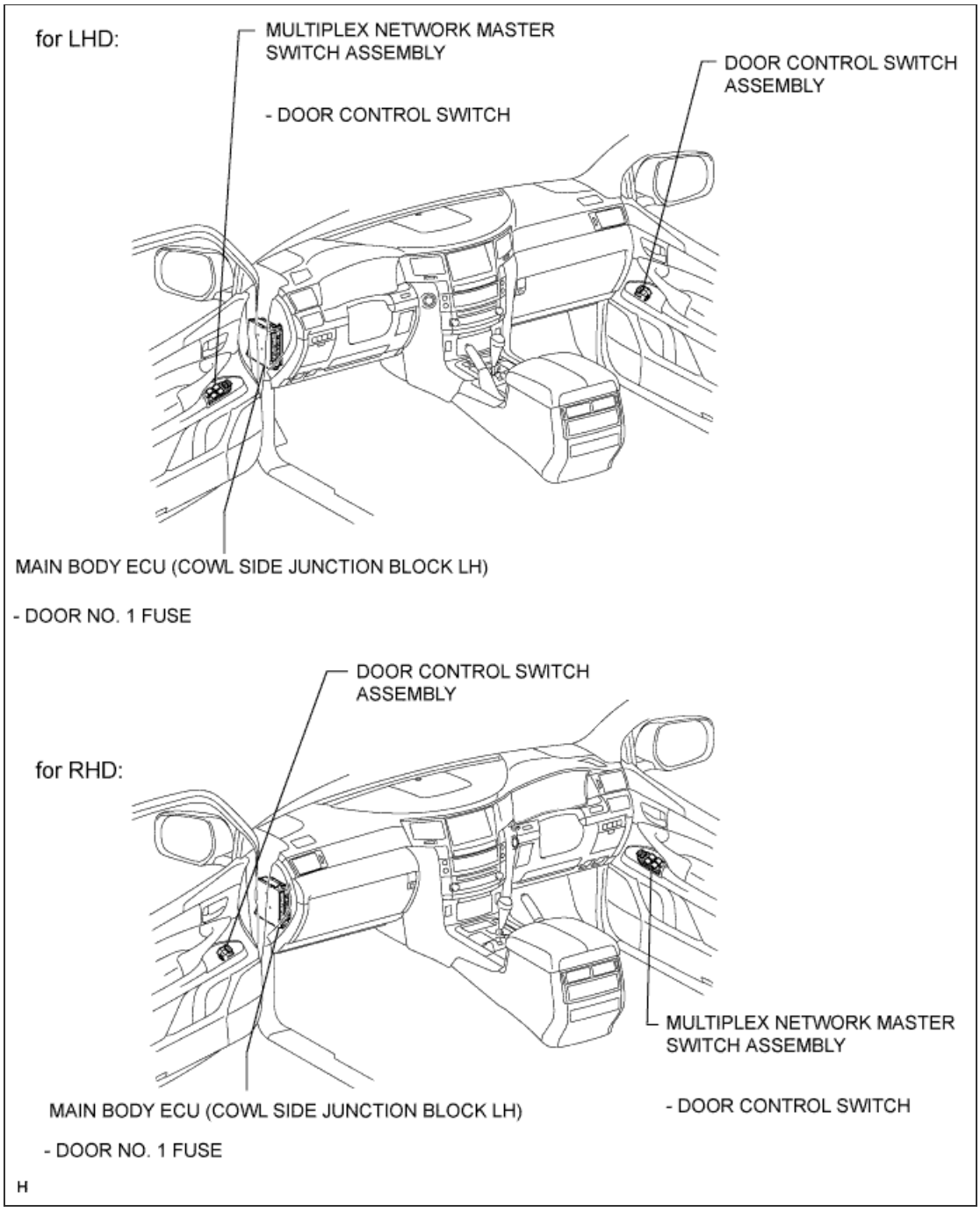
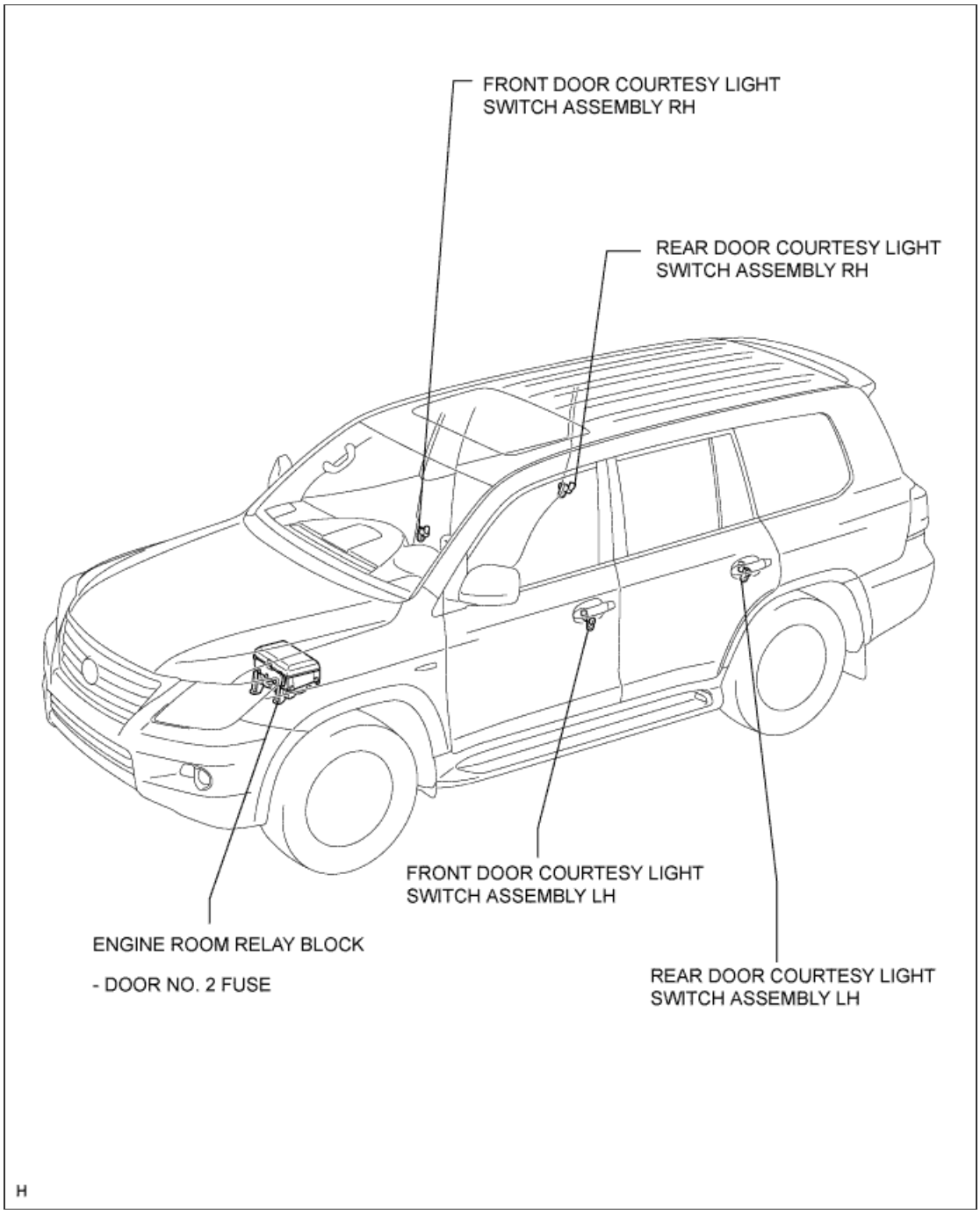
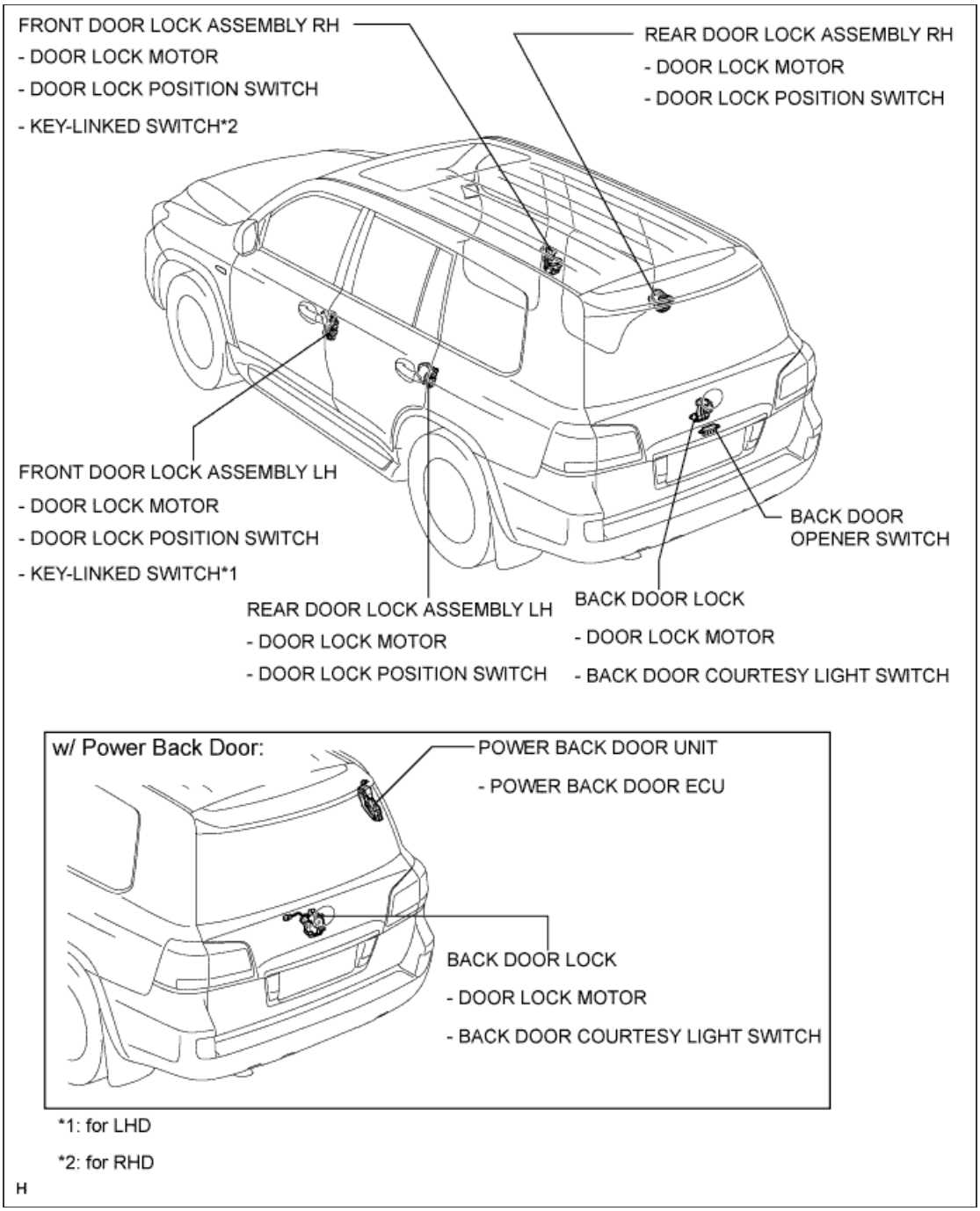
for Preparation Click here




FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY RH
REAR DOOR COURTESY LIGHT SWITCH ASSEMBLY RH
FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY LH
ENGINE ROOM RELAY BLOCK
- DOOR NO. 2 FUSE
REAR DOOR COURTESY LIGHT SWITCH ASSEMBLY LH
H

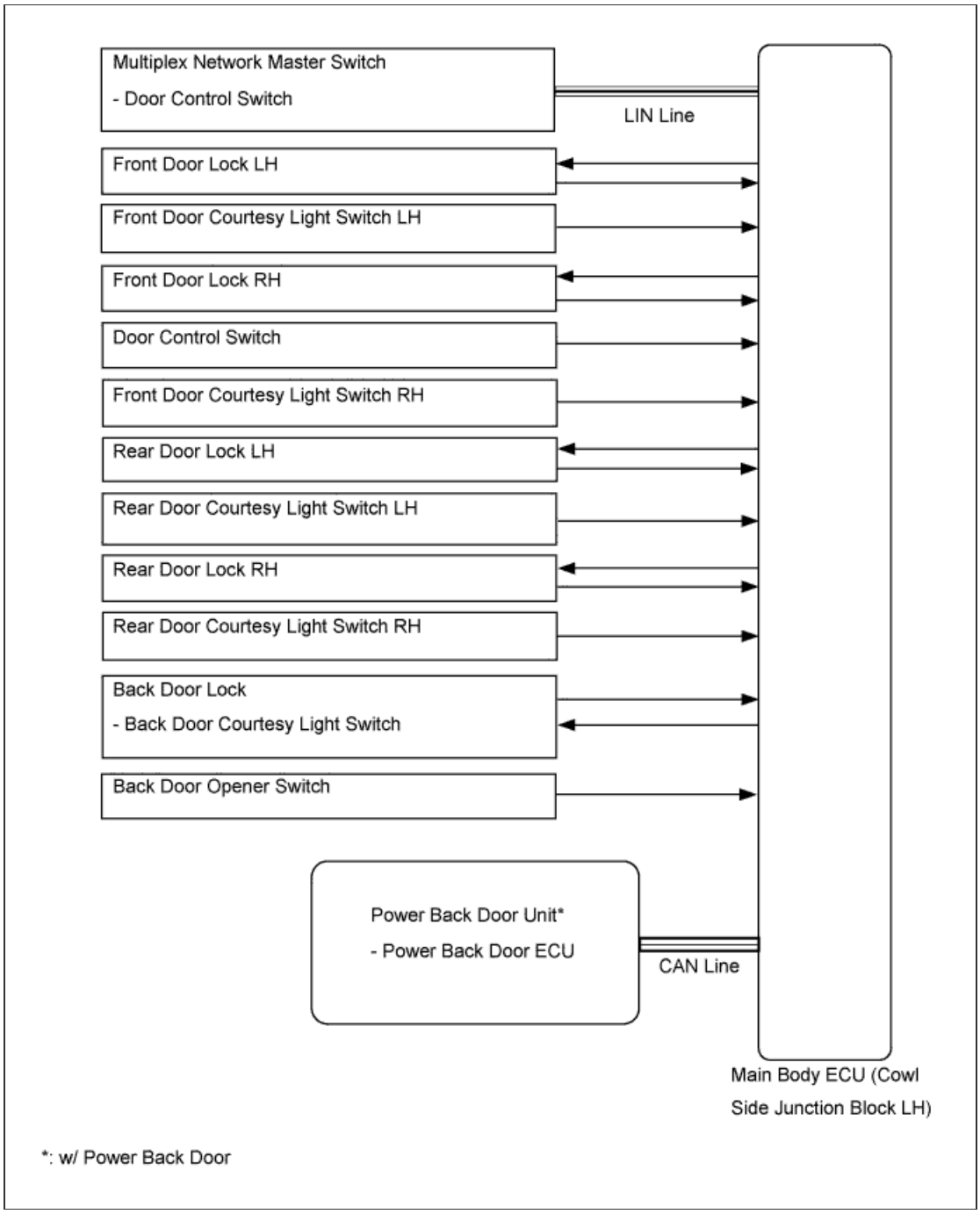


*1: for LHD

*2: for RHD

H

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Communication Table

Sender	Receiver	Signal	Line
Multiplex Network Master Switch	Main Body ECU	Driver side door manual lock switch signal	LIN

for Preparation Click here

FUNCTION OF MAIN COMPONENT

*1: w/o Power Back Door
*2: w/ Power Back Door

Components	Function
Multiplex network master switch	The door control switch on the master switch locks/unlocks all doors.
Door courtesy light switch	Turns on when the door is open and off when the door is closed. Outputs the door status (open or closed) to the main body ECU.
Driver side door lock	• The built-in motor locks/unlocks the door. • The built-in key-linked switch detects the door key cylinder status (lock or unlock) and outputs the data to the main body ECU. • The built-in position switch detects the door status (locked or unlocked) and outputs the data to the main body ECU. This switch turns off when the door is locked and on when the door is unlocked.
Front passenger side door lock Rear door lock LH Rear door lock RH	• The built-in motor locks/unlocks the door. • The built-in position switch detects the door status (locked or unlocked) and outputs the data to the main body ECU. This switch turns off when the door is locked and on when the door is unlocked.
Back door lock	• The built-in motor opens the door.*1 • The built-in motor opens/closes the door.*2 • Performs the back door open operation according to the door position determination of the main body ECU.*1 • Performs the back door open/close operation according to the door position as determined by the power back door ECU.*2

SYSTEM DESCRIPTION

a. The power door lock system locks/unlocks all doors.

- The door control switch of the master switch uses the LIN line to send lock/unlock request signals to the main body ECU.
- The driver door key cylinder lock/unlock request signals are sent to the main body ECU from the driver side door lock.
- The passenger door control switch lock/unlock request signals are sent to the main body ECU from the passenger side door lock.
- The main body ECU receives the request signals and locks/unlocks each door.

The door control system has the following functions:

Function	Outline
Manual lock and unlock function	Locks/unlocks all doors by the door control switch lock operation (manual operation).
Key-linked lock and unlock function	Linked with the door key cylinder. Locks/unlocks all doors when the lock/unlock operation is possible.
Key lock-in prevention function	When the door control transmitter is in the vehicle, performing the door lock operation with the lock switch on the outer handle will not lock the door and will sound a buzzer.
Collision door lock release	If the SRS has been deployed and the main body ECU has detected the signal that is output from the airbag sensor, the main body ECU will unlock all doors.
2-step unlock function	Unlocks only the driver side door by turning the key cylinder once and unlocks the other doors by turning it twice.
Shift-linked automatic door lock*	When the conditions listed below are all met, this function causes all doors to automatically lock: • The engine switch is on (IG). • All doors are closed. • The shift lever is moved out of P.
Shift-linked automatic door unlock*	When the engine switch is on (IG), if the shift lever is moved to P from any other position, all the doors are automatically

	unlocked.
Speed-sensitive automatic door lock	When the doors are unlocked and the vehicle reaches a speed of 20 km/h (12 mph) or more, all doors are locked.
Door open-linked automatic door unlock*	When the driver side door is opened within 10 seconds after the engine switch is turned off, the other doors are unlocked.

*: This function is set through the customize function, as it is off by default.

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HINT:

- **Use these procedures to troubleshoot the power door lock control system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK COMMUNICATION FUNCTION OF LIN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the LIN communication system is functioning normally.

Result

Result	Proceed to
LIN DTC is not output	A
LIN DTC is output	B

B. → **Go to LIN COMMUNICATION SYSTEM (Click here)**

A

4.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. → **Go to step 7**

A

5.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Operation Check (Click here)

b. Terminals of ECU (Click here)

c. Data List / Active Test (Click here)

NEXT

6.ADJUST, REPAIR OR REPLACE

NEXT

7.CONFIRMATION TEST

NEXT

END

for Preparation Click here

CHECK POWER DOOR LOCK OPERATION

a. Check the basic function.

i. Check that all doors lock when the door control switch (for manual operation) is turned to lock and all doors unlock when turned to unlock.

ii. Check that all doors lock when the driver side door key cylinder is turned to lock using the key.

iii. Check that only the driver side door unlocks when the key cylinder is turned to unlock once using the key. Then, check that the other doors unlock when the key cylinder is turned to unlock again within 3 seconds (2-step unlocking function).

b. Check the key lock-in prevention function.

NOTICE:

In order to prevent the key from being locked in, the inspection should be made with the driver side door window open.

i. Turn the engine switch on (IG) or on (ACC).

ii. With the driver side door open, check that all doors unlock immediately after the door lock knob for the driver side door is locked.

iii. With the driver side door open, check that all doors unlock immediately after the door control switch (for manual operation) is turned to lock.

iv. With the driver side door open, lock the driver side door lock knob and hold it for 2 seconds or more, then close the driver side door and check that all doors unlock.

c. Check the security function.

i. Close all doors with the driver side door window open so that the door control switch can be operated from outside the vehicle.

ii. Remove the key from the inside of the vehicle, open the driver side door and then close and lock the door without using the key. Then, check that all doors do not unlock when the door control switch (for manual operation) is turned to unlock from outside the vehicle.

iii. Remove the key from the inside of the vehicle, then close and lock the driver side door with the key. Under this condition, check that all doors do not unlock when the door control switch (for manual operation) is turned to unlock from outside the vehicle.

iv. Remove the key from the inside of the vehicle, close the driver side door and lock the door with the wireless door lock operation. Then, check that all doors do not unlock when the door control switch (for manual operation) is turned to unlock from outside the vehicle.

HINT:

Check that the security function is canceled under the following conditions:

- The engine switch is turned on (IG).
- The driver side door is unlocked using the key.
- The door control switch (for manual operation) is turned to unlock after the door lock knob is unlocked manually.
- The doors are unlocked by wireless operation.

d. Check the illumination function.

i. Set the map light switch to the DOOR position.

ii. With all the doors locked, check that all doors unlock and the map light turns on when the driver side door key cylinder is turned to unlock using the key.

iii. Check that the map light turns off in approximately 15 seconds after the doors have not been opened.

for Preparation Click here

CUSTOMIZING FUNCTION WITH INTELLIGENT TESTER

HINT:

The following items can be customized.

NOTICE:

- **When the customer requests a change in a function, first make sure that the function can be customized.**
- **Be sure to make a note of the current settings before customizing.**
- **When troubleshooting a function, first make sure that the function is set to the default setting.**

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the tester on.

d. Enter the following menus: Body / Door Lock / Utility / Customize.

e. Select the setting by referring to the table below.

Door Lock

Display	Default	Contents	Setting
Unlock Key Twice	ON	Function that unlocks only the driver side door when the driver side door key cylinder is turned to unlock once, and unlock all doors when it is turned to unlock twice. For the OFF setting, turning it once unlocks all doors.	ON/OFF
Auto Lock	ON	Function that locks all doors when the vehicle speed reaches a certain level.	ON/OFF
Auto Lock/Shift	OFF	Function that locks all doors when the shift lever is moved from P to any position other than P while the engine is running and all doors are closed.	ON/OFF
Auto Unlock/Shift	OFF	Function that unlocks all doors when the shift lever is moved to P from any position other than P while the engine switch is on (IG).	ON/OFF
All Unlock/Open-Close	OFF	Function that unlocks the other doors when the driver side door is opened within 10 seconds after the engine switch is turned off.	ON/OFF

for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

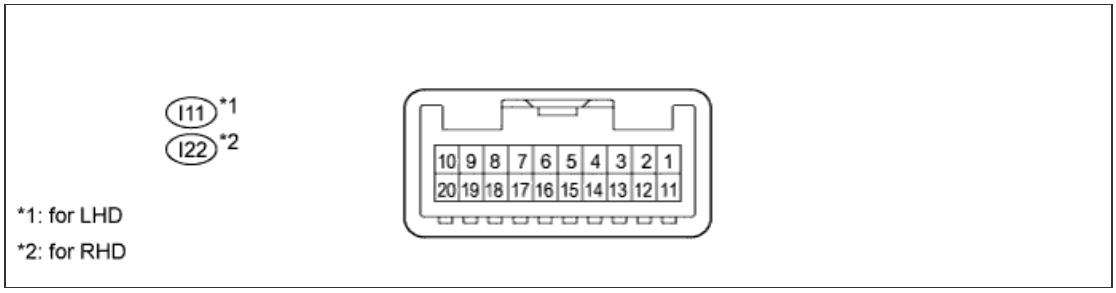
Power Door Lock Control System

Symptom	Suspected Area	See page
All Doors LOCK/UNLOCK Functions do not Operate Via Master Switch, Driver Side Door Key Cylinder	DOOR NO. 1 fuse	Click here
	DOOR NO. 2 fuse	Click here
	Front door lock LH*1	Click here
	Front door lock RH*2	Click here
	Harness or connector	Click here
	Main body ECU	Click here
All Doors LOCK/UNLOCK Functions do not Operate Via Door Control Switch	DOOR NO. 1 fuse	Click here
	DOOR NO. 2 fuse	Click here
	Door control switch	Click here
	Harness or connector	Click here
	Main body ECU	Click here
Only Driver Door LOCK/UNLOCK Functions do not Operate	Front door lock LH*1	Click here
	Front door lock RH*2	Click here
	Harness or connector	-
	Main body ECU	-
Only Passenger Door LOCK/UNLOCK Functions do not Operate	Front door lock RH*1	Click here
	Front door lock LH*2	Click here
	Harness or connector	-
	Main body ECU	-
Only Rear Door LH LOCK/UNLOCK Functions do not Operate	Rear door lock LH	Click here
	Harness or connector	-
	Main body ECU	-
Only Rear Door RH LOCK/UNLOCK Functions do not Operate	Rear door lock RH	Click here
	Harness or connector	-
	Main body ECU	-
Only Back Door LOCK/UNLOCK Functions do not Operate	Back door opener switch	Click here
	Back door lock	Click here
	Harness or connector	-
	Main body ECU*3	-
	Power back door ECU*4	-

*1: for LHD
*2: for RHD
*3: w/o Power Back Door
*4: w/ Power Back Door

for Preparation Click here

CHECK MULTIPLEX NETWORK MASTER SWITCH ASSEMBLY



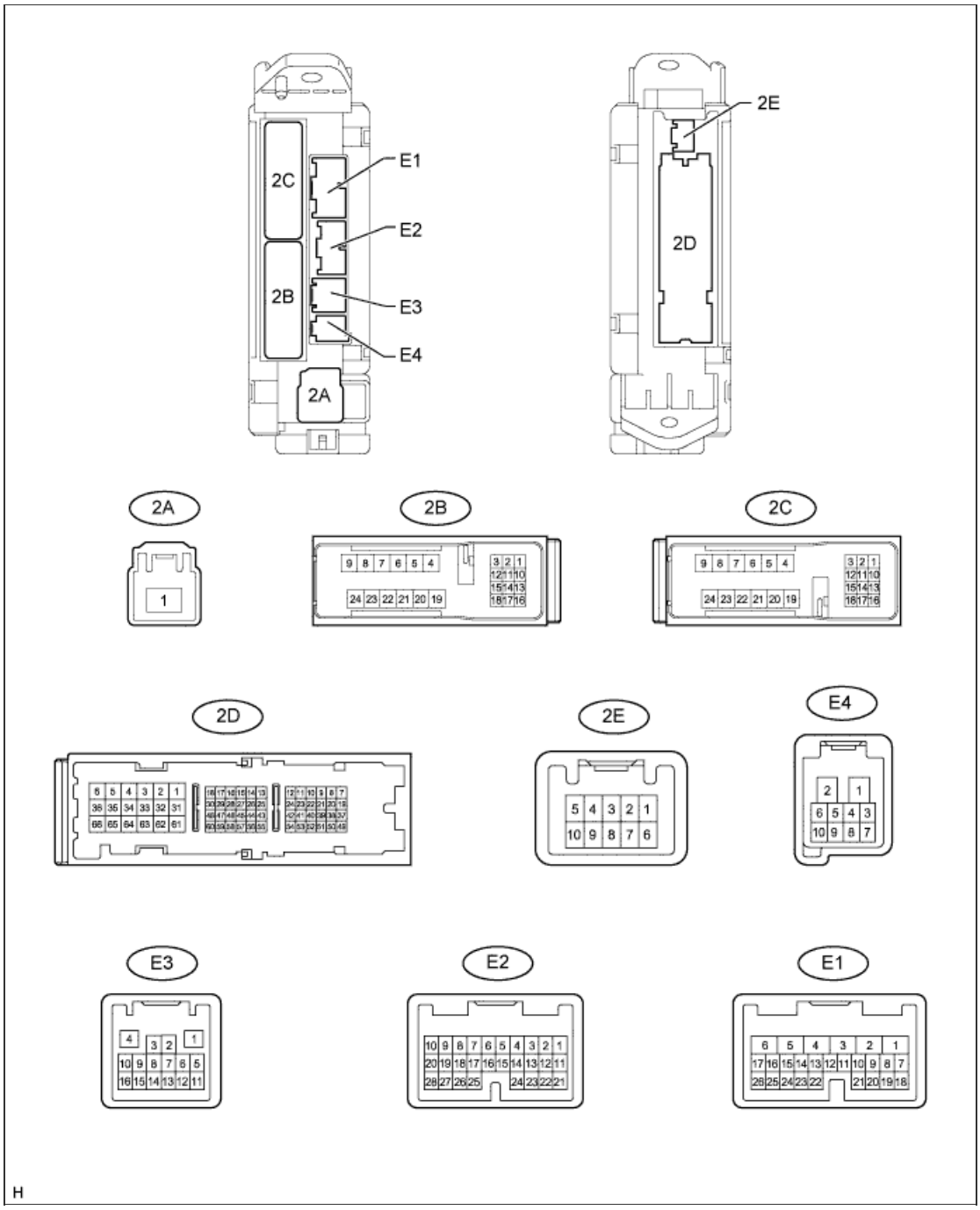
a. Disconnect the I11*1 or I22*2 switch connector.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
I11-12 (GND) - Body ground*1	W-B - Body ground	Ground	Always	Below 1 Ω
I11-11 (B) - I11-12 (GND)*1	L - W-B	Battery power supply	Always	11 to 14 V
I22-12 (GND) - Body ground*2	W-B - Body ground	Ground	Always	Below 1 Ω
I22-11 (B) - I22-12 (GND)*2	L - W-B	Battery power supply	Always	11 to 14 V

*1: for LHD
*2: for RHD
If the result is not as specified, there may be a malfunction on the wire harness side.

CHECK MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)



a. Disconnect the 2A, 2B, 2D and E3 ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
2B-20 (BATB) - Body ground	L - Body ground	Battery power supply	Always	11 to 14 V
2A-1 (ALBT) - Body ground	B - Body ground	Power supply	Engine switch on (ACC)	11 to 14 V
2A-1 (ALBT) - Body ground	B - Body ground	Power supply	Engine switch off	11 to 14 V
2D-62 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E3-1 (GND3) - Body ground	BR - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the 2A, 2B, 2D and E3 ECU connectors.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
		Driver side door		

E1-24 (DCTY) - Body ground	L*1 - Body ground Y*2 - Body ground	courtesy light switch input	Driver side door open	Below 1 V
E1-24 (DCTY) - Body ground	L*1 - Body ground Y*2 - Body ground	Driver side door courtesy light switch input	Engine switch off and driver side door courtesy light switch off	Pulse generation (see waveform 1 or 2)
E2-21 (PCTY) - Body ground	Y*1 - Body ground L*2 - Body ground	Front passenger side door courtesy light switch input	Front passenger side door open	Below 1 V
E2-21 (PCTY) - Body ground	Y*1 - Body ground L*2 - Body ground	Front passenger side door courtesy light switch input	Engine switch off and passenger side door courtesy light switch off	Pulse generation (see waveform 3 or 4)
2C-2 (LCTY) - Body ground	W - Body ground	Rear door LH courtesy light switch input	Rear door LH open	Below 1 V
2C-2 (LCTY) - Body ground	W - Body ground	Rear door LH courtesy light switch input	Engine switch off and rear LH side door courtesy light switch off	Pulse generation (see waveform 5 or 6)
E2-7 (RCTY) - Body ground	G - Body ground	Rear door RH courtesy light switch input	Rear door RH open	Below 1 V
E2-7 (RCTY) - Body ground	G - Body ground	Rear door RH courtesy light switch input	Engine switch off and rear RH side door courtesy light switch off	Pulse generation (see waveform 7 or 8)
E2-25 (BCTY) - Body ground	W - Body ground	Back door courtesy light switch input	Back door open	Below 1 V
E2-25 (BCTY) - Body ground	W - Body ground	Back door courtesy light switch input	Engine switch off and back door closed	Pulse generation (see waveform 9 or 10)
2D-3 (ACT+) - Body ground	L - Body ground	Door lock motor lock drive output	Master switch (door control switch) or driver side door key cylinder neutral position	Below 1 V
2D-3 (ACT+) - Body ground	L - Body ground	Door lock motor lock drive output	Master switch (door control switch) or driver side door key cylinder lock	11 to 14 V
2C-24 (ACT+) - Body ground	L - Body ground	Door lock motor lock drive output	Master switch (door control switch) or driver side door key cylinder neutral position	Below 1 V
2C-24 (ACT+) - Body ground	L - Body ground	Door lock motor lock drive output	Master switch (door control switch) or driver side door key cylinder lock	11 to 14 V
E1-5 (ACTD) - Body ground	B - Body ground	Driver side door lock motor unlock drive output	Master switch (door control switch) or driver side door key cylinder neutral position	Below 1 V
E1-5 (ACTD) - Body ground	B - Body ground	Driver side door lock motor unlock drive output	Master switch (door control switch) or driver side door key cylinder unlock	11 to 14 V
2D-2 (ACT-) - Body ground	B - Body ground	Front passenger side, and rear door RH door lock motor unlock drive output	Master switch (door control switch) or driver side door key cylinder neutral position	Below 1 V
2D-2 (ACT-) - Body ground	B - Body ground	Front passenger side, and rear door RH door lock motor unlock drive output	Master switch (door control switch) or driver side door key cylinder unlock	11 to 14 V
2C-23 (ACT-) - Body ground	B - Body ground	Rear door LH and RH door lock motor unlock drive output	Master switch (door control switch) or driver side door key cylinder neutral position	Below 1 V
2C-23 (ACT-) - Body ground	B - Body ground	Rear door LH and RH door lock motor unlock drive output	Master switch (door control switch) or driver side door key cylinder unlock	11 to 14 V
E1-10 (UL3) - Body ground	Y*1 - Body ground L*2 - Body ground	Driver side door lock key switch input	Driver side door key cylinder unlock	Below 1 V
E1-10 (UL3) - Body	Y*1 - Body ground	Driver side door lock key	Engine switch off, all doors closed and driver	Pulse generation

ground	L*2 - Body ground	switch input	side door key cylinder neutral position	(see waveform 11 or 12)
2D-53 (L2) - Body ground	LG - Body ground	Driver side door lock key switch input	Driver side door key cylinder lock	Below 1 V
2D-53 (L2) - Body ground	LG - Body ground	Driver side door lock key switch input	Engine switch off, all doors closed and driver side door key cylinder neutral position	Pulse generation (see waveform 13 or 14)
E1-1 (TR+) - Body ground	L - Body ground	Back door lock motor unlock drive output	Master switch (door control switch) or driver side door key cylinder neutral position	Below 1 V
E1-1 (TR+) - Body ground	L - Body ground	Back door lock motor unlock drive output	Master switch (door control switch) or driver side door key cylinder unlock	11 to 14 V
E1-9 (LSWD) - Body ground	BR - Body ground	Driver side door lock position switch input	Driver side door unlocked	Below 1 V
E1-9 (LSWD) - Body ground	BR - Body ground	Driver side door lock position switch input	Engine switch off, all doors closed and driver side door locked	Pulse generation (see waveform 15 or 16)
E2-27 (LSWP) - Body ground	Y*1 - Body ground BR*2 - Body ground	Front passenger side door lock position switch input	Front passenger side door unlocked	Below 1 V
E2-27 (LSWP) - Body ground	Y*1 - Body ground BR*2 - Body ground	Front passenger side door lock position switch input	Engine switch off, all doors closed and passenger side door locked	Pulse generation (see waveform 17 or 18)
2C-1 (LSWL) - Body ground	BR - Body ground	Rear door LH lock position switch input	Rear door LH unlocked	Below 1 V
2C-1 (LSWL) - Body ground	BR - Body ground	Rear door LH lock position switch input	Engine switch off, all doors closed and rear door LH locked	Pulse generation (see waveform 19 or 20)
E2-5 (LSWR) - Body ground	BR - Body ground	Rear door RH lock position switch input	Rear door RH unlocked	Below 1 V
E2-5 (LSWR) - Body ground	BR - Body ground	Rear door RH lock position switch input	Engine switch off, all doors closed and rear door RH locked	Pulse generation (see waveform 21 or 22)
E1-26 (BDSU) - Body ground	L - Body ground	Back door opener switch input	Back door opener switch off	Below 1 V
E1-26 (BDSU) - Body ground	L - Body ground	Back door opener switch input	Back door opener switch on	Pulse generation (see waveform 23 or 24)

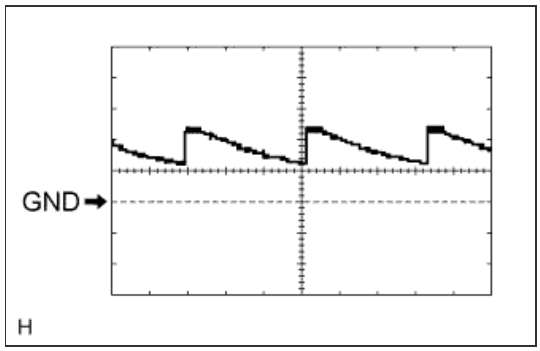
*1: for LHD
*2: for RHD

If the result is not as specified, the ECU may have a malfunction.

e. Using an oscilloscope, check waveform 1.

Waveform 1 (Reference)

Item	Content
Terminal No. (Symbol)	E1-24 (DCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and driver side door courtesy light switch off

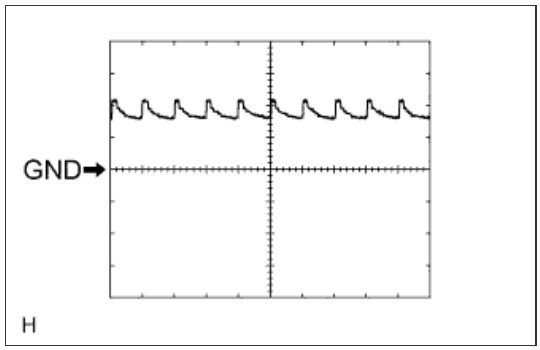


f. Using an oscilloscope, check waveform 2.

Waveform 2 (Reference)

Item	Content
Terminal No. (Symbol)	E1-24 (DCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.

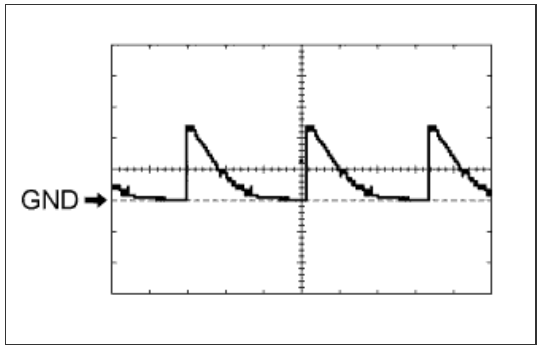
Condition	Engine switch off and driver side door courtesy light switch off



g. Using an oscilloscope, check waveform 3.

Waveform 3 (Reference)

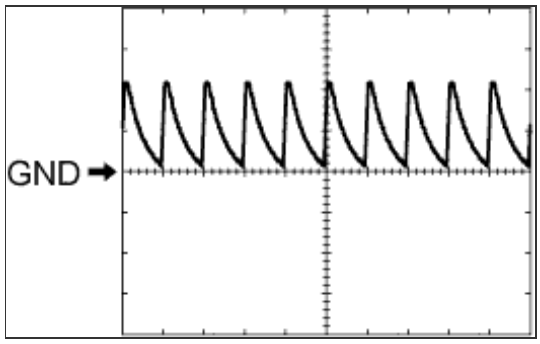
Item	Content
Terminal No. (Symbol)	E2-21 (PCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and passenger side door courtesy light switch off



h. Using an oscilloscope, check waveform 4.

Waveform 4 (Reference)

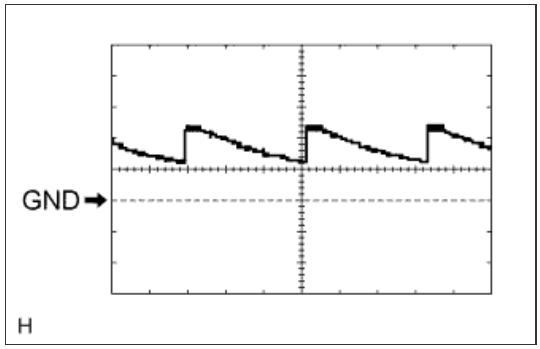
Item	Content
Terminal No. (Symbol)	E2-21 (PCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and passenger side door courtesy light switch off



i. Using an oscilloscope, check waveform 5.

Waveform 5 (Reference)

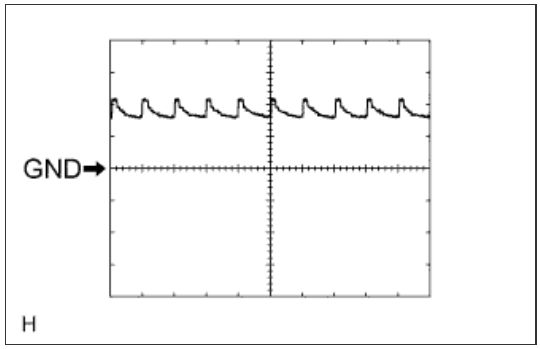
Item	Content
Terminal No. (Symbol)	2C-2 (LCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and rear LH side door courtesy light switch off



j. Using an oscilloscope, check waveform 6.

Waveform 6 (Reference)

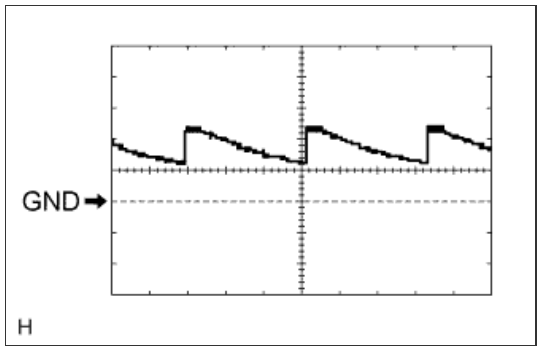
Item	Content
Terminal No. (Symbol)	2C-2 (LCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and rear LH side door courtesy light switch off



k. Using an oscilloscope, check waveform 7.

Waveform 7 (Reference)

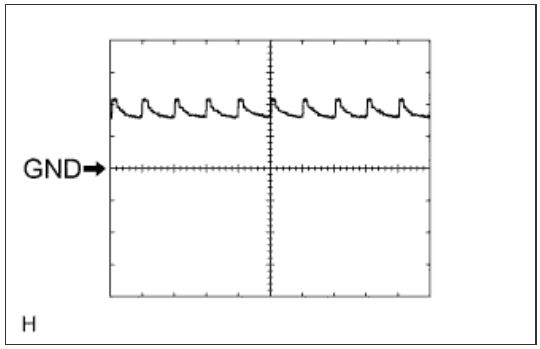
Item	Content
Terminal No. (Symbol)	E2-7 (RCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and rear RH side door courtesy light switch off



l. Using an oscilloscope, check waveform 8.

Waveform 8 (Reference)

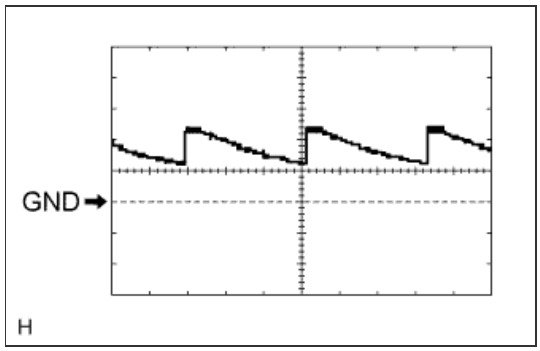
Item	Content
Terminal No. (Symbol)	E2-7 (RCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and rear RH side door courtesy light switch off



m. Using an oscilloscope, check waveform 9.

Waveform 9 (Reference)

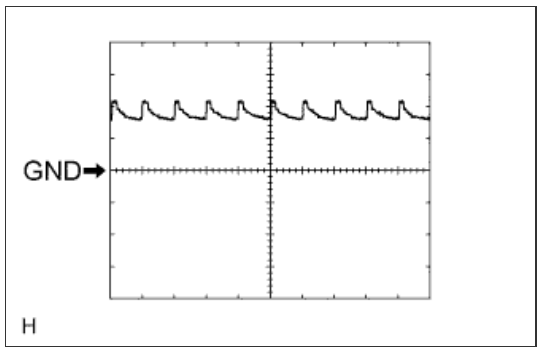
Item	Content
Terminal No. (Symbol)	E2-25 (BCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and back door closed



n. Using an oscilloscope, check waveform 10.

Waveform 10 (Reference)

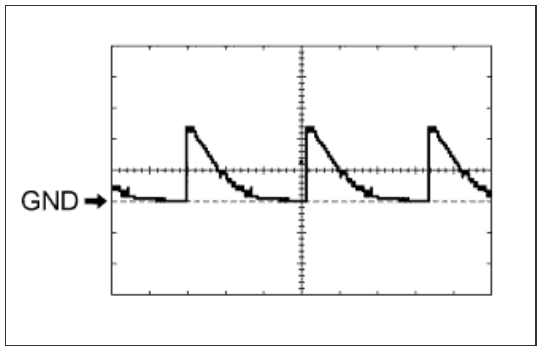
Item	Content
Terminal No. (Symbol)	E2-25 (BCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and back door closed



o. Using an oscilloscope, check waveform 11.

Waveform 11 (Reference)

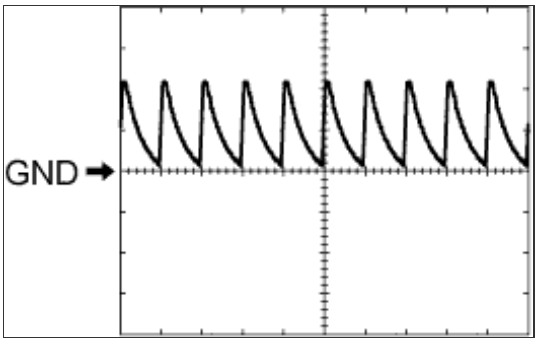
Item	Content
Terminal No. (Symbol)	E1-10 (UL3) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and driver side door key cylinder neutral position



p. Using an oscilloscope, check waveform 12.

Waveform 12 (Reference)

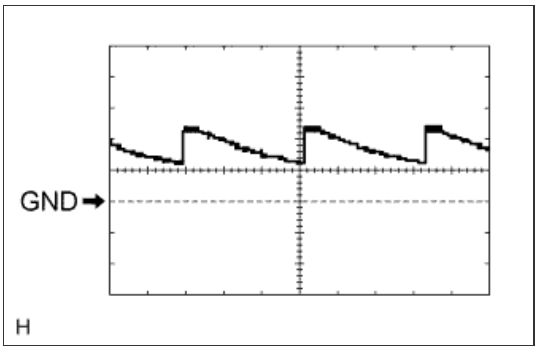
Item	Content
Terminal No. (Symbol)	E1-10 (UL3) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and driver side door key cylinder neutral position



q. Using an oscilloscope, check waveform 13.

Waveform 13 (Reference)

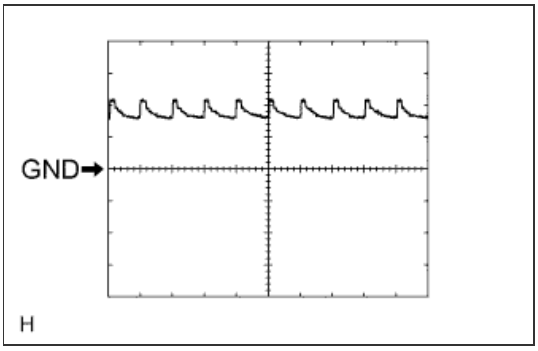
Item	Content
Terminal No. (Symbol)	2D-53 (L2) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and driver side door key cylinder neutral position



r. Using an oscilloscope, check waveform 14.

Waveform 14 (Reference)

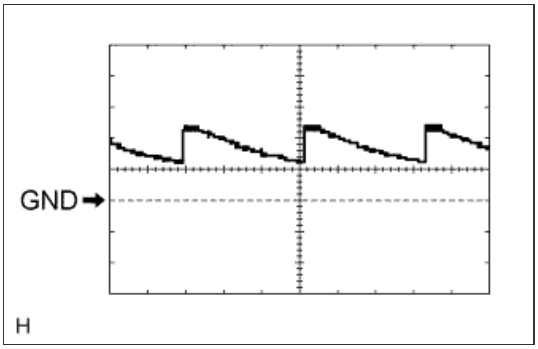
Item	Content
Terminal No. (Symbol)	2D-53 (L2) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and driver side door key cylinder neutral position



s. Using an oscilloscope, check waveform 15.

Waveform 15 (Reference)

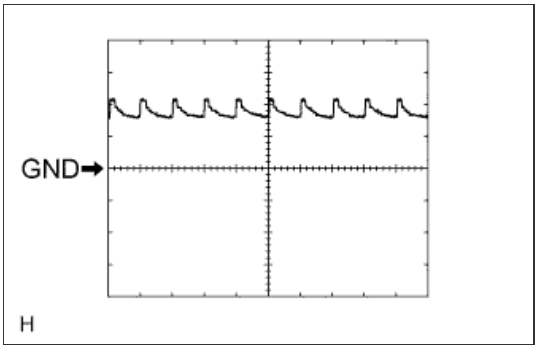
Item	Content
Terminal No. (Symbol)	E1-9 (LSWD) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and driver side door locked



t. Using an oscilloscope, check waveform 16.

Waveform 16 (Reference)

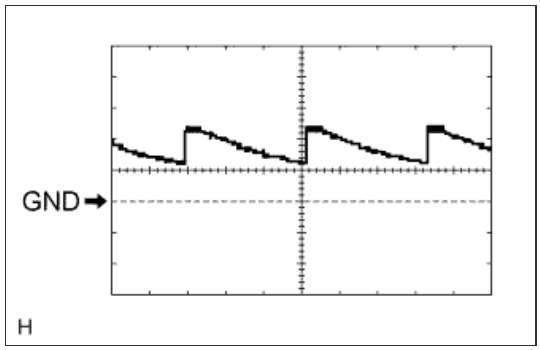
Item	Content
Terminal No. (Symbol)	E1-9 (LSWD) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and driver side door locked



u. Using an oscilloscope, check waveform 17.

Waveform 17 (Reference)

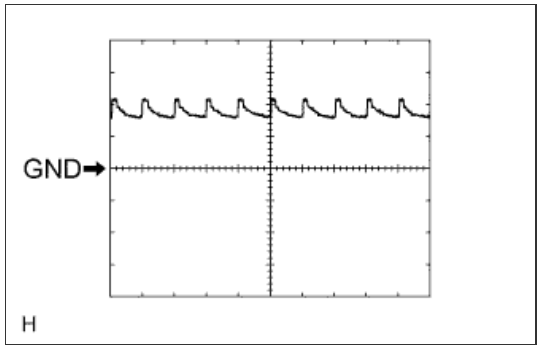
Item	Content
Terminal No. (Symbol)	E2-27 (LSWP) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and passenger side door locked



v. Using an oscilloscope, check waveform 18.

Waveform 18 (Reference)

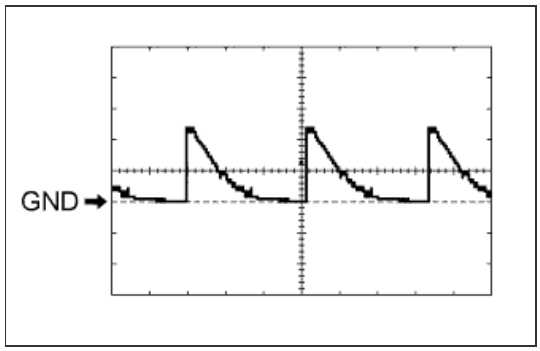
Item	Content
Terminal No. (Symbol)	E2-27 (LSWP) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and passenger side door locked



w. Using an oscilloscope, check waveform 19.

Waveform 19 (Reference)

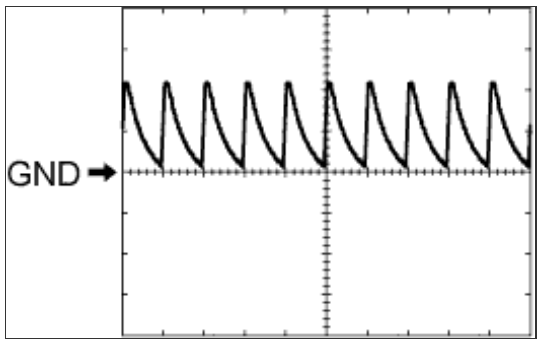
Item	Content
Terminal No. (Symbol)	2C-1 (LSWL) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and rear door LH locked



x. Using an oscilloscope, check waveform 20.

Waveform 20 (Reference)

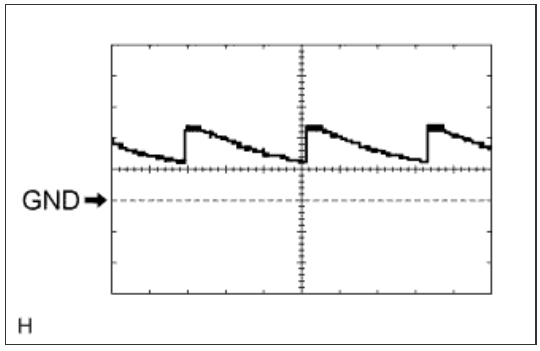
Item	Content
Terminal No. (Symbol)	2C-1 (LSWL) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and rear door LH locked



y. Using an oscilloscope, check waveform 21.

Waveform 21 (Reference)

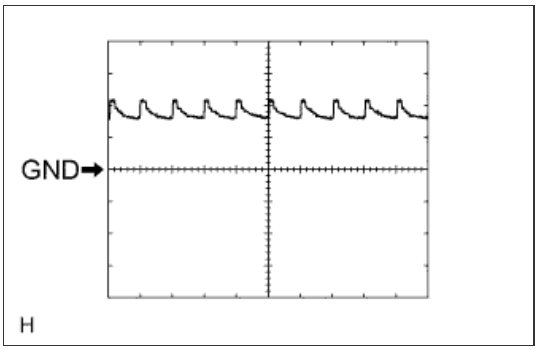
Item	Content
Terminal No. (Symbol)	E2-5 (LSWR) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and rear door RH locked



z. Using an oscilloscope, check waveform 22.

Waveform 22 (Reference)

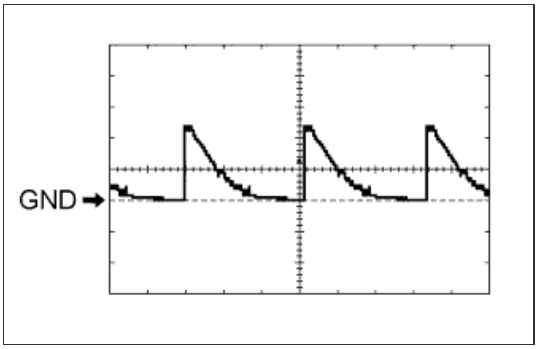
Item	Content
Terminal No. (Symbol)	E2-5 (LSWR) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and rear door RH locked



aa. Using an oscilloscope, check waveform 23.

Waveform 23 (Reference)

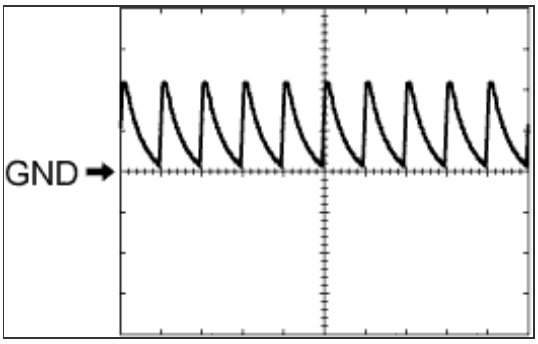
Item	Content
Terminal No. (Symbol)	E1-26 (BDSU) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and back door opener switch on



ab. Using an oscilloscope, check waveform 24.

Waveform 24 (Reference)

Item	Content
Terminal No. (Symbol)	E1-26 (BDSU) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and back door opener switch on



for Preparation Click here

CHECK DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Check for DTCs by following the prompts on the tester screen.

HINT:

Refer to the intelligent tester operator's manual for further details.

CLEAR DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Clear the DTCs by following the prompts on the tester screen.

HINT:

Refer to the intelligent tester operator's manual for further details.

for Preparation Click here

DATA LIST

HINT:

Using the intelligent tester to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the tester on.

d. Enter the following menus:
Body / (desired system) / Data List.

e. According to the display on the tester, read the Data List.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
D Door Courtesy SW	Driver side door courtesy light switch signal / ON or OFF	ON: Driver side door opened OFF: Driver side door closed	-
D Door Lock Pos SW	Driver side door lock position switch signal / ON or OFF	ON: Driver side door unlocked OFF: Driver side door locked	-
Door Key SW-Lock	Door key-linked switch lock signal / ON or OFF	ON: Driver side door key cylinder turned to lock position OFF: Driver side door key cylinder not turned	-
D-Door Key SW-UL	Door key-linked switch unlock signal / ON or OFF	ON: Driver side door key cylinder turned to unlock position OFF: Driver side door key cylinder not turned	-
P-Door Courtesy SW	Front passenger side door courtesy light switch signal / ON or OFF	ON: Front passenger side door opened OFF: Front passenger side door closed	-
P-Door Lock Pos SW	Front passenger side door lock position switch signal / ON or OFF	ON: Front passenger side door unlocked OFF: Front passenger side door locked	-
Door Lock SW-Lock	Door manual lock switch signal / ON or OFF	ON: Front passenger side door control switch on (lock) OFF: Front passenger side door control switch off	-
Door Unlock SW-Unlock	Door manual unlock switch signal / ON or OFF	ON: Front passenger side door control switch on (unlock) OFF: Front passenger side door control switch off	-
RL Door Courtesy SW	Rear LH side door courtesy light switch signal / ON or OFF	ON: Rear LH side door opened OFF: Rear LH side door closed	-
RL-Door Lock Pos SW	Rear LH side door lock position switch signal / ON or OFF	ON: Rear LH side door unlocked OFF: Rear LH side door locked	-
RR Door Courtesy SW	Rear RH side door courtesy light switch signal / ON or OFF	ON: Rear RH side door opened OFF: Rear RH side door closed	-
RR-Door Lock Pos SW	Rear RH side door lock position switch signal / ON or OFF	ON: Rear RH side door unlocked OFF: Rear RH side door locked	-
Back Door Courtesy SW	Back door courtesy light switch signal / ON or OFF	ON: Back door open OFF: Back door closed	-
Back Door Open Handle SW	Back door opener switch signal / ON or OFF	ON: Back door opener switch pushed OFF: Back door opener switch not pushed	-
		Permit: Back door unlocked	

Back Door Open	Back door open status / Permit or Prohibit	Prohibit: Back door locked	-
IG SW	Engine switch status / ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
ACC SW	Engine switch status / ON or OFF	ON: Engine switch on (ACC) OFF: Engine switch off	-

Master Switch

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Door Lock Switch Status	Door manual lock switch signal / ON or OFF	ON: Door control switch on (lock) OFF: Door control switch off	-
Door Unlock Switch Status	Door manual unlock switch signal / ON or OFF	ON: Door control switch on (unlock) OFF: Door control switch off	-

Back Door*

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Door Lock Status	Back door lock switch signal / UNLOCK or LOCK	UNLOCK: Back door unlocked LOCK: Back door locked	-

*: w/ Power Back Door

ACTIVE TEST

HINT:

Using the intelligent tester to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the tester on.

d. Enter the following menus:
Body / (desired system) / Active Test.

e. According to the display on the tester, perform the Active Test.

Main Body

Tester Display	Test Part	Control Range	Diagnostic Note
Door Lock	Operate door lock motor	Lock or Unlock	-
Shock Detection Unlock	Operate door lock motor	Lock or Unlock	-
D-Door Unlock	Operate door lock motor	ON or OFF	-
Trunk and Back-Door Open	Operate back door opener	ON or OFF	-

Back Door*

Tester Display	Test Part	Control Range	Diagnostic Note
Latch Release	Operate back door lock	ON or OFF	-

*: w/ Power Back Door

for Preparation Click here

HINT:

If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.

DTC Code	Detection Item	Trouble Area	See page
B1243	GSW Terminal Circuit Malfunction	- Harness or connector - Center airbag sensor - Main body ECU	Click here

DTC B1243 GSW Terminal Circuit Malfunction

for Preparation Click here

DESCRIPTION

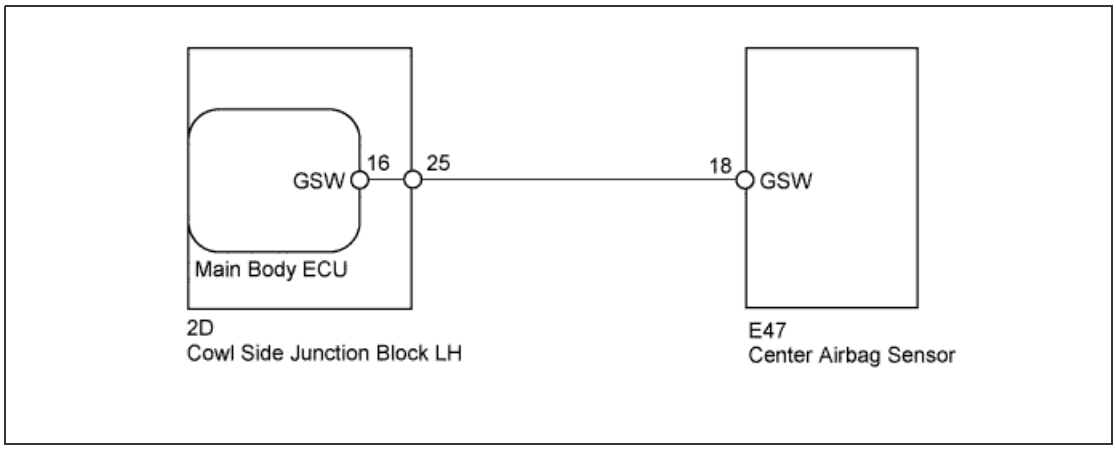
If the collision door lock release function does not operate normally, or an open or short in the GSW input circuit of the main body ECU is detected, DTC B1243 will be stored.

HINT:

If DTC B1243 is stored, the speed-sensitive automatic door lock function, shift-linked automatic door lock function, and collision door lock release function will be prohibited.

DTC Code	DTC Detection Condition	Trouble Area
B1243	When either of the following occurs: • An open or short in the GSW input circuit of the main body ECU (cowl side junction block LH). • The collision door lock release function does not operate normally.	• Harness or connector • Center airbag sensor • Main body ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK DTC OUTPUT

a. Clear the DTCs (Click here).

b. Check for DTCs.

Result

Result	Proceed to
B1243 is output	A
B1243 is not output	B

B → USE SIMULATION METHOD TO CHECK (Click here)

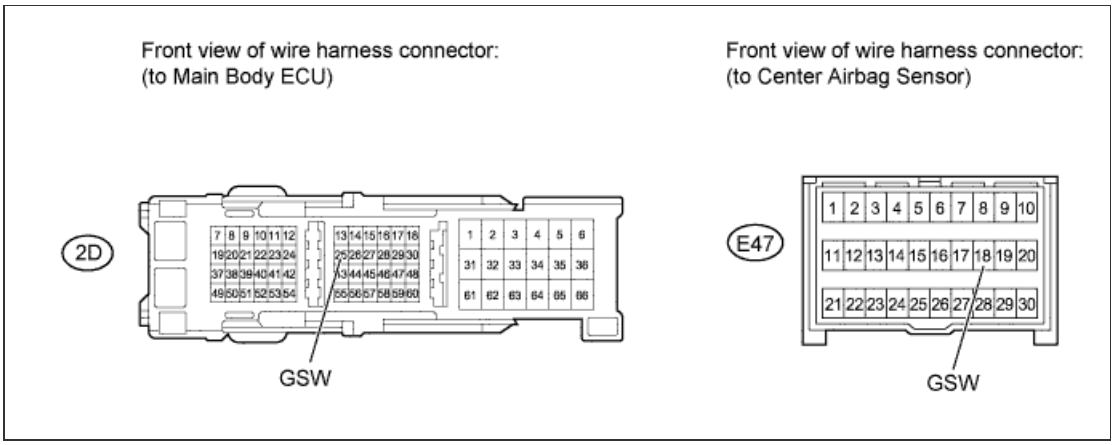
A

2.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - CENTER AIRBAG SENSOR)

a. Disconnect the cable from the negative (-) battery terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.



b. Disconnect the 2D ECU connector.

c. Disconnect the E47 sensor connector.

d. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
2D-25 (GSW) - E47-18 (GSW)	Always	Below 1 Ω
2D-25 (GSW) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK MAIN BODY ECU (GSW VOLTAGE)

a. Disconnect the cable from the negative (-) battery terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

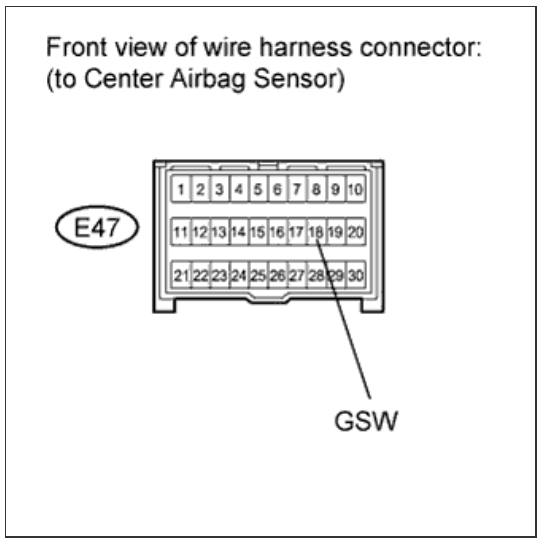
b. Reconnect the 2D ECU connector.

c. Connect the cable to the negative (-) battery terminal.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E47-18 (GSW) - Body ground	Engine switch on (IG)	4.5 to 5.5 V



NG → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

OK

4.REPLACE CENTER AIRBAG SENSOR

a. Disconnect the cable from the negative (-) battery terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

b. Replace the center airbag sensor (Click here).

NEXT

5.CHECK DTC OUTPUT

a. Recheck for DTCs (Click here).

Result

Result	Proceed to
B1243 is output	A
B1243 is not output	B

B → END

A

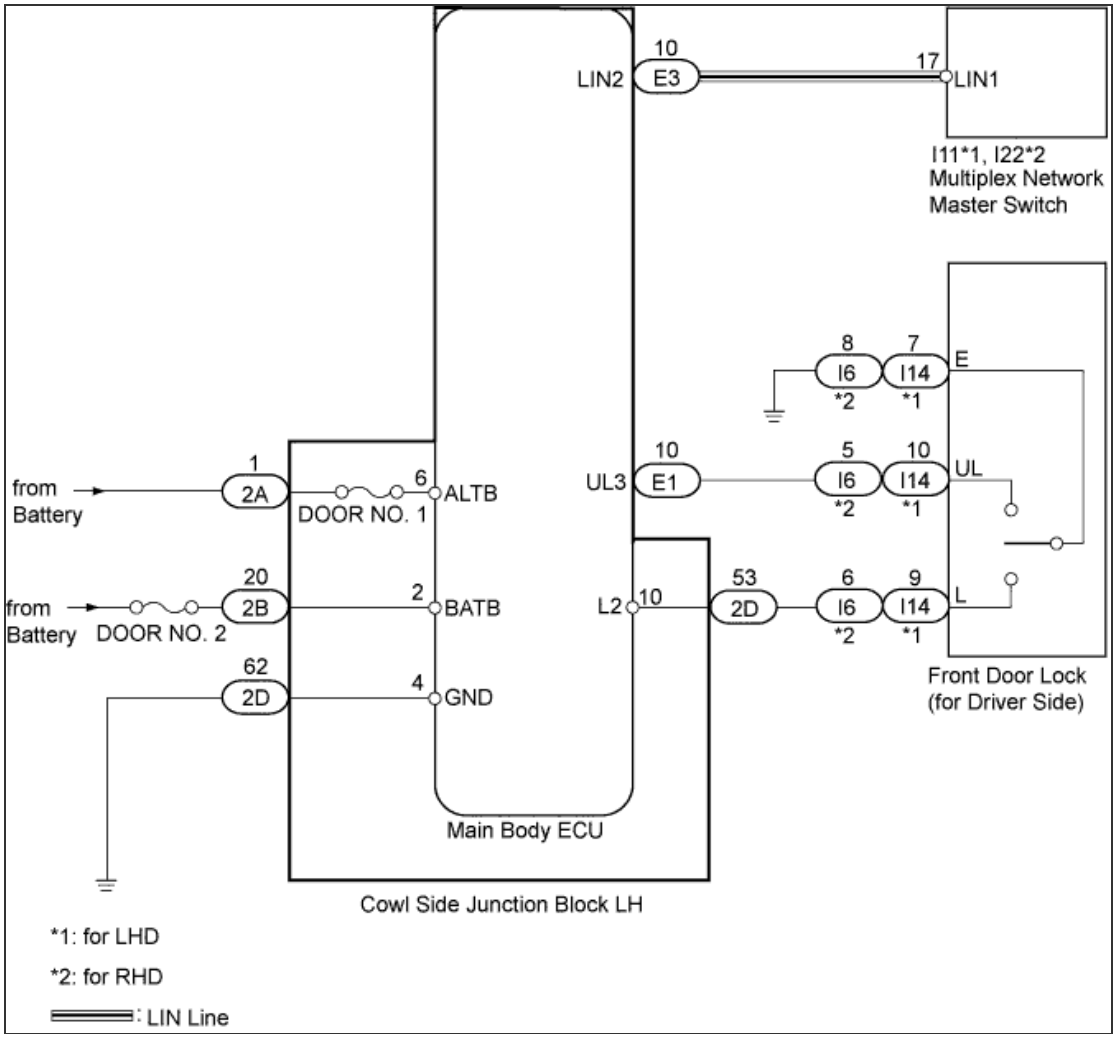
REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

for Preparation Click here

DESCRIPTION

The main body ECU receives switch signals from the multiplex network master switch, and driver side door key cylinder switch signals from the front door lock. The main body ECU activates the door lock motor on each door according to these signals.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK DOOR LOCK OPERATION

a. Check the door lock operation.

Result

Result	Proceed to
All doors cannot be locked through multiplex network master switch and driver side door key cylinder	A
All doors cannot be locked through multiplex network master switch	B
All doors cannot be locked through driver side door key cylinder	C

B → Go to step 4

C → Go to step 5

A

2.INSPECT FUSE (DOOR NO. 1, DOOR NO. 2)

a. Remove the DOOR NO. 1 fuse from the cowl side junction block LH.

b. Remove the DOOR NO. 2 fuse from the engine room relay block.

c. Measure the resistance according to the value(s) in the table below.

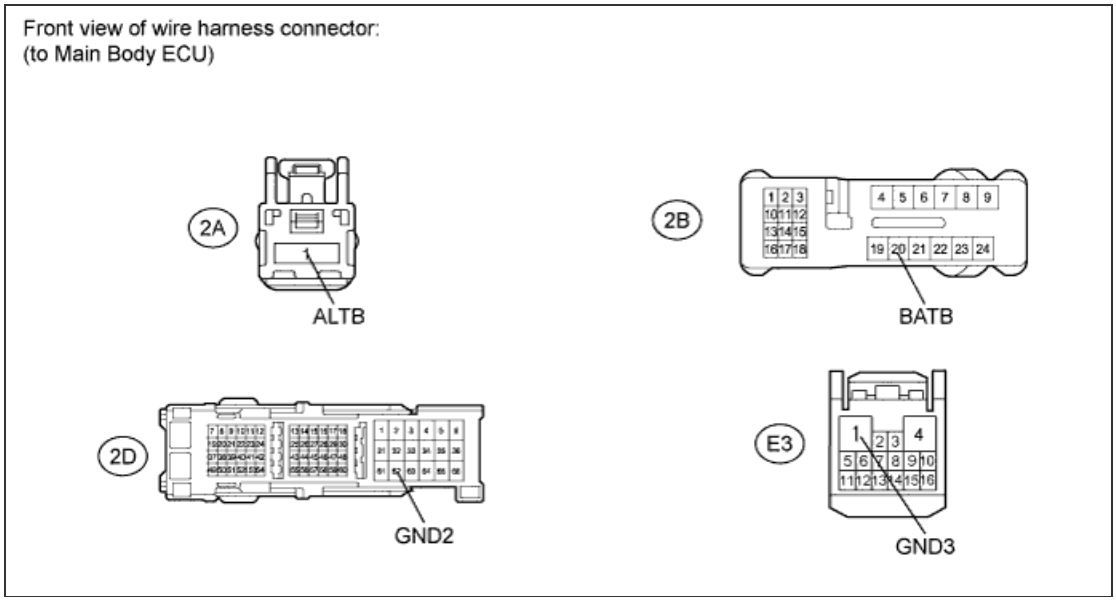
Standard Resistance:

Tester Connection	Condition	Specified Condition
DOOR NO. 1 fuse	Always	Below 1 Ω
DOOR NO. 2 fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

3.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - BATTERY AND BODY GROUND)



a. Disconnect the 2A, 2B and 2D ECU connectors.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage :

Tester Connection	Condition	Specified Condition
2A-1 (ALTB) - Body ground	Always	11 to 14 V
2B-20 (BATB) - Body ground	Always	11 to 14 V

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
2D-62 (GND) - Body ground	Always	Below 1 Ω
E3-1 (GND3) - Body ground	Always	Below 1 Ω

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

4.CHECK MULTIPLEX NETWORK MASTER SWITCH ASSEMBLY (OPERATION)

a. Replace the multiplex network master switch with a normally functioning one (Click here).

b. Check that all doors can be locked and unlocked by using the multiplex network master switch.

OK:
All doors can be locked and unlocked with multiplex network master switch.

NG → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

OK

END (MULTIPLEX NETWORK MASTER SWITCH ASSEMBLY IS DEFECTIVE)

5.READ VALUE USING INTELLIGENT TESTER (DOOR KEY-LINKED LOCK AND UNLOCK SWITCH)

a. Use the Data List to check if the door key-linked lock and unlock switches are functioning properly.

Main Body ECU

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Door Key Linked Lock SW	Door key-linked switch lock signal / ON or OFF	ON: Driver side door key cylinder turned to lock position OFF: Driver side door key cylinder not turned	-
Door Key Linked Unlock SW	Door key-linked switch unlock signal / ON or OFF	ON: Driver side door key cylinder turned to unlock position OFF: Driver side door key cylinder not turned	-

OK:
On tester screen, each item changes between ON and OFF according to above chart.

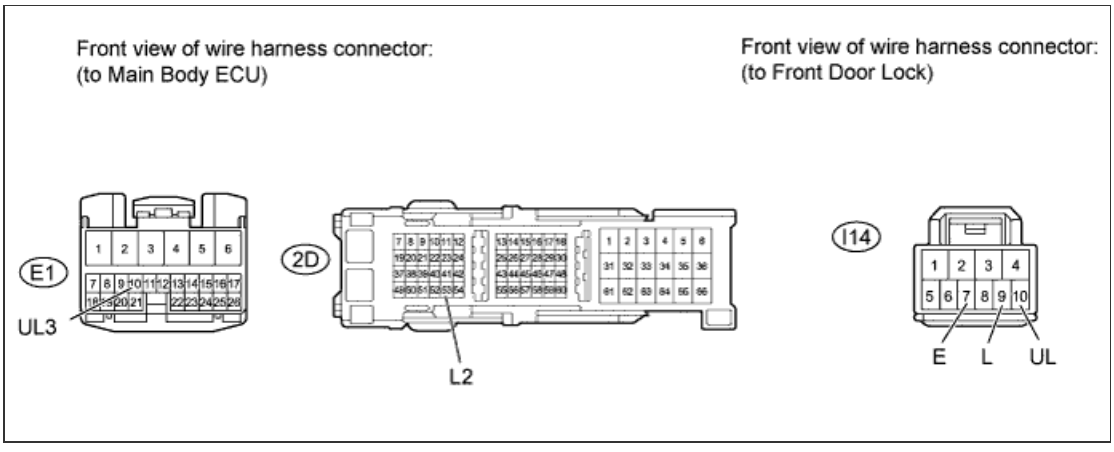
NG → Go to step 6

OK

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

6.CHECK HARNESS AND CONNECTOR (FRONT DOOR LOCK - MAIN BODY ECU AND BODY GROUND)

a. for LHD:



i. Disconnect the I14 door lock connector.

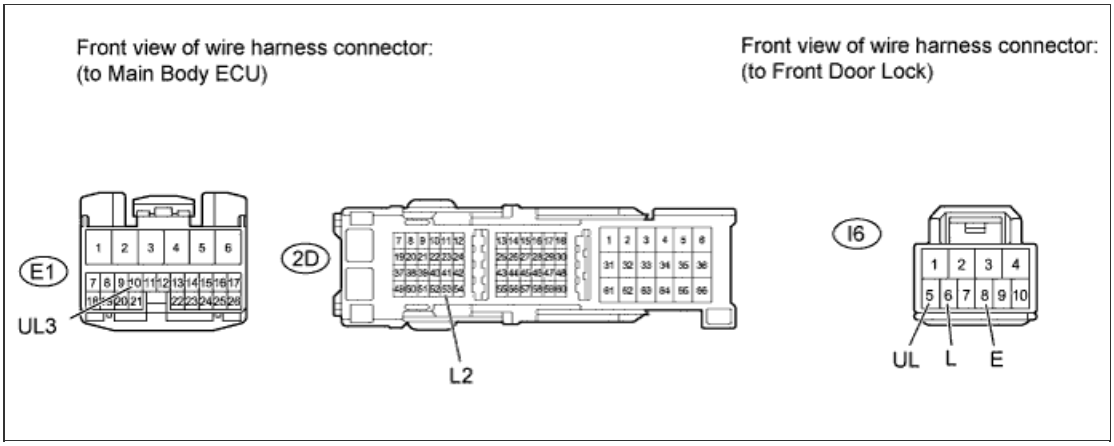
ii. Disconnect the E1 and 2D ECU connectors.

iii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I14-10 (UL) - E1-10 (UL3)	Always	Below 1 Ω
I14-9 (L) - 2D-53 (L2)	Always	Below 1 Ω
I14-7 (E) - Body ground	Always	Below 1 Ω
I14-10 (UL) - Body ground	Always	10 kΩ or higher
I14-9 (L) - Body ground	Always	10 kΩ or higher

b. for RHD:



i. Disconnect the I6 door lock connector.

ii. Disconnect the E1 and 2D ECU connectors.

iii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

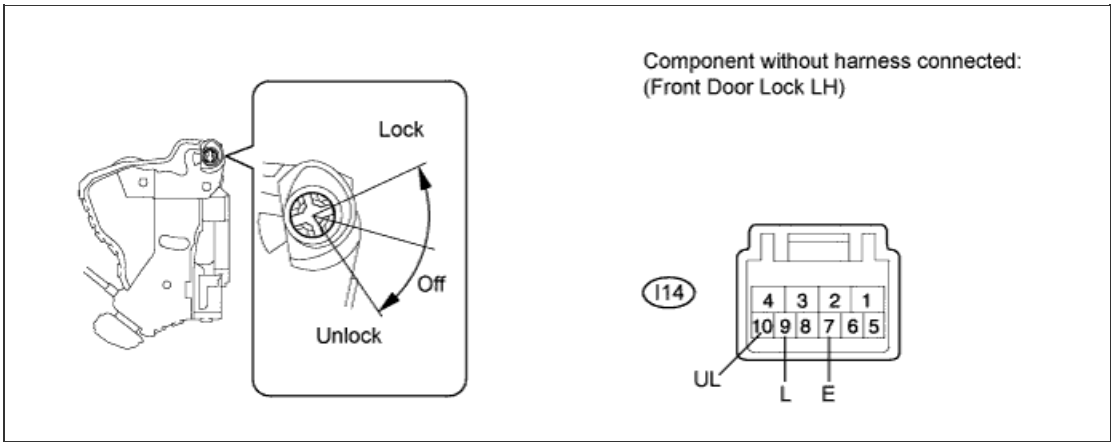
Tester Connection	Condition	Specified Condition
I6-5 (UL) - E1-10 (UL3)	Always	Below 1 Ω
I6-6 (L) - 2D-53 (L2)	Always	Below 1 Ω
I6-8 (E) - Body ground	Always	Below 1 Ω
I6-5 (UL) - Body ground	Always	10 kΩ or higher
I6-6 (L) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

7.INSPECT FRONT DOOR LOCK ASSEMBLY (DOOR KEY-LINKED LOCK AND UNLOCK SWITCH)

a. for LHD:



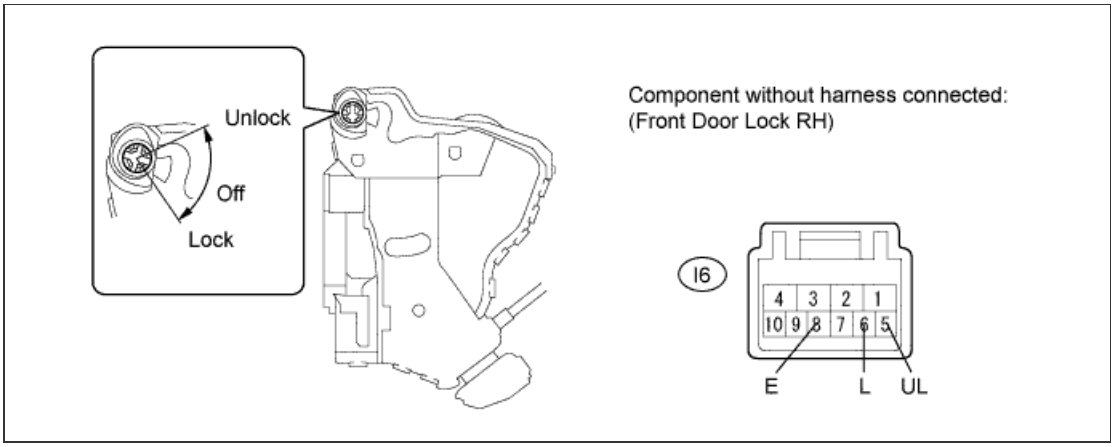
i. Remove the front door lock LH (Click here).

ii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
9 (L) - 7 (E)	Lock	Below 1 Ω
9 (L) - 7 (E)	Off	10 kΩ or higher
10 (UL) - 7 (E)	Unlock	Below 1 Ω
10 (UL) - 7 (E)	Off	10 kΩ or higher

b. for RHD:



i. Remove the front door lock RH (Click here).

ii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
5 (UL) - 8 (E)	Unlock	Below 1 Ω
5 (UL) - 8 (E)	Off	10 kΩ or higher
6 (L) - 8 (E)	Lock	Below 1 Ω
6 (L) - 8 (E)	Off	10 kΩ or higher

NG → REPLACE FRONT DOOR LOCK ASSEMBLY (Click here)

OK

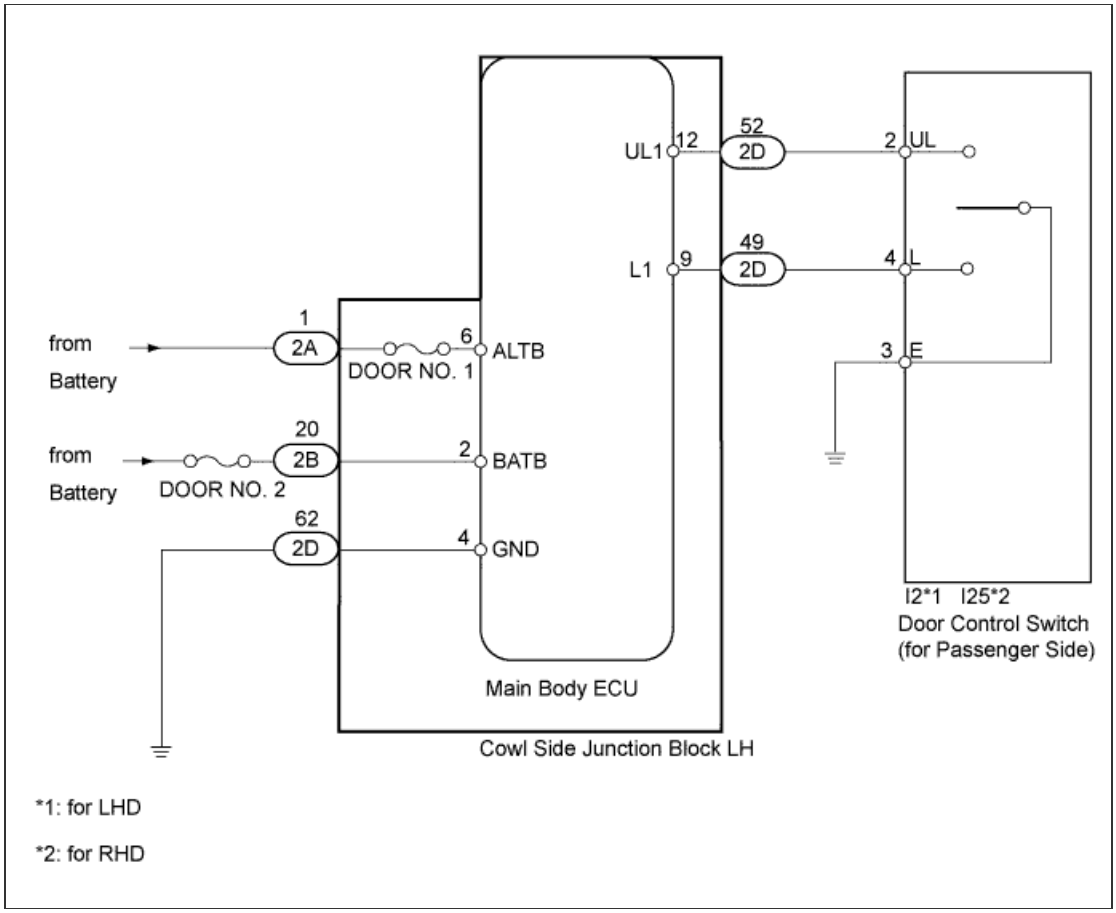
REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

for Preparation Click here

DESCRIPTION

The main body ECU receives switch signals from the door control switch and activates the door lock motor on each door according to these signals.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK AND UNLOCK SWITCH)

a. Use the Data List to check if the door lock and unlock switches are functioning properly.

Main Body ECU

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Door Lock SW-Lock	Door manual lock switch signal / ON or OFF	ON: Front passenger side door control switch on (lock) OFF: Front passenger side door control switch off	-
Door Unlock SW-Unlock	Door manual unlock switch signal / ON or OFF	ON: Front passenger side door control switch on (unlock) OFF: Front passenger side door control switch off	-

OK:

On the intelligent tester screen, each item changes between ON and OFF according to above chart.

NG → Go to step 4

OK

2.INSPECT FUSE (DOOR NO. 1, DOOR NO. 2)

a. Remove the DOOR NO. 1 fuse from the main body ECU (cowl side junction block LH).

b. Remove the DOOR NO. 2 fuse from the engine room relay block.

c. Measure the resistance according to the value(s) in the table below.

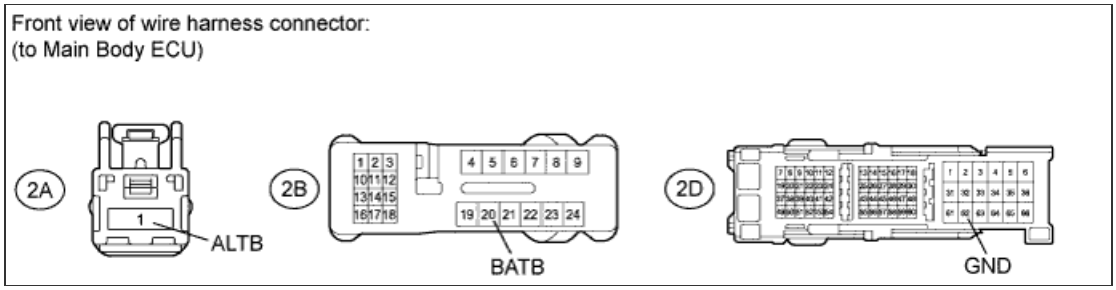
Standard Resistance:

Tester Connection	Condition	Specified Condition
DOOR NO. 1 fuse	Always	Below 1 Ω
DOOR NO. 2 fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

3.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - BATTERY AND BODY GROUND)



a. Disconnect the 2A, 2B, and 2D ECU connectors.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
2A-1 (ALTB) - Body ground	Always	11 to 14 V
2B-20 (BATB) - Body ground	Always	11 to 14 V

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
2D-62 (GND) - Body ground	Always	Below 1 Ω

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

4.INSPECT DOOR CONTROL SWITCH ASSEMBLY (DOOR LOCK AND UNLOCK SWITCH)

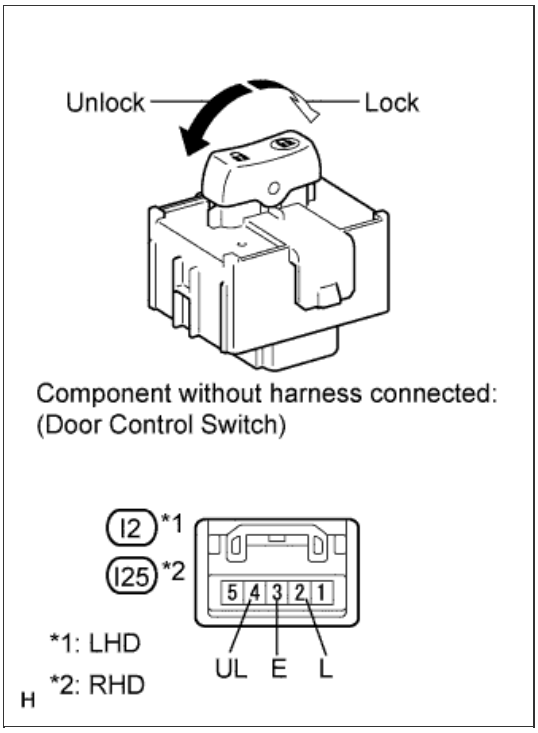
a. Remove the door control switch (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
2 (L) - 3 (E)	Lock	Below 1 Ω

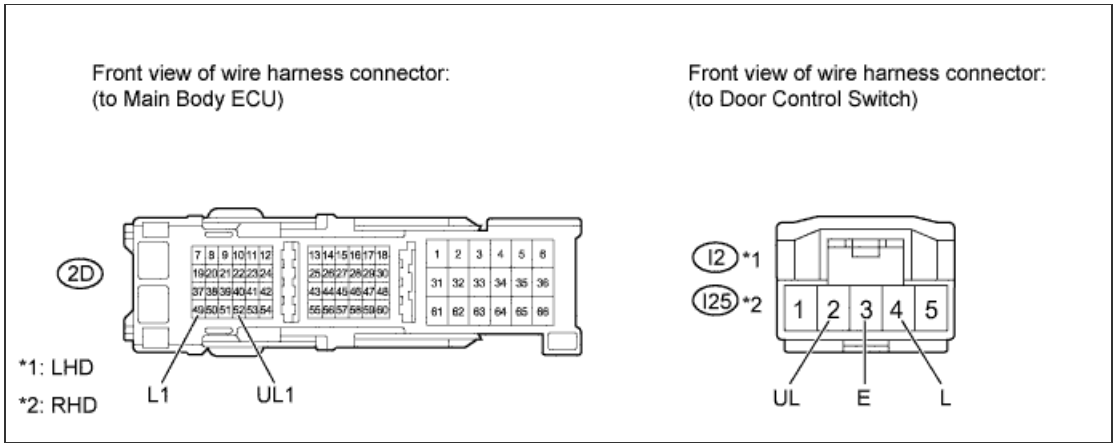
2 (L) - 3 (E) 4 (UL) - 3 (E)	Off	10 kΩ or higher
4 (UL) - 3 (E)	Unlock	Below 1 Ω



NG → REPLACE DOOR CONTROL SWITCH ASSEMBLY (Click here)

OK

5.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - DOOR CONTROL SWITCH AND BODY GROUND)



a. Disconnect the 2D ECU connector.

b. Disconnect the I2*1 or I25*2 switch connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
2D-52 (UL1) - I2-4 (UL)*1	Always	Below 1 Ω
2D-52 (UL1) - I25-4 (UL)*2		
2D-49 (L1) - I2-4 (UL)*1	Always	Below 1 Ω
2D-49 (L1) - I25-4 (UL)*2		
I2-2 (L)*1 - Body ground	Always	10 kΩ or higher
I25-2 (L)*2 - Body ground		

I2-3 (E)*1 - Body ground	Always	Below 1 Ω
I25-3 (E)*2 - Body ground		
I2-4 (UL)*1 - Body ground	Always	10 kΩ or higher
I25-4 (UL)*2 - Body ground		

*1: for LHD
*2: for RHD

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

for Preparation Click here

1.PRECAUTIONS FOR EACH FUNCTION

a. Precautions for the key:

The key is a precision instrument. Be sure to observe the following:

i. Do not drop or strike the key.

ii. Do not keep the key in a high temperature area for a long time.

iii. Do not use an ultrasonic washing machine to clean the key.

iv. Keep the key away from magnets or magnetized items during use.

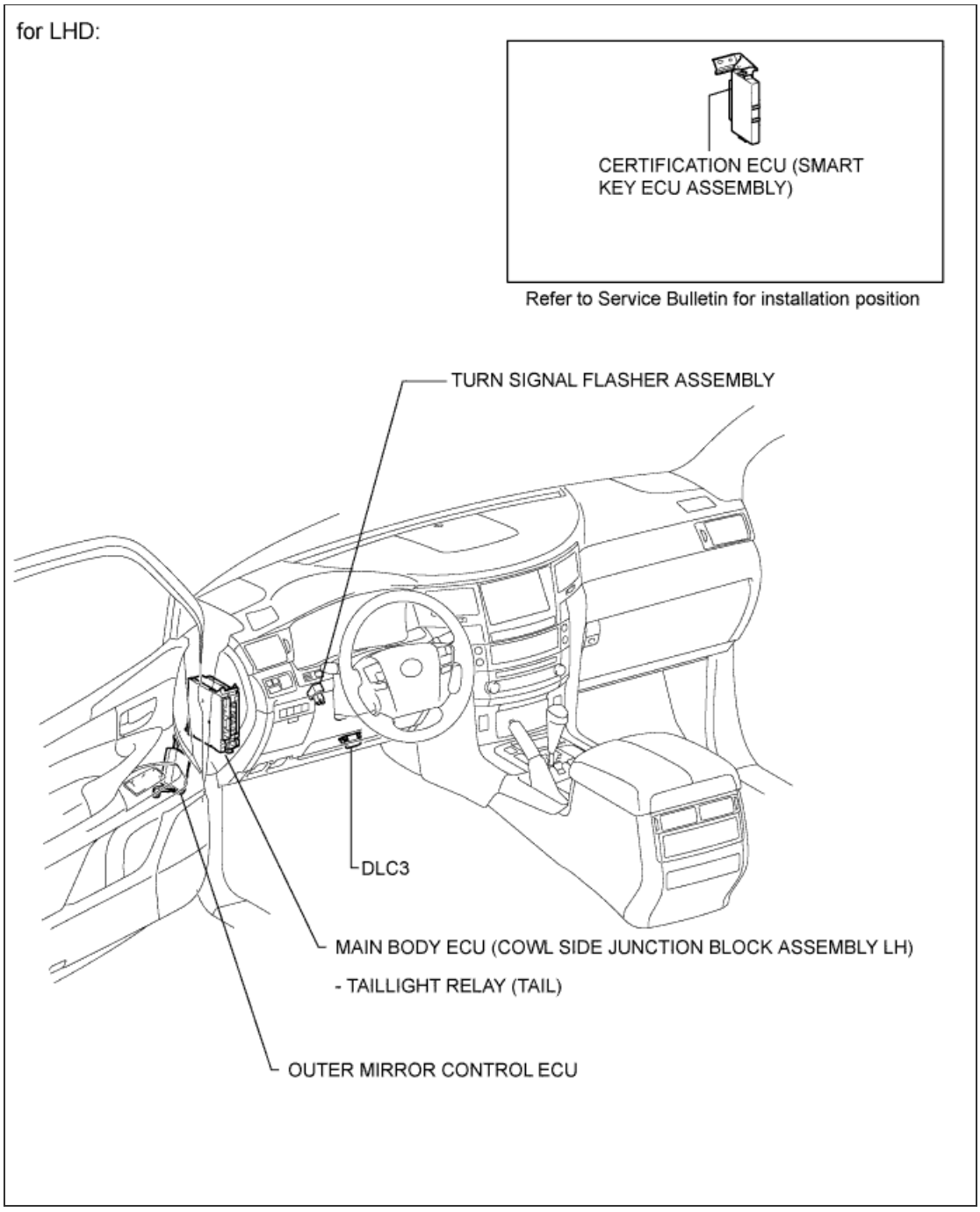
v. Do not attach any stickers to the key.

b. Precautions for the battery built into the key and the vehicle battery:

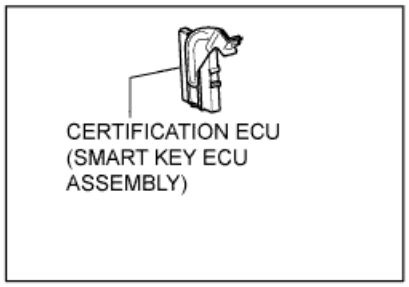
i. When the door is being locked, the vehicle battery is used to transmit a radio wave. The battery may be fully depleted if the vehicle remains stopped for a long time. If the vehicle is not used for a long time, replace the transmitter battery (Click here) or cancel the entry and start system (for Entry Function) (Click here).

ii. When the door is being locked with the key in the detection area of the door oscillator, the battery is used to regulate communication between the key and vehicle. If the vehicle is not used, keep the key away from the vehicle (more than 2 m (6.56 ft.)).

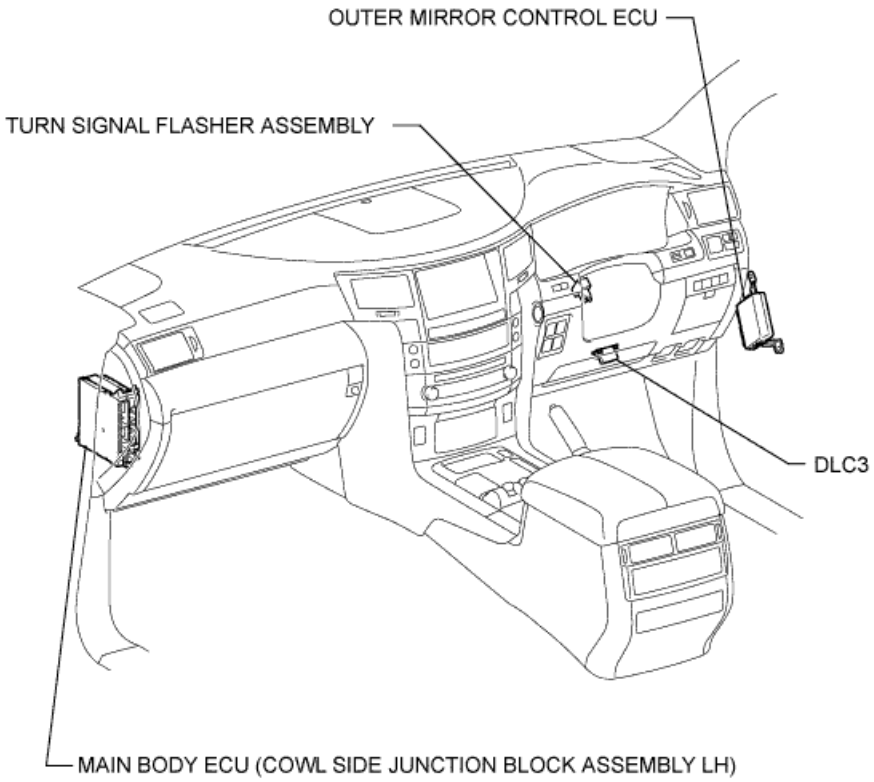
for Preparation Click here



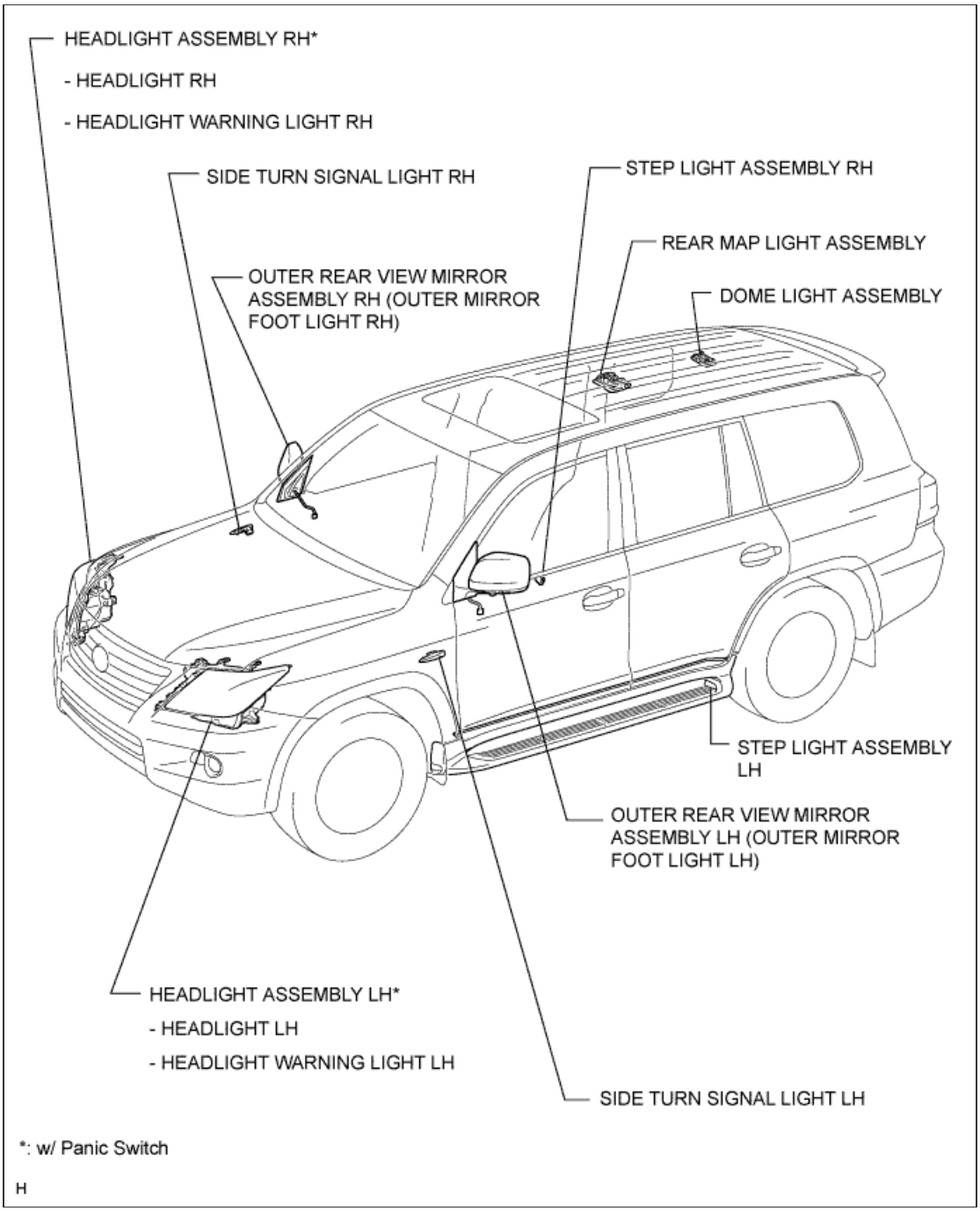
for RHD:



Refer to Service Bulletin for installation position

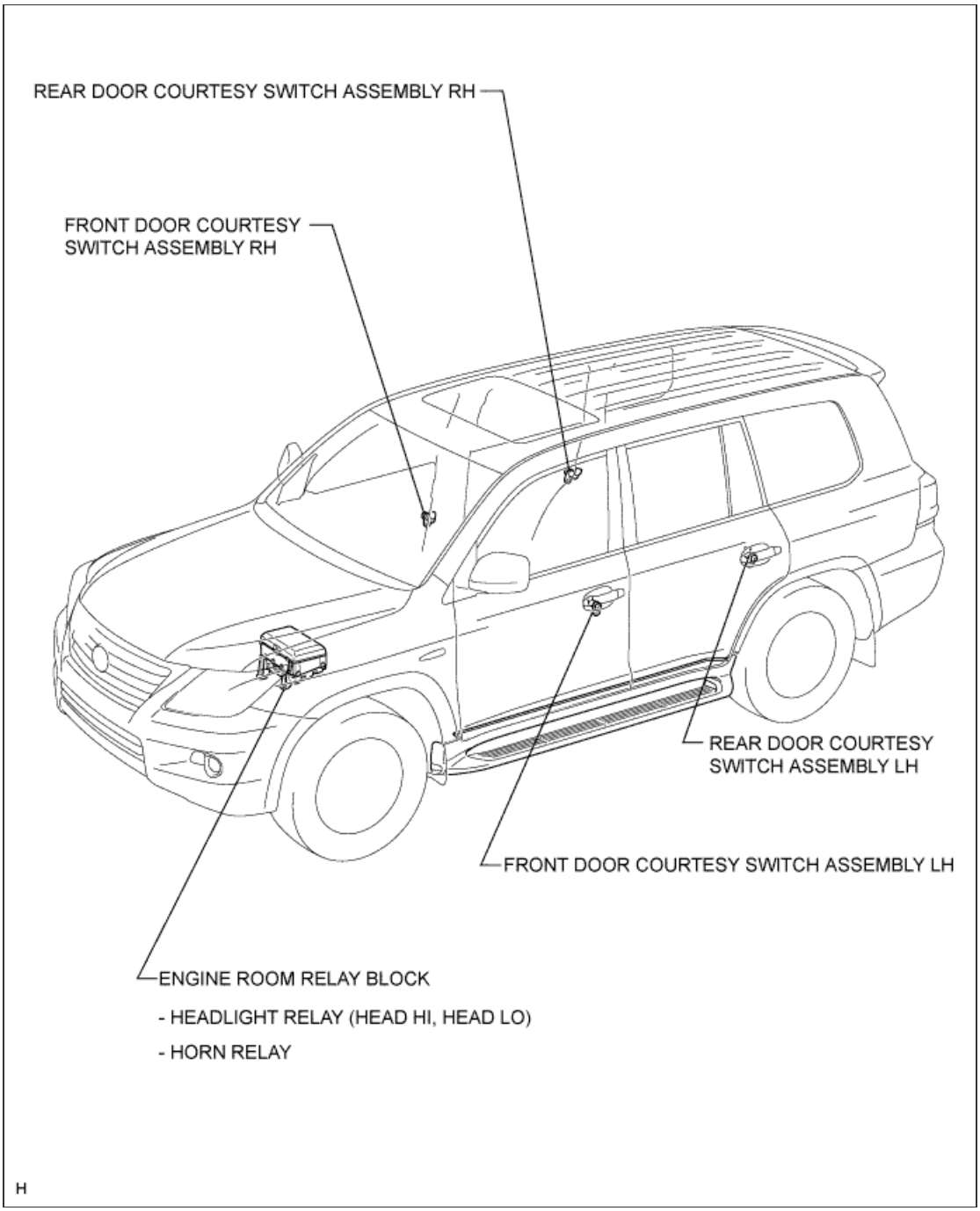


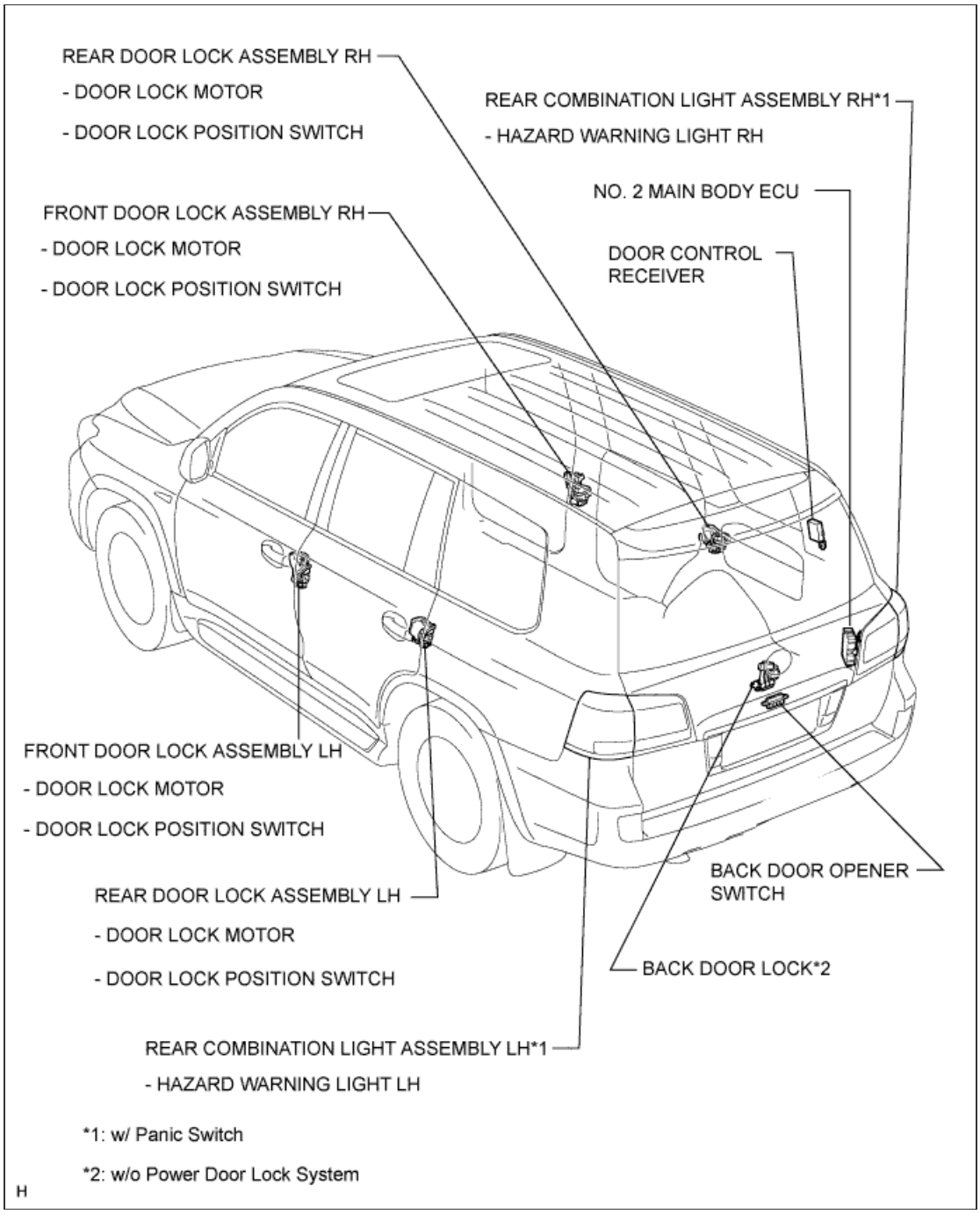
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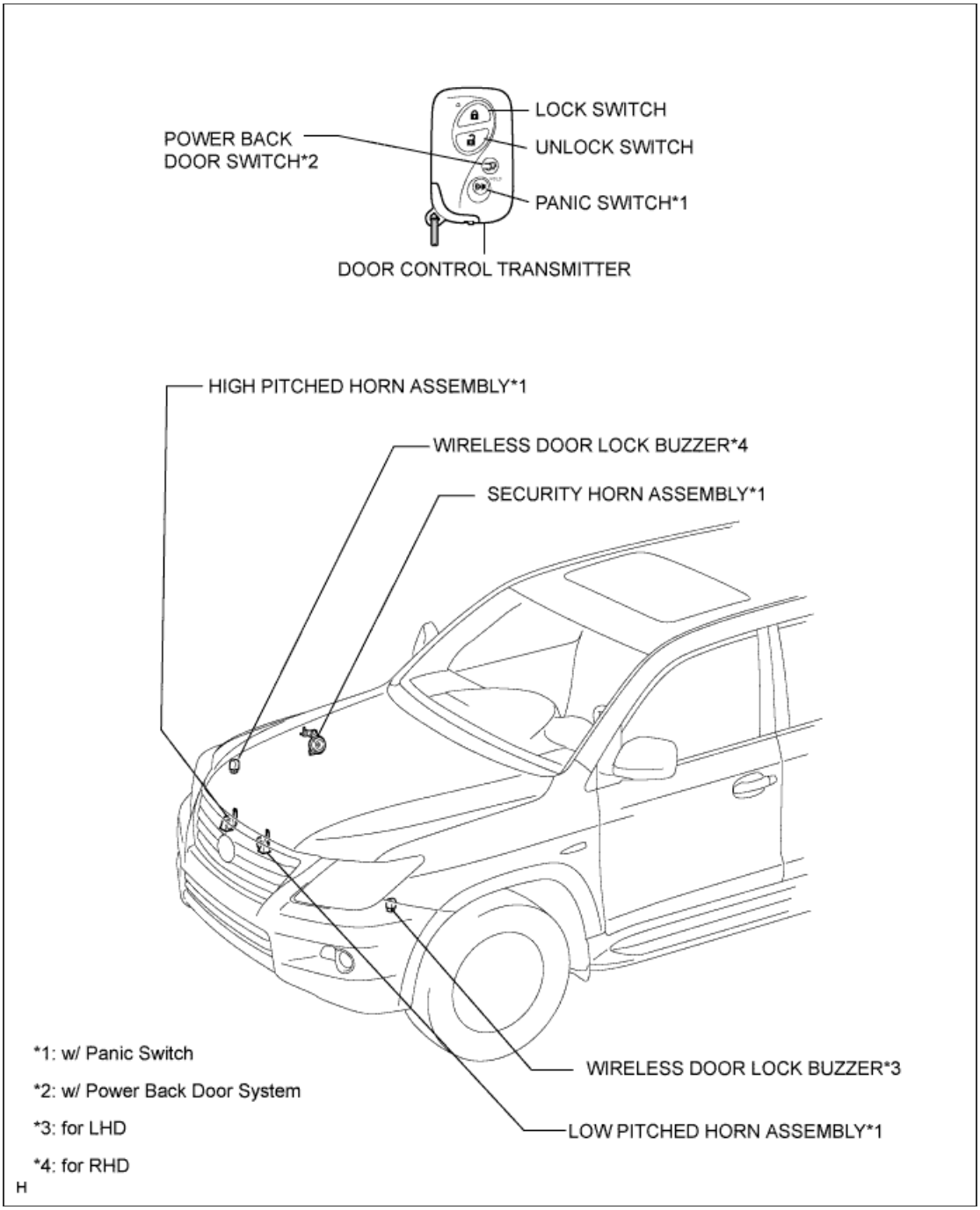


*: w/ Panic Switch

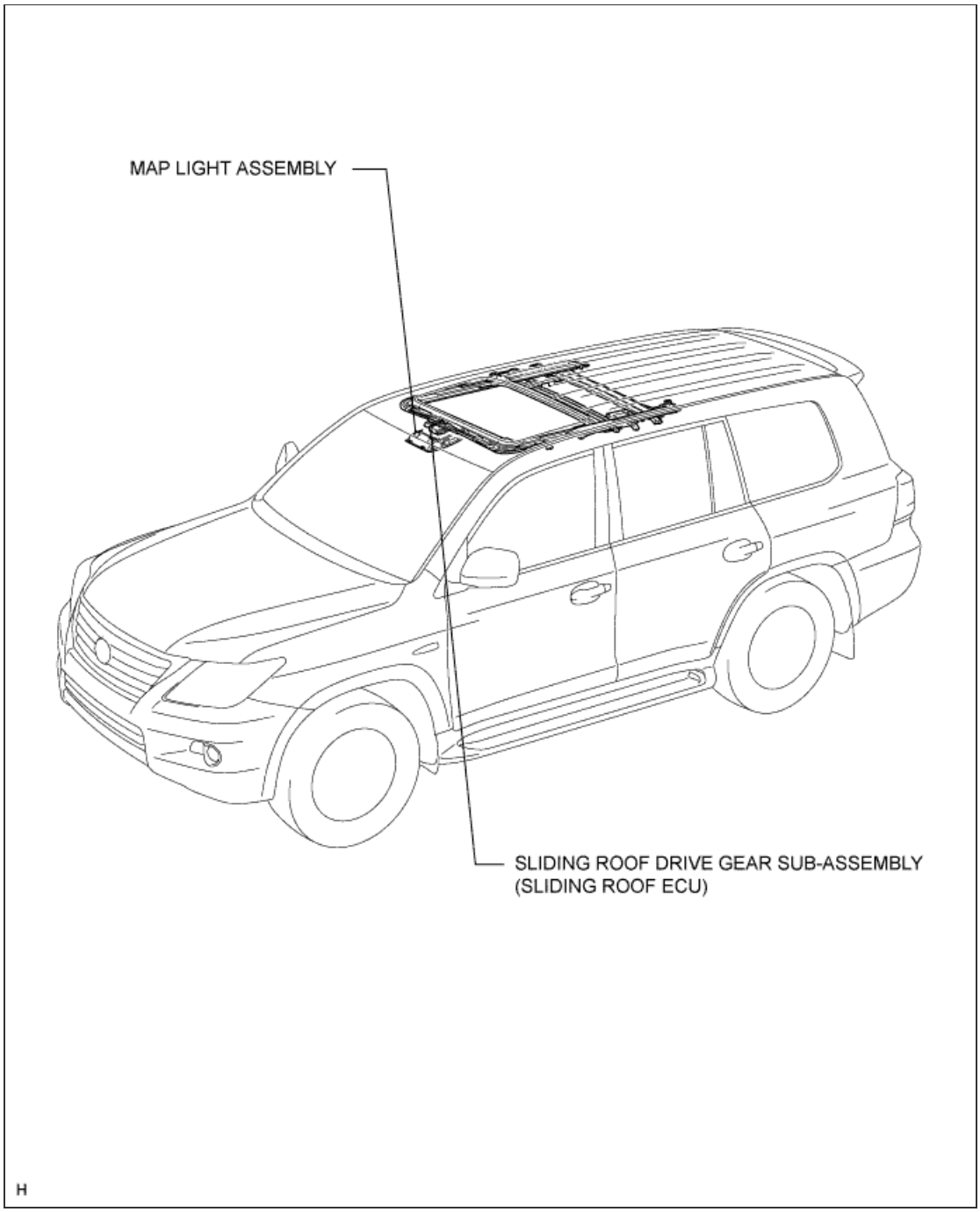
H


REAR DOOR COURTESY SWITCH ASSEMBLY RH
FRONT DOOR COURTESY SWITCH ASSEMBLY RH
REAR DOOR COURTESY SWITCH ASSEMBLY LH
FRONT DOOR COURTESY SWITCH ASSEMBLY LH
ENGINE ROOM RELAY BLOCK
- HEADLIGHT RELAY (HEAD HI, HEAD LO)
- HORN RELAY
H

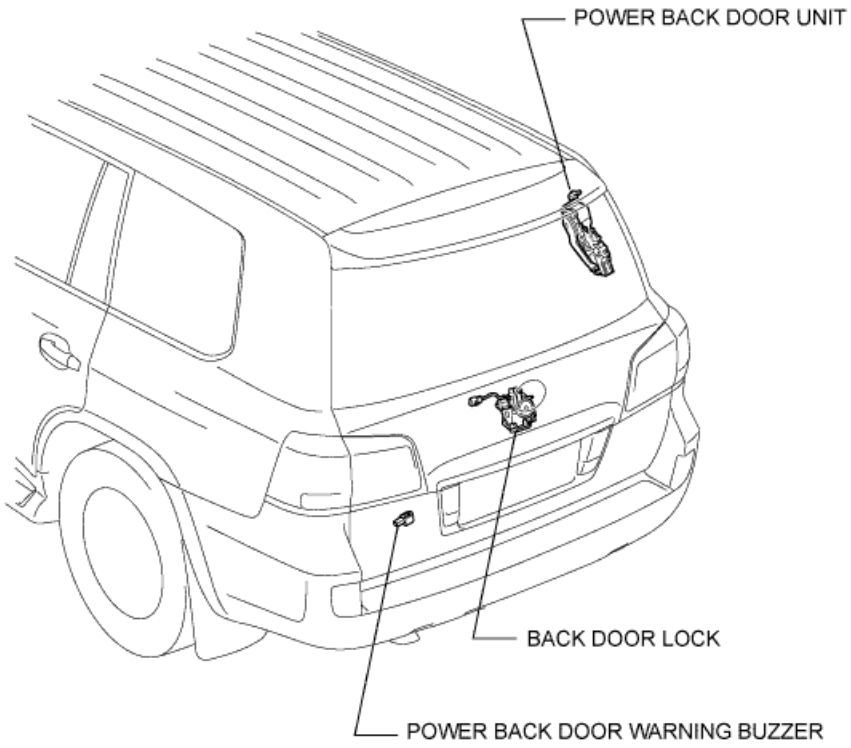

REAR DOOR LOCK ASSEMBLY RH
- DOOR LOCK MOTOR
- DOOR LOCK POSITION SWITCH
REAR COMBINATION LIGHT ASSEMBLY RH*1
- HAZARD WARNING LIGHT RH
NO. 2 MAIN BODY ECU
FRONT DOOR LOCK ASSEMBLY RH
- DOOR LOCK MOTOR
- DOOR LOCK POSITION SWITCH
DOOR CONTROL RECEIVER
FRONT DOOR LOCK ASSEMBLY LH
- DOOR LOCK MOTOR
- DOOR LOCK POSITION SWITCH
BACK DOOR OPENER SWITCH
REAR DOOR LOCK ASSEMBLY LH
- DOOR LOCK MOTOR
- DOOR LOCK POSITION SWITCH
BACK DOOR LOCK*2
REAR COMBINATION LIGHT ASSEMBLY LH*1
- HAZARD WARNING LIGHT LH
*1: w/ Panic Switch
*2: w/o Power Door Lock System
H


LOCK SWITCH
POWER BACK
DOOR SWITCH*2
UNLOCK SWITCH
PANIC SWITCH*1
DOOR CONTROL TRANSMITTER
HIGH PITCHED HORN ASSEMBLY*1
WIRELESS DOOR LOCK BUZZER*4
SECURITY HORN ASSEMBLY*1
WIRELESS DOOR LOCK BUZZER*3
LOW PITCHED HORN ASSEMBLY*1
*1: w/ Panic Switch
*2: w/ Power Back Door System
*3: for LHD
*4: for RHD

H

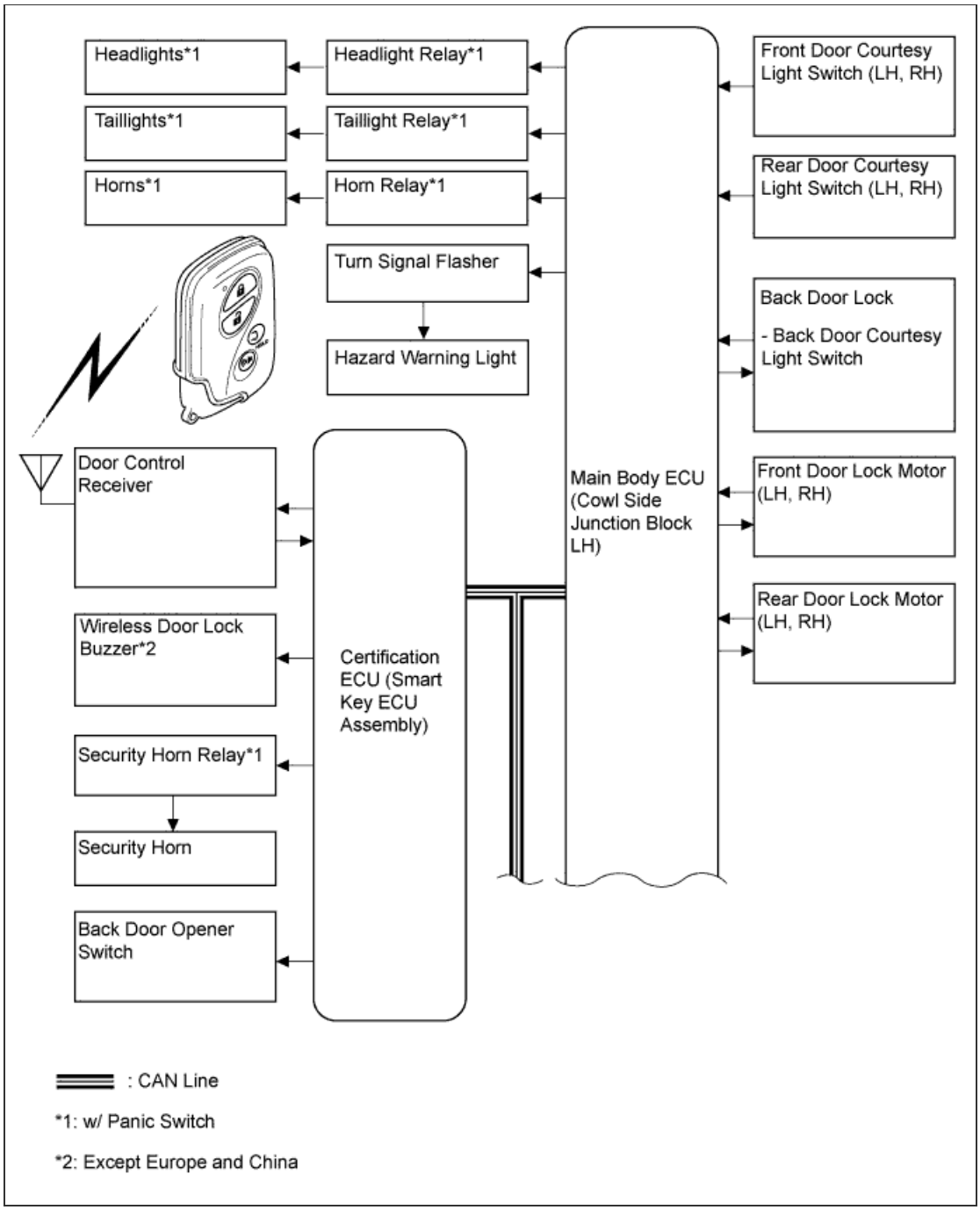

MAP LIGHT ASSEMBLY
SLIDING ROOF DRIVE GEAR SUB-ASSEMBLY
(SLIDING ROOF ECU)
H

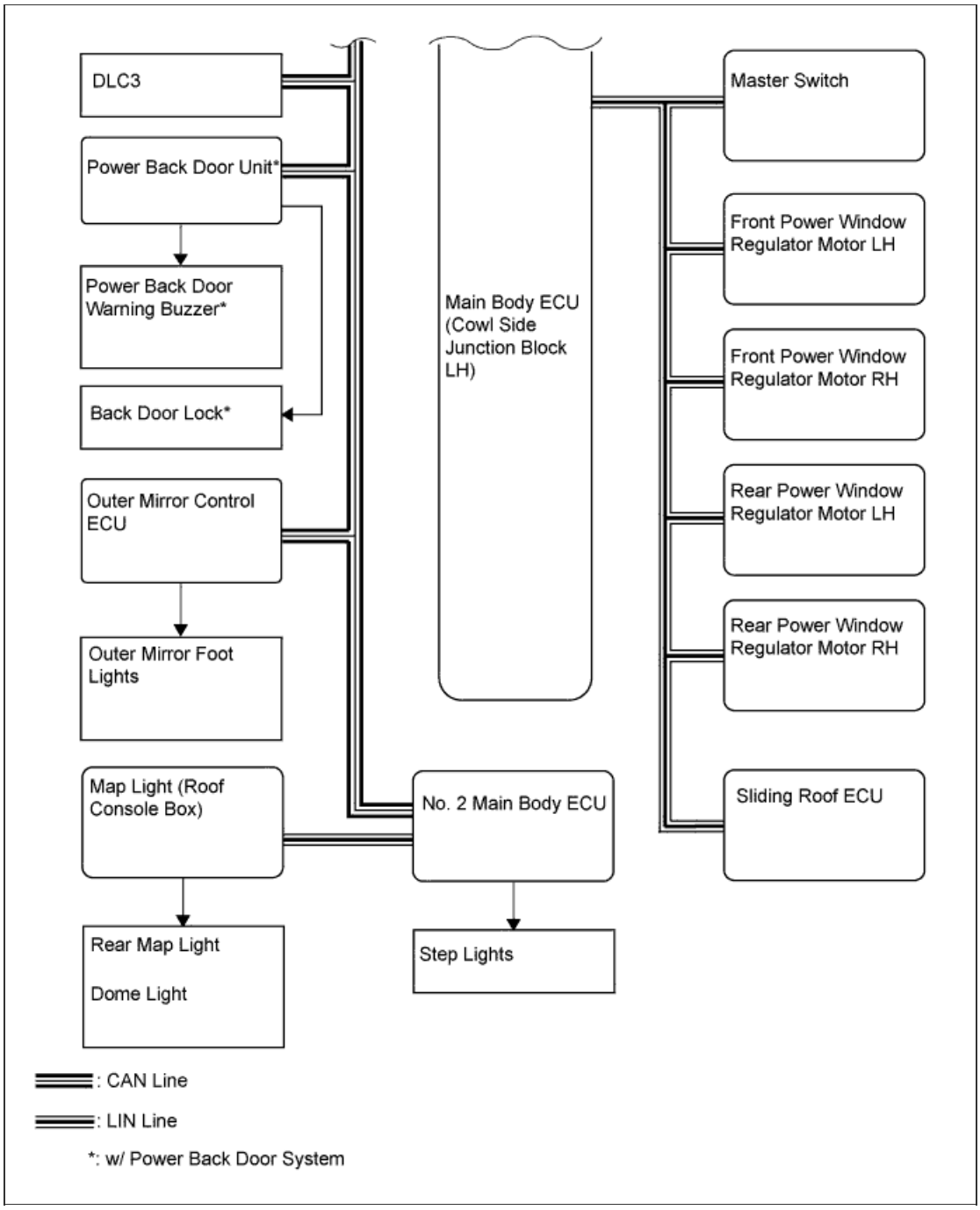
w/ Power Back Door System:



H

for Preparation Click here





Communication Table:

Sender	Receiver	Signal	Line
Certification ECU (smart key ECU assembly)	Main body ECU (Cowl side junction block LH)	• Door unlock standby control signal • Hazard answer back signal • Map light answer back signal	CAN
Main body ECU (Cowl side junction block LH)	Certification ECU (smart key ECU assembly)	• Door lock/unlock output request signal • Wireless door lock buzzer sound request signal • Door lock position signal	
Main body ECU (Cowl side junction block LH)	Power back door unit*	Back door lock control sign	CAN
Main body ECU (Cowl side junction block LH)	Outer rear view mirror (outer mirror control ECU)	Outer rear view mirror foot light answer back signal	CAN
Main body ECU (Cowl side junction block LH)	No. 2 main body ECU	Step light answer back signal	CAN
Main body ECU (Cowl side junction	• Master switch • Front power window regulator motor LH • Front power window regulator motor RH	Wireless power window up/down signal	LIN

block LH)	• Rear power window regulator motor LH • Rear power window regulator motor RH		
Main body ECU (Cowl side junction block LH)	Sliding roof ECU	Wireless sliding roof open/close signal	LIN

*: w/ Power Back Door System

for Preparation Click here

This system lock/unlocks the doors remotely. The wireless door lock control system has the following features:

- The certification ECU (smart key ECU assembly) performs the code identification process and the main body ECU (cowl side junction block LH) controls the door lock. A serial data link is provided for communication between the certification ECU (smart key ECU assembly) and main body ECU (cowl side junction block LH).
- A key-integrated type transmitter is used and it contains the following 3 switches: lock switch, unlock switch and panic switch*.
  *: w/ Panic Switch
- An LED is mounted on the transmitter to show if the battery is depleted.

FUNCTION OF MAIN COMPONENTS

*1: w/ Panic Switch
*2: w/o Power Back Door System
*3: w/ Power Back Door System

Component	Function
Door control transmitter	• Contains lock, unlock, and panic switches*1. • Transmits weak electric waves (recognition codes and function codes) to door control receiver. • Illuminates indicator light (LED) during transmission.
Door control receiver	Receives weak electric waves (recognition codes and function codes) from door control transmitter via electrical key antenna and changes waves to code data.
Front door courtesy light switch Rear door courtesy light switch Back door courtesy light switch	Turns on when door is open and off when door is closed. Outputs door status (open or closed) to main body ECU (cowl side junction block LH).
Back door lock	• The built-in motor open the door.*2 • The built-in motor open/close the door.*3 • Performs the back door open operation according to the door lock position determination of the main body ECU.*2 • Performs the back door open/close operation according to the door position as determined by the power back door ECU.*3
Door lock position switch	Transmits door lock positions of each door to main body ECU (cowl side junction block LH).
Wireless door lock buzzer	Emits beep (answer-back) when doors are locked or unlocked by wireless operation (except Europe and China).
Certification ECU (smart key ECU assembly)	Matches code data with registered code and outputs code data to main body ECU (cowl side junction block LH).

SYSTEM FUNCTION

a. The wireless door lock control system has the following functions:

Function	Outline
All door lock function	Pressing the lock switch locks all the doors and retracts the outer mirrors.
All door unlock function **HINT:** This function can be enabled by changing the customize parameter.	Pressing unlock switch unlocks all the doors and returns the outer mirrors.
2-step unlock function	Pressing the unlock switch once unlocks only the driver side door and returns the outer mirrors. Pressing the unlock switch twice within 3 seconds unlocks all the doors.
Power window and sliding roof open function	After locking all the doors with the door control transmitter operation, pressing the unlock switch for 3 seconds or more opens all the power windows and the sliding roof.
Power window and sliding roof close function	After locking all the doors with the door control transmitter operation, pressing the unlock switch for 3 seconds or more

	closes all the power windows and the sliding roof.
Chattering prevention function	If a switch is pressed, the corresponding switch operation is performed once. If a switch is held down, the corresponding switch operation occurs only once and does not repeatedly activate. Lastly, when pressing a switch at 1 second intervals, the corresponding operation activates once for every press of the switch.
Answer-back function - Buzzer answer-back (except Europe and China) - Hazard answer-back (except China)	• When the doors are locked, the turn signal lights flash once. When the doors are unlocked, the turn signal lights flash twice and the wireless warning buzzer sounds twice. • When the transmitter is used for opening the power windows and sliding roof, this function causes the buzzer to sound to indicate that the operation begins.
Automatic lock function	If no doors are opened within 30 seconds after they are unlocked by the door control transmitter, all the doors will lock again automatically.
Panic alarm function*1	Holding down the panic switch for more than 1 second sets off the theft deterrent alarm (the horn and security horn sound, the hazard warning lights, headlights, and taillights flash, and the map light and spot light illuminate).
Fail-safe function	When the key is in the vehicle, the doors cannot be locked by the lock switch.
Illuminated entry function	• Pressing the unlock switch causes dome light (map light and rear map light), side step light and outer mirror foot light illumination and all door unlock operation to occur simultaneously. • If the doors have not been opened, the dome light (map light and rear map light), side step light and outer mirror foot light turns off in approximately 15 seconds.
Door ajar warning function (except China)	If any door is open or ajar, pressing the lock switch will cause the wireless door lock buzzer to sound for about 10 seconds.
Memory call function	If the unlock switch of a memory call registered transmitter is pressed and the driver door is opened, the following parts move to the memory call position: front seat, front seat belt anchor, steering wheel and outer mirrors.
Transmitter recognition code registration function	Enables 7 modes for registering (writing and storing) transmitter recognition codes in the EEPROM.
Wireless power back door open/close function*2	When the back door switch is pressed for 0.8 seconds or more, the back door opens/closes. (Power back door operation changes according to the customize parameters. For details, refer to the Power Back Door System.)

*1: w/ Panic Switch
*2: w/ Power Back Door System

for Preparation Click here

HINT:

- **The wireless door lock control system troubleshooting procedures are based on the premise that the following systems are operating normally. Check these systems first before troubleshooting the wireless door lock control system.**
  - **Power door lock control system**
  - **Power window control system**
  - **Sliding roof system**
- **Use these procedures to troubleshoot the wireless door lock control system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK FOR DTC*

a. Check for DTCs and note any codes that are output (Click here).

b. Clear the DTCs (Click here).

c. Recheck for DTCs (Click here). Based on the DTCs output above, try to force output of the same CAN communication system DTC, LIN communication system DTC or wireless door lock control system DTC by simulating the symptoms indicated by the DTC.

Result

Result	Proceed to
DTC is not output	A
CAN communication system (for LHD) DTC is output	B
CAN communication system (for RHD) DTC is output	C
LIN communication system DTC is output	D
Wireless door lock control system DTC is output	E

B. Go to CAN COMMUNICATION SYSTEM (**Click here**)

C. Go to CAN COMMUNICATION SYSTEM (**Click here**)

D. Go to LIN COMMUNICATION SYSTEM (**Click here**)

E. Go to DIAGNOSTIC TROUBLE CODE CHART (**Click here**)

A

4.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. → Go to step 6

A

5.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Operation Check (Click here)

b. Terminals of ECU (Click here)

c. Data List / Active Test (Click here)

NEXT

6.REPAIR OR REPLACE

NEXT

7.CONFIRMATION TEST

NEXT

END

for Preparation Click here

NOTICES WHEN CHECKING

a. Wireless door lock/unlock function:
The wireless door lock control function operates only when the following 5 conditions are met:

- The engine switch is off.
- All the doors are closed.

HINT:

The unlock function operates even when one of the doors is open.

- There is no door control transmitter in the cabin.
- The power door lock system is functioning normally.
- The function is not disabled by customization.

b. The wireless transmitter operational area differs depending on the situation.

- The operational area differs depending on the user, the way the transmitter is held and the location.
- In certain areas, the operational area will be reduced due to the vehicle body shape and the influence of the surrounding environment.
- The weak electric waves of the transmitter may be affected if the area has strong electric waves or noise. The transmitter operational area may be shortened or the transmitter may not function.
- When the battery weakens, the operational area is reduced or the transmitter may not function.

HINT:

The battery may weaken or other problems may occur if one of the following occurs: 1) it has had prolonged exposure to direct sunlight, such as on the instrument panel; or 2) it is placed within 1 m (3.28 ft) of electrical products, such as TVs, computers, cordless phones, cell phone recharger stands (with the cell phone recharging), etc.

CHECK WIRELESS DOOR LOCK CONTROL SYSTEM

HINT:

- **The switches described below transmit signals and are built into the door control transmitter.**
- **The transmitter operational area must be taken into account while checks are being made.**

a. Make sure the vehicle is in a condition in which the wireless door lock control functions can be operated (see previous step).

b. Check the basic functions:

- Check that the transmitter LED lights up 3 times when each switch is pressed 3 times.

HINT:

If the LED does not illuminate when the switch has been pressed 3 times or more, the battery may be depleted.

- Check that when the lock switch is pressed, all the doors lock and the outer mirrors retract.
- Check that when the unlock switch is pressed, all doors unlock and the outer mirrors return.
- When the transmitter is within 1 m (3.28 ft) of the driver seat, check that when the unlock switch is held down for 3 seconds or more, all the power windows and the sliding roof open. Also check that the open operation stops when the switch is released.

c. Check the chattering prevention function:

- If a switch is pressed, check that the corresponding operation is performed only once. If the switch is held down, check that the corresponding operation occurs only once and does not repeatedly activate. Lastly, if a switch is pressed at 1 second intervals, check that the corresponding operation activates once for every press of the switch.

d. Check the answer-back function:

- When the lock switch is pressed, check that the turn signal lights flash once, the wireless door lock buzzer sounds* once and all the doors lock.
- When the unlock switch is pressed, check that the turn signal lights flash twice, the wireless door lock buzzer sounds* twice and all the doors unlock.

HINT:

*: Except Europe and China

e. Check the automatic lock function:

- When all of the doors are unlocked with the unlock switch and none of the doors are opened or locked within 30 seconds*, check that the doors lock again.

HINT:

*: The automatic lock function time (30 seconds) applies only if the setting of this function is the default.

f. Check the panic alarm function (w/ Panic Switch):

- When the panic switch is held down for 1 second or more, check that the security horn and vehicle horn sound, the headlights, taillights, and turn signal lights flash, and the map light and spot light illuminate.

g. Check the switch operation fail-safe function:

- If the key is in the vehicle, check that the doors cannot be locked by the lock switch. However, this does not apply when the system is in the recognition code registration mode.

h. Check the illuminated entry function:

- When the map light DOOR switch is on and all the doors are locked, pressing the unlock switch causes the dome light (map light, rear map light) to illuminate and all doors to unlock simultaneously.
- If the doors have not been opened, the map light and dome light turn off in approximately 15 seconds.

HINT:

The illumination period of the lights can be changed by adjusting the customize parameters.

i. Check the door ajar warning function (except China):

- If a door is open or not completely closed, check that the doors cannot be locked by the lock switch and the buzzer sounds for 10 seconds.

HINT:

The buzzer stops sounding if either of the following conditions is met:

- **The buzzer has sounded for 10 seconds.**
- **The engine switch is on (ACC) or on (IG).**
- **All the doors are closed.**

j. Check the memory call function (Click here).

k. Check the power back door function:

- When the back door switch is pressed with the back door closed, check that the buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door opens.

HINT:

- **Power back door operation changes according to the customize parameters. For details, refer to the Power Back Door System.**
- **When the back door switch is pressed for 0.8 seconds or more with the back door open, check that the buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door closes.**

for Preparation Click here

NOTICES WHEN CHECKING

a. Wireless door lock/unlock function:
The wireless door lock control function operates only when the following 5 conditions are met:

- The engine switch is off.
- All the doors are closed.

HINT:

The unlock function operates even when one of the doors is open.

- There is no door control transmitter in the cabin.
- The power door lock system is functioning normally.
- The function is not disabled by customization.

b. The wireless transmitter operational area differs depending on the situation.

- The operational area differs depending on the user, the way the transmitter is held and the location.
- In certain areas, the operational area will be reduced due to the vehicle body shape and the influence of the surrounding environment.
- The weak electric waves of the transmitter may be affected if the area has strong electric waves or noise. The transmitter operational area may be shortened or the transmitter may not function.
- When the battery weakens, the operational area is reduced or the transmitter may not function.

HINT:

The battery may weaken or other problems may occur if one of the following occurs: 1) it has had prolonged exposure to direct sunlight, such as on the instrument panel; or 2) it is placed within 1 m (3.28 ft) of electrical products, such as TVs, computers, cordless phones, cell phone recharger stands (with the cell phone recharging), etc.

CHECK WIRELESS DOOR LOCK CONTROL SYSTEM

HINT:

- **The switches described below transmit signals and are built into the door control transmitter.**
- **The transmitter operational area must be taken into account while checks are being made.**

a. Make sure the vehicle is in a condition in which the wireless door lock control functions can be operated (see previous step).

b. Check the basic functions:

- Check that the transmitter LED lights up 3 times when each switch is pressed 3 times.

HINT:

If the LED does not illuminate when the switch has been pressed 3 times or more, the battery may be depleted.

- Check that when the lock switch is pressed, all the doors lock and the outer mirrors retract.
- Check that when the unlock switch is pressed, all doors unlock and the outer mirrors return.
- When the transmitter is within 1 m (3.28 ft) of the driver seat, check that when the unlock switch is held down for 3 seconds or more, all the power windows and the sliding roof open. Also check that the open operation stops when the switch is released.

c. Check the chattering prevention function:

- If a switch is pressed, check that the corresponding operation is performed only once. If the switch is held down, check that the corresponding operation occurs only once and does not repeatedly activate. Lastly, if a switch is pressed at 1 second intervals, check that the corresponding operation activates once for every press of the switch.

d. Check the answer-back function:

- When the lock switch is pressed, check that the turn signal lights flash once, the wireless door lock buzzer sounds* once and all the doors lock.
- When the unlock switch is pressed, check that the turn signal lights flash twice, the wireless door lock buzzer sounds* twice and all the doors unlock.

HINT:

*: Except Europe and China

e. Check the automatic lock function:

- When all of the doors are unlocked with the unlock switch and none of the doors are opened or locked within 30 seconds*, check that the doors lock again.

HINT:

*: The automatic lock function time (30 seconds) applies only if the setting of this function is the default.

f. Check the panic alarm function (w/ Panic Switch):

- When the panic switch is held down for 1 second or more, check that the security horn and vehicle horn sound, the headlights, taillights, and turn signal lights flash, and the map light and spot light illuminate.

g. Check the switch operation fail-safe function:

- If the key is in the vehicle, check that the doors cannot be locked by the lock switch. However, this does not apply when the system is in the recognition code registration mode.

h. Check the illuminated entry function:

- When the map light DOOR switch is on and all the doors are locked, pressing the unlock switch causes the dome light (map light, rear map light) to illuminate and all doors to unlock simultaneously.
- If the doors have not been opened, the map light and dome light turn off in approximately 15 seconds.

HINT:

The illumination period of the lights can be changed by adjusting the customize parameters.

i. Check the door ajar warning function (except China):

- If a door is open or not completely closed, check that the doors cannot be locked by the lock switch and the buzzer sounds for 10 seconds.

HINT:

The buzzer stops sounding if either of the following conditions is met:

- **The buzzer has sounded for 10 seconds.**
- **The engine switch is on (ACC) or on (IG).**
- **All the doors are closed.**

j. Check the memory call function (Click here).

k. Check the power back door function:

- When the back door switch is pressed with the back door closed, check that the buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door opens.

HINT:

- **Power back door operation changes according to the customize parameters. For details, refer to the Power Back Door System.**
- **When the back door switch is pressed for 0.8 seconds or more with the back door open, check that the buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door closes.**

for Preparation Click here

CUSTOMIZING FUNCTION WITH INTELLIGENT TESTER (REFERENCE)

NOTICE:

- **When the customer requests a change in a function, first make sure that the function can be customized.**
- **Be sure to make a note of the current settings before customizing.**
- **When troubleshooting a function, first make sure that the function is set to the default setting.**

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Customize Setting.

e. Select the setting by referring to the table below.

Wireless Door Lock

Display	Default	Contents	Setting
Hazard Answer Back	ON	When the lock switch on the transmitter is pressed, this function illuminates the hazard warning lights once. When the unlock switch is pressed, the hazard warning lights illuminate twice.	ON/OFF
Wireless Control	ON	Function that turns the wireless door lock function on or off.	ON/OFF
Open Door Warning (except China)	ON	If a door is not completely closed and the transmitter lock switch is pressed, this function makes the buzzer sound for 10 seconds.	ON/OFF
Panic Alarm Function*	ON	Function to operate the theft deterrent system by continuously pressing the panic switch on transmitter for 2.5 seconds.	ON/OFF
Unlock 2 Operation	ON	Function that unlocks the driver side door when the unlock switch on the transmitter is pressed once, and unlocks all doors when the switch is pressed twice. If the setting is OFF, pressing the unlock switch once makes all the doors unlock.	ON/OFF
Auto Lock Time	30 s	Function to change the time until relocking after unlocking with the wireless door lock function.	30 s/60 s/120 s
Wireless Buzzer Resp	ON (except Europe and China)	Wireless buzzer response function.	ON/OFF
Wireless Buzzer Volume	Level 7	This function changes the wireless buzzer volume.	Level 0/Level 1/Level 2/Level 3/Level 4/Level 5/Level6/Level 7

*: w/ Panic Switch

PSD & PBD Operation (w/ Power Back Door System)

Display	Default	Contents	Setting
PBD One Motion	ON	Function to turn on/off the power back door wireless one motion open operation.	ON/OFF
Wireless PBD SW Operation	0.8sPR	Function to change the way the power back door is operated by the back door switch.	1 TIME/2 TIMES/0.8sPR/OFF

for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Wireless Door Lock Control System

Symptom	Suspected Area	See page
Wireless control function and entry function do not operate	Proceed to "All Door Entry Lock/Unlock Functions and Wireless Functions do not Operate"	Click here
Wireless control function does not operate but entry function operates	Replace electrical key transmitter	Click here
Answer-back function does not operate	Proceed to "No Answer-Back"	Click here
Automatic lock function only does not operate	Perform operation check	Click here
	Front door courtesy switch	Click here
	Rear door courtesy switch	Click here
Illuminated entry function only does not operate	Perform operation check	Click here
	Front door courtesy switch	Click here
	Rear door courtesy switch	Click here
Door ajar warning function only does not operate (except China)	Perform operation check	Click here
	Front door courtesy switch	Click here
	Rear door courtesy switch	Click here
	Meter/gauge system	Click here
Panic alarm function only does not operate*1	Perform operation check	Click here
	Theft deterrent system	Click here
Memory call function only does not operate	Perform operation check	Click here
	Front power seat control system	Click here
	Power tilt and power telescopic steering column system	Click here
	Power mirror control system	Click here
Power window open/close function only does not operate	Perform operation check	Click here
	Power window control system	Click here
Sliding roof open/close function only does not operate	Perform operation check	Click here
	Sliding roof system	Click here
Back door does not open/close even though power back door switch is pressed*2	Power back door system	Click here
Back door does not open/close even though power back door switch is pressed. However, pressing back door close switch closes the door.*2	Replace electrical key transmitter	Click here

*1: w/ Panic Switch
*2: w/ Power Back Door System

for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

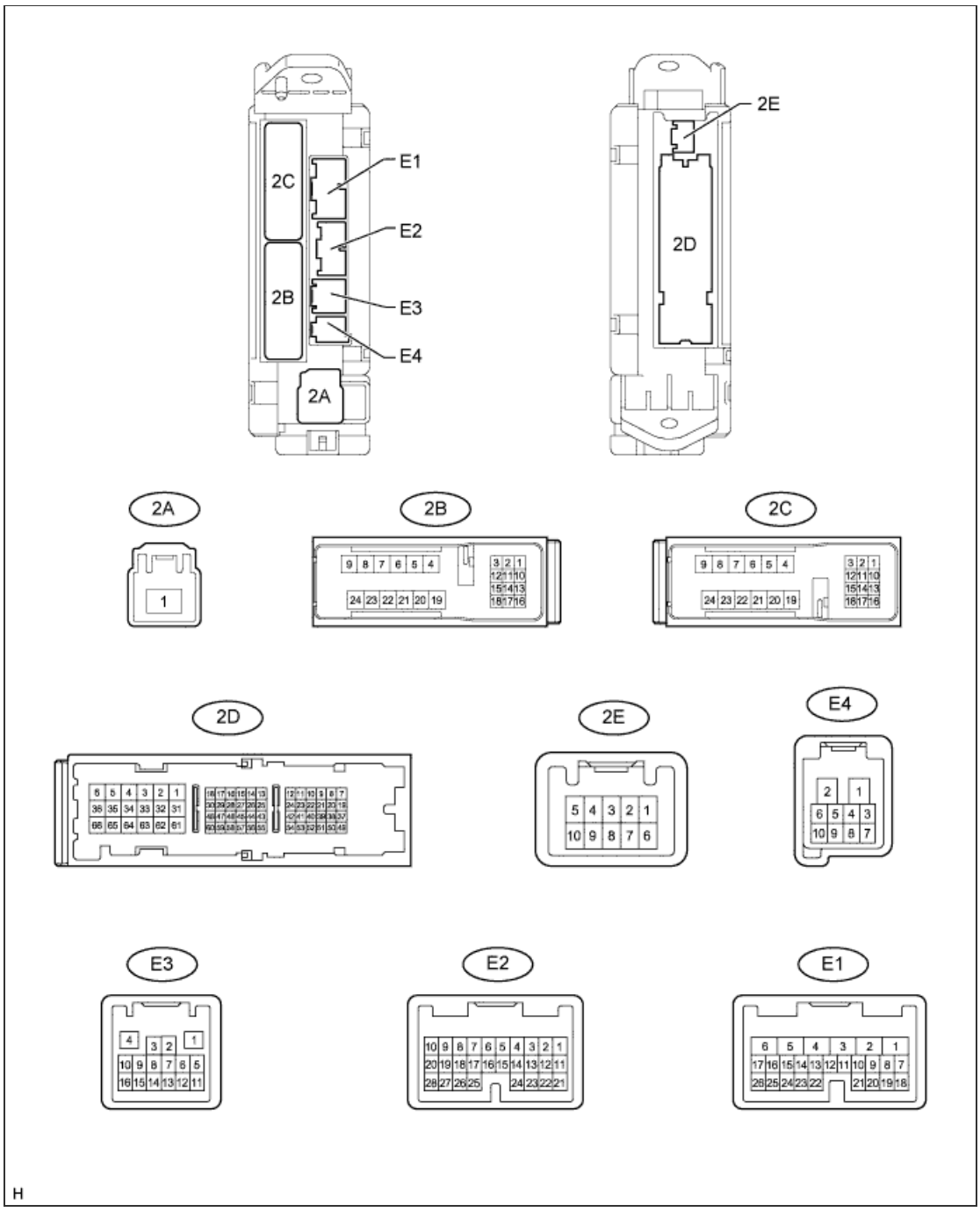
Wireless Door Lock Control System

Symptom	Suspected Area	See page
Wireless control function and entry function do not operate	Proceed to "All Door Entry Lock/Unlock Functions and Wireless Functions do not Operate"	Click here
Wireless control function does not operate but entry function operates	Replace electrical key transmitter	Click here
Answer-back function does not operate	Proceed to "No Answer-Back"	Click here
Automatic lock function only does not operate	Perform operation check	Click here
	Front door courtesy switch	Click here
	Rear door courtesy switch	Click here
Illuminated entry function only does not operate	Perform operation check	Click here
	Front door courtesy switch	Click here
	Rear door courtesy switch	Click here
Door ajar warning function only does not operate (except China)	Perform operation check	Click here
	Front door courtesy switch	Click here
	Rear door courtesy switch	Click here
	Meter/gauge system	Click here
Panic alarm function only does not operate*1	Perform operation check	Click here
	Theft deterrent system	Click here
Memory call function only does not operate	Perform operation check	Click here
	Front power seat control system	Click here
	Power tilt and power telescopic steering column system	Click here
	Power mirror control system	Click here
Power window open/close function only does not operate	Perform operation check	Click here
	Power window control system	Click here
Sliding roof open/close function only does not operate	Perform operation check	Click here
	Sliding roof system	Click here
Back door does not open/close even though power back door switch is pressed*2	Power back door system	Click here
Back door does not open/close even though power back door switch is pressed. However, pressing back door close switch closes the door.*2	Replace electrical key transmitter	Click here

*1: w/ Panic Switch
*2: w/ Power Back Door System

for Preparation Click here

CHECK MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)



a. Disconnect the 2A, 2D and E3 ECU connectors.

b. Measure the resistance and voltage according to value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
2D-62 (GND2) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E3-1 (GND3) - Body ground	BR - Body ground	Ground	Always	Below 1 Ω
E2-1(AM2) - 2D-62 (GND2)	W - W-B	Battery power supply	Always	11 to 14 V
E1-6(AM1) - 2D-62 (GND2)	W - W-B	Battery power supply	Always	11 to 14 V

2A-1 (IG) - 2D-62 (GND2)	B - W-B	IG power supply	Engine switch on (IG)	11 to 14 V

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the 2A, 2D and E3 ECU connectors.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E1-24 (DCTY) - Body ground	LHD: L - Body ground RHD: Y - Body ground	Driver side door courtesy light switch input	Driver side door open	Below 1 Ω
			Engine switch off and driver side door courtesy switch off	Pulse generation (refer to waveform 1 and 2)
E2-21 (PCTY) - Body ground	LHD: Y - Body ground RHD: L - Body ground	Passenger side door courtesy light switch input	Passenger side door open	Below 1 Ω
			Engine switch off and passenger side door courtesy switch off	Pulse generation (refer to waveform 3 and 4)
2C-2 (LCTY) - Body ground	W - Body ground	Rear side door LH courtesy light switch input	Rear side door LH open	Below 1 Ω
			Engine switch off and rear side door LH courtesy switch off	Pulse generation (refer to waveform 5 and 6)
E2-7 (RCTY) - Body ground	G - Body ground	Rear side door RH courtesy light switch input	Rear side door RH open	Below 1 Ω
			Engine switch off and rear side door RH courtesy switch off	Pulse generation (refer to waveform 7 and 8)
E2-25 (BCTY) - Body ground	W - Body ground	Back door courtesy light switch input	Back door open	Below 1 Ω
			Engine switch off and back door courtesy switch off	Pulse generation (refer to waveform 9 and 10)
E3-4 (HAZ) - Body ground	O - Body ground	Turn signal light drive	Hazard warning signal switch on	Pulse generation
			Hazard warning signal switch off	Below 1 V
2B-16 (DIM) - 2D-62 (GND2)*	R-G - W-B	Headlight low drive	Headlight dimmer switch low	11 to 14 V
2B-18 (HRLY) - 2D-62 (GND2)*	L - W-B	Headlight (high) drive	Headlight dimmer switch high	11 to 14 V
2B-8 (TRLY) - 2D-62 (GND2)*	W - W-B	Taillight drive	Headlight dimmer switch tail	11 to 14 V

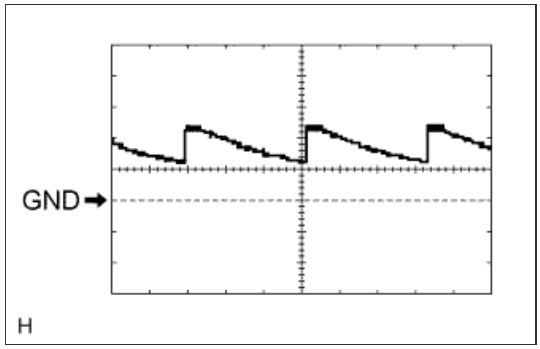
*: w/ Panic Switch

If the result is not as specified, the ECU may have a malfunction.

e. Using an oscilloscope, check waveform 1.

Waveform 1 (Reference)

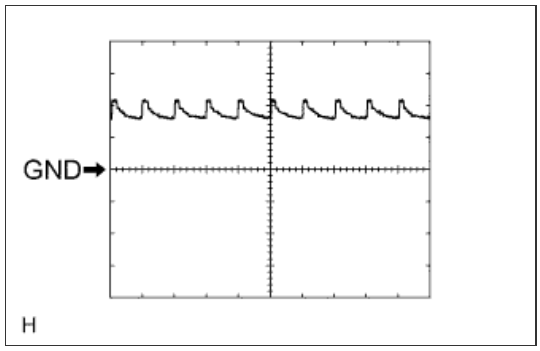
Item	Content
Terminal No. (Symbol)	E1-24 (DCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and driver side door courtesy switch off



f. Using an oscilloscope, check waveform 2.

Waveform 2 (Reference)

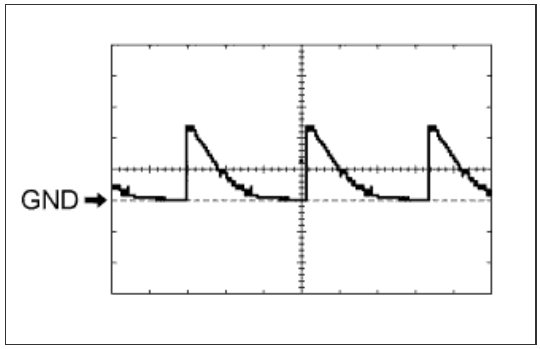
Item	Content
Terminal No. (Symbol)	E1-24 (DCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and driver side door courtesy switch off



g. Using an oscilloscope, check waveform 3.

Waveform 3 (Reference)

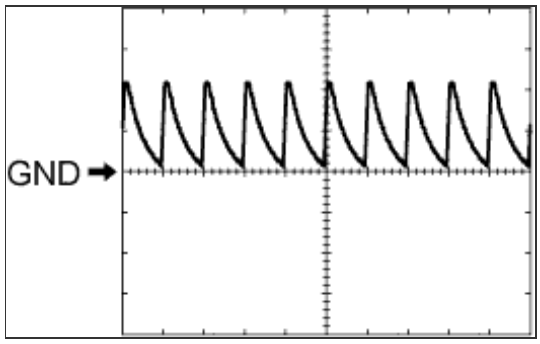
Item	Content
Terminal No. (Symbol)	E2-21 (PCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and passenger side door courtesy switch off



h. Using an oscilloscope, check waveform 4.

Waveform 4 (Reference)

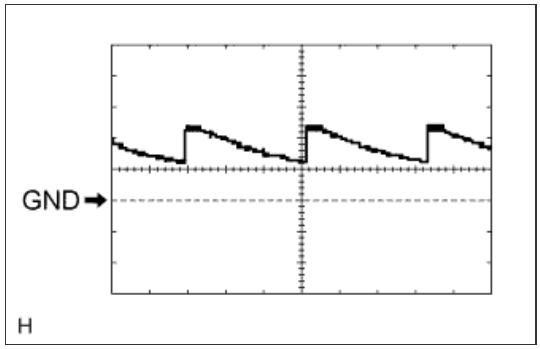
Item	Content
Terminal No. (Symbol)	E2-21 (PCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and passenger side door courtesy switch off



i. Using an oscilloscope, check waveform 5.

Waveform 5 (Reference)

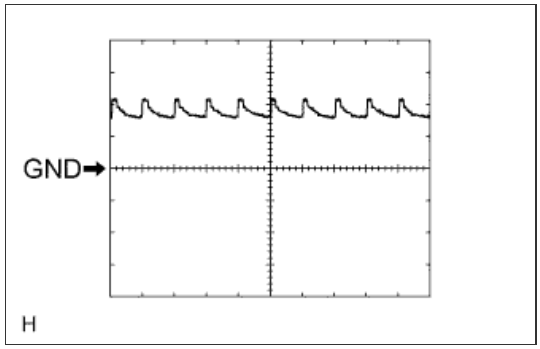
Item	Content
Terminal No. (Symbol)	2C-2 (LCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and rear LH side door courtesy switch off



j. Using an oscilloscope, check waveform 6.

Waveform 6 (Reference)

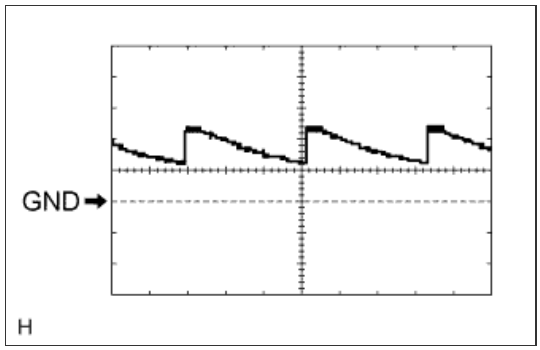
Item	Content
Terminal No. (Symbol)	2C-2 (LCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and rear LH side door courtesy switch off



k. Using an oscilloscope, check waveform 7.

Waveform 7 (Reference)

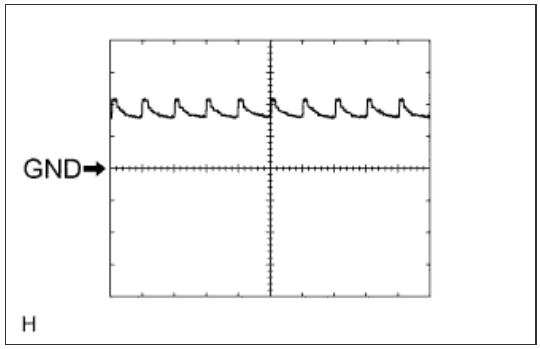
Item	Content
Terminal No. (Symbol)	E2-7 (RCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and rear RH side door courtesy switch off



l. Using an oscilloscope, check waveform 8.

Waveform 8 (Reference)

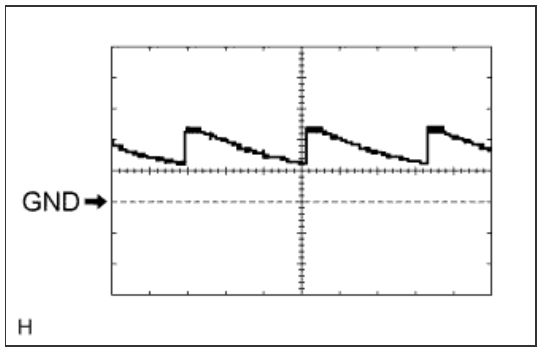
Item	Content
Terminal No. (Symbol)	E2-7 (RCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and rear RH side door courtesy switch off



m. Using an oscilloscope, check waveform 9.

Waveform 9 (Reference)

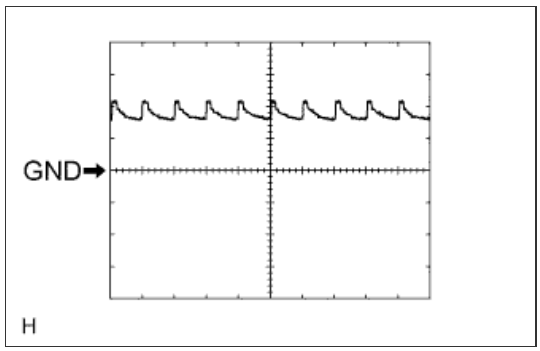
Item	Content
Terminal No. (Symbol)	E2-25 (BCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and back door closed



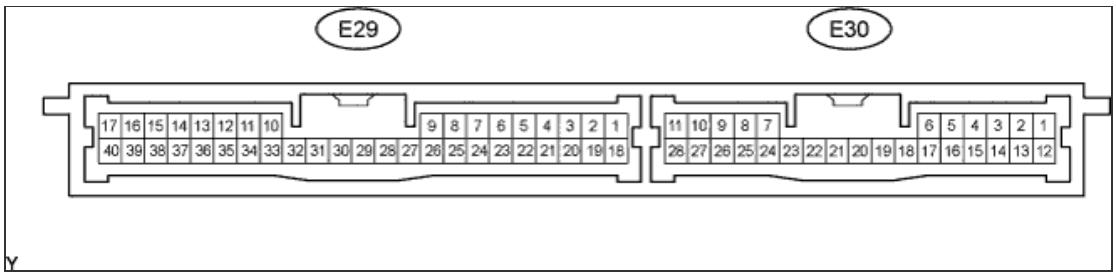
n. Using an oscilloscope, check waveform 10.

Waveform 10 (Reference)

Item	Content
Terminal No. (Symbol)	E2-25 (BCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off and back door closed



CHECK CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)



a. Disconnect the E29 and E30 ECU connectors.

b. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E29-17 (E) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E29-1 (+B) - E29-17 (E)	B - W-B	Battery power supply	Always	11 to 14 V
E29-18 (IG) - E29-17 (E)	B - W-B	IG power supply	Engine switch on (IG)	11 to 14 V
			Engine switch off	Below 1 V

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the E29 and E30 ECU connectors.

d. Measure the voltage according to the value(s) in the table below.

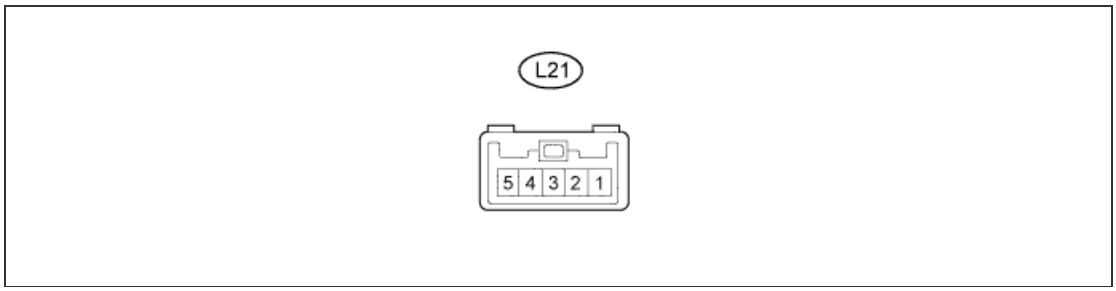
Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E29-39 (RSSI) - E29-17 (E)	L - W-B	Door control receiver electric wave existence signal	Engine switch off, all doors closed and transmitter switch not pressed → pressed	11 to 14 V → Below 1 V
E29-38 (RDA) - E29-17 (E)	LG - W-B	Door control receiver data input signal	Engine switch off, all doors closed and transmitter switch not pressed → pressed	Below 1 V → 11 to 14 V → Below 1 V
E29-29 (RCO) - E29-17 (E)	B - W-B	Door control receiver power source	Engine switch off, all doors closed and transmitter switch not pressed → pressed	Below 1 V → 4.6 to 5.4 V → Below 1 V
E29-21 (BZR) - Body ground*	LG - Body ground	Wireless door lock buzzer output	Wireless door lock buzzer ON	11 to 14 V
E29-21 (BZR) - Body ground*	LG - Body ground	Wireless door lock buzzer output	Wireless door lock buzzer OFF	Below 1 V

HINT:

*: Except Europe and China

If the result is not as specified, the ECU may have a malfunction.

CHECK DOOR CONTROL RECEIVER



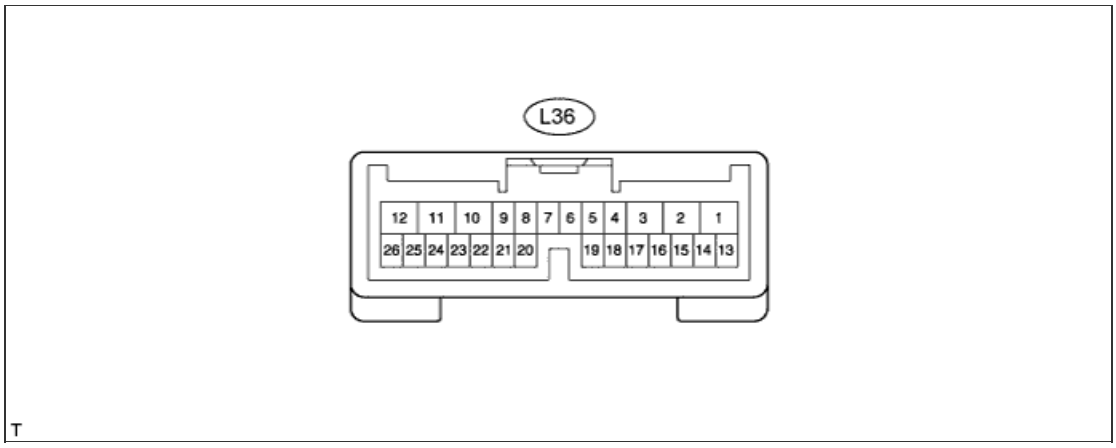
a. Disconnect the L21 receiver connector.

b. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
L21-1 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
L21-4 (+5) - Body ground	B - Body ground	Battery power supply	Always	4.6 to 5.4 V

If the result is not as specified, there may be a malfunction on the wire harness side.

CHECK POWER BACK DOOR UNIT (w/ Power Back Door System)



a. Disconnect the L36 unit connector.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
L36-11 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
L36-10 (ECUB) - Body ground	R - Body ground	Battery power supply	Always	11 to 14 V

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the L36 unit connector.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
L36-26 (BZR+) - Body ground	L - Body ground	Power back door warning buzzer signal	Back door warning buzzer is sounding	11 to 14 V Pulse generation
L36-26 (BZR+) - Body ground	L - Body ground	Power back door warning buzzer signal	Back door warning buzzer is stopped	Below 1 V

If the result is not as specified, the ECU may have a malfunction.

for Preparation Click here

CHECK DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Trouble Codes.

e. Read the DTCs.

CLEAR DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Trouble Codes.

e. Clear the DTCs.

for Preparation Click here

READ DATA LIST

HINT:

Using the intelligent tester to read the Data List allows values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body or Power Back /Data List.

e. According to the display on the intelligent tester, read the Data List.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
D Door Courtesy SW	Driver side door courtesy switch signal / ON or OFF	ON: Driver side door open OFF: Driver side door closed	-
P Door Courtesy SW	Passenger side door courtesy switch signal / ON or OFF	ON: Passenger side door open OFF: Passenger side door closed	-
RL Door Courtesy SW	Rear door courtesy switch LH signal / ON or OFF	ON: Rear side door LH open OFF: Rear side door LH closed	-
RR Door Courtesy SW	Rear door courtesy switch RH signal / ON or OFF	ON: Rear side door RH open OFF: Rear side door RH closed	-
Back Door Courtesy SW	Back door courtesy switch signal / ON or OFF	ON: Back door open OFF: Back door closed	-
D Lock Pos switch	Driver side door lock position switch signal / ON or OFF	ON: Driver side door lock unlocked OFF: Driver side door lock locked	-
P Lock Pos switch	Passenger side door lock position switch signal / ON or OFF	ON: Passenger side door unlocked OFF: Passenger side door locked	-
RL Lock Pos switch	Rear door LH lock position switch signal / ON or OFF	ON: Rear side door LH unlocked OFF: Rear side door LH locked	-
RR Lock Pos switch	Rear door RH lock position switch signal / ON or OFF	ON: Rear side door RH unlocked OFF: Rear side door RH locked	-
Back Lock Pos switch*	Back door lock position switch signal / ON or OFF	ON: Back door unlocked OFF: Back door locked	-

*: w/ Power Back Door System

Power Back (w/ Power Back Door System)

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Door lock status	Back door lock status signal / UNLOCK or LOCK	UNLOCK: Back door unlocked LOCK: Back door locked	-
Wireless PBD SW Operation	Transmitter switch operation condition signal/1 time, 2 times, 0.8 sPR or OFF	Current customize setting displayed	-

ACTIVE TEST

HINT:

Using the intelligent tester to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body, Body No. 4, Mirror or Entry&Start / Active Test.

e. According to the display on the intelligent tester, perform the Active Test.

Main Body

Tester Display	Test Part	Control Range	Diagnostic Note
Hazard	Turn signal flasher relay	ON or OFF	-
Door Lock	All door lock motors	OFF or LOCK	-
D-Door Unlock	Driver side door unlock motor	OFF or UNLOCK	-

Body No. 4

Tester Display	Test Part	Control Range	Diagnostic Note
Rear Step Light	Step lights	OFF or ON	-

Mirror

Tester Display	Test Part	Control Range	Diagnostic Note
Foot Light	Foot lights	ON or OFF	-

Entry&Start

Tester Display	Test Part	Control Range	Diagnostic Note
Wireless Buzzer operation	Wireless door lock buzzer	ON or OFF	-

for Preparation Click here

If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.

Wireless Door Lock Control System

DTC Code	Detection Item	See page
B1242	Wireless Door Lock Tuner Circuit Malfunction	Click here

DTC B1242 Wireless Door Lock Tuner Circuit Malfunction

for Preparation Click here

DESCRIPTION

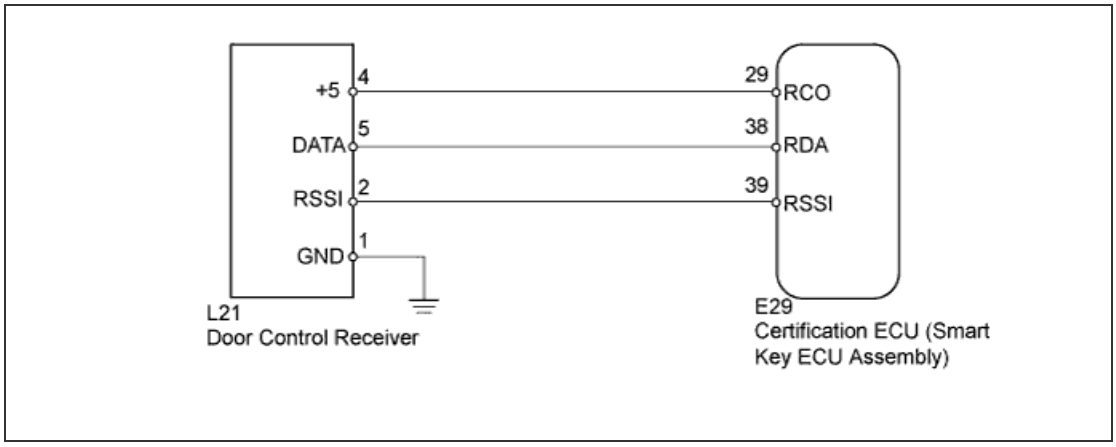
The door lock receiver is used to receive electrical waves relating to the entry functions of the entry and start system (for Entry Function). The certification ECU (smart key ECU assembly) decodes the requested entry and start system (for Entry Function) operation by identifying a key code based on the electric waves received via the door control receiver. The door control receiver receives a signal from the door control transmitter and sends signals to the main body ECU through the certification ECU (smart key ECU assembly). The certification ECU (smart key ECU assembly) then sends a command, according to the requested operation, to each ECU (ex. if door lock operation is requested, the certification ECU (smart key ECU assembly) sends a door lock command to the main body ECU).
This DTC is stored when one of the following occurs: 1) a short in RDA or RSSI to ground between the certification ECU (smart key ECU assembly) and the door control receiver, or 2) a short in RDA or RSSI to ground when RCO (5 V) output from the ECU is off.

NOTICE:

- **When replacing or inspecting the door control receiver and wire harness, do not change the position or length of the wire harness. If the wire harness is too close to the door control receiver, entry and wireless function performance may be affected.**
- **Before performing the inspection, check that there are no problems related to the CAN communication system and LIN communication system.**
- **When using the intelligent tester with the engine switch off to troubleshoot: Connect the intelligent tester to the vehicle, and turn the front door courtesy light switch LH on and off at 1.5 second intervals until communication between the intelligent tester and vehicle begins.**

DTC Code	DTC Detection Condition	Trouble Area
B1242	One of the following conditions is met: • Short in RDA or RSSI to ground between the certification ECU (smart key ECU assembly) and the door control receiver. • Short in RDA or RSSI to ground when RCO (5 V) output from the ECU is off.	• Harness or connector • Door control receiver • Certification ECU (smart key ECU assembly)

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU - DOOR CONTROL RECEIVER)

a. Disconnect the E29 ECU connector.

b. Disconnect the L21 receiver connector.

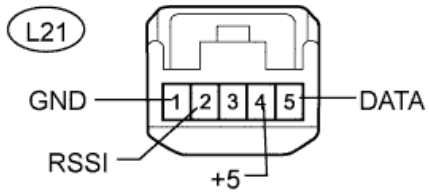
c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

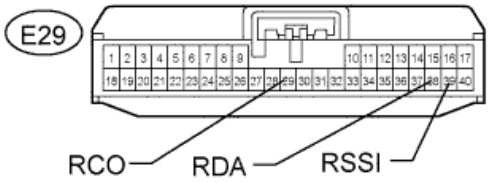
Tester Connection	Condition	Specified Condition

E29-39 (RSSI) - L21-2 (RSSI)	Always	Below 1 Ω
E29-38 (RDA) - L21-5 (DATA)		
E29-29 (RCO) - L21-4 (+5)		
L21-1 (GND) - Body ground		
E29-39 (RSSI) or L21-2 (RSSI) - Body ground	Always	10 kΩ or higher
E29-38 (RDA) or L21-5 (DATA) - Body ground		
E29-29 (RCO) or L21-4 (+5) - Body ground		

Front view of harness side connector:
(to Door Control Receiver)



Front view of harness side connector:
(to Certification ECU)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

2.CHECK CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

a. Disconnect the L21 receiver connector.

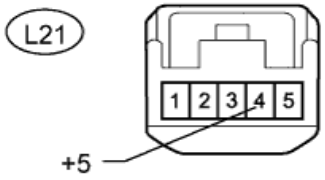
b. Reconnect the E29 ECU connector.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
L21-4 (+5) - Body ground	Always	4.5 to 5.4 V

Front view of harness side connector:
(to Door Control Receiver)



NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

3.REPLACE DOOR CONTROL RECEIVER

a. Temporarily replace the door control receiver with a new one (Click here).

NEXT

4.CHECK FOR DTC

a. Clear the DTC (Click here).

b. Recheck for DTC (Click here).

OK:

DTC B1242 is not output.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

END (DOOR CONTROL RECEIVER IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

In some cases, wireless door lock control functions are normal but the turn signal lights and wireless door lock buzzer are not. Malfunctions may be present in the main body ECU, certification ECU (smart key ECU assembly), turn signal lights, and/or wireless door lock buzzer signal outputs.*

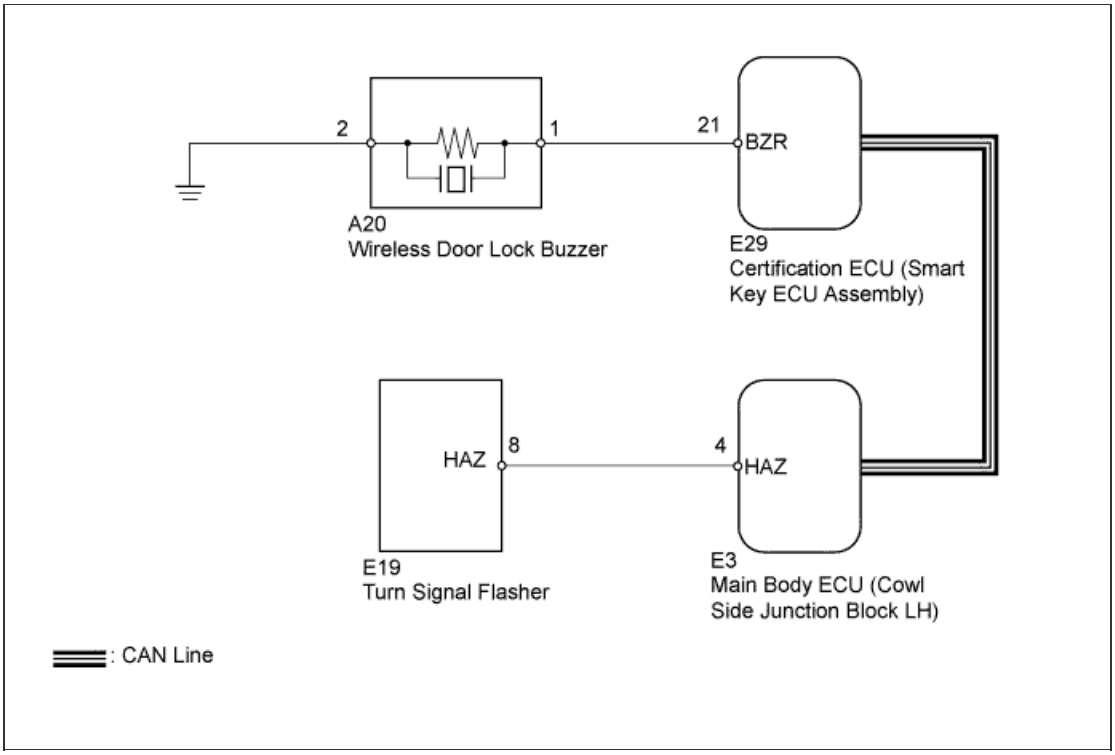
NOTICE:

- **Before performing the inspection, check that there are no problems related to the CAN communication system and LIN communication system.**
- **When troubleshooting a function, first make sure that the answer-back function is set to the default setting.**
- **Check that DTC B1242 is not output.**
- **When troubleshooting a function, first make sure that the open door warning function is set to the default setting.**

HINT:

*: For Europe and China, there is no buzzer sound answer-back function.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
D Lock Pos switch	Driver side door lock position switch signal / ON or OFF	ON: Driver side door lock unlocked OFF: Driver side door lock locked	-
	Passenger side door lock position switch signal / ON or	ON: Passenger side door	

P Lock Pos switch	OFF	unlocked OFF: Passenger side door locked	-
RL Lock Pos switch	Rear door LH lock position switch signal / ON or OFF	ON: Rear side door LH unlocked OFF: Rear side door LH locked	-
RR Lock Pos switch	Rear door RH lock position switch signal / ON or OFF	ON: Rear side door RH unlocked OFF: Rear side door RH locked	-
Back Lock Pos switch*	Back door lock position switch signal / ON or OFF	ON: Back door unlocked OFF: Back door locked	-

*: w/ Power Back Door System

OK:

On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

HINT:

- **Go to POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Driver Door LOCK/UNLOCK Function do not Operate) (Click here).**
- **Go to POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Passenger Door LOCK/UNLOCK Function do not Operate) (Click here).**
- **Go to POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Rear Door LH LOCK/UNLOCK Function do not Operate) (Click here).**
- **Go to POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Rear Door RH LOCK/UNLOCK Function do not Operate) (Click here).**
- **Go to POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Back Door LOCK/UNLOCK Function do not Operate) (Click here).**

NG → Go to POWER DOOR LOCK CONTROL SYSTEM

OK ↓

2.CHECK WIRELESS DOOR LOCK FUNCTION

a. Check that the wireless door lock control functions operate with a transmitter (Click here).

Result

Result	Proceed to
Wireless door lock control functions operate normally but turn signal light answer-back does not occur	A
Wireless door lock control functions operate normally but wireless door lock buzzer answer-back does not occur	B

B → Go to step 4

A ↓

3.CHECK HAZARD WARNING LIGHT

a. Check that the turn signal lights flash continuously when the hazard warning signal switch is pressed (Click here).

OK:

Hazard warning lights flash continuously.

NG → Go to PROBLEM SYMPTOMS TABLE (LIGHTING SYSTEM) (Click here)

OK ↓

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

4.CHECK HARNESS AND CONNECTOR (WIRELESS DOOR LOCK BUZZER - CERTIFICATION ECU AND BODY GROUND)

a. Disconnect the E29 ECU connector.

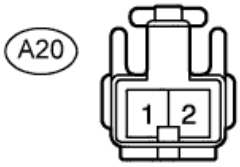
b. Disconnect the A20 buzzer connector.

c. Measure the resistance according to the value(s) in the table below.

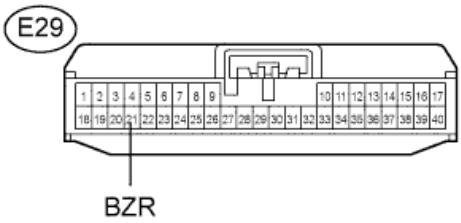
Standard Resistance:

Tester Connection	Condition	Specified Condition
A20-1 - E29-21 (BZR)	Always	Below 1 Ω
A20-2 - Body ground		
A20-1 - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Wireless Door Lock Buzzer)



Front view of wire harness connector:
(to Certification ECU)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5.CHECK WIRELESS DOOR LOCK BUZZER (OPERATION)

a. Temporarily replace the wireless door lock buzzer with a new one (Click here).

b. Check that the wireless door lock buzzer sounds by using the transmitter lock/unlock switch.

OK:
Wireless door lock buzzer sounds.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

END (WIRELESS DOOR LOCK BUZZER IS DEFECTIVE)

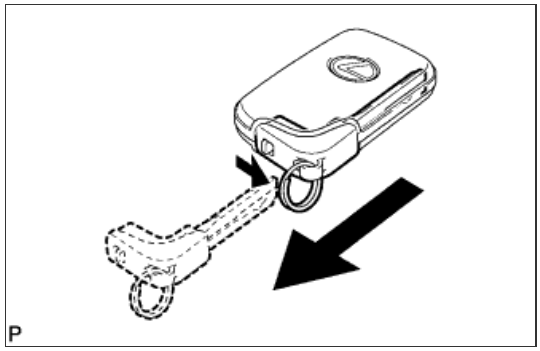
for Preparation Click here

1. REMOVE TRANSMITTER BATTERY

NOTICE:

Take extra care when handling these precision electronic components.

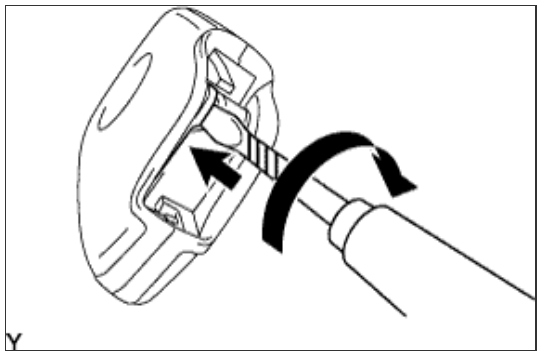
a. Push and hold the release knob in the direction indicated by the arrow in the illustration. Then take the mechanical key out of the case.



b. Insert a precision screwdriver into the gap, and turn the screwdriver to detach the transmitter housing cover.

HINT:

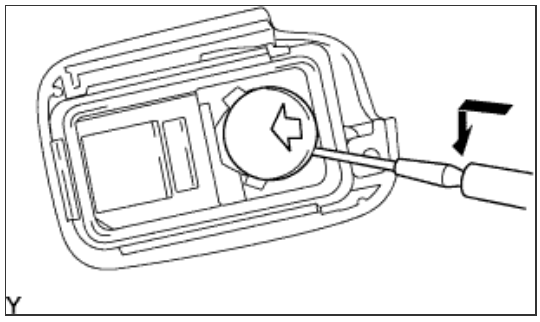
Tape the screwdriver tip before use.



c. Insert a precision screwdriver into the gap and remove the battery (lithium battery: CR1632).

NOTICE:

- **Do not push the terminals with your finger.**
- **Do not forcibly pry up the battery. The terminals may be damaged.**
- **Do not touch the battery with wet hands. Water may cause rust.**
- **Do not touch or move any components inside the transmitter. It may interfere with proper operation.**



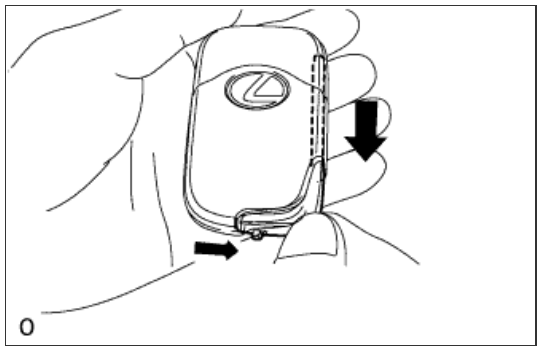
2. REMOVE TRANSMITTER BATTERY (w/ Battery Cover)

NOTICE:

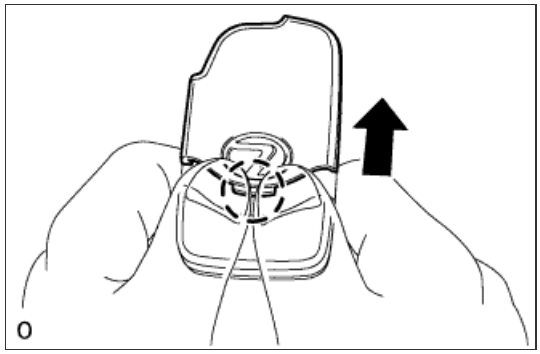
Take extra care when handling these precision electronic components.

a. Push and hold the release knob in the direction indicated by the arrow in the illustration.

b. Remove the mechanical key from the case.

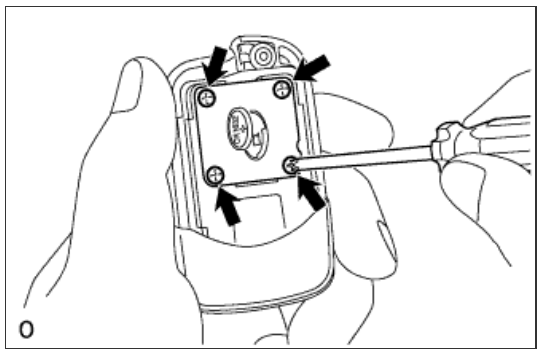


c. Detach the claw and remove the slide cover.



d. Remove the 4 screws and battery cover.

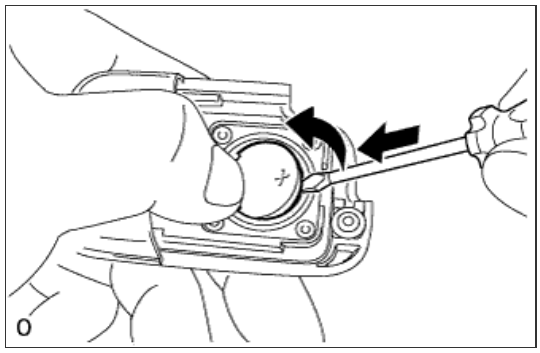
e. Remove the O-ring.



f. Insert a precision screwdriver into the gap and remove the battery (lithium battery: CR1632).

NOTICE:

- **Do not touch the terminals.**
- **Do not forcibly pry up the battery. The terminals may be damaged.**
- **Do not touch the battery with wet hands. Water may cause rust.**
- **Do not touch or move any components inside the transmitter. It may interfere with proper operation.**



3. REMOVE TRANSMITTER BATTERY (for Card Type)

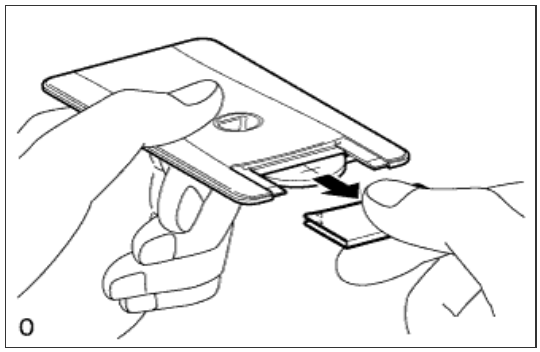
a. Lightly hold and pull the transmitter housing cover in the direction of the arrow as shown in the illustration.

HINT:

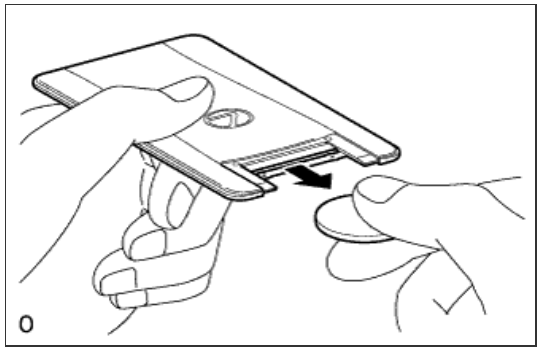
- **If the battery cover is held too firmly, it becomes harder to pull out.**
- **If the cover is slippery and is difficult to pull out, use non-slip gloves to pull the cover out.**

NOTICE:

Do not insert a screwdriver, etc. between the case and battery cover and forcefully bend the battery cover. This will deform the battery cover.

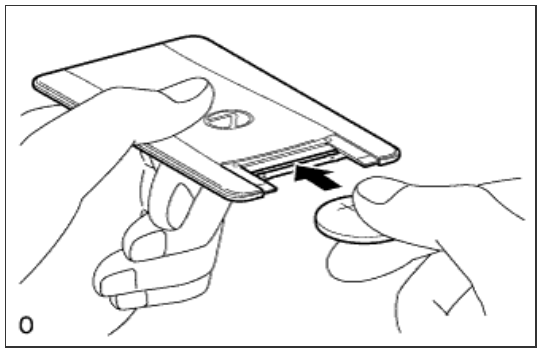


b. Remove the transmitter battery (lithium battery: CR2412).



4. INSTALL TRANSMITTER BATTERY (for Card Type)

a. Push in and install a new transmitter battery (lithium battery (CR2412)) while being careful of the following: 1) the positive (+) and negative (-) terminals of the battery; and 2) being sure to insert the battery between the 2 terminals and deep into the card, in the direction of the arrow.



HINT:

Check if the card terminals are damaged or if the card interior has foreign matter.

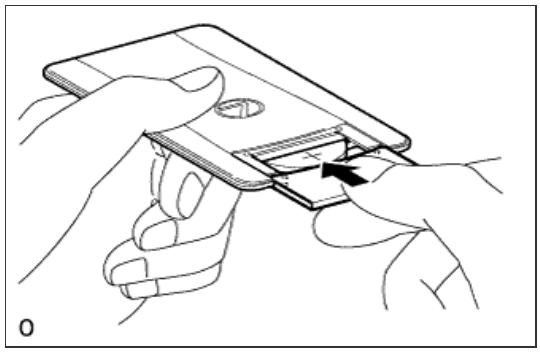
NOTICE:

- **Insert the battery so that its positive (+) side is facing the LEXUS mark.**
- **Do not deform the terminals.**
- **If the terminals are dirty, wipe the terminals with a soft cloth before installing the battery.**

b. Install the transmitter housing cover so that it clips onto the case.

NOTICE:

- **Push on the transmitter cover until its attachment hooks attach securely.**
- **When the transmitter cover is removed and installed many times, be careful as the cover may become loose.**



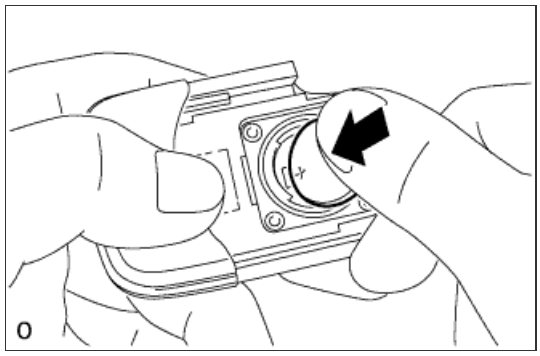
5. INSTALL TRANSMITTER BATTERY (w/ Battery Cover)

a. Install a new battery (lithium battery: CR1632) with the positive (+) side facing upward, as shown in the illustration.

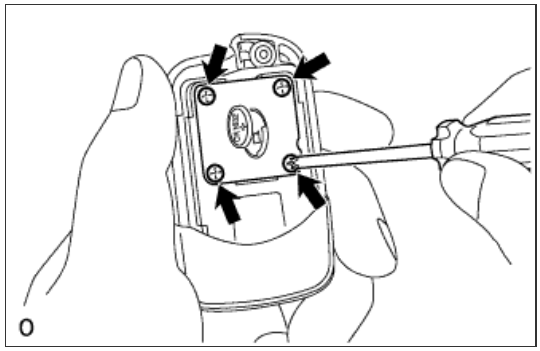
NOTICE:

- **When inserting the transmitter battery, do not bend the terminal.**
- **Keep the transmitter cover interior free of dust and oil.**

b. Install a new O-ring.



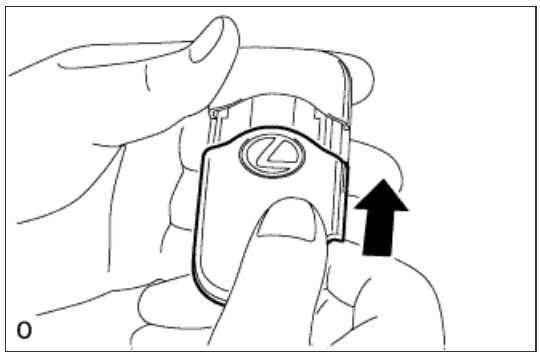
c. Install the battery cover with the 4 screws.



d. Attach the claw to install the slide cover.

e. Insert the mechanical key into the transmitter.

f. Press one of the transmitter switches and check that the LED illuminates.

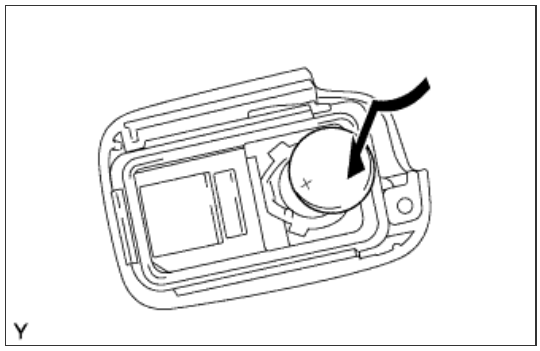


6. INSTALL TRANSMITTER BATTERY

a. Install a new battery (lithium battery: CR1632) with the positive (+) side facing upward, as shown in the illustration.

HINT:

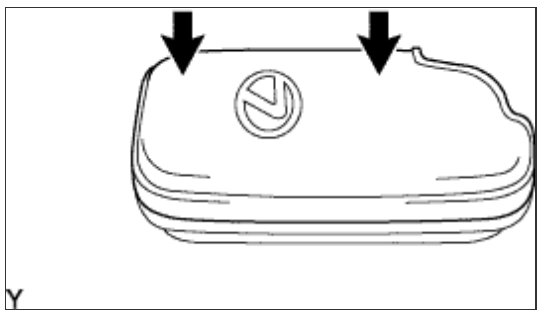
- **Do not bend the transmitter battery electrode during insertion.**
- **Keep the transmitter cover interior free of dust and oil.**



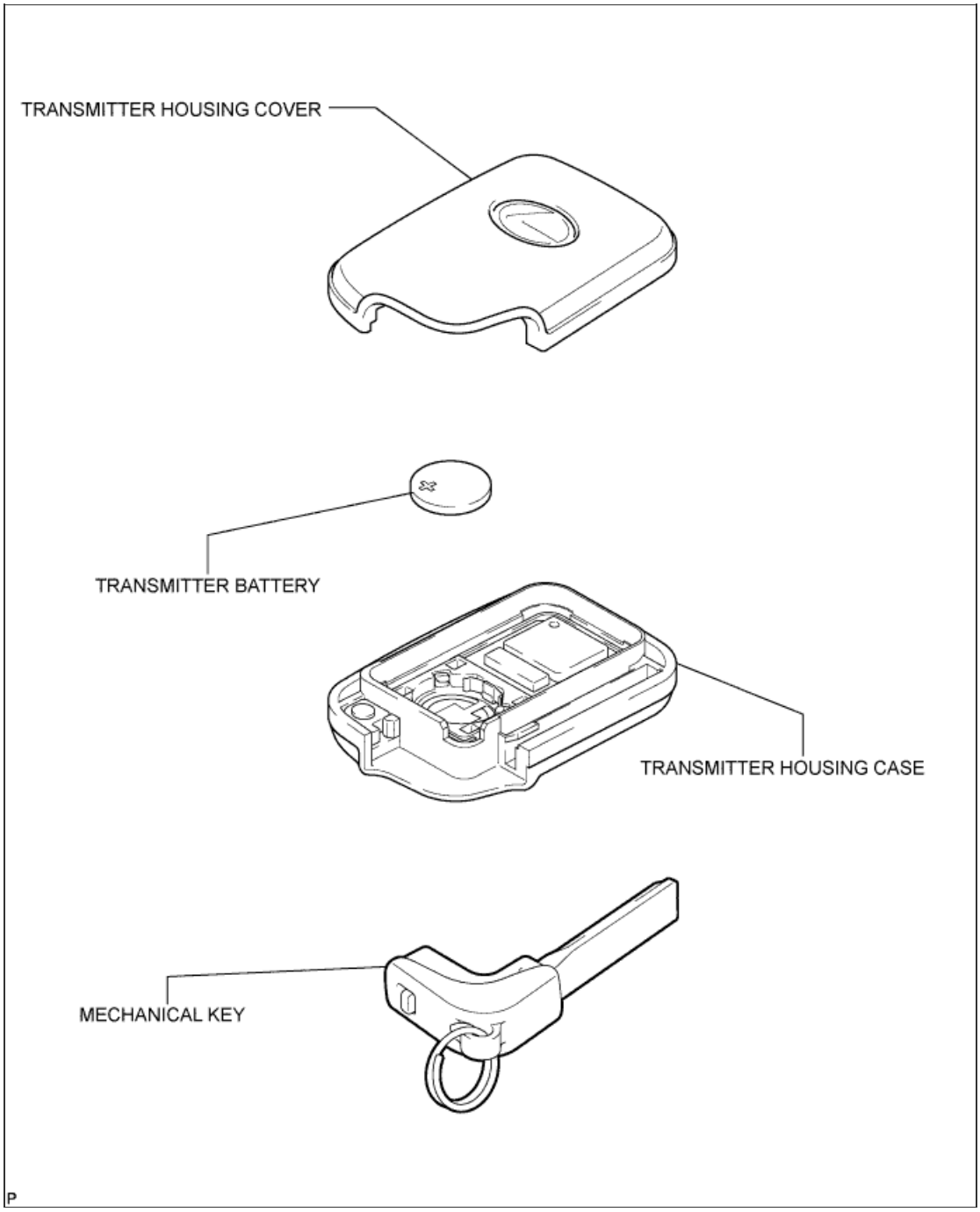
b. Install the transmitter housing cover by pressing down on it as shown in the illustration.

c. Insert the mechanical key into the transmitter.

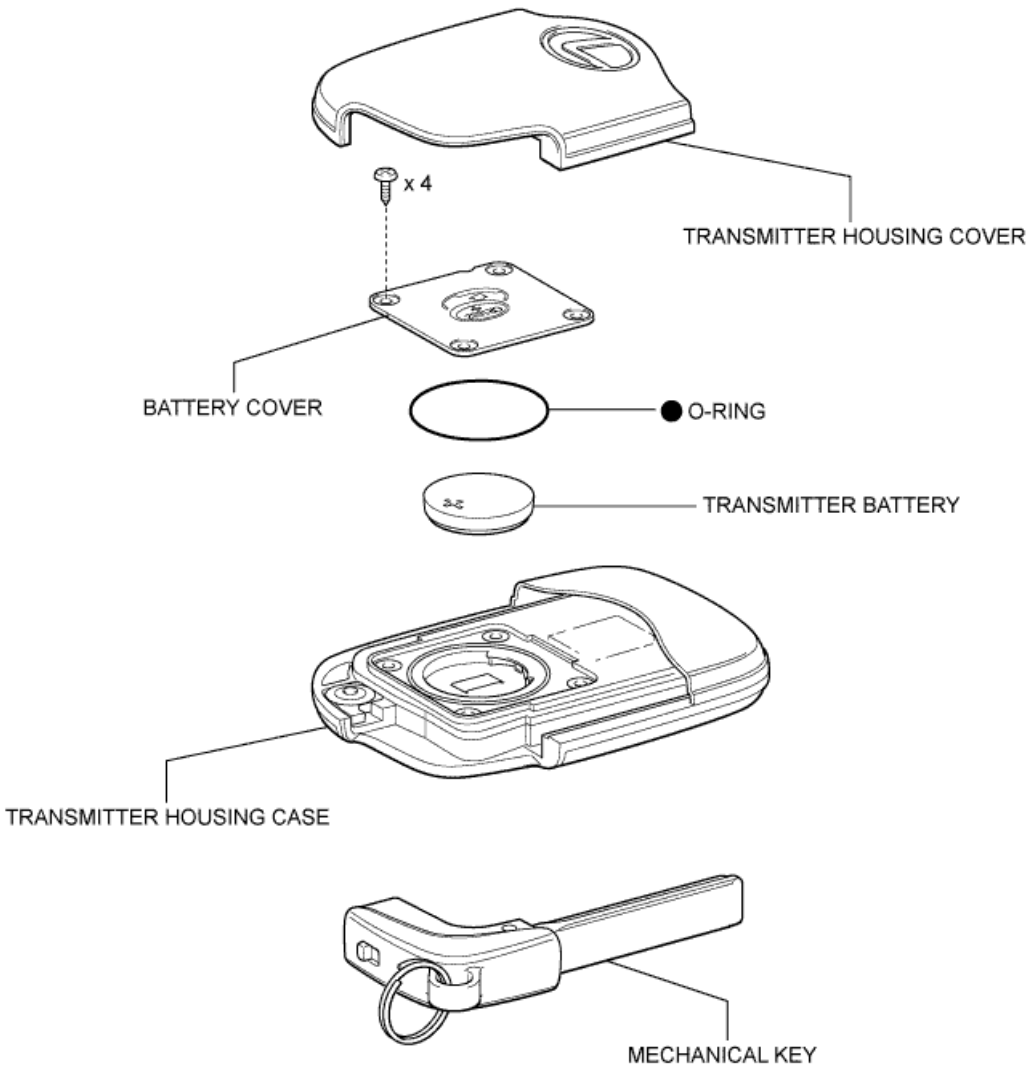
d. Press one of the transmitter switches and check that the LED illuminates.



for Preparation Click here



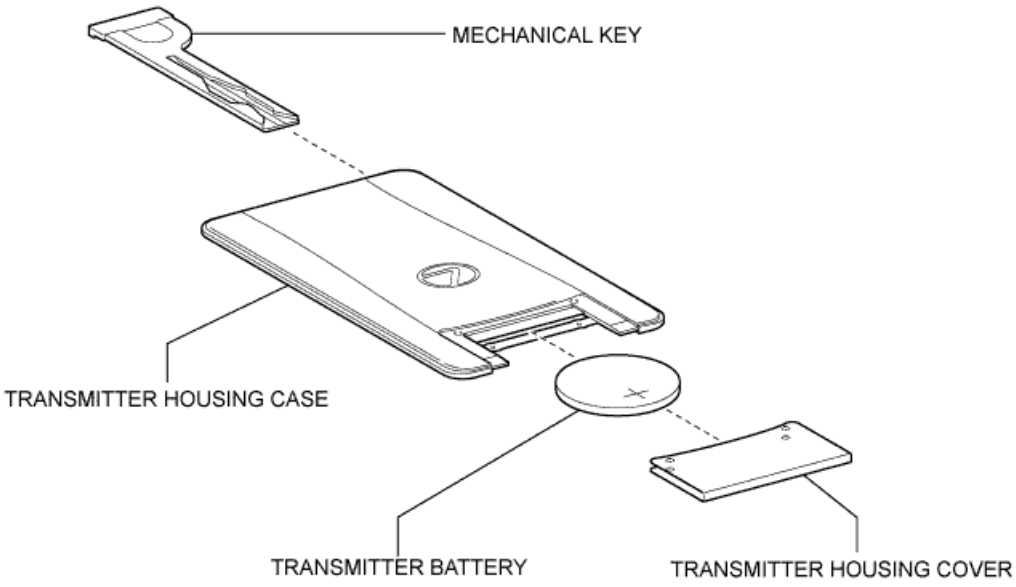
w/ Battery Cover:



● Non-reusable part

0

for Card Type:



o

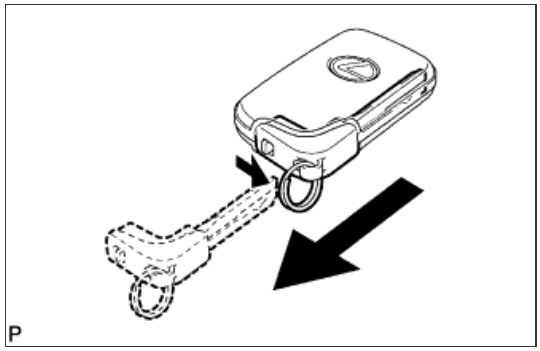
for Preparation Click here

1. REMOVE TRANSMITTER BATTERY

NOTICE:

Take extra care when handling these precision electronic components.

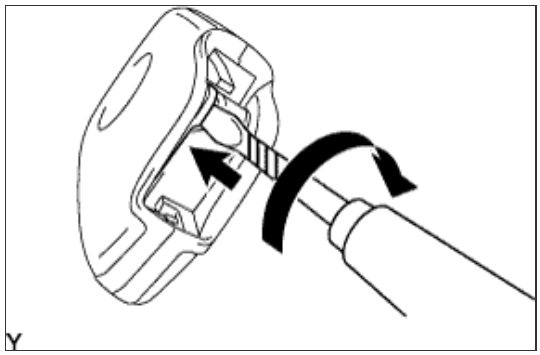
a. Push and hold the release knob in the direction indicated by the arrow in the illustration. Then take the mechanical key out of the case.



b. Insert a precision screwdriver into the gap, and turn the screwdriver to detach the transmitter housing cover.

HINT:

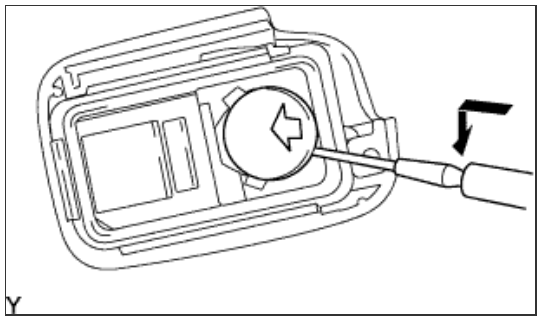
Tape the screwdriver tip before use.



c. Insert a precision screwdriver into the gap and remove the battery (lithium battery: CR1632).

NOTICE:

- **Do not push the terminals with your finger.**
- **Do not forcibly pry up the battery. The terminals may be damaged.**
- **Do not touch the battery with wet hands. Water may cause rust.**
- **Do not touch or move any components inside the transmitter. It may interfere with proper operation.**



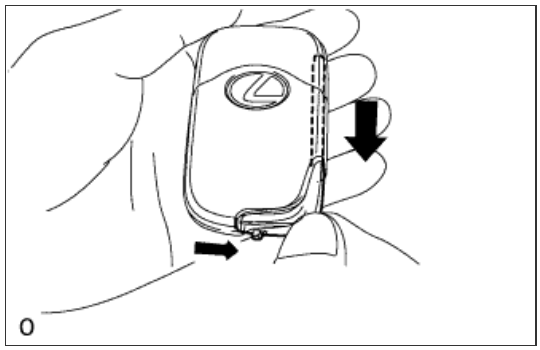
2. REMOVE TRANSMITTER BATTERY (w/ Battery Cover)

NOTICE:

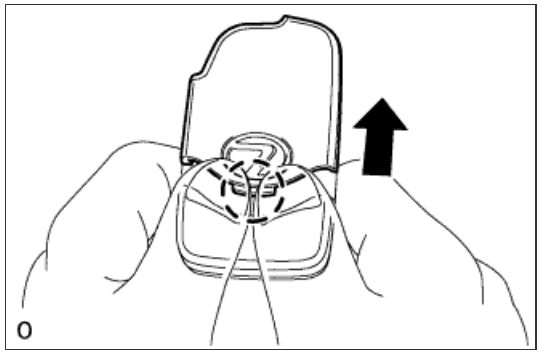
Take extra care when handling these precision electronic components.

a. Push and hold the release knob in the direction indicated by the arrow in the illustration.

b. Remove the mechanical key from the case.

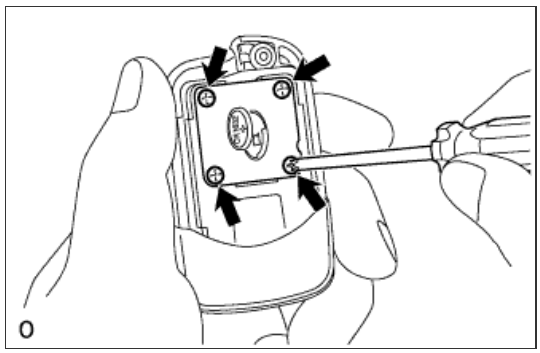


c. Detach the claw and remove the slide cover.



d. Remove the 4 screws and battery cover.

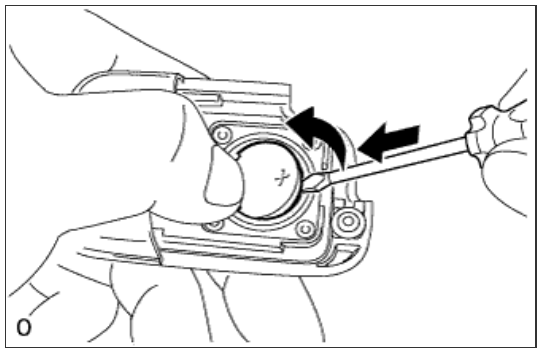
e. Remove the O-ring.



f. Insert a precision screwdriver into the gap and remove the battery (lithium battery: CR1632).

NOTICE:

- **Do not touch the terminals.**
- **Do not forcibly pry up the battery. The terminals may be damaged.**
- **Do not touch the battery with wet hands. Water may cause rust.**
- **Do not touch or move any components inside the transmitter. It may interfere with proper operation.**



3. REMOVE TRANSMITTER BATTERY (for Card Type)

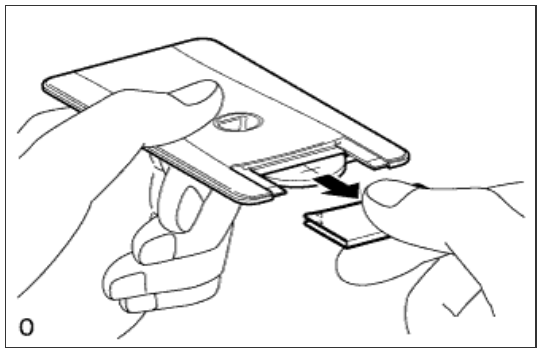
a. Lightly hold and pull the transmitter housing cover in the direction of the arrow as shown in the illustration.

HINT:

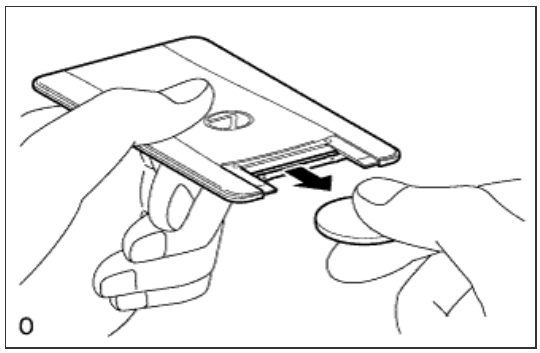
- **If the battery cover is held too firmly, it becomes harder to pull out.**
- **If the cover is slippery and is difficult to pull out, use non-slip gloves to pull the cover out.**

NOTICE:

Do not insert a screwdriver, etc. between the case and battery cover and forcefully bend the battery cover. This will deform the battery cover.



b. Remove the transmitter battery (lithium battery: CR2412).



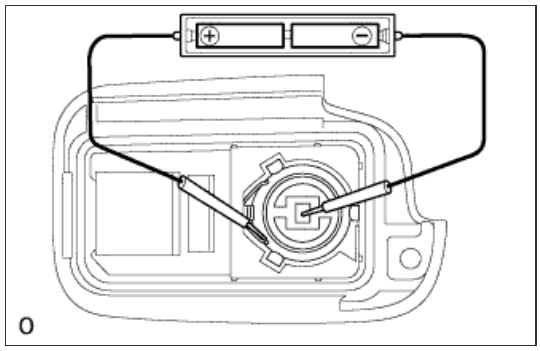
for Preparation Click here

1. INSPECT TRANSMITTER BATTERY

a. Inspect operation of the transmitter.

i. Remove the battery (lithium battery) from the transmitter (Click here).

b. Install a new or normal battery (lithium battery).



NOTICE:

If a new or normal battery is not available, first connect 2 new 1.5 V batteries in series. Then connect leads to the batteries and apply 3 V to the transmitter, as shown in the illustration.

c. From outside the vehicle, approximately 1 m (3.28 ft.) away from the driver side outside door handle, test the transmitter by pointing it at the vehicle and pressing a transmitter switch.

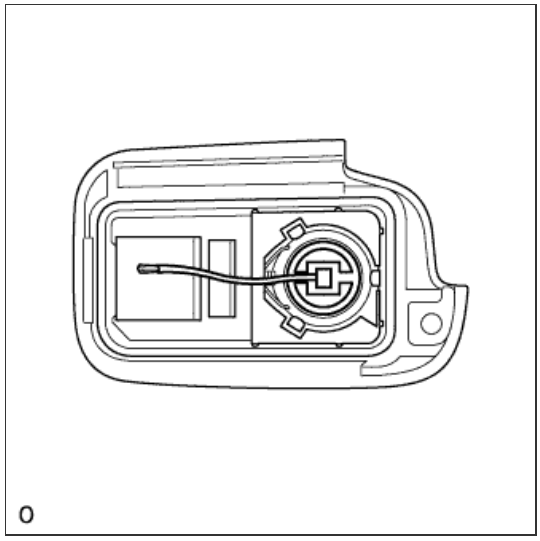
OK:

The door lock can be operated via the transmitter.
The LED comes on more than once.

HINT:

- **The operational area differs depending on the user, the way the transmitter is held, and the location.**
- **The weak electric waves of the transmitter may be affected if the area has strong electric waves or noise. The operational area of the transmitter may be shortened or the transmitter may not function.**

d. Inspect the battery capacity.



i. Remove the battery from the electrical key transmitter that does not operate (Click here). Attach a lead wire (0.6 mm (0.0236 in.) in diameter or less including wire sheath) with tape or equivalent to the negative terminal.

NOTICE:

Do not wrap the lead wire around a terminal, wedge it between terminals, or solder it. A terminal may be deformed or damaged, and the battery will not be able to be installed correctly.

ii. Carefully extend the lead wire from the position shown in the illustration and install the previously removed transmitter battery.

iii. Using an oscilloscope, check the transmitter battery voltage waveform.

HINT:

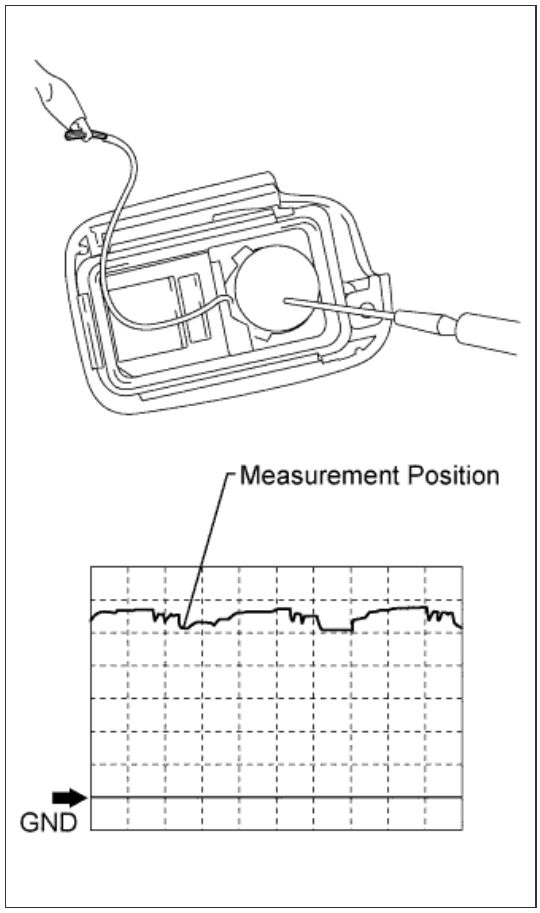
When measuring the battery voltage, bring the electrical key transmitter within the entry and start system operating range and operate the lock switch of a door handle to perform the measurement. For the entry and start system operating range, refer to the System Description (Click here).

Standard Voltage:

Tester Connection	Tool Setting	Switch Condition	Specified Condition

Battery positive (+) - Battery negative (-)	0.5 V/DIV., 100 ms/DIV.	Engine switch off, all doors closed and lock switch pushed	2.2 to 3.2 V (Refer to the waveform)

If the result is not as specified, replace the transmitter battery.

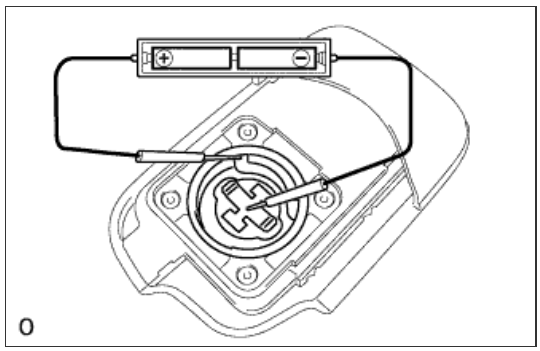


2. INSPECT TRANSMITTER BATTERY (w/ Battery Cover)

a. Inspect operation of the transmitter.

i. Remove the battery (lithium battery) from the transmitter (Click here).

b. Install a new or normal battery (lithium battery).



NOTICE:

If a new or normal battery is not available, first connect 2 new 1.5 V batteries in series. Then connect leads to the batteries and apply 3 V to the transmitter, as shown in the illustration.

c. From outside the vehicle, approximately 1 m (3.28 ft.) away from the driver side outside door handle, test the transmitter by pointing it at the vehicle and pressing a transmitter switch.

OK:
The door lock can be operated via the transmitter.
The LED comes on more than once.

HINT:

- **The operational area differs depending on the user, the way the transmitter is held, and the location.**
- **The weak electric waves of the transmitter may be affected if the area has strong electric waves or noise. The operational area of the transmitter may be shortened or the transmitter may not function.**

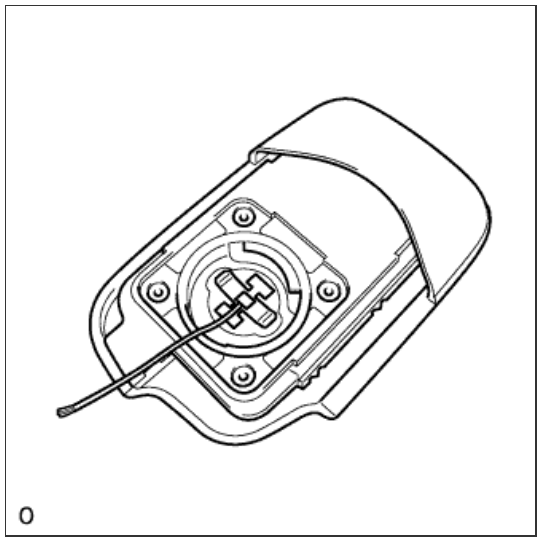
d. Inspect the battery capacity.

i. Remove the battery from the electrical key transmitter that does not operate (Click here). Attach a lead wire (0.6 mm (0.0236 in.) in diameter or less including wire sheath) with tape or equivalent to the negative terminal.

NOTICE:

Do not wrap the lead wire around a terminal, wedge it between terminals, or solder it. A terminal may be deformed or damaged, and the battery will not be able to be installed correctly.

ii. Carefully extend the lead wire from the position shown in the illustration and install the previously removed transmitter battery.



iii. Using an oscilloscope, check the transmitter battery voltage waveform.

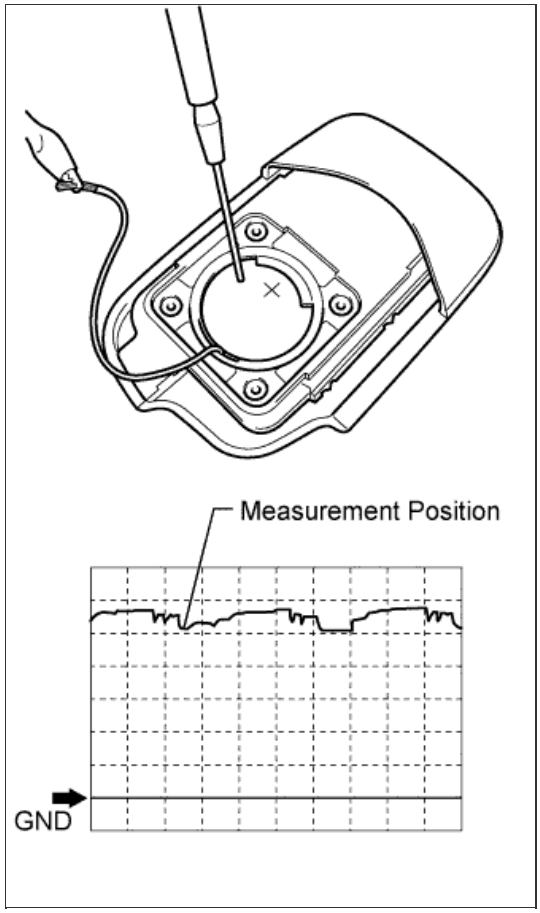
HINT:

When measuring the battery voltage, bring the electrical key transmitter within the entry and start system operating range and operate the lock switch of a door handle to perform the measurement. For the entry and start system operating range, refer to the System Description (Click here).

Standard Voltage:

Tester Connection	Tool Setting	Switch Condition	Specified Condition
Battery positive (+) - Battery negative (-)	0.5 V/DIV., 100 ms/DIV.	Engine switch off, all doors closed and lock switch pushed	2.2 to 3.2 V (Refer to the waveform)

If the result is not as specified, replace the transmitter battery.



3. INSPECT TRANSMITTER BATTERY (for Card Type)

a. Inspect operation of the transmitter.

i. Remove the battery (lithium battery) from the transmitter (Click here).

b. Install a new or normal battery (lithium battery).

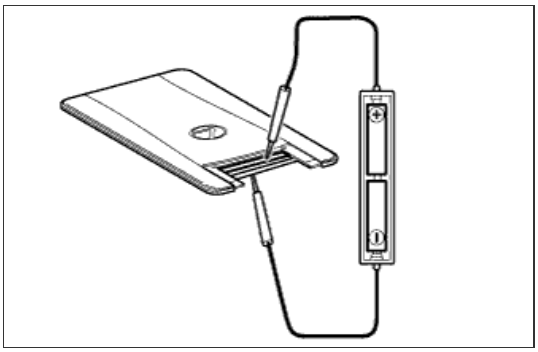
NOTICE:

If a new or normal battery is not available, first connect 2 new 1.5 V batteries in series. Then connect leads to the batteries and apply 3 V to the transmitter, as shown in the illustration.

c. Hold the card key in the entry and start system operating range, and operate the entry lock and unlock switch of the door handle.

OK:

Door can be locked and unlocked.



NOTICE:

- **Make sure the engine switch is off.**
- **Make sure to close all doors.**
- **Do not wedge the tip of the tester lead between terminals, as a terminal may be deformed or damaged.**

d. Inspect the battery capacity.

i. Remove the battery from the card key that does not operate (Click here). Attach a lead wire to the negative and positive side of the battery with tape or equivalent.

NOTICE:

Do not wrap the lead wire around a terminal, wedge it between the terminals, or solder it. A terminal may be deformed or damaged, and the battery will not be able to be installed correctly.

ii. Using an oscilloscope, check the transmitter battery voltage waveform.

HINT:

When measuring the battery voltage, bring the electrical key transmitter within the entry and start system operating range and operate the lock switch of a door handle to perform the measurement. For the entry and start system operating range, refer to the System Description (Click here).

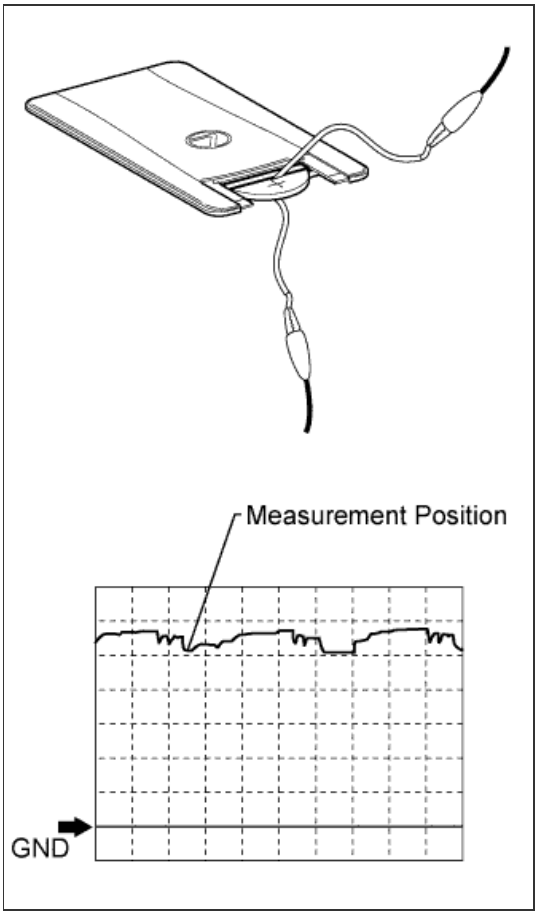
Standard Voltage:

Tester Connection	Tool Setting	Switch Condition	Specified Condition
Battery positive (+) - Battery negative (-)	0.5 V/DIV., 100 ms/DIV.	Engine switch off, all doors closed and lock switch pushed	2.2 to 3.2 V (Refer to the waveform)

If the result is not as specified, replace the transmitter battery.

NOTICE:

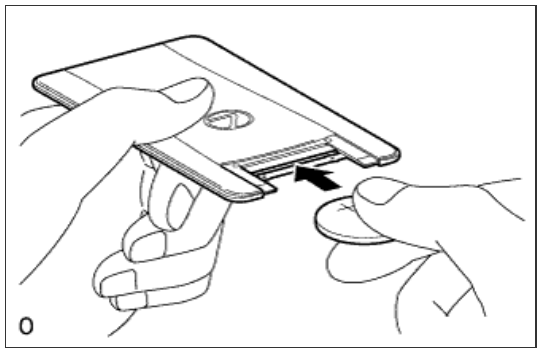
Before measuring the battery voltage, make sure that the positive side of the battery is set towards the logo side.



for Preparation Click here

1. INSTALL TRANSMITTER BATTERY (for Card Type)

a. Push in and install the transmitter battery (lithium battery (CR2412)) while being careful of the following: 1) the positive (+) and negative (-) terminals of the battery; and 2) being sure to insert the battery between the 2 terminals and deep into the card, in the direction of the arrow.



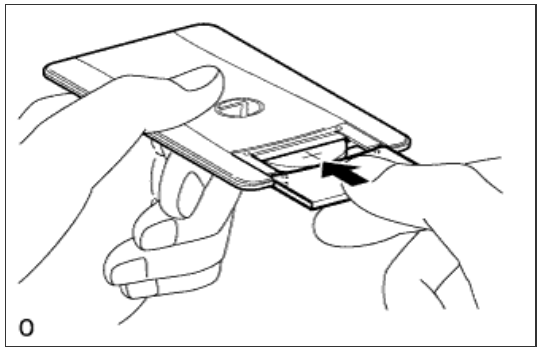
HINT:

Check if the card terminals are damaged or if the card interior has foreign matter.

NOTICE:

- **Insert the battery so that its positive (+) side is facing the LEXUS mark.**
- **Do not deform the terminals.**
- **If the terminals are dirty, wipe the terminals with a soft cloth before installing the battery.**

b. Install the transmitter housing cover so that it clips onto the case.

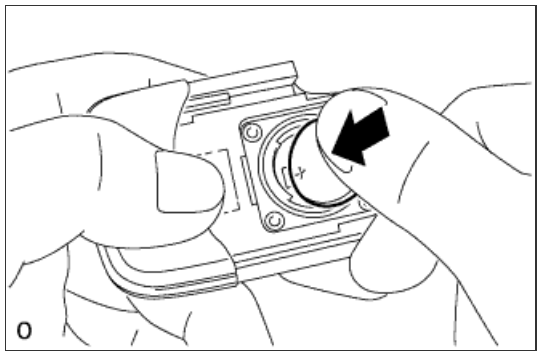


NOTICE:

- **Push on the transmitter cover until its attachment hooks attach securely.**
- **When the transmitter cover is removed and installed many times, be careful as the cover may become loose.**

2. INSTALL TRANSMITTER BATTERY (w/ Battery Cover)

a. Install the battery (lithium battery: CR1632) with the positive (+) side facing upward, as shown in the illustration.

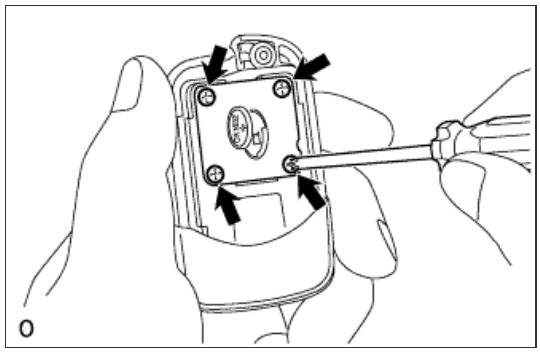


NOTICE:

- **When inserting the transmitter battery, do not bend the terminal.**
- **Keep the transmitter cover interior free of dust and oil.**

b. Install a new O-ring.

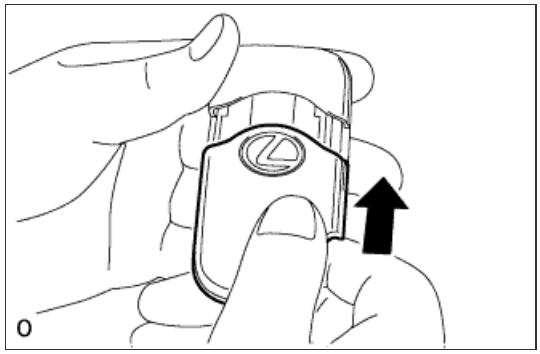
c. Install the battery cover with the 4 screws.



d. Attach the claw to install the slide cover.

e. Insert the mechanical key into the transmitter.

f. Press one of the transmitter switches and check that the LED illuminates.

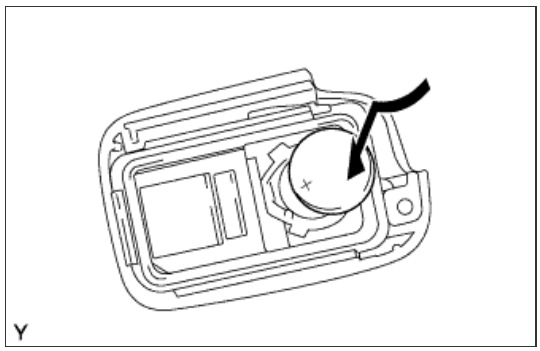


3. INSTALL TRANSMITTER BATTERY

a. Install the battery (lithium battery: CR1632) with the positive (+) side facing upward, as shown in the illustration.

NOTICE:

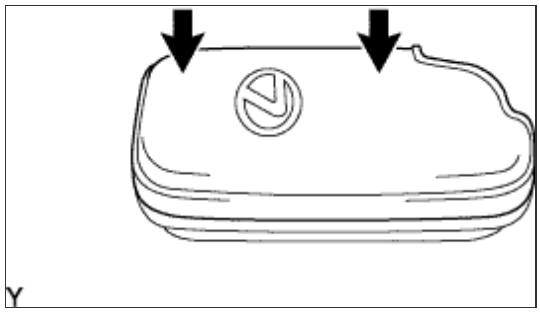
- **Do not bend the transmitter battery electrode during insertion.**
- **Keep the transmitter cover interior free of dust and oil.**



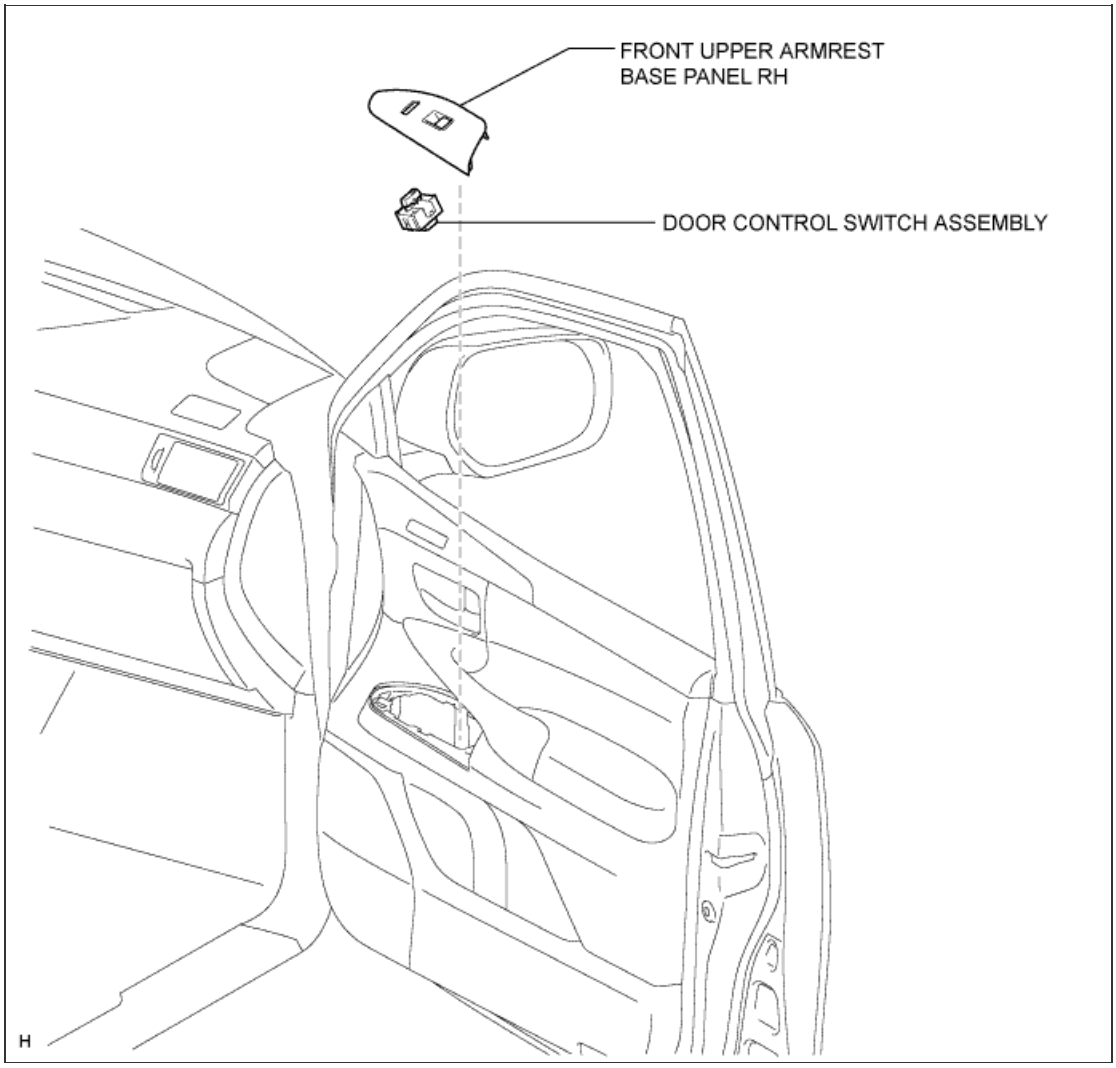
b. Install the transmitter housing cover by pressing down on it as shown in the illustration.

c. Insert the mechanical key into the transmitter.

d. Press one of the transmitter switches and check that the LED illuminates.



for Preparation Click here



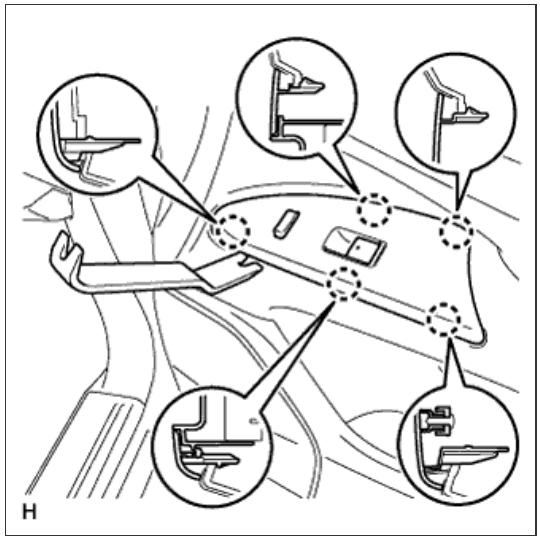
for Preparation Click here

HINT:

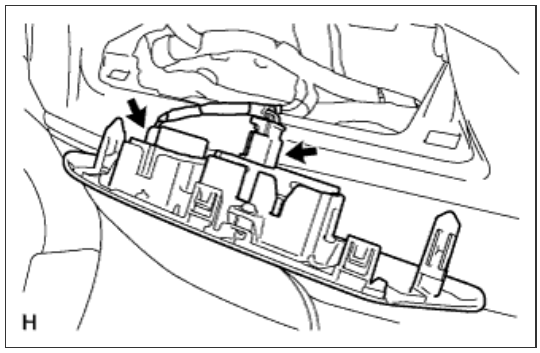
- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE FRONT UPPER ARMREST BASE PANEL RH

a. Using a moulding remover, detach the 5 claws and remove the front upper armrest base panel RH.

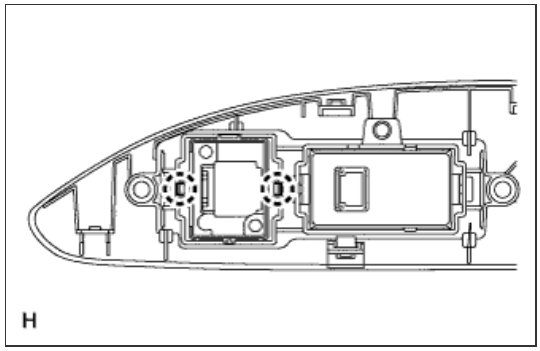


b. Disconnect the 2 connectors.



2. REMOVE DOOR CONTROL SWITCH ASSEMBLY

a. Detach the 2 claws and remove the door control switch.



for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

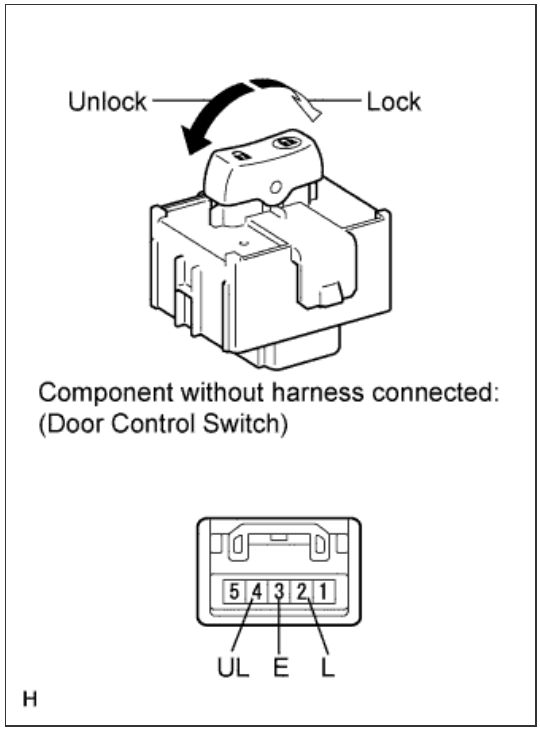
1. INSPECT DOOR CONTROL SWITCH ASSEMBLY

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
2 (L) - 3 (E)	Lock	Below 1 Ω
2 (L) - 3 (E) 4 (UL) - 3 (E)	Off	10 kΩ or higher
4 (UL) - 3 (E)	Unlock	Below 1 Ω

If the result is not as specified, replace the control switch assembly.

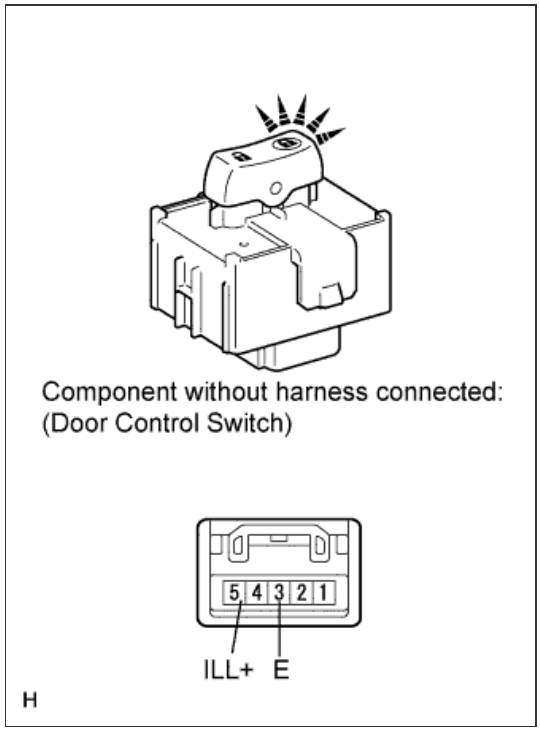


b. Apply battery voltage to the switch connector and check the indicator (LED) illumination condition.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 5 (ILL+)	Indicator (LED) illuminates
Battery negative (-) → Terminal 3 (E)	

If the result is not as specified, replace the door control switch assembly.



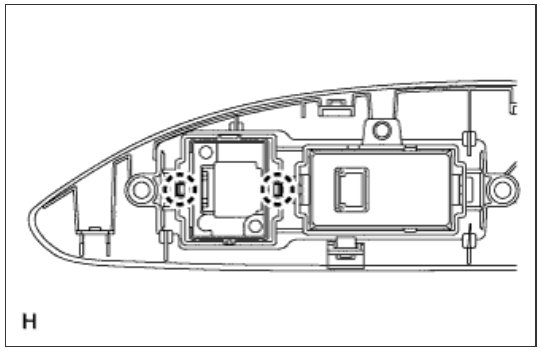
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

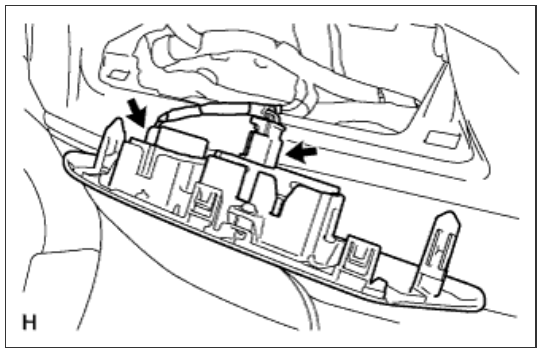
1. INSTALL DOOR CONTROL SWITCH ASSEMBLY

a. Attach the 2 claws to install the control switch.

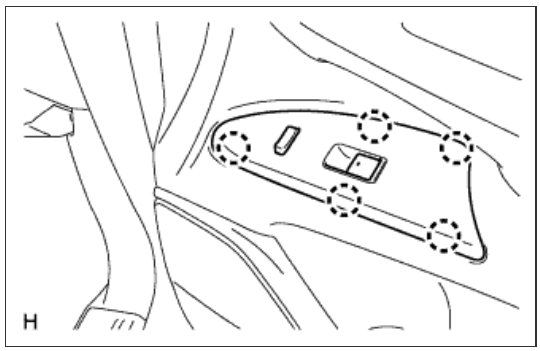


2. INSTALL FRONT UPPER ARMREST BASE PANEL RH

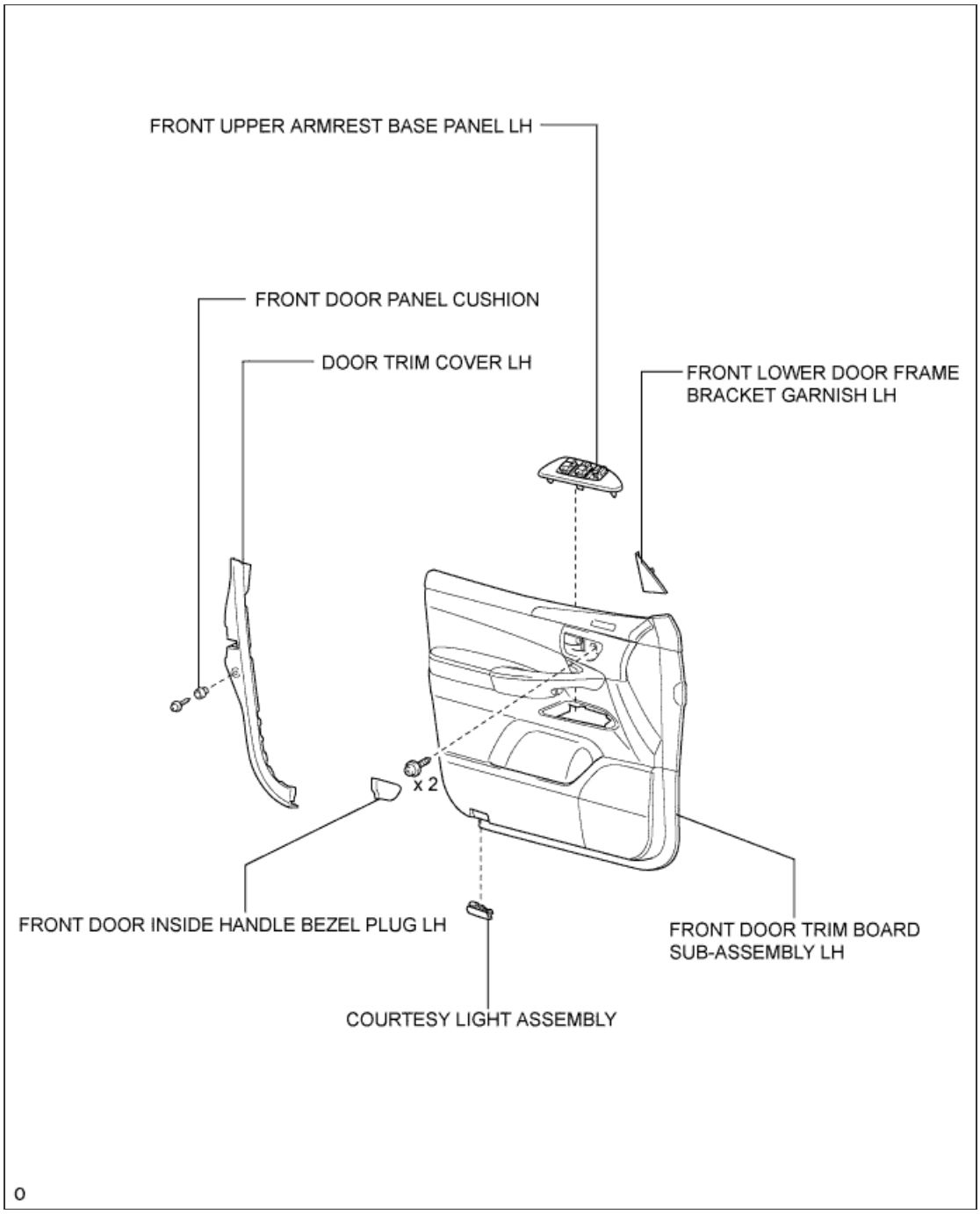
a. Connect the 2 connectors.

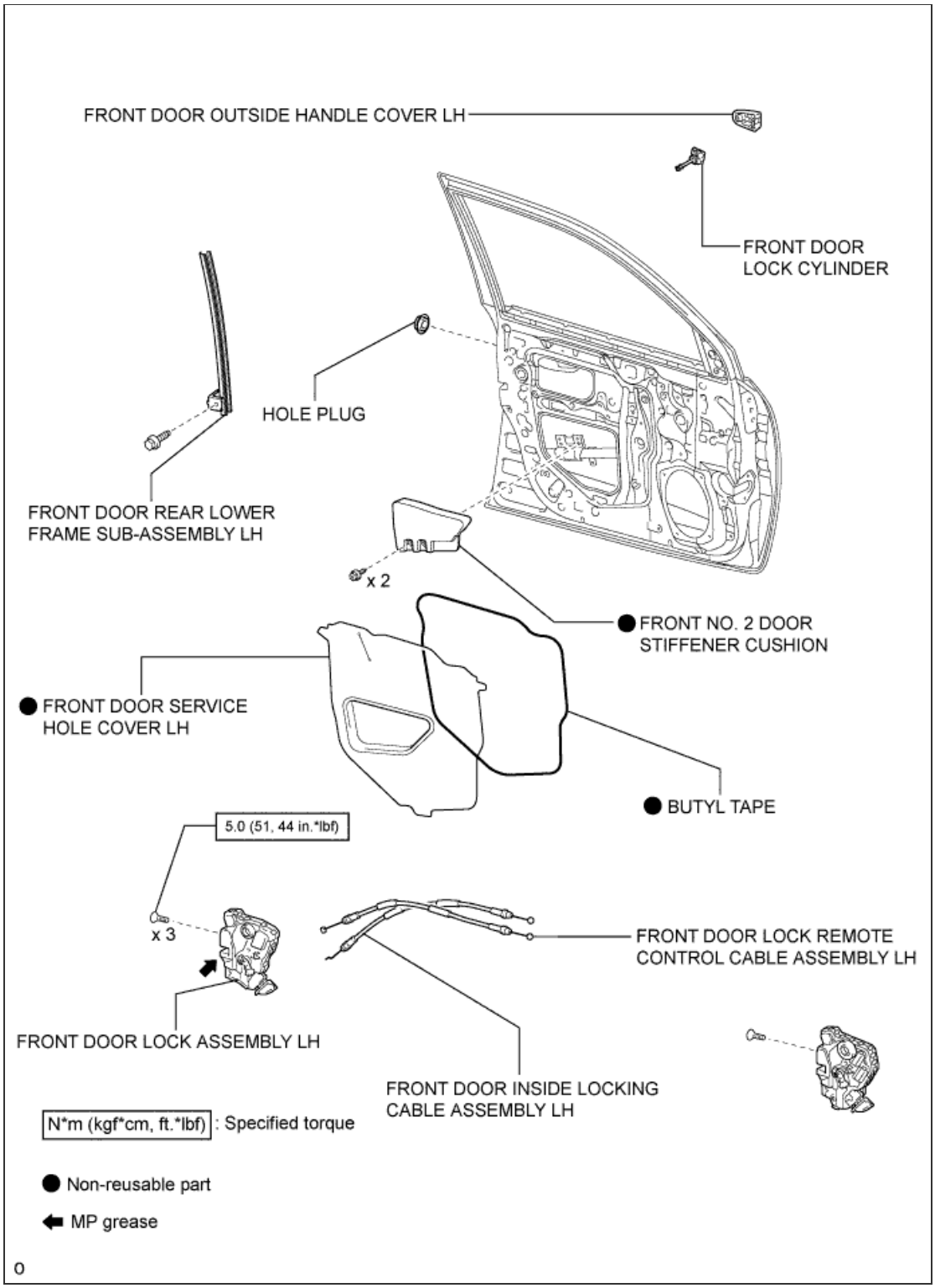


b. Attach the 5 claws to install the front upper armrest base panel RH.



for Preparation Click here




FRONT DOOR OUTSIDE HANDLE COVER LH
FRONT DOOR
LOCK CYLINDER
HOLE PLUG
FRONT DOOR REAR LOWER
FRAME SUB-ASSEMBLY LH
x 2
FRONT NO. 2 DOOR
STIFFENER CUSHION
FRONT DOOR SERVICE
HOLE COVER LH
BUTYL TAPE
5.0 (51, 44 in.*lbf)
x 3
FRONT DOOR LOCK REMOTE
CONTROL CABLE ASSEMBLY LH
FRONT DOOR LOCK ASSEMBLY LH
FRONT DOOR INSIDE LOCKING
CABLE ASSEMBLY LH
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
MP grease
o

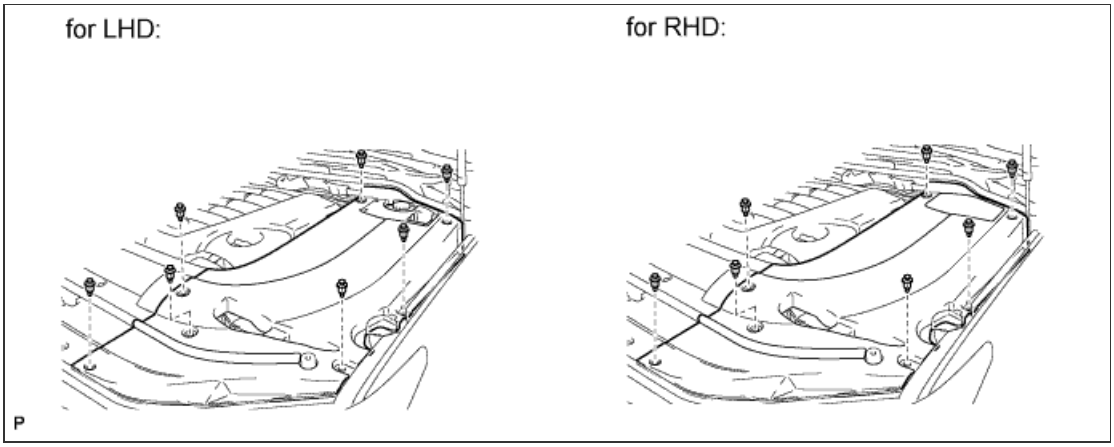
for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

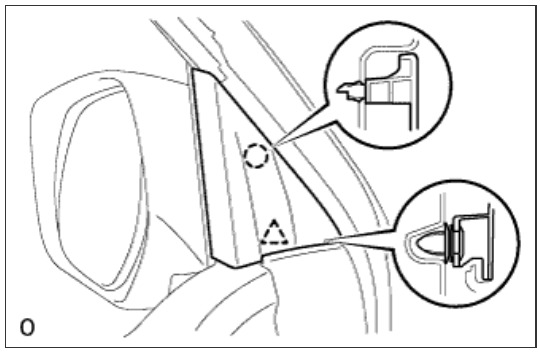
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

- **When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).**
- **w/ Navigation System:**
  After the engine switch is turned off, the HDD navigation system requires approximately 6 minutes to record various types of memory and settings. As a result, after turning the engine switch off, wait 6 minutes or more before disconnecting the cable from the negative (-) battery terminal.

3. REMOVE FRONT LOWER DOOR FRAME BRACKET GARNISH LH

a. Detach the clip and claw, and remove the front lower door frame bracket garnish.

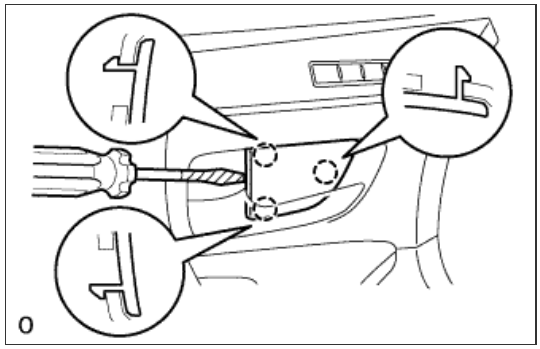


4. REMOVE FRONT DOOR INSIDE HANDLE BEZEL PLUG LH

a. Using a screwdriver, detach the 3 claws and remove the inside handle bezel plug.

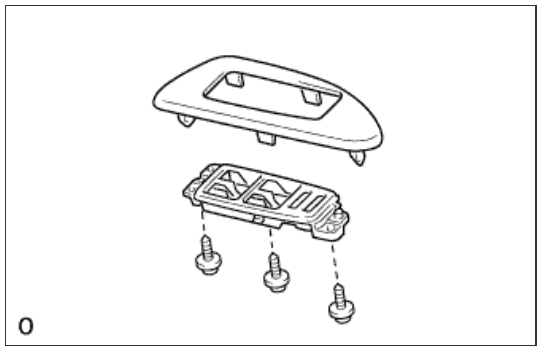
HINT:

Tape the screwdriver tip before use.



5. REMOVE FRONT UPPER ARMREST BASE PANEL LH

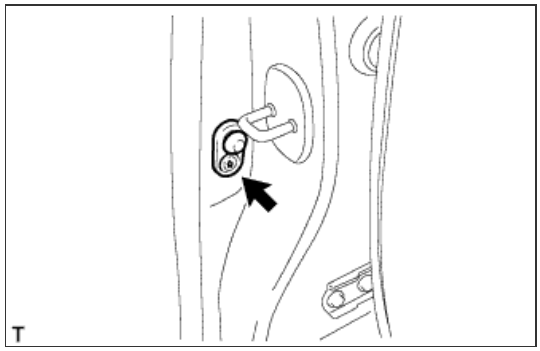
a. Remove the 3 screws and front lower door armrest base panel LH.



6. REMOVE COURTESY LIGHT ASSEMBLY

a. Using a T30 "TORX" socket wrench, remove the screw and switch.

b. Disconnect the connector.

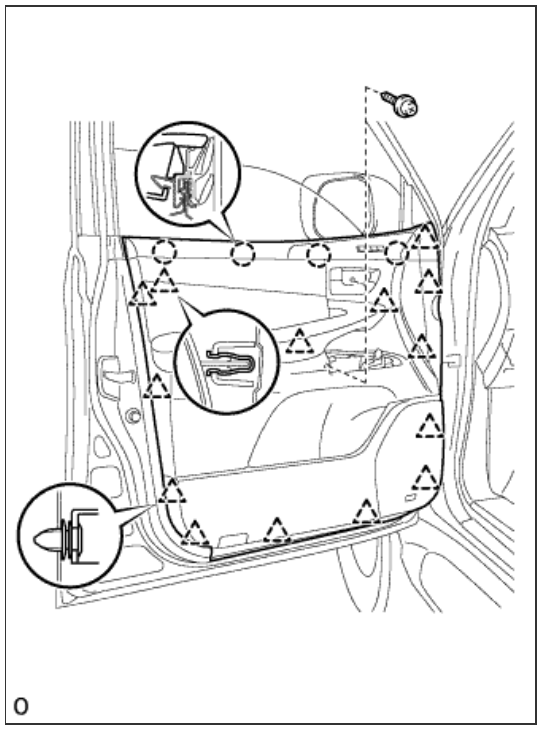


7. REMOVE FRONT DOOR TRIM BOARD SUB-ASSEMBLY LH

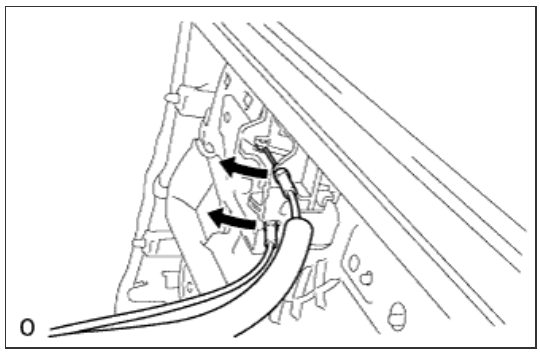
a. Remove the 2 screws.

b. Detach the 14 clips and 4 claws.

c. Disconnect the connector and remove the trim board.

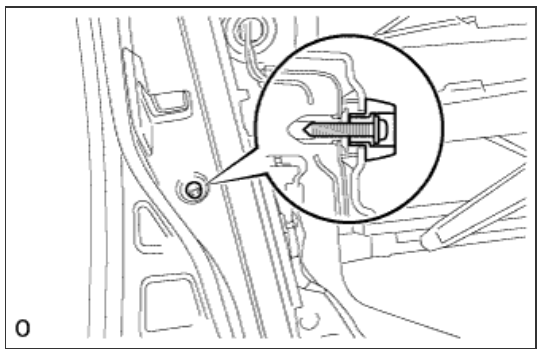


d. Disconnect the 2 cables from the inside handle.



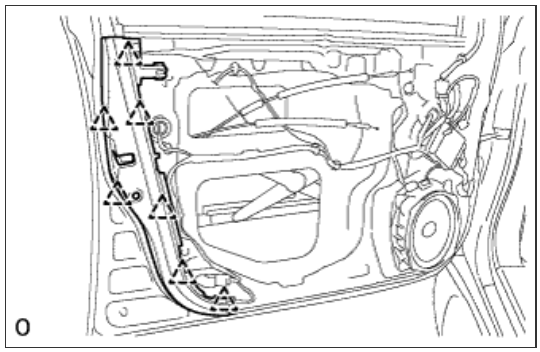
8. REMOVE FRONT DOOR PANEL CUSHION

a. Remove the screw and front door panel cushion.



9. REMOVE DOOR TRIM COVER LH

a. Using a clip remover, detach the 7 clips and remove the door trim cover.



10. REMOVE FRONT DOOR SERVICE HOLE COVER LH

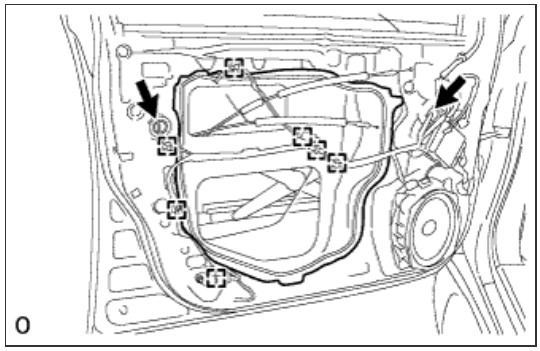
a. Using a clip remover, detach the 7 clamps.

b. Remove the bolt and disconnect the 2 connectors.

c. Remove the service hole cover.

HINT:

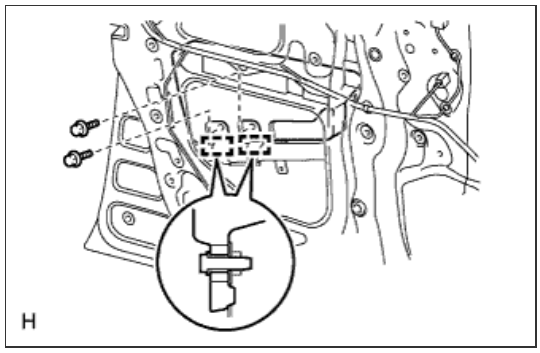
Remove the remaining tape on the door.



11. REMOVE FRONT NO. 2 DOOR STIFFENER CUSHION

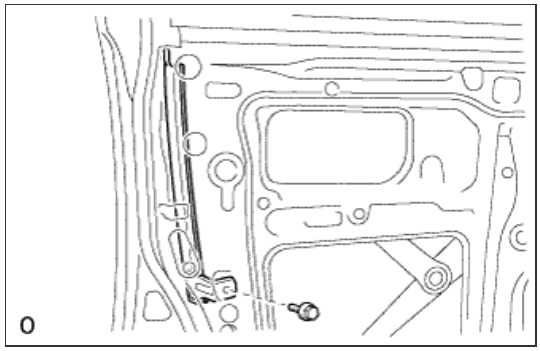
a. Remove the 2 bolts.

b. Detach the 2 clamps and remove the door stiffener cushion.



12. REMOVE FRONT DOOR REAR LOWER FRAME SUB-ASSEMBLY LH

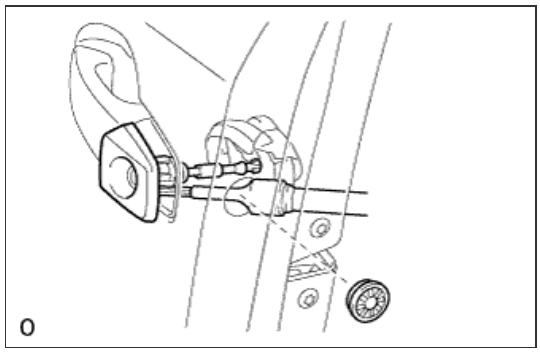
a. Remove the bolt and rear lower frame.



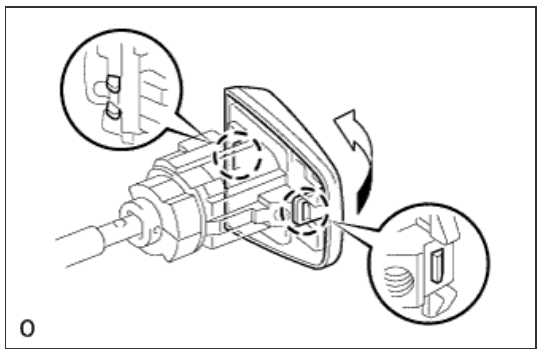
13. REMOVE FRONT DOOR OUTSIDE HANDLE COVER LH

a. Remove the hole plug.

b. Using a T30 "TORX" wrench, loosen the screw and remove the cover with the door lock cylinder installed.



c. Detach the 2 claws and remove the front door outside handle cover.



14. REMOVE FRONT DOOR LOCK ASSEMBLY LH

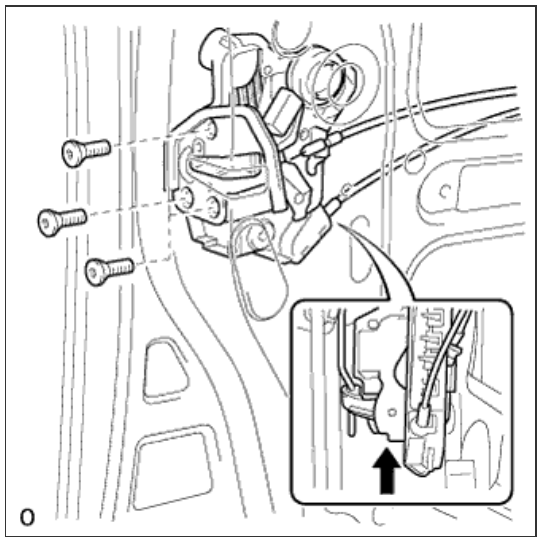
a. Using a T30 "TORX" wrench, remove the 3 screws and door lock.

HINT:

Remove the door lock through the service hole.

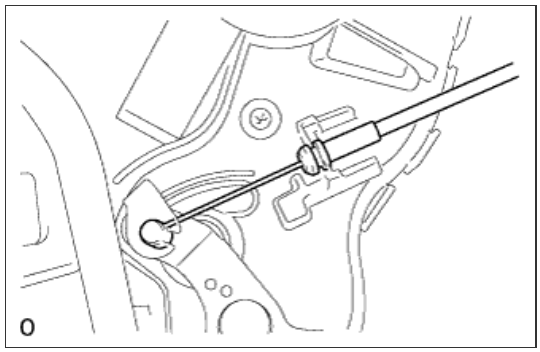
NOTICE:

Be careful when removing the screws as the door lock may fall and become damaged.



15. REMOVE FRONT DOOR LOCK REMOTE CONTROL CABLE ASSEMBLY LH

a. Remove the front door lock remote control cable assembly.

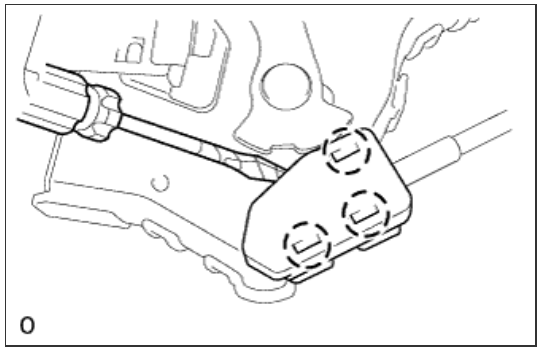


16. REMOVE FRONT DOOR INSIDE LOCKING CABLE ASSEMBLY LH

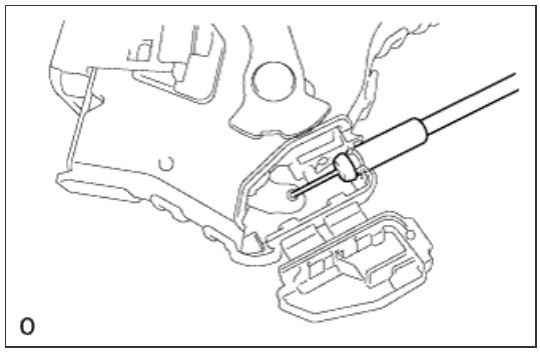
a. Using a screwdriver, detach the 3 claws.

HINT:

Tape the screwdriver tip before use.

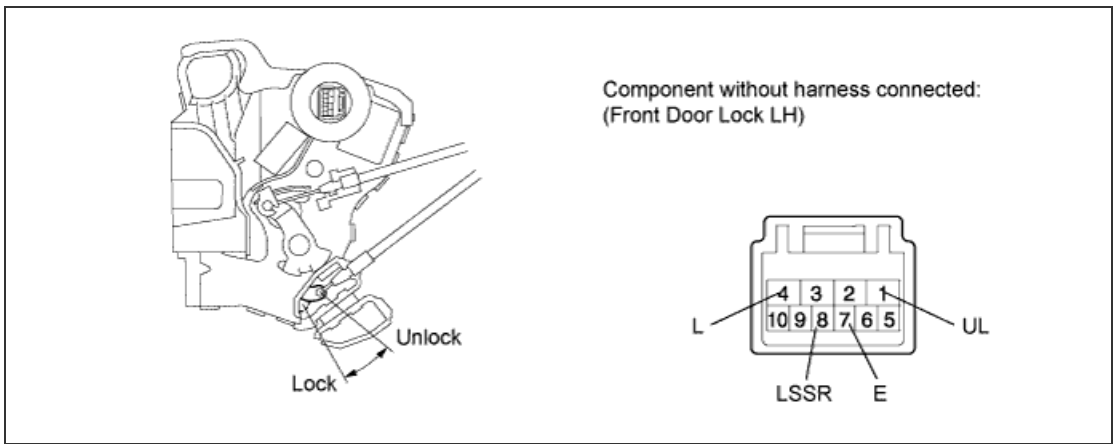


b. Remove the front door inside locking cable assembly.



for Preparation Click here

1. INSPECT FRONT DOOR LOCK ASSEMBLY LH



a. Check the door lock motor operation.

i. Apply battery voltage to the motor connector and check the operation of the door lock motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 4 (L) Battery negative (-) → 1 (UL)	Lock
Battery positive (+) → 1 (UL) Battery negative (-) → 4 (L)	Unlock

If the result is not as specified, replace the door lock assembly.

b. Check the detection switch.

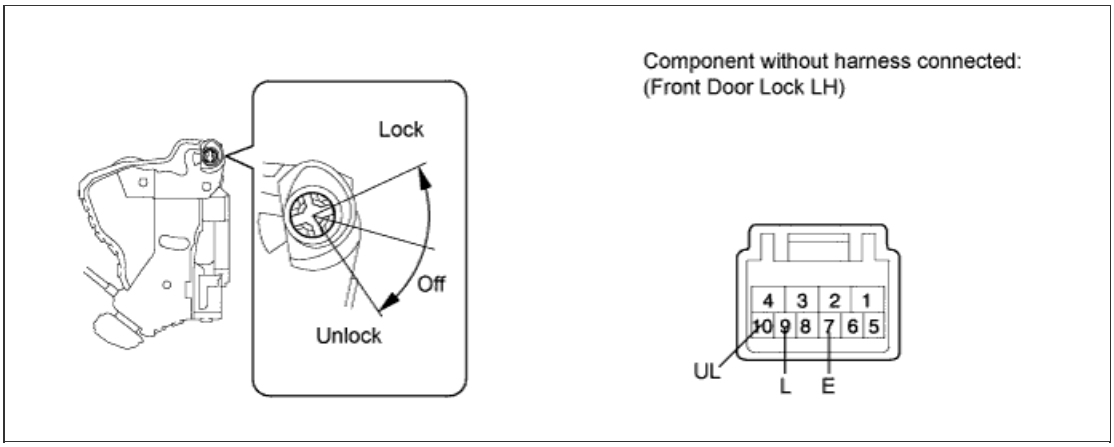
i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
8 (LSSR) - 7 (E)	Lock	10 kΩ or higher
8 (LSSR) - 7 (E)	Unlock	Below 1 Ω

If the result is not as specified, replace the door lock assembly.

c. for LHD:



i. Check the door lock and unlock switch.

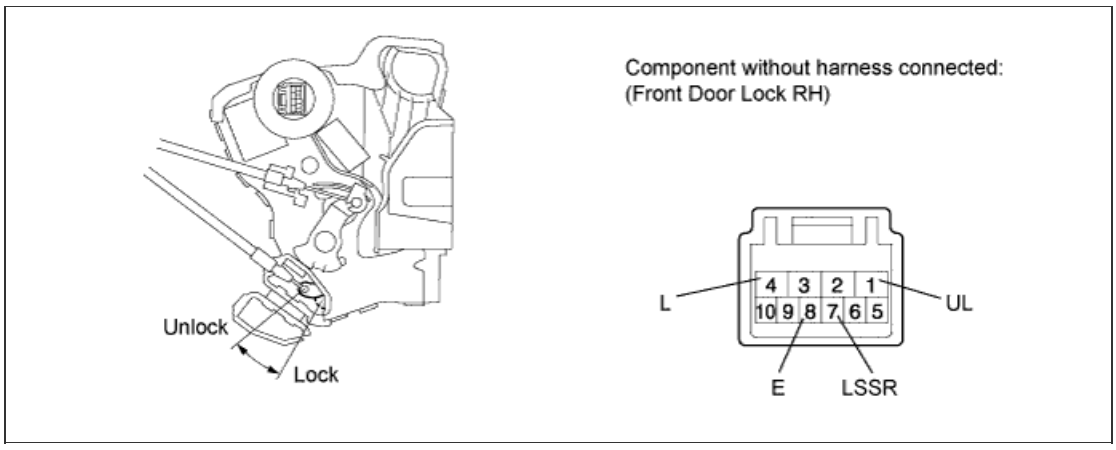
1. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
9 (L) - 7 (E)	Lock	Below 1 Ω
9 (L) - 7 (E) 10 (UL) - 7 (E)	Off	10 kΩ or higher
10 (UL) - 7 (E)	Unlock	Below 1 Ω

If the result is not as specified, replace the door lock assembly.

2. INSPECT FRONT DOOR LOCK ASSEMBLY RH



a. Check the door lock motor operation.

i. Apply battery voltage to the door lock motor connector and check the operation of the door lock motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 4 (L) Battery negative (-) → 1 (UL)	Lock
Battery positive (+) → 1 (UL) Battery negative (-) → 4 (L)	Unlock

If the result is not as specified, replace the door lock assembly.

b. Check the detection switch.

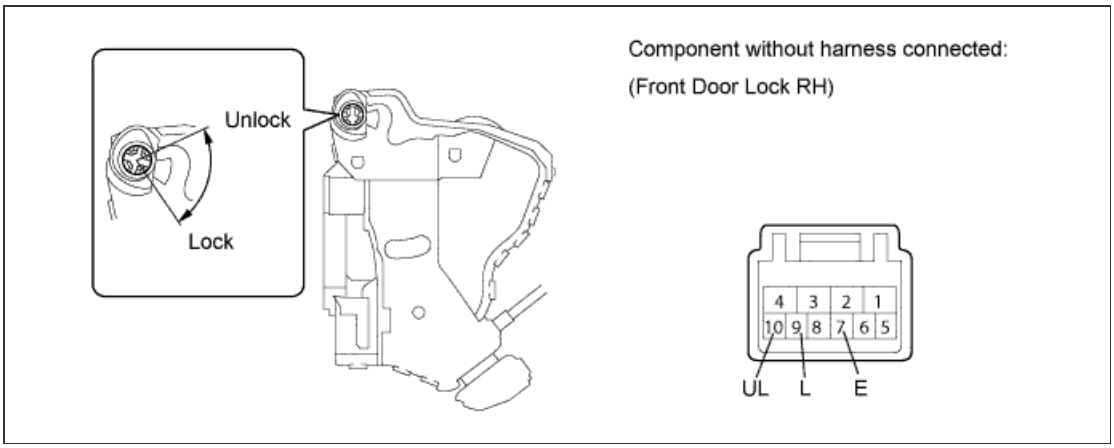
i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
7 (LSSR) - 8 (E)	Lock	10 kΩ or higher
7 (LSSR) - 8 (E)	Unlock	Below 1 Ω

If the result is not as specified, replace the door lock assembly.

c. for RHD:



i. Check the door lock and unlock switch.

1. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
9 (L) - 7 (E)	Lock	Below 1 Ω
9 (L) - 7 (E) 10 (UL) - 7 (E)	OFF	10 kΩ or higher
10 (UL) - 7 (E)	Unlock	Below 1 Ω

If the result is not as specified, replace the door lock assembly.

for Preparation Click here

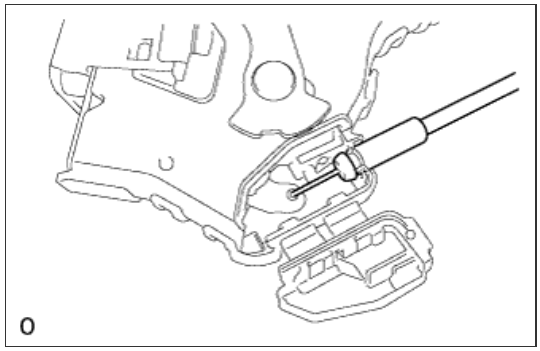
HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. INSTALL FRONT DOOR INSIDE LOCKING CABLE ASSEMBLY LH

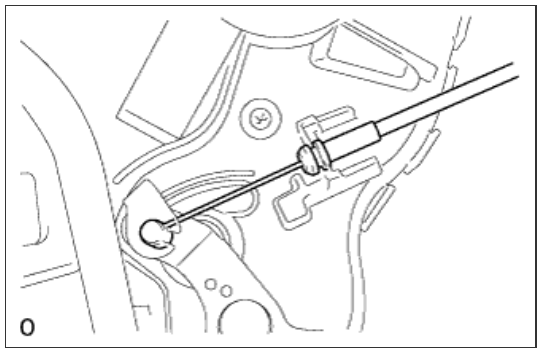
a. Install the front door inside locking cable.

b. Attach the 3 claws.



2. INSTALL FRONT DOOR LOCK REMOTE CONTROL CABLE ASSEMBLY LH

a. Install the front door lock remote control cable.



3. INSTALL FRONT DOOR LOCK ASSEMBLY LH

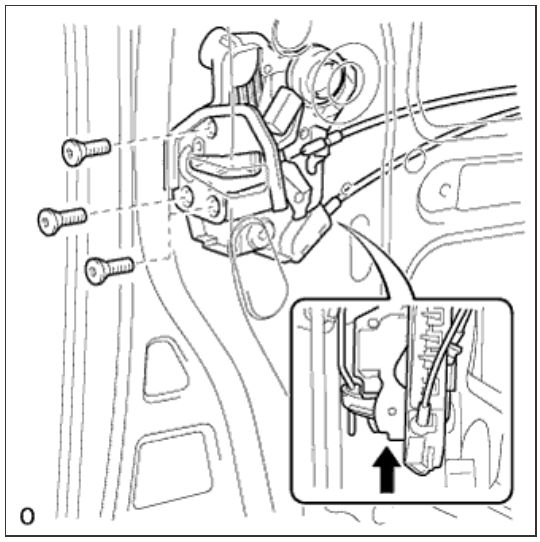
a. Apply MP grease to the sliding parts of the front door lock assembly.

b. Insert the front door lock open rod into the front door lock assembly.

c. Make sure that the front door lock open rod is securely connected to the front door lock assembly.

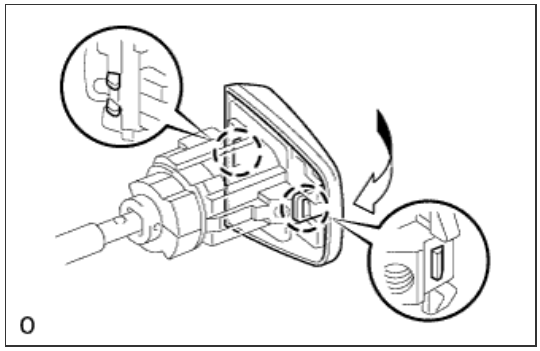
d. Using a T30 "TORX" wrench, install the door lock with the 3 screws.

Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }



4. INSTALL FRONT DOOR OUTSIDE HANDLE COVER LH

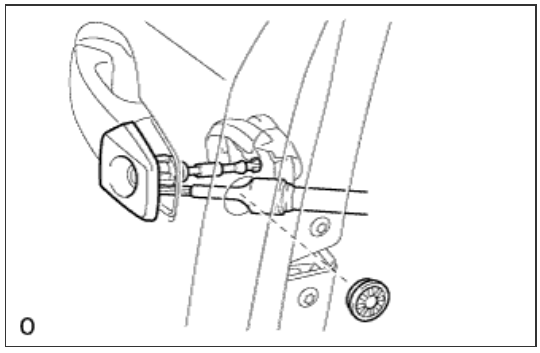
a. Attach the 2 claws to install the front door outside handle cover to the front door lock cylinder.



b. Using a T30 "TORX" socket, install the cover (with the door lock cylinder) with the screw.

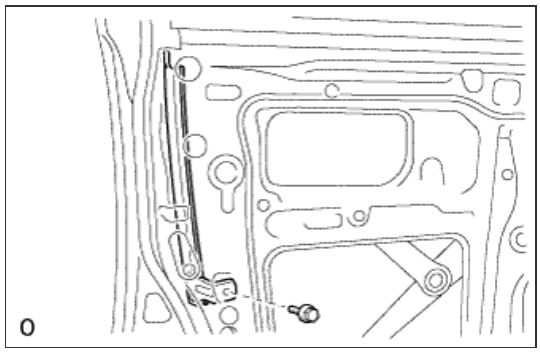
Torque:
4.0 N*m{ 41 kgf*cm , 35 in.*lbf }

c. Install the hole plug.



5. INSTALL FRONT DOOR REAR LOWER FRAME SUB-ASSEMBLY LH

a. Install the frame with the bolt.



6. INSTALL FRONT NO. 2 DOOR STIFFENER CUSHION

a. Clean the installation surface.

i. Using a heat light, heat the installation surface.

HINT:

When installing the door stiffener cushion, heat the vehicle body using a heat light.

Standard Heating Temperature:

Item	Temperature
Door Stiffener Cushion	20 to 30°C (68 to 86°F)
Vehicle Body	40 to 60°C (104 to 140°F)

NOTICE:

Do not heat the door stiffener cushion and vehicle body excessively.

ii. Remove the double-sided tape from the installation surface.

iii. Wipe off any tape adhesive residue with cleaner.

b. Install a new door stiffener cushion.

i. Using a heat light, heat a new door stiffener cushion and the installation surface.

HINT:

When installing the door stiffener cushion, heat the vehicle body and door stiffener cushion using a heat light.

Standard Heating Temperature:

Item	Temperature
Door Stiffener Cushion	20 to 30°C (68 to 86°F)
Vehicle Body	40 to 60°C (104 to 140°F)

NOTICE:

Do not heat the door stiffener cushion and vehicle body excessively.

ii. Remove the peeling paper from the face of the door stiffener cushion.

HINT:

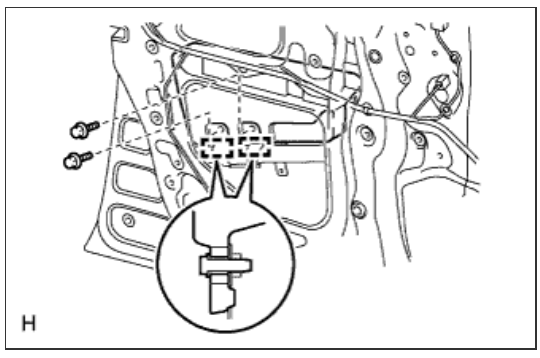
After removing the peeling paper, keep the exposed adhesive free from foreign matter.

iii. Attach the 2 clamps and double-sided tape to install the door stiffener cushion.

HINT:

Press the door stiffener cushion firmly to install it.

iv. Install the 2 bolts.



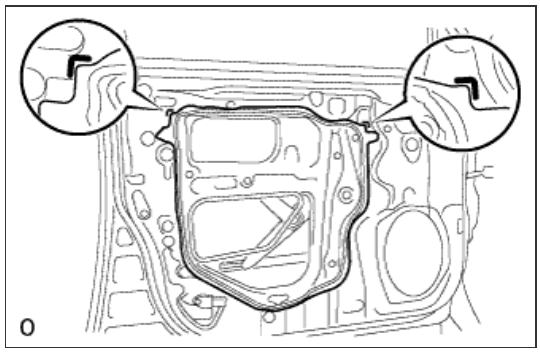
7. INSTALL FRONT DOOR SERVICE HOLE COVER LH

a. Apply butyl tape to the door.

b. Pass the front door lock remote control cable and front door inside locking cable through a new front door service hole cover.

NOTICE:

- **When installing the service hole cover, pull the links and connectors through the service hole cover.**
- **There should be no wrinkles or folds after installing the service hole cover.**
- **After installing the service hole cover, check the sealing quality.**

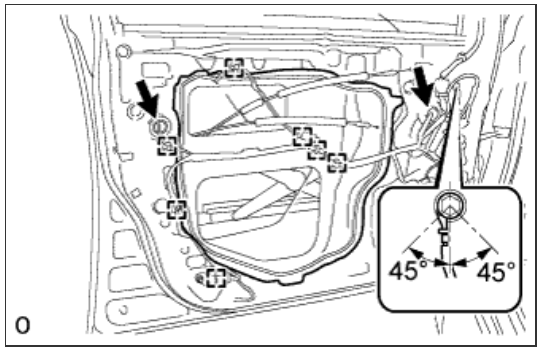


c. Connect the 2 connectors.

d. Attach the 7 clamps.

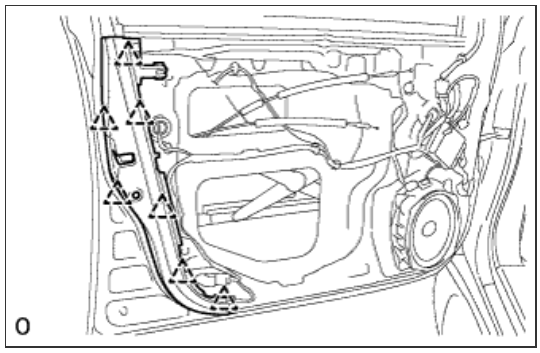
e. Install the bolt as shown in the illustration.

Torque:
8.4 N*m{ 86 kgf*cm , 74 in.*lbf }



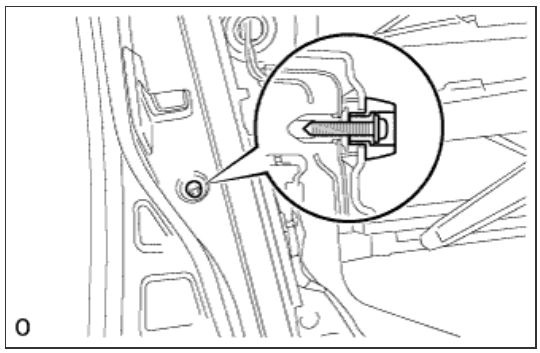
8. INSTALL DOOR TRIM COVER LH

a. Attach the 7 clips to install the door trim cover.



9. INSTALL FRONT DOOR PANEL CUSHION

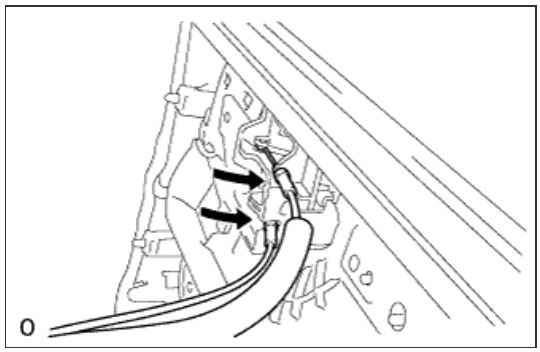
a. Install the front door panel cushion with the screw.



10. INSTALL FRONT DOOR TRIM BOARD SUB-ASSEMBLY LH

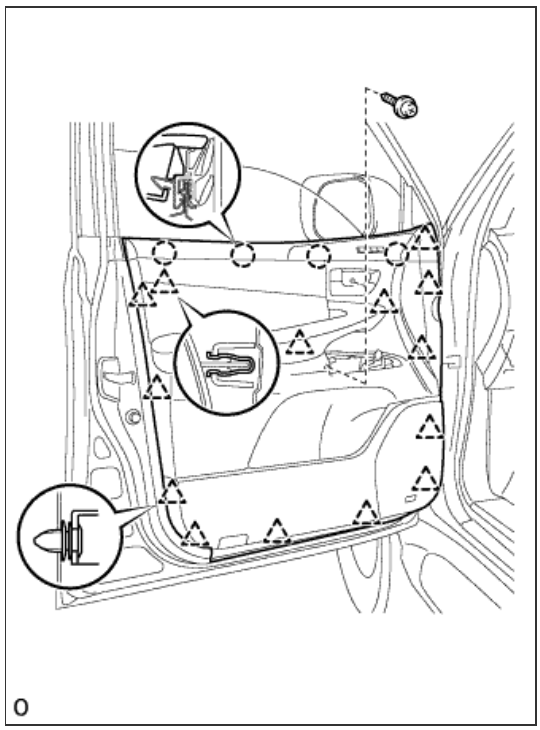
a. Connect the connector.

b. Connect the front door lock remote control cable and front door inside locking cable to the front door inside handle sub-assembly.



c. Attach the 4 claws and 14 clips to install the trim board.

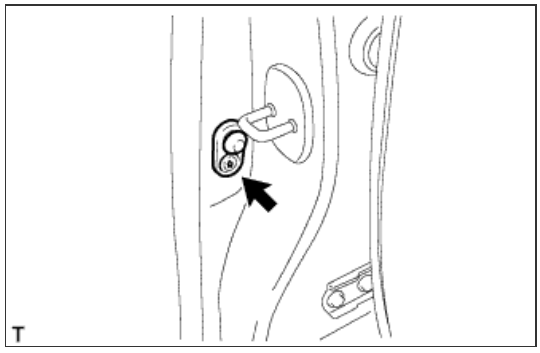
d. Install the 2 screws.



11. INSTALL COURTESY LIGHT ASSEMBLY

a. Using a T30 "TORX" socket wrench, remove the screw and switch.

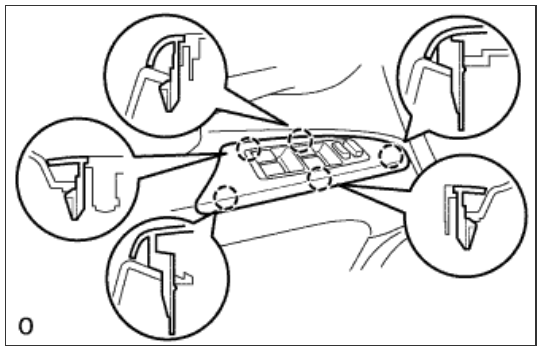
b. Disconnect the connector.



12. INSTALL FRONT UPPER ARMREST BASE PANEL LH

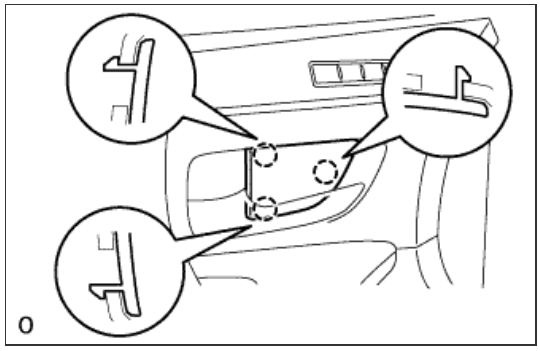
a. Connect the connector.

b. Attach the 5 claws to install the front upper armrest base panel.



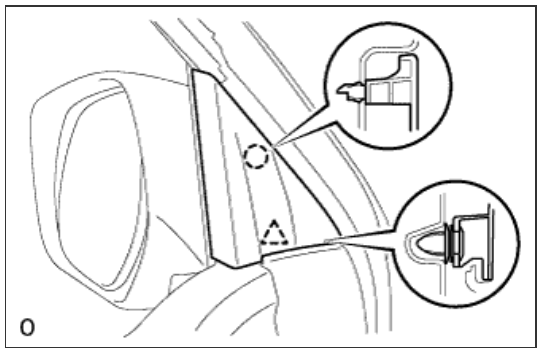
13. INSTALL FRONT DOOR INSIDE HANDLE BEZEL PLUG LH

a. Attach the 3 claws to install the inside handle bezel plug.



14. INSTALL FRONT LOWER DOOR FRAME BRACKET GARNISH LH

a. Attach the clip and claw to install the front door lower frame bracket garnish.



15. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

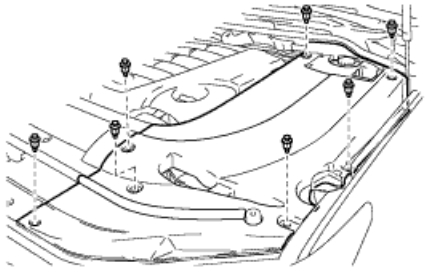
16. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

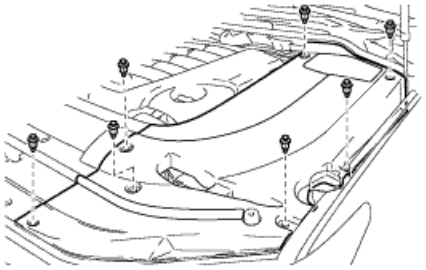
17. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.

for LHD:

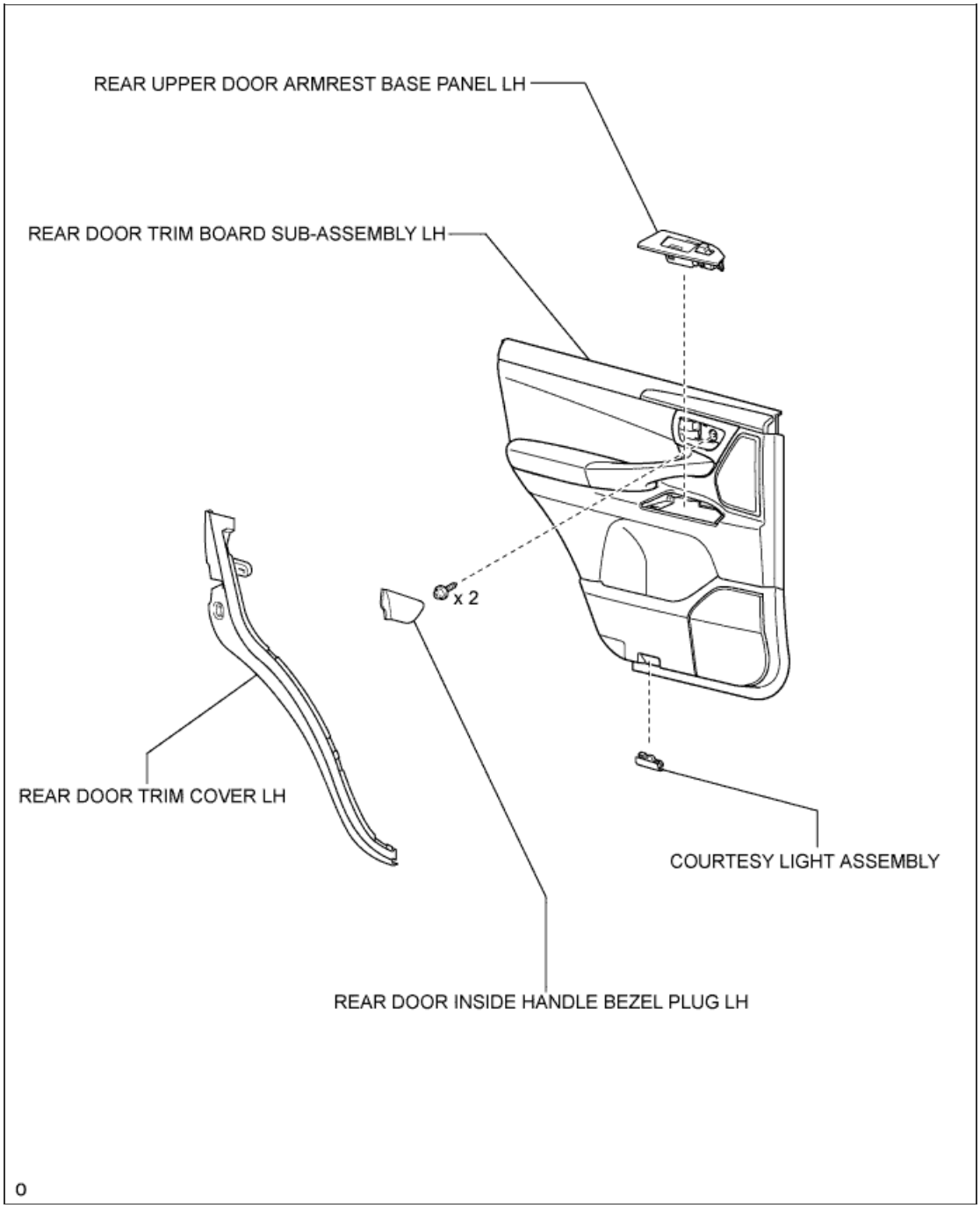


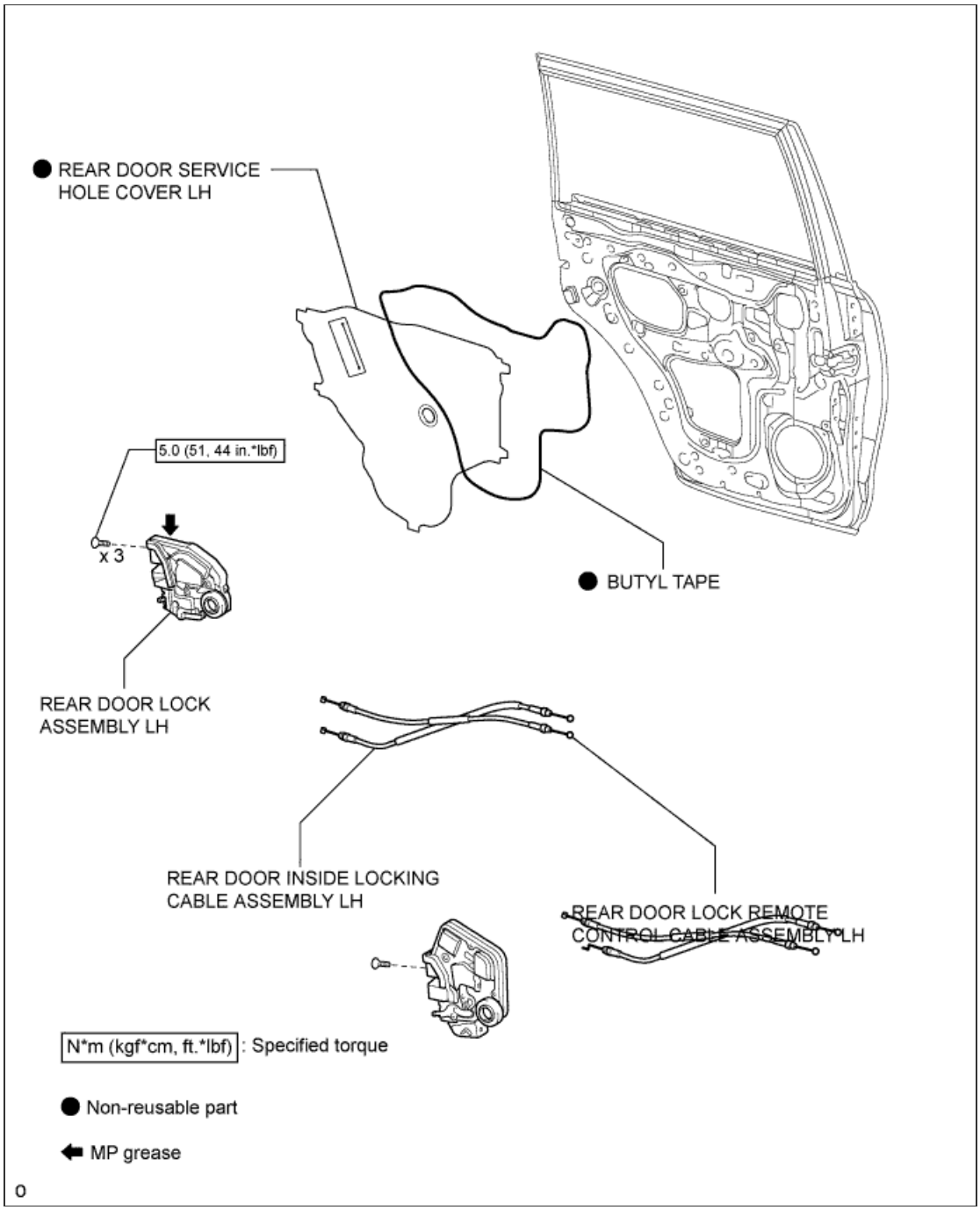
for RHD:



P

for Preparation Click here




REAR DOOR SERVICE HOLE COVER LH
5.0 (51, 44 in.*lbf)
x 3
BUTYL TAPE
REAR DOOR LOCK ASSEMBLY LH
REAR DOOR INSIDE LOCKING CABLE ASSEMBLY LH
REAR DOOR LOCK REMOTE CONTROL CABLE ASSEMBLY LH
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
MP grease
o

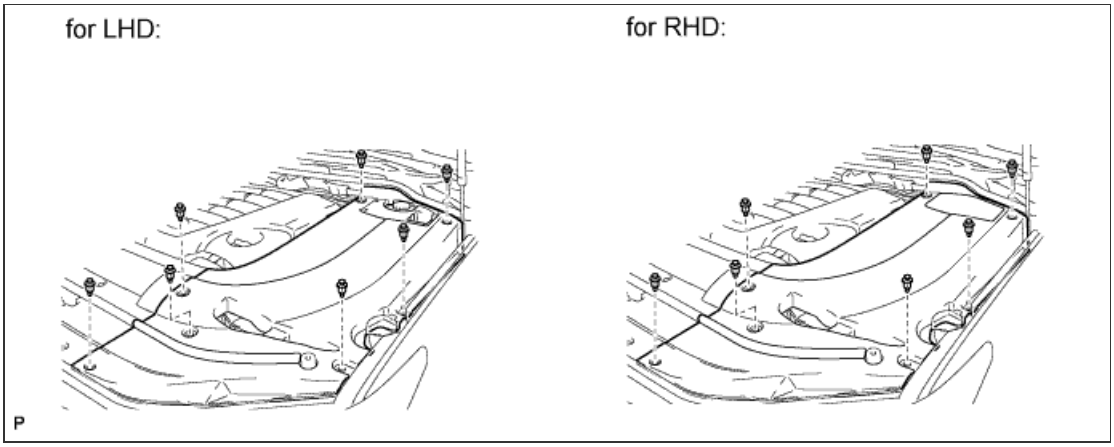
for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

NOTICE:

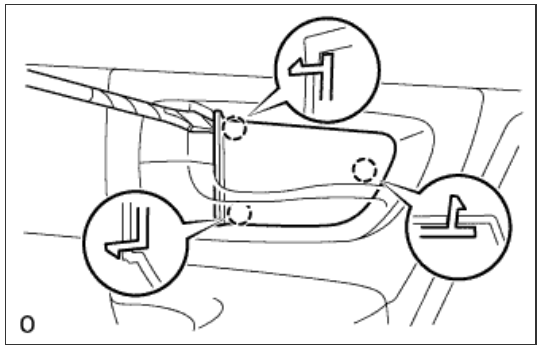
- **When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).**
- **w/ Navigation System:**
  After the engine switch is turned off, the HDD navigation system requires approximately 6 minutes to record various types of memory and settings. As a result, after turning the engine switch off, wait 6 minutes or more before disconnecting the cable from the negative (-) battery terminal.

3. REMOVE REAR DOOR INSIDE HANDLE BEZEL PLUG LH

a. Using a screwdriver, detach the 3 claws and remove the inside handle bezel plug.

HINT:

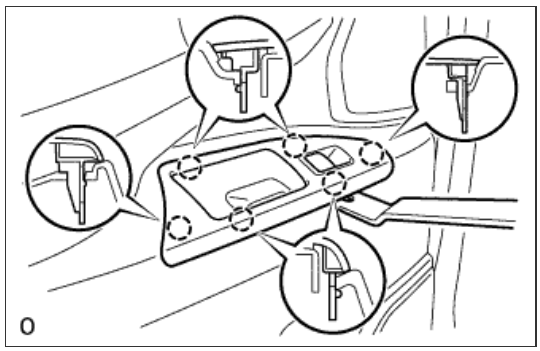
Tape the screwdriver tip before use.



4. REMOVE REAR UPPER DOOR ARMREST BASE PANEL LH

a. Using a moulding remover, detach the 6 claws.

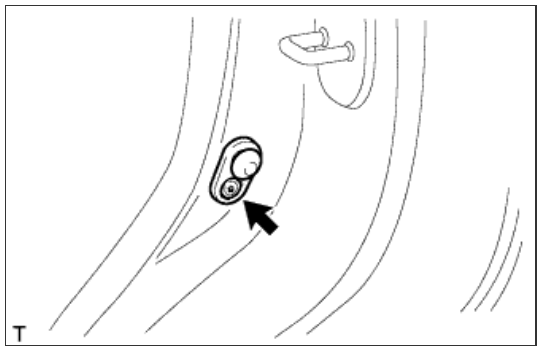
b. Disconnect the connector and remove the rear upper door armrest base panel and rear power window regulator switch assembly.



5. REMOVE COURTESY LIGHT ASSEMBLY

a. Using a T30 "TORX" socket wrench, remove the screw and switch.

b. Disconnect the connector.

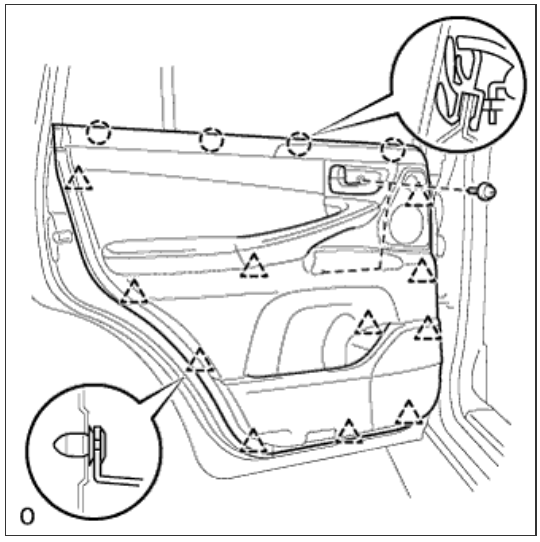


6. REMOVE REAR DOOR TRIM BOARD SUB-ASSEMBLY LH

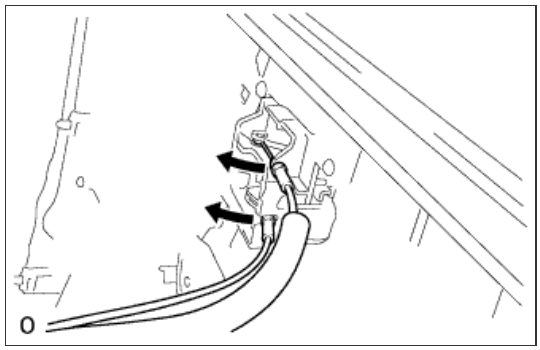
a. Remove the 2 screws.

b. Detach the 11 clips and 4 claws.

c. Disconnect the connector and remove the trim board.

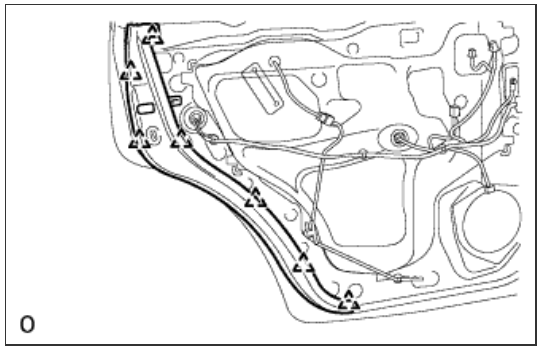


d. Disconnect the 2 cables from the inside handle.



7. REMOVE REAR DOOR TRIM COVER LH

a. Detach the 7 clips and remove the door trim cover.



8. REMOVE REAR DOOR SERVICE HOLE COVER LH

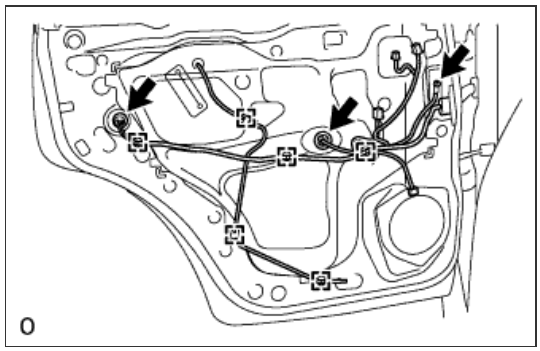
a. Using a clip remover, detach the 6 clamps.

b. Remove the bolt and disconnect the 2 connectors.

c. Remove the service hole cover.

HINT:

Remove the remaining tape on the door.

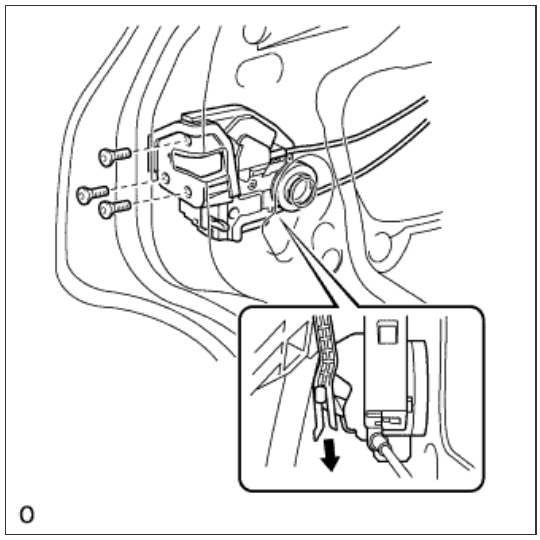


9. REMOVE REAR DOOR LOCK ASSEMBLY LH

a. Using a T30 "TORX" socket, remove the 3 screws and door lock.

NOTICE:

Be careful when removing the screws as the door lock may fall and become damaged.

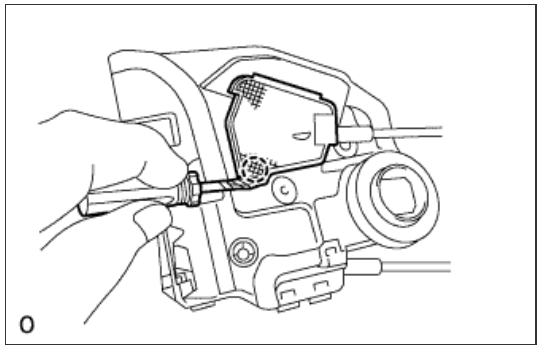


10. REMOVE REAR DOOR LOCK REMOTE CONTROL CABLE ASSEMBLY LH

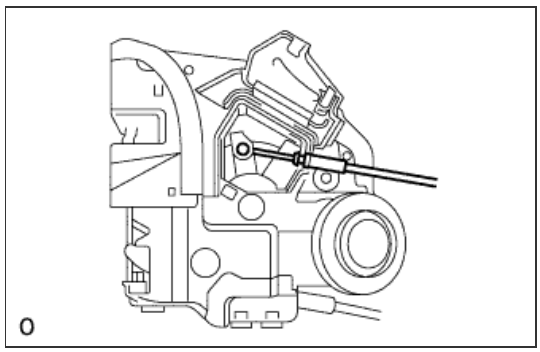
a. Using a screwdriver, detach the claw.

HINT:

Tape the screwdriver tip before use.



b. Remove the rear door lock remote control cable.

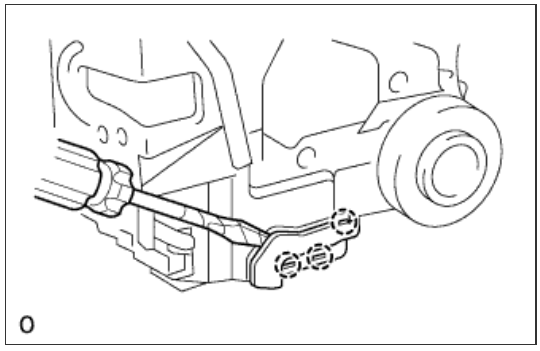


11. REMOVE REAR DOOR INSIDE LOCKING CABLE ASSEMBLY LH

a. Using a screwdriver, detach the 3 claws.

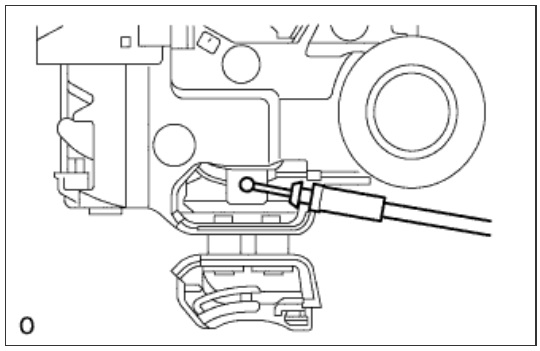
HINT:

Tape the screwdriver tip before use.



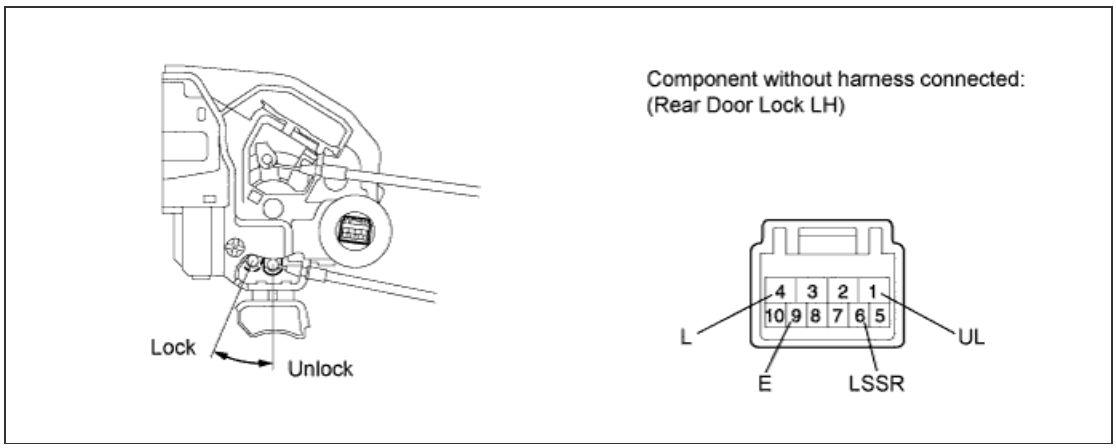
b. Remove the rear door inside locking cable.

b. Remove the rear door inside locking cable.



for Preparation Click here

1. INSPECT REAR DOOR LOCK ASSEMBLY LH



a. Check the door lock motor operation.

i. Apply battery voltage to the door lock motor connector and check the operation of the door lock motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 4 (L) Battery negative (-) → 1 (UL)	Lock
Battery positive (+) → 1 (UL) Battery negative (-) → 4 (L)	Unlock

If the result is not as specified, replace the door lock assembly.

b. Check the detection switch.

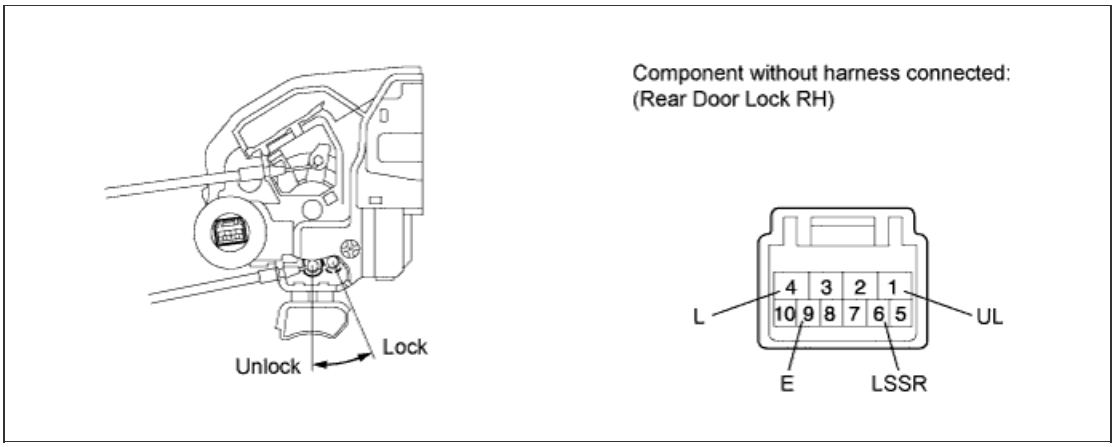
i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
6 (LSSR) - 9 (E)	Unlock	Below 1 Ω
6 (LSSR) - 9 (E)	Lock	10 kΩ or higher

If the result is not as specified, replace the door lock assembly.

2. INSPECT REAR DOOR LOCK ASSEMBLY RH



a. Check the door lock motor operation.

i. Apply battery voltage to the door lock motor connector and check the operation of the door lock motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 4 (L) Battery negative (-) → 1 (UL)	Lock
Battery positive (+) → 1 (UL) Battery negative (-) → 4 (L)	Unlock

If the result is not as specified, replace the door lock assembly.

b. Check the detection switch.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
6 (LSSR) - 9 (E)	Unlock	Below 1 Ω
6 (LSSR) - 9 (E)	Lock	10 kΩ or higher

If the result is not as specified, replace the door lock assembly.

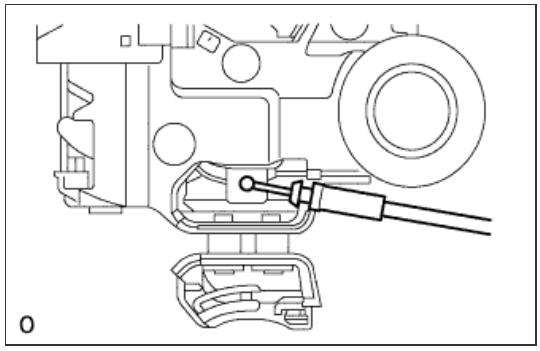
for Preparation Click here

HINT:

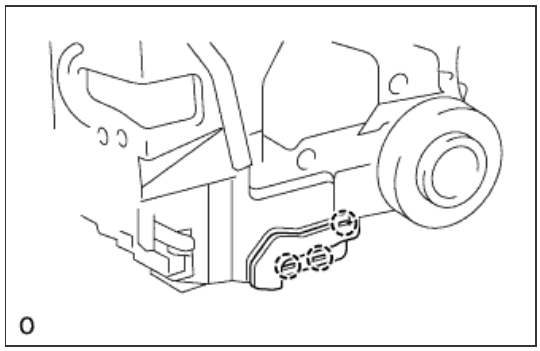
- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. INSTALL REAR DOOR INSIDE LOCKING CABLE ASSEMBLY LH

a. Install the rear door inside locking cable assembly.

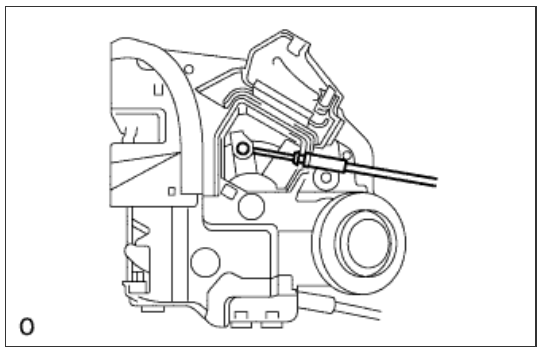


b. Attach the 3 claws.

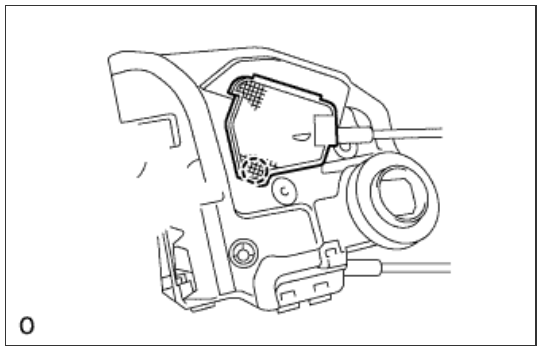


2. INSTALL REAR DOOR LOCK REMOTE CONTROL CABLE ASSEMBLY LH

a. Install the rear door lock remote control cable assembly.



b. Attach the claw.



3. INSTALL REAR DOOR LOCK ASSEMBLY LH

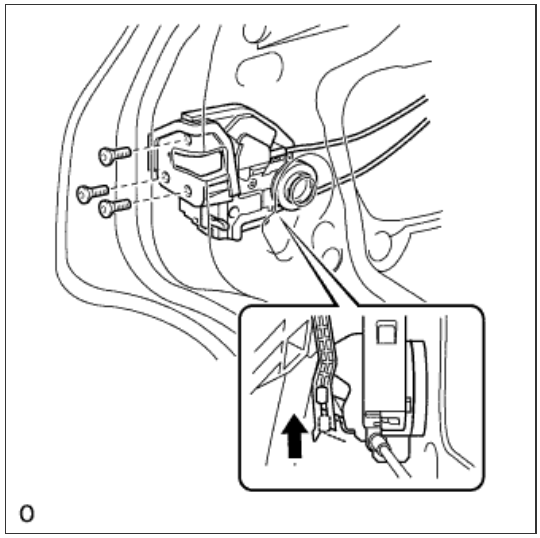
a. Apply MP grease to the sliding parts of the rear door lock assembly.

b. Install the rear door lock assembly to the rear door outside handle release plate, and set it to the rear door panel.

c. Make sure that the rear door outside handle frame release plate is securely connected to the rear door lock assembly.

d. Using a T30 "TORX" wrench, install the 3 screws.

Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }



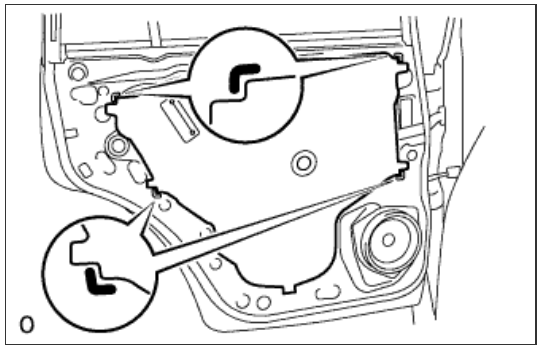
4. INSTALL REAR DOOR SERVICE HOLE COVER LH

a. Apply butyl tape to the door.

b. Pass the rear door lock remote control cable and rear door inside locking cable through a new rear door service hole cover.

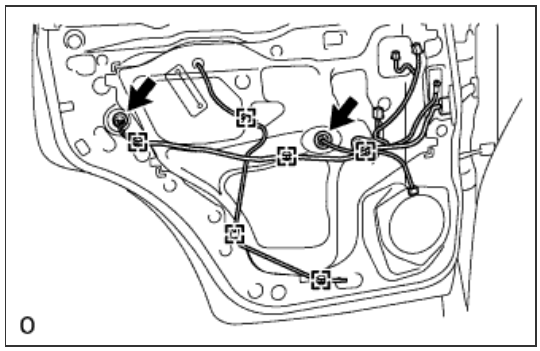
NOTICE:

- **When installing the service hole cover, pull the links and connectors through the service hole cover.**
- **There should be no wrinkles or folds after installing the service hole cover.**
- **After installing the service hole cover, check the sealing quality.**



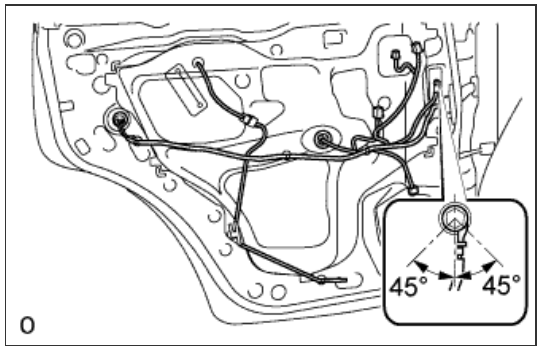
c. Connect the 2 connectors.

d. Attach the 6 clamps.



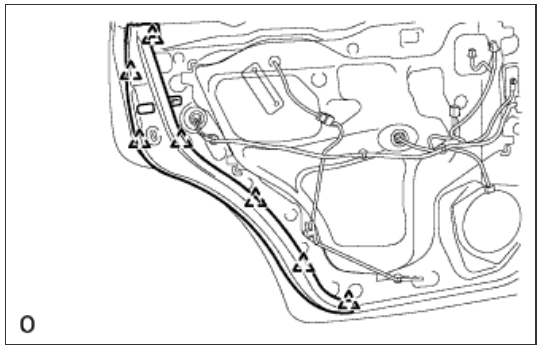
e. Install the bolt as shown in the illustration.

Torque:
8.4 N*m{ 86 kgf*cm , 74 in.*lbf }



5. INSTALL REAR DOOR TRIM COVER LH

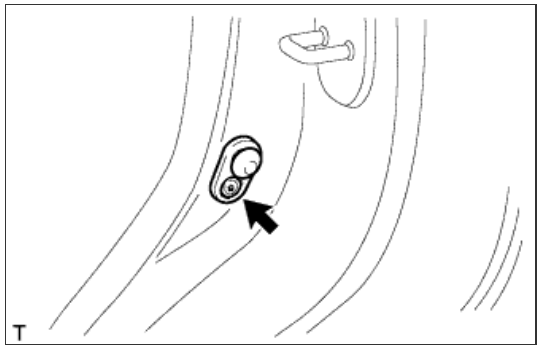
a. Attach the 7 clips to install the door trim cover.



6. INSTALL COURTESY LIGHT ASSEMBLY

a. Connect the connector.

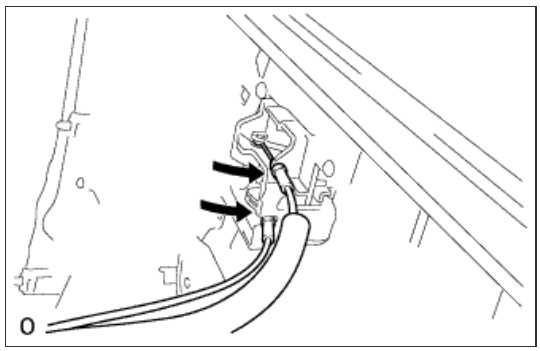
b. Using a T30 "TORX" socket wrench, install the switch with the screw.



7. INSTALL REAR DOOR TRIM BOARD SUB-ASSEMBLY LH

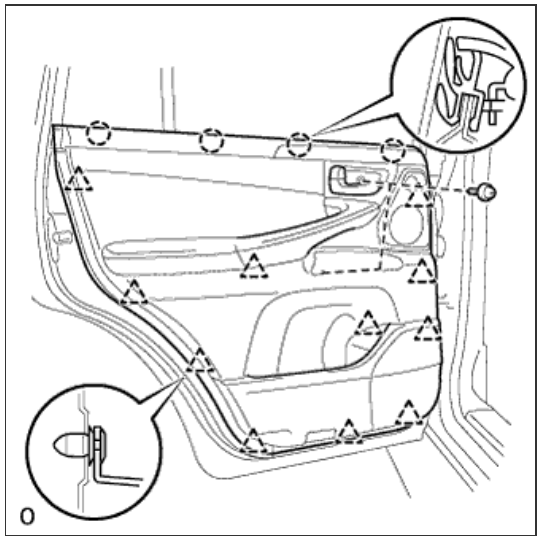
a. Connect the connector.

b. Connect the rear door lock remote control cable and rear door inside locking cable to the rear door inside handle sub-assembly.



c. Attach the 4 claws and 11 clips to install the rear door trim board sub-assembly.

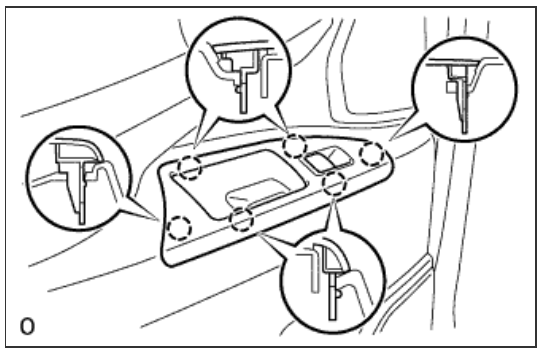
d. Install the 2 screws.



8. INSTALL REAR UPPER DOOR ARMREST BASE PANEL LH

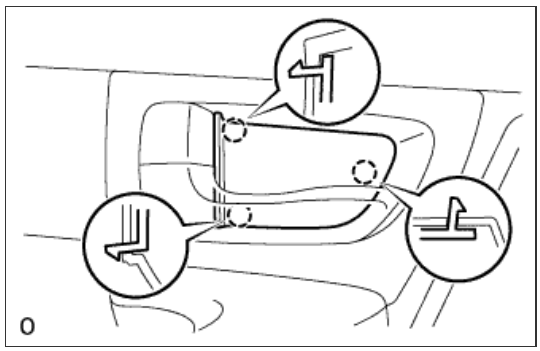
a. Connect the connector.

b. Attach the 6 claws to install the rear upper door armrest base panel.



9. INSTALL REAR DOOR INSIDE HANDLE BEZEL PLUG LH

a. Attach the 3 claws to install the bezel plug.



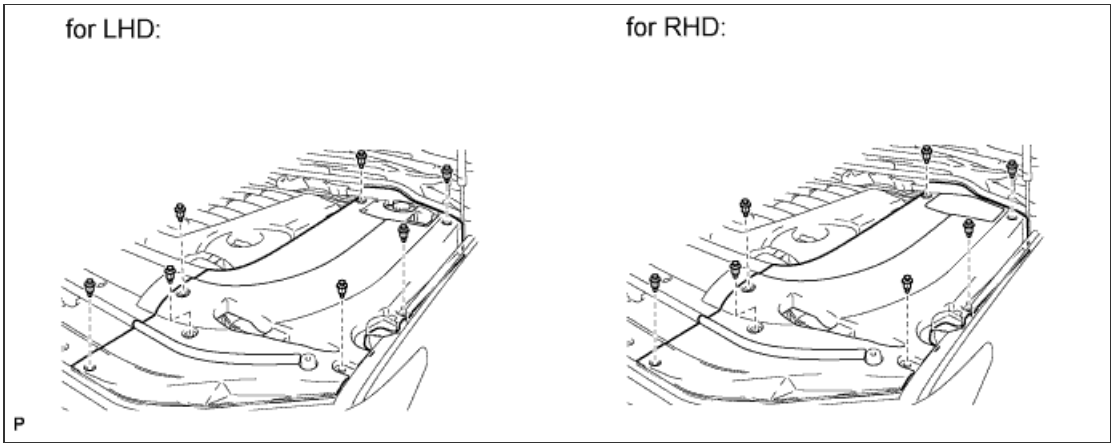
10. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

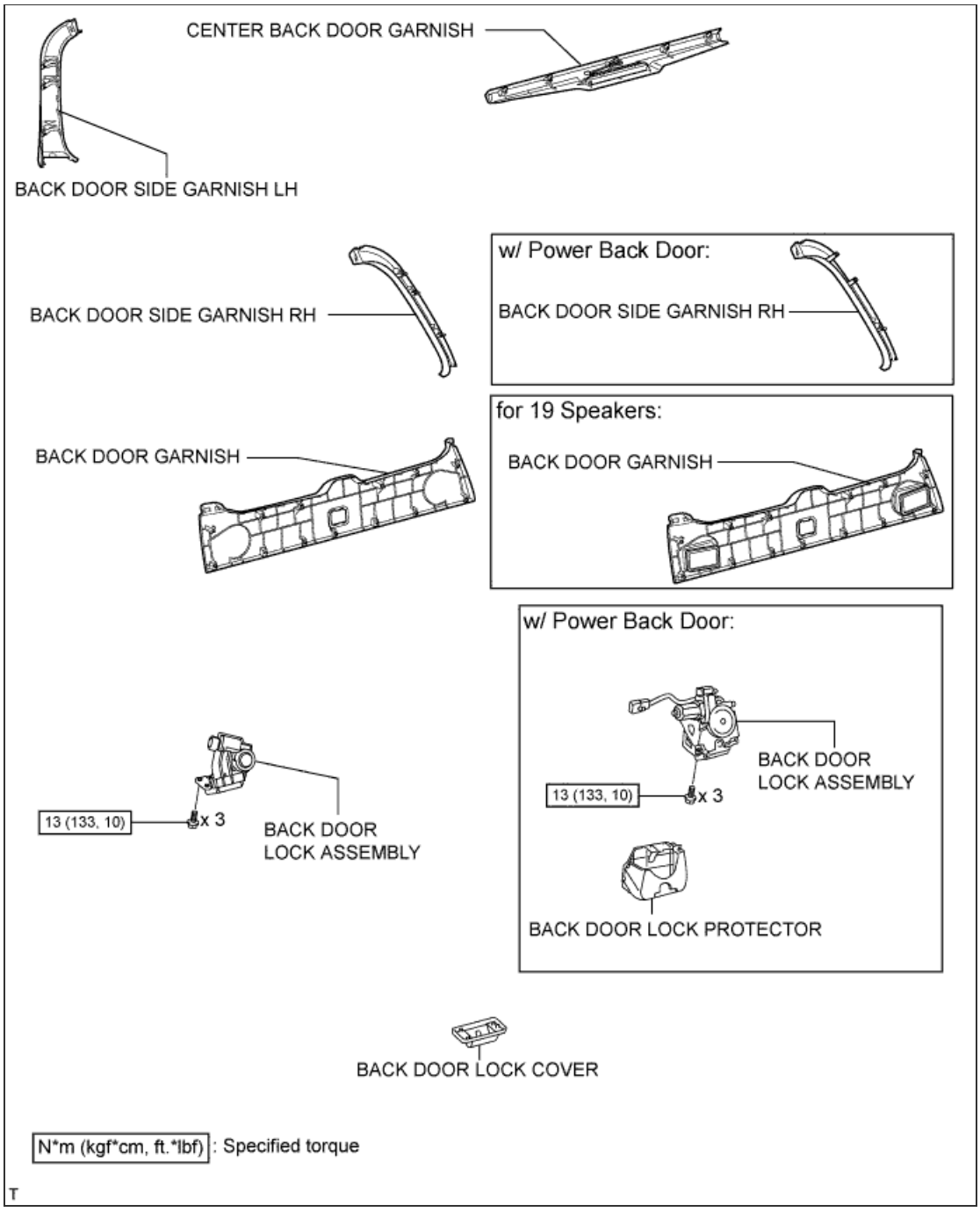
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

11. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



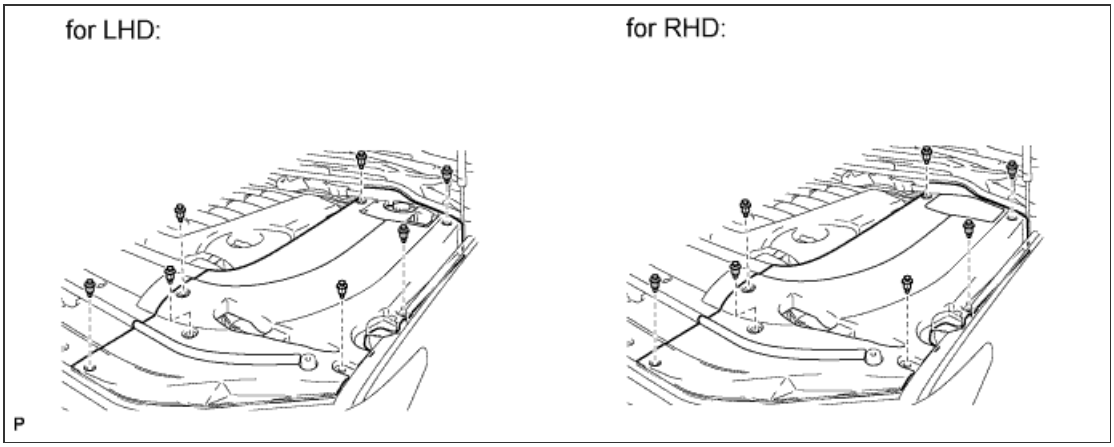
for Preparation Click here



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

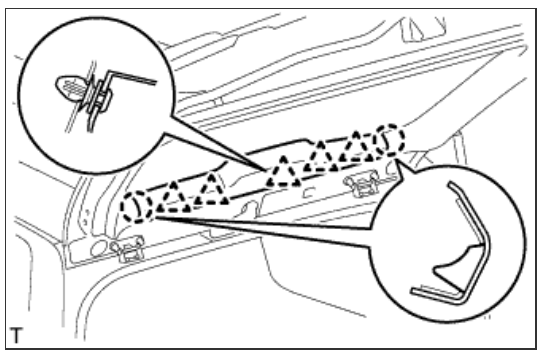
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

- **When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).**
- **w/ Navigation System:**
  After the engine switch is turned off, the HDD navigation system requires approximately 6 minutes to record various types of memory and settings. As a result, after turning the engine switch off, wait 6 minutes or more before disconnecting the cable from the negative (-) battery terminal.

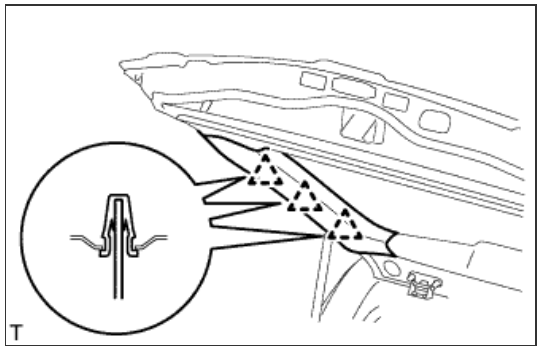
3. REMOVE CENTER BACK DOOR GARNISH

a. Detach the 5 clips and 2 claws, and remove the back door garnish.



4. REMOVE BACK DOOR SIDE GARNISH LH

a. Detach the 3 clips and remove the back door side garnish.



5. REMOVE BACK DOOR SIDE GARNISH RH

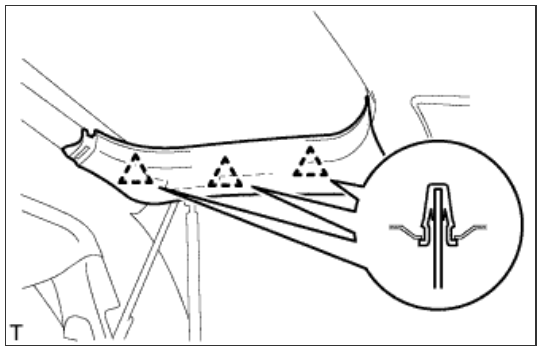
a. w/o Power Back Door:

HINT:

Use the same procedures described for the LH side.

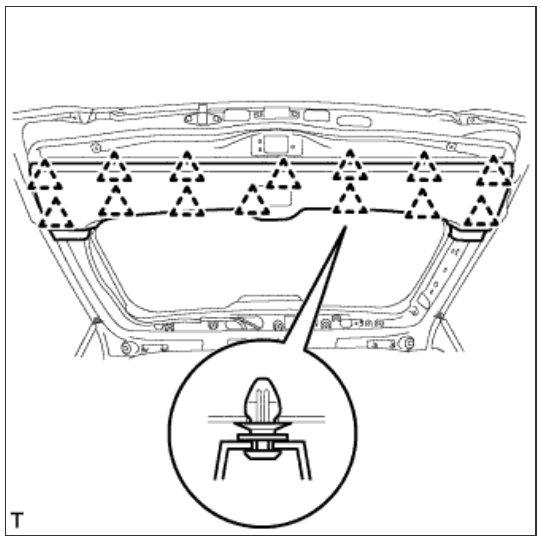
b. w/ Power Back Door:

i. Detach the 3 clips and remove the back door side garnish.



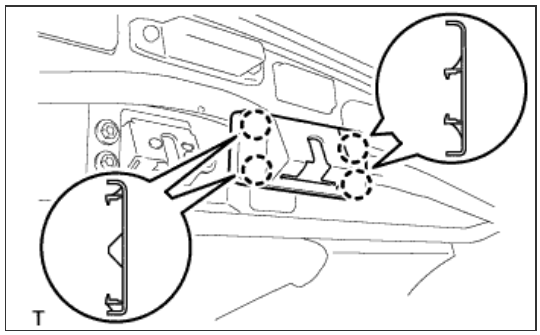
6. REMOVE BACK DOOR GARNISH

a. Using a screwdriver, detach the 14 clips and remove the back door garnish.



7. REMOVE BACK DOOR LOCK COVER

a. Detach the 4 claws and remove the cover.

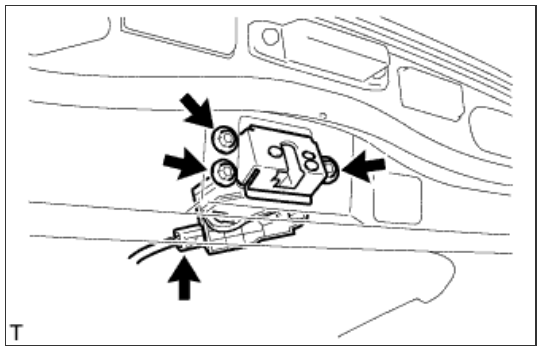


8. REMOVE BACK DOOR LOCK ASSEMBLY

a. w/o Power Back Door:

i. Disconnect the connector.

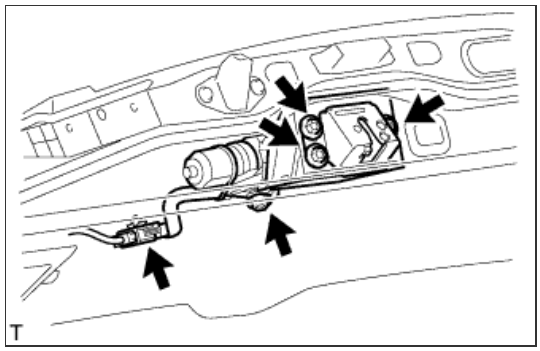
ii. Remove the 3 bolts and door lock.



b. w/ Power Back Door:

i. Disconnect the connector.

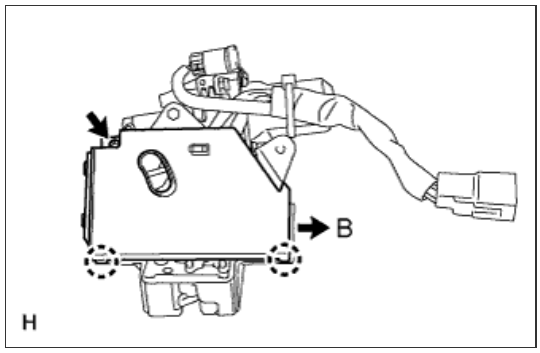
ii. Remove the 4 bolts and door lock.



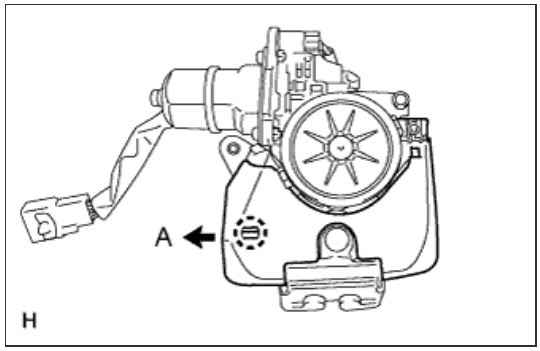
9. REMOVE BACK DOOR LOCK PROTECTOR (w/ Power Back Door)

a. Remove the screw.

b. Detach the 2 claws and remove the protector B.

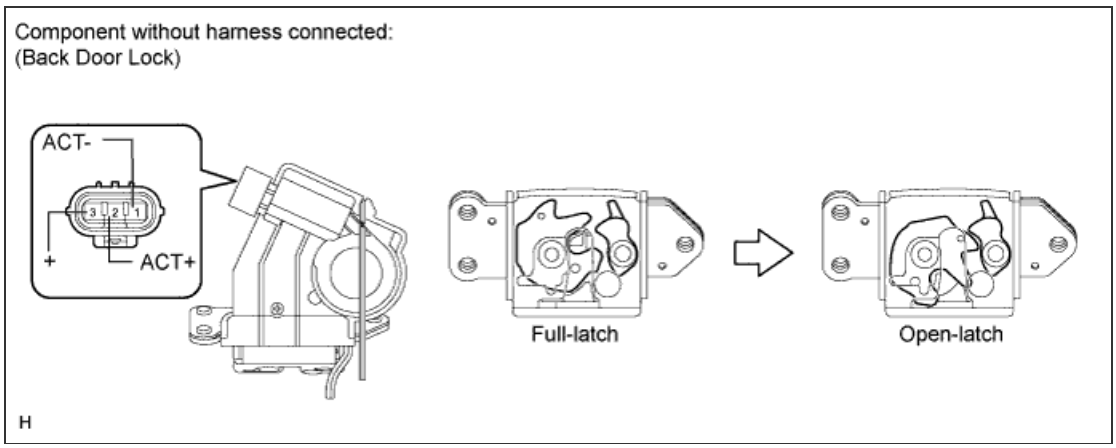


c. Detach the claw and remove the protector A.



for Preparation Click here

1. INSPECT BACK DOOR LOCK ASSEMBLY



a. Set the back door lock to the full-latch position.

b. Apply battery voltage to the door motor connector and check the operation of the door lock motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 2 (ACT+) Battery negative (-) → 1 (ACT-)	Moves to open-latch position

If the result is not as specified, replace the back door lock assembly.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 (ACT-) - 3 (+)	Open-latch	Below 1 Ω
1 (ACT-) - 3 (+)	Full-latch	10 kΩ or higher

If the result is not as specified, replace the back door lock assembly.

2. INSPECT BACK DOOR LOCK ASSEMBLY (w/ Power Back Door)

a. Inspect the closer motor operation.

i. Set the back door lock assembly to the full-latch position.

ii. Apply battery voltage and check the operation of the door lock motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 2 (ACT+) Battery negative (-) → 1 (ACT-)	Moves to open-latch position

If the result is not as specified, replace the back door lock

assembly.

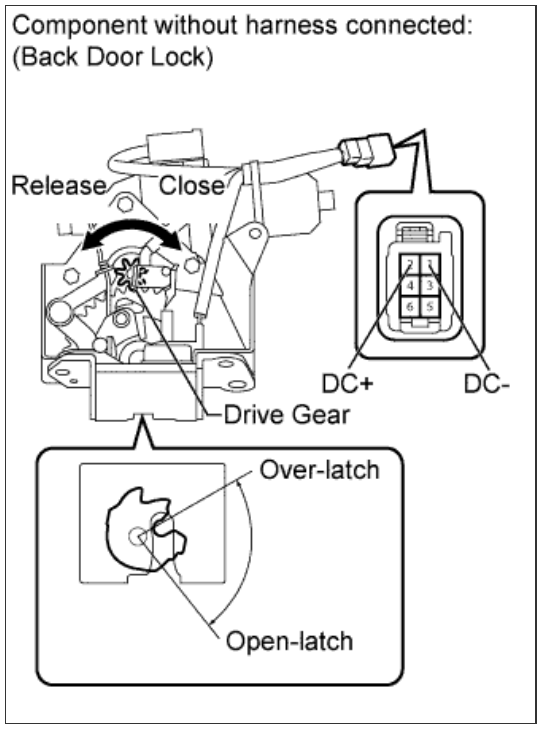
iii. Set the back door lock assembly to the half-latch position.

iv. Apply battery voltage and check the operation of the door lock motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 1 (ACT-) Battery negative (-) → 2 (ACT+)	Moves to over-latch position

If the result is not as specified, replace the back door lock assembly.



b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Half-latch Switch

Tester Connection	Condition	Specified Condition
5 (CLS) - 4 (E)	Over-latch	Below 1 Ω
5 (CLS) - 4 (E)	Full-latch	10 kΩ or higher
5 (CLS) - 4 (E)	Half-latch	10 kΩ or higher
5 (CLS) - 4 (E)	Open-latch	10 kΩ or higher

If the result is not as specified, replace the back door lock assembly.

Closer Position Switch:

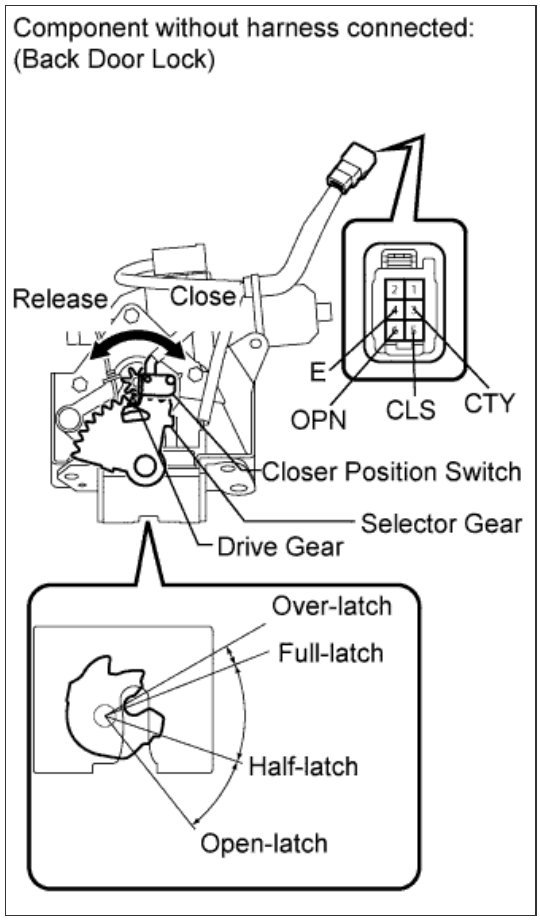
Tester Connection	Condition	Specified Condition
6 (OPN) - 4 (E)	Selector gear is in center position	Below 1 Ω
6 (OPN) - 4 (E)	Selector gear is not in center position	10 kΩ or higher

If the result is not as specified, replace the back door lock assembly.

Back Door Courtesy Switch:

Tester Connection	Condition	Specified Condition
6 (OPN) - 4 (E)	Selector gear is in center position	Below 1 Ω
6 (OPN) - 4 (E)	Selector gear is not in center position	10 kΩ or higher

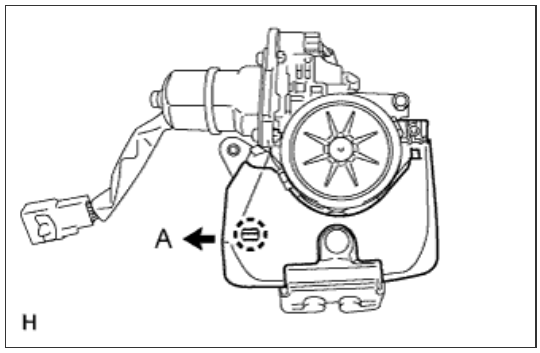
If the result is not as specified, replace the back door lock assembly.



for Preparation Click here

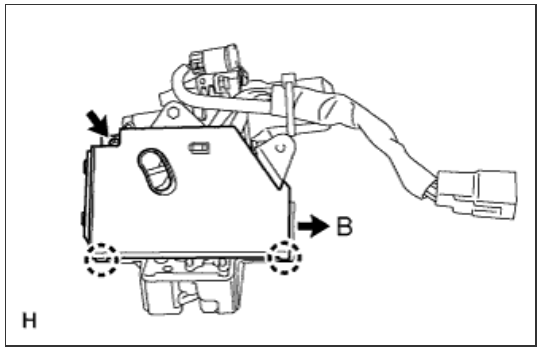
1. INSTALL BACK DOOR LOCK PROTECTOR (w/ Power Back Door)

a. Attach the claw to install the protector A.



b. Attach the 2 claws to install the protector B.

c. Install the screw.



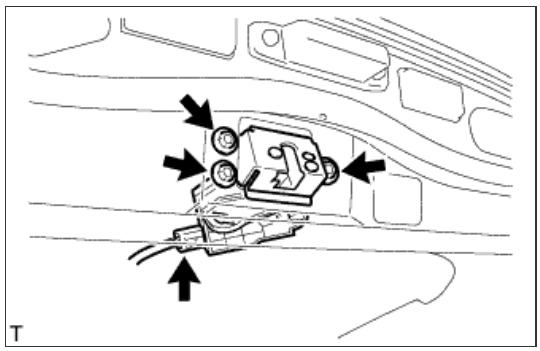
2. INSTALL BACK DOOR LOCK ASSEMBLY

a. w/o Power Back Door:

i. Install the door lock with the 3 bolts.

Torque:
13 N*m{ 133 kgf*cm , 10 ft.*lbf }

ii. Connect the connector.

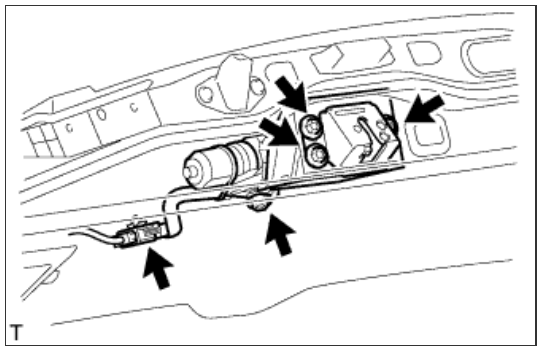


b. w/ Power Back Door:

i. Install the back door lock with the 4 bolts.

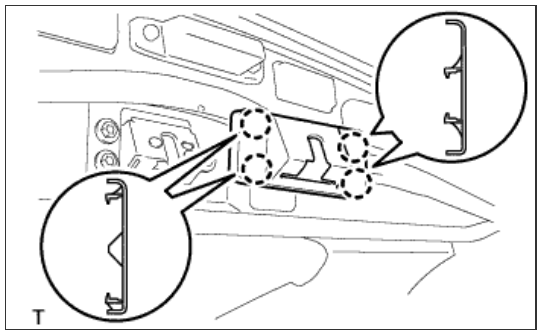
ii. Connect the connector.

Torque:
13 N*m{ 133 kgf*cm , 10 ft.*lbf }



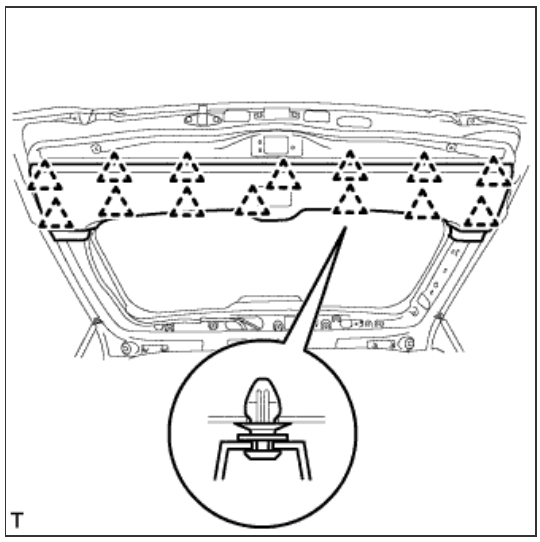
3. INSTALL BACK DOOR LOCK COVER

a. Attach the 4 claws to install the cover.



4. INSTALL BACK DOOR GARNISH

a. Attach the 14 clips to install the back door garnish.



5. INSTALL BACK DOOR SIDE GARNISH RH

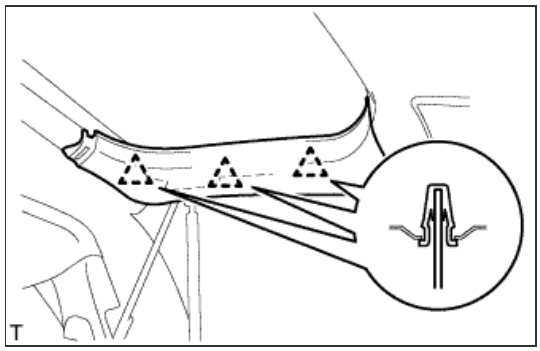
a. w/o Power Back Door:

HINT:

Use the same procedures described for the LH side.

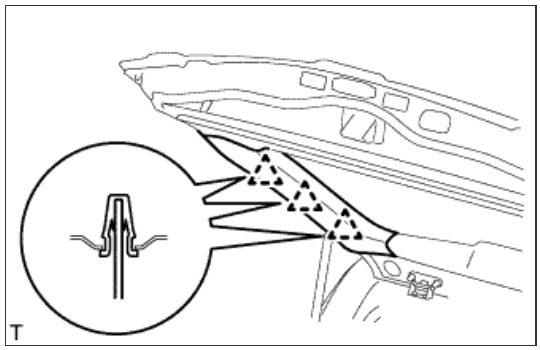
b. w/ Power Back Door:

i. Attach the 3 clips to install the back door side garnish.



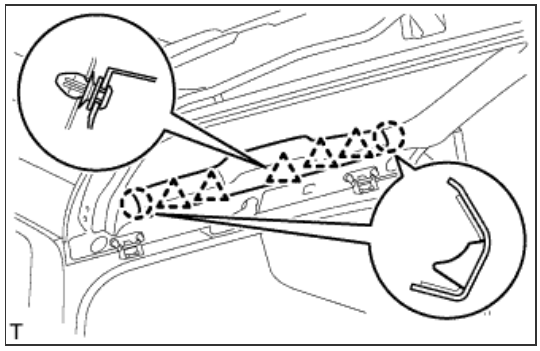
6. INSTALL BACK DOOR SIDE GARNISH LH

a. Attach the 3 clips to install the back door side garnish.



7. INSTALL CENTER BACK DOOR GARNISH

a. Attach the 5 clips and 2 claws to install the back door garnish.



8. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

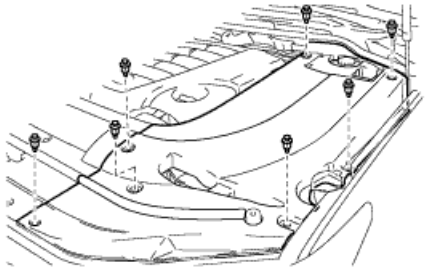
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

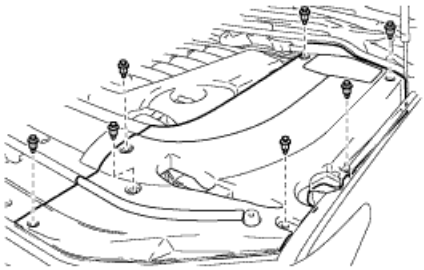
9. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.

for LHD:

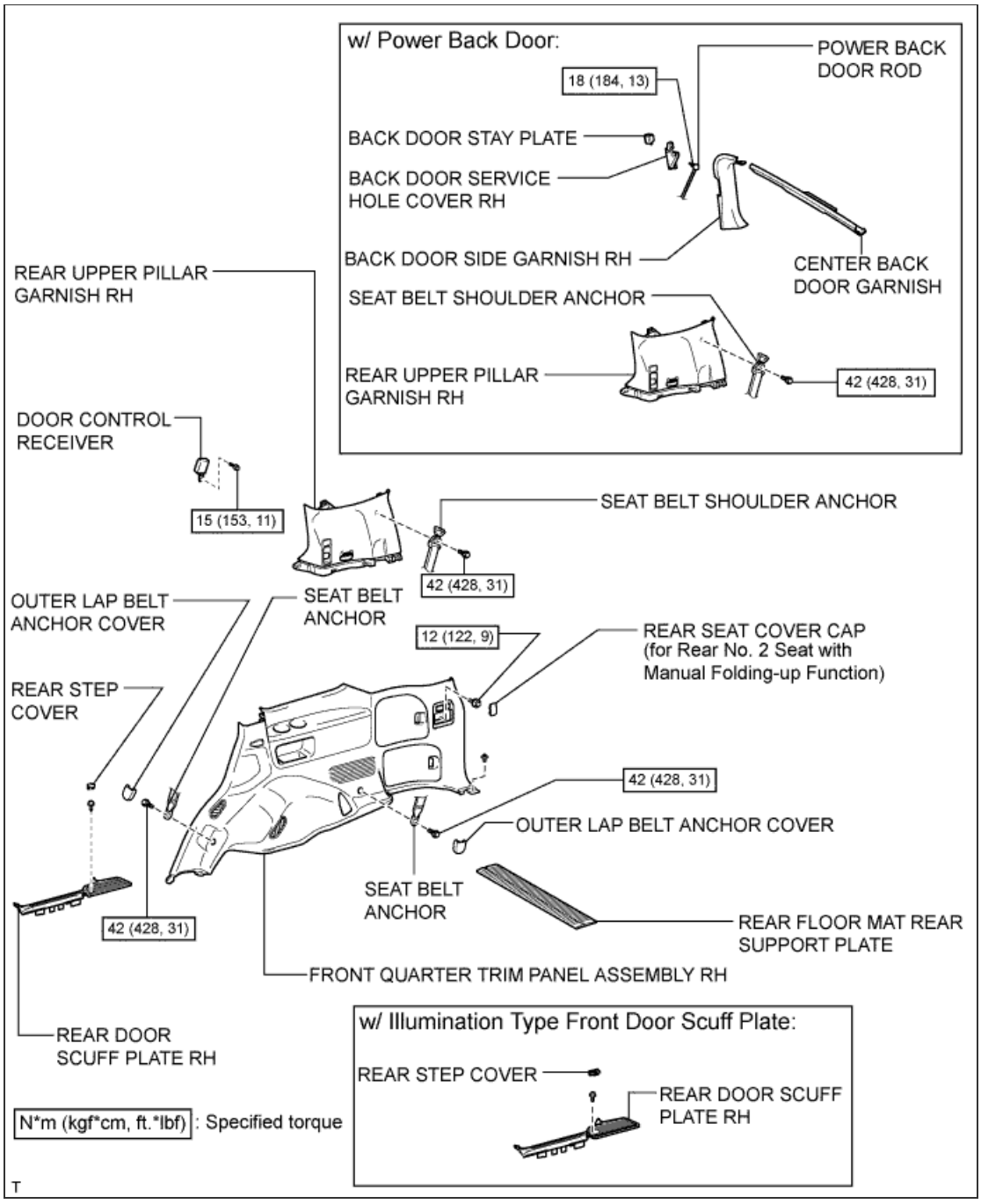


for RHD:



P

for Preparation Click here



for Preparation Click here

1. REMOVE REAR NO. 2 SEAT ASSEMBLY RH

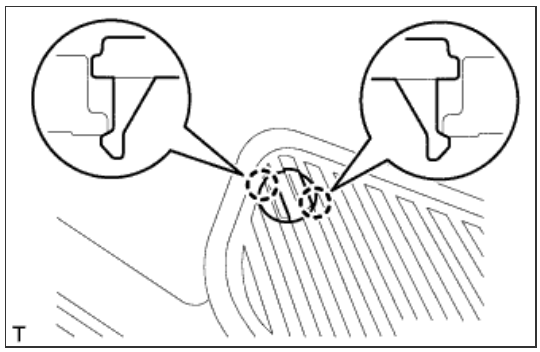
a. Remove the rear No. 2 seat assembly RH (Click here).

2. REMOVE REAR STEP COVER

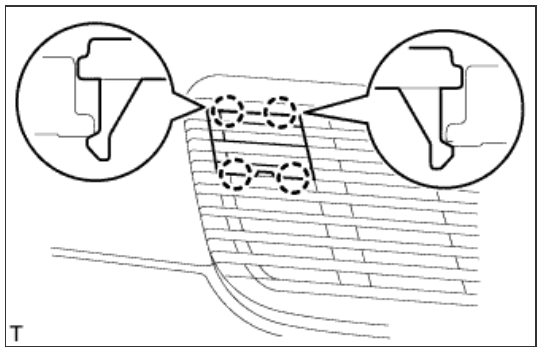
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.



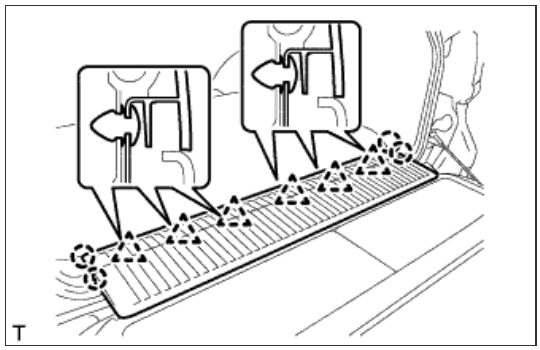
3. REMOVE REAR DOOR SCUFF PLATE RH

HINT:

Use the same procedures described for the LH side.

4. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.



5. REMOVE REAR SEAT COVER CAP (for Rear No. 2 Seat with Manual Folding-up Function)

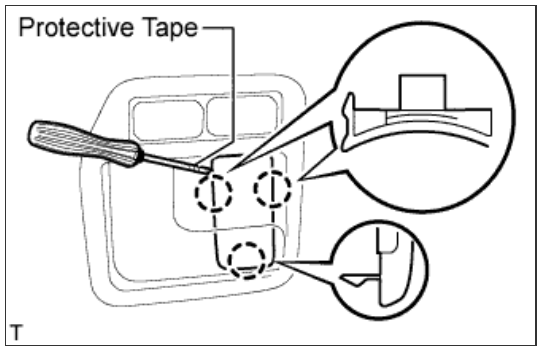
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

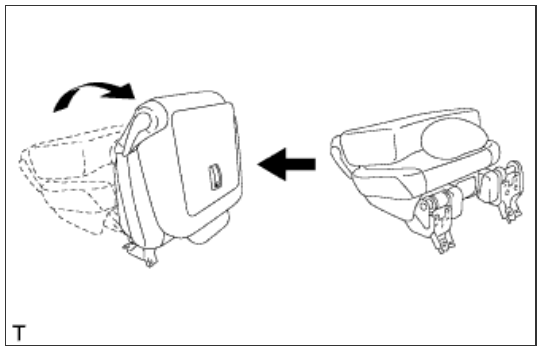
Tape the screwdriver tip before use.



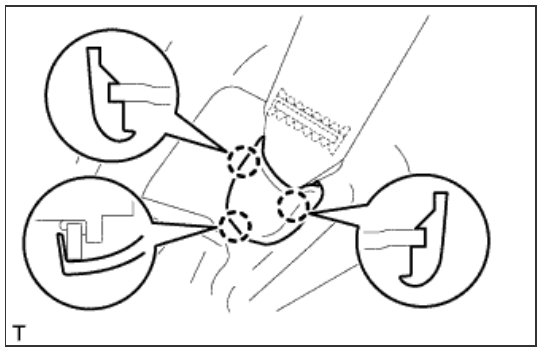
6. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

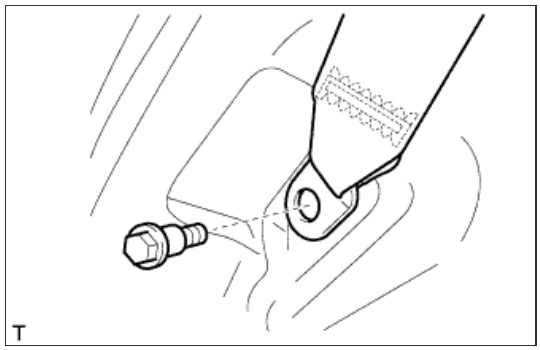
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



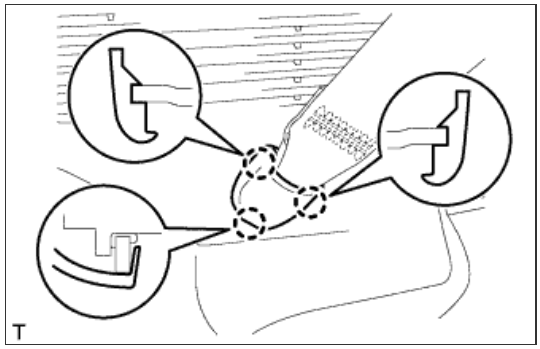
a. Detach the 3 claws and remove the cover.



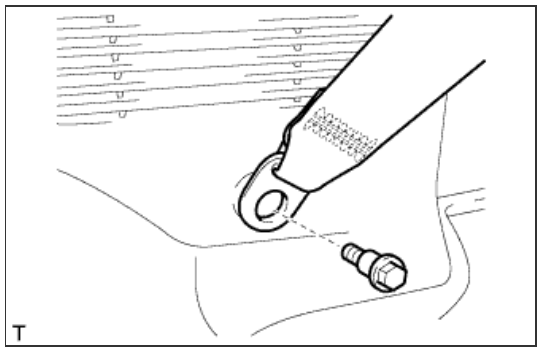
b. Remove the bolt and rear No. 1 seat belt anchor.



c. Detach the 3 claws and remove the cover.



d. Remove the bolt and rear No. 2 seat belt anchor.

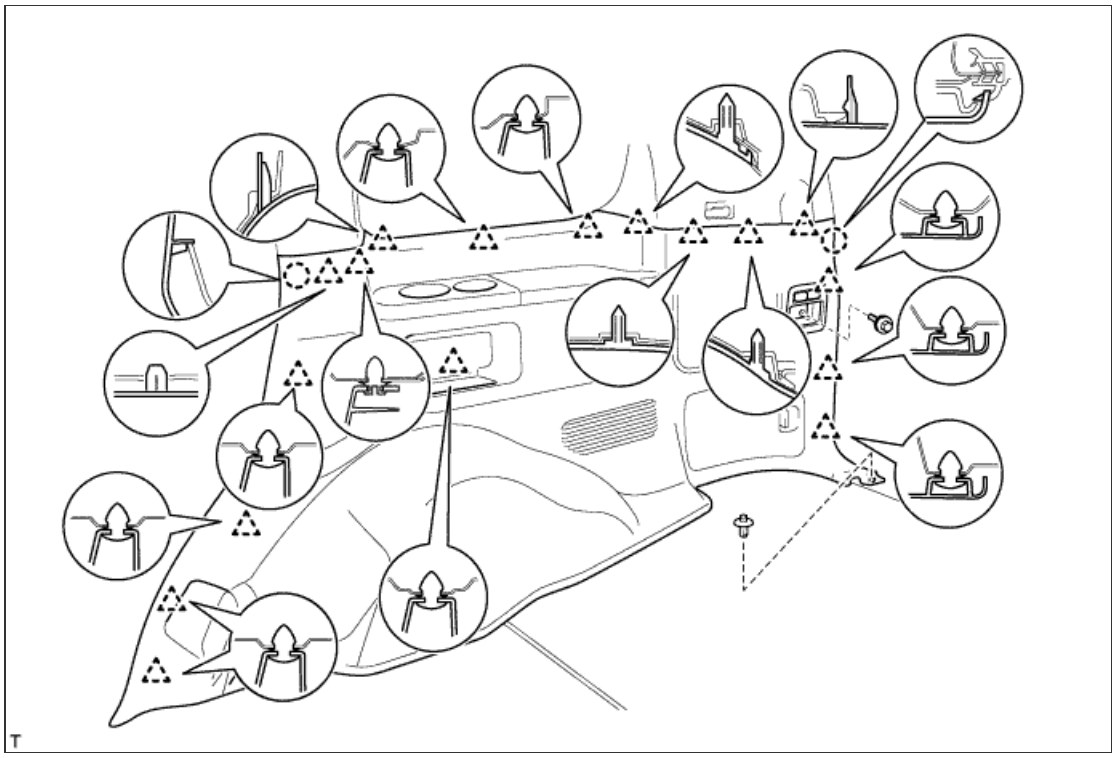


e. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

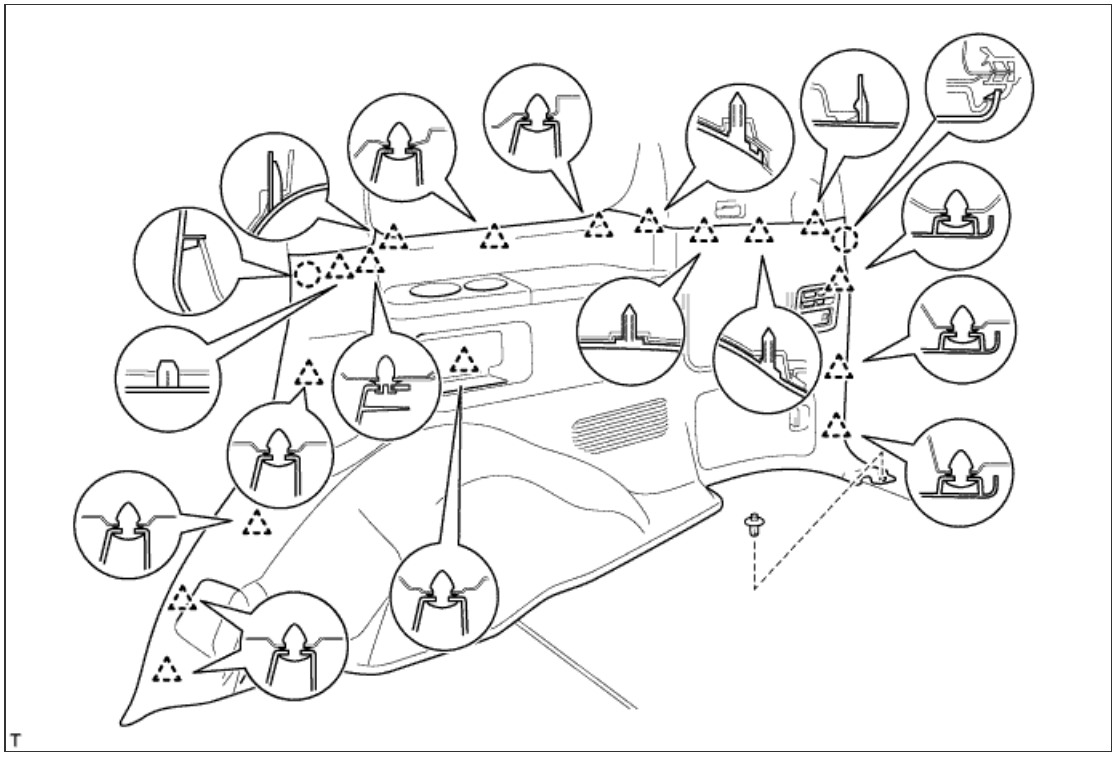


f. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

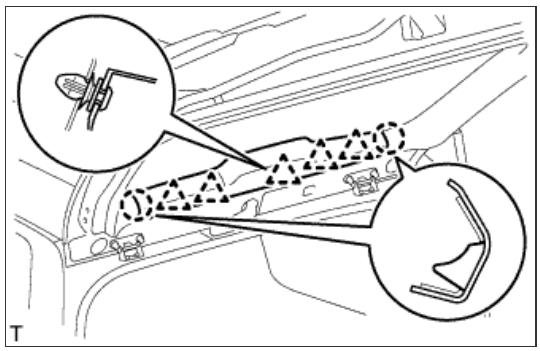
ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.



7. REMOVE CENTER BACK DOOR GARNISH

a. Detach the 5 clips and 2 claws, and remove the back door garnish.



8. REMOVE BACK DOOR SIDE GARNISH RH

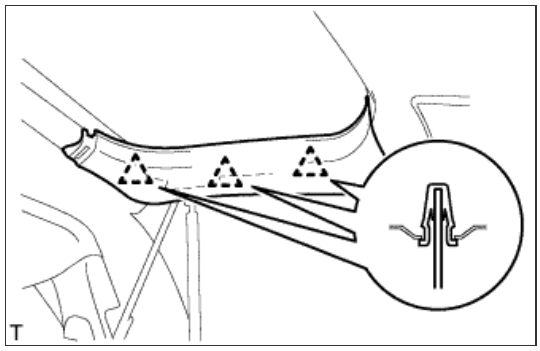
a. w/o Power Back Door:

HINT:

Use the same procedures described for the LH side.

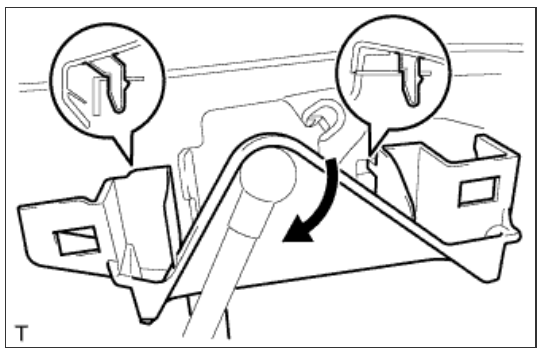
b. w/ Power Back Door:

i. Detach the 3 clips and remove the back door side garnish.



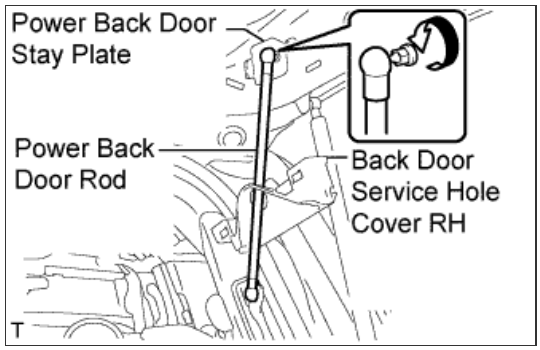
9. REMOVE BACK DOOR SERVICE HOLE COVER RH (w/ Power Back Door)

a. Detach the 2 clips and move the service hole cover so that the rod and back door stay plate can be removed.



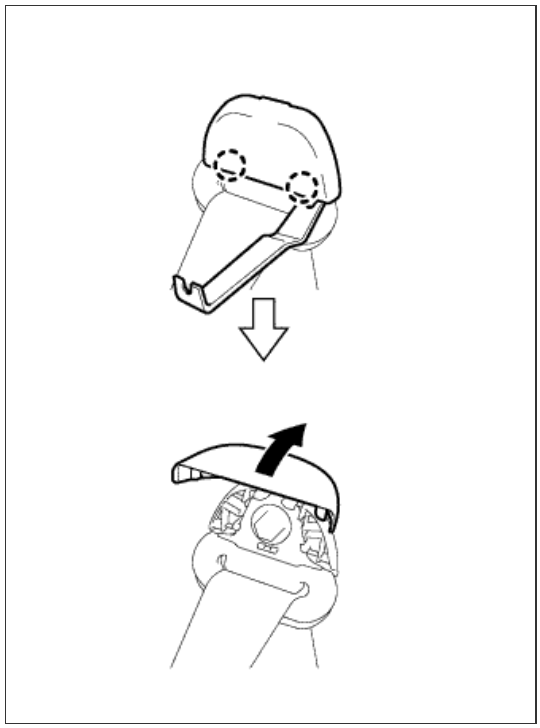
b. Remove the ball joint bolt, power back door rod and back door stay plate.

c. Remove the service hole cover from the power back door rod.

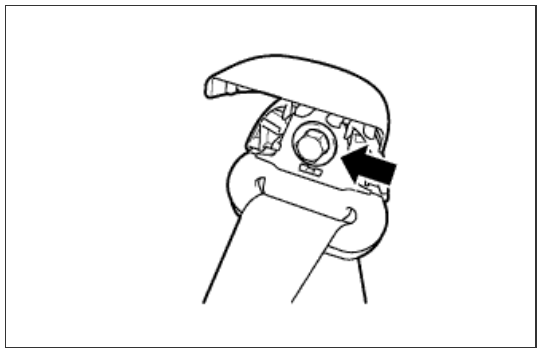


10. REMOVE REAR UPPER PILLAR GARNISH RH

a. Using a moulding remover, detach the 2 claws and open the seat belt shoulder anchor cover.

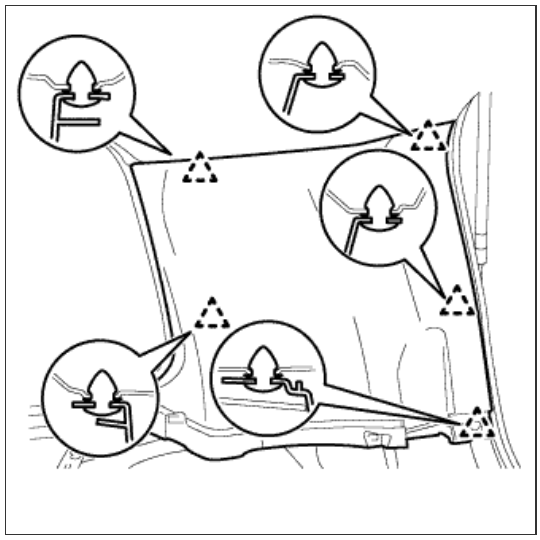


b. Remove the bolt and seat belt shoulder anchor.



c. w/o Power Back Door:

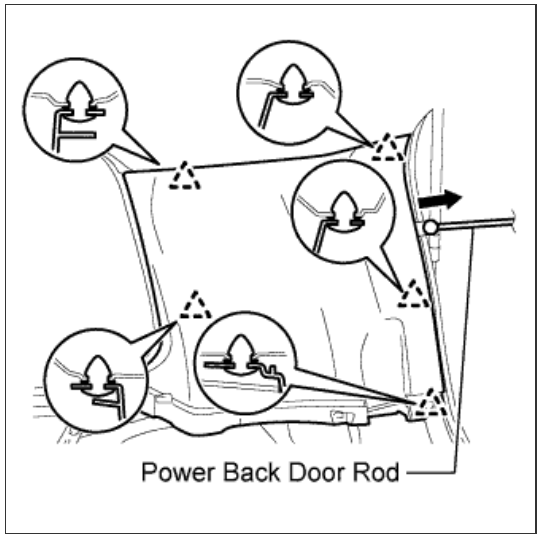
i. Detach the 5 clips and remove the rear upper pillar garnish.



d. w/ Power Back Door:

i. Detach the 5 clips.

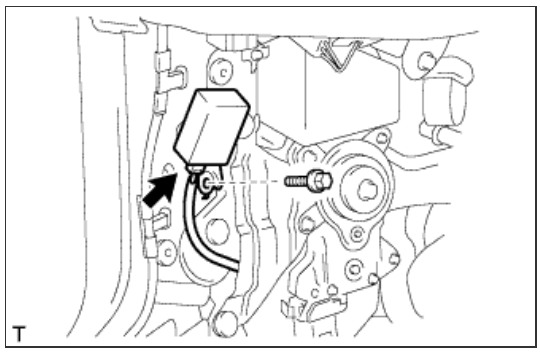
ii. Pass the power back door rod through the rear upper pillar garnish, and remove the rear upper pillar garnish.



11. REMOVE DOOR CONTROL RECEIVER

a. Disconnect the connector.

b. Remove the bolt and receiver.



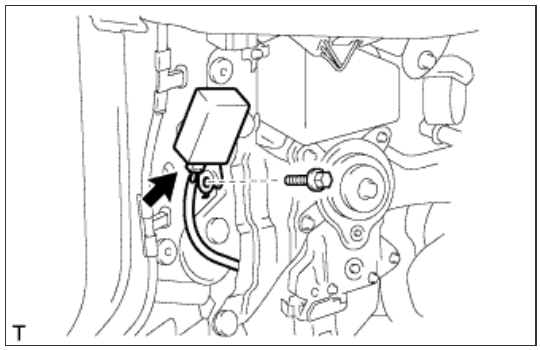
for Preparation Click here

1. INSTALL DOOR CONTROL RECEIVER

a. Install the receiver with the bolt.

Torque:
15 N*m{ 153 kgf*cm , 11 ft.*lbf }

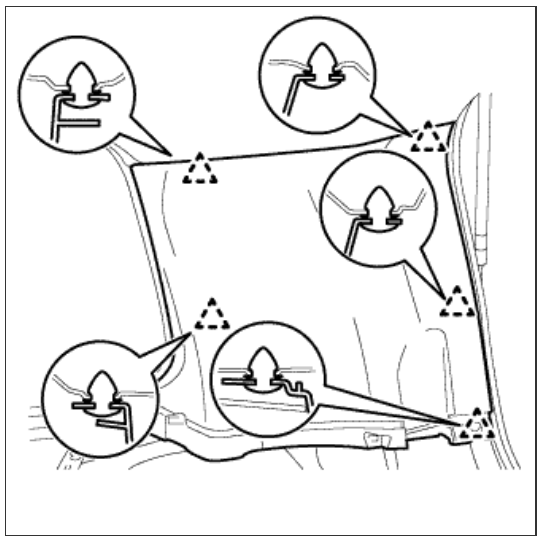
b. Connect the connector.



2. INSTALL REAR UPPER PILLAR GARNISH RH

a. w/o Power Back Door:

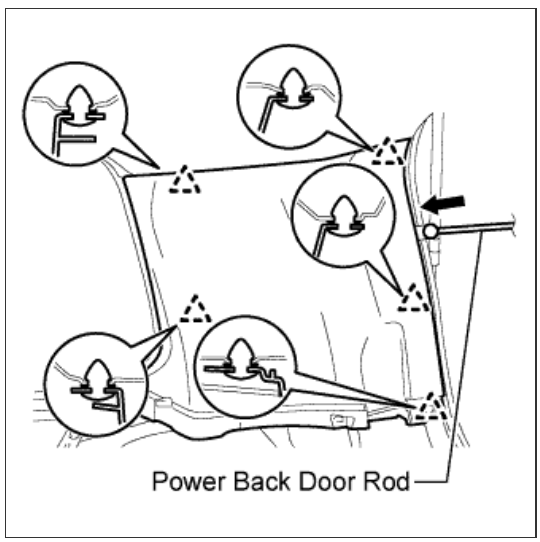
i. Attach the 5 clips to install the rear upper pillar garnish.



b. w/ Power Back Door:

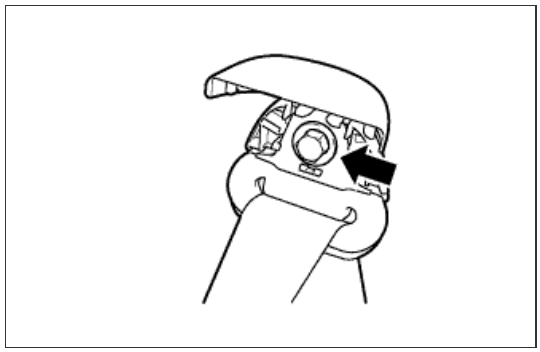
i. Pass the power back door rod through the rear upper pillar garnish.

ii. Attach the 5 clips to install the rear upper pillar garnish.



c. Install the seat belt shoulder anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

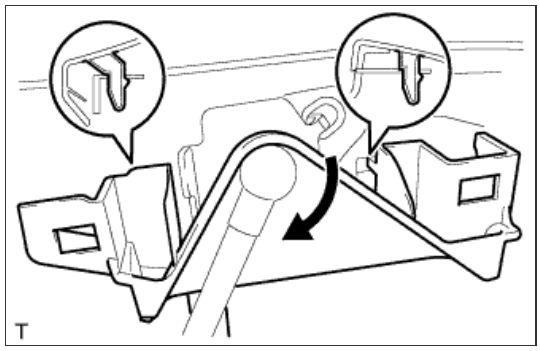


d. Attach the 2 claws to close the seat belt shoulder anchor cover.



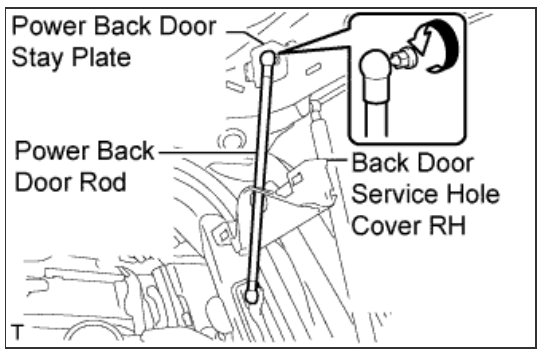
3. INSTALL BACK DOOR SERVICE HOLE COVER RH (w/ Power Back Door)

a. Detach the 2 clips and move the service hole cover so that the rod and back door stay plate can be removed.



b. Remove the ball joint bolt, power back door rod and back door stay plate.

c. Remove the service hole cover from the power back door rod.



4. INSTALL BACK DOOR SIDE GARNISH RH

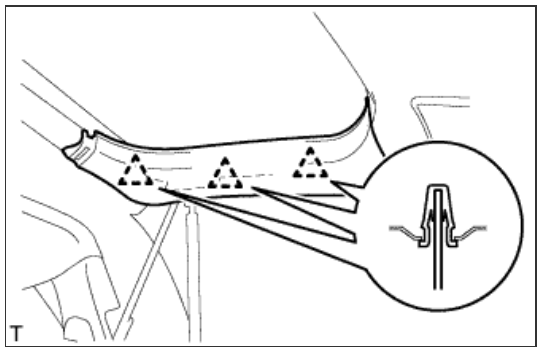
a. w/o Power Back Door:

HINT:

Use the same procedures described for the LH side.

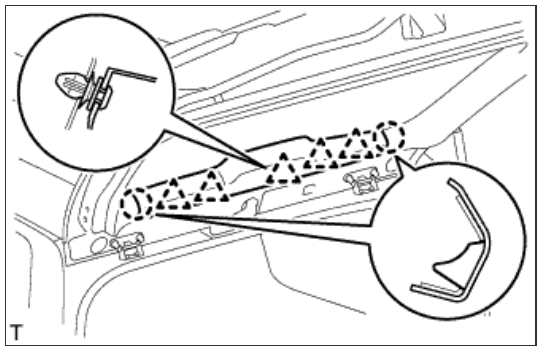
b. w/ Power Back Door:

i. Attach the 3 clips to install the back door side garnish.



5. INSTALL CENTER BACK DOOR GARNISH

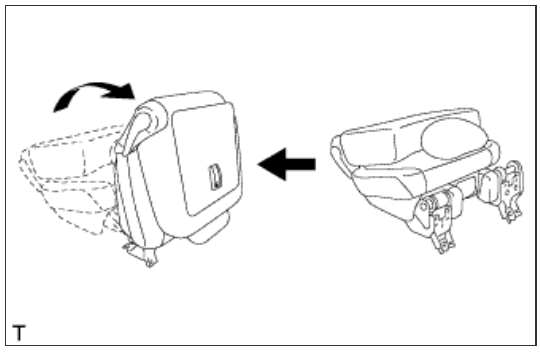
a. Attach the 5 clips and 2 claws to install the back door garnish.



6. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



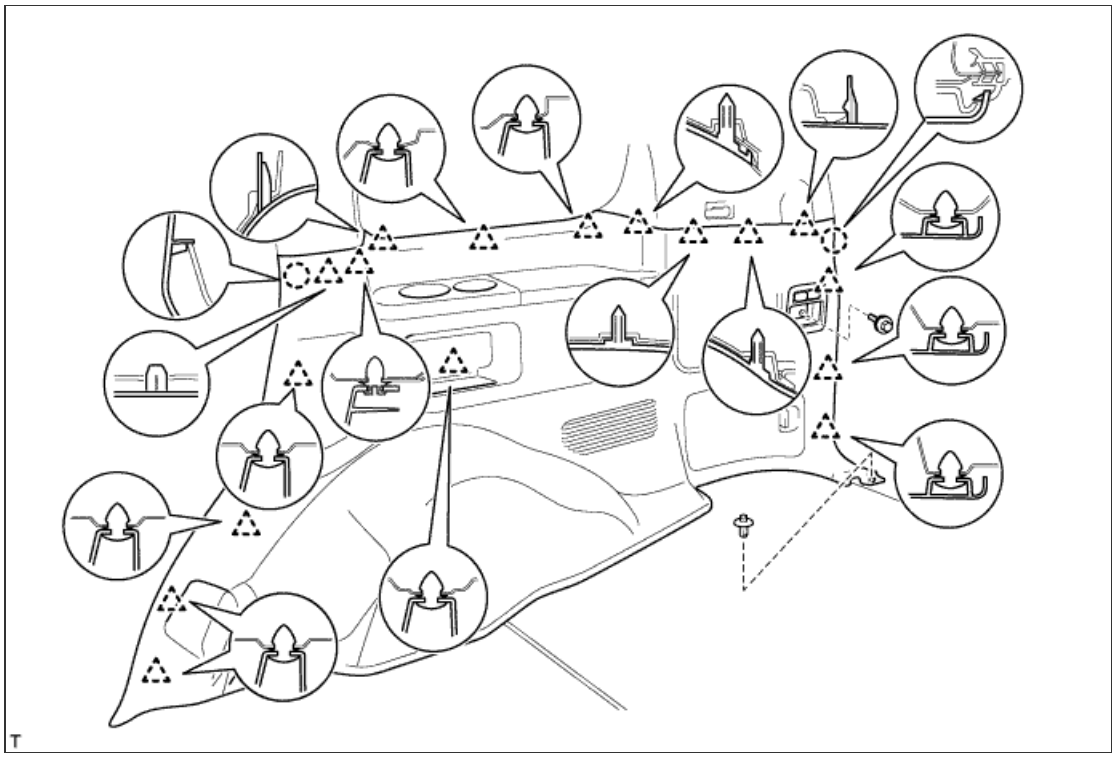
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

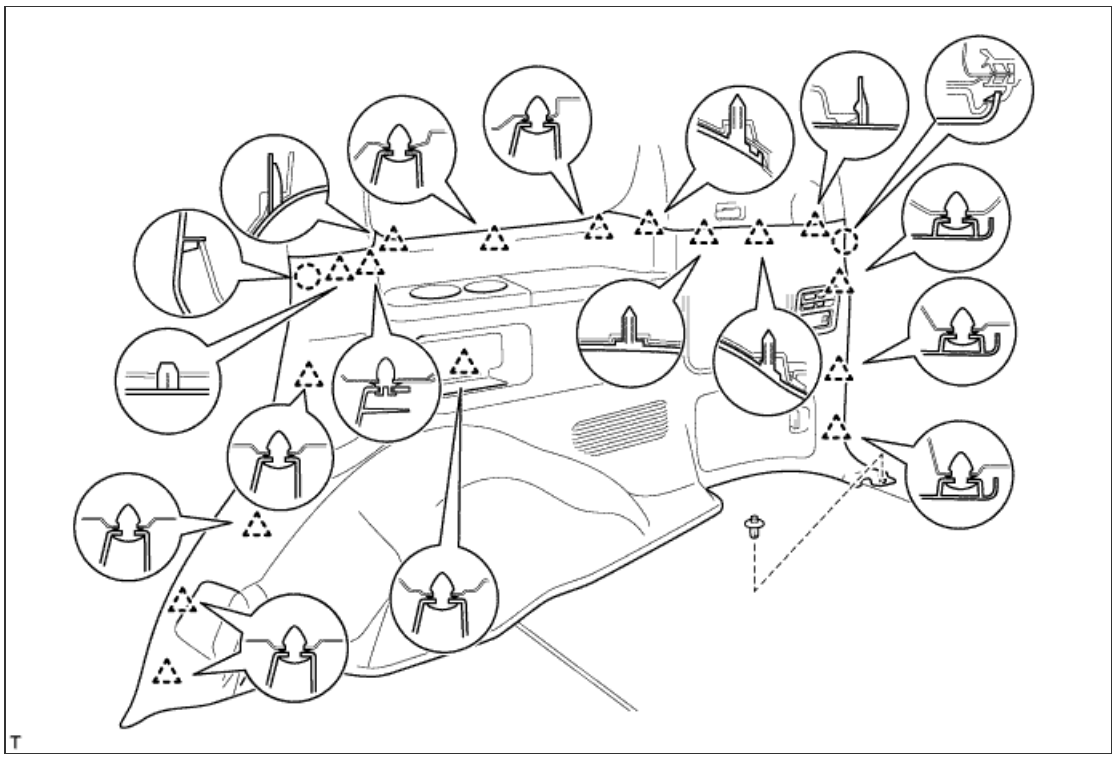


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

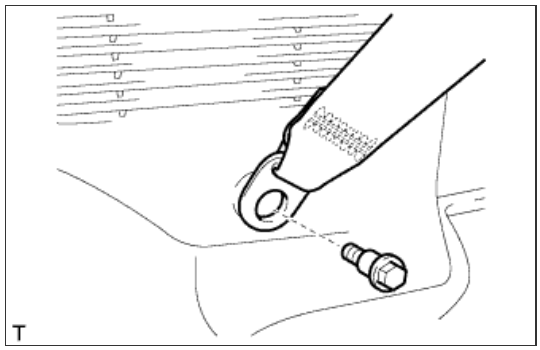
ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

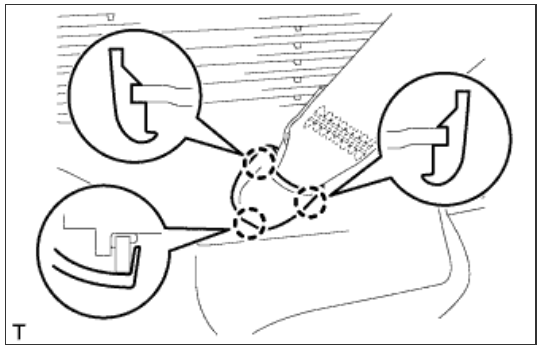


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

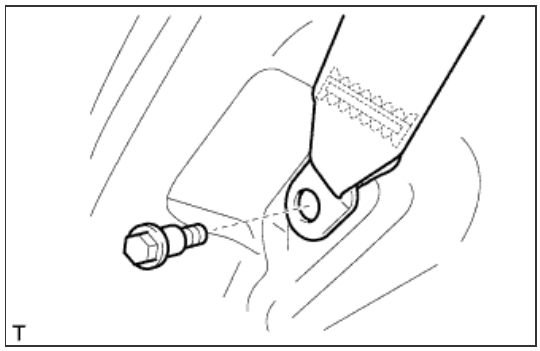


d. Attach the 3 claws to install the cover.

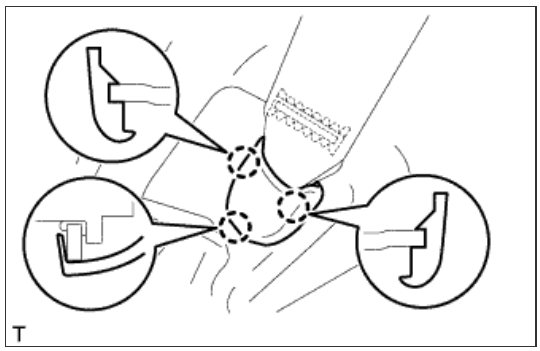


e. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



f. Attach the 3 claws to install the cover.

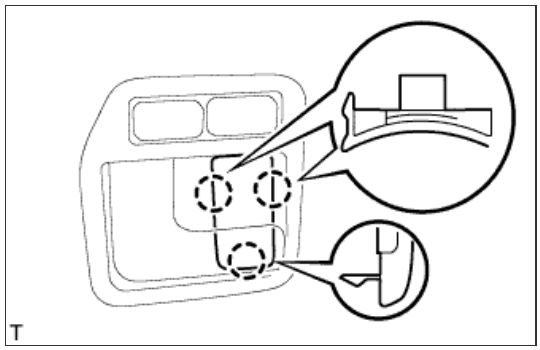


7. INSTALL REAR SEAT COVER CAP (for Rear No. 2 Seat with Manual Folding-up Function)

HINT:

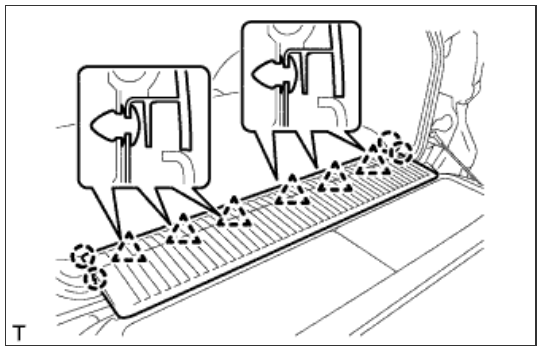
Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.



8. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.



9. INSTALL REAR DOOR SCUFF PLATE RH

HINT:

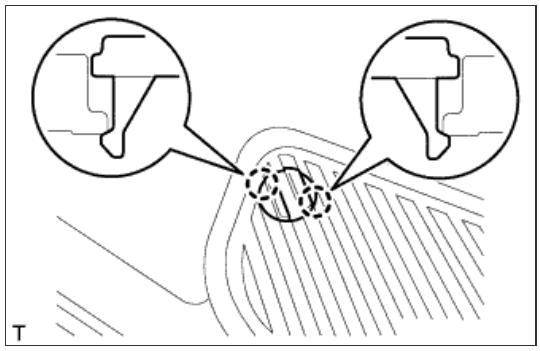
Use the same procedures described for the LH side.

10. INSTALL REAR STEP COVER

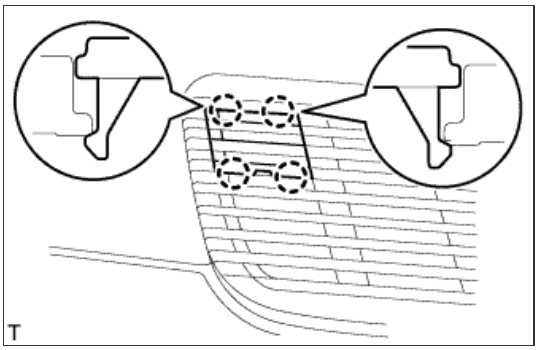
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.



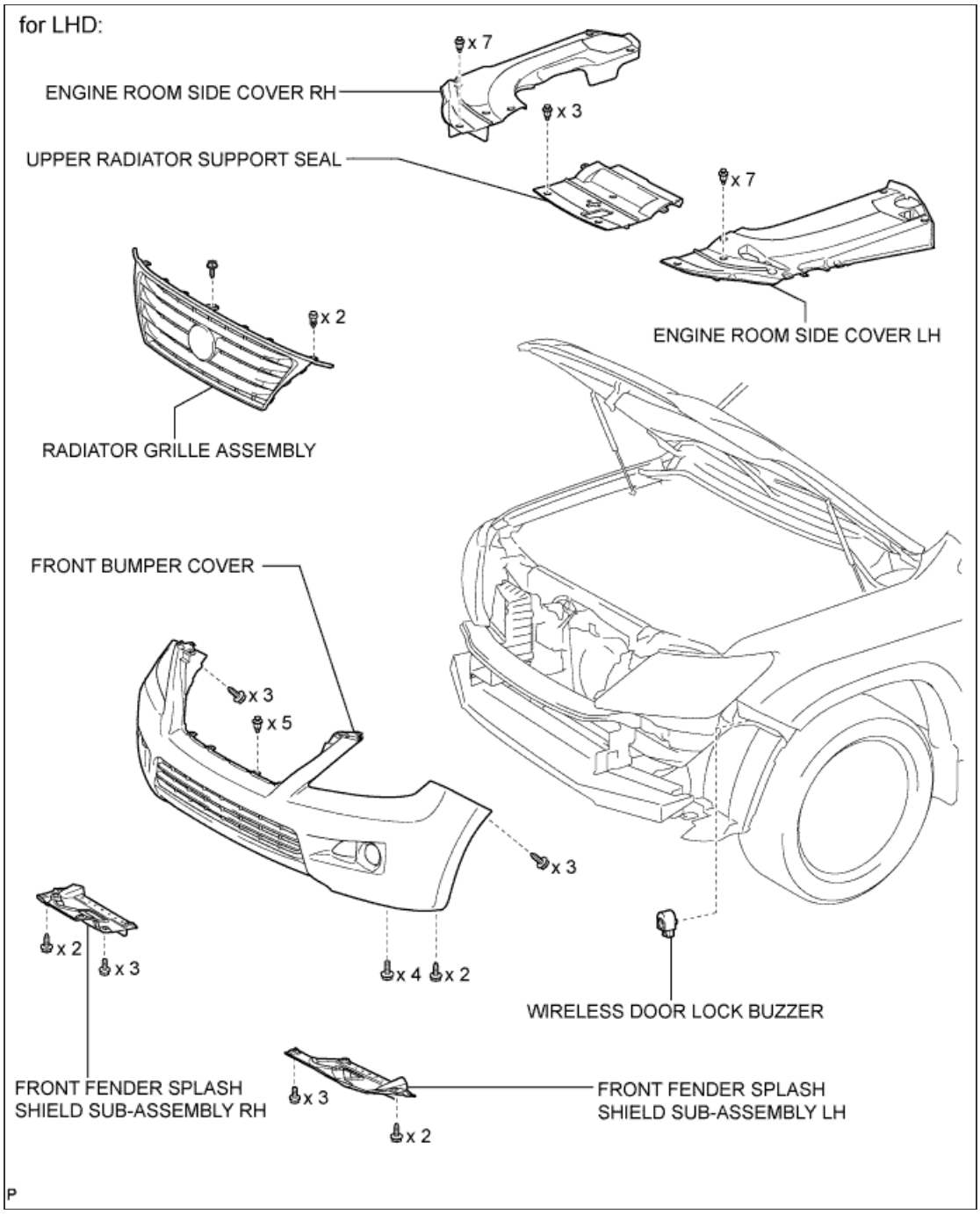
b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



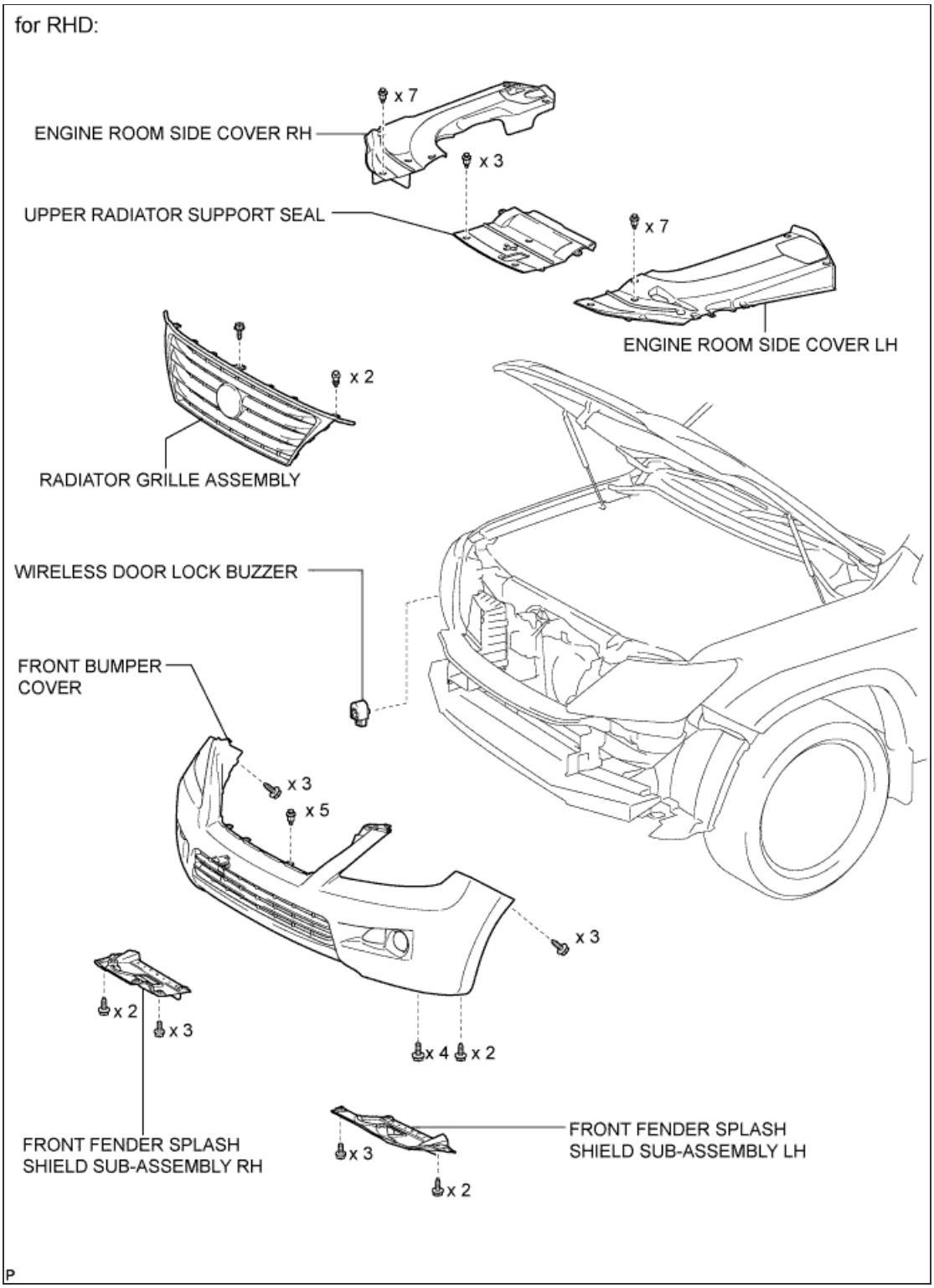
11. INSTALL REAR NO. 2 SEAT ASSEMBLY RH

a. Install the rear No. 2 seat assembly RH (Click here).

for Preparation Click here



for RHD:


x 7
ENGINE ROOM SIDE COVER RH
x 3
UPPER RADIATOR SUPPORT SEAL
x 7
ENGINE ROOM SIDE COVER LH
x 2
RADIATOR GRILLE ASSEMBLY
WIRELESS DOOR LOCK BUZZER
FRONT BUMPER COVER
x 3
x 5
x 3
x 2
x 3
x 4
x 2
FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY RH
x 3
x 2
FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY LH

P

for Preparation Click here

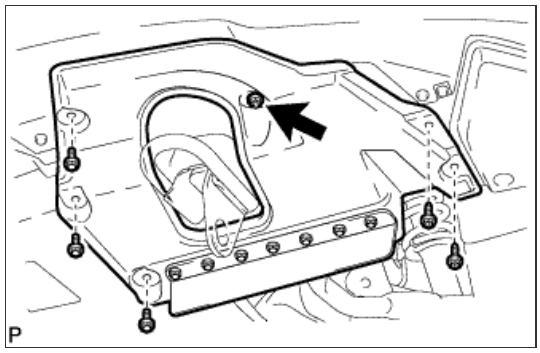
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY LH

a. Remove the 3 bolts and 2 screws.

b. Turn the clip indicated by the arrow in the illustration to remove the fender splash shield.



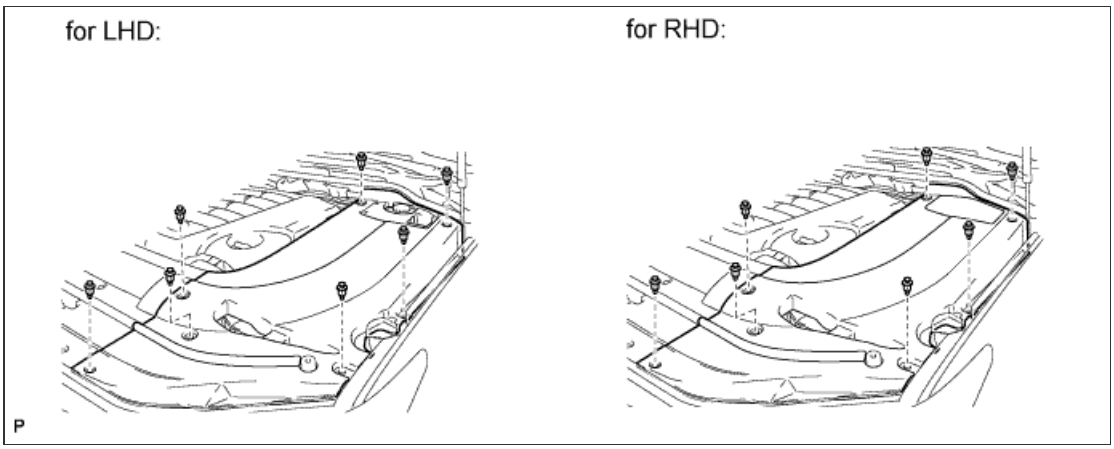
2. REMOVE FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

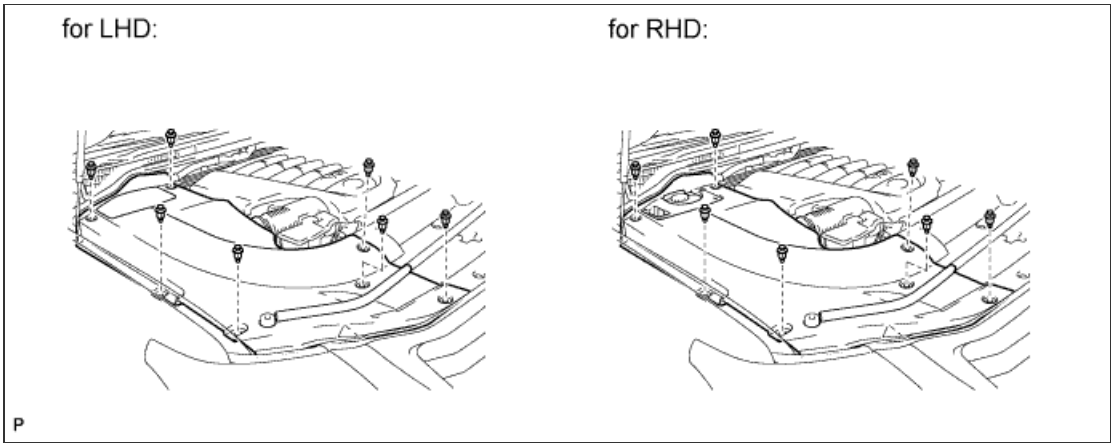
3. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



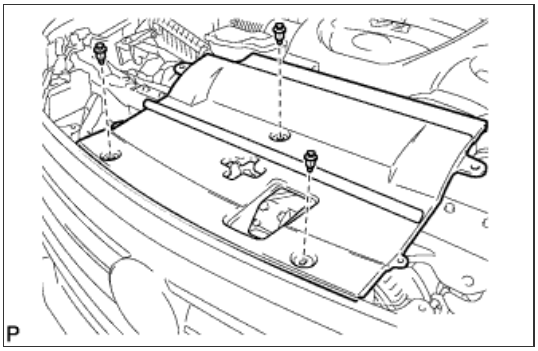
4. REMOVE ENGINE ROOM SIDE COVER RH

a. Remove the 7 clips and engine room side cover.



5. REMOVE UPPER RADIATOR SUPPORT SEAL

a. Remove the 3 clips and upper radiator support seal.



6. REMOVE RADIATOR GRILLE ASSEMBLY

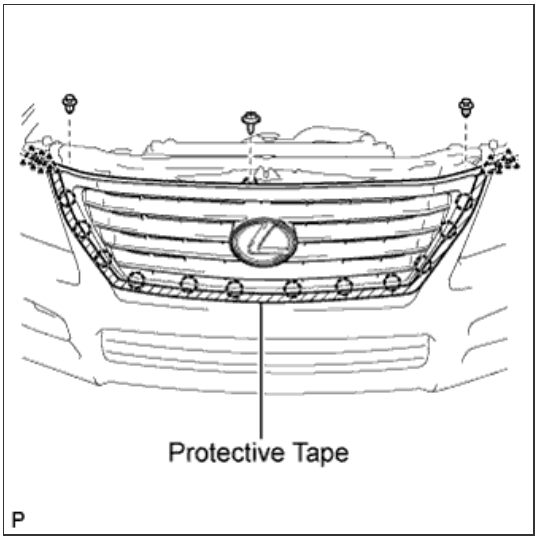
a. Put protective tape around the radiator grille.

b. Remove the screw and 2 clips.

c. Detach the 5 clips and partially remove the upper radiator seal.

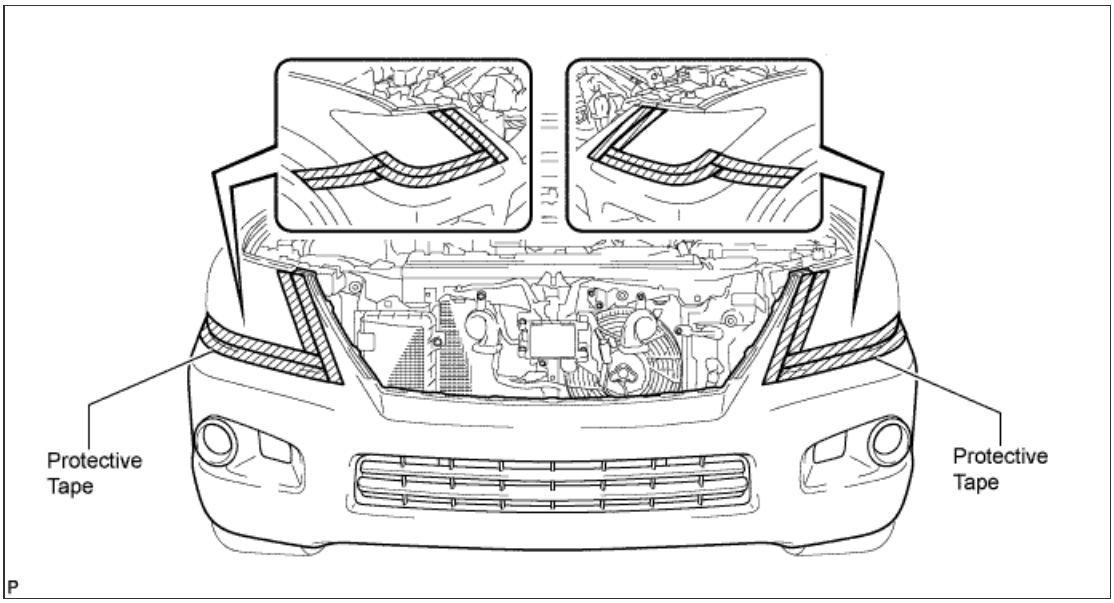
d. w/o Wide View Front Monitor System:
Detach the 12 claws and remove the radiator grille.

e. w/ Wide View Front Monitor System:
Detach the 12 claws, disconnect the connector and remove the radiator grille.

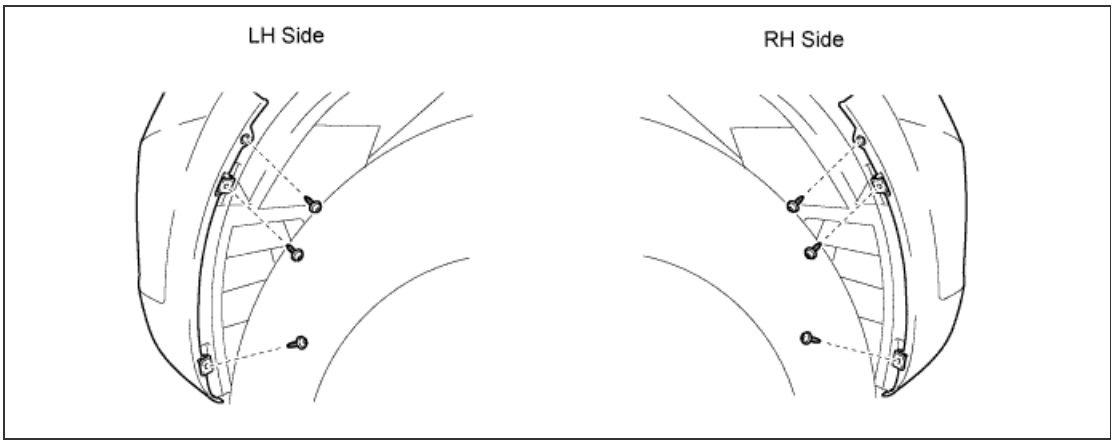


7. REMOVE FRONT BUMPER COVER

a. Put protective tape around the bumper cover.

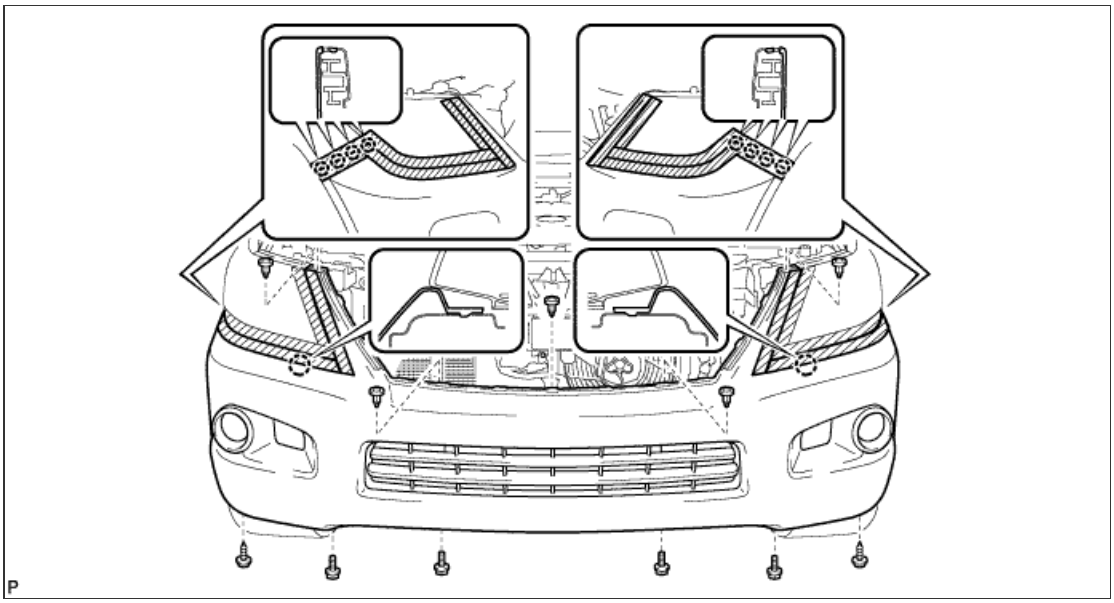


b. Using a T30 "TORX" socket, remove the 6 screws.

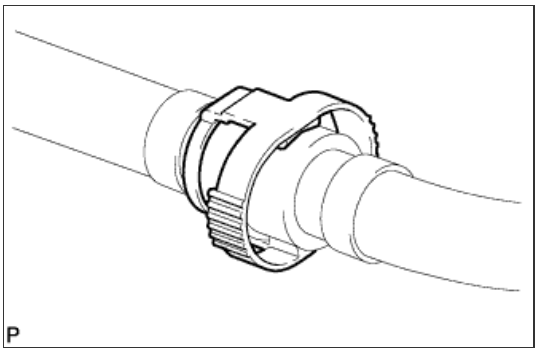


c. Remove the 5 clips, 2 screws and 4 bolts.

d. Detach the 10 claws, disconnect the No. 4 engine room wire connector and remove the bumper cover.



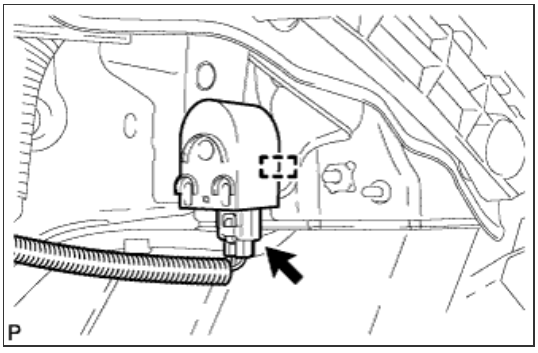
e. w/ Headlight Cleaner System:
Disconnect the headlight cleaner hose and remove the bumper cover.



8. REMOVE WIRELESS DOOR LOCK BUZZER

a. Disconnect the connector.

b. Detach the clamp and remove the buzzer.



for Preparation Click here

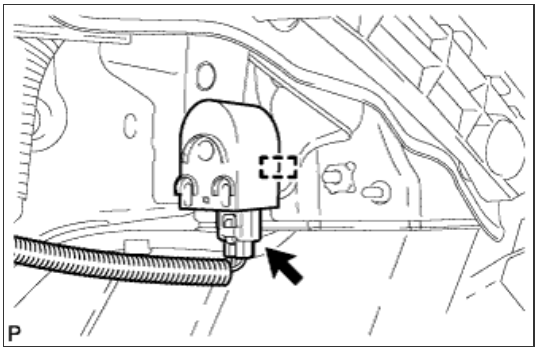
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL WIRELESS DOOR LOCK BUZZER

a. Connect the connector.

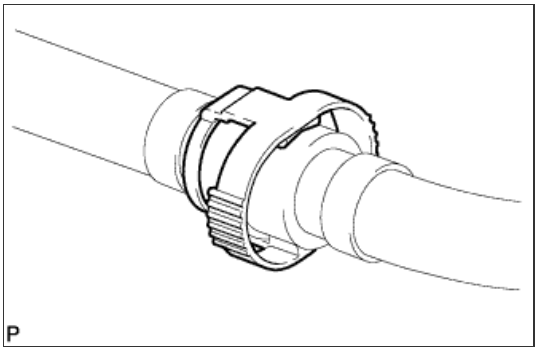
b. Attach the clamp to install the buzzer.



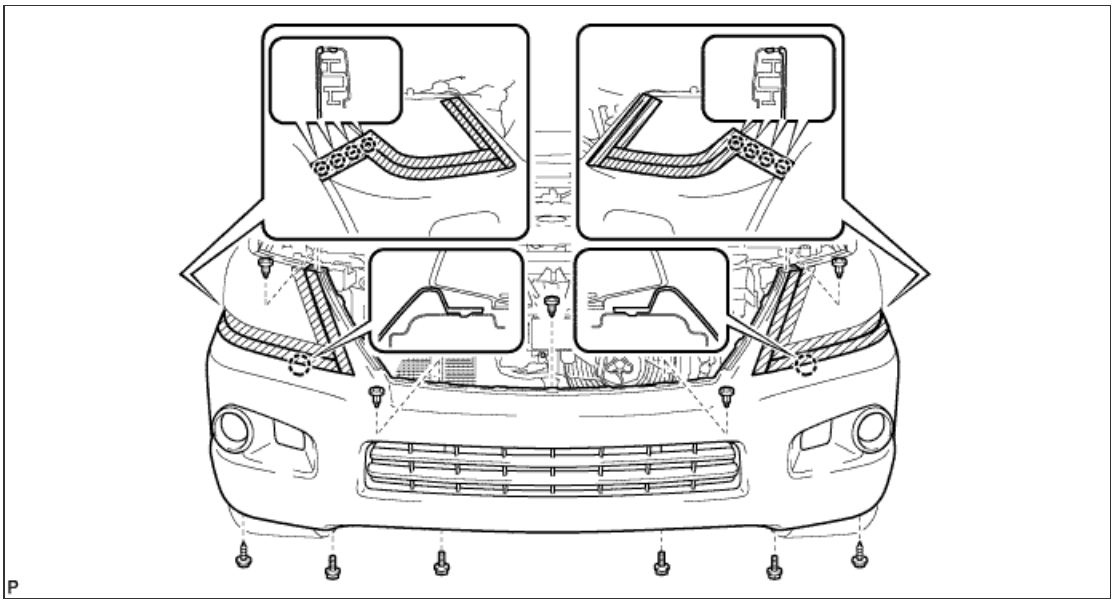
2. INSTALL FRONT BUMPER COVER

a. w/ Headlight Cleaner System:
Connect the headlight cleaner hose.

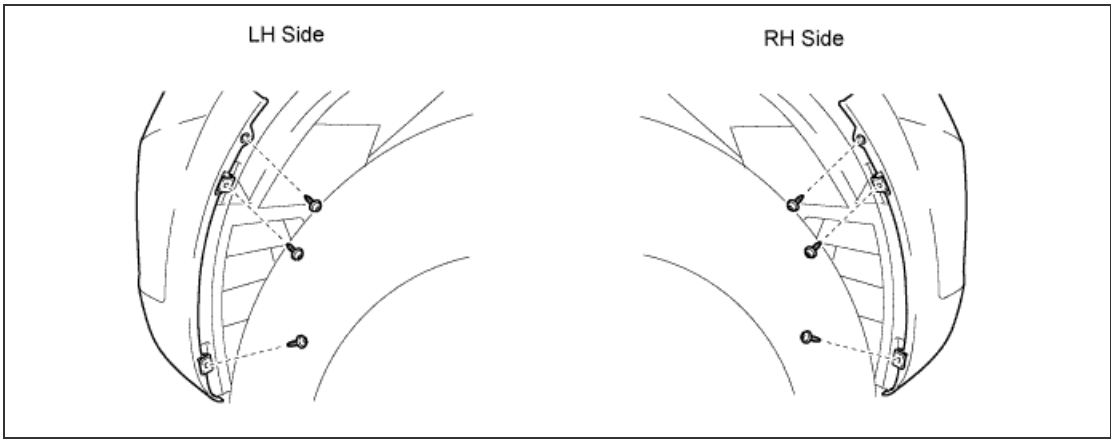
b. Connect the No. 4 engine room wire connector and attach the 10 claws to install the bumper cover.



c. Install the 5 clips, 2 screws and 4 bolts.



d. Using a T30 "TORX" socket, install the 6 screws.



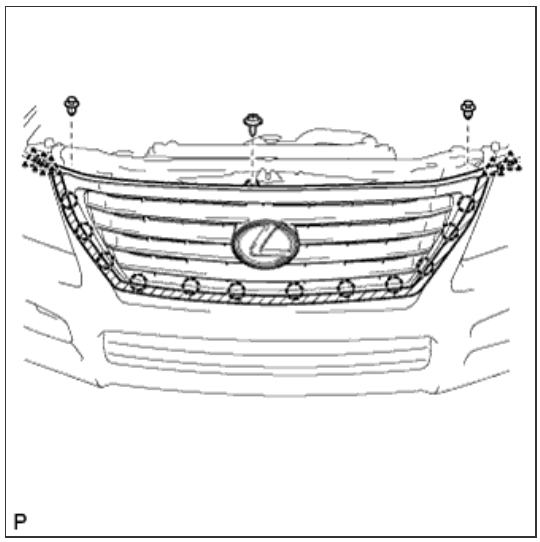
3. INSTALL RADIATOR GRILLE ASSEMBLY

a. w/ Wide View Front Monitor System:
Connect the connector.

b. Attach the 12 claws to install the radiator grille.

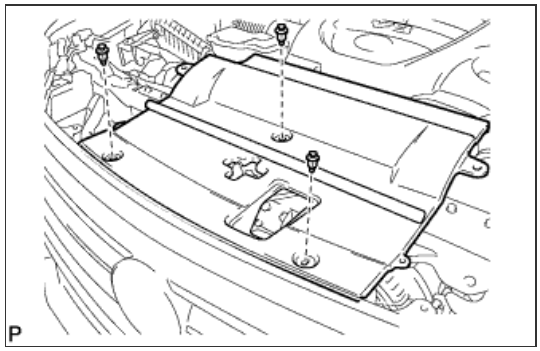
c. Attach the 5 clips to install the detached part of the upper radiator seal.

d. Install the screw and 2 clips.



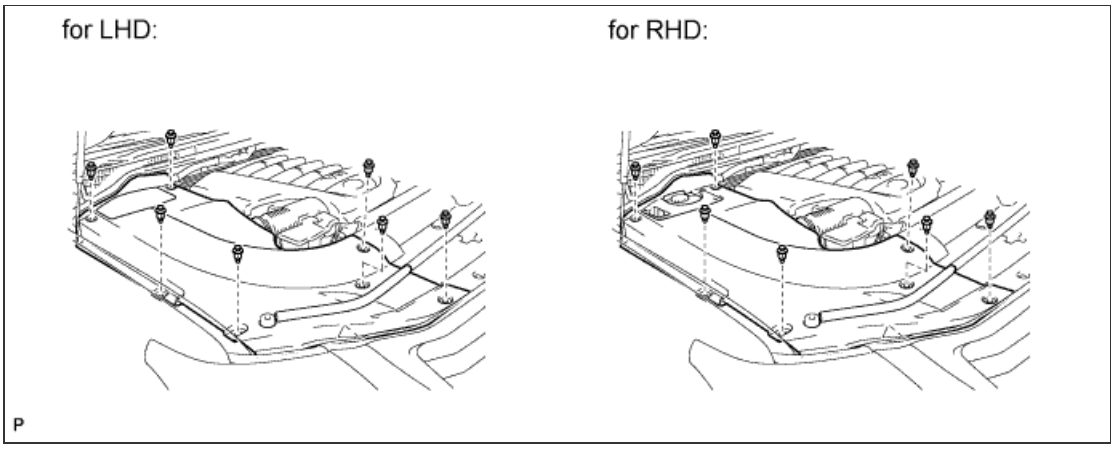
4. INSTALL UPPER RADIATOR SUPPORT SEAL

a. Install the upper radiator support seal with the 3 clips.



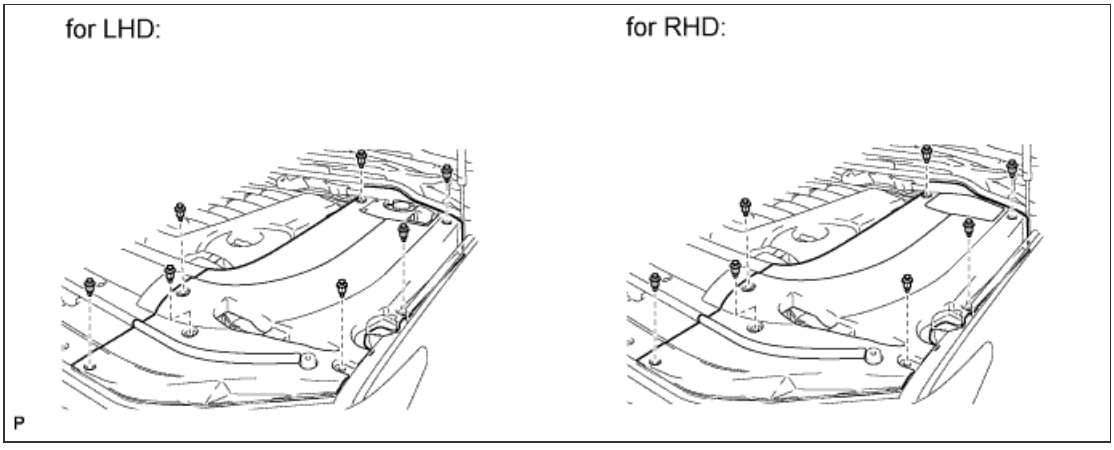
5. INSTALL ENGINE ROOM SIDE COVER RH

a. Install the engine room side cover with the 7 clips.



6. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



7. INSTALL FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY RH

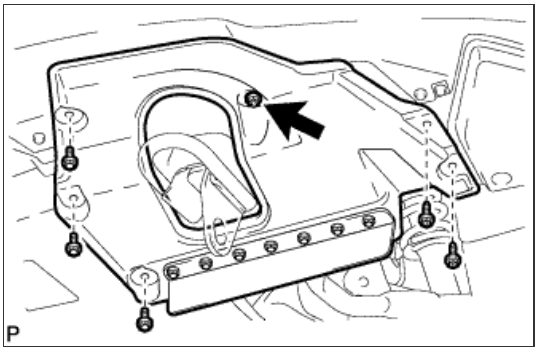
HINT:

Use the same procedures described for the LH side.

8. INSTALL FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY LH

a. Push in the clip indicated by the arrow in the illustration to install the fender splash shield.

b. Install the 3 bolts and 2 screws.

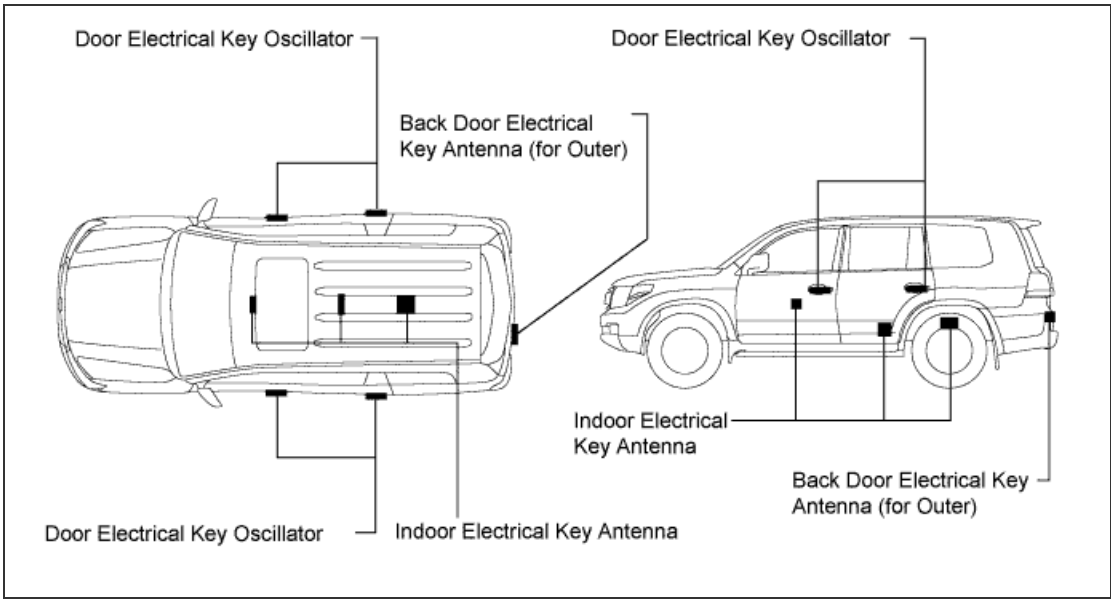


for Preparation Click here

1.PRECAUTIONS FOR USERS WITH PACEMAKERS

a. Weak electric waves are emitted from the key. If a pacemaker is being used, read the pacemaker instruction manual before using the entry and start system.

- If implanted pacemakers or cardioverter defibrillators are being used, make sure they are not brought near the electrical key antenna and electrical key oscillator. The electric waves may affect them.
- If electric devices (for medical purposes) other than an implantable pacemaker or implantable cardioverter defibrillator are used, confirm with the manufacturer if electric waves affect their operation. Electric waves may affect the electric devices.
- The entry and start system can be set so that it does not operate. Refer to Key Cancel for more information (Click here).



2.PRECAUTIONS FOR ENTRY AND START SYSTEM AND KEY

a. The entry and start system does not operate in the following situations. If it does not operate at all, check that the following is not the cause.

i. The key cancel operation has been performed.

ii. There is no key battery.
(Key indicator does not blink when key switches are pressed).

b. The key must be in the possession of the user.
(A requirement of the entry and start system. This is to make sure the user maintains a habit of carrying the key).

c. As the key only emits weak electric waves, if any of the following conditions are met, the detection area of the key may become smaller or the key may become undetectable.

i. The battery is depleted.

ii. There are TV towers, electric power plants, broadcasting stations, gas stations or other areas of strong electric wave output nearby.

iii. Wireless products such as cell phones, etc. are carried with the key.

iv. The key is covered by or in contact with metal.

v. Electric wave type keyless entry systems are being operated nearby.

vi. The key is placed near high-voltage, electric noise emitting equipment.

vii. Film with some metallic content is stuck to the back glass.

HINT:

In this case, remove the cause or unlock the door using the mechanical key.

d. Even if the key is in the vehicle exterior key detection area, the key may not operate properly due to the vehicle body design.

e. Even if the key is in the vehicle exterior key detection area, the key may not be properly detected if the key is near a window, a door handle or the center of a bumper.

f. Even if the key is in the vehicle interior key detection area, the key may not be properly detected if the key is on the instrument panel, on the rear tray, in the glove box or on the floor.

g. Depending on the way the key is held, the key may not operate properly.

3.PRECAUTIONS WHEN USING INTELLIGENT TESTER

a. When troubleshooting the entry and start system using the intelligent tester with the engine switch off, connect the intelligent tester to the vehicle and turn any of the courtesy light switches on and off until communication between the intelligent tester and the vehicle begins (the interval between on and off should be less than 1.5 seconds).
(The reason the above procedure is necessary is that when the engine switch is off, the main body ECU may be in sleep mode. When the main body ECU is in sleep mode, communication with the intelligent tester is not possible).

b. After DTCs are all cleared, check if the trouble occurs again 6 seconds after the engine switch is turned on (IG).

4.PRECAUTIONS FOR EACH FUNCTION

a. Precautions for the key:
The key is a precision instrument. Be sure to observe the following:

i. Do not drop or strike the key.

ii. Do not keep the key in a high temperature area for a long time.

iii. Do not use an ultrasonic washing machine to clean the key.

iv. Keep the key away from magnets or magnetized items during use.

v. Do not attach any stickers to the key.

vi. If a key is lost, clear all registered key ID codes and then reregister the remaining keys.

b. Precautions for the entry unlock function:

i. As the sensor is built into the backside of the outside door handle, the user must touch the backside part of the handle when performing the unlock function.

ii. If the sensor is touched with gloved hands, the response of the door may be delayed.

iii. During the entry unlock operation, if the door handle is pulled before the door unlocks, the unlock function cannot be completed. Confirm that the door has been unlocked before pulling the door handle to open the door.

iv. Make sure that the doors are unlocked when touching the touch sensor on the outside door handle while the key is being carried. If the doors cannot be unlocked, the certification ECU (smart key ECU assembly) orders the main body ECU to perform the door unlock operation 4 times at intervals of 0.75 seconds.
At this time, the door may not be unlocked because the handle is being pulled due to some mechanical reasons.
Be sure to return the door handle to its original position.
If the door cannot be opened by pulling the handle, perform the entry unlock operation again.

v. If the key is too close to the oscillator on the outside of the vehicle, the door may not be unlocked because the key cannot react to the strong wave output from the transmitter.

vi. If the key is within the vehicle exterior detection area, the door can be unlocked even when a person other than the person carrying the key holds the door handle.
However, the doors other than the door that the codes match will not be unlocked.
(If the key is within the detection area of the driver side door outside the vehicle, the doors will be unlocked when the person carrying the key holds the driver side door handle. However, if any door handle other than that of the driver side door is held, the doors will not be unlocked).

vii. If a door is not opened after the door unlock operation, the doors automatically lock after approximately 30 seconds.

viii. If a large amount of water is applied to the door handle due to a car wash or heavy rain, the key being within the vehicle exterior detection area may cause the doors to be unlocked.
However, the doors will be locked again after approximately 30 seconds if a door is not opened.

ix. If the key of the entry and start system is used while it is being carried with the key of another entry and start system, the time before the entry unlock operation will become more than usual. This is not a malfunction.

c. Precautions for the entry lock function:

i. When performing the entry lock operation, firmly press the lock switch on the outside door handle.
If pressed too quickly or lightly, the entry lock may not operate.

ii. It is possible that signals output from the indoor electrical key antenna may leak through the window. Also, if the key is too close to a door oscillator, the oscillator output signals are too strong and the key cannot respond. As a result, when the key is near the vehicle interior (window, door handle), the entry lock function may not operate. Also, the key reminder warning buzzer may sound and the entry unlock operation may stop functioning. In this situation, move the key away from the vehicle interior (window, door handle), perform the entry lock operation and then perform the entry unlock operation.

iii. Do not touch the lock switch while opening or closing the door.
If the lock switch is pressed when opening or closing the door while the key is being carried, the door ajar warning buzzer sounds (beeps outside the vehicle for 10 seconds).

iv. If the key is on the instrument panel, rear package tray or floor, or in the glove box, the key reminder function may not operate and the key may be locked in the vehicle. Always carry the key.

v. If the key is outside the vehicle but is very close to a window or door handle (the ECU determines that the key is inside the vehicle) and the transmitter or mechanical key is used to lock the doors (entry lock is not used), entry unlock will not operate. To unlock the doors, perform a wireless door unlock operation. The entry lock function operates in this way to prevent the doors from being unlocked by the door oscillator (vehicle exterior) without the knowledge of the user. For example, when a user operates the wireless door lock operation from inside the vehicle, radio waves from a door oscillator may leak into the vehicle interior and the doors may unlock.

vi. To allow the user enough time to check if the doors are locked after performing a door lock operation (entry lock function or wireless door lock operation), the entry unlock function will not be permitted for 3 seconds after the door lock operation.

d. Precautions for the entry ignition function:

i. To start the engine system, first depress the brake pedal firmly until the engine switch indicator illuminates green, and then press the engine switch.
Also, after performing the engine start operation, continue depressing the brake pedal until the engine has completely started.

ii. When operating the engine switch, firmly press the switch. If the switch is pressed too quickly, power source control and engine system starting may not operate.

iii. While driving the vehicle, continuously pressing the engine switch for 3 seconds or more will turn off the engine system. Do not touch the engine switch while driving, except in an emergency.

iv. Do not touch the engine switch with oily hands.

v. If the vehicle has been in a hot location for an extended period of time, be careful when touching the engine switch. It may be very hot and lead to burns.

vi. Take care to avoid spilling beverages on the engine switch. Keep all liquids away from the engine switch.

vii. Do not use the engine switch if it seems to be sticking or feels abnormal.

viii. The vehicle continually records the power source mode (off, on (ACC), on (IG), start). When the battery cable is disconnected and reconnected, the power source mode will return to the mode it was in before disconnecting the battery cable. Always turn the engine switch off before disconnecting the battery cable. When the vehicle battery is fully depleted, power is cut, and the power source mode before the power was cut is unknown, so be extremely careful.

ix. Do not connect any electronic products to the ACC, IG1 or IG2 coil side wiring, as the vehicle power supply may be unable to be turned on, or other problems may occur.

x. When the key battery is depleted and the key is held up to the engine switch to start the engine system, the following warning alarms will sound.

- Driver side door is opened and closed:
  - Shift lever in P power source cut reminder exit warning
  - Shift lever not in P power source cut reminder exit warning
- Door other than driver side door is opened and closed:
  Occupant leaves with key warning

The warning alarms do not indicate an actual malfunction. The alarms sound because the key battery is depleted and the system cannot determine if the key is inside the vehicle or not.

xi. With the engine switch on (ACC), the engine can be started by pressing the engine switch for 15 seconds without depressing the brake pedal.

e. Precautions for back door entry unlock function:
Even if the key is within the electrical key antenna (for outside luggage compartment) detection area, the back door cannot be opened if the key is in the following areas:

- Near the center of the bumper
- Too close to the ground or in a high place

f. Precautions for the battery built into the key and the vehicle battery:

i. The key is constantly checking for signals from the vehicle, which requires power from the built-in battery. The life of the battery is approximately 1 to 2 years depending on the usage conditions. Also, if the key is in contact with a cell phone while the user walks

around (by putting them together into a pocket, etc.), the battery may significantly deplete. Be sure to replace the battery when its power is low. When replacing the battery, do not touch the inner circuit board or other inner parts.

ii. The key is constantly checking for signals from the vehicle and using battery power, whether the key is being used or not. Even if the user is carrying 2 keys and only 1 key is used, both keys will consume battery power.

iii. In order to communicate with the vehicle, the key is constantly checking for signals. Therefore if the key is in contact with a cell phone while the user walks around (by putting them together into a pocket, etc.), the battery may significantly deplete.

iv. The key receives radio waves at approximately 134 kHz. If the key continuously receives strong, identical frequency waves, this may drain the key battery. Store the key at least 1 m (3.28 ft.) from TVs, personal computers, chargers for cell phone, etc. or other electrical products.

v. When the door is being locked, the vehicle battery is used to transmit radio waves. The battery may be fully depleted if the vehicle remains stopped for a long time. If the vehicle is not used for a long time, remove the battery from the vehicle or cancel the entry and start system.

vi. When the door is being locked with the key in the detection area of a door oscillator, the battery is used for regular communication between the key and vehicle. If the vehicle is not used, keep the key away from the vehicle (more than 2 m (6.56 ft.)).

vii. After disconnecting and reconnecting the battery cable, the entry unlock function may not operate. If this occurs, perform a wireless door unlock and lock operation.

viii. When the battery is fully depleted and the engine does not start even after recharging, perform the following: 1) move the shift lever to P; 2) turn the engine switch off; and 3) open and close the driver door. Then start the engine.

ix. When starting the engine system after the removal and installation of the vehicle battery, first perform the following: 1) open and close the driver door; and 2) wait 10 seconds or more. When an engine system start is attempted after the above procedures, the engine system will not start. However, this is not a malfunction. The engine system will start normally starting from the second attempt.

g. Precautions when using the remote start function:

i. When using the remote start, the entry unlock function can be operated. However, depending on the amount of engine noise and other factors, the door oscillator detection area may become smaller.

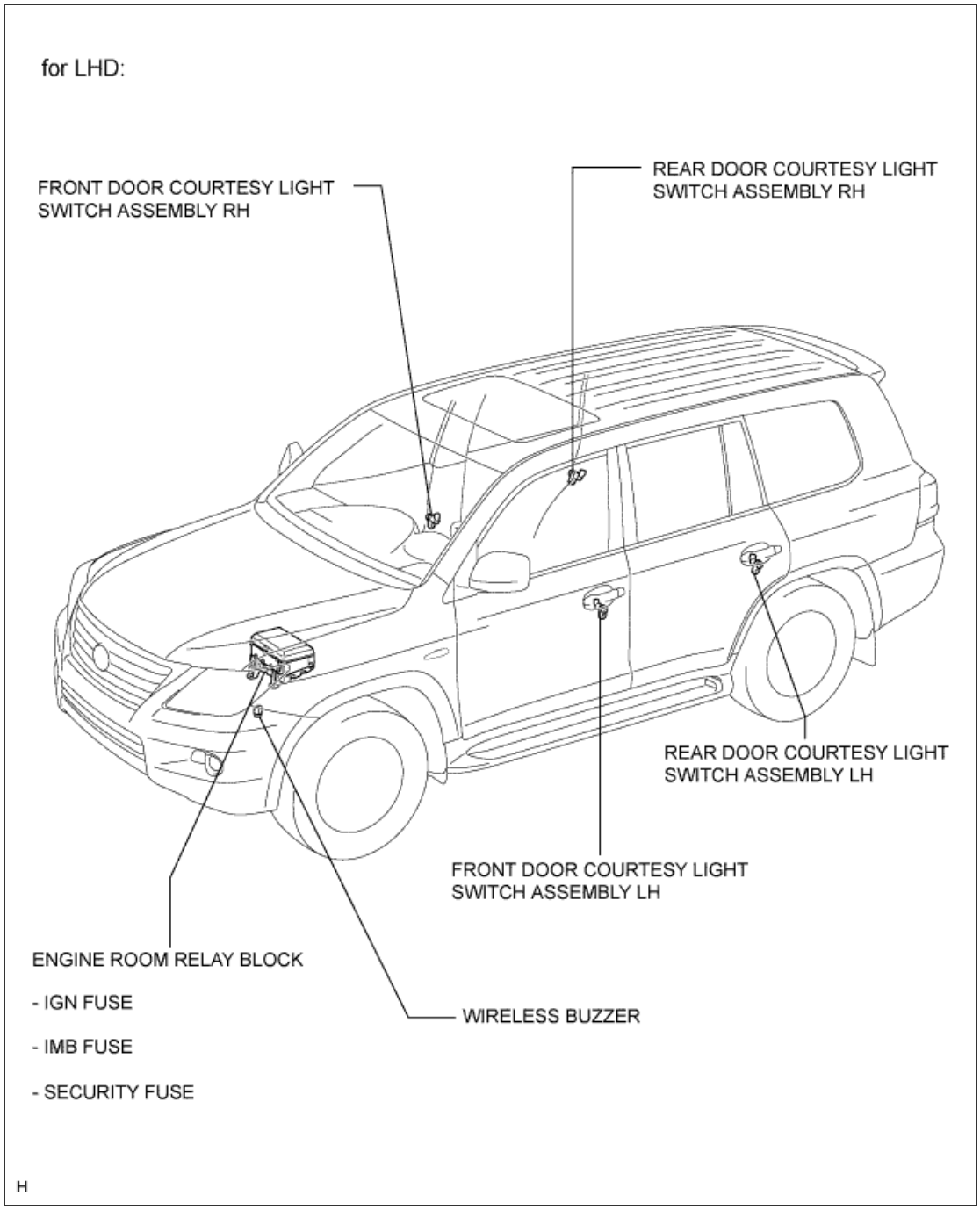
ii. If the remote start is used, a door is unlocked, and the user enters the vehicle, the engine system will automatically turn off. After the engine system turns off, the engine system cannot be started for approximately 5 seconds.

h. Precautions for the entry unlock mode switching function:

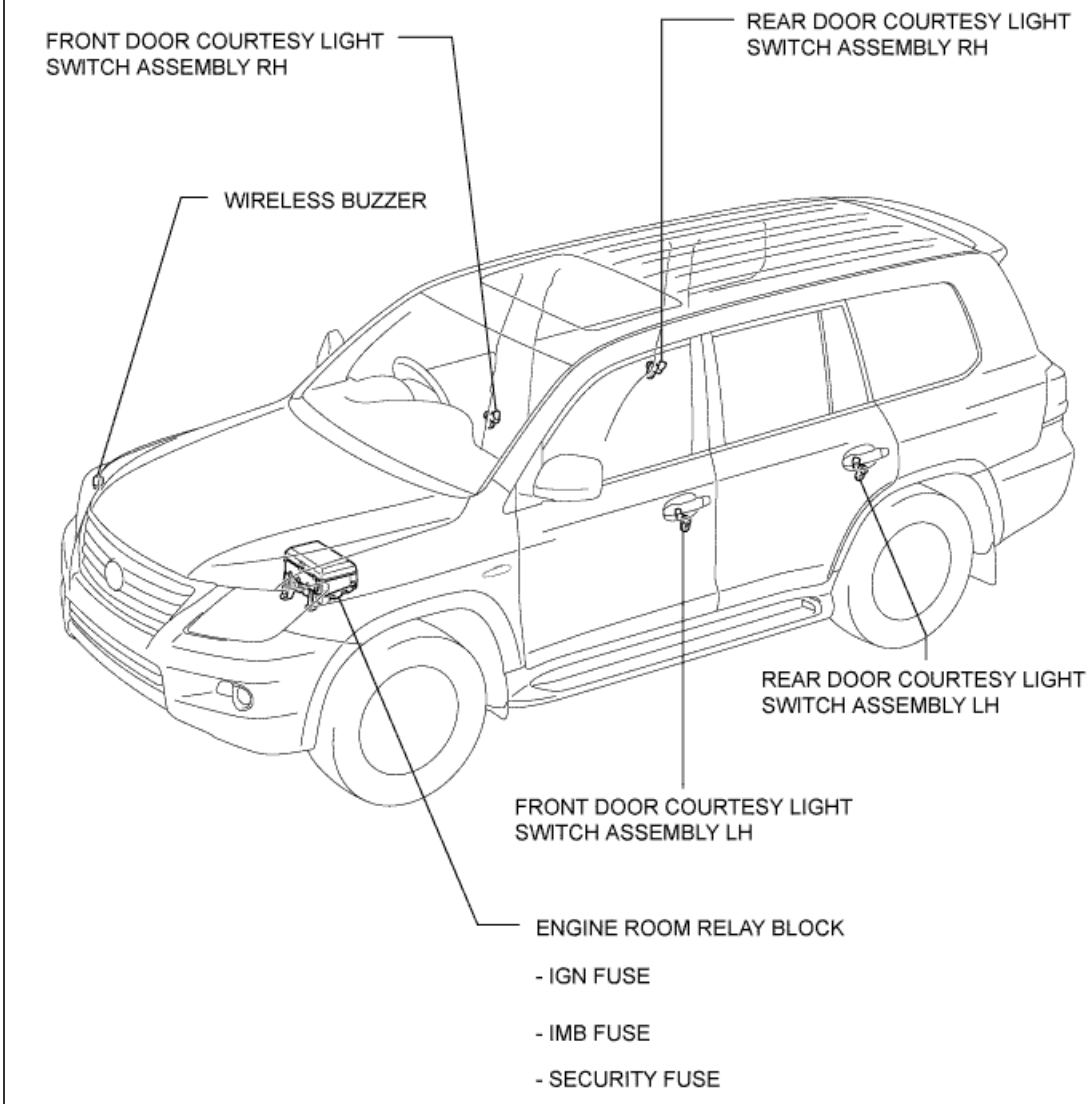
i. Perform the entry unlock mode switching function within a 1 m (3.28 ft.) area around the vehicle or from inside the vehicle.

ii. After changing modes, holding down the switch for 5 seconds or more will not change the mode. The switch must be released and then pressed again to change modes.

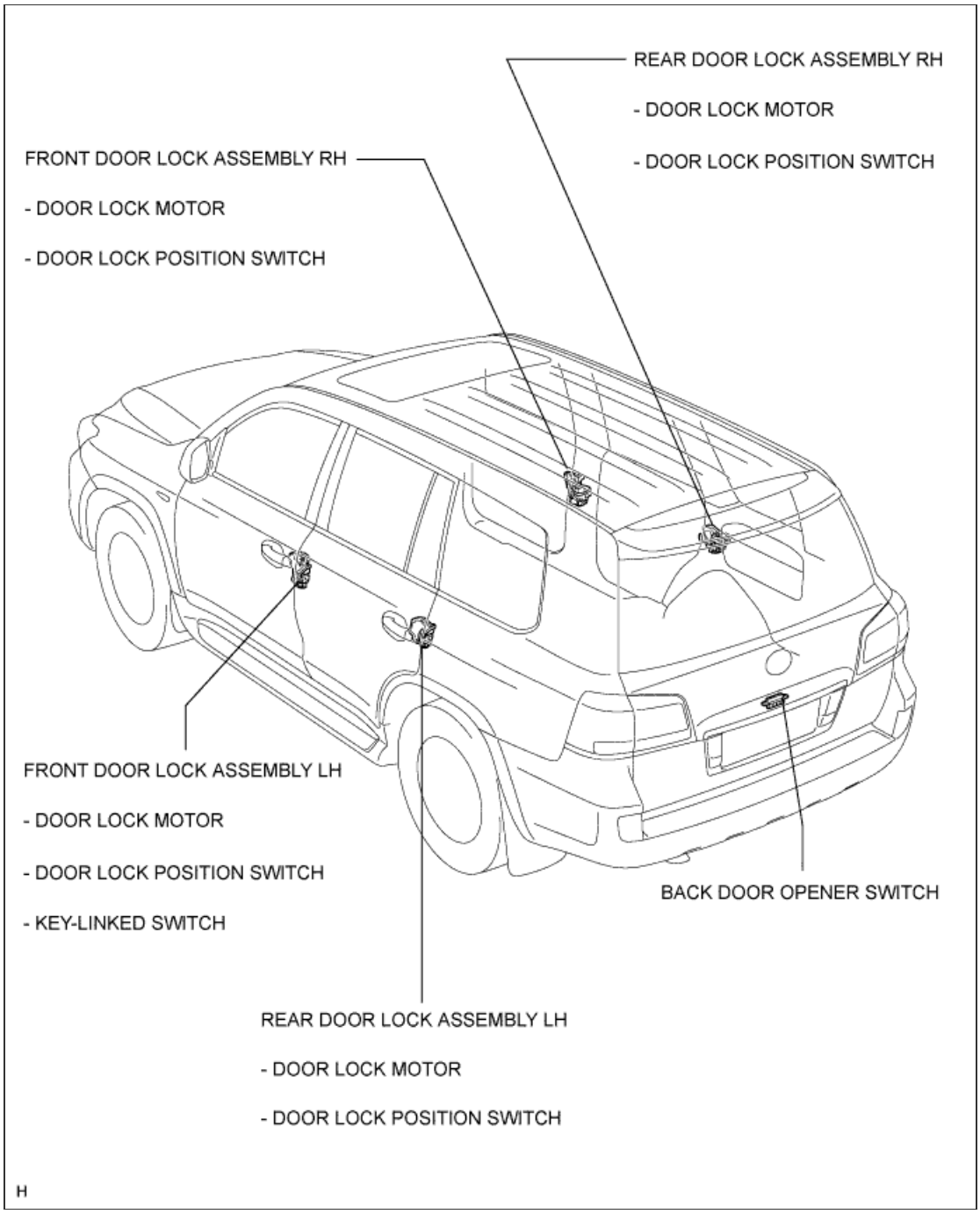
for Preparation Click here



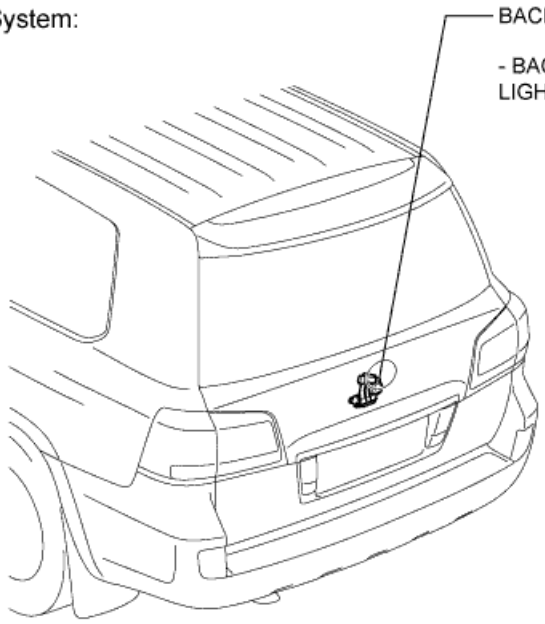
for RHD:


FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY RH
REAR DOOR COURTESY LIGHT SWITCH ASSEMBLY RH
WIRELESS BUZZER
REAR DOOR COURTESY LIGHT SWITCH ASSEMBLY LH
FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY LH
ENGINE ROOM RELAY BLOCK
- IGN FUSE
- IMB FUSE
- SECURITY FUSE

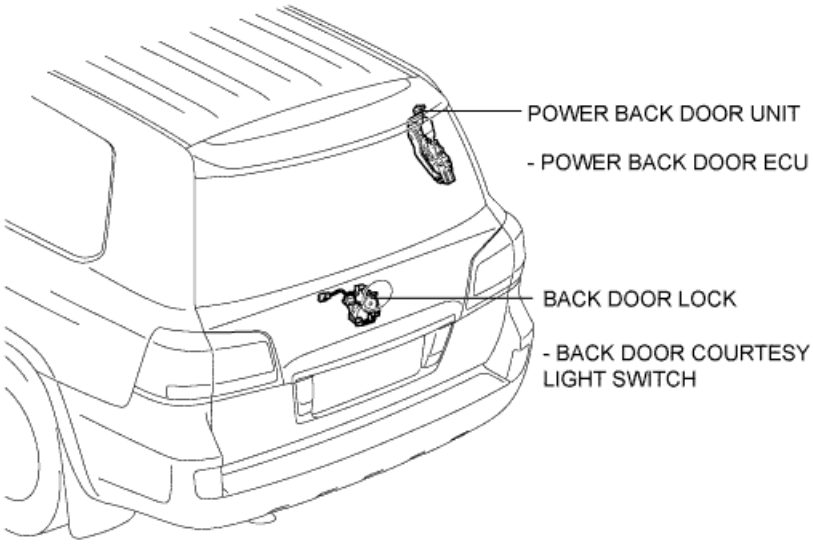
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REAR DOOR LOCK ASSEMBLY RH
- DOOR LOCK MOTOR
- DOOR LOCK POSITION SWITCH
FRONT DOOR LOCK ASSEMBLY RH
- DOOR LOCK MOTOR
- DOOR LOCK POSITION SWITCH
FRONT DOOR LOCK ASSEMBLY LH
- DOOR LOCK MOTOR
- DOOR LOCK POSITION SWITCH
- KEY-LINKED SWITCH
BACK DOOR OPENER SWITCH
REAR DOOR LOCK ASSEMBLY LH
- DOOR LOCK MOTOR
- DOOR LOCK POSITION SWITCH
H

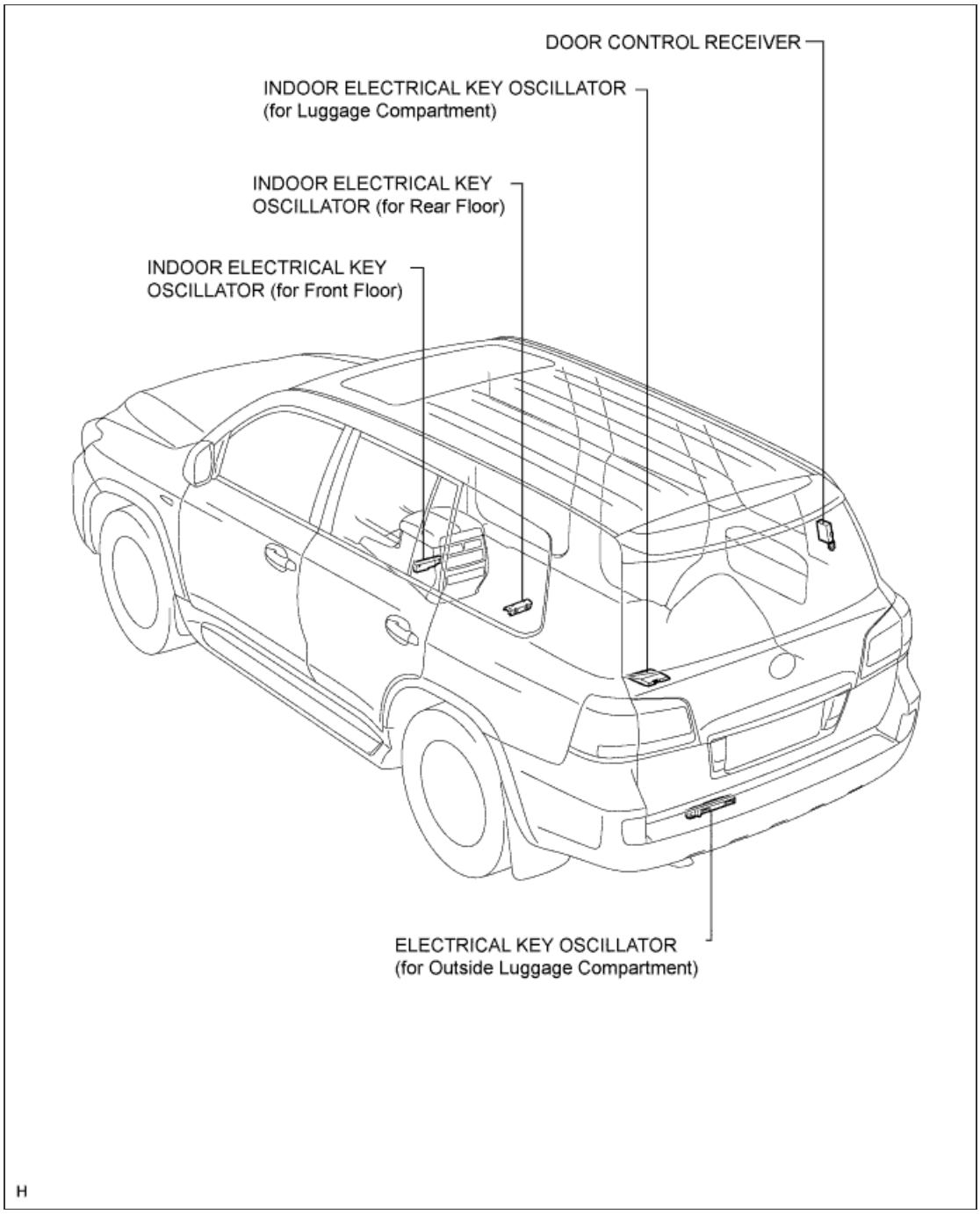
w/o Power Back Door System:

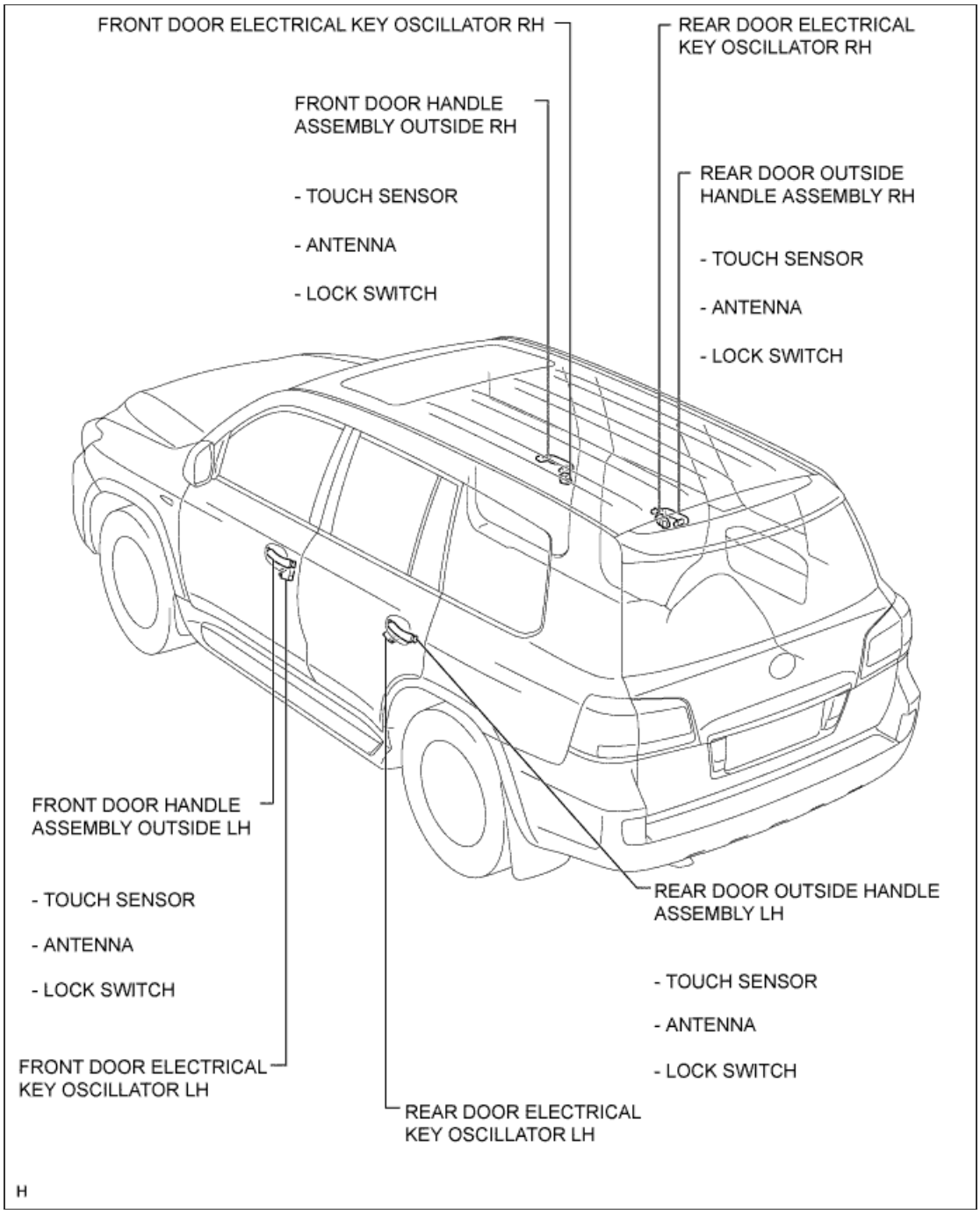


w/ Power Back Door System:

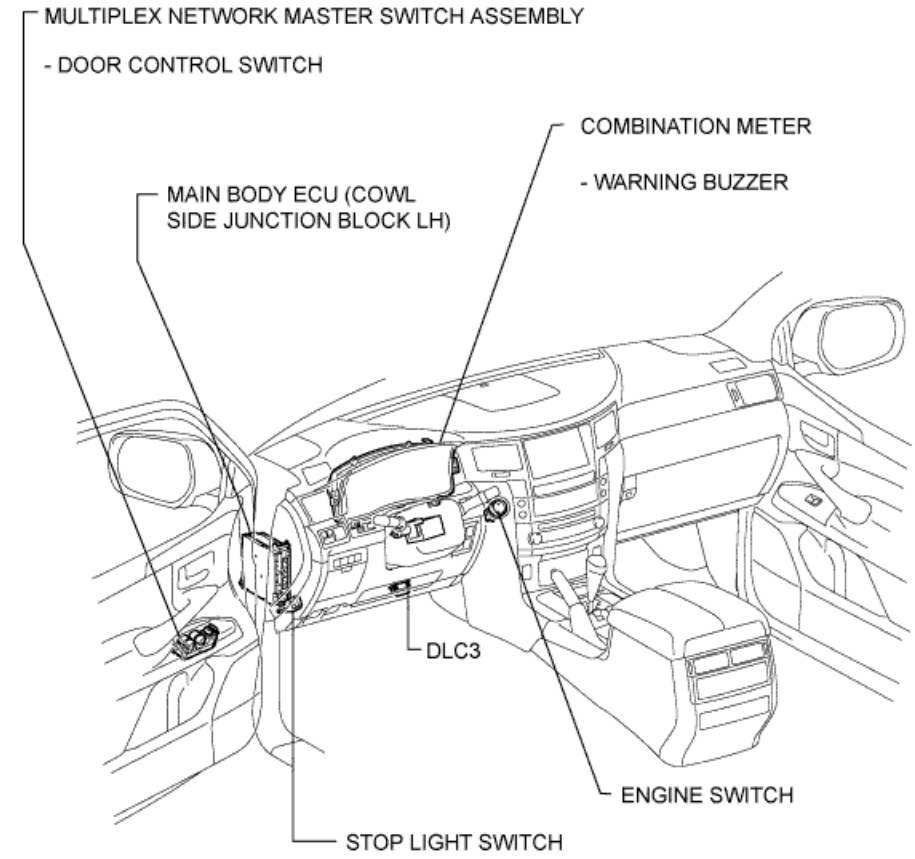


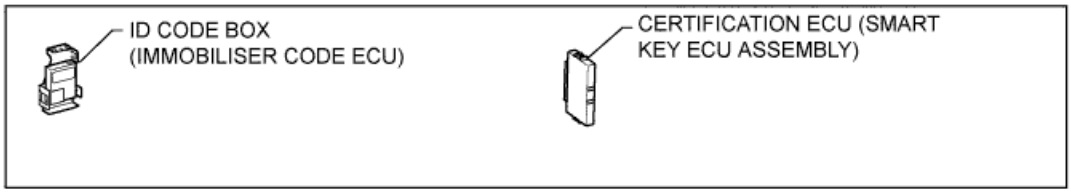
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DOOR CONTROL RECEIVER
INDOOR ELECTRICAL KEY OSCILLATOR
(for Luggage Compartment)
INDOOR ELECTRICAL KEY
OSCILLATOR (for Rear Floor)
INDOOR ELECTRICAL KEY
OSCILLATOR (for Front Floor)
ELECTRICAL KEY OSCILLATOR
(for Outside Luggage Compartment)
H


FRONT DOOR ELECTRICAL KEY OSCILLATOR RH
REAR DOOR ELECTRICAL KEY OSCILLATOR RH
FRONT DOOR HANDLE ASSEMBLY OUTSIDE RH
- TOUCH SENSOR
- ANTENNA
- LOCK SWITCH
REAR DOOR OUTSIDE HANDLE ASSEMBLY RH
- TOUCH SENSOR
- ANTENNA
- LOCK SWITCH
FRONT DOOR HANDLE ASSEMBLY OUTSIDE LH
- TOUCH SENSOR
- ANTENNA
- LOCK SWITCH
FRONT DOOR ELECTRICAL KEY OSCILLATOR LH
REAR DOOR OUTSIDE HANDLE ASSEMBLY LH
- TOUCH SENSOR
- ANTENNA
- LOCK SWITCH
REAR DOOR ELECTRICAL KEY OSCILLATOR LH
H

for LHD:

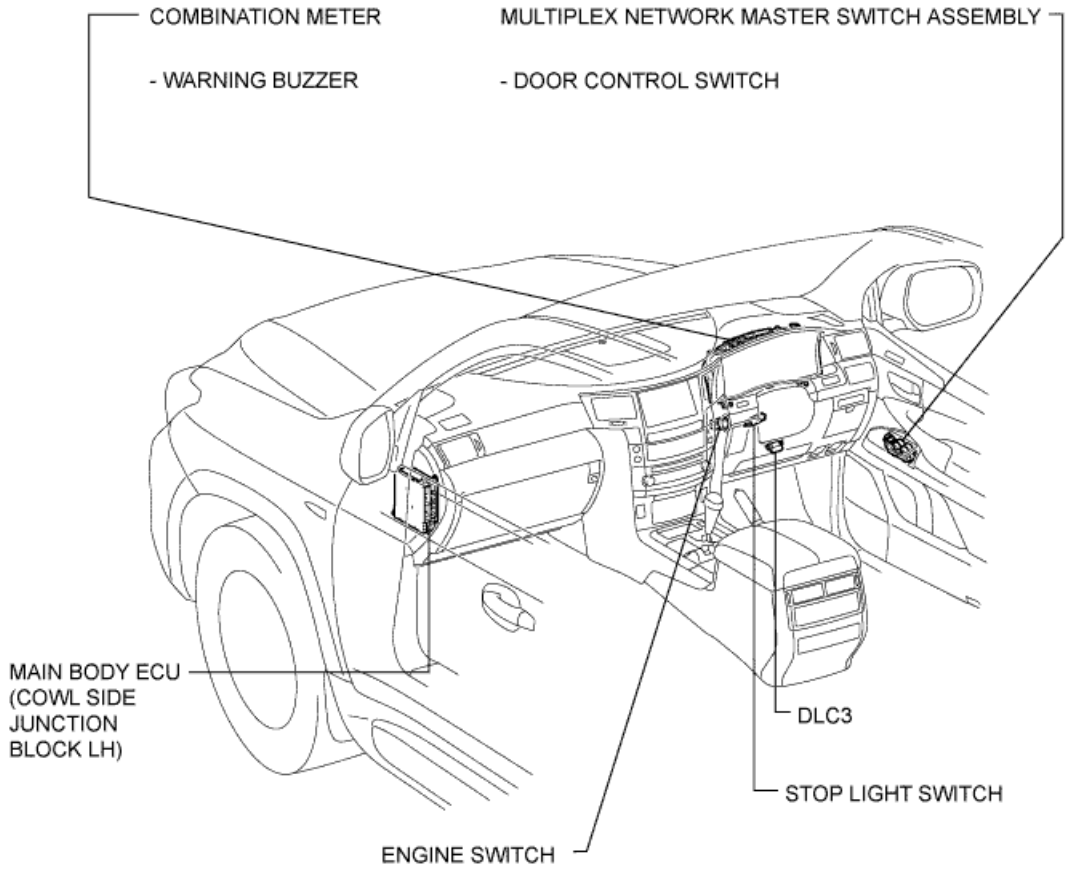


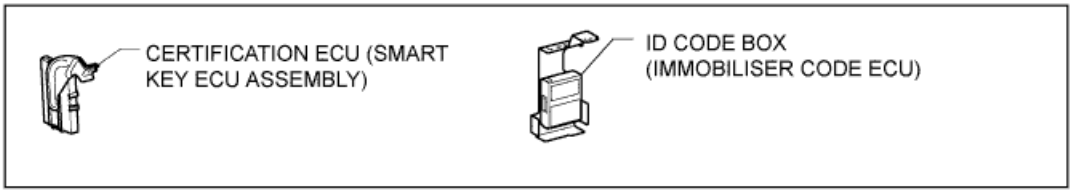


Refer to Service Bulletin for installation position.

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for RHD:

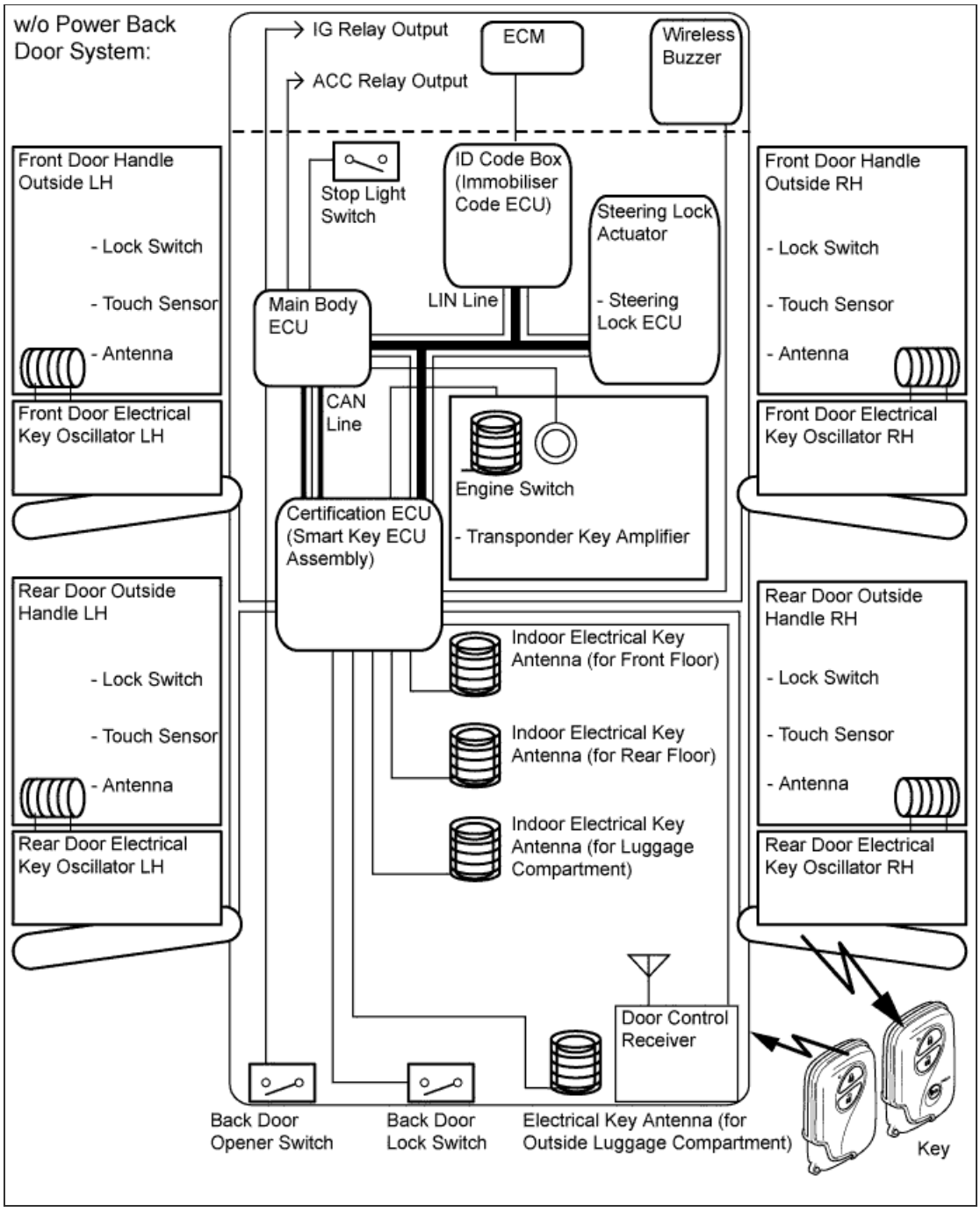


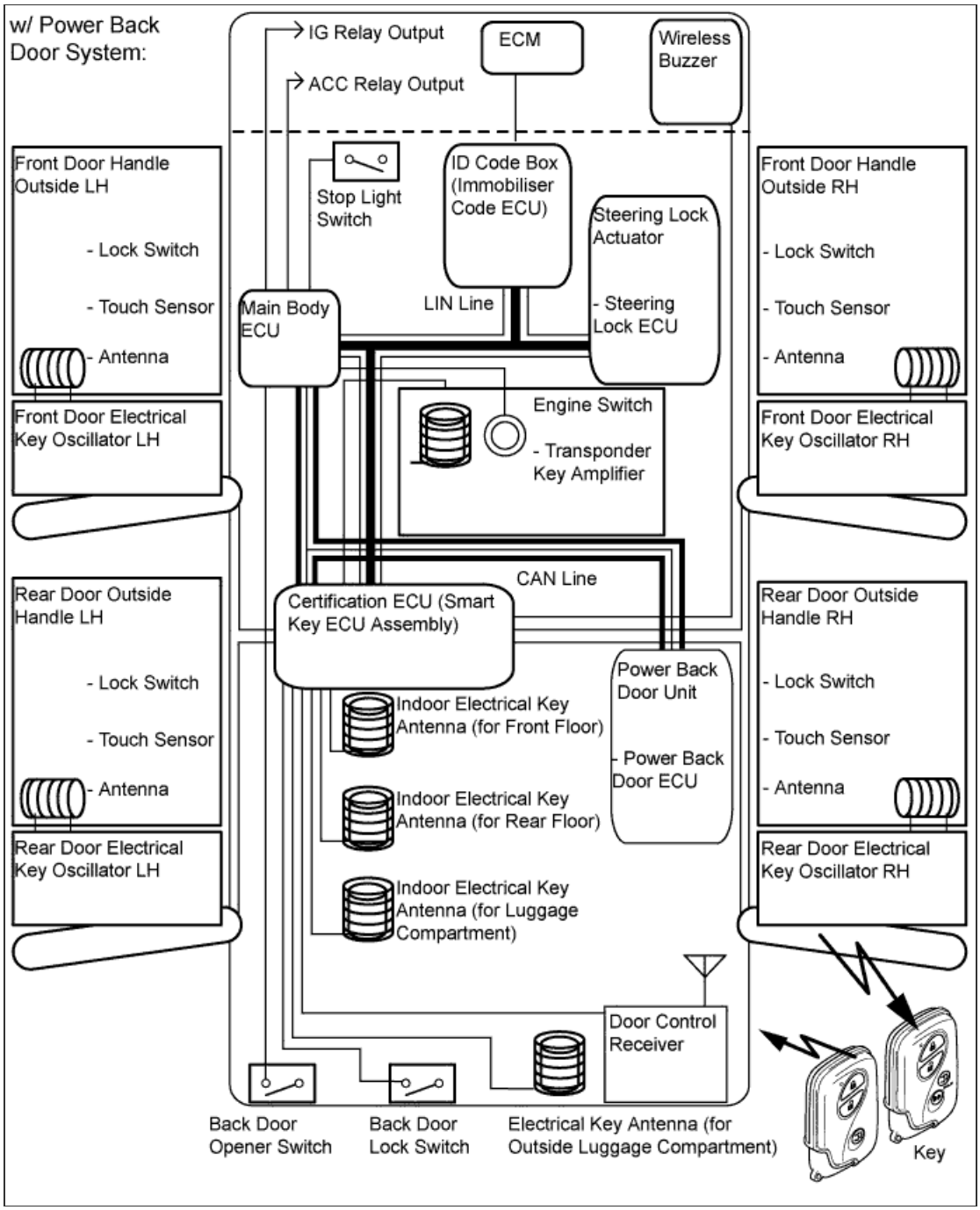


Refer to Service Bulletin for installation position.

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for Preparation Click here





Communication table:

Sender	Receiver	Signal	Line
Main Body ECU	Certification ECU (Smart key ECU assembly)	• IG signal • ACC signal • Engine switch signal • Driver side door courtesy light switch signal • Passenger side door courtesy light switch signal • Rear LH side door courtesy light switch signal • Rear RH side door courtesy light switch signal • Vehicle type handle signal • Back door courtesy light switch signal • Back door opener switch signal • Wireless door lock buzzer sound signal • Door lock position signal	CAN
Main Body ECU	Power Back Door ECU*	Back door opener switch signal*	CAN
Meter ECU	• Certification ECU (Smart key ECU assembly) • Main Body ECU	Vehicle speed signal	CAN
		• Encryption code signal • Encryption code finish signal	

Steering Lock ECU	Certification ECU (Smart key ECU assembly)	• Encryption calculate fixed number memory requirement signal • During entry control signal	LIN
ID Code Box (Immobiliser code ECU)	Certification ECU (Smart key ECU assembly)	Matching request random number signal	LIN
Certification ECU (Smart key ECU assembly)	Meter ECU	• Inside key existence warning signal • Low key battery warning signal • Shift position warning signal • Meter buzzer request signal • Door open indicate signal • Steering lock warning signal	CAN
Certification ECU (Smart key ECU assembly)	Main Body ECU	• Entry door lock signal • Entry door unlock signal • Entry lock switch signal • Door lock/unlock standby control signal	CAN
Certification ECU (Smart key ECU assembly)	Main Body ECU	• Immobiliser ID entry required signal • Key code check signal	LIN
Certification ECU (Smart key ECU assembly)	ID Code Box (Immobiliser code ECU)	Replay code signal	LIN

*: w/ Power Back Door System

for Preparation Click here

CAUTION:

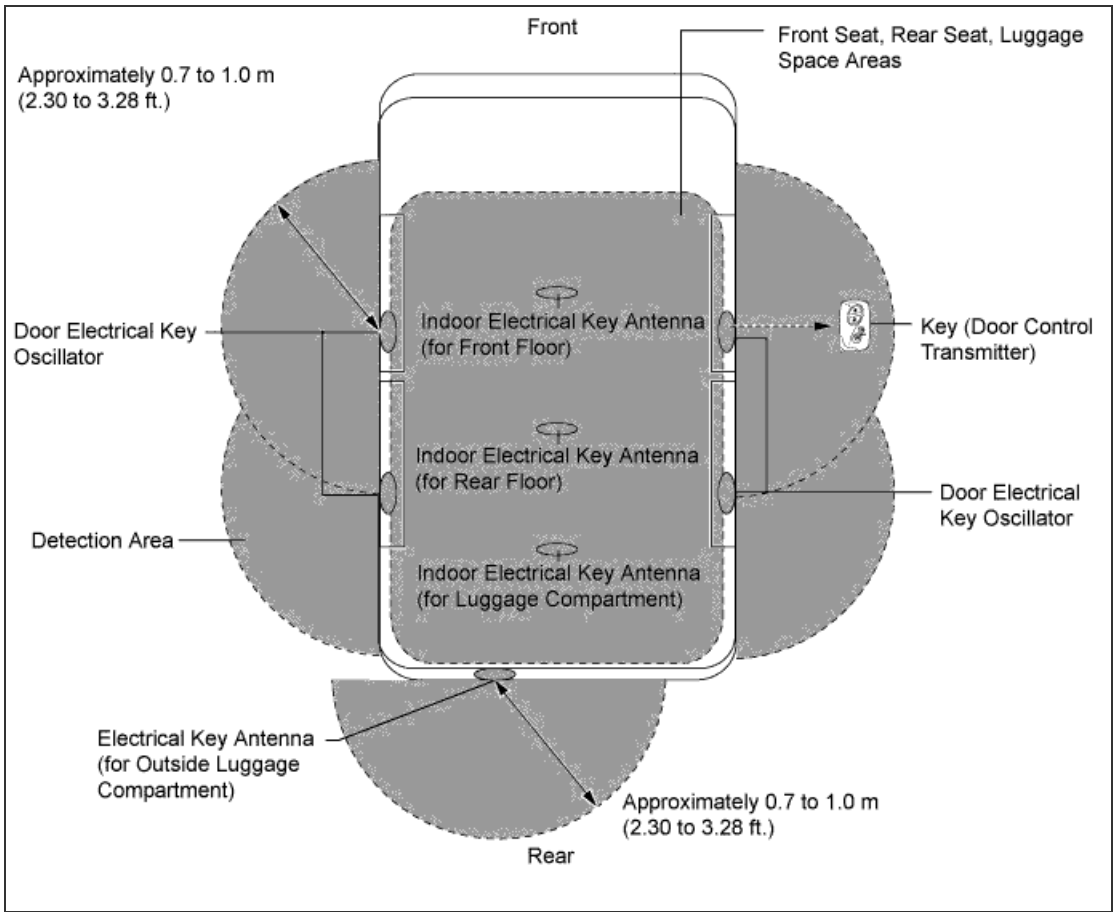
If using a pacemaker, be sure to read the manual of the pacemaker before using the key, as the radio waves of the key may affect the pacemaker.

ENTRY AND START SYSTEM DESCRIPTION

a. In addition to conventional mechanical key and wireless door lock control functions, the entry and start system enables door locking/unlocking, steering lock releasing, engine control system starting and back door opening without operating the key. The only requirement is that the key is in the possession of the user.

- This system is controlled by the certification ECU (smart key ECU assembly). When the certification ECU (smart key ECU assembly) detects the presence of the key in one of the detection areas, it identifies and checks the ID code, and outputs operation signals to the related ECU in accordance with their functions.
- For vehicle with rear entry function:
  The detection areas are formed by 4 oscillators and 4 antennas (4 door oscillators, the back door antenna and 3 indoor antennas).
- For vehicle without rear entry function:
  The detection areas are formed by 2 oscillators and 4 antenna (2 door oscillators, back door antenna and 3 indoor antennas).

DETECTION AREA



a. Precautions for the entire system:

- Be sure to carry the key during inspection of the entry and start system.
- As weak radio waves are used to detect the key, the key detection area may decrease, or the key may not be detected correctly in the following situations.
  1. The key battery is depleted.
  2. Any facilities that generate strong radio waves, such as a TV tower, power plant, broadcast station or gas station, are located near the inspection site.
  3. A wireless device, such as a cell phone, is carried with the key.
  4. The key is in contact with or covered with metal.
  5. Electric wave type keyless entry systems are being operated nearby.

6. The key is located near a device that generates high voltage or noise.
7. Film with some metallic content is stuck to the back glass.

HINT:

In this case, remove the cause or unlock the door using the mechanical key.

- Even if the key is in the vehicle exterior key detection area, the key may not operate properly due to the vehicle body design.
- The key may not be detected correctly if it is around the vehicle's windows, the door handle or center of the bumper, even when it is in the detection area outside the vehicle.
- The key may not be detected correctly if it is on the instrument panel, rear package tray or floor, or in the glove box, even when it is in the detection area inside the vehicle.
- The key may not operate if the key is not held properly.
- The entry and start system does not operate in the following conditions:
    1. The entry and start system is canceled.
    2. The key battery is completely depleted (the indicator does not blink when pushing any of the switches on the key).

FUNCTION OF MAIN COMPONENTS

Component	Function
Certification ECU (Smart key ECU assembly)	Controls the entry and start system in accordance with signals from each oscillator, various switches, ECUs and the key. • Performs key verification. • Performs vehicle interior/exterior transmission. • Performs occupant sensor control. • Sends lock/unlock commands during entry function. • Sends steering lock/unlock commands. • Sends immobiliser set/unset commands. • Records verification codes.
Main body ECU	Controls the power source mode function in accordance with signals from various switches, ECUs and the combination meter. • Controls the ACC/IG power source by turning it on/off. • Sends an engine start command to the ECM. • Controls the indicator and word illumination of the engine switch. • Activates starter relay.
ID code box (Immobiliser code ECU)	• Receives a command from the certification ECU (smart key ECU assembly), and sends an immobiliser set/unset command to the ECM. • Records verification codes.
Indoor electrical key antenna (for front floor, rear floor and luggage compartment)	Receives a request signal from the certification ECU (smart key ECU assembly), and forms the detection area in the vehicle interior.
Door control receiver	Receives the ID code from the key in the actuation area and transmits it to the certification ECU (smart key ECU assembly).
Electrical key antenna (for outside luggage compartment)	Receives a request signal from the certification ECU (smart key ECU assembly), and forms the actuation area around the back door.
Back door opener switch	Transmits a back door open request signal to the main body ECU.
Back door lock switch	Transmits a back door lock request signal to the certification ECU (smart key ECU assembly).
Door electrical key oscillator (for driver, front passenger, rear LH, rear RH side doors)	Receives a request signal from the certification ECU (smart key ECU assembly), and forms the detection area around each door.
Outside door handle (for driver, front passenger, rear LH, rear RH side doors) (antenna)	Transmits request signals.
Outside door handle (for driver, front passenger, rear LH, rear RH side doors) (touch sensor)	Detects when a person touches the inside of the outside handle.
Outside door handle (for driver, front passenger, rear LH, rear RH side doors) (lock switch)	Transmits door lock request signals to the certification ECU (smart key ECU assembly).
Key	• When an LF wave*1 that is output from the vehicle interior/exterior antenna is received, RF wave*2 format conversion is performed on the key ID, vehicle ID and other information, and an RF wave*2 is then output. • When the lock/unlock switch on the key is pressed, the signal is converted to an RF wave*2 and is then output. • When the wave output from the engine switch immobiliser amplifier is received, the key ID, vehicle ID and other information is output through immobiliser communication. • The key is equipped with a mechanical key for unlocking

	doors when the battery is fully depleted.
Wireless door lock buzzer Combination meter • Multi-information Display • Buzzer	When the certification ECU (smart key ECU assembly) detects human errors such as those below, it warns the driver by sounding the wireless door lock buzzer*, displays information and sounds the buzzer in accordance with the request signal from the ECU. *: Except China Example: • Key is taken outside the vehicle. • Driver leaves the vehicle while the engine is still running. • Driver leaves the vehicle while the shift lever is in a position other than P.

HINT:

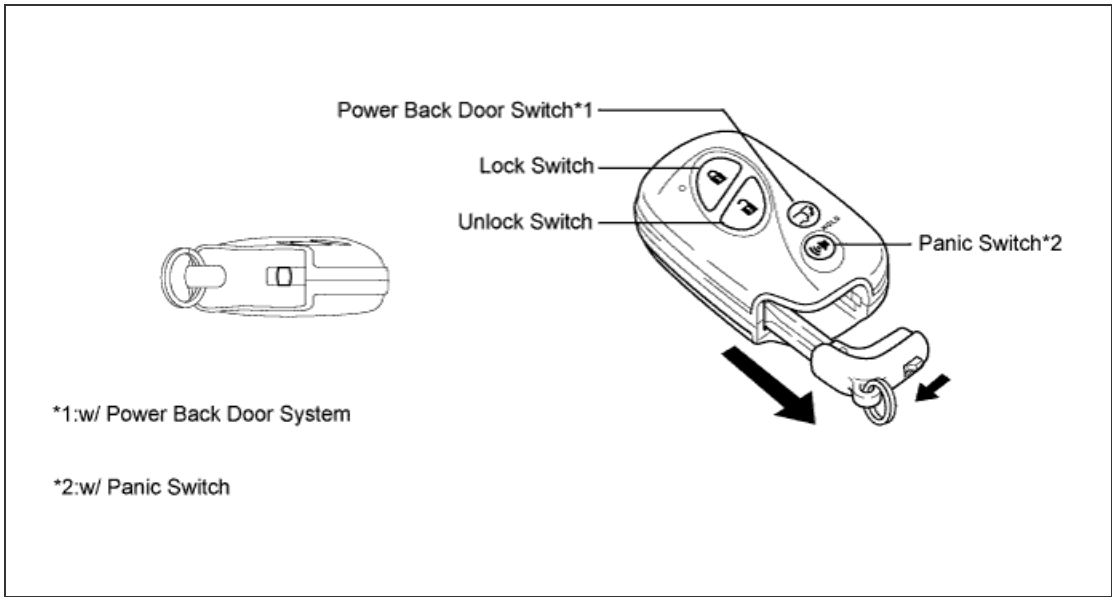
- ***1: LF waves (134 KHz) check if the key is in the vehicle interior or not.**
- ***2: RF waves (314.35 MHz for Australia, 433.92 MHz for Europe and the Middle and Near East, and 315.12 MHz for China) are emitted from the key in response to the LF waves, and are sent to the door control receiver.**

CONSTRUCTION AND OPERATION

a. Key:
A total of 7 keys can be registered.

i. Electrical key transmitter:
The electrical key transmitter consists of a mechanical key, a transmitter function for the wireless door lock control and a transceiver for the entry and start system.

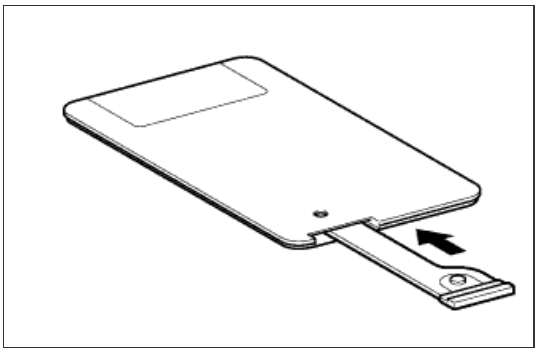
- The transceiver function for the entry and start system receives the signals from the oscillators and sends the ID code to the door control receiver.
- The transmitter function for the wireless door lock control has a lock switch, unlock switch and panic switch.
- This mechanical key can lock/unlock all the doors. To lock or unlock the doors, remove the cap from the driver door outside handle, insert the key into the door key cylinder, and then turn it to the lock or unlock position.



ii. Card type key:
The card type key consists of a mechanical key and a transceiver for the entry and start system.

- The transceiver function for the entry and start system receives the signals from the oscillators and sends the ID

code to the door control receiver.
- This mechanical key works for the driver door and glove box, but cannot start the engine.



b. Oscillator (each door oscillator, front floor, rear floor and luggage compartment indoor antenna, and back door outside antenna)
Each oscillator transmits the request signal received from the certification ECU (smart key ECU assembly), and forms a key detection area to detect the presence of a key. The detection area formed by each door oscillator and back door outside antenna is approximately 0.7 to 1.0 m (2.30 to 3.28 ft.) from the outside handle of each door or the center of the rear bumper.

- The detection area of each door oscillator is formed by transmitting a request signal every 0.25 seconds while the engine switch is off and each door is locked. In this way, it detects the proximity of a key. During entry lock, the detection area is formed with the lock switch on.
- The detection area of the back door antenna is formed when the back door opener switch is on.
- The detection area of the indoor antenna (for front floor, rear floor and luggage compartment) is formed when the driver door is opened or closed, during starting, when a warning is activated, or when the lock switch is on.

ENTRY FUNCTION OPERATION

a. The entry and start system has the following functions.

Function	Outline
Mechanical Key	Operation is the same as a conventional mechanical key.
Wireless Door Lock Control	This function remotely locks and unlocks all doors and the back door. Operation is the same as the wireless door lock control system. However, receiver in the certification ECU (smart key ECU assembly) uses the entry door control receiver to control locking and unlocking.
Entry Illumination	When a person carrying the key enters the detection area, the door will enter unlock standby mode and room light and door mirror foot light will illuminate.
Entry Unlock	When the key is located in the detection area of the door oscillator, the door will unlock by touching the inside of the outside door handle.
Entry Unlock Mode Switching (Click here)	Changes the doors that can be unlocked with the entry unlock function between 2 modes. • Driver door unlock mode • All door unlock mode
Entry Lock	When the key is located in the detection area of the door oscillator and the engine switch is off, the door can be locked by pressing the lock switch on the outside door handle.
Entry Back Door Open	When the key is in the detection area of the back door outside antenna, the back door opens by pressing the back door opener switch.
Memory Call	This function operates the driving position memory system in accordance with the key ID code.
• Power Window Close Function • Sliding Roof Close Function	Pressing the door handle entry lock switch for approximately 3 seconds or more causes all power windows and the sliding roof to close while sounding the wireless buzzer*.
Key Lock-in Prevention	Prevents lock-in of the key if the door is locked using the outside door handle while the key is still inside the vehicle.
Warning	When any of the situations below occur, the entry and start system causes the certification ECU (smart key ECU assembly) to sound the buzzer in the combination meter and the wireless door lock buzzer*, and display information in order to alert the driver. • Shift lever not in P (power source cut reminder) vehicle exit warning • Key reminder warning • Shift lever in P (power source cut reminder) vehicle exit warning • Entry door ajar warning • Passenger has brought key out of vehicle warning • Key is not within detection area warning • Key lock-in prevention function buzzer • Key battery low warning
	If the key is constantly located within the actuation area of the door oscillator, the system maintains periodic communication

Battery Saving	with the key. Therefore, if the vehicle remains parked in that state for a long time, key battery and vehicle battery could be drained. For this reason, the vehicle has controls for saving battery power.
Key Cancel (Click here)	The following key functions can be canceled: • Entry Unlock/Lock • Entry Ignition • Memory Call • Entry Back Door Open • Key Lock-in Prevention • Warning

*: except China

WIRELESS DOOR LOCK AND UNLOCK AND POWER BACK DOOR*1 AND PANIC*2 FUNCTION

Push the lock/unlock/power back door*1/panic*2 switch on the key to operate each function.
*1: w/ Power Back Door System
*2: w/ PANIC Switch

ENTRY UNLOCK FUNCTION

a. The detection area is formed by communication between a door oscillator and the certification ECU (smart key ECU assembly) when the door is locked in order to detect the person carrying the key.

b. When the person carrying the key enters the detection area around the vehicle, the matching of the ID codes for a door oscillator and key will automatically be performed. After the matching is completed, the door will enter unlock standby mode.

c. In unlock standby mode, the antenna built into the outside handle starts sensing. If the outside handle is held (the back side of the handle is touched), the door unlock operation will be performed. At this time, the hazard warning light blinks twice and the wireless door lock buzzer sounds twice*.
*: except Europe and China

d. If any of the doors are not opened after a door unlock operation, all doors will automatically lock after 30 seconds.

ENTRY LOCK FUNCTION

a. After leaving the vehicle carrying the key, push the lock switch on the outside handle when all the doors are closed.

b. The certification ECU (smart key ECU assembly) determines whether the key is located inside or outside of the cabin based on the information from a door oscillator and indoor antenna. Then matching of the ID codes is performed.

c. When the matching result shows that the ID codes of the key and indoor antenna do not match and the ID codes of the key and door oscillator match, the door lock function will operate. At this time, the hazard warning lights blink once and the wireless door lock buzzer sounds once*.
*: except Europe and China

d. If the key is located inside of the cabin, the door lock function will not operate and the alarm buzzer (beep sound) will sound for 2 seconds*.
*: except China

ENTRY BACK DOOR OPEN FUNCTION

Stand in front of the back door with the key and push the back door opener switch to start the matching of the ID codes for the back door antenna. If the ID codes match, the back door open operation will be performed.

PREVENTION OF KEY LOCK-IN FUNCTION

a. If you attempt to lock the door through keyless operation (move the lock knob to the lock position and then close the door) with the key in the cabin, the system determines that the key is located in the cabin and unlocks the door.

b. If the back door is closed with the key in it, the alarm will sound and the back door can be opened only when all the doors are locked in order to prevent key lock-in in the vehicle.

ENTRY ILLUMINATION FUNCTION

In order to improve ease of entering and exiting the vehicle at night, the vehicle lights illuminate when the key is brought near the vehicle.

ENTRY POWER WINDOW FUNCTION

a. Pressing the door handle lock switch for 3 seconds or more operates the door window close operation of all of the windows and the sliding roof close operation.

b. If the entry power window function is operating and the door handle lock switch is released, the entry power window operation will stop.

HINT:

For more information about the entry power window function, refer to the Power Window Control System (Click here).

MEMORY CALL FUNCTION

a. After unlocking the driver door using the key ID and opening the driver door, the seat automatically moves to the position associated with the key ID.

HINT:

For more information about the memory call function, refer to the Front Power Seat Control System (Click here).

WARNING FUNCTION

a. General:
When any of the situations below occur, the entry and start system responds to alert the driver.

Warning Function Operation Condition	Situation
Shift lever not in P (power source cut reminder) vehicle exit warning	A
Key reminder warning	B
Shift lever in P (power source cut reminder) vehicle exit warning	C
Entry door ajar warning	D
Passenger has brought key out of vehicle warning	E
Key is not within detection area warning	F
Key lock-in prevention function buzzer	G
Key battery low warning	H

b. Situation A:
Shift lever not in P (power source cut reminder) vehicle exit warning

i. With shift lever not in P, door is opened and vehicle exit (while holding key) is attempted

Reason for warning: Sudden vehicle start prevention, vehicle theft prevention, vehicle roll-away prevention			
Warning start condition: Shift lever is not in P, engine switch is on (ACC) or on (IG), driver side door is opened and vehicle speed is 5 km/h or less (3.107 mph)			
Warning stop condition: Engine switch is off, shift lever is in P, vehicle speed is above 0 km/h (0 mph), or driver side door is closed			
Warning description	Combination meter buzzer	Multi-buzzer	Sounds continuously (beep)
	Combination meter display	Combination meter information	"Shift to P Range"
		Telltale	None
	Wireless buzzer	None	
Recommended user action		Move shift lever to P	

ii. With shift lever not in P, door is opened, key is brought out of vehicle, door is closed, and movement away from vehicle is attempted

Reason for warning: Sudden vehicle start prevention, vehicle theft prevention, vehicle roll-away prevention			
Warning start condition: Shift lever is not in P, engine switch is on (ACC) or on (IG), opened driver side door is closed, vehicle speed is 0 km/h (0 mph) and key is not in detected in vehicle interior and luggage interior			
Warning stop condition: • Key is detected in vehicle interior and luggage interior: Buzzer stops and "Shift to P Range" is displayed on combination meter • Vehicle speed is more than 0 km/h (0 mph): Buzzer stops, "Key is not detected" - "Check key position" is displayed on combination meter • Engine switch off: All warnings are turned off			
Warning description	Combination meter buzzer	Multi-buzzer	Sounds continuously (beep)
	Combination meter display	Combination meter information	Information below is displayed alternately on combination meter "Shift to P Range" "Key is not detected" -

			"Check key position"
		Telltale	None
	Wireless buzzer	Sounds continuously (beep)* *: except China	
Recommended user action		Move shift lever to P	

c. Situation B:
Key reminder warning

i. Steering lock/unlock set, driver door is opened and movement away from vehicle is attempted

Reason for warning: Vehicle theft prevention, required by law			
Precondition: Remote start is not operating			
Warning start condition: One of following conditions is met 1. Engine switch on (ACC) or off, and driver door opened 2. Engine switch off, steering lock/unlock set and driver door opened			
Warning stop condition: One of following conditions is met 1. Engine switch is on (IG) or driver door is closed 2. Engine switch on (ACC) or off, and steering lock/unlock is set			
Warning description	Combination meter buzzer	Multi-buzzer	Sounds intermittently (several "pon" sounds)
	Combination meter display	Combination meter information	None
		Telltale	None
	Wireless buzzer	None	
Recommended user action		If engine switch is on (ACC) or on (IG), turn engine switch off and close driver door	

d. Situation C:
Shift lever in P (power source cut reminder) vehicle exit warning

i. With shift lever in P, driver door is opened, key is brought out of vehicle, driver door is closed, and movement away from vehicle is attempted

Reason for warning: Vehicle theft prevention, "Engine control system cannot be restarted" prevention, battery depletion prevention			
Warning start condition: Shift lever is in P, engine switch is on (ACC) or on (IG), opened driver side door is closed and key is not in detected in vehicle interior and luggage interior			
Warning stop condition: Engine switch on (ACC) or off, or key is detected in vehicle interior and luggage interior			
Warning description	Combination meter buzzer	Multi-buzzer	Sounds once (1 "pon" sound) (when key is not detected continuously, sounds again when vehicle is first driven)
	Combination meter display	Combination meter information	"Key is not detected" - "Check key position"
		Telltale	None
	Wireless buzzer	Sounds 3 times (short beeps)* *: except China	
Recommended user action		Turn engine switch off and exit vehicle while holding key	

ii. With shift lever in P and either engine switch on (ACC) or steering lock/unlock set, driver door is opened, user moves away from vehicle, and door handle lock switch is pressed in an attempt to perform entry lock operation

Reason for warning: Vehicle theft prevention, battery depletion prevention			
Precondition: Change door control lock switch from off to on			
Warning start condition: Shift lever is in P, engine switch is on (ACC) or on (IG), all doors are closed, key is detected in vehicle exterior, key is not detected in vehicle interior and vehicle speed is 0 km/h			
Warning stop condition: One of following conditions is met 1. Engine switch off. 2. Key is detected in vehicle interior and luggage interior. 3. Vehicle speed is more than 0 km/h. 4. Shift lever is not in P.			
Warning description	Combination meter buzzer	Multi-buzzer	None
	Combination meter display	Combination meter information	None

		Telltale	None
	Wireless buzzer	Sounds for 60 seconds (long beep)* *: except China	
Recommended user action		Turn engine switch off and perform entry lock operation	

e. Situation D:
Entry door ajar warning

i. With one vehicle door open, entry lock operation is attempted

Reason for warning: Vehicle theft prevention			
Precondition: Engine switch on (ACC) or off, and one door open			
Warning start condition: After preconditions are met, entry lock operation is performed			
Warning stop condition: Engine switch is on (ACC) or on (IG), all doors are closed, wireless unlock is performed, entry unlock operation is performed or 10 seconds have passed after warning start			
Warning description	Combination meter buzzer	Multi-buzzer	None
	Combination meter display	Combination meter information	None
		Telltale	None
	Wireless buzzer	Sounds for 10 seconds (long beep)* *: except China	
Recommended user action		Close all doors and perform entry lock operation	

f. Situation E:
Passenger has brought key out of vehicle warning

i. With engine switch in condition other than off, key is brought out of vehicle by passenger

Reason for warning: "Engine control system cannot be started" prevention			
Warning start condition: Engine switch is on (ACC) or on (IG), opened door other than driver side door is closed, vehicle speed is 0 km/h (0 mph) and key is not in detected in vehicle interior and luggage interior			
Warning stop condition: Engine switch on (ACC) or off, or key is detected in vehicle interior and luggage interior or vehicle speed is more than 0 km/h (0 mph)			
Warning description	Combination meter buzzer	Multi-buzzer	Sounds once (1 "pon" sound) (when key is not detected continuously, sounds again when vehicle is first driven)
	Combination meter display	Combination meter information	"Key is not detected" - "Check key position"
		Telltale	Illuminates
	Wireless buzzer	Sounds 3 times (short beeps)* *: except China	
Recommended user action		Check if the passenger who exited the vehicle has the key or not	

g. Situation F:
Key is not within detection area warning

i. With key not in vehicle cabin or key battery depleted, engine switch on (ACC) or on (IG) operation is attempted

Reason for warning: User confusion prevention			
Warning condition: Engine switch is not off and key is not detected in vehicle interior			
Warning description	Combination meter buzzer	Multi-buzzer	Sounds once (1 "pon" sound)
	Combination meter display	Combination meter information	"Key is not detected" - "Check key position" is displayed for 10 seconds, then display ends
		Telltale	None
	Wireless buzzer	None	
		Check if the key is within the detection area of the vehicle cabin If key is within the vehicle interior, built-in battery may be depleted	

Recommended user action	If wireless door lock switch on key is pressed, check if indicator on key illuminates If indicator does not illuminate, replace the built-in battery It is recommended that battery be bought at dealer, but battery can be replaced according to user preference

h. Situation G:
Key lock-in prevention function buzzer (for cabin)

i. With key in vehicle cabin, vehicle is exited and door handle lock switch is pressed in an attempt to perform entry lock operation

Reason for warning: Key reminder vehicle theft warning prevention			
Warning condition: Engine switch off, all doors closed, door handle lock switch on and key is detected in vehicle interior			
Warning description	Combination meter buzzer	Multi-buzzer	None
	Combination meter display	Combination meter information	None
		Telltale	None
	Wireless buzzer	Sounds for 2 seconds (long beep)* *: except China	
Recommended user action		Pick up key that is in vehicle interior and perform entry lock operation again	

i. Situation H:
Key battery low warning

i. Key with almost depleted battery is used to drive vehicle

Reason for warning: Helpful function			
Warning condition: After engine switch not off condition continues for 20 minutes or more, engine switch is changed from not off to off, key battery is low and key is detected in vehicle interior			
Warning description	Combination meter buzzer	Multi-buzzer	Sound once (1 "pon" sound)
	Combination meter display	Combination meter information	"Low Key Battery" - "Have your vehicle checked by a dealer" is displayed for 10 seconds, then display ends
		Telltale	None
	Wireless buzzer	None	
Recommended user action		Replace key built-in battery with new one It is recommended that battery be bought at dealer, but battery can be replaced according to user preference	

BATTERY SAVING

a. Vehicle battery saving function:
In the entry and start system, signals are emitted outside of the vehicle at a prescribed interval (0.25 seconds) when the doors are locked. Therefore, the vehicle battery could be drained if the vehicle remains parked for a long time. For this reason, the controls listed below exist.

Condition	Control
Both conditions below are met for 10 days: • Key is not in detection area • Touch sensor or lock switch operation is not performed	Signal transmission interval is extended from 0.25 to 0.75 seconds
Both conditions below are met for 15 days: • Key is not in detection area • Touch sensor or lock switch operation is not performed	Signal transmission interval is extended from 0.75 to 2.25 seconds
Both conditions below are met for 30 days: • Key is not in detection area • Touch sensor or lock switch operation is not performed	Automatically deactivates the entry and start system

Reinstatement Conditions:

- A wireless door lock control signal (lock, unlock) is input and the ID matches.
- A user carries the key and pushes a lock switch on an outside door handle.

- The driver door is locked or unlocked by the mechanical key.

b. Key battery and vehicle battery saving function:
In the entry and start system, if the key is constantly located within the vehicle exterior detection area of the doors, the system maintains periodic communication with the key. Therefore, if the vehicle remains parked in that state for a long time, the key battery and the vehicle battery could be drained. For this reason, if this state continues for more than 10 minutes, the entry and start system automatically becomes deactivated.
Reinstatement Conditions:

- A wireless door lock control signal (lock, unlock) is input and the ID code matches.
- A user carries the key and pushes a lock switch on an outside handle.
- The driver door is locked or unlocked by the mechanical key.

KEY DIAGNOSTIC MODE (Using the intelligent tester)

HINT:

Key diagnostic mode checks if the electrical key transmitter within a selected oscillator/antenna detection area is operating normally. The results are output through the wireless door lock buzzer (in the right front fender).

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Entry&Start / Key Communication Check.

e. Check the values by referring to the table below.

Entry&Start

Tester Display	Inspection Range
Overhead + Driver Side*1	Door electrical key oscillator (for Driver Side)
Overhead + Passenger Side*2	Door electrical key oscillator (for Front Passenger Side)
Overhead + Driver Side Rear*3	Door electrical key oscillator (for Driver Side Rear)
Overhead + Passenger Side Rear*4	Door electrical key oscillator (for Passenger Side Rear)
Overhead + Front Room*5	Indoor electrical key antenna (for Front Floor)
Overhead + Rear Room*6	Indoor electrical key antenna (for Rear Floor)
Overhead + Back Door (inside)*7	Indoor electrical key antenna (for luggage compartment)
Overhead + Back Door (outside)*8	Back door electrical key antenna (for outside luggage compartment)

f. When the electrical key transmitter is brought near the selected oscillator/antenna, check that the wireless door lock buzzer sounds.

i. *1: Door electrical key oscillator (for Driver Side)

HINT:

- **Hold the key at the same height as the door outside handle (0.7 to 1.0 m (2.30 to 3.28 ft.)). Pay attention to the direction of the key in the illustration.**
- ***2: Perform the same inspection above for the door electrical key oscillator (front passenger seat outside transmitter).**
- ***3: Perform the same inspection above for the door electrical key oscillator (driver side rear seat outside transmitter).**
- ***4: Perform the same inspection above for the door electrical key oscillator (passenger side rear seat outside transmitter).**

ii. *5: Indoor electrical key antenna (front inside transmitter)

HINT:

Place the electrical key transmitter on the driver or front passenger seat cushion.

iii. *6: Indoor electrical key antenna (rear inside transmitter)

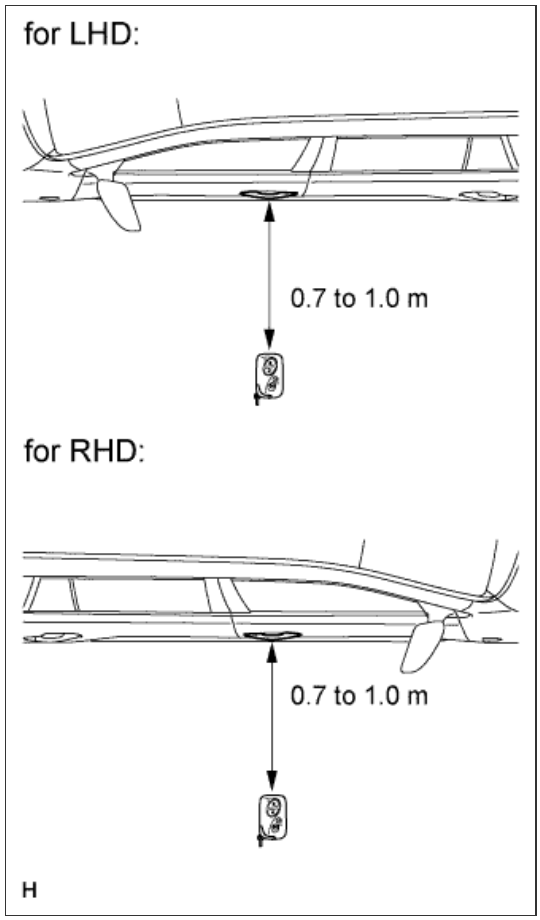
HINT:

Place the electrical key transmitter on the rear no. 1 seat cushion.

iv. *7: Indoor electrical key antenna (for luggage compartment inside transmitter)

HINT:

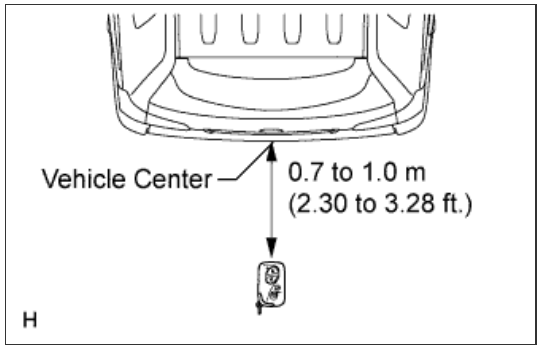
Place the electrical key transmitter on the rear no. 2 seat cushion.



v. *8: Electrical key antenna (for outside luggage compartment)

HINT:

Hold the electrical key transmitter at the same height as the rear bumper upper surface and aligned with the center of the rear of the vehicle, as shown in the illustration.



for Preparation Click here

CAUTION:

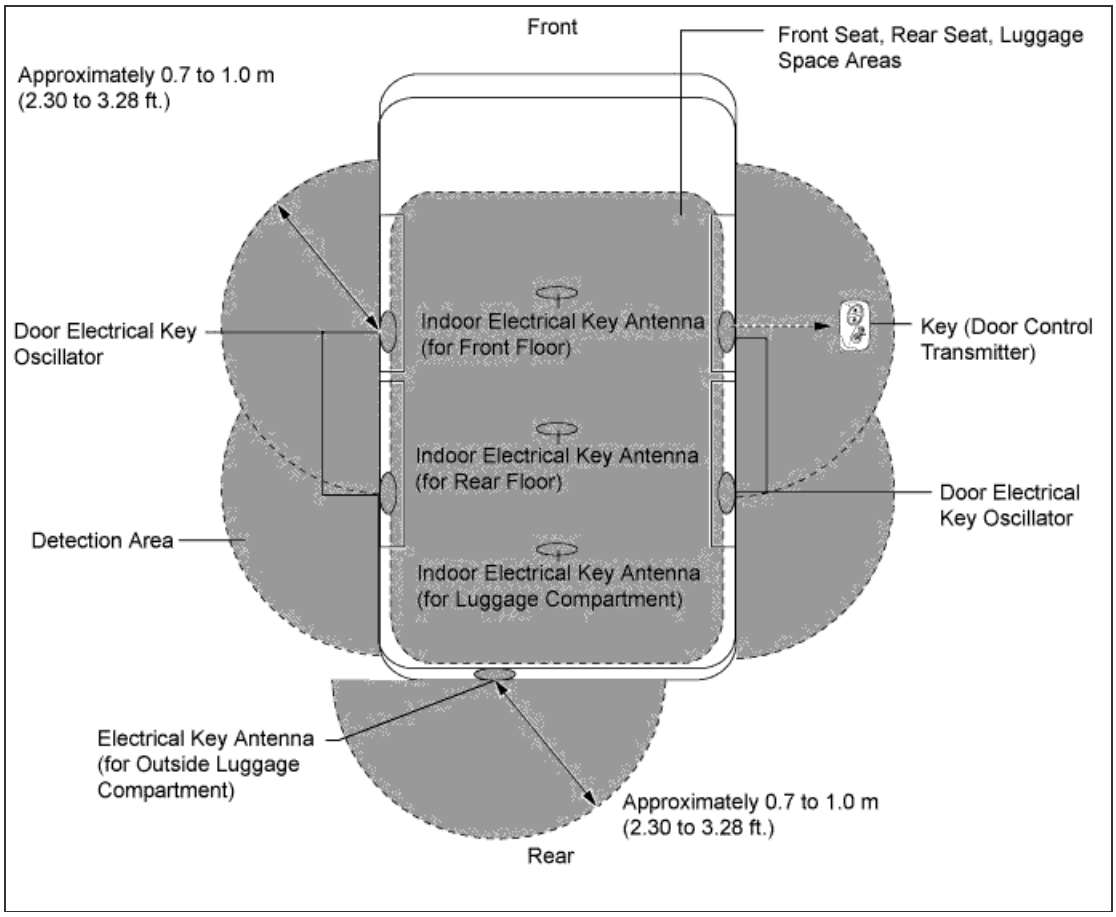
If using a pacemaker, be sure to read the manual of the pacemaker before using the key, as the radio waves of the key may affect the pacemaker.

ENTRY AND START SYSTEM DESCRIPTION

a. In addition to conventional mechanical key and wireless door lock control functions, the entry and start system enables door locking/unlocking, steering lock releasing, engine control system starting and back door opening without operating the key. The only requirement is that the key is in the possession of the user.

- This system is controlled by the certification ECU (smart key ECU assembly). When the certification ECU (smart key ECU assembly) detects the presence of the key in one of the detection areas, it identifies and checks the ID code, and outputs operation signals to the related ECU in accordance with their functions.
- For vehicle with rear entry function:
  The detection areas are formed by 4 oscillators and 4 antennas (4 door oscillators, the back door antenna and 3 indoor antennas).
- For vehicle without rear entry function:
  The detection areas are formed by 2 oscillators and 4 antenna (2 door oscillators, back door antenna and 3 indoor antennas).

DETECTION AREA



a. Precautions for the entire system:

- Be sure to carry the key during inspection of the entry and start system.
- As weak radio waves are used to detect the key, the key detection area may decrease, or the key may not be detected correctly in the following situations.
  1. The key battery is depleted.
  2. Any facilities that generate strong radio waves, such as a TV tower, power plant, broadcast station or gas station, are located near the inspection site.
  3. A wireless device, such as a cell phone, is carried with the key.
  4. The key is in contact with or covered with metal.
  5. Electric wave type keyless entry systems are being operated nearby.

6. The key is located near a device that generates high voltage or noise.
7. Film with some metallic content is stuck to the back glass.

HINT:

In this case, remove the cause or unlock the door using the mechanical key.

- Even if the key is in the vehicle exterior key detection area, the key may not operate properly due to the vehicle body design.
- The key may not be detected correctly if it is around the vehicle's windows, the door handle or center of the bumper, even when it is in the detection area outside the vehicle.
- The key may not be detected correctly if it is on the instrument panel, rear package tray or floor, or in the glove box, even when it is in the detection area inside the vehicle.
- The key may not operate if the key is not held properly.
- The entry and start system does not operate in the following conditions:
    1. The entry and start system is canceled.
    2. The key battery is completely depleted (the indicator does not blink when pushing any of the switches on the key).

FUNCTION OF MAIN COMPONENTS

Component	Function
Certification ECU (Smart key ECU assembly)	Controls the entry and start system in accordance with signals from each oscillator, various switches, ECUs and the key. • Performs key verification. • Performs vehicle interior/exterior transmission. • Performs occupant sensor control. • Sends lock/unlock commands during entry function. • Sends steering lock/unlock commands. • Sends immobiliser set/unset commands. • Records verification codes.
Main body ECU	Controls the power source mode function in accordance with signals from various switches, ECUs and the combination meter. • Controls the ACC/IG power source by turning it on/off. • Sends an engine start command to the ECM. • Controls the indicator and word illumination of the engine switch. • Activates starter relay.
ID code box (Immobiliser code ECU)	• Receives a command from the certification ECU (smart key ECU assembly), and sends an immobiliser set/unset command to the ECM. • Records verification codes.
Indoor electrical key antenna (for front floor, rear floor and luggage compartment)	Receives a request signal from the certification ECU (smart key ECU assembly), and forms the detection area in the vehicle interior.
Door control receiver	Receives the ID code from the key in the actuation area and transmits it to the certification ECU (smart key ECU assembly).
Electrical key antenna (for outside luggage compartment)	Receives a request signal from the certification ECU (smart key ECU assembly), and forms the actuation area around the back door.
Back door opener switch	Transmits a back door open request signal to the main body ECU.
Back door lock switch	Transmits a back door lock request signal to the certification ECU (smart key ECU assembly).
Door electrical key oscillator (for driver, front passenger, rear LH, rear RH side doors)	Receives a request signal from the certification ECU (smart key ECU assembly), and forms the detection area around each door.
Outside door handle (for driver, front passenger, rear LH, rear RH side doors) (antenna)	Transmits request signals.
Outside door handle (for driver, front passenger, rear LH, rear RH side doors) (touch sensor)	Detects when a person touches the inside of the outside handle.
Outside door handle (for driver, front passenger, rear LH, rear RH side doors) (lock switch)	Transmits door lock request signals to the certification ECU (smart key ECU assembly).
Key	• When an LF wave*1 that is output from the vehicle interior/exterior antenna is received, RF wave*2 format conversion is performed on the key ID, vehicle ID and other information, and an RF wave*2 is then output. • When the lock/unlock switch on the key is pressed, the signal is converted to an RF wave*2 and is then output. • When the wave output from the engine switch immobiliser amplifier is received, the key ID, vehicle ID and other information is output through immobiliser communication. • The key is equipped with a mechanical key for unlocking

	doors when the battery is fully depleted.
Wireless door lock buzzer Combination meter • Multi-information Display • Buzzer	When the certification ECU (smart key ECU assembly) detects human errors such as those below, it warns the driver by sounding the wireless door lock buzzer*, displays information and sounds the buzzer in accordance with the request signal from the ECU. *: Except China Example: • Key is taken outside the vehicle. • Driver leaves the vehicle while the engine is still running. • Driver leaves the vehicle while the shift lever is in a position other than P.

HINT:

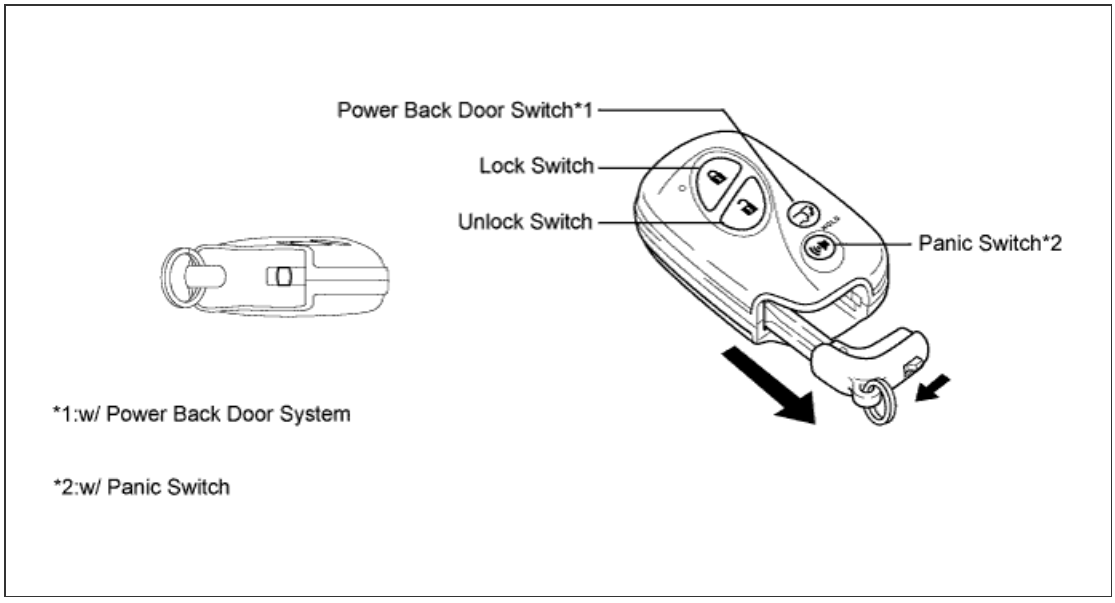
- ***1: LF waves (134 KHz) check if the key is in the vehicle interior or not.**
- ***2: RF waves (314.35 MHz for Australia, 433.92 MHz for Europe and the Middle and Near East, and 315.12 MHz for China) are emitted from the key in response to the LF waves, and are sent to the door control receiver.**

CONSTRUCTION AND OPERATION

a. Key:
A total of 7 keys can be registered.

i. Electrical key transmitter:
The electrical key transmitter consists of a mechanical key, a transmitter function for the wireless door lock control and a transceiver for the entry and start system.

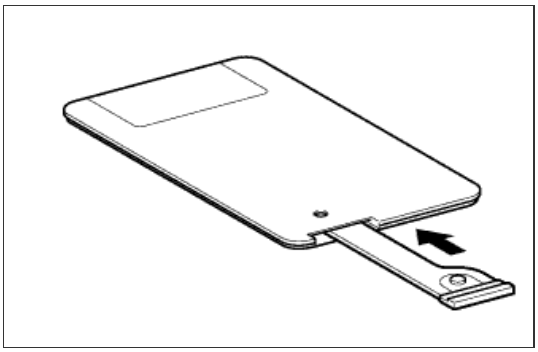
- The transceiver function for the entry and start system receives the signals from the oscillators and sends the ID code to the door control receiver.
- The transmitter function for the wireless door lock control has a lock switch, unlock switch and panic switch.
- This mechanical key can lock/unlock all the doors. To lock or unlock the doors, remove the cap from the driver door outside handle, insert the key into the door key cylinder, and then turn it to the lock or unlock position.



ii. Card type key:
The card type key consists of a mechanical key and a transceiver for the entry and start system.

- The transceiver function for the entry and start system receives the signals from the oscillators and sends the ID

code to the door control receiver.
- This mechanical key works for the driver door and glove box, but cannot start the engine.



b. Oscillator (each door oscillator, front floor, rear floor and luggage compartment indoor antenna, and back door outside antenna)
Each oscillator transmits the request signal received from the certification ECU (smart key ECU assembly), and forms a key detection area to detect the presence of a key. The detection area formed by each door oscillator and back door outside antenna is approximately 0.7 to 1.0 m (2.30 to 3.28 ft.) from the outside handle of each door or the center of the rear bumper.

- The detection area of each door oscillator is formed by transmitting a request signal every 0.25 seconds while the engine switch is off and each door is locked. In this way, it detects the proximity of a key. During entry lock, the detection area is formed with the lock switch on.
- The detection area of the back door antenna is formed when the back door opener switch is on.
- The detection area of the indoor antenna (for front floor, rear floor and luggage compartment) is formed when the driver door is opened or closed, during starting, when a warning is activated, or when the lock switch is on.

ENTRY FUNCTION OPERATION

a. The entry and start system has the following functions.

Function	Outline
Mechanical Key	Operation is the same as a conventional mechanical key.
Wireless Door Lock Control	This function remotely locks and unlocks all doors and the back door. Operation is the same as the wireless door lock control system. However, receiver in the certification ECU (smart key ECU assembly) uses the entry door control receiver to control locking and unlocking.
Entry Illumination	When a person carrying the key enters the detection area, the door will enter unlock standby mode and room light and door mirror foot light will illuminate.
Entry Unlock	When the key is located in the detection area of the door oscillator, the door will unlock by touching the inside of the outside door handle.
Entry Unlock Mode Switching (Click here)	Changes the doors that can be unlocked with the entry unlock function between 2 modes. • Driver door unlock mode • All door unlock mode
Entry Lock	When the key is located in the detection area of the door oscillator and the engine switch is off, the door can be locked by pressing the lock switch on the outside door handle.
Entry Back Door Open	When the key is in the detection area of the back door outside antenna, the back door opens by pressing the back door opener switch.
Memory Call	This function operates the driving position memory system in accordance with the key ID code.
• Power Window Close Function • Sliding Roof Close Function	Pressing the door handle entry lock switch for approximately 3 seconds or more causes all power windows and the sliding roof to close while sounding the wireless buzzer*.
Key Lock-in Prevention	Prevents lock-in of the key if the door is locked using the outside door handle while the key is still inside the vehicle.
Warning	When any of the situations below occur, the entry and start system causes the certification ECU (smart key ECU assembly) to sound the buzzer in the combination meter and the wireless door lock buzzer*, and display information in order to alert the driver. • Shift lever not in P (power source cut reminder) vehicle exit warning • Key reminder warning • Shift lever in P (power source cut reminder) vehicle exit warning • Entry door ajar warning • Passenger has brought key out of vehicle warning • Key is not within detection area warning • Key lock-in prevention function buzzer • Key battery low warning
	If the key is constantly located within the actuation area of the door oscillator, the system maintains periodic communication

Battery Saving	with the key. Therefore, if the vehicle remains parked in that state for a long time, key battery and vehicle battery could be drained. For this reason, the vehicle has controls for saving battery power.
Key Cancel (Click here)	The following key functions can be canceled: • Entry Unlock/Lock • Entry Ignition • Memory Call • Entry Back Door Open • Key Lock-in Prevention • Warning

*: except China

WIRELESS DOOR LOCK AND UNLOCK AND POWER BACK DOOR*1 AND PANIC*2 FUNCTION

Push the lock/unlock/power back door*1/panic*2 switch on the key to operate each function.
*1: w/ Power Back Door System
*2: w/ PANIC Switch

ENTRY UNLOCK FUNCTION

a. The detection area is formed by communication between a door oscillator and the certification ECU (smart key ECU assembly) when the door is locked in order to detect the person carrying the key.

b. When the person carrying the key enters the detection area around the vehicle, the matching of the ID codes for a door oscillator and key will automatically be performed. After the matching is completed, the door will enter unlock standby mode.

c. In unlock standby mode, the antenna built into the outside handle starts sensing. If the outside handle is held (the back side of the handle is touched), the door unlock operation will be performed. At this time, the hazard warning light blinks twice and the wireless door lock buzzer sounds twice*.
*: except Europe and China

d. If any of the doors are not opened after a door unlock operation, all doors will automatically lock after 30 seconds.

ENTRY LOCK FUNCTION

a. After leaving the vehicle carrying the key, push the lock switch on the outside handle when all the doors are closed.

b. The certification ECU (smart key ECU assembly) determines whether the key is located inside or outside of the cabin based on the information from a door oscillator and indoor antenna. Then matching of the ID codes is performed.

c. When the matching result shows that the ID codes of the key and indoor antenna do not match and the ID codes of the key and door oscillator match, the door lock function will operate. At this time, the hazard warning lights blink once and the wireless door lock buzzer sounds once*.
*: except Europe and China

d. If the key is located inside of the cabin, the door lock function will not operate and the alarm buzzer (beep sound) will sound for 2 seconds*.
*: except China

ENTRY BACK DOOR OPEN FUNCTION

Stand in front of the back door with the key and push the back door opener switch to start the matching of the ID codes for the back door antenna. If the ID codes match, the back door open operation will be performed.

PREVENTION OF KEY LOCK-IN FUNCTION

a. If you attempt to lock the door through keyless operation (move the lock knob to the lock position and then close the door) with the key in the cabin, the system determines that the key is located in the cabin and unlocks the door.

b. If the back door is closed with the key in it, the alarm will sound and the back door can be opened only when all the doors are locked in order to prevent key lock-in in the vehicle.

ENTRY ILLUMINATION FUNCTION

In order to improve ease of entering and exiting the vehicle at night, the vehicle lights illuminate when the key is brought near the vehicle.

ENTRY POWER WINDOW FUNCTION

a. Pressing the door handle lock switch for 3 seconds or more operates the door window close operation of all of the windows and the sliding roof close operation.

b. If the entry power window function is operating and the door handle lock switch is released, the entry power window operation will stop.

HINT:

For more information about the entry power window function, refer to the Power Window Control System (Click here).

MEMORY CALL FUNCTION

a. After unlocking the driver door using the key ID and opening the driver door, the seat automatically moves to the position associated with the key ID.

HINT:

For more information about the memory call function, refer to the Front Power Seat Control System (Click here).

WARNING FUNCTION

a. General:
When any of the situations below occur, the entry and start system responds to alert the driver.

Warning Function Operation Condition	Situation
Shift lever not in P (power source cut reminder) vehicle exit warning	A
Key reminder warning	B
Shift lever in P (power source cut reminder) vehicle exit warning	C
Entry door ajar warning	D
Passenger has brought key out of vehicle warning	E
Key is not within detection area warning	F
Key lock-in prevention function buzzer	G
Key battery low warning	H

b. Situation A:
Shift lever not in P (power source cut reminder) vehicle exit warning

i. With shift lever not in P, door is opened and vehicle exit (while holding key) is attempted

Reason for warning: Sudden vehicle start prevention, vehicle theft prevention, vehicle roll-away prevention			
Warning start condition: Shift lever is not in P, engine switch is on (ACC) or on (IG), driver side door is opened and vehicle speed is 5 km/h or less (3.107 mph)			
Warning stop condition: Engine switch is off, shift lever is in P, vehicle speed is above 0 km/h (0 mph), or driver side door is closed			
Warning description	Combination meter buzzer	Multi-buzzer	Sounds continuously (beep)
	Combination meter display	Combination meter information	"Shift to P Range"
		Telltale	None
	Wireless buzzer	None	
Recommended user action		Move shift lever to P	

ii. With shift lever not in P, door is opened, key is brought out of vehicle, door is closed, and movement away from vehicle is attempted

Reason for warning: Sudden vehicle start prevention, vehicle theft prevention, vehicle roll-away prevention			
Warning start condition: Shift lever is not in P, engine switch is on (ACC) or on (IG), opened driver side door is closed, vehicle speed is 0 km/h (0 mph) and key is not in detected in vehicle interior and luggage interior			
Warning stop condition: • Key is detected in vehicle interior and luggage interior: Buzzer stops and "Shift to P Range" is displayed on combination meter • Vehicle speed is more than 0 km/h (0 mph): Buzzer stops, "Key is not detected" - "Check key position" is displayed on combination meter • Engine switch off: All warnings are turned off			
Warning description	Combination meter buzzer	Multi-buzzer	Sounds continuously (beep)
	Combination meter display	Combination meter information	Information below is displayed alternately on combination meter "Shift to P Range" "Key is not detected" -

			"Check key position"
		Telltale	None
	Wireless buzzer	Sounds continuously (beep)* *: except China	
Recommended user action		Move shift lever to P	

c. Situation B:
Key reminder warning

i. Steering lock/unlock set, driver door is opened and movement away from vehicle is attempted

Reason for warning: Vehicle theft prevention, required by law			
Precondition: Remote start is not operating			
Warning start condition: One of following conditions is met 1. Engine switch on (ACC) or off, and driver door opened 2. Engine switch off, steering lock/unlock set and driver door opened			
Warning stop condition: One of following conditions is met 1. Engine switch is on (IG) or driver door is closed 2. Engine switch on (ACC) or off, and steering lock/unlock is set			
Warning description	Combination meter buzzer	Multi-buzzer	Sounds intermittently (several "pon" sounds)
	Combination meter display	Combination meter information	None
		Telltale	None
	Wireless buzzer	None	
Recommended user action		If engine switch is on (ACC) or on (IG), turn engine switch off and close driver door	

d. Situation C:
Shift lever in P (power source cut reminder) vehicle exit warning

i. With shift lever in P, driver door is opened, key is brought out of vehicle, driver door is closed, and movement away from vehicle is attempted

Reason for warning: Vehicle theft prevention, "Engine control system cannot be restarted" prevention, battery depletion prevention			
Warning start condition: Shift lever is in P, engine switch is on (ACC) or on (IG), opened driver side door is closed and key is not in detected in vehicle interior and luggage interior			
Warning stop condition: Engine switch on (ACC) or off, or key is detected in vehicle interior and luggage interior			
Warning description	Combination meter buzzer	Multi-buzzer	Sounds once (1 "pon" sound) (when key is not detected continuously, sounds again when vehicle is first driven)
	Combination meter display	Combination meter information	"Key is not detected" - "Check key position"
		Telltale	None
	Wireless buzzer	Sounds 3 times (short beeps)* *: except China	
Recommended user action		Turn engine switch off and exit vehicle while holding key	

ii. With shift lever in P and either engine switch on (ACC) or steering lock/unlock set, driver door is opened, user moves away from vehicle, and door handle lock switch is pressed in an attempt to perform entry lock operation

Reason for warning: Vehicle theft prevention, battery depletion prevention			
Precondition: Change door control lock switch from off to on			
Warning start condition: Shift lever is in P, engine switch is on (ACC) or on (IG), all doors are closed, key is detected in vehicle exterior, key is not detected in vehicle interior and vehicle speed is 0 km/h			
Warning stop condition: One of following conditions is met 1. Engine switch off. 2. Key is detected in vehicle interior and luggage interior. 3. Vehicle speed is more than 0 km/h. 4. Shift lever is not in P.			
Warning description	Combination meter buzzer	Multi-buzzer	None
	Combination meter display	Combination meter information	None

		Telltale	None
	Wireless buzzer	Sounds for 60 seconds (long beep)* *: except China	
Recommended user action		Turn engine switch off and perform entry lock operation	

e. Situation D:
Entry door ajar warning

i. With one vehicle door open, entry lock operation is attempted

Reason for warning: Vehicle theft prevention			
Precondition: Engine switch on (ACC) or off, and one door open			
Warning start condition: After preconditions are met, entry lock operation is performed			
Warning stop condition: Engine switch is on (ACC) or on (IG), all doors are closed, wireless unlock is performed, entry unlock operation is performed or 10 seconds have passed after warning start			
Warning description	Combination meter buzzer	Multi-buzzer	None
	Combination meter display	Combination meter information	None
		Telltale	None
	Wireless buzzer	Sounds for 10 seconds (long beep)* *: except China	
Recommended user action		Close all doors and perform entry lock operation	

f. Situation E:
Passenger has brought key out of vehicle warning

i. With engine switch in condition other than off, key is brought out of vehicle by passenger

Reason for warning: "Engine control system cannot be started" prevention			
Warning start condition: Engine switch is on (ACC) or on (IG), opened door other than driver side door is closed, vehicle speed is 0 km/h (0 mph) and key is not in detected in vehicle interior and luggage interior			
Warning stop condition: Engine switch on (ACC) or off, or key is detected in vehicle interior and luggage interior or vehicle speed is more than 0 km/h (0 mph)			
Warning description	Combination meter buzzer	Multi-buzzer	Sounds once (1 "pon" sound) (when key is not detected continuously, sounds again when vehicle is first driven)
	Combination meter display	Combination meter information	"Key is not detected" - "Check key position"
		Telltale	Illuminates
	Wireless buzzer	Sounds 3 times (short beeps)* *: except China	
Recommended user action		Check if the passenger who exited the vehicle has the key or not	

g. Situation F:
Key is not within detection area warning

i. With key not in vehicle cabin or key battery depleted, engine switch on (ACC) or on (IG) operation is attempted

Reason for warning: User confusion prevention			
Warning condition: Engine switch is not off and key is not detected in vehicle interior			
Warning description	Combination meter buzzer	Multi-buzzer	Sounds once (1 "pon" sound)
	Combination meter display	Combination meter information	"Key is not detected" - "Check key position" is displayed for 10 seconds, then display ends
		Telltale	None
	Wireless buzzer	None	
		Check if the key is within the detection area of the vehicle cabin If key is within the vehicle interior, built-in battery may be depleted	

Recommended user action	If wireless door lock switch on key is pressed, check if indicator on key illuminates If indicator does not illuminate, replace the built-in battery It is recommended that battery be bought at dealer, but battery can be replaced according to user preference

h. Situation G:
Key lock-in prevention function buzzer (for cabin)

i. With key in vehicle cabin, vehicle is exited and door handle lock switch is pressed in an attempt to perform entry lock operation

Reason for warning: Key reminder vehicle theft warning prevention			
Warning condition: Engine switch off, all doors closed, door handle lock switch on and key is detected in vehicle interior			
Warning description	Combination meter buzzer	Multi-buzzer	None
	Combination meter display	Combination meter information	None
		Telltale	None
	Wireless buzzer	Sounds for 2 seconds (long beep)* *: except China	
Recommended user action		Pick up key that is in vehicle interior and perform entry lock operation again	

i. Situation H:
Key battery low warning

i. Key with almost depleted battery is used to drive vehicle

Reason for warning: Helpful function			
Warning condition: After engine switch not off condition continues for 20 minutes or more, engine switch is changed from not off to off, key battery is low and key is detected in vehicle interior			
Warning description	Combination meter buzzer	Multi-buzzer	Sound once (1 "pon" sound)
	Combination meter display	Combination meter information	"Low Key Battery" - "Have your vehicle checked by a dealer" is displayed for 10 seconds, then display ends
		Telltale	None
	Wireless buzzer	None	
Recommended user action		Replace key built-in battery with new one It is recommended that battery be bought at dealer, but battery can be replaced according to user preference	

BATTERY SAVING

a. Vehicle battery saving function:
In the entry and start system, signals are emitted outside of the vehicle at a prescribed interval (0.25 seconds) when the doors are locked. Therefore, the vehicle battery could be drained if the vehicle remains parked for a long time. For this reason, the controls listed below exist.

Condition	Control
Both conditions below are met for 10 days: • Key is not in detection area • Touch sensor or lock switch operation is not performed	Signal transmission interval is extended from 0.25 to 0.75 seconds
Both conditions below are met for 15 days: • Key is not in detection area • Touch sensor or lock switch operation is not performed	Signal transmission interval is extended from 0.75 to 2.25 seconds
Both conditions below are met for 30 days: • Key is not in detection area • Touch sensor or lock switch operation is not performed	Automatically deactivates the entry and start system

Reinstatement Conditions:

- A wireless door lock control signal (lock, unlock) is input and the ID matches.
- A user carries the key and pushes a lock switch on an outside door handle.

- The driver door is locked or unlocked by the mechanical key.

b. Key battery and vehicle battery saving function:
In the entry and start system, if the key is constantly located within the vehicle exterior detection area of the doors, the system maintains periodic communication with the key. Therefore, if the vehicle remains parked in that state for a long time, the key battery and the vehicle battery could be drained. For this reason, if this state continues for more than 10 minutes, the entry and start system automatically becomes deactivated.
Reinstatement Conditions:

- A wireless door lock control signal (lock, unlock) is input and the ID code matches.
- A user carries the key and pushes a lock switch on an outside handle.
- The driver door is locked or unlocked by the mechanical key.

KEY DIAGNOSTIC MODE (Using the intelligent tester)

HINT:

Key diagnostic mode checks if the electrical key transmitter within a selected oscillator/antenna detection area is operating normally. The results are output through the wireless door lock buzzer (in the right front fender).

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Entry&Start / Key Communication Check.

e. Check the values by referring to the table below.

Entry&Start

Tester Display	Inspection Range
Overhead + Driver Side*1	Door electrical key oscillator (for Driver Side)
Overhead + Passenger Side*2	Door electrical key oscillator (for Front Passenger Side)
Overhead + Driver Side Rear*3	Door electrical key oscillator (for Driver Side Rear)
Overhead + Passenger Side Rear*4	Door electrical key oscillator (for Passenger Side Rear)
Overhead + Front Room*5	Indoor electrical key antenna (for Front Floor)
Overhead + Rear Room*6	Indoor electrical key antenna (for Rear Floor)
Overhead + Back Door (inside)*7	Indoor electrical key antenna (for luggage compartment)
Overhead + Back Door (outside)*8	Back door electrical key antenna (for outside luggage compartment)

f. When the electrical key transmitter is brought near the selected oscillator/antenna, check that the wireless door lock buzzer sounds.

i. *1: Door electrical key oscillator (for Driver Side)

HINT:

- **Hold the key at the same height as the door outside handle (0.7 to 1.0 m (2.30 to 3.28 ft.)). Pay attention to the direction of the key in the illustration.**
- ***2: Perform the same inspection above for the door electrical key oscillator (front passenger seat outside transmitter).**
- ***3: Perform the same inspection above for the door electrical key oscillator (driver side rear seat outside transmitter).**
- ***4: Perform the same inspection above for the door electrical key oscillator (passenger side rear seat outside transmitter).**

ii. *5: Indoor electrical key antenna (front inside transmitter)

HINT:

Place the electrical key transmitter on the driver or front passenger seat cushion.

iii. *6: Indoor electrical key antenna (rear inside transmitter)

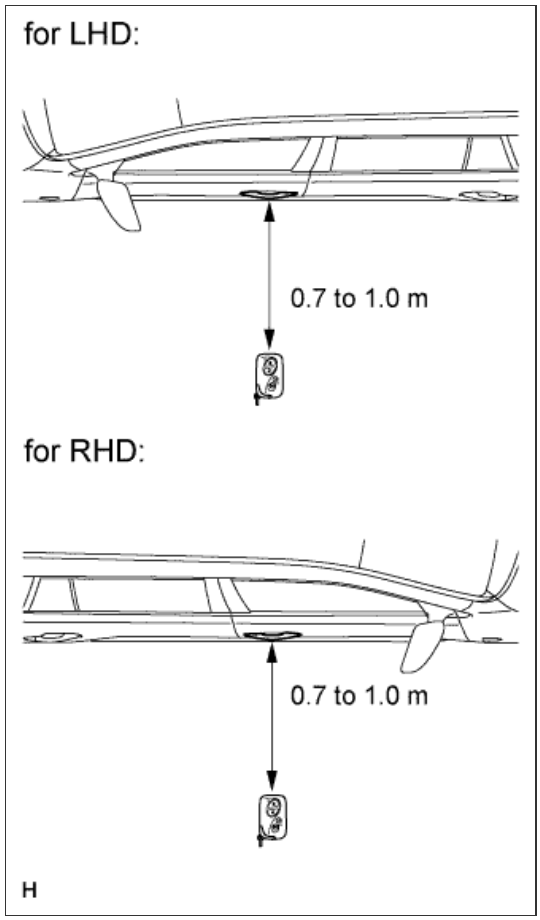
HINT:

Place the electrical key transmitter on the rear no. 1 seat cushion.

iv. *7: Indoor electrical key antenna (for luggage compartment inside transmitter)

HINT:

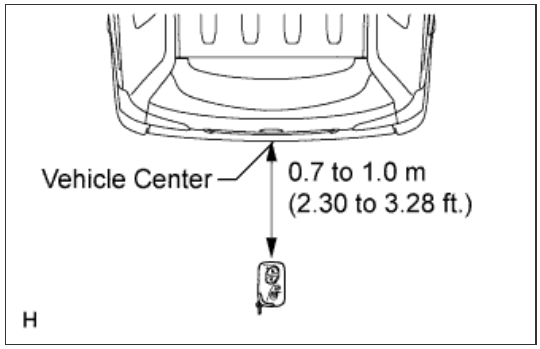
Place the electrical key transmitter on the rear no. 2 seat cushion.



v. *8: Electrical key antenna (for outside luggage compartment)

HINT:

Hold the electrical key transmitter at the same height as the rear bumper upper surface and aligned with the center of the rear of the vehicle, as shown in the illustration.



for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the entry and start system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.INSPECT COMMUNICATION FUNCTION OF CAN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the CAN communication system is functioning normally.

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B. Go to CAN COMMUNICATION SYSTEM (Click here)

C. Go to CAN COMMUNICATION SYSTEM (Click here)

A

4.INSPECT COMMUNICATION FUNCTION OF LIN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the LIN communication system is functioning normally.

Result

Result	Proceed to
LIN DTC is not output	A
LIN DTC is output	B

B. Go to LIN COMMUNICATION SYSTEM (Click here)

A

5.CHECK FOR DTC*

a. Check for DTCs. Based on the DTCs output, try to cause the output of the same steering lock system DTC or engine immobiliser system DTC by simulating the symptoms indicated by the DTC.

Result

Result	Proceed to
DTC is not output	A
Steering lock system DTC is output	B
Engine immobiliser system DTC is output	C

B. Go to STEERING LOCK SYSTEM (Click here)

C. Go to ENGINE IMMOBILISER SYSTEM (Click here)

A

6.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. Go to step 8

A

7.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Operation Check (Click here)

b. Data List / Active Test (Click here)

c. Terminals of ECU (Click here)

NEXT

8.REPAIR OR REPLACEMENT

NEXT

9.CONFIRMATION TEST

NEXT

END

for Preparation Click here

ENTRY AND START SYSTEM OPERATION INSPECTION

a. Check the entry unlock function.

i. Use the wireless lock operation to lock the doors. With the key in your possession, touch a door outside handle (touch sensor) and check that the door unlocks.

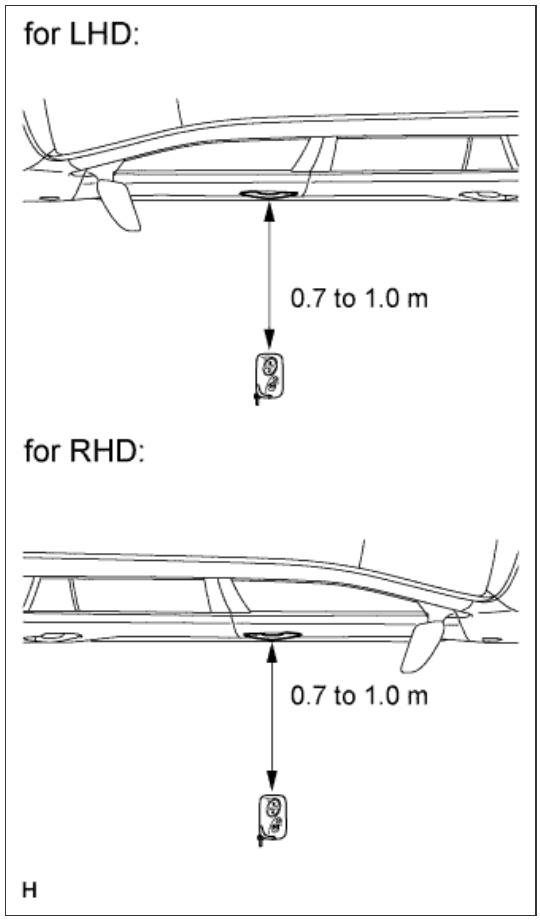
b. Check the entry unlock operation detection area.

i. Step 1: Hold the key at the same height as the door outside handle (approximately 0.8 m (2.62 ft.)). Pay attention to the direction of the key in the illustration.

ii. Step 2: Check that when the key is brought within 0.7 to 1.0 m (2.30 to 3.28 ft.) of the vehicle, the system enters unlock standby mode.

HINT:

Unlock standby mode is signified by the red LED of the key illuminating.



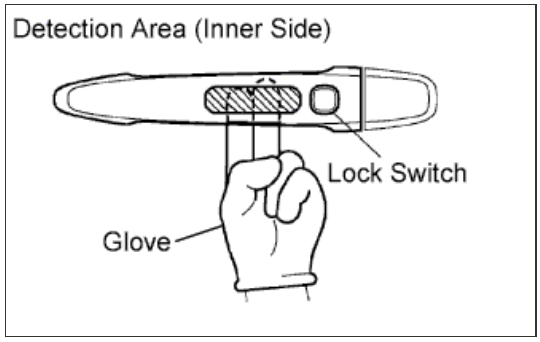
iii. Step 3: After the system enters unlock standby mode, touch the sensor on the outside handle within 3 seconds. Check that the door unlocks.

NOTICE:

The key may not be able to communicate with the system within a 0.2 m (0.656 ft.) radius of each outside handle.

iv. Step 4: Repeat step 2 and step 3 for the remaining doors.

v. Step 5: Inspect the door electrical key oscillator response sensitivity. Wear protective gloves, set the system to unlock standby mode, and check that touching the inner side of the outside handle (the



highlighted area in the illustration) with your finger causes the door to unlock.

NOTICE:

When touching the highlighted area, tapping too quickly or having extended contact may not trigger the sensor. In such a case, the door will not unlock.

vi. Step 6: Repeat step 5 for the remaining doors.

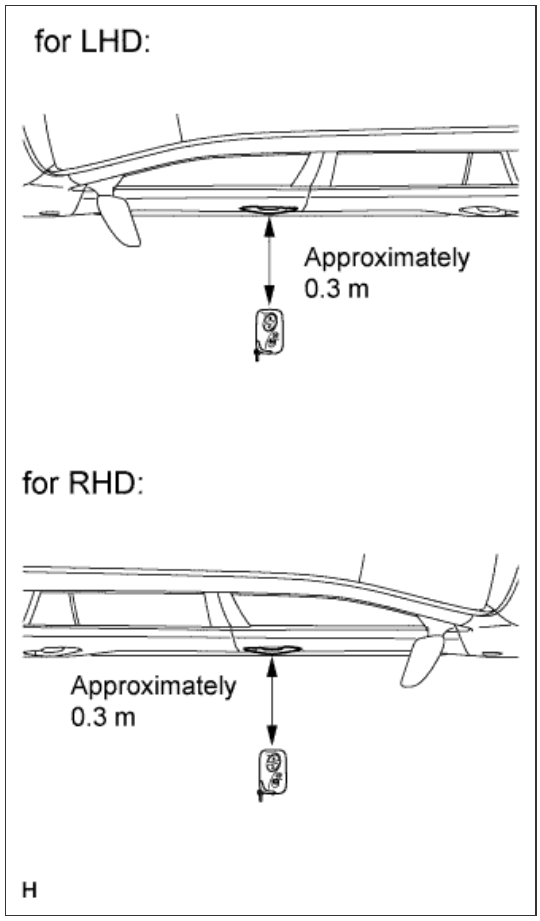
c. Check the entry lock function.

i. Step 1: Close all of the vehicle doors. With the key in your possession outside of the vehicle, check that pressing the lock switch locks the doors.

HINT:

- **When pressing the lock switch, hold the electrical key transmitter about 1 m (3.28 ft.) above the ground and about 0.3 m (0.984 ft.) away from the vehicle as shown in the illustration.**
- **Due to the key being unable to communicate with the system within a 0.2 m (0.656 ft.) distance from the outside handle, do not press the lock switch with the same hand that is holding the key. The doors may not lock.**
- **If the key lock-in prevention function buzzer sounds*, radio waves from the indoor electrical key antenna may be leaking from the vehicle.**
  ***: except China**

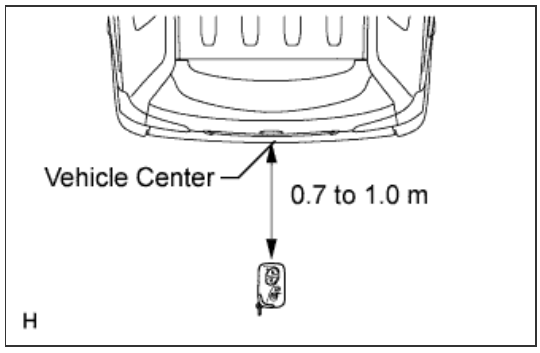
ii. Step 2: Repeat step 1 for the remaining doors.



d. Check the entry back door unlatch function.

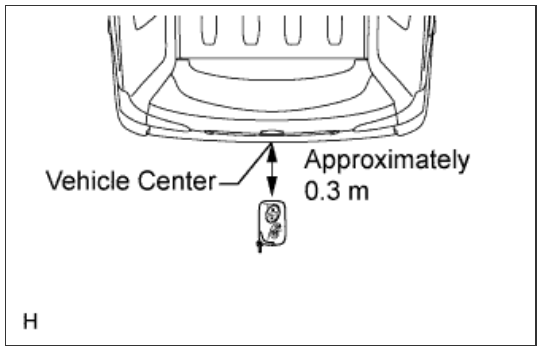
i. Close all the doors and the back door. With the key in your possession, check that pressing the back door opener switch unlocks all the doors and unlatches the back door.

ii. Inspect the detection area of the entry back door open operation. Hold the key at the same height as the back door opener switch (approximately 0.8 m (2.62 ft.)) and aligned with the center of the rear of the vehicle. Pay attention to the direction of the key shown in the illustration. Check that the when the key is brought within 0.7 to 1.0 m (2.30 to 3.28 ft.) of the vehicle, pressing the back door opener switch unlocks all the doors and unlatches the back door.



e. Check the entry back door lock function.

i. Step 1: Close all of the vehicle doors. With the key in your possession outside of the vehicle, check that pressing the back door lock switch locks all the doors.



HINT:

- **When pressing the lock switch, hold the electrical key transmitter about 1 m (3.28 ft.) above the ground and about 0.3 m (0.984 ft.) away from the vehicle as shown in the illustration.**
- **Due to the key being unable to communicate with the system within a 0.2 m (0.656 ft.) distance from the center of the rear of the vehicle, do not press the lock switch with the same hand that is holding the key. The doors may not lock.**
- **If the key lock-in prevention function buzzer sounds, radio waves from the indoor electrical key antenna may be leaking from the vehicle.**

f. Check the entry ignition function.

i. When the engine control system is off: With the key in your possession and the brake pedal depressed, check that pressing the engine switch releases the steering wheel lock and starts the engine control system.

HINT:

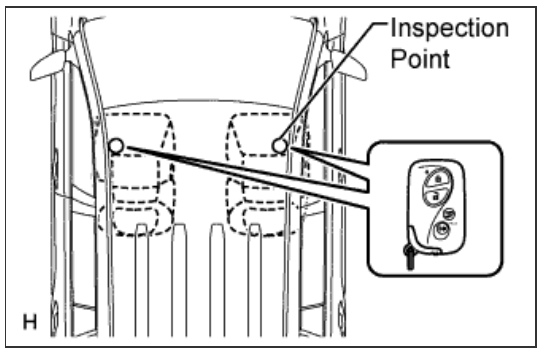
- **The engine control system can be started only when the engine switch indicator illumination in green.**
- **Even when not depressing the brake pedal, continually pressing the engine switch for 15 seconds when the engine switch is on (ACC) can start the engine control system.**

ii. When the engine control system is running: With the key in your possession, check that pressing the engine switch stops the engine control system and activates the steering wheel lock.

HINT:

The shift lever must be in P to be able to stop the engine control system.

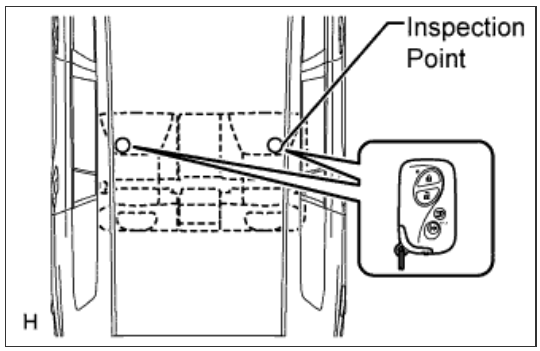
iii. Inspect the detection area of the entry ignition operation (front seat). Pay attention to the direction of the key in the illustration. When the key is in either of the 2 locations in the illustration, check that the engine control system can start.



NOTICE:

The engine control system cannot be started when the key is on the instrument panel or rear package tray, or in the glove box.

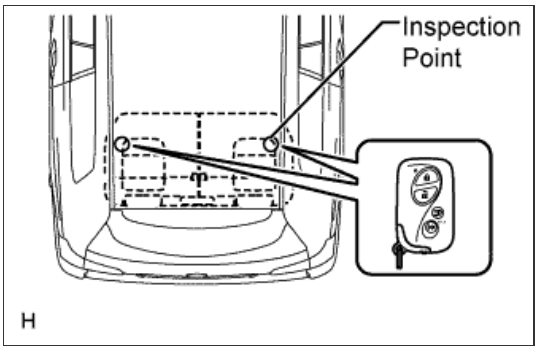
iv. Inspect the detection area of the entry ignition operation (rear no. 1 seat). Pay attention to the direction of the key in the illustration. When the key is in either of the 2 locations in the illustration, check that the engine control system can start.



NOTICE:

The engine control system cannot be started when the key is on the instrument panel or rear package tray, or in the glove box.

v. Inspect the detection area of the entry ignition operation (rear no. 2 seat). Pay attention to the direction of the key in the illustration. When the key is in either of the 2 locations in the illustration, check that the engine control system can start.



NOTICE:

The engine control system cannot be started when the key is on the instrument panel or rear package tray, or in the glove box.

g. Check the key lock-in prevention function.

NOTICE:

To prevent key lock-in, perform the inspection with one of the door windows open.

i. Place the key in the vehicle with all doors locked. Check that, when all the doors are locked through keyless operation (move the lock knob to the lock position and then close the door), the wireless buzzer sounds* for seconds and all the doors are unlocked.
*: except China

NOTICE:

If the key in inside a metal storage item, such as a metal briefcase or metal box, the key will not be able to be detected by the system.

h. Check the key cancel function.

i. While the engine switch is on (IG), check that the back door opener switch is the only switch in the entry and start system that can be operated.

ii. While the key cancel function (entry and start system cancel function) is on, check that all functions in the entry and start system cannot be operated.

i. Check the answer-back function (hazard warning light flashing and buzzer sounding).

Entry Operation	Hazard Warning Light	Buzzer*
Entry Door Lock	Flashes once	Sounds once
Entry Door Unlock	Flashes twice	Sounds twice
Entry Back Door Open	Flashes twice	Sounds twice

*: except Europe and China

j. Check that the key reminder warning buzzer sounds.

i. Carry the key in the vehicle and close the driver side door. Then turn the engine switch off or on (ACC).

ii. Open the driver side door and check that the buzzer sounds intermittently.

k. Check that the key reminder warning buzzer stops.

i. When the buzzer is sounding, check that the buzzer stops sounding if either of the following are performed:

- Close the driver side door (front door courtesy light switch is off).
- Turn the engine switch on (IG).

for Preparation Click here

CUSTOMIZING FUNCTION WITH INTELLIGENT TESTER

HINT:

The following items can be customized.

NOTICE:

- **When the customer requests a change in a function, first make sure that the function can be customized.**
- **Be sure to make a note of the current setting before customizing.**
- **When troubleshooting a function, first make sure that the function is set to the default setting.**

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Customize Setting.

e. Select the setting by referring to the table below.

Entry & Start

Display	Default	Contents	Setting
Park Wait Time*1	2.5s	Function that sets the waiting time to permit unlocking the door after the door is locked with the entry lock function.	0.5s/1.5s/2.5s/5s
Ignition Area*2	ALL	Function to choose the available area for the key to start the engine and cancel the steering lock.	FRONT/ALL*3
Back Door Opening Operation*4	LONG	The back door opening operation.	LONG/TWICE/OFF

Warning

Display	Default	Contents	Setting
Key Low Battery Warning*5	ON	Function that warns the driver that the key battery power is low.	ON/OFF

HINT:

*1: Waiting time to permit unlocking door after locking.

*2: Entry ignition available area.

*3: "FRONT" means front, and "ALL" means front floor, rear floor and luggage compartment.

*4: Back door open mode when vehicle is locked.

*5: Warn when key battery becomes weak.

ENTRY UNLOCK MODE SWITCHING FUNCTION

a. To use the entry unlock mode switching function, make sure the engine switch is off and simultaneously press and hold the lock switch on the key and another key switch for 5 seconds.

When the switches are pressed and held for 5 seconds, the entry door unlock mode changes in the following order: all door unlock mode, driver door unlock mode.

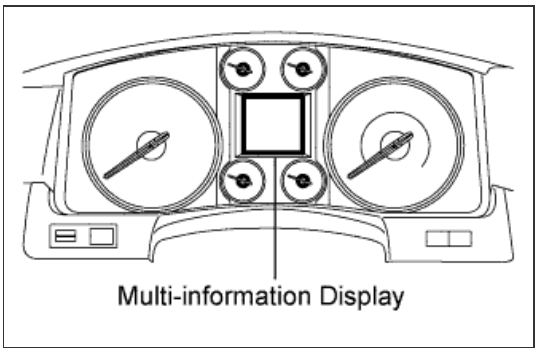
NOTICE:

After pressing and holding the switches for 5 seconds, wait 5 seconds before performing the same procedure again.

- All door unlock mode (default):
  When a touch sensor is touched, all doors unlock.
- Driver door unlock mode:
  When the driver door touch sensor is touched, only the driver door unlocks. When another touch sensor is touched, all doors unlock.

b. The certification ECU (smart key ECU assembly) receives this signal from the door control receiver and changes the entry and start system to the entry unlock mode.

c. The certification ECU (smart key ECU assembly) sounds the wireless door lock buzzer and combination meter buzzer to inform the user that the mode has been switched.



HINT:

The function only changes the entry unlock mode of the entry and start system. It does not switch the unlocking of the wireless door lock control.

- All door unlock mode:

Mode		All Doors (Default)
Wireless Door Lock Buzzer*		ON / OFF — Sounds 2 times
Combination Meter	Multi-information Display	Displayed for 4 seconds
	Buzzer	Sounds once

*: except China.

- Driver door unlock mode:

Mode		Driver Door (Customized)
Wireless Door Lock Buzzer*		Each interval approximately 0.13 seconds ON / OFF — Sounds 3 times 1 second
Combination Meter	Multi-information Display	Displayed for 4 seconds
	Buzzer	Sounds once

*: except China.

HINT:

The above illustration is for LHD vehicles. For RHD vehicles, the left side and right side are reversed.

KEY CANCEL

The key cancel operation disables the following functions:

- Entry Unlock/Lock
- Key Lock-in Prevention
- Memory Call
- Entry Back Door Open
- Warning
- Entry Ignition

a. The operation procedures are as follows:
Precondition:
Engine switch off, driver side door closed and unlocked.

i. Unlock the driver side door once with the unlock switch of the key.

ii. Open the driver door within 5 seconds.

iii. Unlock the driver side door twice with the unlock switch of the key within 5 seconds.

iv. Perform close → open twice for the driver door within 30 seconds.
(Driver door: Open condition → Close → Open → Close → Open)

v. Unlock the driver side door twice with the unlock switch of the key within 5 seconds.

vi. Perform close → open once for the driver door within 30 seconds.
(Driver door: Open condition → Close → Open)

vii. Close the driver door within 5 seconds.
When key cancel is activated, the wireless door lock buzzer sounds twice.
To return to the original condition, perform the procedures again. When the original condition is returned, the wireless door lock buzzer sounds once.

WIRELESS BUZZER VOLUME ADJUSTMENT (**Click here**).

for Preparation Click here

HINT:

- **Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.**
- **Inspect the fuses and relays related to this system before inspecting the suspected areas below.**

Entry and Start System

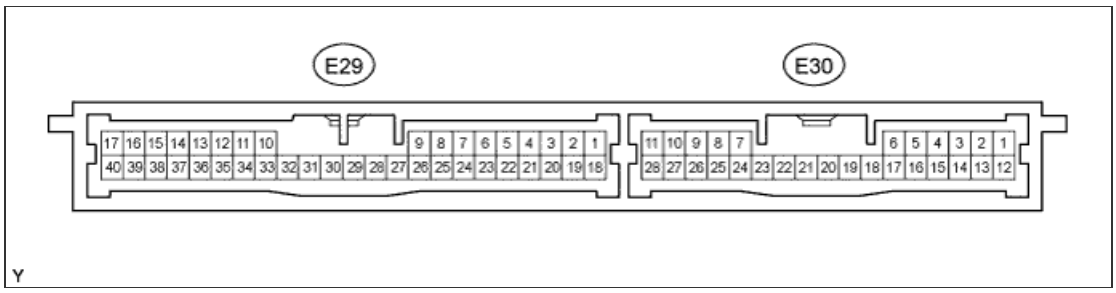
Symptom	Suspected Area	See page
Entry Answer-back Buzzer does not Sound	Wireless door lock control system	Click here
	Certification ECU (Smart key ECU assembly)	-
All Door Entry Lock/Unlock Functions and Wireless Functions do not Operate	Power door lock control system	Click here
	Door control transmitter	-
	Transmitter battery	-
	Fuse (IMB)	-
	Harness or connector	-
	Door control receiver	-
	Certification ECU (Smart key ECU assembly)	-
All Door Entry Lock/Unlock Functions do not Operate, but Wireless Functions Operate	Door control transmitter	Click here
	Certification ECU (Smart key ECU assembly)	-
Driver Side Door Entry Unlock Function does not Operate	Power door lock control system	Click here
	Door electrical key oscillator	-
	Door outside handle assembly (for Driver side)	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
Front Passenger Side Door Entry Unlock Function does not Operate	Power door lock control system	Click here
	Door electrical key oscillator	-
	Door outside handle assembly (for Front passenger side)	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
Rear Door LH Entry Unlock Function does not Operate	Power door lock control system	Click here
	Door electrical key oscillator	-
	Rear door outside handle assembly LH	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
Rear Door RH Entry Unlock Function does not Operate	Power door lock control system	Click here
	Door electrical key oscillator	-
	Rear door outside handle assembly RH	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
Driver Side Door Entry Lock and Unlock Functions do not Operate	Power door lock control system	Click here
	Door electrical key oscillator	-
	Door outside handle assembly (for Driver side)	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
	Power door lock control system	Click here

Front Passenger Side Door Entry Lock and Unlock Functions do not Operate	Door electrical key oscillator	-
	Door outside handle assembly (for Front passenger side)	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
Rear Door LH Entry Lock and Unlock Functions do not Operate	Power door lock control system	Click here
	Door electrical key oscillator	-
	Rear door outside handle assembly LH	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
Rear Door RH Entry Lock and Unlock Functions do not Operate	Power door lock control system	Click here
	Door electrical key oscillator	-
	Rear door outside handle assembly RH	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
Driver Side Door Entry Lock Function does not Operate	Power door lock control system	Click here
	Door electrical key oscillator	-
	Door outside handle assembly (for Driver side)	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
Front Passenger Side Door Entry Lock Function does not Operate	Power door lock control system	Click here
	Door electrical key oscillator	-
	Door outside handle assembly (for Front passenger side)	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
Rear Door LH Entry Lock Function does not Operate	Power door lock control system	Click here
	Door electrical key oscillator	-
	Rear door outside handle assembly LH	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
Rear Door RH Entry Lock Function does not Operate	Power door lock control system	Click here
	Door electrical key oscillator	-
	Rear door outside handle assembly RH	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
Room Oscillator does not Recognize Key	Indoor electrical key antenna (for front floor)	Click here
	Indoor electrical key antenna (for rear floor)	-
	Indoor electrical key antenna (for luggage compartment)	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
	Door control transmitter	-
Entry Interior Alarm does not Sound	Combination meter	Click here
	Certification ECU (Smart key ECU assembly)	-
Back Door Entry Unlock Function does not Operate	Power door lock control system	Click here
	Back door opener switch	-
	Back door electrical key antenna (for outside luggage compartment)	-
	Main body ECU	-
	Harness or connector	-
	Certification ECU (Smart key ECU assembly)	-
		Click

Back Door Entry Lock and Unlock Functions do not Operate	Power door lock control system	here
	Back door opener switch	-
	Back door electrical key antenna (for outside luggage compartment)	-
	Main body ECU	-
	Certification ECU (Smart key ECU assembly)	-
	Harness or connector	-
Back Door Entry Lock Function does not Operate	Power door lock control system	Click here
	Back door electrical key antenna (for outside luggage compartment)	-
	Certification ECU (Smart key ECU assembly)	-
	Main body ECU	-
	Harness or connector	-

for Preparation Click here

CHECK CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)



a. Disconnect the E29 ECU connector.

b. Measure the resistance and voltage of the wire harness side connector.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E29-17 (E) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E29-1 (+B) - Body ground	B - Body ground	+B power supply	Always	11 to 14 V
E29-18 (IG) - Body ground	B - Body ground	Ignition power supply	Engine switch off	Below 1 V
			Engine switch on (IG)	11 to 14 V
E29-3 (TSW1) - E29-17 (E)	G - W-B	Door outside handle (driver side) lock switch signal	Switch released	10 kΩ or higher
			Switch pressed in	Below 1 Ω
E29-4 (TSW2) - E29-17 (E)	BR - W-B	Door outside handle (front passenger side) lock switch signal	Switch released	10 kΩ or higher
			Switch pressed in	Below 1 Ω
E30-25 (TSW3) - E29-17 (E)	G - W-B	• Door outside handle (rear LH) lock switch signal*1 • Door outside handle (rear RH) lock switch signal*2	Switch released	10 kΩ or higher
			Switch pressed in	Below 1 Ω
E30-26 (TSW4) - E29-17 (E)	G - W-B	• Door outside handle (rear RH) lock switch signal*1 • Door outside handle (rear LH) lock switch signal*2	Switch released	10 kΩ or higher
			Switch pressed in	Below 1 Ω
E29-7 (TSW5) - E29-17 (E)	L - W-B	Back door lock switch signal	Switch released	10 kΩ or higher
			Switch pressed in	Below 1 Ω

*1: for LHD
*2: for RHD

If the result is not as specified, the wire harness side may have a malfunction.

c. Reconnect the E29 ECU connector.

d. Measure the voltage of the connector.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
		Door electrical key	All doors closed, all doors locked and engine	Alternating between 5 V

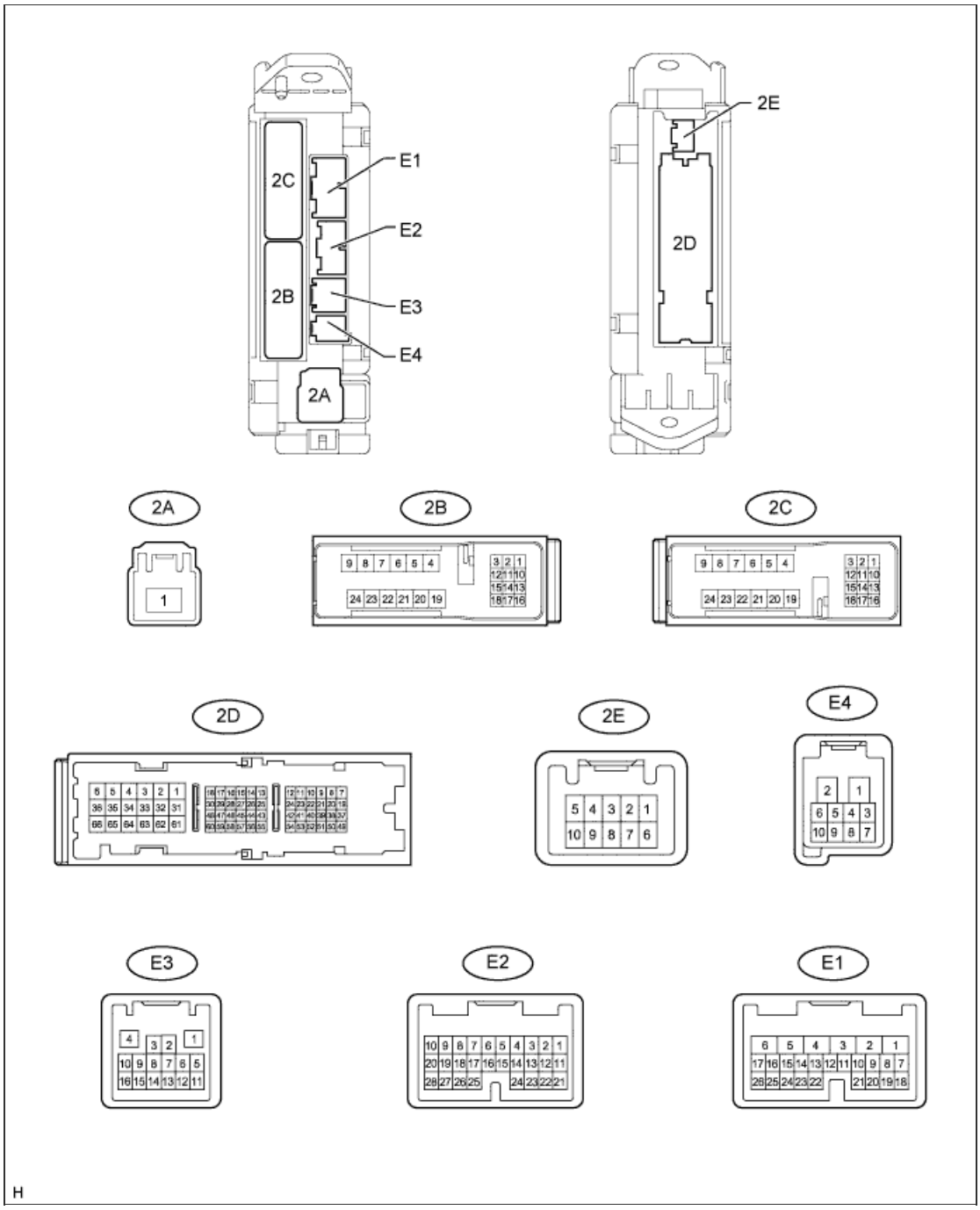
E29-33 (CLG1) - E29-34 (CG1B)	L - W	oscillator (driver side) sensor signal	switch off	and below 1 V
			Door unlocked or door open	Below 1 V
E29-22 (SEN1) - E29-17 (E)	R - W-B	Touch sensor detection signal	Door outside handle touched	11 to 14 V
			Door outside handle not touched	Below 1 V
E29-5 (SEL1) - E29-17 (E)	Y - W-B	Touch sensor activation control signal	Key at least 5 m (16.4 ft.) away from door	11 to 14 V
			Key moved near outside door handle	Below 1 V
E29-35 (CLG2) - E29-36 (CG2B)	L - R	Door electrical key oscillator (front passenger side) sensor signal	All doors closed, all doors locked and engine switch off	Alternating between 5 V and below 1 V
			Door unlocked or door open	Below 1 V
E29-23 (SEN2) - E29-17 (E)	R - W-B	Touch sensor detection signal	Door outside handle touched	11 to 14 V
			Door outside handle not touched	Below 1 V
E29-6 (SEL2) - E29-17 (E)	Y - W-B	Touch sensor activation control signal	Key at least 5 m (16.4 ft.) away from door	11 to 14 V
			Key moved near outside door handle	Below 1 V
E30-8 (CLG3) - E30-9 (CG3B)	L - W	• Door electrical key oscillator (rear LH) sensor signal*1 • Door electrical key oscillator (rear RH) sensor signal*2	All doors closed, all doors locked and engine switch off	Alternating between 5 V and below 1 V
			Door unlocked or door open	Below 1 V
E30-28 (SEN3) - E29-17 (E)	R - W-B	Touch sensor detection signal	Door outside handle touched	11 to 14 V
			Door outside handle not touched	Below 1 V
E30-1 (SEL3) - E29-17 (E)	Y - W-B	Touch sensor activation control signal	Key at least 5 m (16.4 ft.) away from door	11 to 14 V
			Key moved near outside door handle	Below 1 V
E30-10 (CLG4) - E30-11 (CG4B)	L - W	• Door electrical key oscillator (rear RH) sensor signal*1 • Door electrical key oscillator (rear LH) sensor signal*2	All doors closed, all doors locked and engine switch off	Alternating between 5 V and below 1 V
			Door unlocked or door open	Below 1 V
E30-27 (SEN4) - E29-17 (E)	R - W-B	Touch sensor detection signal	Door outside handle touched	11 to 14 V
			Door outside handle not touched	Below 1 V
E30-2 (SEL4) - E29-17 (E)	Y - W-B	Touch sensor activation control signal	Key at least 5 m (16.4 ft.) away from door	11 to 14 V
			Key moved near outside door handle	Below 1 V
			30 seconds after driver	

E29-11 (CLG5) - E29-12 (CG5B)	SB - V	Indoor electrical key antenna (for front floor) sensor signal	side door opened and closed, engine switch off	Alternating between 5 V and below 1 V
			Within 30 seconds after driver side door opened and closed, engine switch off	Below 1 V
E29-13 (CLG6) - E29-14 (CG6B)	R - SB	Indoor electrical key antenna (for rear floor) sensor signal	30 seconds after driver side door opened and closed, engine switch off	Alternating between 5 V and below 1 V
			Within 30 seconds after driver side door opened and closed, engine switch off	Below 1 V
E29-15 (CLG7) - E29-16 (CG7B)	GR - W	Indoor electrical key antenna (for luggage compartment) sensor signal	30 seconds after driver side door opened and closed, engine switch off	Alternating between 5 V and below 1 V
			Within 30 seconds after driver side door opened and closed, engine switch off	Below 1 V
E29-31 (CLG8) - E29-32 (CG8B)	G - GR	Back door electrical key antenna (for outside luggage compartment) sensor signal	Back door opener switch off	Alternating between 5 V and below 1 V
			Back door opener switch on	Below 1 V
E29-29 (RCO) - E29-17 (E)	B - W-B	Door control receiver power source	Engine switch off, all doors closed and transmitter switch not pressed → pressed	Below 1 V → 4.6 to 5.4 V → Below 1 V
E29-39 (RSSI) - E29-17 (E)	L - W-B	Door control receiver electric wave existence signal	Engine switch off, all doors closed and transmitter switch not pressed → pressed	11 to 14 V → Below 1 V
E29-38 (RDA) - E29-17 (E)	LG - W-B	Door control receiver data input signal	Engine switch off, all doors closed and transmitter switch not pressed → pressed	Below 1 V → 11 to 14 V → Below 1 V
E29-21 (BZR) - E29-17 (E)	LG - W-B	Wireless door lock buzzer signal	Answer-back on	Pulse generation
			Answer-back off	Below 1 V

*1: for LHD
*2: for RHD

If the result is not as specified, the ECU may have a malfunction.

CHECK MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)



a. Disconnect the E1, E2, E3, 2A, 2B and 2D ECU connectors.

b. Measure the resistance and voltage of the wire harness side connectors.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
2D-62 (GND2) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E3-1 (GND3) - Body ground	BR - Body ground	Ground	Always	Below 1 Ω
2A-1 (ALTB) - Body ground	B - Body ground	ALTB power supply	Always	11 to 14 V
2B-20 (BATB) - Body ground	L - Body ground	BATB power supply	Always	11 to 14 V
E1-6 (AM1) - Body ground	W - Body ground	AM1 power supply	Always	11 to 14 V
E2-1 (AM2) - Body ground	W - Body ground	AM2 power supply	Always	11 to 14 V
2A-1 (IG) - Body ground	B - Body ground	IG1 signal	Engine switch on (IG)	11 to 14 V
			Engine switch off	Below 1 V
2A-1 (ACC) - Body ground	B - Body ground	ACC signal	Engine switch on (ACC)	11 to 14 V
			Engine switch off	Below 1 V

If the result is not as specified, the wire harness side may have a malfunction.

c. Reconnect the E1, E2, E3, 2A, 2B and 2D ECU connectors.

d. Measure the voltage of the connectors.

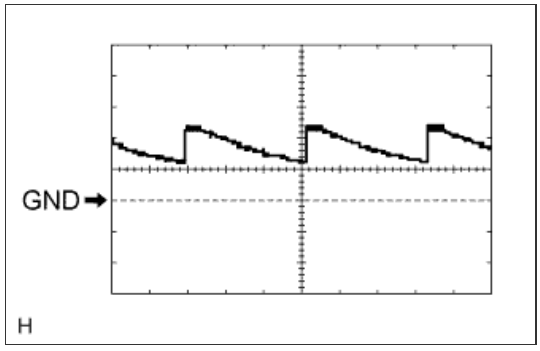
Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E1-24 (DCTY) - Body ground	L - Body ground*1 Y - Body ground*2	Driver side door courtesy switch input	Driver side door open	Below 1 V
			Engine switch off, and driver side door courtesy switch off	Pulse generation (see waveform 1 or 2)
E2-21 (PCTY) - Body ground	Y - Body ground*1 L - Body ground*2	Front passenger side door courtesy switch input	Front passenger side door open	Below 1 V
			Engine switch off, and passenger side door courtesy switch off	Pulse generation (see waveform 3 or 4)
2C-2 (LCTY) - Body ground	W - Body ground	Rear door LH courtesy light switch input	Rear door LH open	Below 1 V
			Engine switch off, and rear LH side door courtesy switch off	Pulse generation (see waveform 5 or 6)
E2-7 (RCTY) - Body ground	G - Body ground	Rear door RH courtesy light switch input	Rear door RH open	Below 1 V
			Engine switch off, and rear RH side door courtesy switch off	Pulse generation (see waveform 7 or 8)
E2-25 (BCTY) - Body ground	W - Body ground	Back door courtesy light switch input	Back door open	Below 1 V
			Engine switch off, and back door closed	Pulse generation (see waveform 9 or 10)
E3-4 (HAZ) - Body ground	O - Body ground	Hazard warning light signal	Answer-back on	Below 1 V
			Answer-back off	11 to 14 V
E1-26 (BDSU) - Body ground	L - Body ground	Back door opener switch input	Back door lock opener switch off	Below 1 V
			Back door lock opener switch on	Pulse generation (see waveform 11 or 12)

*1: for LHD
*2: for RHD
If the result is not as specified, the ECU may have a malfunction.

e. Using an oscilloscope, check waveform 1.

Waveform 1 (Reference)

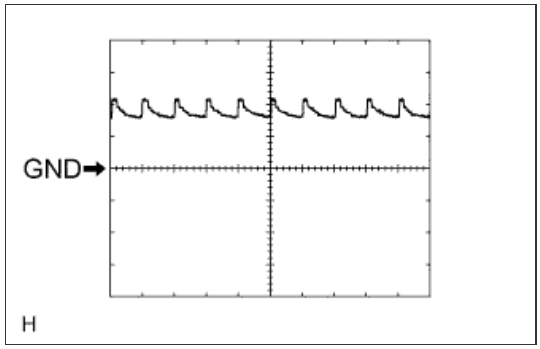
Item	Content
Terminal No. (Symbol)	E1-24 (DCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and driver side door courtesy switch off



f. Using an oscilloscope, check waveform 2.

Waveform 2 (Reference)

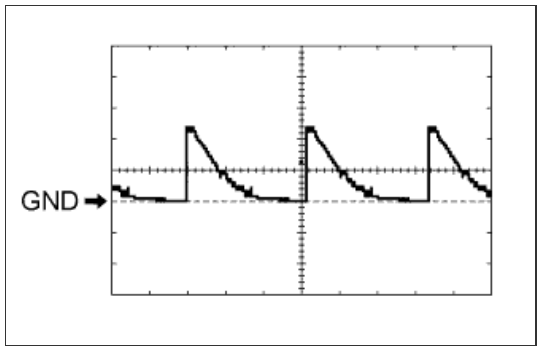
Item	Content
Terminal No. (Symbol)	E1-24 (DCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and driver side door courtesy switch off



g. Using an oscilloscope, check waveform 3.

Waveform 3 (Reference)

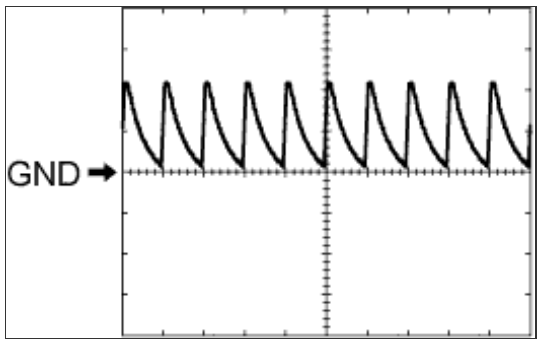
Item	Content
Terminal No. (Symbol)	E2-21 (PCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and passenger side door courtesy switch off



h. Using an oscilloscope, check waveform 4.

Waveform 4 (Reference)

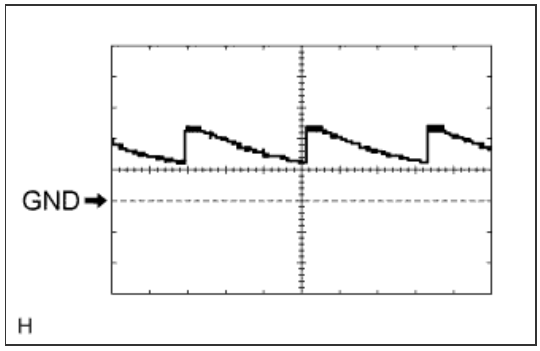
Item	Content
Terminal No. (Symbol)	E2-21 (PCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and passenger side door courtesy switch off



i. Using an oscilloscope, check waveform 5.

Waveform 5 (Reference)

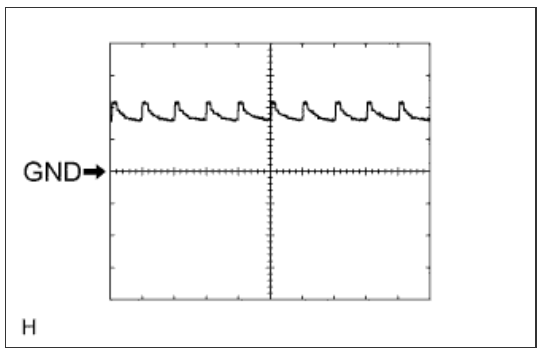
Item	Content
Terminal No. (Symbol)	2C-2 (LCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and rear LH side door courtesy switch off



j. Using an oscilloscope, check waveform 6.

Waveform 6 (Reference)

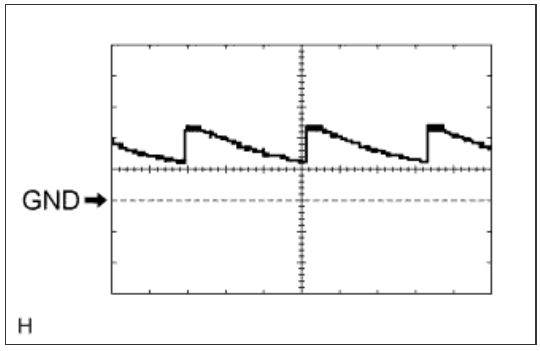
Item	Content
Terminal No. (Symbol)	2C-2 (LCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and rear LH side door courtesy switch off



k. Using an oscilloscope, check waveform 7.

Waveform 7 (Reference)

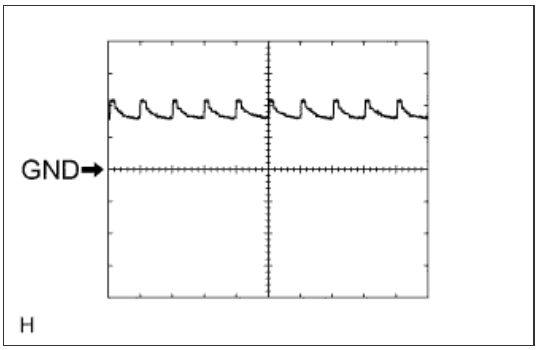
Item	Content
Terminal No. (Symbol)	E2-7 (RCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and rear RH side door courtesy switch off



l. Using an oscilloscope, check waveform 8.

Waveform 8 (Reference)

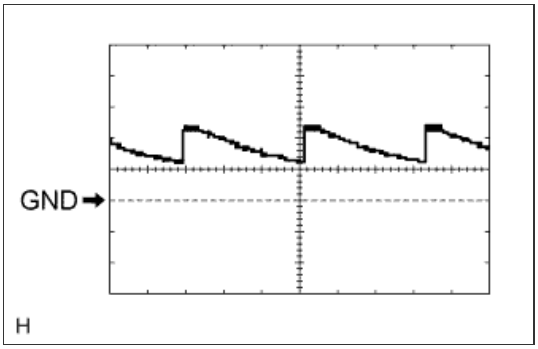
Item	Content
Terminal No. (Symbol)	E2-7 (RCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and rear RH side door courtesy switch off



m. Using an oscilloscope, check waveform 9.

Waveform 9 (Reference)

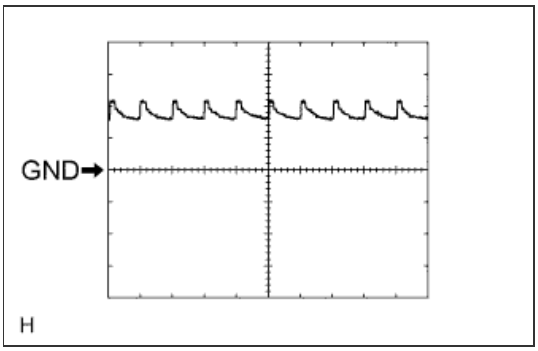
Item	Content
Terminal No. (Symbol)	E2-25 (BCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and back door closed



n. Using an oscilloscope, check waveform 10.

Waveform 10 (Reference)

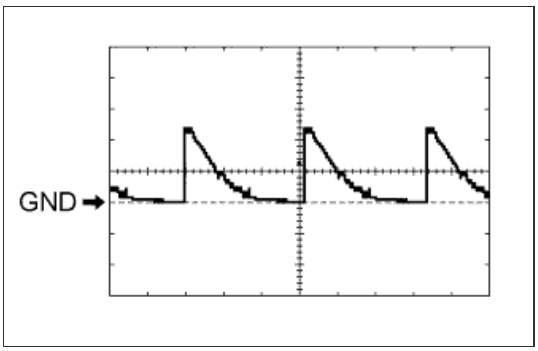
Item	Content
Terminal No. (Symbol)	E2-25 (BCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and back door closed



o. Using an oscilloscope, check waveform 11.

Waveform 11 (Reference)

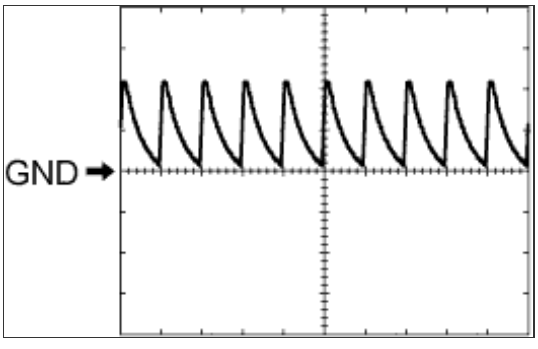
Item	Content
Terminal No. (Symbol)	E1-26 (BDSU) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and back door lock opener switch on



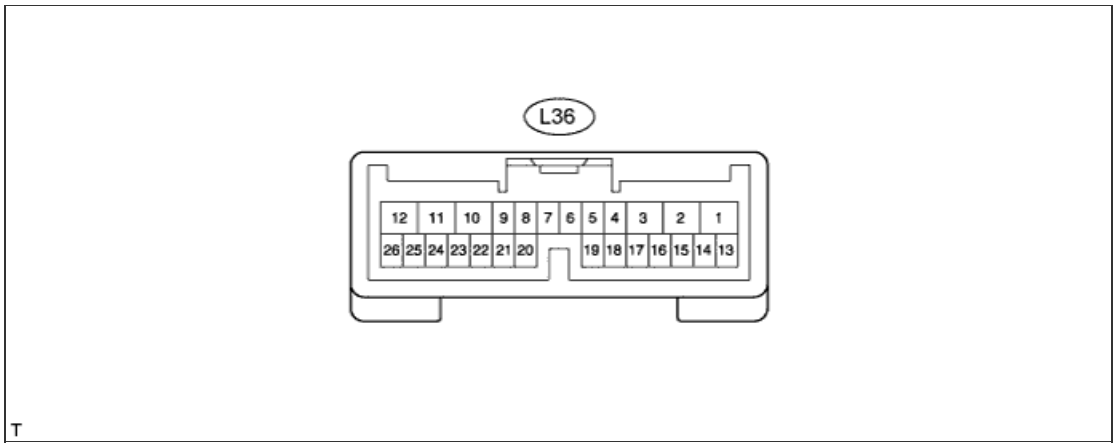
p. Using an oscilloscope, check waveform 12.

Waveform 12 (Reference)

Item	Content
Terminal No. (Symbol)	E1-26 (BDSU) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and back door lock opener switch on



CHECK POWER BACK DOOR UNIT (w/ Power Back Door)



a. Disconnect the L36 unit connector.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
L36-10 (ECUB) - Body ground	R - Body ground	ECUB power supply	Always	11 to 14 V
L36-11 (GND) - Body ground	W-B - Body ground	Body ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the L36 unit connector.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
L36-2 (DC+) - L36-1 (DC-)	R - B	Power back door lock motor circuit	Back door lock motor is operating	11 to 14 V
L36-2 (DC+) - L36-1 (DC-)	R - B	Power back door lock motor circuit	Back door lock motor is stopped	Below 1 V

If the result is not as specified, the ECU may have a malfunction.

for Preparation Click here

READ DATA LIST

HINT:

Using the intelligent tester to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Data List.

e. According to the display on the intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Power Save Cnt 10 Min.	Power save counter - 10 minutes / Min: 0, Max: 225	Within range from 0 to 225	-
Power Save Cnt 9 Days	Power save counter - 9 days / Min: 0, Max: 225	Within range from 0 to 225	-
Power Save Cnt 14 Days	Power save counter - 14 days / Min: 0, Max: 225	Within range from 0 to 225	-
Power Save Cnt 30 Days	Power save counter - 30 days / Min: 0, Max: 225	Within range from 0 to 225	-
Unmatched Vehicle-ID	No communication condition between vehicle and electrical key transmitter (vehicle-ID) / Yes or No	Yes: Key ID code not matched to vehicle No: Key ID code matched to vehicle	-
No Response	No communication condition between vehicle and electrical key transmitter (response) / Yes or No	Yes: Key ID code not matched to vehicle No: Key ID code matched to vehicle	-
Unmatch Code or Form	No communication condition between vehicle and electrical key transmitter (response code and format) / Yes or No	Yes: Key ID code not matched to vehicle No: Key ID code matched to vehicle	-
Key Low Battery	Key low battery / Yes or No	Yes: Key battery voltage low No: Key battery voltage normal	-
ID Code Difference(Resp)	No communication condition between vehicle and electrical key transmitter (ID code) / Yes or No	Yes: Key ID code not matched to vehicle No: Key ID code matched to vehicle	-
C Code Difference	No communication condition between vehicle and electrical key transmitter (challenge code) / Yes or No	Yes: Key ID code not matched to vehicle No: Key ID code matched to vehicle	-
Door Unlock Mode	Door unlock mode / All, Each, D_Door, Side	Mode status displayed	-
Auto Entry Cancel SW	Entry door lock function cancel / ON or OFF	Mode status displayed	-
Trunk Open Mode	Luggage compartment door open mode with vehicle locked / ON or OFF	Customization status displayed	-
Ignition Available Area	Ignition available area / Front or All	Customization status displayed	-
D-Door Touch Sensor	Driver side door touch sensor / ON or OFF	ON: Driver side door sensor touched OFF: Driver side door sensor not touched	-
D-Door Trigger	Driver side door outside handle lock switch / ON or OFF	ON: Driver side door outside handle lock switch pushed	-

Switch		OFF: Driver side door outside handle lock switch not pushed	
P-Door Touch Sensor	Front passenger side door touch sensor / ON or OFF	ON: Front passenger side door sensor touched OFF: Front passenger side door sensor not touched	-
P-Door Trigger Switch	Front passenger side door outside handle lock switch / ON or OFF	ON: Front passenger side door outside handle lock switch pushed OFF: Front passenger side door outside handle lock switch not pushed	-
Dr-Door Touch Sensor	Driver side rear door touch sensor / ON or OFF	ON: Driver side rear door sensor touched OFF: Driver side rear door sensor not touched	-
Dr-Door Trigger Switch	Driver side rear door outside handle lock switch / ON or OFF	ON: Driver side rear door outside handle lock switch pushed OFF: Driver side rear door outside handle lock switch not pushed	-
Pr-Door Touch Sensor	Passenger side rear door touch sensor / ON or OFF	ON: Passenger side rear door sensor touched OFF: Passenger side rear door sensor not touched	-
Pr-Door Trigger Switch	Passenger side rear door outside handle lock switch / ON or OFF	ON: Passenger side rear door outside handle lock switch pushed OFF: Passenger side rear door outside handle lock switch not pushed	-
Tr/B-Door Lock SW	Back door lock switch / ON or OFF	ON: Back door lock switch pushed OFF: Back door lock switch not pushed	-

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
IG SW	Engine switch on (IG) / ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
ACC SW	Engine switch on (ACC) / ON or OFF	ON: Engine switch on (ACC) OFF: Engine switch off	-
D Door Courtesy SW	Driver side door courtesy light switch signal / ON or OFF	ON: Driver side door opened OFF: Driver side door closed	-
P Door Courtesy SW	Front passenger side door courtesy light switch signal / ON or OFF	ON: Front passenger side door opened OFF: Front passenger side door closed	-
RL Door Courtesy SW	Rear LH side door courtesy light switch signal / ON or OFF	ON: Rear side door LH opened OFF: Rear side door LH closed	-
RR Door Courtesy SW	Rear RH side door courtesy light switch signal / ON or OFF	ON: Rear side door RH opened OFF: Rear side door RH closed	-
D Door Lock Position SW	Driver side door lock position switch signal / ON or OFF	ON: Driver side door unlocked OFF: Driver side door locked	-
P Door Lock Position SW	Front passenger side door lock position switch signal / ON or OFF	ON: Front passenger side door unlocked OFF: Front passenger side door locked	-
DR Door Lock Position SW	Driver side rear door lock position switch signal / ON or OFF	ON: Driver side rear door unlocked OFF: Driver side rear door locked	-
PR Door Lock Position SW	Passenger side rear door lock position switch signal / ON or OFF	ON: Passenger side rear door unlocked OFF: Passenger side rear door locked	-
Back Door Handle SW	Back door opener switch / ON or OFF	ON: Back door opener switch pushed OFF: Back door opener switch not pushed	-
Back Door Courtesy SW	Back door courtesy light switch signal / ON or OFF	ON: Back door opened OFF: Back door closed	-

Back Door (w/ Power Back Door)

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Door Lock Status	Back door lock status signal / ON or OFF	ON: Back door unlocked OFF: Back door locked	-

PERFORM ACTIVE TEST

HINT:

Using the intelligent tester to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Entry&Start / Active Test.

e. According to the display on the intelligent tester, perform the Active Test.

Entry&Start

Tester Display	Test Part	Control Range	Diagnostic Note
Overhead Tuner Power Supply ON	Door control receiver	ON or OFF	-
D-Seat Outside Transmitter	Door electrical key oscillator (for Driver Side)	ON or OFF	-
P-Seat Outside Transmitter	Door electrical key oscillator (for Front Passenger Side)	ON or OFF	-
DR-Seat Outside Transmitter	Door electrical key oscillator (for Driver Side Rear)	ON or OFF	-
PR-Seat Outside Transmitter	Door electrical key oscillator (for Passenger Side Rear)	ON or OFF	-
Fr-Seat Inside Transmitter	Indoor electrical key antenna (for Front Floor)	ON or OFF	-
Rr-Seat Inside Transmitter	Indoor electrical key antenna (for Rear Floor)	ON or OFF	-
Inside Trunk/Backdoor Transmitter	Indoor electrical key antenna (for Luggage Compartment)	ON or OFF	-
Outside Trunk/Backdoor Transmitter	Electrical key antenna (for Outside Luggage Compartment)	ON or OFF	-
D-Seat Select	Driver side select	ON or OFF	-
P-Seat Select	Front passenger side select	ON or OFF	-
Dr-Seat Select	Driver side rear select	ON or OFF	-
Pr-Seat Select	Passenger side rear select	ON or OFF	-
Wireless Buzzer Operation	Wireless buzzer	ON or OFF	-

for Preparation Click here

DESCRIPTION

The entry and start system uses the wireless door lock buzzer to perform various vehicle exterior warnings. When the conditions of each warning are met, the certification ECU (smart key ECU assembly) sends a buzzer signal to the wireless buzzer, and the wireless door lock buzzer sounds*.

HINT:

*: For Europe and China, the wireless door lock buzzer does not sound.

INSPECTION PROCEDURE

NOTICE:

Before performing the inspection, check that there are no problems related to the "CAN Communication System" and "LIN Communication System".

1.CHECK WIRELESS DOOR LOCK BUZZER OPERATION

a. When the wireless operation is used to lock and unlock the doors, check that the wireless door lock buzzer sounds normally (Click here).

OK:
Operates normally

NG → GO TO WIRELESS DOOR LOCK CONTROL SYSTEM (Click here)

OK

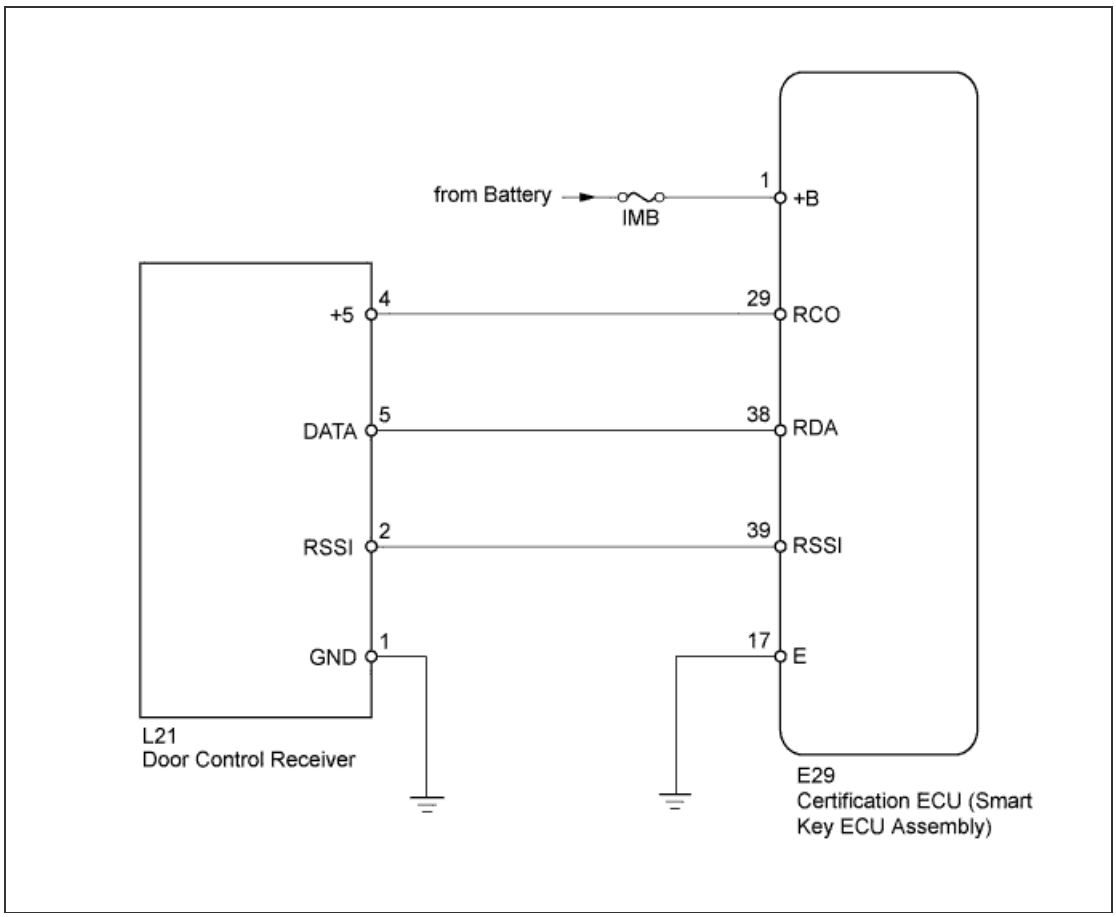
REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

for Preparation Click here

DESCRIPTION

When the entry operation and wireless operation door lock function does not operate, a malfunction or wave interference may be occurring in either of the following: 1) the signal communication line between the door control receiver and certification ECU (smart key ECU assembly) (line is used by entry and wireless); or 2) the door control transmitter.

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

- **Before performing the inspection, check that there are no problems related to the "CAN Communication System" and "LIN Communication System".**
- **Check that there are no door control transmitters in the vehicle.**
- **Before performing the inspection, check that DTC B1242 is not output (Click here).**

1.CHECK POWER DOOR LOCK CONTROL SYSTEM

a. When the master switch door control switch is operated, check that the locked doors unlock (Click here).

OK:
Locked doors unlock.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.CHECK DOOR CONTROL TRANSMITTER

a. When another registered door control transmitter is used, check that the wireless and entry function operates normally (Click here).

Result

Result	Proceed to
Entry function operates and door control transmitter that did not operate is electrical key transmitter	A
Entry function operates and door control transmitter that did not operate is card key*	B
Entry function does not operate	C

*: for Card Type

B → Go to step 5

C → Go to step 6

A

3.CHECK DOOR CONTROL TRANSMITTER (LED)

a. Check that the transmitter LED illuminates 3 times when a switch is pressed 3 times.

Result

Result	Proceed to
Transmitter LED does not illuminate 3 times when switch is pressed 3 times	A
Transmitter LED illuminates 3 times when switch is pressed 3 times	B
Transmitter LED does not illuminate second or third time	C

HINT:

If the transmitter LED does not illuminate the second or third time, replace the transmitter battery as it is depleted.

B → REPLACE DOOR CONTROL TRANSMITTER

C → REPLACE TRANSMITTER BATTERY (Click here)

A

4.INSPECT TRANSMITTER BATTERY (VOLTAGE)

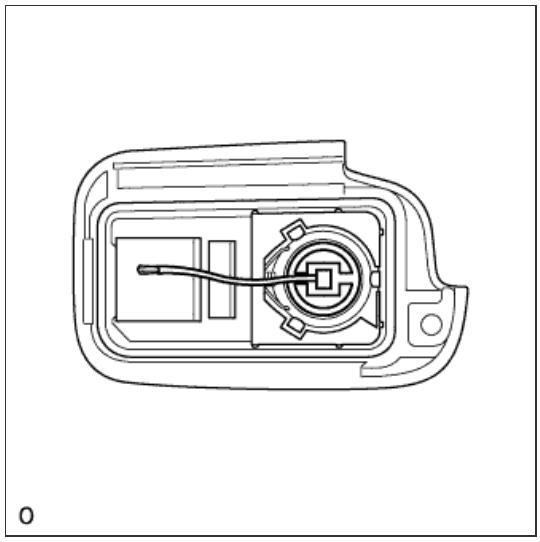
a. Electrical Key Transmitter (w/o Battery Cover):

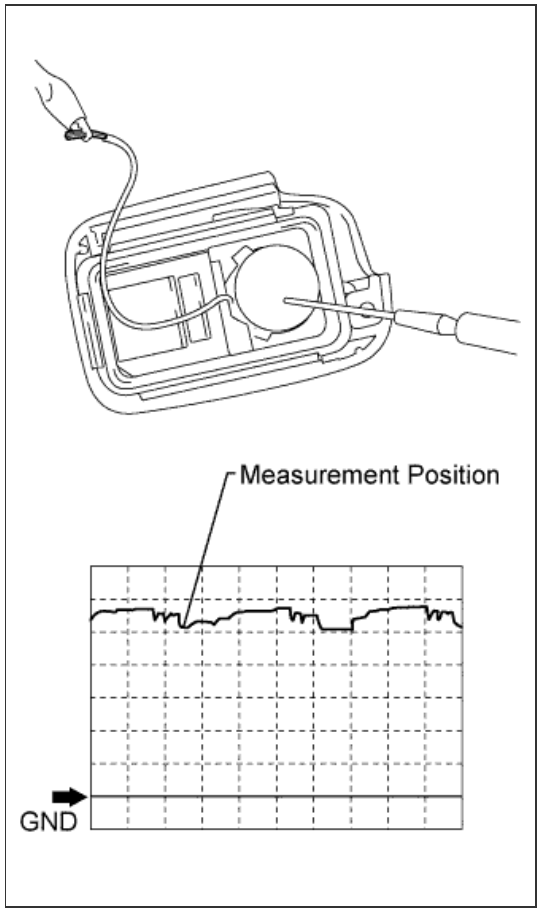
i. Remove the battery from the electrical key transmitter that does not operate. Attach a lead wire (0.6 mm (0.0236 in.) or less in diameter including wire sheath) with tape or equivalent to the negative terminal (Click here).

NOTICE:

Do not wrap the lead wire around a terminal, wedge it between terminals, or solder it. A terminal may be deformed or damaged, and the battery will not be able to be installed correctly.

ii. Carefully pull the lead wire out from the position shown in the illustration and install the previously removed transmitter battery.





iii. Using an oscilloscope, measure the voltage according to the value(s) in the table below.

HINT:

When measuring the battery voltage, while operating the lock switch of a door handle, bring the electrical key transmitter within the entry operating range to perform the measurement. For the entry operating range, refer to System Description (Click here).

Standard Voltage:

Tester Connection	Tool Setting	Condition	Specified Condition
Battery positive (+) - Battery negative (-)	0.5 V/DIV., 100 ms/DIV.	Engine switch off, all doors closed and lock switch pushed	2.5 to 3.2 V (Refer to the waveform)

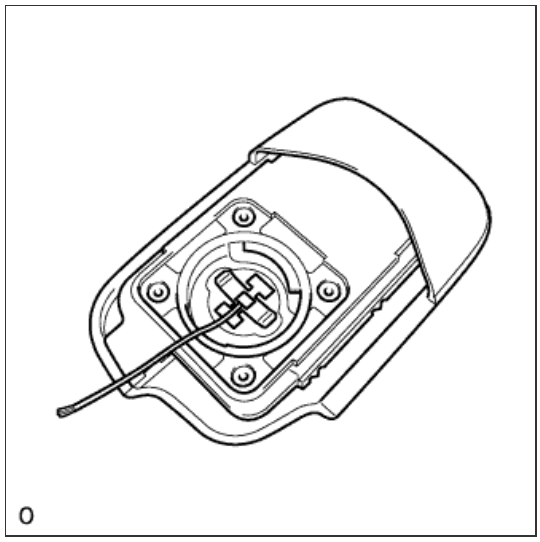
b. Electrical Key Transmitter (w/ Battery Cover):

i. Remove the battery from the electrical key transmitter that does not operate. Attach a lead wire (0.6 mm (0.0236 in.) in diameter or less including wire sheath) with tape or equivalent to the negative terminal (Click here).

NOTICE:

Do not wrap the lead wire around a terminal, wedge it between terminals, or solder it. A terminal may be deformed or damaged, and the battery will not be able to be installed correctly.

ii. Carefully pull the lead wire out from the position shown in the illustration and install the previously removed transmitter battery.



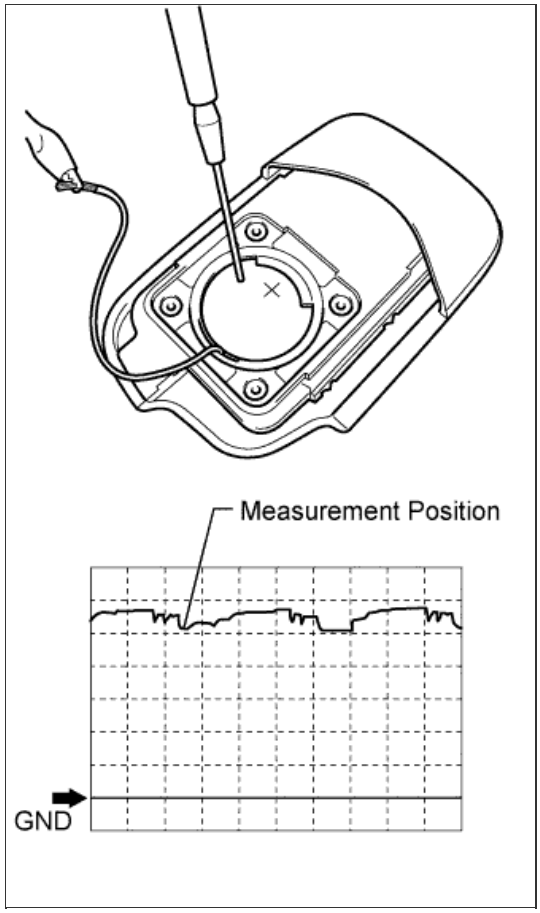
iii. Using an oscilloscope, measure the voltage according to the value(s) in the table below.

HINT:

When measuring the battery voltage, while operating the lock switch of a door handle, bring the electrical key transmitter within the entry operating range to perform the measurement. For the entry operating range, refer to System Description (Click here).

Standard Voltage:

Tester Connection	Tool Setting	Condition	Specified Condition
Battery positive (+) - Battery negative (-)	0.5 V/DIV., 100 ms/DIV.	Engine switch OFF, all doors closed and lock switch pushed	2.5 to 3.2 V (Refer to the waveform)



NG → REPLACE TRANSMITTER BATTERY (Click here)

OK

REPLACE DOOR CONTROL TRANSMITTER

5.INSPECT CARD KEY BATTERY (VOLTAGE)

a. Remove the battery from the card key that does not operate. Attach a lead wire to the negative and positive side of the battery with tape or equivalent (Click here).

NOTICE:

Do not wrap the lead wire around a terminal, wedge it between the terminals, or solder it. A terminal may be deformed or damaged, and the battery will not be able to be installed correctly.

b. Using an oscilloscope, measure the voltage according to the value(s) in the table

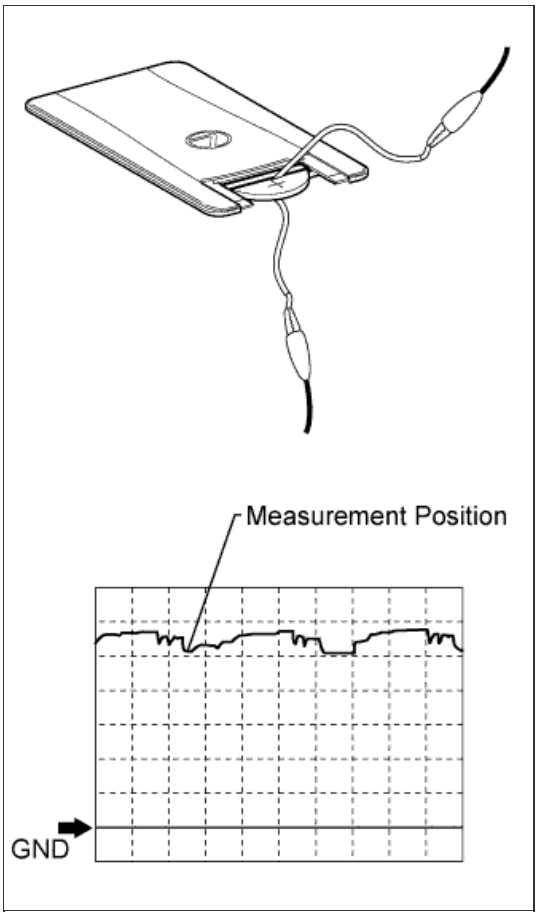
below.

HINT:

When measuring the battery voltage, while operating the lock switch of a door handle, bring the card key within the entry operating range to perform the measurement. For the entry operating range, refer to System Description (Click here).

Standard Voltage:

Tester Connection	Tool Setting	Condition	Specified Condition
Battery positive (+) - Battery negative (-)	0.5 V/DIV., 100 ms/DIV.	Engine switch OFF, all doors closed and lock switch pushed	2.5 to 3.2 V (Refer to the waveform)



NOTICE:

Before measuring the battery voltage, make sure that the positive side of the battery is set towards the LEXUS mark side.

NG → REPLACE CARD KEY BATTERY (Click here)

OK → REPLACE CARD KEY

6.CHECK WAVE ENVIRONMENT

a. Bring the door control transmitter near the door control receiver, and perform a wireless and entry function operation check.

HINT:

- **When the door control transmitter is brought near the door control receiver, the possibility of wave interference decreases, and it can be determined if wave interference is causing the problem symptom.**
- **If the inspection result is that the problem only occurs in certain locations or times of day, the possibility of wave interference is high. Also, added vehicle components may cause wave interference. If installed, remove them and perform the operation check.**

OK:

Wireless and entry functions operate normally.

NG → Go to step 7

OK → AFFECTED BY WAVE INTERFERENCE

7.INSPECT FUSE (IMB)

a. Remove the IMB fuse from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
IMB fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

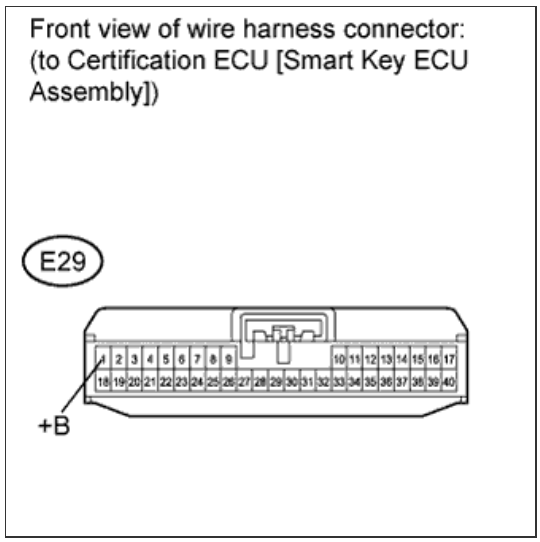
8.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - BATTERY)

a. Disconnect the E29 ECU connector.

b. Measure the voltage according to the value(s) in the tables below.

Standard Voltage:

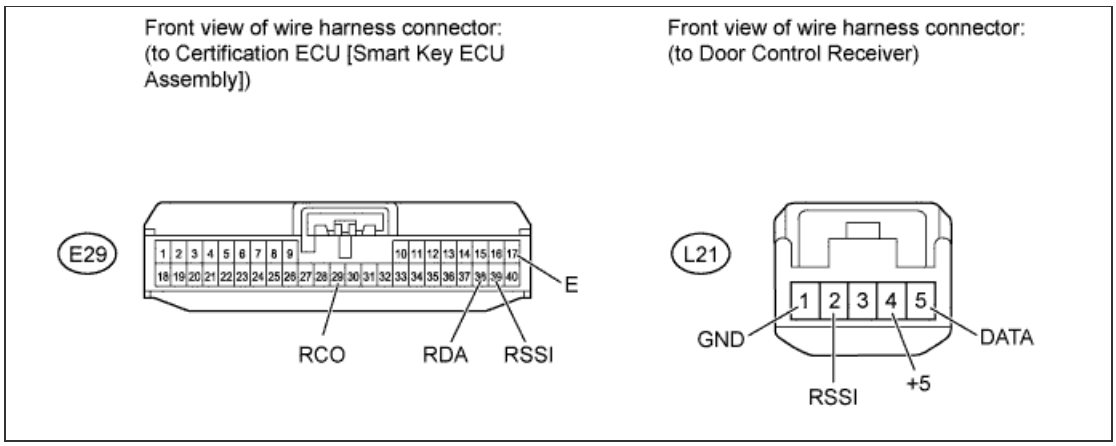
Tester Connection	Condition	Specified Condition
E29-1 (+B) - Body ground	Always	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

9.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - DOOR CONTROL RECEIVER AND BODY GROUND)



a. Disconnect the L21 receiver connector.

b. Disconnect the E29 ECU connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E29-29 (RCO) - L21-4 (+5)	Always	Below 1 Ω
E29-38 (RDA) - L21-5 (DATA)	Always	Below 1 Ω
E29-39 (RSSI) - L21-2 (RSSI)	Always	Below 1 Ω
E29-17(E) - Body ground	Always	Below 1 Ω
L21-1 (GND) -		

Body ground	Always	Below 1 Ω
E29-29 (RCO) or L21-4 (+5) - Body ground	Always	10 kΩ or higher
E29-38 (RDA) or L21-5 (DATA) - Body ground	Always	10 kΩ or higher
E29-39 (RSSI) or L21-2 (RSSI) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

10.CHECK DOOR CONTROL RECEIVER OPERATION

a. Temporarily replace the door control receiver with a new one (Click here).

b. Check that the wireless and entry functions operate normally.

OK:
Wireless and entry functions operate normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

END (DOOR CONTROL RECEIVER IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

When the wireless operation can be used to lock and unlock the doors, the communication line between the door control receiver and certification ECU (smart key ECU assembly) is normal. When the entry operation does not operate, one of the following may be the cause: 1) entry cancel function is set through customization; 2) malfunction in entry and start system communication line (electrical key transmitter and vehicle); or 3) wave interference.

INSPECTION PROCEDURE

NOTICE:

Before performing the inspection, check that there are no problems related to the "Can Communication System" and "LIN Communication System"

1.READ VALUE USING INTELLIGENT TESTER (AUTO ENTRY CANCEL SW)

a. Using the intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Auto Entry Cancel SW	Entry function cancel/ON or OFF	Mode status displayed	-

Result

Result	Proceed to
Entry function cancel is OFF	A
Entry function cancel is ON	B

B → PERFORM CANCELLATION OF ENTRY KEY CANCEL FUNCTION (Click here)

A

2.CHECK WAVE ENVIRONMENT

a. Move the electrical key transmitter as described below and perform the operation inspection (Click here).

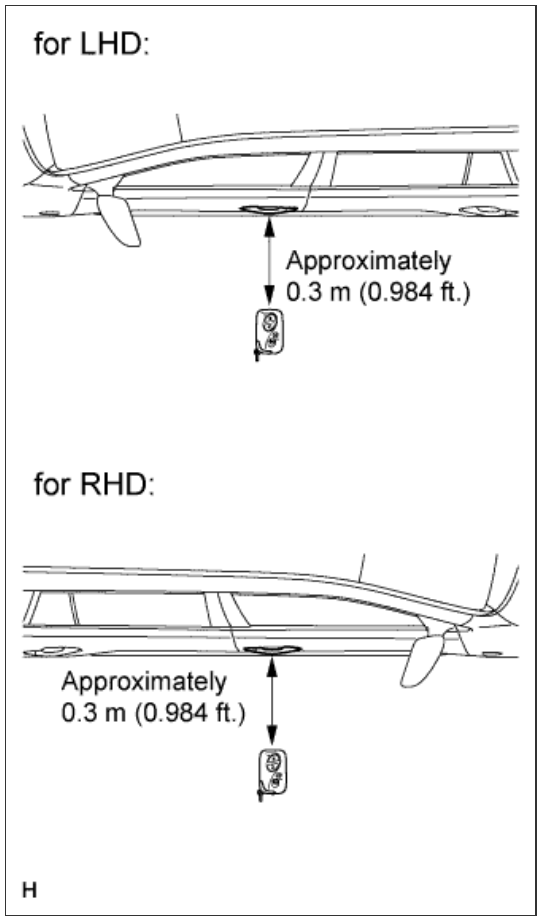
HINT:

- **When the electrical key transmitter is brought near the door outside handle or electrical key antenna, the possibility of wave interference decreases, and it can be determined if wave interference is causing the problem symptom.**
- **The transmitting wave of the wireless function and entry function are the same, but the wave logic is different. As a result, it is possible that only the wireless function or only the entry function is affected by wave interference.**

i. Bring the electrical key transmitter near the door outside handle (for driver side), and perform a driver door entry lock and unlock operation check.

NOTICE:

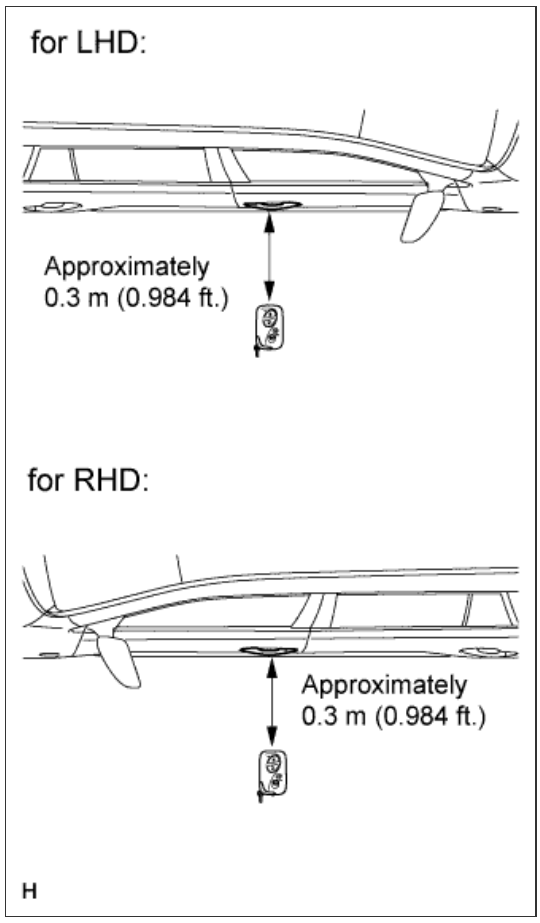
If the key is brought within 0.2 m (0.656 ft.) of the door handle, communication may not be possible.



ii. Bring the electrical key transmitter near the door outside handle (for front passenger side), and perform a front passenger door entry lock and unlock operation check.

NOTICE:

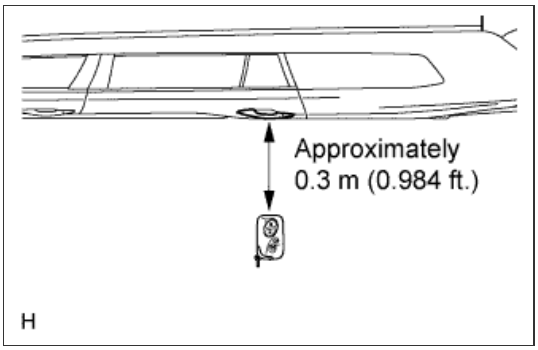
If the key is brought within 0.2 m (0.656 ft.) of the door handle, communication may not be possible.



iii. Bring the electrical key transmitter near the rear door outside handle LH, and perform a rear left door entry lock and unlock operation check.

NOTICE:

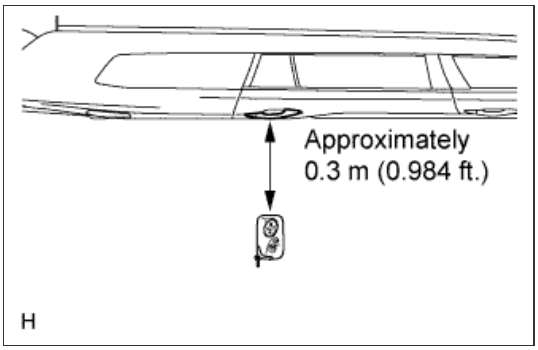
If the key is brought within 0.2 m (0.656 ft.) of the door handle, communication may not be possible.



iv. Bring the electrical key transmitter near the rear door outside handle RH, and perform a rear right door entry lock and unlock operation check.

NOTICE:

If the key is brought within 0.2 m (0.656 ft.) of the door handle, communication may not be possible.



v. Bring the electrical key transmitter near the indoor electrical key antenna (in center console), and perform an engine start check.

NOTICE:

If the key is brought within 0.2 m (0.656 ft.) of the center console, communication may not be possible.

vi. Bring the electrical key transmitter near the indoor electrical key antenna (in rear No. 1 seat cushion), and perform an engine start check.

NOTICE:

If the key is brought within 0.2 m (0.656 ft.) of the rear No. 1 seat cushion, communication may not be possible.

vii. Bring the electrical key transmitter near the indoor electrical key antenna (in rear No. 2 seat cushion), and perform an engine start check.

NOTICE:

If the key is brought within 0.2 m (0.656 ft.) of the rear No. 2 seat cushion, communication may not be possible.

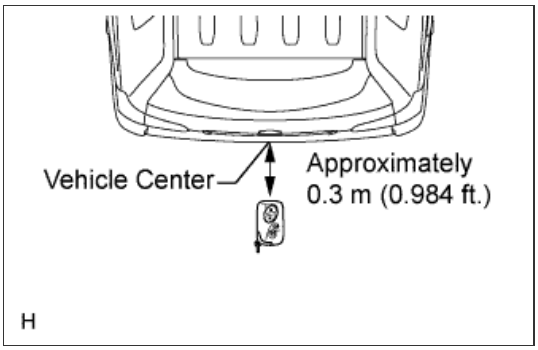
viii. Bring the electrical key transmitter near the electrical key antenna (in rear bumper), and perform an entry back door open function check.

NOTICE:

If the key is brought within 0.2 m (0.656 ft.) of the rear bumper, communication may not be possible.

HINT:

If the inspection result is that the problem only occurs in certain locations or times of day, the possibility of wave interference is high. Also, added vehicle components may cause wave interference. If installed, remove them and perform the operation check.



Result

Result	Proceed to
All operation checks fail	A
Some operation checks are normal	B

B → AFFECTED BY WAVE INTERFERENCE

A → 3.KEY DIAGNOSTIC MODE

a. Diagnostic mode inspection (door electrical key oscillator).

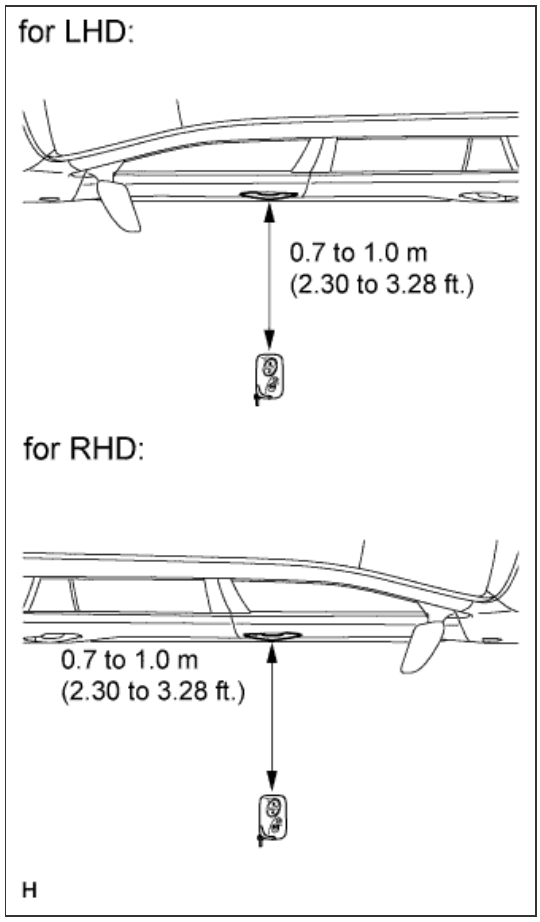
i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Driver Side.

v. When the electrical key transmitter is in the position shown in the illustration, check that the wireless door lock buzzer sounds.



b. Diagnostic mode inspection (door electrical key oscillator).

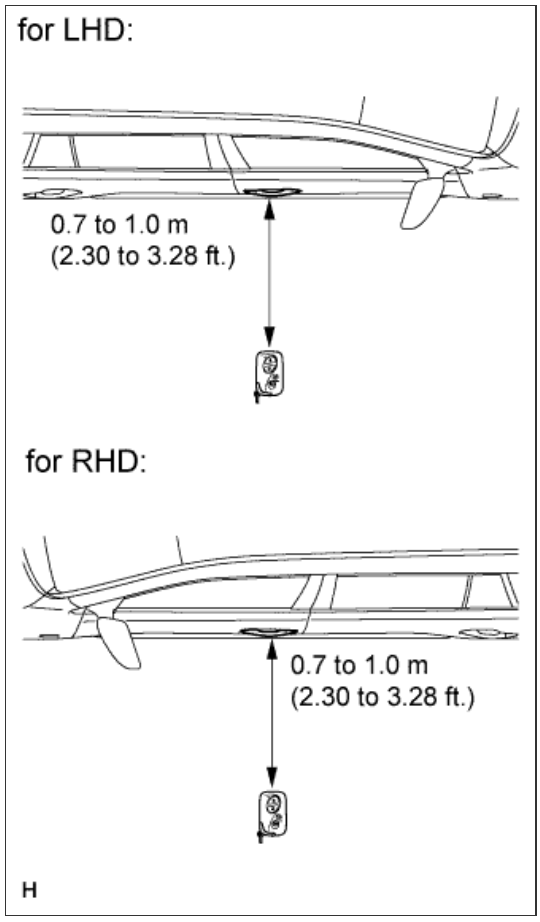
i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Passenger Side.

v. When the electrical key transmitter is in the position shown in the illustration, check that the wireless door lock buzzer sounds.



c. Diagnostic mode inspection (door electrical key oscillator).

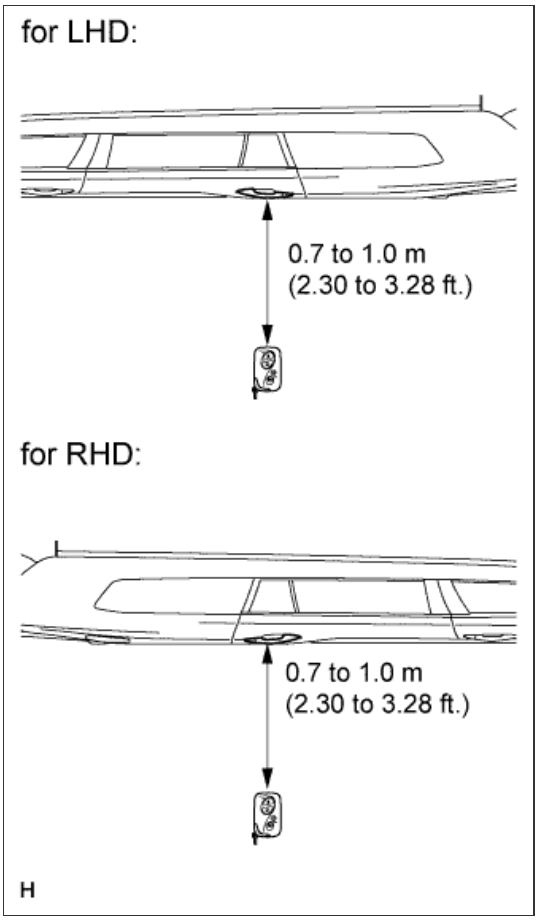
i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Driver Side Rear.

v. When the electrical key transmitter is in the position shown in the illustration, check that the wireless door lock buzzer sounds.



d. Diagnostic mode inspection (door electrical key oscillator).

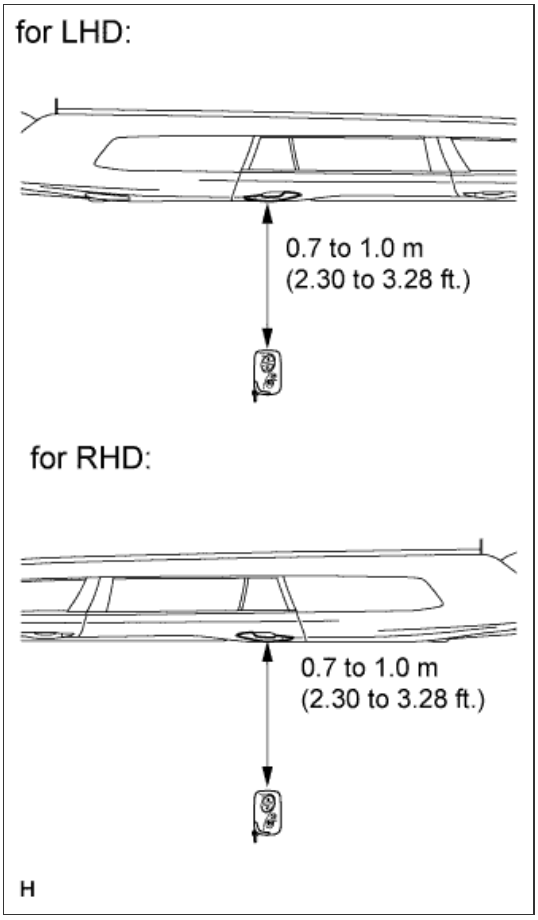
i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Passenger Side Rear.

v. When the electrical key transmitter is in the position shown in the illustration, check that the wireless door lock buzzer sounds.



e. Diagnostic mode inspection (indoor electrical key antenna (for Front Floor)).

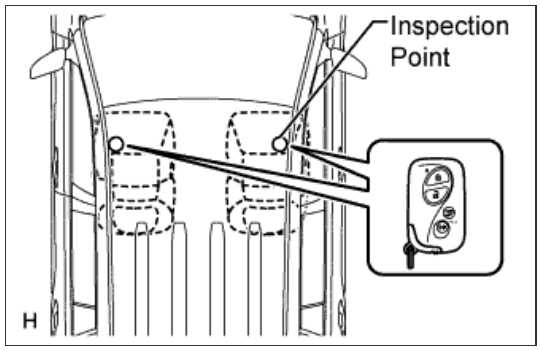
i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Front Room.

v. When the electrical key transmitter is in the position shown in the illustration, check that the wireless door lock buzzer sounds.



f. Diagnostic mode inspection (indoor electrical key antenna (for Rear Floor)).

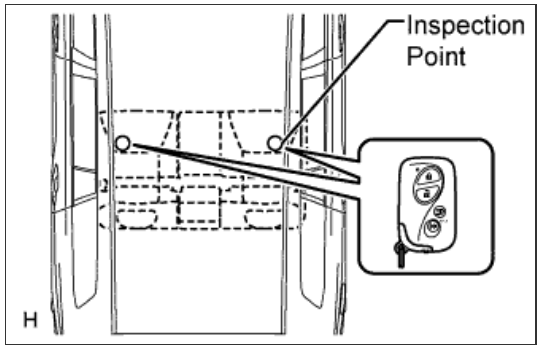
i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Rear Room.

v. When the electrical key transmitter is in the position shown in the illustration, check that the wireless door lock buzzer sounds.



g. Diagnostic mode inspection (indoor electrical key antenna (for Luggage Compartment)).

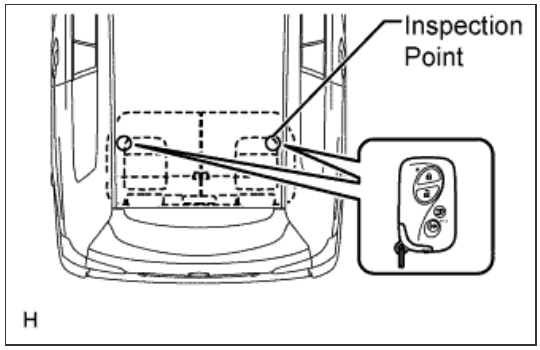
i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Back Door (inside).

v. When the electrical key transmitter is in the position shown in the illustration, check that the wireless door lock buzzer sounds.



h. Diagnostic mode inspection (electrical key antenna (for Outside Luggage Compartment)).

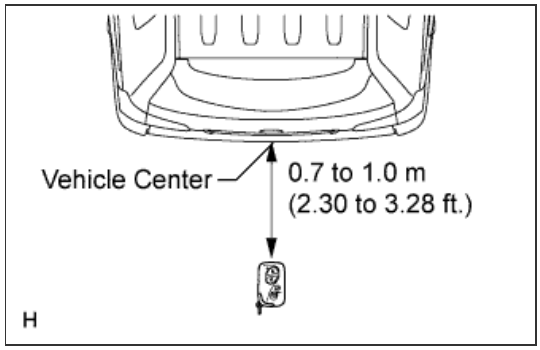
i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Back Door (outside).

v. When the electrical key transmitter is in the position shown in the illustration, check that the wireless door lock buzzer sounds.



Result

Result	Proceed to
All diagnostic mode inspections fail	A
Some diagnostic mode inspections fail (door)	B
Some diagnostic mode inspections fail (interior)	C
Some diagnostic mode inspections fail (back door)	D
All diagnostic mode inspections are normal	E

B → GO TO DTC OF OTHER COMPONENTS (PROCEED TO PROBLEM SYMPTOM FLOWCHART FOR EACH DOOR) (Click here)

C → GO TO OTHER FLOWCHART (Click here)

D → GO TO OTHER FLOWCHART (Click here)

E → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

A

4.REPLACE ELECTRICAL KEY TRANSMITTER

a. Replace the electrical key transmitter with a new one.

b. Perform the registration procedure (Refer to Service Bulletin for registration).

NEXT

5.CHECK ENTRY LOCK OPERATION

a. Check the operation of the entry lock function (Click here).

OK:
Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

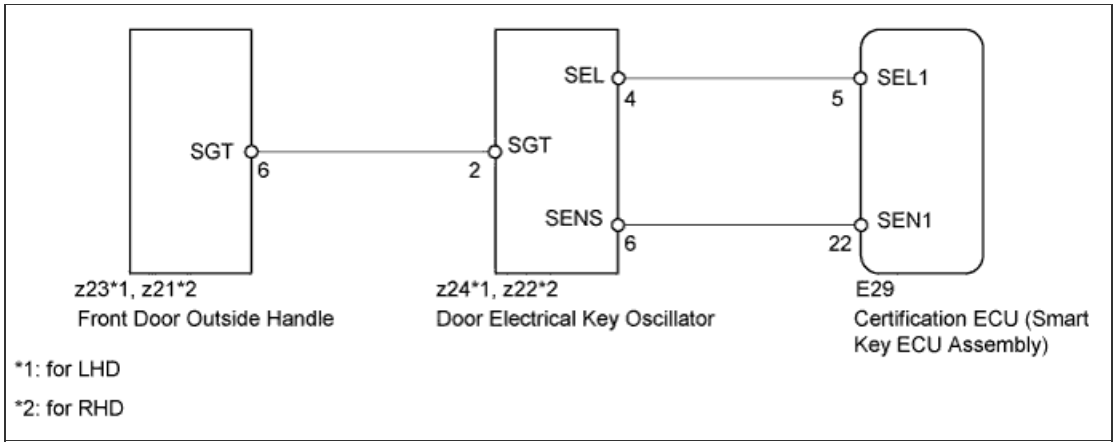
END (ELECTRICAL KEY TRANSMITTER IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

If the driver side door entry unlock function does not operate but the entry lock function operates, the communication line between the vehicle and electrical key transmitter is normal. The part at fault may be a touch sensor circuit (certification ECU (smart key ECU assembly) → driver side door outside handle → driver side door electrical key oscillator).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK POWER DOOR LOCK OPERATION

a. When the master switch assembly door control switch is operated, check that the locked doors unlock.

OK:
Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
D Door Lock Position SW	Driver side door lock position switch signal / ON or OFF	ON: Driver side door unlocked OFF: Driver side door locked	-

OK:
On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Driver Door LOCK/UNLOCK Functions do not Operate) (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (TOUCH SENSOR)

a. Using the intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
D-Door Touch Sensor	Driver side door touch sensor / ON or OFF	ON: Touch sensor touched OFF: Touch sensor not touched	-

OK:
"ON" (sensor is touched) and "OFF" (sensor is not touched) appears on the screen.

NG → Go to step 4

OK

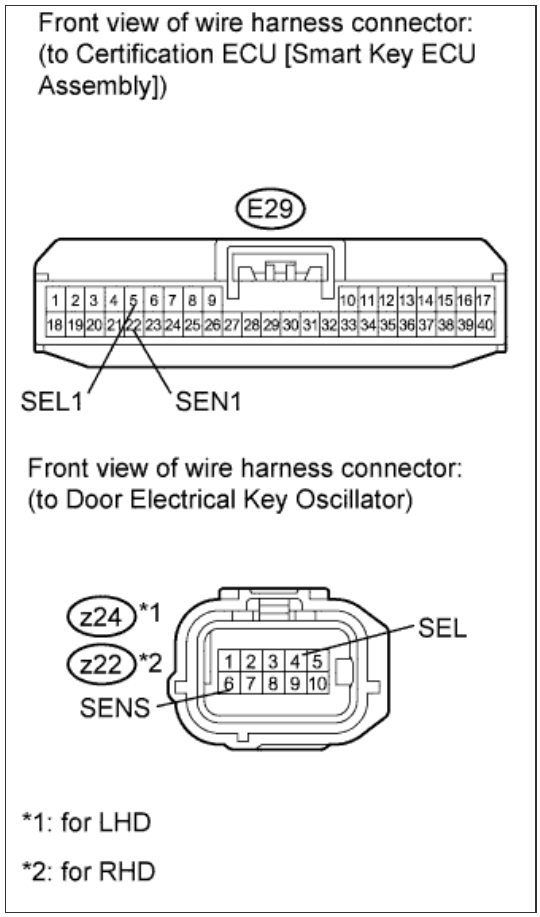
REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

4.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - DOOR ELECTRICAL KEY OSCILLATOR)

a. Disconnect the E29 ECU connector.

b. Disconnect the z24 or z22 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:
for LHD:

Tester Connection	Condition	Specified Condition
E29-5 (SEL1) - z24-4 (SEL)	Always	Below 1 Ω
E29-22 (SEN1) - z24-6 (SENS)	Always	Below 1 Ω
E29-5 (SEL1) - Body ground	Always	10 kΩ or higher
E29-22 (SEN1) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
E29-5 (SEL1) - z22-4 (SEL)	Always	Below 1 Ω
E29-22 (SEN1) - z22-6 (SENS)	Always	Below 1 Ω
E29-5 (SEL1) - Body ground	Always	10 kΩ or higher
E29-22 (SEN1) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

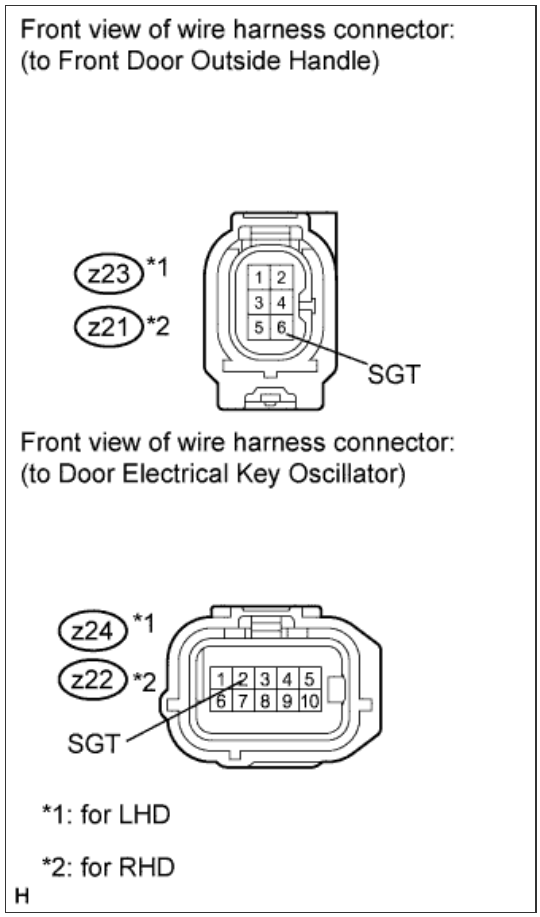
OK

5.CHECK HARNESS AND CONNECTOR (DOOR ELECTRICAL KEY OSCILLATOR - FRONT DOOR OUTSIDE HANDLE)

a. Disconnect the z23 or z21 handle connector.

b. Disconnect the z24 or z22 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
z23-6 (SGT) - z24-2 (SGT)	Always	Below 1 Ω
z23-6 (SGT) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
z21-6 (SGT) - z22-2 (SGT)	Always	Below 1 Ω
z21-6 (SGT) - Body		

ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6.REPLACE DOOR ELECTRICAL KEY OSCILLATOR

a. Replace the door electrical key oscillator (Click here).

NEXT

7.CHECK DOOR ELECTRICAL KEY OSCILLATOR OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → Go to step 8

OK

END (DOOR ELECTRICAL KEY OSCILLATOR IS DEFECTIVE)

8.REPLACE FRONT DOOR OUTSIDE HANDLE

a. Replace the front door outside handle (Click here).

NEXT

9.CHECK FRONT DOOR OUTSIDE HANDLE OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

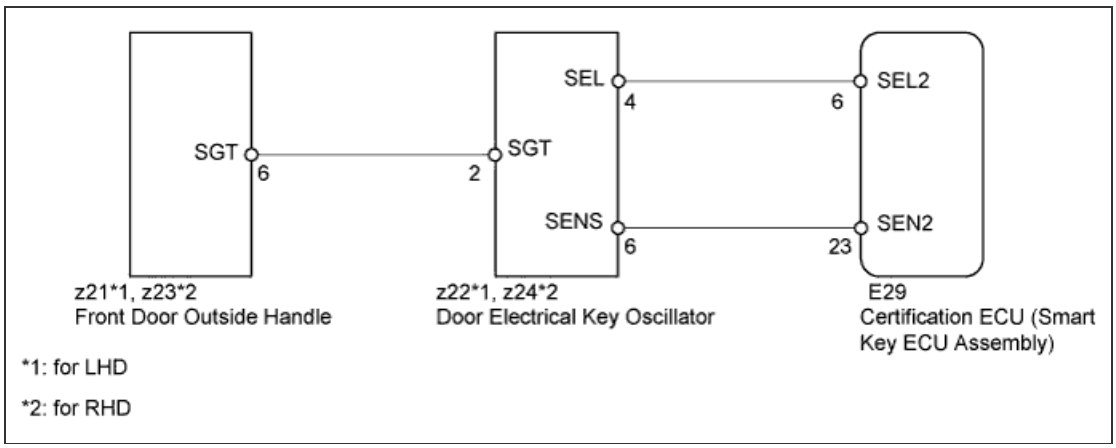
END (FRONT DOOR OUTSIDE HANDLE IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

If the front passenger side door entry unlock function does not operate but the entry lock function operates, the communication line between the vehicle and electrical key transmitter is normal. The part at fault may be a touch sensor circuit (certification ECU (smart key ECU assembly) → front passenger side door outside handle → front passenger side door electrical key oscillator).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK POWER DOOR LOCK OPERATION

a. When the master switch assembly door control switch is operated, check that the locked doors unlock.

OK:
Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
P Door Lock Position SW	Front passenger side door lock position switch signal / ON or OFF	ON: Front passenger side door unlocked OFF: Front passenger side door locked	-

OK:
On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Passenger Door LOCK/UNLOCK Functions do not

Operate) (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (TOUCH SENSOR)

a. Using the intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
P-Door Touch Sensor	Front passenger side door touch sensor / ON or OFF	ON: Touch sensor touched OFF: Touch sensor not touched	-

OK:
"ON" (sensor is touched) and "OFF" (sensor is not touched) appears on the screen.

NG → Go to step 4

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

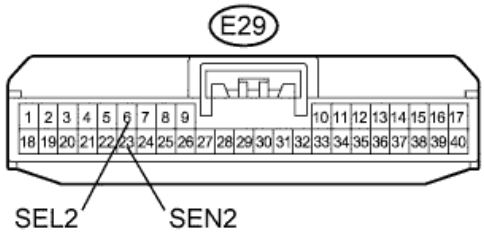
4.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - DOOR ELECTRICAL KEY OSCILLATOR)

a. Disconnect the E29 ECU connector.

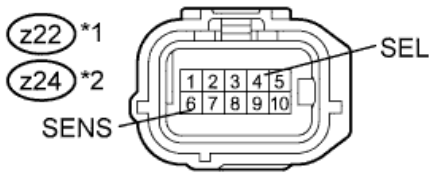
b. Disconnect the z22 or z24 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector:
(to Certification ECU [Smart Key ECU Assembly])



Front view of wire harness connector:
(to Door Electrical Key Oscillator)



*1: for LHD

*2: for RHD

Standard Resistance:
for LHD:

Tester Connection	Condition	Specified Condition
E29-6 (SEL2) - z22-4 (SEL)	Always	Below 1 Ω
E29-23 (SEN2) - z22-6 (SENS)	Always	Below 1 Ω

E29-6 (SEL2) - Body ground	Always	10 kΩ or higher
E29-23 (SEN2) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
E29-6 (SEL2) - z24-4 (SEL)	Always	Below 1 Ω
E29-23 (SEN2) - z24-6 (SENS)	Always	Below 1 Ω
E29-6 (SEL2) - Body ground	Always	10 kΩ or higher
E29-23 (SEN2) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

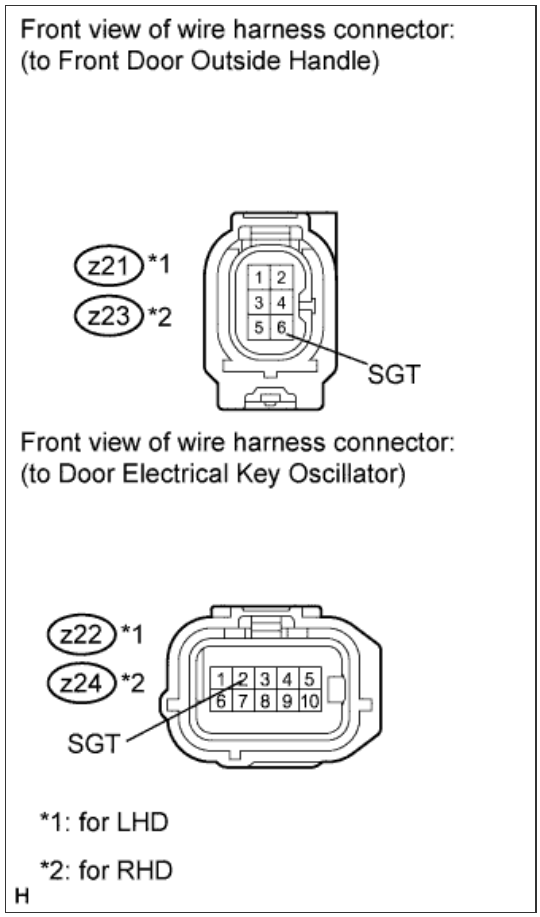
OK

5.CHECK HARNESS AND CONNECTOR (DOOR ELECTRICAL KEY OSCILLATOR - FRONT DOOR OUTSIDE HANDLE)

a. Disconnect the z21 or z23 handle connector.

b. Disconnect the z22 or z24 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
z21-6 (SGT) - z22-2 (SGT)	Always	Below 1 Ω
z21-6 (SGT) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified

		Condition
z23-6 (SGT) - z24-2 (SGT)	Always	Below 1 Ω
z23-6 (SGT) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6.REPLACE DOOR ELECTRICAL KEY OSCILLATOR

a. Replace the door electrical key oscillator (Click here).

NEXT

7.CHECK DOOR ELECTRICAL KEY OSCILLATOR OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → Go to step 8

OK

END (DOOR ELECTRICAL KEY OSCILLATOR IS DEFECTIVE)

8.REPLACE FRONT DOOR OUTSIDE HANDLE

a. Replace the front door outside handle (Click here).

NEXT

9.CHECK FRONT DOOR OUTSIDE HANDLE OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

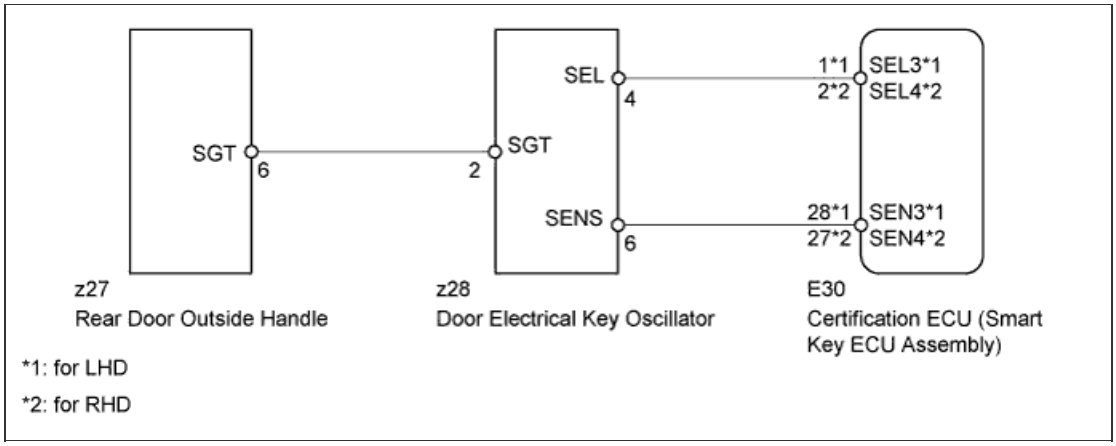
END (FRONT DOOR OUTSIDE HANDLE IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

If the rear door LH entry unlock function does not operate but the entry lock function operates, the communication line between the vehicle and electrical key transmitter is normal. The part at fault may be a touch sensor circuit (certification ECU (smart key ECU assembly) → rear door outside handle LH → rear door electrical key oscillator LH).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK POWER DOOR LOCK OPERATION

a. When the master switch assembly door control switch is operated, check that the locked doors unlock.

OK:
Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
DR Door Lock Position SW	Driver side rear door lock position switch signal / ON or OFF	ON: Driver side rear door unlocked OFF: Driver side rear door locked	-

OK:
On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Rear Door LH LOCK/UNLOCK Functions do not Operate) (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (TOUCH SENSOR)

a. Using the intelligent tester, read the Data List.

i. for LHD:

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Dr-Door Touch Sensor	Driver side rear door touch sensor / ON or OFF	ON: Touch sensor touched OFF: Touch sensor not touched	-

OK:
"ON" (sensor is touched) and "OFF" (sensor is not touched) appears on the screen.

ii. for RHD:

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Pr-Door Touch Sensor	Passenger side rear door touch sensor / ON or OFF	ON: Touch sensor touched OFF: Touch sensor not touched	-

OK:
"ON" (sensor is touched) and "OFF" (sensor is not touched) appears on the screen.

NG → Go to step 4

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

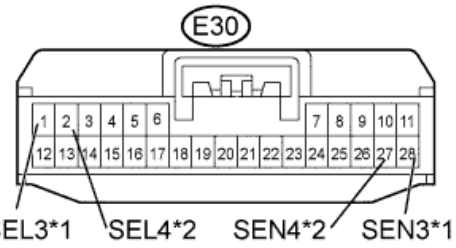
4.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - DOOR ELECTRICAL KEY OSCILLATOR)

a. Disconnect the E30 ECU connector.

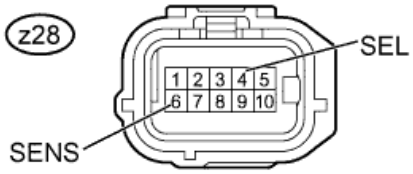
b. Disconnect the z28 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector:
(to Certification ECU [Smart Key ECU Assembly])



Front view of wire harness connector:
(to Door Electrical Key Oscillator)



*1: for LHD

*2: for RHD

Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
E30-1 (SEL3) - z28-4 (SEL)	Always	Below 1 Ω
E30-28 (SEN3) - z28-6 (SENS)	Always	Below 1 Ω
E30-1 (SEL3) - Body ground	Always	10 kΩ or higher
E30-28 (SEN3) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
E30-2 (SEL4) - z28-4 (SEL)	Always	Below 1 Ω
E30-27 (SEN4) - z28-6 (SENS)	Always	Below 1 Ω
E30-2 (SEL4) - Body ground	Always	10 kΩ or higher
E30-27 (SEN4) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5.CHECK HARNESS AND CONNECTOR (DOOR ELECTRICAL KEY OSCILLATOR - REAR DOOR OUTSIDE HANDLE)

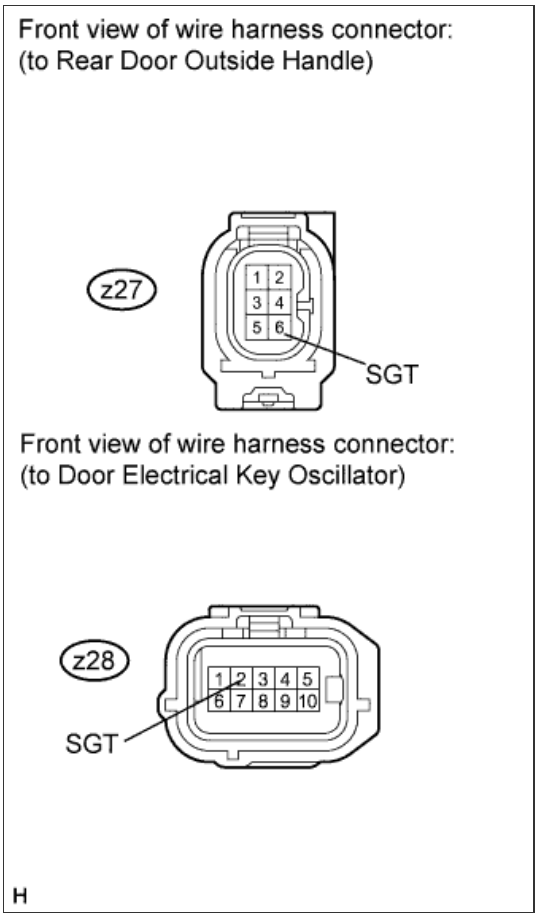
a. Disconnect the z27 handle connector.

b. Disconnect the z28 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z27-6 (SGT) - z28-2 (SGT)	Always	Below 1 Ω
z27-6 (SGT) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6.REPLACE DOOR ELECTRICAL KEY OSCILLATOR

a. Replace the door electrical key oscillator (Click here).

NEXT

7.CHECK DOOR ELECTRICAL KEY OSCILLATOR OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → Go to step 8

OK

END (DOOR ELECTRICAL KEY OSCILLATOR IS DEFECTIVE)

8.REPLACE REAR DOOR OUTSIDE HANDLE

a. Replace the rear door outside handle (Click here).

NEXT

9.CHECK REAR DOOR OUTSIDE HANDLE OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

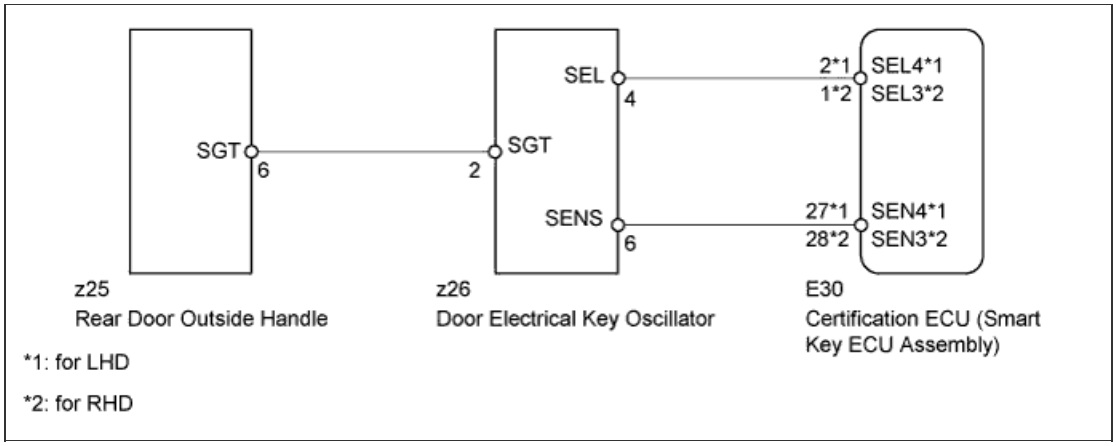
END (REAR DOOR OUTSIDE HANDLE IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

If the rear door RH entry unlock function does not operate but the entry lock function operates, the communication line between the vehicle and electrical key transmitter is normal. The part at fault may be a touch sensor circuit (certification ECU (smart key ECU assembly) → rear door outside handle RH → rear door electrical key oscillator RH).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK POWER DOOR LOCK OPERATION

a. When the master switch assembly door control switch is operated, check that the locked doors unlock.

OK:
Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
PR Door Lock Position SW	Passenger side rear door lock position switch signal / ON or OFF	ON: Passenger side rear door unlocked OFF: Passenger side rear door locked	-

OK:
On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Rear Door RH LOCK/UNLOCK Functions do not Operate) (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (TOUCH SENSOR)

a. Using the intelligent tester, read the Data List.

i. for LHD:

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Pr-Door Touch Sensor	Passenger side rear door touch sensor / ON or OFF	ON: Touch sensor touched OFF: Touch sensor not touched	-

OK:
"ON" (sensor is touched) and "OFF" (sensor is not touched) appears on the screen.

ii. for RHD:

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Dr-Door Touch Sensor	Driver side rear door touch sensor / ON or OFF	ON: Touch sensor touched OFF: Touch sensor not touched	-

OK:
"ON" (sensor is touched) and "OFF" (sensor is not touched) appears on the screen.

NG → Go to step 4

OK

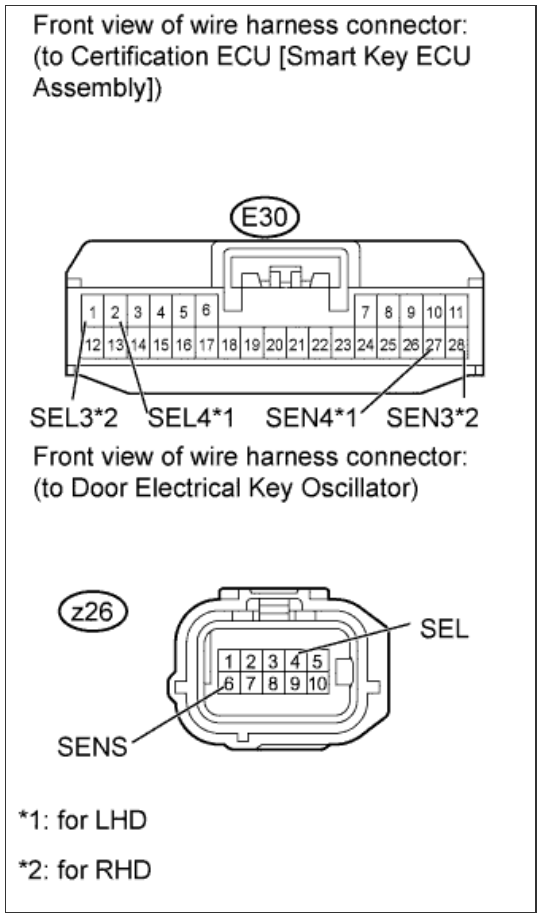
REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

4.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - DOOR ELECTRICAL KEY OSCILLATOR)

a. Disconnect the E30 ECU connector.

b. Disconnect the z26 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
E30-2 (SEL4) - z26-4 (SEL)	Always	Below 1 Ω
E30-27 (SEN4) - z26-6 (SENS)	Always	Below 1 Ω
E30-2 (SEL4) - Body ground	Always	10 kΩ or higher
E30-27 (SEN4) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
E30-1 (SEL3) - z26-4 (SEL)	Always	Below 1 Ω
E30-28 (SEN3) - z26-6 (SENS)	Always	Below 1 Ω
E30-1 (SEL3) - Body ground	Always	10 kΩ or higher
E30-28 (SEN3) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5.CHECK HARNESS AND CONNECTOR (DOOR ELECTRICAL KEY OSCILLATOR - REAR DOOR OUTSIDE HANDLE)

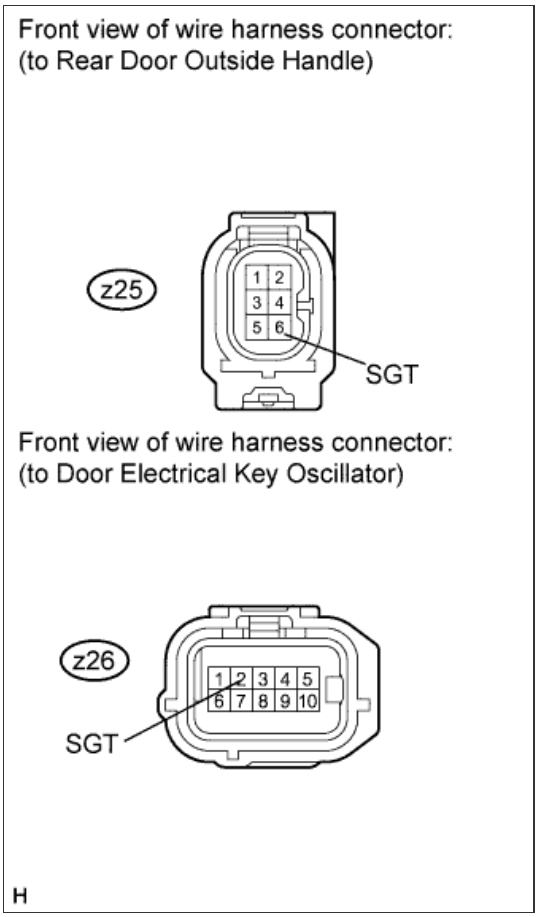
a. Disconnect the z25 handle connector.

b. Disconnect the z26 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z25-6 (SGT) - z26-2 (SGT)	Always	Below 1 Ω
z25-6 (SGT) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6.REPLACE DOOR ELECTRICAL KEY OSCILLATOR

a. Replace the door electrical key oscillator (Click here).

NEXT

7.CHECK DOOR ELECTRICAL KEY OSCILLATOR OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → Go to step 8

OK

END (DOOR ELECTRICAL KEY OSCILLATOR IS DEFECTIVE)

8.REPLACE REAR DOOR OUTSIDE HANDLE

a. Replace the rear door outside handle (Click here).

NEXT

9.CHECK REAR DOOR OUTSIDE HANDLE OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

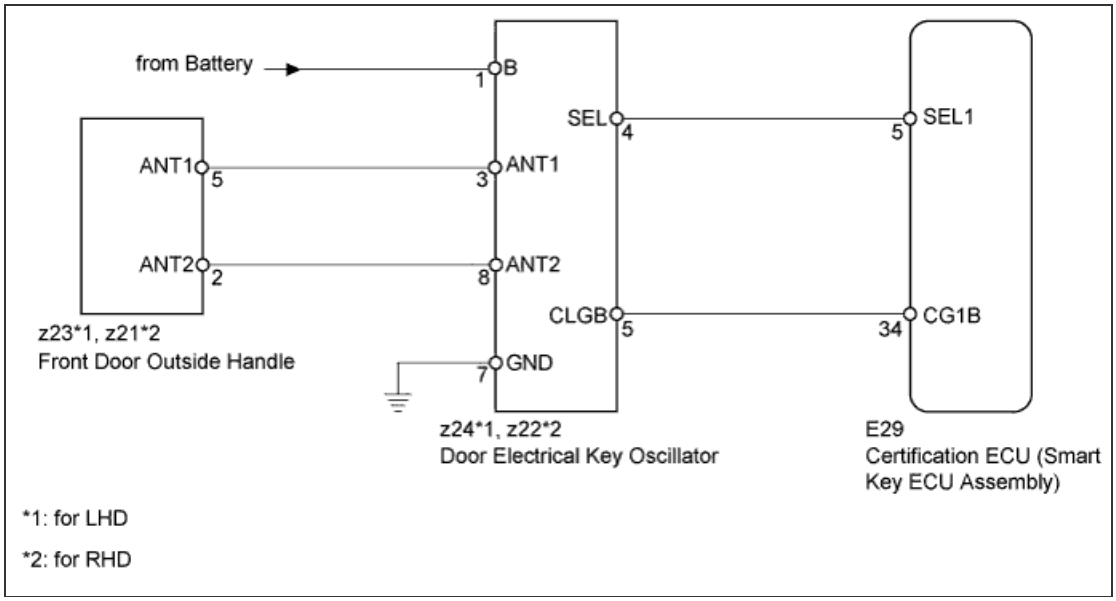
END (REAR DOOR OUTSIDE HANDLE IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

When the driver side door entry lock and unlock functions do not operate, one of the following may be malfunctioning: 1) power door lock system, 2) driver side door electrical key oscillator, or 3) certification ECU (smart key ECU assembly).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK POWER DOOR LOCK OPERATION

a. When the master switch assembly door control switch is operated, check that the locked doors unlock.

OK:
Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
D Door Lock Position SW	Driver side door lock position switch signal / ON or OFF	ON: Driver side door unlocked OFF: Driver side door locked	-

OK:
On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to

NG → Only Driver Door LOCK/UNLOCK Functions do not Operate) (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (TOUCH SENSOR, TRIGGER SWITCH)

a. Using the intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
D-Door Touch Sensor	Driver side door touch sensor / ON or OFF	ON: Touch sensor touched OFF: Touch sensor not touched	-
D-Door Trigger Switch	Driver side door outside handle lock switch / ON or OFF	ON: Entry lock switch pushed OFF: Entry lock switch not pushed	-

Result

Result	Proceed to
Display changes according to manual operation	A
Display does not change according to manual operation	B

B → REPLACE FRONT DOOR OUTSIDE HANDLE (Click here)

A

4.CHECK WAVE ENVIRONMENT

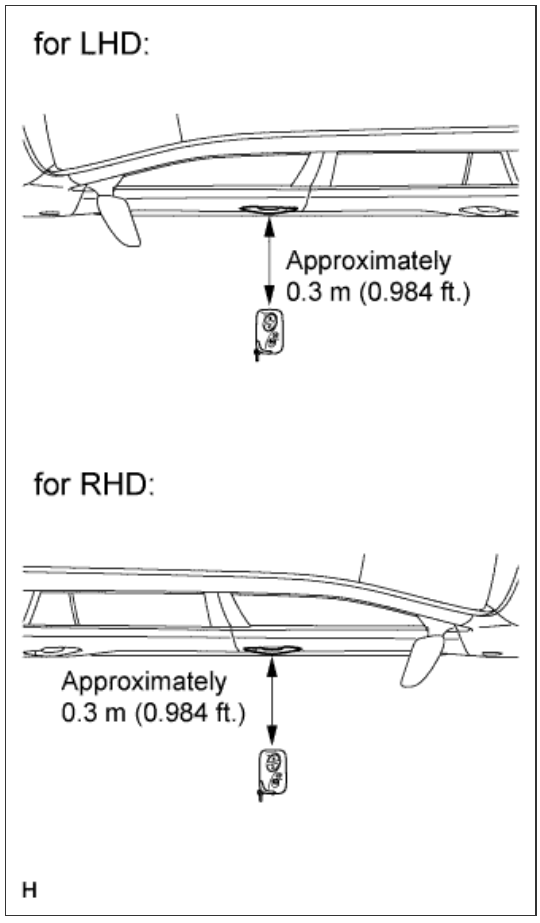
a. Bring the electrical key transmitter near the driver side door outside handle, and perform a driver side door entry lock and unlock operation check.

NOTICE:

If the key is brought within 0.2 m (0.656 ft.) of the door handle, communication is not possible.

HINT:

- **When the electrical key transmitter is brought near the driver side door outside handle, the possibility of wave interference decreases, and it can be determined if wave interference is causing the problem symptom.**
- **If the operation check is normal, the possibility of wave interference is high. Also, added vehicle components may cause wave interference. If installed, remove them and perform the operation check.**



Result

Result	Proceed to
Operation check fails	A
Operation check is normal	B

B → AFFECTED BY WAVE INTERFERENCE

A

5.PERFORM KEY DIAGNOSTIC MODE INSPECTION

a. Diagnostic mode inspection (driver side door electrical key oscillator).

i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Driver Side.

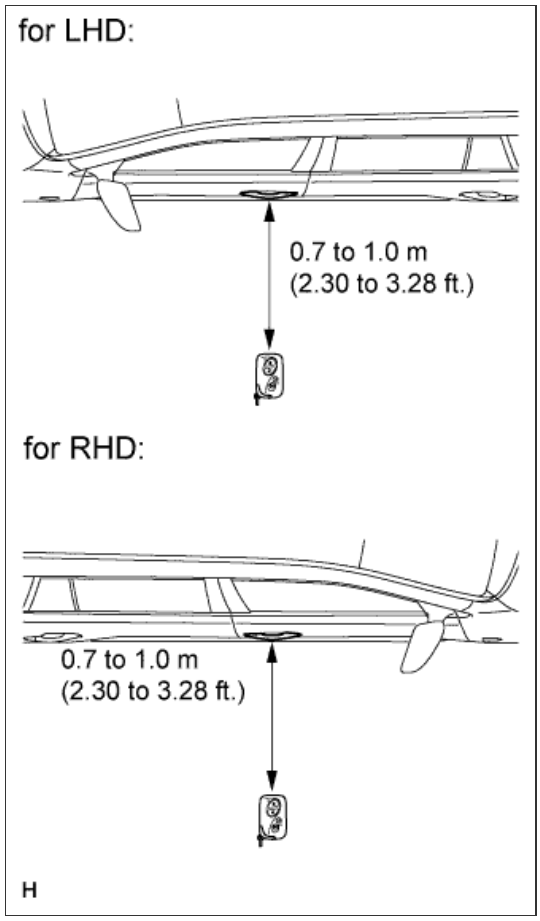
v. When the electrical key transmitter is in the position shown in the illustration, check that the wireless door lock buzzer sounds.

HINT:

If the buzzer sounds, it can be determined that the driver seat outside transmitter is operating normally.

OK:

Wireless door lock buzzer sounds.



NG → Go to step 6

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

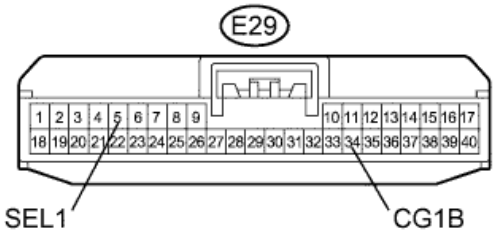
6.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - DOOR ELECTRICAL KEY OSCILLATOR)

a. Disconnect the E29 ECU connector.

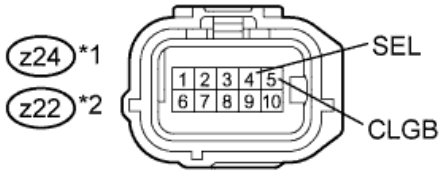
b. Disconnect the z24 or z22 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector:
(to Certification ECU [Smart Key ECU Assembly])



Front view of wire harness connector:
(to Door Electrical Key Oscillator)



*1: for LHD

*2: for RHD

Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
E29-5 (SEL1) - z24-4 (SEL)	Always	Below 1 Ω
E29-34 (CG1B) - z24-5 (CLGB)	Always	Below 1 Ω
E29-5 (SEL1) - Body ground	Always	10 kΩ or higher
E29-34 (CG1B) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
E29-5 (SEL1) - z22-4 (SEL)	Always	Below 1 Ω
E29-34 (CG1B) - z22-5 (CLGB)	Always	Below 1 Ω
E29-5 (SEL1) - Body ground	Always	10 kΩ or higher
E29-34 (CG1B) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

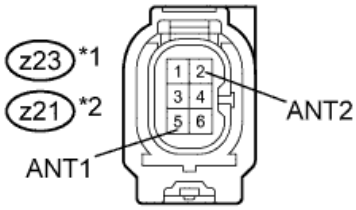
7.CHECK HARNESS AND CONNECTOR (DOOR ELECTRICAL KEY OSCILLATOR - FRONT DOOR OUTSIDE HANDLE)

a. Disconnect the z23 or z21 handle connector.

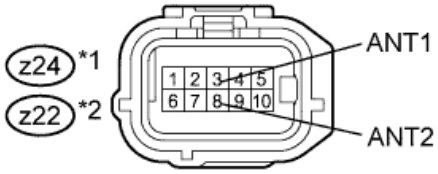
b. Disconnect the z24 or z22 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector:
(to Front Door Outside Handle)



Front view of wire harness connector:
(to Door Electrical Key Oscillator)



*1: for LHD

*2: for RHD

H

Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
z23-2 (ANT2) - z24-8 (ANT2)	Always	Below 1 Ω
z23-5 (ANT1) - z24-3 (ANT1)	Always	Below 1 Ω
z23-2 (ANT2) - Body ground	Always	10 kΩ or higher
z23-5 (ANT1) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
z21-2 (ANT2) - z22-8 (ANT2)	Always	Below 1 Ω
z21-5 (ANT1) - z22-3 (ANT1)	Always	Below 1 Ω
z21-2 (ANT2) - Body ground	Always	10 kΩ or higher
z21-5 (ANT1) - Body ground	Always	10 kΩ or higher

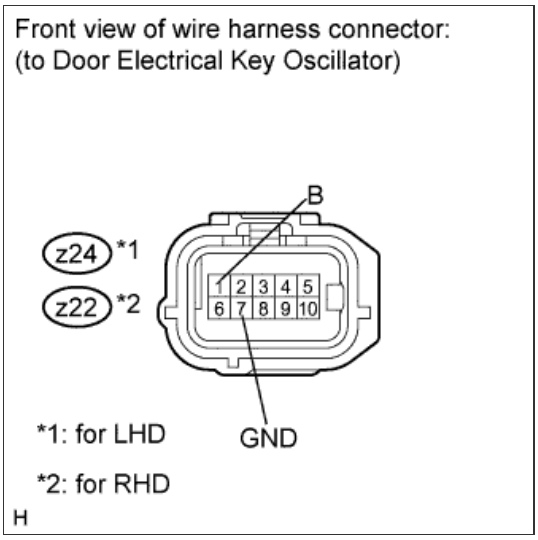
NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

8.CHECK HARNESS AND CONNECTOR (DOOR ELECTRICAL KEY OSCILLATOR - BATTERY AND BODY GROUND)

a. Disconnect the z24 or z22 oscillator connector.

b. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

for LHD:

Tester Connection	Condition	Specified Condition
z24-1 (B) - z24-7 (GND)	Always	11 to 14 V

for RHD:

Tester Connection	Condition	Specified Condition
z22-1 (B) - z22-7 (GND)	Always	11 to 14 V

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

9.REPLACE DOOR ELECTRICAL KEY OSCILLATOR

a. Replace the door electrical key oscillator (Click here).

NEXT

10.CHECK DOOR ELECTRICAL KEY OSCILLATOR OPERATION

a. Check that the entry function operates normally.

OK:

Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

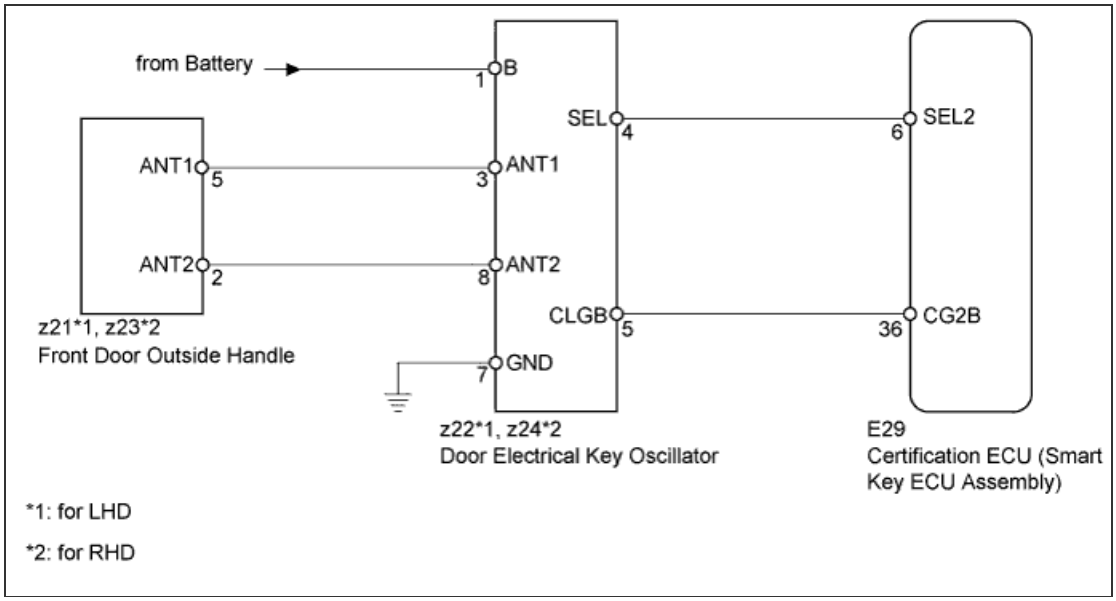
END (DOOR ELECTRICAL KEY OSCILLATOR IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

When the front passenger side door entry lock and unlock functions do not operate, one of the following may be malfunctioning: 1) power door lock system, 2) front passenger side door electrical key oscillator, or 3) certification ECU (smart key ECU assembly).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK POWER DOOR LOCK OPERATION

a. When the master switch assembly door control switch is operated, check that the locked doors unlock.

OK:

Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
P Door Lock Position SW	Front passenger side door lock position switch signal / ON or OFF	ON: Front passenger side door unlocked OFF: Front passenger side door locked	-

OK:

On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Passenger Door LOCK/UNLOCK Functions do not Operate) (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (TOUCH SENSOR, TRIGGER SWITCH)

a. Using the intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
P-Door Touch Sensor	Front passenger side door touch sensor / ON or OFF	ON: Touch sensor touched OFF: Touch sensor not touched	-
P-Door Trigger Switch	Front passenger side door outside handle lock switch / ON or OFF	ON: Entry lock switch pushed OFF: Entry lock switch not pushed	-

Result

Result	Proceed to
Display changes according to manual operation	A
Display does not change according to manual operation	B

B → REPLACE FRONT DOOR OUTSIDE HANDLE (Click here)

A

4.CHECK WAVE ENVIRONMENT

a. Bring the electrical key transmitter near the front passenger side door outside handle, and perform a front passenger side door entry lock and unlock operation check.

NOTICE:

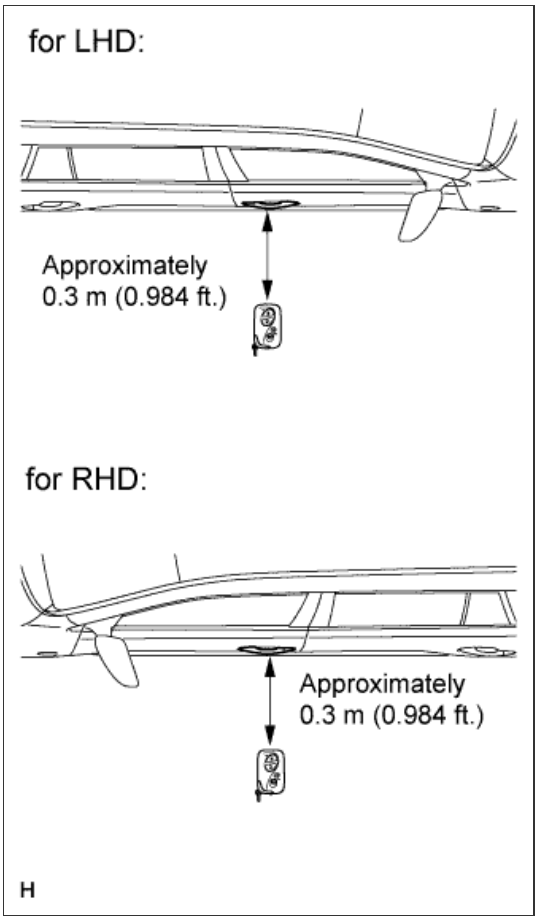
If the key is brought within 0.2 m (0.656 ft.) of the door handle, communication is not possible.

HINT:

- **When the electrical key transmitter is brought near the front passenger side door outside handle, the possibility of wave interference decreases, and it can be determined if wave interference is causing the problem symptom.**
- **If the operation check is normal, the possibility of wave interference is high. Also, added vehicle components may cause wave interference. If installed, remove them and perform the operation check.**

Result

Result	Proceed to
Operation check fails	A
Operation check is normal	B



B → AFFECTED BY WAVE INTERFERENCE

A

5.PERFORM KEY DIAGNOSTIC MODE INSPECTION

a. Diagnostic mode inspection (front passenger side door electrical key oscillator).

i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Passenger Side.

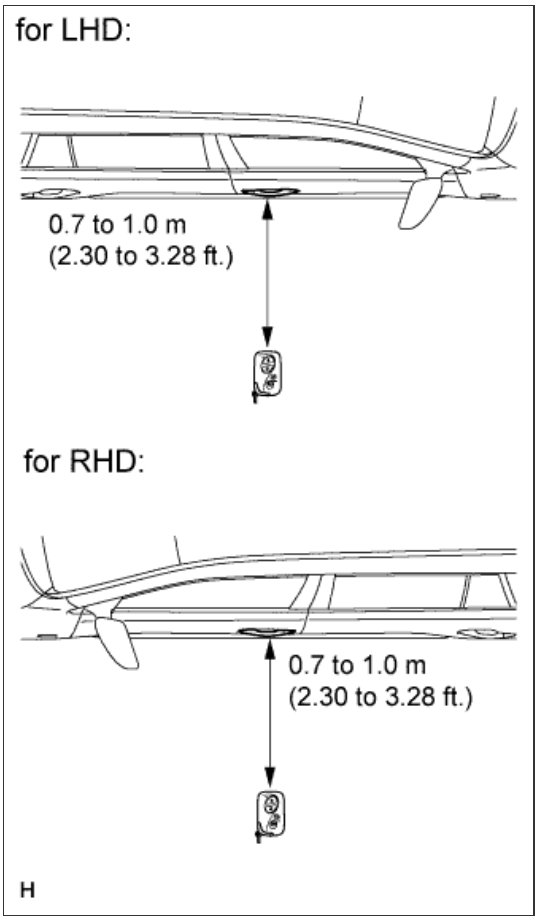
v. When the electrical key transmitter is in the position shown in the illustration, check that the wireless door lock buzzer sounds.

HINT:

If the buzzer sounds, it can be determined that the front passenger seat outside transmitter is operating normally.

OK:

Wireless door lock buzzer sounds.



NG → Go to step 6

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

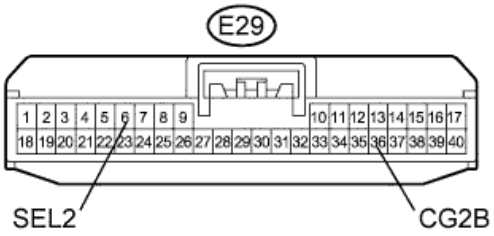
6.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - DOOR ELECTRICAL KEY OSCILLATOR)

a. Disconnect the E29 ECU connector.

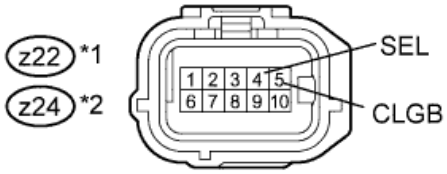
b. Disconnect the z22 or z24 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector:
(to Certification ECU [Smart Key ECU Assembly])



Front view of wire harness connector:
(to Door Electrical Key Oscillator)



*1: for LHD

*2: for RHD

Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
E29-6 (SEL2) - z22-4 (SEL)	Always	Below 1 Ω
E29-36 (CG2B) - z22-5 (CLGB)	Always	Below 1 Ω
E29-6 (SEL2) - Body ground	Always	10 kΩ or higher
E29-36 (CG2B) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
E29-6 (SEL2) - z24-4 (SEL)	Always	Below 1 Ω
E29-36 (CG2B) - z24-5 (CLGB)	Always	Below 1 Ω
E29-6 (SEL2) - Body ground	Always	10 kΩ or higher
E29-36 (CG2B) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

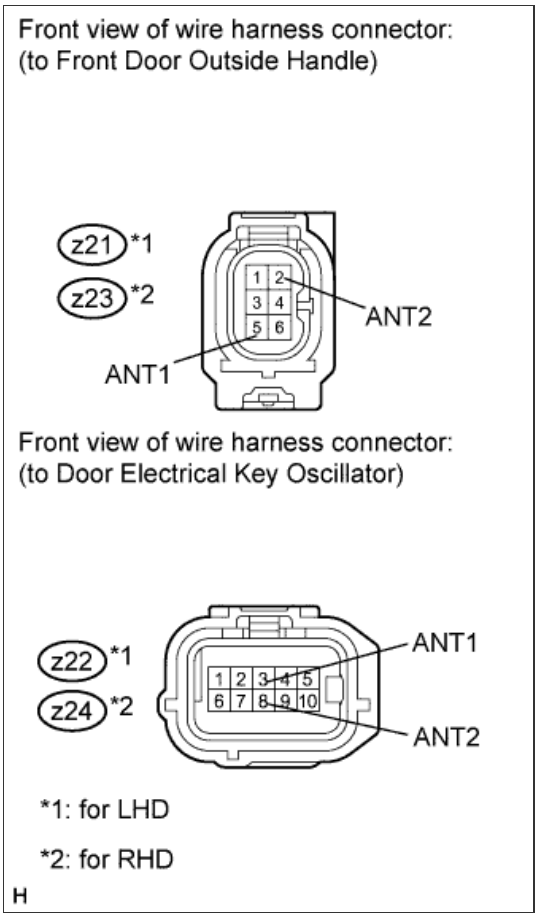
OK

7.CHECK HARNESS AND CONNECTOR (DOOR ELECTRICAL KEY OSCILLATOR - FRONT DOOR OUTSIDE HANDLE)

a. Disconnect the z21 or z23 handle connector.

b. Disconnect the z22 or z24 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
z21-2 (ANT2) - z22-8 (ANT2)	Always	Below 1 Ω
z21-5 (ANT1) - z22-3 (ANT1)	Always	Below 1 Ω
z21-2 (ANT2) - Body ground	Always	10 kΩ or higher
z21-5 (ANT1) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
z23-2 (ANT2) - z24-8 (ANT2)	Always	Below 1 Ω
z23-5 (ANT1) - z24-3 (ANT1)	Always	Below 1 Ω
z23-2 (ANT2) - Body ground	Always	10 kΩ or higher
z23-5 (ANT1) - Body ground	Always	10 kΩ or higher

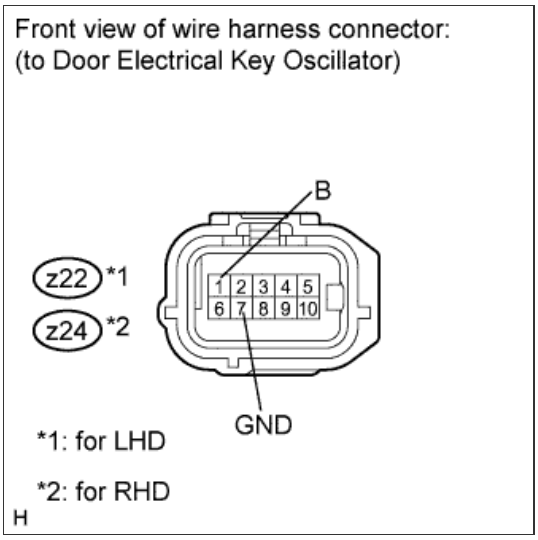
NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

8.CHECK HARNESS AND CONNECTOR (DOOR ELECTRICAL KEY OSCILLATOR - BATTERY AND BODY GROUND)

a. Disconnect the z22 or z24 oscillator connector.

b. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

for LHD:

Tester Connection	Condition	Specified Condition
z22-1 (B) - z22-7 (GND)	Always	11 to 14 V

for RHD:

Tester Connection	Condition	Specified Condition
z24-1 (B) - z24-7 (GND)	Always	11 to 14 V

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

9.REPLACE DOOR ELECTRICAL KEY OSCILLATOR

a. Replace the door electrical key oscillator (Click here).

NEXT

10.CHECK DOOR ELECTRICAL KEY OSCILLATOR OPERATION

a. Check that the entry function operates normally.

OK:

Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

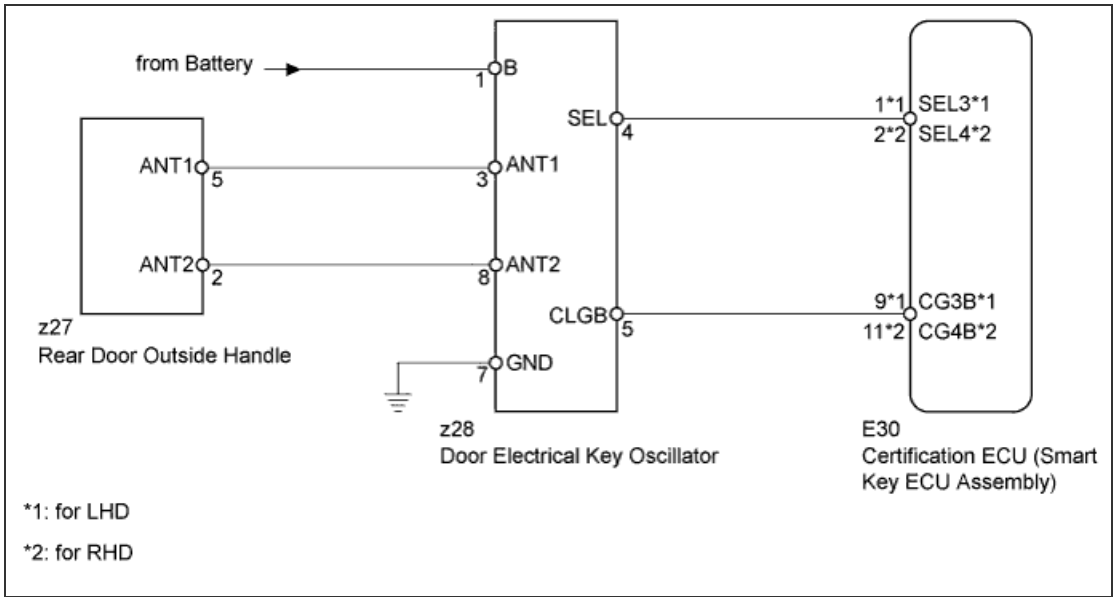
END (DOOR ELECTRICAL KEY OSCILLATOR IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

When the rear door LH entry lock and unlock functions do not operate, one of the following may be malfunctioning: 1) power door lock system, 2) rear door electrical key oscillator LH, or 3) certification ECU (smart key ECU assembly).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK POWER DOOR LOCK OPERATION

a. When the master switch assembly door control switch is operated, check that the locked doors unlock.

OK:

Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
DR Door Lock Position SW	Driver side rear door lock position switch signal / ON or OFF	ON: Driver side rear door unlocked OFF: Driver side rear door locked	-

OK:

On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Rear Door LH LOCK/UNLOCK Functions do not Operate) (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (TOUCH SENSOR, TRIGGER SWITCH)

a. Using the intelligent tester, read the Data List.

i. for LHD:

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Dr-Door Touch Sensor	Driver side rear door touch sensor / ON or OFF	ON: Touch sensor touched OFF: Touch sensor not touched	-
Dr-Door Trigger Switch	Driver side rear door outside handle lock switch / ON or OFF	ON: Entry lock switch pushed OFF: Entry lock switch not pushed	-

ii. for RHD:

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Pr-Door Touch Sensor	Passenger side rear door touch sensor / ON or OFF	ON: Touch sensor touched OFF: Touch sensor not touched	-
Pr-Door Trigger Switch	Passenger side rear door outside handle lock switch / ON or OFF	ON: Entry lock switch pushed OFF: Entry lock switch not pushed	-

Result

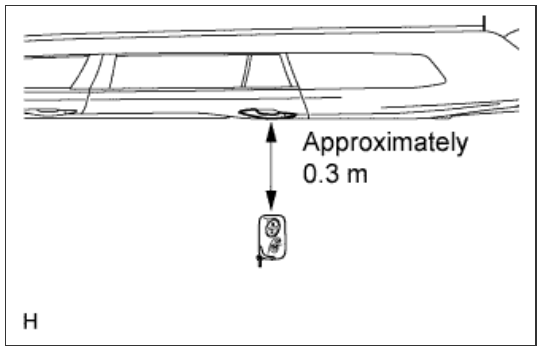
Result	Proceed to
Display changes according to manual operation	A
Display does not change according to manual operation	B

B → REPLACE REAR DOOR OUTSIDE HANDLE (Click here)

A

4.CHECK WAVE ENVIRONMENT

a. Bring the electrical key transmitter near the rear door outside handle LH, and perform a rear door LH entry lock and unlock operation check.



NOTICE:

If the key is brought within 0.2 m (0.656 ft.) of the door handle, communication is not possible.

HINT:

- **When the electrical key transmitter is brought near the rear door outside handle LH, the possibility of wave interference decreases, and it can be determined if wave interference is causing the problem symptom.**
- **If the operation check is normal, the possibility of wave interference is high. Also, added vehicle components may cause wave interference. If installed, remove them and perform the operation check.**

Result

Result	Proceed to
Operation check fails	A
Operation check is normal	B

B → AFFECTED BY WAVE INTERFERENCE

A

5.PERFORM KEY DIAGNOSTIC MODE INSPECTION

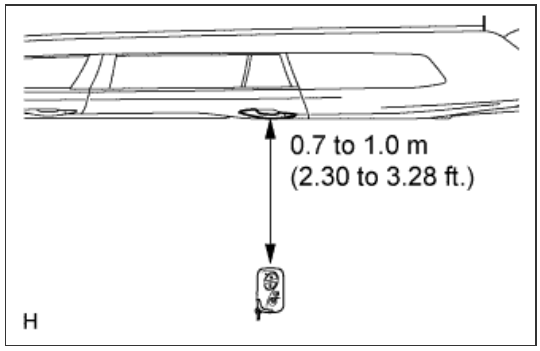
a. Diagnostic mode inspection (rear door electrical key oscillator LH).

i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus:
for LHD:
Select: Body / Entry&Start / Key Communication Check / Overhead + Driver Side Rear.
for RHD:
Select: Body / Entry&Start / Key Communication Check / Overhead + Passenger Side Rear.



v. When the electrical key transmitter is in the position shown in the illustration, check that the wireless door lock buzzer sounds.

HINT:

If the buzzer sounds, it can be determined that the rear LH seat outside transmitter is operating normally.

OK:
Wireless door lock buzzer sounds.

NG → Go to step 6

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

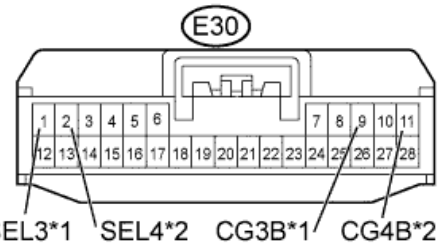
6.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - DOOR ELECTRICAL KEY OSCILLATOR)

a. Disconnect the E30 ECU connector.

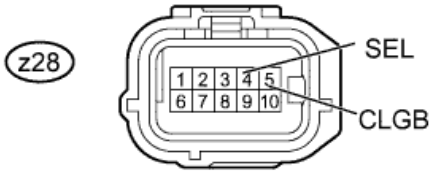
b. Disconnect the z28 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector:
(to Certification ECU [Smart Key ECU Assembly])



Front view of wire harness connector:
(to Door Electrical Key Oscillator)



*1: for LHD

*2: for RHD

Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
E30-1 (SEL3) - z28-4 (SEL)	Always	Below 1 Ω
E30-9 (CG3B) - z28-5 (CLGB)	Always	Below 1 Ω
E30-1 (SEL3) - Body ground	Always	10 kΩ or higher
E30-9 (CG3B) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
E30-2 (SEL4) - z28-4 (SEL)	Always	Below 1 Ω
E30-11 (CG4B) - z28-5 (CLGB)	Always	Below 1 Ω
E30-2 (SEL4) - Body ground	Always	10 kΩ or higher
E30-11 (CG4B) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

7.CHECK HARNESS AND CONNECTOR (DOOR ELECTRICAL KEY OSCILLATOR - REAR DOOR OUTSIDE HANDLE)

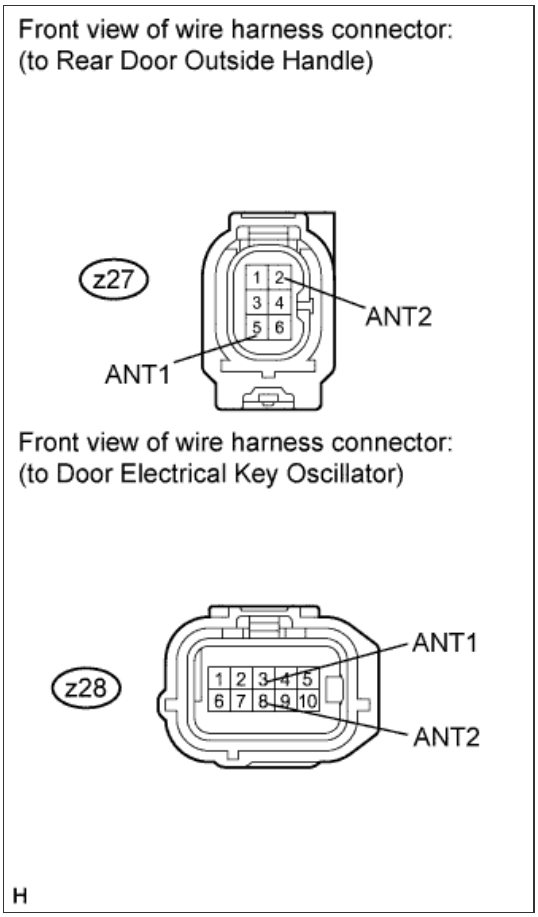
a. Disconnect the z27 handle connector.

b. Disconnect the z28 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z27-2 (ANT2) - z28-8 (ANT2)	Always	Below 1 Ω
z27-5 (ANT1) - z28-3 (ANT1)	Always	Below 1 Ω
z27-2 (ANT2) - Body ground	Always	10 kΩ or higher
z27-5 (ANT1) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

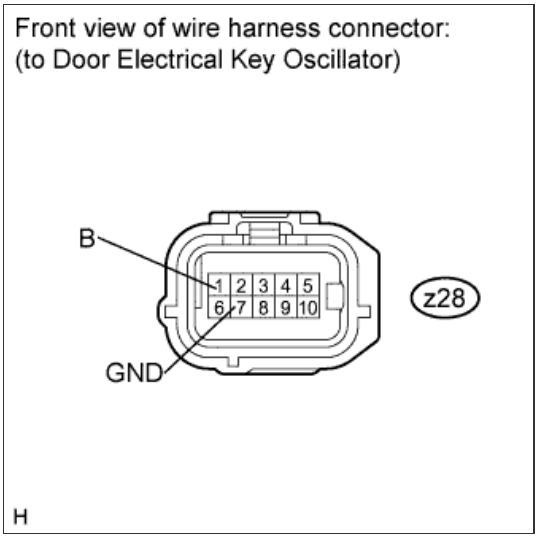
8.CHECK HARNESS AND CONNECTOR (DOOR ELECTRICAL KEY OSCILLATOR - BATTERY AND BODY GROUND)

a. Disconnect the z28 oscillator connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
z28-1 (B) - z28-7 (GND)	Always	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

9.REPLACE DOOR ELECTRICAL KEY OSCILLATOR

a. Replace the door electrical key oscillator (Click here).

NEXT

10.CHECK DOOR ELECTRICAL KEY OSCILLATOR OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

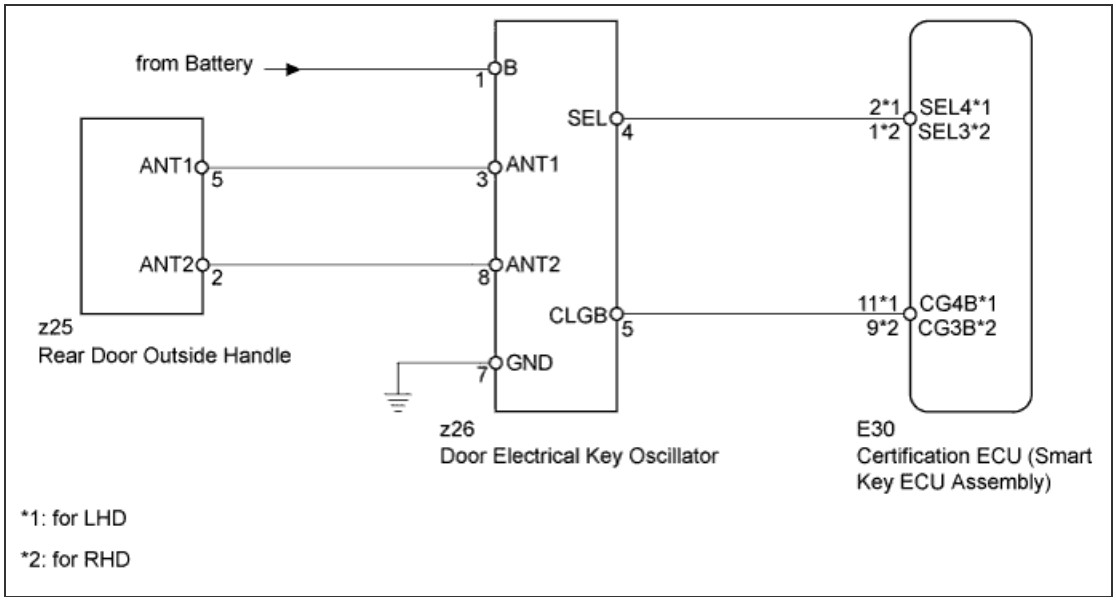
END (DOOR ELECTRICAL KEY OSCILLATOR IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

When the rear door RH entry lock and unlock functions do not operate, one of the following may be malfunctioning: 1) power door lock system, 2) rear door electrical key oscillator RH, or 3) certification ECU (smart key ECU assembly).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK POWER DOOR LOCK OPERATION

a. When the master switch assembly door control switch is operated, check that the locked doors unlock.

OK:

Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
PR Door Lock Position SW	Passenger side rear door lock position switch signal / ON or OFF	ON: Passenger side rear door unlocked OFF: Passenger side rear door locked	-

OK:

On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Rear Door RH LOCK/UNLOCK Functions do not Operate) (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (TOUCH SENSOR, TRIGGER SWITCH)

a. Using the intelligent tester, read the Data List.

i. for LHD:

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Pr-Door Touch Sensor	Passenger side rear door touch sensor / ON or OFF	ON: Touch sensor touched OFF: Touch sensor not touched	-
Pr-Door Trigger Switch	Passenger side rear door outside handle lock switch / ON or OFF	ON: Entry lock switch pushed OFF: Entry lock switch not pushed	-

ii. for RHD:

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Dr-Door Touch Sensor	Driver side rear door touch sensor / ON or OFF	ON: Touch sensor touched OFF: Touch sensor not touched	-
Dr-Door Trigger Switch	Driver side rear door outside handle lock switch / ON or OFF	ON: Entry lock switch pushed OFF: Entry lock switch not pushed	-

Result

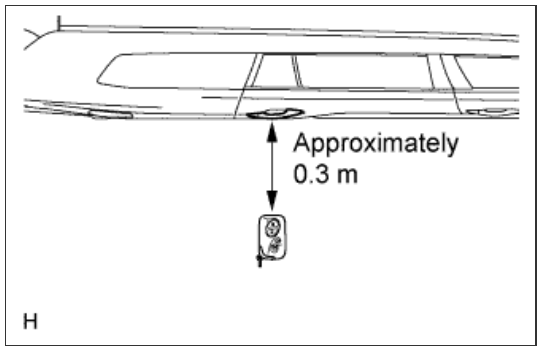
Result	Proceed to
Display changes according to manual operation	A
Display does not change according to manual operation	B

B → REPLACE REAR DOOR OUTSIDE HANDLE (Click here)

A

4.CHECK WAVE ENVIRONMENT

a. Bring the electrical key transmitter near the rear door outside handle RH, and perform a rear door RH entry lock and unlock operation check.



NOTICE:

If the key is brought within 0.2 m (0.656 ft.) of the door handle, communication is not possible.

HINT:

- **When the electrical key transmitter is brought near the rear door outside handle RH, the possibility of wave interference decreases, and it can be determined if wave interference is causing the problem symptom.**
- **If the operation check is normal, the possibility of wave interference is high. Also, added vehicle components may cause wave interference. If installed, remove them and perform the operation check.**

Result

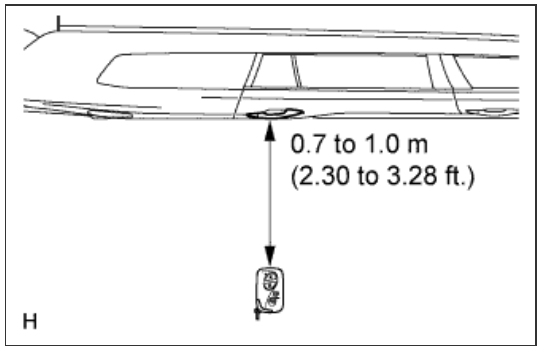
Result	Proceed to
Operation check fails	A
Operation check is normal	B

B → AFFECTED BY WAVE INTERFERENCE

A

5.PERFORM KEY DIAGNOSTIC MODE INSPECTION

a. Diagnostic mode inspection (rear door electrical key oscillator RH).



i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus:
for LHD:
Select: Body / Entry&Start / Key Communication Check / Overhead + Passenger Side Rear.
for RHD:
Select: Body / Entry&Start / Key Communication Check / Overhead + Driver Side Rear.

v. When the electrical key transmitter is in the position shown in the illustration, check that the wireless door lock buzzer sounds.

HINT:

If the buzzer sounds, it can be determined that the rear RH seat outside transmitter is operating normally.

OK:
Wireless door lock buzzer sounds.

NG → Go to step 6

OK

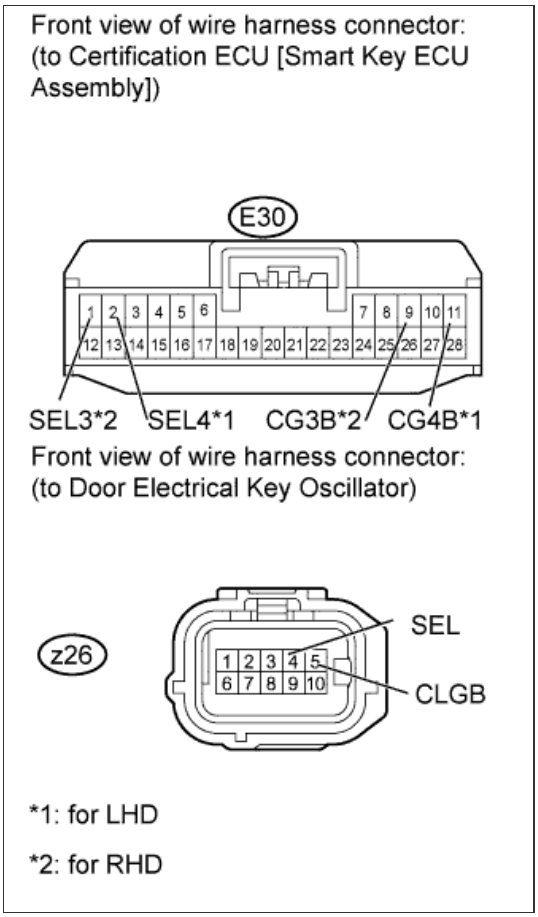
REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

6.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - DOOR ELECTRICAL KEY OSCILLATOR)

a. Disconnect the E30 ECU connector.

b. Disconnect the z26 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
E30-2 (SEL4) - z26-4 (SEL)	Always	Below 1 Ω
E30-11 (CG4B) - z26-5 (CLGB)	Always	Below 1 Ω
E30-2 (SEL4) - Body ground	Always	10 kΩ or higher
E30-11 (CG4B) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
E30-1 (SEL3) - z26-4 (SEL)	Always	Below 1 Ω
E30-9 (CG3B) - z26-5 (CLGB)	Always	Below 1 Ω
E30-1 (SEL3) - Body ground	Always	10 kΩ or higher
E30-9 (CG3B) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

7.CHECK HARNESS AND CONNECTOR (DOOR ELECTRICAL KEY OSCILLATOR - REAR DOOR OUTSIDE HANDLE)

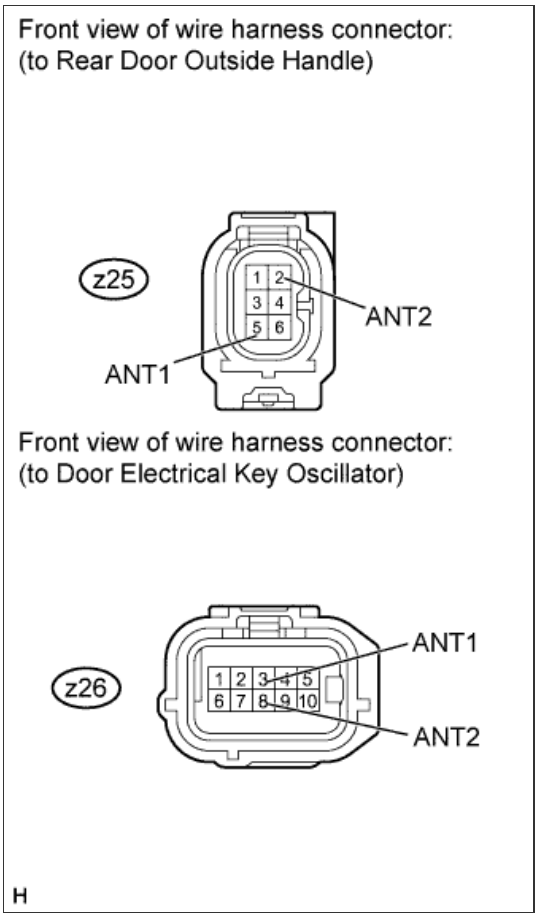
a. Disconnect the z25 handle connector.

b. Disconnect the z26 oscillator connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z25-2 (ANT2) - z26-8 (ANT2)	Always	Below 1 Ω
z25-5 (ANT1) - z26-3 (ANT1)	Always	Below 1 Ω
z25-2 (ANT2) - Body ground	Always	10 kΩ or higher
z25-5 (ANT1) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

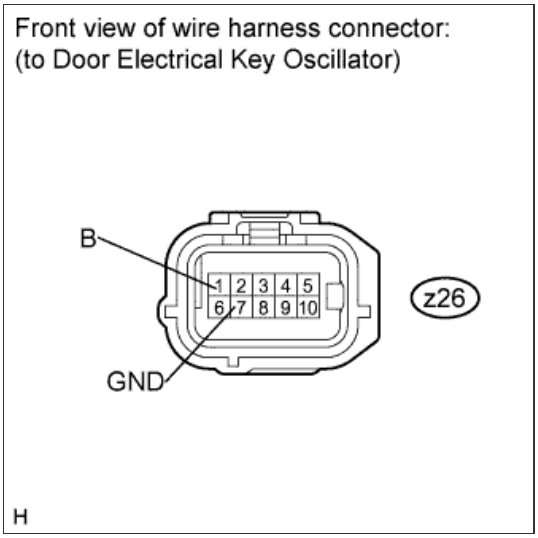
8.CHECK HARNESS AND CONNECTOR (DOOR ELECTRICAL KEY OSCILLATOR - BATTERY AND BODY GROUND)

a. Disconnect the z26 oscillator connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
z26-1 (B) - z26-7 (GND)	Always	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

9.REPLACE DOOR ELECTRICAL KEY OSCILLATOR

a. Replace the door electrical key oscillator (Click here).

NEXT

10.CHECK DOOR ELECTRICAL KEY OSCILLATOR OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

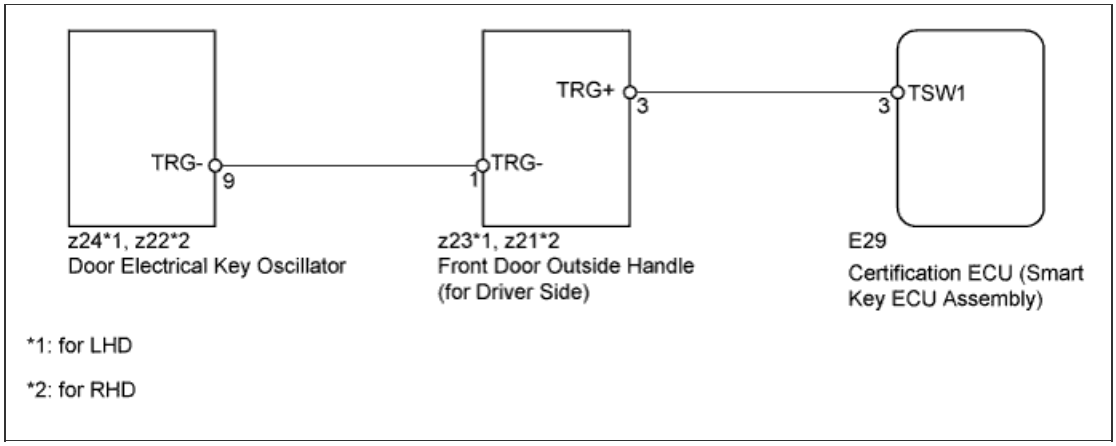
END (DOOR ELECTRICAL KEY OSCILLATOR IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

If the driver side door entry lock function does not operate but the entry unlock function operates, the communication line between the vehicle and electrical key transmitter is normal. The part at fault may be an entry lock switch circuit (certification ECU (smart key ECU assembly) → driver side door outside handle (entry lock switch) → driver side door electrical key oscillator).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK POWER DOOR LOCK OPERATION

a. When the master switch assembly door control switch is operated, check that the locked doors unlock.

OK:
Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
D Door Lock Position SW	Driver side door lock position switch signal / ON or OFF	ON: Driver side door unlocked OFF: Driver side door locked	-

OK:
On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Driver Door LOCK/UNLOCK Functions do not Operate) (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (LOCK SWITCH)

a. Using the intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
D-Door Trigger Switch	Driver side door outside handle lock switch / ON or OFF	ON: Entry lock switch pushed OFF: Entry lock switch not pushed	-

OK:

On tester screen, item changes between ON and OFF according to above chart.

NG → Go to step 4

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

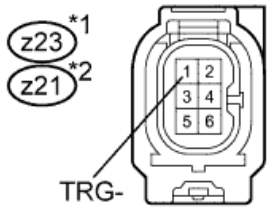
4.CHECK HARNESS AND CONNECTOR (FRONT DOOR OUTSIDE HANDLE - DOOR ELECTRICAL KEY OSCILLATOR)

a. Disconnect the z24 or z22 oscillator connector.

b. Disconnect the z23 or z21 handle connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector:
(to Front Door Outside Handle)



Front view of wire harness connector:
(to Door Electrical Key Oscillator)



*1: for LHD

*2: for RHD

H

Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
z24-9 (TRG-) - z23-1 (TRG-)	Always	Below 1 Ω
z24-9 (TRG-) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition

z22-9 (TRG-) - z21-1 (TRG-)	Always	Below 1 Ω
z22-9 (TRG-) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

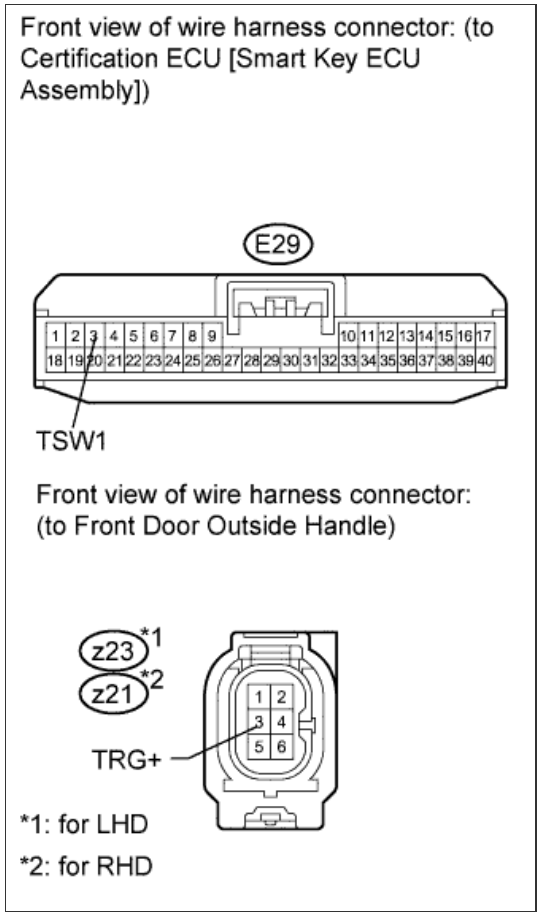
OK

5.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - FRONT DOOR OUTSIDE HANDLE)

a. Disconnect the E29 ECU connector.

b. Disconnect the z23 or z21 handle connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
E29-3 (TSW1) - z23-3 (TRG+)	Always	Below 1 Ω
E29-3 (TSW1) - Body ground	Always	10 kΩ or higher

for RHD:

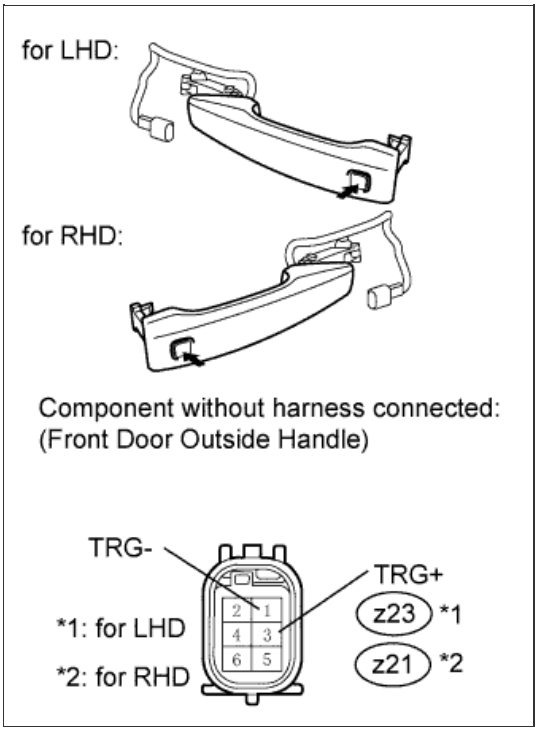
Tester Connection	Condition	Specified Condition
E29-3 (TSW1) - z21-3 (TRG+)	Always	Below 1 Ω
E29-3 (TSW1) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6.INSPECT FRONT DOOR OUTSIDE HANDLE (for Driver Side)

a. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD:

Tester Connection	Switch Condition	Specified Condition
z23-1 (TRG-) - z23-3 (TRG+)	Lock switch not pushed	10 kΩ or higher
	Lock switch pushed	Below 1 Ω

for RHD:

Tester Connection	Switch Condition	Specified Condition
z21-1 (TRG-) - z21-3 (TRG+)	Lock switch not pushed	10 kΩ or higher
	Lock switch pushed	Below 1 Ω

NG → REPLACE FRONT DOOR OUTSIDE HANDLE (Click here)

OK

7.REPLACE DOOR ELECTRICAL KEY OSCILLATOR

a. Replace the door electrical key oscillator (Click here).

NEXT

8.CHECK DOOR ELECTRICAL KEY OSCILLATOR OPERATION

a. Check that the entry function operates normally.

OK:

Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

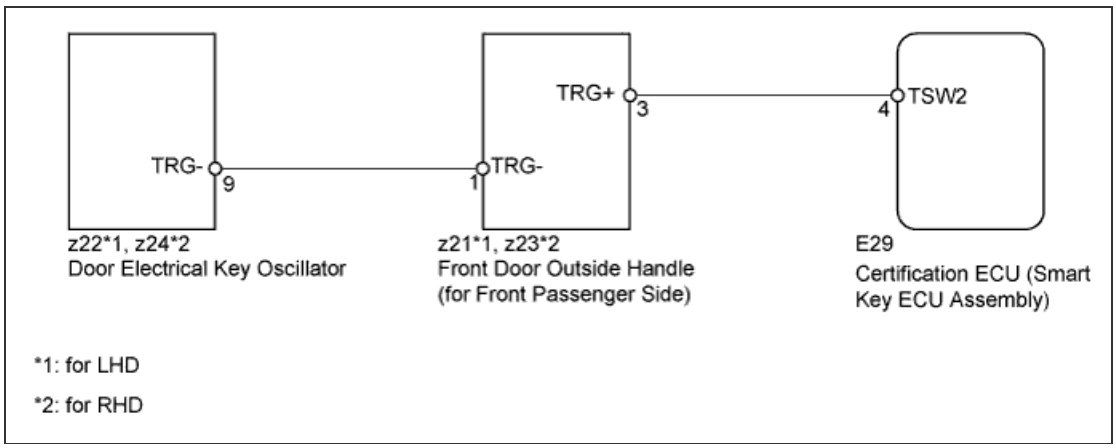
END (DOOR ELECTRICAL OSCILLATOR IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

If the front passenger side door entry lock function does not operate but the entry unlock function operates, the communication line between the vehicle and electrical key transmitter is normal. The part at fault may be an entry lock switch circuit (certification ECU (smart key ECU assembly) → front passenger side door outside handle (entry lock switch) → front passenger side door electrical key oscillator).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK POWER DOOR LOCK OPERATION

a. When the master switch assembly door control switch is operated, check that the locked doors unlock.

OK:
Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
P Door Lock Position SW	Front passenger side door lock position switch signal / ON or OFF	ON: Front passenger side door unlocked OFF: Front passenger side door locked	-

OK:
On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Passenger Door LOCK/UNLOCK Functions do not

Operate) (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (LOCK SWITCH)

a. Using the intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
P-Door Trigger Switch	Front passenger side door outside handle lock switch / ON or OFF	ON: Entry lock switch pushed OFF: Entry lock switch not pushed	-

OK:
On tester screen, item changes between ON and OFF according to above chart.

NG → Go to step 4

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

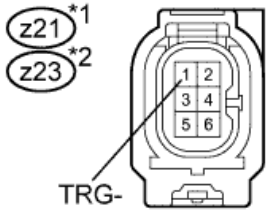
4.CHECK HARNESS AND CONNECTOR (FRONT DOOR OUTSIDE HANDLE - DOOR ELECTRICAL KEY OSCILLATOR)

a. Disconnect the z22 or z24 oscillator connector.

b. Disconnect the z21 or z23 handle connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector:
(to Front Door Outside Handle)



Front view of wire harness connector:
(to Door Electrical Key Oscillator)



*1: for LHD

*2: for RHD

H

Standard Resistance:
for LHD:

Tester Connection	Condition	Specified Condition
z22-9 (TRG-) - z21-1 (TRG-)	Always	Below 1 Ω
z22-9 (TRG-) - Body	Always	10 kΩ or higher

ground		

for RHD:

Tester Connection	Condition	Specified Condition
z24-9 (TRG-) - z23-1 (TRG-)	Always	Below 1 Ω
z24-9 (TRG-) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

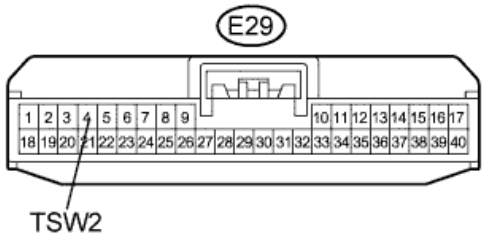
5.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - FRONT DOOR OUTSIDE HANDLE)

a. Disconnect the E29 ECU connector.

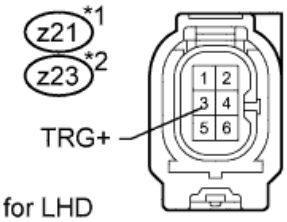
b. Disconnect the z21 or z23 handle connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector: (to Certification ECU [Smart Key ECU Assembly])



Front view of wire harness connector: (to Front Door Outside Handle)



*1: for LHD

*2: for RHD

Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
E29-4 (TSW2) - z21-3 (TRG+)	Always	Below 1 Ω
E29-4 (TSW2) - Body ground	Always	10 kΩ or higher

for RHD:

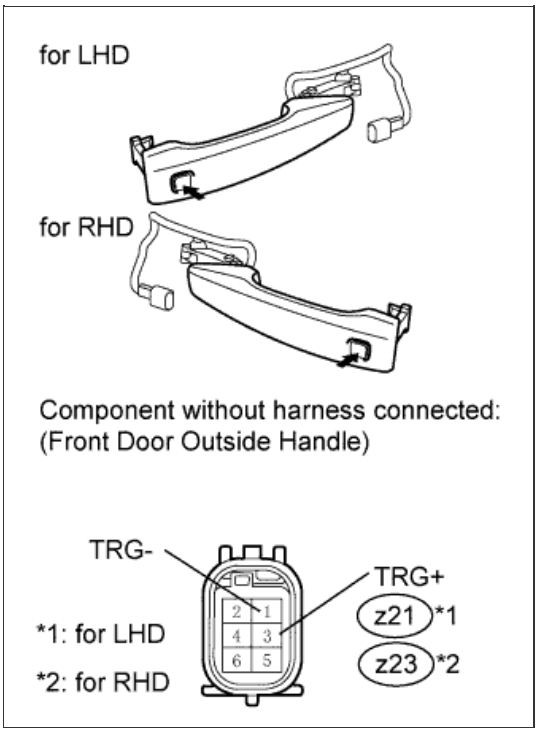
Tester Connection	Condition	Specified Condition
E29-4 (TSW2) - z23-3 (TRG+)	Always	Below 1 Ω
E29-4 (TSW2) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6.INSPECT FRONT DOOR OUTSIDE HANDLE (for Front Passenger Side)

a. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD:

Tester Connection	Switch Condition	Specified Condition
z21-1 (TRG-) - z21-3 (TRG+)	Lock switch not pushed	10 kΩ or higher
	Lock switch pushed	Below 1 Ω

for RHD:

Tester Connection	Switch Condition	Specified Condition
z23-1 (TRG-) - z23-3 (TRG+)	Lock switch not pushed	10 kΩ or higher
	Lock switch pushed	Below 1 Ω

NG → REPLACE FRONT DOOR OUTSIDE HANDLE (Click here)

OK

7.REPLACE DOOR ELECTRICAL KEY OSCILLATOR

a. Replace the door electrical key oscillator (Click here).

NEXT

8.CHECK DOOR ELECTRICAL KEY OSCILLATOR OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

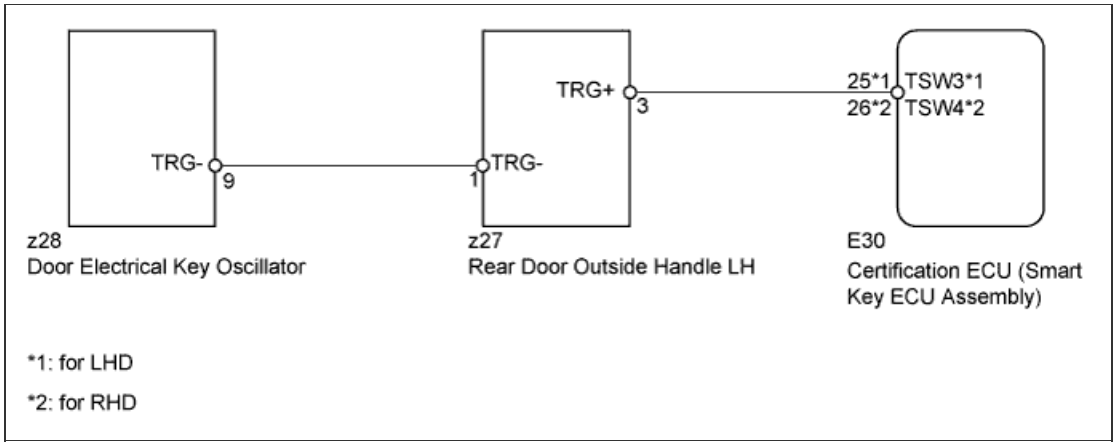
END (DOOR ELECTRICAL OSCILLATOR IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

If the rear door LH entry lock function does not operate but the entry unlock function operates, the communication line between the vehicle and electrical key transmitter is normal. The part at fault may be an entry lock switch circuit (certification ECU (smart key ECU assembly) → rear door outside handle LH (entry lock switch) → rear door electrical key oscillator LH).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK POWER DOOR LOCK OPERATION

a. When the master switch assembly door control switch is operated, check that the locked doors unlock.

OK:
Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
DR Door Lock Position SW	Driver side rear door lock position switch signal / ON or OFF	ON: Driver side rear door unlocked OFF: Driver side rear door locked	-

OK:
On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Rear Door LH LOCK/UNLOCK Functions do not Operate) (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (LOCK SWITCH)

a. Using the intelligent tester, read the Data List.

i. for LHD:

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Dr-Door Trigger Switch	Driver side rear door outside handle lock switch / ON or OFF	ON: Entry lock switch pushed OFF: Entry lock switch not pushed	-

OK:
On tester screen, item changes between ON and OFF according to above chart.

ii. for RHD:

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Pr-Door Trigger Switch	Passenger side rear door outside handle lock switch / ON or OFF	ON: Entry lock switch pushed OFF: Entry lock switch not pushed	-

OK:
On tester screen, item changes between ON and OFF according to above chart.

NG → Go to step 4

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

4.CHECK HARNESS AND CONNECTOR (REAR DOOR OUTSIDE HANDLE - DOOR ELECTRICAL KEY OSCILLATOR)

a. Disconnect the z28 oscillator connector.

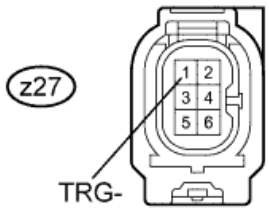
b. Disconnect the z27 handle connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z28-9 (TRG-) - z27-1 (TRG-)	Always	Below 1 Ω
z28-9 (TRG-) - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Rear Door Outside Handle)



Front view of wire harness connector:
(to Door Electrical Key Oscillator)



H

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

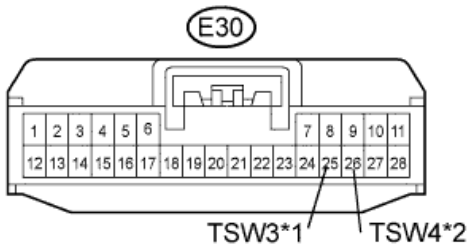
5.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - REAR DOOR OUTSIDE HANDLE)

a. Disconnect the E30 ECU connector.

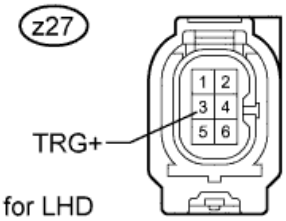
b. Disconnect the z27 handle connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector: (to Certification ECU [Smart Key ECU Assembly])



Front view of wire harness connector: (to Rear Door Outside Handle)



*1: for LHD

*2: for RHD

Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
E30-25 (TSW3) - z27-3 (TRG+)	Always	Below 1 Ω
E30-25 (TSW3) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
E30-26 (TSW4) - z27-3 (TRG+)	Always	Below 1 Ω
E30-26 (TSW4) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

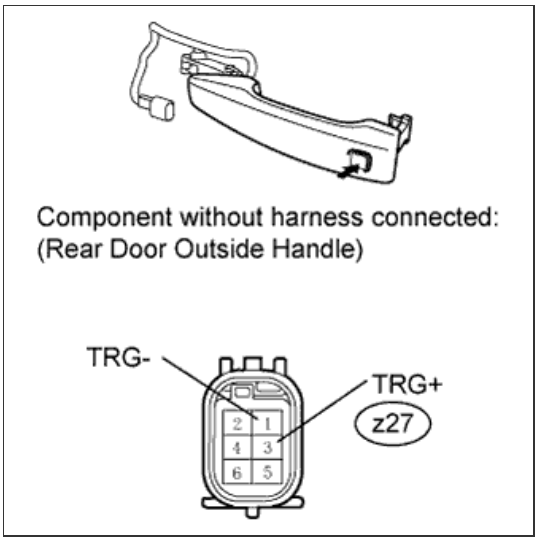
OK

6.INSPECT REAR DOOR OUTSIDE HANDLE LH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
z27-1 (TRG-) - z27-3 (TRG+)	Lock switch not pushed	10 kΩ or higher
	Lock switch pushed	Below 1 Ω



NG → REPLACE REAR DOOR OUTSIDE HANDLE (Click here)

OK

7.REPLACE DOOR ELECTRICAL KEY OSCILLATOR

a. Replace the door electrical key oscillator (Click here).

NEXT

8.CHECK DOOR ELECTRICAL KEY OSCILLATOR OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

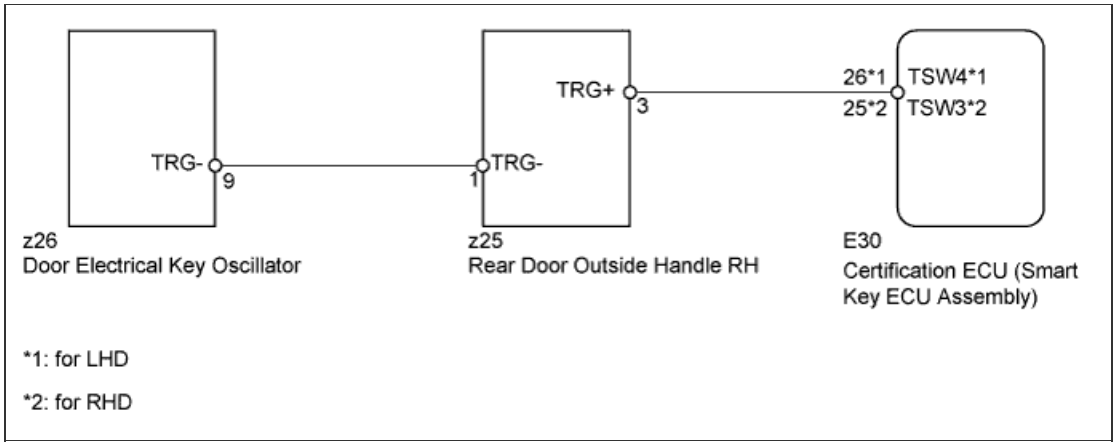
END (DOOR ELECTRICAL OSCILLATOR IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

If the rear door RH entry lock function does not operate but the entry unlock function operates, the communication line between the vehicle and electrical key transmitter is normal. The part at fault may be an entry lock switch circuit (certification ECU (smart key ECU assembly) → rear door outside handle RH (entry lock switch) → rear door electrical key oscillator RH).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK POWER DOOR LOCK OPERATION

a. When the master switch assembly door control switch is operated, check that the locked doors unlock.

OK:
Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
PR Door Lock Position SW	Passenger side rear door lock position switch signal / ON or OFF	ON: Passenger side rear door unlocked OFF: Passenger side rear door locked	-

OK:
On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Rear Door RH LOCK/UNLOCK Functions do not Operate) (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (LOCK SWITCH)

a. Using the intelligent tester, read the Data List.

i. for LHD:

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Pr-Door Trigger Switch	Passenger side rear door outside handle lock switch / ON or OFF	ON: Entry lock switch pushed OFF: Entry lock switch not pushed	-

OK:
On tester screen, item changes between ON and OFF according to above chart.

ii. for RHD:

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Dr-Door Trigger Switch	Driver side rear door outside handle lock switch / ON or OFF	ON: Entry lock switch pushed OFF: Entry lock switch not pushed	-

OK:
On tester screen, item changes between ON and OFF according to above chart.

NG → Go to step 4

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

4.CHECK HARNESS AND CONNECTOR (REAR DOOR OUTSIDE HANDLE - DOOR ELECTRICAL KEY OSCILLATOR)

a. Disconnect the z26 oscillator connector.

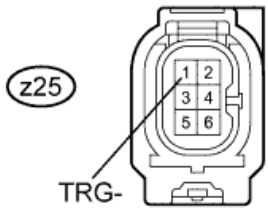
b. Disconnect the z25 handle connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z26-9 (TRG-) - z25-1 (TRG-)	Always	Below 1 Ω
z26-9 (TRG-) - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Rear Door Outside Handle)



Front view of wire harness connector:
(to Door Electrical Key Oscillator)



H

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

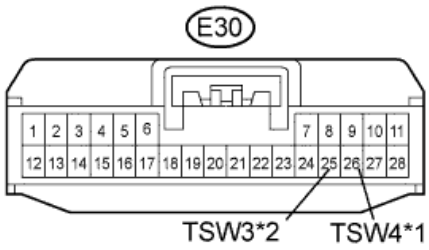
5.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - REAR DOOR OUTSIDE HANDLE)

a. Disconnect the E30 ECU connector.

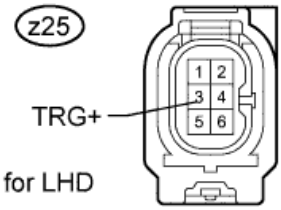
b. Disconnect the z25 handle connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector: (to Certification ECU [Smart Key ECU Assembly])



Front view of wire harness connector: (to Rear Door Outside Handle)



*1: for LHD

*2: for RHD

Standard Resistance:

for LHD:

Tester Connection	Condition	Specified Condition
E30-26 (TSW4) - z25-3 (TRG+)	Always	Below 1 Ω
E30-26 (TSW4) - Body ground	Always	10 kΩ or higher

for RHD:

Tester Connection	Condition	Specified Condition
E30-25 (TSW3) - z25-3 (TRG+)	Always	Below 1 Ω
E30-25 (TSW3) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

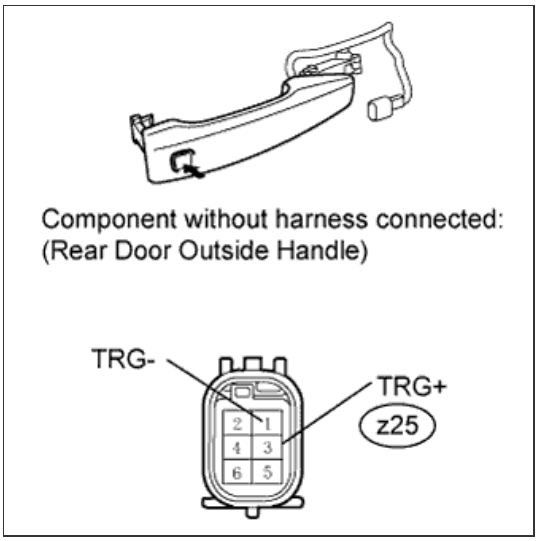
OK

6.INSPECT REAR DOOR OUTSIDE HANDLE RH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
z25-1 (TRG-) - z25-3 (TRG+)	Lock switch not pushed	10 kΩ or higher
	Lock switch pushed	Below 1 Ω



NG → REPLACE REAR DOOR OUTSIDE HANDLE (Click here)

OK

7.REPLACE DOOR ELECTRICAL KEY OSCILLATOR

a. Replace the door electrical key oscillator (Click here).

NEXT

8.CHECK DOOR ELECTRICAL KEY OSCILLATOR OPERATION

a. Check that the entry function operates normally.

OK:
Operates normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

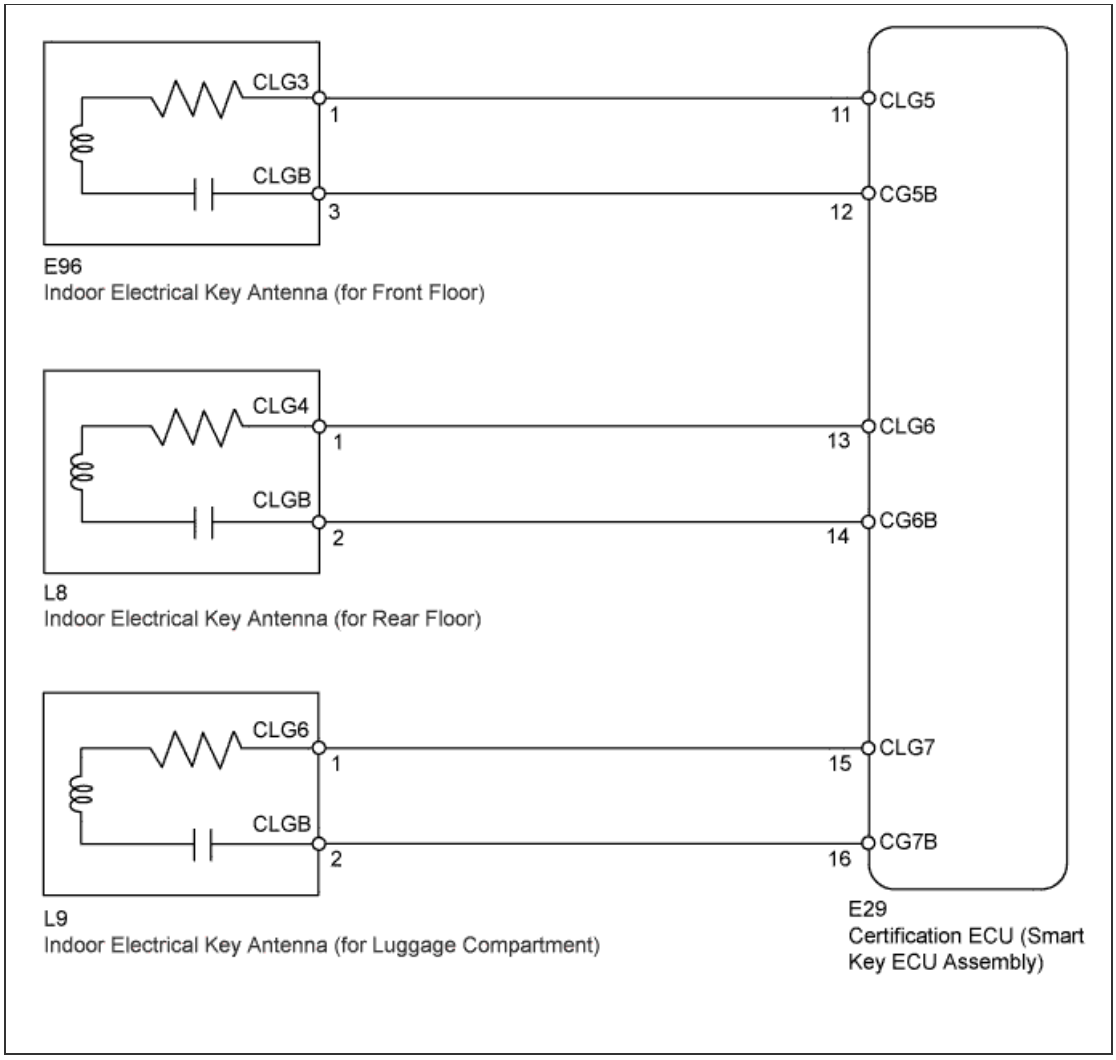
END (DOOR ELECTRICAL OSCILLATOR IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

If the room oscillator does not recognize the key, one of the following may be the cause: 1) communication between the indoor electrical key antenna (for Front Floor) and electrical key transmitter cannot be performed; or 2) communication between the indoor electrical key antenna (for Rear Floor) and electrical key transmitter cannot be performed; or 3) communication between the indoor electrical key antenna (for Luggage Compartment) and electrical key transmitter cannot be performed.

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

- **Before performing the inspection, check that there are no problems related to the "CAN Communication System" and "LIN Communication System".**
- **When using the intelligent tester with the engine switch off to troubleshoot: Connect the intelligent tester to the vehicle, and turn a courtesy light switch on and off at 1.5 second intervals until communication between the tester and vehicle begins.**

1.CHECK ENTRY AND START SYSTEM (ENTRY FUNCTION)

a. Check that the entry lock and unlock function can be operated at each door (Click here).

NG → Go to DTC OF OTHER COMPONENTS (PROCEED TO PROBLEM SYMPTOM FLOWCHART FOR EACH DOOR) (Click here)

OK

2.CHECK ENTRY AND START SYSTEM (START FUNCTION)

a. Remove the battery of the electrical key transmitter (Click here).

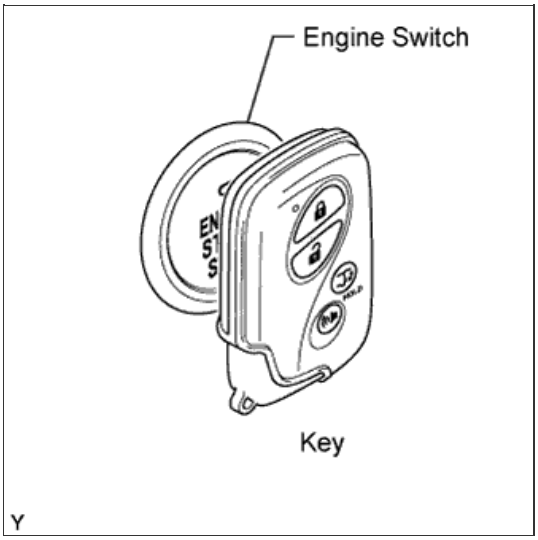
b. With the brake pedal depressed, touch the LEXUS mark of the key to the engine switch.

c. When operating the engine switch, check whether the power source mode changes.

OK:
Power source mode changes.

HINT:

- **When the electrical key transmitter cannot be verified even though it is in the operating range of the start function, the engine start check can be performed by removing the transmitter battery from the electrical key transmitter and holding the transmitter against the engine switch.**
- **When performing the check, if the power source mode changes, there is a problem with key certification inside the cabin.**



NG → Go to ENTRY AND START SYSTEM (Power Source Mode does not Change) (Click here)

OK

3.CHECK WAVE ENVIRONMENT

a. Install the battery to the electrical key transmitter (Click here).

b. Bring the electrical key transmitter near the indoor electrical key antenna (in center console), and perform an engine control system start check.

NOTICE:

If the key is brought within 0.2 m (0.656 ft.) of the center console, communication is not possible.

OK:
Engine starts.

c. Bring the electrical key transmitter near the indoor electrical key antenna (in rear No. 1 seat cushion), and perform an engine control system start check.

NOTICE:

If the key is brought within 0.2 m (0.656 ft.) of the rear No. 1 seat cushion, communication is not possible.

OK:
Engine starts.

d. Bring the electrical key transmitter near the indoor electrical key antenna (in rear No. 2 seat cushion), and perform an engine control system start check.

NOTICE:

If the key is brought within 0.2 m (0.656 ft.) of the rear No. 2 seat cushion, communication is not possible.

HINT:

- **When the electrical key transmitter is brought near the indoor electrical key antenna, the possibility of wave interference decreases, and it can be determined if wave interference is causing the problem symptom.**
- **If the inspection result is that the operation check is normal, the possibility of wave interference is high. Also, added vehicle components may cause wave interference, If installed, remove them and perform the operation check.**

OK:
Engine starts.

NG → Go to step 4

OK

AFFECTED BY WAVE INTERFERENCE

4.PERFORM KEY DIAGNOSTIC MODE INSPECTION

a. Diagnostic mode inspection (indoor electrical key antenna (for Front Floor)).

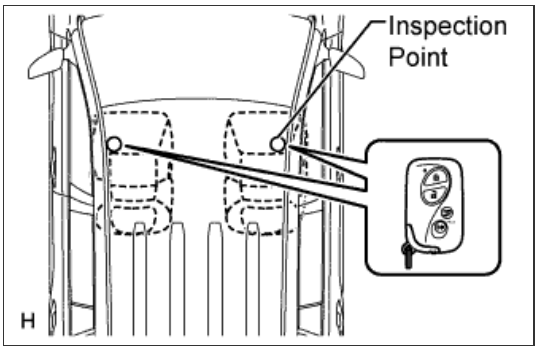
i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Front Room.

v. When the electrical key transmitter is placed on the driver seat or front passenger seat cushion, check that the wireless door lock buzzer sounds.



b. Diagnostic mode inspection (indoor electrical key antenna (for Rear Floor)).

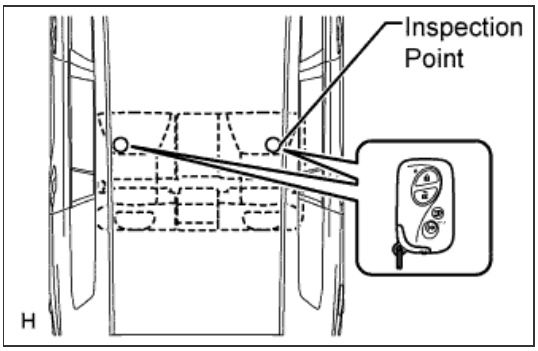
i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Rear Room.

v. When the electrical key transmitter is placed on the rear seat cushion, check that the wireless door lock buzzer sounds.



c. Diagnostic mode inspection (indoor electrical key antenna (for Luggage Compartment)).

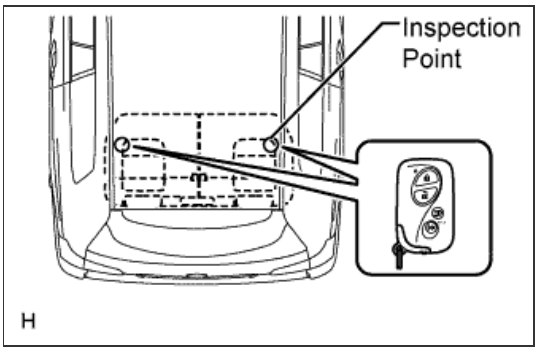
i. Connect the intelligent tester to the DLC3.

ii. Turn the engine switch on (IG).

iii. Turn the intelligent tester on.

iv. Enter the following menus: Body / Entry&Start / Key Communication Check / Overhead + Back Door (inside) Room.

v. When the electrical key transmitter is placed on the rear seat cushion, check that the wireless door lock buzzer sounds.



HINT:

- **If the buzzer sounds, it can be determined that the vehicle interior transmitters are operating normally.**
- **It is possible to check which indoor electrical key antenna (front floor, rear floor and luggage compartment) is operating by sounding the buzzer.**
- **If the buzzer does not sound for any indoor electrical key antennas, the certification ECU (smart key ECU assembly) circuit may have a malfunction.**

Result

Result	Proceed to
Front floor operation check fails	A
Rear floor operation check fails	B
Luggage compartment operation check fails	C
Front floor, rear floor and luggage compartment operation checks are normal or fail	D

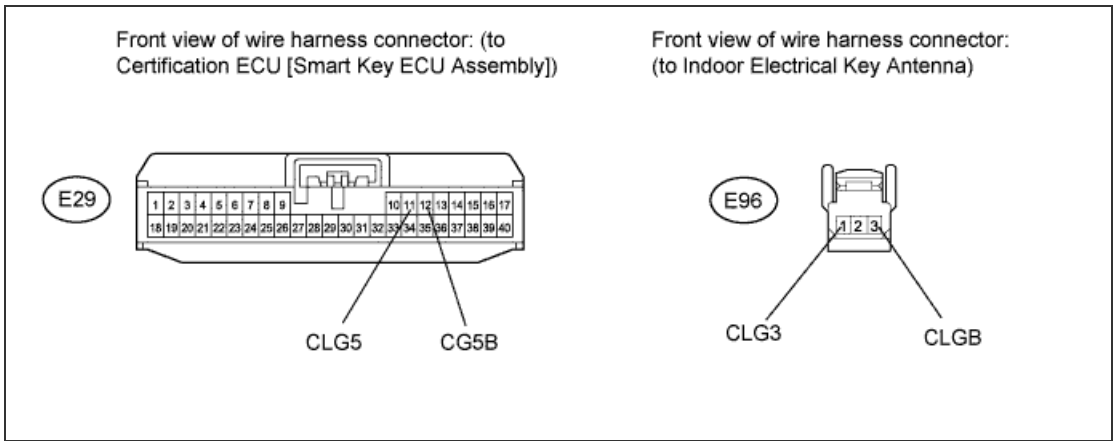
B → Go to step 7

C → Go to step 9

D → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

A

5.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - INDOOR ELECTRICAL KEY ANTENNA)



a. Disconnect the E29 ECU connector.

b. Disconnect the E96 antenna connector.

c. Measure the resistance according to the value(s) in the table below.

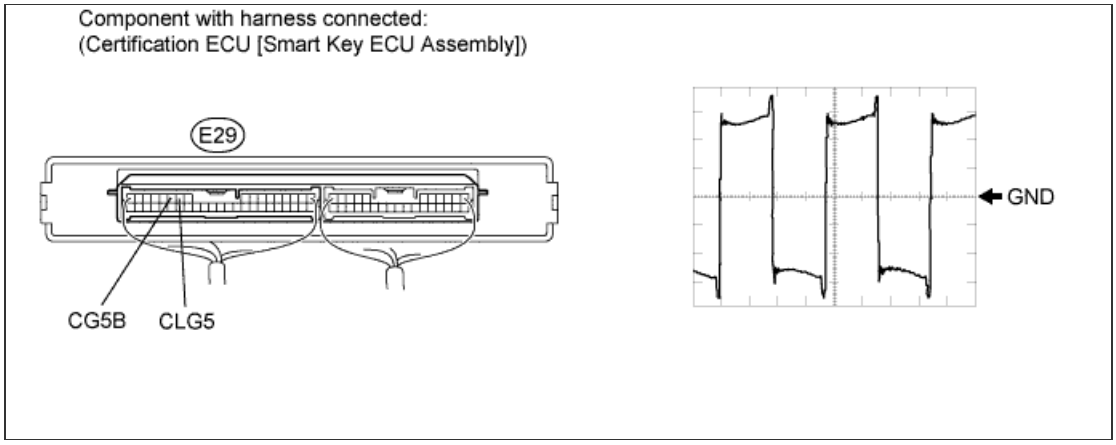
Standard Resistance:

Tester Connection	Condition	Specified Condition
E96-1 (CLG3) - E29-11 (CLG5)	Always	Below 1 Ω
E96-3 (CLGB) - E29-12 (CG5B)	Always	Below 1 Ω
E96-1 (CLG3) - Body ground	Always	10 kΩ or higher
E96-3 (CLGB) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6.CHECK INDOOR ELECTRICAL KEY ANTENNA (for Front Floor)



a. Using an oscilloscope, check the waveform.

OK:

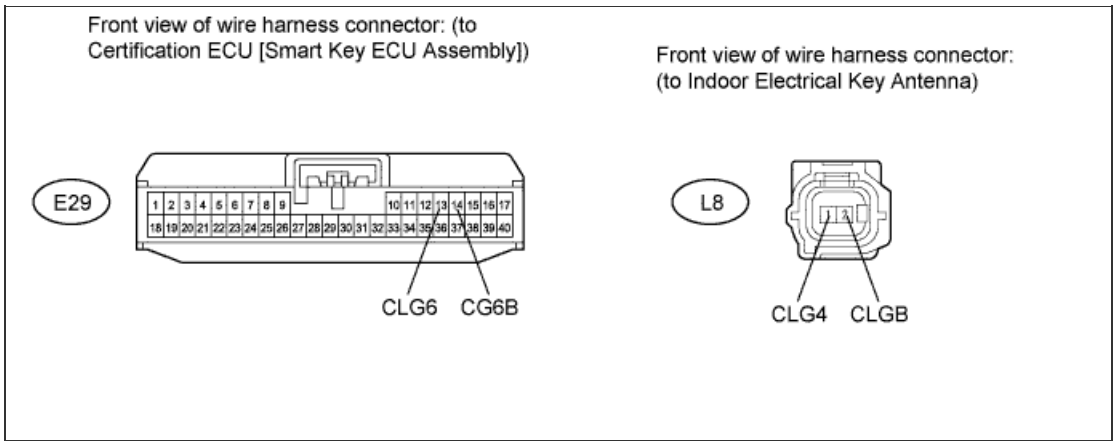
Tester Connection	Tool Setting	Switch Condition	Specified Condition
E29-11 (CLG5) - E29-12 (CG5B)	2 V/DIV., 2 µsec./DIV. (Reference)	Engine switch on (IG)	Waveform is as shown in the illustration

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

REPLACE INDOOR ELECTRICAL KEY ANTENNA (for Front Floor) (Click here)

7.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - INDOOR ELECTRICAL KEY ANTENNA)



a. Disconnect the E29 ECU connector.

b. Disconnect the L8 antenna connector.

c. Measure the resistance according to the value(s) in the table below.

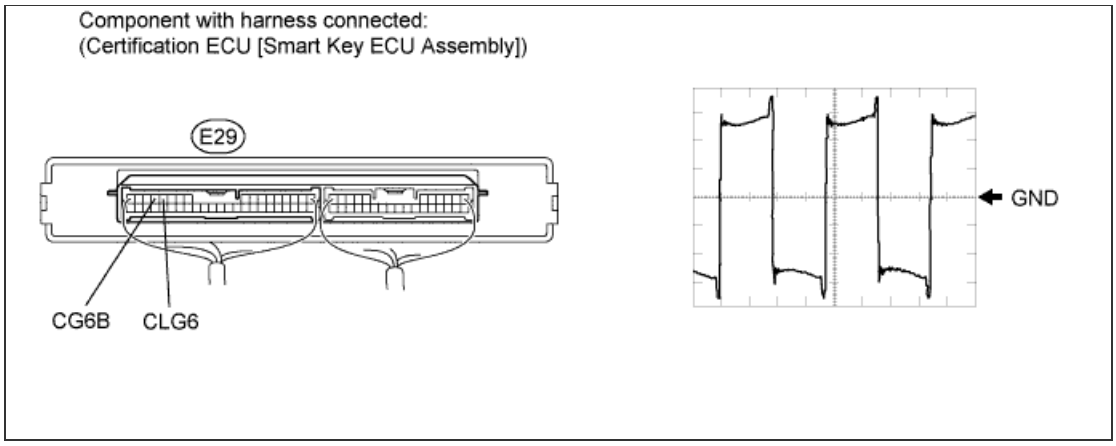
Standard Resistance:

Tester Connection	Condition	Specified Condition
L8-1 (CLG4) - E29-13 (CLG6)	Always	Below 1 Ω
L8-2 (CLGB) - E29-14 (CG6B)	Always	Below 1 Ω
L8-1 (CLG4) - Body ground	Always	10 kΩ or higher
L8-2 (CLGB) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

8.CHECK INDOOR ELECTRICAL KEY ANTENNA (for Rear Floor)



a. Using an oscilloscope, check the waveform.

OK:

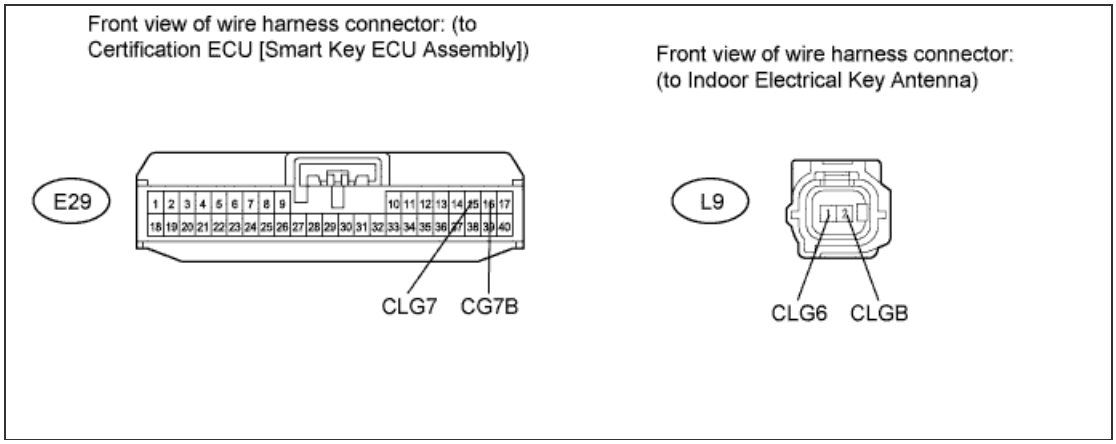
Tester Connection	Tool Setting	Switch Condition	Specified Condition
E29-13 (CLG6) - E29-14 (CG6B)	2 V/DIV., 2 µsec./DIV. (Reference)	Engine switch on (IG)	Waveform is as shown in the illustration

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

REPLACE INDOOR ELECTRICAL KEY ANTENNA (for Rear Floor) (Click here)

9.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - INDOOR ELECTRICAL KEY ANTENNA)



a. Disconnect the E29 ECU connector.

b. Disconnect the L9 antenna connector.

c. Measure the resistance according to the value(s) in the table below.

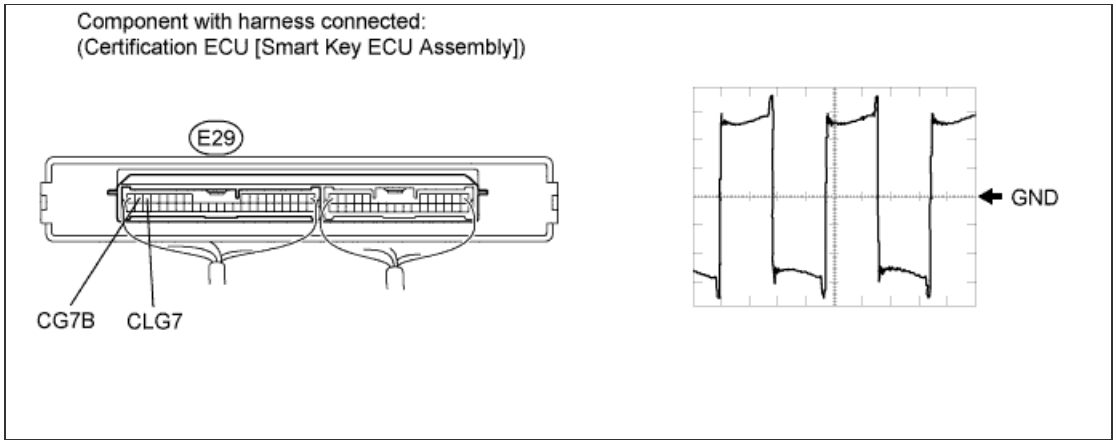
Standard Resistance:

Tester Connection	Condition	Specified Condition
L9-1 (CLG6) - E29-15 (CLG7)	Always	Below 1 Ω
L9-2 (CLGB) - E29-16 (CG7B)	Always	Below 1 Ω
L9-1 (CLG6) - Body ground	Always	10 kΩ or higher
L9-2 (CLGB) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

10.CHECK INDOOR ELECTRICAL KEY ANTENNA (for Luggage Compartment)



a. Using an oscilloscope, check the waveform.

OK:

Tester Connection	Tool Setting	Switch Condition	Specified Condition
E29-15 (CLG7) - E29-16 (CG7B)	2 V/DIV., 2 µsec./DIV. (Reference)	Engine switch on (IG)	Waveform is as shown in the illustration

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

REPLACE INDOOR ELECTRICAL KEY ANTENNA (for Luggage Compartment) (Click here)

for Preparation Click here

DESCRIPTION

The entry and start system uses the combination meter buzzer to perform various vehicle interior warnings. When the conditions of each warning are met, the certification ECU (smart key ECU assembly) sends a buzzer signal to the meter ECU, and the combination meter buzzer sounds.

INSPECTION PROCEDURE

1.CHECK COMBINATION METER ASSEMBLY OPERATION

a. Turn the engine switch on (IG). Place luggage on the passenger seat to cause the passenger seat belt warning light to blink.

b. When driving the vehicle at 15 km/h (9.3 mph) or more, check that the seat belt warning buzzer sounds to inform that the passenger seat belt is not fastened.

HINT:

The entry and start system sounds the buzzer built into the combination meter for indoor warnings. This buzzer is also used for the seat belt warning system. Therefore, check the operation of the combination meter buzzer by checking if the buzzer sounds to inform that the seat belt is not fastened.

OK:

Combination meter buzzer sounds.

NG → GO TO METER / GAUGE SYSTEM (Click here)

OK

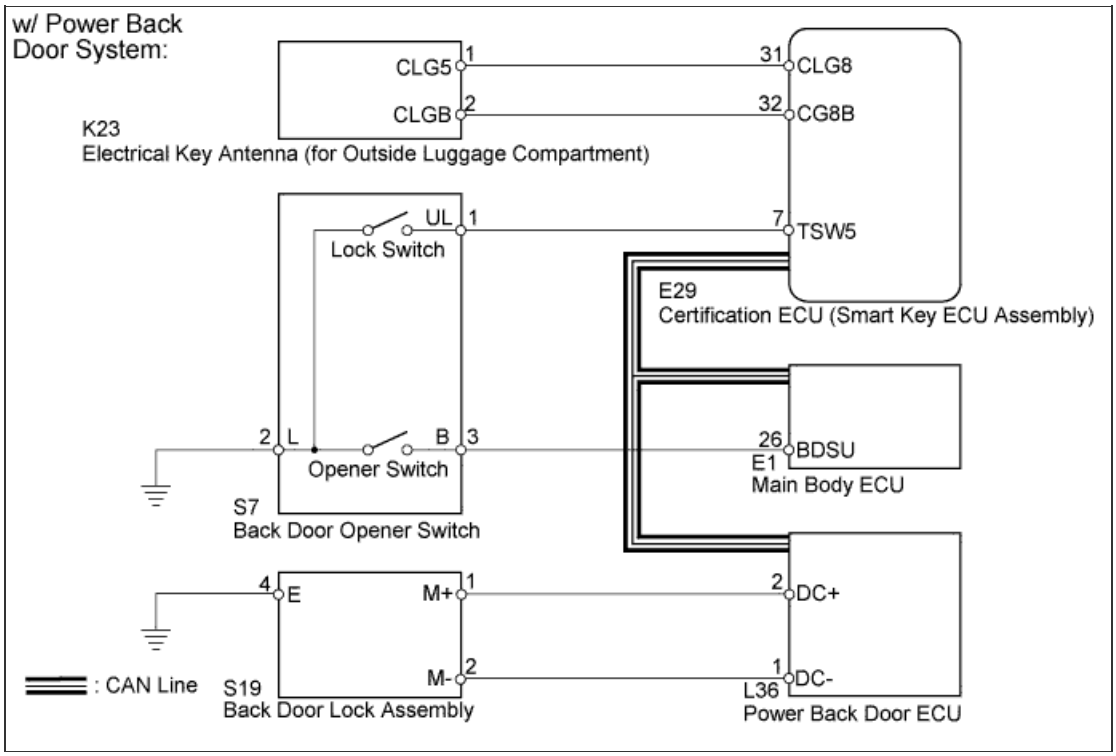
REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

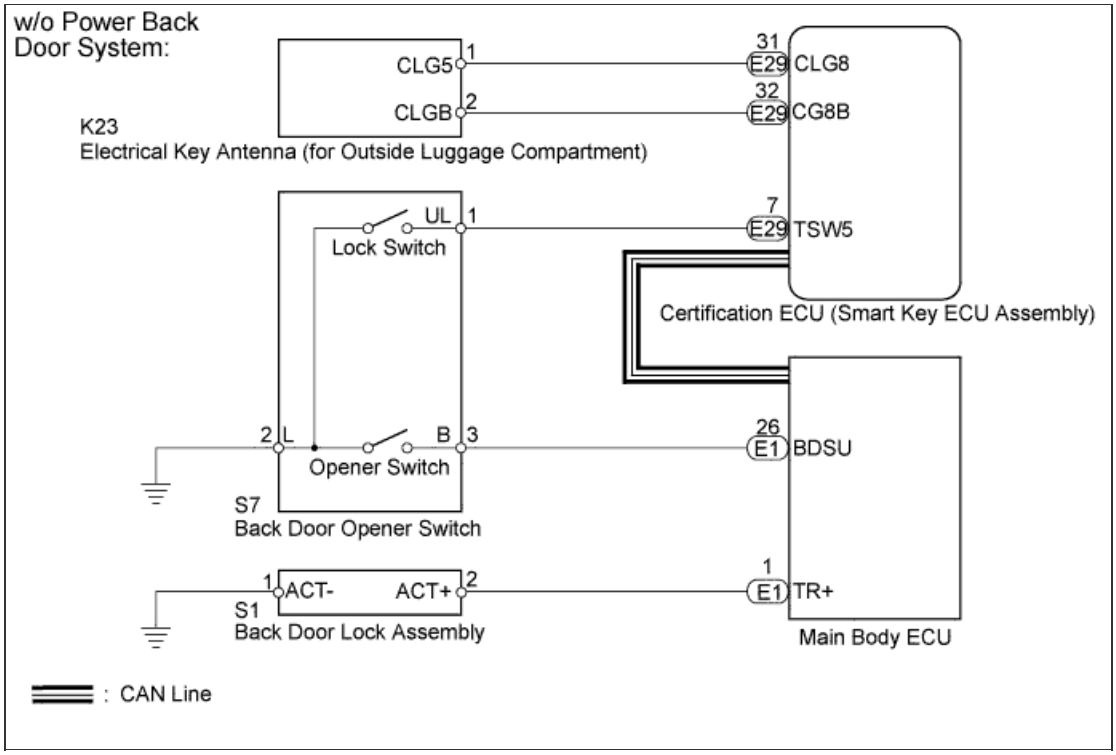
for Preparation Click here

DESCRIPTION

When the back door opener switch is turned on, the certification ECU (smart key ECU assembly) uses the electrical key antenna (for outside luggage compartment) and antenna to output a request signal to the outside of the vehicle for a distance of approximately 1.0 m (3.28 ft.) from the back door. A key near the back door detects this request and transmits its ID code. The door control receiver receives the ID code and sends this ID code to the certification ECU (smart key ECU assembly). The certification ECU (smart key ECU assembly) checks if the ID code is valid. When the ID code is valid, the certification ECU (smart key ECU assembly) sends a back door open signal to the main body ECU using the CAN communication line and stops outputting request signals. The main body ECU then unlocks the back door.

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

Before performing the inspection, check that there are no problems related to the "CAN Communication System" and "LIN Communication System".

1.CHECK POWER DOOR LOCK OPERATION

a. When the door control switch of the master switch assembly is operated, check that the locked doors unlock.

OK:
Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.CHECK VEHICLE EQUIPMENT

a. Check if the power back door is equipped on the vehicle.

Result

Result	Proceed to
w/ Power Back Door System	A
w/o Power Back Door System	B

B → Go to step 4

A

3.CHECK POWER BACK DOOR OPERATION

a. When the power back door switch is operated, check that the power back door opens.

OK:
Power back door is open.

Result

Result	Proceed to
NG	A
OK	B

B → Go to step 5

A

GO TO POWER BACK DOOR SYSTEM (Click here)

4.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
Back Lock Pos switch	Back door lock position switch signal / ON or OFF	ON: Back door unlocked OFF: Back door locked	-

OK:

On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Back Door LOCK/UNLOCK Functions do not Operate) (Click here)

OK

5.READ VALUE USING INTELLIGENT TESTER (BACK DOOR HANDLE SW)

a. Using the intelligent tester, read the Data List.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Back Door Handle SW	Back door opener switch / ON or OFF	ON: Back door opener switch pushed OFF: Back door opener switch not pushed	-

OK:
"ON" (switch is pushed) and "OFF" (switch is not pushed) appears on the screen.

NG → Go to step 6

OK

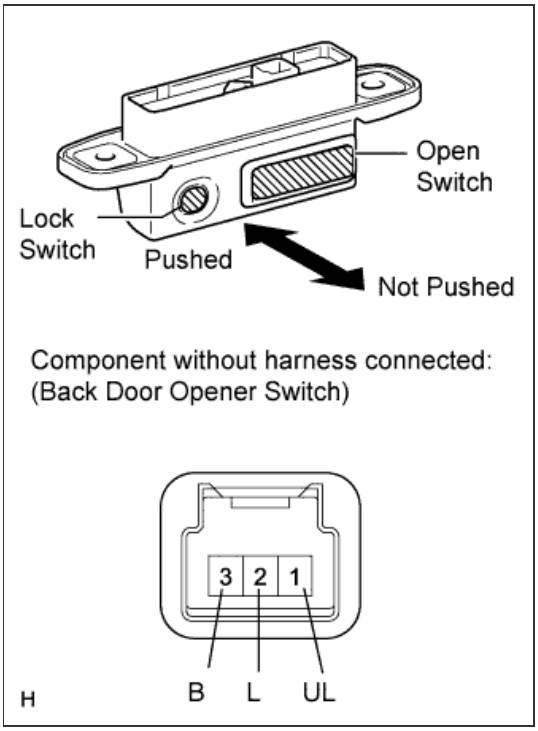
REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

6.CHECK BACK DOOR OPENER SWITCH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
1 (UL) - 2 (L) 3 (B) - 2 (L)	Not pushed	10 kΩ or higher
1 (UL) - 2 (L)	Lock switch pushed	Below 1 Ω
3 (B) - 2 (L)	Open switch pushed	Below 1 Ω



NG → REPLACE BACK DOOR OPENER SWITCH (Click here)

OK

7.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - BACK DOOR OPENER SWITCH)

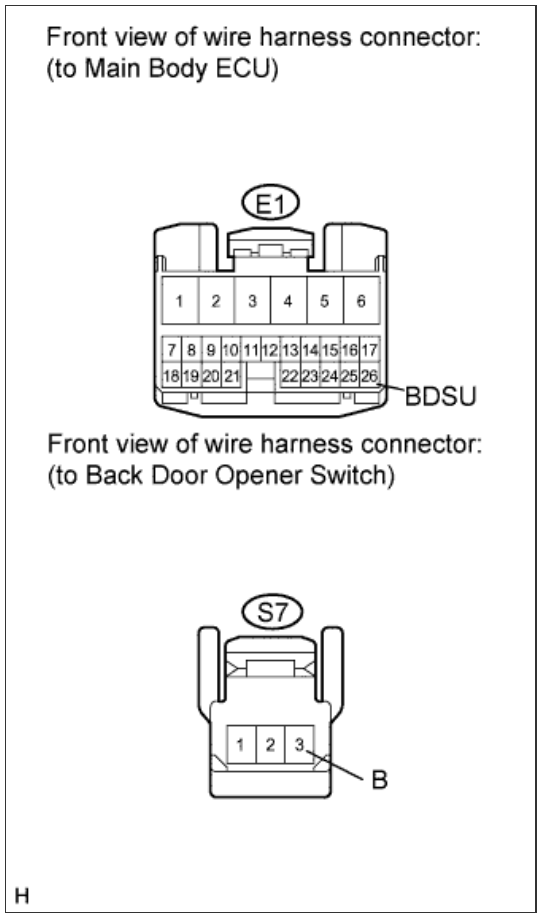
a. Disconnect the E1 ECU connector.

b. Disconnect the S7 switch connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E1-26 (BDSU) - S7-3 (B)	Always	Below 1 Ω
E1-26 (BDSU) or S7-3 (B) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

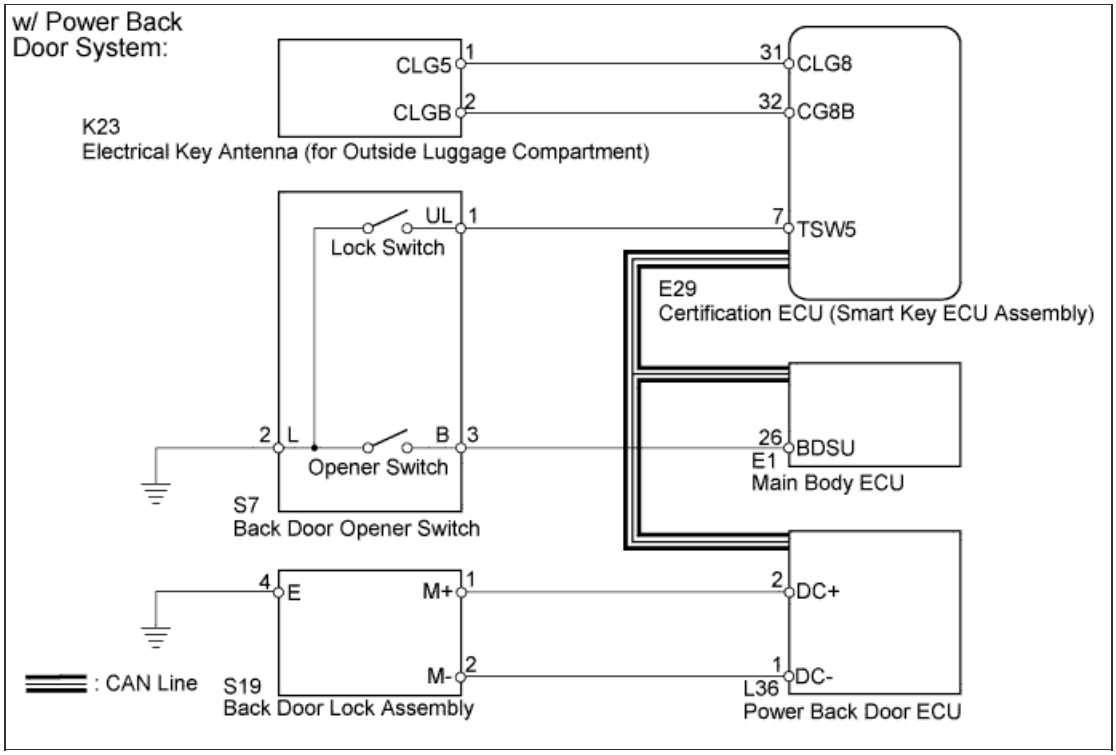
OK → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

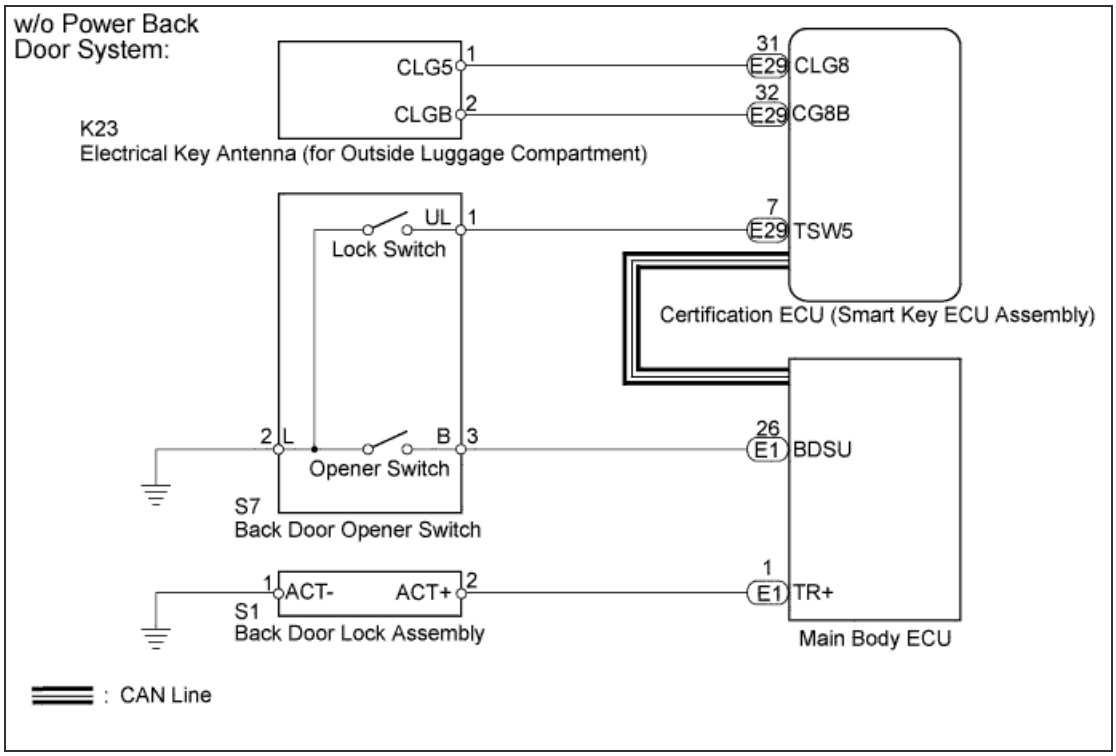
for Preparation Click here

DESCRIPTION

When the back door entry lock and unlock functions do not operate, one of the following may be malfunctioning: 1) power door lock control system, or 2) electrical key antenna (for outside luggage compartment), or 3) main body ECU (cowl side junction block LH), or 4) certification ECU (smart key ECU assembly).

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

Before performing the inspection, check that there are no problems related to the "CAN Communication System" and "LIN Communication System".

1.CHECK POWER DOOR LOCK OPERATION

a. When the door control switch of the master switch assembly is operated, check that the locked doors unlock.

OK:
Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.CHECK VEHICLE EQUIPMENT

a. Check if the power back door is equipped on the vehicle.

Result

Result	Proceed to
w/ Power Back Door System	A
w/o Power Back Door System	B

B → Go to step 4

A

3.CHECK POWER BACK DOOR OPERATION

a. When the power back door switch is operated, check that the power back door open and close.

OK:
Power back door is open and close.

Result

Result	Proceed to
NG	A
OK	B

B → Go to step 5

A

GO TO POWER BACK DOOR SYSTEM (Click here)

4.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
Back Lock Pos switch	Back door lock position switch signal / ON or OFF	ON: Back door unlocked OFF: Back door locked	-

OK:
On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG

GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Back Door LOCK/UNLOCK Functions do not Operate) (Click here)

OK

5.READ VALUE USING INTELLIGENT TESTER (BACK DOOR LOCK SWITCH, BACK DOOR OPENER SWITCH)

a. Using the intelligent tester, read the Data List.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Back Door Handle SW	Back door opener switch / ON or OFF	ON: Back door opener switch pushed OFF: Back door opener switch not pushed	-

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Tr/B-Door Lock SW	Back door lock switch / ON or OFF	ON: Back door lock switch pushed OFF: Back door lock switch not pushed	-

OK:
"ON" (switch is pushed) and "OFF" (switch is not pushed) appears on the screen.

NG

Go to step 9

OK

6.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - OUTSIDE ELECTRICAL KEY ANTENNA)

a. Disconnect the E29 ECU connector.

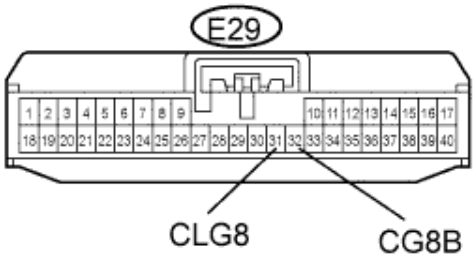
b. Disconnect the K23 antenna connector.

c. Measure the resistance according to the value(s) in the table below.

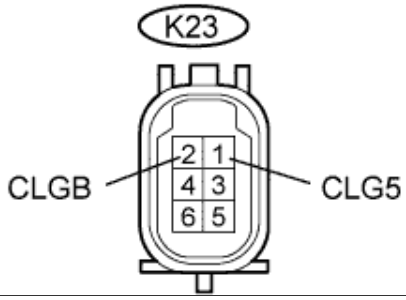
Standard Resistance:

Tester Connection	Condition	Specified Condition
E29-31 (CLG8) - K23-1 (CLG5)	Always	Below 1 Ω
E29-32 (CG8B) - K23-2 (CLGB)	Always	Below 1 Ω
E29-31 (CLG8) - Body ground	Always	10 kΩ or higher
E29-32 (CG8B) - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Certification ECU [Smart Key ECU Assembly])



Front view of wire harness connector:
(to Electrical Key Antenna [for Outside Luggage Compartment])



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

7.REPLACE ELECTRICAL KEY ANTENNA (for Outside Luggage Compartment)

a. Replace the back door electrical key antenna (Click here).

NEXT

8.CHECK ELECTRICAL KEY ANTENNA (for Outside Luggage Compartment) OPERATION

a. Check that the entry functions operate normally.

OK:
Entry functions operate normally.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

END (ELECTRICAL KEY ANTENNA [for Outside Luggage Compartment] IS DEFECTIVE)

9.CHECK HARNESS AND CONNECTOR (BACK DOOR OPENER SWITCH - BODY GROUND)

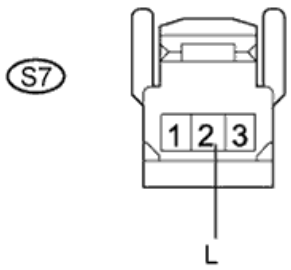
a. Disconnect the S7 switch connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
S7-2 (L) - Body ground	Always	Below 1 Ω

Front view of wire harness connector:
(to Back Door Opener Switch)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

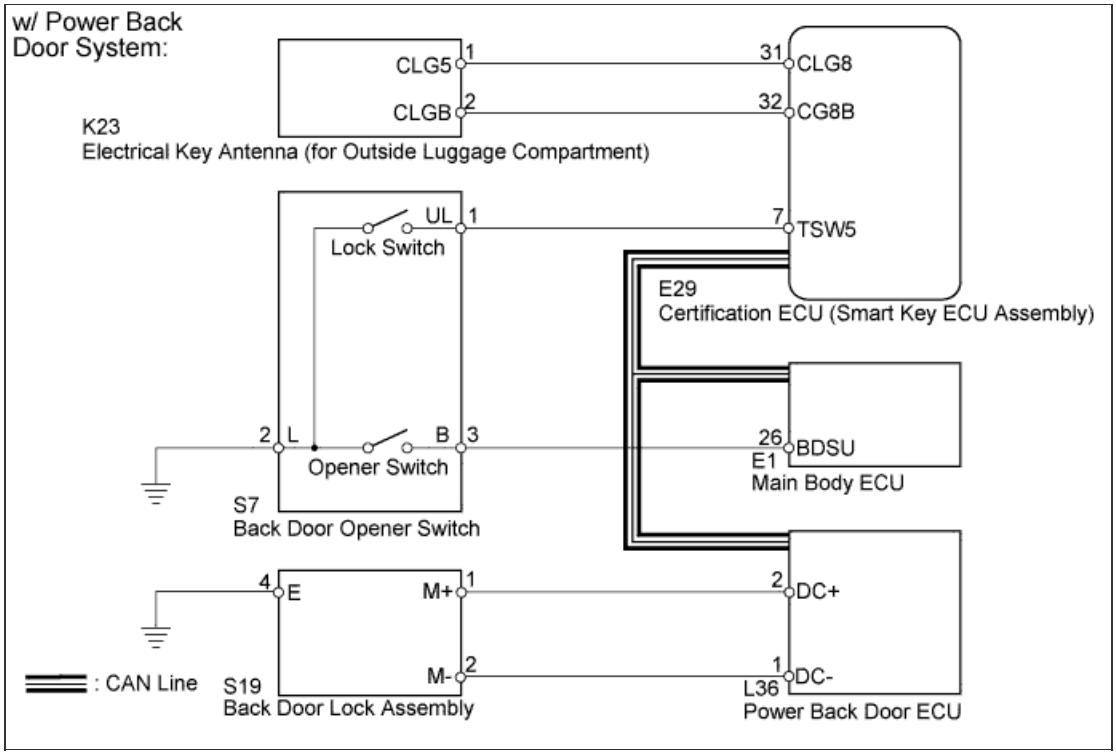
OK → REPLACE BACK DOOR OPENER SWITCH (Click here)

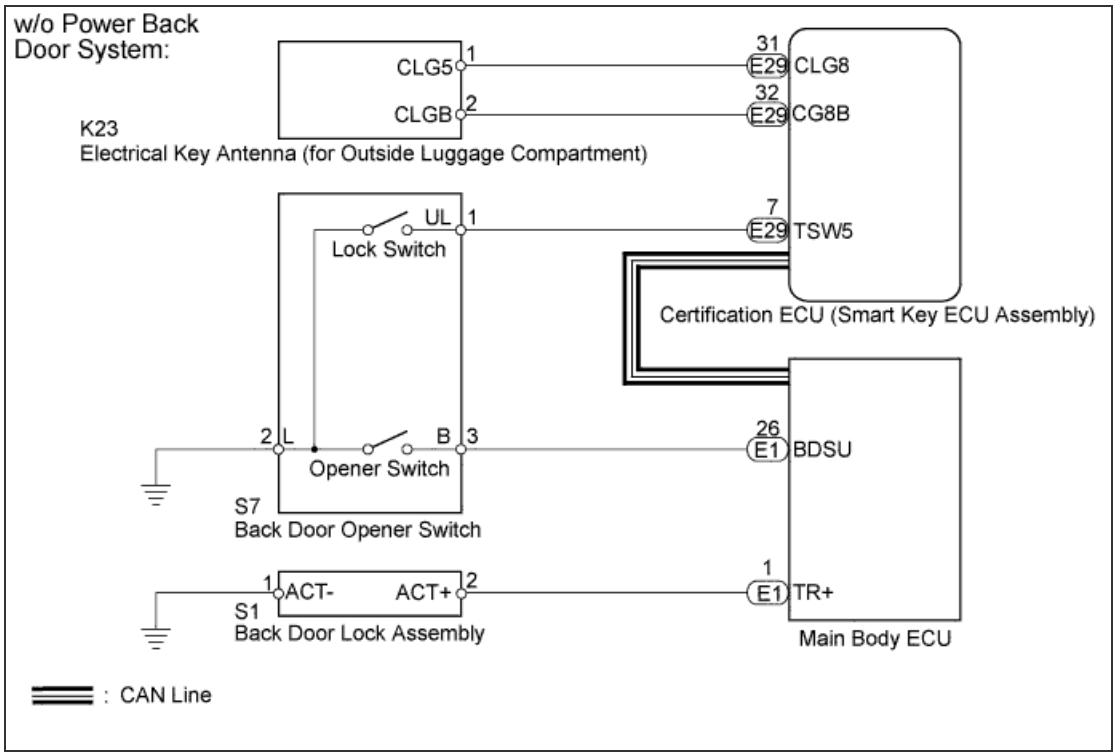
for Preparation Click here

DESCRIPTION

If the back door entry lock function does not operate but the back door open function operates, the communication line between the vehicle and electrical key transmitter is normal. The part at fault may be the entry lock switch circuit (certification ECU (smart key ECU assembly) → back door opener switch).

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

Before performing the inspection, check that there are no problems related to the "CAN Communication System" and "LIN Communication System".

1.CHECK POWER DOOR LOCK OPERATION

a. When the door control switch of the master switch assembly is operated, check that the locked doors unlock.

OK:
Door locks operate normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK

2.CHECK VEHICLE EQUIPMENT

a. Check if the power back door is equipped on the vehicle.

Result

Result	Proceed to
w/ Power Back Door System	A
w/o Power Back Door System	B

B → Go to step 4

A

3.CHECK POWER BACK DOOR OPERATION

a. When the power back door switch is operated, check that the power back door closes.

OK:
Power back door is closes.

Result

Result	Proceed to
NG	A
OK	B

B → Go to step 5

A

GO TO POWER BACK DOOR SYSTEM (Click here)

4.READ VALUE USING INTELLIGENT TESTER (DOOR LOCK POSITION SWITCH)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / Data List.

e. Read the Data List according to the display on the intelligent tester.

Main Body

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
Back Lock Pos switch	Back door lock position switch signal / ON or OFF	ON: Back door unlocked OFF: Back door locked	-

OK:
On the intelligent tester screen, the display changes between ON and OFF as shown in the chart above.

NG

GO TO POWER DOOR LOCK CONTROL SYSTEM (Proceed to Only Back Door LOCK/UNLOCK Functions do not Operate) (Click here)

OK

5.READ VALUE USING INTELLIGENT TESTER (BACK DOOR LOCK SWITCH)

a. Using the intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item/Display	Normal Condition	Diagnostic Note
Tr/B-Door Lock SW	Back door lock switch / ON or OFF	ON: Back door lock switch pushed OFF: Back door lock switch not pushed	-

OK:

"ON" (switch is pushed) and "OFF" (switch is not pushed) appears on the screen.

NG

Go to step 6

OK

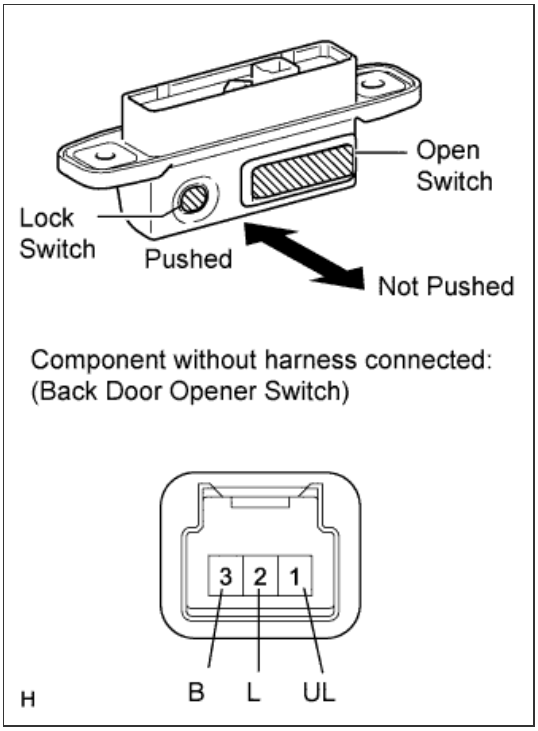
REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

6.CHECK BACK DOOR OPENER SWITCH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
1 (UL) - 2 (L)	Lock switch pushed	Below 1 Ω
1 (UL) - 2 (L)	Lock switch not pushed	10 kΩ or higher



NG

REPLACE BACK DOOR OPENER SWITCH (Click here)

OK

7.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - BACK DOOR OPENER SWITCH)

a. Disconnect the E29 ECU connector.

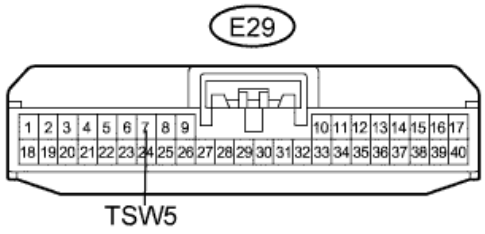
b. Disconnect the S7 switch connector.

c. Measure the resistance according to the value(s) in the table below.

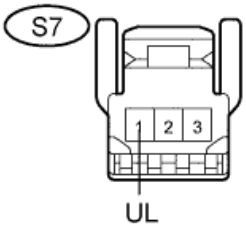
Standard Resistance:

Tester Connection	Condition	Specified Condition
E29-7 (TSW5) - S7-1 (UL)	Always	Below 1 Ω
E29-7 (TSW5) - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Certification ECU [Smart Key ECU Assembly])



Front view of wire harness connector:
(to Back Door Opener Switch)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

for Preparation Click here

1.PRECAUTIONS FOR PUSH-BUTTON START FUNCTION

a. Before starting the engine, firmly depress the brake pedal until the indicator in the engine switch turns green.

b. The power source mode (off, on (ACC), on (IG)) is always retained in memory by the vehicle. If the battery is disconnected, the power source mode that was present before the disconnection will be restored after the battery is reconnected. Be sure to turn the engine switch off before disconnecting the cable from the negative battery terminal. Be careful if the power source mode of a vehicle with a discharged battery is not known.

c. After the battery is reconnected, be sure to wait 10 seconds or more before attempting to start the engine. The engine may not start immediately after the battery is reconnected.

d. If the LEXUS mark of the key or card key is touched to the engine switch to start the engine when the key battery is depleted or the transmitter is affected by wave noise, etc., the following warnings will sound:

i. Driver door open → closed

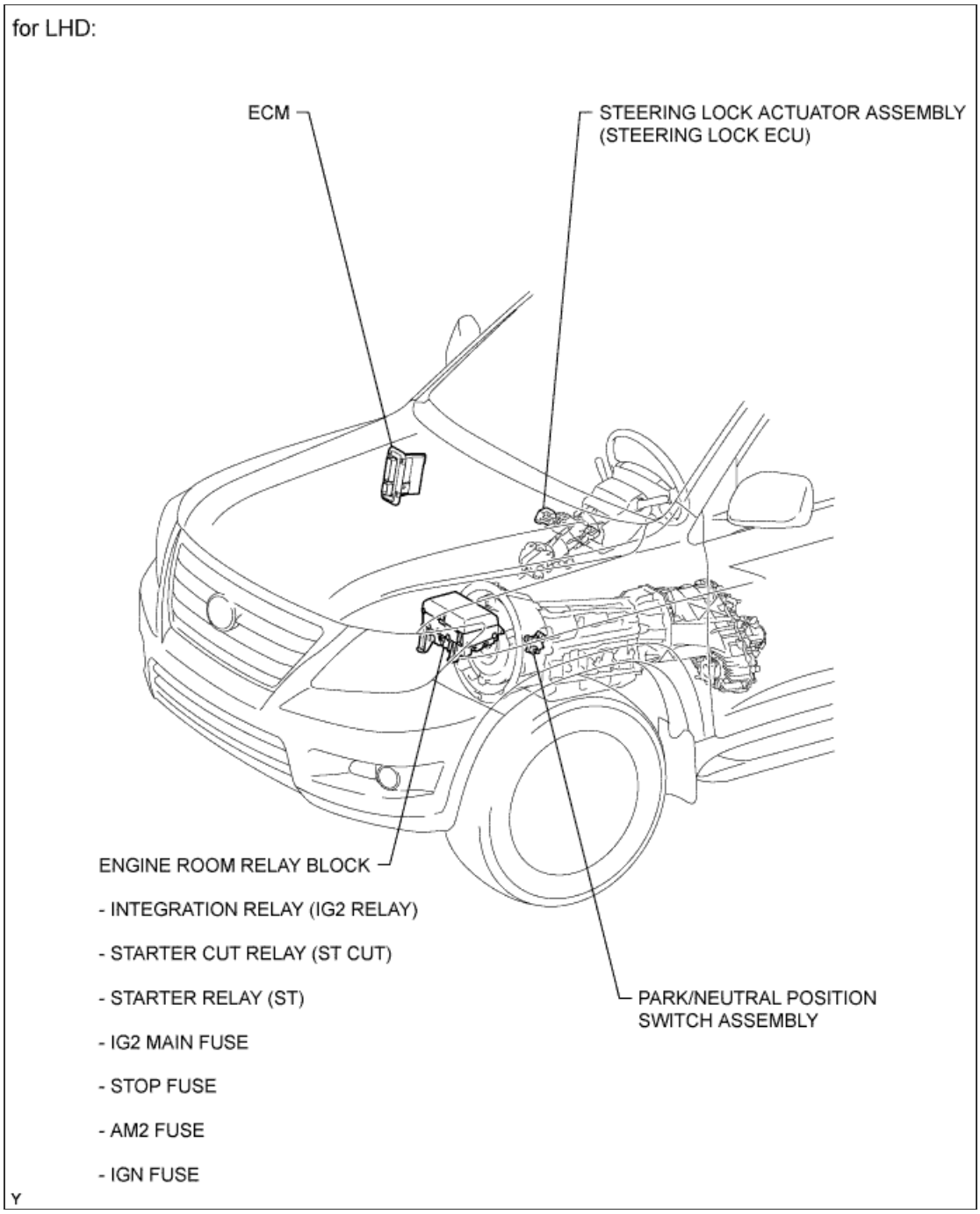
- An exit warning will sound if the shift lever is not in P and the power source is in a mode other than off.
- An exit warning will sound if the shift lever is in P and the power source is in a mode other than off.

ii. Doors other than the driver door open → closed

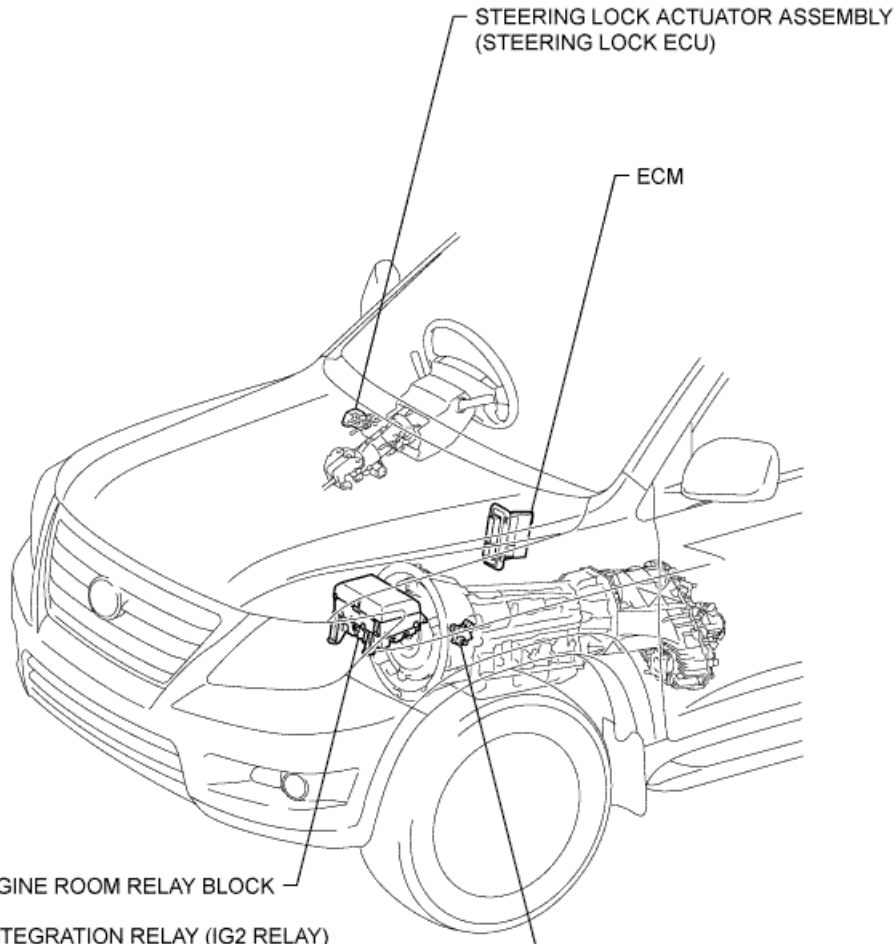
- A warning will sound to indicate that the key has been taken out of the vehicle.

These warnings will sound because it is not possible for the vehicle to determine if the key is present in the vehicle due to the depleted key battery. These warnings do not indicate system malfunctions.

for Preparation Click here

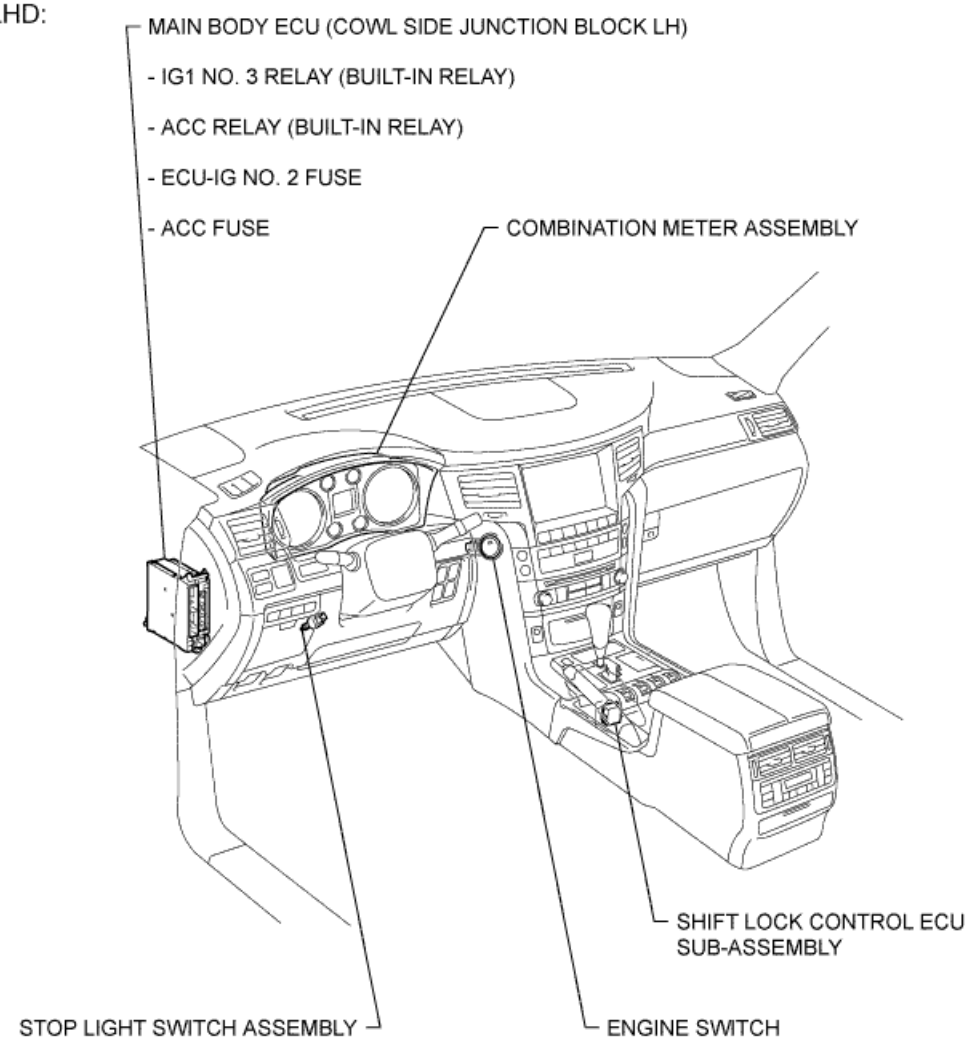


for RHD:


STEERING LOCK ACTUATOR ASSEMBLY
(STEERING LOCK ECU)
ECM
ENGINE ROOM RELAY BLOCK
- INTEGRATION RELAY (IG2 RELAY)
- STARTER CUT RELAY (ST CUT)
- STARTER RELAY (ST)
- IG2 MAIN FUSE
- STOP FUSE
- AM2 FUSE
- IGN FUSE
PARK/NEUTRAL POSITION
SWITCH ASSEMBLY

Y

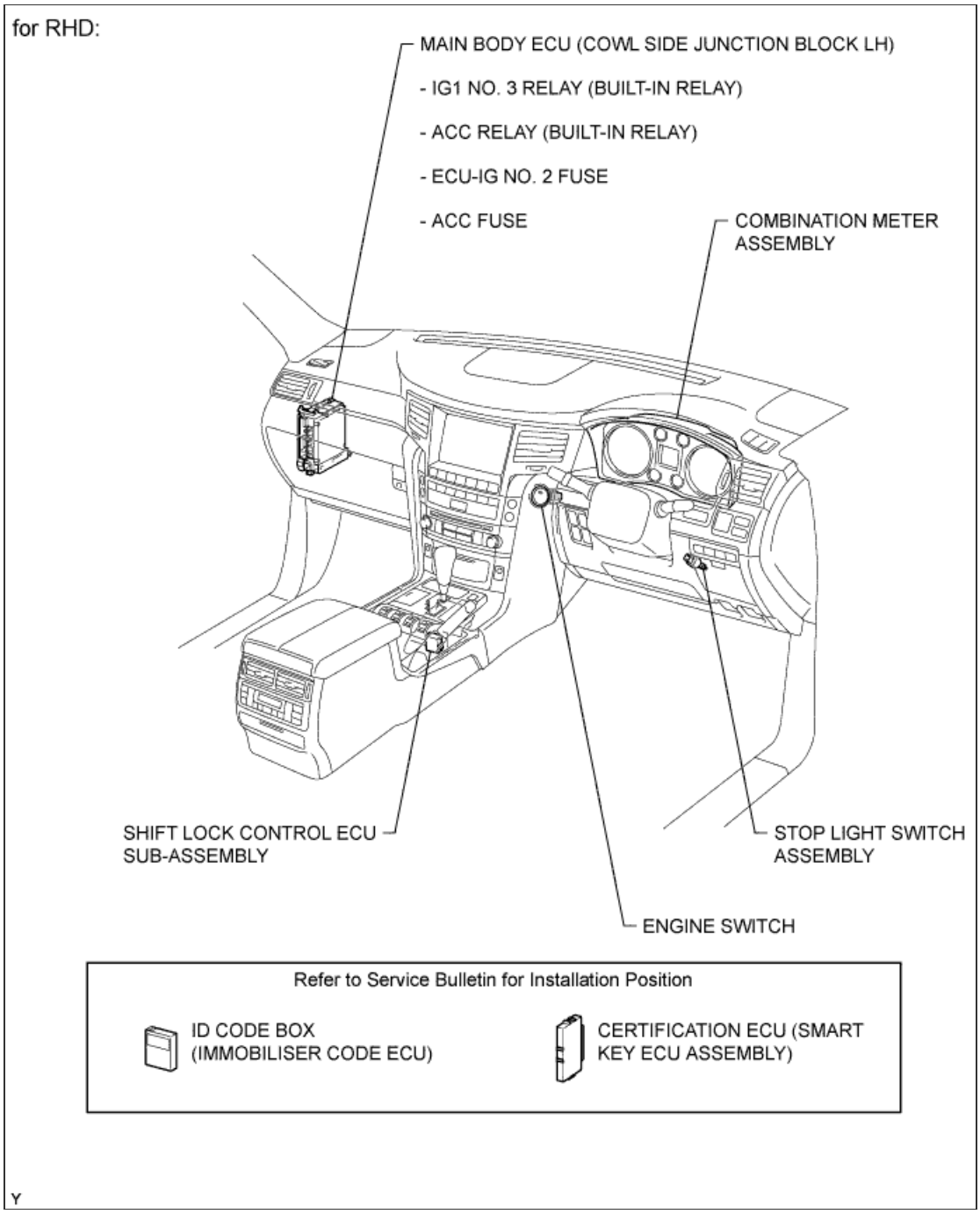
for LHD:



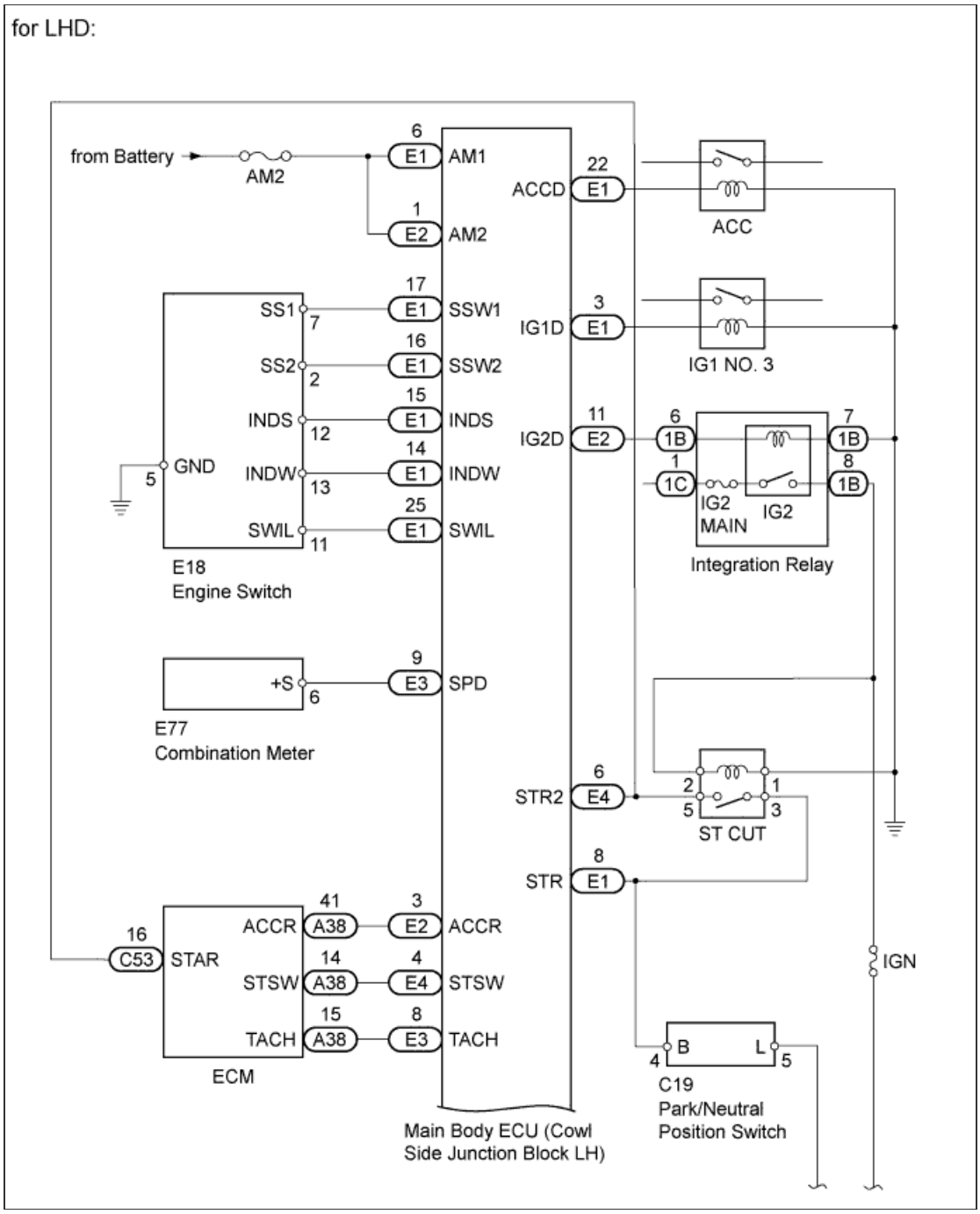
Refer to Service Bulletin for Installation Position

ID CODE BOX (IMMOBILISER CODE ECU)

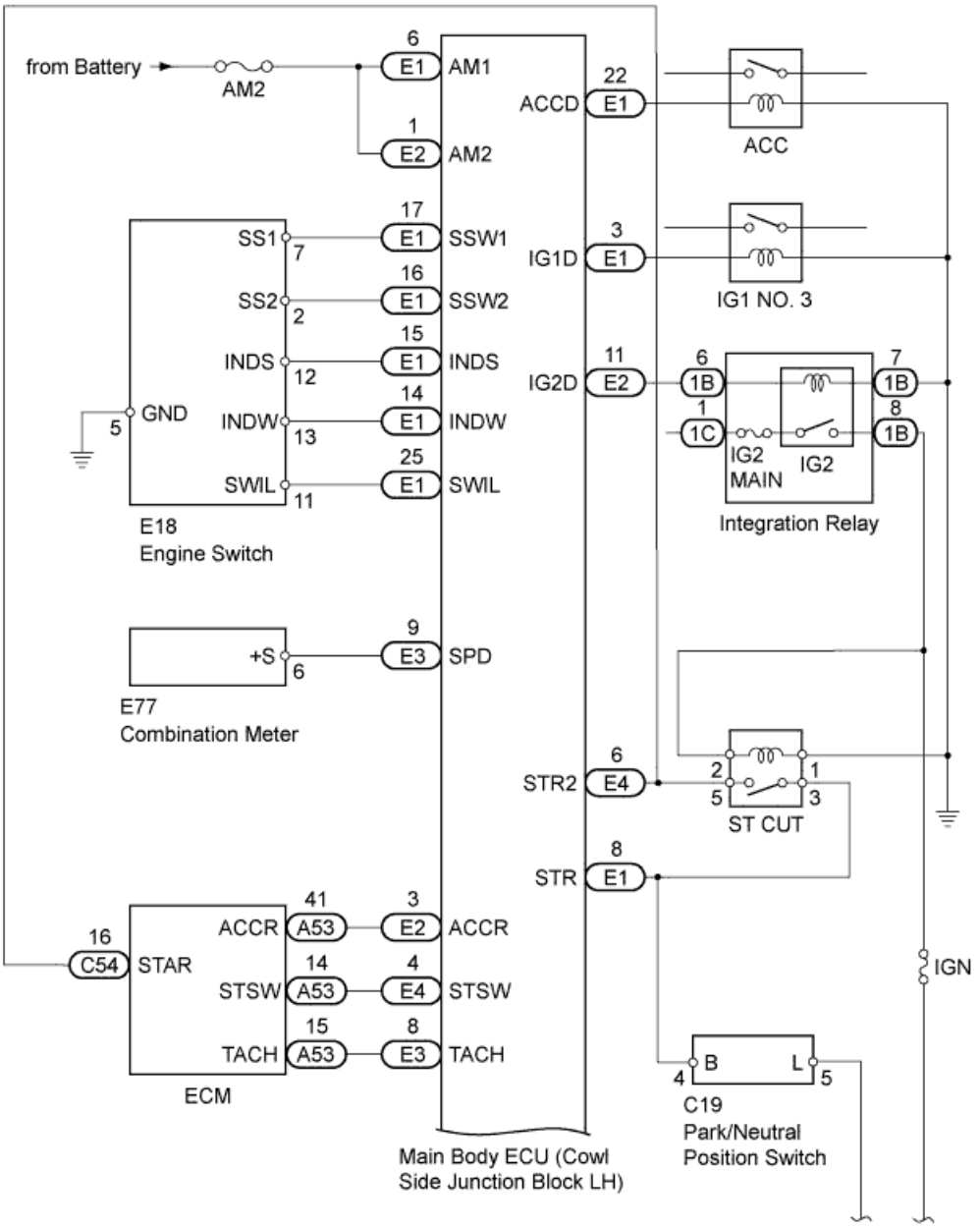
CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

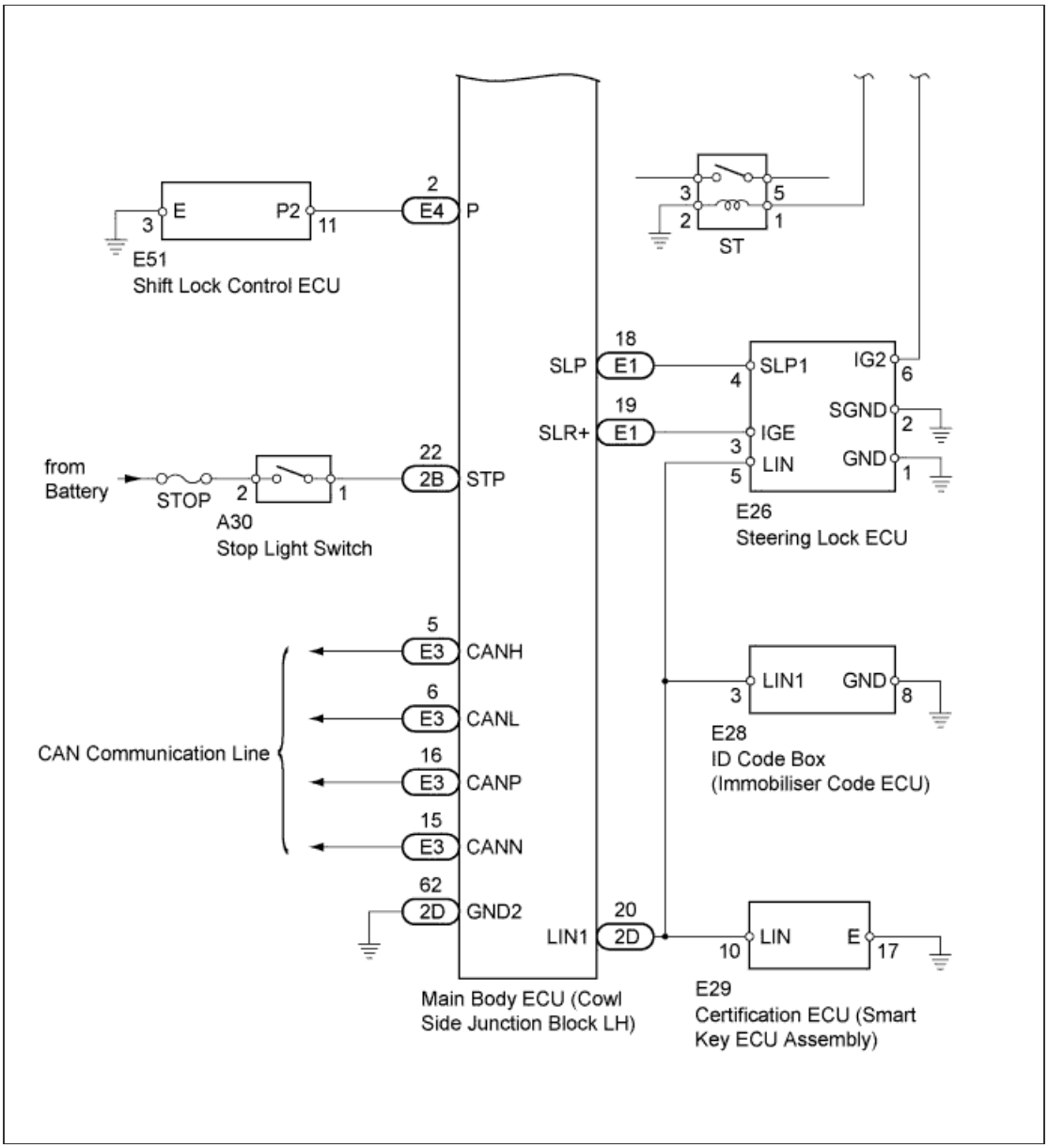

for RHD:
MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)
- IG1 NO. 3 RELAY (BUILT-IN RELAY)
- ACC RELAY (BUILT-IN RELAY)
- ECU-IG NO. 2 FUSE
- ACC FUSE
COMBINATION METER ASSEMBLY
SHIFT LOCK CONTROL ECU SUB-ASSEMBLY
STOP LIGHT SWITCH ASSEMBLY
ENGINE SWITCH
Refer to Service Bulletin for Installation Position
ID CODE BOX (IMMOBILISER CODE ECU)
CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)
Y

for Preparation Click here



for RHD:


from Battery
AM2
6
E1
AM1
1
E2
AM2
22
ACCD
E1
ACC
17
SSW1
16
SSW2
15
INDS
14
INDW
25
SWIL
SS1
7
SS2
2
INDS
12
GND
5
INDW
13
SWIL
11
E18
Engine Switch
3
IG1D
E1
IG1 NO. 3
11
IG2D
E2
6
1B
1
1C
7
1B
8
1B
IG2
MAIN
IG2
Integration Relay
9
SPD
+S
6
E77
Combination Meter
6
STR2
E4
2
1
5
3
ST CUT
8
STR
E1
IGN
41
ACCR
A53
3
E2
ACCR
16
C54
STAR
14
STSW
A53
4
E4
STSW
15
TACH
A53
8
E3
TACH
ECM
4
B
L
5
C19
Park/Neutral
Position Switch
Main Body ECU (Cowl
Side Junction Block LH)



Communication Table

Sender	Receiver	Signal	Line
ECM	Main body ECU	Engine speed signal	CAN
Combination meter	Main body ECU	Vehicle speed signal	CAN
Steering lock ECU	Main body ECU	Steering lock/unlock signal	LIN
Certification ECU (Smart key ECU assembly)	Main body ECU	LIN master signal	LIN
Main body ECU	ID code box (Immobiliser code ECU)	ID required signal	LIN
Main body ECU	Certification ECU (Smart key ECU assembly)	Key existence condition signal	LIN

for Preparation Click here

PUSH-BUTTON START DESCRIPTION

a. The push-button start uses a push-type engine switch, which the driver can operate by merely carrying the key. This system consists primarily of the main body ECU, engine switch, ID code box (immobiliser code ECU), steering lock ECU, key, ACC relay, IG1 No. 3 relay, integration relay (IG2 relay) and certification ECU (smart key ECU assembly). The main body ECU controls the system. This function operates in cooperation with the entry and start system. The table below shows the transition of the engine switch, which depends on whether the brake pedal is depressed or released.

b. This system has different power source mode patterns depending on the brake pedal and shift lever conditions.

Condition	Power Source Mode Pattern
Brake pedal not depressed, shift lever in P	Each time engine switch is pushed off → on (ACC) → on (IG) → off
Brake pedal not depressed	When engine switch is pushed in engine started condition Engine started → off
Brake pedal depressed, shift lever in P	When engine switch is pushed once off → engine start
Brake pedal depressed, shift lever in P	When engine switch is pushed in on (ACC) condition on (ACC) → engine start
Brake pedal depressed, shift lever in P	When engine switch is pushed in on (IG) condition on (IG) → engine start
Brake pedal depressed	When engine switch is pushed in engine started condition Engine started → off

When the battery of the key is low, the push-button start function can be operated by touching the key to the engine switch.

FUNCTION OF COMPONENT

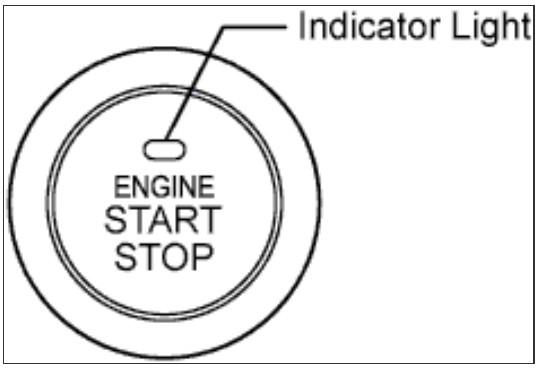
Component	Function
Engine Switch (Transponder Key Amplifier)	• Transmits engine switch signal to main body ECU. • Informs driver of power source mode or system abnormality with indicator light illumination. • Receives ID code and transmits it to certification ECU (smart key ECU assembly) when key battery is depleted or transmitter is affected by wave noise, etc.
Key	Receives signals from oscillators and returns ID code to entry door control receiver.
Indoor Key Oscillator	Receives request signal from certification ECU (smart key ECU assembly) and forms detection area in vehicle interior.
Door Control Receiver	Receives ID code from key and transmits it to certification ECU (smart key ECU assembly).
Main Body ECU	• Changes power source mode in 4 stages (off, on (ACC), on (IG), start) in accordance with state of park/neutral position switch. • Controls push-button start function in accordance with signals received from switches and each ECU.
Certification ECU (Smart Key ECU Assembly)	Certifies ID code received from entry door control receiver and transmits certification results to ID code box (immobiliser code ECU) and steering lock ECU.
Shift Lock Control ECU	Outputs state of shift position to main body ECU.
Stop Light Switch	Outputs state of brake pedal to main body ECU.
ID Code Box (Immobiliser Code ECU)	Receives steering unlock or engine immobiliser unset signals from certification ECU (smart key ECU assembly), certifies them, and transmits each unset signal to steering lock ECU or ECM.
ECM	• Receives engine start request signal from main body ECU, turns on ST relay, and starts engine. • Receives signal from ID code box (immobiliser code ECU) and performs engine ignition and fuel injection.

SYSTEM FUNCTION

The electric controls of the push-button start function are described below:

Control	Outline
Engine Switch Control	• When the driver operates the engine switch with a key in driver possession, the certification ECU (smart key ECU assembly) starts the indoor key oscillator, which transmits a request signal to the key. Upon receiving this signal, the key transmits an ID code signal to the door control receiver. • The ID code box (immobiliser code ECU) verifies the check results received from the certification ECU (smart key ECU assembly) via the LIN line and sends them to the main body ECU. Based on these results, the main body ECU authorizes operation of the engine switch.
Diagnosis	When the main body ECU detects a malfunction, the main body ECU diagnoses and memorizes which section failed.

CONSTRUCTION AND OPERATION



a. Engine switch:
The engine switch consists of a momentary type switch, 3 color (amber, green, greenish white) LEDs, and the transponder key amplifier.

- The greenish white LED is for illumination.
- The amber and green LEDs are for the indicator light. The driver can check the present power source mode and whether the engine can start or not in accordance with the illumination state of the indicator light.
- When the main body ECU detects an abnormality in the entry and start system, it makes the amber indicator light flash. If the engine is stopped in this state, it might not be possible to restart it.

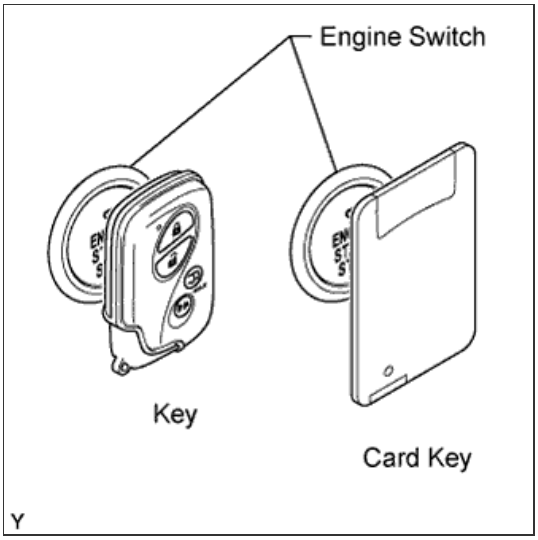
b. Indicator light condition:

Engine Switch Indicator Light Condition

Power Source Mode/Condition	Indicator Light Condition	
	Brake Pedal Released	Brake Pedal Depressed, Shift Lever in P
Off	Off	Illuminates (green)
On (ACC), on (IG)	Illuminates (amber)	Illuminates (green)
Engine running	Off	Off
Steering lock not unlocked	Flashes (green) for 30 seconds	Flashes (green) for 30 seconds
System malfunction	Flashes (amber) for 15 seconds	Flashes (amber) for 15 seconds
Stop light switch malfunction with shift lever in P	Flashes (green) for 15 seconds	Flashes (green) for 15 seconds

c. Main body ECU:
The main body ECU consists of the IG1 No. 3 relay and ACC relay actuation circuits and CPU.

SYSTEM NOT OPERATING NORMALLY (DUE TO KEY BATTERY DEPLETION, ELECTRICAL NOISE, ETC.)



a. To operate the push-button start function when the key battery is depleted or the transmitter is affected by wave noise, etc., touch the LEXUS mark of the key or card key to the engine switch while depressing the brake pedal with the shift lever in P.

b. The main body ECU transmits a key verification request signal from the stop light switch to the certification ECU (smart key ECU assembly).

c. The certification ECU (smart key ECU assembly) does not receive an ID code response from the door control receiver, so it activates the transponder key amplifier built into the engine switch.

d. The transponder key amplifier outputs an engine immobiliser radio wave to the key.

e. The key receives the radio wave, and returns a radio wave response to the transponder key amplifier.

f. The transponder key amplifier combines the key ID codes with the radio wave response, and transmits it to the certification ECU (smart key ECU assembly).

g. The certification ECU (smart key ECU assembly) judges and verifies the ID code, and transmits a key verification OK signal to the main body ECU. The buzzer in the combination meter sounds at the same time.

h. After the buzzer sounds, with the shift lever in P, if the engine switch is pressed within 10 seconds with the brake pedal not depressed, the

power source mode changes to on (ACC) or on (IG), as in the normal condition.

DIAGNOSIS

The main body ECU can detect malfunctions in the push-button start function when the power source mode is on (IG).
When the ECU detects a malfunction, the amber indicator light of the engine switch flashes to warn the driver. At the same time, the ECU stores the 5-digit DTC (Diagnostic Trouble Code) in memory.

- The indicator light warning continues for 15 seconds even after the power source mode is changed to off.
- The DTC can be output by connecting the intelligent tester to the DLC3.
- The push-button start function cannot be operated if a malfunction occurs.

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the push-button start function.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.INSPECT COMMUNICATION FUNCTION OF CAN COMMUNICATION SYSTEM*

a. Using the intelligent tester, check if the CAN communication system is functioning normally.

- For LHD vehicles, use the following procedures (Click here).
- For RHD vehicles, use the following procedures (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output (for LHD)	B
DTC is output (for RHD)	C

B. → GO TO CAN COMMUNICATION SYSTEM (DIAGNOSTIC TROUBLE CODE CHART) (**Click here**)

C. → GO TO CAN COMMUNICATION SYSTEM (DIAGNOSTIC TROUBLE CODE CHART) (**Click here**)

A

4.CHECK FOR DTC*

a. Check for DTCs and note any output DTCs (Click here).

b. Clear the DTCs.

c. Check whether the same DTC(s) relevant to the SFI system or entry and start system recurs by reproducing the symptoms indicated by the noted DTC(s) in the first step above.

Result

Result	Proceed to
DTC output does not reoccur	A
SFI system DTC output reoccurs	B
Entry and start system DTC output reoccurs	C

B. → GO TO SFI SYSTEM (DIAGNOSTIC TROUBLE CODE CHART) (**Click**

here)

C. GO TO STEP 7

A

5.PROBLEM SYMPTOMS TABLE

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. GO TO STEP 7

A

6.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Terminals of ECU (Click here)

b. Data List / Active Test (Click here)

NEXT

7.ADJUST, REPAIR OR REPLACE

NEXT

8.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the push-button start function.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.INSPECT COMMUNICATION FUNCTION OF CAN COMMUNICATION SYSTEM*

a. Using the intelligent tester, check if the CAN communication system is functioning normally.

- For LHD vehicles, use the following procedures (Click here).
- For RHD vehicles, use the following procedures (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output (for LHD)	B
DTC is output (for RHD)	C

B. → GO TO CAN COMMUNICATION SYSTEM (DIAGNOSTIC TROUBLE CODE CHART) (**Click here**)

C. → GO TO CAN COMMUNICATION SYSTEM (DIAGNOSTIC TROUBLE CODE CHART) (**Click here**)

A

4.CHECK FOR DTC*

a. Check for DTCs and note any output DTCs (Click here).

b. Clear the DTCs.

c. Check whether the same DTC(s) relevant to the SFI system or entry and start system recurs by reproducing the symptoms indicated by the noted DTC(s) in the first step above.

Result

Result	Proceed to
DTC output does not reoccur	A
SFI system DTC output reoccurs	B
Entry and start system DTC output reoccurs	C

B. → GO TO SFI SYSTEM (DIAGNOSTIC TROUBLE CODE CHART) (**Click**

here)

C. GO TO STEP 7

A

5.PROBLEM SYMPTOMS TABLE

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. GO TO STEP 7

A

6.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Terminals of ECU (Click here)

b. Data List / Active Test (Click here)

NEXT

7.ADJUST, REPAIR OR REPLACE

NEXT

8.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the push-button start function.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.INSPECT COMMUNICATION FUNCTION OF CAN COMMUNICATION SYSTEM*

a. Using the intelligent tester, check if the CAN communication system is functioning normally.

- For LHD vehicles, use the following procedures (Click here).
- For RHD vehicles, use the following procedures (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output (for LHD)	B
DTC is output (for RHD)	C

B. → GO TO CAN COMMUNICATION SYSTEM (DIAGNOSTIC TROUBLE CODE CHART) (**Click here**)

C. → GO TO CAN COMMUNICATION SYSTEM (DIAGNOSTIC TROUBLE CODE CHART) (**Click here**)

A

4.CHECK FOR DTC*

a. Check for DTCs and note any output DTCs (Click here).

b. Clear the DTCs.

c. Check whether the same DTC(s) relevant to the SFI system or entry and start system recurs by reproducing the symptoms indicated by the noted DTC(s) in the first step above.

Result

Result	Proceed to
DTC output does not reoccur	A
SFI system DTC output reoccurs	B
Entry and start system DTC output reoccurs	C

B. → GO TO SFI SYSTEM (DIAGNOSTIC TROUBLE CODE CHART) (**Click**

here)

C. GO TO STEP 7

A

5.PROBLEM SYMPTOMS TABLE

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. GO TO STEP 7

A

6.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Terminals of ECU (Click here)

b. Data List / Active Test (Click here)

NEXT

7.ADJUST, REPAIR OR REPLACE

NEXT

8.CONFIRMATION TEST

NEXT

END

for Preparation Click here

CUSTOMIZING FUNCTION WITH INTELLIGENT TESTER (REFERENCE)

NOTICE:

- **When the customer requests a change in a function, first make sure that the function can be customized.**
- **Be sure to make a note of the current settings before customizing.**
- **When troubleshooting a function, first make sure that the function is set to the default setting.**

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Utility / Customize.

e. Select the setting by referring to the table below.

Smart Key / Access

Display	Default	Content	Setting
Ignition Available Area	All	Function to choose the available area for the key to start the engine and cancel the steering lock.	Front/All

for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Entry and Start System (for Start Function)

Symptom	Suspected Area	See page
Power source mode does not change	AM2 fuse	Click here
	IGN fuse	Click here
	IG2 MAIN fuse	Click here
	Integration relay (IG2 relay)	Click here
	Engine switch	Click here
	Main body ECU	Click here
	Room oscillator does not recognize key	Click here
	Harness or connector	Click here
Engine does not start	STOP fuse	Click here
	Stop light switch	Click here
	ST relay	Click here
	Park/neutral position switch	Click here
	Shift lock control ECU	Click here
	Steering lock actuator assembly (Steering lock control ECU)	Click here
	ID code box (Immobiliser code ECU)	Click here
	Certification ECU (Smart key ECU assembly)	Click here
	Main body ECU	Click here
	Steering lock system	Click here
	ECM	Click here
	Power source mode does not change	Click here
	Harness or connector	Click here
Engine switch indicator circuit	Engine switch	Click here
	Main body ECU	Click here
	Harness or connector	Click here

for Preparation Click here

HINT:

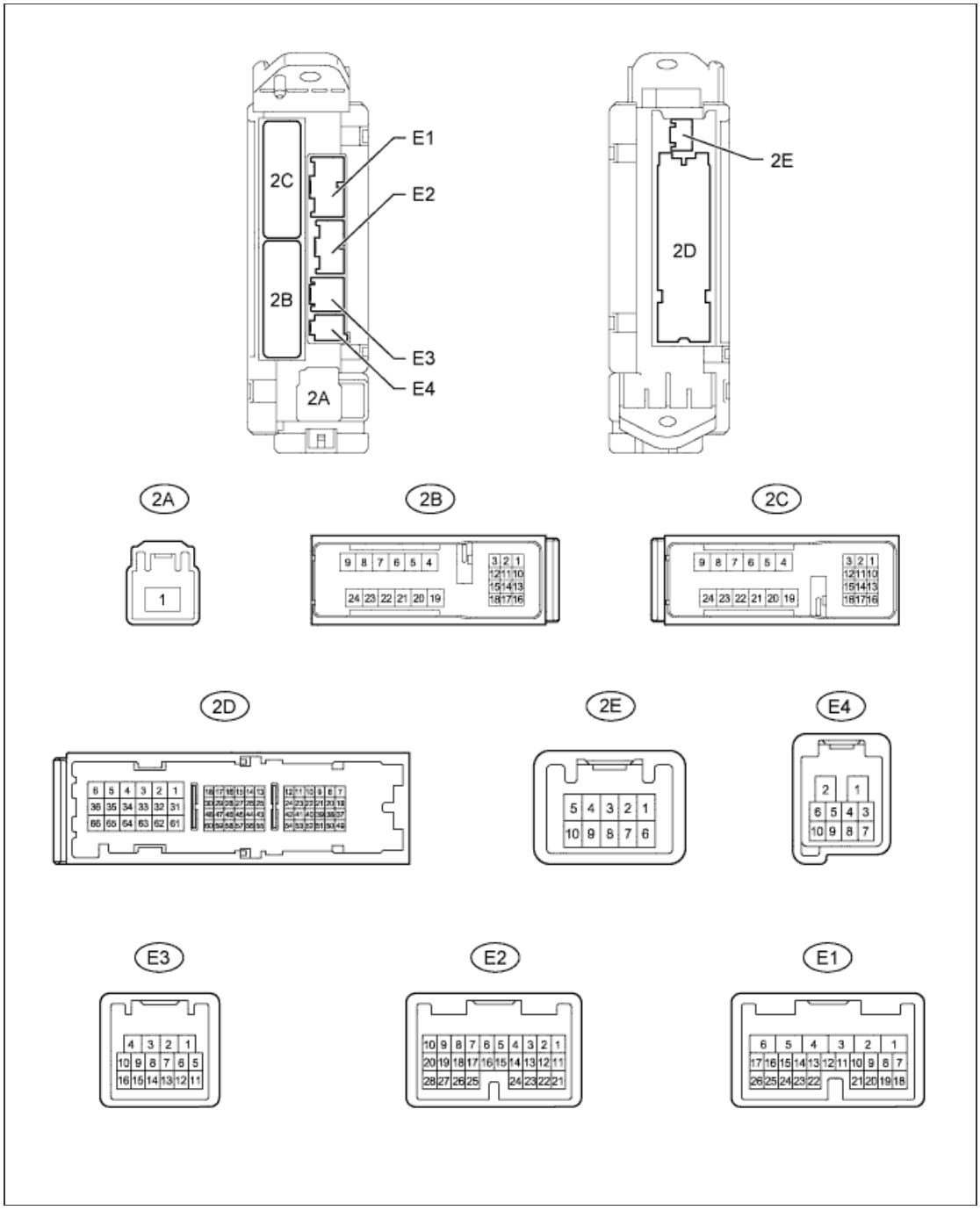
Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Entry and Start System (for Start Function)

Symptom	Suspected Area	See page
Power source mode does not change	AM2 fuse	Click here
	IGN fuse	Click here
	IG2 MAIN fuse	Click here
	Integration relay (IG2 relay)	Click here
	Engine switch	Click here
	Main body ECU	Click here
	Room oscillator does not recognize key	Click here
	Harness or connector	Click here
Engine does not start	STOP fuse	Click here
	Stop light switch	Click here
	ST relay	Click here
	Park/neutral position switch	Click here
	Shift lock control ECU	Click here
	Steering lock actuator assembly (Steering lock control ECU)	Click here
	ID code box (Immobiliser code ECU)	Click here
	Certification ECU (Smart key ECU assembly)	Click here
	Main body ECU	Click here
	Steering lock system	Click here
	ECM	Click here
	Power source mode does not change	Click here
	Harness or connector	Click here
Engine switch indicator circuit	Engine switch	Click here
	Main body ECU	Click here
	Harness or connector	Click here

for Preparation Click here

CHECK MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)



a. Disconnect the E1, E2 and 2D main body ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E1-6 (AM1) - Body ground	W - Body ground	+B power supply	Always	11 to 14 V
E2-1 (AM2) - Body ground	W - Body ground	+B power supply	Always	11 to 14 V
E1-17 (SSW1) - Body ground	B - Body ground	Engine switch 1 input	Engine switch pushed	Below 1 Ω
E1-17 (SSW1) - Body ground	B - Body ground	Engine switch 1 input	Engine switch not pushed	10 kΩ or higher

E1-16 (SSW2) - Body ground	B - Body ground	Engine switch 2 input	Engine switch pushed	Below 1 Ω
E1-16 (SSW2) - Body ground	B - Body ground	Engine switch 2 input	Engine switch not pushed	10 kΩ or higher
2D-62 (GND2) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
2D-20 (LIN1) - Body ground	GR - Body ground	LIN line	Always	10 kΩ or higher

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the E1, E2 and 2D main body ECU connectors.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E1-22 (ACCD) - 2D-62 (GND2)	P - W-B	ACC relay drive signal	Engine switch on (ACC)	11 to 14 V
E1-22 (ACCD) - 2D-62 (GND2)	P - W-B	ACC relay drive signal	Engine switch off	Below 1 V
E1-3 (IG1D) - 2D-62 (GND2)	G - W-B	IG1 No. 3 relay drive signal	Engine switch on (IG)	11 to 14 V
E1-3 (IG1D) - 2D-62 (GND2)	G - W-B	IG1 No. 3 relay drive signal	Engine switch on (ACC)	Below 1 V
E2-11 (IG2D) - 2D-62 (GND2)	B - W-B	Integration relay (IG2 relay) drive signal	Engine switch on (IG)	11 to 14 V
E2-11 (IG2D) - 2D-62 (GND2)	B - W-B	Integration relay (IG2 relay) drive signal	Engine switch on (ACC)	Below 1 V
E1-19 (SLR+) - 2D-62 (GND2)	G - W-B	Steering lock power supply	Steering lock motor operating	Below 1 V
E1-19 (SLR+) - 2D-62 (GND2)	G - W-B	Steering lock power supply	Steering lock motor not operating	11 to 14 V
E1-8 (STR) - 2D-62 (GND2)	L - W-B	Park/neutral position switch signal	Engine switch on (IG), shift lever not in P or N → P or N	Below 2 V → Pulse generation*1
E1-18 (SLP) - 2D-62 (GND2)	SB - W-B	Steering lock actuator position signal	Steering lock locked	11 to 14 V
E1-18 (SLP) - 2D-62 (GND2)	SB - W-B	Steering lock actuator position signal	Steering lock released	Below 1 V
E3-9 (SPD) - 2D-62 (GND2)	V - W-B	Speed signal from combination meter	Engine switch on (IG), driving wheel rotating slowly	Pulse generation (see waveform 1)
E3-8 (TACH) - 2D-62 (GND2)	W - W-B	Tachometer signal	Engine running	Pulse generation (see waveform 2)
E4-2 (P) - 2D-62 (GND2)	L - W-B	Shift lock signal	Shift lever in P	Pulse generation (see waveform 3)
E4-2 (P) - 2D-62 (GND2)	L - W-B	Shift lock signal	Shift lever not in P	Below 1 V
E4-4 (STSW) - 2D-62 (GND2)	R - W-B	Starter activation request signal	Brake pedal depressed with shift lever in P, engine switch pushed once	11 to 14 V
E1-15 (INDS) - 2D-62 (GND2)	W - W-B	Vehicle condition signal	Brake pedal released with shift lever in P or N, engine switch off, on (ACC) or on (IG)	9 to 14 V
E1-14 (INDW) - 2D-62 (GND2)	W - W-B	Vehicle condition signal	Brake pedal released with shift lever in P or N, engine switch off, on (ACC) or on (IG)	9 to 14 V
E1-25 (SWIL) - 2D-62 (GND2)	R - W-B	Illumination signal	Light control switch tail or head	11 to 14 V
2B-22 (STP) - 2D-62 (GND2)	R - W-B	Stop light switch signal	Brake pedal depressed	11 to 14 V
2B-22 (STP) - 2D-62 (GND2)	R - W-B	Stop light switch signal	Brake pedal released	Below 1 V

HINT:

*1: Remove the ST CUT relay before measuring the voltage.

If the result is not as specified, the ECU may have a malfunction.

e. Using an oscilloscope, check the signal waveform of the ECU.

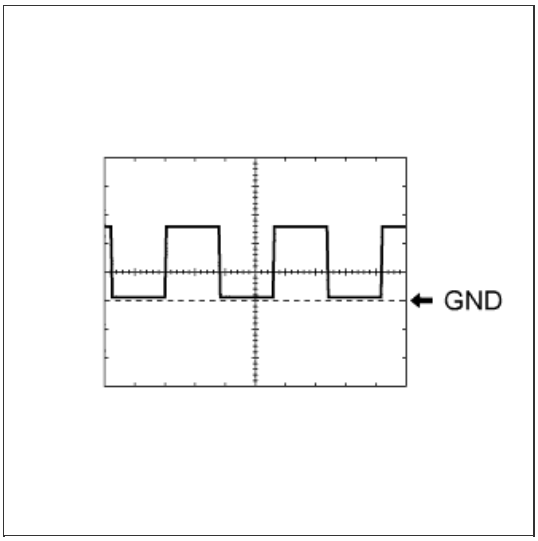
i. Waveform 1

Reference

Terminal No. (Symbol)	Tool Setting	Condition
E3-9 (SPD) - 2D-62 (GND2)	5 V/DIV., 100 msec./DIV.	Vehicle driven at approx. 20 km/h (12 mph)

HINT:

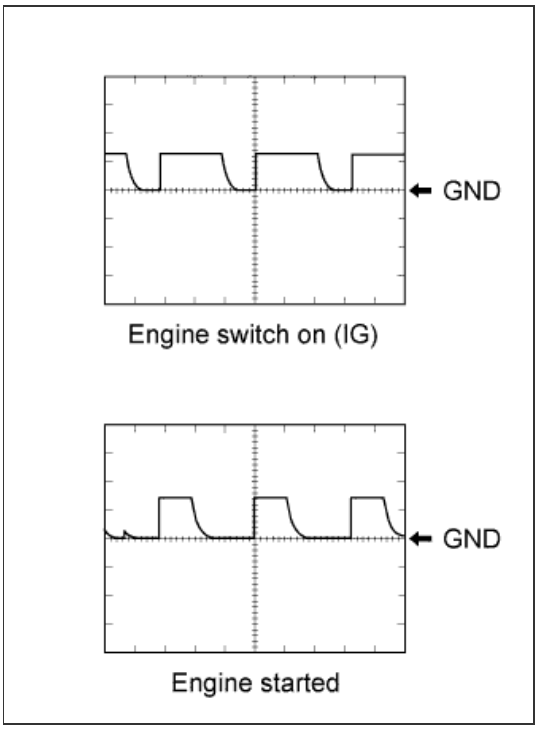
As the vehicle speed increases, the wavelength shortens.



ii. Waveform 2

Reference

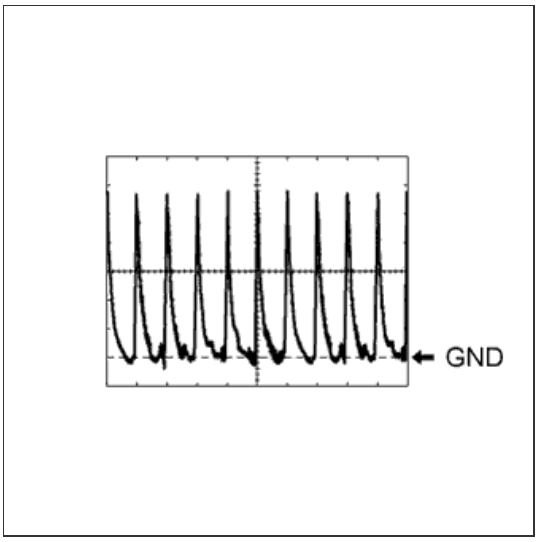
Terminal No. (Symbol)	Tool Setting	Condition
E3-8 (TACH) - 2D-62 (GND2)	10 V/DIV., 10 msec./DIV.	Engine switch on (IG) or engine started



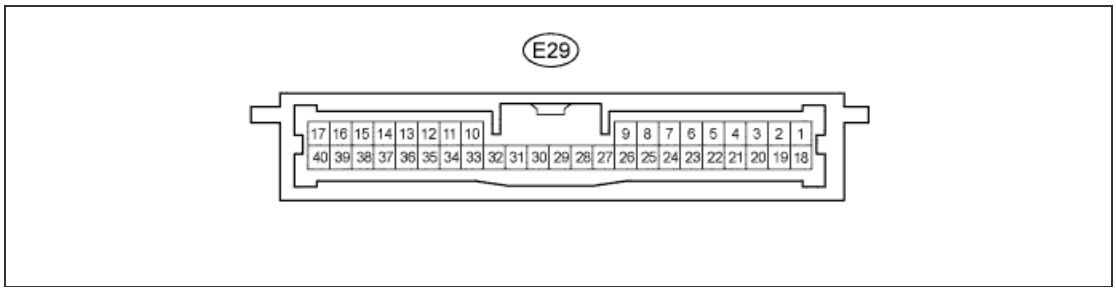
iii. Waveform 3

Reference

Terminal No. (Symbol)	Tool Setting	Condition
E4-2 (P) - 2D-62 (GND2)	2 V/DIV., 20 msec./DIV.	Shift lever in P



CHECK CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)



a. Disconnect the E29 certification ECU (smart key ECU assembly) connector.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E29-1 (+B) - Body ground	B - Body ground	+B power supply	Always	11 to 14 V
E29-10 (LIN) - Body ground	GR - Body ground	LIN line	Always	10 kΩ or higher
E29-17 (E) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

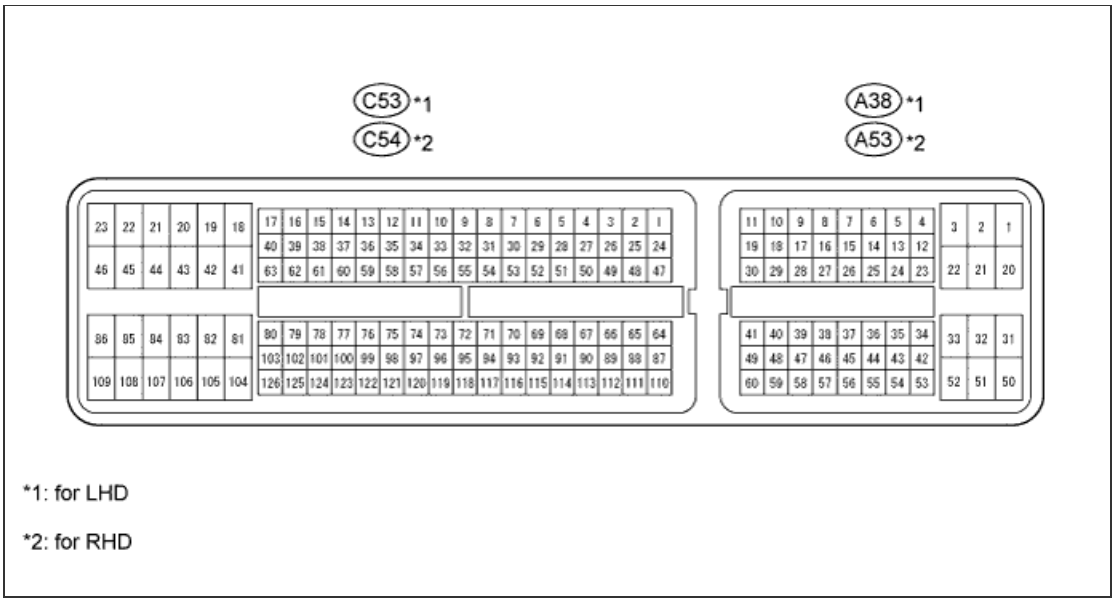
c. Reconnect the E29 certification ECU (smart key ECU assembly) connector.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E29-18 (IG) - Body ground	B - Body ground	Ignition power supply	Engine switch on (IG)	11 to 14 V
E29-18 (IG) - Body ground	B - Body ground	Ignition power supply	Engine switch off	Below 1 V

If the result is not as specified, the certification ECU (smart key ECU assembly) may have a malfunction.

CHECK ECM



a. Disconnect the A38 and C53 ECM connectors (for LHD).

b. Disconnect the A53 and C54 ECM connectors (for RHD).

c. Measure the voltage and resistance according to the value(s) in the table below.
*1: for LHD
*2: for RHD

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
A38-1 (BATT) - C53-81 (E1)*1 A53-1 (BATT) - C54-81 (E1)*2	L - W-B	Battery (for measuring battery voltage and for ECM memory)	Always	11 to 14 V
A38-3 (+B) - C53-81 (E1)*1 A53-3 (+B) - C54-81 (E1)*2	B - W-B	Power source of ECM	Engine switch on (IG)	11 to 14 V
A38-28 (IGSW) - C53-81 (E1)*1 A53-28 (IGSW) - C54-81 (E1)*2	B - W-B	Engine switch signal	Always	11 to 14 V
C53-81 (E1) - Body ground*1 C54-81 (E1) - Body ground*2	W-B - Body ground	Ground	Always	Below 1 Ω
C53-43 (E01) - Body ground*1 C54-43 (E01) - Body ground*2	W-B - Body ground	Ground	Always	Below 1 Ω
C53-42 (E02) - Body ground*1 C54-42 (E02) - Body ground*2	BR - Body ground	Ground	Always	Below 1 Ω
C53-46 (E03) - Body ground*1 C54-46 (E03) - Body ground*2	W-B - Body ground	Ground	Always	Below 1 Ω
C53-23 (E04) - Body ground*1 C54-23 (E04) - Body ground*2	W-B - Body ground	Ground	Always	Below 1 Ω
C53-21 (E05) - Body ground*1 C54-21 (E05) - Body ground*2	W-B - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

d. Reconnect the ECM connectors.

e. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
A38-46 (STA) - C53-81 (E1)*1 A53-46 (STA) - C54-81 (E1)*2	R-B - W-B	ST relay operation signal	Cranking	5.5 V or higher
A38-14 (STSW) - C53-81 (E1)*1 A53-14 (STSW) - C54-81 (E1)*2	R - W-B	Starter activation request signal	Brake pedal depressed, engine switch on (IG)	Output voltage at terminal AM1 or AM2 is - 2 V or higher
A38-41 (ACCR) - C53-81 (E1)*1 A53-41 (ACCR) - C54-81 (E1)*2	L-Y - W-B	ACC relay cut signal (output)	Engine switch on (IG) → Cranking	11 to 14 V → Below 1 V
A38-15 (TACH) - C53-81 (E1)*1 A53-15 (TACH) - C54-81 (E1)*2	W-G - W-B	Engine speed signal (output)	Idling	Pulse generation (see waveform 1)
C53-16 (STAR) - C53-81 (E1)*1 C54-16 (STAR) - C54-81 (E1)*2	L - W-B	ST relay drive signal	Cranking	11 to 14 V

If the result is not as specified, the ECM may have a malfunction.

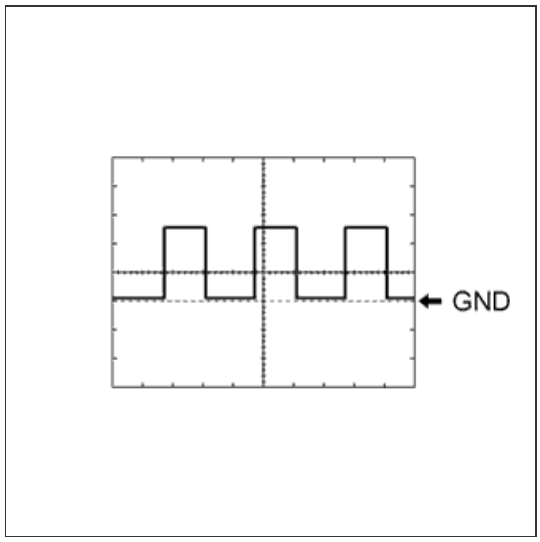
f. Using an oscilloscope, check the signal waveform of the ECM.

Reference

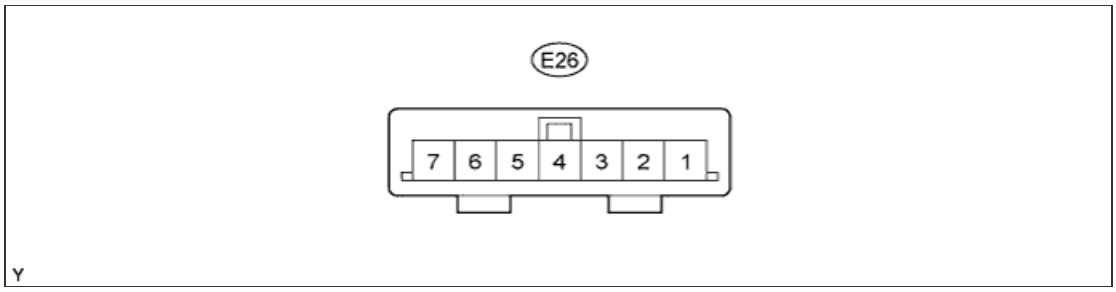
Terminal No. (Symbol)	Tool Setting	Condition
A38-15 (TACH) - C53-81 (E1)*1 A53-15 (TACH) - C54-81 (E1)*2	5 V/DIV., 10 ms./DIV.	Engine idling

HINT:

As the engine speed increases, the wavelength shortens.



CHECK STEERING LOCK ECU



a. Disconnect the E26 steering lock ECU connector.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E26-7 (B) - Body ground	R - Body ground	+B power supply	Always	11 to 14 V
E26-6 (IG2) - Body ground	B - Body ground	Ignition power supply	Engine switch on (IG)	11 to 14 V
E26-6 (IG2) - Body ground	B - Body ground	Ignition power supply	Engine switch off	Below 1 V
E26-1 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω

E26-2 (SGND) - Body ground	BR - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the E26 steering lock ECU connector.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E26-4 (SLP1) - E26-1 (GND)	SB - W-B	Steering lock actuator position signal	Steering locked	11 to 14 V
E26-4 (SLP1) - E26-1 (GND)	SB - W-B	Steering lock actuator position signal	Steering released	Below 1 V

If the result is not as specified, the ECU may have a malfunction.

for Preparation Click here

CHECK DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / DTC.

e. Read the DTCs.

CLEAR DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Main Body / DTC.

e. Clear the DTCs.

for Preparation Click here

READ DATA LIST

HINT:

Using the intelligent tester to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Data List.

e. According to the display on the tester, read the Data List.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
ACC SW	Engine switch on (ACC)/ON or OFF	ON: Engine switch on (ACC) OFF: Engine switch off	-
IG SW	Engine switch on (IG)/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
Stop Light SW	Stop light switch/ON or OFF	ON: Brake pedal depressed OFF: Brake pedal released	-
Start Switch1	Start switch 1/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
Start Switch2	Start switch 2/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
Steering Unlock Switch	Steering lock condition/ON or OFF	ON: Steering unlocked OFF: Steering locked	-
Neutral SW/ Clutch SW	Park/neutral position switch/ON or OFF	ON: Shift lever in P or N OFF: Shift lever not in P or N	-
Shift P Signal	Shift P position signal/ON or OFF	ON: Shift lever in P OFF: Shift lever not in P	-
Vehicle Speed Signal	Vehicle speed signal/Stop or Run	Stop: Vehicle stopped Run: Vehicle running	-
Engine Condition	Engine condition/Stop or Run	Stop: Engine stopped Run: Engine running	-
IG1 Relay Monitor(Outside)	IG1 No. 3 relay outer relay monitor/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
IG2 Relay Monitor(Outside)	Integration relay (IG2 relay) outer relay monitor/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
IG1 Relay Monitor(Inside)	IG1 No. 3 relay inner relay monitor/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
IG2 Relay Monitor(Inside)	Integration relay (IG2 relay) inner relay monitor/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
ACC Relay Monitor	ACC relay monitor/ON or OFF	ON: Engine switch on (ACC) OFF: Engine switch off	-
Latch Circuit	Latch circuit/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off or on (ACC)	-
Starter Request Signal	Starter request signal/ON or OFF	ON: ST relay on OFF: ST relay off	-
		ALL OFF: All relays off ACC ON: ACC relay on	

Power Supply Condition	Power supply condition/ALL OFF, ACC ON, IG2 ON or ST ON	IG2 ON: Integration relay (IG2 relay) on ST ON: STSW signal on	-
ACC Relay Cut Signal	ACC relay cut signal/ON or OFF	ON: Engine cranking OFF: Engine not cranking	-
Starter Relay Monitor	ST relay monitor/ON or OFF	ON: Engine cranking OFF: Engine not cranking	-
Communication Smart/Wireless	Communication to certification ECU (smart key ECU assembly)/OK or STOP	OK: Communication STOP: No communication	-
The Number of DTC	Number of diagnostic trouble codes/Min: 0, Max: 255	-	-

Entry and Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Ignition Switch	Engine switch/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
Unmatched Vehicle-ID	Key ID/Yes or No	Yes: Key ID matches No: Key ID differs	-
No Response	No Communication condition between vehicle and electrical key transmitter (response) / Yes or No	Yes: Key ID code not matched to vehicle No: Key ID code matched to vehicle	-
Unmatch Code or Form	Code format/Yes or No	Yes: Code format matches No: Code format differs	-
Key Low Battery	Key battery conditions/Yes or No	Yes: Key battery voltage low No: Key battery voltage normal	-
#Codes	Number of diagnostic trouble codes/Min: 0, Max: 255	-	-
ID Code Difference(Resp)	ID code/Yes or No	Yes: ID code matches No: ID code differs	-
C Code Difference	Challenge code/Yes or No	Yes: Challenge code matches No: Challenge code differs	-
Engine Start Condition	Engine start condition by certification ECU (smart key ECU assembly)/OK or NG	OK: Engine start permitted NG: Engine start prohibited	-
S Code Check	S code certification result/NG or OK	OK: S code certification result normal NG: S code certification result abnormal	-
L Code Check	L code certification result/NG or OK	OK: L code certification result normal NG: L code certification result abnormal	-
Ignition Available Area	Key area where engine start is possible/All or Front	All: All areas Front: Front only	-

PERFORM ACTIVE TEST

HINT:

Using the intelligent tester to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Active Test.

e. According to the display on the tester, perform the Active Test.

Main Body

Tester Display	Test Part	Control Range	Diagnostic Note
Indicator for Lighting	Indicator illumination	ON/OFF	-
Indicator Condition	Indicator light illumination pattern	Green/Red/No Sig	-

P Supply for Steering Lock	Steering lock ECU power supply	ON/OFF	-

Entry and Start

Tester Display	Test Part	Control Range	Diagnostic Note
Fr-Seat Inside Transmitter	Indoor key antenna (for front)	ON/OFF	-
Rr-Seat Inside Transmitter	Indoor key antenna (for rear 1)	ON/OFF	-
Inside Trunk/Backdoor Transmitter	Indoor key antenna (for rear 2)	ON/OFF	-
Outside Trunk/Backdoor Transmitter	Electrical key antenna	ON/OFF	-

for Preparation Click here

HINT:

If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.

Entry and Start System (for Start Function)

DTC Code	Detection Item	Trouble Area	See page
B2271	Ignition Hold Monitor Malfunction	- Main body ECU - AM2 fuse - Harness or connector	Click here
B2272	Ignition 1 Monitor Malfunction	- Main body ECU - Harness or connector	Click here
B2273	Ignition 2 Monitor Malfunction	- Main body ECU - IG2 MAIN fuse - Integration relay (IG2 relay) - Harness or connector	Click here
B2274	ACC Monitor Malfunction	- Main body ECU - Harness or connector	Click here
B2275	STSW Monitor Malfunction	- Main body ECU - ECM - Harness or connector	Click here
B2276	ACCR Signal Circuit Malfunction	- Main body ECU - ECM - Harness or connector	Click here
B2277	Detecting Vehicle Submersion	Main body ECU	Click here
B2278	Engine Switch Circuit Malfunction	- Main body ECU - Engine switch - Harness or connector	Click here
B2281	"P" Signal Malfunction	- Main body ECU - Shift lock control ECU - Harness or connector	Click here
B2282	Vehicle Speed Signal Malfunction	- Main body ECU - Combination meter - Harness or connector	Click here
B2283	Vehicle Speed Sensor Malfunction	- Main body ECU - Combination meter - Speed sensor - Skid control ECU - Harness or connector	Click here
B2284	Brake Signal Malfunction	- Main body ECU - Stop light switch - STOP fuse - Harness or connector	Click here
B2285	Steering Lock Position Signal Circuit Malfunction	- Main body ECU - Steering lock actuator assembly (steering lock ECU) - Harness or connector	Click here
B2286	Runnable Signal Malfunction	- Main body ECU - ECM - Harness or connector	Click here
B2288	Steering Lock Signal Circuit Malfunction	- Main body ECU - Steering lock actuator assembly (steering lock ECU) - Harness or connector	Click here
B2289	Key Collation Waiting Time Over	- Main body ECU - Engine switch - Certification ECU (smart key ECU assembly) - Key - Engine immobiliser system - Harness or connector	Click here

DTC B2271 Ignition Hold Monitor Malfunction

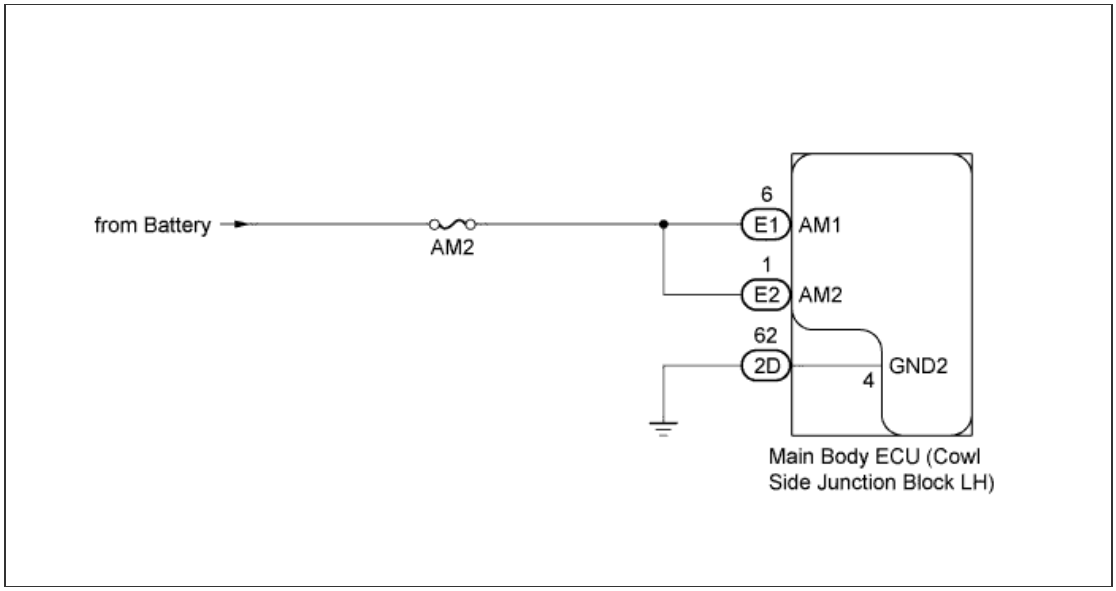
for Preparation Click here

DESCRIPTION

This DTC is stored when the IG output circuits inside the main body ECU are open or shorted.

DTC Code	Detection Condition	Trouble Area
B2271	The IG1 No. 3 relay actuation circuit or integration relay (IG2 relay) actuation circuit inside the main body ECU is abnormal.	• Main body ECU • AM2 fuse • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK WHETHER DTC OUTPUT RECURS

a. Clear the DTCs (Click here).

b. Check whether DTC B2271 is output.

Result

Result	Proceed to
DTC B2271 output	A
No DTC output	B

B → USE SIMULATION METHOD TO CHECK (Click here)

A

2.INSPECT FUSE (AM2)

a. Remove the AM2 fuse from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

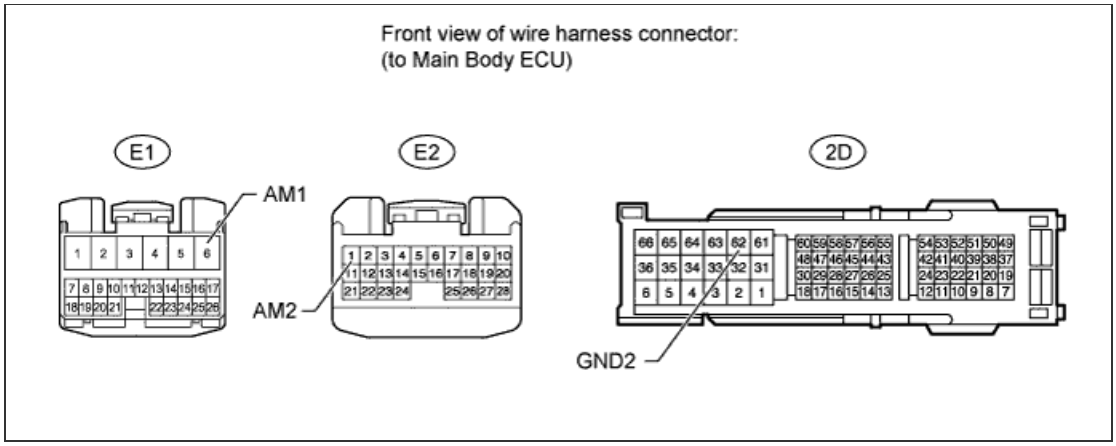
Standard Resistance:

Tester Connection	Condition	Specified Condition
AM2 fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

3.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - BATTERY AND BODY GROUND)



a. Disconnect the E1, E2 and 2D main body ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
E1-6 (AM1) - Body ground	Always	11 to 14 V
E2-1 (AM2) - Body ground	Always	11 to 14 V

Standard Resistance:

Tester Connection	Condition	Specified Condition
2D-62 (GND2) - Body ground	Always	Below 1 Ω

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

DTC B2281 "P" Signal Malfunction

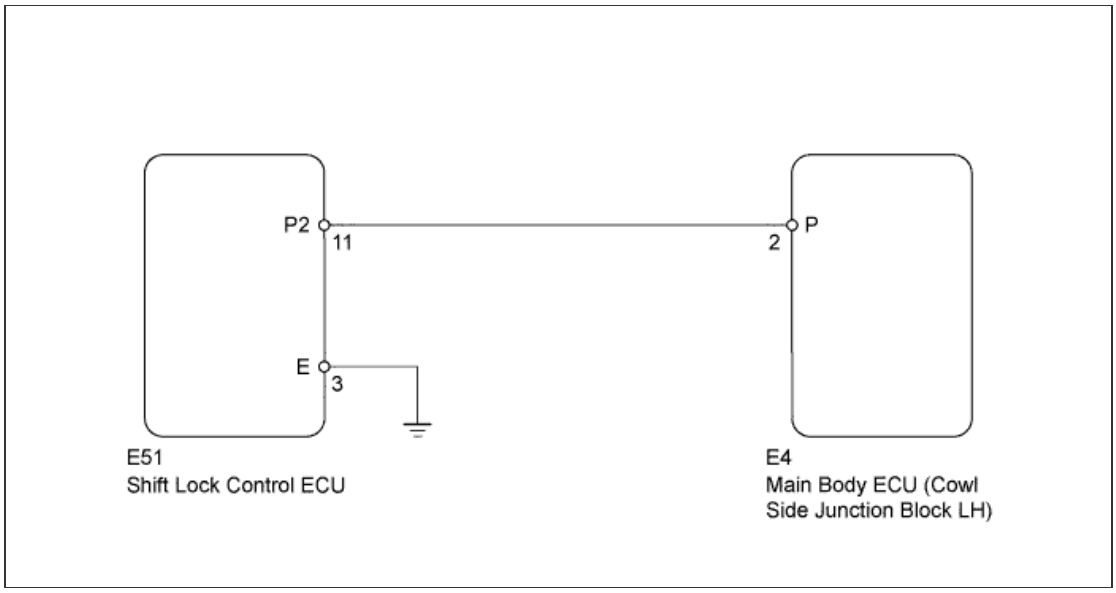
for Preparation Click here

DESCRIPTION

This DTC is stored when there is an abnormal circuit between the main body ECU and the shift lock control ECU.

DTC Code	Detection Condition	Trouble Area
B2281	Communication or the communication line between the main body ECU and shift lock control ECU is abnormal.	• Main body ECU • Shift lock control ECU • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (SHIFT P SIGNAL)

a. Use the Data List to check if the shift position signal is functioning properly.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Shift P Signal	Shift P position signal/ON or OFF	ON: Shift lever in P OFF: Shift lever not in P	-

Result

Result	Proceed to
Display on the intelligent tester does not change according to shift lever operation	A
Display on the intelligent tester changes according to shift lever operation	B

B → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

A

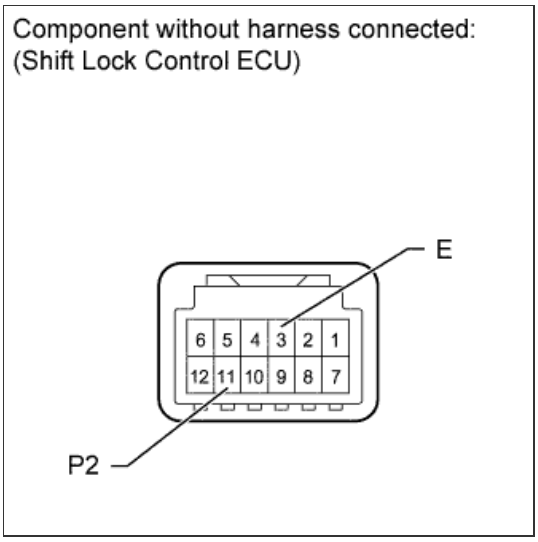
2.INSPECT SHIFT LOCK CONTROL ECU SUB-ASSEMBLY

a. Disconnect the E51 shift lock control ECU connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

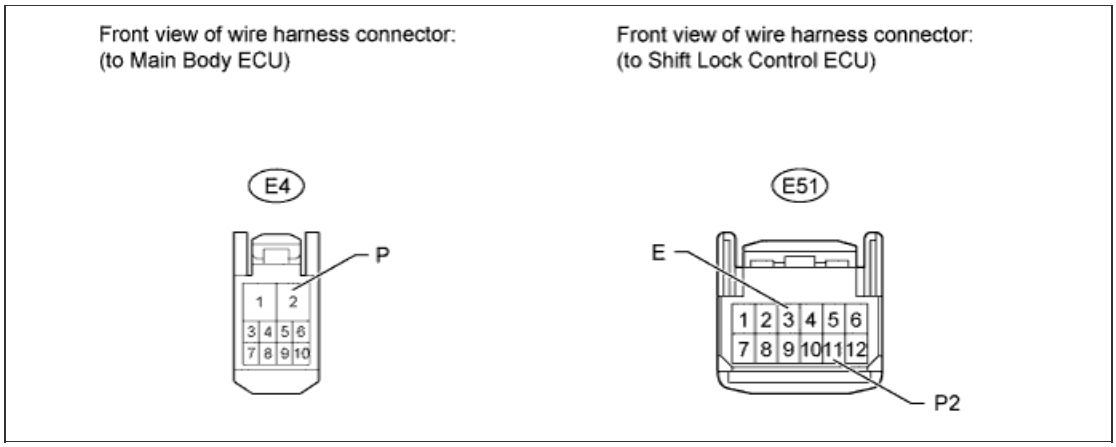
Tester Connection	Condition	Specified Condition
11 (P2) - 3 (E)	Shift lever not in P	Below 1 Ω
11 (P2) - 3 (E)	Shift lever in P	10 kΩ or higher



NG → REPLACE SHIFT LOCK CONTROL ECU SUB-ASSEMBLY (Click here)

OK

3.CHECK HARNESS AND CONNECTOR (SHIFT LOCK CONTROL ECU - MAIN BODY ECU AND BODY GROUND)



a. Disconnect the E4 main body ECU connector.

b. Disconnect the E51 shift lock control ECU connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E4-2 (P) - E51-11 (P2)	Always	Below 1 Ω
E51-3 (E) - Body ground	Always	Below 1 Ω
E4-2 (P) or E51-11 (P2) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

DTC B2272 Ignition 1 Monitor Malfunction

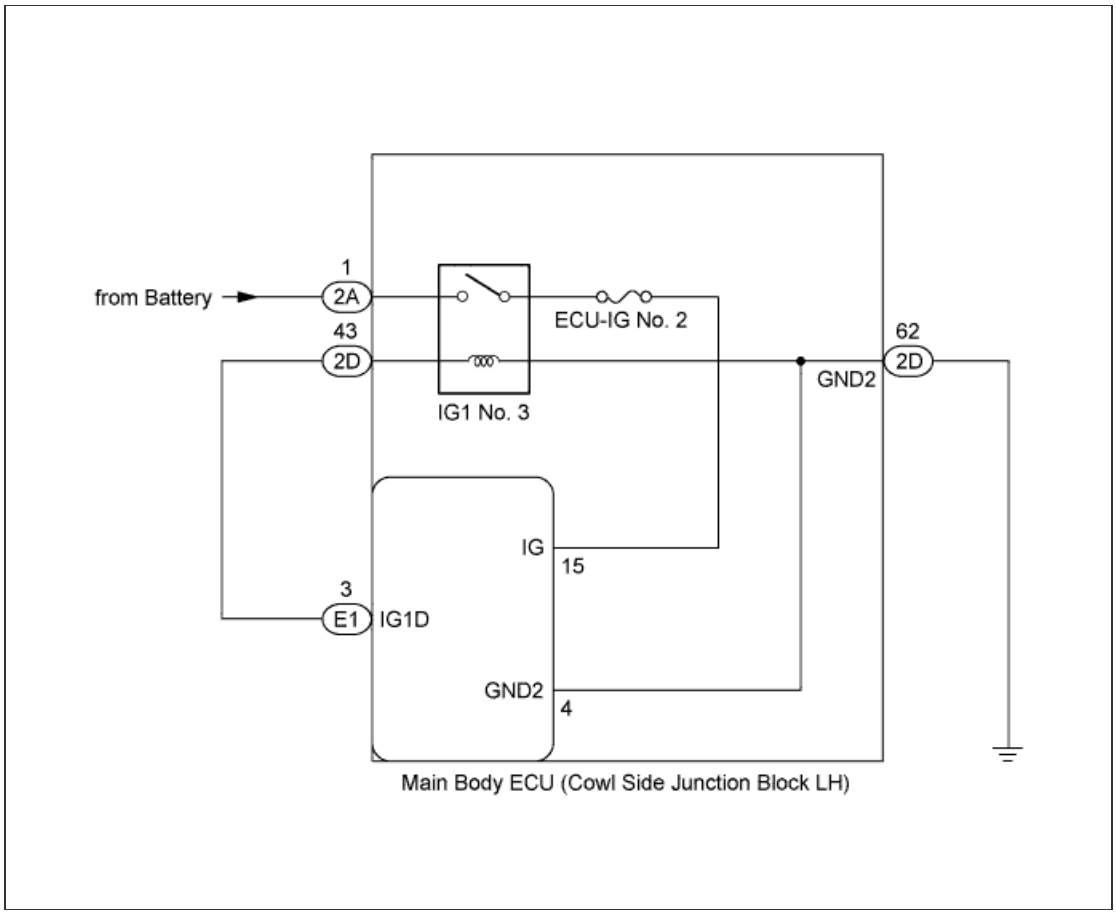
for Preparation Click here

DESCRIPTION

This DTC is stored when a malfunction occurs in the IG1D output circuit, which is between the IG1 No. 3 relay actuation circuit inside the main body ECU and the IG1 No. 3 relay.

DTC Code	Detection Condition	Trouble Area
B2272	The IG1 No. 3 relay actuation circuit inside the main body ECU or other related circuit is malfunctioning.	• Main body ECU • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (IG1 RELAY MONITOR (OUTSIDE))

a. Use the Data List to check if the IG1 No. 3 relay is functioning properly.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
IG1 Relay Monitor(Outside)	IG1 No. 3 relay outer relay monitor/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-

OK:

When the engine switch is turned on (IG), ON is displayed on the intelligent tester.

NG → Go to step 3

OK

2.CHECK WHETHER DTC OUTPUT RECURS

a. Clear the DTCs (Click here).

b. Turn the engine switch on (IG), wait at least 10 seconds, and check whether DTC B2272 is output.

Result

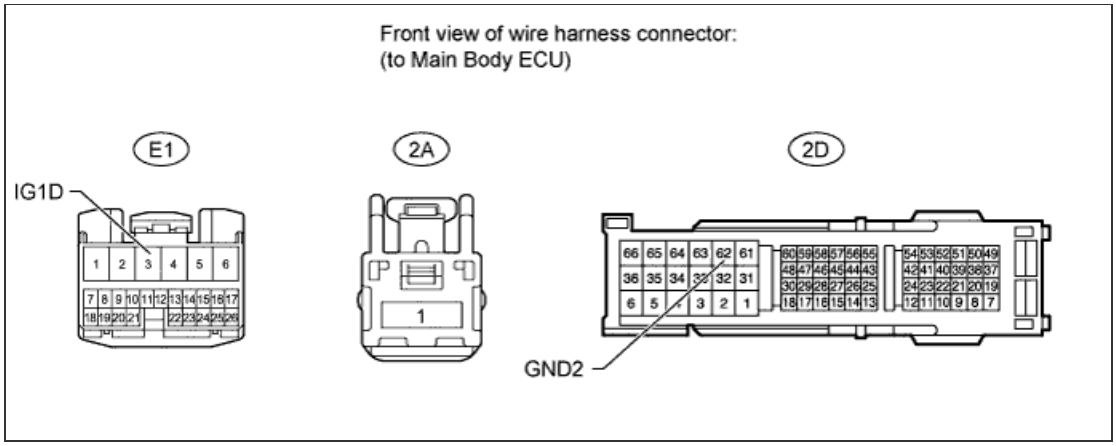
Result	Proceed to
No DTC output	A
DTC B2272 output	B

B → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

A

USE SIMULATION METHOD TO CHECK (Click here)

3.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - BATTERY AND BODY GROUND)



a. Disconnect the E1, 2A and 2D main body ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
2A-1 - Body ground	Always	11 to 14 V

Standard Resistance:

Tester Connection	Condition	Specified Condition
E1-3 (IG1D) - 2D-43	Always	Below 1 Ω
2D-62 (GND2) - Body ground	Always	Below 1 Ω
E1-3 (IG1D) or 2D-43 - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

DTC B2282 Vehicle Speed Signal Malfunction

DTC B2283 Vehicle Speed Sensor Malfunction

for Preparation Click here

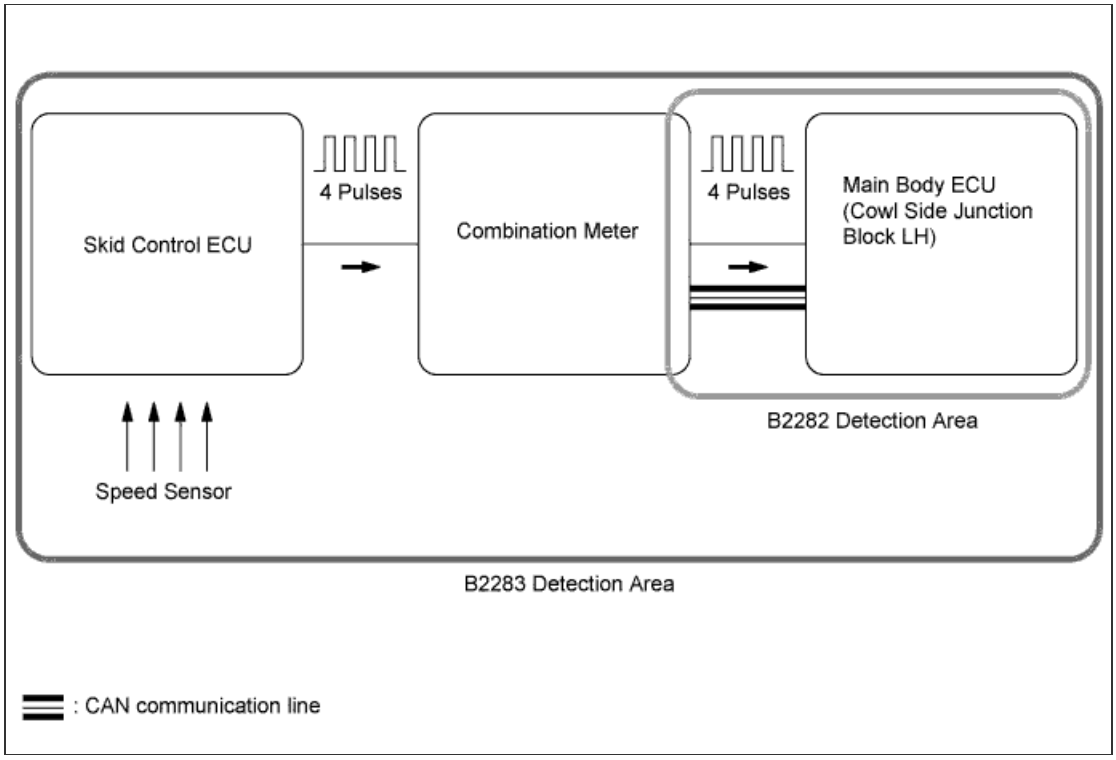
DESCRIPTION

The main body ECU and the combination meter are connected with a cable and the CAN communication line. DTC B2282 is stored when signals, transmitted through the cable and communication line, do not match.

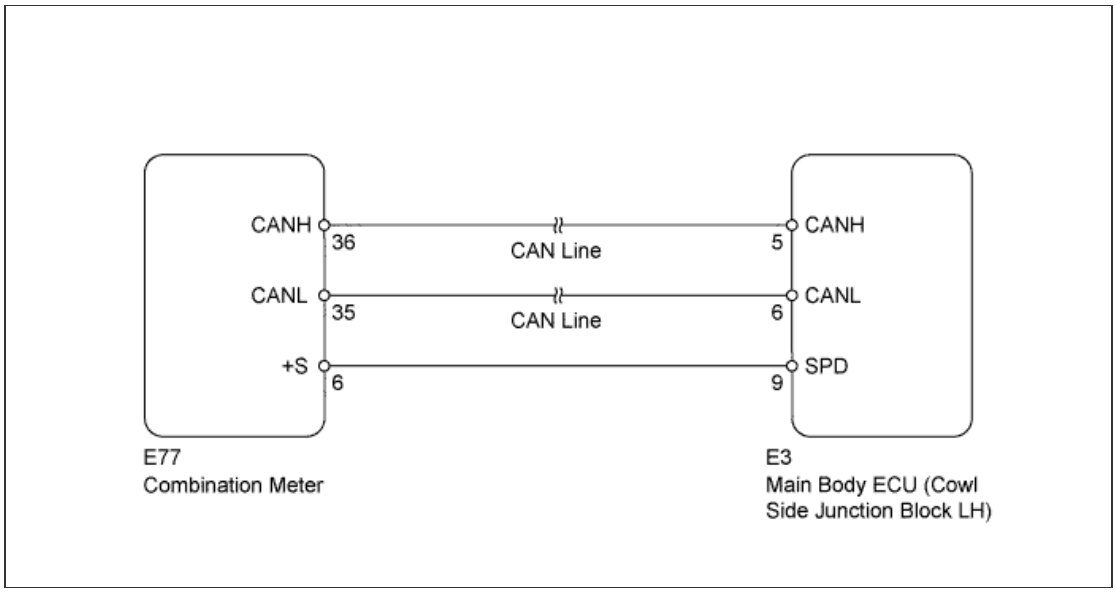
DTC Code	Detection Condition	Trouble Area
B2282	When the following conditions are met: • Signals between the main body ECU and combination meter are inconsistent. • A malfunction is detected in the circuit between the vehicle speed sensor and combination meter.	• Main body ECU • Combination meter assembly • Harness or connector

The skid control ECU converts signals from the speed sensor into 4-pulse signals and sends them to the combination meter. After these signals are converted into a more precise rectangular waveform by the waveform shaping circuit inside the combination meter, they are then transmitted to the main body ECU. The main body ECU determines the vehicle speed based on the frequencies of these pulse signals.

DTC Code	Detection Condition	Trouble Area
B2283	When both of the conditions below are met: • The vehicle speed decreases significantly. • The vehicle speed does not correspond with the engine speed.	• Main body ECU • Combination meter assembly • Speed sensor • Skid control ECU • Harness or connector



WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (VEHICLE SPEED SIGNAL)

a. Use the Data List to check if the vehicle speed signal is functioning properly.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Vehicle Speed Signal	Vehicle speed signal/Stop or Run	Stop: Vehicle stopped Run: Vehicle running	-

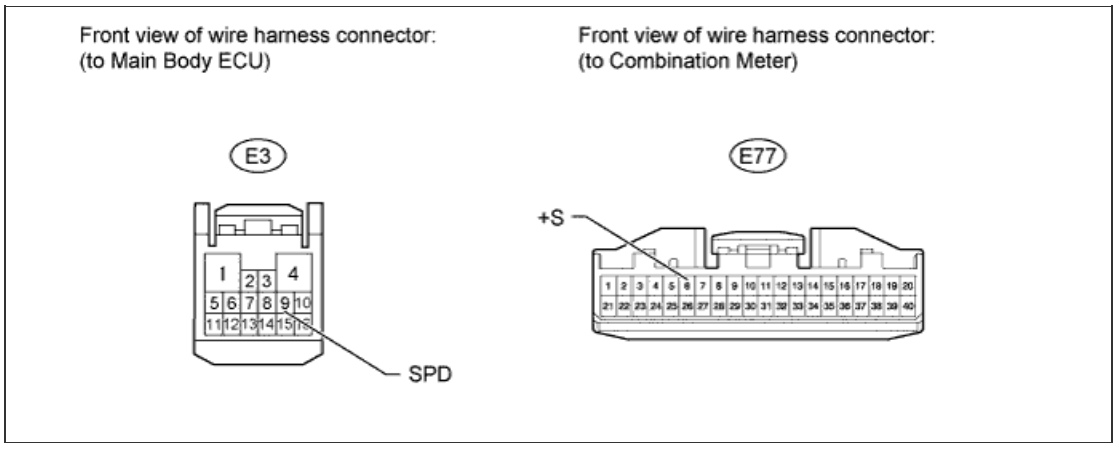
Result

Result	Proceed to
Display on the intelligent tester does not change according to vehicle condition	A
Display on the intelligent tester changes according to vehicle condition	B

B → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

A

2.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - COMBINATION METER)



a. Disconnect the E3 main body ECU connector.

b. Disconnect the E77 combination meter connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E3-9 (SPD) - E77-6 (+S)	Always	Below 1 Ω
E3-9 (SPD) or E77-6 (+S) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

a. Temporarily replace the main body ECU with a new or normally functioning one.

b. Check whether DTC B2282 and B2283 are output.

OK:
No DTC is output.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

END

DTC B2273 Ignition 2 Monitor Malfunction

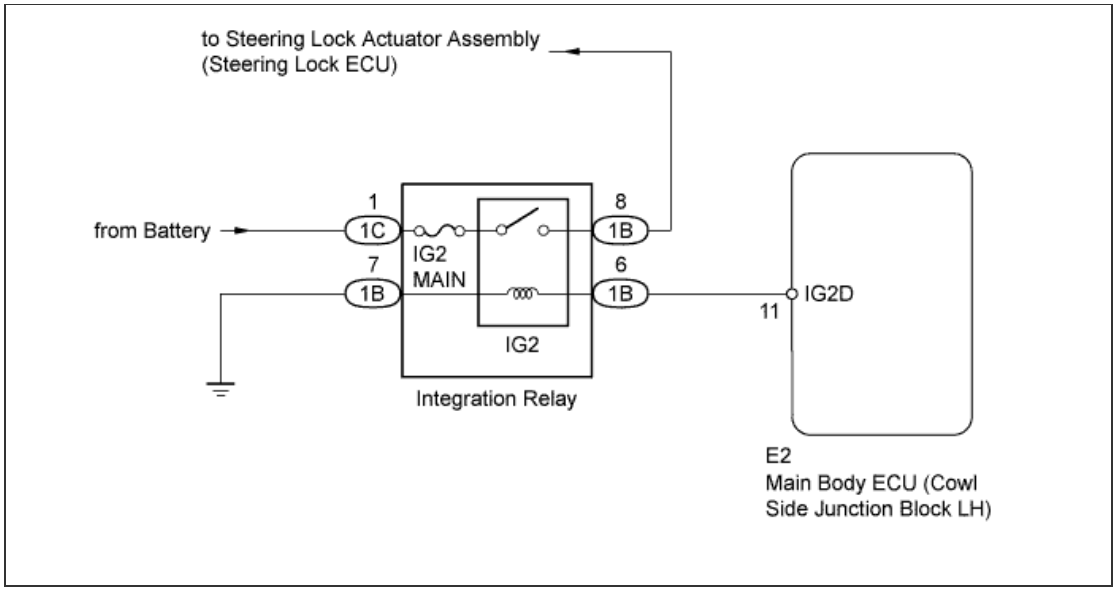
for Preparation Click here

DESCRIPTION

This DTC is stored when a malfunction occurs in the IG2D output circuit, which is between the integration relay (IG2 relay) actuation circuit inside the main body ECU and the integration relay (IG2 relay).

DTC Code	Detection Condition	Trouble Area
B2273	The integration relay (IG2 relay) actuation circuit inside the main body ECU or other related circuit is malfunctioning.	• Main body ECU • IG2 MAIN fuse • Integration relay (IG2 relay) • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (IG2 RELAY MONITOR (INSIDE))

a. Use the Data List to check if the integration relay (IG2 relay) is functioning properly.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
IG2 Relay Monitor(Inside)	Integration relay (IG2 relay) inner relay monitor/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-

OK:

When the engine switch is turned on (IG), ON is displayed on the intelligent tester.

NG → Go to step 3

OK

2.CHECK WHETHER DTC OUTPUT RECURS

a. Clear the DTCs (Click here).

b. Turn the engine switch on (IG), wait at least 10 seconds, and check whether DTC B2273 is output.

Result

Result	Proceed to
No DTC output	A
DTC B2273 output	B

B → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

A

USE SIMULATION METHOD TO CHECK (Click here)

3.INSPECT FUSE (IG2 MAIN)

a. Remove the IG2 MAIN fuse from the integration relay.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
IG2 MAIN fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

4.INSPECT INTEGRATION NO.1 RELAY (IG2 RELAY)

a. Install the IG2 MAIN fuse to the integration relay.

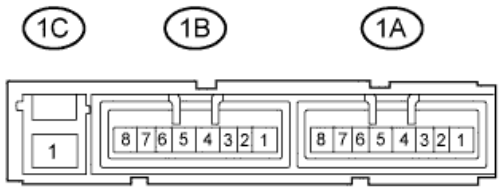
b. Remove the integration relay from the engine room relay block.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1B-8 - 1C-1	Battery voltage applied to terminals 1B-6 and 1B-7	Below 1 Ω
1B-8 - 1C-1	Battery voltage not applied to terminals 1B-6 and 1B-7	10 kΩ or higher

Component without harness connected:
(Integration Relay)

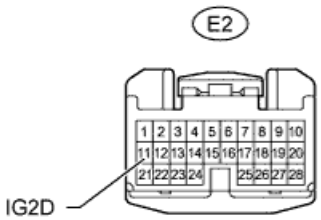


NG → REPLACE INTEGRATION NO.1 RELAY

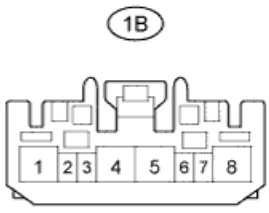
OK

5.CHECK HARNESS AND CONNECTOR (INTEGRATION RELAY (IG2 RELAY) - MAIN BODY ECU AND BODY GROUND)

Front view of wire harness connector:
(to Main Body ECU)



Front view of wire harness connector:
(to Integration Relay)



a. Disconnect the E2 main body ECU connector.

b. Disconnect the 1B integration relay connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E2-11 (IG2D) - 1B-6	Always	Below 1 Ω
1B-7 - Body ground	Always	Below 1 Ω
E2-11 (IG2D) or 1B-6 - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

DTC B2282 Vehicle Speed Signal Malfunction

DTC B2283 Vehicle Speed Sensor Malfunction

for Preparation Click here

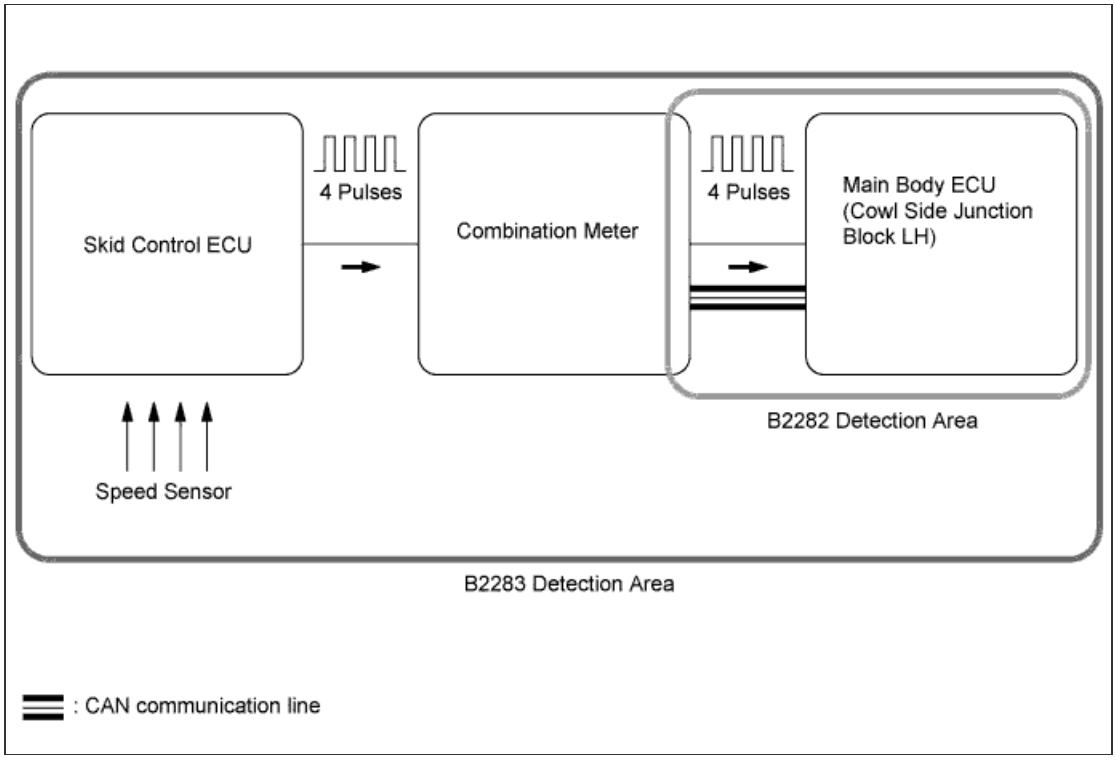
DESCRIPTION

The main body ECU and the combination meter are connected with a cable and the CAN communication line. DTC B2282 is stored when signals, transmitted through the cable and communication line, do not match.

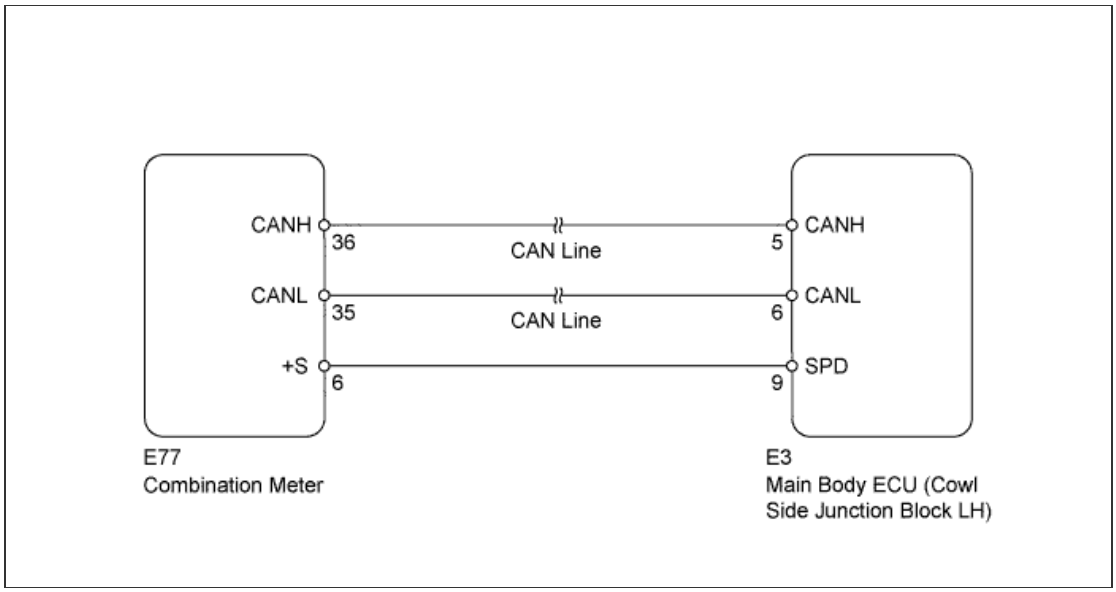
DTC Code	Detection Condition	Trouble Area
B2282	When the following conditions are met: • Signals between the main body ECU and combination meter are inconsistent. • A malfunction is detected in the circuit between the vehicle speed sensor and combination meter.	• Main body ECU • Combination meter assembly • Harness or connector

The skid control ECU converts signals from the speed sensor into 4-pulse signals and sends them to the combination meter. After these signals are converted into a more precise rectangular waveform by the waveform shaping circuit inside the combination meter, they are then transmitted to the main body ECU. The main body ECU determines the vehicle speed based on the frequencies of these pulse signals.

DTC Code	Detection Condition	Trouble Area
B2283	When both of the conditions below are met: • The vehicle speed decreases significantly. • The vehicle speed does not correspond with the engine speed.	• Main body ECU • Combination meter assembly • Speed sensor • Skid control ECU • Harness or connector



WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (VEHICLE SPEED SIGNAL)

a. Use the Data List to check if the vehicle speed signal is functioning properly.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Vehicle Speed Signal	Vehicle speed signal/Stop or Run	Stop: Vehicle stopped Run: Vehicle running	-

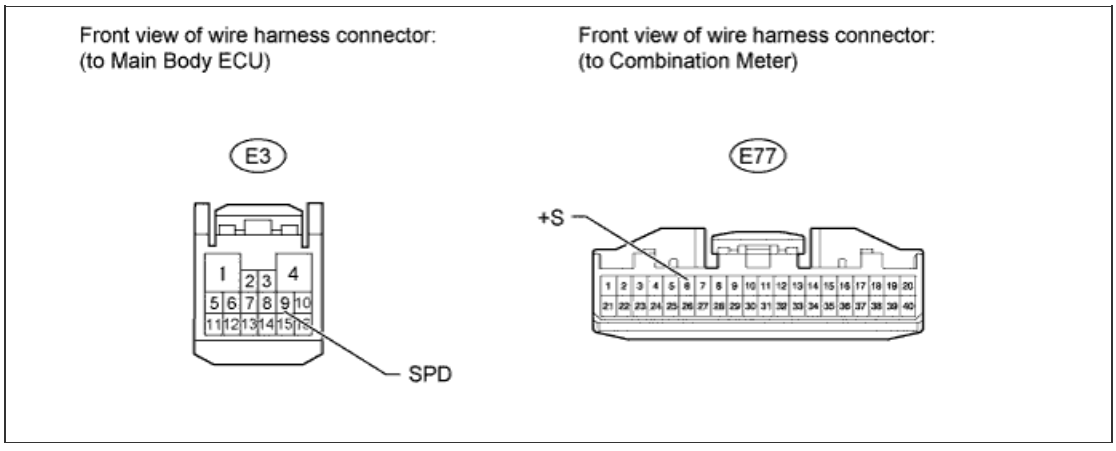
Result

Result	Proceed to
Display on the intelligent tester does not change according to vehicle condition	A
Display on the intelligent tester changes according to vehicle condition	B

B → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

A

2.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - COMBINATION METER)



a. Disconnect the E3 main body ECU connector.

b. Disconnect the E77 combination meter connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E3-9 (SPD) - E77-6 (+S)	Always	Below 1 Ω
E3-9 (SPD) or E77-6 (+S) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

a. Temporarily replace the main body ECU with a new or normally functioning one.

b. Check whether DTC B2282 and B2283 are output.

OK:
No DTC is output.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

END

DTC B2274 ACC Monitor Malfunction

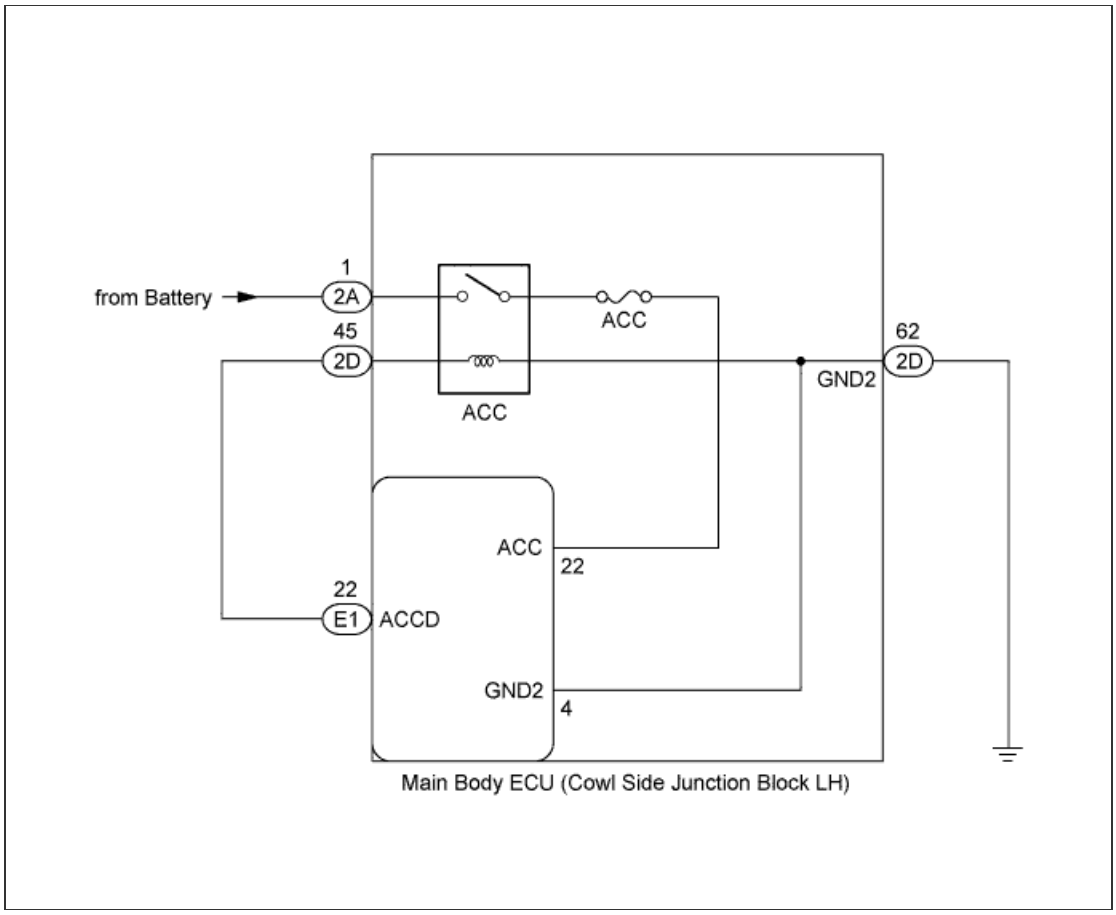
for Preparation Click here

DESCRIPTION

This DTC is stored when a malfunction occurs in the ACCD output circuit, which is between the ACC relay actuation circuit inside the main body ECU and the ACC relay.

DTC Code	Detection Condition	Trouble Area
B2274	The ACC relay actuation circuit inside the main body ECU or other related circuit is malfunctioning.	• Main body ECU • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (ACC RELAY MONITOR)

a. Use the Data List to check if the ACC relay is functioning properly.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
ACC Relay Monitor	ACC relay monitor/ON or OFF	ON: Engine switch on (ACC) OFF: Engine switch off	-

OK:

When the engine switch is turned on (IG), ON is displayed on the intelligent tester.

NG → Go to step 3

OK

2.CHECK WHETHER DTC OUTPUT RECURS

a. Clear the DTCs (Click here).

b. Turn the engine switch on (IG), wait at least 10 seconds, and check whether DTC B2274 is output.

Result

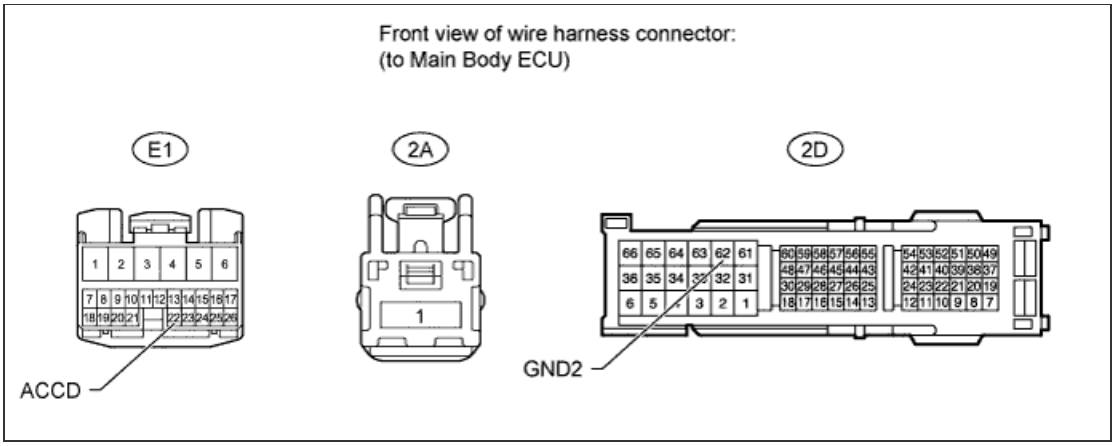
Result	Proceed to
No DTC output	A
DTC B2274 output	B

B → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

A →

USE SIMULATION METHOD TO CHECK (Click here)

3.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - BATTERY AND BODY GROUND)



a. Disconnect the E1, 2A and 2D main body ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
2A-1 - Body ground	Always	11 to 14 V

Standard Resistance:

Tester Connection	Condition	Specified Condition
E1-22 (ACCD) - 2D-45	Always	Below 1 Ω
2D-62 (GND2) - Body ground	Always	Below 1 Ω
E1-22 (ACCD) or 2D-45 - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK →

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

DTC B2284 Brake Signal Malfunction

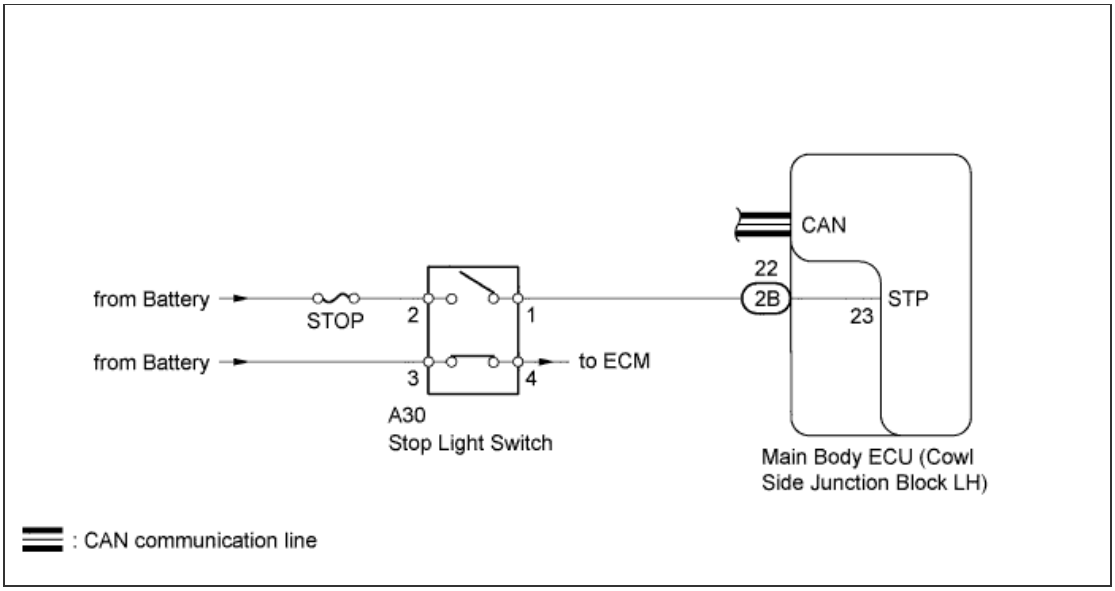
for Preparation Click here

DESCRIPTION

This DTC is stored when there is an inconsistency between the circuit between the main body ECU and stop light switch, and the CAN communication signal between the main body ECU and ECM.

DTC Code	Detection Condition	Trouble Area
B2284	The circuit between the main body ECU and stop light switch, and the CAN communication signal between the main body ECU and ECM are inconsistent.	• Main body ECU • Stop light switch • STOP fuse • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (STOP LIGHT SWITCH)

a. Use the Data List to check if the stop light switch is functioning properly.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Stop Light SW	Stop light switch/ON or OFF	ON: Brake pedal depressed OFF: Brake pedal released	-

Result

Result	Proceed to
Display on the intelligent tester does not change according to brake pedal operation	A
Display on the intelligent tester changes according to brake pedal operation	B

B → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

A

2.INSPECT FUSE (STOP)

a. Remove the STOP fuse from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
STOP fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

3.INSPECT STOP LIGHT SWITCH ASSEMBLY

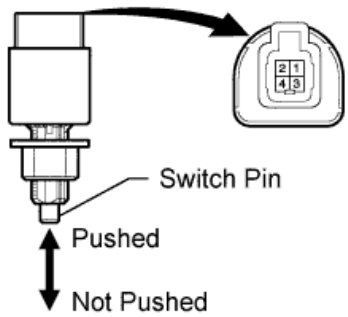
a. Disconnect the A30 stop light switch connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
1 - 2	Stop light switch pin not pushed	Below 1 Ω
3 - 4	Stop light switch pin pushed	Below 1 Ω
1 - 2	Stop light switch pin pushed	10 kΩ or higher
3 - 4	Stop light switch pin not pushed	10 kΩ or higher

Component without harness connected:
(Stop Light Switch)

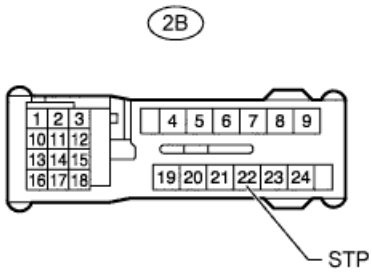


NG → REPLACE STOP LIGHT SWITCH ASSEMBLY (Click here)

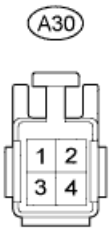
OK

4.CHECK HARNESS AND CONNECTOR (STOP LIGHT SWITCH - BATTERY AND MAIN BODY ECU)

Front view of wire harness connector:
(to Main Body ECU)



Front view of wire harness connector:
(to Stop Light Switch)



a. Disconnect the 2B main body ECU connector.

b. Disconnect the A30 stop light switch connector.

c. Measure the voltage and resistance according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
A30-2 - Body ground	Always	11 to 14 V

Standard Resistance:

Tester Connection	Condition	Specified Condition
2B-22 (STP) -		

A30-1	Always	Below 1 Ω
2B-22 (STP) or A30-1 - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

DTC B2275 STSW Monitor Malfunction

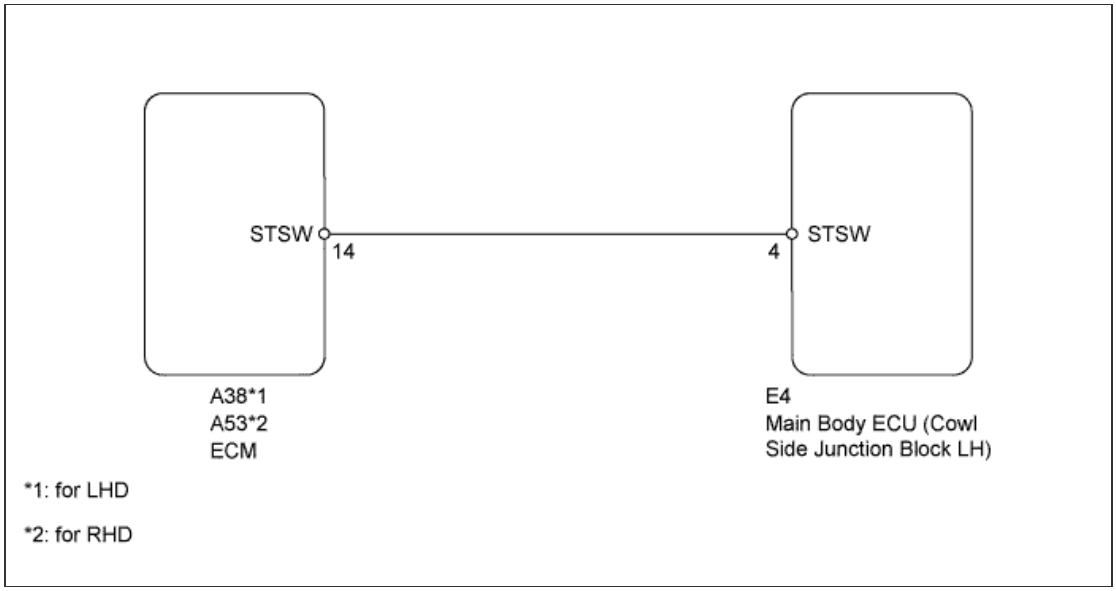
for Preparation Click here

DESCRIPTION

This DTC is stored when the engine start request signal circuit inside the main body ECU is open or shorted.

DTC Code	Detection Condition	Trouble Area
B2275	The engine start request signal circuit inside the main body ECU or other related circuit is malfunctioning.	• Main body ECU • ECM • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK WHETHER DTC OUTPUT RECURS

a. Clear the DTCs (Click here).

b. Depress the brake pedal with the engine switch on (IG), wait at least 15 seconds, and check whether DTC B2275 is output.

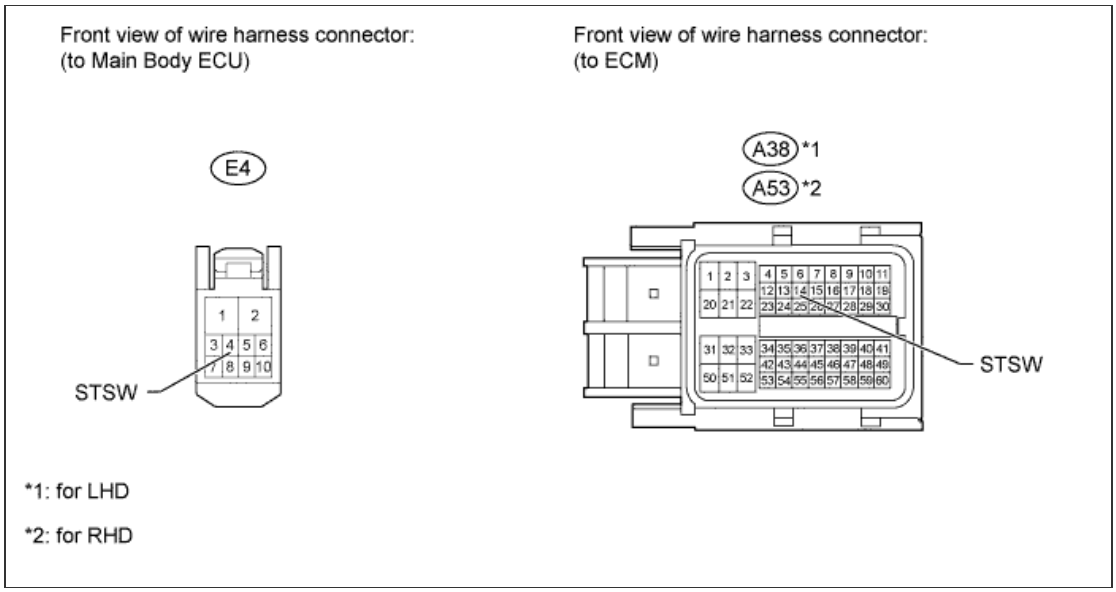
Result

Result	Proceed to
DTC B2275 output	A
No DTC output	B

B → USE SIMULATION METHOD TO CHECK (Click here)

A

2.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - ECM)



a. Disconnect the E4 main body ECU connector.

b. Disconnect the A38 ECM connector (for LHD).

c. Disconnect the A53 ECM connector (for RHD).

d. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
E4-4 (STSW) - A38-14 (STSW)	Always	Below 1 Ω
E4-4 (STSW) or A38-14 (STSW) - Body ground	Always	10 kΩ or higher

for RHD

Tester Connection	Condition	Specified Condition
E4-4 (STSW) - A53-14 (STSW)	Always	Below 1 Ω
E4-4 (STSW) or A53-14 (STSW) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.INSPECT MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

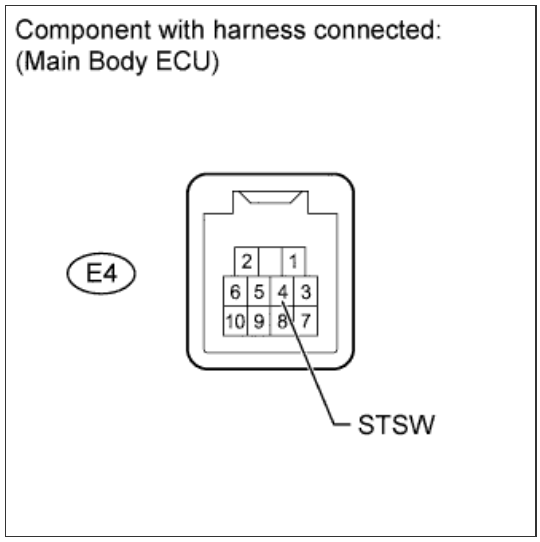
a. Measure the voltage according to the value(s) in the table below.

HINT:

The voltage is generated at terminal STSW for 0.3 seconds when the engine cranks.

Standard Voltage:

Tester Connection	Condition	Specified Condition
E4-4 (STSW) - Body ground	Brake pedal depressed with shift lever in P, engine switch pushed once	11 to 14 V



NG → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

OK

REPLACE ECM (Click here)

DTC B2285 Steering Lock Position Signal Circuit Malfunction

DTC B2288 Steering Lock Signal Circuit Malfunction

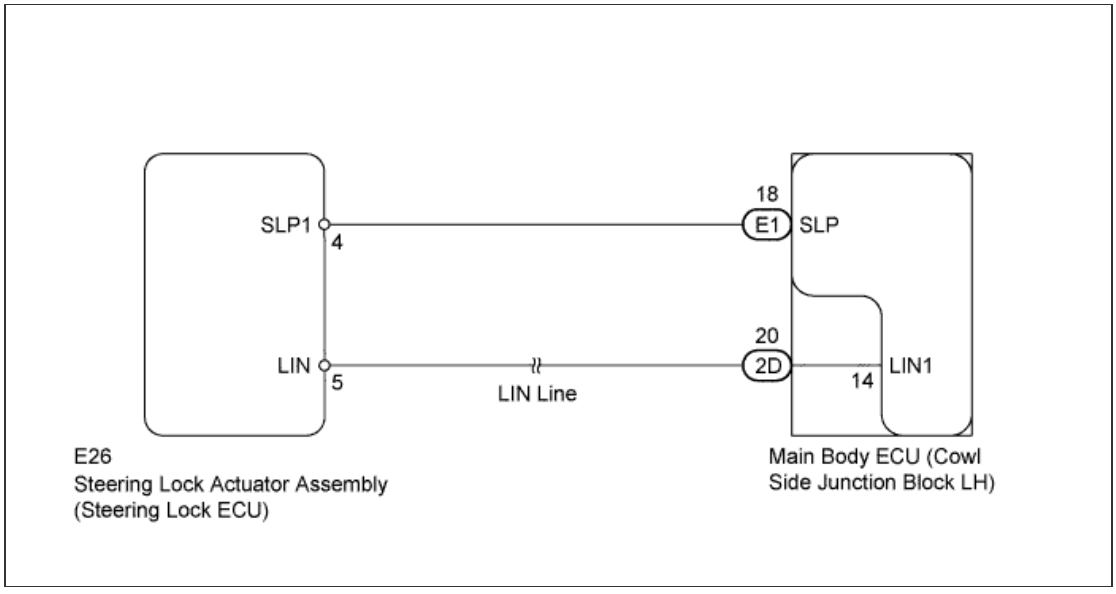
for Preparation Click here

DESCRIPTION

The main body ECU and the steering lock ECU are connected by a cable and the LIN communication line. These DTCs are stored when: 1) signals, transmitted through the cable and the communication line, do not match; or 2) a malfunction is detected in the circuit between the main body ECU and the steering lock ECU.

DTC Code	Detection Condition	Trouble Area
B2285	The cable and LIN information between the main body ECU and steering lock ECU is inconsistent.	• Main body ECU • Steering lock actuator assembly (steering lock ECU) • Harness or connector
B2288	After turning the engine switch from off to on (IG), the steering wheel does not unlock for a certain period of time (the ECU unlocks the steering wheel only when it receives an unlock signal through LIN communication and the cable).	• Main body ECU • Steering lock actuator assembly (steering lock ECU) • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (STEERING UNLOCK SWITCH)

a. Use the Data List to check if the steering lock is functioning properly.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Steering Unlock Switch	Steering lock condition/ON or OFF	ON: Steering unlocked OFF: Steering locked	-

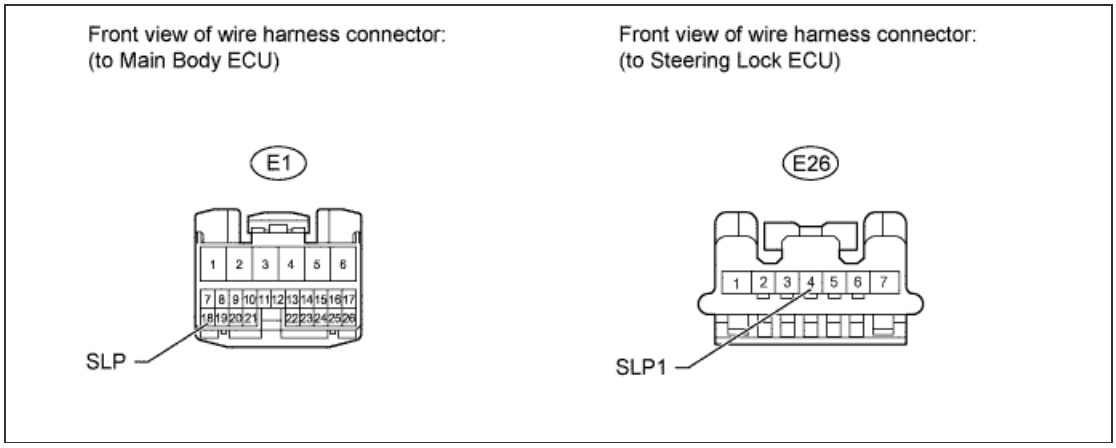
Result

Result	Proceed to
Display on the intelligent tester does not change according to steering lock position	A
Display on the intelligent tester changes according to steering lock position	B

B → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

A

2.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - STEERING LOCK ECU)



a. Disconnect the E1 main body ECU connector.

b. Disconnect the E26 steering lock ECU connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E1-18 (SLP) - E26-4 (SLP1)	Always	Below 1 Ω
E1-18 (SLP) or E26-4 (SLP1) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

a. Temporarily replace the main body ECU with a new or normally functioning one.

b. Check whether DTC B2285 and B2288 are output.

OK:
No DTC is output.

NG → REPLACE STEERING LOCK ECU (STEERING LOCK ACTUATOR ASSEMBLY) (Click here)

OK

END

DTC B2276 ACCR Signal Circuit Malfunction

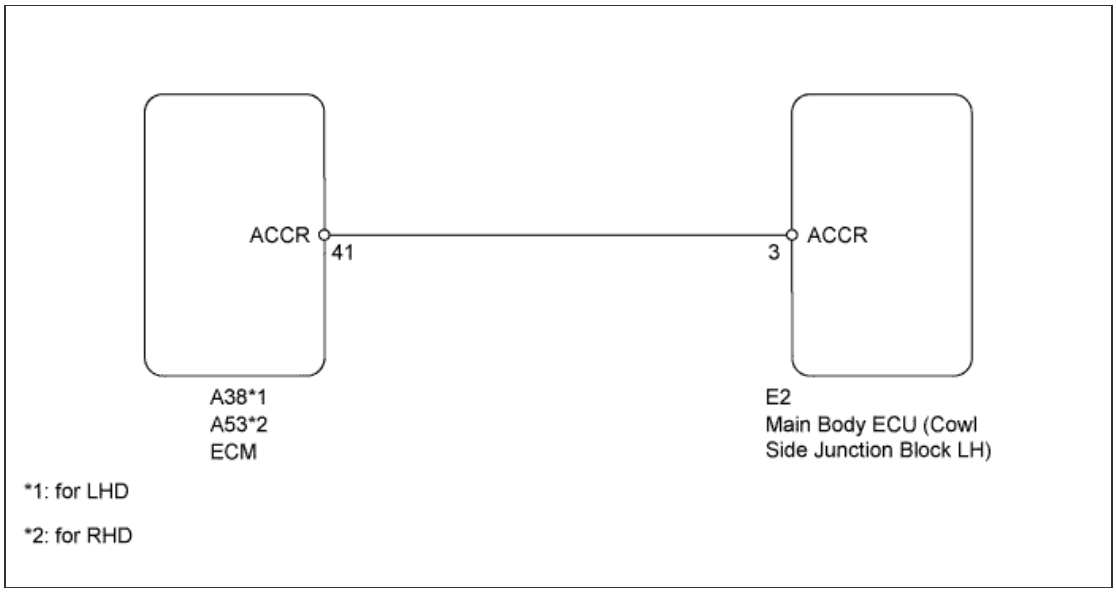
for Preparation Click here

DESCRIPTION

This DTC is stored when a malfunction is detected in the ACCR signal output by the main body ECU.

DTC Code	Detection Condition	Trouble Area
B2276	The ACCR output circuit inside the main body ECU or other related circuit is malfunctioning.	• Main body ECU • ECM • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK WHETHER DTC OUTPUT RECURS

a. Clear the DTCs (Click here).

b. Check whether DTC B2276 is output 50 seconds or more after the engine switch is turned on (IG).

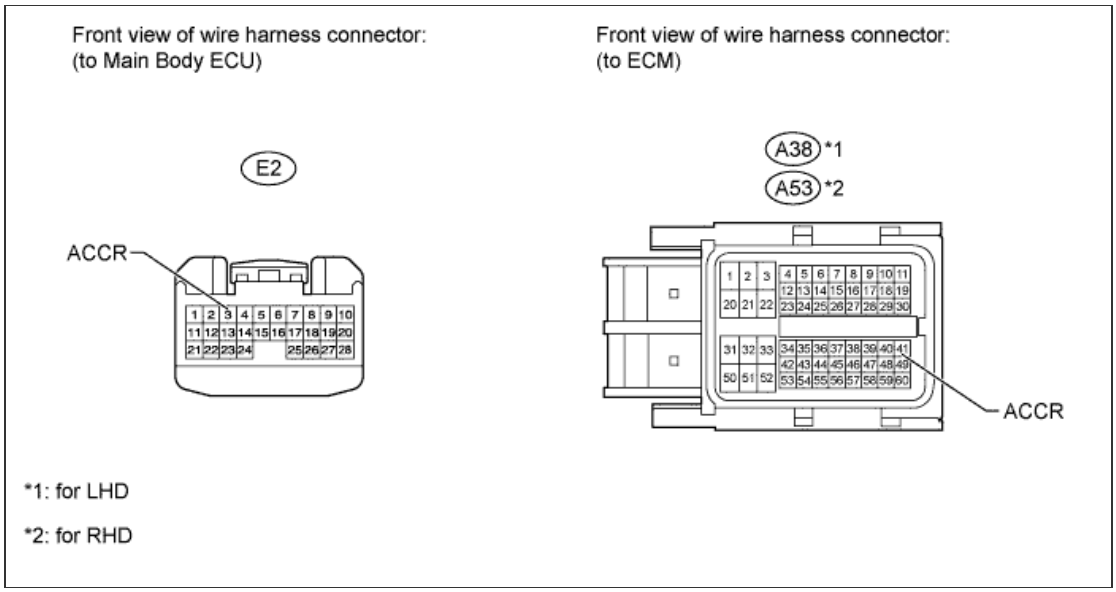
Result

Result	Proceed to
DTC B2276 output	A
No DTC output	B

B → USE SIMULATION METHOD TO CHECK (SYSTEM IS OK) (Click here)

A

2.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - ECM)



a. Disconnect the E2 main body ECU connector.

b. Disconnect the A38 ECM connector (for LHD).

c. Disconnect the A53 ECM connector (for RHD).

d. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
E2-3 (ACCR) - A38-41 (ACCR)	Always	Below 1 Ω
E2-3 (ACCR) or A38-41 (ACCR) - Body ground	Always	10 kΩ or higher

for RHD

Tester Connection	Condition	Specified Condition
E2-3 (ACCR) - A53-41 (ACCR)	Always	Below 1 Ω
E2-3 (ACCR) or A53-41 (ACCR) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

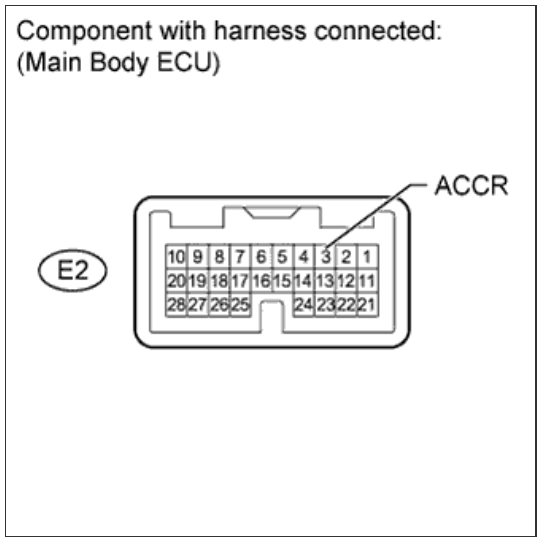
OK

3.INSPECT MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

a. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
E2-3 (ACCR) - Body ground	Engine switch pressed and engine cranking	11 to 14 V



NG → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

OK

REPLACE ECM (Click here)

DTC B2285 Steering Lock Position Signal Circuit Malfunction

DTC B2288 Steering Lock Signal Circuit Malfunction

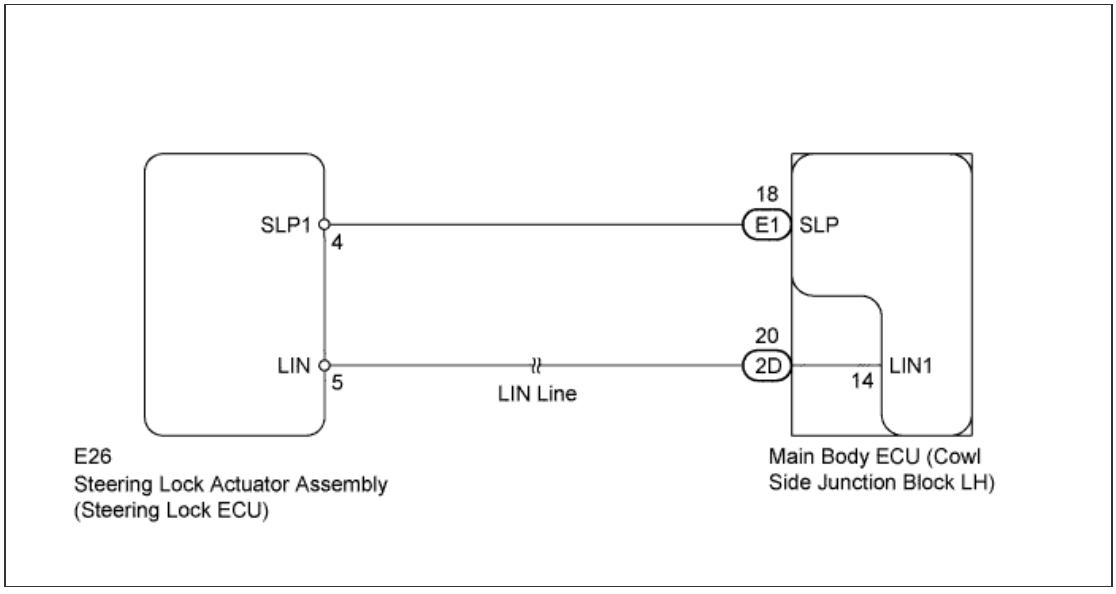
for Preparation Click here

DESCRIPTION

The main body ECU and the steering lock ECU are connected by a cable and the LIN communication line. These DTCs are stored when: 1) signals, transmitted through the cable and the communication line, do not match; or 2) a malfunction is detected in the circuit between the main body ECU and the steering lock ECU.

DTC Code	Detection Condition	Trouble Area
B2285	The cable and LIN information between the main body ECU and steering lock ECU is inconsistent.	• Main body ECU • Steering lock actuator assembly (steering lock ECU) • Harness or connector
B2288	After turning the engine switch from off to on (IG), the steering wheel does not unlock for a certain period of time (the ECU unlocks the steering wheel only when it receives an unlock signal through LIN communication and the cable).	• Main body ECU • Steering lock actuator assembly (steering lock ECU) • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (STEERING UNLOCK SWITCH)

a. Use the Data List to check if the steering lock is functioning properly.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Steering Unlock Switch	Steering lock condition/ON or OFF	ON: Steering unlocked OFF: Steering locked	-

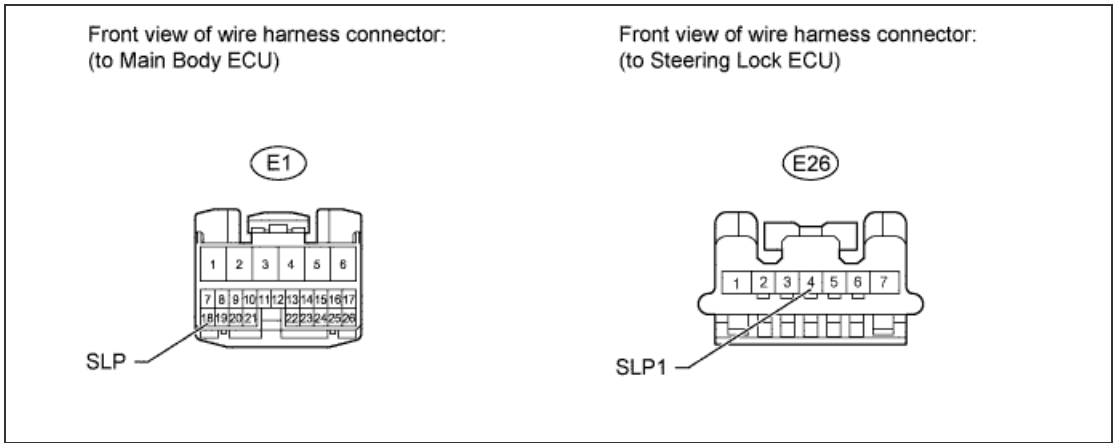
Result

Result	Proceed to
Display on the intelligent tester does not change according to steering lock position	A
Display on the intelligent tester changes according to steering lock position	B

B → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

A

2.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - STEERING LOCK ECU)



a. Disconnect the E1 main body ECU connector.

b. Disconnect the E26 steering lock ECU connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E1-18 (SLP) - E26-4 (SLP1)	Always	Below 1 Ω
E1-18 (SLP) or E26-4 (SLP1) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

a. Temporarily replace the main body ECU with a new or normally functioning one.

b. Check whether DTC B2285 and B2288 are output.

OK:
No DTC is output.

NG → REPLACE STEERING LOCK ECU (STEERING LOCK ACTUATOR ASSEMBLY) (Click here)

OK

END

DTC B2277 Detecting Vehicle Submersion

for Preparation Click here

DESCRIPTION

This DTC is stored when the submersion circuit monitor inside the main body ECU detects that the vehicle has been submerged in water.

DTC Code	Detection Condition	Trouble Area
B2277	The submersion circuit monitor inside the main body ECU detects that the vehicle is submerged in water.	Main body ECU

INSPECTION PROCEDURE

HINT:

Before commencing troubleshooting, check if the main body ECU is wet. If it is, replace the main body ECU.

1.CHECK WHETHER DTC OUTPUT RECURS

a. Clear the DTCs (Click here).

b. Check whether DTC B2277 is output 30 seconds or more after the engine switch is turned on (IG).

OK:
No DTC is output.

NG → **REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)**

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2286 Runnable Signal Malfunction

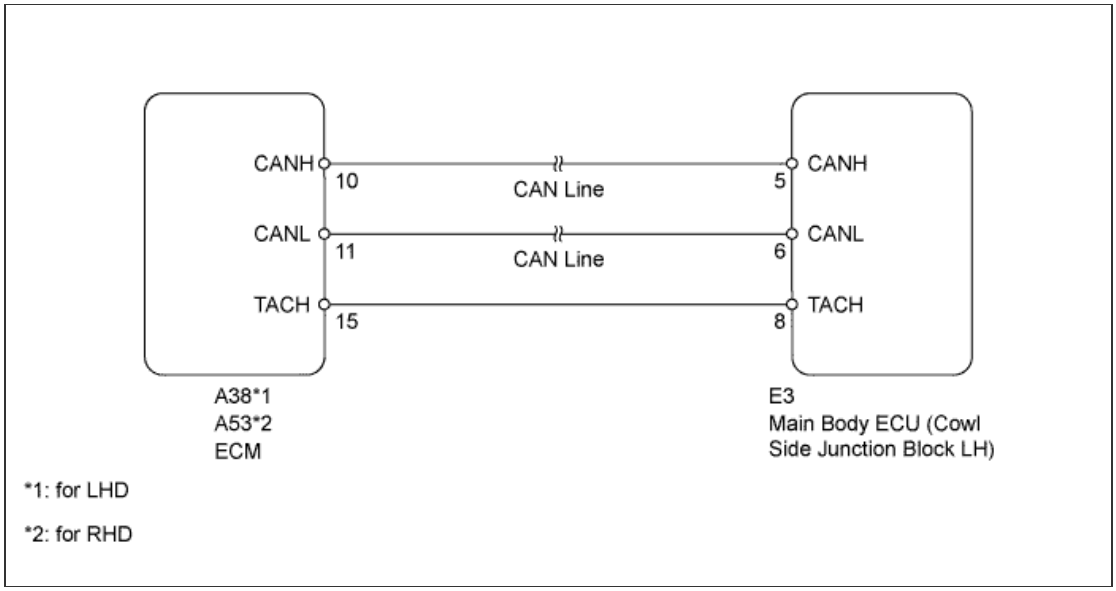
for Preparation Click here

DESCRIPTION

The main body ECU and ECM are connected by a cable and the CAN communication line. If the cable information and CAN information are inconsistent, this DTC is stored.

DTC Code	Detection Condition	Trouble Area
B2286	The cable and CAN information between the main body ECU and ECM is inconsistent.	• Main body ECU • ECM • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (ENGINE CONDITION)

a. Use the Data List to check if the engine start is functioning properly.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Engine Condition	Engine condition/Stop or Run	Stop: Engine stopped Run: Engine running	-

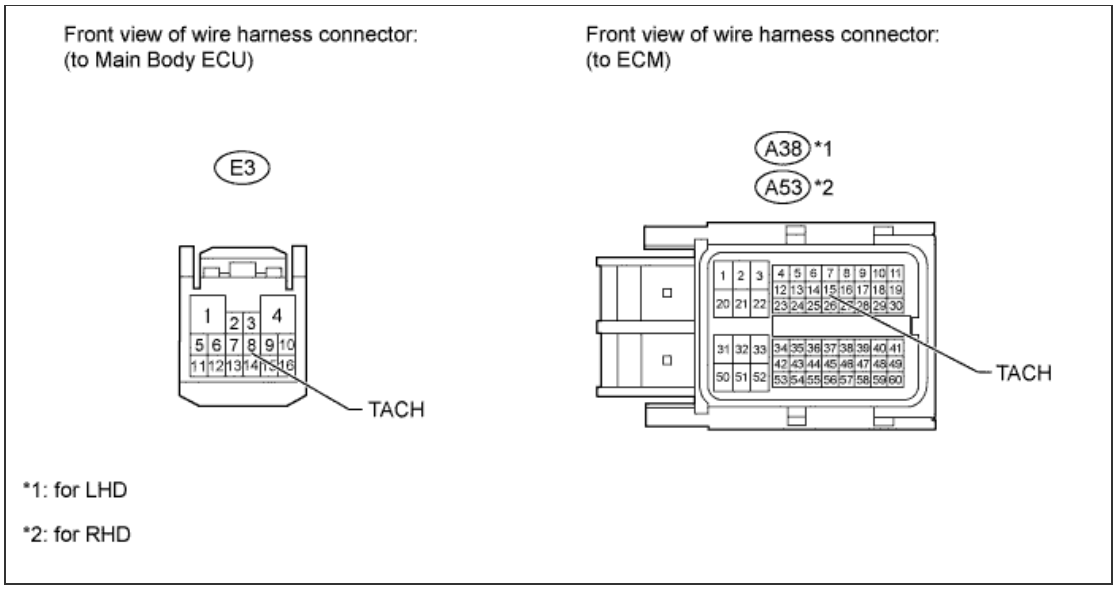
Result

Result	Proceed to
Display on the intelligent tester does not change according to engine condition	A
Display on the intelligent tester changes according to engine condition	B

B → **REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)**

A

2.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - ECM)



a. Disconnect the E3 main body ECU connector.

b. Disconnect the A38 ECM connector (for LHD).

c. Disconnect the A53 ECM connector (for RHD).

d. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
E3-8 (TACH) - A38-15 (TACH)	Always	Below 1 Ω
E3-8 (TACH) or A38-15 (TACH) - Body ground	Always	10 kΩ or higher

for RHD

Tester Connection	Condition	Specified Condition
E3-8 (TACH) - A53-15 (TACH)	Always	Below 1 Ω
E3-8 (TACH) or A53-15 (TACH) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK ↓

3.REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

a. Temporarily replace the main body ECU with a new or normally functioning one.

b. Check whether DTC B2286 is output.

OK:

No DTC is output.

NG → REPLACE ECM (Click here)

OK ↓

END

DTC B2278 Engine Switch Circuit Malfunction

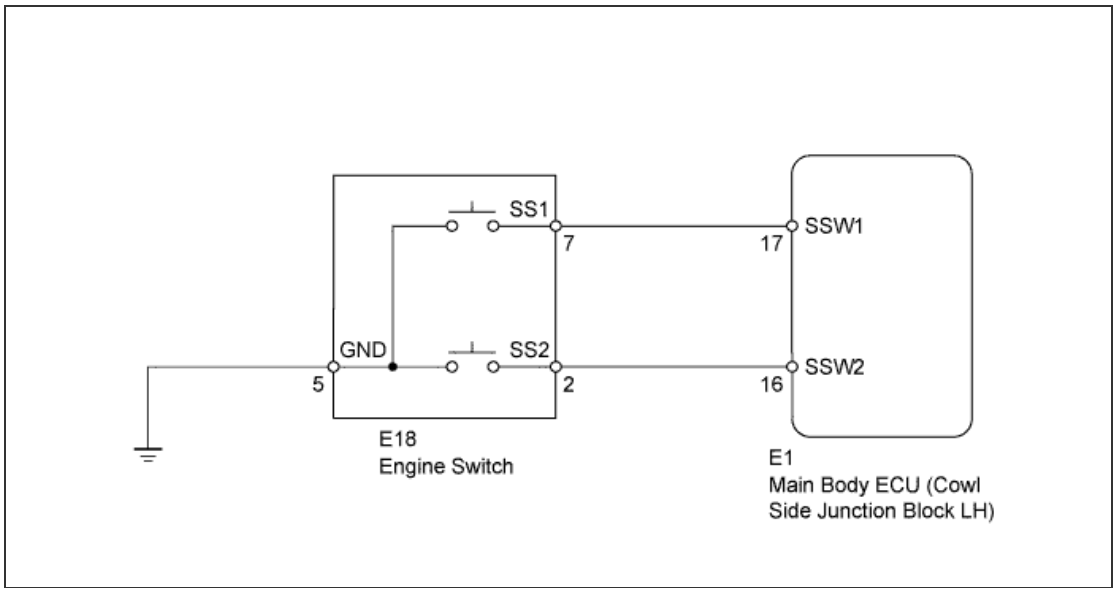
for Preparation Click here

DESCRIPTION

This DTC is stored when: 1) a malfunction is detected between the main body ECU and the engine switch; or 2) either of the switches inside the engine switch is malfunctioning.

DTC Code	Detection Condition	Trouble Area
B2278	Communication between the main body ECU and engine switch is abnormal or the engine switch is defective.	• Main body ECU • Engine switch • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (START SWITCH 1, 2)

a. Use the Data List to check if the engine switch is functioning properly.

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Start Switch1	Start switch 1/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
Start Switch2	Start switch 2/ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-

OK:

When the engine switch is turned on (IG), ON is displayed on the intelligent tester.

NG → Go to step 3

OK

2.CHECK WHETHER DTC OUTPUT RECURS

a. Clear the DTCs (Click here).

b. Turn the engine switch on (IG), and check whether DTC B2278 is output.

Result

Result	Proceed to
No DTC output	A

DTC B2278 output	B

B → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

A

USE SIMULATION METHOD TO CHECK (Click here)

3.INSPECT ENGINE SWITCH

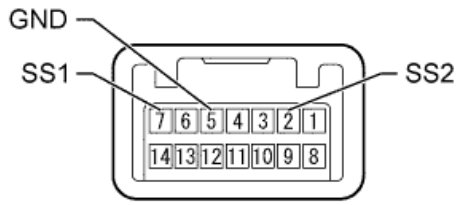
a. Disconnect the E18 engine switch connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
7 (SS1) - 5 (GND)	Pushed	Below 1 Ω
2 (SS2) - 5 (GND)	Pushed	Below 1 Ω
7 (SS1) - 5 (GND)	Not pushed	10 kΩ or higher
2 (SS2) - 5 (GND)	Not pushed	10 kΩ or higher

Component without harness connected:
(Engine Switch)

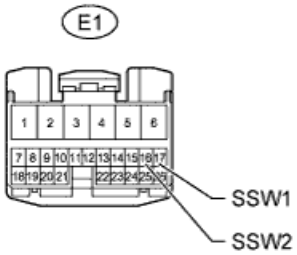


NG → REPLACE ENGINE SWITCH (Click here)

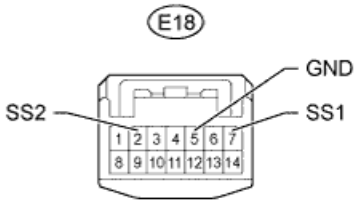
OK

4.CHECK HARNESS AND CONNECTOR (ENGINE SWITCH - MAIN BODY ECU AND BODY GROUND)

Front view of wire harness connector:
(to Main Body ECU)



Front view of wire harness connector:
(to Engine Switch)



a. Disconnect the E1 main body ECU connector.

b. Disconnect the E18 engine switch connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E1-17 (SSW1) - E18-7 (SS1)	Always	Below 1 Ω
E1-16 (SSW2) - E18-2 (SS2)	Always	Below 1 Ω
E18-5 (GND) - Body ground	Always	Below 1 Ω
E1-17 (SSW1) or E18-7 (SS1) -	Always	10 kΩ or higher

Body ground		
E1-16 (SSW2) or E18-2 (SS2) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

DTC B2289 Key Collation Waiting Time Over

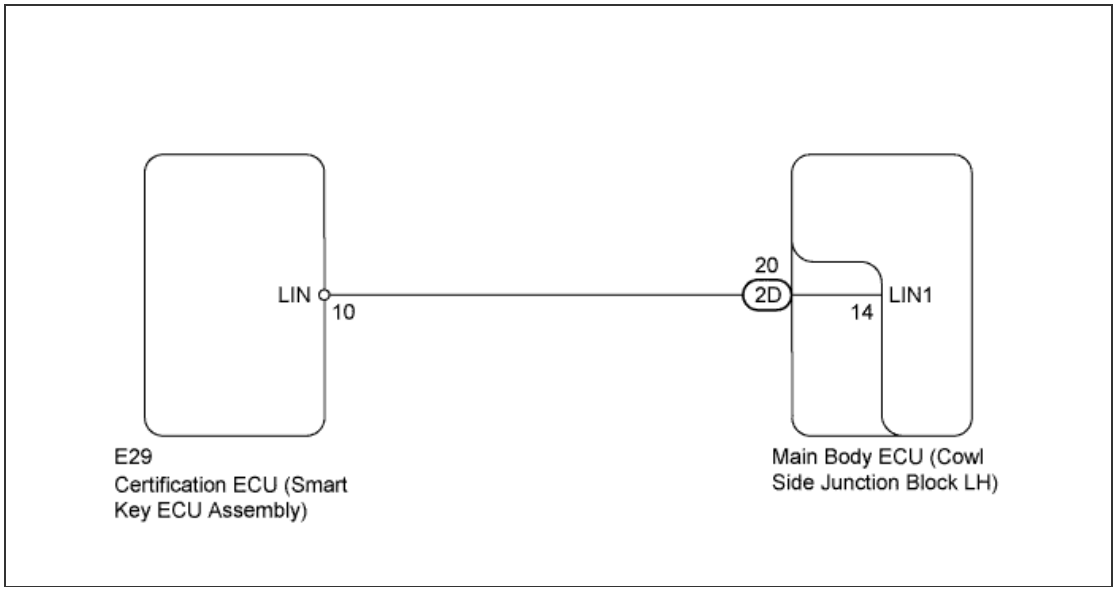
for Preparation Click here

DESCRIPTION

This DTC is stored when there is a LIN communication problem between the main body ECU and certification ECU (smart key ECU assembly) or when there is a problem in the engine immobiliser system.

DTC Code	Detection Condition	Trouble Area
B2289	When either of the following conditions is met: • Communication or the communication line among the main body ECU, certification ECU (smart key ECU assembly), steering lock ECU and ID code box (immobiliser code ECU) is abnormal. • The immobiliser system malfunctions.	• Main body ECU • Engine switch • Certification ECU (Smart key ECU assembly) • Key • Engine immobiliser system • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK WHETHER DTC OUTPUT RECURS

a. Clear the DTCs (Click here).

b. Check whether DTC B2289 is output.

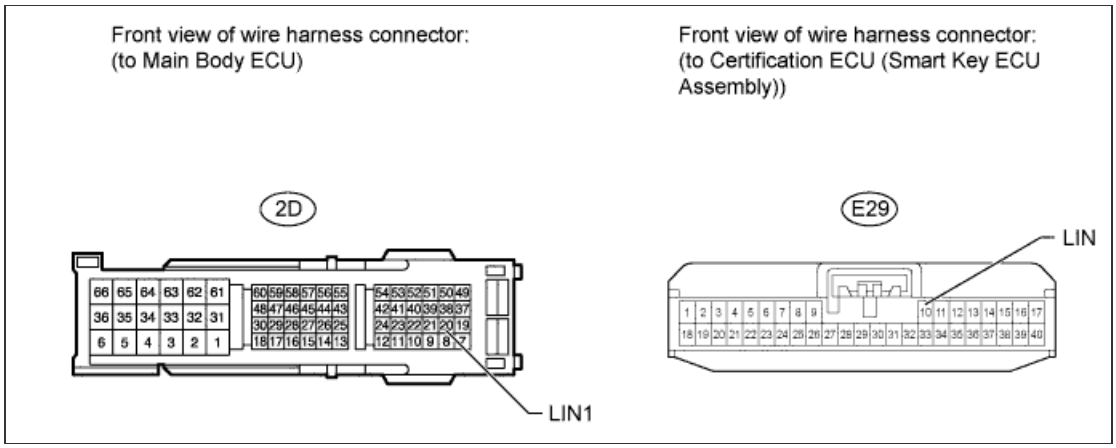
Result

Result	Proceed to
DTC B2289 output	A
No DTC output	B

B → USE SIMULATION METHOD TO CHECK (Click here)

A

2.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - CERTIFICATION ECU (SMART KEY ECU ASSEMBLY))



a. Disconnect the 2D main body ECU connector.

b. Disconnect the E29 certification ECU (smart key ECU assembly) connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
2D-20 (LIN1) - E29-10 (LIN)	Always	Below 1 Ω
2D-20 (LIN1) or E29-10 (LIN) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

a. Temporarily replace the main body ECU with a new or normally functioning one.

b. Check whether DTC B2289 is output.

OK:
No DTC is output.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

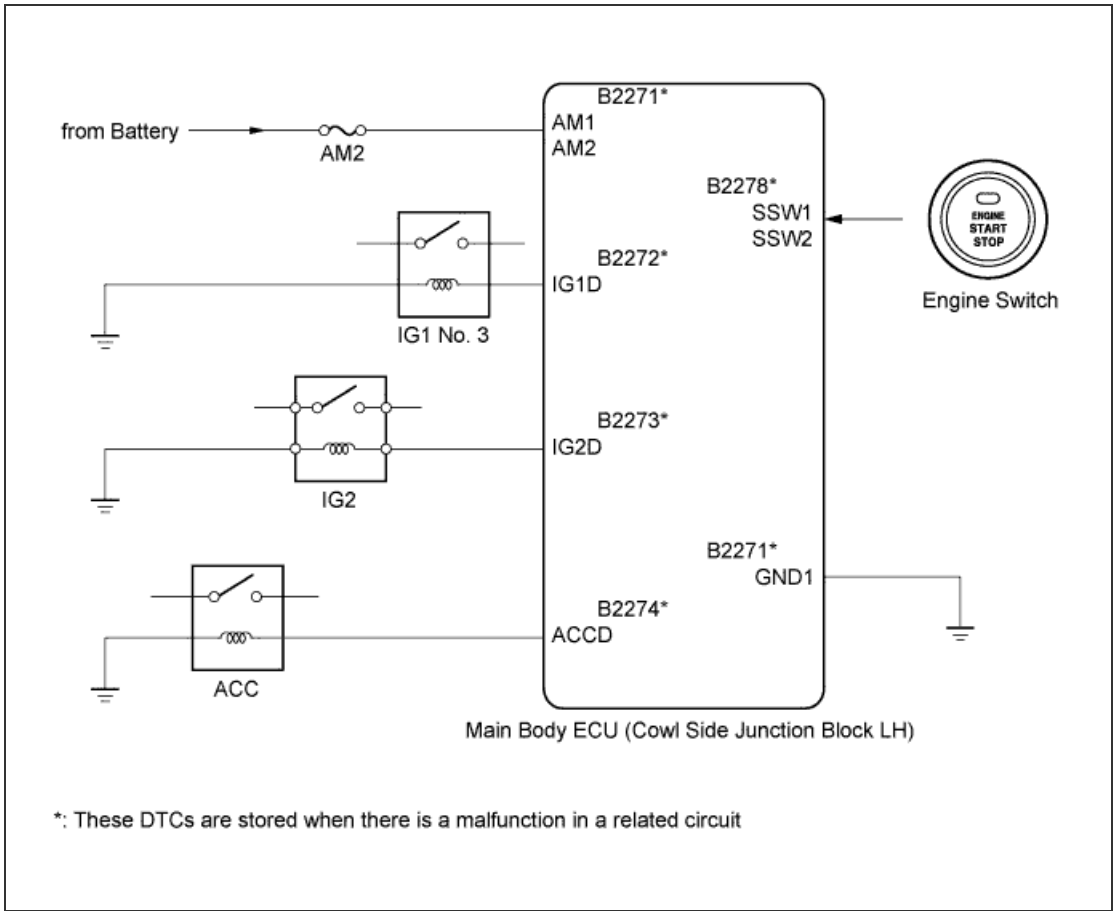
END

for Preparation Click here

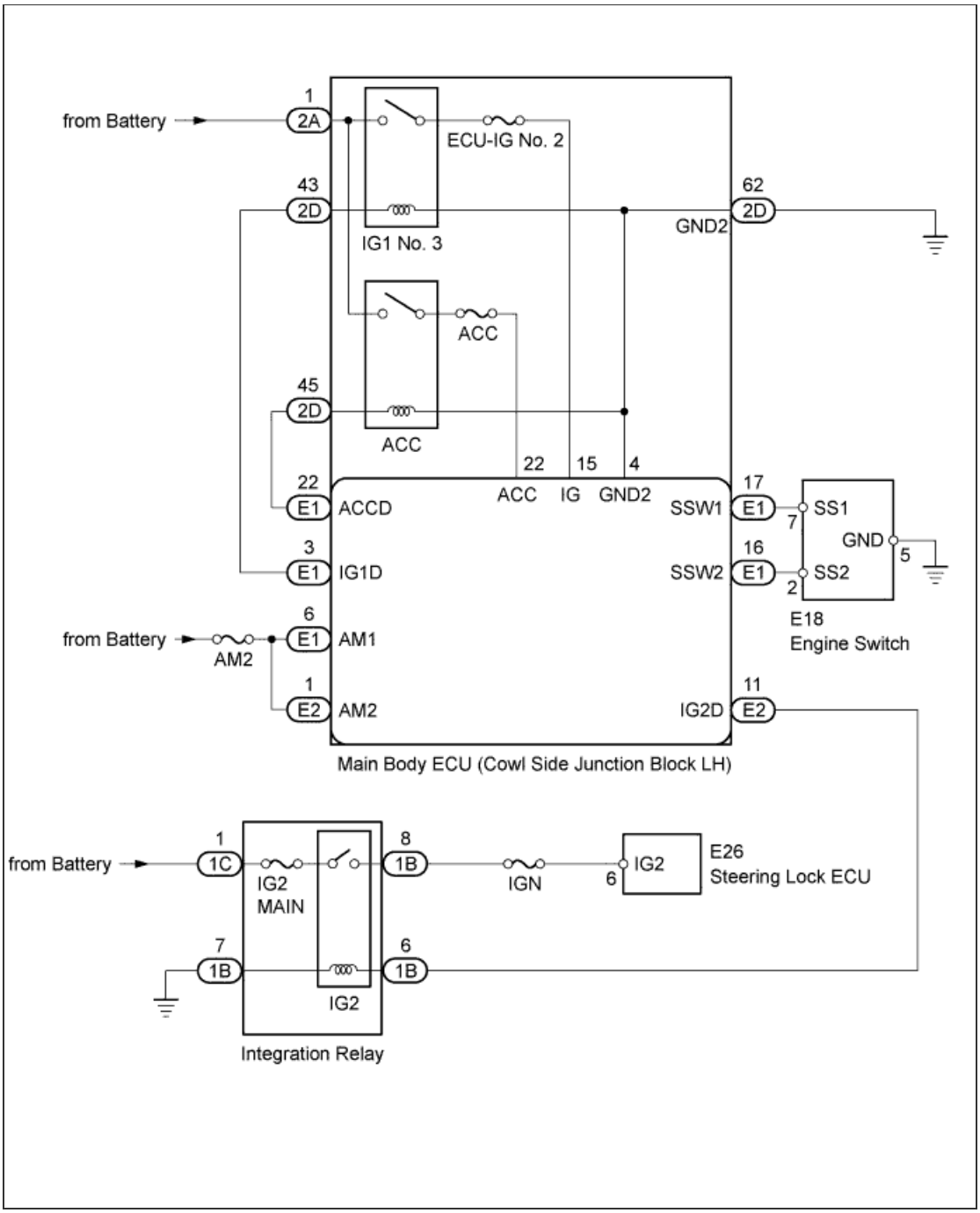
DESCRIPTION

When the certification ECU (smart key ECU assembly) has detected the key inside the cabin before the brake pedal is depressed, the power source mode can be changed in the following order sequentially by pressing the engine switch: off → on (ACC) → on (IG) → off.
When one of the DTCs shown in the illustration below is detected, troubleshoot the DTC(s) by following the troubleshooting procedure relevant to the DTC(s). If the power source mode still cannot be changed normally, despite troubleshooting, one of the following may have occurred:

- The LIN communication line is malfunctioning.
- The certification ECU (smart key ECU assembly) has determined that no key is inside the cabin.
- The engine switch is malfunctioning.
- The main body ECU is malfunctioning.



WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

If the vehicle is in key cancel mode, change to normal mode (Click here).

1.CHECK DTC OUTPUT

a. Check whether DTC is output (Click here).

Result

Display (DTC output)	Proceed to
No DTC output	A
DTC output	B

B → GO TO ENTRY AND START SYSTEM (FOR START FUNCTION) (DIAGNOSTIC TROUBLE CODE CHART) (Click here)

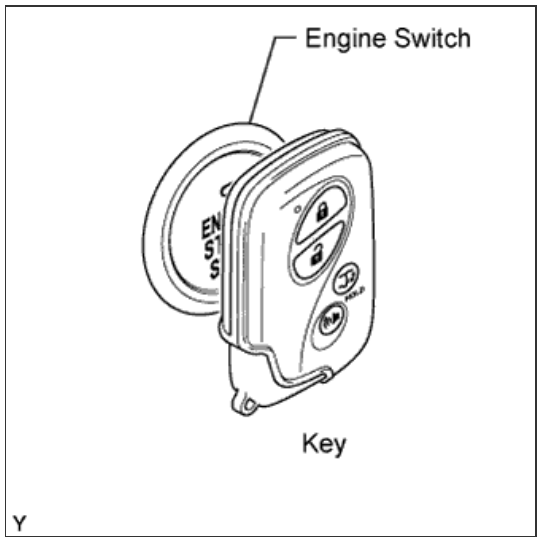
A

2.CHECK ENTRY AND START SYSTEM

a. Remove the battery of the electrical key transmitter (Click here).

b. With the brake pedal depressed, touch the LEXUS mark of the key to the engine switch.

c. When operating the engine switch, check whether the engine switch changes to on (ACC) or on (IG).



HINT:

- **When the electrical key transmitter cannot be verified even when it is in the operational area, the engine start check can be performed by removing the transmitter battery from the electrical key transmitter and holding the transmitter against the engine switch.**
- **When performing the check, if the engine switch turns on (ACC) or on (IG), there is a problem with key certification inside the cabin.**

Result

Result	Proceed to
Does not change to on (ACC)	A
Does not change to on (IG)	B
Does not change to on (ACC) and on (IG)	C
Changes to on (ACC) and on (IG)	D

B → Go to step 5

C → Go to step 11

D → GO TO ENTRY AND START SYSTEM (FOR ENTRY FUNCTION) (ROOM OSCILLATOR DOES NOT RECOGNIZE KEY) (Click here)

A

3.INSPECT FUSE (AM2)

a. Remove the AM2 fuse from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

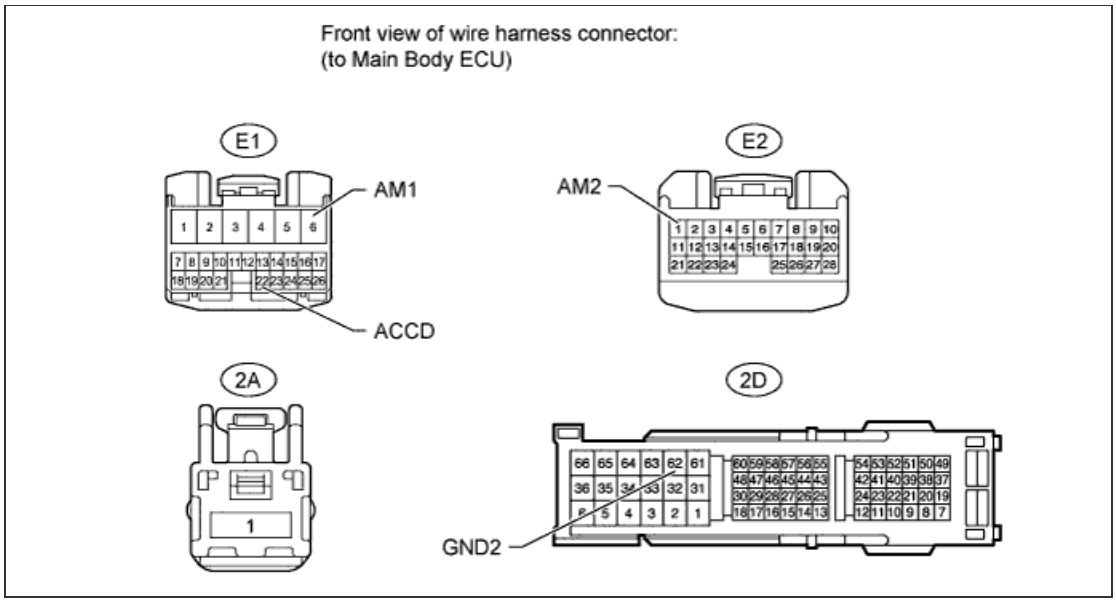
Standard Resistance:

Tester Connection	Condition	Specified Condition
AM2 fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

4.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - BATTERY AND BODY GROUND)



a. Disconnect the E1, E2, 2A and 2D main body ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
E1-6 (AM1) - Body ground	Always	11 to 14 V
E2-1 (AM2) - Body ground	Always	11 to 14 V
2A-1 - Body ground	Always	11 to 14 V

Standard Resistance:

Tester Connection	Condition	Specified Condition
E1-22 (ACCD) - 2D-45	Always	Below 1 Ω
2D-62 (GND2) - Body ground	Always	Below 1 Ω
E1-22 (ACCD) or 2D-45 - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

5.INSPECT FUSE (AM2)

a. Remove the AM2 fuse from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

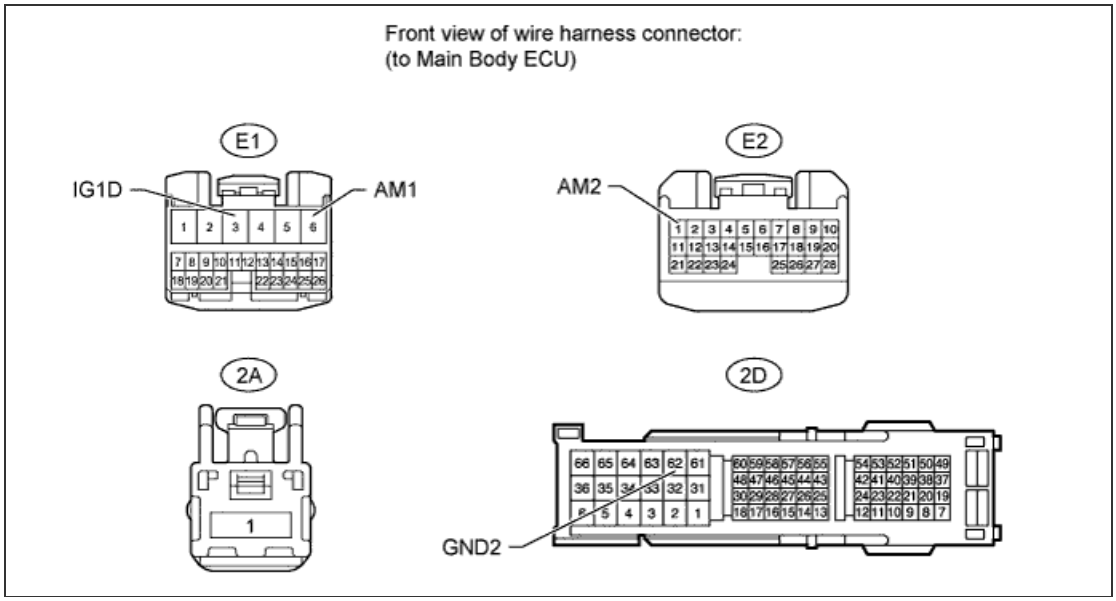
Standard Resistance:

Tester Connection	Condition	Specified Condition
AM2 fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

6.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - BATTERY AND BODY GROUND)



a. Disconnect the E1, E2, 2A and 2D main body ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
E1-6 (AM1) - Body ground	Always	11 to 14 V
E2-1 (AM2) - Body ground	Always	11 to 14 V
2A-1 - Body ground	Always	11 to 14 V

Standard Resistance:

Tester Connection	Condition	Specified Condition
E1-3 (IG1D) - 2D-43	Always	Below 1 Ω
2D-62 (GND2) - Body ground	Always	Below 1 Ω
E1-3 (IG1D) or 2D-43 - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

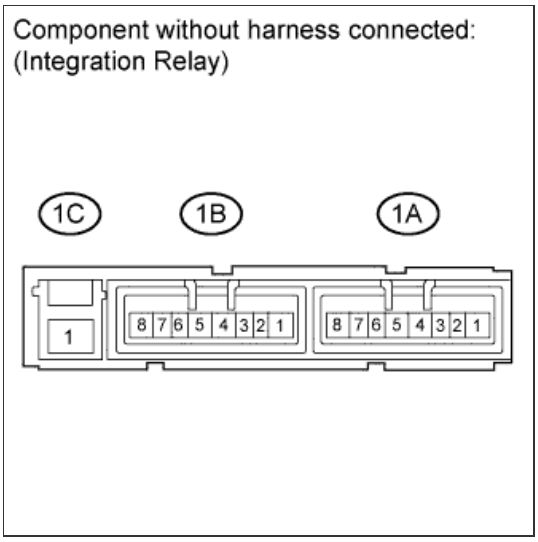
7.INSPECT INTEGRATION NO.1 RELAY (IG2 RELAY)

a. Remove the integration relay from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

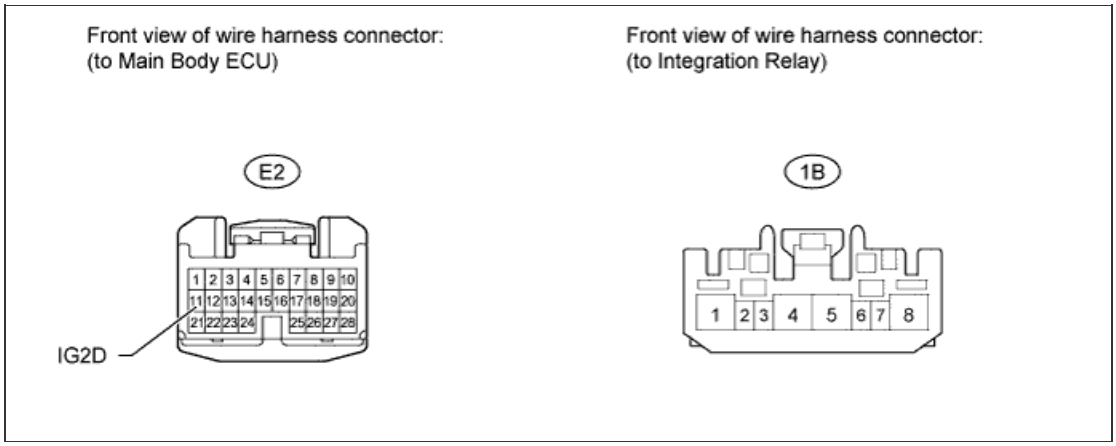
Tester Connection	Condition	Specified Condition
1B-8 - 1C-1	Battery voltage applied to terminals 1B-6 and 1B-7	Below 1 Ω
1B-8 - 1C-1	Battery voltage not applied to terminals 1B-6 and 1B-7	10 kΩ or higher



NG → REPLACE INTEGRATION NO.1 RELAY

OK

8.CHECK HARNESS AND CONNECTOR (INTEGRATION RELAY (IG2 RELAY) - MAIN BODY ECU AND BODY GROUND)



a. Disconnect the E2 main body ECU connector.

b. Disconnect the 1B integration relay connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E2-11 (IG2D) - 1B-6	Always	Below 1 Ω
1B-7 - Body ground	Always	Below 1 Ω
E2-11 (IG2D) or 1B-6 - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

9.INSPECT FUSE (IGN, IG2 MAIN)

a. Remove the IGN and IG2 MAIN fuses from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

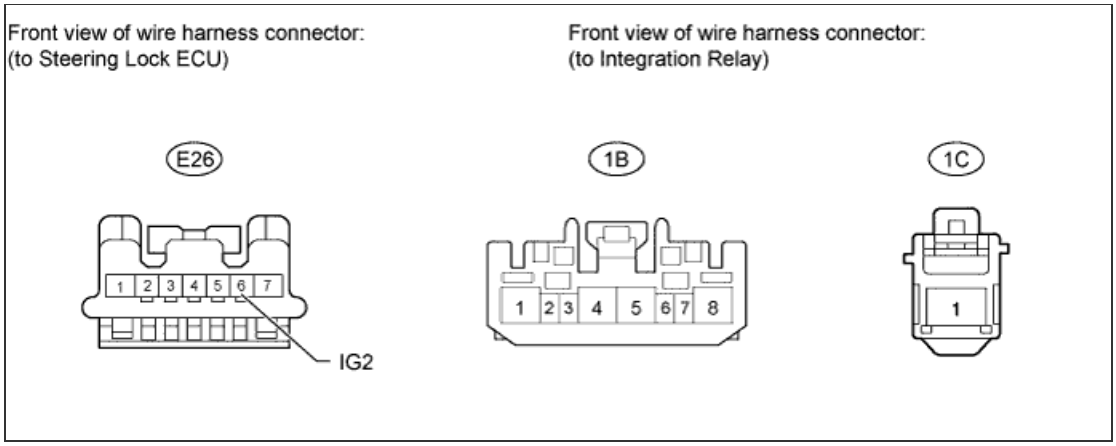
Standard Resistance:

Tester Connection	Condition	Specified Condition
IGN fuse	Always	Below 1 Ω
IG2 MAIN fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

10.CHECK HARNESS AND CONNECTOR (INTEGRATION RELAY (IG2 RELAY) - STEERING LOCK ECU AND BATTERY)



a. Disconnect the E26 steering lock ECU connector.

b. Disconnect the 1B and 1C integration relay connectors.

c. Measure the voltage and resistance according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
1C-1 - Body ground	Always	11 to 14 V

Standard Resistance:

Tester Connection	Condition	Specified Condition
E26-6 (IG2) - 1B-8	Always	Below 1 Ω
E26-6 (IG2) or 1B-8 - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

11.INSPECT FUSE (AM2)

a. Remove the AM2 fuse from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

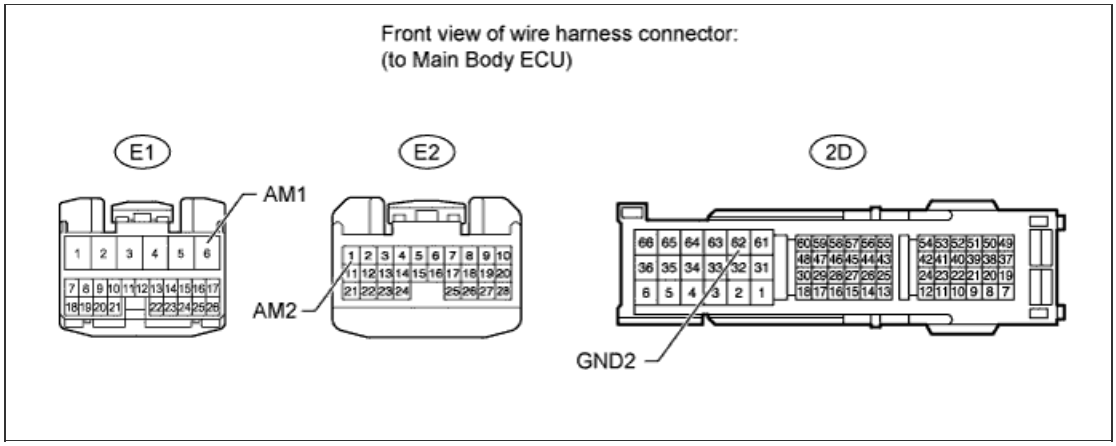
Standard Resistance:

Tester Connection	Condition	Specified Condition
AM2 fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

12.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - BATTERY AND BODY GROUND)



a. Disconnect the E1, E2 and 2D main body ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
E1-6 (AM1) - Body ground	Always	11 to 14 V
E2-1 (AM2) - Body ground	Always	11 to 14 V

Standard Resistance:

Tester Connection	Condition	Specified Condition
2D-62 (GND2) - Body ground	Always	Below 1 Ω

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

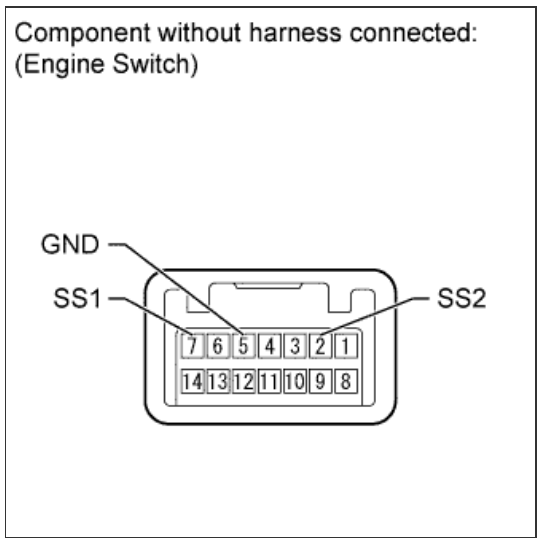
13.INSPECT ENGINE SWITCH

a. Disconnect the E18 engine switch connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

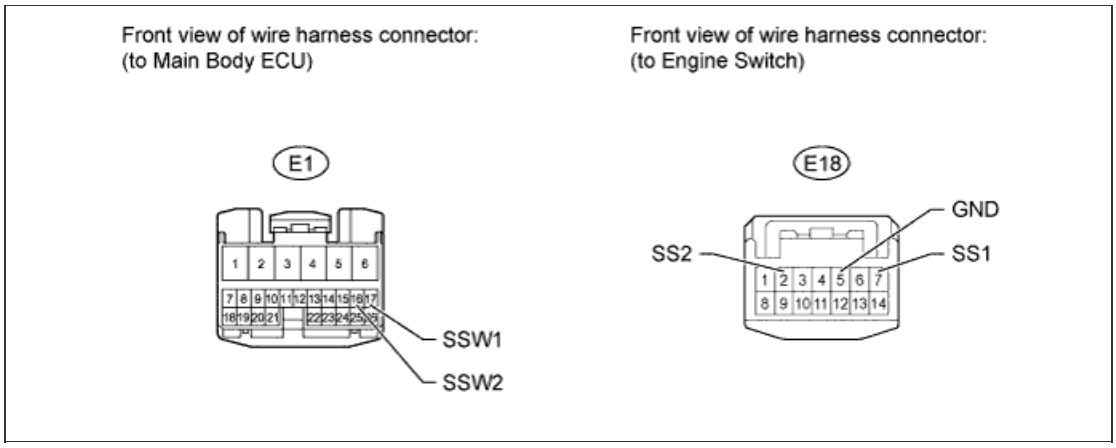
Tester Connection	Switch Condition	Specified Condition
7 (SS1) - 5 (GND)	Pushed	Below 1 Ω
2 (SS2) - 5 (GND)	Pushed	Below 1 Ω
7 (SS1) - 5 (GND)	Not pushed	10 kΩ or higher
2 (SS2) - 5 (GND)	Not pushed	10 kΩ or higher



NG → REPLACE ENGINE SWITCH (Click here)

OK

14.CHECK HARNESS AND CONNECTOR (ENGINE SWITCH - MAIN BODY ECU AND BODY GROUND)



a. Disconnect the E1 main body ECU connector.

b. Disconnect the E18 engine switch connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E1-17 (SSW1) - E18-7 (SS1)	Always	Below 1 Ω
E1-16 (SSW2) - E18-2 (SS2)	Always	Below 1 Ω
E18-5 (GND) - Body ground	Always	Below 1 Ω
E1-17 (SSW1) or E18-7 (SS1) - Body ground	Always	10 kΩ or higher
E1-16 (SSW2) or E18-2 (SS2) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

for Preparation Click here

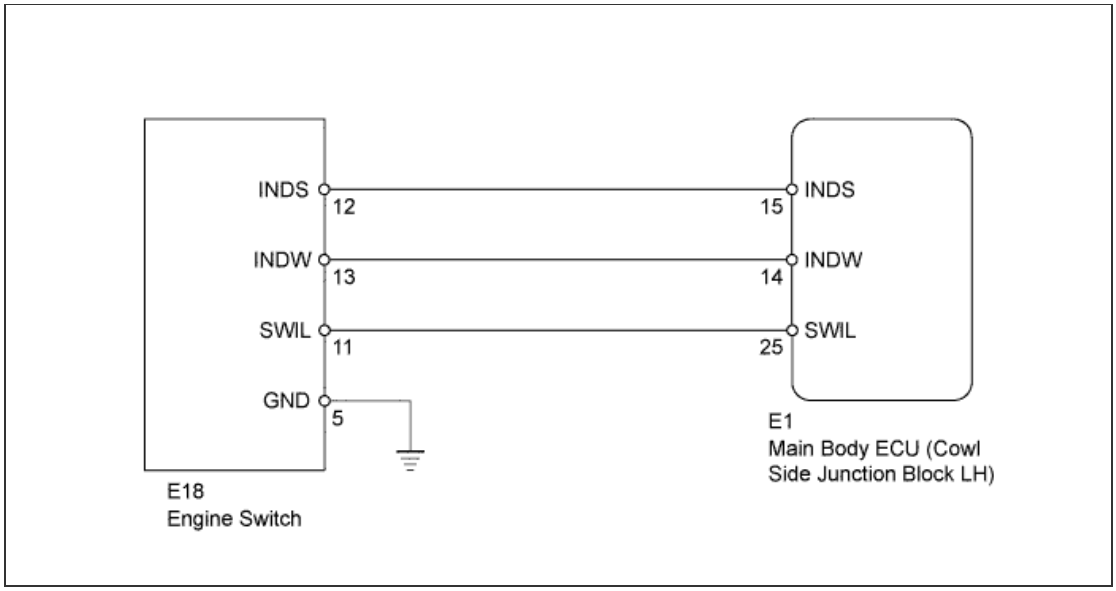
DESCRIPTION

The engine switch condition (power source mode) or system malfunctions can be checked by observing the status of the engine switch indicator light.

Engine Switch Indicator Light Condition

Power Source Mode/Condition	Indicator Light Condition	
	Brake Pedal Released	Brake Pedal Depressed, Shift Lever in P
Off	Off	Illuminates (green)
On (ACC), on (IG)	Illuminates (amber)	Illuminates (green)
Engine running	Off	Off
Steering lock not unlocked	Flashes (green) for 30 seconds	Flashes (green) for 30 seconds
System malfunction	Flashes (amber) for 15 seconds	Flashes (amber) for 15 seconds
Stop light switch malfunction with shift lever in P	Flashes (green) for 15 seconds	Flashes (green) for 15 seconds

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT ENGINE SWITCH

a. Disconnect the E18 engine switch connector.

b. Apply battery voltage to the terminals of the engine switch, and check the illumination condition of the engine switch indicator light.

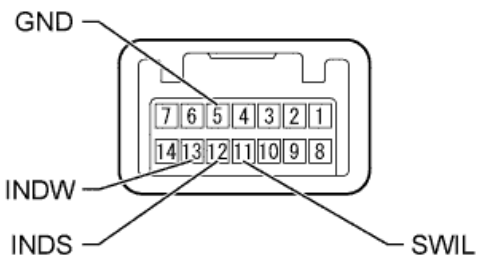
NOTICE:

- **If the positive (+) lead and the negative (-) lead are incorrectly connected, the engine switch indicator light will not illuminate.**
- **If the voltage is too low, the indicator light will not illuminate.**

OK:

Measurement Condition	Condition	Specified Condition
Battery terminal (+) → Terminal 11 (SWIL) - Battery terminal (-) → Terminal 5 (GND)	Battery voltage is applied to the terminals	Illuminates
Battery terminal (+) → Terminal 12 (INDS) - Battery terminal (-) →		

Component without harness connected:
(Engine Switch)

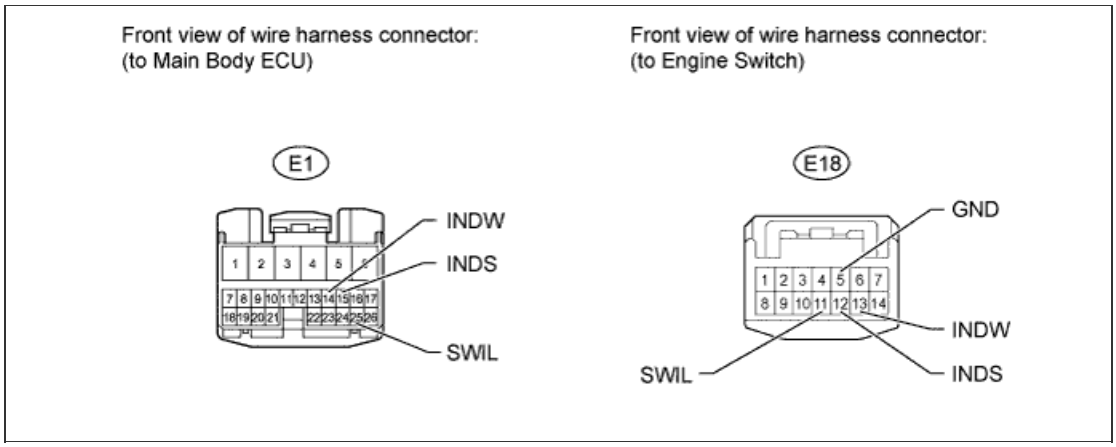


Terminal 5 (GND)		
Battery terminal (+) → Terminal 13 (INDW) - Battery terminal (-) → Terminal 5 (GND)		

NG → REPLACE ENGINE SWITCH (Click here)

OK

2.CHECK HARNESS AND CONNECTOR (ENGINE SWITCH - MAIN BODY ECU AND BODY GROUND)



a. Disconnect the E1 main body ECU connector.

b. Disconnect the E18 engine switch connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E1-25 (SWIL) - E18-11 (SWIL)	Always	Below 1 Ω
E1-15 (INDS) - E18-12 (INDS)	Always	Below 1 Ω
E1-14 (INDW) - E18-13 (INDW)	Always	Below 1 Ω
E18-5 (GND) - Body ground	Always	Below 1 Ω
E1-25 (SWIL) or E18-11 (SWIL) - Body ground	Always	10 kΩ or higher
E1-15 (INDS) or E18-12 (INDS) - Body ground	Always	10 kΩ or higher
E1-14 (INDW) or E18-13 (INDW) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

for Preparation Click here

1.PRECAUTIONS WHEN USING THE INTELLIGENT TESTER

a. When using the intelligent tester with the engine switch off to troubleshoot: Connect the intelligent tester to the vehicle, and turn a courtesy light switch on and off at 1.5 second intervals until communication between the intelligent tester and vehicle begins.

b. After all DTCs are cleared, check if the trouble occurs again 6 seconds after turning the engine switch on (IG).

2.PRECAUTIONS FOR EACH FUNCTION

a. Precautions for the key:

The key is a precision instrument. Be sure to observe the following:

i. Do not drop or strike the key.

ii. Do not keep the key in a high temperature area for a long time.

iii. Do not use an ultrasonic washing machine to clean the key.

iv. Keep the key away from magnets or magnetized items during use.

v. Do not attach any stickers to the key.

b. Precautions for the engine start function:

i. Before starting the engine, firmly depress the brake pedal until the indicator of the engine switch illuminates in green.

ii. Be sure to turn the engine switch off before disconnecting the cable from the negative (-) battery terminal. When the battery cable is disconnected, the power source mode (off, on (ACC), on (IG)) is memorized. When battery depletion causes the vehicle power to be cut, be careful to remember the power source mode.

iii. After the battery is removed and reinstalled, be sure to wait 10 seconds or more before the next engine start. The engine may not start immediately after the battery is reinstalled.

iv. When the key battery is depleted, affected by wave noise, etc. and it is held close to the engine switch to start the engine, several warnings may sound. However, the warnings most likely sound because the vehicle cannot determine if the key is in the vehicle or not, and not because there is an actual malfunction. The following warnings may sound:

1. Driver side door open → closed:
   - Warning to inform that the shift lever is in a position other than P, and the power source mode is not off.
   - Warning to inform that the shift lever is in P but the power source mode is not off.
2. Door other than the driver side door open → closed:
   - Warning to inform that a passenger is carrying the key out of the vehicle.

c. Precautions for the battery built into the key and the vehicle battery:

i. When the door is being locked, the vehicle battery is used to transmit a radio wave. The battery may be fully depleted if the vehicle remains stopped for a long time. If the vehicle is not used for a long time, recharge or replace the battery or cancel the entry and start system (for Entry Function) (Click here).

ii. When the door is being locked with the key in the detection area of the door oscillator, the battery is used to regulate communication between the key and vehicle. If the vehicle is not used, keep the key away from the vehicle (more than 2 m (6.56 ft.)).

3.PRECAUTIONS FOR BATTERY

a. Immediately after removing and installing the battery, door unlock by the entry and start system (for Entry Function) may not operate. In that case, after performing a door unlock/lock operation with the door control transmitter, door unlock operation by the smart key system returns.

b. When the battery is fully depleted and it is recharged using another vehicle battery, start the engine by performing the following: (1) Put the shift lever in P; (2) with the engine switch off, open and close the driver door once; and (3) start the engine.

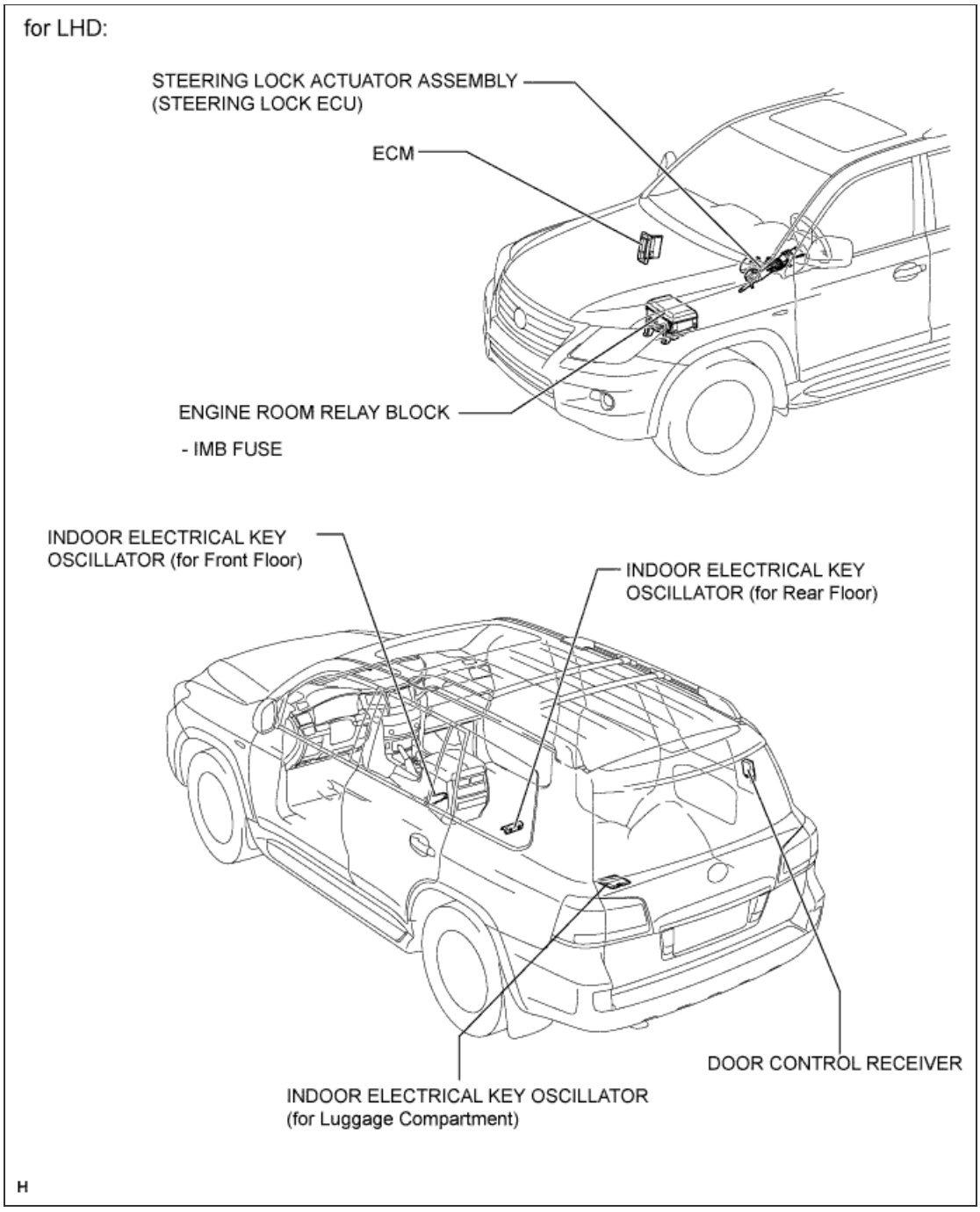
c. When starting the engine after removing and installing the battery, open and close the driver door and wait 10 seconds before starting the system.

HINT:

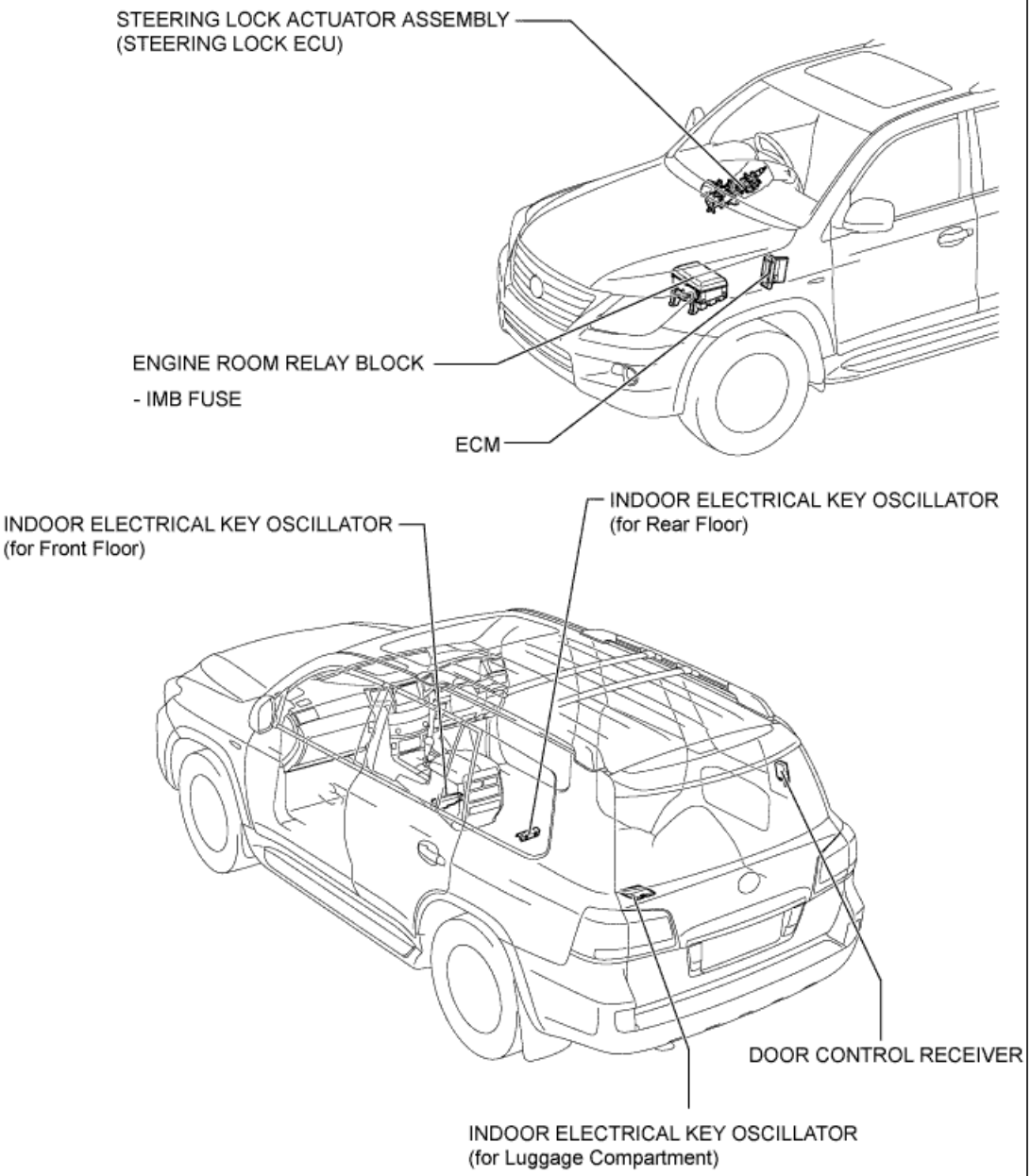
If the engine does not start the first time after removing and installing the battery, the engine will start normally from the second time

onward.

for Preparation Click here

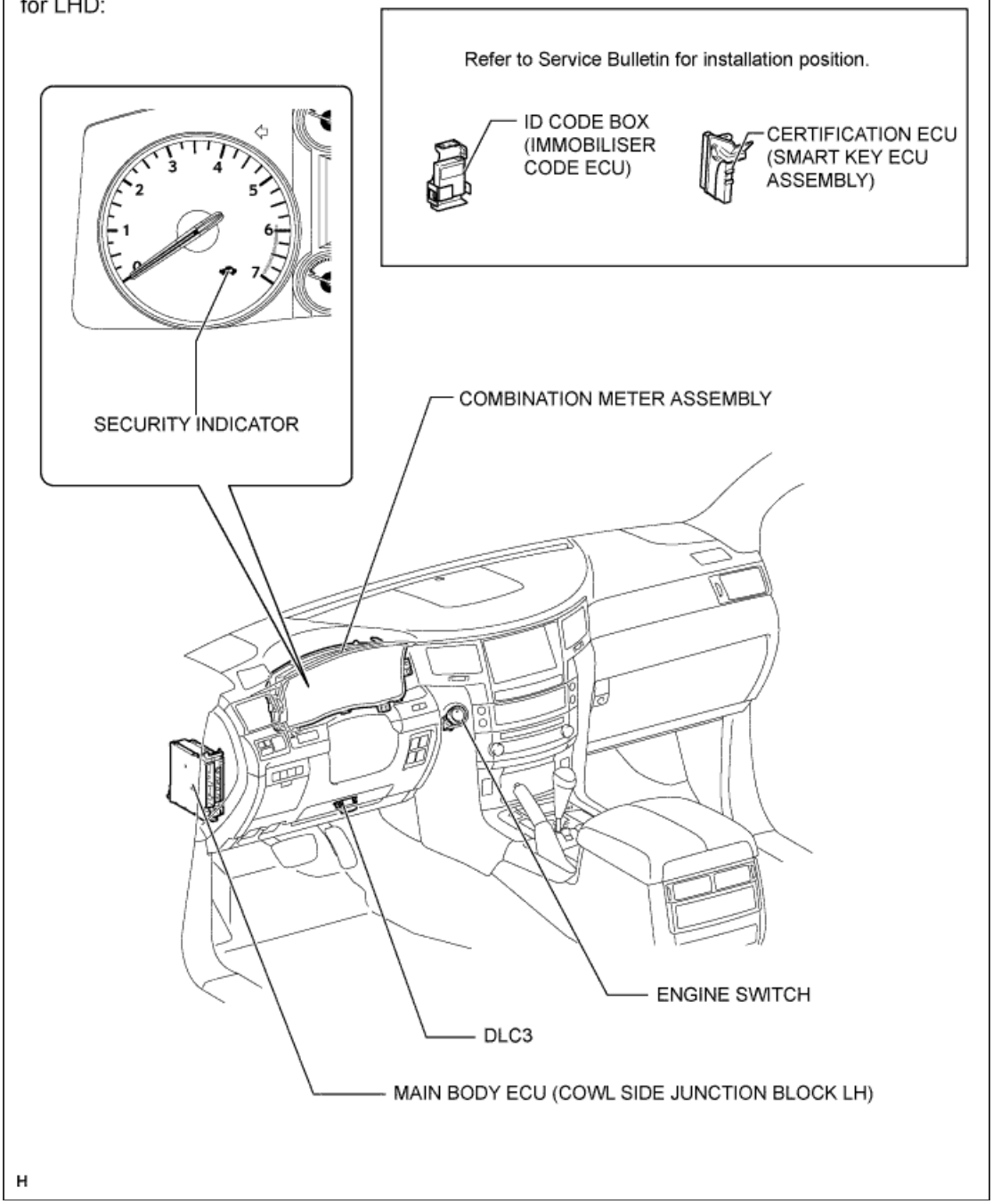


for RHD:


STEERING LOCK ACTUATOR ASSEMBLY
(STEERING LOCK ECU)
ENGINE ROOM RELAY BLOCK
- IMB FUSE
ECM
INDOOR ELECTRICAL KEY OSCILLATOR
(for Front Floor)
INDOOR ELECTRICAL KEY OSCILLATOR
(for Rear Floor)
DOOR CONTROL RECEIVER
INDOOR ELECTRICAL KEY OSCILLATOR
(for Luggage Compartment)

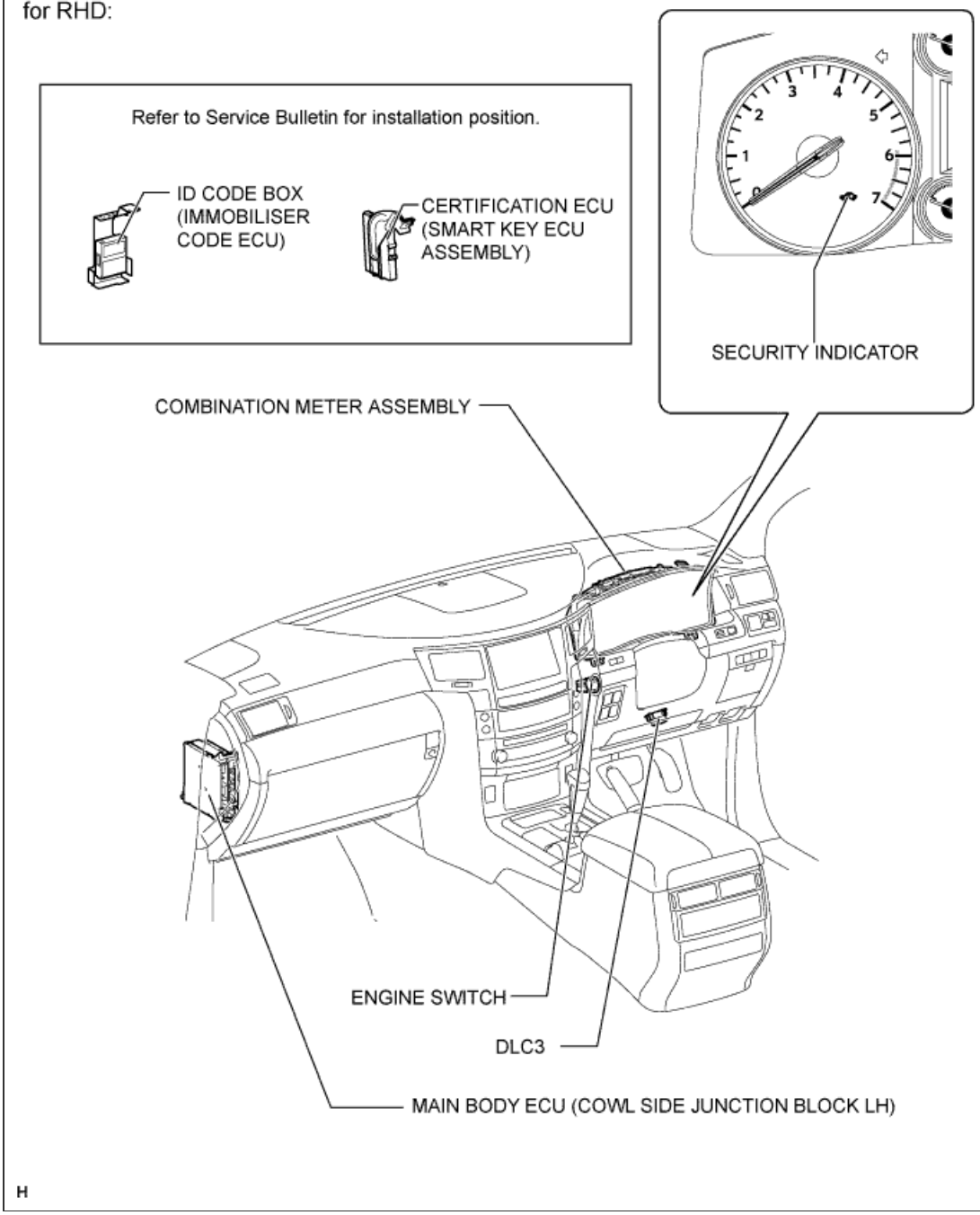
H

for LHD:


Refer to Service Bulletin for installation position.
ID CODE BOX (IMMOBILISER CODE ECU)
CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)
SECURITY INDICATOR
COMBINATION METER ASSEMBLY
ENGINE SWITCH
DLC3
MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

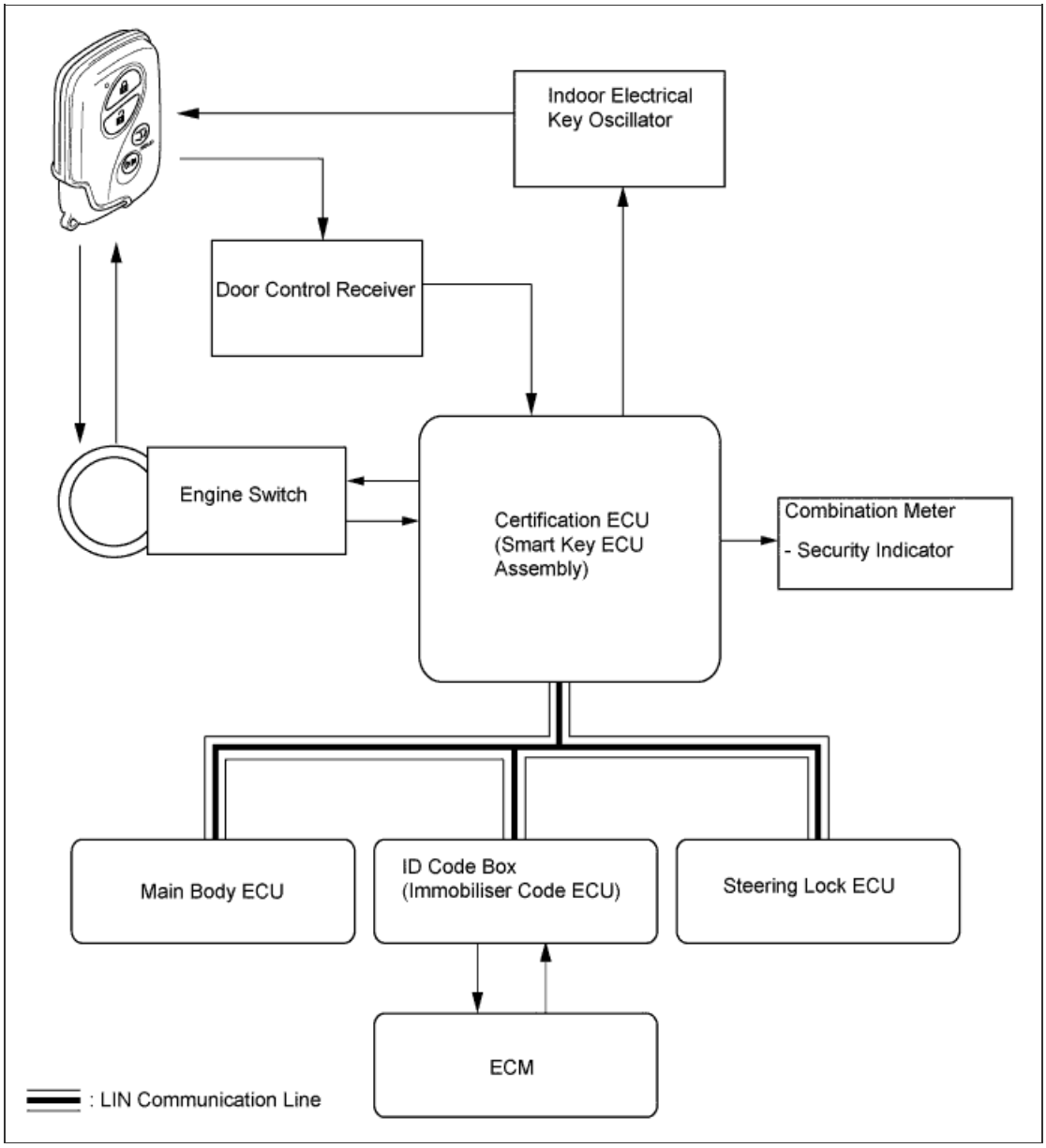
H

for RHD:


Refer to Service Bulletin for installation position.
ID CODE BOX (IMMOBILISER CODE ECU)
CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)
SECURITY INDICATOR
COMBINATION METER ASSEMBLY
ENGINE SWITCH
DLC3
MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

H

for Preparation Click here



Communication Table

Transmitting ECU (Transmitter)	Receiving ECU (Receiver)	Signals	Communication Method
Certification ECU (smart key ECU assembly)	Main body ECU	• Engine immobiliser system set/unset signal • Double lock fail-safe unset signal • Engine start signal • Transponder valid signal • Steering unlock demand signal • Steering lock demand signal	LIN
Main body ECU	Certification ECU (smart key ECU assembly)	• Key code recognition signal • Engine start operation signal • ACC relay activation signal • IG relay activation signal	
	Certification ECU (smart key ECU	• Matching request random number signal • EFI code reception signal • Engine start permission demand reception signal	

ID code box (immobiliser code ECU)	assembly)	• S code verification result signal • L code verification result signal • Steering unlock demand reception signal • Steering lock demand reception signal	
	Steering lock ECU	• Steering lock release signal • Matching request random number signal	
Steering lock ECU	Certification ECU (smart key ECU assembly)	L code verification signal	

for Preparation Click here

ENGINE IMMOBILISER SYSTEM DESCRIPTION

a. The engine immobiliser system determines whether or not to disable starting of the SFI system based on a comparison of the key ID code and the vehicle pre-registered code. The engine immobiliser system compares the vehicle certification ECU (smart key ECU assembly) pre-registered ID code with the key-embedded transponder chip ID code. If the ID codes do not match, the engine immobiliser system activates and the SFI system cannot be started. The certification ECU (smart key ECU assembly) manages communication with the SFI system, main body ECU, steering lock ECU and ID code box (immobiliser code ECU). When the ID codes of the transponder chip and certification ECU (smart key ECU assembly) match, the certification ECU (smart key ECU assembly) authorizes the starting of the SFI system.

FUNCTION OF MAIN COMPONENT

Component	Outline
Transponder key coil/amplifier (built into engine switch)	Receives the key ID code, amplifies the ID code and outputs it to the certification ECU (smart key ECU assembly).
Indoor electrical key oscillator	Transmits the key detection signals within the detection area in the vehicle interior upon receiving a transmission request signal from the certification ECU (smart key ECU assembly). The certification ECU (smart key ECU assembly) request signal is activated when the key is brought into the vehicle interior and the engine switch is pushed.
Door control receiver	Receives the ID code from the key in the actuation area and transmits it to the certification ECU (smart key ECU assembly).
Security indicator	Illuminates or starts blinking. The Illumination is controlled by the certification ECU (smart key ECU assembly).

SYSTEM FUNCTION

a. Using the entry function

i. When the driver (or an occupant) gets in the vehicle and depresses the brake pedal while carrying the key, the main body ECU recognizes that the brake pedal has been depressed and sends a key certification request signal to the certification ECU (smart key ECU assembly). Then the certification ECU (smart key ECU assembly) generates a request signal and sends it to the indoor electrical key oscillator. When the request signal is received, the indoor electrical key oscillator sends another request signal in order to detect whether the key is inside the vehicle. When the key receives this request signal, it sends back an ID code which includes a response code. The ID code sent from the key is sent to the certification ECU (smart key ECU assembly) via the door control receiver. When the ID code is received, the certification ECU (smart key ECU assembly) analyzes the code. If the certification result is normal, the certification ECU (smart key ECU assembly) sends a key certification compatible response signal to the main body ECU. At this time, the engine switch indicator illuminates in green. When the indicator illuminates in green and the driver presses the engine switch, the main body ECU recognizes the engine start signal, changes the ACC relay to on, and changes the IG1 and IG2 relays to on in that order after 0.025 seconds. At this time, the certification ECU (smart key ECU assembly) confirms that the power source mode has changed, and sends a steering unlock command signal to the main body ECU. After this signal is received, the main body ECU supplies the steering lock actuator with power. Then (via the ID code box (immobiliser code ECU)) the steering lock ECU confirms that the certification ECU (smart key ECU assembly) is the proper ECU, and drives the steering actuator motor until the steering lock is unlocked. After the steering lock is unlocked, the steering lock ECU sends an unlock completion signal to the certification ECU (smart key ECU assembly) and main body ECU. When this signal is received, the certification ECU (smart key ECU assembly) sends an immobiliser unset command signal to the ID code box (immobiliser code ECU). Once this signal is received, the ID code box (immobiliser code ECU) sends an immobiliser unset command signal to the SFI system after confirming that the certification ECU (smart key ECU assembly) is the proper ECU. Then the certification ECU (smart key ECU assembly) sends a security indicator off signal to the combination meter.

b. Not using the entry function (when battery is depleted, transmitter is affected by wave noise, etc.)

i. When the driver is sitting in the vehicle while carrying the key and the brake pedal is depressed, the main body ECU recognizes that the stop light switch is on and sends a key confirmation request signal to the certification ECU (smart key ECU assembly). Upon receipt of this signal, the certification ECU (smart key ECU assembly) drives the motor of the engine switch built-in immobiliser amplifier. At this time, the engine switch outputs an RF (Radio Frequency) wave communication signal. If the driver holds the key up to the engine switch at this time, the key receives the immobiliser RF (Radio Frequency) wave signal and responds by sending a radio wave signal. When the engine switch receives the radio wave signal from the key, it duplicates the signal and sends an ID code to the certification ECU (smart key ECU assembly). Upon receipt of the ID code, the code is analyzed. If the certification passes, a key certification pass response signal is sent to the main body ECU while simultaneously sending a sound buzzer request signal to the meter ECU. When the main body ECU receives this signal, the ACC relay is switched on and the IG1 and IG2 relays are switched on in sequence after 0.025 seconds. At this time, the engine switch indicator

illuminates in green. Then the certification ECU (smart key ECU assembly) checks that the power source mode has been changed and sends a steering lock command signal to the main body ECU. After receiving this signal, the main body ECU supplies power to the steering lock actuator. Then (via the ID code box (immobiliser code ECU)) the steering lock ECU confirms that the certification ECU (smart key ECU assembly) is certified and drives the steering actuator motor until the steering lock is unlocked. After unlocking the steering lock, an unlock completed signal is sent to the certification ECU (smart key ECU assembly). Upon receipt of this signal, the certification ECU (smart key ECU assembly) sends an unset command signal to the ID code box (immobiliser code ECU). Once this signal is received, the ID code box (immobiliser code ECU) confirms that the certification ECU (smart key ECU assembly) is certified, sends an immobiliser unset command signal to the SFI system, and then the certification ECU (smart key ECU assembly) sends a security indicator off signal to the combination meter.

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the engine immobiliser system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK FOR DTC*

a. Check for DTCs and make a note of any codes that are output (Click here).

b. Clear the DTCs (Click here).

c. Recheck for DTCs (Click here). Based on the DTCs output above, try to cause the output of the same SFI system or ECD system DTC, LIN communication system DTC, steering lock system DTC or engine immobiliser system DTC by simulating the symptoms indicated by the DTC.

Result

Result	Proceed to
DTC is not output	A
SFI system DTC is output	B
LIN communication system DTC is output	C
Steering lock system DTC is output	D
Engine immobiliser system DTC is output	E

B. → Go to DIAGNOSTIC TROUBLE CODE CHART (Click here)

C. → Go to DIAGNOSTIC TROUBLE CODE CHART (Click here)

D. → Go to DIAGNOSTIC TROUBLE CODE CHART (Click here)

E. → Go to DIAGNOSTIC TROUBLE CODE CHART (Click here)

A

4.PROBLEM SYMPTOMS TABLE

a. Refer to the problem symptoms table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. Go to step 6

A

5.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Data List/Active Test (Click here)

b. Terminals of ECU (Click here)

NEXT

6.ADJUST, REPAIR OR REPLACE

NEXT

7.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.**
- **Inspect the fuses and relays related to this system before inspecting the suspected areas below.**

Engine Immobiliser System

Symptom	Suspected Area	See page
Engine does not start	LIN communication system	Click here
	ID code box power source circuit	Click here
	Certification ECU power source circuit	Click here
	Steering lock ECU power source circuit	Click here
	Entry and start system (for start function)	Click here
	SFI system (for 3UR-FE)	Click here
Security indicator malfunction	Security indicator light circuit	Click here

for Preparation Click here

HINT:

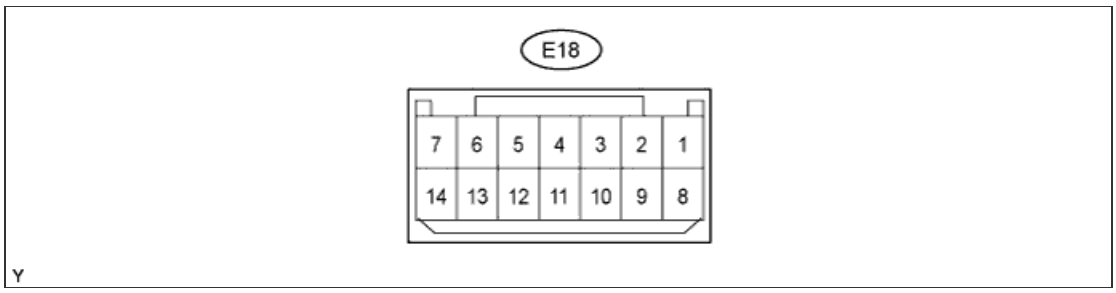
- **Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.**
- **Inspect the fuses and relays related to this system before inspecting the suspected areas below.**

Engine Immobiliser System

Symptom	Suspected Area	See page
Engine does not start	LIN communication system	Click here
	ID code box power source circuit	Click here
	Certification ECU power source circuit	Click here
	Steering lock ECU power source circuit	Click here
	Entry and start system (for start function)	Click here
	SFI system (for 3UR-FE)	Click here
Security indicator malfunction	Security indicator light circuit	Click here

for Preparation Click here

CHECK ENGINE SWITCH



a. Disconnect the E18 switch connector.

b. Measure the resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E18-5 (GND) - Body ground	BR - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the E18 switch connector.

d. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E18-8 (AGND) - Body ground	L - Body ground	Ground	Always	Below 1 Ω
E18-14 (VC5) - E18-8 (AGND)	P - L	Power supply	Key not in cabin	Below 1 V
			Engine switch pressed*	4.6 to 5.4 V
E18-10 (CODE) - E18-8 (AGND)	G - L	Demodulated signal of key code output	Key not in cabin	Below 1 V
			Engine switch pressed and key held close to engine switch*	Pulse generation (see waveform 1)
E18-9 (TXCT) - E18-8 (AGND)	SB - L	Key code input signal	Key not in cabin	Below 1 V
			Engine switch pressed and key held close to engine switch*	Pulse generation (see waveform 2)

HINT:

*: Remove the key battery before performing this inspection.

If the result is not as specified, the switch may have a malfunction.

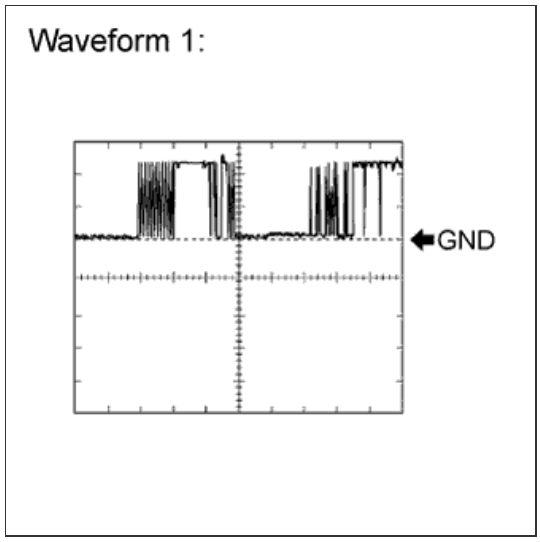
e. Using an oscilloscope, check waveform 1.

Waveform 1 (Reference)

Item	Content
Terminal No. (Symbol)	E18-10 (CODE) - E18-8 (AGND)
Tool Setting	2 V/DIV., 20 msec./DIV.
Condition	Engine switch pressed and key held close to engine switch*

HINT:

*: Remove the key battery before performing this inspection.



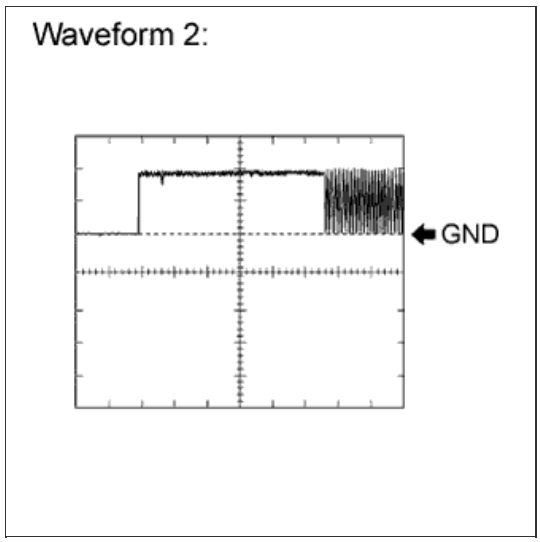
f. Using an oscilloscope, check waveform 2.

Waveform 2 (Reference)

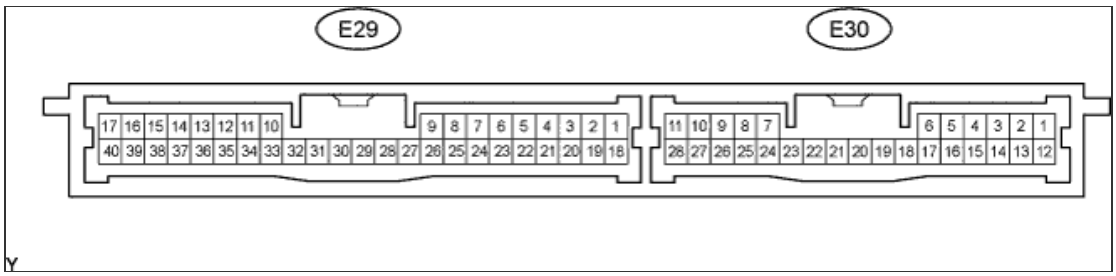
Item	Content
Terminal No. (Symbol)	E18-9 (TXCT) - E18-8 (AGND)
Tool Setting	2 V/DIV., 20 msec./DIV.
Condition	Engine switch pressed and key held close to engine switch*

HINT:

*: Remove the key battery before performing this inspection.



CHECK CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)



a. Disconnect the E29 ECU connector.

b. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E29 -17 (E) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E29-1 (+B) - E29-17 (E)	B - W-B	+B power supply	Always	11 to 14 V
E29-18 (IG) - E29-17 (E)	B - W-B	Ignition power supply	Engine switch off	Below 1 V
			Engine switch on	11 to 14 V

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the E29 ECU connector.

d. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E29-40 (AGND) - Body				

ground	L - Body ground	Engine switch ground	Always	Below 1 Ω
E29-30 (VC5) - E29-40 (AGND)	P - L	Engine switch power supply	Key not in cabin	Below 1 V
			Engine switch pressed*	4.6 to 5.4 V
E29-9 (CODE) - E29-40 (AGND)	G- L	Engine switch CODE input	Key not in cabin	Below 1 V
			Engine switch pressed and key held close to engine switch*	Pulse generation (see waveform 1)
E29-8 (TXCT) - E29-40 (AGND)	SB - L	Engine switch TX output	Key not in cabin	Below 1 V
			Engine switch pressed and key held close to engine switch*	Pulse generation (see waveform 2)

HINT:

*: Remove the key battery before performing this inspection.

If the result is not as specified, the ECU may have a malfunction.

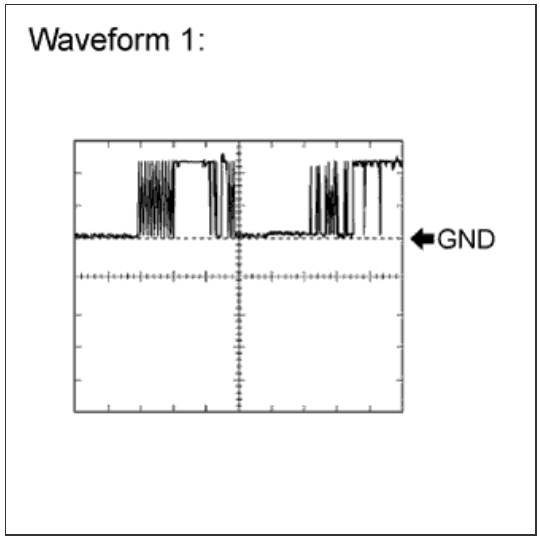
e. Using an oscilloscope, check waveform 1.

Waveform 1 (Reference)

Item	Content
Terminal No. (Symbol)	E29-9 (CODE) - E29-40 (AGND)
Tool Setting	2 V/DIV., 20 msec./DIV.
Condition	Engine switch pressed and key held close to engine switch*

HINT:

*: Remove the key battery before performing this inspection.



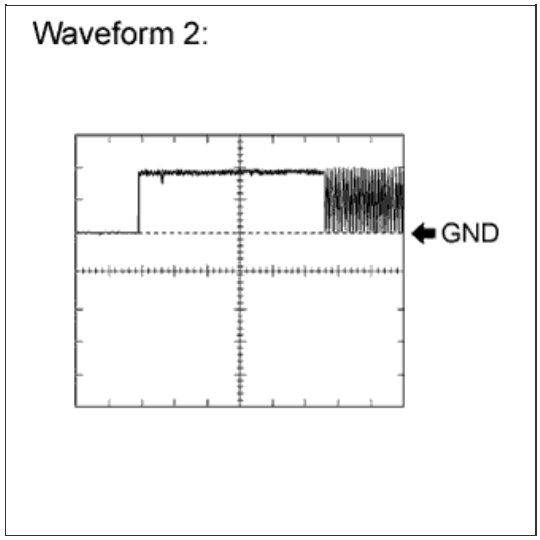
f. Using an oscilloscope, check waveform 2.

Waveform 2 (Reference)

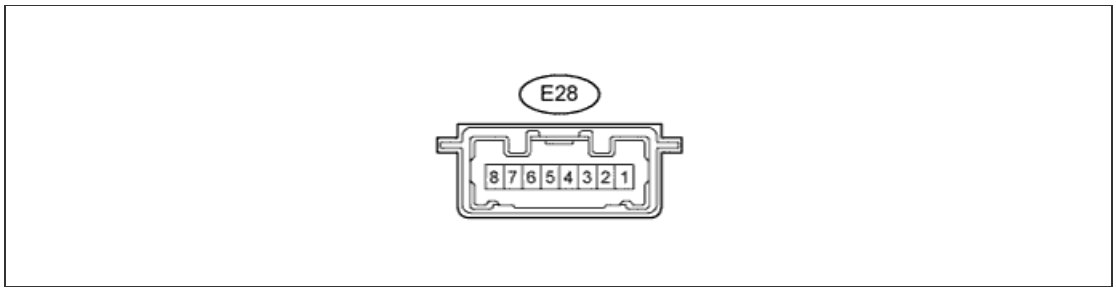
Item	Content
Terminal No. (Symbol)	E29-8 (TXCT) - E29-40 (AGND)
Tool Setting	2 V/DIV., 20 msec./DIV.
Condition	Engine switch pressed and key held close to engine switch*

HINT:

*: Remove the key battery before performing this inspection.



CHECK ID CODE BOX (IMMOBILISER CODE ECU)



a. Disconnect the E28 box connector.

b. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E28-8 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E28-1 (+B) - E28-8 (GND)	B - W-B	+B power supply	Always	11 to 14 V

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the E28 box connector.

d. Measure the voltage according to the value(s) in the table below.

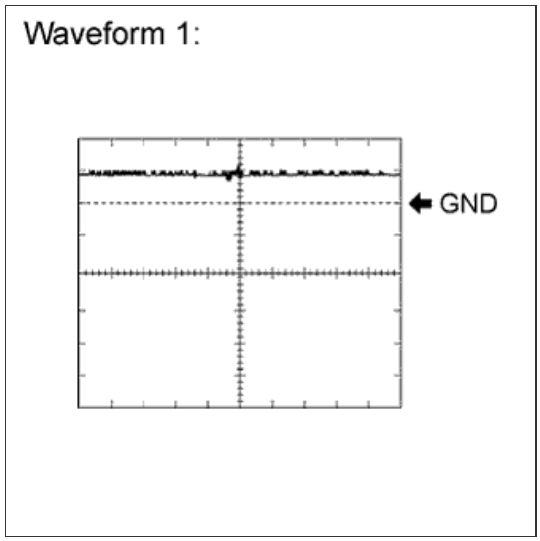
Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E28-5 (EFII) - E28-8 (GND)	W - W-B	ECM input signal	Engine switch off	Below 1 V
			Engine switch on (IG)	Pulse generation (see waveform 1)
E28-6 (EFIO) - E28-8 (GND)	R - W-B	ECM output signal	Engine switch off	Below 1 V
			Engine switch on (IG)	Pulse generation (see waveform 2)

If the result is not as specified, the ID code box (immobiliser code ECU) may have a malfunction.

e. Using an oscilloscope, check waveform 1.

Waveform 1 (Reference)

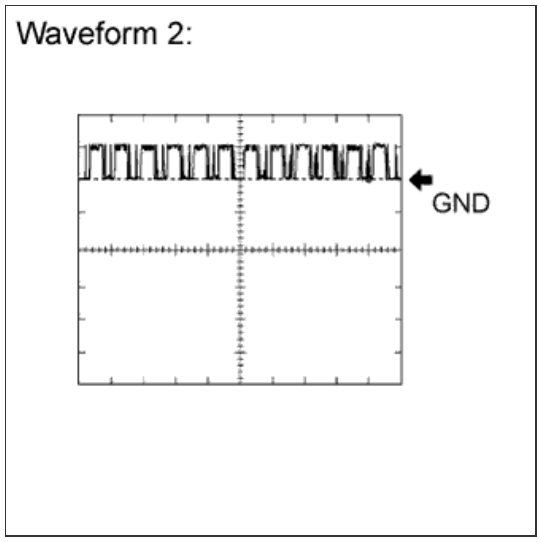
Item	Content
Terminal No. (Symbol)	E28-5 (EFII) - E28-8 (GND)
Tool Setting	10 V/DIV., 100 msec./DIV.
Condition	Engine switch on (IG)



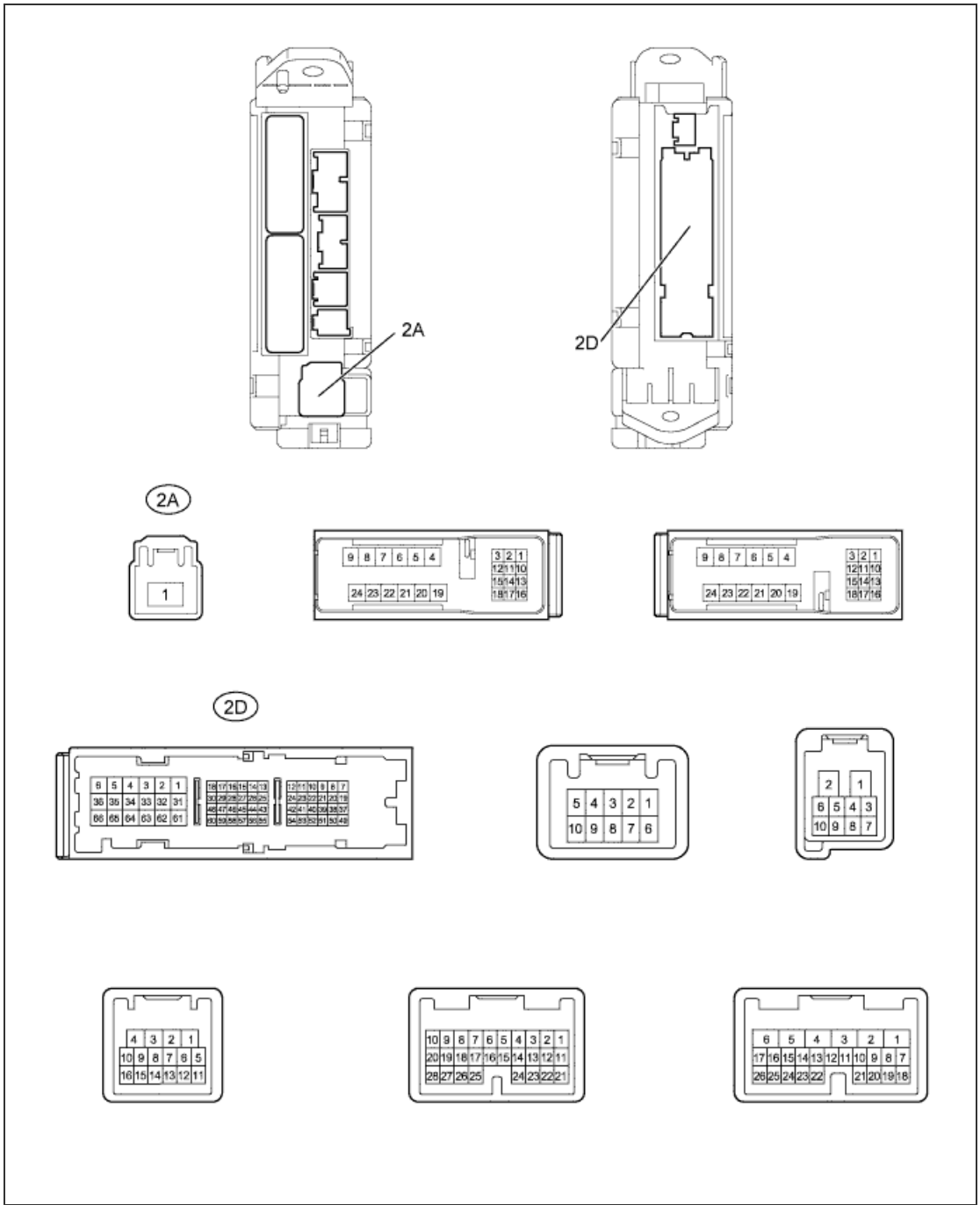
f. Using an oscilloscope, check waveform 2.

Waveform 2 (Reference)

Item	Content
Terminal No. (Symbol)	E28-6 (EFIO) - E28-8 (GND)
Tool Setting	10 V/DIV., 100 msec./DIV.
Condition	Engine switch on (IG)



CHECK MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)



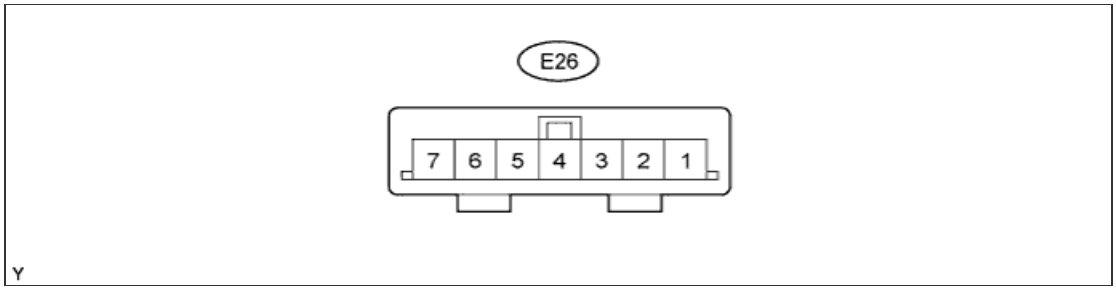
a. Disconnect the 2D and 2A ECU connectors.

b. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
2D-62 (GND2) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
2D-8 (ACC) - 2D-62 (GND2)	GR - W-B	ACC power supply	Engine switch off	Below 1 V
			Engine switch on (ACC)	11 to 14 V
2A-1 (IG) - 2D-62 (GND2)	B - W-B	IG power supply	Engine switch off	Below 1 V
			Engine switch on (IG)	11 to 14 V

If the result is not as specified, there may be a malfunction on the wire harness side.

CHECK STEERING LOCK ACTUATOR (STEERING LOCK ECU)



a. Disconnect the E26 ECU connector.

b. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E26-2 (SGND) - Body ground	BR - Body ground	Ground	Always	Below 1 Ω
E26-1 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E26-7 (B) - Body ground	R - Body ground	+B power supply	Always	11 to 14 V
E26-6 (IG2) - Body ground	B - Body ground	Ignition power supply	Engine switch off	Below 1 V
			Engine switch on (IG)	11 to 14 V

If the result is not as specified, there may be a malfunction on the wire harness side.

for Preparation Click here

CHECK DTC

HINT:

- **When using the intelligent tester with the engine switch off to troubleshoot: Connect the intelligent tester to the vehicle, and turn a courtesy light switch on and off at 1.5 second intervals until communication between the intelligent tester and vehicle begins.**
- **Refer to the intelligent tester operator manual for further details.**

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body or Powertrain / (desired system) / Trouble Codes.

e. Check the DTCs.

CLEAR DTC

HINT:

- **When using the intelligent tester with the engine switch off to troubleshoot: Connect the intelligent tester to the vehicle, and turn a courtesy light switch on and off at 1.5 second intervals until communication between the intelligent tester and vehicle begins.**
- **Refer to the intelligent tester operator manual for further details.**

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body or Powertrain / (desired system) / Trouble Codes.

e. Clear the DTCs.

for Preparation Click here

READ DATA LIST

HINT:

Using the intelligent tester to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Entry&Start / Data List.

e. According to the display on the intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Ignition Switch	Engine switch on (IG) signal / ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
#Codes	Number of trouble codes / Min: 0, Max: 255	-	-
Immobiliser	Engine immobiliser system status / Set or Unset	Set: Key not in cabin Unset: Key in cabin	-
Master Key	Master key code signal / Match or No Match	Match: Master key code is sent No Match: Unmatched master key code sent	-
BCC Malfunction	Transponder chip signal / OK or NG	OK: Correct data sent NG: Incorrect data sent	-
Abnormal Status	Transponder chip data / OK or NG	OK: Data OK NG: Data error	-
Different Encrypt Code	Transponder chip signal / OK or NG	OK: Correct data sent NG: Incorrect data sent	-
Different Serial Number	Transponder chip signal / OK or NG	OK: Correct data sent NG: Incorrect data sent	-
Frame Error	Transponder chip signal / OK or NG	OK: Correct data sent NG: Incorrect data sent	-
Response	Transponder chip signal / OK or NG	OK: Correct data sent NG: Incorrect data sent	-
ID-BOX Sleep Condition	ID code box condition / Yes or No	Yes: ID code box in sleep condition No: ID code box not in sleep condition	-
ID-BOX Start Condition	ID code box condition / Yes or No	Yes: ID code box sends wake up signal No: ID code box does not send wake up signal	-
Engine Start Request	ID code box start request condition / OK or NG	OK: Start request condition signal received (past) NG: Start request condition signal not received (past)	-
S Code Check	S code verification result / OK or NG	OK: Verification confirmed NG: Verification not confirmed	-
L Code Check	L code verification result / OK or NG	OK: Verification confirmed NG: Verification not confirmed	-
Unlock Request Receive	Steering unlock command reception status / OK or NG	OK: Steering unlock request received NG: Steering unlock request not received	-
Lock Request Receive	Steering lock command reception status / OK or NG	OK: Steering lock request received NG: Steering lock request is not received	-
S Code Check		OK: Verification confirmed (past)	

(Past)	S code verification result (past) / OK or NG	NG: Verification not confirmed (past)	-
L Code Check (Past)	L code verification result (past) / OK or NG	OK: Verification confirmed (past) NG: Verification not confirmed (past)	-
EFI Code Receive	SFI code receive (when DTC stored) / OK or NG	OK: SFI code received NG: SFI code not received	-
EFI communication	SFI communication / OK or NG	OK: SFI communication normal NG: SFI communication abnormal	-

PERFORM ACTIVE TEST

HINT:

Using the intelligent tester to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Entry&Start / Active Test.

e. According to the display on the intelligent tester, perform the Active Test.

Entry&Start

Tester Display	Test Part	Control Range	Diagnostic Note
Security Indicator	Security indicator light	ON or OFF	-

for Preparation Click here

HINT:

If a trouble code is output during the DTC check, check the circuit listed for that code in the table below. Then proceed to the "See page" below.

Certification ECU

DTC Code	Detection Item	Trouble Area	See page
B2784	Antenna Coil Open / Short	- Certification ECU (Smart key ECU assembly) - Engine switch	Click here
B278A	Short to GND in Immobiliser System Power Source Circuit	- Harness or connector - Engine switch - Certification ECU (Smart key ECU assembly)	Click here
B2790	ID BOX EEPROM Malfunction	ID code box (Immobiliser code ECU)	Click here

HINT:

The DTCs for the engine immobiliser system are specified above. If other codes are output, check the DTC chart for the ECM.

ECM

DTC Code	Detection Item	Trouble Area	See page
B2799	Engine Immobiliser System Malfunction	- Harness or connector - ID code box (Immobiliser code ECU) -ECM	Click here
B279A	Theft Deterrent System Communication Line High Fixation	- Harness or connector - ID code box (Immobiliser code ECU) - ECM	Click here
B279C	Theft Deterrent System Presence Detection	ECM	Click here

DTC B2784 Antenna Coil Open / Short

for Preparation Click here

DESCRIPTION

This DTC is output when there is an open or short malfunction in the transponder key coil (built into the engine switch).

DTC Code	DTC Detection Condition	Trouble Area
B2784	The antenna coil is open/shorted.	• Certification ECU (Smart key ECU assembly) • Engine switch

INSPECTION PROCEDURE

1.CLEAR DTC

a. Clear the DTCs (Click here).

NEXT

2.CHECK FOR DTC

a. Check for DTCs (Click here).

OK:
DTC B2784 is not output.

NG → Go to step 3

OK

USE SIMULATION METHOD TO CHECK (Click here)

3.REPLACE ENGINE SWITCH

a. Temporarily replace the engine switch with a new one (Click here).

NEXT

4.CLEAR DTC

a. Clear the DTCs (Click here).

NEXT

5.CHECK FOR DTC

a. Recheck for DTCs (Click here).

OK:
DTC B2784 is not output.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK

END (ENGINE SWITCH IS DEFECTIVE)

DTC B2799 Engine Immobiliser System Malfunction

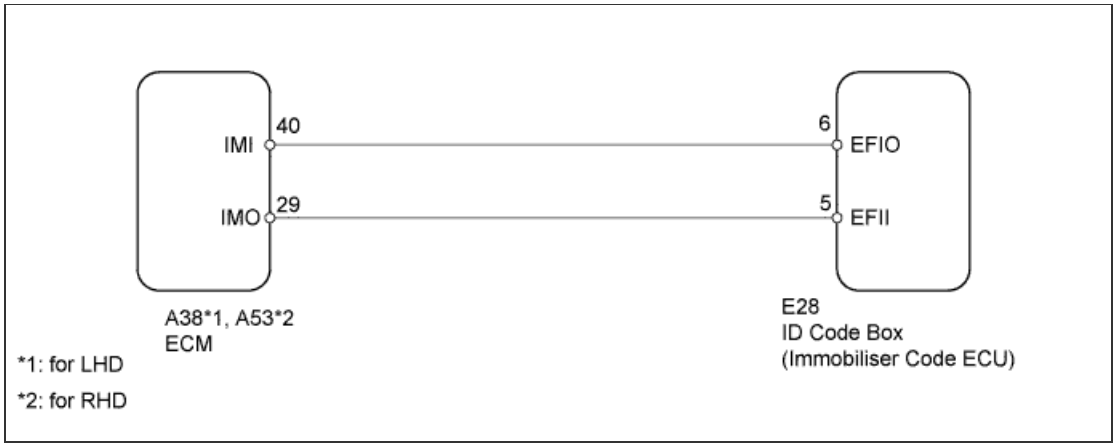
for Preparation Click here

DESCRIPTION

This DTC is output when one of the following occurs: 1) the ECM detected errors in its own communications with the ID code box (immobiliser code ECU); 2) the ECM detects errors in the communication lines; or 3) the ECU communication ID between the ID code box (immobiliser code ECU) and ECM is different and an engine start is attempted.
Before troubleshooting for this DTC, make sure no certification ECU DTCs are stored. If stored, troubleshoot the certification ECU DTCs first.

DTC Code	DTC Detection Condition	Trouble Area
B2799	One of following conditions is met: • Error in the communication between the ECM and the ID code box (immobiliser code ECU). • Error in the communication lines. • The communication ID is different during communication with the ID code box (immobiliser code ECU).	• Harness or connector • ECM • ID code box (immobiliser code ECU)

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CLEAR DTC

a. Clear the DTCs (Click here).

NEXT

2.CHECK FOR DTC

a. Check for DTCs (Click here).

OK:
DTC B2799 is not output.

NG → **Go to step 3**

OK

USE SIMULATION METHOD TO CHECK (Click here)

3.REREGISTER ECU CODE

a. Reregister the recognition codes in the ECUs.

NEXT

4.CLEAR DTC

a. Clear the DTCs (Click here).

NEXT

5.CHECK FOR DTC

a. Check for DTCs (Click here).

OK:
DTC B2799 is not output.

NG → Go to step 6

OK

END (RECOGNITION CODE IN ECU IS DEFECTIVE)

6.CHECK CONNECTION OF CONNECTOR

a. Turn the engine switch off.

b. Check that the connectors are properly connected to the ECM and the ID code box (immobiliser code ECU).

OK:
Connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

7.CHECK HARNESS AND CONNECTOR (ID CODE BOX (IMMOBILISER CODE ECU) - ECM)

a. for LHD:

i. Disconnect the E28 box connector.

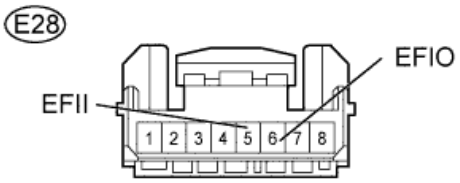
ii. Disconnect the A38 ECU connector.

iii. Measure the resistance according to the value(s) in the table below.

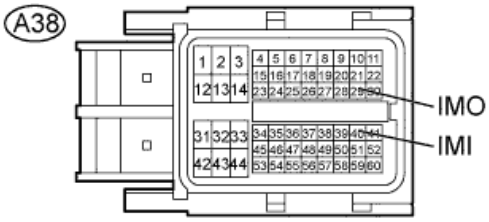
Standard Resistance:

Tester Connection	Condition	Specified Condition
E28-5 (EFII) - A38-29 (IMO)	Always	Below 1 Ω
E28-6 (EFIO) - A38-40 (IMI)		
E28-5 (EFII) or A38-29 (IMO) - Body ground	Always	10 kΩ or higher
E28-6 (EFIO) or A38-40 (IMI) - Body ground		

Front view of wire harness connector:
(to ID Code Box)



Front view of wire harness connector:
(to ECM)



b. for RHD:

i. Disconnect the E28 box connector.

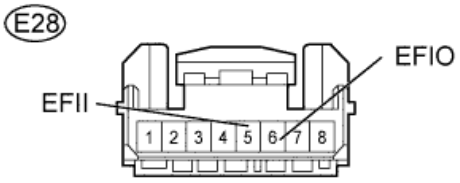
ii. Disconnect the A53 ECU connector.

iii. Measure the resistance according to the value(s) in the table below.

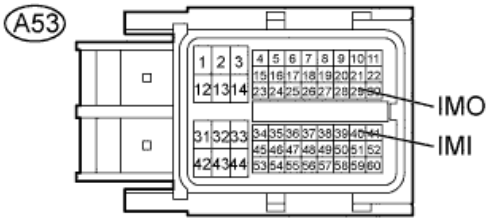
Standard Resistance:

Tester Connection	Condition	Specified Condition
E28-5 (EFII) - A53-29 (IMO)	Always	Below 1 Ω
E28-6 (EFIO) - A53-40 (IMI)		
E28-5 (EFII) or A53-29 (IMO) - Body ground	Always	10 kΩ or higher
E28-6 (EFIO) or A53-40 (IMI) - Body ground		

Front view of wire harness connector:
(to ID Code Box)



Front view of wire harness connector:
(to ECM)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

8.REPLACE ECM

a. Temporarily replace the ECM with a new one (Click here).

NEXT

9.REGISTER ECU CODE

a. Register the recognition codes in the ECUs.

NEXT

10.CLEAR DTC

a. Clear the DTCs (Click here).

NEXT

11.CHECK FOR DTC

a. Check for DTCs (Click here).

OK:
DTC B2799 is not output.

NG → REPLACE ID CODE BOX (IMMOBILISER CODE ECU)

OK

END (ECM IS DEFECTIVE) (**Click here**)

DTC B278A Short to GND in Immobiliser System Power Source Circuit

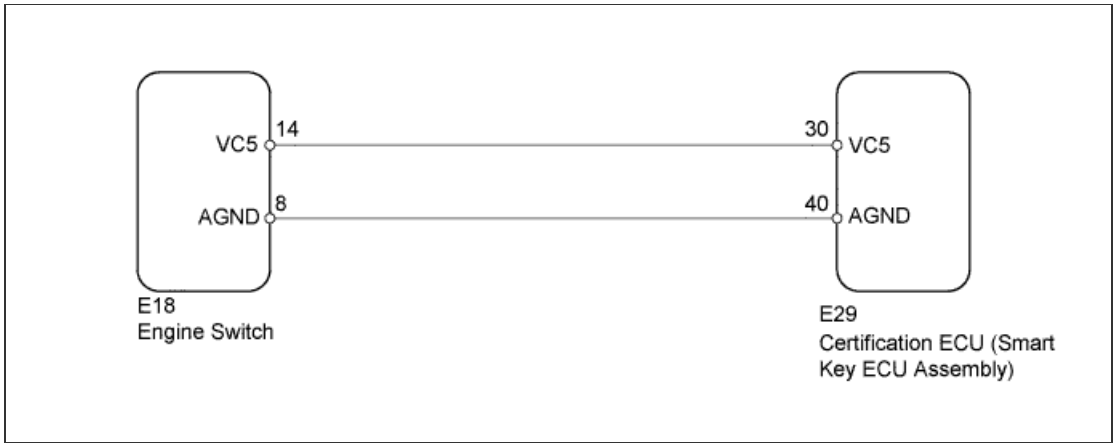
for Preparation Click here

DESCRIPTION

This DTC is output when the engine switch power source supply line is open or shorted.

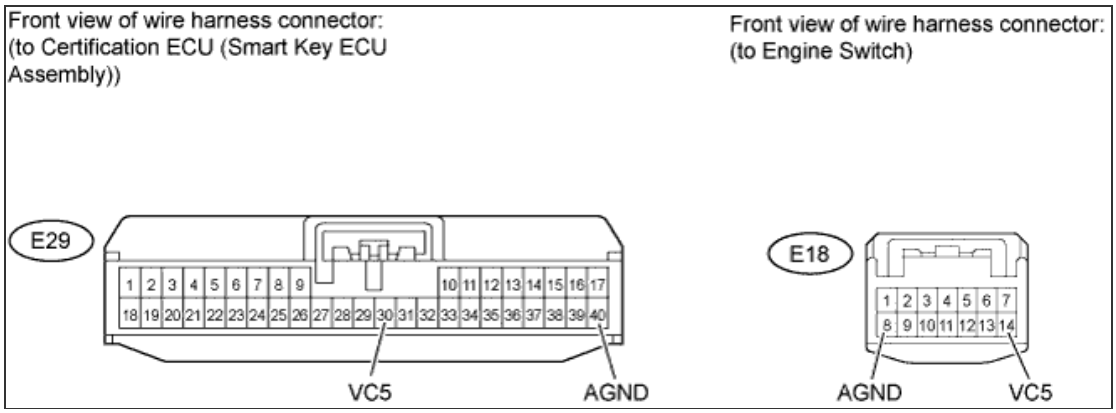
DTC Code	DTC Detection Condition	Trouble Area
B278A	The engine switch power source supply line is open or shorted.	• Harness or connector • Engine switch • Certification ECU (smart key ECU assembly)

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU (SMART KEY ECU ASSEMBLY) - ENGINE SWITCH)



a. Disconnect the E29 ECU connector.

b. Disconnect the E18 switch connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E29-30 (VC5) - E18-14 (VC5)	Always	Below 1 Ω
E29-40 (AGND) - E18-8 (AGND)		
E29-30 (VC5) or E18-14 (VC5) -		

Body ground	Always	10 kΩ or higher
E29-40 (AGND) or E18-8 (AGND) - Body ground		

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK ↓

2.REPLACE ENGINE SWITCH

a. Temporarily replace the engine switch with a new one (Click here).

NEXT ↓

3.CLEAR DTC

a. Clear the DTCs (Click here).

NEXT ↓

4.CHECK FOR DTC

a. Check for DTCs (Click here).

OK:
DTC B278A is not output.

NG → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

OK ↓

END (ENGINE SWITCH IS DEFECTIVE)

DTC B279A Theft Deterrent System Communication Line High Fixation

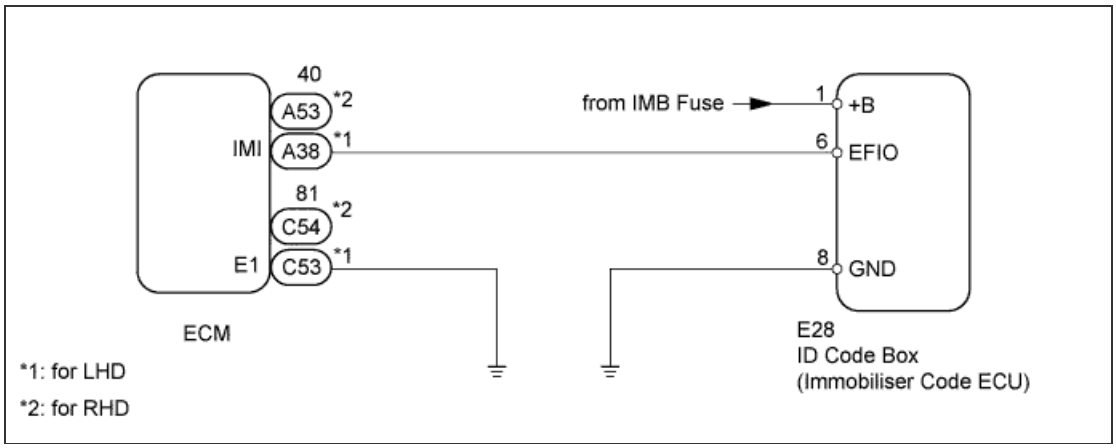
for Preparation Click here

DESCRIPTION

If the communication line (EFIO-IMI) to the ID code box (immobiliser code ECU) is stuck on HI output, the ECM outputs this DTC.

DTC Code	DTC Detection Condition	Trouble Area
B279A	When the communication line (EFIO-IMI) between the ECM and the ID code box (immobiliser code ECU) is stuck on HI output.	• Harness or connector • ID code box (immobiliser code ECU) • ECM

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CLEAR DTC

a. Clear the DTCs (Click here).

NEXT

2.CHECK FOR DTC

a. Check for DTCs (Click here).

HINT:

If DTCs other than DTC B279A are output, troubleshoot those DTCs first.

Result

Result	Proceed to
DTC B279A is output	A
DTC B279A and other DTCs are output	B

B → Go to DIAGNOSTIC TROUBLE CODE CHART (Click here)

A

3.CHECK HARNESS AND CONNECTOR (ID CODE BOX - ECM)

a. for LHD:

i. Disconnect the E28 box connector.

ii. Disconnect the A38 ECU connector.

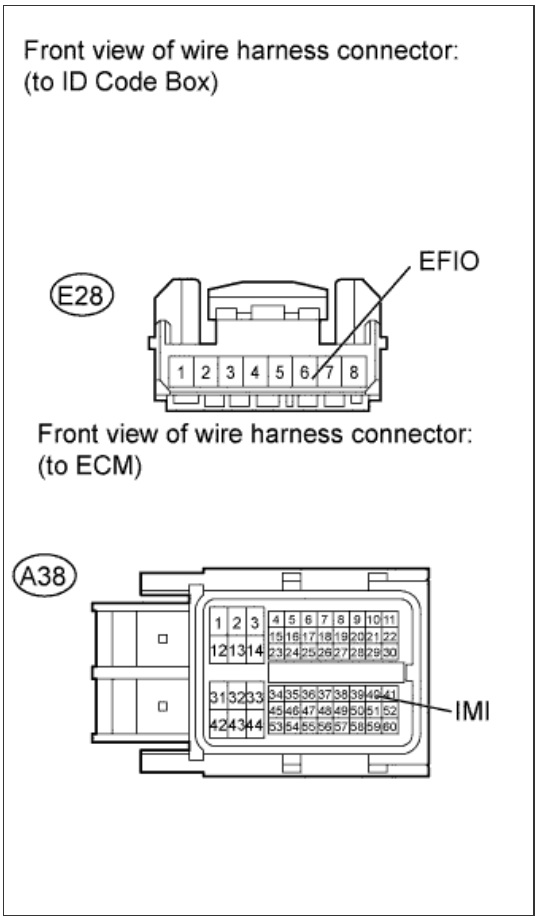
iii. Measure the resistance and voltage according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E28-6 (EFIO) - A38-40 (IMI)	Always	Below 1 Ω
E28-6 (EFIO) or A38-40 (IMI) - Body ground	Always	10 kΩ or higher

Standard Voltage:

Tester Connection	Condition	Specified Condition
E28-6 (EFIO) - Body ground	Always	Below 1 V
A38-40 (IMI) - Body ground		



b. for RHD:

i. Disconnect the E28 box connector.

ii. Disconnect the A53 ECU connector.

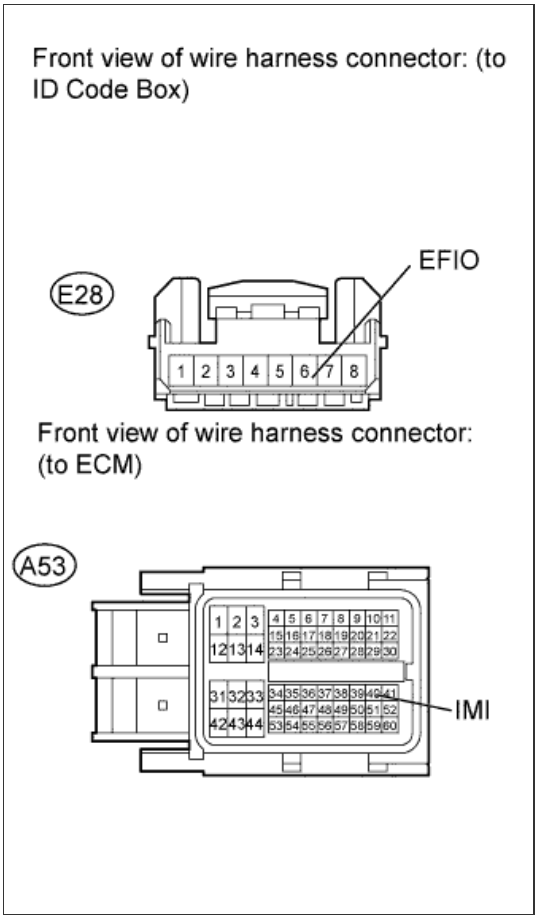
iii. Measure the resistance and voltage according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E28-6 (EFIO) - A53-40 (IMI)	Always	Below 1 Ω
E28-6 (EFIO) or A53-40 (IMI) - Body ground	Always	10 kΩ or higher

Standard Voltage:

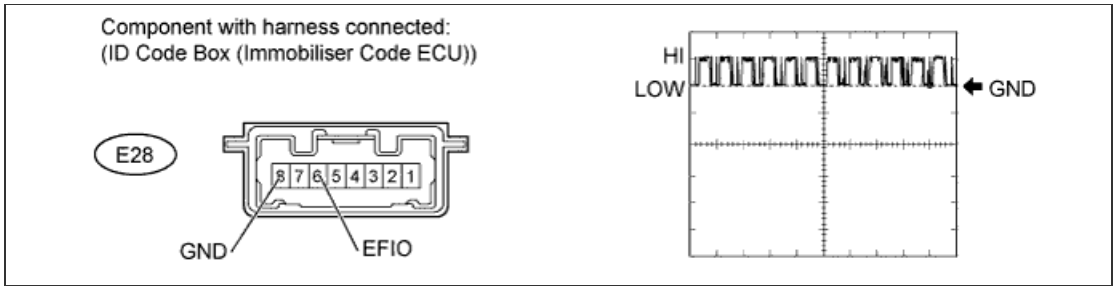
Tester Connection	Condition	Specified Condition
E28-6 (EFIO) - Body ground	Always	Below 1 V
A53-40 (IMI) - Body ground	Always	Below 1 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK ID CODE BOX (IMMOBILISER CODE ECU) (OUTPUT)



a. Using an oscilloscope, check the waveform.

Measurement Condition

Item	Content
Tester Connection	E28-6 (EFIO) - E28-8 (GND)
Tool Setting	10 V/DIV., 100 msec./DIV.
Condition	Engine switch on (IG)

OK:

Waveform is output normally (see illustration).

NG → Go to step 5

OK →

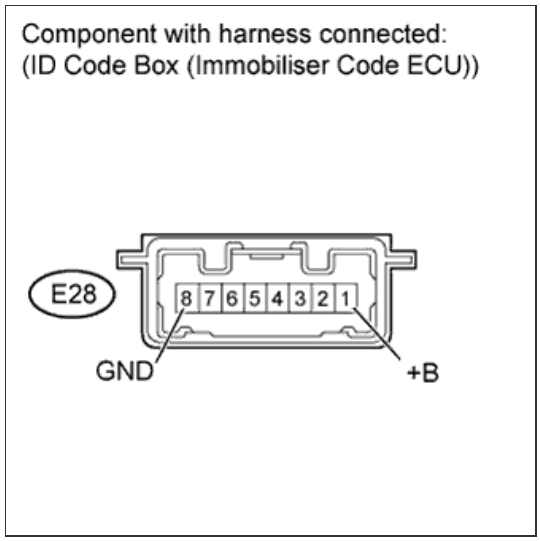
REPLACE ECM (Click here)

5.CHECK ID CODE BOX (POWER SOURCE AND BODY GROUND)

a. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connector	Condition	Specified Condition
E28-1 (+B) - E28-8 (GND)	Always	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK →

REPLACE ID CODE BOX (IMMOBILISER CODE ECU)

DTC B2790 ID BOX EEPROM Malfunction

for Preparation Click here

DESCRIPTION

This DTC is output when the ID code box (immobiliser code ECU) detects an internal malfunction.

DTC Code	DTC Detection Condition	Trouble Area
B2790	The ID code box detects an internal malfunction.	ID code box (immobiliser code ECU)

INSPECTION PROCEDURE

1.REPLACE ID CODE BOX (IMMOBILISER CODE ECU)

a. Replace the ID code box (immobiliser code ECU).

NEXT

2.REGISTER ECU CODE

a. Reregister the recognition codes in the ECUs.

NEXT

END

DTC B279C Theft Deterrent System Presence Detection

for Preparation Click here

DESCRIPTION

If an ECM that is incompatible with the engine immobiliser system is installed, the ECM outputs this DTC.

DTC Code	DTC Detection Condition	Trouble Area
B279C	When an ECM that is incompatible with the engine immobiliser system is installed.	ECM

INSPECTION PROCEDURE

1.REPLACE CURRENT ECM WITH PROPER ECM

a. Replace the current ECM with the proper ECM (Click here).

NEXT

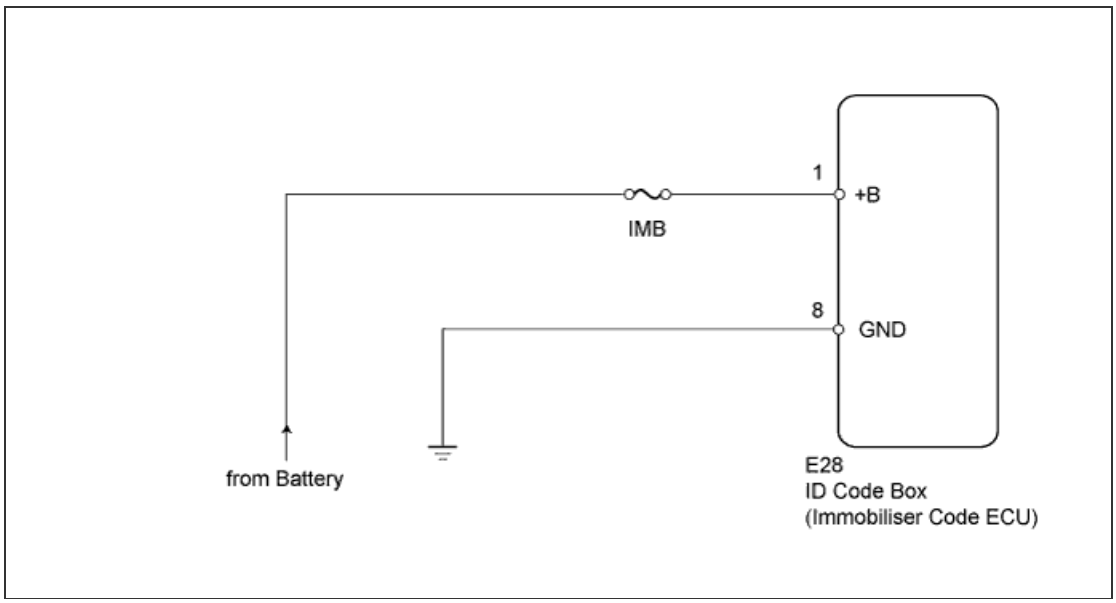
END

for Preparation Click here

DESCRIPTION

This circuit provides power to operate the ID code box (immobiliser code ECU).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (IMB)

a. Remove the IMB fuse from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
IMB fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

2.CHECK HARNESS AND CONNECTOR (ID CODE BOX - BATTERY AND BODY GROUND)

a. Disconnect the E28 box connector.

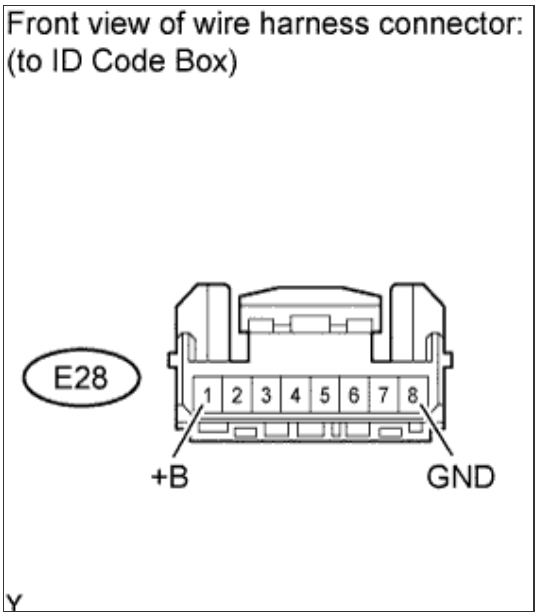
b. Measure the resistance and voltage according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E28-8 (GND) - Body ground	Always	Below 1 Ω

Standard Voltage:

Tester Connection	Condition	Specified Condition
E28-1 (+B) - Body ground	Always	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (Click here)

for Preparation Click here

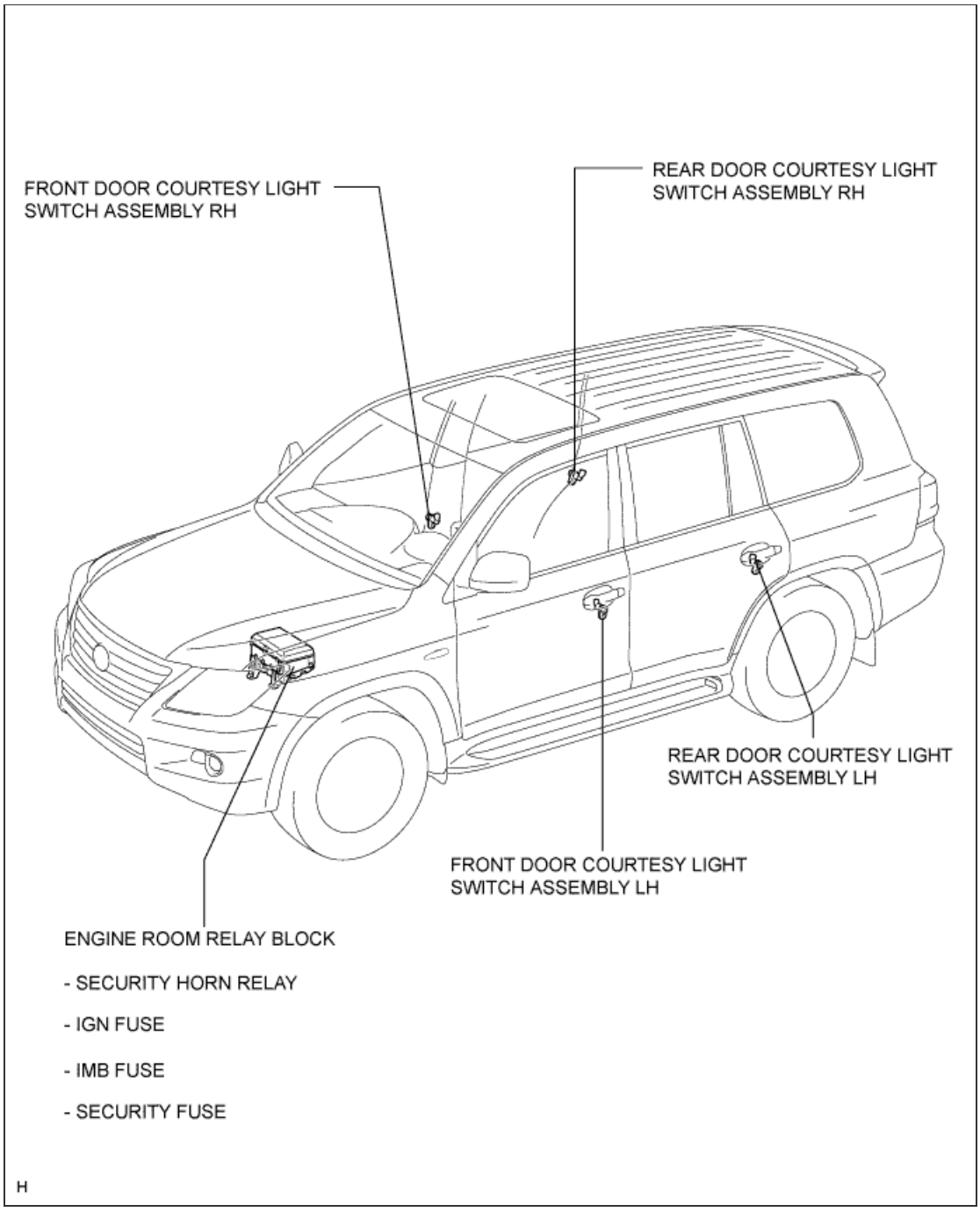
1.NOTICE FOR ARMED STATE

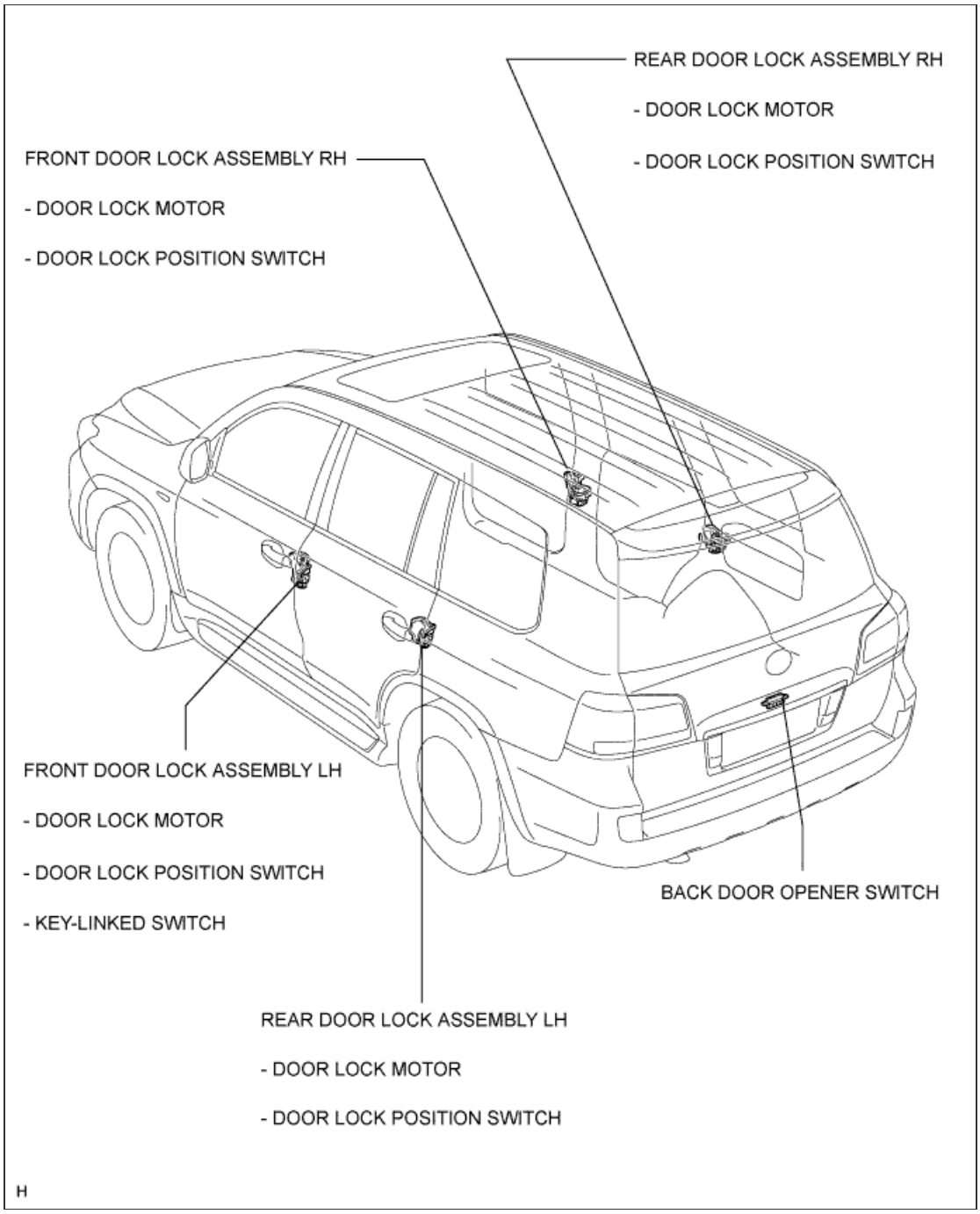
If the vehicle is left in the armed state for an extended period of time or in another condition that causes the battery to be fully depleted, the alarm may sound simultaneously with the recharging of the battery or the replacement of the battery with a new one.* If this occurs, immediately unlock the vehicle's doors through a wireless unlock operation or entry unlock operation to stop the alarm.

HINT:

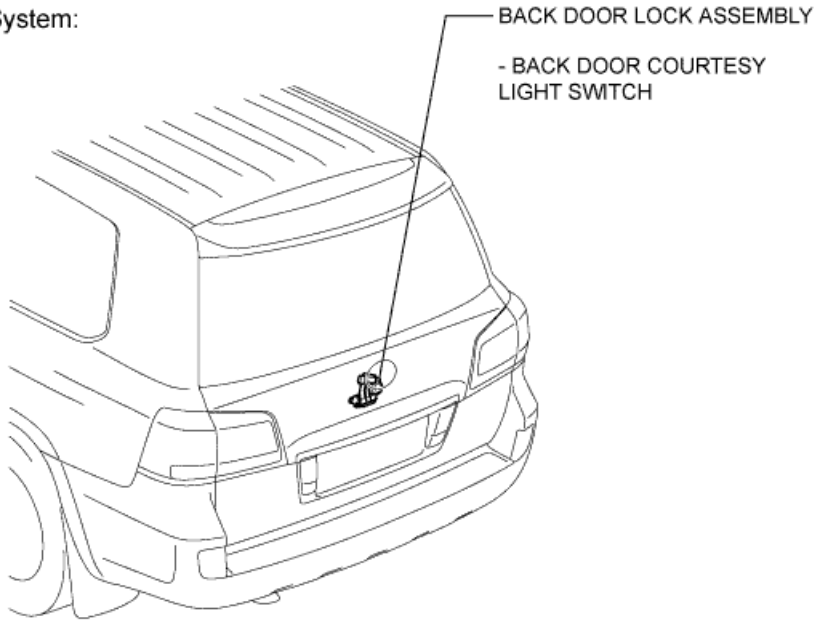
*: This may occur in the following situation: during active arming mode while in the armed state, the cable of the negative (-) battery terminal is disconnected and reconnected (Click here).

for Preparation Click here

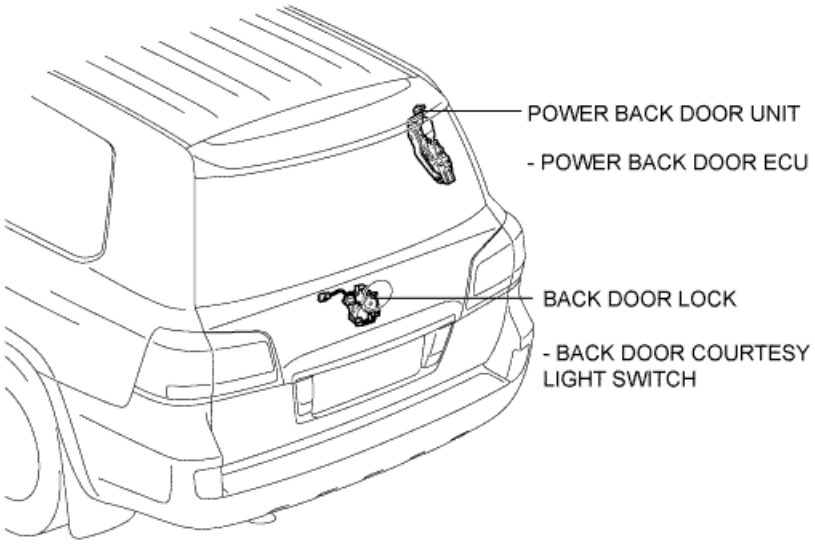



REAR DOOR LOCK ASSEMBLY RH
- DOOR LOCK MOTOR
- DOOR LOCK POSITION SWITCH
FRONT DOOR LOCK ASSEMBLY RH
- DOOR LOCK MOTOR
- DOOR LOCK POSITION SWITCH
FRONT DOOR LOCK ASSEMBLY LH
- DOOR LOCK MOTOR
- DOOR LOCK POSITION SWITCH
- KEY-LINKED SWITCH
BACK DOOR OPENER SWITCH
REAR DOOR LOCK ASSEMBLY LH
- DOOR LOCK MOTOR
- DOOR LOCK POSITION SWITCH
H

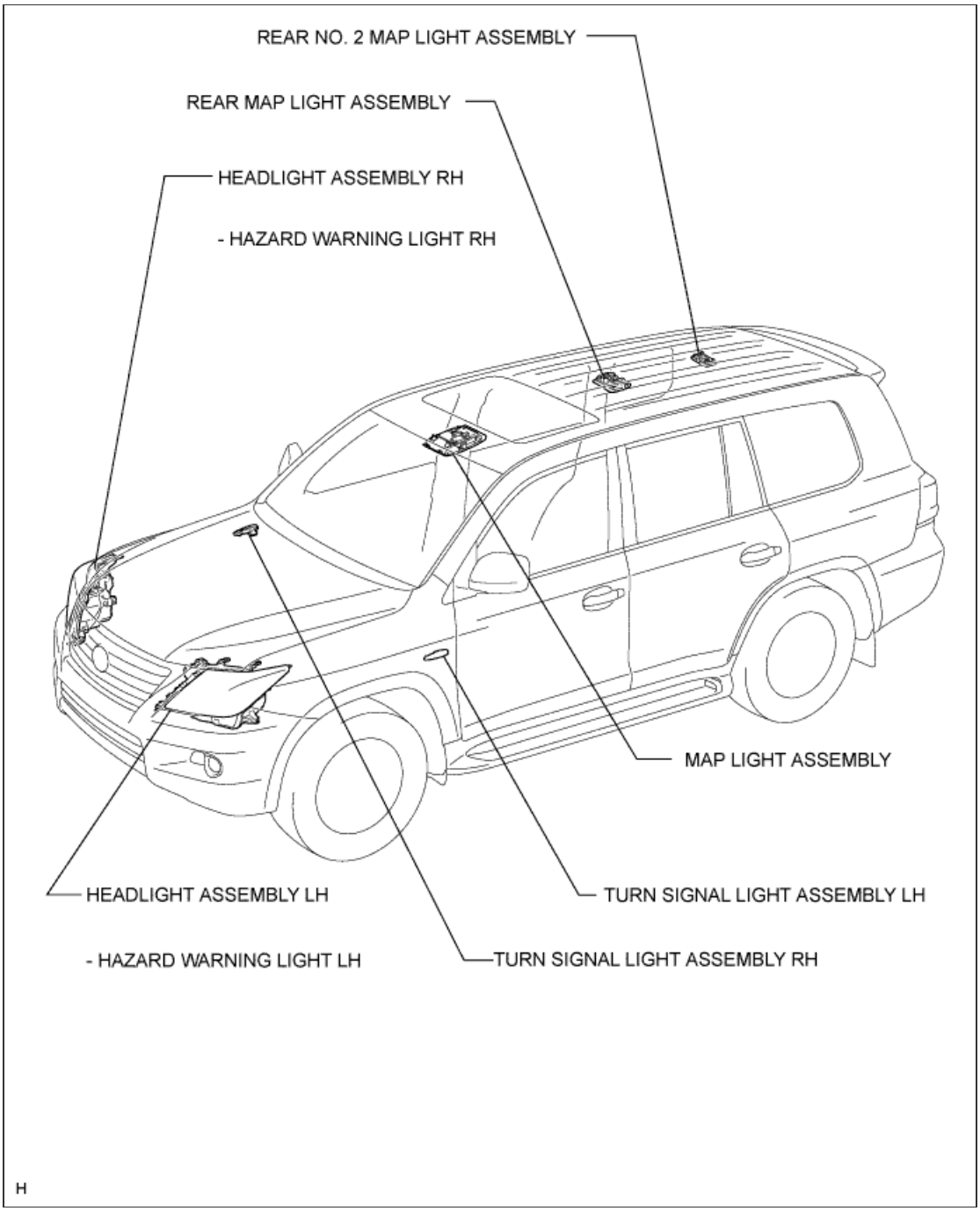
w/o Power Back Door System:



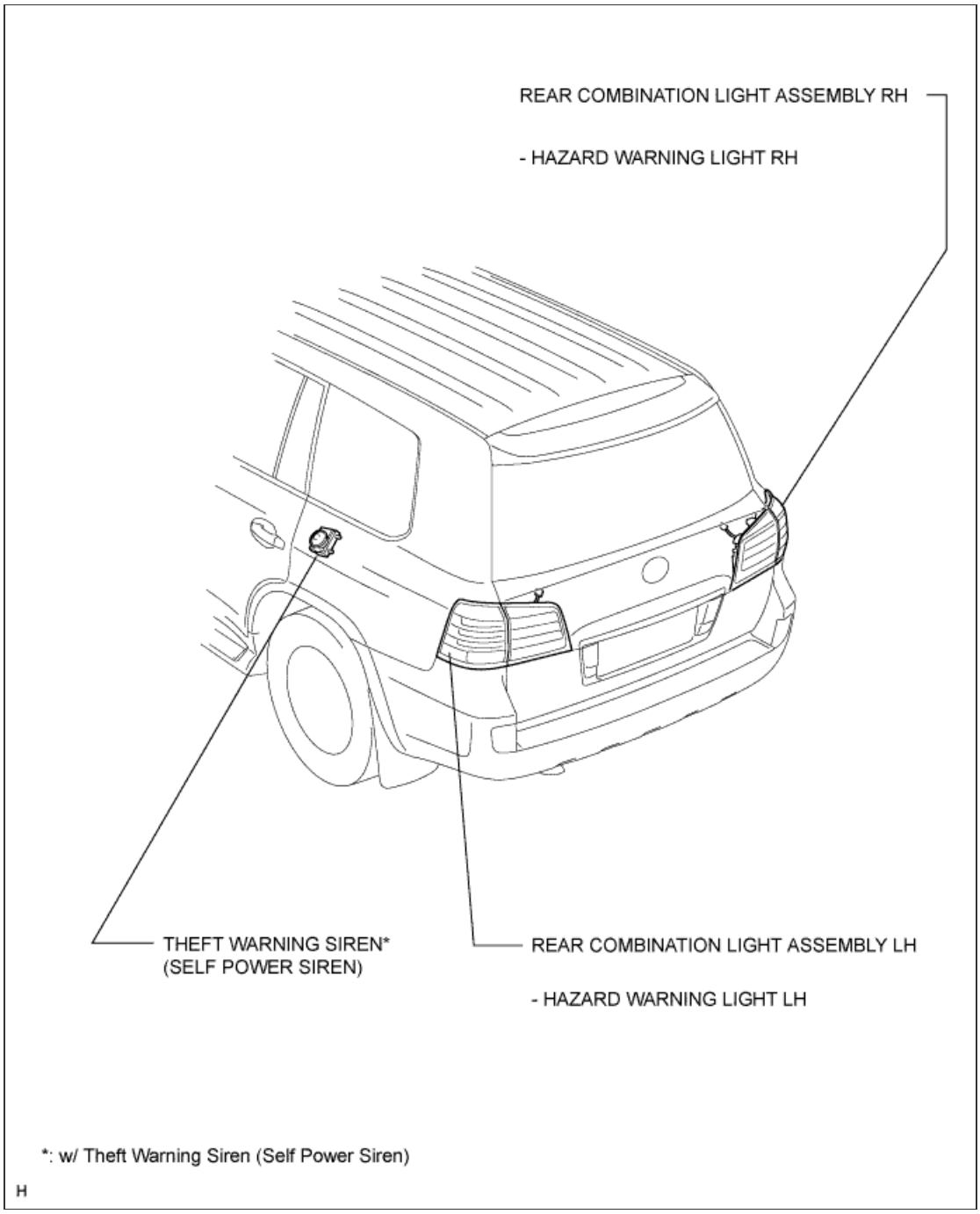
w/ Power Back Door System:



H

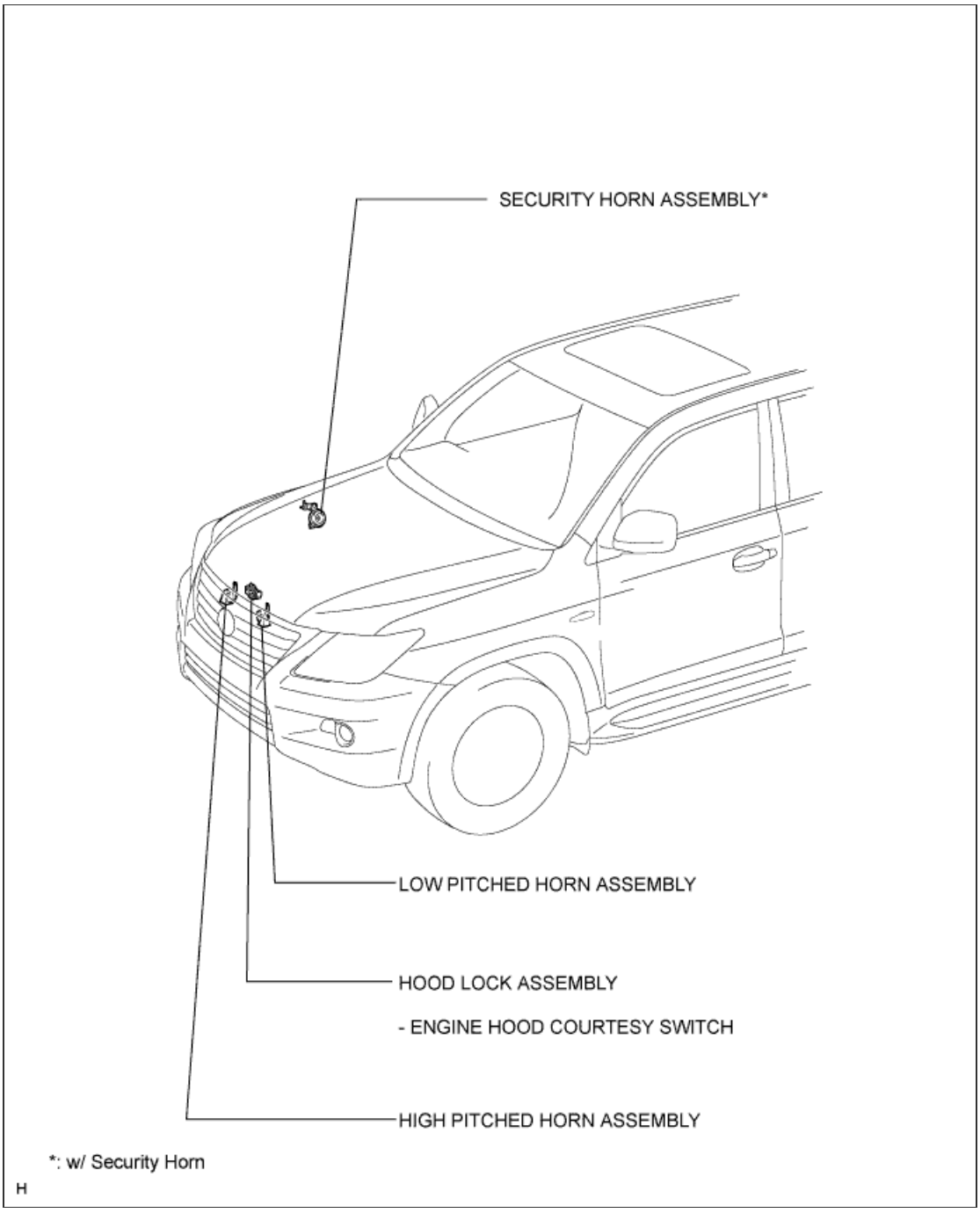

REAR NO. 2 MAP LIGHT ASSEMBLY
REAR MAP LIGHT ASSEMBLY
HEADLIGHT ASSEMBLY RH
- HAZARD WARNING LIGHT RH
MAP LIGHT ASSEMBLY
HEADLIGHT ASSEMBLY LH
- HAZARD WARNING LIGHT LH
TURN SIGNAL LIGHT ASSEMBLY LH
TURN SIGNAL LIGHT ASSEMBLY RH

H



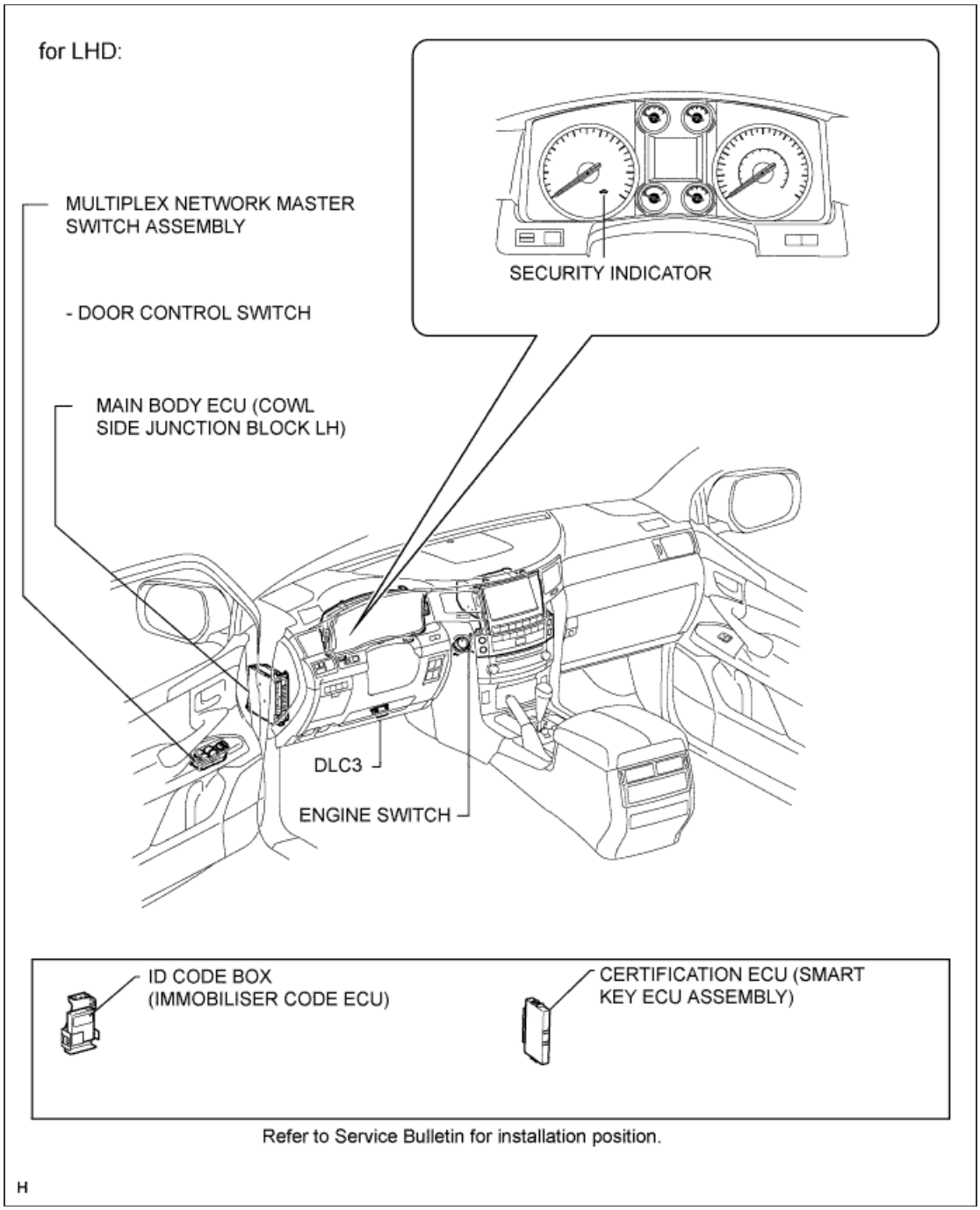
*: w/ Theft Warning Siren (Self Power Siren)

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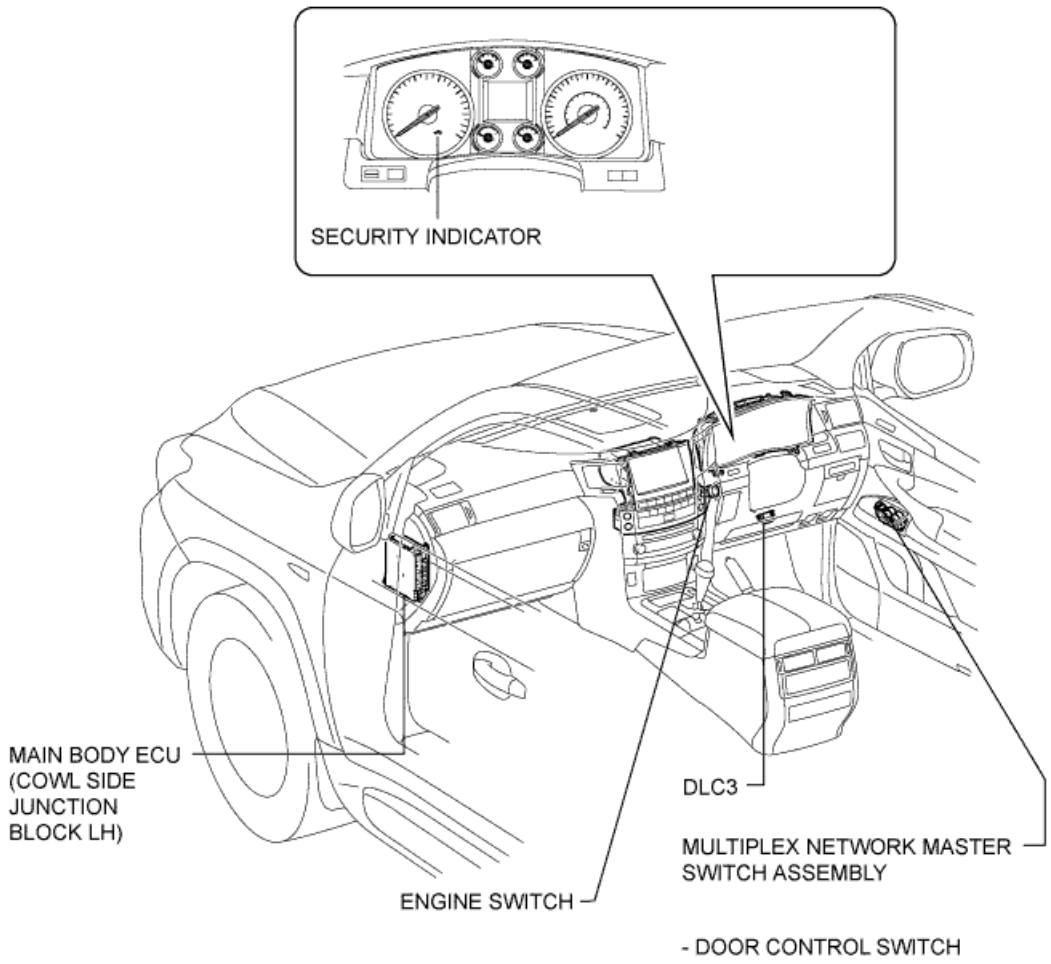


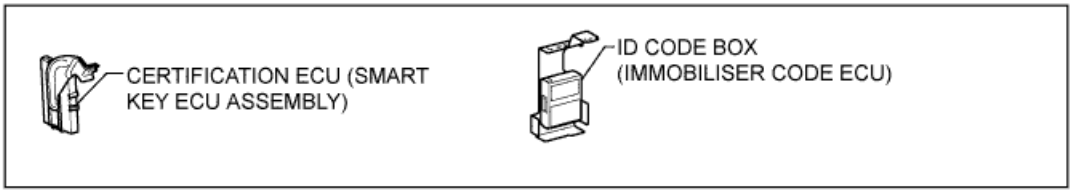
*: w/ Security Horn

H


for LHD:
MULTIPLEX NETWORK MASTER SWITCH ASSEMBLY
- DOOR CONTROL SWITCH
MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)
SECURITY INDICATOR
DLC3
ENGINE SWITCH
ID CODE BOX (IMMOBILISER CODE ECU)
CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)
Refer to Service Bulletin for installation position.
H

for RHD:

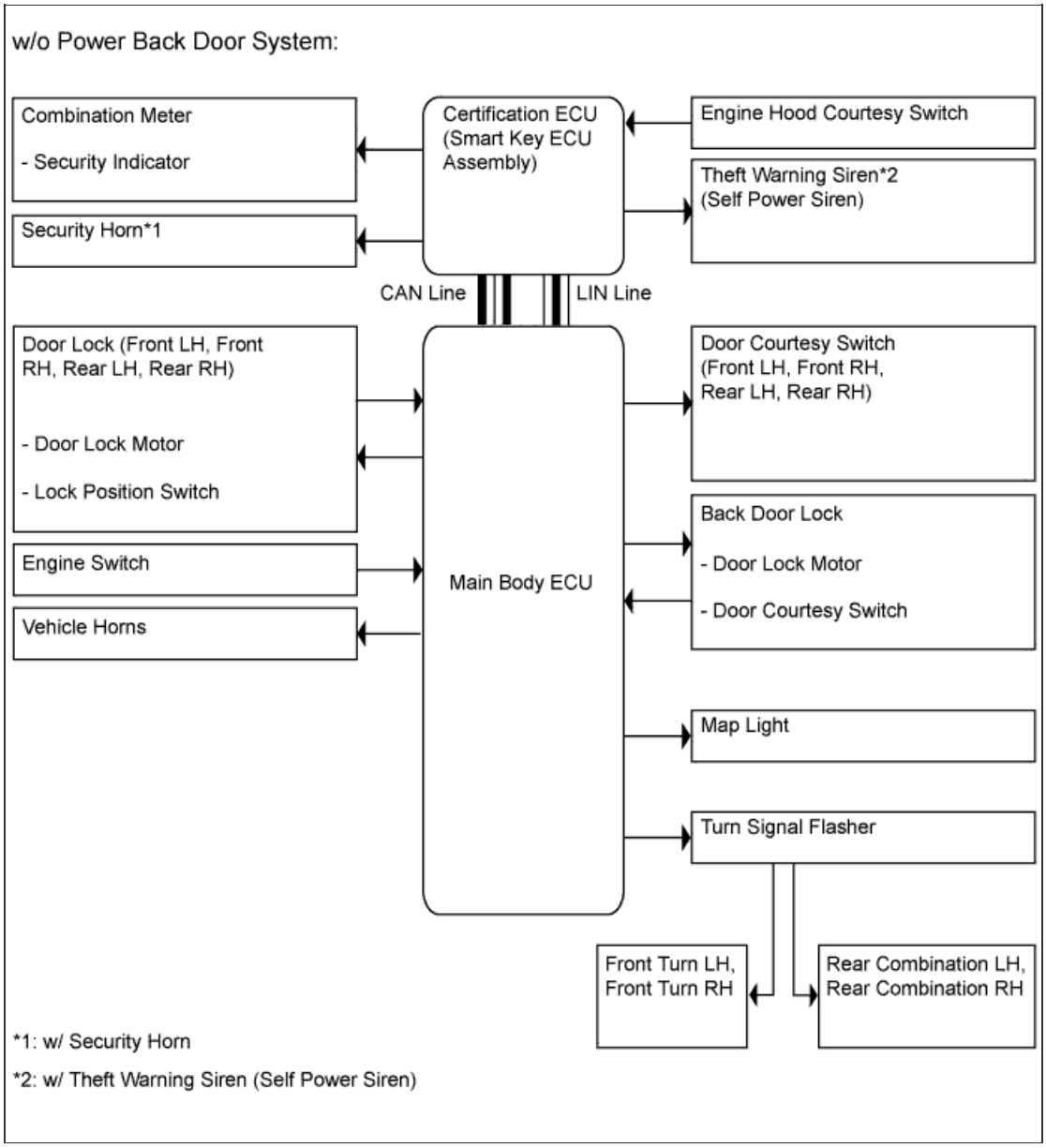


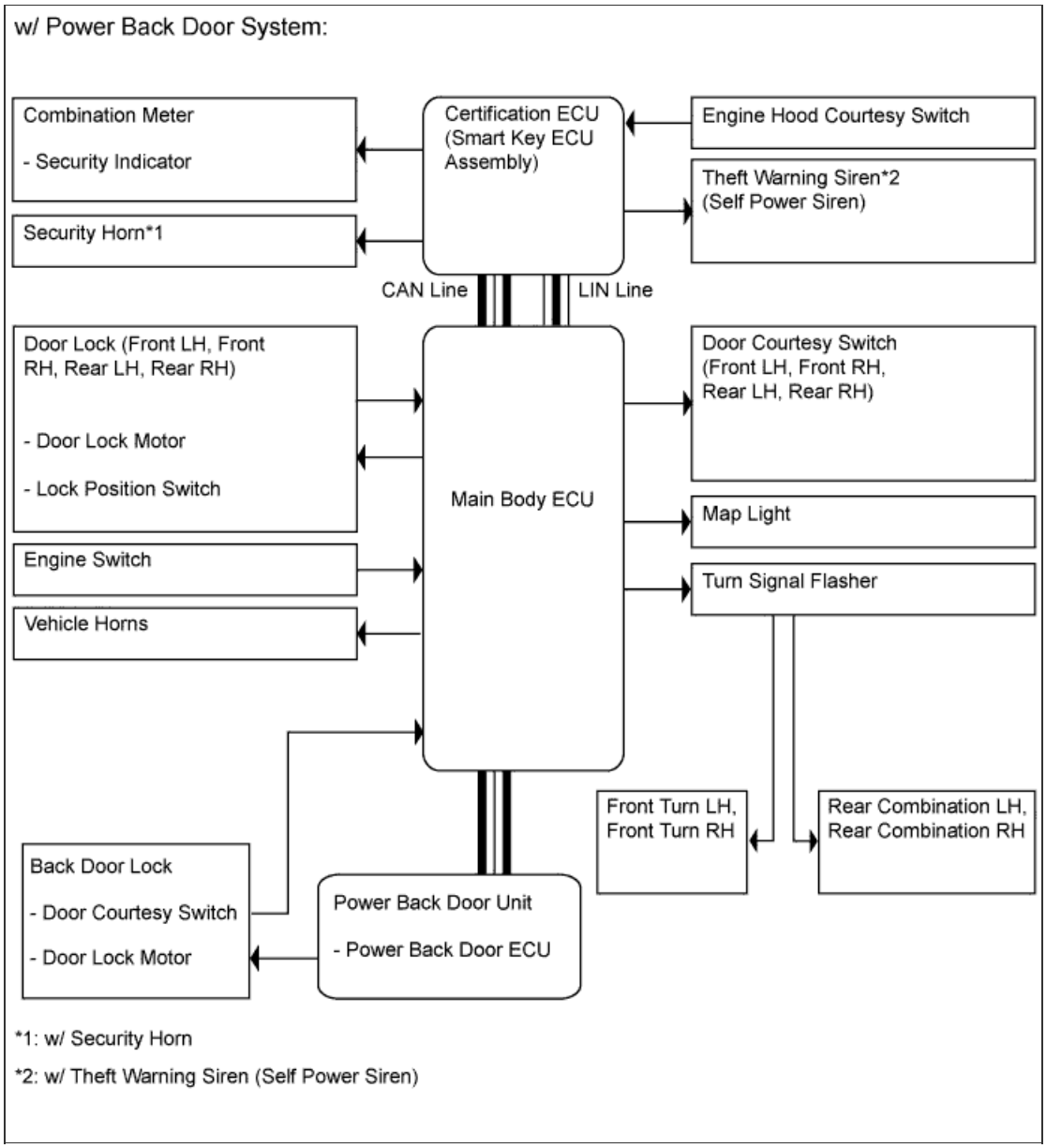


Refer to Service Bulletin for installation position.

H

for Preparation Click here





Communication Table

Sender	Receiver	Signal	Line
Main Body ECU	Certification ECU (Smart Key ECU Assembly)	• Door courtesy light switch signal • Engine switch status signal • Driver door lock position signal • Driver door key-linked lock switch signal • Front passenger door lock position signal • Front passenger door manual lock switch signal • Rear door lock LH position signal • Rear door lock RH position signal • Back door courtesy switch signal • Back door open signal	CAN
Main Body ECU	Power Back Door ECU*	Back door lock status signal*	CAN
Certification ECU (Smart Key ECU Assembly)	Main Body ECU	• Driver door lock control signal • Front passenger door lock control signal • Rear door lock LH control signal • Rear door lock RH control signal • Back door lock control signal • Horn signal • Hazard warning light flash signal • Map light and interior light illumination signal	CAN

*: w/ Power Back Door System

for Preparation Click here

THEFT DETERRENT SYSTEM DESCRIPTION

The theft deterrent system is designed to deter vehicle break-ins and theft. If an attempted break-in or theft is detected, the vehicle horns and security horn*1 or theft warning siren (self power siren)*2 will sound, the room light will illuminate and hazard warning lights will flash. The system detects an attempted break-in or theft when any of the following occurs: 1) the vehicle is forcibly entered; 2) the engine hood is forcibly opened; 3) the doors are unlocked without the use of a key; or 4) the cable from the negative (-) battery terminal is disconnected and reconnected.
If the system enters the alarm sounding state, any unlocked doors will automatically lock.
The system has 4 states: disarmed state, arming preparation state, armed and alarm sounding state.
*1: w/ Security Horn
*2: w/ Theft Warning Siren (Self Power Siren)

FUNCTION OF MAIN COMPONENT

*1: w/ Security Horn
*2: w/ Theft Warning Siren (Self Power Siren)

Function	Outline
Security indicator	Informs driver of the theft deterrent system status.
Security horn*1	Sounds when an attempted break-in or theft is detected. Located in the engine compartment.
Theft warning siren (Self power siren)*2	Sounds when an attempted break-in or theft is detected. Located on the quarter inner LH.
Map light and rear map light	Illuminates when an attempted break-in or theft is detected. The map light has intrusion sensor cancel switch. For vehicles equipped with a tilt sensor, the intrusion sensor cancel switch also functions as tilt sensor OFF switch.
Hazard warning light	Begins flashing when an attempted break-in or theft is detected.
Vehicle horns	Sounds when an attempted break-in or theft is detected.
Door courtesy light switch	Detects the door open status (open or closed).
Door lock position switch	Detects the door lock status (locked or unlocked).
Engine hood courtesy switch	Detects the engine hood open status (open or closed).
Back door courtesy switch	Detects the back door open status (open or closed).
Main body ECU	Detects the engine switch condition (off, on (ACC), or on (IG) or start).

SYSTEM FUNCTION

a. Disarmed state:

- The alarm function is not operating.
- The theft deterrent system is not operating.

b. Arming preparation state:

The theft deterrent system is not operating.

c. Armed state:

The theft deterrent system is operating.

d. Alarm sounding state:

The alarm function is operating (30 +/-5 seconds).

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the theft deterrent system.**
- ***: Use the intelligent tester.**
- **Troubleshooting of the theft deterrent system is based on the premise that the door lock control system, the wireless door lock control system, the lighting system, the horn system, the engine immobiliser system and the entry and start system are operating normally. Check these systems first before troubleshooting the theft deterrent system.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.INSPECT COMMUNICATION FUNCTION OF CAN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the CAN communication system is functioning normally.

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B. → Go to CAN COMMUNICATION SYSTEM (Click here)

C. → Go to CAN COMMUNICATION SYSTEM (Click here)

A

4.CHECK LIN COMMUNICATION SYSTEM*

a. The theft deterrent system uses the LIN communication system to communicate. Check that the LIN communication system is functioning normally.

Result

Result	Proceed to
LIN communication system is normal	A
LIN communication system is malfunctioning	B

B. → Go to LIN COMMUNICATION SYSTEM (Click here)

A

5.PROBLEM SYMPTOMS TABLE

a. Refer to Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. → Go to step 7

A

6.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Data List / Active Test (Click here)

b. Terminals of ECU (Click here)

c. Operation Check (Click here)

d. Inspection

NEXT

7.REPAIR OR REPLACE

NEXT

8.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Before checking the theft deterrent system function, cancel the entry and start system.**
- **If the battery is reconnected during the armed state, the system may enter the alarm sounding state and the alarm may sound. If so, perform a wireless unlock operation to stop the alarm.**
- **For vehicles with a theft warning siren (self power siren), if the battery is disconnected during the armed state, the system may enter the alarm sounding state and the alarm may sound. If so, perform a wireless unlock operation to stop the alarm.**

OUTLINE OF THEFT DETERRENT SYSTEM

a. When the theft deterrent system detects that the vehicle is being tampered with, the horns sound and lights flash continuously. For vehicles with a siren, the theft warning siren (self power siren) sounds simultaneously.

b. The system has active arming mode (refer to "Active Arming Mode").

c. Active arming mode has 4 states: disarmed state, arming preparation state, armed state and alarm sounding state.

i. Disarmed state:

- The alarm function is not operating.
- The theft deterrent system is not operating.

ii. Arming preparation state:

- The theft deterrent system is not operating.

iii. Armed state:

- The theft deterrent system is operating.

iv. Alarm sounding state:

- The alarm function is operating (30 +/-5 seconds).

Alarm Method and Time

Alarm Method	Hazard Warning Light	Blinking (cycle of flasher relay)
	Vehicle Horn	Sounding (cycle of 0.4 seconds)
	Security Horn*1	Sounding (cycle of 0.4 seconds)
	Room Light	Illuminating
	Theft Warning Siren (Self Power Siren)*2	Sounding (cycle of 0.4 seconds)
	Security Indicator	Illuminating
Alarm Time	30 +/-5 seconds	

*1: w/ Security Horn
*2: w/ Theft Warning Siren (Self Power Siren)

HINT:

- **If during the alarm sounding state, one of the doors is unlocked without using a proper key, a forced door lock signal will be output (refer to "Forced Door Lock Control").**

ACTIVE ARMING MODE

*1: except Europe
*2: For Europe, if the customize parameter "Mech. Key Entry Alarm Cancel (Key Alarm)" is on, it is possible to cancel the alarm. If the parameter is off (default setting), the system will change to the alarm sounding state (Click here).

HINT:

- **Active arming mode starts the alarm control immediately after the doors are locked.**
- **Before checking the theft deterrent system, cancel the entry and start system.**

System State	State Switching Condition	Transfer to
	Perform one of following, and system will go on to "Arming preparation state":	

1. Disarmed state	1. With all doors and engine hood closed, lock all doors by keyless lock operation. 2. With all doors and engine hood closed, lock all doors by wireless operation. 3. With all doors and engine hood closed, lock all doors using mechanical key.*1 4. With any door or engine hood open, lock all doors and close all doors and engine hood.*1	2. Arming preparation state
2. Arming preparation state	Perform one of following, and system will go on to "Disarmed state": 1. Unlock all doors by wireless operation. 2. Unlock all doors using mechanical key.*1, *2 3. Unlock door. 4. Open engine hood. 5. Turn engine switch on (ACC) or on (IG). 6. Reconnect battery.	1. Disarmed state
	Perform one of following, and system will go on to "Armed state": 1. Allow 30 (+/-1.5) seconds to elapse.	3. Armed state
3. Armed State	Perform one of following, and system will go on to "Disarmed state": 1. Unlock all doors by wireless operation. 2. Unlock all doors using mechanical key.*1, *2 3. With brake pedal depressed, put and hold key 10 mm (0.393 in.) from engine switch with key ornament facing engine switch for 5 seconds, and turn engine switch on (IG).	1. Disarmed state
	Perform one of following, and system will go on to "Alarm sounding state": 1. Open engine hood. 2. Open door. 3. Unlock door without using wireless operation. 4. Unlock door without using mechanical key.*1 5. Disconnect and reconnect battery negative (-) cable. **HINT:** For vehicles with a theft warning siren (self power siren), the siren begins to sound as soon as the battery cable is disconnected. 6. Force engine ignition system to turn on without proper engine start method.	4. Alarm sounding state
4. Alarm sounding state	Perform one of following, and system will go on to "Disarmed state": 1. Unlock all doors using wireless operation. 2. Unlock all doors using mechanical key.*1, *2 3. With brake pedal depressed, put and hold key 10 mm (0.393 in.) from engine switch with key ornament facing engine switch for 5 seconds,	1. Disarmed state

	and turn engine switch on (IG).	
	Perform one of following, and system will go on to "Armed state": 1. Allow 30 (+/-5) seconds to elapse.	3. Armed state (alarm stops sounding)

FORCED DOOR LOCK CONTROL

a. The forced door lock control also helps to prevent the vehicle from being tampered with. When a door is unlocked and the alarm starts, the door is forced to lock by a forced door lock signal.

i. Conditions that force the doors to lock:

- 0.4 seconds have elapsed after the previous output of a forced door lock signal.
- The theft deterrent system is in the alarm sounding state of active arming mode.
- A door is unlocked.

PANIC ALARM CONTROL (w/ Panic Switch)

a. The panic alarm control activates the panic alarm when the wireless transmitter panic switch is pressed. The panic alarm control operates independently from the change of the theft deterrent system alarm control from the armed state to the alarm sounding state.

i. Conditions that cause the panic alarm control to set off the panic alarm:
The panic alarm is activated when the panic switch on the wireless transmitter is pressed and held for 1.0 seconds or more under the following conditions.

- The engine switch is off.
- The theft deterrent system is not in the alarm sounding state.
- The panic alarm control is not operating (the alarm is not set off).

ii. Conditions that cause the panic alarm control to shut off the alarm:
The panic alarm is deactivated when any of the following conditions is fulfilled during panic alarm operation.

- The engine switch is turned on (IG).
- The wireless transmitter lock/unlock switch is pressed.
- 60 +/-5 seconds have passed and the panic alarm has ended.
- The theft deterrent system changes to the alarm sounding state. However, the alarm still sounds, because the theft deterrent system has changed to the alarm sounding state.
  Conditions for canceling the panic alarm are the same as for the alarm control.

HINT:

For more information about active mode, refer to "Active Arming Mode".

SECURITY INDICATOR OUTPUT

a. The security indicator turns on and off based on output signals from the certification ECU (smart key ECU assembly). However, in some cases, the actual status of the security indicator is different from the output signals of the certification ECU (smart key ECU assembly).

Output

State of Theft Deterrent System	Security Indicator	
	Output Signals from ECU	Actual Lighting Condition
Disarmed state	Off	Off (Immobiliser system not set) Blinking (Immobiliser system set)
Arming preparation state	On	On
Armed state	Off	Blinking
Alarm sounding state	On	On

Blinking Cycle

Time	Security Indicator
0.125 seconds	On
1.875 seconds	Off

HINT:

When the immobiliser system is set, the security indicator blinks during the disarmed state and the armed state due to the output signals from the immobiliser system.

for Preparation Click here

CUSTOMIZING FUNCTION WITH INTELLIGENT TESTER (REFERENCE)

NOTICE:

- **When the customer requests a change in a function, first make sure that the function can be customized.**
- **Be sure to make a note of the current settings before customizing.**
- **When troubleshooting a function, first make sure that the function is set to the default setting.**

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Utility / Customize.

e. Select the setting by referring to the table below.

Security

Display	Default	Contents	Setting
Warning by Horn*1	ON	Function that allows the vehicle horns and security horn to be used as a warning device.	ON/OFF
Mech. Key Entry Alarm Cancel (Key Alarm)*2	OFF	Function that makes it possible to cancel the alarm with an unlock operation using the mechanical key.	ON/OFF

*1: w/ Security Horn
*2: For Europe

for Preparation Click here

HINT:

- **Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.**
- **Troubleshooting of the theft deterrent system is based on the premise that the door lock control system, the wireless door lock control system, the lighting system, the horn system, the engine immobiliser system and the entry and start system are operating normally. Check these systems first before troubleshooting the theft deterrent system.**

Theft Deterrent System

Symptom	Suspected Area	See page
Theft deterrent system cannot be set	Engine hood courtesy switch circuit	Click here
	Door courtesy light does not illuminate	-
	Certification ECU power source circuit	Click here
Security indicator is not blinking when theft deterrent system is set	Security indicator light circuit	Click here
Alarm sounding state cannot be canceled when engine switch is turned on (IG)	IG power source circuit	Click here
Theft deterrent system can be set even when any door is open	Engine hood courtesy switch circuit	Click here
	Door courtesy light does not illuminate	-
Horns (low pitched, high pitched) do not sound while theft deterrent system is in alarm sounding state	Horn system	Click here
Hazard warning lights do not flash while theft deterrent system is in warning operation	Turn signal light does not illuminate	-
Security horn does not sound while theft deterrent system is set*1	Security horn circuit	Click here
Map light does not illuminate while theft deterrent system is in alarm sounding state	Room light control does not operate	-
Theft warning siren (self power siren) does not sound when theft deterrent system is in alarm sounding state*2	Theft warning siren circuit	Click here

*1: w/ Security Horn
*2: w/ Theft Warning Siren (Self Power Siren)

If the suspected areas operate normally, replace the certification ECU (smart key ECU assembly).

for Preparation Click here

HINT:

- **Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.**
- **Troubleshooting of the theft deterrent system is based on the premise that the door lock control system, the wireless door lock control system, the lighting system, the horn system, the engine immobiliser system and the entry and start system are operating normally. Check these systems first before troubleshooting the theft deterrent system.**

Theft Deterrent System

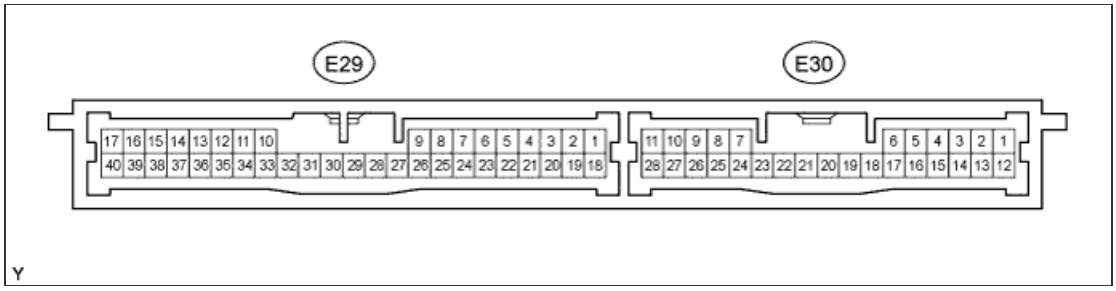
Symptom	Suspected Area	See page
Theft deterrent system cannot be set	Engine hood courtesy switch circuit	Click here
	Door courtesy light does not illuminate	-
	Certification ECU power source circuit	Click here
Security indicator is not blinking when theft deterrent system is set	Security indicator light circuit	Click here
Alarm sounding state cannot be canceled when engine switch is turned on (IG)	IG power source circuit	Click here
Theft deterrent system can be set even when any door is open	Engine hood courtesy switch circuit	Click here
	Door courtesy light does not illuminate	-
Horns (low pitched, high pitched) do not sound while theft deterrent system is in alarm sounding state	Horn system	Click here
Hazard warning lights do not flash while theft deterrent system is in warning operation	Turn signal light does not illuminate	-
Security horn does not sound while theft deterrent system is set*1	Security horn circuit	Click here
Map light does not illuminate while theft deterrent system is in alarm sounding state	Room light control does not operate	-
Theft warning siren (self power siren) does not sound when theft deterrent system is in alarm sounding state*2	Theft warning siren circuit	Click here

*1: w/ Security Horn
*2: w/ Theft Warning Siren (Self Power Siren)

If the suspected areas operate normally, replace the certification ECU (smart key ECU assembly).

for Preparation Click here

CHECK CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)



a. Disconnect the E29 and E30 ECU connectors.

b. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E29-1 (+B) - Body ground	B - Body ground	+B power supply	Always	11 to 14 V
E29-18 (IG) - Body ground	B - Body ground	IG power supply	Engine switch on (IG)	11 to 14 V
			Engine switch off	Below 1 Ω
E29-17 (E) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the E29 and E30 ECU connectors.

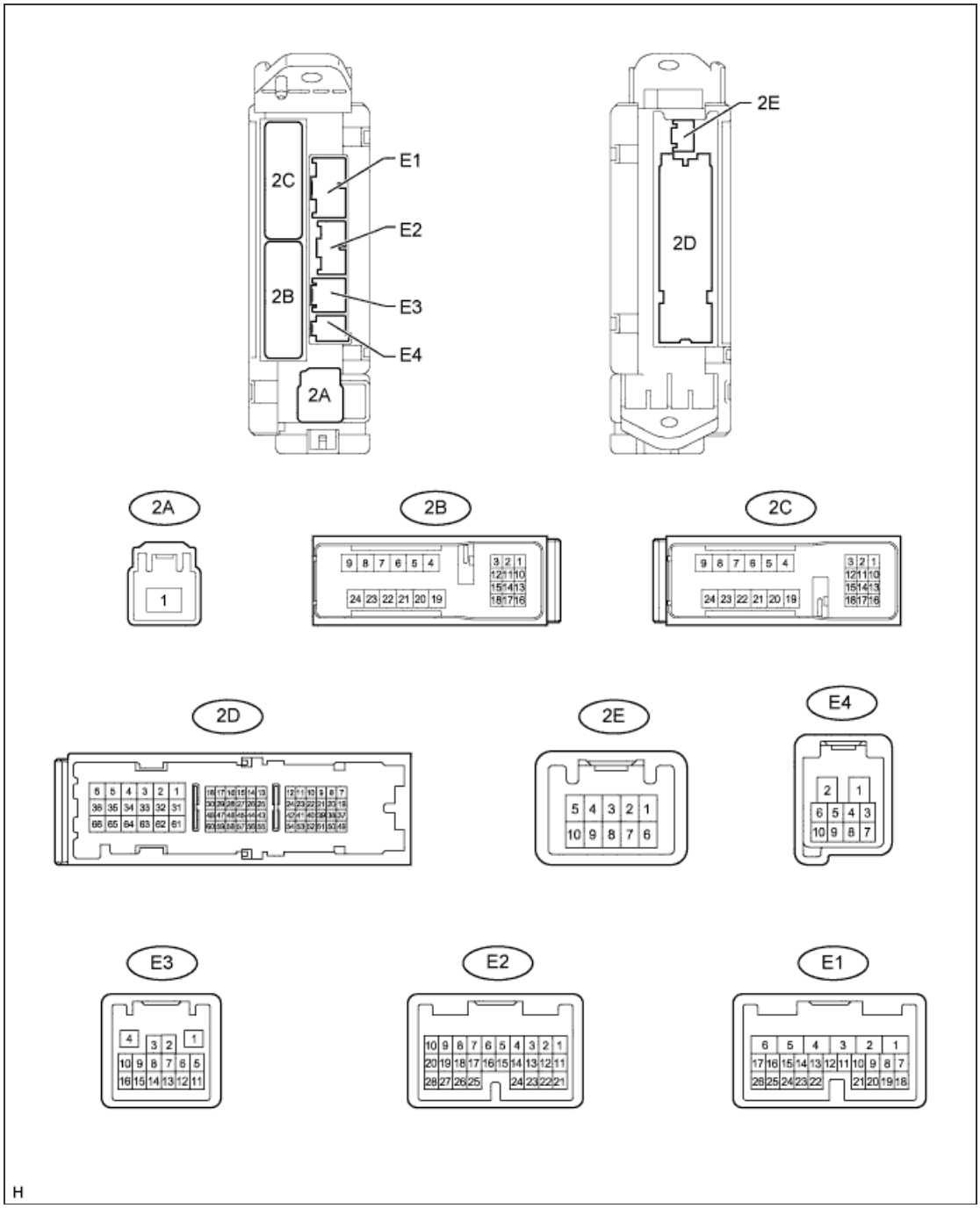
d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E29-2 (IND) - Body ground	V - Body ground	Security indicator signal	Security indicator illuminates (illuminates only for 60 sec. in alarm sounding state (blinking when system in armed state))	6 to 11 V
E30-20 (SH-) - Body ground*1	LG - Body ground	Security horn signal	Security horn not sounding (theft deterrent system in alarm sounding state)	11 to 14 V
			Security horn sounding (theft deterrent system in alarm sounding state)	0.5 to 4 V
E30-24 (HSW) - Body ground	W - Body ground	Engine hood courtesy switch signal	Engine hood closed	10 kΩ or higher
			Engine hood open	Below 1 Ω
E30-7 (SSCL) - Body ground*2	L - Body ground	Theft warning siren (self power siren) signal	Theft warning siren (self power siren) sounding (theft warning system in alarm sounding state)	Below 2 V
			Theft warning siren (self power siren) not sounding (theft warning system in alarm sounding state)	4.5 to 14 V

*1: w/ Security Horn
*2: w/ Theft Warning Siren (Self Power Siren)

If the result is not as specified, the ECU may have a malfunction.

CHECK MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)



a. Disconnect the 2A, 2B, 2D and E3 ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
2A-1 (ALTB) - Body ground	B - Body ground	Battery power supply	Always	11 to 14 V
2B-20 (BATB) - Body ground	L - Body ground	Battery power supply	Always	11 to 14 V
2A-1 (IG) - Body ground	B - Body ground	IG power supply	Engine switch on (IG)	11 to 14 V
			Engine switch off	Below 1 V
2A-1 (ACC) - Body ground	B - Body ground	ACC power supply	Engine switch on (ACC)	11 to 14 V
			Engine switch off	Below 1 V
2D-62 (GND2) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E3-1 (GND3) - Body ground	BR - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction in the wire harness.

c. Reconnect the 2A, 2B, 2D and E3 ECU connectors.

d. Measure the voltage of the connectors.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E1-24 (DCTY) - Body ground	L - Body ground*1 Y - Body ground*2	Driver side door courtesy switch input	Driver side door open	Below 1 V
			Engine switch off, and driver side door courtesy switch off	Pulse generation (see waveform 1 or 2)
E2-21 (PCTY) - Body ground	Y - Body ground*1 L - Body ground*2	Front passenger side door courtesy switch input	Front passenger side door open	Below 1 V
			Engine switch off, and passenger side door courtesy switch off	Pulse generation (see waveform 3 or 4)
2C-2 (LCTY) - Body ground	W - Body ground	Rear door LH courtesy light switch input	Rear door LH open	Below 1 V
			Engine switch off, and rear LH side door courtesy switch off	Pulse generation (see waveform 5 or 6)
E2-7 (RCTY) - Body ground	G - Body ground	Rear door RH courtesy light switch input	Rear door RH open	Below 1 V
			Engine switch off, and rear RH side door courtesy switch off	Pulse generation (see waveform 7 or 8)
E2-25 (BCTY) - Body ground	W - Body ground	Back door courtesy light switch input	Back door open	Below 1 V
			Engine switch off, and back door closed	Pulse generation (see waveform 9 or 10)
2D-3 (ACT+) - Body ground	L - Body ground	Driver side door lock motor lock drive output	Master switch (door control switch) or driver side door key cylinder off	Below 1 V
			Master switch (door control switch) or driver side door key cylinder lock	11 to 14 V
E1-5 (ACTD) - Body ground	B - Body ground	Driver side door lock motor unlock drive output	Master switch (door control switch) or driver side door key cylinder off	Below 1 V
			Master switch (door control switch) or driver side door key cylinder unlock	11 to 14 V
2D-3 (ACT+) - Body ground	L - Body ground	Front passenger side door lock motor lock drive output	Master switch (door control switch) or driver side door key cylinder off	Below 1 V
			Master switch (door control switch) or driver side door key cylinder lock	11 to 14 V
2D-2 (ACT-) - Body ground	B - Body ground	Front passenger side door lock motor unlock drive output	Master switch (door control switch) or driver side door key cylinder off	Below 1 V
			Master switch (door control switch) or driver side door key cylinder unlock	11 to 14 V
2D-3 (ACT+) - Body ground	L - Body ground	Rear door LH lock motor lock drive output	Master switch (door control switch) or driver side door key cylinder off	Below 1 V
			Master switch (door control switch) or driver side door key cylinder lock	11 to 14 V
2C-23 (ACT-) - Body ground	B - Body ground	Rear door LH lock motor unlock drive output	Master switch (door control switch) or driver side door key cylinder off	Below 1 V
			Master switch (door control switch) or driver side door key cylinder unlock	11 to 14 V
			Master switch (door control switch) or driver side door key cylinder off	Below 1 V

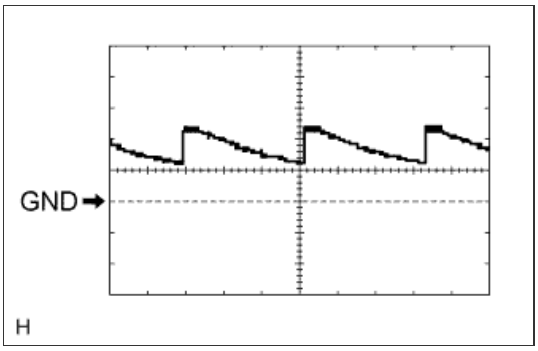
2D-3 (ACT+) - Body ground	L - Body ground	Rear door RH lock motor lock drive output	Master switch (door control switch) or driver side door key cylinder lock	11 to 14 V
2D-2 (ACT-) - Body ground	B - Body ground	Rear door RH lock motor unlock drive output	Master switch (door control switch) or driver side door key cylinder off	Below 1 V
			Master switch (door control switch) or driver side door key cylinder unlock	11 to 14 V
E1-10 (UL3) - Body ground	L - Body ground	Driver side door lock key switch input	Driver side door key cylinder unlock	Below 1 V
			Engine switch off, all doors closed and driver side door key cylinder neutral position	Pulse generation (see waveform 11 or 12)
2D-53 (L2) - Body ground	LG - Body ground	Driver side door lock key switch input	Driver side door key cylinder lock	Below 1 V
			Engine switch off, all doors closed and driver side door key cylinder neutral position	Pulse generation (see waveform 13 or 14)
E1-9 (LSWD) - Body ground	BR - Body ground	Driver side door lock position switch input	Driver side door unlock	Below 1 V
			Engine switch off, all doors closed and driver side door lock	Pulse generation (see waveform 15 or 16)
E2-27 (LSWP) - Body ground	Y - Body ground*1 BR - Body ground*2	Passenger side door lock position switch input	Passenger side door unlock	Below 1 V
			Engine switch off, all doors closed and passenger side door lock	Pulse generation (see waveform 17 or 18)
2C-1 (LSWL) - Body ground	BR - Body ground	Rear door LH lock position switch input	Rear door LH unlock	Below 1 V
			Engine switch off, all doors closed and rear door LH lock	Pulse generation (see waveform 19 or 20)
E2-5 (LSWR) - Body ground	BR - Body ground	Rear door RH lock position switch input	Rear door RH unlock	Below 1 V
			Engine switch off, all doors closed and rear door RH lock	Pulse generation (see waveform 21 or 22)
E1-26 (BDSU) - Body ground	L - Body ground	Back door opener switch input	Back door lock opener switch off	Below 1 V
			Back door lock opener switch on	Pulse generation (see waveform 23 or 24)

*1: for LHD
*2: for RHD
If the result is not as specified, the ECU may have a malfunction.

e. Using an oscilloscope, check waveform 1.

Waveform 1 (Reference)

Item	Content
Terminal No. (Symbol)	E1-24 (DCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and driver side door courtesy switch off

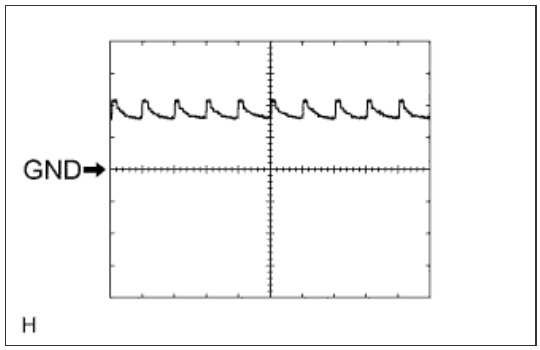


f. Using an oscilloscope, check waveform 2.

Waveform 2 (Reference)

Item	Content

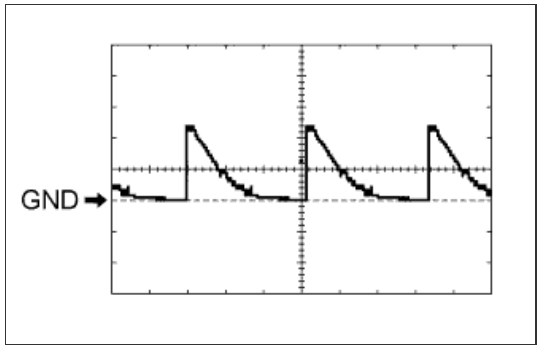
Terminal No. (Symbol)	E1-24 (DCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and driver side door courtesy switch off



g. Using an oscilloscope, check waveform 3.

Waveform 3 (Reference)

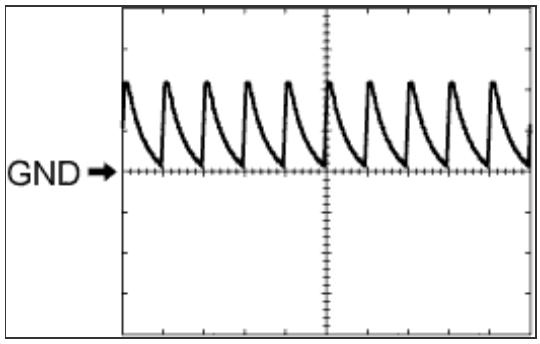
Item	Content
Terminal No. (Symbol)	E2-21 (PCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and passenger side door courtesy switch off



h. Using an oscilloscope, check waveform 4.

Waveform 4 (Reference)

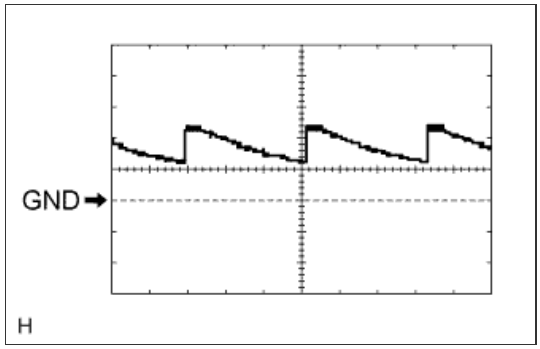
Item	Content
Terminal No. (Symbol)	E2-21 (PCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and passenger side door courtesy switch off



i. Using an oscilloscope, check waveform 5.

Waveform 5 (Reference)

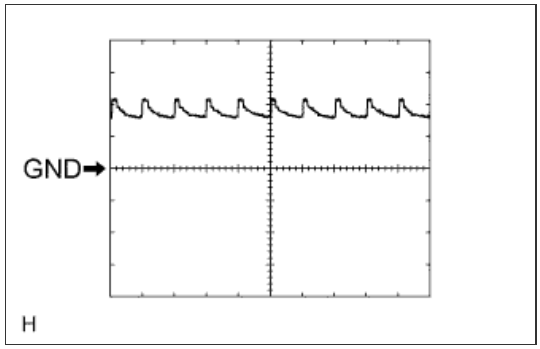
Item	Content
Terminal No. (Symbol)	2C-2 (LCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and rear LH side door courtesy switch off



j. Using an oscilloscope, check waveform 6.

Waveform 6 (Reference)

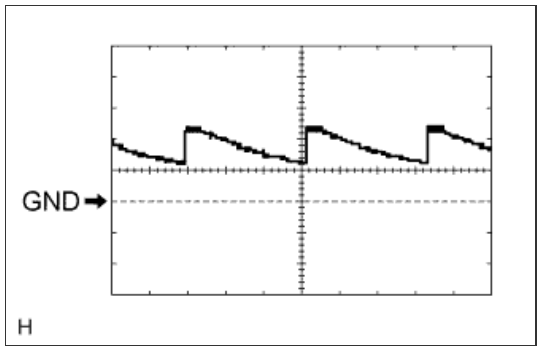
Item	Content
Terminal No. (Symbol)	2C-2 (LCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and rear LH side door courtesy switch off



k. Using an oscilloscope, check waveform 7.

Waveform 7 (Reference)

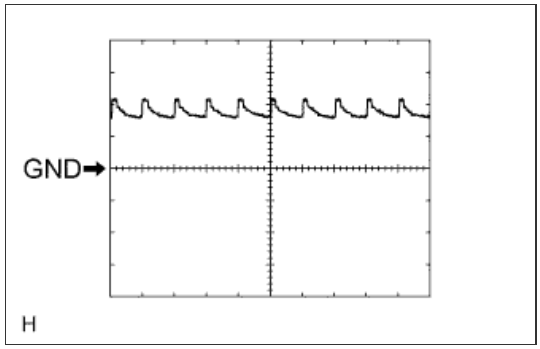
Item	Content
Terminal No. (Symbol)	E2-7 (RCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and rear RH side door courtesy switch off



l. Using an oscilloscope, check waveform 8.

Waveform 8 (Reference)

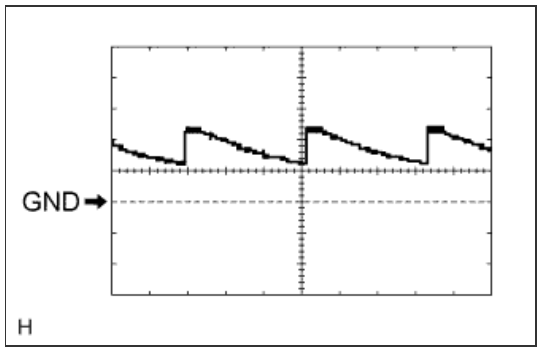
Item	Content
Terminal No. (Symbol)	E2-7 (RCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and rear RH side door courtesy switch off



m. Using an oscilloscope, check waveform 9.

Waveform 9 (Reference)

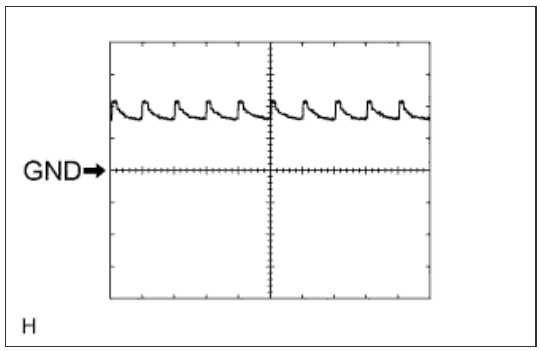
Item	Content
Terminal No. (Symbol)	E2-25 (BCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and back door closed



n. Using an oscilloscope, check waveform 10.

Waveform 10 (Reference)

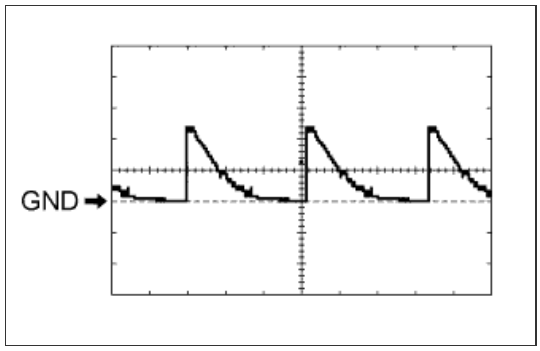
Item	Content
Terminal No. (Symbol)	E2-25 (BCTY) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, and back door closed



o. Using an oscilloscope, check waveform 11.

Waveform 11 (Reference)

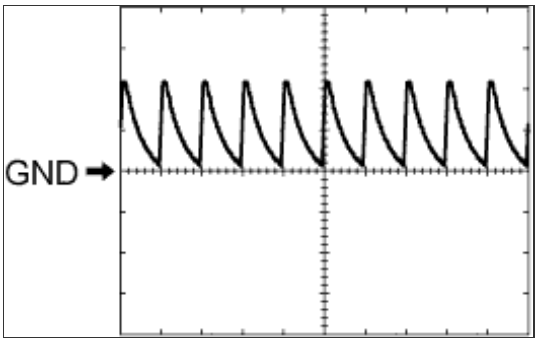
Item	Content
Terminal No. (Symbol)	E1-10 (UL3) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and driver side door key cylinder neutral position



p. Using an oscilloscope, check waveform 12.

Waveform 12 (Reference)

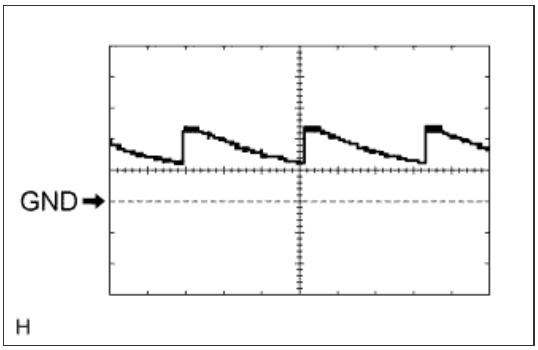
Item	Content
Terminal No. (Symbol)	E1-10 (UL3) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and driver side door key cylinder neutral position



q. Using an oscilloscope, check waveform 13.

Waveform 13 (Reference)

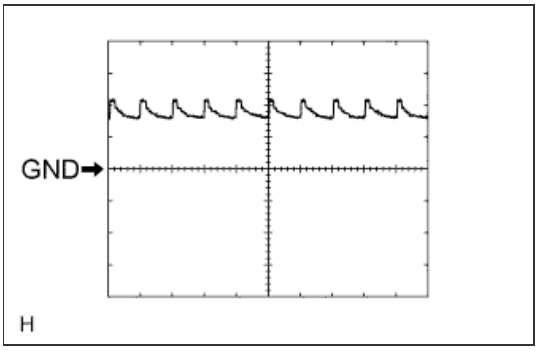
Item	Content
Terminal No. (Symbol)	2D-53 (L2) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and driver side door key cylinder neutral position



r. Using an oscilloscope, check waveform 14.

Waveform 14 (Reference)

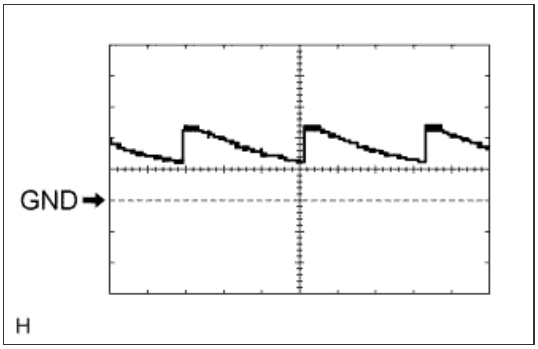
Item	Content
Terminal No. (Symbol)	2D-53 (L2) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and driver side door key cylinder neutral position



s. Using an oscilloscope, check waveform 15.

Waveform 15 (Reference)

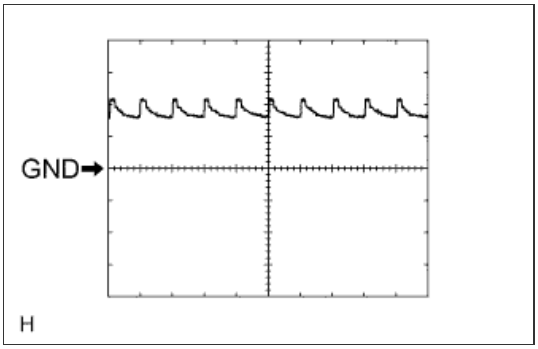
Item	Content
Terminal No. (Symbol)	E1-9 (LSWD) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and driver side door lock



t. Using an oscilloscope, check waveform 16.

Waveform 16 (Reference)

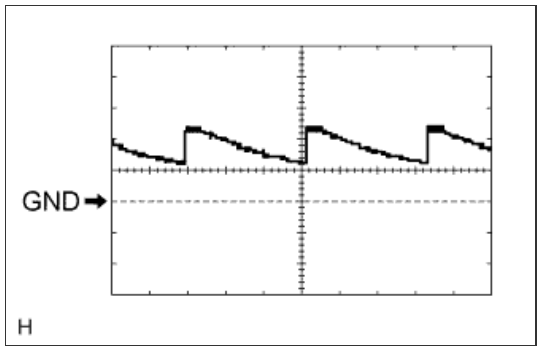
Item	Content
Terminal No. (Symbol)	E1-9 (LSWD) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and driver side door lock



u. Using an oscilloscope, check waveform 17.

Waveform 17 (Reference)

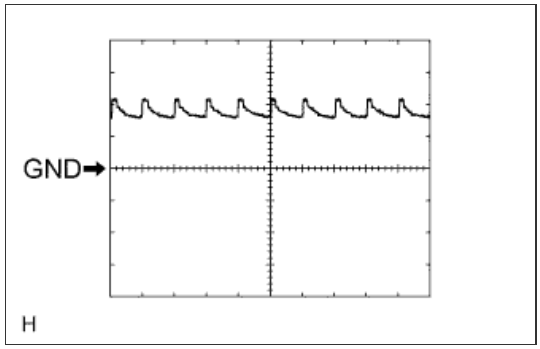
Item	Content
Terminal No. (Symbol)	E2-27 (LSWP) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and passenger side door lock



v. Using an oscilloscope, check waveform 18.

Waveform 18 (Reference)

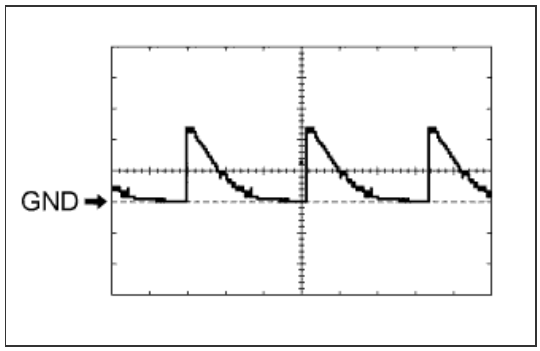
Item	Content
Terminal No. (Symbol)	E2-27 (LSWP) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and passenger side door lock



w. Using an oscilloscope, check waveform 19.

Waveform 19 (Reference)

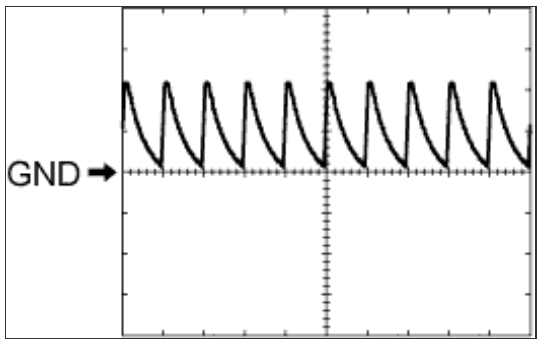
Item	Content
Terminal No. (Symbol)	2C-1 (LSWL) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and rear door LH lock



x. Using an oscilloscope, check waveform 20.

Waveform 20 (Reference)

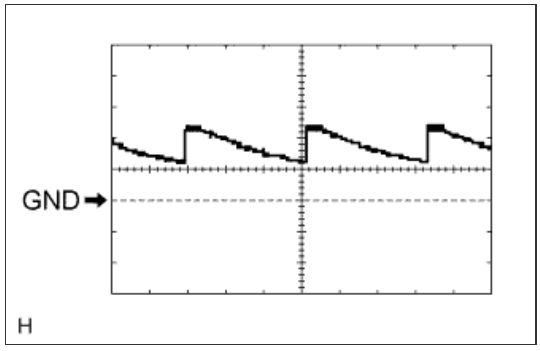
Item	Content
Terminal No. (Symbol)	2C-1 (LSWL) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and rear door LH lock



y. Using an oscilloscope, check waveform 21.

Waveform 21 (Reference)

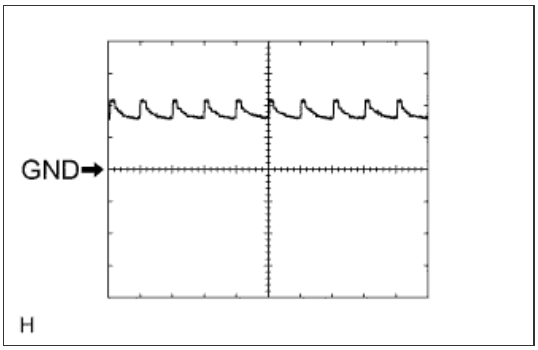
Item	Content
Terminal No. (Symbol)	E2-5 (LSWR) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and rear door RH lock



z. Using an oscilloscope, check waveform 22.

Waveform 22 (Reference)

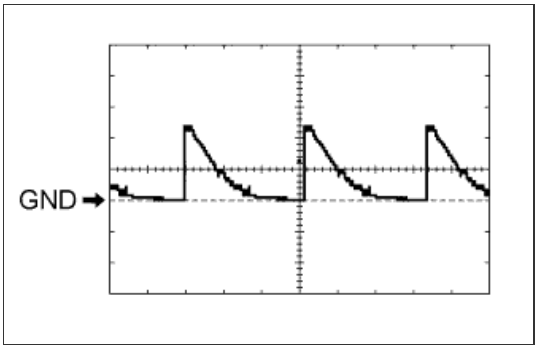
Item	Content
Terminal No. (Symbol)	E2-5 (LSWR) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and rear door RH lock



aa. Using an oscilloscope, check waveform 23.

Waveform 23 (Reference)

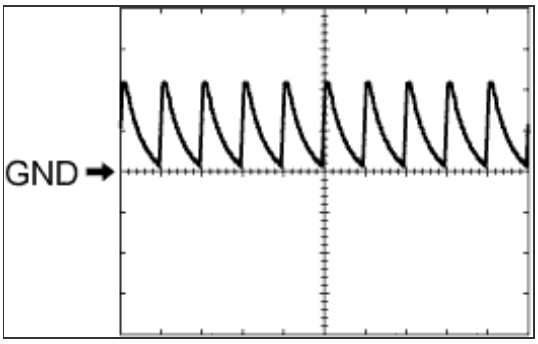
Item	Content
Terminal No. (Symbol)	E1-26 (BDSU) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and back door opener switch on



ab. Using an oscilloscope, check waveform 24.

Waveform 24 (Reference)

Item	Content
Terminal No. (Symbol)	E1-26 (BDSU) - Body ground
Tool Setting	5 V/DIV., 20 ms/DIV.
Condition	Engine switch off, all doors closed and back door opener switch on



for Preparation Click here

DATA LIST

HINT:

Using the intelligent tester to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Data List.

e. According to the display on intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Hood Courtesy Switch	Engine hood courtesy switch / ON or OFF	ON: Engine hood open OFF: Engine hood closed	-
Warn By Horn	Security horn / ON or OFF	ON: Security horn sounding OFF: Security horn not sounding	-
# Codes	Number of diagnostic trouble codes	-	-

Main Body

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
D Door Courtesy SW	Driver side door courtesy light switch signal / ON or OFF	ON: Driver side door opened OFF: Driver side door closed	-
D Door Lock Pos SW	Driver side door lock position switch signal / ON or OFF	ON: Driver side door unlocked OFF: Driver side door locked	-
Door Key SW-Lock	Door key linked lock switch signal / ON or OFF	ON: Driver side door key cylinder turned to lock position OFF: Driver side door key cylinder not turned	-
D-Door Key SW-UL	Door key linked unlock switch signal / ON or OFF	ON: Driver side door key cylinder turned to unlock position OFF: Driver side door key cylinder not turned	-
P-Door Courtesy SW	Front passenger side door courtesy light switch signal / ON or OFF	ON: Front passenger side door opened OFF: Front passenger side door closed	-
P-Door Lock Pos SW	Front passenger side door lock position switch signal / ON or OFF	ON: Front passenger side door unlocked OFF: Front passenger side door locked	-
Door Lock SW-Lock	Door manual lock switch signal / ON or OFF	ON: Front passenger side door control switch on (lock) OFF: Front passenger side door control switch off	-
Door Unlock SW-Unlock	Door manual unlock switch signal / ON or OFF	ON: Front passenger side door control switch on (unlock) OFF: Front passenger side door control switch off	-
RL Door Courtesy SW	Rear LH side door courtesy light switch signal / ON or OFF	ON: Rear LH side door opened OFF: Rear LH side door closed	-
RL-Door Lock Pos SW	Rear LH side door lock position switch signal / ON or OFF	ON: Rear LH side door unlocked OFF: Rear LH side door locked	-
RR Door Courtesy SW	Rear RH side door courtesy light switch signal / ON or OFF	ON: Rear RH side door opened OFF: Rear RH side door closed	-

RR-Door Lock Pos SW	Rear RH side door lock position switch signal / ON or OFF	ON: Rear RH side door unlocked OFF: Rear RH side door locked	-
Back Door Courtesy SW	Back door courtesy light switch signal / ON or OFF	ON: Back door open OFF: Back door closed	-
Back Door Open SW	ON / OFF	ON: Back door opener switch on OFF: Back door opener switch off	-
Back Door Open	Permit / Prohibit	PERMIT: Back door open available PROHIBIT: Back door open unavailable	-
IG SW	ON / OFF	ON: Engine switch is on (IG) OFF: Engine switch is off	-
ACC SW	ON / OFF	ON: Engine switch on (ACC) OFF: Engine switch off	-

Back Door (w/ Power Back Door System)

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Door Lock Status	Back door lock status signal / ON or OFF	ON: Back door unlocked OFF: Back door locked	-

ACTIVE TEST

HINT:

Using the intelligent tester to perform the Active Test allows relays, VSVs and actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Entry&Start / Active Test.

e. According to the display on intelligent tester, perform the Active Test.

Entry&Start

Tester Display	Test Part	Control Range	Diagnostic Note
Security Indicator	Security indicator	ON / OFF	-
Security Horn*1	Security horn	ON / OFF	-
Security Horn2*2	Theft warning siren (self power siren)	ON / OFF	-

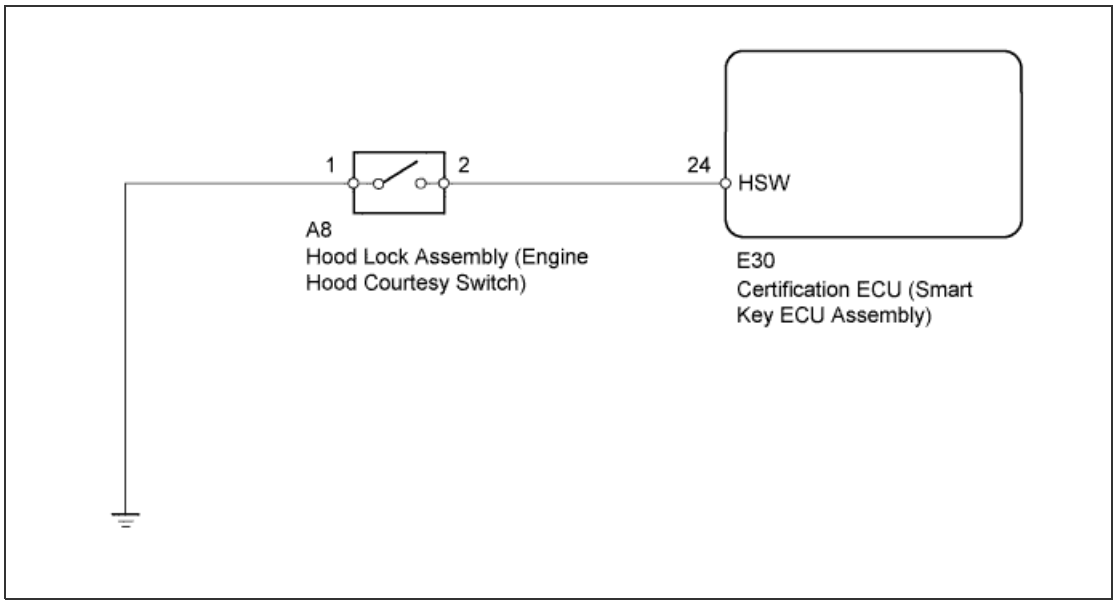
*1: w/ Security Horn
*2: w/ Theft Warning Siren (Self Power Siren)

for Preparation Click here

DESCRIPTION

The engine hood courtesy switch is built into the hood lock. This switch turns on when the engine hood is opened and turns off when the engine hood is closed.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (ENGINE HOOD COURTESY SWITCH)

a. Using the intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
Hood Courtesy Switch	Engine hood courtesy switch / ON or OFF	ON: Engine hood open OFF: Engine hood closed	-

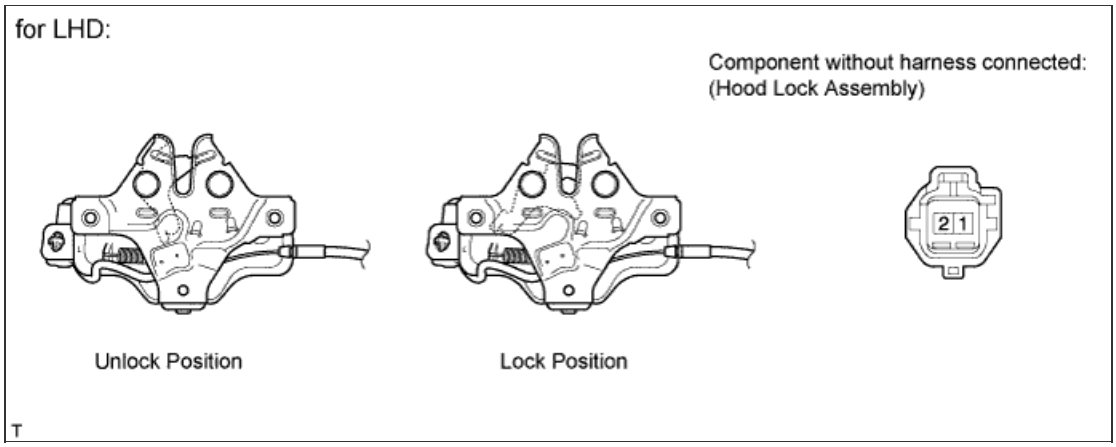
OK:
ON (engine hood is open) appears on screen.

NG → Go to step 2

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

2.INSPECT HOOD LOCK ASSEMBLY (ENGINE HOOD COURTESY SWITCH)



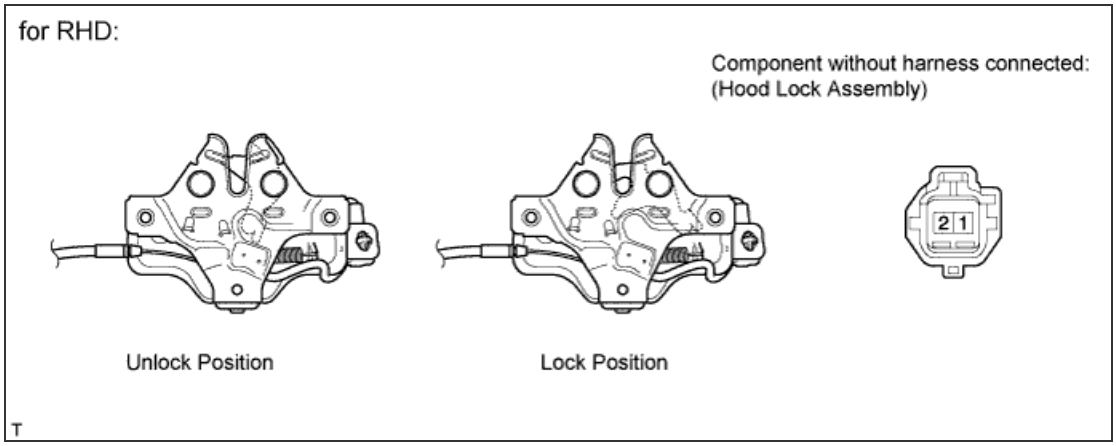
a. for LHD:

i. Remove the hood lock (Click here).

ii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	Unlock position	Below 1 Ω
1 - 2	Lock position	10 kΩ or higher



b. for RHD:

i. Remove the hood lock (Click here).

ii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	Unlock position	Below 1 Ω
1 - 2	Lock position	10 kΩ or higher

NG → REPLACE HOOD LOCK ASSEMBLY (ENGINE HOOD COURTESY SWITCH)

OK

3.CHECK HARNESS AND CONNECTOR (HOOD LOCK - CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] AND BODY GROUND)

a. Disconnect the E30 ECU connector.

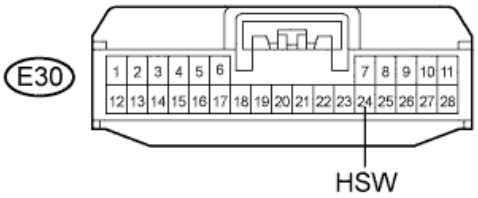
b. Disconnect the A8 switch connector.

c. Measure the resistance according to the value(s) in the table below.

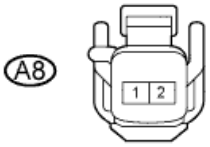
Standard Resistance:

Tester Connection	Condition	Specified Condition
E30-24 (HSW) - A8-2	Always	Below 1 Ω
A8-1 - Body ground	Always	Below 1 Ω
E30-24 (HSW) or A8-2 - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Certification ECU [Smart Key ECU Assembly])



Front view of wire harness connector:
(to Hood Lock)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

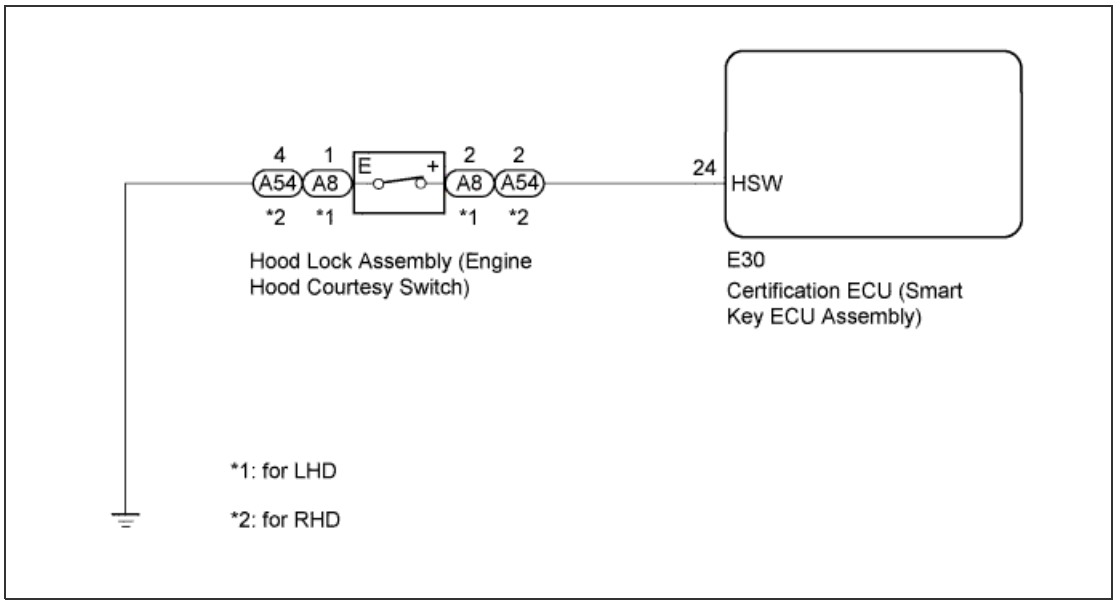
OK → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

for Preparation Click here

DESCRIPTION

The engine hood courtesy switch is built into the hood lock. This switch turns on when the engine hood is opened and turns off when the engine hood is closed.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (ENGINE HOOD COURTESY SWITCH)

a. Using the intelligent tester, read the Data List.

Entry&Start

Tester Display	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
Hood Courtesy Switch	Engine hood courtesy switch / ON or OFF	ON: Engine hood open OFF: Engine hood closed	-

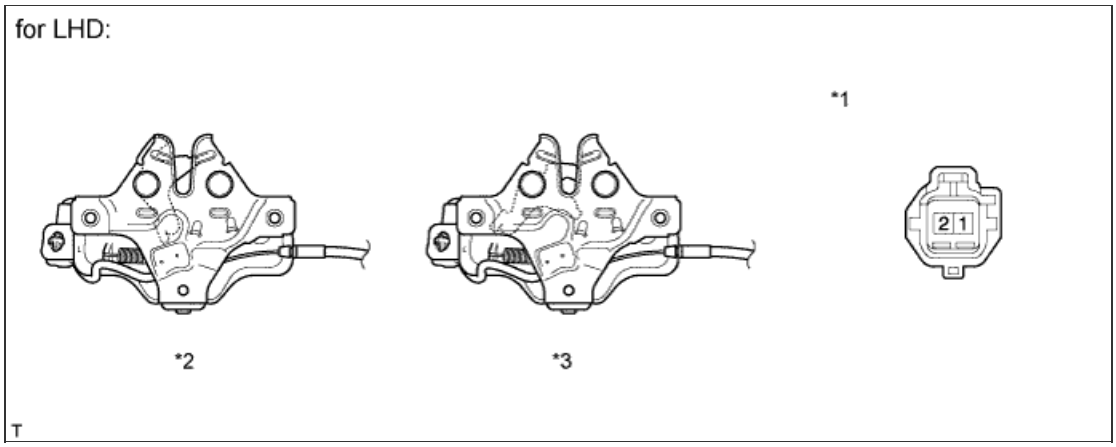
OK:
ON (engine hood is open) appears on screen.

NG → Go to step 2

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

2.INSPECT HOOD LOCK ASSEMBLY (ENGINE HOOD COURTESY SWITCH)



Text in Illustration

*1	Component without harness connected (Hood Lock Assembly)	*2	Unlock Position
*3	Lock Position	-	-

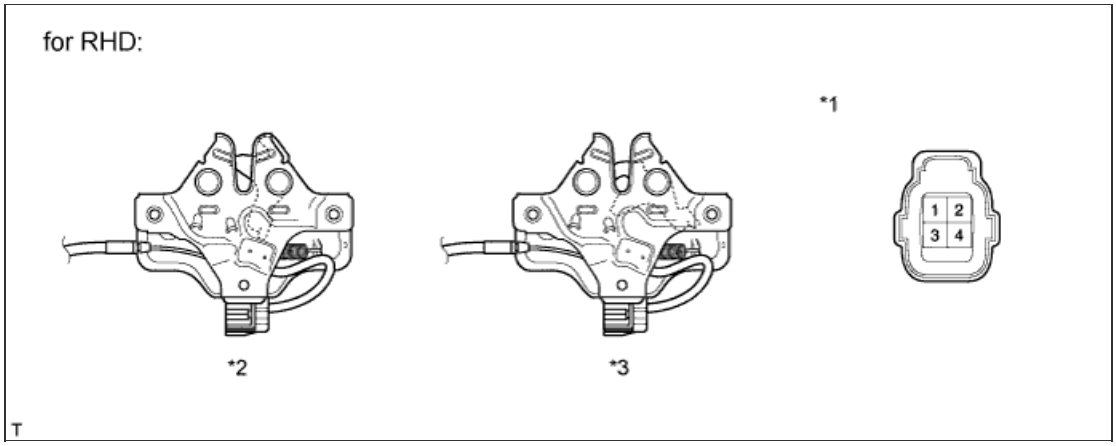
a. for LHD:

i. Remove the hood lock (Click here).

ii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	Unlock position	Below 1 Ω
1 - 2	Lock position	10 kΩ or higher



Text in Illustration

*1	Component without harness connected (Hood Lock Assembly)	*2	Unlock Position
*3	Lock Position	-	-

b. for RHD:

i. Remove the hood lock (Click here).

ii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
2 - 4	Unlock position	Below 1 Ω
2 - 4	Lock position	10 kΩ or higher

REPLACE HOOD LOCK ASSEMBLY (ENGINE HOOD

NG → COURTESY SWITCH)

OK

3.CHECK HARNESS AND CONNECTOR (HOOD LOCK - CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] AND BODY GROUND)

a. for LHD:

i. Disconnect the E30 ECU connector.

ii. Disconnect the A8 switch connector.

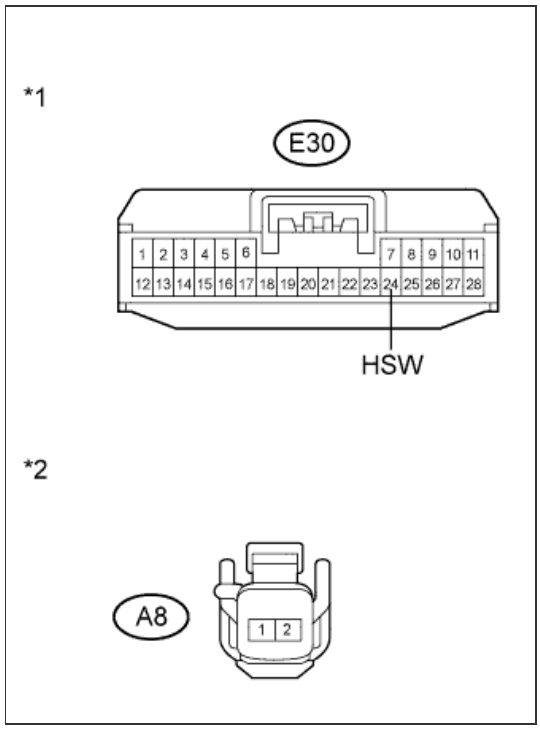
iii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E30-24 (HSW) - A8-2	Always	Below 1 Ω
A8-1 - Body ground	Always	Below 1 Ω
E30-24 (HSW) or A8-2 - Body ground	Always	10 kΩ or higher

Text in Illustration

*1	Front view of wire harness connector: (to Certification ECU (Smart Key ECU Assembly)
*2	Front view of wire harness connector: (to Hood Lock)



b. for RHD:

i. Disconnect the E30 ECU connector.

ii. Disconnect the A54 switch connector.

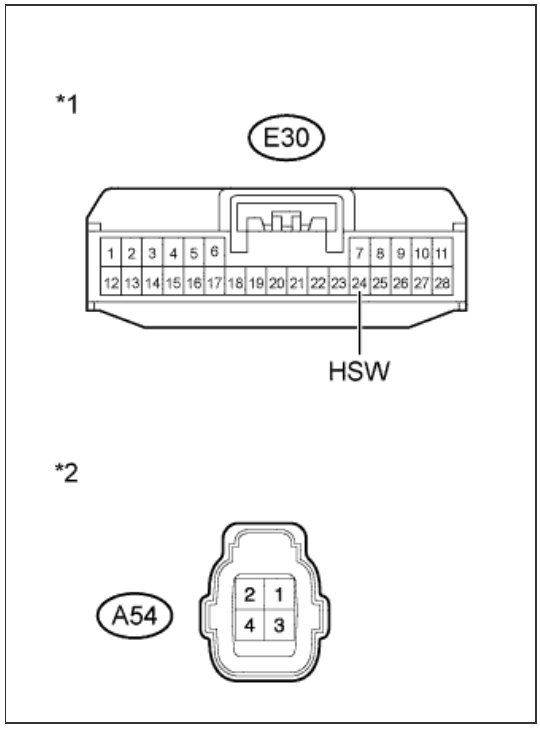
iii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E30-24 (HSW) - A54-2	Always	Below 1 Ω
A54-4 - Body ground	Always	Below 1 Ω
E30-24 (HSW) or A54-2 - Body ground	Always	10 kΩ or higher

Text in Illustration

*1	Front view of wire harness connector: (to Certification ECU (Smart Key ECU Assembly)
*2	Front view of wire harness connector: (to Hood Lock)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

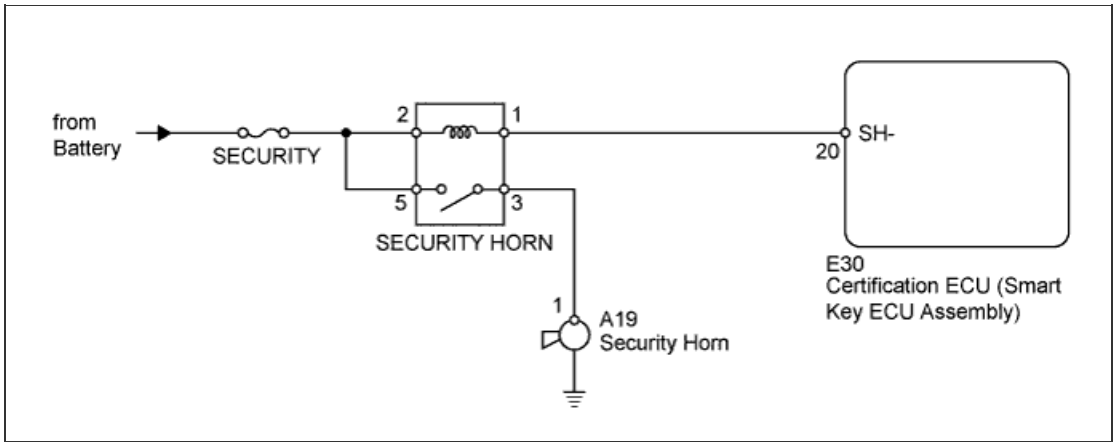
REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

for Preparation Click here

DESCRIPTION

When the theft deterrent system is operating, the certification ECU (smart key ECU assembly) outputs a signal continuously at 0.4 second intervals, causing the security horn to sound.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (SECURITY HORN)

a. Operate the intelligent tester according to the steps on the display and select "Active Test".

Entry&Start

Tester Display	Test Part	Control Range	Diagnostic Note
Security Horn	Security horn	ON/OFF	-

OK:

Security horn operates normally.

NG → Go to step 2

OK →

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

2.INSPECT FUSE (SECURITY)

a. Remove the SECURITY fuse from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
SECURITY fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK →

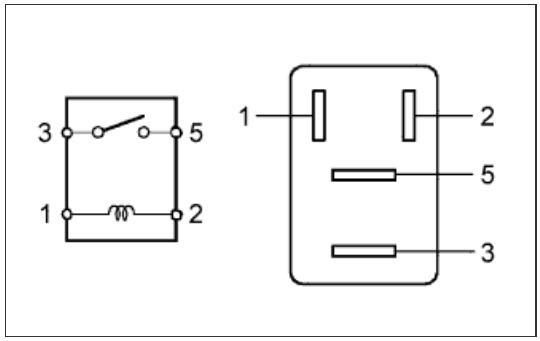
3.INSPECT SECURITY HORN RELAY

a. Remove the security horn relay from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
3 - 5	Battery voltage is not applied to terminals 1 and 2	10 kΩ or higher
3 - 5	Battery voltage is applied to terminals 1 and 2	Below 1 Ω



NG → REPLACE SECURITY HORN RELAY

OK

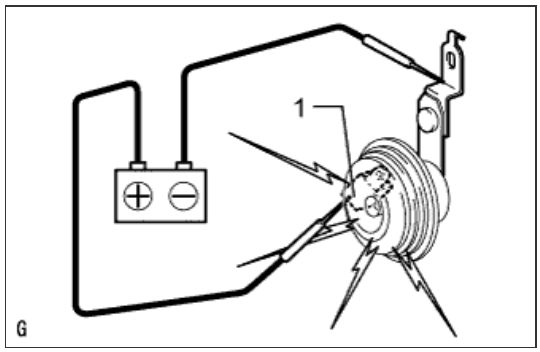
4.INSPECT SECURITY HORN ASSEMBLY

a. Remove the security horn (Click here).

b. Apply battery voltage to the horn and check the operation of the horn.

OK:

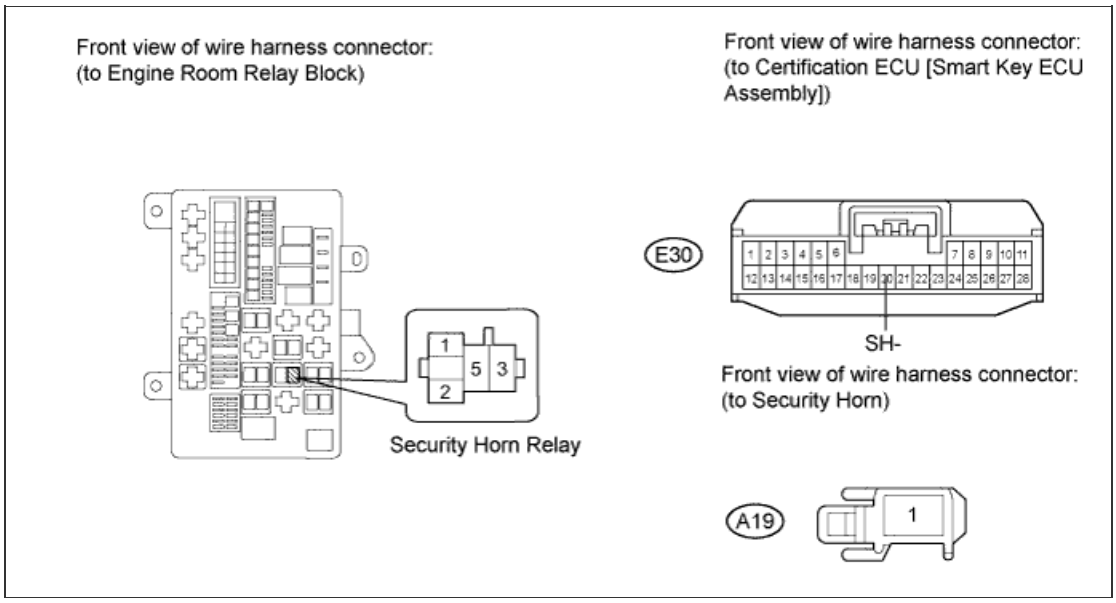
Measurement Condition	Specified Condition
Battery positive (+) → Terminal 1 Battery negative (-) → Horn bracket	Horn sounds



NG → REPLACE SECURITY HORN ASSEMBLY (Click here)

OK

5.CHECK HARNESS AND CONNECTOR (ENGINE ROOM RELAY BLOCK - CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] AND SECURITY HORN)



a. Remove the security horn relay from the engine room relay block.

b. Disconnect the E30 ECU connector.

c. Disconnect the A19 horn connector.

d. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Relay block security horn relay terminal 1 - E30-20 (SH-)	Always	Below 1 Ω
Relay block security horn relay terminal 3 - A19-1	Always	Below 1 Ω
E30-20 (SH-) Body ground	Always	10 kΩ or higher
A19-1 - Body ground	Always	10 kΩ or higher

e. Measure the voltage according to value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
Relay block security horn relay terminal 2 - Body ground	Always	11 to 14 V
Relay block security horn relay terminal 5 - Body ground	Always	11 to 14 V

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

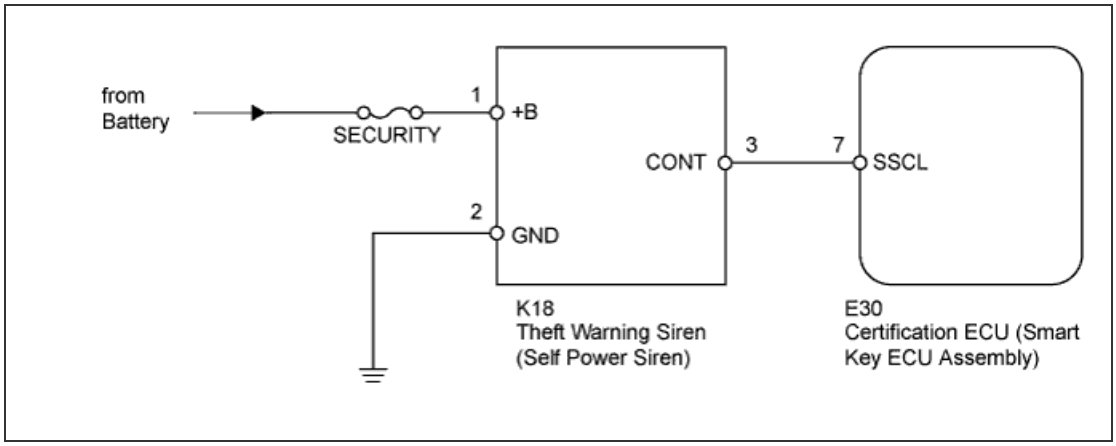
OK → REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

for Preparation Click here

DESCRIPTION

The theft warning siren (self power siren) has an internal battery. If the vehicle battery cable is disconnected or any of the communication lines are open, the theft warning siren (self power siren) detects this and sounds its siren.
Although the theft warning siren (self power siren) usually sounds by receiving a signal from the certification ECU (smart key ECU assembly), the theft warning siren (self power siren) can sound by its internal battery in case the vehicle battery cable is disconnected.
The certification ECU (smart key ECU assembly) sends an arming signal to the theft warning siren (self power siren) while transferring to the armed state, and it also sends a disarming signal to the siren while switching to the disarmed state. Also, the certification ECU (smart key ECU assembly) can cause the theft warning siren (self power siren) to sound by sending an alarm signal during the alarm sounding state.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (THEFT WARNING SIREN [SELF POWER SIREN])

a. Operate the intelligent tester according to the steps on the display and select "Active Test".

Entry&Start

Tester Display	Test Part	Control Range	Diagnostic Note
Security Horn2	Theft warning siren (self power siren)	ON / OFF	-

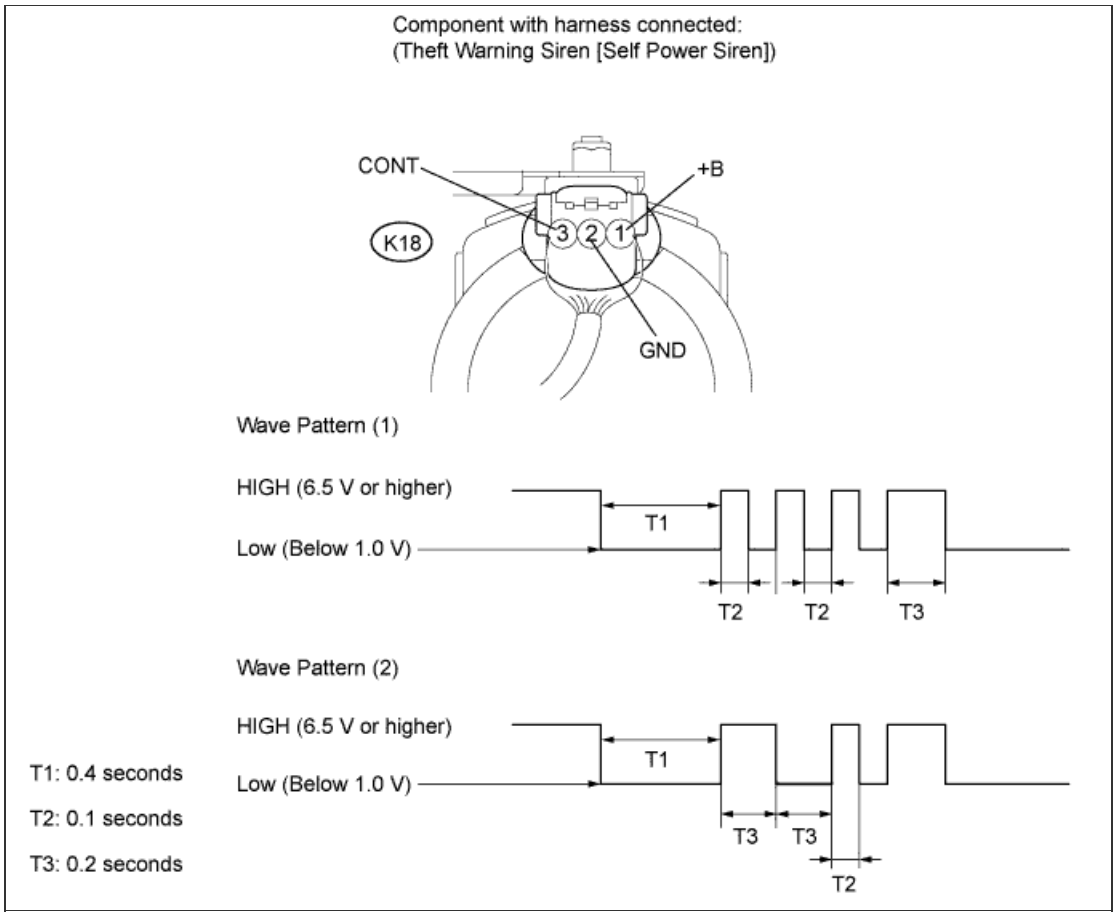
OK:
Siren operates normally.

NG → Go to step 2

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

2.CHECK THEFT WARNING SIREN (SELF POWER SIREN)



a. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
K18-1 (+B) - Body ground	Always	11 to 14 V
K18-2 (GND) - Body ground	Always	Below 1 V
K18-3 (CONT) - Body ground	Switched from armed state or arming preparation state to disarmed state (1)	Wave pattern (1) shown in chart below
	Switched from arming preparation state to armed state (2)	Wave pattern (2) shown in chart below
	Normal condition (Except (1) and (2))	1 to 2 V

NG → Go to step 3

OK

REPLACE THEFT WARNING SIREN (SELF POWER SIREN) (Click here)

3.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - THEFT WARNING SIREN [SELF POWER SIREN])

a. Disconnect the E30 ECU connector.

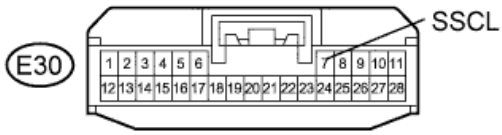
b. Disconnect the K18 siren connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E30-7 (SSCL) - K18-3 (CONT)	Always	Below 1 Ω
E30-7 (SSCL) or K18-3 (CONT) - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Certification ECU [Smart Key ECU Assembly])



Front view of wire harness connector:
(to Theft Warning Siren [Self Power Siren])



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK HARNESS AND CONNECTOR (THEFT WARNING SIREN [SELF POWER SIREN] - BODY GROUND)

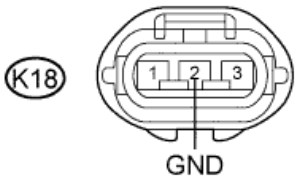
a. Disconnect the K18 siren connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K18-2 (GND) - Body ground	Always	Below 1 Ω

Front view of wire harness connector:
(to Theft Warning Siren [Self Power Siren])



Y

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

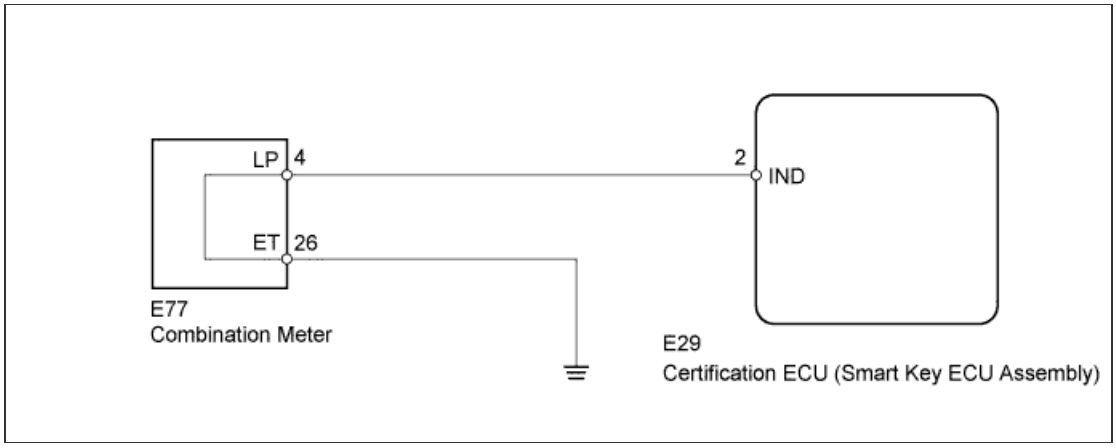
REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

for Preparation Click here

DESCRIPTION

When the theft deterrent system is in the disarmed state, the security indicator will flash continuously if the immobiliser system is set, or not illuminate if the immobiliser system is not set.
When the theft deterrent system is in the armed state, the immobiliser system is automatically set and the security indicator will flash continuously.
When the theft deterrent system is in the arming preparation state and alarm sounding state, the certification ECU (smart key ECU assembly) causes the security indicator to be illuminated.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (SECURITY INDICATOR)

a. Operate the intelligent tester according to the steps on the display and select "Active Test".

Entry&Start

Tester Display	Test Part	Control Range	Diagnostic Note
Security Indicator	Security indicator	ON / OFF	-

OK:
Security indicator illuminates.

NG → Go to step 2

OK

REPLACE CERTIFICATION ECU (SMART KEY ECU ASSEMBLY)

2.CHECK HARNESS AND CONNECTOR (COMBINATION METER - CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] AND BODY GROUND)

a. Disconnect the E77 meter connector.

b. Disconnect the E29 ECU connector.

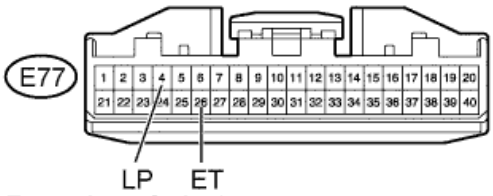
c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

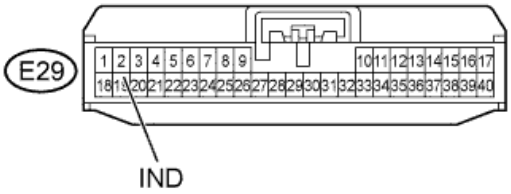
Tester Connection	Condition	Specified Condition
E77-4 (LP) - E29-2 (IND)	Always	Below 1 Ω
E77-26 (ET) - Body ground	Always	Below 1 Ω

E77-4 (LP) or E29-2 (IND) - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Combination Meter)



Front view of wire harness connector:
(to Certification ECU [Smart Key ECU Assembly])



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

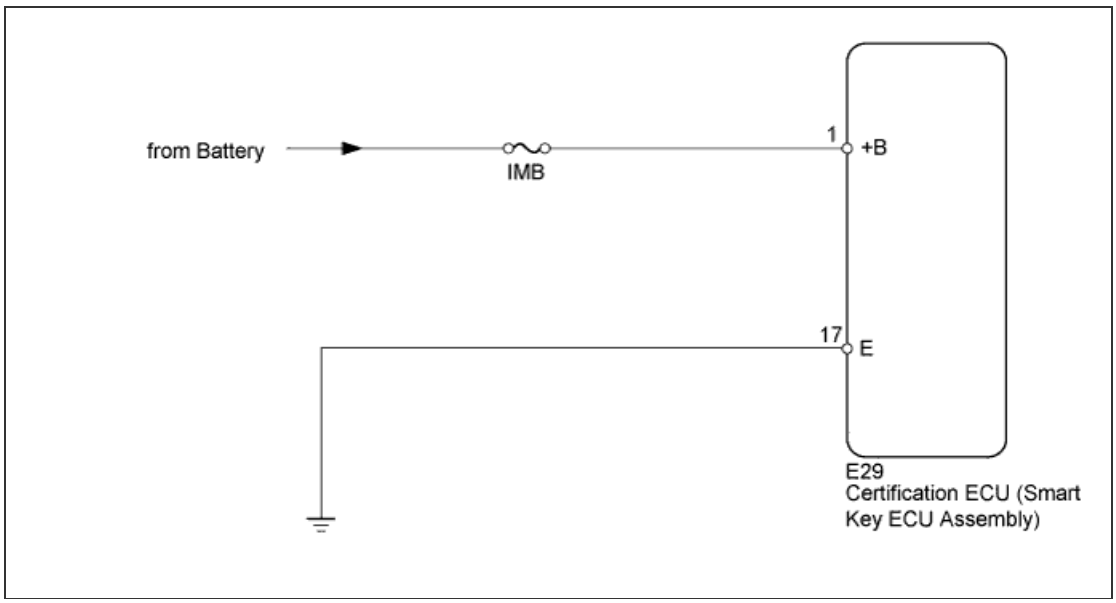
REPLACE COMBINATION METER (Click here)

for Preparation Click here

DESCRIPTION

This circuit provides power to operate the certification ECU (smart key ECU assembly).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (IMB)

a. Remove the IMB fuse from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
IMB fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

2.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - BATTERY AND BODY GROUND)

a. Disconnect the E29 ECU connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

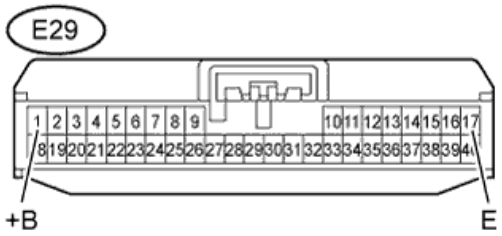
Tester Connection	Condition	Specified Condition
E29-17 (E) - Body ground	Always	Below 1 Ω

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
E29-1 (+B) - Body ground	Always	11 to 14 V

Front view of wire harness connector:
(to Certification ECU [Smart Key ECU Assembly])



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

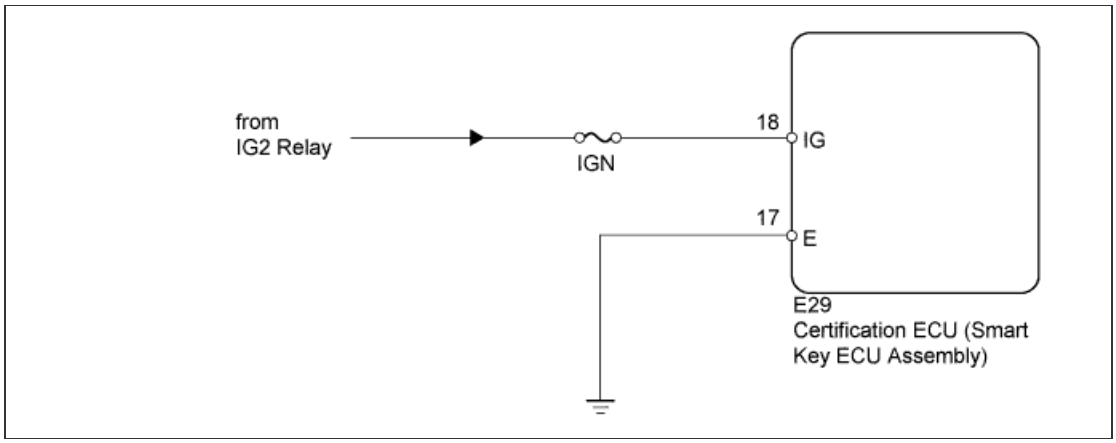
PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (Click here)

for Preparation Click here

DESCRIPTION

When the engine switch is turned on (IG), positive (+) battery voltage is applied to the certification ECU (smart key ECU assembly).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK BASIC FUNCTION (POWER SOURCE MODE FUNCTION)

a. Check the basic function of the power source mode function.

OK:
Basic function operates normally.

NG → GO TO ENTRY AND START SYSTEM (for Start Function) (Click here)

OK

2.INSPECT FUSE (IGN)

a. Remove the IGN fuse from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
IGN fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

3.CHECK HARNESS AND CONNECTOR (CERTIFICATION ECU [SMART KEY ECU ASSEMBLY] - BATTERY AND BODY GROUND)

a. Disconnect the E29 ECU connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

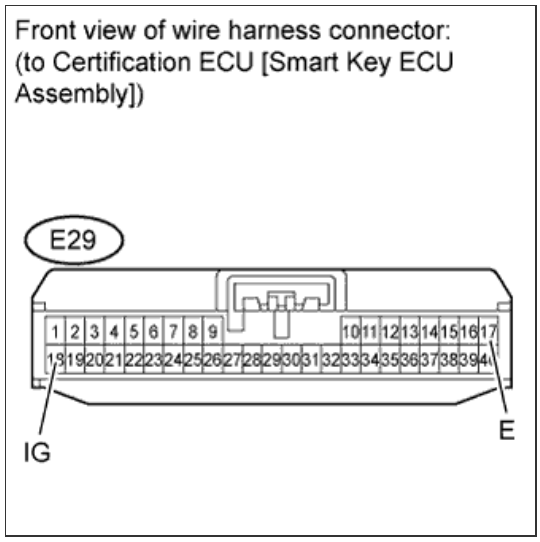
Tester Connection	Condition	Specified Condition

E29-17 (E) - Body ground	Always	Below 1 Ω

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E29-18 (IG) - Body ground	Engine switch on (IG)	11 to 14 V

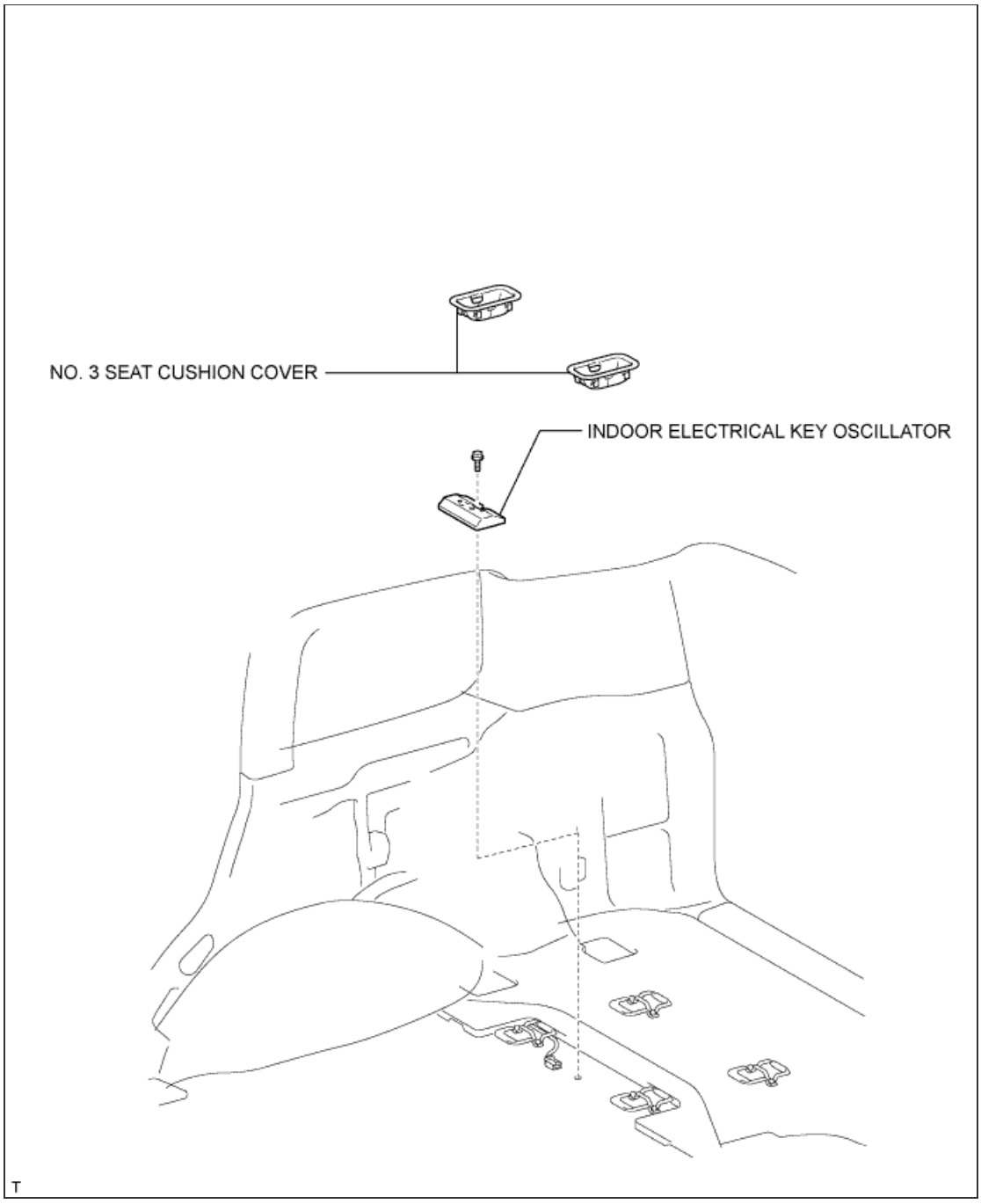


NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (Click here)

for Preparation Click here



for Preparation Click here

1. REMOVE REAR NO. 2 SEAT ASSEMBLY

a. Remove the rear No. 2 seat assembly (Click here).

2. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

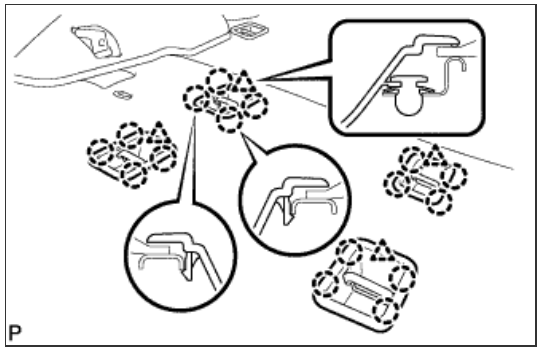
a. Remove the front quarter trim panel LH (Click here).

3. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY RH

a. Remove the front quarter trim panel RH (Click here).

4. REMOVE NO. 3 SEAT CUSHION COVER

a. Detach the 4 clips and 16 claws, and remove the 4 seat cushion covers.

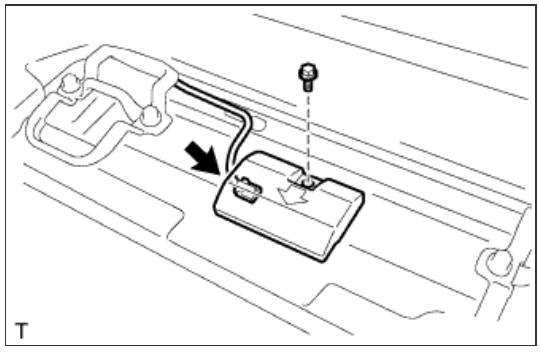


5. REMOVE INDOOR ELECTRICAL KEY OSCILLATOR

a. Fold back the rear floor carpet assembly.

b. Disconnect the connector.

c. Remove the bolt and electrical key oscillator.



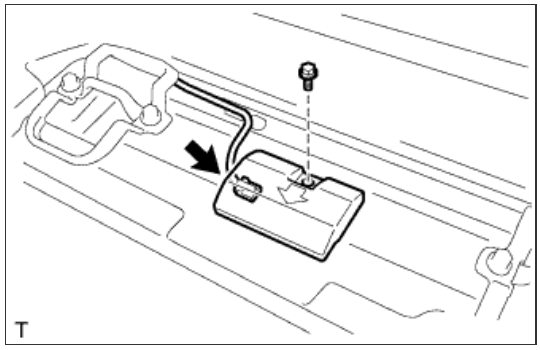
for Preparation Click here

1. INSTALL INDOOR ELECTRICAL KEY OSCILLATOR

a. Install the electrical key oscillator with the bolt.

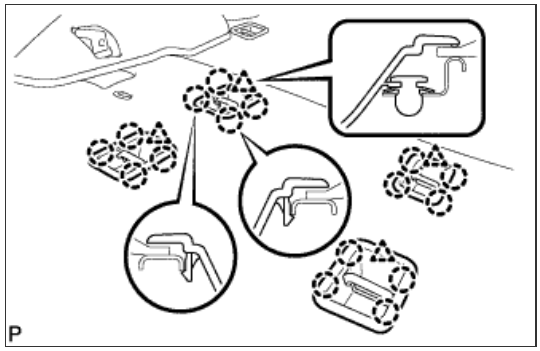
b. Connect the connector.

c. Install the floor carpet assembly.



2. INSTALL NO. 3 SEAT CUSHION COVER

a. Attach the 16 claws and 4 clips to install the 4 seat cushion covers.



3. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY RH

a. Install the front quarter trim panel assembly RH (Click here).

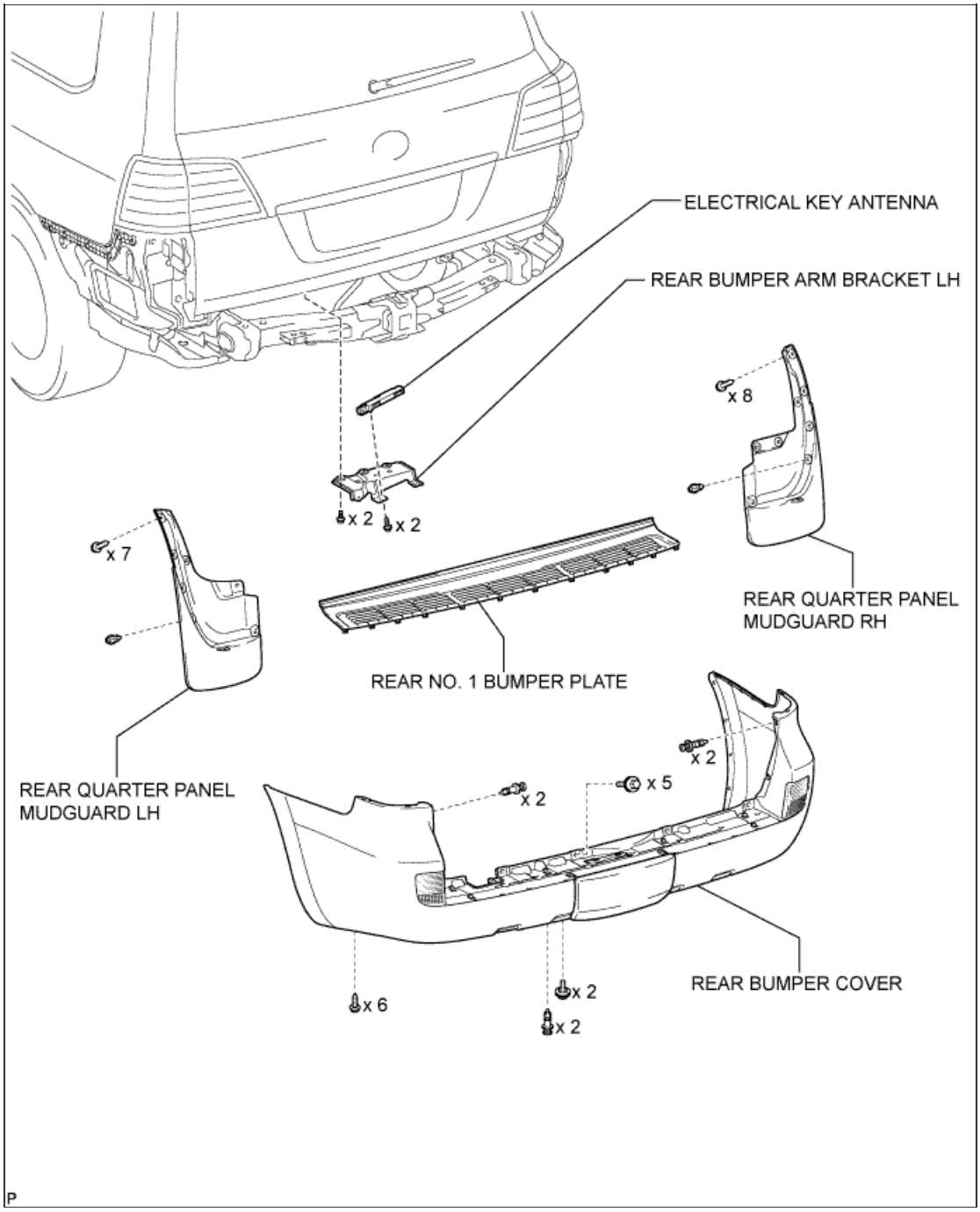
4. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

a. Install the front quarter trim panel assembly LH (Click here).

5. INSTALL REAR NO. 2 SEAT ASSEMBLY

a. Install the rear No. 2 seat assembly (Click here).

for Preparation Click here

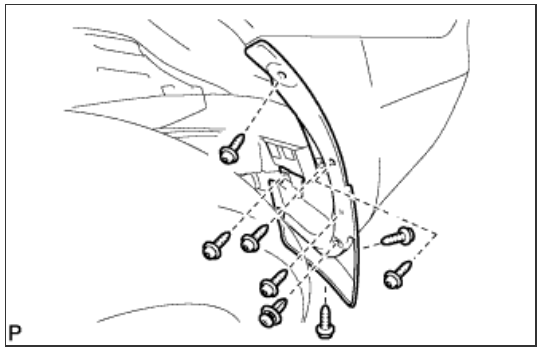


for Preparation Click here

1. REMOVE REAR QUARTER PANEL MUDGUARD LH

a. Remove the clip.

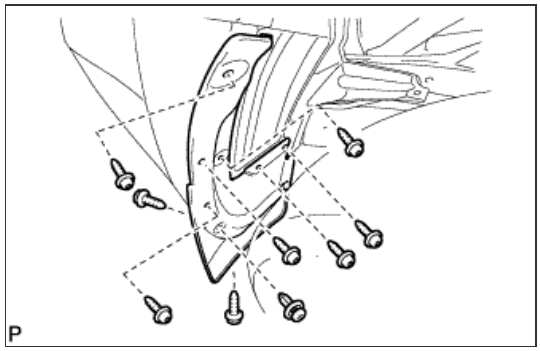
b. Using a T30 "TORX" socket, remove the 7 screws and mudguard.



2. REMOVE REAR QUARTER PANEL MUDGUARD RH

a. Remove the clip.

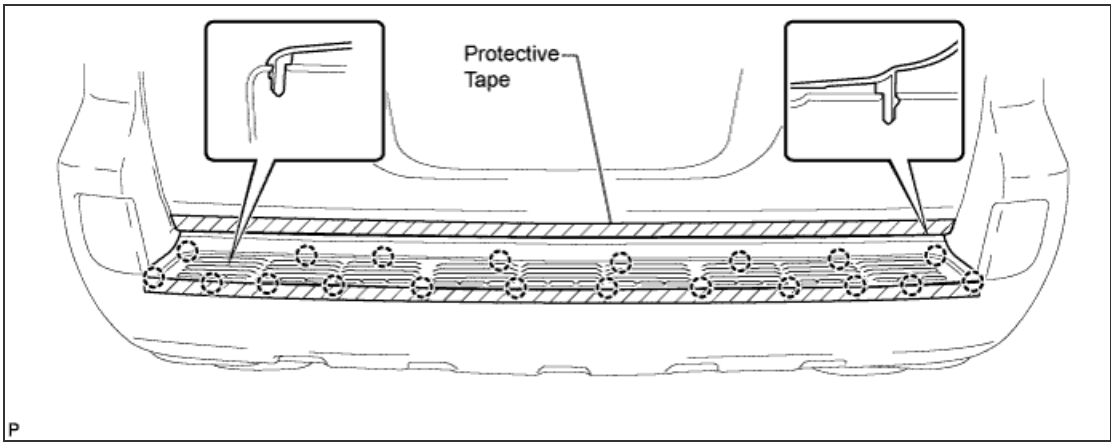
b. Using a T30 "TORX" socket, remove the 8 screws and mudguard.



3. REMOVE REAR NO. 1 BUMPER PLATE

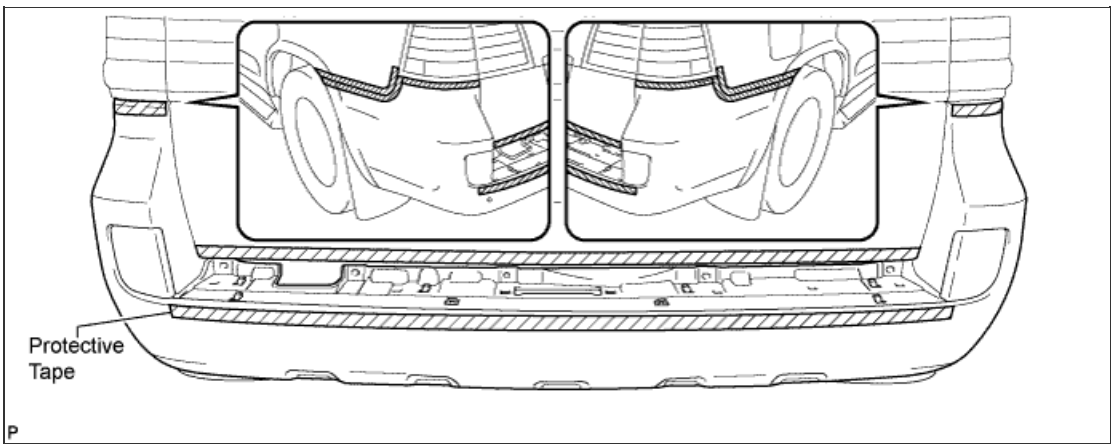
a. Put protective tape around the bumper plate.

b. Detach the 20 claws and remove the bumper plate.

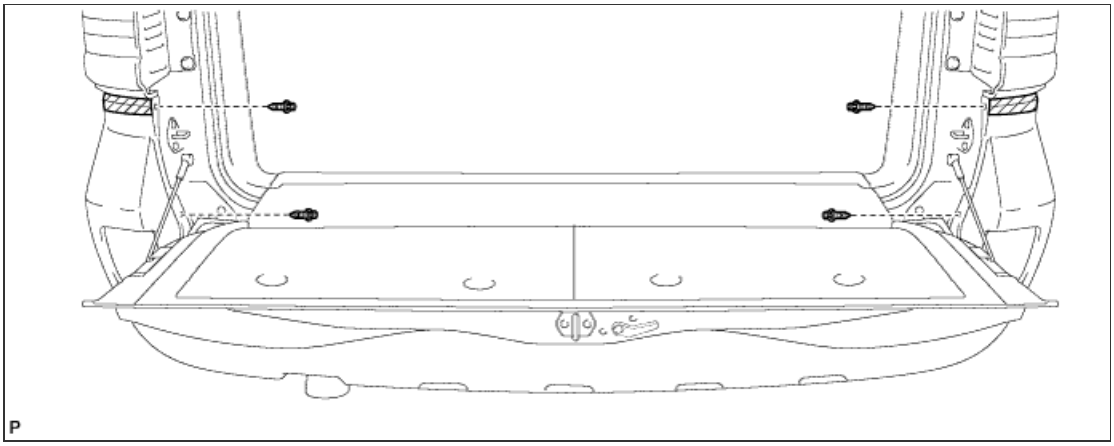


4. REMOVE REAR BUMPER COVER

a. Put protective tape around the bumper cover.



b. Open the tail gate and remove the 4 clips.

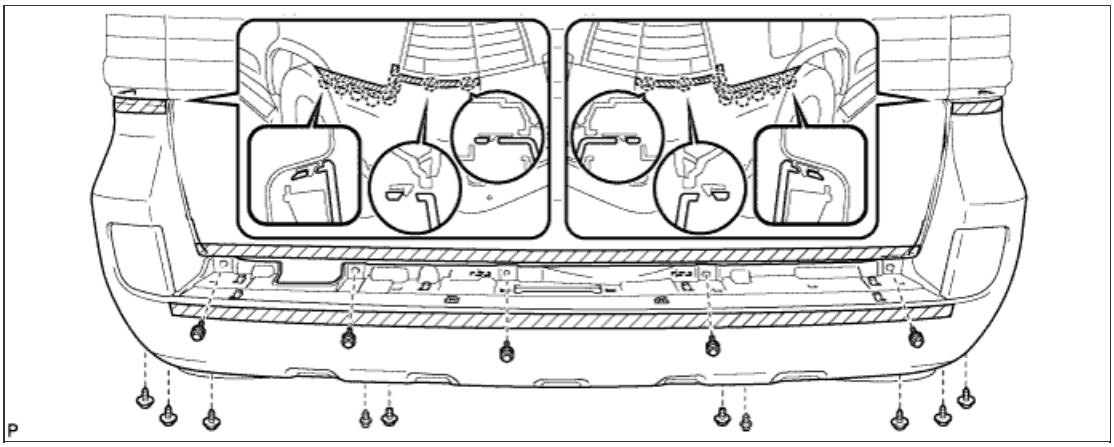


c. Close the tail gate.

d. Remove the 7 bolts, 6 screws and 2 clips.

e. w/o LEXUS Parking Assist-sensor System, w/o Rear Fog Light:
Detach the 16 claws and remove the bumper cover.

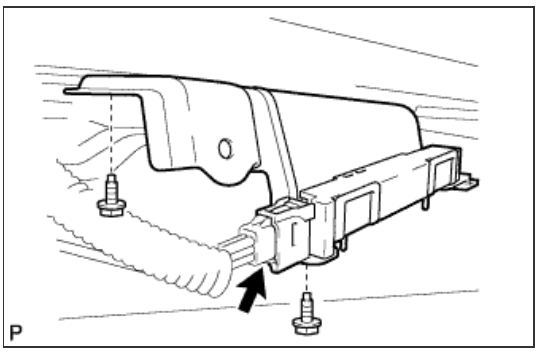
f. w/ LEXUS Parking Assist-sensor System or w/ Rear Fog Light:
Detach the 16 claws, disconnect the No. 2 frame wire connector and remove the bumper cover.



5. REMOVE REAR BUMPER ARM BRACKET LH

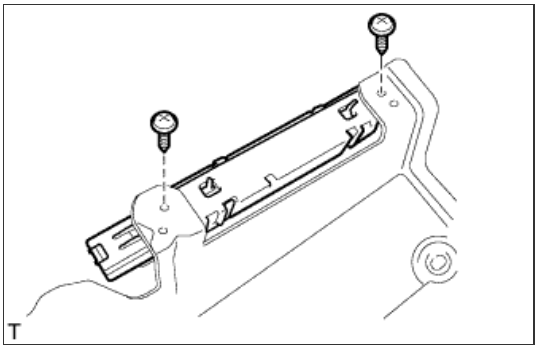
a. Disconnect the connector.

b. Remove the 2 bolts and bumper arm bracket.



6. REMOVE ELECTRICAL KEY ANTENNA

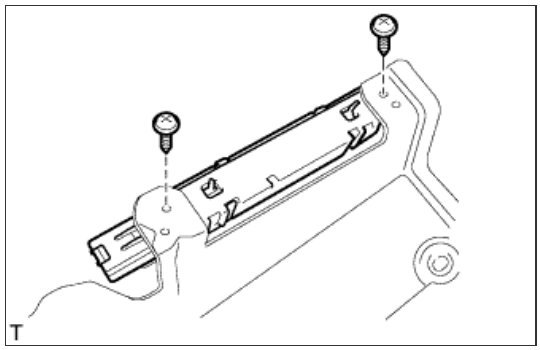
a. Remove the 2 screws and antenna.



for Preparation Click here

1. INSTALL ELECTRICAL KEY ANTENNA

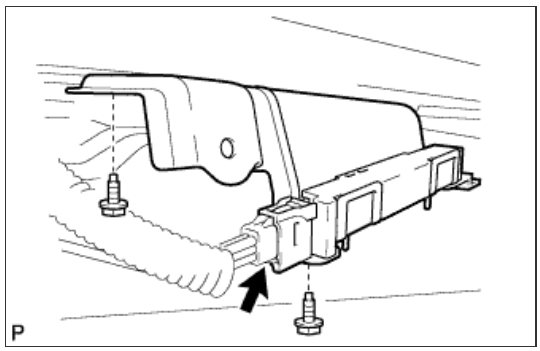
a. Install the antenna with the 2 screws.



2. INSTALL REAR BUMPER ARM BRACKET LH

a. Install the bumper arm bracket with the 2 bolts.

b. Connect the connector.

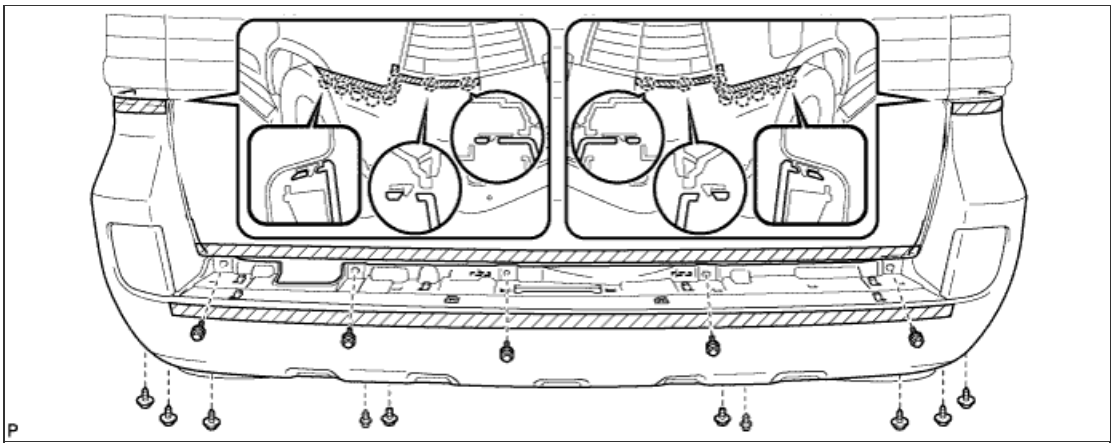


3. INSTALL REAR BUMPER COVER

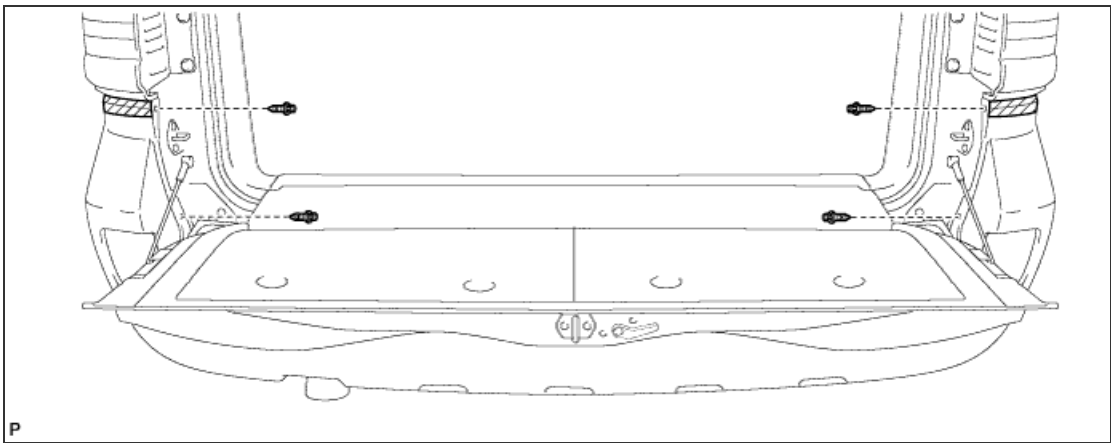
a. w/o LEXUS Parking Assist-sensor System, w/o Rear Fog Light:
Attach the 16 claws to install the bumper cover.

b. w/ LEXUS Parking Assist-sensor System or w/ Rear Fog Light:
Connect the No. 2 frame wire connector and attach the 16 claws to install the bumper cover.

c. Install the 7 bolts, 6 screws and 2 clips.



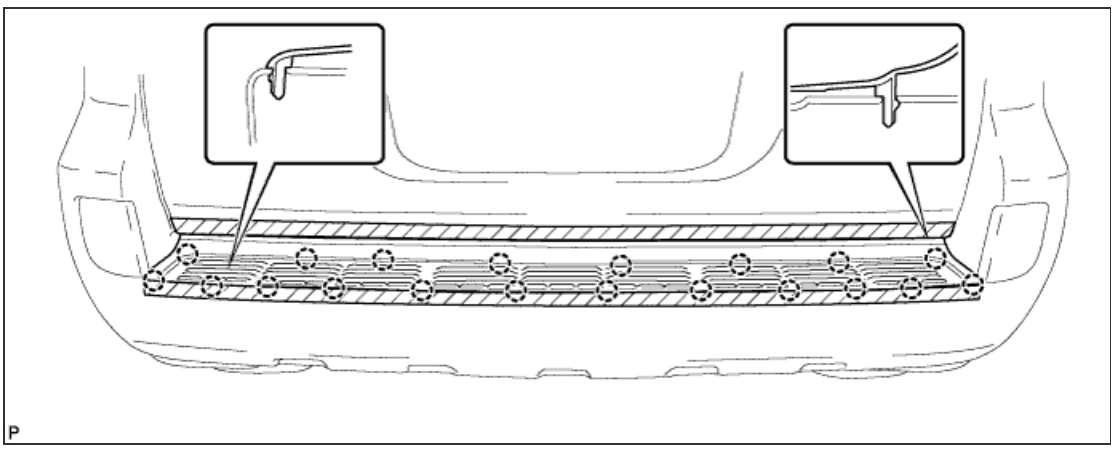
d. Open the tail gate and install the 4 clips.



e. Close the tail gate.

4. INSTALL REAR NO. 1 BUMPER PLATE

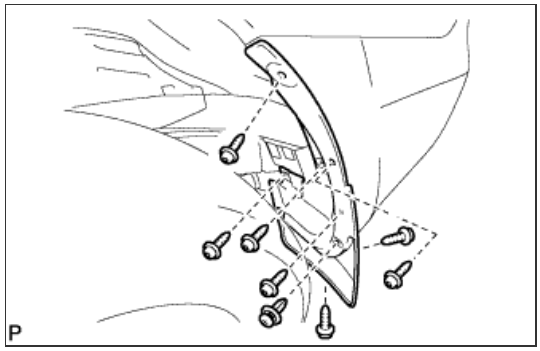
a. Attach the 20 claws to install the bumper plate.



5. INSTALL REAR QUARTER PANEL MUDGUARD LH

a. Install the mudguard with the clip.

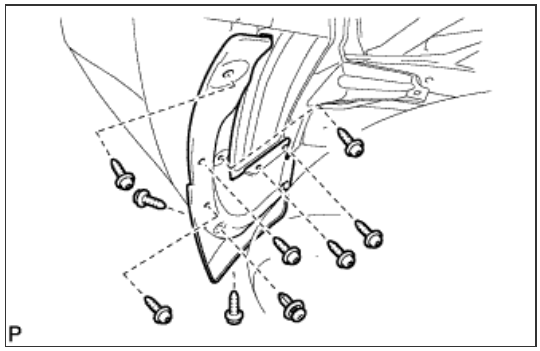
b. Using a T30 "TORX" socket, install the 7 screws.



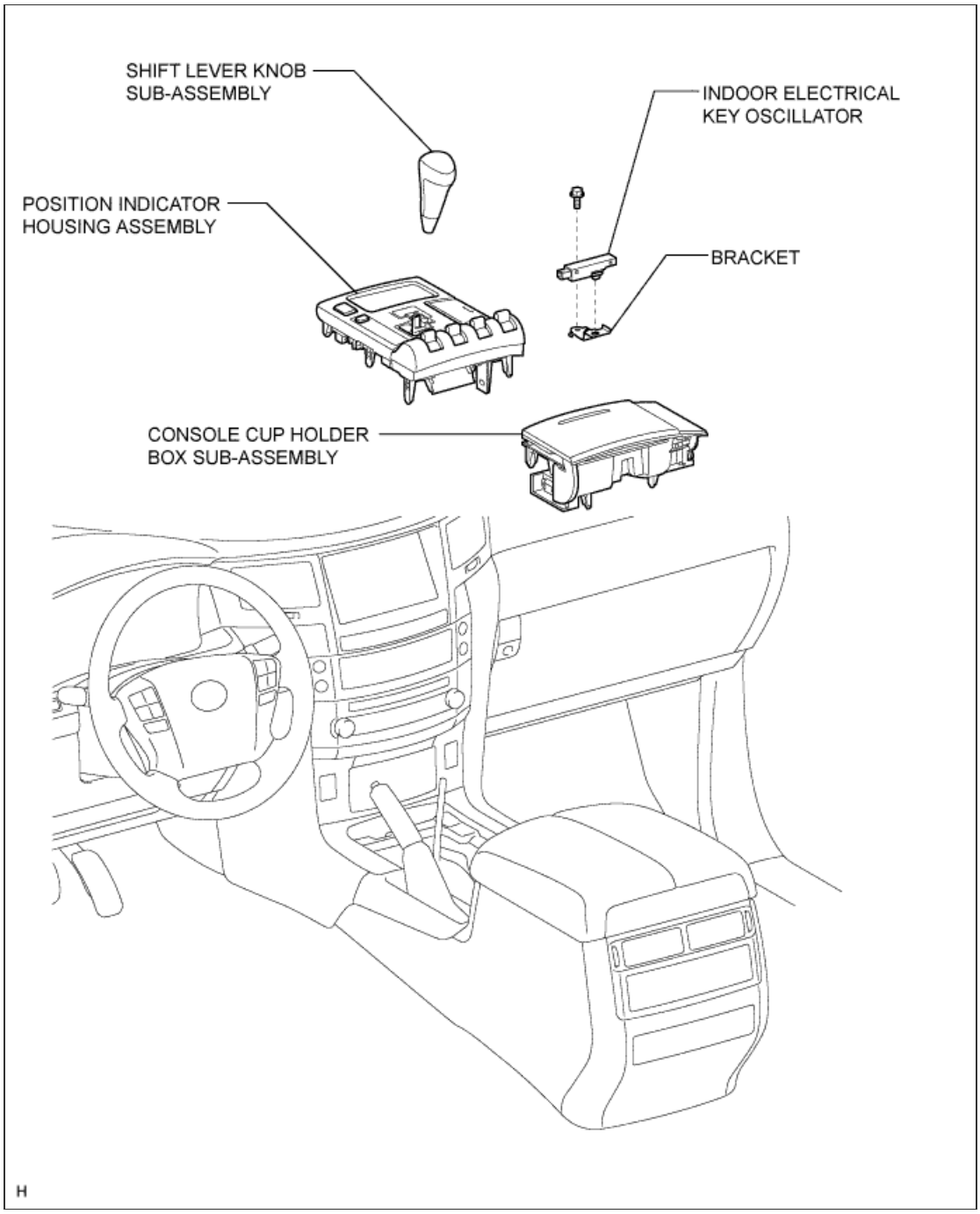
6. INSTALL REAR QUARTER PANEL MUDGUARD RH

a. Install the mudguard with the clip.

b. Using a T30 "TORX" socket, install the 8 screws.



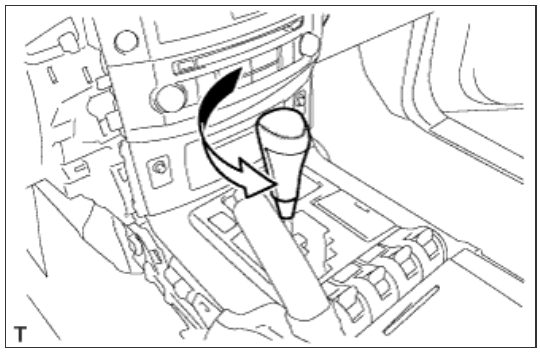
for Preparation Click here



for Preparation Click here

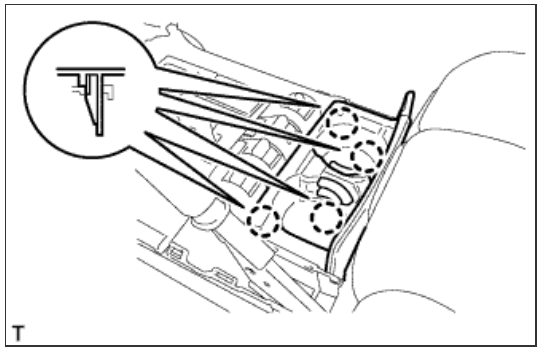
1. REMOVE SHIFT LEVER KNOB SUB-ASSEMBLY

a. Twist the shift lever knob in the direction indicated by the arrow and remove it.



2. REMOVE CONSOLE CUP HOLDER BOX SUB-ASSEMBLY

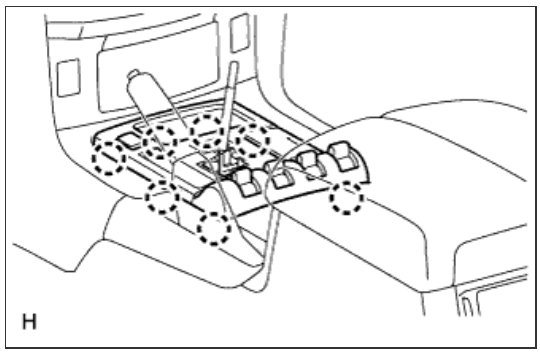
a. Detach the 4 claws and remove the box.



3. REMOVE POSITION INDICATOR HOUSING ASSEMBLY

a. Detach the 7 claws.

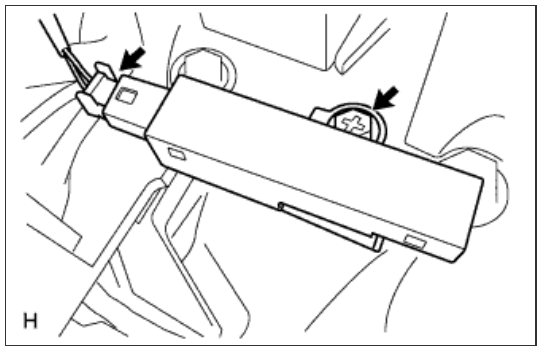
b. Disconnect the connectors and remove the position indicator housing.



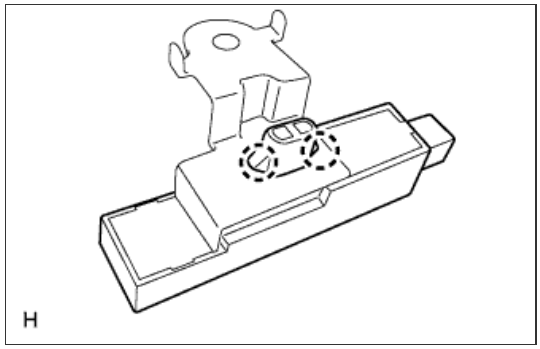
4. REMOVE INDOOR ELECTRICAL KEY OSCILLATOR

a. Disconnect the connector.

b. Remove the screw and electrical key oscillator.



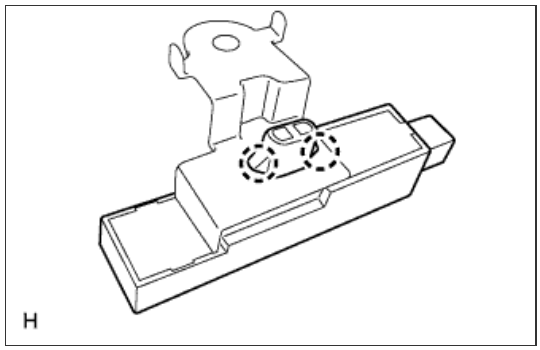
c. Detach the 2 claws and remove the bracket.



for Preparation Click here

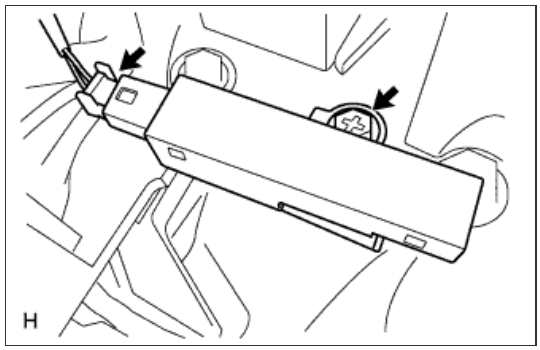
1. INSTALL INDOOR ELECTRICAL KEY OSCILLATOR

a. Attach the 2 claws to install the bracket.



b. Connect the connector.

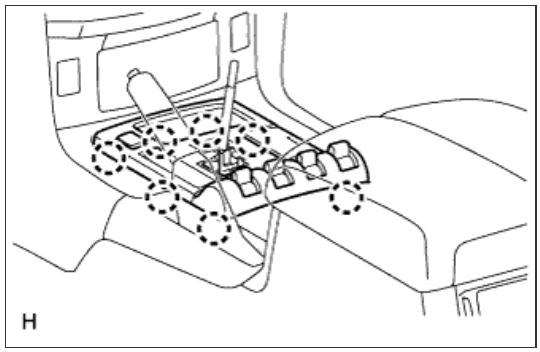
c. Install the electrical key oscillator with the screw.



2. INSTALL POSITION INDICATOR HOUSING ASSEMBLY

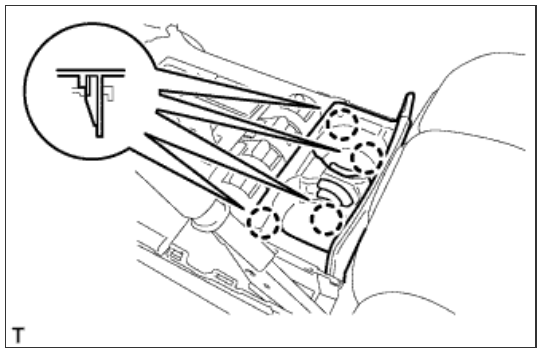
a. Connect the connectors.

b. Attach the 7 claws to install the position indicator housing.



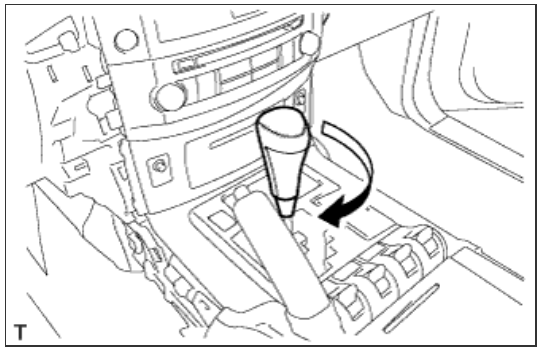
3. INSTALL CONSOLE CUP HOLDER BOX SUB-ASSEMBLY

a. Attach the 4 claws to install the box.

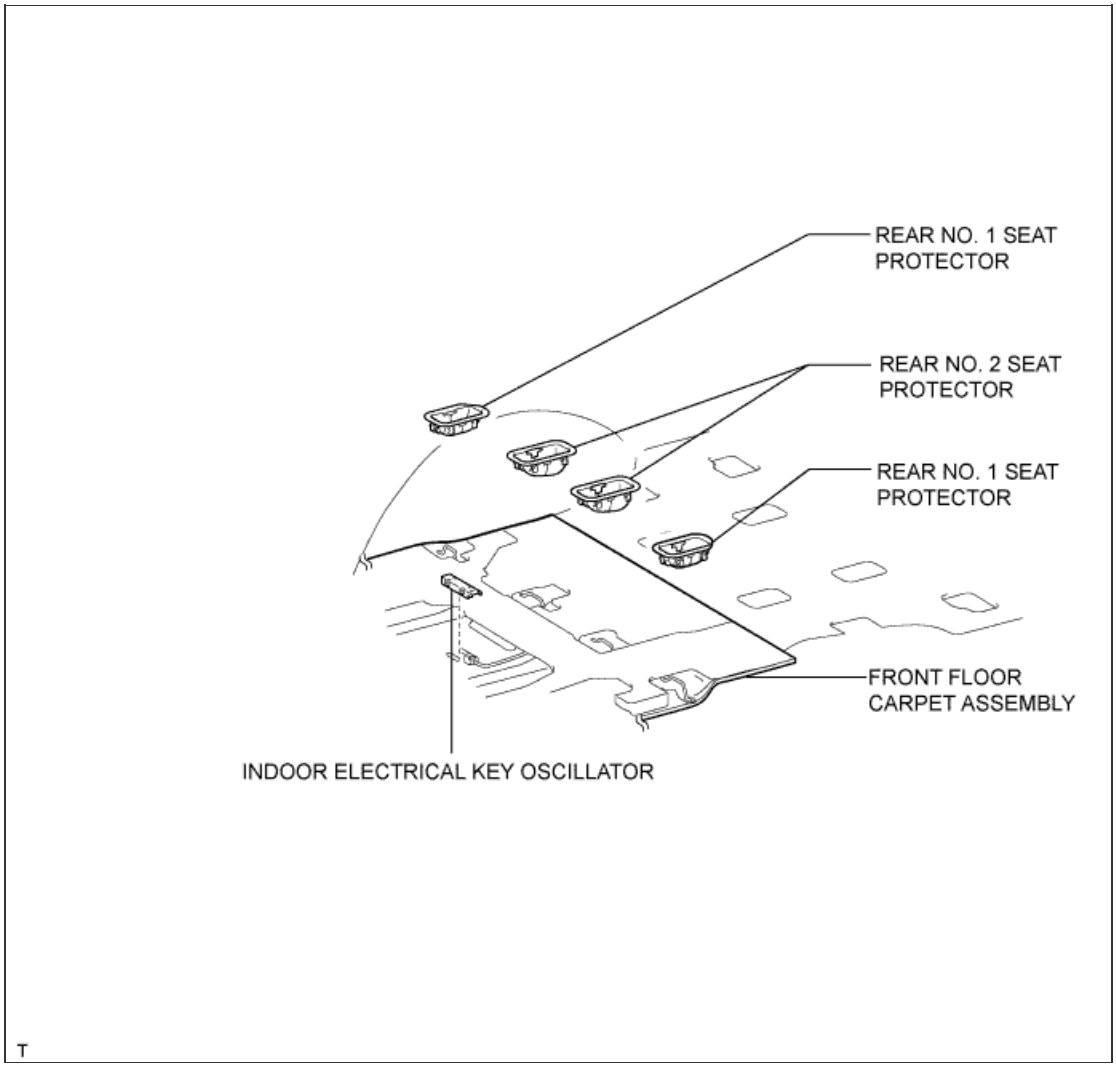


4. INSTALL SHIFT LEVER KNOB SUB-ASSEMBLY

a. Install the shift lever knob and twist it in the direction indicated by the arrow.



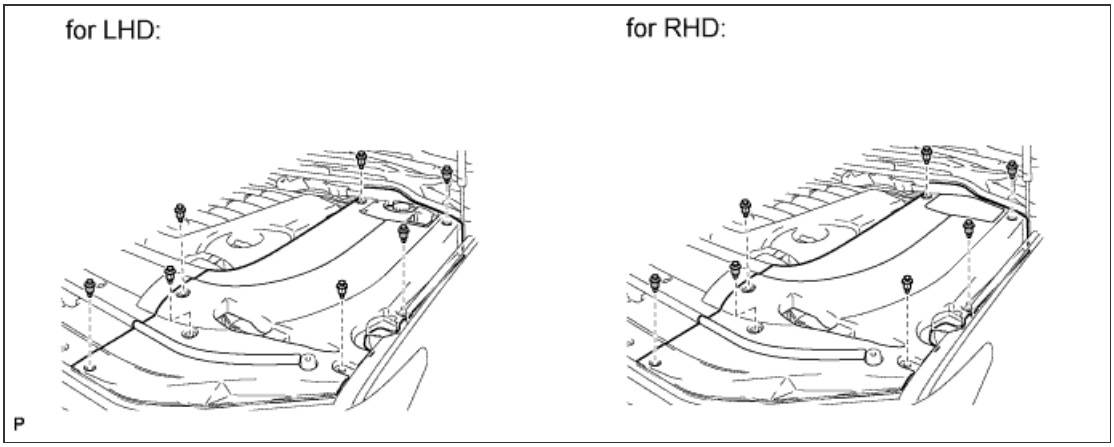
for Preparation Click here



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

- **When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).**
- **w/ Navigation System:**
  After the engine switch is turned off, the HDD navigation system requires approximately 6 minutes to record various types of memory and settings. As a result, after turning the engine switch off, wait 6 minutes or more before disconnecting the cable from the negative (-) battery terminal.

3. REMOVE REAR NO. 1 SEAT ASSEMBLY LH

a. Remove the rear No. 1 seat assembly LH (Click here).

4. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

a. Remove the rear No. 1 seat assembly RH (Click here).

5. REMOVE REAR NO. 2 SEAT ASSEMBLY

a. Remove the rear No. 2 seat assembly (Click here).

6. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

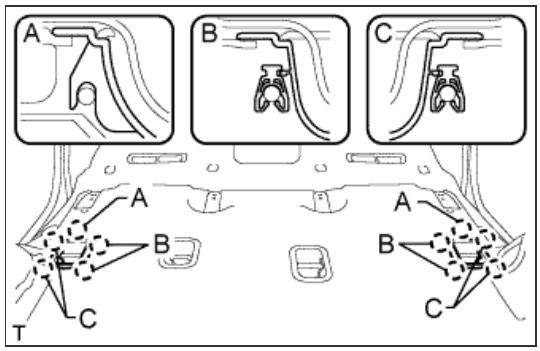
a. Remove the front quarter trim panel assembly LH (Click here).

7. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY RH

a. Remove the front quarter trim panel assembly RH (Click here).

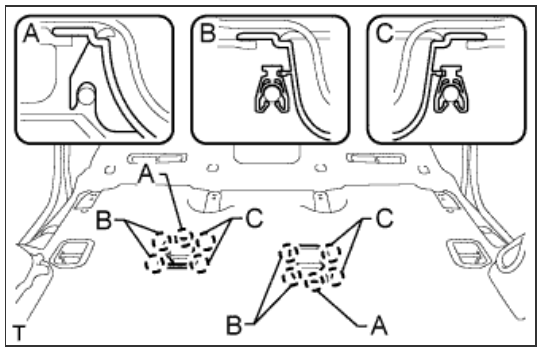
8. REMOVE REAR NO. 1 SEAT PROTECTOR

a. Detach the 10 claws and remove the 2 seat protectors.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the 10 claws and remove the 2 seat protectors.

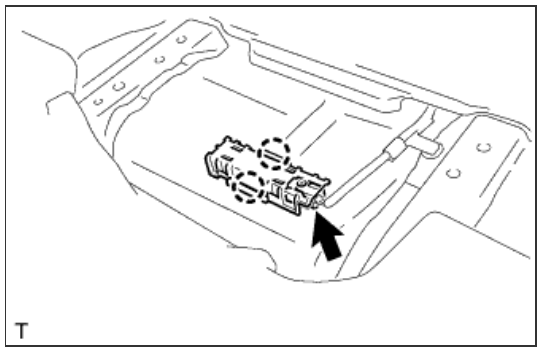


10. REMOVE INDOOR ELECTRICAL KEY OSCILLATOR

a. Fold back the front floor carpet assembly.

b. Disconnect the connector.

c. Detach the 2 claws and remove the electrical key oscillator.



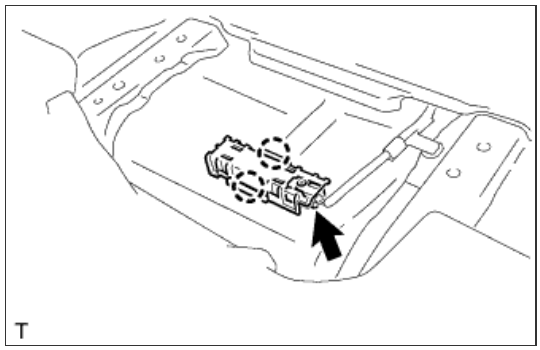
for Preparation Click here

1. INSTALL INDOOR ELECTRICAL KEY OSCILLATOR

a. Attach the 2 claws to install the electrical key oscillator.

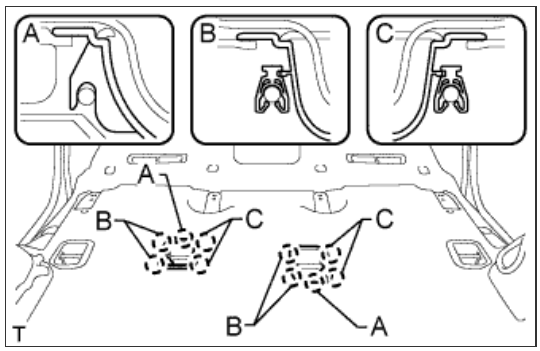
b. Connect the connector.

c. Install the front floor carpet assembly.



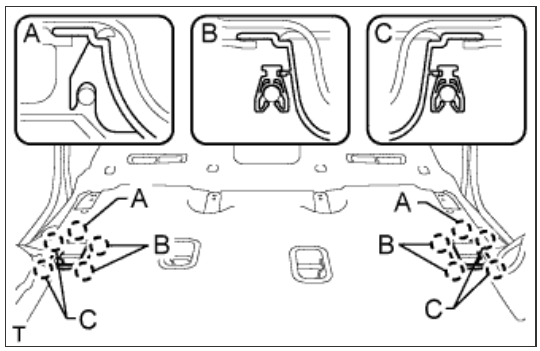
2. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Attach the 10 claws to install the 2 seat protectors.



3. INSTALL REAR NO. 1 SEAT PROTECTOR

a. Attach the 10 claws to install the 2 seat protectors.



4. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

a. Install the front quarter trim panel assembly LH (Click here).

5. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY RH

a. Install the front quarter trim panel assembly RH (Click here).

6. INSTALL REAR NO. 2 SEAT ASSEMBLY

a. Install the rear No. 2 seat assembly (Click here).

7. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

a. Install the rear No. 1 seat assembly RH (Click here).

8. INSTALL REAR NO. 1 SEAT ASSEMBLY LH

a. Install the rear No. 1 seat assembly LH (Click here).

9. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

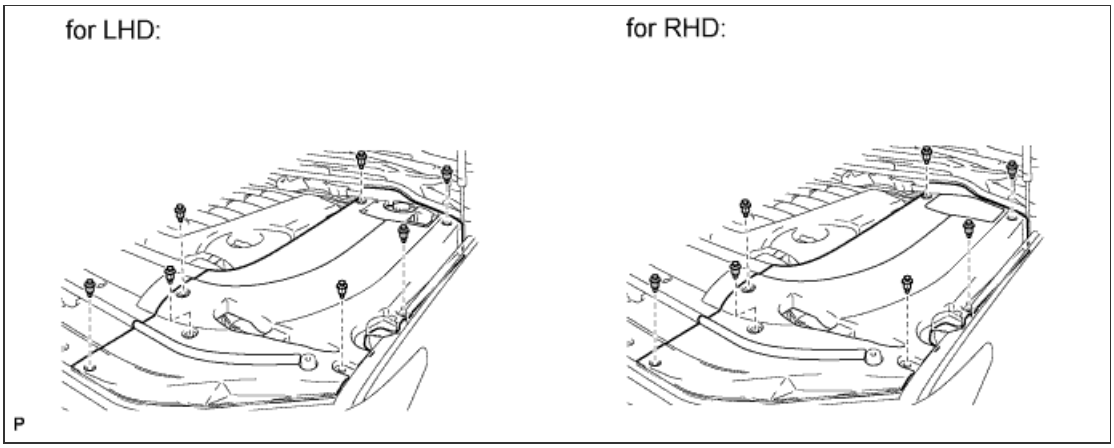
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

10. CHECK SRS WARNING LIGHT

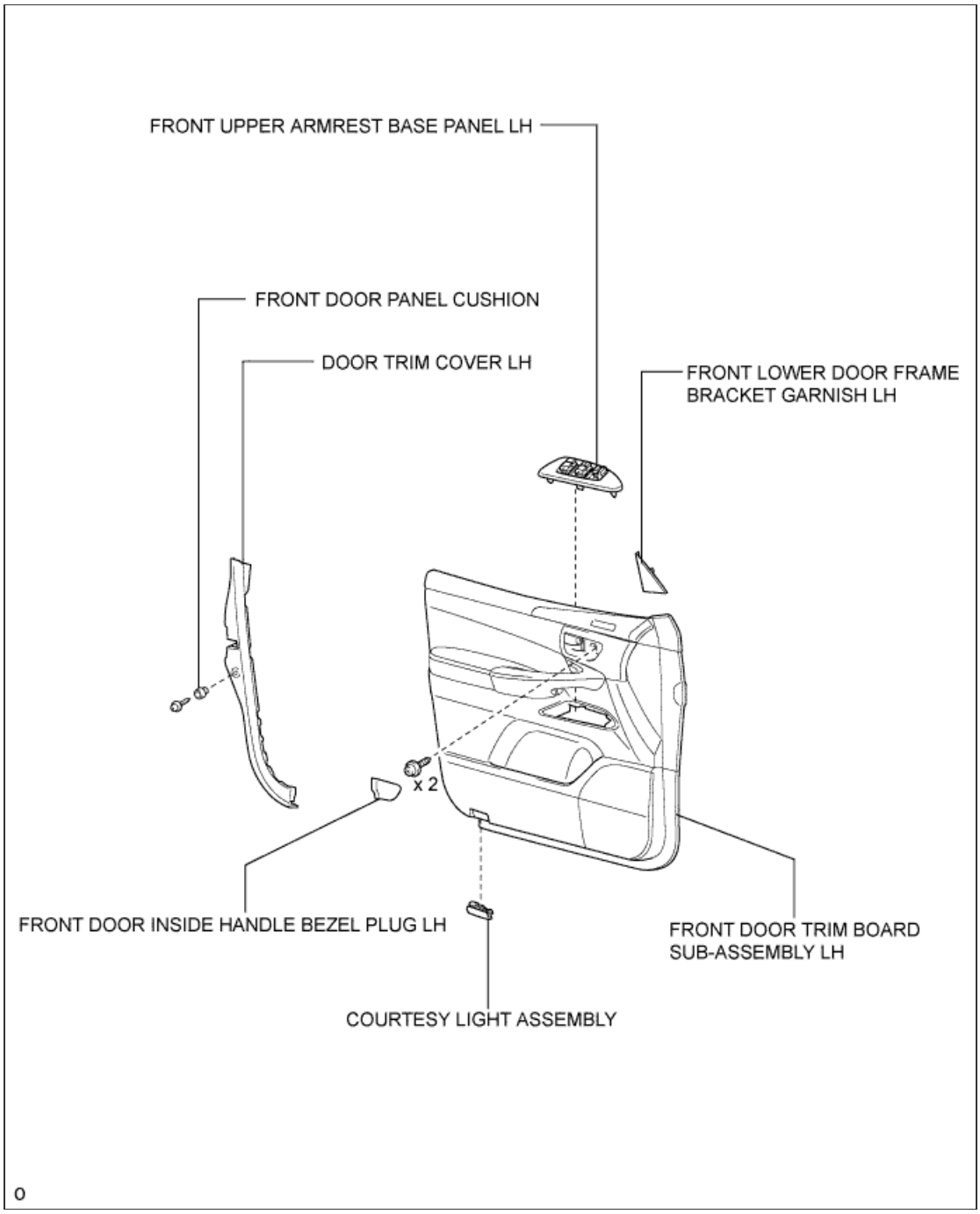
a. Check the SRS warning light (Click here).

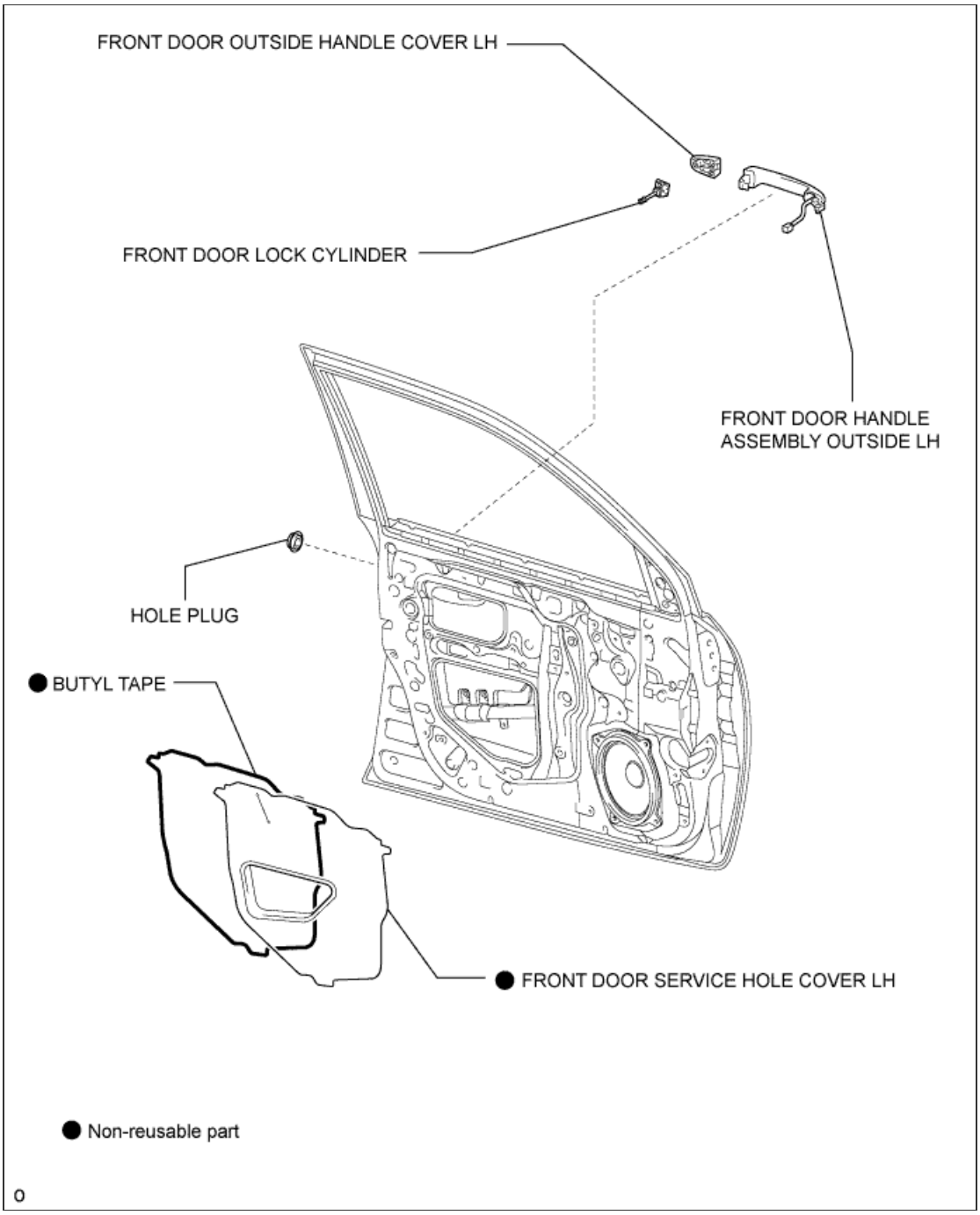
11. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here




FRONT DOOR OUTSIDE HANDLE COVER LH
FRONT DOOR LOCK CYLINDER
FRONT DOOR HANDLE ASSEMBLY OUTSIDE LH
HOLE PLUG
● BUTYL TAPE
● FRONT DOOR SERVICE HOLE COVER LH
● Non-reusable part

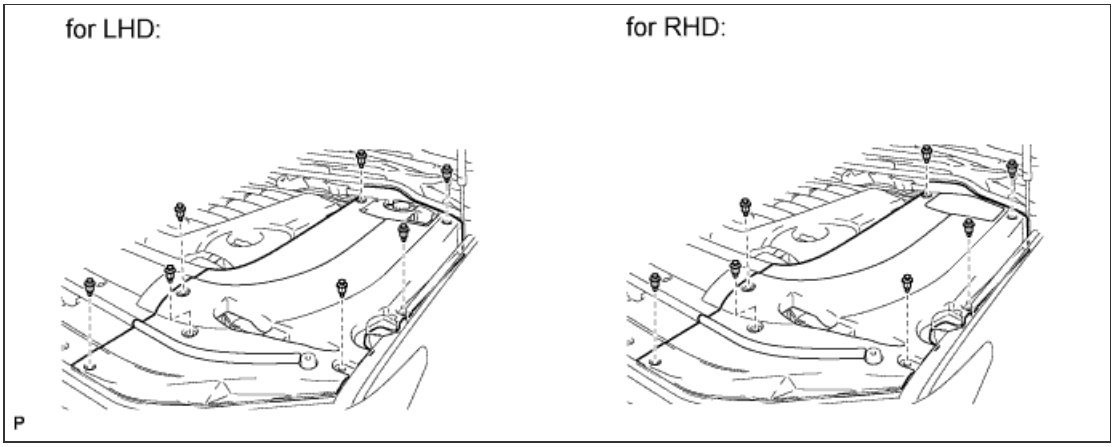
for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

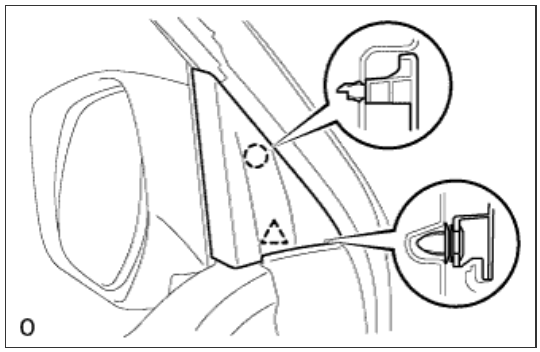
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

- **When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).**
- **w/ Navigation System:**
  After the engine switch is turned off, the HDD navigation system requires approximately 6 minutes to record various types of memory and settings. As a result, after turning the engine switch off, wait 6 minutes or more before disconnecting the cable from the negative (-) battery terminal.

3. REMOVE FRONT LOWER DOOR FRAME BRACKET GARNISH LH

a. Detach the clip and claw, and remove the front lower door frame bracket garnish.

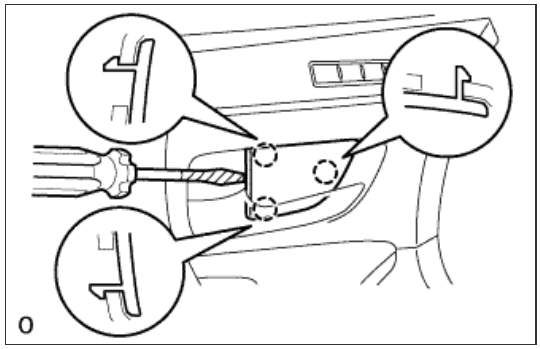


4. REMOVE FRONT DOOR INSIDE HANDLE BEZEL PLUG LH

a. Using a screwdriver, detach the 3 claws and remove the inside handle bezel plug.

HINT:

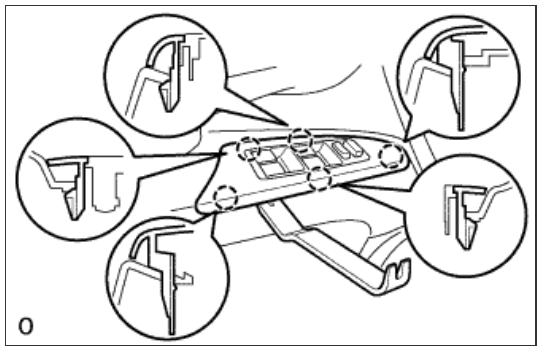
Tape the screwdriver tip before use.



5. REMOVE FRONT UPPER ARMREST BASE PANEL LH

a. Using a moulding remover, detach the 5 claws.

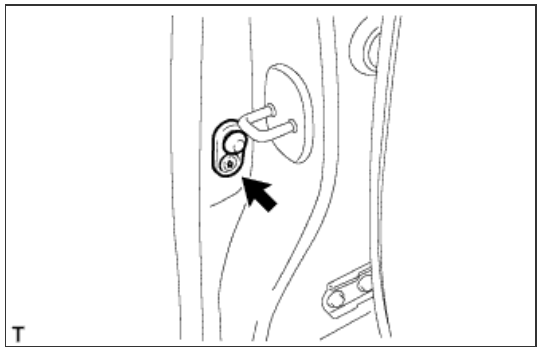
b. Disconnect the connector and remove the front upper armrest base panel and multiplex network master switch.



6. REMOVE COURTESY LIGHT ASSEMBLY

a. Using a T30 "TORX" socket wrench, remove the screw and switch.

b. Disconnect the connector.

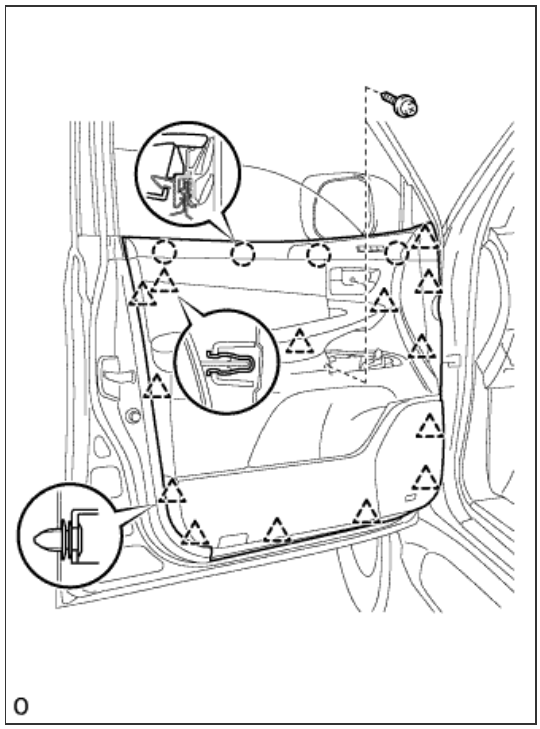


7. REMOVE FRONT DOOR TRIM BOARD SUB-ASSEMBLY LH

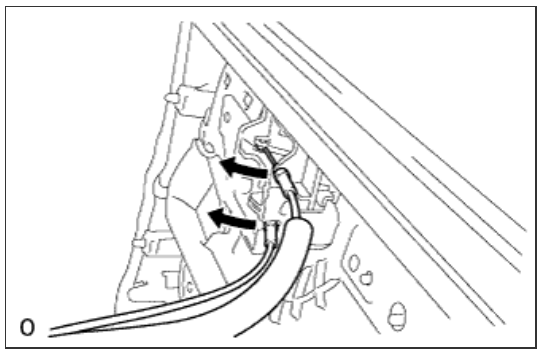
a. Remove the 2 screws.

b. Detach the 14 clips and 4 claws.

c. Disconnect the connector and remove the trim board.

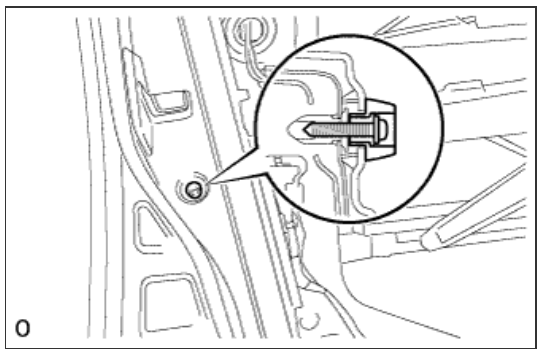


d. Disconnect the 2 cables from the inside handle.



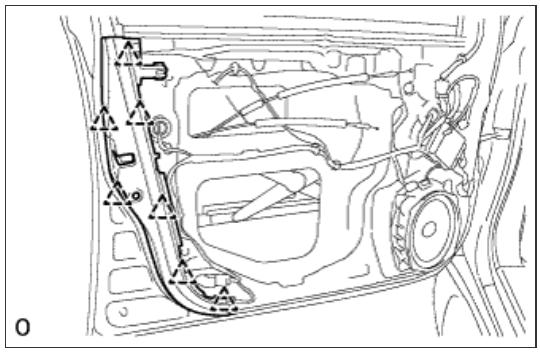
8. REMOVE FRONT DOOR PANEL CUSHION

a. Remove the screw and front door panel cushion.



9. REMOVE DOOR TRIM COVER LH

a. Using a clip remover, detach the 7 clips and remove the door trim cover.



10. REMOVE FRONT DOOR SERVICE HOLE COVER LH

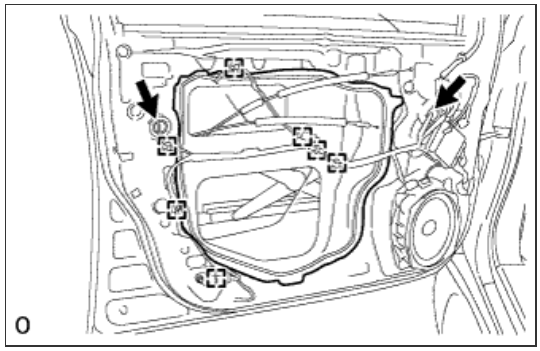
a. Using a clip remover, detach the 7 clamps.

b. Remove the bolt and disconnect the 2 connectors.

c. Remove the service hole cover.

HINT:

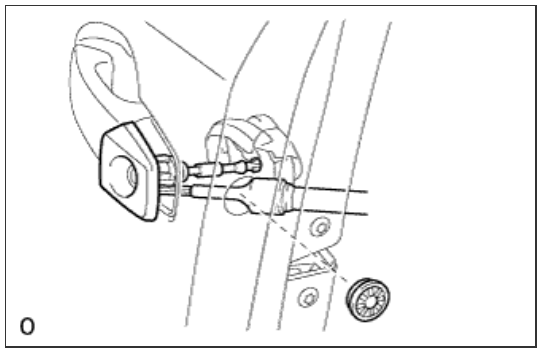
Remove the remaining tape on the door.



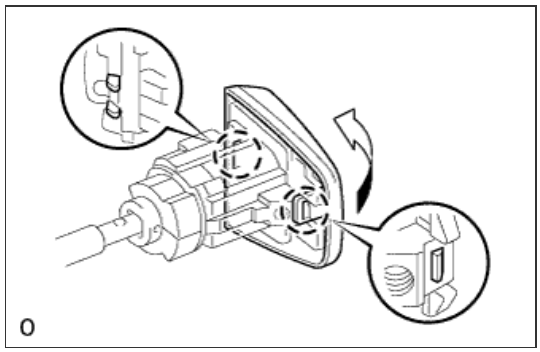
11. REMOVE FRONT DOOR OUTSIDE HANDLE COVER LH

a. Remove the hole plug.

b. Using a T30 "TORX" wrench, loosen the screw and remove the cover with the door lock cylinder installed.



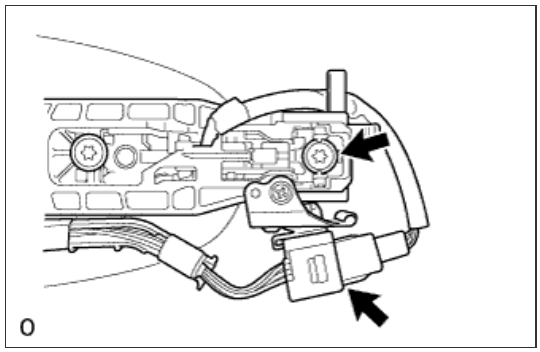
c. Detach the 2 claws and remove the front door outside handle cover.



12. REMOVE FRONT DOOR HANDLE ASSEMBLY OUTSIDE LH

a. Disconnect the connector.

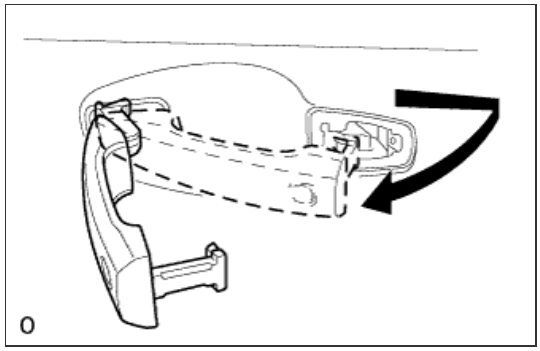
b. Using a T30 "TORX" wrench, loosen the screw.



c. Remove the handle by sliding and pulling it in the direction indicated by the arrow in the illustration.

NOTICE:

If the release plate is not pulled and held when removing the handle, the release plate will interfere with the handle and become damaged.



for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. INSPECT ENTRY LOCK AND UNLOCK SWITCH

a. Disconnect the connector.

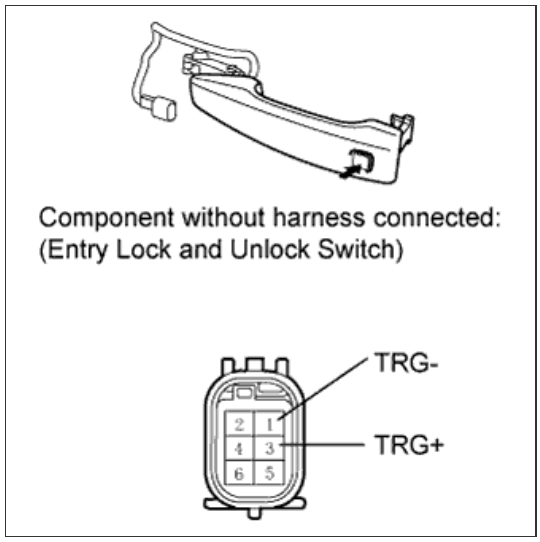
b. Remove the outside handle.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
1 (TRG-) - 3 (TRG+)	Lock switch not pushed (off)	10 kΩ or higher
1 (TRG-) - 3 (TRG+)	Lock switch pushed (on)	Below 1 Ω

If the result is not as specified, replace the entry lock and unlock switch.



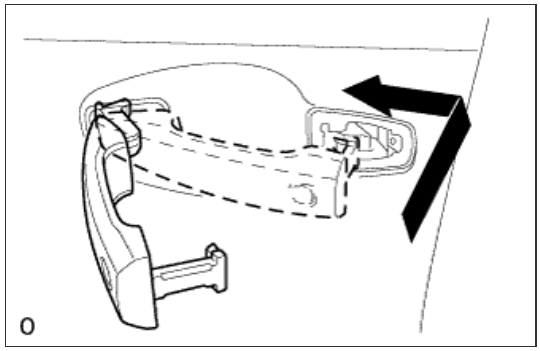
for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

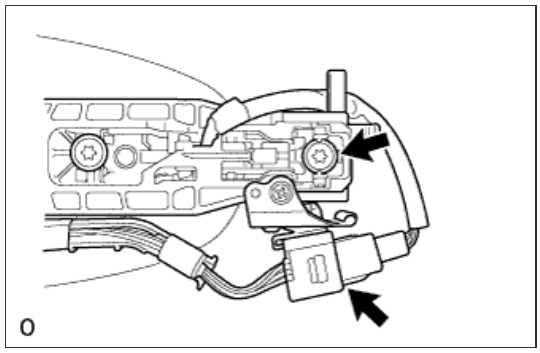
1. INSTALL FRONT DOOR HANDLE ASSEMBLY OUTSIDE LH

a. Install the handle by pushing it in the direction of the arrow in the illustration.



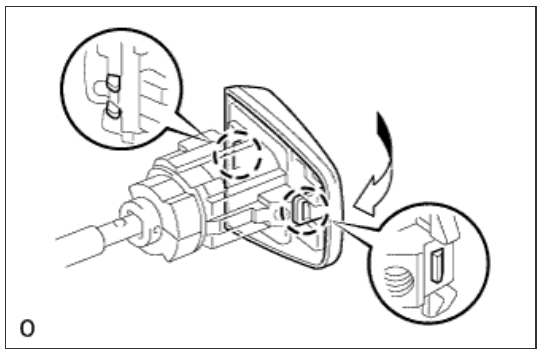
b. Using a T30 "TORX" socket, tighten the screw.

c. Connect the connector.



2. INSTALL FRONT DOOR OUTSIDE HANDLE COVER LH

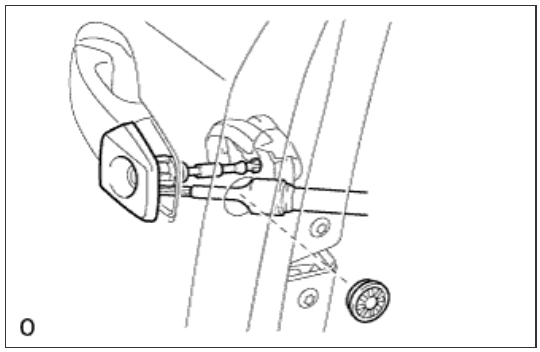
a. Attach the 2 claws to install the front door outside handle cover to the front door lock cylinder.



b. Using a T30 "TORX" socket, install the cover (with the door lock cylinder) with the screw.

Torque:
4.0 N*m{ 41 kgf*cm , 35 in.*lbf }

c. Install the hole plug.



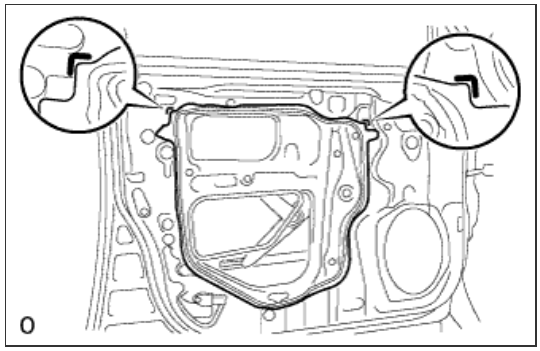
3. INSTALL FRONT DOOR SERVICE HOLE COVER LH

a. Apply butyl tape to the door.

b. Pass the front door lock remote control cable and front door inside locking cable through a new front door service hole cover.

NOTICE:

- **When installing the service hole cover, pull the links and connectors through the service hole cover.**
- **There should be no wrinkles or folds after installing the service hole cover.**
- **After installing the service hole cover, check the sealing quality.**

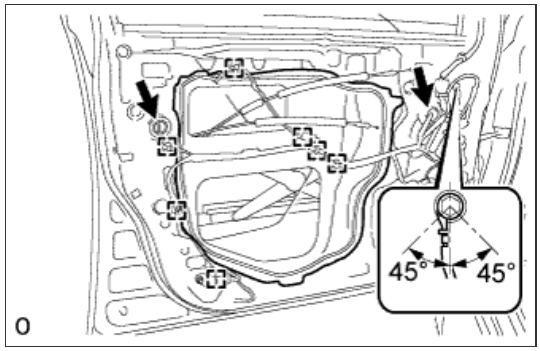


c. Connect the 2 connectors.

d. Attach the 7 clamps.

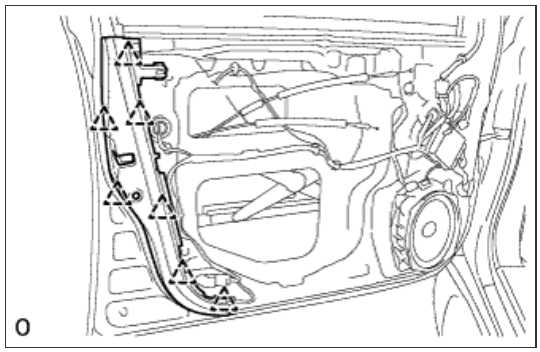
e. Install the bolt as shown in the illustration.

Torque:
8.4 N*m{ 86 kgf*cm , 74 in.*lbf }



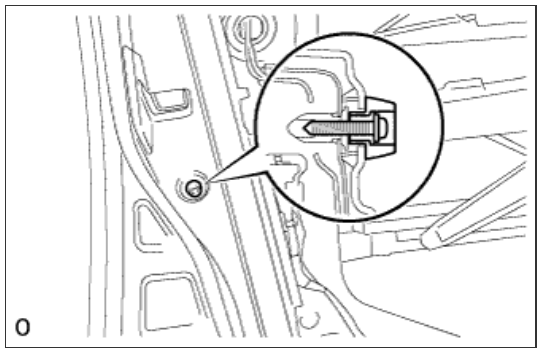
4. INSTALL DOOR TRIM COVER LH

a. Attach the 7 clips to install the door trim cover.



5. INSTALL FRONT DOOR PANEL CUSHION

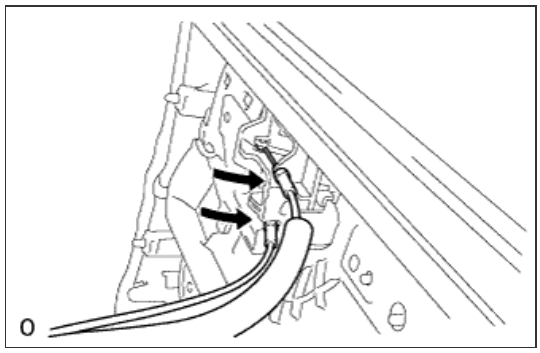
a. Install the front door panel cushion with the screw.



6. INSTALL FRONT DOOR TRIM BOARD SUB-ASSEMBLY LH

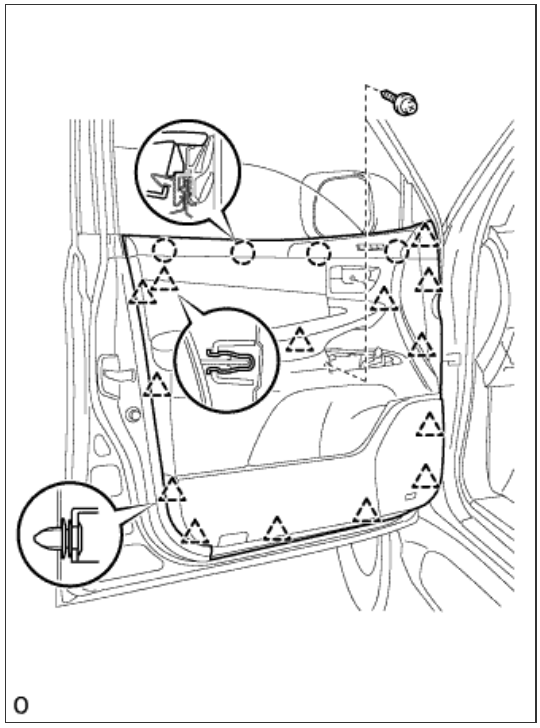
a. Connect the connector.

b. Connect the front door lock remote control cable and front door inside locking cable to the front door inside handle sub-assembly.



c. Attach the 4 claws and 14 clips to install the trim board.

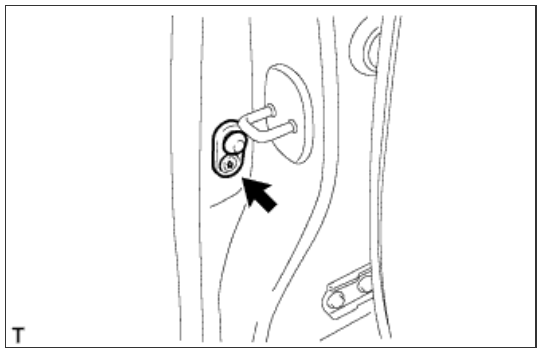
d. Install the 2 screws.



7. INSTALL COURTESY LIGHT ASSEMBLY

a. Using a T30 "TORX" socket wrench, remove the screw and switch.

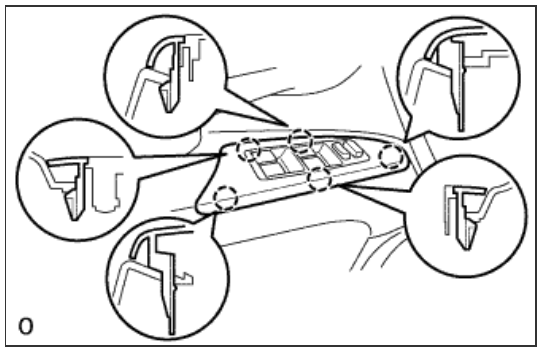
b. Disconnect the connector.



8. INSTALL FRONT UPPER ARMREST BASE PANEL LH

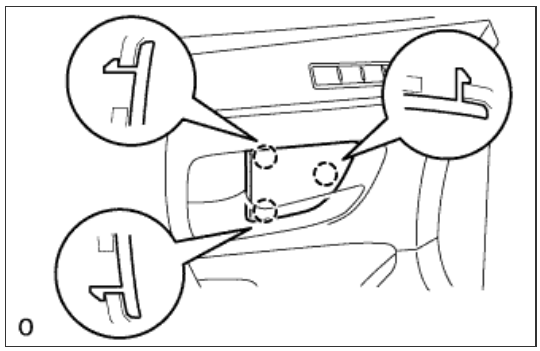
a. Connect the connector.

b. Attach the 5 claws to install the front upper armrest base panel.



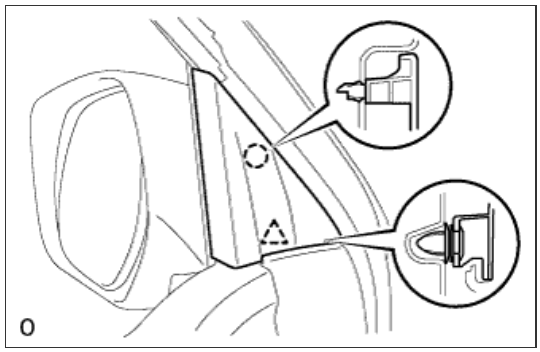
9. INSTALL FRONT DOOR INSIDE HANDLE BEZEL PLUG LH

a. Attach the 3 claws to install the inside handle bezel plug.



10. INSTALL FRONT LOWER DOOR FRAME BRACKET GARNISH LH

a. Attach the clip and claw to install the front door lower frame bracket garnish.



11. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

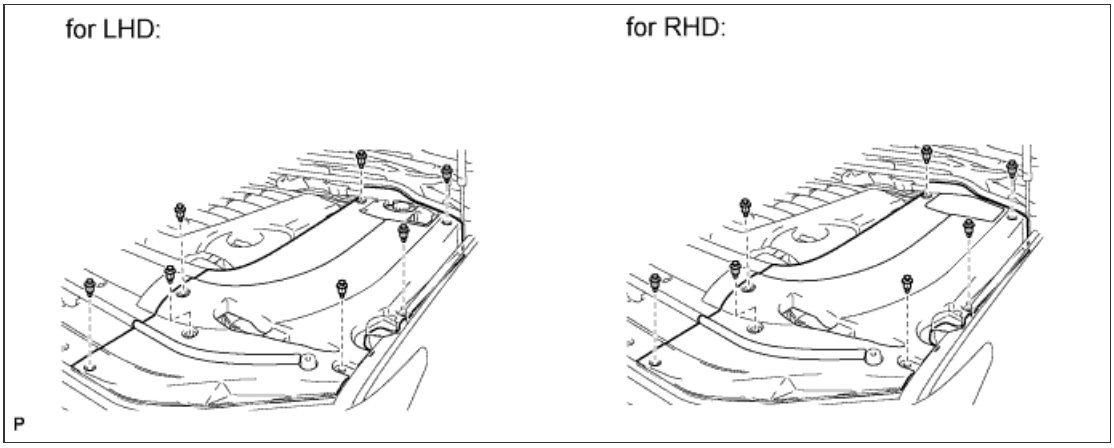
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

12. CHECK SRS WARNING LIGHT

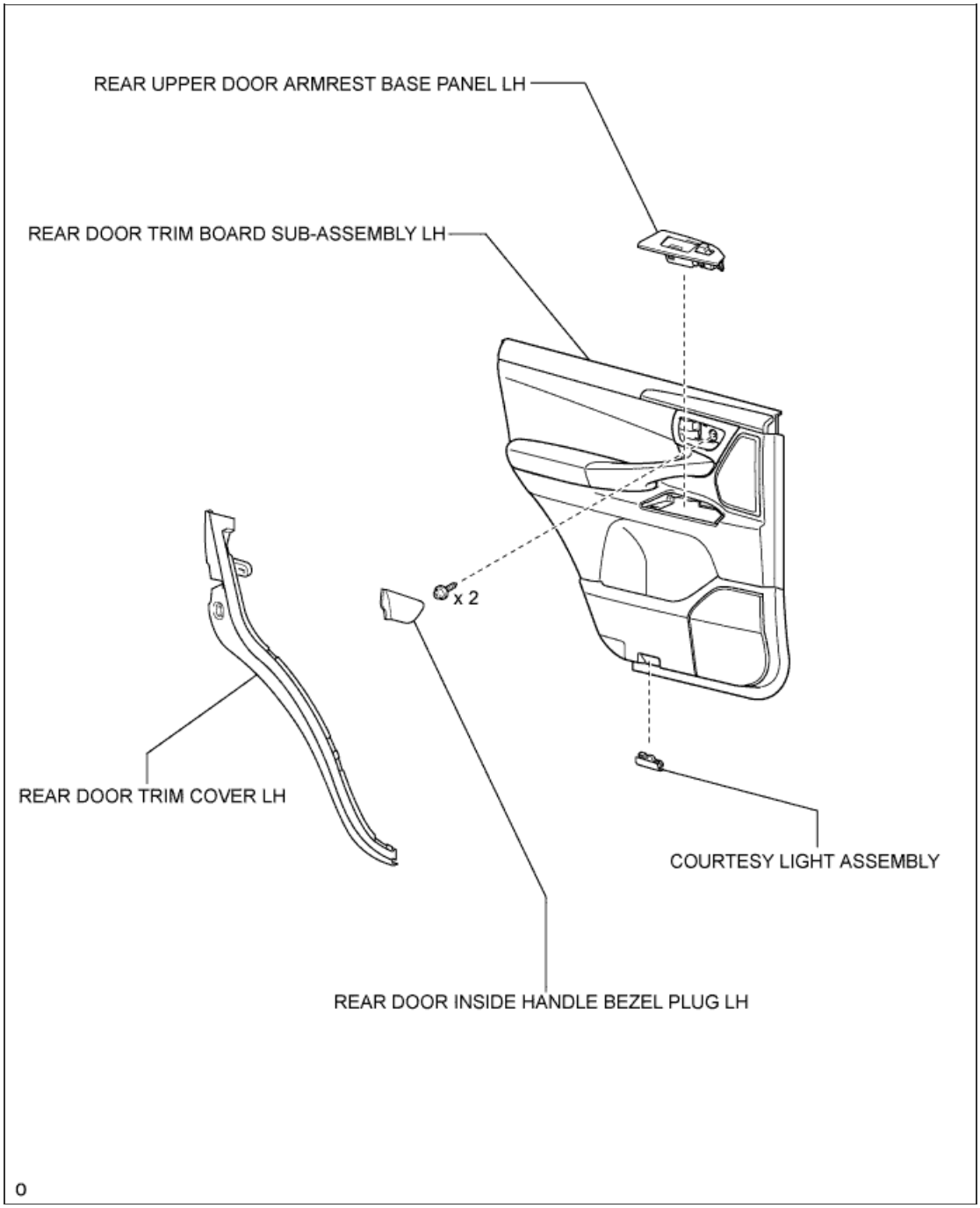
a. Check the SRS warning light (Click here).

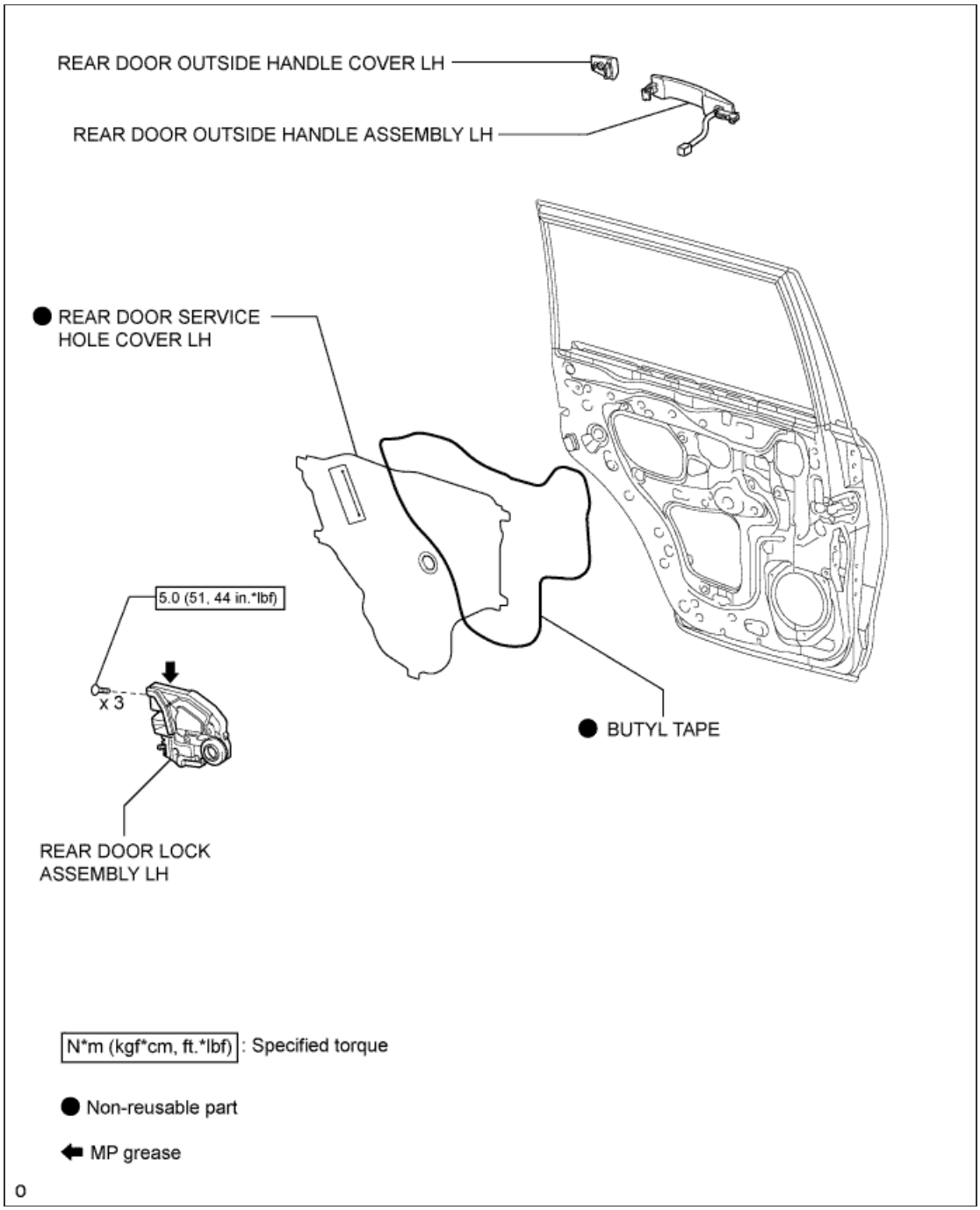
13. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here




REAR DOOR OUTSIDE HANDLE COVER LH
REAR DOOR OUTSIDE HANDLE ASSEMBLY LH
● REAR DOOR SERVICE HOLE COVER LH
5.0 (51, 44 in.*lbf)
x 3
● BUTYL TAPE
REAR DOOR LOCK ASSEMBLY LH
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
MP grease

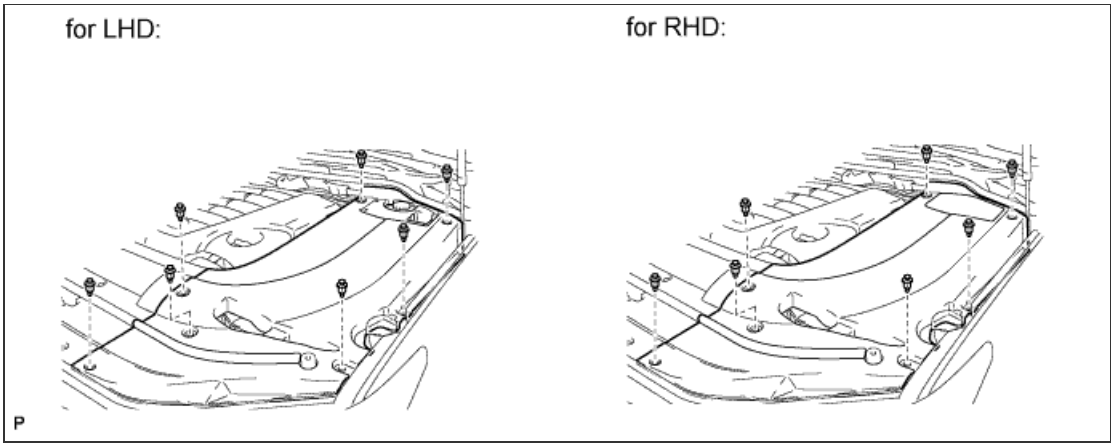
for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

NOTICE:

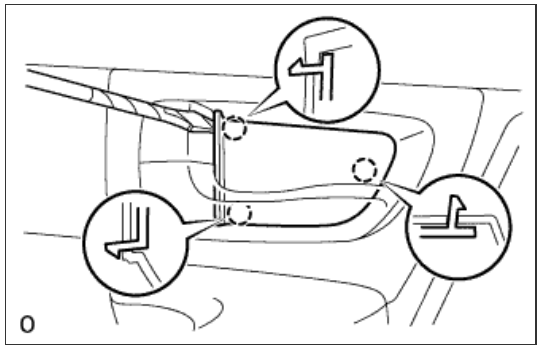
- **When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).**
- **w/ Navigation System:**
  After the engine switch is turned off, the HDD navigation system requires approximately 6 minutes to record various types of memory and settings. As a result, after turning the engine switch off, wait 6 minutes or more before disconnecting the cable from the negative (-) battery terminal.

3. REMOVE REAR DOOR INSIDE HANDLE BEZEL PLUG LH

a. Using a screwdriver, detach the 3 claws and remove the inside handle bezel plug.

HINT:

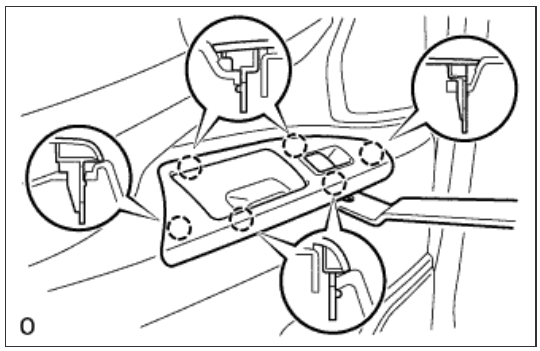
Tape the screwdriver tip before use.



4. REMOVE REAR UPPER DOOR ARMREST BASE PANEL LH

a. Using a moulding remover, detach the 6 claws.

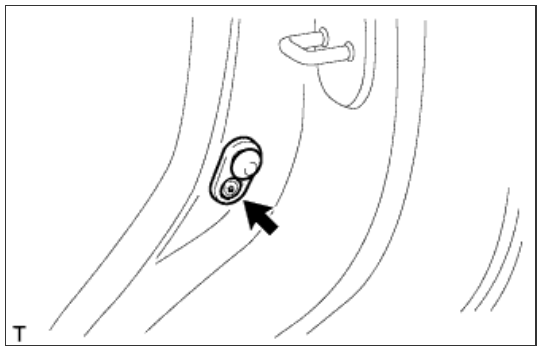
b. Disconnect the connector and remove the rear upper door armrest base panel and rear power window regulator switch assembly.



5. REMOVE COURTESY LIGHT ASSEMBLY

a. Using a T30 "TORX" socket wrench, remove the screw and switch.

b. Disconnect the connector.

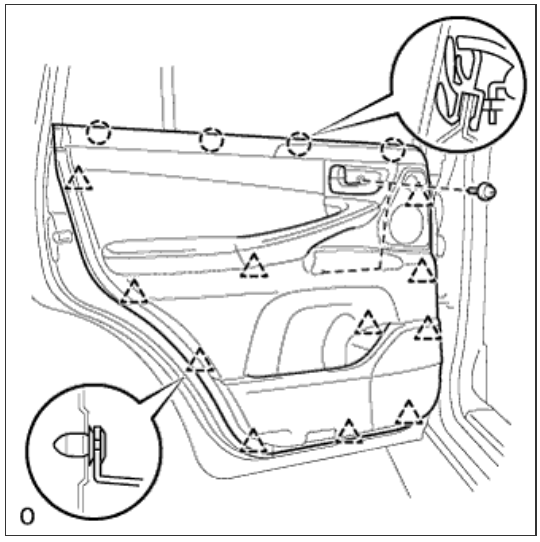


6. REMOVE REAR DOOR TRIM BOARD SUB-ASSEMBLY LH

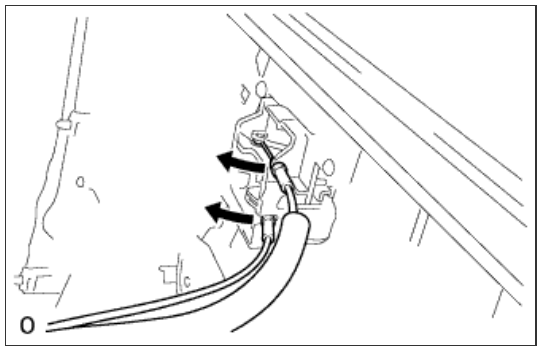
a. Remove the 2 screws.

b. Detach the 11 clips and 4 claws.

c. Disconnect the connector and remove the trim board.

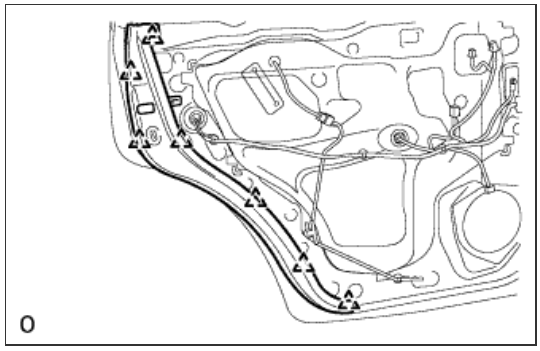


d. Disconnect the 2 cables from the inside handle.



7. REMOVE REAR DOOR TRIM COVER LH

a. Detach the 7 clips and remove the door trim cover.



8. REMOVE REAR DOOR SERVICE HOLE COVER LH

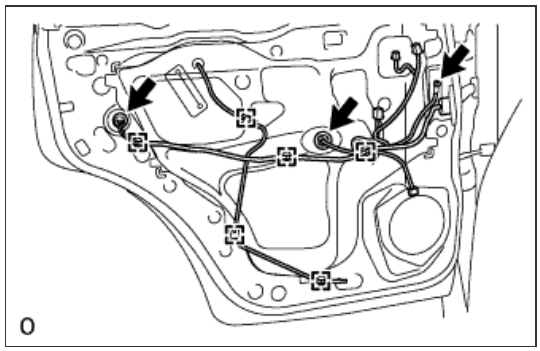
a. Using a clip remover, detach the 6 clamps.

b. Remove the bolt and disconnect the 2 connectors.

c. Remove the service hole cover.

HINT:

Remove the remaining tape on the door.



9. REMOVE REAR DOOR LOCK ASSEMBLY LH

a. Disconnect the connector.

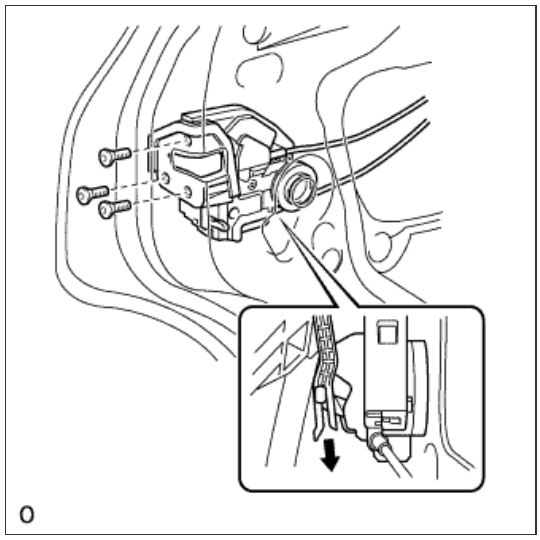
b. Using a T30 "TORX" socket, remove the 3 screws and door lock.

NOTICE:

Be careful when removing the screws as the door lock may fall and become damaged.

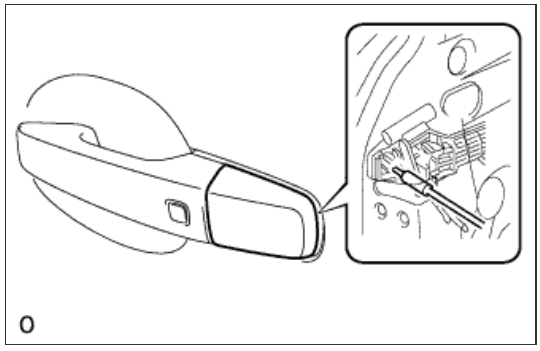
HINT:

Remove the door lock through the service hole.

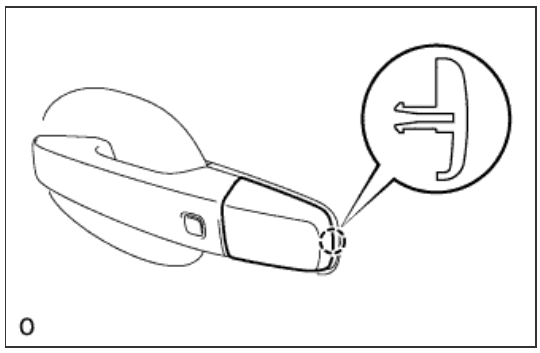


10. REMOVE REAR DOOR OUTSIDE HANDLE COVER LH

a. Using a T30 "TORX" socket, loosen the screw.



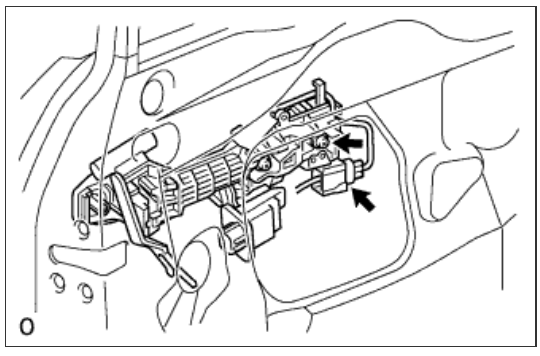
b. Detach the claw and remove the rear door outside handle cover.



11. REMOVE REAR DOOR OUTSIDE HANDLE ASSEMBLY LH

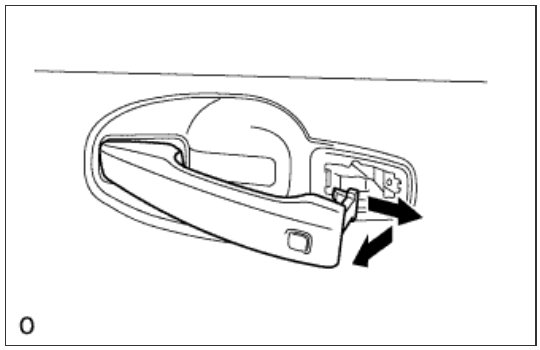
a. Using a T30 "TORX" wrench, loosen the screw.

b. Disconnect the connector.



c. Remove the handle by sliding and pulling it in the direction indicated by the

c. Remove the handle by sliding and pulling it in the direction indicated by the arrows in the illustration.



for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. INSPECT ENTRY LOCK AND UNLOCK SWITCH

a. Disconnect the connector.

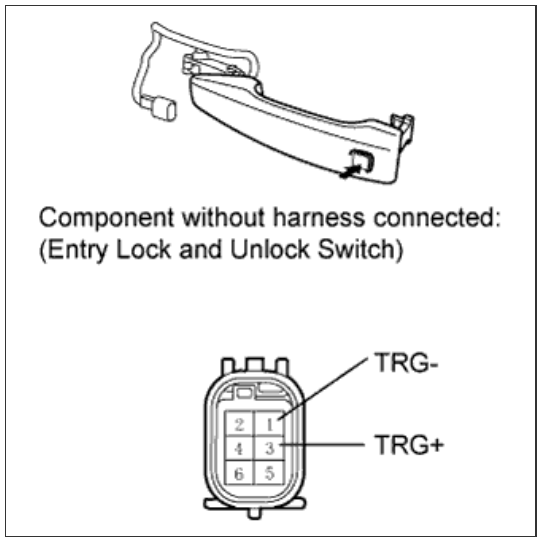
b. Remove the outside handle.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
1 (TRG-) - 3 (TRG+)	Lock switch not pushed (off)	10 kΩ or higher
1 (TRG-) - 3 (TRG+)	Lock switch pushed (on)	Below 1 Ω

If the result is not as specified, replace the entry lock and unlock switch.



for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

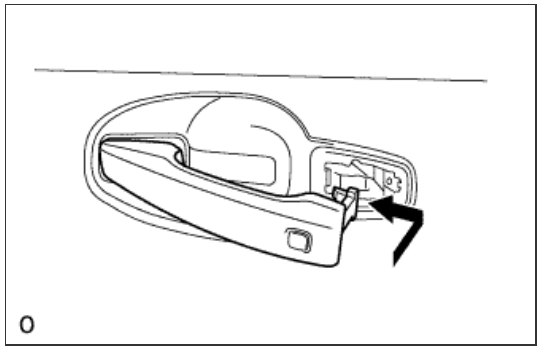
1. INSTALL REAR DOOR OUTSIDE HANDLE ASSEMBLY LH

a. Insert the front end of the rear door outside handle assembly into the rear door outside handle frame.

NOTICE:

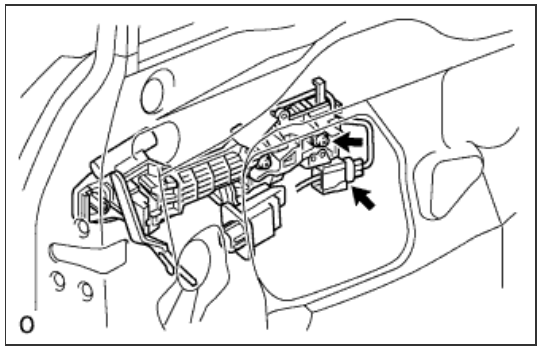
If the bell crank lever is not pulled and held when installing the outside handle, the bell crank lever will interfere with the outside handle and the release plate may be damaged

b. Insert the rear end of the rear door outside handle assembly into the rear door outside handle frame. Next, slide the rear door outside handle assembly toward the front of the vehicle to install it.



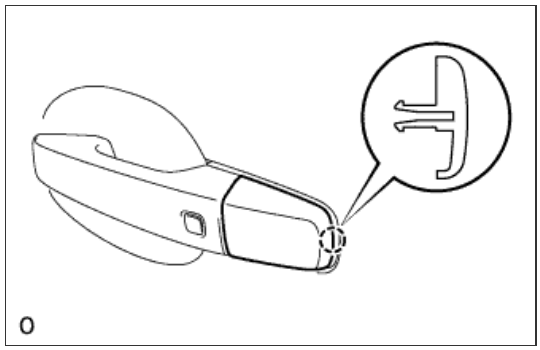
c. Using a T30 "TORX" socket, tighten the screw.

d. Connect the connector.

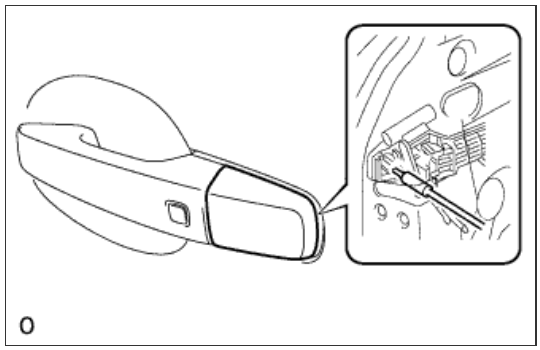


2. INSTALL REAR DOOR OUTSIDE HANDLE COVER LH

a. Attach the claw to install the rear door outside handle cover.



b. Using a T30 "TORX" socket, tighten the screw.



3. INSTALL REAR DOOR LOCK ASSEMBLY LH

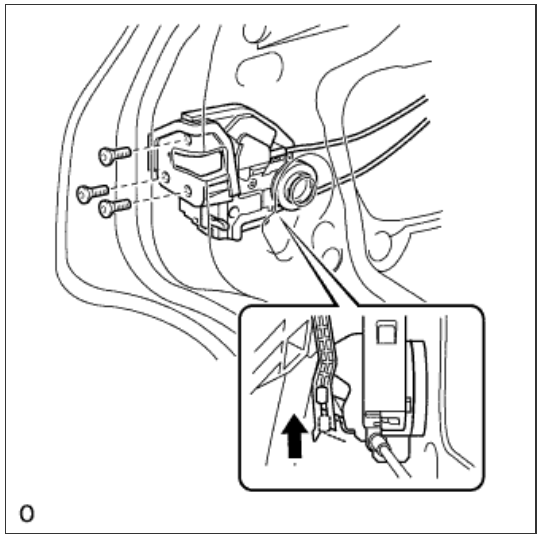
a. Apply MP grease to the sliding parts of the rear door lock assembly.

b. Insert the rear door lock assembly into the rear door outside handle release plate, and set it to the rear door panel.

c. Make sure that the rear door outside handle frame release plate is securely connected to the rear door lock assembly.

d. Using a T30 "TORX" wrench, install the door lock with the 3 screws.

Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }



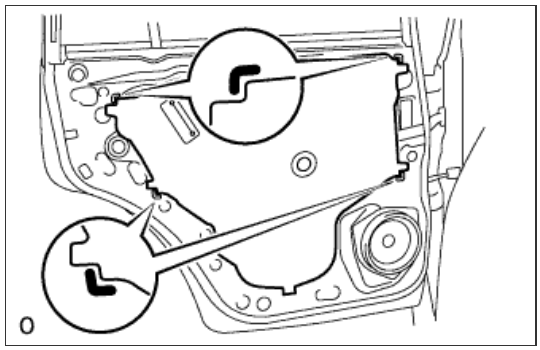
4. INSTALL REAR DOOR SERVICE HOLE COVER LH

a. Apply butyl tape to the door.

b. Pass the rear door lock remote control cable and rear door inside locking cable through a new rear door service hole cover.

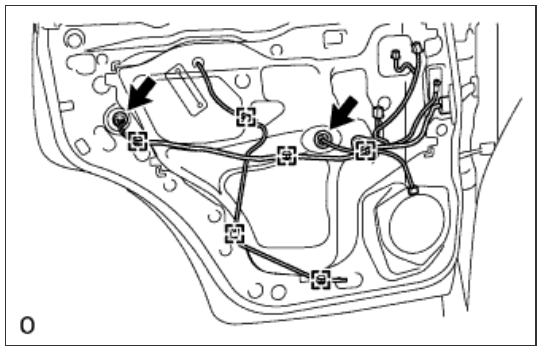
NOTICE:

- **When installing the service hole cover, pull the links and connectors through the service hole cover.**
- **There should be no wrinkles or folds after installing the service hole cover.**
- **After installing the service hole cover, check the sealing quality.**



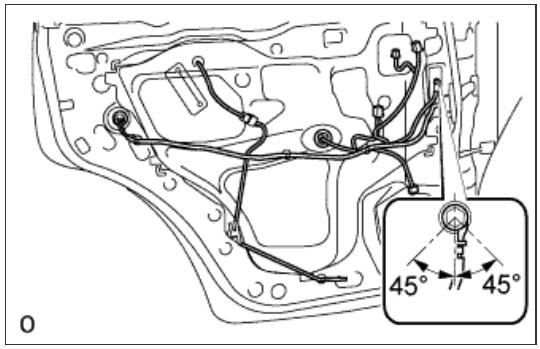
c. Connect the 2 connectors.

d. Attach the 6 clamps.



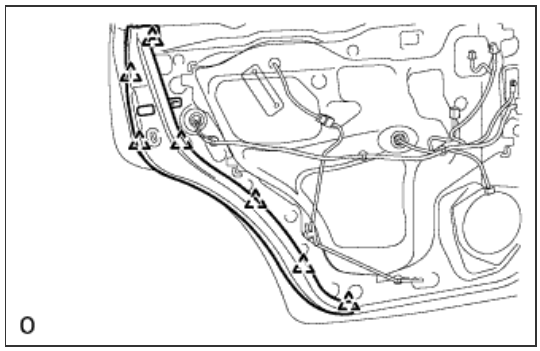
e. Install the bolt as shown in the illustration.

Torque:
8.4 N*m{ 86 kgf*cm , 74 in.*lbf }



5. INSTALL REAR DOOR TRIM COVER LH

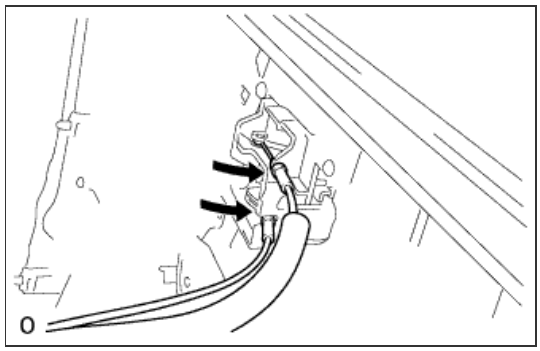
a. Attach the 7 clips to install the door trim cover.



6. INSTALL REAR DOOR TRIM BOARD SUB-ASSEMBLY LH

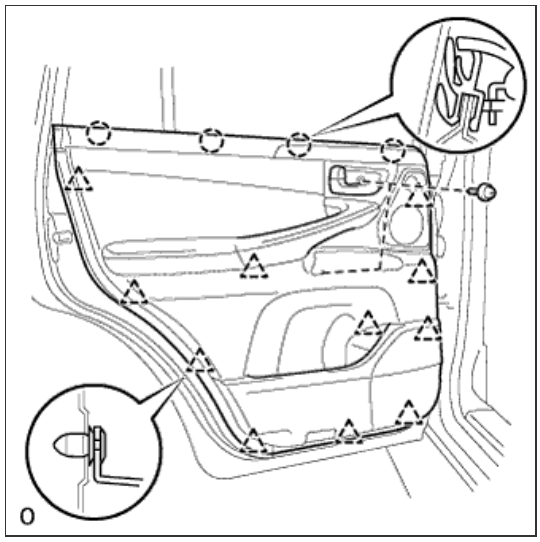
a. Connect the connector.

b. Connect the rear door lock remote control cable and rear door inside locking cable to the rear door inside handle sub-assembly.



c. Attach the 4 claws and 11 clips to install the rear door trim board sub-assembly.

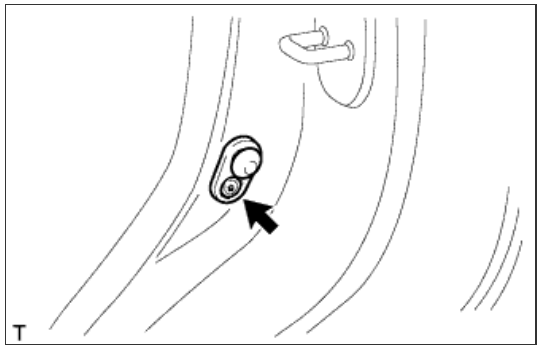
d. Install the 2 screws.



7. INSTALL COURTESY LIGHT ASSEMBLY

a. Connect the connector.

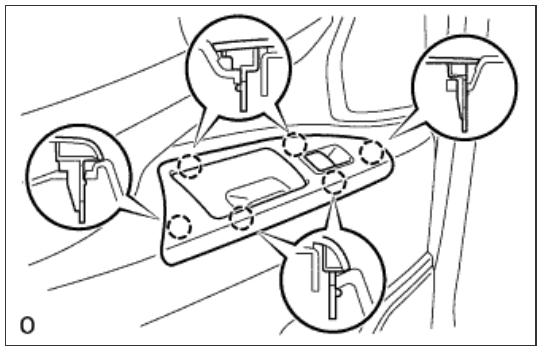
b. Using a T30 "TORX" socket wrench, install the switch with the screw.



8. INSTALL REAR UPPER DOOR ARMREST BASE PANEL LH

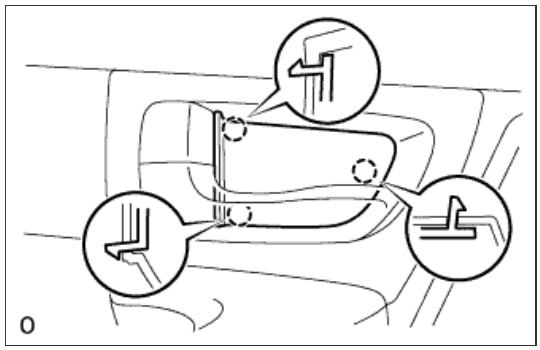
a. Connect the connector.

b. Attach the 6 claws to install the rear upper door armrest base panel.



9. INSTALL REAR DOOR INSIDE HANDLE BEZEL PLUG LH

a. Attach the 3 claws to install the bezel plug.



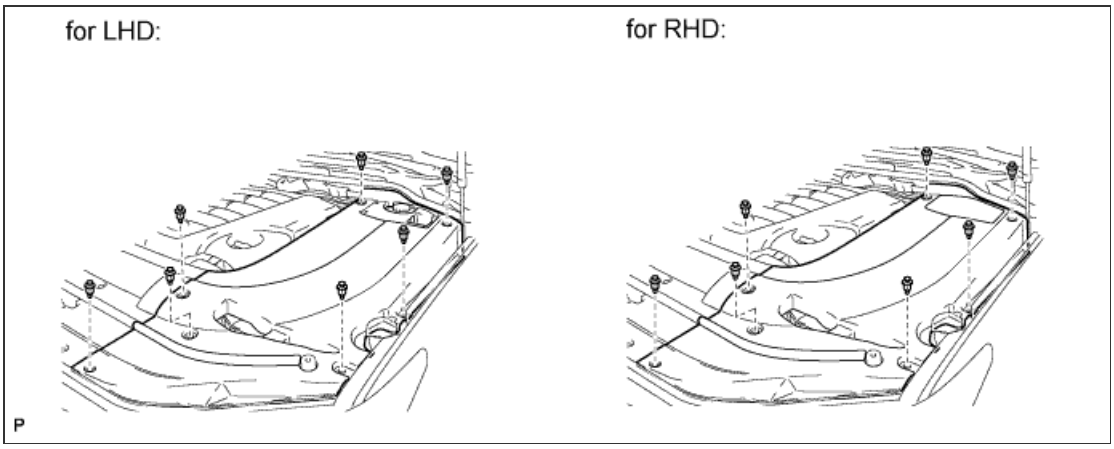
10. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

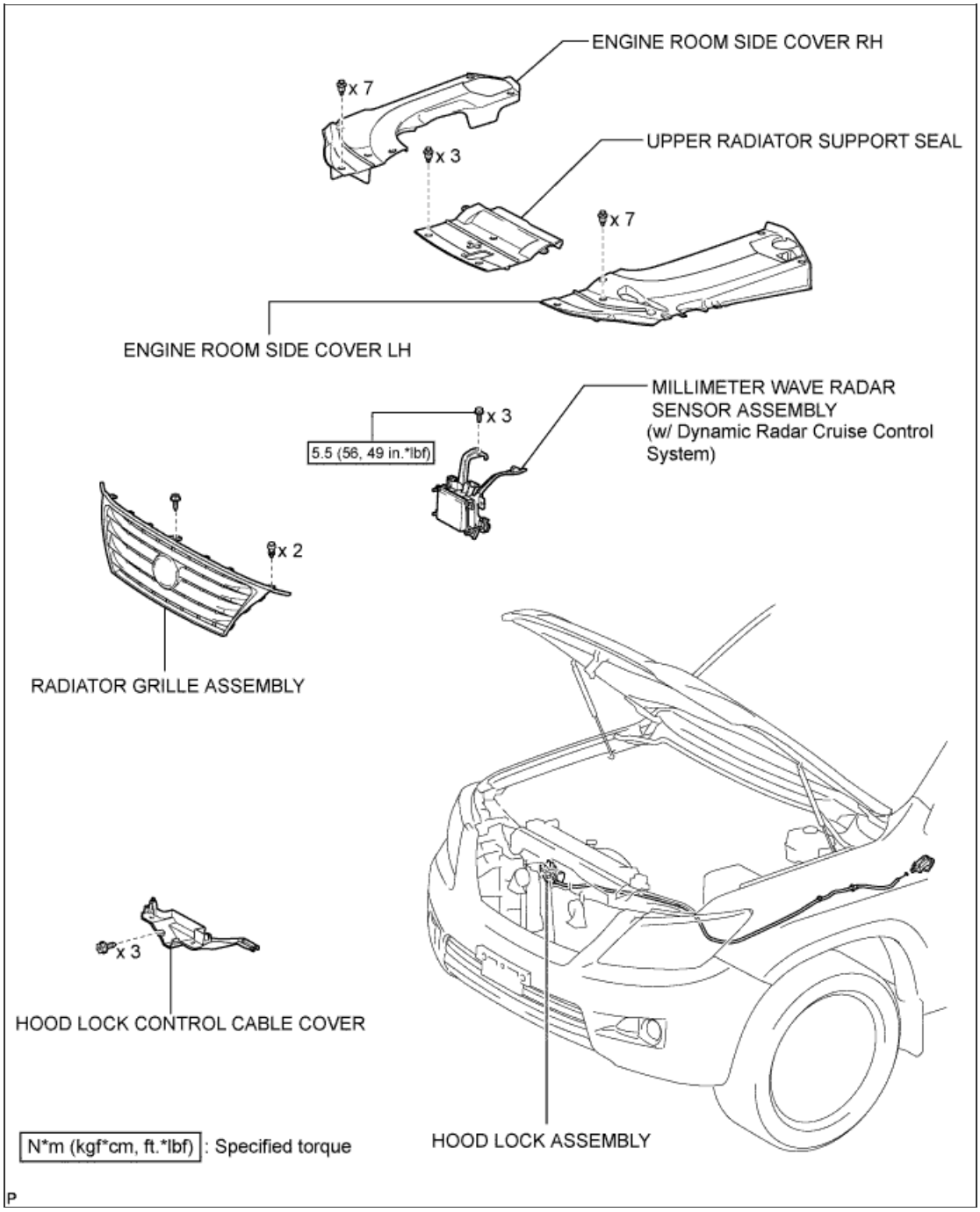
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

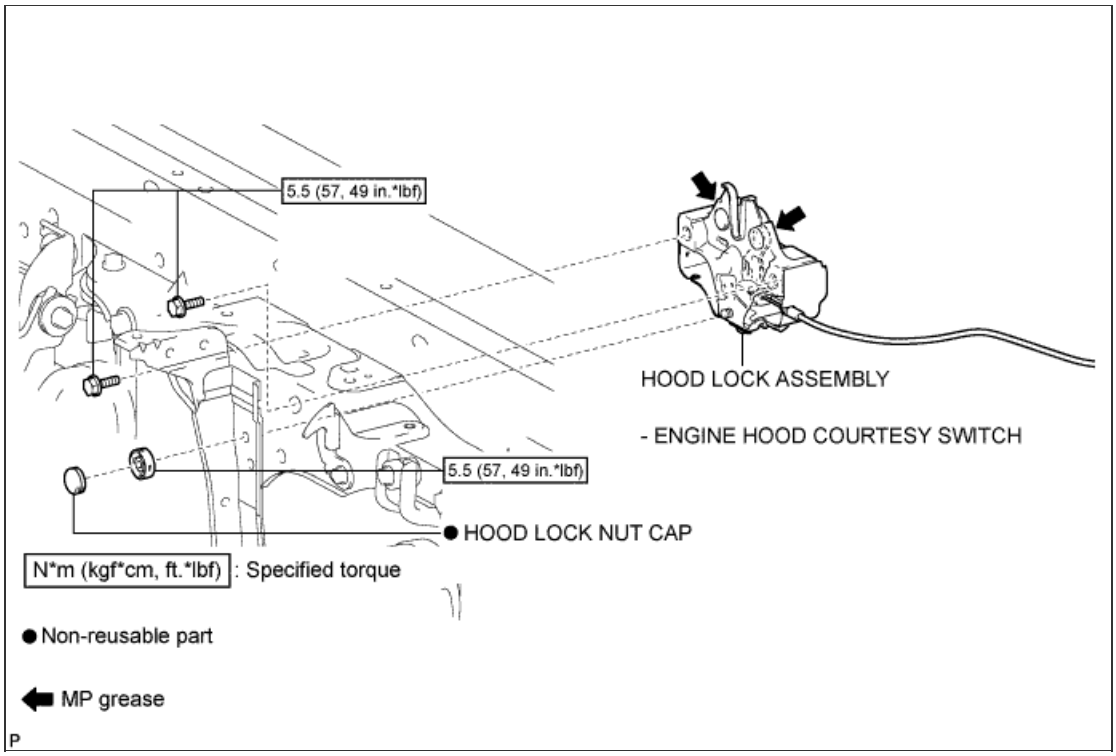
11. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here




5.5 (57, 49 in.*lbf)
HOOD LOCK ASSEMBLY
- ENGINE HOOD COURTESY SWITCH
5.5 (57, 49 in.*lbf)
● HOOD LOCK NUT CAP
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
MP grease
P

ENGINE HOOD COURTESY SWITCH > REMOVAL

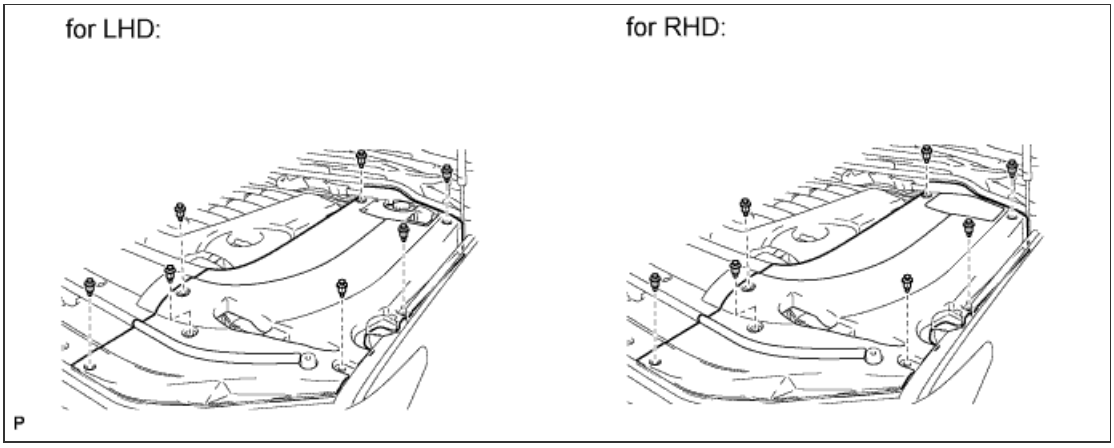
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

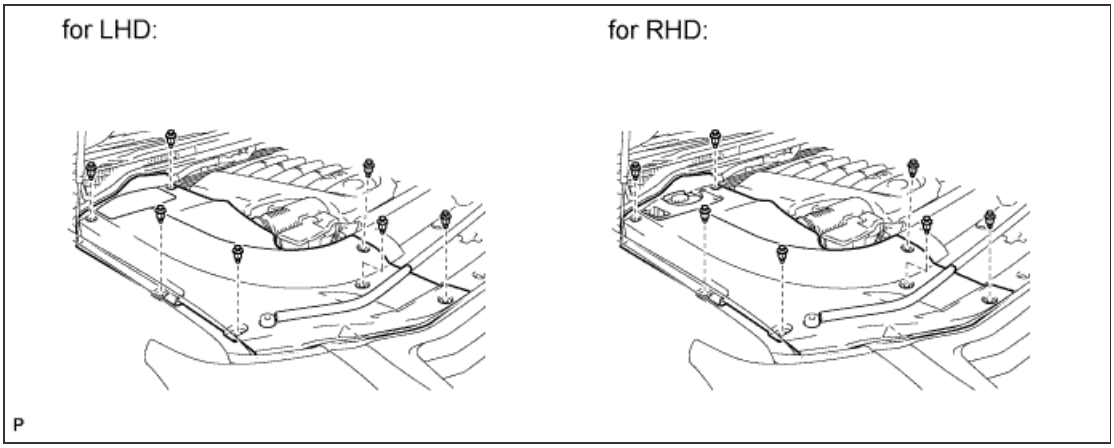
1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



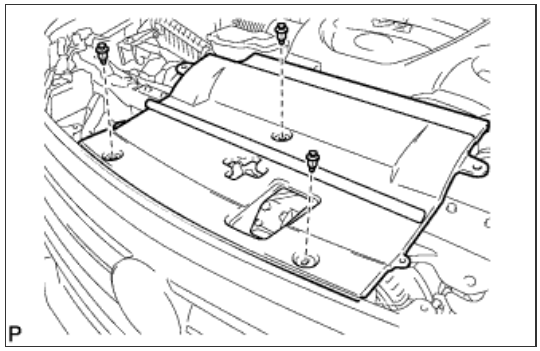
2. REMOVE ENGINE ROOM SIDE COVER RH

a. Remove the 7 clips and engine room side cover.



3. REMOVE UPPER RADIATOR SUPPORT SEAL

a. Remove the 3 clips and upper radiator support seal.



4. REMOVE RADIATOR GRILLE ASSEMBLY

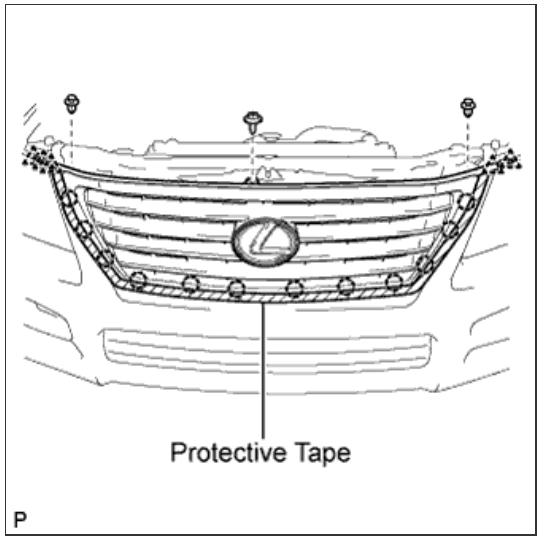
a. Put protective tape around the radiator grille.

b. Remove the screw and 2 clips.

c. Detach the 5 clips and partially remove the upper radiator seal.

d. w/o Wide View Front Monitor System:
Detach the 12 claws and remove the radiator grille.

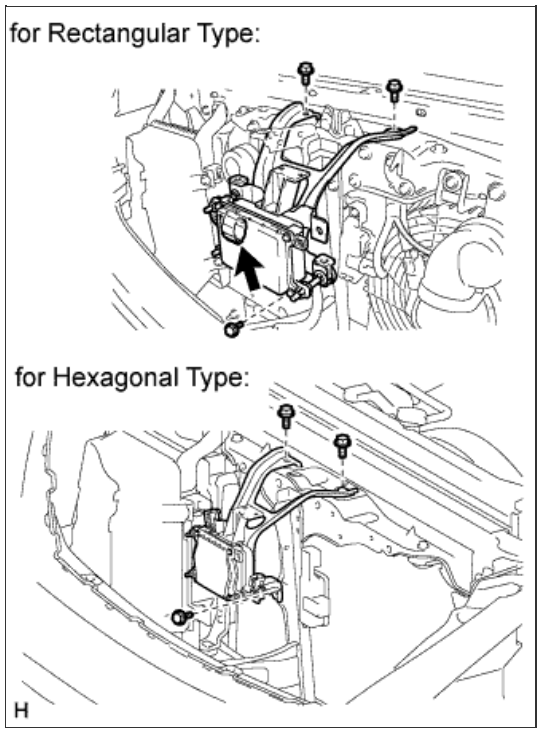
e. w/ Wide View Front Monitor System:
Detach the 12 claws, disconnect the connector and remove the radiator grille.



5. REMOVE MILLIMETER WAVE RADAR SENSOR ASSEMBLY (w/ Dynamic Radar Cruise Control System)

a. Disconnect the sensor connector.

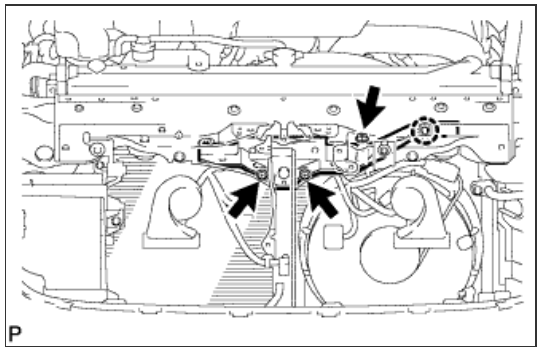
b. Remove the 3 bolts and sensor.



6. REMOVE HOOD LOCK CONTROL CABLE COVER

a. Remove the 3 screws.

b. Detach the claw and remove the cover.

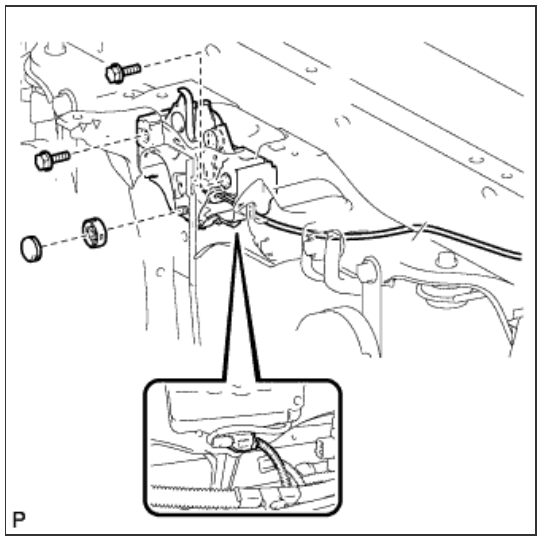


7. REMOVE HOOD LOCK ASSEMBLY

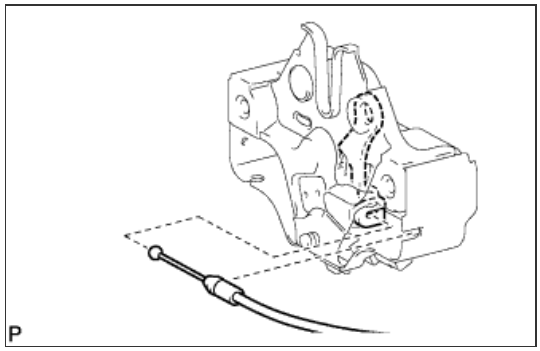
a. Remove the hood lock nut cap.

b. Remove the 2 bolts and nut.

c. Disconnect the connector.



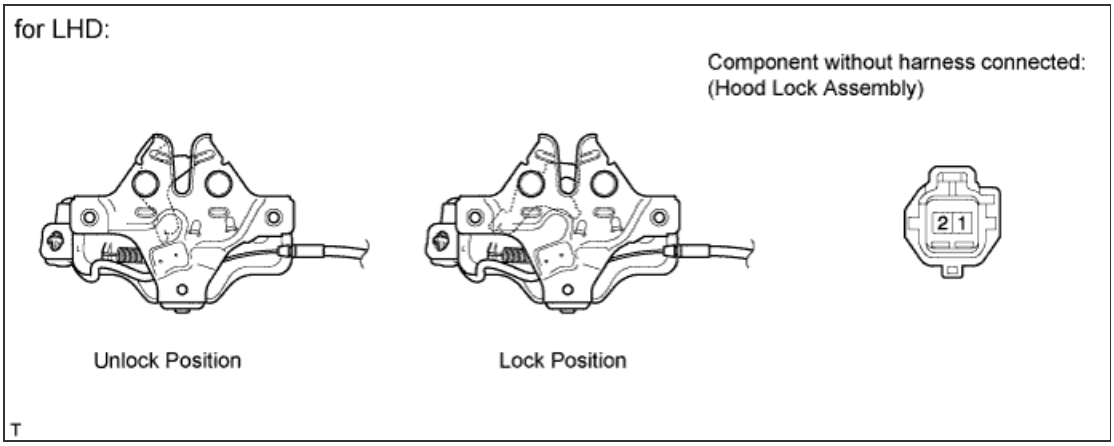
d. Disconnect the hood lock control cable and remove the hood lock.



for Preparation Click here

1. INSPECT HOOD LOCK ASSEMBLY (ENGINE HOOD COURTESY SWITCH)

a. for LHD:



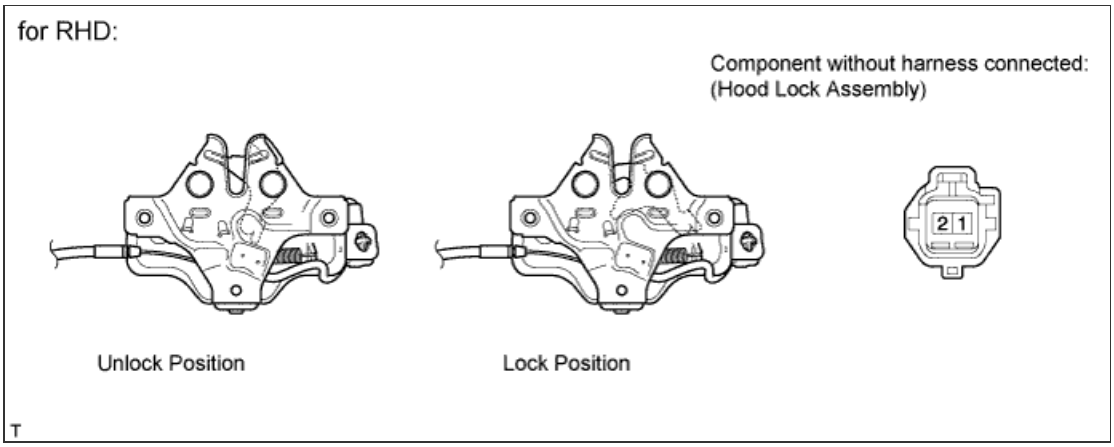
i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	Unlock	Below 1 Ω
1 - 2	Lock	10 kΩ or higher

If the result is not as specified, replace the hood lock assembly.

b. for RHD:



i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition

1 - 2	Unlock	Below 1 Ω
1 - 2	Lock	10 kΩ or higher

If the result is not as specified, replace the hood lock assembly.

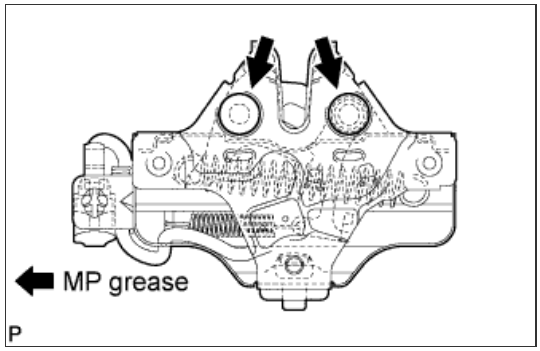
for Preparation Click here

HINT:

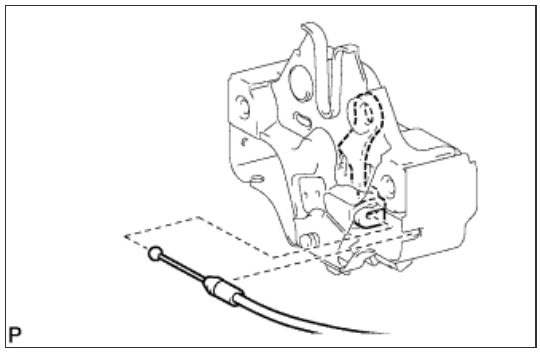
- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL HOOD LOCK ASSEMBLY

a. Apply MP grease to the sliding areas of the lock.



b. Connect the hood lock control cable.

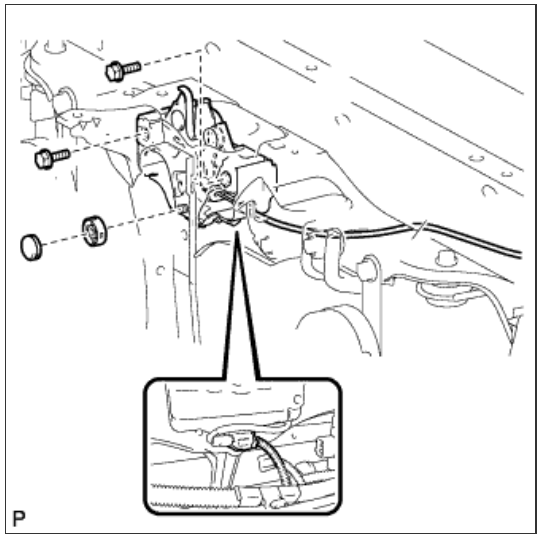


c. Connect the connector.

d. Install the hood lock with the 2 bolts and nut.

Torque:
5.5 N*m{ 57 kgf*cm , 49 in.*lbf }

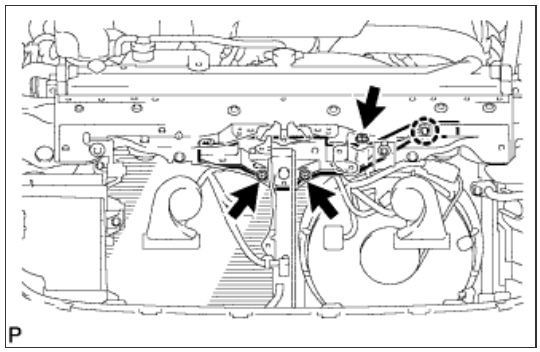
e. Install a new hood lock nut cap.



2. INSTALL HOOD LOCK CONTROL CABLE COVER

a. Attach the claw to install the cover.

b. Install the 3 screws.



3. INSTALL MILLIMETER WAVE RADAR SENSOR ASSEMBLY (w/ Dynamic Radar Cruise Control System)

a. Temporarily install the millimeter wave radar sensor assembly with the 3 bolts.

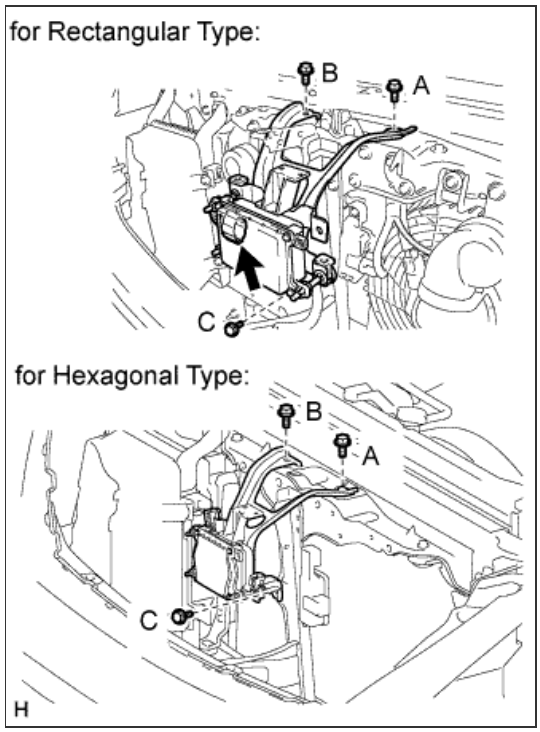
b. Tighten the 3 bolts in alphabetical order.

Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

c. Connect the sensor connector.

NOTICE:

Do not use a sensor which has been dropped or subjected to any strong shocks.



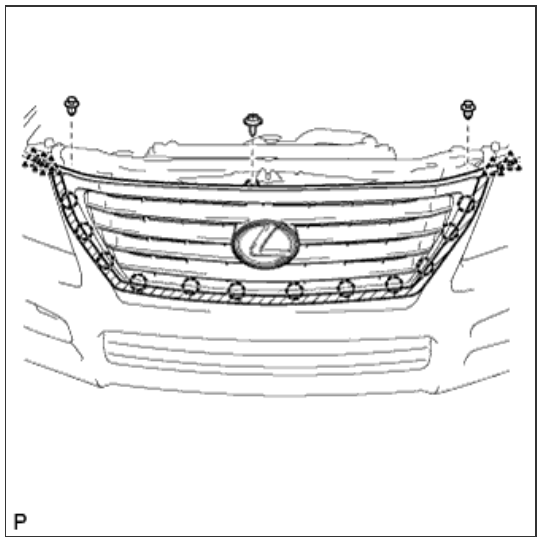
4. INSTALL RADIATOR GRILLE ASSEMBLY

a. w/ Wide View Front Monitor System:
Connect the connector.

b. Attach the 12 claws to install the radiator grille.

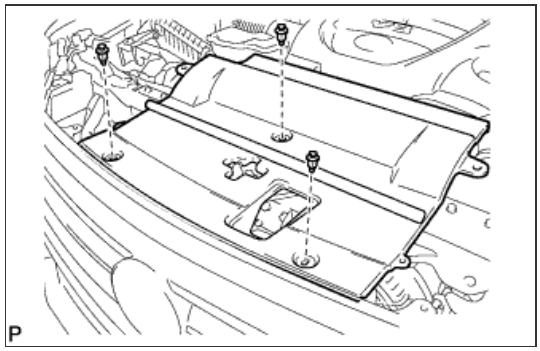
c. Attach the 5 clips to install the detached part of the upper radiator seal.

d. Install the screw and 2 clips.



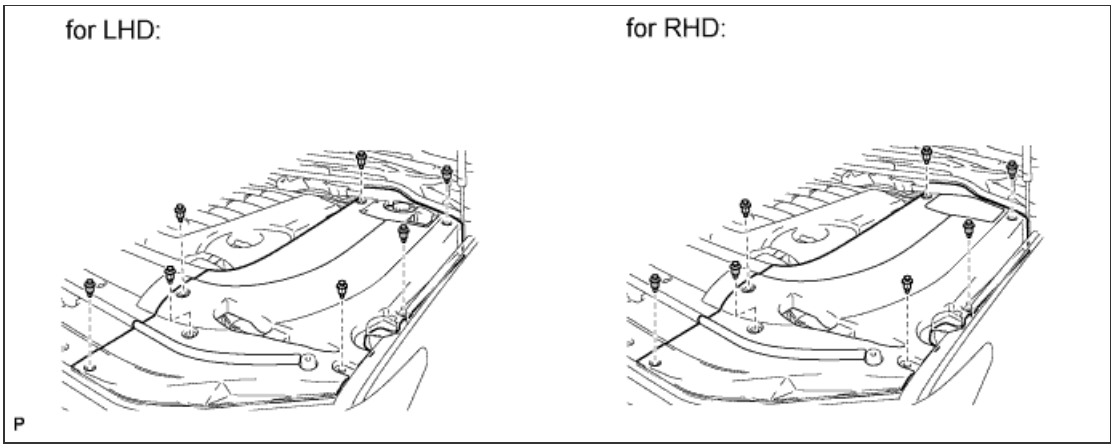
5. INSTALL UPPER RADIATOR SUPPORT SEAL

a. Install the upper radiator support seal with the 3 clips.



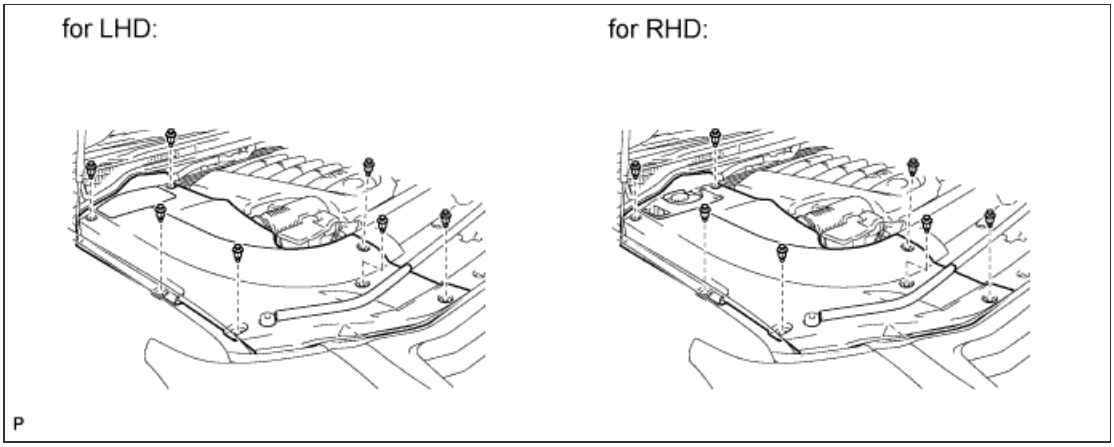
6. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



7. INSTALL ENGINE ROOM SIDE COVER RH

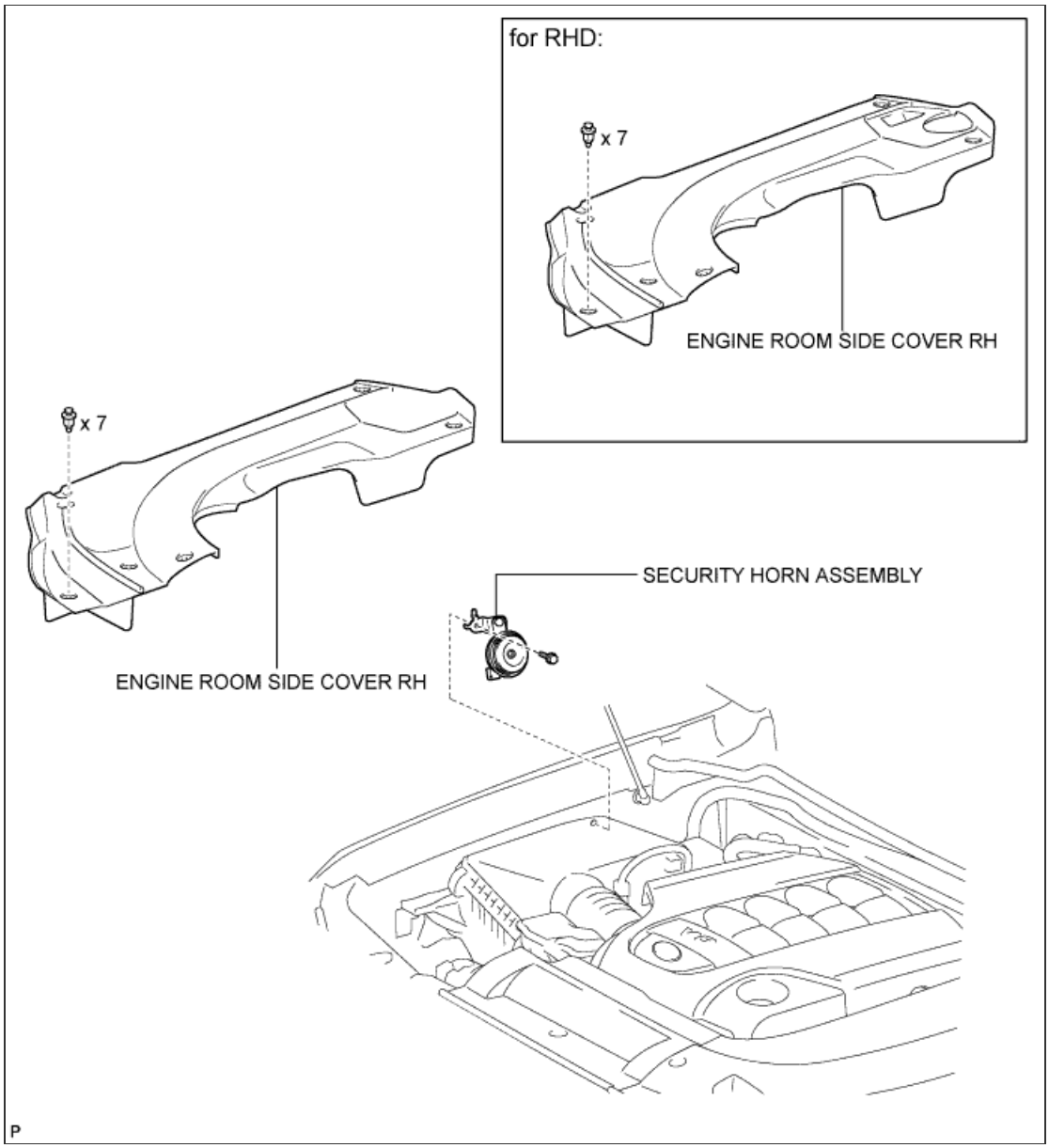
a. Install the engine room side cover with the 7 clips.



8. ADJUST MILLIMETER WAVE RADAR SENSOR ASSEMBLY (w/ Dynamic Radar Cruise Control System)

a. Adjust millimeter wave radar sensor (Click here).

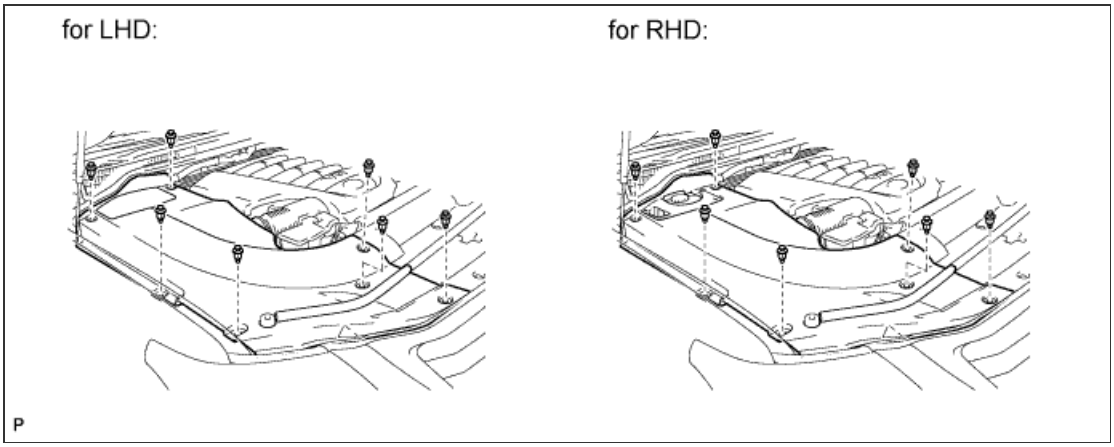
for Preparation Click here



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER RH

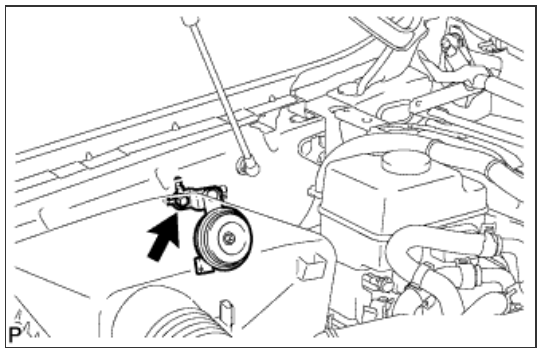
a. Remove the 7 clips and engine room side cover.



2. REMOVE SECURITY HORN ASSEMBLY

a. Disconnect the connector.

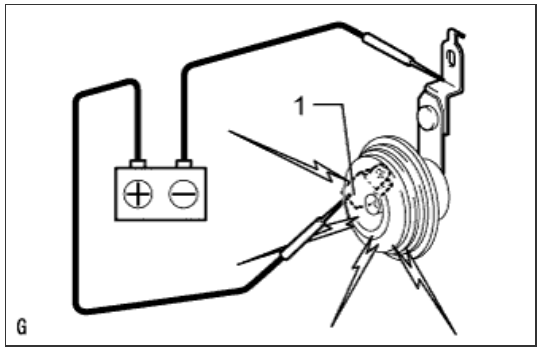
b. Remove the bolt and horn.



for Preparation Click here

1. INSPECT SECURITY HORN ASSEMBLY

a. Apply battery voltage to the horn connector and check the operation of the horn.



OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 1 Battery negative (-) → Horn bracket	Horn sounds

If the result is not as specified, replace the security horn assembly.

for Preparation Click here

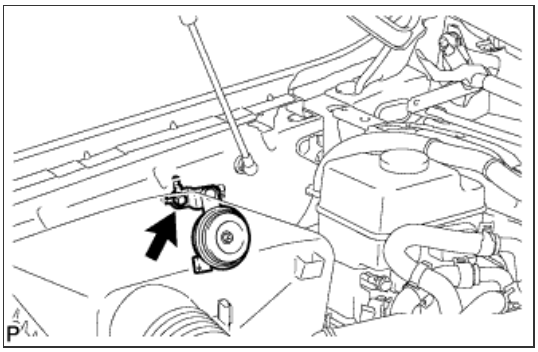
HINT:

A bolt without a torque specification is shown in the standard bolt chart (Click here).

1. INSTALL SECURITY HORN ASSEMBLY

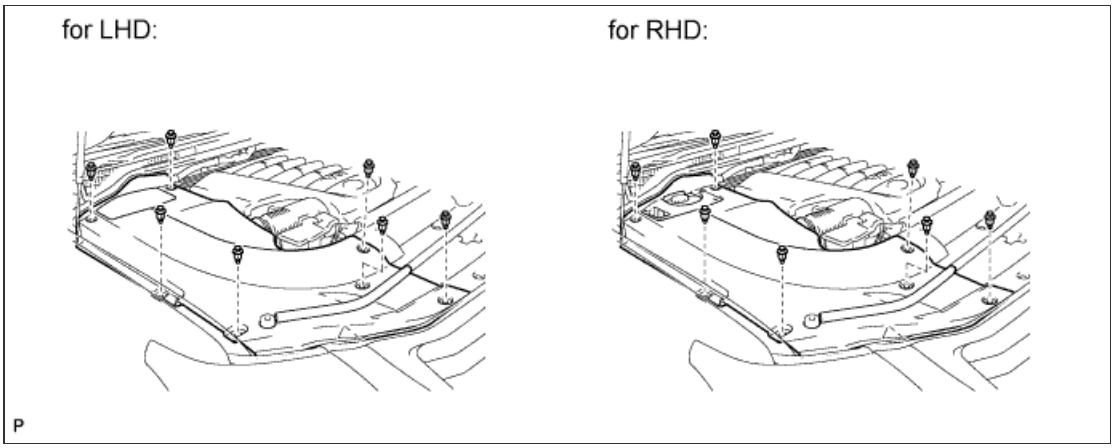
a. Install the horn with the bolt.

b. Connect the connector.

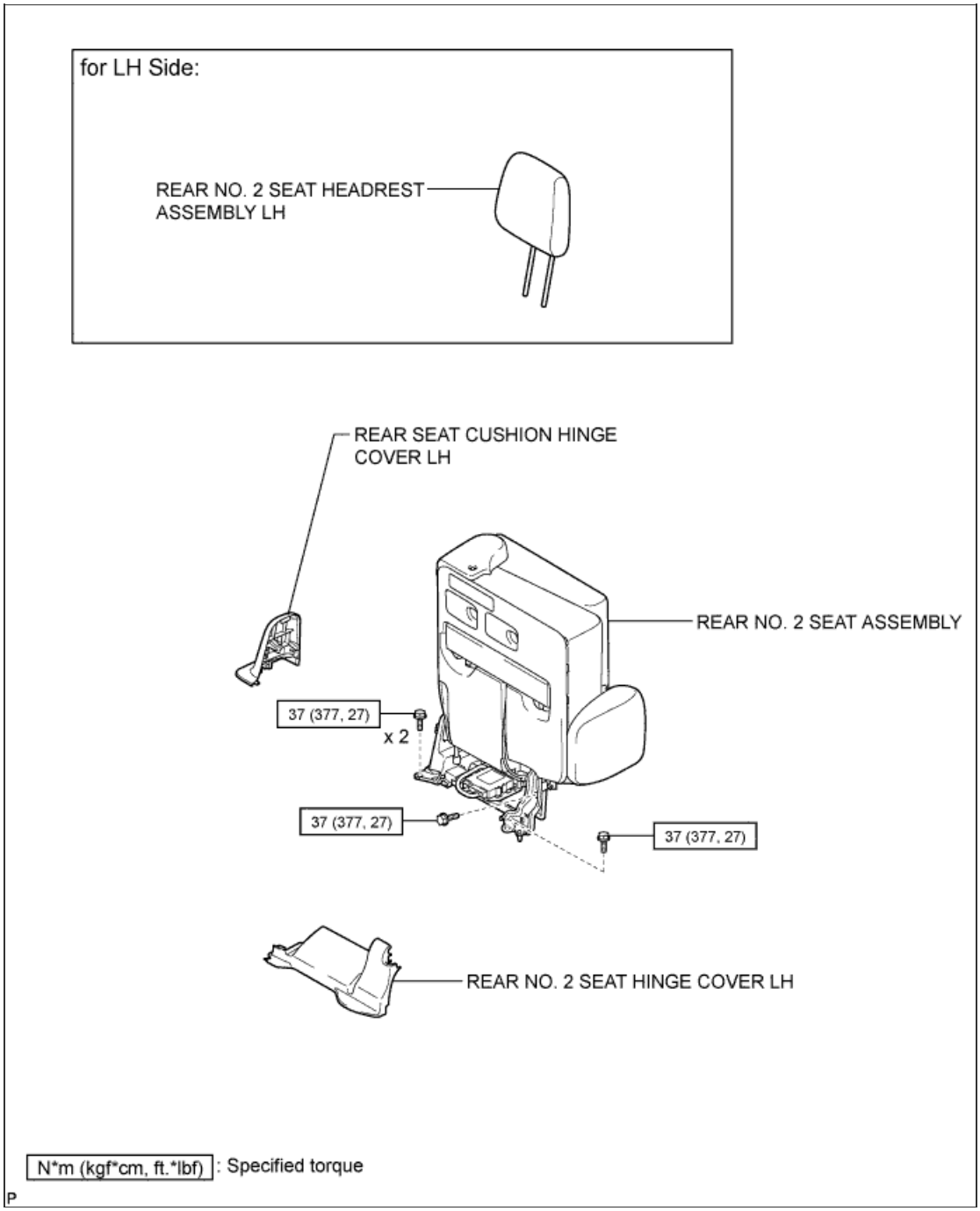


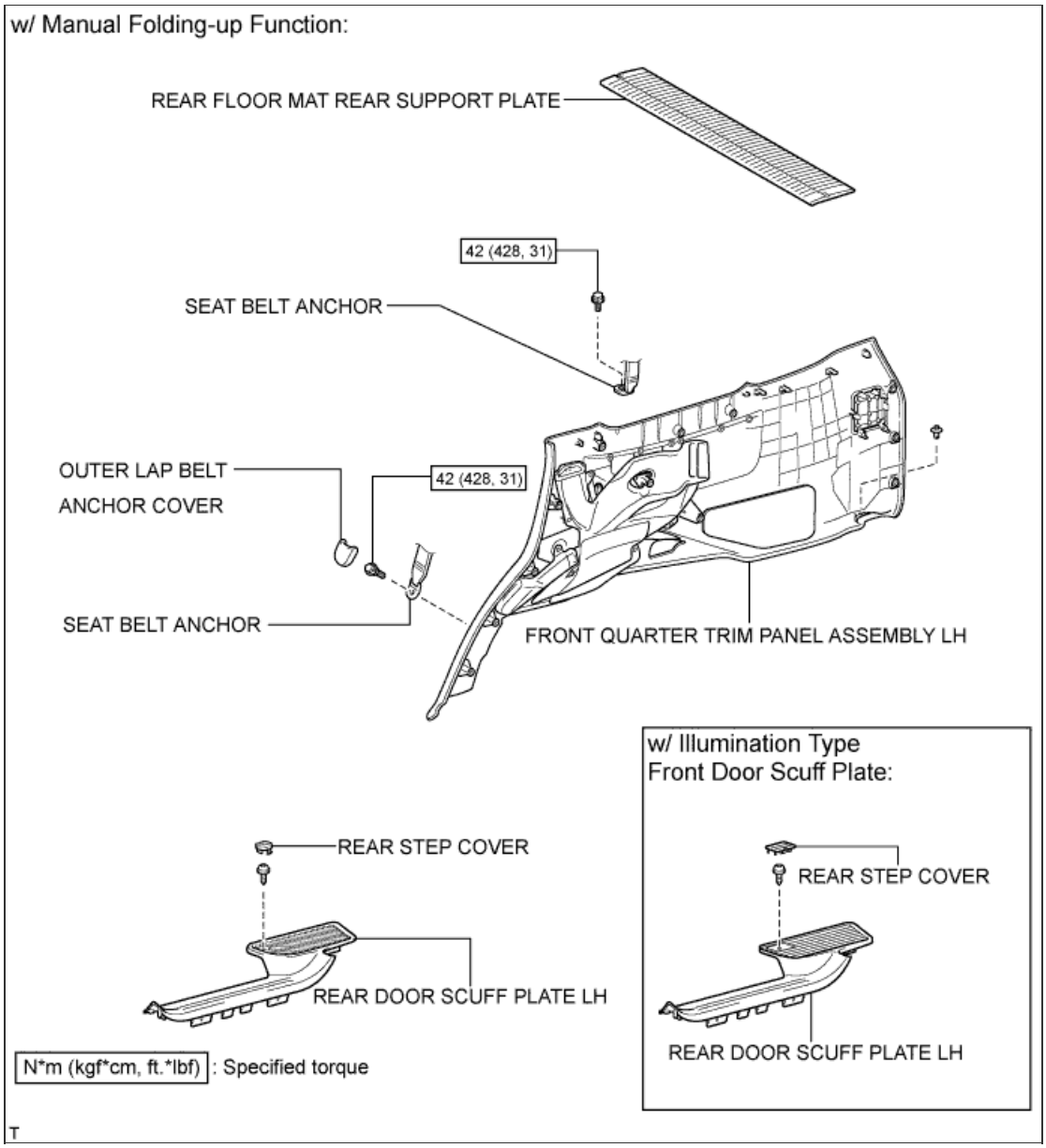
2. INSTALL ENGINE ROOM SIDE COVER RH

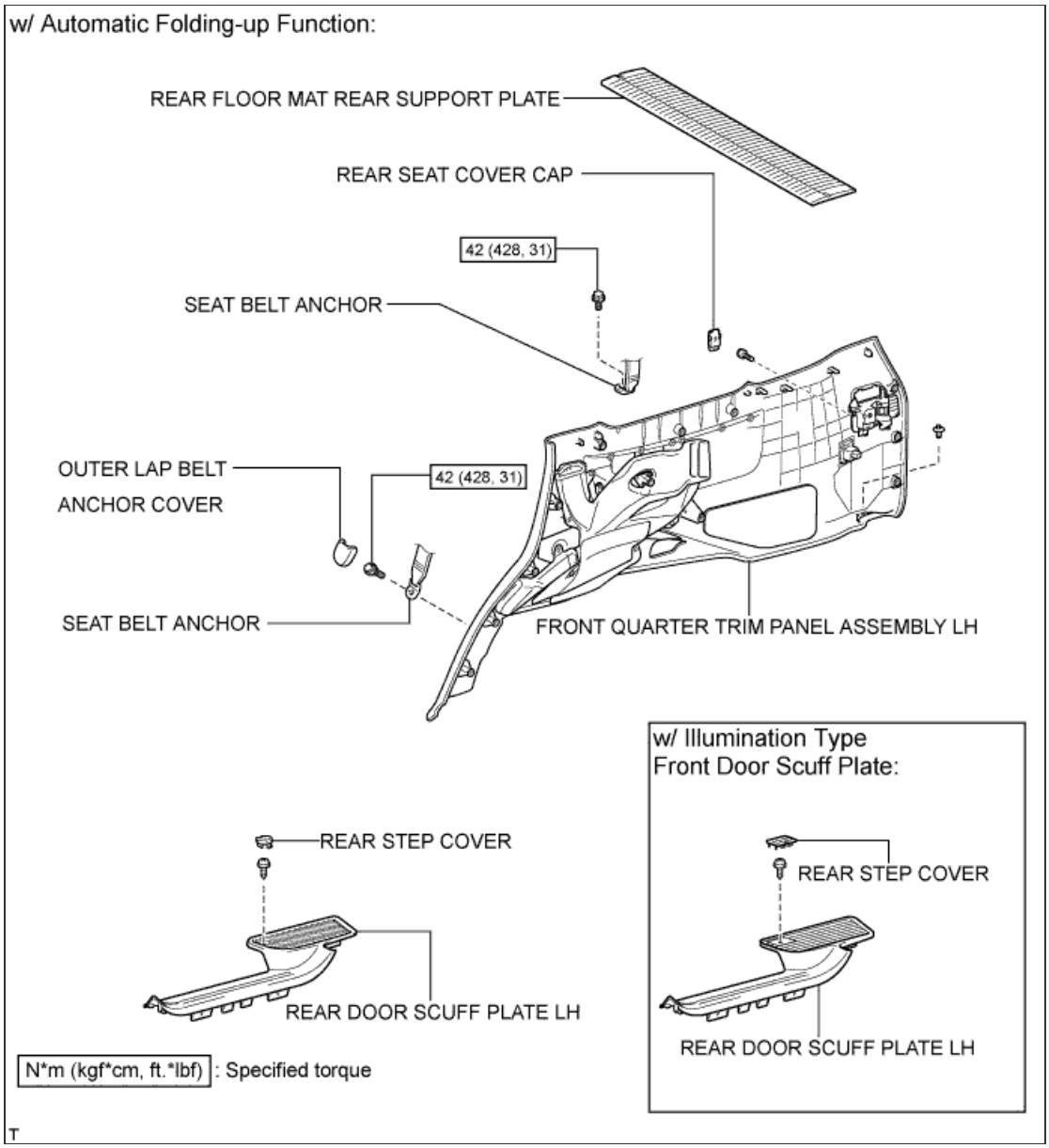
a. Install the engine room side cover with the 7 clips.

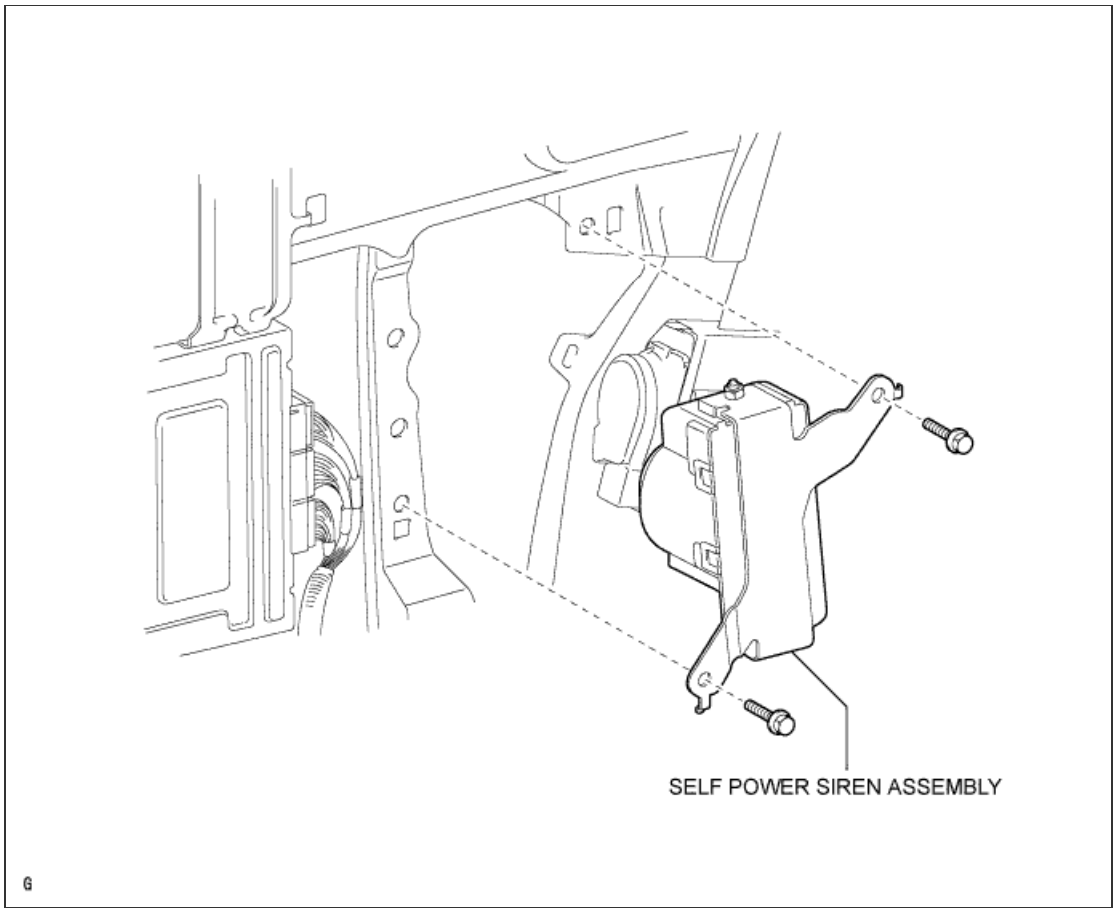


for Preparation [Click here]




w/ Manual Folding-up Function:
REAR FLOOR MAT REAR SUPPORT PLATE
42 (428, 31)
SEAT BELT ANCHOR
OUTER LAP BELT
ANCHOR COVER
42 (428, 31)
SEAT BELT ANCHOR
FRONT QUARTER TRIM PANEL ASSEMBLY LH
w/ Illumination Type
Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
N*m (kgf*cm, ft.*lbf) : Specified torque
T


w/ Automatic Folding-up Function:
REAR FLOOR MAT REAR SUPPORT PLATE
REAR SEAT COVER CAP
42 (428, 31)
SEAT BELT ANCHOR
OUTER LAP BELT
ANCHOR COVER
42 (428, 31)
SEAT BELT ANCHOR
FRONT QUARTER TRIM PANEL ASSEMBLY LH
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
w/ Illumination Type
Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
N*m (kgf*cm, ft.*lbf) : Specified torque
T


SELF POWER SIREN ASSEMBLY
G

for Preparation Click here

1. REMOVE REAR NO. 2 SEAT HEADREST ASSEMBLY LH

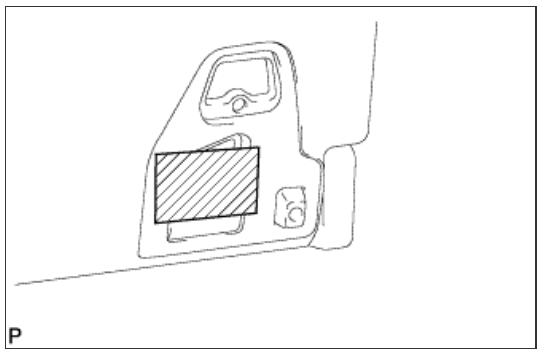
2. REMOVE REAR SEAT CUSHION HINGE COVER LH

a. Apply protective tape to the rear seatback lock striker as shown in the illustration to prevent the seat from locking.

b. Operate the power seat switch and move the seat to the storage position.

HINT:

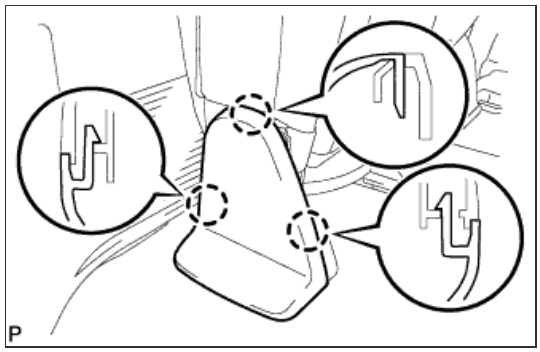
Make sure that the lock and striker are not engaged.



c. Using a screwdriver, detach the 3 claws and remove the cover.

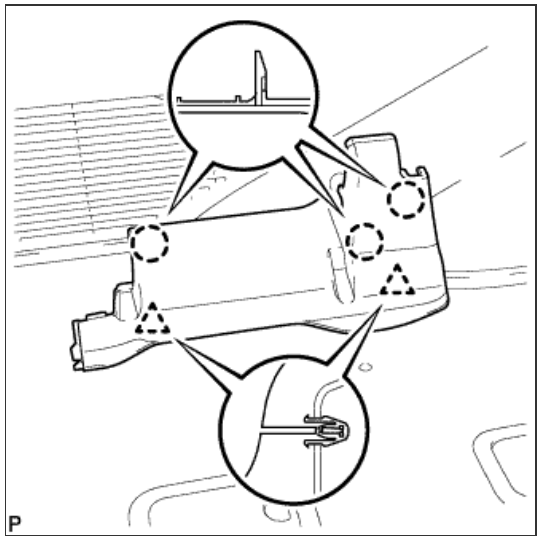
HINT:

Tape the screwdriver tip before use.



3. REMOVE REAR NO. 2 SEAT HINGE COVER LH

a. Detach the 3 claws and 2 clips, and then remove the cover.



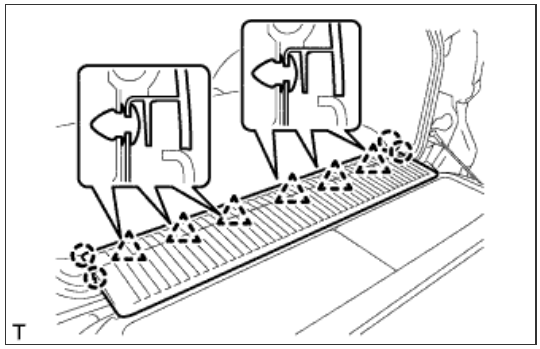
4. REMOVE REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

5. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.

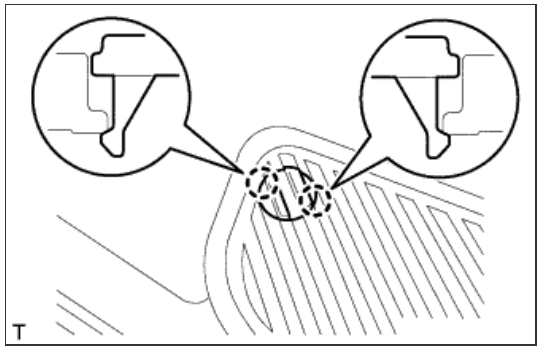


6. REMOVE REAR STEP COVER

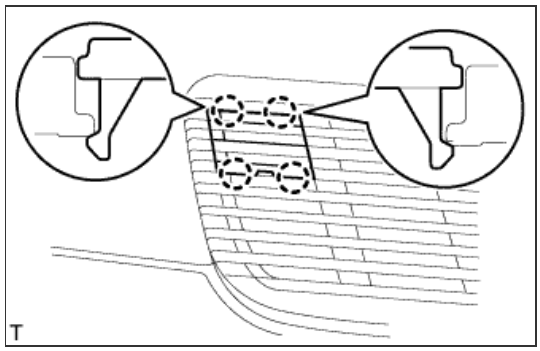
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

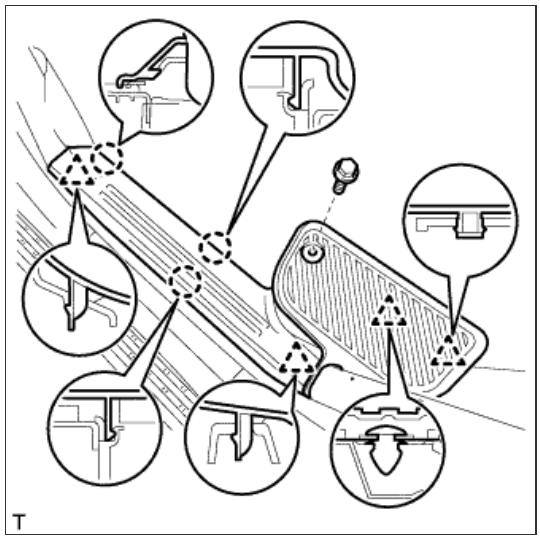


7. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

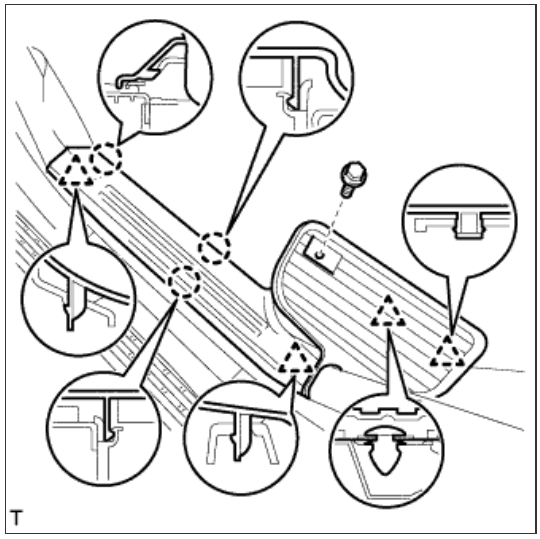
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



8. REMOVE REAR SEAT COVER CAP

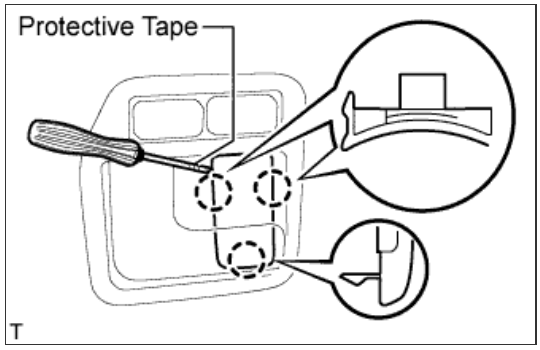
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

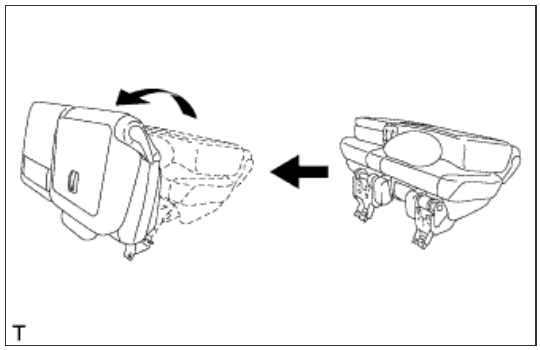
Tape the screwdriver tip before use.



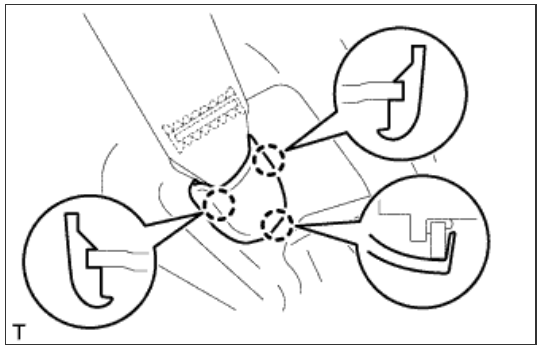
9. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

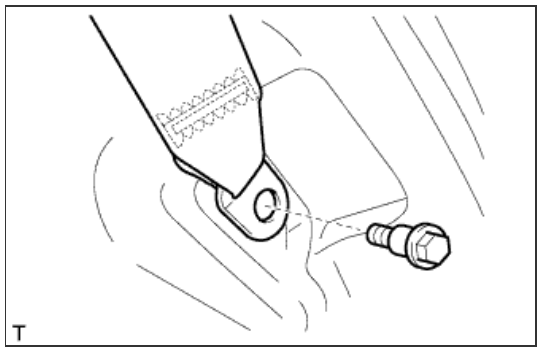
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



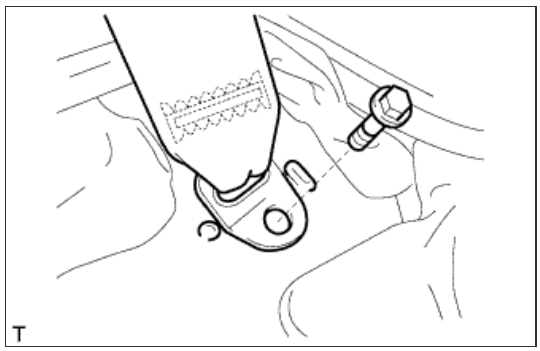
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

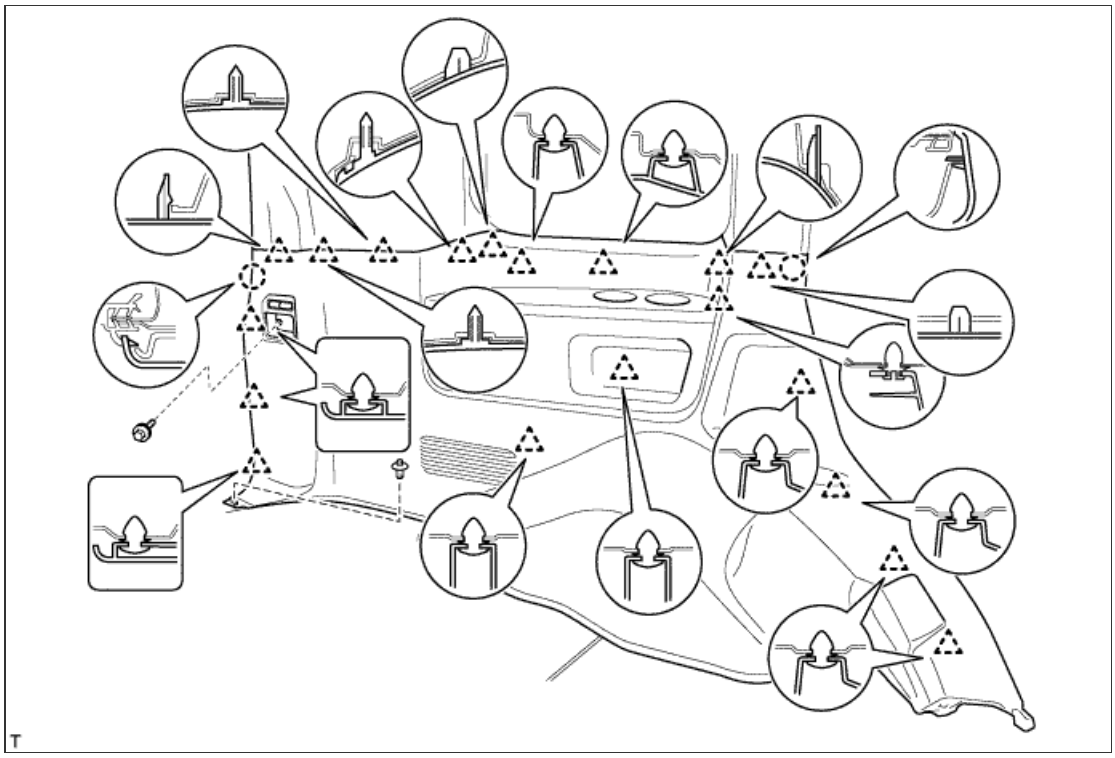


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

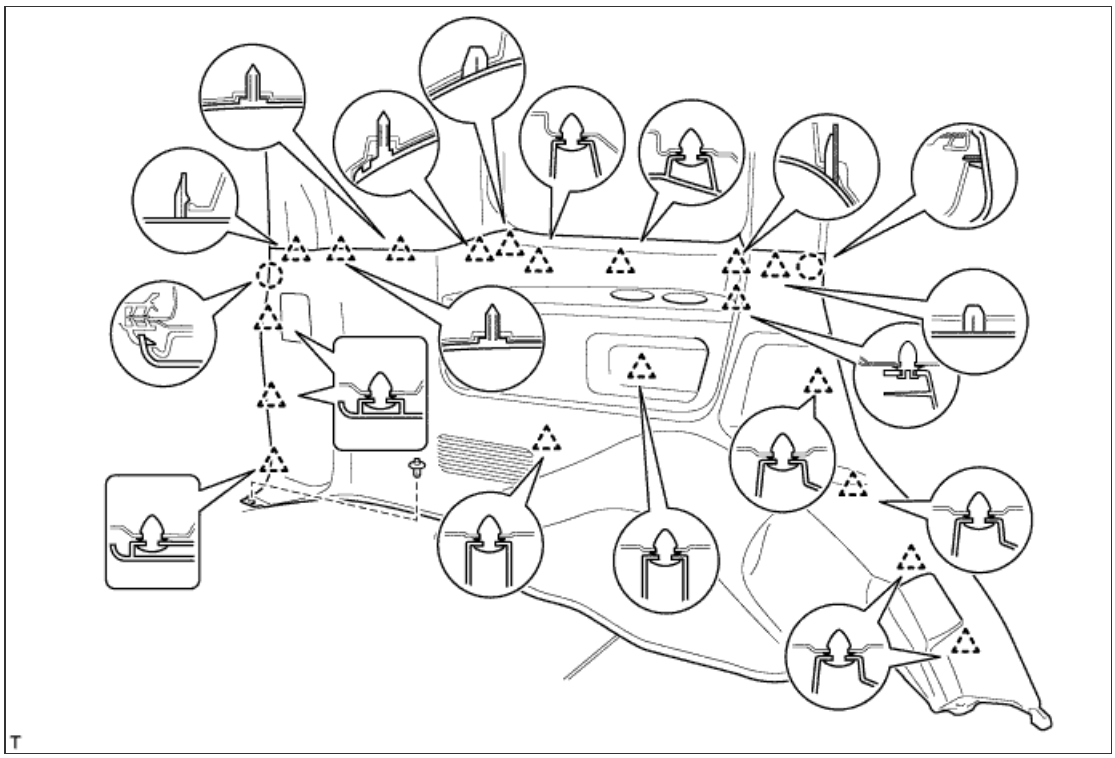


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 19 clips and 2 claws.

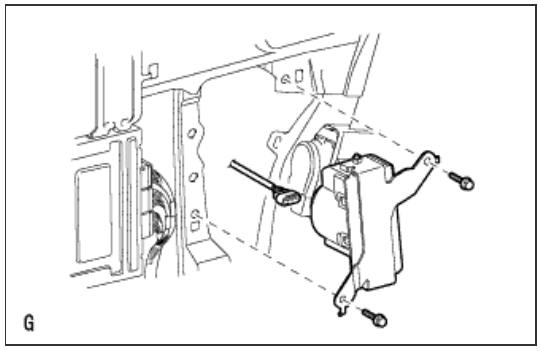
iii. Disconnect the thermistor connector and then remove the quarter trim panel.



10. REMOVE SELF POWER SIREN ASSEMBLY

a. Disconnect the connector.

b. Remove the 2 bolts and siren.



for Preparation Click here

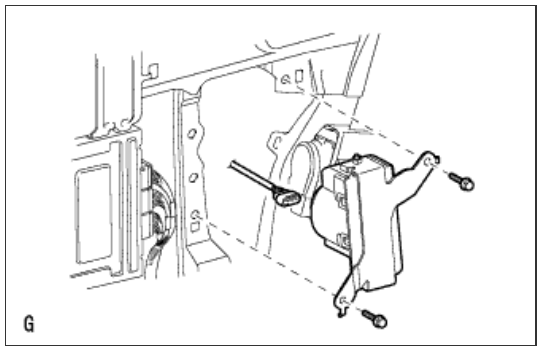
HINT:

A bolt without a torque specification is shown in the standard bolt chart (Click here).

1. INSTALL SELF POWER SIREN ASSEMBLY

a. Connect the connector.

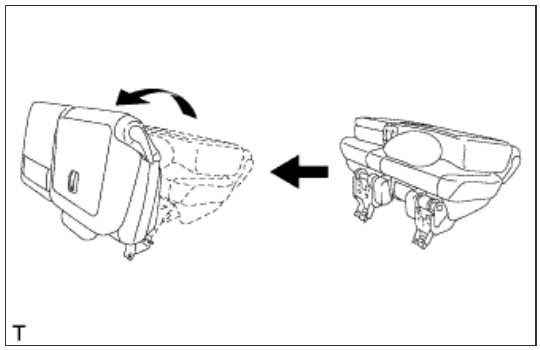
b. Install the siren with the 2 bolts.



2. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



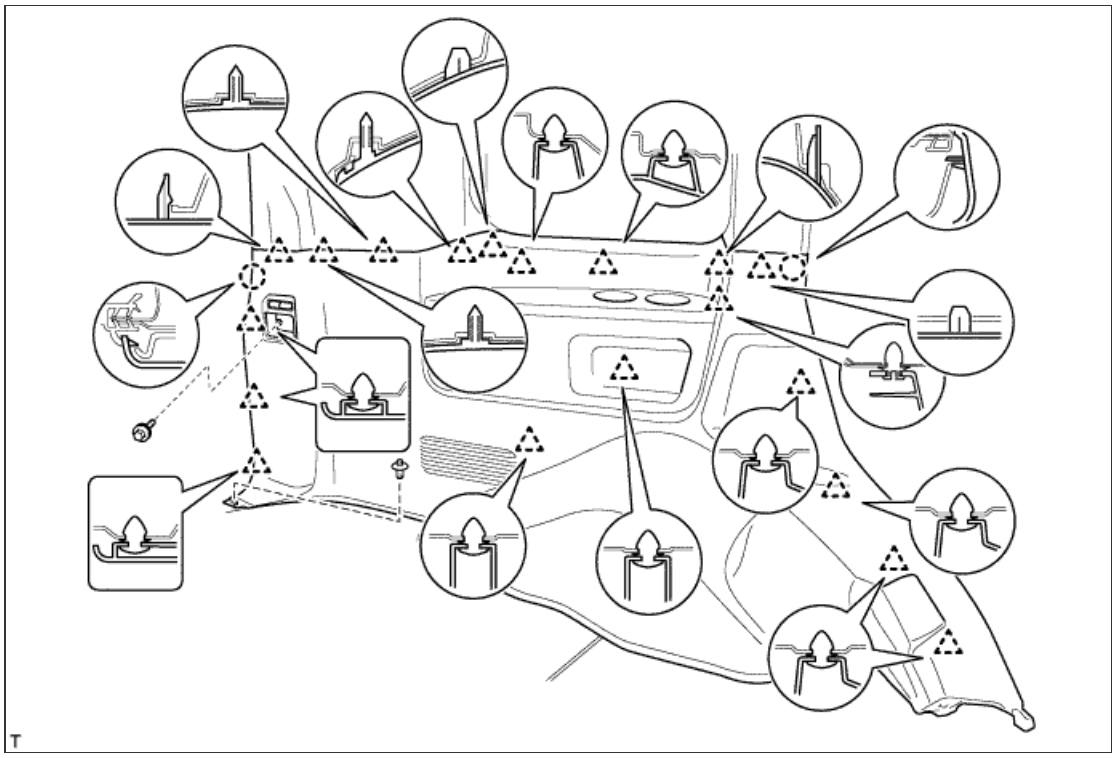
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

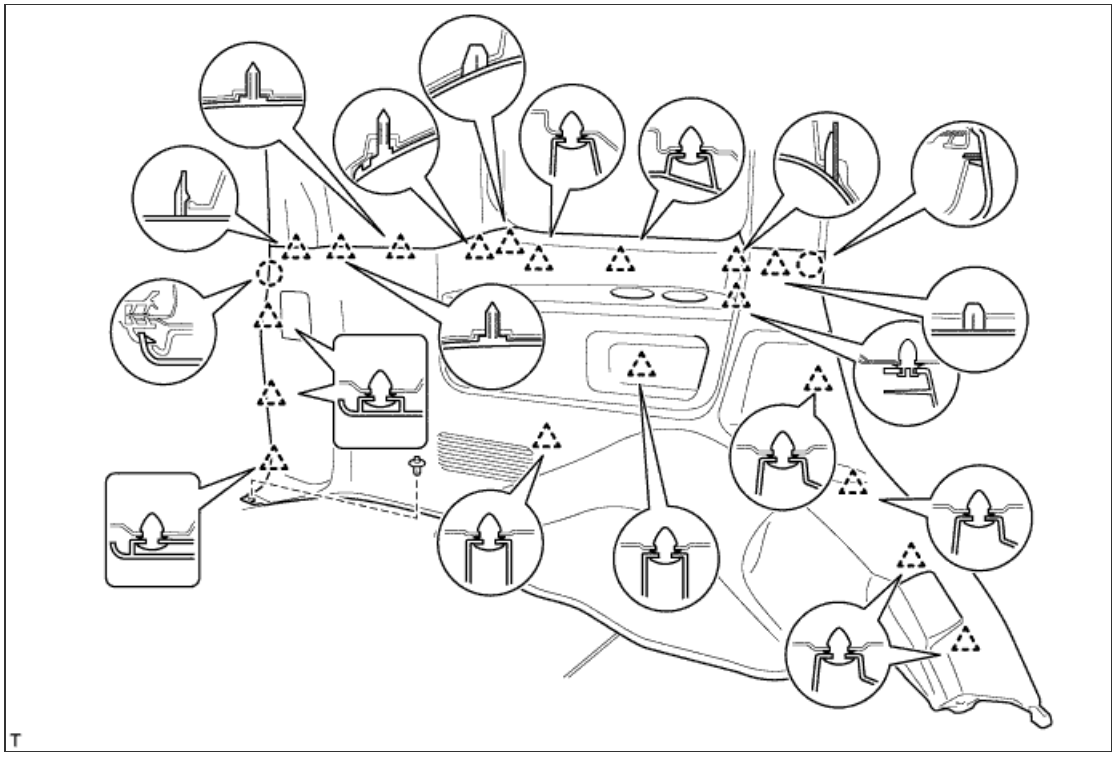


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

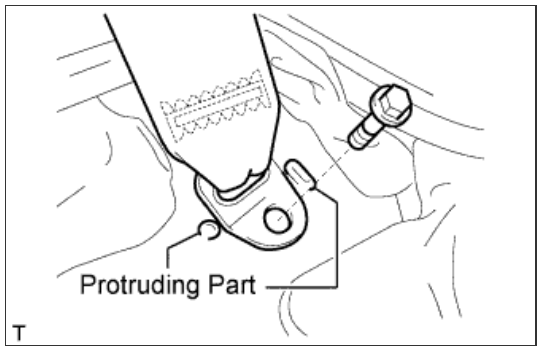


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

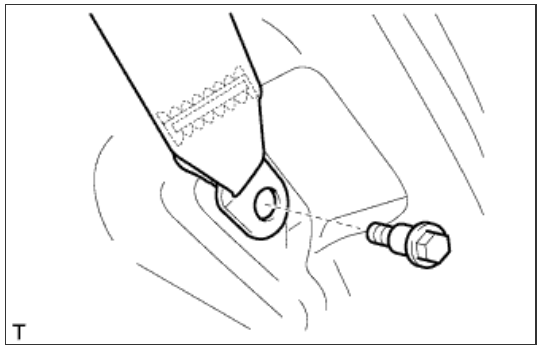
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

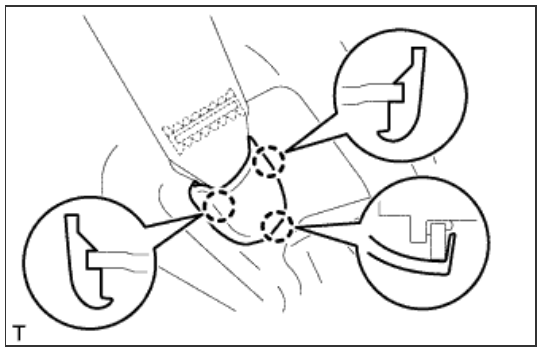


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



e. Attach the 3 claws to install the cover.

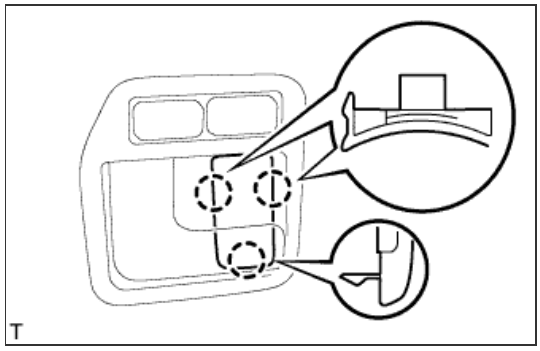


3. INSTALL REAR SEAT COVER CAP

HINT:

Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.

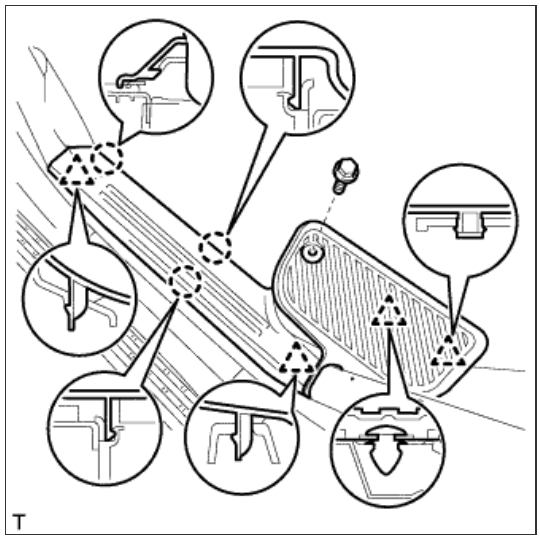


4. INSTALL REAR DOOR SCUFF PLATE LH

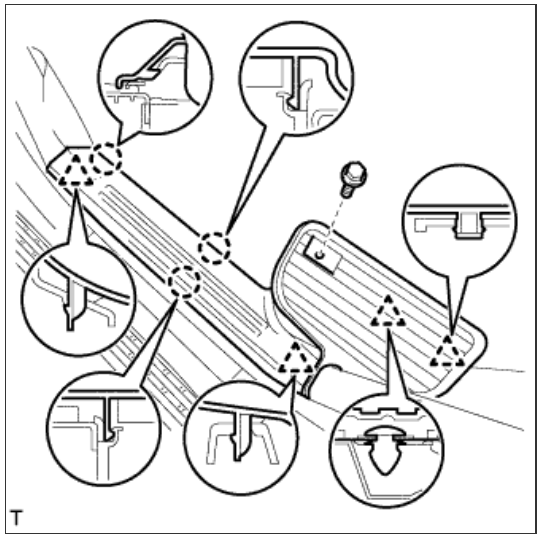
a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

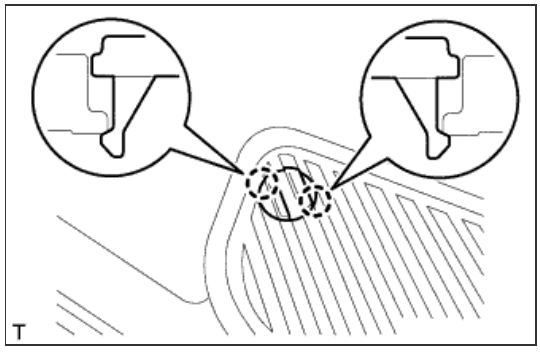
ii. Install the screw.

5. INSTALL REAR STEP COVER

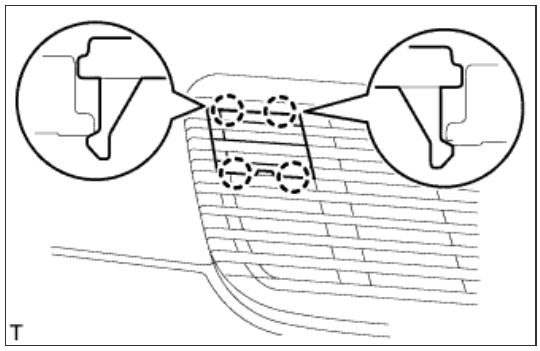
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.

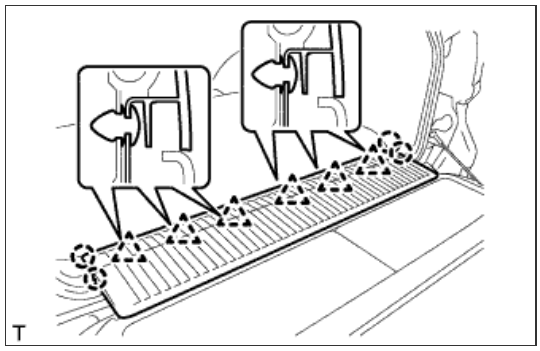


b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



6. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.



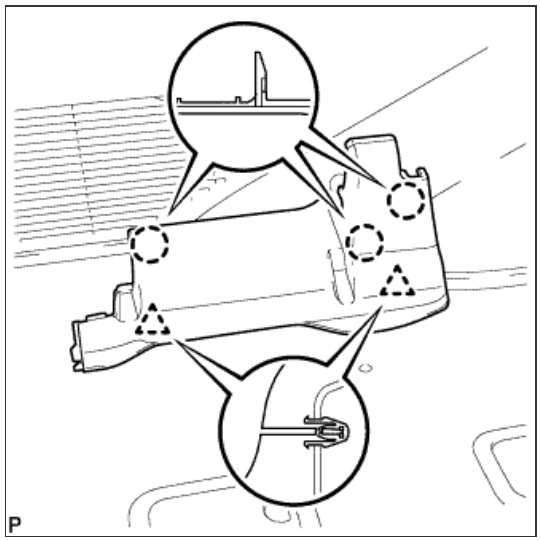
7. INSTALL REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding-up Function:
Install the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Install the rear No. 2 seat assembly (Click here).

8. INSTALL REAR NO. 2 SEAT HINGE COVER LH

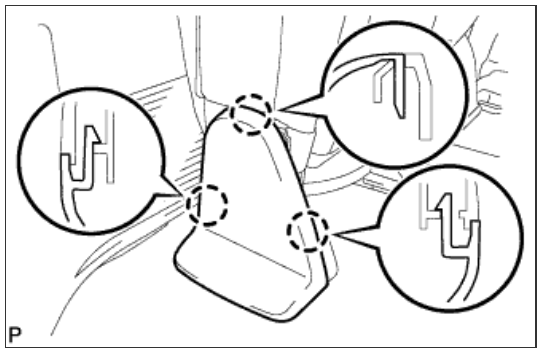
a. Attach the 3 claws and 2 clips to install the cover.



9. INSTALL REAR SEAT CUSHION HINGE COVER LH

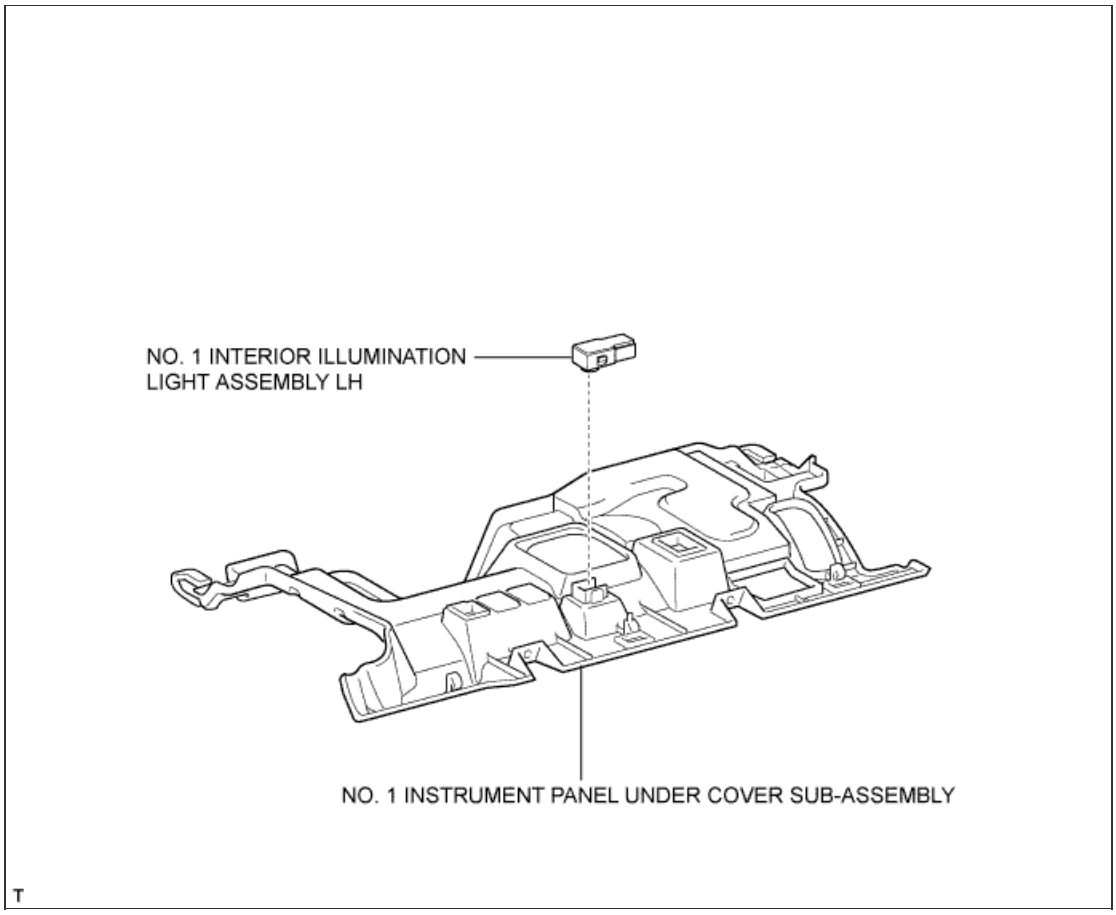
a. Attach the 3 claws to install the cover.

b. Return the seat to the upright position.



10. INSTALL REAR NO. 2 SEAT HEADREST ASSEMBLY LH

for Preparation Click here



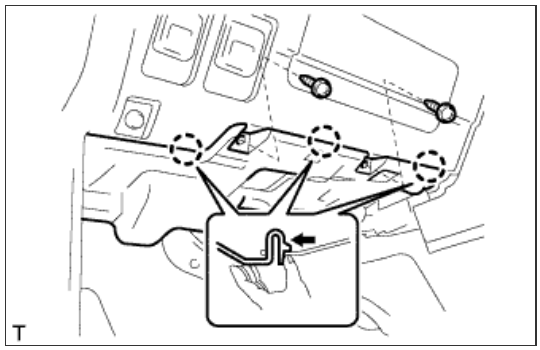
for Preparation Click here

1. REMOVE NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Remove the 2 screws.

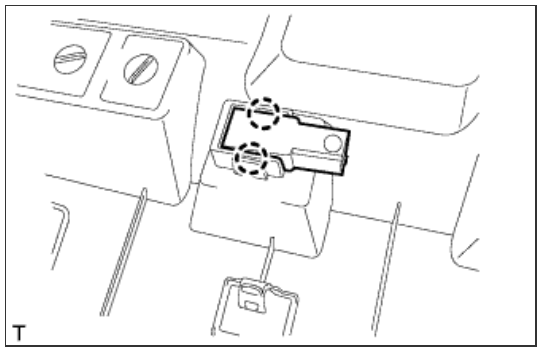
b. Detach the 3 claws.

c. Remove the under cover and disconnect the connectors.



2. REMOVE NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY LH

a. Detach the 2 claws and remove the light.



for Preparation Click here

1. INSPECT NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY LH (PERSONAL LIGHT)

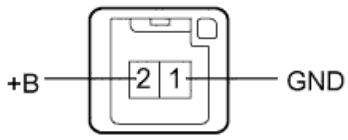
a. Apply battery voltage to the connector and check the LED illumination condition.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 (+B) Battery negative (-) → Terminal 1 (GND)	Light illuminates

If the result is not as specified, there may be a malfunction in the light.

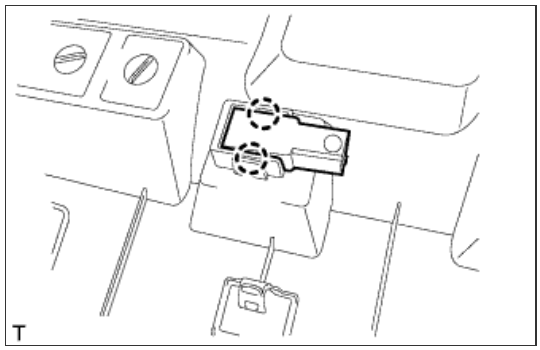
Component without harness connected:
(No. 1 Interior Illumination Light Assembly)



for Preparation Click here

1. INSTALL NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY LH

a. Attach the 2 claws to install the light.

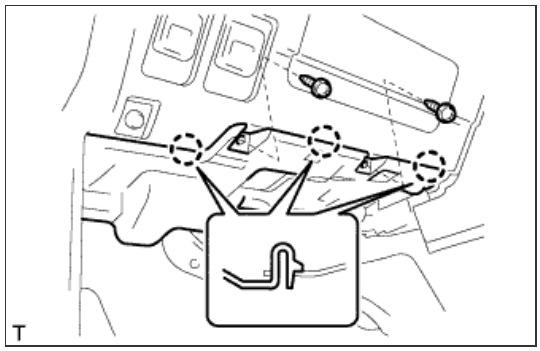


2. INSTALL NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

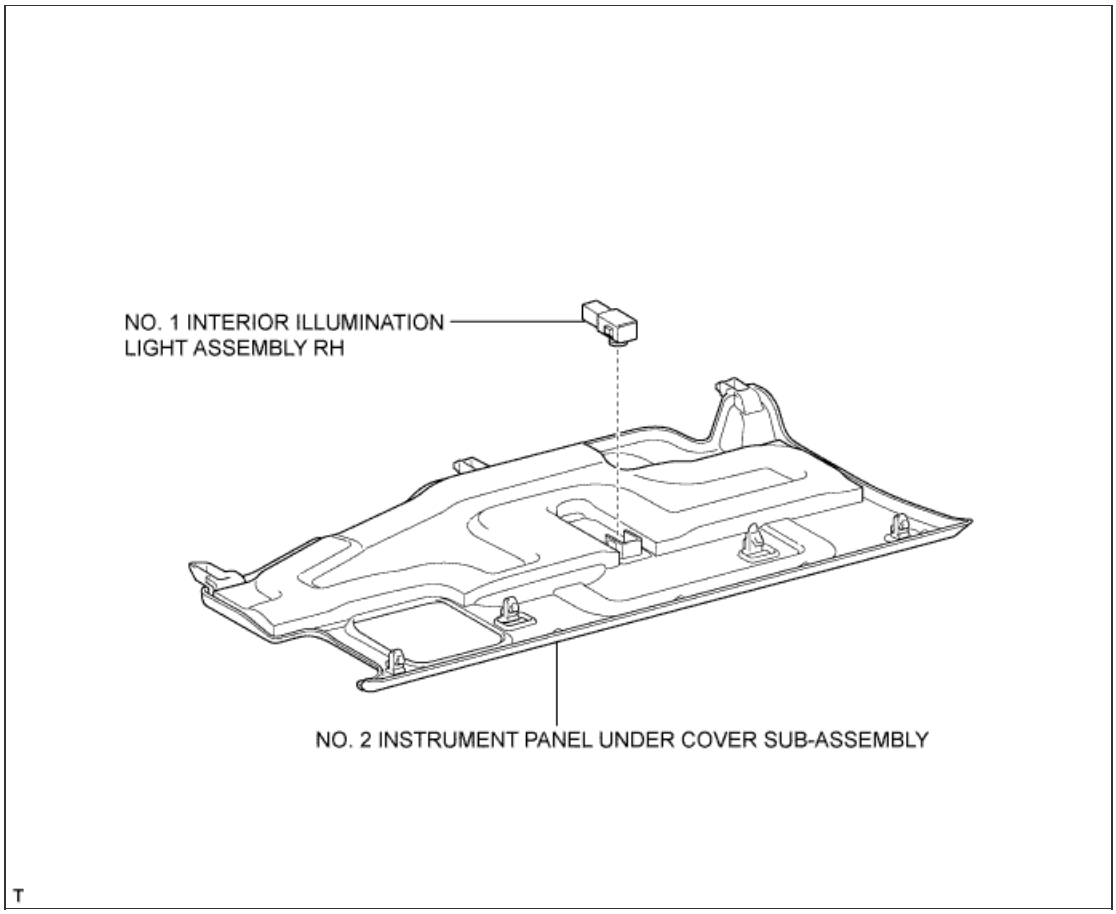
a. Connect the connectors.

b. Attach the 3 claws to install the under cover.

c. Install the 2 screws.



for Preparation [Click here]

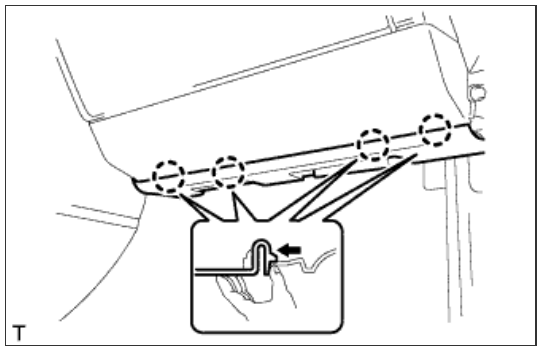


for Preparation Click here

1. REMOVE NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

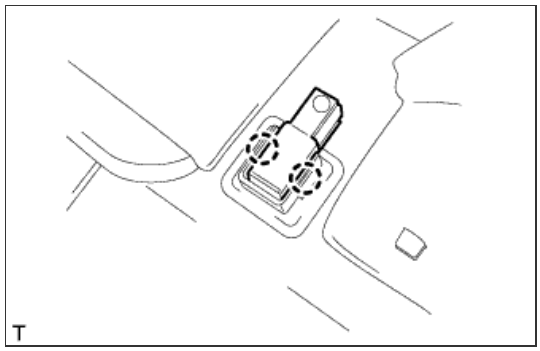
a. Detach the 4 claws.

b. Remove the under cover and disconnect the connector.



2. REMOVE NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY RH

a. Detach the 2 claws and remove the light.



for Preparation Click here

1. INSPECT NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY RH (PERSONAL LIGHT)

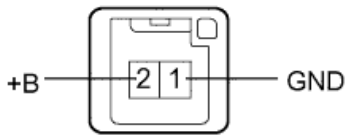
a. Apply battery voltage to the connector and check the LED illumination condition.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 (+B) Battery negative (-) → Terminal 1 (GND)	Light illuminates

If the result is not as specified, there may be a malfunction in the light.

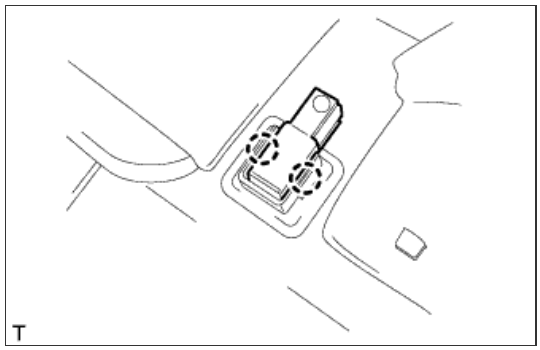
Component without harness connected:
(No. 1 Interior Illumination Light Assembly)



for Preparation Click here

1. INSTALL NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY RH

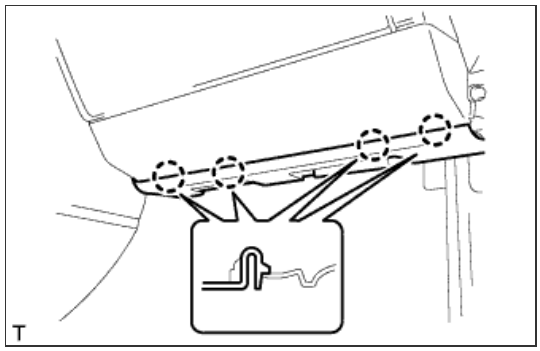
a. Attach the 2 claws to install the light.



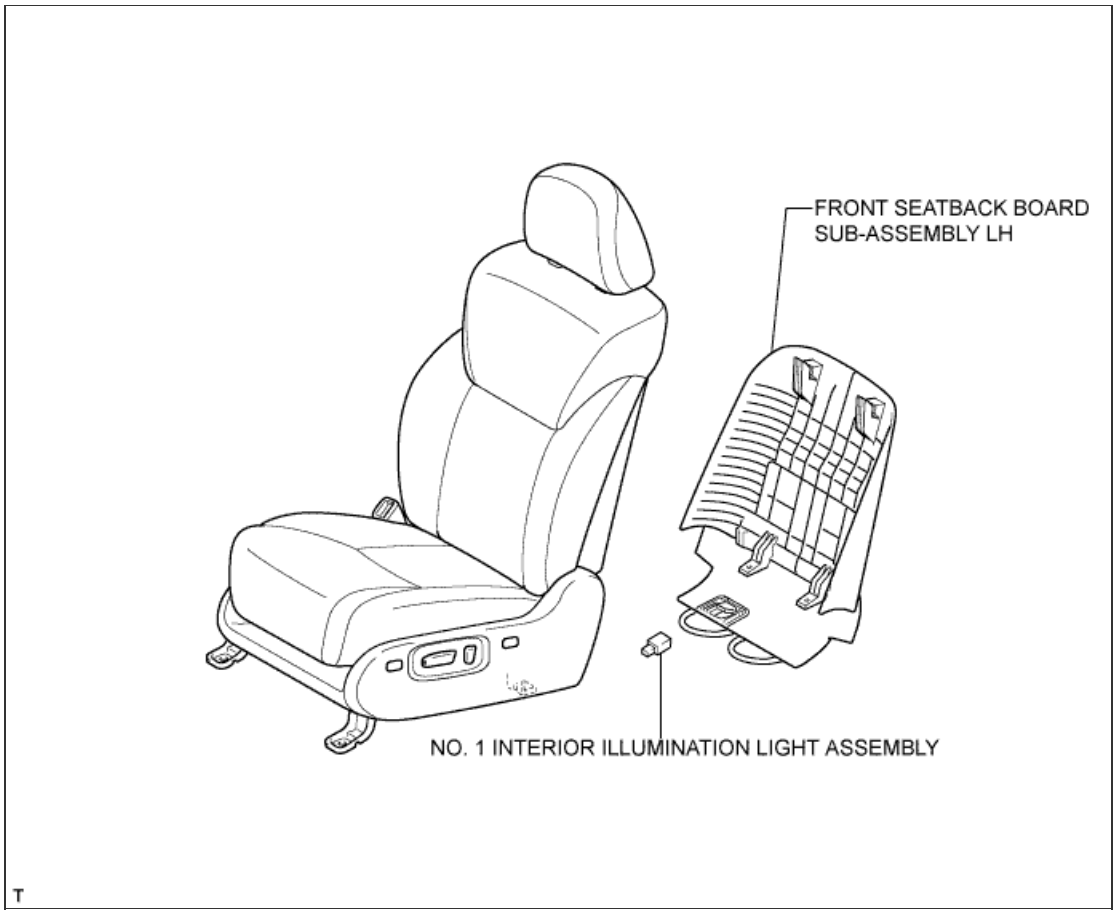
2. INSTALL NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Connect the connector.

b. Attach the 4 claws to install the under cover.



for Preparation Click here



for Preparation Click here

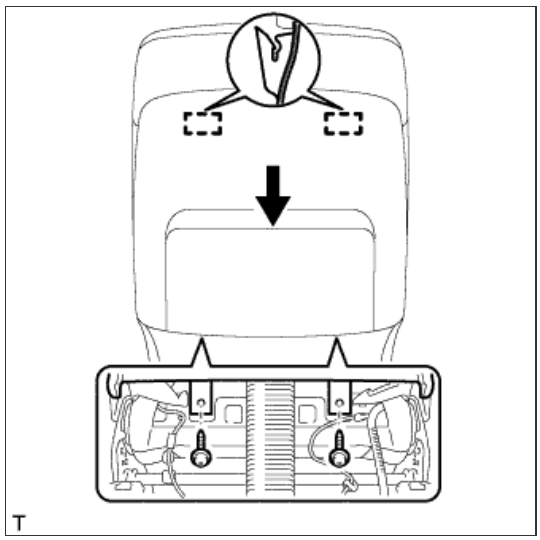
1. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly LH (Click here).

2. REMOVE FRONT SEATBACK BOARD SUB-ASSEMBLY LH

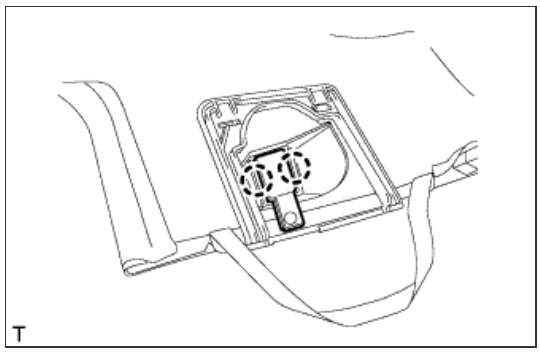
a. Remove the 2 screws.

b. Move the seatback board in the direction of the arrow to detach the 2 hooks and remove the seatback board.



3. REMOVE NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY

a. Detach the 2 claws and remove the light.



for Preparation Click here

1. INSPECT NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY (PERSONAL LIGHT)

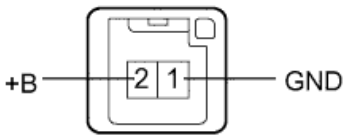
a. Apply battery voltage to the connector and check the LED illumination condition.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 (+B) Battery negative (-) → Terminal 1 (GND)	Light illuminates

If the result is not as specified, there may be a malfunction in the light.

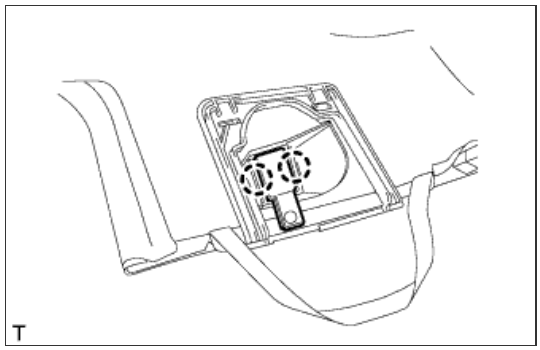
Component without harness connected:
(No. 1 Interior Illumination Light Assembly)



for Preparation Click here

1. INSTALL NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY

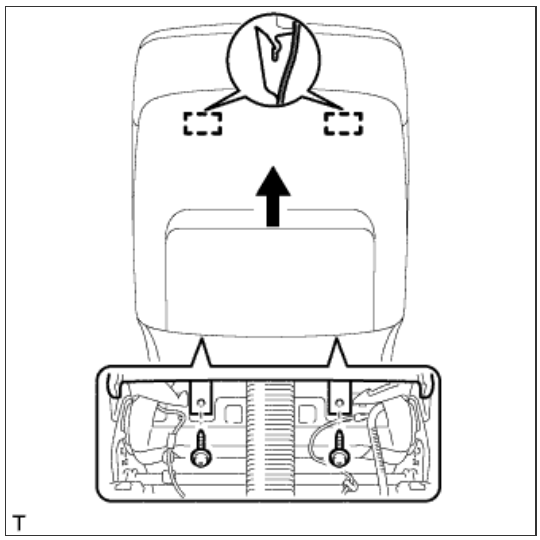
a. Attach the 2 claws to install the light.



2. INSTALL FRONT SEATBACK BOARD SUB-ASSEMBLY LH

a. Move the seatback board in the direction of the arrow to attach the 2 hooks and install the seatback board.

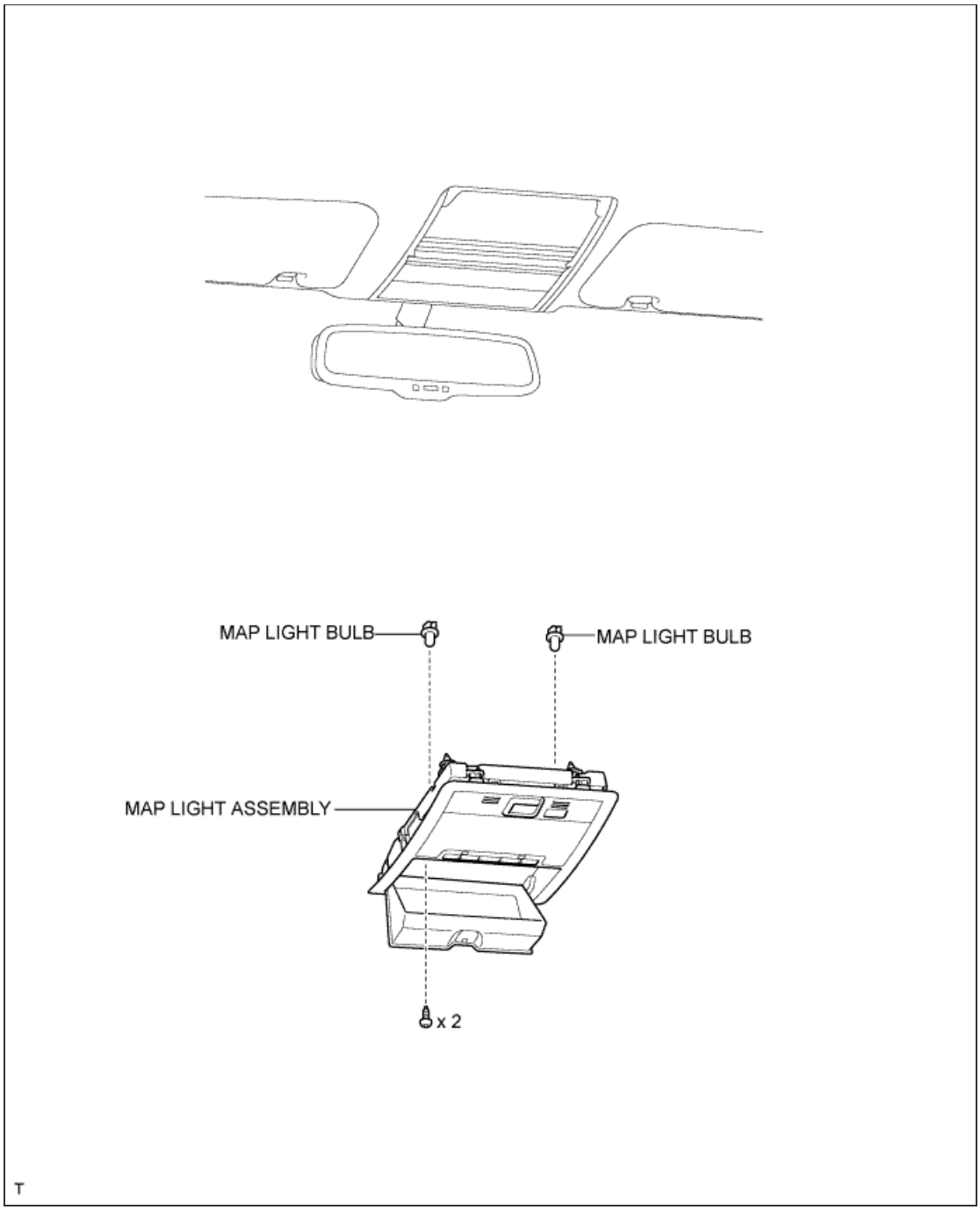
b. Install the 2 screws.



3. INSTALL FRONT SEAT ASSEMBLY LH

a. Install the front seat assembly LH (Click here).

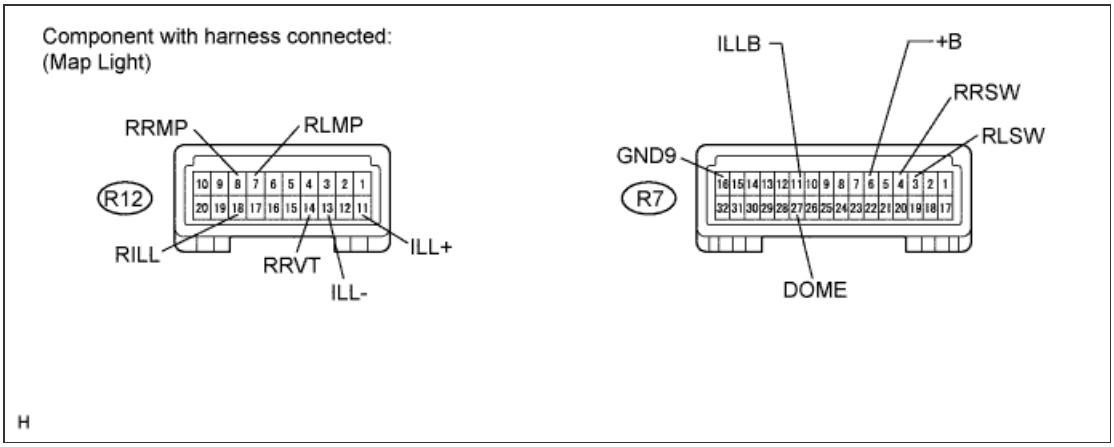
for Preparation Click here



for Preparation Click here

1. CHECK MAP LIGHT ASSEMBLY (ROOM LIGHT)

a. Remove the map light with the connector connected.



b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
R7-3 (RLSW) - R7-16 (GND9)	Rear spot light RH switch off	Below 1 V
	Rear spot light RH switch on	11 to 14 V
R7-4 (RRSW) - R7-16 (GND9)	Rear spot light LH switch off	Below 1 V
	Rear spot light LH switch on	11 to 14 V
R12-18 (RILL) - R7-17 (GND9)	Rear dome light off	11 to 14 V
	Rear dome light on	Below 1 V
R7-11 (ILLB) - R7-16 (GND9)	Always	11 to 14 V
R7-6 (+B) - R7-16 (GND9)	Always	11 to 14 V
R7-27 (DOME) - R7-16 (GND9)	Always	11 to 14 V
R12-7 (RLMP) - R7-16 (GND9)	Always	11 to 14 V
R12-8 (RRMP) - R7-16 (GND9)	Always	11 to 14 V
R12-11 (ILL+) - R7-16 (GND9)	Engine switch on (ACC)	11 to 14 V
R12-13 (ILL-) - R7-16 (GND9)	Headlight dimmer switch off	Below 1 V
	Headlight dimmer switch TAIL	11 to 14 V
R12-14 (RRVT) - R7-16 (GND9)	Back door closed	Below 1 V
	Back door open	11 to 14 V

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
R7-16 (GND9) - Body ground	Always	Below 1 Ω

If the result is not as specified, replace the map light.

for Preparation Click here

HINT:

When only replacing the room light bulbs, use the following procedures.

1. REMOVE MAP LIGHT ASSEMBLY

a. Using a screwdriver, detach the 2 claws and open the 2 covers.

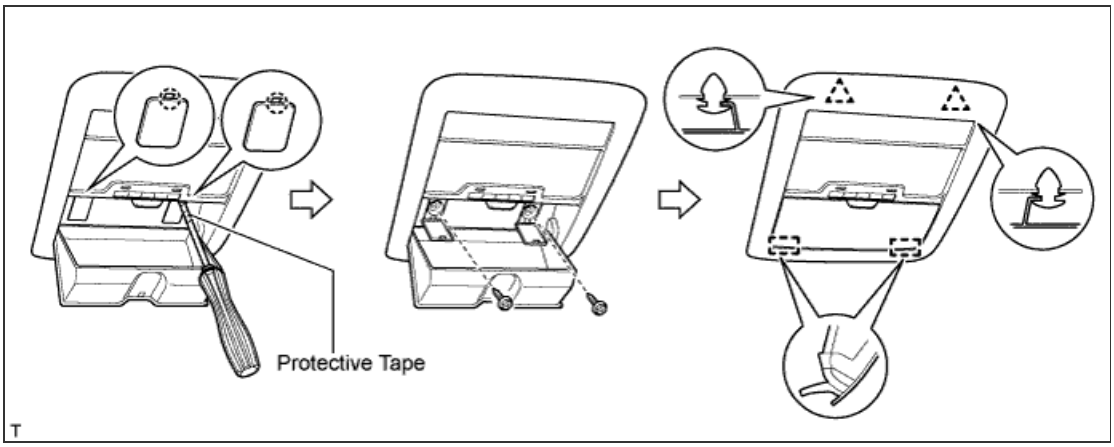
HINT:

Tape the screwdriver tip before use.

b. Remove the 2 screws.

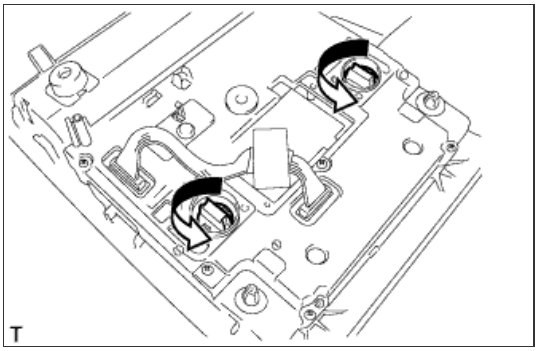
c. Detach the 2 clips and 2 guides.

d. Disconnect the 2 connectors and then remove the map light.



2. REMOVE MAP LIGHT BULB

a. Turn the 2 map light bulbs in the direction indicated by the arrows and remove them.



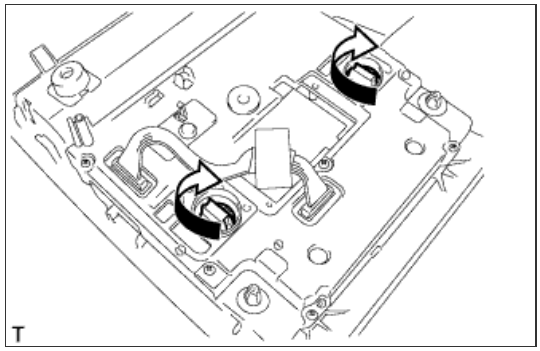
for Preparation Click here

HINT:

When only replacing the room light bulbs, use the following procedures.

1. INSTALL MAP LIGHT BULB

a. Turn the 2 map light bulbs in the direction indicated by the arrow to install them.



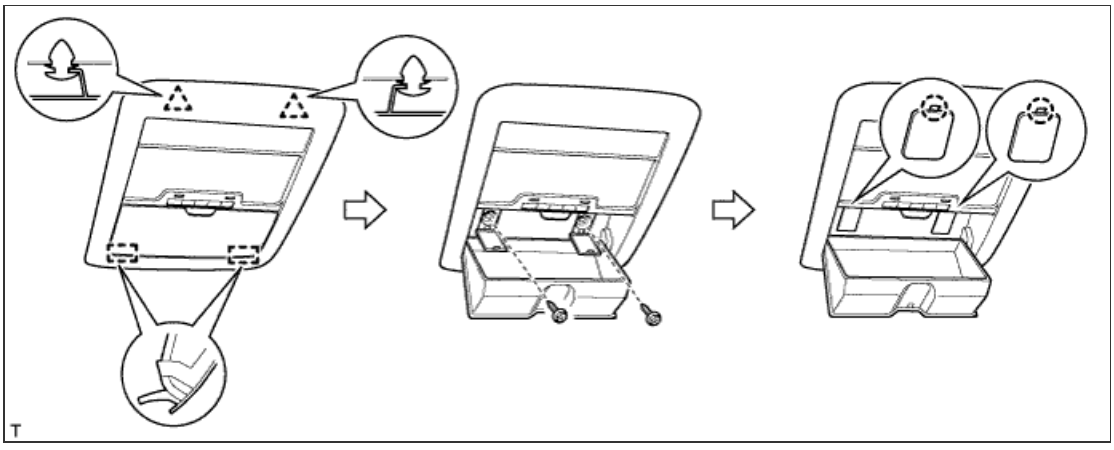
2. INSTALL MAP LIGHT ASSEMBLY

a. Connect the 2 connectors.

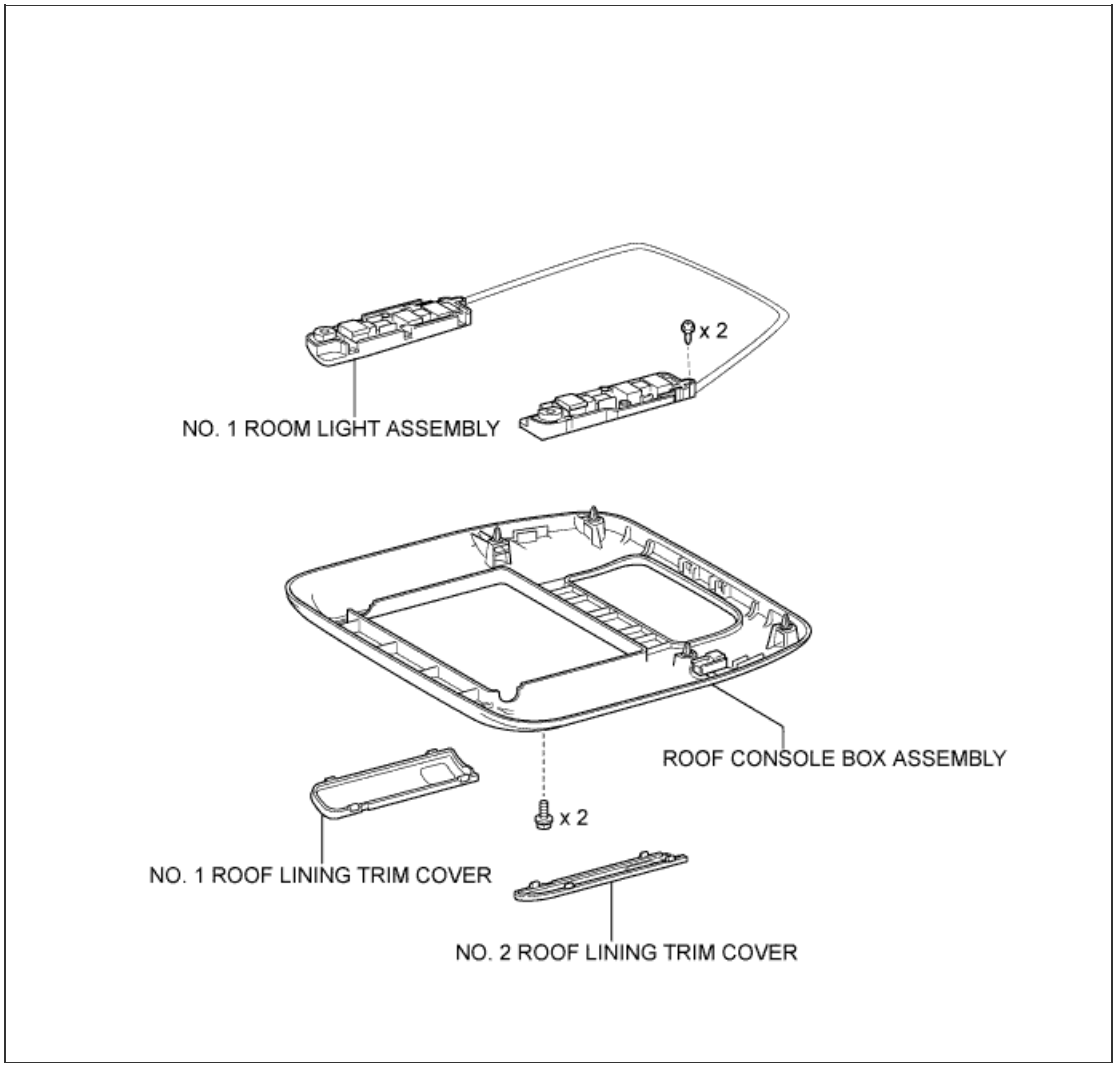
b. Attach the 2 clips and 2 guides to install the map light.

c. Install the 2 screws.

d. Attach the 2 claws to close the 2 covers.



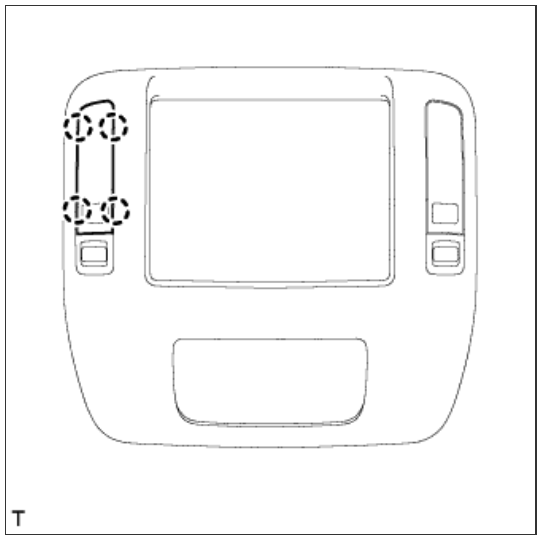
for Preparation Click here



for Preparation Click here

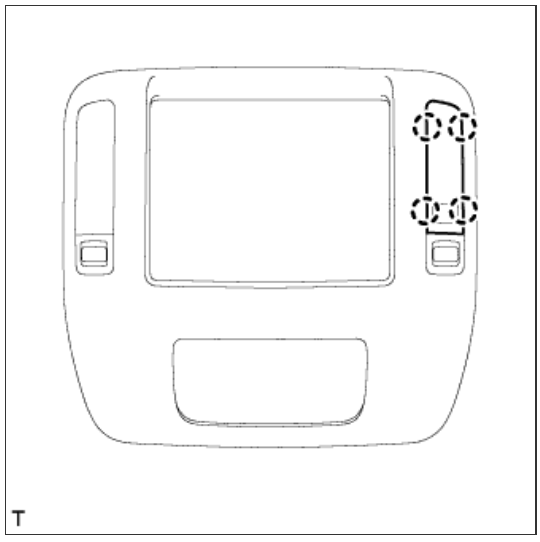
1. REMOVE NO. 1 ROOF LINING TRIM COVER

a. Detach the 4 claws and remove the cover.



2. REMOVE NO. 2 ROOF LINING TRIM COVER

a. Detach the 4 claws and remove the cover.

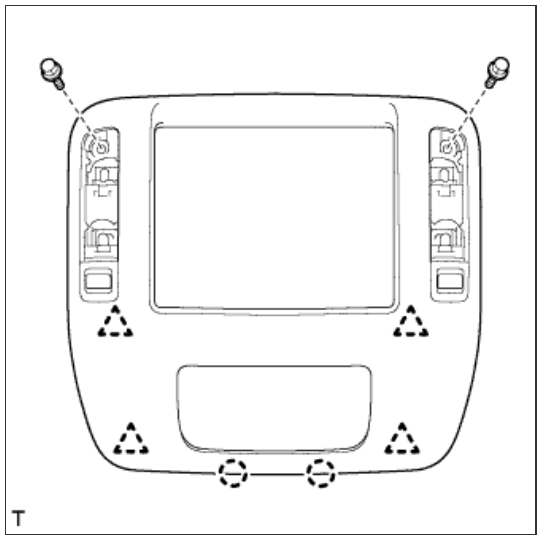


3. REMOVE ROOF CONSOLE BOX ASSEMBLY

a. Remove the 2 bolts.

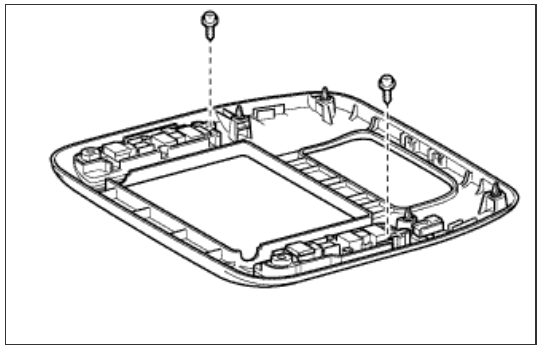
b. Detach the 4 clips and 2 claws.

c. Disconnect the connector and remove the roof console box.



4. REMOVE NO. 1 ROOM LIGHT ASSEMBLY

a. Remove the 2 screws and light.



for Preparation Click here

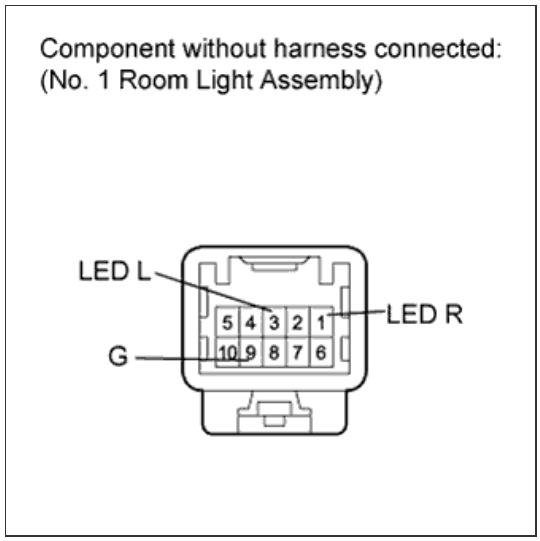
1. INSPECT NO. 1 ROOM LIGHT ASSEMBLY

a. Apply battery voltage to the connector, and check the LED illumination condition.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 1 (LED R) Battery negative (-) → Terminal 9 (G)	LED on right illuminates
Battery positive (+) → Terminal 3 (LED L) Battery negative (-) → Terminal 9 (G)	LED on left illuminates

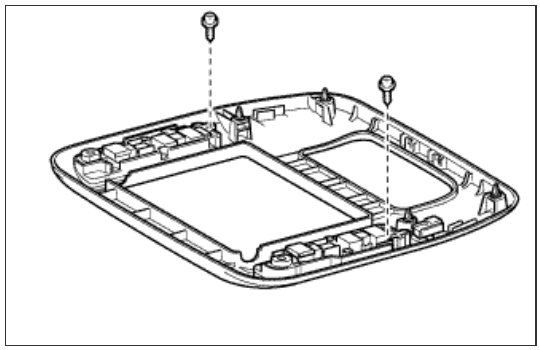
If the result is not as specified, there may be a malfunction in the No. 1 room light assembly.



for Preparation Click here

1. INSTALL NO. 1 ROOM LIGHT ASSEMBLY

a. Install the light with the 2 screws.

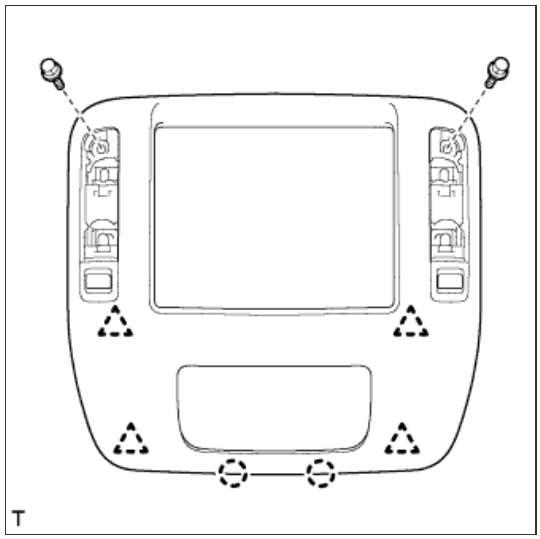


2. INSTALL ROOF CONSOLE BOX ASSEMBLY

a. Connect the connector.

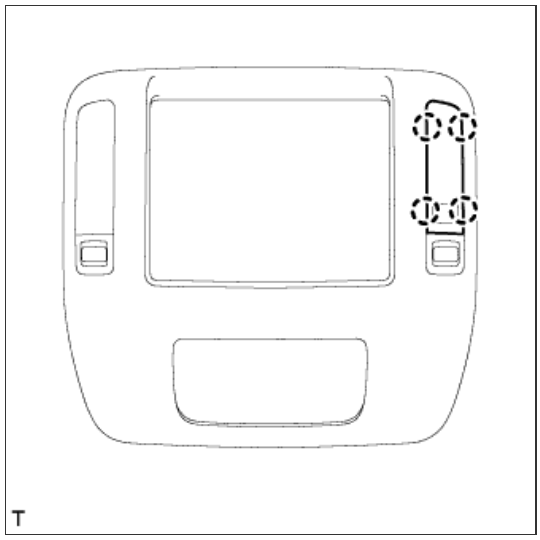
b. Attach the 4 clips and 2 claws to install the roof console box.

c. Install the 2 bolts.



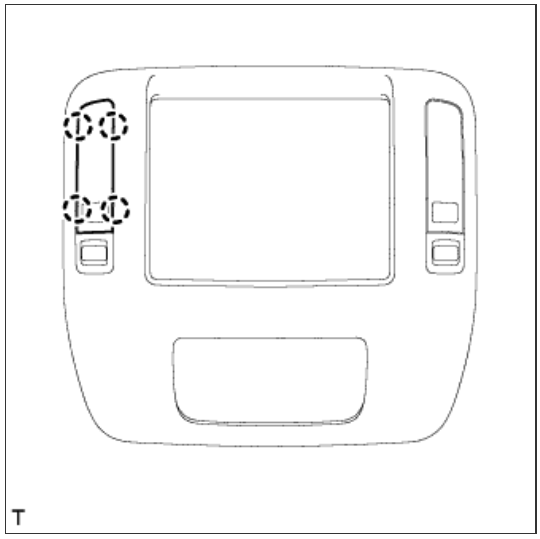
3. INSTALL NO. 2 ROOF LINING TRIM COVER

a. Attach the 4 claws to install the cover.

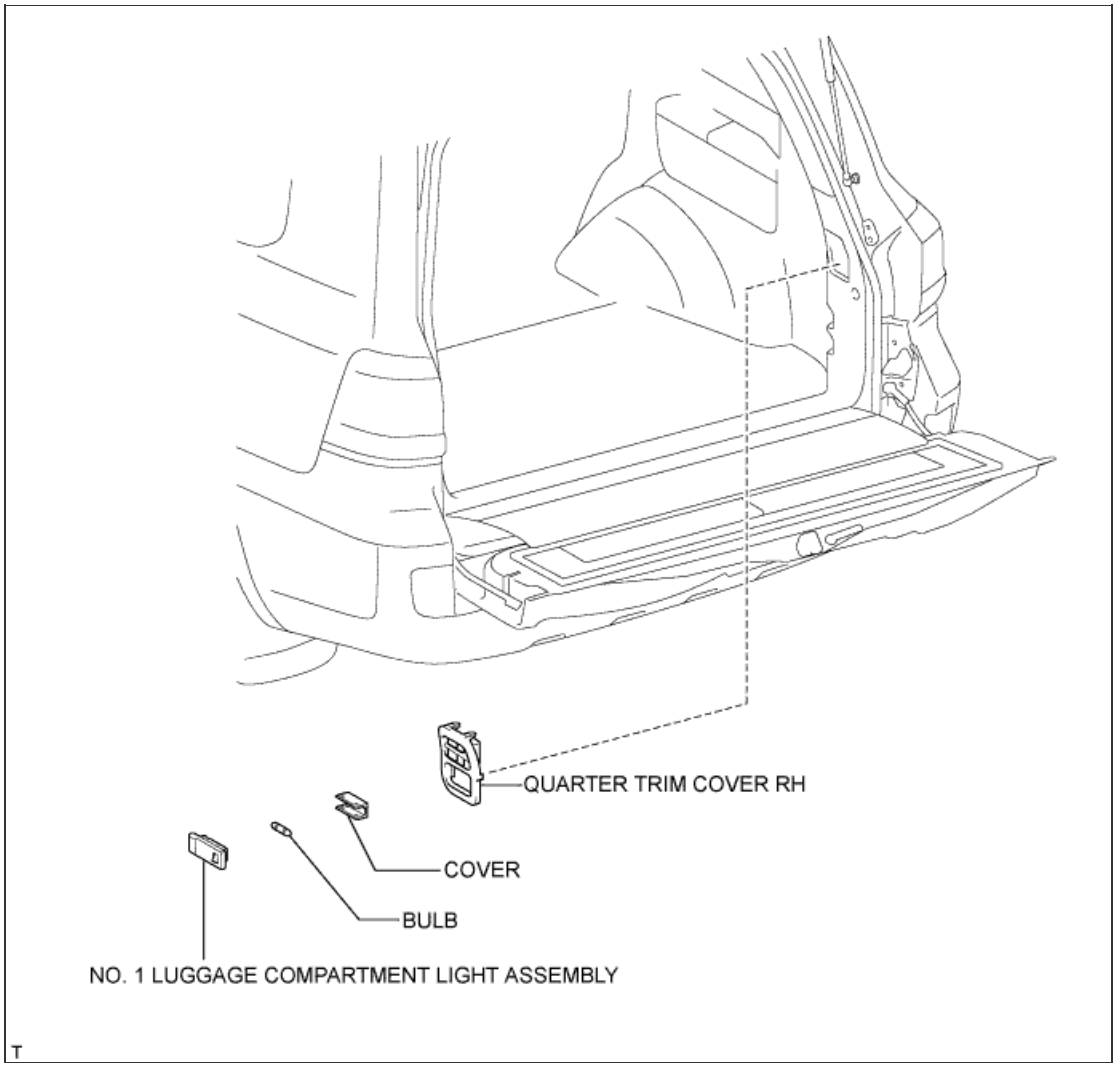


4. INSTALL NO. 1 ROOF LINING TRIM COVER

a. Attach the 4 claws to install the cover.



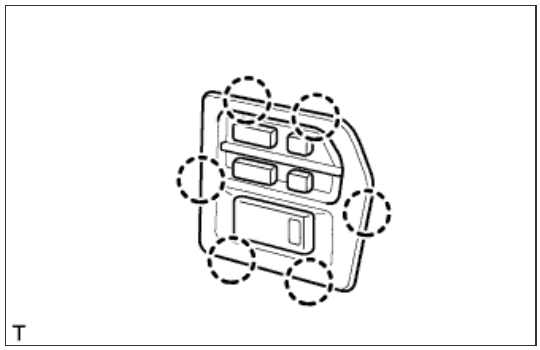
for Preparation Click here



for Preparation Click here

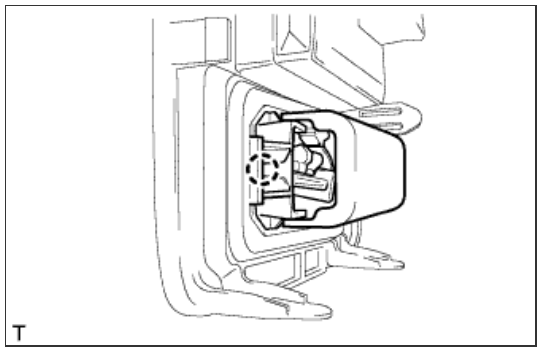
1. REMOVE QUARTER TRIM COVER RH

a. Detach the 6 claws and remove the cover.

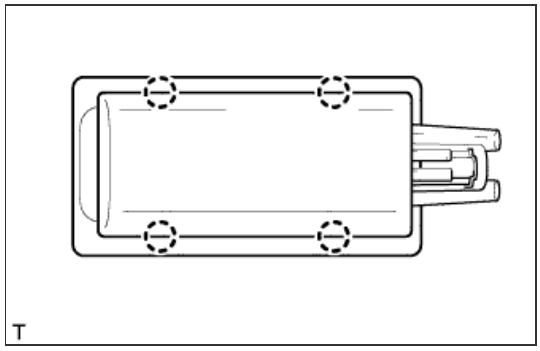


2. REMOVE NO. 1 LUGGAGE COMPARTMENT LIGHT ASSEMBLY

a. Detach the claw and remove the light



b. Detach the 4 claws and remove the cover and bulb.



for Preparation Click here

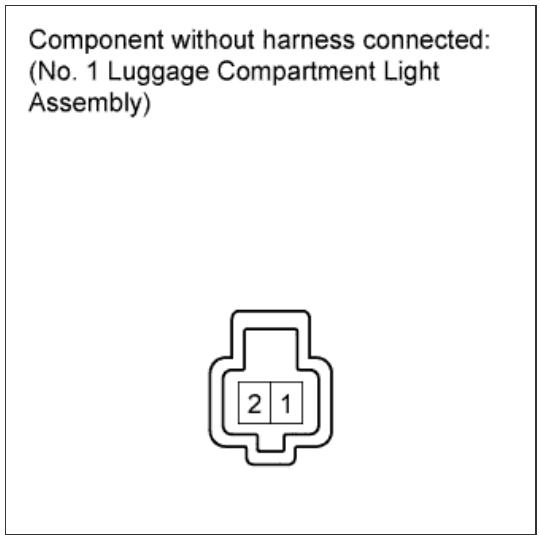
1. INSPECT NO. 1 LUGGAGE COMPARTMENT LIGHT ASSEMBLY

a. Measure the resistance according to the value(s) in the table below.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 Battery negative (-) → Terminal 1	Light illuminates

If the result is not as specified, replace the No. 1 luggage compartment light assembly.

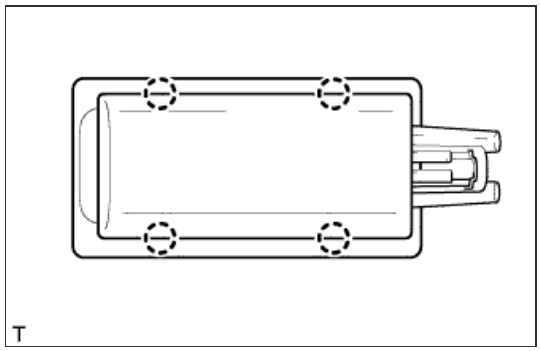


for Preparation Click here

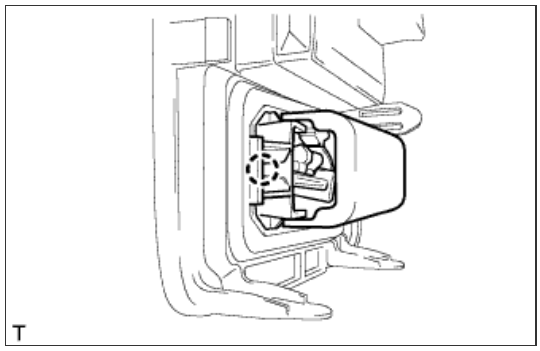
1. INSTALL NO. 1 LUGGAGE COMPARTMENT LIGHT ASSEMBLY

a. Install the bulb.

b. Attach the 4 claws to install the cover.

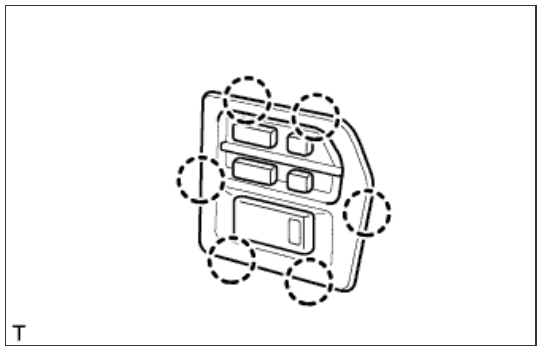


c. Attach the claw to install the light.

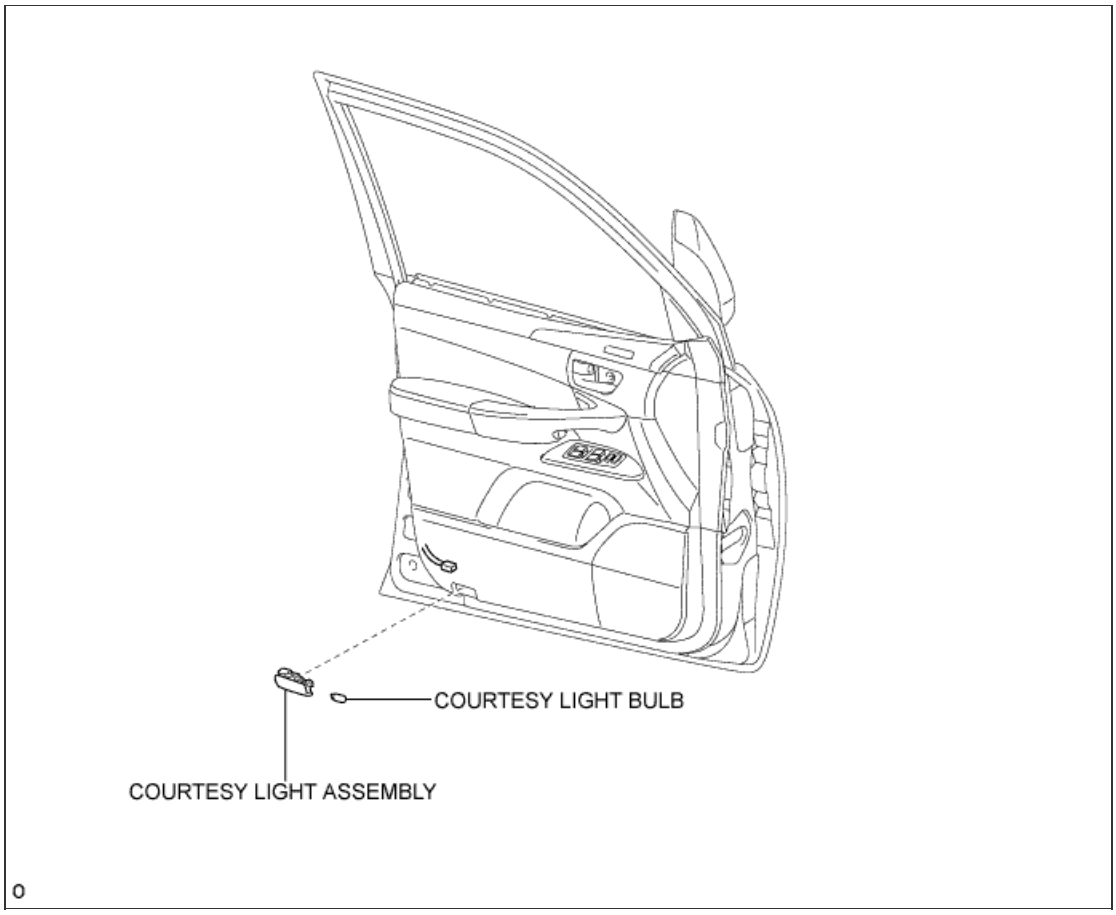


2. INSTALL QUARTER TRIM COVER RH

a. Attach the 6 claws to install the cover.



for Preparation Click here



for Preparation Click here

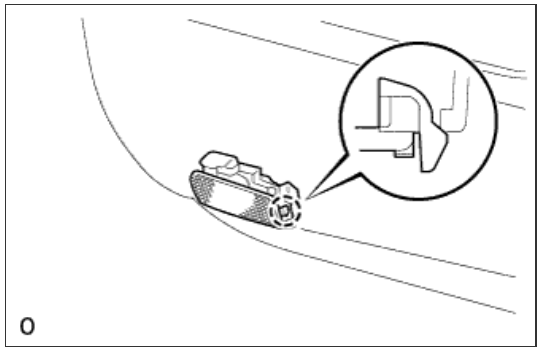
HINT:

- **Use the same procedures for the RH and LH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE COURTESY LIGHT ASSEMBLY

a. Detach the claw.

b. Remove the courtesy light and then disconnect the connector.



2. REMOVE COURTESY LIGHT BULB

a. Remove the bulb.

for Preparation Click here

1. INSPECT COURTESY LIGHT ASSEMBLY

a. Measure the resistance according to the value(s) in the table below.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 Battery negative (-) → Terminal 1	Light illuminates

If the result is not as specified, replace the courtesy light assembly.

Component without harness connected:
(Door Courtesy Light)



for Preparation Click here

HINT:

- **Use the same procedures for the RH and LH side.**
- **The procedures listed below are for the LH side.**

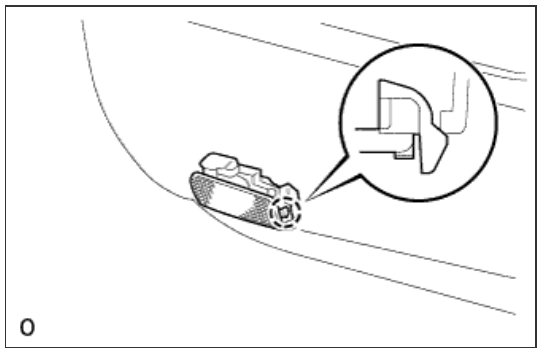
1. INSTALL COURTESY LIGHT BULB

a. Install the bulb.

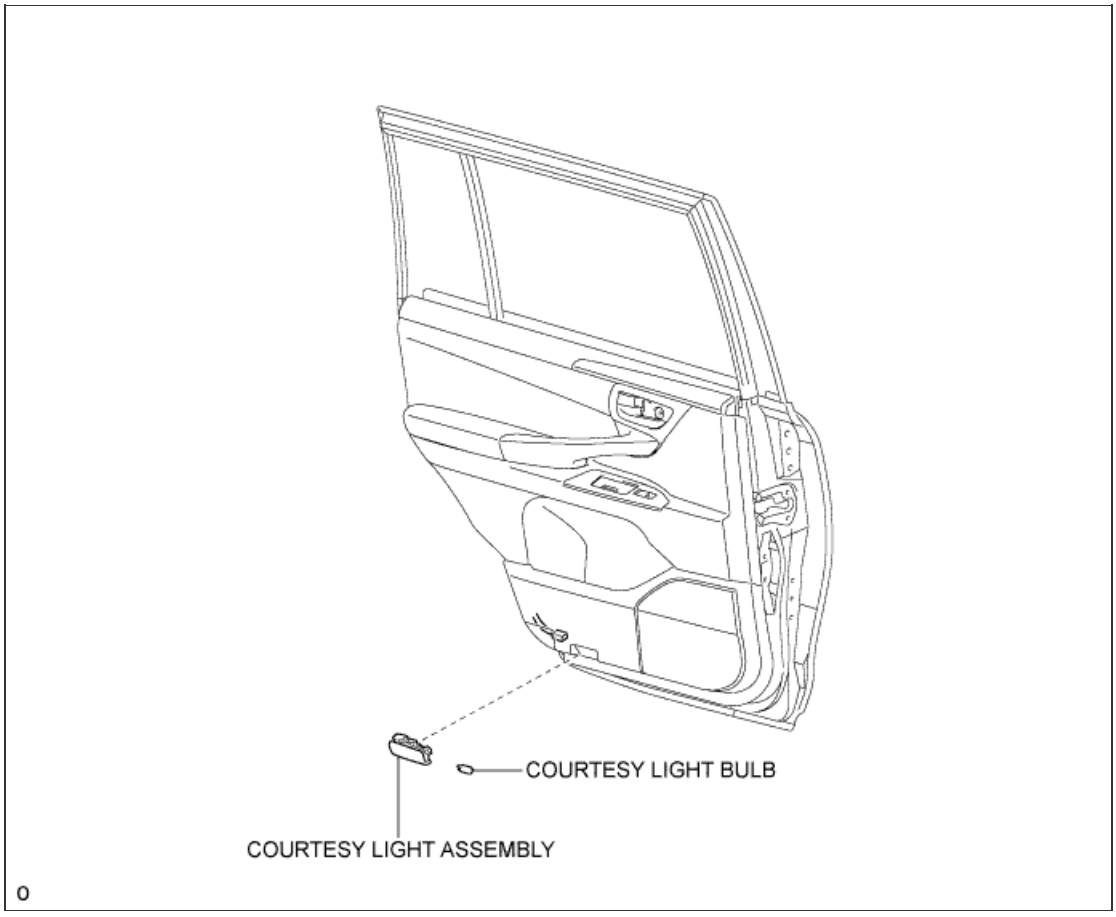
2. INSTALL COURTESY LIGHT ASSEMBLY

a. Connect the connector.

b. Attach the claw of the courtesy light to the front door trim.



for Preparation Click here



for Preparation Click here

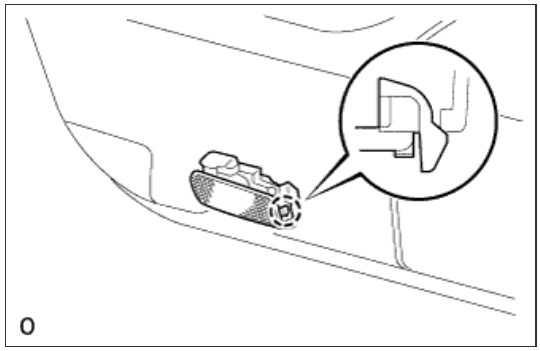
HINT:

- **Use the same procedures for the RH and LH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE COURTESY LIGHT ASSEMBLY

a. Detach the claw.

b. Remove the courtesy light and then disconnect the connector.



2. REMOVE COURTESY LIGHT BULB

a. Remove the bulb.

for Preparation Click here

1. INSPECT COURTESY LIGHT ASSEMBLY

a. Measure the resistance according to the value(s) in the table below.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 Battery negative (-) → Terminal 1	Light illuminates

If the result is not as specified, replace the courtesy light assembly.

Component without harness connected:
(Door Courtesy Light)



for Preparation Click here

HINT:

- **Use the same procedures for the RH and LH side.**
- **The procedures listed below are for the LH side.**

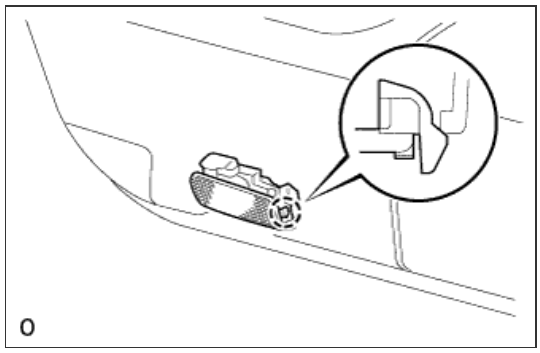
1. INSTALL COURTESY LIGHT BULB

a. Install the bulb.

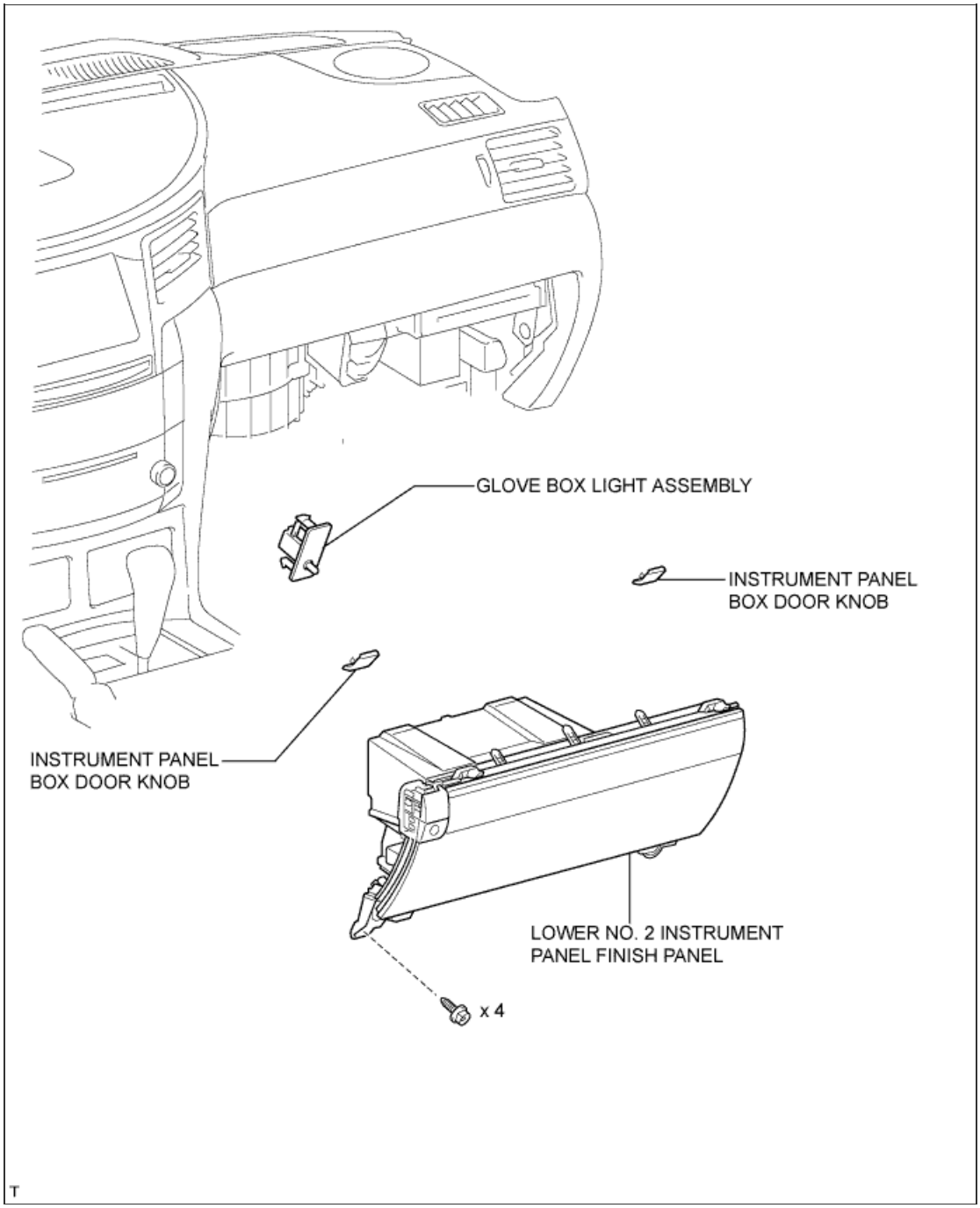
2. INSTALL COURTESY LIGHT ASSEMBLY

a. Connect the connector.

b. Attach the claw of the courtesy light to the rear door trim.



for Preparation [Click here]



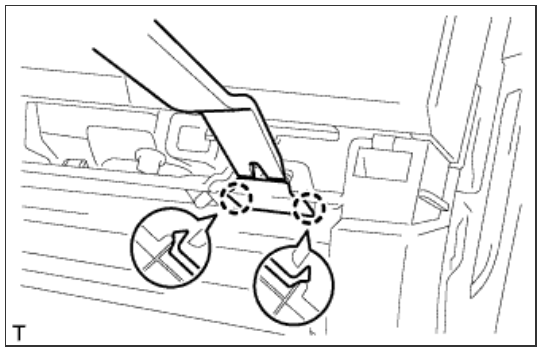
for Preparation Click here

1. REMOVE FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY

a. Remove the front passenger side knee airbag assembly (Click here).

2. REMOVE INSTRUMENT PANEL BOX DOOR KNOB

a. Using a moulding remover, detach the 2 claws and remove the knob.

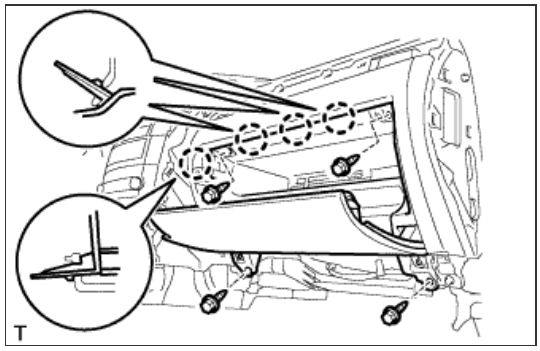


3. REMOVE LOWER NO. 2 INSTRUMENT PANEL FINISH PANEL

a. Remove the 4 bolts.

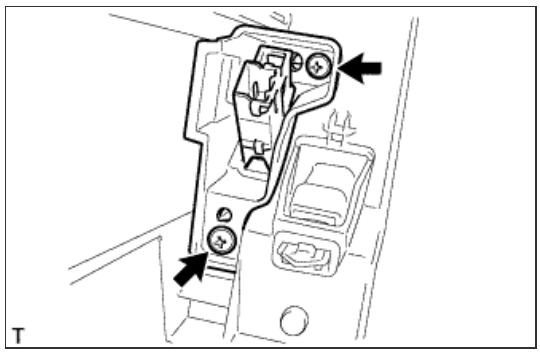
b. Detach the 4 claws.

c. Remove the finish panel and then disconnect the connector.



4. REMOVE GLOVE BOX LIGHT ASSEMBLY

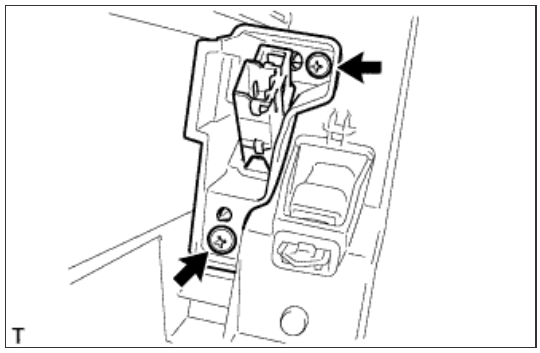
a. Remove the 2 screws and glove box light.



for Preparation Click here

1. INSTALL GLOVE BOX LIGHT ASSEMBLY

a. Install the glove box light with the 2 screws.

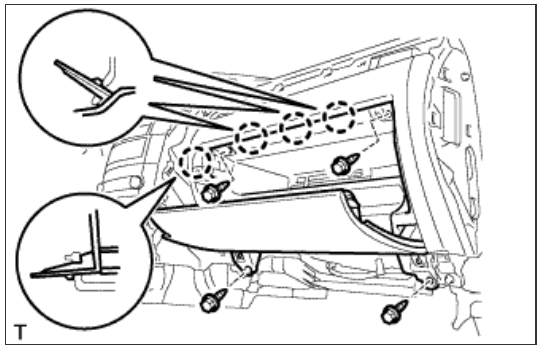


2. INSTALL LOWER NO. 2 INSTRUMENT PANEL FINISH PANEL

a. Connect the connector.

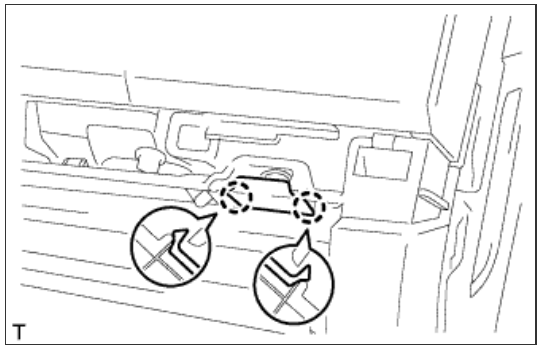
b. Attach the 4 claws to install the finish panel.

c. Install the 4 bolts.



3. INSTALL INSTRUMENT PANEL BOX DOOR KNOB

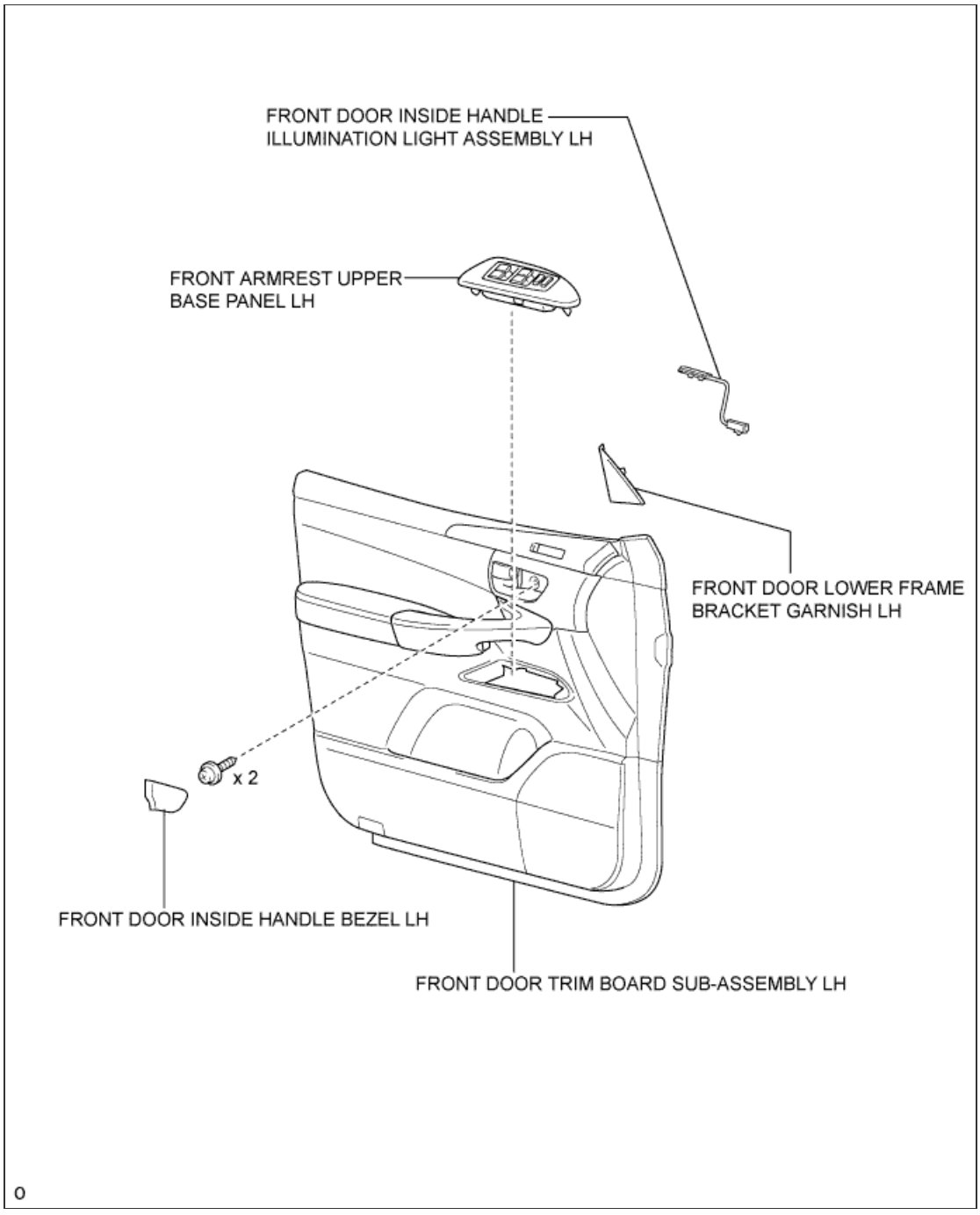
a. Attach the 2 claws to install the knob.



4. INSTALL FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY

a. Install the front passenger side knee airbag assembly (Click here).

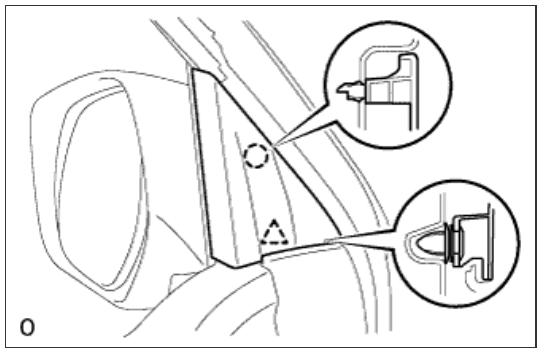
for Preparation Click here



for Preparation Click here

1. REMOVE FRONT DOOR LOWER FRAME BRACKET GARNISH LH

a. Detach the clip and claw, and remove the front lower door frame bracket garnish.

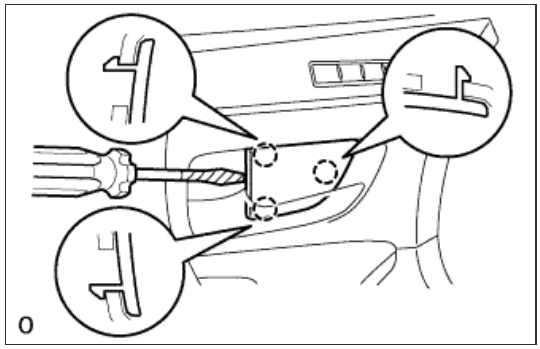


2. REMOVE FRONT DOOR INSIDE HANDLE BEZEL LH

a. Using a screwdriver, detach the 3 claws and remove the inside handle bezel plug.

HINT:

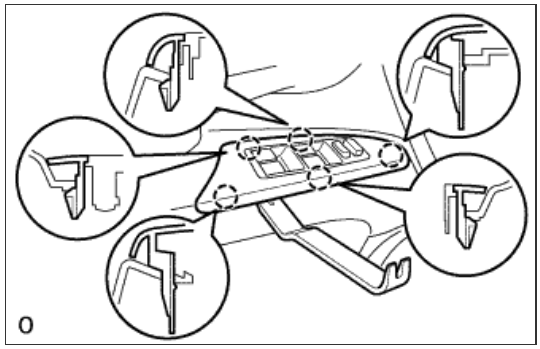
Tape the screwdriver tip before use.



3. REMOVE FRONT ARMREST UPPER BASE PANEL LH

a. Using a moulding remover, detach the 5 claws.

b. Disconnect the connector and remove the front upper armrest base panel and multiplex network master switch.

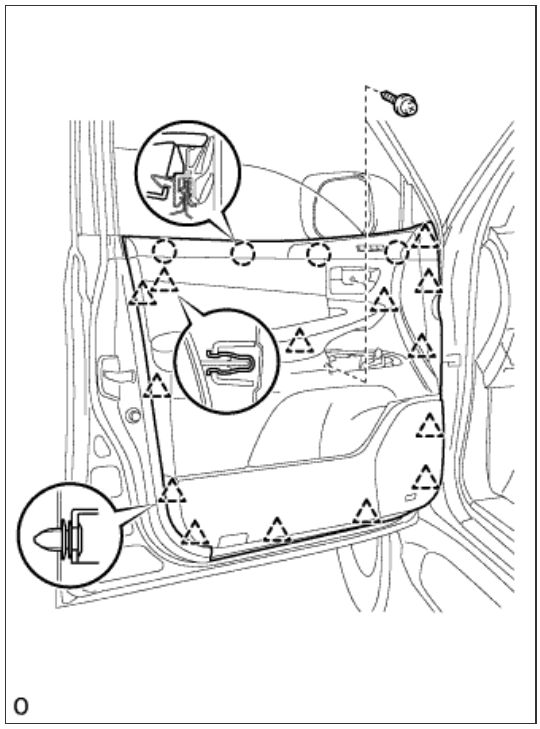


4. REMOVE FRONT DOOR TRIM BOARD SUB-ASSEMBLY LH

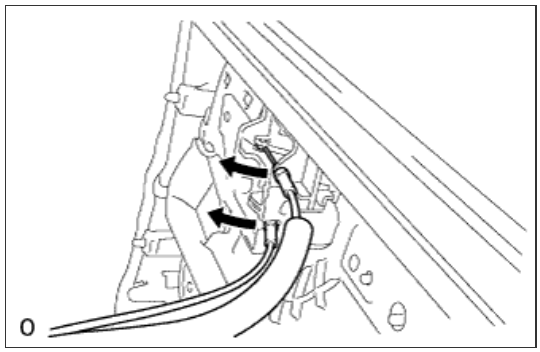
a. Remove the 2 screws.

b. Detach the 14 clips and 4 claws.

c. Disconnect the connector and remove the trim board.

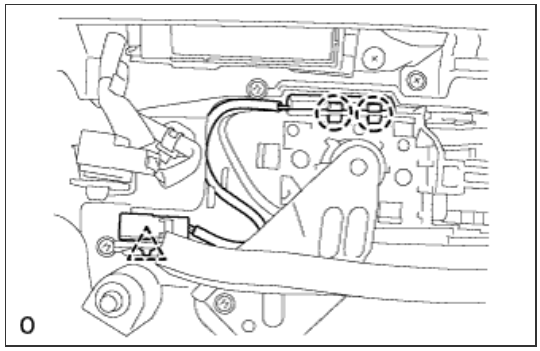


d. Disconnect the 2 cables from the inside handle.



5. REMOVE FRONT DOOR INSIDE HANDLE ILLUMINATION LIGHT ASSEMBLY LH

a. Detach the 2 claws and clamp, and remove the light.



for Preparation Click here

1. INSPECT FRONT DOOR INSIDE HANDLE ILLUMINATION LIGHT ASSEMBLY LH (INSIDE HANDLE LIGHT)

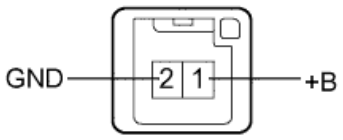
a. Apply battery voltage to the connector and check the LED illumination condition.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 1 (+B) Battery negative (-) → Terminal 2 (GND)	Light illuminates

If the result is not as specified, there may be a malfunction in the light.

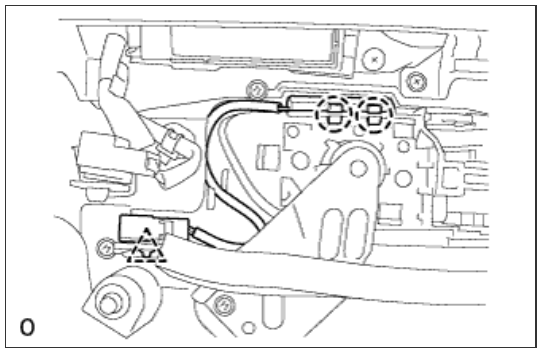
Component without harness connected:
(Front Door Inside Handle Illumination Light Assembly)



for Preparation Click here

1. INSTALL FRONT DOOR INSIDE HANDLE ILLUMINATION LIGHT ASSEMBLY LH

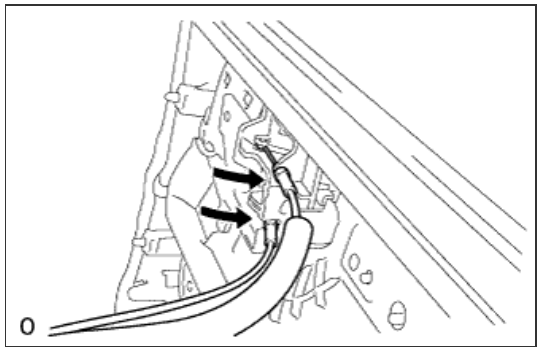
a. Attach the 2 claws and clamp to install the light.



2. INSTALL FRONT DOOR TRIM BOARD SUB-ASSEMBLY LH

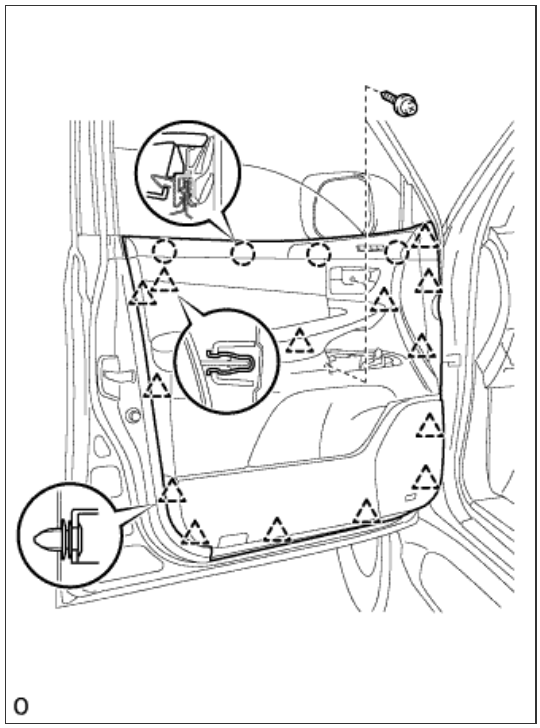
a. Connect the connector.

b. Connect the front door lock remote control cable and front door inside locking cable to the front door inside handle sub-assembly.



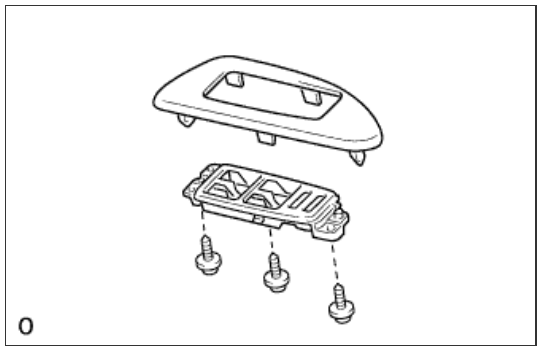
c. Attach the 4 claws and 14 clips to install the trim board.

d. Install the 2 screws.



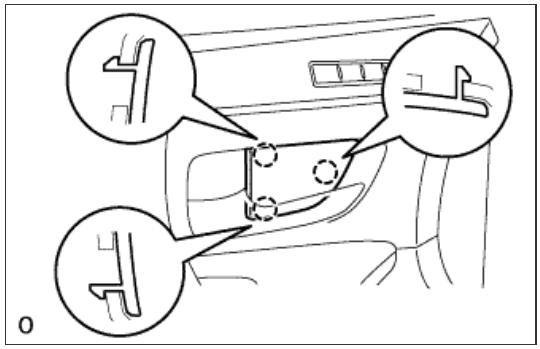
3. INSTALL FRONT ARMREST UPPER BASE PANEL LH

a. Install the front lower door armrest base panel with the 3 screws.



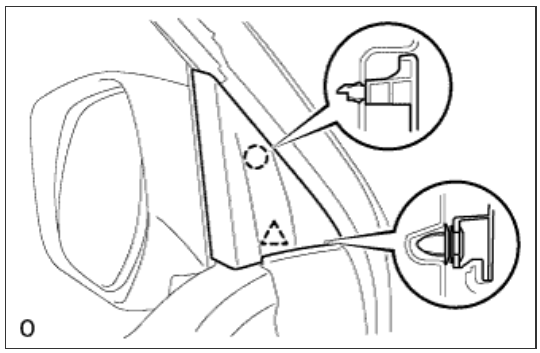
4. INSTALL FRONT DOOR INSIDE HANDLE BEZEL LH

a. Attach the 3 claws to install the inside handle bezel plug.

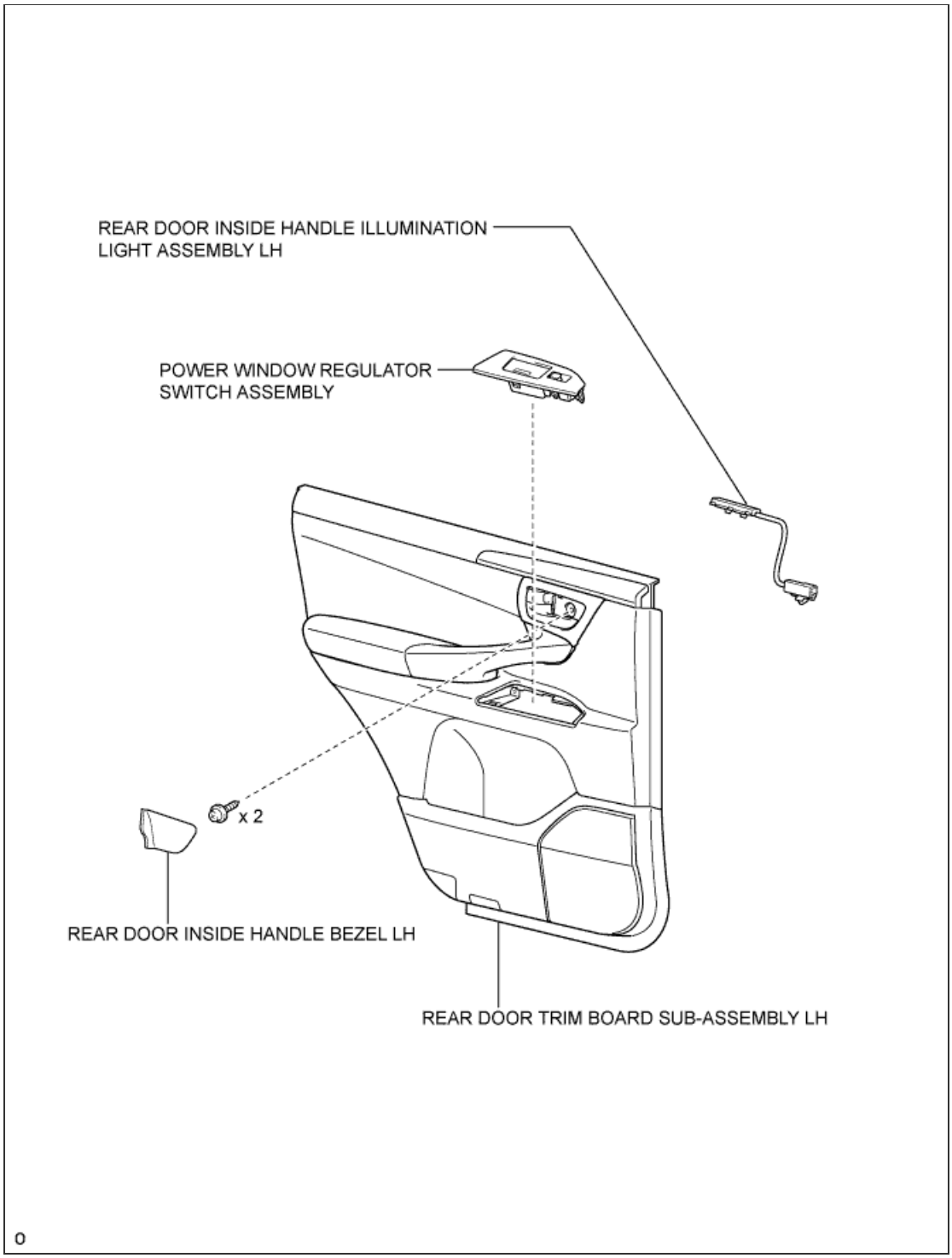


5. INSTALL FRONT DOOR LOWER FRAME BRACKET GARNISH LH

a. Attach the clip and claw to install the front door lower frame bracket garnish.



for Preparation Click here



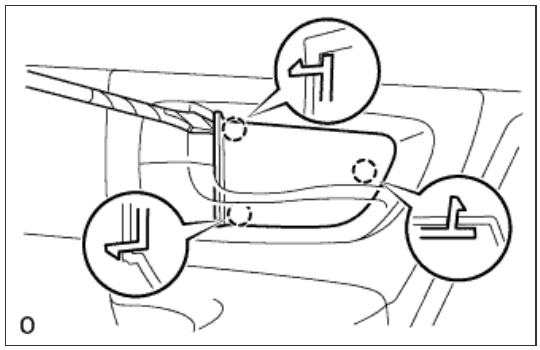
for Preparation Click here

1. REMOVE REAR DOOR INSIDE HANDLE BEZEL LH

a. Using a screwdriver, detach the 3 claws and remove the inside handle bezel plug.

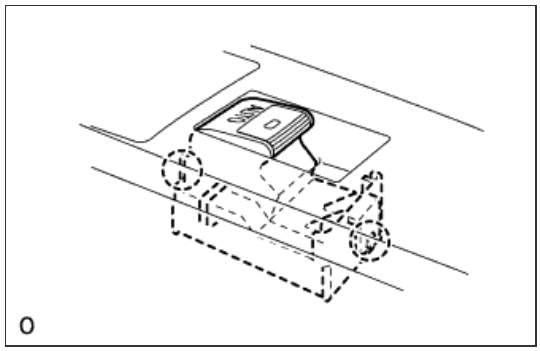
HINT:

Tape the screwdriver tip before use.



2. REMOVE POWER WINDOW REGULATOR SWITCH ASSEMBLY

a. Detach the 2 claws and remove the regulator switch.

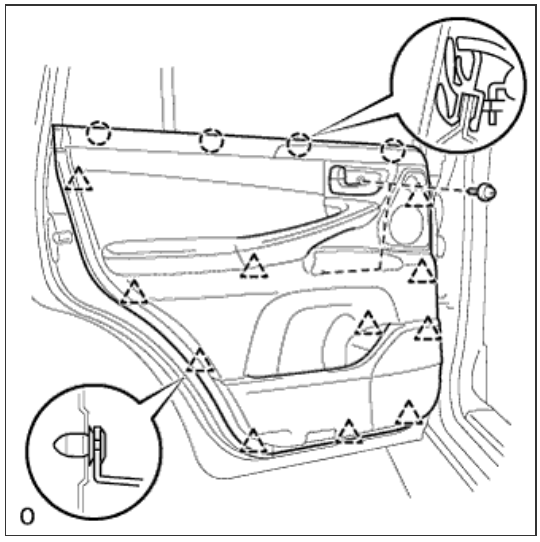


3. REMOVE REAR DOOR TRIM BOARD SUB-ASSEMBLY LH

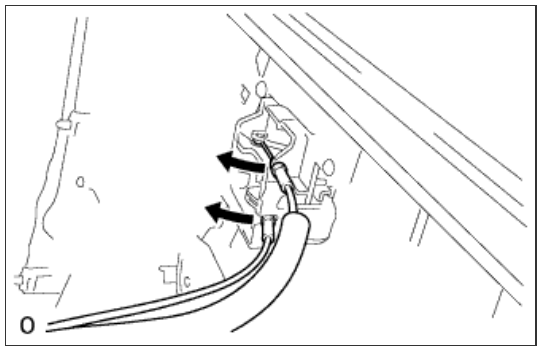
a. Remove the 2 screws.

b. Detach the 11 clips and 4 claws.

c. Disconnect the connector and remove the trim board.

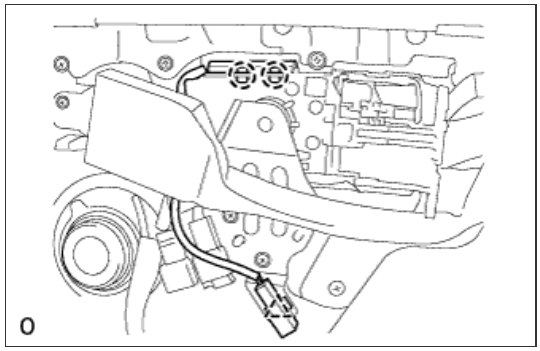


d. Disconnect the 2 cables from the inside handle.



4. REMOVE REAR DOOR INSIDE HANDLE ILLUMINATION LIGHT ASSEMBLY LH

a. Detach the 2 claws and remove the light.



for Preparation Click here

1. INSPECT REAR DOOR INSIDE HANDLE ILLUMINATION LIGHT ASSEMBLY LH (INSIDE HANDLE LIGHT)

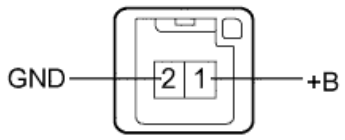
a. Apply battery voltage to the connector and check the LED illumination condition.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 1 (+B) Battery negative (-) → Terminal 2 (GND)	Light illuminates

If the result is not as specified, there may be a malfunction in the light.

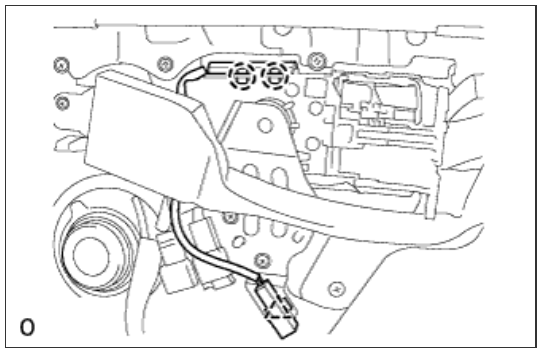
Component without harness connected:
(Rear Door Inside Handle Illumination Light Assembly)



for Preparation Click here

1. INSTALL REAR DOOR INSIDE HANDLE ILLUMINATION LIGHT ASSEMBLY LH

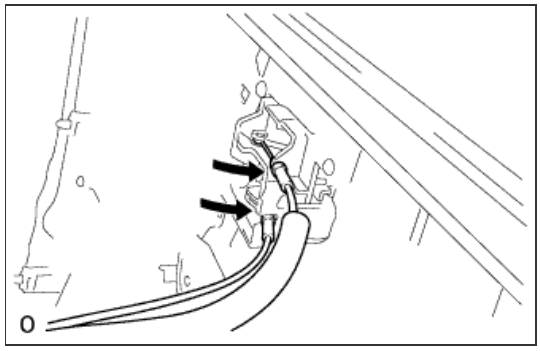
a. Attach the 2 claws to install the light.



2. INSTALL REAR DOOR TRIM BOARD SUB-ASSEMBLY LH

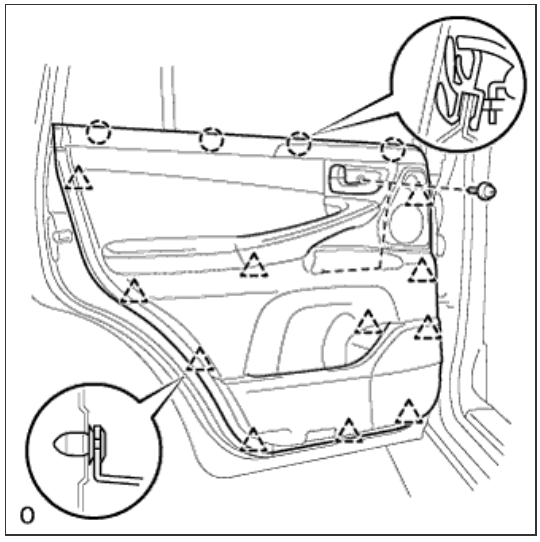
a. Connect the connector.

b. Connect the rear door lock remote control cable and rear door inside locking cable to the rear door inside handle sub-assembly.



c. Attach the 4 claws and 11 clips to install the rear door trim board sub-assembly.

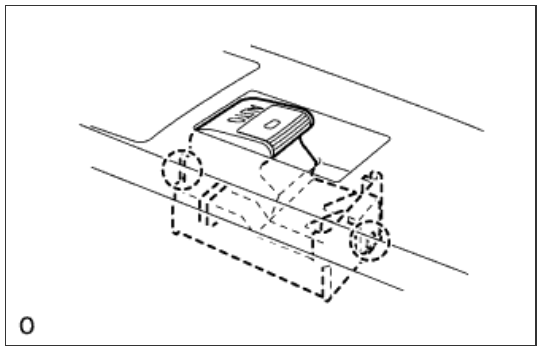
d. Install the 2 screws.



3. INSTALL POWER WINDOW REGULATOR SWITCH ASSEMBLY

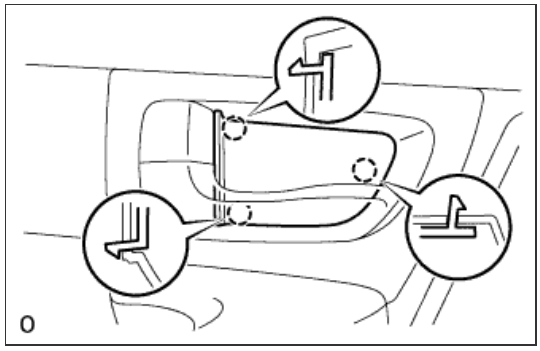
a. Attach the 2 claws to install the window regulator switch.

b. Attach the 2 claws to install the window regulator switch.

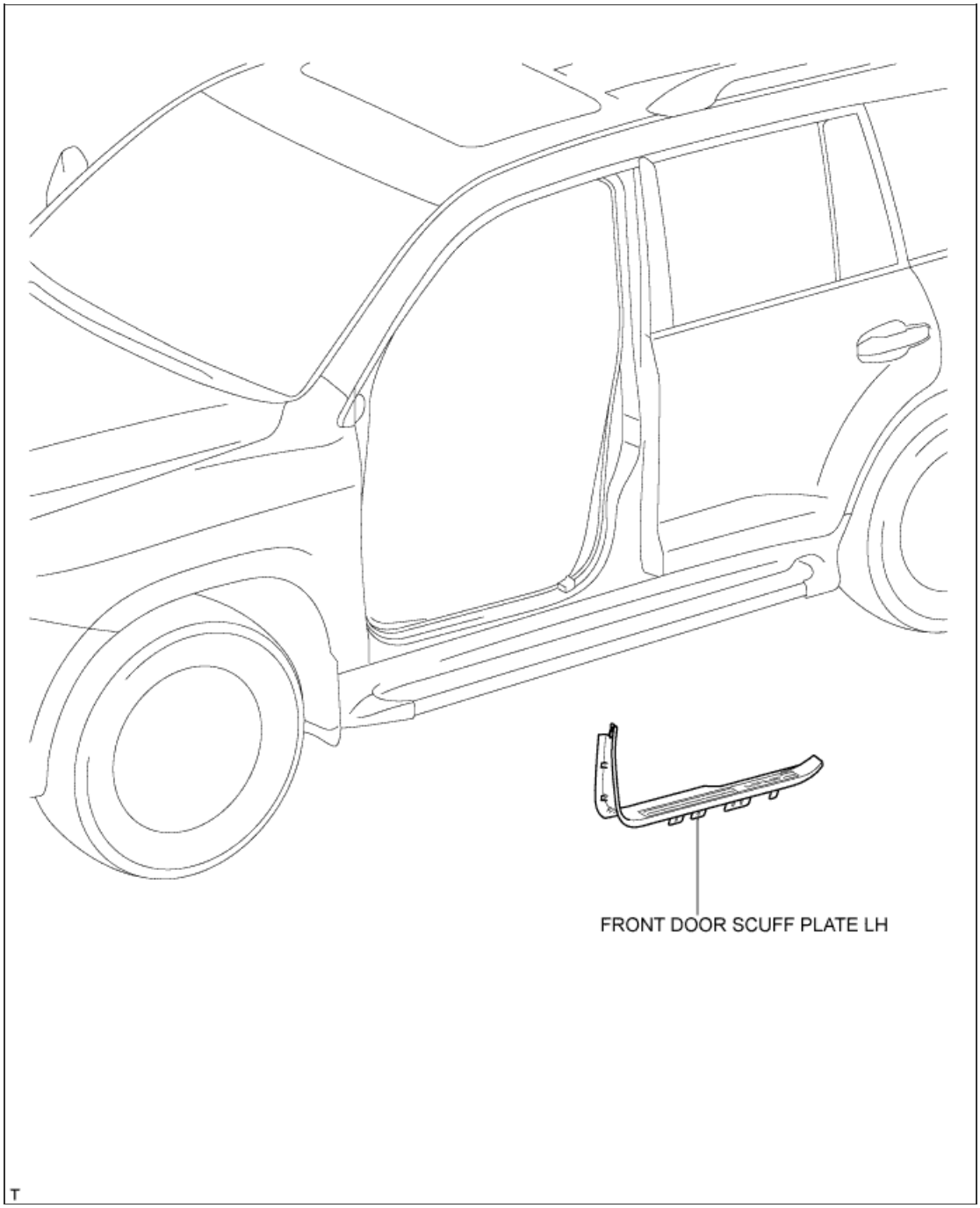


4. INSTALL REAR DOOR INSIDE HANDLE BEZEL LH

a. Attach the 3 claws to install the bezel plug.



for Preparation Click here

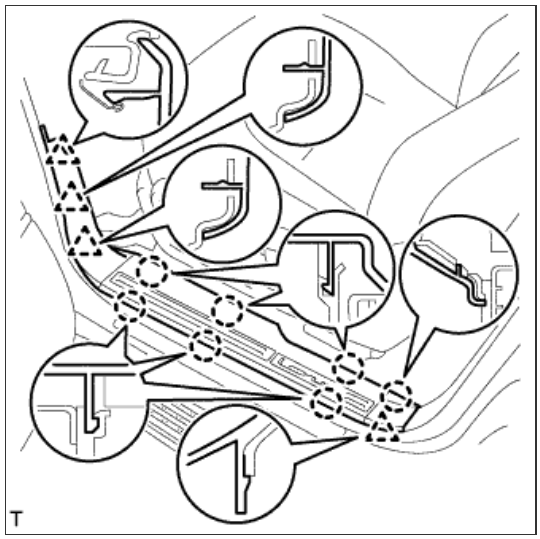


for Preparation Click here

1. REMOVE FRONT DOOR SCUFF PLATE LH

a. Detach the 7 claws and 4 clips, and remove the scuff plate.

b. Disconnect the connector.



for Preparation Click here

1. INSPECT FRONT DOOR SCUFF PLATE LH (SCUFF PLATE LIGHT)

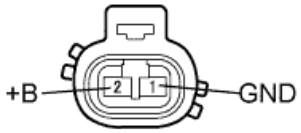
a. Apply battery voltage to the connector and check the LED illumination condition.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 (+B) Battery negative (-) → Terminal 1 (GND)	Light illuminates

If the result is not as specified, there may be a malfunction in the light.

Component without harness connected:
(Front Door Scuff Plate LH)

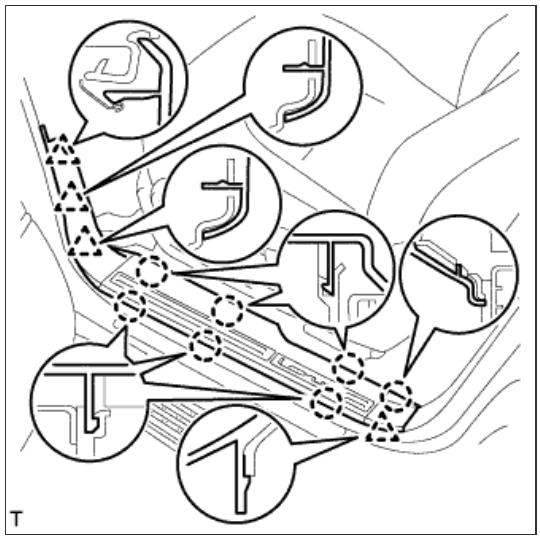


for Preparation Click here

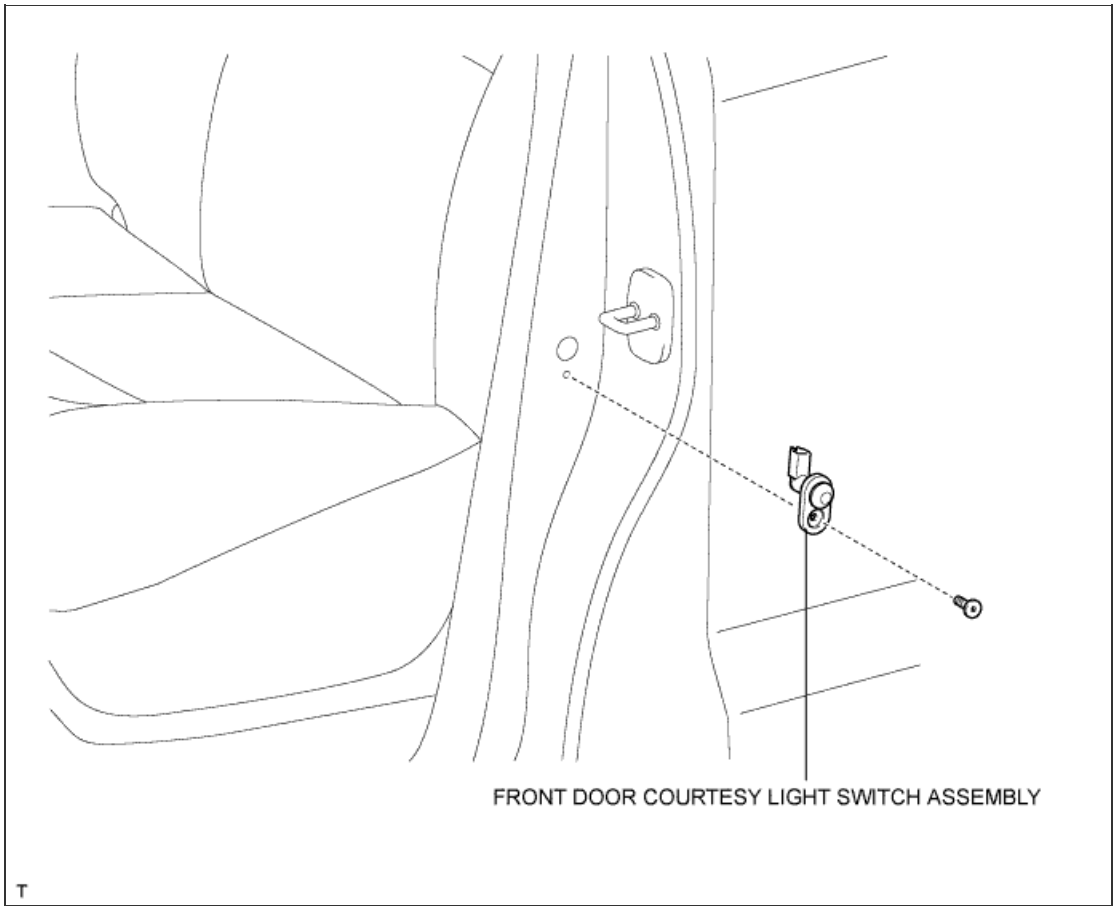
1. INSTALL FRONT DOOR SCUFF PLATE LH

a. Connect the connector.

b. Attach the 7 claws and 4 clips to install the scuff plate.



for Preparation Click here

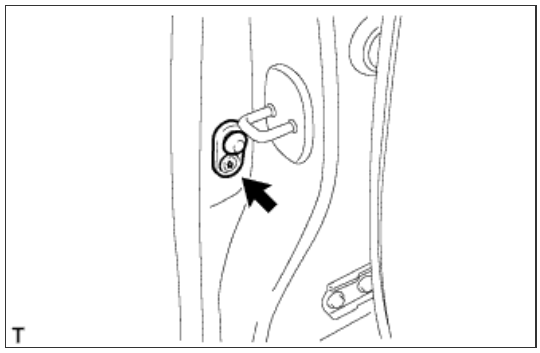


for Preparation Click here

1. REMOVE FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY

a. Using a T30 "TORX" socket wrench, remove the screw and switch.

b. Disconnect the connector.



for Preparation Click here

1. INSPECT FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY

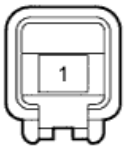
a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
1 - Body ground	Pin not pushed	Below 1 Ω
1 - Body ground	Pin pushed	10 kΩ or higher

If the result is not as specified, there may be a malfunction in the front door courtesy switch.

Component without harness connected:
(Front Door Courtesy Switch)

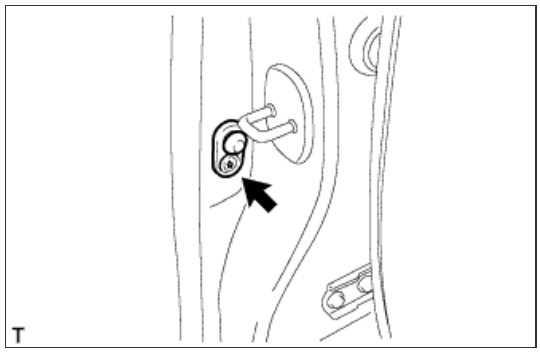


for Preparation Click here

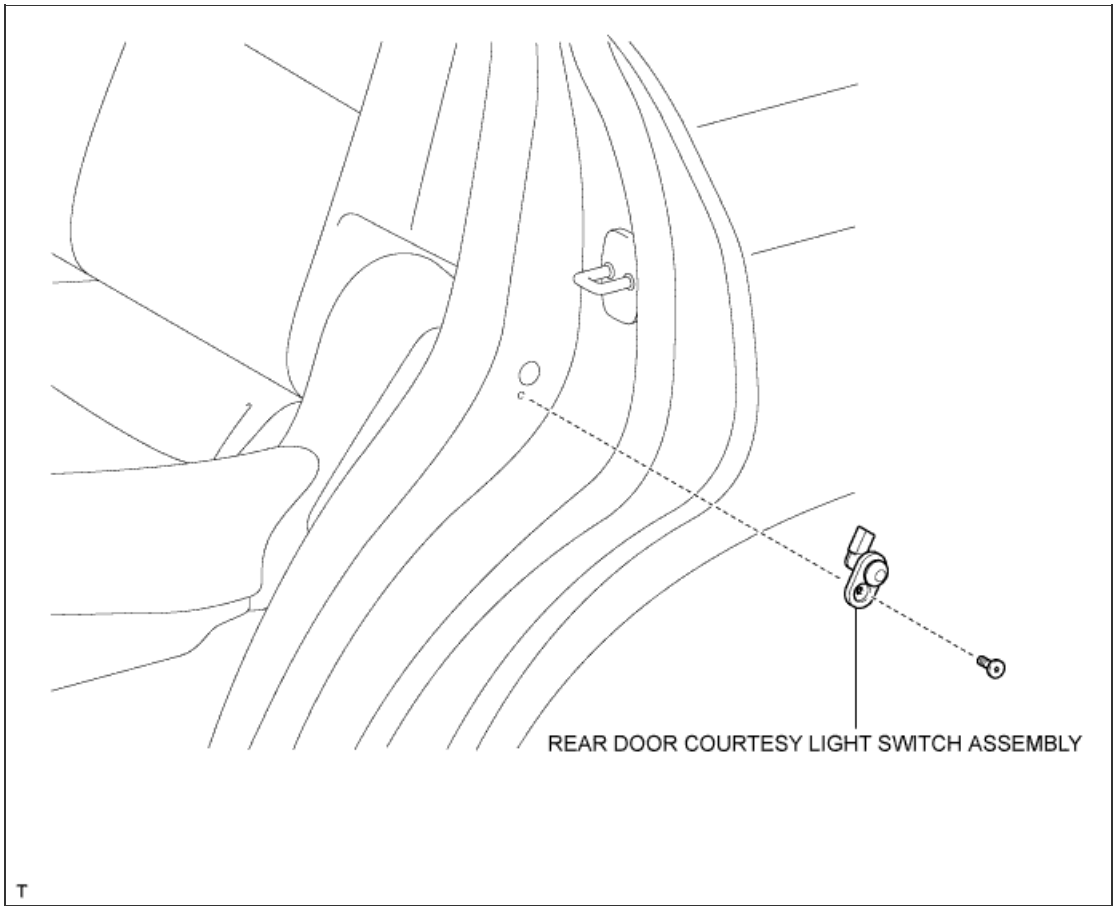
1. INSTALL FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY

a. Connect the connector.

b. Using a T30 "TORX" socket wrench, install the switch with the screw.



for Preparation Click here

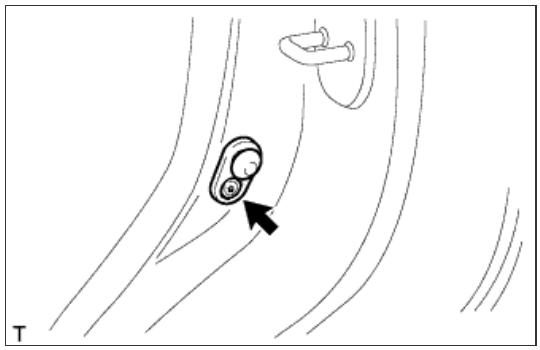


for Preparation Click here

1. REMOVE REAR DOOR COURTESY LIGHT SWITCH ASSEMBLY

a. Using a T30 "TORX" socket wrench, remove the screw and switch.

b. Disconnect the connector.



for Preparation Click here

1. INSPECT REAR DOOR COURTESY LIGHT SWITCH ASSEMBLY

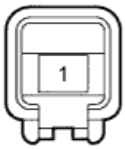
a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
1 - Body ground	Pin not pushed	Below 1 Ω
1 - Body ground	Pin pushed	10 kΩ or higher

If the result is not as specified, there may be a malfunction in the rear door courtesy switch.

Component without harness connected:
(Rear Door Courtesy Switch)

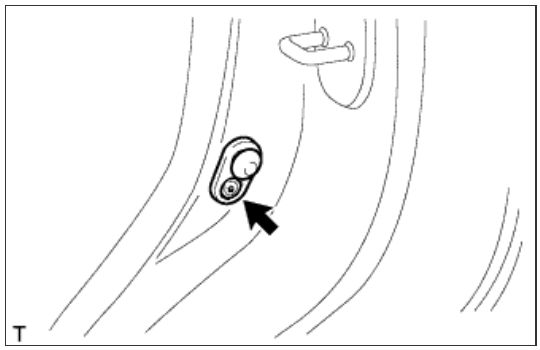


for Preparation Click here

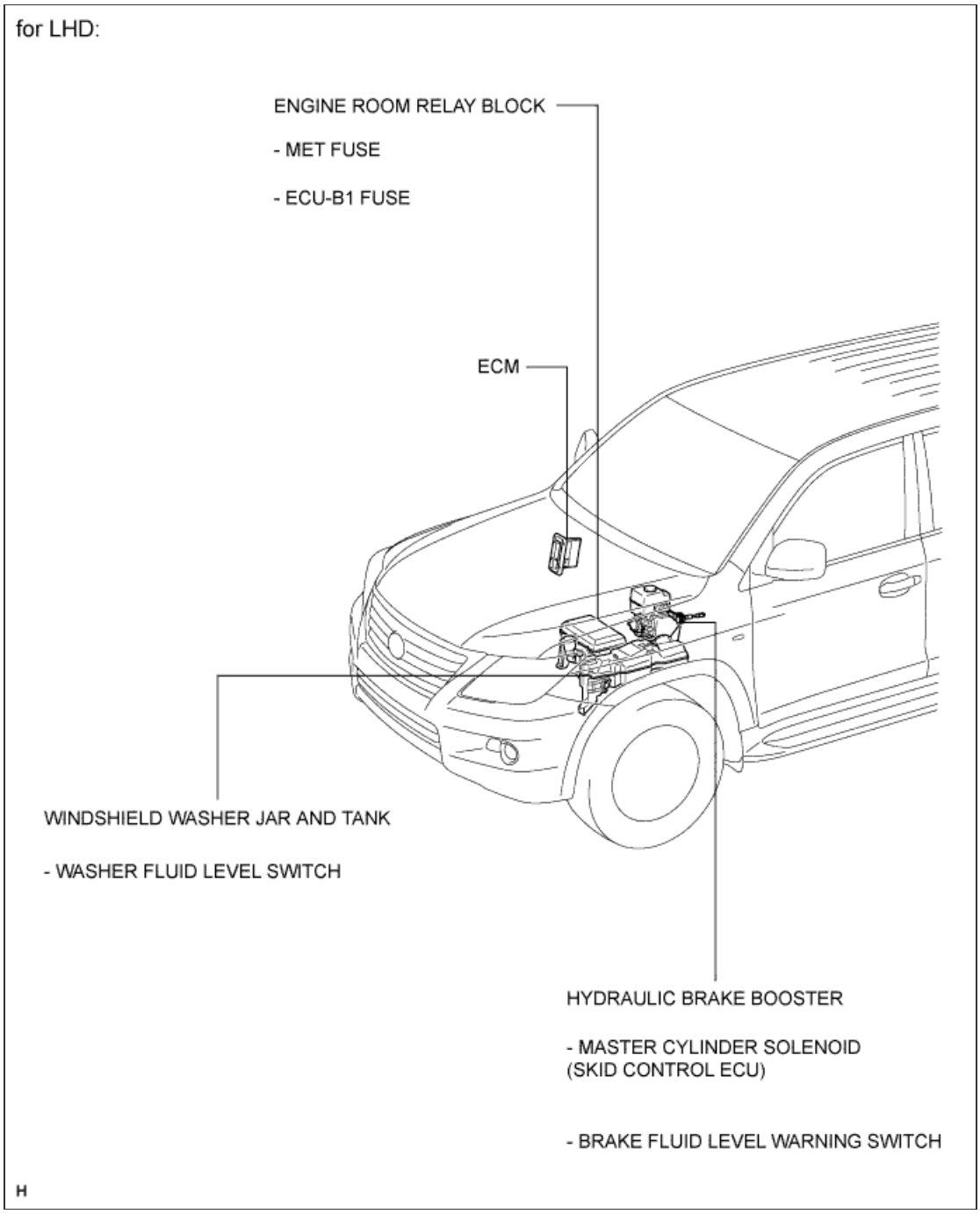
1. INSTALL REAR DOOR COURTESY LIGHT SWITCH ASSEMBLY

a. Connect the connector.

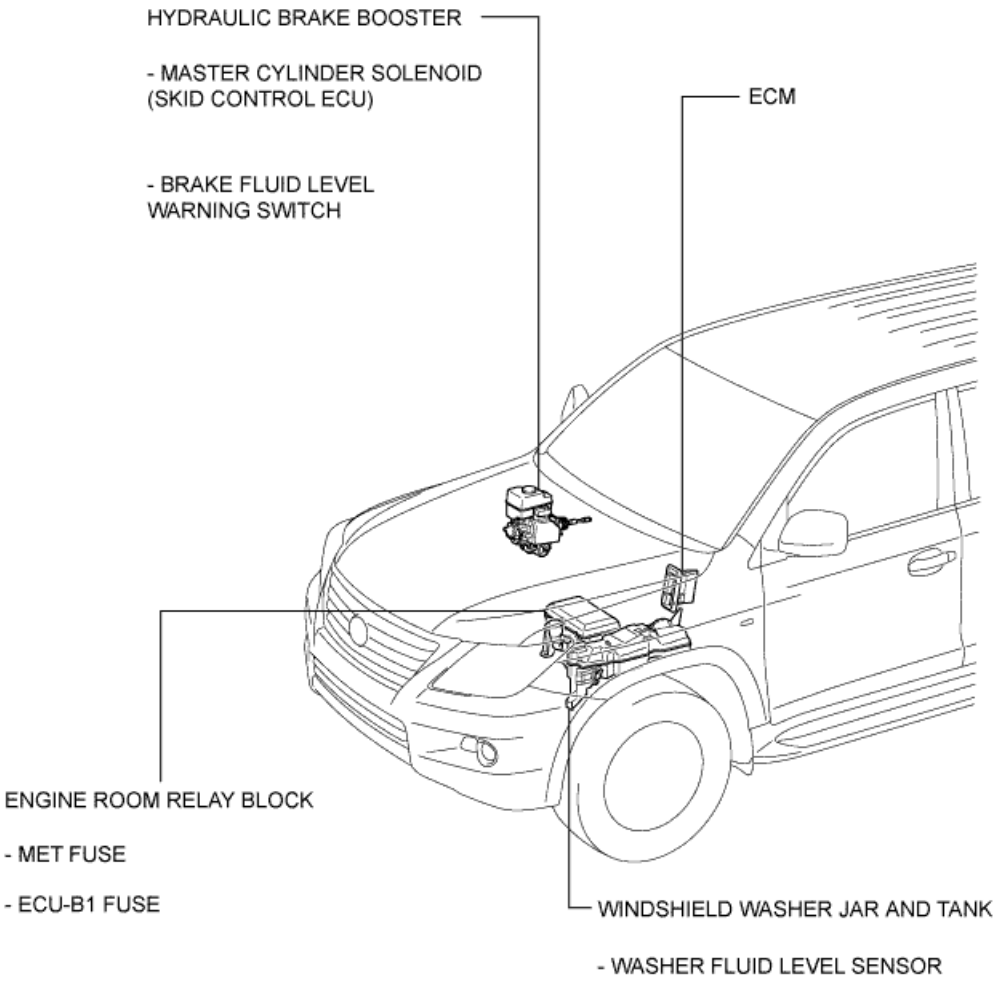
b. Using a T30 "TORX" socket wrench, install the switch with the screw.



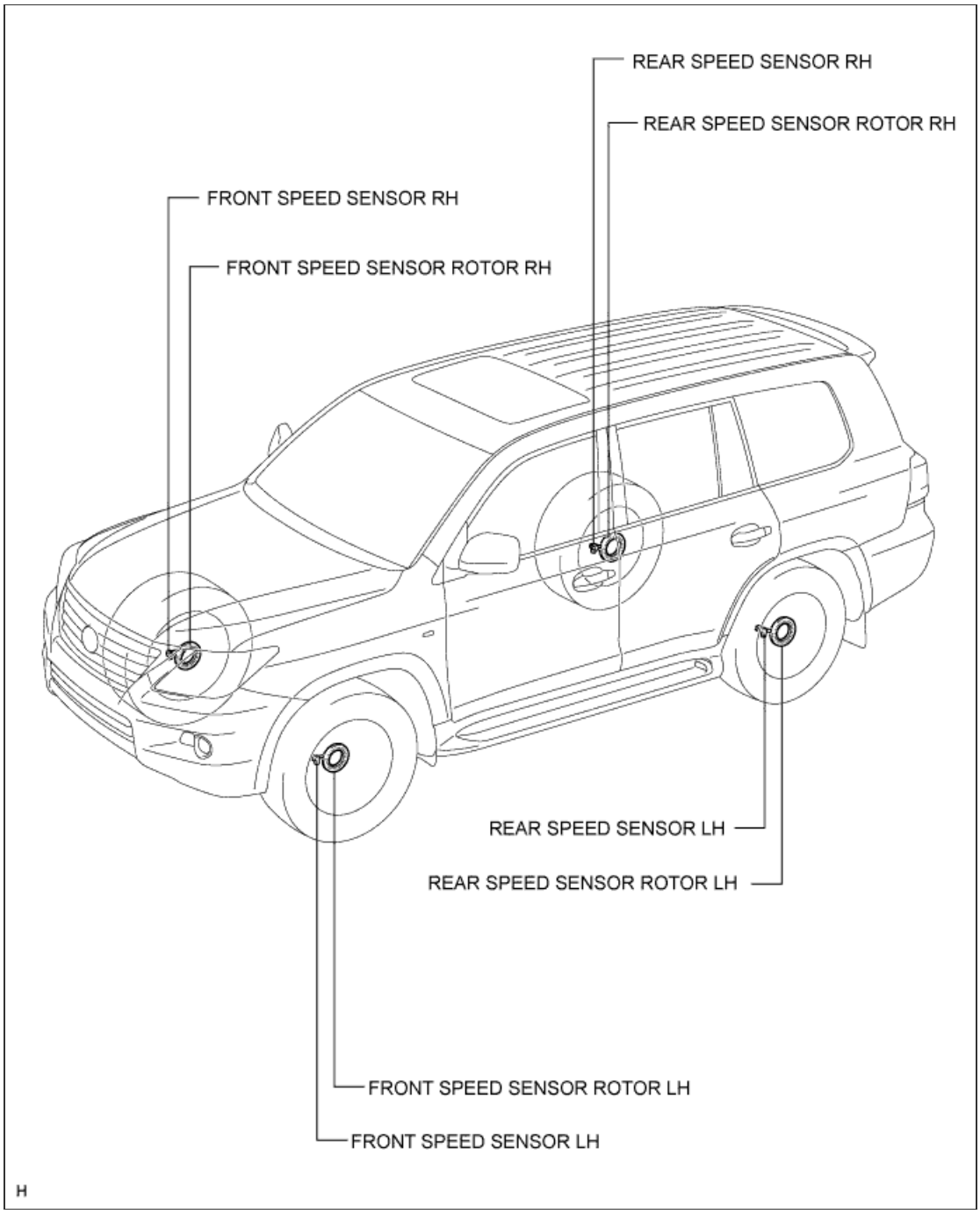
for Preparation Click here

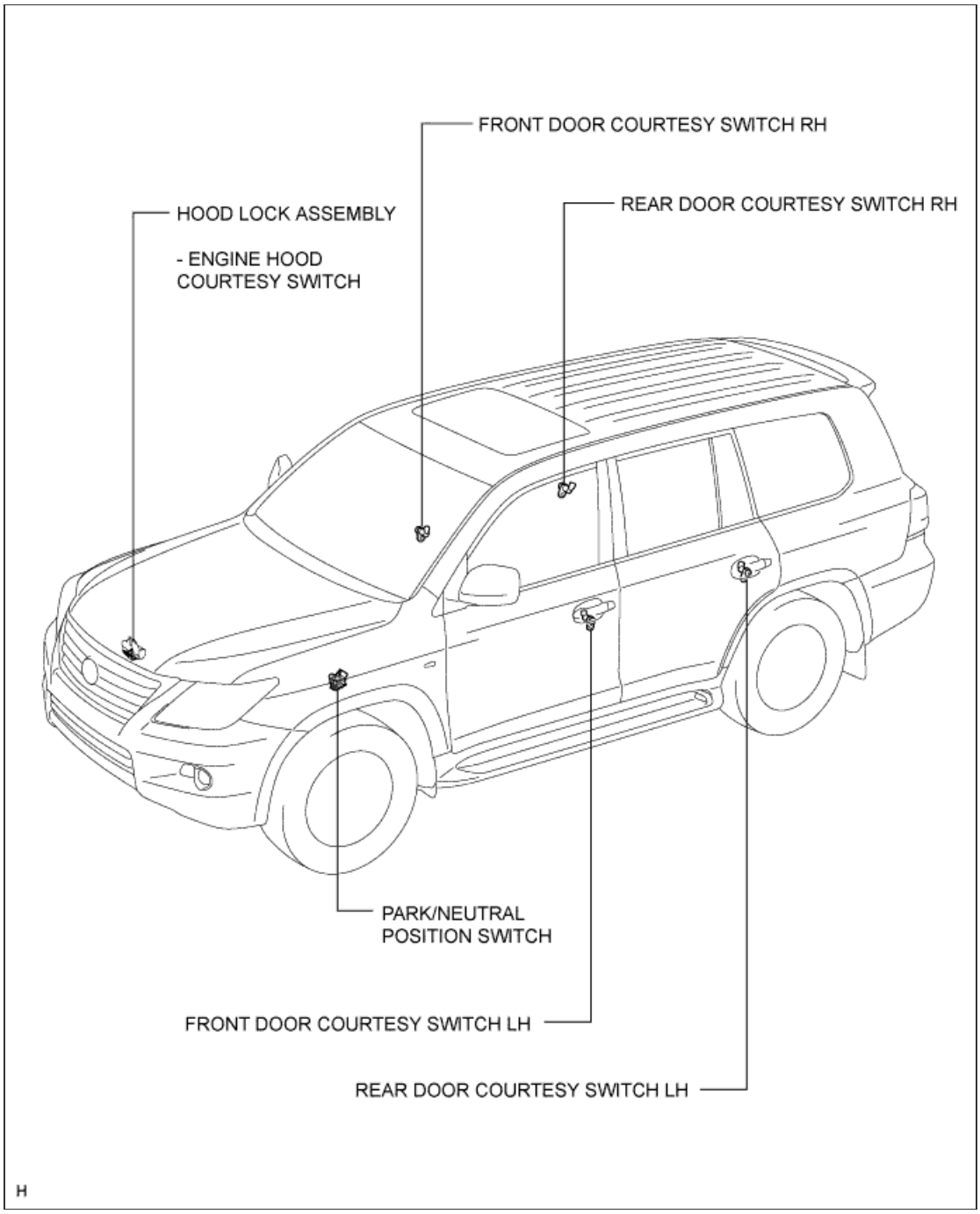


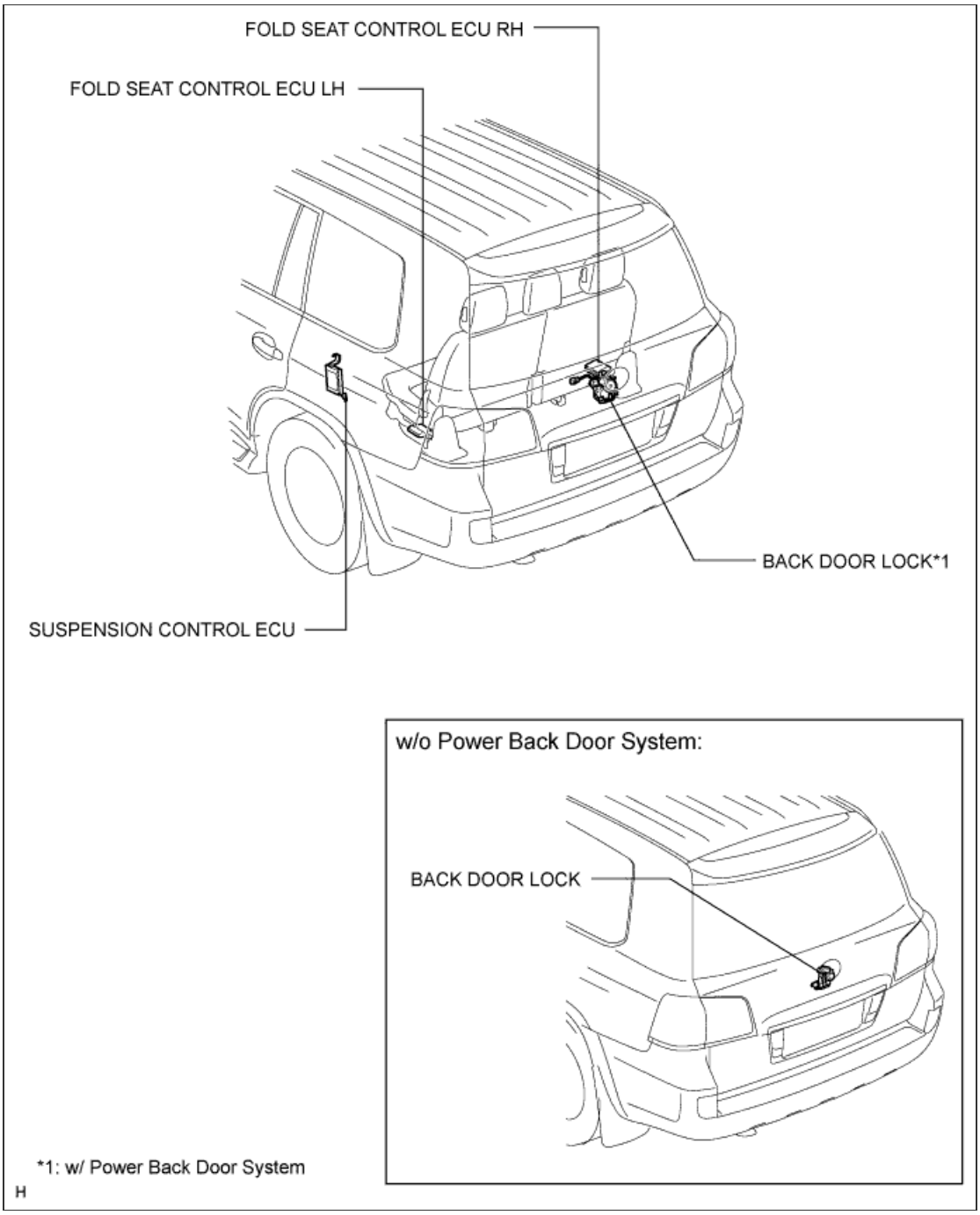
for RHD:

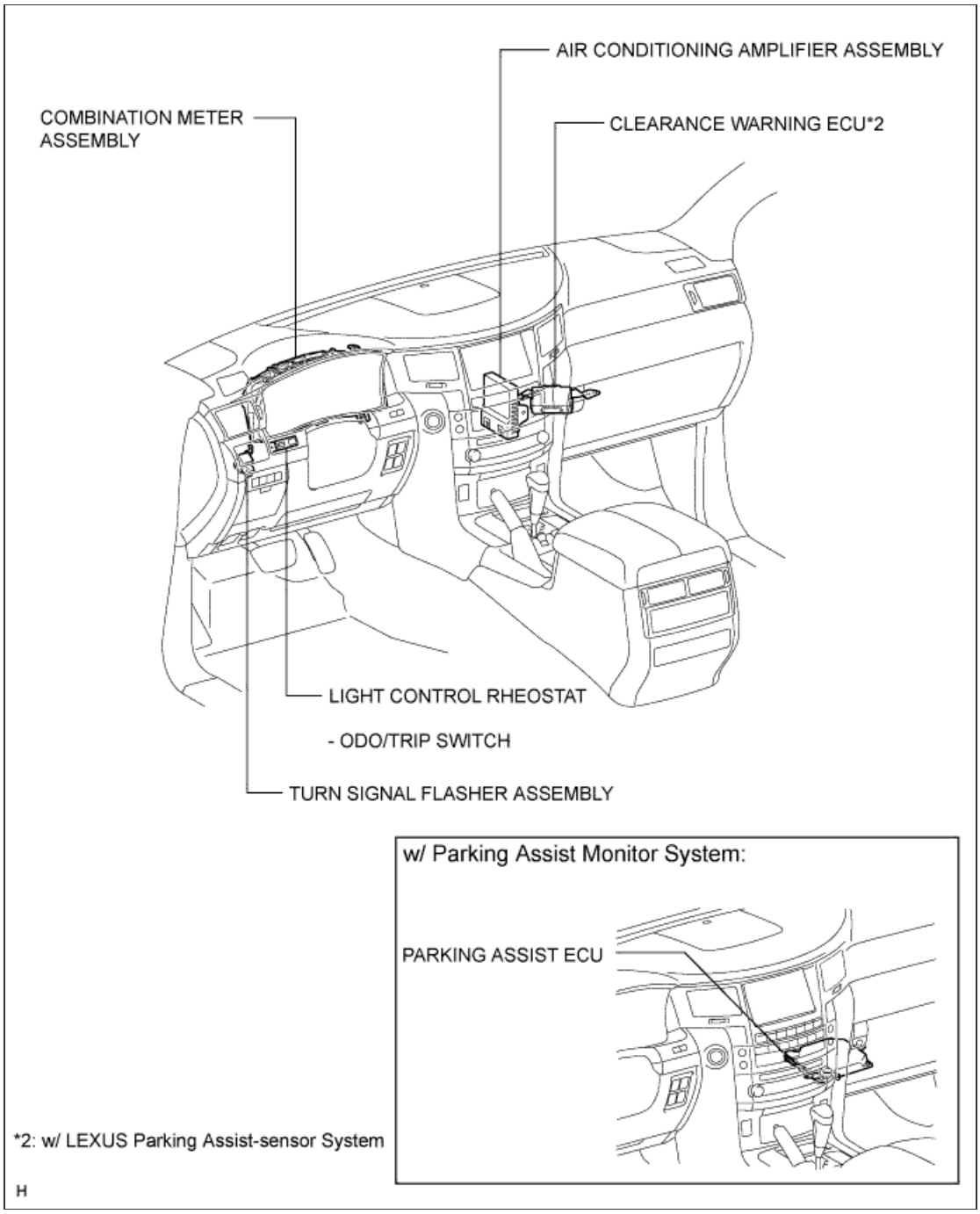

HYDRAULIC BRAKE BOOSTER
- MASTER CYLINDER SOLENOID
(SKID CONTROL ECU)
- BRAKE FLUID LEVEL
WARNING SWITCH
ECM
ENGINE ROOM RELAY BLOCK
- MET FUSE
- ECU-B1 FUSE
WINDSHIELD WASHER JAR AND TANK
- WASHER FLUID LEVEL SENSOR

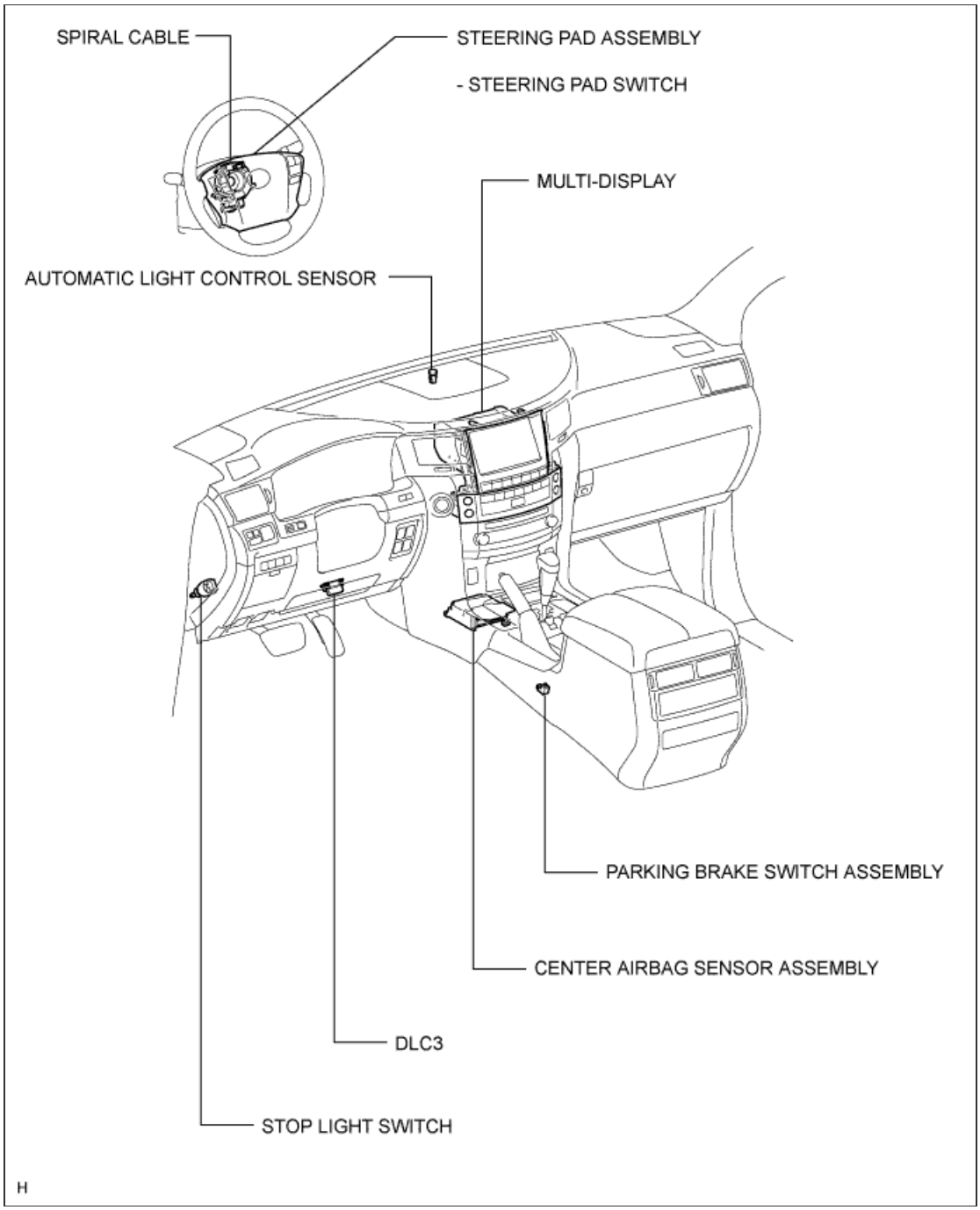
H


REAR SPEED SENSOR RH
REAR SPEED SENSOR ROTOR RH
FRONT SPEED SENSOR RH
FRONT SPEED SENSOR ROTOR RH
REAR SPEED SENSOR LH
REAR SPEED SENSOR ROTOR LH
FRONT SPEED SENSOR ROTOR LH
FRONT SPEED SENSOR LH
H


FRONT DOOR COURTESY SWITCH RH
HOOD LOCK ASSEMBLY
- ENGINE HOOD COURTESY SWITCH
REAR DOOR COURTESY SWITCH RH
PARK/NEUTRAL POSITION SWITCH
FRONT DOOR COURTESY SWITCH LH
REAR DOOR COURTESY SWITCH LH
H

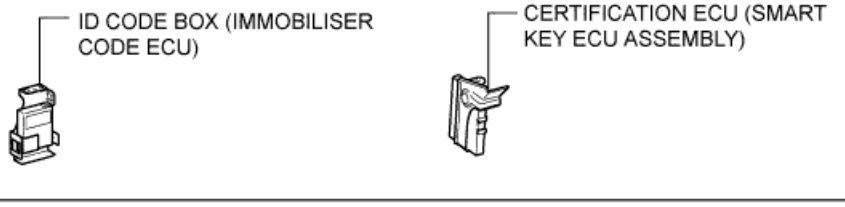

FOLD SEAT CONTROL ECU RH
FOLD SEAT CONTROL ECU LH
BACK DOOR LOCK*1
SUSPENSION CONTROL ECU
w/o Power Back Door System:
BACK DOOR LOCK
*1: w/ Power Back Door System
H

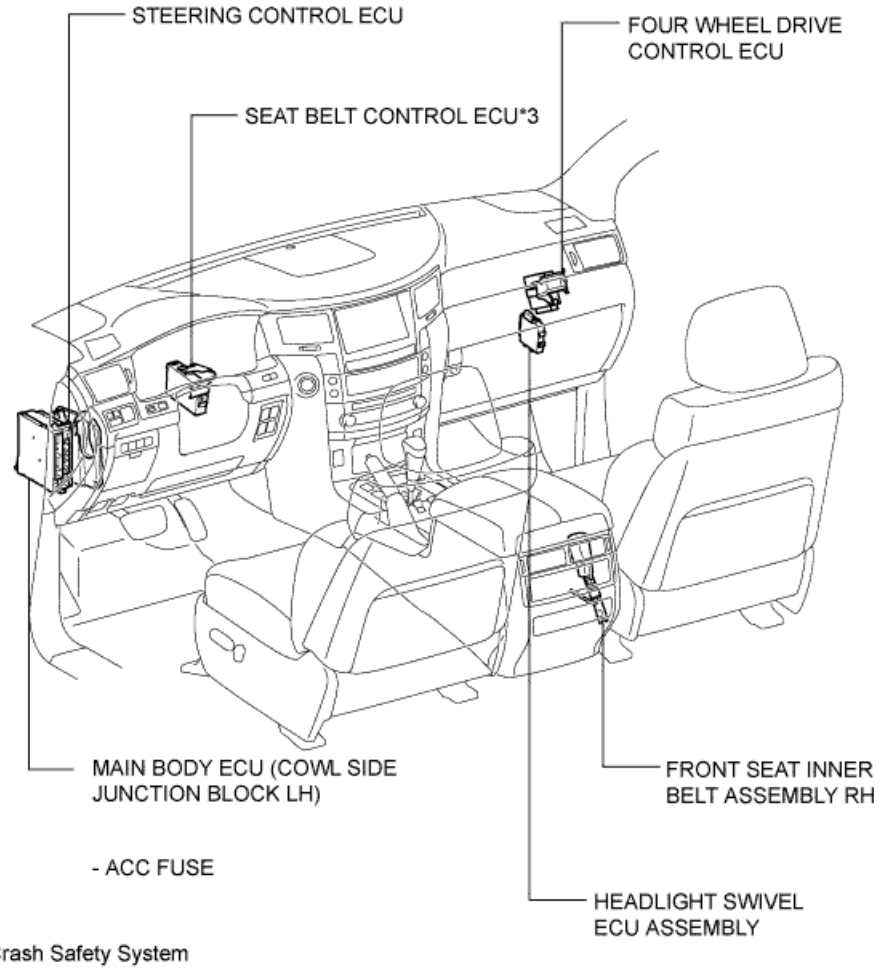

AIR CONDITIONING AMPLIFIER ASSEMBLY
COMBINATION METER ASSEMBLY
CLEARANCE WARNING ECU*2
LIGHT CONTROL RHEOSTAT
- ODO/TRIP SWITCH
TURN SIGNAL FLASHER ASSEMBLY
w/ Parking Assist Monitor System:
PARKING ASSIST ECU
*2: w/ LEXUS Parking Assist-sensor System
H


SPIRAL CABLE
STEERING PAD ASSEMBLY
- STEERING PAD SWITCH
MULTI-DISPLAY
AUTOMATIC LIGHT CONTROL SENSOR
PARKING BRAKE SWITCH ASSEMBLY
CENTER AIRBAG SENSOR ASSEMBLY
DLC3
STOP LIGHT SWITCH
H

for LHD:

Refer to Service Bulletin for installation position.



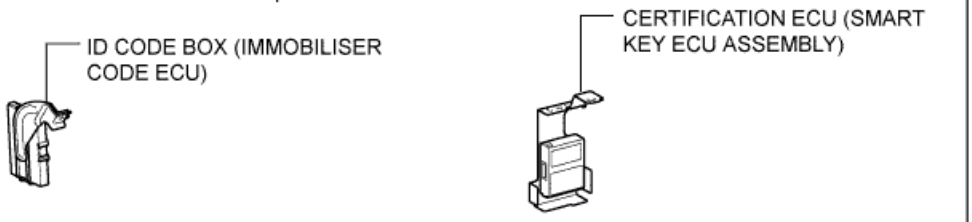


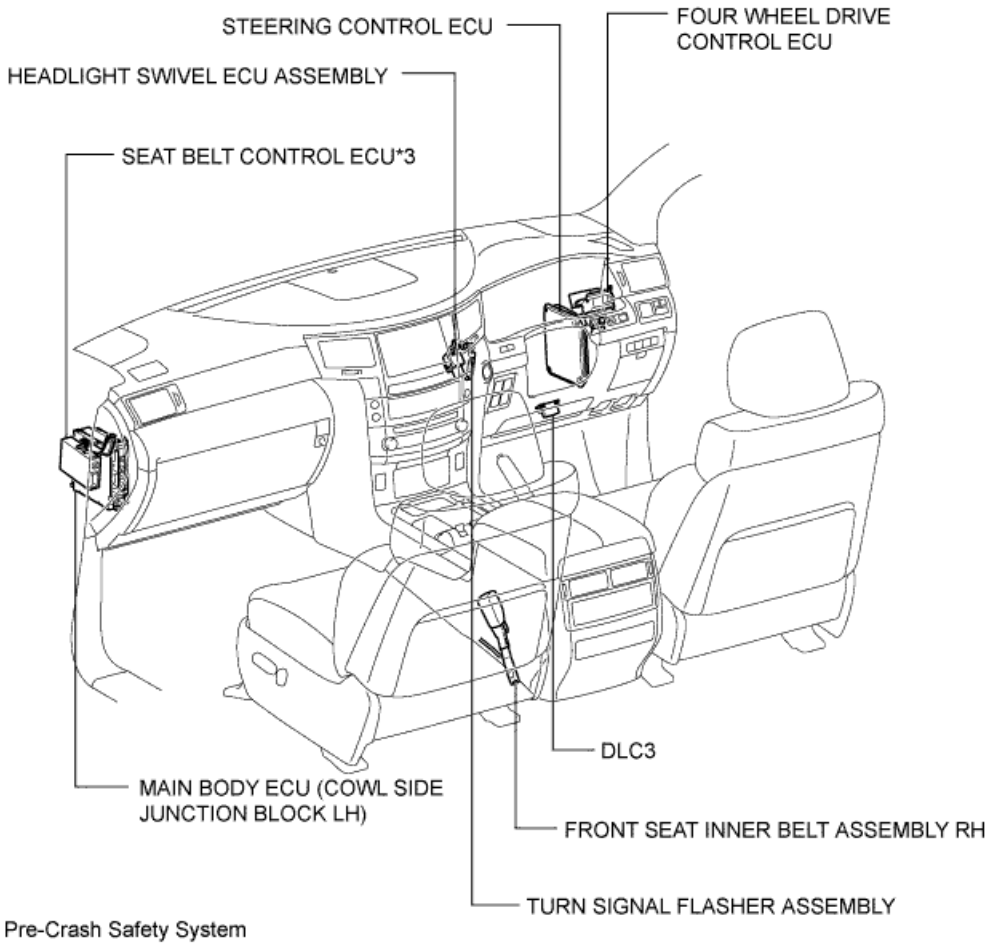
*3: w/ Pre-Crash Safety System

H

for RHD:

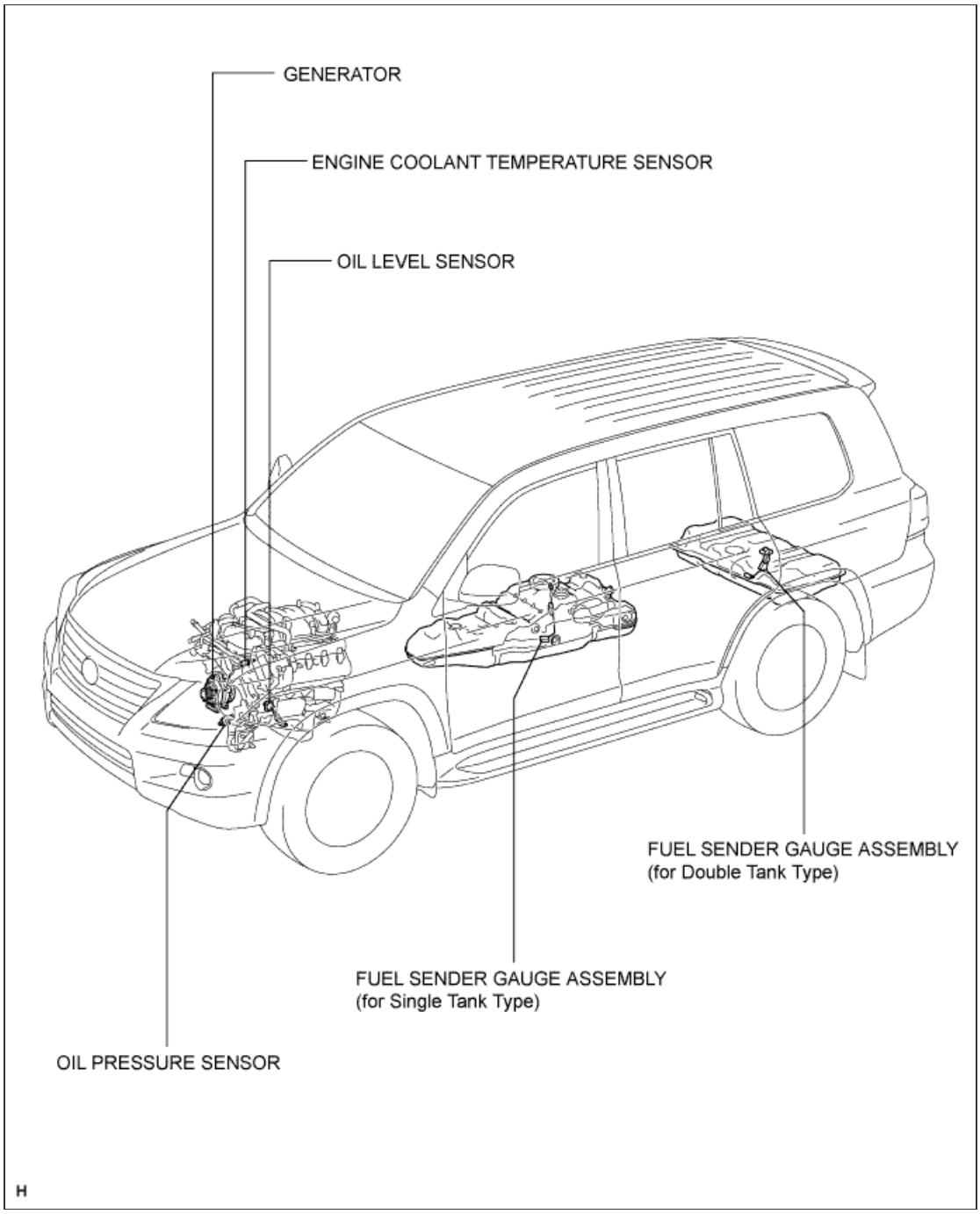
Refer to Service Bulletin for installation position.



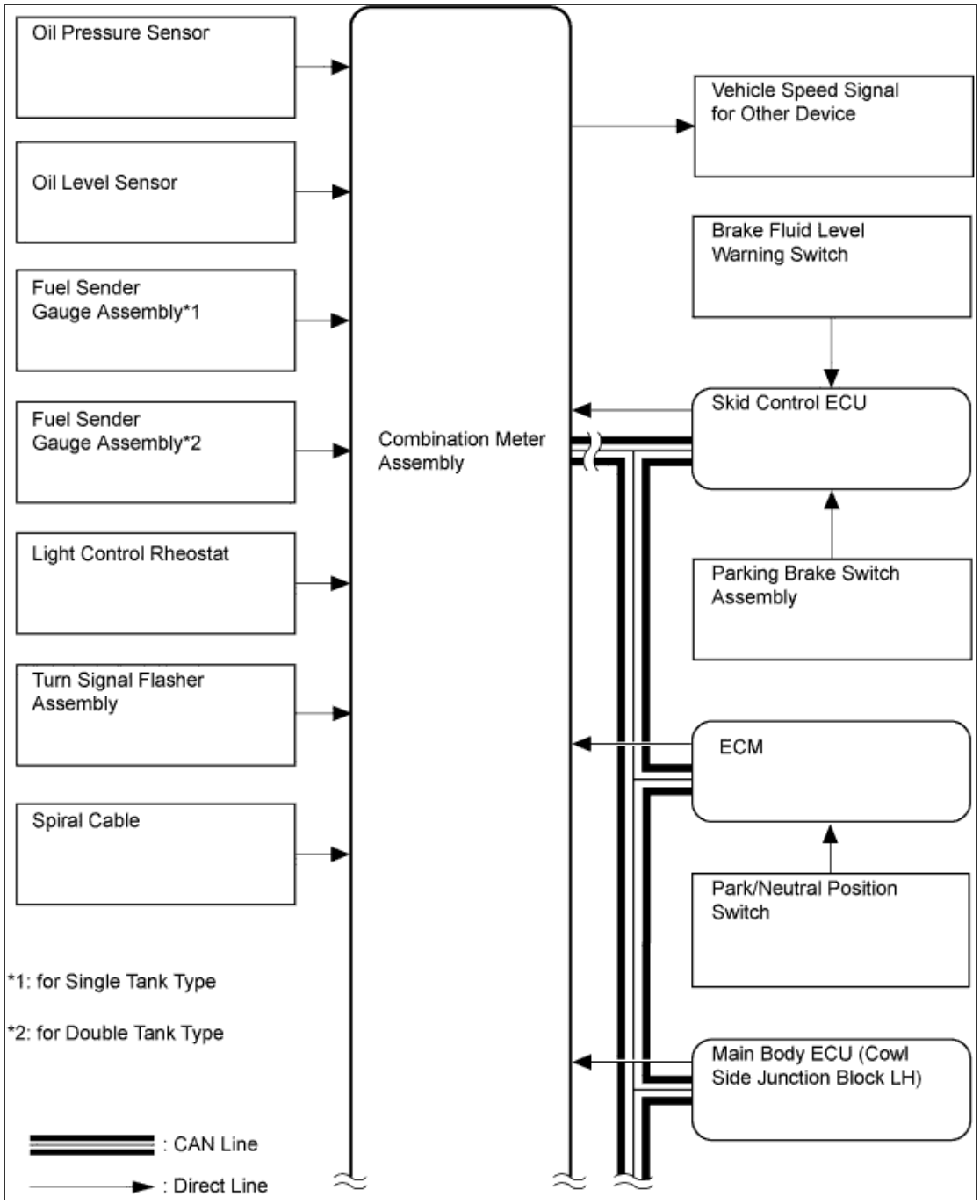


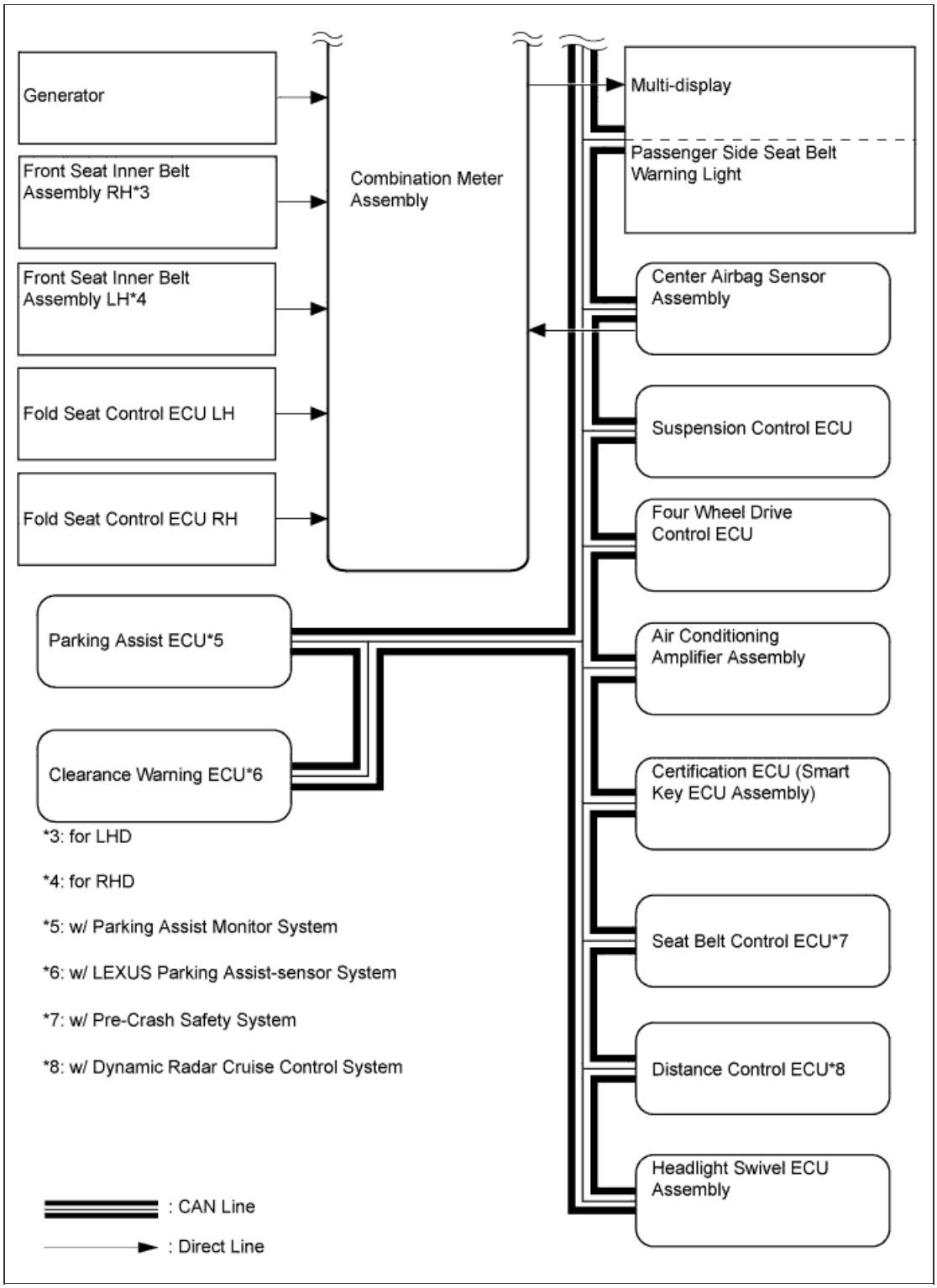
*3: w/ Pre-Crash Safety System

H


GENERATOR
ENGINE COOLANT TEMPERATURE SENSOR
OIL LEVEL SENSOR
FUEL SENDER GAUGE ASSEMBLY
(for Double Tank Type)
FUEL SENDER GAUGE ASSEMBLY
(for Single Tank Type)
OIL PRESSURE SENSOR
H

for Preparation Click here





Communication Table

Sender	Receiver	Communication Signal	Communication Line
Combination meter assembly	• ECM • Main body ECU	Vehicle speed signal	Direct Line
	• Main body ECU	Rheostat duty signal	CAN
	ECM	Vehicle specification signal (Destination/Handle code)	
	Multi-display	Front passenger side seat belt warning light signal	CAN
		• ECT PWR indicator light signal • CRUISE main indicator light signal • Engine coolant temperature signal • ATF temperature signal	

ECM	Combination meter assembly	• Current gear position signal • Fuel injection information signal • Engine speed data • CHARGE warning light signal	CAN
		MIL signal	Direct Line
Center airbag sensor	Combination meter assembly	• SRS warning light signal • Diagnosis signal	CAN
Four wheel drive control ECU	Combination meter assembly	• 4LO indicator light signal • Center differential lock indicator light signal	CAN
Skid control ECU	Combination meter assembly	• ABS warning light signal • Slip indicator light signal • Vehicle speed signal • Brake warning light signal • CRAWL indicator light signal • SPEED LIMIT indicator light signal*1	CAN
Main body ECU	Combination meter assembly	• Driver side seat belt buckle switch signal • Courtesy light switch signal • BEAM indicator light signal • TAIL indicator light signal • FRONT FOG indicator light signal • REAR FOG indicator light signal*2	CAN
Seat belt control ECU*3	Combination meter assembly	PCS indicator light signal	CAN
ECM	Combination meter assembly	• Shift position P signal • Shift position R signal • Shift position N signal • Shift position D signal • Shift position 6 signal • Shift position 5 signal • Shift position 4 signal • Shift position 3 signal • Shift position 2 signal • Shift position 1 signal • Sports mode enable signal • Shift position signal • Sports shift reject buzzer signal	CAN
Steering pad switch	Combination meter assembly	Steering pad switch operation signal	Direct Line
Fuel sender gauge	Combination meter assembly	Fuel level signal	Direct Line
Turn signal flasher assembly	Combination meter assembly	Turn signal indicator (LH/RH) signal	Direct Line
Washer fluid level sensor	Combination meter assembly	Washer information signal	Direct Line
Parking assist ECU*4	Combination meter assembly	• Clearance sonar indicator light signal • Clearance sonar information signal	CAN
Clearance warning ECU*5	Combination meter assembly	• Clearance sonar indicator light signal • Clearance sonar information signal	CAN
Suspension control ECU	Combination meter assembly	• Access mode indicator light signal • 4-wheel AHC information signal	CAN
Headlight swivel ECU assembly	Combination meter assembly	AFS OFF indicator light signal	CAN
Brake fluid level warning switch	Combination meter assembly	Brake fluid level warning light signal	CAN
Oil level sensor	Combination meter assembly	Engine oil level signal	Direct Line
Light control rheostat	Combination meter assembly	Illumination signal	Direct Line
Generator	Combination meter assembly	CHARGE warning light signal	Direct Line
Oil pressure sensor	Combination meter assembly	Oil pressure signal	Direct Line

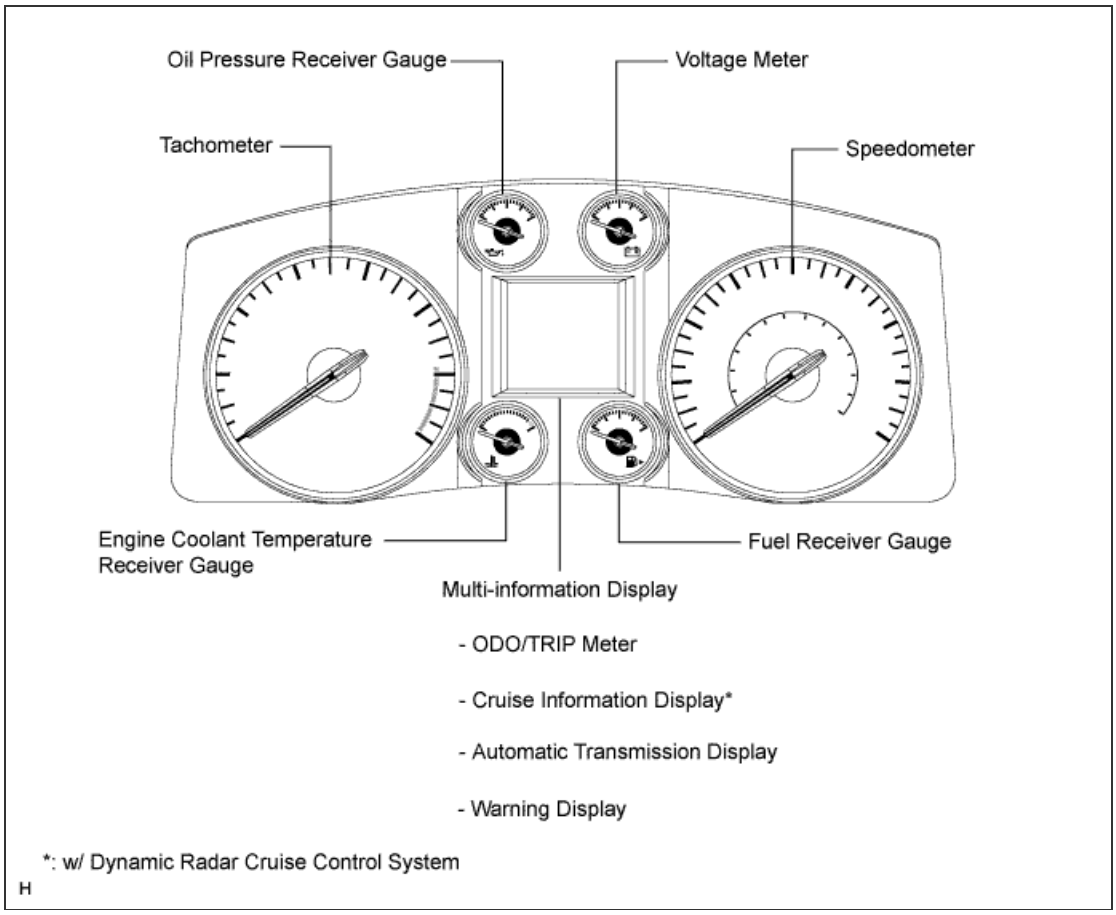
Air conditioning amplifier	Combination meter assembly	Outside temperature information signal	CAN
Fold seat control ECU LH	Combination meter assembly	3rd seat information signal	Direct Line
Fold seat control ECU RH	Combination meter assembly	3rd seat information signal	Direct Line
Distance control ECU*6	Combination meter assembly	• Diagnosis signal • Vehicle-to-vehicle distance control signal • Vehicle-to-vehicle distance signal • Front millimeter wave radar sensor grime signal • Bad weather detection signal • Approach warning signal • Preceding vehicle detection signal • Front millimeter wave radar sensor beam axis deviation signal • Dynamic radar cruise warning signal • Cruise control vehicle speed signal • Constant speed cruise signal • Radar sensor information signal	CAN
Certification ECU (Smart key ECU assembly)	Combination meter assembly	• Inside key existence warning signal • Low key battery warning signal • Shift position warning signal • Meter buzzer request signal • Door unlock mode display signal • Steering lock warning signal • Security warning light signal	CAN
Front seat inner belt assembly RH*7	Combination meter assembly	Passenger side seat belt buckle switch signal	Direct Line
Front seat inner belt assembly LH*8	Combination meter assembly	Passenger side seat belt buckle switch signal	Direct Line

*1: for Middle East
*2: except Middle East
*3: w/ Pre-Crash Safety System
*4: w/ Parking Assist Monitor System
*5: w/ LEXUS Parking Assist-sensor System
*6: w/ Dynamic Radar Cruise Control System
*7: for LHD
*8: for RHD

for Preparation Click here

METER GAUGE AND WARNING/INDICATOR

*1: except Middle East
*2: w/ Parking Assist Monitor System
*3: w/ LEXUS Parking Assist-sensor System
*4: w/ Pre-Crash Safety System
*5: for Middle East



Meter/Gauge

Item	Details
Speedometer	Based on a signal received from the wheel speed sensor, the skid control ECU calculates the vehicle speed and transmits data to the combination meter (CAN).
Tachometer	The combination meter receives an engine speed signal from the ECM and the gauge needle operates (CAN).
ODO/TRIP meter	• The combination meter receives a vehicle speed pulse integration signal from the skid control ECU and the ODO/TRIP meter display operates (CAN). • Using the ODO/TRIP switch, the ODO/TRIP meter display changes.
Fuel receiver gauge	The combination meter receives fuel amount information measured by the fuel sender gauge and the gauge needle operates (Direct line).
Engine coolant temperature receiver gauge	The combination meter receives an engine coolant temperature signal from the ECM and the gauge needle operates (CAN).
Oil pressure receiver gauge	The combination meter receives an engine speed signal from the ECM (CAN) and receives an oil pressure sender signal from the oil pressure sender (Direct line). Then the meter measures signals and the gauge needle operates.
Voltage meter	Monitors IG voltage and the gauge needle operates (Direct line).

Warning/Indicator

Item	Details
BEAM indicator light	

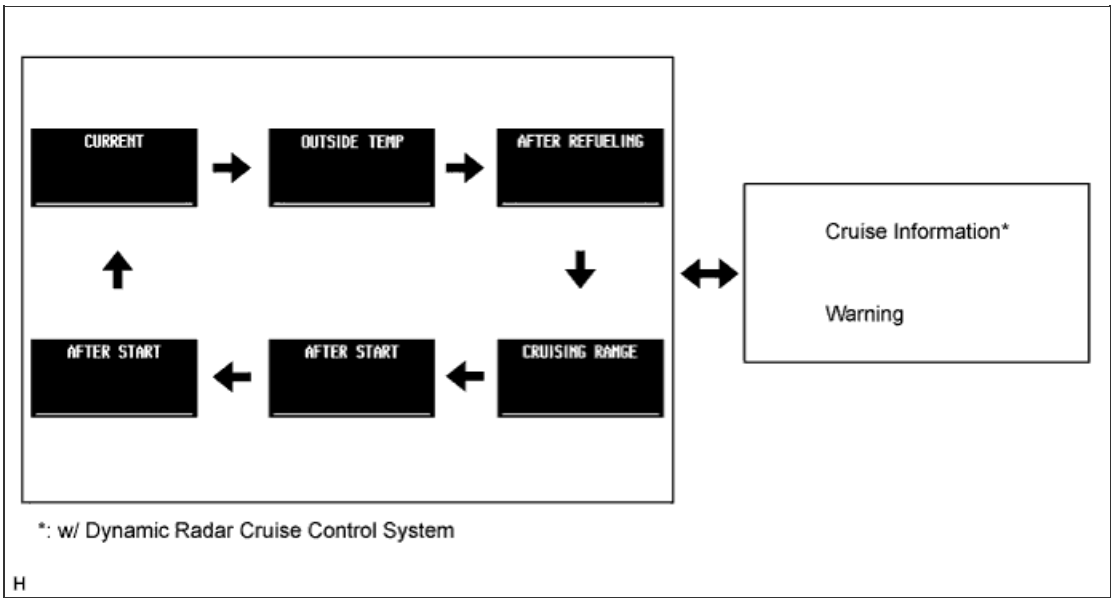
	Receives signals from the main body ECU (CAN).
FRONT FOG indicator light 	The indicator turns on when a FRONT FOG illumination command signal is received (CAN).
REAR FOG indicator light*1 	The indicator turns on when a REAR FOG illumination command signal is received (CAN).
A/T P warning light A/T P	Receives a shift position P signal and transfer neutral signal, and activates the warning light (CAN).
SRS warning light 	Receives malfunction signals from the center airbag sensor (CAN).
DOOR indicator light 	The open door indicator comes on when a signal is received from the main body ECU (CAN).
Driver side seat belt warning light 	Receives driver seat belt signals (unfastened) from the main body ECU (CAN).
Brake warning light 	• Comes on when the parking brake switch is on (CAN). • Comes on when the brake fluid level warning switch is on (CAN). • Comes on when the vehicle stability control system is malfunctioning.
CHARGE warning light 	Receives malfunction signals from the generator (Direct line).
4LO indicator light 4LO	Receives 4LO indicator light signals from the four wheel drive control ECU (CAN).
ABS warning light 	Receives malfunction signals from the skid control ECU (CAN).
MIL 	Receives malfunction signals from the ECM (Direct line).
SECURITY warning light 	Receives SECURITY warning light signals from the certification ECU (smart key ECU assembly) (Direct line).
CLEARANCE SONAR indicator light	• Receives CLEARANCE SONAR indicator signals from the parking assist ECU*2 (CAN)

	• Receives CLEARANCE SONAR indicator signals from the parking assist ECU 2 (CAN). • Receives CLEARANCE SONAR indicator signals from the clearance warning ECU*3 (CAN).
ACCESS MODE indicator light 	Receives ACCESS MODE indicator signals from the suspension control ECU (CAN).
AFS OFF indicator light 	Receives AFS OFF indicator signals from the headlight swivel ECU (CAN).
FUEL warning light 	Receives fuel empty signals from the fuel sender gauge (Direct line).
SLIP indicator light 	Receives malfunction signals from the skid control ECU (CAN).
CRUISE main indicator light 	Receives a CRUISE on signal or malfunction signal from the ECM (CAN).
TAIL indicator light 	The indicator turns on when a taillight illumination signal is received (CAN).
Turn signal indicator light (LH/RH) 	Receives a turn signal from the FLASHER relay (Direct line).
RSCA OFF indicator light 	Receives an RSCA OFF signal from the center airbag sensor (Direct line).
Master warning light 	Receives warning signals from sensors and ECUs (Direct line and CAN).
CRAWL indicator light 	Receives a CRAWL switch on signal from the skid control ECU (CAN).
ECT PWR indicator light 	Receives an ECT PWR switch ON signal from the ECM (CAN).
2nd START indicator light 	Receives a 2nd START switch ON signal from the ECM (CAN).
Center differential lock indicator light	

	Receives a center differential lock switch ON signal from the four wheel drive control ECU (CAN).
PCS indicator light*4 PCS	Receives a PCS indicator light signal from the seat belt control ECU (CAN).
SPEED LIMIT indicator light*5 120 km/h	The indicator turns on when a vehicle speed signal is received (CAN).
A/T P shift position indicator	Receives a P signal from the ECM (CAN).
A/T R shift position indicator	Receives an R signal from the ECM (CAN).
A/T N shift position indicator	Receives an N signal from the ECM (CAN).
A/T D shift position indicator	Receives a D signal from the ECM (CAN).
A/T S (1 to 6) shift position indicator	Receives a signal (1 to 6) from the ECM (CAN).

MULTI-INFORMATION DISPLAY

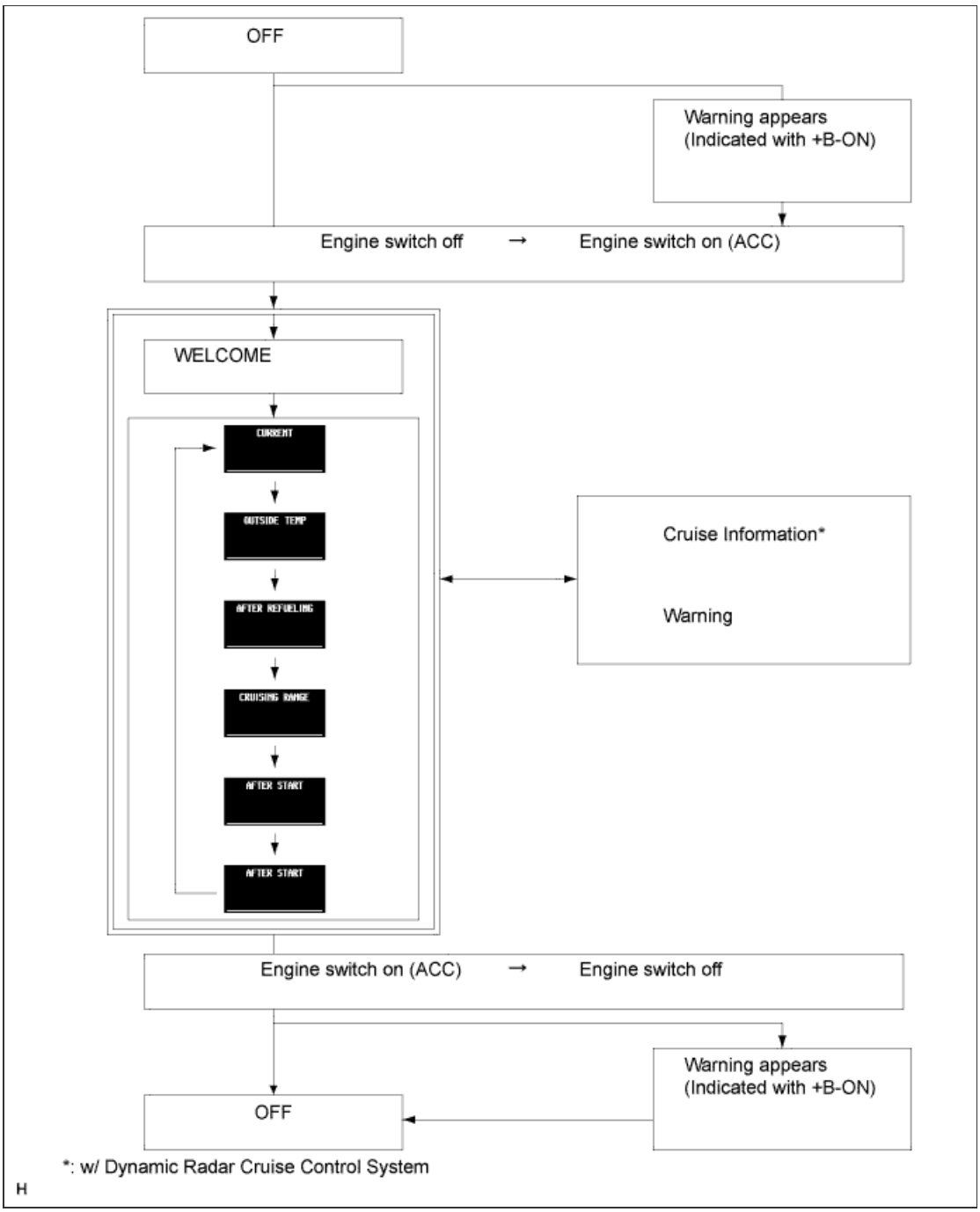
a. Cruise information display:
The cruise information is displayed in the following order each time the DISP switch is pressed.



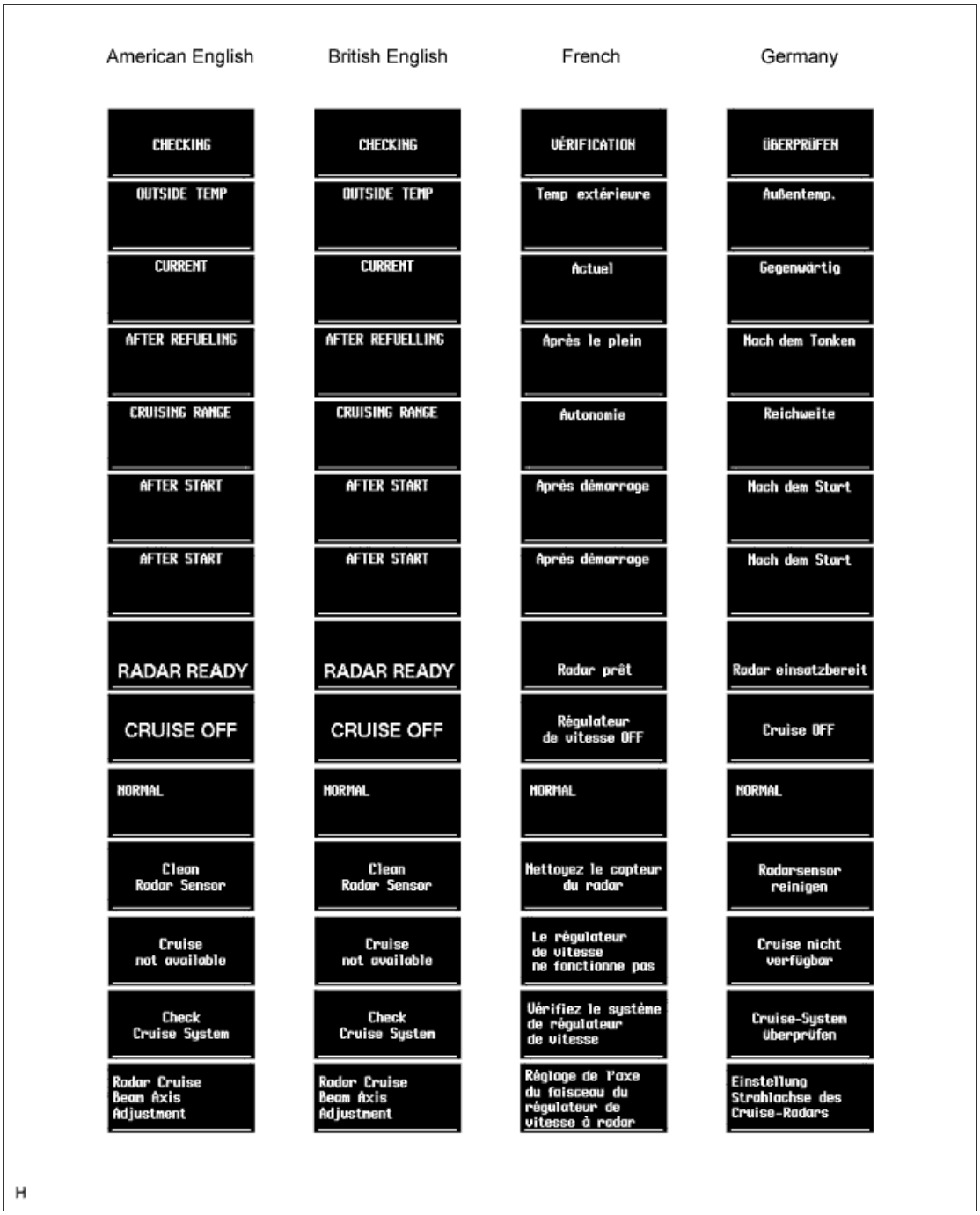
Display	Outline
CURRENT	Receives vehicle speed pulse signals (via CAN) and fuel consumption data, and measures the instant fuel consumption.
OUTSIDE TEMP	Receives an outside temperature condition signal via CAN communication and displays through the multi-display.
AFTER REFUELING	Receives vehicle speed pulse signals (via CAN) and fuel consumption data, and measures the average fuel consumption from the time the vehicle was refueled.
CRUISING RANGE	• Calculates the estimated distance to empty. • The distance is calculated using the fuel gauge value and long-term learned fuel consumption value.
AFTER START (Average speed)	Receives vehicle speed pulse signals (via CAN) and fuel consumption data, and measures the average vehicle speed from the time the engine was started.

AFTER START (Travel distance)	Receives vehicle speed pulse signals (via CAN) and fuel consumption data, and measures the distance driven from the time the engine was started.

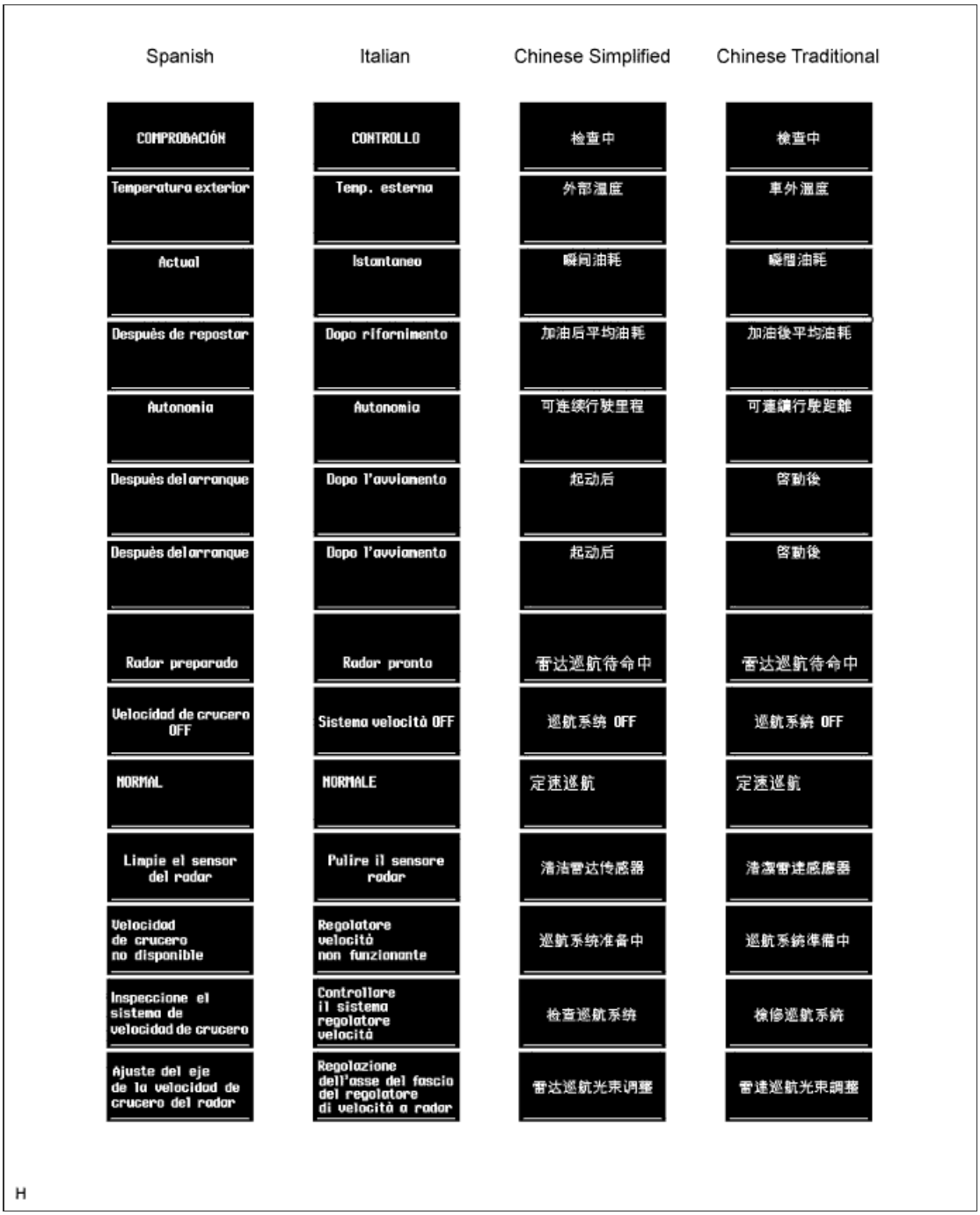
b. Basic Flowchart.



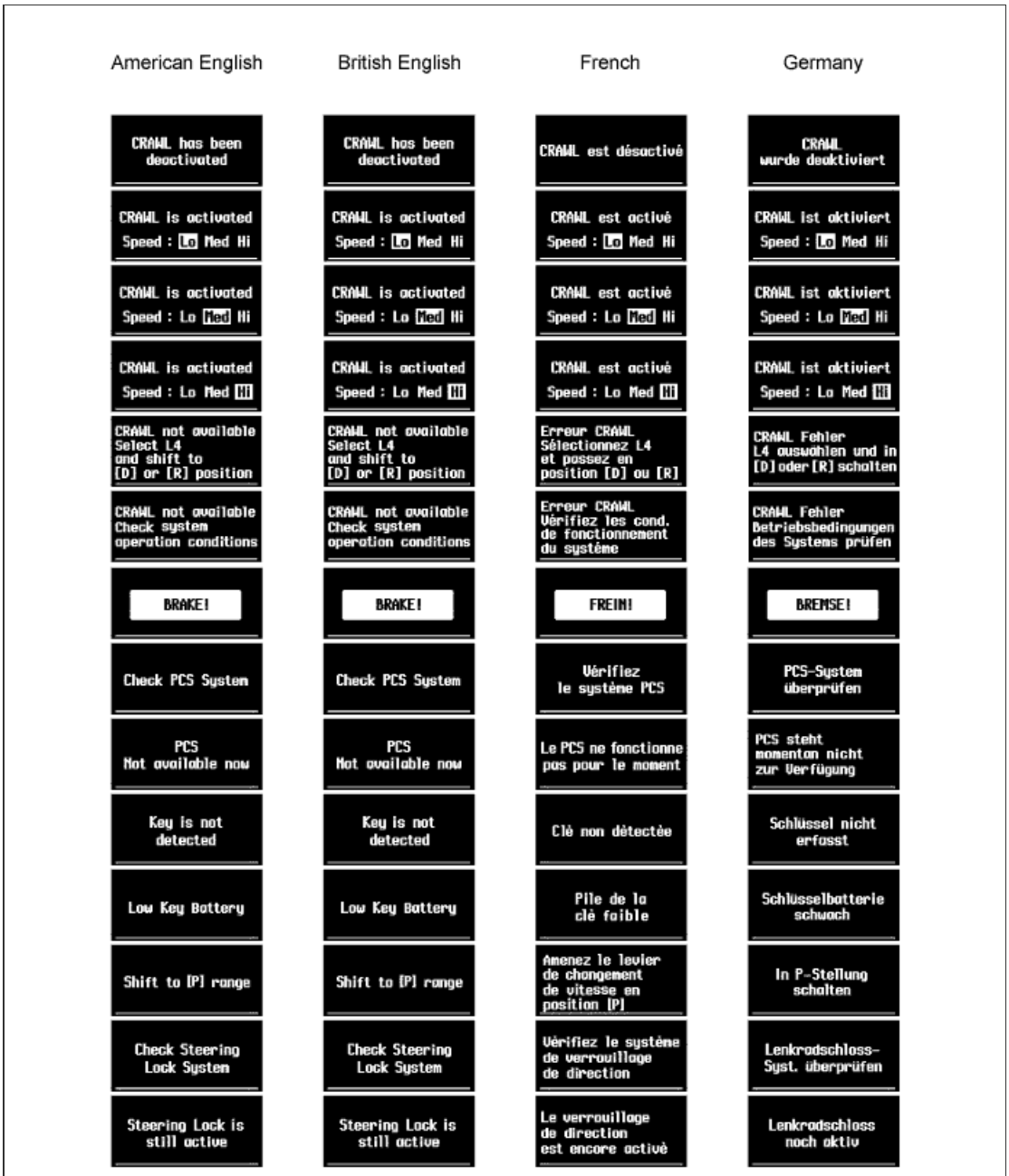
c. Multi-information display:
When a warning is necessary, the warning display interrupts the multi-information display.
The master warning light may illuminate or blink and a buzzer may sound depending on the item in the multi-information display.


American English
British English
French
Germany
CHECKING
CHECKING
VÉRIFICATION
ÜBERPRÜFEN
OUTSIDE TEMP
OUTSIDE TEMP
Temp extérieure
Außentemp.
CURRENT
CURRENT
Actuel
Gegenwärtig
AFTER REFUELING
AFTER REFUELLING
Après le plein
Nach dem Tanken
CRUISING RANGE
CRUISING RANGE
Autonomie
Reichweite
AFTER START
AFTER START
Après démarrage
Nach dem Start
AFTER START
AFTER START
Après démarrage
Nach dem Start
RADAR READY
RADAR READY
Radar prêt
Radar einsatzbereit
CRUISE OFF
CRUISE OFF
Régulateur de vitesse OFF
Cruise OFF
NORMAL
NORMAL
NORMAL
NORMAL
Clean Radar Sensor
Clean Radar Sensor
Nettoyez le capteur du radar
Radarsensor reinigen
Cruise not available
Cruise not available
Le régulateur de vitesse ne fonctionne pas
Cruise nicht verfügbar
Check Cruise System
Check Cruise System
Vérifiez le système de régulateur de vitesse
Cruise-System überprüfen
Radar Cruise Beam Axis Adjustment
Radar Cruise Beam Axis Adjustment
Réglage de l'axe du faisceau du régulateur de vitesse à radar
Einstellung Strahlachse des Cruise-Radars

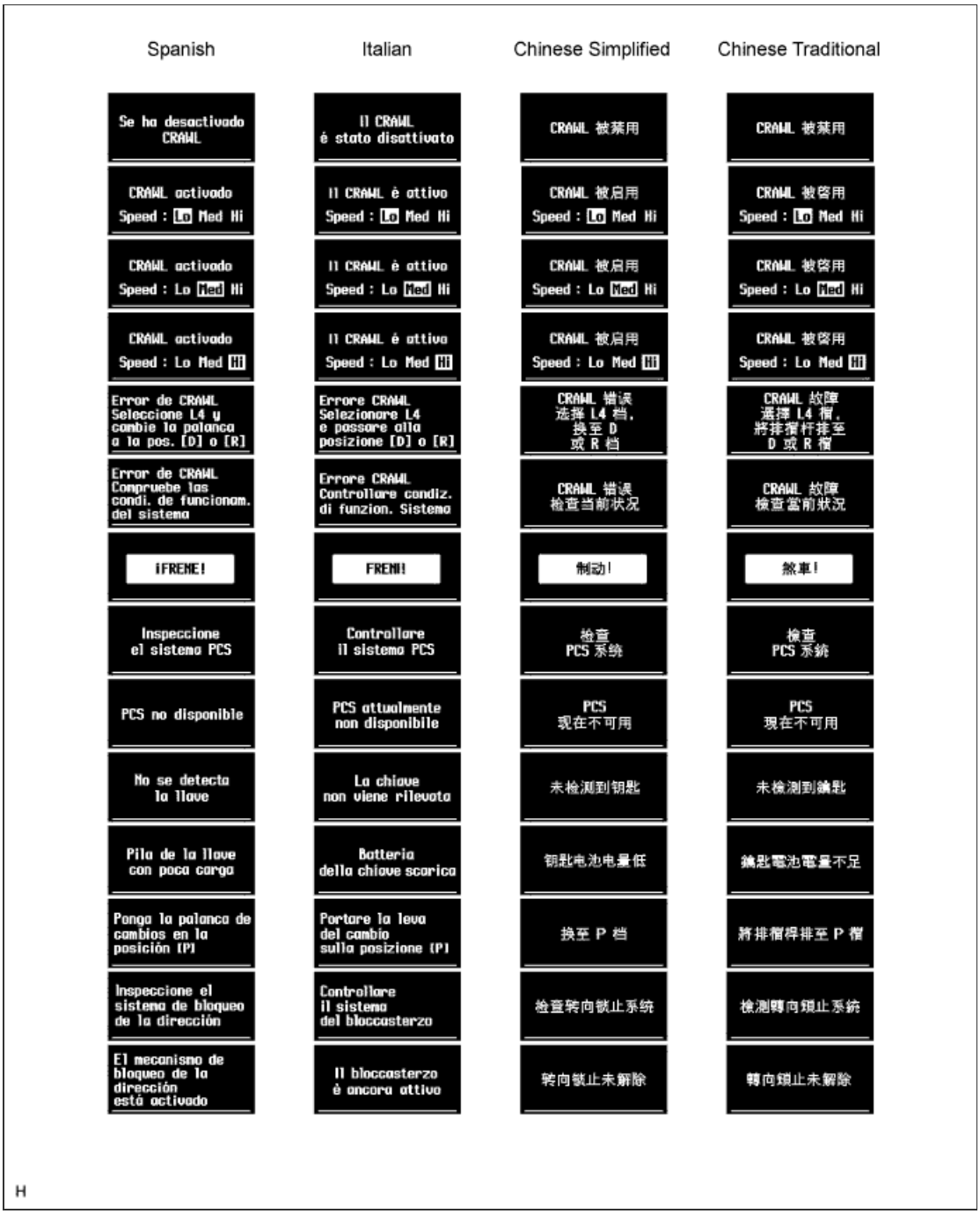
H


Spanish
Italian
Chinese Simplified
Chinese Traditional
COMPROBACIÓN
CONTROLLO
检查中
檢查中
Temperatura exterior
Temp. esterna
外部温度
車外溫度
Actual
Istantaneo
瞬间油耗
瞬間油耗
Después de repostar
Dopo rifornimento
加油后平均油耗
加油後平均油耗
Autonomía
Autonomia
可连续行驶里程
可連續行駛距離
Después del arranque
Dopo l'avviamento
起动后
啓動後
Después del arranque
Dopo l'avviamento
起动后
啓動後
Radar preparado
Radar pronto
雷达巡航待命中
雷达巡航待命中
Velocidad de crucero OFF
Sistema velocità OFF
巡航系统 OFF
巡航系統 OFF
NORMAL
NORMALE
定速巡航
定速巡航
Limpie el sensor del radar
Pulire il sensore radar
清洁雷达传感器
清潔雷達感應器
Velocidad de crucero no disponible
Regolatore velocità non funzionante
巡航系统准备中
巡航系統準備中
Inspeccione el sistema de velocidad de crucero
Controllare il sistema regolatore velocità
检查巡航系统
檢修巡航系統
Ajuste del eje de la velocidad de crucero del radar
Regolazione dell'asse del fascio del regolatore di velocità a radar
雷达巡航光束调整
雷達巡航光束調整

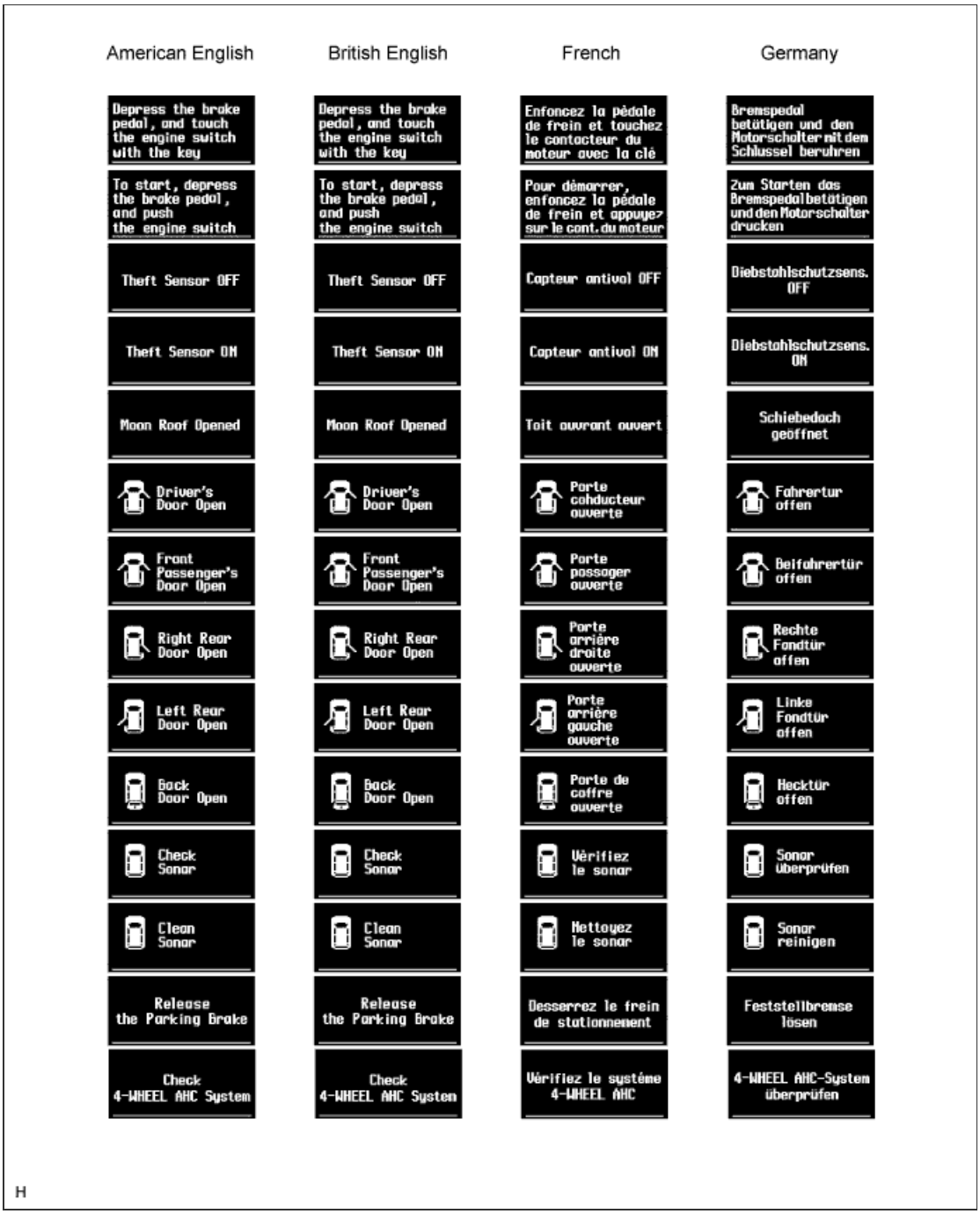
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American English
British English
French
Germany
CRAWL has been deactivated
CRAWL has been deactivated
CRAWL est désactivé
CRAWL wurde deaktiviert
CRAWL is activated Speed : Lo Med Hi
CRAWL is activated Speed : Lo Med Hi
CRAWL est activé Speed : Lo Med Hi
CRAWL ist aktiviert Speed : Lo Med Hi
CRAWL is activated Speed : Lo Med Hi
CRAWL is activated Speed : Lo Med Hi
CRAWL est activé Speed : Lo Med Hi
CRAWL ist aktiviert Speed : Lo Med Hi
CRAWL is activated Speed : Lo Med Hi
CRAWL is activated Speed : Lo Med Hi
CRAWL est activé Speed : Lo Med Hi
CRAWL ist aktiviert Speed : Lo Med Hi
CRAWL not available Select L4 and shift to [D] or [R] position
CRAWL not available Select L4 and shift to [D] or [R] position
Erreur CRAWL Sélectionnez L4 et passez en position [D] ou [R]
CRAWL Fehler L4 auswählen und in [D] oder [R] schalten
CRAWL not available Check system operation conditions
CRAWL not available Check system operation conditions
Erreur CRAWL Vérifiez les cond. de fonctionnement du système
CRAWL Fehler Betriebsbedingungen des Systems prüfen
BRAKE!
BRAKE!
FREIN!
BREMSE!
Check PCS System
Check PCS System
Vérifiez le système PCS
PCS-System überprüfen
PCS Not available now
PCS Not available now
Le PCS ne fonctionne pas pour le moment
PCS steht momentan nicht zur Verfügung
Key is not detected
Key is not detected
Clé non détectée
Schlüssel nicht erfosst
Low Key Battery
Low Key Battery
Pile de la clé faible
Schlüsselbatterie schwach
Shift to [P] range
Shift to [P] range
Amenez le levier de changement de vitesse en position [P]
In P-Stellung schalten
Check Steering Lock System
Check Steering Lock System
Vérifiez le système de verrouillage de direction
Lenkradschloss-Syst. überprüfen
Steering Lock is still active
Steering Lock is still active
Le verrouillage de direction est encore activé
Lenkradschloss noch aktiv

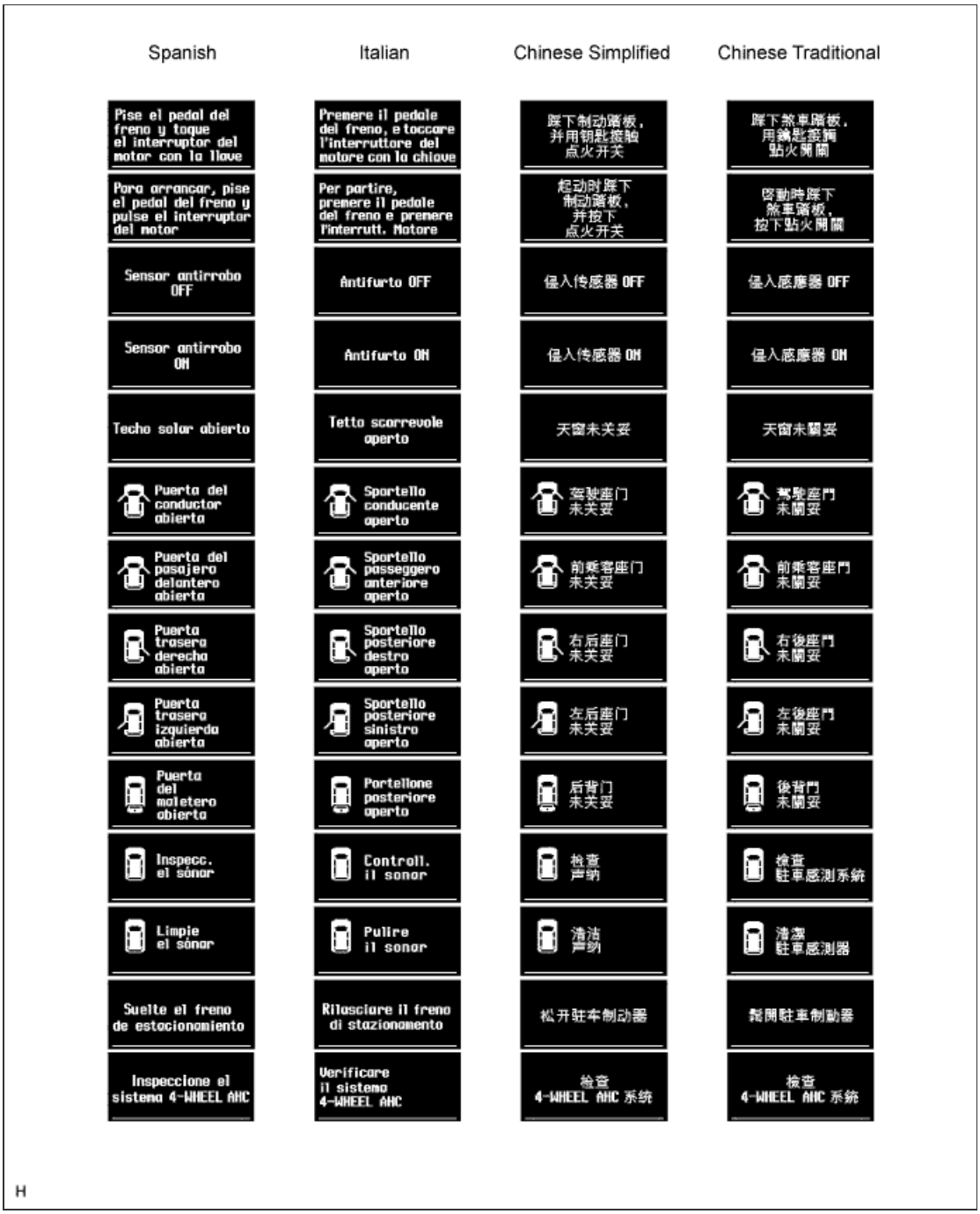
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Spanish
Italian
Chinese Simplified
Chinese Traditional
Se ha desactivado CRAWL
Il CRAWL é stato disattivato
CRAWL 被禁用
CRAWL 被禁用
CRAWL activado
Speed : Lo Med Hi
Il CRAWL è attivo
Speed : Lo Med Hi
CRAWL 被启用
Speed : Lo Med Hi
CRAWL 被啓用
Speed : Lo Med Hi
CRAWL activado
Speed : Lo Med Hi
Il CRAWL è attivo
Speed : Lo Med Hi
CRAWL 被启用
Speed : Lo Med Hi
CRAWL 被啓用
Speed : Lo Med Hi
CRAWL activado
Speed : Lo Med Hi
Il CRAWL é attivo
Speed : Lo Med Hi
CRAWL 被启用
Speed : Lo Med Hi
CRAWL 被啓用
Speed : Lo Med Hi
Error de CRAWL Seleccione L4 y cambie la palanca a la pos. [D] o [R]
Errore CRAWL Selezionare L4 e passare alla posizione [D] o [R]
CRAWL 错误 选择 L4 档, 换至 D 或 R 档
CRAWL 故障 選擇 L4 檔, 將排檔杆排至 D 或 R 檔
Error de CRAWL Compruebe las condi. de funcionam. del sistema
Errore CRAWL Controllare condiz. di funzion. Sistema
CRAWL 错误 检查当前状况
CRAWL 故障 檢查當前狀況
¡FRENE!
FRENI!
制动!
煞車!
Inspeccione el sistema PCS
Controllare il sistema PCS
检查 PCS 系统
檢查 PCS 系統
PCS no disponible
PCS attualmente non disponibile
PCS 现在不可用
PCS 現在不可用
No se detecta la llave
La chiave non viene rilevata
未检测到钥匙
未檢測到鑰匙
Pila de la llave con poca carga
Batteria della chiave scarica
钥匙电池电量低
鑰匙電池電量不足
Ponga la palanca de cambios en la posición [P]
Portare la leva del cambio sulla posizione [P]
换至 P 档
將排檔桿排至 P 檔
Inspeccione el sistema de bloqueo de la dirección
Controllare il sistema del bloccasterzo
检查转向锁止系统
檢測轉向鎖止系統
El mecanismo de bloqueo de la dirección está activado
Il bloccasterzo è ancora attivo
转向锁止未解除
轉向鎖止未解除

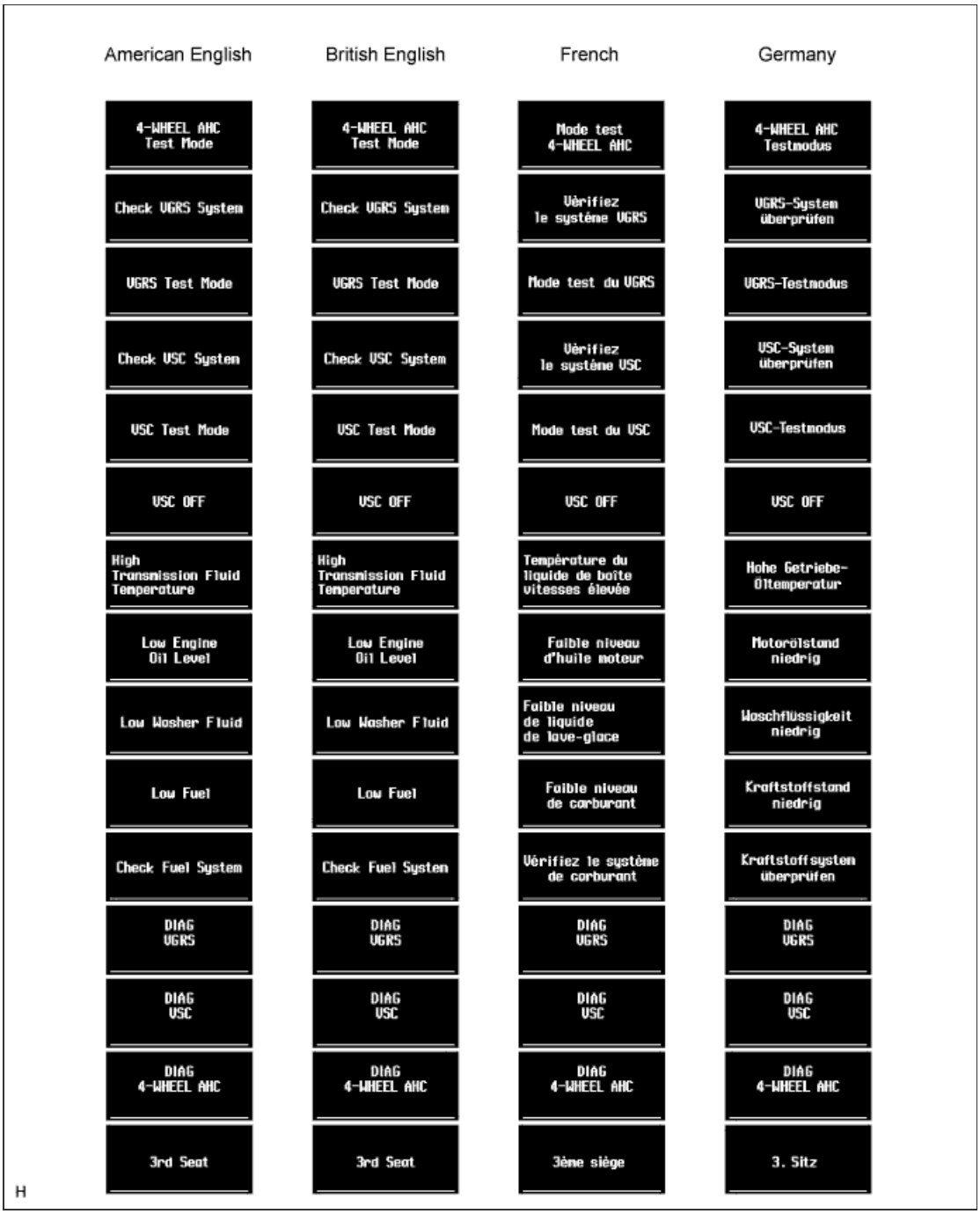
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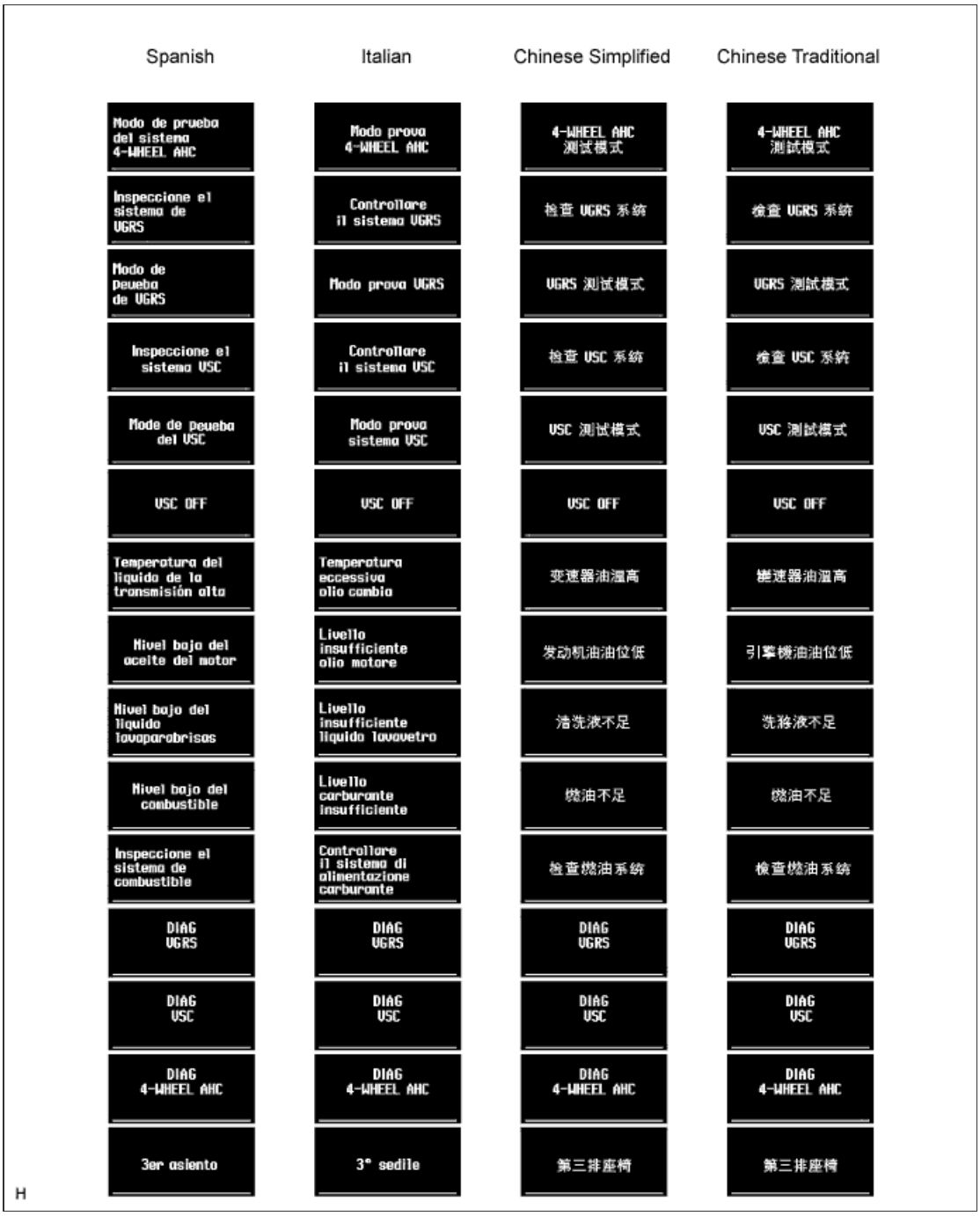

American English
British English
French
Germany
Depress the brake pedal, and touch the engine switch with the key
Depress the brake pedal, and touch the engine switch with the key
Enfoncez la pédale de frein et touchez le contacteur du moteur avec la clé
Bremspedal betätigen und den Motorschalter mit dem Schlussel beruhren
To start, depress the brake pedal, and push the engine switch
To start, depress the brake pedal, and push the engine switch
Pour démarrer, enfoncez la pédale de frein et appuyez sur le cont. du moteur
Zum Starten das Bremspedal betätigen und den Motorschalter drucken
Theft Sensor OFF
Theft Sensor OFF
Capteur antivol OFF
Diebstahlschutzsens. OFF
Theft Sensor ON
Theft Sensor ON
Capteur antivol ON
Diebstahlschutzsens. ON
Moon Roof Opened
Moon Roof Opened
Toit ouvrant ouvert
Schiebedach geöffnet
Driver's Door Open
Driver's Door Open
Porte conducteur ouverte
Fahrertur offen
Front Passenger's Door Open
Front Passenger's Door Open
Porte passager ouverte
Beifahrertür offen
Right Rear Door Open
Right Rear Door Open
Porte arrière droite ouverte
Rechte Fondtür offen
Left Rear Door Open
Left Rear Door Open
Porte arrière gauche ouverte
Linke Fondtür offen
Back Door Open
Back Door Open
Porte de coffre ouverte
Hecktür offen
Check Sonar
Check Sonar
Vérifiez le sonar
Sonar überprüfen
Clean Sonar
Clean Sonar
Nettoyez le sonar
Sonar reinigen
Release the Parking Brake
Release the Parking Brake
Desserrez le frein de stationnement
Feststellbremse lösen
Check 4-WHEEL AHC System
Check 4-WHEEL AHC System
Vérifiez le système 4-WHEEL AHC
4-WHEEL AHC-System überprüfen

H


Spanish
Italian
Chinese Simplified
Chinese Traditional
Pise el pedal del freno y toque el interruptor del motor con la llave
Premere il pedale del freno, e toccare l'interruttore del motore con la chiave
踩下制动踏板，并用钥匙接触点火开关
踩下煞車踏板，用鑰匙接觸點火開關
Para arrancar, pise el pedal del freno y pulse el interruptor del motor
Per partire, premere il pedale del freno e premere l'interrutt. Motore
起动时踩下制动踏板，并按下点火开关
啓動時踩下煞車踏板，按下點火開關
Sensor antirrobo OFF
Antifurto OFF
侵入传感器 OFF
侵入感應器 OFF
Sensor antirrobo ON
Antifurto ON
侵入传感器 ON
侵入感應器 ON
Techo solar abierto
Tetto scorrevole aperto
天窗未关妥
天窗未關妥
Puerta del conductor abierta
Sportello conducente aperto
驾驶座门未关妥
駕駛座門未關妥
Puerta del pasajero delantero abierta
Sportello passeggero anteriore aperto
前乘客座门未关妥
前乘客座門未關妥
Puerta trasera derecha abierta
Sportello posteriore destro aperto
右后座门未关妥
右後座門未關妥
Puerta trasera izquierda abierta
Sportello posteriore sinistro aperto
左后座门未关妥
左後座門未關妥
Puerta del maletero abierta
Portellone posteriore aperto
后背门未关妥
後背門未關妥
Inspecc. el sónar
Controll. il sonar
检查声纳
檢查駐車感測系統
Limpie el sónar
Pulire il sonar
清洁声纳
清潔駐車感測器
Suelte el freno de estacionamiento
Rilasciare il freno di stazionamento
松开驻车制动器
鬆開駐車制動器
Inspeccione el sistema 4-WHEEL AHC
Verificare il sistema 4-WHEEL AHC
检查4-WHEEL AHC 系统
檢查4-WHEEL AHC 系統

H


American English
British English
French
Germany
4-WHEEL AHC Test Mode
Check VGRS System
VGRS Test Mode
Check VSC System
VSC Test Mode
VSC OFF
High Transmission Fluid Temperature
Low Engine Oil Level
Low Washer Fluid
Low Fuel
Check Fuel System
DIAG VGRS
DIAG VSC
DIAG 4-WHEEL AHC
3rd Seat
4-WHEEL AHC Test Mode
Check VGRS System
VGRS Test Mode
Check VSC System
VSC Test Mode
VSC OFF
High Transmission Fluid Temperature
Low Engine Oil Level
Low Washer Fluid
Low Fuel
Check Fuel System
DIAG VGRS
DIAG VSC
DIAG 4-WHEEL AHC
3rd Seat
Mode test 4-WHEEL AHC
Vérifiez le systéme VGRS
Mode test du VGRS
Vérifiez le systéme VSC
Mode test du VSC
VSC OFF
Température du liquide de boîte vitesses élevée
Faible niveau d'huile moteur
Faible niveau de liquide de lave-glace
Faible niveau de carburant
Vérifiez le système de carburant
DIAG VGRS
DIAG VSC
DIAG 4-WHEEL AHC
3ème siège
4-WHEEL AHC Testmodus
VGRS-System überprüfen
VGRS-Testmodus
VSC-System überprüfen
VSC-Testmodus
VSC OFF
Hohe Getriebe-Öltemperatur
Motorölstand niedrig
Waschflüssigkeit niedrig
Kraftstoffstand niedrig
Kraftstoffsystem überprüfen
DIAG VGRS
DIAG VSC
DIAG 4-WHEEL AHC
3. Sitz
H


Spanish
Italian
Chinese Simplified
Chinese Traditional
Modo de prueba del sistema 4-WHEEL AHC
Modo prova 4-WHEEL AHC
4-WHEEL AHC 测试模式
4-WHEEL AHC 測試模式
Inspeccione el sistema de VGRS
Controllare il sistema VGRS
检查 VGRS 系统
檢查 VGRS 系統
Modo de peueba de VGRS
Modo prova VGRS
VGRS 测试模式
VGRS 測試模式
Inspeccione el sistema VSC
Controllare il sistema VSC
检查 VSC 系统
檢查 VSC 系統
Mode de peueba del VSC
Modo prova sistema VSC
VSC 测试模式
VSC 測試模式
VSC OFF
VSC OFF
VSC OFF
VSC OFF
Temperatura del liquido de la transmisión alta
Temperatura eccessiva olio cambio
变速器油温高
變速器油溫高
Nivel bajo del aceite del motor
Livello insufficiente olio motore
发动机油油位低
引擎機油油位低
Nivel bajo del liquido lavaparabrisas
Livello insufficiente liquido lavavetro
清洗液不足
洗滌液不足
Nivel bajo del combustible
Livello carburante insufficiente
燃油不足
燃油不足
Inspeccione el sistema de combustible
Controllare il sistema di alimentazione carburante
检查燃油系统
檢查燃油系統
DIAG VGRS
DIAG VGRS
DIAG VGRS
DIAG VGRS
DIAG VSC
DIAG VSC
DIAG VSC
DIAG VSC
DIAG 4-WHEEL AHC
DIAG 4-WHEEL AHC
DIAG 4-WHEEL AHC
DIAG 4-WHEEL AHC
3er asiento
3° sedile
第三排座椅
第三排座椅
H

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the meter/gauge system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK FOR DTC*

a. Check for DTCs and note any codes that are output (Click here).

b. Clear the DTCs (Click here).

c. Recheck for DTCs. Based on the DTCs output above, try to force output of the same CAN communication system DTC or meter/gauge system DTC by simulating the symptoms indicated by the DTC.

Result

Result	Proceed to
DTC is not output	A
CAN communication system (for LHD) DTC is output	B
CAN communication system (for RHD) DTC is output	C
Meter/gauge system DTC is output	D

B. → Go to CAN COMMUNICATION SYSTEM (Click here)

C. → Go to CAN COMMUNICATION SYSTEM (Click here)

D. → Go to DIAGNOSTIC TROUBLE CODE CHART (Click here)

A

4.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. Go to step 6

A

5.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Terminals of ECU (Click here)

b. Data List / Active Test (Click here)

c. Operation Check (Click here)

NEXT

6.REPAIR OR REPLACE

NEXT

7.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the meter/gauge system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK FOR DTC*

a. Check for DTCs and note any codes that are output (Click here).

b. Clear the DTCs (Click here).

c. Recheck for DTCs. Based on the DTCs output above, try to force output of the same CAN communication system DTC or meter/gauge system DTC by simulating the symptoms indicated by the DTC.

Result

Result	Proceed to
DTC is not output	A
CAN communication system (for LHD) DTC is output	B
CAN communication system (for RHD) DTC is output	C
Meter/gauge system DTC is output	D

B. → Go to CAN COMMUNICATION SYSTEM (Click here)

C. → Go to CAN COMMUNICATION SYSTEM (Click here)

D. → Go to DIAGNOSTIC TROUBLE CODE CHART (Click here)

A

4.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. Go to step 6

A

5.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Terminals of ECU (Click here)

b. Data List / Active Test (Click here)

c. Operation Check (Click here)

NEXT

6.REPAIR OR REPLACE

NEXT

7.CONFIRMATION TEST

NEXT

END

for Preparation Click here

INSPECT INDICATOR/WARNING LIGHT

a. Check the following indicators and warning lights.

Indicator/Warning Light	Switch Condition	Specified Condition
ABS warning light	Engine switch off → on (IG)	Comes on for 3 seconds
SLIP indicator light		
RSCA OFF indicator light		
ACCESS MODE indicator light		
CRAWL indicator light		
PCS indicator light*1		
AFS OFF indicator light		
BRAKE warning light		
SPEED LIMIT indicator light*2		
SRS warning light	Engine switch off → on (IG)	Comes on for 6 seconds
CHARGE warning light	Engine switch off → on (IG)	Illuminates when engine switch is turned on (IG). Turns off when engine is started.
MIL		

*1: w/ Pre-Crash Safety System
*2: for Middle East

INSPECT SPEEDOMETER

a. Using a speedometer tester, check that the speedometer reading is within the allowable range shown in the table below. Also, check for proper operation of the odometer.

Reference:

Standard Indication	Acceptable Range
20 km/h	21 to 25 km/h 20.8 to 25 km/h*1
40 km/h	41.7 to 46.2 km/h 41 to 45.5 km/h*1
60 km/h	62.7 to 67.2 km/h 61.2 to 65.7 km/h*1
80 km/h	83.4 to 88.4 km/h 81.4 to 85.9 km/h*1
100 km/h	104.3 to 109.3 km/h 101.6 to 106.1 km/h*1
120 km/h	125.1 to 130.6 km/h 121.1 to 126.8 km/h*1
140 km/h	145.8 to 151.8 km/h 142.5 to 147.5 km/h*1
160 km/h	166.2 to 173.2 km/h 163 to 168.2 km/h*1
180 km/h	186.9 to 194.5 km/h 183.4 to 188.8 km/h*1
200 km/h	207.7 to 215.7 km/h 203.9 to 209.5 km/h*1
	228.4 to 236.8 km/h

220 km/h	224.4 to 230.2 km/h*1
240 km/h	249.2 to 258 km/h 244.8 to 250.9 km/h*1

If the result is not as specified, the speedometer may have a malfunction.
*1: for Australia

NOTICE:

Do not use worn, underinflated or overinflated tires, as the speedometer reading will be inaccurate.

b. Check the deflection width of the speedometer indicator.

Reference:
Within 0.3°

INSPECT TACHOMETER

a. Connect a tune-up tachometer and start the engine.

b. Compare the test results with the tachometer indicator.

DC 13.5 V, at 25°C (77°F):

Standard indication (rpm)	Acceptable range Data in ( ) is for reference
700	630 to 770
1000	(900 to 1100)
2000	(1850 to 2150)
3000	2800 to 3200
4000	(3800 to 4200)
5000	4800 to 5200
6000	(5750 to 6250)

If the result is not as specified, the tachometer may have a malfunction.

INSPECT METER/GAUGE

a. Connect the intelligent tester to the DLC3.

b. Perform Active Test (Click here).

OK:
Each meter/gauge needle indication is normal.

INSPECT WARNING/INDICATOR LIGHT

a. Connect the intelligent tester to the DLC3.

b. Perform Active Test (Click here).

OK:
Each warning/indicator light turns on and off using the intelligent tester.

INSPECT ENGINE OIL LEVEL WARNING

a. Turn the engine switch on (IG) and warm up the engine at an engine speed of 2000 rpm or less until the coolant temperature reaches approximately 80°C (176°F) or more.

b. Disconnect the engine oil level sensor connector for 40 seconds or more.

c. Turn the engine switch on (IG) and check the multi-information display.

OK:
Low engine oil level message is displayed.

INSPECT MULTI-INFORMATION DISPLAY

a. Connect the intelligent tester to the DLC3.

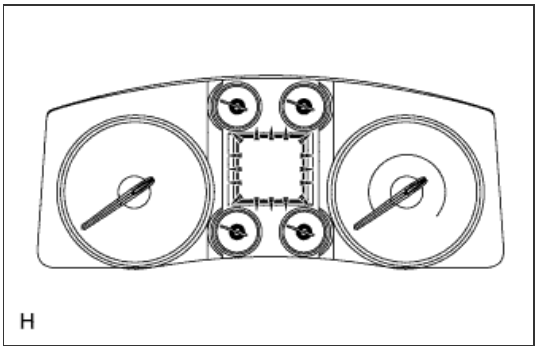
b. Perform Active Test (Click here).

HINT:

If this Active Test is being performed and the engine switch is turned off and then on (IG), the A/T and ODO/TRIP display background may turn white. If this occurs, end the Active Test and turn the engine switch off.

OK:

All dots in the multi-information display turn on and off using the intelligent tester.



for Preparation Click here

CUSTOMIZING FUNCTION WITH INTELLIGENT TESTER

NOTICE:

- **When the customer requests a change in a function, first make sure that the function can be customized.**
- **Be sure to make a note of the current settings before customizing.**
- **When troubleshooting a function, first make sure that the function is set to the default setting.**

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Customize Setting.

e. Select the setting by referring to the table below.

Warning

Display	Default	Contents	Setting
Driver Side Seatbelt Warning Buzzer	ON	To change the seat-belt warning buzzer.	ON/OFF
Front Passenger Side Seatbelt Warning Buzzer	ON	To change the seat-belt warning buzzer.	ON/OFF

Unit Conversion

Display	Default	Contents	Setting
Units By Region	Different for each vehicle	To change the units of the display.	Km/l JP / Km/l / Ml/g US / Ml/g UK

Display

Display	Default	Contents	Setting
Language	None	To change the language of the display.	Eng US / Eng UK / French / German / Spanish / Italian / Japanes / CHN Sim / CHN Trd

for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Malfunction System

Symptom	Suspected Area	See page
Entire Combination Meter does not Operate	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Combination meter assembly	Click here
	Fuses (ECU-B1, MET)	Click here
	Harness or connector	Click here
ODO/TRIP Switch Malfunction	Combination meter assembly	Click here
	Light control rheostat	Click here
	Harness or connector	Click here
Operating Light Control Rheostat does not Change Light Brightness	Combination meter assembly	Click here
	Light control rheostat	Click here
	Harness or connector	Click here
Meter Illumination is Always Dark	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Combination meter assembly	Click here
	Main body ECU (Cowl side junction block LH)	Click here
Meter Illumination does not Dim at Night	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Combination meter assembly	Click here
Multi-information Display does not Change Using DISP switch	Inspect steering pad switch	Click here
	Inspect spiral cable	Click here
	Perform Active Test (Meter display 1)	Click here
	Replace combination meter assembly	Click here
Multi-information Display is Missing Dots	Perform Active Test (Meter display 1)	Click here
	Replace combination meter assembly	Click here

Meter Gauges

Symptom	Suspected Area	See page
Speedometer Malfunction	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Combination meter assembly	Click here
	Vehicle stability control system	Click here
Tachometer Malfunction	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Combination meter assembly	Click here
	SFI system	Click here
Fuel Receiver Gauge Malfunction	Fuel sender gauge (DTC B1500)	Click here
	Fuel sender gauge (DTC B1501)	Click here
	Combination meter assembly	Click here
Engine Coolant Temperature Gauge Malfunction	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Combination meter assembly	Click here
	SFI system	Click here

Oil Pressure Receiver Gauge Malfunction	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Combination meter assembly	Click here
	Oil pressure sensor	Click here
	Harness or connector	Click here
Voltage Meter Malfunction	Fuse (MET)	Click here
	Combination meter assembly	Click here
	Harness or connector	Click here

Warning/Indicator Lights

Symptom	Suspected Area	See page
BEAM indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Perform Active Test (Indicat. Lamp Beam)	Click here
	Replace combination meter assembly	Click here
FRONT FOG indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Perform Active Test (Indicat. Lamp Fr FOG)	Click here
	Replace combination meter assembly	Click here
TAIL indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Perform Active Test (Indicat. Lamp Tail)	Click here
	Replace combination meter assembly	Click here
REAR FOG indicator light does not come on*1	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Perform Active Test (Indicat. Lamp Rr Fog)	Click here
	Replace combination meter assembly	Click here
A/T P warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Transfer system	Click here
	Perform Active Test (Indicat. A/T P)	Click here
	Replace combination meter assembly	Click here
SRS warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Airbag system	Click here
	Perform Active Test (Indicat. Lamp Airbag)	Click here
	Replace combination meter assembly	Click here
DOOR warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Perform Active Test (Indicat. Lamp Doors All Open)	Click here
	Replace combination meter assembly	Click here
Driver side seat belt warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Seat belt warning system	Click here
	Perform Active Test (Driver Side Seat Belt)	Click here
	Replace combination meter assembly	Click here
Brake warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Vehicle stability control system	Click here
	Perform Active Test (Indicat. Lamp Brake)	Click here
	Replace combination meter assembly	Click here
	Perform Active Test (Indicat. Lamp Charge)	Click here

CHARGE warning light does not come on	Replace combination meter assembly	Click here
4LO indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Transfer system	Click here
	Perform Active Test (Indicat. 4LO)	Click here
	Replace combination meter assembly	Click here
ABS warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Vehicle stability control system	Click here
	Perform Active Test (Indicat. Lamp ABS)	Click here
	Replace combination meter assembly	Click here
MIL does not come on	SFI system	Click here
	Replace ECM	Click here
	Replace combination meter assembly	Click here
	Harness or connector	-
FUEL warning light does not come on	Perform Active Test (Indicat. Lamp fuel)	Click here
	Replace combination meter assembly	Click here
	Harness or connector	-
SECURITY warning light does not come on	Theft deterrent system	Click here
	Replace combination meter assembly	Click here
	Harness or connector	-
ACCESS MODE indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Suspension control system	Click here
	Perform Active Test (Indicat. Ride mode)	Click here
	Replace combination meter assembly	Click here
SLIP indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Vehicle stability control system	Click here
	Perform Active Test (Indicat. Lamp Slip)	Click here
	Replace combination meter assembly	Click here
CRUISE main indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Cruise control system	Click here
	Perform Active Test (Indicat. Lamp Cruise)	Click here
	Replace combination meter assembly	Click here
Turn signal indicator light does not come on	Lighting system	Click here
	Replace combination meter assembly	Click here
RSCA OFF indicator light does not come on	Airbag system	Click here
	Replace combination meter assembly	Click here
Master warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Perform Active Test (Master Warning)	Click here
	Replace combination meter assembly	Click here
CRAWL indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Vehicle stability control system	Click here
	Perform Active Test (Indicat. CRAWL)	Click here
	Replace combination meter assembly	Click here
ECT PWR indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Automatic transmission system	Click here
	Perform Active Test (Indicat. Lamp ECT PWR)	Click here
	Replace combination meter assembly	Click here
2nd START indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	SFI system	Click here

	Perform Active Test (Indicat. 2nd START)	Click here
	Replace combination meter assembly	Click here
Center differential lock indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Transfer system	Click here
	Perform Active Test (Indicat. Ctr DIFF LOCK)	Click here
	Replace combination meter assembly	Click here
CLEARANCE SONAR indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Parking assist ECU*2	Click here
	LEXUS parking assist-sensor system*3	Click here
	Clearance warning ECU*3	Click here
	Perform Active Test (Indicat. Clearance Sonar LCD)	Click here
	Replace combination meter assembly	Click here
AFS OFF indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Headlight swivel ECU assembly (for LHD)	Click here
	Headlight swivel ECU assembly (for RHD)	Click here
	Perform Active Test (Indicat. AFS)	Click here
	Replace combination meter assembly	Click here
PCS indicator light does not come on*4	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Pre-crash safety system	Click here
	Perform Active Test (Indicat. Precrash)	Click here
	Replace combination meter assembly	Click here
SPEED LIMIT indicator light does not come on*5	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Vehicle stability control system	Click here
	Perform Active Test (Indicat. Over Speed)	Click here
	Replace combination meter assembly	Click here

*1: except Middle East
*2: w/ Parking Assist Monitor System
*3: w/ LEXUS Parking Assist-Sensor System
*4: w/ Pre-Crash Safety System
*5: for Middle East

Multi-information Display

Symptom	Suspected Area	See page
"CHECKING" multi-information display malfunction	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"CURRENT" multi-information display malfunction	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"AFTER REFUELING" multi-information display malfunction	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"CRUISING RANGE" multi-information display malfunction	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"AFTER START" multi-information display malfunction	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
		Click

"NORMAL" multi-information display malfunction*1	Dynamic radar cruise control system	here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"RADAR READY" multi-information display malfunction*1	Dynamic radar cruise control system	Click here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"CRUISE OFF" multi-information display malfunction*1	Dynamic radar cruise control system	Click here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Clean Radar Sensor" multi-information display malfunction*1	Dynamic radar cruise control system	Click here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Cruise not available" multi-information display malfunction*1	Dynamic radar cruise control system	Click here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check Cruise System" multi-information display malfunction*1	Dynamic radar cruise control system	Click here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Radar Cruise Beam Axis Adjustment" multi-information display malfunction*1	Dynamic radar cruise control system	Click here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"CRAWL has been deactivated" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"CRAWL is activated" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here

	Replace combination meter assembly	Click here
"CRAWL not available" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"BRAKE!" multi-information display malfunction*2	Pre-crash safety system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check PCS System" multi-information display malfunction*2	Pre-crash safety system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"PCS Not available now" multi-information display malfunction*2	Pre-crash safety system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Key is not detected" multi-information display malfunction	Entry and start system (for Entry Function)	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Low Key Battery" multi-information display malfunction	Entry and start system (for Entry Function)	Click here
	Replace transmitter battery	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Shift to P position" multi-information display malfunction	SFI system	Click here
	Entry and start system (for Start Function)	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"P" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"R" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"N" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click

		here
"D" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S1" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S2" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S3" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S4" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S5" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S6" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check Steering Lock System" multi-information display malfunction	Steering lock system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Steering Lock is still active" multi-information display malfunction	Steering lock system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
	Entry and start system (for Start Function)	Click here
	Engine Immobiliser system	Click here

"Depress the brake pedal, and touch the engine switch with the key" multi-information display malfunction	Steering lock system	Click here
	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"To start, depress the brake pedal, and push the engine switch" multi-information display malfunction	Entry and start system (for Start Function)	Click here
	Engine Immobiliser system	Click here
	Steering lock system	Click here
	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Moon Roof Opened" multi-information display malfunction	Sliding roof system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"3rd Seat" multi-information display malfunction	Rear power seat control system	Click here
	Fold seat control ECU LH	Click here
	Fold seat control ECU RH	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Driver's door Open" multi-information display malfunction	Lighting system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Front Passenger's Door Open" multi-information display malfunction	Lighting system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Right Rear Door Open" multi-information display malfunction	Lighting system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Left Rear Door Open" multi-information display malfunction	Lighting system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Back Door Open" multi-information display malfunction	Lighting system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here

"Check Sonar" multi-information display malfunction	Parking assist ECU*3	Click here
	LEXUS parking assist-sensor system*4	Click here
	Clearance warning ECU*4	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Clean Sonar" multi-information display malfunction	Parking assist ECU*3	Click here
	LEXUS parking assist-sensor system*4	Click here
	Clearance warning ECU*4	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Release the Parking Brake" multi-information display malfunction	Parking brake system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check VSC System" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"VSC Test Mode" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"VSC OFF" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"DIAG VSC" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"High Transmission Fluid Temperature" multi-information display malfunction	Automatic transmission system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Low Engine Oil Level" multi-information display malfunction	Oil level sensor	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
	Wiper and washer system	Click here

"Low Washer Fluid" multi-information display malfunction	Wind washer jar and tank Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Low Fuel" multi-information display malfunction	Fuel system	Click here
	Inspect fuel sender gauge assembly	Click here
	Inspect fuel sender gauge assembly (for Fuel Sub Tank)	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check Fuel System" multi-information display malfunction	Fuel system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check VGRS System" multi-information display malfunction	Variable gear ratio steering system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"VGRS Test Mode" multi-information display malfunction	Variable gear ratio steering system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"DIAG VGRS System" multi-information display malfunction	Variable gear ratio steering system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check 4-WHEEL AHC System" multi-information display malfunction	Suspension control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"4-WHEEL AHC Test Mode" multi-information display malfunction	Suspension control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"DIAG 4-WHEEL AHC" multi-information display malfunction	Suspension control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"OUTSIDE TEMP" multi-information display malfunction	Air conditioning system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here

*1: w/ Dynamic Radar Cruise Control System
*2: w/ Pre-Crash Safety System

*3: w/ Parking Assist Monitor System
*4: w/ LEXUS Parking Assist-Sensor System

Buzzer

Symptom	Suspected Area	See page
Driver seat belt warning buzzer (buzzer that sounds 5 times) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Seat belt warning system	Click here
	Replace combination meter assembly	Click here
Door control transmitter buzzer (buzzer that sounds intermittently) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Entry and start system (for Entry Function)	Click here
	Replace combination meter assembly	Click here
Immobiliser confirmed buzzer (buzzer that sounds once) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Engine immobiliser system	Click here
	Replace combination meter assembly	Click here
Multi-display warning buzzer (buzzer that sounds once) does not sound	Replace combination meter assembly	Click here
Door control transmitter buzzer (buzzer that sounds once) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Entry and start system (for Entry Function)	Click here
	Replace combination meter assembly	Click here
Seat belt warning LEVEL 1 buzzer (buzzer that sounds continuously) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Seat belt warning system	Click here
	Replace combination meter assembly	Click here
Seat belt warning LEVEL 2 buzzer (buzzer that sounds continuously) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Seat belt warning system	Click here
	Replace combination meter assembly	Click here
Door control transmitter buzzer (buzzer that sounds continuously) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Entry and start system (for Entry Function)	Click here
	Replace combination meter assembly	Click here
PKB-ON running buzzer (buzzer that sounds intermittently) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Replace combination meter assembly	Click here
Door ajar running warning buzzer (buzzer that sounds once) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Replace combination meter assembly	Click here
Sports shift reject buzzer (buzzer that sounds twice) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Automatic transmission system	Click here
	Replace combination meter assembly	Click here
Light reminder buzzer (buzzer that sounds continuously) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Replace combination meter assembly	Click here
Sliding roof buzzer (buzzer that sounds once) does not sound	Sliding roof system	Click here
	Replace combination meter assembly	Click here
Four wheel drive buzzer (buzzer that sounds 3 times) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Transfer system	Click here
	Replace combination meter assembly	Click here
Radar cruise canceled by low speed buzzer (buzzer that sounds twice) does not sound*1	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Dynamic radar cruise control system	Click here

	Replace combination meter assembly	Click here
Radar cruise warning buzzer (buzzer that sounds once) does not sound*1	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Dynamic radar cruise control system	Click here
	Replace combination meter assembly	Click here
Speed limit buzzer (buzzer that sounds continuously) does not sound*2	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Vehicle stability control system	Click here
	Replace combination meter assembly	Click here

*1: w/ Dynamic Radar Cruise Control System
*2: for Middle East

for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Malfunction System

Symptom	Suspected Area	See page
Entire Combination Meter does not Operate	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Combination meter assembly	Click here
	Fuses (ECU-B1, MET)	Click here
	Harness or connector	Click here
ODO/TRIP Switch Malfunction	Combination meter assembly	Click here
	Light control rheostat	Click here
	Harness or connector	Click here
Operating Light Control Rheostat does not Change Light Brightness	Combination meter assembly	Click here
	Light control rheostat	Click here
	Harness or connector	Click here
Meter Illumination is Always Dark	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Combination meter assembly	Click here
	Main body ECU (Cowl side junction block LH)	Click here
Meter Illumination does not Dim at Night	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Combination meter assembly	Click here
Multi-information Display does not Change Using DISP switch	Inspect steering pad switch	Click here
	Inspect spiral cable	Click here
	Perform Active Test (Meter display 1)	Click here
	Replace combination meter assembly	Click here
Multi-information Display is Missing Dots	Perform Active Test (Meter display 1)	Click here
	Replace combination meter assembly	Click here

Meter Gauges

Symptom	Suspected Area	See page
Speedometer Malfunction	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Combination meter assembly	Click here
	Vehicle stability control system	Click here
Tachometer Malfunction	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Combination meter assembly	Click here
	SFI system	Click here
Fuel Receiver Gauge Malfunction	Fuel sender gauge (DTC B1500)	Click here
	Fuel sender gauge (DTC B1501)	Click here
	Combination meter assembly	Click here
Engine Coolant Temperature Gauge Malfunction	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Combination meter assembly	Click here
	SFI system	Click here

Oil Pressure Receiver Gauge Malfunction	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Combination meter assembly	Click here
	Oil pressure sensor	Click here
	Harness or connector	Click here
Voltage Meter Malfunction	Fuse (MET)	Click here
	Combination meter assembly	Click here
	Harness or connector	Click here

Warning/Indicator Lights

Symptom	Suspected Area	See page
BEAM indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Perform Active Test (Indicat. Lamp Beam)	Click here
	Replace combination meter assembly	Click here
FRONT FOG indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Perform Active Test (Indicat. Lamp Fr FOG)	Click here
	Replace combination meter assembly	Click here
TAIL indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Perform Active Test (Indicat. Lamp Tail)	Click here
	Replace combination meter assembly	Click here
REAR FOG indicator light does not come on*1	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Perform Active Test (Indicat. Lamp Rr Fog)	Click here
	Replace combination meter assembly	Click here
A/T P warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Transfer system	Click here
	Perform Active Test (Indicat. A/T P)	Click here
	Replace combination meter assembly	Click here
SRS warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Airbag system	Click here
	Perform Active Test (Indicat. Lamp Airbag)	Click here
	Replace combination meter assembly	Click here
DOOR warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Perform Active Test (Indicat. Lamp Doors All Open)	Click here
	Replace combination meter assembly	Click here
Driver side seat belt warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Seat belt warning system	Click here
	Perform Active Test (Driver Side Seat Belt)	Click here
	Replace combination meter assembly	Click here
Brake warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Vehicle stability control system	Click here
	Perform Active Test (Indicat. Lamp Brake)	Click here
	Replace combination meter assembly	Click here
	Perform Active Test (Indicat. Lamp Charge)	Click here

CHARGE warning light does not come on	Replace combination meter assembly	Click here
4LO indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Transfer system	Click here
	Perform Active Test (Indicat. 4LO)	Click here
	Replace combination meter assembly	Click here
ABS warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Vehicle stability control system	Click here
	Perform Active Test (Indicat. Lamp ABS)	Click here
	Replace combination meter assembly	Click here
MIL does not come on	SFI system	Click here
	Replace ECM	Click here
	Replace combination meter assembly	Click here
	Harness or connector	-
FUEL warning light does not come on	Perform Active Test (Indicat. Lamp fuel)	Click here
	Replace combination meter assembly	Click here
	Harness or connector	-
SECURITY warning light does not come on	Theft deterrent system	Click here
	Replace combination meter assembly	Click here
	Harness or connector	-
ACCESS MODE indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Suspension control system	Click here
	Perform Active Test (Indicat. Ride mode)	Click here
	Replace combination meter assembly	Click here
SLIP indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Vehicle stability control system	Click here
	Perform Active Test (Indicat. Lamp Slip)	Click here
	Replace combination meter assembly	Click here
CRUISE main indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Cruise control system	Click here
	Perform Active Test (Indicat. Lamp Cruise)	Click here
	Replace combination meter assembly	Click here
Turn signal indicator light does not come on	Lighting system	Click here
	Replace combination meter assembly	Click here
RSCA OFF indicator light does not come on	Airbag system	Click here
	Replace combination meter assembly	Click here
Master warning light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Perform Active Test (Master Warning)	Click here
	Replace combination meter assembly	Click here
CRAWL indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Vehicle stability control system	Click here
	Perform Active Test (Indicat. CRAWL)	Click here
	Replace combination meter assembly	Click here
ECT PWR indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Automatic transmission system	Click here
	Perform Active Test (Indicat. Lamp ECT PWR)	Click here
	Replace combination meter assembly	Click here
2nd START indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	SFI system	Click here

	Perform Active Test (Indicat. 2nd START)	Click here
	Replace combination meter assembly	Click here
Center differential lock indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Transfer system	Click here
	Perform Active Test (Indicat. Ctr DIFF LOCK)	Click here
	Replace combination meter assembly	Click here
CLEARANCE SONAR indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Parking assist ECU*2	Click here
	LEXUS parking assist-sensor system*3	Click here
	Clearance warning ECU*3	Click here
	Perform Active Test (Indicat. Clearance Sonar LCD)	Click here
	Replace combination meter assembly	Click here
AFS OFF indicator light does not come on	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Headlight swivel ECU assembly (for LHD)	Click here
	Headlight swivel ECU assembly (for RHD)	Click here
	Perform Active Test (Indicat. AFS)	Click here
	Replace combination meter assembly	Click here
PCS indicator light does not come on*4	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Pre-crash safety system	Click here
	Perform Active Test (Indicat. Precrash)	Click here
	Replace combination meter assembly	Click here
SPEED LIMIT indicator light does not come on*5	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Vehicle stability control system	Click here
	Perform Active Test (Indicat. Over Speed)	Click here
	Replace combination meter assembly	Click here

*1: except Middle East
*2: w/ Parking Assist Monitor System
*3: w/ LEXUS Parking Assist-Sensor System
*4: w/ Pre-Crash Safety System
*5: for Middle East

Multi-information Display

Symptom	Suspected Area	See page
"CHECKING" multi-information display malfunction	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"CURRENT" multi-information display malfunction	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"AFTER REFUELING" multi-information display malfunction	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"CRUISING RANGE" multi-information display malfunction	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"AFTER START" multi-information display malfunction	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
		Click

"NORMAL" multi-information display malfunction*1	Dynamic radar cruise control system	here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"RADAR READY" multi-information display malfunction*1	Dynamic radar cruise control system	Click here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"CRUISE OFF" multi-information display malfunction*1	Dynamic radar cruise control system	Click here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Clean Radar Sensor" multi-information display malfunction*1	Dynamic radar cruise control system	Click here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Cruise not available" multi-information display malfunction*1	Dynamic radar cruise control system	Click here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check Cruise System" multi-information display malfunction*1	Dynamic radar cruise control system	Click here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Radar Cruise Beam Axis Adjustment" multi-information display malfunction*1	Dynamic radar cruise control system	Click here
	Distance control ECU	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"CRAWL has been deactivated" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"CRAWL is activated" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here

	Replace combination meter assembly	Click here
"CRAWL not available" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"BRAKE!" multi-information display malfunction*2	Pre-crash safety system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check PCS System" multi-information display malfunction*2	Pre-crash safety system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"PCS Not available now" multi-information display malfunction*2	Pre-crash safety system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Key is not detected" multi-information display malfunction	Entry and start system (for Entry Function)	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Low Key Battery" multi-information display malfunction	Entry and start system (for Entry Function)	Click here
	Replace transmitter battery	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Shift to P position" multi-information display malfunction	SFI system	Click here
	Entry and start system (for Start Function)	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"P" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"R" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"N" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click

		here
"D" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S1" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S2" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S3" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S4" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S5" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"S6" does not display on multi-information display	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check Steering Lock System" multi-information display malfunction	Steering lock system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Steering Lock is still active" multi-information display malfunction	Steering lock system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
	Entry and start system (for Start Function)	Click here
	Engine Immobiliser system	Click here

"Depress the brake pedal, and touch the engine switch with the key" multi-information display malfunction	Steering lock system	Click here
	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"To start, depress the brake pedal, and push the engine switch" multi-information display malfunction	Entry and start system (for Start Function)	Click here
	Engine Immobiliser system	Click here
	Steering lock system	Click here
	SFI system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Moon Roof Opened" multi-information display malfunction	Sliding roof system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"3rd Seat" multi-information display malfunction	Rear power seat control system	Click here
	Fold seat control ECU LH	Click here
	Fold seat control ECU RH	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Driver's door Open" multi-information display malfunction	Lighting system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Front Passenger's Door Open" multi-information display malfunction	Lighting system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Right Rear Door Open" multi-information display malfunction	Lighting system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Left Rear Door Open" multi-information display malfunction	Lighting system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Back Door Open" multi-information display malfunction	Lighting system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here

"Check Sonar" multi-information display malfunction	Parking assist ECU*3	Click here
	LEXUS parking assist-sensor system*4	Click here
	Clearance warning ECU*4	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Clean Sonar" multi-information display malfunction	Parking assist ECU*3	Click here
	LEXUS parking assist-sensor system*4	Click here
	Clearance warning ECU*4	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Release the Parking Brake" multi-information display malfunction	Parking brake system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check VSC System" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"VSC Test Mode" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"VSC OFF" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"DIAG VSC" multi-information display malfunction	Vehicle stability control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"High Transmission Fluid Temperature" multi-information display malfunction	Automatic transmission system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Low Engine Oil Level" multi-information display malfunction	Oil level sensor	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
	Wiper and washer system	Click here

"Low Washer Fluid" multi-information display malfunction	Wind washer jar and tank Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Low Fuel" multi-information display malfunction	Fuel system	Click here
	Inspect fuel sender gauge assembly	Click here
	Inspect fuel sender gauge assembly (for Fuel Sub Tank)	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check Fuel System" multi-information display malfunction	Fuel system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check VGRS System" multi-information display malfunction	Variable gear ratio steering system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"VGRS Test Mode" multi-information display malfunction	Variable gear ratio steering system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"DIAG VGRS System" multi-information display malfunction	Variable gear ratio steering system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"Check 4-WHEEL AHC System" multi-information display malfunction	Suspension control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"4-WHEEL AHC Test Mode" multi-information display malfunction	Suspension control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"DIAG 4-WHEEL AHC" multi-information display malfunction	Suspension control system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here
"OUTSIDE TEMP" multi-information display malfunction	Air conditioning system	Click here
	Perform Active Test (Meter Display 1)	Click here
	Replace combination meter assembly	Click here

*1: w/ Dynamic Radar Cruise Control System
*2: w/ Pre-Crash Safety System

*3: w/ Parking Assist Monitor System
*4: w/ LEXUS Parking Assist-Sensor System

Buzzer

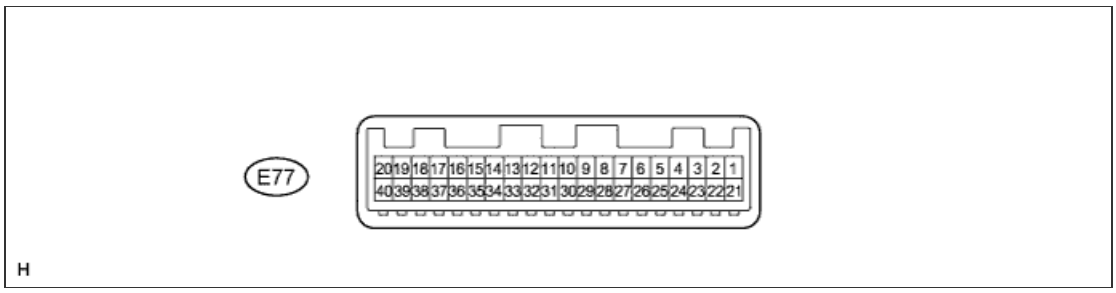
Symptom	Suspected Area	See page
Driver seat belt warning buzzer (buzzer that sounds 5 times) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Seat belt warning system	Click here
	Replace combination meter assembly	Click here
Door control transmitter buzzer (buzzer that sounds intermittently) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Entry and start system (for Entry Function)	Click here
	Replace combination meter assembly	Click here
Immobiliser confirmed buzzer (buzzer that sounds once) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Engine immobiliser system	Click here
	Replace combination meter assembly	Click here
Multi-display warning buzzer (buzzer that sounds once) does not sound	Replace combination meter assembly	Click here
Door control transmitter buzzer (buzzer that sounds once) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Entry and start system (for Entry Function)	Click here
	Replace combination meter assembly	Click here
Seat belt warning LEVEL 1 buzzer (buzzer that sounds continuously) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Seat belt warning system	Click here
	Replace combination meter assembly	Click here
Seat belt warning LEVEL 2 buzzer (buzzer that sounds continuously) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Seat belt warning system	Click here
	Replace combination meter assembly	Click here
Door control transmitter buzzer (buzzer that sounds continuously) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Entry and start system (for Entry Function)	Click here
	Replace combination meter assembly	Click here
PKB-ON running buzzer (buzzer that sounds intermittently) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Replace combination meter assembly	Click here
Door ajar running warning buzzer (buzzer that sounds once) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Replace combination meter assembly	Click here
Sports shift reject buzzer (buzzer that sounds twice) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Automatic transmission system	Click here
	Replace combination meter assembly	Click here
Light reminder buzzer (buzzer that sounds continuously) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Lighting system	Click here
	Replace combination meter assembly	Click here
Sliding roof buzzer (buzzer that sounds once) does not sound	Sliding roof system	Click here
	Replace combination meter assembly	Click here
Four wheel drive buzzer (buzzer that sounds 3 times) does not sound	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Transfer system	Click here
	Replace combination meter assembly	Click here
Radar cruise canceled by low speed buzzer (buzzer that sounds twice) does not sound*1	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Dynamic radar cruise control system	Click here

	Replace combination meter assembly	Click here
Radar cruise warning buzzer (buzzer that sounds once) does not sound*1	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Dynamic radar cruise control system	Click here
	Replace combination meter assembly	Click here
Speed limit buzzer (buzzer that sounds continuously) does not sound*2	CAN communication system (for LHD)	Click here
	CAN communication system (for RHD)	Click here
	Vehicle stability control system	Click here
	Replace combination meter assembly	Click here

*1: w/ Dynamic Radar Cruise Control System
*2: for Middle East

for Preparation Click here

CHECK COMBINATION METER



a. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E77-1 (R/O) - Body ground	P - Body ground	RSCA OFF indicator light input signal	Engine switch on (IG), RSCA OFF indicator light on	Below 1 V
			Engine switch on (IG), RSCA OFF indicator light off	8 to 14 V
E77-2 (CHG-) - Body ground	B - Body ground	CHARGE warning light	Engine switch on (IG), CHARGE warning light on	Below 1 V
			Engine switch on (IG), CHARGE warning light off	11 to 14 V
E77-4 (LP) - Body ground	V - Body ground	SECURITY warning light	Security warning light off	Below 1 V
			Security warning light blinks	Alternating between below 1 and 11 to 14 V
E77-5 (SI) - Body ground	V - Body ground	Speed signal (input)	Engine switch on (IG), wheel turned slowly	Pulse generation
E77-6 (+S) - Body ground	V - Body ground	Speed signal (output)	Engine switch on (IG), wheel turned slowly	Pulse generation
E77-8 (B) - Body ground	L - Body ground	Turn signal L	Engine switch on (IG), turn signal switch neutral position	Below 1 V
			Engine switch on (IG), turn signal switch turned to right	Alternating between below 1 and 11 to 14 V
E77-10 (B) - Body ground	R - Body ground	Turn signal R	Engine switch on (IG), turn signal switch neutral position	Below 1 V
			Engine switch on (IG), turn signal switch turned to left	Alternating between below 1 and 11 to 14 V
E77-12 (FE) - Body ground*1	G - Body ground	Fuel sender gauge ground	Always	Below 1 Ω
E77-13 (L) - Body ground*1	BR - Body ground	Fuel sender gauge signal	Fuel F (full tank) → E (empty)	4.5 to 9 V
E77-14 (E) - Body ground	B - Body ground	Fuel sender gauge ground	Always	Below 1 Ω
E77-15 (L) - Body ground	Y - Body ground	Fuel sender gauge signal	Fuel F (full tank) → E (empty)	4.5 to 9 V
E77-16 (ILL-) - Body ground	W - Body ground	Light control rheostat signal (for bulb)	Light control rheostat knob fully turned left	Below 1 V
			Light control rheostat knob fully turned from left to right	Resistance increases when turned to right

E77-17 (ILL-) - Body ground	W - Body ground	Light control rheostat signal (for LED)	Light control rheostat knob fully turned left	Below 1 V
			Light control rheostat knob fully turned from left to right	Resistance increases when turned to right
E77-18 (CHK) - Body ground	R - Body ground	MIL input signal	Engine switch on (IG), MIL on	Below 3 V
			Engine switch on (IG), MIL off	11 to 14 V
E77-20 (EP) - Body ground	W-B - Body ground	Ground	Always	Below 1 V
E77-21 (B) - Body ground	R - Body ground	Power source	Always	11 to 14 V
E77-22 (LA/B) - Body ground	GR - Body ground	Ground	Always	Below 1 V
E77-23 (OIL) - Body ground	L - Body ground	Oil level signal	Oil level sensor ON	Below 1 V
			Oil level sensor OFF	11 to 14 V
E77-24 (FLDS) - Body ground	B - Body ground	3rd seat information signal	3rd Seat displayed	Below 1 V
			3rd Seat not displayed	11 to 14 V
E77-25 (MSSL) - Body ground	L - Body ground	Spiral cable signal	Engine switch on (IG), steering pad switch signal DISP OFF	Below 1 V
			Engine switch on (IG), steering pad switch signal DISP ON	11 to 14 V
E77-26 (ET) - Body ground	BR - Body ground	Ground	Always	Below 1 V
E77-27 (RSET) - Body ground	B - Body ground	Light control rheostat signal	Engine switch on (IG), light control rheostat ODO/TRIP switch off	Below 1 V
			Engine switch on (IG), light control rheostat ODO/TRIP switch on	11 to 14 V
E77-28 (WLVL) - Body ground	V - Body ground	Washer level warning signal	Washer fluid level sensor ON	Below 1 V
			Washer fluid level sensor OFF	11 to 14 V
E77-29 (P/SB) - Body ground	B - Body ground*2 G - Body ground*3	Seat belt condition signal (Passenger side)	Passenger seat belt indicator off	Below 1 V
			Passenger seat belt indicator blinks	Alternating between below 1 and 11 to 14 V
E77-30 (IG+) - Body ground	B - Body ground	Engine switch signal	Engine switch off	Below 1 V
			Engine switch on (IG)	11 to 14 V
E77-31 (TC) - Body ground	B - Body ground	Light control rheostat signal	Engine switch on (IG), light control rheostat TAIL cancel switch off	Below 1 V
			Engine switch on (IG), light control rheostat TAIL cancel switch on	10 kΩ or higher
E77-32 (ILL+) - Body ground	G - Body ground	Light control rheostat signal	Engine switch on (IG)	4.6 to 5.4 V
E77-33 (TR) - Body ground	W - Body ground	Light control rheostat knob input	Light control rheostat knob fully turned left	Below 1 V
			Light control rheostat knob fully turned right	10 kΩ or higher
E77-34 (E2) - Body ground	L - Body ground	Light control rheostat ground	Always	Below 1 V
E77-39 (WRNP) - Body ground	Y - Body ground	Seat belt condition signal (Passenger side)	Passenger seat belt indicator off	Below 1 V
			Passenger seat belt indicator blinks	Alternating between below 1 and 11 to 14 V
E77-40 (S) - Body ground	L - Body ground	Oil pressure receiver gauge signal	Engine switch on (IG), Oil pressure receiver gauge H	Below 1 V
			Engine switch on (IG), Oil pressure receiver	

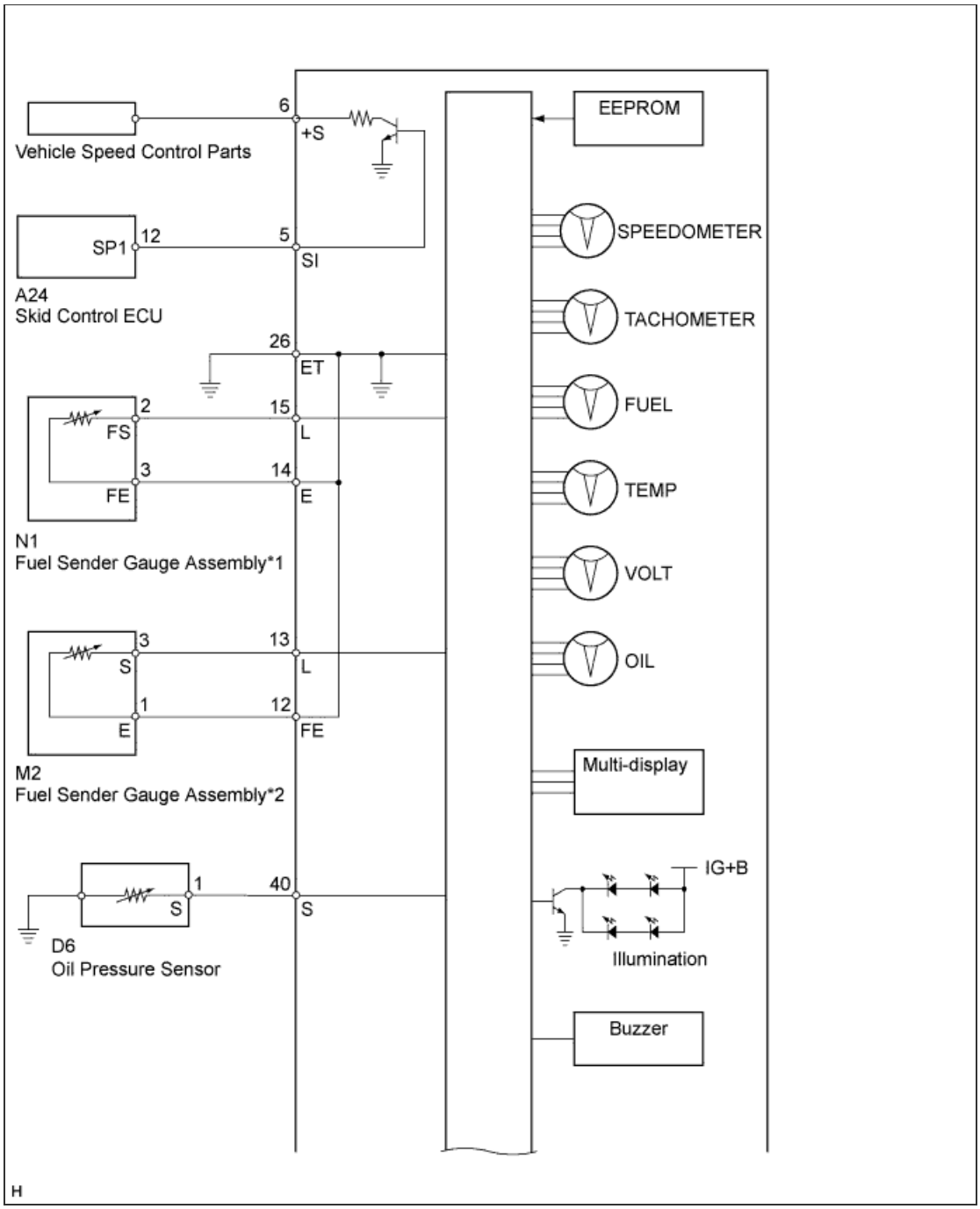
			gauge L	11 to 14 V

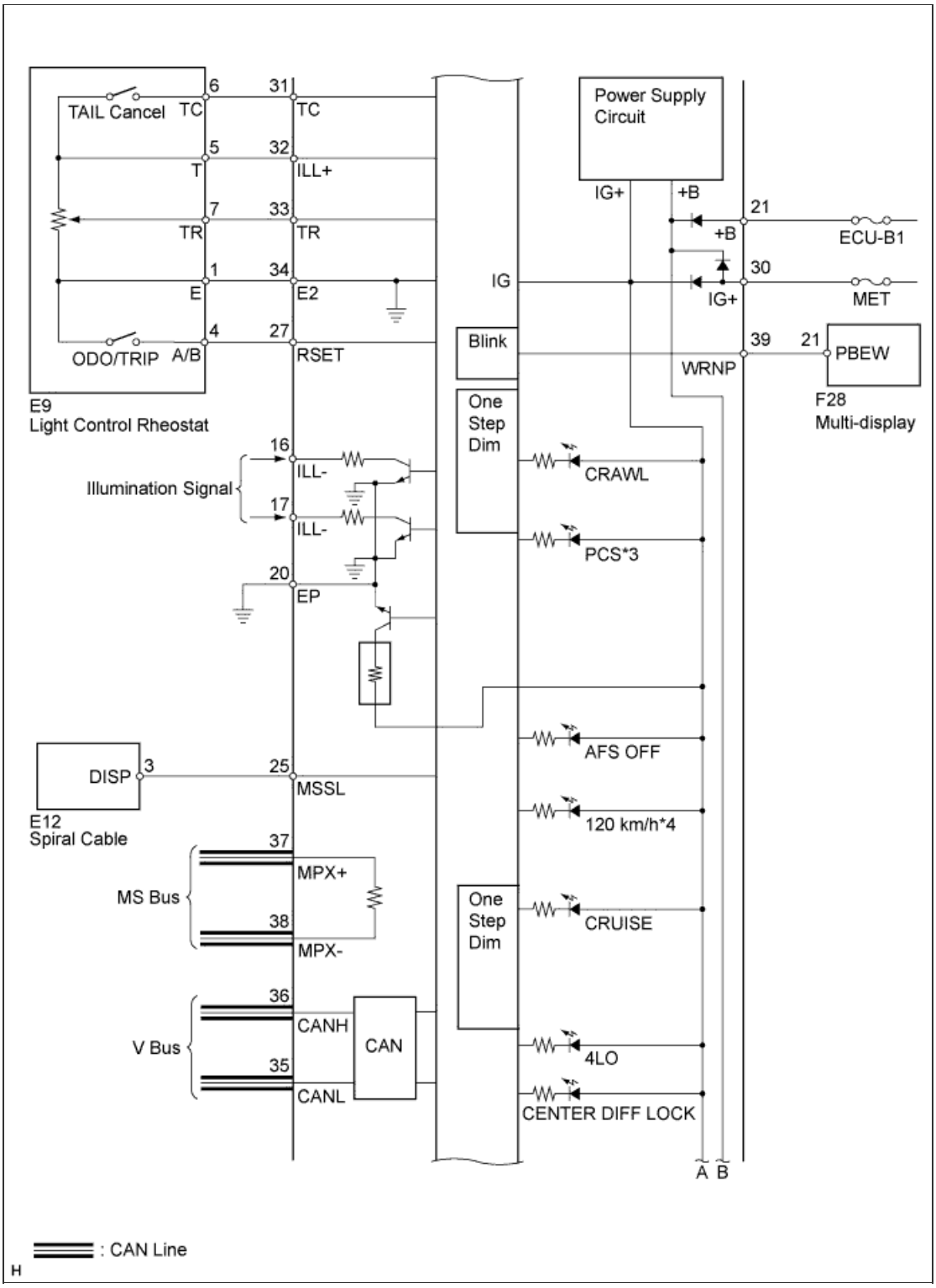
*1: for Double Tank Type
*2: for LHD
*3: for RHD

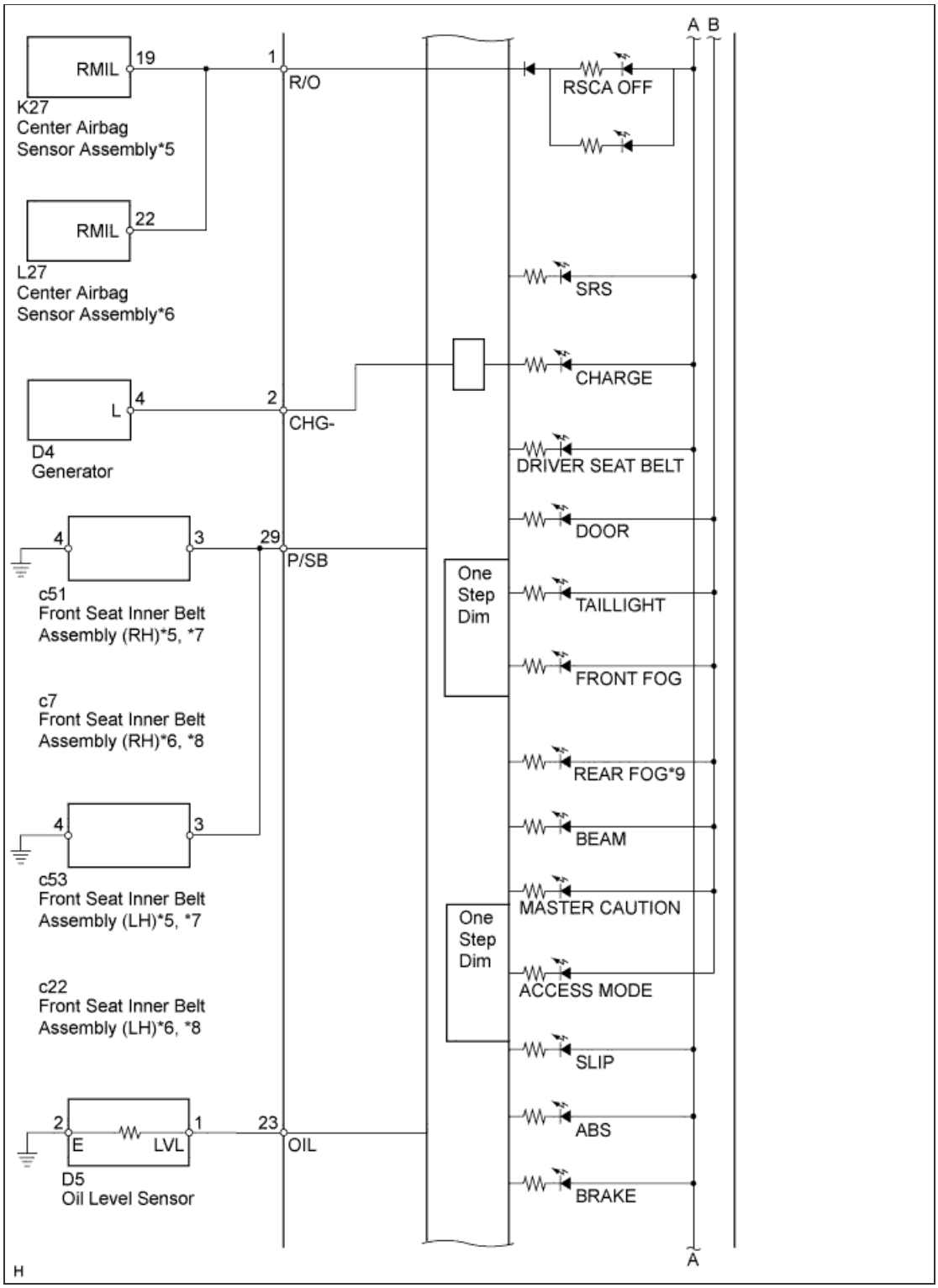
If the result is not as specified, the meter may have a malfunction.

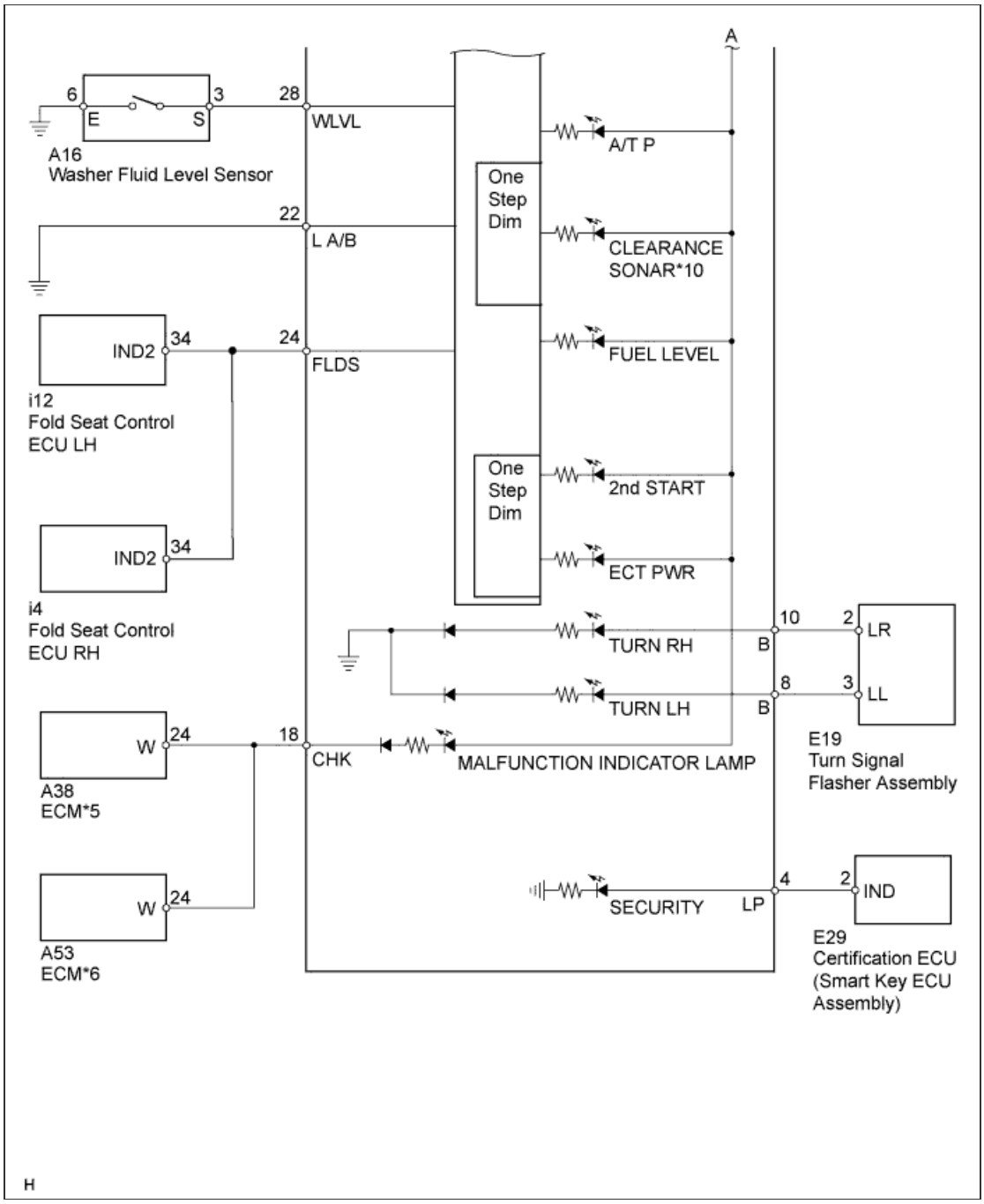
CHECK COMBINATION METER INNER CIRCUIT

*1: for Single Tank Type
*2: for Double Tank Type
*3: w/ Pre-Crash Safety System
*4: for Middle East
*5: for LHD
*6: for RHD
*7: w/ Climate Control Seat System
*8: w/o Climate Control Seat System
*9: except Middle East
*10: w/ LEXUS Parking Assist-sensor System



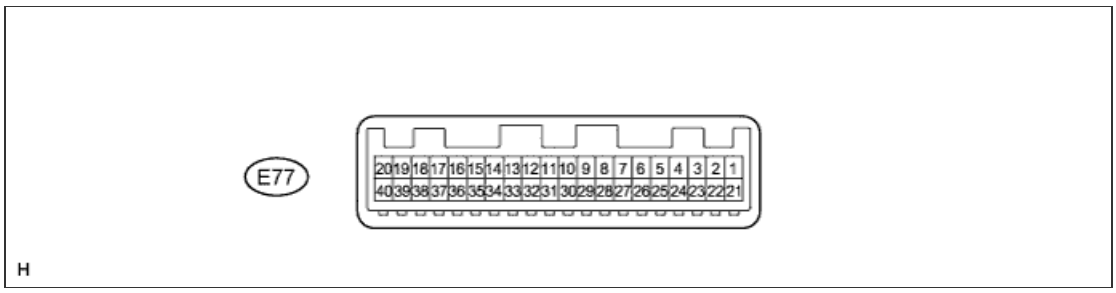

TAIL Cancel
TC
6
31
TC
5
32
T
ILL+
7
33
TR
TR
1
34
E
E2
4
27
ODO/TRIP
A/B
RSET
E9
Light Control Rheostat
Power Supply Circuit
IG+
+B
21
+B
ECU-B1
30
IG+
MET
IG
Blink
39
21
PBEW
WRNP
F28
Multi-display
One Step Dim
16
ILL-
Illumination Signal
17
ILL-
20
EP
CRAWL
PCS*3
AFS OFF
120 km/h*4
DISP
3
25
MSSL
E12
Spiral Cable
37
MPX+
MS Bus
38
MPX-
One Step Dim
CRUISE
36
CANH
CAN
V Bus
35
CANL
4LO
CENTER DIFF LOCK
A
B
: CAN Line
H


A B
RMIL
19
1
R/O
RSCA OFF
K27
Center Airbag
Sensor Assembly*5
RMIL
22
L27
Center Airbag
Sensor Assembly*6
SRS
CHARGE
L
4
2
CHG-
D4
Generator
DRIVER SEAT BELT
DOOR
4
3
29
P/SB
One
Step
Dim
TAILLIGHT
FRONT FOG
c51
Front Seat Inner Belt
Assembly (RH)*5, *7
c7
Front Seat Inner Belt
Assembly (RH)*6, *8
REAR FOG*9
BEAM
4
3
c53
Front Seat Inner Belt
Assembly (LH)*5, *7
MASTER CAUTION
One
Step
Dim
ACCESS MODE
c22
Front Seat Inner Belt
Assembly (LH)*6, *8
SLIP
2
1
23
ABS
E
LVL
OIL
D5
Oil Level Sensor
BRAKE
A
H


A
6
E
S
3
28
WLVL
A16
Washer Fluid Level Sensor
22
L A/B
IND2
34
24
FLDS
i12
Fold Seat Control
ECU LH
IND2
34
i4
Fold Seat Control
ECU RH
W
24
18
CHK
A38
ECM*5
W
24
A53
ECM*6
One
Step
Dim
A/T P
CLEARANCE
SONAR*10
FUEL LEVEL
One
Step
Dim
2nd START
ECT PWR
TURN RH
TURN LH
MALFUNCTION INDICATOR LAMP
10
B
8
B
2
LR
3
LL
E19
Turn Signal
Flasher Assembly
SECURITY
4
LP
2
IND
E29
Certification ECU
(Smart Key ECU
Assembly)
H

for Preparation Click here

CHECK COMBINATION METER



a. Measure the resistance and voltage according to the value(s) in the table below.

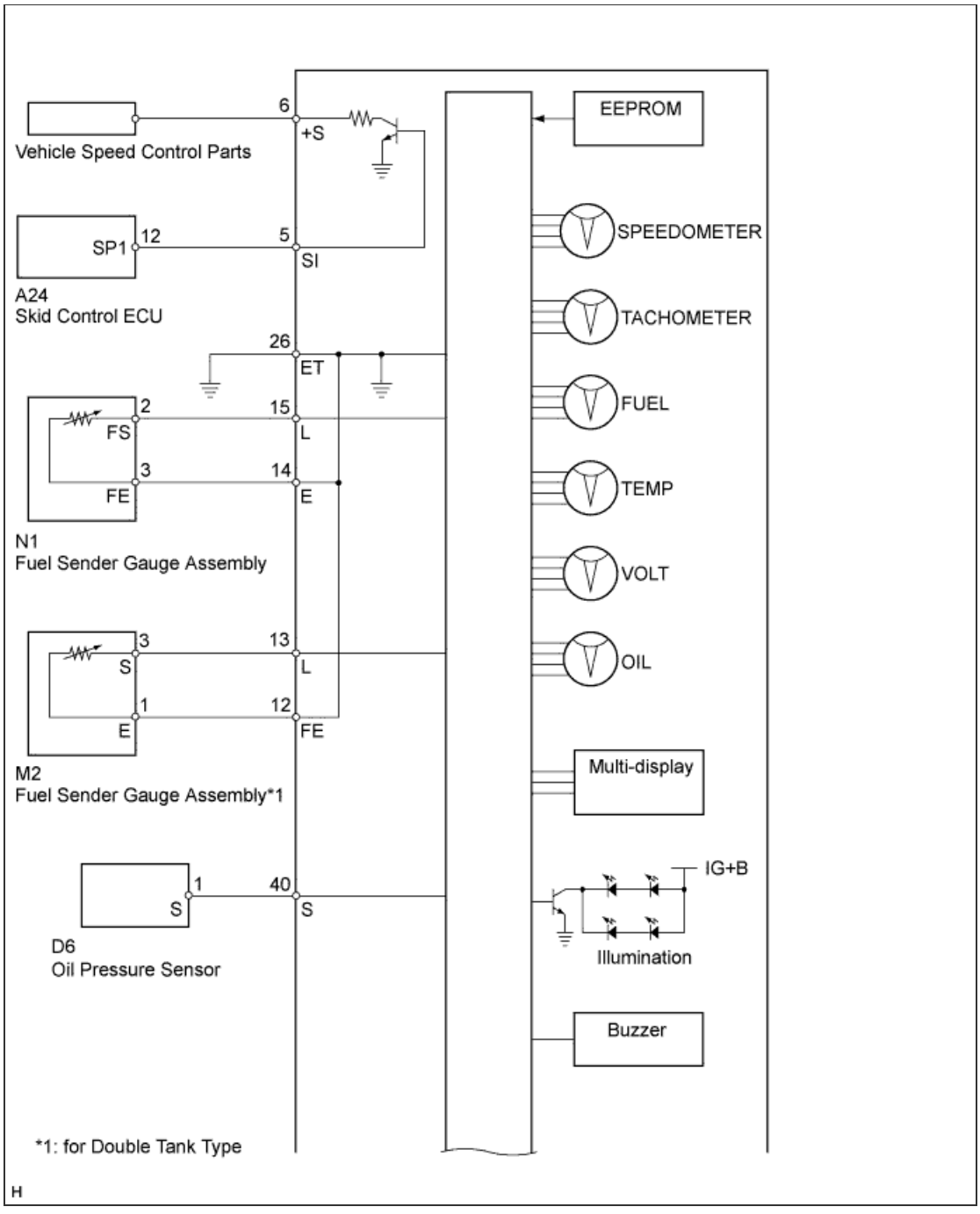
Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E77-1 (R/O) - Body ground	P - Body ground	RSCA OFF indicator light input signal	Engine switch on (IG), RSCA OFF indicator light on	Below 1 V
			Engine switch on (IG), RSCA OFF indicator light off	8 to 14 V
E77-2 (CHG-) - Body ground	B - Body ground	CHARGE warning light	Engine switch on (IG), CHARGE warning light on	Below 1 V
			Engine switch on (IG), CHARGE warning light off	11 to 14 V
E77-4 (LP) - Body ground	V - Body ground	SECURITY warning light	Security warning light off	Below 1 V
			Security warning light blinks	Alternating between below 1 and 11 to 14 V
E77-5 (SI) - Body ground	V - Body ground	Speed signal (input)	Engine switch on (IG), wheel turned slowly	Pulse generation
E77-6 (+S) - Body ground	V - Body ground	Speed signal (output)	Engine switch on (IG), wheel turned slowly	Pulse generation
E77-8 (B) - Body ground	L - Body ground	Turn signal L	Engine switch on (IG), turn signal switch neutral position	Below 1 V
			Engine switch on (IG), turn signal switch turned to right	Alternating between below 1 and 11 to 14 V
E77-10 (B) - Body ground	R - Body ground	Turn signal R	Engine switch on (IG), turn signal switch neutral position	Below 1 V
			Engine switch on (IG), turn signal switch turned to left	Alternating between below 1 and 11 to 14 V
E77-12 (FE) - Body ground*1	G - Body ground	Fuel sender gauge ground	Always	Below 1 Ω
E77-13 (L) - Body ground*1	BR - Body ground	Fuel sender gauge signal	Fuel F (full tank) → E (empty)	4.5 to 9 V
E77-14 (E) - Body ground	B - Body ground	Fuel sender gauge ground	Always	Below 1 Ω
E77-15 (L) - Body ground	Y - Body ground	Fuel sender gauge signal	Fuel F (full tank) → E (empty)	4.5 to 9 V
E77-16 (ILL-) - Body ground	W - Body ground	Light control rheostat signal (for bulb)	Light control rheostat knob fully turned left	Below 1 V
			Light control rheostat knob fully turned from left to right	Resistance increases when turned to right

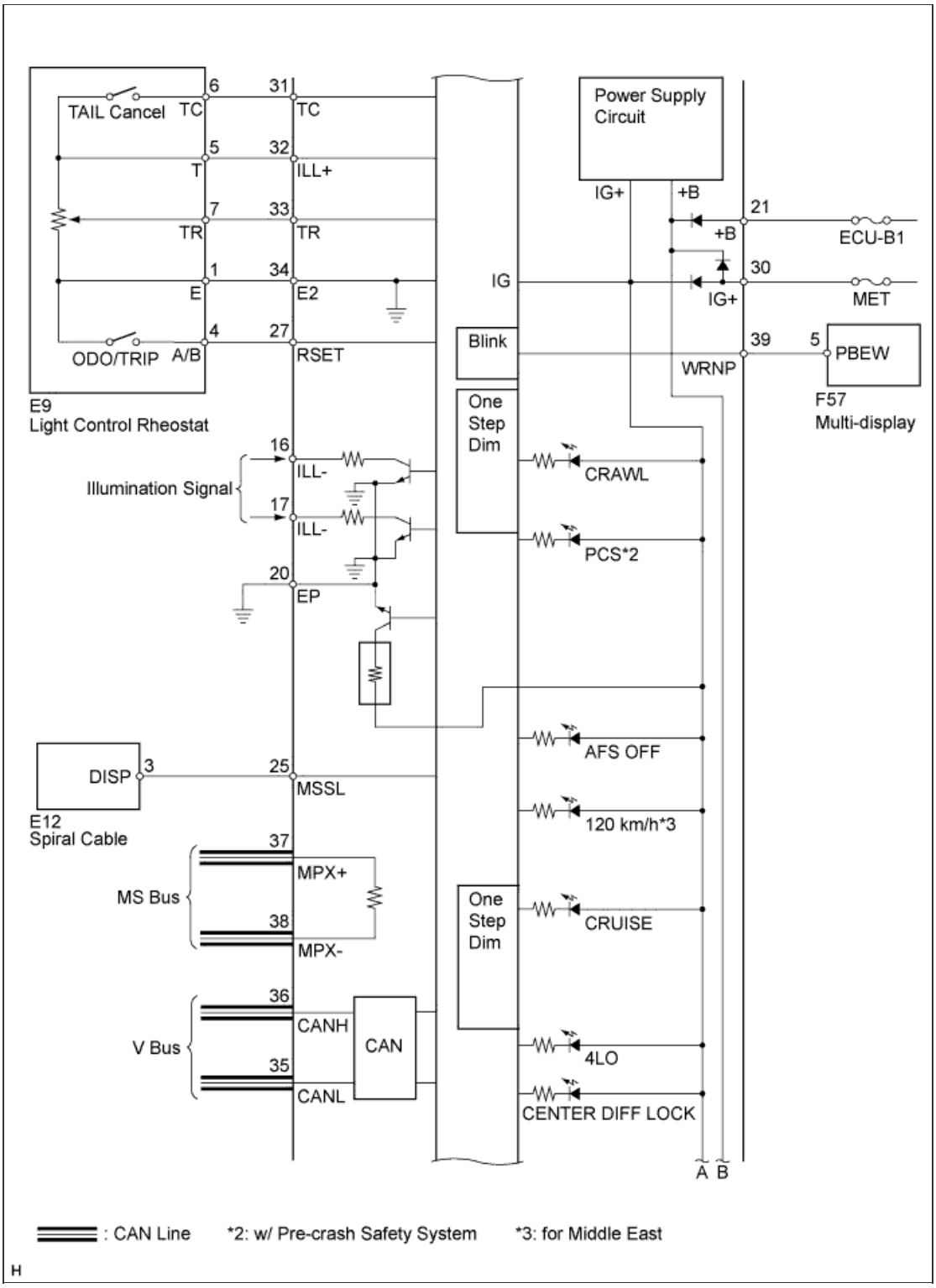
E77-17 (ILL-) - Body ground	W - Body ground	Light control rheostat signal (for LED)	Light control rheostat knob fully turned left	Below 1 V
			Light control rheostat knob fully turned from left to right	Resistance increases when turned to right
E77-18 (CHK) - Body ground	R - Body ground	MIL input signal	Engine switch on (IG), MIL on	Below 3 V
			Engine switch on (IG), MIL off	11 to 14 V
E77-20 (EP) - Body ground	W-B - Body ground	Ground	Always	Below 1 V
E77-21 (B) - Body ground	R - Body ground	Power source	Always	11 to 14 V
E77-22 (LA/B) - Body ground	GR - Body ground	Ground	Always	Below 1 V
E77-23 (OIL) - Body ground	L - Body ground	Oil level signal	Oil level sensor ON	Below 1 V
			Oil level sensor OFF	11 to 14 V
E77-24 (FLDS) - Body ground	B - Body ground	3rd seat information signal	3rd Seat displayed	Below 1 V
			3rd Seat not displayed	11 to 14 V
E77-25 (MSSL) - Body ground	L - Body ground	Spiral cable signal	Engine switch on (IG), steering pad switch signal DISP OFF	Below 1 V
			Engine switch on (IG), steering pad switch signal DISP ON	11 to 14 V
E77-26 (ET) - Body ground	BR - Body ground	Ground	Always	Below 1 V
E77-27 (RSET) - Body ground	B - Body ground	Light control rheostat signal	Engine switch on (IG), light control rheostat ODO/TRIP switch off	Below 1 V
			Engine switch on (IG), light control rheostat ODO/TRIP switch on	11 to 14 V
E77-28 (WLVL) - Body ground	V - Body ground	Washer level warning signal	Washer fluid level sensor ON	Below 1 V
			Washer fluid level sensor OFF	11 to 14 V
E77-29 (P/SB) - Body ground	B - Body ground*2 G - Body ground*3	Seat belt condition signal (Passenger side)	Passenger seat belt indicator off	Below 1 V
			Passenger seat belt indicator blinks	Alternating between below 1 and 11 to 14 V
E77-30 (IG+) - Body ground	B - Body ground	Engine switch signal	Engine switch off	Below 1 V
			Engine switch on (IG)	11 to 14 V
E77-31 (TC) - Body ground	B - Body ground	Light control rheostat signal	Engine switch on (IG), light control rheostat TAIL cancel switch off	Below 1 V
			Engine switch on (IG), light control rheostat TAIL cancel switch on	10 kΩ or higher
E77-32 (ILL+) - Body ground	G - Body ground	Light control rheostat signal	Engine switch on (IG)	4.6 to 5.4 V
E77-33 (TR) - Body ground	W - Body ground	Light control rheostat knob input	Light control rheostat knob fully turned left	Below 1 V
			Light control rheostat knob fully turned right	10 kΩ or higher
E77-34 (E2) - Body ground	L - Body ground	Light control rheostat ground	Always	Below 1 V
E77-39 (WRNP) - Body ground	Y - Body ground	Seat belt condition signal (Passenger side)	Passenger seat belt indicator off	Below 1 V
			Passenger seat belt indicator blinks	Alternating between below 1 and 11 to 14 V
E77-40 (S) - Body ground	L - Body ground	Oil pressure receiver gauge signal	Engine switch on (IG), Oil pressure receiver gauge H	Below 1 V
			Engine switch on (IG), Oil pressure receiver	

			gauge L	11 to 14 V

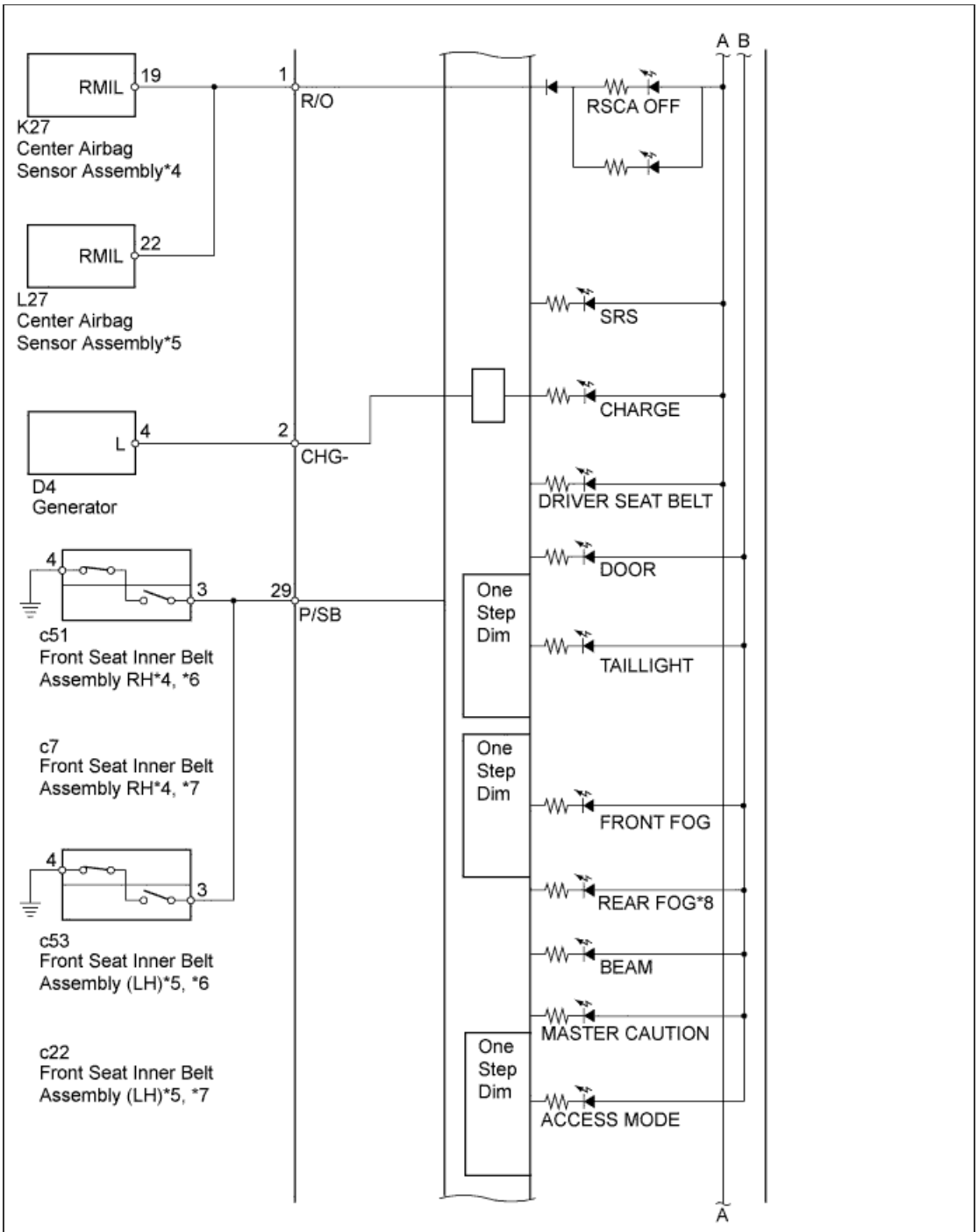
*1: for Double Tank Type
*2: for LHD
*3: for RHD
If the result is not as specified, the meter may have a malfunction.

CHECK COMBINATION METER INNER CIRCUIT




TAIL Cancel
TC
6
31
TC
5
32
T
ILL+
7
33
TR
TR
1
34
E
E2
4
27
ODO/TRIP
A/B
RSET
E9
Light Control Rheostat
Power Supply Circuit
IG+
+B
21
+B
ECU-B1
30
IG+
MET
IG
Blink
39
5
PBEW
WRNP
F57
Multi-display
One Step Dim
16
ILL-
Illumination Signal
17
ILL-
20
EP
CRAWL
PCS*2
AFS OFF
120 km/h*3
CRUISE
4LO
CENTER DIFF LOCK
DISP
3
25
MSSL
E12
Spiral Cable
37
MPX+
MS Bus
38
MPX-
36
CANH
V Bus
35
CANL
CAN
A
B
: CAN Line
*2: w/ Pre-crash Safety System
*3: for Middle East

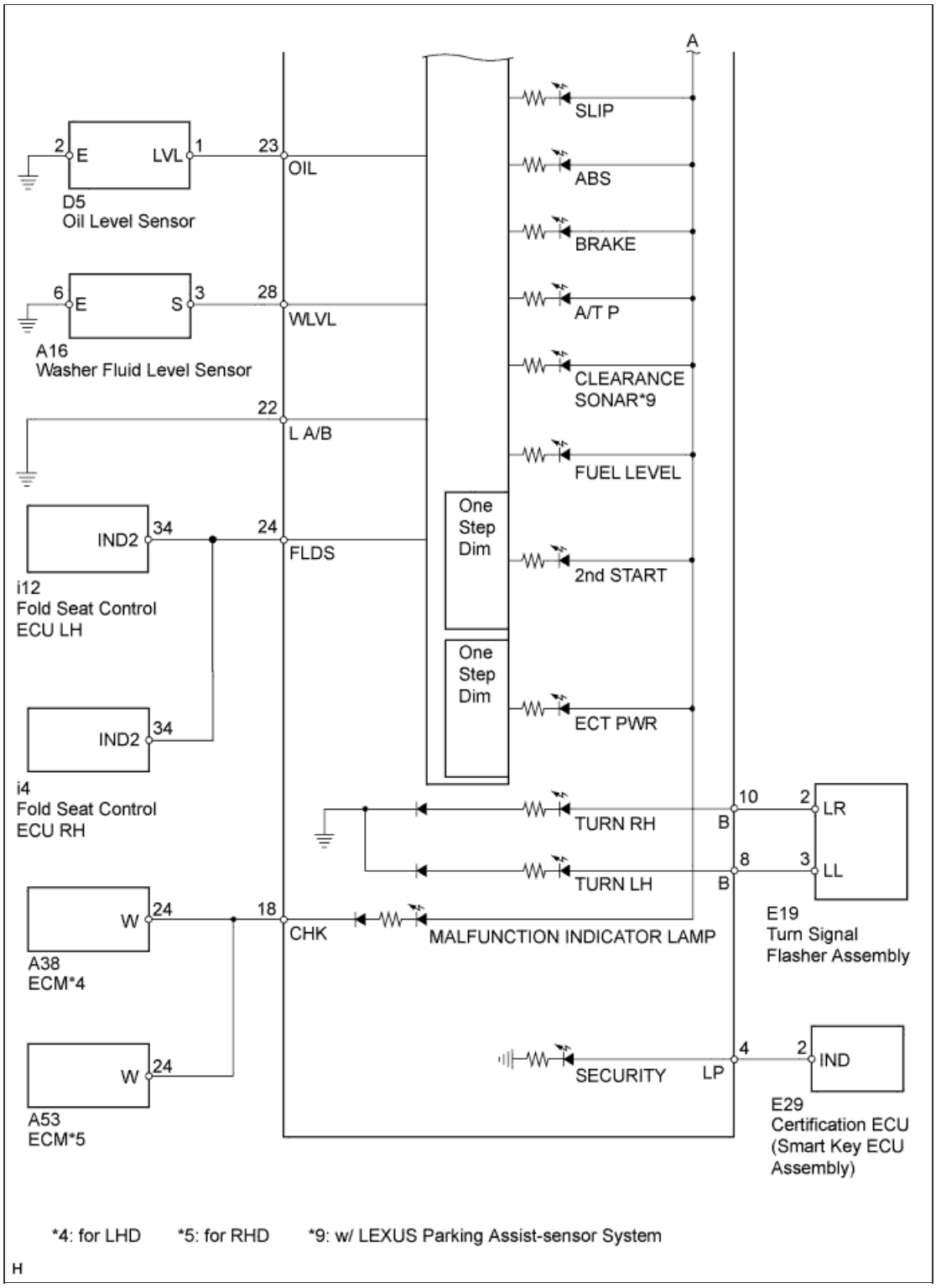
H



*4: for LHD *6: w/o Climate Control Seat System *8: except Middle East

*5: for RHD *7: w/ Climate Control Seat System

H



*4: for LHD *5: for RHD *9: w/ LEXUS Parking Assist-sensor System

H

for Preparation Click here

CHECK DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Trouble Codes.

e. Read the DTCs.

CLEAR DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Trouble Codes.

e. Clear the DTCs.

for Preparation Click here

DATA LIST

HINT:

Using the intelligent tester to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body, Powertrain or Chassis / (desired system) / Data List.

e. According to the display on the intelligent tester, read the Data List.

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
ODO/TRIP Change SW	ODO/TRIP switch condition/ON or OFF	ON: ODO/TRIP switch pushed OFF: ODO/TRIP switch not pushed	-
Tail Cancel SW	TAIL cancel switch condition/ON or OFF	ON: TAIL cancel switch on OFF: TAIL cancel switch off	-
Washer Switch	Washer switch/ON or OFF	ON: Washer switch on OFF: Washer switch off	-
P-Seatbelt Buckle SW	Front passenger side seat belt warning light request signal/ON or OFF	ON: Tongue plate (for front passenger side) inserted OFF: Tongue plate (for front passenger side) not inserted	-
Oil Level SW	Oil level switch/ON or OFF	ON: Oil level switch on OFF: Oil level switch off	-
Multi Display Select Switch	Steering multi-display select switch/ON or OFF	ON: Steering multi-display select switch on OFF: Steering multi-display select switch off	-
Vehicle Speed Meter	Vehicle speed/Min.: 0 (0), Max.: 255 (158)	Almost same as actual vehicle speed (when driving)	Unit: km/h (mph)
Engine Rpm	Engine speed/Min.: 0, Max.: 12750	Idling: 700 to 800	Unit: rpm
Coolant Temperature	Engine coolant temperature/Min.: -40 (-40), Max.: 140 (284)	After warming up: 80 to 105 (176 to 221)	• Unit: °C (°F). • If the value is -40 (-40): The sensor circuit is open. • If the value is 140 (284): The sensor circuit is shorted.
Fuel Input	Fuel sender gauge input/Min.: 0, Max.: 127.5	Fuel sender input value	Unit: L
Sub Fuel Input	Fuel sender gauge input/Min.: 0, Max.: 127.5	Fuel sender input value	Unit: L
Rheostat value	Light control rheostat switch input/Min.: 0, Max.: 100	Light control rheostat switch is fully turned left (0) → fully turned right (100)	Unit: %
Communication ECM/Meter DTC 3	ECM communication stop history/Rec or Unrec	Rec: DTC stored Unrec: DTC not stored	-
ECM ODO (History 3)	ECM odometer history/Min.: 0, Max.: 999999	With history: 0 to 999999 Without history: ffffffh	-
Communication			

ECM/Meter DTC 2	ECM communication stop history/Rec or Unrec	Rec: DTC stored Unrec: DTC not stored	-
ECM ODO (History 2)	ECM odometer history/Min.: 0, Max.: 999999	With history: 0 to 999999 Without history: ffffffh	-
Communication ECM/Meter DTC 1	ECM communication stop history/Rec or Unrec	Rec: DTC stored Unrec: DTC not stored	-
ECM ODO (History 1)	ECM odometer history/Min.: 0, Max.: 999999	With history: 0 to 999999 Without history: ffffffh	-
Communication ABS/Meter DTC 3	Skid control ECU communication stop history/Rec or Unrec	Rec: DTC stored Unrec: DTC not stored	-
ABS/VSC ODO (History 3)	Skid control ECU odometer history/Min.: 0, Max.: 999999	With history: 0 to 999999 Without history: ffffffh	-
Communication ABS/Meter DTC 2	Skid control ECU communication stop history/Rec or Unrec	Rec: DTC stored Unrec: DTC not stored	-
ABS/VSC ODO (History 2)	Skid control ECU odometer history/Min.: 0, Max.: 999999	With history: 0 to 999999 Without history: ffffffh	-
Communication ABS/Meter DTC 1	Skid control ECU communication stop history/Rec or Unrec	Rec: DTC stored Unrec: DTC not stored	-
ABS/VSC ODO (History 1)	Skid control ECU odometer history/Min.: 0, Max.: 999999	With history: 0 to 999999 Without history: ffffffh	-
Units By Region	Units of display setting / Km/l JP, Km/l, MI/g US or MI/g UK	Displays units setting	-
Language	Language of display setting/English, Spanish, French, German or Italian	Displays language setting	-
Driver Side Seatbelt Warning Buzzer	Front driver side seat belt warning buzzer setting/ON or OFF	ON: Front driver side seat belt warning buzzer ON setting OFF: Front driver side seat belt warning buzzer OFF setting	-
P-Seatbelt Warning Buzzer	Front passenger side seat belt warning buzzer setting/ON or OFF	ON: Front passenger side seat belt warning buzzer ON setting OFF: Front passenger side seat belt warning buzzer OFF setting	-
+B Voltage Value	+B voltage/Min.: 0, Max.: 25.5	Below 1 to 14	Unit: V

Engine

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Engine speed	Engine speed/ Min.: 0 rpm, Max.: 16383 rpm	650 to 750 rpm: Idling	-
Vehicle Speed	Vehicle speed/ Min.: 0 km/h, Max.: 255 km/h	Actual vehicle speed	The speed is indicated on the speedometer.
Coolant Temp	Engine coolant temperature/ Min.: -40°C, Max.: 140°C	After warming up: 80 to 100°C (176 to 212°F)	If the value is -40°C (-40°F): The sensor circuit is open. If the value is 140°C (284°F): The sensor circuit is shorted.

ACTIVE TEST

HINT:

Using the intelligent tester to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Combination Meter / Active Test.

e. According to the display on the intelligent tester, perform the Active Test.

Combination Meter

Tester Display	Test Part	Control Range	Diagnostic Note

Speed Meter Operation*1	Speedometer	0, 40, 80, 120, 160, 200, 240 or 280	Perform the test with the vehicle stopped and the engine idling.
Tachometer operation	Tachometer	0, 1000, 2000, 3000, 4000, 5000, 6000 or 7000	Perform the test with the vehicle stopped and the engine idling.
Fuel Meter Operation	Fuel receiver gauge	EMPTY, 1/2 or FULL	Perform the test with the vehicle stopped and the engine idling.
Volt Meter Operation	Voltmeter	0, 3, 6, 9, 12, 15 or 18	Perform the test with the vehicle stopped and the engine idling.
Oil Pressure Meter Operation	Oil pressure receiver gauge	LOW, 1/4, 1/2, 3/4 or HIGH	Perform the test with the vehicle stopped and the engine idling.
A/T Indicator operation 1	A/T indicator (normal mode)	P, R, N, D, 4, 3, 2 or L	Perform the test with the vehicle stopped and the engine idling.
A/T Indicator operation 2	A/T indicator (sequential mode)	Es, 5 or 6	Perform the test with the vehicle stopped and the engine idling.
Meter Display 1*2	All dots in multi-information display	ALL, 0, 1, 2, 3, 4, 5 or 6	Perform the test with the vehicle stopped and the engine idling.
Meter Display 2*2	All dots in multi-information display	7, 8 or 9	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Beam	BEAM indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Tail	TAIL indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Fr FOG	Fr. FOG indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Rr FOG*3	Rr. FOG indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Airbag	SRS warning light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Precrash*4	PCS indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. AFS	AFS OFF indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Driver Side Seat Belt	Driver side seat belt warning light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Front Passenger Side Seat Belt	Passenger side seat belt warning light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Doors All Open	All doors open light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Washer	Multi-information display	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Fuel	Low fuel warning light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Charge	CHARGE warning light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp ABS	ABS warning light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Slip	SLIP indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Brake	Brake warning light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Oil Level	Multi-information display	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp ECT PWR	ECT PWR indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Cruise	CRUISE main indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Lamp Over Speed*5	Speed limit indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. KEY	Multi-information display	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Master Warning	Master warning light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Clearance Sonar LCD	Multi-information display	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. VSC OFF	Multi-information display	ON or OFF	Perform the test with the vehicle stopped

			and the engine idling.
Indicat. 2nd START	2nd START indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Ctr DIFF LOCK	Center differential lock indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. 4LO	4LO indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. Ride Mode	ACCESS MODE indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. CRAWL	CRAWL indicator light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Indicat. A/T P	A/T P warning light	ON or OFF	Perform the test with the vehicle stopped and the engine idling.
Water Temperature Meter Operation	Engine coolant temperature receiver gauge	LOW, NORMAL or HIGH	Perform the test with the vehicle stopped and the engine idling.

*1:

- The doors will be locked automatically when performing the speedometer Active Test. This is a normal function.
- The needle position should be within the acceptable range.
- The displayed value has the same units (km/h, mph) as the main scale of the vehicle speedometer.

*2: If this Active Test is being performed and the engine switch is turned off and then on (IG), the A/T and ODO/TRIP display background may turn white. If this occurs, end this Active Test and turn the engine switch off.
*3: except Middle East
*4: w/ Pre-Crash Safety System
*5: for Middle East

Main Body

Tester Display	Test Part	Control Range	Diagnostic Note
Dimmer Signal	Illumination dimming operation	ON or OFF	-

for Preparation Click here

HINT:

If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.

Meter/gauge System

DTC Code	Detection Item	Trouble Area	See page
B1500	Fuel Sender Open Detected	- Harness or connector - Combination meter assembly - Fuel sender gauge assembly	Click here
B1501	Sub Fuel Sender Open Detected	- Harness or connector - Combination meter assembly - Fuel sender gauge assembly	Click here
U0100	Lost Communication with ECM / PCM "A"	CAN communication system	Click here
U0129	Lost Communication with Brake System Control Module	CAN communication system	Click here

for Preparation Click here

HINT:

If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.

Meter/gauge System

DTC Code	Detection Item	Trouble Area	See page
B1500	Fuel Sender Open Detected	- Harness or connector - Combination meter assembly - Fuel sender gauge assembly	Click here
B1501	Sub Fuel Sender Open Detected	- Harness or connector - Combination meter assembly - Fuel sender gauge assembly	Click here
U0100	Lost Communication with ECM / PCM "A"	CAN communication system	Click here
U0129	Lost Communication with Brake System Control Module	CAN communication system	Click here

DTC B1500 Fuel Sender Open Detected

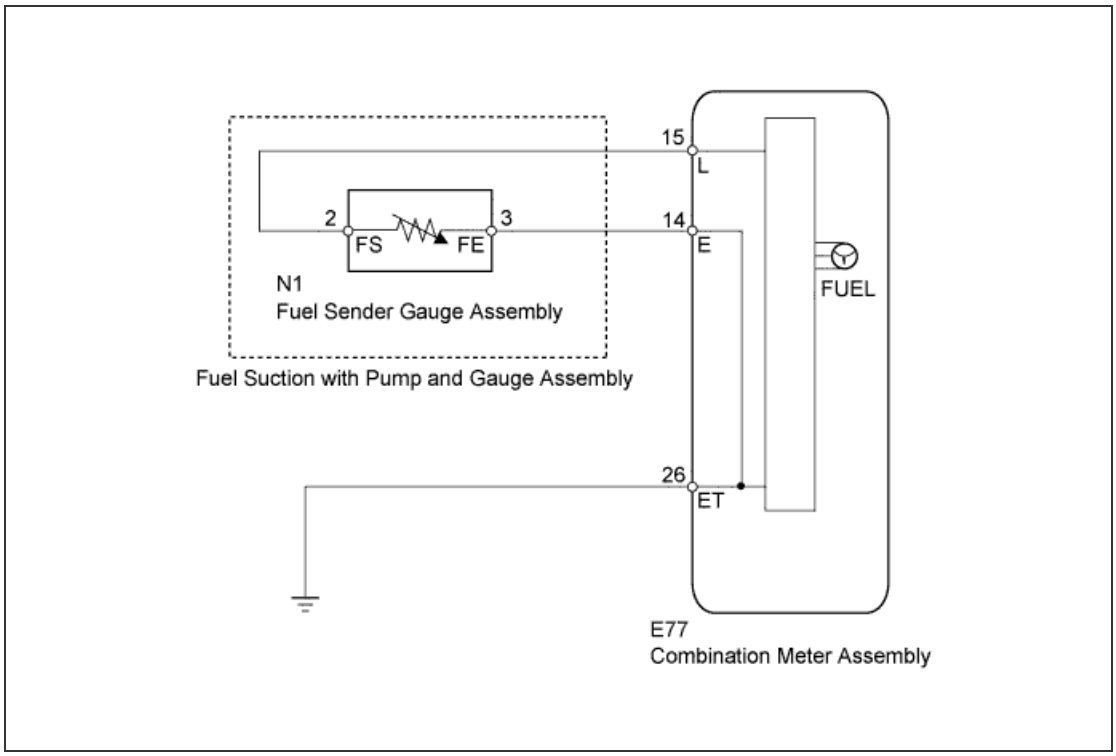
for Preparation Click here

DESCRIPTION

This DTC is stored when the combination meter detects a fuel sender gauge malfunction.

DTC Code	DTC Detection Condition	Trouble Area
B1500	When the combination meter detects a fuel sender gauge malfunction.	• Harness or connector • Combination meter assembly • Fuel suction with pump and gauge assembly • Fuel sender gauge assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (FUEL SENDER GAUGE)

a. Operate the intelligent tester according to the display and select the Data List (Click here).

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Fuel Input	Fuel sender gauge (main) input signal/Min.: 0, Max.: 127.5	Fuel sender input value	Unit: L

OK:

Fuel amount value displayed on the intelligent tester is almost the same as needle indication.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

2.CHECK HARNESS AND CONNECTOR (COMBINATION METER - FUEL SENDER GAUGE AND BODY GROUND)

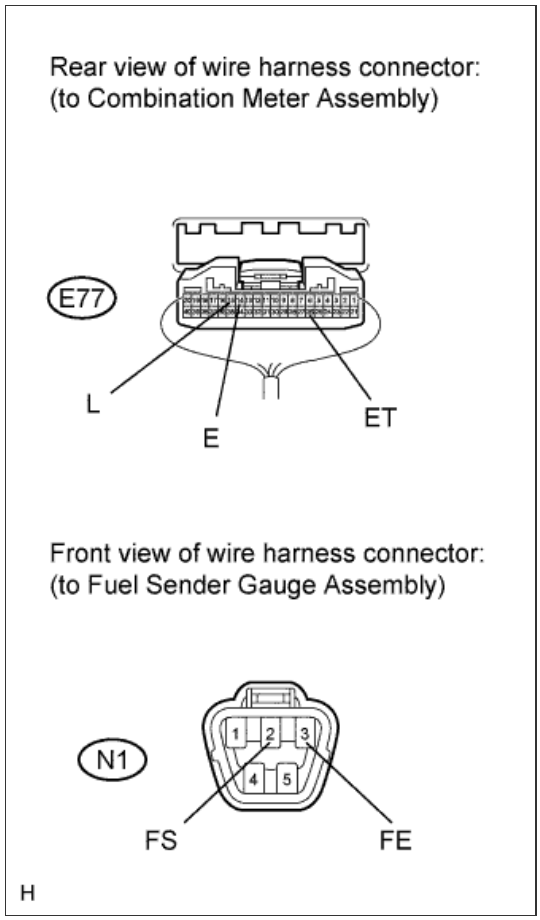
a. Disconnect the E77 meter connector.

b. Disconnect the N1 gauge connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E77-15 (L) - N1-2 (FS)	Always	Below 1 Ω
E77-14 (E) - N1-3 (FE)		
E77-26 (ET) - Body ground		
E77-15 (L) or N1-2 (FS) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

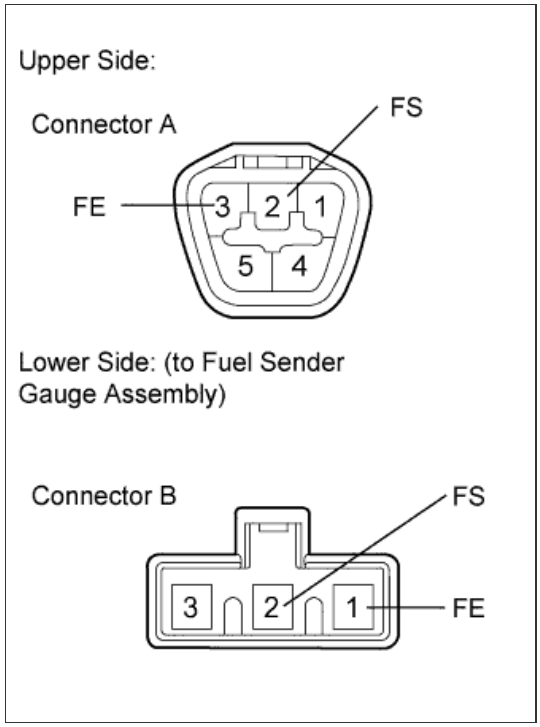
3.INSPECT FUEL SUCTION WITH PUMP AND GAUGE ASSEMBLY

a. Remove the fuel sender gauge (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A-2 (FS) - B-2 (FS)	Always	Below 1 Ω
A-3 (FE) - B-1 (FE)		



NG → REPLACE FUEL SUCTION WITH PUMP AND GAUGE ASSEMBLY (Click here)

OK

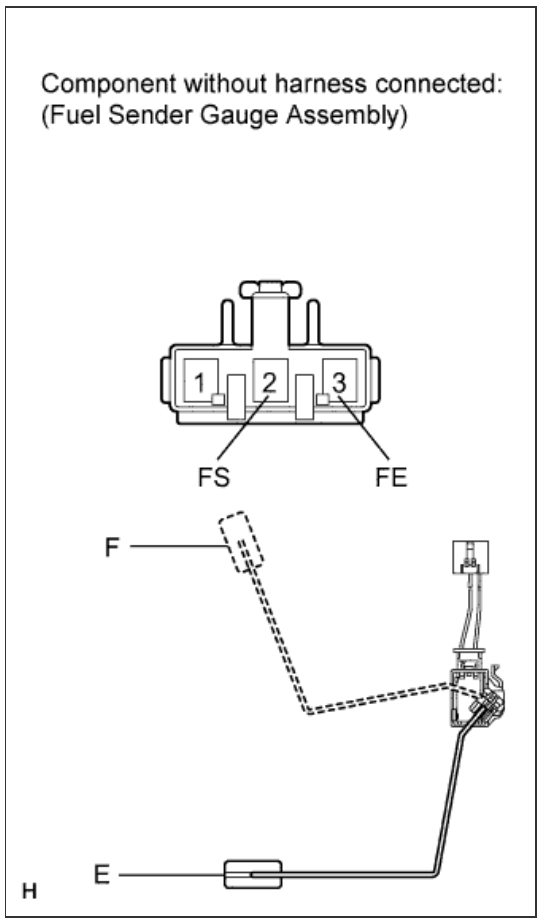
4.INSPECT FUEL SENDER GAUGE ASSEMBLY

a. Remove the fuel sender gauge (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
2 (FS) - 3 (FE)	Float level is F (upper)	12 to 18 Ω
	Float level is E (lower)	405 to 415 Ω



NG → REPLACE FUEL SENDER GAUGE ASSEMBLY (Click here)

OK → REPLACE COMBINATION METER ASSEMBLY (Click here)

DTC U0100 Lost Communication with ECM / PCM "A"

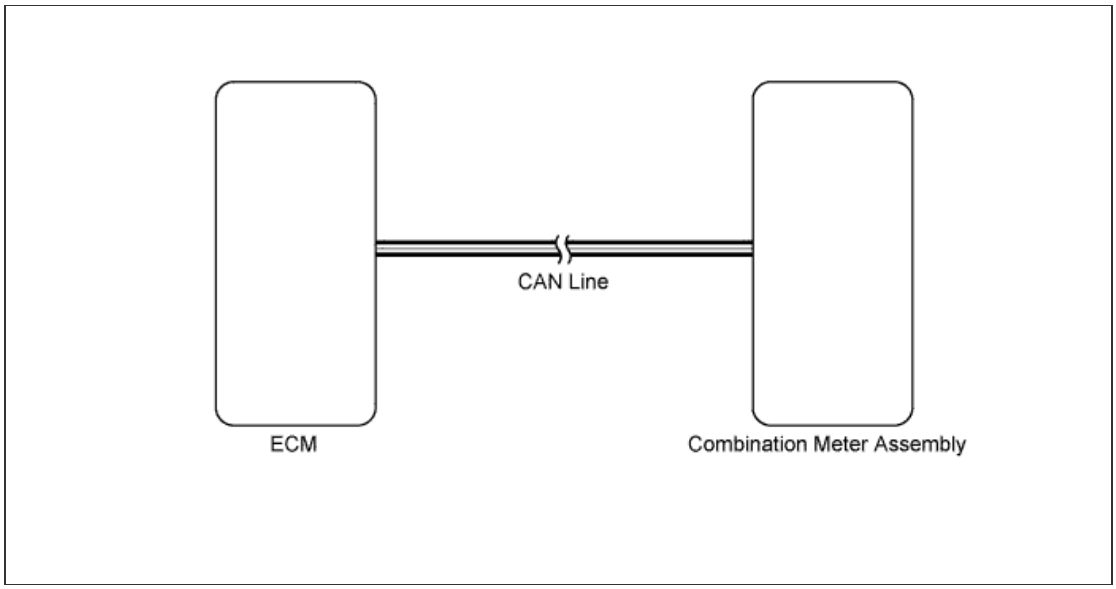
for Preparation Click here

DESCRIPTION

The combination meter communicates with the ECM via the CAN line.

DTC Code	DTC Detection Condition	Trouble Area
U0100	When the vehicle speed is 5 km/h (3 mph) or more and IG voltage is 10.5 V or higher while no communication with the ECM continues for 3 seconds or more, or when there is no communication with the ECM and skid control ECU for 60 seconds or more.	CAN communication system

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs and note any codes that are output (Click here).

b. Clear the DTCs (Click here).

c. Recheck for DTCs (Click here).

Result

Result	Proceed to
CAN communication system DTC is not output	A
CAN communication system (for LHD) DTC is output	B
CAN communication system (for RHD) DTC is output	C

HINT:

If CAN communication system DTC U0100 and another DTC are output at the same time, perform troubleshooting for CAN communication system DTC U0100 first.

B → Go to CAN COMMUNICATION SYSTEM (Click here)

C → Go to CAN COMMUNICATION SYSTEM (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1500 Fuel Sender Open Detected

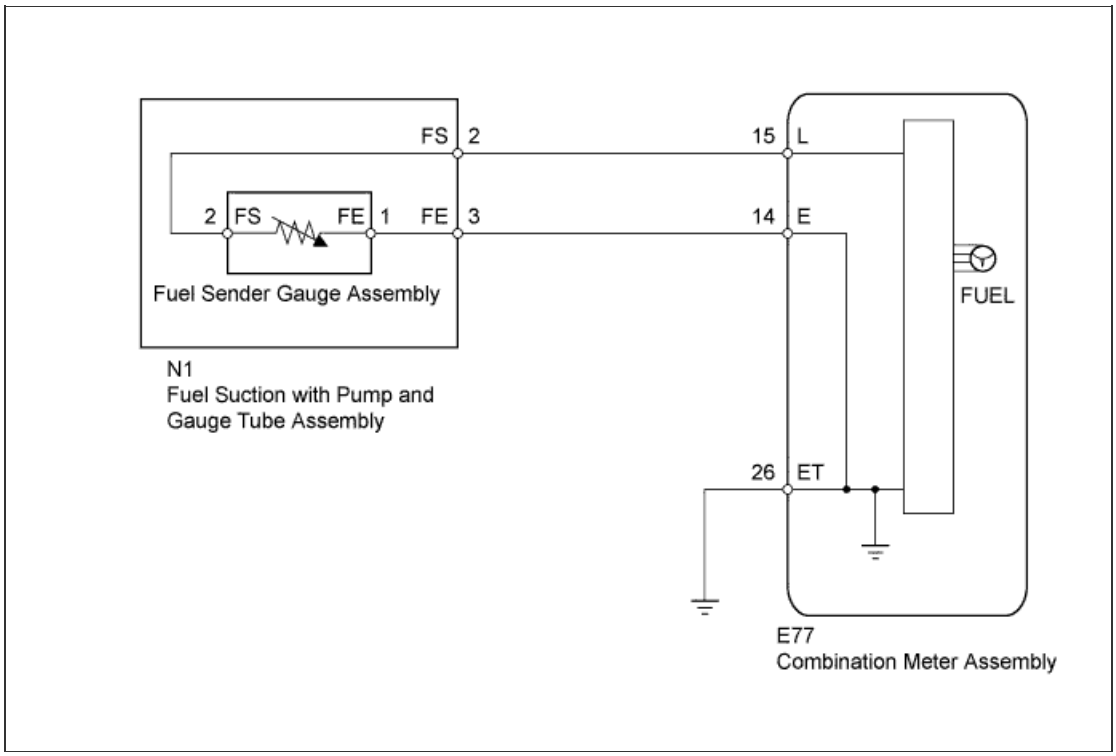
for Preparation Click here

DESCRIPTION

This DTC is stored when the combination meter detects a fuel sender gauge malfunction.

DTC Code	DTC Detection Condition	Trouble Area
B1500	When the combination meter detects a fuel sender gauge malfunction.	• Harness or connector • Combination meter assembly • Fuel suction with pump and gauge tube assembly • Fuel sender gauge assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (FUEL SENDER GAUGE)

a. Operate the intelligent tester according to the display and select the Data List (Click here).

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Fuel Input	Fuel sender gauge (main) input signal/Min.: 0, Max.: 127.5	Fuel sender input value	Unit: L

OK:

Fuel amount value displayed on the intelligent tester is almost the same as needle indication.

NG → **Go to step 2**

OK →

REPLACE COMBINATION METER ASSEMBLY (Click here)

2.CHECK HARNESS AND CONNECTOR (COMBINATION METER - PUMP AND GAUGE AND BODY GROUND)

a. Disconnect the E77 combination meter assembly connector.

b. Disconnect the N1 fuel suction with pump and gauge tube assembly connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E77-15 (L) - N1-2 (FS)	Always	Below 1 Ω
E77-14 (E) - N1-3 (FE)	Always	Below 1 Ω
E77-26 (ET) - Body ground	Always	Below 1 Ω
E77-15 (L) or N1-2 (FS) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.INSPECT FUEL SUCTION WITH PUMP AND GAUGE TUBE ASSEMBLY

a. Remove the fuel sender gauge assembly (Click here).

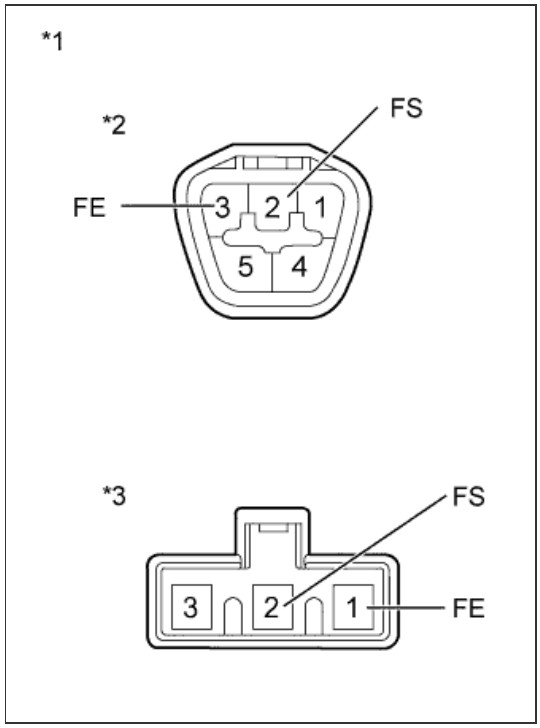
b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A-2 (FS) - B-2 (FS)	Always	Below 1 Ω
A-3 (FE) - B-1 (FE)	Always	Below 1 Ω

Text in Illustration

*1	Component without harness connected (Fuel Suction with Pump and Gauge Tube Assembly)
*2	Connector A
*3	Connector B



NG → REPLACE FUEL SUCTION WITH PUMP AND GAUGE TUBE ASSEMBLY (Click here)

OK

4.INSPECT FUEL SENDER GAUGE ASSEMBLY

a. Remove the fuel sender gauge assembly (Click here).

b. Measure the resistance according to the value(s) in the table below.

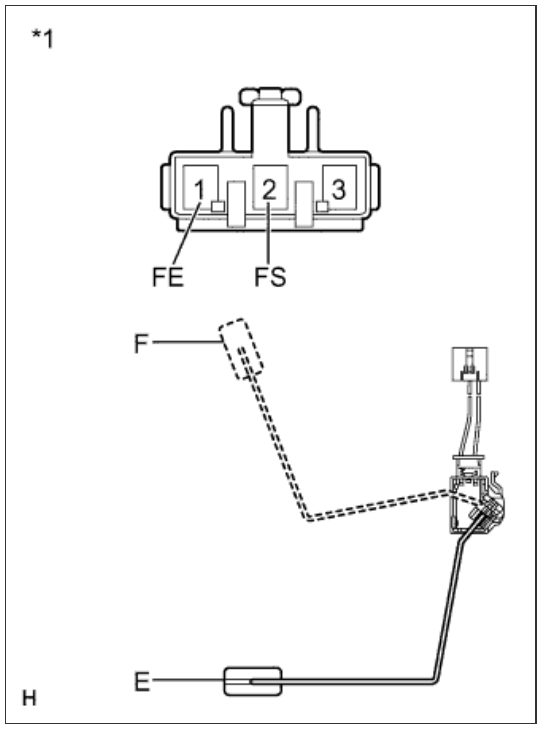
Standard Resistance:

Tester Connection	Condition	Specified Condition
2 (FS) - 1 (FE)	Float level is F (upper)	13.5 to 16.5 Ω
	Float level is E	

	(lower)	405.5 to 414.5 Ω

Text in Illustration

*1	Component without harness connected (Fuel Sender Gauge Assembly)



NG → REPLACE FUEL SENDER GAUGE ASSEMBLY (Click here)

OK → REPLACE COMBINATION METER ASSEMBLY (Click here)

DTC U0129 Lost Communication with Brake System Control Module

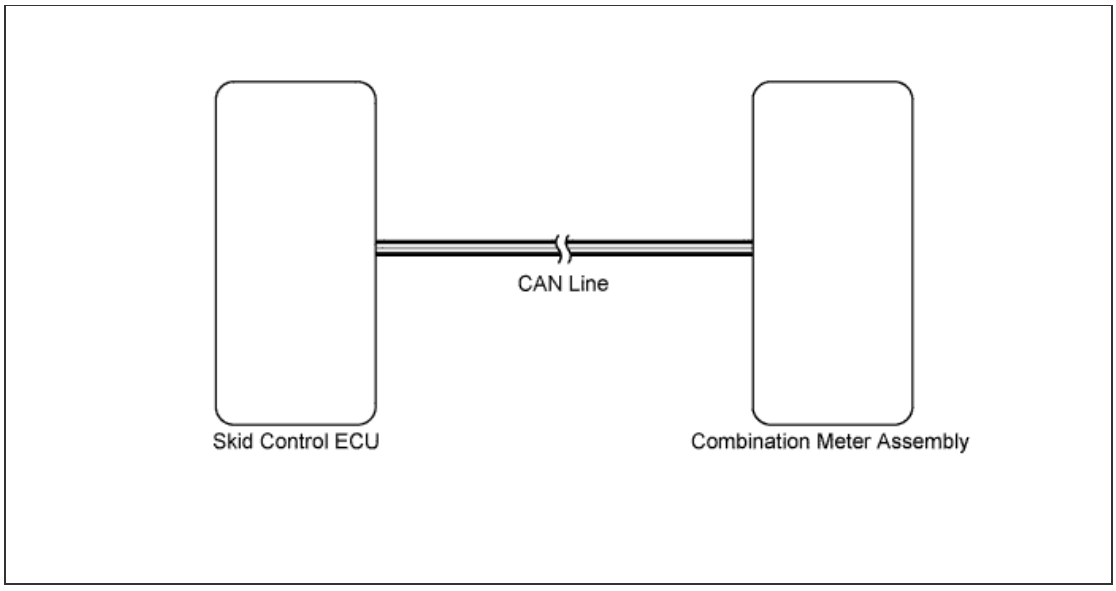
for Preparation Click here

DESCRIPTION

The combination meter communicates with the skid control ECU via the CAN line.

DTC Code	DTC Detection Condition	Trouble Area
U0129	When 15 seconds have elapsed after the engine is started and IG voltage is 10.5 V or higher while no communication with the skid control ECU continues for 3 seconds or more, or when there is no communication with the ECM and skid control ECU for 60 seconds or more.	CAN communication system

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs and note any codes that are output (Click here).

b. Clear the DTCs (Click here).

c. Recheck for DTCs (Click here).

Result

Result	Proceed to
CAN communication system DTC is not output	A
CAN communication system (for LHD) DTC is output	B
CAN communication system (for RHD) DTC is output	C

HINT:

If CAN communication system DTC U0129 and another DTC are output at the same time, perform troubleshooting for CAN communication system DTC U0129 first.

B → Go to CAN COMMUNICATION SYSTEM (Click here)

C → Go to CAN COMMUNICATION SYSTEM (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1501 Sub Fuel Sender Open Detected

for Preparation Click here

DESCRIPTION

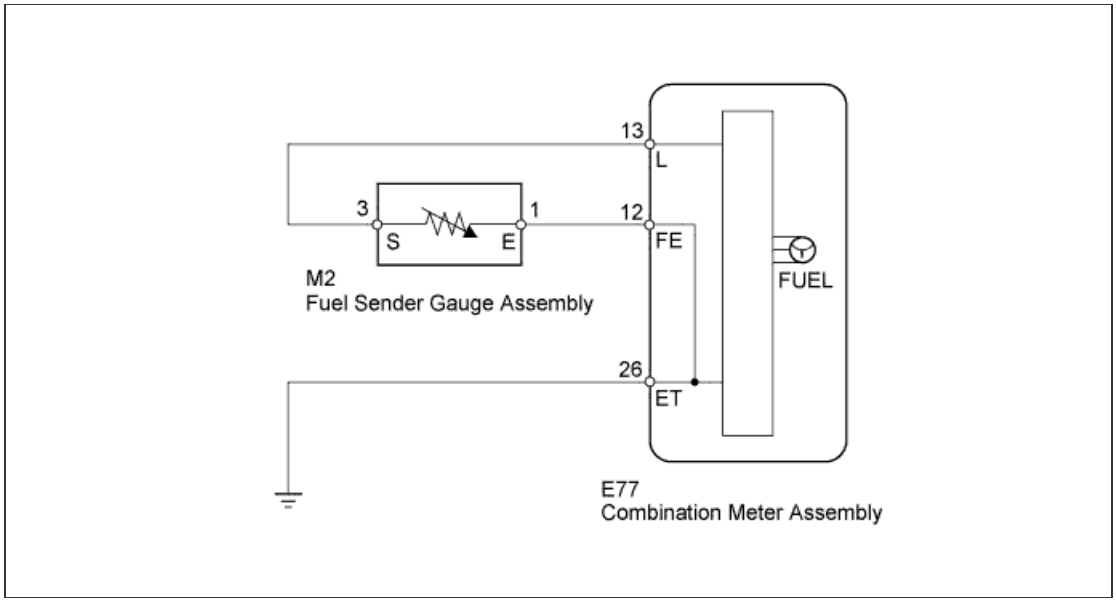
HINT:

Trouble code B1501 is only output for double tank equipped vehicles.

This DTC is stored when the combination meter detects a fuel sender gauge malfunction.

DTC Code	DTC Detection Condition	Trouble Area
B1501	When the combination meter detects a fuel sender gauge malfunction.	• Harness or connector • Combination meter assembly • Fuel sender gauge assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (FUEL SENDER GAUGE)

a. Operate the intelligent tester according to the display and select the Data List (Click here).

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Fuel Input	Fuel sender gauge (main) input signal/Min.: 0, Max.: 127.5	Fuel sender input value	Unit: L

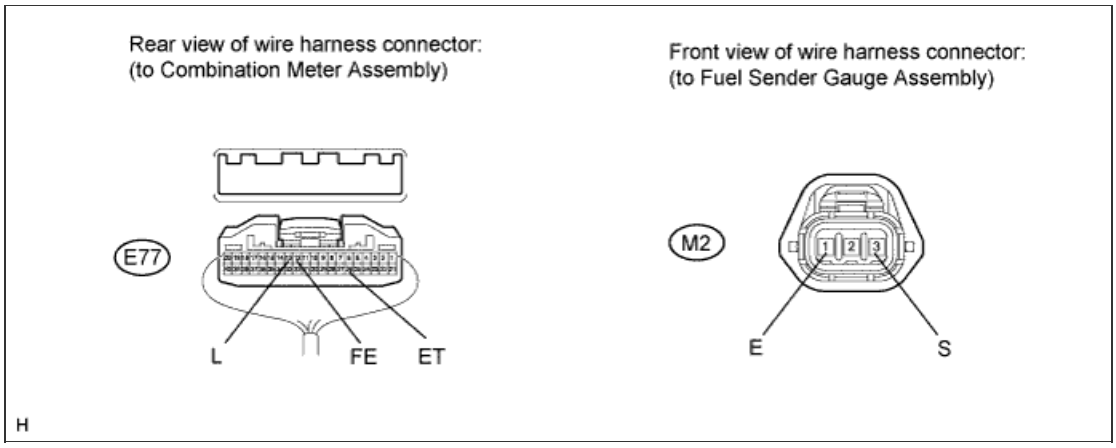
OK:

Fuel amount value displayed on the intelligent tester is almost same as needle indication.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

2.CHECK HARNESS AND CONNECTOR (COMBINATION METER - FUEL SENDER GAUGE AND BODY GROUND)



a. Disconnect the E77 meter connector.

b. Disconnect the M2 gauge connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E77-13 (L) - M2-3 (S)	Always	Below 1 Ω
E77-12 (FE) - M2-1 (E)		
E77-26 (ET) - Body ground		
E77-13 (L) or M2-3 (S) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

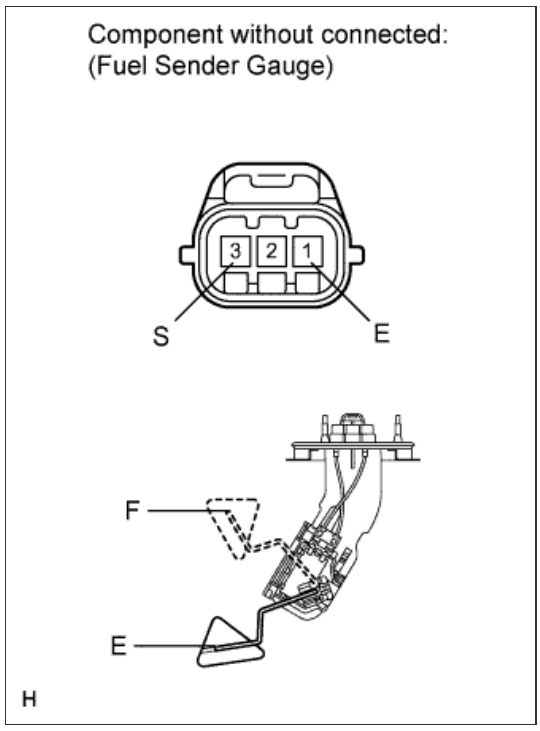
3.INSPECT FUEL SENDER GAUGE ASSEMBLY

a. Remove the fuel sender gauge (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
3 (S) - 1 (E)	Float level is F (upper)	12 to 18 Ω
	Float level is E (lower)	405 to 415 Ω



NG → REPLACE FUEL SENDER GAUGE ASSEMBLY (Click here)

OK

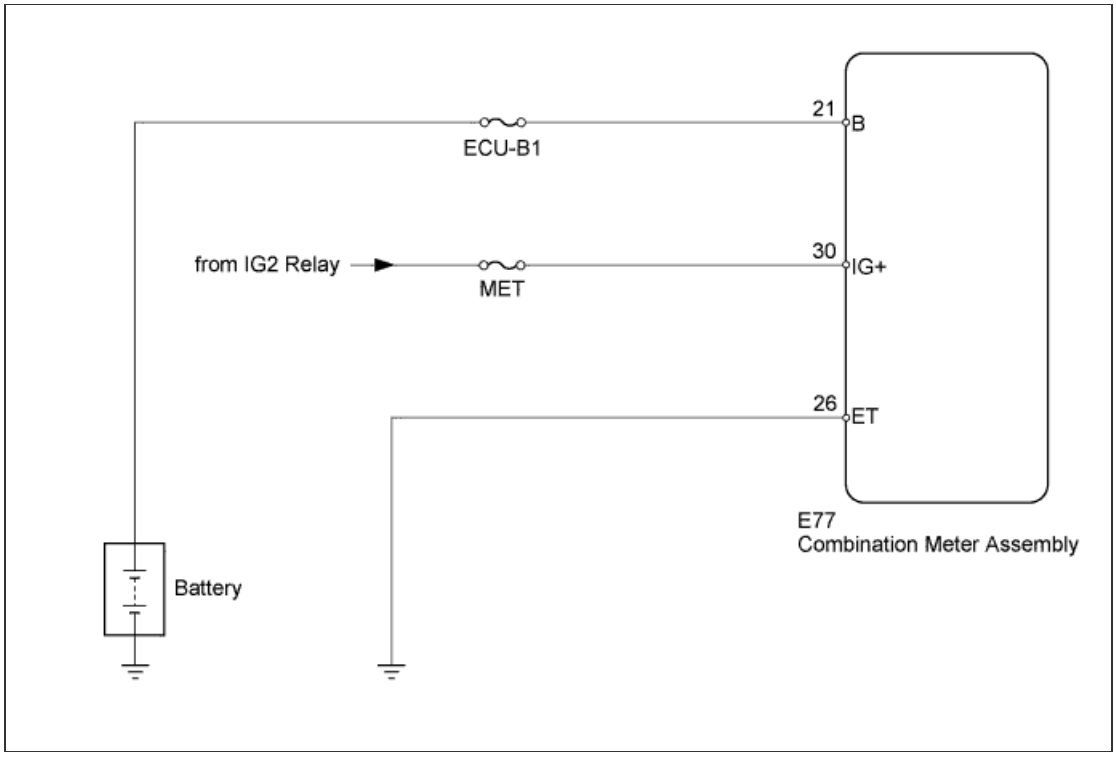
REPLACE COMBINATION METER ASSEMBLY (Click here)

for Preparation Click here

DESCRIPTION

This circuit is the power source circuit for the combination meter. This circuit provides 2 power source types: one is a constant power source mainly used as a backup power source, and the other is a power source mainly used for signal transmission. The constant power source is mainly used as a backup power source for the meter CPU. However, it is also used for communication. If a voltage of 12 V is not applied to terminal IG+ when the engine switch is on (IG), indicators will not operate.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (MET, ECU-B1)

a. Remove the MET and ECU-B1 fuses from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
MET fuse	Always	Below 1 Ω
ECU-B1 fuse		

NG → REPLACE FUSE

OK

2.CHECK HARNESS AND CONNECTOR (COMBINATION METER ASSEMBLY - BATTERY AND BODY GROUND)

a. Disconnect the E77 meter connector.

b. Measure the resistance and voltage according to the value(s) in the tables below.

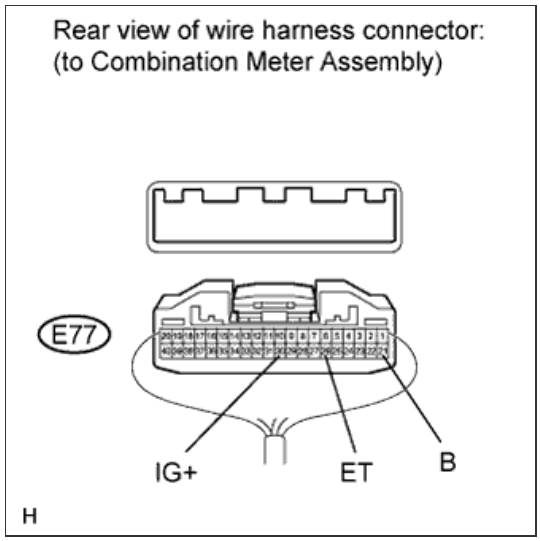
Standard Resistance:

Tester Connection	Condition	Specified Condition

E77-26 (ET) - Body ground	Always	Below 1 Ω

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E77-21 (B) - Body ground	Always	11 to 14 V
E77-30 (IG+) - Body ground	Engine switch on (IG)	



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

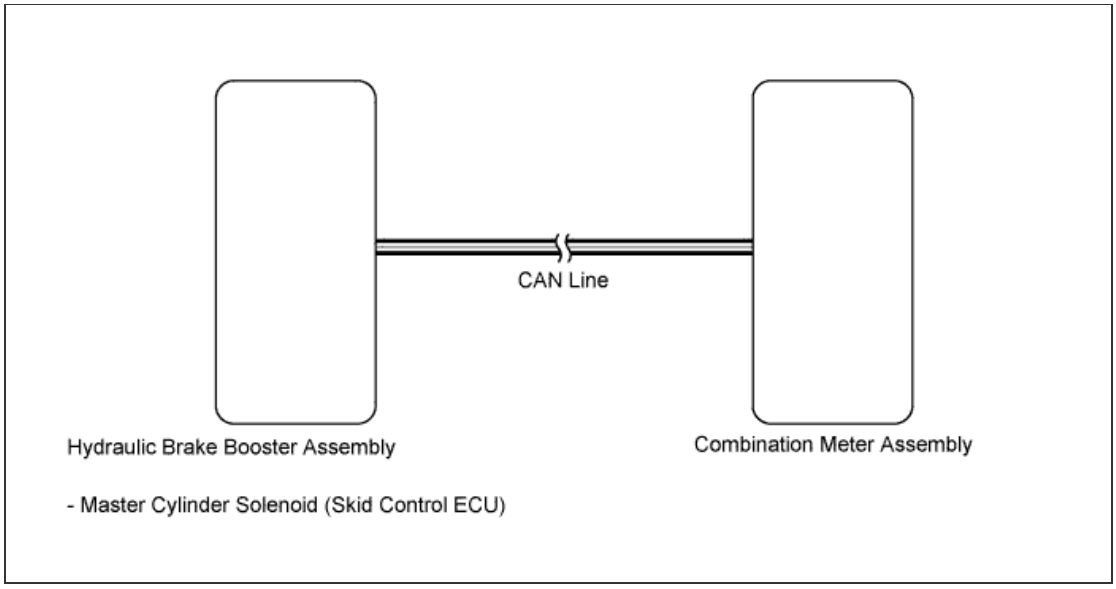
REPLACE COMBINATION METER ASSEMBLY (Click here)

for Preparation Click here

DESCRIPTION

The combination meter receives vehicle speed signals from the skid control ECU via the CAN line. The vehicle speed sensor outputs a voltage that varies according to the vehicle speed. The skid control ECU supplies power to the vehicle speed sensor. The skid control ECU calculates vehicle speed based on the pulses of the voltage.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK CAN COMMUNICATION

a. Check for DTCs (Click here).

Result

Result	Proceed to
CAN communication DTC is not output	A
CAN communication (for LHD) DTC is output	B
CAN communication (for RHD) DTC is output	C

B → Go to CAN COMMUNICATION SYSTEM (Click here)

C → Go to CAN COMMUNICATION SYSTEM (Click here)

A

2.CHECK VEHICLE STABILITY CONTROL SYSTEM (VEHICLE SPEED)

a. Check for DTCs (Click here).

OK:
No DTCs are output.

NG → Go to DIAGNOSTIC TROUBLE CODE CHART (Click here)

OK

3.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (SPEEDOMETER)

a. Operate the intelligent tester according to the display and select the Active Test (Click here).

Combination Meter

Tester Display	Test Part	Control Range	Diagnostic Note
Speed Meter Operation	Speedometer	0, 40, 80, 120, 160, 200, 240 or 280	Perform the test with the vehicle stopped and the engine idling.

HINT:

- **Make sure that the vehicle is stopped and the engine is idling. The doors will be locked automatically when performing the speedometer Active Test. This is a normal function.**
- **The displayed value has the same units (km/h, mph) as the main scale of the vehicle speedometer.**
- **The needle position should be within the acceptable tolerance.**

OK:
Needle indication is normal.

NG → **REPLACE COMBINATION METER ASSEMBLY (Click here)**

OK

4.READ VALUE USING INTELLIGENT TESTER (VEHICLE SPEED)

a. Operate the intelligent tester according to the display and select the Data List (Click here).

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Vehicle Speed meter	Vehicle speed/Min.: 0 (0), Max.: 255 (158)	Almost same as actual speed (when driving)	Unit: km/h (mph)

OK:
Vehicle speed displayed on the intelligent tester is almost the same as actual vehicle speed measured using speedometer tester (calibrated chassis dynamometer).

NG → **REPLACE COMBINATION METER ASSEMBLY (Click here)**

OK

5.READ VALUE USING INTELLIGENT TESTER (WHEEL SPEED SENSOR)

a. Operate the intelligent tester according to the display and select the Data List (Click here).

ABS/VSC/TRAC

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
FR Wheel Speed	Wheel speed sensor FR reading/Min.: 0 (0), Max.: 326 (202)	Actual wheel speed	A similar speed is indicated on the speedometer.
FL Wheel Speed	Wheel speed sensor FL reading/Min.: 0 (0), Max.: 326 (202)	Actual wheel speed	A similar speed is indicated on the speedometer.
RR Wheel Speed	Wheel speed sensor RR reading/Min.: 0 (0), Max.: 326 (202)	Actual wheel speed	A similar speed is indicated on the speedometer.
RL Wheel Speed	Wheel speed sensor RL reading/Min.: 0 (0), Max.: 326 (202)	Actual wheel speed	A similar speed is indicated on the speedometer.

OK:
Wheel speed displayed on the intelligent tester is almost the same as actual wheel speed measured using speedometer tester (calibrated chassis dynamometer).

NG → **Go to VEHICLE STABILITY CONTROL SYSTEM (Click here)**

OK

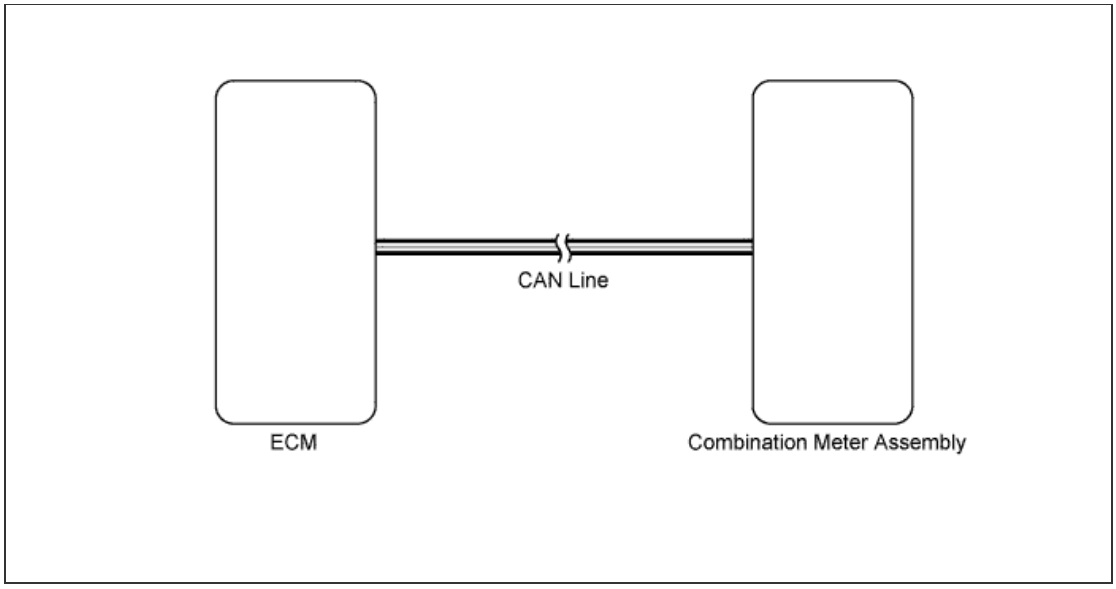
REPLACE COMBINATION METER ASSEMBLY (Click here)

for Preparation Click here

DESCRIPTION

The combination meter receives engine speed signals from the ECM via the CAN line. The combination meter displays engine speed data that is calculated based on the data received from the ECM.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK CAN COMMUNICATION SYSTEM

a. Check for DTCs (Click here).

Result

Result	Proceed to
CAN communication system DTC is not output	A
CAN communication system (for LHD) DTC is output	B
CAN communication system (for RHD) DTC is output	C

B → Go to CAN COMMUNICATION SYSTEM (Click here)

C → Go to CAN COMMUNICATION SYSTEM (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (TACHOMETER)

a. Operate the intelligent tester according to the display and select the Active Test (Click here).

Combination Meter

Tester Display	Test Part	Control Range	Diagnostic Note
TachoMeter Operation	Tachometer	0, 1000, 2000, 3000, 4000, 5000, 6000, 7000	Perform the test with the vehicle stopped and the engine idling.

HINT:

Make sure that the vehicle is stopped and the engine is idling.

OK:

Needle indication is normal.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

3.READ VALUE USING INTELLIGENT TESTER (TACHOMETER)

a. Operate the intelligent tester according to the display and select the Data List (Click here).

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Engine Rpm	Engine speed/Min.: 0, Max.: 12750	Idling: 700 to 800	Unit: rpm

OK:

Engine speed displayed on the intelligent tester is almost the same as actual engine speed.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

4.READ VALUE USING INTELLIGENT TESTER (ENGINE SPEED)

a. Operate the intelligent tester according to the display and select the Data List (Click here).

Result

Result	Proceed to
Engine speed displayed on intelligent tester is almost same as actual engine speed	A
Engine speed displayed on intelligent tester is not same as actual engine speed	B

B → Go to SFI SYSTEM (Click here)

A

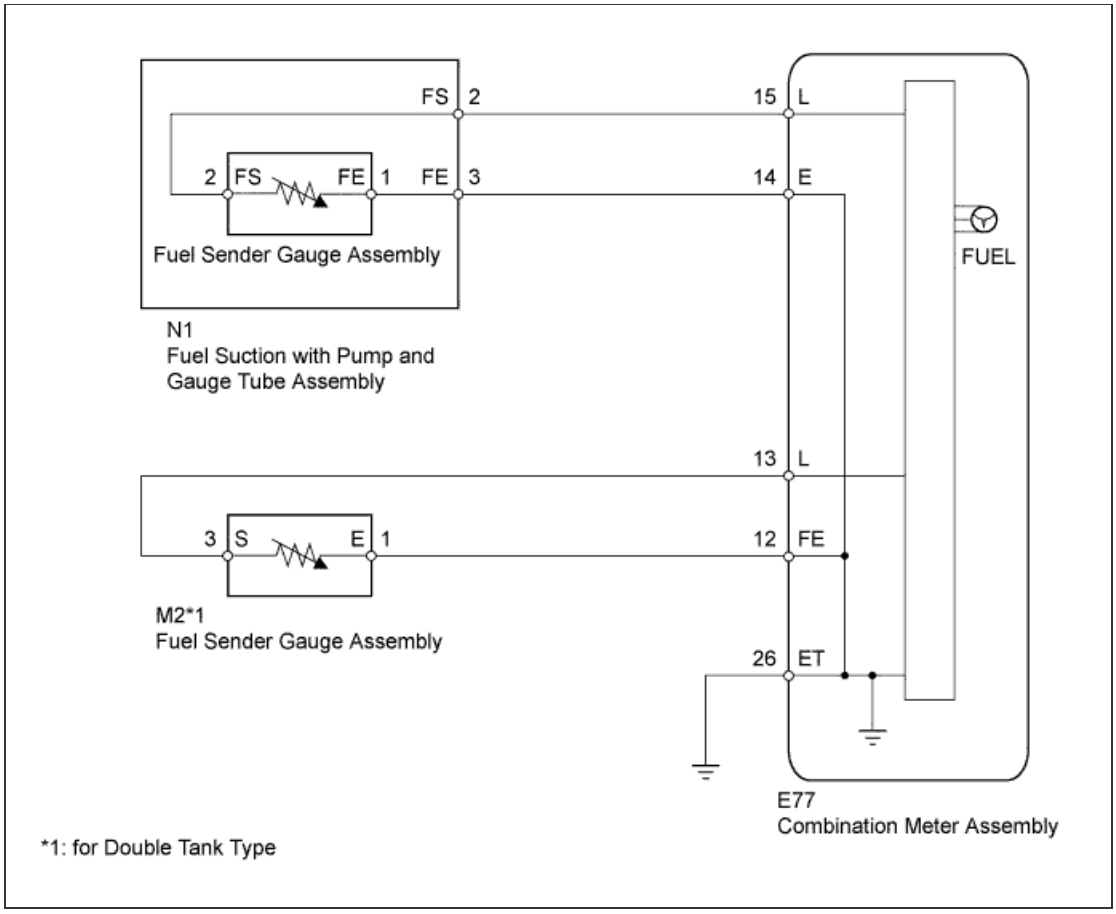
REPLACE COMBINATION METER ASSEMBLY (Click here)

for Preparation Click here

DESCRIPTION

The fuel sender gauge has a variable resistance mechanism. The resistance decreases when the fuel amount increases, and the resistance increases when the fuel amount decreases. The fuel receiver gauge changes based on the resistance of the fuel sender gauge.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1500 or B1501 is not output	A
DTC B1500 is output	B
DTC B1501 is output	C

B → GO TO DTC B1500 (Click here)

C → GO TO DTC B1501 (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (FUEL METER)

a. Operate the intelligent tester according to the display and select Active Test (Click here).

Combination Meter

Tester Display	Test Part	Control Range	Diagnostic Note
Fuel Meter Operation	Fuel receiver gauge	EMPTY, 1/2 or FULL	Perform the test with the vehicle stopped and engine idling.

OK:

Needle indication is normal.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

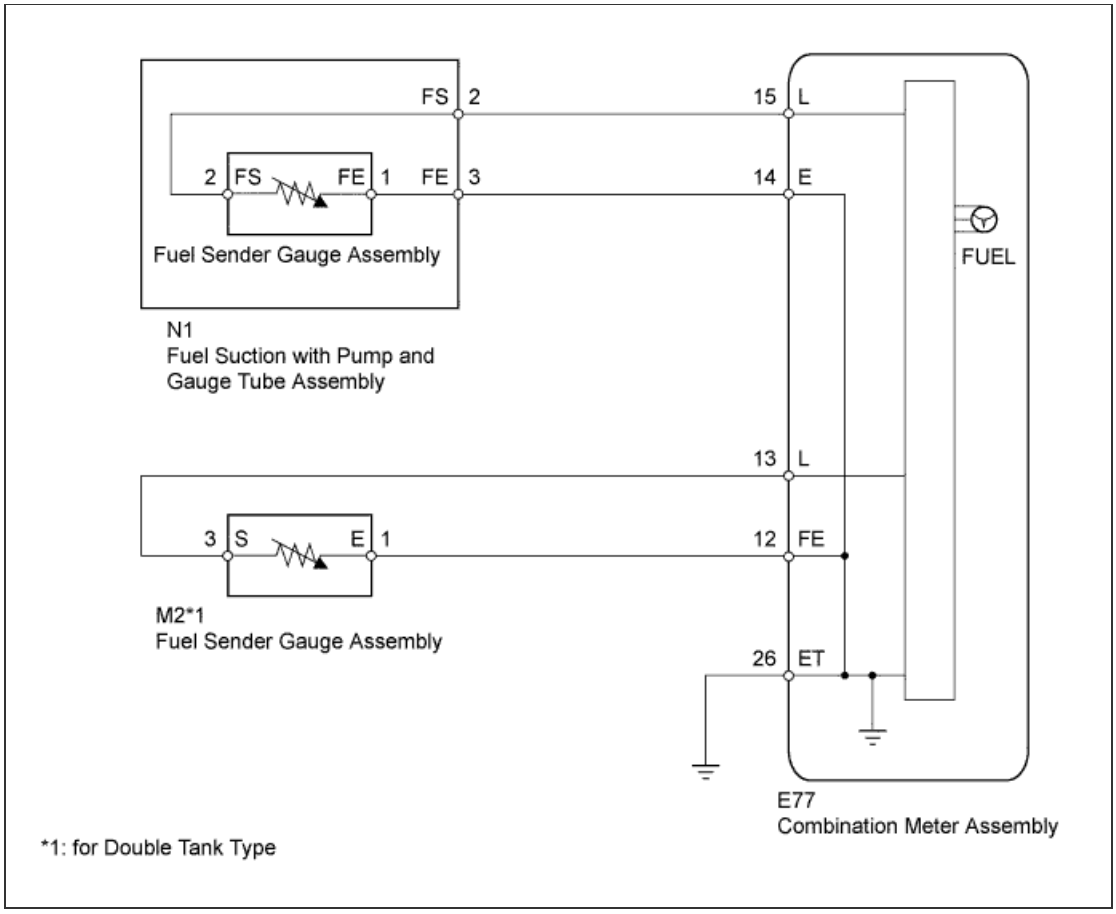
PROCEED TO NEXT INSPECTION PROCEDURE SHOWN IN PROBLEM SYMPTOMS TABLE (Click here)

for Preparation Click here

DESCRIPTION

The fuel sender gauge has a variable resistance mechanism. The resistance decreases when the fuel amount increases, and the resistance increases when the fuel amount decreases. The fuel receiver gauge changes based on the resistance of the fuel sender gauge.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1500 or B1501 is not output	A
DTC B1500 is output	B
DTC B1501 is output	C

B → GO TO DTC B1500 (Click here)

C → GO TO DTC B1501 (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (FUEL METER)

a. Operate the intelligent tester according to the display and select Active Test (Click here).

Combination Meter

Tester Display	Test Part	Control Range	Diagnostic Note
Fuel Meter Operation	Fuel receiver gauge	EMPTY, 1/2 or FULL	Perform the test with the vehicle stopped and engine idling.

OK:

Needle indication is normal.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

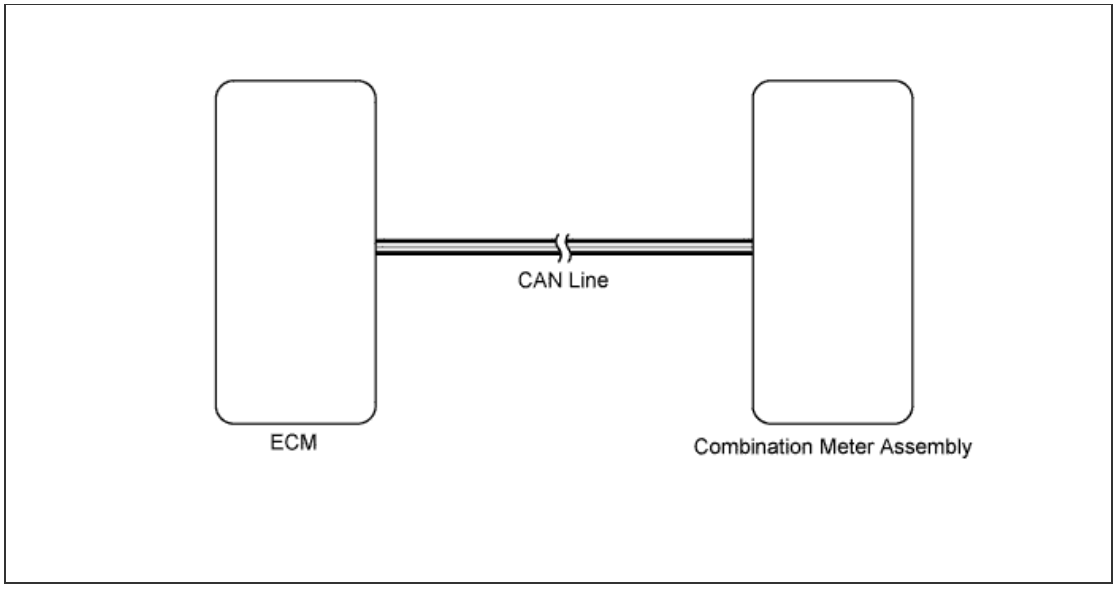
PROCEED TO NEXT INSPECTION PROCEDURE SHOWN IN PROBLEM SYMPTOMS TABLE (Click here)

for Preparation Click here

DESCRIPTION

In this circuit, the combination meter assembly receives engine coolant temperature signals from the ECM using CAN communication lines. The combination meter assembly displays an engine coolant temperature that is calculated based on the data received from the ECM.

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

If there is an open or short in the engine coolant temperature sensor circuit, an SFI system DTC is output. If output, perform troubleshooting on the SFI system first.

1.CHECK CAN COMMUNICATION SYSTEM

a. Check for DTCs (Click here).

Result

Result	Proceed to
CAN communication system DTC is not output	A
CAN communication system (for LHD) DTC is output	B
CAN communication system (for RHD) DTC is output	C

B → Go to CAN COMMUNICATION SYSTEM (Click here)

C → Go to CAN COMMUNICATION SYSTEM (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (COOLANT TEMP)

a. Operate the intelligent tester according to the display and select the Active Test (Click here).

Combination Meter

Tester Display	Test Part	Control Range	Diagnostic Note
Water Temperature Meter Operation	Engine coolant temperature receiver gauge	LOW, NORMAL or HIGH	Perform the test with the vehicle stopped and the engine idling.

HINT:

Confirm that the vehicle is stopped and the engine is idling.

OK:

Needle indication is normal.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK ↓

3.READ VALUE USING INTELLIGENT TESTER (COOLANT TEMPERATURE)

a. Operate the intelligent tester according to the display and select the Data List (Click here).

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Coolant Temperature	Engine coolant temperature/Min.: -40 (-40), Max.: 140 (284)	After warming up: 80 to 105 (176 to 221)	• Unit: °C (°F) • If the value is -40 (-40): The sensor circuit is open • If the value is 140 (284): The sensor circuit is shorted.

OK:

Coolant temperature displayed on the intelligent tester is between 80°C (176°F) and 105°C (221°F) after warming up.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK ↓

4.READ VALUE USING INTELLIGENT TESTER (ENGINE COOLANT TEMPERATURE)

a. Operate the intelligent tester according to the display and select Data List (Click here).

Engine

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Coolant Temp	Engine coolant temperature/Min.: -40°C (-40°F), Max.:140°C (284°F)	80 to 100°C (176 to 212°F): After warming up	If the value is -40°C (-40°F): the sensor circuit is open. If the value is 140°C (284°F): the sensor circuit is shorted.

OK:

Engine coolant temperature value displayed on the intelligent tester is almost the same as actual engine coolant temperature.

NG → Go to SFI SYSTEM (Click here)

OK ↓

5.REPLACE COMBINATION METER ASSEMBLY

a. Temporarily replace the combination meter with a new one (Click here).

NEXT ↓

6.CHECK COMBINATION METER ASSEMBLY

a. Check that the operation of the combination meter returns to normal (Click here).

OK:

Operation of combination meter returns to normal.

NG → REPLACE ECM (Click here)

OK

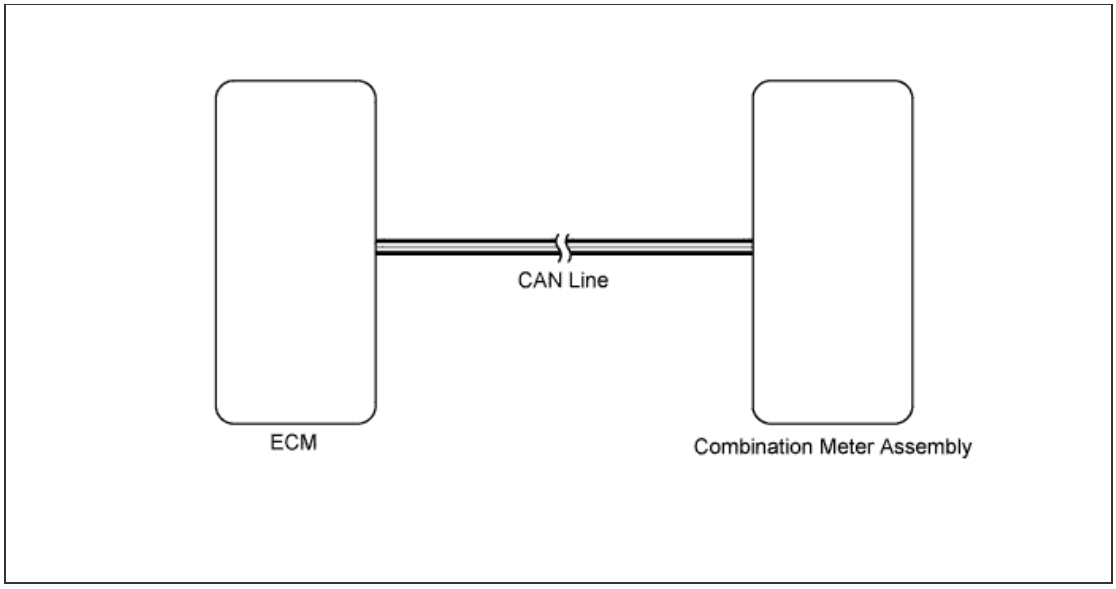
END (COMBINATION METER IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

In this circuit, the combination meter assembly receives engine coolant temperature signals from the ECM using CAN communication lines. The combination meter assembly displays an engine coolant temperature that is calculated based on the data received from the ECM.

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

If there is an open or short in the engine coolant temperature sensor circuit, an SFI system DTC is output. If output, perform troubleshooting on the SFI system first.

1.CHECK CAN COMMUNICATION SYSTEM

a. Check for DTCs (Click here).

Result

Result	Proceed to
CAN communication system DTC is not output	A
CAN communication system (for LHD) DTC is output	B
CAN communication system (for RHD) DTC is output	C

B → Go to CAN COMMUNICATION SYSTEM (Click here)

C → Go to CAN COMMUNICATION SYSTEM (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (COOLANT TEMP)

a. Operate the intelligent tester according to the display and select the Active Test (Click here).

Combination Meter

Tester Display	Test Part	Control Range	Diagnostic Note
Water Temperature Meter Operation	Engine coolant temperature receiver gauge	LOW, NORMAL or HIGH	Perform the test with the vehicle stopped and the engine idling.

HINT:

Confirm that the vehicle is stopped and the engine is idling.

OK:

Needle indication is normal.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK ↓

3.READ VALUE USING INTELLIGENT TESTER (COOLANT TEMPERATURE)

a. Operate the intelligent tester according to the display and select the Data List (Click here).

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Coolant Temperature	Engine coolant temperature/Min.: -40 (-40), Max.: 140 (284)	After warming up: 80 to 105 (176 to 221)	• Unit: °C (°F) • If the value is -40 (-40): The sensor circuit is open • If the value is 140 (284): The sensor circuit is shorted.

OK:

Coolant temperature displayed on the intelligent tester is between 80°C (176°F) and 105°C (221°F) after warming up.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK ↓

4.READ VALUE USING INTELLIGENT TESTER (ENGINE COOLANT TEMPERATURE)

a. Operate the intelligent tester according to the display and select Data List (Click here).

Engine

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Coolant Temp	Engine coolant temperature/Min.: -40°C (-40°F), Max.:140°C (284°F)	80 to 100°C (176 to 212°F): After warming up	If the value is -40°C (-40°F): the sensor circuit is open. If the value is 140°C (284°F): the sensor circuit is shorted.

OK:

Engine coolant temperature value displayed on the intelligent tester is almost the same as actual engine coolant temperature.

NG → Go to SFI SYSTEM (Click here)

OK ↓

5.REPLACE COMBINATION METER ASSEMBLY

a. Temporarily replace the combination meter with a new one (Click here).

NEXT ↓

6.CHECK COMBINATION METER ASSEMBLY

a. Check that the operation of the combination meter returns to normal (Click here).

OK:

Operation of combination meter returns to normal.

NG → REPLACE ECM (Click here)

OK

END (COMBINATION METER IS DEFECTIVE)

for Preparation Click here

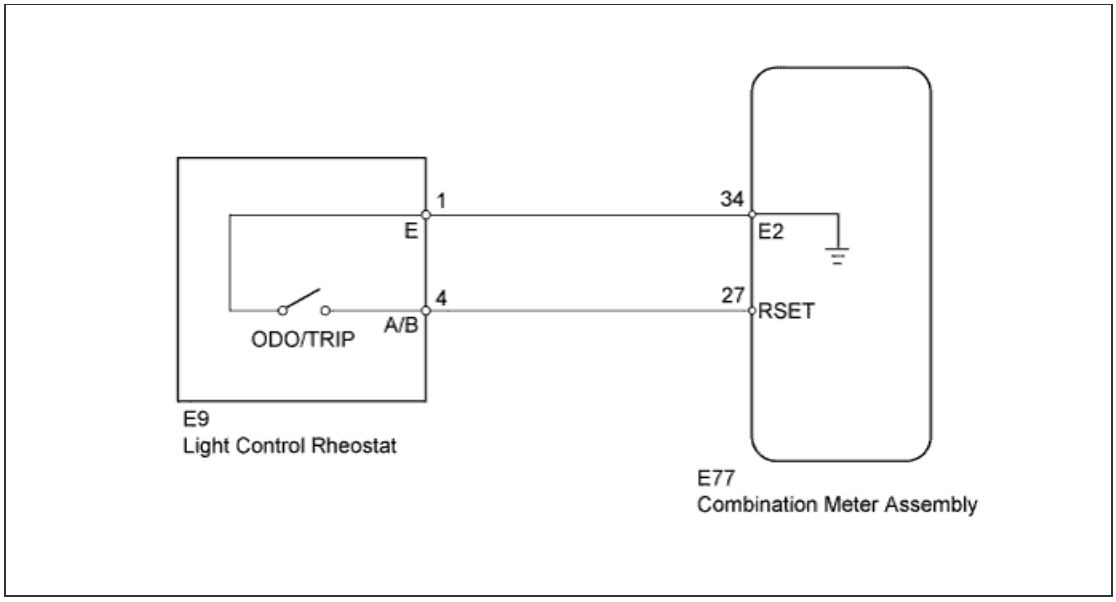
DESCRIPTION

The ODO/TRIP display of the meter changes each time the ODO/TRIP switch on the light control rheostat is pressed.

HINT:

For more information about changing between displays, refer to the owner's manual.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (LIGHT CONTROL RHEOSTAT)

a. Operate the intelligent tester according to the display and select the Data List (Click here).

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
ODO/TRIP Change SW	ODO/TRIP switch condition/ON or OFF	ON: ODO/TRIP switch pushed OFF: ODO/TRIP switch not pushed	-

OK:

Switch condition (ON/OFF) can be switched by actual operation.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

2.INSPECT LIGHT CONTROL RHEOSTAT (ODO/TRIP SWITCH)

a. Remove the light control rheostat (Click here).

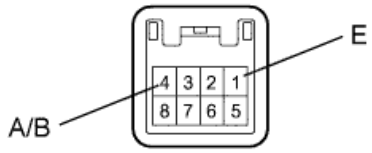
b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
	ODO/TRIP switch on (Pushed)	Below 100 Ω

4 (A/B) - 1 (E)	ODO/TRIP switch off (Not pushed)	1 MΩ or higher

Component without harness connected:
(Light Control Rheostat)



H

NG → REPLACE LIGHT CONTROL RHEOSTAT (Click here)

OK

3.CHECK HARNESS AND CONNECTOR (COMBINATION METER - LIGHT CONTROL RHEOSTAT)

a. Disconnect the E77 meter connector.

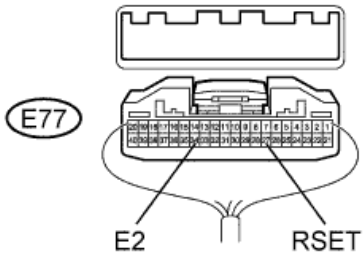
b. Disconnect the E9 switch connector.

c. Measure the resistance according to the value(s) in the table below.

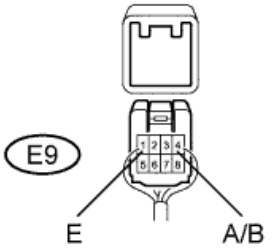
Standard Resistance:

Tester Connection	Condition	Specified Condition
E77-27 (RSET) - E9-4 (A/B)	Always	Below 1 Ω
E77-34 (E2) - E9-1 (E)		
E77-34 (E2) - Body ground		
E77-27 (RSET) or E9-4 (A/B) - Body ground	Always	10 kΩ or higher

Rear view of wire harness connector:
(to Combination Meter Assembly)



Rear view of wire harness connector:
(to Light Control Rheostat)



H

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

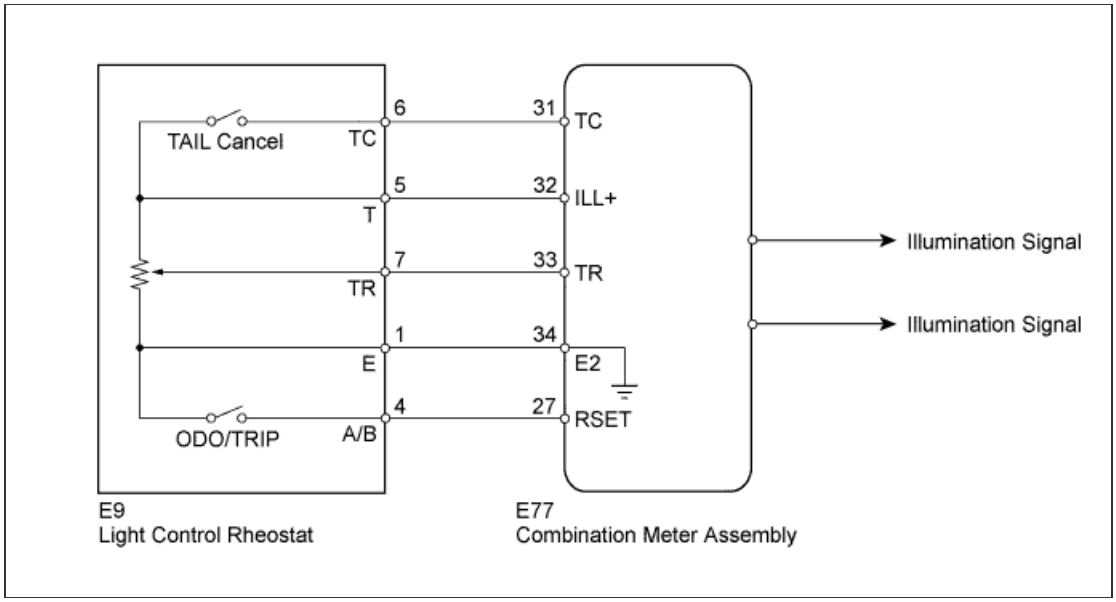
REPLACE COMBINATION METER ASSEMBLY (Click here)

for Preparation Click here

DESCRIPTION

When the light control rheostat knob is turned to the left, the combination meter and vehicle interior illumination will dim. When the light control rheostat knob is turned to the right, the combination meter and vehicle illumination will become brighter.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (LIGHT CONTROL RHEOSTAT)

a. Operate the intelligent tester according to the display and select the Data List (Click here).

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Tail Cancel SW	TAIL cancel switch condition/ON or OFF	ON: TAIL cancel switch on OFF: TAIL cancel switch off	-
Rheostat value	Light control rheostat switch input/Min.: 0, Max.: 100	Light control rheostat switch is fully turned left (0) → fully turned right (100)	Unit: %

OK:

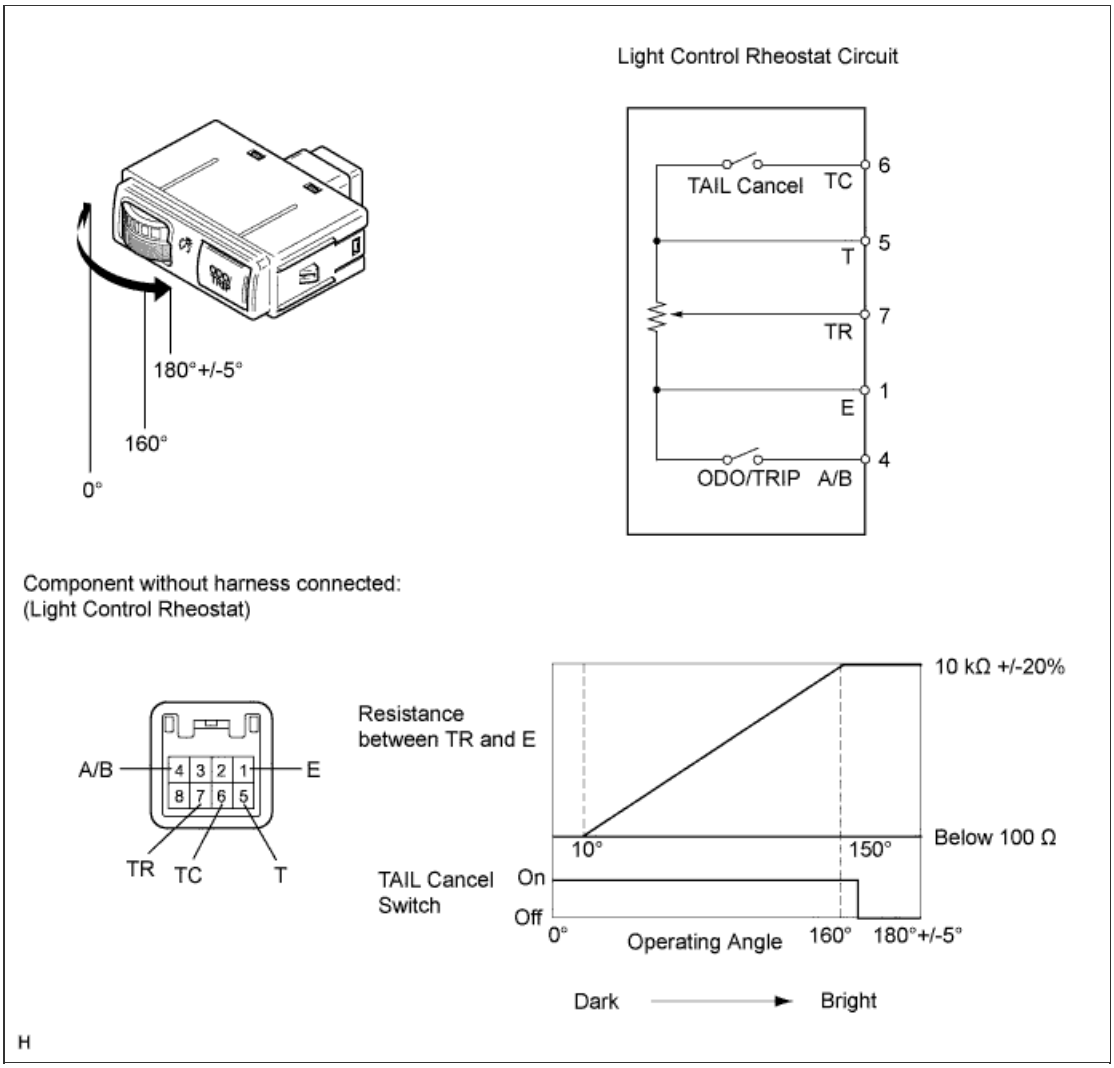
Light brightness can be changed within specified range by manual operation.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

2.INSPECT LIGHT CONTROL RHEOSTAT

a. Inspect the light control rheostat.



i. Remove the light control rheostat (Click here).

ii. Measure the resistance according to the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
6 (TC) - 5 (T)	TAIL cancel switch off → on	10 kΩ or higher → Below 1 Ω
5 (T) - 1 (E)	Always	10 kΩ +/-20%
7 (TR) - 1 (E)	Light control rheostat fully turned right → fully turned left	10 kΩ +/-20% → Below 100 Ω

NG → REPLACE LIGHT CONTROL RHEOSTAT (Click here)

OK

3.CHECK HARNESS AND CONNECTOR (COMBINATION METER - LIGHT CONTROL RHEOSTAT)

a. Disconnect the E77 meter connector.

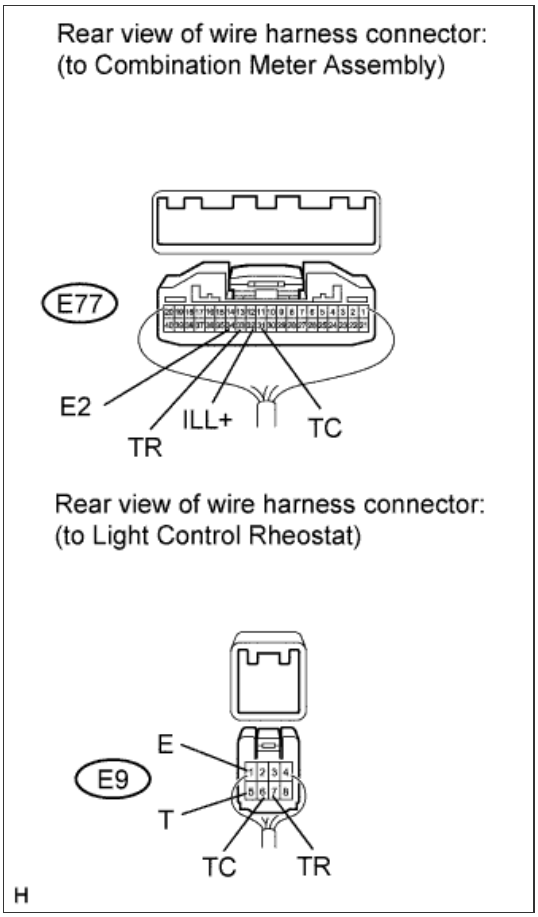
b. Disconnect the E9 rheostat connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E77-32 (ILL+) - E9-5 (T)		

E77-33 (TR) - E9-7 (TR)	Always	Below 1 Ω
E77-34 (E2) - E9-1 (E)		
E7-31 (TC) - E9-6 (TC)		



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.REPLACE COMBINATION METER ASSEMBLY

a. Replace the combination meter assembly with a new or normally operating one (Click here).

b. Perform an operation inspection.

OK:
Combination meter assembly operates normally.

NG → Go to LIGHTING SYSTEM (**Click here**)

OK

END (COMBINATION METER IS DEFECTIVE)

for Preparation Click here

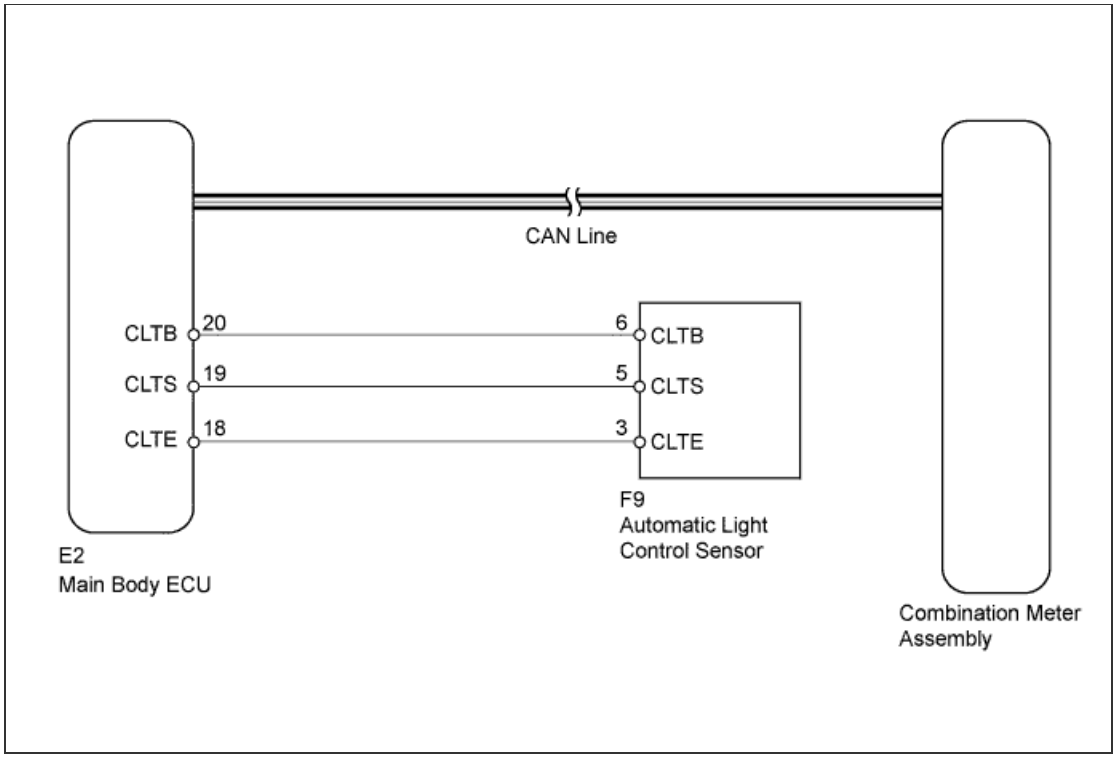
DESCRIPTION

In this circuit, the combination meter assembly receives auto dimmer signals from the main body ECU using CAN communication lines. When the combination meter assembly receives an auto dimmer signal, it dims the meter illumination. The main body ECU determines whether it is daytime, twilight or nighttime based on the waveform transmitted from the automatic light control sensor. If the main body ECU determines that it is daytime, the ECU does not send auto dimmer signals. Therefore, the meter illumination (warning and indicator lights) will not dim even if the driver accidentally turns the light control switch to the tail or head position in the daytime.

HINT:

When the meter illumination does not dim at night, the light control rheostat is fully turned to the right (TAIL cancel switch is on, or there may be a malfunction in the automatic light control sensor, main body ECU, CAN communication system, wire harness or connector, or combination meter.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK CAN COMMUNICATION SYSTEM

a. Check for DTCs (Click here).

Result

Result	Proceed to
DTC is not output	A
CAN communication system (for LHD) DTC is output	B
CAN communication system (for RHD) DTC is output	C
Lighting system DTC (B1244) is output	D

B	Go to CAN COMMUNICATION SYSTEM (Click here)
C	Go to CAN COMMUNICATION SYSTEM (Click here)
D	Go to LIGHTING SYSTEM (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (DIMMER SWITCH)

a. Operate the intelligent tester according to the display and select the Active Test (Click here).

Main Body

Tester Display	Test Part	Control Range	Diagnostic Note
Dimmer Signal	Illumination dimming operation	ON or OFF	-

OK:

Meter illumination is dimmed when the dimmer switch is on and the Active Test "Dimmer Signal" is ON.

HINT:

Refer to the sensitivity setting in the customization table of the automatic light control system (Click here).

NG → **Go to step 3**

OK

CHECK LIGHTING SETTING (**Click here**)

3.REPLACE COMBINATION METER ASSEMBLY

a. Temporarily replace the combination meter with a new one (Click here).

NEXT

4.CHECK COMBINATION METER ASSEMBLY

a. Check that the operation of the combination meter returns to normal (Click here).

b. Perform an operation inspection.

OK:

Operation of combination meter returns to normal.

NG → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

OK

END (COMBINATION METER IS DEFECTIVE)

for Preparation Click here

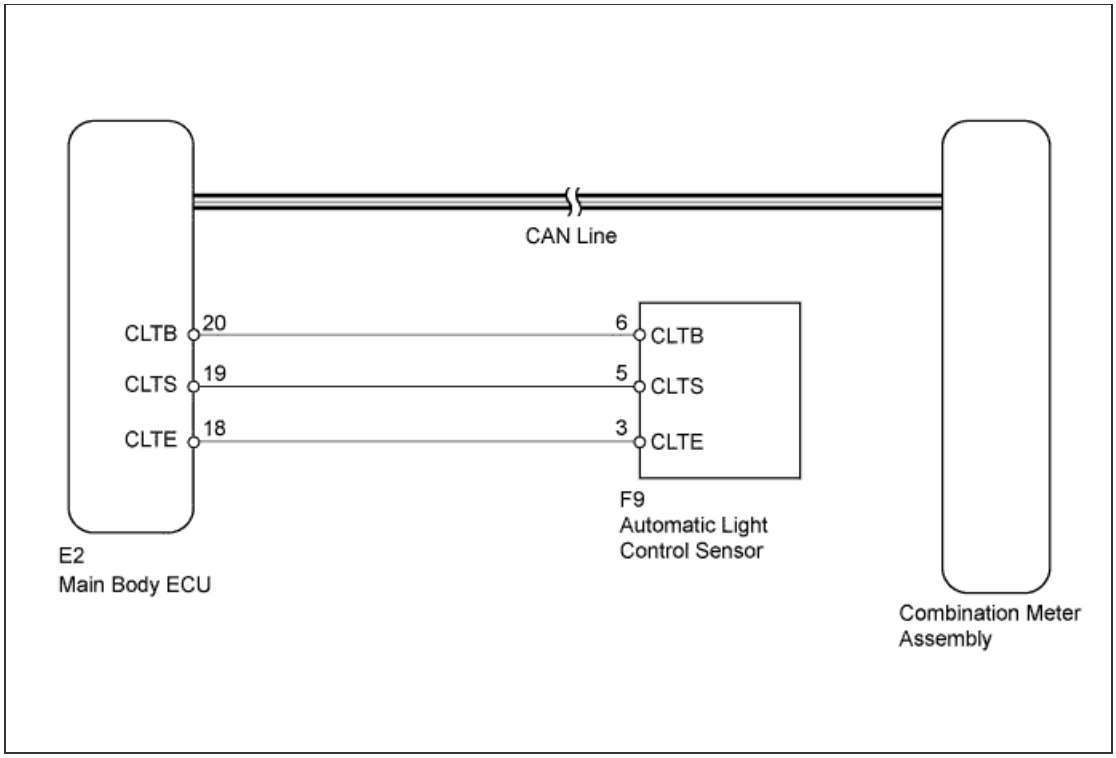
DESCRIPTION

In this circuit, the combination meter assembly receives auto dimmer signals from the main body ECU using CAN communication lines. When the combination meter assembly receives an auto dimmer signal, it dims the meter illumination. The main body ECU determines whether it is daytime, twilight or nighttime based on the waveform transmitted from the automatic light control sensor. If the main body ECU determines that it is daytime, the ECU does not send auto dimmer signals. Therefore, the meter illumination (warning and indicator lights) will not dim even if the driver accidentally turns the light control switch to the tail or head position in the daytime.

HINT:

When the meter illumination does not dim at night, the light control rheostat is fully turned to the right (TAIL cancel switch is on, or there may be a malfunction in the automatic light control sensor, main body ECU, CAN communication system, wire harness or connector, or combination meter.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK CAN COMMUNICATION SYSTEM

a. Check for DTCs (Click here).

Result

Result	Proceed to
DTC is not output	A
CAN communication system (for LHD) DTC is output	B
CAN communication system (for RHD) DTC is output	C
Lighting system DTC (B1244) is output	D

B	Go to CAN COMMUNICATION SYSTEM (Click here)
C	Go to CAN COMMUNICATION SYSTEM (Click here)
D	Go to LIGHTING SYSTEM (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (DIMMER SWITCH)

a. Operate the intelligent tester according to the display and select the Active Test (Click here).

Main Body

Tester Display	Test Part	Control Range	Diagnostic Note
Dimmer Signal	Illumination dimming operation	ON or OFF	-

OK:

Meter illumination is dimmed when the dimmer switch is on and the Active Test "Dimmer Signal" is ON.

HINT:

Refer to the sensitivity setting in the customization table of the automatic light control system (Click here).

NG → **Go to step 3**

OK

CHECK LIGHTING SETTING (**Click here**)

3.REPLACE COMBINATION METER ASSEMBLY

a. Temporarily replace the combination meter with a new one (Click here).

NEXT

4.CHECK COMBINATION METER ASSEMBLY

a. Check that the operation of the combination meter returns to normal (Click here).

b. Perform an operation inspection.

OK:

Operation of combination meter returns to normal.

NG → REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

OK

END (COMBINATION METER IS DEFECTIVE)

for Preparation Click here

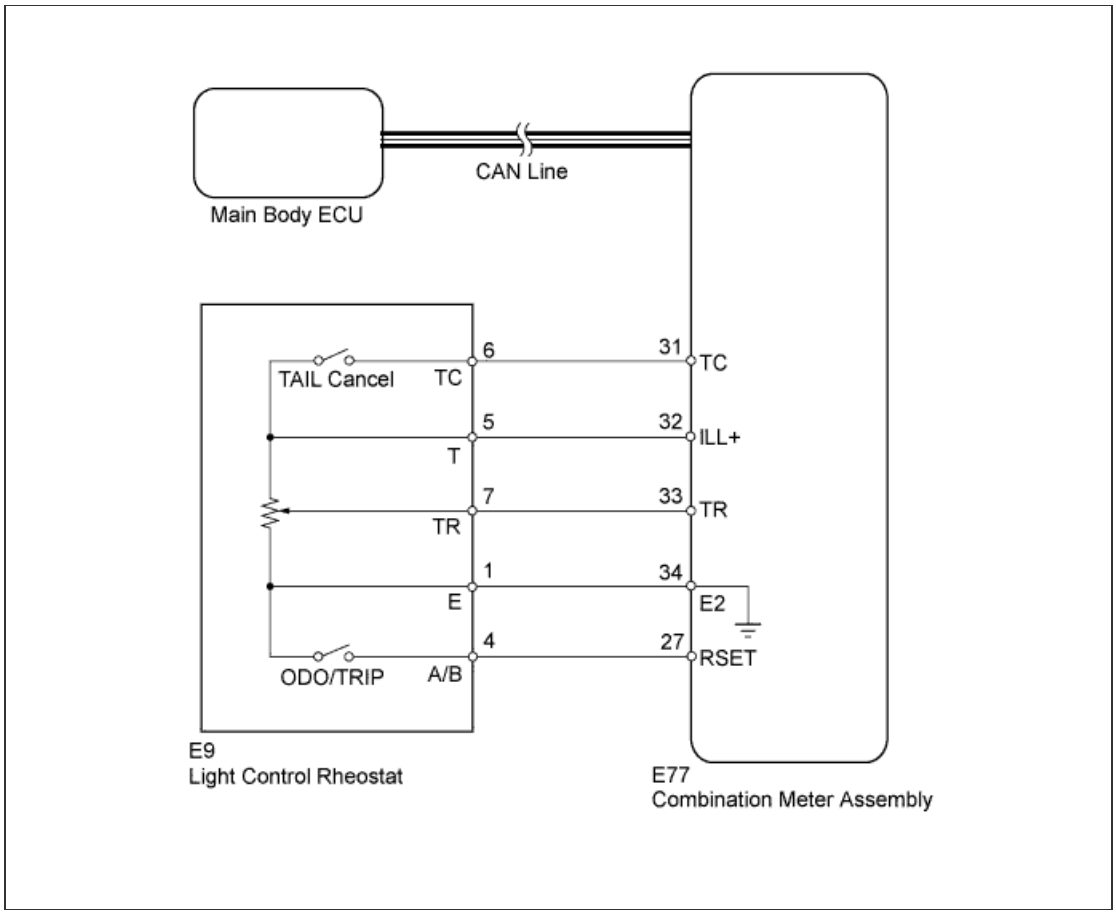
DESCRIPTION

If the dimmer switch is turned to tail, head or AUTO, the main body ECU sends a TAIL relay signal, panel light illumination signal, panel relay signal, and TAIL cancel OFF signal to the combination meter. Then the meter and accessory meter become dim.

HINT:

TAIL cancel switch: When the headlights are illuminated and the TAIL cancel switch is turned off, the meter does not dim.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK CAN COMMUNICATION SYSTEM

a. Check for DTCs (Click here).

Result

Result	Proceed to
CAN communication system DTC is not output	A
CAN communication system (for LHD) DTC is output	B
CAN communication system (for RHD) DTC is output	C

B → Go to CAN COMMUNICATION SYSTEM (Click here)

C → Go to CAN COMMUNICATION SYSTEM (Click here)

A

2.READ VALUE USING INTELLIGENT TESTER (LIGHT CONTROL RHEOSTAT)

a. Operate the intelligent tester according to the display and select the Data List (Click here).

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Tail Cancel SW	TAIL cancel switch condition/ON or OFF	ON: TAIL cancel switch on OFF: TAIL cancel switch off	-
Rheostat value	Light control rheostat switch input/Min.: 0, Max.: 100	Light control rheostat switch is fully turned left (0) → fully turned right (100)	Unit: %

OK:

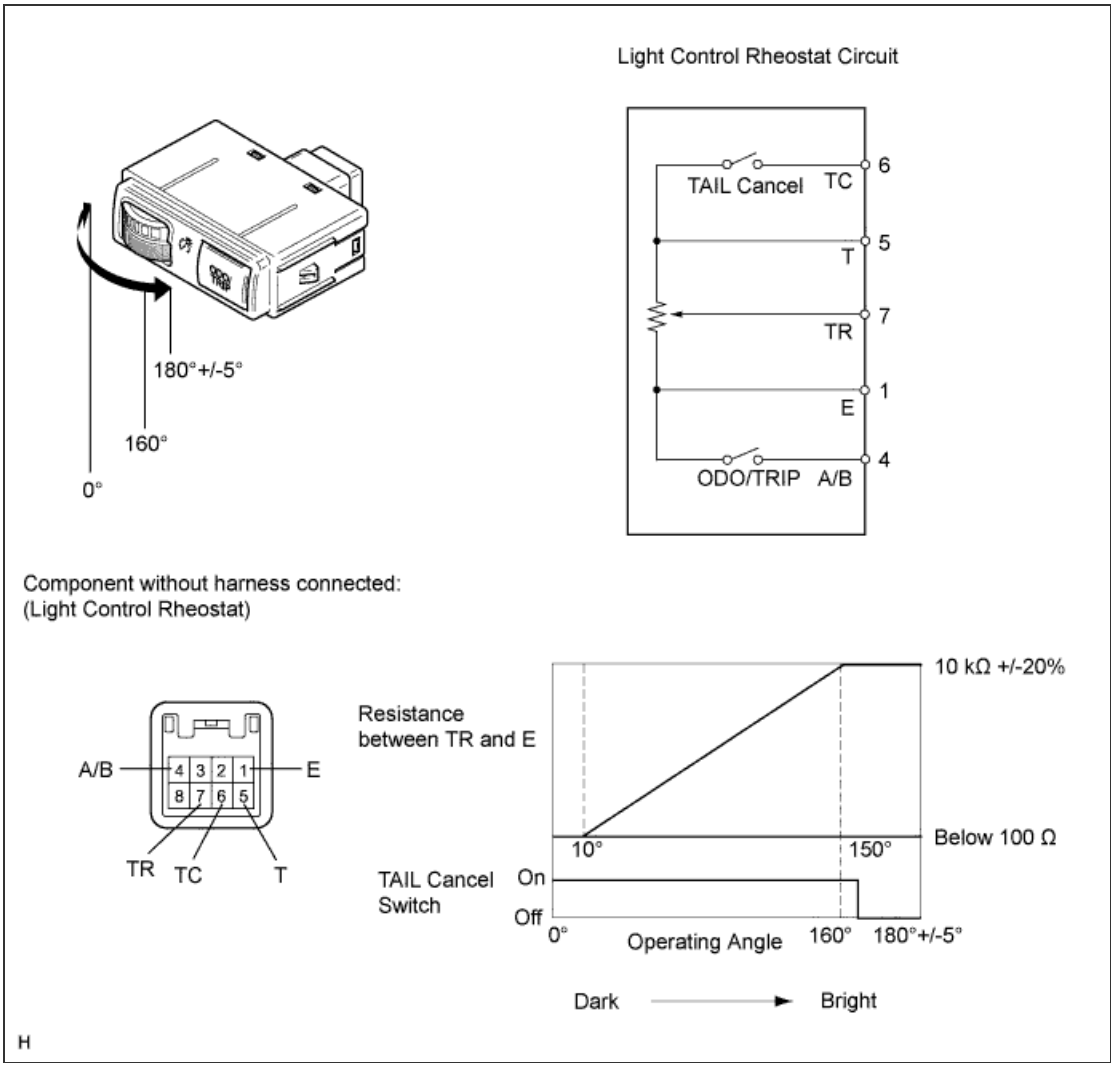
Light brightness can be changed within specified range by manual operation.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

3.INSPECT LIGHT CONTROL RHEOSTAT

a. Inspect the light control rheostat.



i. Remove the light control rheostat (Click here).

ii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
6 (TC) - 5 (T)	TAIL cancel switch off → on	10 kΩ or higher → Below 1 Ω
5 (T) - 1 (E)	Always	10 kΩ +/-20%
7 (TR) - 1 (E)	Light control rheostat fully turned right → fully turned left	10 kΩ +/-20% → Below 100 Ω

NG → REPLACE LIGHT CONTROL RHEOSTAT (Click here)

OK

4.CHECK HARNESS AND CONNECTOR (COMBINATION METER - LIGHT CONTROL RHEOSTAT AND BODY GROUND)

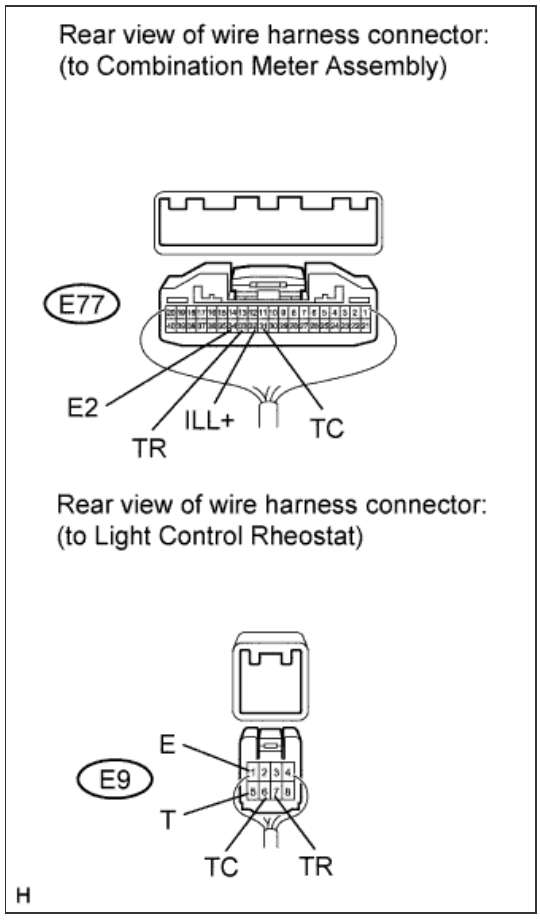
a. Disconnect the E77 meter connector.

b. Disconnect the E9 rheostat connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E77-32 (ILL+) - E9-5 (T)	Always	Below 1 Ω
E77-33 (TR) - E9-7 (TR)		
E77-34 (E2) - E9-1 (E)		
E77-31 (TC) - E9-6 (TC)		
E77-32 (ILL+) or E9-5 (T) - Body ground	Always	10 kΩ or higher
E77-33 (TR) or E9-7 (TR) - Body ground		
E77-34 (E2) or E9-1 (E) - Body ground		
E77-31 (TC) or E9-6 (TC) - Body ground		



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

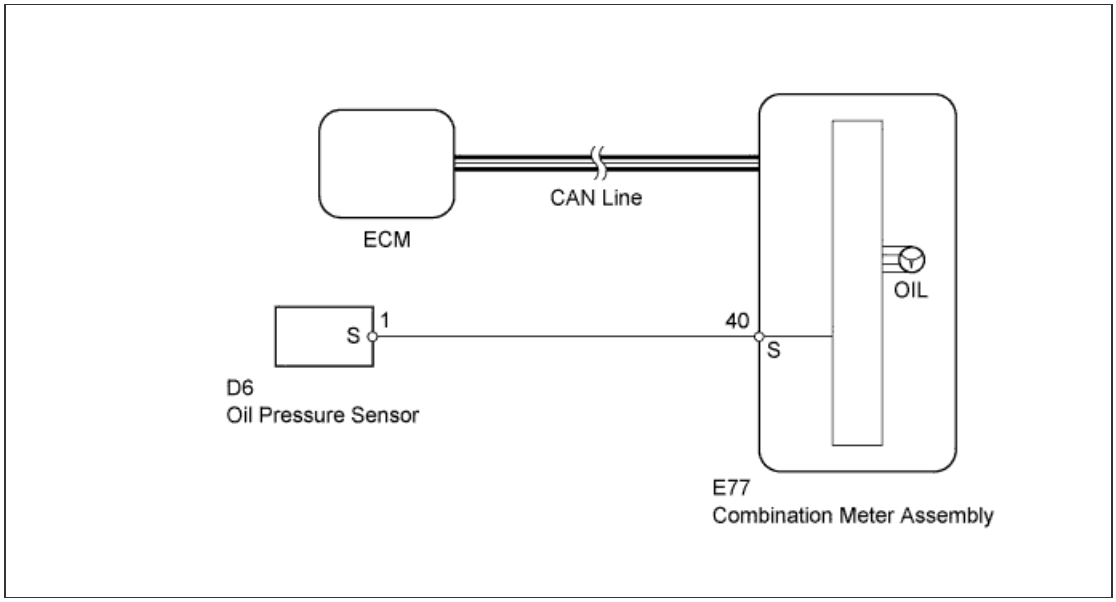
REPLACE COMBINATION METER ASSEMBLY (Click here)

for Preparation Click here

DESCRIPTION

The oil pressure sender detects the oil pressure generated when the engine is started. The combination meter determines that the engine is running when the engine speed is 400 rpm or more, and determines that the engine is cranking when the engine speed is 200 rpm or less. The oil pressure receiver gauge detects and indicates the oil pressure applied to the oil pressure sender.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK CAN COMMUNICATION SYSTEM

a. Check for DTCs (Click here).

Result

Result	Proceed to
CAN communication system DTC is not output	A
CAN communication system (for LHD) DTC is output	B
CAN communication system (for RHD) DTC is output	C

B → Go to CAN COMMUNICATION SYSTEM (Click here)

C → Go to CAN COMMUNICATION SYSTEM (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (OIL PRESSURE SENSOR)

a. Operate the intelligent tester according to the display and select the Active Test (Click here).

Combination Meter

Tester Display	Test Part	Control Range	Diagnostic Note
Oil Pressure Meter Operation	Oil pressure receiver gauge	LOW, 1/4, 1/2, 3/4 or HIGH	Perform the test with the vehicle stopped and the engine idling.

OK:

Needle indication is normal.

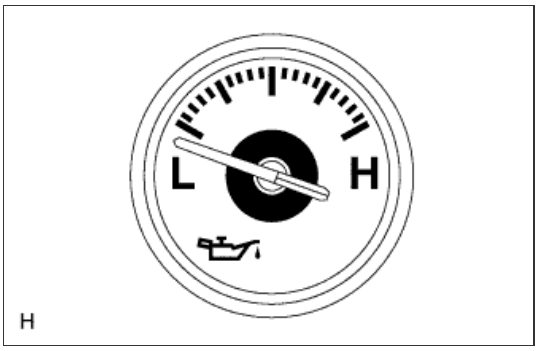
NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

3.INSPECT OIL PRESSURE GAUGE ASSEMBLY (OIL PRESSURE SENSOR)

a. Check that the needle moves in accordance with the engine speed.

OK:
Needle is as shown in illustration when engine is stopped.
Needle moves when engine is running.



NG → REPLACE OIL PRESSURE SENSOR (Click here)

OK

4.CHECK HARNESS AND CONNECTOR (COMBINATION METER - OIL PRESSURE SENSOR AND BODY GROUND)

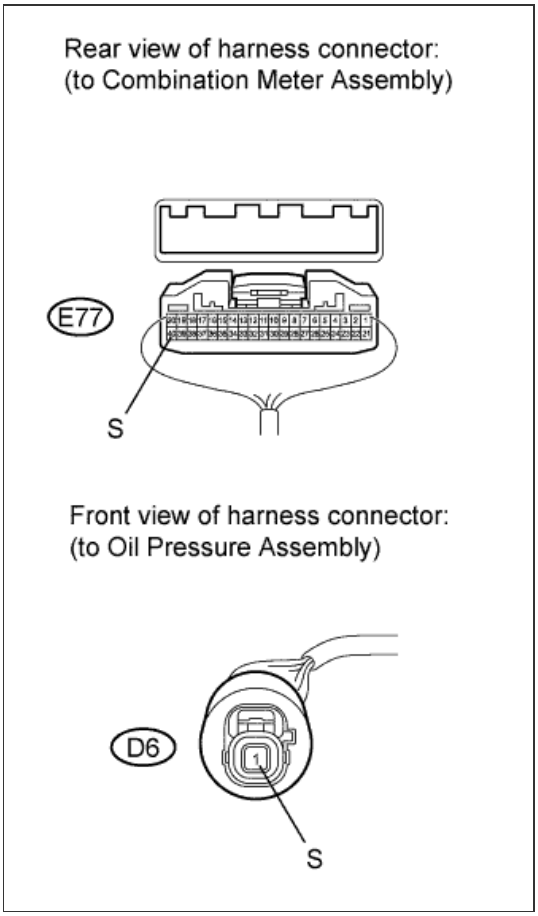
a. Disconnect the E77 meter connector.

b. Disconnect the D6 gauge connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E77-40 (S) - D6-1 (S)	Always	Below 1 Ω
E77-40 (S) or D6-1 (S) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

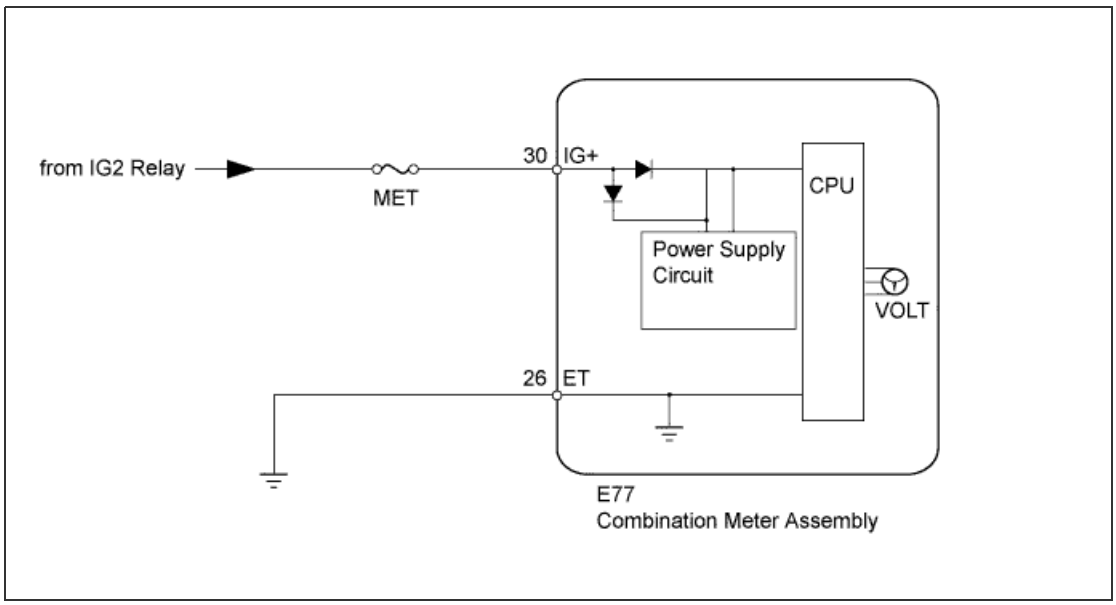
REPLACE COMBINATION METER ASSEMBLY (Click here)

for Preparation Click here

DESCRIPTION

The voltmeter indicates the voltage applied to the IG+ terminal of the combination meter.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (MET)

a. Remove the MET fuse from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
MET fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (VOLTMETER)

a. Operate the intelligent tester according to the display and select the Active Test (Click here).

Combination Meter

Tester Display	Test Part	Control Range	Diagnostic Note
Volt meter Operation	Voltmeter	0, 3, 6, 9, 12, 15, or 18	Perform the test with the vehicle stopped and the engine idling.

OK:

Needle indication is normal.

NG → REPLACE COMBINATION METER ASSEMBLY (Click here)

OK

3.CHECK HARNESS AND CONNECTOR (COMBINATION METER - BATTERY AND BODY GROUND)

a. Disconnect the E77 meter connector.

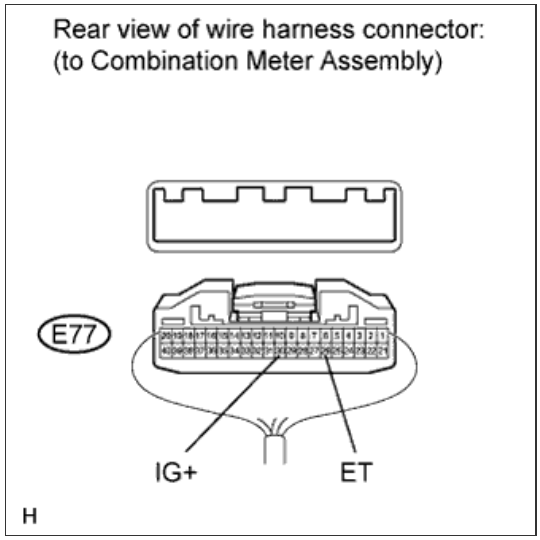
b. Measure the resistance and voltage according to the value(s) in the tables below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E77-26 (ET) - Body ground	Always	Below 1 Ω

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E77-30 (IG+) - Body ground	Engine switch on (IG)	11 to 14 V
	Engine switch off	Below 1 V

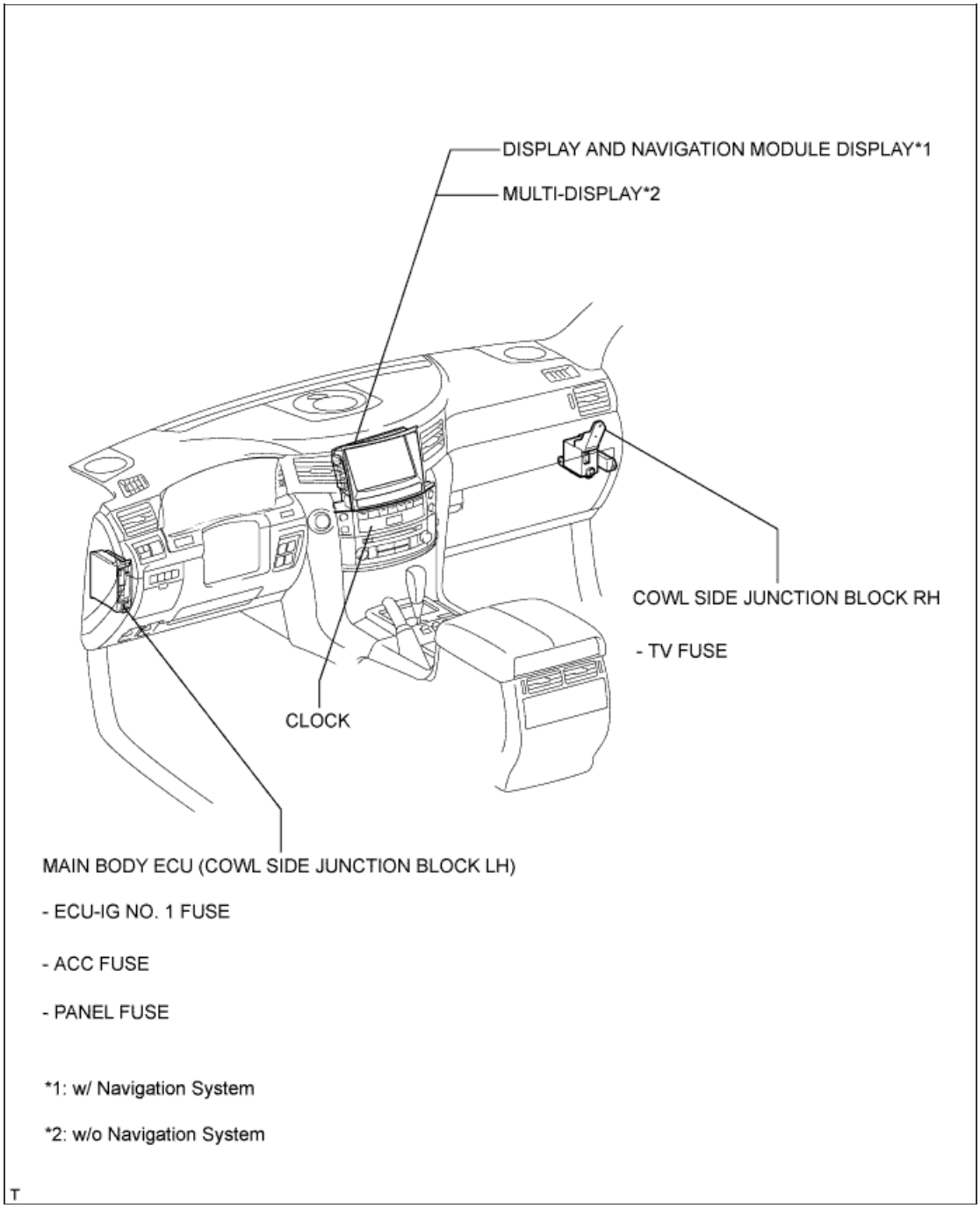


NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

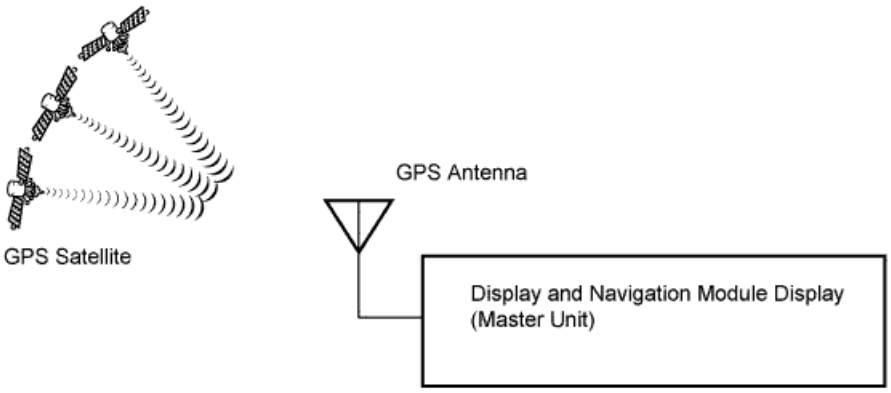
REPLACE COMBINATION METER ASSEMBLY (Click here)

for Preparation Click here

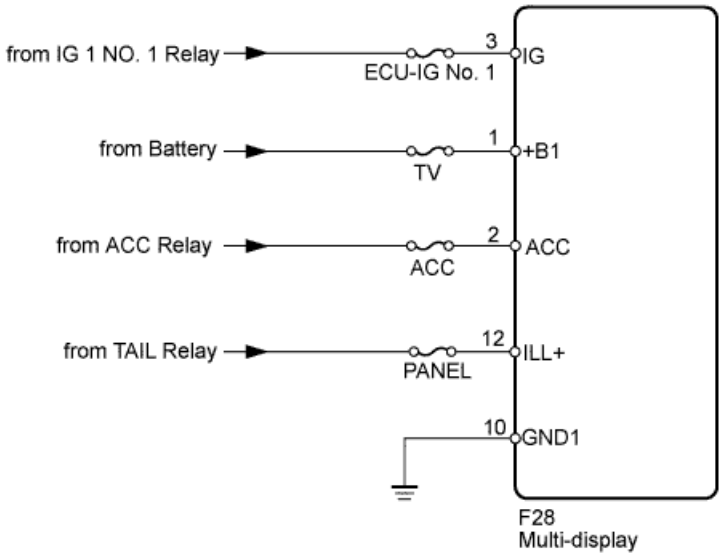


for Preparation Click here

w/ Navigation System:

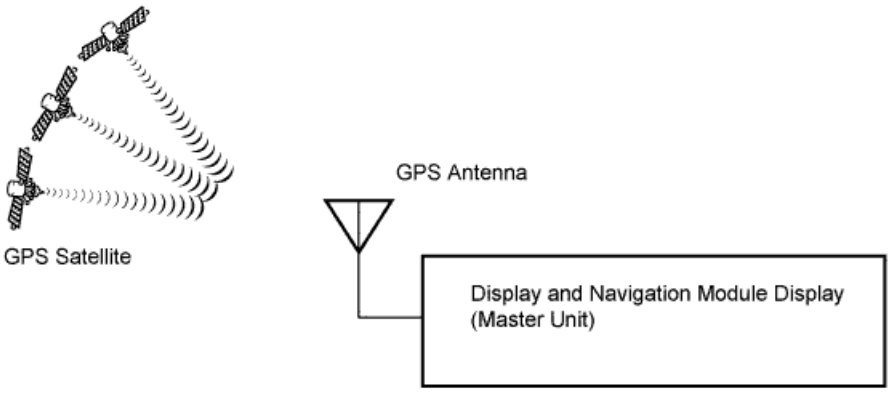


w/o Navigation System:

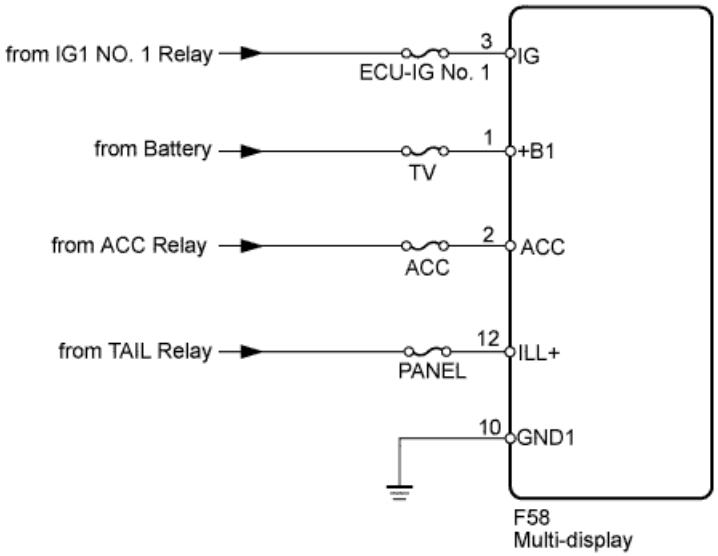


for Preparation Click here

w/ Navigation System:



w/o Navigation System:



for Preparation Click here

CLOCK SYSTEM OUTLINE

a. The clock can be set through the multi-display screen.

b. w/ Navigation System:
The navigation system receives time data from Global Positioning System (GPS) satellites. The clock receives time data from the navigation system every minute, and corrects the time.

for Preparation Click here

HINT:

Use these procedures to troubleshoot the clock system.

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. Go to step 5

A

4.OVERALL ANALYSIS AND TROUBLESHOOTING

a. w/ Navigation System:
Terminals of ECU (Click here).

b. w/o Navigation System:
Terminals of ECU (Click here).

NEXT

5.ADJUST, REPAIR OR REPLACE

NEXT

END

for Preparation Click here

HINT:

Use these procedures to troubleshoot the clock system.

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. → Go to step 5

A

4.OVERALL ANALYSIS AND TROUBLESHOOTING

a. Terminals of ECU

HINT:

- **w/ Navigation System (for DVD) (Click here)**
- **w/ Navigation System (for HDD) (Click here)**
- **w/o Navigation System (Click here)**

NEXT

5.ADJUST, REPAIR OR REPLACE

NEXT

END

for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Clock System (w/ Navigation System)

Symptom	Suspected Area	See page
Clock is not displayed	Display and navigation module display assembly power source circuit	Click here
Clock time is very incorrect	Clock loses or gains time	-
	Replace display and navigation module display assembly	Click here
Nighttime clock illumination does not operate	Illumination circuit	Click here
	Replace display and navigation module display assembly	Click here

Clock System (w/o Navigation System)

Symptom	Suspected Area	See page
Clock is not displayed	Clock power source circuit	Click here
	Clock loses or gains time	-
	Replace multi-display	Click here
Nighttime clock illumination does not operate	Illumination circuit	Click here
	Replace multi-display	Click here

for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

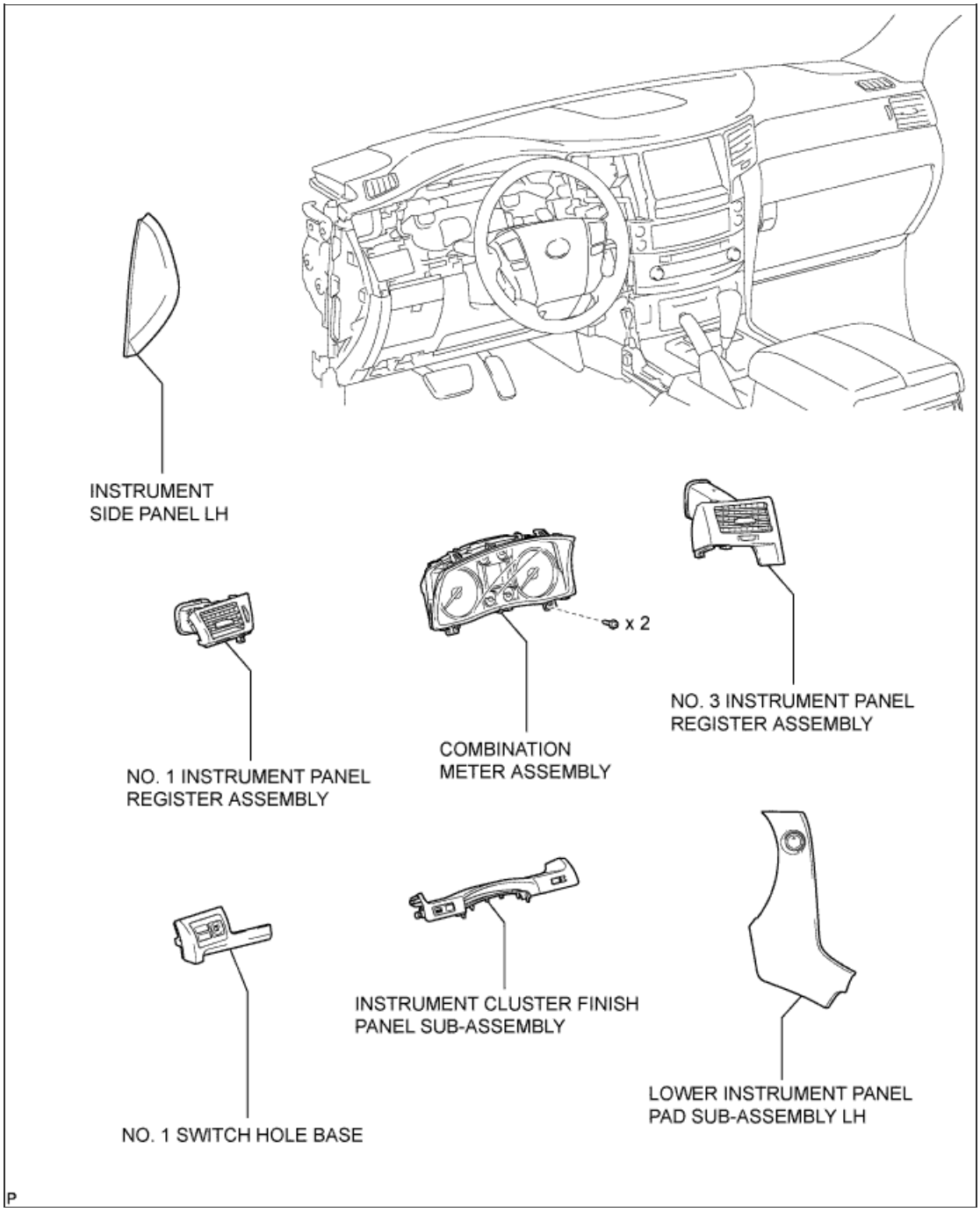
Clock System (w/ Navigation System)

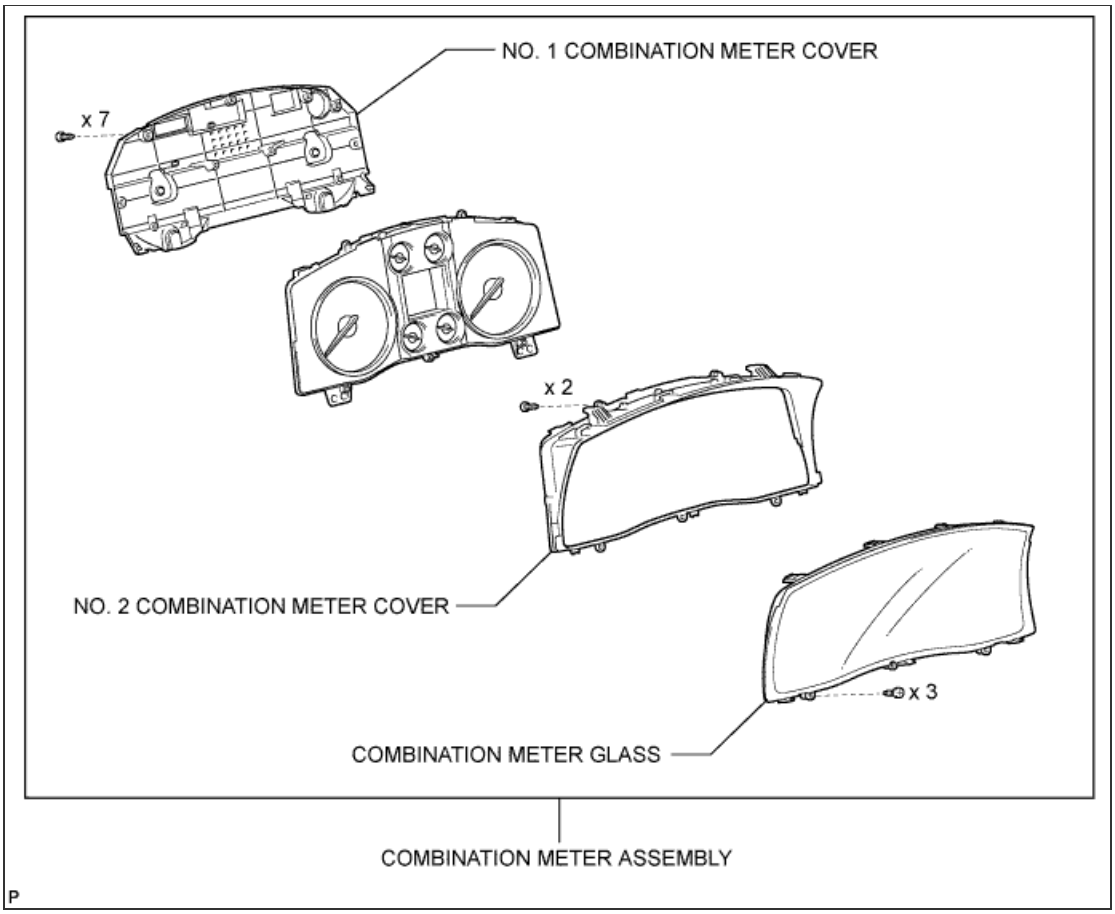
Symptom	Suspected Area	See page
Clock is not displayed	Navigation ECU power source circuit (for DVD)	Click here
	Navigation ECU power source circuit (for HDD)	Click here
Clock time is very incorrect	Clock loses or gains time	-
	Replace display and navigation module display assembly	Click here
Nighttime clock illumination does not operate	Illumination circuit (for DVD)	Click here
	Illumination circuit (for HDD)	Click here
	Replace display and navigation module display assembly	Click here

Clock System (w/o Navigation System)

Symptom	Suspected Area	See page
Clock is not displayed	Clock power source circuit	Click here
	Clock loses or gains time	-
	Replace multi-display	Click here
Nighttime clock illumination does not operate	Illumination circuit	Click here
	Replace multi-display	Click here

for Preparation Click here




NO. 1 COMBINATION METER COVER
x 7
x 2
NO. 2 COMBINATION METER COVER
x 3
COMBINATION METER GLASS
COMBINATION METER ASSEMBLY
P

for Preparation Click here

HINT:

- **Use the same procedures for RHD and LHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. DISABLE AUTOAWAY/RETURN FUNCTION

a. Disable the Autoaway/Return function by changing the customize parameter (Click here).

NOTICE:

Record the current customize parameter setting (whether the Autoaway/Return function is enabled or disabled) in order to restore the current setting after finishing the operation.

HINT:

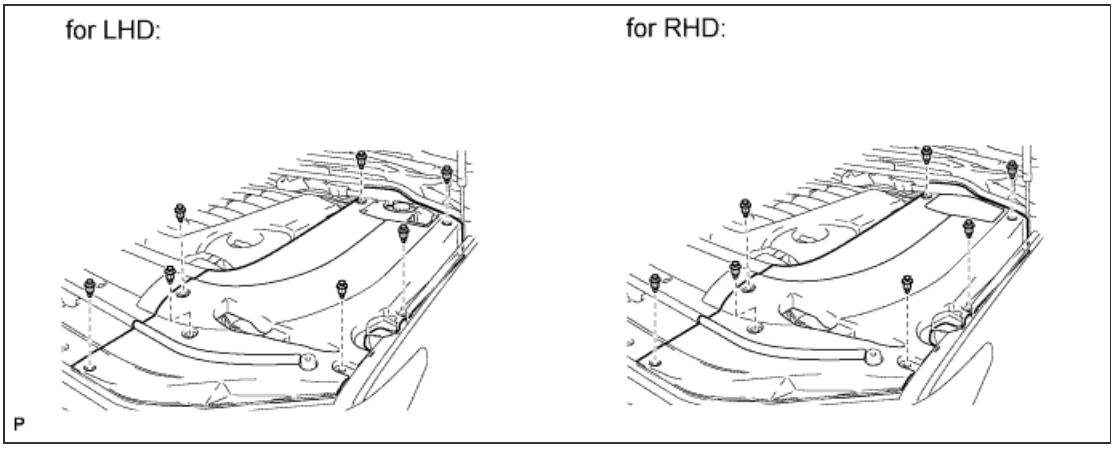
Performing the above operation causes the Autoaway/Return function to be disabled when the engine switch is turned off.

b. Turn the engine switch on (IG). Operate the tilt and telescopic switch to fully extend and lower the steering column.

c. Turn the engine switch off.

2. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



3. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

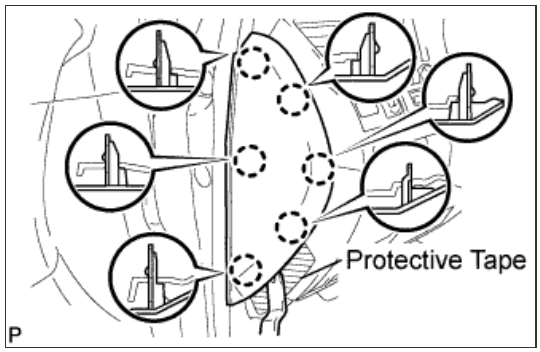
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

4. REMOVE INSTRUMENT SIDE PANEL LH

a. Place protective tape as shown in the illustration.

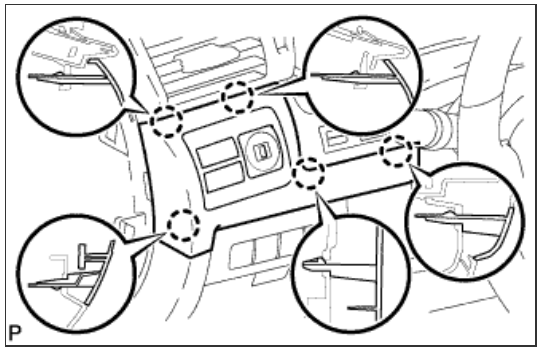
b. Using a moulding remover, detach the 6 claws and remove the side panel.



5. REMOVE NO. 1 SWITCH HOLE BASE

a. Detach the 5 claws.

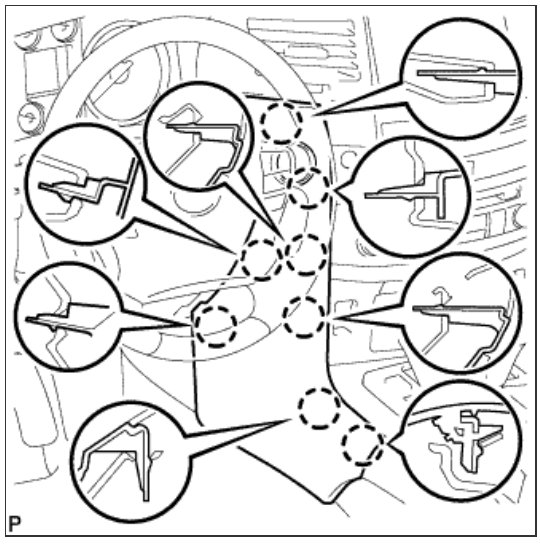
b. Remove the hole base and disconnect the connectors.



6. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

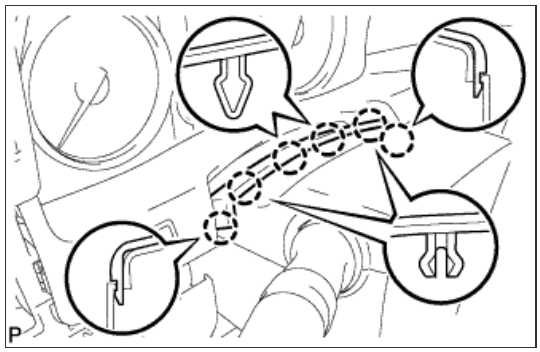
a. Detach the 8 claws.

b. Remove the instrument panel pad and disconnect the connector.



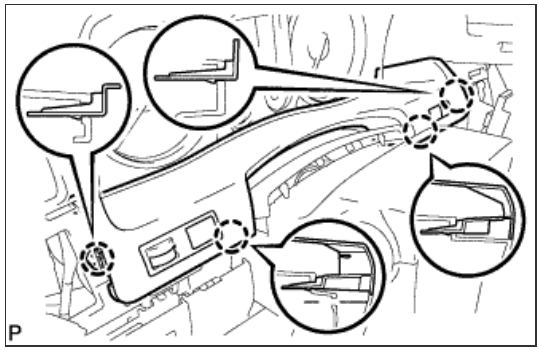
7. REMOVE INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

a. Detach the 6 claws.



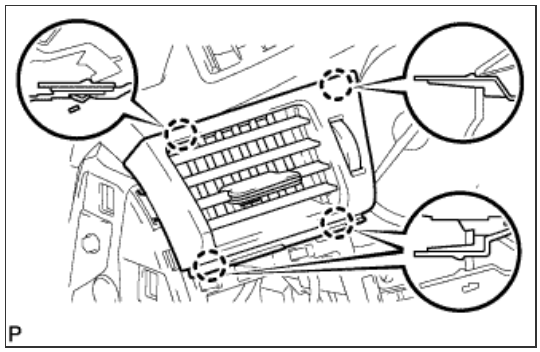
b. Detach the 4 claws.

c. Remove the finish panel and disconnect the connectors.



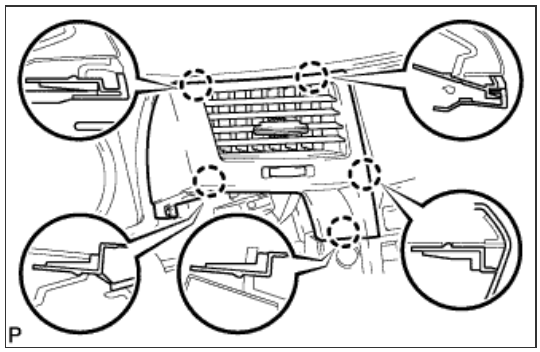
8. REMOVE NO. 1 INSTRUMENT PANEL REGISTER ASSEMBLY

a. Detach the 4 claws and remove the register.



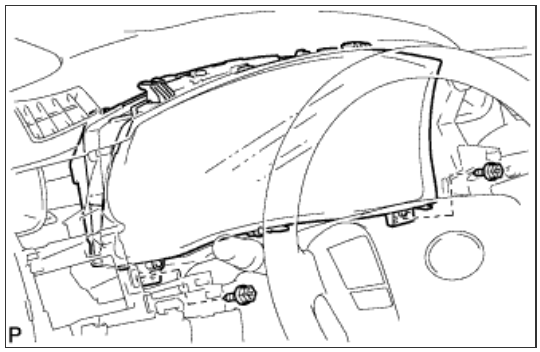
9. REMOVE NO. 3 INSTRUMENT PANEL REGISTER ASSEMBLY

a. Detach the 5 claws and remove the register.

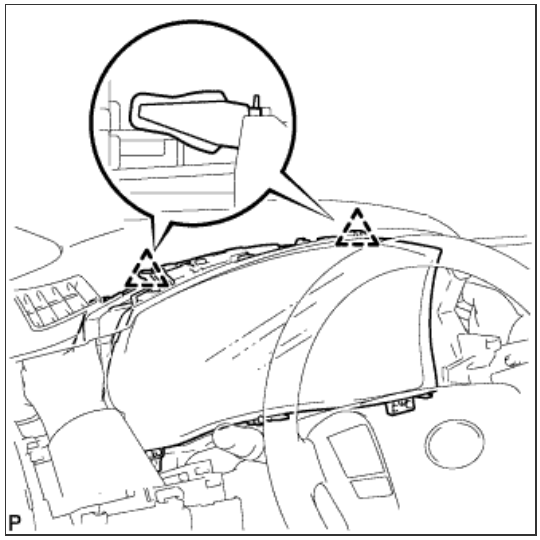


10. REMOVE COMBINATION METER ASSEMBLY

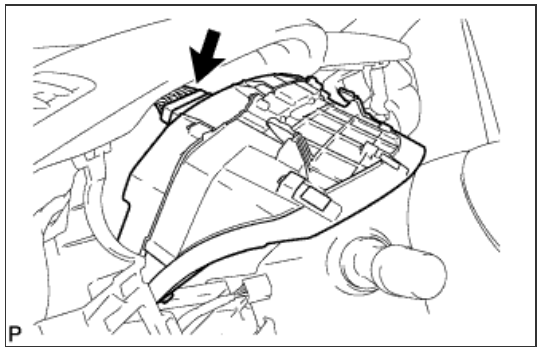
a. Remove the 2 screws.



b. Detach the 2 clips.



c. Disconnect the connector and remove the combination meter.

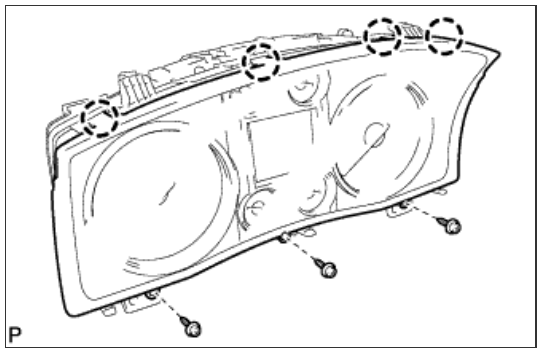


for Preparation Click here

1. REMOVE COMBINATION METER GLASS

a. Remove the 3 screws.

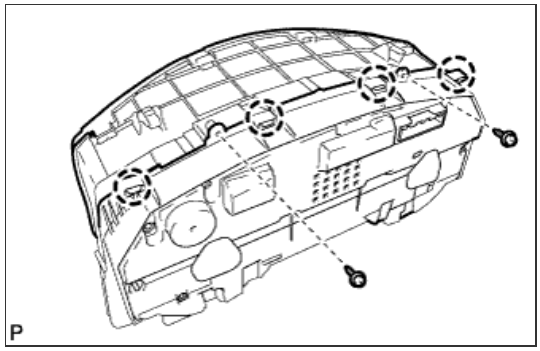
b. Detach the 4 claws and remove the meter glass.



2. REMOVE NO. 2 COMBINATION METER COVER

a. Remove the 2 screws.

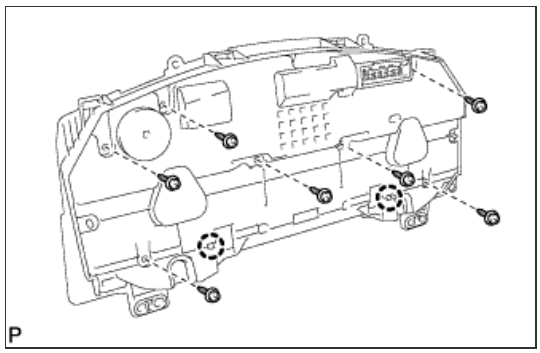
b. Detach the 4 claws and remove the meter cover.



3. REMOVE NO. 1 COMBINATION METER COVER

a. Remove the 7 screws.

b. Detach the 2 claws and remove the meter cover.

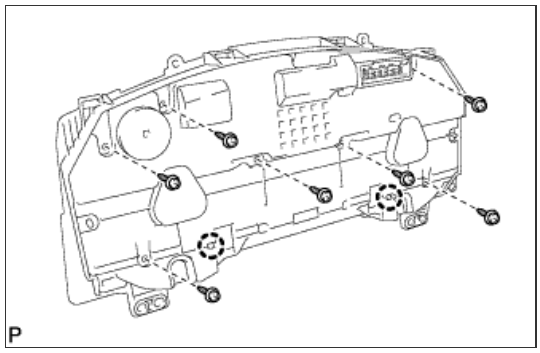


for Preparation Click here

1. INSTALL NO. 1 COMBINATION METER COVER

a. Attach the 2 claws to install the meter cover.

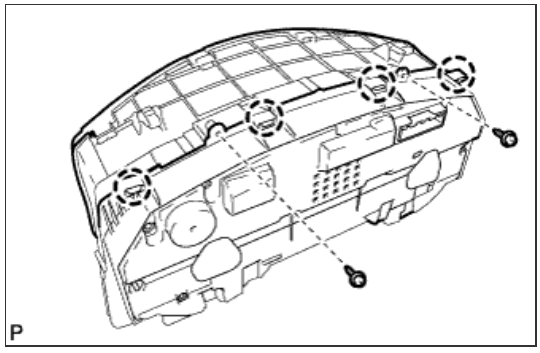
b. Install the 7 screws.



2. INSTALL NO. 2 COMBINATION METER COVER

a. Attach the 4 claws to install the meter cover.

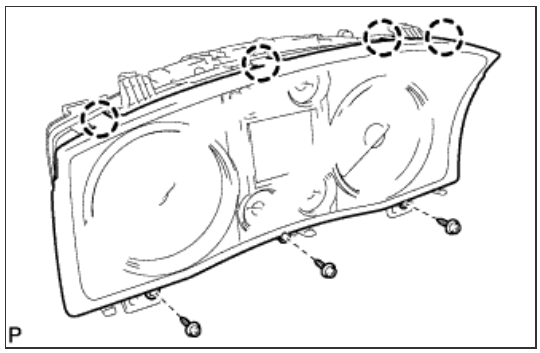
b. Install the 2 screws.



3. INSTALL COMBINATION METER GLASS

a. Attach the 4 claws to install the meter glass.

b. Install the 3 screws.



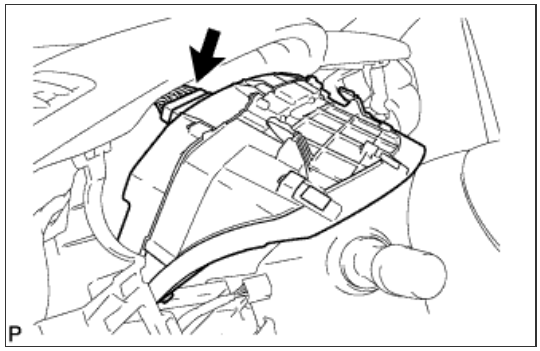
for Preparation Click here

HINT:

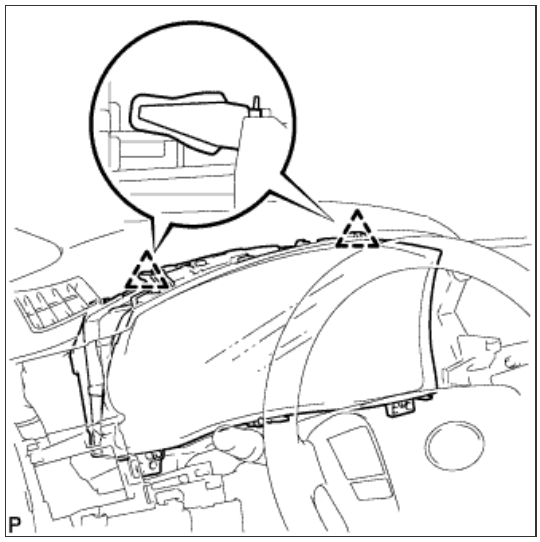
- **Use the same procedures for RHD and LHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL COMBINATION METER ASSEMBLY

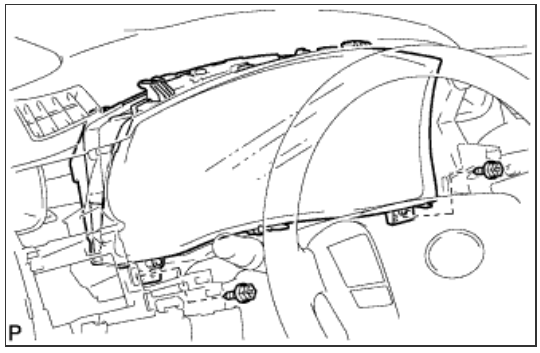
a. Connect the connector.



b. Attach the 2 clips.



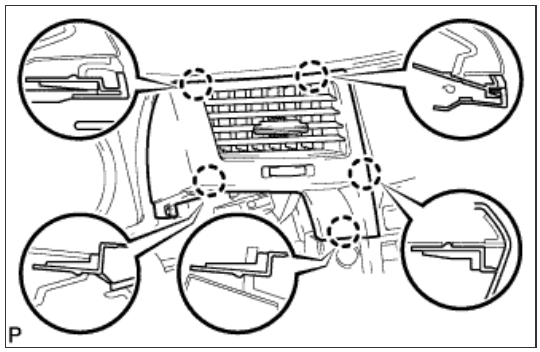
c. Install the combination meter with the 2 screws.



2. INSTALL NO. 3 INSTRUMENT PANEL REGISTER ASSEMBLY

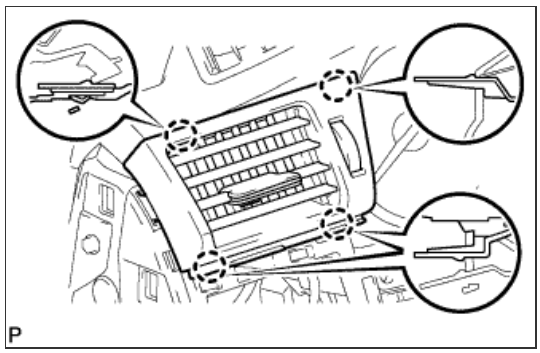
Attach the 5 claws to install the register

a. Attach the 5 claws to install the register.



3. INSTALL NO. 1 INSTRUMENT PANEL REGISTER ASSEMBLY

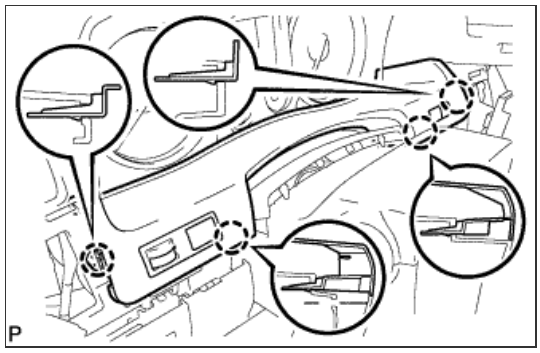
a. Attach the 4 claws to install the register.



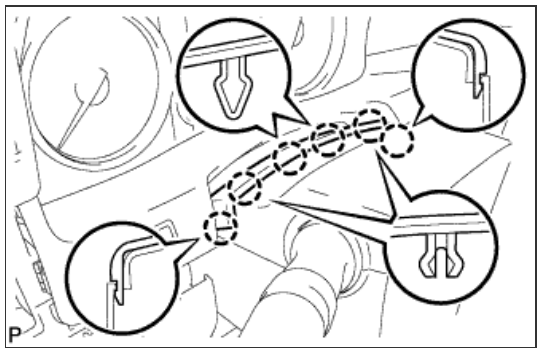
4. INSTALL INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

a. Connect the connectors.

b. Attach the 4 claws to install the finish panel.



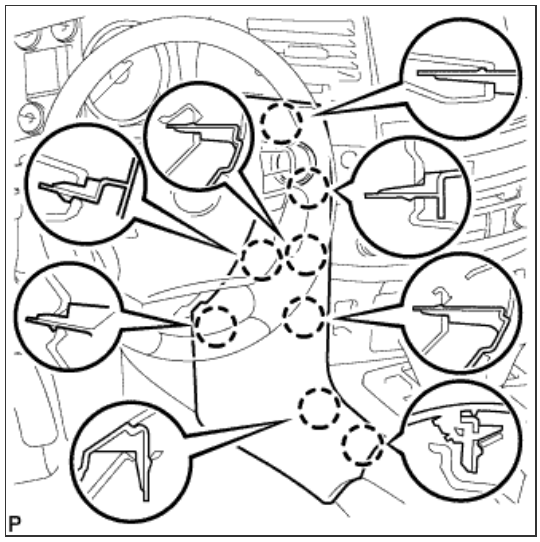
c. Attach the 6 claws.



5. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Connect the connector.

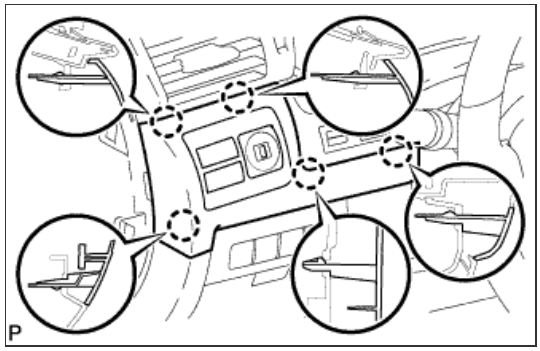
b. Attach the 8 claws to install the instrument panel pad.



6. INSTALL NO. 1 SWITCH HOLE BASE

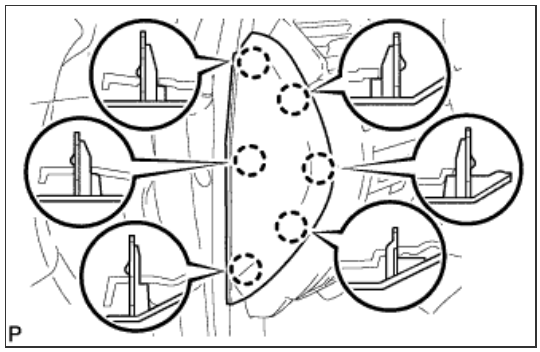
a. Connect the connectors.

b. Attach the 5 claws to install the hole base.



7. INSTALL INSTRUMENT SIDE PANEL LH

a. Attach the 6 claws to install the side panel.



8. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

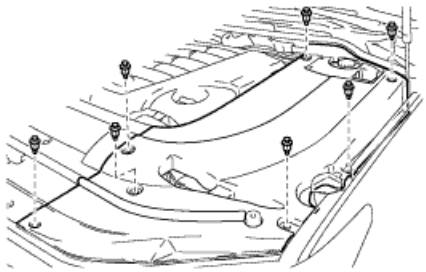
NOTICE:

- **Reset the Autoaway/Return function setting to the previous condition by changing the customize parameter (Click here).**
- **When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).**

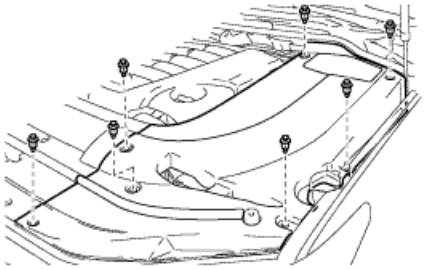
9. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.

for LHD:

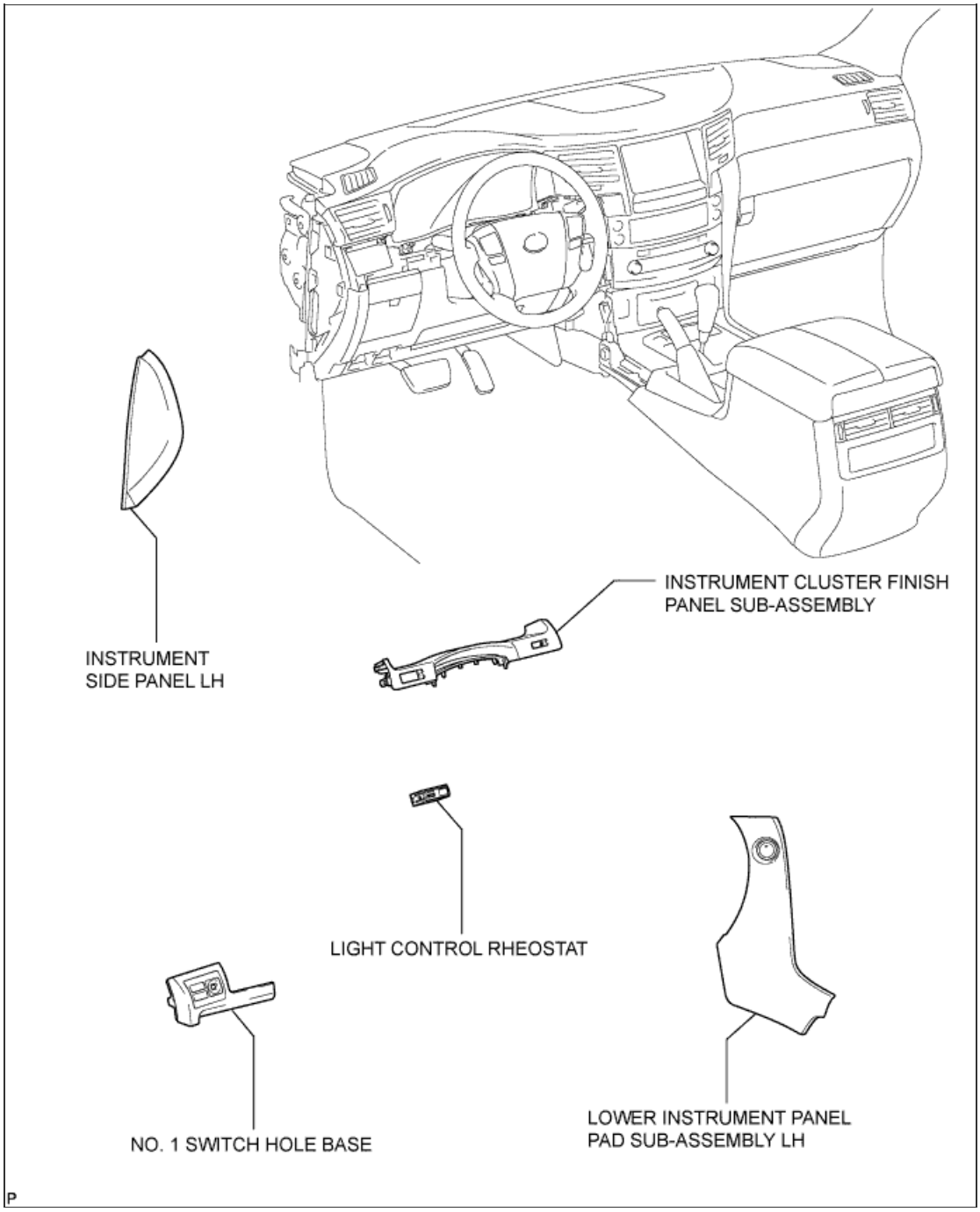


for RHD:



P

for Preparation Click here



for Preparation Click here

HINT:

- **Use the same procedures for RHD and LHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. DISABLE AUTOAWAY/RETURN FUNCTION

a. Disable the Autoaway/Return function by changing the customize parameter (Click here).

NOTICE:

Record the current customize parameter setting (whether the Autoaway/Return function is enabled or disabled) in order to restore the current setting after finishing the operation.

HINT:

Performing the above operation causes the Autoaway/Return function to be disabled when the engine switch is turned off.

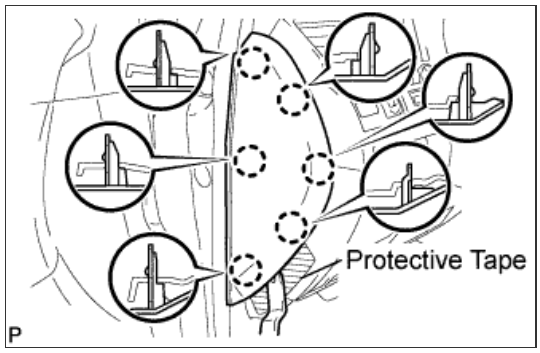
b. Turn the engine switch on (IG). Operate the tilt and telescopic switch to fully extend and lower the steering column.

c. Turn the engine switch off.

2. REMOVE INSTRUMENT SIDE PANEL LH

a. Place protective tape as shown in the illustration.

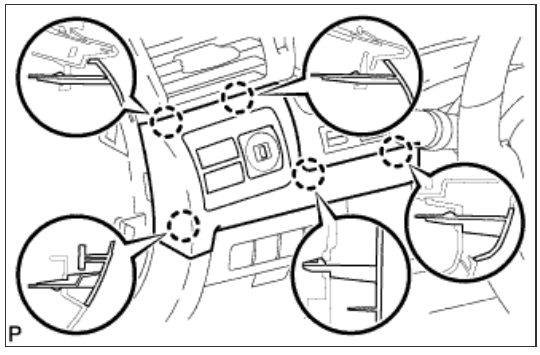
b. Using a moulding remover, detach the 6 claws and remove the side panel.



3. REMOVE NO. 1 SWITCH HOLE BASE

a. Detach the 5 claws.

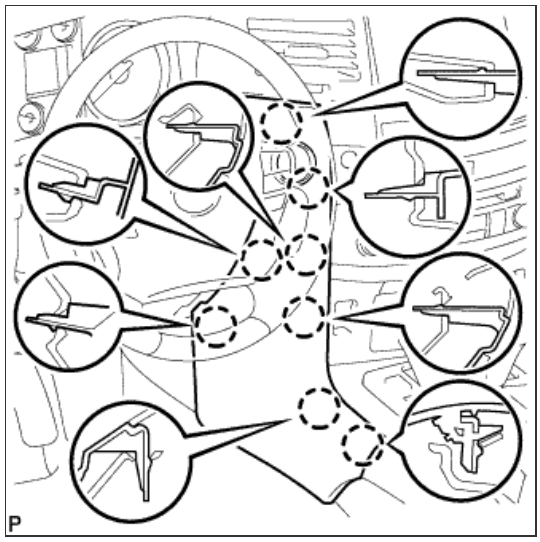
b. Remove the hole base and disconnect the connectors.



4. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

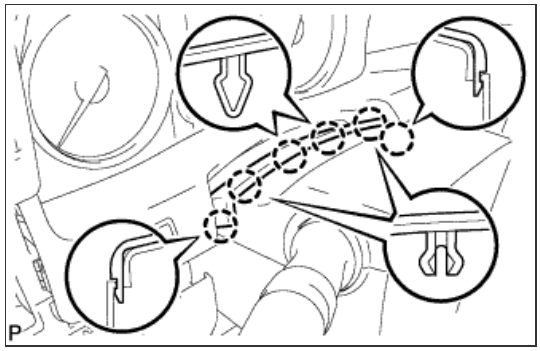
a. Detach the 8 claws.

b. Remove the instrument panel pad and disconnect the connector.



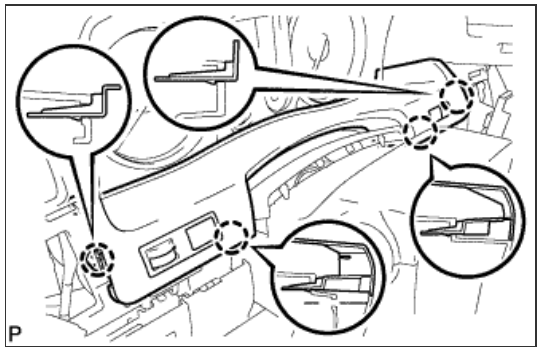
5. REMOVE INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

a. Detach the 6 claws.



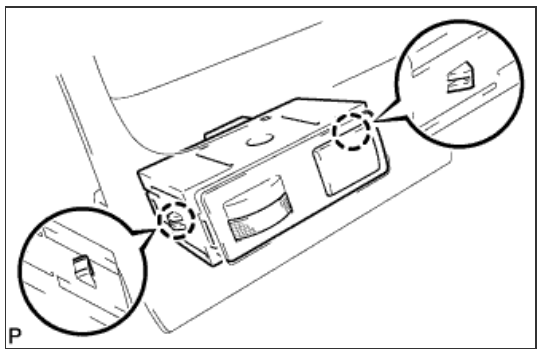
b. Detach the 4 claws.

c. Remove the finish panel and disconnect the connectors.



6. REMOVE LIGHT CONTROL RHEOSTAT

a. Detach the 2 claws and remove the rheostat.

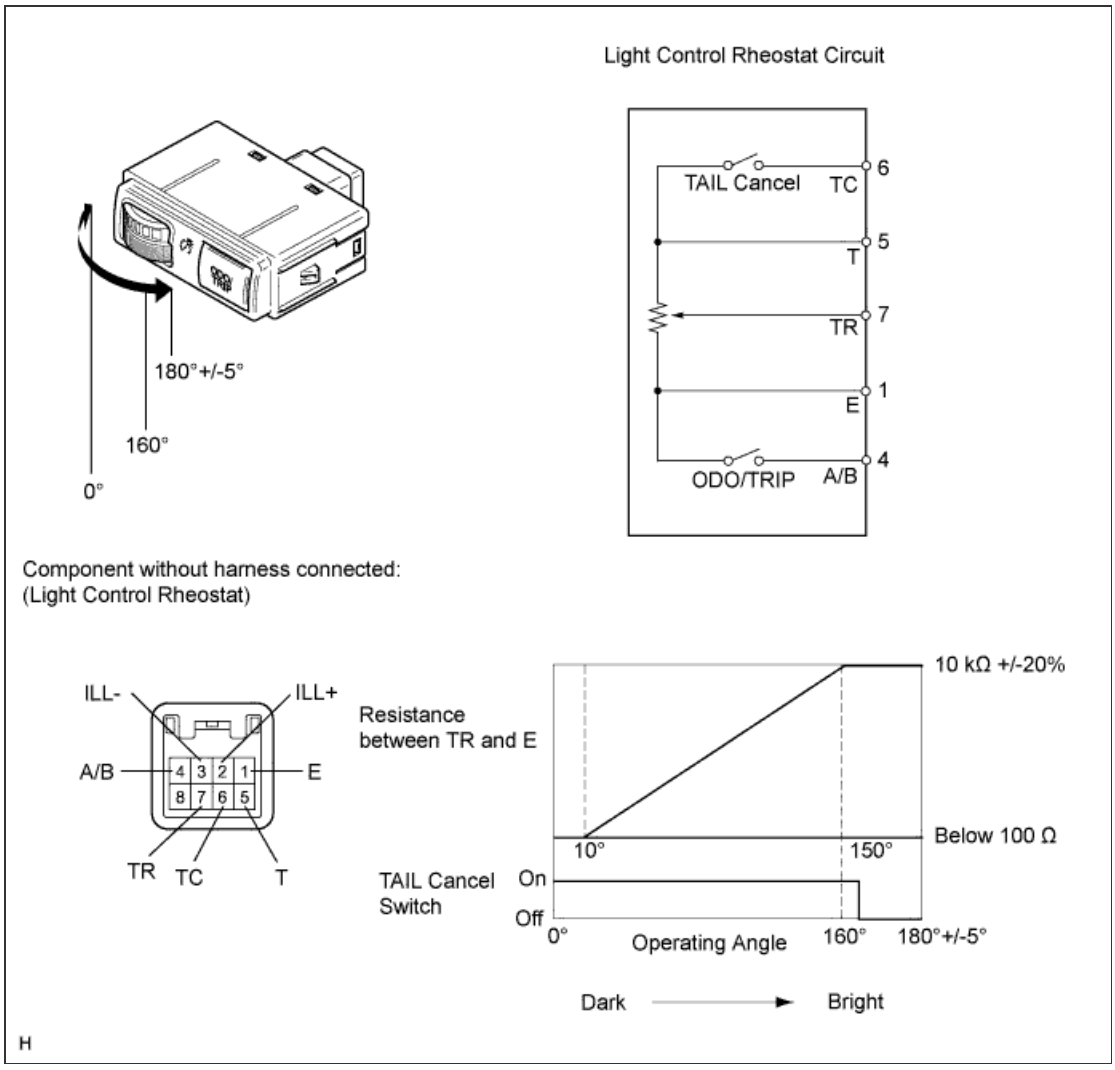


for Preparation Click here

1. INSPECT LIGHT CONTROL RHEOSTAT

a. Inspect the light control rheostat.

i. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
6 (TC) - 5 (E)	TAIL cancel switch off → on	10 kΩ or higher → Below 1 Ω
5 (T) - 1 (E)	Always	10 kΩ +/-20%
7 (TR) - 1 (E)	Light control rheostat fully turned right → Light control rheostat fully turned left	10 kΩ +/-20% → Below 100 Ω

b. Inspect the ODO/TRIP switch.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
4 (A/B) - 1 (E)	ODO/TRIP switch on (Pushed)	Below 100 Ω
	ODO/TRIP switch off (Not pushed)	1 MΩ or higher

c. Apply battery voltage to the connector and check the LED illumination condition.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 (ILL+) Battery negative (-) → Terminal 3 (ILL-)	LED illuminates

If the result is not as specified, replace the rheostat.

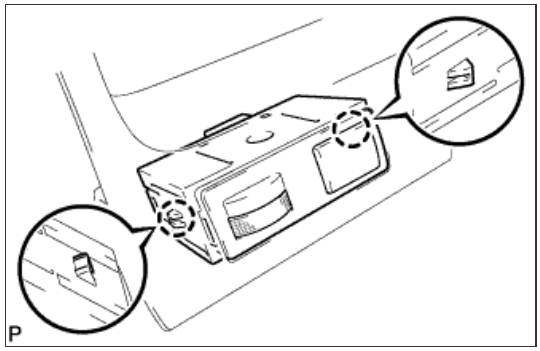
for Preparation Click here

HINT:

- **Use the same procedures for RHD and LHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL LIGHT CONTROL RHEOSTAT

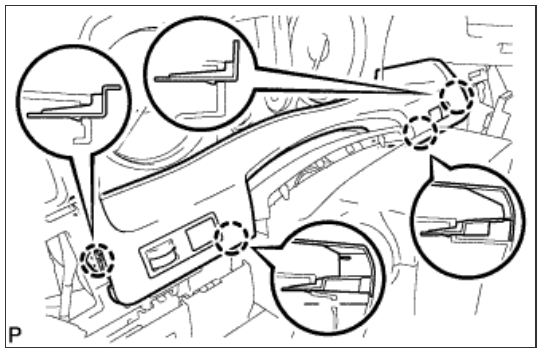
a. Attach the 2 claws to install the rheostat.



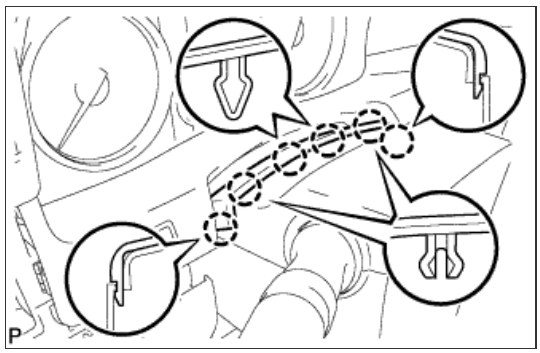
2. INSTALL INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

a. Connect the connectors.

b. Attach the 4 claws to install the finish panel.



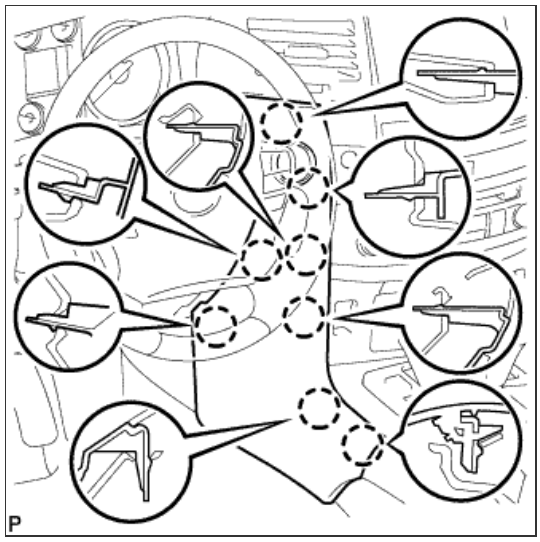
c. Attach the 6 claws.



3. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Connect the connector.

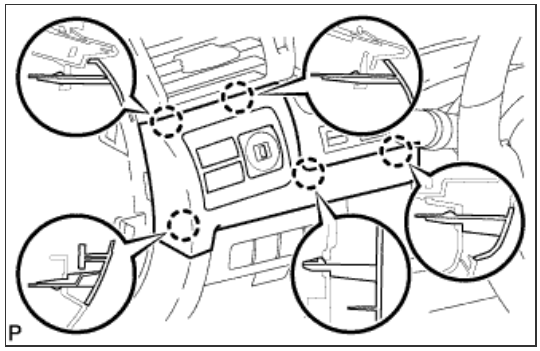
b. Attach the 8 claws to install the instrument panel pad.



4. INSTALL NO. 1 SWITCH HOLE BASE

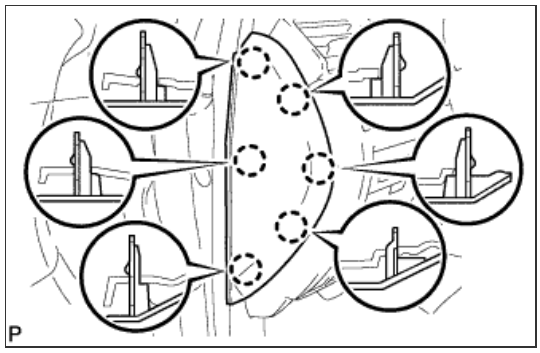
a. Connect the connectors.

b. Attach the 5 claws to install the hole base.



5. INSTALL INSTRUMENT SIDE PANEL LH

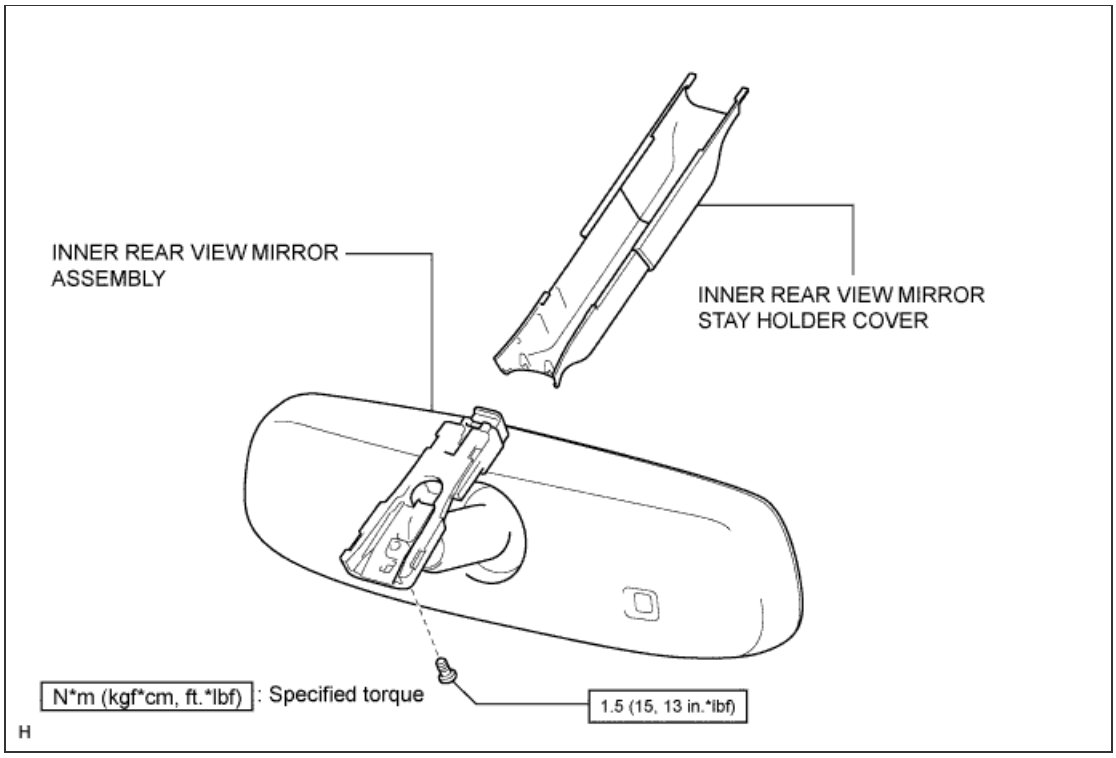
a. Attach the 6 claws to install the side panel.



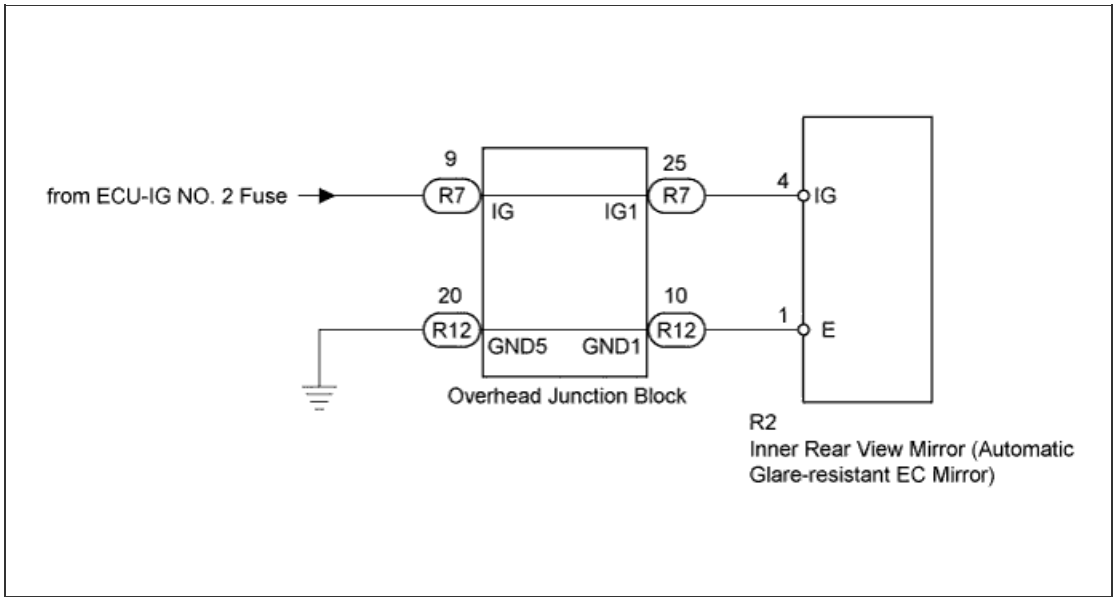
6. ENABLE AUTOAWAY/RETURN FUNCTION

a. Reset the Autoaway/Return function setting to the previous condition by changing the customize parameter (Click here).

for Preparation Click here



for Preparation Click here



for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

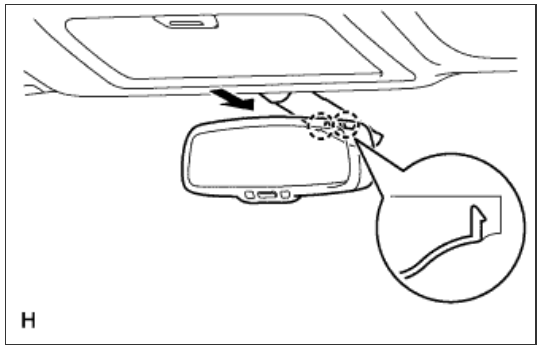
Automatic Glare-resistant EC Mirror

Symptom	Suspected Area	See page
Automatic glare-resistant EC mirror does not operate	ECU-IG NO. 2 fuse	-
	Inner rear view mirror	Click here
	Wire harness	-

for Preparation Click here

1. REMOVE INNER REAR VIEW MIRROR STAY HOLDER COVER

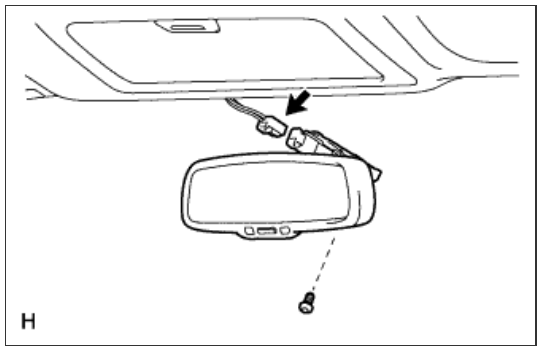
a. Detach the 2 claws and remove the cover as shown in the illustration.



2. REMOVE INNER REAR VIEW MIRROR ASSEMBLY

a. Disconnect the connector.

b. Using a T20 "TORX" socket wrench, remove the screw and inner rear view mirror.



for Preparation Click here

1. INSPECT INNER REAR VIEW MIRROR ASSEMBLY

a. Check operation of the electrochromic inner mirror.

i. Connect the battery positive (+) lead to terminal 4 and the negative (-) lead to terminal 1.

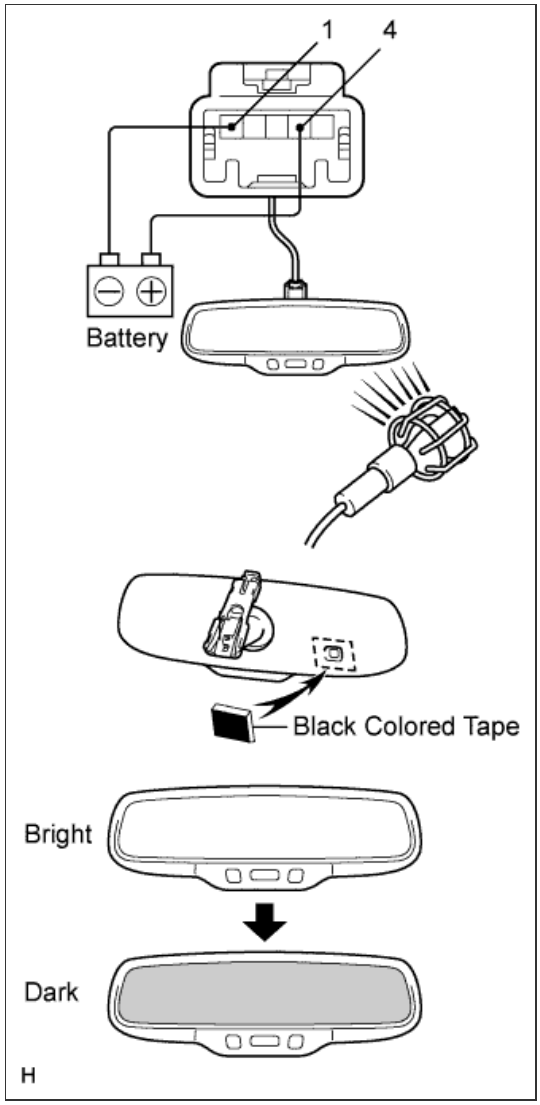
ii. Attach black colored tape to the forward sensor to prevent it from sensing.

iii. Shine an electric light on the mirror. Check that the mirror surface changes from bright to dark.

HINT:

When the environment is very bright, the anti-glare operation may occur immediately after the tape is applied.

If the result is not as specified, replace the mirror assembly.



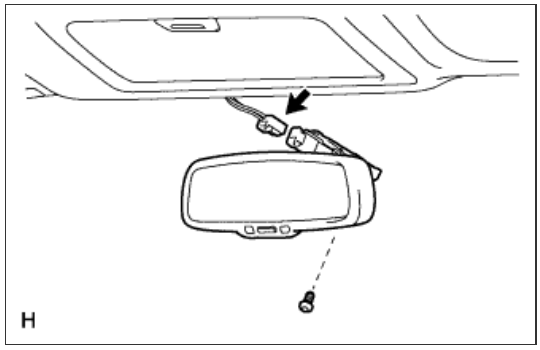
for Preparation Click here

1. INSTALL INNER REAR VIEW MIRROR ASSEMBLY

a. Using a T20 "TORX" socket wrench, install the inner rear view mirror with the screw.

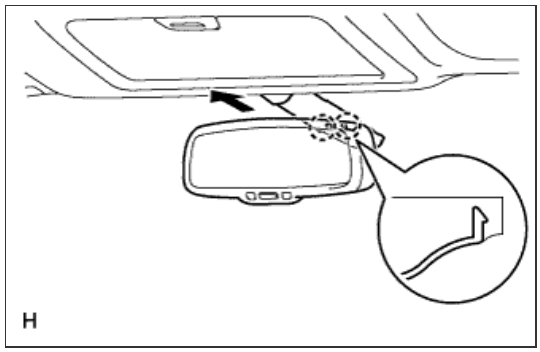
Torque:
1.5 N*m{ 15 kgf*cm , 13 in.*lbf }

b. Connect the connector.



2. INSTALL INNER REAR VIEW MIRROR STAY HOLDER COVER

a. Attach the 2 claws to install the cover as shown in the illustration.



for Preparation Click here

CAUTION:

- **The vehicle is equipped with a Supplemental Restraint System (SRS), which consists of a steering pad, front passenger airbag, curtain shield airbag, front seat airbag, driver side knee airbag, front passenger side knee airbag, rear seat side airbag, rear floor airbag sensor, seat belt pretensioner, center airbag sensor, front airbag sensor, side airbag sensor, rear airbag sensor and seat position sensor. Failure to carry out service procedures in the correct sequence could cause SRS parts to unexpectedly deploy and possibly lead to serious injuries. Furthermore, if a mistake is made when servicing SRS parts, they may fail to operate when required. Before performing servicing (including installation/removal, inspection and replacement of parts), be sure to read the following precautions.**
- **Before starting work, wait at least 90 seconds after the engine switch is turned off and after the cable is disconnected from the negative (-) battery terminal (SRS parts are equipped with a backup power source. If work is started within 90 seconds of turning the engine switch off and disconnecting the cable from the negative (-) battery terminal, SRS parts may deploy).**
- **Do not expose SRS parts directly to hot air or flames.**

NOTICE:

- **Malfunction symptoms of SRS parts are difficult to confirm. DTCs are the most important source of information when troubleshooting. During troubleshooting, always confirm DTCs before disconnecting the cable from the negative (-) battery terminal.**
- **For minor collisions where SRS parts do not deploy, always inspect the SRS parts.**
- **Before performing repairs, remove the airbag sensors if any kind of impact is likely to occur to an airbag sensor during repairs.**
- **Never use SRS parts from another vehicle. When replacing SRS parts, replace them with new ones.**
- **Never disassemble or attempt to repair SRS parts.**
- **If an SRS part has been dropped, or if there are any cracks, dents or other defects in the case, bracket or connector, replace the SRS part with a new one.**
- **Use an ohmmeter/voltmeter with high impedance (10 kΩ/V minimum) for troubleshooting the electrical circuits.**
- **Information labels are attached to the periphery of SRS parts. Follow the cautions and instructions on the labels.**
- **After work on the SRS is completed, perform the SRS warning light check (Click here).**
- **When the cable is disconnected from the negative (-) battery terminal, the memory settings of each system will be cleared. Because of this, be sure to write down the settings of each system before starting work. When work is finished, reset the settings of each system as before. Never use a backup power supply from outside the vehicle to avoid erasing the memory in a system.**
- **If the vehicle is equipped with a mobile communication system, refer to the Precaution in the Introduction section.**

HINT:

In the airbag system, the center airbag sensor, front airbag sensor LH and RH, side airbag sensor LH and RH, rear airbag sensor LH and RH, and rear floor airbag sensor are collectively referred to as the airbag sensors.

1.HANDLING PRECAUTIONS FOR AIRBAG SENSORS

a. Before starting the following operations, wait for at least 90 seconds after disconnecting the cable from the negative (-) battery terminal:

   i. Replacement of the airbag sensors.

   ii. Adjustment of the front/rear doors of the vehicle equipped with side airbags and curtain shield airbags (fitting adjustment).

b. When connecting or disconnecting the airbag sensor connectors, ensure that each sensor is installed in the vehicle.

c. Do not use airbag sensors which have been dropped during operation or transportation.

d. Do not disassemble the airbag sensors.

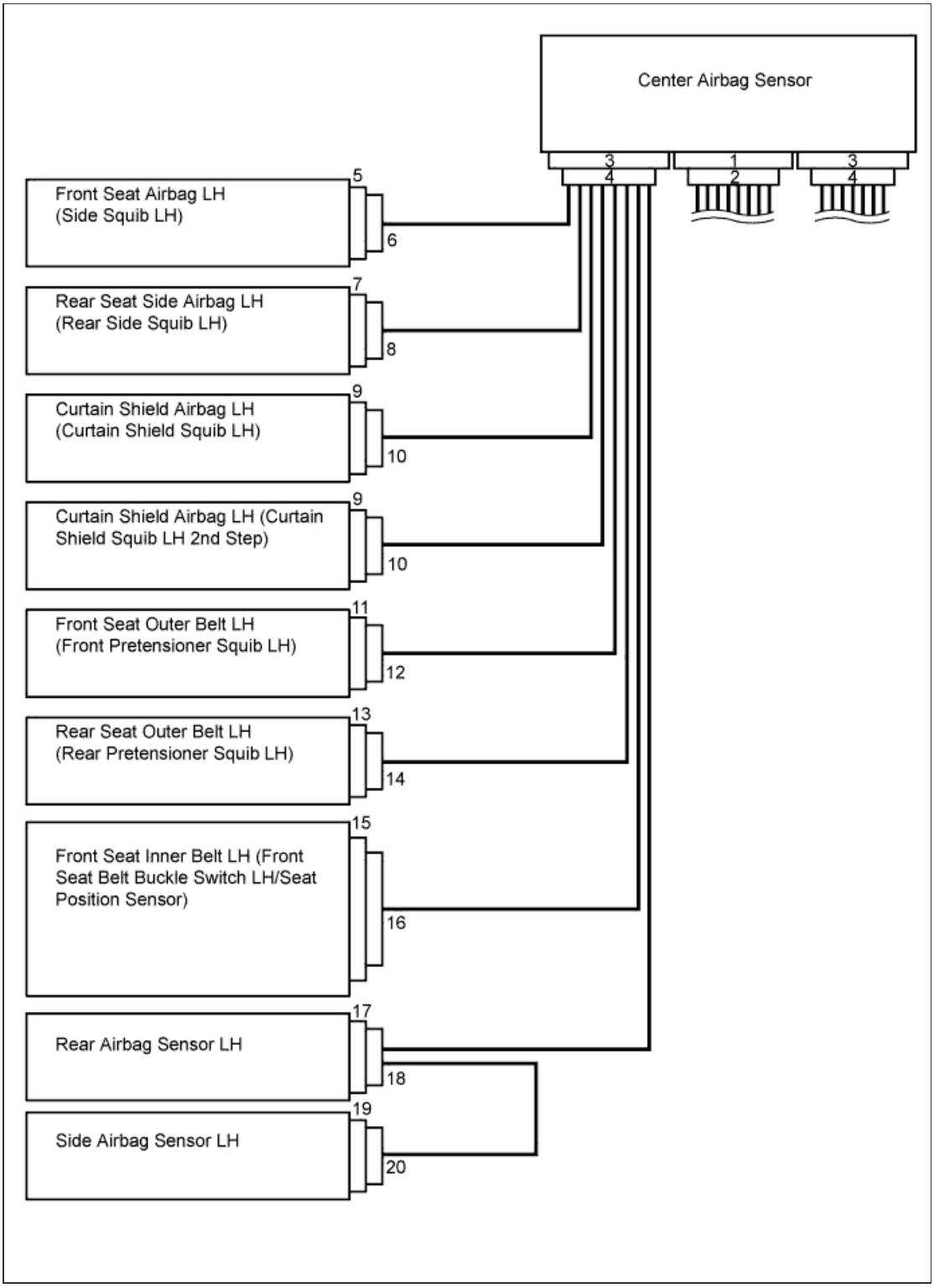
2.INSPECTION PROCEDURE FOR VEHICLE INVOLVED IN ACCIDENT

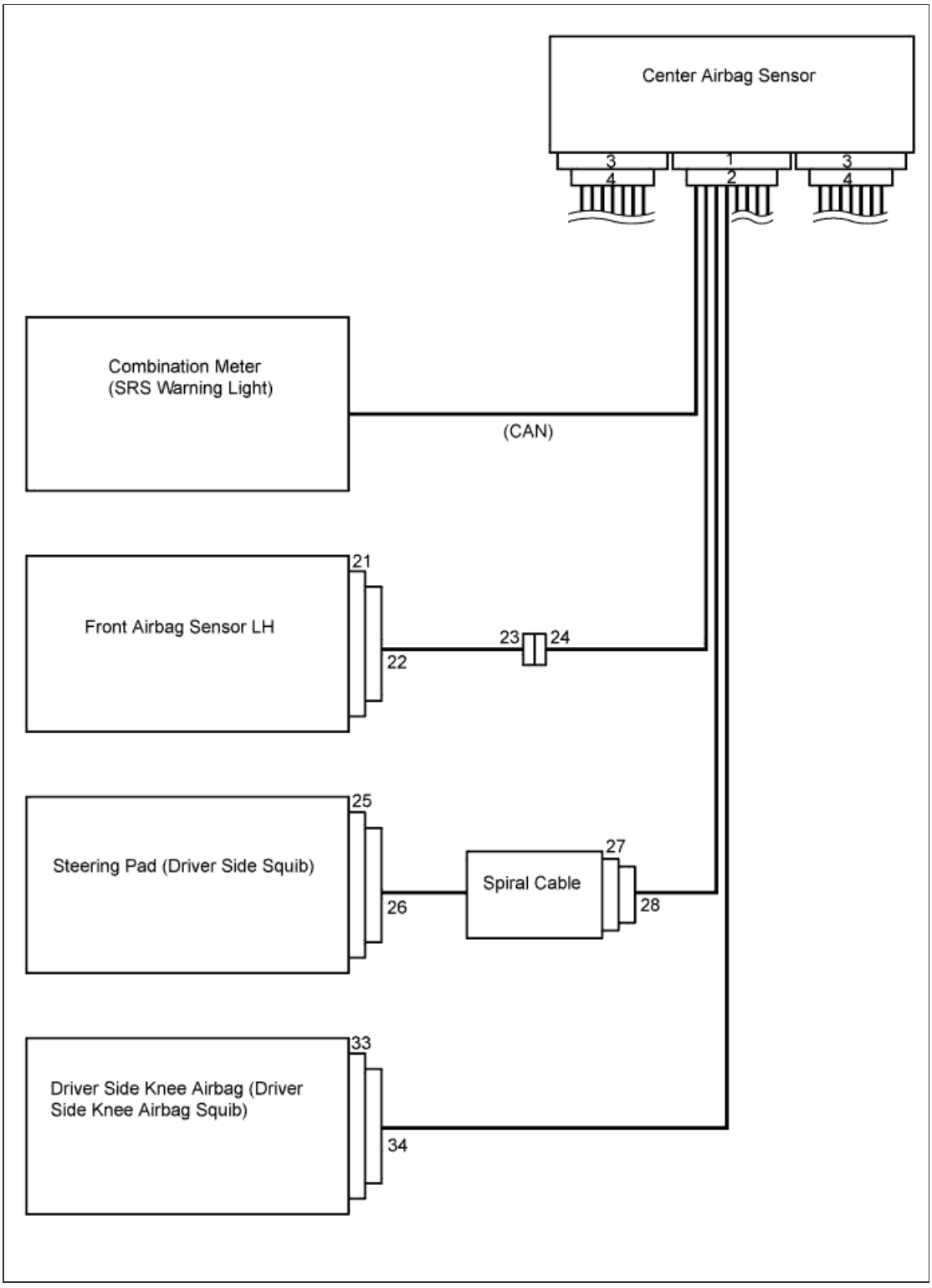
a. When the airbag has not deployed, confirm the DTCs by checking the SRS warning light. If there is any malfunction in the SRS airbag system, perform troubleshooting.

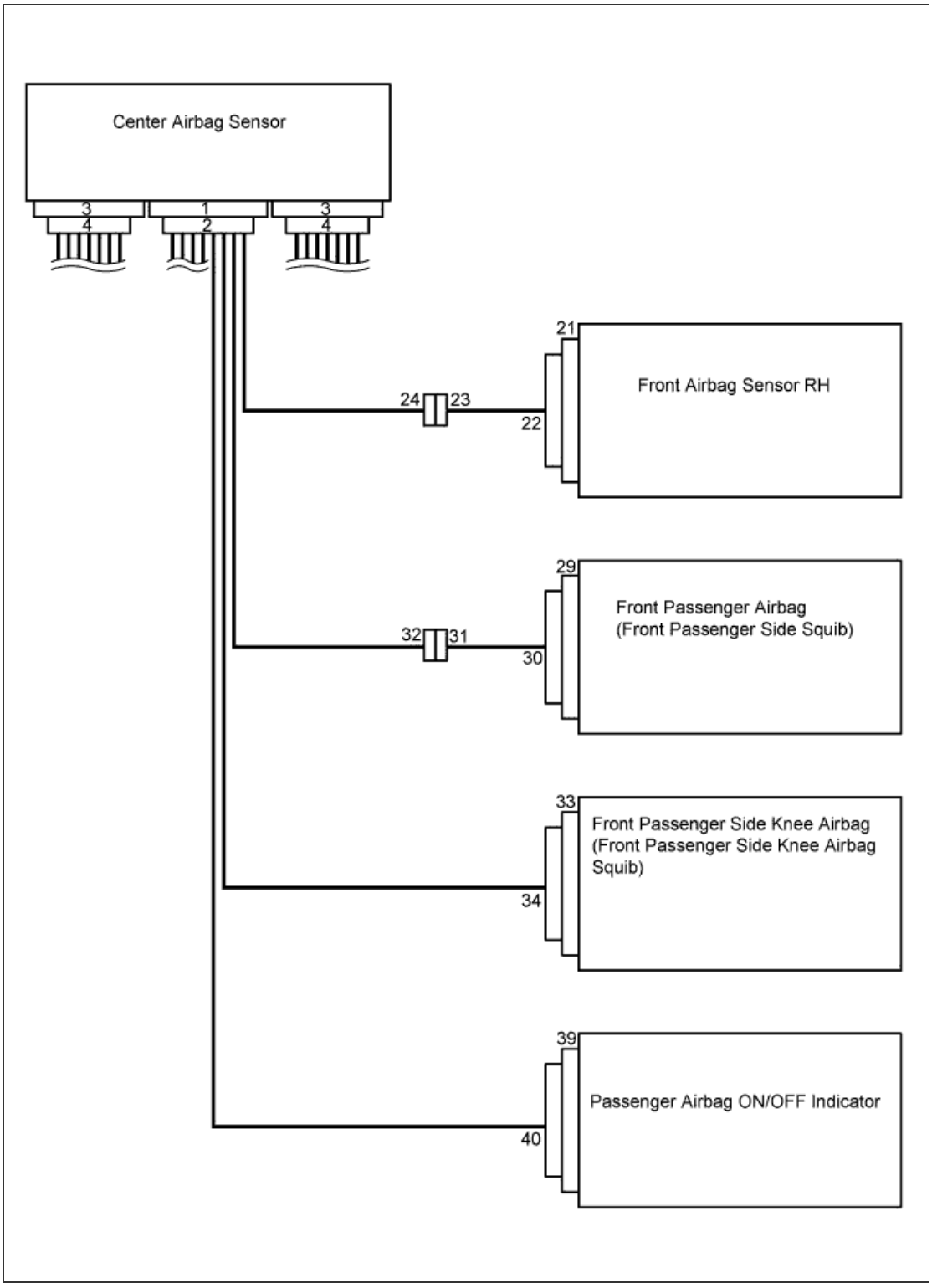
b. When any of the airbags have deployed, replace the airbag sensors and check the installation condition.

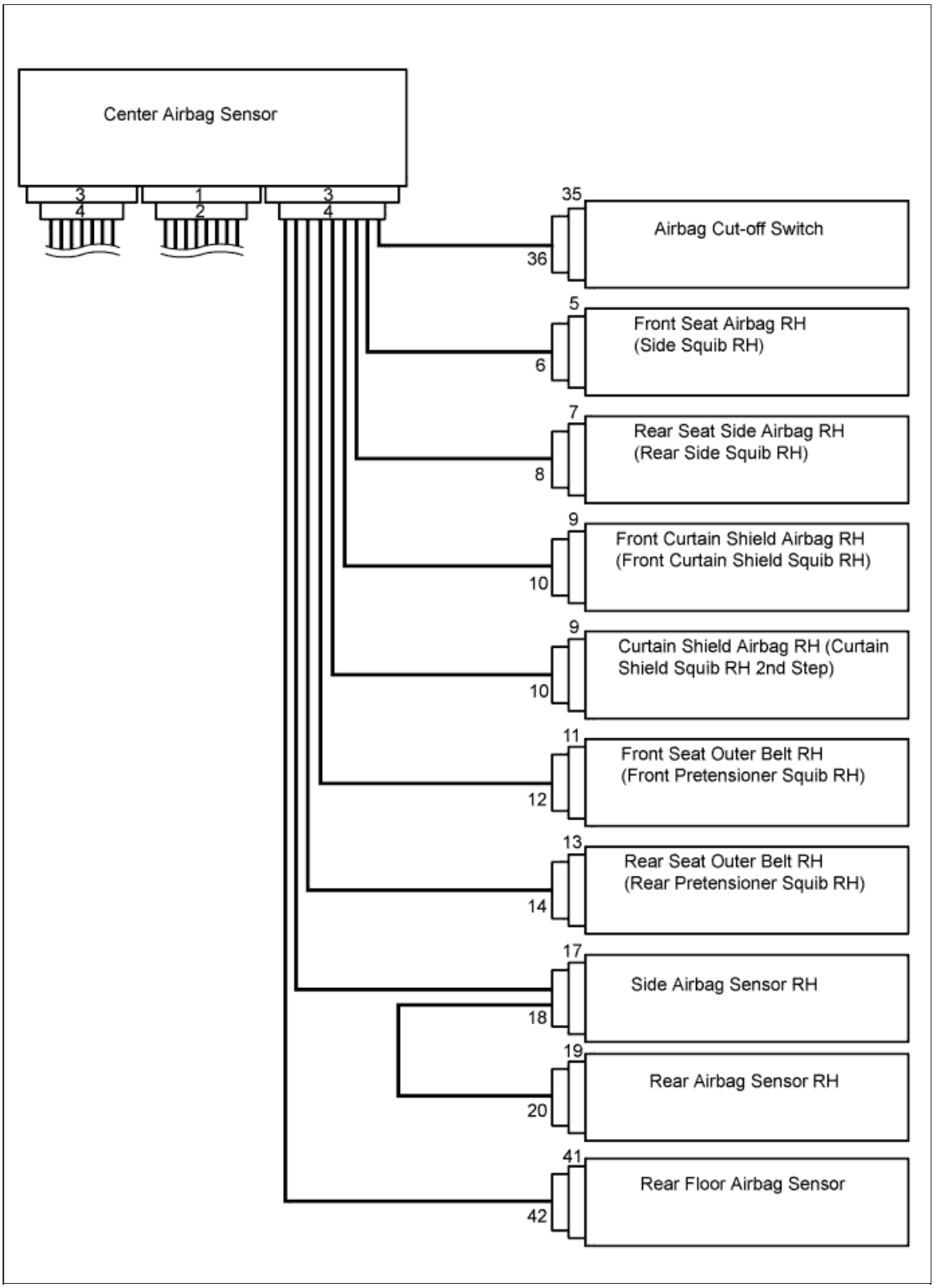
3.SRS CONNECTORS

a. SRS connectors are located as shown in the following illustration.


Center Airbag Sensor
3
4
1
2
3
4
Front Seat Airbag LH
(Side Squib LH)
5
6
Rear Seat Side Airbag LH
(Rear Side Squib LH)
7
8
Curtain Shield Airbag LH
(Curtain Shield Squib LH)
9
10
Curtain Shield Airbag LH (Curtain
Shield Squib LH 2nd Step)
9
10
Front Seat Outer Belt LH
(Front Pretensioner Squib LH)
11
12
Rear Seat Outer Belt LH
(Rear Pretensioner Squib LH)
13
14
Front Seat Inner Belt LH (Front
Seat Belt Buckle Switch LH/Seat
Position Sensor)
15
16
Rear Airbag Sensor LH
17
18
Side Airbag Sensor LH
19
20


Center Airbag Sensor
3
4
1
2
3
4
Combination Meter
(SRS Warning Light)
(CAN)
Front Airbag Sensor LH
21
22
23
24
Steering Pad (Driver Side Squib)
25
26
Spiral Cable
27
28
Driver Side Knee Airbag (Driver
Side Knee Airbag Squib)
33
34

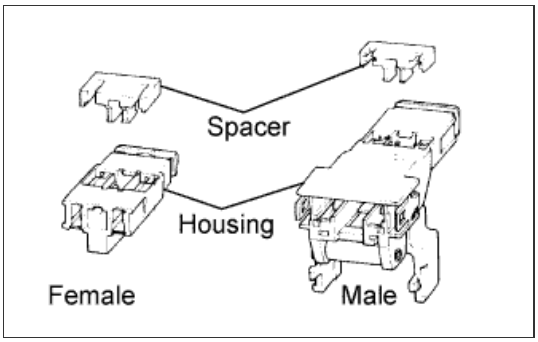

Center Airbag Sensor
3
4
1
2
3
4
21
Front Airbag Sensor RH
24
23
22
29
Front Passenger Airbag
(Front Passenger Side Squib)
32
31
30
33
Front Passenger Side Knee Airbag
(Front Passenger Side Knee Airbag
Squib)
34
39
Passenger Airbag ON/OFF Indicator
40



Item	Application
Terminal Twin-lock Mechanism	Connectors 5, 6, 7, 8, 18, 20, 23, 24, 27, 28, 31, 32, 37, 38, 41, 42
Activation Prevention Mechanism	Connectors 5, 7, 27, 31, 37, 41
Half Connection Prevention Mechanism	Connectors 6, 8, 23, 28, 32, 38, 42
Connector Position Assurance Mechanism	Connectors 18, 20, 22
Connector Lock Mechanism (1)	Connectors 10, 12, 14, 26, 30, 34
Connector Lock Mechanism (2)	Connectors 2, 4
Improper Connection Prevention Lock Mechanism	Connectors 1, 3

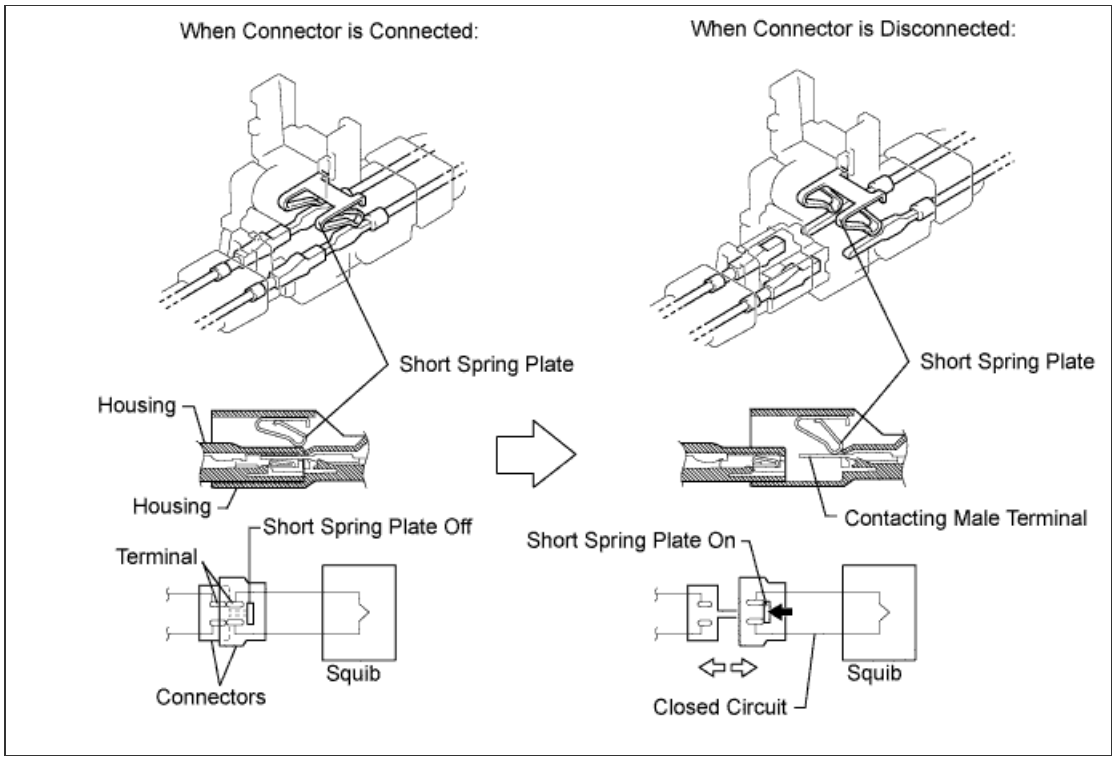
b. All connectors in the SRS, except the seat position sensor connector, are colored yellow to distinguish them from other connectors. These connectors have special functions, and are specially designed for the SRS. All SRS

connectors use durable gold-plated terminals which are placed in the locations shown below to ensure high reliability.

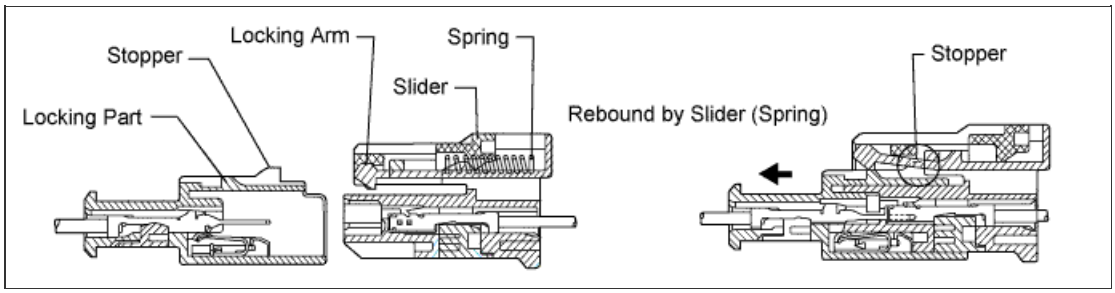


i. Terminal twin-lock mechanism:
All connectors with a terminal twin-lock mechanism have a two-piece component consisting of a housing and a spacer. This design enables the terminal to be locked securely by two locking devices (the retainer and the lance) to prevent terminals from coming out.

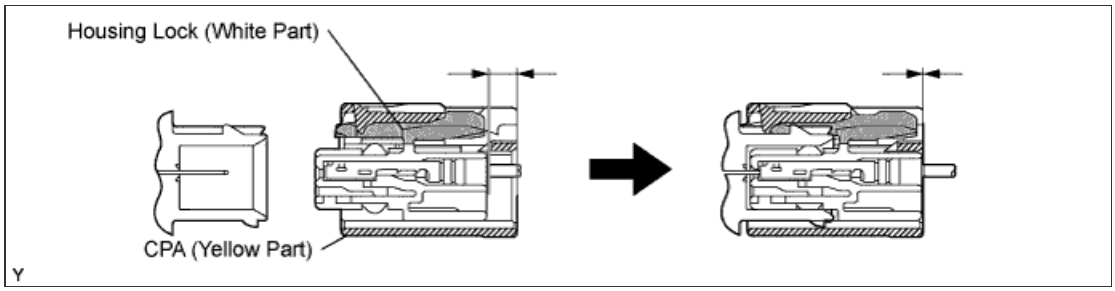
ii. Activation prevention mechanism:
All connectors with an activation prevention mechanism contain a short spring plate. When these connectors are disconnected, the short spring plate creates a short circuit by automatically connecting the positive (+) and negative (-) terminals of the squib.



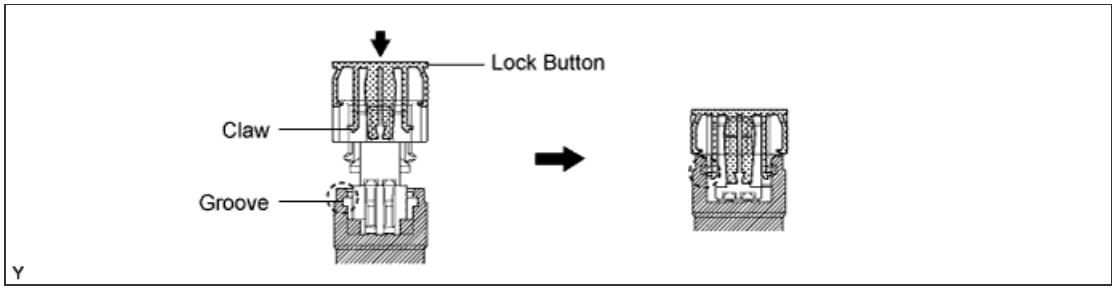
iii. Half connection prevention mechanism:
If the connector is not completely connected, the connector is disconnected due to the spring force so that no continuity exists.



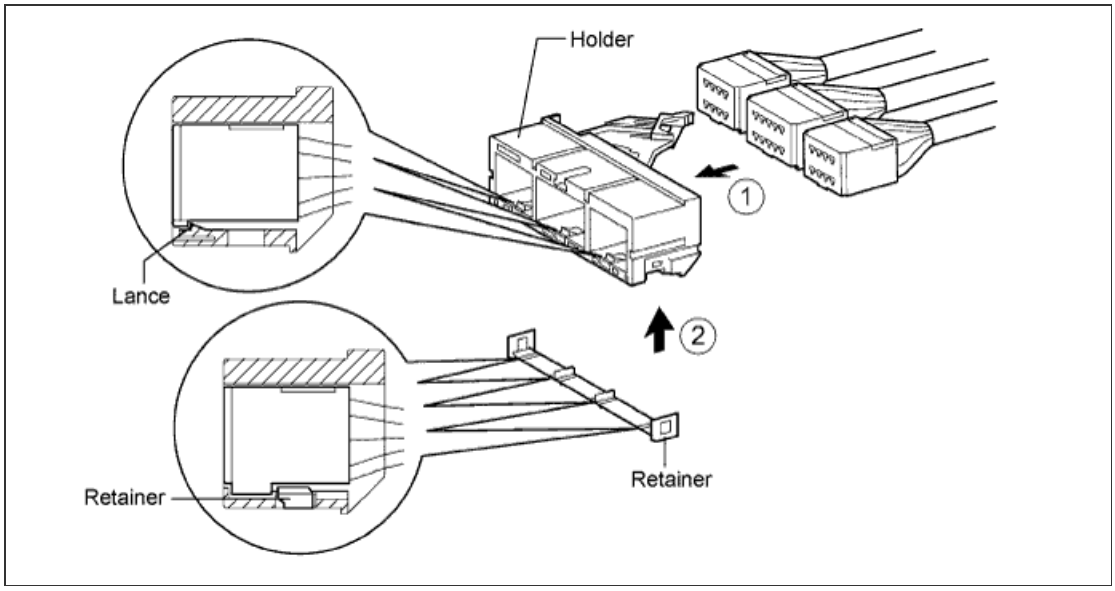
iv. Connector position assurance mechanism:
Only when the housing lock (white part) is completely engaged, the CPA (yellow part) slides, which completes the connector engagement.



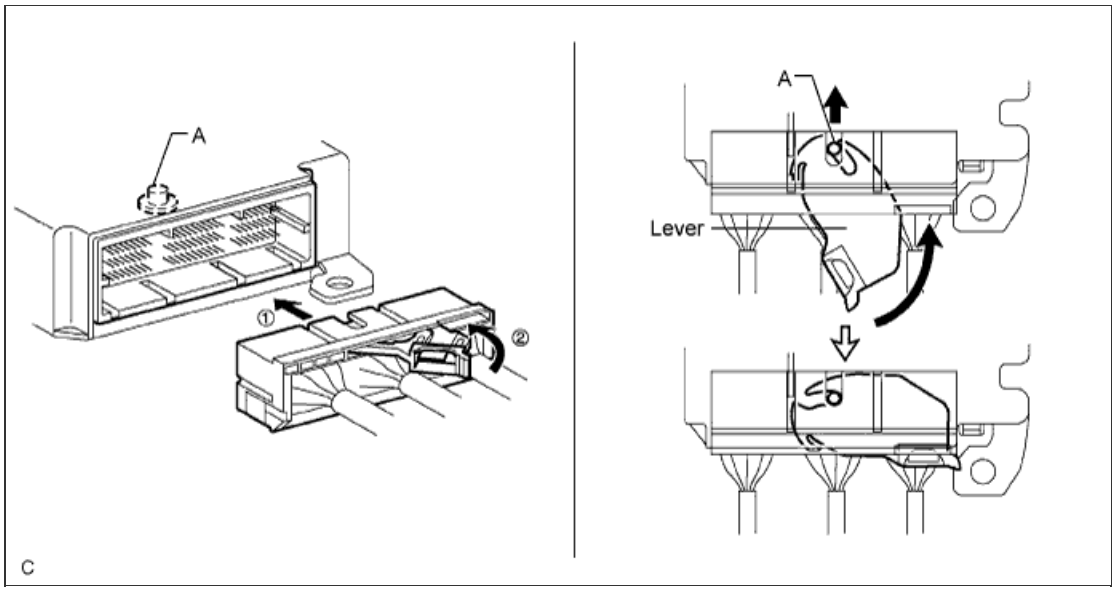
v. Connector lock mechanism (1):
Locking the connector lock button connects the connector securely.



vi. Connector lock mechanism (2):
Both the primary lock with holder lances and the secondary lock with retainer prevent the connectors from becoming disconnected.



vii. Improper connection prevention lock mechanism:
When connecting the holder, the lever is pushed into the lock position by rotating around the A axis to lock the holder securely.



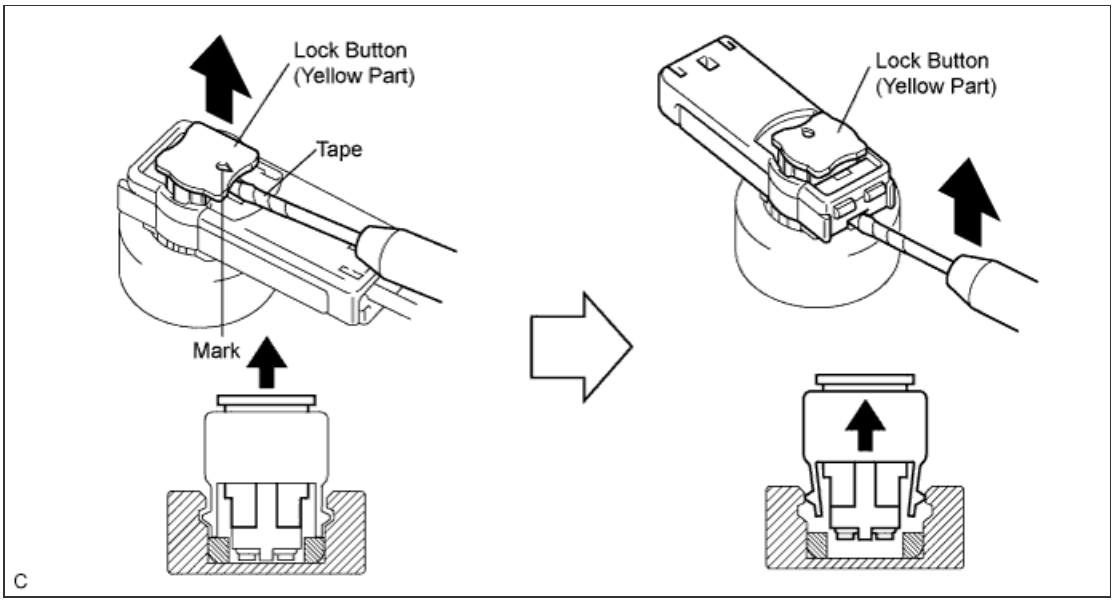
4.DISCONNECTION OF CONNECTORS FOR STEERING PAD, FRONT PASSENGER AIRBAG (SQUIB SIDE), DRIVER SIDE KNEE AIRBAG, FRONT PASSENGER SIDE KNEE AIRBAG, CURTAIN SHIELD AIRBAG, FRONT SEAT AIRBAG (SQUIB SIDE) AND REAR SEAT SIDE AIRBAG (SQUIB SIDE)

HINT:

Tape the screwdriver tip before use.

a. Release the lock button (yellow part) of the connector using a screwdriver.

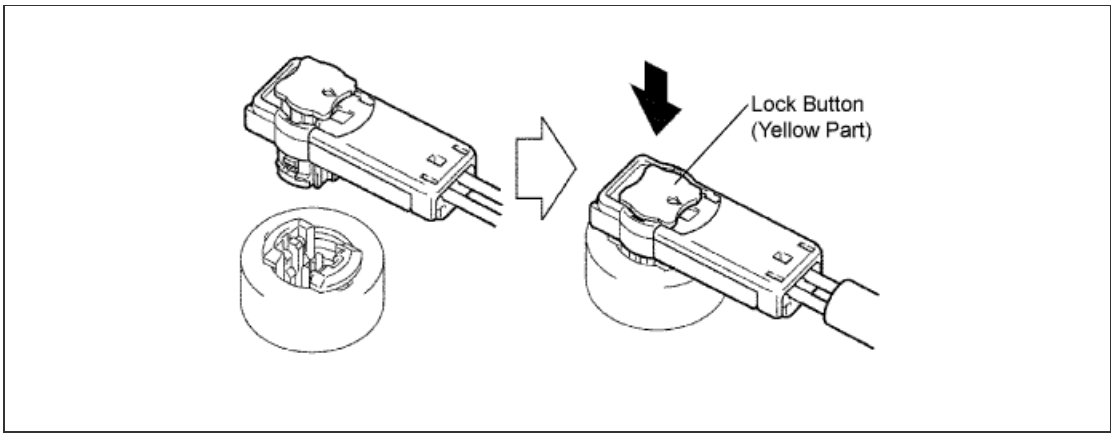
b. Insert the screwdriver tip between the connector and the base, and then raise the connector.



5.CONNECTION OF CONNECTORS FOR STEERING PAD, FRONT PASSENGER AIRBAG (SQUIB SIDE), DRIVER SIDE KNEE AIRBAG, FRONT PASSENGER SIDE KNEE AIRBAG, CURTAIN SHIELD AIRBAG, FRONT SEAT AIRBAG (SQUIB SIDE) AND REAR SEAT SIDE AIRBAG (SQUIB SIDE)

a. Connect the connector.

b. Push down securely on the lock button (yellow part) of the connector (when locked, a click sound can be heard).



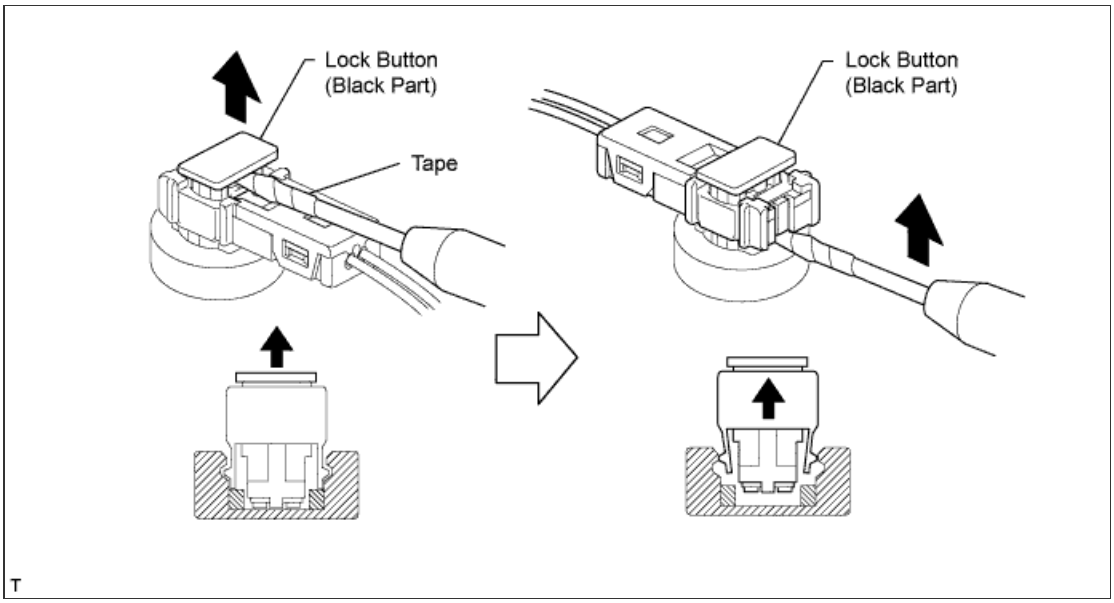
6.DISCONNECTION OF CONNECTORS FOR FRONT SEAT OUTER BELT AND REAR SEAT OUTER BELT

HINT:

Tape the screwdriver tip before use.

a. Release the lock button (black part) of the connector using a screwdriver.

b. Insert the screwdriver tip between the connector and the base, and then raise the connector.

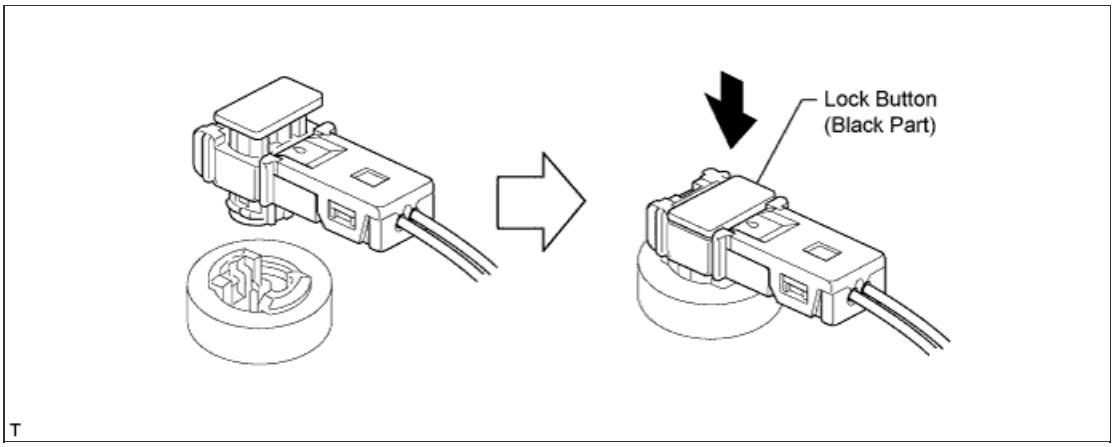


T

7.CONNECTION OF CONNECTORS FOR FRONT SEAT OUTER BELT AND REAR SEAT OUTER BELT

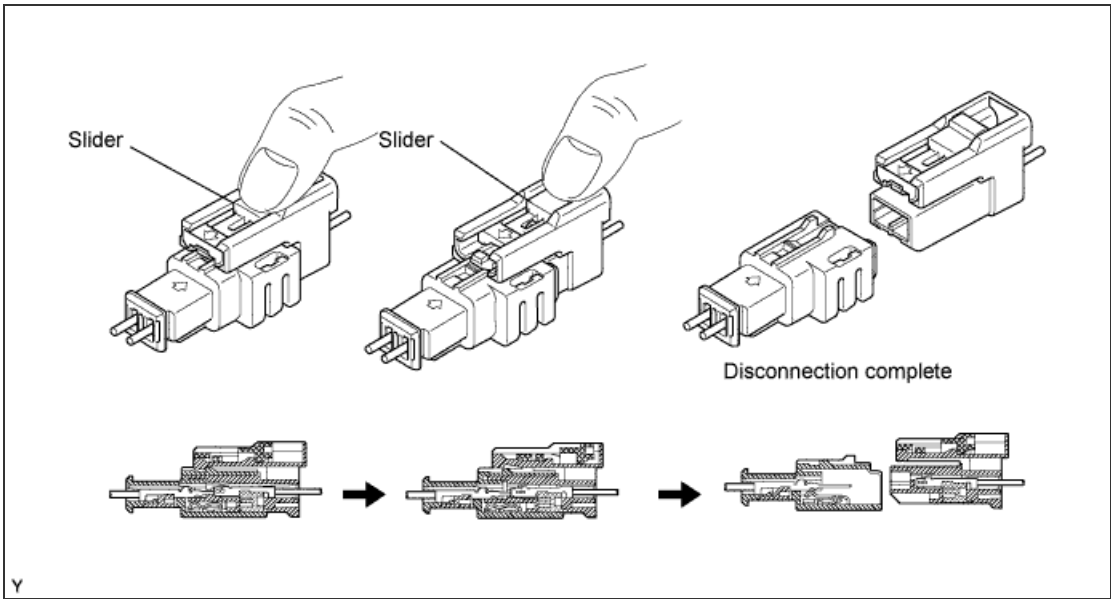
a. Connect the connector.

b. Push down security on the lock button (black part) of the connector (when locked, a click sound can be heard).



8.DISCONNECTION OF CONNECTOR FOR SPIRAL CABLE (INSTRUMENT PANEL WIRE SIDE) AND FRONT PASSENGER AIRBAG (INSTRUMENT PANEL WIRE SIDE)

a. Place a finger on the slider, slide the slider to release the lock, and then disconnect the connector.

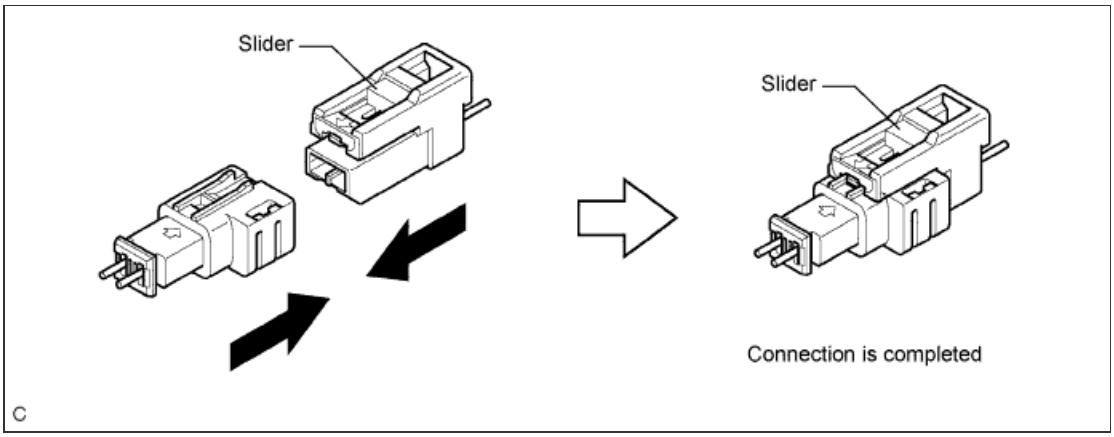


9.CONNECTION OF CONNECTOR FOR SPIRAL CABLE (INSTRUMENT PANEL WIRE SIDE) AND FRONT PASSENGER AIRBAG (INSTRUMENT PANEL WIRE ASSEMBLY SIDE)

a. Connect the connector as shown in the illustration (when locking, make sure that the slider returns to its original position and a click sound can be heard).

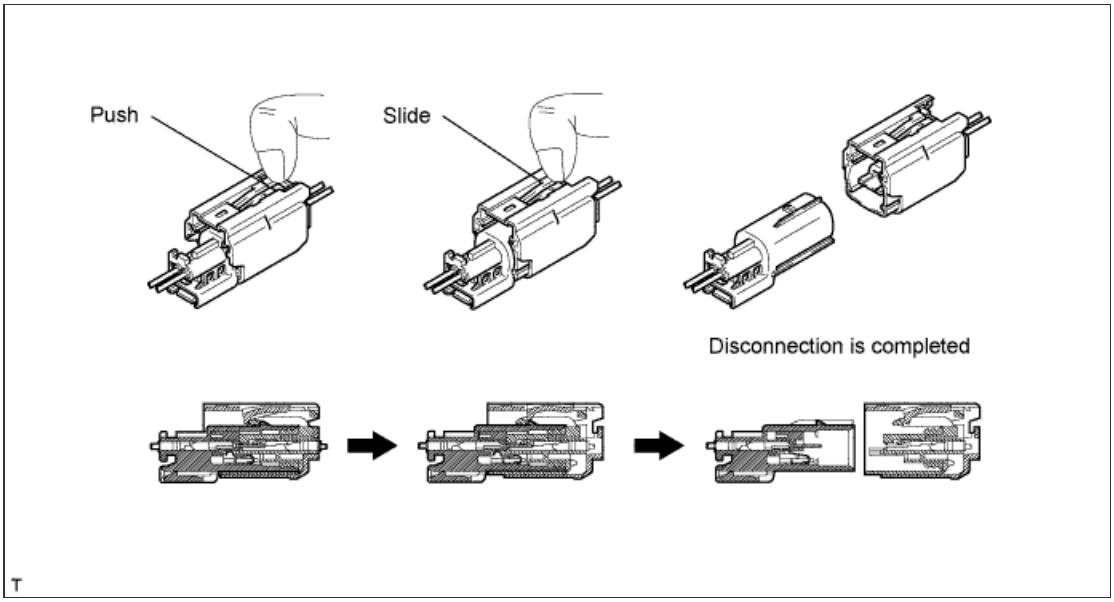
HINT:

When connecting, the slider will slide. Be sure not to touch the slider while connecting, as it may result in an insecure fit.



10.DISCONNECTION OF CONNECTORS FOR FRONT SEAT AIRBAG (FLOOR WIRE SIDE) AND REAR SEAT SIDE AIRBAG (FLOOR WIRE SIDE)

a. Push the slider with a finger to detach the first claw. Without releasing your finger, slide the slider to detach the second claw and disconnect the connector.

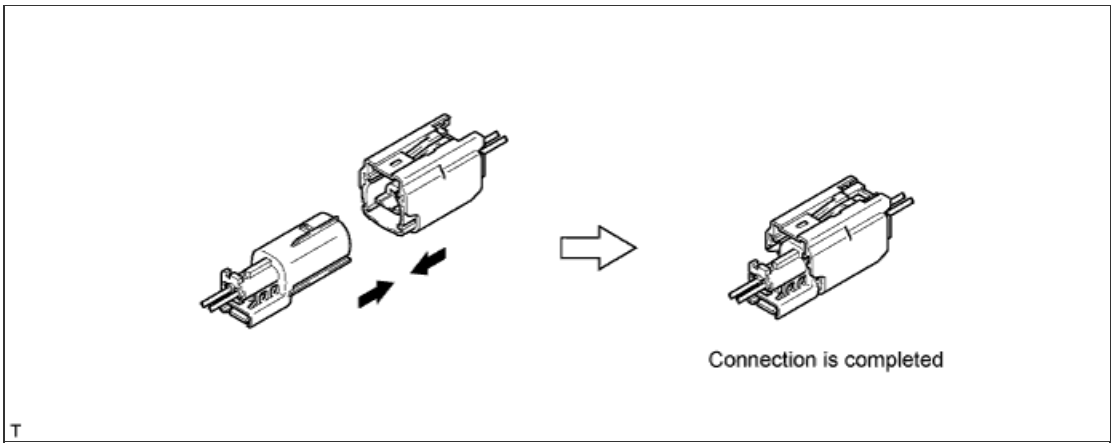


11.CONNECTION OF CONNECTORS FOR FRONT SEAT AIRBAG (FLOOR WIRE SIDE) AND REAR SEAT SIDE AIRBAG (FLOOR WIRE SIDE)

a. Connect the connector as shown in the illustration (when locking, make sure that the slider returns to its original position and click sounds can be heard).

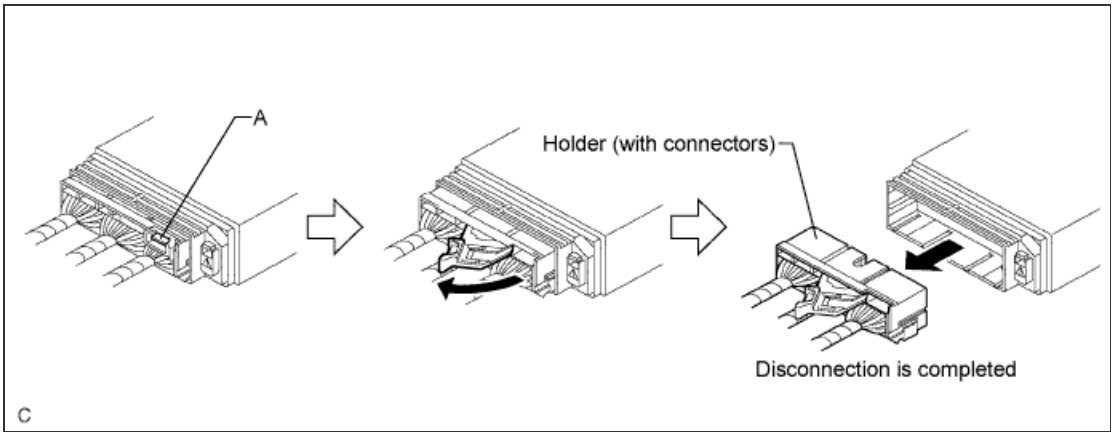
HINT:

When connecting, the slider will slide. Be sure not to touch the slider while connecting, as it may result in an insecure fit.



12.DISCONNECTION OF CONNECTOR FOR CENTER AIRBAG SENSOR

a. Pull the lever by pushing part A as shown in the illustration and disconnect the holder (with connectors).

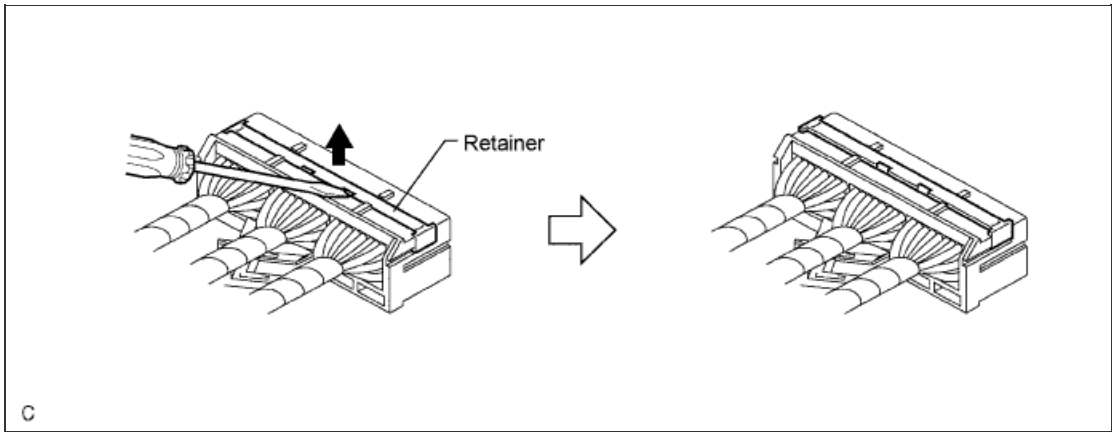


HINT:

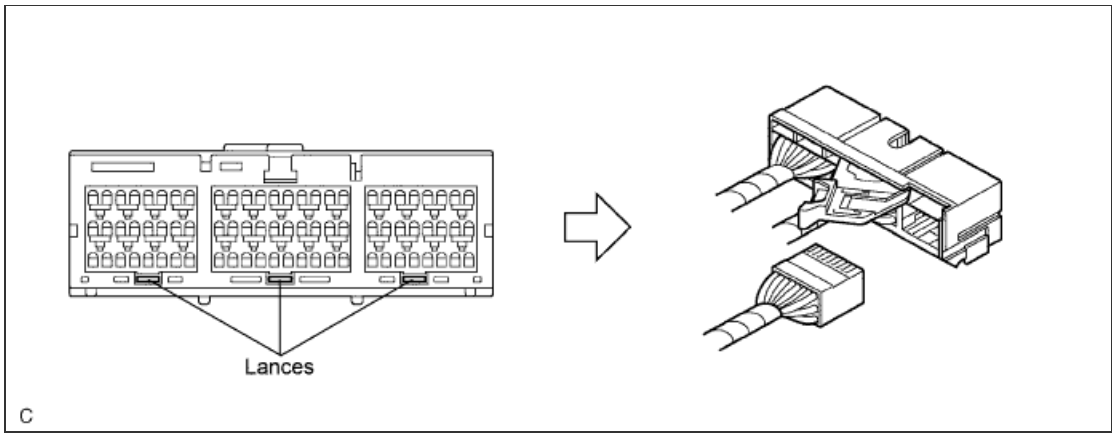
Perform the following procedures when replacing the holder.

b. Remove the holder.

i. Using a screwdriver, unlock the retainer.



ii. Release the fitting lances and remove the holder.

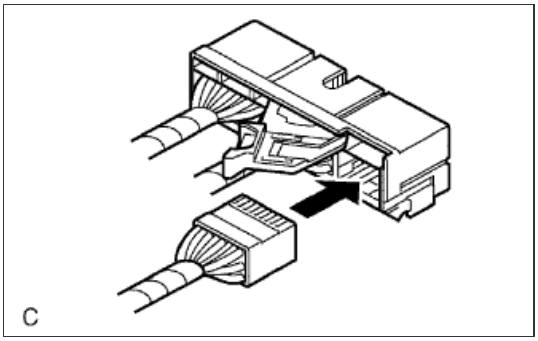


c. Install the holder.

i. Install the connectors to the holder (when locked, a click sound can be heard).

HINT:

The retainer is locked when the holder is connected.



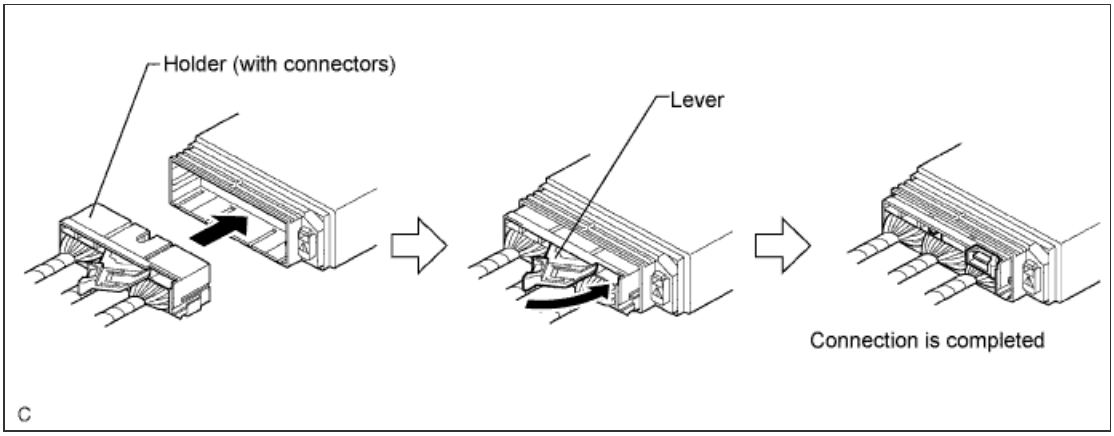
13.CONNECTION OF CONNECTOR FOR CENTER AIRBAG SENSOR

a. Firmly insert the holder (with connectors) into the center airbag sensor until it cannot be pushed any further.

b. Push the lever to connect the holder (with connectors) (when locked, a click sound can be heard).

HINT:

The holder slides into the center airbag sensor when it is being connected. Be sure not to hold the holder while connecting, as it may result in an insecure fit.



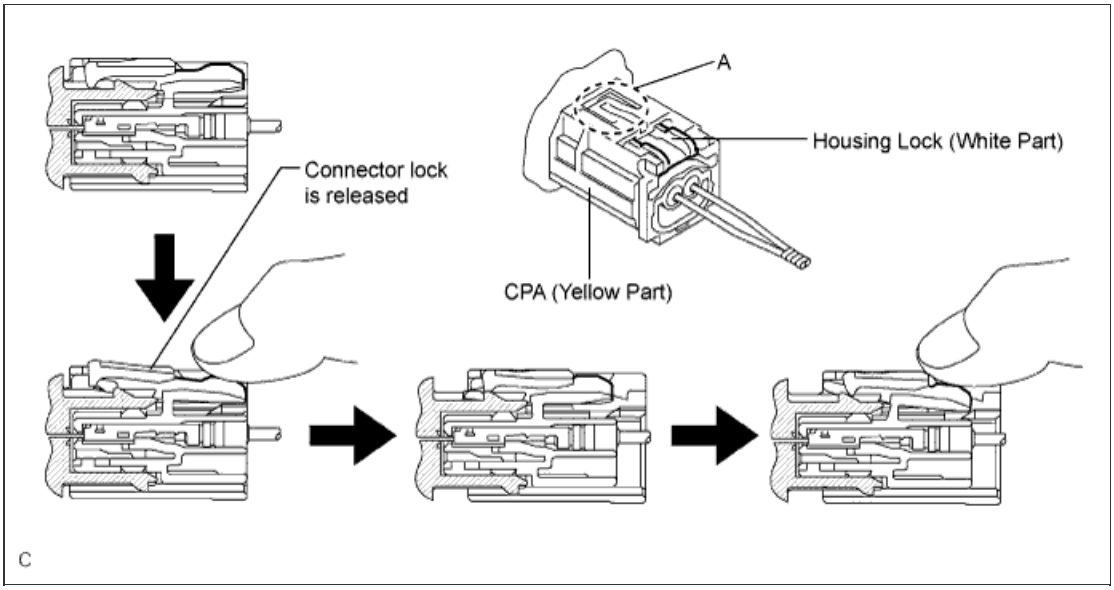
14.DISCONNECTION OF CONNECTOR FOR FRONT AIRBAG SENSOR, REAR AIRBAG SENSOR RH AND REAR FLOOR AIRBAG SENSOR

a. Push down the housing lock (white part) and slide the CPA (yellow part) (at this time, the connector cannot be disconnected yet).

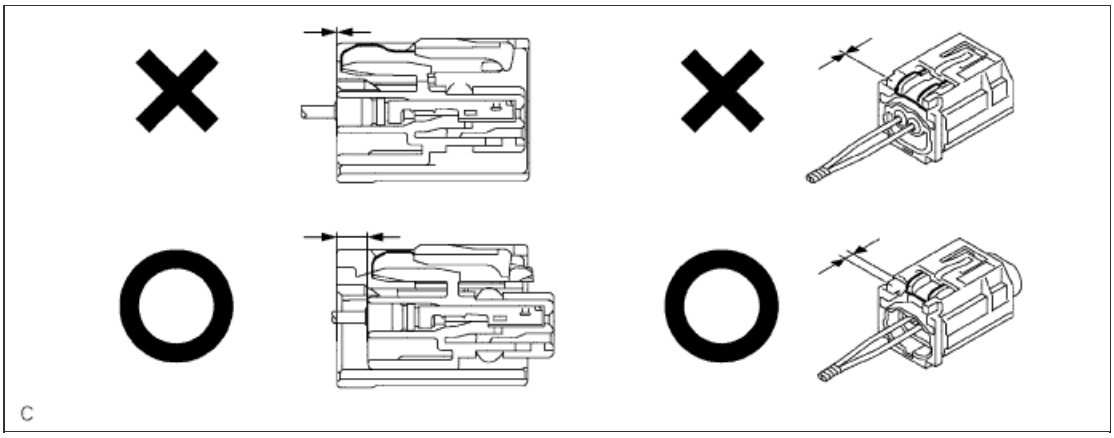
b. Push down the housing lock (white part) again and disconnect the connector.

HINT:

Do not push down the part labeled A shown in the illustration when disconnecting.

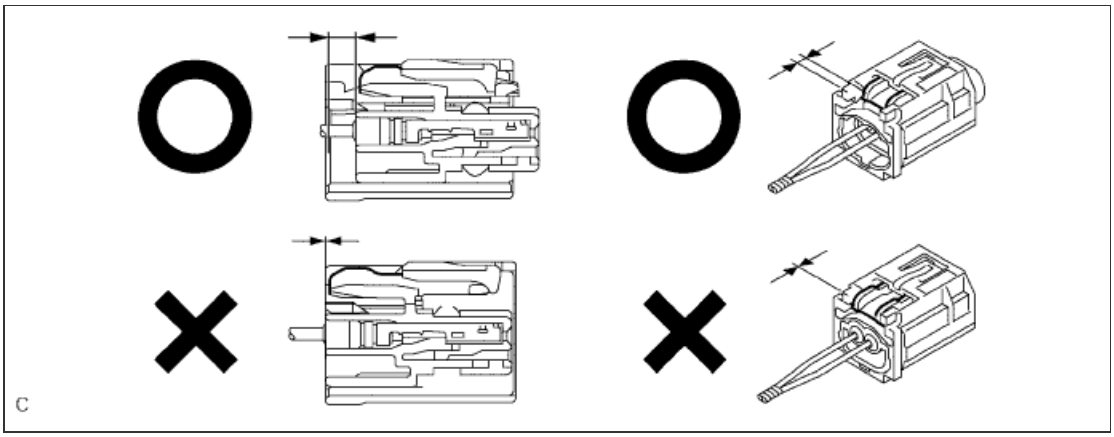


c. After disconnecting the connector, check that the position of the housing lock (white part) is as shown in the illustration.



15.CONNECTION OF CONNECTOR FOR FRONT AIRBAG SENSOR, REAR AIRBAG SENSOR RH AND REAR FLOOR AIRBAG SENSOR

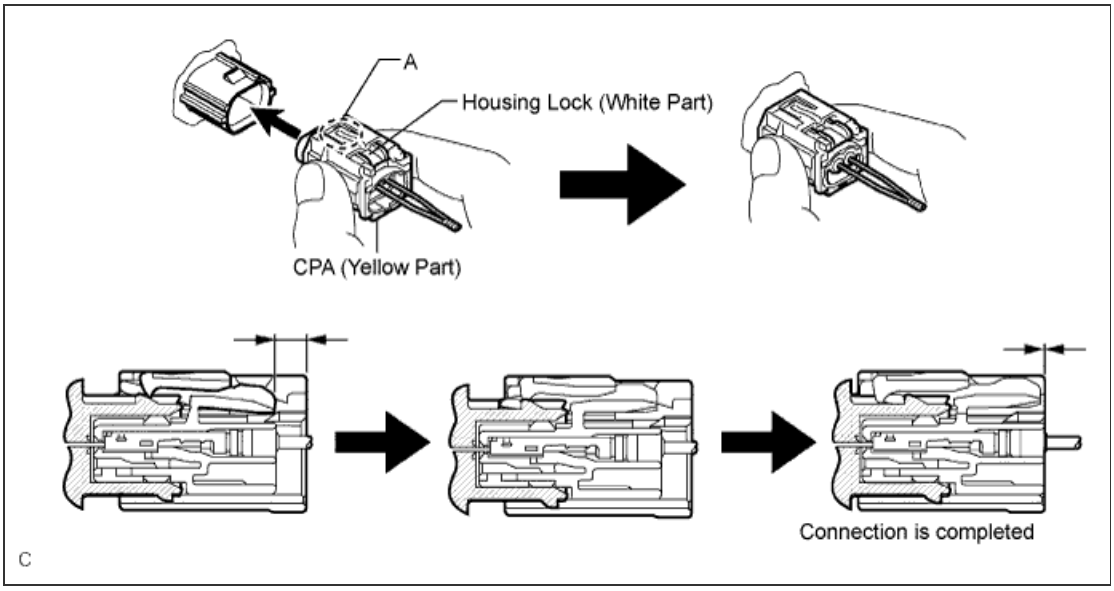
a. Before connecting the connectors, check that the position of the housing lock (white part) is as shown in the illustration.



b. Be sure to engage the connectors until they are locked (when locking, make sure that a click sound can be heard).

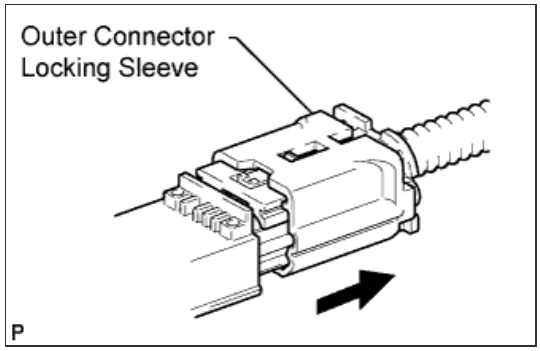
HINT:

When connecting the connectors, the housing lock (white part) slides. Be sure not to hold the housing lock (white part) and the part labeled A, as it may result in an insecure fit.



16.DISCONNECTION OF CONNECTORS FOR SIDE AIRBAG SENSOR AND REAR AIRBAG SENSOR LH

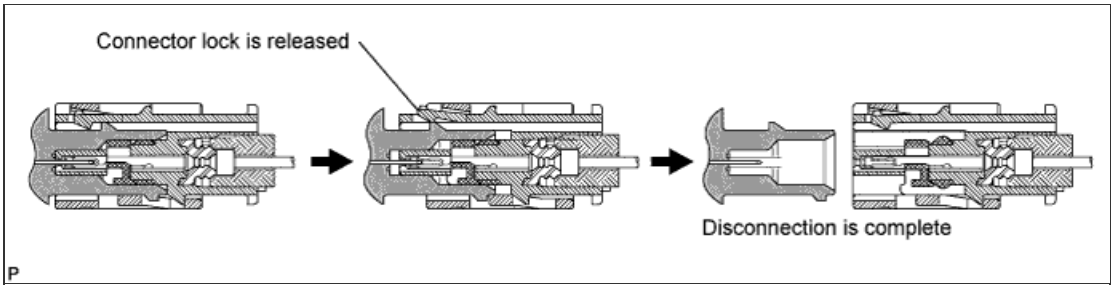
a. While holding the sides of the outer connector locking sleeve, slide the sleeve in the direction shown by the arrow.



b. When the connector lock is released, the connectors are disconnected.

HINT:

Be sure to hold both sides of the sleeve. Holding the top and bottom will make disconnection difficult.

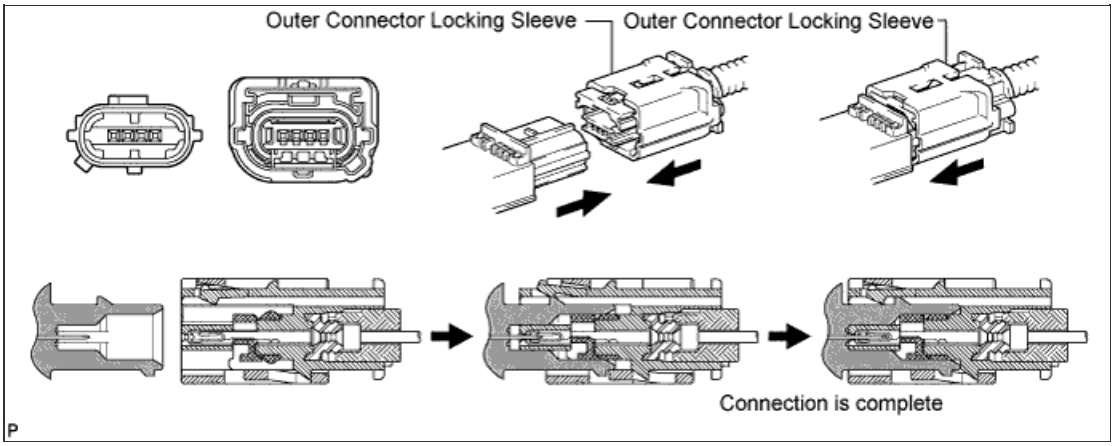


17.CONNECTION OF CONNECTORS FOR SIDE AIRBAG SENSOR AND REAR AIRBAG SENSOR LH

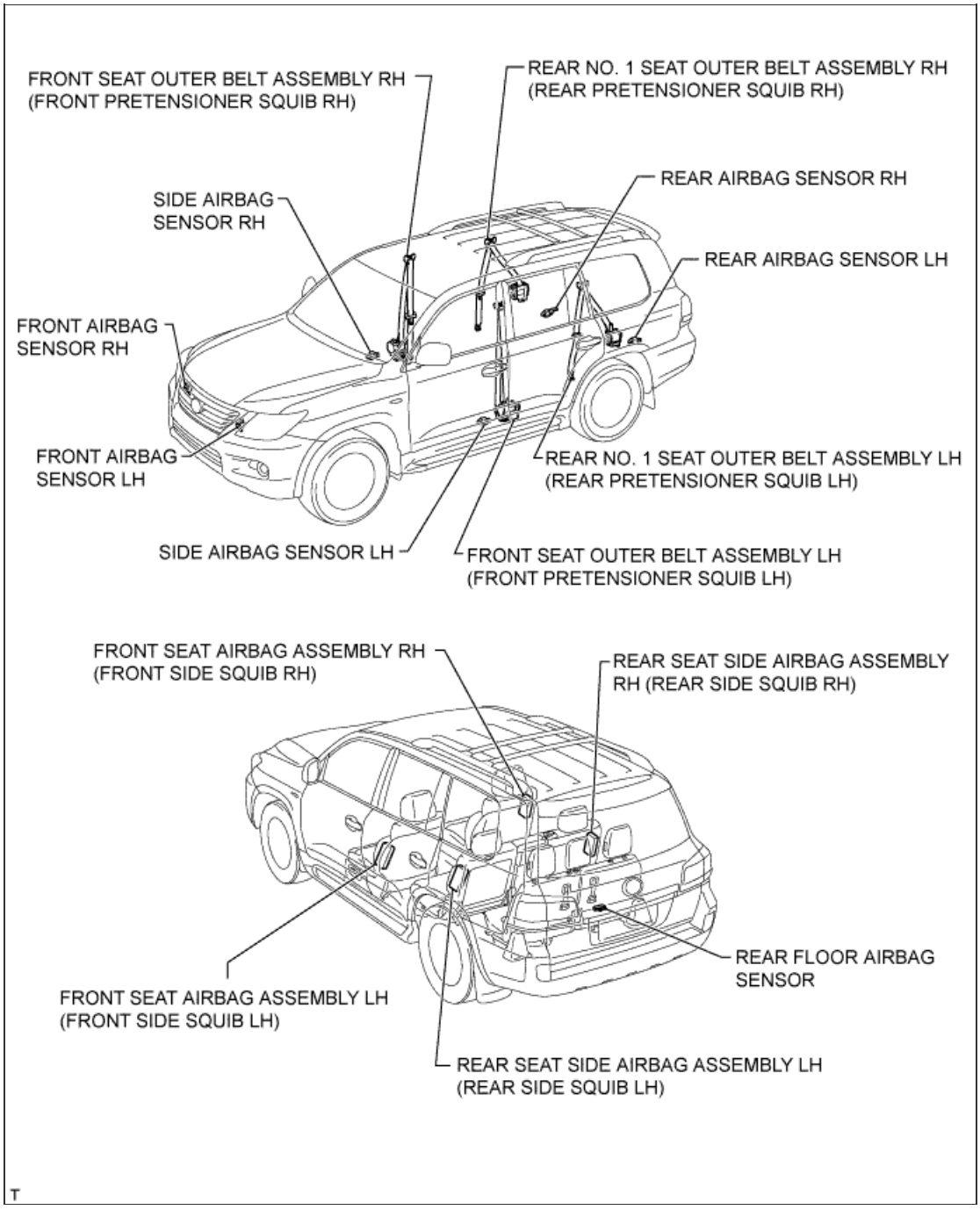
a. Connect the connector as shown in the illustration (when locking, make sure that the outer connector locking sleeve returns to its original position and a click sound can be heard).

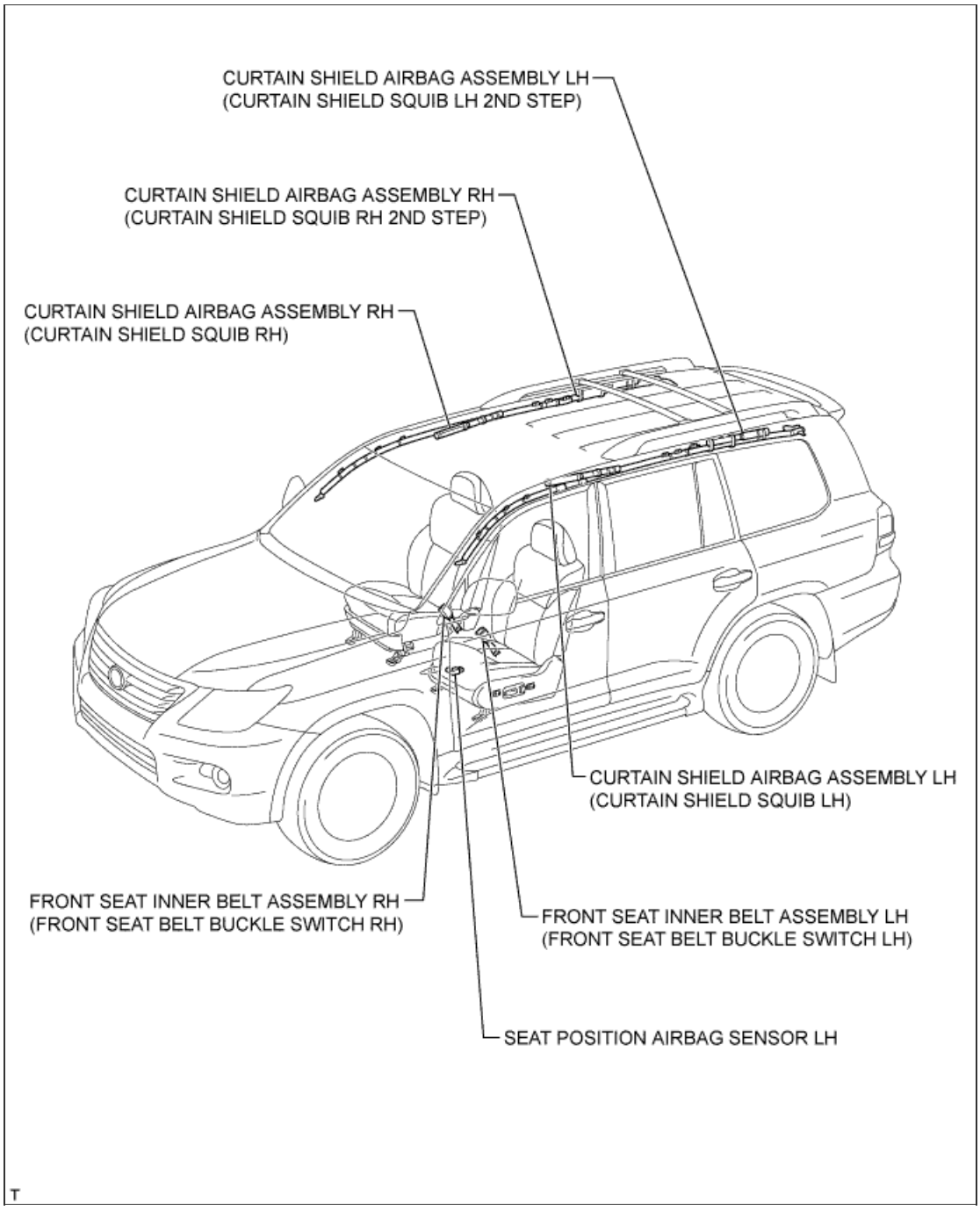
HINT:

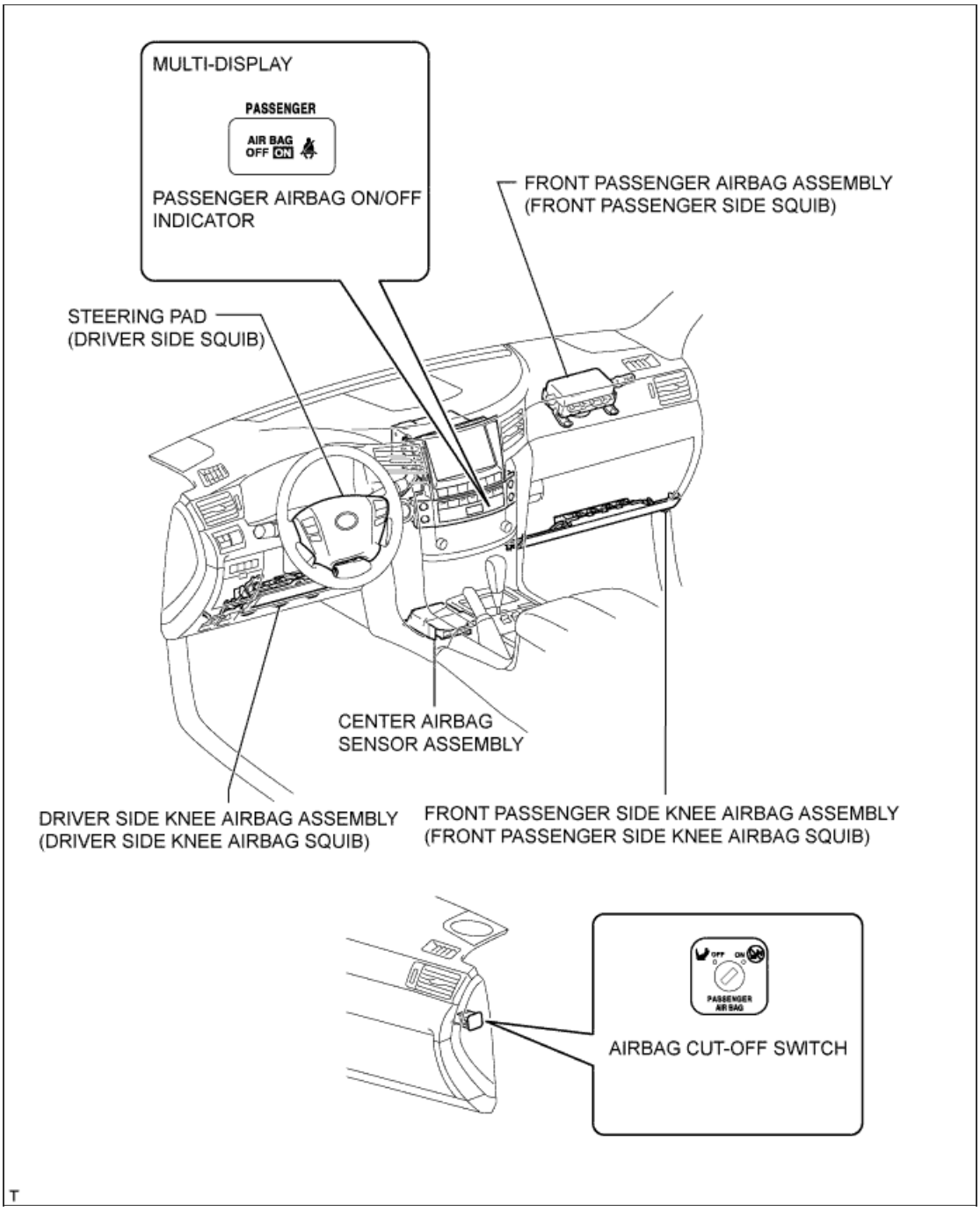
When connecting, the sleeve will slide. Be sure not to hold the sleeve while connecting, as it may result in an insecure fit.



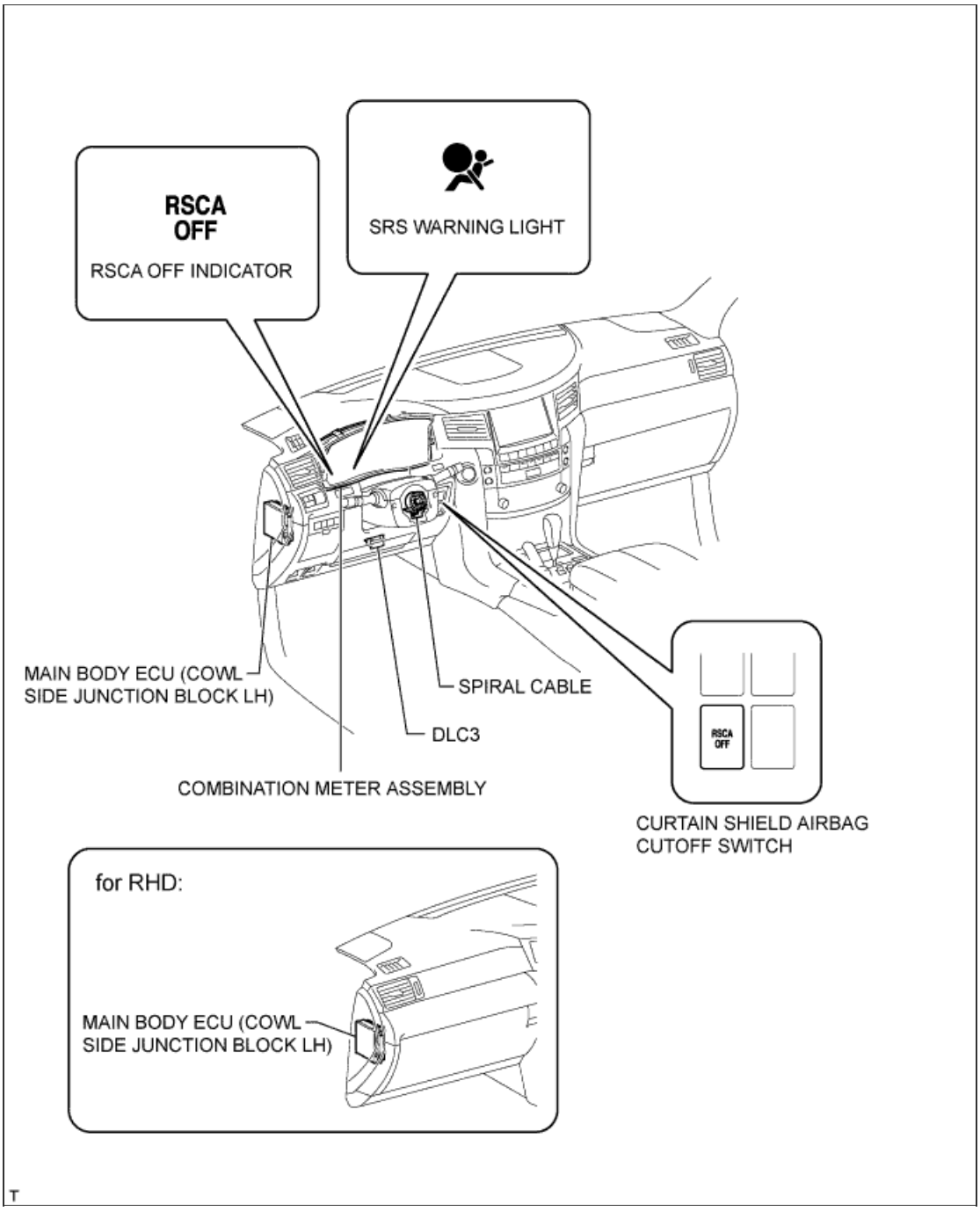
for Preparation Click here



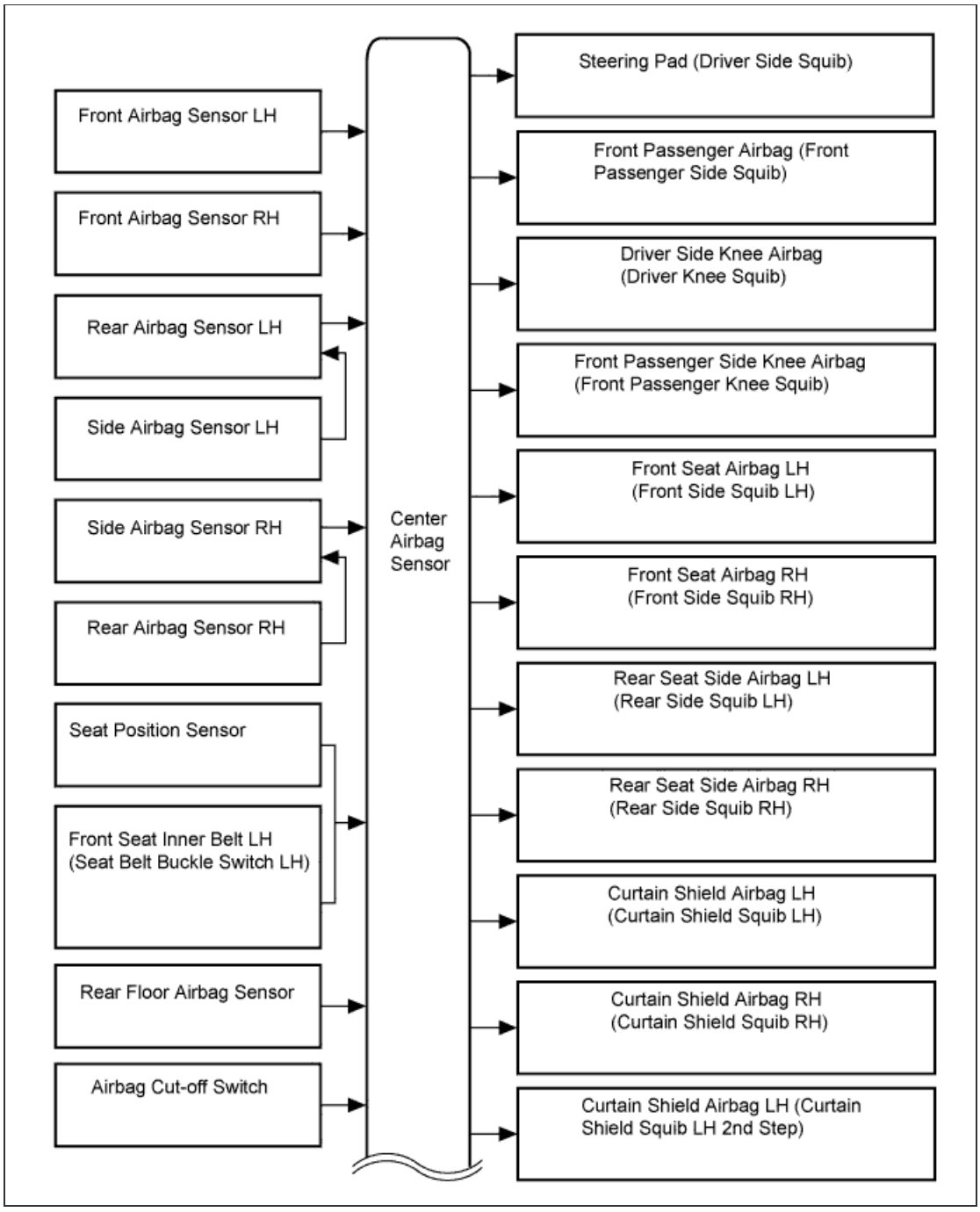

CURTAIN SHIELD AIRBAG ASSEMBLY LH
(CURTAIN SHIELD SQUIB LH 2ND STEP)
CURTAIN SHIELD AIRBAG ASSEMBLY RH
(CURTAIN SHIELD SQUIB RH 2ND STEP)
CURTAIN SHIELD AIRBAG ASSEMBLY RH
(CURTAIN SHIELD SQUIB RH)
CURTAIN SHIELD AIRBAG ASSEMBLY LH
(CURTAIN SHIELD SQUIB LH)
FRONT SEAT INNER BELT ASSEMBLY RH
(FRONT SEAT BELT BUCKLE SWITCH RH)
FRONT SEAT INNER BELT ASSEMBLY LH
(FRONT SEAT BELT BUCKLE SWITCH LH)
SEAT POSITION AIRBAG SENSOR LH
T

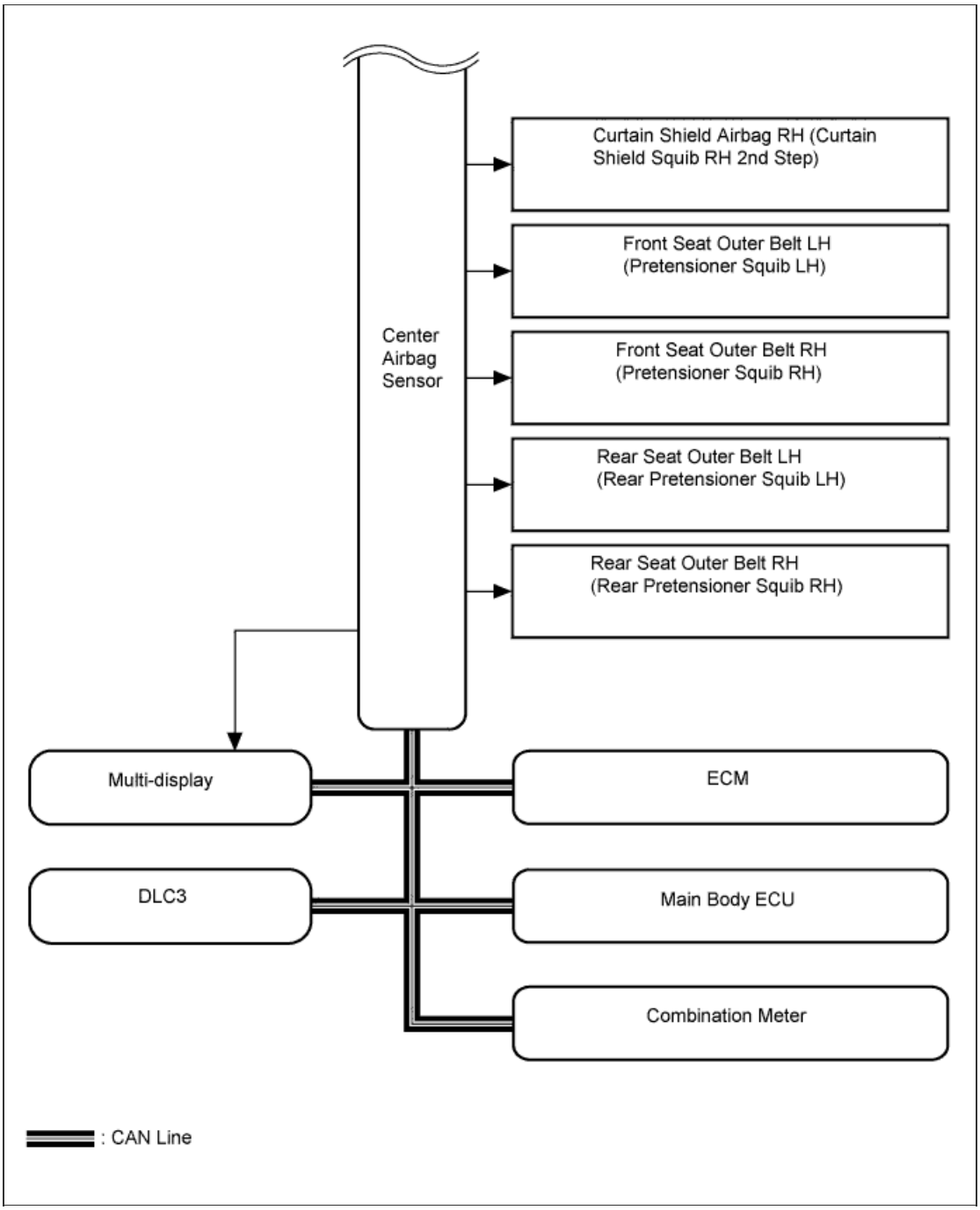

MULTI-DISPLAY
PASSENGER
AIR BAG
OFF ON
PASSENGER AIRBAG ON/OFF INDICATOR
FRONT PASSENGER AIRBAG ASSEMBLY (FRONT PASSENGER SIDE SQUIB)
STEERING PAD (DRIVER SIDE SQUIB)
CENTER AIRBAG SENSOR ASSEMBLY
DRIVER SIDE KNEE AIRBAG ASSEMBLY (DRIVER SIDE KNEE AIRBAG SQUIB)
FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY (FRONT PASSENGER SIDE KNEE AIRBAG SQUIB)
OFF
ON
PASSENGER AIR BAG
AIRBAG CUT-OFF SWITCH

T


RSCA
OFF
RSCA OFF INDICATOR
SRS WARNING LIGHT
MAIN BODY ECU (COWL
SIDE JUNCTION BLOCK LH)
SPIRAL CABLE
DLC3
COMBINATION METER ASSEMBLY
RSCA
OFF
CURTAIN SHIELD AIRBAG
CUTOFF SWITCH
for RHD:
MAIN BODY ECU (COWL
SIDE JUNCTION BLOCK LH)
T

for Preparation Click here





Transmitting ECU (Transmitter)	Receiving ECU	Signal	Communication Method
Center Airbag Sensor	ECM	• Crash detection signal • Fuel cut signal	CAN
Center Airbag Sensor	Main Body ECU	Driver seat buckle switch signal	
Center Airbag Sensor	Combination Meter	• SRS warning light on demand signal • SRS warning light blink demand signal • Passenger seat occupant detection signal • Passenger seat buckle switch signal • Diagnosis signal (DTC)	
Combination Meter	Center Airbag Sensor	• Vehicle speed signal • Meter diagnosis polling signal	
		• Engine speed signal • Accelerator opening	

ECM	Center Airbag Sensor	angle information • Accelerator opening angle signal • Shift position signal • Test mode signal • Stop signal	
Center Airbag Sensor	Multi-display	• Passenger occupant signal • Passenger seat buckle switch signal	

for Preparation Click here

GENERAL

a. In conjunction with the impact absorbing structure for a front collision, the SRS (Supplemental Restraint System) driver airbag, front passenger airbag, driver side knee airbag, and front passenger side knee airbag are designed to supplement seat belts in the event of a front collision in order to help reduce shock to the head, chest, and knees of the driver and front passenger. This system is a 3-sensor type airbag system which detects the impact during a front collision using the center airbag sensor and front airbag sensors. It also operates the airbag system and seat belt pretensioners.

b. This vehicle is equipped with electrical type deceleration sensors for the front airbags in order to detect details about the extent of a collision during the initial stages of the collision. Therefore, the deployment of the driver airbag and front passenger airbag is controlled in two stages according to the severity of the impact.

c. In conjunction with the impact absorbing structure for a side collision, the side airbag and curtain shield airbag are designed to help reduce shock to the driver, front passenger, and rear outer passengers in the event of a side collision.

d. The curtain shield airbag helps reduce shock to the front and rear seat occupants. In conjunction with the curtain shield airbag, side airbag sensors are installed at the bottom of the center pillars and rear airbag sensors are installed at the bottom of the rear pillars.

e. In this system, a front side collision is detected by the side airbag sensor in order to simultaneously deploy the front seat, rear seat side, and curtain shield airbags. A rear side collision is detected by the rear airbag sensor and the center airbag sensor in order to deploy the rear seat side airbags, and curtain shield airbag.

f. The center airbag sensor sends the airbag deployment signal to the ECM through the CAN (Controller Area Network) to operate the fuel pump control.

g. The center airbag sensor sends the airbag deployment signal to the main body ECU via the discrete line to operate collision door lock release control.

CONSTRUCTION AND OPERATION

a. FRONT AIRBAG SENSOR

   i. The front airbag sensors are installed on the right and left radiator supports respectively.

   ii. The front airbag sensor consists of a deceleration sensor.

   iii. The deceleration sensor is built into the front airbag sensor, and the distortion that is created in the sensor is converted into an electric signal based on the vehicle deceleration rate during a front collision. Accordingly, the extent of the initial collision can be detected in detail.

b. SIDE AIRBAG SENSOR

   i. The side airbag sensors are installed on the bottom of the right and left center pillars respectively.

   ii. The side airbag sensor consists of a deceleration sensor.

   iii. The deceleration sensor is built into the side airbag sensor, and the distortion that is created in the sensor is converted into an electric signal based on the vehicle deceleration rate during a front side collision. Accordingly, the extent of the initial collision can be detected in detail.

c. REAR AIRBAG SENSOR

   i. The rear airbag sensors are installed on the right and left rear pillars respectively.

   ii. The rear airbag sensor consists of a deceleration sensor.

   iii. The deceleration sensor is built into the rear airbag sensor, and the distortion that is created in the sensor is converted into an electric signal based on the vehicle deceleration rate during a rear side collision. Accordingly, the extent of the initial collision can be detected in detail.

d. REAR FLOOR AIRBAG SENSOR

   i. The floor airbag sensor is installed in the center of the floor between the rear pillars.

   ii. The floor airbag sensor consists of the deceleration sensor.

   iii. The deceleration sensor is built into the floor airbag sensor, and the distortion that is created in the sensor is converted into an electric signal based on the vehicle deceleration rate during a side collision. Accordingly, the extent of the initial collision can be

detected in detail.

e. CENTER AIRBAG SENSOR

i. General

- The center airbag sensor is installed in the center floor under the instrument panel.
- The center airbag sensor consists of a deceleration sensor, safing sensor, electronic safing sensor, ignition control circuit, and diagnostic circuit.
- The center airbag sensor receives signals from the deceleration sensor and safing sensor built into the center airbag sensor and front airbag sensor. Then the center airbag sensor determines whether the driver airbag, front passenger airbag, driver side knee airbag, front passenger side knee airbag, front seat belt pretensioners and rear seat belt pretensioners should be activated, and diagnoses system malfunctions.
- The center airbag sensor causes the front side, rear side, and curtain shield airbags to deploy when receiving signals from the side airbag sensors.
- The center airbag sensor receives signals from the deceleration sensor and the electronic safing sensor built into the center airbag sensor and the rear airbag sensor, and determines whether the rear seat side curtain shield airbag should be activated, and diagnoses system malfunctions.
- The center airbag sensor sends the airbag deployment signal to the ECM through the CAN to operate the fuel pump control.
- The center airbag sensor sends the airbag deployment signal to the main body ECU through the discrete line to operate collision door lock release control.

ii. Deceleration sensor and ignition control circuit

- The deceleration sensor is built into the center airbag sensor.
- The ignition control circuit performs calculations based on the signal output from the deceleration sensors of the center airbag sensor and front airbag sensor. If the calculated values are more than the specified values, it activates an ignition operation.

iii. Safing sensor

The safing sensor is built into the center airbag sensor. During a front collision, the sensor turns on and outputs an ON signal to the center airbag sensor if a deceleration rate sent to the safing sensor is more than the specified value.

iv. Electronic safing sensor

The electronic safing sensor is built into the center airbag sensor. During a side collision, the sensor turns on and outputs an ON signal to the center airbag sensor if a deceleration rate sent to the electronic safing sensor is more than the specified value.

v. Backup power source

The backup power source consists of a power supply capacitor and a DC-DC converter. When the power system does not function during a collision, the power supply capacitor discharges and supplies electric power to the system. The DC-DC converter operates as a boosting transformer when the battery voltage falls below a predetermined level.

vi. Diagnostic circuit

This circuit constantly diagnoses system malfunctions. When a malfunction is detected, it turns on the SRS warning light on the combination meter to inform the driver.

vii. Memory circuit

When a malfunction is detected in the diagnostic circuit, it is coded and stored in the memory circuit.

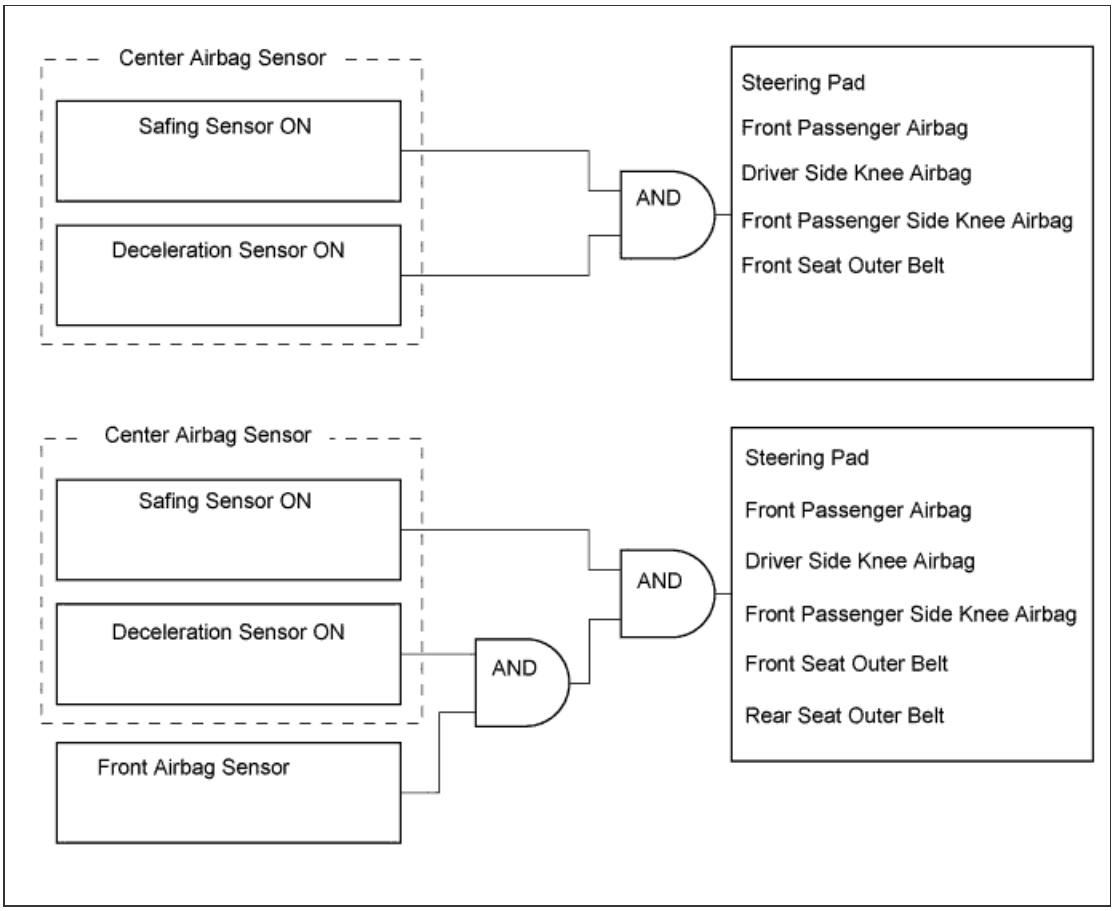
f. SRS Warning Light

i. The SRS warning light is located on the combination meter. It comes on to inform the driver of system trouble when a malfunction is detected in the self-diagnosis of the center airbag sensor. Under normal operating conditions when the engine switch is turned on (IG), it comes on for approximately 6 seconds and then goes off.

DEPLOYMENT CONDITION

If the vehicle is in a collision and the shock is more than the specified value, the SRS is activated automatically. The center airbag sensor includes the safing sensor and deceleration sensor. The safing sensor is designed to turn on at a lower deceleration rate than the deceleration sensor.

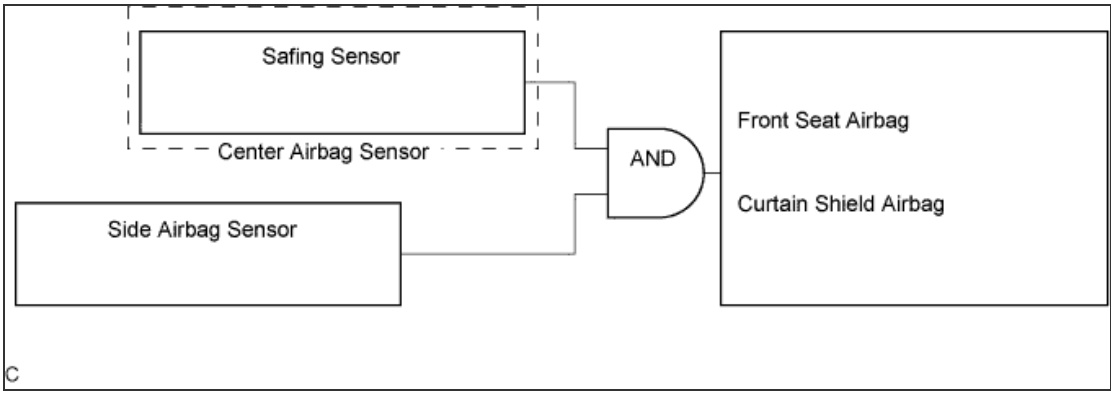
a. The center airbag sensor determines whether ignition is necessary based on signals from the deceleration sensor and the front airbag sensor. If the safing sensor turns on simultaneously, current flows to the squibs to deploy the SRS as shown in the illustration below.



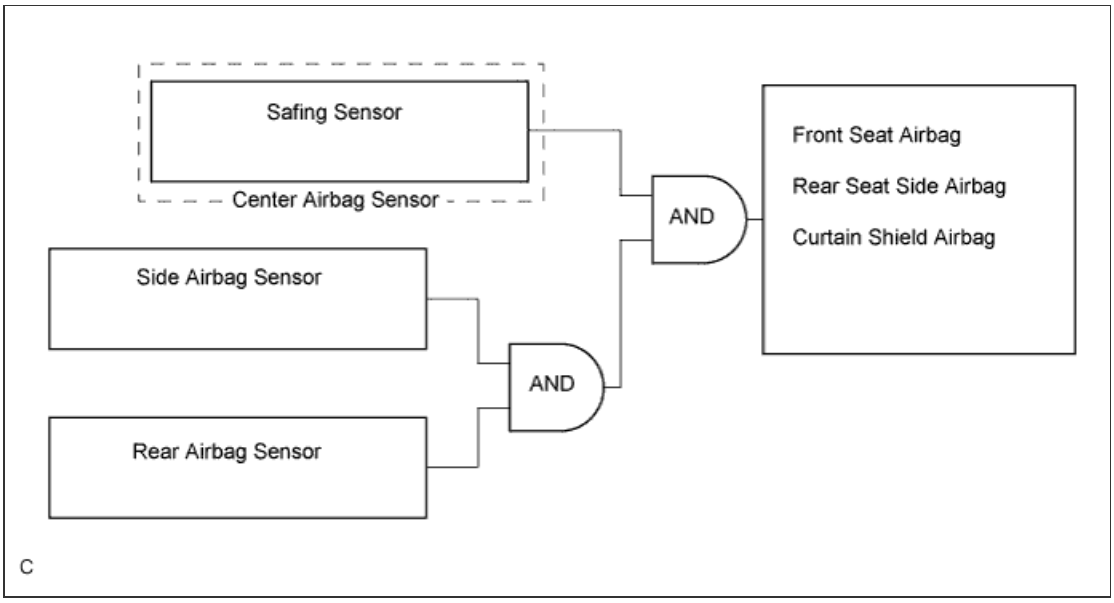
HINT:

In case of a front collision, the ignition signal could be output with the deceleration sensor ON signal even without a signal from the front airbag sensor.

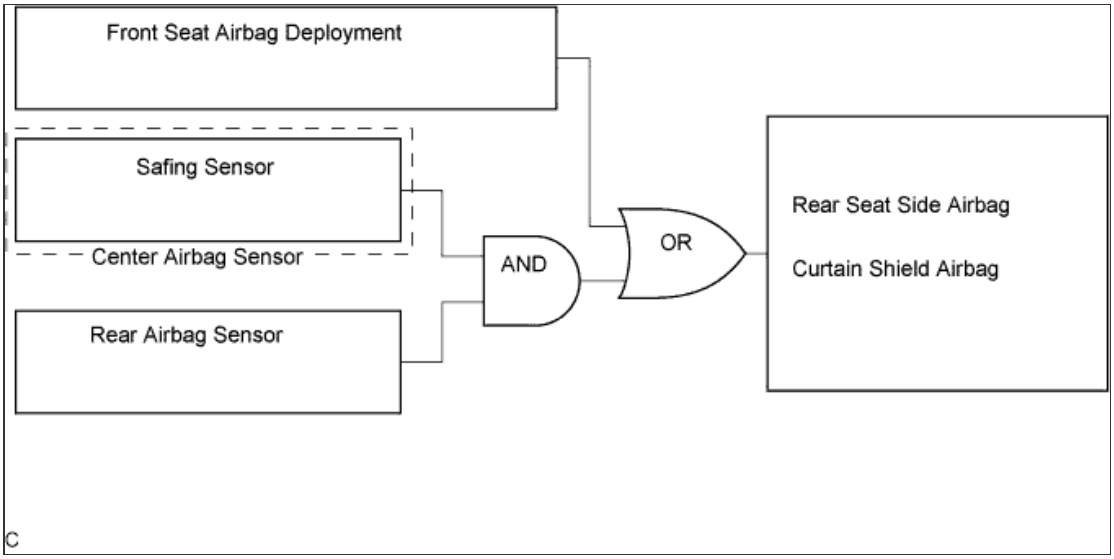
b. The center airbag sensor determines whether ignition is necessary based on signals from the side airbag sensor. If the safing sensor turns on simultaneously, current flows to the squib to deploy the SRS as shown in the illustration below.



c. The center airbag sensor determines whether ignition is necessary based on signals from the side airbag sensor and rear airbag sensor. If the safing sensor turns on simultaneously, current flows to the squib to deploy the SRS as shown in the illustration below.



d. The center airbag sensor determines whether ignition is necessary based on signals from the rear airbag sensor. If the safing sensor turns on simultaneously, current flows to the squib to deploy the SRS as shown in the illustration below.



HINT:

If the front seat airbag deploys, the rear seat side airbag, and the curtain shield airbag will also deploy, regardless of whether the signal is output from the rear airbag sensor.

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the airbag system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK CAN COMMUNICATION SYSTEM*

a. Check for DTC (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output (for LHD)	B
DTC is output (for RHD)	C

B. Go to CAN COMMUNICATION SYSTEM (Click here)

C. Go to CAN COMMUNICATION SYSTEM (Click here)

A

4.WARNING LIGHT CHECK

NEXT

5.CHECK DTC (Present and Past DTCs)*

a. Check for DTC (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output	B

B. Go to PROBLEM SYMPTOMS TABLE (Click here)

A

6.DTC CHART

NEXT

7.CIRCUIT INSPECTION

NEXT

8.REPAIR

NEXT

9.CLEAR DTC (Present and Past DTCs)*

NEXT

10.CHECK DTC (Present and Past DTCs)*

a. Check for DTC (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output	B

B. Go to DIAGNOSTIC TROUBLE CODE CHART (Click here)

A

11.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the airbag system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK CAN COMMUNICATION SYSTEM*

a. Check for DTC (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output (for LHD)	B
DTC is output (for RHD)	C

B. Go to CAN COMMUNICATION SYSTEM (Click here)

C. Go to CAN COMMUNICATION SYSTEM (Click here)

A

4.WARNING LIGHT CHECK

NEXT

5.CHECK DTC (Present and Past DTCs)*

a. Check for DTC (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output	B

B. Go to PROBLEM SYMPTOMS TABLE (Click here)

A

6.DTC CHART

NEXT

7.CIRCUIT INSPECTION

NEXT

8.REPAIR

NEXT

9.CLEAR DTC (Present and Past DTCs)*

NEXT

10.CHECK DTC (Present and Past DTCs)*

a. Check for DTC (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output	B

B. Go to DIAGNOSTIC TROUBLE CODE CHART (Click here)

A

11.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the airbag system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK CAN COMMUNICATION SYSTEM*

a. Check for DTC (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output (for LHD)	B
DTC is output (for RHD)	C

B. Go to CAN COMMUNICATION SYSTEM (Click here)

C. Go to CAN COMMUNICATION SYSTEM (Click here)

A

4.WARNING LIGHT CHECK

NEXT

5.CHECK DTC (Present and Past DTCs)*

a. Check for DTC (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output	B

B. Go to PROBLEM SYMPTOMS TABLE (Click here)

A

6.DTC CHART

NEXT

7.CIRCUIT INSPECTION

NEXT

8.REPAIR

NEXT

9.CLEAR DTC (Present and Past DTCs)*

NEXT

10.CHECK DTC (Present and Past DTCs)*

a. Check for DTC (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output	B

B. Go to DIAGNOSTIC TROUBLE CODE CHART (Click here)

A

11.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Airbag System

Symptom	Suspected Area	See page
The SRS warning light goes off after the primary check, but then comes on.	SRS Warning Light Remains ON	Click here
With the engine switch on (IG), the SRS warning light sometimes comes on after approximately 6 seconds.	SRS Warning Light Remains ON	Click here
The SRS warning light always comes on even when DTC is not output.	SRS Warning Light Remains ON	Click here
With the engine switch on (IG), the SRS warning light does not come on.	SRS Warning Light does not Come ON	Click here
Although the SRS warning light operates normally, a DTC or a normal system code is not output.	Diagnosis Circuit	Click here
Although terminals TC and CG of the DLC3 are not connected, a DTC or a normal system code is output.	Diagnosis Circuit	Click here

for Preparation Click here

HINT:

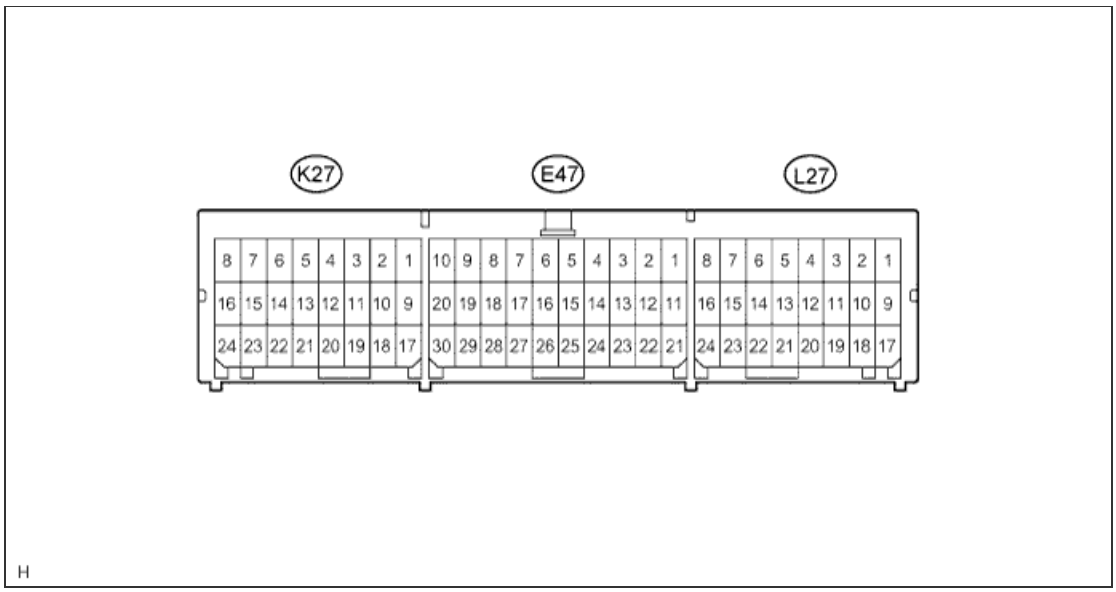
Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Airbag System

Symptom	Suspected Area	See page
The SRS warning light goes off after the primary check, but then comes on.	SRS Warning Light Remains ON	Click here
With the engine switch on (IG), the SRS warning light sometimes comes on after approximately 6 seconds.	SRS Warning Light Remains ON	Click here
The SRS warning light always comes on even when DTC is not output.	SRS Warning Light Remains ON	Click here
With the engine switch on (IG), the SRS warning light does not come on.	SRS Warning Light does not Come ON	Click here
Although the SRS warning light operates normally, a DTC or a normal system code is not output.	Diagnosis Circuit	Click here
Although terminals TC and CG of the DLC3 are not connected, a DTC or a normal system code is output.	Diagnosis Circuit	Click here

for Preparation Click here

CENTER AIRBAG SENSOR



Terminal No.	Symbols	Destination
E47-1	P2+	Front passenger airbag (Front passenger side squib 2nd step)
E47-2	P2-	Front passenger airbag (Front passenger side squib 2nd step)
E47-3	P-	Front passenger airbag (Front passenger side squib)
E47-4	P+	Front passenger airbag (Front passenger side squib)
E47-5	D+	Steering pad (Driver side squib)
E47-6	D-	Steering pad (Driver side squib)
E47-7	D2-	Steering pad (Driver side squib 2nd step)
E47-8	D2+	Steering pad (Driver side squib 2nd step)
E47-9	DK+	Driver side knee airbag (Driver side knee airbag squib)
E47-10	DK-	Driver side knee airbag (Driver side knee airbag squib)
E47-11	MSW+	Airbag cut-off switch
E47-12	MSW-	Airbag cut-off switch
E47-13	CANH	CAN communication line
E47-17	P-AB	Passenger airbag ON/OFF indicator
E47-18	GSW	Main body ECU
E47-19	PK+	Front passenger side knee airbag (Front passenger side knee airbag squib)
E47-20	PK-	Front passenger side knee airbag (Front passenger side knee airbag squib)
E47-21	IG2	IGN fuse
E47-22	CANL	CAN communication line
E47-23	PAON	Passenger airbag ON/OFF indicator
E47-25	E1	Ground
E47-26	E2	Ground
E47-27	-SR	Front airbag sensor RH
E47-28	-SL	Front airbag sensor LH
E47-29	+SR	Front airbag sensor RH

E47-30	+SL	Front airbag sensor LH
K27-1	SFL+	Front seat airbag LH (Front side squib LH)
K27-2	SFL-	Front seat airbag LH (Front side squib LH)
K27-3	ICL-	Curtain shield airbag LH (Curtain shield squib LH)
K27-4	ICL+	Curtain shield airbag LH (Curtain shield squib LH)
K27-5	PL+	Front seat outer belt LH (Front pretensioner squib LH)
K27-6	PL-	Front seat outer belt LH (Front pretensioner squib LH)
K27-7	PLR-	Rear seat outer belt LH (Rear pretensioner squib LH)
K27-8	PLR+	Rear seat outer belt LH (Rear pretensioner squib LH)
K27-9	LSP+	Front seat inner belt LH (Seat position sensor)
K27-10	LBE+	Front seat inner belt LH (Seat belt buckle switch LH)
K27-11	CL2-	Curtain shield airbag LH (Curtain shield squib LH 2nd step)
K27-12	CL2+	Curtain shield airbag LH (Curtain shield squib LH 2nd step)
K27-15	RL-	Rear seat side airbag LH (Rear side squib LH)
K27-16	RL+	Rear seat side airbag LH (Rear side squib LH)
K27-19	RMIL	Combination meter (RSCA OFF Indicator)*1
K27-23	BBL-	Rear airbag sensor LH
K27-24	BBL+	Rear airbag sensor LH
L27-1	PRR+	Rear seat outer belt RH (Rear pretensioner squib RH)
L27-2	PRR-	Rear seat outer belt RH (Rear pretensioner squib RH)
L27-3	PR-	Front seat outer belt RH (Front pretensioner squib RH)
L27-4	PR+	Front seat outer belt RH (Front pretensioner squib RH)
L27-5	ICR+	Curtain shield airbag RH (Curtain shield squib RH)
L27-6	ICR-	Curtain shield airbag RH (Curtain shield squib RH)
L27-7	SFR-	Front seat airbag RH (Front side squib RH)
L27-8	SFR+	Front seat airbag RH (Front side squib RH)
L27-9	RR+	Rear seat side airbag RH (Rear side squib RH)
L27-10	RR-	Rear seat side airbag RH (Rear side squib RH)
L27-13	CR2+	Curtain shield airbag RH (Curtain shield squib RH 2nd step)
L27-14	CR2-	Curtain shield airbag RH (Curtain shield squib RH 2nd step)
L27-15	RSP+	Front seat inner belt RH (Seat position sensor)
L27-16	RBE+	Front seat inner belt RH (Seat belt buckle switch RH)
L27-17	BBR+	Side airbag sensor RH
L27-18	BBR-	Side airbag sensor RH
L27-19	BCR-	Rear floor airbag sensor
L27-20	BCR+	Rear floor airbag sensor
L27-21	RMSW	Curtain shield airbag cutoff switch
L27-22	RMIL	Combination meter (RSCA OFF Indicator)*2

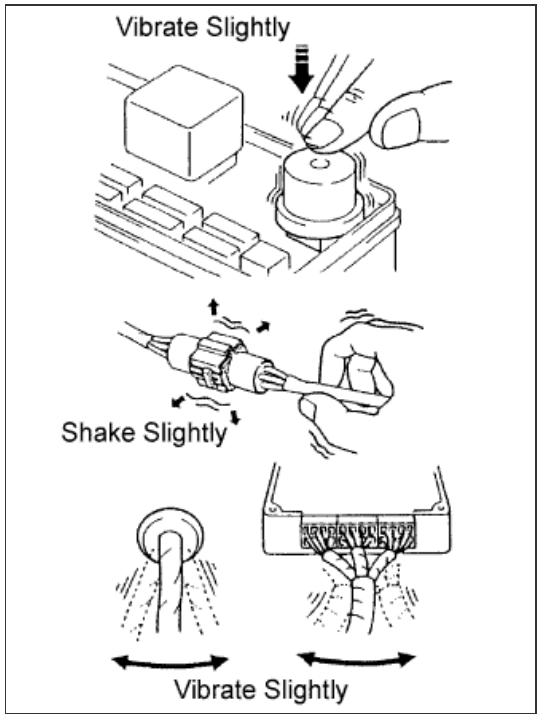
*1: for LHD
*2: for RHD

for Preparation Click here

SYMPTOM SIMULATION

HINT:

The most difficult case in troubleshooting is when no problem symptoms occur. In such a case, a thorough problem analysis must be carried out. A simulation of the same or similar conditions and environment in which the problem occurred in the customer's vehicle should be carried out. No matter how much skill or experience a technician has, troubleshooting without confirming the problem symptoms will lead to important repairs being overlooked and mistakes or delays.



a. Vibration method: When vibration seems to be the major cause.

HINT:

Perform the simulation method only during the primary check period (for approximately 6 seconds after the engine switch is turned on (IG)).

i. Slightly vibrate the part of the sensor considered to be the cause of the problem with your fingers and check whether the malfunction occurs.

NOTICE:

Shaking the relays too strongly may result in open relays.

ii. Slightly shake the connector vertically and horizontally.

iii. Slightly shake the wire harness vertically and horizontally.

HINT:

The connector joint and fulcrum of the vibration are the major areas to be checked thoroughly.

FUNCTION OF SRS WARNING LIGHT

a. Primary check.

i. Turn the engine switch off. Wait for at least 2 seconds, then turn the engine switch on (IG). The SRS warning light comes on for approximately 6 seconds and the diagnosis of the airbag system (including the seat belt pretensioners) is performed.

HINT:

If trouble is detected during the primary check, the SRS warning light remains on even after the primary check period (of approximately 6 seconds) has elapsed.

b. Constant check.

i. After the primary check, the center airbag sensor constantly monitors the airbag system for trouble.

HINT:

If trouble is detected during the constant check, the center airbag sensor functions as follows:

- **The SRS warning light comes on.**
- **The SRS warning light goes off, and then comes on. This blinking pattern indicates a source voltage drop. The SRS warning light goes off 10 seconds after the source voltage returns to normal.**

c. Review.

i. When the airbag system is normal:
The SRS warning light comes on only during the primary check period (for approximately 6 seconds after the engine switch is turned on (IG)).

ii. When the airbag system has trouble:

- The SRS warning light remains on even after the primary check period has elapsed.
- The SRS warning light goes off after the primary check, but comes on again during the constant check.

- The SRS warning light does not come on when turning the engine switch from off to on (IG).

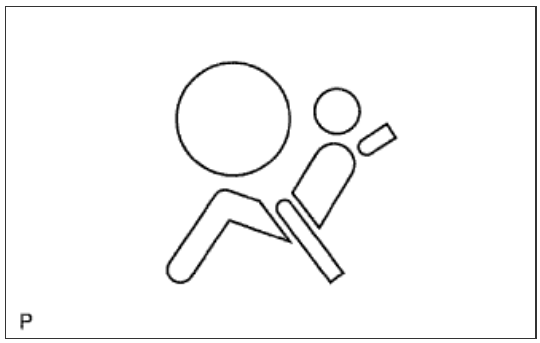
HINT:

The center airbag sensor functions to keep the SRS warning light on if the airbag has been deployed.

CHECK SRS WARNING LIGHT

a. Turn the engine switch on (IG), and check that the SRS warning light comes on for approximately 6 seconds (primary check).

b. Check that the SRS warning light goes off approximately 6 seconds after the engine switch is turned on (IG) (constant check).



HINT:

When any of the following symptoms occur, refer to the "Problem Symptoms Table" (Click here).

- **The SRS warning light comes on occasionally, after the primary check period has elapsed.**
- **The SRS warning light comes on, but a DTC is not output.**
- **The engine switch is turned from off to on (IG), but the SRS warning light does not come on.**

FUNCTION OF PASSENGER AIRBAG ON/OFF INDICATOR

a. Initial check

i. Turn the engine switch on (IG).

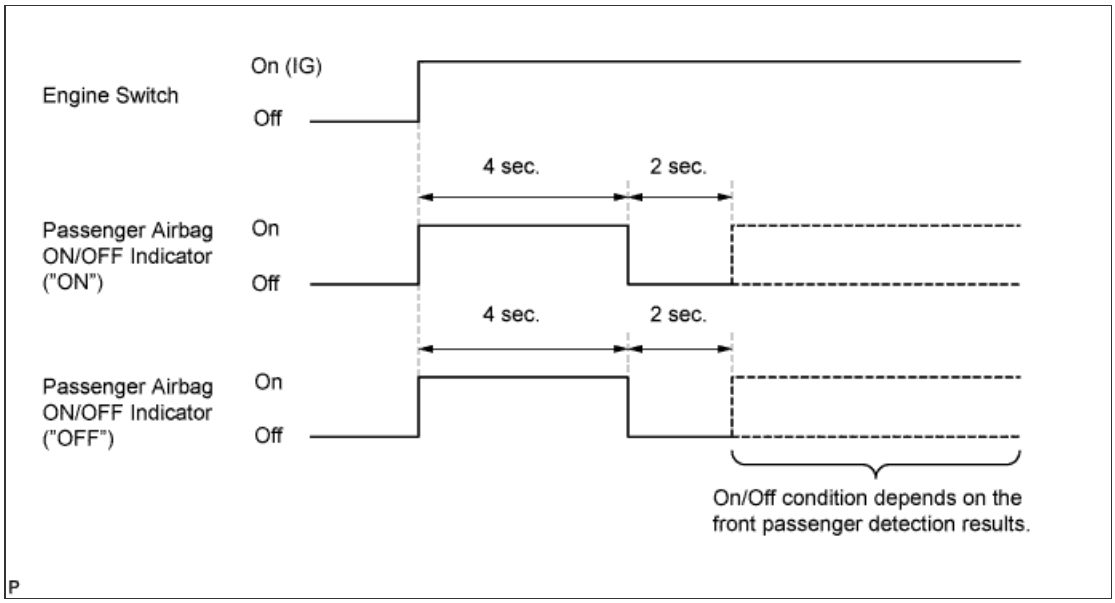
ii. The passenger airbag ON/OFF indicator comes on for approximately 4 seconds, then goes off for approximately 2 seconds.

iii. Approximately 6 seconds after the engine switch is turned on (IG), the passenger airbag ON/OFF indicator will be ON or OFF depending on the conditions listed below.

Condition	"ON" Indicator	"OFF" Indicator
Vacant	Off	Off
Adult is seated	On	Off
Child is seated	Off	On
Child restraint system is set	Off	On
Front passenger occupant classification failure	Off	On

HINT:

- **The timing chart below shows the operation of the passenger airbag ON/OFF indicator. Use the chart to check the indicator light circuit.**
- **When the occupant classification system has trouble, both the SRS warning light and the passenger airbag ON/OFF indicator ("OFF") come on. In this case, check the DTCs for "Airbag System" first. Then troubleshoot the occupant classification system if DTC B1650/32 is output, and troubleshoot the passenger airbag ON/OFF indicator if DTC B1660/43 is output.**



CHECK PASSENGER AIRBAG ON/OFF INDICATOR

a. Turn the engine switch on (IG).

b. Check that the passenger airbag ON/OFF indicator ("ON" and "OFF") comes on for approximately 4 seconds, then goes off for approximately 2 seconds.

HINT:

Refer to the table in the previous step regarding the passenger airbag ON/OFF indicator when the engine switch is turned on (IG) and approximately 6 seconds have passed.



ACTIVATION PREVENTION MECHANISM

a. FUNCTION OF ACTIVATION PREVENTION MECHANISM

i. An activation prevention mechanism is built into the connector (on the center airbag sensor side) of the airbag system squib circuit to prevent accidental airbag activation.

ii. This mechanism closes the circuit when the connector is disconnected by bringing the short spring into contact with the terminals and shutting off external electricity to prevent accidental airbag activation.

b. RELEASING OF ACTIVATION PREVENTION MECHANISM

i. To release the activation prevention mechanism, insert a piece of paper with the same thickness as the male terminal (approximately 0.5 mm (0.020 in.)) between the terminals and the short spring to break the connection.

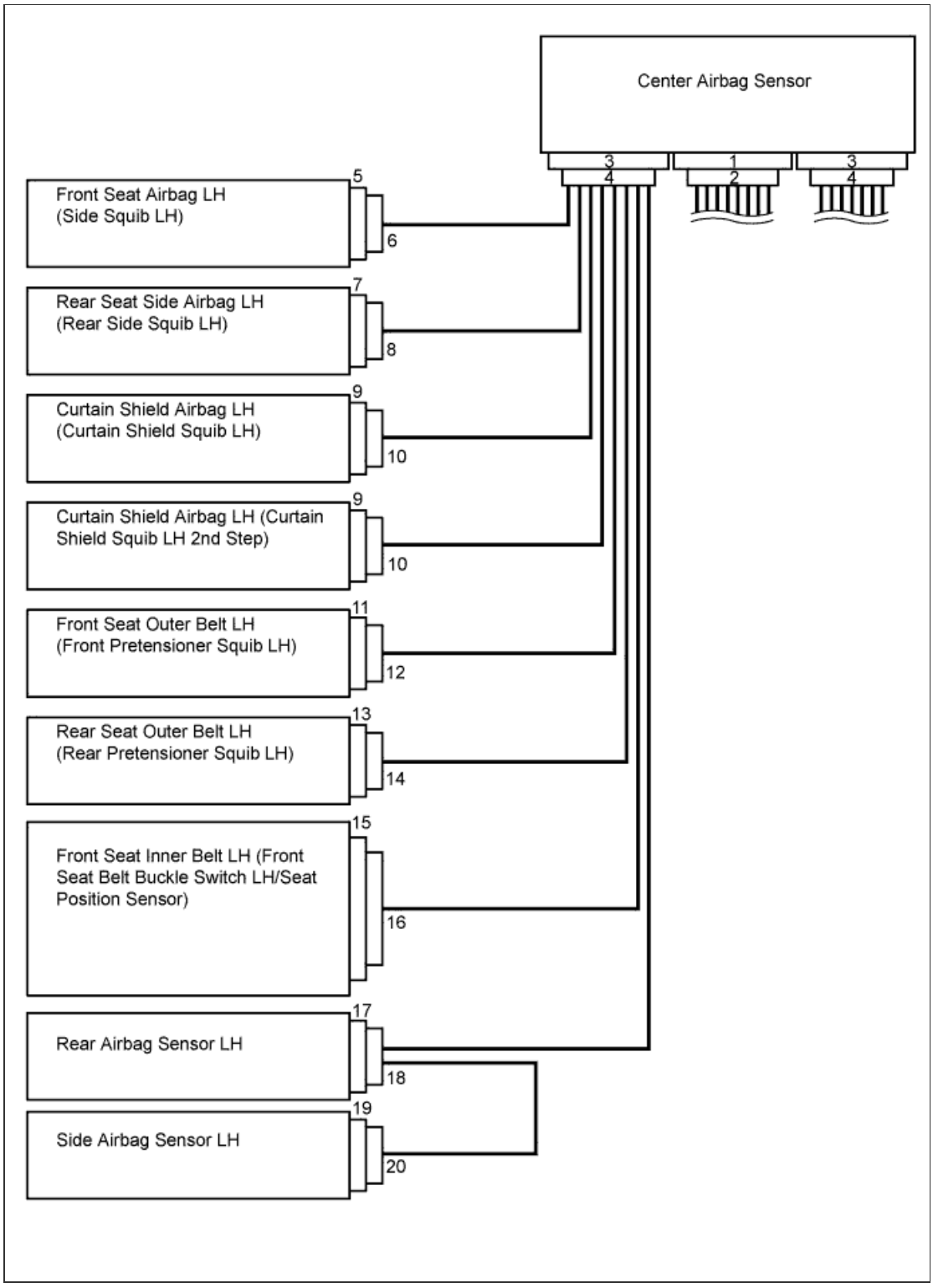
ii. Refer to the following illustrations concerning connectors utilizing the activation prevention mechanism and its release method.

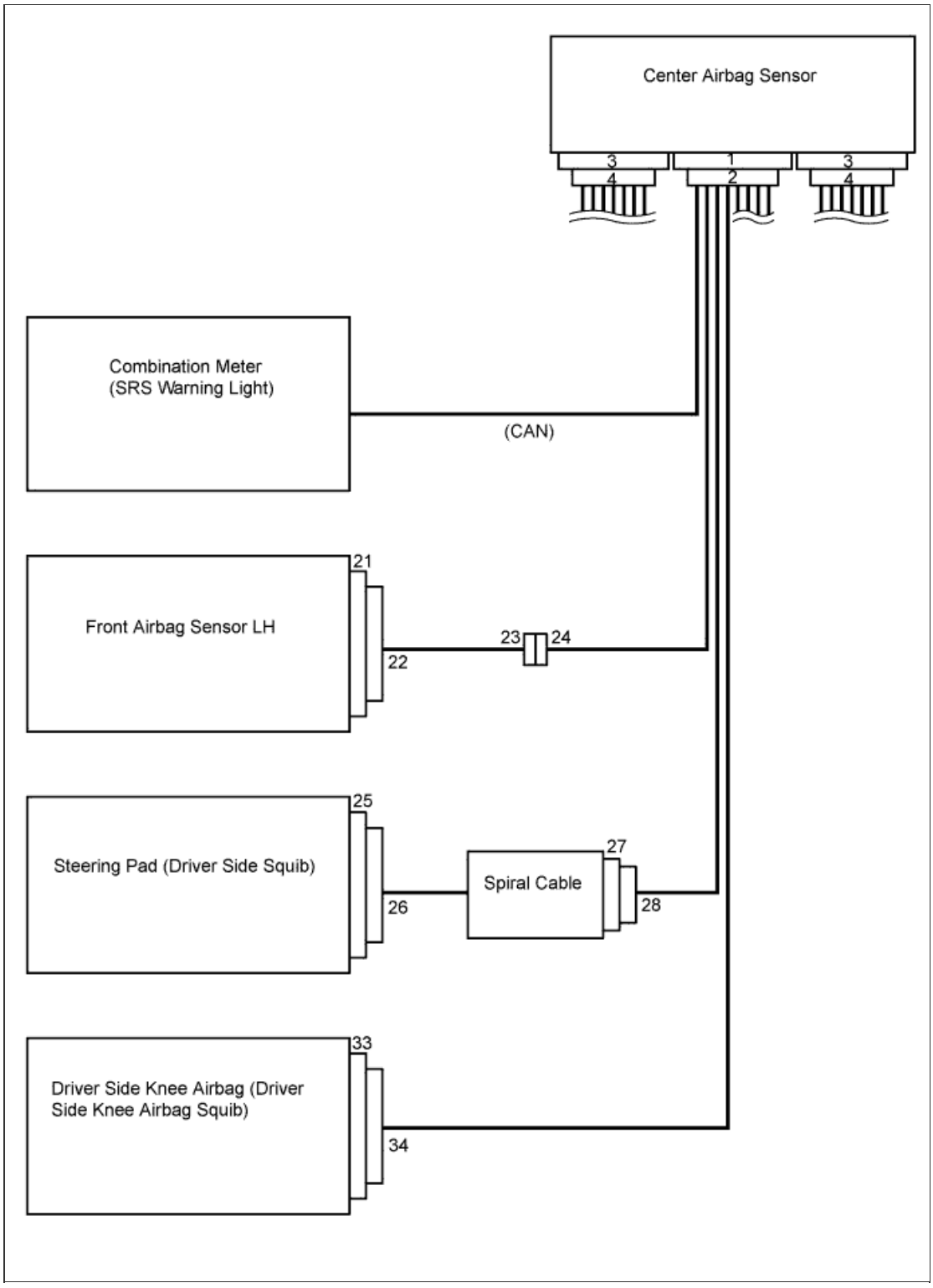
CAUTION:

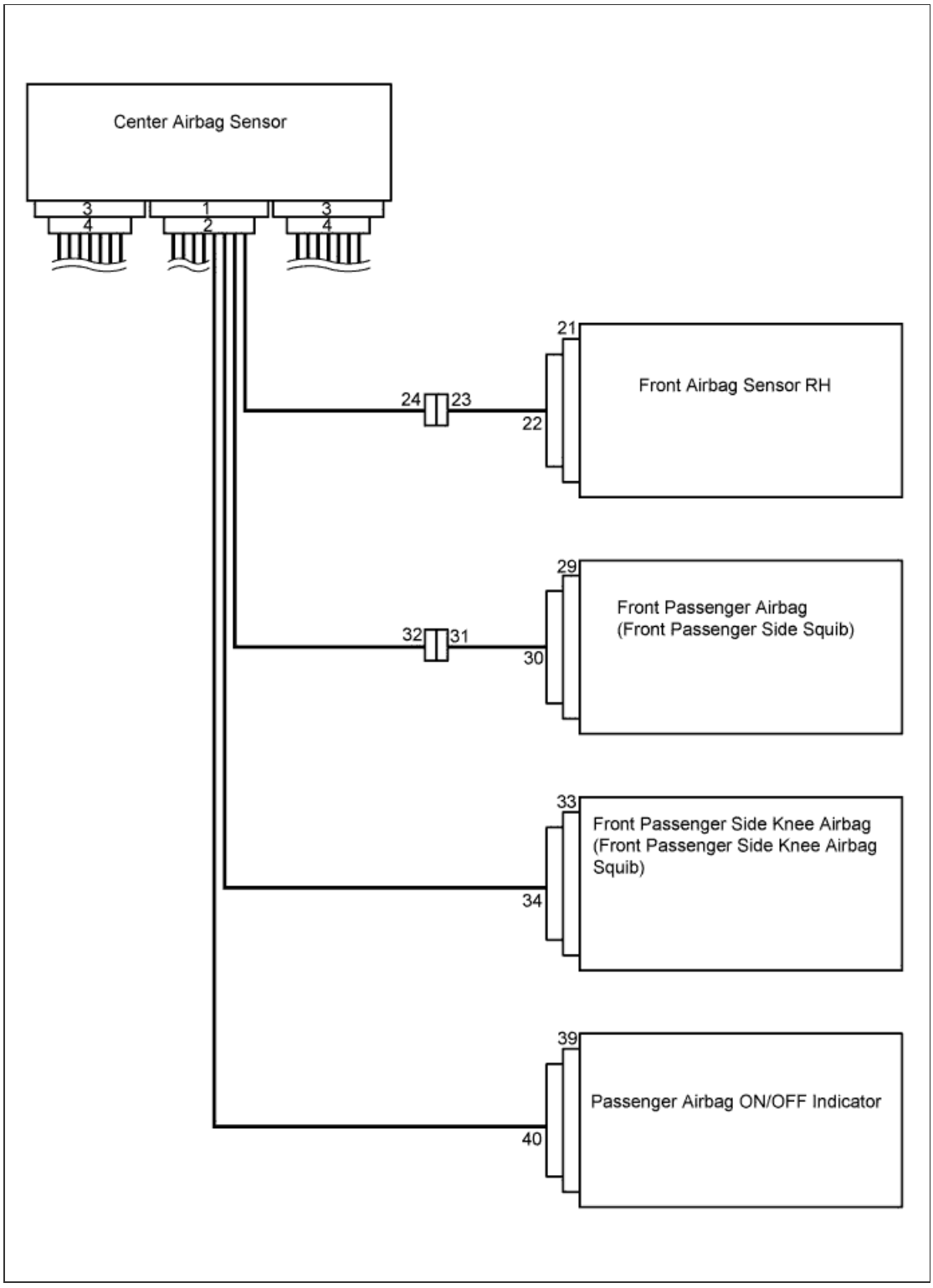
Never release the activation prevention mechanism on the squib connector even when inspecting with the squib disconnected.

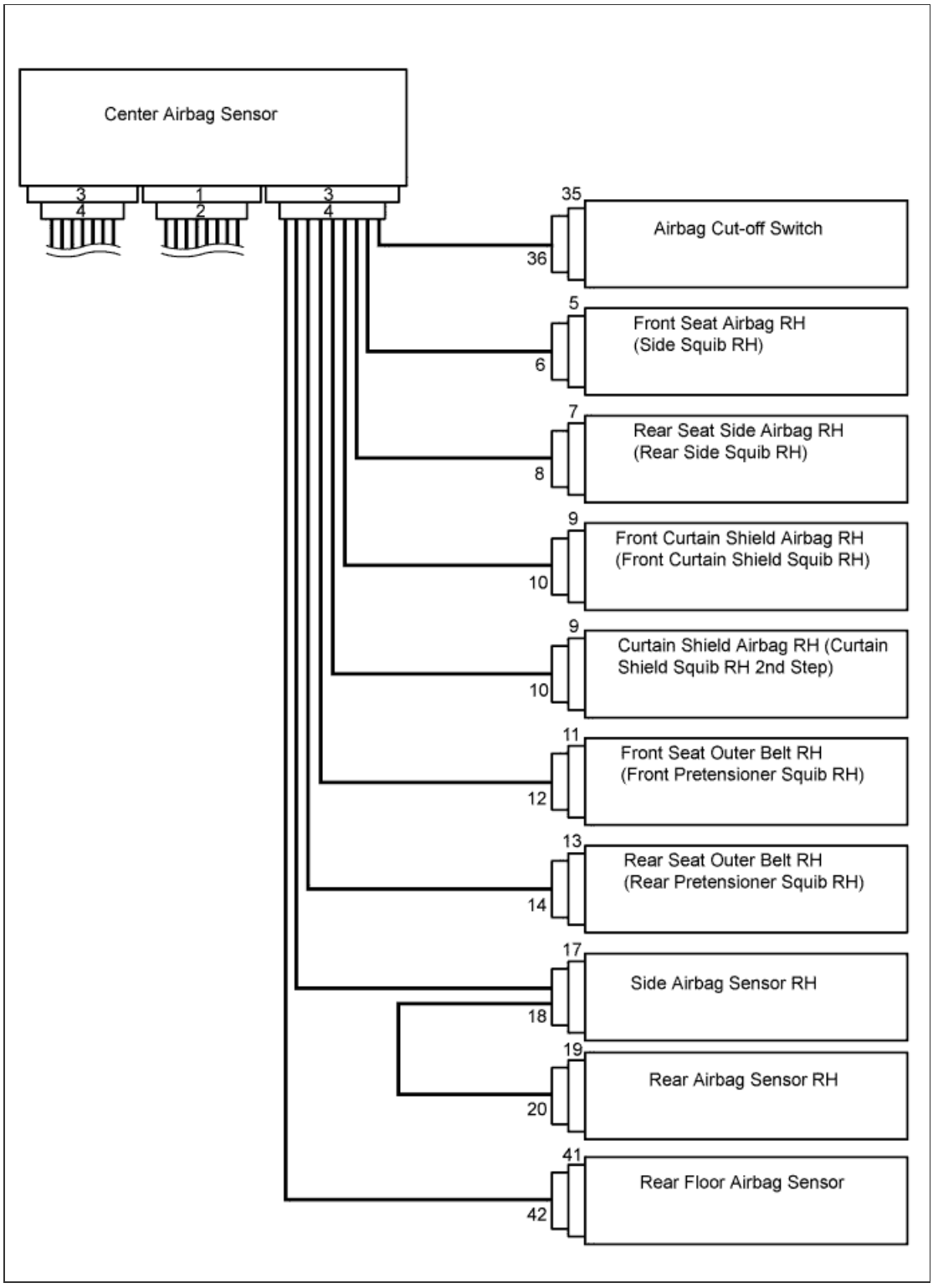
NOTICE:

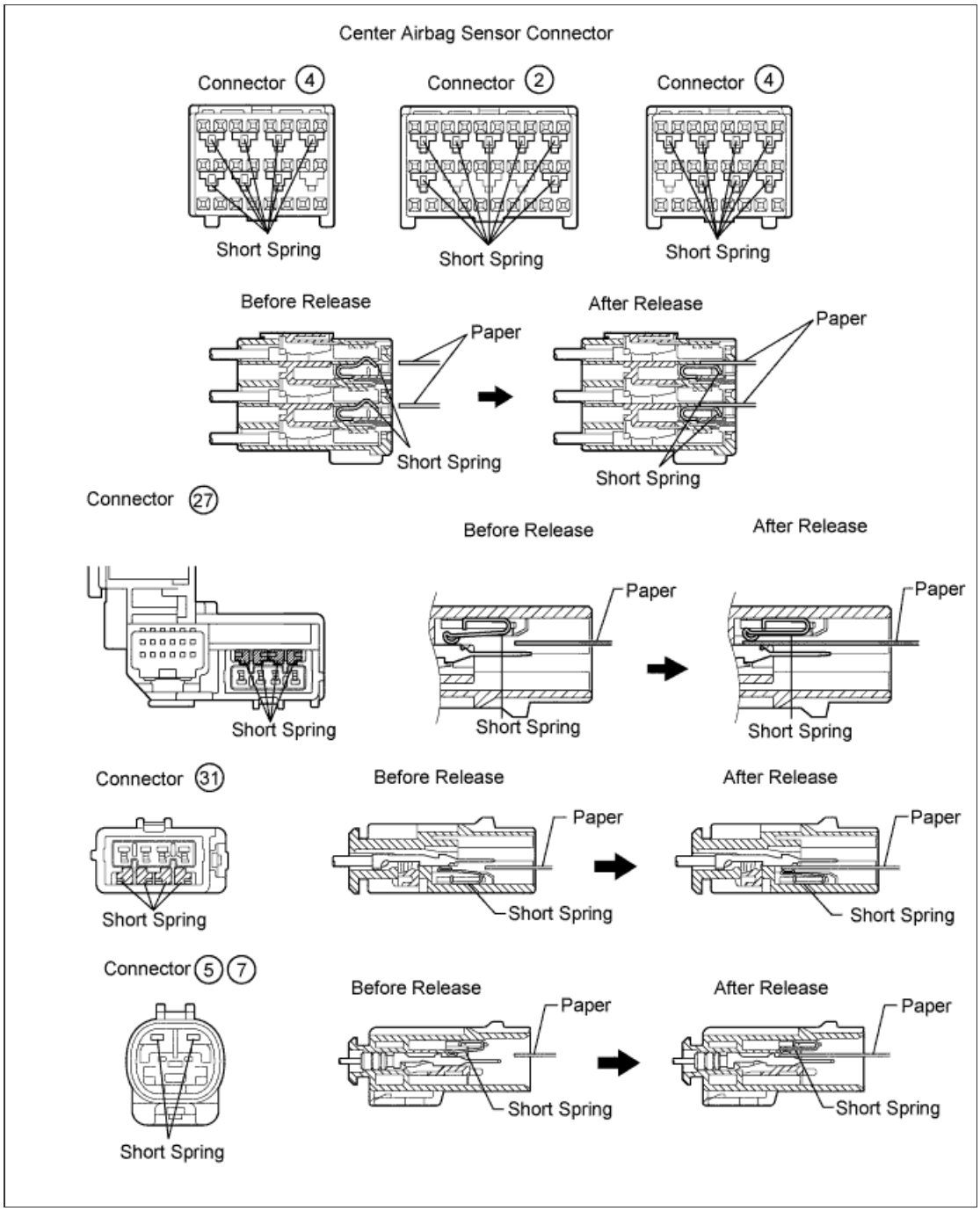
- **Do not release the activation prevention mechanism unless specially directed by the troubleshooting procedure.**
- **To prevent the terminal and the short spring from being damaged, always use a piece of paper with the same thickness as the male terminal.**


Center Airbag Sensor
3
4
1
2
3
4
Front Seat Airbag LH
(Side Squib LH)
5
6
Rear Seat Side Airbag LH
(Rear Side Squib LH)
7
8
Curtain Shield Airbag LH
(Curtain Shield Squib LH)
9
10
Curtain Shield Airbag LH (Curtain
Shield Squib LH 2nd Step)
9
10
Front Seat Outer Belt LH
(Front Pretensioner Squib LH)
11
12
Rear Seat Outer Belt LH
(Rear Pretensioner Squib LH)
13
14
Front Seat Inner Belt LH (Front
Seat Belt Buckle Switch LH/Seat
Position Sensor)
15
16
Rear Airbag Sensor LH
17
18
Side Airbag Sensor LH
19
20


Center Airbag Sensor
3
4
1
2
3
4
Combination Meter
(SRS Warning Light)
(CAN)
Front Airbag Sensor LH
21
22
23
24
Steering Pad (Driver Side Squib)
25
26
Spiral Cable
27
28
Driver Side Knee Airbag (Driver
Side Knee Airbag Squib)
33
34


Center Airbag Sensor
3
4
1
2
3
4
21
Front Airbag Sensor RH
24
23
22
29
Front Passenger Airbag
(Front Passenger Side Squib)
32
31
30
33
Front Passenger Side Knee Airbag
(Front Passenger Side Knee Airbag
Squib)
34
39
Passenger Airbag ON/OFF Indicator
40

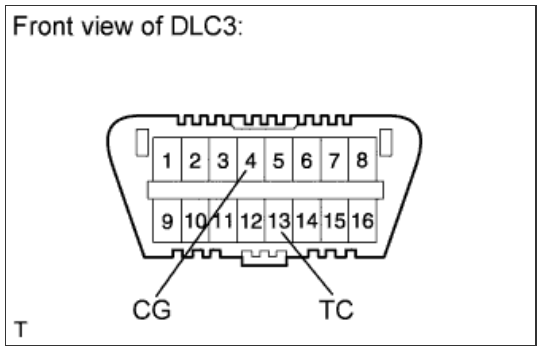

Center Airbag Sensor
3
4
1
2
3
4
35
36
Airbag Cut-off Switch
5
6
Front Seat Airbag RH
(Side Squib RH)
7
8
Rear Seat Side Airbag RH
(Rear Side Squib RH)
9
10
Front Curtain Shield Airbag RH
(Front Curtain Shield Squib RH)
9
10
Curtain Shield Airbag RH (Curtain
Shield Squib RH 2nd Step)
11
12
Front Seat Outer Belt RH
(Front Pretensioner Squib RH)
13
14
Rear Seat Outer Belt RH
(Rear Pretensioner Squib RH)
17
18
Side Airbag Sensor RH
19
20
Rear Airbag Sensor RH
41
42
Rear Floor Airbag Sensor


Center Airbag Sensor Connector
Connector 4
Short Spring
Connector 2
Short Spring
Connector 4
Short Spring
Before Release
After Release
Paper
Short Spring
Paper
Short Spring
Connector 27
Before Release
After Release
Short Spring
Paper
Short Spring
Paper
Short Spring
Connector 31
Before Release
After Release
Short Spring
Paper
Short Spring
Paper
Short Spring
Connector 5 7
Before Release
After Release
Short Spring
Paper
Short Spring
Paper
Short Spring

for Preparation Click here

CHECK DTC (Using SST Check Wire)

a. Check the DTCs (Present trouble code).



i. Turn the engine switch on (IG), and wait for approximately 60 seconds.

ii. Using SST, connect terminals 13 (TC) and 4 (CG) of the DLC3.

SST
09843-18040

NOTICE:

Connect the correct terminals to avoid a malfunction.

b. Check the DTCs (Past trouble code).

i. Using SST, connect terminals 13 (TC) and 4 (CG) of the DLC3.

SST
09843-18040

NOTICE:

Connect the correct terminals to avoid a malfunction.

ii. Turn the engine switch on (IG), and wait for approximately 60 seconds.

c. Read the DTCs.

i. Read the blinking patterns of the DTCs. As examples, the blinking patterns for the normal system code and trouble codes 11 and 31 are shown in the illustration.

- Normal system code indication (without past trouble code):
  The light blinks twice per second.
- Normal system code indication (with past trouble code):
  When a past trouble code is stored in the center airbag sensor, the light blinks only once per second.
- Trouble code indication:
  Each digit of a DTC is separated by a 1.5 second pause.

If there is more than 1 code, there will be a 2.5 second pause between each code. After all codes are output, there will be a 4.0 second pause, and then all codes will be repeated.

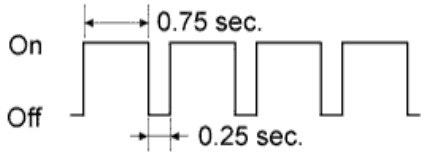
HINT:

- **If 2 or more malfunctions are found, the indication begins with the smaller-numbered code.**
- **If DTCs are output without connecting the terminals, proceed to "Diagnosis Circuit" (Click here).**

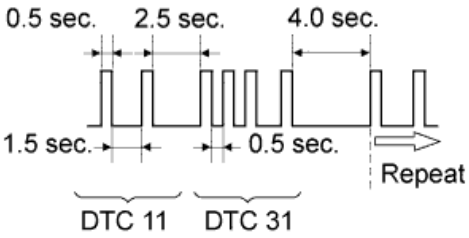
Normal System Code (without Past Trouble Code):



Normal System Code (with Past Trouble Code):



Trouble Code (Example Codes 11 and 31):



CLEAR DTC (Using SST Check Wire)

a. When the engine switch is turned off, the DTCs are cleared.

HINT:

Depending on the DTC, the code may not be cleared by turning off the engine switch. In this case, proceed to the next procedure.

b. Using SST, connect terminals 13 (TC) and 4 (CG) of the DLC3, and then turn the engine switch on (IG).

SST
09843-18040

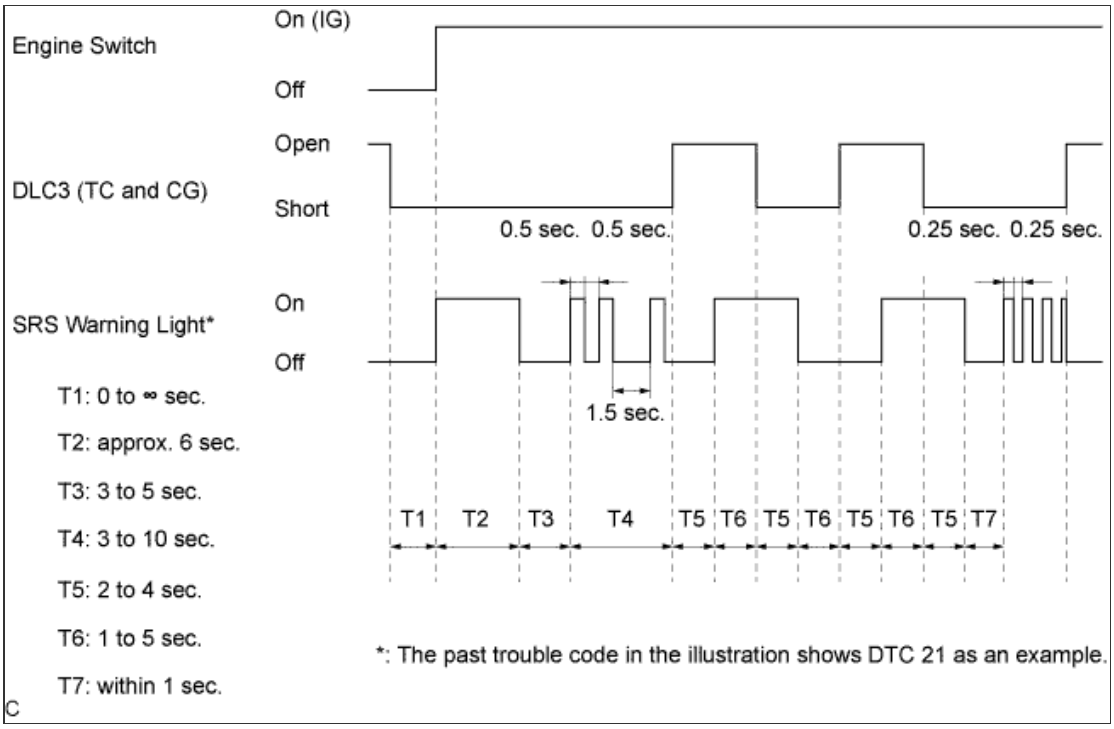
c. Disconnect terminal TC of the DLC3 within 3 to 10 seconds after the DTCs are output, and check if the SRS warning light comes on after 3 seconds.

d. Within 2 to 4 seconds after the SRS warning light comes on, connect terminals 13 (TC) and 4 (CG) of the DLC3.

e. The SRS warning light should go off within 2 to 4 seconds after connecting terminals 13 (TC) and 4 (CG) of the DLC3. Then, disconnect terminal 13 (TC) within 2 to 4 seconds after the SRS warning light goes off.

f. The SRS warning light comes on again within 2 to 4 seconds after disconnecting terminal 13 (TC). Then, reconnect terminals 13 (TC) and 4 (CG) within 2 to 4 seconds after the SRS warning light comes on.

g. Check if the SRS warning light goes off within 2 to 4 seconds after connecting terminals 13 (TC) and 4 (CG) of the DLC3. Also check if the normal system code is output within 1 second after the SRS warning light goes off.
If DTCs are not cleared, repeat this procedure until the codes are cleared.



CHECK DTC (Using the Intelligent Tester)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Check the DTCs by following the prompts on the tester screen.

HINT:

Refer to the intelligent tester operator's manual for further details.

CLEAR DTC (Using the Intelligent Tester)

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Clear the DTCs by following the prompts on the tester screen.

HINT:

Refer to the intelligent tester operator's manual for further details.

for Preparation Click here

NOTICE:

Enter "Signal Check" from the "DTC Check" screen displayed on the intelligent tester to clear the output DTCs (both present and past).

HINT:

- **DTCs can be stored more sensitively in check mode than in normal diagnosis mode.**
- **Perform the check mode inspection when a malfunction in each squib circuit is suspected even after the normal system code is output through normal diagnosis mode inspection.**

CHECK MODE PROCEDURE (for Using an Intelligent Tester)

a. Turn the engine switch off.

b. Connect the intelligent tester to the DLC3.

c. Turn the engine switch on (IG).

d. Turn the intelligent tester on.

e. Enter the following menus: Body / SRS Airbag / Utility / Signal Check*.

HINT:

*: Follow the directions on the tester screen.

for Preparation Click here

READ DATA LIST

HINT:

Using the intelligent tester to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Warm up the engine.

b. Turn the engine switch off.

c. Connect the intelligent tester to the DLC3.

d. Turn the engine switch on (IG).

e. Turn the intelligent tester on.

f. Enter the following menus: Body / SRS Airbag / Data List.

g. According to the display on the tester, read the Data List.

SRS Airbag

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Driver Seat Position	Driver Seat Position/ Forward: Seat position is forward Bkward: Seat position is backward Fail: Failure detected	Forward/Bkward	-
Passenger Detection	Passenger Detection/ NG: Data is not determined OFF: Vacant None: No passenger Detect: A passenger is seated Fail: Failure detected	None/Detect	-
Right Side Buckle SW	Right Side Buckle SW/ Unset: The seat belt is not fastened Set: The seat belt is fastened NG: Data is not determined	Unset/Set	-
Left Side Buckle SW	Left Side Buckle SW/ Unset: The seat belt is not fastened Set: The seat belt is fastened NG: Data is not determined	Unset/Set	-
Display Type Information	Display Type Information/ LR: The display is indicated by LH/RH DP: The display is indicated by Driver/Passenger	LR	-
Number of Past DTC	Number of Past DTCs/ Min.: 0, Max.: 255	0	-

for Preparation Click here

- If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.
- When the SRS warning light remains on and the DTC output is the normal system code, a voltage source drop is likely to occur. This malfunction is not stored in the memory by the center airbag sensor.
- If the power source voltage returns to normal, the SRS warning light will automatically go off. When 2 or more codes are output, the code with the lower number is output first.
- When 2 or more codes are output, the code with the lower number is output first.
- If a code not listed in the chart is output, the center airbag sensor may have a malfunction.
- If a DTC is output indicating a short to ground, short to B+ or open in an airbag squib circuit area, other DTCs may not be output. First replace or repair the malfunctioning area indicated by the current DTC, and then check for DTCs again to output the other DTCs.
- Mark in the check mode column:
  *1: DTC is not output in check mode.
  *2: DTC is output in check mode.

DTC Code	Detection Item	Trouble Area	Check Mode	See page
B1000/31	Center Airbag Sensor Assembly Malfunction	Center airbag sensor assembly	*1	Click here
B1603/83	Front Satellite Sensor Bus RH Initialization Incomplete	- Instrument panel wire - Engine room main wire - Front airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1608/84	Front Satellite Sensor Bus LH Initialization Incomplete	- Instrument panel wire - Engine room main wire - Front airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1610/13	Front Airbag Sensor RH Malfunction	- Front airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1612/83	Lost Communication with Front Airbag Sensor RH	- Instrument panel wire - Engine room main wire - Front airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1613/83	Front Airbag Sensor RH Initialization Incomplete	- Instrument panel wire - Engine room main wire - Front airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1615/14	Front Airbag Sensor LH Malfunction	- Front airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1617/84	Lost Communication with Front Airbag Sensor LH	- Instrument panel wire - Engine room main wire - Front airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1618/84	Front Airbag Sensor LH Initialization Incomplete	- Instrument panel wire - Engine room main wire - Front airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1630/23	Rear Airbag Sensor RH Circuit Malfunction	- Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1632/81	Lost Communication with Rear Airbag Sensor RH	- No. 2 floor wire - Front door wire RH - Side airbag sensor RH - Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1633/81	Rear Airbag Sensor Assembly RH Initialization Incomplete	- No. 2 floor wire - Front door wire RH - Side airbag sensor RH - Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1635/24	Rear Airbag Sensor LH Circuit Malfunction	- Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1637/82	Lost Communication with Rear Airbag Sensor LH	- Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here

B1638/82	Rear Airbag Sensor Assembly LH Initialization Incomplete	- Floor wire - Rear airbag sensor LH - Side airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1642/81	Lost Communication with Side Satellite Sensor Bus RH	- No. 2 floor wire - Front door wire RH - Side airbag sensor RH - Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1643/81	Side Satellite Sensor Bus RH Initialization Incomplete	- No. 2 floor wire - Rear airbag sensor RH - Side airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1647/82	Lost Communication with Side Satellite Sensor Bus LH	- Floor wire - Front door wire LH - Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1648/82	Side Satellite Sensor Bus LH Initialization Incomplete	- No. 2 floor wire - Front door wire LH - Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1651/33	Manual Cut off Switch Trouble	- Instrument panel wire - Airbag cut-off switch - Center airbag sensor assembly	*1	Click here
B1653/35	Seat Position Airbag Sensor Circuit Malfunction	- Seat position sensor - Center airbag sensor assembly - Floor wire (for LHD) - No. 2 floor wire (for RHD)	*1	Click here
B1655/37	Driver Side Seat Belt Buckle Switch Circuit Malfunction	- Floor wire (for LHD) - No. 2 floor wire (for RHD) - Front seat inner belt assembly LH (Seat belt buckle switch LH) - Front seat inner belt assembly RH (Seat belt buckle switch RH) - Center airbag sensor assembly	*1	Click here
B1660/43	Passenger Airbag ON/OFF Indicator Circuit Malfunction	- Instrument panel wire - Multi-display - Clock - Center airbag sensor assembly - No. 2 instrument panel wire - No. 5 instrument panel wire	*1	Click here
B1661/44	Roll Over Cut Off Indicator Malfunction	- Combination meter assembly - Curtain shield airbag cutoff switch - Center airbag sensor assembly - Instrument panel wire - No. 3 instrument panel wire - Floor wire - No. 2 floor wire	*1	Click here
B1662/45	Indicator Light Circuit Malfunction	- Combination meter assembly (SRS warning light) - Center airbag sensor assembly - Instrument panel wire	*1	Click here
B1675/82	Rear Floor Airbag Sensor Malfunction	- Center airbag sensor assembly - Rear floor airbag sensor	*1	Click here
B1676/85	Lost Communication with Rear Floor Airbag Sensor RH	- Center airbag sensor assembly - Rear floor airbag sensor - No. 2 floor wire	*1	Click here
B1677/85	Rear Floor Airbag Sensor RH Initialization Incomplete	- Center airbag sensor assembly - Rear floor airbag sensor - No. 2 floor wire	*1	Click here
B1690/15	Door Side Airbag Sensor RH Malfunction	- Side airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1692/81	Lost Communication with Door Side Airbag Sensor RH	- Side airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1693/81	Door Side Airbag Sensor RH Initialization Incomplete	- No. 2 floor wire - Front door wire RH - Side airbag sensor RH - Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
	Side Satellite Sensor No. 2 Bus RH Initialization	- Center airbag sensor assembly		Click

B1694/85	Incomplete	- Rear floor airbag sensor - No. 2 floor wire	*1	here
B1695/16	Door Side Airbag Sensor LH Malfunction	- Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1697/82	Lost Communication with Door Side Airbag Sensor LH	- Floor wire - Front door wire LH - Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1698/82	Door Side Airbag Sensor LH Initialization Incomplete	- Floor wire - Front door wire LH - Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1800/51	Short in Driver Side Squib Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib) - Center airbag sensor assembly	*2	Click here
B1801/51	Open in Driver Side Squib Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib) - Center airbag sensor assembly	*2	Click here
B1802/51	Short to GND in Driver Side Squib Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib) - Center airbag sensor assembly	*2	Click here
B1803/51	Short to B+ in Driver Side Squib Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib) - Center airbag sensor assembly	*2	Click here
B1805/52	Short in Front Passenger Side Squib Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib) - Center airbag sensor assembly	*2	Click here
B1806/52	Open in Front Passenger Side Squib Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib) - Center airbag sensor assembly	*2	Click here
B1807/52	Short to GND in Front Passenger Side Squib Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib) - Center airbag sensor assembly	*2	Click here
B1808/52	Short to B+ in Front Passenger Side Squib Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib) - Center airbag sensor assembly	*2	Click here
B1810/53	Short in Driver Side Squib 2nd Step Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1811/53	Open in Driver Side Squib 2nd Step Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1812/53	Short to GND in Driver Side Squib 2nd Step Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1813/53	Short to B+ in Driver Side Squib 2nd Step Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1815/54	Short in Front Passenger Side Squib 2nd Step Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib 2nd step) - Center airbag sensor assembly	*2	Click here
	Open in Front Passenger Side Squib 2nd Step	- Instrument panel wire - Instrument panel wire assembly		Click

B1816/54	Circuit	- Front passenger airbag assembly (Front passenger side squib 2nd step) - Center airbag sensor assembly	*2	here
B1817/54	Short to GND in Front Passenger Side Squib 2nd Step Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1818/54	Short to B+ in Front Passenger Side Squib 2nd Step Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1820/55	Short in Side Squib RH Circuit	- No. 2 floor wire - Front seat airbag assembly RH (Side squib RH) - Center airbag sensor assembly	*2	Click here
B1821/55	Open in Side Squib RH Circuit	- No. 2 floor wire - Front seat airbag assembly RH (Side squib RH) - Center airbag sensor assembly	*2	Click here
B1822/55	Short to GND in Side Squib RH Circuit	- No. 2 floor wire - Front seat airbag assembly RH (Side squib RH) - Center airbag sensor assembly	*2	Click here
B1823/55	Short to B+ in Side Squib RH Circuit	- No. 2 floor wire - Front seat airbag assembly RH (Side squib RH) - Center airbag sensor assembly	*2	Click here
B1825/56	Short in Side Squib LH Circuit	- Floor wire - Front seat airbag assembly LH (Side squib LH) - Center airbag sensor assembly	*2	Click here
B1826/56	Open in Side Squib LH Circuit	- Floor wire - Front seat airbag assembly LH (Side squib LH) - Center airbag sensor assembly	*2	Click here
B1827/56	Short to GND in Side Squib LH Circuit	- Floor wire - Front seat airbag assembly LH (Side squib LH) - Center airbag sensor assembly	*2	Click here
B1828/56	Short to B+ in Side Squib LH Circuit	- Floor wire - Front seat airbag assembly LH (Side squib LH) - Center airbag sensor assembly	*2	Click here
B1830/57	Short in Curtain Shield Squib RH Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib RH) - Center airbag sensor assembly	*2	Click here
B1831/57	Open in Curtain Shield Squib RH Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib RH) - Center airbag sensor assembly	*2	Click here
B1832/57	Short to GND in Curtain Shield Squib RH Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib RH) - Center airbag sensor assembly	*2	Click here
B1833/57	Short to B+ in Curtain Shield Squib RH Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib RH) - Center airbag sensor assembly	*2	Click here
B1835/58	Short in Curtain Shield Squib LH Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib LH) - Center airbag sensor assembly	*2	Click here
B1836/58	Open in Curtain Shield Squib LH Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib LH) - Center airbag sensor assembly	*2	Click here
B1837/58	Short to GND in Curtain Shield Squib LH Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib LH) - Center airbag sensor assembly	*2	Click here
B1838/58	Short to B+ in Curtain Shield Squib LH Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib LH) - Center airbag sensor assembly	*2	Click here
B1840/59	Short in Curtain Shield Squib RH 2nd Step Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib 2nd-step RH) - Center airbag sensor assembly	*2	Click here
B1841/59	Open in Curtain Shield Squib RH 2nd Step Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib 2nd-step RH) - Center airbag sensor assembly	*2	Click here

B1842/59	Short to GND in Curtain Shield Squib RH 2nd Step Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib 2nd-step RH) - Center airbag sensor assembly	*2	Click here
B1843/59	Short to B+ in Curtain Shield Squib RH 2nd Step Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib 2nd-step RH) - Center airbag sensor assembly	*2	Click here
B1845/61	Short in Curtain Shield Squib LH 2nd Step Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib squib 2nd-step LH) - Center airbag sensor assembly	*2	Click here
B1846/61	Open in Curtain Shield Squib LH 2nd Step Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib squib 2nd-step LH) - Center airbag sensor assembly	*2	Click here
B1847/61	Short to GND in Curtain Shield Squib LH 2nd Step Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib 2nd-step LH) - Center airbag sensor assembly	*2	Click here
B1848/61	Short to B+ in Curtain Shield Squib LH 2nd Step Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib squib 2nd-step LH) - Center airbag sensor assembly	*2	Click here
B1850/62	Short in Rear Side Squib RH Circuit	- No. 2 floor wire - Rear seat wire RH - Rear seat side airbag assembly RH (Rear side squib RH) - Center airbag sensor assembly	*2	Click here
B1851/62	Open in Rear Side Squib RH Circuit	- No. 2 floor wire - Rear seat wire RH - Rear seat side airbag assembly RH (Rear side squib RH) - Center airbag sensor assembly	*2	Click here
B1852/62	Short to GND in Rear Side Squib RH Circuit	- No. 2 floor wire - Rear seat wire RH - Rear seat side airbag assembly RH (Rear side squib RH) - Center airbag sensor assembly	*2	Click here
B1853/62	Short to B+ in Rear Side Squib RH Circuit	- No. 2 floor wire - Rear seat wire RH - Rear seat side airbag assembly RH (Rear side squib RH) - Center airbag sensor assembly	*2	Click here
B1855/63	Short in Rear Side Squib LH Circuit	- Floor wire - Rear seat side airbag assembly LH (Rear side squib LH) - Center airbag sensor assembly	*2	Click here
B1856/63	Open in Rear Side Squib LH Circuit	- Floor wire - Rear seat side airbag assembly LH (Rear side squib LH) - Center airbag sensor assembly	*2	Click here
B1857/63	Short to GND in Rear Side Squib LH Circuit	- Floor wire - Rear seat side airbag assembly LH (Rear side squib LH) - Center airbag sensor assembly	*2	Click here
B1858/63	Short to B+ in Rear Side Squib LH Circuit	- Floor wire - Rear seat side airbag assembly LH (Rear side squib LH) - Center airbag sensor assembly	*2	Click here
B1860/64	Short in Driver Side Knee Airbag Squib Circuit	- Instrument panel wire - Driver side knee airbag assembly (Driver side knee squib) - Center airbag sensor assembly	*2	Click here
B1861/64	Open in Driver Side Knee Airbag Squib Circuit	- Instrument panel wire - Driver side knee airbag assembly (Driver side knee squib) - Center airbag sensor assembly	*2	Click here
B1862/64	Short to GND in Driver Side Knee Airbag Squib Circuit	- Instrument panel wire - Driver side knee airbag assembly (Driver side knee squib) - Center airbag sensor assembly	*2	Click here
B1863/64	Short to B+ in Driver Side Knee Airbag Squib Circuit	- Instrument panel wire - Driver side knee airbag assembly (Driver side knee squib) - Center airbag sensor assembly	*2	Click here
B1865/65	Short in Front Passenger Side Knee Airbag Squib Circuit	- Instrument panel wire - Front passenger side knee airbag assembly (Front passenger side knee squib) - Center airbag sensor assembly	*2	Click here
	Open in Front Passenger Side Knee Airbag Squib	- Instrument panel wire - Front passenger side knee airbag assembly (Front passenger		Click

B1866/65	Circuit	side knee squib) - Center airbag sensor assembly	*2	here
B1867/65	Short to GND in Front Passenger Side Knee Airbag Squib Circuit	- Instrument panel wire - Front passenger side knee airbag assembly (Front passenger side knee squib) - Center airbag sensor assembly	*2	Click here
B1868/65	Short to B+ in Front Passenger Side Knee Airbag Squib Circuit	- Instrument panel wire - Front passenger side knee airbag assembly (Front passenger side knee squib) - Center airbag sensor assembly	*2	Click here
B1900/73	Short in Front Pretensioner Squib RH Circuit	- No. 2 floor wire - Front seat outer belt assembly RH (Front pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1901/73	Open in Front Pretensioner Squib RH Circuit	- No. 2 floor wire - Front seat outer belt assembly RH (Front pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1902/73	Short to GND in Front Pretensioner Squib RH Circuit	- No. 2 floor wire - Front seat outer belt assembly RH (Front pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1903/73	Short to B+ in Front Pretensioner Squib RH Circuit	- No. 2 floor wire - Front seat outer belt assembly RH (Front pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1905/74	Short in Front Pretensioner Squib LH Circuit	- Floor wire - Front seat outer belt assembly LH (Front pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1906/74	Open in Front Pretensioner Squib LH Circuit	- Floor wire - Front seat outer belt assembly LH (Front pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1907/74	Short to GND in Front Pretensioner Squib LH Circuit	- Floor wire - Front seat outer belt assembly LH (Front pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1908/74	Short to B+ in Front Pretensioner Squib LH Circuit	- Floor wire - Front seat outer belt assembly LH (Front pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1920/77	Short in Rear Pretensioner Squib RH Circuit	- No. 2 floor wire - Rear seat outer belt assembly RH (Rear pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1921/77	Open in Rear Pretensioner Squib RH Circuit	- No. 2 floor wire - Rear seat outer belt assembly RH (Rear pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1922/77	Short to GND in Rear Pretensioner Squib RH Circuit	- No. 2 floor wire - Rear seat outer belt assembly RH (Rear pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1923/77	Short to B+ in Rear Pretensioner Squib RH Circuit	- No. 2 floor wire - Rear seat outer belt assembly RH (Rear pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1925/78	Short in Rear Pretensioner Squib LH Circuit	- Floor wire - Rear seat outer belt assembly LH (Rear pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1926/78	Open in Rear Pretensioner Squib LH Circuit	- Floor wire - Rear seat outer belt assembly LH (Rear pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1927/78	Short to GND in Rear Pretensioner Squib LH Circuit	- Floor wire - Rear seat outer belt assembly LH (Rear pretensioner squib LH) - Center airbag sensor assembly	*2	Click here

B1928/78	Short to B+ in Rear Pretensioner Squib LH Circuit	- Floor wire - Rear seat outer belt assembly LH (Rear pretensioner squib LH) - Center airbag sensor assembly	*2	Click here

for Preparation Click here

- If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.
- When the SRS warning light remains on and the DTC output is the normal system code, a voltage source drop is likely to occur. This malfunction is not stored in the memory by the center airbag sensor.
- If the power source voltage returns to normal, the SRS warning light will automatically go off. When 2 or more codes are output, the code with the lower number is output first.
- When 2 or more codes are output, the code with the lower number is output first.
- If a code not listed in the chart is output, the center airbag sensor may have a malfunction.
- If a DTC is output indicating a short to ground, short to B+ or open in an airbag squib circuit area, other DTCs may not be output. First replace or repair the malfunctioning area indicated by the current DTC, and then check for DTCs again to output the other DTCs.
- Mark in the check mode column:
  *1: DTC is not output in check mode.
  *2: DTC is output in check mode.

Airbag System

DTC Code	Detection Item	Trouble Area	Check Mode	See page
B1000/31	Center Airbag Sensor Assembly Malfunction	Center airbag sensor assembly	*1	Click here
B1603/83	Front Satellite Sensor Bus RH Initialization Incomplete	- Instrument panel wire - Engine room main wire - Front airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1608/84	Front Satellite Sensor Bus LH Initialization Incomplete	- Instrument panel wire - Engine room main wire - Front airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1610/13	Front Airbag Sensor RH Malfunction	- Front airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1612/83	Lost Communication with Front Airbag Sensor RH	- Instrument panel wire - Engine room main wire - Front airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1613/83	Front Airbag Sensor RH Initialization Incomplete	- Instrument panel wire - Engine room main wire - Front airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1615/14	Front Airbag Sensor LH Malfunction	- Front airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1617/84	Lost Communication with Front Airbag Sensor LH	- Instrument panel wire - Engine room main wire - Front airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1618/84	Front Airbag Sensor LH Initialization Incomplete	- Instrument panel wire - Engine room main wire - Front airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1630/23	Rear Airbag Sensor RH Circuit Malfunction	- Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1632/81	Lost Communication with Rear Airbag Sensor RH	- No. 2 floor wire - Front door wire RH - Side airbag sensor RH - Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1633/81	Rear Airbag Sensor Assembly RH Initialization Incomplete	- No. 2 floor wire - Front door wire RH - Side airbag sensor RH - Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1635/24	Rear Airbag Sensor LH Circuit Malfunction	- Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1637/82	Lost Communication with Rear Airbag Sensor LH	- Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here

B1638/82	Rear Airbag Sensor Assembly LH Initialization Incomplete	- Floor wire - Rear airbag sensor LH - Side airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1642/81	Lost Communication with Side Satellite Sensor Bus RH	- No. 2 floor wire - Front door wire RH - Side airbag sensor RH - Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1643/81	Side Satellite Sensor Bus RH Initialization Incomplete	- No. 2 floor wire - Rear airbag sensor RH - Side airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1647/82	Lost Communication with Side Satellite Sensor Bus LH	- Floor wire - Front door wire LH - Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1648/82	Side Satellite Sensor Bus LH Initialization Incomplete	- No. 2 floor wire - Front door wire LH - Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1651/33	Manual Cut off Switch Trouble	- Instrument panel wire - Airbag cut-off switch - Center airbag sensor assembly	*1	Click here
B1653/35	Seat Position Airbag Sensor Circuit Malfunction	- Seat position sensor - Center airbag sensor assembly - Floor wire (for LHD) - No. 2 floor wire (for RHD)	*1	Click here
B1655/37	Driver Side Seat Belt Buckle Switch Circuit Malfunction	- Floor wire (for LHD) - No. 2 floor wire (for RHD) - Front seat inner belt assembly LH (Seat belt buckle switch LH) - Front seat inner belt assembly RH (Seat belt buckle switch RH) - Center airbag sensor assembly	*1	Click here
B1660/43	Passenger Airbag ON/OFF Indicator Circuit Malfunction	- Instrument panel wire - Multi-display - Clock - Center airbag sensor assembly - No. 2 instrument panel wire - No. 5 instrument panel wire	*1	Click here
B1661/44	Roll Over Cut Off Indicator Malfunction	- Combination meter assembly - Curtain shield airbag cutoff switch - Center airbag sensor assembly - Instrument panel wire - No. 3 instrument panel wire - Floor wire - No. 2 floor wire	*1	Click here
B1662/45	Indicator Light Circuit Malfunction	- Combination meter assembly (SRS warning light) - Center airbag sensor assembly - Instrument panel wire	*1	Click here
B1675/82	Rear Floor Airbag Sensor Malfunction	- Center airbag sensor assembly - Rear floor airbag sensor	*1	Click here
B1676/85	Lost Communication with Rear Floor Airbag Sensor RH	- Center airbag sensor assembly - Rear floor airbag sensor - No. 2 floor wire	*1	Click here
B1677/85	Rear Floor Airbag Sensor RH Initialization Incomplete	- Center airbag sensor assembly - Rear floor airbag sensor - No. 2 floor wire	*1	Click here
B1690/15	Door Side Airbag Sensor RH Malfunction	- Side airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1692/81	Lost Communication with Door Side Airbag Sensor RH	- Side airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1693/81	Door Side Airbag Sensor RH Initialization Incomplete	- No. 2 floor wire - Front door wire RH - Side airbag sensor RH - Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
	Side Satellite Sensor No. 2 Bus RH Initialization	- Center airbag sensor assembly		Click

B1694/85	Incomplete	- Rear floor airbag sensor - No. 2 floor wire	*1	here
B1695/16	Door Side Airbag Sensor LH Malfunction	- Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1697/82	Lost Communication with Door Side Airbag Sensor LH	- Floor wire - Front door wire LH - Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1698/82	Door Side Airbag Sensor LH Initialization Incomplete	- Floor wire - Front door wire LH - Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1800/51	Short in Driver Side Squib Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib) - Center airbag sensor assembly	*2	Click here
B1801/51	Open in Driver Side Squib Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib) - Center airbag sensor assembly	*2	Click here
B1802/51	Short to GND in Driver Side Squib Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib) - Center airbag sensor assembly	*2	Click here
B1803/51	Short to B+ in Driver Side Squib Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib) - Center airbag sensor assembly	*2	Click here
B1805/52	Short in Front Passenger Side Squib Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib) - Center airbag sensor assembly	*2	Click here
B1806/52	Open in Front Passenger Side Squib Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib) - Center airbag sensor assembly	*2	Click here
B1807/52	Short to GND in Front Passenger Side Squib Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib) - Center airbag sensor assembly	*2	Click here
B1808/52	Short to B+ in Front Passenger Side Squib Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib) - Center airbag sensor assembly	*2	Click here
B1810/53	Short in Driver Side Squib 2nd Step Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1811/53	Open in Driver Side Squib 2nd Step Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1812/53	Short to GND in Driver Side Squib 2nd Step Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1813/53	Short to B+ in Driver Side Squib 2nd Step Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1815/54	Short in Front Passenger Side Squib 2nd Step Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib 2nd step) - Center airbag sensor assembly	*2	Click here
	Open in Front Passenger Side Squib 2nd Step	- Instrument panel wire - Instrument panel wire assembly		Click

B1816/54	Circuit	- Front passenger airbag assembly (Front passenger side squib 2nd step) - Center airbag sensor assembly	*2	here
B1817/54	Short to GND in Front Passenger Side Squib 2nd Step Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1818/54	Short to B+ in Front Passenger Side Squib 2nd Step Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1820/55	Short in Side Squib RH Circuit	- No. 2 floor wire - Front seat airbag assembly RH (Side squib RH) - Center airbag sensor assembly	*2	Click here
B1821/55	Open in Side Squib RH Circuit	- No. 2 floor wire - Front seat airbag assembly RH (Side squib RH) - Center airbag sensor assembly	*2	Click here
B1822/55	Short to GND in Side Squib RH Circuit	- No. 2 floor wire - Front seat airbag assembly RH (Side squib RH) - Center airbag sensor assembly	*2	Click here
B1823/55	Short to B+ in Side Squib RH Circuit	- No. 2 floor wire - Front seat airbag assembly RH (Side squib RH) - Center airbag sensor assembly	*2	Click here
B1825/56	Short in Side Squib LH Circuit	- Floor wire - Front seat airbag assembly LH (Side squib LH) - Center airbag sensor assembly	*2	Click here
B1826/56	Open in Side Squib LH Circuit	- Floor wire - Front seat airbag assembly LH (Side squib LH) - Center airbag sensor assembly	*2	Click here
B1827/56	Short to GND in Side Squib LH Circuit	- Floor wire - Front seat airbag assembly LH (Side squib LH) - Center airbag sensor assembly	*2	Click here
B1828/56	Short to B+ in Side Squib LH Circuit	- Floor wire - Front seat airbag assembly LH (Side squib LH) - Center airbag sensor assembly	*2	Click here
B1830/57	Short in Curtain Shield Squib RH Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib RH) - Center airbag sensor assembly	*2	Click here
B1831/57	Open in Curtain Shield Squib RH Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib RH) - Center airbag sensor assembly	*2	Click here
B1832/57	Short to GND in Curtain Shield Squib RH Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib RH) - Center airbag sensor assembly	*2	Click here
B1833/57	Short to B+ in Curtain Shield Squib RH Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib RH) - Center airbag sensor assembly	*2	Click here
B1835/58	Short in Curtain Shield Squib LH Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib LH) - Center airbag sensor assembly	*2	Click here
B1836/58	Open in Curtain Shield Squib LH Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib LH) - Center airbag sensor assembly	*2	Click here
B1837/58	Short to GND in Curtain Shield Squib LH Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib LH) - Center airbag sensor assembly	*2	Click here
B1838/58	Short to B+ in Curtain Shield Squib LH Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib LH) - Center airbag sensor assembly	*2	Click here
B1840/59	Short in Curtain Shield Squib RH 2nd Step Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib 2nd-step RH) - Center airbag sensor assembly	*2	Click here
B1841/59	Open in Curtain Shield Squib RH 2nd Step Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib 2nd-step RH) - Center airbag sensor assembly	*2	Click here

B1842/59	Short to GND in Curtain Shield Squib RH 2nd Step Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib 2nd-step RH) - Center airbag sensor assembly	*2	Click here
B1843/59	Short to B+ in Curtain Shield Squib RH 2nd Step Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib 2nd-step RH) - Center airbag sensor assembly	*2	Click here
B1845/61	Short in Curtain Shield Squib LH 2nd Step Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib squib 2nd-step LH) - Center airbag sensor assembly	*2	Click here
B1846/61	Open in Curtain Shield Squib LH 2nd Step Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib squib 2nd-step LH) - Center airbag sensor assembly	*2	Click here
B1847/61	Short to GND in Curtain Shield Squib LH 2nd Step Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib 2nd-step LH) - Center airbag sensor assembly	*2	Click here
B1848/61	Short to B+ in Curtain Shield Squib LH 2nd Step Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib squib 2nd-step LH) - Center airbag sensor assembly	*2	Click here
B1850/62	Short in Rear Side Squib RH Circuit	- No. 2 floor wire - Rear seat wire RH - Rear seat side airbag assembly RH (Rear side squib RH) - Center airbag sensor assembly	*2	Click here
B1851/62	Open in Rear Side Squib RH Circuit	- No. 2 floor wire - Rear seat wire RH - Rear seat side airbag assembly RH (Rear side squib RH) - Center airbag sensor assembly	*2	Click here
B1852/62	Short to GND in Rear Side Squib RH Circuit	- No. 2 floor wire - Rear seat wire RH - Rear seat side airbag assembly RH (Rear side squib RH) - Center airbag sensor assembly	*2	Click here
B1853/62	Short to B+ in Rear Side Squib RH Circuit	- No. 2 floor wire - Rear seat wire RH - Rear seat side airbag assembly RH (Rear side squib RH) - Center airbag sensor assembly	*2	Click here
B1855/63	Short in Rear Side Squib LH Circuit	- Floor wire - Rear seat side airbag assembly LH (Rear side squib LH) - Center airbag sensor assembly	*2	Click here
B1856/63	Open in Rear Side Squib LH Circuit	- Floor wire - Rear seat side airbag assembly LH (Rear side squib LH) - Center airbag sensor assembly	*2	Click here
B1857/63	Short to GND in Rear Side Squib LH Circuit	- Floor wire - Rear seat side airbag assembly LH (Rear side squib LH) - Center airbag sensor assembly	*2	Click here
B1858/63	Short to B+ in Rear Side Squib LH Circuit	- Floor wire - Rear seat side airbag assembly LH (Rear side squib LH) - Center airbag sensor assembly	*2	Click here
B1860/64	Short in Driver Side Knee Airbag Squib Circuit	- Instrument panel wire - Driver side knee airbag assembly (Driver side knee squib) - Center airbag sensor assembly	*2	Click here
B1861/64	Open in Driver Side Knee Airbag Squib Circuit	- Instrument panel wire - Driver side knee airbag assembly (Driver side knee squib) - Center airbag sensor assembly	*2	Click here
B1862/64	Short to GND in Driver Side Knee Airbag Squib Circuit	- Instrument panel wire - Driver side knee airbag assembly (Driver side knee squib) - Center airbag sensor assembly	*2	Click here
B1863/64	Short to B+ in Driver Side Knee Airbag Squib Circuit	- Instrument panel wire - Driver side knee airbag assembly (Driver side knee squib) - Center airbag sensor assembly	*2	Click here
B1865/65	Short in Front Passenger Side Knee Airbag Squib Circuit	- Instrument panel wire - Front passenger side knee airbag assembly (Front passenger side knee squib) - Center airbag sensor assembly	*2	Click here
	Open in Front Passenger Side Knee Airbag Squib	- Instrument panel wire - Front passenger side knee airbag assembly (Front passenger		Click

B1866/65	Circuit	side knee squib) - Center airbag sensor assembly	*2	here
B1867/65	Short to GND in Front Passenger Side Knee Airbag Squib Circuit	- Instrument panel wire - Front passenger side knee airbag assembly (Front passenger side knee squib) - Center airbag sensor assembly	*2	Click here
B1868/65	Short to B+ in Front Passenger Side Knee Airbag Squib Circuit	- Instrument panel wire - Front passenger side knee airbag assembly (Front passenger side knee squib) - Center airbag sensor assembly	*2	Click here
B1900/73	Short in Front Pretensioner Squib RH Circuit	- No. 2 floor wire - Front seat outer belt assembly RH (Front pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1901/73	Open in Front Pretensioner Squib RH Circuit	- No. 2 floor wire - Front seat outer belt assembly RH (Front pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1902/73	Short to GND in Front Pretensioner Squib RH Circuit	- No. 2 floor wire - Front seat outer belt assembly RH (Front pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1903/73	Short to B+ in Front Pretensioner Squib RH Circuit	- No. 2 floor wire - Front seat outer belt assembly RH (Front pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1905/74	Short in Front Pretensioner Squib LH Circuit	- Floor wire - Front seat outer belt assembly LH (Front pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1906/74	Open in Front Pretensioner Squib LH Circuit	- Floor wire - Front seat outer belt assembly LH (Front pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1907/74	Short to GND in Front Pretensioner Squib LH Circuit	- Floor wire - Front seat outer belt assembly LH (Front pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1908/74	Short to B+ in Front Pretensioner Squib LH Circuit	- Floor wire - Front seat outer belt assembly LH (Front pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1920/77	Short in Rear Pretensioner Squib RH Circuit	- No. 2 floor wire - Rear seat outer belt assembly RH (Rear pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1921/77	Open in Rear Pretensioner Squib RH Circuit	- No. 2 floor wire - Rear seat outer belt assembly RH (Rear pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1922/77	Short to GND in Rear Pretensioner Squib RH Circuit	- No. 2 floor wire - Rear seat outer belt assembly RH (Rear pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1923/77	Short to B+ in Rear Pretensioner Squib RH Circuit	- No. 2 floor wire - Rear seat outer belt assembly RH (Rear pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1925/78	Short in Rear Pretensioner Squib LH Circuit	- Floor wire - Rear seat outer belt assembly LH (Rear pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1926/78	Open in Rear Pretensioner Squib LH Circuit	- Floor wire - Rear seat outer belt assembly LH (Rear pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1927/78	Short to GND in Rear Pretensioner Squib LH Circuit	- Floor wire - Rear seat outer belt assembly LH (Rear pretensioner squib LH) - Center airbag sensor assembly	*2	Click here

B1928/78	Short to B+ in Rear Pretensioner Squib LH Circuit	- Floor wire - Rear seat outer belt assembly LH (Rear pretensioner squib LH) - Center airbag sensor assembly	*2	Click here

for Preparation Click here

- If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.
- When the SRS warning light remains on and the DTC output is the normal system code, a voltage source drop is likely to occur. This malfunction is not stored in the memory by the center airbag sensor.
- If the power source voltage returns to normal, the SRS warning light will automatically go off. When 2 or more codes are output, the code with the lower number is output first.
- When 2 or more codes are output, the code with the lower number is output first.
- If a code not listed in the chart is output, the center airbag sensor may have a malfunction.
- If a DTC is output indicating a short to ground, short to B+ or open in an airbag squib circuit area, other DTCs may not be output. First replace or repair the malfunctioning area indicated by the current DTC, and then check for DTCs again to output the other DTCs.
- Mark in the check mode column:
  *1: DTC is not output in check mode.
  *2: DTC is output in check mode.

Airbag System

DTC Code	Detection Item	Trouble Area	Check Mode	See page
B1000/31	Center Airbag Sensor Assembly Malfunction	Center airbag sensor assembly	*1	Click here
B1603/83	Front Satellite Sensor Bus RH Initialization Incomplete	- Instrument panel wire - Engine room main wire - Front airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1608/84	Front Satellite Sensor Bus LH Initialization Incomplete	- Instrument panel wire - Engine room main wire - Front airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1610/13	Front Airbag Sensor RH Malfunction	- Front airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1612/83	Lost Communication with Front Airbag Sensor RH	- Instrument panel wire - Engine room main wire - Front airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1613/83	Front Airbag Sensor RH Initialization Incomplete	- Instrument panel wire - Engine room main wire - Front airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1615/14	Front Airbag Sensor LH Malfunction	- Front airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1617/84	Lost Communication with Front Airbag Sensor LH	- Instrument panel wire - Engine room main wire - Front airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1618/84	Front Airbag Sensor LH Initialization Incomplete	- Instrument panel wire - Engine room main wire - Front airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1630/23	Rear Airbag Sensor RH Circuit Malfunction	- Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1632/81	Lost Communication with Rear Airbag Sensor RH	- No. 2 floor wire - Front door wire RH - Side airbag sensor RH - Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1633/81	Rear Airbag Sensor Assembly RH Initialization Incomplete	- No. 2 floor wire - Front door wire RH - Side airbag sensor RH - Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1635/24	Rear Airbag Sensor LH Circuit Malfunction	- Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1637/82	Lost Communication with Rear Airbag Sensor LH	- Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here

B1638/82	Rear Airbag Sensor Assembly LH Initialization Incomplete	- Floor wire - Rear airbag sensor LH - Side airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1642/81	Lost Communication with Side Satellite Sensor Bus RH	- No. 2 floor wire - Front door wire RH - Side airbag sensor RH - Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1643/81	Side Satellite Sensor Bus RH Initialization Incomplete	- No. 2 floor wire - Rear airbag sensor RH - Side airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1647/82	Lost Communication with Side Satellite Sensor Bus LH	- Floor wire - Front door wire LH - Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1648/82	Side Satellite Sensor Bus LH Initialization Incomplete	- No. 2 floor wire - Front door wire LH - Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1651/33	Manual Cut off Switch Trouble	- Instrument panel wire - Airbag cut-off switch - Center airbag sensor assembly	*1	Click here
B1653/35	Seat Position Airbag Sensor Circuit Malfunction	- Seat position sensor - Center airbag sensor assembly - Floor wire (for LHD) - No. 2 floor wire (for RHD)	*1	Click here
B1655/37	Driver Side Seat Belt Buckle Switch Circuit Malfunction	- Floor wire (for LHD) - No. 2 floor wire (for RHD) - Front seat inner belt assembly LH (Seat belt buckle switch LH) - Front seat inner belt assembly RH (Seat belt buckle switch RH) - Center airbag sensor assembly	*1	Click here
B1660/43	Passenger Airbag ON/OFF Indicator Circuit Malfunction	- Instrument panel wire - Multi-display - Clock - Center airbag sensor assembly - No. 2 instrument panel wire - No. 5 instrument panel wire	*1	Click here
B1661/44	Roll Over Cut Off Indicator Malfunction	- Combination meter assembly - Curtain shield airbag cutoff switch - Center airbag sensor assembly - Instrument panel wire - No. 3 instrument panel wire - Floor wire - No. 2 floor wire	*1	Click here
B1662/45	Indicator Light Circuit Malfunction	- Combination meter assembly (SRS warning light) - Center airbag sensor assembly - Instrument panel wire	*1	Click here
B1675/82	Rear Floor Airbag Sensor Malfunction	- Center airbag sensor assembly - Rear floor airbag sensor	*1	Click here
B1676/85	Lost Communication with Rear Floor Airbag Sensor RH	- Center airbag sensor assembly - Rear floor airbag sensor - No. 2 floor wire	*1	Click here
B1677/85	Rear Floor Airbag Sensor RH Initialization Incomplete	- Center airbag sensor assembly - Rear floor airbag sensor - No. 2 floor wire	*1	Click here
B1690/15	Door Side Airbag Sensor RH Malfunction	- Side airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1692/81	Lost Communication with Door Side Airbag Sensor RH	- Side airbag sensor RH - Center airbag sensor assembly	*1	Click here
B1693/81	Door Side Airbag Sensor RH Initialization Incomplete	- No. 2 floor wire - Front door wire RH - Side airbag sensor RH - Rear airbag sensor RH - Center airbag sensor assembly	*1	Click here
	Side Satellite Sensor No. 2 Bus RH Initialization	- Center airbag sensor assembly		Click

B1694/85	Incomplete	- Rear floor airbag sensor - No. 2 floor wire	*1	here
B1695/16	Door Side Airbag Sensor LH Malfunction	- Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1697/82	Lost Communication with Door Side Airbag Sensor LH	- Floor wire - Front door wire LH - Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1698/82	Door Side Airbag Sensor LH Initialization Incomplete	- Floor wire - Front door wire LH - Side airbag sensor LH - Rear airbag sensor LH - Center airbag sensor assembly	*1	Click here
B1800/51	Short in Driver Side Squib Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib) - Center airbag sensor assembly	*2	Click here
B1801/51	Open in Driver Side Squib Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib) - Center airbag sensor assembly	*2	Click here
B1802/51	Short to GND in Driver Side Squib Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib) - Center airbag sensor assembly	*2	Click here
B1803/51	Short to B+ in Driver Side Squib Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib) - Center airbag sensor assembly	*2	Click here
B1805/52	Short in Front Passenger Side Squib Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib) - Center airbag sensor assembly	*2	Click here
B1806/52	Open in Front Passenger Side Squib Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib) - Center airbag sensor assembly	*2	Click here
B1807/52	Short to GND in Front Passenger Side Squib Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib) - Center airbag sensor assembly	*2	Click here
B1808/52	Short to B+ in Front Passenger Side Squib Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib) - Center airbag sensor assembly	*2	Click here
B1810/53	Short in Driver Side Squib 2nd Step Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1811/53	Open in Driver Side Squib 2nd Step Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1812/53	Short to GND in Driver Side Squib 2nd Step Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1813/53	Short to B+ in Driver Side Squib 2nd Step Circuit	- Instrument panel wire - Spiral cable - Steering pad (Driver side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1815/54	Short in Front Passenger Side Squib 2nd Step Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib 2nd step) - Center airbag sensor assembly	*2	Click here
	Open in Front Passenger Side Squib 2nd Step	- Instrument panel wire - Instrument panel wire assembly		Click

B1816/54	Circuit	- Front passenger airbag assembly (Front passenger side squib 2nd step) - Center airbag sensor assembly	*2	here
B1817/54	Short to GND in Front Passenger Side Squib 2nd Step Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1818/54	Short to B+ in Front Passenger Side Squib 2nd Step Circuit	- Instrument panel wire - Instrument panel wire assembly - Front passenger airbag assembly (Front passenger side squib 2nd step) - Center airbag sensor assembly	*2	Click here
B1820/55	Short in Side Squib RH Circuit	- No. 2 floor wire - Front seat airbag assembly RH (Side squib RH) - Center airbag sensor assembly	*2	Click here
B1821/55	Open in Side Squib RH Circuit	- No. 2 floor wire - Front seat airbag assembly RH (Side squib RH) - Center airbag sensor assembly	*2	Click here
B1822/55	Short to GND in Side Squib RH Circuit	- No. 2 floor wire - Front seat airbag assembly RH (Side squib RH) - Center airbag sensor assembly	*2	Click here
B1823/55	Short to B+ in Side Squib RH Circuit	- No. 2 floor wire - Front seat airbag assembly RH (Side squib RH) - Center airbag sensor assembly	*2	Click here
B1825/56	Short in Side Squib LH Circuit	- Floor wire - Front seat airbag assembly LH (Side squib LH) - Center airbag sensor assembly	*2	Click here
B1826/56	Open in Side Squib LH Circuit	- Floor wire - Front seat airbag assembly LH (Side squib LH) - Center airbag sensor assembly	*2	Click here
B1827/56	Short to GND in Side Squib LH Circuit	- Floor wire - Front seat airbag assembly LH (Side squib LH) - Center airbag sensor assembly	*2	Click here
B1828/56	Short to B+ in Side Squib LH Circuit	- Floor wire - Front seat airbag assembly LH (Side squib LH) - Center airbag sensor assembly	*2	Click here
B1830/57	Short in Curtain Shield Squib RH Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib RH) - Center airbag sensor assembly	*2	Click here
B1831/57	Open in Curtain Shield Squib RH Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib RH) - Center airbag sensor assembly	*2	Click here
B1832/57	Short to GND in Curtain Shield Squib RH Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib RH) - Center airbag sensor assembly	*2	Click here
B1833/57	Short to B+ in Curtain Shield Squib RH Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib RH) - Center airbag sensor assembly	*2	Click here
B1835/58	Short in Curtain Shield Squib LH Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib LH) - Center airbag sensor assembly	*2	Click here
B1836/58	Open in Curtain Shield Squib LH Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib LH) - Center airbag sensor assembly	*2	Click here
B1837/58	Short to GND in Curtain Shield Squib LH Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib LH) - Center airbag sensor assembly	*2	Click here
B1838/58	Short to B+ in Curtain Shield Squib LH Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib LH) - Center airbag sensor assembly	*2	Click here
B1840/59	Short in Curtain Shield Squib RH 2nd Step Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib 2nd-step RH) - Center airbag sensor assembly	*2	Click here
B1841/59	Open in Curtain Shield Squib RH 2nd Step Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib 2nd-step RH) - Center airbag sensor assembly	*2	Click here

B1842/59	Short to GND in Curtain Shield Squib RH 2nd Step Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib 2nd-step RH) - Center airbag sensor assembly	*2	Click here
B1843/59	Short to B+ in Curtain Shield Squib RH 2nd Step Circuit	- No. 2 floor wire - Curtain shield airbag assembly RH (Curtain shield squib 2nd-step RH) - Center airbag sensor assembly	*2	Click here
B1845/61	Short in Curtain Shield Squib LH 2nd Step Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib squib 2nd-step LH) - Center airbag sensor assembly	*2	Click here
B1846/61	Open in Curtain Shield Squib LH 2nd Step Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib squib 2nd-step LH) - Center airbag sensor assembly	*2	Click here
B1847/61	Short to GND in Curtain Shield Squib LH 2nd Step Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib 2nd-step LH) - Center airbag sensor assembly	*2	Click here
B1848/61	Short to B+ in Curtain Shield Squib LH 2nd Step Circuit	- Floor wire - Curtain shield airbag assembly LH (Curtain shield squib squib 2nd-step LH) - Center airbag sensor assembly	*2	Click here
B1850/62	Short in Rear Side Squib RH Circuit	- No. 2 floor wire - Rear seat wire RH - Rear seat side airbag assembly RH (Rear side squib RH) - Center airbag sensor assembly	*2	Click here
B1851/62	Open in Rear Side Squib RH Circuit	- No. 2 floor wire - Rear seat wire RH - Rear seat side airbag assembly RH (Rear side squib RH) - Center airbag sensor assembly	*2	Click here
B1852/62	Short to GND in Rear Side Squib RH Circuit	- No. 2 floor wire - Rear seat wire RH - Rear seat side airbag assembly RH (Rear side squib RH) - Center airbag sensor assembly	*2	Click here
B1853/62	Short to B+ in Rear Side Squib RH Circuit	- No. 2 floor wire - Rear seat wire RH - Rear seat side airbag assembly RH (Rear side squib RH) - Center airbag sensor assembly	*2	Click here
B1855/63	Short in Rear Side Squib LH Circuit	- Floor wire - Rear seat side airbag assembly LH (Rear side squib LH) - Center airbag sensor assembly	*2	Click here
B1856/63	Open in Rear Side Squib LH Circuit	- Floor wire - Rear seat side airbag assembly LH (Rear side squib LH) - Center airbag sensor assembly	*2	Click here
B1857/63	Short to GND in Rear Side Squib LH Circuit	- Floor wire - Rear seat side airbag assembly LH (Rear side squib LH) - Center airbag sensor assembly	*2	Click here
B1858/63	Short to B+ in Rear Side Squib LH Circuit	- Floor wire - Rear seat side airbag assembly LH (Rear side squib LH) - Center airbag sensor assembly	*2	Click here
B1860/64	Short in Driver Side Knee Airbag Squib Circuit	- Instrument panel wire - Driver side knee airbag assembly (Driver side knee squib) - Center airbag sensor assembly	*2	Click here
B1861/64	Open in Driver Side Knee Airbag Squib Circuit	- Instrument panel wire - Driver side knee airbag assembly (Driver side knee squib) - Center airbag sensor assembly	*2	Click here
B1862/64	Short to GND in Driver Side Knee Airbag Squib Circuit	- Instrument panel wire - Driver side knee airbag assembly (Driver side knee squib) - Center airbag sensor assembly	*2	Click here
B1863/64	Short to B+ in Driver Side Knee Airbag Squib Circuit	- Instrument panel wire - Driver side knee airbag assembly (Driver side knee squib) - Center airbag sensor assembly	*2	Click here
B1865/65	Short in Front Passenger Side Knee Airbag Squib Circuit	- Instrument panel wire - Front passenger side knee airbag assembly (Front passenger side knee squib) - Center airbag sensor assembly	*2	Click here
	Open in Front Passenger Side Knee Airbag Squib	- Instrument panel wire - Front passenger side knee airbag assembly (Front passenger		Click

B1866/65	Circuit	side knee squib) - Center airbag sensor assembly	*2	here
B1867/65	Short to GND in Front Passenger Side Knee Airbag Squib Circuit	- Instrument panel wire - Front passenger side knee airbag assembly (Front passenger side knee squib) - Center airbag sensor assembly	*2	Click here
B1868/65	Short to B+ in Front Passenger Side Knee Airbag Squib Circuit	- Instrument panel wire - Front passenger side knee airbag assembly (Front passenger side knee squib) - Center airbag sensor assembly	*2	Click here
B1900/73	Short in Front Pretensioner Squib RH Circuit	- No. 2 floor wire - Front seat outer belt assembly RH (Front pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1901/73	Open in Front Pretensioner Squib RH Circuit	- No. 2 floor wire - Front seat outer belt assembly RH (Front pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1902/73	Short to GND in Front Pretensioner Squib RH Circuit	- No. 2 floor wire - Front seat outer belt assembly RH (Front pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1903/73	Short to B+ in Front Pretensioner Squib RH Circuit	- No. 2 floor wire - Front seat outer belt assembly RH (Front pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1905/74	Short in Front Pretensioner Squib LH Circuit	- Floor wire - Front seat outer belt assembly LH (Front pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1906/74	Open in Front Pretensioner Squib LH Circuit	- Floor wire - Front seat outer belt assembly LH (Front pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1907/74	Short to GND in Front Pretensioner Squib LH Circuit	- Floor wire - Front seat outer belt assembly LH (Front pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1908/74	Short to B+ in Front Pretensioner Squib LH Circuit	- Floor wire - Front seat outer belt assembly LH (Front pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1920/77	Short in Rear Pretensioner Squib RH Circuit	- No. 2 floor wire - Rear seat outer belt assembly RH (Rear pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1921/77	Open in Rear Pretensioner Squib RH Circuit	- No. 2 floor wire - Rear seat outer belt assembly RH (Rear pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1922/77	Short to GND in Rear Pretensioner Squib RH Circuit	- No. 2 floor wire - Rear seat outer belt assembly RH (Rear pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1923/77	Short to B+ in Rear Pretensioner Squib RH Circuit	- No. 2 floor wire - Rear seat outer belt assembly RH (Rear pretensioner squib RH) - Center airbag sensor assembly	*2	Click here
B1925/78	Short in Rear Pretensioner Squib LH Circuit	- Floor wire - Rear seat outer belt assembly LH (Rear pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1926/78	Open in Rear Pretensioner Squib LH Circuit	- Floor wire - Rear seat outer belt assembly LH (Rear pretensioner squib LH) - Center airbag sensor assembly	*2	Click here
B1927/78	Short to GND in Rear Pretensioner Squib LH Circuit	- Floor wire - Rear seat outer belt assembly LH (Rear pretensioner squib LH) - Center airbag sensor assembly	*2	Click here

B1928/78	Short to B+ in Rear Pretensioner Squib LH Circuit	- Floor wire - Rear seat outer belt assembly LH (Rear pretensioner squib LH) - Center airbag sensor assembly	*2	Click here

DTC B1000/31 Center Airbag Sensor Assembly Malfunction

for Preparation Click here

DESCRIPTION

The center airbag sensor consists of the airbag sensor, the safing sensor, the drive circuit, the diagnosis circuit, the ignition control, etc.
If the center airbag sensor receives signals from the airbag sensor, it determines whether the SRS should be activated.
DTC B1000/31 is output when a malfunction is detected in the center airbag sensor.

DTC Code	DTC Detection Condition	Trouble Area
B1000/31	A center airbag sensor malfunction.	Center airbag sensor assembly

HINT:

When a trouble code is output simultaneously with B1000/31, repair the malfunction indicated by the other code first.

INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CENTER AIRBAG SENSOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).

OK:
DTC B1000 is not output.

NG → **REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)**

OK ↓

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1825/56 Short in Side Squib LH Circuit

DTC B1826/56 Open in Side Squib LH Circuit

DTC B1827/56 Short to GND in Side Squib LH Circuit

DTC B1828/56 Short to B+ in Side Squib LH Circuit

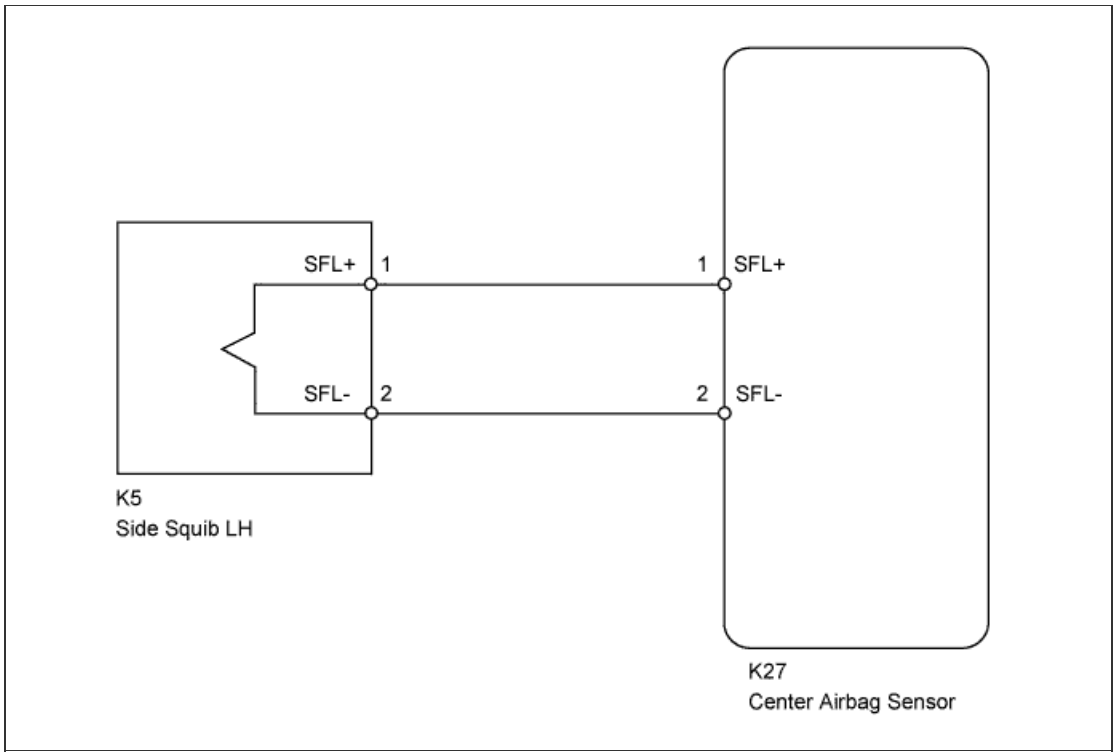
for Preparation Click here

DESCRIPTION

The side squib LH circuit consists of the center airbag sensor and the front seat airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the side squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1825/56	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the side squib LH circuit during the primary check. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly
B1826/56	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the side squib LH circuit for 2 seconds. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly
B1827/56	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the side squib LH circuit for 0.5 seconds. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly
B1828/56	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the side squib LH circuit for 0.5 seconds. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT AIRBAG LH (SIDE SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the front seat airbag LH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

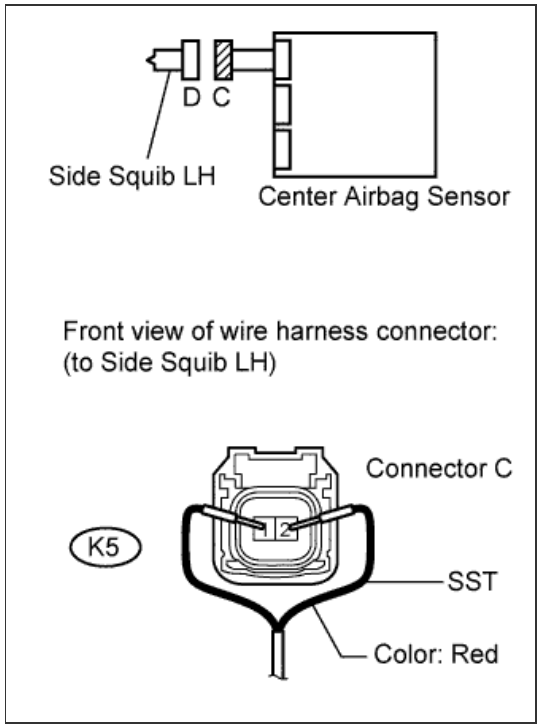
Never connect the tester to the front seat airbag LH (side squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1825, B1826, B1827 or B1828 is not output.

HINT:

Codes other than DTC B1825, B1826, B1827 and B1828 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT AIRBAG ASSEMBLY LH (Click here)

2.CHECK FLOOR WIRE (SIDE SQUIB LH CIRCUIT)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K5-1 (SFL+) - Body ground	Engine switch on (IG)	Below 1 V
K5-2 (SFL-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

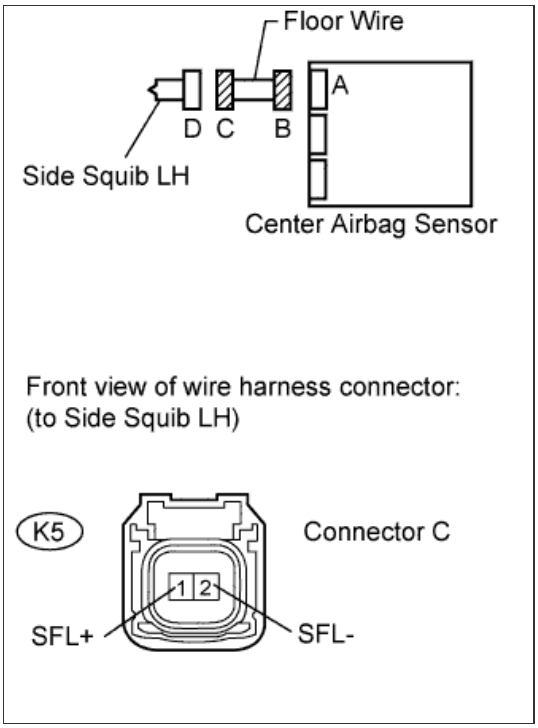
Tester Connection	Condition	Specified Condition
K5-1 (SFL+) - K5-2 (SFL-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K5-1 (SFL+) - K5-2 (SFL-)	Always	1 MΩ or higher
K5-1 (SFL+) - Body ground	Always	1 MΩ or higher
K5-2 (SFL-) - Body ground	Always	1 MΩ or higher



NG → REPLACE FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

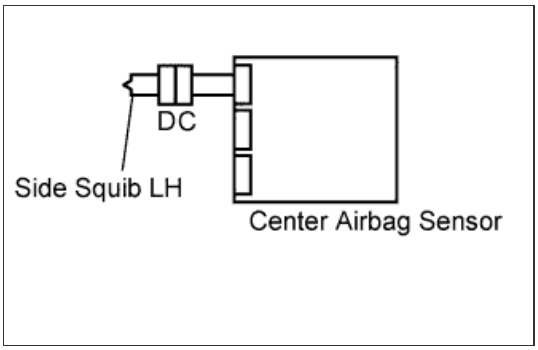
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1825, B1826, B1827 or B1828 is not output.

HINT:

Codes other than DTC B1825, B1826, B1827 and B1828 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK → USE SIMULATION METHOD TO CHECK (Click here)

DTC B1603/83 Front Satellite Sensor Bus RH Initialization Incomplete

DTC B1612/83 Lost Communication with Front Airbag Sensor RH

DTC B1613/83 Front Airbag Sensor RH Initialization Incomplete

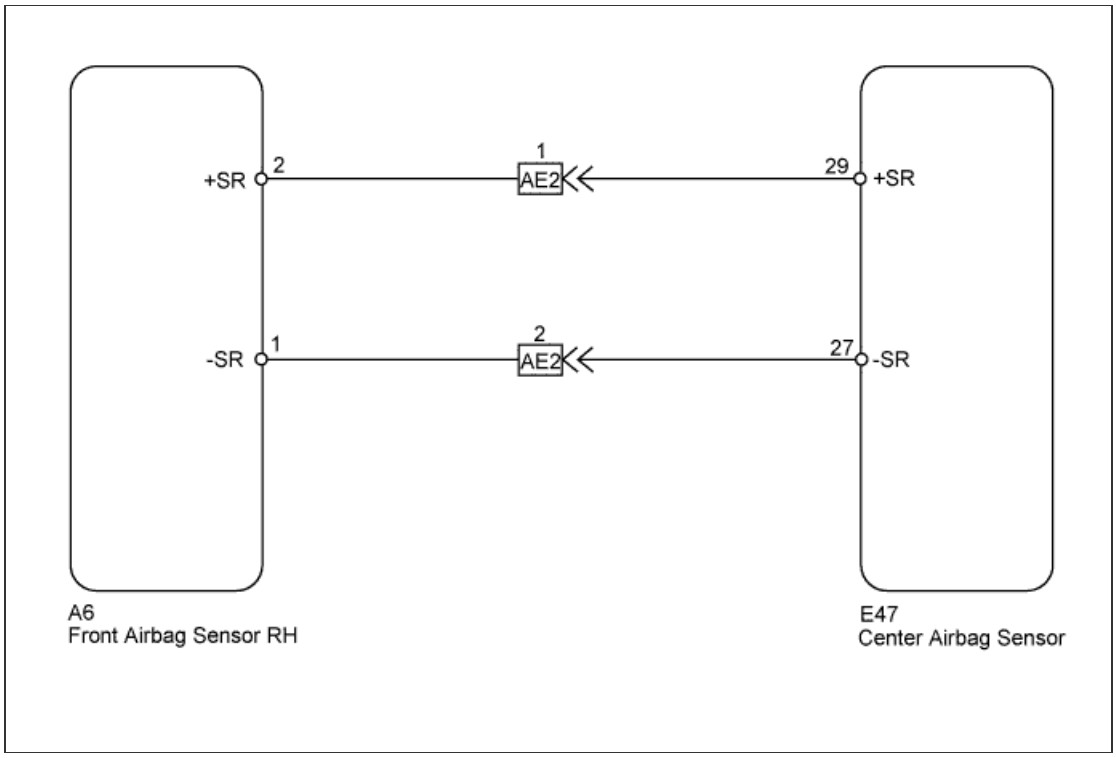
for Preparation Click here

DESCRIPTION

The front airbag sensor RH circuit consists of the center airbag sensor and front airbag sensor RH.
The front airbag sensor RH detects impacts to the vehicle and sends signals to the center airbag sensor to determine if the airbag should be deployed.
DTC B1603/83, B1612/83 or B1613/83 is stored when a malfunction is detected in the front airbag sensor RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1603/83	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor RH circuit for 2 seconds. • A front airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor RH • Center airbag sensor assembly
B1612/83	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor RH circuit for 2 seconds. • A front airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor RH • Center airbag sensor assembly
B1613/83	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor RH circuit for 2 seconds. • A front airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor RH • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the front airbag sensor RH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

2.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and front airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side and front airbag sensor RH side) are not damaged.

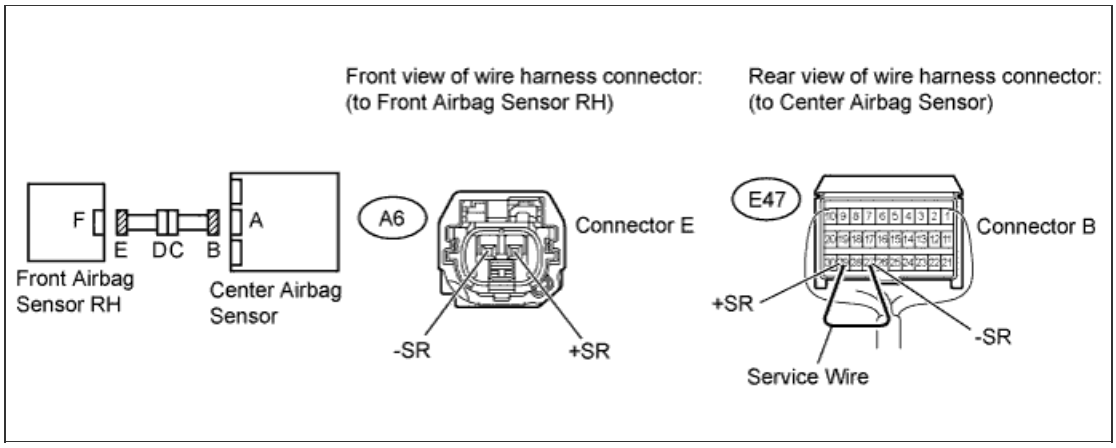
OK:

The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

3.CHECK FRONT AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
A6-2 (+SR) - Body ground	Engine switch on (IG)	Below 1 V
A6-1 (-SR) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 29 (+SR) and 27 (-SR) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A6-2 (+SR) - A6-1 (-SR)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A6-2 (+SR) - A6-1 (-SR)	Always	1 MΩ or higher
A6-2 (+SR) - Body ground	Always	1 MΩ or higher
A6-1 (-SR) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK FRONT AIRBAG SENSOR RH

a. Connect the connectors to the center airbag sensor.

b. Interchange the front airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

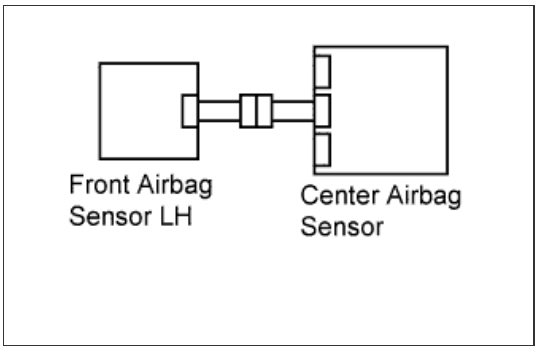
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



Result

Result	Proceed to
DTC B1612, B1613, B1617 and B1618 are not output	A
DTC B1617 or B1618 is output	B
DTC B1612 or B1613 is output	C

HINT:

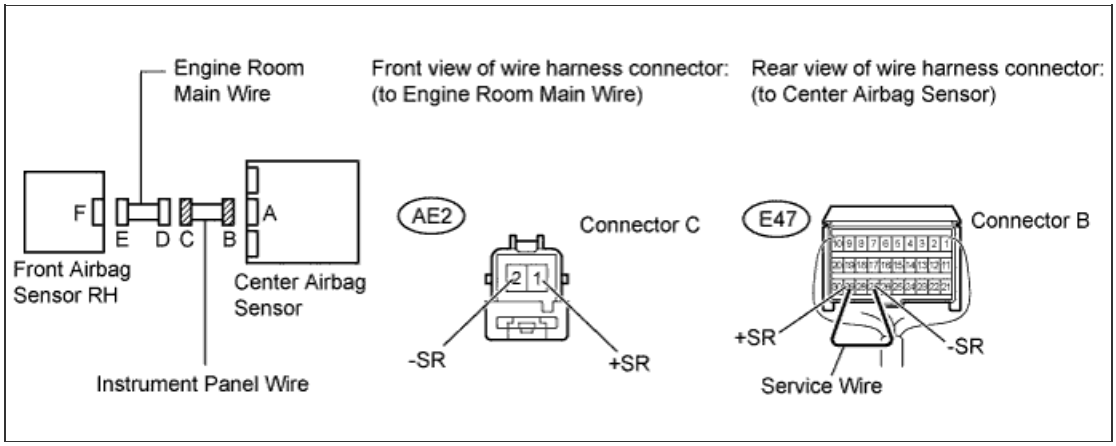
Codes other than DTC B1612, B1613, B1617 and B1618 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE FRONT AIRBAG SENSOR RH (Click here)

C → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - ENGINE ROOM MAIN WIRE)



a. Disconnect the instrument panel wire connector from the engine room main wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
AE2-1 (+SR) - Body ground	Engine switch on (IG)	Below 1 V
AE2-2 (-SR) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminal 29 (+SR) and 27 (-SR) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminal of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
AE2-1 (+SR) - AE2-2 (-SR)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
AE2-1 (+SR) - AE2-2 (-SR)	Always	1 MΩ or higher
AE2-1 (+SR) - Body ground	Always	1 MΩ or higher
AE2-2 (-SR) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE ENGINE ROOM MAIN WIRE

DTC B1825/56 Short in Side Squib LH Circuit

DTC B1826/56 Open in Side Squib LH Circuit

DTC B1827/56 Short to GND in Side Squib LH Circuit

DTC B1828/56 Short to B+ in Side Squib LH Circuit

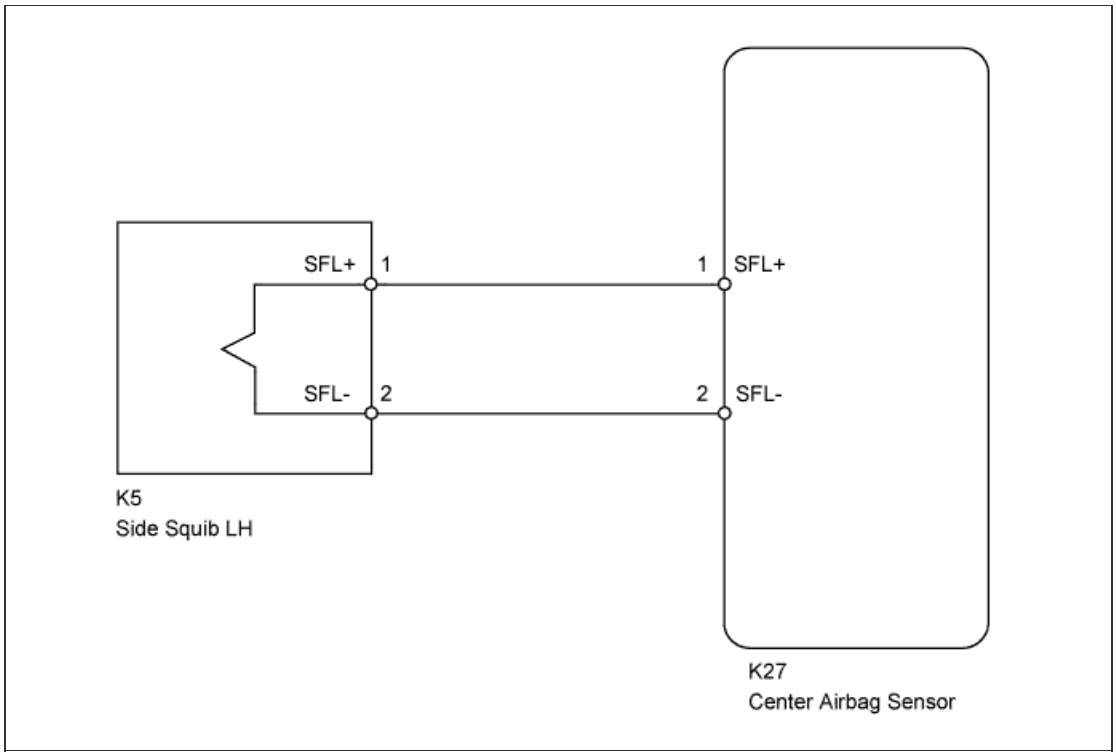
for Preparation Click here

DESCRIPTION

The side squib LH circuit consists of the center airbag sensor and the front seat airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the side squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1825/56	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the side squib LH circuit during the primary check. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly
B1826/56	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the side squib LH circuit for 2 seconds. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly
B1827/56	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the side squib LH circuit for 0.5 seconds. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly
B1828/56	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the side squib LH circuit for 0.5 seconds. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT AIRBAG LH (SIDE SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the front seat airbag LH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

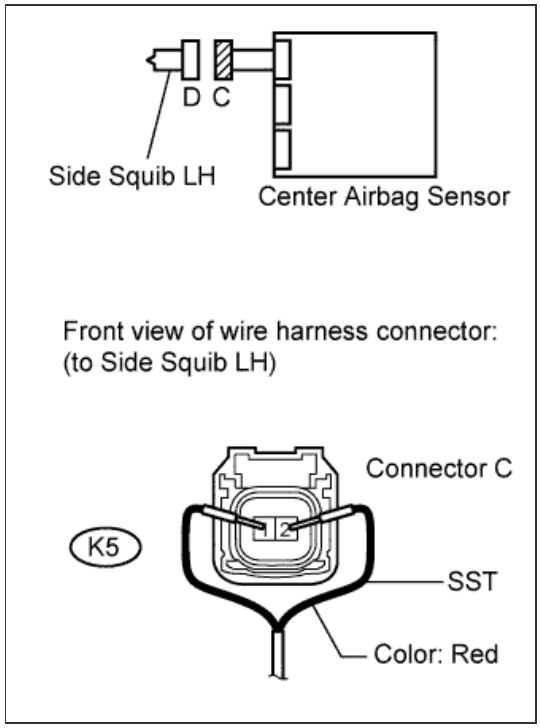
Never connect the tester to the front seat airbag LH (side squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1825, B1826, B1827 or B1828 is not output.

HINT:

Codes other than DTC B1825, B1826, B1827 and B1828 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT AIRBAG ASSEMBLY LH (Click here)

2.CHECK FLOOR WIRE (SIDE SQUIB LH CIRCUIT)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K5-1 (SFL+) - Body ground	Engine switch on (IG)	Below 1 V
K5-2 (SFL-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

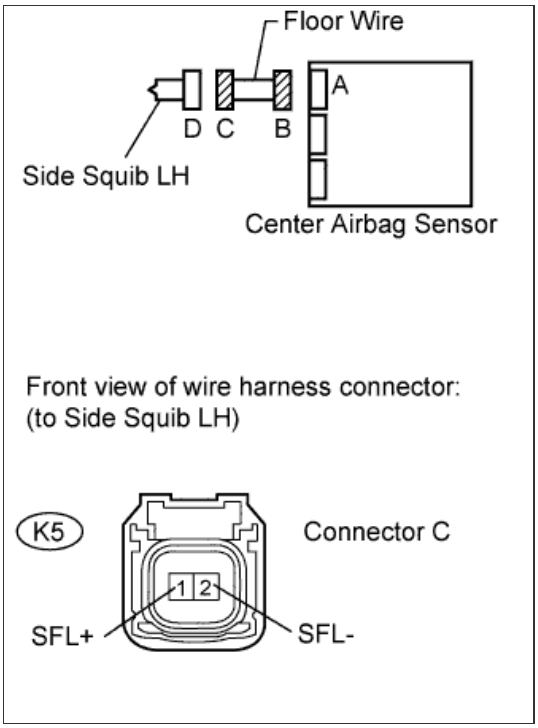
Tester Connection	Condition	Specified Condition
K5-1 (SFL+) - K5-2 (SFL-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K5-1 (SFL+) - K5-2 (SFL-)	Always	1 MΩ or higher
K5-1 (SFL+) - Body ground	Always	1 MΩ or higher
K5-2 (SFL-) - Body ground	Always	1 MΩ or higher



NG → REPLACE FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

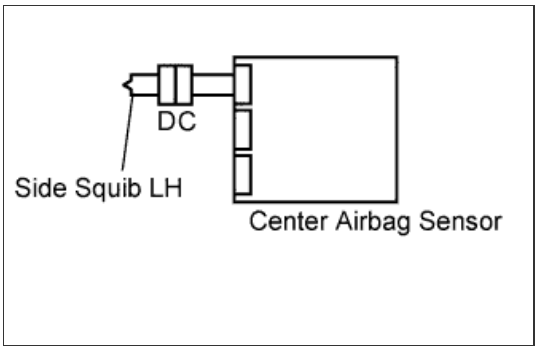
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1825, B1826, B1827 or B1828 is not output.

HINT:

Codes other than DTC B1825, B1826, B1827 and B1828 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK → USE SIMULATION METHOD TO CHECK (Click here)

DTC B1603/83 Front Satellite Sensor Bus RH Initialization Incomplete

DTC B1612/83 Lost Communication with Front Airbag Sensor RH

DTC B1613/83 Front Airbag Sensor RH Initialization Incomplete

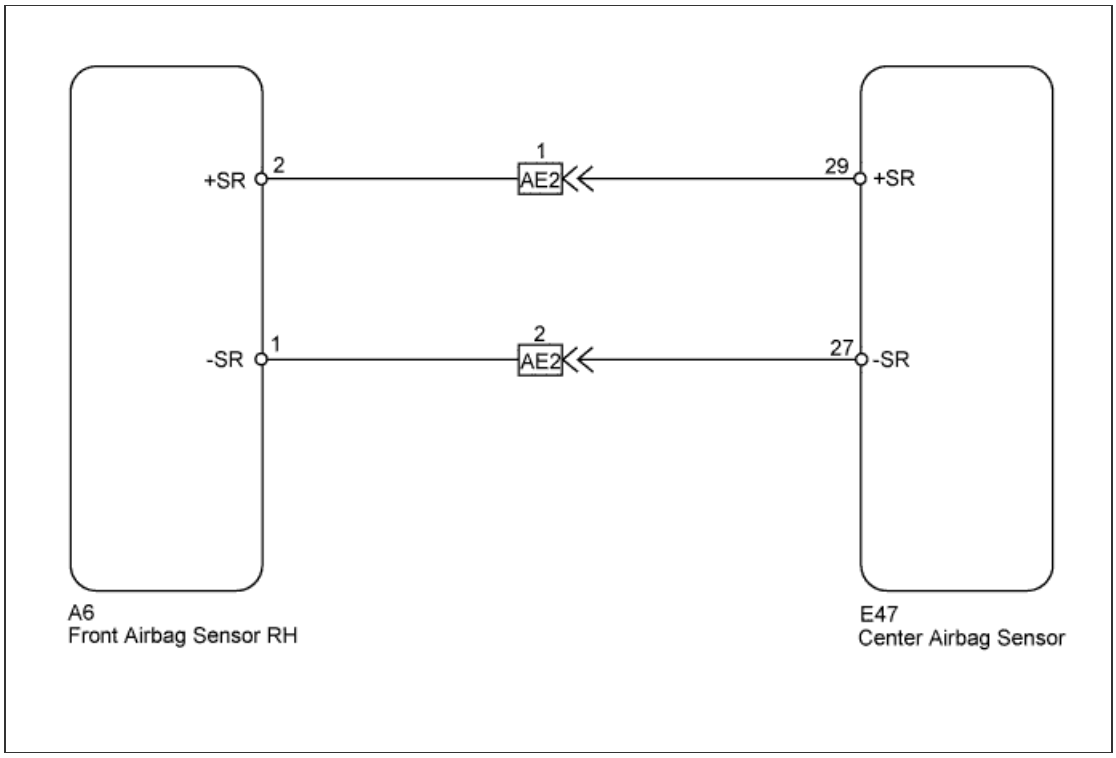
for Preparation Click here

DESCRIPTION

The front airbag sensor RH circuit consists of the center airbag sensor and front airbag sensor RH.
The front airbag sensor RH detects impacts to the vehicle and sends signals to the center airbag sensor to determine if the airbag should be deployed.
DTC B1603/83, B1612/83 or B1613/83 is stored when a malfunction is detected in the front airbag sensor RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1603/83	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor RH circuit for 2 seconds. • A front airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor RH • Center airbag sensor assembly
B1612/83	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor RH circuit for 2 seconds. • A front airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor RH • Center airbag sensor assembly
B1613/83	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor RH circuit for 2 seconds. • A front airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor RH • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the front airbag sensor RH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

2.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and front airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side and front airbag sensor RH side) are not damaged.

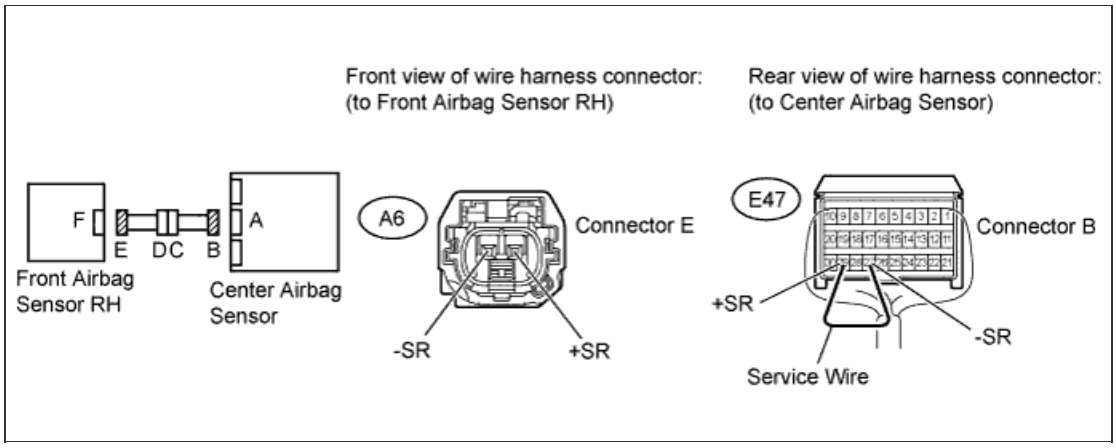
OK:

The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

3.CHECK FRONT AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
A6-2 (+SR) - Body ground	Engine switch on (IG)	Below 1 V
A6-1 (-SR) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 29 (+SR) and 27 (-SR) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A6-2 (+SR) - A6-1 (-SR)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A6-2 (+SR) - A6-1 (-SR)	Always	1 MΩ or higher
A6-2 (+SR) - Body ground	Always	1 MΩ or higher
A6-1 (-SR) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK FRONT AIRBAG SENSOR RH

a. Connect the connectors to the center airbag sensor.

b. Interchange the front airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

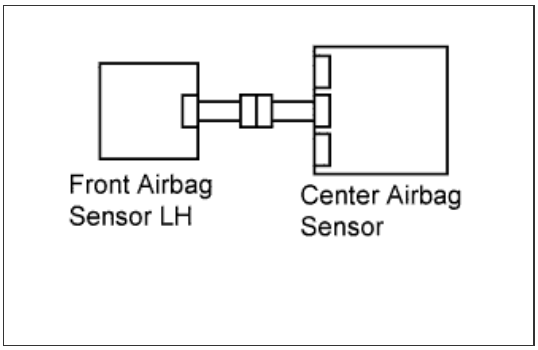
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



Result

Result	Proceed to
DTC B1612, B1613, B1617 and B1618 are not output	A
DTC B1617 or B1618 is output	B
DTC B1612 or B1613 is output	C

HINT:

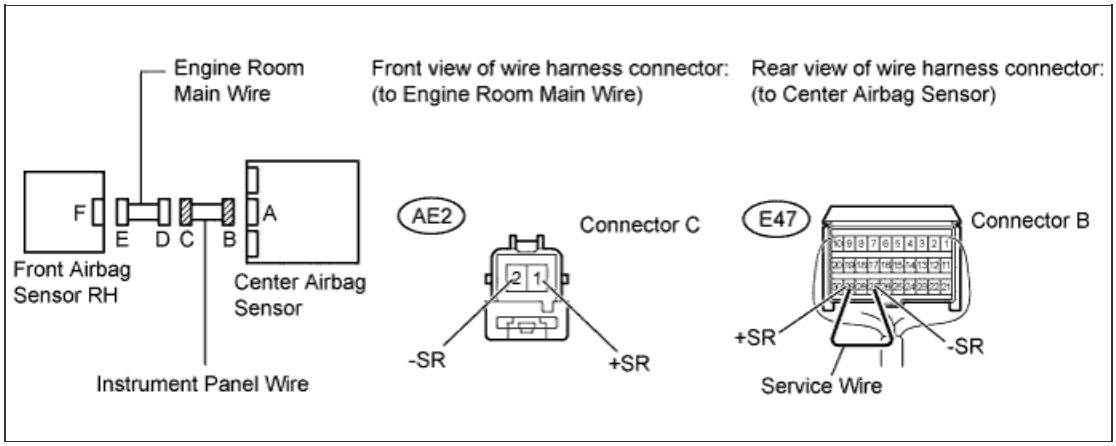
Codes other than DTC B1612, B1613, B1617 and B1618 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE FRONT AIRBAG SENSOR RH (Click here)

C → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - ENGINE ROOM MAIN WIRE)



a. Disconnect the instrument panel wire connector from the engine room main wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
AE2-1 (+SR) - Body ground	Engine switch on (IG)	Below 1 V
AE2-2 (-SR) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminal 29 (+SR) and 27 (-SR) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminal of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
AE2-1 (+SR) - AE2-2 (-SR)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
AE2-1 (+SR) - AE2-2 (-SR)	Always	1 MΩ or higher
AE2-1 (+SR) - Body ground	Always	1 MΩ or higher
AE2-2 (-SR) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE ENGINE ROOM MAIN WIRE

DTC B1830/57 Short in Curtain Shield Squib RH Circuit

DTC B1831/57 Open in Curtain Shield Squib RH Circuit

DTC B1832/57 Short to GND in Curtain Shield Squib RH Circuit

DTC B1833/57 Short to B+ in Curtain Shield Squib RH Circuit

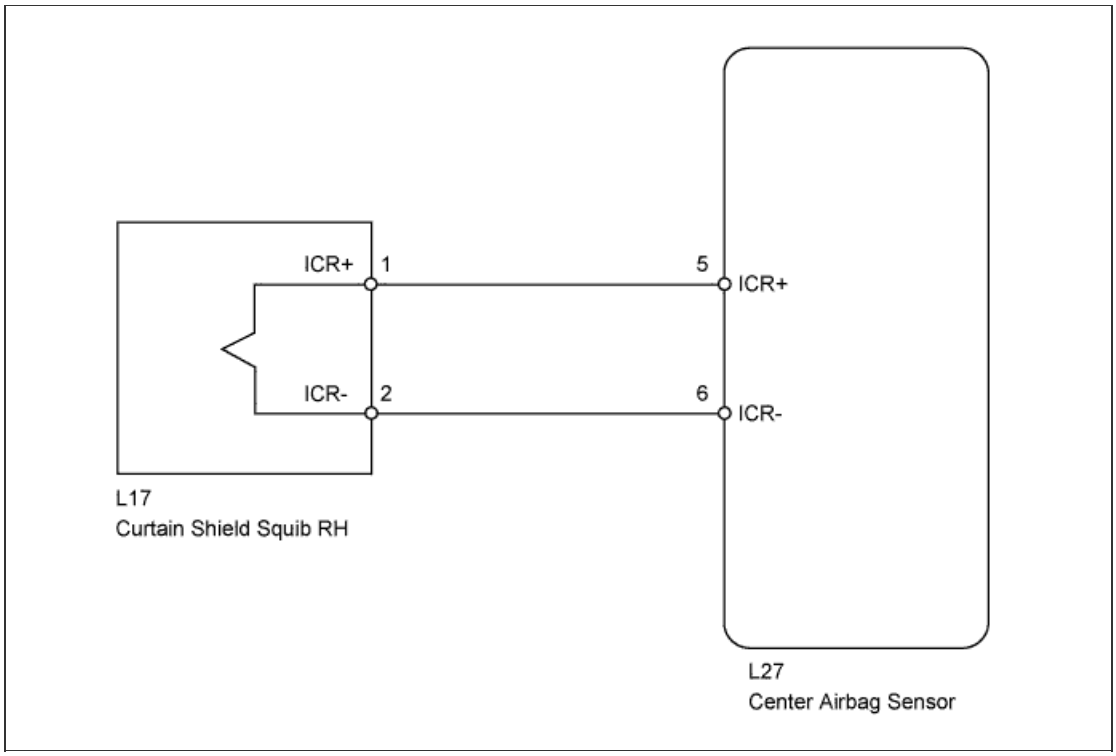
for Preparation Click here

DESCRIPTION

The curtain shield squib RH circuit consists of the center airbag sensor and the curtain shield airbag RH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1830/57	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib RH circuit during the primary check. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly
B1831/57	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib RH circuit for 2 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly
B1832/57	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib RH circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly
B1833/57	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib RH circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG RH (CURTAIN SHIELD SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the curtain shield airbag RH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

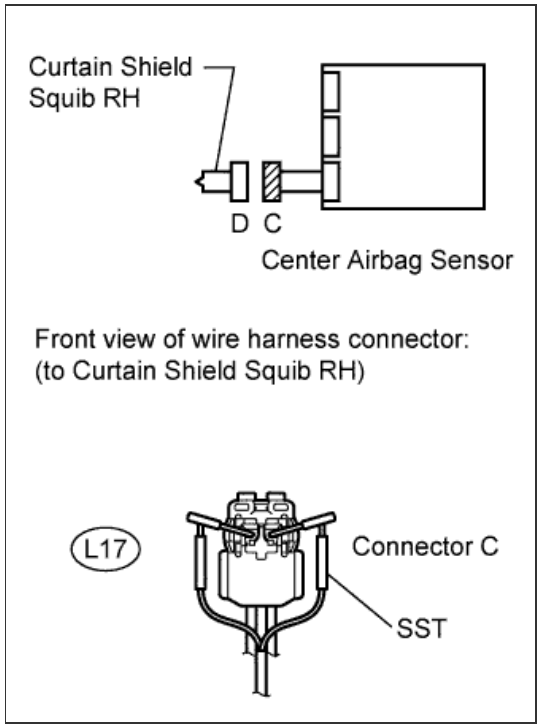
Never connect the tester to the curtain shield airbag RH (curtain shield squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1830, B1831, B1832 or B1833 is not output.

HINT:

Codes other than DTC B1830, B1831, B1832 and B1833 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY RH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the curtain shield airbag RH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (CURTAIN SHIELD AIRBAG RH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L17-1 (ICR+) - Body ground	Engine switch on (IG)	Below 1 V
L17-2 (ICR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

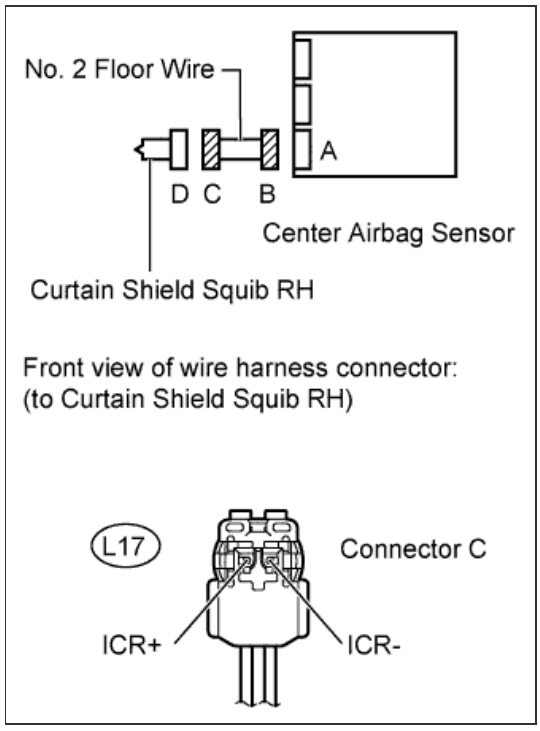
Tester Connection	Condition	Specified Condition
L17-1 (ICR+) - L17-2 (ICR-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L17-1 (ICR+) - L17-2 (ICR-)	Always	1 MΩ or higher
L17-1 (ICR+) - Body ground	Always	1 MΩ or higher
L17-2 (ICR-) -	Always	1 MΩ or higher



Body ground		

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

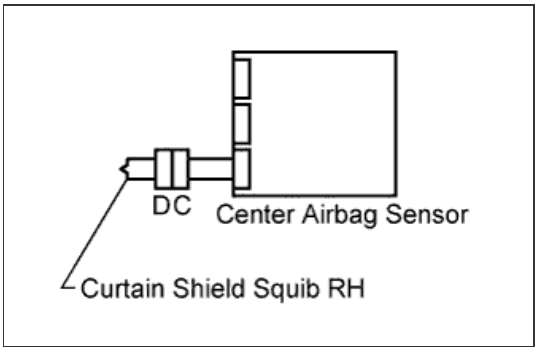
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1830, B1831, B1832 or B1833 is not output.

HINT:

Codes other than DTC B1830, B1831, B1832 and B1833 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1603/83 Front Satellite Sensor Bus RH Initialization Incomplete

DTC B1612/83 Lost Communication with Front Airbag Sensor RH

DTC B1613/83 Front Airbag Sensor RH Initialization Incomplete

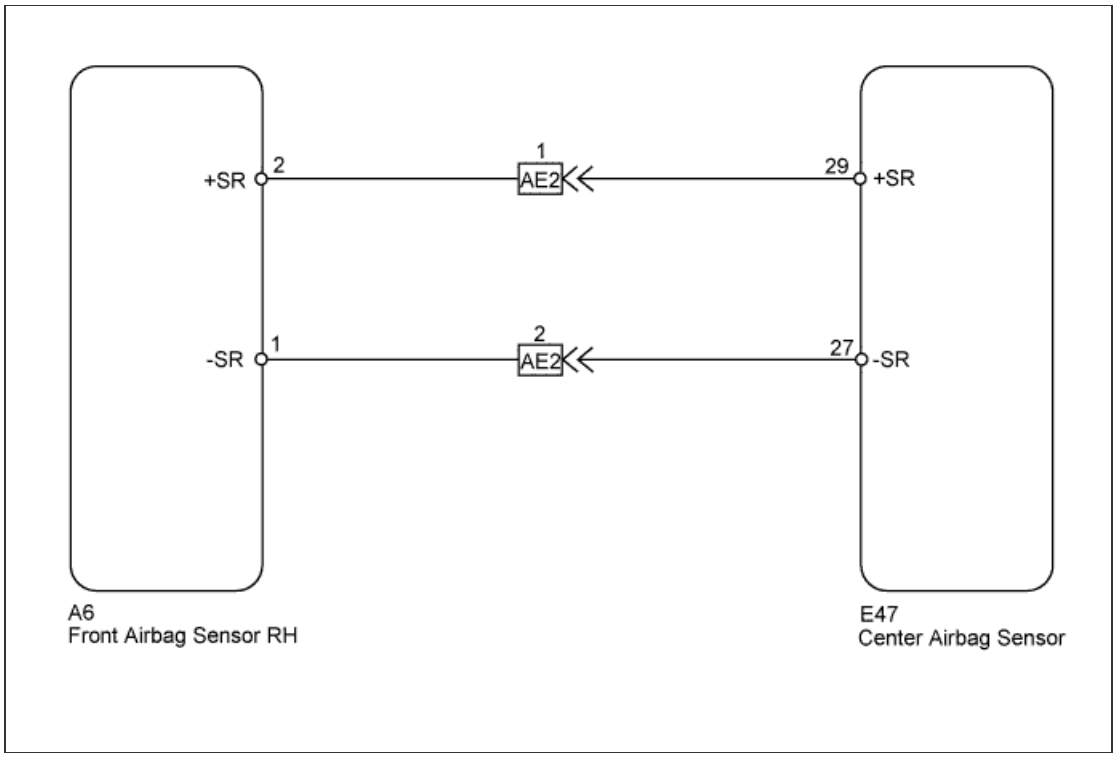
for Preparation Click here

DESCRIPTION

The front airbag sensor RH circuit consists of the center airbag sensor and front airbag sensor RH.
The front airbag sensor RH detects impacts to the vehicle and sends signals to the center airbag sensor to determine if the airbag should be deployed.
DTC B1603/83, B1612/83 or B1613/83 is stored when a malfunction is detected in the front airbag sensor RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1603/83	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor RH circuit for 2 seconds. • A front airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor RH • Center airbag sensor assembly
B1612/83	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor RH circuit for 2 seconds. • A front airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor RH • Center airbag sensor assembly
B1613/83	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor RH circuit for 2 seconds. • A front airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor RH • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the front airbag sensor RH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

2.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and front airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side and front airbag sensor RH side) are not damaged.

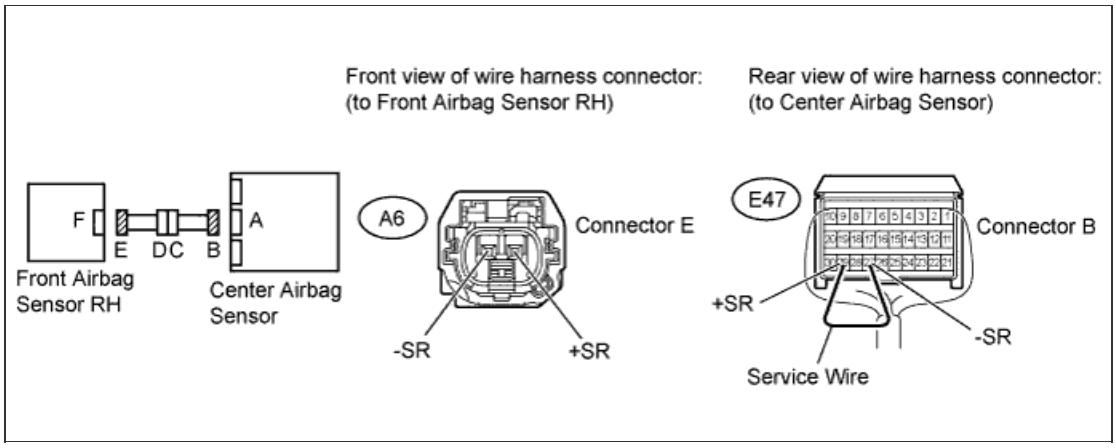
OK:

The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

3.CHECK FRONT AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
A6-2 (+SR) - Body ground	Engine switch on (IG)	Below 1 V
A6-1 (-SR) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 29 (+SR) and 27 (-SR) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A6-2 (+SR) - A6-1 (-SR)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A6-2 (+SR) - A6-1 (-SR)	Always	1 MΩ or higher
A6-2 (+SR) - Body ground	Always	1 MΩ or higher
A6-1 (-SR) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK FRONT AIRBAG SENSOR RH

a. Connect the connectors to the center airbag sensor.

b. Interchange the front airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

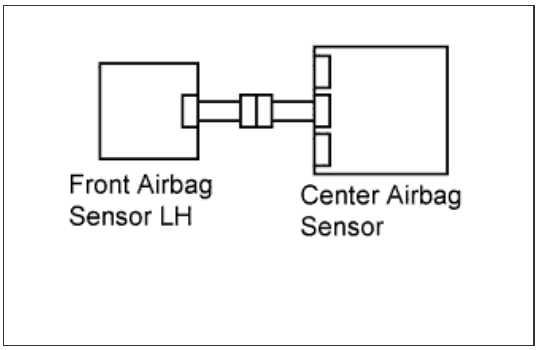
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



Result

Result	Proceed to
DTC B1612, B1613, B1617 and B1618 are not output	A
DTC B1617 or B1618 is output	B
DTC B1612 or B1613 is output	C

HINT:

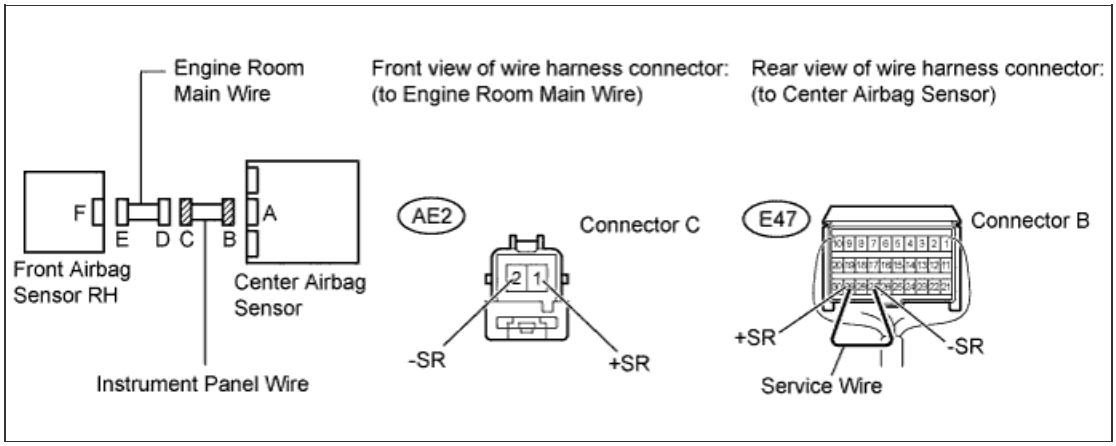
Codes other than DTC B1612, B1613, B1617 and B1618 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE FRONT AIRBAG SENSOR RH (Click here)

C → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - ENGINE ROOM MAIN WIRE)



a. Disconnect the instrument panel wire connector from the engine room main wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
AE2-1 (+SR) - Body ground	Engine switch on (IG)	Below 1 V
AE2-2 (-SR) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminal 29 (+SR) and 27 (-SR) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminal of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
AE2-1 (+SR) - AE2-2 (-SR)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
AE2-1 (+SR) - AE2-2 (-SR)	Always	1 MΩ or higher
AE2-1 (+SR) - Body ground	Always	1 MΩ or higher
AE2-2 (-SR) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE ENGINE ROOM MAIN WIRE

DTC B1830/57 Short in Curtain Shield Squib RH Circuit

DTC B1831/57 Open in Curtain Shield Squib RH Circuit

DTC B1832/57 Short to GND in Curtain Shield Squib RH Circuit

DTC B1833/57 Short to B+ in Curtain Shield Squib RH Circuit

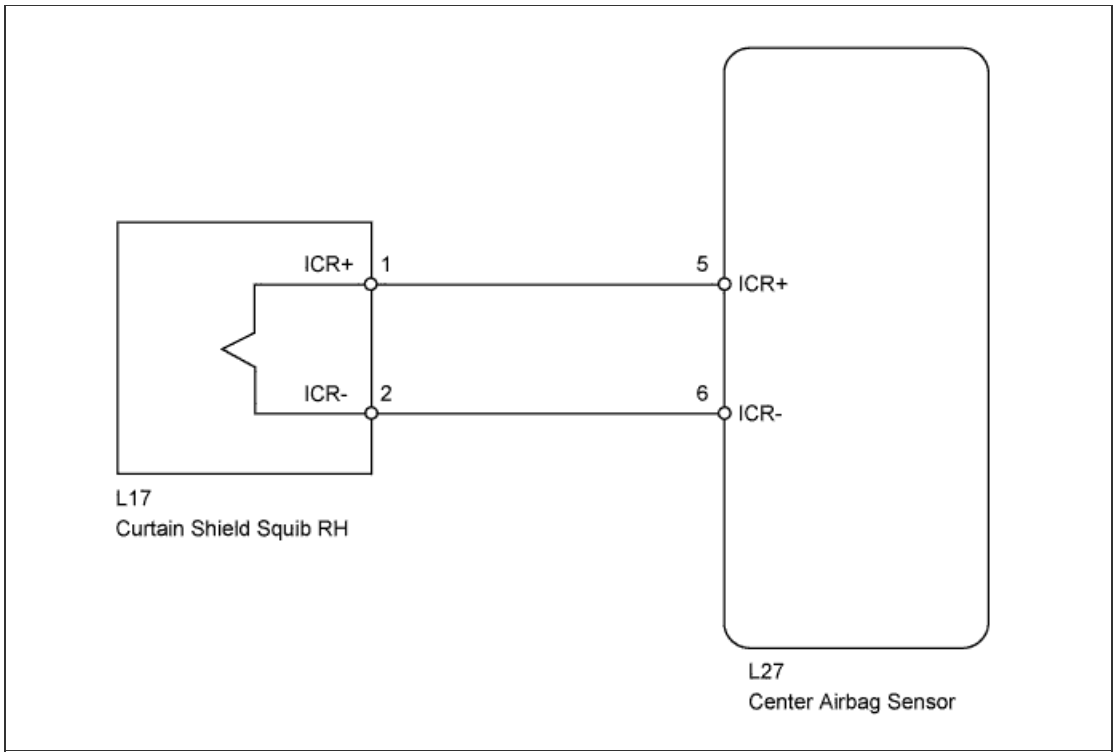
for Preparation Click here

DESCRIPTION

The curtain shield squib RH circuit consists of the center airbag sensor and the curtain shield airbag RH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1830/57	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib RH circuit during the primary check. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly
B1831/57	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib RH circuit for 2 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly
B1832/57	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib RH circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly
B1833/57	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib RH circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG RH (CURTAIN SHIELD SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the curtain shield airbag RH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

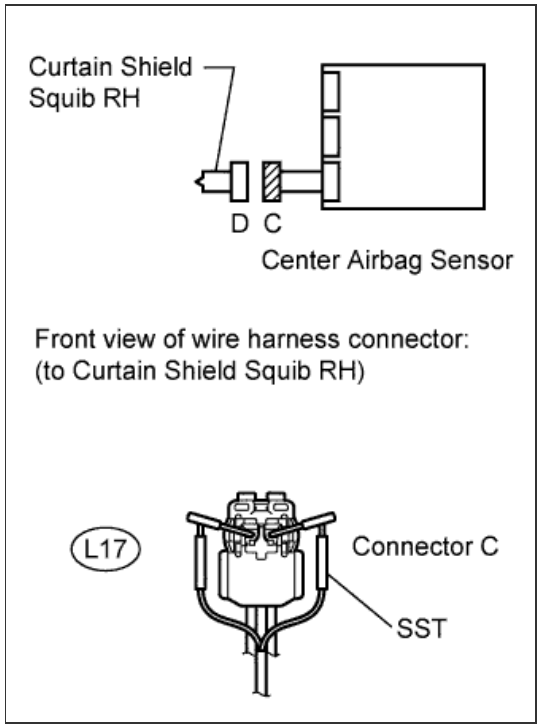
Never connect the tester to the curtain shield airbag RH (curtain shield squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1830, B1831, B1832 or B1833 is not output.

HINT:

Codes other than DTC B1830, B1831, B1832 and B1833 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY RH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the curtain shield airbag RH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (CURTAIN SHIELD AIRBAG RH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L17-1 (ICR+) - Body ground	Engine switch on (IG)	Below 1 V
L17-2 (ICR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

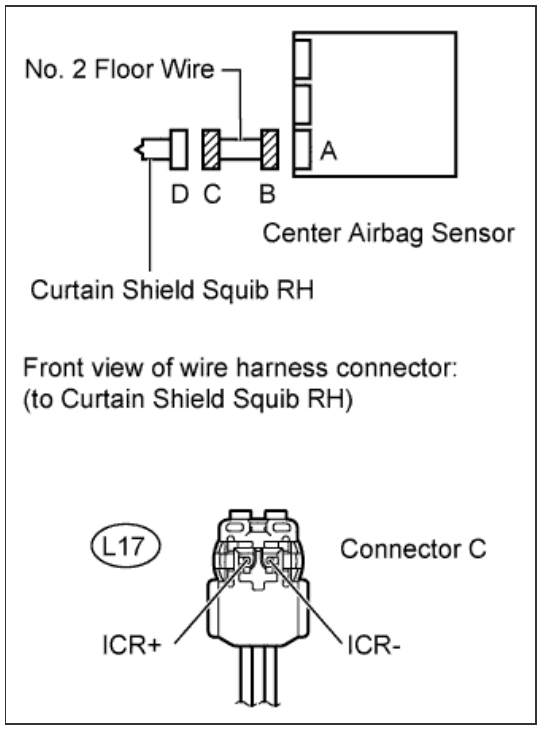
Tester Connection	Condition	Specified Condition
L17-1 (ICR+) - L17-2 (ICR-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L17-1 (ICR+) - L17-2 (ICR-)	Always	1 MΩ or higher
L17-1 (ICR+) - Body ground	Always	1 MΩ or higher
L17-2 (ICR-) -	Always	1 MΩ or higher



Body ground		

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

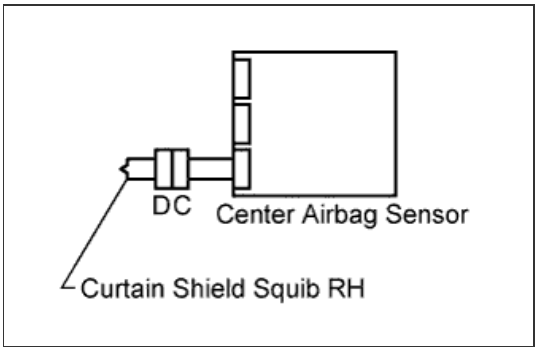
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1830, B1831, B1832 or B1833 is not output.

HINT:

Codes other than DTC B1830, B1831, B1832 and B1833 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1608/84 Front Satellite Sensor Bus LH Initialization Incomplete

DTC B1617/84 Lost Communication with Front Airbag Sensor LH

DTC B1618/84 Front Airbag Sensor LH Initialization Incomplete

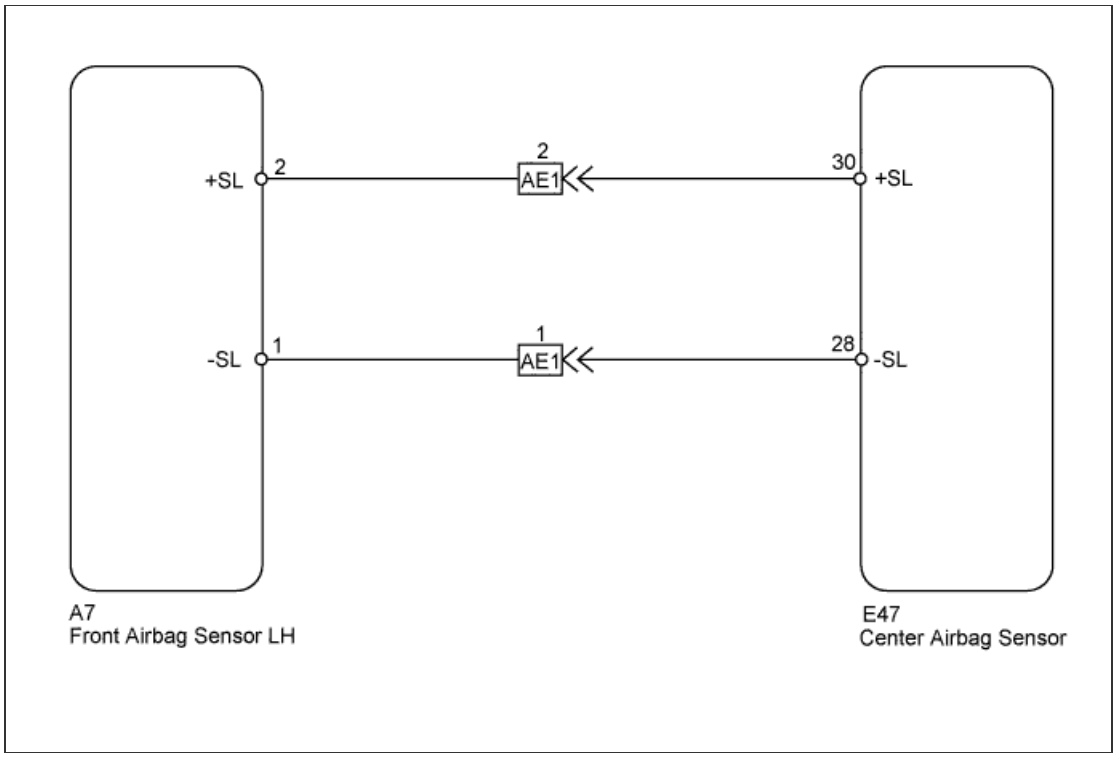
for Preparation Click here

DESCRIPTION

The front airbag sensor LH circuit consists of the center airbag sensor and front airbag sensor LH.
The front airbag sensor LH detects impacts to the vehicle and sends signals to the center airbag sensor to determine if the airbag should be deployed.
DTC B1608/84, B1617/84 or B1618/84 is stored when a malfunction is detected in the front airbag sensor LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1608/84	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor LH circuit for 2 seconds. • A front airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor LH • Center airbag sensor assembly
B1617/84	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor LH circuit for 2 seconds. • A front airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor LH • Center airbag sensor assembly
B1618/84	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor LH circuit for 2 seconds. • A front airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor LH • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the front airbag sensor LH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

2.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and front airbag sensor LH.

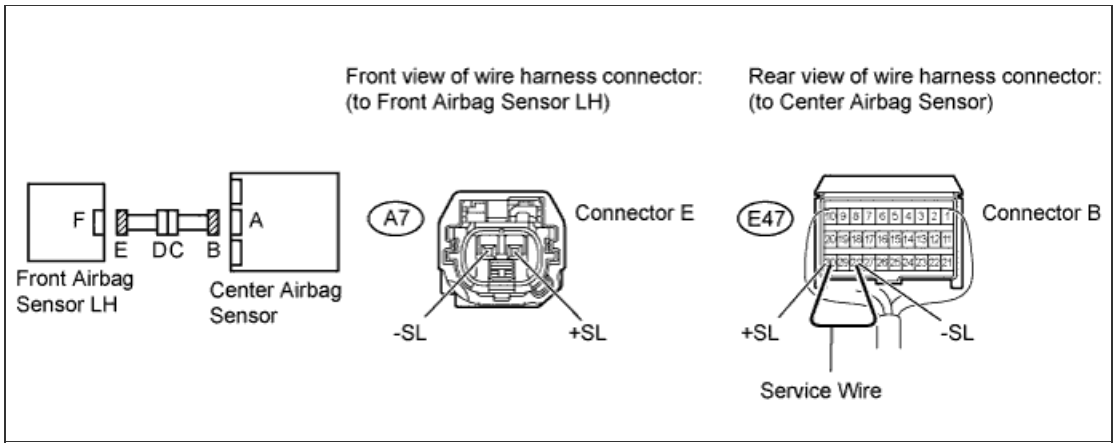
b. Check that the connectors (on the center airbag sensor side and front airbag sensor LH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

3.CHECK FRONT AIRBAG SENSOR LH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
A7-2 (+SL) - Body ground	Engine switch on (IG)	Below 1 V
A7-1 (-SL) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 30 (+SL) and 28 (-SL) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A7-2 (+SL) - A7-1 (-SL)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A7-2 (+SL) - A7-1 (-SL)	Always	1 MΩ or higher
A7-2 (+SL) - Body ground	Always	1 MΩ or higher
A7-1 (-SL) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK FRONT AIRBAG SENSOR LH

a. Connect the connectors to the center airbag sensor.

b. Interchange the front airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

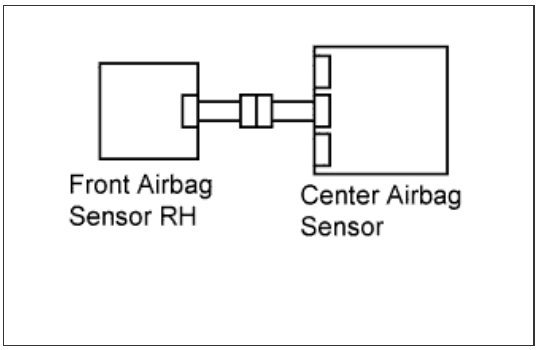
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



Result

Result	Proceed to
DTC B1617 or B1618 is output	A
DTC B1612 or B1613 is output	B
DTC B1612, B1613, B1617 and B1618 are not output	C

HINT:

Codes other than DTC B1612, B1613, B1617 and B1618 may be output at this time, but they are not related to this check.

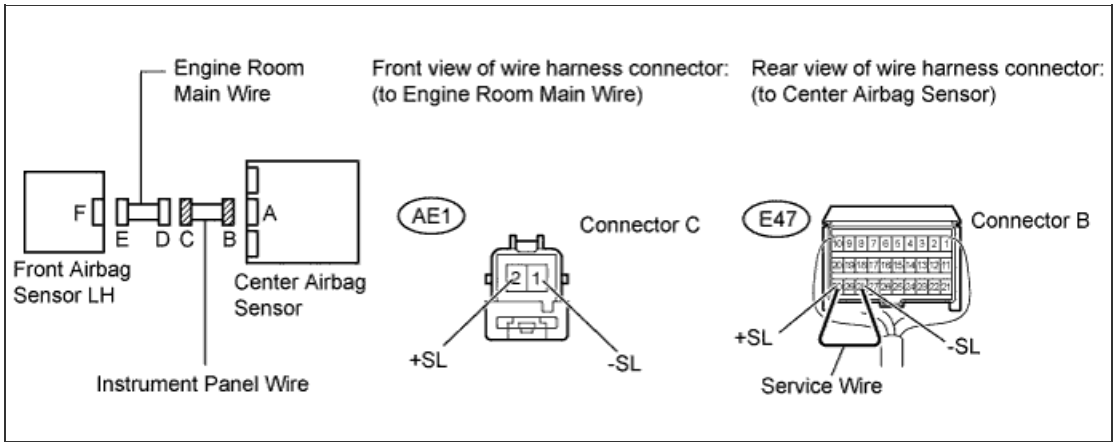
A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

B → REPLACE FRONT AIRBAG SENSOR LH (Click here)

C

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - ENGINE ROOM MAIN WIRE)



a. Disconnect the instrument panel wire connector from the engine room main wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
AE1-2 (+SL) - Body ground	Engine switch on (IG)	Below 1 V
AE1-1 (-SL) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 30 (+SL) and 28 (-SL) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
AE1-2 (+SL) - AE1-1 (-SL)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
AE1-2 (+SL) - AE1-1 (-SL)	Always	1 MΩ or higher
AE1-2 (+SL) - Body ground	Always	1 MΩ or higher
AE1-1 (-SL) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE ENGINE ROOM MAIN WIRE

DTC B1830/57 Short in Curtain Shield Squib RH Circuit

DTC B1831/57 Open in Curtain Shield Squib RH Circuit

DTC B1832/57 Short to GND in Curtain Shield Squib RH Circuit

DTC B1833/57 Short to B+ in Curtain Shield Squib RH Circuit

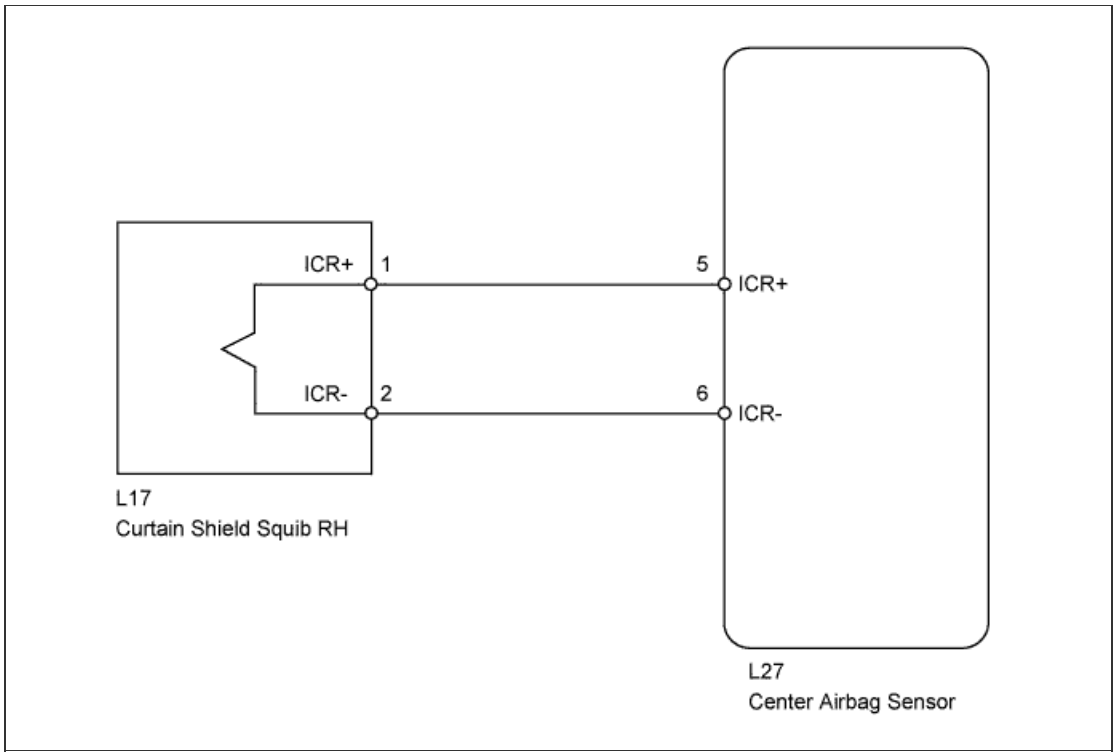
for Preparation Click here

DESCRIPTION

The curtain shield squib RH circuit consists of the center airbag sensor and the curtain shield airbag RH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1830/57	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib RH circuit during the primary check. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly
B1831/57	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib RH circuit for 2 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly
B1832/57	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib RH circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly
B1833/57	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib RH circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG RH (CURTAIN SHIELD SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the curtain shield airbag RH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

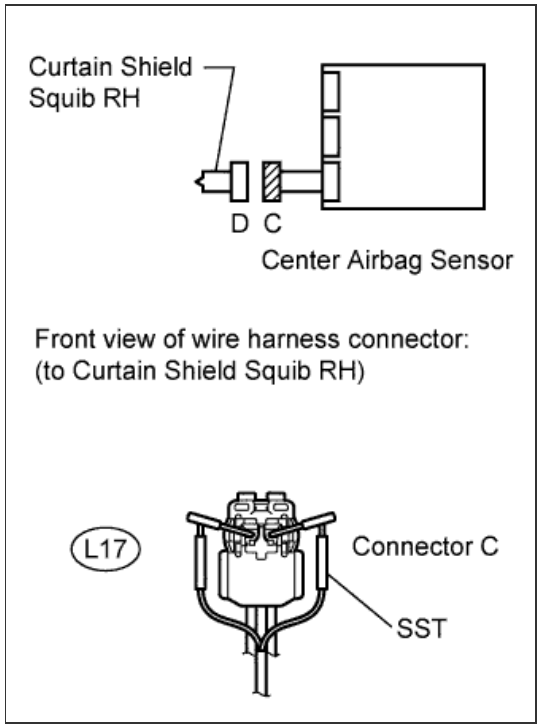
Never connect the tester to the curtain shield airbag RH (curtain shield squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1830, B1831, B1832 or B1833 is not output.

HINT:

Codes other than DTC B1830, B1831, B1832 and B1833 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY RH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the curtain shield airbag RH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (CURTAIN SHIELD AIRBAG RH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L17-1 (ICR+) - Body ground	Engine switch on (IG)	Below 1 V
L17-2 (ICR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

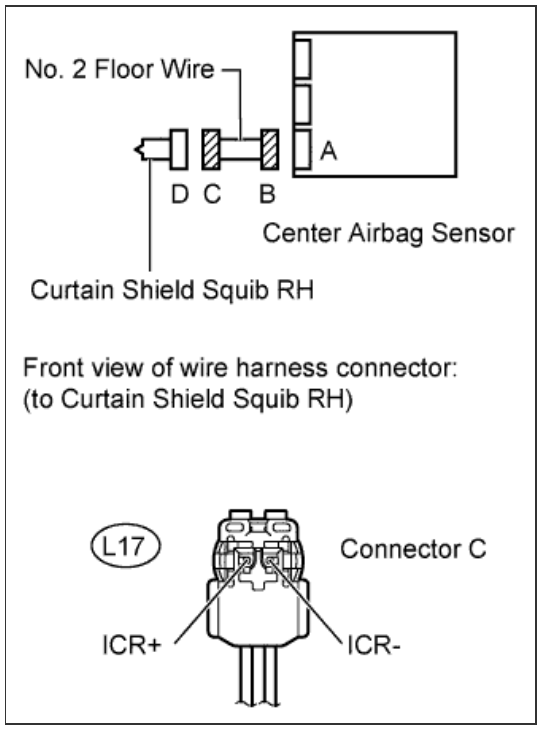
Tester Connection	Condition	Specified Condition
L17-1 (ICR+) - L17-2 (ICR-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L17-1 (ICR+) - L17-2 (ICR-)	Always	1 MΩ or higher
L17-1 (ICR+) - Body ground	Always	1 MΩ or higher
L17-2 (ICR-) -	Always	1 MΩ or higher



Body ground		

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

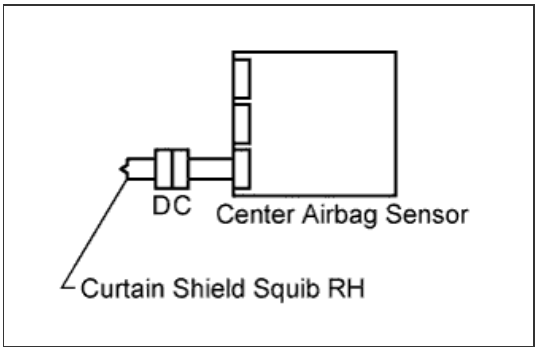
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1830, B1831, B1832 or B1833 is not output.

HINT:

Codes other than DTC B1830, B1831, B1832 and B1833 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1608/84 Front Satellite Sensor Bus LH Initialization Incomplete

DTC B1617/84 Lost Communication with Front Airbag Sensor LH

DTC B1618/84 Front Airbag Sensor LH Initialization Incomplete

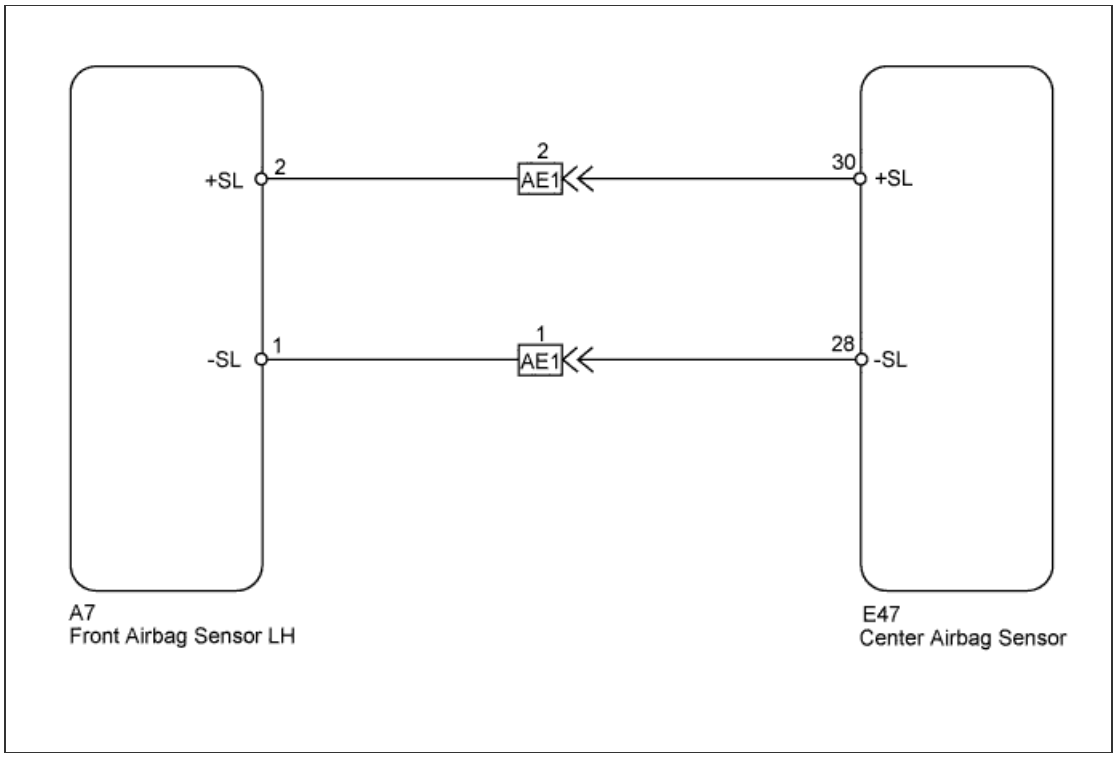
for Preparation Click here

DESCRIPTION

The front airbag sensor LH circuit consists of the center airbag sensor and front airbag sensor LH.
The front airbag sensor LH detects impacts to the vehicle and sends signals to the center airbag sensor to determine if the airbag should be deployed.
DTC B1608/84, B1617/84 or B1618/84 is stored when a malfunction is detected in the front airbag sensor LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1608/84	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor LH circuit for 2 seconds. • A front airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor LH • Center airbag sensor assembly
B1617/84	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor LH circuit for 2 seconds. • A front airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor LH • Center airbag sensor assembly
B1618/84	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor LH circuit for 2 seconds. • A front airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor LH • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the front airbag sensor LH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

2.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and front airbag sensor LH.

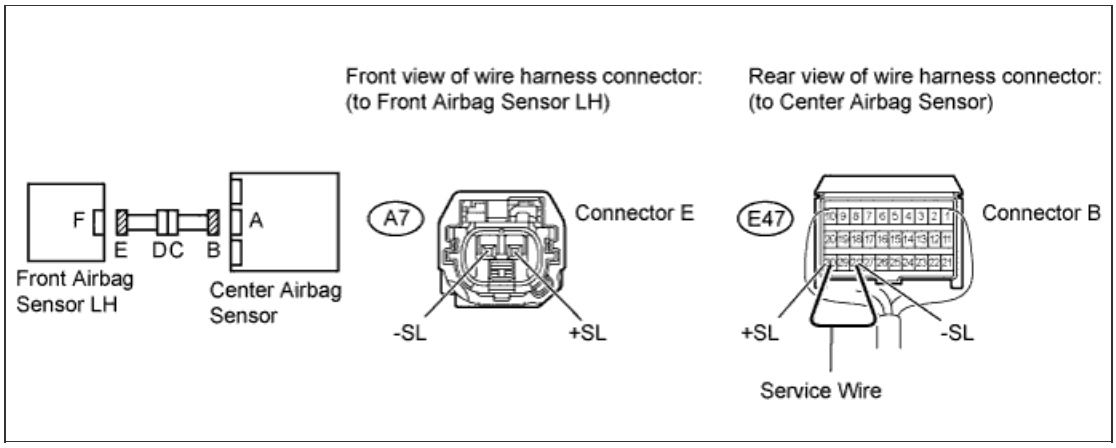
b. Check that the connectors (on the center airbag sensor side and front airbag sensor LH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

3.CHECK FRONT AIRBAG SENSOR LH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
A7-2 (+SL) - Body ground	Engine switch on (IG)	Below 1 V
A7-1 (-SL) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 30 (+SL) and 28 (-SL) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A7-2 (+SL) - A7-1 (-SL)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A7-2 (+SL) - A7-1 (-SL)	Always	1 MΩ or higher
A7-2 (+SL) - Body ground	Always	1 MΩ or higher
A7-1 (-SL) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK FRONT AIRBAG SENSOR LH

a. Connect the connectors to the center airbag sensor.

b. Interchange the front airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

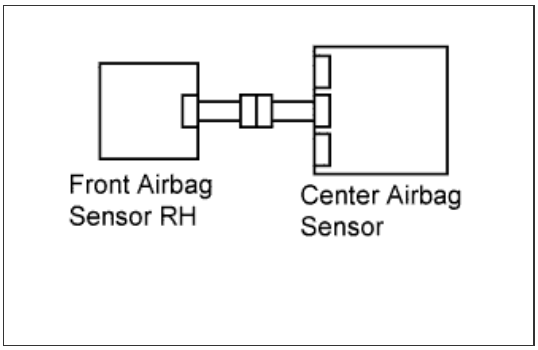
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



Result

Result	Proceed to
DTC B1617 or B1618 is output	A
DTC B1612 or B1613 is output	B
DTC B1612, B1613, B1617 and B1618 are not output	C

HINT:

Codes other than DTC B1612, B1613, B1617 and B1618 may be output at this time, but they are not related to this check.

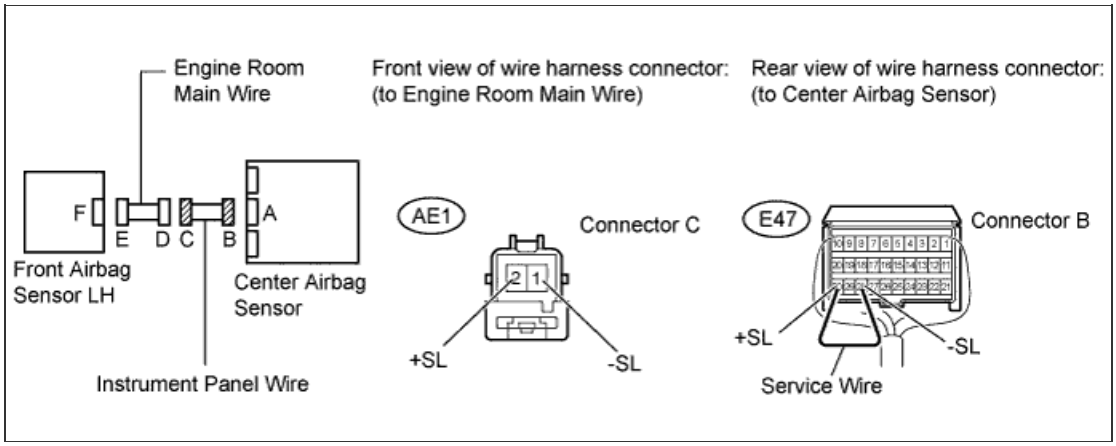
A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

B → REPLACE FRONT AIRBAG SENSOR LH (Click here)

C

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - ENGINE ROOM MAIN WIRE)



a. Disconnect the instrument panel wire connector from the engine room main wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
AE1-2 (+SL) - Body ground	Engine switch on (IG)	Below 1 V
AE1-1 (-SL) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 30 (+SL) and 28 (-SL) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
AE1-2 (+SL) - AE1-1 (-SL)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
AE1-2 (+SL) - AE1-1 (-SL)	Always	1 MΩ or higher
AE1-2 (+SL) - Body ground	Always	1 MΩ or higher
AE1-1 (-SL) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE ENGINE ROOM MAIN WIRE

DTC B1830/57 Short in Curtain Shield Squib RH Circuit

DTC B1831/57 Open in Curtain Shield Squib RH Circuit

DTC B1832/57 Short to GND in Curtain Shield Squib RH Circuit

DTC B1833/57 Short to B+ in Curtain Shield Squib RH Circuit

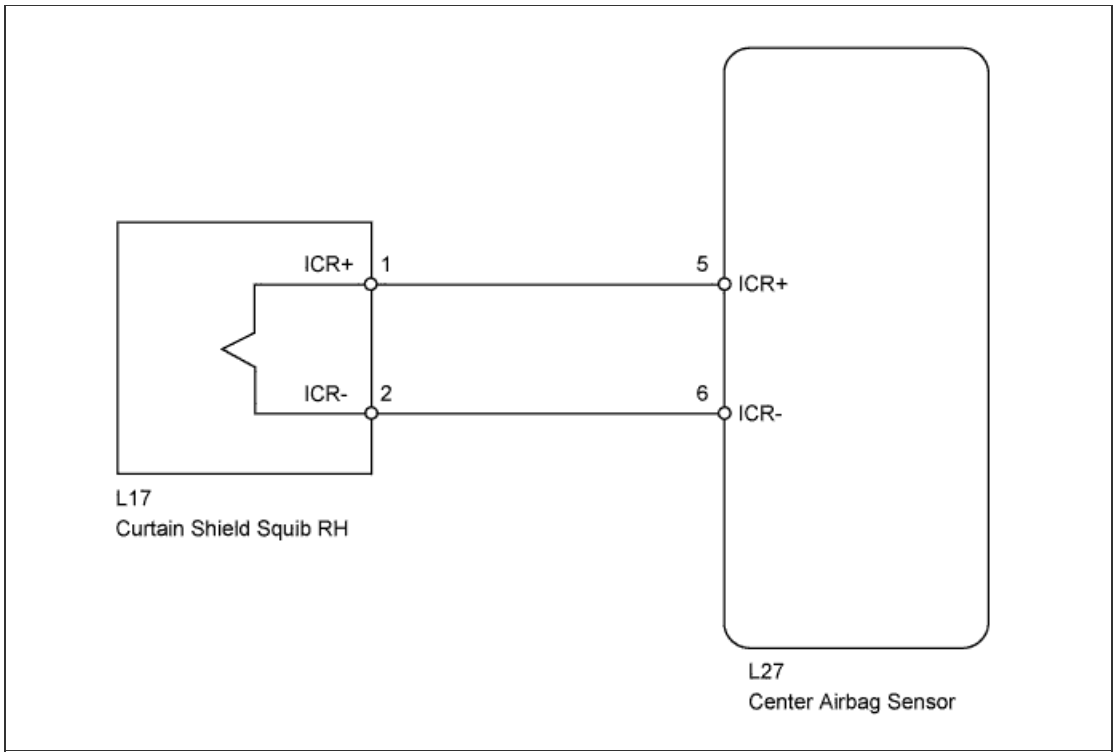
for Preparation Click here

DESCRIPTION

The curtain shield squib RH circuit consists of the center airbag sensor and the curtain shield airbag RH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1830/57	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib RH circuit during the primary check. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly
B1831/57	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib RH circuit for 2 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly
B1832/57	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib RH circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly
B1833/57	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib RH circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG RH (CURTAIN SHIELD SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the curtain shield airbag RH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

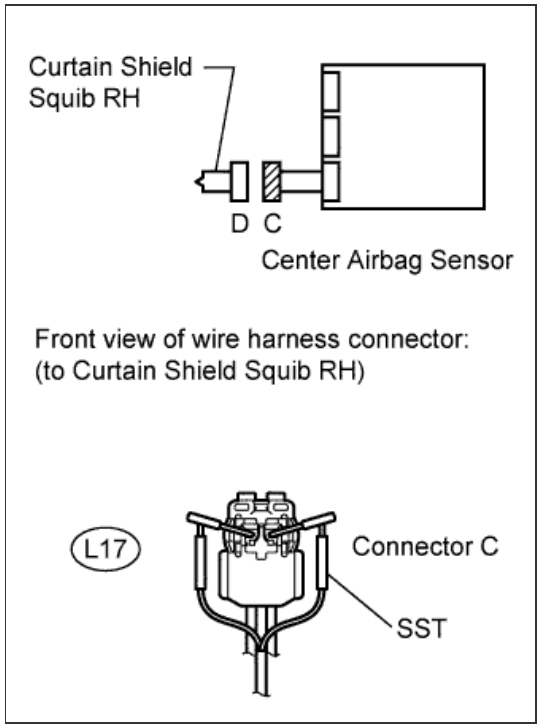
Never connect the tester to the curtain shield airbag RH (curtain shield squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1830, B1831, B1832 or B1833 is not output.

HINT:

Codes other than DTC B1830, B1831, B1832 and B1833 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY RH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the curtain shield airbag RH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (CURTAIN SHIELD AIRBAG RH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L17-1 (ICR+) - Body ground	Engine switch on (IG)	Below 1 V
L17-2 (ICR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

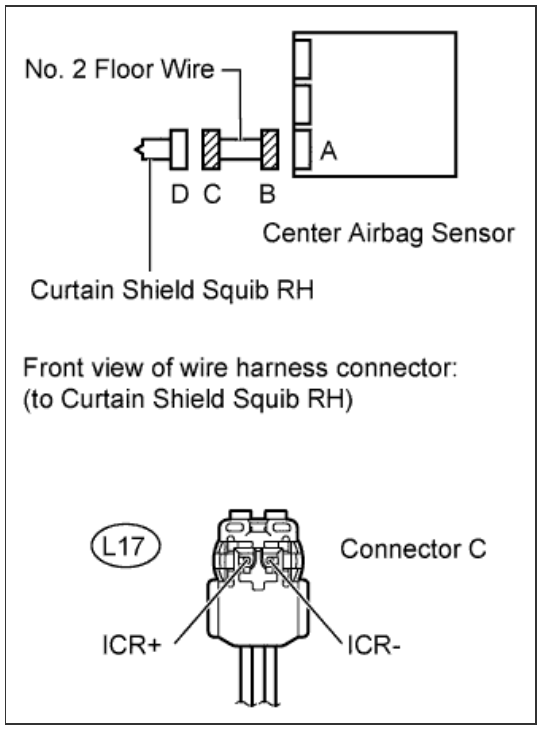
Tester Connection	Condition	Specified Condition
L17-1 (ICR+) - L17-2 (ICR-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L17-1 (ICR+) - L17-2 (ICR-)	Always	1 MΩ or higher
L17-1 (ICR+) - Body ground	Always	1 MΩ or higher
L17-2 (ICR-) -	Always	1 MΩ or higher



Body ground		

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

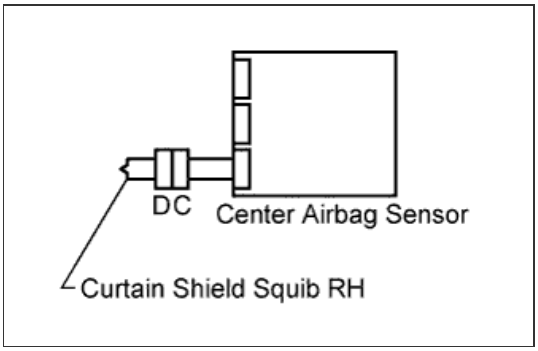
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1830, B1831, B1832 or B1833 is not output.

HINT:

Codes other than DTC B1830, B1831, B1832 and B1833 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1608/84 Front Satellite Sensor Bus LH Initialization Incomplete

DTC B1617/84 Lost Communication with Front Airbag Sensor LH

DTC B1618/84 Front Airbag Sensor LH Initialization Incomplete

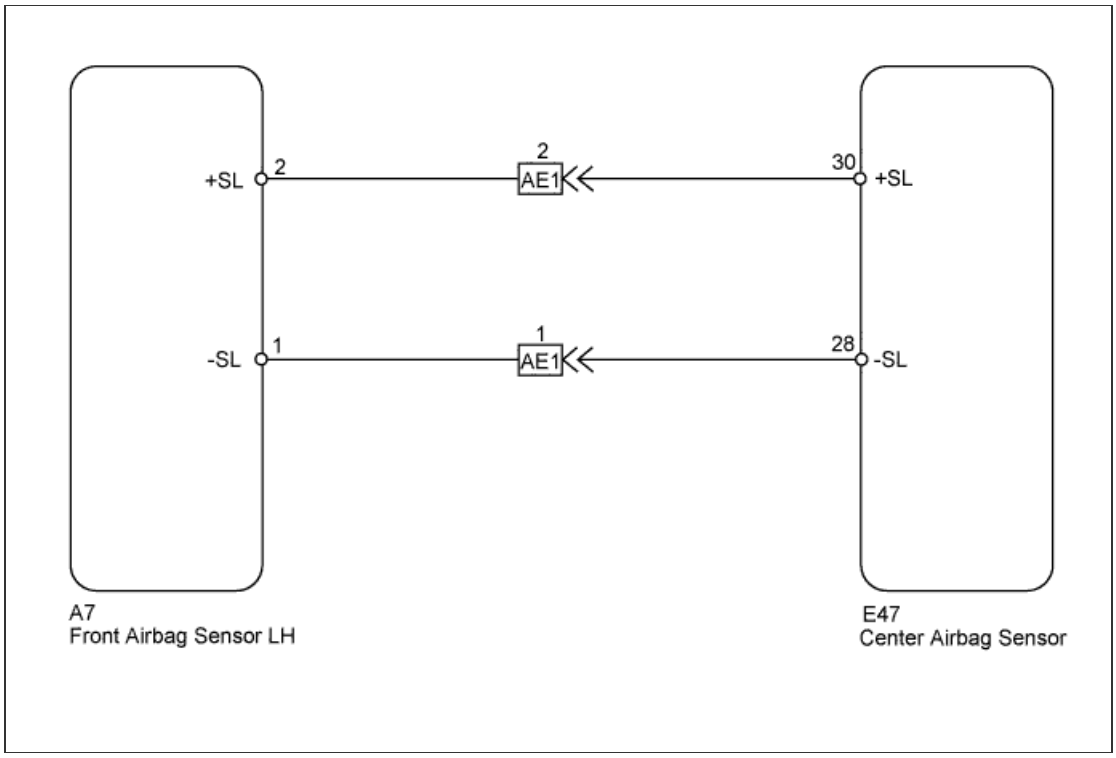
for Preparation Click here

DESCRIPTION

The front airbag sensor LH circuit consists of the center airbag sensor and front airbag sensor LH.
The front airbag sensor LH detects impacts to the vehicle and sends signals to the center airbag sensor to determine if the airbag should be deployed.
DTC B1608/84, B1617/84 or B1618/84 is stored when a malfunction is detected in the front airbag sensor LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1608/84	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor LH circuit for 2 seconds. • A front airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor LH • Center airbag sensor assembly
B1617/84	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor LH circuit for 2 seconds. • A front airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor LH • Center airbag sensor assembly
B1618/84	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the front airbag sensor LH circuit for 2 seconds. • A front airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Engine room main wire • Front airbag sensor LH • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the front airbag sensor LH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

2.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and front airbag sensor LH.

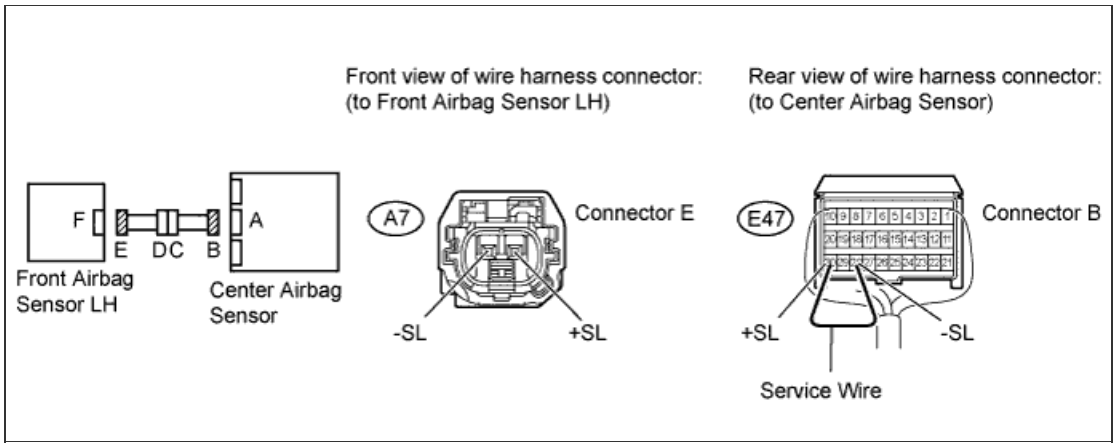
b. Check that the connectors (on the center airbag sensor side and front airbag sensor LH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

3.CHECK FRONT AIRBAG SENSOR LH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
A7-2 (+SL) - Body ground	Engine switch on (IG)	Below 1 V
A7-1 (-SL) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 30 (+SL) and 28 (-SL) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A7-2 (+SL) - A7-1 (-SL)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A7-2 (+SL) - A7-1 (-SL)	Always	1 MΩ or higher
A7-2 (+SL) - Body ground	Always	1 MΩ or higher
A7-1 (-SL) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK FRONT AIRBAG SENSOR LH

a. Connect the connectors to the center airbag sensor.

b. Interchange the front airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

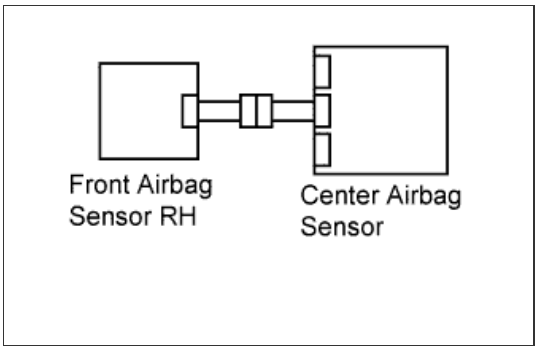
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



Result

Result	Proceed to
DTC B1617 or B1618 is output	A
DTC B1612 or B1613 is output	B
DTC B1612, B1613, B1617 and B1618 are not output	C

HINT:

Codes other than DTC B1612, B1613, B1617 and B1618 may be output at this time, but they are not related to this check.

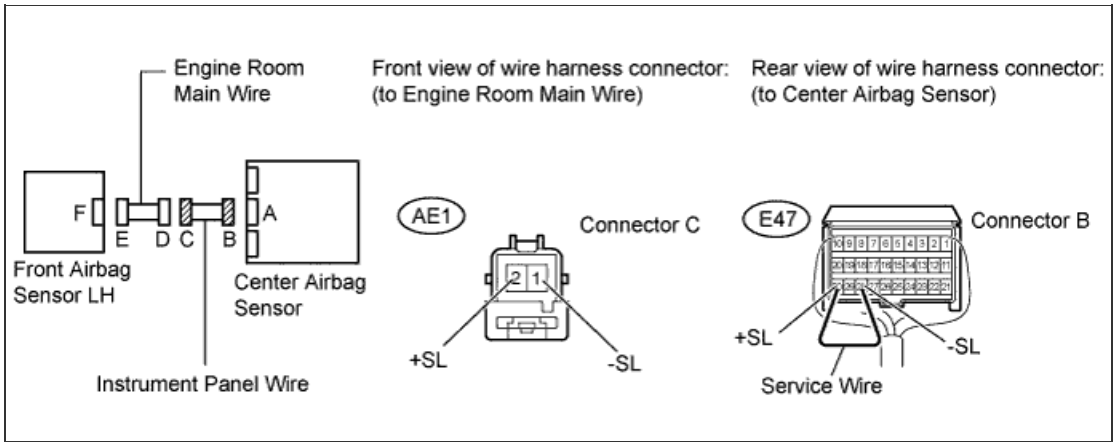
A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

B → REPLACE FRONT AIRBAG SENSOR LH (Click here)

C

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - ENGINE ROOM MAIN WIRE)



a. Disconnect the instrument panel wire connector from the engine room main wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
AE1-2 (+SL) - Body ground	Engine switch on (IG)	Below 1 V
AE1-1 (-SL) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 30 (+SL) and 28 (-SL) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
AE1-2 (+SL) - AE1-1 (-SL)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
AE1-2 (+SL) - AE1-1 (-SL)	Always	1 MΩ or higher
AE1-2 (+SL) - Body ground	Always	1 MΩ or higher
AE1-1 (-SL) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE ENGINE ROOM MAIN WIRE

DTC B1835/58 Short in Curtain Shield Squib LH Circuit

DTC B1836/58 Open in Curtain Shield Squib LH Circuit

DTC B1837/58 Short to GND in Curtain Shield Squib LH Circuit

DTC B1838/58 Short to B+ in Curtain Shield Squib LH Circuit

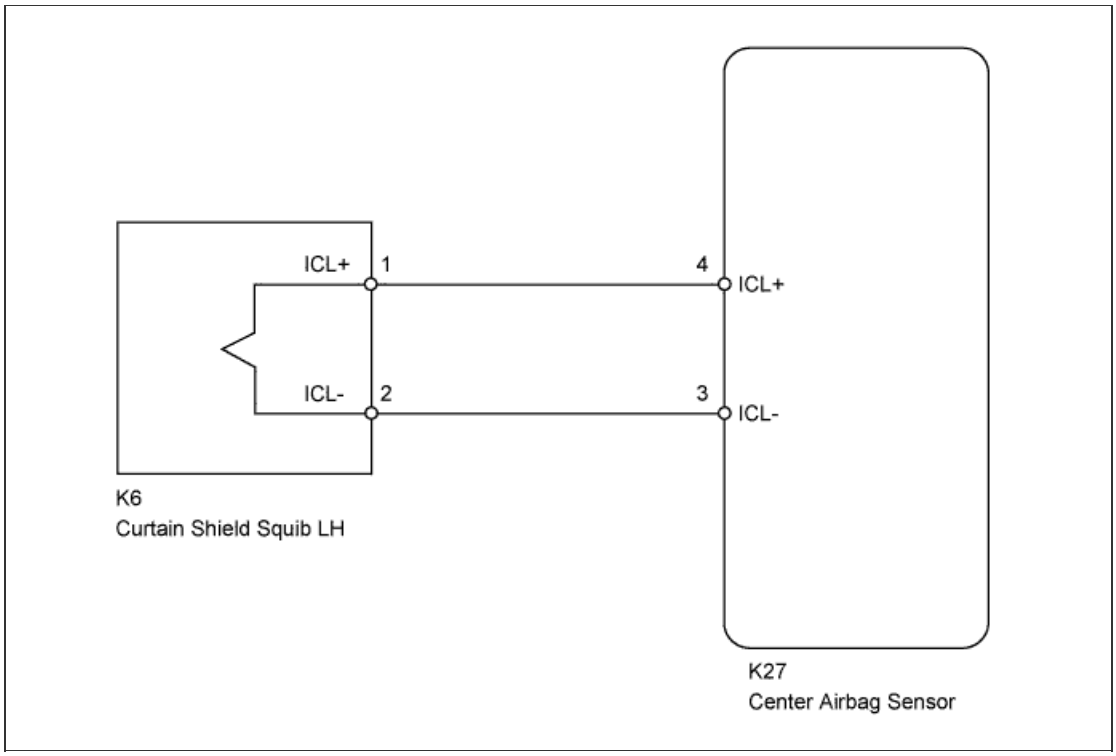
for Preparation Click here

DESCRIPTION

The curtain shield squib LH circuit consists of the center airbag sensor and the curtain shield airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1835/58	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib LH circuit during the primary check. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly
B1836/58	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib LH circuit for 2 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly
B1837/58	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib LH circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly
B1838/58	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib LH circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG LH (CURTAIN SHIELD SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the curtain shield airbag LH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

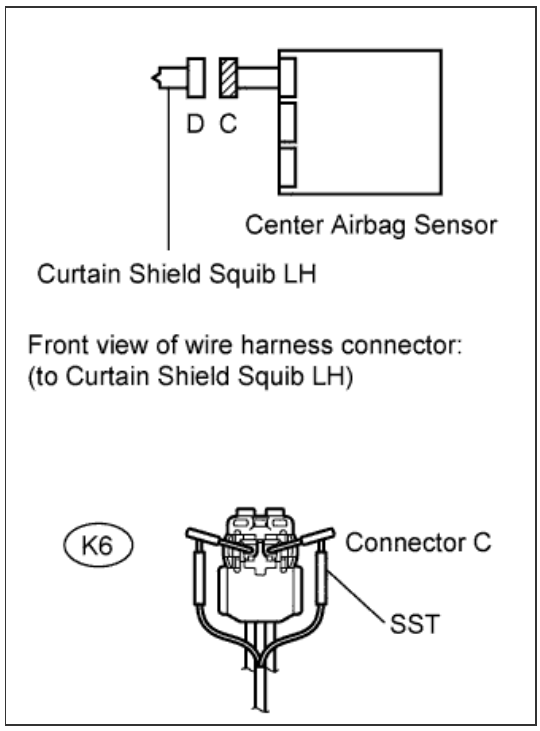
CAUTION:

Never connect the tester to the curtain shield airbag LH (curtain shield squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST
09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1835, B1836, B1837 or B1838 is not output.

HINT:

Codes other than DTC B1835, B1836, B1837 and B1838 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connectors (on the curtain shield airbag LH side) are not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (CURTAIN SHIELD AIRBAG LH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K6-1 (ICL+) - Body ground	Engine switch on (IG)	Below 1 V
K6-2 (ICL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

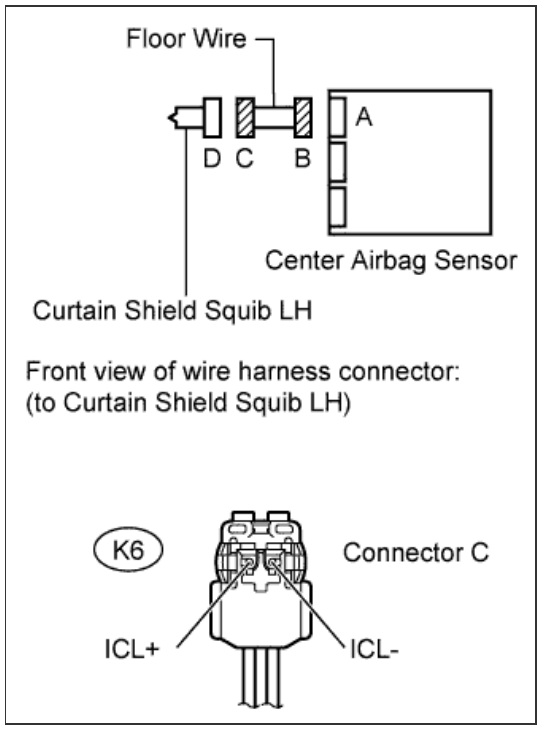
Tester Connection	Condition	Specified Condition
K6-1 (ICL+) - K6-2 (ICL-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K6-1 (ICL+) - K6-2 (ICL-)	Always	1 MΩ or higher
K6-1 (ICL+) - Body ground	Always	1 MΩ or higher
K6-2 (ICL-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

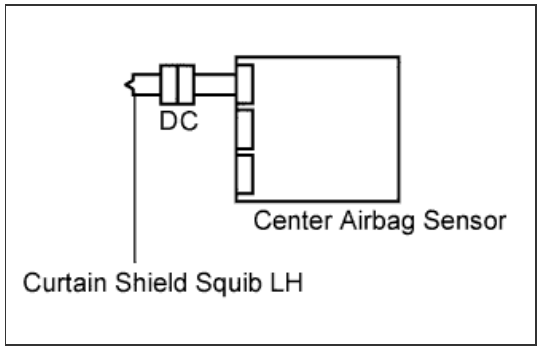
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1835, B1836, B1837 or B1838 is not output.

HINT:

Codes other than DTC B1835, B1836, B1837 and B1838 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1610/13 Front Airbag Sensor RH Malfunction

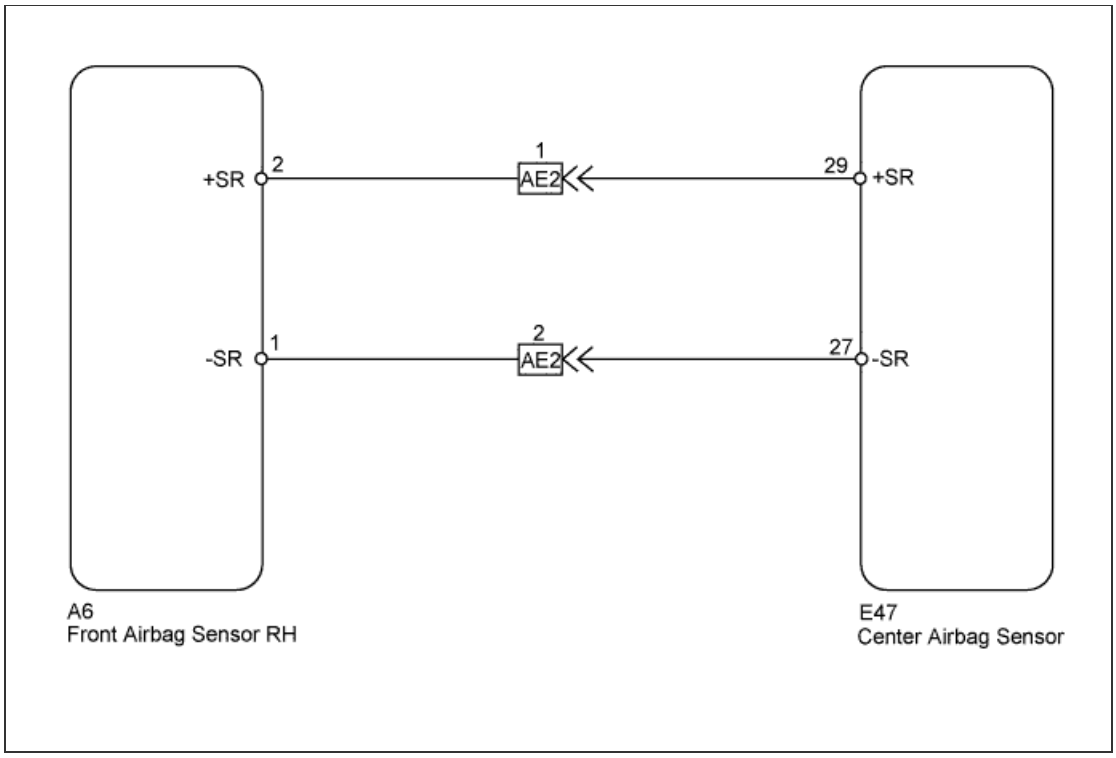
for Preparation Click here

DESCRIPTION

The front airbag sensor RH consists of the diagnostic circuit and the frontal deceleration sensor, etc.
If the center airbag sensor receives signals from the frontal deceleration sensor, it determines whether the SRS should be activated.
DTC B1610/13 is stored when a malfunction is detected in the front airbag sensor RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1610/13	When one of the following conditions is met: • A front airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Front airbag sensor RH • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FRONT AIRBAG SENSOR RH

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

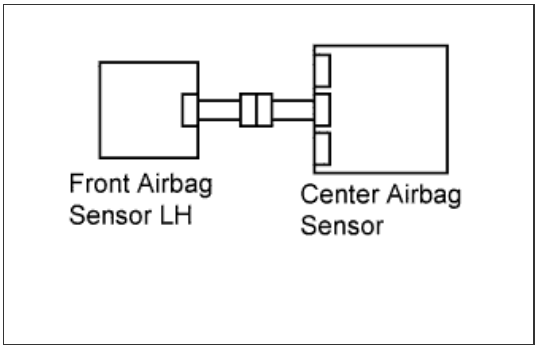
c. Interchange the front airbag sensor LH with RH and connect the connectors to them.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.



h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1610 is output	A
DTC B1615 is output	B
DTC B1610 and B1615 are not output	C

HINT:

Codes other than DTC B1610 and B1615 may be output at this time, but they are not related to this check.

A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

B → REPLACE FRONT AIRBAG SENSOR RH (Click here)

C → USE SIMULATION METHOD TO CHECK (Click here)

DTC B1835/58 Short in Curtain Shield Squib LH Circuit

DTC B1836/58 Open in Curtain Shield Squib LH Circuit

DTC B1837/58 Short to GND in Curtain Shield Squib LH Circuit

DTC B1838/58 Short to B+ in Curtain Shield Squib LH Circuit

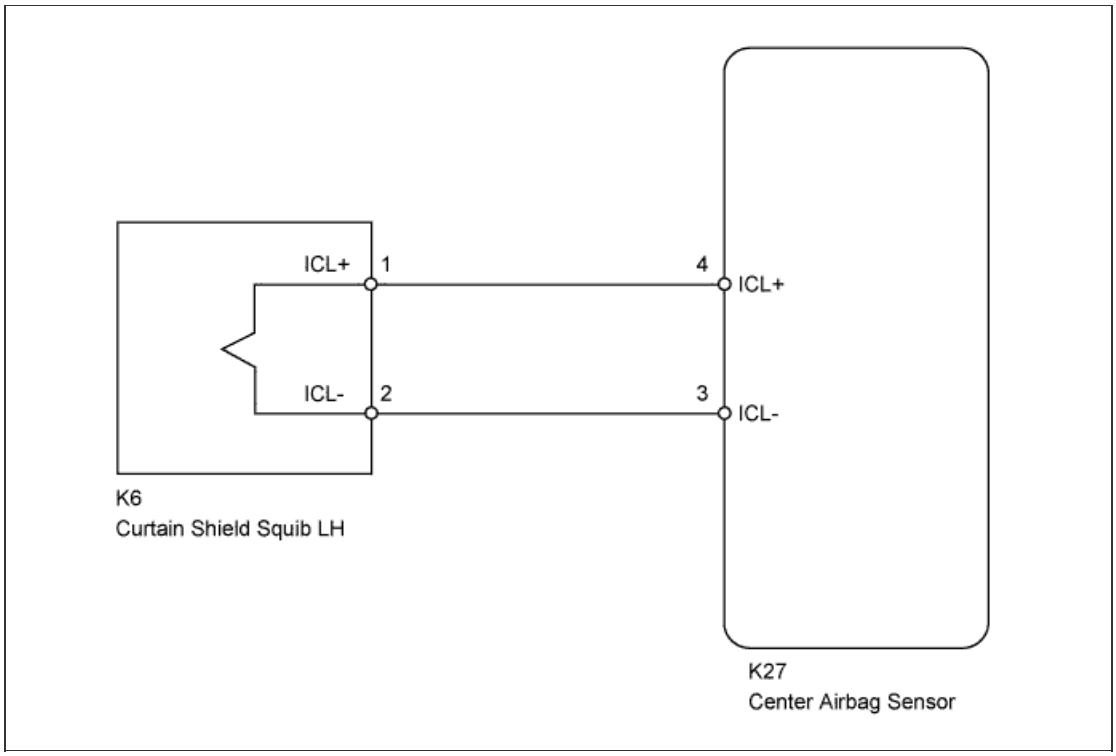
for Preparation Click here

DESCRIPTION

The curtain shield squib LH circuit consists of the center airbag sensor and the curtain shield airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1835/58	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib LH circuit during the primary check. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly
B1836/58	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib LH circuit for 2 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly
B1837/58	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib LH circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly
B1838/58	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib LH circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG LH (CURTAIN SHIELD SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the curtain shield airbag LH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

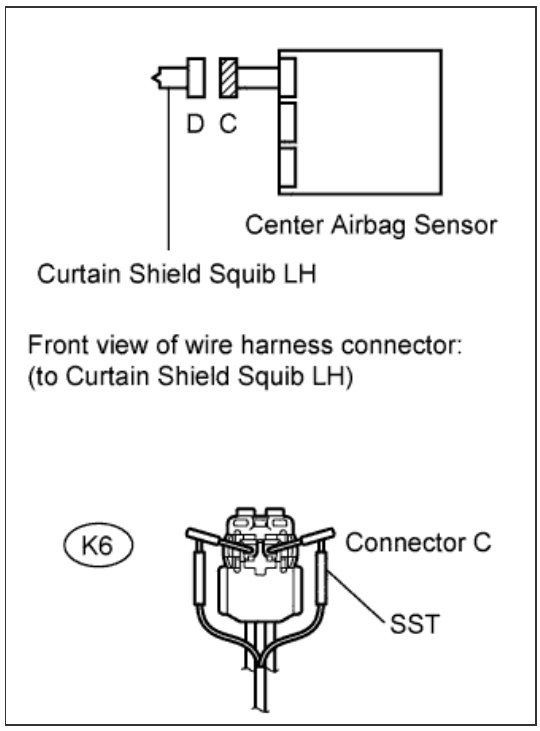
CAUTION:

Never connect the tester to the curtain shield airbag LH (curtain shield squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST
09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1835, B1836, B1837 or B1838 is not output.

HINT:

Codes other than DTC B1835, B1836, B1837 and B1838 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connectors (on the curtain shield airbag LH side) are not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (CURTAIN SHIELD AIRBAG LH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K6-1 (ICL+) - Body ground	Engine switch on (IG)	Below 1 V
K6-2 (ICL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

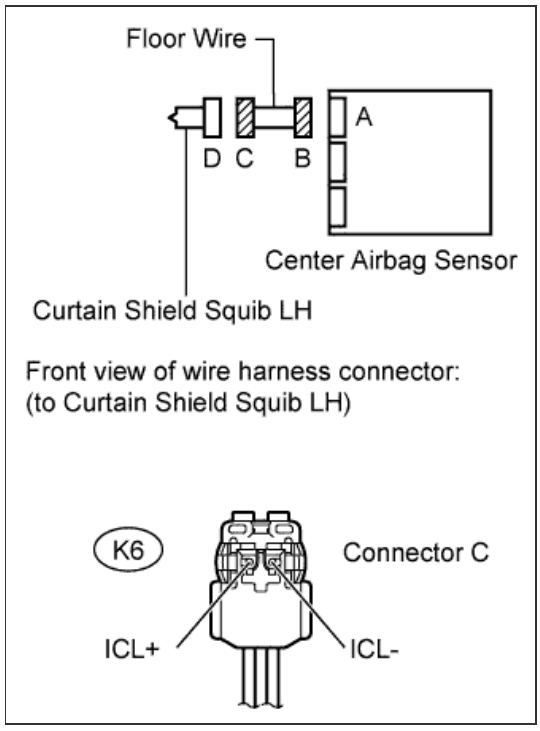
Tester Connection	Condition	Specified Condition
K6-1 (ICL+) - K6-2 (ICL-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K6-1 (ICL+) - K6-2 (ICL-)	Always	1 MΩ or higher
K6-1 (ICL+) - Body ground	Always	1 MΩ or higher
K6-2 (ICL-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

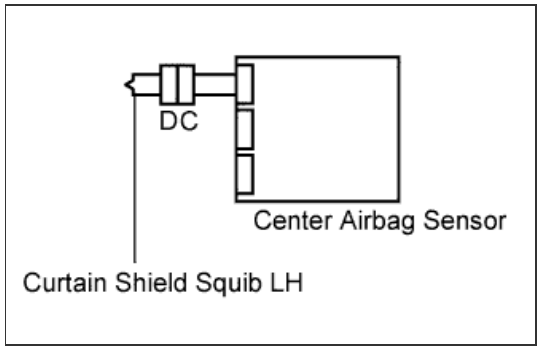
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1835, B1836, B1837 or B1838 is not output.

HINT:

Codes other than DTC B1835, B1836, B1837 and B1838 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1615/14 Front Airbag Sensor LH Malfunction

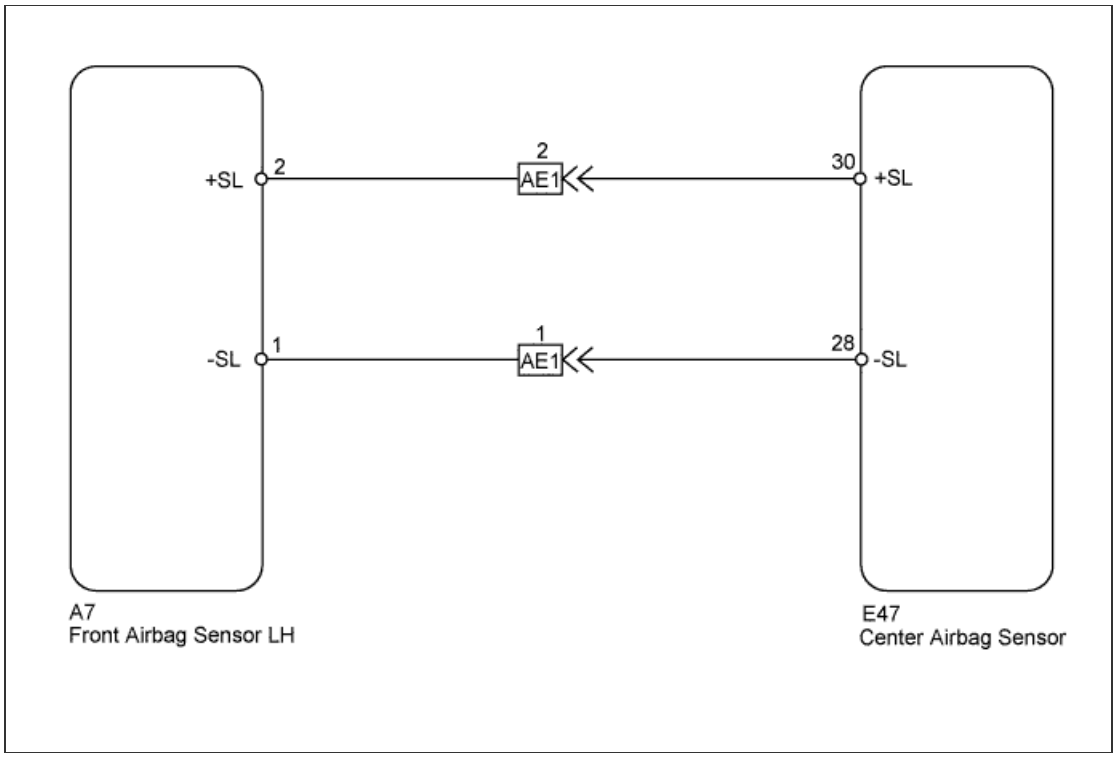
for Preparation Click here

DESCRIPTION

The front airbag sensor LH consists of the diagnostic circuit and the frontal deceleration sensor, etc.
If the center airbag sensor receives signals from the frontal deceleration sensor, it determines whether the SRS should be activated.
DTC B1615/14 is stored when a malfunction is detected in the front airbag sensor LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1615/14	When one of the following conditions is met: • A front airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Front airbag sensor LH • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FRONT AIRBAG SENSOR LH

a. Turn the engine switch off.

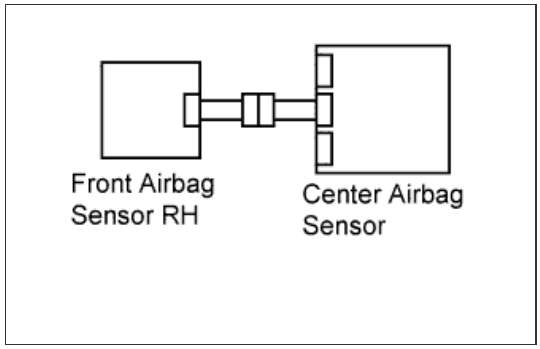
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Interchange the front airbag sensor RH with LH and connect the connectors to them.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).



g. Turn the engine switch off.

h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1615 is output	A
DTC B1610 is output	B
DTC B1610 and B1615 are not output	C

HINT:

Codes other than DTC B1610 and B1615 may be output at this time, but they are not related to this check.

A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

B → REPLACE FRONT AIRBAG SENSOR LH (Click here)

C

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1835/58 Short in Curtain Shield Squib LH Circuit

DTC B1836/58 Open in Curtain Shield Squib LH Circuit

DTC B1837/58 Short to GND in Curtain Shield Squib LH Circuit

DTC B1838/58 Short to B+ in Curtain Shield Squib LH Circuit

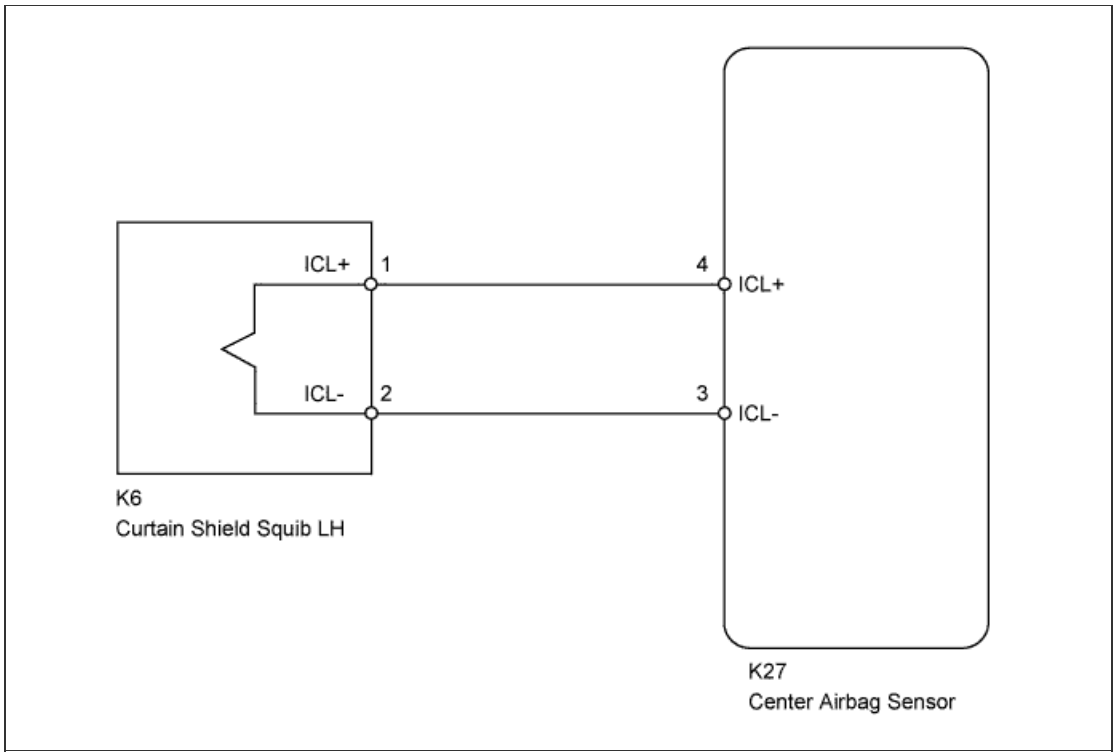
for Preparation Click here

DESCRIPTION

The curtain shield squib LH circuit consists of the center airbag sensor and the curtain shield airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1835/58	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib LH circuit during the primary check. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly
B1836/58	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib LH circuit for 2 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly
B1837/58	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib LH circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly
B1838/58	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib LH circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG LH (CURTAIN SHIELD SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the curtain shield airbag LH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

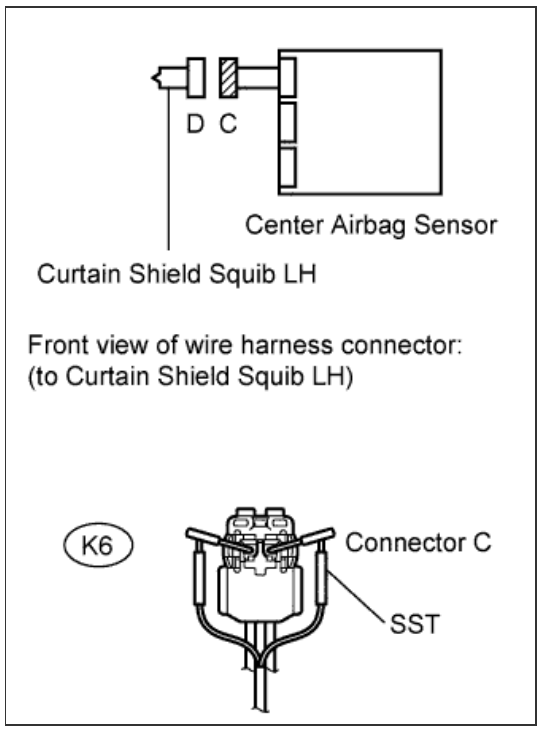
CAUTION:

Never connect the tester to the curtain shield airbag LH (curtain shield squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST
09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1835, B1836, B1837 or B1838 is not output.

HINT:

Codes other than DTC B1835, B1836, B1837 and B1838 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connectors (on the curtain shield airbag LH side) are not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (CURTAIN SHIELD AIRBAG LH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K6-1 (ICL+) - Body ground	Engine switch on (IG)	Below 1 V
K6-2 (ICL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

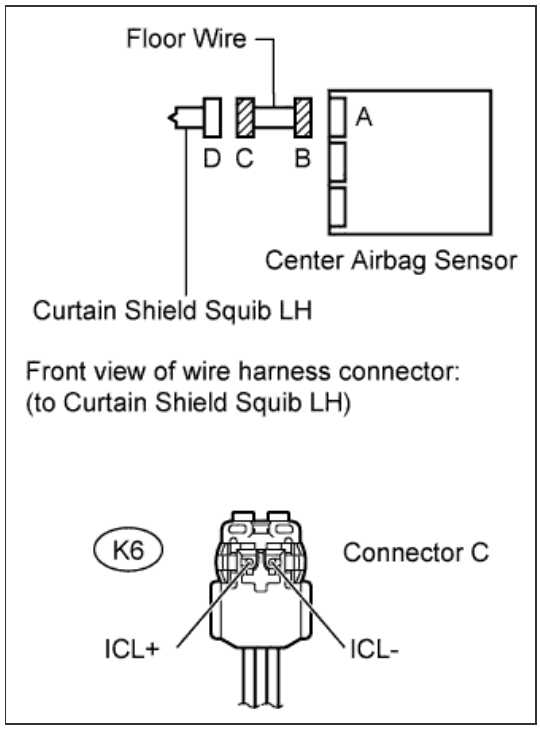
Tester Connection	Condition	Specified Condition
K6-1 (ICL+) - K6-2 (ICL-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K6-1 (ICL+) - K6-2 (ICL-)	Always	1 MΩ or higher
K6-1 (ICL+) - Body ground	Always	1 MΩ or higher
K6-2 (ICL-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

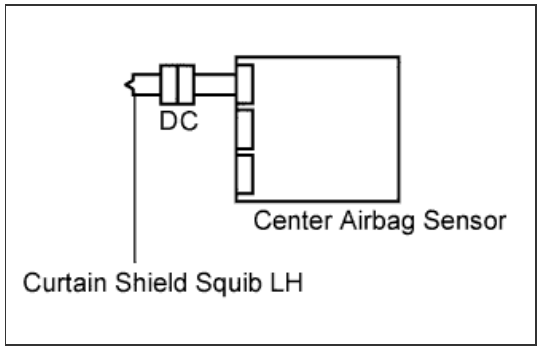
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1835, B1836, B1837 or B1838 is not output.

HINT:

Codes other than DTC B1835, B1836, B1837 and B1838 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1630/23 Rear Airbag Sensor RH Circuit Malfunction

DTC B1695/16 Door Side Airbag Sensor LH Malfunction

for Preparation Click here

DESCRIPTION

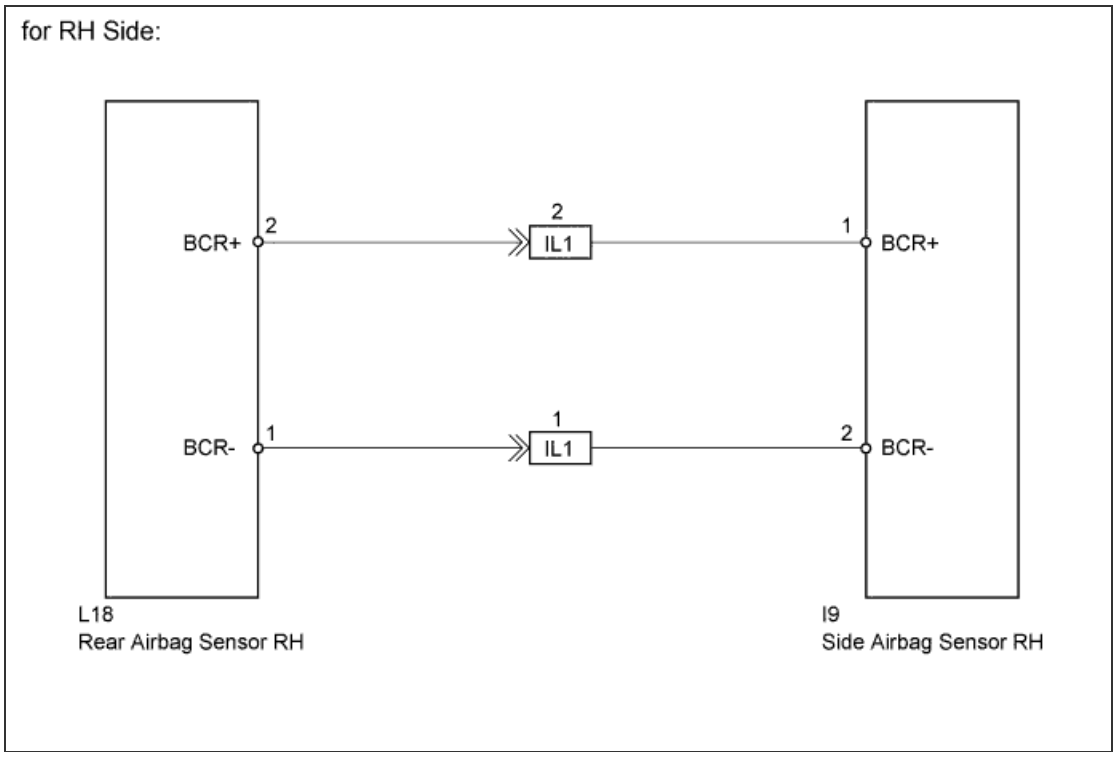
HINT:

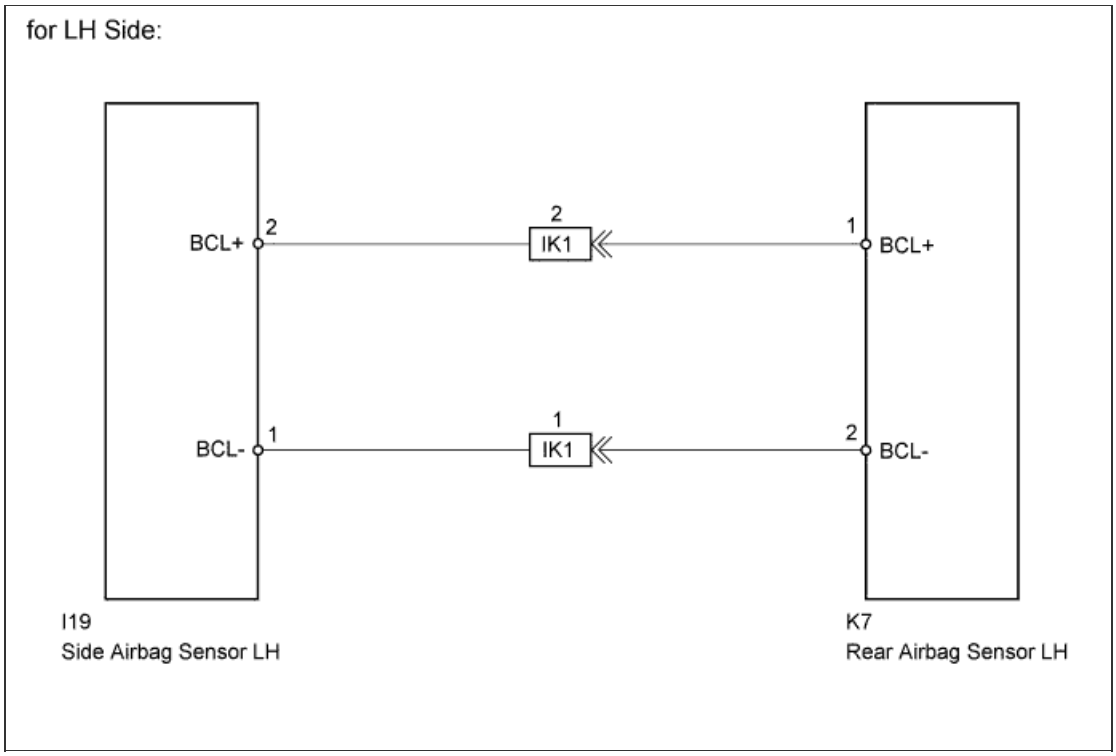
"Door side airbag sensor LH" refers to the side airbag sensor LH.

- The side airbag sensor LH or rear airbag sensor RH consists of the safing sensor, the diagnostic circuit, the lateral deceleration sensor, etc. If the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether the SRS should be activated. DTC B1630/23 or B1695/16 is stored when a malfunction is detected in the side airbag sensor LH or rear airbag sensor RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1630/23	When one of the following conditions is met: • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Rear airbag sensor RH • Center airbag sensor assembly
B1695/16	When one of the following conditions is met: • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Side airbag sensor LH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FOR DTC

a. Turn the engine switch on (IG).

b. Clear the DTCs stored in the memory (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1630 and B1695 are not output	A
DTC B1695 is output	B
DTC B1630 is output	C

A	USE SIMULATION METHOD TO CHECK (Click here)
B	Go to step 3
C	

2.CHECK REAR AIRBAG SENSOR RH

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Temporarily replace the rear airbag sensor RH with a new one.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.

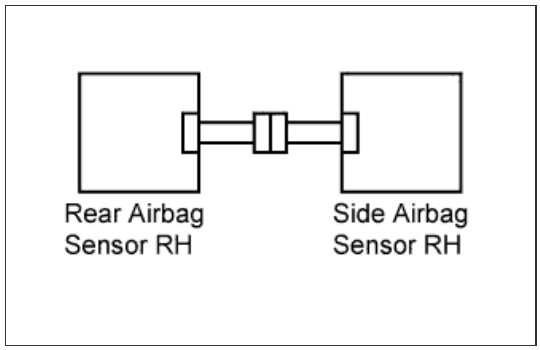
h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

OK:
DTC B1630 is not output.

HINT:

Codes other than DTC B1630 may be output at this time, but they are not related to this check.



NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR RH (Click here)

3.CHECK SIDE AIRBAG SENSOR LH

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Interchange the side airbag sensor RH with LH and connect the connectors to them.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

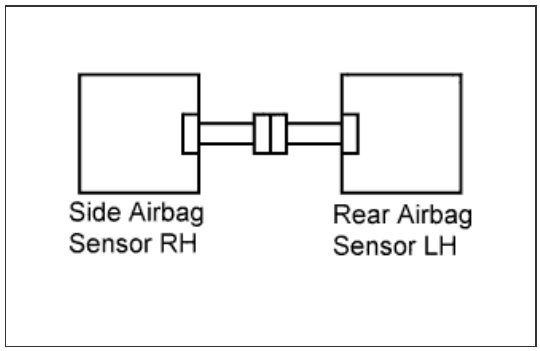
e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.

h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).



Result

Result	Proceed to
DTC B1690 and B1695 are not output	A
DTC B1695 is output	B
DTC B1690 is output	C

HINT:

Codes other than DTC B1690 and B1695 may be output at this time, but they are not related to this check.

j. Turn the engine switch off.

k. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

l. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

C

REPLACE SIDE AIRBAG SENSOR LH (Click here)

DTC B1835/58 Short in Curtain Shield Squib LH Circuit

DTC B1836/58 Open in Curtain Shield Squib LH Circuit

DTC B1837/58 Short to GND in Curtain Shield Squib LH Circuit

DTC B1838/58 Short to B+ in Curtain Shield Squib LH Circuit

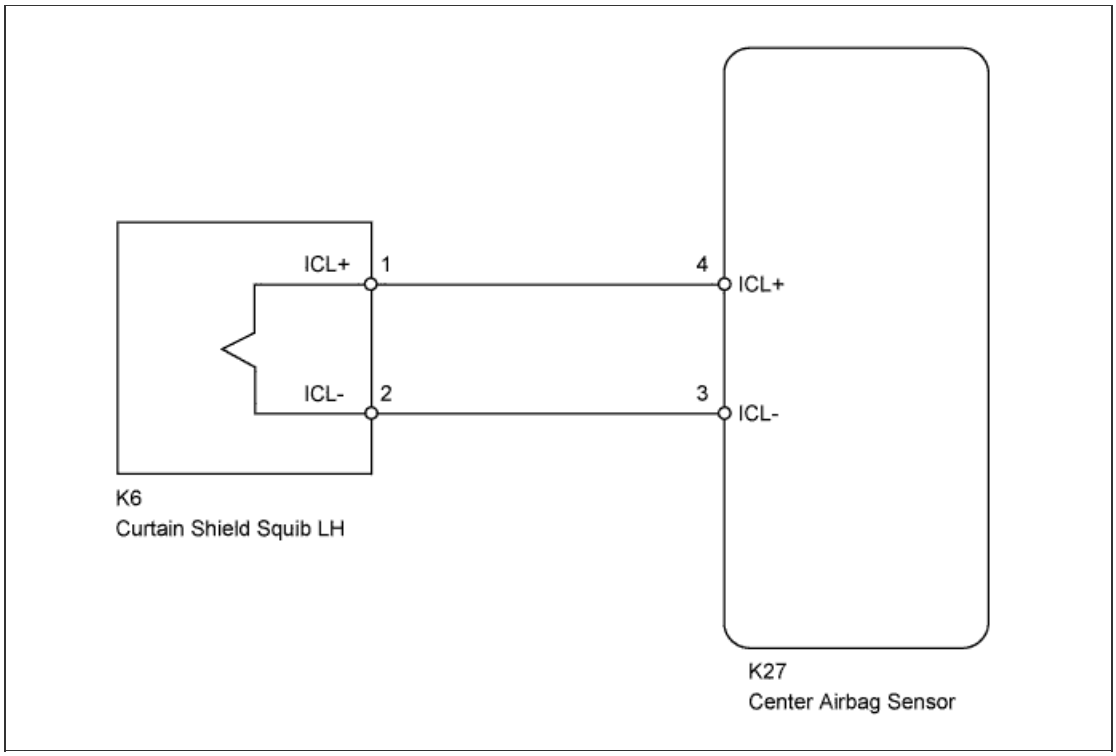
for Preparation Click here

DESCRIPTION

The curtain shield squib LH circuit consists of the center airbag sensor and the curtain shield airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1835/58	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib LH circuit during the primary check. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly
B1836/58	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib LH circuit for 2 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly
B1837/58	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib LH circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly
B1838/58	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib LH circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG LH (CURTAIN SHIELD SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the curtain shield airbag LH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

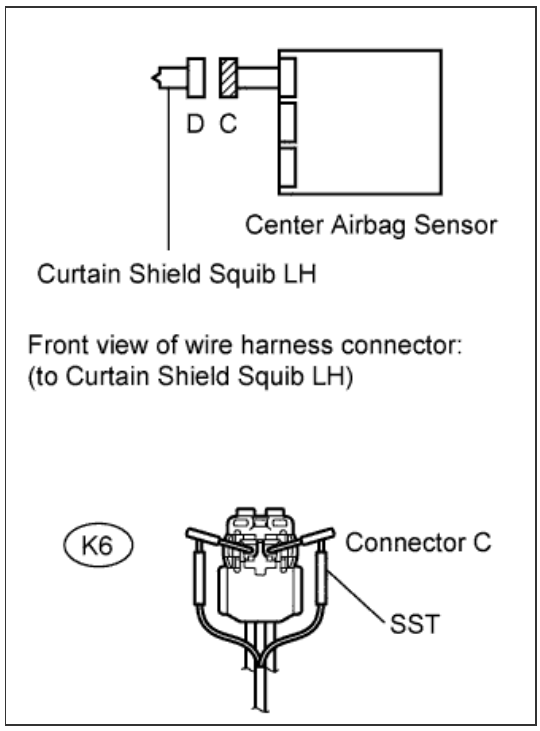
CAUTION:

Never connect the tester to the curtain shield airbag LH (curtain shield squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST
09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1835, B1836, B1837 or B1838 is not output.

HINT:

Codes other than DTC B1835, B1836, B1837 and B1838 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connectors (on the curtain shield airbag LH side) are not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (CURTAIN SHIELD AIRBAG LH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K6-1 (ICL+) - Body ground	Engine switch on (IG)	Below 1 V
K6-2 (ICL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

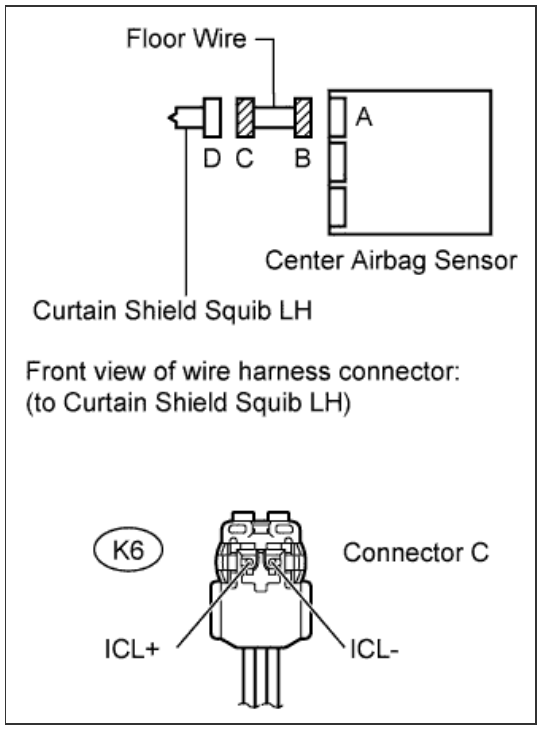
Tester Connection	Condition	Specified Condition
K6-1 (ICL+) - K6-2 (ICL-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K6-1 (ICL+) - K6-2 (ICL-)	Always	1 MΩ or higher
K6-1 (ICL+) - Body ground	Always	1 MΩ or higher
K6-2 (ICL-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

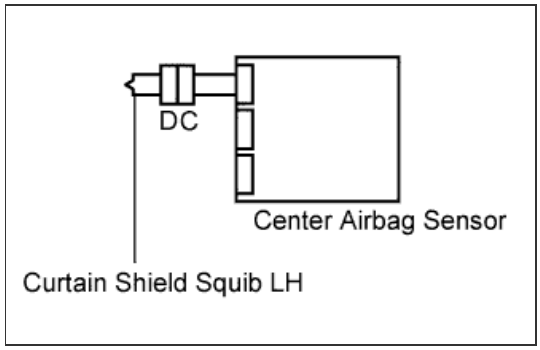
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1835, B1836, B1837 or B1838 is not output.

HINT:

Codes other than DTC B1835, B1836, B1837 and B1838 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1630/23 Rear Airbag Sensor RH Circuit Malfunction

DTC B1695/16 Door Side Airbag Sensor LH Malfunction

for Preparation Click here

DESCRIPTION

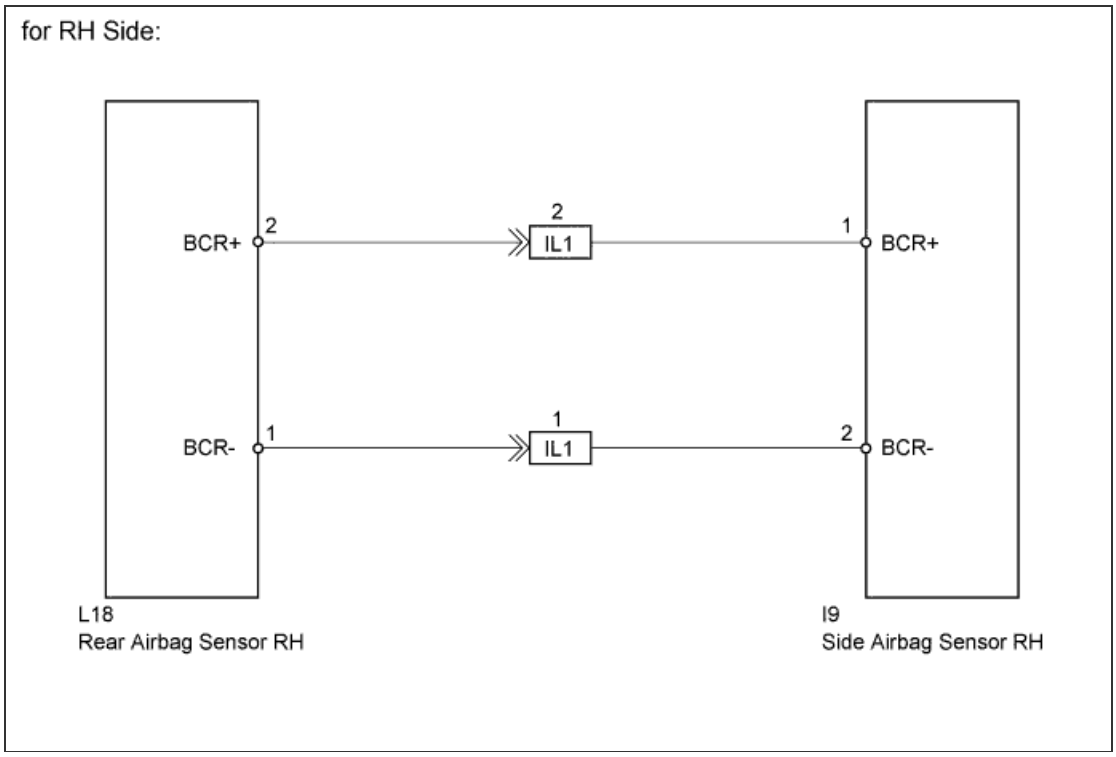
HINT:

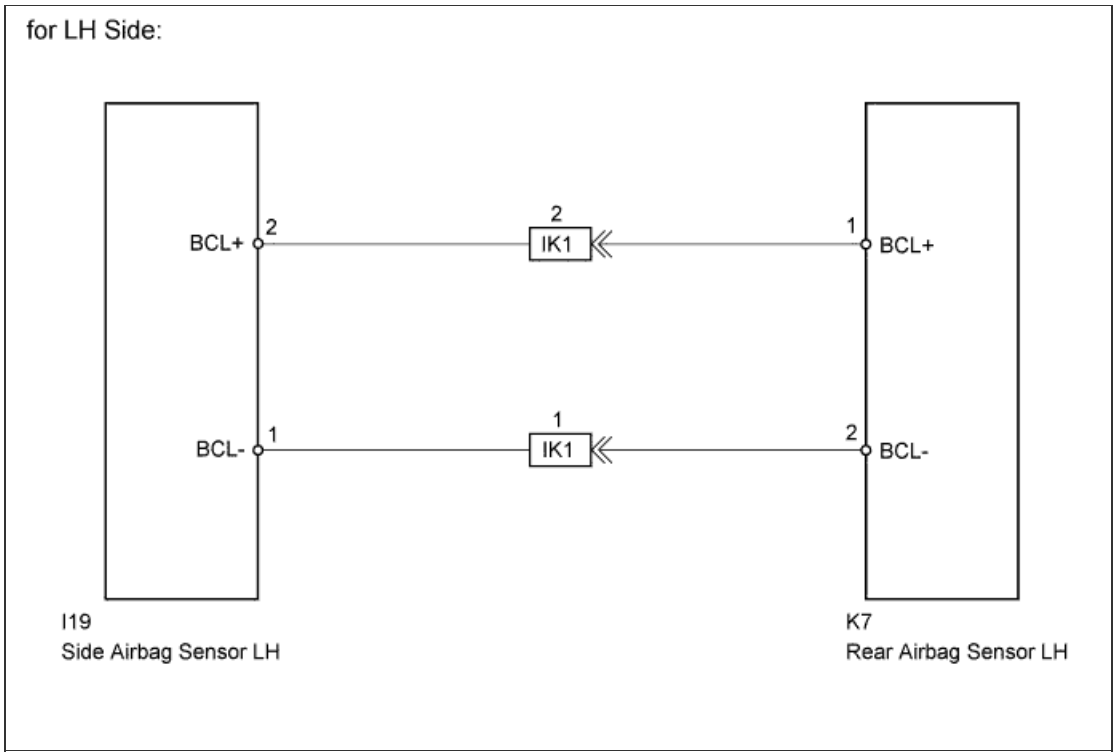
"Door side airbag sensor LH" refers to the side airbag sensor LH.

- The side airbag sensor LH or rear airbag sensor RH consists of the safing sensor, the diagnostic circuit, the lateral deceleration sensor, etc. If the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether the SRS should be activated. DTC B1630/23 or B1695/16 is stored when a malfunction is detected in the side airbag sensor LH or rear airbag sensor RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1630/23	When one of the following conditions is met: • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Rear airbag sensor RH • Center airbag sensor assembly
B1695/16	When one of the following conditions is met: • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Side airbag sensor LH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FOR DTC

a. Turn the engine switch on (IG).

b. Clear the DTCs stored in the memory (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1630 and B1695 are not output	A
DTC B1695 is output	B
DTC B1630 is output	C

A	USE SIMULATION METHOD TO CHECK (Click here)
B	Go to step 3
C	

2.CHECK REAR AIRBAG SENSOR RH

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Temporarily replace the rear airbag sensor RH with a new one.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.

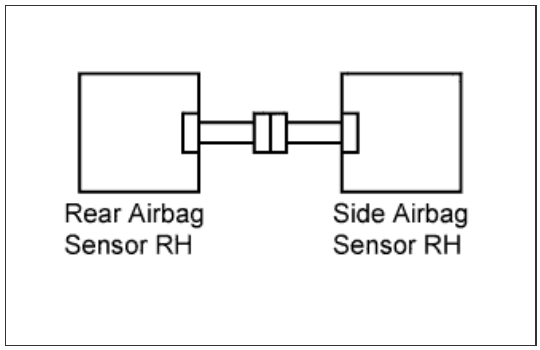
h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

OK:
DTC B1630 is not output.

HINT:

Codes other than DTC B1630 may be output at this time, but they are not related to this check.



NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR RH (Click here)

3.CHECK SIDE AIRBAG SENSOR LH

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Interchange the side airbag sensor RH with LH and connect the connectors to them.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

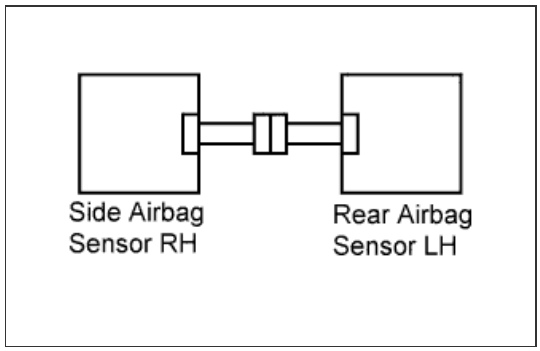
e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.

h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).



Result

Result	Proceed to
DTC B1690 and B1695 are not output	A
DTC B1695 is output	B
DTC B1690 is output	C

HINT:

Codes other than DTC B1690 and B1695 may be output at this time, but they are not related to this check.

j. Turn the engine switch off.

k. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

l. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

C

REPLACE SIDE AIRBAG SENSOR LH (Click here)

DTC B1840/59 Short in Curtain Shield Squib RH 2nd Step Circuit

DTC B1841/59 Open in Curtain Shield Squib RH 2nd Step Circuit

DTC B1842/59 Short to GND in Curtain Shield Squib RH 2nd Step Circuit

DTC B1843/59 Short to B+ in Curtain Shield Squib RH 2nd Step Circuit

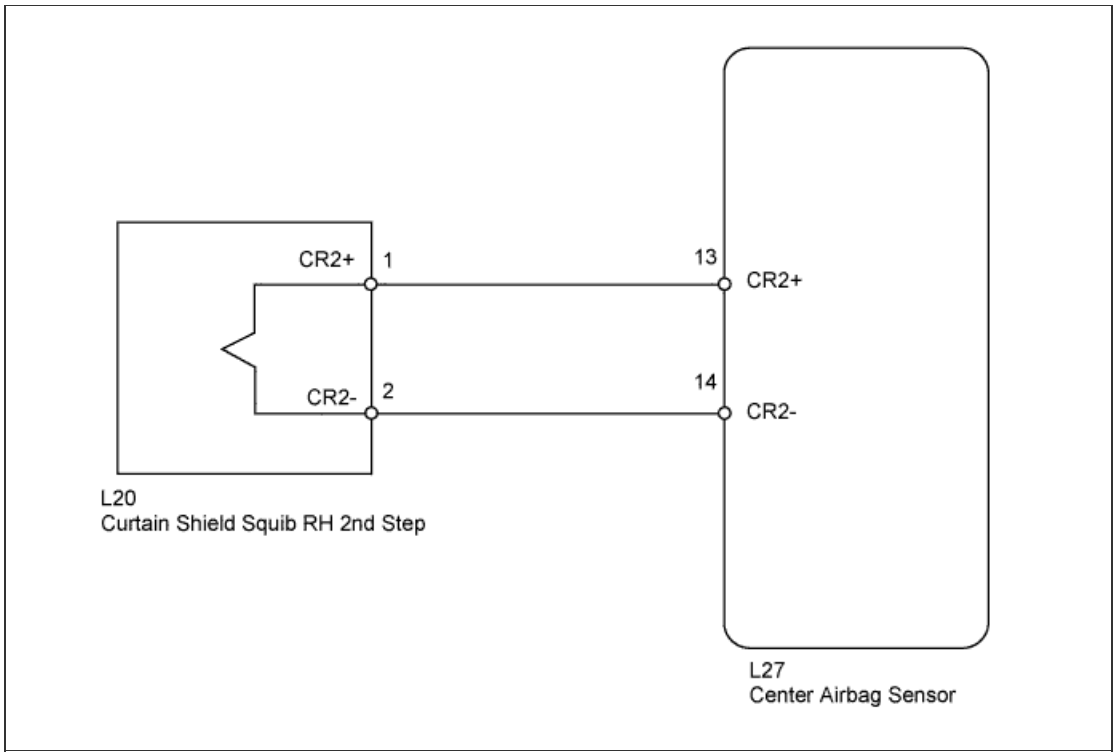
for Preparation Click here

DESCRIPTION

The curtain shield squib RH 2nd step circuit consists of the center airbag sensor and the curtain shield airbag RH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib RH 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1840/59	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib RH 2nd step circuit during the primary check. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly
B1841/59	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib RH 2nd step circuit for 2 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly
B1842/59	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib RH 2nd step circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly
B1843/59	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib RH 2nd step circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG RH (CURTAIN SHIELD SQUIB RH 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the curtain shield squib RH 2nd step.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

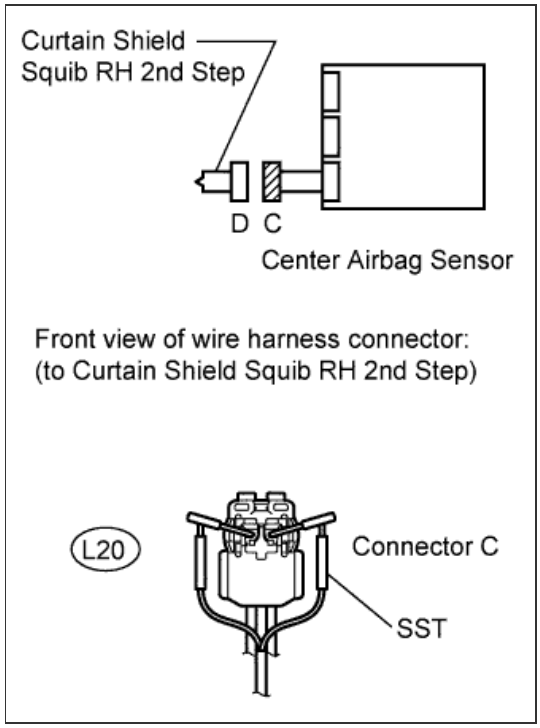
Never connect the tester to the curtain shield airbag RH (curtain shield squib RH 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1840, B1841, B1842 or B1843 is not output.

HINT:

Codes other than DTC B1840, B1841, B1842 and B1843 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY RH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the curtain shield squib RH 2nd step side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (CURTAIN SHIELD AIRBAG RH 2ND STEP CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L20-1 (CR2+) - Body ground	Engine switch on (IG)	Below 1 V
L20-2 (CR2-) - Body ground	Engine switch on (IG)	Below 1 V

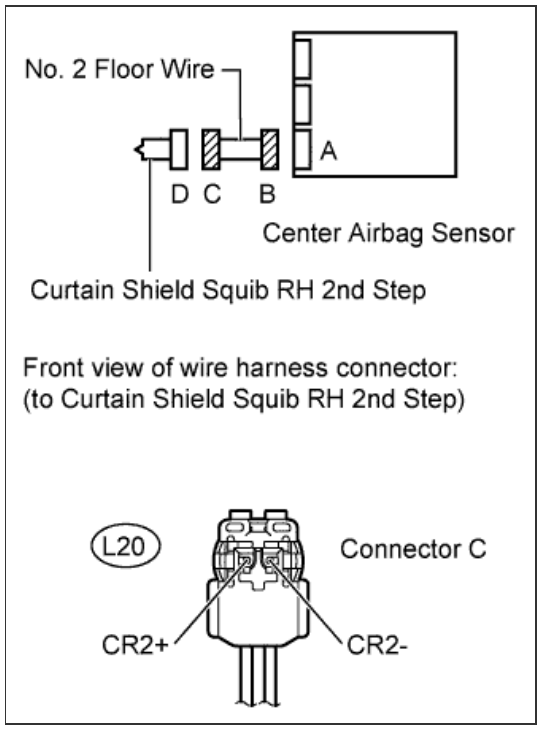
d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L20-1 (CR2+) - L20-2 (CR2-)	Always	Below 1 Ω



g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L20-1 (CR2+) - L20-2 (CR2-)	Always	1 MΩ or higher
L20-1 (CR2+) - Body ground	Always	1 MΩ or higher
L20-2 (CR2-) -	Always	1 MΩ or higher

Body ground		

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield squib RH 2nd step and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

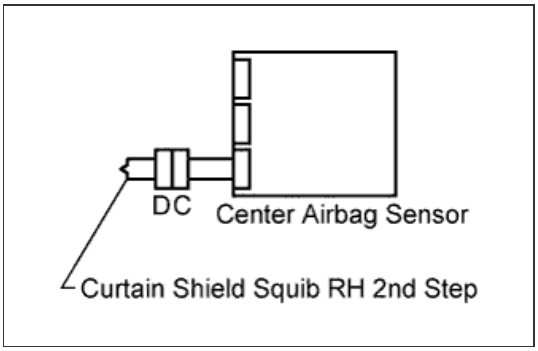
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1840, B1841, B1842 or B1843 is not output.

HINT:

Codes other than DTC B1840, B1841, B1842 and B1843 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1632/81 Lost Communication with Rear Airbag Sensor RH

DTC B1633/81 Rear Airbag Sensor Assembly RH Initialization Incomplete

DTC B1697/82 Lost Communication with Door Side Airbag Sensor LH

DTC B1698/82 Door Side Airbag Sensor LH Initialization Incomplete

for Preparation Click here

DESCRIPTION

HINT:

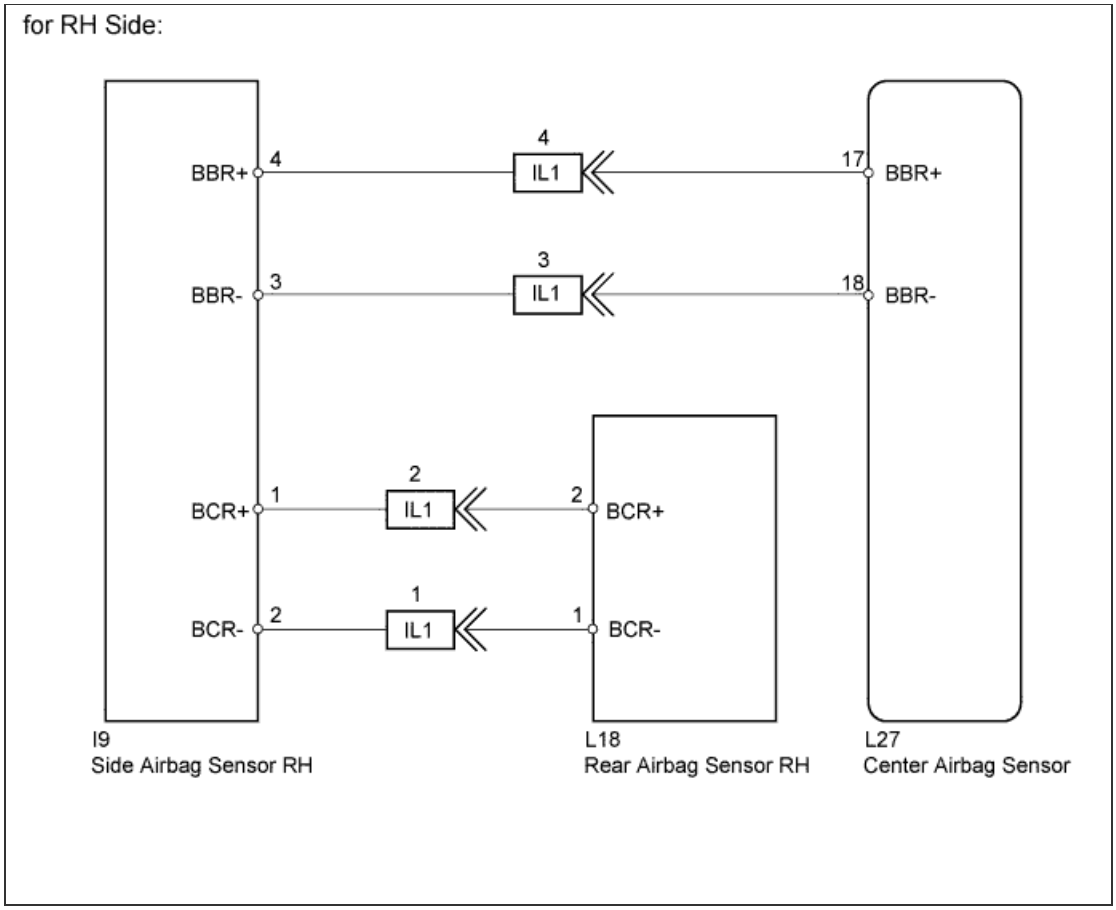
"Door side airbag sensor LH" refers to the side airbag sensor LH.

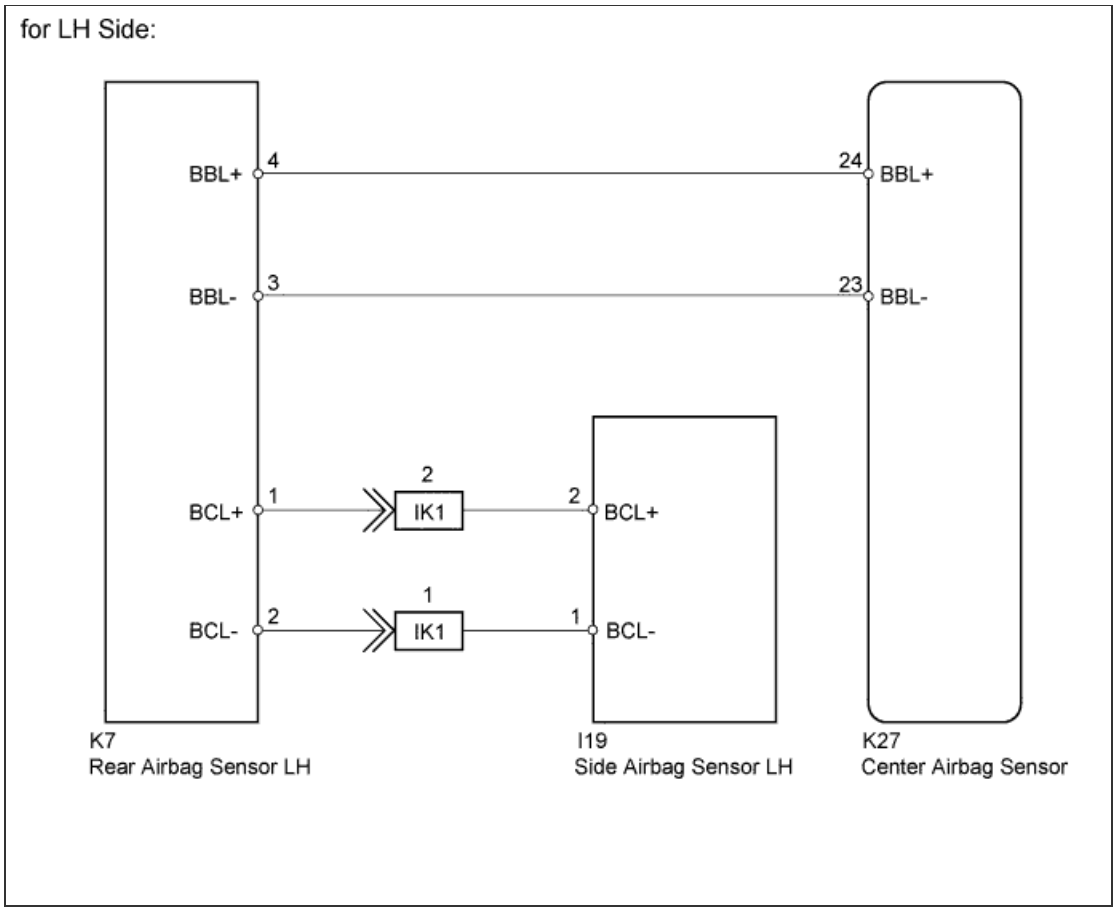
- The circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH) is composed of the center airbag sensor, side airbag sensor LH or RH, and rear airbag sensor LH or RH.
  The side airbag sensor LH or RH and rear airbag sensor LH or RH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1632/81 or B1697/82 is stored when a malfunction is detected in the circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH).

DTC Code	DTC Detection Condition	Trouble Area
B1632/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly
B1633/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly
B1697/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction.	• Floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

	• A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	
B1698/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction. • A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FOR DTC

a. Turn the engine switch on (IG).

b. Clear the DTCs stored in the memory (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1632, B1633, B1697 and B1698 are not output	A
DTC B1697 or B1698 is output	B
DTC B1632 or B1633 is output	C

HINT:

Codes other than DTC B1632, B1633, B1697 and B1698 may be output at this time, but they are not related to this check.

A	USE SIMULATION METHOD TO CHECK (Click here)
B	Go to step 8
C	

2.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor, the side airbag sensor RH and rear airbag sensor RH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

3.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor, rear airbag sensor RH and side airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side, the rear airbag sensor RH side and side airbag sensor RH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

4.CHECK SIDE AIRBAG SENSOR RH

a. Connect the connectors to the center airbag sensor.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

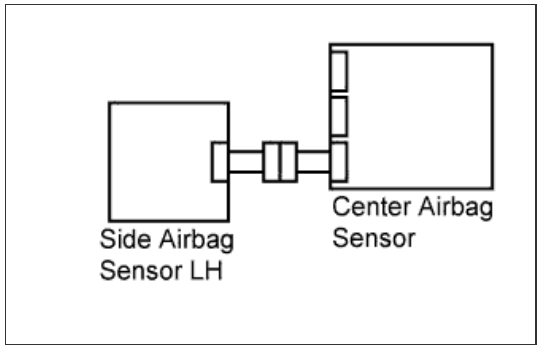
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



Result

Result	Proceed to
DTC B1632, B1633, B1697 and B1698 are not output	A
DTC B1697 or B1698 is output	B
DTC B1632 or B1633 is output	C

HINT:

Codes other than DTC B1632, B1633, B1697 and B1698 may be output at this time, but they are not related to this check.

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

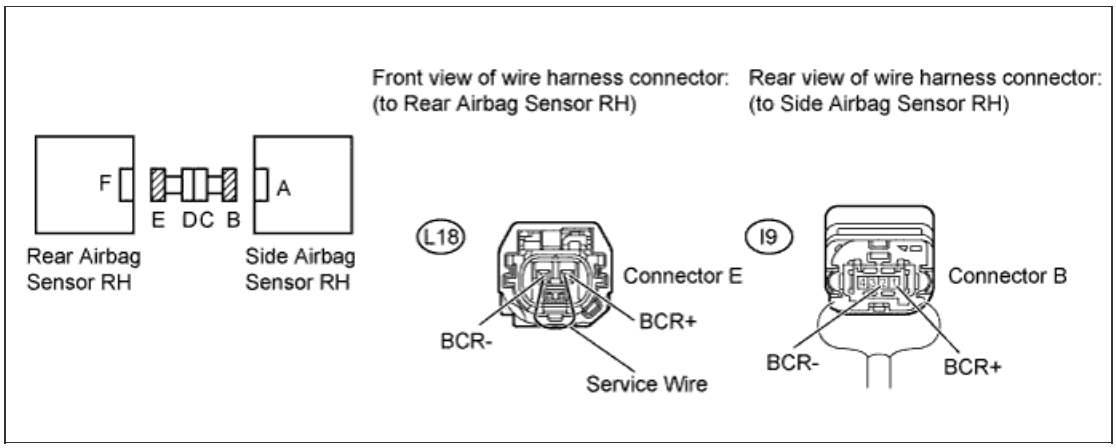
k. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

5.CHECK REAR AIRBAG SENSOR RH CIRCUIT



a. Disconnect the connectors from the side airbag sensor RH and rear airbag sensor RH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector E.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 7

OK

6.CHECK REAR AIRBAG SENSOR RH

a. Connect the connectors to the side airbag sensor RH.

b. Temporarily replace the rear airbag sensor RH with a new one.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

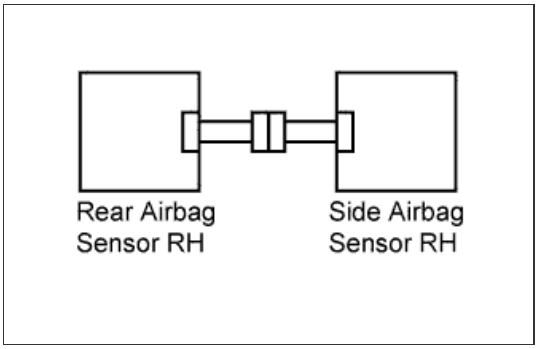
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



OK:

DTC B1632 and B1633 is not output.

HINT:

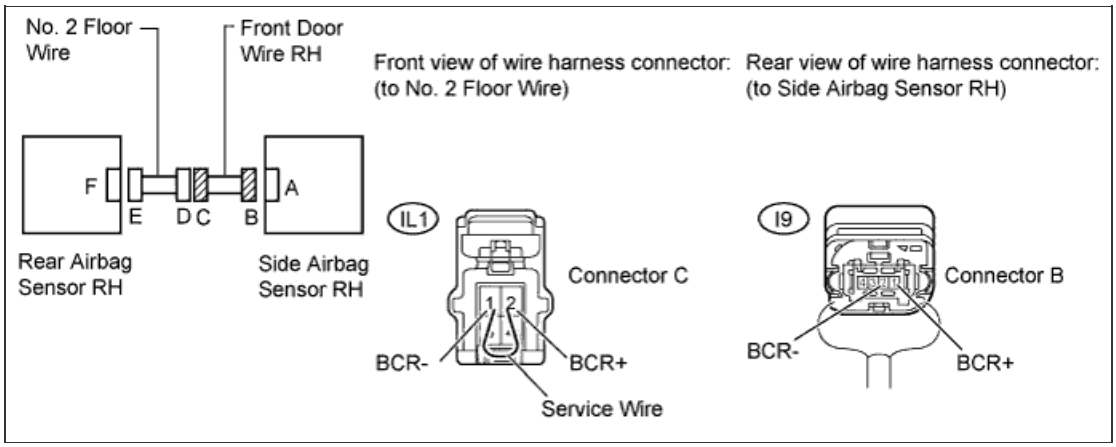
Codes other than DTC B1632 and B1633 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR RH (Click here)

7.CHECK FRONT DOOR WIRE RH (SIDE AIRBAG SENSOR RH - NO. 2 FLOOR WIRE)



a. Disconnect the front door wire RH connectors from the No. 2 floor wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FRONT DOOR WIRE RH

OK

REPLACE NO. 2 FLOOR WIRE

8.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor, the side airbag sensor LH and rear airbag sensor LH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

9.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor, side airbag sensor LH and rear airbag sensor LH.

b. Check that the connectors (on the center airbag sensor side, the rear airbag sensor LH side and side airbag sensor LH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

10.CHECK REAR AIRBAG SENSOR LH

a. Connect the connector to the center airbag sensor.

b. Temporarily replace the rear airbag sensor LH with a new one.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

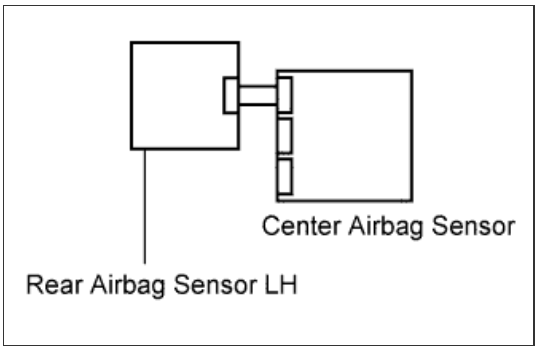
h. Check for DTCs (Click here).

OK:

DTC B1697 and B1698 are not output.

HINT:

Codes other than DTC B1697 and B1698 may be output at this time, but they are not related to this check.

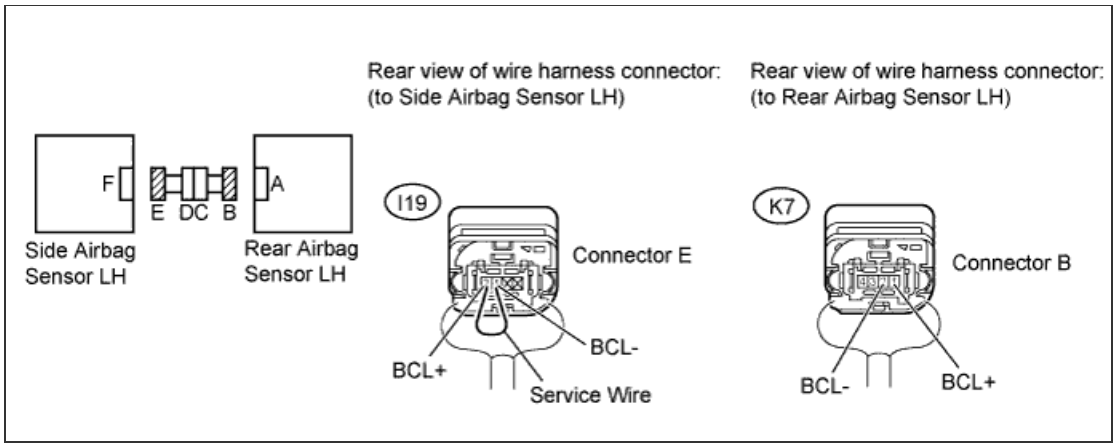


NG → Go to step 11

OK

REPLACE REAR AIRBAG SENSOR LH (Click here)

11.CHECK SIDE AIRBAG SENSOR LH CIRCUIT



a. Turn the engine switch off.

b. Disconnect the connectors from the side airbag sensor LH and rear airbag sensor LH.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

i. Disconnect the service wire from connector E.

j. Measure the resistance according to the value(s) in the table below.

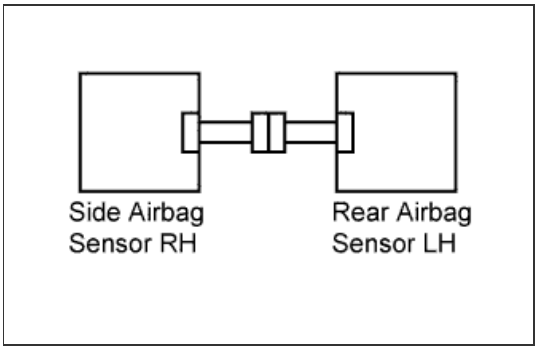
Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → Go to step 13

OK

12.CHECK SIDE AIRBAG SENSOR LH



a. Connect the connectors to the rear airbag sensor LH.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1632, B1633, B1697 and B1698 are not output	A
DTC B1632 or B1633 is output	B
DTC B1697 or B1698 is output	C

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

k. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

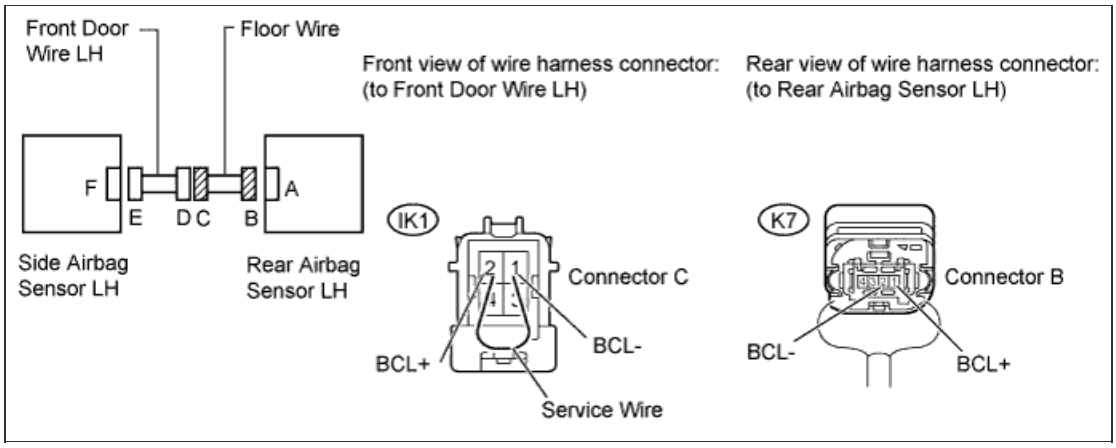
A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR LH (Click here)

C

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

13.CHECK FLOOR WIRE (SIDE AIRBAG SENSOR LH - FRONT DOOR WIRE LH)



a. Disconnect the floor wire connector from the front door wire LH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

REPLACE FRONT DOOR WIRE LH

DTC B1840/59 Short in Curtain Shield Squib RH 2nd Step Circuit

DTC B1841/59 Open in Curtain Shield Squib RH 2nd Step Circuit

DTC B1842/59 Short to GND in Curtain Shield Squib RH 2nd Step Circuit

DTC B1843/59 Short to B+ in Curtain Shield Squib RH 2nd Step Circuit

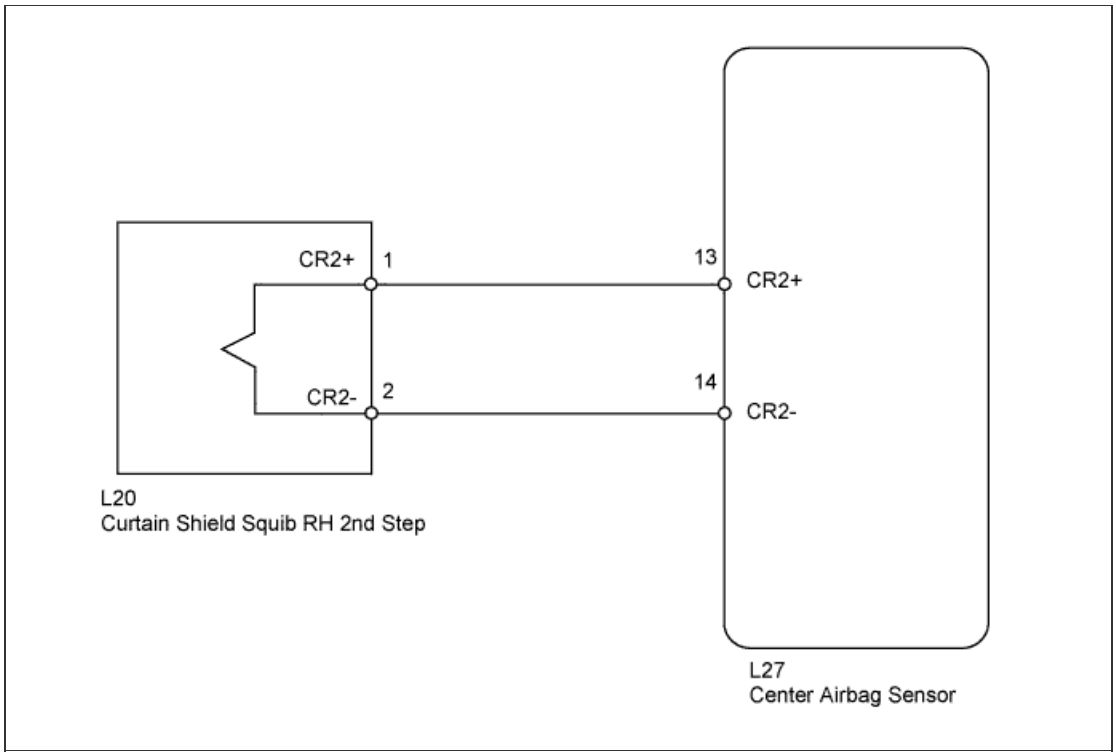
for Preparation Click here

DESCRIPTION

The curtain shield squib RH 2nd step circuit consists of the center airbag sensor and the curtain shield airbag RH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib RH 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1840/59	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib RH 2nd step circuit during the primary check. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly
B1841/59	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib RH 2nd step circuit for 2 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly
B1842/59	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib RH 2nd step circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly
B1843/59	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib RH 2nd step circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG RH (CURTAIN SHIELD SQUIB RH 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the curtain shield squib RH 2nd step.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

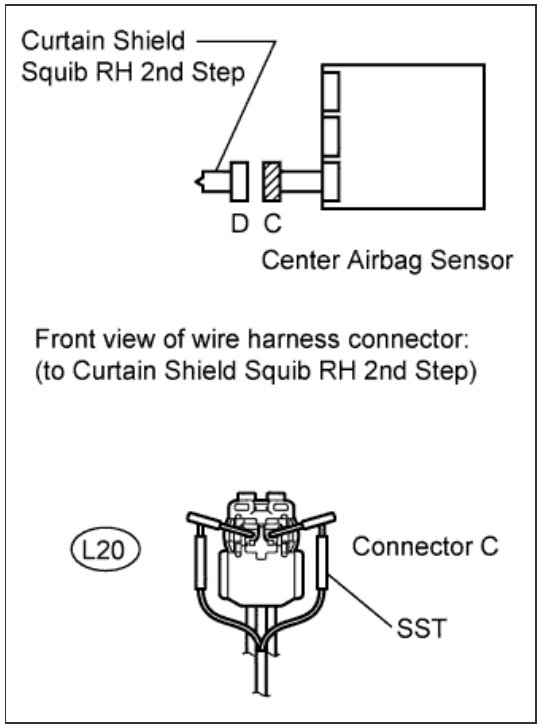
Never connect the tester to the curtain shield airbag RH (curtain shield squib RH 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1840, B1841, B1842 or B1843 is not output.

HINT:

Codes other than DTC B1840, B1841, B1842 and B1843 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY RH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the curtain shield squib RH 2nd step side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (CURTAIN SHIELD AIRBAG RH 2ND STEP CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L20-1 (CR2+) - Body ground	Engine switch on (IG)	Below 1 V
L20-2 (CR2-) - Body ground	Engine switch on (IG)	Below 1 V

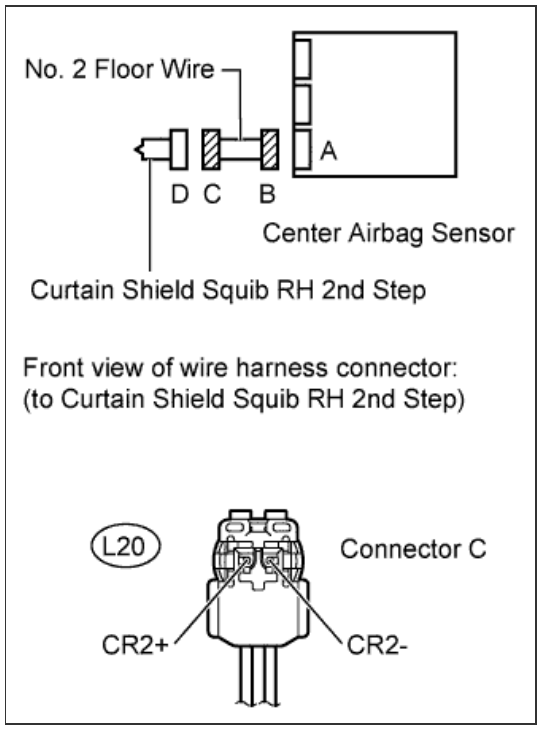
d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L20-1 (CR2+) - L20-2 (CR2-)	Always	Below 1 Ω



g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L20-1 (CR2+) - L20-2 (CR2-)	Always	1 MΩ or higher
L20-1 (CR2+) - Body ground	Always	1 MΩ or higher
L20-2 (CR2-) -	Always	1 MΩ or higher

Body ground		

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield squib RH 2nd step and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

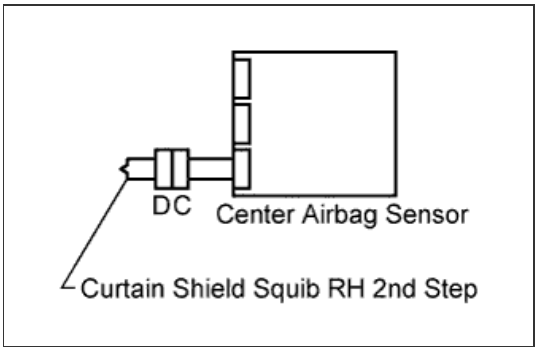
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1840, B1841, B1842 or B1843 is not output.

HINT:

Codes other than DTC B1840, B1841, B1842 and B1843 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1632/81 Lost Communication with Rear Airbag Sensor RH

DTC B1633/81 Rear Airbag Sensor Assembly RH Initialization Incomplete

DTC B1697/82 Lost Communication with Door Side Airbag Sensor LH

DTC B1698/82 Door Side Airbag Sensor LH Initialization Incomplete

for Preparation Click here

DESCRIPTION

HINT:

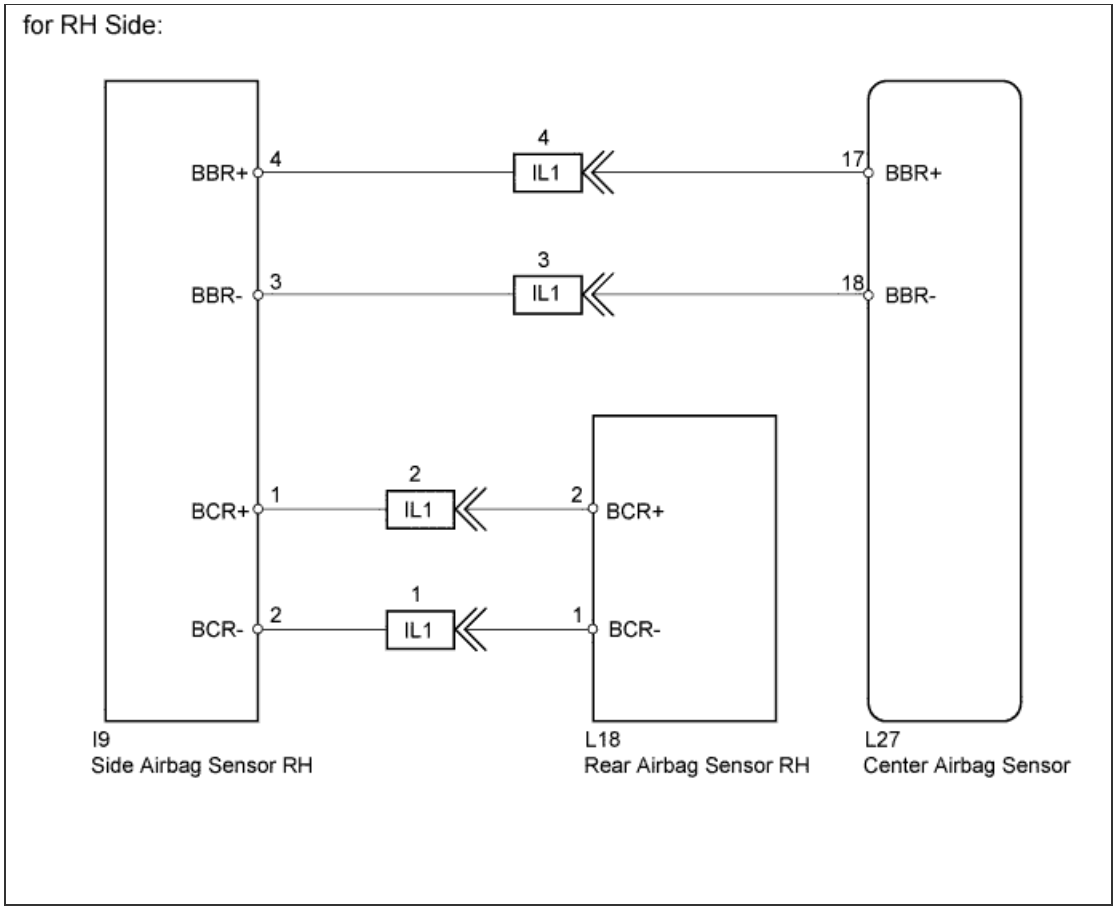
"Door side airbag sensor LH" refers to the side airbag sensor LH.

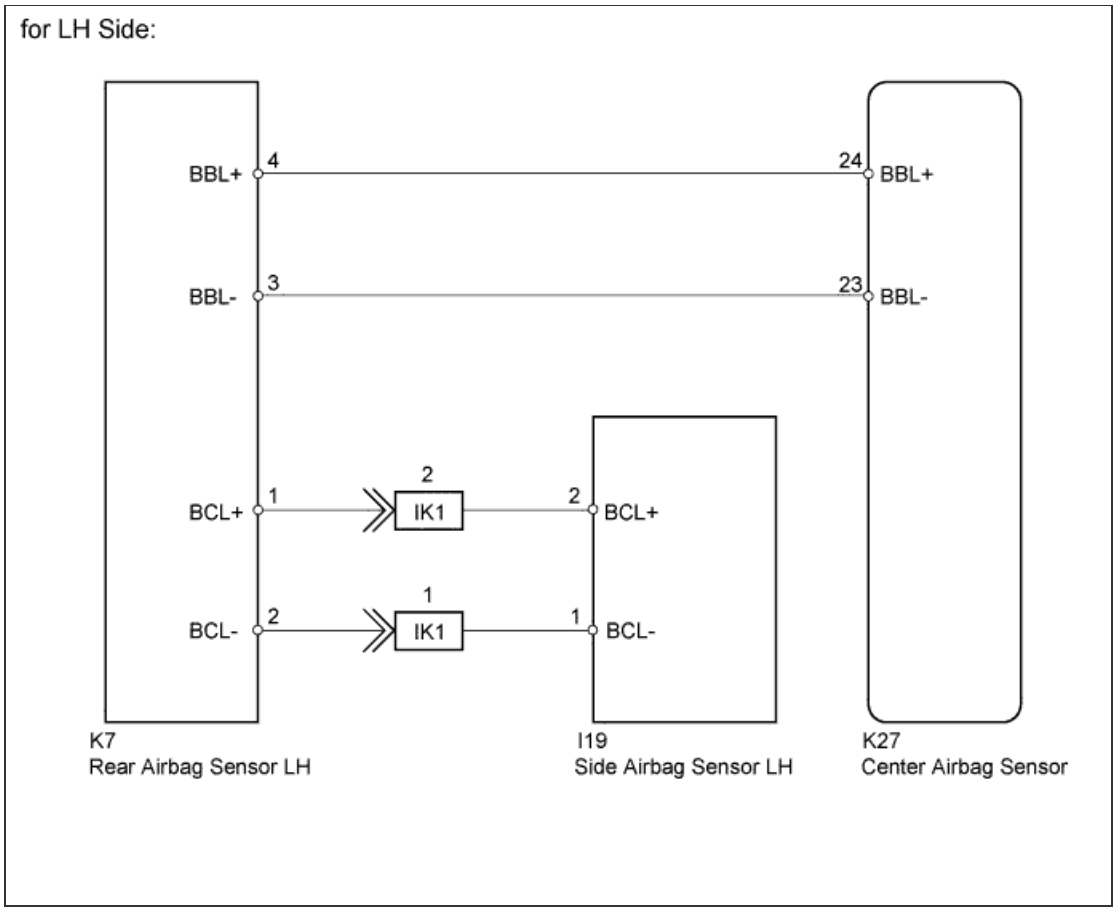
- The circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH) is composed of the center airbag sensor, side airbag sensor LH or RH, and rear airbag sensor LH or RH.
  The side airbag sensor LH or RH and rear airbag sensor LH or RH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1632/81 or B1697/82 is stored when a malfunction is detected in the circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH).

DTC Code	DTC Detection Condition	Trouble Area
B1632/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly
B1633/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly
B1697/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction.	• Floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

	• A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	
B1698/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction. • A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FOR DTC

a. Turn the engine switch on (IG).

b. Clear the DTCs stored in the memory (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1632, B1633, B1697 and B1698 are not output	A
DTC B1697 or B1698 is output	B
DTC B1632 or B1633 is output	C

HINT:

Codes other than DTC B1632, B1633, B1697 and B1698 may be output at this time, but they are not related to this check.

A	USE SIMULATION METHOD TO CHECK (Click here)
B	Go to step 8
C	

2.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor, the side airbag sensor RH and rear airbag sensor RH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

3.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor, rear airbag sensor RH and side airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side, the rear airbag sensor RH side and side airbag sensor RH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

4.CHECK SIDE AIRBAG SENSOR RH

a. Connect the connectors to the center airbag sensor.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

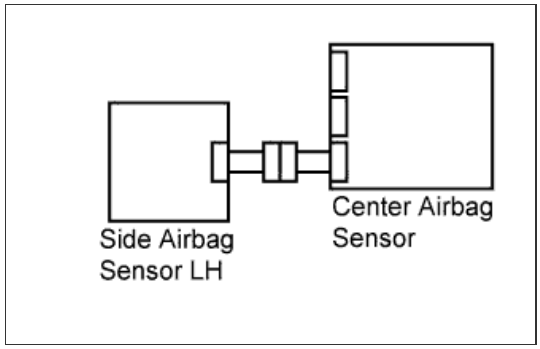
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



Result

Result	Proceed to
DTC B1632, B1633, B1697 and B1698 are not output	A
DTC B1697 or B1698 is output	B
DTC B1632 or B1633 is output	C

HINT:

Codes other than DTC B1632, B1633, B1697 and B1698 may be output at this time, but they are not related to this check.

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

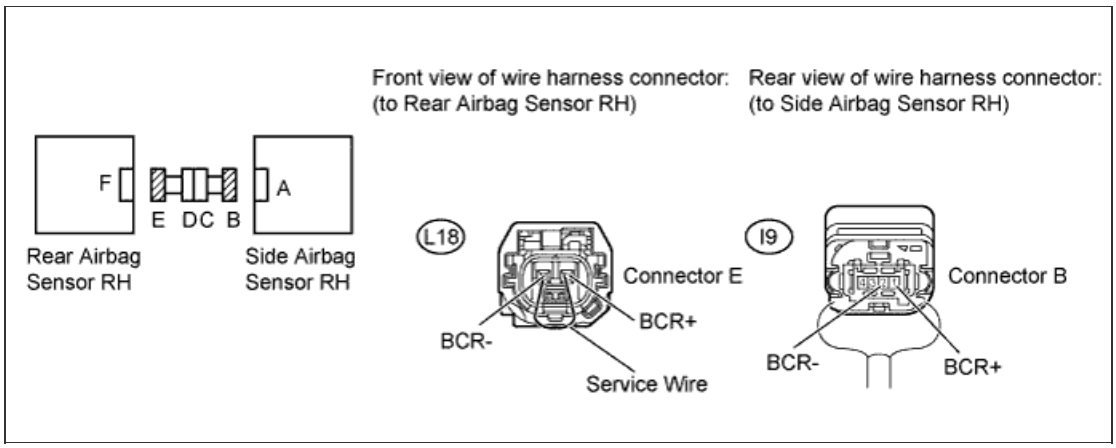
k. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

5.CHECK REAR AIRBAG SENSOR RH CIRCUIT



a. Disconnect the connectors from the side airbag sensor RH and rear airbag sensor RH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector E.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 7

OK

6.CHECK REAR AIRBAG SENSOR RH

a. Connect the connectors to the side airbag sensor RH.

b. Temporarily replace the rear airbag sensor RH with a new one.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

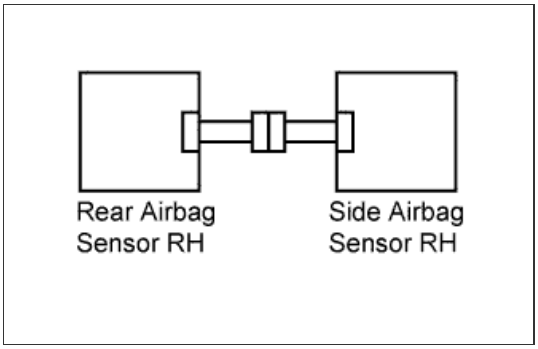
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



OK:

DTC B1632 and B1633 is not output.

HINT:

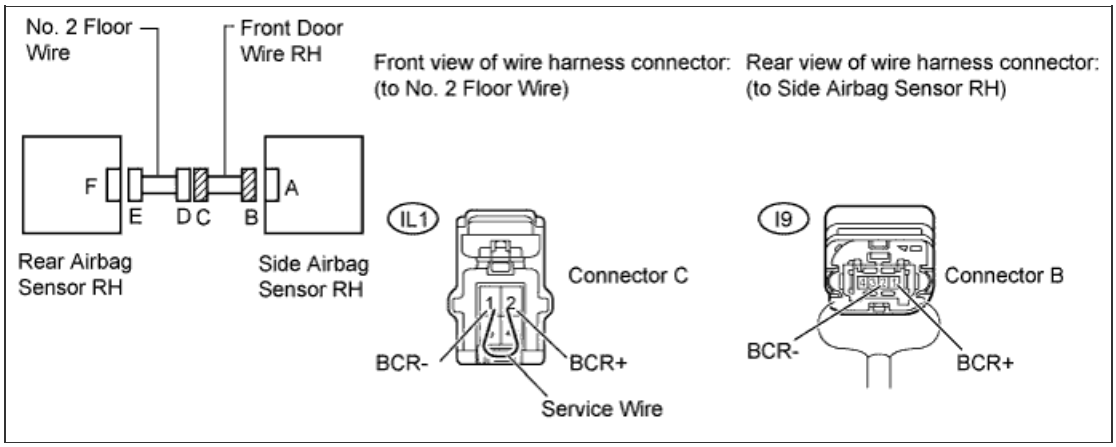
Codes other than DTC B1632 and B1633 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR RH (Click here)

7.CHECK FRONT DOOR WIRE RH (SIDE AIRBAG SENSOR RH - NO. 2 FLOOR WIRE)



a. Disconnect the front door wire RH connectors from the No. 2 floor wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FRONT DOOR WIRE RH

OK

REPLACE NO. 2 FLOOR WIRE

8.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor, the side airbag sensor LH and rear airbag sensor LH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

9.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor, side airbag sensor LH and rear airbag sensor LH.

b. Check that the connectors (on the center airbag sensor side, the rear airbag sensor LH side and side airbag sensor LH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

10.CHECK REAR AIRBAG SENSOR LH

a. Connect the connector to the center airbag sensor.

b. Temporarily replace the rear airbag sensor LH with a new one.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

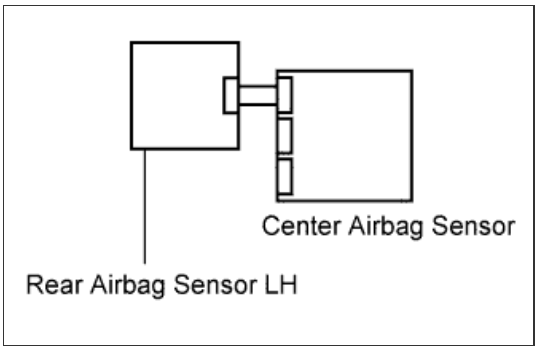
h. Check for DTCs (Click here).

OK:

DTC B1697 and B1698 are not output.

HINT:

Codes other than DTC B1697 and B1698 may be output at this time, but they are not related to this check.

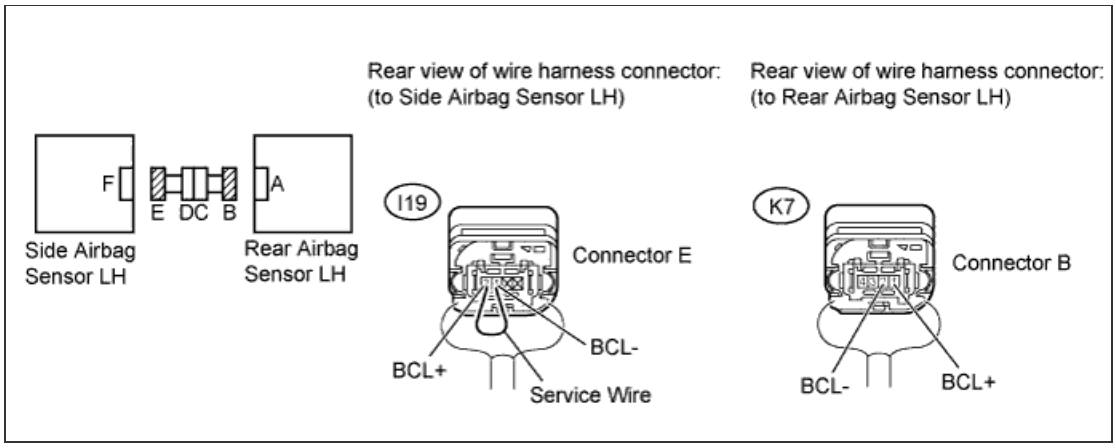


NG → Go to step 11

OK

REPLACE REAR AIRBAG SENSOR LH (Click here)

11.CHECK SIDE AIRBAG SENSOR LH CIRCUIT



a. Turn the engine switch off.

b. Disconnect the connectors from the side airbag sensor LH and rear airbag sensor LH.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

i. Disconnect the service wire from connector E.

j. Measure the resistance according to the value(s) in the table below.

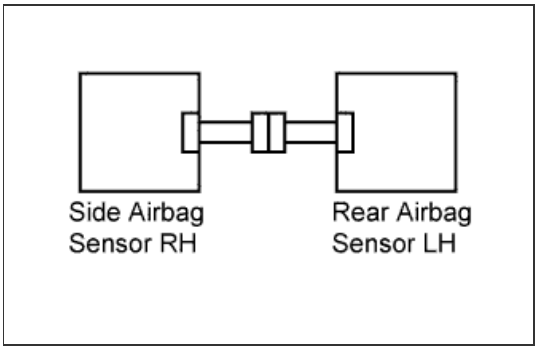
Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → Go to step 13

OK

12.CHECK SIDE AIRBAG SENSOR LH



a. Connect the connectors to the rear airbag sensor LH.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1632, B1633, B1697 and B1698 are not output	A
DTC B1632 or B1633 is output	B
DTC B1697 or B1698 is output	C

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

k. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

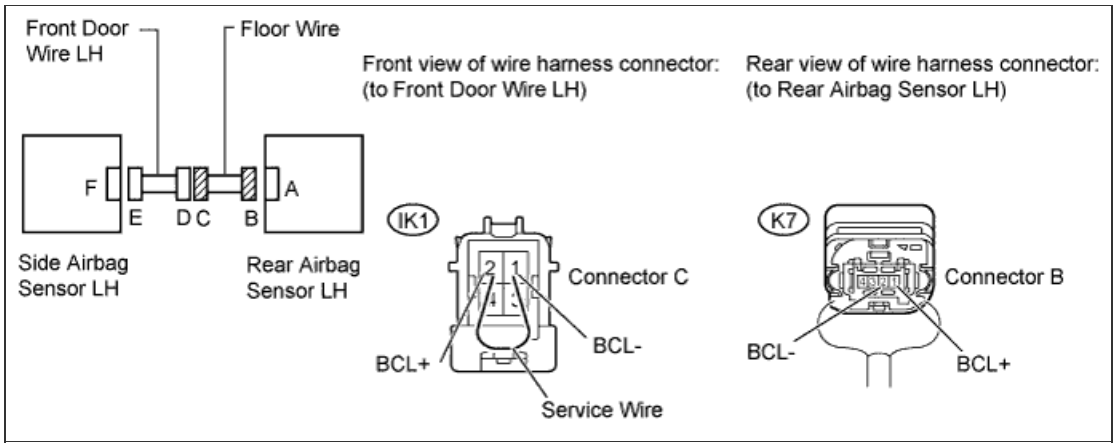
A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR LH (Click here)

C

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

13.CHECK FLOOR WIRE (SIDE AIRBAG SENSOR LH - FRONT DOOR WIRE LH)



a. Disconnect the floor wire connector from the front door wire LH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

REPLACE FRONT DOOR WIRE LH

DTC B1840/59 Short in Curtain Shield Squib RH 2nd Step Circuit

DTC B1841/59 Open in Curtain Shield Squib RH 2nd Step Circuit

DTC B1842/59 Short to GND in Curtain Shield Squib RH 2nd Step Circuit

DTC B1843/59 Short to B+ in Curtain Shield Squib RH 2nd Step Circuit

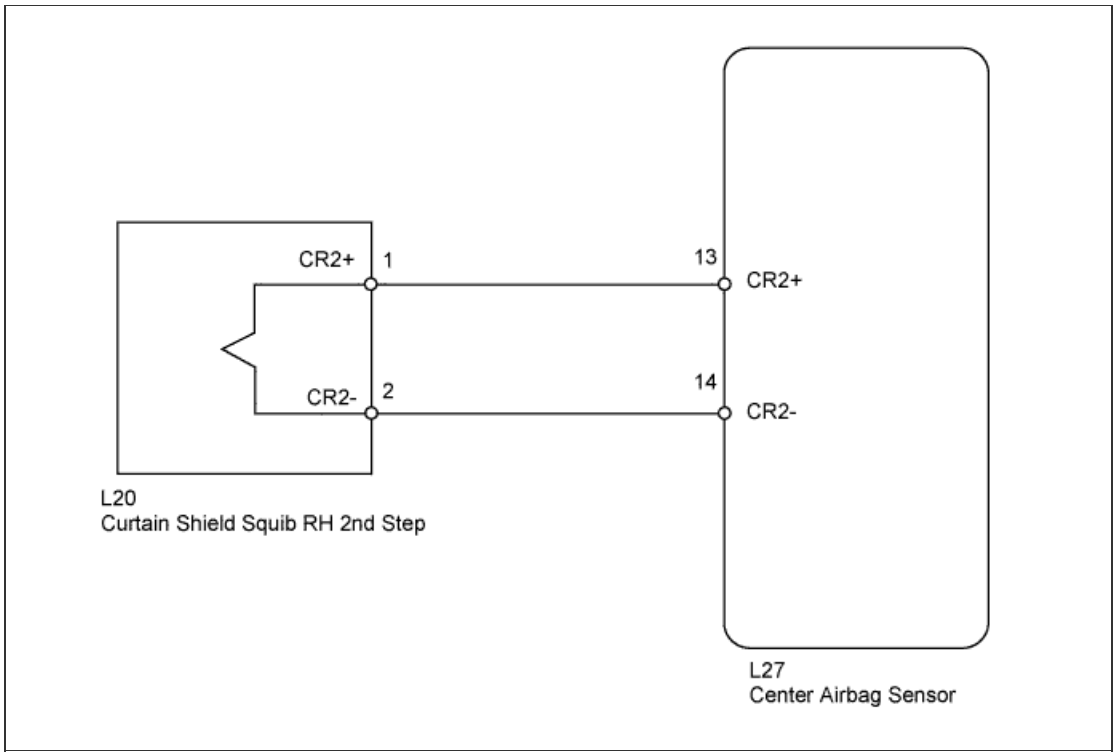
for Preparation Click here

DESCRIPTION

The curtain shield squib RH 2nd step circuit consists of the center airbag sensor and the curtain shield airbag RH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib RH 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1840/59	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib RH 2nd step circuit during the primary check. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly
B1841/59	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib RH 2nd step circuit for 2 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly
B1842/59	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib RH 2nd step circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly
B1843/59	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib RH 2nd step circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG RH (CURTAIN SHIELD SQUIB RH 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the curtain shield squib RH 2nd step.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

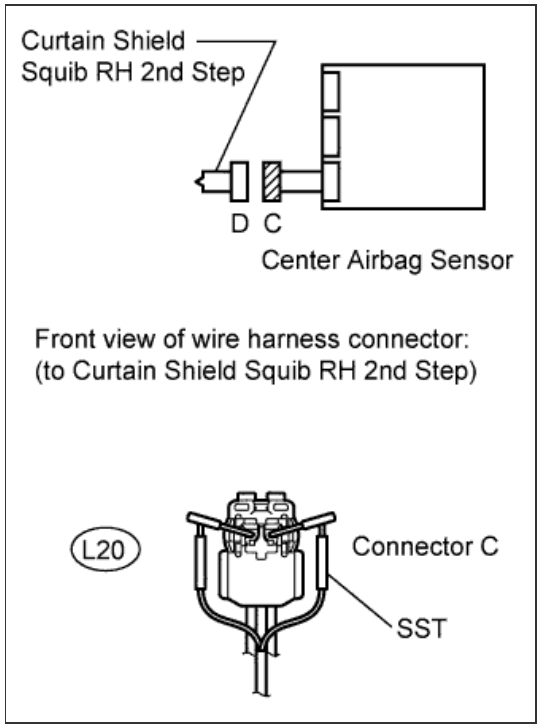
Never connect the tester to the curtain shield airbag RH (curtain shield squib RH 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1840, B1841, B1842 or B1843 is not output.

HINT:

Codes other than DTC B1840, B1841, B1842 and B1843 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY RH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the curtain shield squib RH 2nd step side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (CURTAIN SHIELD AIRBAG RH 2ND STEP CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L20-1 (CR2+) - Body ground	Engine switch on (IG)	Below 1 V
L20-2 (CR2-) - Body ground	Engine switch on (IG)	Below 1 V

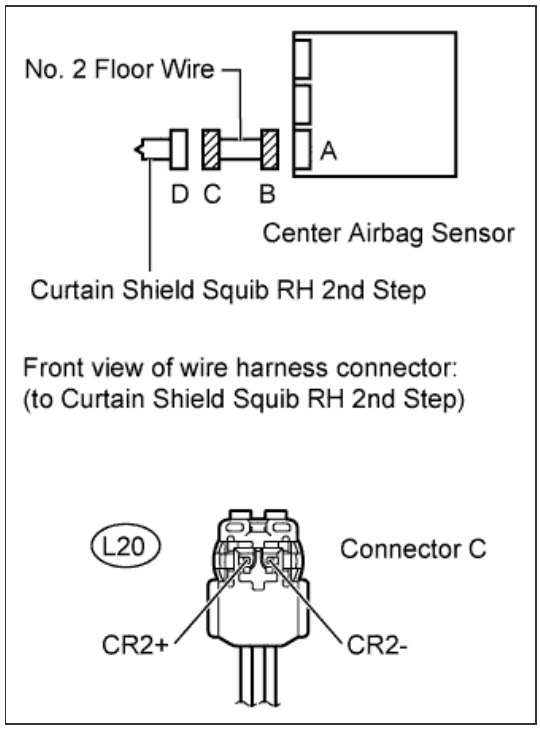
d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L20-1 (CR2+) - L20-2 (CR2-)	Always	Below 1 Ω



g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L20-1 (CR2+) - L20-2 (CR2-)	Always	1 MΩ or higher
L20-1 (CR2+) - Body ground	Always	1 MΩ or higher
L20-2 (CR2-) -	Always	1 MΩ or higher

Body ground		

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield squib RH 2nd step and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

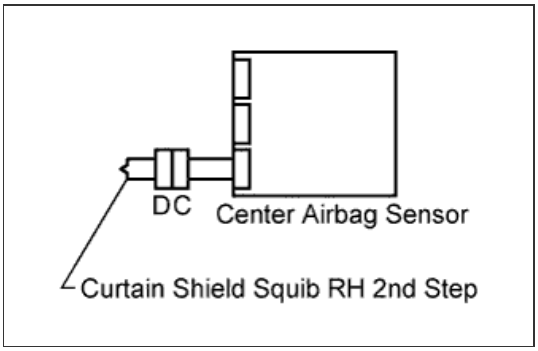
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1840, B1841, B1842 or B1843 is not output.

HINT:

Codes other than DTC B1840, B1841, B1842 and B1843 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1632/81 Lost Communication with Rear Airbag Sensor RH

DTC B1633/81 Rear Airbag Sensor Assembly RH Initialization Incomplete

DTC B1697/82 Lost Communication with Door Side Airbag Sensor LH

DTC B1698/82 Door Side Airbag Sensor LH Initialization Incomplete

for Preparation Click here

DESCRIPTION

HINT:

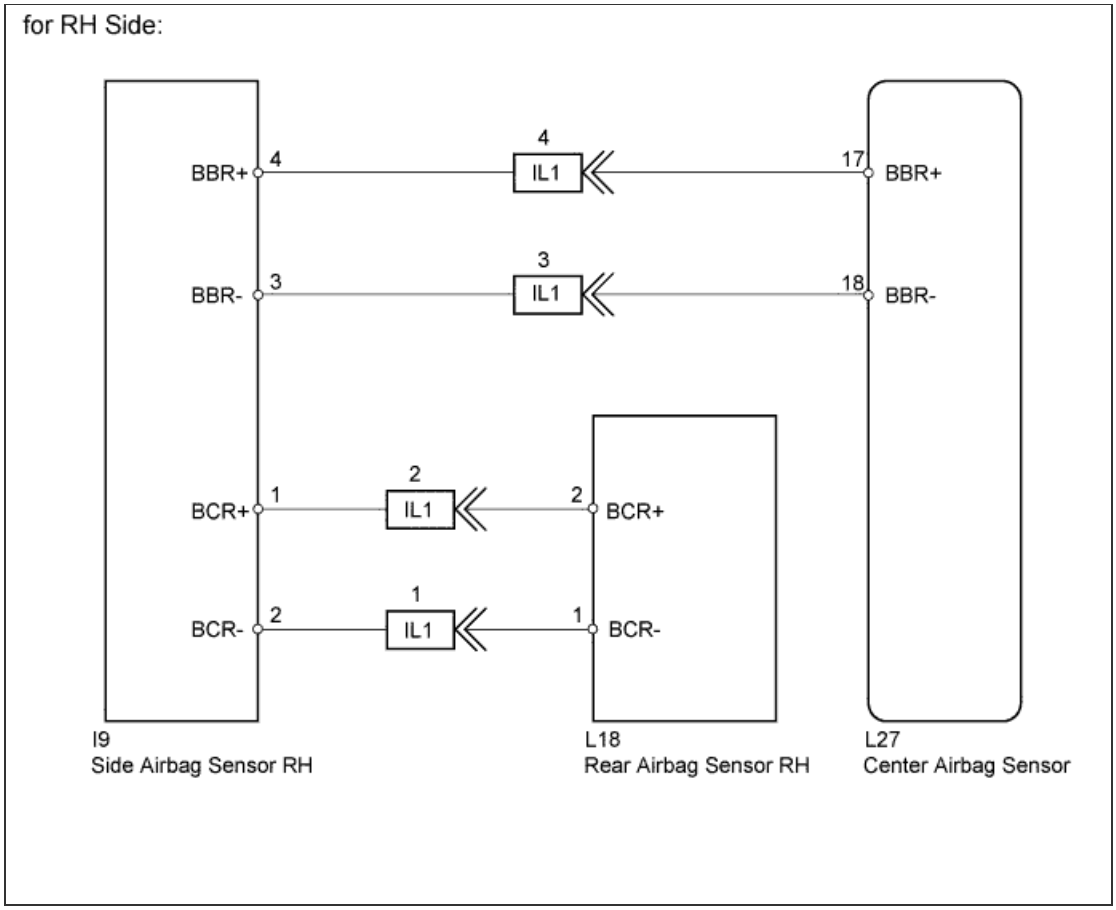
"Door side airbag sensor LH" refers to the side airbag sensor LH.

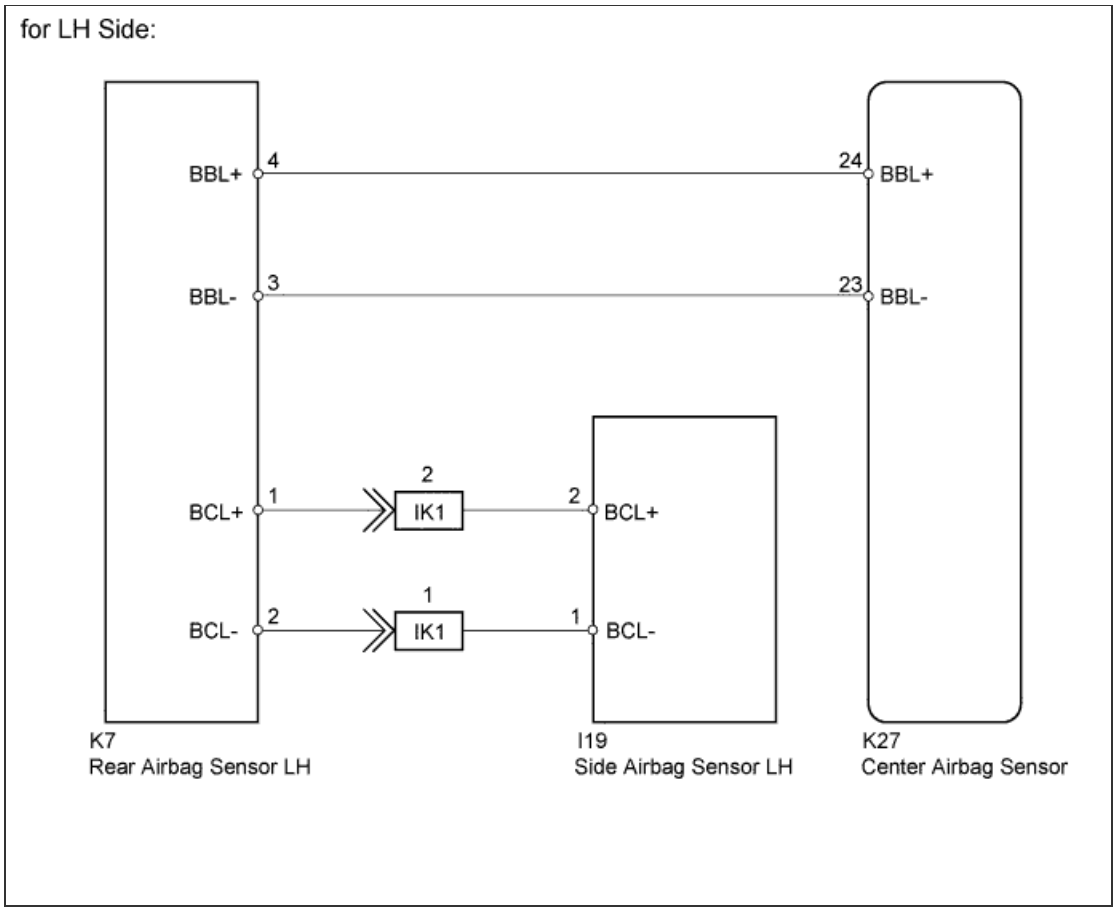
- The circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH) is composed of the center airbag sensor, side airbag sensor LH or RH, and rear airbag sensor LH or RH.
  The side airbag sensor LH or RH and rear airbag sensor LH or RH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1632/81 or B1697/82 is stored when a malfunction is detected in the circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH).

DTC Code	DTC Detection Condition	Trouble Area
B1632/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly
B1633/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly
B1697/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction.	• Floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

	• A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	
B1698/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction. • A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FOR DTC

a. Turn the engine switch on (IG).

b. Clear the DTCs stored in the memory (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1632, B1633, B1697 and B1698 are not output	A
DTC B1697 or B1698 is output	B
DTC B1632 or B1633 is output	C

HINT:

Codes other than DTC B1632, B1633, B1697 and B1698 may be output at this time, but they are not related to this check.

A	USE SIMULATION METHOD TO CHECK (Click here)
B	Go to step 8
C	

2.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor, the side airbag sensor RH and rear airbag sensor RH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

3.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor, rear airbag sensor RH and side airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side, the rear airbag sensor RH side and side airbag sensor RH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

4.CHECK SIDE AIRBAG SENSOR RH

a. Connect the connectors to the center airbag sensor.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

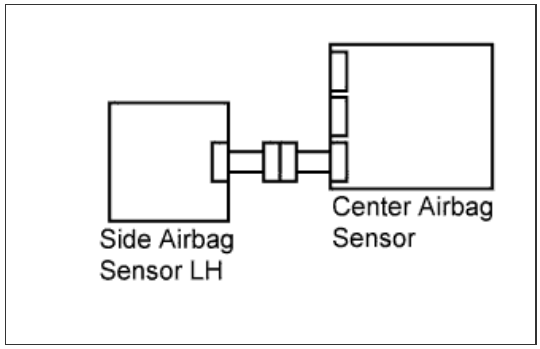
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



Result

Result	Proceed to
DTC B1632, B1633, B1697 and B1698 are not output	A
DTC B1697 or B1698 is output	B
DTC B1632 or B1633 is output	C

HINT:

Codes other than DTC B1632, B1633, B1697 and B1698 may be output at this time, but they are not related to this check.

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

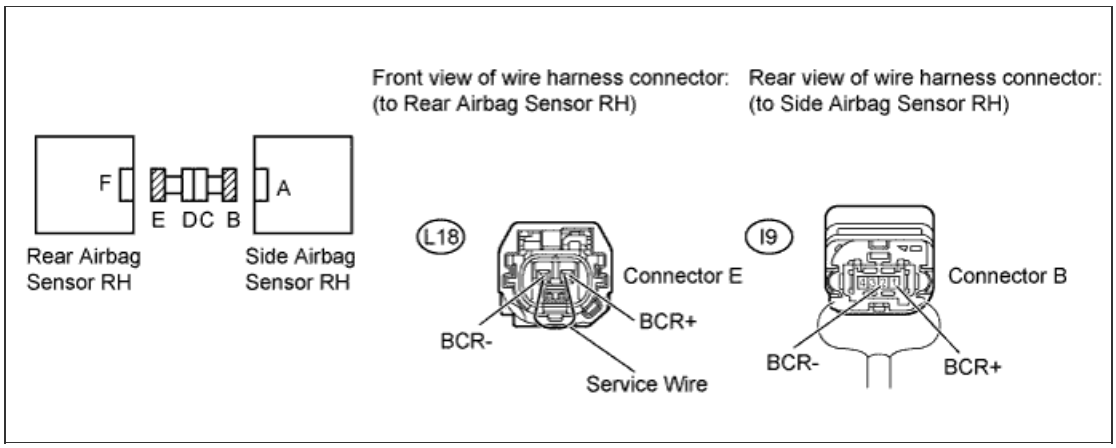
k. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

5.CHECK REAR AIRBAG SENSOR RH CIRCUIT



a. Disconnect the connectors from the side airbag sensor RH and rear airbag sensor RH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector E.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 7

OK

6.CHECK REAR AIRBAG SENSOR RH

a. Connect the connectors to the side airbag sensor RH.

b. Temporarily replace the rear airbag sensor RH with a new one.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

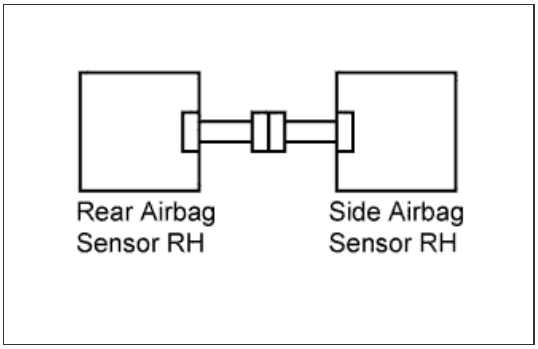
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



OK:

DTC B1632 and B1633 is not output.

HINT:

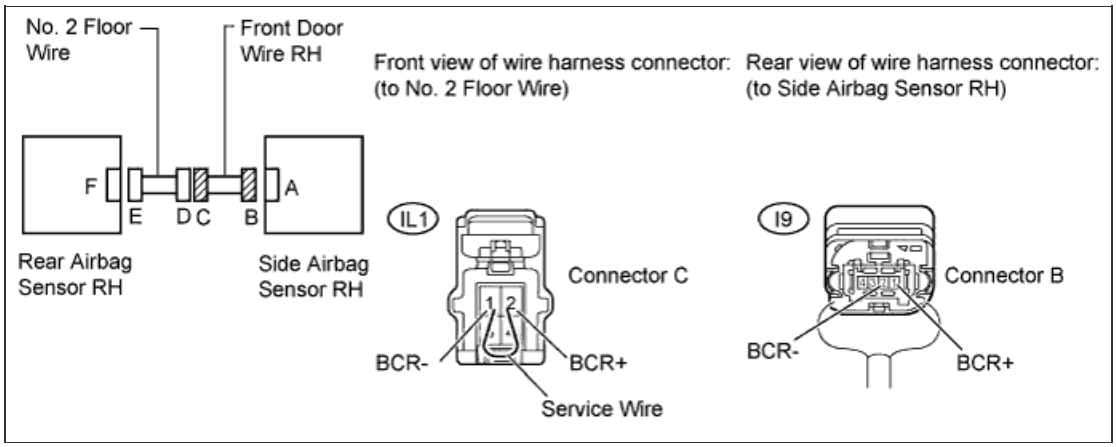
Codes other than DTC B1632 and B1633 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR RH (Click here)

7.CHECK FRONT DOOR WIRE RH (SIDE AIRBAG SENSOR RH - NO. 2 FLOOR WIRE)



a. Disconnect the front door wire RH connectors from the No. 2 floor wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FRONT DOOR WIRE RH

OK

REPLACE NO. 2 FLOOR WIRE

8.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor, the side airbag sensor LH and rear airbag sensor LH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

9.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor, side airbag sensor LH and rear airbag sensor LH.

b. Check that the connectors (on the center airbag sensor side, the rear airbag sensor LH side and side airbag sensor LH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

10.CHECK REAR AIRBAG SENSOR LH

a. Connect the connector to the center airbag sensor.

b. Temporarily replace the rear airbag sensor LH with a new one.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

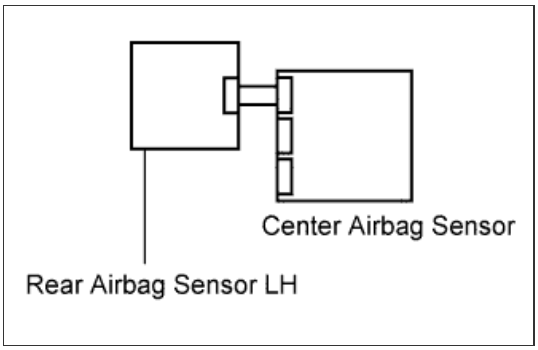
h. Check for DTCs (Click here).

OK:

DTC B1697 and B1698 are not output.

HINT:

Codes other than DTC B1697 and B1698 may be output at this time, but they are not related to this check.

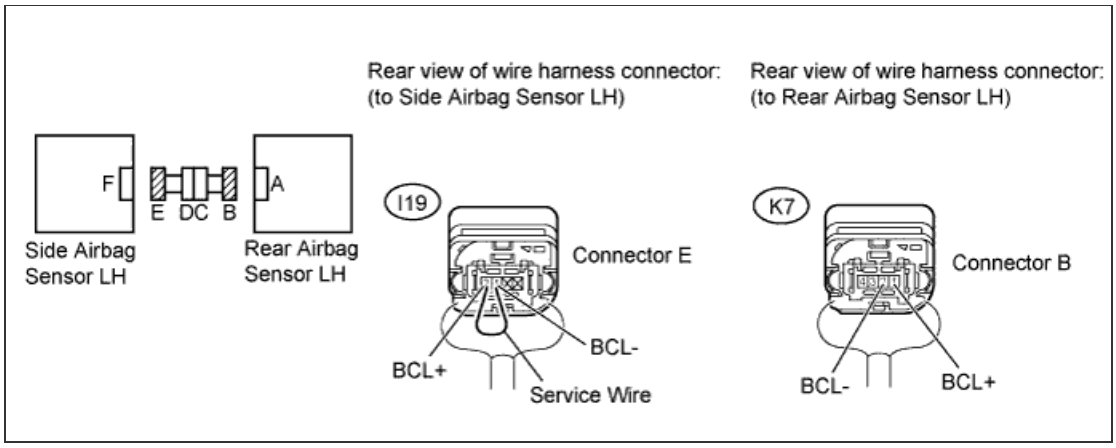


NG → Go to step 11

OK

REPLACE REAR AIRBAG SENSOR LH (Click here)

11.CHECK SIDE AIRBAG SENSOR LH CIRCUIT



a. Turn the engine switch off.

b. Disconnect the connectors from the side airbag sensor LH and rear airbag sensor LH.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

i. Disconnect the service wire from connector E.

j. Measure the resistance according to the value(s) in the table below.

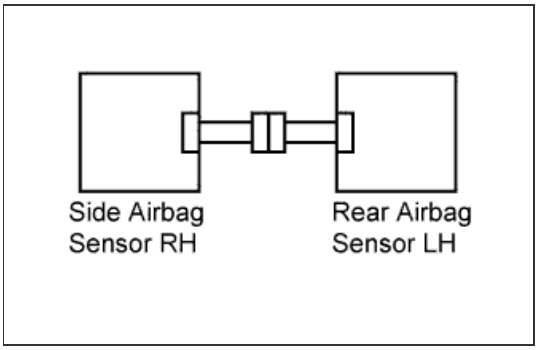
Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → Go to step 13

OK

12.CHECK SIDE AIRBAG SENSOR LH



a. Connect the connectors to the rear airbag sensor LH.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1632, B1633, B1697 and B1698 are not output	A
DTC B1632 or B1633 is output	B
DTC B1697 or B1698 is output	C

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

k. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

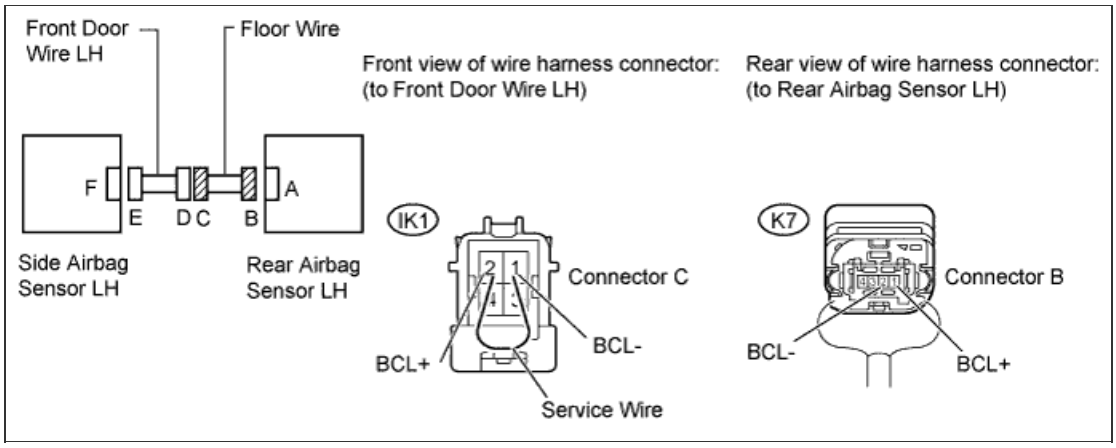
A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR LH (Click here)

C

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

13.CHECK FLOOR WIRE (SIDE AIRBAG SENSOR LH - FRONT DOOR WIRE LH)



a. Disconnect the floor wire connector from the front door wire LH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

REPLACE FRONT DOOR WIRE LH

DTC B1840/59 Short in Curtain Shield Squib RH 2nd Step Circuit

DTC B1841/59 Open in Curtain Shield Squib RH 2nd Step Circuit

DTC B1842/59 Short to GND in Curtain Shield Squib RH 2nd Step Circuit

DTC B1843/59 Short to B+ in Curtain Shield Squib RH 2nd Step Circuit

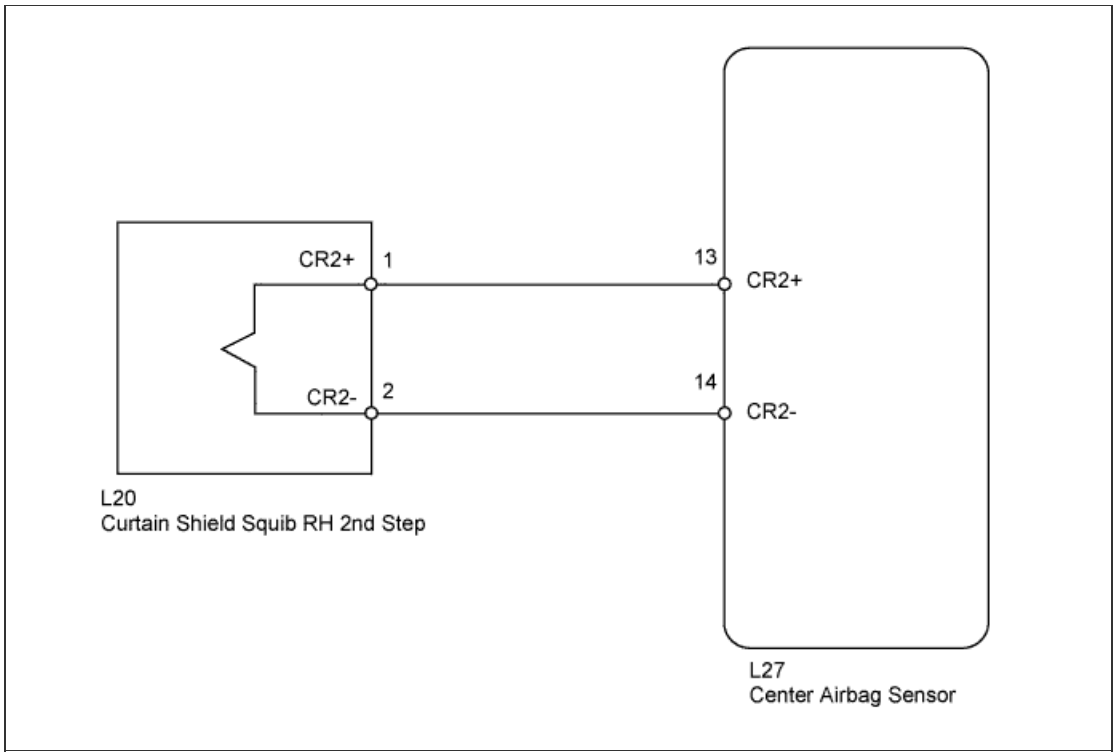
for Preparation Click here

DESCRIPTION

The curtain shield squib RH 2nd step circuit consists of the center airbag sensor and the curtain shield airbag RH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib RH 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1840/59	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib RH 2nd step circuit during the primary check. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly
B1841/59	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib RH 2nd step circuit for 2 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly
B1842/59	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib RH 2nd step circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly
B1843/59	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib RH 2nd step circuit for 0.5 seconds. • A curtain shield squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Curtain shield airbag assembly RH (Curtain shield squib RH 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG RH (CURTAIN SHIELD SQUIB RH 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the curtain shield squib RH 2nd step.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

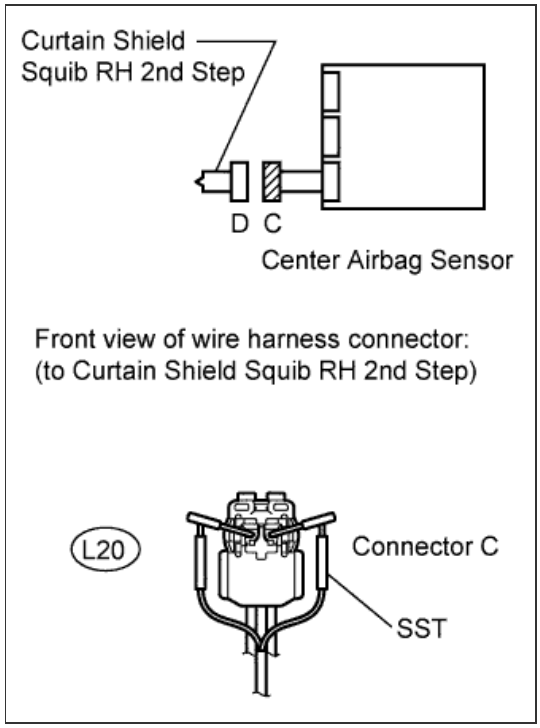
Never connect the tester to the curtain shield airbag RH (curtain shield squib RH 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1840, B1841, B1842 or B1843 is not output.

HINT:

Codes other than DTC B1840, B1841, B1842 and B1843 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY RH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the curtain shield squib RH 2nd step side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (CURTAIN SHIELD AIRBAG RH 2ND STEP CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L20-1 (CR2+) - Body ground	Engine switch on (IG)	Below 1 V
L20-2 (CR2-) - Body ground	Engine switch on (IG)	Below 1 V

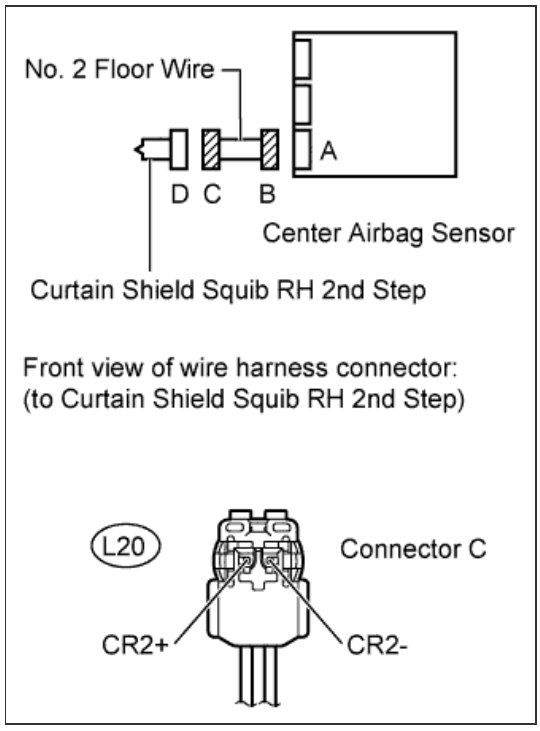
d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L20-1 (CR2+) - L20-2 (CR2-)	Always	Below 1 Ω



g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L20-1 (CR2+) - L20-2 (CR2-)	Always	1 MΩ or higher
L20-1 (CR2+) - Body ground	Always	1 MΩ or higher
L20-2 (CR2-) -	Always	1 MΩ or higher

Body ground		

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield squib RH 2nd step and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

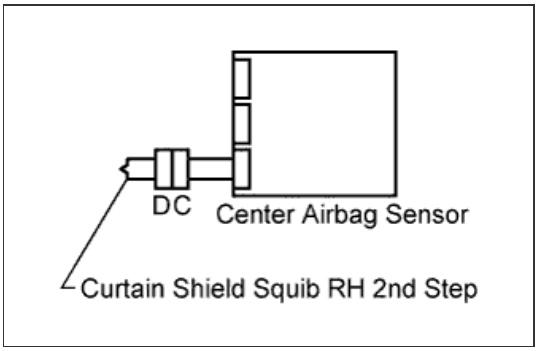
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1840, B1841, B1842 or B1843 is not output.

HINT:

Codes other than DTC B1840, B1841, B1842 and B1843 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1632/81 Lost Communication with Rear Airbag Sensor RH

DTC B1633/81 Rear Airbag Sensor Assembly RH Initialization Incomplete

DTC B1697/82 Lost Communication with Door Side Airbag Sensor LH

DTC B1698/82 Door Side Airbag Sensor LH Initialization Incomplete

for Preparation Click here

DESCRIPTION

HINT:

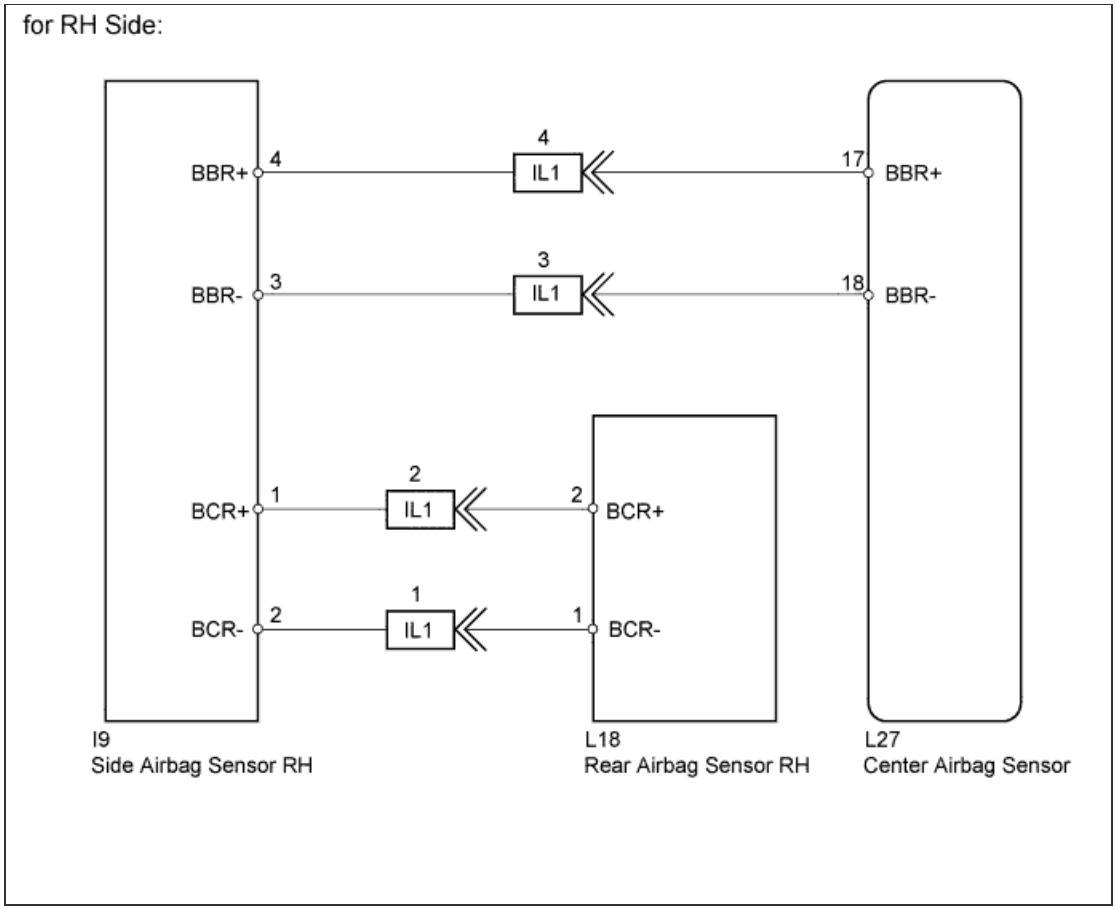
"Door side airbag sensor LH" refers to the side airbag sensor LH.

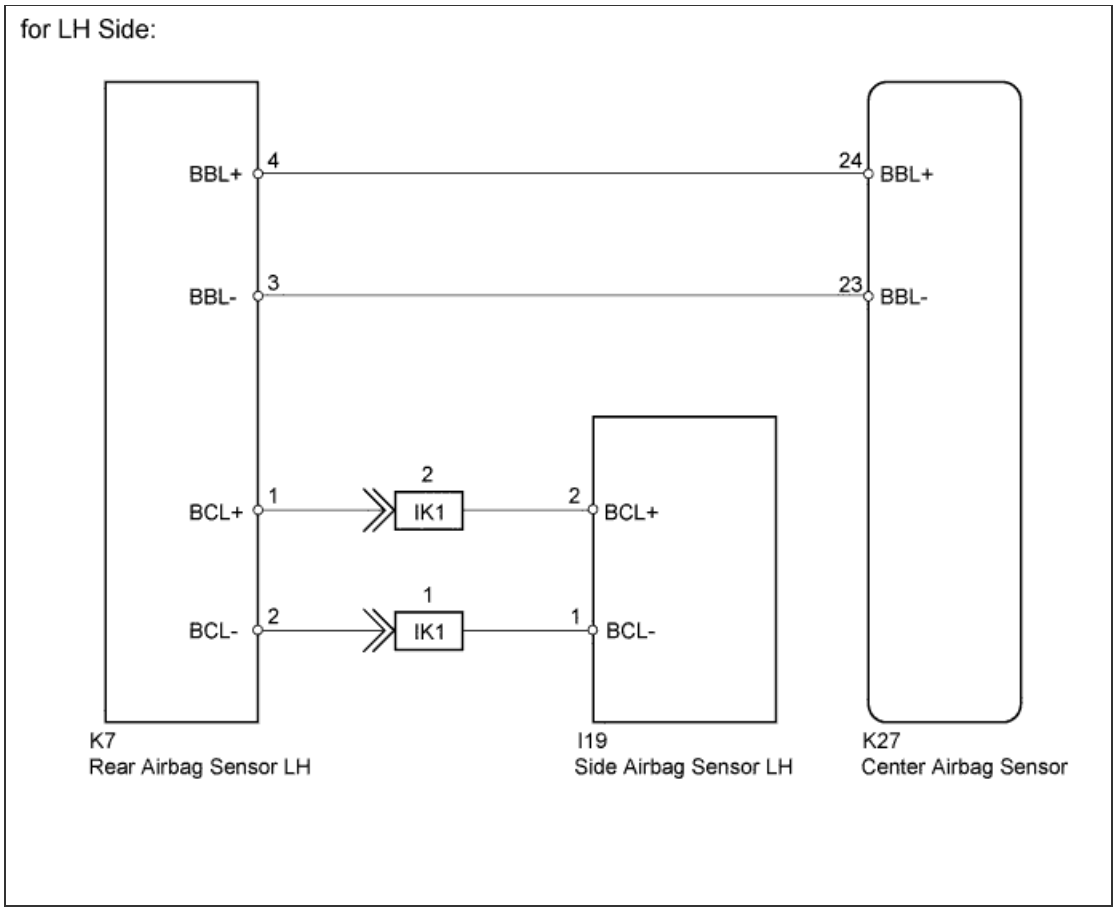
- The circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH) is composed of the center airbag sensor, side airbag sensor LH or RH, and rear airbag sensor LH or RH.
  The side airbag sensor LH or RH and rear airbag sensor LH or RH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1632/81 or B1697/82 is stored when a malfunction is detected in the circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH).

DTC Code	DTC Detection Condition	Trouble Area
B1632/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly
B1633/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly
B1697/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction.	• Floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

	• A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	
B1698/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction. • A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FOR DTC

a. Turn the engine switch on (IG).

b. Clear the DTCs stored in the memory (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1632, B1633, B1697 and B1698 are not output	A
DTC B1697 or B1698 is output	B
DTC B1632 or B1633 is output	C

HINT:

Codes other than DTC B1632, B1633, B1697 and B1698 may be output at this time, but they are not related to this check.

A	USE SIMULATION METHOD TO CHECK (Click here)
B	Go to step 8
C	

2.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor, the side airbag sensor RH and rear airbag sensor RH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

3.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor, rear airbag sensor RH and side airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side, the rear airbag sensor RH side and side airbag sensor RH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

4.CHECK SIDE AIRBAG SENSOR RH

a. Connect the connectors to the center airbag sensor.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

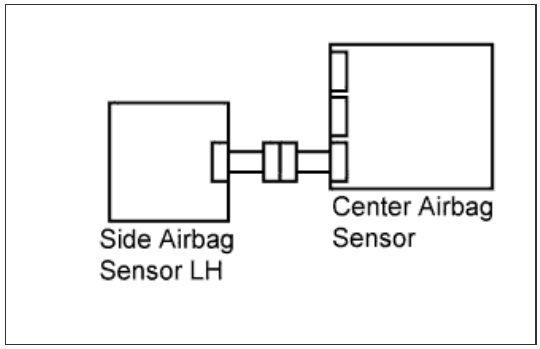
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



Result

Result	Proceed to
DTC B1632, B1633, B1697 and B1698 are not output	A
DTC B1697 or B1698 is output	B
DTC B1632 or B1633 is output	C

HINT:

Codes other than DTC B1632, B1633, B1697 and B1698 may be output at this time, but they are not related to this check.

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

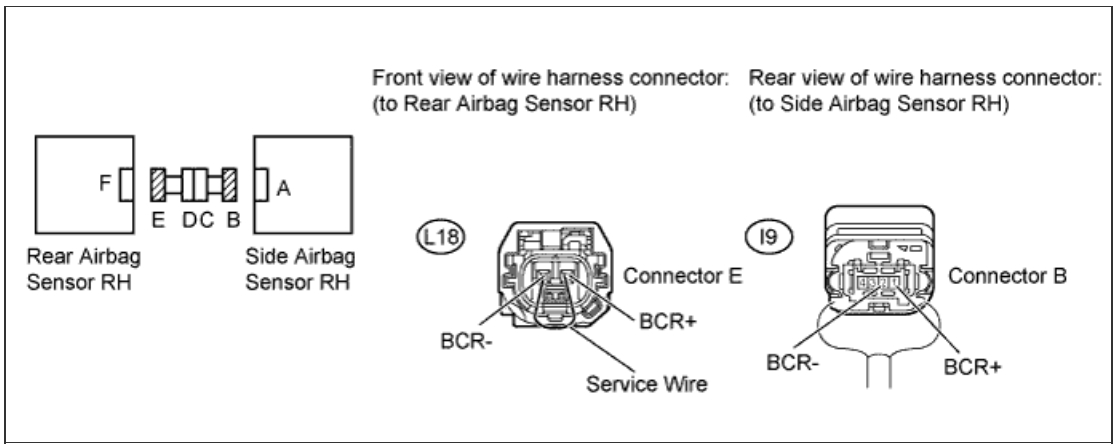
k. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

5.CHECK REAR AIRBAG SENSOR RH CIRCUIT



a. Disconnect the connectors from the side airbag sensor RH and rear airbag sensor RH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector E.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 7

OK

6.CHECK REAR AIRBAG SENSOR RH

a. Connect the connectors to the side airbag sensor RH.

b. Temporarily replace the rear airbag sensor RH with a new one.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

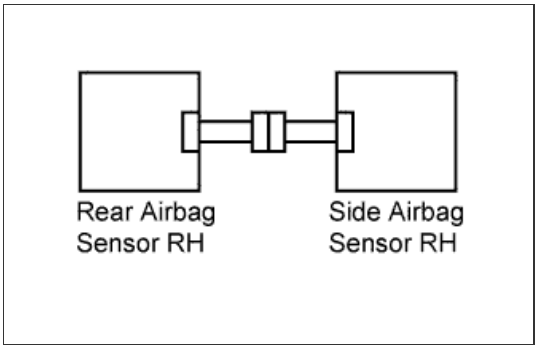
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).



OK:

DTC B1632 and B1633 is not output.

HINT:

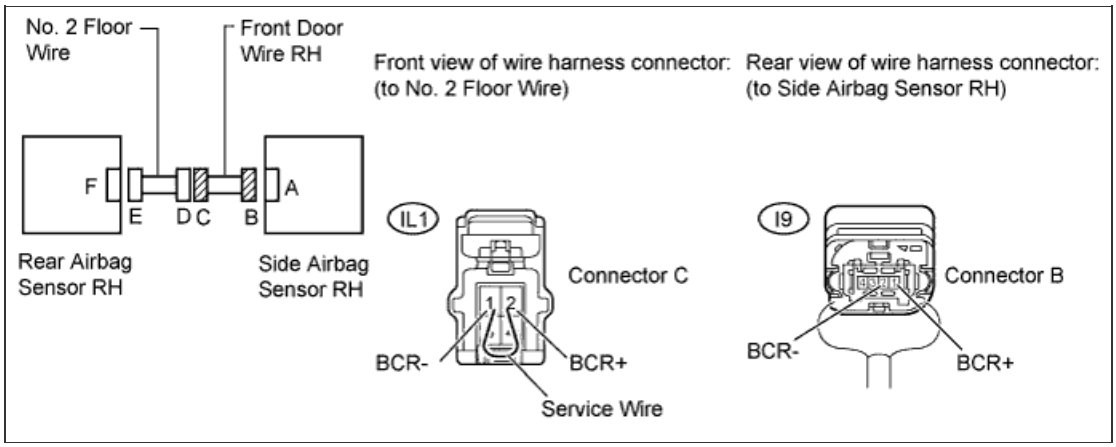
Codes other than DTC B1632 and B1633 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR RH (Click here)

7.CHECK FRONT DOOR WIRE RH (SIDE AIRBAG SENSOR RH - NO. 2 FLOOR WIRE)



a. Disconnect the front door wire RH connectors from the No. 2 floor wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FRONT DOOR WIRE RH

OK

REPLACE NO. 2 FLOOR WIRE

8.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor, the side airbag sensor LH and rear airbag sensor LH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

9.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor, side airbag sensor LH and rear airbag sensor LH.

b. Check that the connectors (on the center airbag sensor side, the rear airbag sensor LH side and side airbag sensor LH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

10.CHECK REAR AIRBAG SENSOR LH

a. Connect the connector to the center airbag sensor.

b. Temporarily replace the rear airbag sensor LH with a new one.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

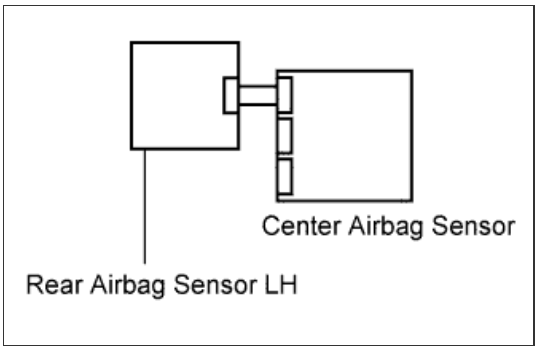
h. Check for DTCs (Click here).

OK:

DTC B1697 and B1698 are not output.

HINT:

Codes other than DTC B1697 and B1698 may be output at this time, but they are not related to this check.

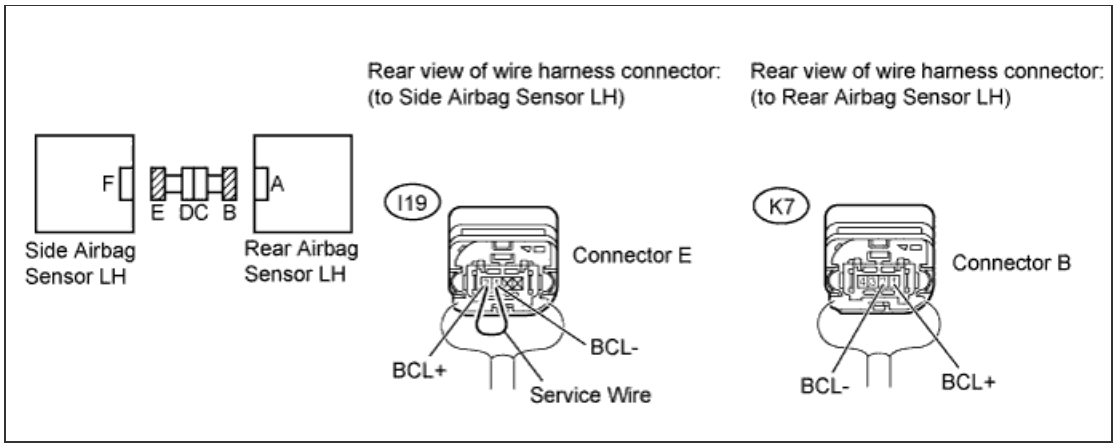


NG → Go to step 11

OK

REPLACE REAR AIRBAG SENSOR LH (Click here)

11.CHECK SIDE AIRBAG SENSOR LH CIRCUIT



a. Turn the engine switch off.

b. Disconnect the connectors from the side airbag sensor LH and rear airbag sensor LH.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

i. Disconnect the service wire from connector E.

j. Measure the resistance according to the value(s) in the table below.

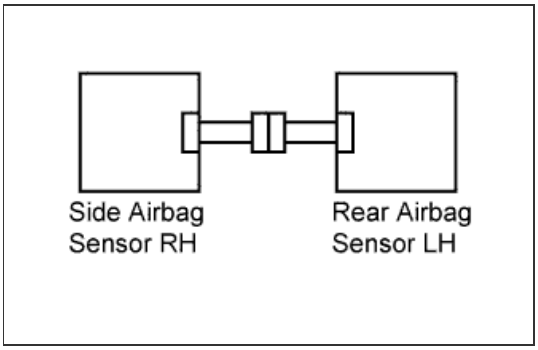
Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → Go to step 13

OK

12.CHECK SIDE AIRBAG SENSOR LH



a. Connect the connectors to the rear airbag sensor LH.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1632, B1633, B1697 and B1698 are not output	A
DTC B1632 or B1633 is output	B
DTC B1697 or B1698 is output	C

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

k. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

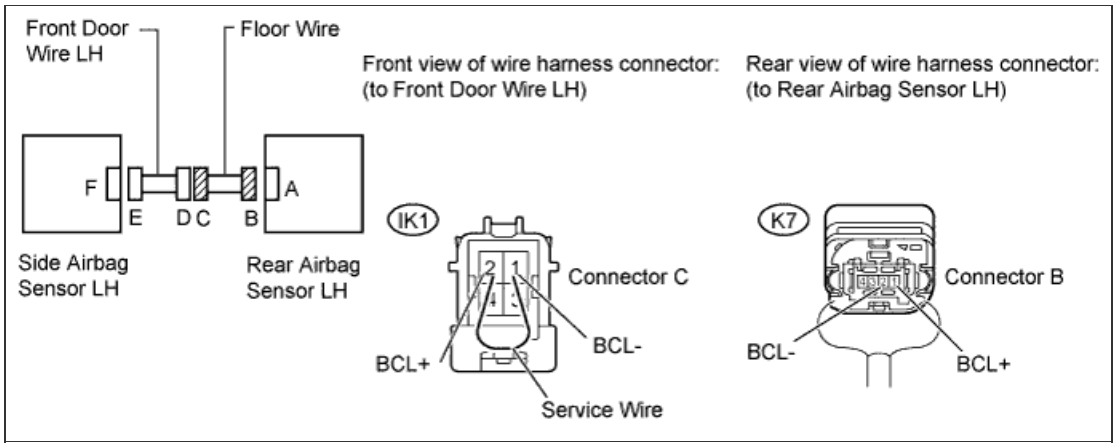
A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR LH (Click here)

C

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

13.CHECK FLOOR WIRE (SIDE AIRBAG SENSOR LH - FRONT DOOR WIRE LH)



a. Disconnect the floor wire connector from the front door wire LH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

REPLACE FRONT DOOR WIRE LH

DTC B1845/61 Short in Curtain Shield Squib LH 2nd Step Circuit

DTC B1846/61 Open in Curtain Shield Squib LH 2nd Step Circuit

DTC B1847/61 Short to GND in Curtain Shield Squib LH 2nd Step Circuit

DTC B1848/61 Short to B+ in Curtain Shield Squib LH 2nd Step Circuit

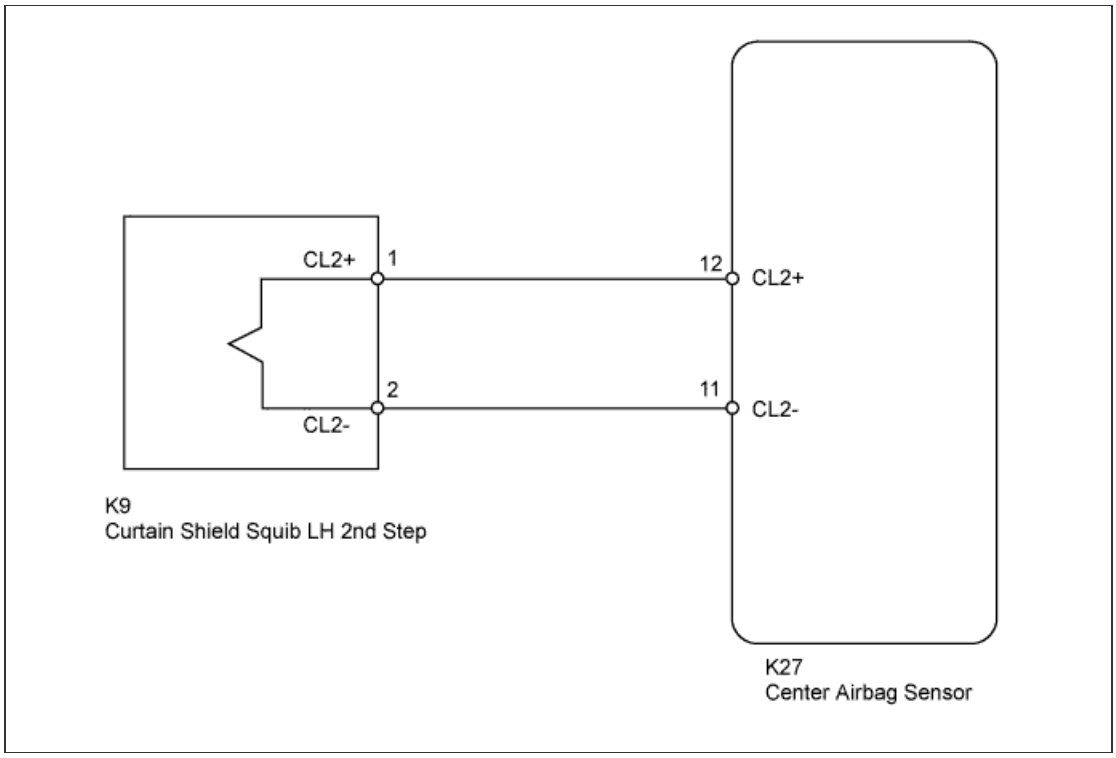
for Preparation Click here

DESCRIPTION

The curtain shield squib LH 2nd step circuit consists of the center airbag sensor and the curtain shield airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib LH 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1845/61	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib LH 2nd step circuit during the primary check. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly
B1846/61	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib LH 2nd step circuit for 2 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly
B1847/61	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib LH 2nd step circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly
B1848/61	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib LH 2nd step circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG LH (CURTAIN SHIELD SQUIB LH 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the curtain shield squib LH 2nd step.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

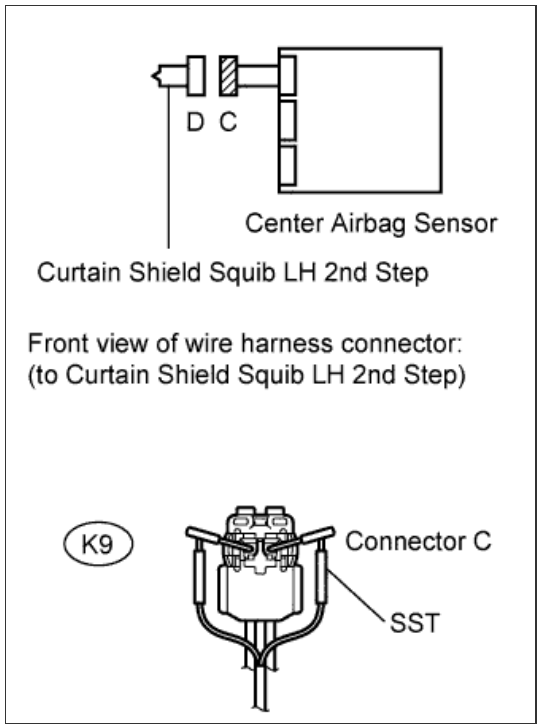
CAUTION:

Never connect the tester to the curtain shield airbag LH (curtain shield squib LH 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST
09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1845, B1846, B1847 or B1848 is not output.

HINT:

Codes other than DTC B1845, B1846, B1847 and B1848 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connectors (on the curtain shield squib LH 2nd step side) are not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (CURTAIN SHIELD SQUIB LH 2ND STEP CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K9-1 (CL2+) - Body ground	Engine switch on (IG)	Below 1 V
K9-2 (CL2-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

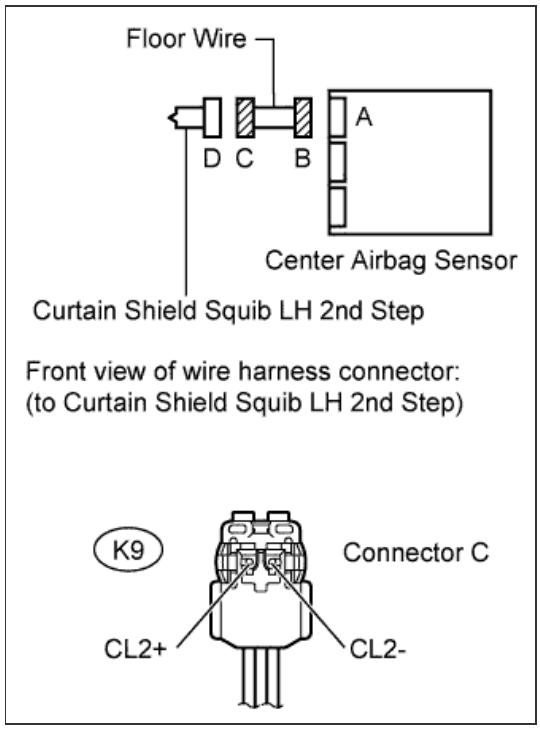
Tester Connection	Condition	Specified Condition
K9-1 (CL2+) - K9-2 (CL2-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K9-1 (CL2+) - K9-2 (CL2-)	Always	1 MΩ or higher
K9-1 (CL2+) - Body ground	Always	1 MΩ or higher
K9-2 (CL2-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield squib LH 2nd step and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

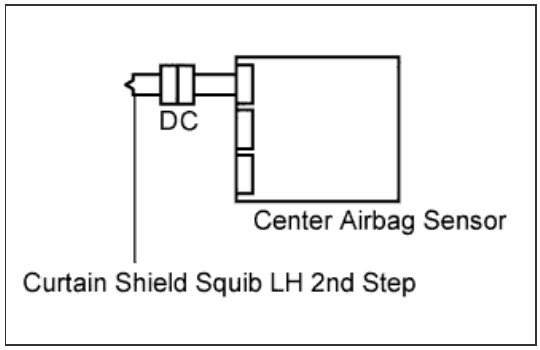
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1845, B1846, B1847 or B1848 is not output.

HINT:

Codes other than DTC B1845, B1846, B1847 and B1848 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1635/24 Rear Airbag Sensor LH Circuit Malfunction

DTC B1637/82 Lost Communication with Rear Airbag Sensor LH

DTC B1690/15 Door Side Airbag Sensor RH Malfunction

DTC B1692/81 Lost Communication with Door Side Airbag Sensor RH

for Preparation Click here

DESCRIPTION

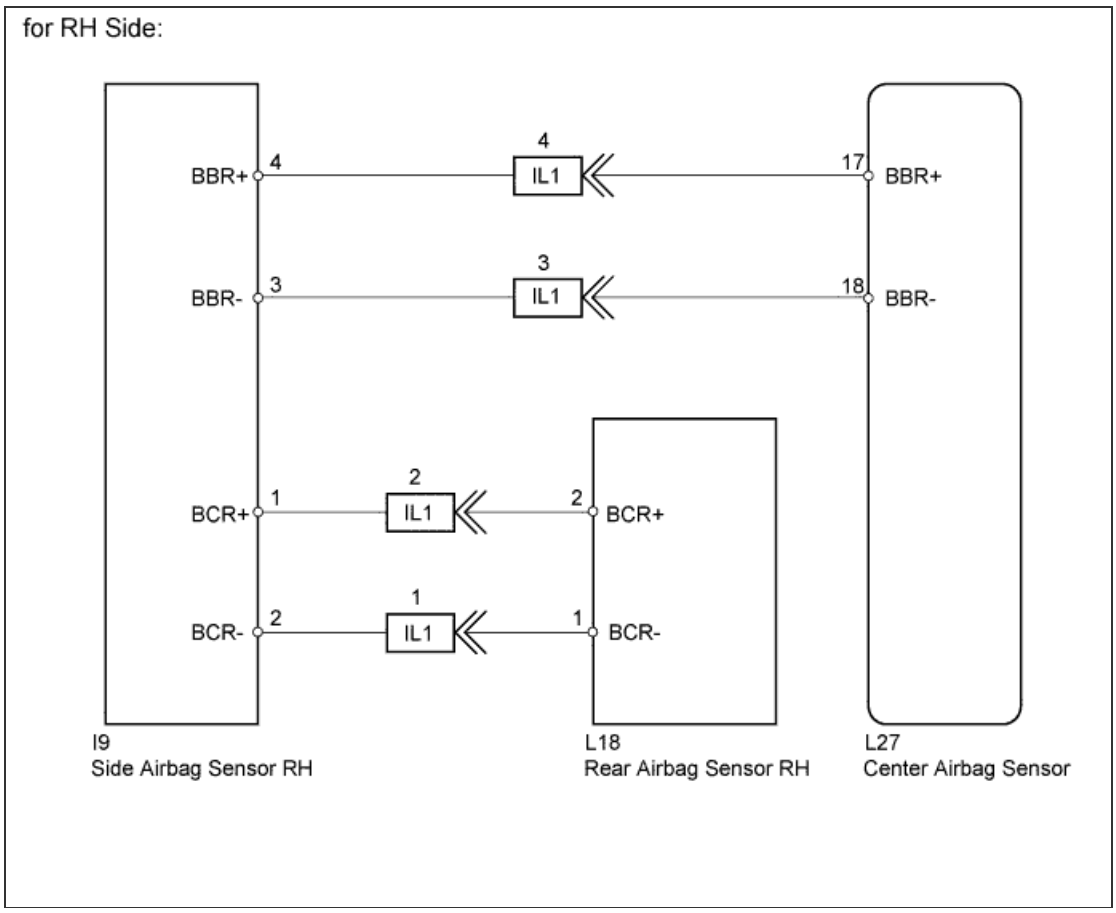
HINT:

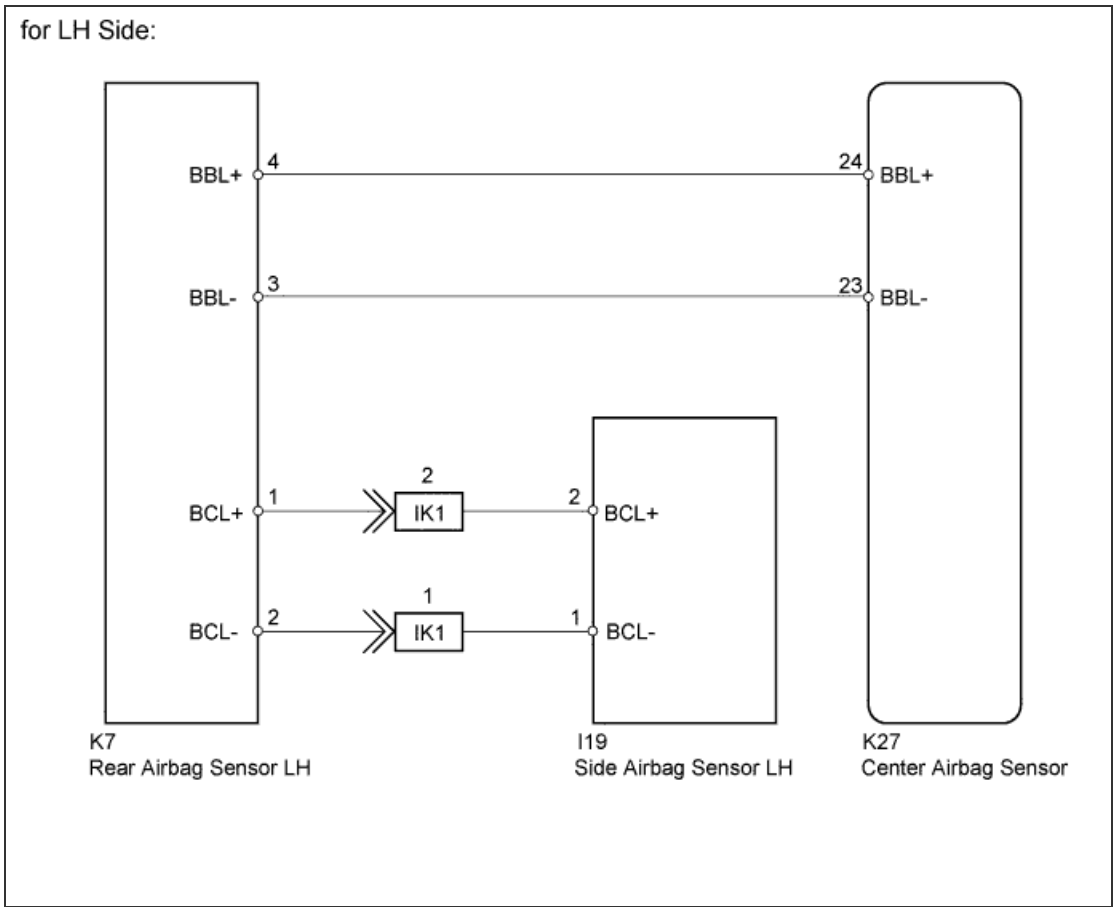
"Door side airbag sensor RH" refers to the side airbag sensor RH.

- For DTC B1690 and B1635:
  The rear airbag sensor LH and side airbag sensor RH consists of the safing sensor, the diagnostic circuit, the lateral deceleration sensor, etc.
  If the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether the SRS should be activated.
  DTC B1690/15 or B1635/24 is stored when a malfunction is detected in the rear airbag sensor LH or side airbag sensor RH circuit.
- For DTC B1692 and B1637:
  The circuit for the side collision sensor RH or LH (to determine deployment of the front seat airbag RH or LH, rear seat side airbag RH or LH and curtain shield airbag RH or LH) is composed of the center airbag sensor, side airbag sensor RH or LH, and rear airbag sensor RH or LH.
  The side airbag sensor RH or LH, and rear airbag sensor RH or LH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1692 or B1637 is stored when a malfunction is detected in the circuit for the side collision sensor RH or LH (to determine deployment of the front seat airbag RH or LH, rear seat side airbag RH or LH, and curtain shield airbag RH or LH).

DTC Code	DTC Detection Condition	Trouble Area
B1635/24	When one of the following conditions is met: • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Rear airbag sensor LH • Center airbag sensor assembly
B1637/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH, rear seat side airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Rear airbag sensor LH • Center airbag sensor assembly
B1690/15	When one of the following conditions is met: • A side airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Side airbag sensor RH • Center airbag sensor assembly
B1692/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH, rear seat side airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Side airbag sensor RH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FOR DTC

a. Turn the engine switch on (IG).

b. Clear the DTCs stored in the memory (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1635, B1637, B1690 and B1692 are not output	A
DTC B1635 or B1637 is output	B
DTC B1690 or B1692 is output	C

HINT:

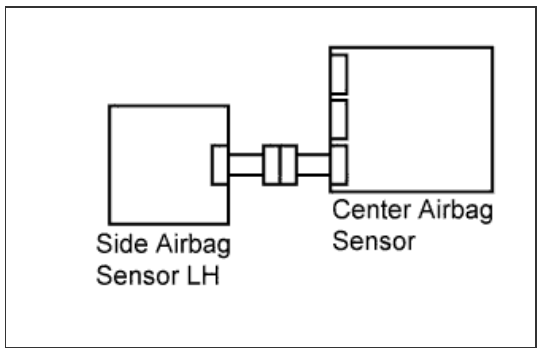
Codes other than DTC B1635, B1637, B1690 and B1692 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → Go to step 3

C

2.CHECK SIDE AIRBAG SENSOR RH



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Interchange the side airbag sensor RH with LH and connect the connectors to them.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.

h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1695, B1697, B1690 and B1692 are not output	A
DTC B1695 or B1697 is output	B
DTC B1690 or B1692 is output	C

HINT:

Codes other than DTC B1690, B1692, B1695 and B1697 may be output at this time, but they are not related to this check.

j. Turn the engine switch off.

k. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

l. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

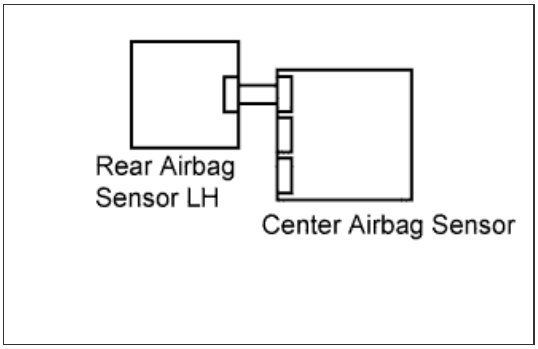
A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

3.CHECK REAR AIRBAG SENSOR LH



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Temporarily replace the rear airbag sensor LH with a new one.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.

h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

OK:
DTC B1635 and B1637 are not output.

HINT:

Codes other than DTC B1635 and B1637 may be output at this time, but they are not related to this check.

j. Turn the engine switch off.

k. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

l. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR LH (Click here)

DTC B1845/61 Short in Curtain Shield Squib LH 2nd Step Circuit

DTC B1846/61 Open in Curtain Shield Squib LH 2nd Step Circuit

DTC B1847/61 Short to GND in Curtain Shield Squib LH 2nd Step Circuit

DTC B1848/61 Short to B+ in Curtain Shield Squib LH 2nd Step Circuit

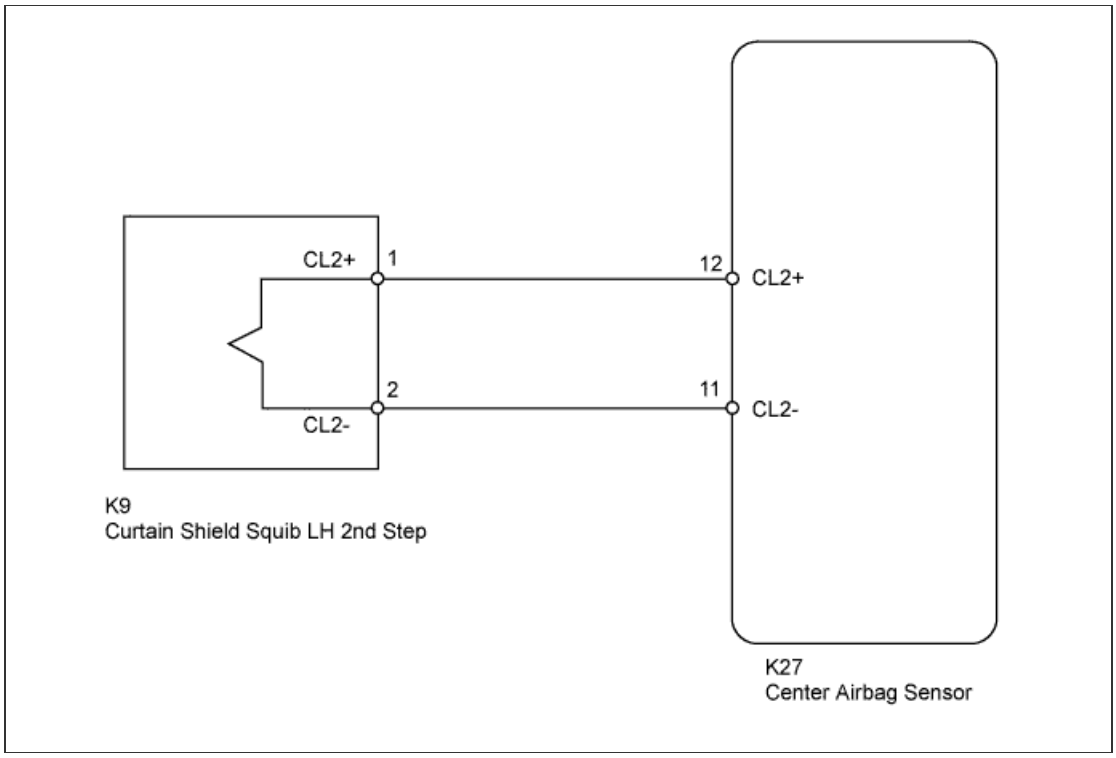
for Preparation Click here

DESCRIPTION

The curtain shield squib LH 2nd step circuit consists of the center airbag sensor and the curtain shield airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib LH 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1845/61	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib LH 2nd step circuit during the primary check. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly
B1846/61	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib LH 2nd step circuit for 2 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly
B1847/61	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib LH 2nd step circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly
B1848/61	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib LH 2nd step circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG LH (CURTAIN SHIELD SQUIB LH 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the curtain shield squib LH 2nd step.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

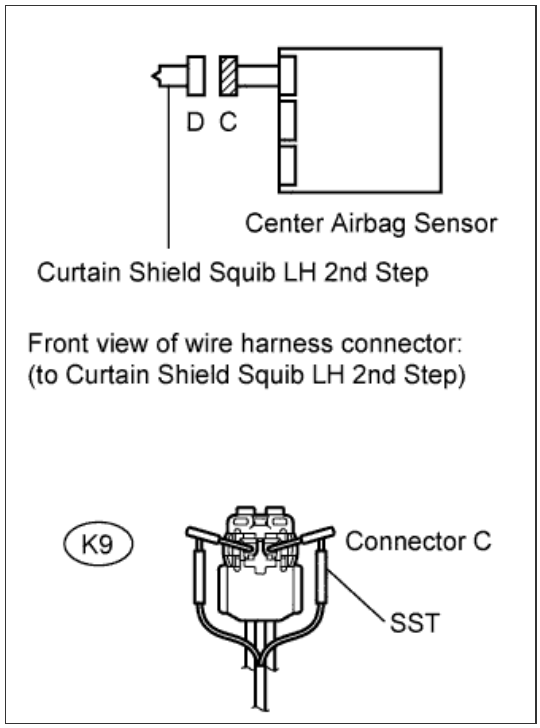
CAUTION:

Never connect the tester to the curtain shield airbag LH (curtain shield squib LH 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST
09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1845, B1846, B1847 or B1848 is not output.

HINT:

Codes other than DTC B1845, B1846, B1847 and B1848 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connectors (on the curtain shield squib LH 2nd step side) are not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (CURTAIN SHIELD SQUIB LH 2ND STEP CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K9-1 (CL2+) - Body ground	Engine switch on (IG)	Below 1 V
K9-2 (CL2-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

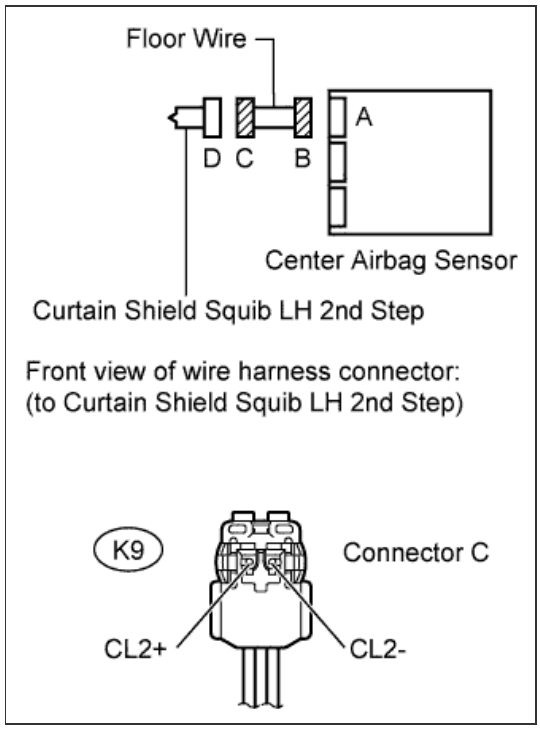
Tester Connection	Condition	Specified Condition
K9-1 (CL2+) - K9-2 (CL2-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K9-1 (CL2+) - K9-2 (CL2-)	Always	1 MΩ or higher
K9-1 (CL2+) - Body ground	Always	1 MΩ or higher
K9-2 (CL2-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield squib LH 2nd step and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

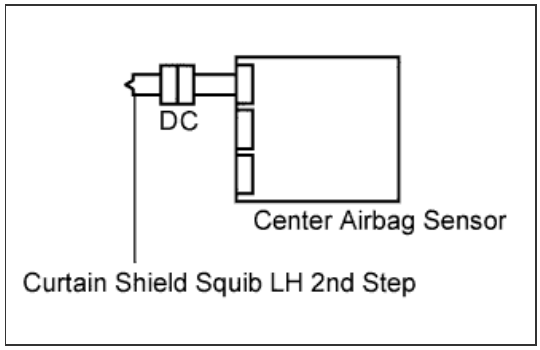
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1845, B1846, B1847 or B1848 is not output.

HINT:

Codes other than DTC B1845, B1846, B1847 and B1848 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1635/24 Rear Airbag Sensor LH Circuit Malfunction

DTC B1637/82 Lost Communication with Rear Airbag Sensor LH

DTC B1690/15 Door Side Airbag Sensor RH Malfunction

DTC B1692/81 Lost Communication with Door Side Airbag Sensor RH

for Preparation Click here

DESCRIPTION

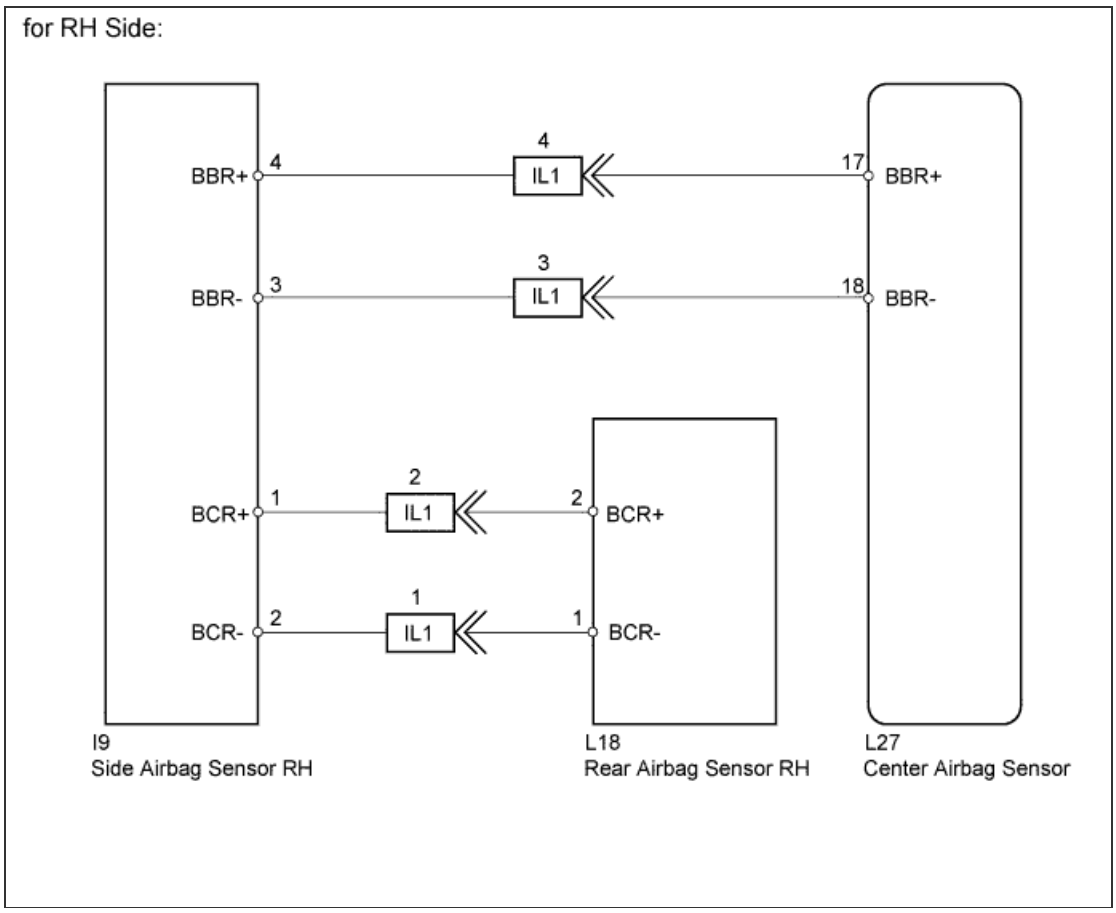
HINT:

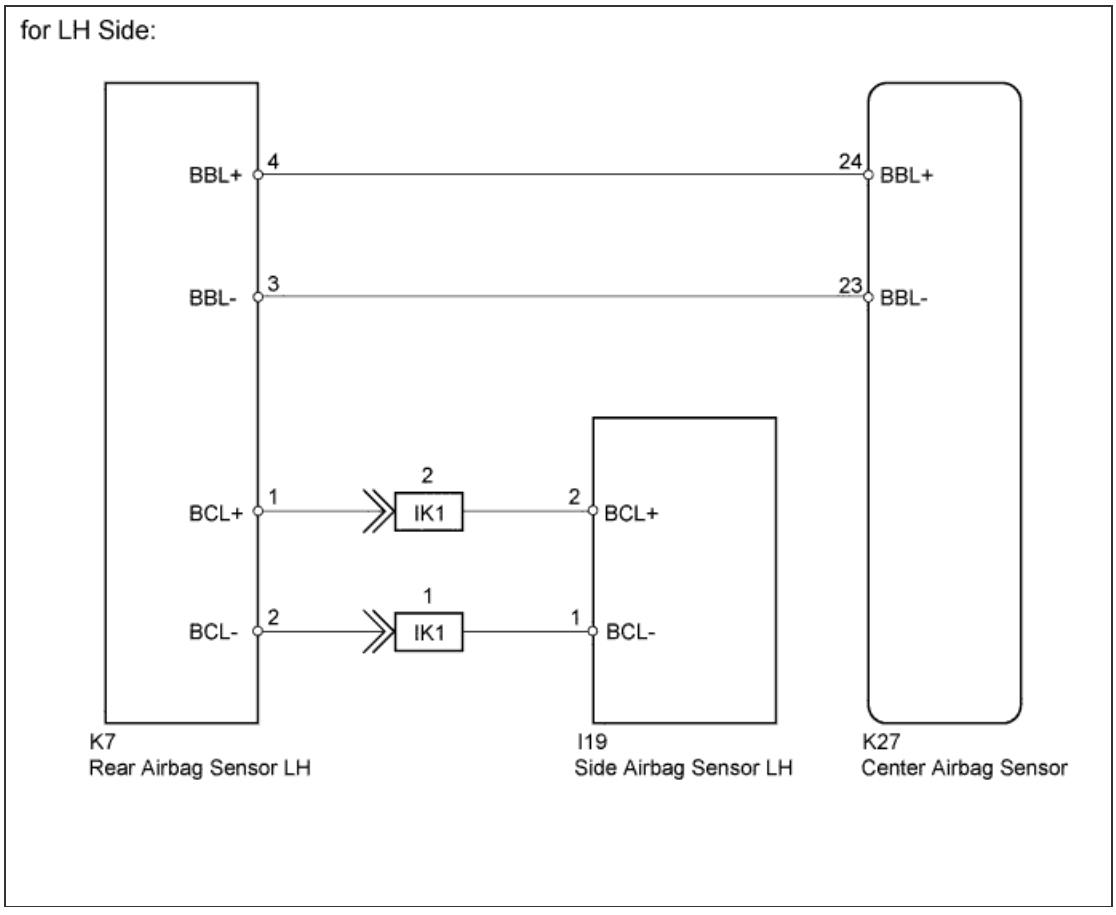
"Door side airbag sensor RH" refers to the side airbag sensor RH.

- For DTC B1690 and B1635:
  The rear airbag sensor LH and side airbag sensor RH consists of the safing sensor, the diagnostic circuit, the lateral deceleration sensor, etc.
  If the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether the SRS should be activated.
  DTC B1690/15 or B1635/24 is stored when a malfunction is detected in the rear airbag sensor LH or side airbag sensor RH circuit.
- For DTC B1692 and B1637:
  The circuit for the side collision sensor RH or LH (to determine deployment of the front seat airbag RH or LH, rear seat side airbag RH or LH and curtain shield airbag RH or LH) is composed of the center airbag sensor, side airbag sensor RH or LH, and rear airbag sensor RH or LH.
  The side airbag sensor RH or LH, and rear airbag sensor RH or LH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1692 or B1637 is stored when a malfunction is detected in the circuit for the side collision sensor RH or LH (to determine deployment of the front seat airbag RH or LH, rear seat side airbag RH or LH, and curtain shield airbag RH or LH).

DTC Code	DTC Detection Condition	Trouble Area
B1635/24	When one of the following conditions is met: • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Rear airbag sensor LH • Center airbag sensor assembly
B1637/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH, rear seat side airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Rear airbag sensor LH • Center airbag sensor assembly
B1690/15	When one of the following conditions is met: • A side airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Side airbag sensor RH • Center airbag sensor assembly
B1692/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH, rear seat side airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Side airbag sensor RH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FOR DTC

a. Turn the engine switch on (IG).

b. Clear the DTCs stored in the memory (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1635, B1637, B1690 and B1692 are not output	A
DTC B1635 or B1637 is output	B
DTC B1690 or B1692 is output	C

HINT:

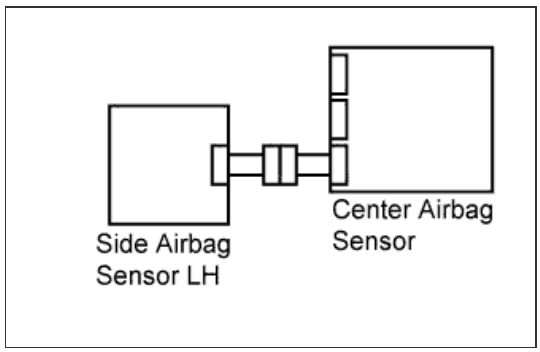
Codes other than DTC B1635, B1637, B1690 and B1692 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → Go to step 3

C

2.CHECK SIDE AIRBAG SENSOR RH



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Interchange the side airbag sensor RH with LH and connect the connectors to them.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.

h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1695, B1697, B1690 and B1692 are not output	A
DTC B1695 or B1697 is output	B
DTC B1690 or B1692 is output	C

HINT:

Codes other than DTC B1690, B1692, B1695 and B1697 may be output at this time, but they are not related to this check.

j. Turn the engine switch off.

k. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

l. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

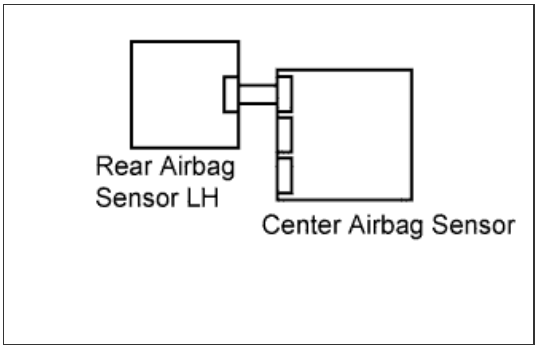
A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

3.CHECK REAR AIRBAG SENSOR LH



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Temporarily replace the rear airbag sensor LH with a new one.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.

h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

OK:
DTC B1635 and B1637 are not output.

HINT:

Codes other than DTC B1635 and B1637 may be output at this time, but they are not related to this check.

j. Turn the engine switch off.

k. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

l. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR LH (Click here)

DTC B1845/61 Short in Curtain Shield Squib LH 2nd Step Circuit

DTC B1846/61 Open in Curtain Shield Squib LH 2nd Step Circuit

DTC B1847/61 Short to GND in Curtain Shield Squib LH 2nd Step Circuit

DTC B1848/61 Short to B+ in Curtain Shield Squib LH 2nd Step Circuit

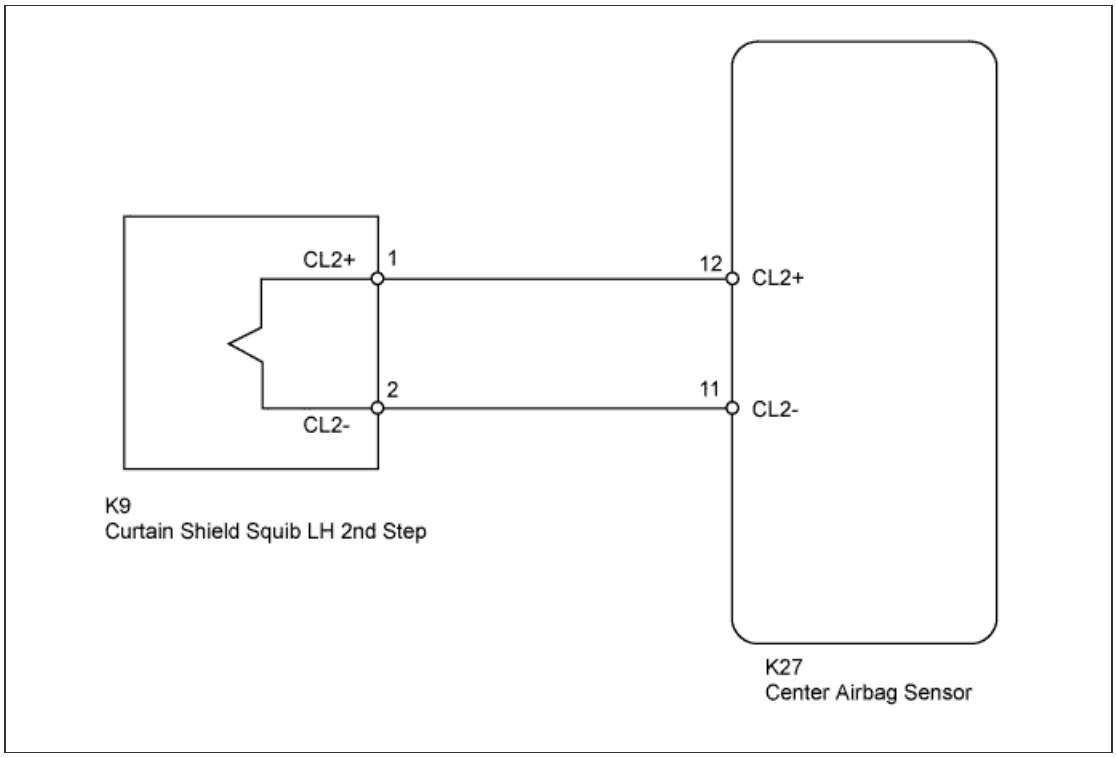
for Preparation Click here

DESCRIPTION

The curtain shield squib LH 2nd step circuit consists of the center airbag sensor and the curtain shield airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib LH 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1845/61	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib LH 2nd step circuit during the primary check. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly
B1846/61	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib LH 2nd step circuit for 2 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly
B1847/61	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib LH 2nd step circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly
B1848/61	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib LH 2nd step circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG LH (CURTAIN SHIELD SQUIB LH 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the curtain shield squib LH 2nd step.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

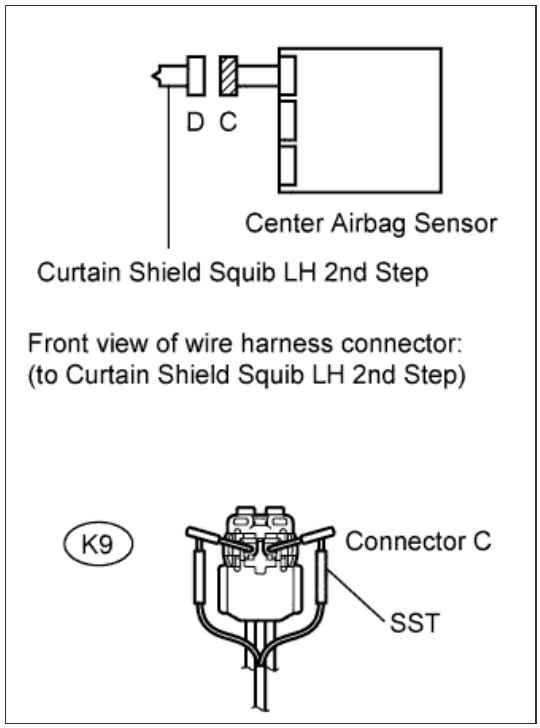
CAUTION:

Never connect the tester to the curtain shield airbag LH (curtain shield squib LH 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST
09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1845, B1846, B1847 or B1848 is not output.

HINT:

Codes other than DTC B1845, B1846, B1847 and B1848 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connectors (on the curtain shield squib LH 2nd step side) are not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (CURTAIN SHIELD SQUIB LH 2ND STEP CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K9-1 (CL2+) - Body ground	Engine switch on (IG)	Below 1 V
K9-2 (CL2-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

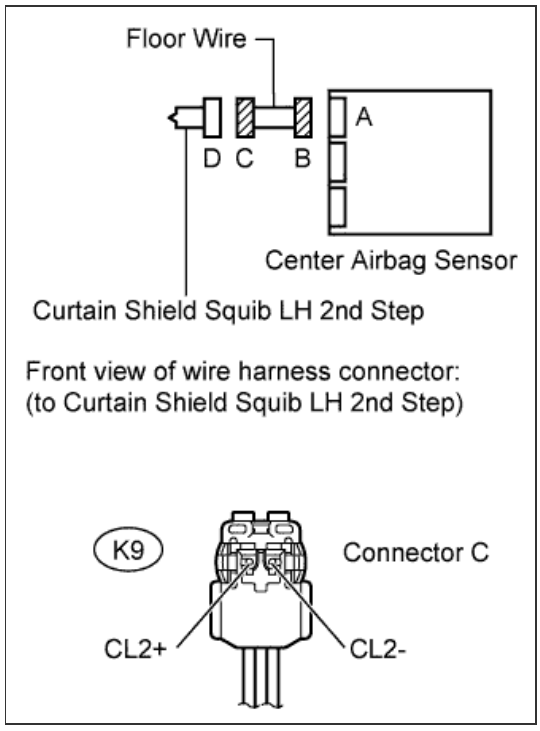
Tester Connection	Condition	Specified Condition
K9-1 (CL2+) - K9-2 (CL2-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K9-1 (CL2+) - K9-2 (CL2-)	Always	1 MΩ or higher
K9-1 (CL2+) - Body ground	Always	1 MΩ or higher
K9-2 (CL2-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield squib LH 2nd step and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

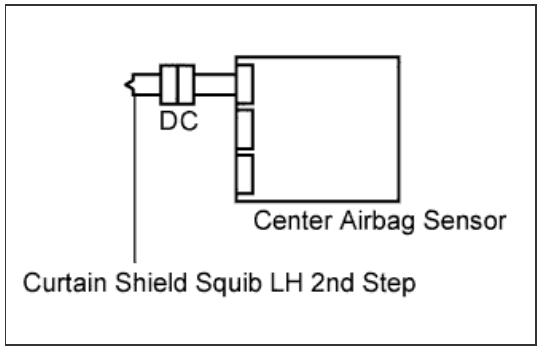
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1845, B1846, B1847 or B1848 is not output.

HINT:

Codes other than DTC B1845, B1846, B1847 and B1848 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1635/24 Rear Airbag Sensor LH Circuit Malfunction

DTC B1637/82 Lost Communication with Rear Airbag Sensor LH

DTC B1690/15 Door Side Airbag Sensor RH Malfunction

DTC B1692/81 Lost Communication with Door Side Airbag Sensor RH

for Preparation Click here

DESCRIPTION

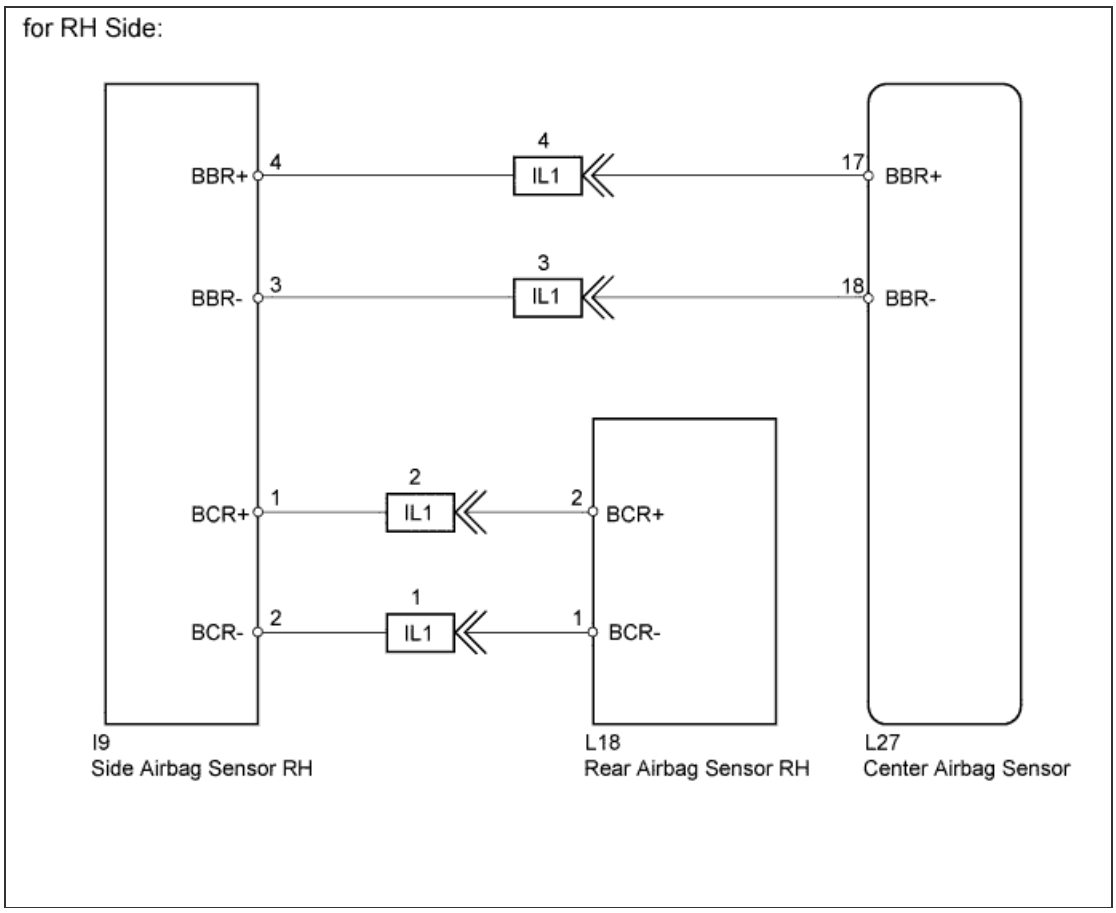
HINT:

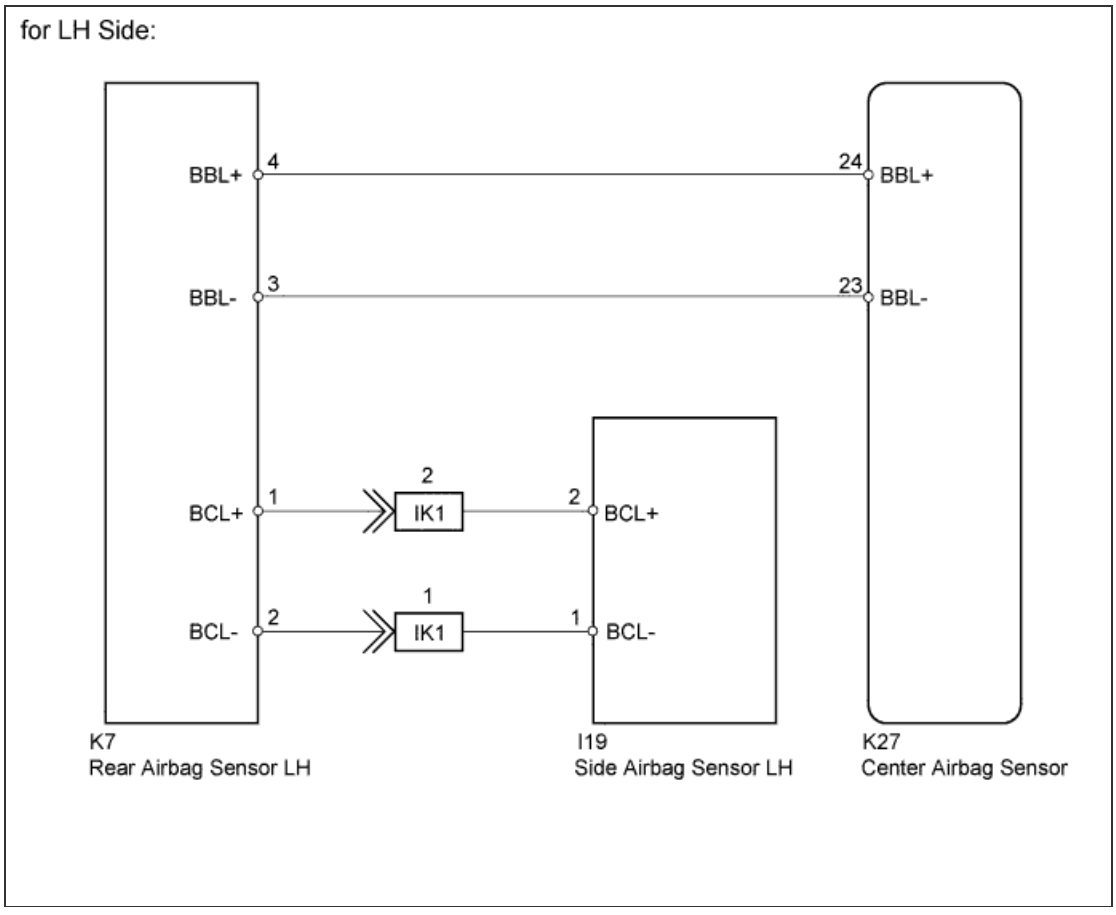
"Door side airbag sensor RH" refers to the side airbag sensor RH.

- For DTC B1690 and B1635:
  The rear airbag sensor LH and side airbag sensor RH consists of the safing sensor, the diagnostic circuit, the lateral deceleration sensor, etc.
  If the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether the SRS should be activated.
  DTC B1690/15 or B1635/24 is stored when a malfunction is detected in the rear airbag sensor LH or side airbag sensor RH circuit.
- For DTC B1692 and B1637:
  The circuit for the side collision sensor RH or LH (to determine deployment of the front seat airbag RH or LH, rear seat side airbag RH or LH and curtain shield airbag RH or LH) is composed of the center airbag sensor, side airbag sensor RH or LH, and rear airbag sensor RH or LH.
  The side airbag sensor RH or LH, and rear airbag sensor RH or LH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1692 or B1637 is stored when a malfunction is detected in the circuit for the side collision sensor RH or LH (to determine deployment of the front seat airbag RH or LH, rear seat side airbag RH or LH, and curtain shield airbag RH or LH).

DTC Code	DTC Detection Condition	Trouble Area
B1635/24	When one of the following conditions is met: • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Rear airbag sensor LH • Center airbag sensor assembly
B1637/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH, rear seat side airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Rear airbag sensor LH • Center airbag sensor assembly
B1690/15	When one of the following conditions is met: • A side airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Side airbag sensor RH • Center airbag sensor assembly
B1692/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH, rear seat side airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Side airbag sensor RH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FOR DTC

a. Turn the engine switch on (IG).

b. Clear the DTCs stored in the memory (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1635, B1637, B1690 and B1692 are not output	A
DTC B1635 or B1637 is output	B
DTC B1690 or B1692 is output	C

HINT:

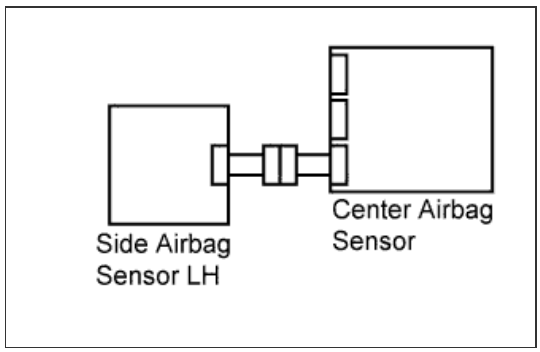
Codes other than DTC B1635, B1637, B1690 and B1692 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → Go to step 3

C

2.CHECK SIDE AIRBAG SENSOR RH



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Interchange the side airbag sensor RH with LH and connect the connectors to them.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.

h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1695, B1697, B1690 and B1692 are not output	A
DTC B1695 or B1697 is output	B
DTC B1690 or B1692 is output	C

HINT:

Codes other than DTC B1690, B1692, B1695 and B1697 may be output at this time, but they are not related to this check.

j. Turn the engine switch off.

k. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

l. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

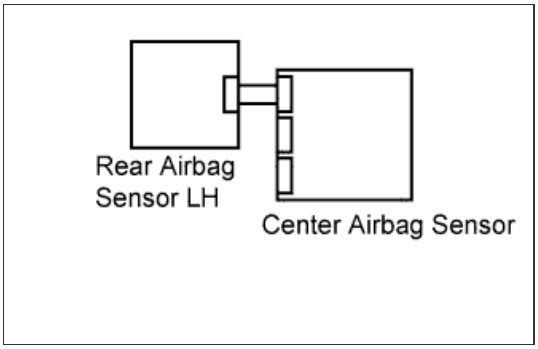
A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

3.CHECK REAR AIRBAG SENSOR LH



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Temporarily replace the rear airbag sensor LH with a new one.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.

h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

OK:
DTC B1635 and B1637 are not output.

HINT:

Codes other than DTC B1635 and B1637 may be output at this time, but they are not related to this check.

j. Turn the engine switch off.

k. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

l. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR LH (Click here)

DTC B1845/61 Short in Curtain Shield Squib LH 2nd Step Circuit

DTC B1846/61 Open in Curtain Shield Squib LH 2nd Step Circuit

DTC B1847/61 Short to GND in Curtain Shield Squib LH 2nd Step Circuit

DTC B1848/61 Short to B+ in Curtain Shield Squib LH 2nd Step Circuit

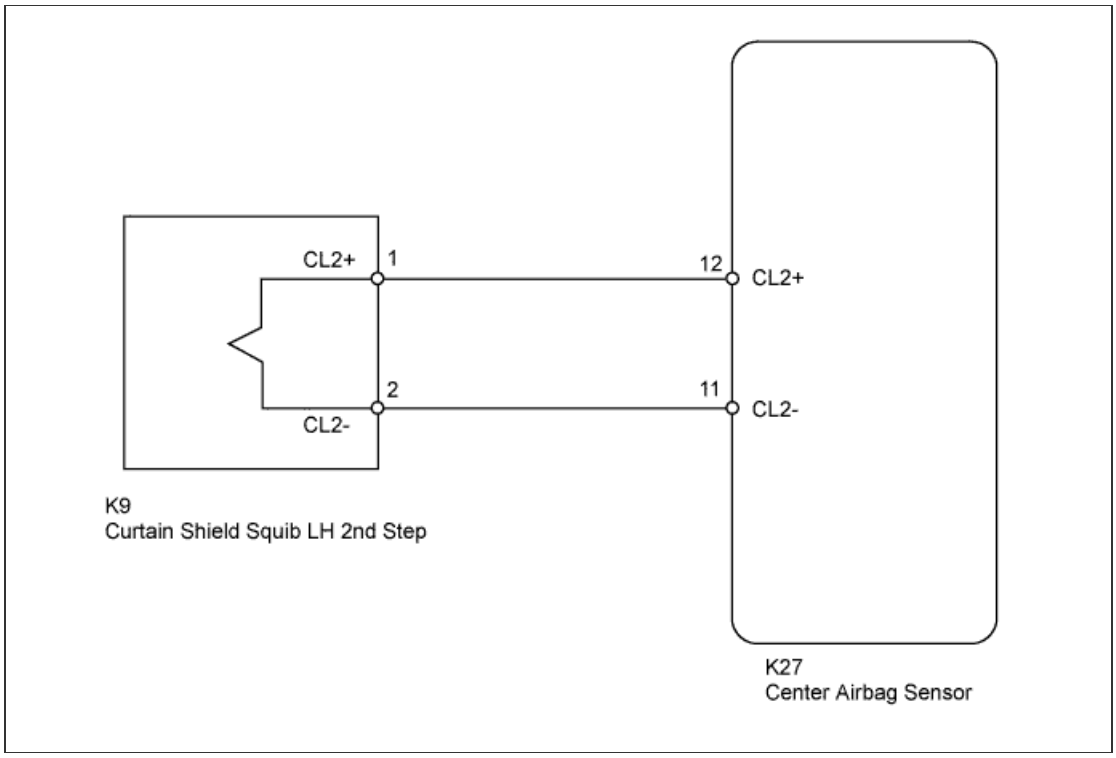
for Preparation Click here

DESCRIPTION

The curtain shield squib LH 2nd step circuit consists of the center airbag sensor and the curtain shield airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the curtain shield squib LH 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1845/61	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the curtain shield squib LH 2nd step circuit during the primary check. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly
B1846/61	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the curtain shield squib LH 2nd step circuit for 2 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly
B1847/61	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the curtain shield squib LH 2nd step circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly
B1848/61	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the curtain shield squib LH 2nd step circuit for 0.5 seconds. • A curtain shield squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Curtain shield airbag assembly LH (Curtain shield squib LH 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK CURTAIN SHIELD AIRBAG LH (CURTAIN SHIELD SQUIB LH 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the curtain shield squib LH 2nd step.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

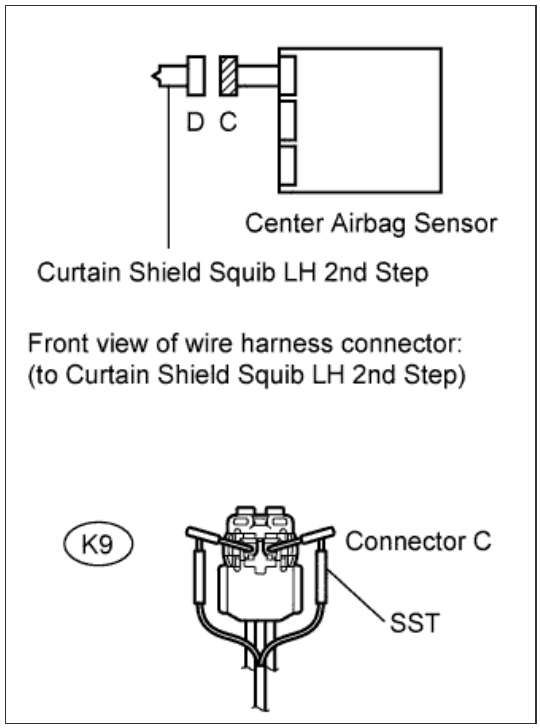
CAUTION:

Never connect the tester to the curtain shield airbag LH (curtain shield squib LH 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST
09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1845, B1846, B1847 or B1848 is not output.

HINT:

Codes other than DTC B1845, B1846, B1847 and B1848 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE CURTAIN SHIELD AIRBAG ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connectors (on the curtain shield squib LH 2nd step side) are not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (CURTAIN SHIELD SQUIB LH 2ND STEP CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K9-1 (CL2+) - Body ground	Engine switch on (IG)	Below 1 V
K9-2 (CL2-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

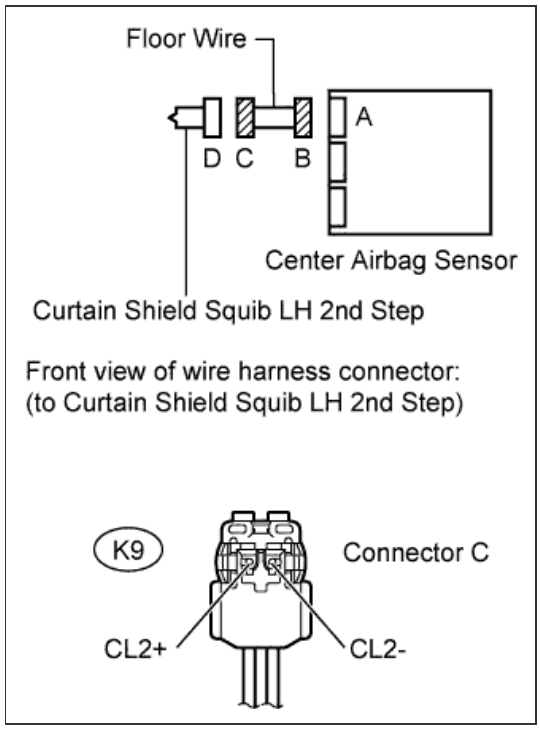
Tester Connection	Condition	Specified Condition
K9-1 (CL2+) - K9-2 (CL2-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K9-1 (CL2+) - K9-2 (CL2-)	Always	1 MΩ or higher
K9-1 (CL2+) - Body ground	Always	1 MΩ or higher
K9-2 (CL2-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the curtain shield squib LH 2nd step and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

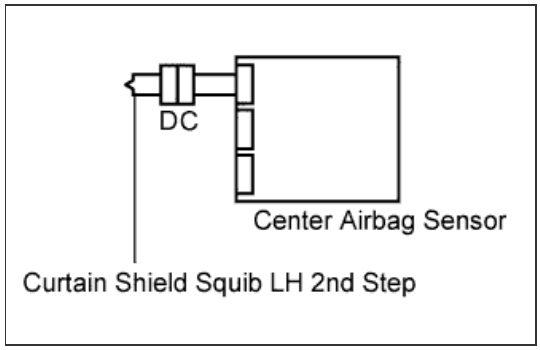
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1845, B1846, B1847 or B1848 is not output.

HINT:

Codes other than DTC B1845, B1846, B1847 and B1848 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1635/24 Rear Airbag Sensor LH Circuit Malfunction

DTC B1637/82 Lost Communication with Rear Airbag Sensor LH

DTC B1690/15 Door Side Airbag Sensor RH Malfunction

DTC B1692/81 Lost Communication with Door Side Airbag Sensor RH

for Preparation Click here

DESCRIPTION

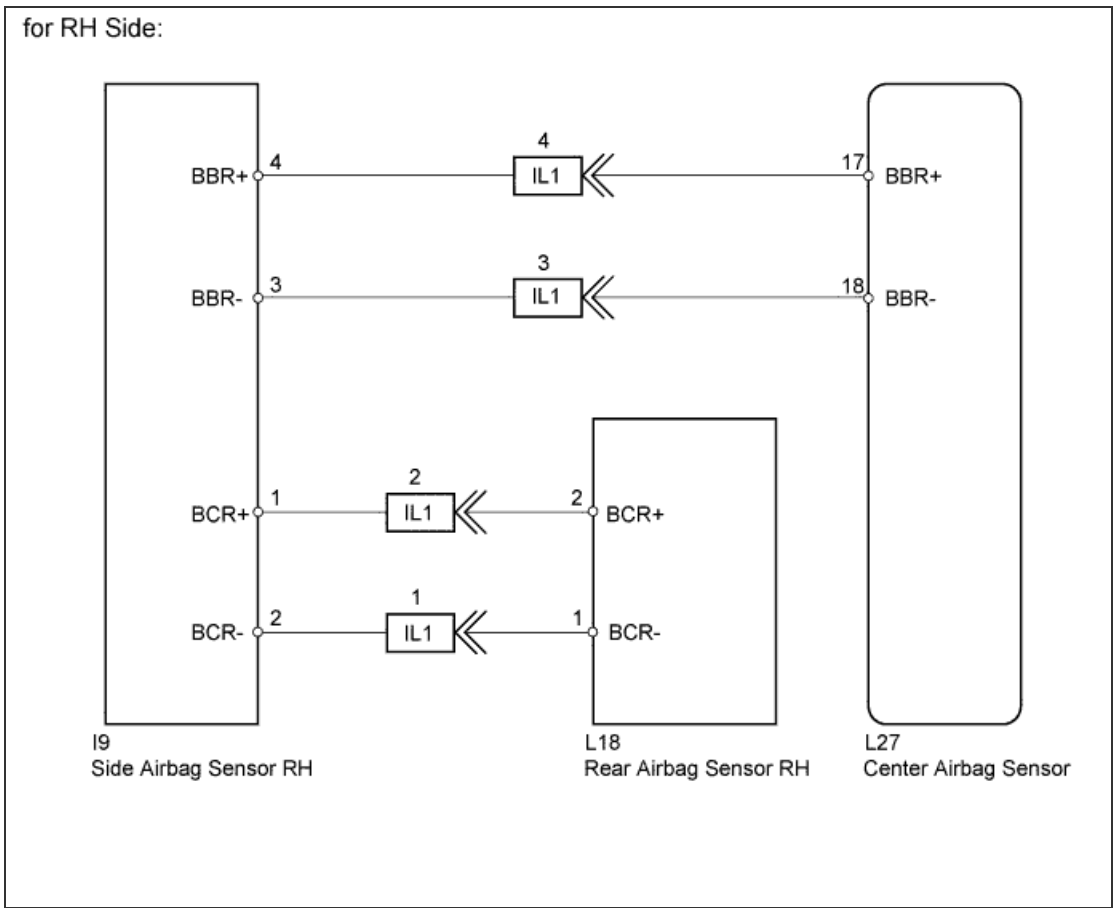
HINT:

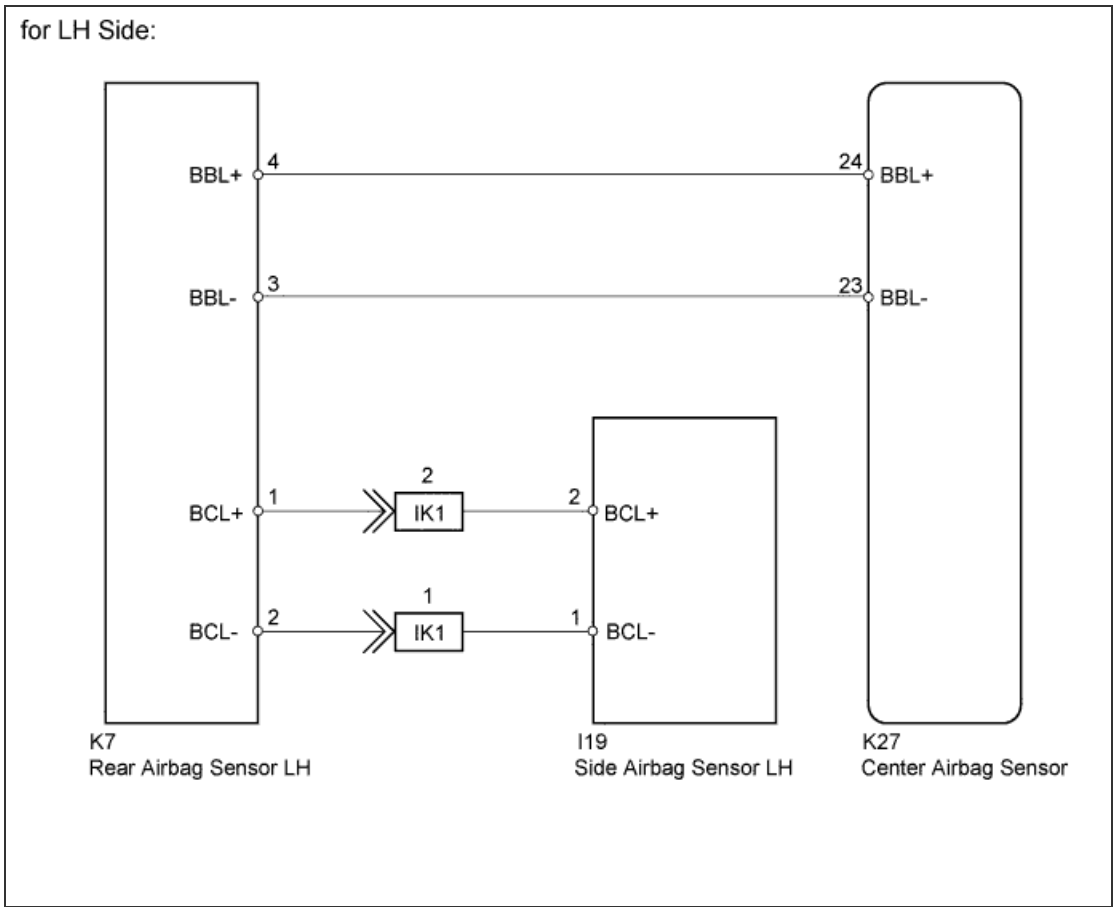
"Door side airbag sensor RH" refers to the side airbag sensor RH.

- For DTC B1690 and B1635:
  The rear airbag sensor LH and side airbag sensor RH consists of the safing sensor, the diagnostic circuit, the lateral deceleration sensor, etc.
  If the center airbag sensor receives signals from the lateral deceleration sensor, it determines whether the SRS should be activated.
  DTC B1690/15 or B1635/24 is stored when a malfunction is detected in the rear airbag sensor LH or side airbag sensor RH circuit.
- For DTC B1692 and B1637:
  The circuit for the side collision sensor RH or LH (to determine deployment of the front seat airbag RH or LH, rear seat side airbag RH or LH and curtain shield airbag RH or LH) is composed of the center airbag sensor, side airbag sensor RH or LH, and rear airbag sensor RH or LH.
  The side airbag sensor RH or LH, and rear airbag sensor RH or LH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1692 or B1637 is stored when a malfunction is detected in the circuit for the side collision sensor RH or LH (to determine deployment of the front seat airbag RH or LH, rear seat side airbag RH or LH, and curtain shield airbag RH or LH).

DTC Code	DTC Detection Condition	Trouble Area
B1635/24	When one of the following conditions is met: • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Rear airbag sensor LH • Center airbag sensor assembly
B1637/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH, rear seat side airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Rear airbag sensor LH • Center airbag sensor assembly
B1690/15	When one of the following conditions is met: • A side airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Side airbag sensor RH • Center airbag sensor assembly
B1692/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH, rear seat side airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Side airbag sensor RH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FOR DTC

a. Turn the engine switch on (IG).

b. Clear the DTCs stored in the memory (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1635, B1637, B1690 and B1692 are not output	A
DTC B1635 or B1637 is output	B
DTC B1690 or B1692 is output	C

HINT:

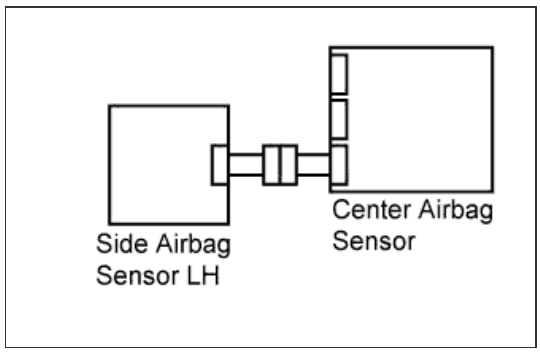
Codes other than DTC B1635, B1637, B1690 and B1692 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → Go to step 3

C

2.CHECK SIDE AIRBAG SENSOR RH



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Interchange the side airbag sensor RH with LH and connect the connectors to them.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.

h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1695, B1697, B1690 and B1692 are not output	A
DTC B1695 or B1697 is output	B
DTC B1690 or B1692 is output	C

HINT:

Codes other than DTC B1690, B1692, B1695 and B1697 may be output at this time, but they are not related to this check.

j. Turn the engine switch off.

k. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

l. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

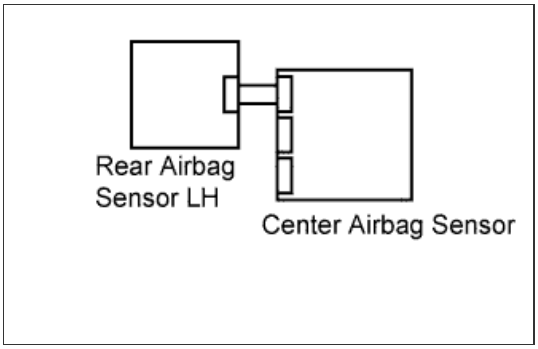
A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

3.CHECK REAR AIRBAG SENSOR LH



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Temporarily replace the rear airbag sensor LH with a new one.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.

h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

OK:
DTC B1635 and B1637 are not output.

HINT:

Codes other than DTC B1635 and B1637 may be output at this time, but they are not related to this check.

j. Turn the engine switch off.

k. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

l. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR LH (Click here)

DTC B1850/62 Short in Rear Side Squib RH Circuit

DTC B1851/62 Open in Rear Side Squib RH Circuit

DTC B1852/62 Short to GND in Rear Side Squib RH Circuit

DTC B1853/62 Short to B+ in Rear Side Squib RH Circuit

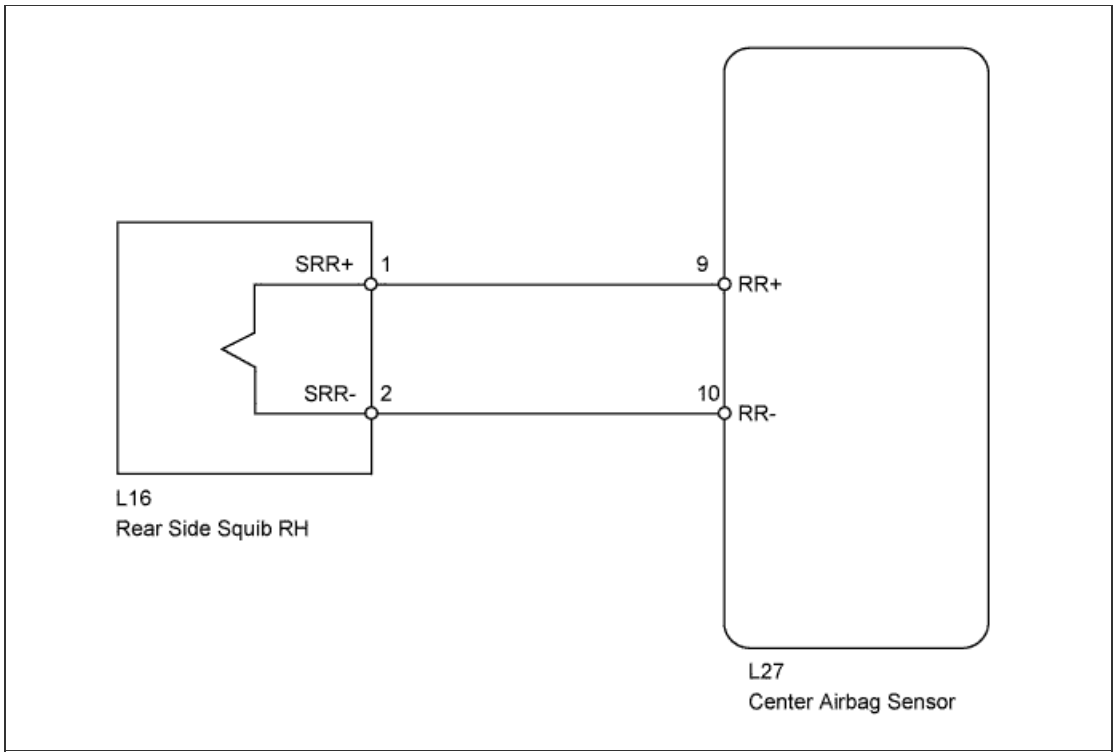
for Preparation Click here

DESCRIPTION

The rear side squib RH circuit consists of the center airbag sensor and the rear seat side airbag RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1850/62	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib RH circuit during the primary check. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1851/62	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib RH circuit for 2 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1852/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1853/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG RH (REAR SIDE SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag RH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

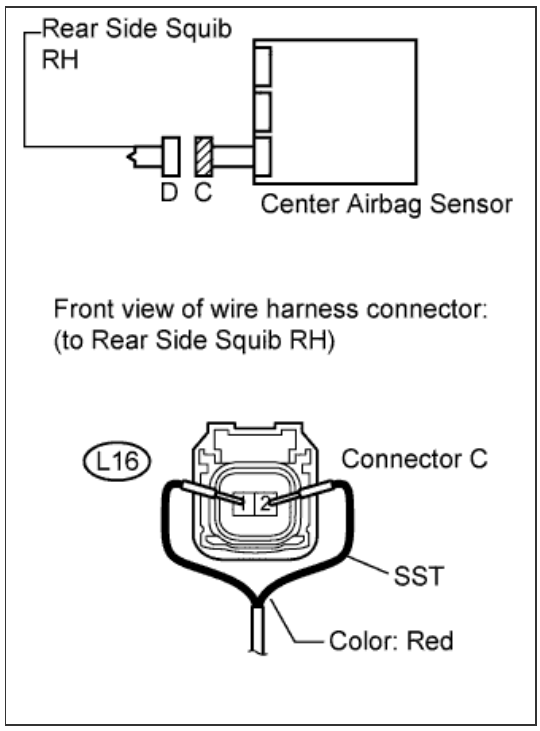
Never connect the tester to the rear seat side airbag RH (rear side squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

2.CHECK NO. 2 FLOOR WIRE (REAR SIDE SQUIB RH CIRCUIT)

a. Turn the engine switch off.

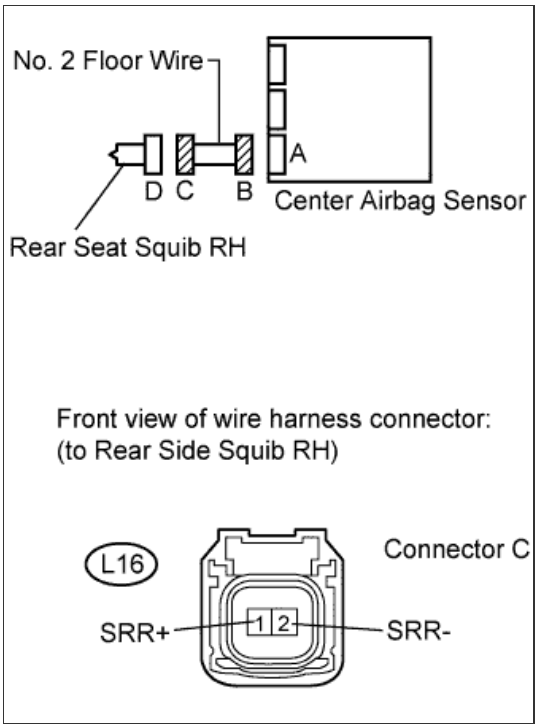
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST (resistance: 2.1 Ω) from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L16-1 (SRR+) - Body ground	Engine switch on (IG)	Below 1 V
L16-2 (SRR-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	1 MΩ or higher
L16-1 (SRR+) - Body ground	Always	1 MΩ or higher
L16-2 (SRR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat side airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

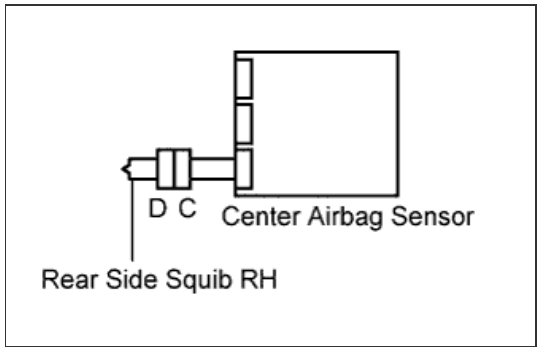
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1638/82 Rear Airbag Sensor Assembly LH Initialization Incomplete

DTC B1643/81 Side Satellite Sensor Bus RH Initialization Incomplete

DTC B1648/82 Side Satellite Sensor Bus LH Initialization Incomplete

DTC B1693/81 Door Side Airbag Sensor RH Initialization Incomplete

for Preparation Click here

DESCRIPTION

HINT:

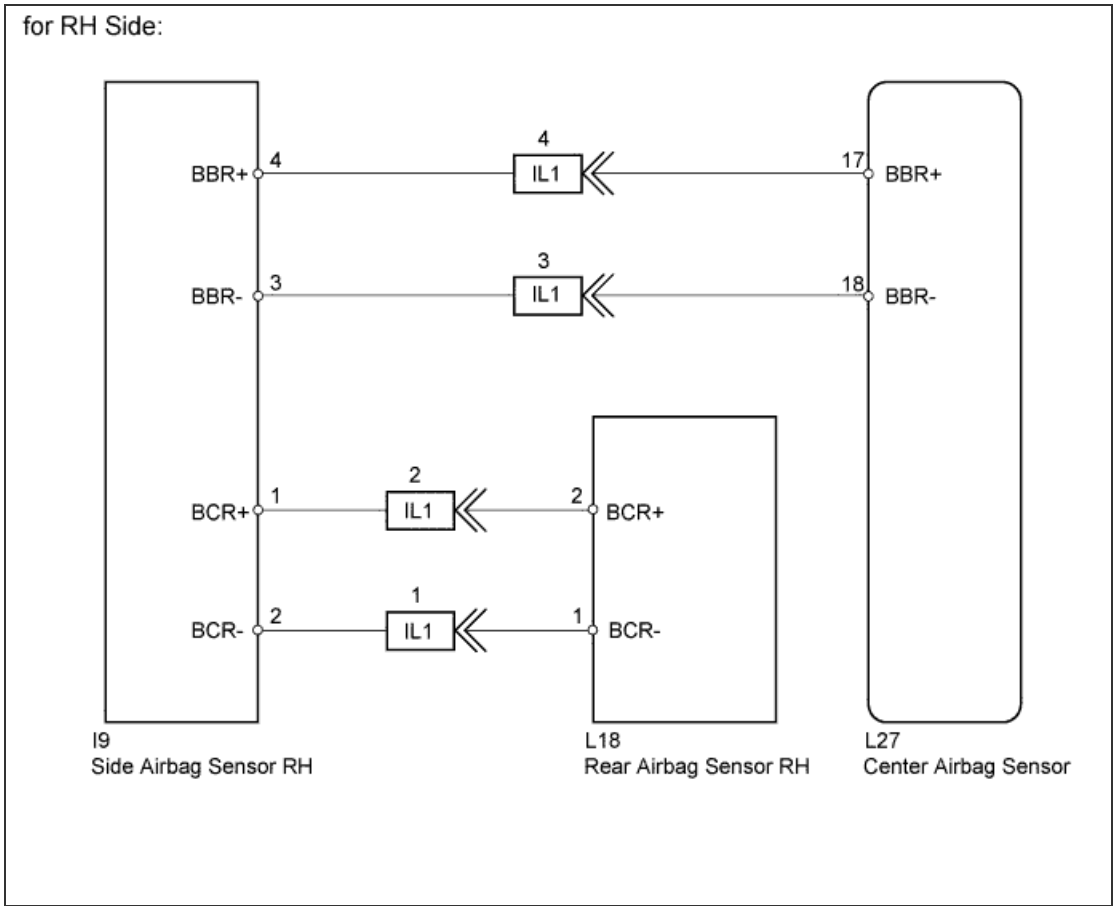
"Door side airbag sensor RH" refers to the side airbag sensor RH.

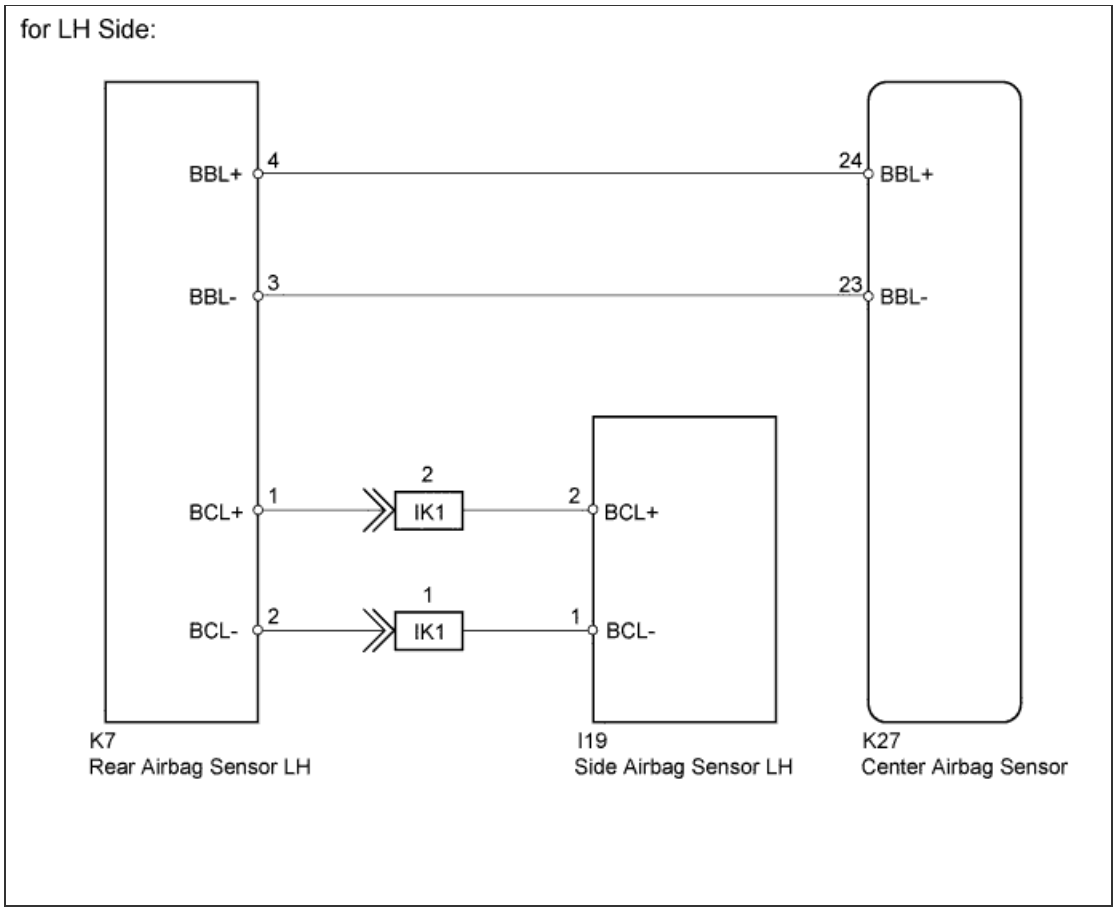
- The circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH) is composed of the center airbag sensor, side airbag sensor LH or RH, and rear airbag sensor LH or RH.
  The side airbag sensor LH or RH and rear airbag sensor LH or RH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1693/81 or B1648/82 is stored when a malfunction is detected in the circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH and curtain shield airbag LH or RH).
  DTC B1643/81 or B1638/82 is stored when a malfunction is detected in the circuit for the rear collision sensor LH or RH (to determine deployment of the rear seat side airbag LH or RH and curtain shield airbag LH or RH).

DTC Code	DTC Detection Condition	Trouble Area
B1638/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the rear collision sensor LH (to determine deployment of the rear seat side airbag LH and curtain shield airbag LH) for 2 seconds. • A rear airbag sensor LH malfunction. • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear airbag sensor LH • Side airbag sensor LH • Center airbag sensor assembly
B1643/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the rear collision sensor RH (to determine deployment of the rear seat side airbag RH and curtain shield airbag RH) for 2 seconds. • A rear airbag sensor RH malfunction. • A side airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear airbag sensor RH • Side airbag sensor RH • Center airbag sensor assembly
B1648/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds.	• No. 2 floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

	• A side airbag sensor LH malfunction. • A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	
B1693/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK PAST DTC

a. Turn the engine switch on (IG), and wait for at least 60 seconds.

b. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1637 or B1692 is output	A
DTC B1632 or B1697 is output	B
DTC B1632, B1637, B1692 and B1697 are not output	C

A → GO TO DTC B1637 (Click here)

B → GO TO DTC B1632 (Click here)

C

2.CHECK FOR DTC

a. Turn the engine switch off.

HINT:

If a communication error occurs, DTCs for both the LH and RH sides will be stored simultaneously. The malfunctioning area can be identified by turning the engine switch off and then on (IG) again.

b. Turn the engine switch on (IG), and wait for at least 60 seconds.

c. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1638, B1643, B1648 and B1693 are not output	A
DTC B1638 or B1648 is output	B
DTC B1643 or B1693 is output	C

HINT:

Codes other than DTC B1638, B1643,B1648 and B1693 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → Go to step 13

C

3.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and side airbag sensor RH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

4.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and side airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side and side airbag sensor RH side) are not damaged.

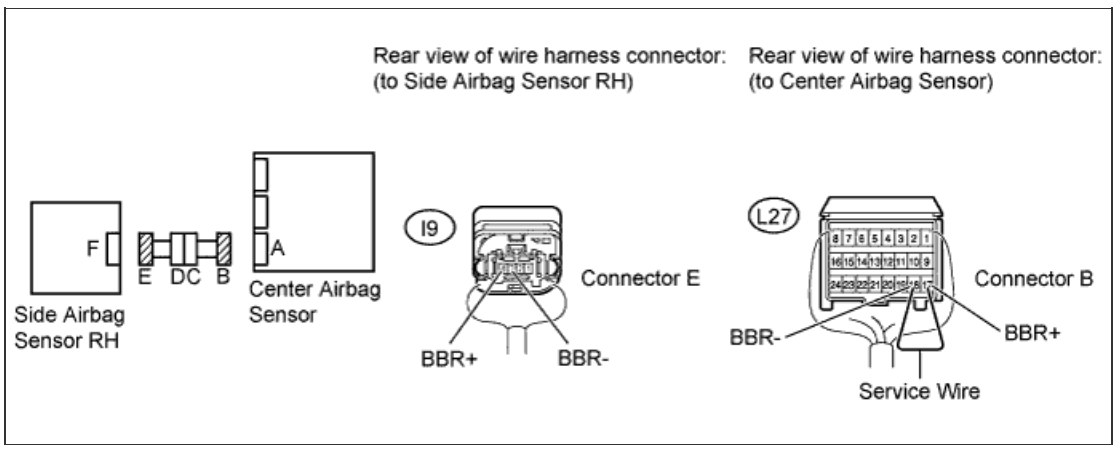
OK:

The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

5.CHECK SIDE AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-4 (BBR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-3 (BBR-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 17 (BBR+) and 18 (BBR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-4 (BBR+) - I9-3 (BBR-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-4 (BBR+) - I9-3 (BBR-)	Always	1 MΩ or higher
I9-4 (BBR+) - Body ground	Always	1 MΩ or higher
I9-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 11

OK

6.CHECK CONNECTION OF CONNECTORS

a. Check that the connector is properly connected to the rear airbag sensor RH.

OK:
The connector is properly connected.

NG → CONNECT CONNECTOR PROPERLY

OK

7.CHECK CONNECTORS

a. Disconnect the connectors from the side airbag sensor RH and rear airbag sensor RH.

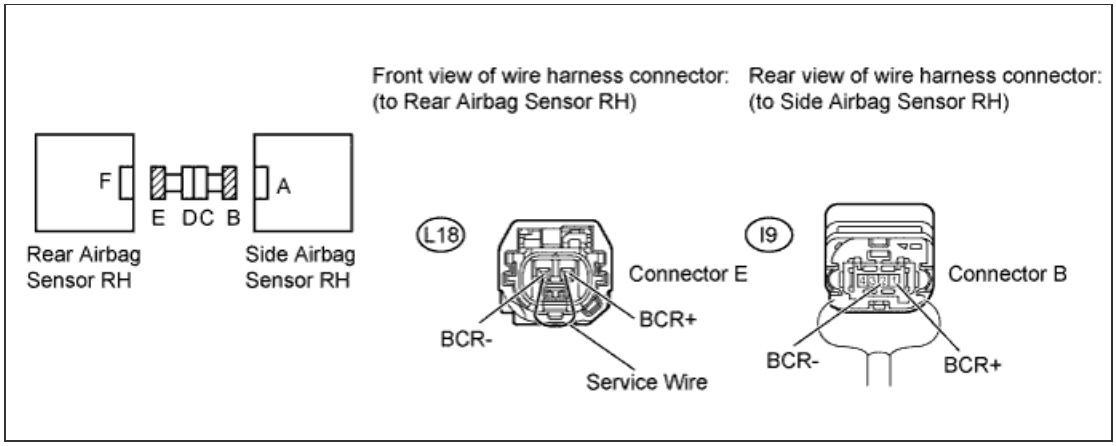
b. Check that the connector (on the rear airbag sensor RH side) is not damaged.

OK:
The connector is not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

8.CHECK REAR AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

g. Disconnect the service wire from connector E.

h. Measure the resistance according to the value(s) in the table below.

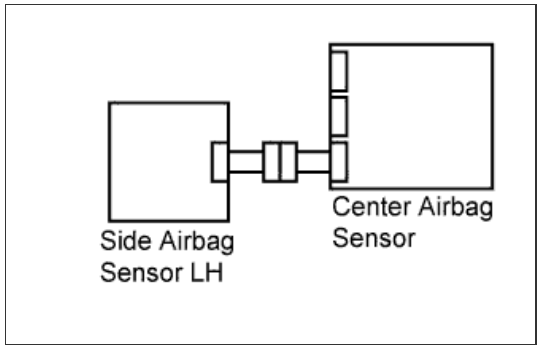
Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 12

OK

9.CHECK SIDE AIRBAG SENSOR RH



a. Connect the connector to the center airbag sensor.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1643, B1693 and B1698 are not output	A
DTC B1698 is output	B
DTC B1643 and B1693 are output	C

HINT:

Codes other than DTC B1643,B1693 and B1698 may be output at this time, but they are not related to this check.

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

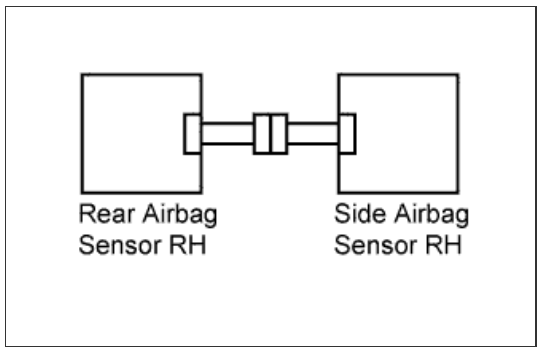
k. Return the side airbag sensor LH and RH to their original positions and connect the connectors to them.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

10.CHECK REAR AIRBAG SENSOR RH



a. Temporarily replace the rear airbag sensor RH with a new one.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1643 or B1693 is not output.

HINT:

Codes other than DTC B1643 and B1693 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

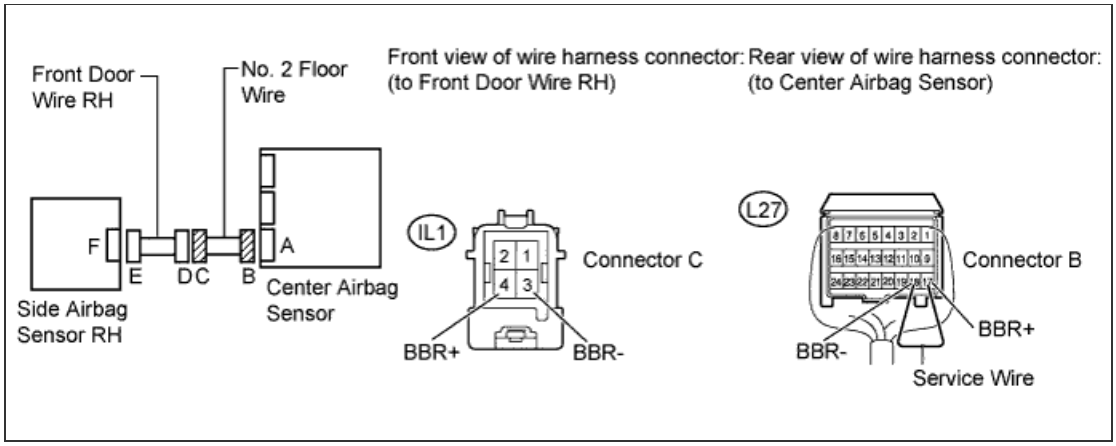
i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR RH (Click here)

11.CHECK NO. 2 FLOOR WIRE (CENTER AIRBAG SENSOR - FRONT DOOR WIRE RH)



a. Disconnect the No. 2 floor wire from the front door wire RH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
IL1-4 (BBR+) - Body ground	Engine switch on (IG)	Below 1 V
IL1-3 (BBR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 17 (BBR+) and 18 (BBR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
IL1-4 (BBR+) - IL1-3 (BBR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

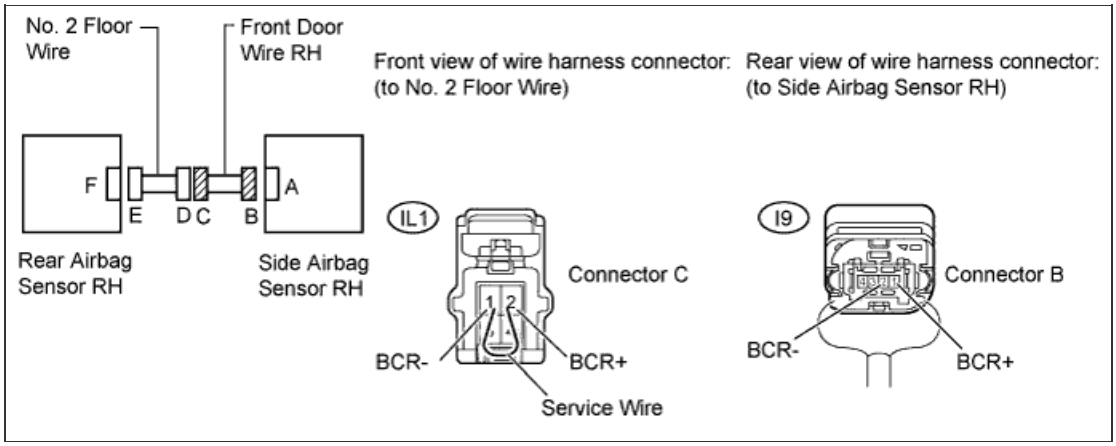
Standard Resistance:

Tester Connection	Condition	Specified Condition
IL1-4 (BBR+) - IL1-3 (BBR-)	Always	1 MΩ or higher
IL1-4 (BBR+) - Body ground	Always	1 MΩ or higher
IL1-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK → REPLACE FRONT DOOR WIRE RH

12.CHECK FRONT DOOR WIRE RH (SIDE AIRBAG SENSOR RH - NO. 2 FLOOR WIRE)



a. Disconnect the front door wire RH from the No. 2 floor wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FRONT DOOR WIRE RH

OK

REPLACE NO. 2 FLOOR WIRE

13.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and rear airbag sensor LH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

14.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and rear airbag sensor LH.

b. Check that the connectors (on the center airbag sensor side and rear airbag sensor LH side) are not damaged.

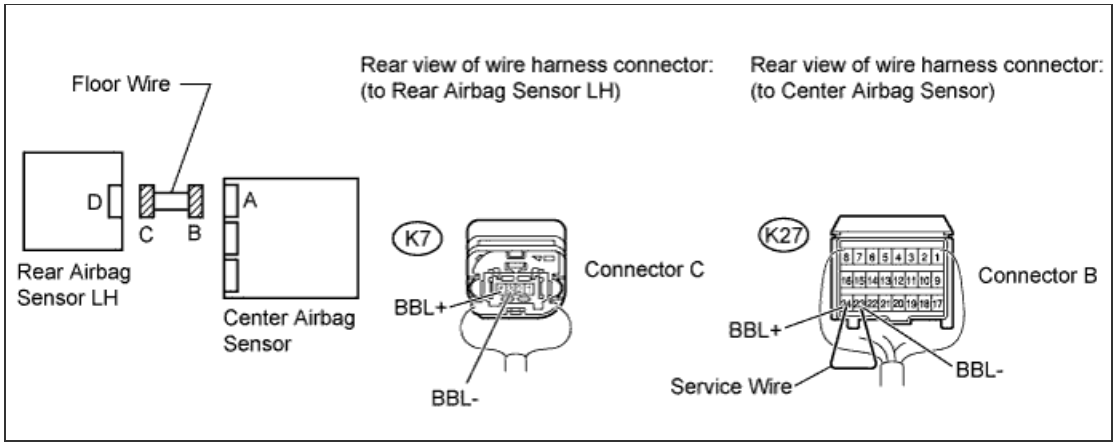
OK:

The connectors are not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

15.CHECK FLOOR WIRE (CENTER AIRBAG SENSOR - REAR AIRBAG SENSOR LH)



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-4 (BBL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-3 (BBL-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 24 (BBL+) and 23 (BBL-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

		Specified

Tester Connection	Condition	Condition
K7-4 (BBL+) - K7-3 (BBL-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-4 (BBL+) - K7-3 (BBL-)	Always	1 MΩ or higher
K7-4 (BBL+) - Body ground	Always	1 MΩ or higher
K7-3 (BBL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

16.CHECK CONNECTION OF CONNECTOR

a. Check that the connector is properly connected to the side airbag sensor LH.

OK:
The connector is properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

17.CHECK CONNECTORS

a. Disconnect the connectors from the rear airbag sensor LH and side airbag sensor LH.

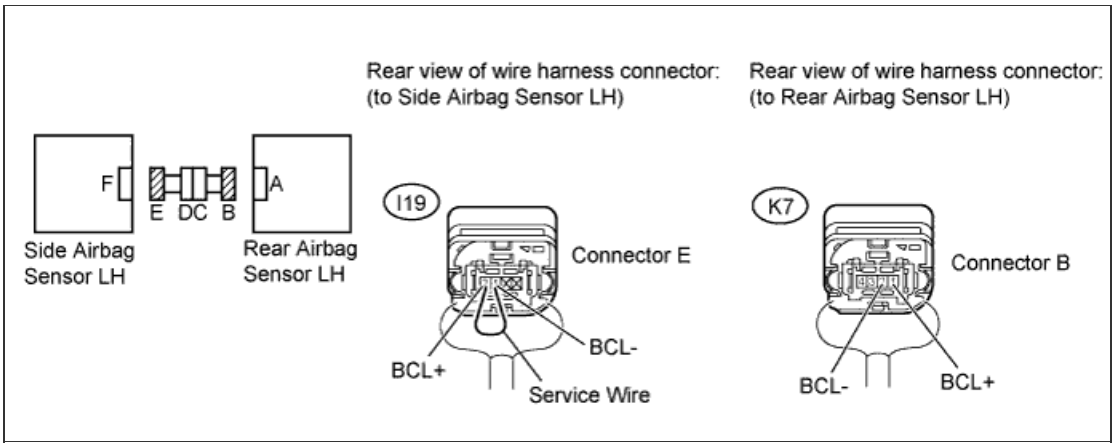
b. Check that the connector (on the side airbag sensor LH side) is not damaged.

OK:
The connector is not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

18.CHECK SIDE AIRBAG SENSOR LH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

g. Disconnect the service wire from connector E.

h. Measure the resistance according to the value(s) in the table below.

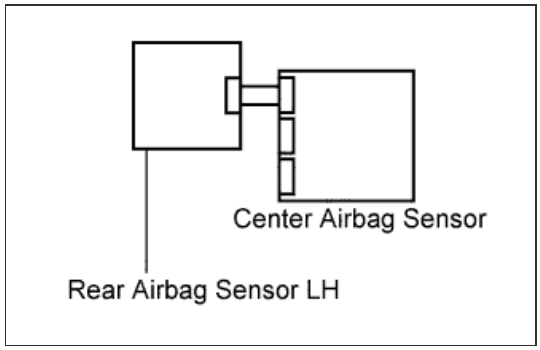
Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	1 MΩ or higher
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → Go to step 21

OK

19.CHECK REAR AIRBAG SENSOR LH



a. Temporarily replace the side airbag sensor LH with a new one.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1638 or B1648 is not output.

HINT:

Codes other than DTC B1638 and B1648 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

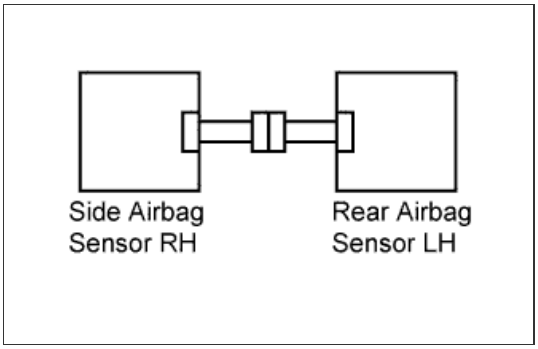
i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

NG → Go to step 20

OK

REPLACE REAR AIRBAG SENSOR LH (Click here)

20.CHECK SIDE AIRBAG SENSOR LH



a. Interchange the side airbag sensor RH with LH and connect the connectors to them.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 90 seconds.

g. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1638 or B1648 is output	A
DTC B1633 is output	B
DTC B1633, B1638 and B1648 are not output	C

HINT:

Codes other than DTC B1633, B1638 and B1648 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

j. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

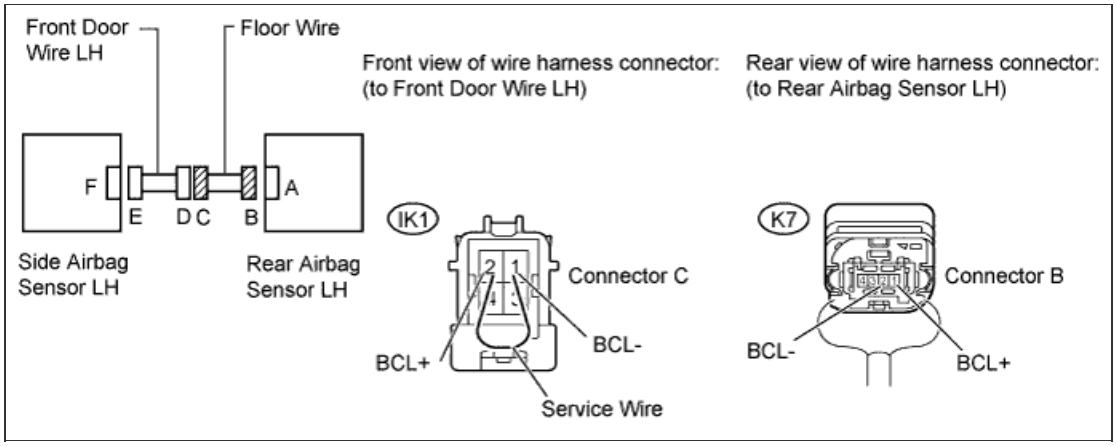
A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

B → REPLACE SIDE AIRBAG SENSOR LH (Click here)

C

USE SIMULATION METHOD TO CHECK (Click here)

21.CHECK FLOOR WIRE (REAR AIRBAG SENSOR LH - FRONT DOOR WIRE LH)



a. Disconnect the floor wire from the front door wire LH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	1 MΩ or higher
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK → REPLACE FRONT DOOR WIRE LH

DTC B1850/62 Short in Rear Side Squib RH Circuit

DTC B1851/62 Open in Rear Side Squib RH Circuit

DTC B1852/62 Short to GND in Rear Side Squib RH Circuit

DTC B1853/62 Short to B+ in Rear Side Squib RH Circuit

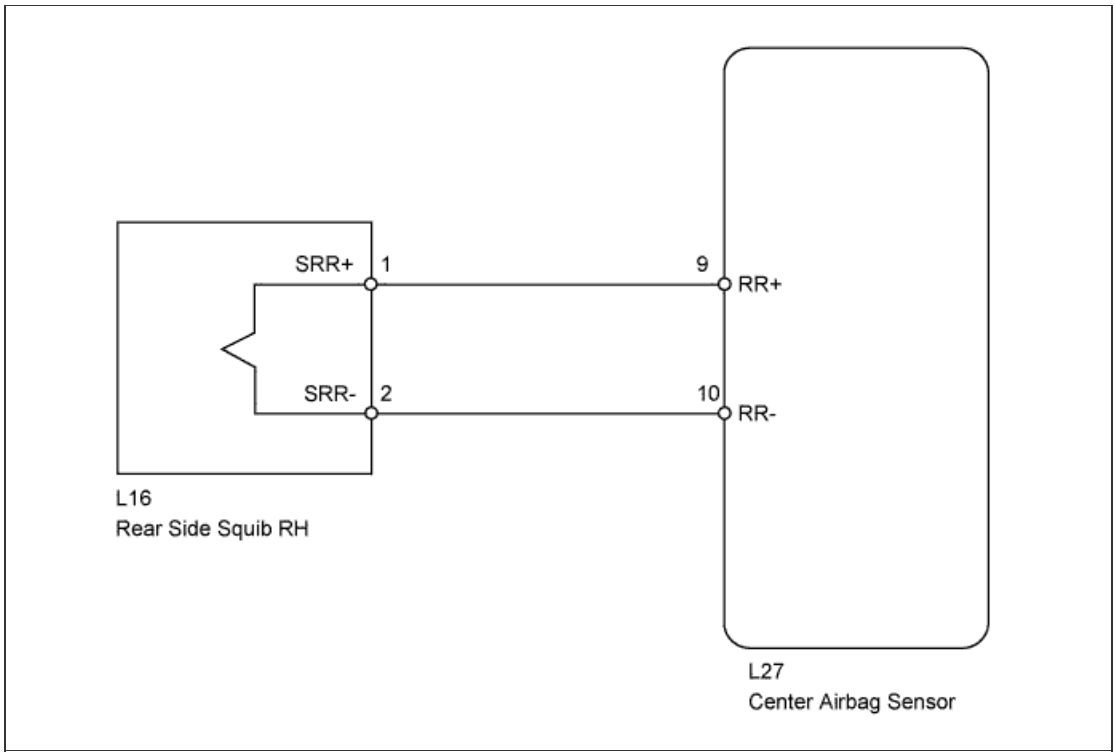
for Preparation Click here

DESCRIPTION

The rear side squib RH circuit consists of the center airbag sensor and the rear seat side airbag RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1850/62	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib RH circuit during the primary check. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1851/62	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib RH circuit for 2 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1852/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1853/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG RH (REAR SIDE SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag RH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

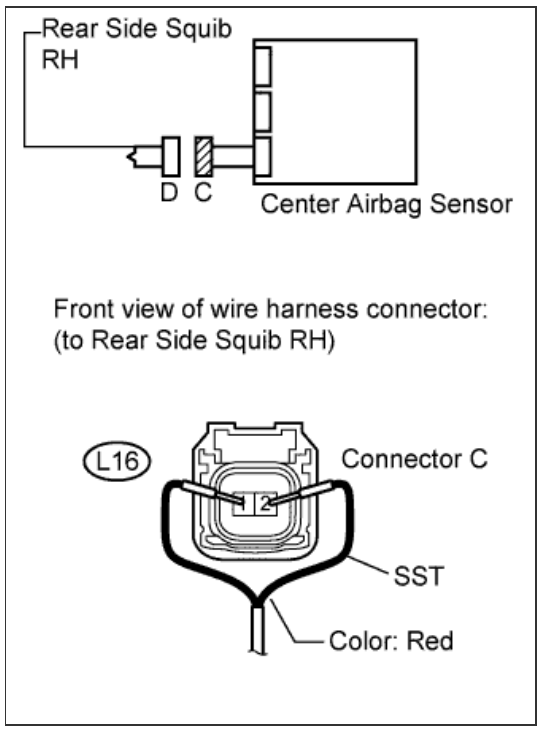
Never connect the tester to the rear seat side airbag RH (rear side squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

2.CHECK NO. 2 FLOOR WIRE (REAR SIDE SQUIB RH CIRCUIT)

a. Turn the engine switch off.

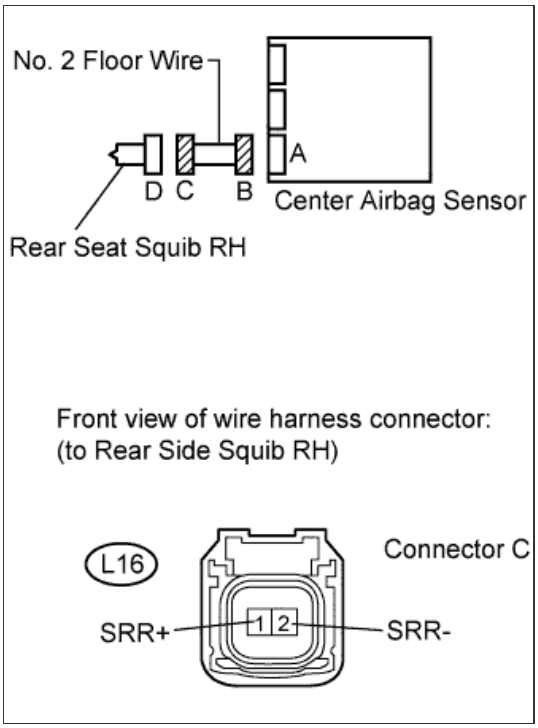
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST (resistance: 2.1 Ω) from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L16-1 (SRR+) - Body ground	Engine switch on (IG)	Below 1 V
L16-2 (SRR-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	1 MΩ or higher
L16-1 (SRR+) - Body ground	Always	1 MΩ or higher
L16-2 (SRR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat side airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

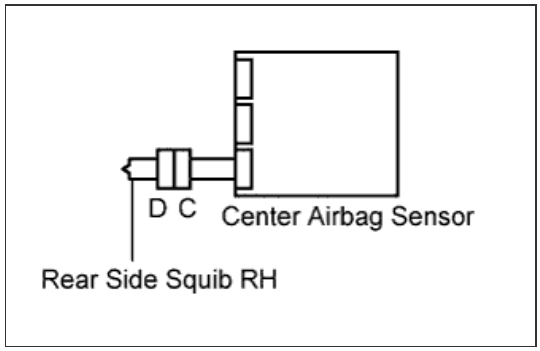
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1638/82 Rear Airbag Sensor Assembly LH Initialization Incomplete

DTC B1643/81 Side Satellite Sensor Bus RH Initialization Incomplete

DTC B1648/82 Side Satellite Sensor Bus LH Initialization Incomplete

DTC B1693/81 Door Side Airbag Sensor RH Initialization Incomplete

for Preparation Click here

DESCRIPTION

HINT:

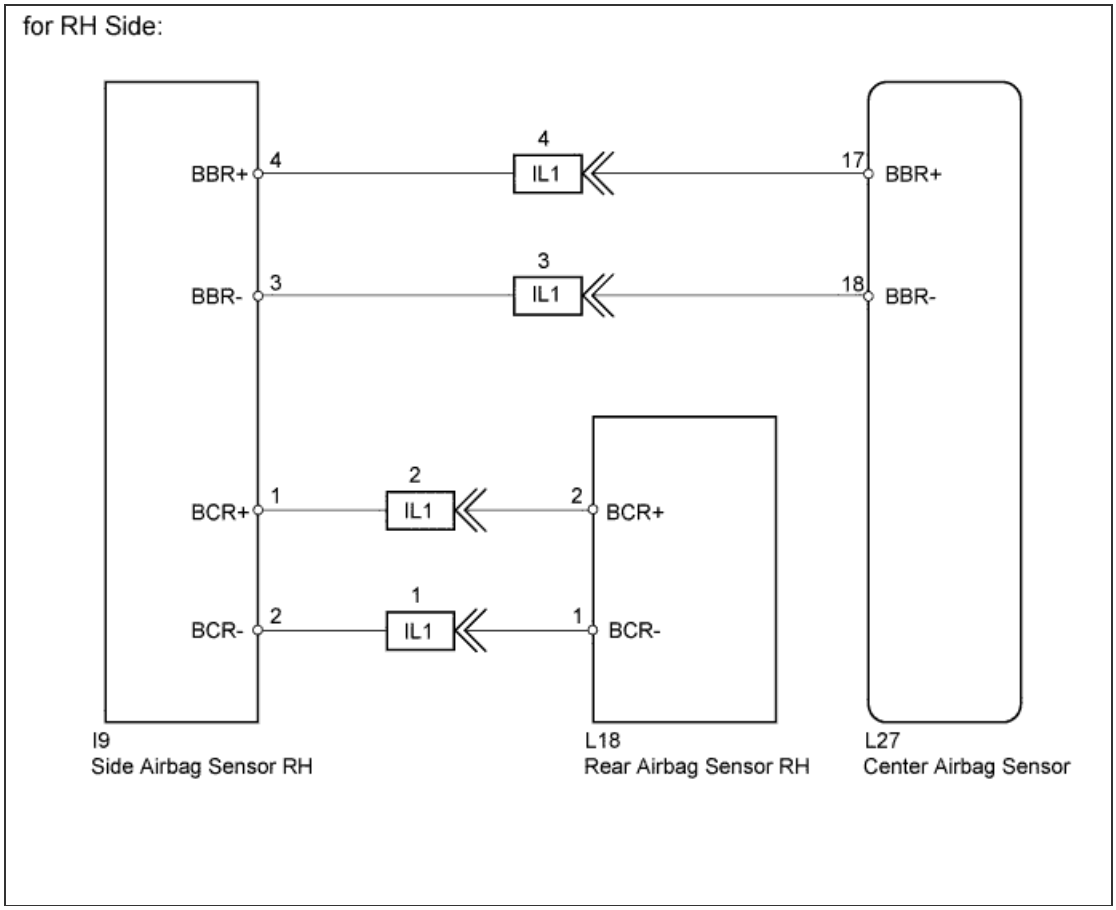
"Door side airbag sensor RH" refers to the side airbag sensor RH.

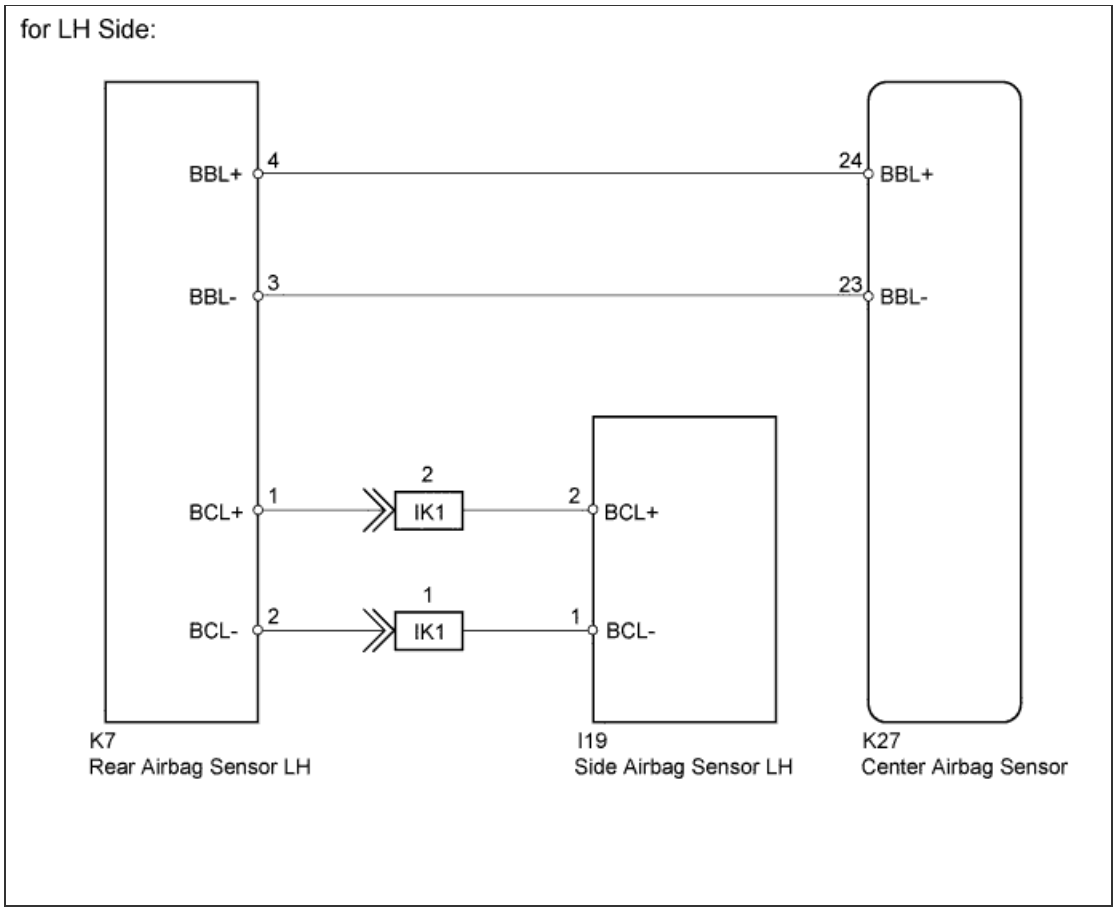
- The circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH) is composed of the center airbag sensor, side airbag sensor LH or RH, and rear airbag sensor LH or RH.
  The side airbag sensor LH or RH and rear airbag sensor LH or RH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1693/81 or B1648/82 is stored when a malfunction is detected in the circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH and curtain shield airbag LH or RH).
  DTC B1643/81 or B1638/82 is stored when a malfunction is detected in the circuit for the rear collision sensor LH or RH (to determine deployment of the rear seat side airbag LH or RH and curtain shield airbag LH or RH).

DTC Code	DTC Detection Condition	Trouble Area
B1638/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the rear collision sensor LH (to determine deployment of the rear seat side airbag LH and curtain shield airbag LH) for 2 seconds. • A rear airbag sensor LH malfunction. • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear airbag sensor LH • Side airbag sensor LH • Center airbag sensor assembly
B1643/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the rear collision sensor RH (to determine deployment of the rear seat side airbag RH and curtain shield airbag RH) for 2 seconds. • A rear airbag sensor RH malfunction. • A side airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear airbag sensor RH • Side airbag sensor RH • Center airbag sensor assembly
B1648/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds.	• No. 2 floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

	• A side airbag sensor LH malfunction. • A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	
B1693/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK PAST DTC

a. Turn the engine switch on (IG), and wait for at least 60 seconds.

b. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1637 or B1692 is output	A
DTC B1632 or B1697 is output	B
DTC B1632, B1637, B1692 and B1697 are not output	C

A → GO TO DTC B1637 (Click here)

B → GO TO DTC B1632 (Click here)

C

2.CHECK FOR DTC

a. Turn the engine switch off.

HINT:

If a communication error occurs, DTCs for both the LH and RH sides will be stored simultaneously. The malfunctioning area can be identified by turning the engine switch off and then on (IG) again.

b. Turn the engine switch on (IG), and wait for at least 60 seconds.

c. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1638, B1643, B1648 and B1693 are not output	A
DTC B1638 or B1648 is output	B
DTC B1643 or B1693 is output	C

HINT:

Codes other than DTC B1638, B1643,B1648 and B1693 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → Go to step 13

C

3.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and side airbag sensor RH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

4.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and side airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side and side airbag sensor RH side) are not damaged.

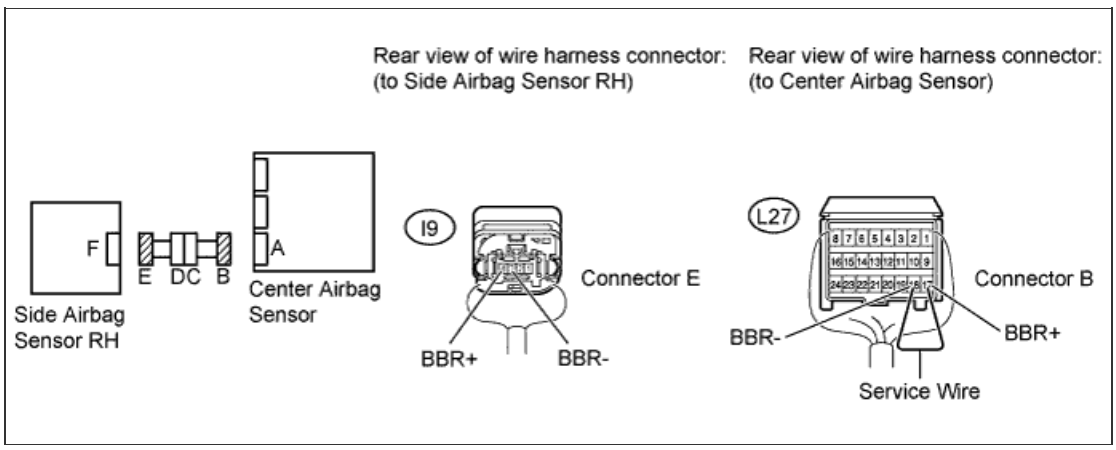
OK:

The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

5.CHECK SIDE AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-4 (BBR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-3 (BBR-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 17 (BBR+) and 18 (BBR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-4 (BBR+) - I9-3 (BBR-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-4 (BBR+) - I9-3 (BBR-)	Always	1 MΩ or higher
I9-4 (BBR+) - Body ground	Always	1 MΩ or higher
I9-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 11

OK

6.CHECK CONNECTION OF CONNECTORS

a. Check that the connector is properly connected to the rear airbag sensor RH.

OK:
The connector is properly connected.

NG → CONNECT CONNECTOR PROPERLY

OK

7.CHECK CONNECTORS

a. Disconnect the connectors from the side airbag sensor RH and rear airbag sensor RH.

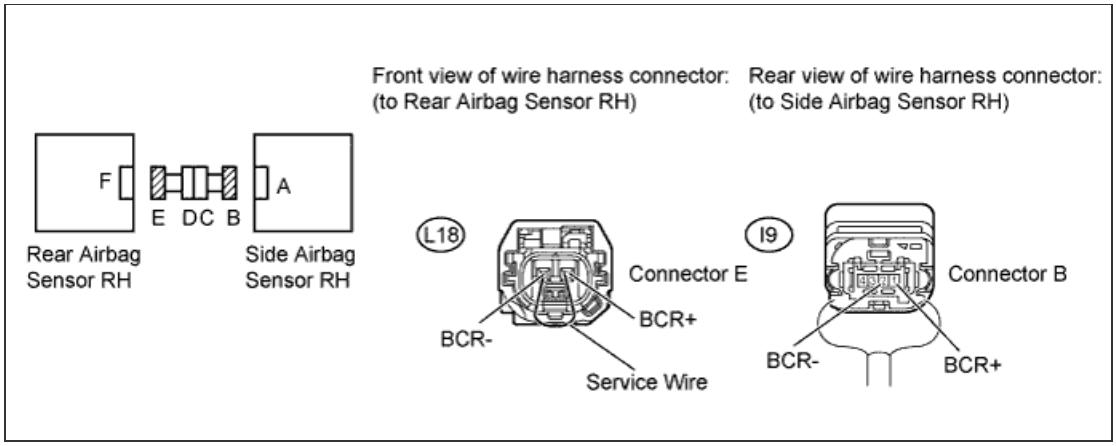
b. Check that the connector (on the rear airbag sensor RH side) is not damaged.

OK:
The connector is not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

8.CHECK REAR AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

g. Disconnect the service wire from connector E.

h. Measure the resistance according to the value(s) in the table below.

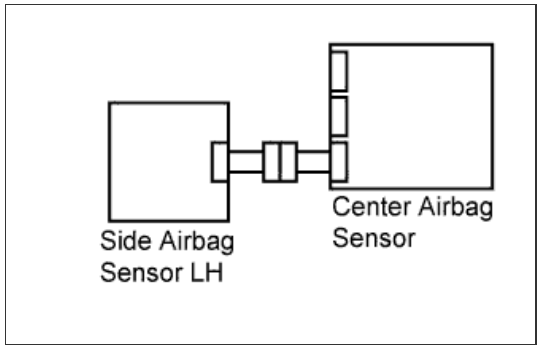
Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 12

OK

9.CHECK SIDE AIRBAG SENSOR RH



a. Connect the connector to the center airbag sensor.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1643, B1693 and B1698 are not output	A
DTC B1698 is output	B
DTC B1643 and B1693 are output	C

HINT:

Codes other than DTC B1643,B1693 and B1698 may be output at this time, but they are not related to this check.

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

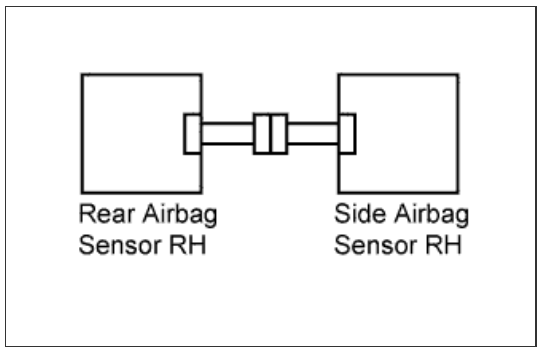
k. Return the side airbag sensor LH and RH to their original positions and connect the connectors to them.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

10.CHECK REAR AIRBAG SENSOR RH



a. Temporarily replace the rear airbag sensor RH with a new one.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1643 or B1693 is not output.

HINT:

Codes other than DTC B1643 and B1693 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

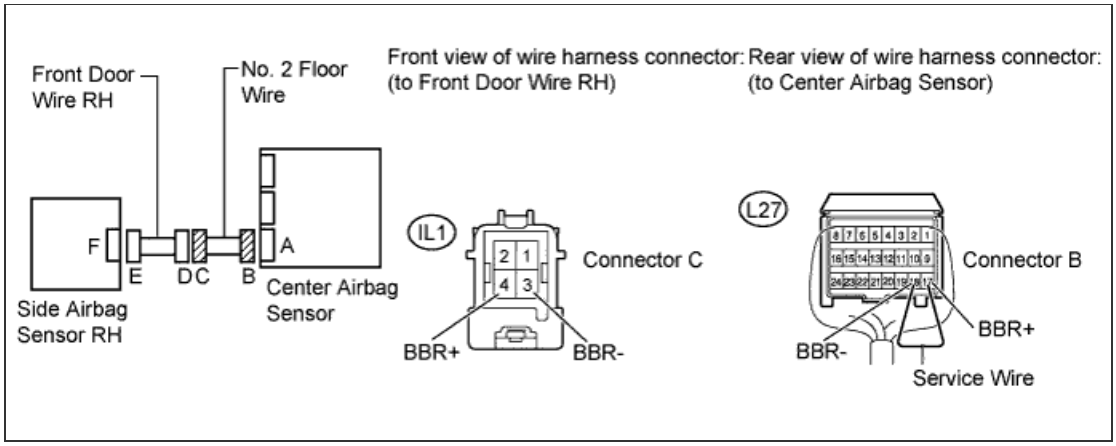
i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR RH (Click here)

11.CHECK NO. 2 FLOOR WIRE (CENTER AIRBAG SENSOR - FRONT DOOR WIRE RH)



a. Disconnect the No. 2 floor wire from the front door wire RH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
IL1-4 (BBR+) - Body ground	Engine switch on (IG)	Below 1 V
IL1-3 (BBR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 17 (BBR+) and 18 (BBR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
IL1-4 (BBR+) - IL1-3 (BBR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

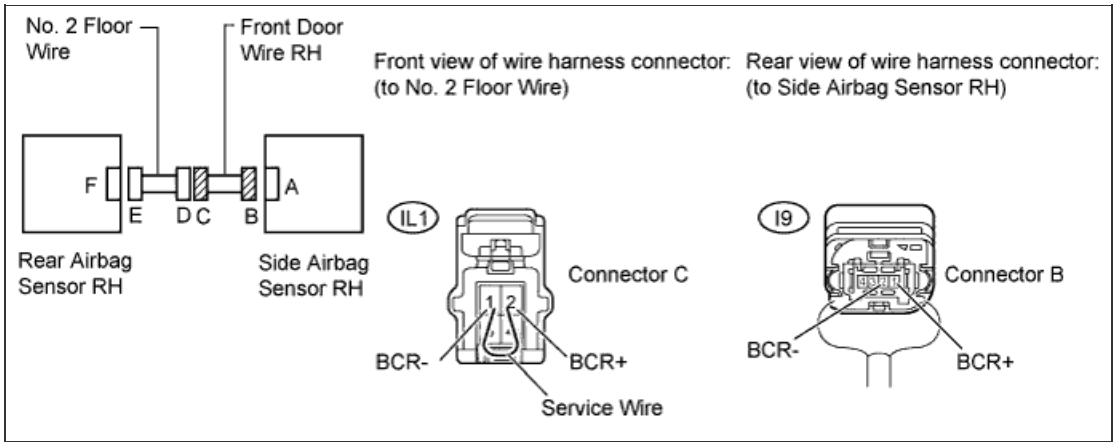
Standard Resistance:

Tester Connection	Condition	Specified Condition
IL1-4 (BBR+) - IL1-3 (BBR-)	Always	1 MΩ or higher
IL1-4 (BBR+) - Body ground	Always	1 MΩ or higher
IL1-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK → REPLACE FRONT DOOR WIRE RH

12.CHECK FRONT DOOR WIRE RH (SIDE AIRBAG SENSOR RH - NO. 2 FLOOR WIRE)



a. Disconnect the front door wire RH from the No. 2 floor wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FRONT DOOR WIRE RH

OK

REPLACE NO. 2 FLOOR WIRE

13.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and rear airbag sensor LH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

14.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and rear airbag sensor LH.

b. Check that the connectors (on the center airbag sensor side and rear airbag sensor LH side) are not damaged.

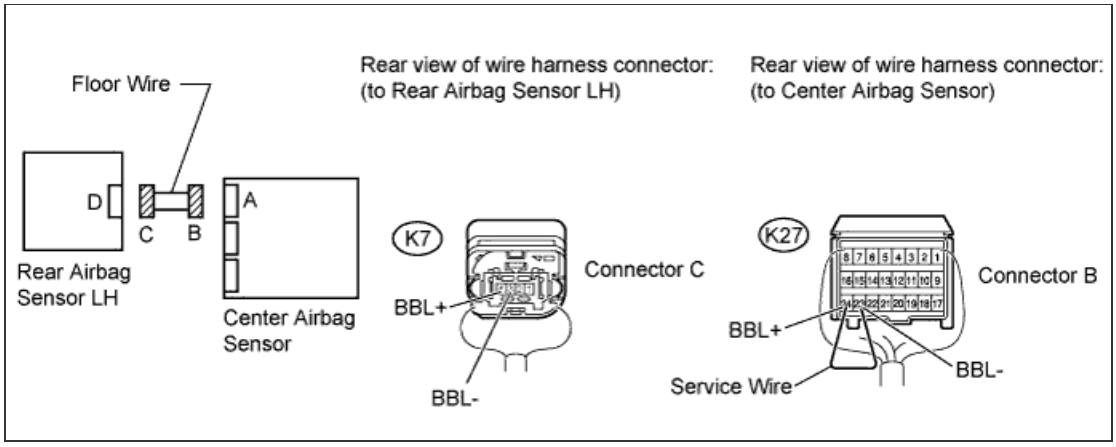
OK:

The connectors are not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

15.CHECK FLOOR WIRE (CENTER AIRBAG SENSOR - REAR AIRBAG SENSOR LH)



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-4 (BBL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-3 (BBL-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 24 (BBL+) and 23 (BBL-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

		Specified

Tester Connection	Condition	Condition
K7-4 (BBL+) - K7-3 (BBL-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-4 (BBL+) - K7-3 (BBL-)	Always	1 MΩ or higher
K7-4 (BBL+) - Body ground	Always	1 MΩ or higher
K7-3 (BBL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

16.CHECK CONNECTION OF CONNECTOR

a. Check that the connector is properly connected to the side airbag sensor LH.

OK:
The connector is properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

17.CHECK CONNECTORS

a. Disconnect the connectors from the rear airbag sensor LH and side airbag sensor LH.

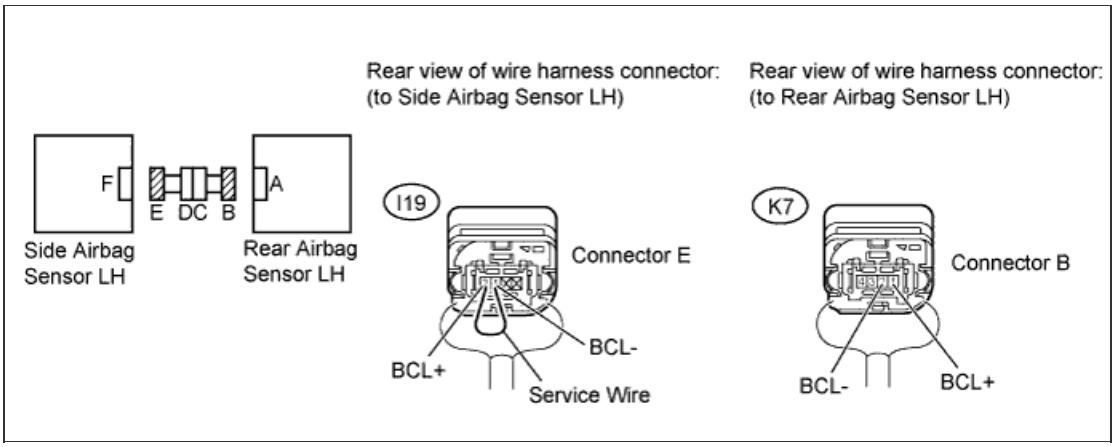
b. Check that the connector (on the side airbag sensor LH side) is not damaged.

OK:
The connector is not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

18.CHECK SIDE AIRBAG SENSOR LH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

g. Disconnect the service wire from connector E.

h. Measure the resistance according to the value(s) in the table below.

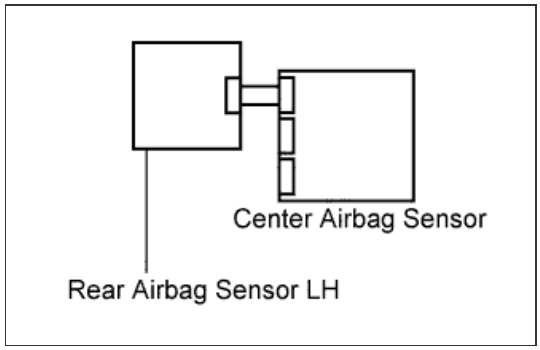
Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	1 MΩ or higher
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → Go to step 21

OK

19.CHECK REAR AIRBAG SENSOR LH



a. Temporarily replace the side airbag sensor LH with a new one.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1638 or B1648 is not output.

HINT:

Codes other than DTC B1638 and B1648 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

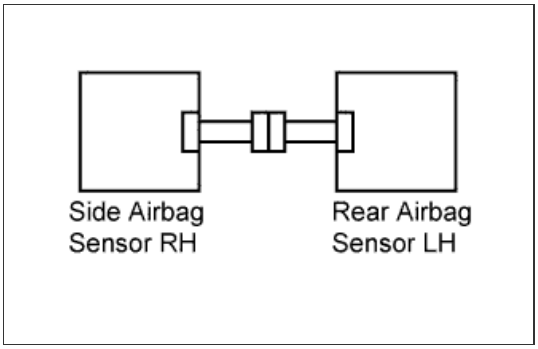
i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

NG → Go to step 20

OK

REPLACE REAR AIRBAG SENSOR LH (Click here)

20.CHECK SIDE AIRBAG SENSOR LH



a. Interchange the side airbag sensor RH with LH and connect the connectors to them.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 90 seconds.

g. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1638 or B1648 is output	A
DTC B1633 is output	B
DTC B1633, B1638 and B1648 are not output	C

HINT:

Codes other than DTC B1633, B1638 and B1648 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

j. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

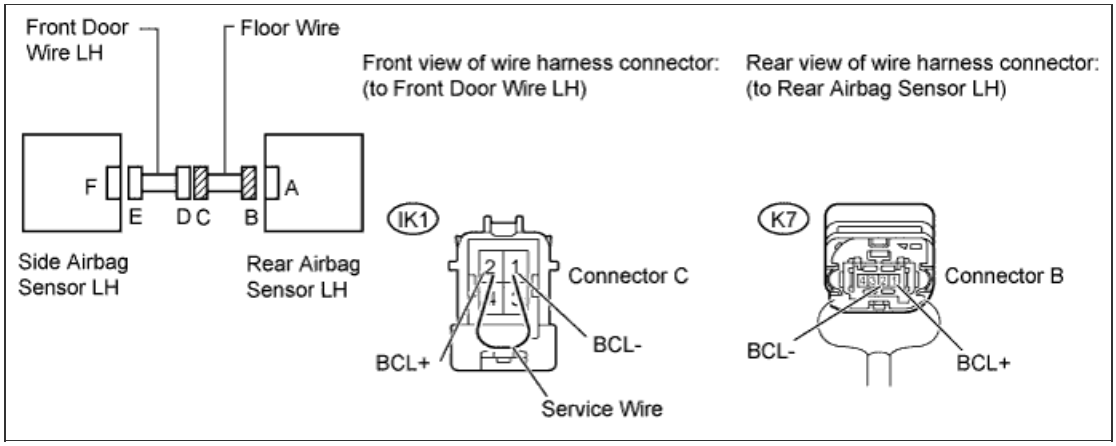
A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

B → REPLACE SIDE AIRBAG SENSOR LH (Click here)

C

USE SIMULATION METHOD TO CHECK (Click here)

21.CHECK FLOOR WIRE (REAR AIRBAG SENSOR LH - FRONT DOOR WIRE LH)



a. Disconnect the floor wire from the front door wire LH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	1 MΩ or higher
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK → REPLACE FRONT DOOR WIRE LH

DTC B1850/62 Short in Rear Side Squib RH Circuit

DTC B1851/62 Open in Rear Side Squib RH Circuit

DTC B1852/62 Short to GND in Rear Side Squib RH Circuit

DTC B1853/62 Short to B+ in Rear Side Squib RH Circuit

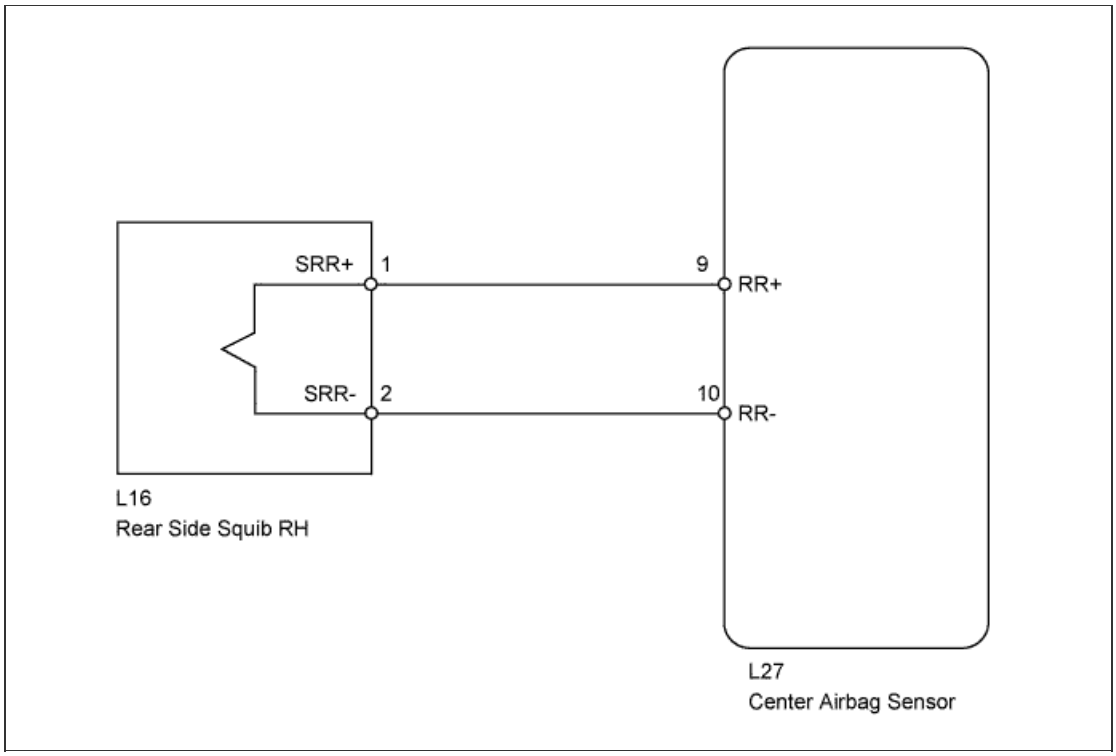
for Preparation Click here

DESCRIPTION

The rear side squib RH circuit consists of the center airbag sensor and the rear seat side airbag RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1850/62	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib RH circuit during the primary check. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1851/62	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib RH circuit for 2 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1852/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1853/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG RH (REAR SIDE SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag RH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

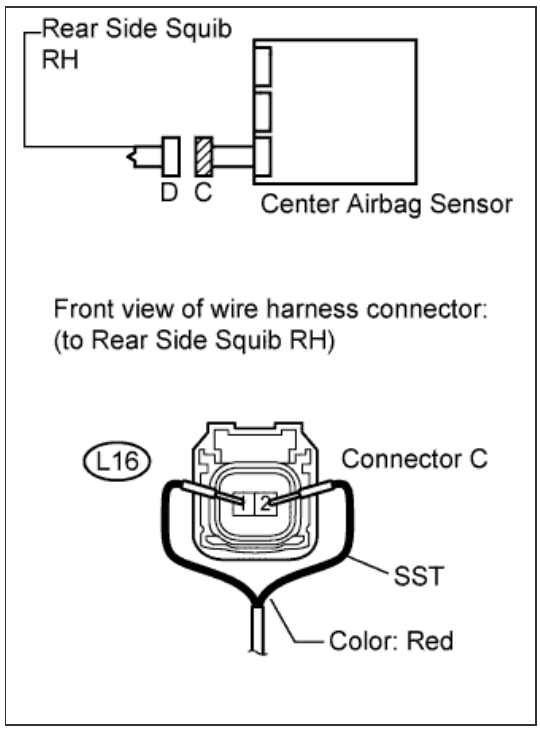
Never connect the tester to the rear seat side airbag RH (rear side squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

2.CHECK NO. 2 FLOOR WIRE (REAR SIDE SQUIB RH CIRCUIT)

a. Turn the engine switch off.

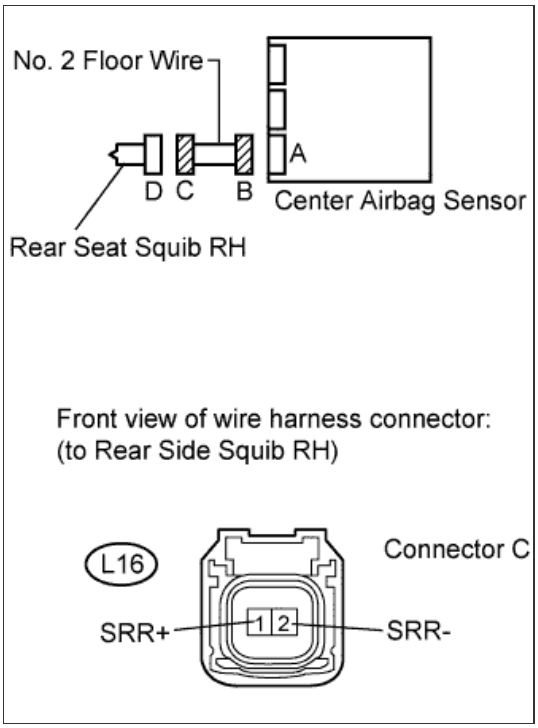
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST (resistance: 2.1 Ω) from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L16-1 (SRR+) - Body ground	Engine switch on (IG)	Below 1 V
L16-2 (SRR-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	1 MΩ or higher
L16-1 (SRR+) - Body ground	Always	1 MΩ or higher
L16-2 (SRR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat side airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

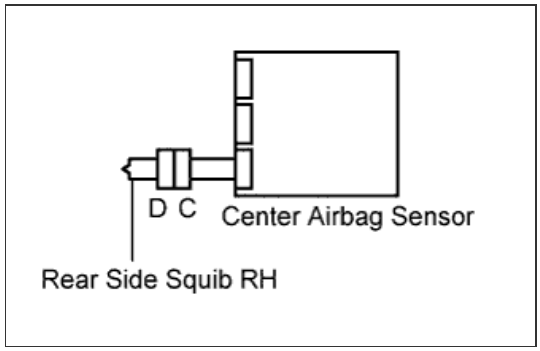
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1638/82 Rear Airbag Sensor Assembly LH Initialization Incomplete

DTC B1643/81 Side Satellite Sensor Bus RH Initialization Incomplete

DTC B1648/82 Side Satellite Sensor Bus LH Initialization Incomplete

DTC B1693/81 Door Side Airbag Sensor RH Initialization Incomplete

for Preparation Click here

DESCRIPTION

HINT:

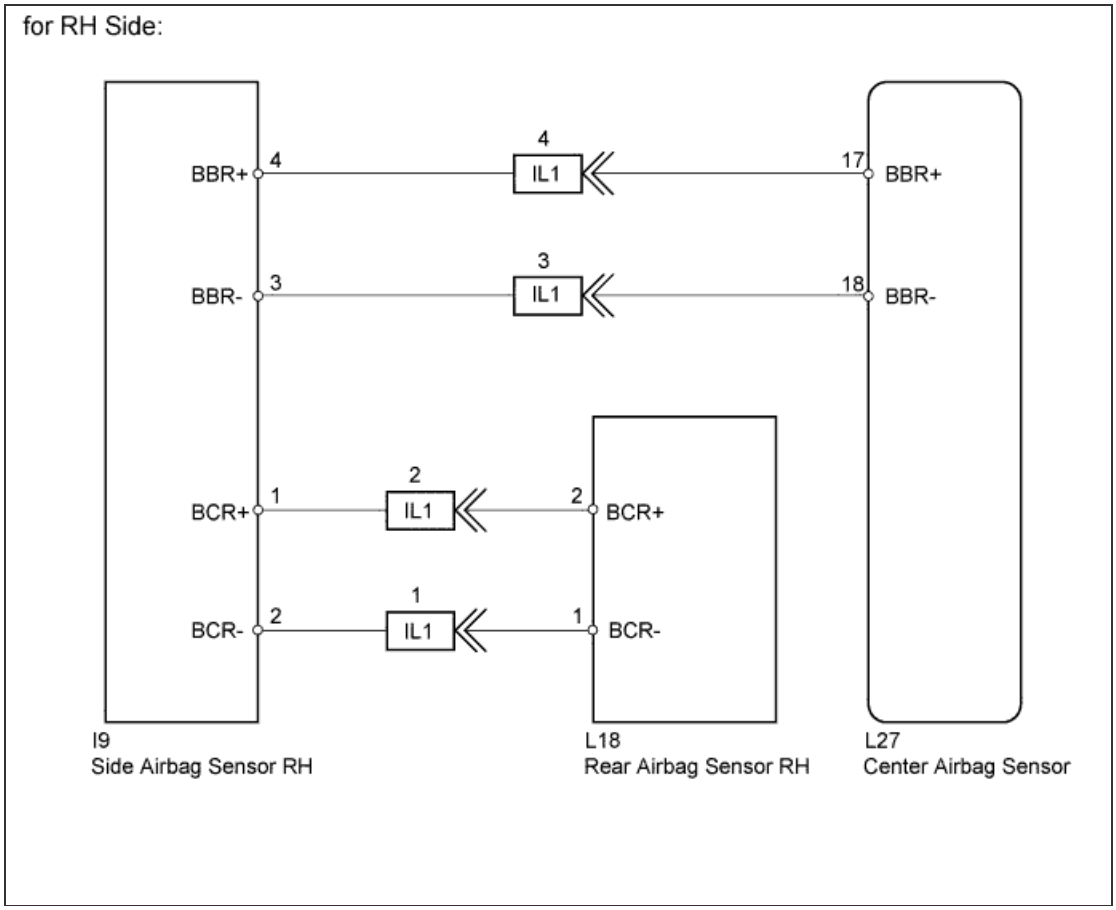
"Door side airbag sensor RH" refers to the side airbag sensor RH.

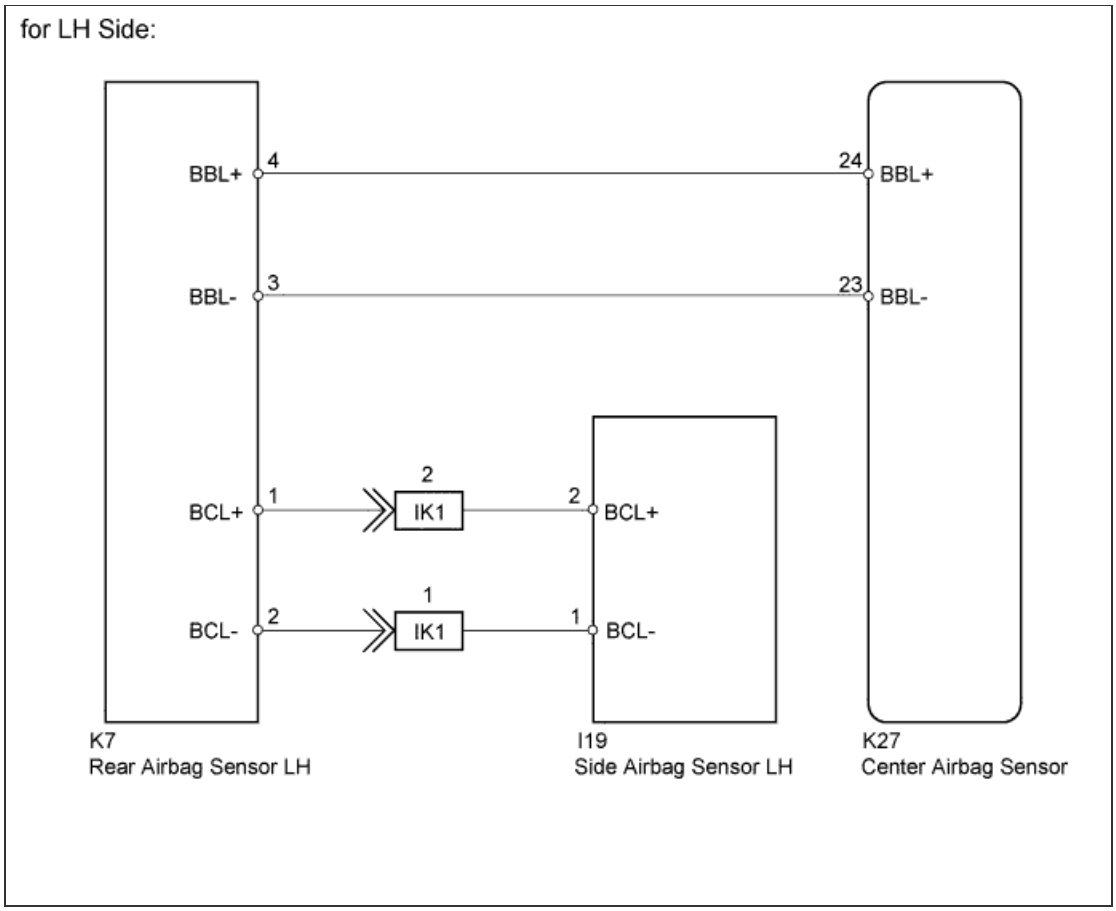
- The circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH) is composed of the center airbag sensor, side airbag sensor LH or RH, and rear airbag sensor LH or RH.
  The side airbag sensor LH or RH and rear airbag sensor LH or RH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1693/81 or B1648/82 is stored when a malfunction is detected in the circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH and curtain shield airbag LH or RH).
  DTC B1643/81 or B1638/82 is stored when a malfunction is detected in the circuit for the rear collision sensor LH or RH (to determine deployment of the rear seat side airbag LH or RH and curtain shield airbag LH or RH).

DTC Code	DTC Detection Condition	Trouble Area
B1638/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the rear collision sensor LH (to determine deployment of the rear seat side airbag LH and curtain shield airbag LH) for 2 seconds. • A rear airbag sensor LH malfunction. • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear airbag sensor LH • Side airbag sensor LH • Center airbag sensor assembly
B1643/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the rear collision sensor RH (to determine deployment of the rear seat side airbag RH and curtain shield airbag RH) for 2 seconds. • A rear airbag sensor RH malfunction. • A side airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear airbag sensor RH • Side airbag sensor RH • Center airbag sensor assembly
B1648/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds.	• No. 2 floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

	• A side airbag sensor LH malfunction. • A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	
B1693/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK PAST DTC

a. Turn the engine switch on (IG), and wait for at least 60 seconds.

b. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1637 or B1692 is output	A
DTC B1632 or B1697 is output	B
DTC B1632, B1637, B1692 and B1697 are not output	C

A → GO TO DTC B1637 (Click here)

B → GO TO DTC B1632 (Click here)

C

2.CHECK FOR DTC

a. Turn the engine switch off.

HINT:

If a communication error occurs, DTCs for both the LH and RH sides will be stored simultaneously. The malfunctioning area can be identified by turning the engine switch off and then on (IG) again.

b. Turn the engine switch on (IG), and wait for at least 60 seconds.

c. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1638, B1643, B1648 and B1693 are not output	A
DTC B1638 or B1648 is output	B
DTC B1643 or B1693 is output	C

HINT:

Codes other than DTC B1638, B1643,B1648 and B1693 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → Go to step 13

C

3.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and side airbag sensor RH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

4.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and side airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side and side airbag sensor RH side) are not damaged.

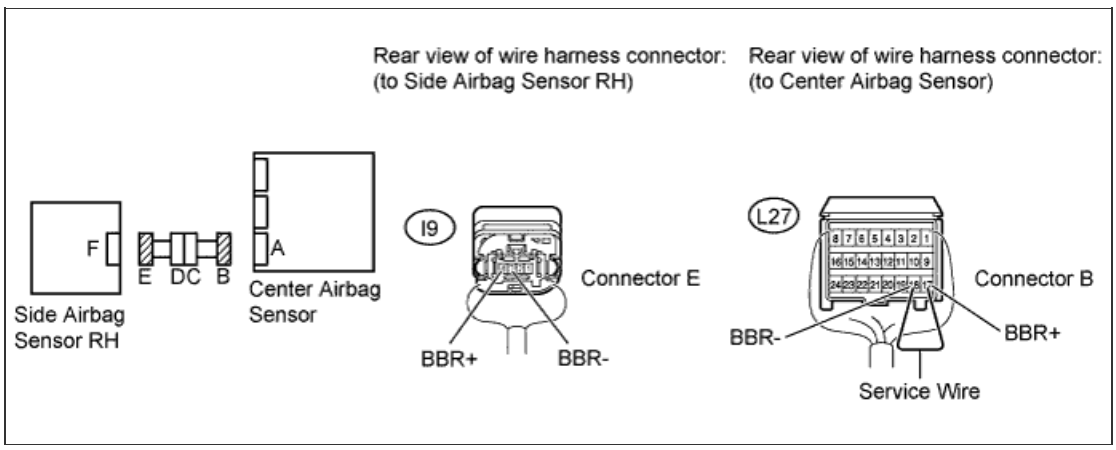
OK:

The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

5.CHECK SIDE AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-4 (BBR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-3 (BBR-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 17 (BBR+) and 18 (BBR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-4 (BBR+) - I9-3 (BBR-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-4 (BBR+) - I9-3 (BBR-)	Always	1 MΩ or higher
I9-4 (BBR+) - Body ground	Always	1 MΩ or higher
I9-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 11

OK

6.CHECK CONNECTION OF CONNECTORS

a. Check that the connector is properly connected to the rear airbag sensor RH.

OK:
The connector is properly connected.

NG → CONNECT CONNECTOR PROPERLY

OK

7.CHECK CONNECTORS

a. Disconnect the connectors from the side airbag sensor RH and rear airbag sensor RH.

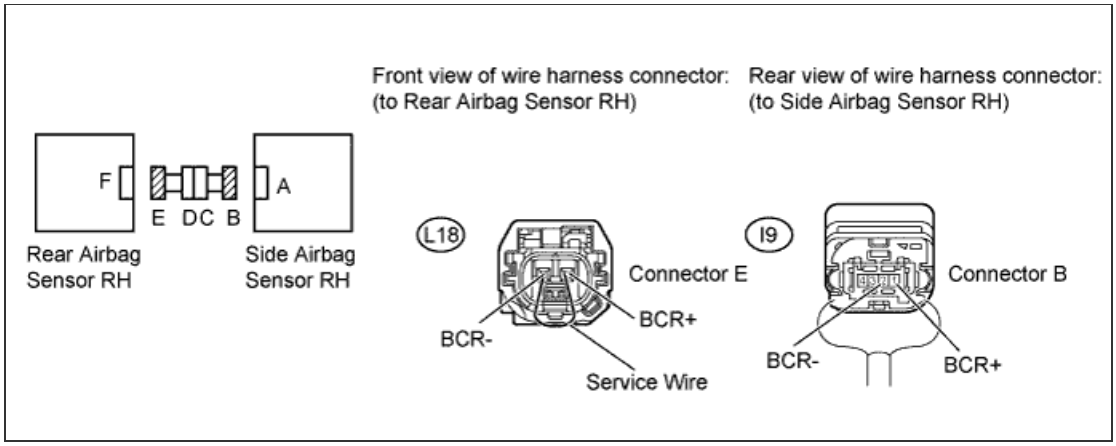
b. Check that the connector (on the rear airbag sensor RH side) is not damaged.

OK:
The connector is not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

8.CHECK REAR AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

g. Disconnect the service wire from connector E.

h. Measure the resistance according to the value(s) in the table below.

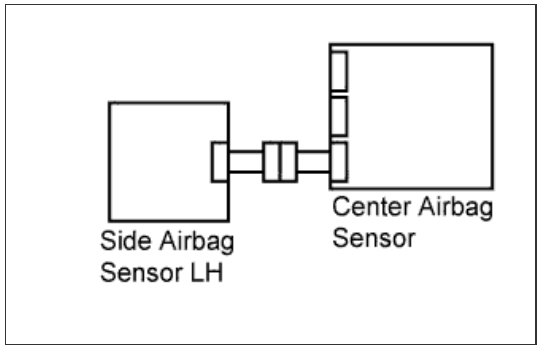
Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 12

OK

9.CHECK SIDE AIRBAG SENSOR RH



a. Connect the connector to the center airbag sensor.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1643, B1693 and B1698 are not output	A
DTC B1698 is output	B
DTC B1643 and B1693 are output	C

HINT:

Codes other than DTC B1643,B1693 and B1698 may be output at this time, but they are not related to this check.

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

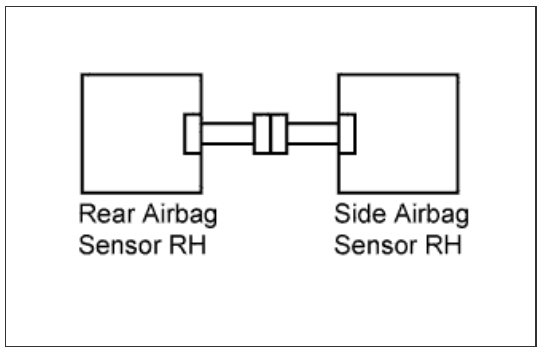
k. Return the side airbag sensor LH and RH to their original positions and connect the connectors to them.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

10.CHECK REAR AIRBAG SENSOR RH



a. Temporarily replace the rear airbag sensor RH with a new one.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1643 or B1693 is not output.

HINT:

Codes other than DTC B1643 and B1693 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

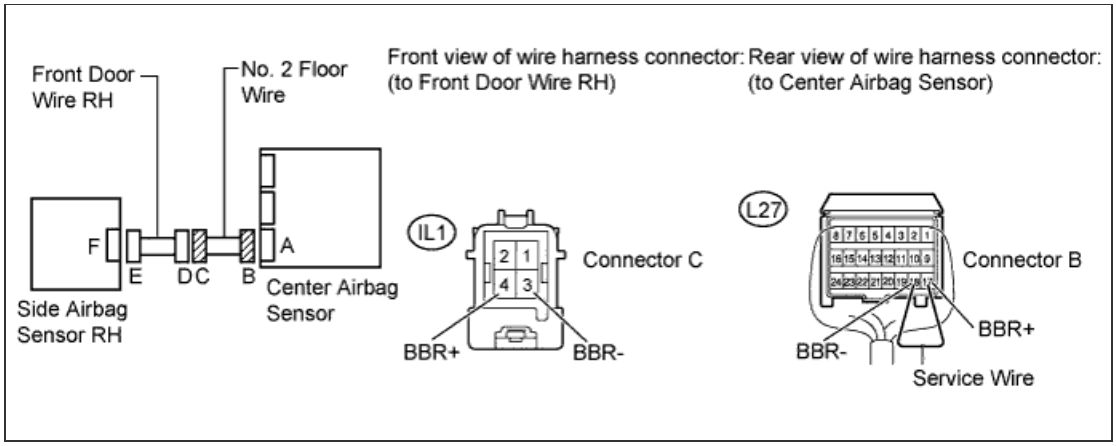
i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR RH (Click here)

11.CHECK NO. 2 FLOOR WIRE (CENTER AIRBAG SENSOR - FRONT DOOR WIRE RH)



a. Disconnect the No. 2 floor wire from the front door wire RH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
IL1-4 (BBR+) - Body ground	Engine switch on (IG)	Below 1 V
IL1-3 (BBR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 17 (BBR+) and 18 (BBR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
IL1-4 (BBR+) - IL1-3 (BBR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

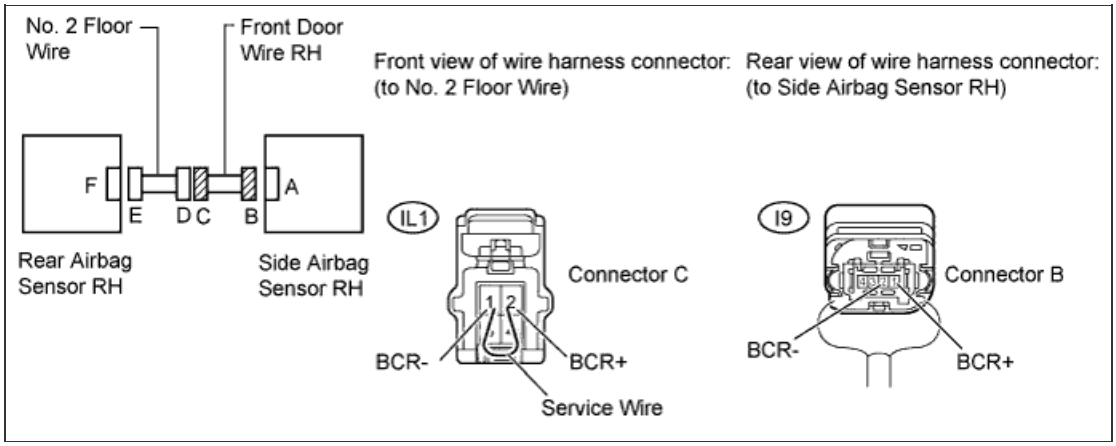
Standard Resistance:

Tester Connection	Condition	Specified Condition
IL1-4 (BBR+) - IL1-3 (BBR-)	Always	1 MΩ or higher
IL1-4 (BBR+) - Body ground	Always	1 MΩ or higher
IL1-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK → REPLACE FRONT DOOR WIRE RH

12.CHECK FRONT DOOR WIRE RH (SIDE AIRBAG SENSOR RH - NO. 2 FLOOR WIRE)



a. Disconnect the front door wire RH from the No. 2 floor wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FRONT DOOR WIRE RH

OK

REPLACE NO. 2 FLOOR WIRE

13.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and rear airbag sensor LH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

14.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and rear airbag sensor LH.

b. Check that the connectors (on the center airbag sensor side and rear airbag sensor LH side) are not damaged.

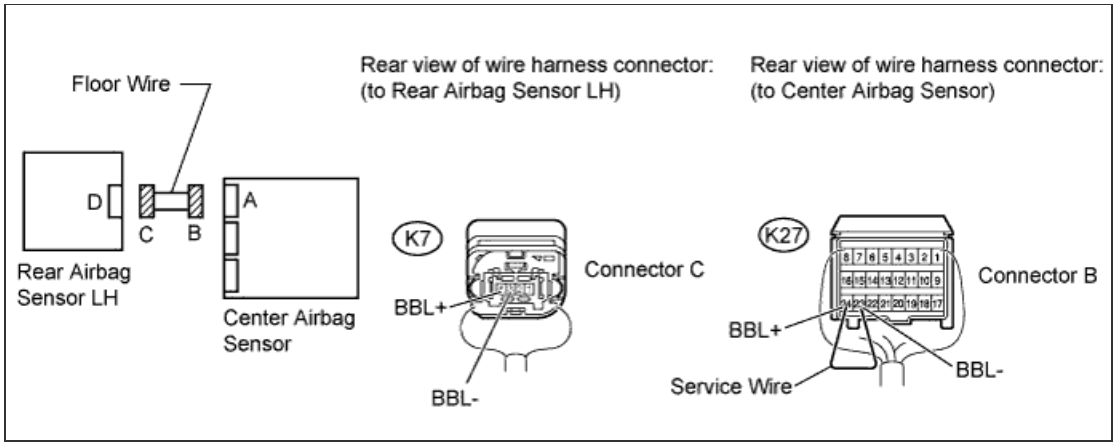
OK:

The connectors are not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

15.CHECK FLOOR WIRE (CENTER AIRBAG SENSOR - REAR AIRBAG SENSOR LH)



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-4 (BBL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-3 (BBL-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 24 (BBL+) and 23 (BBL-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

		Specified

Tester Connection	Condition	Condition
K7-4 (BBL+) - K7-3 (BBL-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-4 (BBL+) - K7-3 (BBL-)	Always	1 MΩ or higher
K7-4 (BBL+) - Body ground	Always	1 MΩ or higher
K7-3 (BBL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

16.CHECK CONNECTION OF CONNECTOR

a. Check that the connector is properly connected to the side airbag sensor LH.

OK:
The connector is properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

17.CHECK CONNECTORS

a. Disconnect the connectors from the rear airbag sensor LH and side airbag sensor LH.

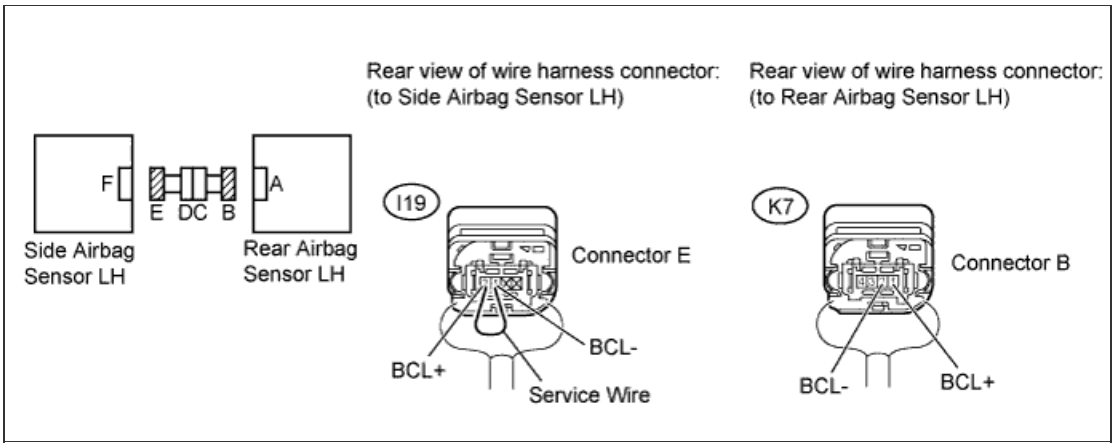
b. Check that the connector (on the side airbag sensor LH side) is not damaged.

OK:
The connector is not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

18.CHECK SIDE AIRBAG SENSOR LH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

g. Disconnect the service wire from connector E.

h. Measure the resistance according to the value(s) in the table below.

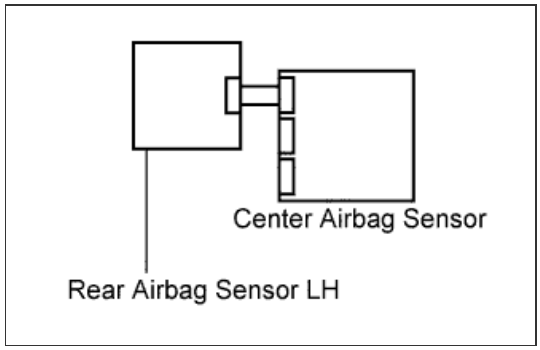
Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	1 MΩ or higher
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → Go to step 21

OK

19.CHECK REAR AIRBAG SENSOR LH



a. Temporarily replace the side airbag sensor LH with a new one.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1638 or B1648 is not output.

HINT:

Codes other than DTC B1638 and B1648 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

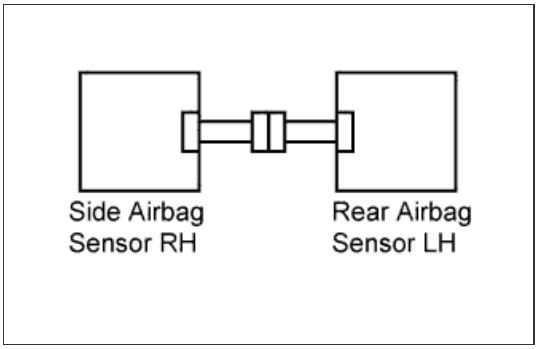
i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

NG → Go to step 20

OK

REPLACE REAR AIRBAG SENSOR LH (Click here)

20.CHECK SIDE AIRBAG SENSOR LH



a. Interchange the side airbag sensor RH with LH and connect the connectors to them.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 90 seconds.

g. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1638 or B1648 is output	A
DTC B1633 is output	B
DTC B1633, B1638 and B1648 are not output	C

HINT:

Codes other than DTC B1633, B1638 and B1648 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

j. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

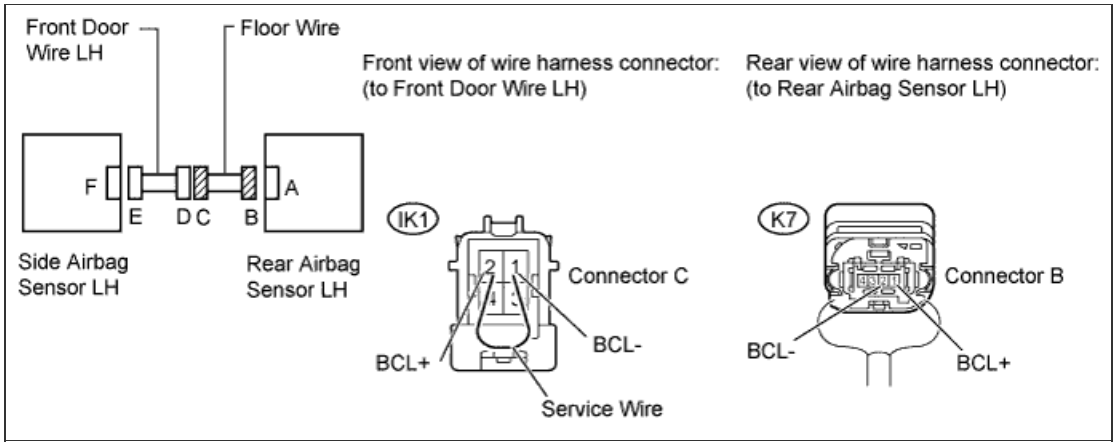
A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

B → REPLACE SIDE AIRBAG SENSOR LH (Click here)

C

USE SIMULATION METHOD TO CHECK (Click here)

21.CHECK FLOOR WIRE (REAR AIRBAG SENSOR LH - FRONT DOOR WIRE LH)



a. Disconnect the floor wire from the front door wire LH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	1 MΩ or higher
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK → REPLACE FRONT DOOR WIRE LH

DTC B1850/62 Short in Rear Side Squib RH Circuit

DTC B1851/62 Open in Rear Side Squib RH Circuit

DTC B1852/62 Short to GND in Rear Side Squib RH Circuit

DTC B1853/62 Short to B+ in Rear Side Squib RH Circuit

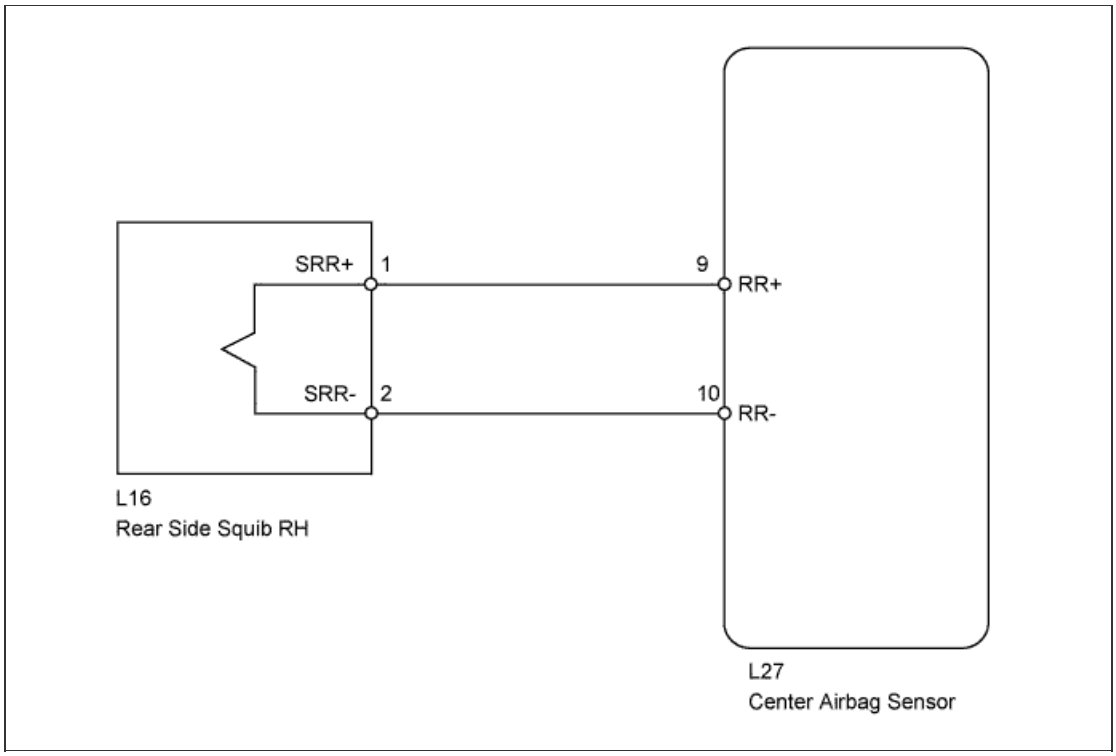
for Preparation Click here

DESCRIPTION

The rear side squib RH circuit consists of the center airbag sensor and the rear seat side airbag RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1850/62	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib RH circuit during the primary check. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1851/62	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib RH circuit for 2 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1852/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1853/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG RH (REAR SIDE SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag RH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

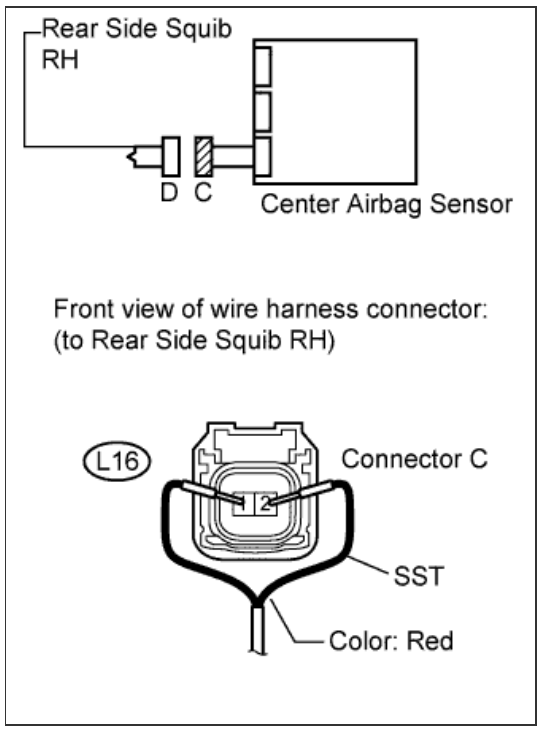
Never connect the tester to the rear seat side airbag RH (rear side squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

2.CHECK NO. 2 FLOOR WIRE (REAR SIDE SQUIB RH CIRCUIT)

a. Turn the engine switch off.

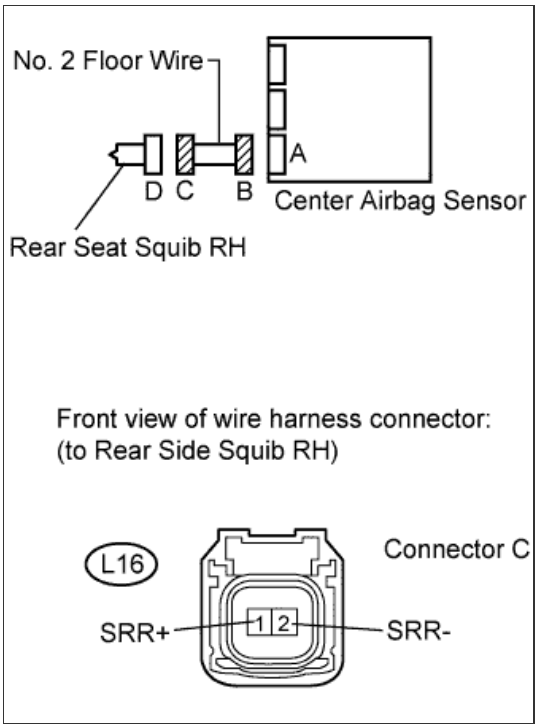
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST (resistance: 2.1 Ω) from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L16-1 (SRR+) - Body ground	Engine switch on (IG)	Below 1 V
L16-2 (SRR-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	1 MΩ or higher
L16-1 (SRR+) - Body ground	Always	1 MΩ or higher
L16-2 (SRR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat side airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

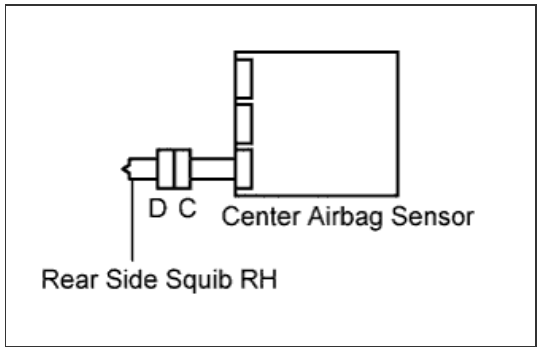
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1638/82 Rear Airbag Sensor Assembly LH Initialization Incomplete

DTC B1643/81 Side Satellite Sensor Bus RH Initialization Incomplete

DTC B1648/82 Side Satellite Sensor Bus LH Initialization Incomplete

DTC B1693/81 Door Side Airbag Sensor RH Initialization Incomplete

for Preparation Click here

DESCRIPTION

HINT:

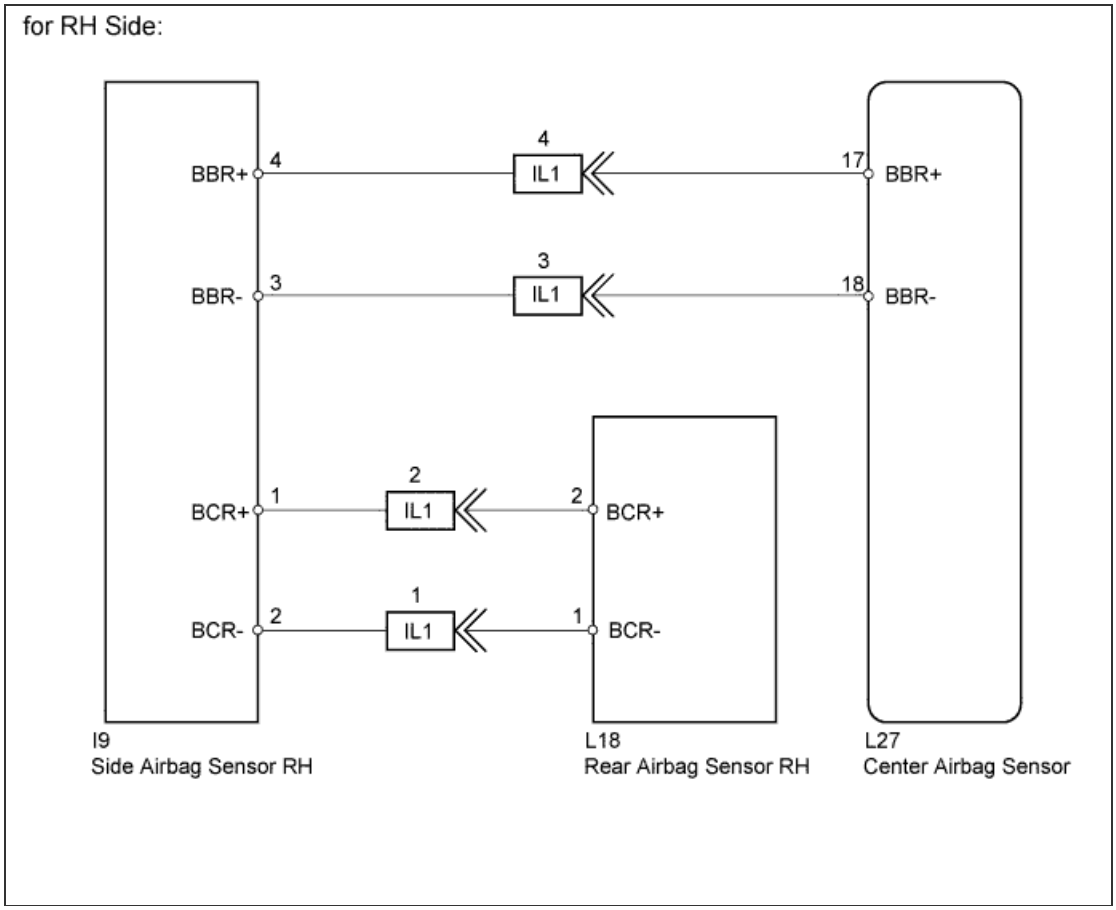
"Door side airbag sensor RH" refers to the side airbag sensor RH.

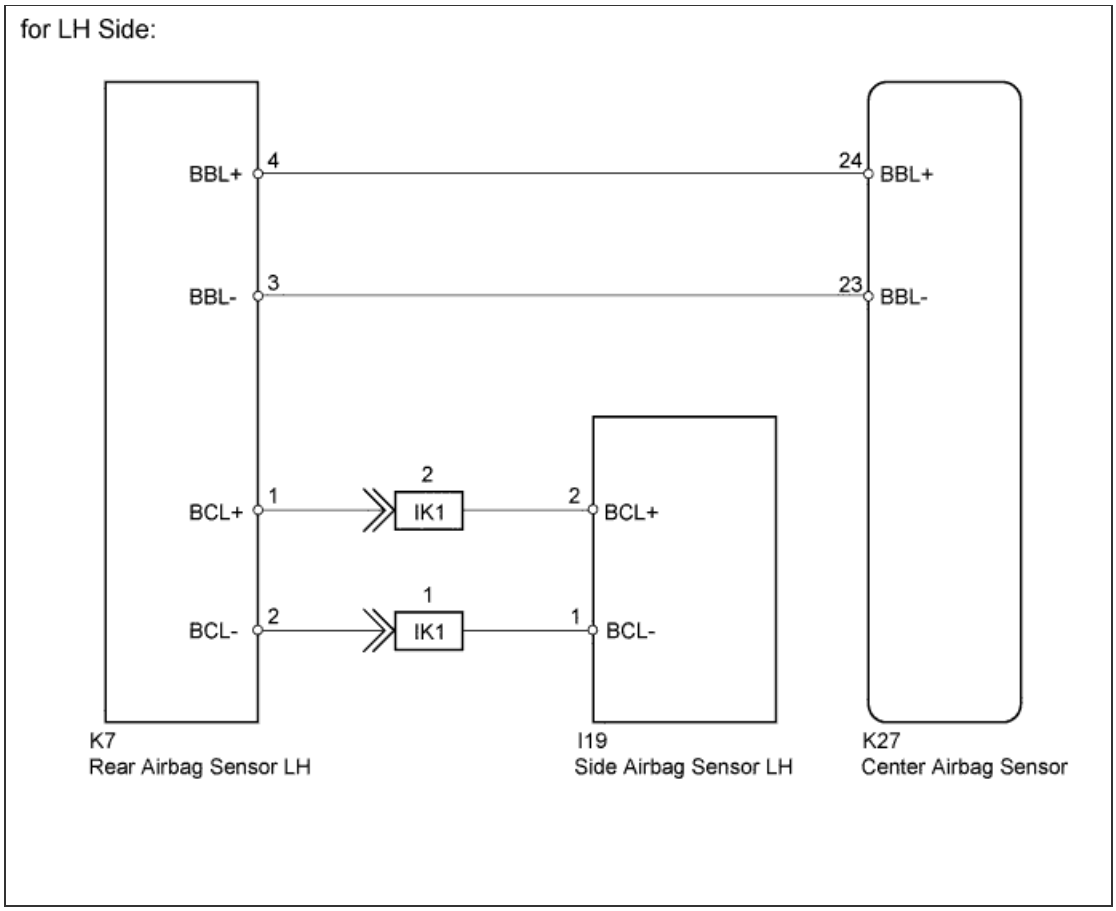
- The circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH) is composed of the center airbag sensor, side airbag sensor LH or RH, and rear airbag sensor LH or RH.
  The side airbag sensor LH or RH and rear airbag sensor LH or RH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1693/81 or B1648/82 is stored when a malfunction is detected in the circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH and curtain shield airbag LH or RH).
  DTC B1643/81 or B1638/82 is stored when a malfunction is detected in the circuit for the rear collision sensor LH or RH (to determine deployment of the rear seat side airbag LH or RH and curtain shield airbag LH or RH).

DTC Code	DTC Detection Condition	Trouble Area
B1638/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the rear collision sensor LH (to determine deployment of the rear seat side airbag LH and curtain shield airbag LH) for 2 seconds. • A rear airbag sensor LH malfunction. • A side airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear airbag sensor LH • Side airbag sensor LH • Center airbag sensor assembly
B1643/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the rear collision sensor RH (to determine deployment of the rear seat side airbag RH and curtain shield airbag RH) for 2 seconds. • A rear airbag sensor RH malfunction. • A side airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear airbag sensor RH • Side airbag sensor RH • Center airbag sensor assembly
B1648/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds.	• No. 2 floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

	• A side airbag sensor LH malfunction. • A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	
B1693/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK PAST DTC

a. Turn the engine switch on (IG), and wait for at least 60 seconds.

b. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1637 or B1692 is output	A
DTC B1632 or B1697 is output	B
DTC B1632, B1637, B1692 and B1697 are not output	C

A → GO TO DTC B1637 (Click here)

B → GO TO DTC B1632 (Click here)

C

2.CHECK FOR DTC

a. Turn the engine switch off.

HINT:

If a communication error occurs, DTCs for both the LH and RH sides will be stored simultaneously. The malfunctioning area can be identified by turning the engine switch off and then on (IG) again.

b. Turn the engine switch on (IG), and wait for at least 60 seconds.

c. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1638, B1643, B1648 and B1693 are not output	A
DTC B1638 or B1648 is output	B
DTC B1643 or B1693 is output	C

HINT:

Codes other than DTC B1638, B1643,B1648 and B1693 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → Go to step 13

C

3.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and side airbag sensor RH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

4.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and side airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side and side airbag sensor RH side) are not damaged.

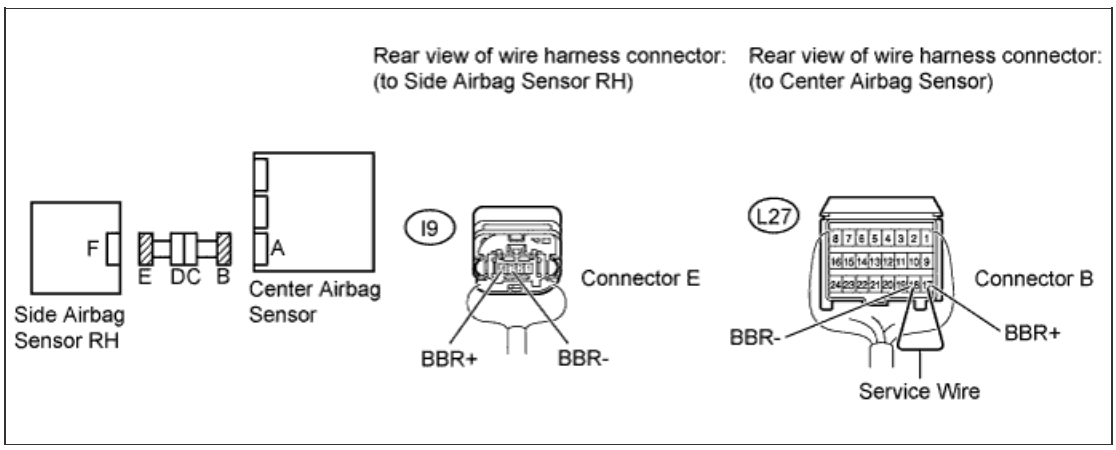
OK:

The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

5.CHECK SIDE AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-4 (BBR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-3 (BBR-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 17 (BBR+) and 18 (BBR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-4 (BBR+) - I9-3 (BBR-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-4 (BBR+) - I9-3 (BBR-)	Always	1 MΩ or higher
I9-4 (BBR+) - Body ground	Always	1 MΩ or higher
I9-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 11

OK

6.CHECK CONNECTION OF CONNECTORS

a. Check that the connector is properly connected to the rear airbag sensor RH.

OK:
The connector is properly connected.

NG → CONNECT CONNECTOR PROPERLY

OK

7.CHECK CONNECTORS

a. Disconnect the connectors from the side airbag sensor RH and rear airbag sensor RH.

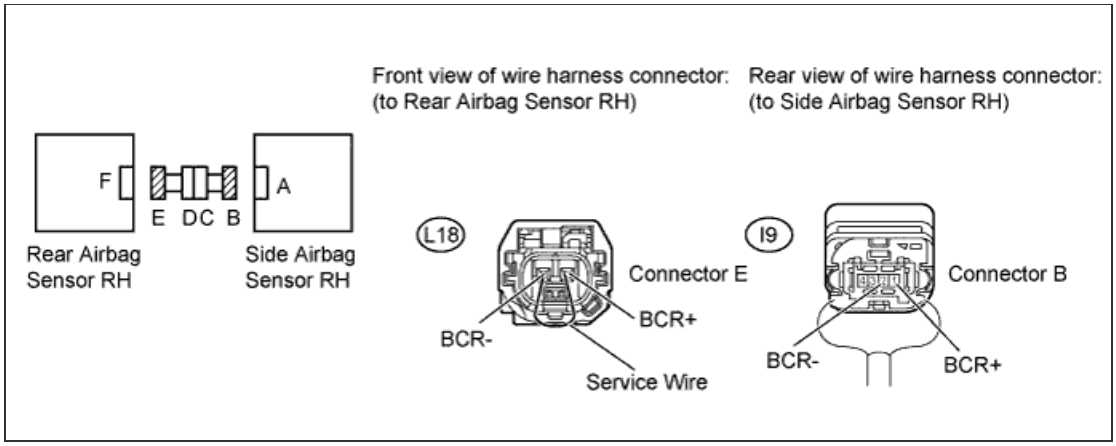
b. Check that the connector (on the rear airbag sensor RH side) is not damaged.

OK:
The connector is not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

8.CHECK REAR AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

g. Disconnect the service wire from connector E.

h. Measure the resistance according to the value(s) in the table below.

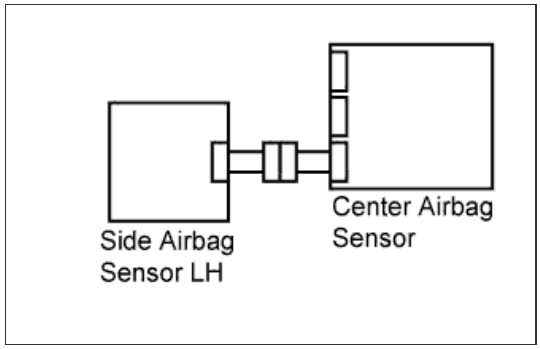
Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 12

OK

9.CHECK SIDE AIRBAG SENSOR RH



a. Connect the connector to the center airbag sensor.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1643, B1693 and B1698 are not output	A
DTC B1698 is output	B
DTC B1643 and B1693 are output	C

HINT:

Codes other than DTC B1643,B1693 and B1698 may be output at this time, but they are not related to this check.

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

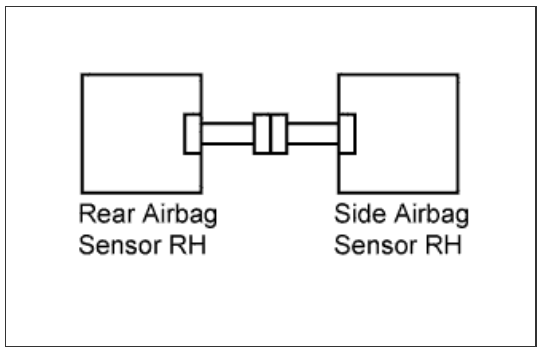
k. Return the side airbag sensor LH and RH to their original positions and connect the connectors to them.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

10.CHECK REAR AIRBAG SENSOR RH



a. Temporarily replace the rear airbag sensor RH with a new one.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1643 or B1693 is not output.

HINT:

Codes other than DTC B1643 and B1693 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

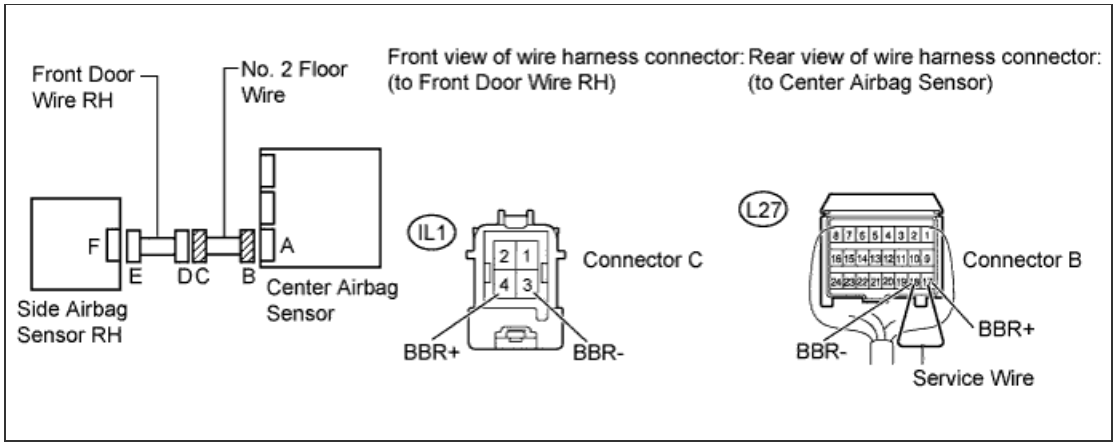
i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR RH (Click here)

11.CHECK NO. 2 FLOOR WIRE (CENTER AIRBAG SENSOR - FRONT DOOR WIRE RH)



a. Disconnect the No. 2 floor wire from the front door wire RH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
IL1-4 (BBR+) - Body ground	Engine switch on (IG)	Below 1 V
IL1-3 (BBR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 17 (BBR+) and 18 (BBR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
IL1-4 (BBR+) - IL1-3 (BBR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

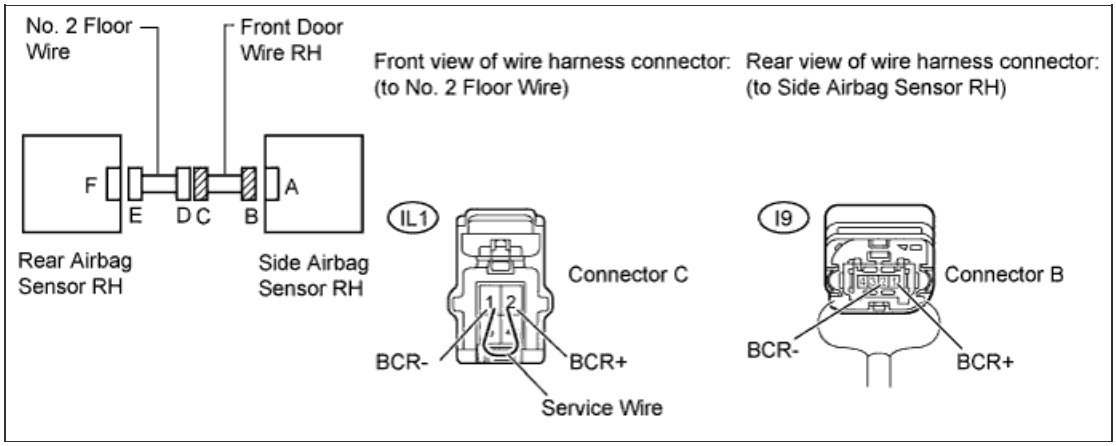
Standard Resistance:

Tester Connection	Condition	Specified Condition
IL1-4 (BBR+) - IL1-3 (BBR-)	Always	1 MΩ or higher
IL1-4 (BBR+) - Body ground	Always	1 MΩ or higher
IL1-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK → REPLACE FRONT DOOR WIRE RH

12.CHECK FRONT DOOR WIRE RH (SIDE AIRBAG SENSOR RH - NO. 2 FLOOR WIRE)



a. Disconnect the front door wire RH from the No. 2 floor wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FRONT DOOR WIRE RH

OK

REPLACE NO. 2 FLOOR WIRE

13.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and rear airbag sensor LH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

14.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and rear airbag sensor LH.

b. Check that the connectors (on the center airbag sensor side and rear airbag sensor LH side) are not damaged.

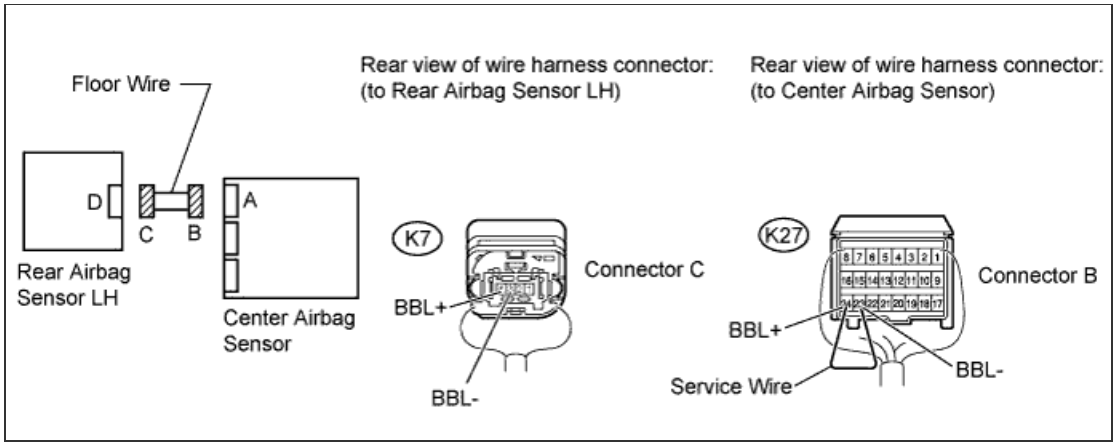
OK:

The connectors are not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

15.CHECK FLOOR WIRE (CENTER AIRBAG SENSOR - REAR AIRBAG SENSOR LH)



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-4 (BBL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-3 (BBL-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 24 (BBL+) and 23 (BBL-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

		Specified

Tester Connection	Condition	Condition
K7-4 (BBL+) - K7-3 (BBL-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-4 (BBL+) - K7-3 (BBL-)	Always	1 MΩ or higher
K7-4 (BBL+) - Body ground	Always	1 MΩ or higher
K7-3 (BBL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

16.CHECK CONNECTION OF CONNECTOR

a. Check that the connector is properly connected to the side airbag sensor LH.

OK:
The connector is properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

17.CHECK CONNECTORS

a. Disconnect the connectors from the rear airbag sensor LH and side airbag sensor LH.

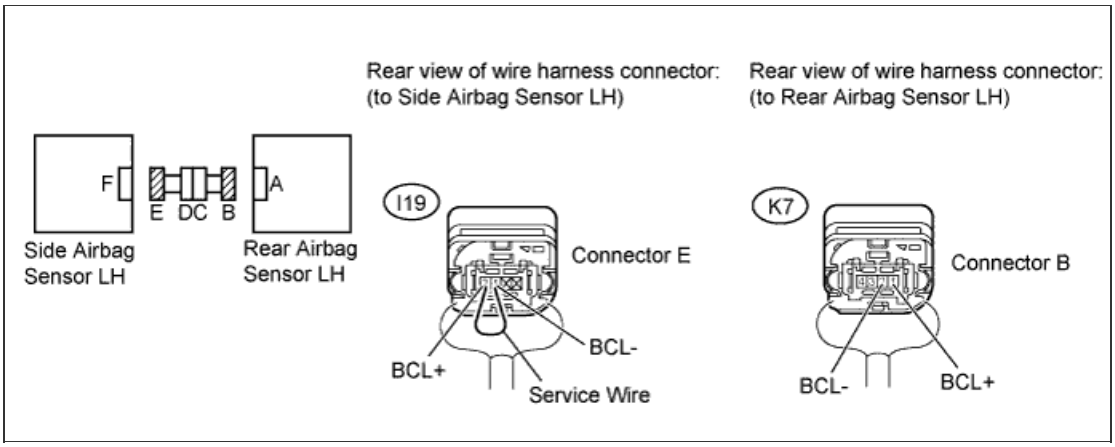
b. Check that the connector (on the side airbag sensor LH side) is not damaged.

OK:
The connector is not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

18.CHECK SIDE AIRBAG SENSOR LH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

g. Disconnect the service wire from connector E.

h. Measure the resistance according to the value(s) in the table below.

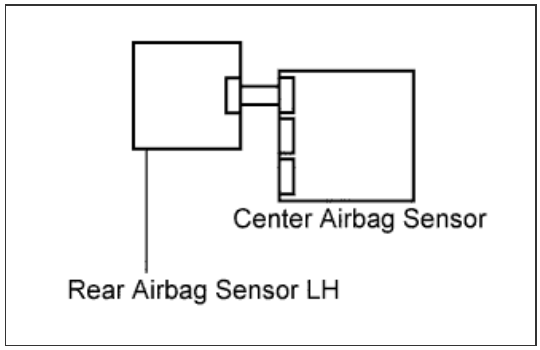
Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	1 MΩ or higher
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → Go to step 21

OK

19.CHECK REAR AIRBAG SENSOR LH



a. Temporarily replace the side airbag sensor LH with a new one.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1638 or B1648 is not output.

HINT:

Codes other than DTC B1638 and B1648 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

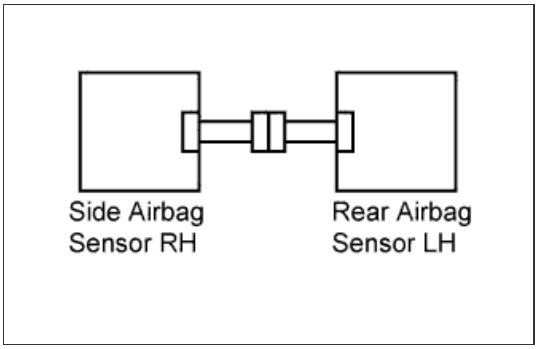
i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

NG → Go to step 20

OK

REPLACE REAR AIRBAG SENSOR LH (Click here)

20.CHECK SIDE AIRBAG SENSOR LH



a. Interchange the side airbag sensor RH with LH and connect the connectors to them.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 90 seconds.

g. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1638 or B1648 is output	A
DTC B1633 is output	B
DTC B1633, B1638 and B1648 are not output	C

HINT:

Codes other than DTC B1633, B1638 and B1648 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

j. Return the side airbag sensor RH and LH to their original positions and connect the connectors to them.

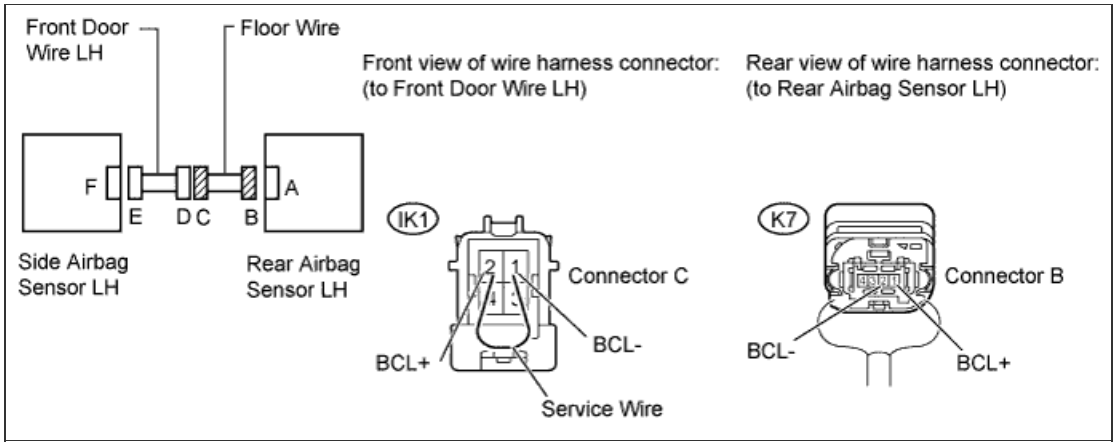
A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

B → REPLACE SIDE AIRBAG SENSOR LH (Click here)

C

USE SIMULATION METHOD TO CHECK (Click here)

21.CHECK FLOOR WIRE (REAR AIRBAG SENSOR LH - FRONT DOOR WIRE LH)



a. Disconnect the floor wire from the front door wire LH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	1 MΩ or higher
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK → REPLACE FRONT DOOR WIRE LH

DTC B1850/62 Short in Rear Side Squib RH Circuit

DTC B1851/62 Open in Rear Side Squib RH Circuit

DTC B1852/62 Short to GND in Rear Side Squib RH Circuit

DTC B1853/62 Short to B+ in Rear Side Squib RH Circuit

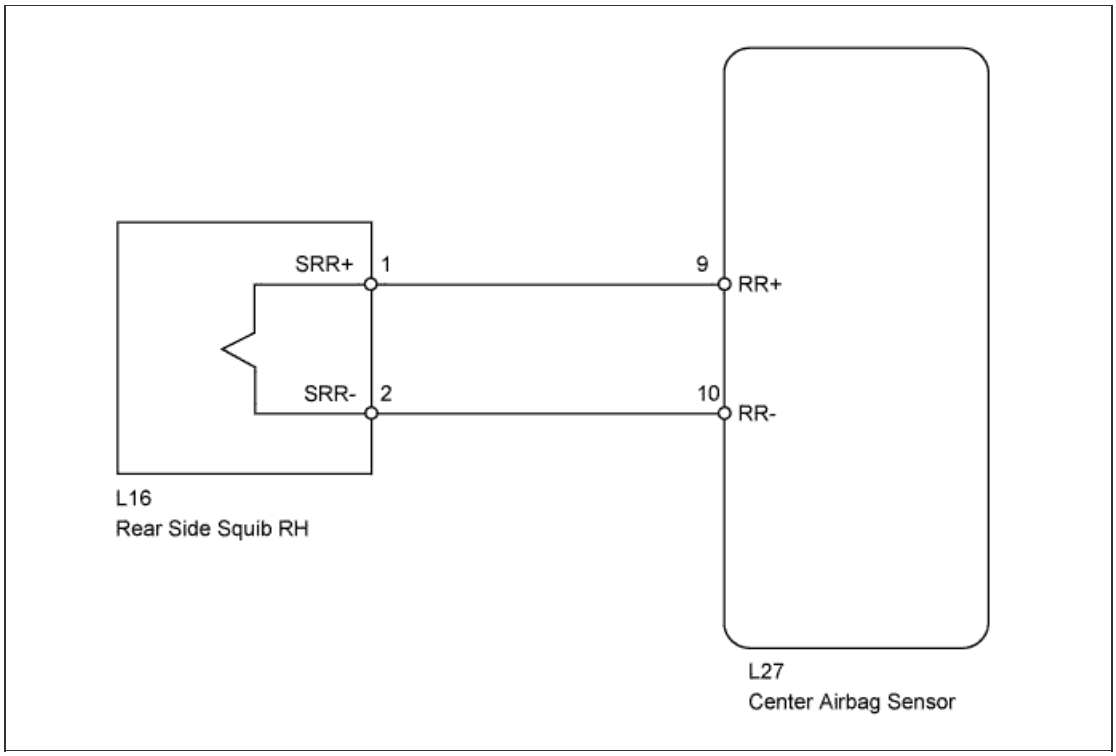
for Preparation Click here

DESCRIPTION

The rear side squib RH circuit consists of the center airbag sensor and the rear seat side airbag RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1850/62	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib RH circuit during the primary check. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1851/62	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib RH circuit for 2 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1852/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1853/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG RH (REAR SIDE SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag RH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

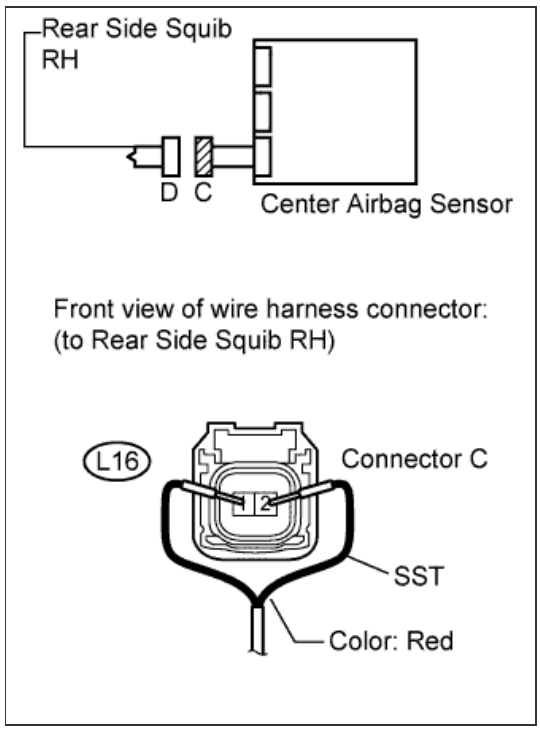
Never connect the tester to the rear seat side airbag RH (rear side squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

2.CHECK NO. 2 FLOOR WIRE (REAR SIDE SQUIB RH CIRCUIT)

a. Turn the engine switch off.

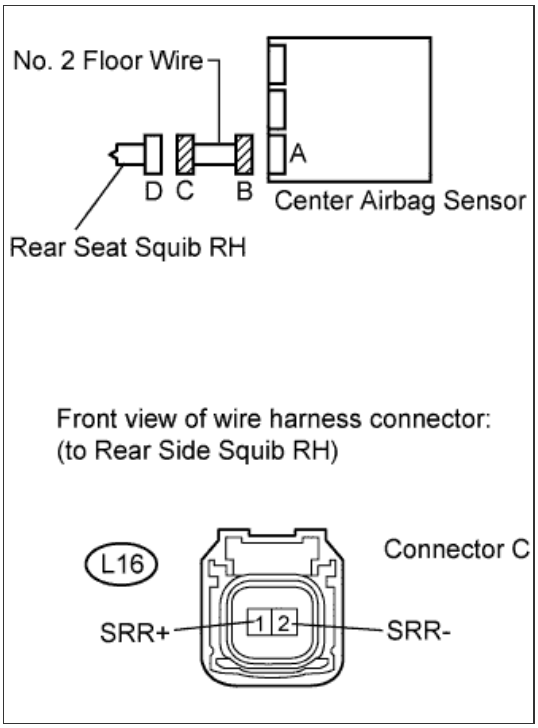
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST (resistance: 2.1 Ω) from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L16-1 (SRR+) - Body ground	Engine switch on (IG)	Below 1 V
L16-2 (SRR-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	1 MΩ or higher
L16-1 (SRR+) - Body ground	Always	1 MΩ or higher
L16-2 (SRR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat side airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

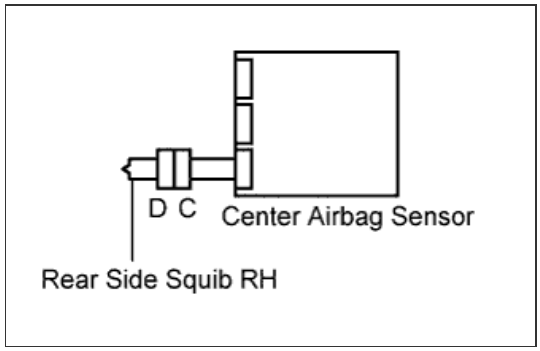
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1642/81 Lost Communication with Side Satellite Sensor Bus RH

DTC B1647/82 Lost Communication with Side Satellite Sensor Bus LH

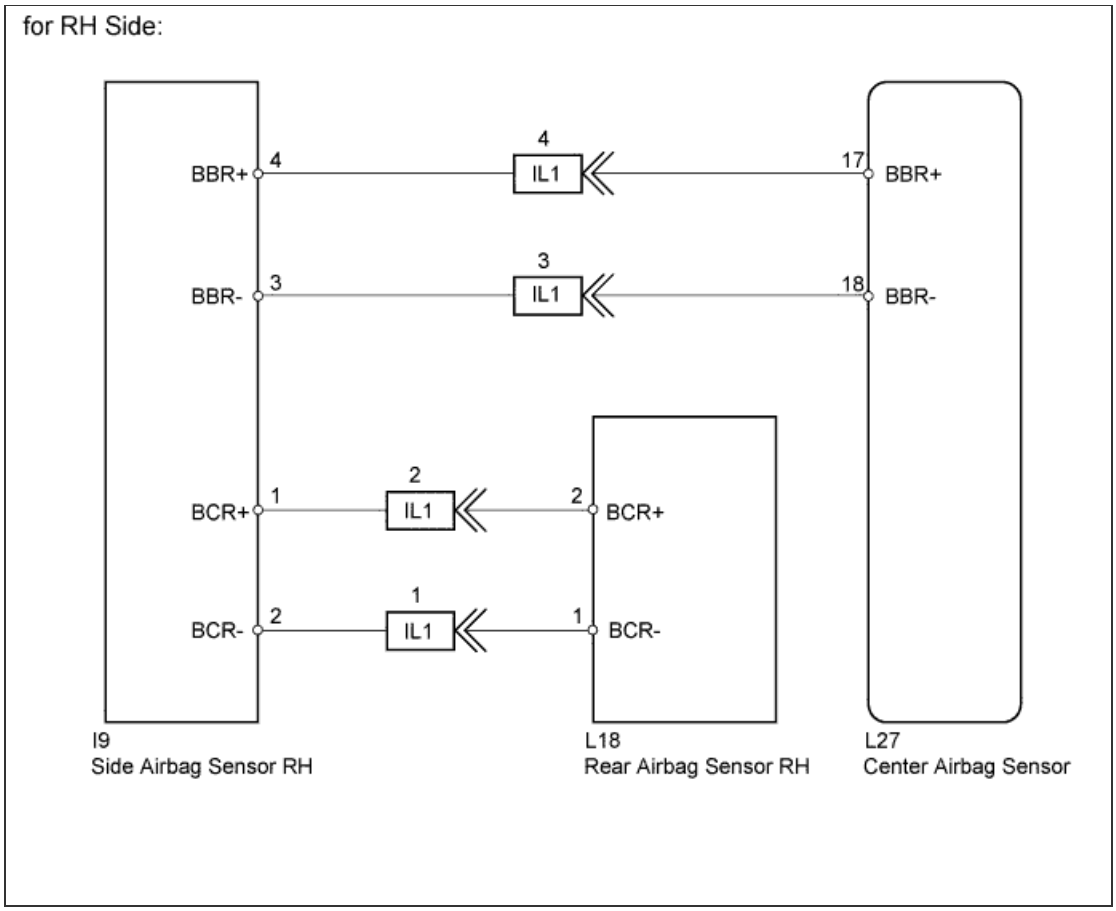
for Preparation Click here

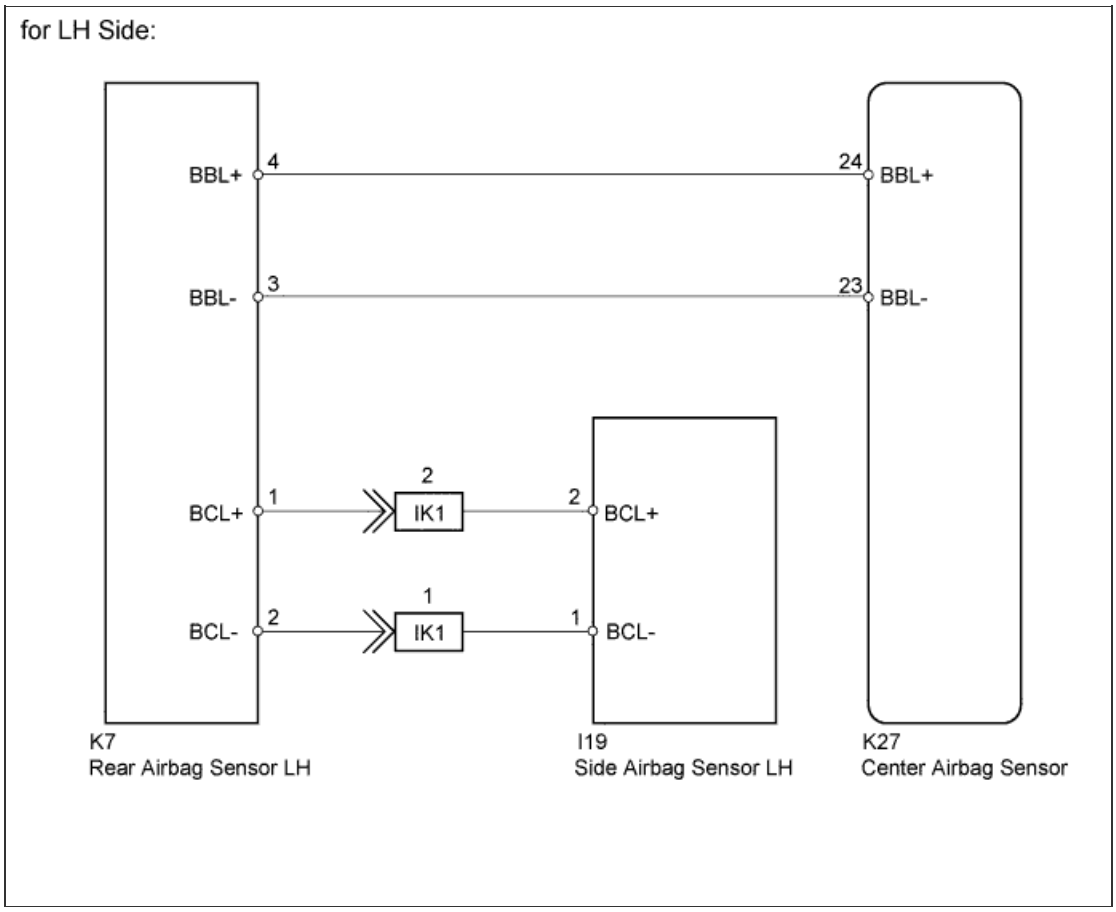
DESCRIPTION

The circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH) is composed of the center airbag sensor, side airbag sensor LH or RH, and rear airbag sensor LH or RH.
The side airbag sensor LH or RH and rear airbag sensor LH or RH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
DTC B1642/81 or B1647/82 is stored when a malfunction is detected in the circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH).

DTC Code	DTC Detection Condition	Trouble Area
B1642/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly
B1647/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction. • A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FOR DTC

a. Turn the engine switch off.

b. Turn the engine switch on (IG), and wait for at least 60 seconds.

c. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1642 and B1647 are not output	A
DTC B1647 is output	B
DTC B1642 is output	C

HINT:

Code other than DTC B1642 and B1647 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → Go to step 12

C

2.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and side airbag sensor RH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

3.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and side airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side and side airbag sensor RH side) are not damaged.

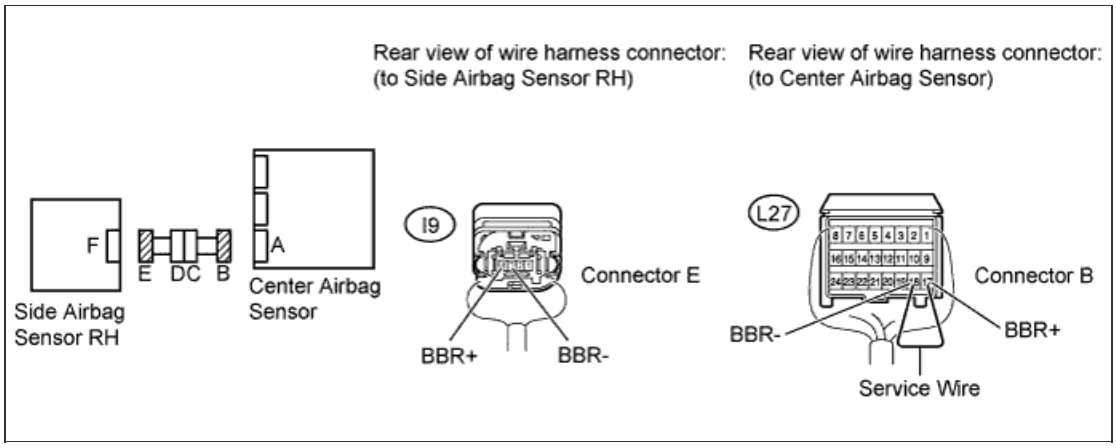
OK:

The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

4.CHECK SIDE AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-4 (BBR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-3 (BBR-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 17 (BBR+) and 18 (BBR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-4 (BBR+) - I9-3 (BBR-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-4 (BBR+) - I9-3 (BBR-)	Always	1 MΩ or higher
I9-4 (BBR+) - Body ground	Always	1 MΩ or higher
I9-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 10

OK

5.CHECK CONNECTION OF CONNECTORS

a. Check that the connector is properly connected to the rear airbag sensor RH.

OK:

The connector is properly connected.

NG → CONNECT CONNECTOR PROPERLY

OK

6.CHECK CONNECTORS

a. Disconnect the connectors from the side airbag sensor RH and rear airbag sensor RH.

b. Check that the connector (on the rear airbag sensor RH side) is not damaged.

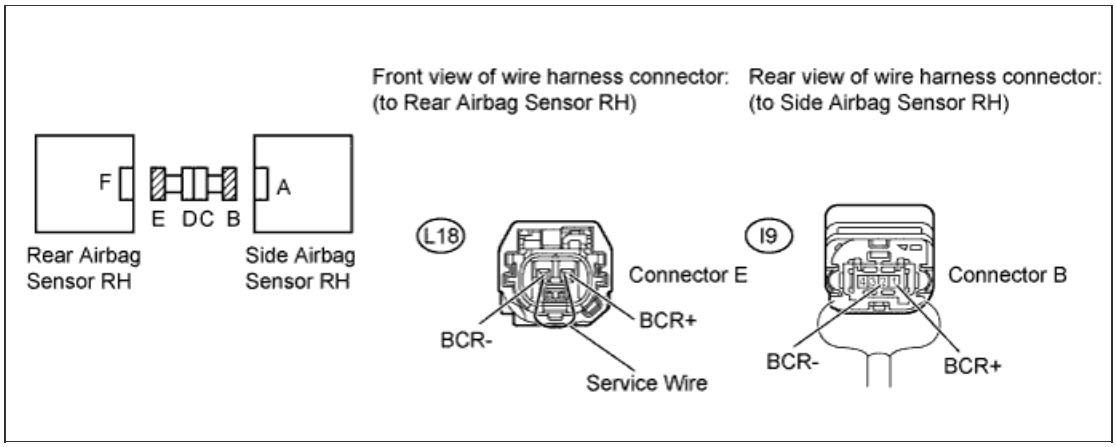
OK:

The connector is not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

7.CHECK REAR AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

g. Disconnect the service wire from connector E.

h. Measure the resistance according to the value(s) in the table below.

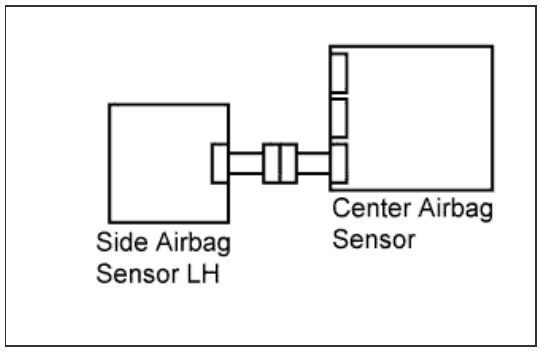
Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 11

OK

8.CHECK SIDE AIRBAG SENSOR RH



a. Connect the connector to the center airbag sensor.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1642 and B1647 are not output	A
DTC B1647 is output	B
DTC B1642 is output	C

HINT:

Codes other than DTC B1642 and B1647 may be output at this time, but they are not related to this check.

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

k. Return the side airbag sensor LH and RH to their original positions and connect the connectors to them.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

9.CHECK REAR AIRBAG SENSOR RH

a. Temporarily replace the rear airbag sensor RH with a new one.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

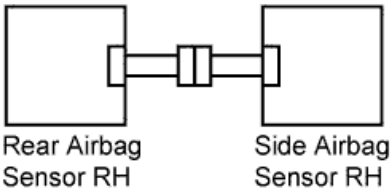
OK:
DTC B1642 is not output.

HINT:

Codes other than DTC B1642 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

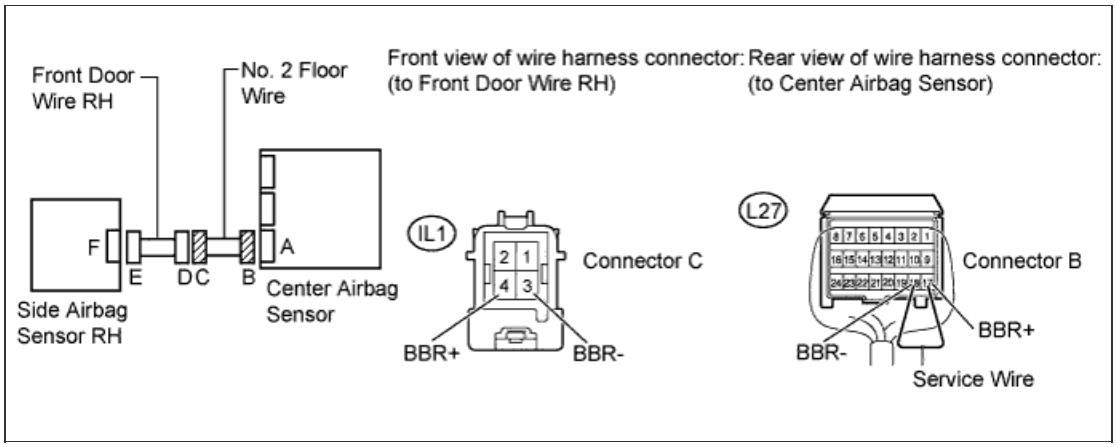


NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR RH (Click here)

10.CHECK NO. 2 FLOOR WIRE (CENTER AIRBAG SENSOR - FRONT DOOR WIRE RH)



a. Disconnect the No. 2 floor wire connector from the front door wire RH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
IL1-4 (BBR+) - Body ground	Engine switch on (IG)	Below 1 V
IL1-3 (BBR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 17 (BBR+) and 18 (BBR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
IL1-4 (BBR+) - IL1-3 (BBR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

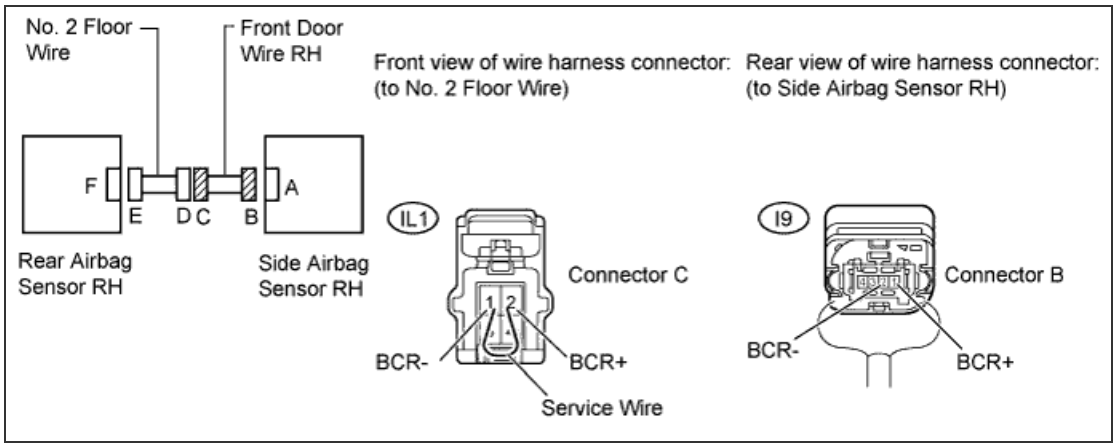
Tester Connection	Condition	Specified Condition
IL1-4 (BBR+) - IL1-3 (BBR-)	Always	1 MΩ or higher
IL1-4 (BBR+) - Body ground	Always	1 MΩ or higher
IL1-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

REPLACE FRONT DOOR WIRE RH

11.CHECK FRONT DOOR WIRE RH (SIDE AIRBAG SENSOR RH - NO. 2 FLOOR WIRE)



a. Disconnect the front door wire RH connector from the No. 2 floor wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FRONT DOOR WIRE RH

OK

REPLACE NO. 2 FLOOR WIRE

12.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and rear airbag sensor LH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

13.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and rear airbag sensor LH.

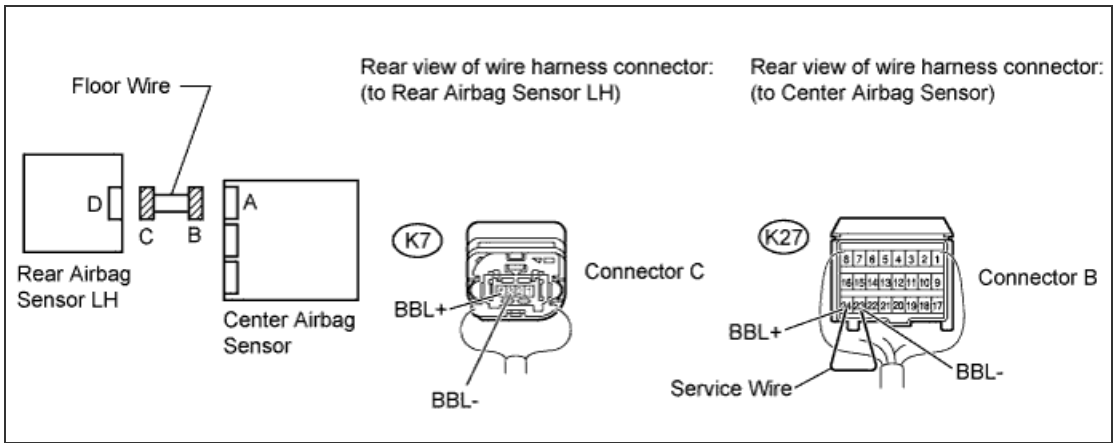
b. Check that the connectors (on the center airbag sensor side and rear airbag sensor LH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

14.CHECK FLOOR WIRE (CENTER AIRBAG SENSOR - REAR AIRBAG SENSOR LH)



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-4 (BBL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-3 (BBL-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 24 (BBL+) and 23 (BBL-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-4 (BBL+) - K7-3 (BBL-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-4 (BBL+) - K7-3 (BBL-)	Always	1 MΩ or higher
K7-4 (BBL+) - Body ground	Always	1 MΩ or higher
K7-3 (BBL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK ↓

15.CHECK CONNECTION OF CONNECTOR

a. Check that the connector is properly connected to the side airbag sensor LH.

OK:
The connector is properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK ↓

16.CHECK CONNECTORS

a. Disconnect the connectors from the rear airbag sensor LH and side airbag sensor LH.

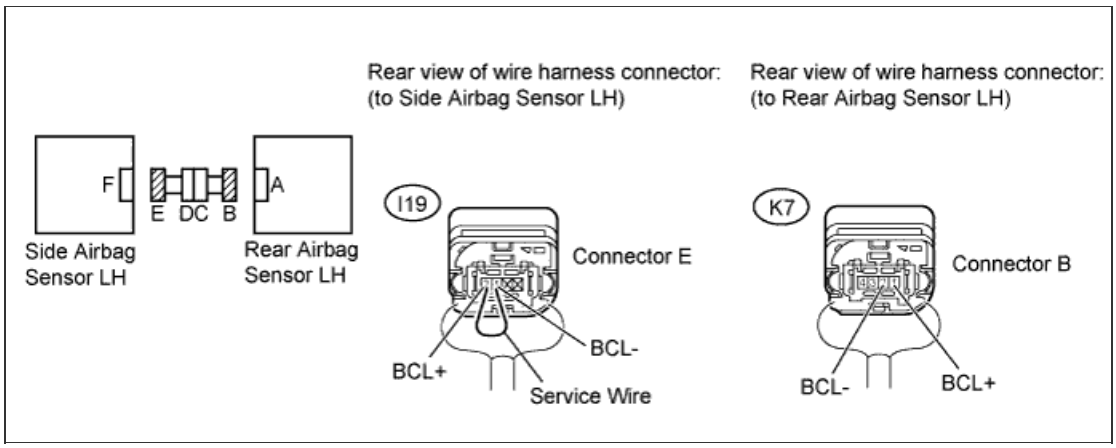
b. Check that the connector (on the side airbag sensor LH side) is not damaged.

OK:
The connector is not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK ↓

17.CHECK SIDE AIRBAG SENSOR LH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

g. Disconnect the service wire from connector E.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	1 MΩ or higher
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → Go to step 20

OK

18.CHECK REAR AIRBAG SENSOR LH

a. Temporarily replace the side airbag sensor LH with a new one.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

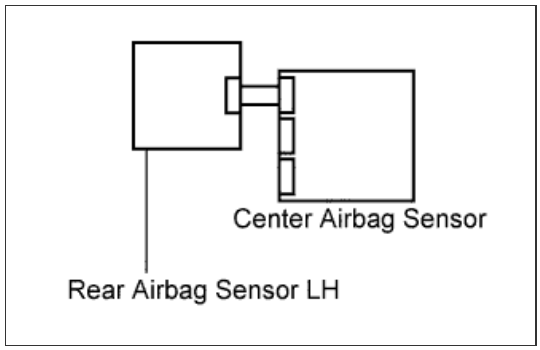
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1642 or B1647 is not output.

HINT:

Codes other than DTC B1642 and B1647 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

NG → Go to step 19

OK →

REPLACE REAR AIRBAG SENSOR LH (Click here)

19.CHECK SIDE AIRBAG SENSOR LH

a. Interchange the side airbag sensor RH with LH and connect the connectors to them.

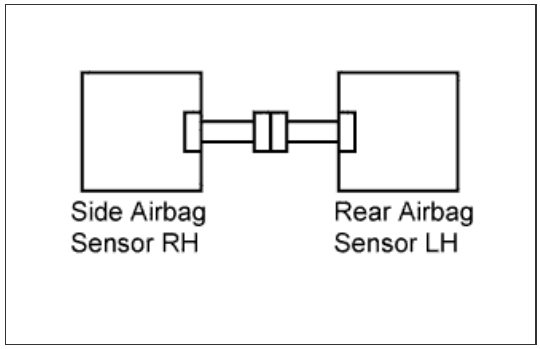
b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.



g. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1647 is output	A
DTC B1642 is output	B
DTC B1642 and B1647 are not output	C

HINT:

Codes other than DTC B1642 and B1647 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

j. Return the rear airbag sensor RH and LH to their original positions and connect the connectors to them.

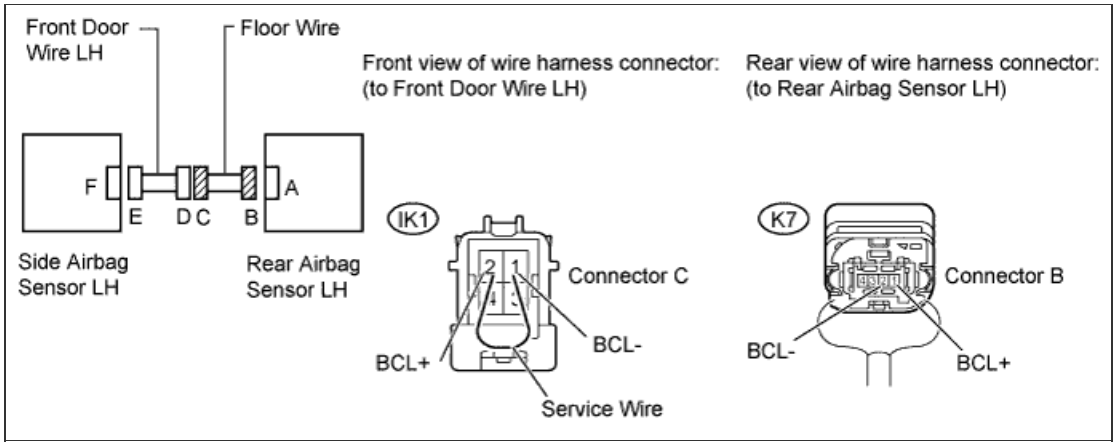
A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

B → REPLACE SIDE AIRBAG SENSOR LH (Click here)

C →

USE SIMULATION METHOD TO CHECK (Click here)

20.CHECK FLOOR WIRE (REAR SIDE AIRBAG SENSOR LH - FRONT DOOR WIRE LH)



a. Disconnect the floor wire connector from the front door wire LH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	1 MΩ or higher
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK → REPLACE FRONT DOOR WIRE LH

DTC B1850/62 Short in Rear Side Squib RH Circuit

DTC B1851/62 Open in Rear Side Squib RH Circuit

DTC B1852/62 Short to GND in Rear Side Squib RH Circuit

DTC B1853/62 Short to B+ in Rear Side Squib RH Circuit

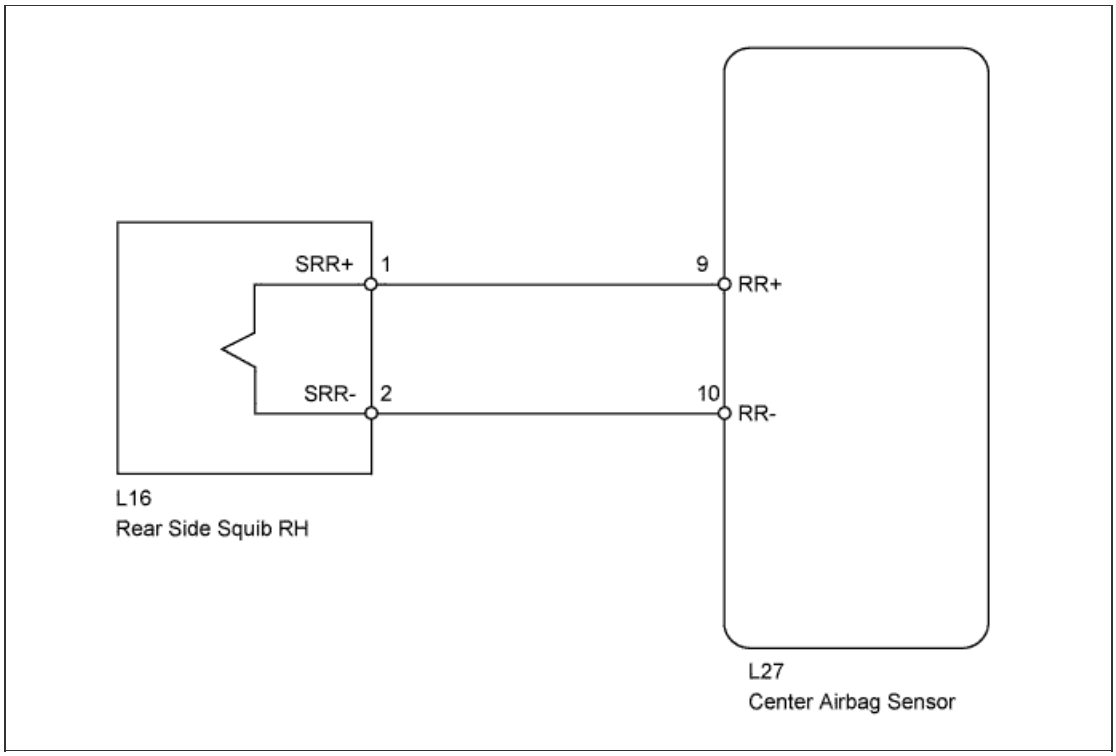
for Preparation Click here

DESCRIPTION

The rear side squib RH circuit consists of the center airbag sensor and the rear seat side airbag RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1850/62	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib RH circuit during the primary check. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1851/62	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib RH circuit for 2 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1852/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1853/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG RH (REAR SIDE SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag RH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

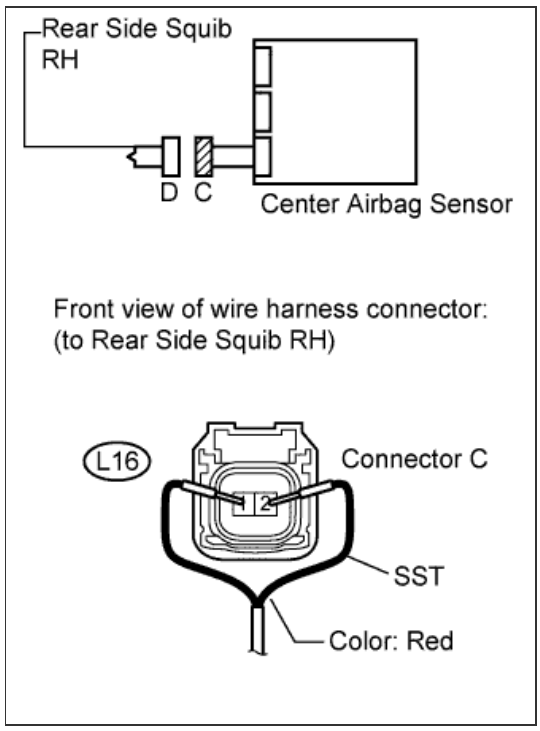
Never connect the tester to the rear seat side airbag RH (rear side squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

2.CHECK NO. 2 FLOOR WIRE (REAR SIDE SQUIB RH CIRCUIT)

a. Turn the engine switch off.

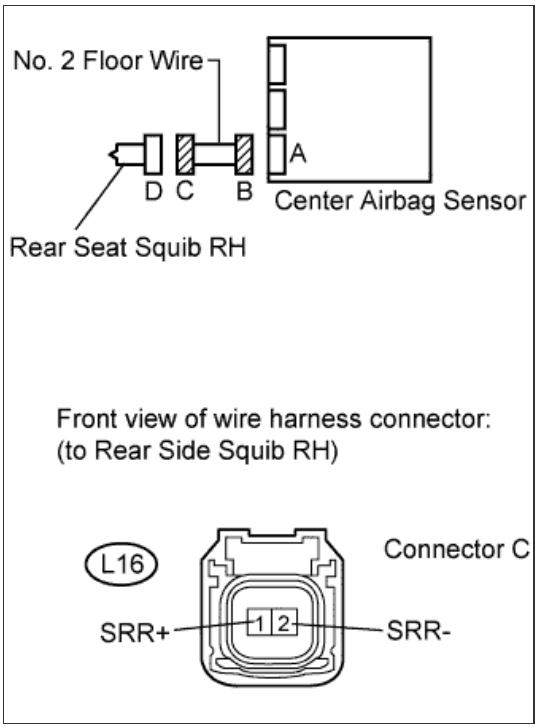
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST (resistance: 2.1 Ω) from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L16-1 (SRR+) - Body ground	Engine switch on (IG)	Below 1 V
L16-2 (SRR-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	1 MΩ or higher
L16-1 (SRR+) - Body ground	Always	1 MΩ or higher
L16-2 (SRR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat side airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

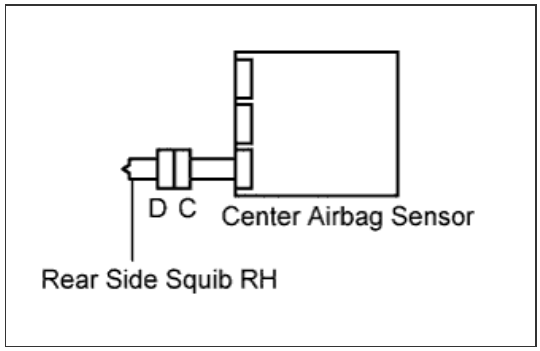
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1642/81 Lost Communication with Side Satellite Sensor Bus RH

DTC B1647/82 Lost Communication with Side Satellite Sensor Bus LH

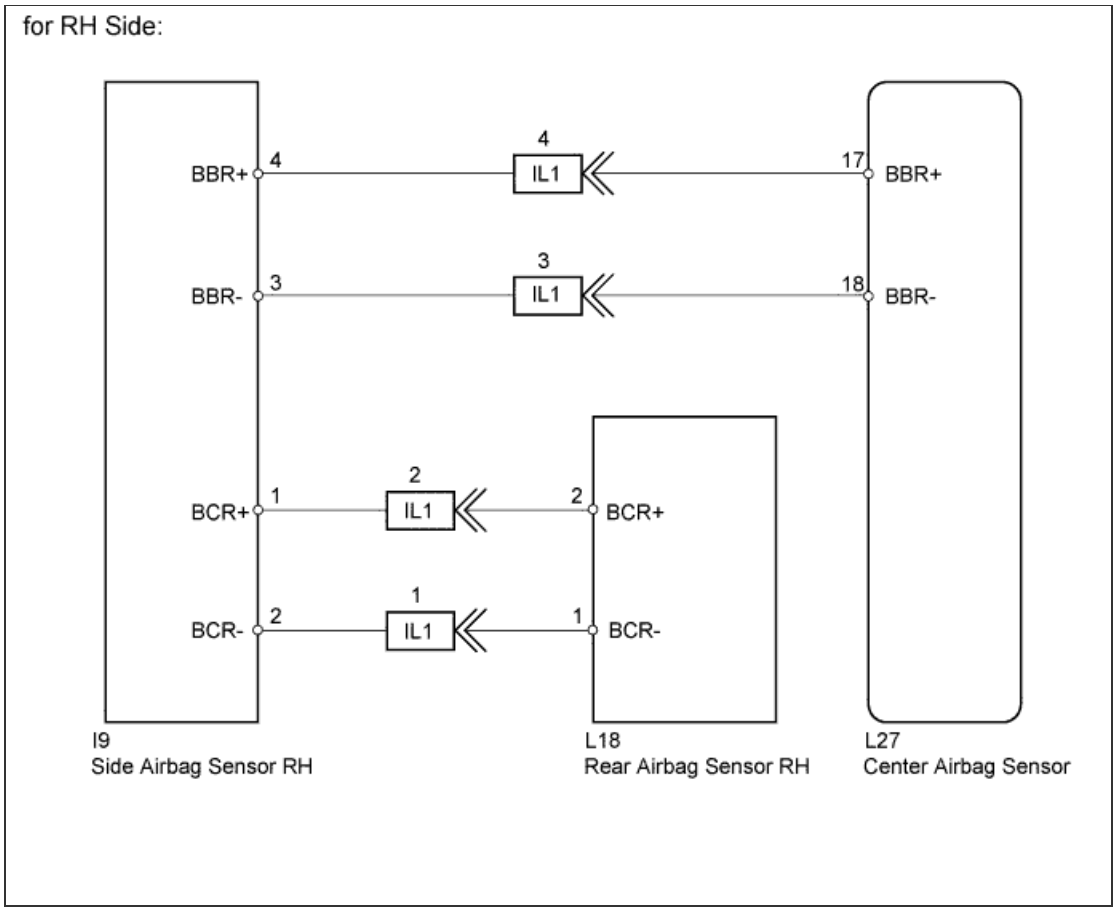
for Preparation Click here

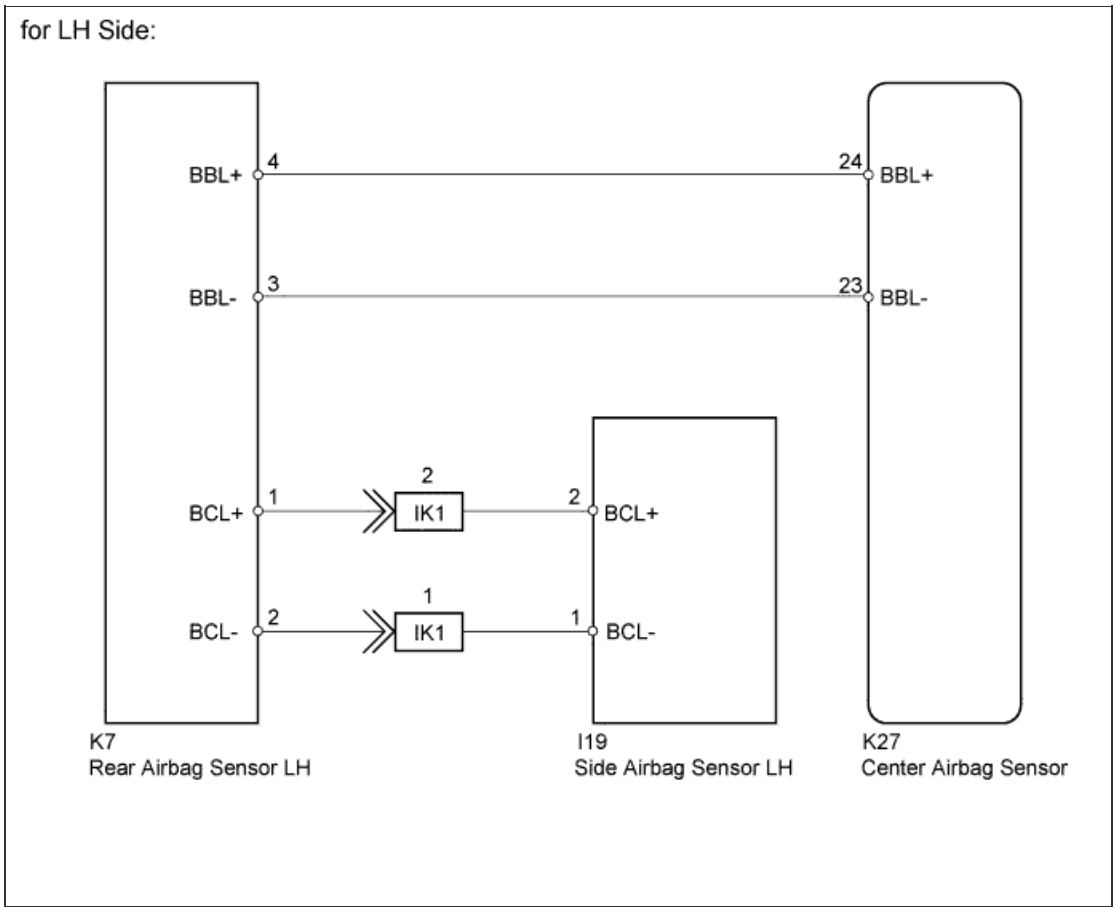
DESCRIPTION

The circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH) is composed of the center airbag sensor, side airbag sensor LH or RH, and rear airbag sensor LH or RH.
The side airbag sensor LH or RH and rear airbag sensor LH or RH detect impacts to the vehicle and send signals to the center airbag sensor to determine if the airbag should be deployed.
DTC B1642/81 or B1647/82 is stored when a malfunction is detected in the circuit for the side collision sensor LH or RH (to determine deployment of the front seat airbag LH or RH, rear seat side airbag LH or RH and curtain shield airbag LH or RH).

DTC Code	DTC Detection Condition	Trouble Area
B1642/81	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor RH (to determine deployment of the front seat airbag RH and curtain shield airbag RH) for 2 seconds. • A side airbag sensor RH malfunction. • A rear airbag sensor RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front door wire RH • Side airbag sensor RH • Rear airbag sensor RH • Center airbag sensor assembly
B1647/82	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the circuit for the side collision sensor LH (to determine deployment of the front seat airbag LH and curtain shield airbag LH) for 2 seconds. • A side airbag sensor LH malfunction. • A rear airbag sensor LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front door wire LH • Side airbag sensor LH • Rear airbag sensor LH • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK FOR DTC

a. Turn the engine switch off.

b. Turn the engine switch on (IG), and wait for at least 60 seconds.

c. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1642 and B1647 are not output	A
DTC B1647 is output	B
DTC B1642 is output	C

HINT:

Code other than DTC B1642 and B1647 may be output at this time, but they are not related to this check.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → Go to step 12

C

2.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and side airbag sensor RH.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

3.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and side airbag sensor RH.

b. Check that the connectors (on the center airbag sensor side and side airbag sensor RH side) are not damaged.

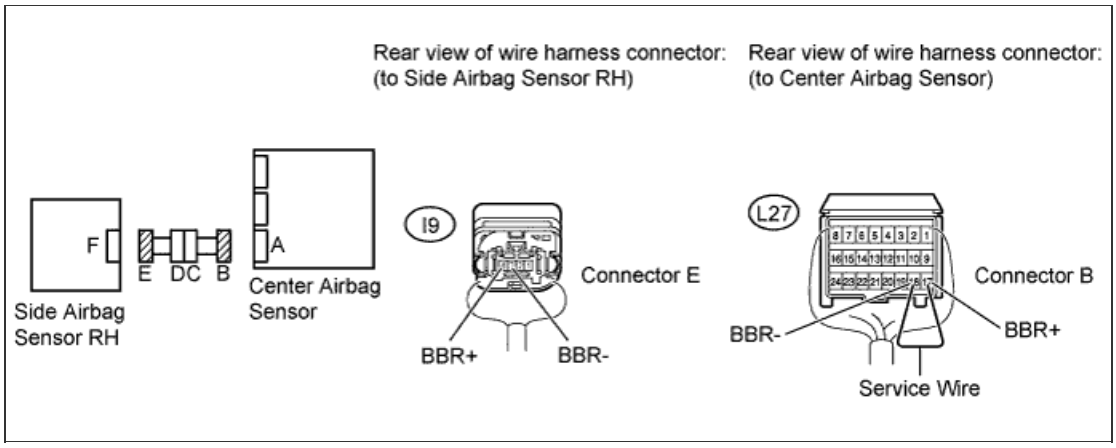
OK:

The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

4.CHECK SIDE AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-4 (BBR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-3 (BBR-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 17 (BBR+) and 18 (BBR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-4 (BBR+) - I9-3 (BBR-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-4 (BBR+) - I9-3 (BBR-)	Always	1 MΩ or higher
I9-4 (BBR+) - Body ground	Always	1 MΩ or higher
I9-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 10

OK

5.CHECK CONNECTION OF CONNECTORS

a. Check that the connector is properly connected to the rear airbag sensor RH.

OK:

The connector is properly connected.

NG → CONNECT CONNECTOR PROPERLY

OK

6.CHECK CONNECTORS

a. Disconnect the connectors from the side airbag sensor RH and rear airbag sensor RH.

b. Check that the connector (on the rear airbag sensor RH side) is not damaged.

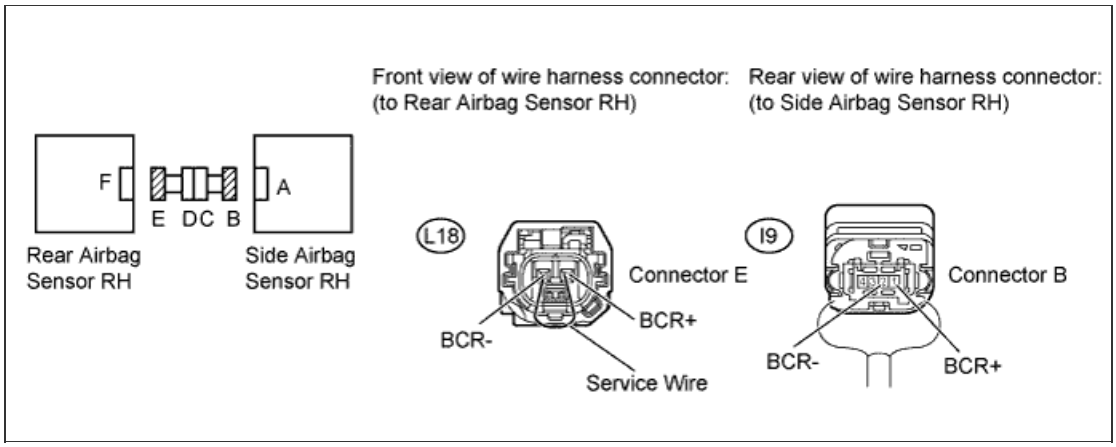
OK:

The connector is not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

7.CHECK REAR AIRBAG SENSOR RH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

g. Disconnect the service wire from connector E.

h. Measure the resistance according to the value(s) in the table below.

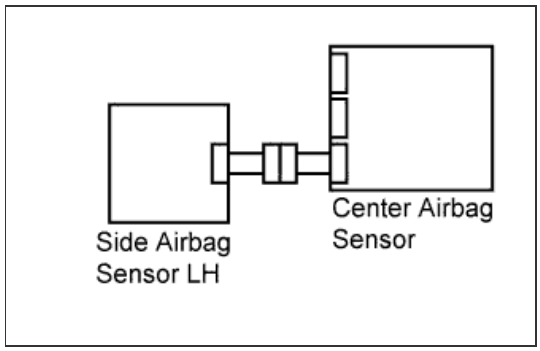
Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → Go to step 11

OK

8.CHECK SIDE AIRBAG SENSOR RH



a. Connect the connector to the center airbag sensor.

b. Interchange the side airbag sensor LH with RH and connect the connectors to them.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

h. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1642 and B1647 are not output	A
DTC B1647 is output	B
DTC B1642 is output	C

HINT:

Codes other than DTC B1642 and B1647 may be output at this time, but they are not related to this check.

i. Turn the engine switch off.

j. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

k. Return the side airbag sensor LH and RH to their original positions and connect the connectors to them.

A → USE SIMULATION METHOD TO CHECK (Click here)

B → REPLACE SIDE AIRBAG SENSOR RH (Click here)

C

9.CHECK REAR AIRBAG SENSOR RH

a. Temporarily replace the rear airbag sensor RH with a new one.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

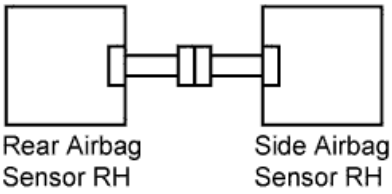
OK:
DTC B1642 is not output.

HINT:

Codes other than DTC B1642 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

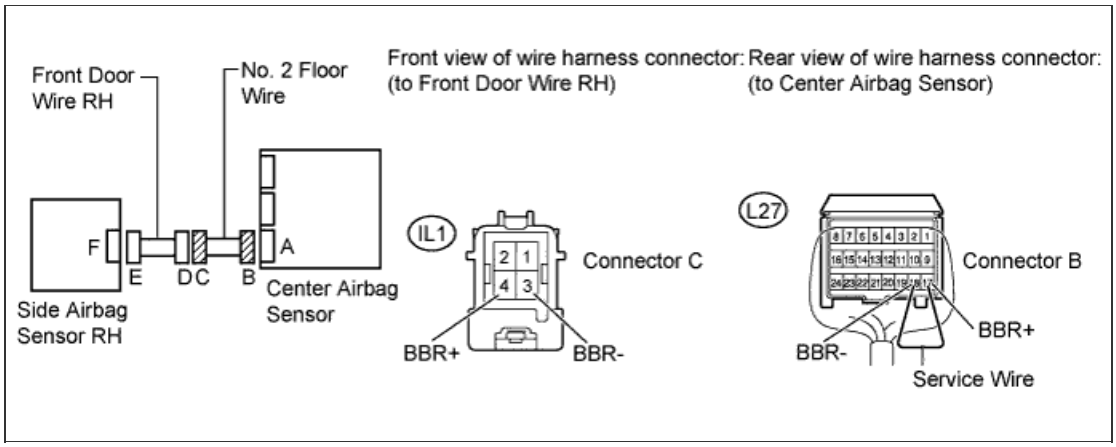


NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE REAR AIRBAG SENSOR RH (Click here)

10.CHECK NO. 2 FLOOR WIRE (CENTER AIRBAG SENSOR - FRONT DOOR WIRE RH)



a. Disconnect the No. 2 floor wire connector from the front door wire RH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
IL1-4 (BBR+) - Body ground	Engine switch on (IG)	Below 1 V
IL1-3 (BBR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 17 (BBR+) and 18 (BBR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
IL1-4 (BBR+) - IL1-3 (BBR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

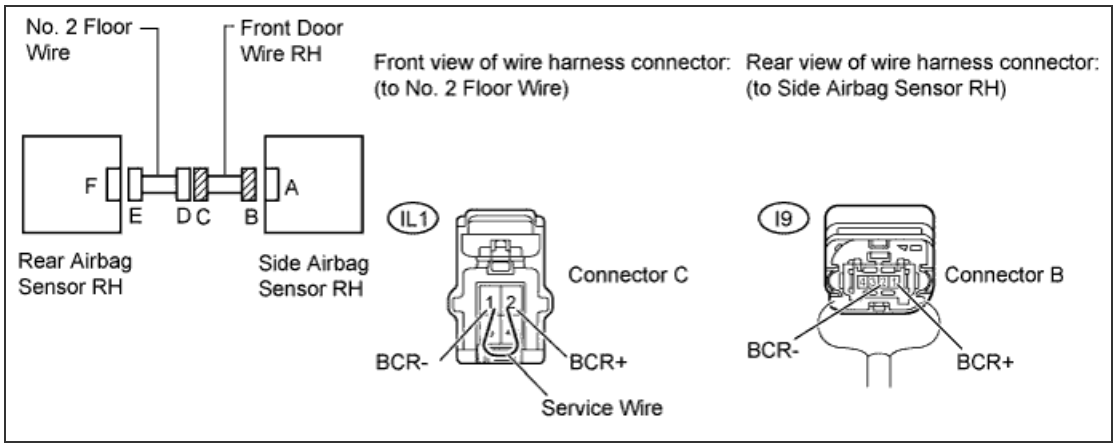
Tester Connection	Condition	Specified Condition
IL1-4 (BBR+) - IL1-3 (BBR-)	Always	1 MΩ or higher
IL1-4 (BBR+) - Body ground	Always	1 MΩ or higher
IL1-3 (BBR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

REPLACE FRONT DOOR WIRE RH

11.CHECK FRONT DOOR WIRE RH (SIDE AIRBAG SENSOR RH - NO. 2 FLOOR WIRE)



a. Disconnect the front door wire RH connector from the No. 2 floor wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
I9-1 (BCR+) - Body ground	Engine switch on (IG)	Below 1 V
I9-2 (BCR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCR+) and 1 (BCR-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
I9-1 (BCR+) - I9-2 (BCR-)	Always	1 MΩ or higher
I9-1 (BCR+) - Body ground	Always	1 MΩ or higher
I9-2 (BCR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FRONT DOOR WIRE RH

OK

REPLACE NO. 2 FLOOR WIRE

12.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and rear airbag sensor LH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

13.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and rear airbag sensor LH.

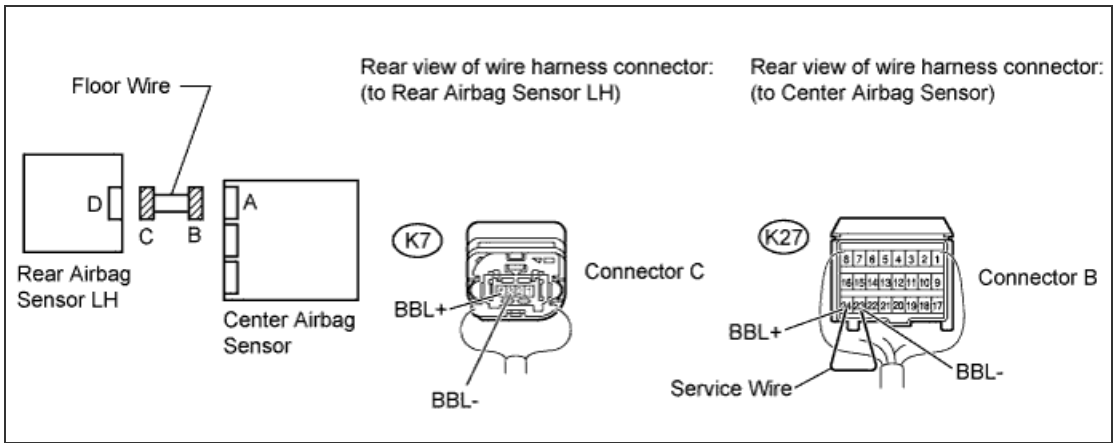
b. Check that the connectors (on the center airbag sensor side and rear airbag sensor LH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

14.CHECK FLOOR WIRE (CENTER AIRBAG SENSOR - REAR AIRBAG SENSOR LH)



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-4 (BBL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-3 (BBL-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 24 (BBL+) and 23 (BBL-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-4 (BBL+) - K7-3 (BBL-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-4 (BBL+) - K7-3 (BBL-)	Always	1 MΩ or higher
K7-4 (BBL+) - Body ground	Always	1 MΩ or higher
K7-3 (BBL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK ↓

15.CHECK CONNECTION OF CONNECTOR

a. Check that the connector is properly connected to the side airbag sensor LH.

OK:
The connector is properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK ↓

16.CHECK CONNECTORS

a. Disconnect the connectors from the rear airbag sensor LH and side airbag sensor LH.

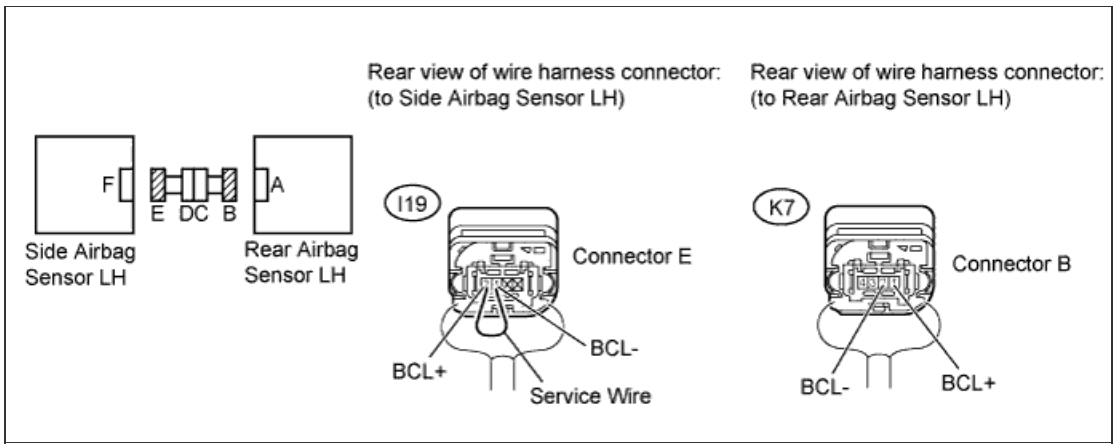
b. Check that the connector (on the side airbag sensor LH side) is not damaged.

OK:
The connector is not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK ↓

17.CHECK SIDE AIRBAG SENSOR LH CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector E.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

g. Disconnect the service wire from connector E.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	1 MΩ or higher
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → Go to step 20

OK

18.CHECK REAR AIRBAG SENSOR LH

a. Temporarily replace the side airbag sensor LH with a new one.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

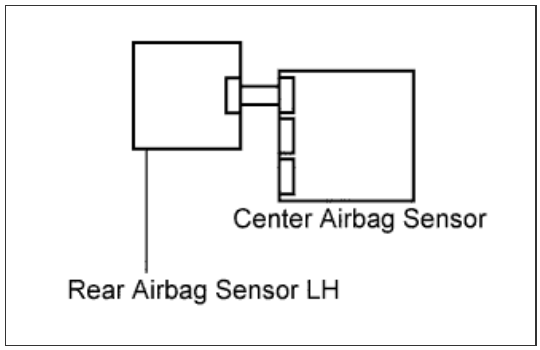
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1642 or B1647 is not output.

HINT:

Codes other than DTC B1642 and B1647 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

NG → Go to step 19

OK →

REPLACE REAR AIRBAG SENSOR LH (Click here)

19.CHECK SIDE AIRBAG SENSOR LH

a. Interchange the side airbag sensor RH with LH and connect the connectors to them.

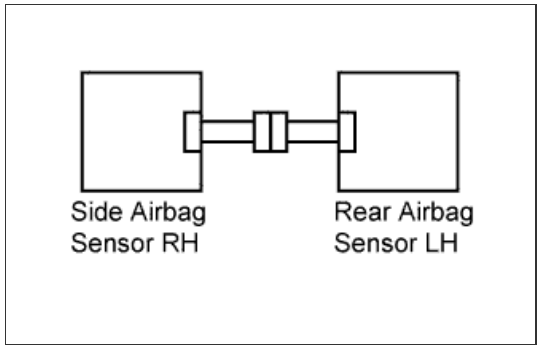
b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.



g. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1647 is output	A
DTC B1642 is output	B
DTC B1642 and B1647 are not output	C

HINT:

Codes other than DTC B1642 and B1647 may be output at this time, but they are not related to this check.

h. Turn the engine switch off.

i. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

j. Return the rear airbag sensor RH and LH to their original positions and connect the connectors to them.

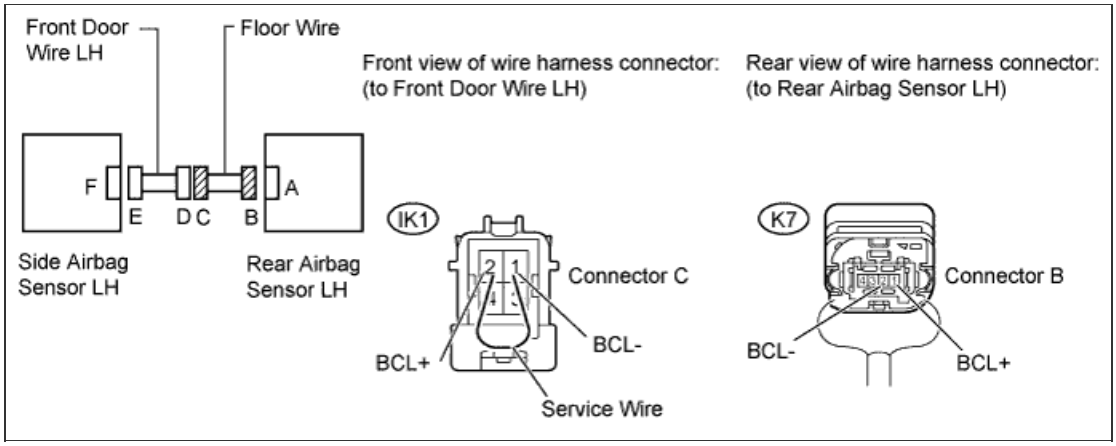
A → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

B → REPLACE SIDE AIRBAG SENSOR LH (Click here)

C →

USE SIMULATION METHOD TO CHECK (Click here)

20.CHECK FLOOR WIRE (REAR SIDE AIRBAG SENSOR LH - FRONT DOOR WIRE LH)



a. Disconnect the floor wire connector from the front door wire LH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K7-1 (BCL+) - Body ground	Engine switch on (IG)	Below 1 V
K7-2 (BCL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 2 (BCL+) and 1 (BCL-) of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	Below 1 Ω

h. Disconnect the service wire from connector C.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K7-1 (BCL+) - K7-2 (BCL-)	Always	1 MΩ or higher
K7-1 (BCL+) - Body ground	Always	1 MΩ or higher
K7-2 (BCL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK → REPLACE FRONT DOOR WIRE LH

DTC B1850/62 Short in Rear Side Squib RH Circuit

DTC B1851/62 Open in Rear Side Squib RH Circuit

DTC B1852/62 Short to GND in Rear Side Squib RH Circuit

DTC B1853/62 Short to B+ in Rear Side Squib RH Circuit

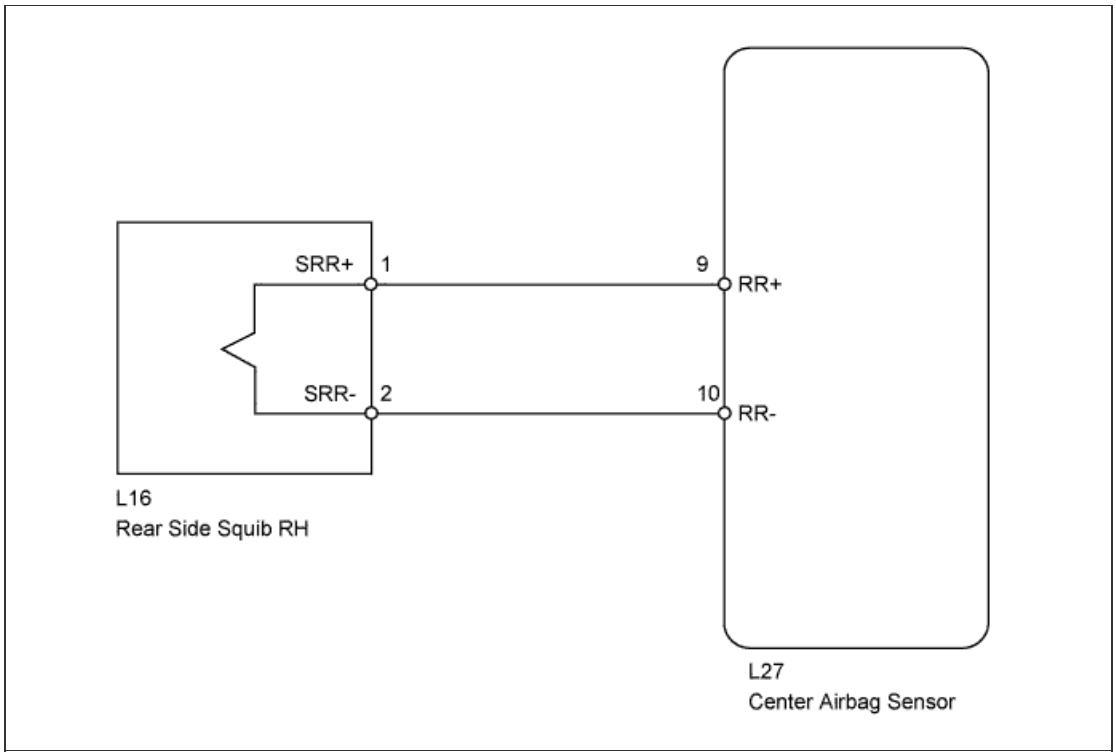
for Preparation Click here

DESCRIPTION

The rear side squib RH circuit consists of the center airbag sensor and the rear seat side airbag RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1850/62	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib RH circuit during the primary check. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1851/62	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib RH circuit for 2 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1852/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1853/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG RH (REAR SIDE SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag RH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

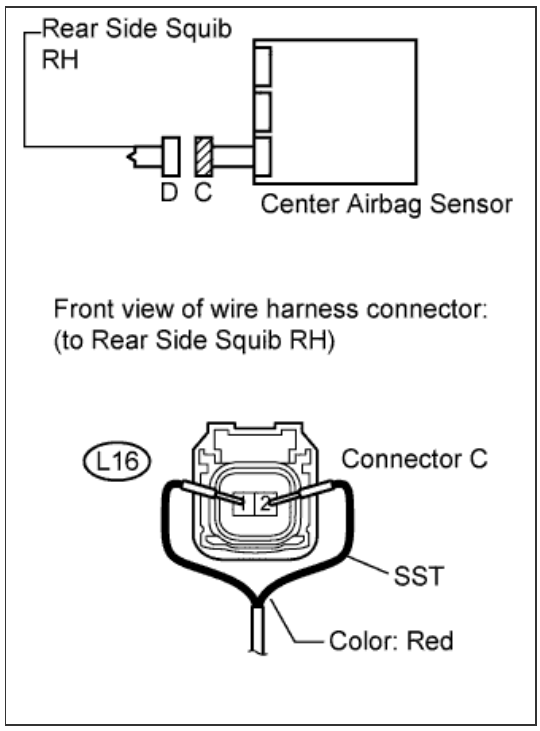
Never connect the tester to the rear seat side airbag RH (rear side squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

2.CHECK NO. 2 FLOOR WIRE (REAR SIDE SQUIB RH CIRCUIT)

a. Turn the engine switch off.

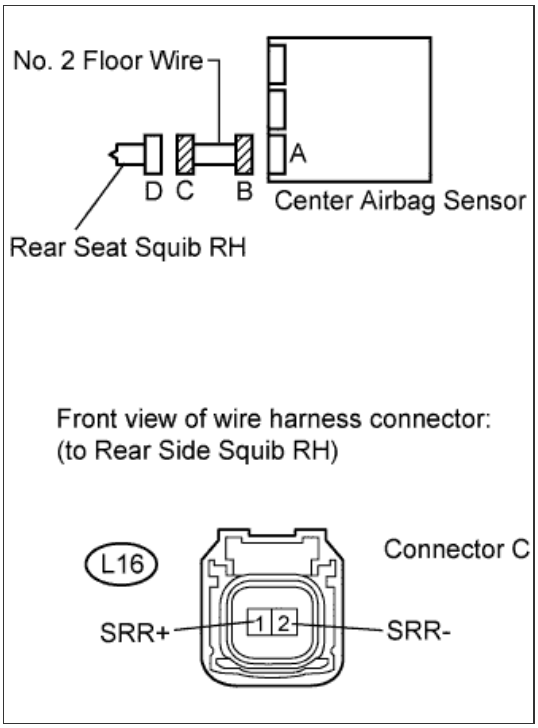
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST (resistance: 2.1 Ω) from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L16-1 (SRR+) - Body ground	Engine switch on (IG)	Below 1 V
L16-2 (SRR-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	1 MΩ or higher
L16-1 (SRR+) - Body ground	Always	1 MΩ or higher
L16-2 (SRR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat side airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

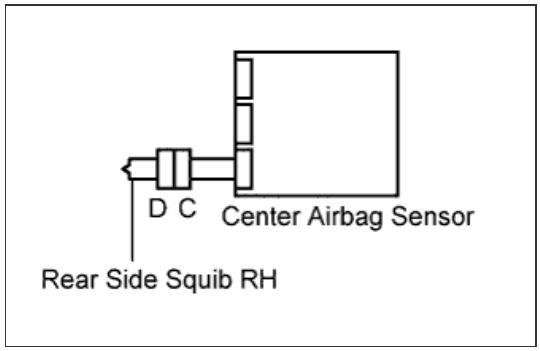
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1651/33 Manual Cut off Switch Trouble

for Preparation Click here

DESCRIPTION

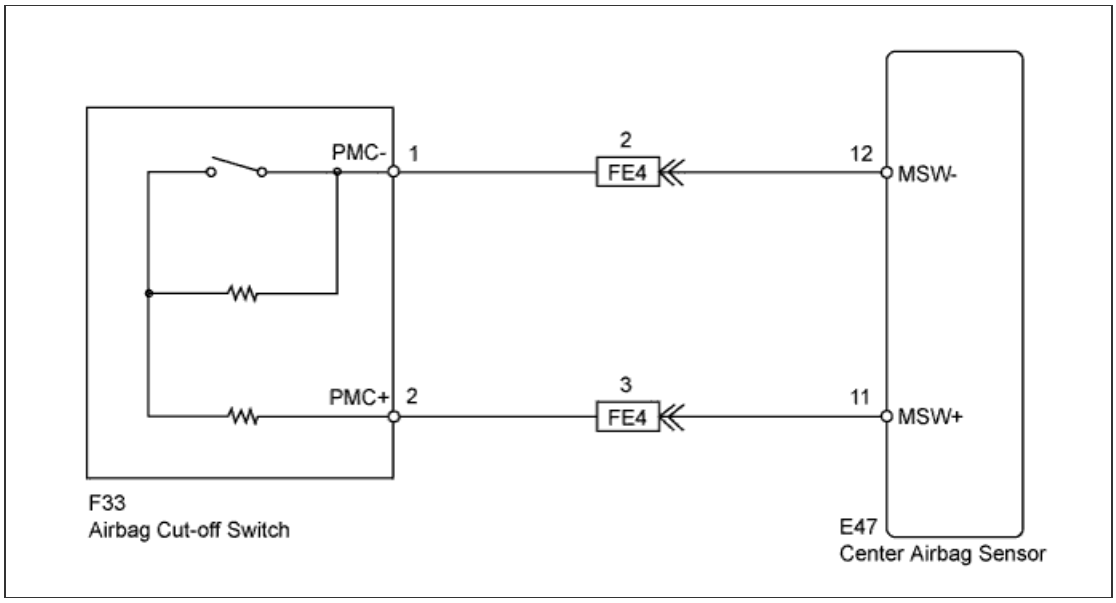
HINT:

"Manual cut off switch" refers to the airbag cut-off switch.

- The airbag cut-off switch circuit consists of the center airbag sensor and the airbag cut-off switch.
  The front passenger airbag can be optionally deactivated via this circuit by turning the airbag cut-off switch to the "OFF" position.
  If the front passenger airbag is deactivated, the passenger airbag "OFF" indicator comes on to inform the passengers.
  DTC B1651/33 is recorded when a malfunction is detected in the airbag cut-off switch circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1651/33	When all the conditions below are met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the airbag cut-off switch circuit for 2 seconds. • A airbag cut-off switch malfunction • A center airbag sensor malfunction	• Instrument panel wire • No. 2 instrument panel wire • Airbag cut-off switch • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

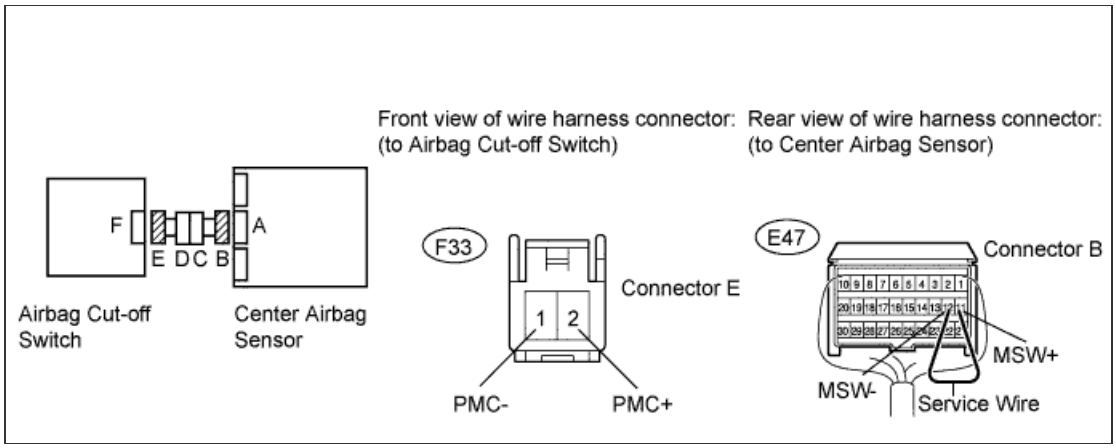
NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

The E47-11 (MSW+) and E47-12 (MSW-) terminals in this circuit have an activation prevention mechanism. This mechanism can be used to check for an open circuit in the wire harness. In case of other checks (check for short, short to ground or short to B+), this mechanism should be released.

1.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - AIRBAG CUT-OFF SWITCH)



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the center airbag sensor and airbag cut-off switch.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG).

f. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
F33-2 (PMC+) - Body ground	Engine switch on (IG)	Below 1 V
F33-1 (PMC-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Using a service wire, connector terminals 11 (MSW+) and 12 (MSW-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

j. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
F33-2 (PMC+) - F33-1 (PMC-)	Always	Below 1 Ω

k. Disconnect a service wire from connector B.

l. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
F33-2 (PMC+) - F33-1 (PMC-)	Always	1 MΩ or higher
F33-2 (PMC+) - Body ground	Always	1 MΩ or higher
F33-1 (PMC-) - Body ground	Always	1 MΩ or higher

NG → Go to step 4

OK

2.INSPECT AIRBAG CUT-OFF SWITCH

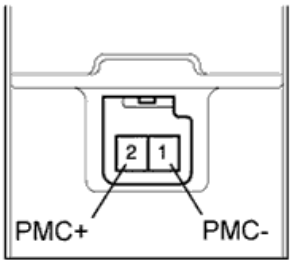
a. Remove the airbag cut-off switch (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
2 (PMC+) - 1 (PMC-)	Cut off switch is in "ON" position (Front passenger side airbag is active)	360 to 440 Ω
2 (PMC+) - 1 (PMC-)	Cut off switch is in "OFF" position (Front passenger side airbag is not active)	90 to 110 Ω

Component without harness connected:
(Airbag Cut-off Switch)



NG → REPLACE AIRBAG CUT-OFF SWITCH (Click here)

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the center airbag sensor and the airbag cut-off switch.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

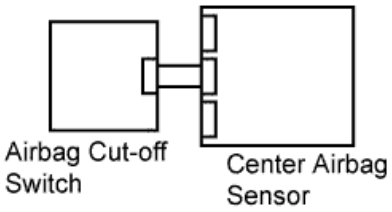
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check the DTCs (Click here).



OK:
DTC B1651 is not output.

HINT:

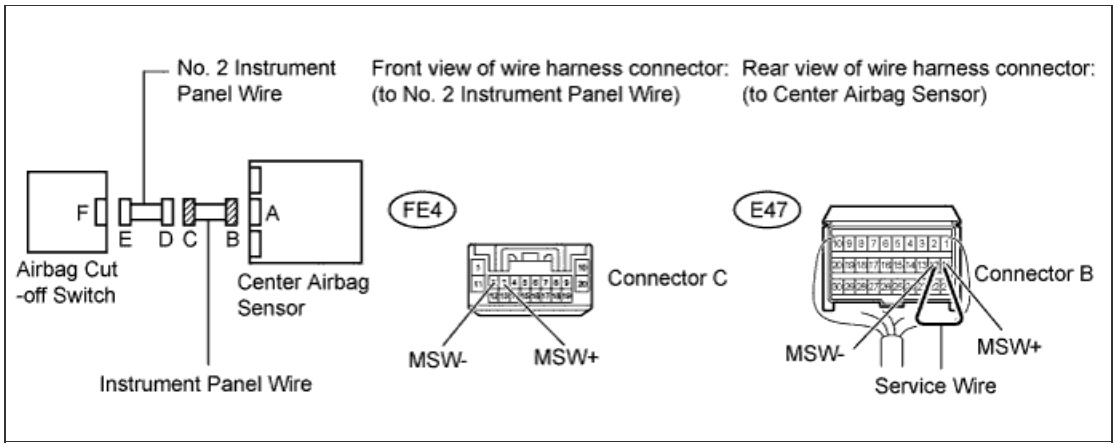
Codes other than DTC B1651 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

4.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - NO. 2 INSTRUMENT PANEL WIRE)



a. Disconnect the instrument panel wire connector from the No. 2 instrument panel wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG).

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
FE4-3 (MSW+) - Body ground	Engine switch on (IG)	Below 1 V
FE4-2 (MSW-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Using a service wire, connector terminals 11 (MSW+) and 12 (MSW-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
FE4-3 (MSW+) - FE4-2 (MSW-)	Always	Below 1 Ω

i. Disconnect the service wire from connector B.

j. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
FE4-3 (MSW+) - FE4-2 (MSW-)	Always	1 MΩ or higher
FE4-3 (MSW+) - Body ground	Always	1 MΩ or higher
FE4-2 (MSW-) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK

REPLACE NO. 2 INSTRUMENT PANEL WIRE

DTC B1850/62 Short in Rear Side Squib RH Circuit

DTC B1851/62 Open in Rear Side Squib RH Circuit

DTC B1852/62 Short to GND in Rear Side Squib RH Circuit

DTC B1853/62 Short to B+ in Rear Side Squib RH Circuit

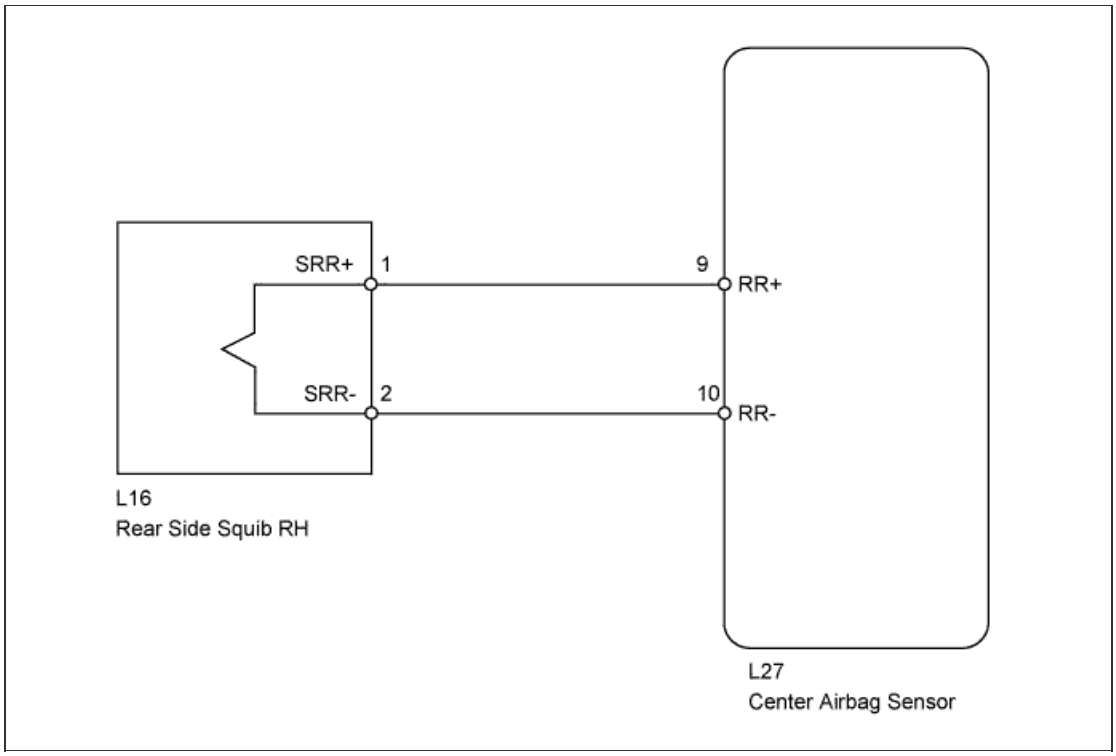
for Preparation Click here

DESCRIPTION

The rear side squib RH circuit consists of the center airbag sensor and the rear seat side airbag RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1850/62	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib RH circuit during the primary check. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1851/62	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib RH circuit for 2 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1852/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly
B1853/62	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib RH circuit for 0.5 seconds. • A rear side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat side airbag assembly RH (Rear side squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG RH (REAR SIDE SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag RH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

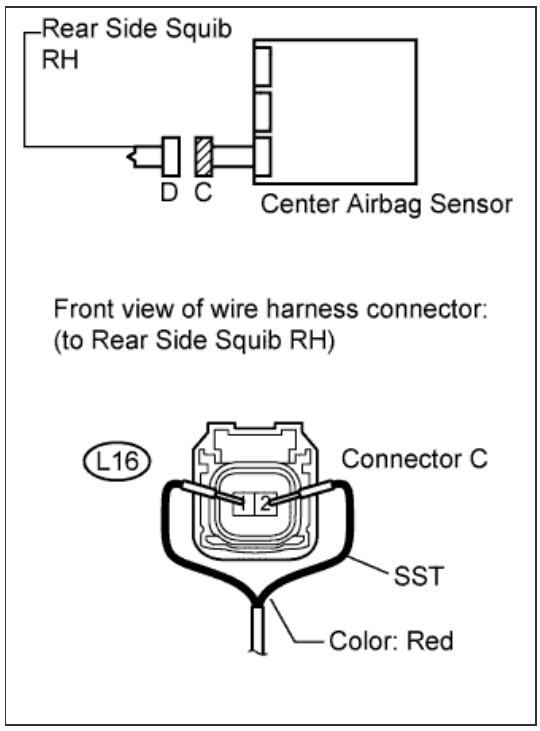
Never connect the tester to the rear seat side airbag RH (rear side squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY RH (Click here)

2.CHECK NO. 2 FLOOR WIRE (REAR SIDE SQUIB RH CIRCUIT)

a. Turn the engine switch off.

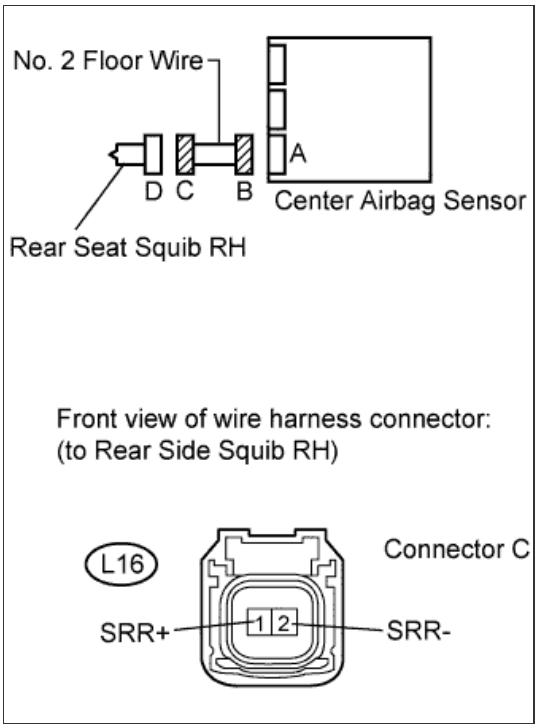
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST (resistance: 2.1 Ω) from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L16-1 (SRR+) - Body ground	Engine switch on (IG)	Below 1 V
L16-2 (SRR-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L16-1 (SRR+) - L16-2 (SRR-)	Always	1 MΩ or higher
L16-1 (SRR+) - Body ground	Always	1 MΩ or higher
L16-2 (SRR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat side airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

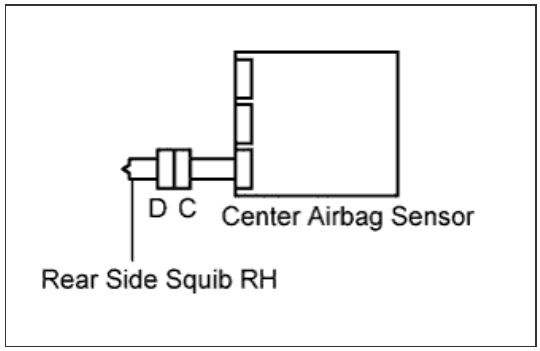
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1850, B1851, B1852 or B1853 is not output.

HINT:

Codes other than DTC B1850, B1851, B1852 and B1853 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1653/35 Seat Position Airbag Sensor Circuit Malfunction

for Preparation Click here

DESCRIPTION

The seat position sensor circuit consists of the center airbag sensor and the seat position sensor.
DTC B1653/35 is stored when a malfunction is detected in the seat position sensor circuit.

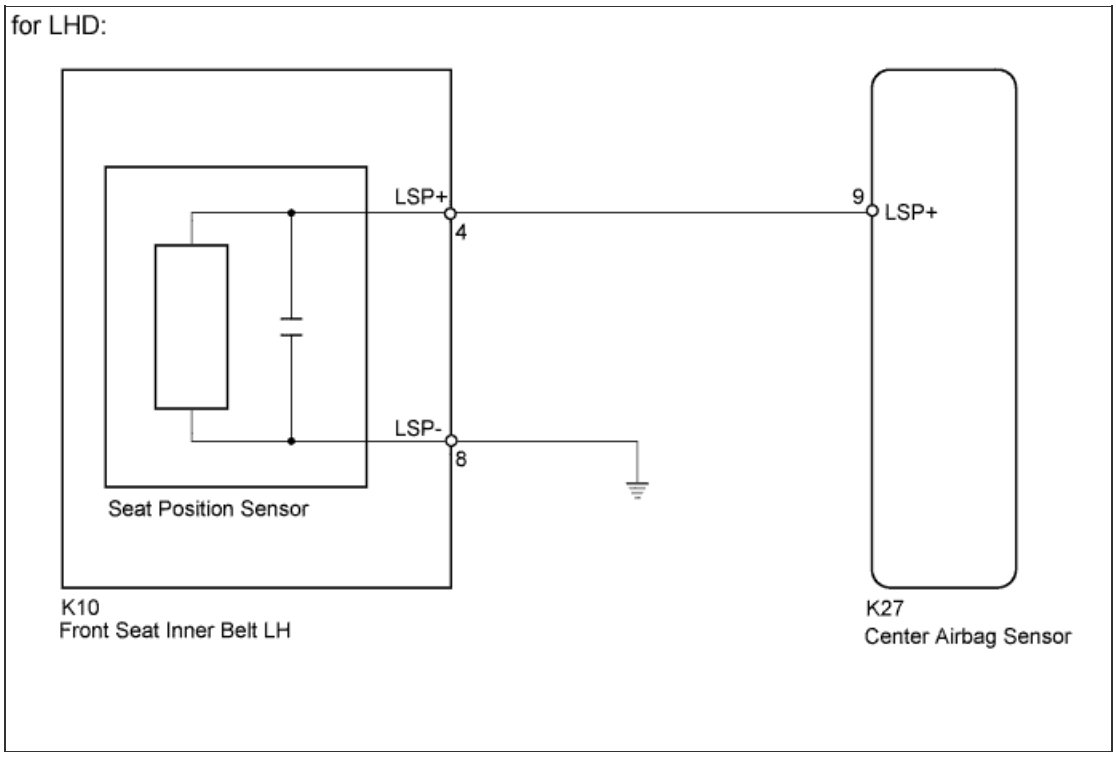
for LHD

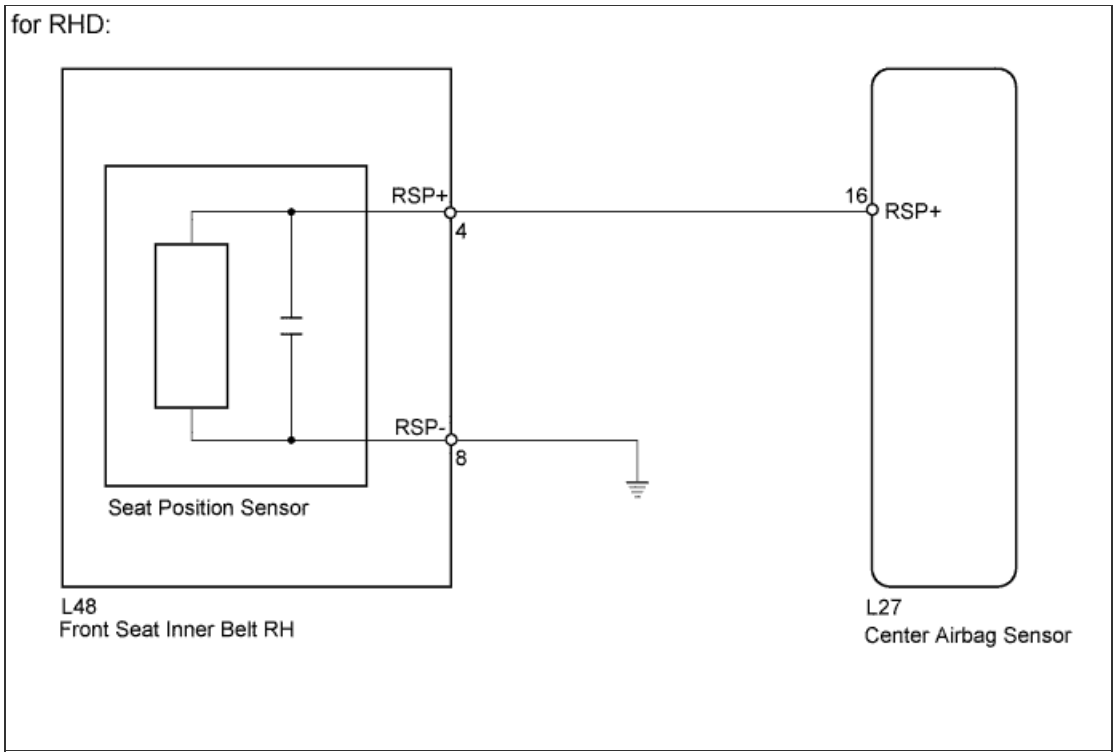
DTC Code	DTC Detection Condition	Trouble Area
B1653/35	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the seat position sensor circuit for 2 seconds. • A seat position sensor malfunction. • A center airbag sensor malfunction.	• Floor wire • Seat position sensor • Center airbag sensor assembly

for RHD

DTC Code	DTC Detection Condition	Trouble Area
B1653/35	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the seat position sensor circuit for 2 seconds. • A seat position sensor malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Seat position sensor • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK VEHICLE CONDITION

a. Check vehicle condition.

Result

Result	Proceed to
for LHD	A
for RHD	B

B → **Go to step 9**

A

2.CHECK FOR DTC

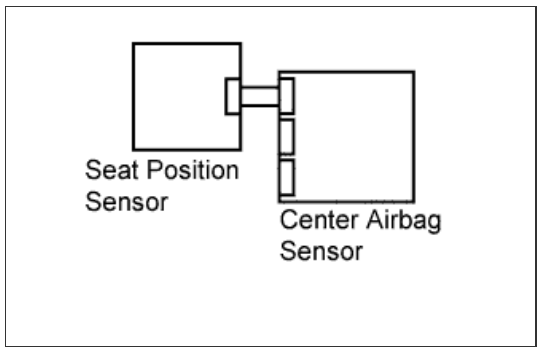
a. Turn the engine switch on (IG).

b. Clear the DTCs (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).



OK:

DTC B1653 is not output.

HINT:

Codes other than DTC B1653 may be output at this time, but they are not related to this check.

NG → **Go to step 3**

OK

USE SIMULATION METHOD TO CHECK (Click here)

3.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the seat position sensor.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

4.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and the seat position sensor.

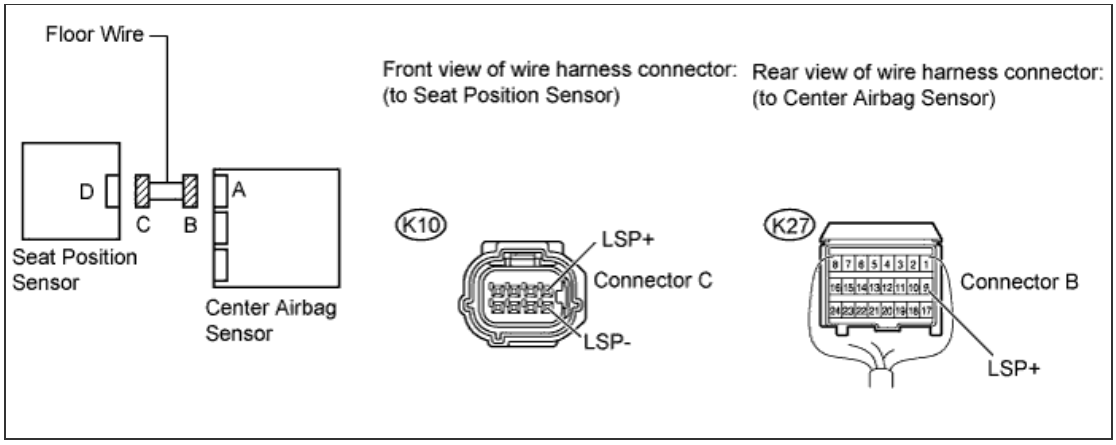
b. Check that the connectors (on the center airbag sensor side and seat position sensor side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

5.CHECK FLOOR WIRE (CENTER AIRBAG SENSOR - SEAT POSITION SENSOR)



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K10-4 (LSP+) - Body ground	Engine switch on (IG)	Below 1 V
K10-8 (LSP-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

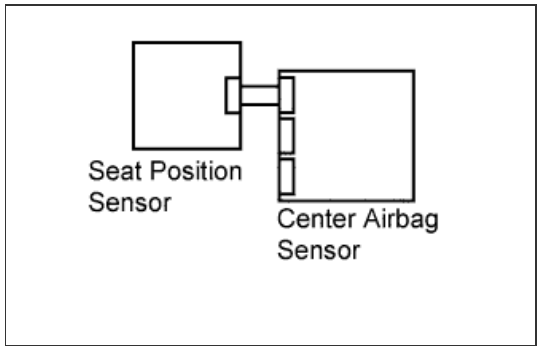
Tester Connection	Condition	Specified Condition
K10-4 (LSP+) -		

K27-9 (LSP+)	Always	Below 1 Ω
K10-4 (LSP+) - Body ground	Always	1 MΩ or higher
K10-8 (LSP-) - Body ground	Always	Below 1 Ω

NG → REPLACE FLOOR WIRE

OK

6.CHECK SEAT POSITION SENSOR



a. Connect the connectors to the center airbag sensor and the seat position sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1653 is not output.

HINT:

Codes other than DTC B1653 may be output at this time, but they are not related to this check.

NG → **Go to step 7**

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

7.REPLACE SEAT POSITION SENSOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

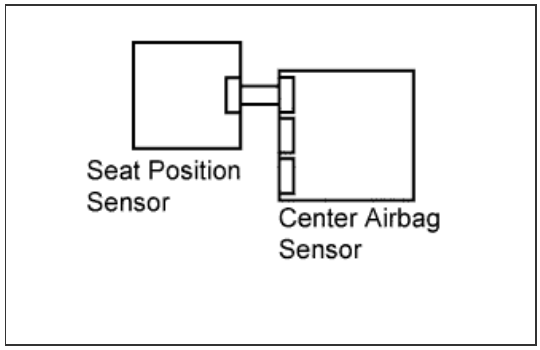
c. Replace the seat position sensor (Click here).

HINT:

Perform the inspection using parts from a normally functioning vehicle if possible.

NEXT

8.CHECK CENTER AIRBAG SENSOR



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Turn the engine switch on (IG), and wait for at least 60 seconds.

c. Clear the DTCs (Click here).

d. Turn the engine switch off.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Check for DTCs (Click here).

OK:
DTC B1653 is not output.

HINT:

Codes other than DTC B1653 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE SEAT POSITION SENSOR (Click here)

9.CHECK FOR DTC

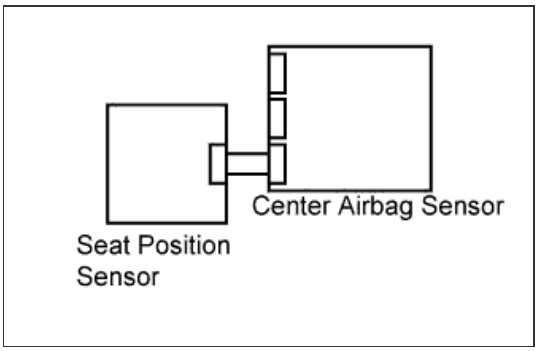
a. Turn the engine switch on (IG), and wait for at least 60 seconds.

b. Clear the DTCs (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).



OK:
DTC B1653/35 is not output.

HINT:

Codes other than DTC B1653/35 may be output at this time, but they are not related to this check.

NG → Go to step 10

OK

USE SIMULATION METHOD TO CHECK (Click here)

10.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the seat position sensor.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

11.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and the seat position sensor.

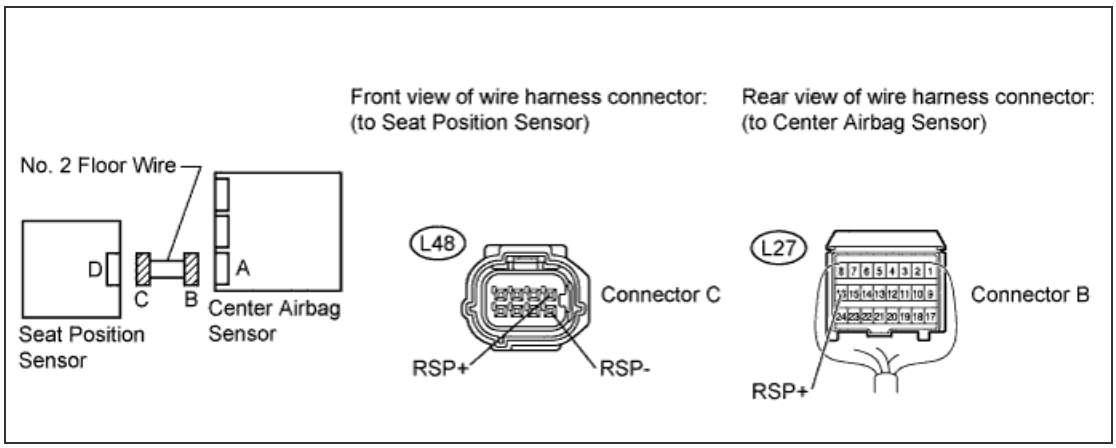
b. Check that the connectors (on the center airbag sensor side and seat position sensor side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

12.CHECK NO. 2 FLOOR WIRE (CENTER AIRBAG SENSOR - SEAT POSITION SENSOR)



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L48-4 (RSP+) - Body ground	Engine switch on (IG)	Below 1 V
L48-8 (RSP-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Measure the resistance according to the value(s) in the table below.

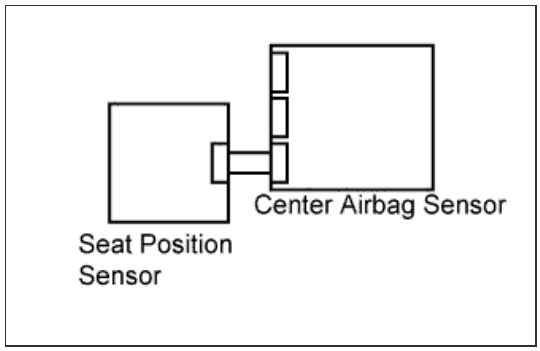
Standard Resistance:

Tester Connection	Condition	Specified Condition
L48-4 (RSP+) - L27-16 (RSP+)	Always	Below 1 Ω
L48-4 (RSP+) - Body ground	Always	1 MΩ or higher
L48-8 (RSP-) - Body ground	Always	Below 1 Ω

NG → REPLACE NO. 2 FLOOR WIRE

OK

13.CHECK SEAT POSITION SENSOR



a. Connect the connectors to the center airbag sensor and the seat position sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1653/35 is not output.

HINT:

Codes other than DTC B1653/35 may be output at this time, but they are not related to this check.

NG → Go to step 14

OK

USE SIMULATION METHOD TO CHECK (Click here)

14.REPLACE SEAT POSITION SENSOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Replace the seat position sensor (Click here).

HINT:

Perform inspection using parts from a normal vehicle if possible.

NEXT

15.CHECK CENTER AIRBAG SENSOR

a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

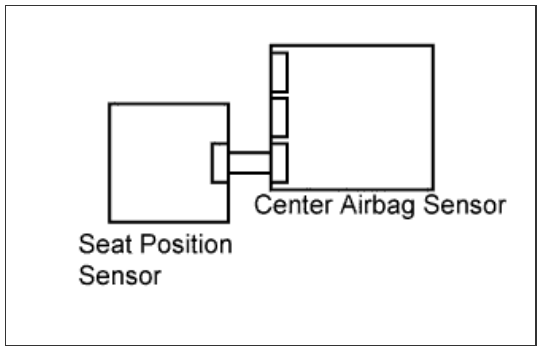
b. Turn the engine switch on (IG), and wait for at least 60 seconds.

c. Clear the DTCs (Click here).

d. Turn the engine switch off.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Check for DTCs (Click here).



OK:
DTC B1653/35 is not output.

HINT:

Codes other than DTC B1653/35 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE SEAT POSITION SENSOR (Click here)

DTC B1855/63 Short in Rear Side Squib LH Circuit

DTC B1856/63 Open in Rear Side Squib LH Circuit

DTC B1857/63 Short to GND in Rear Side Squib LH Circuit

DTC B1858/63 Short to B+ in Rear Side Squib LH Circuit

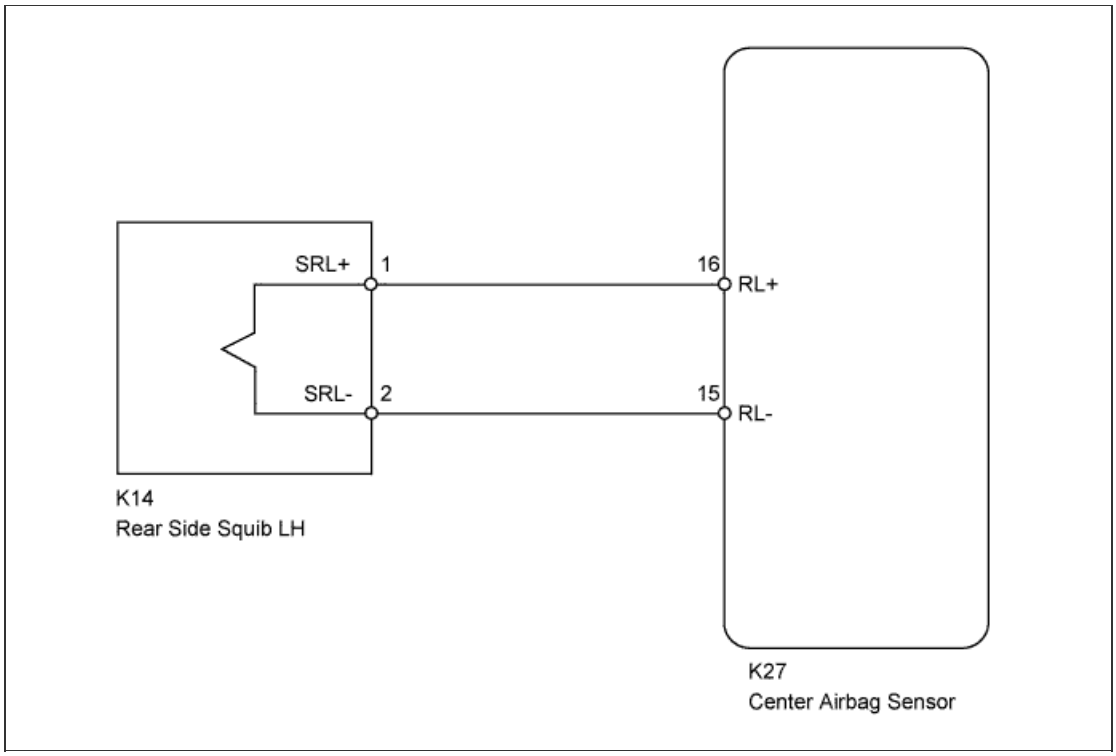
for Preparation Click here

DESCRIPTION

The rear side squib LH circuit consists of the center airbag sensor and the rear seat side airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1855/63	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib LH circuit during the primary check. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1856/63	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib LH circuit for 2 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1857/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1858/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG LH (REAR SIDE SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag LH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

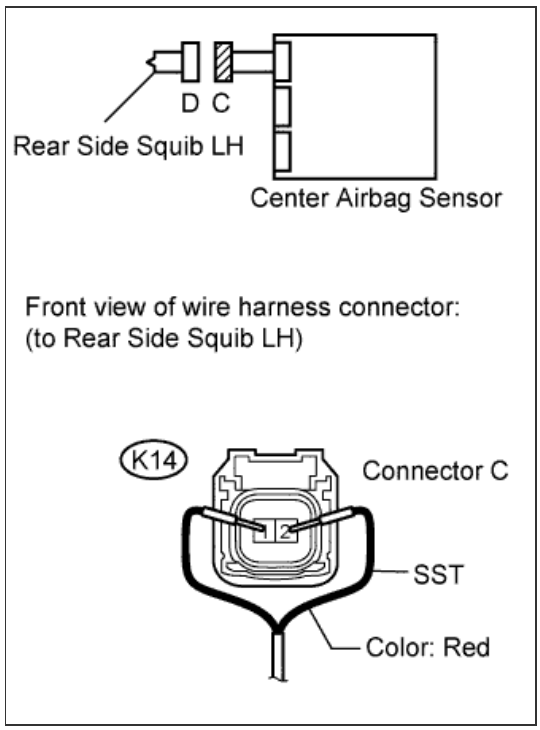
Never connect the tester to the rear seat side airbag LH (rear side squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

2.CHECK FLOOR WIRE (REAR SIDE SQUIB LH CIRCUIT)

a. Turn the engine switch off.

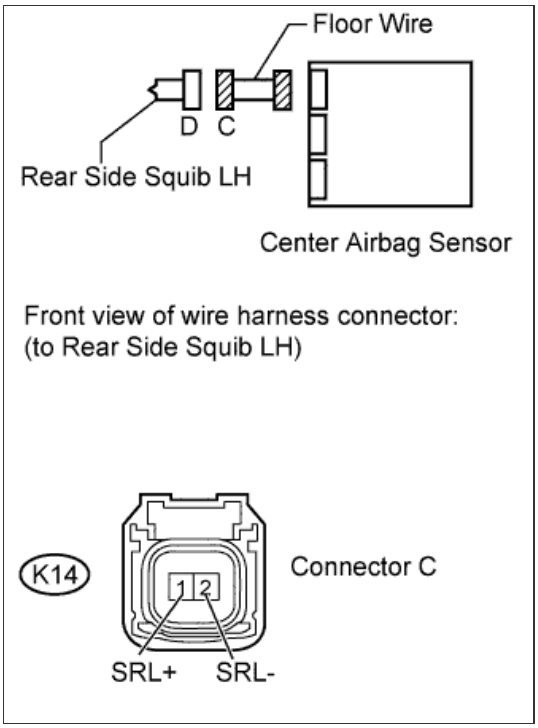
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K14-1 (SRL+) - Body ground	Engine switch on (IG)	Below 1 V
K14-2 (SRL-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

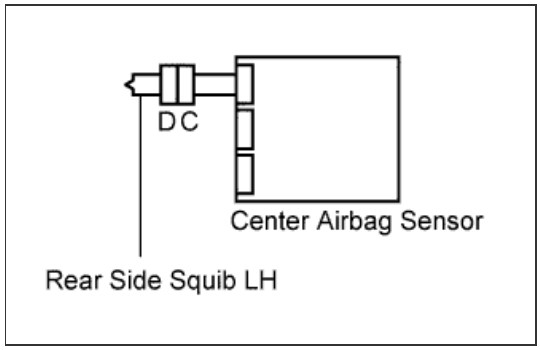
Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	1 MΩ or higher
K14-1 (SRL+) - Body ground	Always	1 MΩ or higher
K14-2 (SRL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the rear seat side airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1655/37 Driver Side Seat Belt Buckle Switch Circuit Malfunction

for Preparation Click here

DESCRIPTION

for LHD:
The seat belt buckle switch LH circuit consists of the center airbag sensor and the front seat inner belt LH.
DTC B1655/37 is recorded when a malfunction is detected in the seat belt buckle switch LH circuit.
for RHD:
The seat belt buckle switch RH circuit consists of the center airbag sensor and the front seat inner belt RH. DTC B1655/37 is stored when a malfunction is detected in the seat belt buckle switch RH circuit.

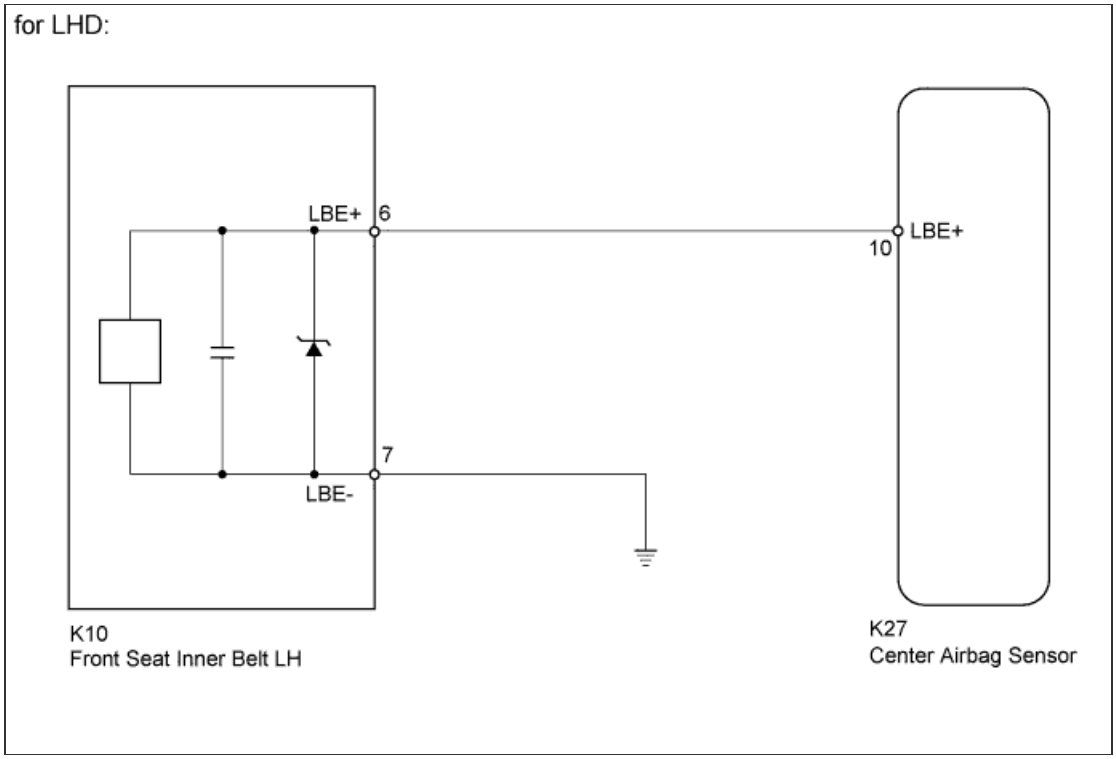
for LHD

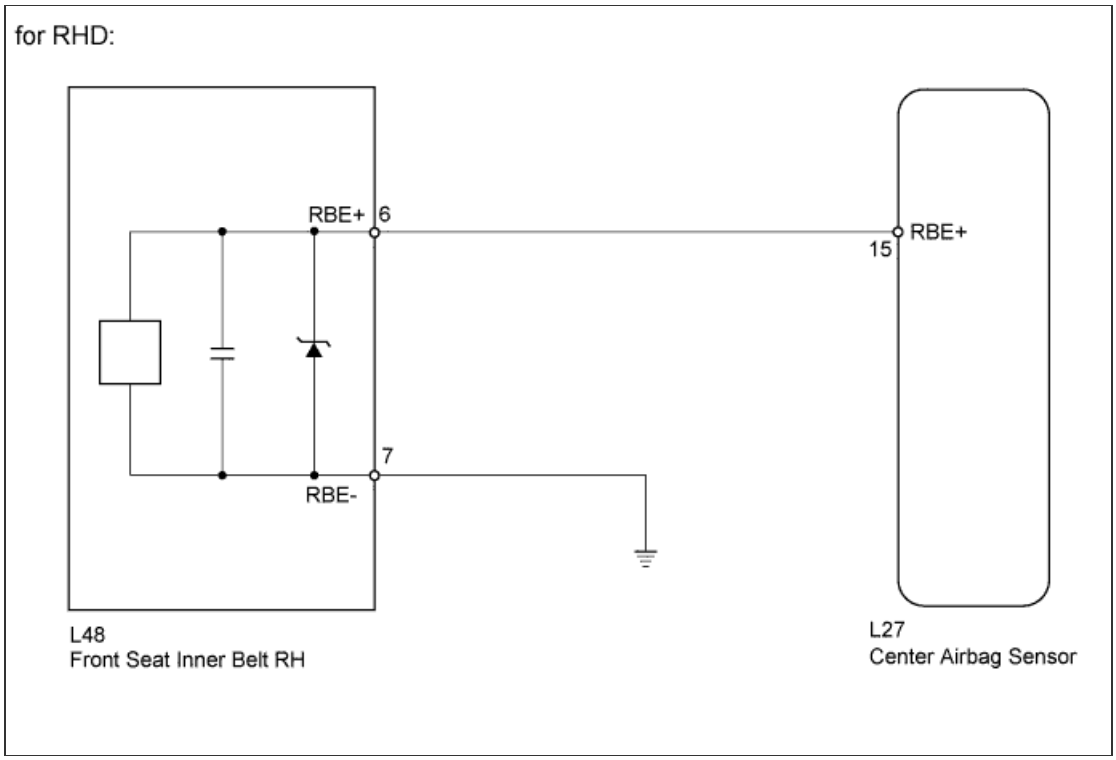
DTC Code	DTC Detection Condition	Trouble Area
B1655/37	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the seat belt buckle switch LH circuit for 2 seconds. • A front seat inner belt LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat inner belt assembly LH (Seat belt buckle switch LH) • Center airbag sensor assembly

for RHD

DTC Code	DTC Detection Condition	Trouble Area
B1655/37	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the seat belt buckle switch RH circuit for 2 seconds. • A front seat inner belt RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat inner belt assembly RH (Seat belt buckle switch RH) • Center airbag sensor assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK VEHICLE CONDITION

a. Check vehicle condition.

Result

Result	Proceed to
for LHD	A
for RHD	B

B → Go to step 9

A

2.CHECK FOR DTC

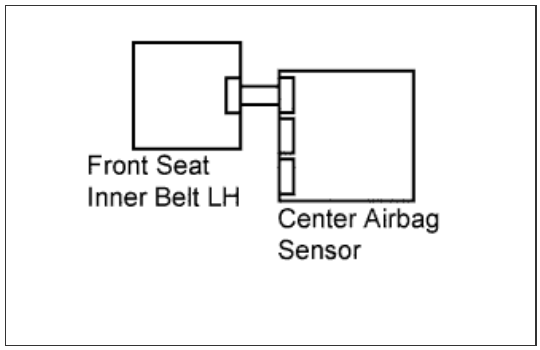
a. Turn the engine switch on (IG).

b. Clear the DTCs (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).



OK:

DTC B1655 is not output.

HINT:

Codes other than DTC B1655 may be output at this time, but they are not related to this check.

NG → Go to step 3

OK

USE SIMULATION METHOD TO CHECK (Click here)

3.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and front seat inner belt LH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

4.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and the front seat inner belt LH.

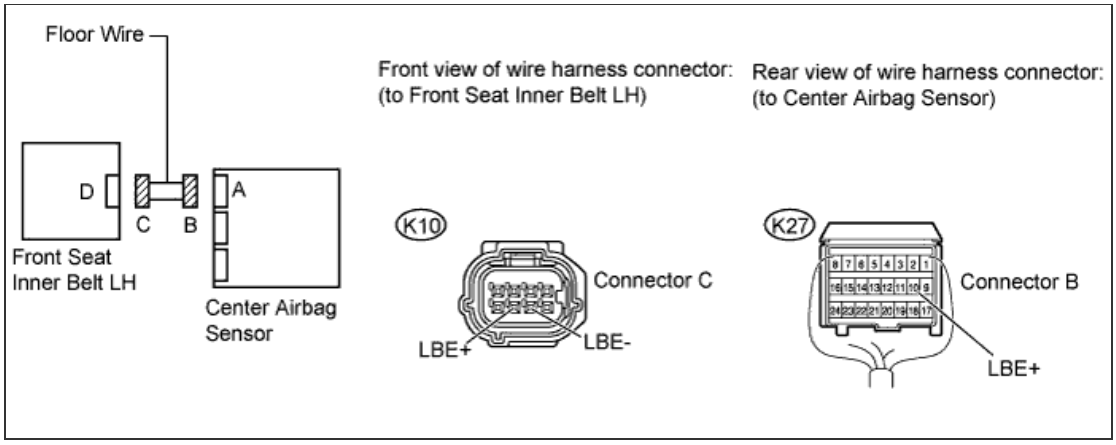
b. Check that the connectors (on the center airbag sensor side and front seat inner belt LH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

5.CHECK FLOOR WIRE (CENTER AIRBAG SENSOR - FRONT SEAT INNER BELT LH)



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K10-6 (LBE+) - Body ground	Engine switch on (IG)	Below 1 V
K10-7 (LBE-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K10-6 (LBE+) -		

K27-10 (LBE+)	Always	Below 1 Ω
K10-6 (LBE+) - Body ground	Always	1 MΩ or higher
K10-7 (LBE-) - Body ground	Always	Below 1 Ω

NG → REPLACE FLOOR WIRE

OK

6.CHECK FRONT SEAT INNER BELT LH (SEAT BELT BUCKLE SWITCH)

a. Connect the connector to the center airbag sensor and the front seat inner belt LH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

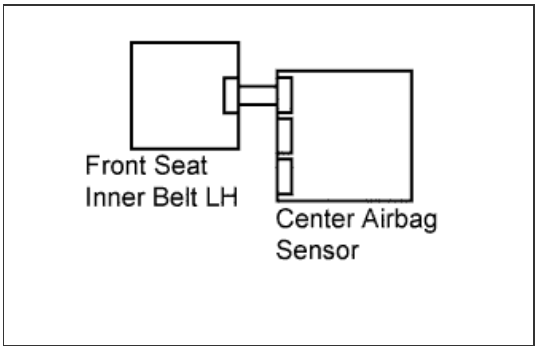
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1655 is not output.

HINT:

Codes other than DTC B1655 may be output at this time, but they are not related to this check.

NG → Go to step 7

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

7.REPLACE FRONT SEAT INNER BELT ASSEMBLY LH

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Replace the front seat inner belt LH (Click here).

HINT:

Perform the inspection using parts from a normally functioning vehicle if possible.

NEXT

8.CHECK CENTER AIRBAG SENSOR

a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

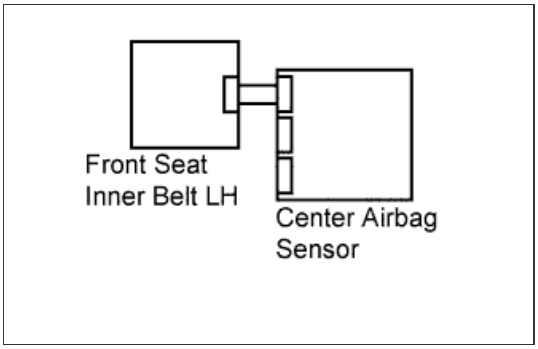
b. Turn the engine switch on (IG), and wait for at least 60 seconds.

c. Clear the DTCs (Click here).

d. Turn the engine switch off.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Check for DTCs (Click here).



OK:

DTC B1655 is not output.

HINT:

Codes other than DTC B1655 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK ↓

REPLACE FRONT SEAT INNER BELT ASSEMBLY LH (Click here)

9.CHECK FOR DTC

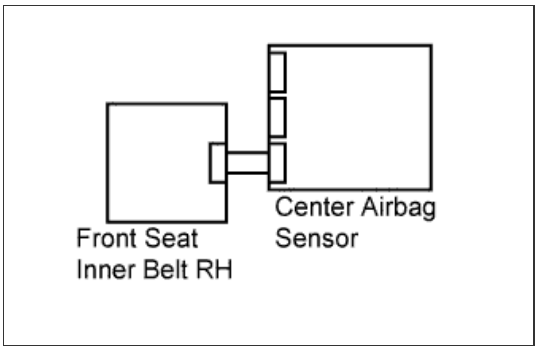
a. Turn the engine switch on (IG), and wait for at least 60 seconds.

b. Clear the DTCs (Click here).

c. Turn the engine switch off.

d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Check for DTCs (Click here).



OK:
DTC B1655 is not output.

HINT:

Code other than DTC B1655 may be output at this time, but they are not related to this check.

NG → Go to step 10

OK ↓

USE SIMULATION METHOD TO CHECK (Click here)

10.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and front seat inner belt RH.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK ↓

11.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and the front seat inner belt RH.

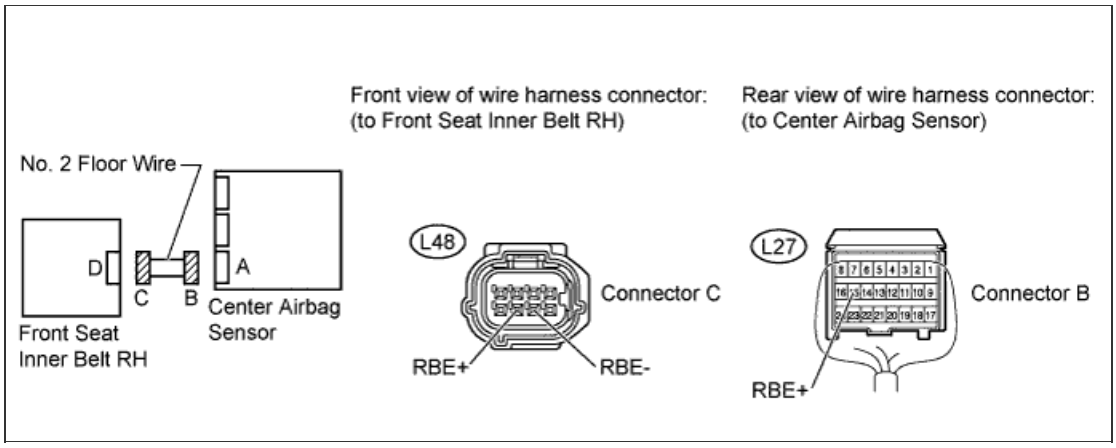
b. Check that the connectors (on the center airbag sensor side and front seat inner belt RH side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK ↓

12.CHECK NO. 2 FLOOR WIRE (CENTER AIRBAG SENSOR - FRONT SEAT INNER BELT RH)



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L48-6 (RBE+) - Body ground	Engine switch on (IG)	Below 1 V
L48-7 (RBE-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Measure the resistance according to the value(s) in the table below.

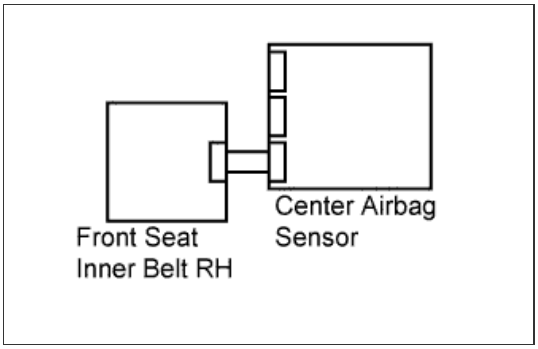
Standard Resistance:

Tester Connection	Condition	Specified Condition
L48-6 (RBE+) - L27-15 (RBE+)	Always	Below 1 Ω
L48-6 (RBE+) - Body ground	Always	1 MΩ or higher
L48-7 (RBE-) - Body ground	Always	Below 1 Ω

NG → REPLACE NO. 2 FLOOR WIRE

OK

13.CHECK FRONT SEAT INNER BELT RH (SEAT BELT BUCKLE SWITCH)



a. Connect the connector to the center airbag sensor and the front seat inner belt RH.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1655 is not output.

HINT:

Codes other than DTC B1655 may be output at this time, but they are not related to this check.

NG → Go to step 14

OK

USE SIMULATION METHOD TO CHECK (Click here)

14.REPLACE FRONT SEAT INNER BELT ASSEMBLY RH

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Replace the front seat inner belt RH (Click here).

HINT:

Perform the inspection using parts from a normally functioning vehicle if possible.

NEXT

15.CHECK CENTER AIRBAG SENSOR

a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

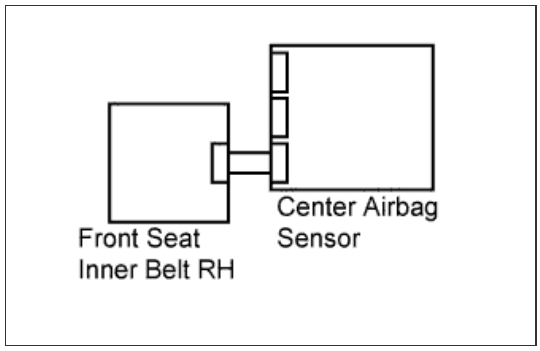
b. Turn the engine switch on (IG), and wait for at least 60 seconds.

c. Clear the DTCs (Click here).

d. Turn the engine switch off.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Check for DTCs (Click here).



OK:
DTC B1655 is not output.

HINT:

Codes other than DTC B1655 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

REPLACE FRONT SEAT INNER BELT ASSEMBLY RH

DTC B1855/63 Short in Rear Side Squib LH Circuit

DTC B1856/63 Open in Rear Side Squib LH Circuit

DTC B1857/63 Short to GND in Rear Side Squib LH Circuit

DTC B1858/63 Short to B+ in Rear Side Squib LH Circuit

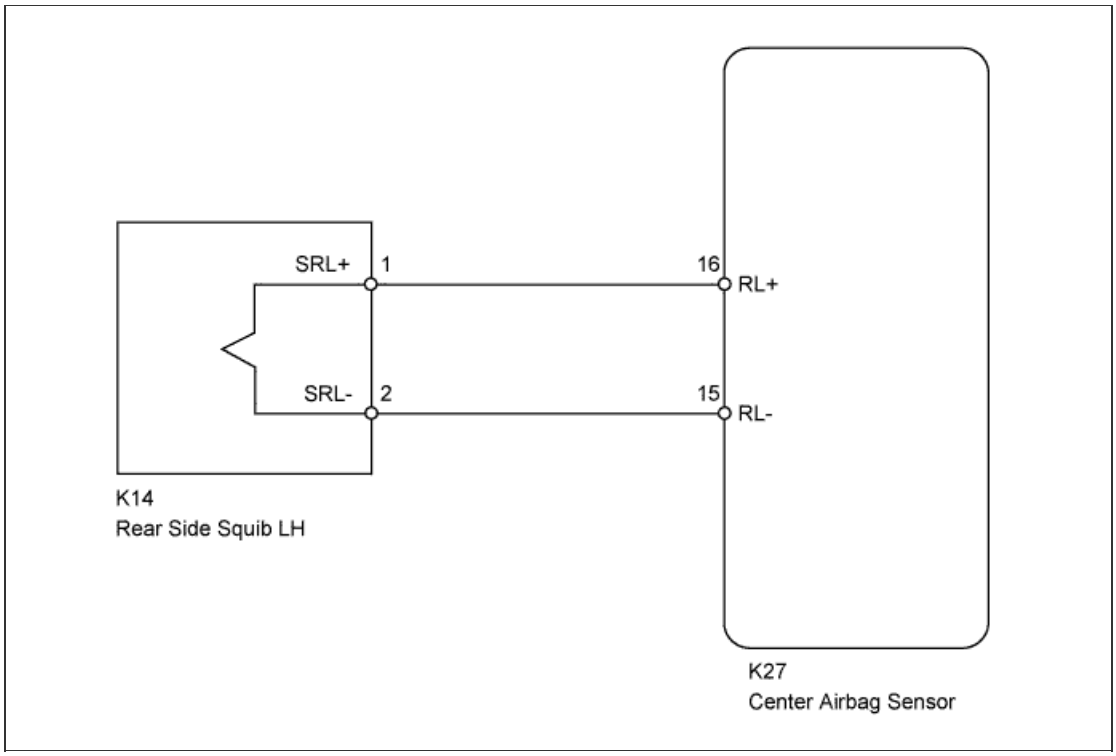
for Preparation Click here

DESCRIPTION

The rear side squib LH circuit consists of the center airbag sensor and the rear seat side airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1855/63	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib LH circuit during the primary check. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1856/63	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib LH circuit for 2 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1857/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1858/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG LH (REAR SIDE SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag LH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

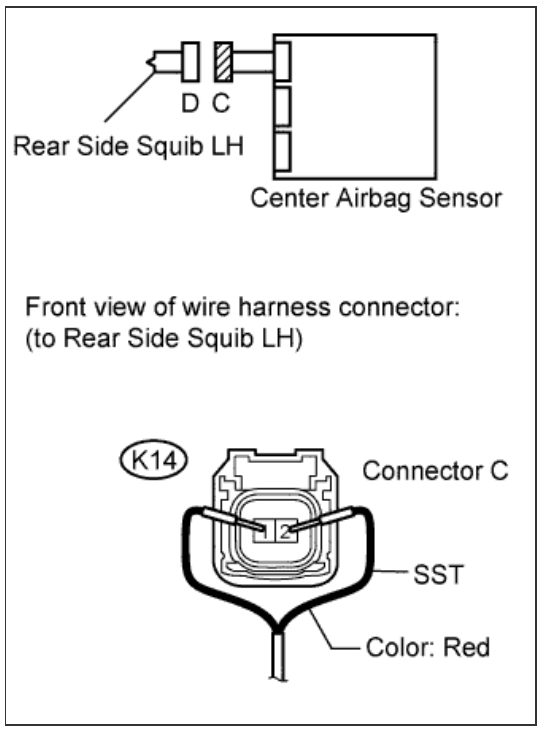
Never connect the tester to the rear seat side airbag LH (rear side squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

2.CHECK FLOOR WIRE (REAR SIDE SQUIB LH CIRCUIT)

a. Turn the engine switch off.

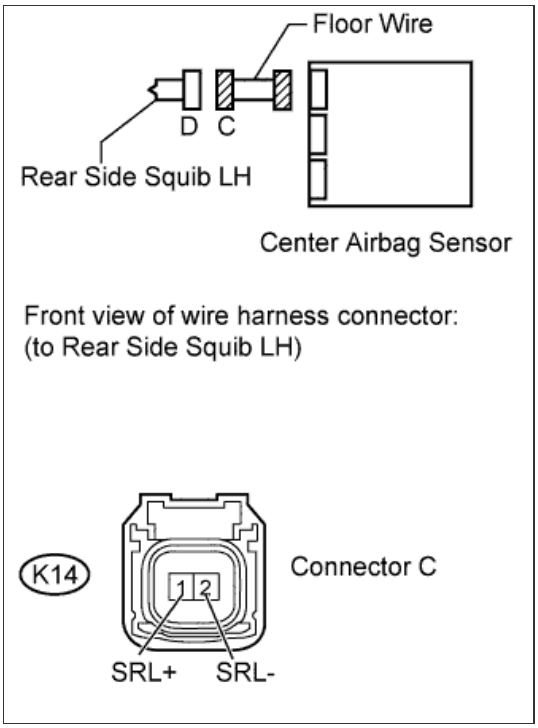
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K14-1 (SRL+) - Body ground	Engine switch on (IG)	Below 1 V
K14-2 (SRL-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

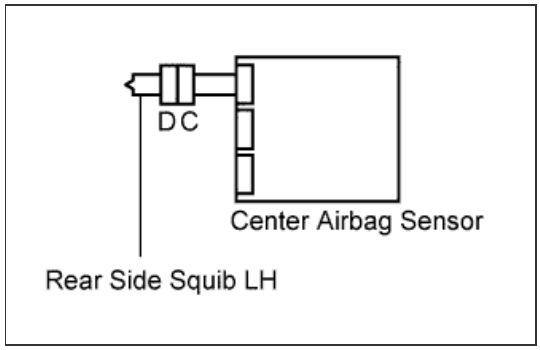
Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	1 MΩ or higher
K14-1 (SRL+) - Body ground	Always	1 MΩ or higher
K14-2 (SRL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the rear seat side airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1660/43 Passenger Airbag ON/OFF Indicator Circuit Malfunction

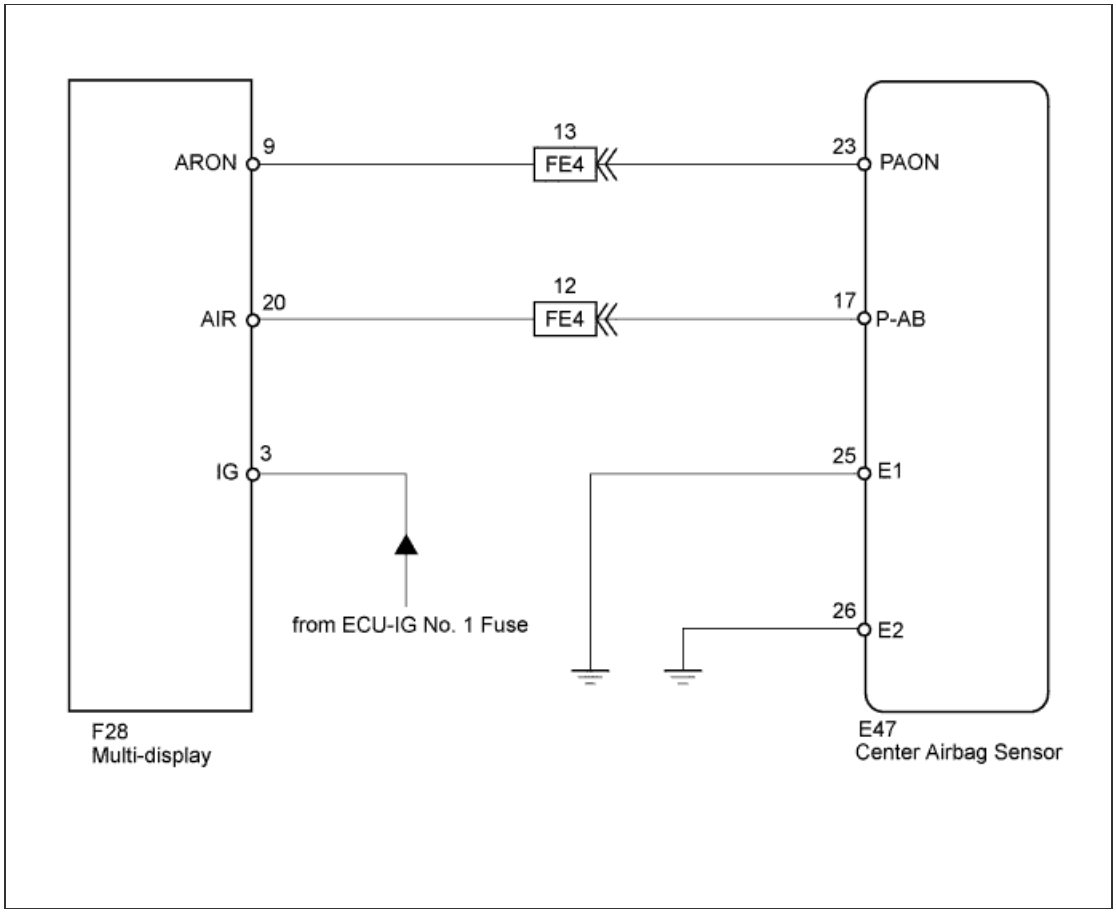
for Preparation Click here

DESCRIPTION

The passenger airbag ON/OFF indicator circuit consists of the center airbag sensor and the passenger airbag ON/OFF indicator.
The passenger airbag ON/OFF indicator indicates the operation condition of the front passenger airbag, front passenger side knee airbag, front seat airbag RH and front seat outer belt RH.
DTC B1660/43 is stored when a malfunction is detected in the passenger airbag ON/OFF indicator circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1660/43	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the passenger airbag ON/OFF indicator circuit for 2 seconds. • A passenger airbag ON/OFF indicator malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Multi-display • Center airbag sensor assembly • No. 2 instrument panel wire

WIRING DIAGRAM

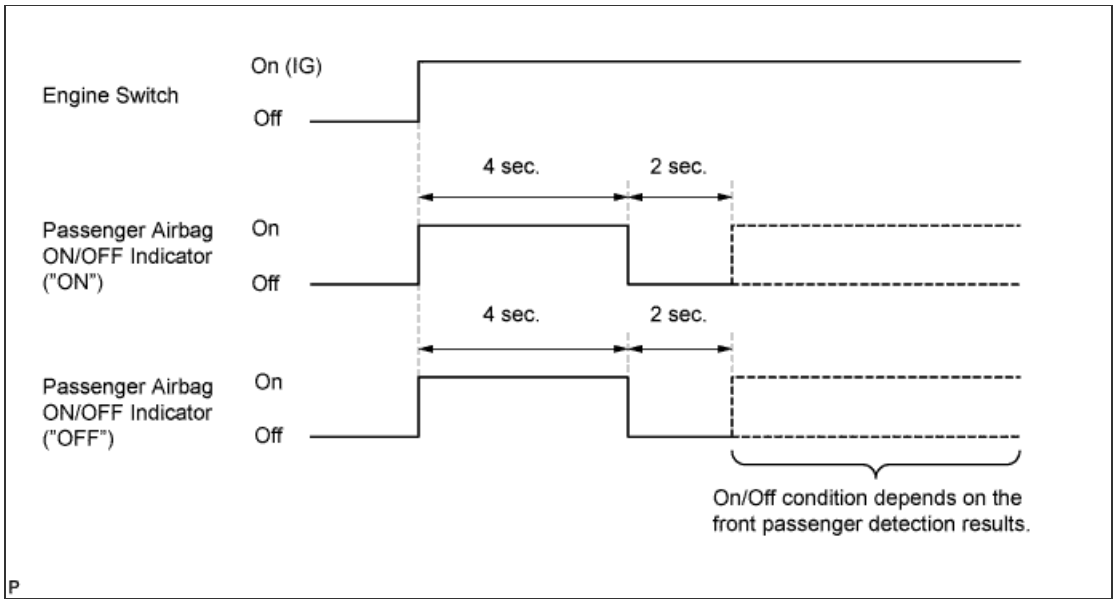


INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK PASSENGER AIRBAG ON/OFF INDICATOR CONDITION



a. Turn the engine switch on (IG).

b. Check the passenger airbag ON/OFF indicator operation.

HINT:

Refer to the normal condition of the passenger airbag ON/OFF indicator (Click here).

Result

Result	Proceed to
Always On	A
Off	B

B → Go to step 8

A

2.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the multi-display.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

3.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and the multi-display.

b. Check that the connectors (on the center airbag sensor side and multi-display side) are not damaged.

OK:

The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

4.CHECK PASSENGER AIRBAG ON/OFF INDICATOR

a. Connect the connector to the multi-display.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG).

d. Check the passenger airbag ON/OFF indicator operation.

OK:
The passenger airbag ON/OFF indicator does not come on.



NG → Go to step 6

OK

5.CHECK CENTER AIRBAG SENSOR

a. Connect the connector to the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

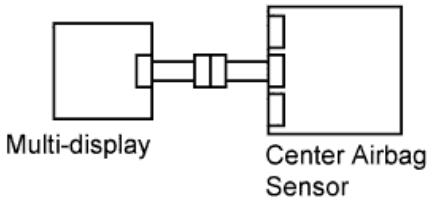
f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1660 is not output.

HINT:

Codes other than DTC B1660 may be output at this time, but they are not related to this check.

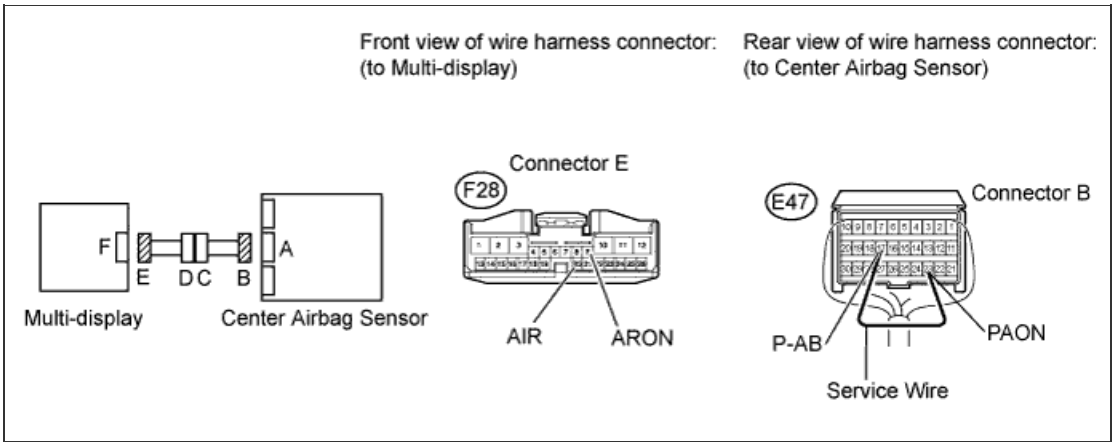


NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

6.CHECK PASSENGER AIRBAG ON/OFF INDICATOR CIRCUIT



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the center airbag sensor and multi-display.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
F28-9 (ARON) - Body ground	Engine switch on (IG)	Below 1 V
F28-20 (AIR) - Body ground	Engine switch on (IG)	Below 1 V

f. Turn the engine switch off.

g. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

h. Using a service wire, connect terminals 23 (PAON) and 17 (P-AB) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
F28-9 (ARON) - F28-20 (AIR)	Always	Below 1 Ω

j. Disconnect the service wire from connector B.

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
F28-9 (ARON) - F28-20 (AIR)	Always	1 MΩ or higher
F28-9 (ARON) - Body ground	Always	1 MΩ or higher
F28-20 (AIR) - Body ground	Always	1 MΩ or higher

Result

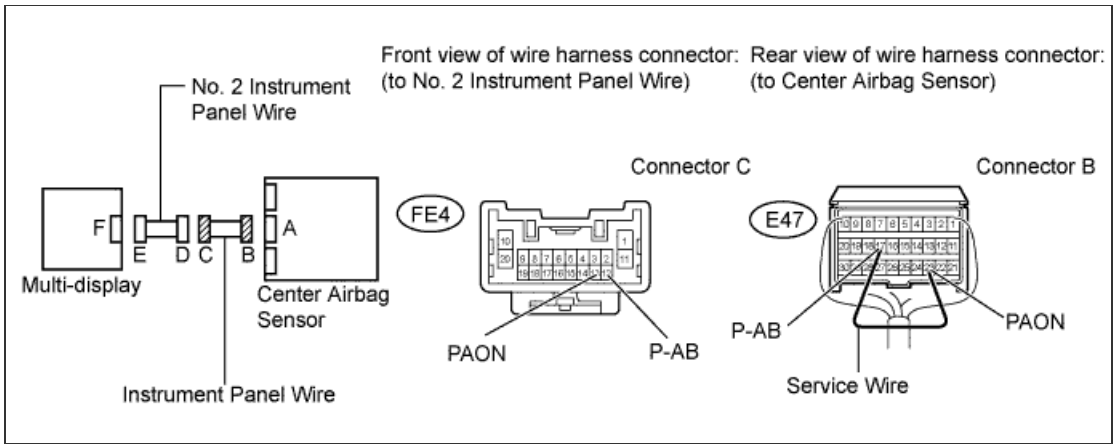
Result	Proceed to
OK (w/ Navigation System)	A
OK (w/o Navigation System)	B
NG	C

B	REPLACE MULTI-DISPLAY (Click here)
C	Go to step 7

A

REPLACE MULTI-DISPLAY (Click here)

7.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - NO. 2 INSTRUMENT PANEL WIRE)



a. Disconnect the instrument panel wire connector from the No. 2 instrument panel wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
FE4-13 (PAON) - Body ground	Engine switch on (IG)	Below 1 V
FE4-12 (P-AB) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 23 (PAON) and 17 (P-AB) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
FE4-13 (PAON) - FE4-12 (P-AB)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
FE4-13 (PAON) - FE4-12 (P-AB)	Always	1 MΩ or higher
FE4-13 (PAON) - Body ground	Always	1 MΩ or higher
FE4-12 (P-AB) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK

REPLACE NO. 2 INSTRUMENT PANEL WIRE

8.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the multi-display.

OK:

The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK ↓

9.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and the multi-display.

b. Check that the connectors (on the center airbag sensor side and multi-display side) are not damaged.

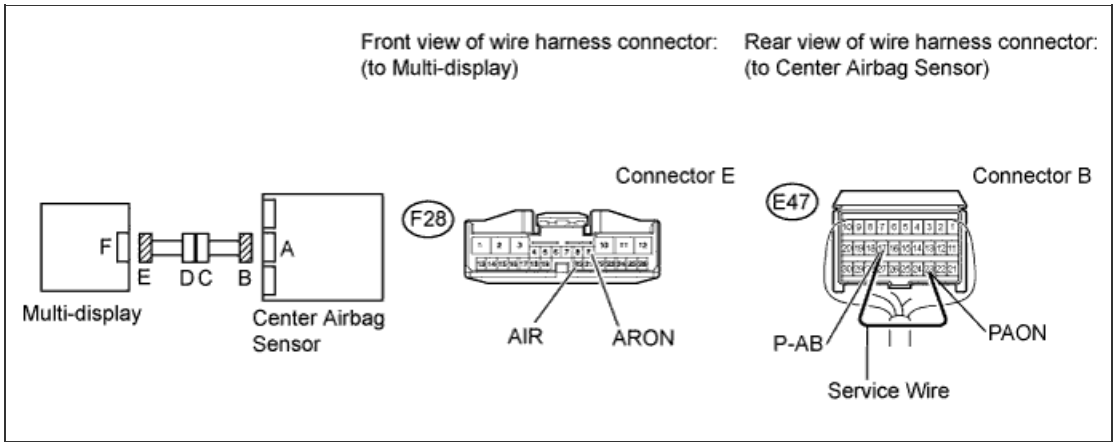
OK:

The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK ↓

10.CHECK PASSENGER AIRBAG ON/OFF INDICATOR CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
F28-9 (ARON) - Body ground	Engine switch on (IG)	Below 1 V
F28-20 (AIR) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 23 (PAON) and 17 (P-AB) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
F28-9 (ARON) -		

F28-20 (AIR)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
F28-9 (ARON) - F28-20 (AIR)	Always	1 MΩ or higher
F28-9 (ARON) - Body ground	Always	1 MΩ or higher
F28-20 (AIR) - Body ground	Always	1 MΩ or higher

NG → Go to step 14

OK

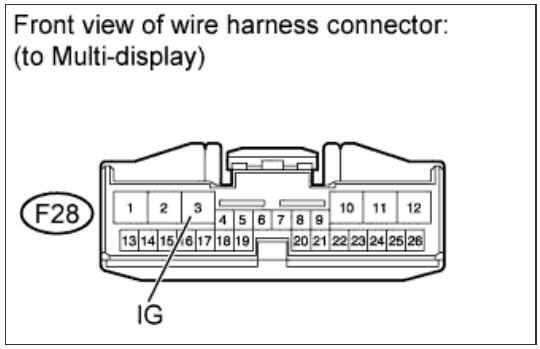
11.CHECK PASSENGER AIRBAG ON/OFF INDICATOR (SOURCE VOLTAGE)

a. Turn the engine switch off.

b. Connect the connectors to the center airbag sensor.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
F28-3 (IG) - Body ground	Engine switch on (IG)	11 to 14 V

NG → REPLACE HARNESS AND CONNECTOR (MULTI-DISPLAY - BATTERY) OR BATTERY

OK

12.CHECK PASSENGER AIRBAG ON/OFF INDICATOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Connect the connector to the multi-display or clock.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Check the indicator according to the table below.

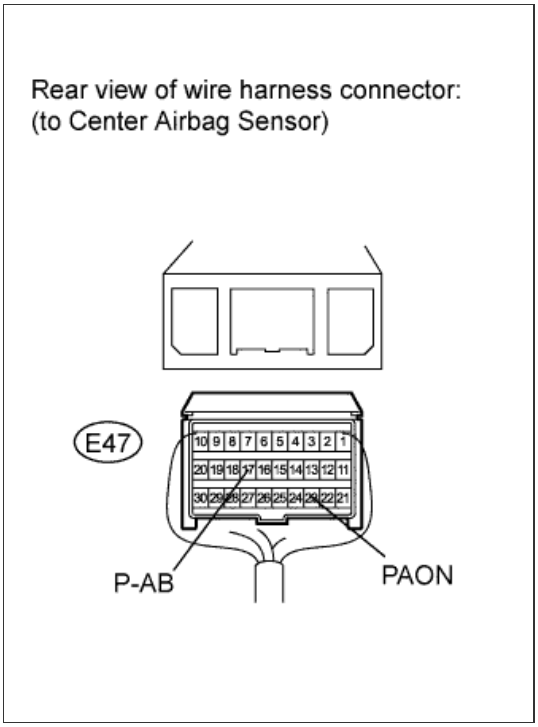
OK:

Tester Connection	Switch Condition	Passenger airbag ON/OFF indicator
E47-23 (PAON) - Body ground	Engine switch on (IG)	"ON" comes on
E47-17 (P-AB) - Body ground	Engine switch on (IG)	"OFF" comes on

Result

Result	Proceed to
OK	A

NG (w/ Navigation System)	B
NG (w/o Navigation System)	C

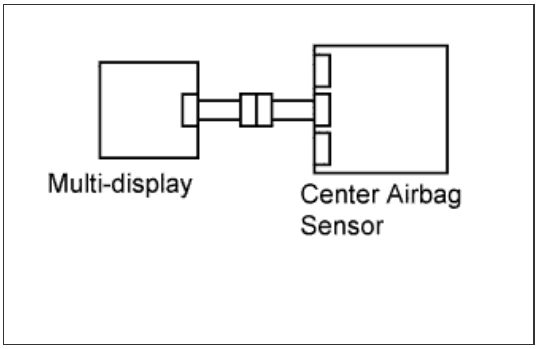


B → REPLACE MULTI-DISPLAY (Click here)

C → REPLACE MULTI-DISPLAY (Click here)

A

13.CHECK CENTER AIRBAG SENSOR



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Connect the connectors to the center airbag sensor.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs (Click here).

g. Turn the engine switch off.

h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

OK:
DTC B1660 is not output.

HINT:

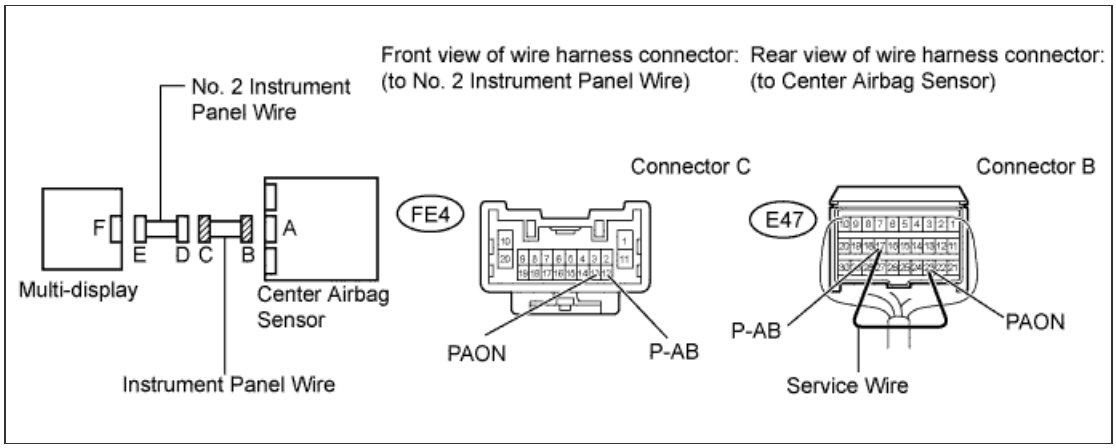
Codes other than DTC B1660 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

14.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - NO. 2 INSTRUMENT PANEL WIRE)



a. Disconnect the instrument panel wire connector from the No. 2 instrument panel wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
FE4-13 (PAON) - Body ground	Engine switch on (IG)	Below 1 V
FE4-12 (P-AB) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Using a service wire, connect terminals 23 (PAON) and 17 (P-AB) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
FE4-13 (PAON) - FE4-12 (P-AB)	Always	Below 1 Ω

h. Disconnect the service wire from connector B.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
FE4-13 (PAON) - FE4-12 (P-AB)	Always	1 MΩ or higher
FE4-13 (PAON) - Body ground	Always	1 MΩ or higher
FE4-12 (P-AB) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK

REPLACE NO. 2 INSTRUMENT PANEL WIRE

DTC B1855/63 Short in Rear Side Squib LH Circuit

DTC B1856/63 Open in Rear Side Squib LH Circuit

DTC B1857/63 Short to GND in Rear Side Squib LH Circuit

DTC B1858/63 Short to B+ in Rear Side Squib LH Circuit

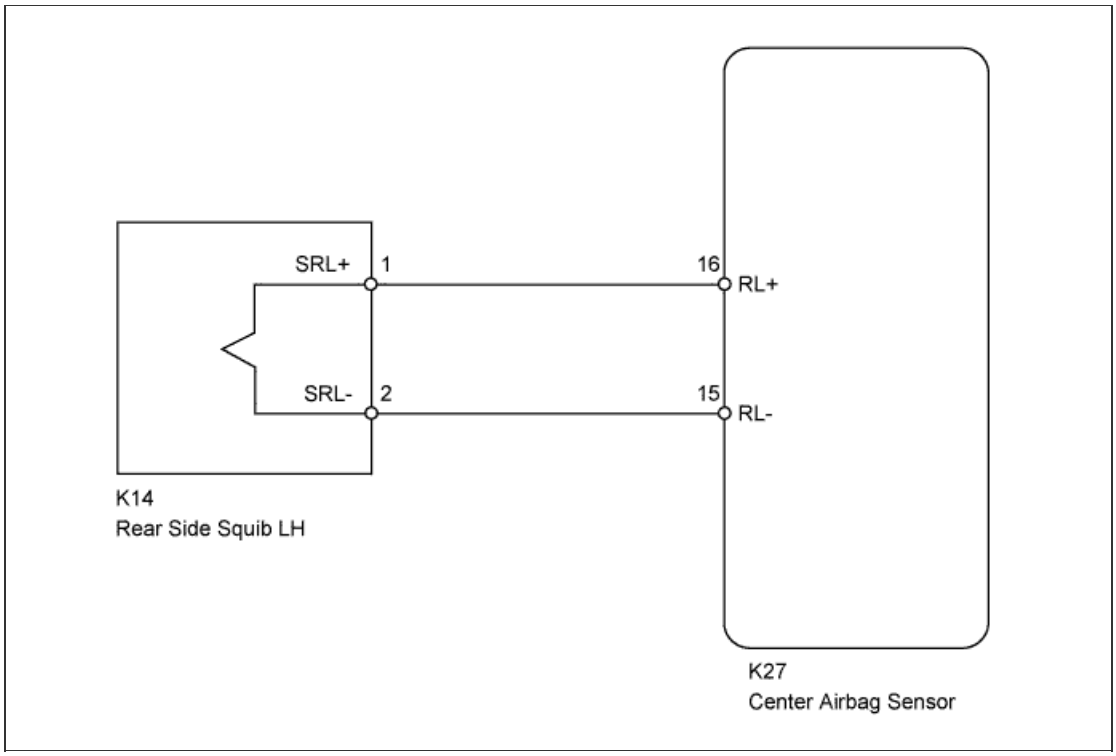
for Preparation Click here

DESCRIPTION

The rear side squib LH circuit consists of the center airbag sensor and the rear seat side airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1855/63	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib LH circuit during the primary check. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1856/63	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib LH circuit for 2 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1857/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1858/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG LH (REAR SIDE SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag LH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

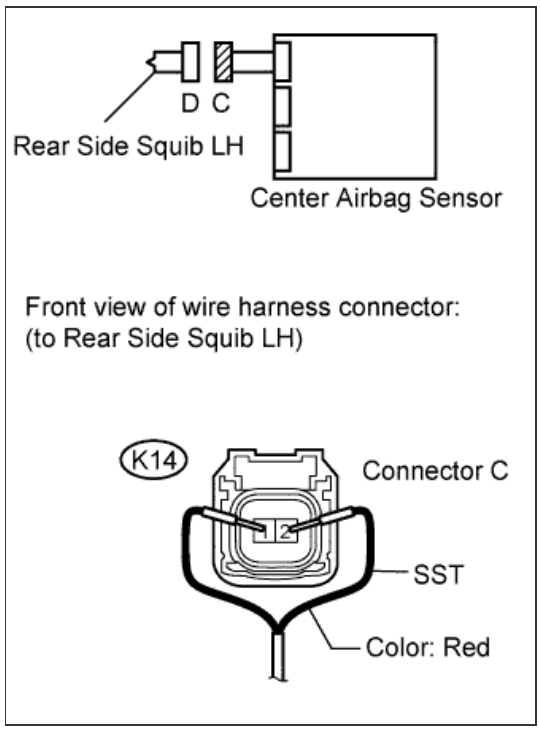
Never connect the tester to the rear seat side airbag LH (rear side squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

2.CHECK FLOOR WIRE (REAR SIDE SQUIB LH CIRCUIT)

a. Turn the engine switch off.

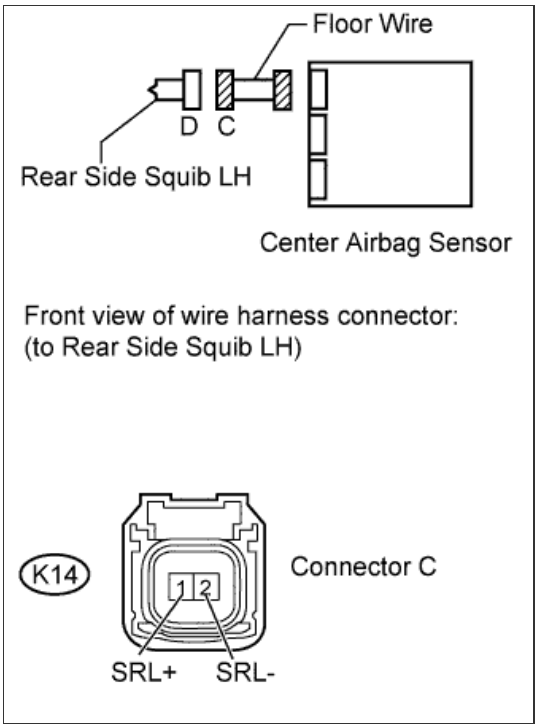
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K14-1 (SRL+) - Body ground	Engine switch on (IG)	Below 1 V
K14-2 (SRL-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

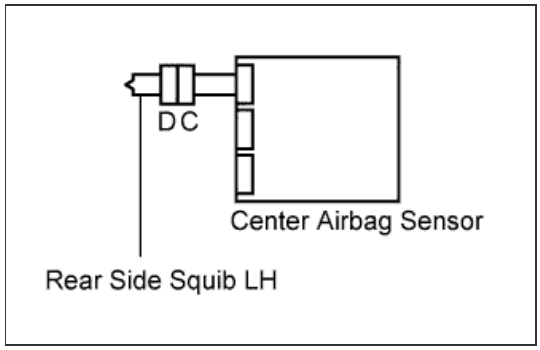
Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	1 MΩ or higher
K14-1 (SRL+) - Body ground	Always	1 MΩ or higher
K14-2 (SRL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the rear seat side airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1661/44 Roll Over Cut Off Indicator Malfunction

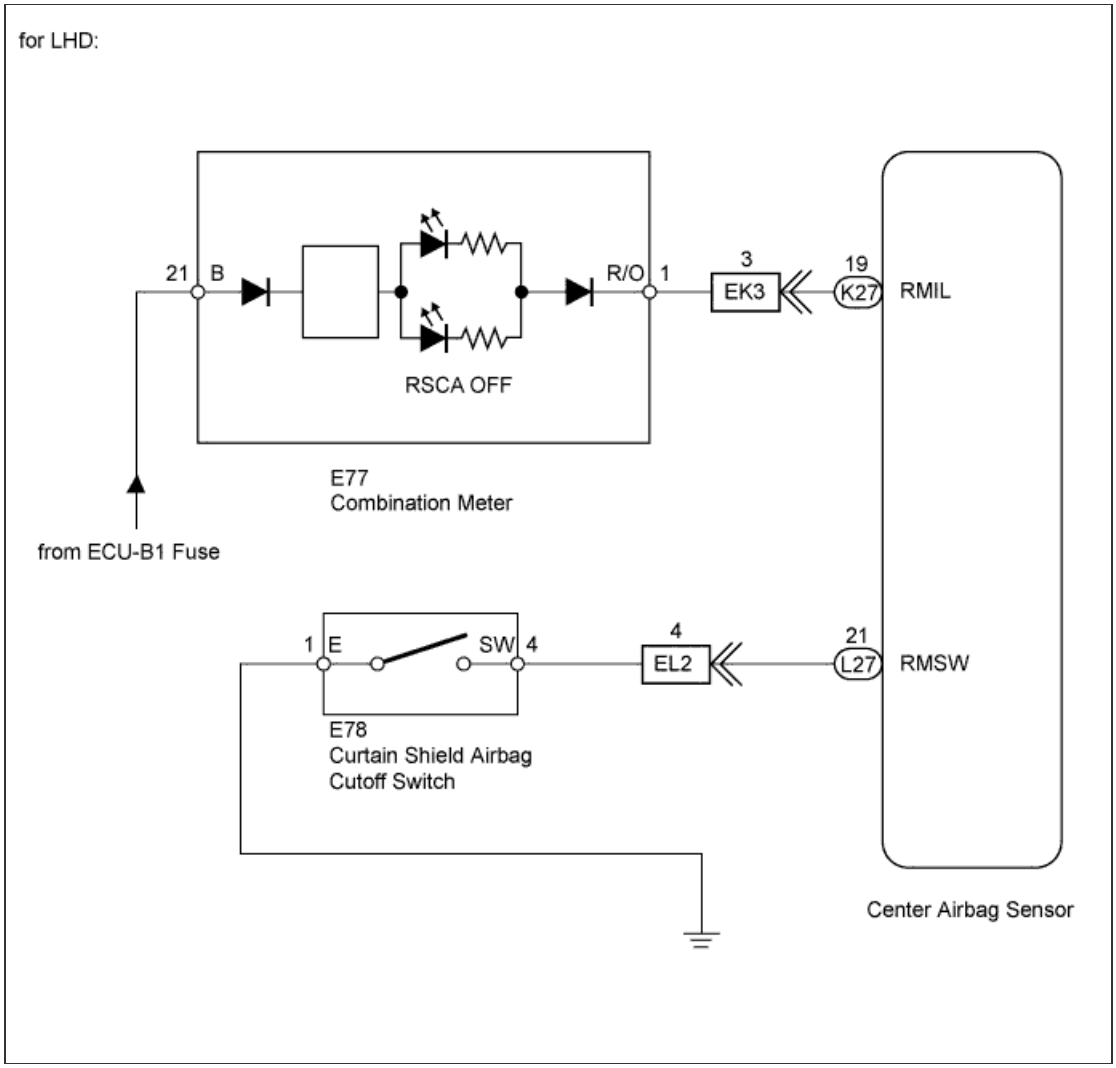
for Preparation Click here

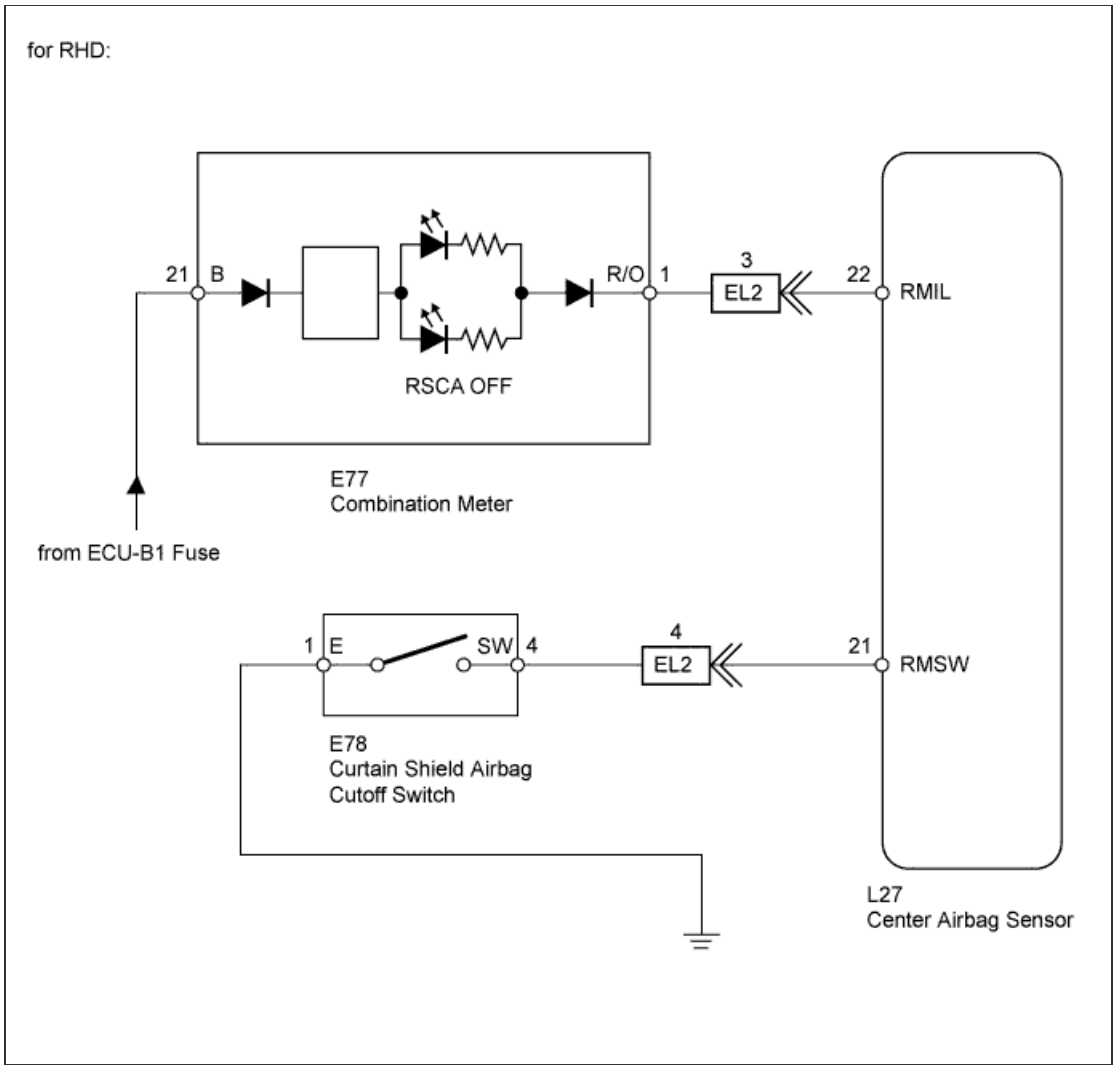
DESCRIPTION

The curtain shield airbag cutoff switch is a mechanism that operates both the right and left sides of the curtain shield airbag and the front seat outer belt when the center airbag sensor detects a roll-over.
The RSCA OFF indicator is installed in the combination meter.
If the curtain shield airbag cutoff switch is operated, the indicator comes on to inform the drive that the roll-over detection system is not working.
The initial setting of the roll-over detection system is on. It automatically operates every time the engine switch is turned on (IG).

DTC Code	DTC Detection Condition	Trouble Area
B1661/44	When one of the following conditions is met: • The center airbag sensor receives an open signal or short to ground in the RSCA OFF indicator circuit. • An RSCA OFF indicator malfunction. • A center airbag sensor malfunction.	• Combination meter assembly • curtain shield airbag cutoff switch • Center airbag sensor assembly • Instrument panel wire • Floor wire • No. 2 floor wire

WIRING DIAGRAM





INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK COMBINATION METER (SOURCE VOLTAGE)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Remove the combination meter with the connector connected.

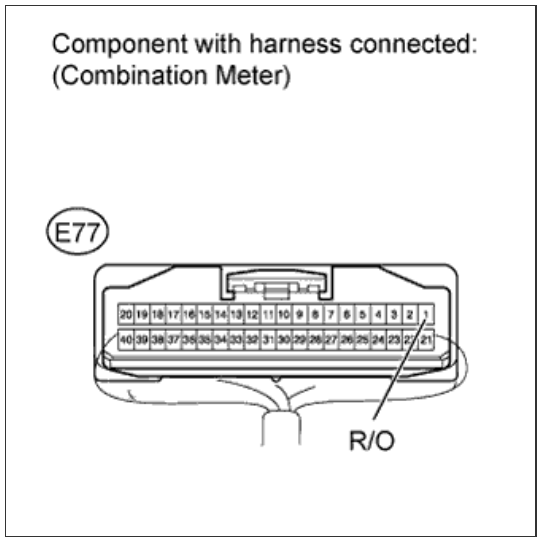
d. Disconnect the connector from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

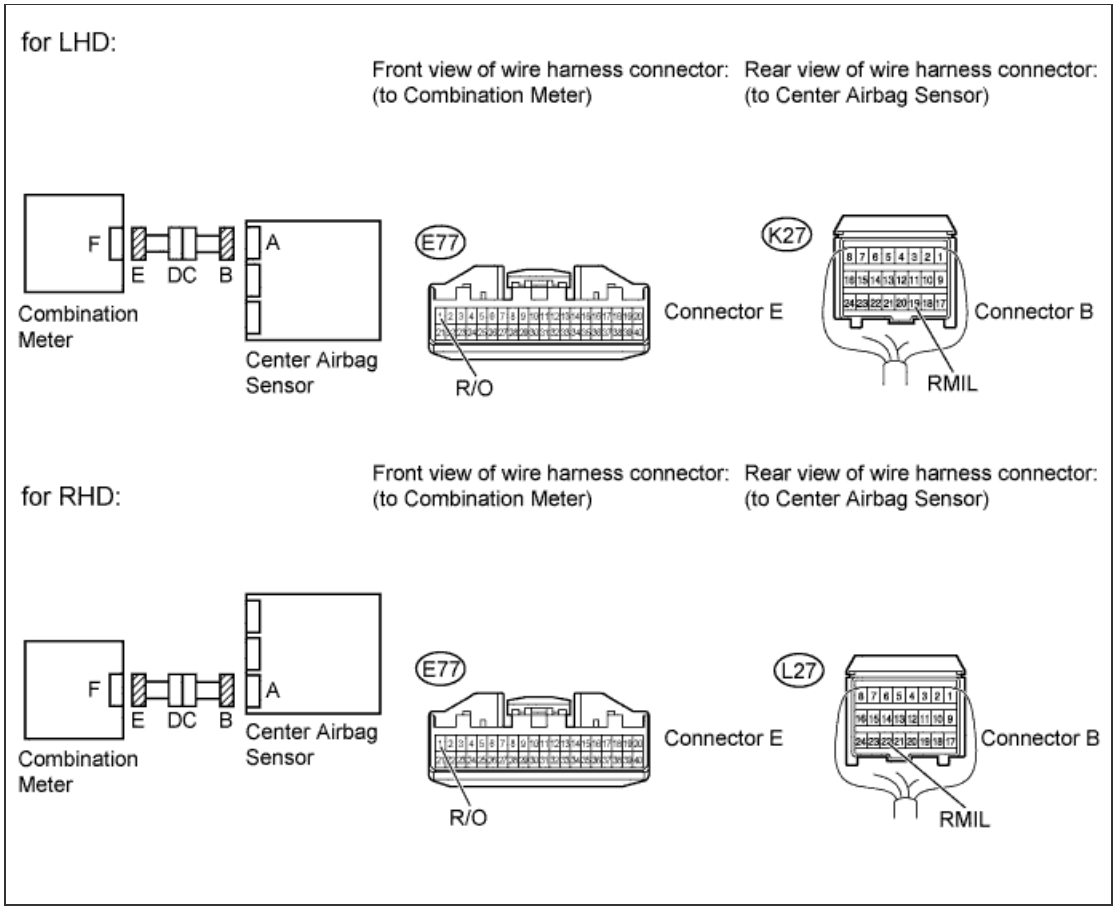
Tester Connection	Switch Condition	Specified Condition
E77-1 (R/O) - Body ground	Engine switch on (IG)	11 to 14 V



NG → GO TO METER / GAUGE SYSTEM (Click here)

OK

2.CHECK RSCA OFF INDICATOR CIRCUIT



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the center airbag sensor and combination meter.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E77-1 (R/O) - Body ground	Engine switch on (IG)	Below 1 V

f. Turn the engine switch off.

g. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
E77-1 (R/O) - K27-19 (RMIL)	Always	Below 1 Ω
E77-1 (R/O) - Body ground	Always	1 MΩ or higher

for RHD

Tester Connection	Condition	Specified Condition
E77-1 (R/O) - L27-22 (RMIL)	Always	Below 1 Ω
E77-1 (R/O) - Body ground	Always	1 MΩ or higher

Result

Result	Proceed to
OK	A
NG (for LHD)	B
NG (for RHD)	C

B → Go to step 5

C → Go to step 6

A

3.INSPECT CURTAIN SHIELD AIRBAG CUTOFF SWITCH

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

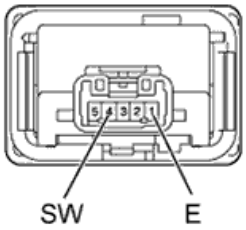
c. Remove the curtain shield airbag cutoff switch (Click here).

d. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
4 (SW) - 1 (E)	Curtain shield airbag cutoff switch is in on position	Below 1 Ω
4 (SW) - 1 (E)	Curtain shield airbag cutoff switch is in off position	1 MΩ or higher

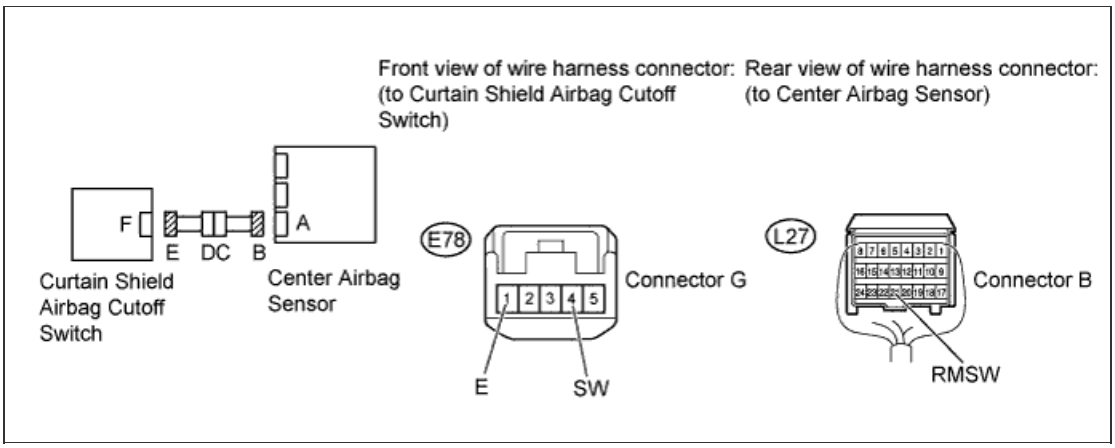
Component without harness connected:
(Curtain Shield Airbag Cutoff Switch)



NG → REPLACE CURTAIN SHIELD AIRBAG CUTOFF SWITCH (Click here)

OK

4.CHECK CURTAIN SHIELD AIRBAG CUTOFF SWITCH CIRCUIT



a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the center airbag sensor and curtain shield airbag cutoff switch.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E78-4 (SW) - Body ground	Engine switch on (IG)	Below 1 V
E78-1 (E) - Body ground	Engine switch on (IG)	Below 1 V

f. Turn the engine switch off.

g. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

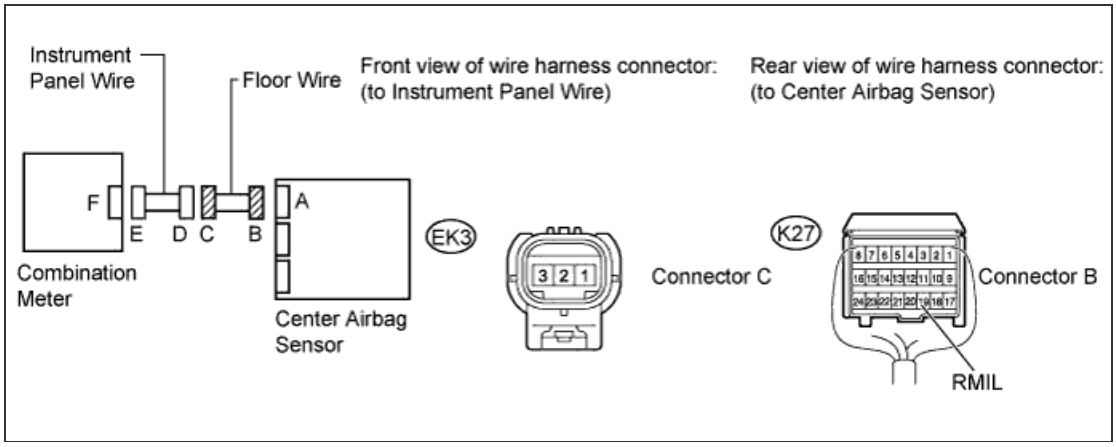
Tester Connection	Condition	Specified Condition
L27-21 (RMSW) - E78-4 (SW)	Always	Below 1 Ω
E78-4 (SW) - Body ground	Always	1 MΩ or higher
E78-1 (E) - Body ground	Always	Below 1 Ω

NG → Go to step 7

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

5.CHECK FLOOR WIRE (CENTER AIRBAG SENSOR - INSTRUMENT PANEL WIRE)



a. Disconnect the floor wire connector from the instrument panel wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
EK3-3 - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified

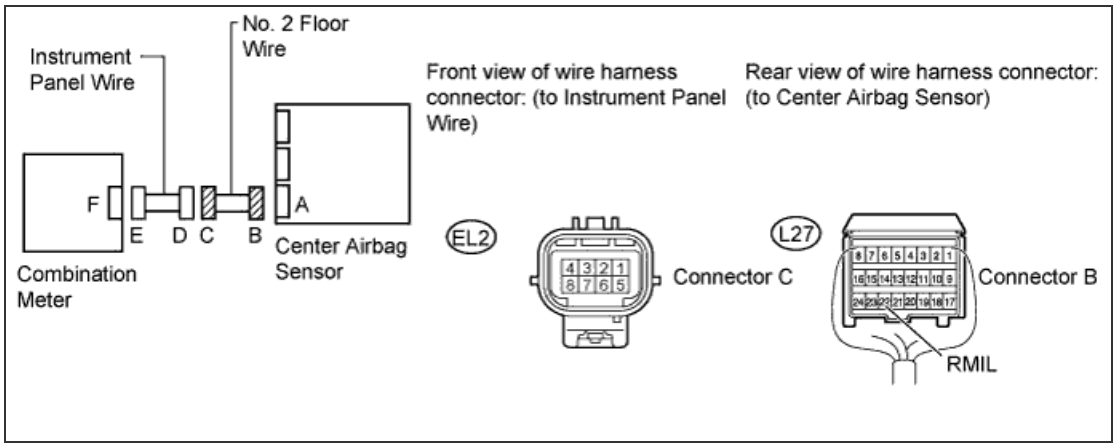
		Condition
EK3-3 - K27-19 (RMIL)	Always	Below 1 Ω
EK3-3 - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

REPLACE INSTRUMENT PANEL WIRE

6.CHECK NO. 2 FLOOR WIRE (CENTER AIRBAG SENSOR - INSTRUMENT PANEL WIRE)



a. Disconnect the No. 2 floor wire connector from the instrument panel wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
EL2-3 - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

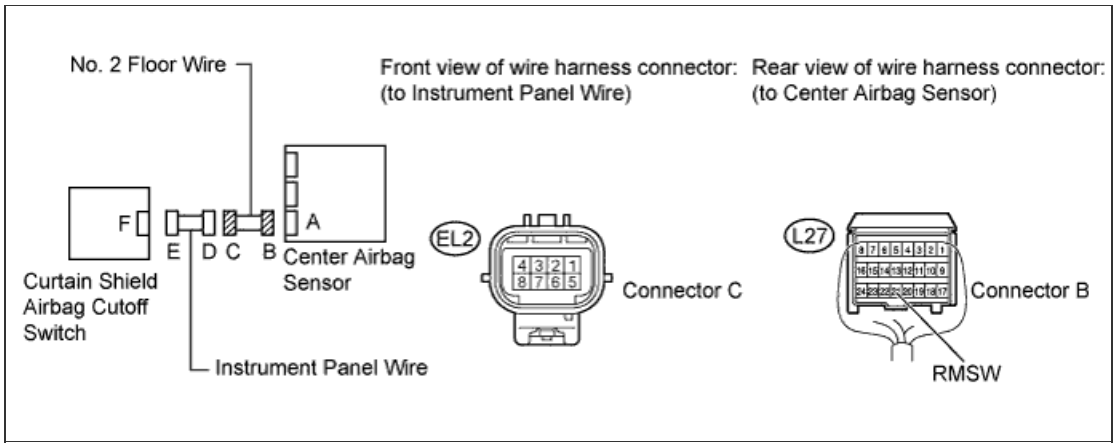
Tester Connection	Condition	Specified Condition
EL2-3 - L27-22 (RMIL)	Always	Below 1 Ω
EL2-3 - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

REPLACE INSTRUMENT PANEL WIRE

7.CHECK NO. 2 FLOOR WIRE (CENTER AIRBAG SENSOR - INSTRUMENT PANEL WIRE)



a. Disconnect the No. 2 floor wire connector from the instrument panel wire.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
EL2-4 - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L27-21 (RMSW) - EL2-4	Always	Below 1 Ω
EL2-4 - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK → REPLACE INSTRUMENT PANEL WIRE

DTC B1855/63 Short in Rear Side Squib LH Circuit

DTC B1856/63 Open in Rear Side Squib LH Circuit

DTC B1857/63 Short to GND in Rear Side Squib LH Circuit

DTC B1858/63 Short to B+ in Rear Side Squib LH Circuit

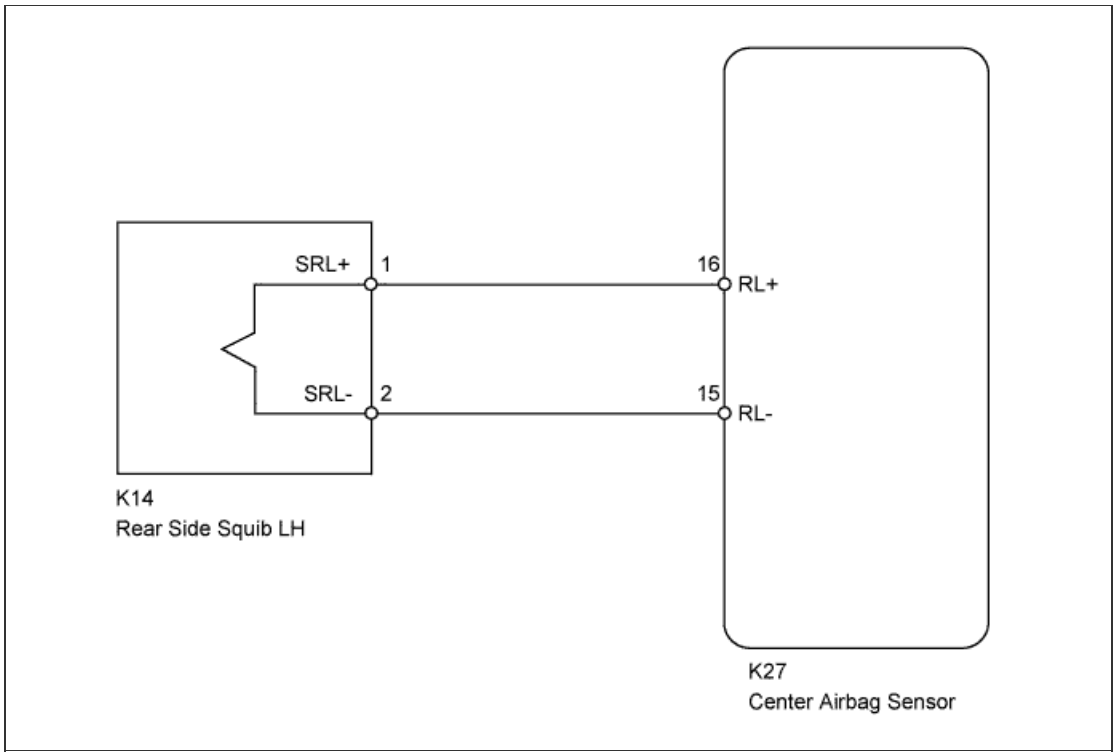
for Preparation Click here

DESCRIPTION

The rear side squib LH circuit consists of the center airbag sensor and the rear seat side airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1855/63	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib LH circuit during the primary check. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1856/63	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib LH circuit for 2 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1857/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1858/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG LH (REAR SIDE SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag LH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

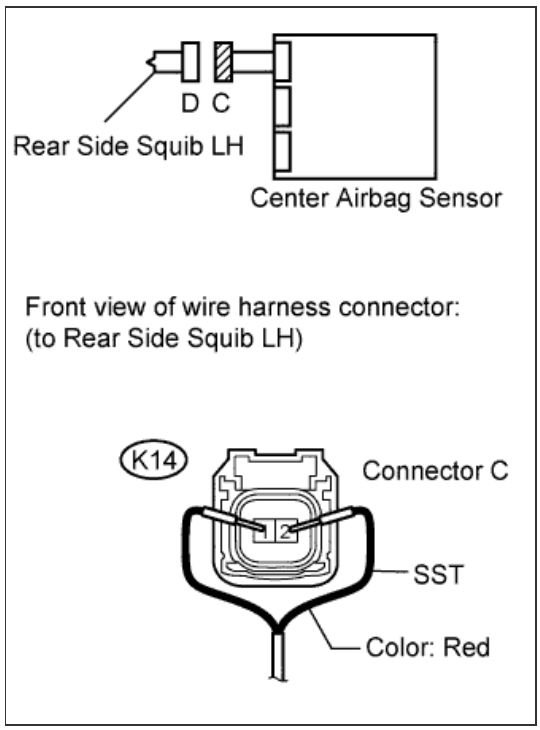
Never connect the tester to the rear seat side airbag LH (rear side squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

2.CHECK FLOOR WIRE (REAR SIDE SQUIB LH CIRCUIT)

a. Turn the engine switch off.

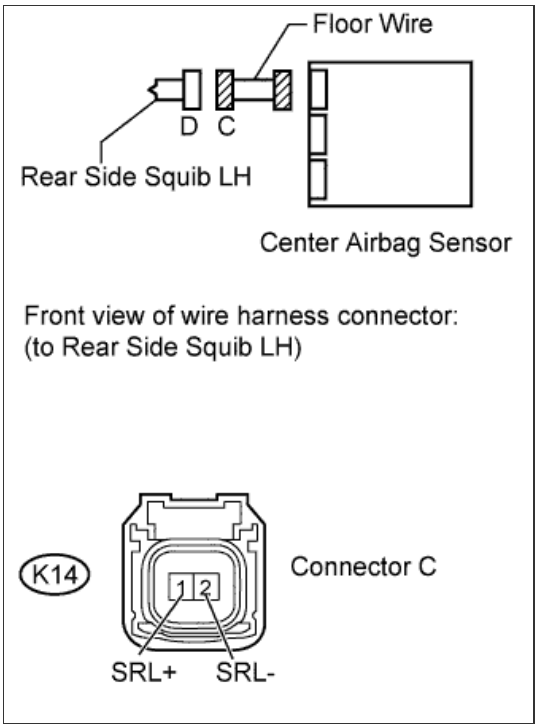
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K14-1 (SRL+) - Body ground	Engine switch on (IG)	Below 1 V
K14-2 (SRL-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

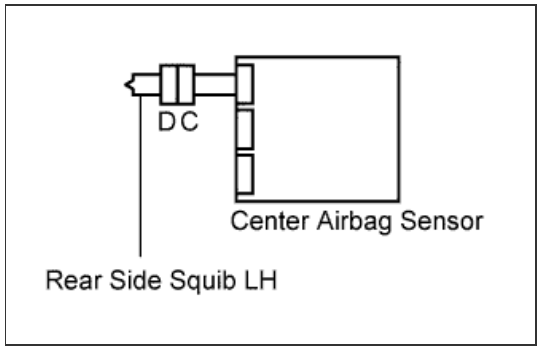
Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	1 MΩ or higher
K14-1 (SRL+) - Body ground	Always	1 MΩ or higher
K14-2 (SRL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the rear seat side airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1662/45 Indicator Light Circuit Malfunction

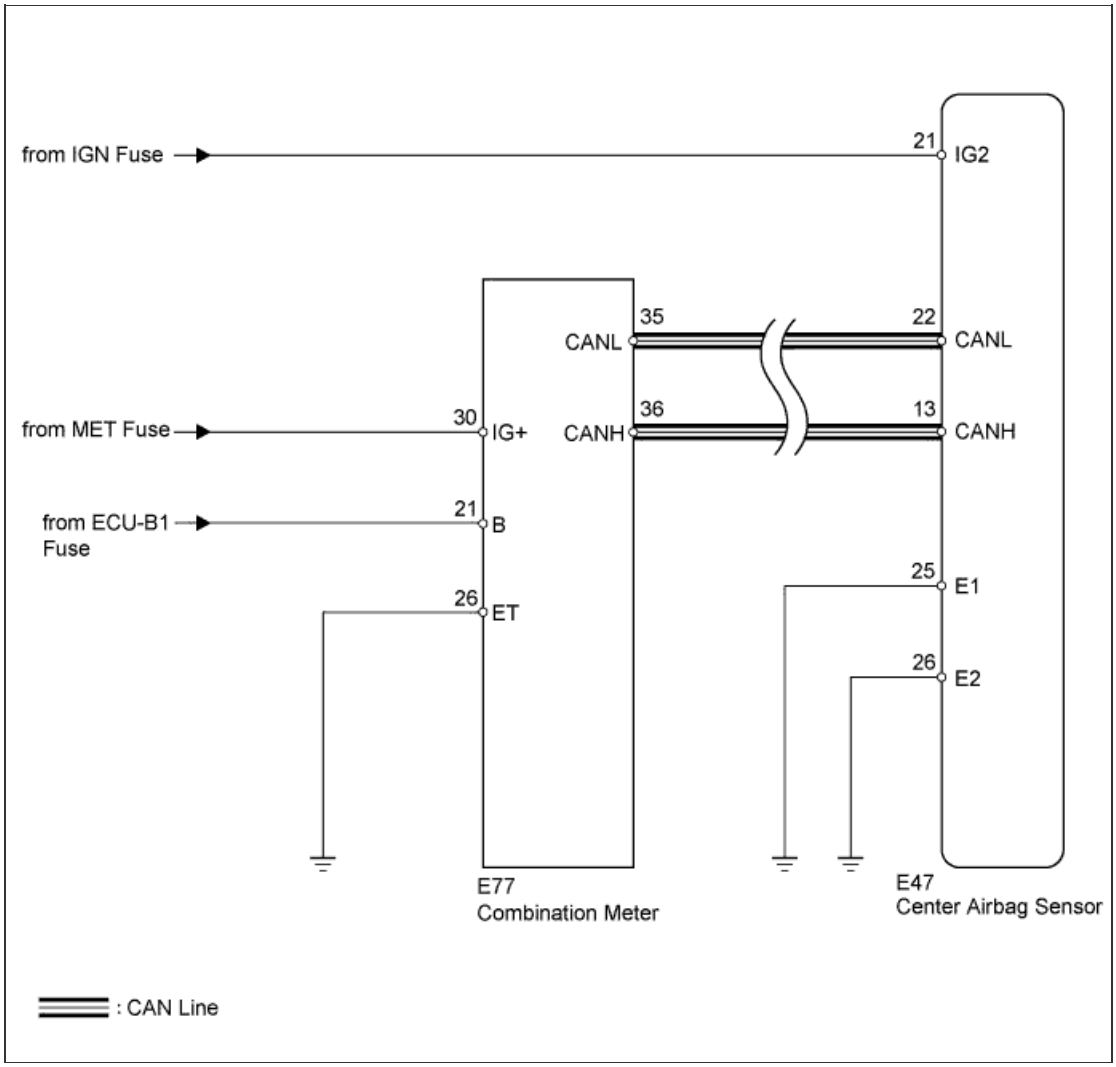
for Preparation Click here

DESCRIPTION

The indicator light circuit consists of the center airbag sensor and the combination meter.
When the center airbag sensor detects a malfunction in the SRS airbag system, the SRS warning light comes on to inform the driver. It also comes on when the source voltage drops, and automatically goes off in approximately 10 seconds after the source voltage returns to normal (DTC is not stored).
The SRS warning light comes on for 6 seconds after the engine switch is turned on (IG) and goes off if the system is normal.
When an open circuit is detected, such as when the connector between the combination meter and the center airbag sensor is disconnected, the SRS warning light remains on even when approximately 6 seconds elapsed after the engine switch is turned on (IG).
DTC B1662/45 is stored when a malfunction is detected in the indicator light circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1662/45	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal, a short to ground signal or a short circuit to ground signal or a short circuit to B+ signal in the indicator light circuit for 2 seconds. • A combination meter malfunction. • A center airbag sensor malfunction.	• Combination meter assembly (SRS warning light) • Center airbag sensor assembly • Instrument panel wire

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CAN COMMUNICATION SYSTEM

a. Check if a CAN communication DTC is output (Click here).

b. Check if a CAN communication DTC is output (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output (for LHD)	B
DTC is output (for RHD)	C

B → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS (Click here)

C → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS (Click here)

A

2.CHECK BATTERY

a. Measure the voltage of the battery.

Standard voltage:
11 to 14 V

NG → CHECK AND REPLACE BATTERY OR CHARGING SYSTEM

OK

3.CHECK CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and combination meter.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

4.CHECK HARNESS AND CONNECTOR (SOURCE VOLTAGE OF CENTER AIRBAG SENSOR)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG).

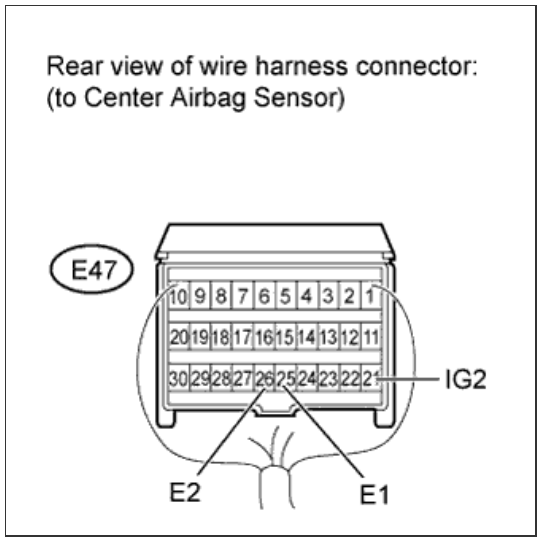
d. Operate all the components of the electrical system (defogger, wipers, headlights, heater blower, etc.).

e. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E47-21 (IG2) - E47-25 (E1)	Engine switch on (IG)	11 to 14 V
E47-21 (IG2) -	Engine switch on	11 to 14 V

E47-26 (E2)	(IG)	



NG → REPLACE HARNESS AND CONNECTOR

OK

5.CHECK HARNESS AND CONNECTOR (SOURCE VOLTAGE OF COMBINATION METER)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

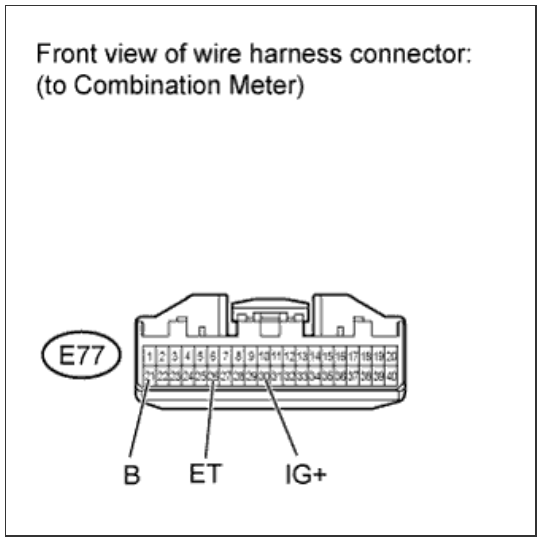
c. Disconnect the E77 connector from the combination meter.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E77-30 (IG+) - E77-26 (ET)	Engine switch on (IG)	11 to 14 V
E77-21 (B) - E77-26 (ET)	Always	11 to 14 V



NG → REPLACE HARNESS AND CONNECTOR

OK

6.CHECK SRS WARNING LIGHT (SHORT TO GROUND)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Connect the connector to the combination meter.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG).

f. Check the SRS warning light condition.

OK:

After the primary check period, SRS warning light goes off for approximately 10 seconds and then remains on.

HINT:

The primary check period is approximately 6 seconds after the engine switch is turned on (IG).

NG

GO TO METER / GAUGE SYSTEM (Click here)

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

DTC B1855/63 Short in Rear Side Squib LH Circuit

DTC B1856/63 Open in Rear Side Squib LH Circuit

DTC B1857/63 Short to GND in Rear Side Squib LH Circuit

DTC B1858/63 Short to B+ in Rear Side Squib LH Circuit

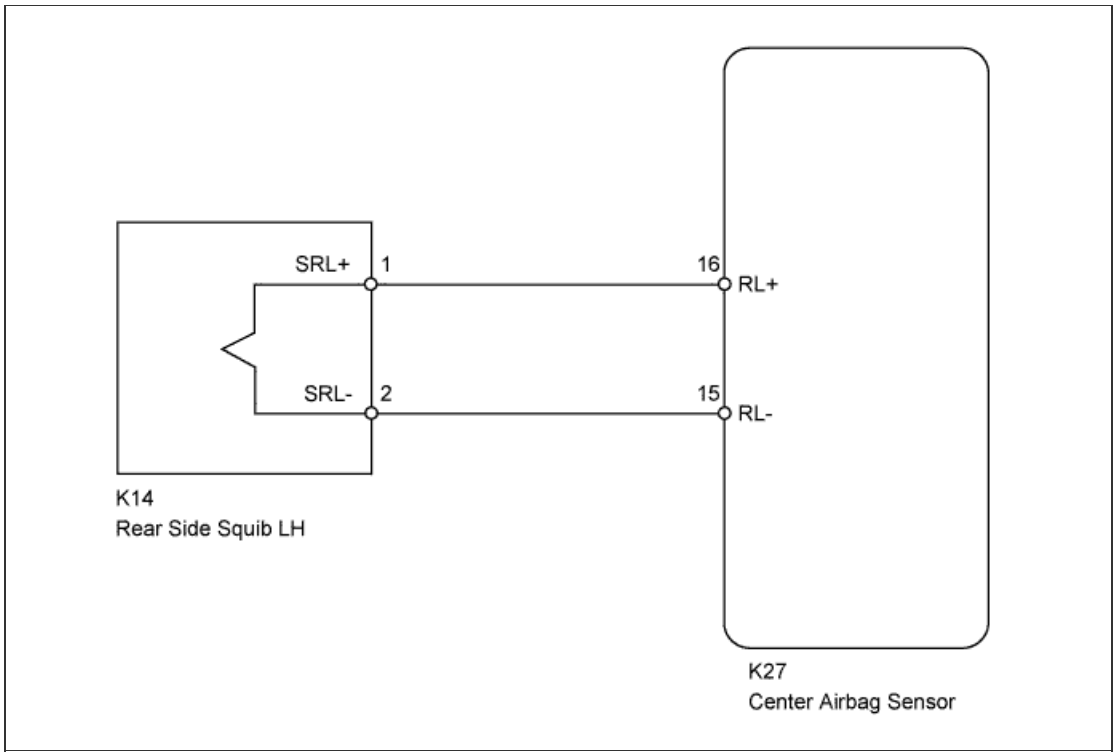
for Preparation Click here

DESCRIPTION

The rear side squib LH circuit consists of the center airbag sensor and the rear seat side airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1855/63	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib LH circuit during the primary check. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1856/63	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib LH circuit for 2 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1857/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1858/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG LH (REAR SIDE SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag LH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

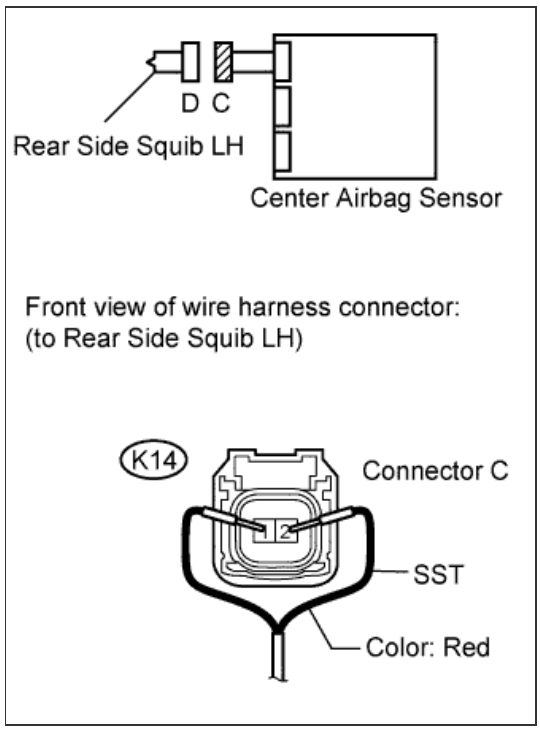
Never connect the tester to the rear seat side airbag LH (rear side squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

2.CHECK FLOOR WIRE (REAR SIDE SQUIB LH CIRCUIT)

a. Turn the engine switch off.

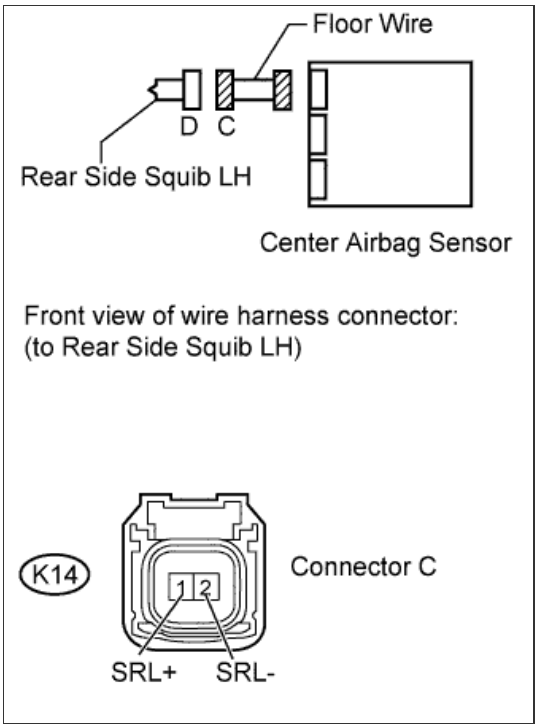
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K14-1 (SRL+) - Body ground	Engine switch on (IG)	Below 1 V
K14-2 (SRL-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

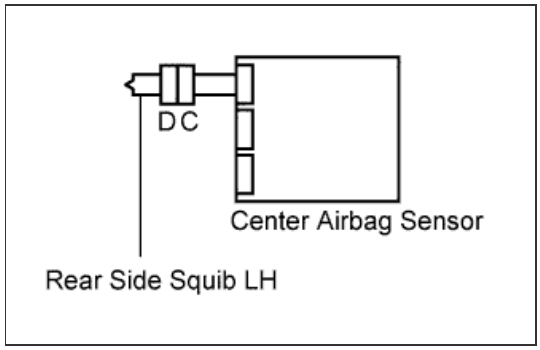
Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	1 MΩ or higher
K14-1 (SRL+) - Body ground	Always	1 MΩ or higher
K14-2 (SRL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the rear seat side airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1662/45 Indicator Light Circuit Malfunction

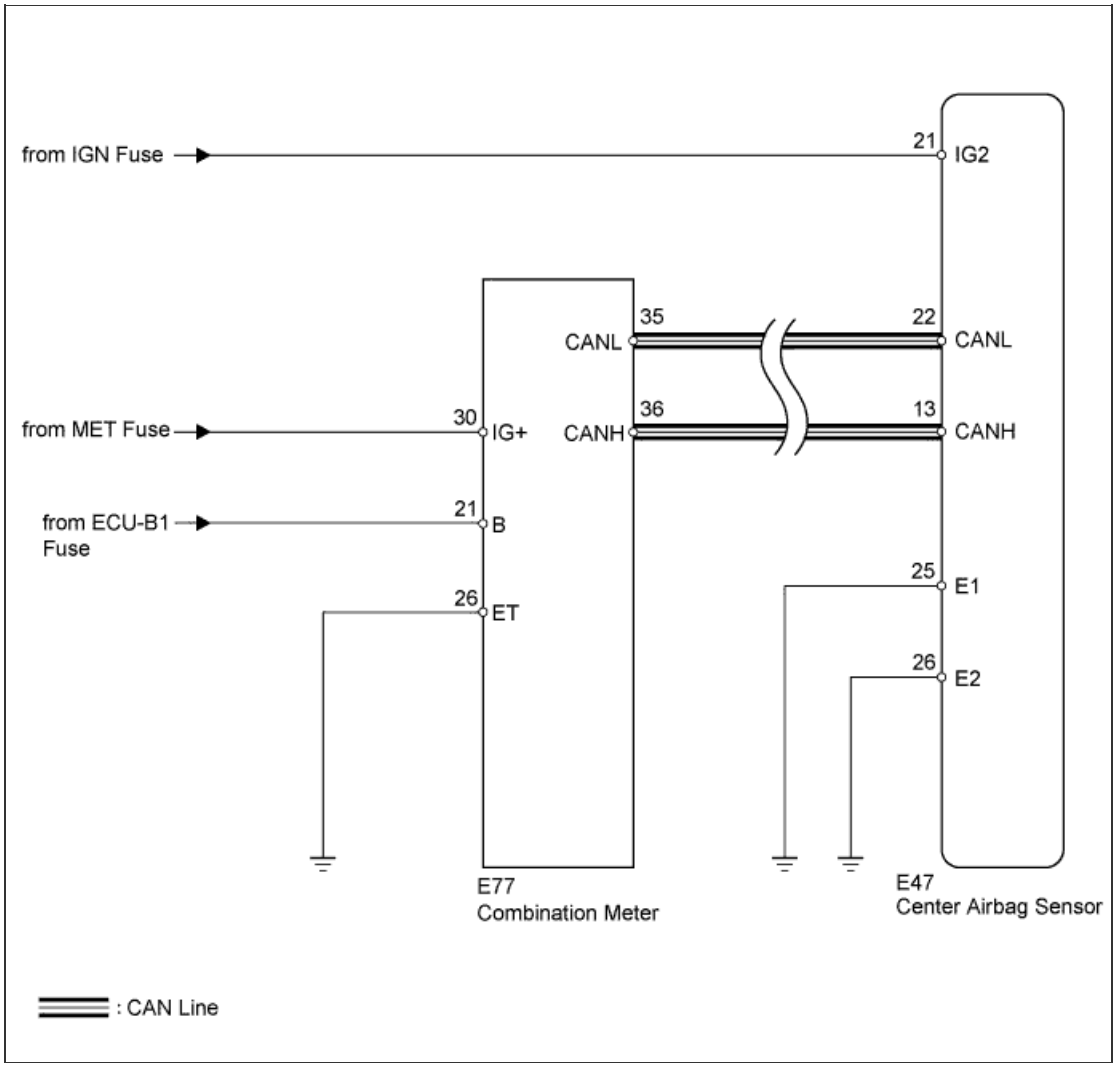
for Preparation Click here

DESCRIPTION

The indicator light circuit consists of the center airbag sensor and the combination meter.
When the center airbag sensor detects a malfunction in the SRS airbag system, the SRS warning light comes on to inform the driver. It also comes on when the source voltage drops, and automatically goes off in approximately 10 seconds after the source voltage returns to normal (DTC is not stored).
The SRS warning light comes on for 6 seconds after the engine switch is turned on (IG) and goes off if the system is normal.
When an open circuit is detected, such as when the connector between the combination meter and the center airbag sensor is disconnected, the SRS warning light remains on even when approximately 6 seconds elapsed after the engine switch is turned on (IG).
DTC B1662/45 is stored when a malfunction is detected in the indicator light circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1662/45	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal, a short to ground signal or a short circuit to ground signal or a short circuit to B+ signal in the indicator light circuit for 2 seconds. • A combination meter malfunction. • A center airbag sensor malfunction.	• Combination meter assembly (SRS warning light) • Center airbag sensor assembly • Instrument panel wire

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CAN COMMUNICATION SYSTEM

a. Check if a CAN communication DTC is output (Click here).

b. Check if a CAN communication DTC is output (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output (for LHD)	B
DTC is output (for RHD)	C

B → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS (Click here)

C → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS (Click here)

A

2.CHECK BATTERY

a. Measure the voltage of the battery.

Standard voltage:
11 to 14 V

NG → CHECK AND REPLACE BATTERY OR CHARGING SYSTEM

OK

3.CHECK CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and combination meter.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

4.CHECK HARNESS AND CONNECTOR (SOURCE VOLTAGE OF CENTER AIRBAG SENSOR)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG).

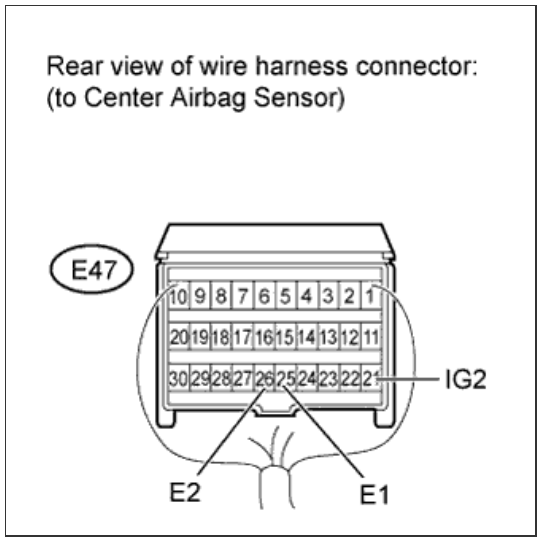
d. Operate all the components of the electrical system (defogger, wipers, headlights, heater blower, etc.).

e. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E47-21 (IG2) - E47-25 (E1)	Engine switch on (IG)	11 to 14 V
E47-21 (IG2) -	Engine switch on	11 to 14 V

E47-26 (E2)	(IG)	



NG → REPLACE HARNESS AND CONNECTOR

OK

5.CHECK HARNESS AND CONNECTOR (SOURCE VOLTAGE OF COMBINATION METER)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

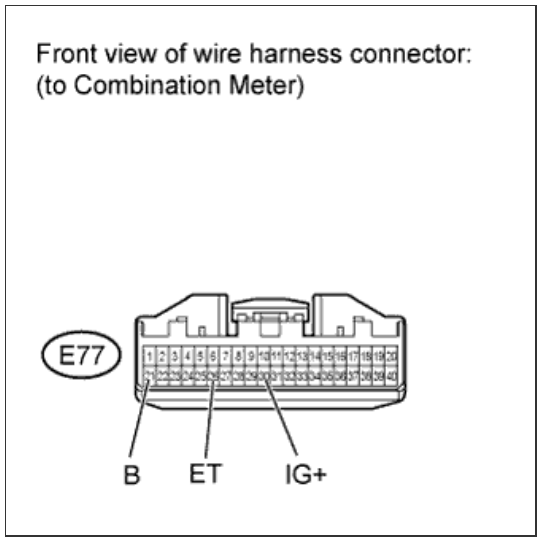
c. Disconnect the E77 connector from the combination meter.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E77-30 (IG+) - E77-26 (ET)	Engine switch on (IG)	11 to 14 V
E77-21 (B) - E77-26 (ET)	Always	11 to 14 V



NG → REPLACE HARNESS AND CONNECTOR

OK

6.CHECK SRS WARNING LIGHT (SHORT TO GROUND)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Connect the connector to the combination meter.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG).

f. Check the SRS warning light condition.

OK:

After the primary check period, SRS warning light goes off for approximately 10 seconds and then remains on.

HINT:

The primary check period is approximately 6 seconds after the engine switch is turned on (IG).

NG

GO TO METER / GAUGE SYSTEM (Click here)

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

DTC B1855/63 Short in Rear Side Squib LH Circuit

DTC B1856/63 Open in Rear Side Squib LH Circuit

DTC B1857/63 Short to GND in Rear Side Squib LH Circuit

DTC B1858/63 Short to B+ in Rear Side Squib LH Circuit

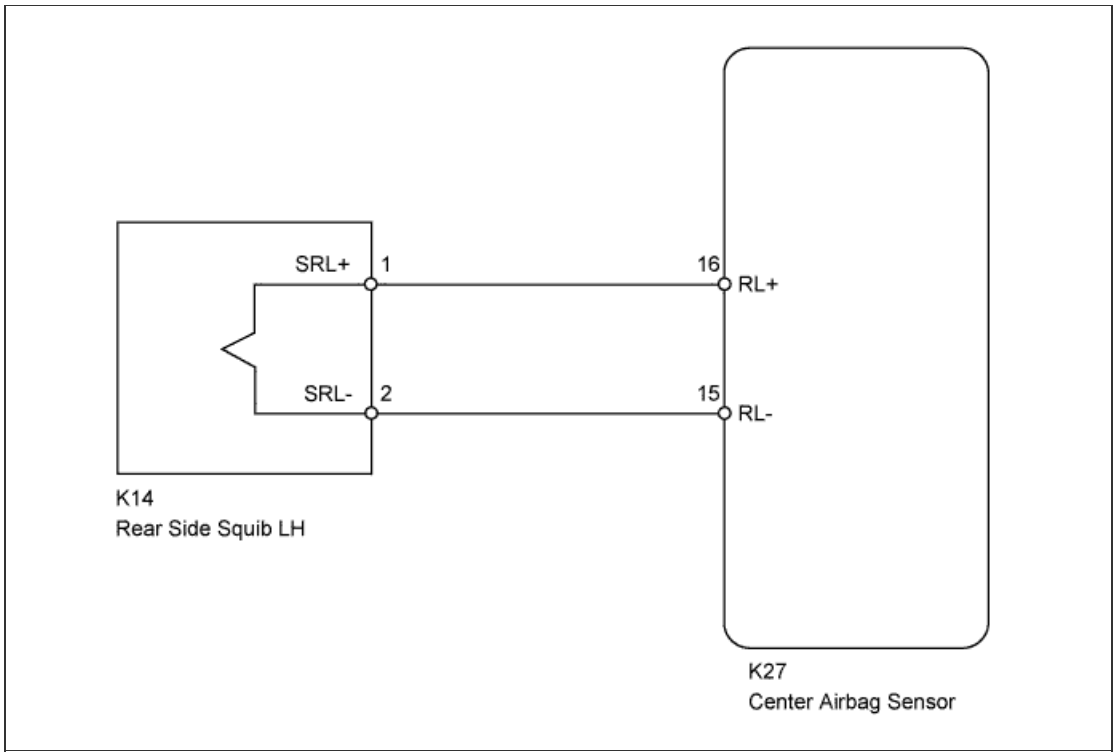
for Preparation Click here

DESCRIPTION

The rear side squib LH circuit consists of the center airbag sensor and the rear seat side airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1855/63	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib LH circuit during the primary check. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1856/63	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib LH circuit for 2 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1857/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1858/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG LH (REAR SIDE SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag LH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

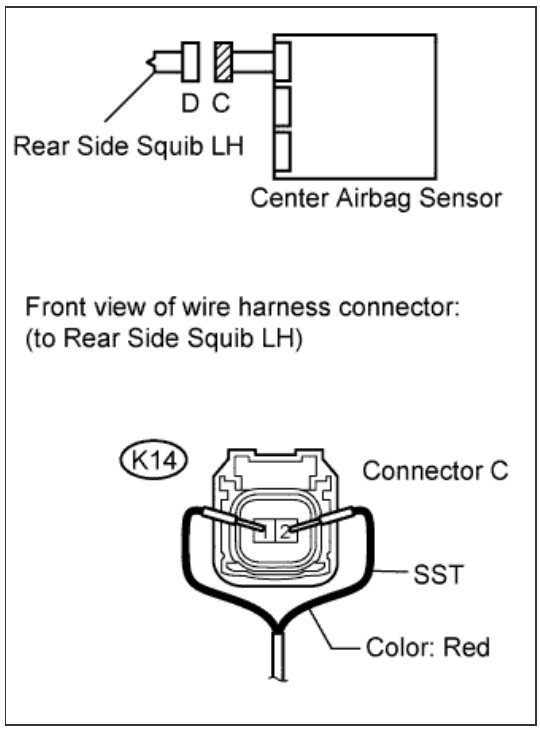
Never connect the tester to the rear seat side airbag LH (rear side squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

2.CHECK FLOOR WIRE (REAR SIDE SQUIB LH CIRCUIT)

a. Turn the engine switch off.

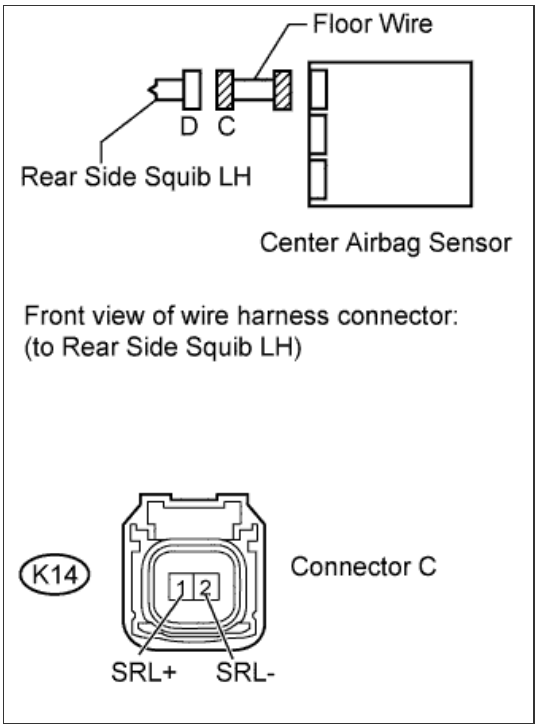
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K14-1 (SRL+) - Body ground	Engine switch on (IG)	Below 1 V
K14-2 (SRL-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

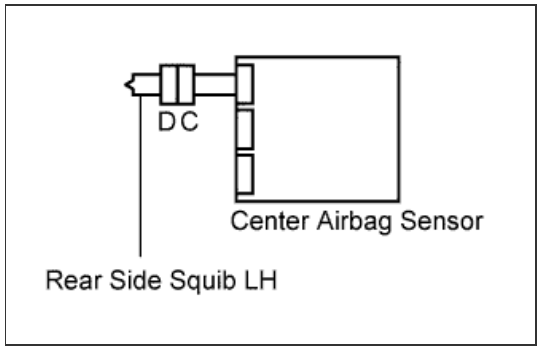
Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	1 MΩ or higher
K14-1 (SRL+) - Body ground	Always	1 MΩ or higher
K14-2 (SRL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the rear seat side airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1675/82 Rear Floor Airbag Sensor Malfunction

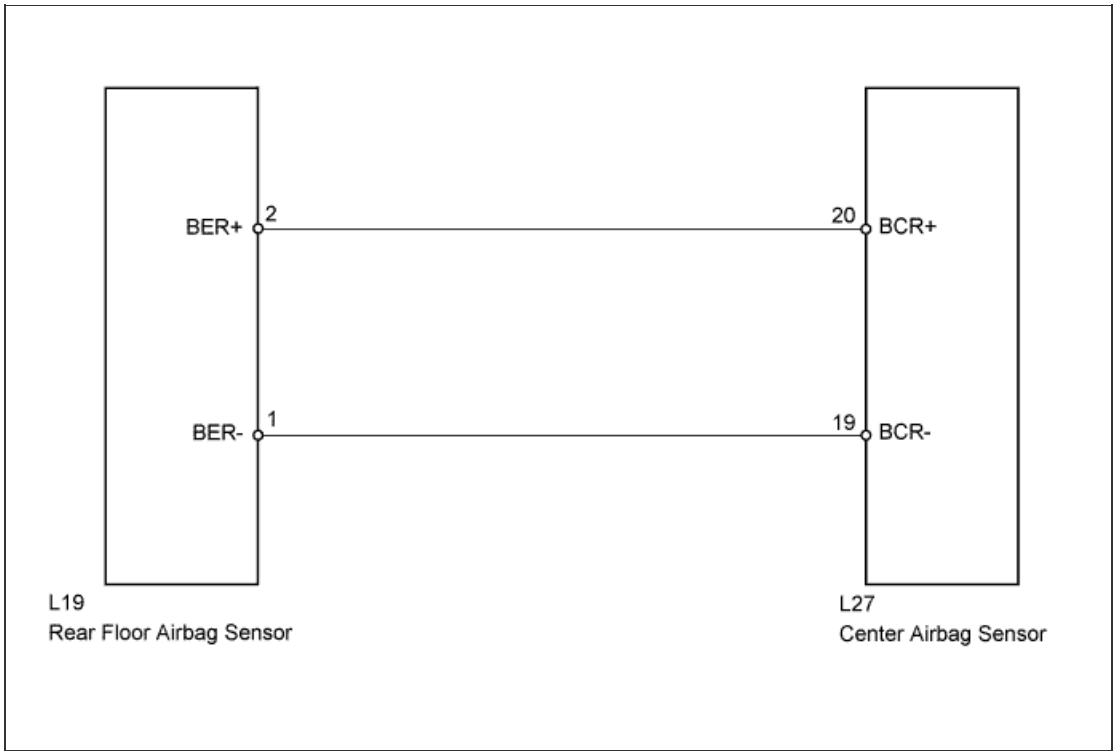
for Preparation Click here

DESCRIPTION

The rear floor airbag sensor consists of the diagnostic circuit, the rear floor deceleration sensor, etc.
If the center airbag sensor receives signals from the rear floor deceleration sensor, it determines whether the SRS should be activated.
DTC B1675/82 is stored when a malfunction is detected in the rear floor airbag sensor circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1675/82	When one of the following conditions is met: • A rear floor airbag sensor malfunction. • A center airbag sensor malfunction.	• Rear floor airbag sensor • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK REAR FLOOR AIRBAG SENSOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

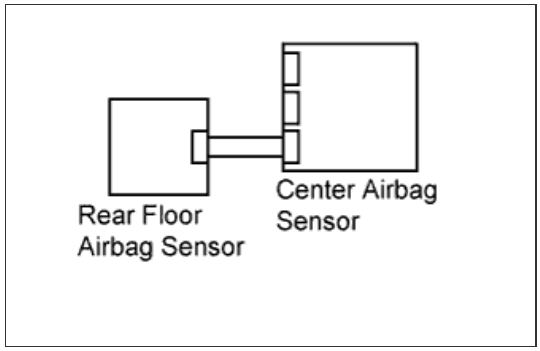
c. Temporarily replace the rear floor airbag sensor with a new one.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG), and wait for at least 60 seconds.

f. Clear the DTCs stored in the memory (Click here).

g. Turn the engine switch off.



h. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).

OK:
DTC B1675 is not output.

HINT:

Codes other than DTC B1675 may be output at this time, but they are not related to this check.

A	REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)
B	REPLACE REAR FLOOR AIRBAG SENSOR (**Click here**)

C

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1855/63 Short in Rear Side Squib LH Circuit

DTC B1856/63 Open in Rear Side Squib LH Circuit

DTC B1857/63 Short to GND in Rear Side Squib LH Circuit

DTC B1858/63 Short to B+ in Rear Side Squib LH Circuit

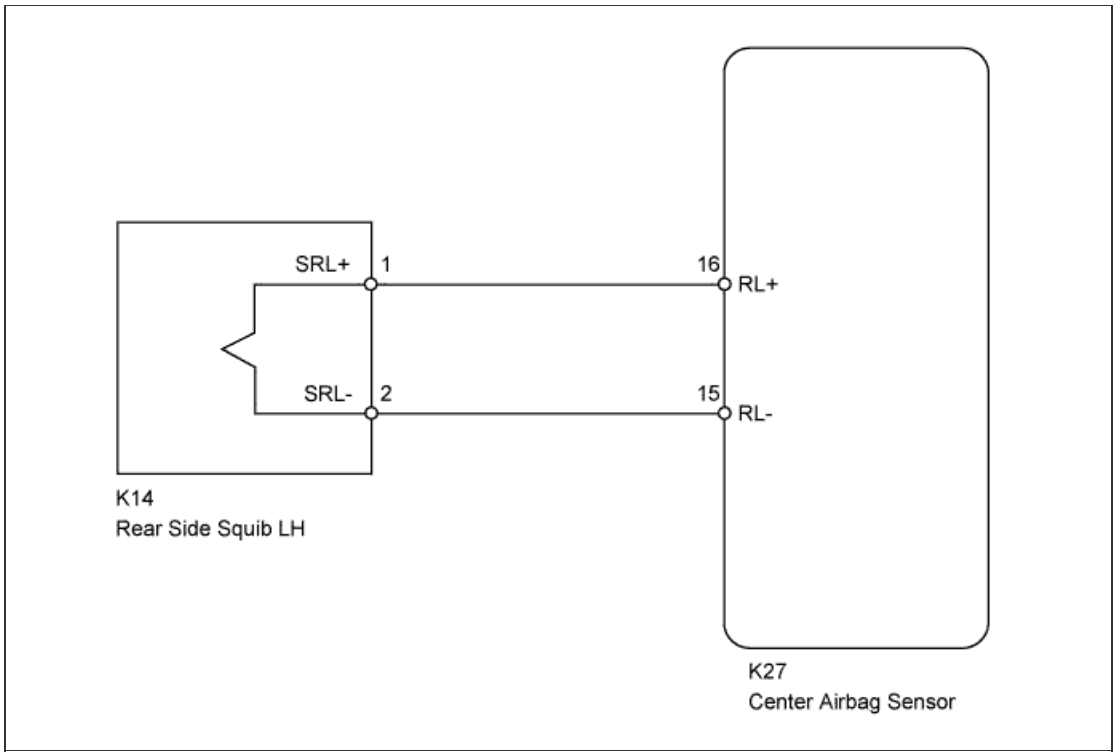
for Preparation Click here

DESCRIPTION

The rear side squib LH circuit consists of the center airbag sensor and the rear seat side airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1855/63	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib LH circuit during the primary check. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1856/63	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib LH circuit for 2 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1857/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1858/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG LH (REAR SIDE SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag LH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

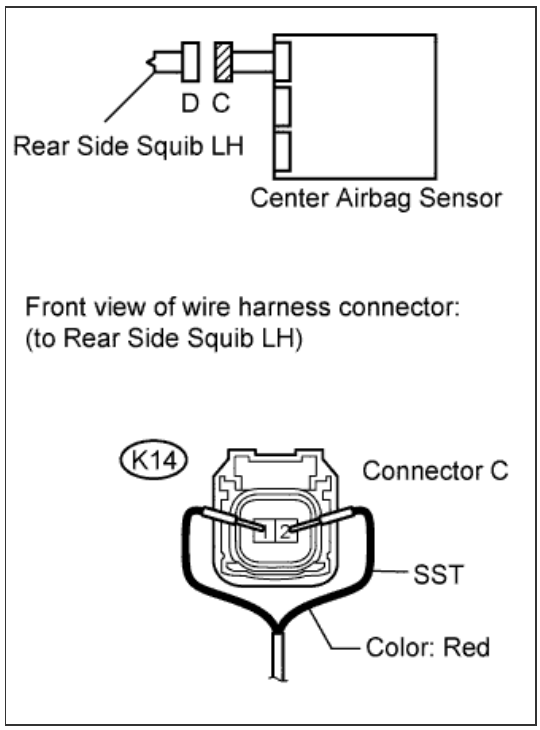
Never connect the tester to the rear seat side airbag LH (rear side squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

2.CHECK FLOOR WIRE (REAR SIDE SQUIB LH CIRCUIT)

a. Turn the engine switch off.

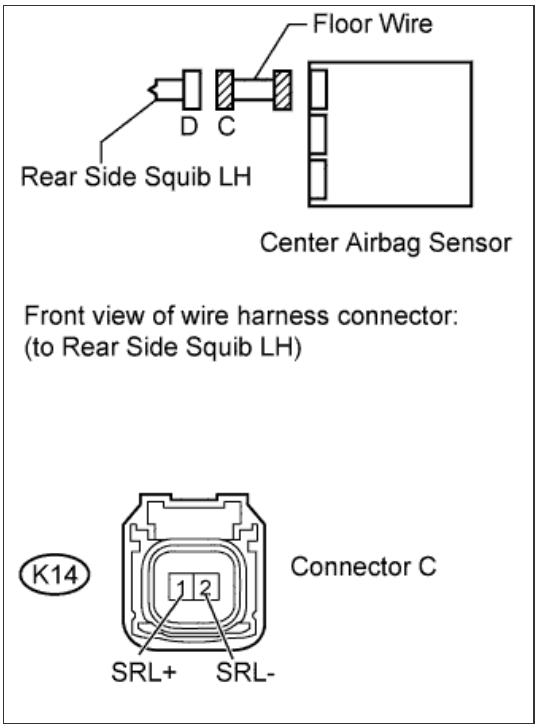
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K14-1 (SRL+) - Body ground	Engine switch on (IG)	Below 1 V
K14-2 (SRL-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

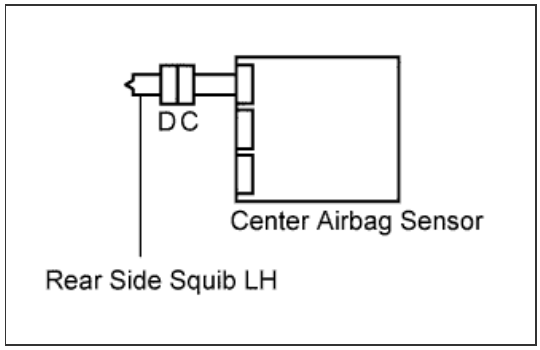
Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	1 MΩ or higher
K14-1 (SRL+) - Body ground	Always	1 MΩ or higher
K14-2 (SRL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the rear seat side airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1676/85 Lost Communication with Rear Floor Airbag Sensor RH

DTC B1677/85 Rear Floor Airbag Sensor RH Initialization Incomplete

DTC B1694/85 Side Satellite Sensor No. 2 Bus RH Initialization Incomplete

for Preparation Click here

DESCRIPTION

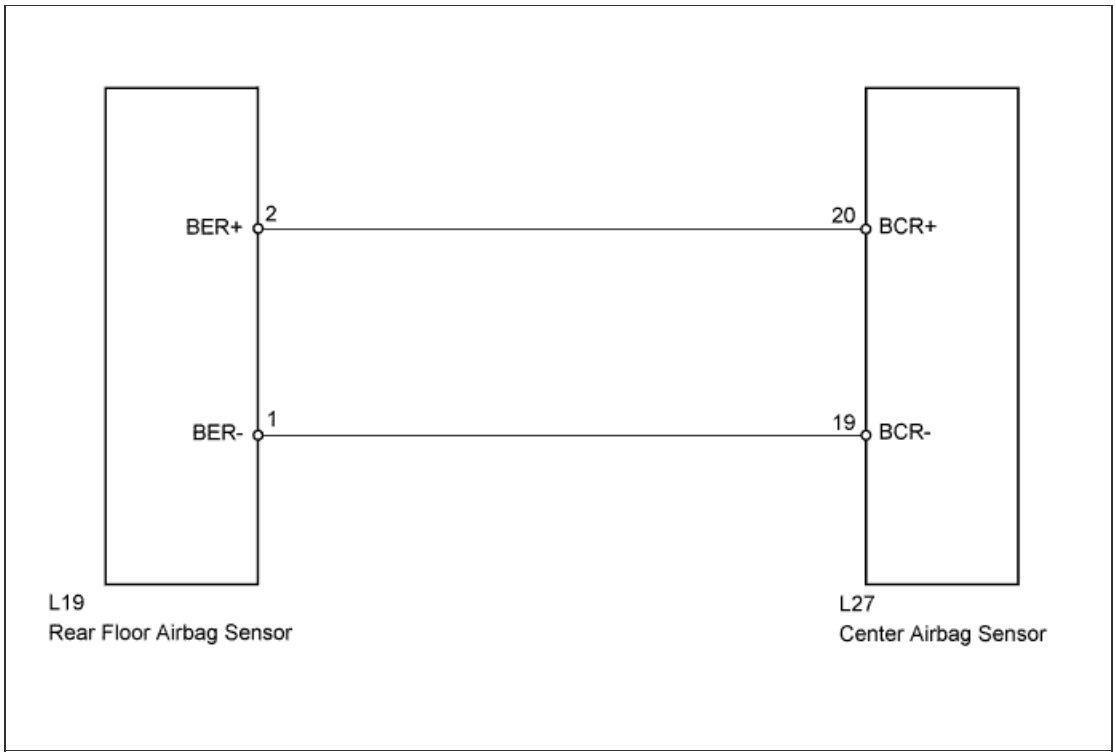
HINT:

"Rear floor airbag sensor RH" refers to the rear floor airbag sensor.

- The rear floor airbag sensor circuit consists of the center airbag sensor and rear floor airbag sensor.
  The rear floor airbag sensor detects impacts to the vehicle and sends signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1676/85, B1677/85 or B1694/85 is stored when a malfunction is detected in the rear floor airbag sensor circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1676/85	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the rear floor airbag sensor circuit for 2 seconds. • A rear floor airbag sensor malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear floor airbag sensor • Center airbag sensor assembly
B1677/85	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the rear floor airbag sensor circuit for 2 seconds. • A rear floor airbag sensor malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear floor airbag sensor • Center airbag sensor assembly
B1694/85	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the rear floor airbag sensor circuit for 2 seconds. • A rear floor airbag sensor malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear floor airbag sensor • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the rear floor airbag sensor.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

2.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and rear floor airbag sensor.

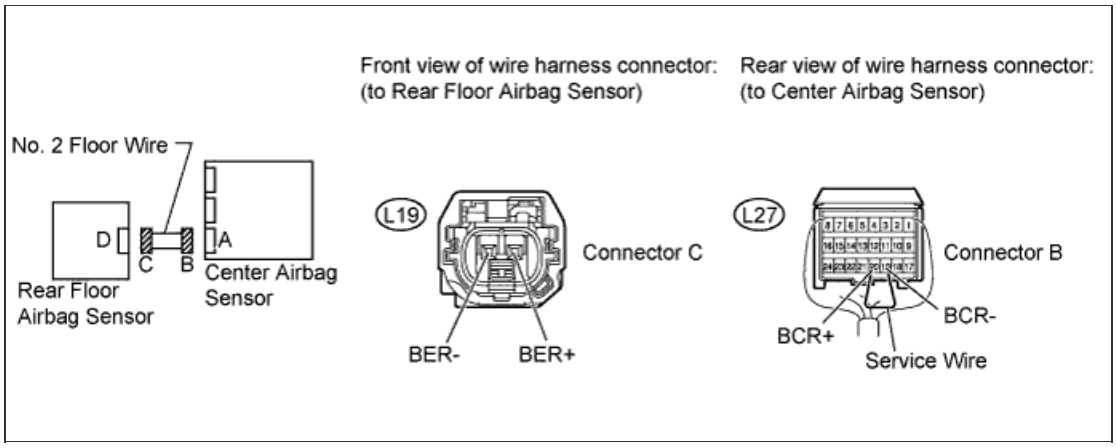
b. Check that the connectors (on the center airbag sensor side and rear floor airbag sensor side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

3.CHECK REAR FLOOR AIRBAG SENSOR CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L19-2 (BER+) - Body ground	Engine switch on (IG)	Below 1 V
L19-1 (BER-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 20 (BCR+) and 19 (BCR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L19-2 (BER+) - L19-1 (BER-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L19-2 (BER+) - L19-1 (BER-)	Always	1 MΩ or higher
L19-2 (BER+) - Body ground	Always	1 MΩ or higher
L19-1 (BER-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK REAR FLOOR AIRBAG SENSOR

a. Connect the connectors to the center airbag sensor.

b. Temporarily replace the rear floor airbag sensor with a new one.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2

seconds.

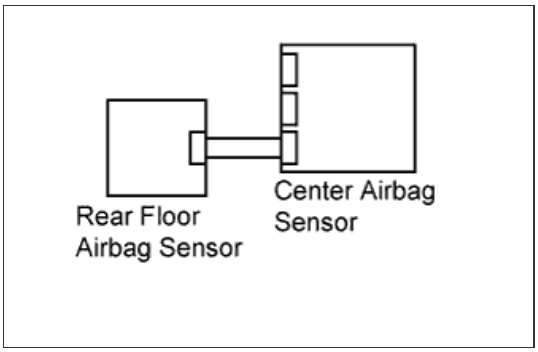
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).



OK:

DTC B1676, B1677 and B1694 are not output.

HINT:

Codes other than DTC B1676, B1677 and B1694 may be output at this time, but they are not related to this check.

A	USE SIMULATION METHOD TO CHECK (Click here)
B	REPLACE REAR FLOOR AIRBAG SENSOR (Click here)

C

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

DTC B1855/63 Short in Rear Side Squib LH Circuit

DTC B1856/63 Open in Rear Side Squib LH Circuit

DTC B1857/63 Short to GND in Rear Side Squib LH Circuit

DTC B1858/63 Short to B+ in Rear Side Squib LH Circuit

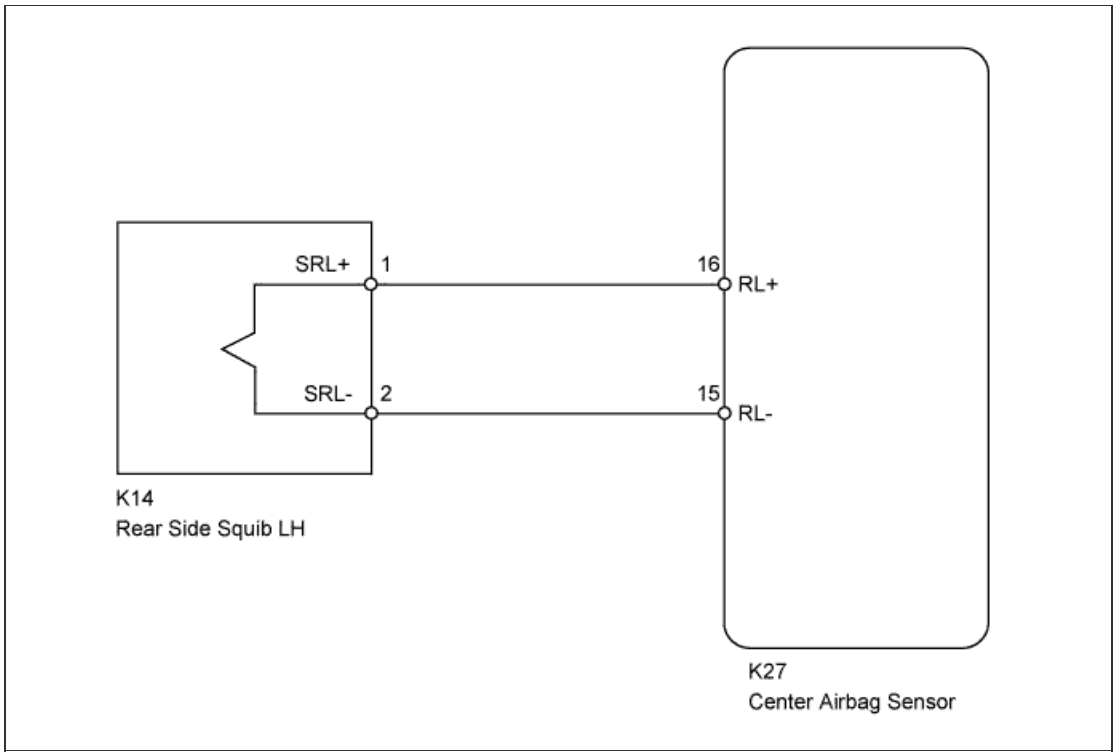
for Preparation Click here

DESCRIPTION

The rear side squib LH circuit consists of the center airbag sensor and the rear seat side airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear side squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1855/63	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear side squib LH circuit during the primary check. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1856/63	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear side squib LH circuit for 2 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1857/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly
B1858/63	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear side squib LH circuit for 0.5 seconds. • A rear side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat side airbag assembly LH (Rear side squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT SIDE AIRBAG LH (REAR SIDE SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the rear seat side airbag LH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

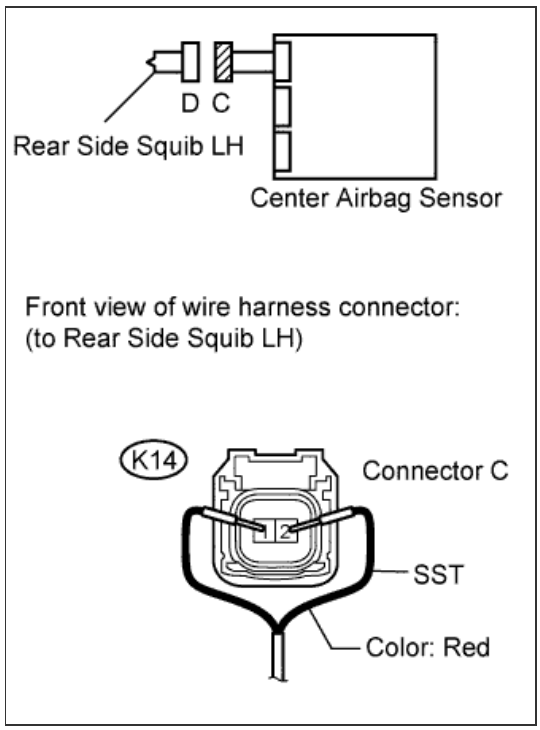
Never connect the tester to the rear seat side airbag LH (rear side squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

C → Go to step 2

A

REPLACE REAR NO. 1 SEAT ASSEMBLY LH (Click here)

2.CHECK FLOOR WIRE (REAR SIDE SQUIB LH CIRCUIT)

a. Turn the engine switch off.

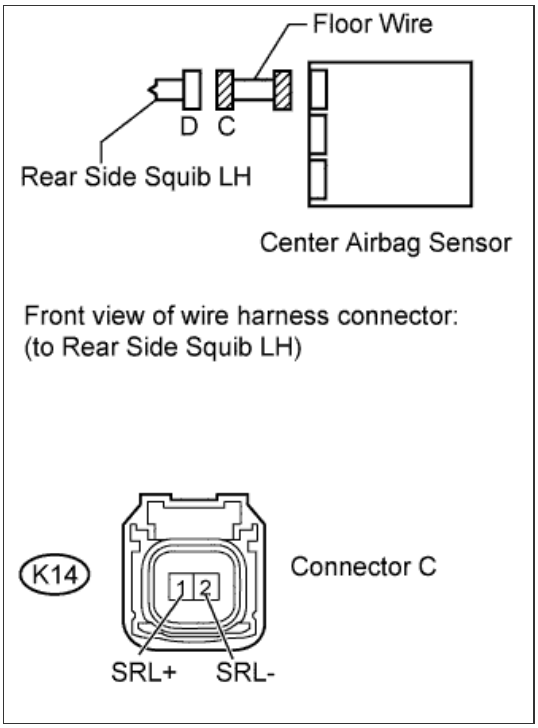
b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K14-1 (SRL+) - Body ground	Engine switch on (IG)	Below 1 V
K14-2 (SRL-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

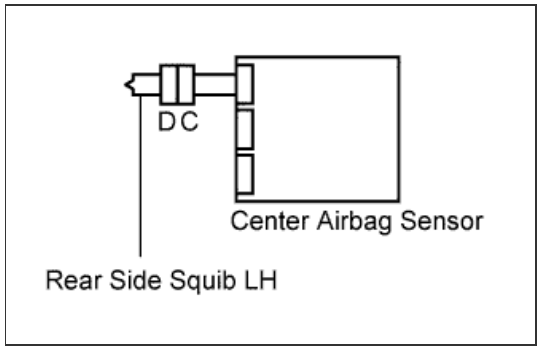
Standard Resistance:

Tester Connection	Condition	Specified Condition
K14-1 (SRL+) - K14-2 (SRL-)	Always	1 MΩ or higher
K14-1 (SRL+) - Body ground	Always	1 MΩ or higher
K14-2 (SRL-) - Body ground	Always	1 MΩ or higher

NG → REPLACE FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the rear seat side airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:

DTC B1855, B1856, B1857 or B1858 is not output.

HINT:

Codes other than DTC B1855, B1856, B1857 and B1858 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1676/85 Lost Communication with Rear Floor Airbag Sensor RH

DTC B1677/85 Rear Floor Airbag Sensor RH Initialization Incomplete

DTC B1694/85 Side Satellite Sensor No. 2 Bus RH Initialization Incomplete

for Preparation Click here

DESCRIPTION

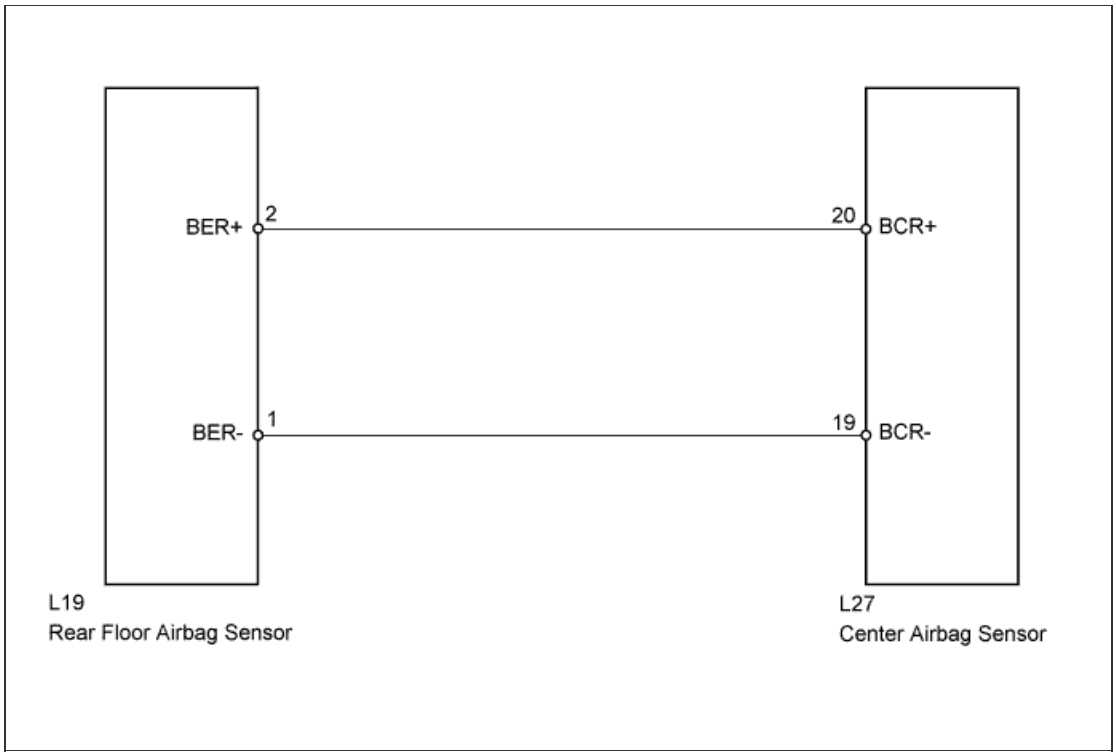
HINT:

"Rear floor airbag sensor RH" refers to the rear floor airbag sensor.

- The rear floor airbag sensor circuit consists of the center airbag sensor and rear floor airbag sensor.
  The rear floor airbag sensor detects impacts to the vehicle and sends signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1676/85, B1677/85 or B1694/85 is stored when a malfunction is detected in the rear floor airbag sensor circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1676/85	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the rear floor airbag sensor circuit for 2 seconds. • A rear floor airbag sensor malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear floor airbag sensor • Center airbag sensor assembly
B1677/85	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the rear floor airbag sensor circuit for 2 seconds. • A rear floor airbag sensor malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear floor airbag sensor • Center airbag sensor assembly
B1694/85	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the rear floor airbag sensor circuit for 2 seconds. • A rear floor airbag sensor malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear floor airbag sensor • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the rear floor airbag sensor.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

2.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and rear floor airbag sensor.

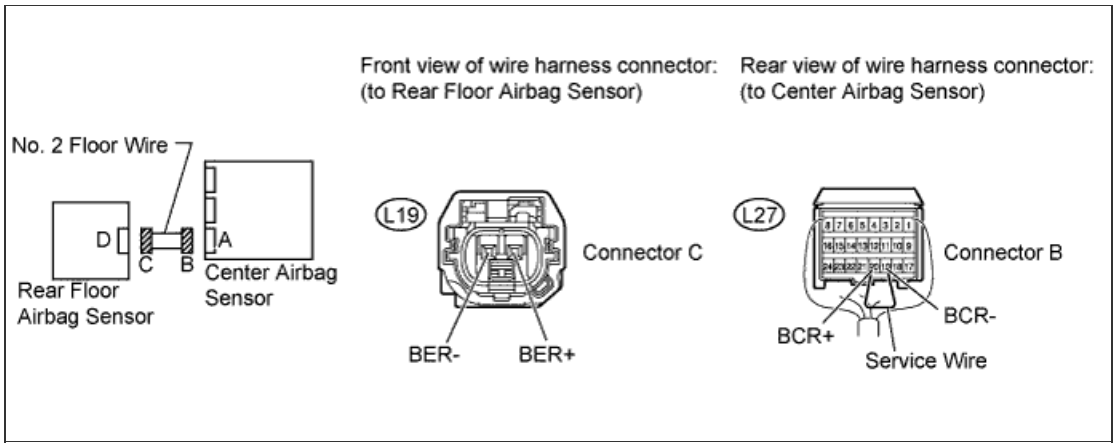
b. Check that the connectors (on the center airbag sensor side and rear floor airbag sensor side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

3.CHECK REAR FLOOR AIRBAG SENSOR CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L19-2 (BER+) - Body ground	Engine switch on (IG)	Below 1 V
L19-1 (BER-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 20 (BCR+) and 19 (BCR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L19-2 (BER+) - L19-1 (BER-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L19-2 (BER+) - L19-1 (BER-)	Always	1 MΩ or higher
L19-2 (BER+) - Body ground	Always	1 MΩ or higher
L19-1 (BER-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK REAR FLOOR AIRBAG SENSOR

a. Connect the connectors to the center airbag sensor.

b. Temporarily replace the rear floor airbag sensor with a new one.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2

seconds.

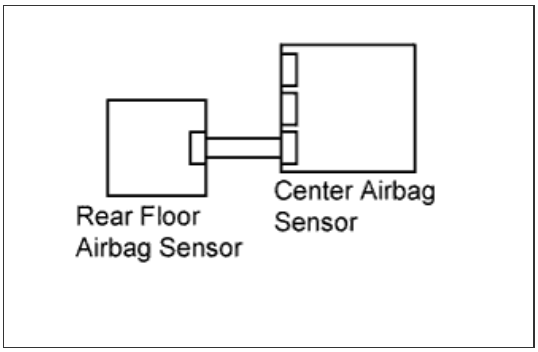
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).



OK:

DTC B1676, B1677 and B1694 are not output.

HINT:

Codes other than DTC B1676, B1677 and B1694 may be output at this time, but they are not related to this check.

A	USE SIMULATION METHOD TO CHECK (Click here)
B	REPLACE REAR FLOOR AIRBAG SENSOR (Click here)

C

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

DTC B1860/64 Short in Driver Side Knee Airbag Squib Circuit

DTC B1861/64 Open in Driver Side Knee Airbag Squib Circuit

DTC B1862/64 Short to GND in Driver Side Knee Airbag Squib Circuit

DTC B1863/64 Short to B+ in Driver Side Knee Airbag Squib Circuit

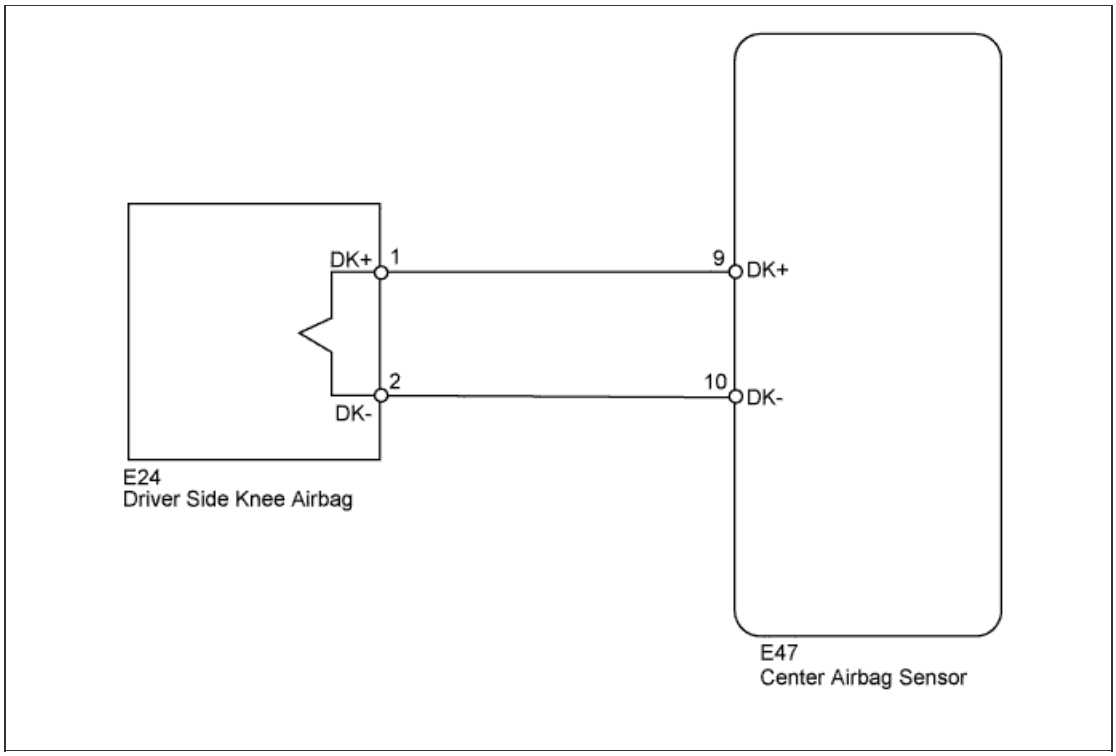
for Preparation Click here

DESCRIPTION

The driver side knee airbag squib circuit consists of the center airbag sensor and the driver side knee airbag.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the driver side knee airbag squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1860/64	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the driver side knee airbag squib circuit during the primary check. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly
B1861/64	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the driver side knee airbag squib circuit for 2 seconds. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly
B1862/64	When one of the following conditions is met: • The airbag sensor center receives a short circuit to ground signal in the knee airbag (Driver side squib) circuit for 0.5 seconds. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly
B1863/64	When one of the following conditions is met: • The airbag sensor center receives a short circuit to B+ signal in the knee airbag (Driver side squib) circuit for 0.5 seconds. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK DRIVER SIDE KNEE AIRBAG (DRIVER SIDE KNEE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the driver side knee airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

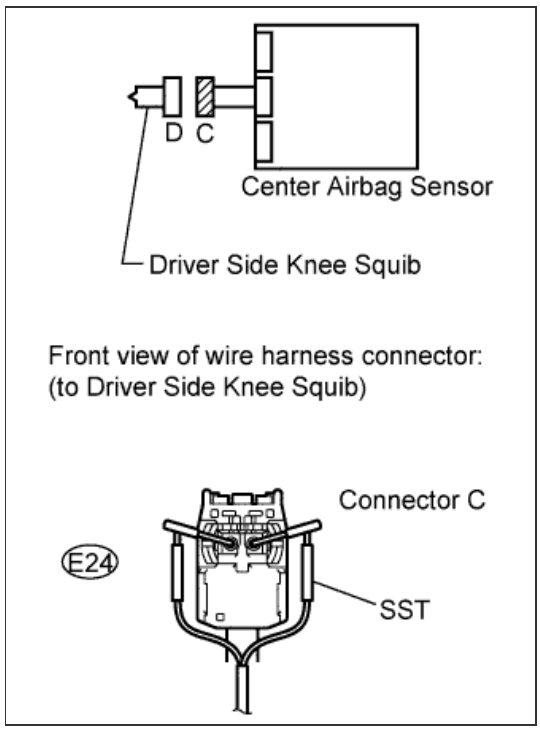
Never connect the tester to the driver side knee airbag (driver side knee squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1860, B1861, B1862 or B1863 is not output.

HINT:

Codes other than DTC B1860, B1861, B1862 and B1863 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE DRIVER SIDE KNEE AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the instrument panel wire connector (on the driver side knee airbag side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE

OK

3.CHECK INSTRUMENT PANEL WIRE (DRIVER SIDE KNEE AIRBAG CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E24-1 (DK+) - Body ground	Engine switch on (IG)	Below 1 V
E24-2 (DK-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

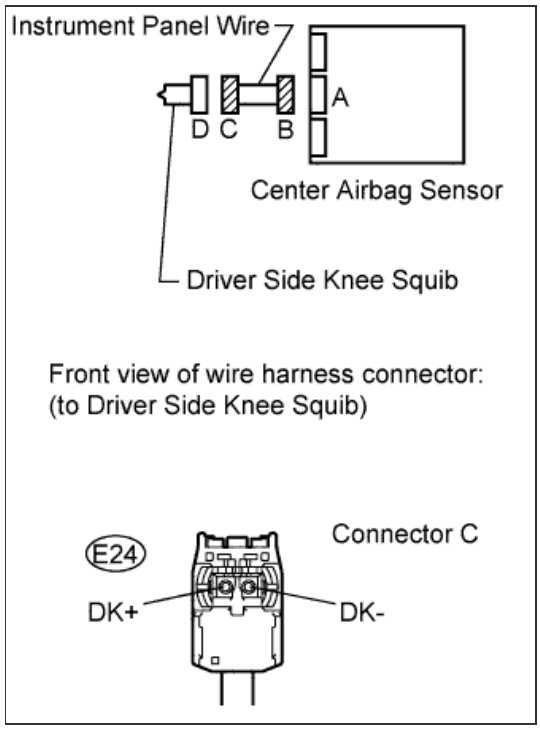
Tester Connection	Condition	Specified Condition
E24-1 (DK+) - E24-2 (DK-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E24-1 (DK+) - E24-2 (DK-)	Always	1 MΩ or higher
E24-1 (DK+) - Body ground	Always	1 MΩ or higher
E24-2 (DK-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE INSTRUMENT PANEL WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the driver side knee airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

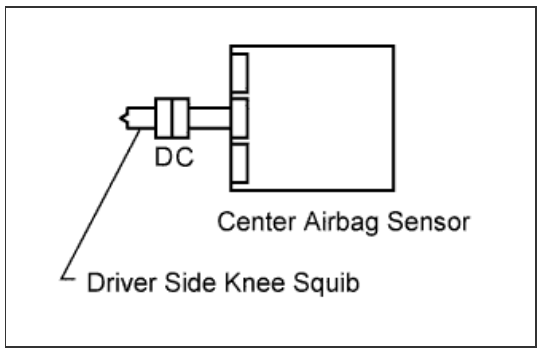
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1860, B1861, B1862 or B1863 is not output.

HINT:

Codes other than DTC B1860, B1861, B1862 and B1863 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1676/85 Lost Communication with Rear Floor Airbag Sensor RH

DTC B1677/85 Rear Floor Airbag Sensor RH Initialization Incomplete

DTC B1694/85 Side Satellite Sensor No. 2 Bus RH Initialization Incomplete

for Preparation Click here

DESCRIPTION

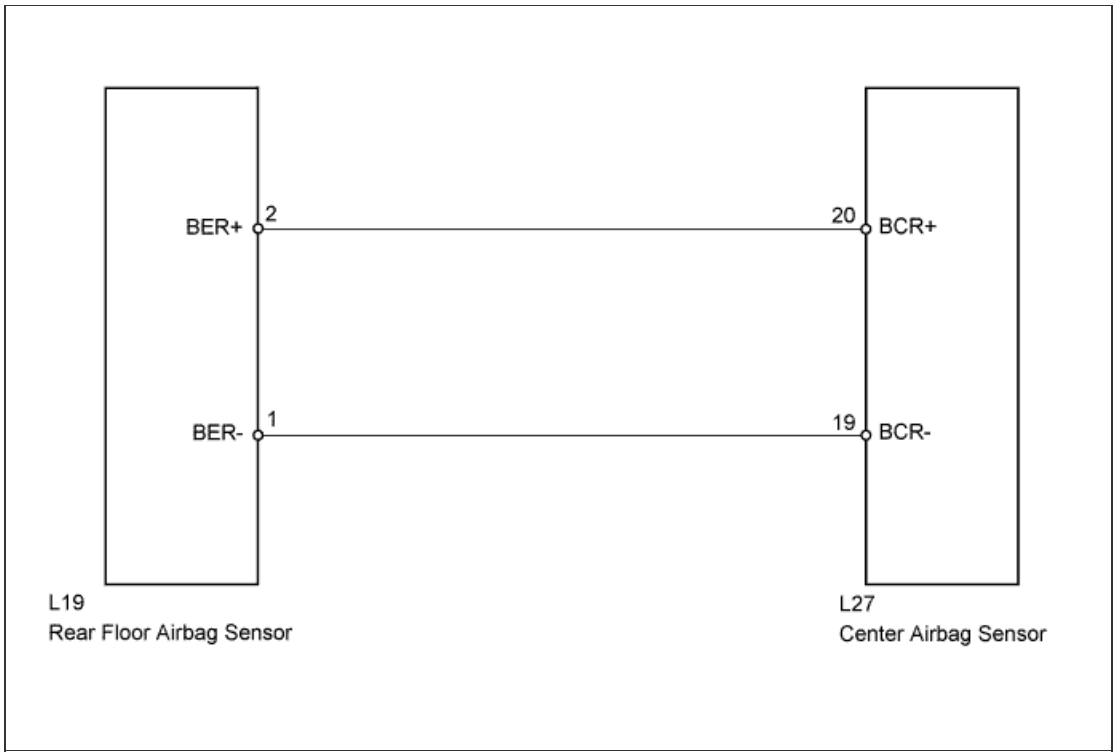
HINT:

"Rear floor airbag sensor RH" refers to the rear floor airbag sensor.

- The rear floor airbag sensor circuit consists of the center airbag sensor and rear floor airbag sensor.
  The rear floor airbag sensor detects impacts to the vehicle and sends signals to the center airbag sensor to determine if the airbag should be deployed.
  DTC B1676/85, B1677/85 or B1694/85 is stored when a malfunction is detected in the rear floor airbag sensor circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1676/85	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the rear floor airbag sensor circuit for 2 seconds. • A rear floor airbag sensor malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear floor airbag sensor • Center airbag sensor assembly
B1677/85	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the rear floor airbag sensor circuit for 2 seconds. • A rear floor airbag sensor malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear floor airbag sensor • Center airbag sensor assembly
B1694/85	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the rear floor airbag sensor circuit for 2 seconds. • A rear floor airbag sensor malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear floor airbag sensor • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CONNECTION OF CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and the rear floor airbag sensor.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

2.CHECK CONNECTORS

a. Disconnect the connectors from the center airbag sensor and rear floor airbag sensor.

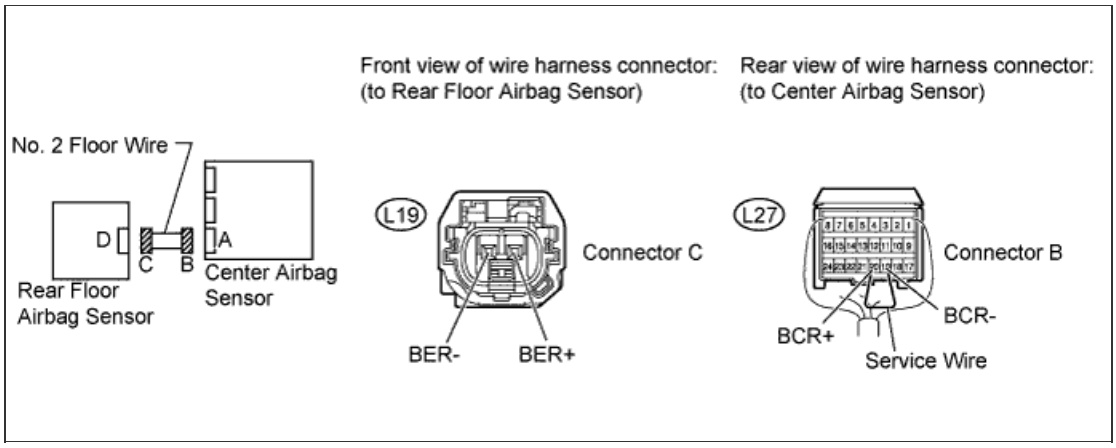
b. Check that the connectors (on the center airbag sensor side and rear floor airbag sensor side) are not damaged.

OK:
The connectors are not deformed or damaged.

NG → REPLACE HARNESS AND CONNECTOR

OK

3.CHECK REAR FLOOR AIRBAG SENSOR CIRCUIT



a. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L19-2 (BER+) - Body ground	Engine switch on (IG)	Below 1 V
L19-1 (BER-) - Body ground	Engine switch on (IG)	Below 1 V

c. Turn the engine switch off.

d. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

e. Using a service wire, connect terminals 20 (BCR+) and 19 (BCR-) of connector B.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting a service wire.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L19-2 (BER+) - L19-1 (BER-)	Always	Below 1 Ω

g. Disconnect the service wire from connector B.

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L19-2 (BER+) - L19-1 (BER-)	Always	1 MΩ or higher
L19-2 (BER+) - Body ground	Always	1 MΩ or higher
L19-1 (BER-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK REAR FLOOR AIRBAG SENSOR

a. Connect the connectors to the center airbag sensor.

b. Temporarily replace the rear floor airbag sensor with a new one.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2

seconds.

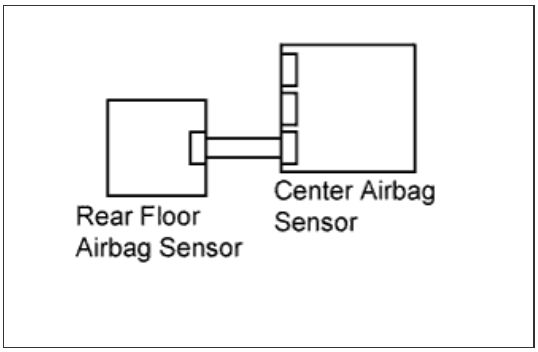
d. Turn the engine switch on (IG), and wait for at least 60 seconds.

e. Clear the DTCs stored in the memory (Click here).

f. Turn the engine switch off.

g. Turn the engine switch on (IG), and wait for at least 60 seconds.

i. Check for DTCs (Click here).



OK:

DTC B1676, B1677 and B1694 are not output.

HINT:

Codes other than DTC B1676, B1677 and B1694 may be output at this time, but they are not related to this check.

A	USE SIMULATION METHOD TO CHECK (Click here)
B	REPLACE REAR FLOOR AIRBAG SENSOR (Click here)

C

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

DTC B1860/64 Short in Driver Side Knee Airbag Squib Circuit

DTC B1861/64 Open in Driver Side Knee Airbag Squib Circuit

DTC B1862/64 Short to GND in Driver Side Knee Airbag Squib Circuit

DTC B1863/64 Short to B+ in Driver Side Knee Airbag Squib Circuit

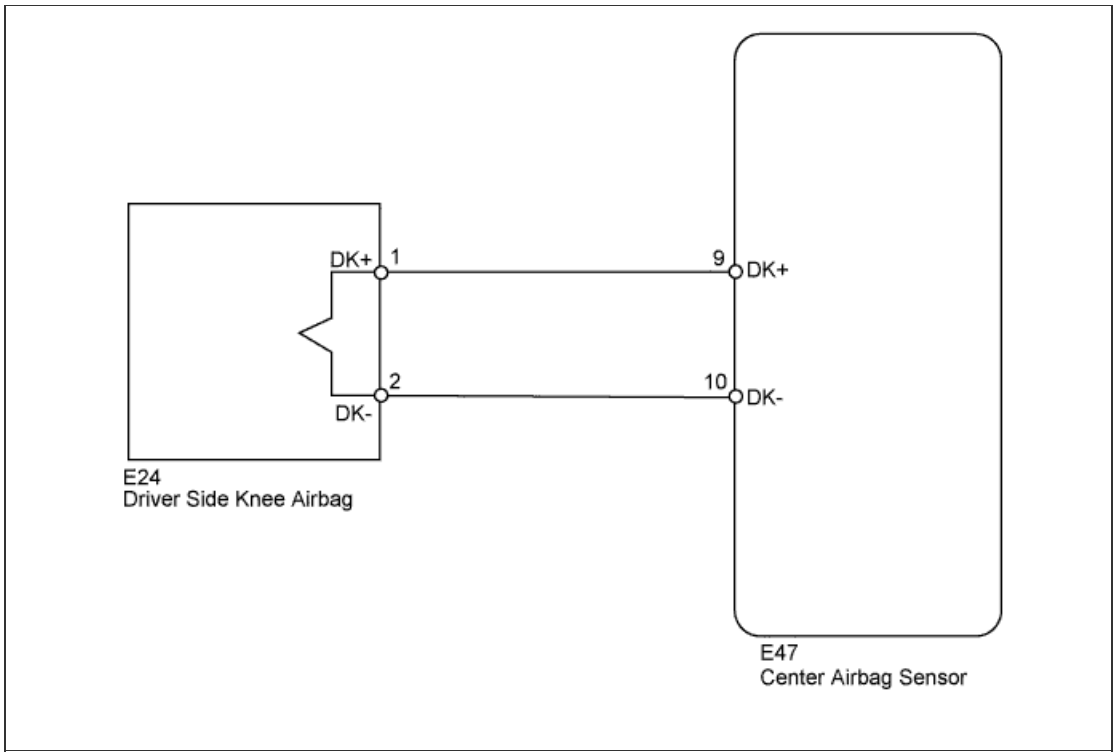
for Preparation Click here

DESCRIPTION

The driver side knee airbag squib circuit consists of the center airbag sensor and the driver side knee airbag.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the driver side knee airbag squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1860/64	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the driver side knee airbag squib circuit during the primary check. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly
B1861/64	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the driver side knee airbag squib circuit for 2 seconds. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly
B1862/64	When one of the following conditions is met: • The airbag sensor center receives a short circuit to ground signal in the knee airbag (Driver side squib) circuit for 0.5 seconds. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly
B1863/64	When one of the following conditions is met: • The airbag sensor center receives a short circuit to B+ signal in the knee airbag (Driver side squib) circuit for 0.5 seconds. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK DRIVER SIDE KNEE AIRBAG (DRIVER SIDE KNEE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the driver side knee airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

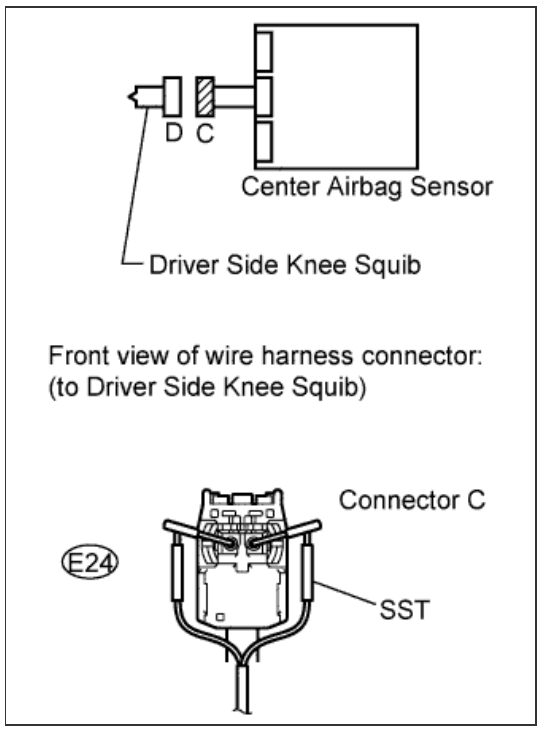
Never connect the tester to the driver side knee airbag (driver side knee squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1860, B1861, B1862 or B1863 is not output.

HINT:

Codes other than DTC B1860, B1861, B1862 and B1863 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE DRIVER SIDE KNEE AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the instrument panel wire connector (on the driver side knee airbag side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE

OK

3.CHECK INSTRUMENT PANEL WIRE (DRIVER SIDE KNEE AIRBAG CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E24-1 (DK+) - Body ground	Engine switch on (IG)	Below 1 V
E24-2 (DK-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

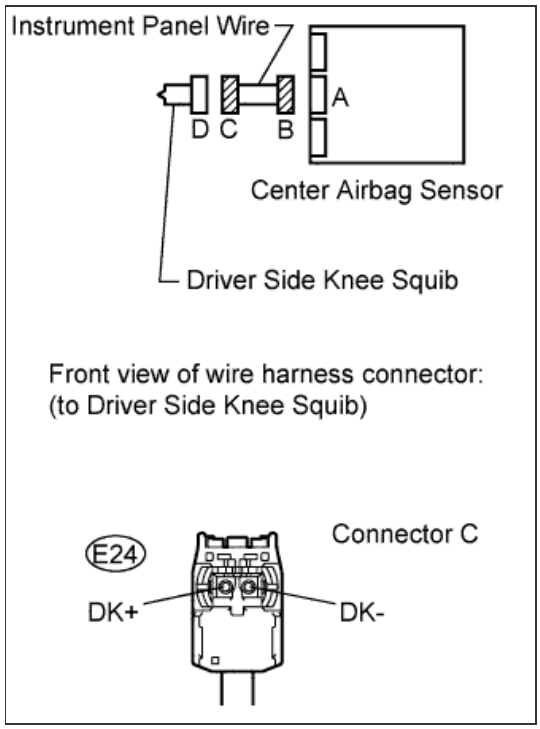
Tester Connection	Condition	Specified Condition
E24-1 (DK+) - E24-2 (DK-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E24-1 (DK+) - E24-2 (DK-)	Always	1 MΩ or higher
E24-1 (DK+) - Body ground	Always	1 MΩ or higher
E24-2 (DK-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE INSTRUMENT PANEL WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the driver side knee airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

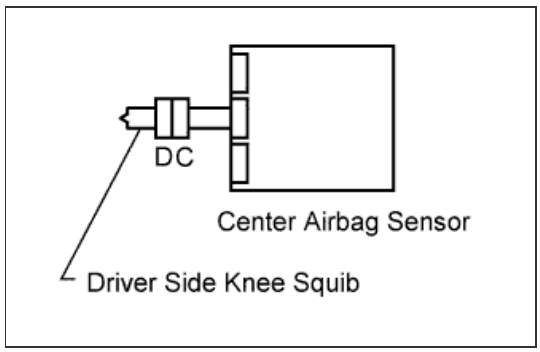
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1860, B1861, B1862 or B1863 is not output.

HINT:

Codes other than DTC B1860, B1861, B1862 and B1863 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1800/51 Short in Driver Side Squib Circuit

DTC B1801/51 Open in Driver Side Squib Circuit

DTC B1802/51 Short to GND in Driver Side Squib Circuit

DTC B1803/51 Short to B+ in Driver Side Squib Circuit

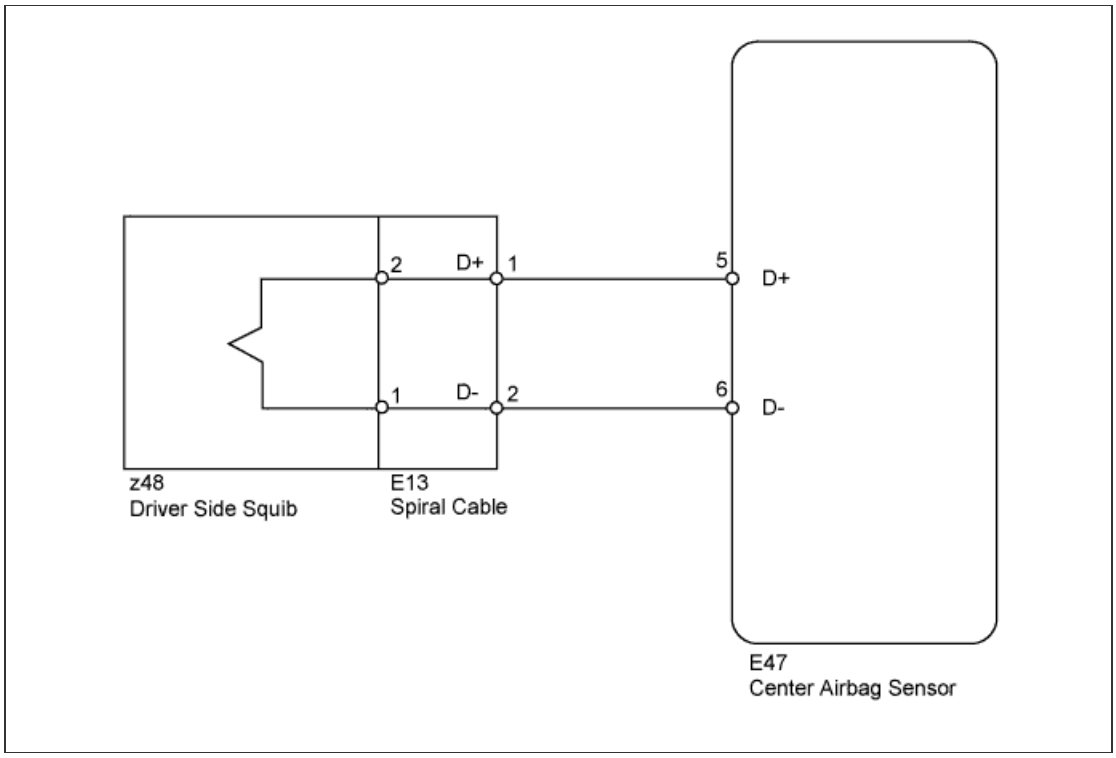
for Preparation Click here

DESCRIPTION

The driver side squib circuit consists of the center airbag sensor, the spiral cable, and the steering pad.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the driver side squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1800/51	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the driver side squib circuit during the primary check. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1801/51	When one of the following conditions is met: • The A center airbag sensor receives an open circuit signal in the driver side squib circuit for 2 seconds. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1802/51	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the driver side squib circuit for 0.5 seconds. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1803/51	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the driver side squib circuit for 0.5 seconds. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

- **When installing the spiral cable and steering wheel, be sure to adjust the spiral cable as it may break if the steering wheel is turned before adjusting the spiral cable (Click here).**
- **When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).**

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK STEERING PAD (DRIVER SIDE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the steering pad.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (orange connector).

CAUTION:

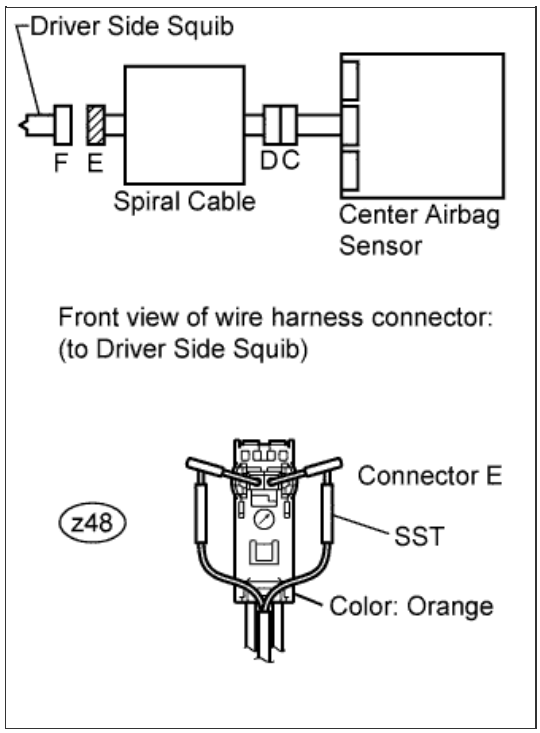
Never connect the tester to the steering pad (driver side squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1800, B1801, B1802 or B1803 is not output.

HINT:

Codes other than DTC B1800, B1801, B1802 and B1803 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE STEERING PAD (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the spiral cable connectors (on the steering pad side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE SPIRAL CABLE (Click here)

OK

3.CHECK DRIVER SIDE SQUIB CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
z48-1 - Body ground	Engine switch on (IG)	Below 1 V
z48-2 - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

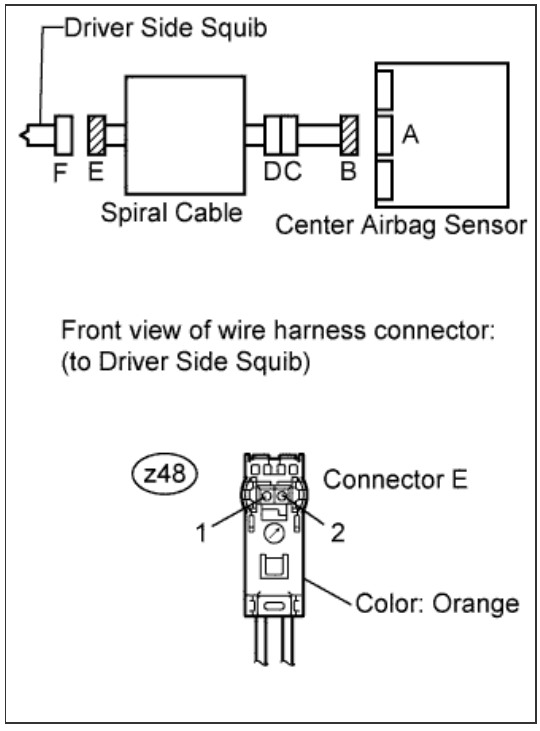
Tester Connection	Condition	Specified Condition
z48-1 - z48-2	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z48-1 - z48-2	Always	1 MΩ or higher
z48-1 - Body ground	Always	1 MΩ or higher
z48-2 - Body ground	Always	1 MΩ or higher



NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the steering pad and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

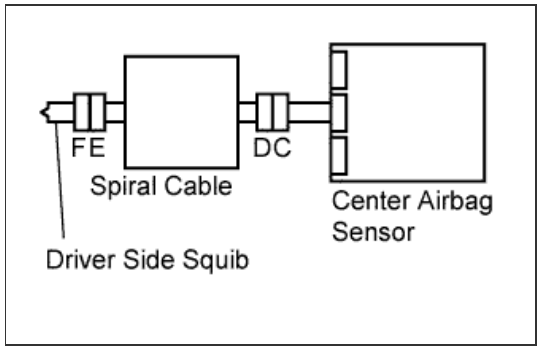
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1800, B1801, B1802 or B1803 is not output.

HINT:

Codes other than DTC B1800, B1801, B1802 and B1803 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - SPIRAL CABLE)

a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the spiral cable.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E13-1 (D+) - Body ground	Engine switch on (IG)	Below 1 V
E13-2 (D-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

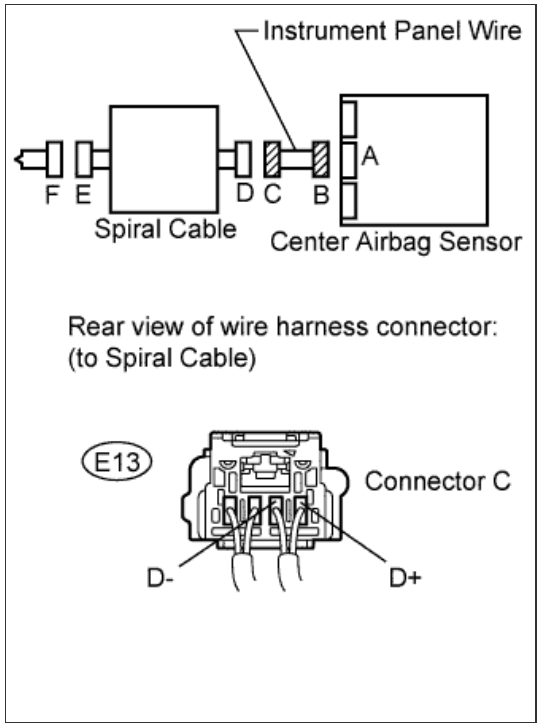
Tester Connection	Condition	Specified Condition
E13-1 (D+) - E13-2 (D-)	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-1 (D+) - E13-2		



(D-)	Always	1 MΩ or higher
E13-1 (D+) - Body ground	Always	1 MΩ or higher
E13-2 (D-) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK

REPLACE SPIRAL CABLE (Click here)

DTC B1860/64 Short in Driver Side Knee Airbag Squib Circuit

DTC B1861/64 Open in Driver Side Knee Airbag Squib Circuit

DTC B1862/64 Short to GND in Driver Side Knee Airbag Squib Circuit

DTC B1863/64 Short to B+ in Driver Side Knee Airbag Squib Circuit

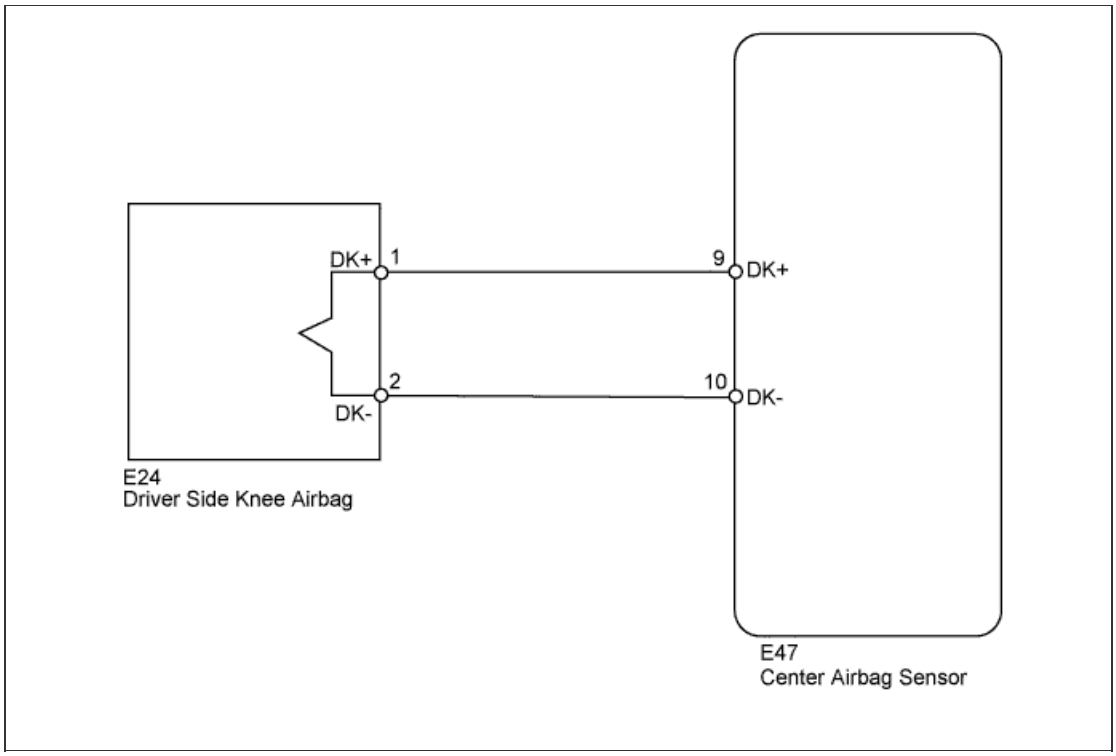
for Preparation Click here

DESCRIPTION

The driver side knee airbag squib circuit consists of the center airbag sensor and the driver side knee airbag.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the driver side knee airbag squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1860/64	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the driver side knee airbag squib circuit during the primary check. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly
B1861/64	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the driver side knee airbag squib circuit for 2 seconds. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly
B1862/64	When one of the following conditions is met: • The airbag sensor center receives a short circuit to ground signal in the knee airbag (Driver side squib) circuit for 0.5 seconds. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly
B1863/64	When one of the following conditions is met: • The airbag sensor center receives a short circuit to B+ signal in the knee airbag (Driver side squib) circuit for 0.5 seconds. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK DRIVER SIDE KNEE AIRBAG (DRIVER SIDE KNEE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the driver side knee airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

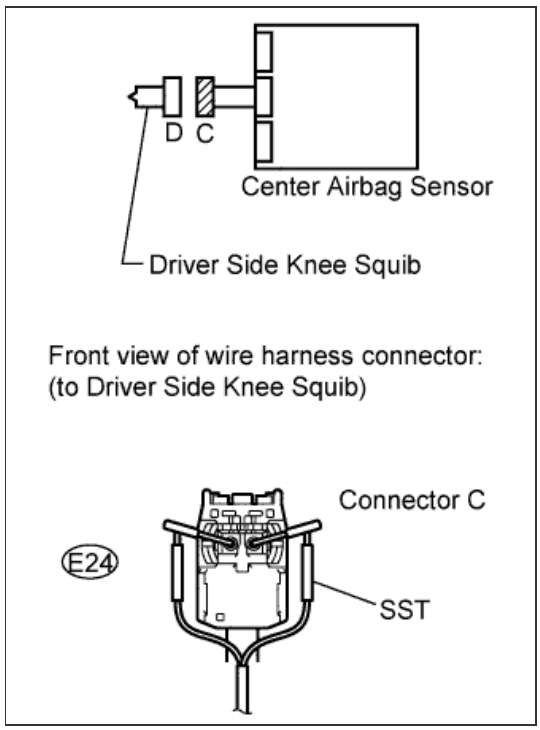
Never connect the tester to the driver side knee airbag (driver side knee squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1860, B1861, B1862 or B1863 is not output.

HINT:

Codes other than DTC B1860, B1861, B1862 and B1863 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE DRIVER SIDE KNEE AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the instrument panel wire connector (on the driver side knee airbag side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE

OK

3.CHECK INSTRUMENT PANEL WIRE (DRIVER SIDE KNEE AIRBAG CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E24-1 (DK+) - Body ground	Engine switch on (IG)	Below 1 V
E24-2 (DK-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

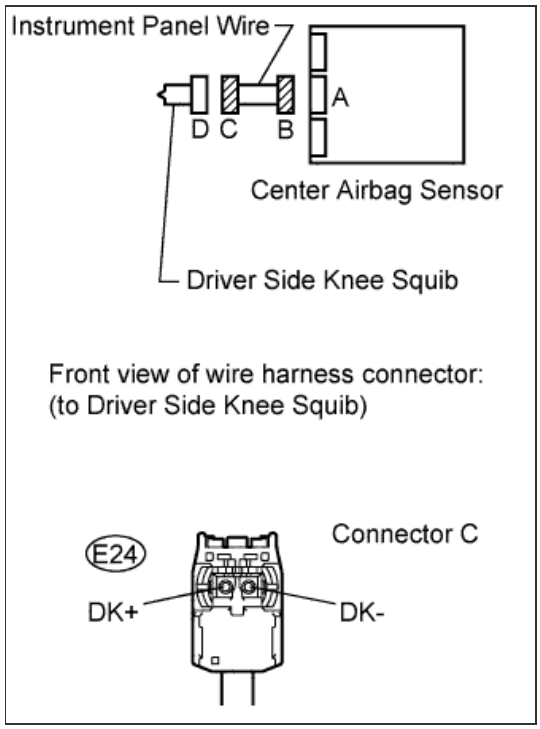
Tester Connection	Condition	Specified Condition
E24-1 (DK+) - E24-2 (DK-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E24-1 (DK+) - E24-2 (DK-)	Always	1 MΩ or higher
E24-1 (DK+) - Body ground	Always	1 MΩ or higher
E24-2 (DK-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE INSTRUMENT PANEL WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the driver side knee airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

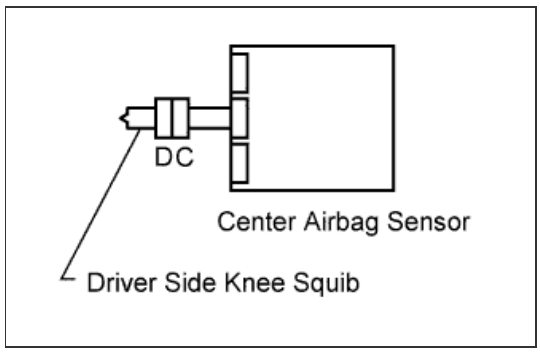
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1860, B1861, B1862 or B1863 is not output.

HINT:

Codes other than DTC B1860, B1861, B1862 and B1863 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1800/51 Short in Driver Side Squib Circuit

DTC B1801/51 Open in Driver Side Squib Circuit

DTC B1802/51 Short to GND in Driver Side Squib Circuit

DTC B1803/51 Short to B+ in Driver Side Squib Circuit

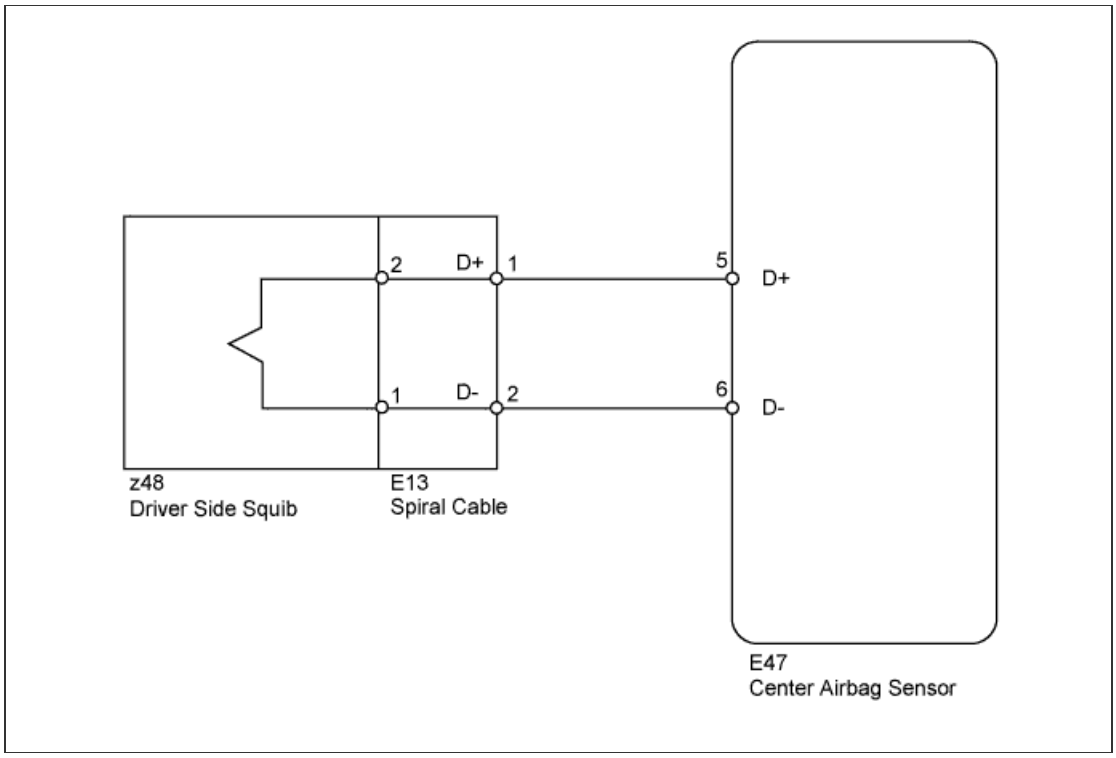
for Preparation Click here

DESCRIPTION

The driver side squib circuit consists of the center airbag sensor, the spiral cable, and the steering pad.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the driver side squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1800/51	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the driver side squib circuit during the primary check. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1801/51	When one of the following conditions is met: • The A center airbag sensor receives an open circuit signal in the driver side squib circuit for 2 seconds. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1802/51	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the driver side squib circuit for 0.5 seconds. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1803/51	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the driver side squib circuit for 0.5 seconds. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

- **When installing the spiral cable and steering wheel, be sure to adjust the spiral cable as it may break if the steering wheel is turned before adjusting the spiral cable (Click here).**
- **When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).**

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK STEERING PAD (DRIVER SIDE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the steering pad.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (orange connector).

CAUTION:

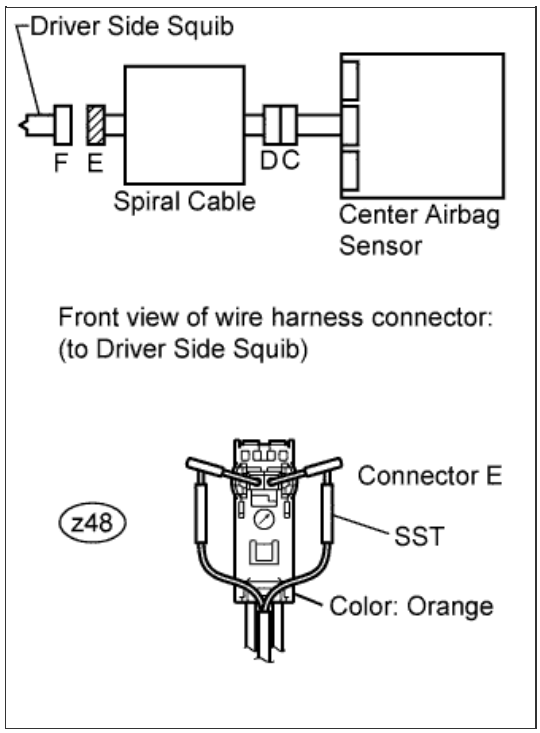
Never connect the tester to the steering pad (driver side squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1800, B1801, B1802 or B1803 is not output.

HINT:

Codes other than DTC B1800, B1801, B1802 and B1803 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE STEERING PAD (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the spiral cable connectors (on the steering pad side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE SPIRAL CABLE (Click here)

OK

3.CHECK DRIVER SIDE SQUIB CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
z48-1 - Body ground	Engine switch on (IG)	Below 1 V
z48-2 - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

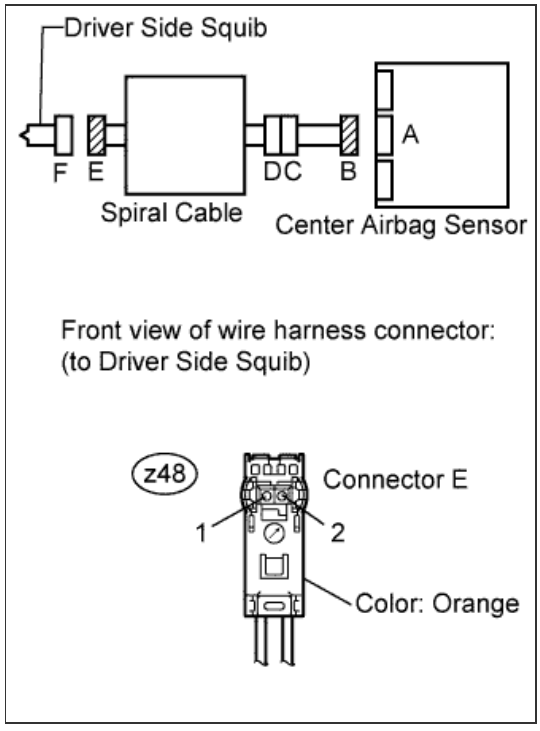
Tester Connection	Condition	Specified Condition
z48-1 - z48-2	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z48-1 - z48-2	Always	1 MΩ or higher
z48-1 - Body ground	Always	1 MΩ or higher
z48-2 - Body ground	Always	1 MΩ or higher



NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the steering pad and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

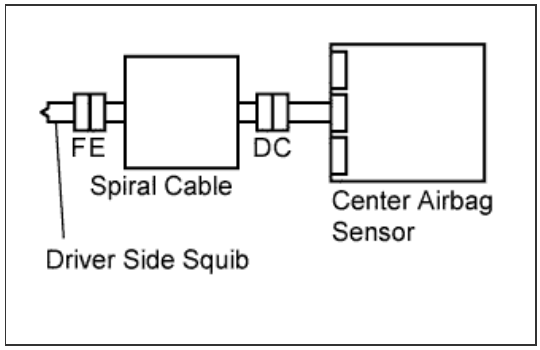
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1800, B1801, B1802 or B1803 is not output.

HINT:

Codes other than DTC B1800, B1801, B1802 and B1803 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - SPIRAL CABLE)

a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the spiral cable.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E13-1 (D+) - Body ground	Engine switch on (IG)	Below 1 V
E13-2 (D-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

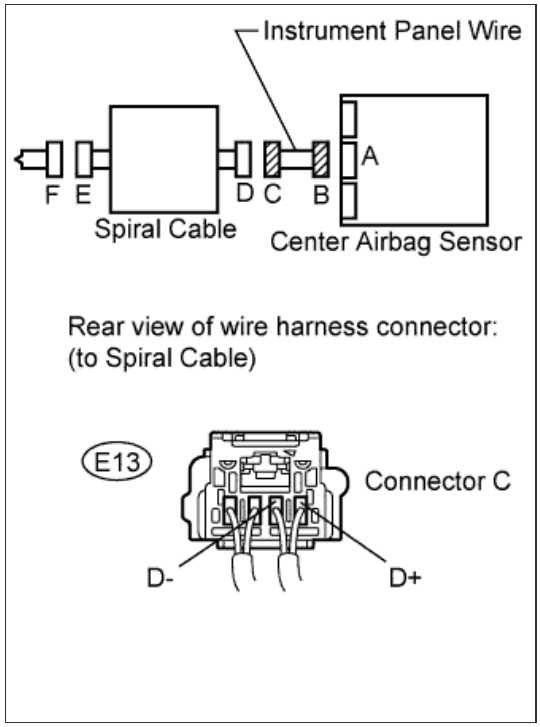
Tester Connection	Condition	Specified Condition
E13-1 (D+) - E13-2 (D-)	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-1 (D+) - E13-2		



(D-)	Always	1 MΩ or higher
E13-1 (D+) - Body ground	Always	1 MΩ or higher
E13-2 (D-) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK

REPLACE SPIRAL CABLE (Click here)

DTC B1860/64 Short in Driver Side Knee Airbag Squib Circuit

DTC B1861/64 Open in Driver Side Knee Airbag Squib Circuit

DTC B1862/64 Short to GND in Driver Side Knee Airbag Squib Circuit

DTC B1863/64 Short to B+ in Driver Side Knee Airbag Squib Circuit

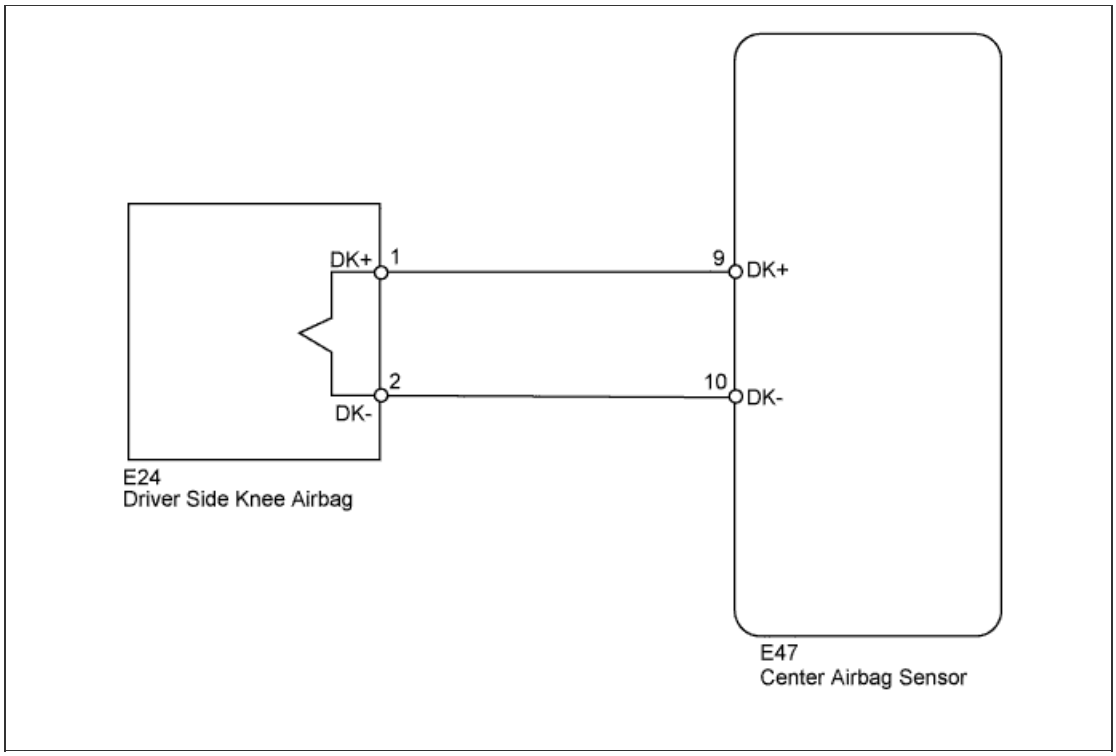
for Preparation Click here

DESCRIPTION

The driver side knee airbag squib circuit consists of the center airbag sensor and the driver side knee airbag.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the driver side knee airbag squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1860/64	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the driver side knee airbag squib circuit during the primary check. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly
B1861/64	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the driver side knee airbag squib circuit for 2 seconds. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly
B1862/64	When one of the following conditions is met: • The airbag sensor center receives a short circuit to ground signal in the knee airbag (Driver side squib) circuit for 0.5 seconds. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly
B1863/64	When one of the following conditions is met: • The airbag sensor center receives a short circuit to B+ signal in the knee airbag (Driver side squib) circuit for 0.5 seconds. • A driver side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Driver side knee airbag assembly (Driver side knee squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK DRIVER SIDE KNEE AIRBAG (DRIVER SIDE KNEE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the driver side knee airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

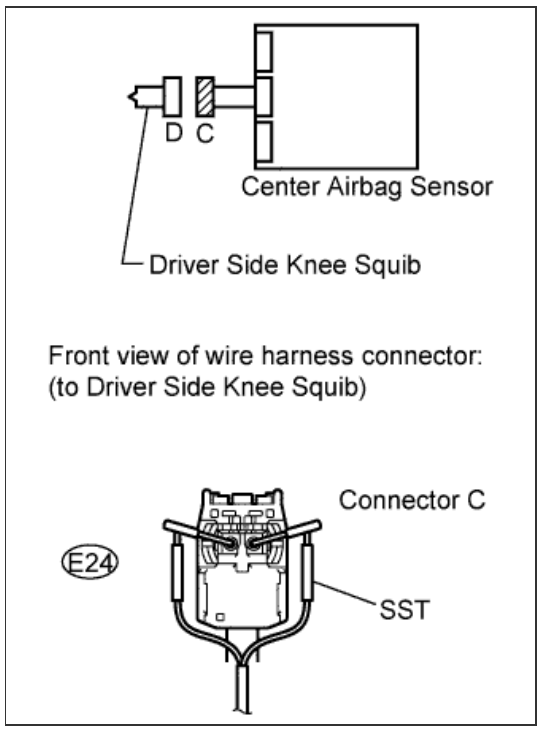
Never connect the tester to the driver side knee airbag (driver side knee squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1860, B1861, B1862 or B1863 is not output.

HINT:

Codes other than DTC B1860, B1861, B1862 and B1863 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE DRIVER SIDE KNEE AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the instrument panel wire connector (on the driver side knee airbag side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE

OK

3.CHECK INSTRUMENT PANEL WIRE (DRIVER SIDE KNEE AIRBAG CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E24-1 (DK+) - Body ground	Engine switch on (IG)	Below 1 V
E24-2 (DK-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

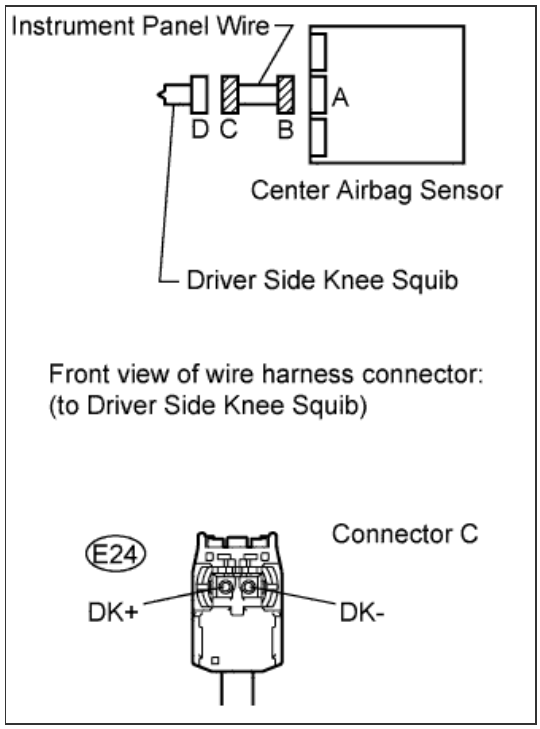
Tester Connection	Condition	Specified Condition
E24-1 (DK+) - E24-2 (DK-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E24-1 (DK+) - E24-2 (DK-)	Always	1 MΩ or higher
E24-1 (DK+) - Body ground	Always	1 MΩ or higher
E24-2 (DK-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE INSTRUMENT PANEL WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the driver side knee airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

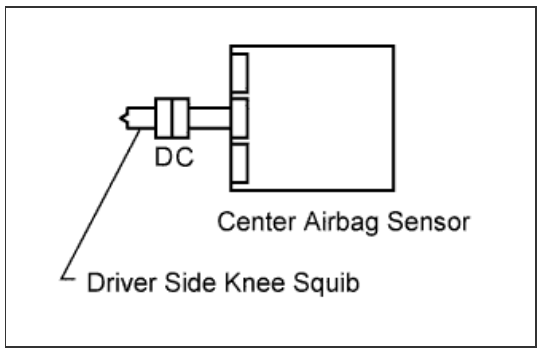
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1860, B1861, B1862 or B1863 is not output.

HINT:

Codes other than DTC B1860, B1861, B1862 and B1863 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1800/51 Short in Driver Side Squib Circuit

DTC B1801/51 Open in Driver Side Squib Circuit

DTC B1802/51 Short to GND in Driver Side Squib Circuit

DTC B1803/51 Short to B+ in Driver Side Squib Circuit

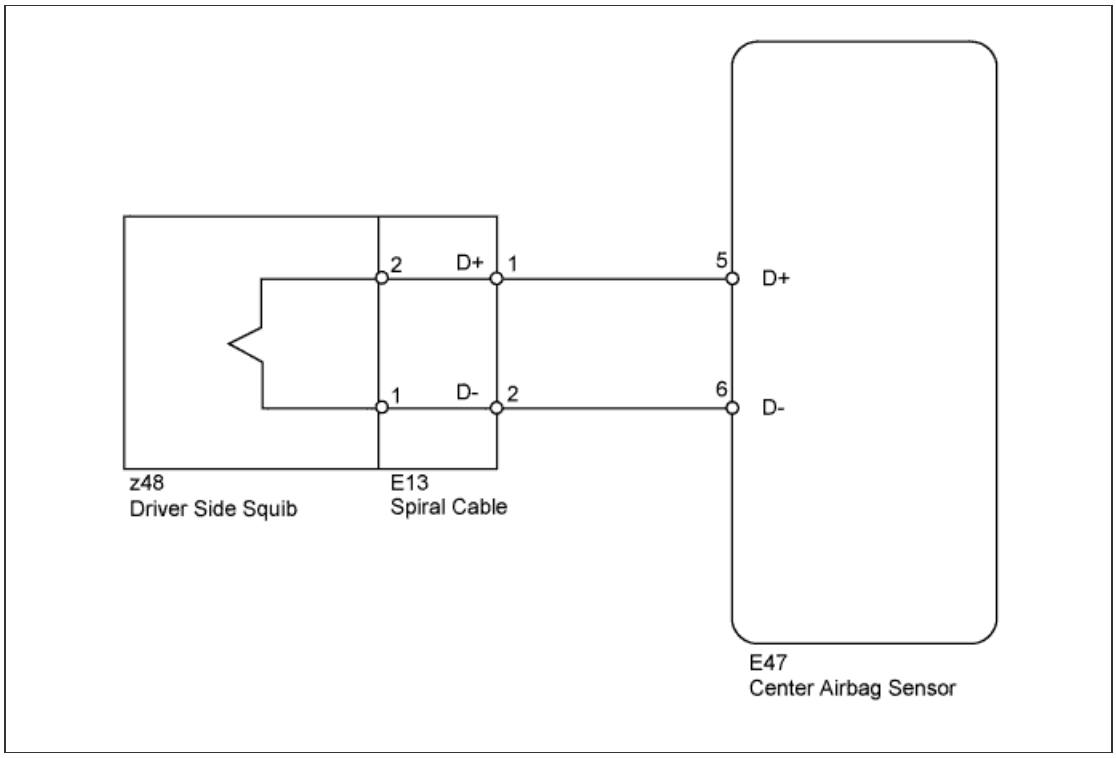
for Preparation Click here

DESCRIPTION

The driver side squib circuit consists of the center airbag sensor, the spiral cable, and the steering pad.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the driver side squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1800/51	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the driver side squib circuit during the primary check. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1801/51	When one of the following conditions is met: • The A center airbag sensor receives an open circuit signal in the driver side squib circuit for 2 seconds. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1802/51	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the driver side squib circuit for 0.5 seconds. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1803/51	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the driver side squib circuit for 0.5 seconds. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

- **When installing the spiral cable and steering wheel, be sure to adjust the spiral cable as it may break if the steering wheel is turned before adjusting the spiral cable (Click here).**
- **When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).**

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK STEERING PAD (DRIVER SIDE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the steering pad.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (orange connector).

CAUTION:

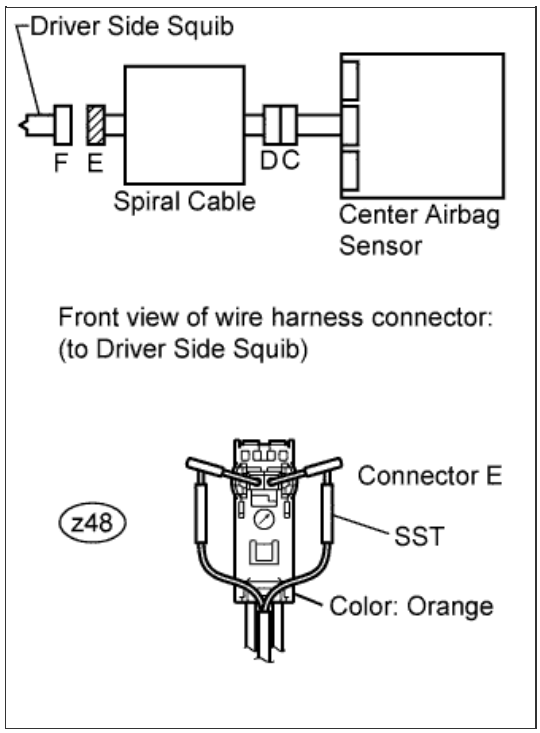
Never connect the tester to the steering pad (driver side squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1800, B1801, B1802 or B1803 is not output.

HINT:

Codes other than DTC B1800, B1801, B1802 and B1803 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE STEERING PAD (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the spiral cable connectors (on the steering pad side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE SPIRAL CABLE (Click here)

OK

3.CHECK DRIVER SIDE SQUIB CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
z48-1 - Body ground	Engine switch on (IG)	Below 1 V
z48-2 - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

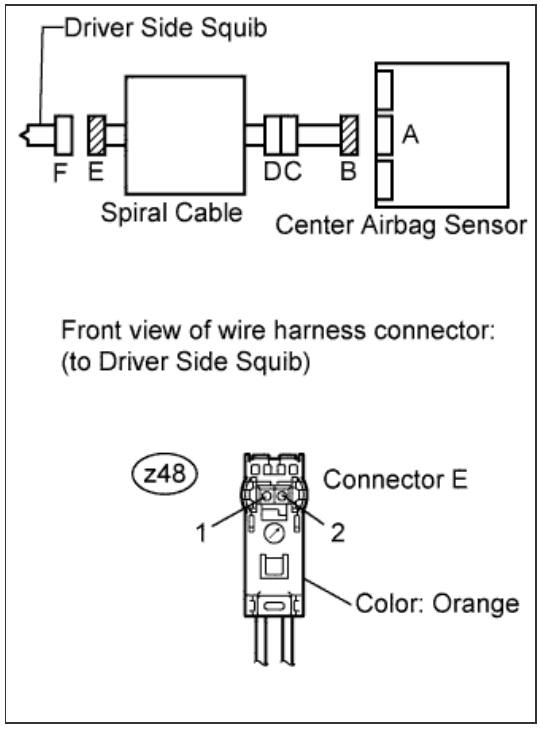
Tester Connection	Condition	Specified Condition
z48-1 - z48-2	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z48-1 - z48-2	Always	1 MΩ or higher
z48-1 - Body ground	Always	1 MΩ or higher
z48-2 - Body ground	Always	1 MΩ or higher



NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the steering pad and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

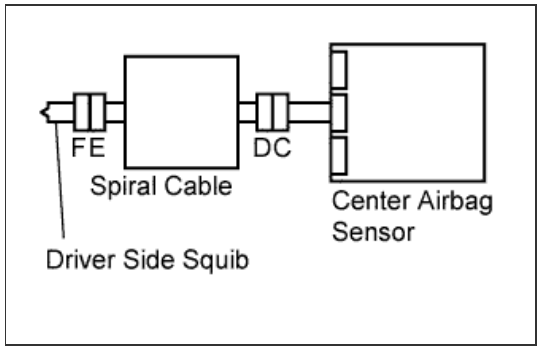
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1800, B1801, B1802 or B1803 is not output.

HINT:

Codes other than DTC B1800, B1801, B1802 and B1803 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - SPIRAL CABLE)

a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the spiral cable.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E13-1 (D+) - Body ground	Engine switch on (IG)	Below 1 V
E13-2 (D-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

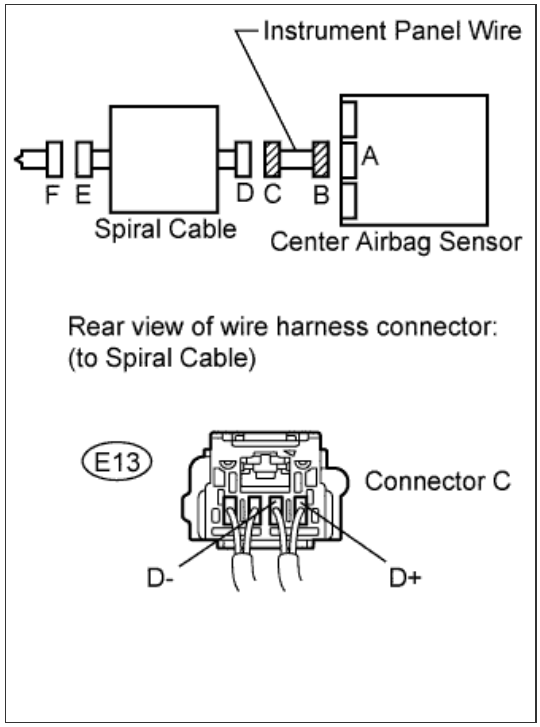
Tester Connection	Condition	Specified Condition
E13-1 (D+) - E13-2 (D-)	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-1 (D+) - E13-2		



(D-)	Always	1 MΩ or higher
E13-1 (D+) - Body ground	Always	1 MΩ or higher
E13-2 (D-) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK

REPLACE SPIRAL CABLE (Click here)

DTC B1865/65 Short in Front Passenger Side Knee Airbag Squib Circuit

DTC B1866/65 Open in Front Passenger Side Knee Airbag Squib Circuit

DTC B1867/65 Short to GND in Front Passenger Side Knee Airbag Squib Circuit

DTC B1868/65 Short to B+ in Front Passenger Side Knee Airbag Squib Circuit

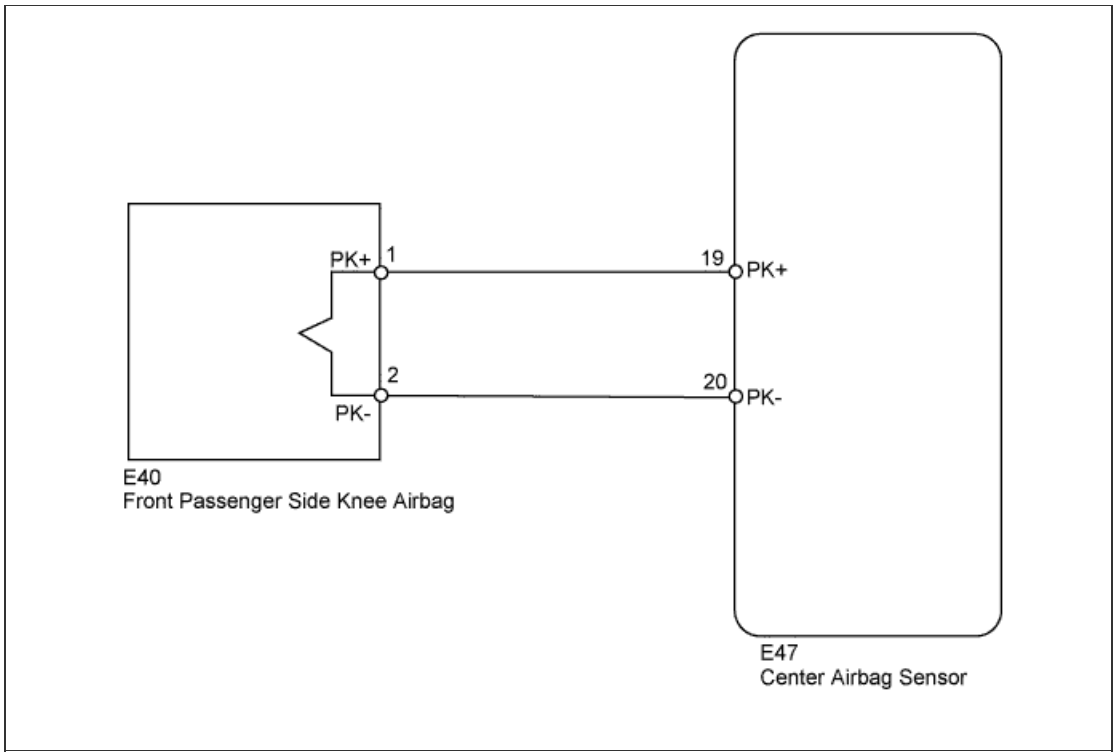
for Preparation Click here

DESCRIPTION

The front passenger side knee airbag squib circuit consists of the center airbag sensor and the front passenger side knee airbag.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front passenger side knee airbag squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1865/65	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front passenger side knee airbag squib circuit during the primary check. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly
B1866/65	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front passenger side knee airbag squib circuit for 2 seconds. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly
B1867/65	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front passenger side knee airbag squib circuit for 0.5 seconds. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly
B1868/65	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front passenger side knee airbag squib circuit for 0.5 seconds. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT PASSENGER SIDE KNEE AIRBAG (FRONT PASSENGER SIDE KNEE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the front passenger side knee airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

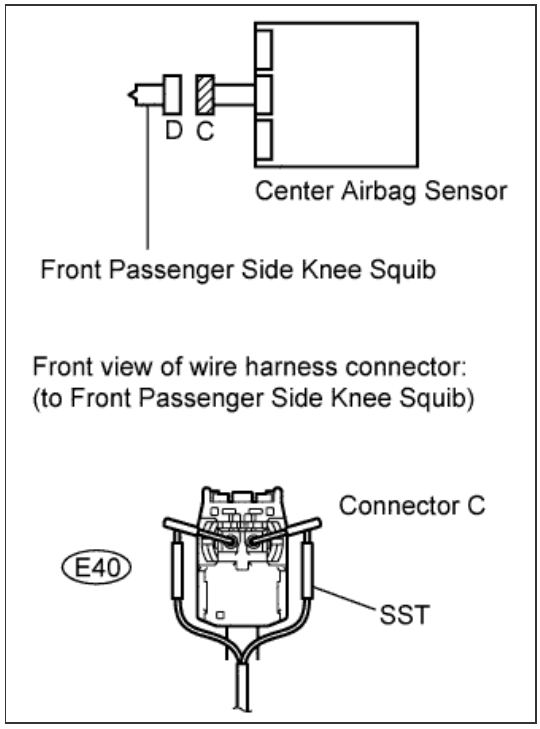
Never connect the tester to the front passenger side knee airbag (front passenger side knee squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1865, B1866, B1867 or B1868 is not output.

HINT:

Codes other than DTC B1865, B1866, B1867 and B1868 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the instrument panel wire connector (on the front passenger side knee airbag side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE

OK

3.CHECK INSTRUMENT PANEL WIRE (FRONT PASSENGER KNEE SQUIB CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E40-1 (PK+) - Body ground	Engine switch on (IG)	Below 1 V
E40-2 (PK-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

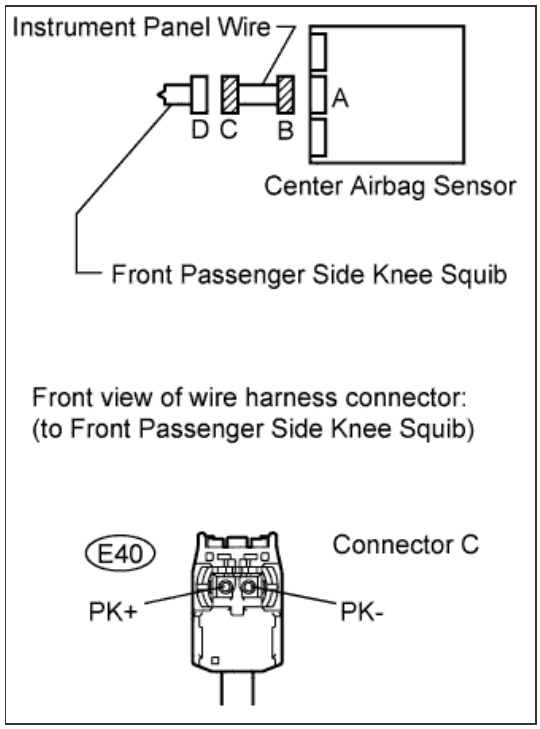
Tester Connection	Condition	Specified Condition
E40-1 (PK+) - E40-2 (PK-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E40-1 (PK+) - E40-2 (PK-)	Always	1 MΩ or higher
E40-1 (PK+) - Body ground	Always	1 MΩ or higher
E40-2 (PK-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE INSTRUMENT PANEL WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front passenger side knee airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

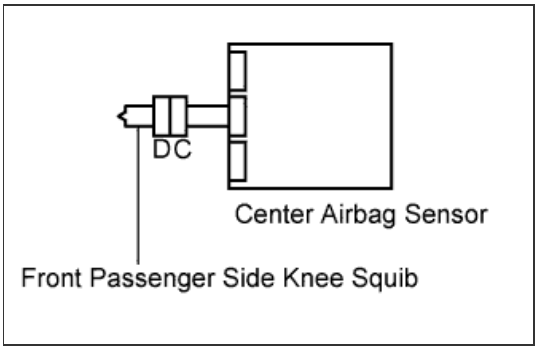
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1865, B1866, B1867 or B1868 is not output.

HINT:

Codes other than DTC B1865, B1866, B1867 and B1868 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1800/51 Short in Driver Side Squib Circuit

DTC B1801/51 Open in Driver Side Squib Circuit

DTC B1802/51 Short to GND in Driver Side Squib Circuit

DTC B1803/51 Short to B+ in Driver Side Squib Circuit

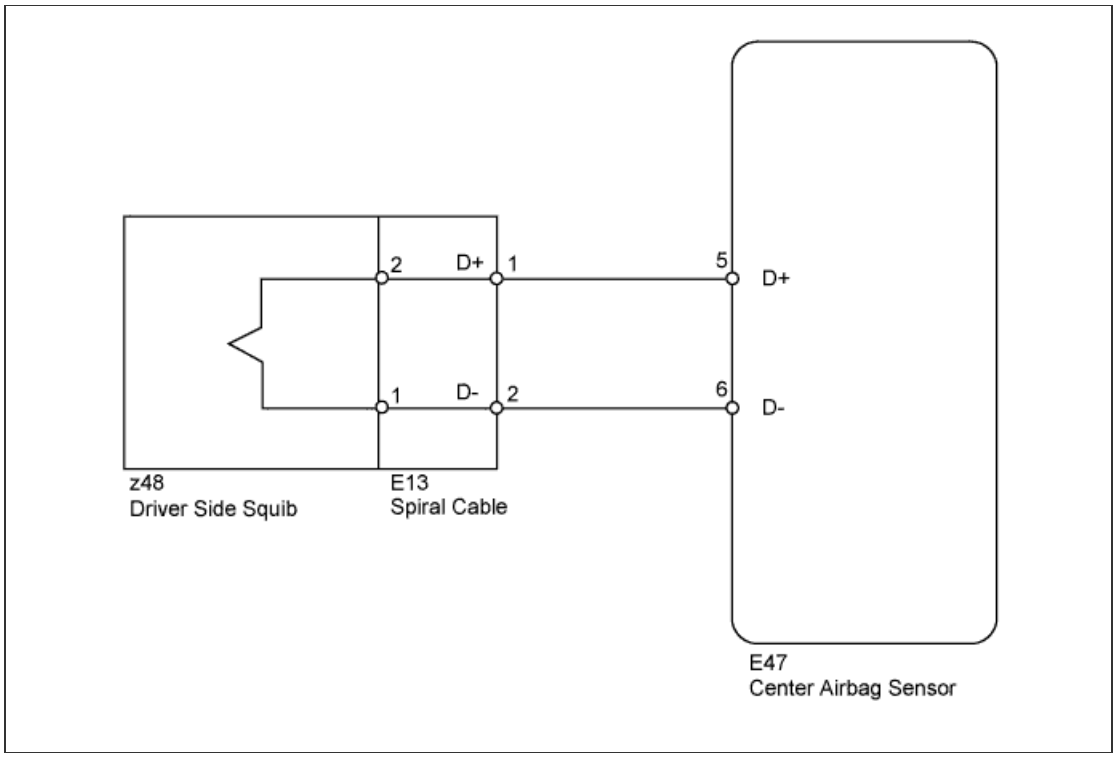
for Preparation Click here

DESCRIPTION

The driver side squib circuit consists of the center airbag sensor, the spiral cable, and the steering pad.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the driver side squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1800/51	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the driver side squib circuit during the primary check. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1801/51	When one of the following conditions is met: • The A center airbag sensor receives an open circuit signal in the driver side squib circuit for 2 seconds. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1802/51	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the driver side squib circuit for 0.5 seconds. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly
B1803/51	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the driver side squib circuit for 0.5 seconds. • A driver side squib malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

- **When installing the spiral cable and steering wheel, be sure to adjust the spiral cable as it may break if the steering wheel is turned before adjusting the spiral cable (Click here).**
- **When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).**

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK STEERING PAD (DRIVER SIDE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the steering pad.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (orange connector).

CAUTION:

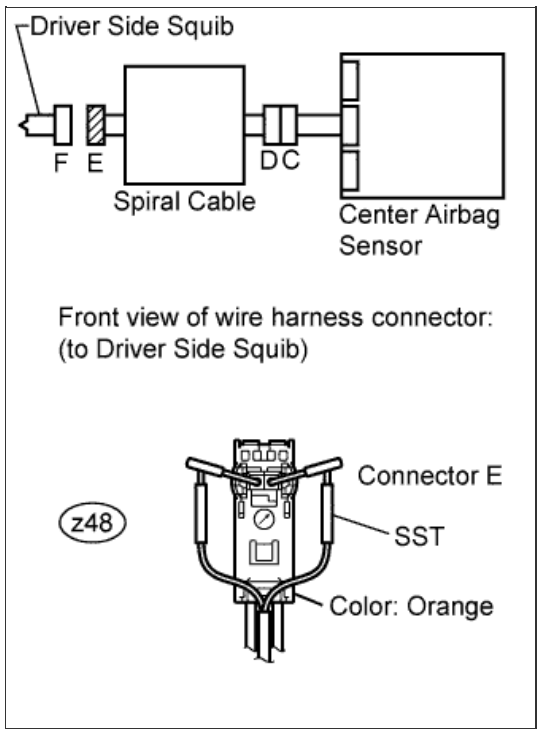
Never connect the tester to the steering pad (driver side squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1800, B1801, B1802 or B1803 is not output.

HINT:

Codes other than DTC B1800, B1801, B1802 and B1803 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE STEERING PAD (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the spiral cable connectors (on the steering pad side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE SPIRAL CABLE (Click here)

OK

3.CHECK DRIVER SIDE SQUIB CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
z48-1 - Body ground	Engine switch on (IG)	Below 1 V
z48-2 - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

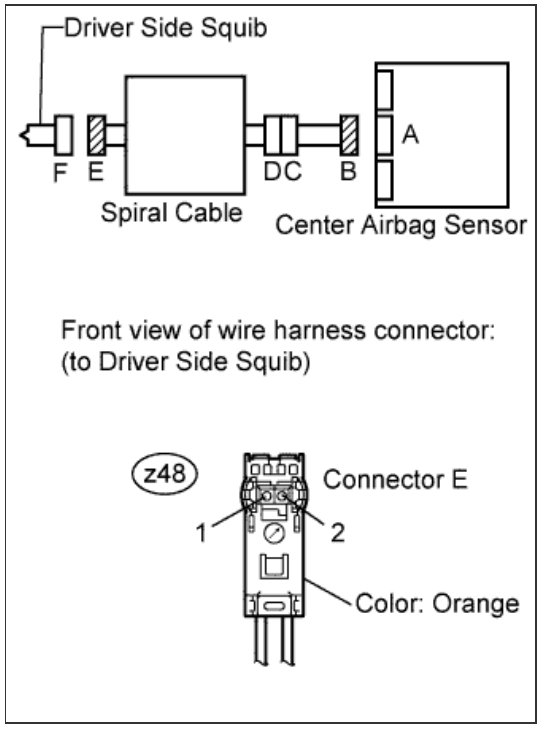
Tester Connection	Condition	Specified Condition
z48-1 - z48-2	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z48-1 - z48-2	Always	1 MΩ or higher
z48-1 - Body ground	Always	1 MΩ or higher
z48-2 - Body ground	Always	1 MΩ or higher



NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the steering pad and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

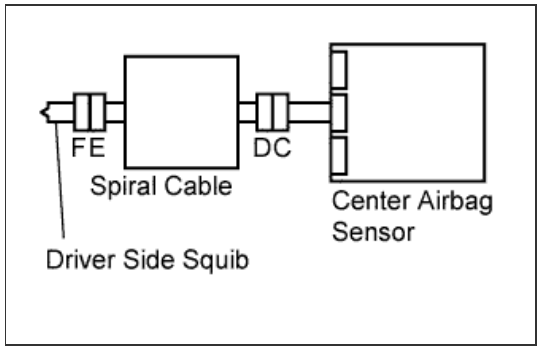
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1800, B1801, B1802 or B1803 is not output.

HINT:

Codes other than DTC B1800, B1801, B1802 and B1803 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - SPIRAL CABLE)

a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the spiral cable.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E13-1 (D+) - Body ground	Engine switch on (IG)	Below 1 V
E13-2 (D-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

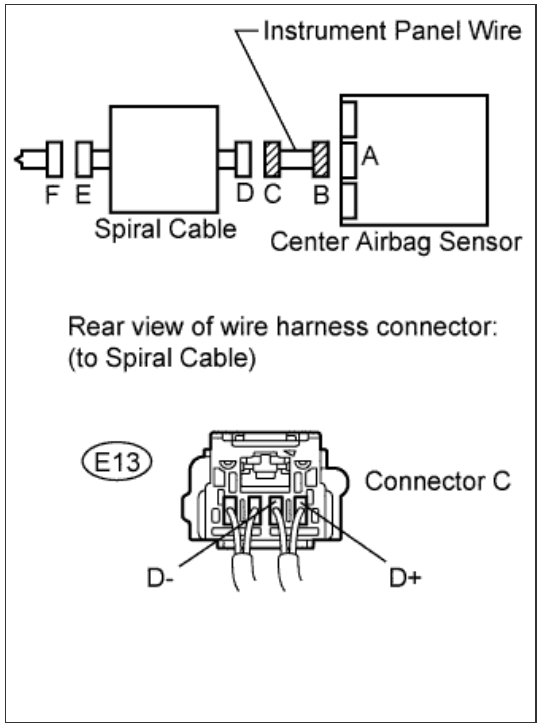
Tester Connection	Condition	Specified Condition
E13-1 (D+) - E13-2 (D-)	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-1 (D+) - E13-2		



(D-)	Always	1 MΩ or higher
E13-1 (D+) - Body ground	Always	1 MΩ or higher
E13-2 (D-) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK

REPLACE SPIRAL CABLE (Click here)

DTC B1865/65 Short in Front Passenger Side Knee Airbag Squib Circuit

DTC B1866/65 Open in Front Passenger Side Knee Airbag Squib Circuit

DTC B1867/65 Short to GND in Front Passenger Side Knee Airbag Squib Circuit

DTC B1868/65 Short to B+ in Front Passenger Side Knee Airbag Squib Circuit

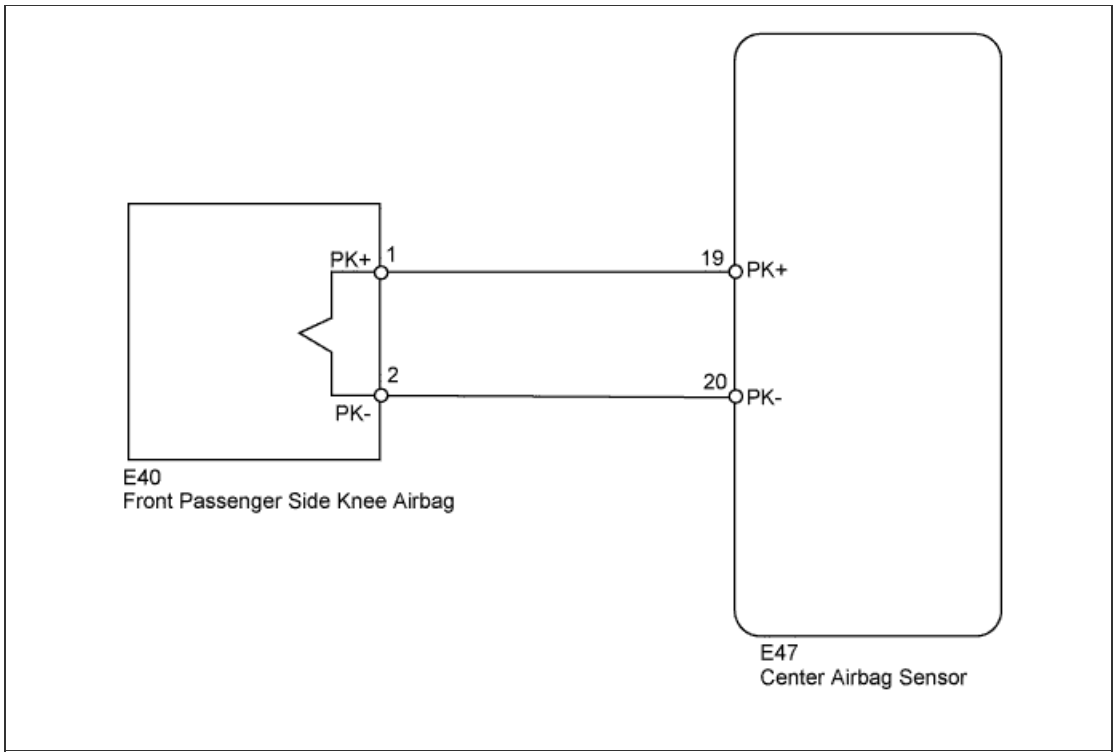
for Preparation Click here

DESCRIPTION

The front passenger side knee airbag squib circuit consists of the center airbag sensor and the front passenger side knee airbag.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front passenger side knee airbag squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1865/65	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front passenger side knee airbag squib circuit during the primary check. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly
B1866/65	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front passenger side knee airbag squib circuit for 2 seconds. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly
B1867/65	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front passenger side knee airbag squib circuit for 0.5 seconds. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly
B1868/65	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front passenger side knee airbag squib circuit for 0.5 seconds. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT PASSENGER SIDE KNEE AIRBAG (FRONT PASSENGER SIDE KNEE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the front passenger side knee airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

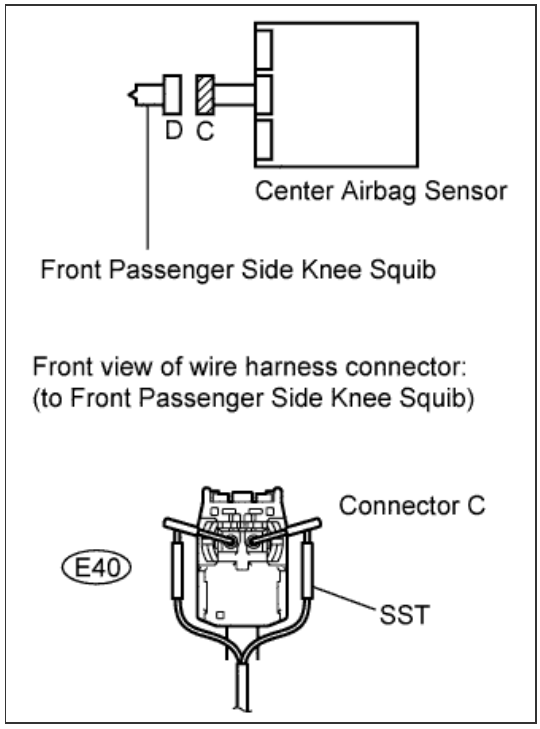
Never connect the tester to the front passenger side knee airbag (front passenger side knee squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1865, B1866, B1867 or B1868 is not output.

HINT:

Codes other than DTC B1865, B1866, B1867 and B1868 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the instrument panel wire connector (on the front passenger side knee airbag side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE

OK

3.CHECK INSTRUMENT PANEL WIRE (FRONT PASSENGER KNEE SQUIB CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E40-1 (PK+) - Body ground	Engine switch on (IG)	Below 1 V
E40-2 (PK-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

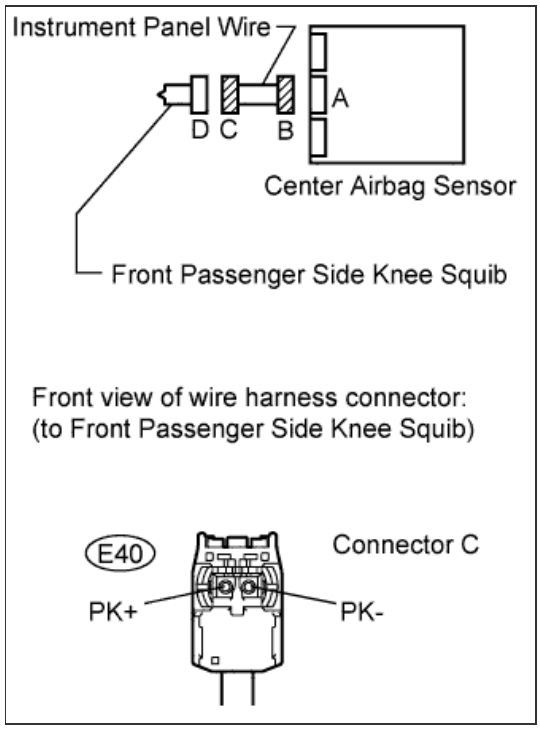
Tester Connection	Condition	Specified Condition
E40-1 (PK+) - E40-2 (PK-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E40-1 (PK+) - E40-2 (PK-)	Always	1 MΩ or higher
E40-1 (PK+) - Body ground	Always	1 MΩ or higher
E40-2 (PK-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE INSTRUMENT PANEL WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front passenger side knee airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

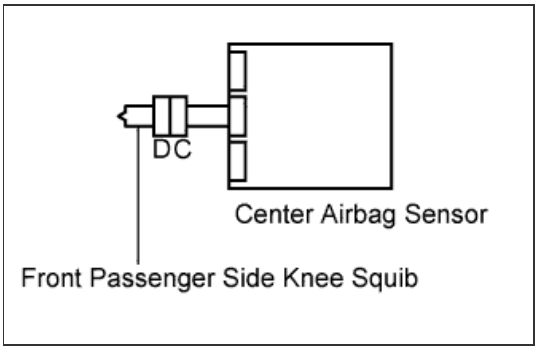
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1865, B1866, B1867 or B1868 is not output.

HINT:

Codes other than DTC B1865, B1866, B1867 and B1868 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1805/52 Short in Front Passenger Side Squib Circuit

DTC B1806/52 Open in Front Passenger Side Squib Circuit

DTC B1807/52 Short to GND in Front Passenger Side Squib Circuit

DTC B1808/52 Short to B+ in Front Passenger Side Squib Circuit

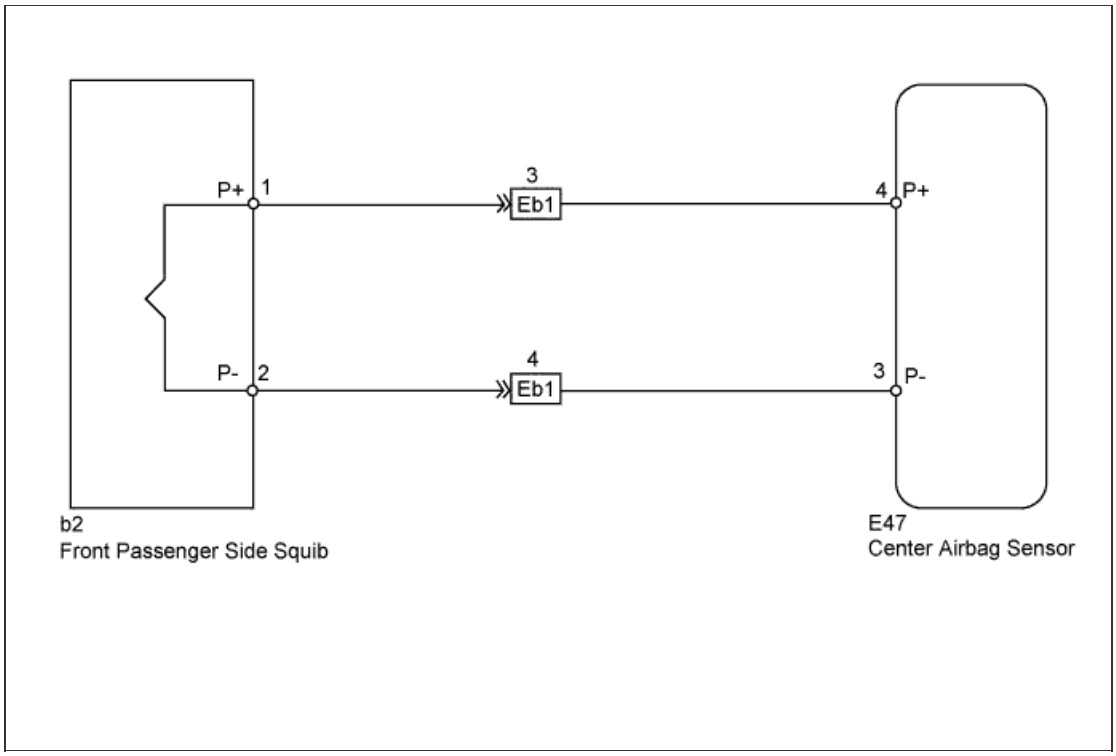
for Preparation Click here

DESCRIPTION

The front passenger side squib circuit consists of the center airbag sensor and the front passenger airbag.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front passenger side squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1805/52	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front passenger side squib circuit during the primary check. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1806/52	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front passenger side squib circuit for 2 seconds. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1807/52	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front passenger side squib circuit for 0.5 seconds. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1808/52	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front passenger side squib circuit for 0.5 seconds. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT PASSENGER AIRBAG (FRONT PASSENGER SIDE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front passenger airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (orange connector).

CAUTION:

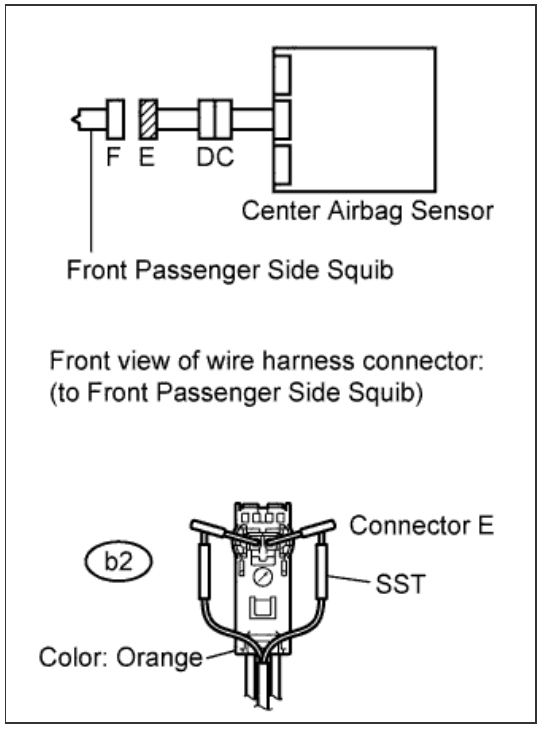
Never connect the tester to the front passenger airbag (front passenger side squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1805, B1806, B1807 or B1808 is not output.

HINT:

Codes other than DTC B1805, B1806, B1807 and B1808 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT PASSENGER AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the instrument panel wire connectors (on the front passenger airbag side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

3.CHECK FRONT PASSENGER SIDE SQUIB CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
b2-1 (P+) - Body ground	Engine switch on (IG)	Below 1 V
b2-2 (P-) - Body ground	Engine switch on (IG)	Below 1 V

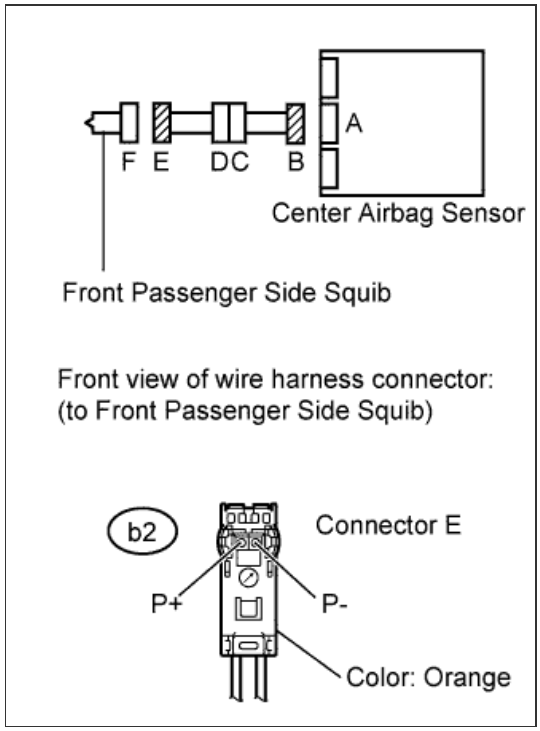
d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
b2-1 (P+) - b2-2 (P-)	Always	Below 1 Ω



g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

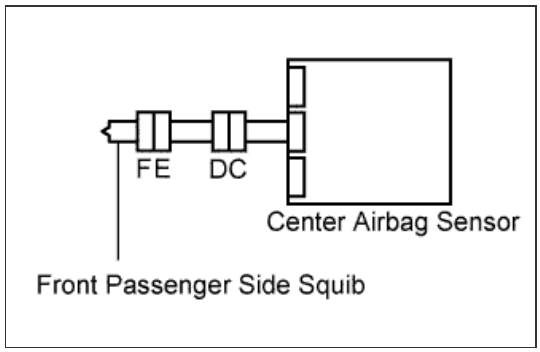
Tester Connection	Condition	Specified Condition
b2-1 (P+) - b2-2 (P-)	Always	1 MΩ or higher
b2-1 (P+) - Body		

ground	Always	1 MΩ or higher
b2-2 (P-) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the front passenger airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1805, B1806, B1807 or B1808 is not output.

HINT:

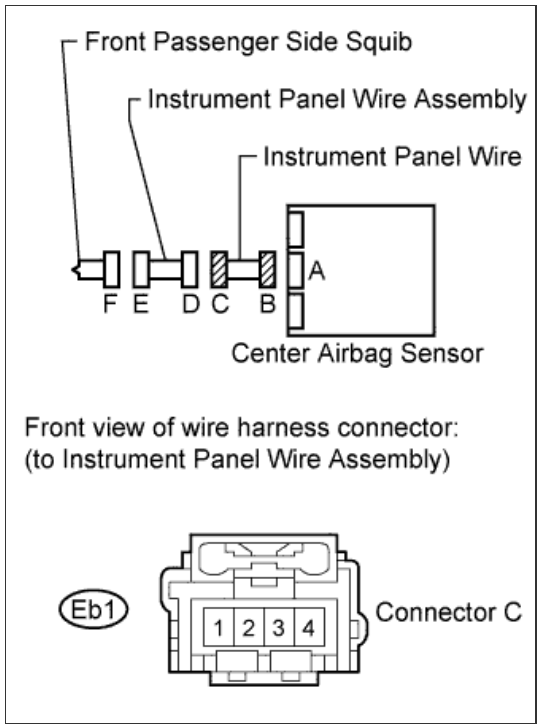
Codes other than DTC B1805, B1806, B1807 and B1808 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - INSTRUMENT PANEL WIRE ASSEMBLY)



a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the instrument panel wire assembly.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
Eb1-3 - Body ground	Engine switch on (IG)	Below 1 V
Eb1-4 - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-3 - Eb1-4	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-3 - Eb1-4	Always	1 MΩ or higher
Eb1-3 - Body ground	Always	1 MΩ or higher
Eb1-4 - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

DTC B1865/65 Short in Front Passenger Side Knee Airbag Squib Circuit

DTC B1866/65 Open in Front Passenger Side Knee Airbag Squib Circuit

DTC B1867/65 Short to GND in Front Passenger Side Knee Airbag Squib Circuit

DTC B1868/65 Short to B+ in Front Passenger Side Knee Airbag Squib Circuit

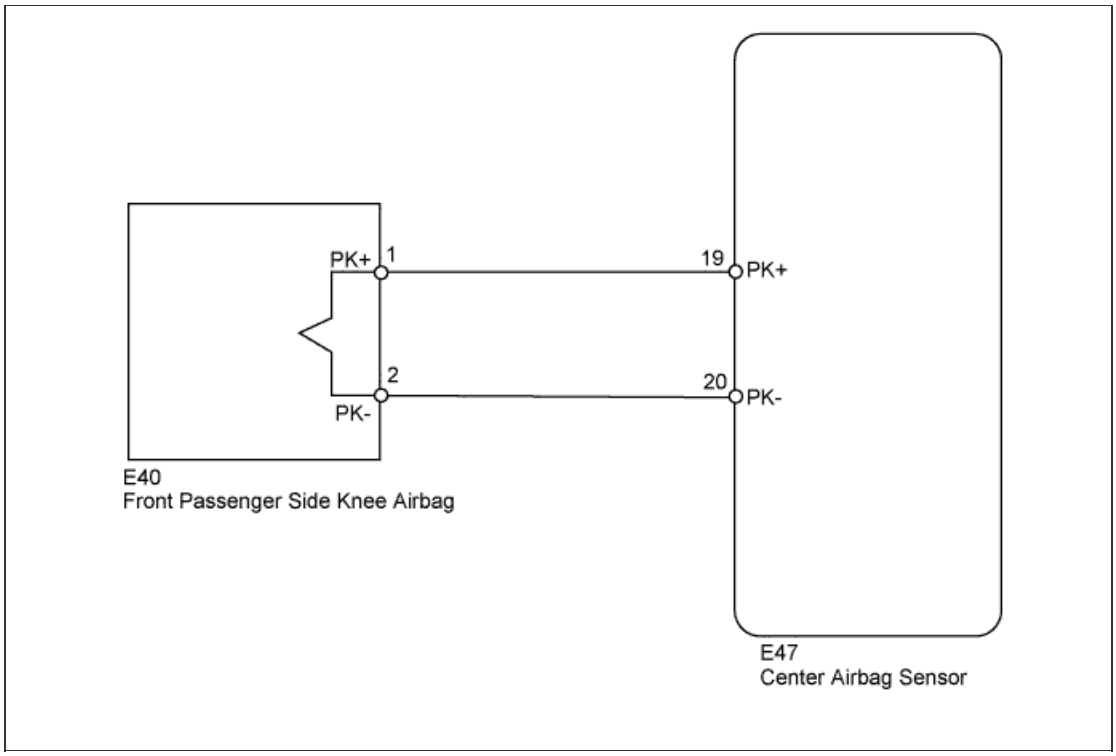
for Preparation Click here

DESCRIPTION

The front passenger side knee airbag squib circuit consists of the center airbag sensor and the front passenger side knee airbag.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front passenger side knee airbag squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1865/65	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front passenger side knee airbag squib circuit during the primary check. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly
B1866/65	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front passenger side knee airbag squib circuit for 2 seconds. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly
B1867/65	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front passenger side knee airbag squib circuit for 0.5 seconds. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly
B1868/65	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front passenger side knee airbag squib circuit for 0.5 seconds. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT PASSENGER SIDE KNEE AIRBAG (FRONT PASSENGER SIDE KNEE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the front passenger side knee airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

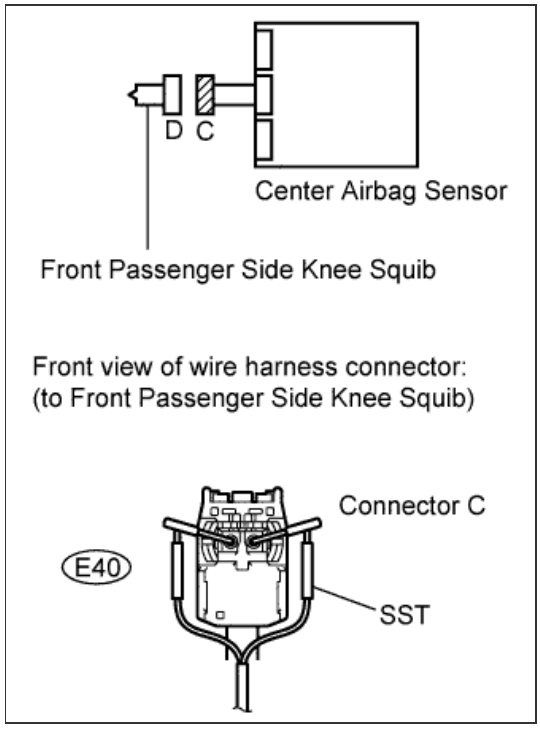
Never connect the tester to the front passenger side knee airbag (front passenger side knee squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1865, B1866, B1867 or B1868 is not output.

HINT:

Codes other than DTC B1865, B1866, B1867 and B1868 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the instrument panel wire connector (on the front passenger side knee airbag side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE

OK

3.CHECK INSTRUMENT PANEL WIRE (FRONT PASSENGER KNEE SQUIB CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E40-1 (PK+) - Body ground	Engine switch on (IG)	Below 1 V
E40-2 (PK-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

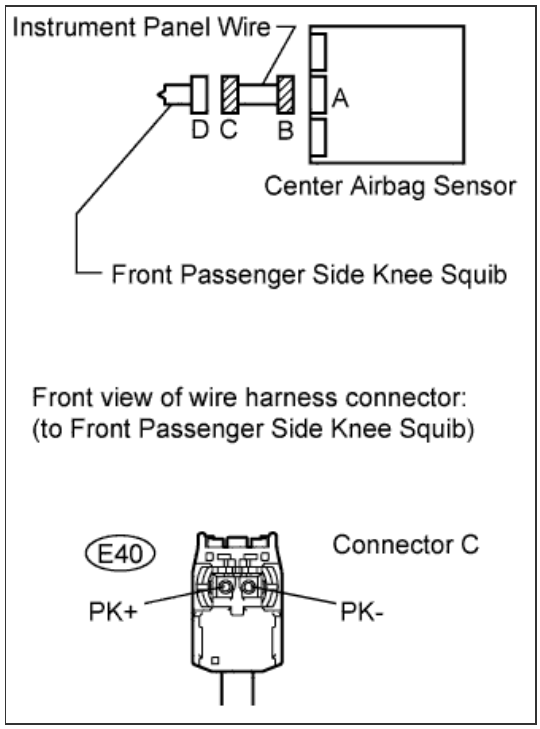
Tester Connection	Condition	Specified Condition
E40-1 (PK+) - E40-2 (PK-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E40-1 (PK+) - E40-2 (PK-)	Always	1 MΩ or higher
E40-1 (PK+) - Body ground	Always	1 MΩ or higher
E40-2 (PK-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE INSTRUMENT PANEL WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front passenger side knee airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

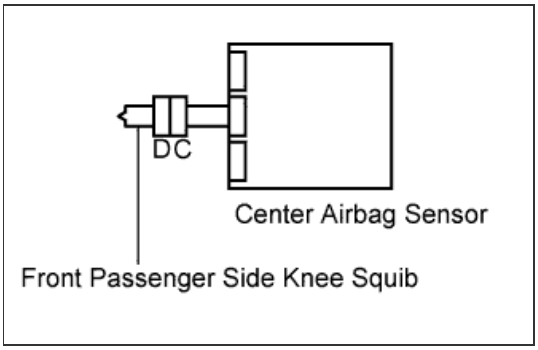
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1865, B1866, B1867 or B1868 is not output.

HINT:

Codes other than DTC B1865, B1866, B1867 and B1868 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1805/52 Short in Front Passenger Side Squib Circuit

DTC B1806/52 Open in Front Passenger Side Squib Circuit

DTC B1807/52 Short to GND in Front Passenger Side Squib Circuit

DTC B1808/52 Short to B+ in Front Passenger Side Squib Circuit

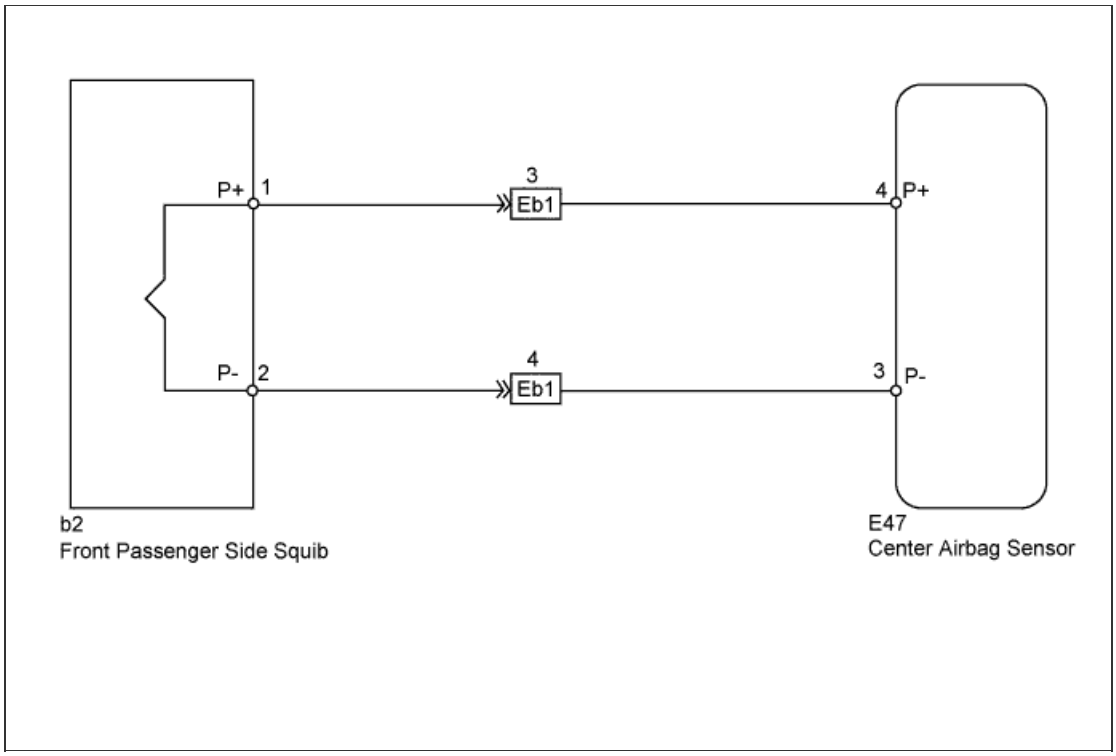
for Preparation Click here

DESCRIPTION

The front passenger side squib circuit consists of the center airbag sensor and the front passenger airbag.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front passenger side squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1805/52	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front passenger side squib circuit during the primary check. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1806/52	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front passenger side squib circuit for 2 seconds. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1807/52	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front passenger side squib circuit for 0.5 seconds. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1808/52	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front passenger side squib circuit for 0.5 seconds. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT PASSENGER AIRBAG (FRONT PASSENGER SIDE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front passenger airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (orange connector).

CAUTION:

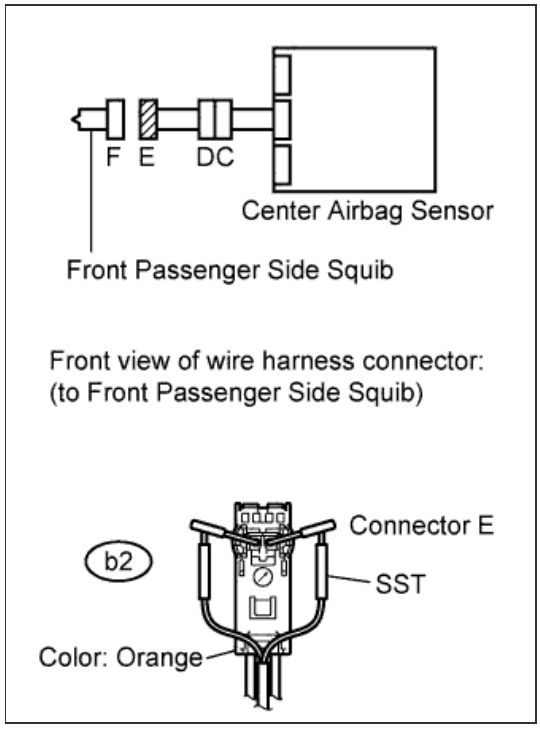
Never connect the tester to the front passenger airbag (front passenger side squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1805, B1806, B1807 or B1808 is not output.

HINT:

Codes other than DTC B1805, B1806, B1807 and B1808 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT PASSENGER AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the instrument panel wire connectors (on the front passenger airbag side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

3.CHECK FRONT PASSENGER SIDE SQUIB CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
b2-1 (P+) - Body ground	Engine switch on (IG)	Below 1 V
b2-2 (P-) - Body ground	Engine switch on (IG)	Below 1 V

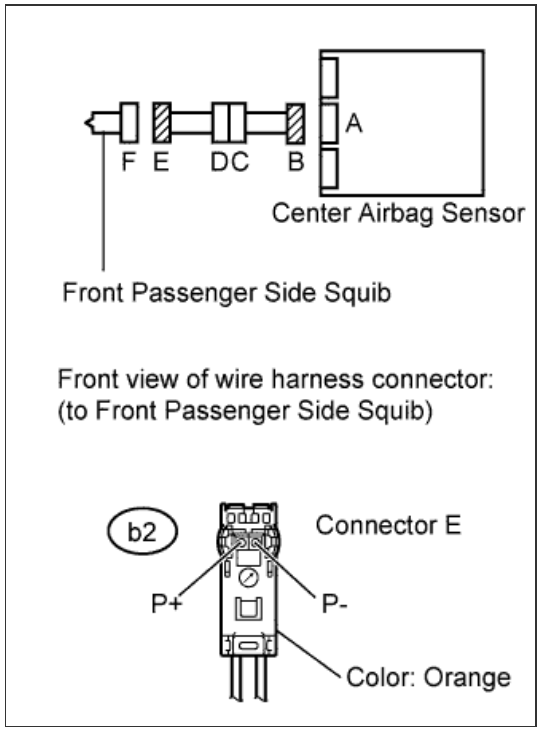
d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
b2-1 (P+) - b2-2 (P-)	Always	Below 1 Ω



g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

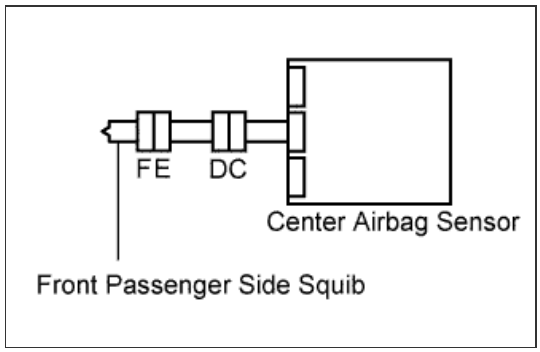
Tester Connection	Condition	Specified Condition
b2-1 (P+) - b2-2 (P-)	Always	1 MΩ or higher
b2-1 (P+) - Body		

ground	Always	1 MΩ or higher
b2-2 (P-) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the front passenger airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1805, B1806, B1807 or B1808 is not output.

HINT:

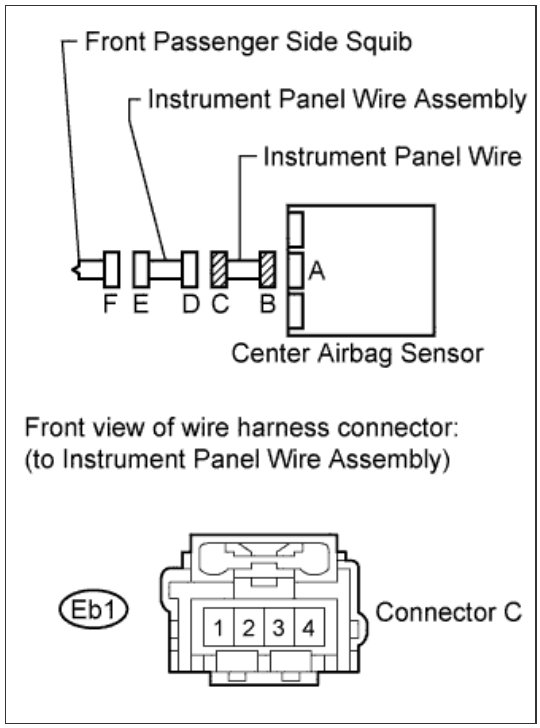
Codes other than DTC B1805, B1806, B1807 and B1808 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - INSTRUMENT PANEL WIRE ASSEMBLY)



a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the instrument panel wire assembly.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
Eb1-3 - Body ground	Engine switch on (IG)	Below 1 V
Eb1-4 - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-3 - Eb1-4	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-3 - Eb1-4	Always	1 MΩ or higher
Eb1-3 - Body ground	Always	1 MΩ or higher
Eb1-4 - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

DTC B1865/65 Short in Front Passenger Side Knee Airbag Squib Circuit

DTC B1866/65 Open in Front Passenger Side Knee Airbag Squib Circuit

DTC B1867/65 Short to GND in Front Passenger Side Knee Airbag Squib Circuit

DTC B1868/65 Short to B+ in Front Passenger Side Knee Airbag Squib Circuit

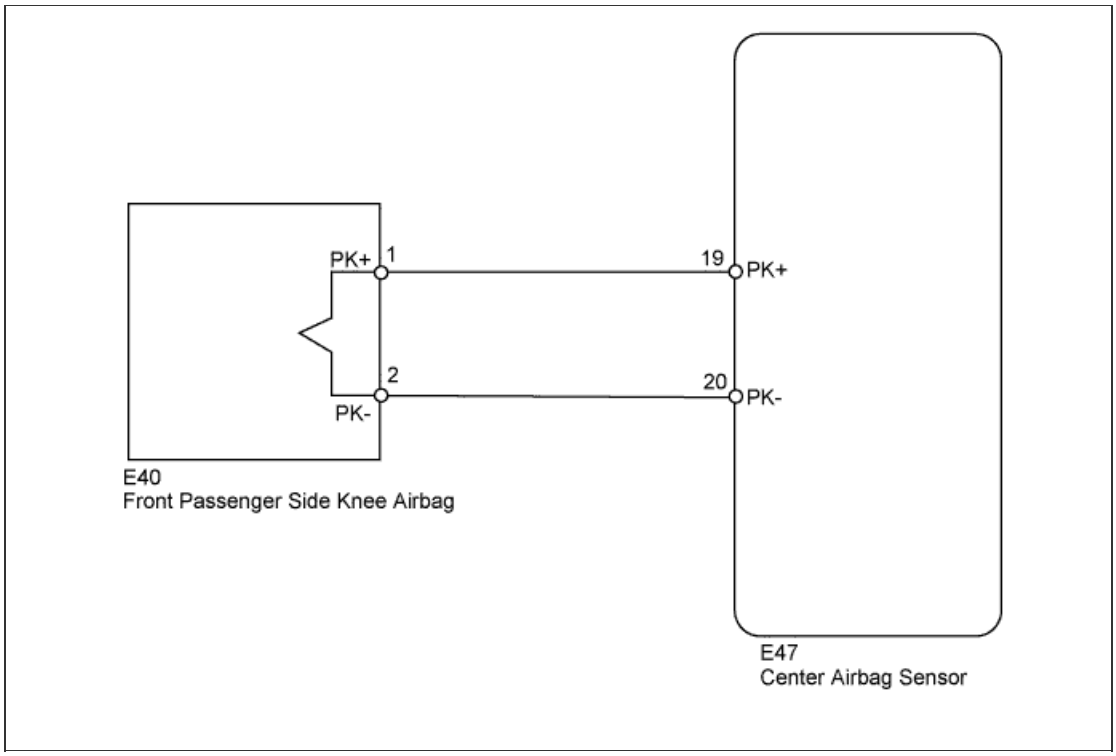
for Preparation Click here

DESCRIPTION

The front passenger side knee airbag squib circuit consists of the center airbag sensor and the front passenger side knee airbag.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front passenger side knee airbag squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1865/65	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front passenger side knee airbag squib circuit during the primary check. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly
B1866/65	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front passenger side knee airbag squib circuit for 2 seconds. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly
B1867/65	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front passenger side knee airbag squib circuit for 0.5 seconds. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly
B1868/65	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front passenger side knee airbag squib circuit for 0.5 seconds. • A front passenger side knee airbag squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Front passenger side knee airbag assembly (Front passenger side knee squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT PASSENGER SIDE KNEE AIRBAG (FRONT PASSENGER SIDE KNEE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the front passenger side knee airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

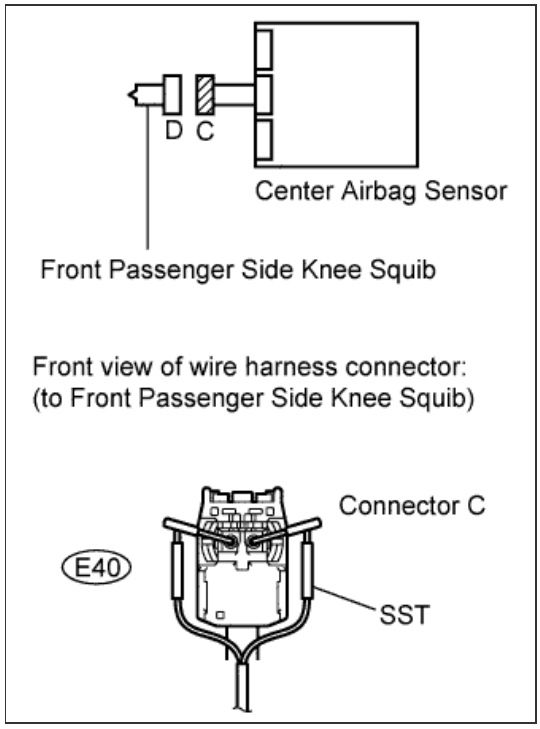
Never connect the tester to the front passenger side knee airbag (front passenger side knee squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1865, B1866, B1867 or B1868 is not output.

HINT:

Codes other than DTC B1865, B1866, B1867 and B1868 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the instrument panel wire connector (on the front passenger side knee airbag side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE

OK

3.CHECK INSTRUMENT PANEL WIRE (FRONT PASSENGER KNEE SQUIB CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E40-1 (PK+) - Body ground	Engine switch on (IG)	Below 1 V
E40-2 (PK-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

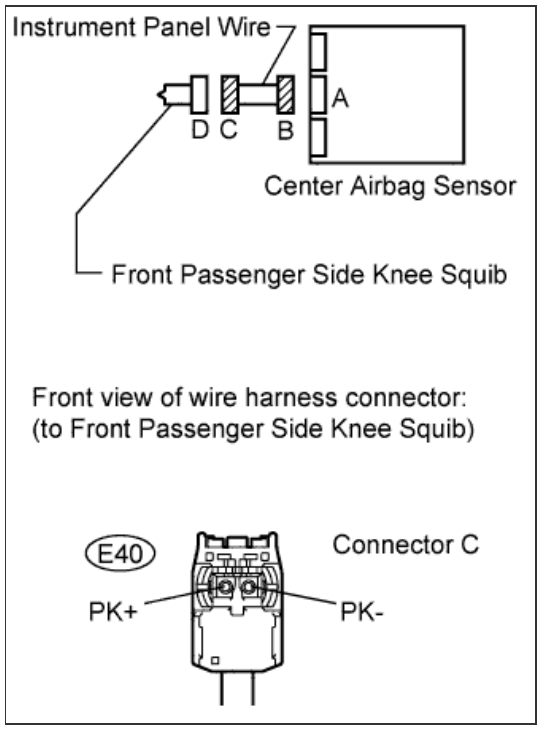
Tester Connection	Condition	Specified Condition
E40-1 (PK+) - E40-2 (PK-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E40-1 (PK+) - E40-2 (PK-)	Always	1 MΩ or higher
E40-1 (PK+) - Body ground	Always	1 MΩ or higher
E40-2 (PK-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE INSTRUMENT PANEL WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front passenger side knee airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

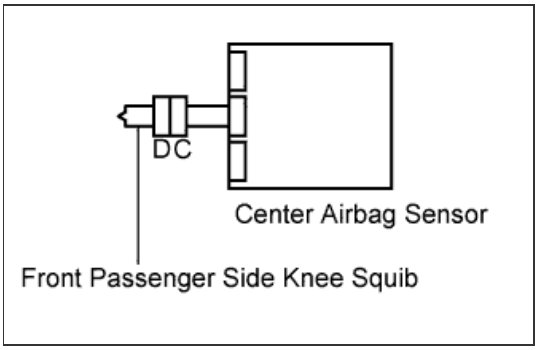
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1865, B1866, B1867 or B1868 is not output.

HINT:

Codes other than DTC B1865, B1866, B1867 and B1868 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1805/52 Short in Front Passenger Side Squib Circuit

DTC B1806/52 Open in Front Passenger Side Squib Circuit

DTC B1807/52 Short to GND in Front Passenger Side Squib Circuit

DTC B1808/52 Short to B+ in Front Passenger Side Squib Circuit

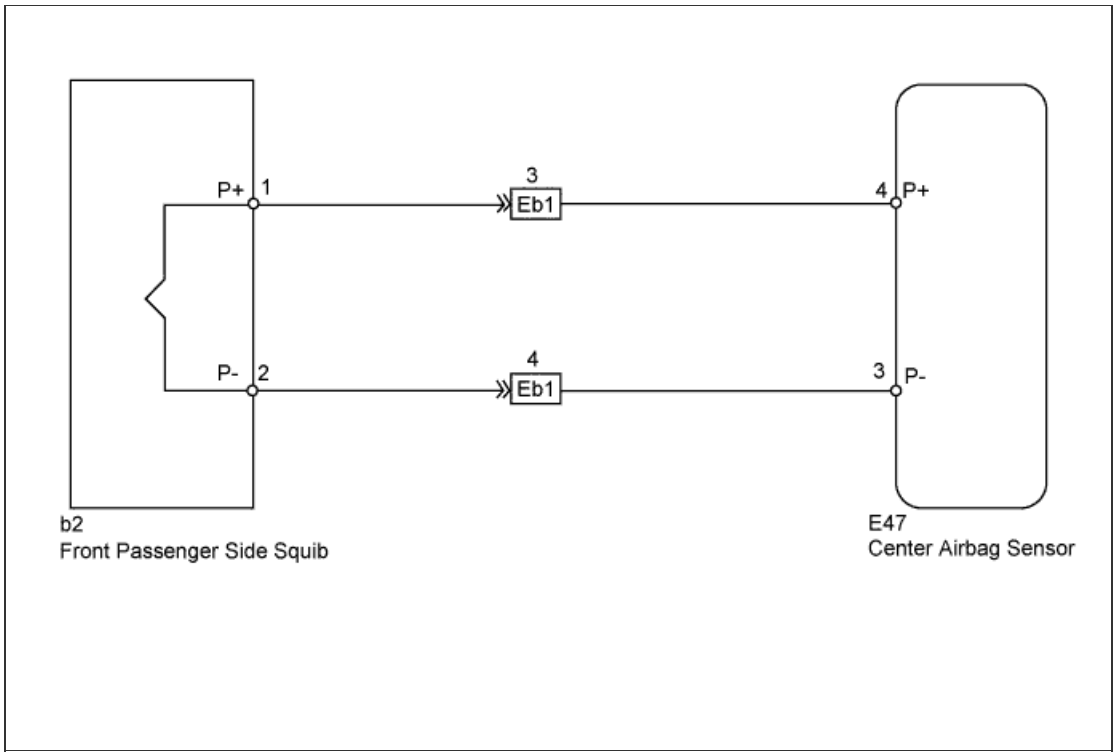
for Preparation Click here

DESCRIPTION

The front passenger side squib circuit consists of the center airbag sensor and the front passenger airbag.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front passenger side squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1805/52	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front passenger side squib circuit during the primary check. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1806/52	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front passenger side squib circuit for 2 seconds. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1807/52	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front passenger side squib circuit for 0.5 seconds. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1808/52	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front passenger side squib circuit for 0.5 seconds. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT PASSENGER AIRBAG (FRONT PASSENGER SIDE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front passenger airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (orange connector).

CAUTION:

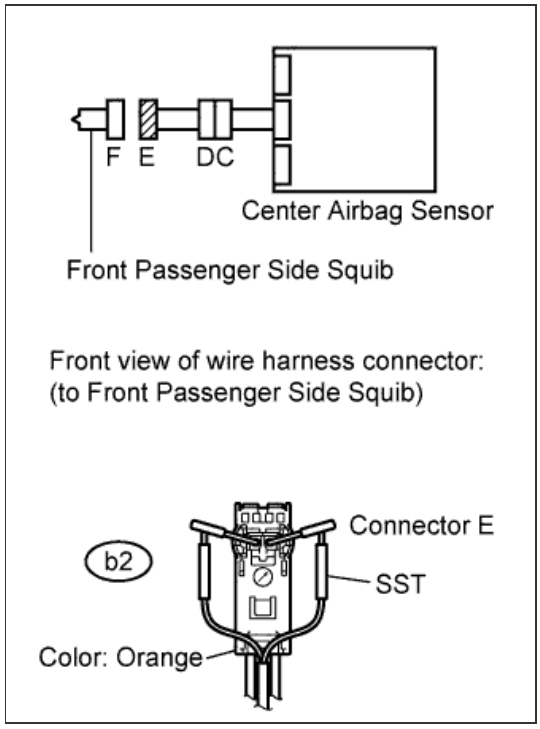
Never connect the tester to the front passenger airbag (front passenger side squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1805, B1806, B1807 or B1808 is not output.

HINT:

Codes other than DTC B1805, B1806, B1807 and B1808 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT PASSENGER AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the instrument panel wire connectors (on the front passenger airbag side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

3.CHECK FRONT PASSENGER SIDE SQUIB CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
b2-1 (P+) - Body ground	Engine switch on (IG)	Below 1 V
b2-2 (P-) - Body ground	Engine switch on (IG)	Below 1 V

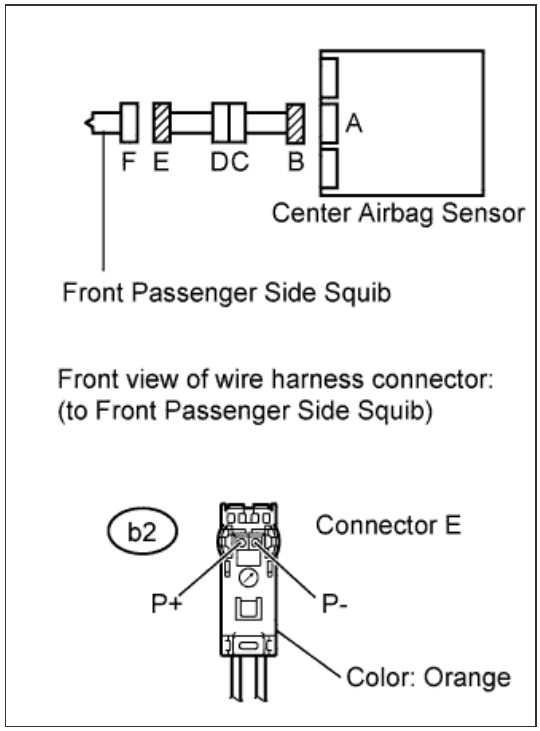
d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
b2-1 (P+) - b2-2 (P-)	Always	Below 1 Ω



g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

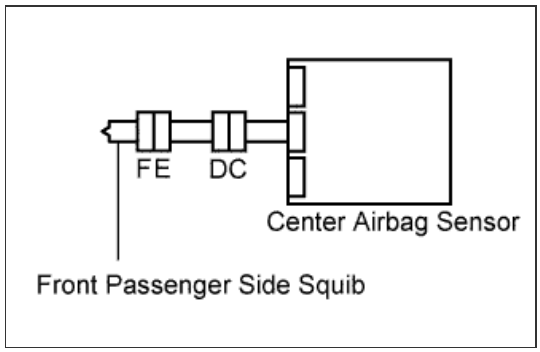
Tester Connection	Condition	Specified Condition
b2-1 (P+) - b2-2 (P-)	Always	1 MΩ or higher
b2-1 (P+) - Body		

ground	Always	1 MΩ or higher
b2-2 (P-) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the front passenger airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1805, B1806, B1807 or B1808 is not output.

HINT:

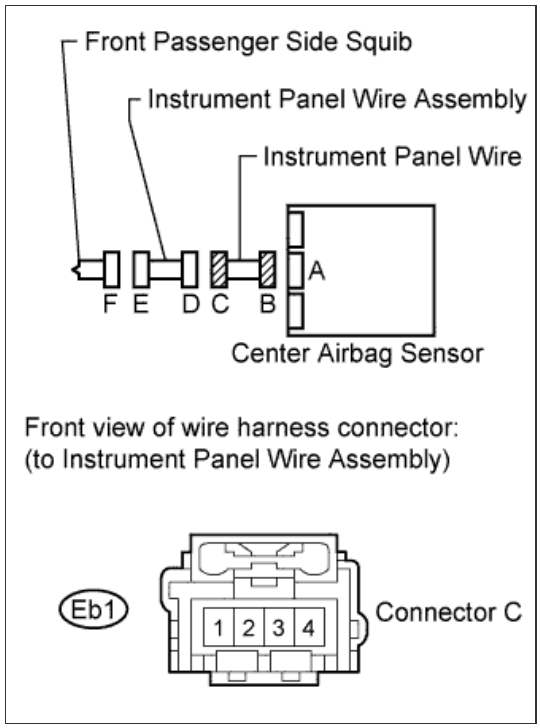
Codes other than DTC B1805, B1806, B1807 and B1808 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - INSTRUMENT PANEL WIRE ASSEMBLY)



a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the instrument panel wire assembly.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
Eb1-3 - Body ground	Engine switch on (IG)	Below 1 V
Eb1-4 - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-3 - Eb1-4	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-3 - Eb1-4	Always	1 MΩ or higher
Eb1-3 - Body ground	Always	1 MΩ or higher
Eb1-4 - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

DTC B1900/73 Short in Front Pretensioner Squib RH Circuit

DTC B1901/73 Open in Front Pretensioner Squib RH Circuit

DTC B1902/73 Short to GND in Front Pretensioner Squib RH Circuit

DTC B1903/73 Short to B+ in Front Pretensioner Squib RH Circuit

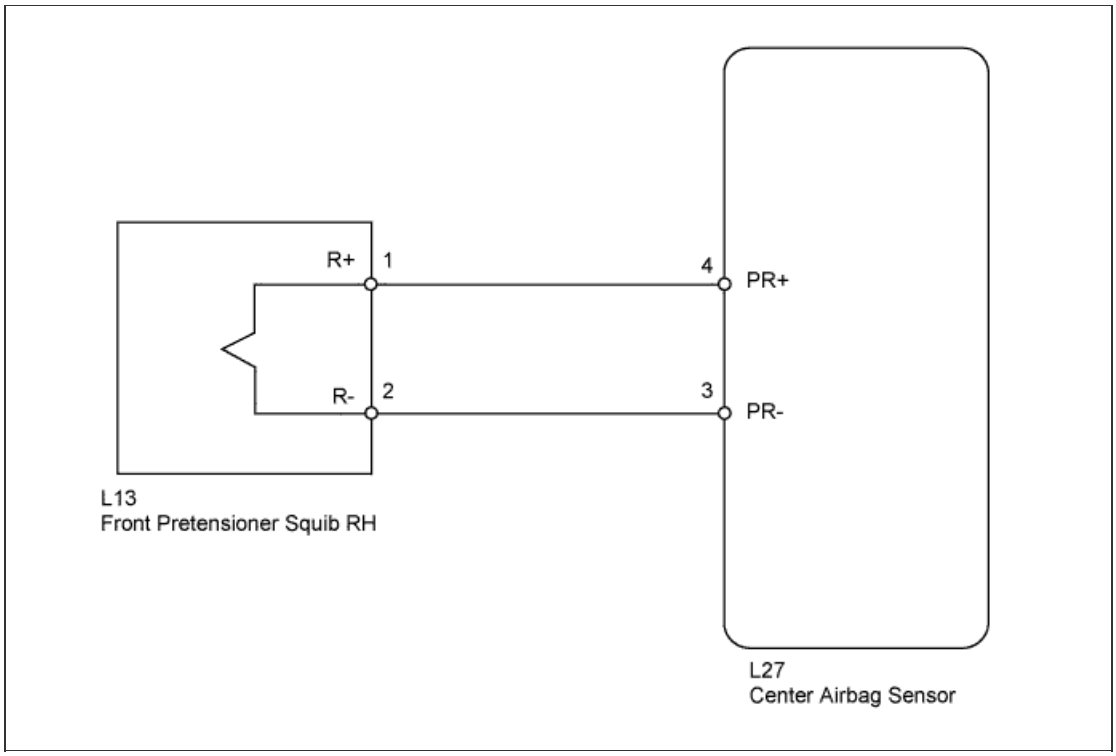
for Preparation Click here

DESCRIPTION

The front pretensioner squib RH circuit consists of the center airbag sensor and the front seat outer belt RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front pretensioner squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1900/73	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front pretensioner squib RH circuit during the primary check. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly
B1901/73	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front pretensioner squib RH circuit for 2 seconds. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly
B1902/73	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front pretensioner squib RH circuit for 0.5 seconds. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly
B1903/73	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front pretensioner squib RH circuit for 0.5 seconds. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT OUTER BELT RH (FRONT PRETENSIONER SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front seat outer belt RH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

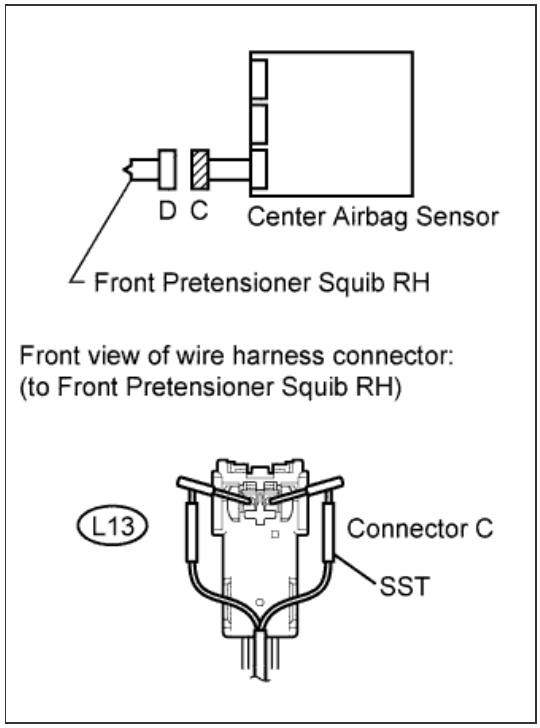
Never connect the tester to the front seat outer belt RH (front pretensioner squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1900, B1901, B1902 or B1903 is not output.

HINT:

Codes other than DTC B1900, B1901, B1902 and B1903 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the front seat outer belt RH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (FRONT PRETENSIONER SQUIB RH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L13-1 (R+) - Body ground	Engine switch on (IG)	Below 1 V
L13-2 (R-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

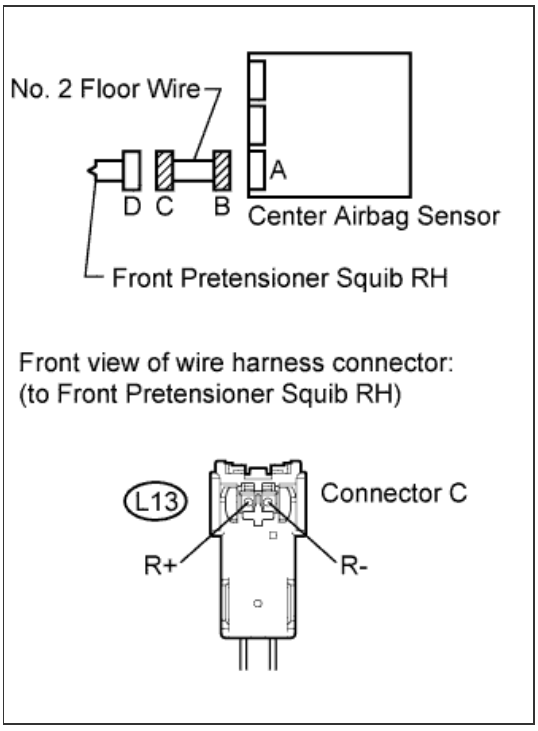
Tester Connection	Condition	Specified Condition
L13-1 (R+) - L13-2 (R-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L13-1 (R+) - L13-2 (R-)	Always	1 MΩ or higher
L13-1 (R+) - Body ground	Always	1 MΩ or higher
L13-2 (R-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat outer belt RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

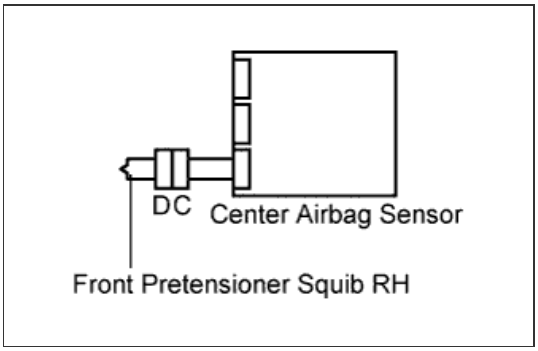
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1900, B1901, B1902 or B1903 is not output.

HINT:

Codes other than DTC B1900, B1901, B1902 and B1903 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1805/52 Short in Front Passenger Side Squib Circuit

DTC B1806/52 Open in Front Passenger Side Squib Circuit

DTC B1807/52 Short to GND in Front Passenger Side Squib Circuit

DTC B1808/52 Short to B+ in Front Passenger Side Squib Circuit

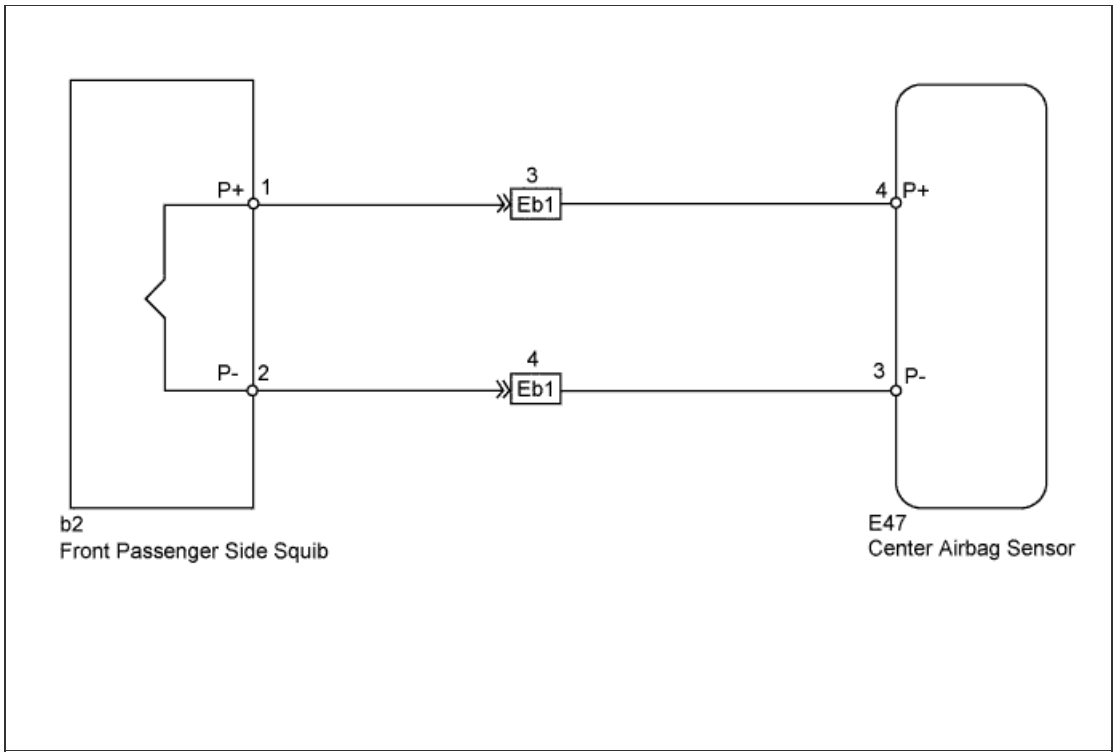
for Preparation Click here

DESCRIPTION

The front passenger side squib circuit consists of the center airbag sensor and the front passenger airbag.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front passenger side squib circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1805/52	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front passenger side squib circuit during the primary check. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1806/52	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front passenger side squib circuit for 2 seconds. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1807/52	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front passenger side squib circuit for 0.5 seconds. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly
B1808/52	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front passenger side squib circuit for 0.5 seconds. • A front passenger side squib malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT PASSENGER AIRBAG (FRONT PASSENGER SIDE SQUIB)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front passenger airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (orange connector).

CAUTION:

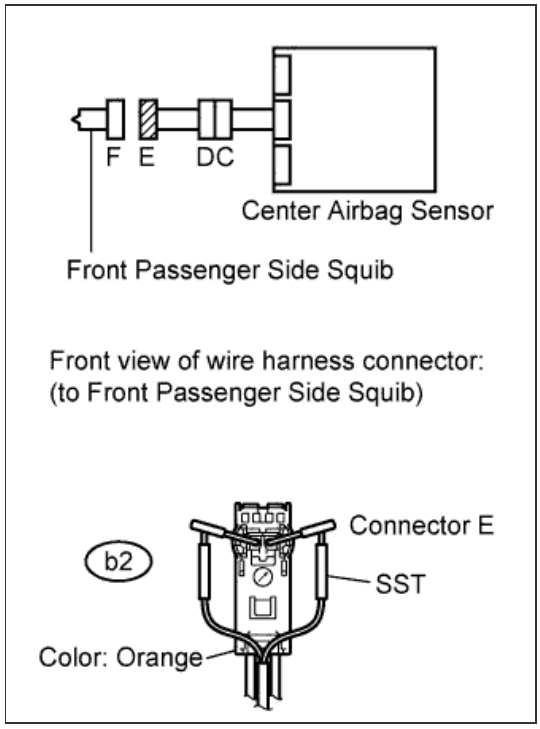
Never connect the tester to the front passenger airbag (front passenger side squib) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1805, B1806, B1807 or B1808 is not output.

HINT:

Codes other than DTC B1805, B1806, B1807 and B1808 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT PASSENGER AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the instrument panel wire connectors (on the front passenger airbag side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

3.CHECK FRONT PASSENGER SIDE SQUIB CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
b2-1 (P+) - Body ground	Engine switch on (IG)	Below 1 V
b2-2 (P-) - Body ground	Engine switch on (IG)	Below 1 V

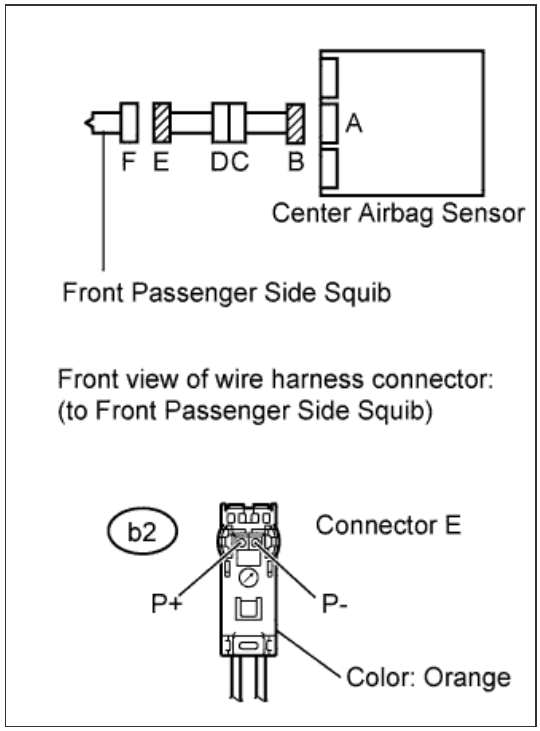
d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
b2-1 (P+) - b2-2 (P-)	Always	Below 1 Ω



g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

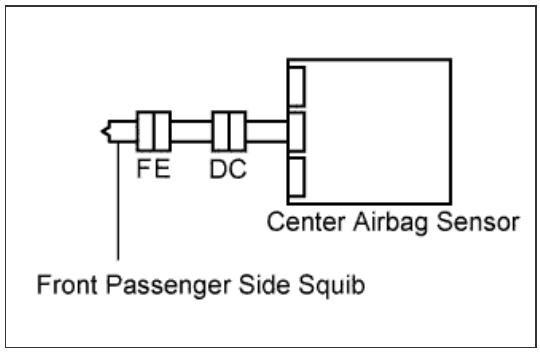
Tester Connection	Condition	Specified Condition
b2-1 (P+) - b2-2 (P-)	Always	1 MΩ or higher
b2-1 (P+) - Body		

ground	Always	1 MΩ or higher
b2-2 (P-) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the front passenger airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1805, B1806, B1807 or B1808 is not output.

HINT:

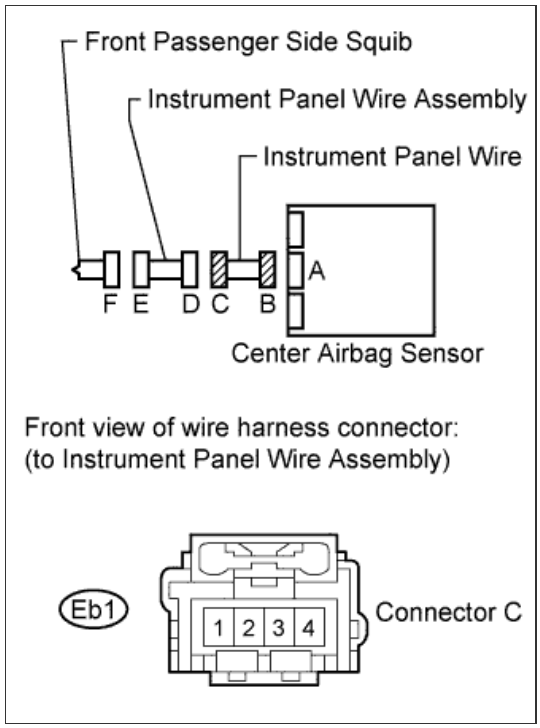
Codes other than DTC B1805, B1806, B1807 and B1808 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - INSTRUMENT PANEL WIRE ASSEMBLY)



a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the instrument panel wire assembly.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
Eb1-3 - Body ground	Engine switch on (IG)	Below 1 V
Eb1-4 - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-3 - Eb1-4	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-3 - Eb1-4	Always	1 MΩ or higher
Eb1-3 - Body ground	Always	1 MΩ or higher
Eb1-4 - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

DTC B1900/73 Short in Front Pretensioner Squib RH Circuit

DTC B1901/73 Open in Front Pretensioner Squib RH Circuit

DTC B1902/73 Short to GND in Front Pretensioner Squib RH Circuit

DTC B1903/73 Short to B+ in Front Pretensioner Squib RH Circuit

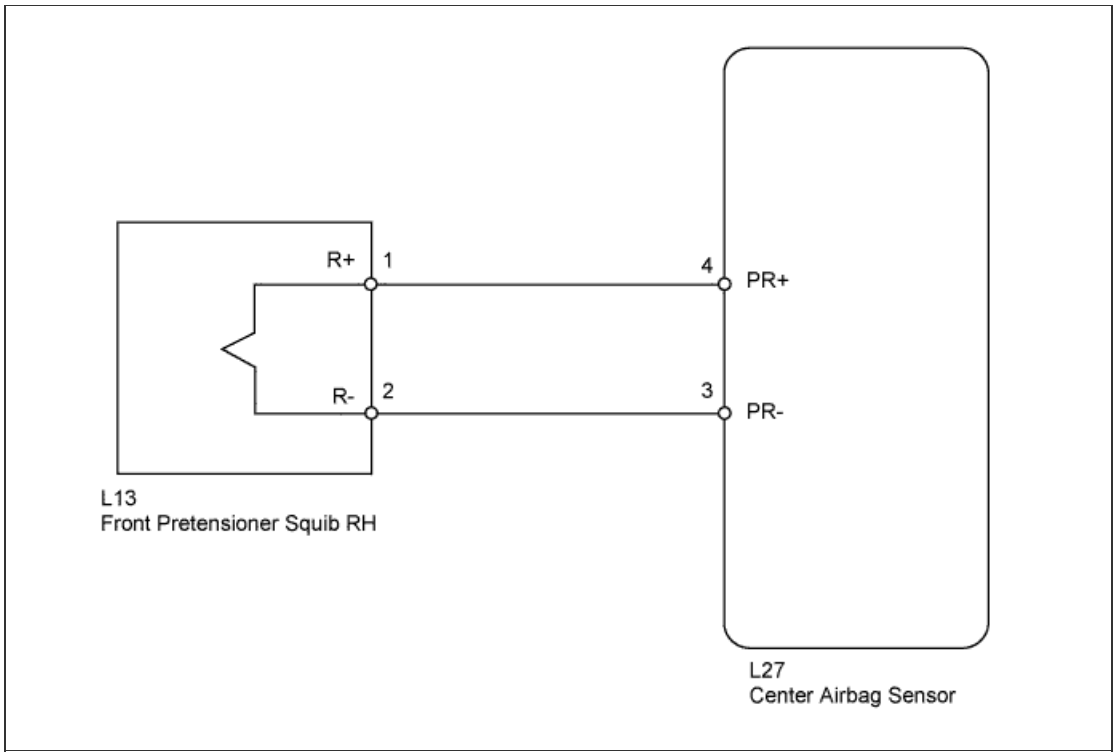
for Preparation Click here

DESCRIPTION

The front pretensioner squib RH circuit consists of the center airbag sensor and the front seat outer belt RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front pretensioner squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1900/73	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front pretensioner squib RH circuit during the primary check. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly
B1901/73	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front pretensioner squib RH circuit for 2 seconds. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly
B1902/73	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front pretensioner squib RH circuit for 0.5 seconds. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly
B1903/73	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front pretensioner squib RH circuit for 0.5 seconds. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT OUTER BELT RH (FRONT PRETENSIONER SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front seat outer belt RH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

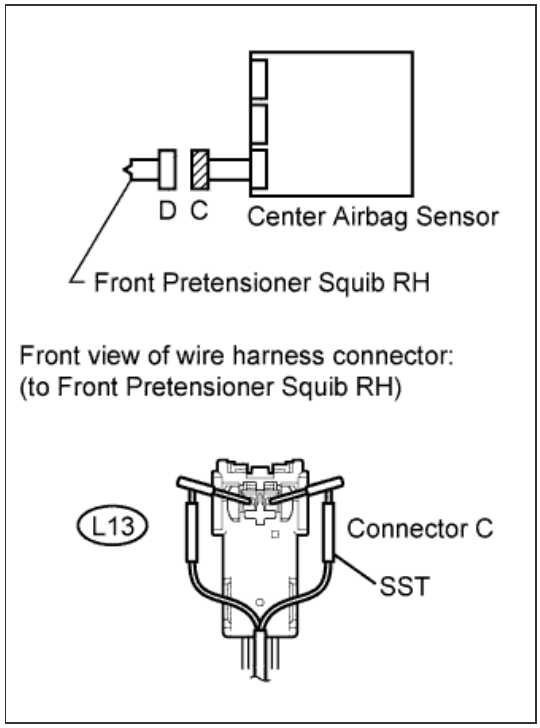
Never connect the tester to the front seat outer belt RH (front pretensioner squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

09843-18061



e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1900, B1901, B1902 or B1903 is not output.

HINT:

Codes other than DTC B1900, B1901, B1902 and B1903 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the front seat outer belt RH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (FRONT PRETENSIONER SQUIB RH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L13-1 (R+) - Body ground	Engine switch on (IG)	Below 1 V
L13-2 (R-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

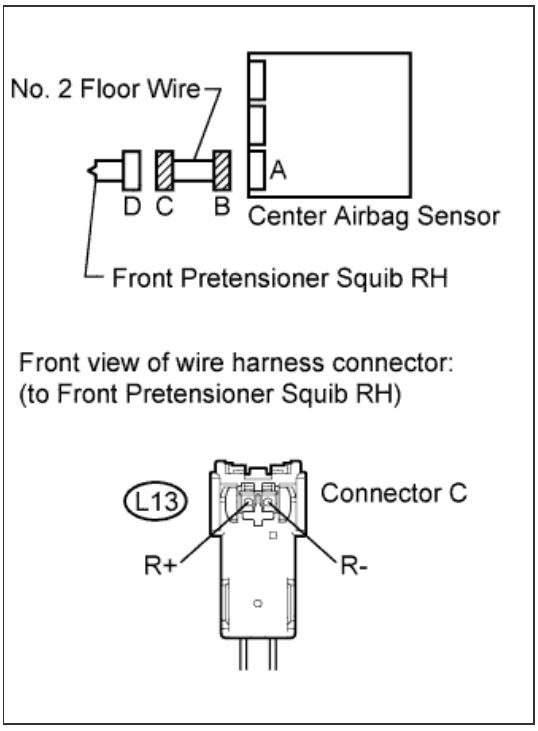
Tester Connection	Condition	Specified Condition
L13-1 (R+) - L13-2 (R-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L13-1 (R+) - L13-2 (R-)	Always	1 MΩ or higher
L13-1 (R+) - Body ground	Always	1 MΩ or higher
L13-2 (R-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat outer belt RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

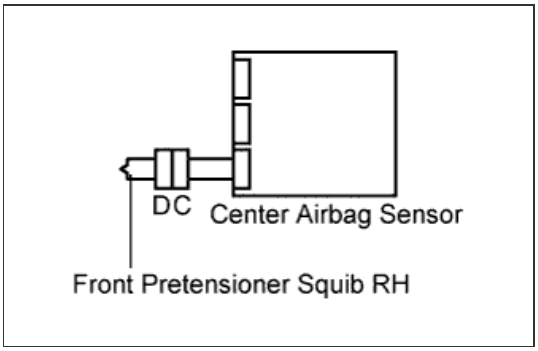
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1900, B1901, B1902 or B1903 is not output.

HINT:

Codes other than DTC B1900, B1901, B1902 and B1903 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1810/53 Short in Driver Side Squib 2nd Step Circuit

DTC B1811/53 Open in Driver Side Squib 2nd Step Circuit

DTC B1812/53 Short to GND in Driver Side Squib 2nd Step Circuit

DTC B1813/53 Short to B+ in Driver Side Squib 2nd Step Circuit

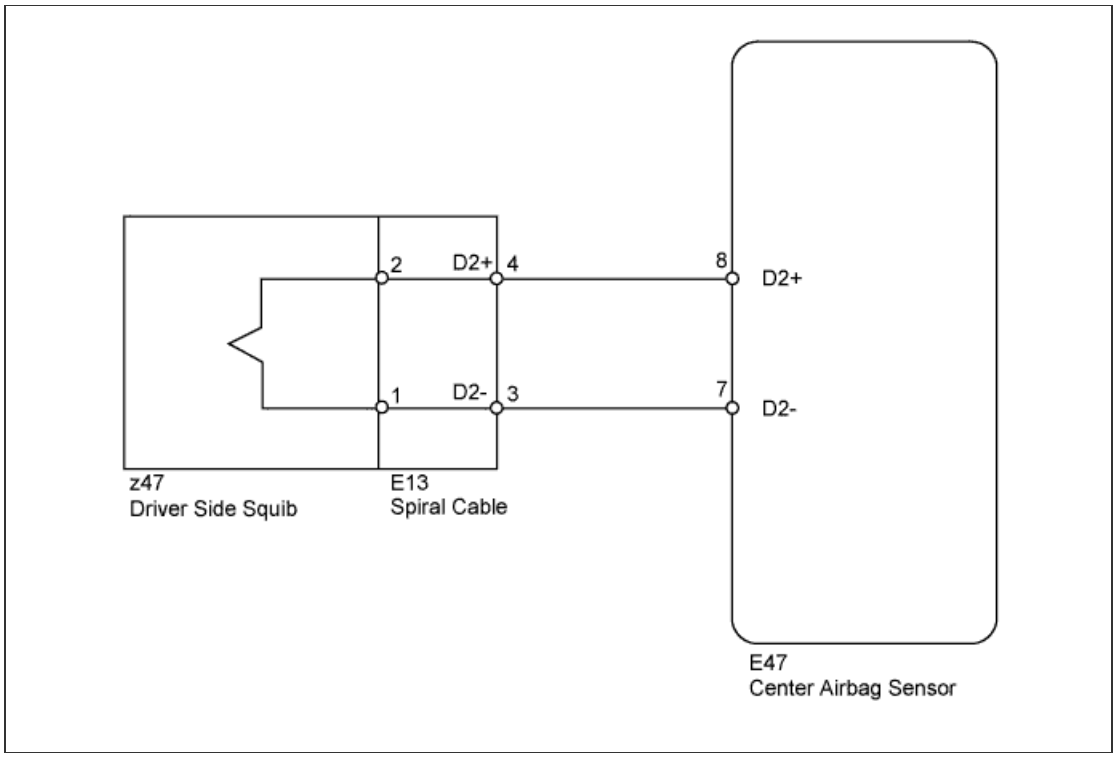
for Preparation Click here

DESCRIPTION

The driver side squib 2nd step circuit consists of the center airbag sensor, the spiral cable, and the steering pad.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the driver side squib 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1810/53	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the driver side squib 2nd step circuit during the primary check. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1811/53	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the driver side squib 2nd step circuit for 2 seconds. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1812/53	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the driver side 2nd step circuit for 0.5 seconds. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1813/53	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the driver side squib 2nd step circuit for 0.5 seconds. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

- **When installing the spiral cable and steering wheel, be sure to adjust the spiral cable as it may break if the steering wheel is turned before adjusting the spiral cable (Click here).**
- **When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).**

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK STEERING PAD (DRIVER SIDE SQUIB 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the steering pad.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (black connector).

CAUTION:

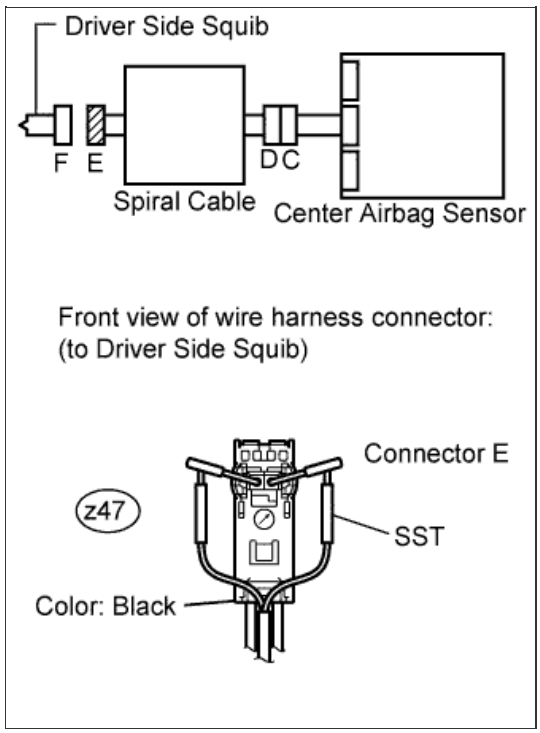
Never connect the tester to the steering pad (driver side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1810, B1811, B1812 or B1813 is not output.

HINT:

Codes other than DTC B1810, B1811, B1812 and B1813 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE STEERING PAD (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the spiral cable connectors (on the steering pad side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE SPIRAL CABLE (Click here)

OK

3.CHECK DRIVER SIDE SQUIB 2ND STEP CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
z47-1 - Body ground	Engine switch on (IG)	Below 1 V
z47-2 - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

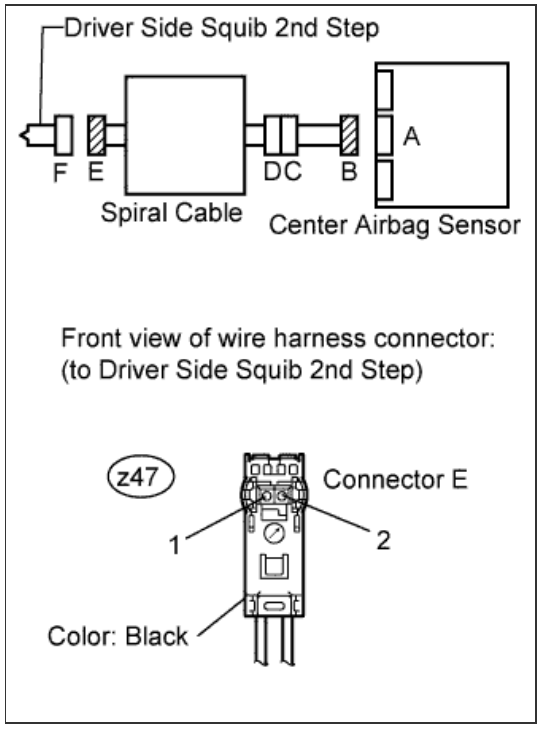
Tester Connection	Condition	Specified Condition
z47-1 - z47-2	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z47-1 - z47-2	Always	1 MΩ or higher
z47-1 - Body ground	Always	1 MΩ or higher
z47-2 - Body		

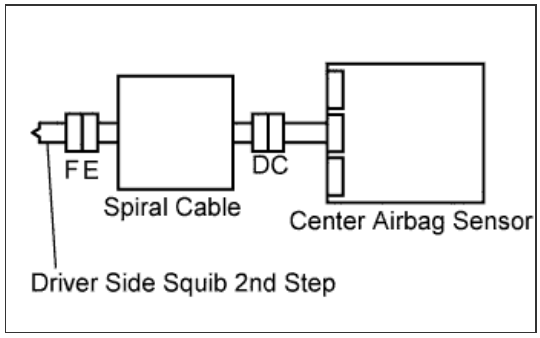


ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the steering pad and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1810, B1811, B1812 or B1813 is not output.

HINT:

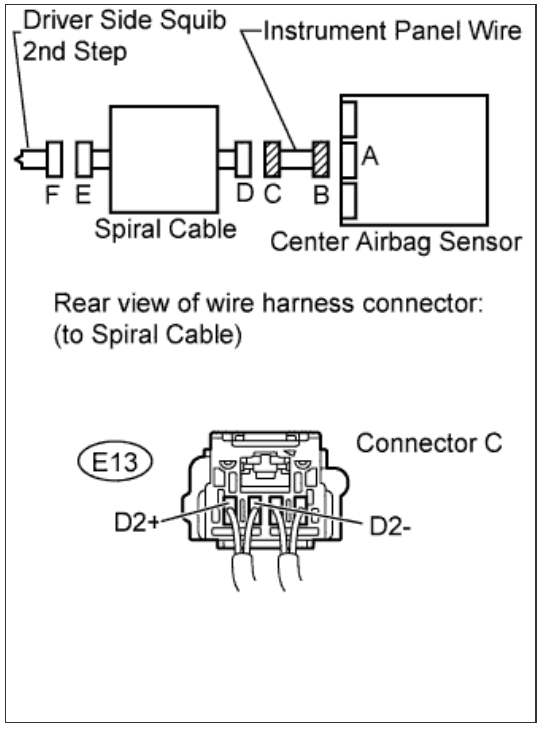
Codes other than DTC B1810, B1811, B1812 and B1813 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - SPIRAL CABLE)



a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the spiral cable.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E13-4 (D2+) - Body ground	Engine switch on (IG)	Below 1 V
E13-3 (D2-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-4 (D2+) - E13-3 (D2-)	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-4 (D2+) - E13-3 (D2-)	Always	1 MΩ or higher
E13-4 (D2+) - Body ground	Always	1 MΩ or higher
E13-3 (D2-) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK

REPLACE SPIRAL CABLE (Click here)

DTC B1900/73 Short in Front Pretensioner Squib RH Circuit

DTC B1901/73 Open in Front Pretensioner Squib RH Circuit

DTC B1902/73 Short to GND in Front Pretensioner Squib RH Circuit

DTC B1903/73 Short to B+ in Front Pretensioner Squib RH Circuit

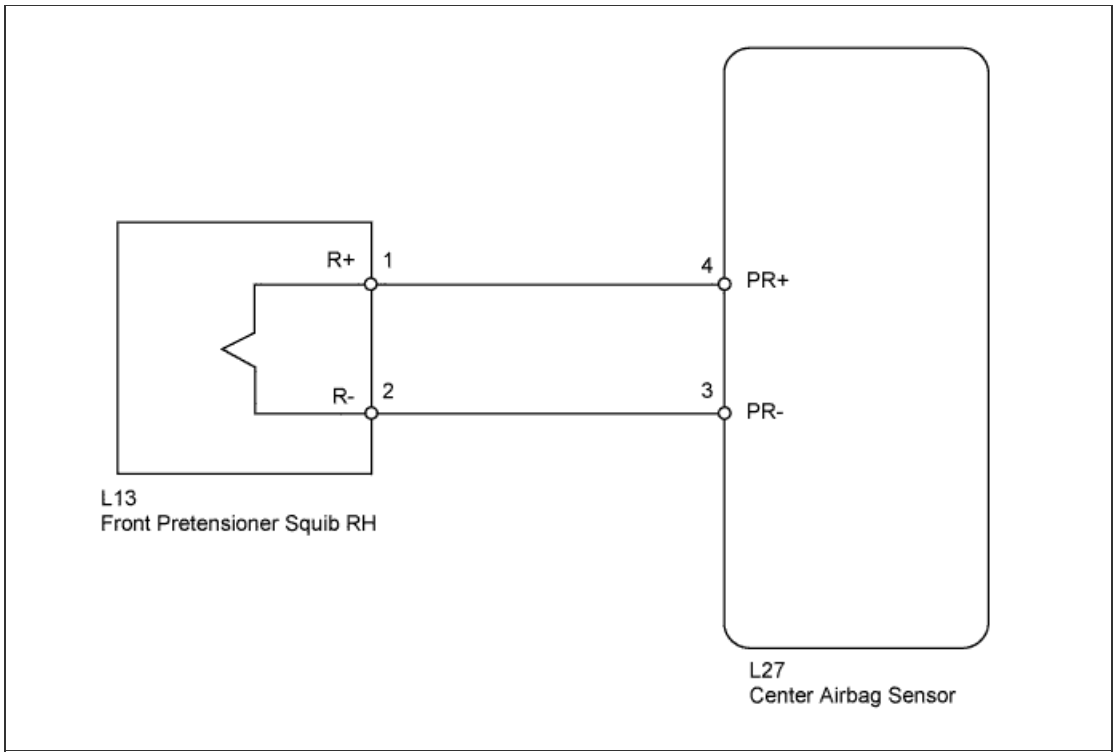
for Preparation Click here

DESCRIPTION

The front pretensioner squib RH circuit consists of the center airbag sensor and the front seat outer belt RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front pretensioner squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1900/73	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front pretensioner squib RH circuit during the primary check. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly
B1901/73	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front pretensioner squib RH circuit for 2 seconds. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly
B1902/73	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front pretensioner squib RH circuit for 0.5 seconds. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly
B1903/73	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front pretensioner squib RH circuit for 0.5 seconds. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT OUTER BELT RH (FRONT PRETENSIONER SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front seat outer belt RH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

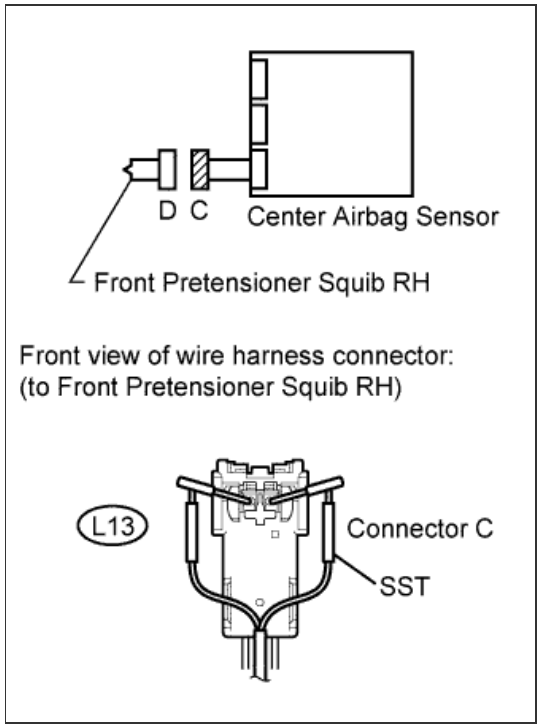
Never connect the tester to the front seat outer belt RH (front pretensioner squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1900, B1901, B1902 or B1903 is not output.

HINT:

Codes other than DTC B1900, B1901, B1902 and B1903 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the front seat outer belt RH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (FRONT PRETENSIONER SQUIB RH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L13-1 (R+) - Body ground	Engine switch on (IG)	Below 1 V
L13-2 (R-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

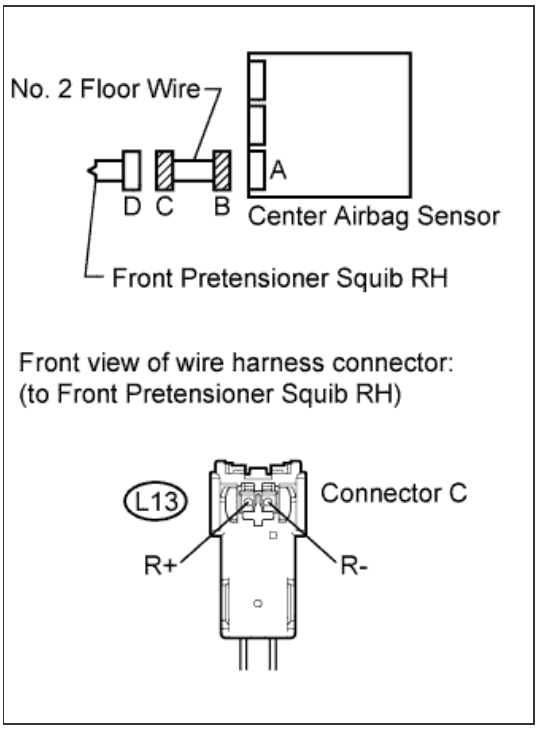
Tester Connection	Condition	Specified Condition
L13-1 (R+) - L13-2 (R-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L13-1 (R+) - L13-2 (R-)	Always	1 MΩ or higher
L13-1 (R+) - Body ground	Always	1 MΩ or higher
L13-2 (R-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat outer belt RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

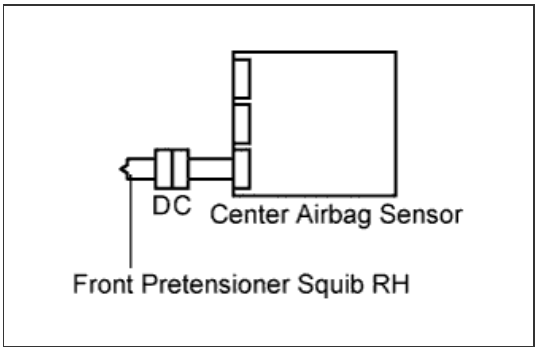
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1900, B1901, B1902 or B1903 is not output.

HINT:

Codes other than DTC B1900, B1901, B1902 and B1903 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1810/53 Short in Driver Side Squib 2nd Step Circuit

DTC B1811/53 Open in Driver Side Squib 2nd Step Circuit

DTC B1812/53 Short to GND in Driver Side Squib 2nd Step Circuit

DTC B1813/53 Short to B+ in Driver Side Squib 2nd Step Circuit

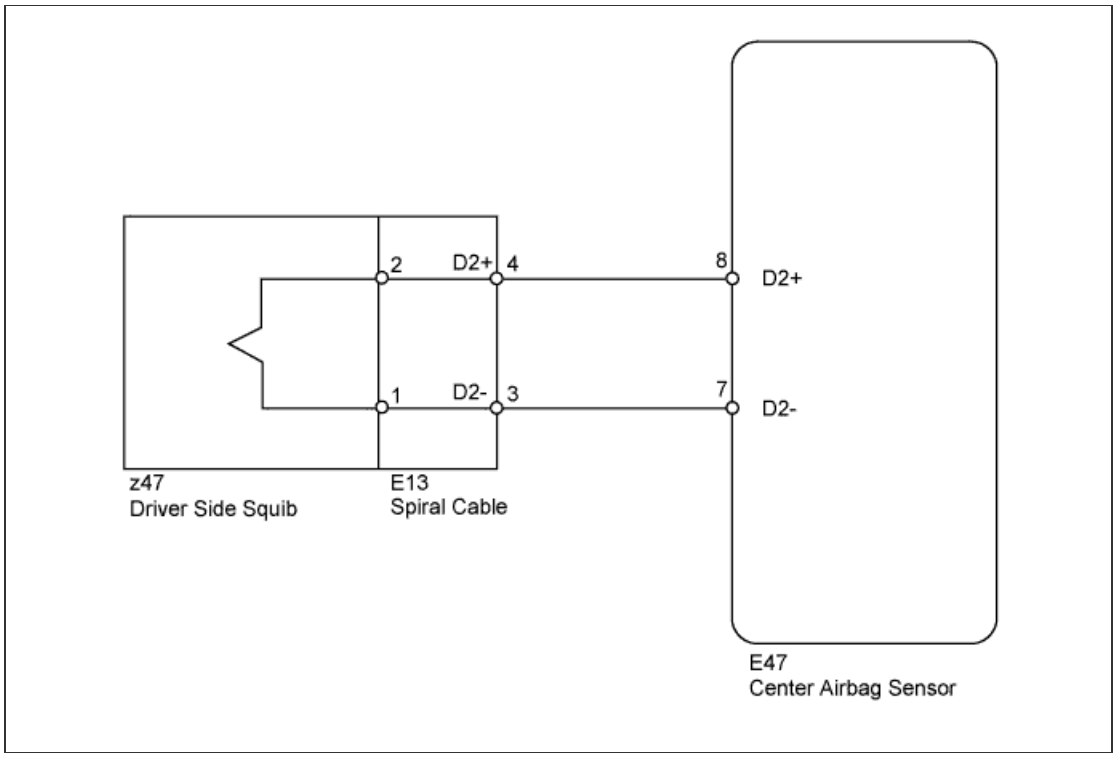
for Preparation Click here

DESCRIPTION

The driver side squib 2nd step circuit consists of the center airbag sensor, the spiral cable, and the steering pad.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the driver side squib 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1810/53	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the driver side squib 2nd step circuit during the primary check. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1811/53	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the driver side squib 2nd step circuit for 2 seconds. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1812/53	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the driver side 2nd step circuit for 0.5 seconds. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1813/53	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the driver side squib 2nd step circuit for 0.5 seconds. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

- **When installing the spiral cable and steering wheel, be sure to adjust the spiral cable as it may break if the steering wheel is turned before adjusting the spiral cable (Click here).**
- **When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).**

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK STEERING PAD (DRIVER SIDE SQUIB 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the steering pad.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (black connector).

CAUTION:

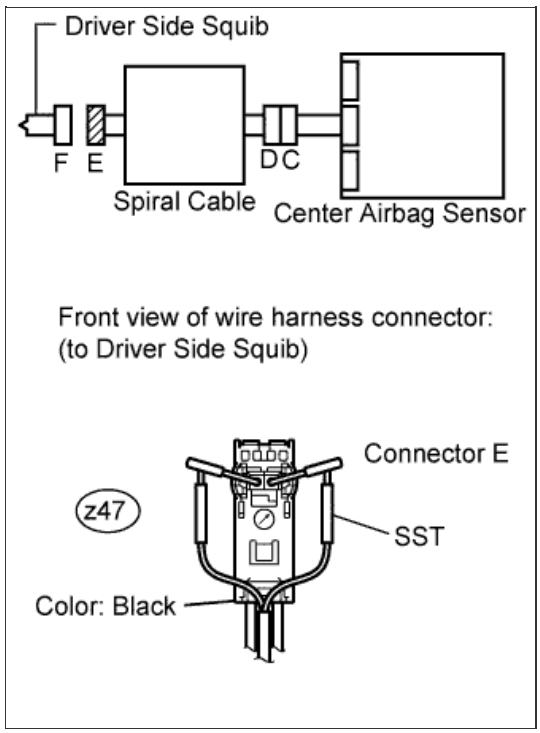
Never connect the tester to the steering pad (driver side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1810, B1811, B1812 or B1813 is not output.

HINT:

Codes other than DTC B1810, B1811, B1812 and B1813 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE STEERING PAD (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the spiral cable connectors (on the steering pad side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE SPIRAL CABLE (Click here)

OK

3.CHECK DRIVER SIDE SQUIB 2ND STEP CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
z47-1 - Body ground	Engine switch on (IG)	Below 1 V
z47-2 - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

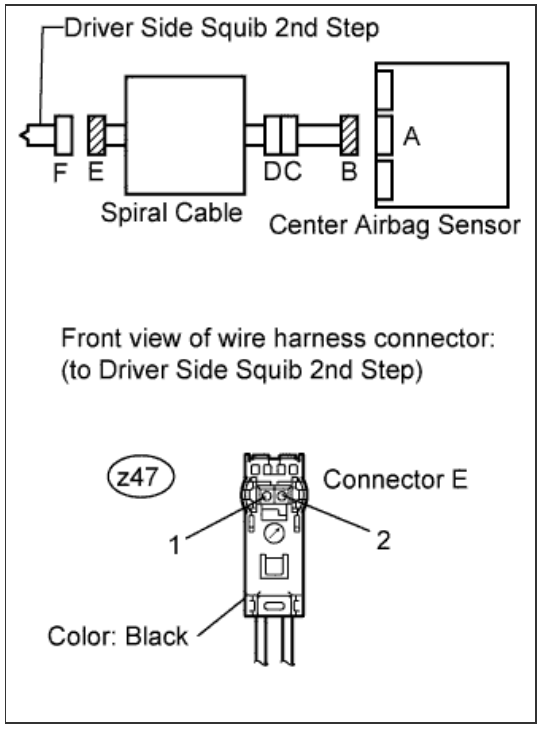
Tester Connection	Condition	Specified Condition
z47-1 - z47-2	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z47-1 - z47-2	Always	1 MΩ or higher
z47-1 - Body ground	Always	1 MΩ or higher
z47-2 - Body		

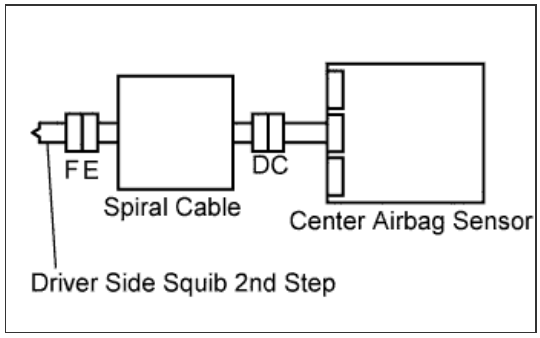


ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the steering pad and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1810, B1811, B1812 or B1813 is not output.

HINT:

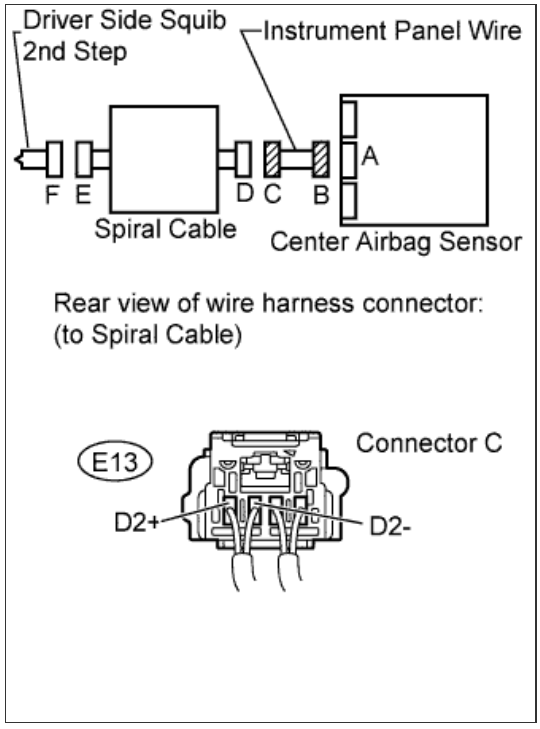
Codes other than DTC B1810, B1811, B1812 and B1813 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - SPIRAL CABLE)



a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the spiral cable.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E13-4 (D2+) - Body ground	Engine switch on (IG)	Below 1 V
E13-3 (D2-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-4 (D2+) - E13-3 (D2-)	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-4 (D2+) - E13-3 (D2-)	Always	1 MΩ or higher
E13-4 (D2+) - Body ground	Always	1 MΩ or higher
E13-3 (D2-) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK

REPLACE SPIRAL CABLE (Click here)

DTC B1900/73 Short in Front Pretensioner Squib RH Circuit

DTC B1901/73 Open in Front Pretensioner Squib RH Circuit

DTC B1902/73 Short to GND in Front Pretensioner Squib RH Circuit

DTC B1903/73 Short to B+ in Front Pretensioner Squib RH Circuit

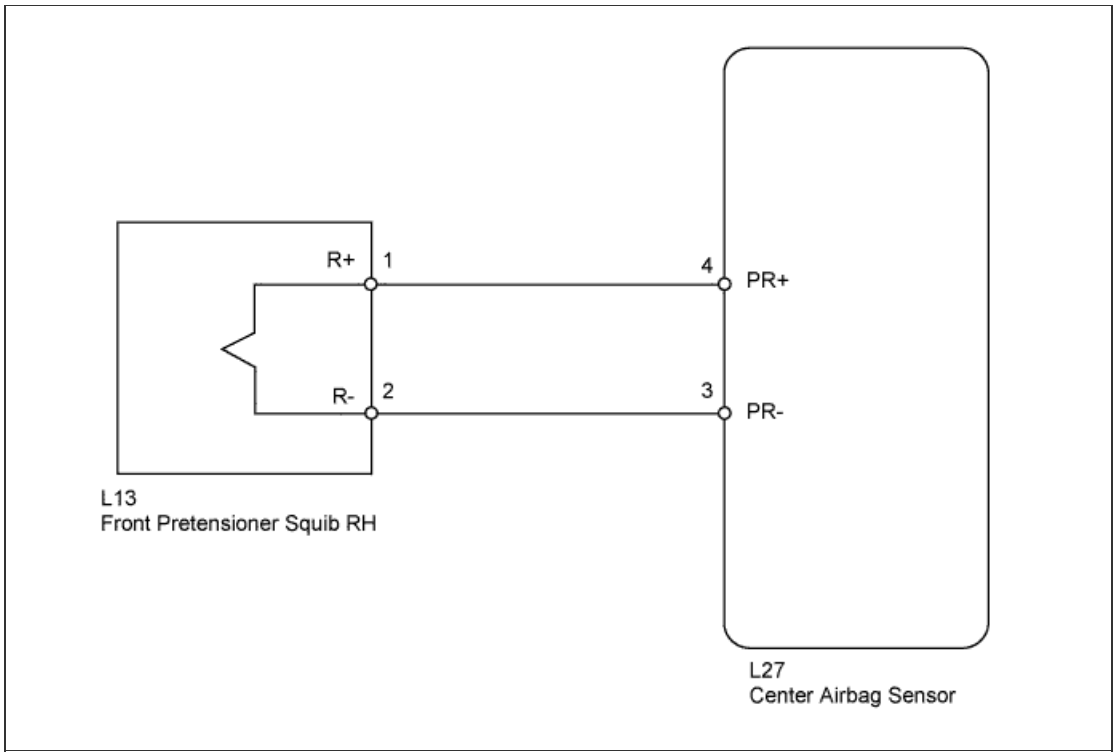
for Preparation Click here

DESCRIPTION

The front pretensioner squib RH circuit consists of the center airbag sensor and the front seat outer belt RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front pretensioner squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1900/73	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front pretensioner squib RH circuit during the primary check. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly
B1901/73	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front pretensioner squib RH circuit for 2 seconds. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly
B1902/73	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front pretensioner squib RH circuit for 0.5 seconds. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly
B1903/73	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front pretensioner squib RH circuit for 0.5 seconds. • A front pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat outer belt assembly RH (Front pretensioner squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT OUTER BELT RH (FRONT PRETENSIONER SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front seat outer belt RH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

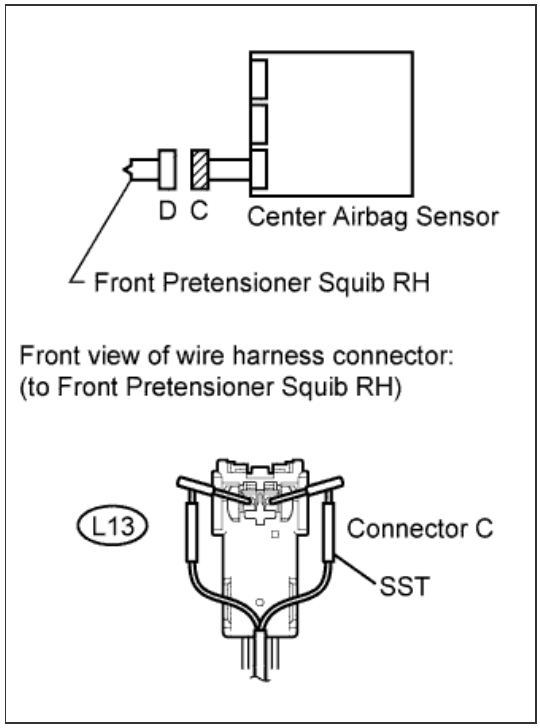
Never connect the tester to the front seat outer belt RH (front pretensioner squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1900, B1901, B1902 or B1903 is not output.

HINT:

Codes other than DTC B1900, B1901, B1902 and B1903 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the front seat outer belt RH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (FRONT PRETENSIONER SQUIB RH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L13-1 (R+) - Body ground	Engine switch on (IG)	Below 1 V
L13-2 (R-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

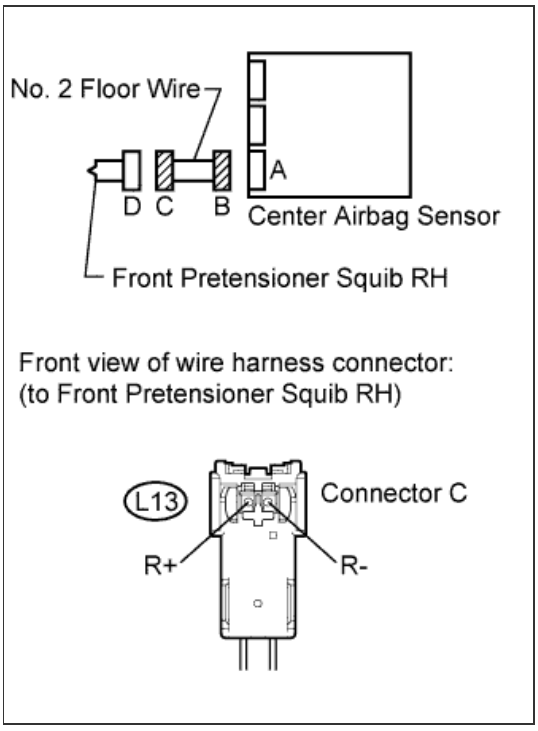
Tester Connection	Condition	Specified Condition
L13-1 (R+) - L13-2 (R-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L13-1 (R+) - L13-2 (R-)	Always	1 MΩ or higher
L13-1 (R+) - Body ground	Always	1 MΩ or higher
L13-2 (R-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat outer belt RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

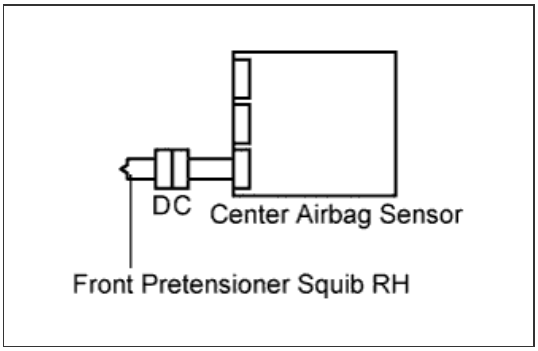
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1900, B1901, B1902 or B1903 is not output.

HINT:

Codes other than DTC B1900, B1901, B1902 and B1903 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1810/53 Short in Driver Side Squib 2nd Step Circuit

DTC B1811/53 Open in Driver Side Squib 2nd Step Circuit

DTC B1812/53 Short to GND in Driver Side Squib 2nd Step Circuit

DTC B1813/53 Short to B+ in Driver Side Squib 2nd Step Circuit

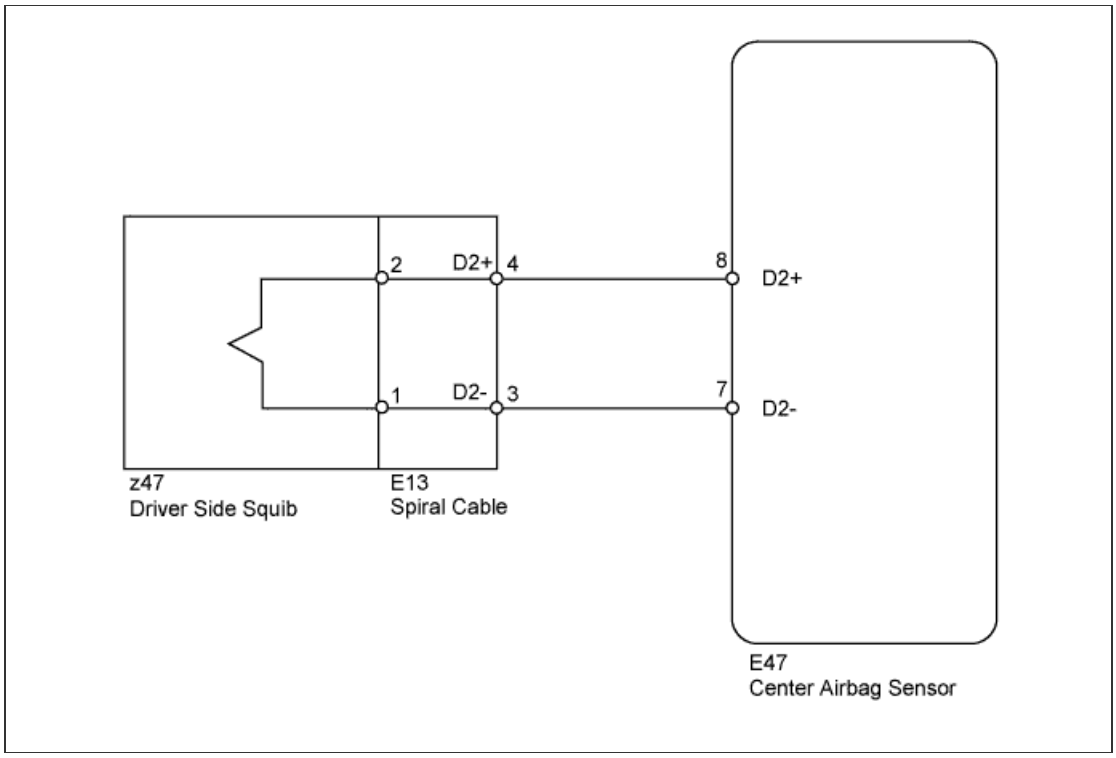
for Preparation Click here

DESCRIPTION

The driver side squib 2nd step circuit consists of the center airbag sensor, the spiral cable, and the steering pad.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the driver side squib 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1810/53	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the driver side squib 2nd step circuit during the primary check. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1811/53	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the driver side squib 2nd step circuit for 2 seconds. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1812/53	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the driver side 2nd step circuit for 0.5 seconds. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1813/53	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the driver side squib 2nd step circuit for 0.5 seconds. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

- **When installing the spiral cable and steering wheel, be sure to adjust the spiral cable as it may break if the steering wheel is turned before adjusting the spiral cable (Click here).**
- **When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).**

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK STEERING PAD (DRIVER SIDE SQUIB 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the steering pad.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (black connector).

CAUTION:

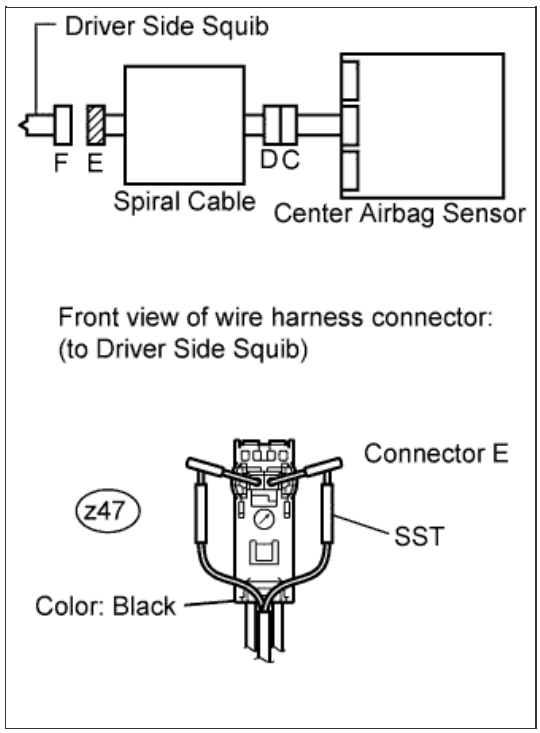
Never connect the tester to the steering pad (driver side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1810, B1811, B1812 or B1813 is not output.

HINT:

Codes other than DTC B1810, B1811, B1812 and B1813 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE STEERING PAD (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the spiral cable connectors (on the steering pad side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE SPIRAL CABLE (Click here)

OK

3.CHECK DRIVER SIDE SQUIB 2ND STEP CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
z47-1 - Body ground	Engine switch on (IG)	Below 1 V
z47-2 - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

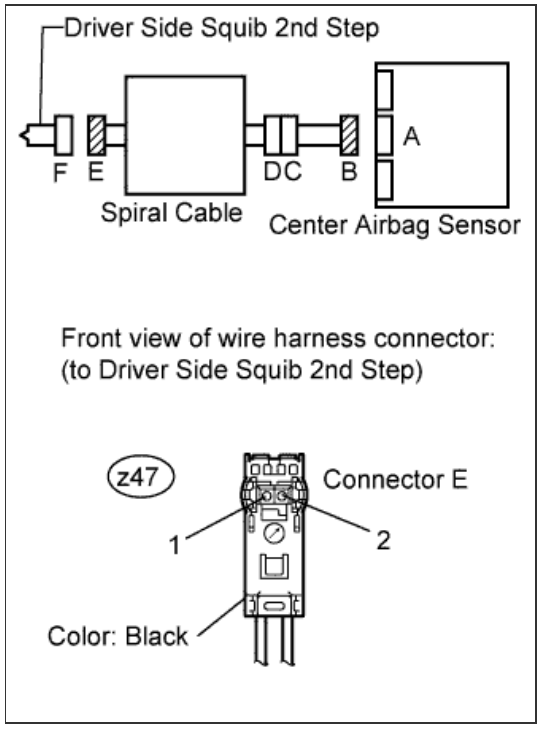
Tester Connection	Condition	Specified Condition
z47-1 - z47-2	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z47-1 - z47-2	Always	1 MΩ or higher
z47-1 - Body ground	Always	1 MΩ or higher
z47-2 - Body		

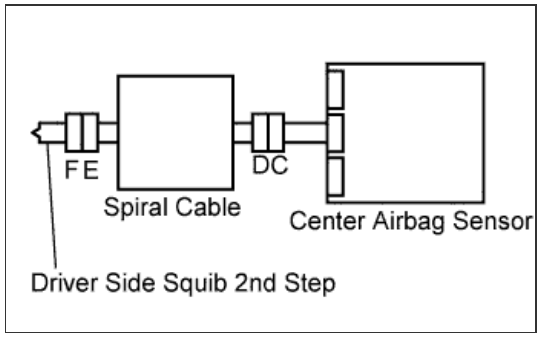


ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the steering pad and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1810, B1811, B1812 or B1813 is not output.

HINT:

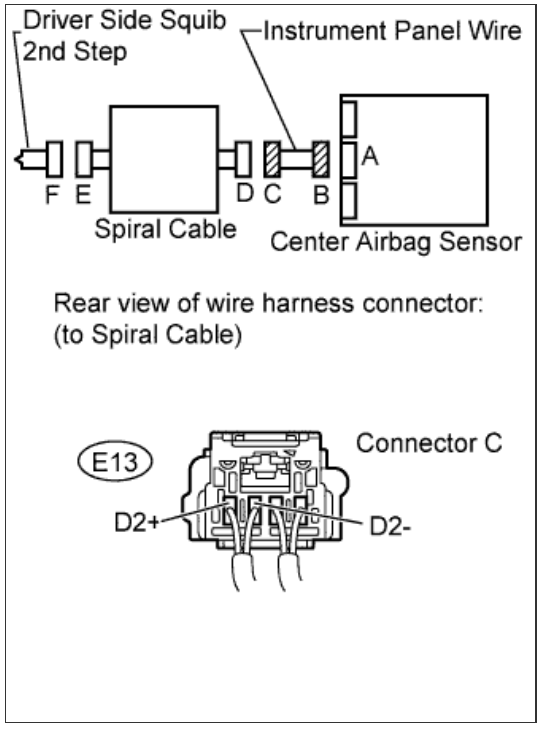
Codes other than DTC B1810, B1811, B1812 and B1813 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - SPIRAL CABLE)



a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the spiral cable.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E13-4 (D2+) - Body ground	Engine switch on (IG)	Below 1 V
E13-3 (D2-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-4 (D2+) - E13-3 (D2-)	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-4 (D2+) - E13-3 (D2-)	Always	1 MΩ or higher
E13-4 (D2+) - Body ground	Always	1 MΩ or higher
E13-3 (D2-) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK

REPLACE SPIRAL CABLE (Click here)

DTC B1905/74 Short in Front Pretensioner Squib LH Circuit

DTC B1906/74 Open in Front Pretensioner Squib LH Circuit

DTC B1907/74 Short to GND in Front Pretensioner Squib LH Circuit

DTC B1908/74 Short to B+ in Front Pretensioner Squib LH Circuit

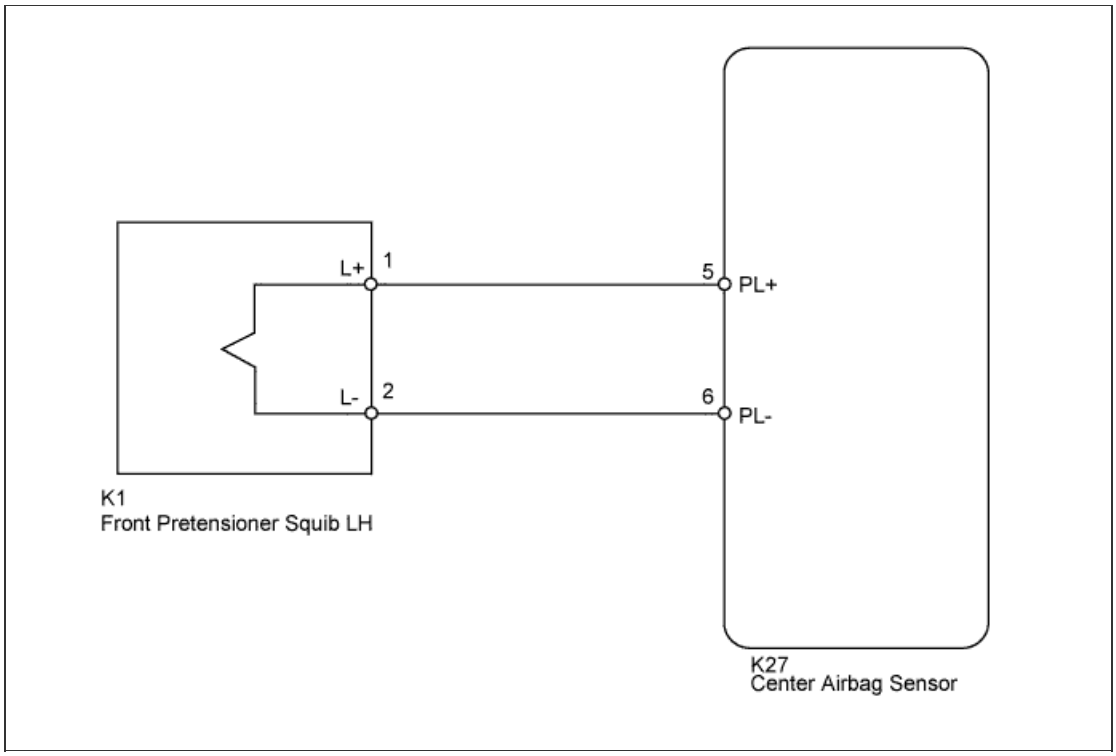
for Preparation Click here

DESCRIPTION

The front pretensioner squib LH circuit consists of the center airbag sensor and the front seat outer belt LH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front pretensioner squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1905/74	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front pretensioner squib LH circuit during the primary check. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly
B1906/74	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front pretensioner squib LH circuit for 2 seconds. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly
B1907/74	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front pretensioner squib LH circuit for 0.5 seconds. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly
B1908/74	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front pretensioner squib LH circuit for 0.5 seconds. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT OUTER BELT LH (FRONT PRETENSIONER SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front seat outer belt LH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

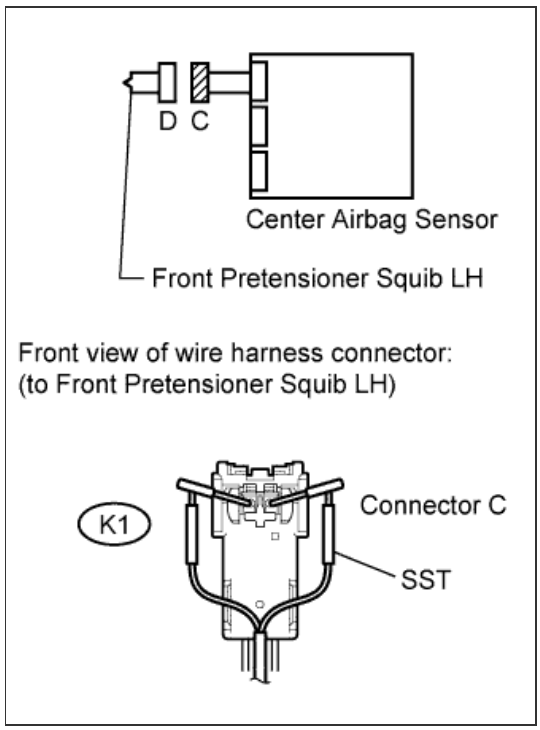
Never connect the tester to the front seat outer belt LH (front pretensioner squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1905, B1906, B1907 or B1908 is not output.

HINT:

Codes other than DTC B1905, B1906, B1907 and B1908 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connector (on the front seat outer belt LH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (FRONT PRETENSIONER SQUIB LH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K1-1 (L+) - Body ground	Engine switch on (IG)	Below 1 V
K1-2 (L-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

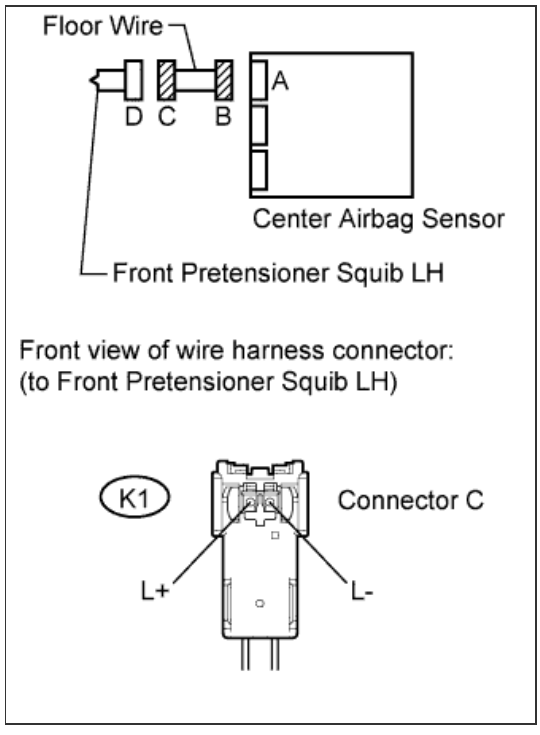
Tester Connection	Condition	Specified Condition
K1-1 (L+) - K1-2 (L-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K1-1 (L+) - K1-2 (L-)	Always	1 MΩ or higher
K1-1 (L+) - Body ground	Always	1 MΩ or higher
K1-2 (L-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat outer belt LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

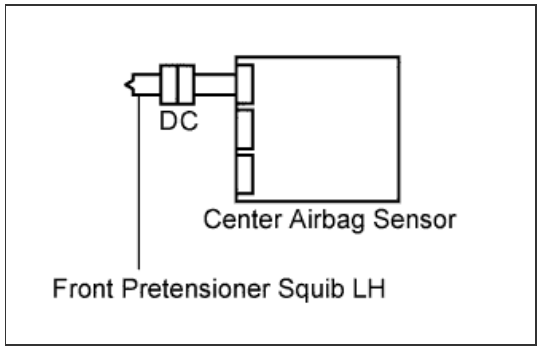
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1905, B1906, B1907 or B1908 is not output.

HINT:

Codes other than DTC B1905, B1906, B1907 and B1908 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1810/53 Short in Driver Side Squib 2nd Step Circuit

DTC B1811/53 Open in Driver Side Squib 2nd Step Circuit

DTC B1812/53 Short to GND in Driver Side Squib 2nd Step Circuit

DTC B1813/53 Short to B+ in Driver Side Squib 2nd Step Circuit

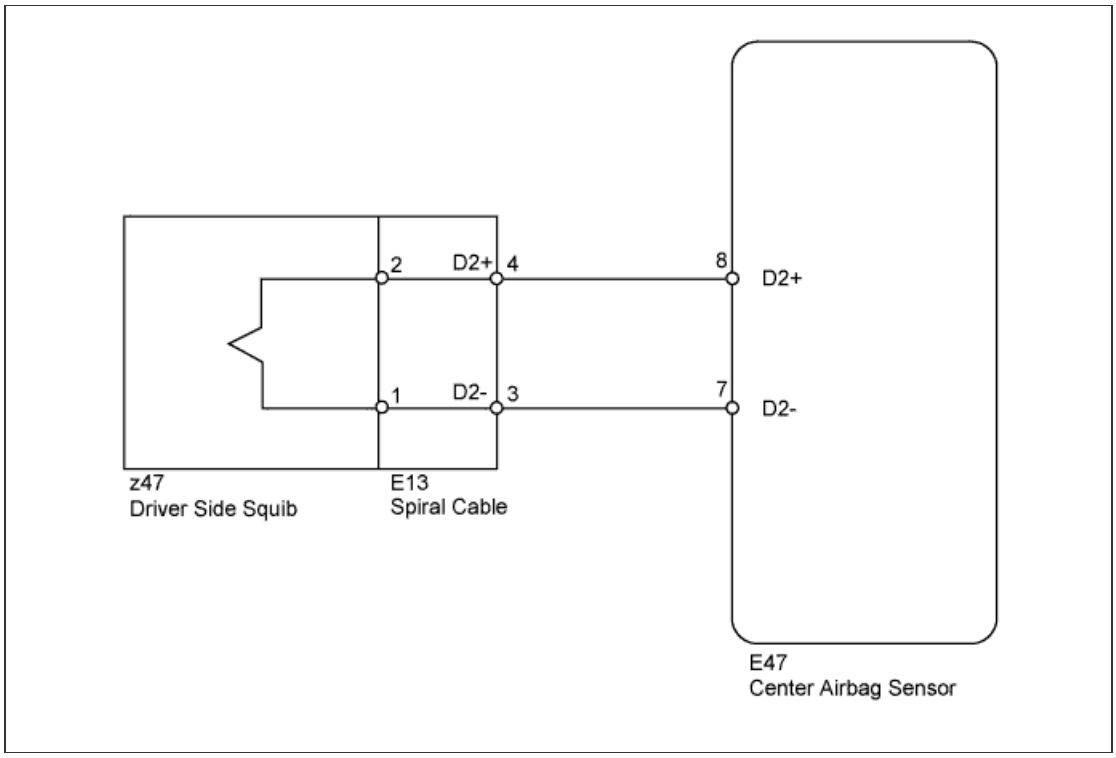
for Preparation Click here

DESCRIPTION

The driver side squib 2nd step circuit consists of the center airbag sensor, the spiral cable, and the steering pad.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the driver side squib 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1810/53	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the driver side squib 2nd step circuit during the primary check. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1811/53	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the driver side squib 2nd step circuit for 2 seconds. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1812/53	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the driver side 2nd step circuit for 0.5 seconds. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly
B1813/53	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the driver side squib 2nd step circuit for 0.5 seconds. • A driver side squib 2nd step malfunction. • A spiral cable malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Spiral cable • Steering pad (Driver side squib 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

- **When installing the spiral cable and steering wheel, be sure to adjust the spiral cable as it may break if the steering wheel is turned before adjusting the spiral cable (Click here).**
- **When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).**

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK STEERING PAD (DRIVER SIDE SQUIB 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the steering pad.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (black connector).

CAUTION:

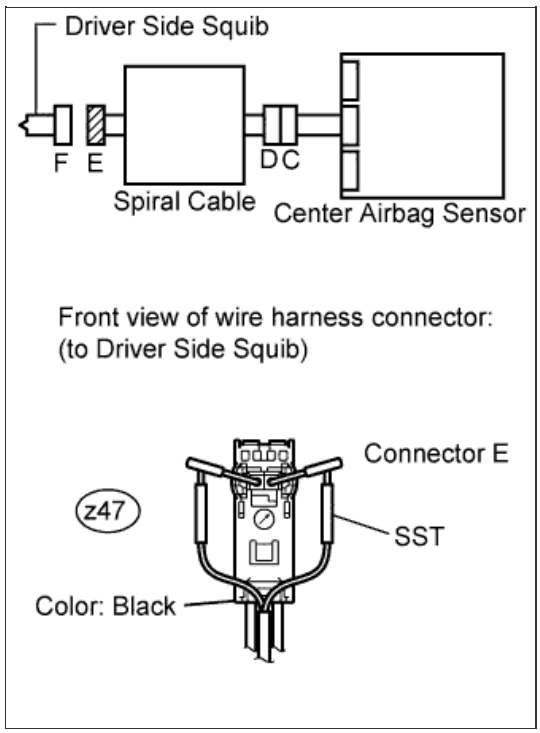
Never connect the tester to the steering pad (driver side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1810, B1811, B1812 or B1813 is not output.

HINT:

Codes other than DTC B1810, B1811, B1812 and B1813 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE STEERING PAD (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the spiral cable connectors (on the steering pad side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE SPIRAL CABLE (Click here)

OK

3.CHECK DRIVER SIDE SQUIB 2ND STEP CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
z47-1 - Body ground	Engine switch on (IG)	Below 1 V
z47-2 - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

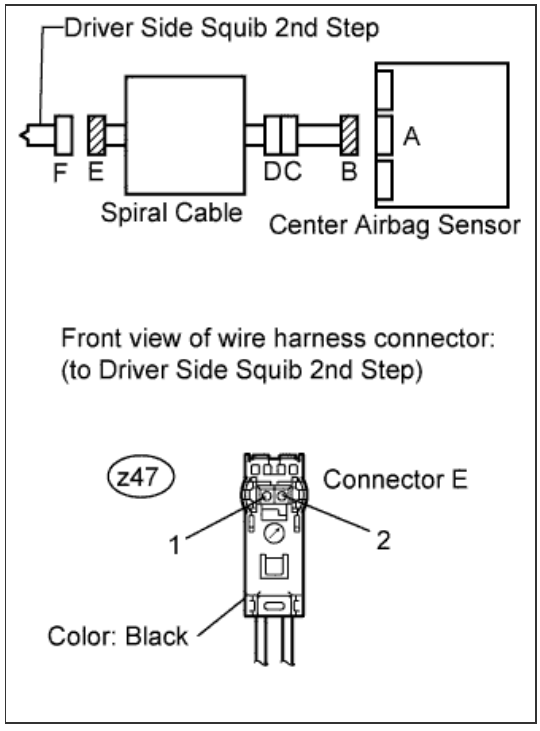
Tester Connection	Condition	Specified Condition
z47-1 - z47-2	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z47-1 - z47-2	Always	1 MΩ or higher
z47-1 - Body ground	Always	1 MΩ or higher
z47-2 - Body		

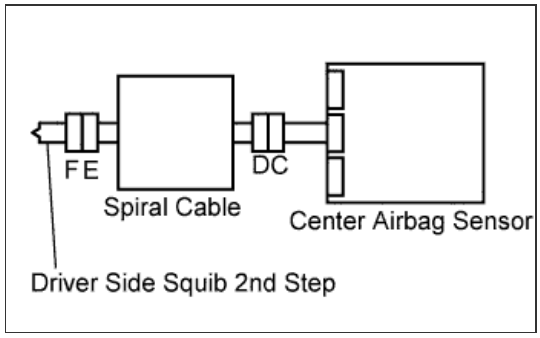


ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR



a. Connect the connectors to the steering pad and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).

OK:
DTC B1810, B1811, B1812 or B1813 is not output.

HINT:

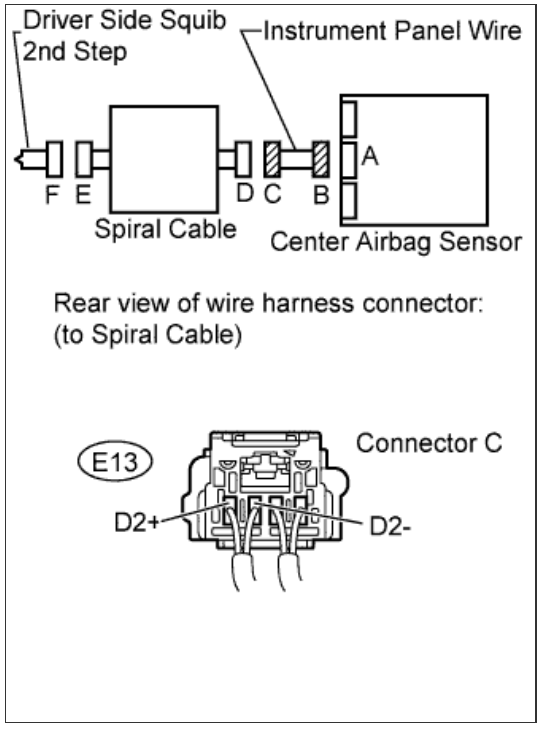
Codes other than DTC B1810, B1811, B1812 and B1813 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - SPIRAL CABLE)



a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the spiral cable.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E13-4 (D2+) - Body ground	Engine switch on (IG)	Below 1 V
E13-3 (D2-) - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-4 (D2+) - E13-3 (D2-)	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-4 (D2+) - E13-3 (D2-)	Always	1 MΩ or higher
E13-4 (D2+) - Body ground	Always	1 MΩ or higher
E13-3 (D2-) - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK

REPLACE SPIRAL CABLE (Click here)

DTC B1905/74 Short in Front Pretensioner Squib LH Circuit

DTC B1906/74 Open in Front Pretensioner Squib LH Circuit

DTC B1907/74 Short to GND in Front Pretensioner Squib LH Circuit

DTC B1908/74 Short to B+ in Front Pretensioner Squib LH Circuit

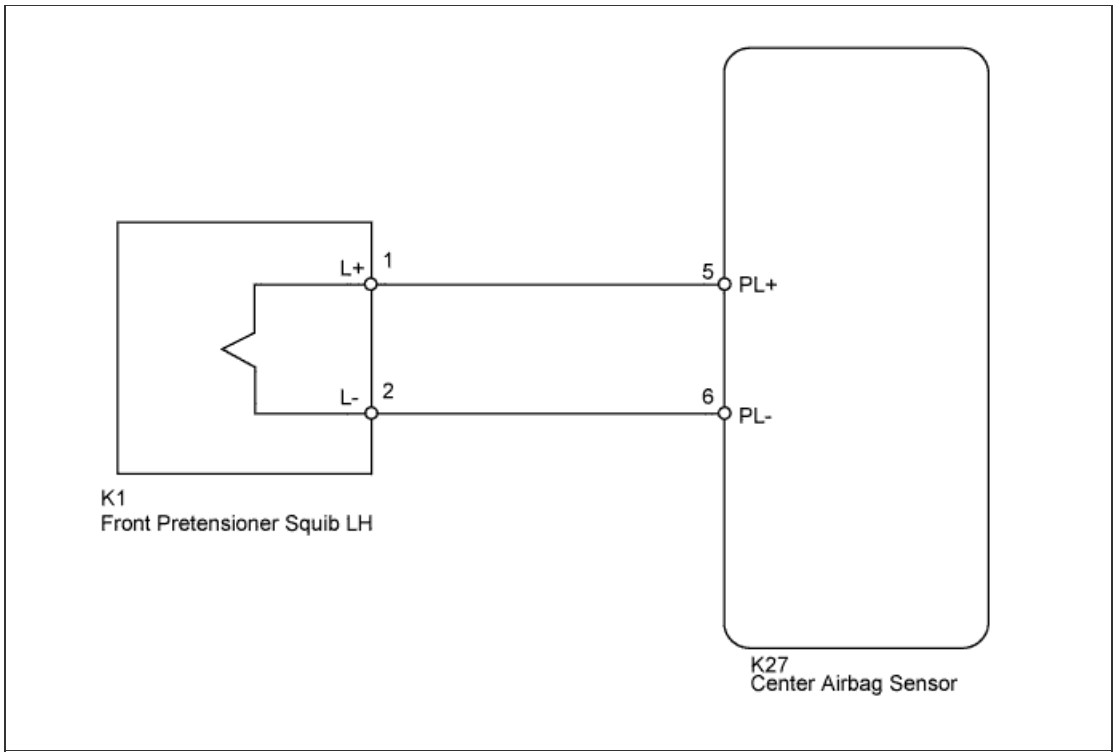
for Preparation Click here

DESCRIPTION

The front pretensioner squib LH circuit consists of the center airbag sensor and the front seat outer belt LH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front pretensioner squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1905/74	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front pretensioner squib LH circuit during the primary check. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly
B1906/74	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front pretensioner squib LH circuit for 2 seconds. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly
B1907/74	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front pretensioner squib LH circuit for 0.5 seconds. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly
B1908/74	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front pretensioner squib LH circuit for 0.5 seconds. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT OUTER BELT LH (FRONT PRETENSIONER SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front seat outer belt LH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

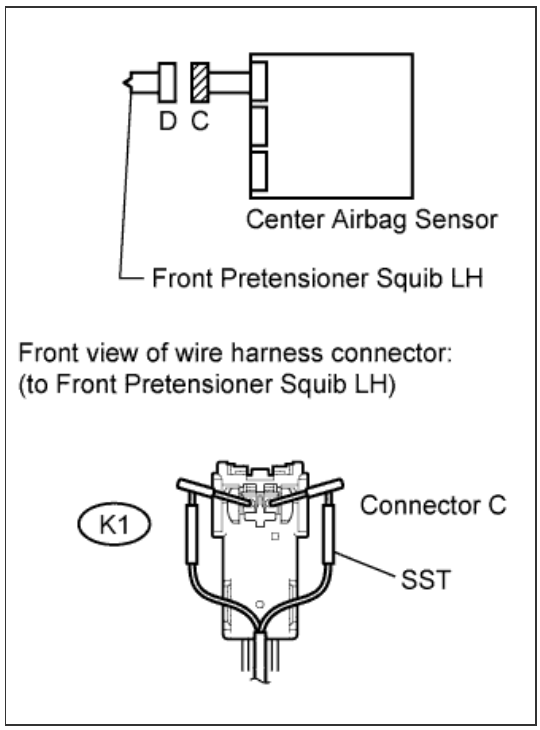
Never connect the tester to the front seat outer belt LH (front pretensioner squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1905, B1906, B1907 or B1908 is not output.

HINT:

Codes other than DTC B1905, B1906, B1907 and B1908 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connector (on the front seat outer belt LH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (FRONT PRETENSIONER SQUIB LH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K1-1 (L+) - Body ground	Engine switch on (IG)	Below 1 V
K1-2 (L-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

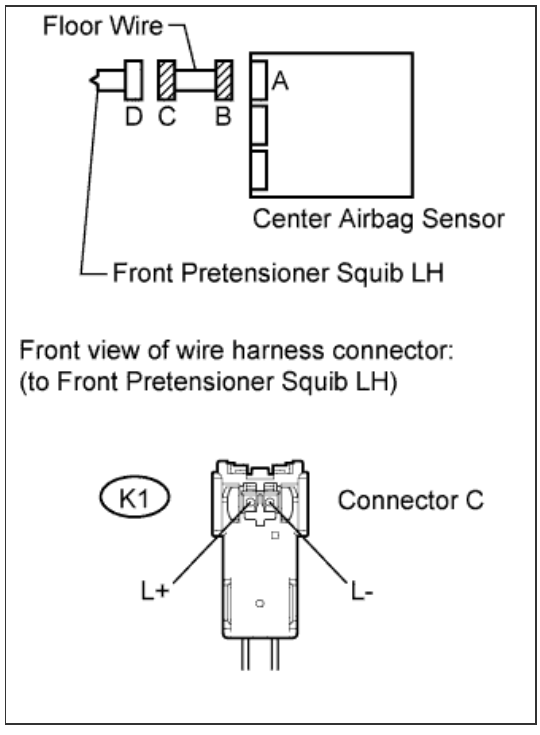
Tester Connection	Condition	Specified Condition
K1-1 (L+) - K1-2 (L-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K1-1 (L+) - K1-2 (L-)	Always	1 MΩ or higher
K1-1 (L+) - Body ground	Always	1 MΩ or higher
K1-2 (L-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat outer belt LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

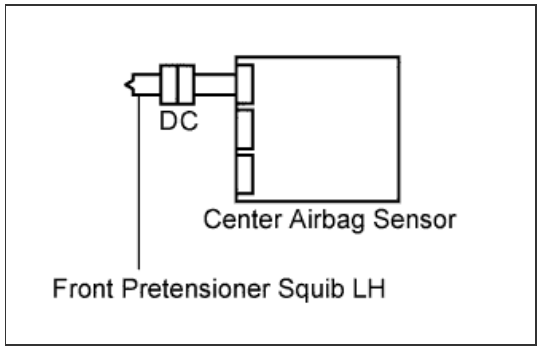
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1905, B1906, B1907 or B1908 is not output.

HINT:

Codes other than DTC B1905, B1906, B1907 and B1908 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1815/54 Short in Front Passenger Side Squib 2nd Step Circuit

DTC B1816/54 Open in Front Passenger Side Squib 2nd Step Circuit

DTC B1817/54 Short to GND in Front Passenger Side Squib 2nd Step Circuit

DTC B1818/54 Short to B+ in Front Passenger Side Squib 2nd Step Circuit

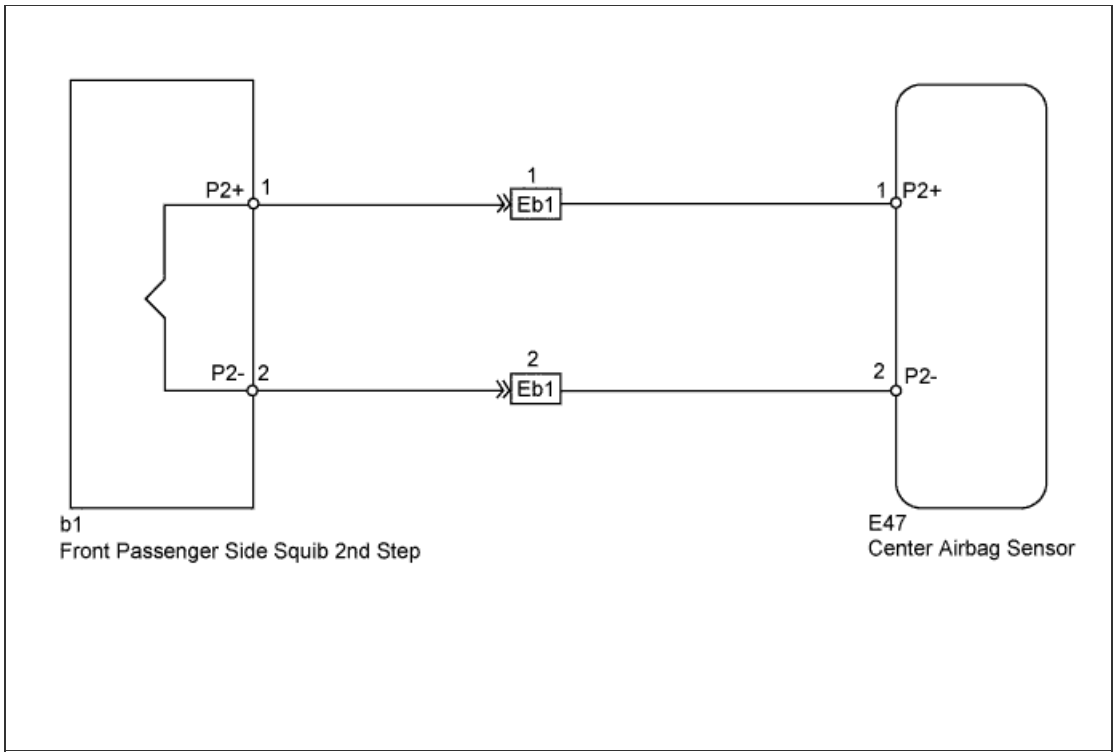
for Preparation Click here

DESCRIPTION

The front passenger side squib 2nd step circuit consists of the center airbag sensor and the front passenger airbag.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front passenger side squib 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1815/54	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front passenger side squib 2nd step circuit during the primary check. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1816/54	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front passenger side squib 2nd step circuit for 2 seconds. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1817/54	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front passenger side squib 2nd step circuit for 0.5 seconds. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1818/54	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front passenger side squib 2nd step circuit for 0.5 seconds. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT PASSENGER AIRBAG (FRONT PASSENGER SIDE SQUIB 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front passenger airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (black connector).

CAUTION:

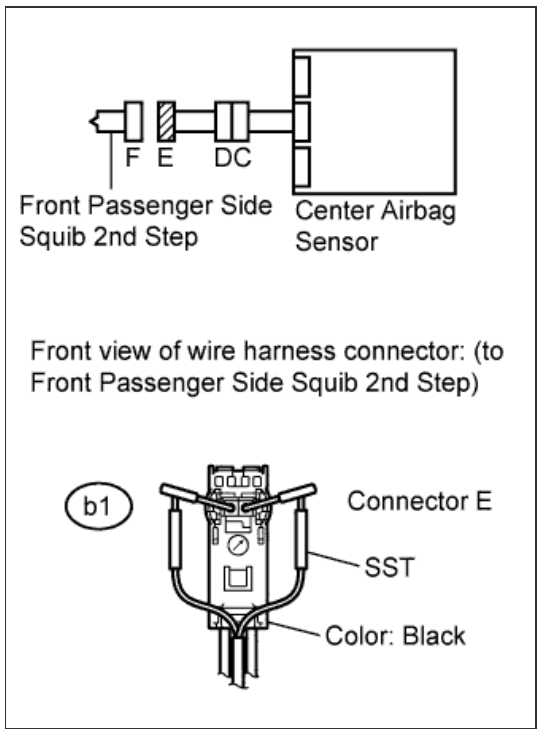
Never connect the tester to the front passenger airbag (front passenger side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1815, B1816, B1817 or B1818 is not output.

HINT:

Codes other than DTC B1815, B1816, B1817 and B1818 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT PASSENGER AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the instrument panel wire connectors (on the front passenger airbag side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not damaged or deformed.

NG → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

3.CHECK FRONT PASSENGER SIDE SQUIB 2ND STEP CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
b1-1 (P2+) - Body ground	Engine switch on (IG)	Below 1 V
b1-2 (P2-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

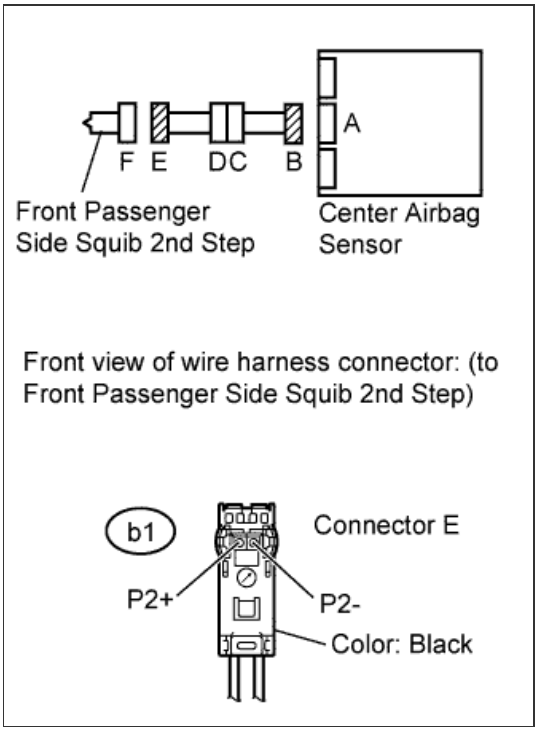
Tester Connection	Condition	Specified Condition
b1-1 (P2+) - b1-2 (P2-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
b1-1 (P2+) - b1-2 (P2-)	Always	1 MΩ or higher
b1-1 (P2+) - Body		



ground	Always	1 MΩ or higher
b1-2 (P2-) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front passenger airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

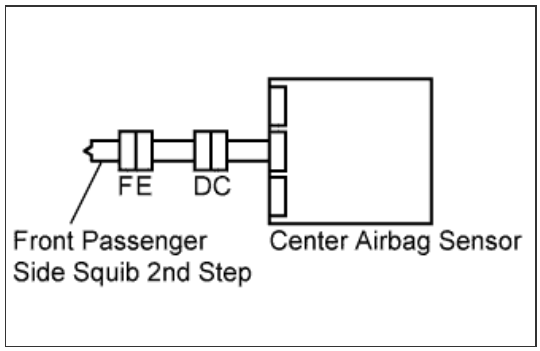
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1815, B1816, B1817 or B1818 is not output.

HINT:

Codes other than DTC B1815, B1816, B1817 and B1818 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

→ USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - INSTRUMENT PANEL WIRE ASSEMBLY)

a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the instrument panel wire assembly.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
Eb1-1 - Body ground	Engine switch on (IG)	Below 1 V
Eb1-2 - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

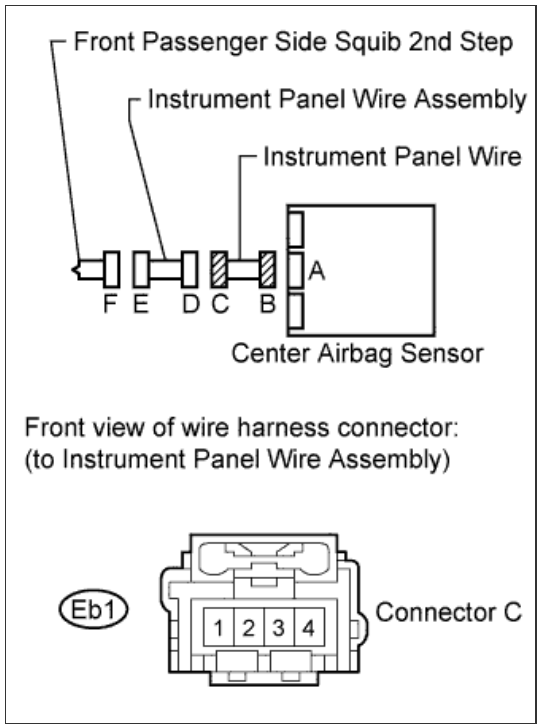
f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-1 - Eb1-2	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).



i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-1 - Eb1-2	Always	1 MΩ or higher
Eb1-1 - Body ground	Always	1 MΩ or higher
Eb1-2 - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

DTC B1905/74 Short in Front Pretensioner Squib LH Circuit

DTC B1906/74 Open in Front Pretensioner Squib LH Circuit

DTC B1907/74 Short to GND in Front Pretensioner Squib LH Circuit

DTC B1908/74 Short to B+ in Front Pretensioner Squib LH Circuit

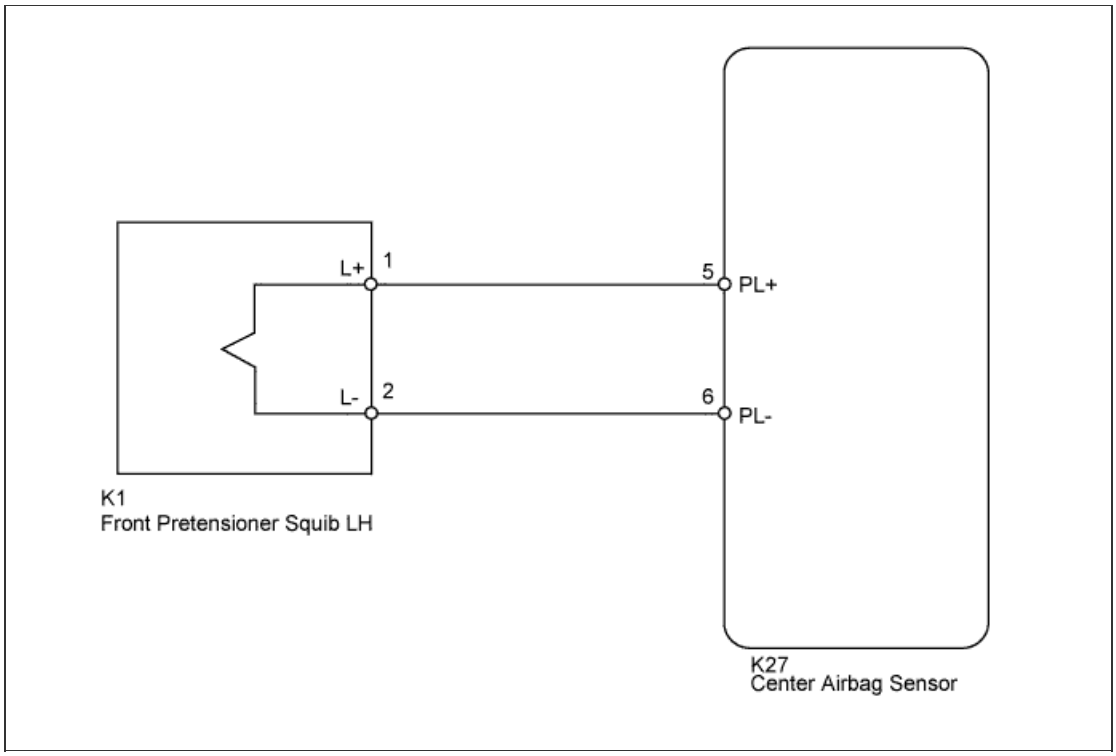
for Preparation Click here

DESCRIPTION

The front pretensioner squib LH circuit consists of the center airbag sensor and the front seat outer belt LH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front pretensioner squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1905/74	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front pretensioner squib LH circuit during the primary check. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly
B1906/74	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front pretensioner squib LH circuit for 2 seconds. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly
B1907/74	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front pretensioner squib LH circuit for 0.5 seconds. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly
B1908/74	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front pretensioner squib LH circuit for 0.5 seconds. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT OUTER BELT LH (FRONT PRETENSIONER SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front seat outer belt LH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

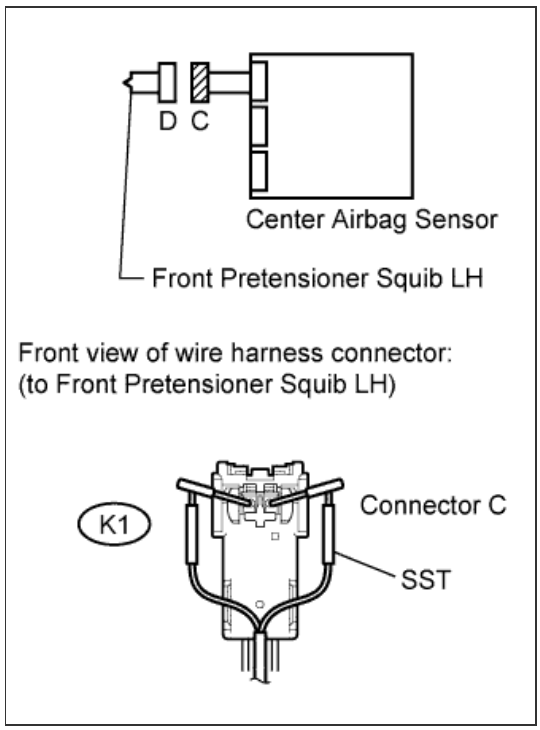
Never connect the tester to the front seat outer belt LH (front pretensioner squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1905, B1906, B1907 or B1908 is not output.

HINT:

Codes other than DTC B1905, B1906, B1907 and B1908 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connector (on the front seat outer belt LH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (FRONT PRETENSIONER SQUIB LH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K1-1 (L+) - Body ground	Engine switch on (IG)	Below 1 V
K1-2 (L-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

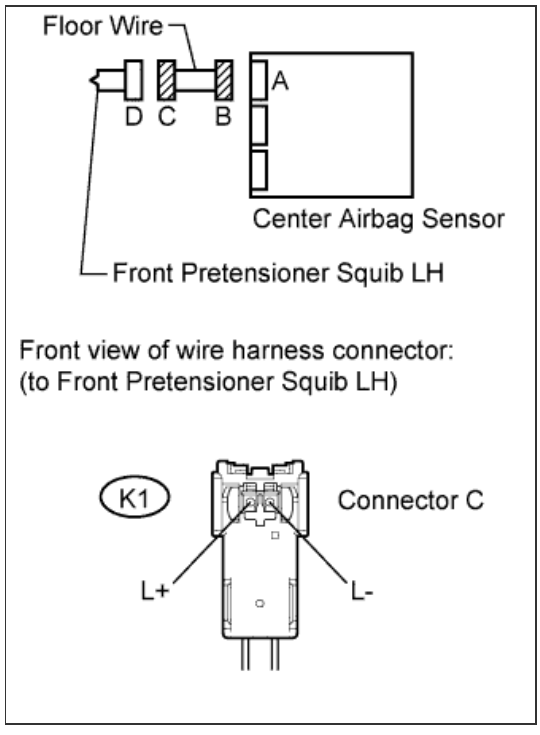
Tester Connection	Condition	Specified Condition
K1-1 (L+) - K1-2 (L-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K1-1 (L+) - K1-2 (L-)	Always	1 MΩ or higher
K1-1 (L+) - Body ground	Always	1 MΩ or higher
K1-2 (L-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat outer belt LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

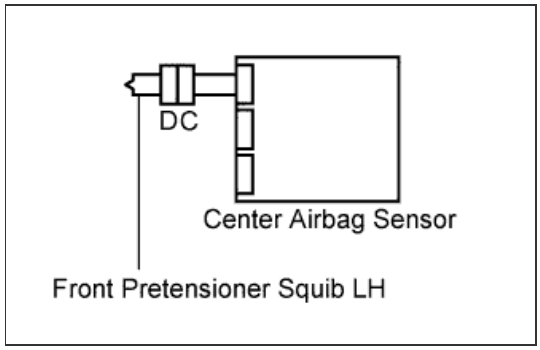
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1905, B1906, B1907 or B1908 is not output.

HINT:

Codes other than DTC B1905, B1906, B1907 and B1908 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1815/54 Short in Front Passenger Side Squib 2nd Step Circuit

DTC B1816/54 Open in Front Passenger Side Squib 2nd Step Circuit

DTC B1817/54 Short to GND in Front Passenger Side Squib 2nd Step Circuit

DTC B1818/54 Short to B+ in Front Passenger Side Squib 2nd Step Circuit

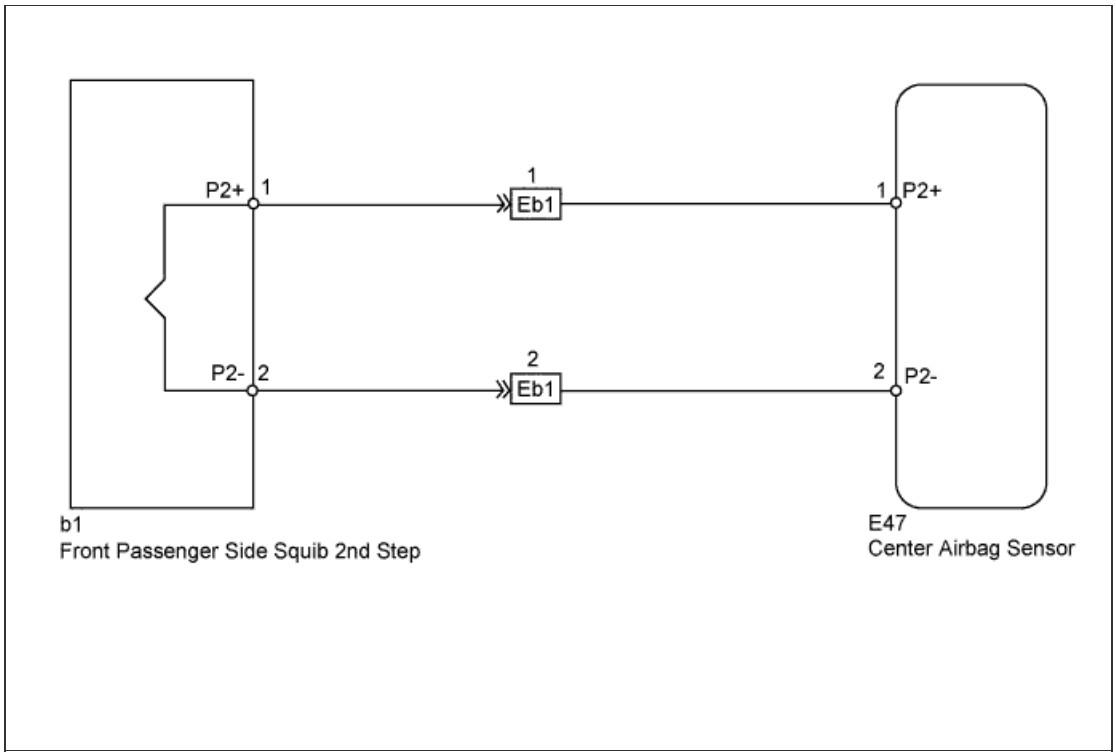
for Preparation Click here

DESCRIPTION

The front passenger side squib 2nd step circuit consists of the center airbag sensor and the front passenger airbag.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front passenger side squib 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1815/54	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front passenger side squib 2nd step circuit during the primary check. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1816/54	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front passenger side squib 2nd step circuit for 2 seconds. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1817/54	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front passenger side squib 2nd step circuit for 0.5 seconds. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1818/54	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front passenger side squib 2nd step circuit for 0.5 seconds. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT PASSENGER AIRBAG (FRONT PASSENGER SIDE SQUIB 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front passenger airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (black connector).

CAUTION:

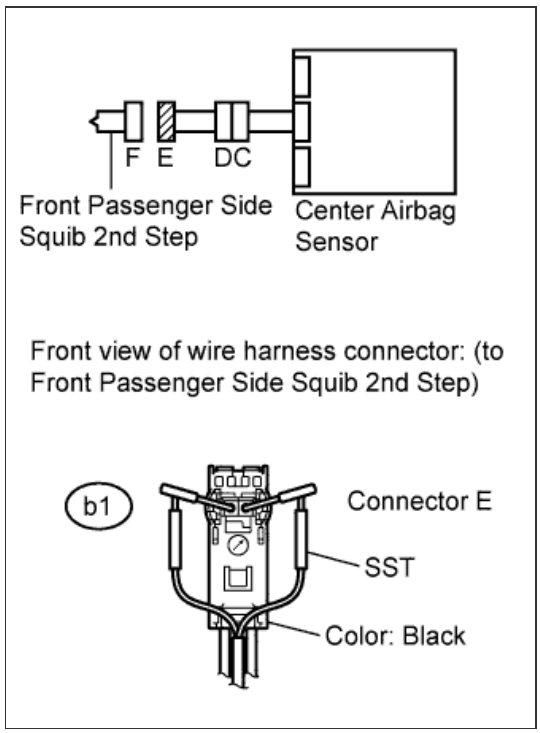
Never connect the tester to the front passenger airbag (front passenger side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1815, B1816, B1817 or B1818 is not output.

HINT:

Codes other than DTC B1815, B1816, B1817 and B1818 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT PASSENGER AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the instrument panel wire connectors (on the front passenger airbag side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not damaged or deformed.

NG → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

3.CHECK FRONT PASSENGER SIDE SQUIB 2ND STEP CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
b1-1 (P2+) - Body ground	Engine switch on (IG)	Below 1 V
b1-2 (P2-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

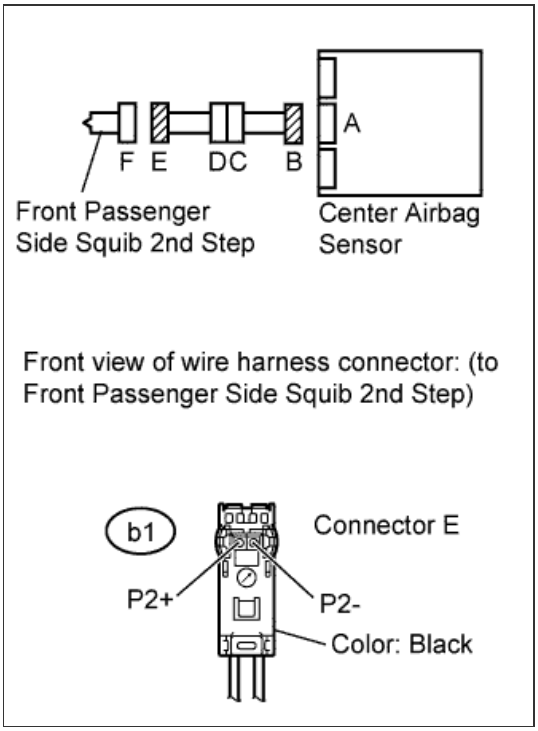
Tester Connection	Condition	Specified Condition
b1-1 (P2+) - b1-2 (P2-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
b1-1 (P2+) - b1-2 (P2-)	Always	1 MΩ or higher
b1-1 (P2+) - Body		



ground	Always	1 MΩ or higher
b1-2 (P2-) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front passenger airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

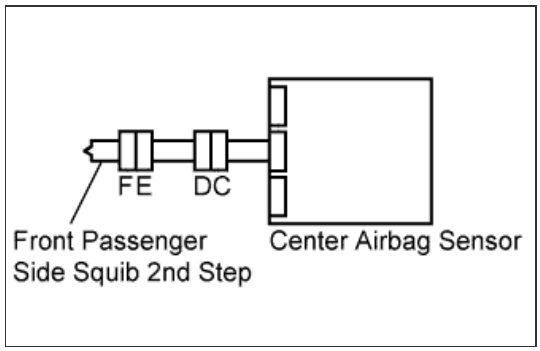
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1815, B1816, B1817 or B1818 is not output.

HINT:

Codes other than DTC B1815, B1816, B1817 and B1818 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

→ USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - INSTRUMENT PANEL WIRE ASSEMBLY)

a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the instrument panel wire assembly.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
Eb1-1 - Body ground	Engine switch on (IG)	Below 1 V
Eb1-2 - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

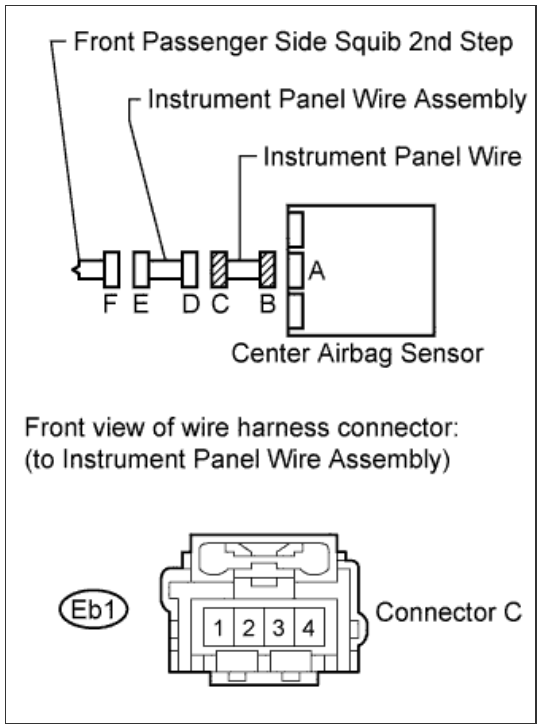
f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-1 - Eb1-2	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).



i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-1 - Eb1-2	Always	1 MΩ or higher
Eb1-1 - Body ground	Always	1 MΩ or higher
Eb1-2 - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

DTC B1905/74 Short in Front Pretensioner Squib LH Circuit

DTC B1906/74 Open in Front Pretensioner Squib LH Circuit

DTC B1907/74 Short to GND in Front Pretensioner Squib LH Circuit

DTC B1908/74 Short to B+ in Front Pretensioner Squib LH Circuit

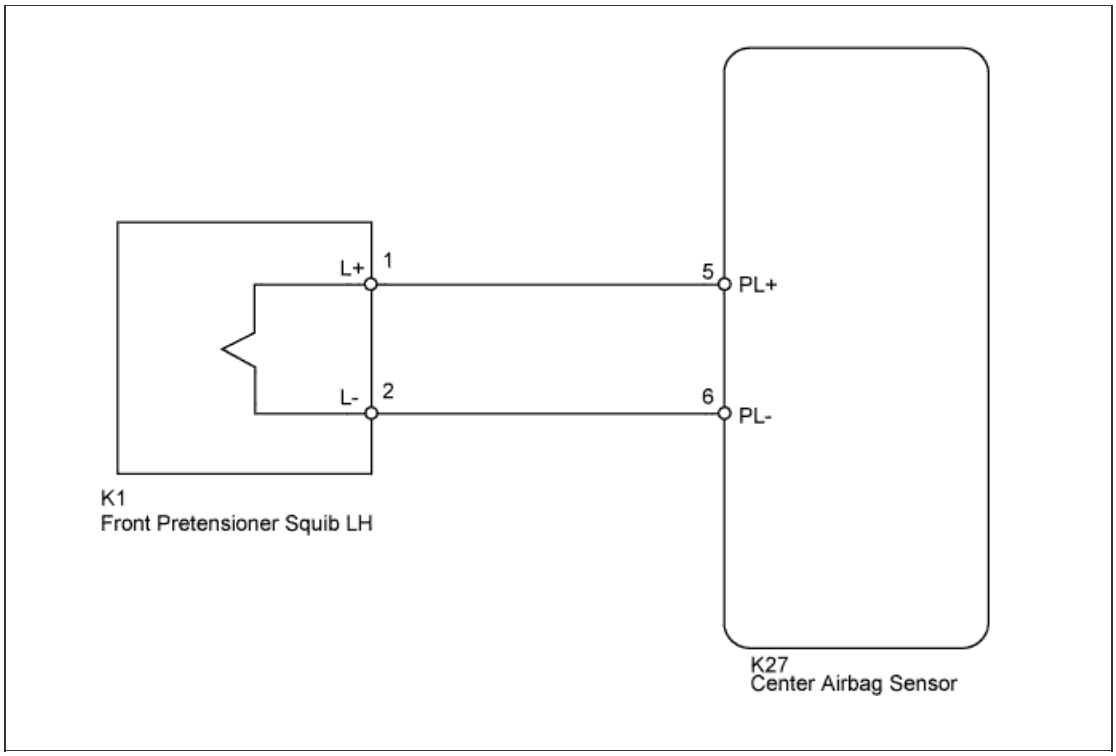
for Preparation Click here

DESCRIPTION

The front pretensioner squib LH circuit consists of the center airbag sensor and the front seat outer belt LH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front pretensioner squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1905/74	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front pretensioner squib LH circuit during the primary check. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly
B1906/74	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front pretensioner squib LH circuit for 2 seconds. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly
B1907/74	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front pretensioner squib LH circuit for 0.5 seconds. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly
B1908/74	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front pretensioner squib LH circuit for 0.5 seconds. • A front pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat outer belt assembly LH (Front pretensioner squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT OUTER BELT LH (FRONT PRETENSIONER SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front seat outer belt LH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

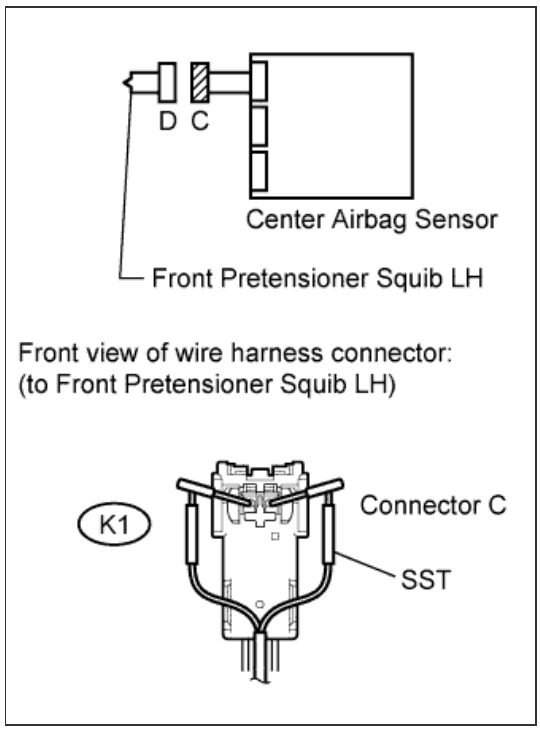
Never connect the tester to the front seat outer belt LH (front pretensioner squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1905, B1906, B1907 or B1908 is not output.

HINT:

Codes other than DTC B1905, B1906, B1907 and B1908 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connector (on the front seat outer belt LH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (FRONT PRETENSIONER SQUIB LH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K1-1 (L+) - Body ground	Engine switch on (IG)	Below 1 V
K1-2 (L-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

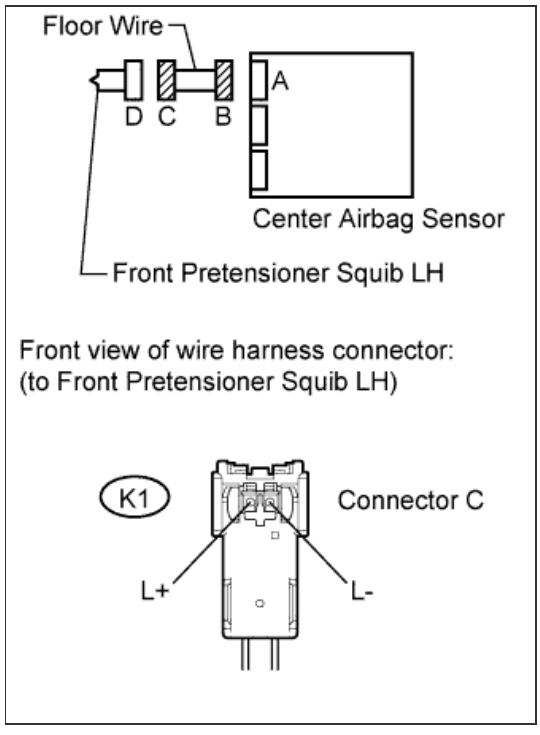
Tester Connection	Condition	Specified Condition
K1-1 (L+) - K1-2 (L-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K1-1 (L+) - K1-2 (L-)	Always	1 MΩ or higher
K1-1 (L+) - Body ground	Always	1 MΩ or higher
K1-2 (L-) - Body	Always	1 MΩ or higher



ground		

NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat outer belt LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

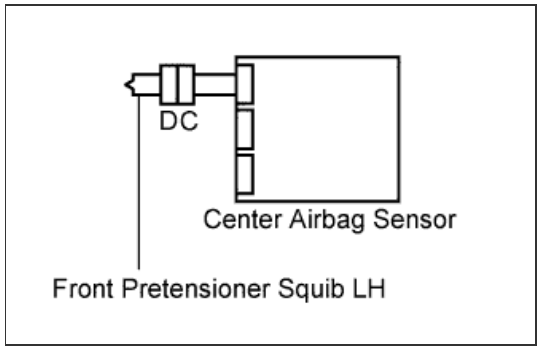
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1905, B1906, B1907 or B1908 is not output.

HINT:

Codes other than DTC B1905, B1906, B1907 and B1908 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1815/54 Short in Front Passenger Side Squib 2nd Step Circuit

DTC B1816/54 Open in Front Passenger Side Squib 2nd Step Circuit

DTC B1817/54 Short to GND in Front Passenger Side Squib 2nd Step Circuit

DTC B1818/54 Short to B+ in Front Passenger Side Squib 2nd Step Circuit

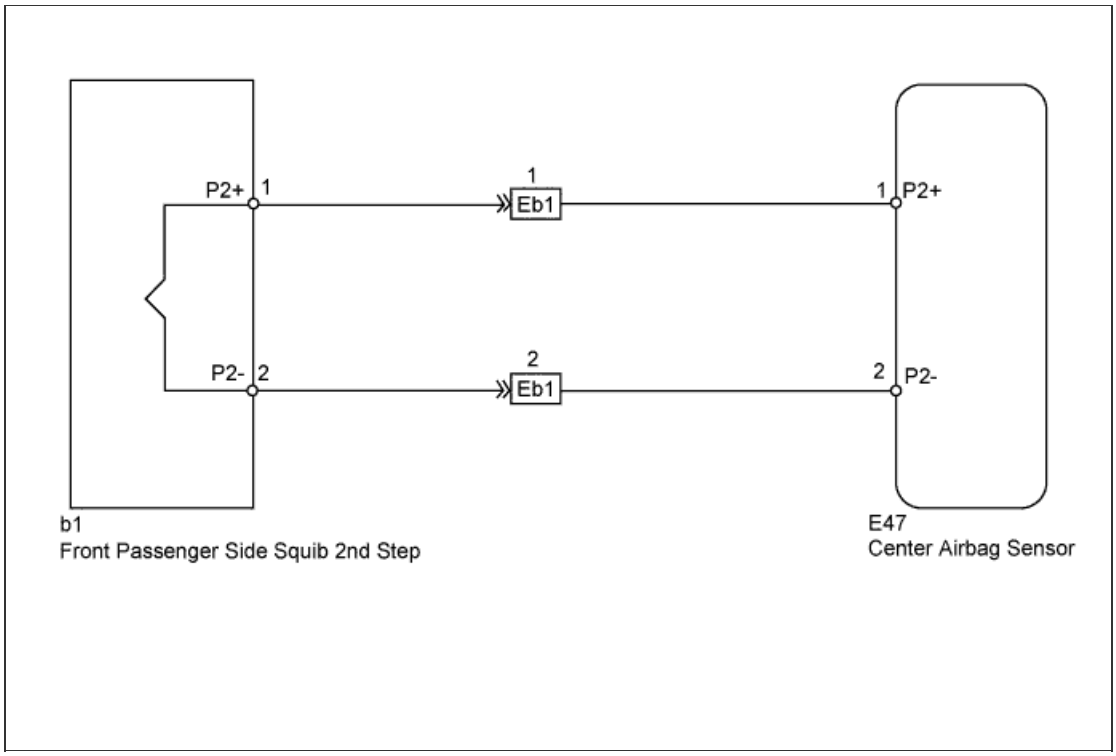
for Preparation Click here

DESCRIPTION

The front passenger side squib 2nd step circuit consists of the center airbag sensor and the front passenger airbag.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front passenger side squib 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1815/54	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front passenger side squib 2nd step circuit during the primary check. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1816/54	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front passenger side squib 2nd step circuit for 2 seconds. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1817/54	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front passenger side squib 2nd step circuit for 0.5 seconds. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1818/54	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front passenger side squib 2nd step circuit for 0.5 seconds. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT PASSENGER AIRBAG (FRONT PASSENGER SIDE SQUIB 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front passenger airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (black connector).

CAUTION:

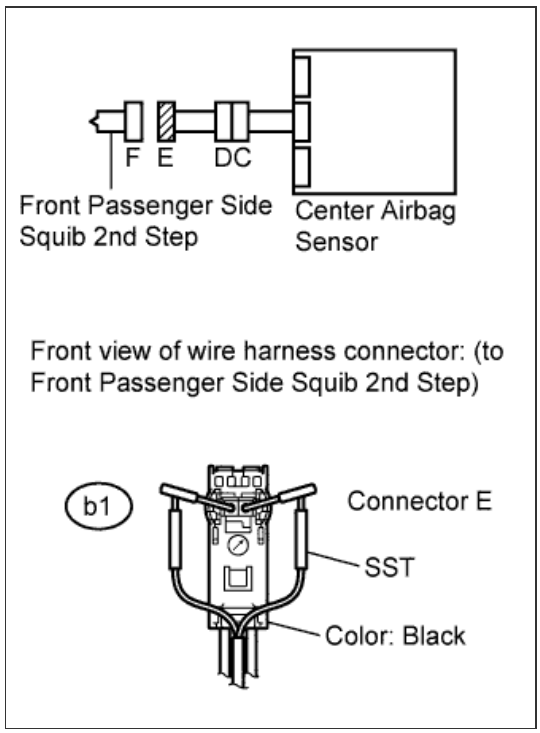
Never connect the tester to the front passenger airbag (front passenger side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1815, B1816, B1817 or B1818 is not output.

HINT:

Codes other than DTC B1815, B1816, B1817 and B1818 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT PASSENGER AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the instrument panel wire connectors (on the front passenger airbag side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not damaged or deformed.

NG → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

3.CHECK FRONT PASSENGER SIDE SQUIB 2ND STEP CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
b1-1 (P2+) - Body ground	Engine switch on (IG)	Below 1 V
b1-2 (P2-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

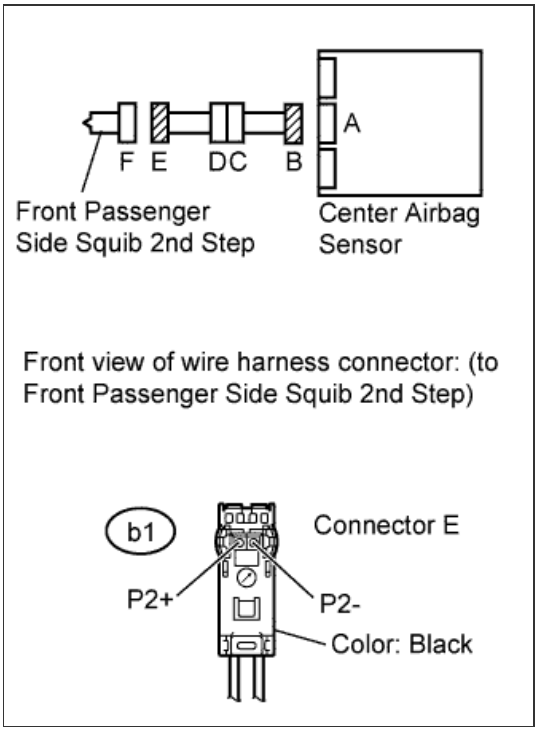
Tester Connection	Condition	Specified Condition
b1-1 (P2+) - b1-2 (P2-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
b1-1 (P2+) - b1-2 (P2-)	Always	1 MΩ or higher
b1-1 (P2+) - Body		



ground	Always	1 MΩ or higher
b1-2 (P2-) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front passenger airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

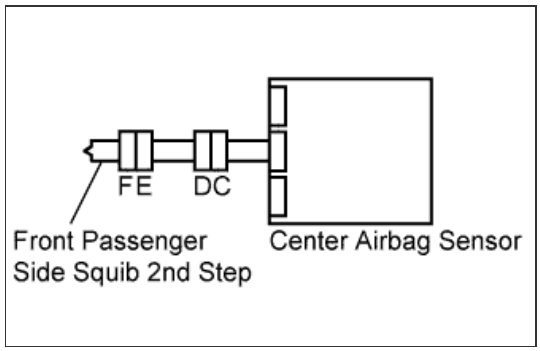
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1815, B1816, B1817 or B1818 is not output.

HINT:

Codes other than DTC B1815, B1816, B1817 and B1818 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

→ USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - INSTRUMENT PANEL WIRE ASSEMBLY)

a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the instrument panel wire assembly.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
Eb1-1 - Body ground	Engine switch on (IG)	Below 1 V
Eb1-2 - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

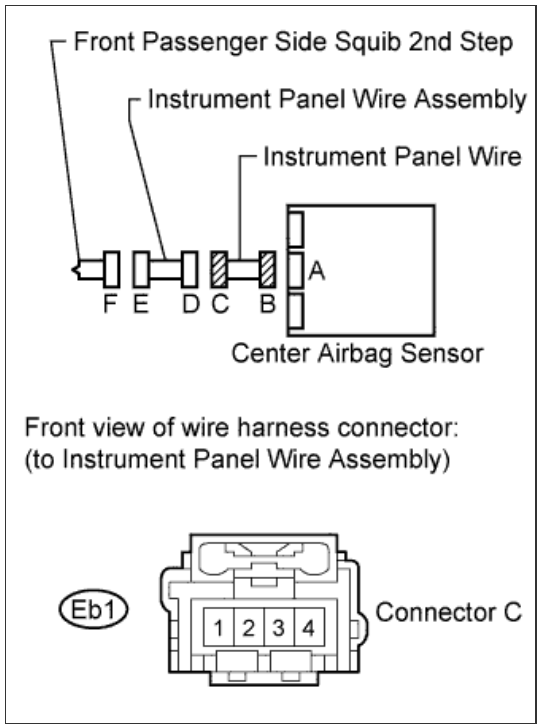
f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-1 - Eb1-2	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).



i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-1 - Eb1-2	Always	1 MΩ or higher
Eb1-1 - Body ground	Always	1 MΩ or higher
Eb1-2 - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

DTC B1920/77 Short in Rear Pretensioner Squib RH Circuit

DTC B1921/77 Open in Rear Pretensioner Squib RH Circuit

DTC B1922/77 Short to GND in Rear Pretensioner Squib RH Circuit

DTC B1923/77 Short to B+ in Rear Pretensioner Squib RH Circuit

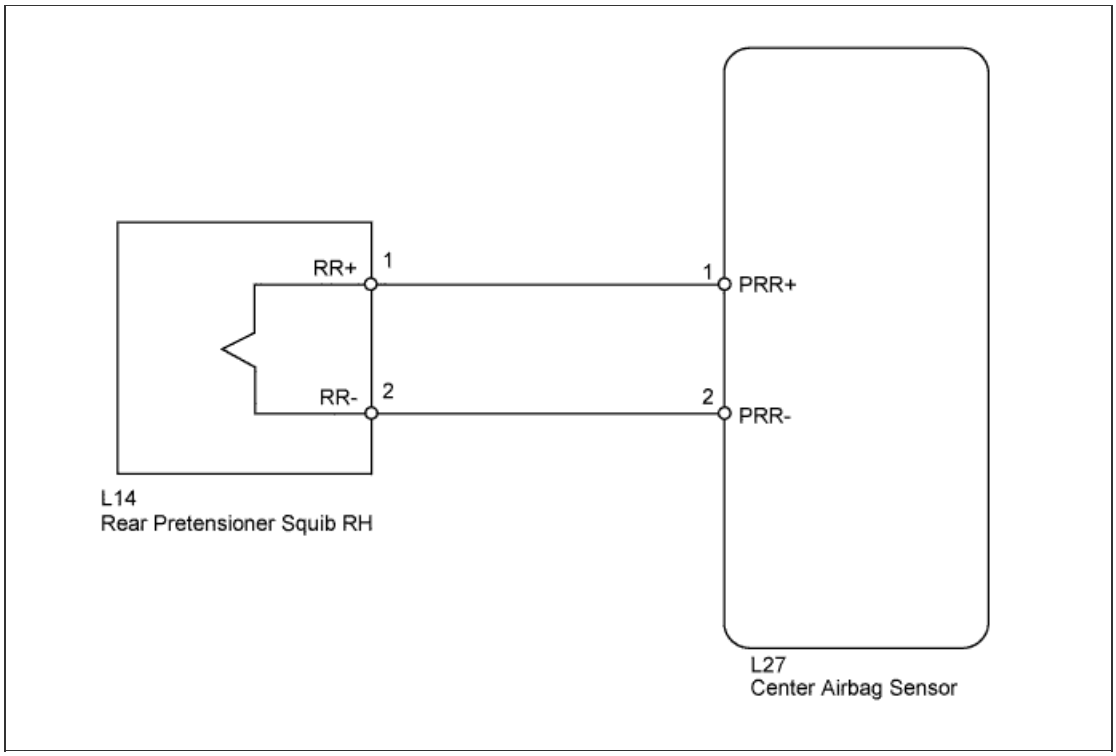
for Preparation Click here

DESCRIPTION

The rear pretensioner squib RH circuit consists of the center airbag sensor and the rear seat outer belt RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear pretensioner squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1920/77	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear pretensioner squib RH circuit during the primary check. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly
B1921/77	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear pretensioner squib RH circuit for 2 seconds. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly
B1922/77	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear pretensioner squib RH circuit for 0.5 seconds. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly
B1923/77	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear pretensioner squib RH circuit for 0.5 seconds. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT OUTER BELT RH (REAR PRETENSIONER SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the rear seat outer belt RH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

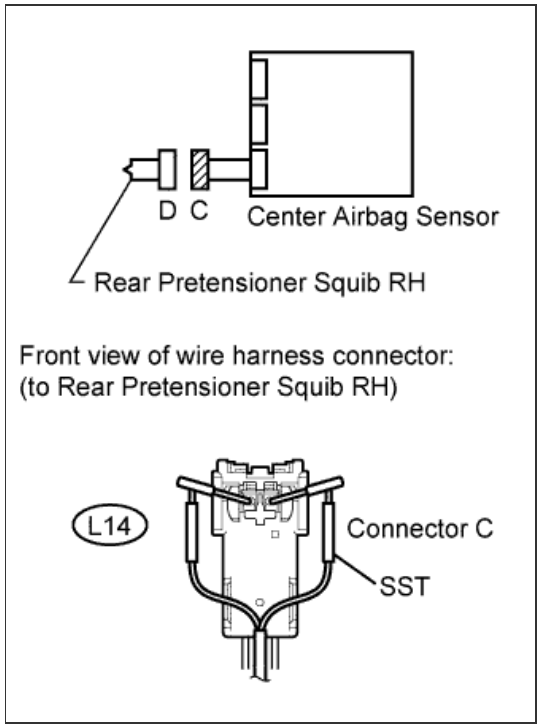
Never connect the tester to the rear seat outer belt RH (rear pretensioner squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs stored in the memory (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1920, B1921, B1922 or B1923 is not output.

HINT:

Codes other than DTC B1920, B1921, B1922 and B1923 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE REAR SEAT OUTER BELT ASSEMBLY RH (Click here)

2.CHECK CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the rear seat outer belt RH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (REAR PRETENSIONER SQUIB RH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 90 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L14-1 (RR+) - Body ground	Engine switch on (IG)	Below 1 V
L14-2 (RR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

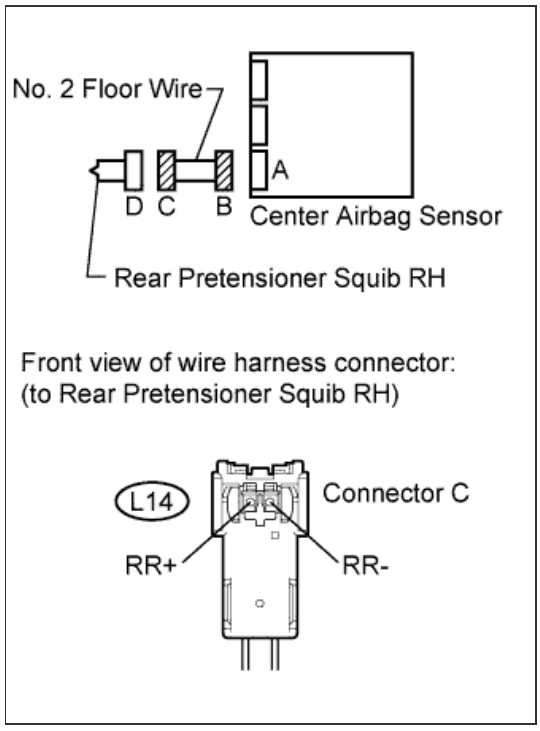
Tester Connection	Condition	Specified Condition
L14-1 (RR+) - L14-2 (RR-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L14-1 (RR+) - L14-2 (RR-)	Always	1 MΩ or higher
L14-1 (RR+) - Body ground	Always	1 MΩ or higher



L14-2 (RR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat outer belt RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 90 seconds.

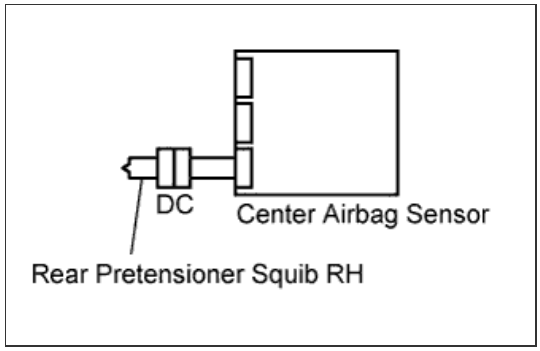
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1920, B1921, B1922 or B1923 is not output.

HINT:

Codes other than DTC B1920, B1921, B1922 and B1923 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1815/54 Short in Front Passenger Side Squib 2nd Step Circuit

DTC B1816/54 Open in Front Passenger Side Squib 2nd Step Circuit

DTC B1817/54 Short to GND in Front Passenger Side Squib 2nd Step Circuit

DTC B1818/54 Short to B+ in Front Passenger Side Squib 2nd Step Circuit

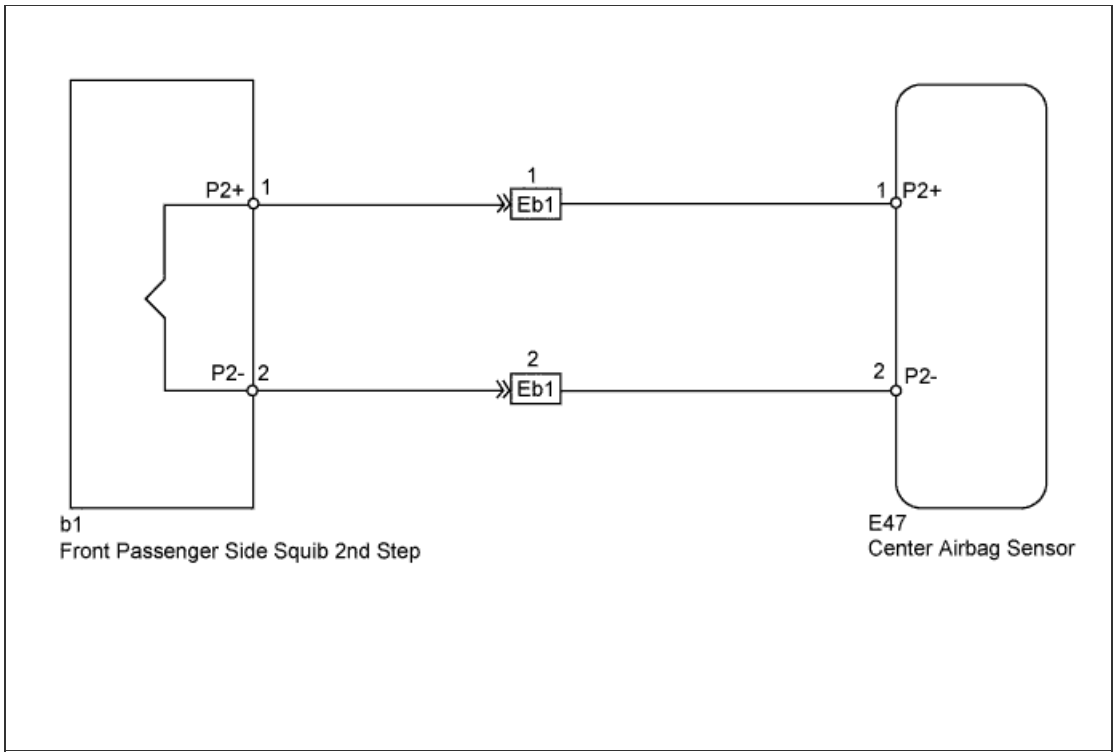
for Preparation Click here

DESCRIPTION

The front passenger side squib 2nd step circuit consists of the center airbag sensor and the front passenger airbag.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the front passenger side squib 2nd step circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1815/54	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the front passenger side squib 2nd step circuit during the primary check. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1816/54	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the front passenger side squib 2nd step circuit for 2 seconds. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1817/54	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the front passenger side squib 2nd step circuit for 0.5 seconds. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly
B1818/54	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the front passenger side squib 2nd step circuit for 0.5 seconds. • A front passenger side squib 2nd step malfunction. • A center airbag sensor malfunction.	• Instrument panel wire • Instrument panel wire assembly • Front passenger airbag assembly (Front passenger side squib 2nd step) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT PASSENGER AIRBAG (FRONT PASSENGER SIDE SQUIB 2ND STEP)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the front passenger airbag.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector E (black connector).

CAUTION:

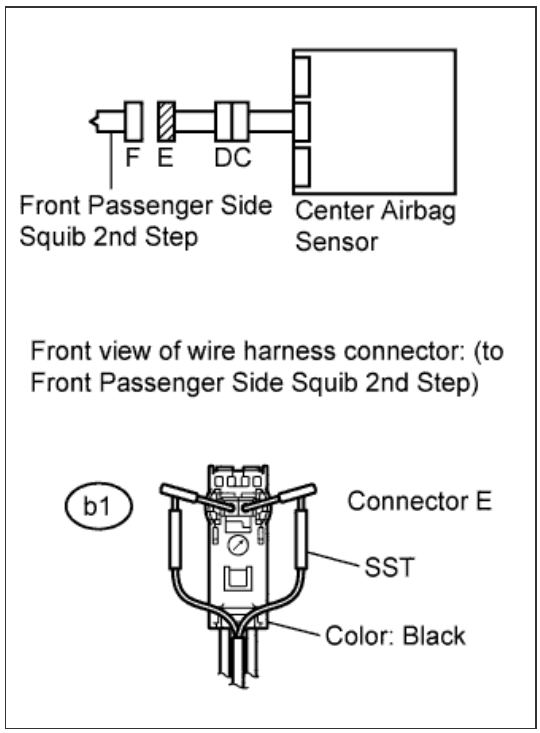
Never connect the tester to the front passenger airbag (front passenger side squib 2nd step) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:
DTC B1815, B1816, B1817 or B1818 is not output.

HINT:

Codes other than DTC B1815, B1816, B1817 and B1818 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT PASSENGER AIRBAG ASSEMBLY (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector E.

d. Check that the instrument panel wire connectors (on the front passenger airbag side) are not damaged.

OK:
The lock button is not disengaged, and the claw of the lock is not damaged or deformed.

NG → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

OK

3.CHECK FRONT PASSENGER SIDE SQUIB 2ND STEP CIRCUIT

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
b1-1 (P2+) - Body ground	Engine switch on (IG)	Below 1 V
b1-2 (P2-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

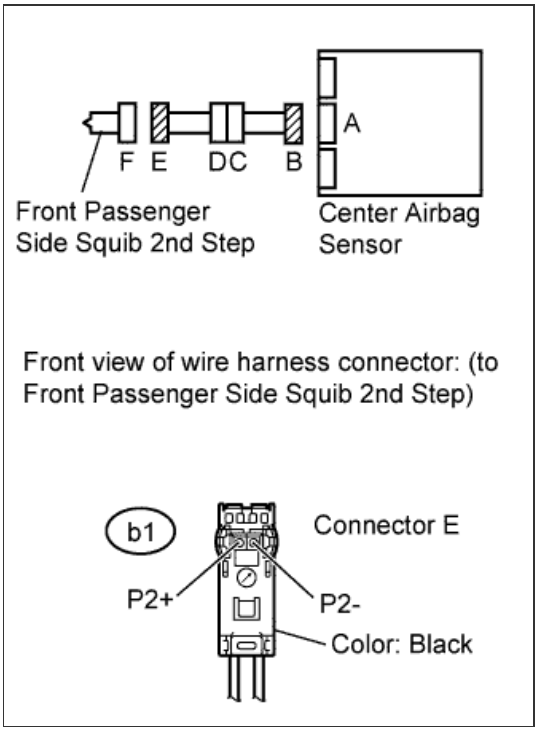
Tester Connection	Condition	Specified Condition
b1-1 (P2+) - b1-2 (P2-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
b1-1 (P2+) - b1-2 (P2-)	Always	1 MΩ or higher
b1-1 (P2+) - Body		



ground	Always	1 MΩ or higher
b1-2 (P2-) - Body ground	Always	1 MΩ or higher

NG → Go to step 5

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front passenger airbag and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

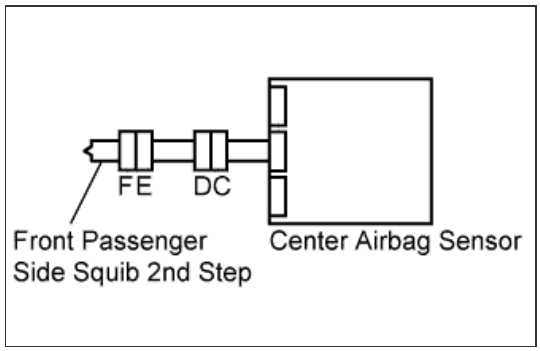
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1815, B1816, B1817 or B1818 is not output.

HINT:

Codes other than DTC B1815, B1816, B1817 and B1818 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

→ USE SIMULATION METHOD TO CHECK (Click here)

5.CHECK INSTRUMENT PANEL WIRE (CENTER AIRBAG SENSOR - INSTRUMENT PANEL WIRE ASSEMBLY)

a. Restore the released activation prevention mechanism of connector B to its original condition.

b. Disconnect the instrument panel wire connector from the instrument panel wire assembly.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
Eb1-1 - Body ground	Engine switch on (IG)	Below 1 V
Eb1-2 - Body ground	Engine switch on (IG)	Below 1 V

e. Turn the engine switch off.

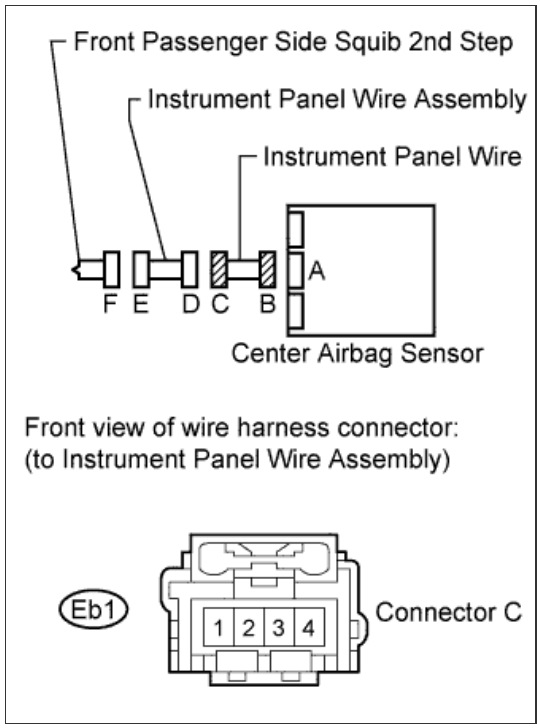
f. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

g. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-1 - Eb1-2	Always	Below 1 Ω

h. Release the activation prevention mechanism built into connector B (Click here).



i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
Eb1-1 - Eb1-2	Always	1 MΩ or higher
Eb1-1 - Body ground	Always	1 MΩ or higher
Eb1-2 - Body ground	Always	1 MΩ or higher

NG → REPLACE INSTRUMENT PANEL WIRE

OK → REPLACE INSTRUMENT PANEL WIRE ASSEMBLY

DTC B1920/77 Short in Rear Pretensioner Squib RH Circuit

DTC B1921/77 Open in Rear Pretensioner Squib RH Circuit

DTC B1922/77 Short to GND in Rear Pretensioner Squib RH Circuit

DTC B1923/77 Short to B+ in Rear Pretensioner Squib RH Circuit

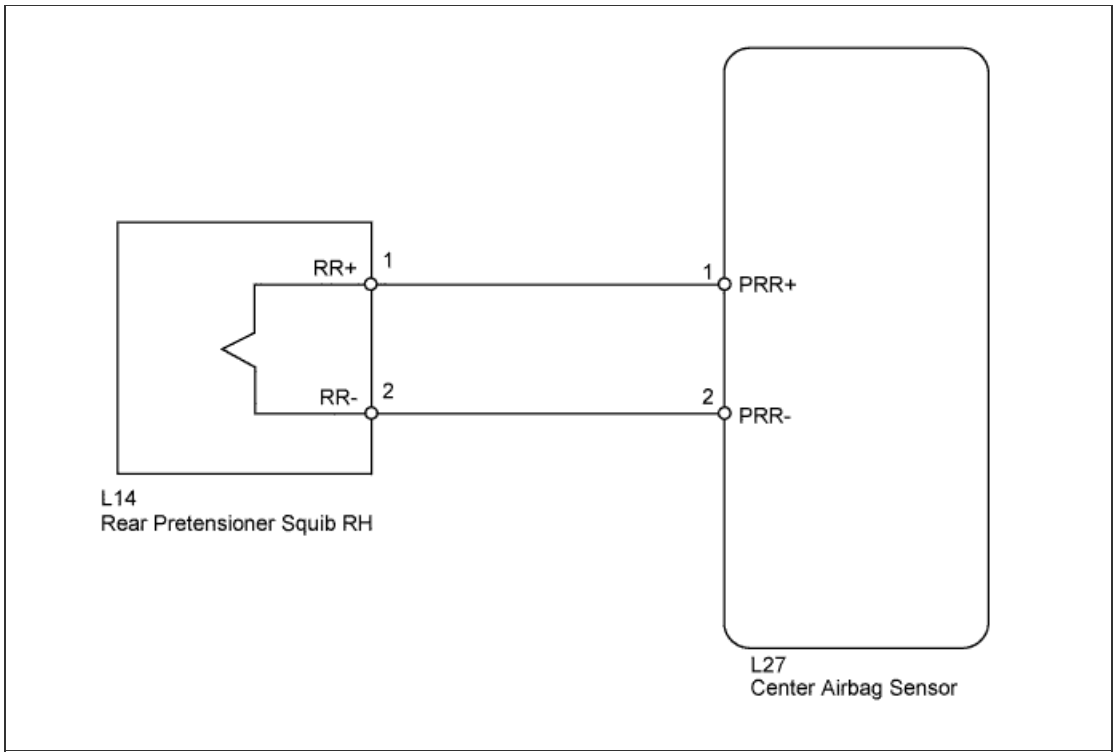
for Preparation Click here

DESCRIPTION

The rear pretensioner squib RH circuit consists of the center airbag sensor and the rear seat outer belt RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear pretensioner squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1920/77	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear pretensioner squib RH circuit during the primary check. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly
B1921/77	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear pretensioner squib RH circuit for 2 seconds. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly
B1922/77	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear pretensioner squib RH circuit for 0.5 seconds. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly
B1923/77	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear pretensioner squib RH circuit for 0.5 seconds. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT OUTER BELT RH (REAR PRETENSIONER SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the rear seat outer belt RH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

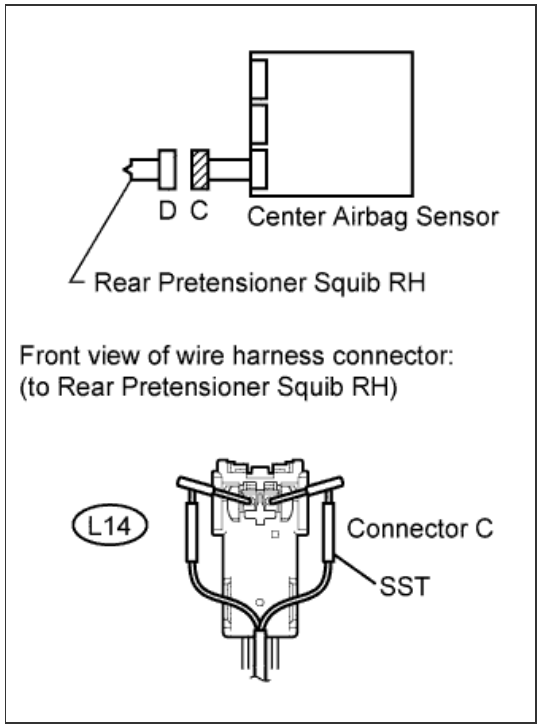
Never connect the tester to the rear seat outer belt RH (rear pretensioner squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs stored in the memory (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1920, B1921, B1922 or B1923 is not output.

HINT:

Codes other than DTC B1920, B1921, B1922 and B1923 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE REAR SEAT OUTER BELT ASSEMBLY RH (Click here)

2.CHECK CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the rear seat outer belt RH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (REAR PRETENSIONER SQUIB RH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 90 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L14-1 (RR+) - Body ground	Engine switch on (IG)	Below 1 V
L14-2 (RR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

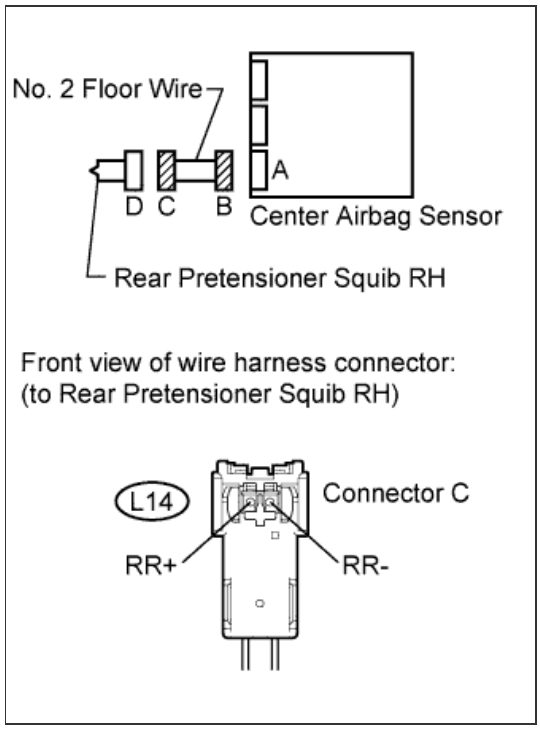
Tester Connection	Condition	Specified Condition
L14-1 (RR+) - L14-2 (RR-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L14-1 (RR+) - L14-2 (RR-)	Always	1 MΩ or higher
L14-1 (RR+) - Body ground	Always	1 MΩ or higher



L14-2 (RR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat outer belt RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 90 seconds.

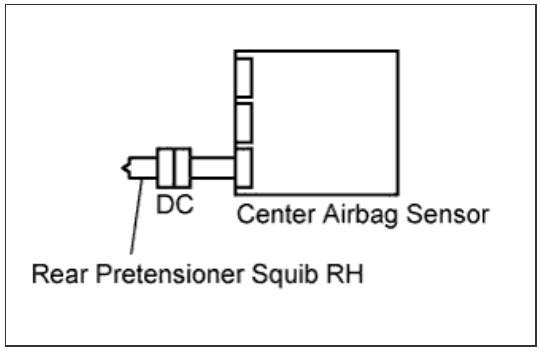
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1920, B1921, B1922 or B1923 is not output.

HINT:

Codes other than DTC B1920, B1921, B1922 and B1923 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1820/55 Short in Side Squib RH Circuit

DTC B1821/55 Open in Side Squib RH Circuit

DTC B1822/55 Short to GND in Side Squib RH Circuit

DTC B1823/55 Short to B+ in Side Squib RH Circuit

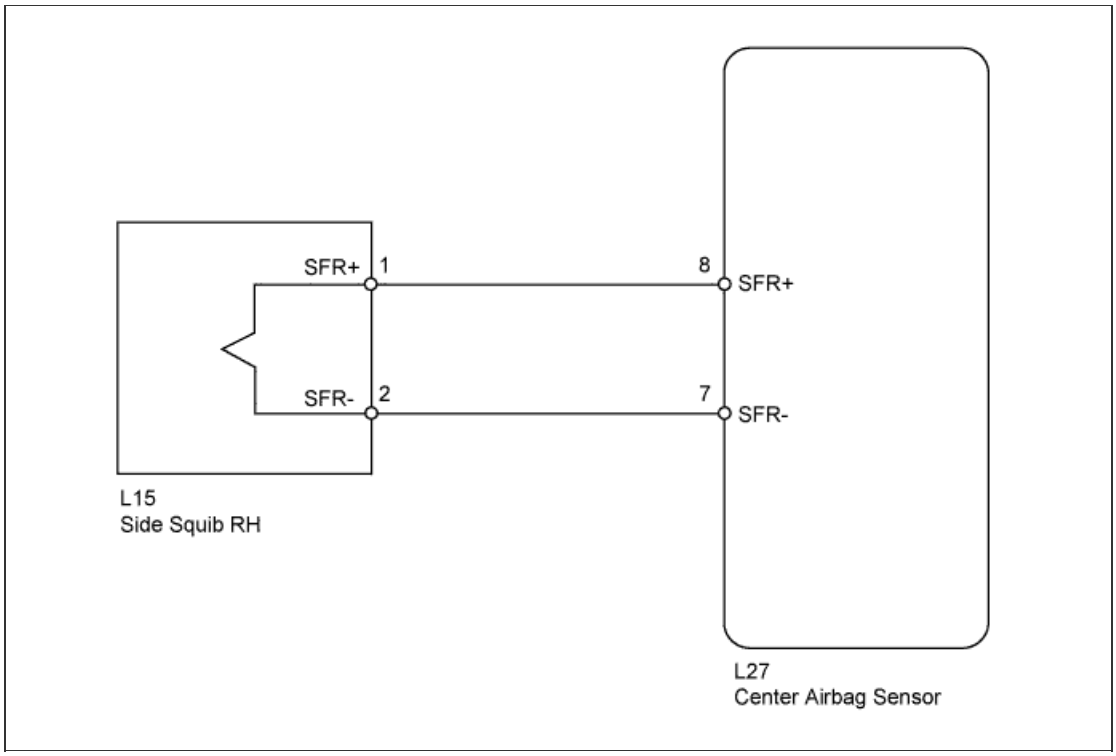
for Preparation Click here

DESCRIPTION

The side squib RH circuit consists of the center airbag sensor and the front seat airbag RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the side squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1820/55	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the side squib RH circuit during the primary check. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly
B1821/55	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the side squib RH circuit for 2 seconds. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly
B1822/55	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the side squib RH circuit for 0.5 seconds. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly
B1823/55	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the side squib RH circuit for 0.5 seconds. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT AIRBAG RH (SIDE SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the front seat airbag RH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

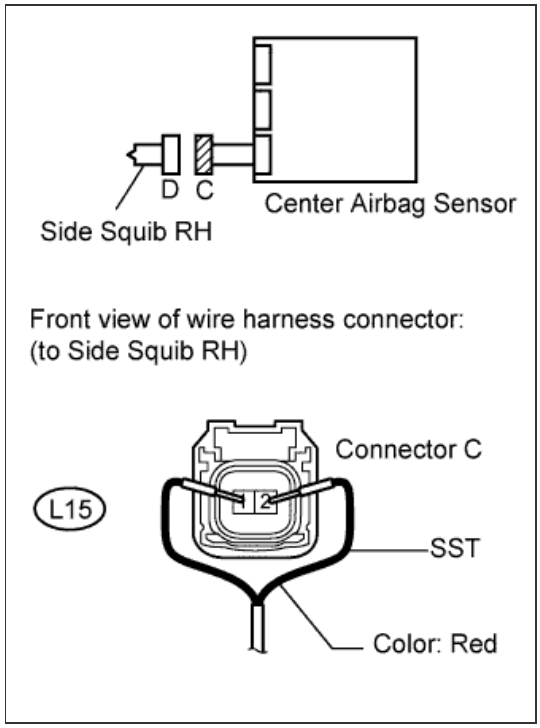
Never connect the tester to the front seat airbag RH (side squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1820, B1821, B1822 or B1823 is not output.

HINT:

Codes other than DTC B1820, B1821, B1822 and B1823 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT AIRBAG ASSEMBLY RH (Click here)

2.CHECK NO. 2 FLOOR WIRE (SIDE SQUIB RH CIRCUIT)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L15-1 (SFR+) - Body ground	Engine switch on (IG)	Below 1 V
L15-2 (SFR-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

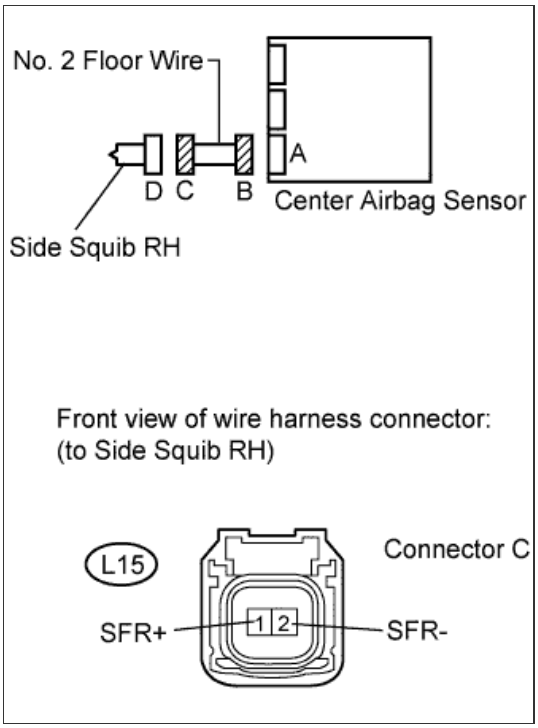
Tester Connection	Condition	Specified Condition
L15-1 (SFR+) - L15-2 (SFR-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L15-1 (SFR+) - L15-2 (SFR-)	Always	1 MΩ or higher
L15-1 (SFR+) - Body ground	Always	1 MΩ or higher
L15-2 (SFR-) - Body ground	Always	1 MΩ or higher



NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

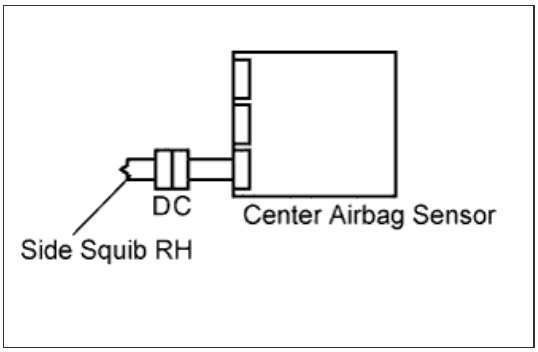
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1820, B1821, B1822 or B1823 is not output.

HINT:

Codes other than DTC B1820, B1821, B1822 and B1823 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1920/77 Short in Rear Pretensioner Squib RH Circuit

DTC B1921/77 Open in Rear Pretensioner Squib RH Circuit

DTC B1922/77 Short to GND in Rear Pretensioner Squib RH Circuit

DTC B1923/77 Short to B+ in Rear Pretensioner Squib RH Circuit

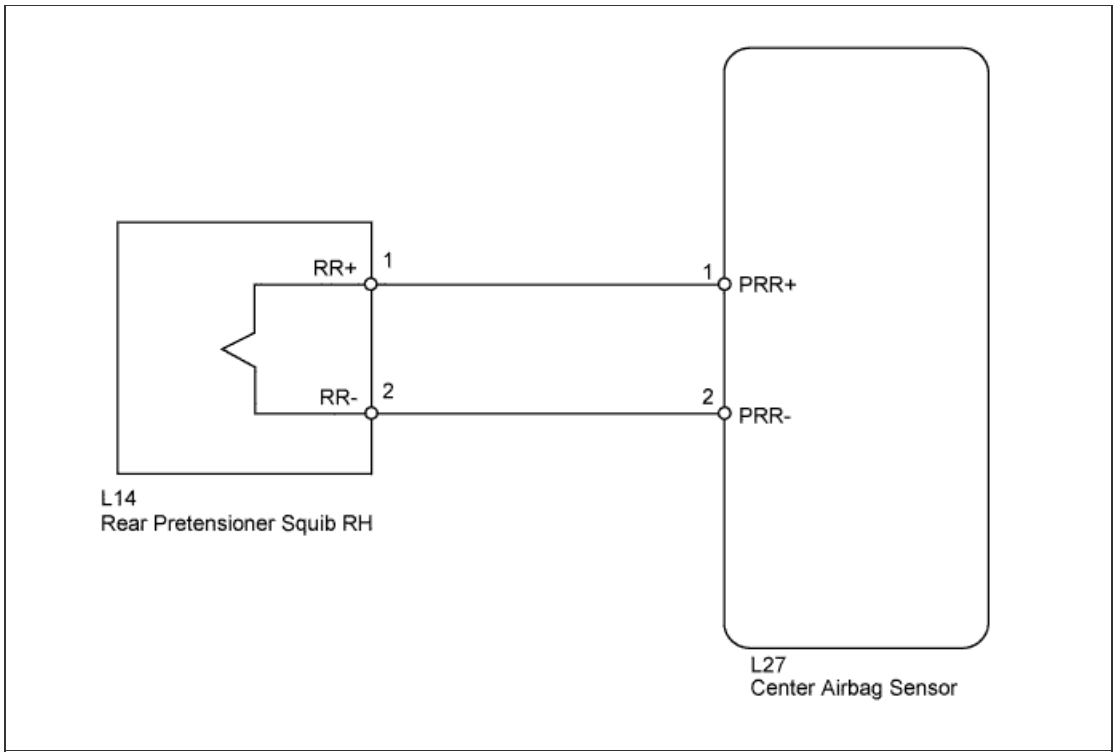
for Preparation Click here

DESCRIPTION

The rear pretensioner squib RH circuit consists of the center airbag sensor and the rear seat outer belt RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear pretensioner squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1920/77	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear pretensioner squib RH circuit during the primary check. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly
B1921/77	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear pretensioner squib RH circuit for 2 seconds. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly
B1922/77	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear pretensioner squib RH circuit for 0.5 seconds. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly
B1923/77	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear pretensioner squib RH circuit for 0.5 seconds. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT OUTER BELT RH (REAR PRETENSIONER SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the rear seat outer belt RH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

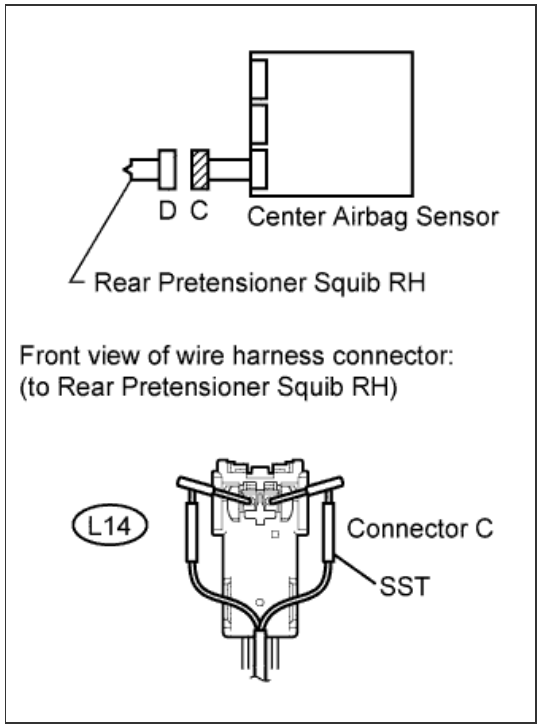
Never connect the tester to the rear seat outer belt RH (rear pretensioner squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs stored in the memory (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1920, B1921, B1922 or B1923 is not output.

HINT:

Codes other than DTC B1920, B1921, B1922 and B1923 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE REAR SEAT OUTER BELT ASSEMBLY RH (Click here)

2.CHECK CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the rear seat outer belt RH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (REAR PRETENSIONER SQUIB RH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 90 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L14-1 (RR+) - Body ground	Engine switch on (IG)	Below 1 V
L14-2 (RR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

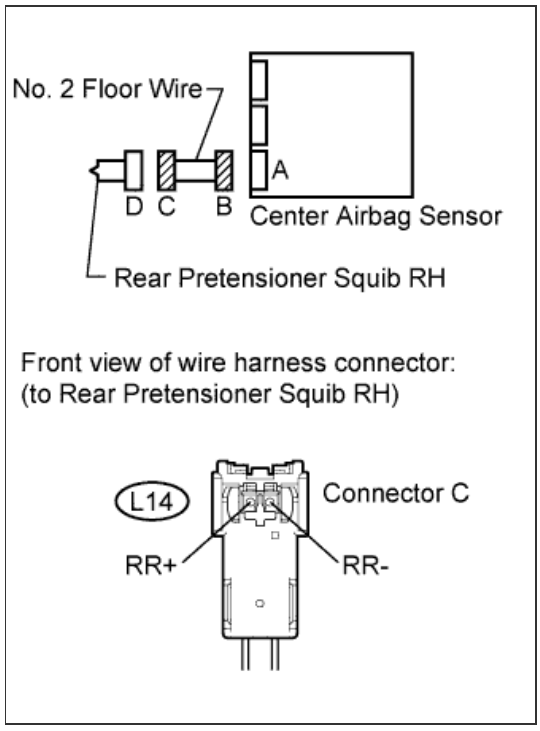
Tester Connection	Condition	Specified Condition
L14-1 (RR+) - L14-2 (RR-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L14-1 (RR+) - L14-2 (RR-)	Always	1 MΩ or higher
L14-1 (RR+) - Body ground	Always	1 MΩ or higher



L14-2 (RR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat outer belt RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 90 seconds.

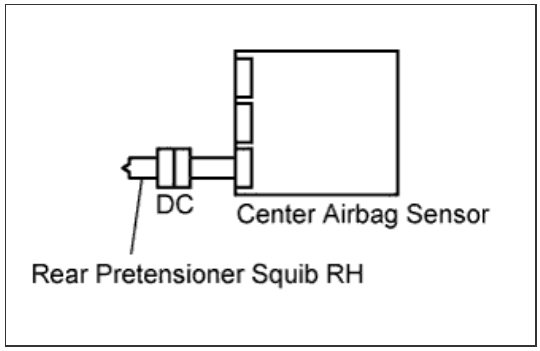
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1920, B1921, B1922 or B1923 is not output.

HINT:

Codes other than DTC B1920, B1921, B1922 and B1923 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1820/55 Short in Side Squib RH Circuit

DTC B1821/55 Open in Side Squib RH Circuit

DTC B1822/55 Short to GND in Side Squib RH Circuit

DTC B1823/55 Short to B+ in Side Squib RH Circuit

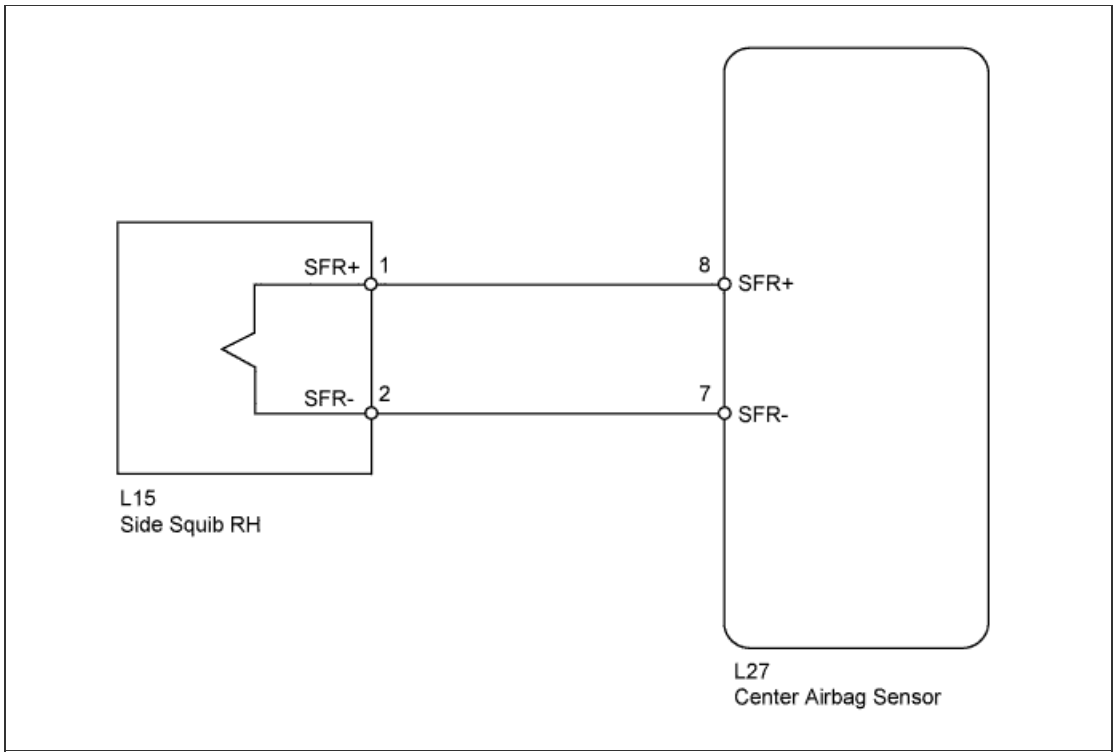
for Preparation Click here

DESCRIPTION

The side squib RH circuit consists of the center airbag sensor and the front seat airbag RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the side squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1820/55	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the side squib RH circuit during the primary check. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly
B1821/55	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the side squib RH circuit for 2 seconds. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly
B1822/55	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the side squib RH circuit for 0.5 seconds. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly
B1823/55	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the side squib RH circuit for 0.5 seconds. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT AIRBAG RH (SIDE SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the front seat airbag RH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

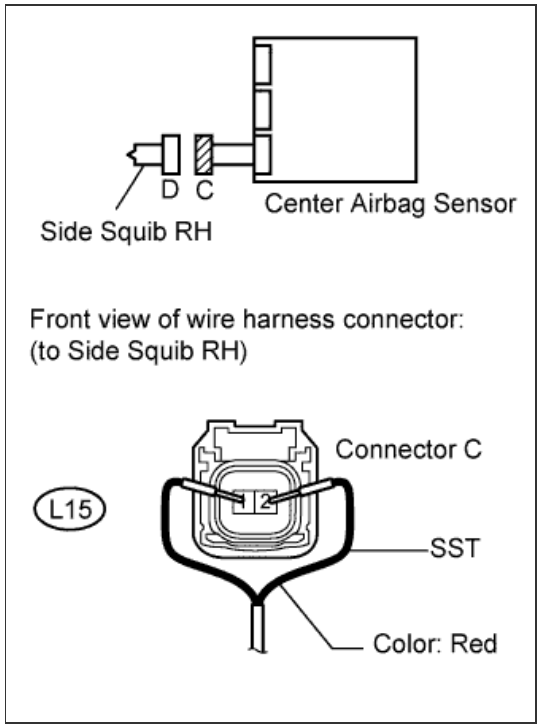
Never connect the tester to the front seat airbag RH (side squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1820, B1821, B1822 or B1823 is not output.

HINT:

Codes other than DTC B1820, B1821, B1822 and B1823 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT AIRBAG ASSEMBLY RH (Click here)

2.CHECK NO. 2 FLOOR WIRE (SIDE SQUIB RH CIRCUIT)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L15-1 (SFR+) - Body ground	Engine switch on (IG)	Below 1 V
L15-2 (SFR-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

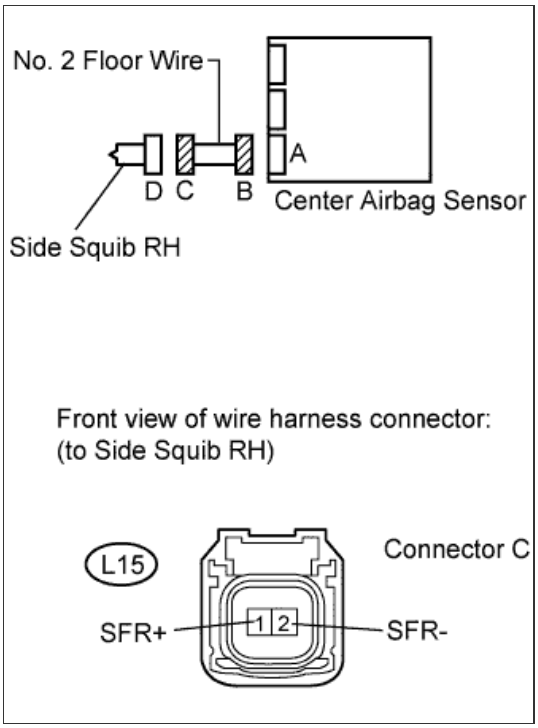
Tester Connection	Condition	Specified Condition
L15-1 (SFR+) - L15-2 (SFR-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L15-1 (SFR+) - L15-2 (SFR-)	Always	1 MΩ or higher
L15-1 (SFR+) - Body ground	Always	1 MΩ or higher
L15-2 (SFR-) - Body ground	Always	1 MΩ or higher



NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

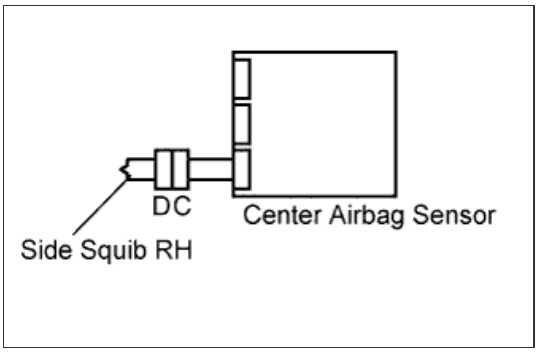
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1820, B1821, B1822 or B1823 is not output.

HINT:

Codes other than DTC B1820, B1821, B1822 and B1823 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1920/77 Short in Rear Pretensioner Squib RH Circuit

DTC B1921/77 Open in Rear Pretensioner Squib RH Circuit

DTC B1922/77 Short to GND in Rear Pretensioner Squib RH Circuit

DTC B1923/77 Short to B+ in Rear Pretensioner Squib RH Circuit

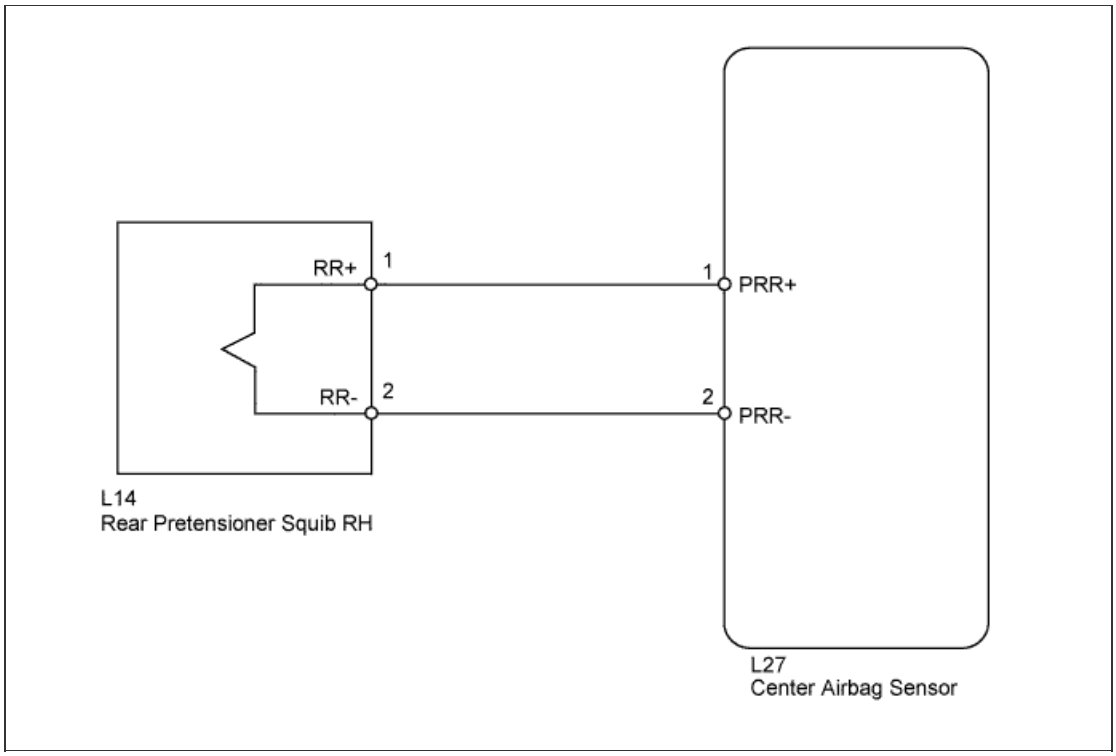
for Preparation Click here

DESCRIPTION

The rear pretensioner squib RH circuit consists of the center airbag sensor and the rear seat outer belt RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear pretensioner squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1920/77	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear pretensioner squib RH circuit during the primary check. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly
B1921/77	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear pretensioner squib RH circuit for 2 seconds. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly
B1922/77	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear pretensioner squib RH circuit for 0.5 seconds. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly
B1923/77	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear pretensioner squib RH circuit for 0.5 seconds. • A rear pretensioner squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Rear seat outer belt assembly RH (Rear pretensioner squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT OUTER BELT RH (REAR PRETENSIONER SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the rear seat outer belt RH.

d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

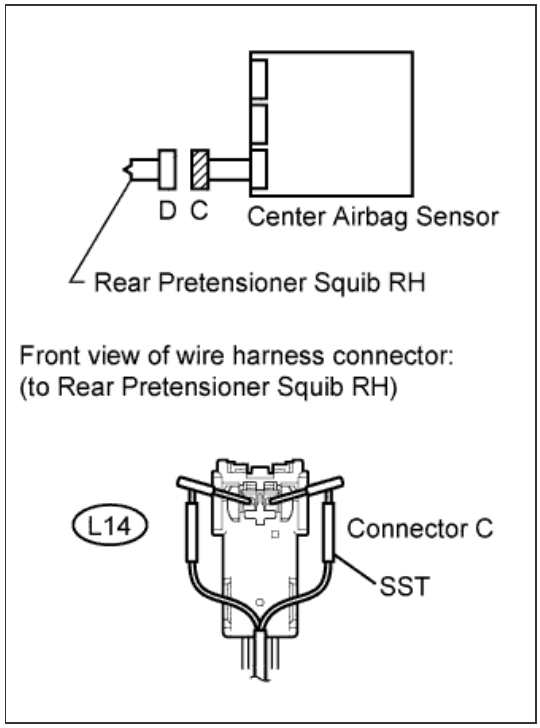
Never connect the tester to the rear seat outer belt RH (rear pretensioner squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs stored in the memory (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1920, B1921, B1922 or B1923 is not output.

HINT:

Codes other than DTC B1920, B1921, B1922 and B1923 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE REAR SEAT OUTER BELT ASSEMBLY RH (Click here)

2.CHECK CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the No. 2 floor wire connector (on the rear seat outer belt RH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not deformed or damaged.

NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK NO. 2 FLOOR WIRE (REAR PRETENSIONER SQUIB RH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 90 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L14-1 (RR+) - Body ground	Engine switch on (IG)	Below 1 V
L14-2 (RR-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

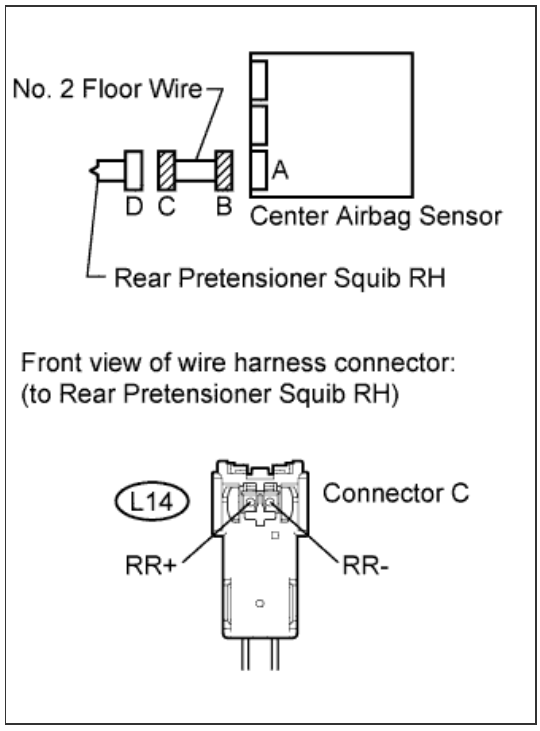
Tester Connection	Condition	Specified Condition
L14-1 (RR+) - L14-2 (RR-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L14-1 (RR+) - L14-2 (RR-)	Always	1 MΩ or higher
L14-1 (RR+) - Body ground	Always	1 MΩ or higher



L14-2 (RR-) - Body ground	Always	1 MΩ or higher

NG → REPLACE NO. 2 FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat outer belt RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 90 seconds.

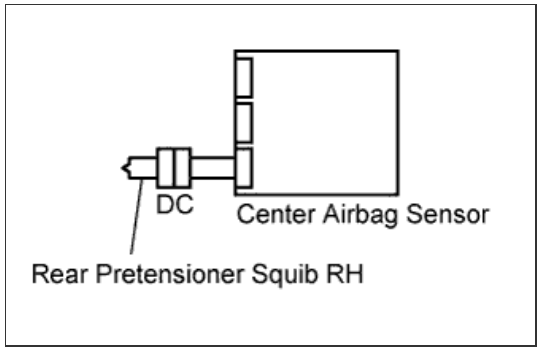
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs stored in the memory (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1920, B1921, B1922 or B1923 is not output.

HINT:

Codes other than DTC B1920, B1921, B1922 and B1923 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1820/55 Short in Side Squib RH Circuit

DTC B1821/55 Open in Side Squib RH Circuit

DTC B1822/55 Short to GND in Side Squib RH Circuit

DTC B1823/55 Short to B+ in Side Squib RH Circuit

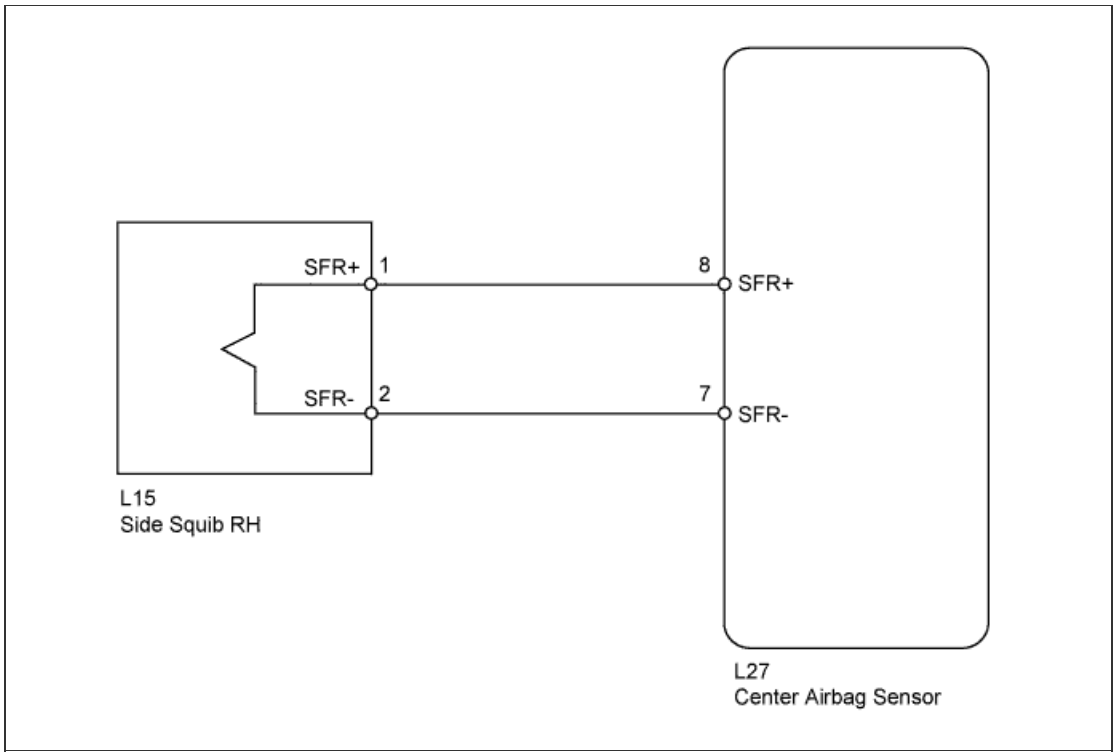
for Preparation Click here

DESCRIPTION

The side squib RH circuit consists of the center airbag sensor and the front seat airbag RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the side squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1820/55	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the side squib RH circuit during the primary check. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly
B1821/55	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the side squib RH circuit for 2 seconds. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly
B1822/55	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the side squib RH circuit for 0.5 seconds. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly
B1823/55	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the side squib RH circuit for 0.5 seconds. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT AIRBAG RH (SIDE SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the front seat airbag RH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

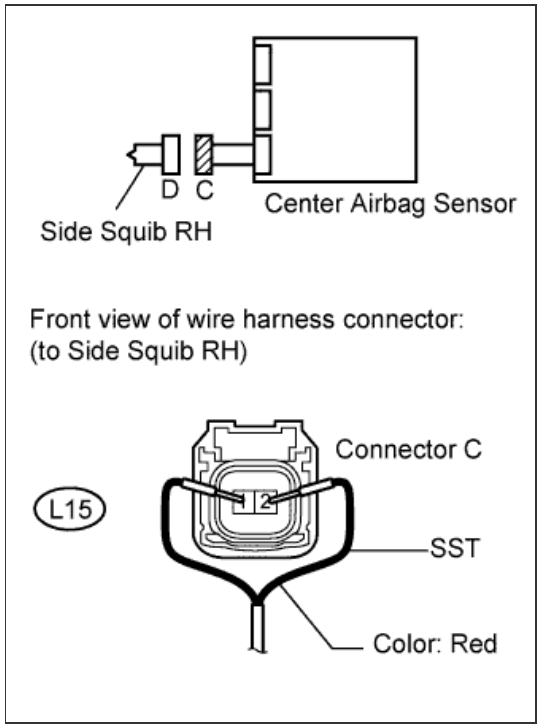
Never connect the tester to the front seat airbag RH (side squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1820, B1821, B1822 or B1823 is not output.

HINT:

Codes other than DTC B1820, B1821, B1822 and B1823 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT AIRBAG ASSEMBLY RH (Click here)

2.CHECK NO. 2 FLOOR WIRE (SIDE SQUIB RH CIRCUIT)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L15-1 (SFR+) - Body ground	Engine switch on (IG)	Below 1 V
L15-2 (SFR-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

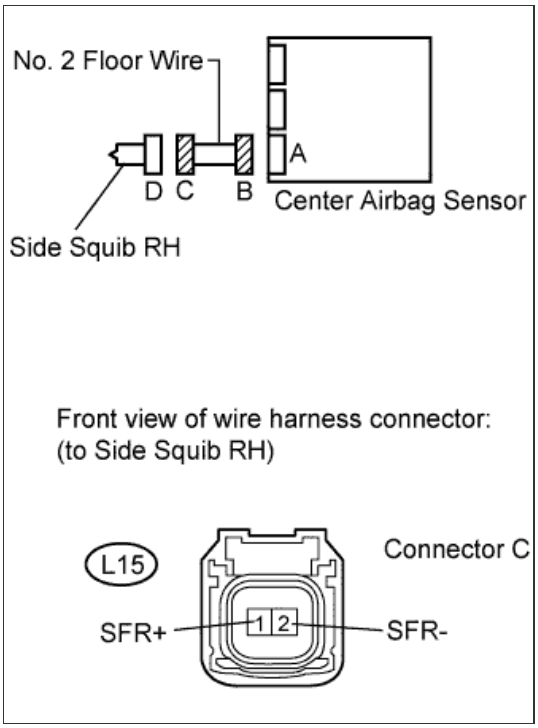
Tester Connection	Condition	Specified Condition
L15-1 (SFR+) - L15-2 (SFR-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L15-1 (SFR+) - L15-2 (SFR-)	Always	1 MΩ or higher
L15-1 (SFR+) - Body ground	Always	1 MΩ or higher
L15-2 (SFR-) - Body ground	Always	1 MΩ or higher



NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

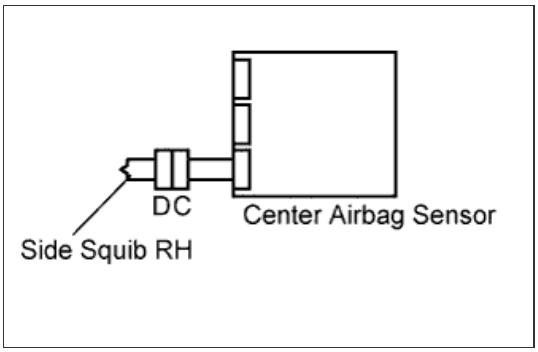
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1820, B1821, B1822 or B1823 is not output.

HINT:

Codes other than DTC B1820, B1821, B1822 and B1823 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1925/78 Short in Rear Pretensioner Squib LH Circuit

DTC B1926/78 Open in Rear Pretensioner Squib LH Circuit

DTC B1927/78 Short to GND in Rear Pretensioner Squib LH Circuit

DTC B1928/78 Short to B+ in Rear Pretensioner Squib LH Circuit

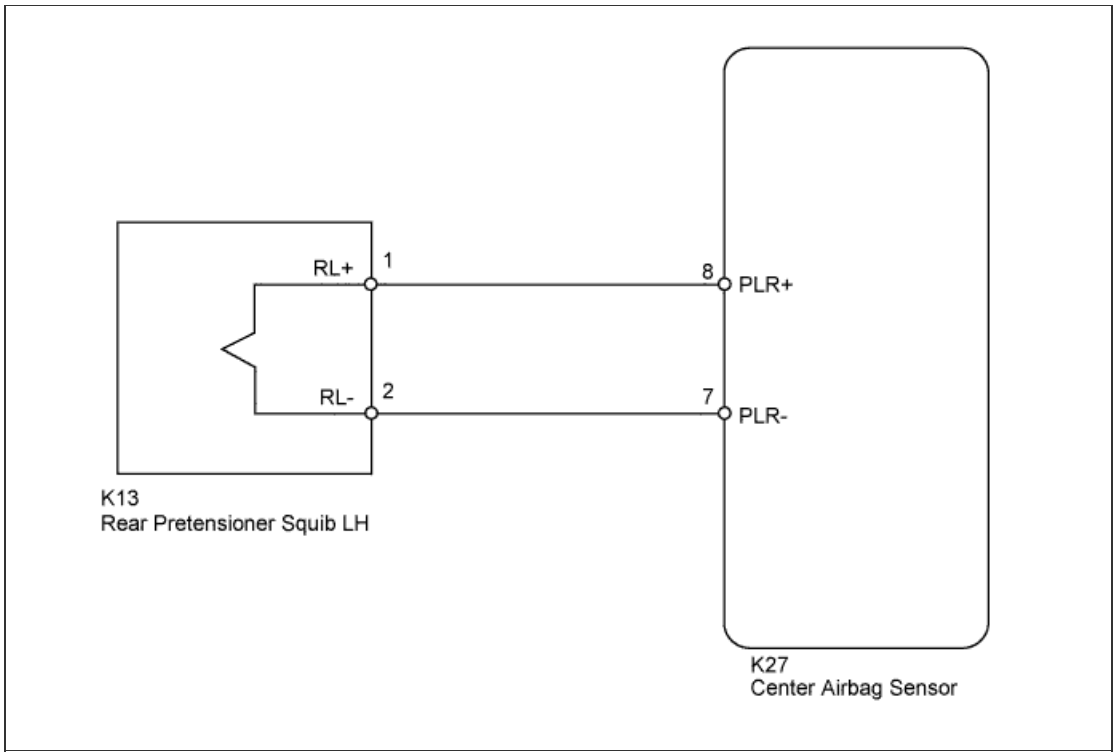
for Preparation Click here

DESCRIPTION

The rear pretensioner squib LH circuit consists of the center airbag sensor and the rear seat outer belt LH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear pretensioner squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1925/78	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear pretensioner squib LH circuit during the primary check. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (Rear pretensioner squib LH) • Center airbag sensor assembly
B1926/78	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear pretensioner squib LH circuit for 2 seconds. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (Rear pretensioner squib LH) • Center airbag sensor assembly
B1927/78	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear pretensioner squib LH circuit for 0.5 seconds. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (Rear pretensioner squib LH) • Center airbag sensor assembly
B1928/78	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear pretensioner squib LH circuit for 0.5 seconds. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (rear pretensioner squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT OUTER BELT LH (REAR PRETENSIONER SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the rear seat outer belt LH.

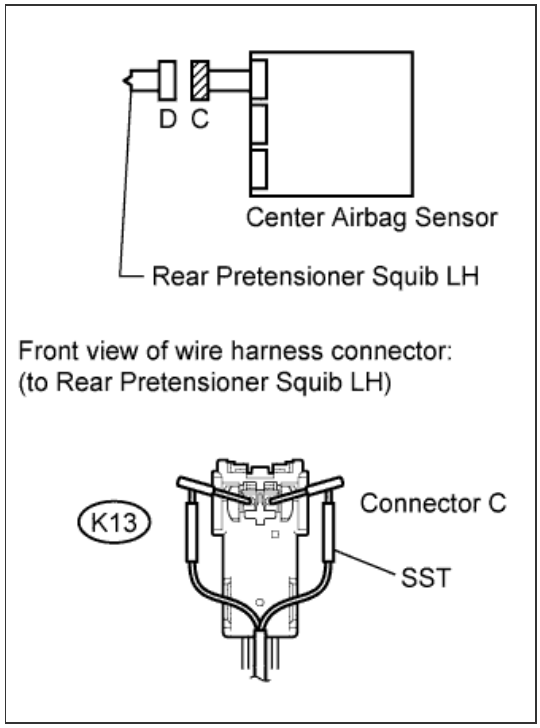
d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

Never connect the tester to the rear seat outer belt LH (rear pretensioner squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**



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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1925, B1926, B1927 or B1928 is not output.

HINT:

Codes other than DTC B1925, B1926, B1927 and B1928 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE REAR SEAT OUTER BELT ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connector (on the rear seat outer belt LH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not damaged or deformed.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (REAR PRETENSIONER SQUIB LH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K13-1 (RL+) - Body ground	Engine switch on (IG)	Below 1 V
K13-2 (RL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

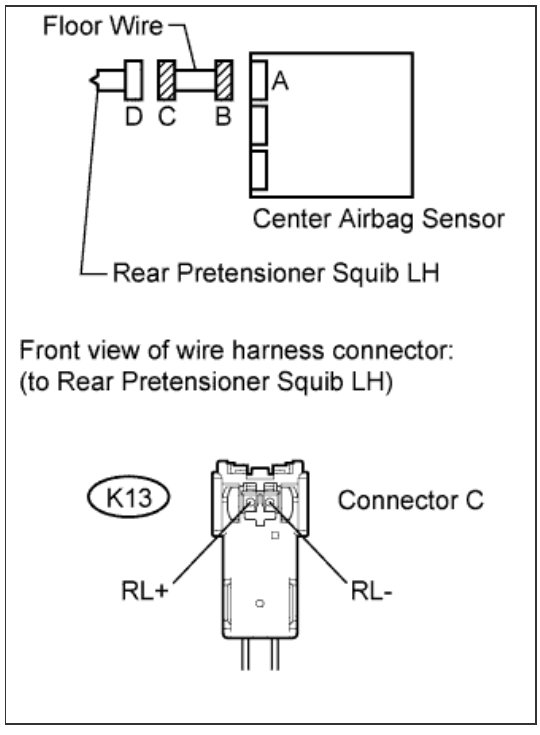
Tester Connection	Condition	Specified Condition
K13-1 (RL+) - K13-2 (RL-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K13-1 (RL+) - K13-2 (RL-)	Always	1 MΩ or higher
K13-1 (RL+) - Body ground	Always	1 MΩ or higher
K13-2 (RL-) - Body ground	Always	1 MΩ or higher



NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat outer belt LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

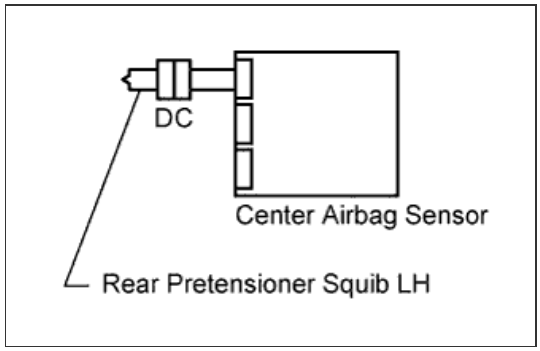
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1925, B1926, B1927 or B1928 is not output.

HINT:

Codes other than DTC B1925, B1926, B1927 or B1928 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1820/55 Short in Side Squib RH Circuit

DTC B1821/55 Open in Side Squib RH Circuit

DTC B1822/55 Short to GND in Side Squib RH Circuit

DTC B1823/55 Short to B+ in Side Squib RH Circuit

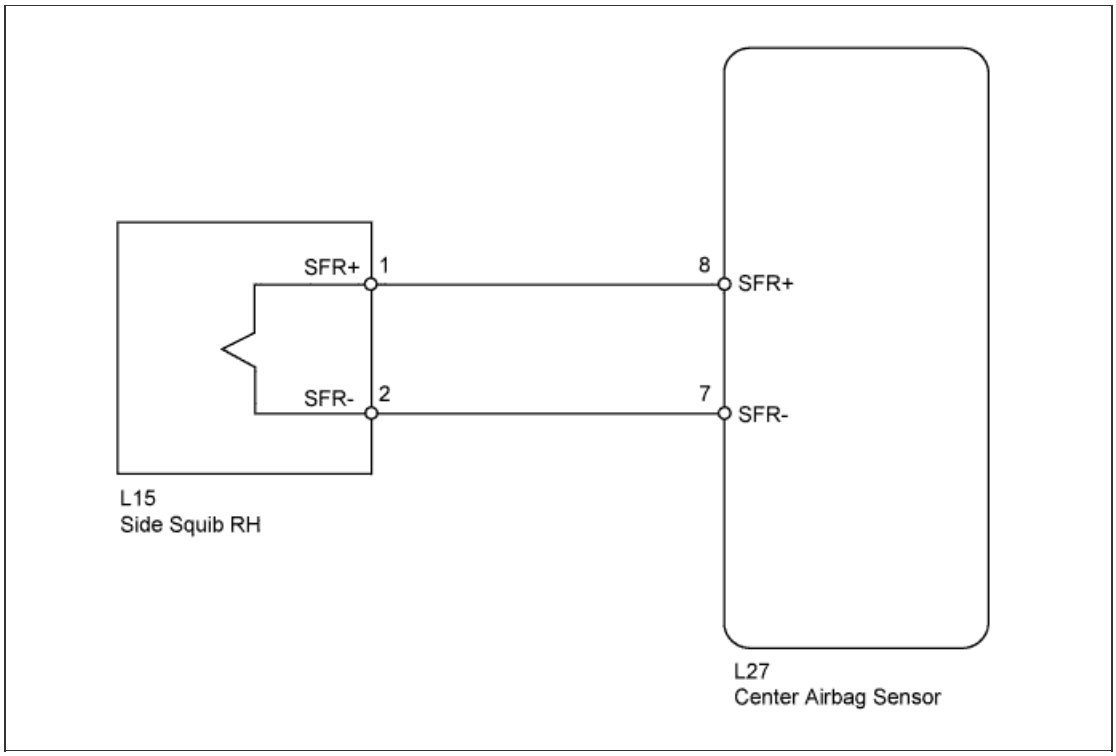
for Preparation Click here

DESCRIPTION

The side squib RH circuit consists of the center airbag sensor and the front seat airbag RH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the side squib RH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1820/55	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the side squib RH circuit during the primary check. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly
B1821/55	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the side squib RH circuit for 2 seconds. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly
B1822/55	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the side squib RH circuit for 0.5 seconds. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly
B1823/55	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the side squib RH circuit for 0.5 seconds. • A side squib RH malfunction. • A center airbag sensor malfunction.	• No. 2 floor wire • Front seat airbag assembly RH (Side squib RH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT AIRBAG RH (SIDE SQUIB RH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the front seat airbag RH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

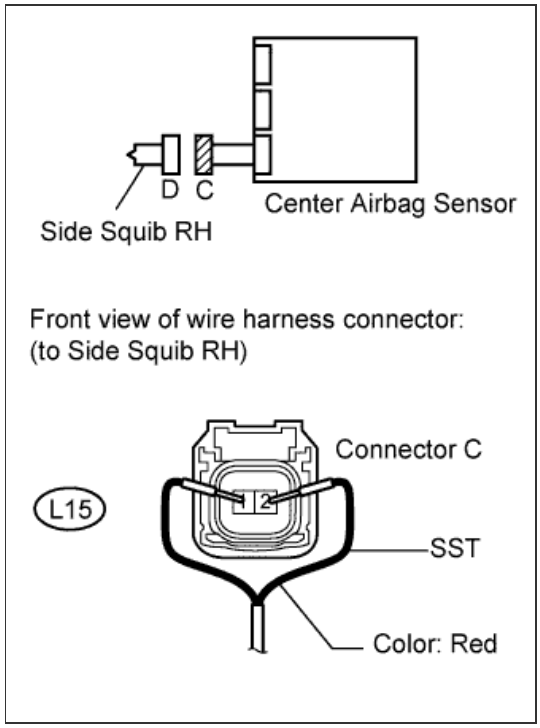
Never connect the tester to the front seat airbag RH (side squib RH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1820, B1821, B1822 or B1823 is not output.

HINT:

Codes other than DTC B1820, B1821, B1822 and B1823 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT AIRBAG ASSEMBLY RH (Click here)

2.CHECK NO. 2 FLOOR WIRE (SIDE SQUIB RH CIRCUIT)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
L15-1 (SFR+) - Body ground	Engine switch on (IG)	Below 1 V
L15-2 (SFR-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

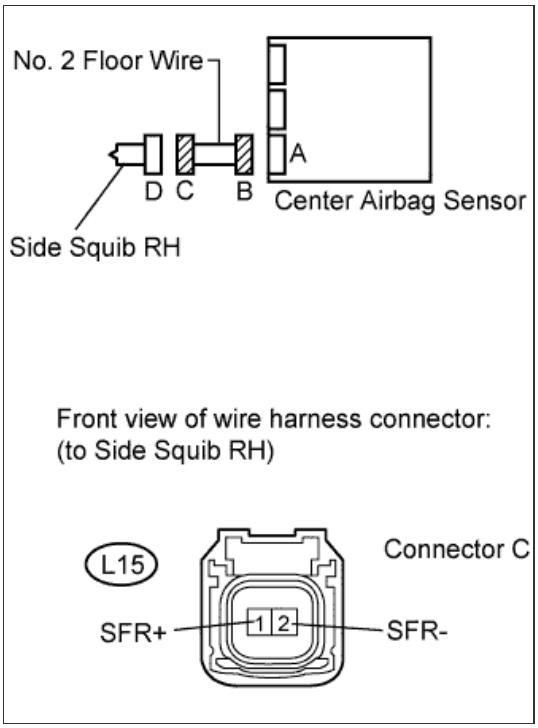
Tester Connection	Condition	Specified Condition
L15-1 (SFR+) - L15-2 (SFR-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
L15-1 (SFR+) - L15-2 (SFR-)	Always	1 MΩ or higher
L15-1 (SFR+) - Body ground	Always	1 MΩ or higher
L15-2 (SFR-) - Body ground	Always	1 MΩ or higher



NG → REPLACE NO. 2 FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat airbag RH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

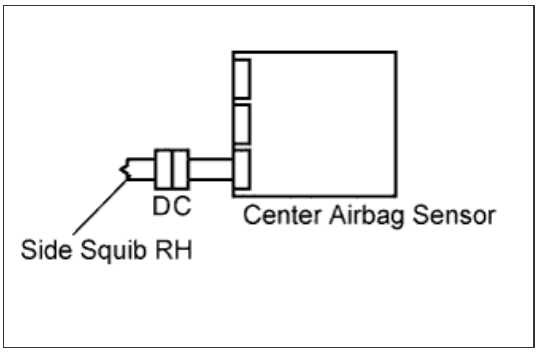
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1820, B1821, B1822 or B1823 is not output.

HINT:

Codes other than DTC B1820, B1821, B1822 and B1823 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (**Click here**)

OK

USE SIMULATION METHOD TO CHECK (**Click here**)

DTC B1925/78 Short in Rear Pretensioner Squib LH Circuit

DTC B1926/78 Open in Rear Pretensioner Squib LH Circuit

DTC B1927/78 Short to GND in Rear Pretensioner Squib LH Circuit

DTC B1928/78 Short to B+ in Rear Pretensioner Squib LH Circuit

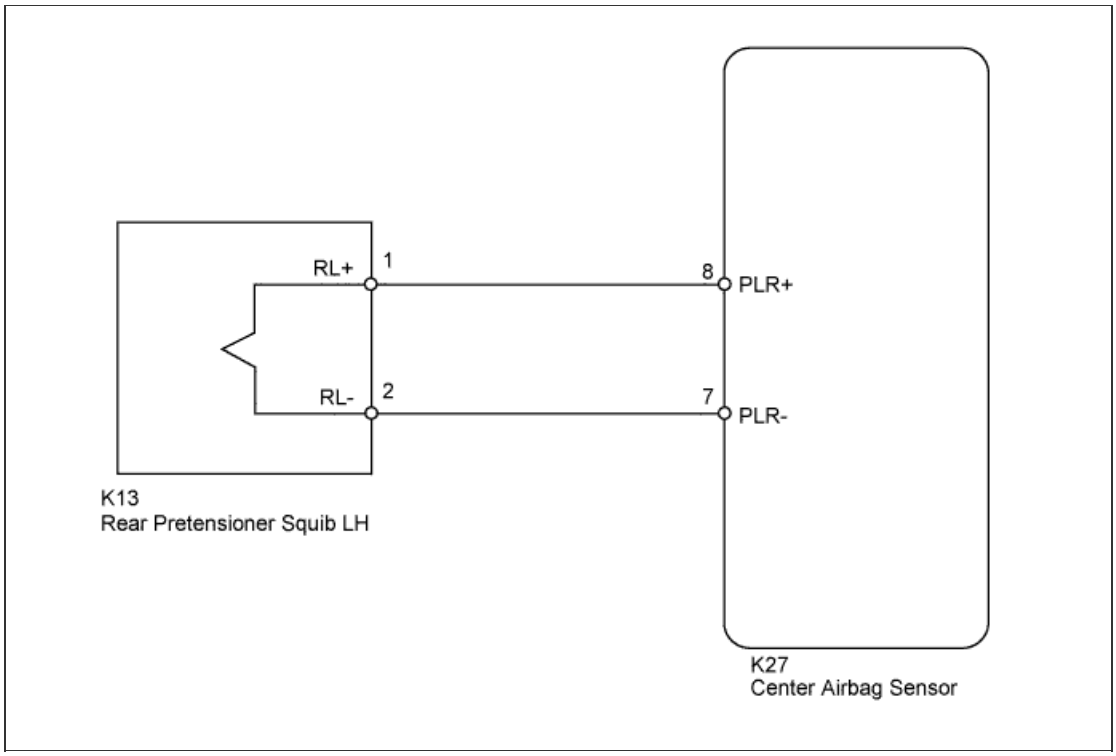
for Preparation Click here

DESCRIPTION

The rear pretensioner squib LH circuit consists of the center airbag sensor and the rear seat outer belt LH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear pretensioner squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1925/78	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear pretensioner squib LH circuit during the primary check. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (Rear pretensioner squib LH) • Center airbag sensor assembly
B1926/78	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear pretensioner squib LH circuit for 2 seconds. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (Rear pretensioner squib LH) • Center airbag sensor assembly
B1927/78	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear pretensioner squib LH circuit for 0.5 seconds. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (Rear pretensioner squib LH) • Center airbag sensor assembly
B1928/78	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear pretensioner squib LH circuit for 0.5 seconds. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (rear pretensioner squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT OUTER BELT LH (REAR PRETENSIONER SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the rear seat outer belt LH.

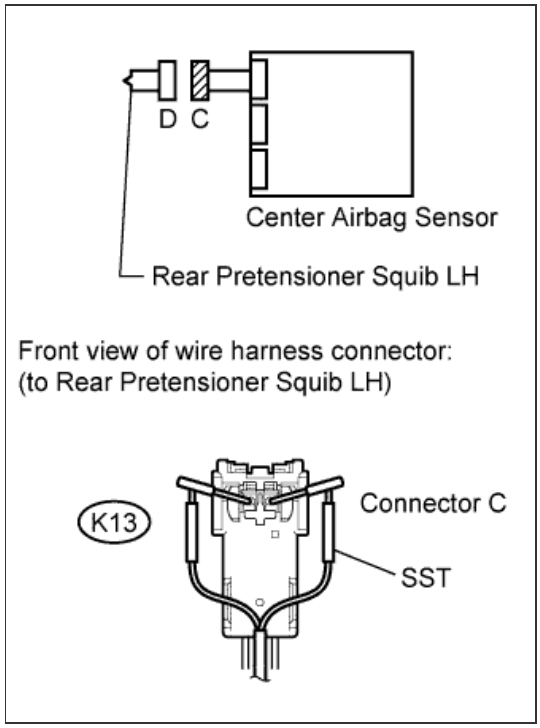
d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

Never connect the tester to the rear seat outer belt LH (rear pretensioner squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**



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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1925, B1926, B1927 or B1928 is not output.

HINT:

Codes other than DTC B1925, B1926, B1927 and B1928 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE REAR SEAT OUTER BELT ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connector (on the rear seat outer belt LH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not damaged or deformed.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (REAR PRETENSIONER SQUIB LH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K13-1 (RL+) - Body ground	Engine switch on (IG)	Below 1 V
K13-2 (RL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

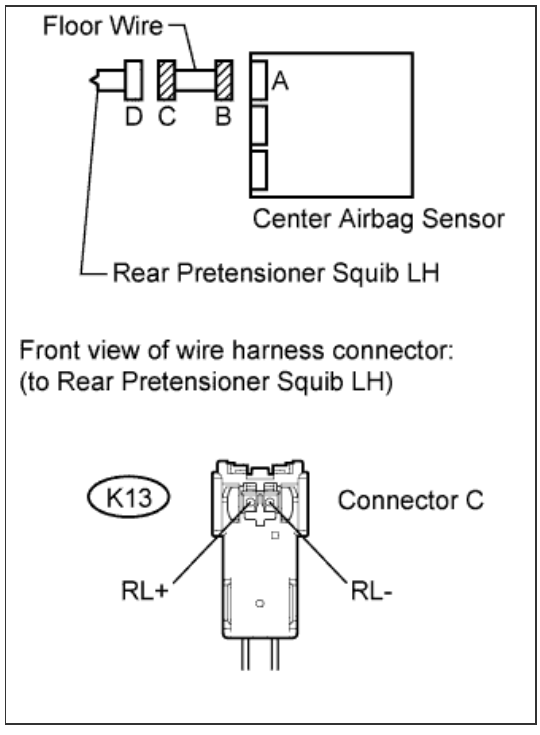
Tester Connection	Condition	Specified Condition
K13-1 (RL+) - K13-2 (RL-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K13-1 (RL+) - K13-2 (RL-)	Always	1 MΩ or higher
K13-1 (RL+) - Body ground	Always	1 MΩ or higher
K13-2 (RL-) - Body ground	Always	1 MΩ or higher



NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat outer belt LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

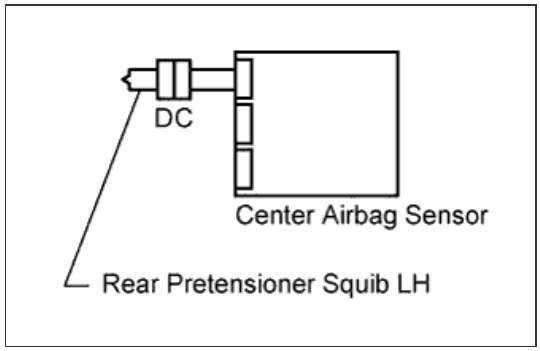
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1925, B1926, B1927 or B1928 is not output.

HINT:

Codes other than DTC B1925, B1926, B1927 or B1928 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1825/56 Short in Side Squib LH Circuit

DTC B1826/56 Open in Side Squib LH Circuit

DTC B1827/56 Short to GND in Side Squib LH Circuit

DTC B1828/56 Short to B+ in Side Squib LH Circuit

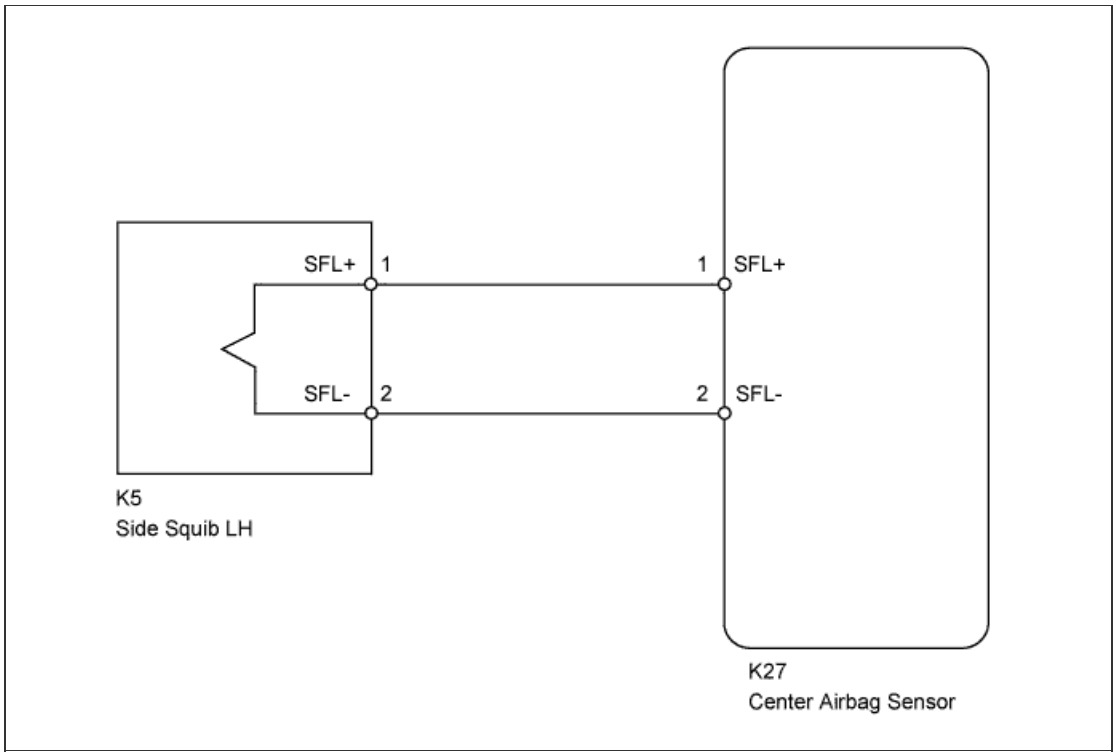
for Preparation Click here

DESCRIPTION

The side squib LH circuit consists of the center airbag sensor and the front seat airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the side squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1825/56	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the side squib LH circuit during the primary check. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly
B1826/56	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the side squib LH circuit for 2 seconds. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly
B1827/56	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the side squib LH circuit for 0.5 seconds. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly
B1828/56	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the side squib LH circuit for 0.5 seconds. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT AIRBAG LH (SIDE SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the front seat airbag LH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

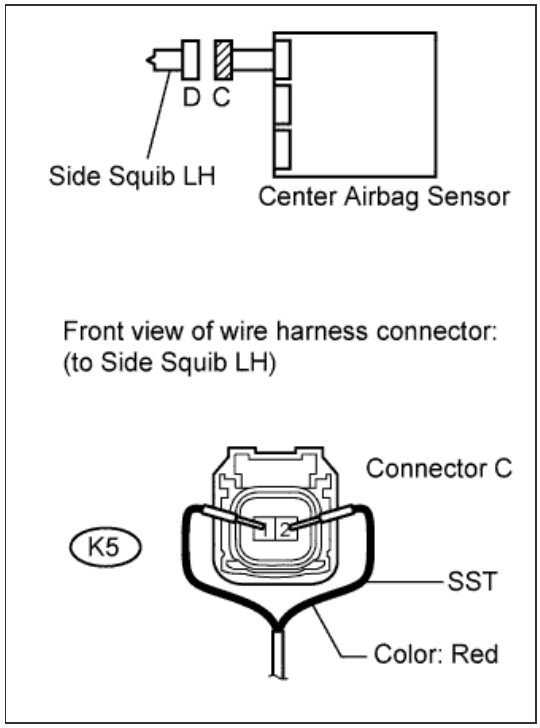
Never connect the tester to the front seat airbag LH (side squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1825, B1826, B1827 or B1828 is not output.

HINT:

Codes other than DTC B1825, B1826, B1827 and B1828 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT AIRBAG ASSEMBLY LH (Click here)

2.CHECK FLOOR WIRE (SIDE SQUIB LH CIRCUIT)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K5-1 (SFL+) - Body ground	Engine switch on (IG)	Below 1 V
K5-2 (SFL-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

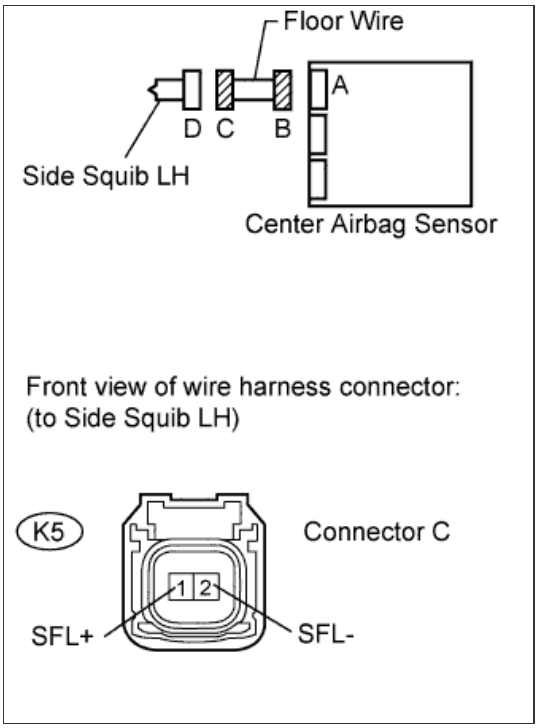
Tester Connection	Condition	Specified Condition
K5-1 (SFL+) - K5-2 (SFL-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K5-1 (SFL+) - K5-2 (SFL-)	Always	1 MΩ or higher
K5-1 (SFL+) - Body ground	Always	1 MΩ or higher
K5-2 (SFL-) - Body ground	Always	1 MΩ or higher



NG → REPLACE FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

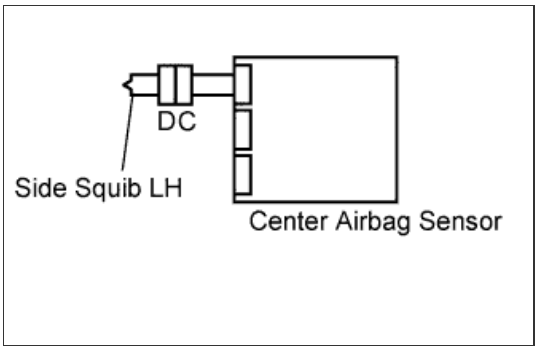
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1825, B1826, B1827 or B1828 is not output.

HINT:

Codes other than DTC B1825, B1826, B1827 and B1828 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK → USE SIMULATION METHOD TO CHECK (Click here)

DTC B1925/78 Short in Rear Pretensioner Squib LH Circuit

DTC B1926/78 Open in Rear Pretensioner Squib LH Circuit

DTC B1927/78 Short to GND in Rear Pretensioner Squib LH Circuit

DTC B1928/78 Short to B+ in Rear Pretensioner Squib LH Circuit

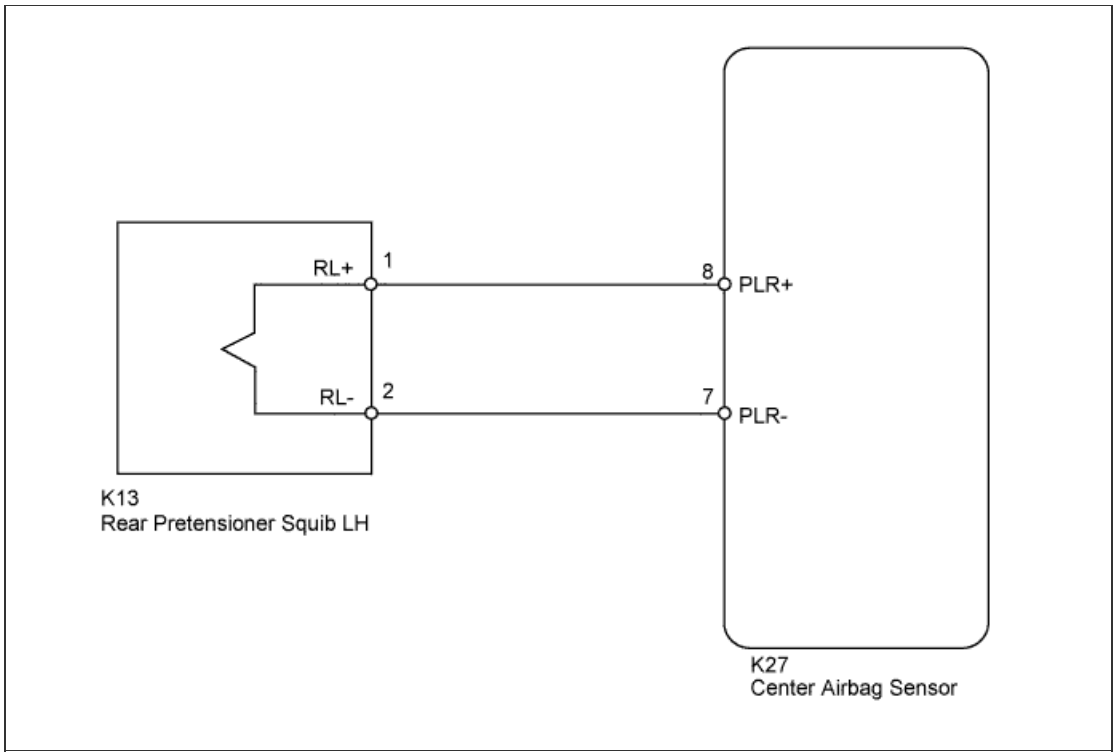
for Preparation Click here

DESCRIPTION

The rear pretensioner squib LH circuit consists of the center airbag sensor and the rear seat outer belt LH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear pretensioner squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1925/78	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear pretensioner squib LH circuit during the primary check. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (Rear pretensioner squib LH) • Center airbag sensor assembly
B1926/78	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear pretensioner squib LH circuit for 2 seconds. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (Rear pretensioner squib LH) • Center airbag sensor assembly
B1927/78	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear pretensioner squib LH circuit for 0.5 seconds. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (Rear pretensioner squib LH) • Center airbag sensor assembly
B1928/78	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear pretensioner squib LH circuit for 0.5 seconds. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (rear pretensioner squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT OUTER BELT LH (REAR PRETENSIONER SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the rear seat outer belt LH.

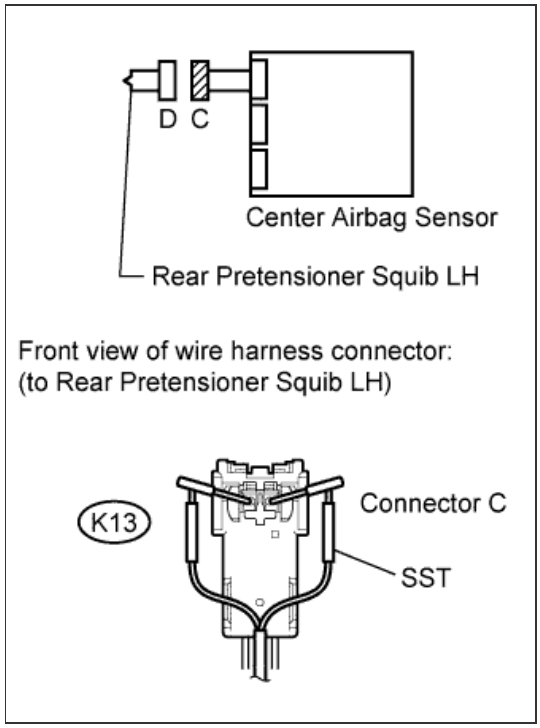
d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

Never connect the tester to the rear seat outer belt LH (rear pretensioner squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**



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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1925, B1926, B1927 or B1928 is not output.

HINT:

Codes other than DTC B1925, B1926, B1927 and B1928 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE REAR SEAT OUTER BELT ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connector (on the rear seat outer belt LH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not damaged or deformed.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (REAR PRETENSIONER SQUIB LH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K13-1 (RL+) - Body ground	Engine switch on (IG)	Below 1 V
K13-2 (RL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

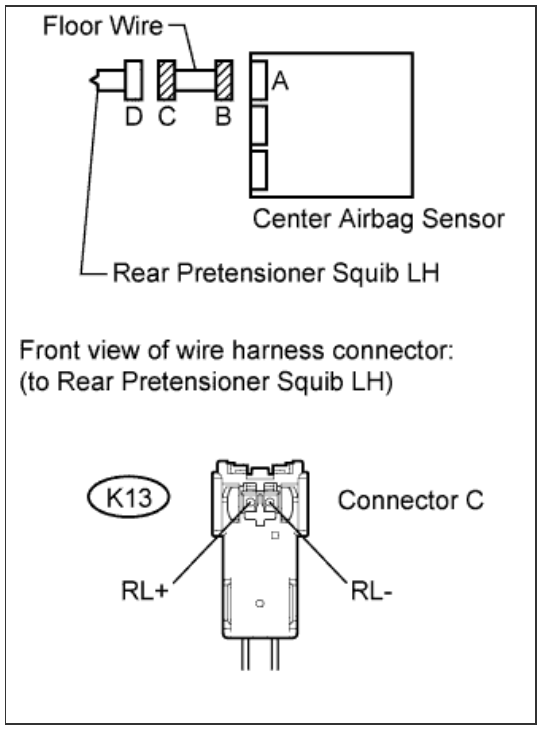
Tester Connection	Condition	Specified Condition
K13-1 (RL+) - K13-2 (RL-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K13-1 (RL+) - K13-2 (RL-)	Always	1 MΩ or higher
K13-1 (RL+) - Body ground	Always	1 MΩ or higher
K13-2 (RL-) - Body ground	Always	1 MΩ or higher



NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat outer belt LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

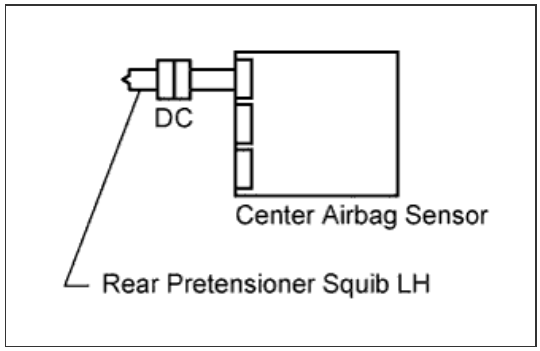
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1925, B1926, B1927 or B1928 is not output.

HINT:

Codes other than DTC B1925, B1926, B1927 or B1928 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1825/56 Short in Side Squib LH Circuit

DTC B1826/56 Open in Side Squib LH Circuit

DTC B1827/56 Short to GND in Side Squib LH Circuit

DTC B1828/56 Short to B+ in Side Squib LH Circuit

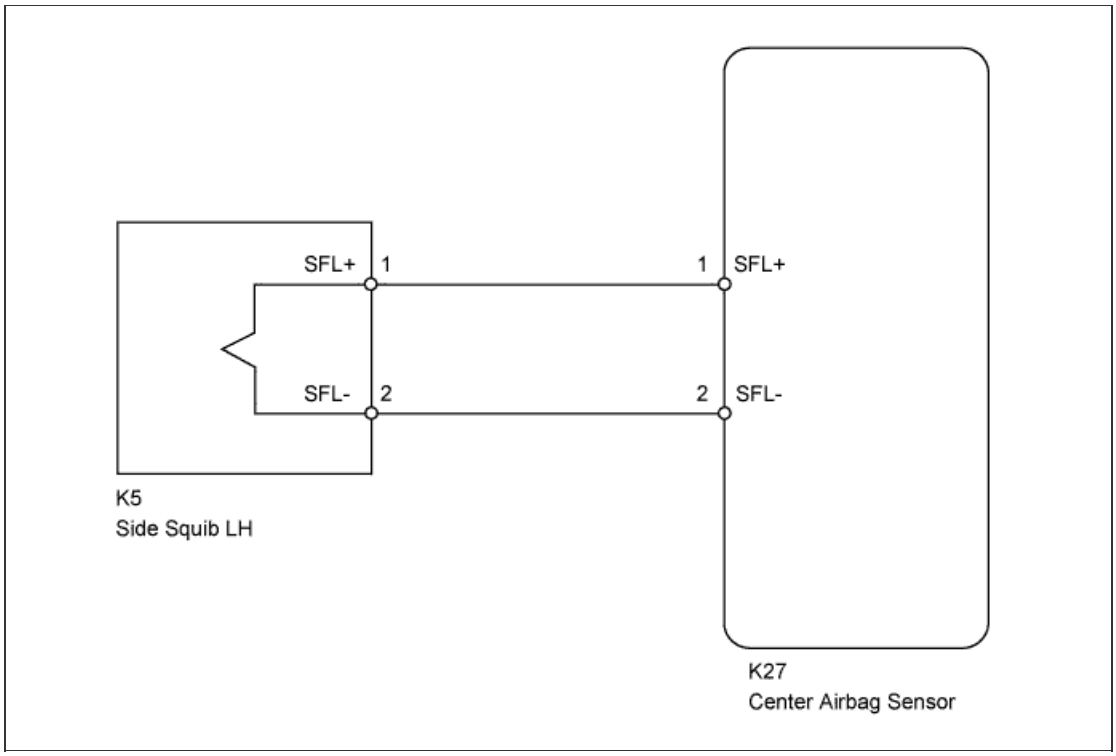
for Preparation Click here

DESCRIPTION

The side squib LH circuit consists of the center airbag sensor and the front seat airbag LH.
The circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the side squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1825/56	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the side squib LH circuit during the primary check. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly
B1826/56	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the side squib LH circuit for 2 seconds. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly
B1827/56	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the side squib LH circuit for 0.5 seconds. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly
B1828/56	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the side squib LH circuit for 0.5 seconds. • A side squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Front seat airbag assembly LH (Side squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK FRONT SEAT AIRBAG LH (SIDE SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connector from the front seat airbag LH.

d. Connect the red wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

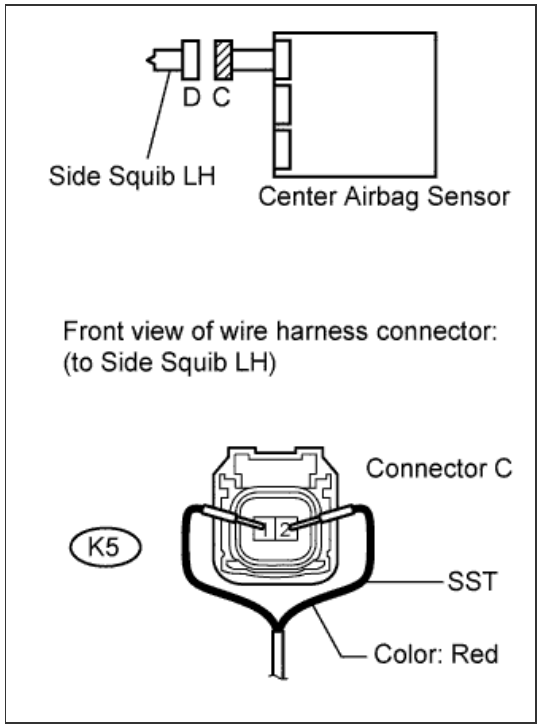
Never connect the tester to the front seat airbag LH (side squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**

SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1825, B1826, B1827 or B1828 is not output.

HINT:

Codes other than DTC B1825, B1826, B1827 and B1828 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE FRONT SEAT AIRBAG ASSEMBLY LH (Click here)

2.CHECK FLOOR WIRE (SIDE SQUIB LH CIRCUIT)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Disconnect the connectors from the center airbag sensor.

e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K5-1 (SFL+) - Body ground	Engine switch on (IG)	Below 1 V
K5-2 (SFL-) - Body ground	Engine switch on (IG)	Below 1 V

g. Turn the engine switch off.

h. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

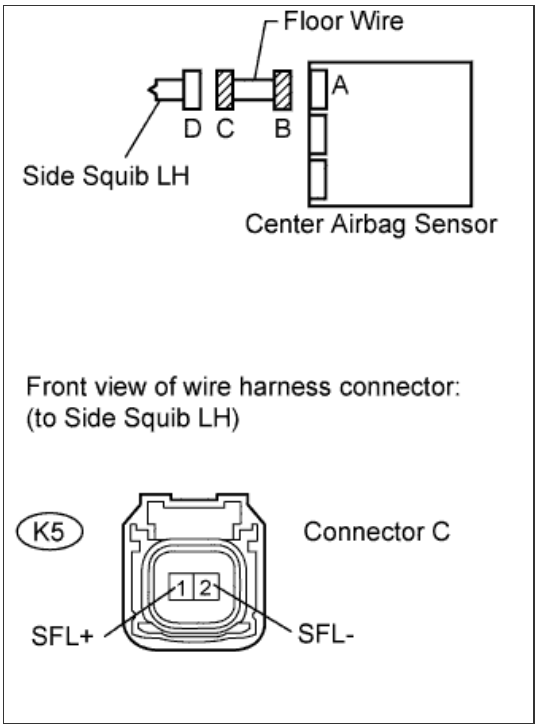
Tester Connection	Condition	Specified Condition
K5-1 (SFL+) - K5-2 (SFL-)	Always	Below 1 Ω

j. Release the activation prevention mechanism built into connector B (Click here).

k. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K5-1 (SFL+) - K5-2 (SFL-)	Always	1 MΩ or higher
K5-1 (SFL+) - Body ground	Always	1 MΩ or higher
K5-2 (SFL-) - Body ground	Always	1 MΩ or higher



NG → REPLACE FLOOR WIRE

OK

3.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the front seat airbag LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

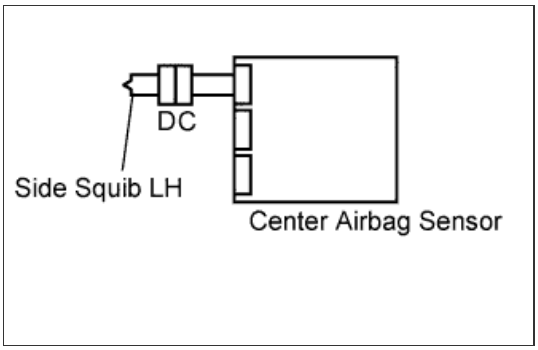
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:
DTC B1825, B1826, B1827 or B1828 is not output.

HINT:

Codes other than DTC B1825, B1826, B1827 and B1828 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK → USE SIMULATION METHOD TO CHECK (Click here)

DTC B1925/78 Short in Rear Pretensioner Squib LH Circuit

DTC B1926/78 Open in Rear Pretensioner Squib LH Circuit

DTC B1927/78 Short to GND in Rear Pretensioner Squib LH Circuit

DTC B1928/78 Short to B+ in Rear Pretensioner Squib LH Circuit

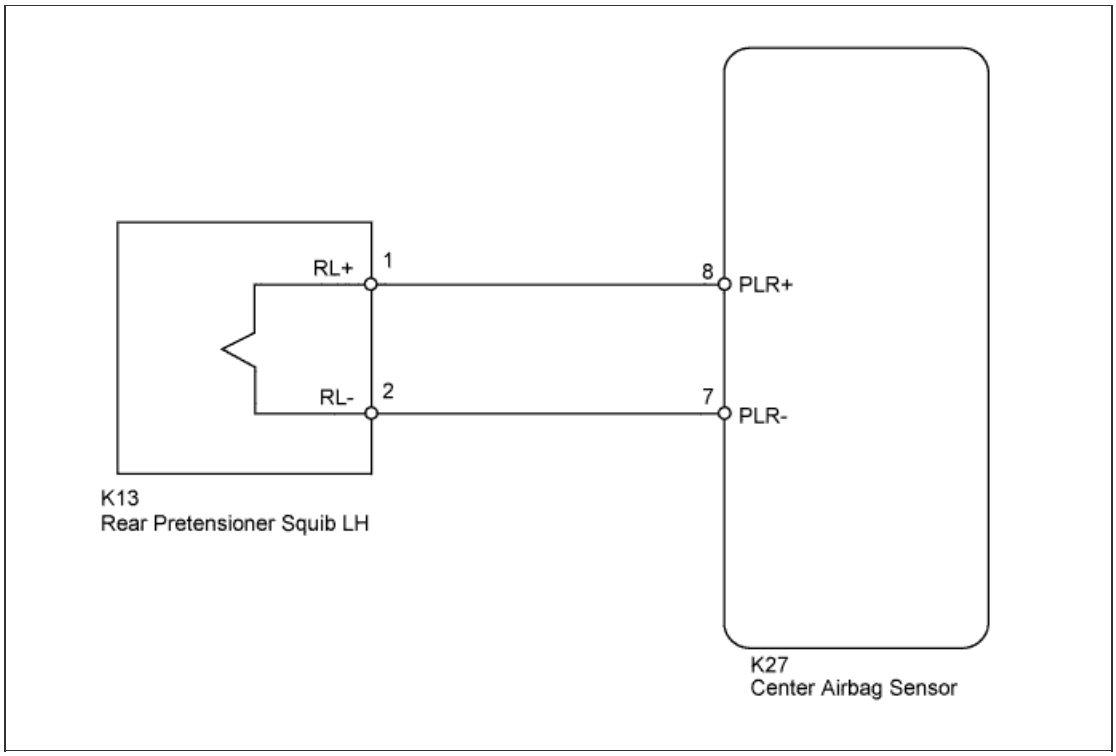
for Preparation Click here

DESCRIPTION

The rear pretensioner squib LH circuit consists of the center airbag sensor and the rear seat outer belt LH.
This circuit instructs the SRS to deploy when deployment conditions are met.
These DTCs are stored when a malfunction is detected in the rear pretensioner squib LH circuit.

DTC Code	DTC Detection Condition	Trouble Area
B1925/78	When one of the following conditions is met: • The center airbag sensor receives a line short circuit signal 5 times in the rear pretensioner squib LH circuit during the primary check. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (Rear pretensioner squib LH) • Center airbag sensor assembly
B1926/78	When one of the following conditions is met: • The center airbag sensor receives an open circuit signal in the rear pretensioner squib LH circuit for 2 seconds. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (Rear pretensioner squib LH) • Center airbag sensor assembly
B1927/78	When one of the following conditions is met: • The center airbag sensor receives a short circuit to ground signal in the rear pretensioner squib LH circuit for 0.5 seconds. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (Rear pretensioner squib LH) • Center airbag sensor assembly
B1928/78	When one of the following conditions is met: • The center airbag sensor receives a short circuit to B+ signal in the rear pretensioner squib LH circuit for 0.5 seconds. • A rear pretensioner squib LH malfunction. • A center airbag sensor malfunction.	• Floor wire • Rear seat outer belt assembly LH (rear pretensioner squib LH) • Center airbag sensor assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

HINT:

To perform the simulation method, enter the check mode (signal check) with the intelligent tester (Click here), and then wiggle each connector of the airbag system or drive the vehicle on various type of road (Click here).

1.CHECK REAR SEAT OUTER BELT LH (REAR PRETENSIONER SQUIB LH)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the connectors from the rear seat outer belt LH.

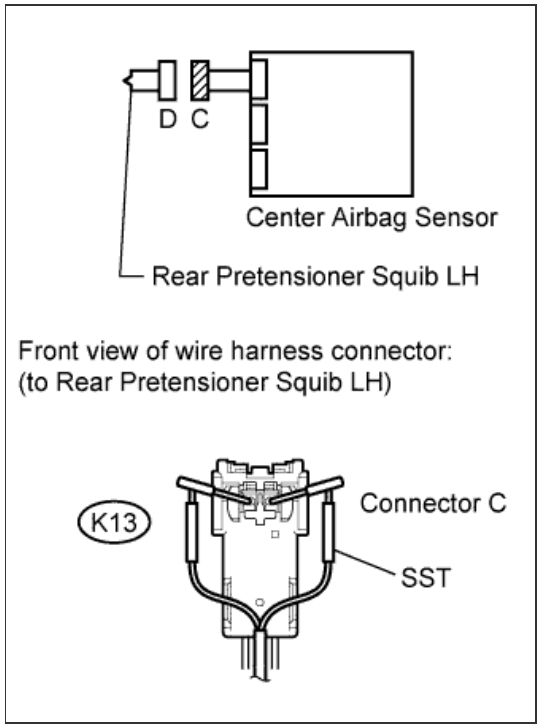
d. Connect the white wire side of SST (resistance: 2.1 Ω) to connector C.

CAUTION:

Never connect the tester to the rear seat outer belt LH (rear pretensioner squib LH) for measurement, as this may lead to a serious injury due to airbag deployment.

NOTICE:

- **Do not forcibly insert SST into the terminals of the connector when connecting SST.**
- **Insert SST straight into the terminals of the connector.**



SST

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e. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Clear the DTCs (Click here).

h. Turn the engine switch off.

i. Turn the engine switch on (IG), and wait for at least 60 seconds.

j. Check for DTCs (Click here).

OK:

DTC B1925, B1926, B1927 or B1928 is not output.

HINT:

Codes other than DTC B1925, B1926, B1927 and B1928 may be output at this time, but they are not related to this check.

NG → Go to step 2

OK

REPLACE REAR SEAT OUTER BELT ASSEMBLY LH (Click here)

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect SST from connector C.

d. Check that the floor wire connector (on the rear seat outer belt LH side) is not damaged.

OK:

The lock button is not disengaged, and the claw of the lock is not damaged or deformed.

NG → REPLACE FLOOR WIRE

OK

3.CHECK FLOOR WIRE (REAR PRETENSIONER SQUIB LH CIRCUIT)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
K13-1 (RL+) - Body ground	Engine switch on (IG)	Below 1 V
K13-2 (RL-) - Body ground	Engine switch on (IG)	Below 1 V

d. Turn the engine switch off.

e. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

f. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

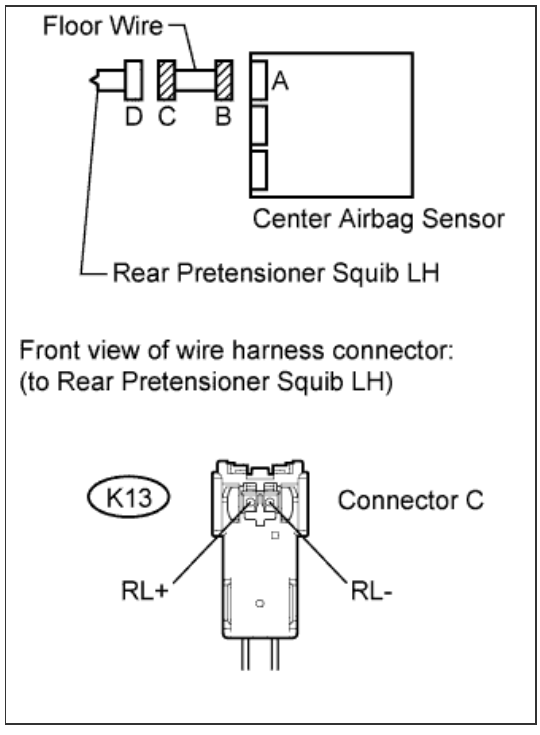
Tester Connection	Condition	Specified Condition
K13-1 (RL+) - K13-2 (RL-)	Always	Below 1 Ω

g. Release the activation prevention mechanism built into connector B (Click here).

h. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K13-1 (RL+) - K13-2 (RL-)	Always	1 MΩ or higher
K13-1 (RL+) - Body ground	Always	1 MΩ or higher
K13-2 (RL-) - Body ground	Always	1 MΩ or higher



NG → REPLACE FLOOR WIRE

OK

4.CHECK CENTER AIRBAG SENSOR

a. Connect the connectors to the rear seat outer belt LH and the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

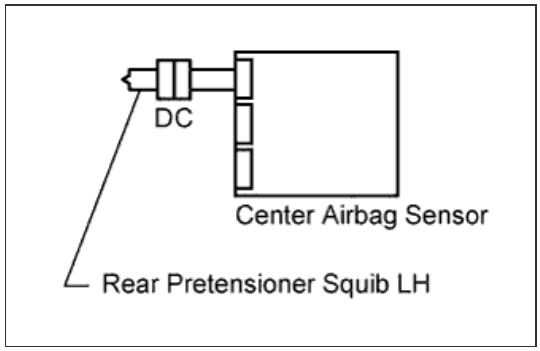
c. Turn the engine switch on (IG), and wait for at least 60 seconds.

d. Clear the DTCs (Click here).

e. Turn the engine switch off.

f. Turn the engine switch on (IG), and wait for at least 60 seconds.

g. Check for DTCs (Click here).



OK:

DTC B1925, B1926, B1927 or B1928 is not output.

HINT:

Codes other than DTC B1925, B1926, B1927 or B1928 may be output at this time, but they are not related to this check.

NG → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

OK

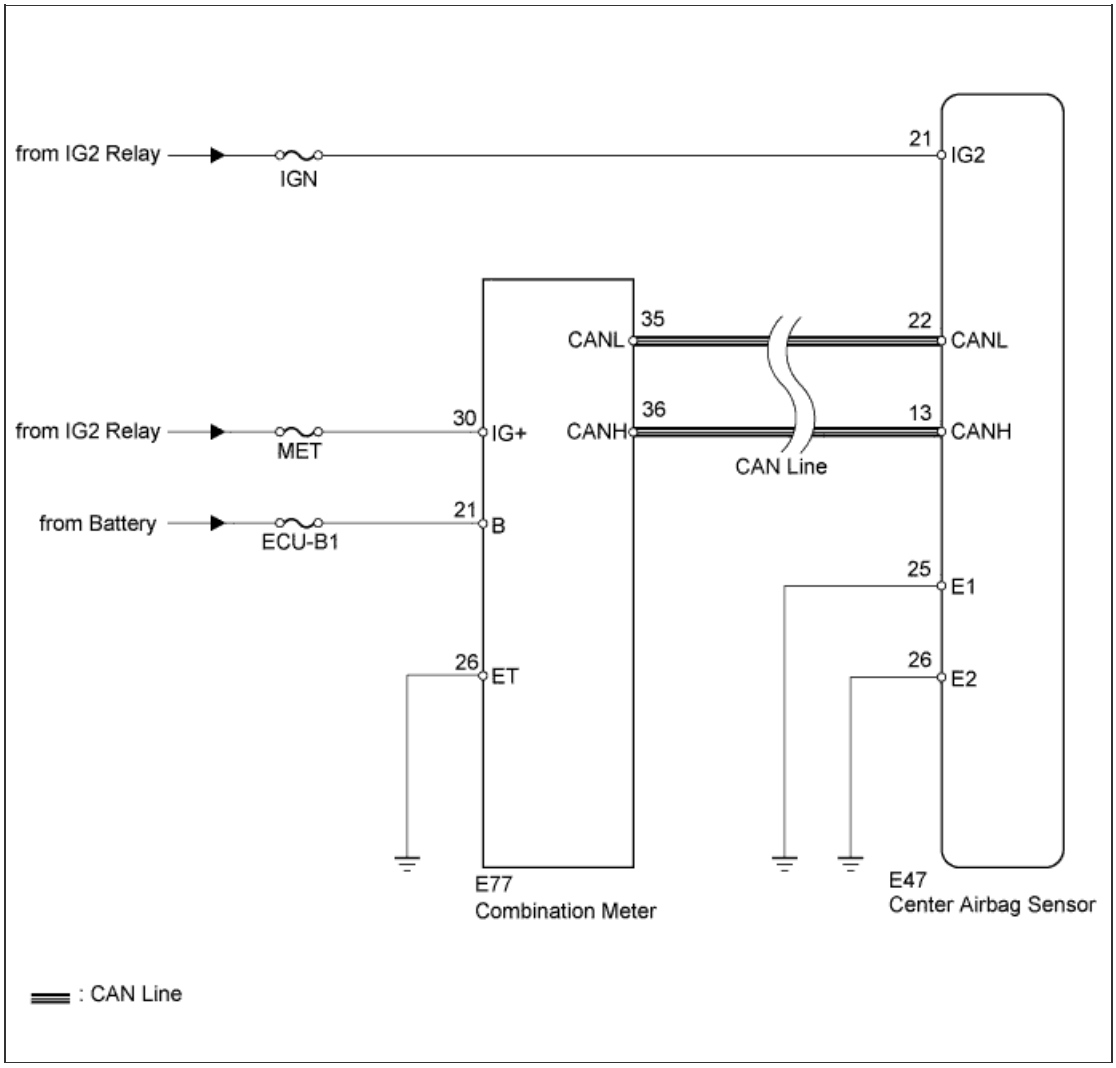
USE SIMULATION METHOD TO CHECK (Click here)

for Preparation Click here

DESCRIPTION

The SRS warning light is located on the combination meter.
When the SRS is normal, the SRS warning light comes on for approximately 6 seconds after the engine switch is turned from off to on (IG), and then goes off automatically.
If there is a malfunction in the SRS, the SRS warning light comes on to inform the driver of a problem.
When terminals TC and CG of the DLC3 are connected, DTCs are output by the blinking of the SRS warning light.
The SRS is equipped with a voltage-increase circuit (DC-DC converter) in the center airbag sensor in case the source voltage drops.
When the battery voltage drops, the voltage-increase circuit (DC-DC converter) functions to increase the voltage of the SRS to normal voltage.
A malfunction in this circuit is not recorded in the center airbag sensor. The SRS warning light automatically goes off when the source voltage returns to normal.
The signal to illuminate the SRS warning light is transmitted from the center airbag sensor to the combination meter through the CAN communication system.

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CAN COMMUNICATION SYSTEM

a. Check if a CAN communication DTC is output.

Result

Result	Proceed to

DTC is not output	A
DTCs are output (for LHD)	B
DTCs are output (for RHD)	C

B → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS (Click here)

C → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS (Click here)

A

2.CHECK BATTERY

a. Measure the voltage of the battery.

Standard voltage:
11 to 14 V

NG → REPLACE OR RECHARGE BATTERY

OK

3.CHECK CONNECTORS

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the center airbag sensor and combination meter.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTORS PROPERLY

OK

4.CHECK HARNESS AND CONNECTOR (SOURCE VOLTAGE OF CENTER AIRBAG SENSOR)

a. Disconnect the connectors from the center airbag sensor.

b. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

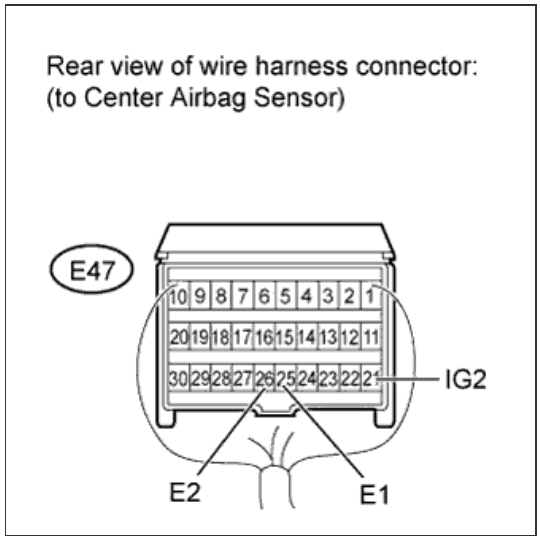
c. Turn the engine switch on (IG).

d. Operate all the components of the electrical system (defogger, wipers, headlights, heater blower, etc.).

e. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E47-21 (IG2) - E47-25 (E1)	Engine switch on (IG)	11 to 14 V
E47-21 (IG2) - E47-26 (E2)	Engine switch on (IG)	11 to 14 V



NG → REPLACE INSTRUMENT PANEL WIRE

OK

5.CHECK HARNESS AND CONNECTOR (SOURCE VOLTAGE OF COMBINATION METER)

a. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

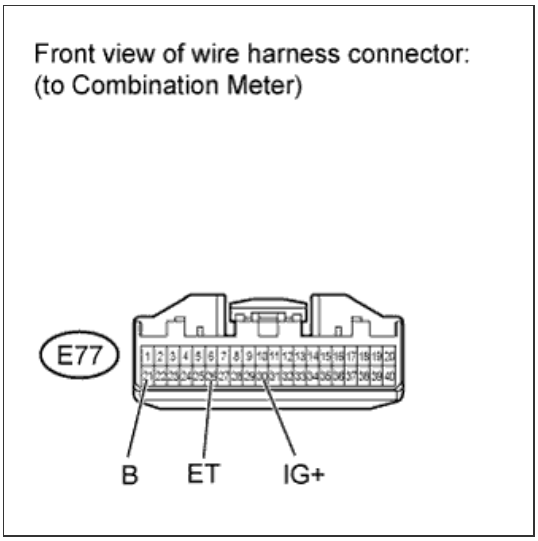
b. Disconnect the E77 connector from the combination meter.

c. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E77-21 (B) - E77-26 (ET)	Always	11 to 14 V
E77-30 (IG+) - E77-26 (ET)	Engine switch on (IG)	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6.CHECK SRS WARNING LIGHT (SHORT TO GROUND)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Connect the connector to the combination meter.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG).

f. Check the SRS warning light condition.

NOTICE:

Make sure that nobody is in the vehicle.

OK:

After the primary check period, the SRS warning light goes off for approximately 10 seconds and then remains on.

HINT:

The primary check period is approximately 6 seconds after the engine switch is turned on (IG).

NG → GO TO METER / GAUGE SYSTEM (Click here)

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

for Preparation Click here

DESCRIPTION

Refer to "SRS Warning Light Remains ON" (Click here).

WIRING DIAGRAM

Refer to "SRS Warning Light Remains ON" (Click here).

INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK BATTERY

a. Measure the voltage of the battery.

Standard voltage:
11 to 14 V

NG → REPLACE OR RECHARGE BATTERY

OK

2.CHECK CONNECTOR

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Check that the connectors are properly connected to the combination meter.

OK:
The connectors are properly connected.

NG → CONNECT CONNECTOR PROPERLY

OK

3.CHECK HARNESS AND CONNECTOR (SOURCE VOLTAGE OF COMBINATION METER)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Disconnect the E77 connector from the combination meter.

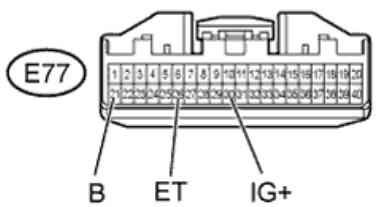
d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E77-30 (IG+) - E77-26 (ET)	Engine switch on (IG)	11 to 14 V
E77-21 (B) - E77-26 (ET)	Always	11 to 14 V

Front view of wire harness connector:
(to Combination Meter)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK SRS WARNING LIGHT (SHORT TO GROUND)

a. Turn the engine switch off.

b. Disconnect the cable from the negative (-) battery terminal, and wait for at least 90 seconds.

c. Connect the connector to the combination meter.

d. Connect the cable to the negative (-) battery terminal, and wait for at least 2 seconds.

e. Turn the engine switch on (IG).

f. Check the SRS warning light condition.

NOTICE:

Make sure that nobody is in the vehicle.

OK:

After the primary check period, the SRS warning light goes off for approximately 10 seconds and then remains on.

HINT:

The primary check period is approximately 6 seconds after the engine switch is turned on (IG).

NG → GO TO METER / GAUGE SYSTEM (Click here)

OK

REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

for Preparation Click here

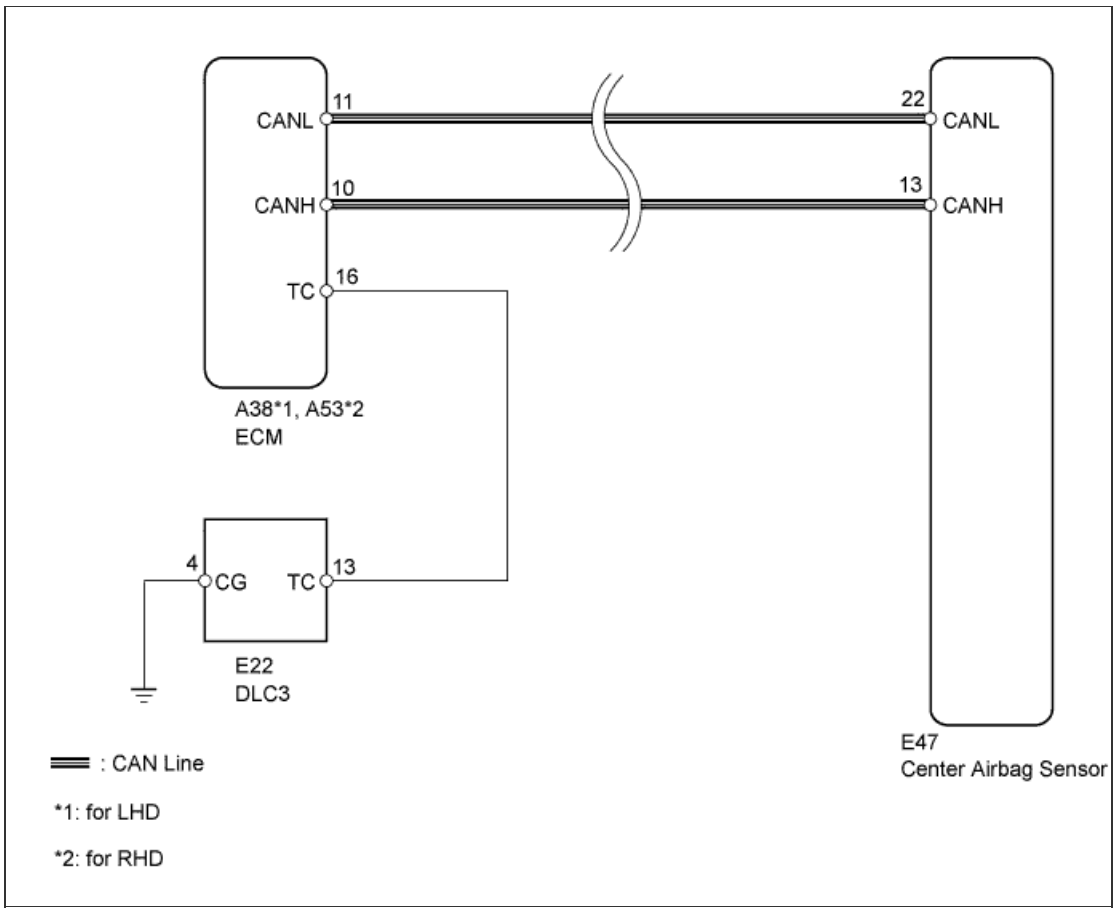
DESCRIPTION

DTC output mode is set by connecting terminals TC and CG of the DLC3.
DTCs are output by the blinking of the SRS warning light.

HINT:

- **When each warning light stays blinking, a ground short in the wiring of terminal TC of the DLC3 or an internal ground short in each ECU is suspected.**
- **A DTC output mode signal is transmitted through the CAN communication system to each ECU including the center airbag sensor. Thus, when all systems do not enter DTC output mode, there may be an ECM malfunction.**

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CAN COMMUNICATION SYSTEM

a. Check if a CAN communication system DTC is output (Click here).

b. Check if a CAN communication system DTC is output (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output (for LHD)	B
DTC is output (for RHD)	C

B → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS (Click here)

C → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS (Click here)

A

2.CHECK HARNESS AND CONNECTOR (DLC3 - ECM)

a. Turn the engine switch off.

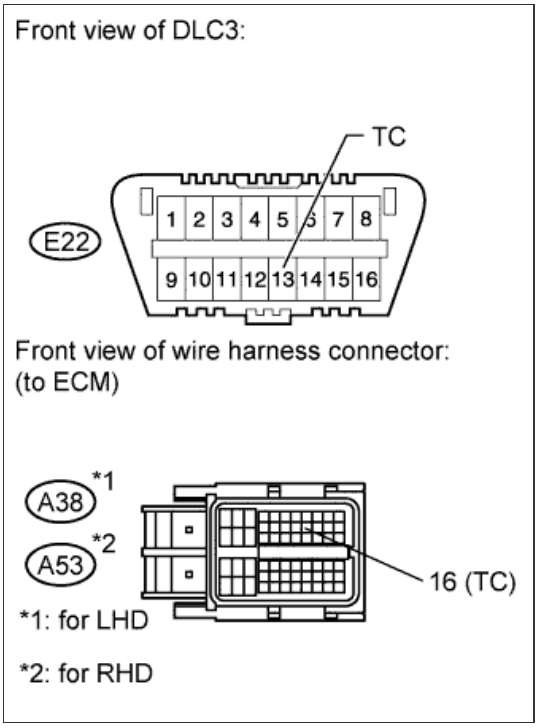
b. Disconnect the A38*1 or A53*2 connector from the ECM.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E22-13 (TC) - A38-16 (TC)*1	Always	Below 1 Ω
E22-13 (TC) - A53-16 (TC)*2	Always	Below 1 Ω

*1: for LHD
*2: for RHD



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

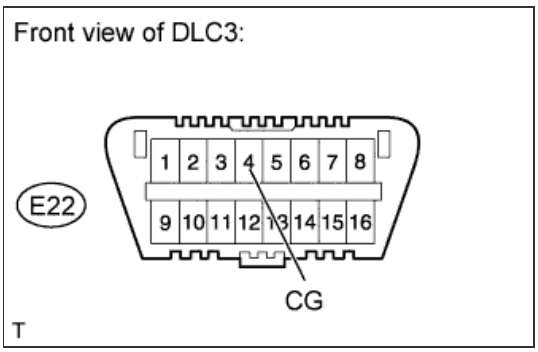
OK

3.CHECK HARNESS AND CONNECTOR (DLC3 - BODY GROUND)

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E22-4 (CG) - Body ground	Always	Below 1 Ω



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK HARNESS AND CONNECTOR (TC OF ECM - BODY GROUND)

a. Measure the resistance according to the value(s) in the table below.

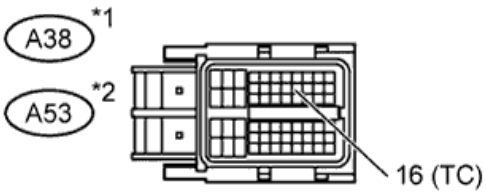
Standard Resistance:

Tester Connection	Condition	Specified Condition
A38-16 (TC) - Body ground*1	Always	1 MΩ or higher
A53-16 (TC) -		

Body ground*2	Always	1 MΩ or higher

*1: for LHD
*2: for RHD

Front view of wire harness connector:
(to ECM)



*1: for LHD

*2: for RHD

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR OR EACH ECU

OK → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

for Preparation Click here

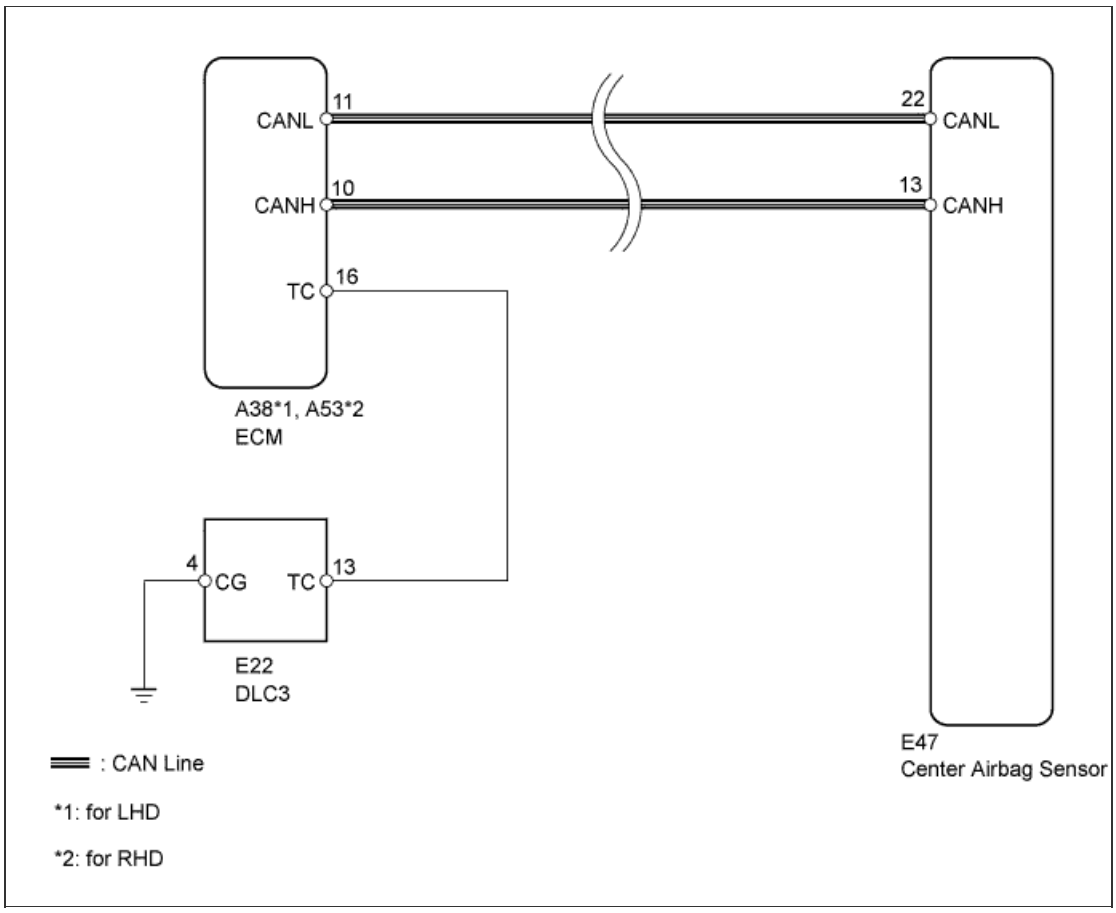
DESCRIPTION

DTC output mode is set by connecting terminals TC and CG of the DLC3.
DTCs are output by the blinking of the SRS warning light.

HINT:

- **When each warning light stays blinking, a ground short in the wiring of terminal TC of the DLC3 or an internal ground short in each ECU is suspected.**
- **A DTC output mode signal is transmitted through the CAN communication system to each ECU including the center airbag sensor. Thus, when all systems do not enter DTC output mode, there may be an ECM malfunction.**

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When disconnecting the cable from the negative (-) battery terminal while performing repairs, some systems need to be initialized after the cable is reconnected (Click here).

1.CHECK CAN COMMUNICATION SYSTEM

a. Check if a CAN communication system DTC is output (Click here).

b. Check if a CAN communication system DTC is output (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output (for LHD)	B
DTC is output (for RHD)	C

B → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS (Click here)

C → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS (Click here)

A

2.CHECK HARNESS AND CONNECTOR (DLC3 - ECM)

a. Turn the engine switch off.

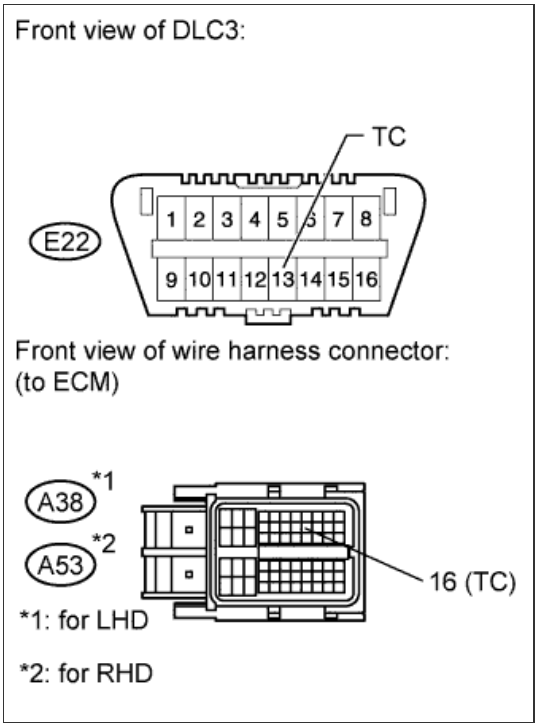
b. Disconnect the A38*1 or A53*2 connector from the ECM.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E22-13 (TC) - A38-16 (TC)*1	Always	Below 1 Ω
E22-13 (TC) - A53-16 (TC)*2	Always	Below 1 Ω

*1: for LHD
*2: for RHD



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

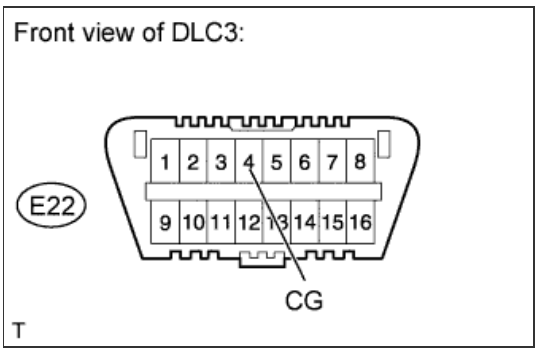
OK

3.CHECK HARNESS AND CONNECTOR (DLC3 - BODY GROUND)

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E22-4 (CG) - Body ground	Always	Below 1 Ω



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK HARNESS AND CONNECTOR (TC OF ECM - BODY GROUND)

a. Measure the resistance according to the value(s) in the table below.

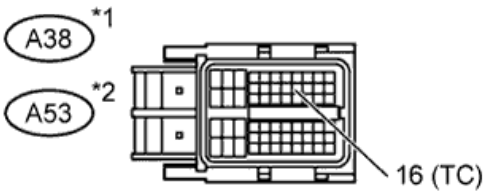
Standard Resistance:

Tester Connection	Condition	Specified Condition
A38-16 (TC) - Body ground*1	Always	1 MΩ or higher
A53-16 (TC) -		

Body ground*2	Always	1 MΩ or higher

*1: for LHD
*2: for RHD

Front view of wire harness connector:
(to ECM)



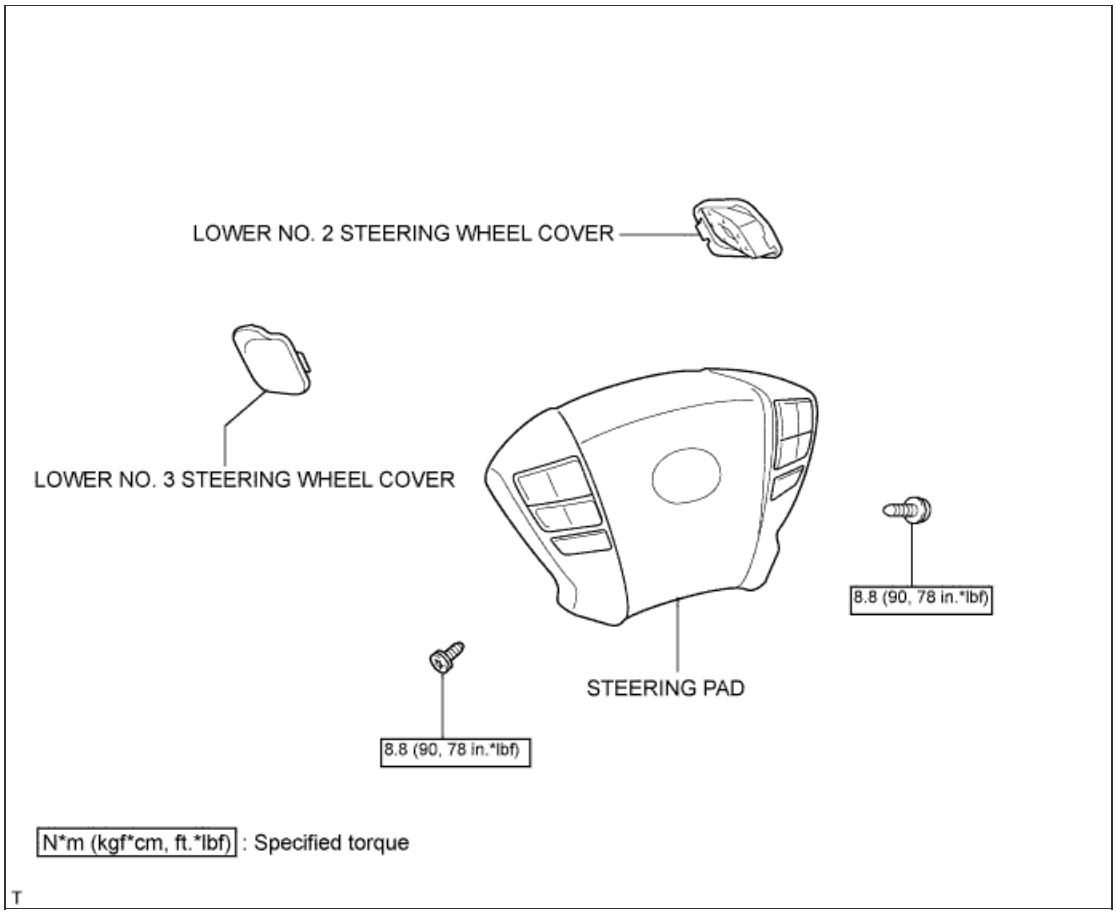
*1: for LHD

*2: for RHD

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR OR EACH ECU

OK → REPLACE CENTER AIRBAG SENSOR ASSEMBLY (Click here)

for Preparation Click here

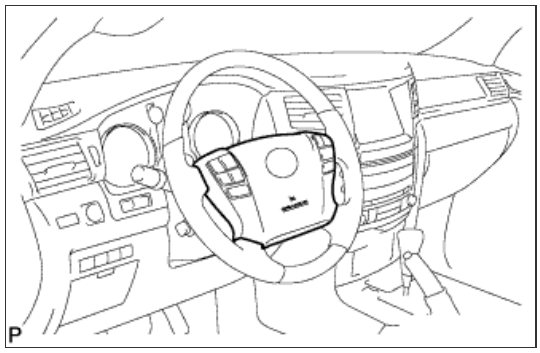


for Preparation Click here

1. CHECK STEERING PAD (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

b. With the steering pad installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the steering pad with a new one:
Cuts, minute cracks or marked discoloration on the steering pad top surface or in the grooved portion.



2. CHECK STEERING PAD (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

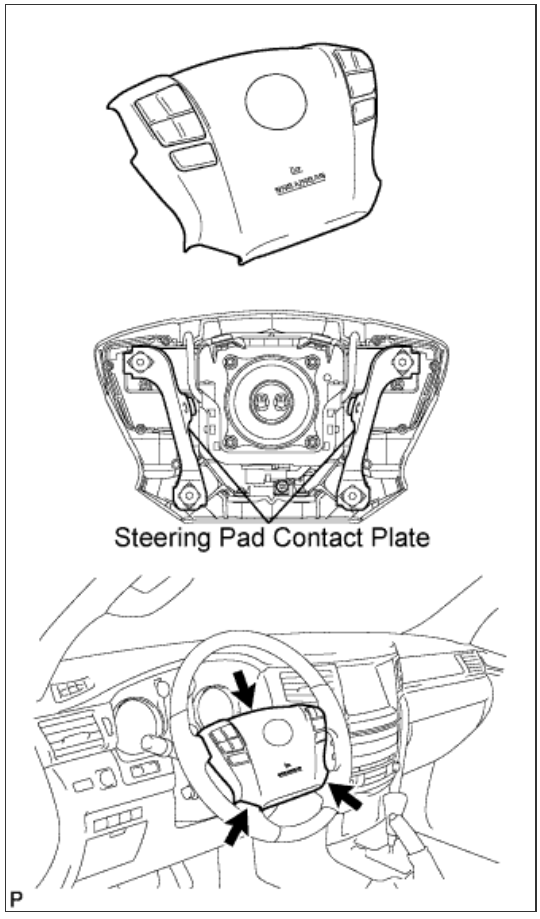
a. Perform a diagnostic system check (Click here).

b. With the steering pad removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the steering pad or steering wheel with a new one:

- Cuts, minute cracks or marked discoloration on the steering pad top surface or in the grooved portion.
- Cracks or other damage to the connectors.
- Deformation of the steering pad contact plate.
- Deformation of the steering wheel.
- There should be no interference between the steering pad and steering wheel, and the clearance should be uniform all the way around when the new steering pad is installed on the steering wheel.

CAUTION:

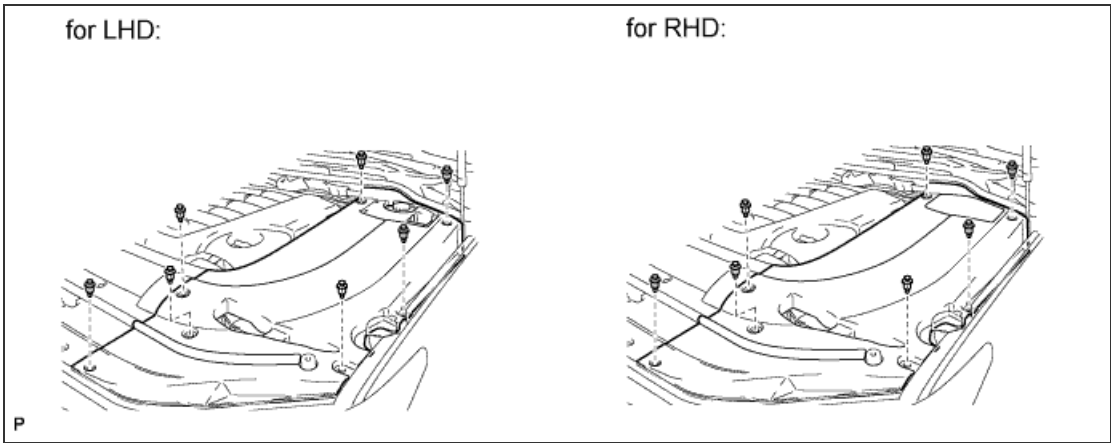
For removal and installation procedures of the steering pad, be sure to follow the correct procedure.



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

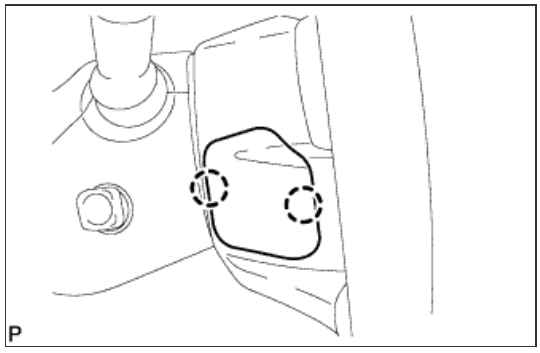
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

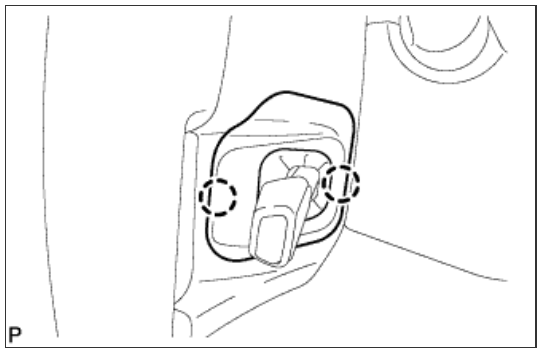
3. REMOVE LOWER NO. 3 STEERING WHEEL COVER

a. Detach the 2 claws and remove the steering wheel cover.



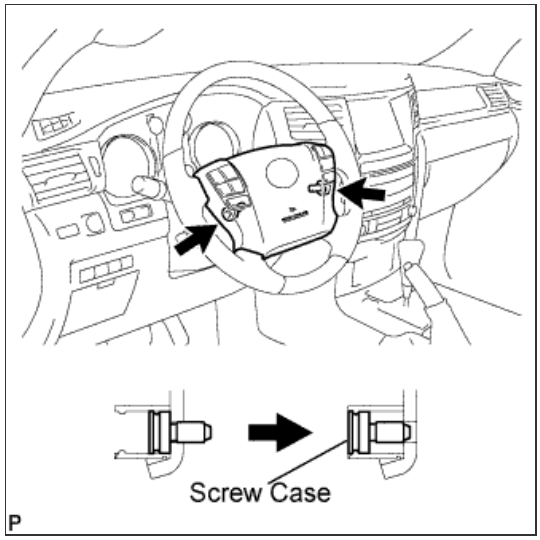
4. REMOVE LOWER NO. 2 STEERING WHEEL COVER

a. Detach the 2 claws and remove the steering wheel cover.



5. REMOVE STEERING PAD

a. Using a T30 "TORX" socket wrench, loosen the 2 screws until the groove along the screw circumference catches on the screw case.



b. Pull out the steering pad from the steering wheel, as shown in the illustration. Then support the steering pad with one hand.

NOTICE:

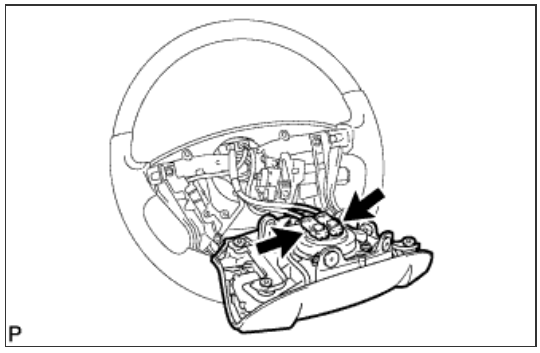
When removing the steering pad, do not pull the airbag wire harness.

c. Disconnect the horn connector.

d. Disconnect the 2 connectors and remove the steering pad.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



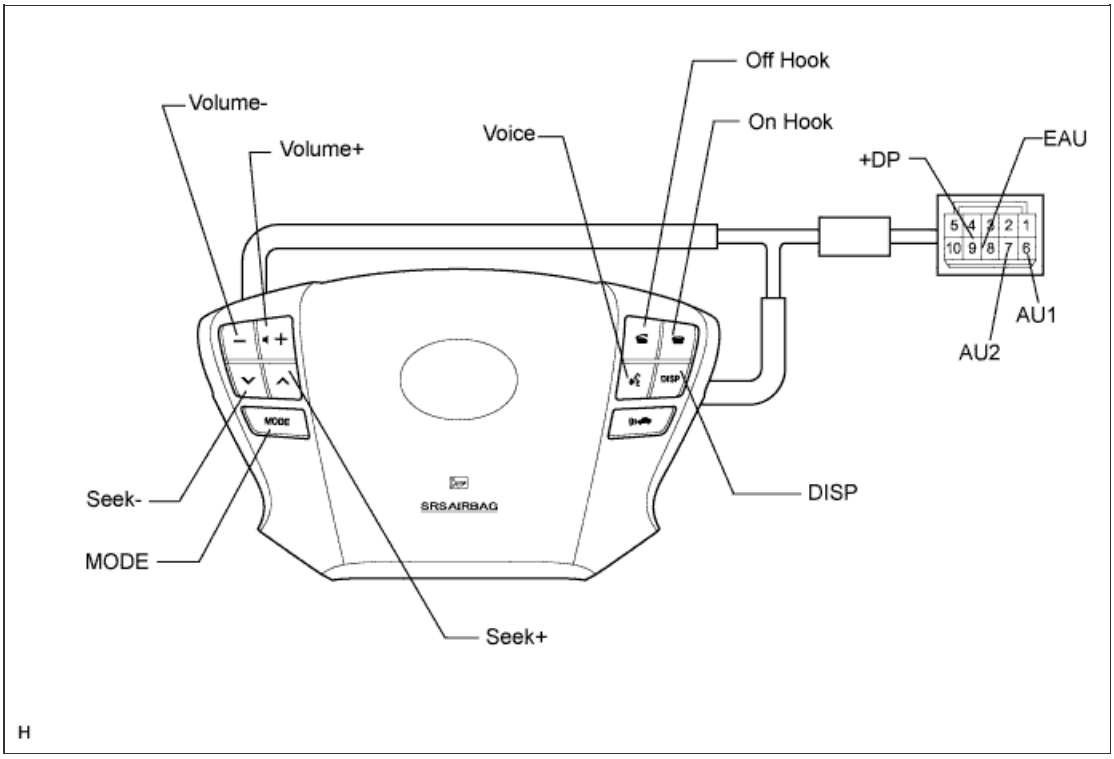
for Preparation Click here

CAUTION:

The vehicle is equipped with an SRS (Supplemental Restraint System) which includes components such as airbags. Before servicing (including removal or installation of parts), be sure to read the precaution in the SRS (Click here).

1. INSPECT STEERING PAD

a. Disconnect the z35 switch connector.



b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
10 (AU1) - 8 (EAU)	No switch is pushed	100 kΩ
10 (AU1) - 8 (EAU)	Seek+ switch pushed	Below 2.5 Ω
10 (AU1) - 8 (EAU)	Seek- switch pushed	329 Ω
10 (AU1) - 8 (EAU)	Volume+ switch pushed	1000 Ω
10 (AU1) - 8 (EAU)	Volume- switch pushed	3110 Ω
9 (AU2) - 8 (EAU)	No switch is pushed	100 kΩ
9 (AU2) - 8 (EAU)	MODE switch pushed	Below 2.5 Ω
9 (AU2) - 8 (EAU)	On hook switch pushed	329 Ω

9 (AU2) - 8 (EAU)	Off hook switch pushed	1000 Ω
9 (AU2) - 8 (EAU)	Voice switch pushed	3110 Ω
7 (+DP) - 8 (EAU)	DISP switch pushed	2.5 Ω or less

If the result is not as specified, replace the steering pad.

for Preparation Click here

1. INSTALL STEERING PAD

a. Support the steering pad with one hand.

b. Connect the 2 connectors to the steering pad.

NOTICE:

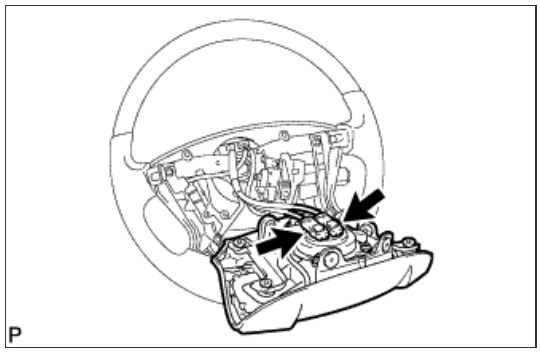
When handling the airbag connector, take care not to damage the airbag wire harness.

c. Connect the horn connector.

d. Confirm that the circumference groove of the "TORX" screw fits in the screw case, and place the steering pad onto the steering wheel.

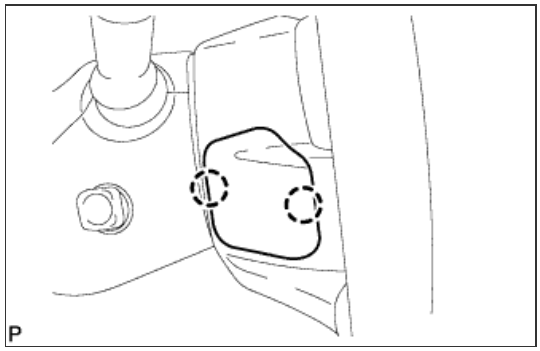
e. Using a T30 "TORX" socket wrench, tighten the 2 screws.

Torque:
8.8 N*m{ 90 kgf*cm , 78 in.*lbf }



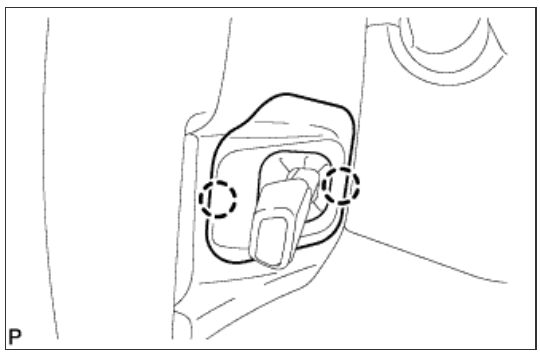
2. INSTALL LOWER NO. 3 STEERING WHEEL COVER

a. Attach the 2 claws to install the cover.



3. INSTALL LOWER NO. 2 STEERING WHEEL COVER

a. Attach the 2 claws to install the cover.



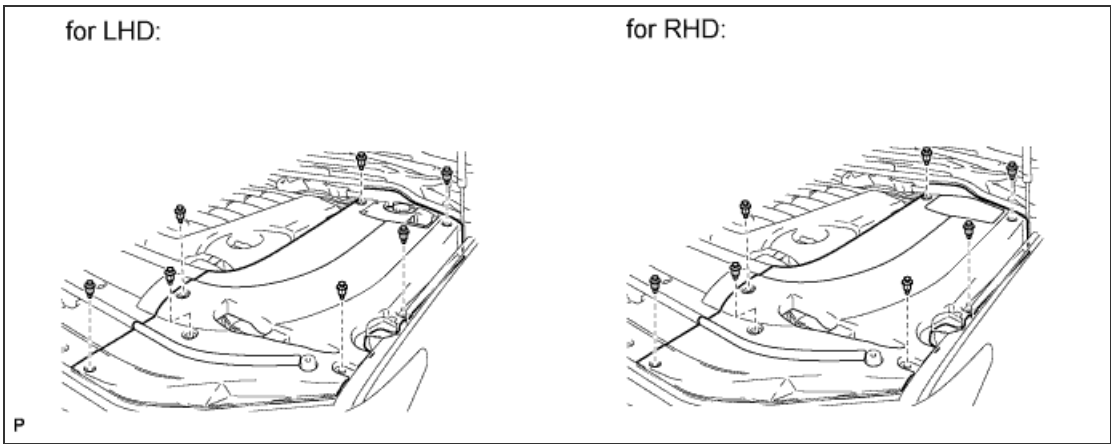
4. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

5. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



6. INSPECT STEERING PAD

a. With the steering pad installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the steering pad with a new one:
Cuts, minute cracks or marked discoloration on the steering pad top surface or in the grooved portion.

b. Make sure that the horn sounds.

HINT:

If the horn does not sound, inspect the horn system.

7. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here

CAUTION:

Before deploying any SRS components for disposal, carefully review and follow all applicable environmental and hazardous material regulations. Depending on the area, deployment of SRS components before disposal may be considered treatment of hazardous materials, which may require special training, certification or licensing.

1. PRECAUTION

HINT:

When scrapping a vehicle equipped with the SRS or disposing of the steering pad, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of the DISTRIBUTOR..

CAUTION:

- **Never dispose of a steering pad that has an unactivated airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors and where it will not create a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (32.8 ft.) away from the steering pad.**
- **The steering pad becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a steering pad with a deployed airbag.**
- **Do not apply water, etc. to a steering pad with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**
- **An airbag or pretensioner may be activated by static electricity. To prevent this, be sure to touch a metal surface with bare hands to discharge static electricity before performing this procedure.**

2. DISPOSE OF STEERING PAD (WHEN INSTALLED IN VEHICLE)

HINT:

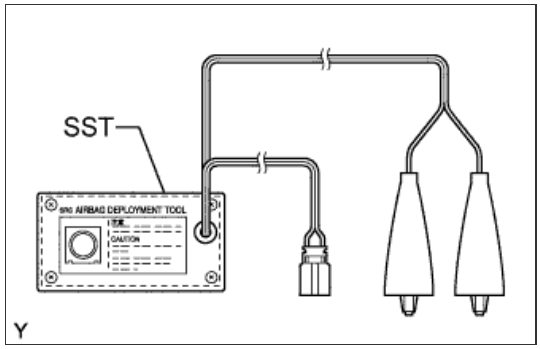
Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST.

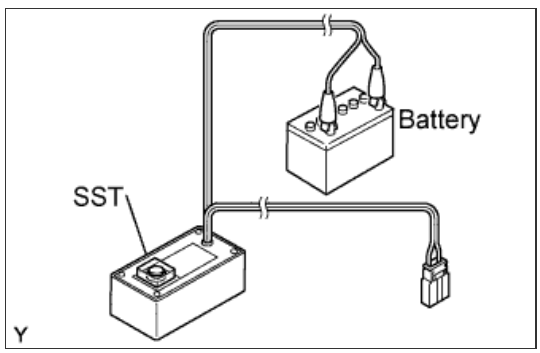
SST
09082-00700

CAUTION:

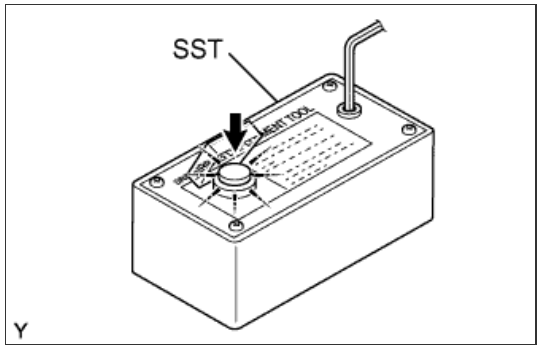
When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool).



i. Connect SST to the battery. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.



ii. Check the function of SST. Press SST activation switch, and check that the LED of SST activation switch comes on.



CAUTION:

- **Do not connect SST connector (yellow colored) to the airbag.**
- **If the LED comes on when the activation switch is not being pressed, SST malfunction is possible, so replace SST with a new one.**

iii. Disconnect SST from the battery.

b. Read the precaution (Click here).

c. Disconnect the cable from the negative (-) battery terminal.

CAUTION:

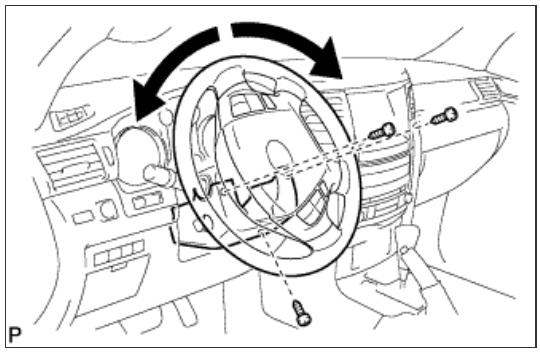
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

d. Remove the steering column cover lower.

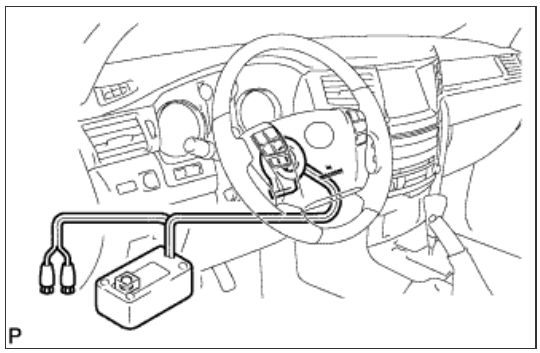
i. While turning the steering wheel to the right and left, remove the 3 screws and steering column cover lower.



e. Install SST.

CAUTION:

Check that there is no looseness in the steering wheel assembly and steering pad.



i. Disconnect the airbag connector (yellow colored) from the spiral cable with steering sensor.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

ii. Connect SST connector to the airbag connector of the spiral cable with steering sensor.

SST
09082-00780

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock.

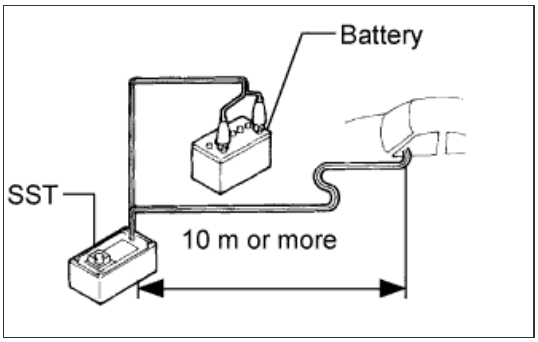
iii. Move SST at least 10 m (32.8 ft.) away from the vehicle front side window.

iv. Maintaining enough clearance for SST wire harness in the front side window, close all doors and windows of the vehicle.

NOTICE:

Take care not to damage SST wire harness.

v. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the negative (-) terminal.



f. Deploy the airbag.

i. Check that no one is inside the vehicle or within a 10 m (32.8 ft.) radius of the vehicle.

ii. Press SST activation switch to deploy the airbag.

CAUTION:

- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The steering pad becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a steering pad with a deployed airbag.**
- **Do not apply water to a steering pad with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:

The airbag is deployed as the LED of SST activation switch comes on.

3. DISPOSE OF STEERING PAD (WHEN NOT INSTALLED IN VEHICLE)

CAUTION:

Be sure to follow the procedure detailed below when deploying the airbag.

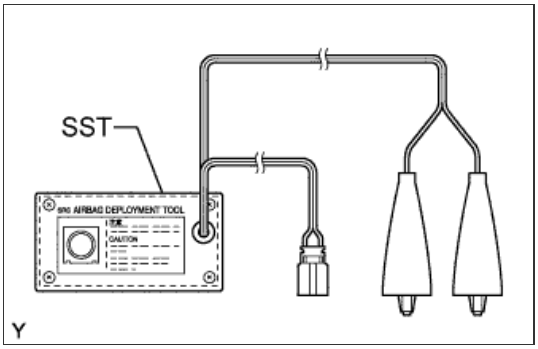
HINT:

Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST.

SST
09082-00700

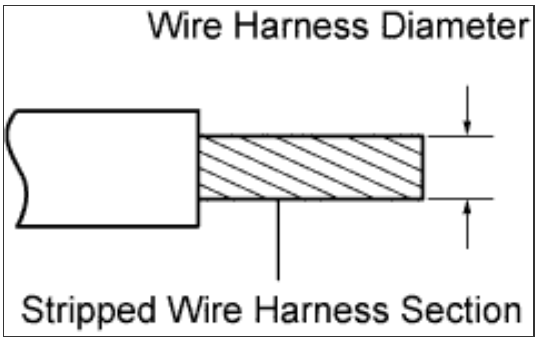
b. Remove the steering pad (Click here).



CAUTION:

- **When removing the steering pad, wait at least 90 seconds after the engine switch is turned off and the cable is disconnected from the negative (-) battery terminal before starting work.**
- **When storing the steering pad, keep the airbag deployment side facing upward.**

c. Using a service-purpose wire harness for the vehicle, tie down the steering pad to a disc wheel.



Cross-sectional area of stripped wire harness section:
1.25 mm^2 (0.00192 in.^{2})

CAUTION:

If the wire harness is too thin or an alternative object is used to tie down the steering pad, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with a cross-sectional area of at least 1.25 mm^2 (0.00192 in.^{2}).

HINT:

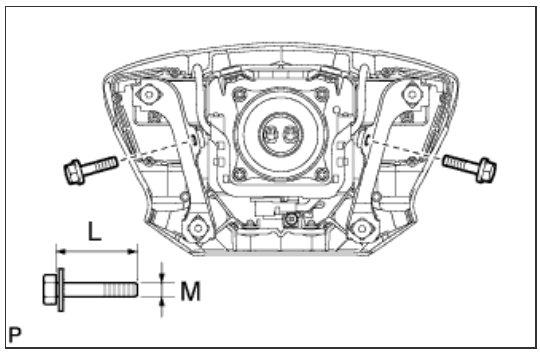
To calculate the cross-sectional area of the stripped wire harness section: Cross-sectional area = 3.14 x (Diameter) ^{2} divided by 4

i. Install 2 bolts with washers into the 2 bolt holes on the steering pad.

Bolt:
L: 35.0 mm (1.38 in.)
M: 6.0 mm (0.236 in.)
Pitch: 1.0 mm (0.0393 in.)

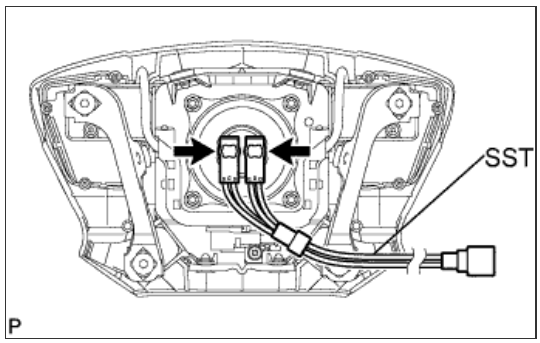
NOTICE:

- **Tighten the bolts by hand until they become difficult to turn.**
- **Do not tighten the bolts excessively.**



ii. After connecting SST to each other, connect them to the steering pad.

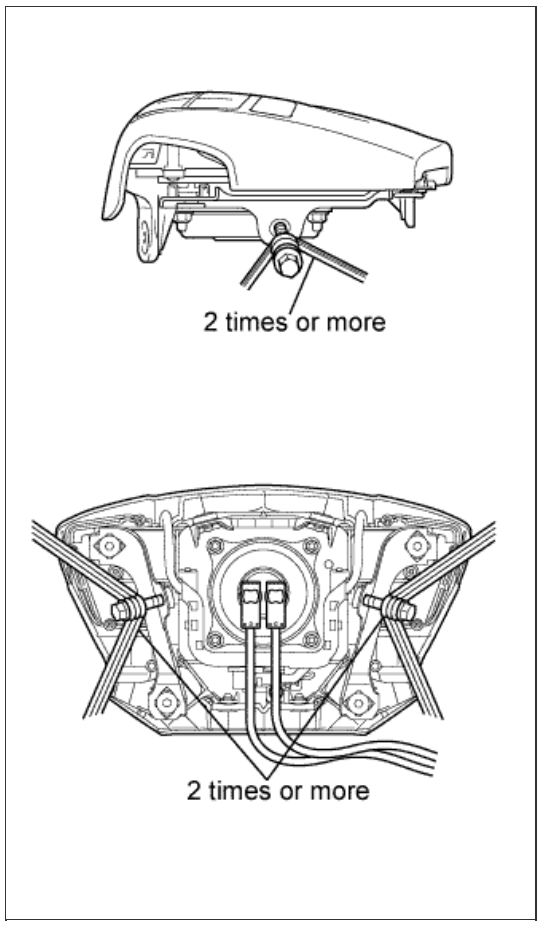
SST
09082-00820



iii. Wind 3 wire harnesses at least 2 times each around the bolts installed on the left and right sides of the steering pad.

CAUTION:

- **Tightly wind the wire harnesses around the bolts so that there is no slack.**
- **Make sure that the wire harnesses are tight. If there is slack in the wire harnesses, the steering pad may become loose due to the shock when the airbag is deployed.**



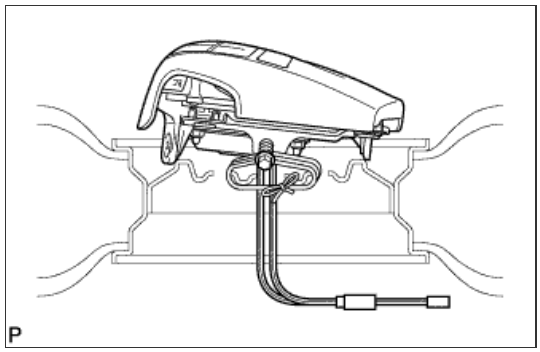
iv. Face the airbag deployment side of the steering pad upward. Separately tie the left and right sides of the steering pad to a disc wheel through the hub nut holes. Position SST connector so that it hangs downward through the hub hole of the disc wheel.

CAUTION:

- **Make sure that the wire harnesses are tight. If there is slack in the wire harnesses, the steering pad may become loose due to the shock when the airbag is deployed.**
- **Always tie down the steering pad with the airbag deployment side facing upward.**

NOTICE:

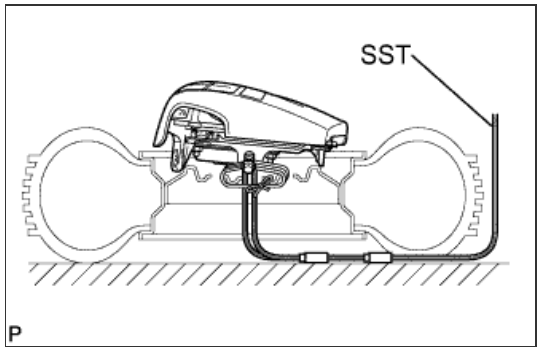
As the disc wheel may be damaged by the airbag deployment, use a disc wheel that you are planning to throw away.



d. Install SST.

CAUTION:

Place the disc wheel on level ground.



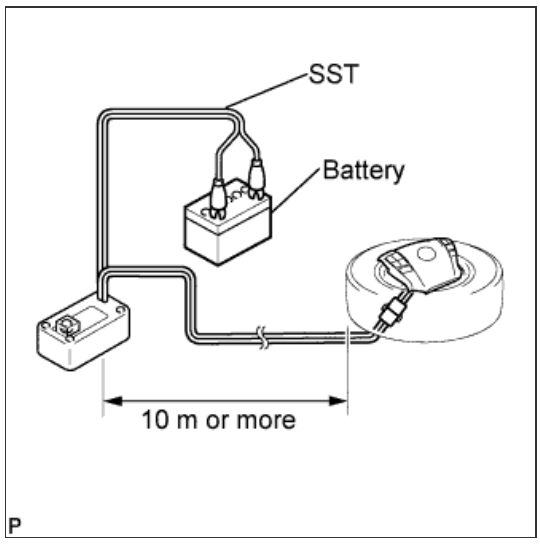
i. Connect SST connector.

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09082-00700

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for SST wire harness inside the disc wheel.

ii. Move SST at least 10 m (32.8 ft.) away from the steering pad tied down to the disc wheel.



e. Cover the steering pad with a cardboard box or tires.

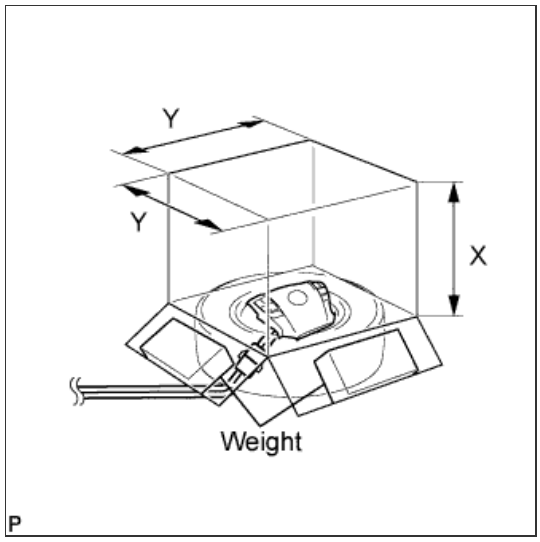
i. Covering method using a cardboard box: Cover the steering pad with the cardboard box and place weights on the cardboard box in 4 places with a total of at least 190 N (19 kgf, 41.8 lbf).

Cardboard box size:
Must exceed the following dimensions
X: 460 mm (18.1 in.)
Y: 650 mm (25.6 in.)

NOTICE:

- **When dimension Y of the cardboard box exceeds the diameter of the tire with disc wheel which the steering pad is tied to, X should be the following size. X = 460 mm (18.1 in.) + width of tire**
- **If a cardboard box which is smaller than the specified**

size is used, the cardboard box will be damaged by the shock from the airbag deployment.



ii. Covering method using tires: Place at least 3 tires without disc wheels on the tire with disc wheel which the steering pad is tied to. Place another tire with disc wheel on them.

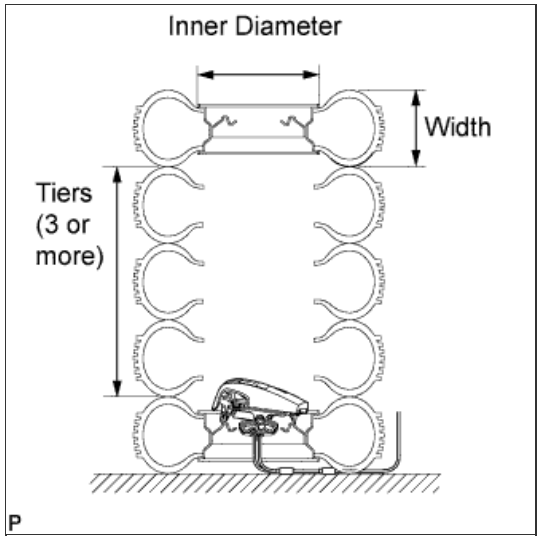
Tire size:
Must exceed the following dimensions Width: 185 mm (7.28 in.)
Inner diameter: 360 mm (14.2 in.)

CAUTION:

Do not use tires with disc wheels except on the top and bottom.

NOTICE:

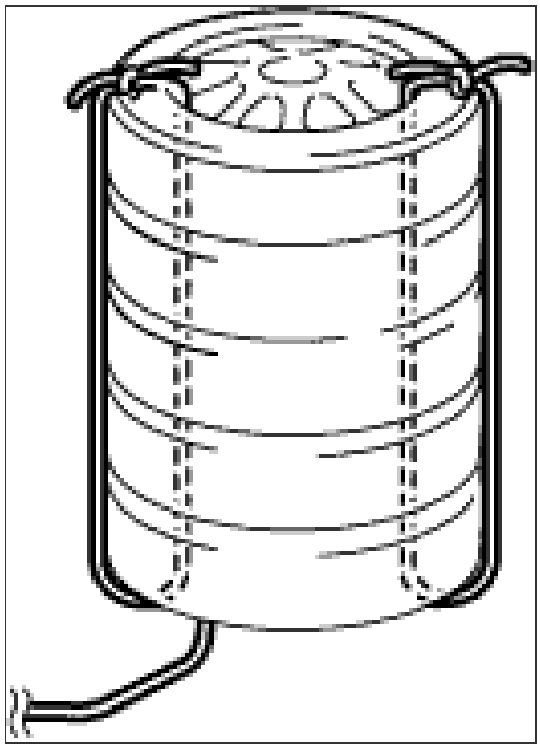
- **As the tires may be damaged by the airbag deployment, use tires that you are planning to throw away.**
- **Do not place SST connector under the tire because it could be damaged.**



iii. Tie the tires together with 2 wire harnesses.

CAUTION:

Make sure that the wire harnesses are tight. Looseness in the wire harnesses results in the tires coming free due to the shock when the airbag is deployed.



f. Deploy the airbag.

i. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.

ii. Check that no one is within a 10 m (32.8 ft.) radius of the disc wheel which the steering pad is tied to.

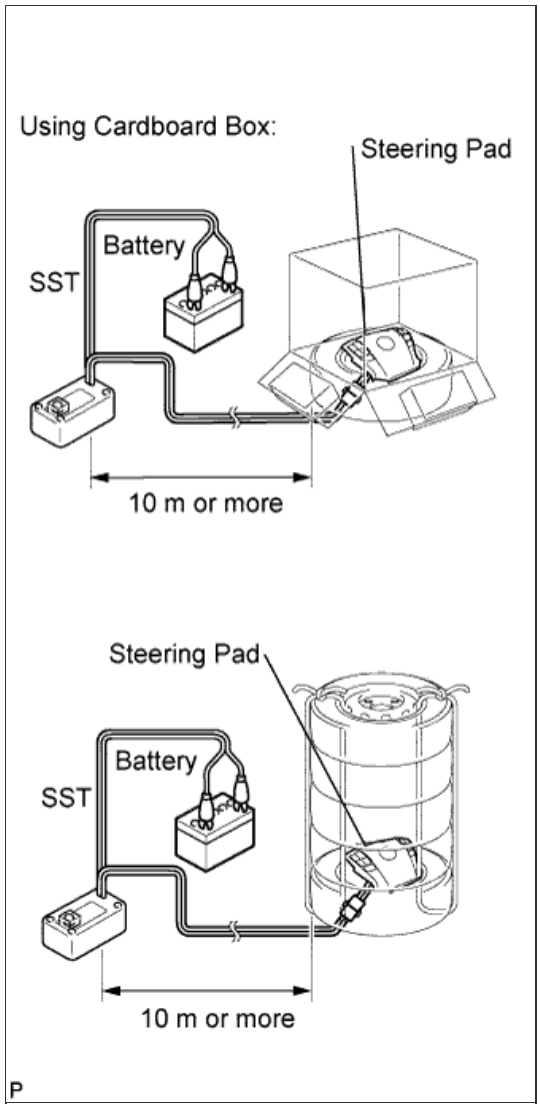
iii. Press SST activation switch to deploy the airbag.

CAUTION:

When deploying the airbag, make sure that no one is near the tire.

HINT:

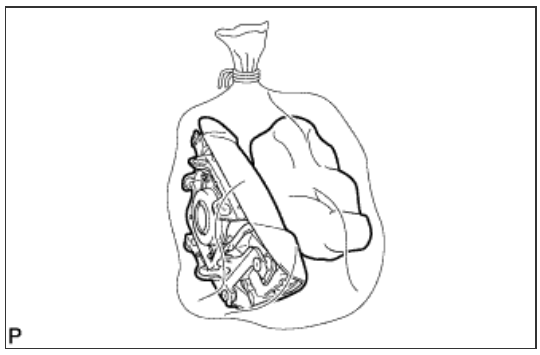
The airbag is deployed as the LED of SST activation switch comes on.



g. Dispose of the steering pad.

CAUTION:

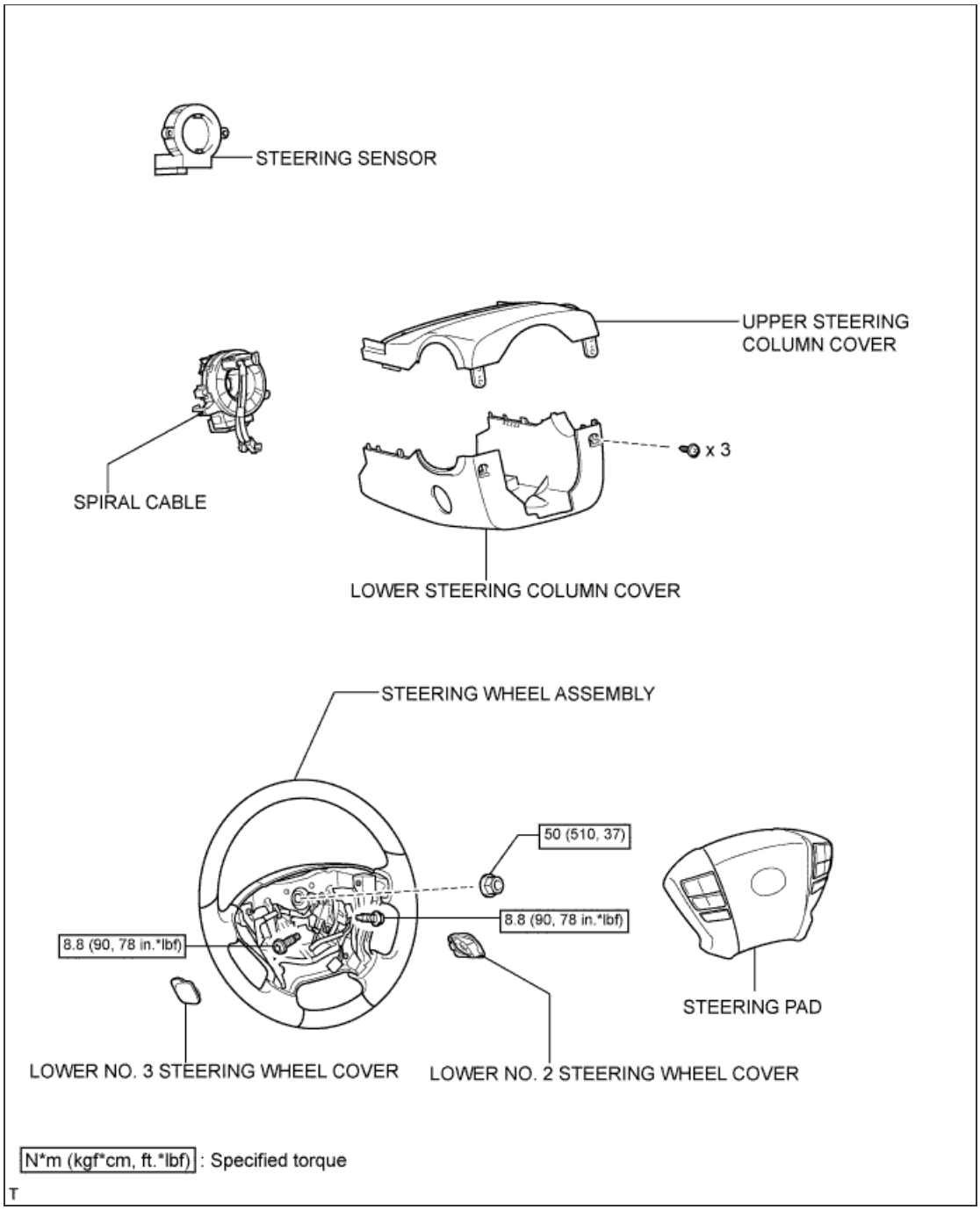
- **The steering pad becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a steering pad with a deployed airbag.**
- **Do not apply water to a steering pad with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**



i. Remove the steering pad from the disc wheel.

ii. Place the steering pad in a plastic bag, tie it tightly and dispose of it in the same way as other general parts.

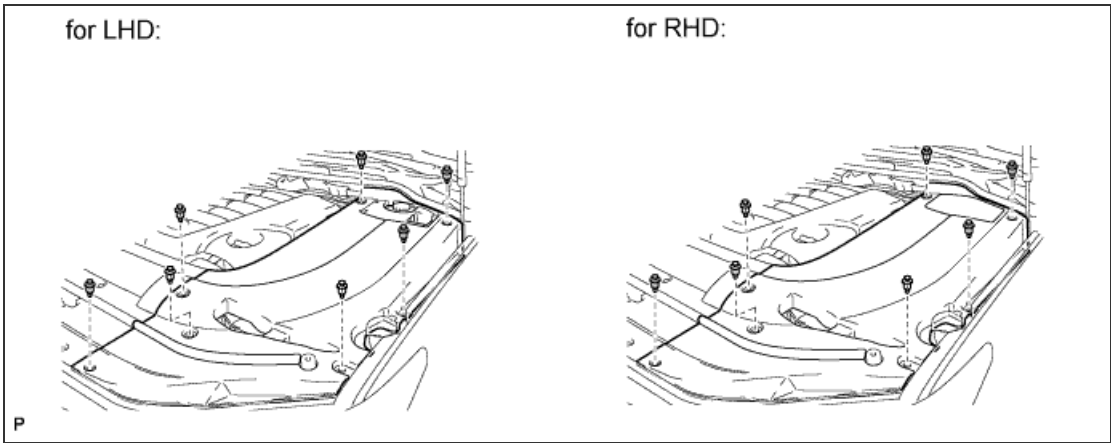
for Preparation Click here



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

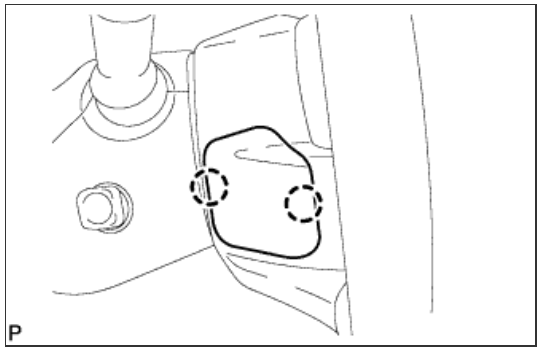
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. PLACE FRONT WHEELS FACING STRAIGHT AHEAD

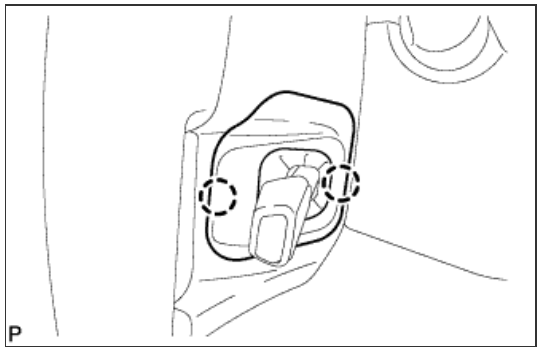
4. REMOVE LOWER NO. 3 STEERING WHEEL COVER

a. Detach the 2 claws and remove the steering wheel cover.



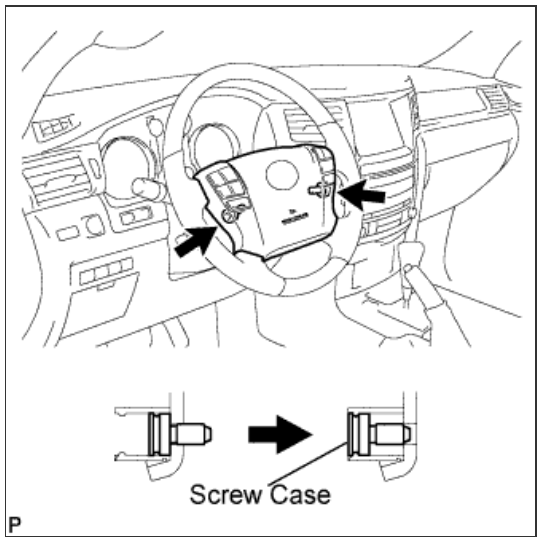
5. REMOVE LOWER NO. 2 STEERING WHEEL COVER

a. Detach the 2 claws and remove the steering wheel cover.



6. REMOVE STEERING PAD

a. Using a T30 "TORX" socket wrench, loosen the 2 screws until the groove along the screw circumference catches on the screw case.



b. Pull out the steering pad from the steering wheel, as shown in the illustration. Then support the steering pad with one hand.

NOTICE:

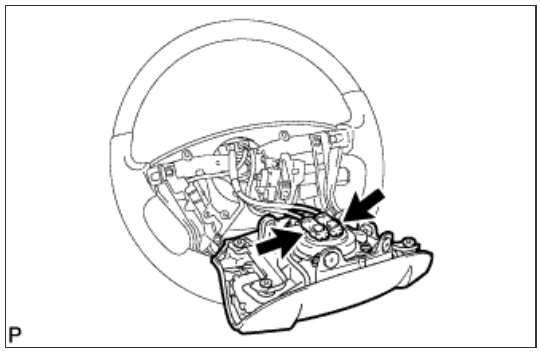
When removing the steering pad, do not pull the airbag wire harness.

c. Disconnect the horn connector.

d. Disconnect the 2 connectors and remove the steering pad.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



7. REMOVE STEERING WHEEL ASSEMBLY

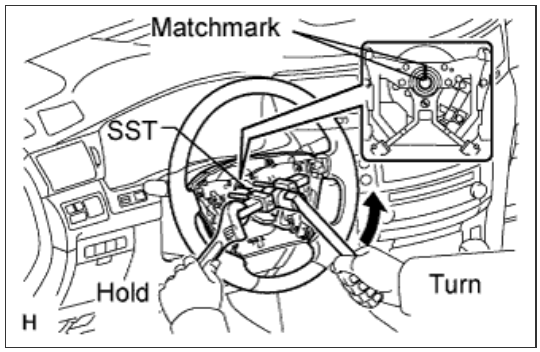
a. Remove the steering wheel set nut.

b. Put matchmarks on the steering wheel and main shaft.

c. Using SST, remove the steering wheel assembly.

SST

09950-50013 (09951-05010, 09952-05010, 09953-05020, 09954-05011)



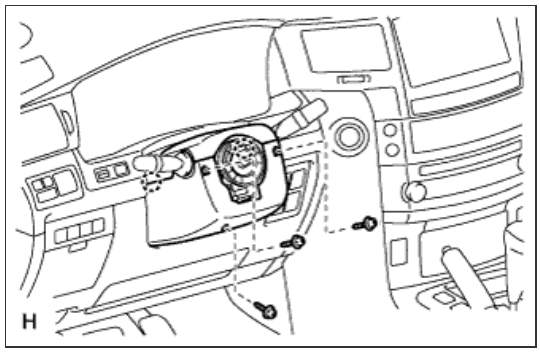
8. REMOVE LOWER STEERING COLUMN COVER

a. Remove the 3 screws.

b. Detach the 2 claws to remove the lower steering column cover.

NOTICE:

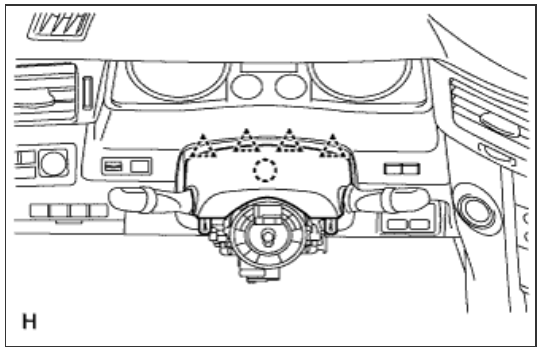
Do not damage the tilt and telescopic switch.



9. REMOVE UPPER STEERING COLUMN COVER

a. Detach the 4 clips.

b. Detach the claw to remove the upper steering column cover.



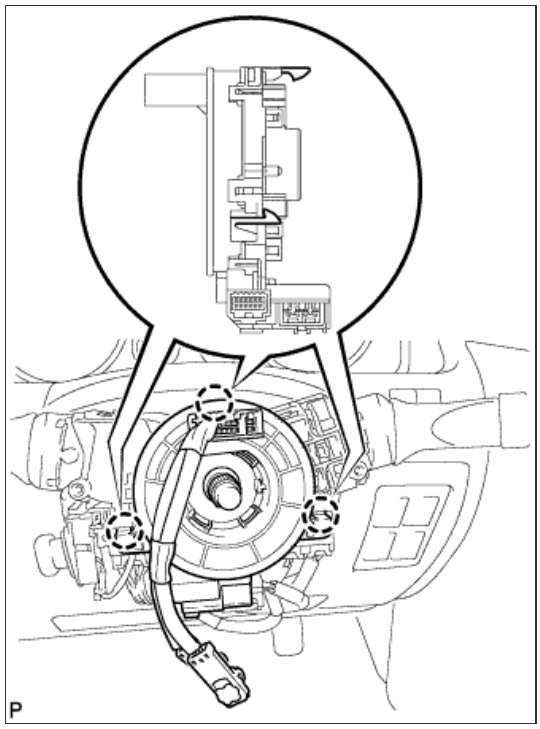
10. REMOVE SPIRAL CABLE

a. Disconnect the connectors from the spiral cable with steering sensor.

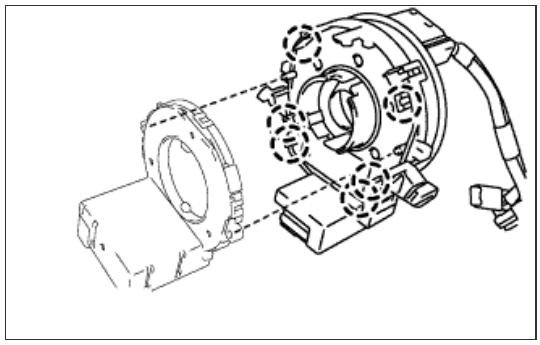
NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

b. Detach the 3 claws and remove the spiral cable with steering sensor.



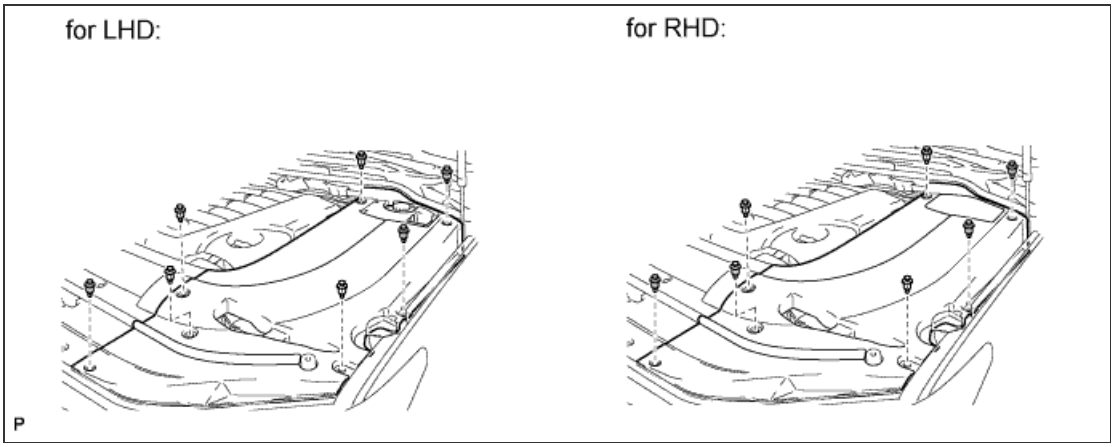
c. Detach the 6 claws and remove the spiral cable from the steering sensor.



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

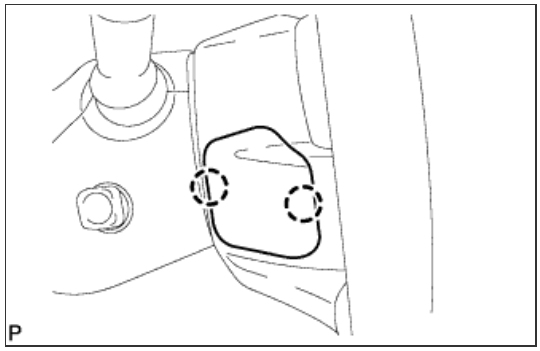
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. PLACE FRONT WHEELS FACING STRAIGHT AHEAD

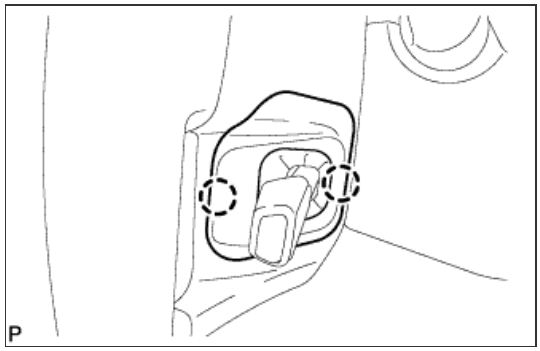
4. REMOVE LOWER NO. 3 STEERING WHEEL COVER

a. Detach the 2 claws and remove the steering wheel cover.



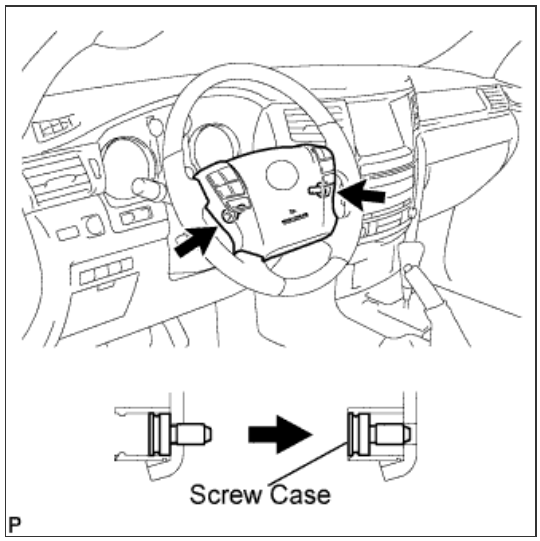
5. REMOVE LOWER NO. 2 STEERING WHEEL COVER

a. Detach the 2 claws and remove the steering wheel cover.



6. REMOVE STEERING PAD

a. Using a T30 "TORX" socket wrench, loosen the 2 screws until the groove along the screw circumference catches on the screw case.



b. Pull out the steering pad from the steering wheel, as shown in the illustration. Then support the steering pad with one hand.

NOTICE:

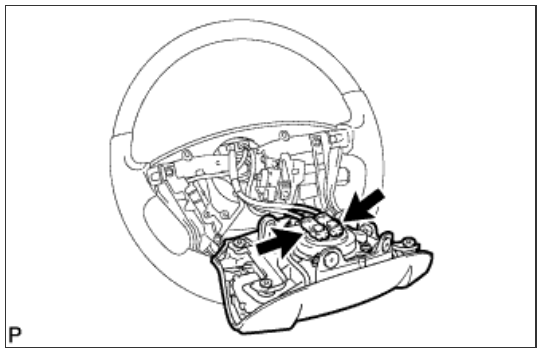
When removing the steering pad, do not pull the airbag wire harness.

c. Disconnect the horn connector.

d. Disconnect the 2 connectors and remove the steering pad.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



7. REMOVE STEERING WHEEL ASSEMBLY

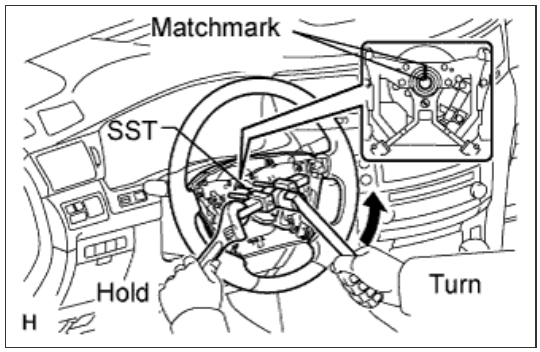
a. Remove the steering wheel set nut.

b. Put matchmarks on the steering wheel and main shaft.

c. Using SST, remove the steering wheel assembly.

SST

09950-50013 (09951-05010, 09952-05010, 09953-05020, 09954-05011)



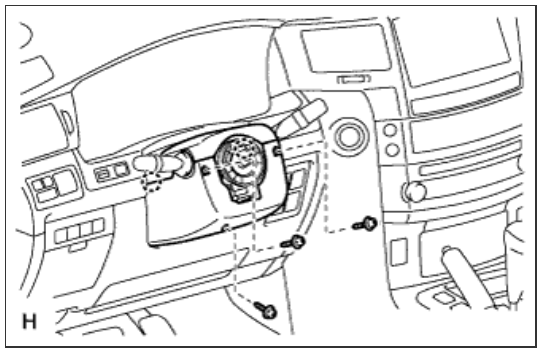
8. REMOVE LOWER STEERING COLUMN COVER

a. Remove the 3 screws.

b. Detach the 2 claws to remove the lower steering column cover.

NOTICE:

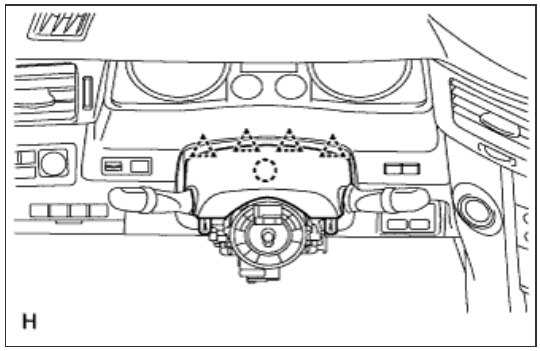
Do not damage the tilt and telescopic switch.



9. REMOVE UPPER STEERING COLUMN COVER

a. Detach the 4 clips.

b. Detach the claw to remove the upper steering column cover.



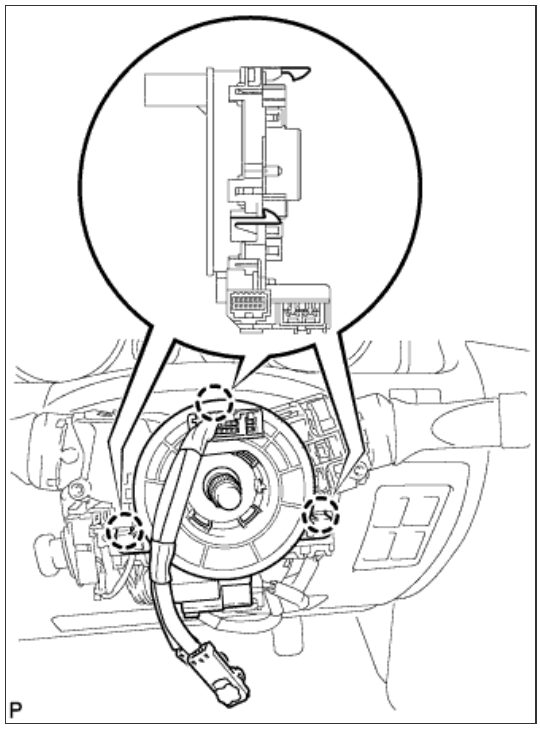
10. REMOVE SPIRAL CABLE

a. Disconnect the connectors from the spiral cable with steering sensor.

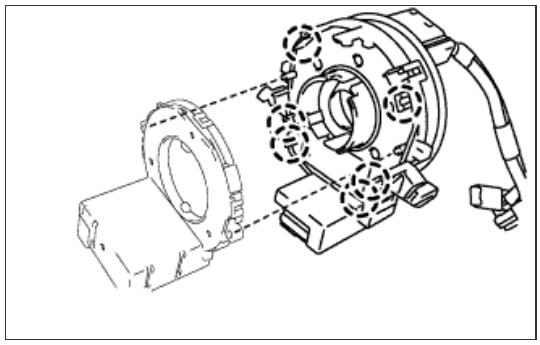
NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

b. Detach the 3 claws and remove the spiral cable with steering sensor.



c. Detach the 6 claws and remove the spiral cable from the steering sensor.

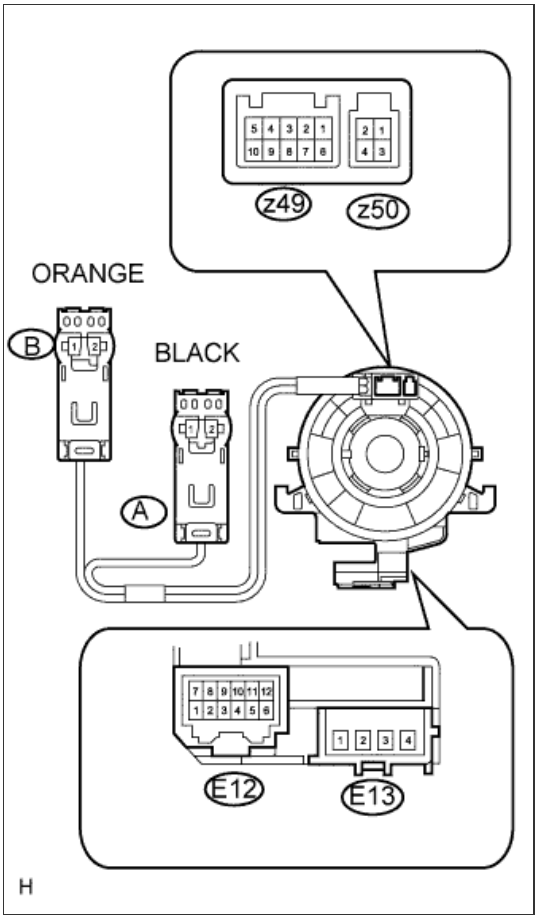


for Preparation Click here

1. INSPECT SPIRAL CABLE

a. If there are any defects as mentioned below, replace the spiral cable with a new one:
Scratches, cracks, dents or chips on the connector or the spiral cable.

b. Check the spiral cable.



i. Set the spiral cable to the center position (Click here).

ii. Measure the resistance between each terminal of the spiral cable according to the table below.

iii. After setting the spiral cable to the center position, rotate the spiral cable 2.5 times clockwise, and measure the resistance as shown. Then rotate the spiral cable 5 times counterclockwise, and measure the resistance as shown.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-1 - B-2	Always	Below 1 Ω
E13-2 - B-1	Always	Below 1 Ω
E13-3 - A-1	Always	Below 1 Ω
E13-4 - A-2	Always	Below 1 Ω
E12-6 - z49-10	Always	Below 1 Ω
E12-5 - z49-9	Always	Below 1 Ω
E12-4 - z49-8	Always	Below 1 Ω
E12-3 - z49-7	Always	Below 1 Ω
E12-2 - z49-6	Always	Below 1 Ω
E12-2 - z50-4	Always	Below 1 Ω
E12-1 - z50-3	Always	Below 1 Ω
E12-12 - z49-5	Always	Below 1 Ω
E12-11 - z49-4	Always	Below 1 Ω
E12-10 - z49-3	Always	Below 1 Ω
E12-9 - z49-2	Always	Below 1 Ω
E12-8 - z49-1	Always	Below 1 Ω
E12-8 - z50-2	Always	Below 1 Ω
E12-7 - z50-1	Always	Below 1 Ω

iv. After setting the spiral cable to the center position, rotate the spiral cable 2.5 times clockwise. Then while rotating the spiral cable 5 times counterclockwise, measure the resistance as shown.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-1 - B-2	Always	Below 1 Ω
E13-2 - B-1	Always	Below 1 Ω
E13-3 - A-1	Always	Below 1 Ω
E13-4 - A-2	Always	Below 1 Ω
E12-6 - z49-10	Always	Below 1 Ω
E12-5 - z49-9	Always	Below 1 Ω
E12-4 - z49-8	Always	Below 1 Ω
E12-3 - z49-7	Always	Below 1 Ω
E12-2 - z49-6	Always	Below 1 Ω
E12-2 - E13-4	Always	Below 1 Ω

E12-1 - E13-3	Always	Below 1 Ω
E12-12 - z49-5	Always	Below 1 Ω
E12-11 - z49-4	Always	Below 1 Ω
E12-10 - z49-3	Always	Below 1 Ω
E12-9 - z49-2	Always	Below 1 Ω
E12-8 - z49-1	Always	Below 1 Ω
E12-8 - z50-2	Always	Below 1 Ω
E12-7 - z50-1	Always	Below 1 Ω

NOTICE:

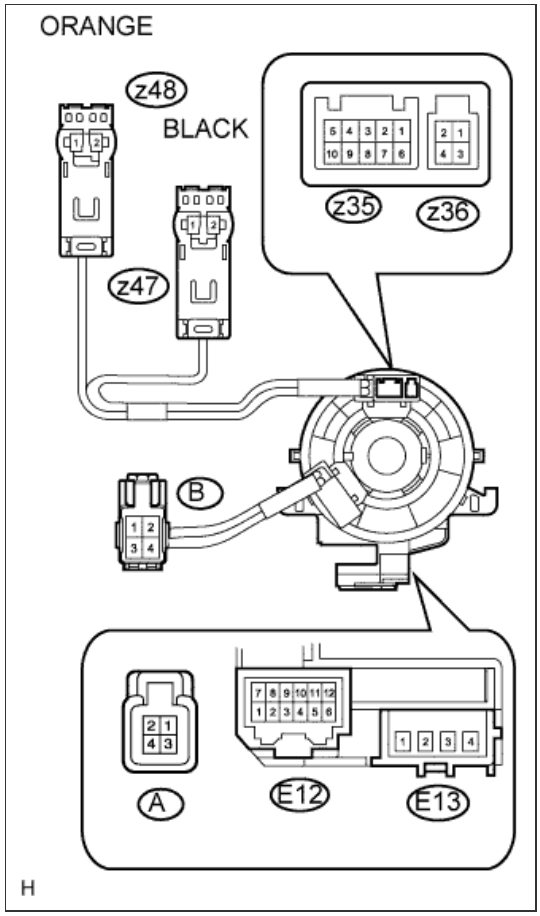
As the spiral cable may break, do not rotate the spiral cable more than the specified amount.

for Preparation Click here

1. INSPECT SPIRAL CABLE (w/ Steering Heater)

a. If there are any defects as mentioned below, replace the spiral cable with a new one:
Scratches, cracks, dents or chips on the connector or the spiral cable.

b. Check the spiral cable.



i. Set the spiral cable to the center position (Click here).

ii. Measure the resistance between each terminal of the spiral cable according to the table below.

iii. After setting the spiral cable to the center position, rotate the spiral cable 2.5 times clockwise and measure the resistance according to the value(s) in the table below. Then rotate the spiral cable 5 times counterclockwise and measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-1 - z48-2	Always	Below 1 Ω
E13-2 - z48-1	Always	Below 1 Ω
E13-3 - z47-1	Always	Below 1 Ω
E13-4 - z47-2	Always	Below 1 Ω
E12-6 - z35-10	Always	Below 1 Ω
E12-5 - z35-9	Always	Below 1 Ω
E12-4 - z35-8	Always	Below 1 Ω
E12-3 - z35-7	Always	Below 1 Ω
E12-2 - z35-6	Always	Below 1 Ω
E12-2 - z36-4	Always	Below 1 Ω
E12-1 - z36-3	Always	Below 1 Ω
E12-12 - z35-5	Always	Below 1 Ω
E12-11 - z35-4	Always	Below 1 Ω
E12-10 - z35-3	Always	Below 1 Ω
E12-9 - z35-2	Always	Below 1 Ω
E12-8 - z35-1	Always	Below 1 Ω
E12-8 - z36-2	Always	Below 1 Ω
E12-7 - z36-1	Always	Below 1 Ω
A-1 - B-1	Always	Below 1 Ω
A-2 - B-3	Always	Below 1 Ω
A-3 - B-2	Always	Below 1 Ω
A-4 - B-4	Always	Below 1 Ω

If the result is not as specified, replace the spiral cable.

iv. After setting the spiral cable to the center position, rotate the spiral cable 2.5 times counterclockwise. Then while rotating the spiral cable 5 times clockwise, measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-1 - z48-2	Always	Below 1 Ω
E13-2 - z48-1	Always	Below 1 Ω
E13-3 - z47-1	Always	Below 1 Ω
E13-4 - z47-2	Always	Below 1 Ω

E12-6 - z35-10	Always	Below 1 Ω
E12-5 - z35-9	Always	Below 1 Ω
E12-4 - z35-8	Always	Below 1 Ω
E12-3 - z35-7	Always	Below 1 Ω
E12-2 - z35-6	Always	Below 1 Ω
E12-2 - E13-4	Always	Below 1 Ω
E12-1 - E13-3	Always	Below 1 Ω
E12-12 - z35-5	Always	Below 1 Ω
E12-11 - z35-4	Always	Below 1 Ω
E12-10 - z35-3	Always	Below 1 Ω
E12-9 - z35-2	Always	Below 1 Ω
E12-8 - z35-1	Always	Below 1 Ω
E12-8 - z36-2	Always	Below 1 Ω
E12-7 - z36-1	Always	Below 1 Ω
A-1 - B-1	Always	Below 1 Ω
A-2 - B-3	Always	Below 1 Ω
A-3 - B-2	Always	Below 1 Ω
A-4 - B-4	Always	Below 1 Ω

NOTICE:

As the spiral cable may break, do not rotate the spiral cable more than the specified amount.

If the result is not as specified, replace the spiral cable.

2. INSPECT SPIRAL CABLE (w/o Steering Heater)

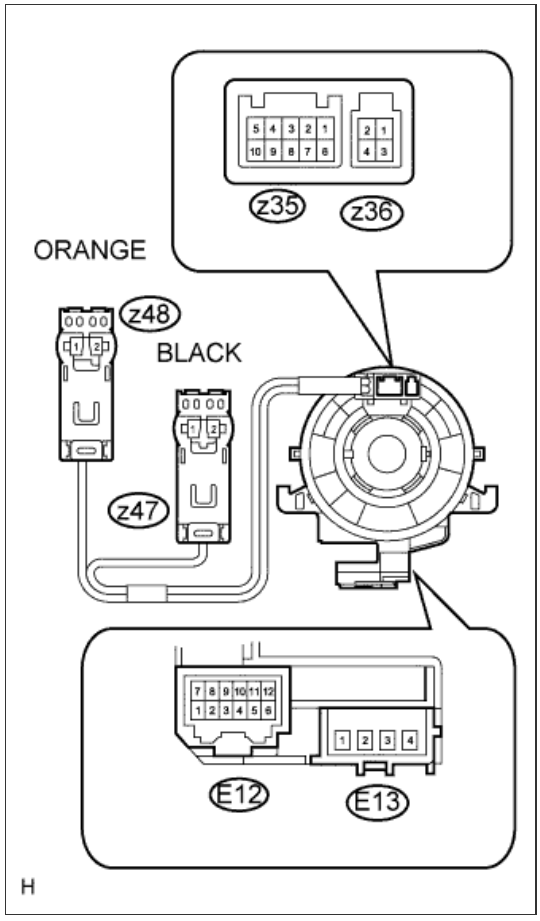
a. If there are any defects as mentioned below, replace the spiral cable with a new one:
Scratches, cracks, dents or chips on the connector or the spiral cable.

b. Check the spiral cable.

i. Set the spiral cable to the center position (Click here).

ii. Measure the resistance between each terminal of the spiral cable according to the table below.

iii. After setting the spiral cable to the center position, rotate the spiral cable 2.5 times clockwise and measure the resistance according to the value(s) in the table below. Then rotate the spiral cable 5 times counterclockwise and measure the resistance according to the value(s) in the table below.



Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-1 - z48-2	Always	Below 1 Ω
E13-2 - z48-1	Always	Below 1 Ω
E13-3 - z47-1	Always	Below 1 Ω
E13-4 - z47-2	Always	Below 1 Ω
E12-6 - z35-10	Always	Below 1 Ω
E12-5 - z35-9	Always	Below 1 Ω
E12-4 - z35-8	Always	Below 1 Ω
E12-3 - z35-7	Always	Below 1 Ω
E12-2 - z35-6	Always	Below 1 Ω
E12-2 - z36-4	Always	Below 1 Ω
E12-1 - z36-3	Always	Below 1 Ω
E12-12 - z35-5	Always	Below 1 Ω
E12-11 - z35-4	Always	Below 1 Ω
E12-10 - z35-3	Always	Below 1 Ω

E12-9 - z35-2	Always	Below 1 Ω
E12-8 - z35-1	Always	Below 1 Ω
E12-8 - z36-2	Always	Below 1 Ω
E12-7 - z36-1	Always	Below 1 Ω

If the result is not as specified, replace the spiral cable.

iv. After setting the spiral cable to the center position, rotate the spiral cable 2.5 times counterclockwise. Then while rotating the spiral cable 5 times clockwise, measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E13-1 - z48-2	Always	Below 1 Ω
E13-2 - z48-1	Always	Below 1 Ω
E13-3 - z47-1	Always	Below 1 Ω
E13-4 - z47-2	Always	Below 1 Ω
E12-6 - z35-10	Always	Below 1 Ω
E12-5 - z35-9	Always	Below 1 Ω
E12-4 - z35-8	Always	Below 1 Ω
E12-3 - z35-7	Always	Below 1 Ω
E12-2 - z35-6	Always	Below 1 Ω
E12-2 - z36-4	Always	Below 1 Ω
E12-1 - z36-3	Always	Below 1 Ω
E12-12 - z35-5	Always	Below 1 Ω
E12-11 - z35-4	Always	Below 1 Ω
E12-10 - z35-3	Always	Below 1 Ω
E12-9 - z35-2	Always	Below 1 Ω
E12-8 - z35-1	Always	Below 1 Ω
E12-8 - z36-2	Always	Below 1 Ω
E12-7 - z36-1	Always	Below 1 Ω

NOTICE:

As the spiral cable may break, do not rotate the spiral cable more than the specified amount.

If the result is not as specified, replace the spiral cable.

for Preparation Click here

1. INSTALL SPIRAL CABLE

a. Align the pins on the spiral cable with the installation holes on the steering sensor.

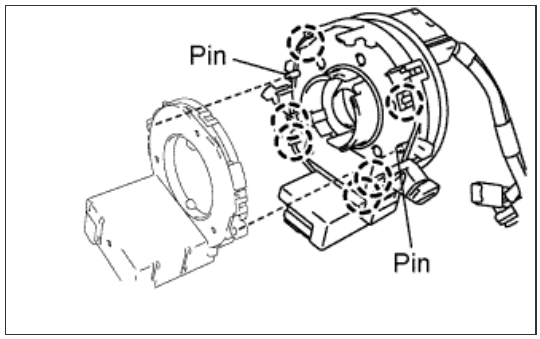
b. Attach the 6 claws and install the spiral cable to the steering sensor.

c. Check that the front wheels are facing straight ahead.

d. Set the turn signal switch to the neutral position.

CAUTION:

If it is not in the neutral position, the pin of the turn signal switch may be snapped.



e. Attach the 3 claws to install the spiral cable with steering sensor.

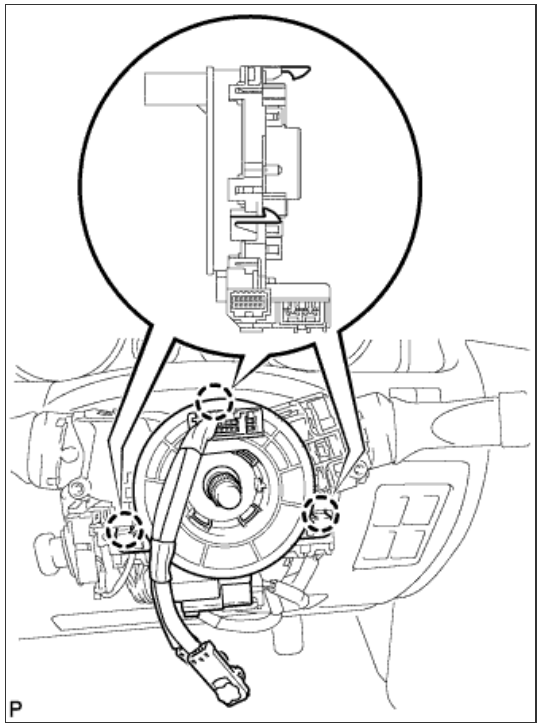
CAUTION:

When replacing the spiral cable with a new one, remove the lock pin before installing the steering wheel assembly.

f. Connect the connectors to the spiral cable with steering sensor.

NOTICE:

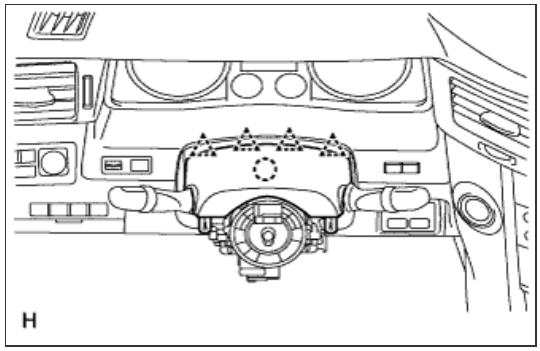
When handling the airbag connector, take care not to damage the airbag wire harness.



2. INSTALL UPPER STEERING COLUMN COVER

a. Attach the claw to install the upper steering column cover.

b. Attach the 4 clips to install the upper steering column cover onto the instrument cluster finish panel.



3. INSTALL LOWER STEERING COLUMN COVER

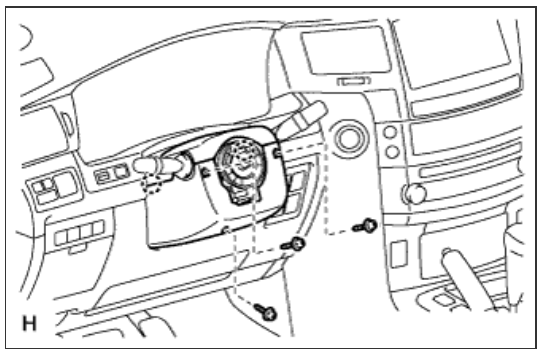
a. Attach the 2 claws to install the lower steering column cover.

NOTICE:

Do not damage the tilt and telescopic switch.

b. Install the 3 screws.

Torque:
1.5 N*m{ 15 kgf*cm , 13 in.*lbf }



4. ADJUST SPIRAL CABLE

a. Check that the engine switch is off.

b. Check that the cable is disconnected from the battery negative (-) terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

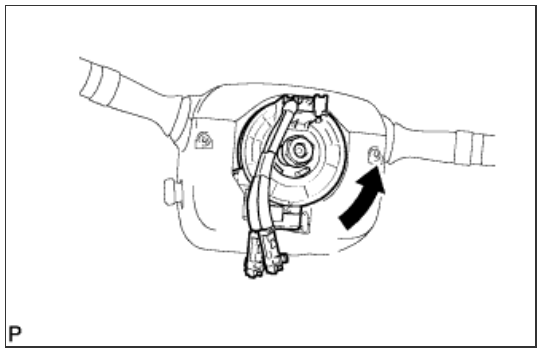
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

c. Rotate the spiral cable with steering sensor counterclockwise slowly by hand until it feels firm.

CAUTION:

Do not turn the spiral cable with steering sensor by the airbag wire harness.



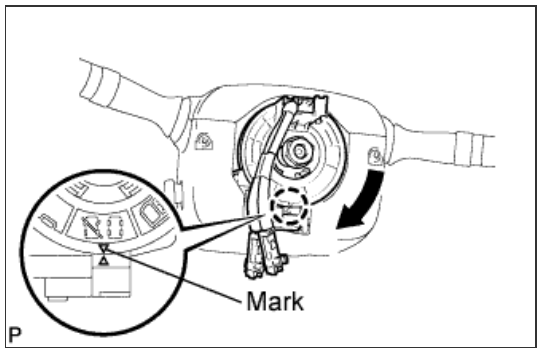
d. Rotate the spiral cable with steering sensor clockwise approximately 2.5 turns to align the marks.

CAUTION:

Do not turn the spiral cable with spiral sensor by the airbag wire harness.

HINT:

The spiral cable with steering sensor will rotate approximately 2.5 turns to both the left and right from the center.

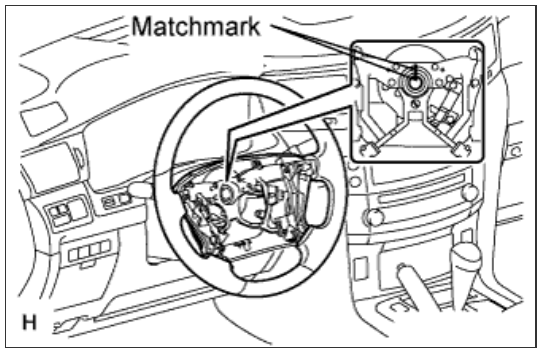


5. INSTALL STEERING WHEEL ASSEMBLY

a. Align the matchmarks on the steering wheel assembly and steering main shaft assembly.

b. Install the steering wheel assembly set nut.

Torque:
50 N*m{ 510 kgf*cm , 37 ft.*lbf }



6. INSTALL STEERING PAD

a. Support the steering pad with one hand.

b. Connect the 2 connectors to the steering pad.

NOTICE:

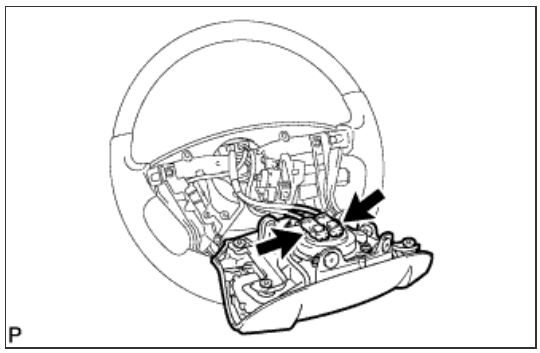
When handling the airbag connector, take care not to damage the airbag wire harness.

c. Connect the horn connector.

d. Confirm that the circumference groove of the "TORX" screw fits in the screw case, and place the steering pad onto the steering wheel.

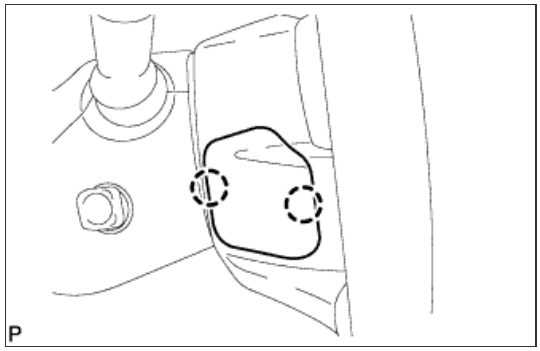
e. Using a T30 "TORX" socket wrench, tighten the 2 screws.

Torque:
8.8 N*m{ 90 kgf*cm , 78 in.*lbf }



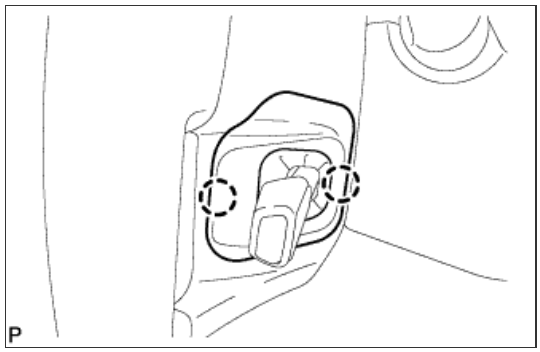
7. INSTALL LOWER NO. 3 STEERING WHEEL COVER

a. Attach the 2 claws to install the cover.



8. INSTALL LOWER NO. 2 STEERING WHEEL COVER

a. Attach the 2 claws to install the cover.



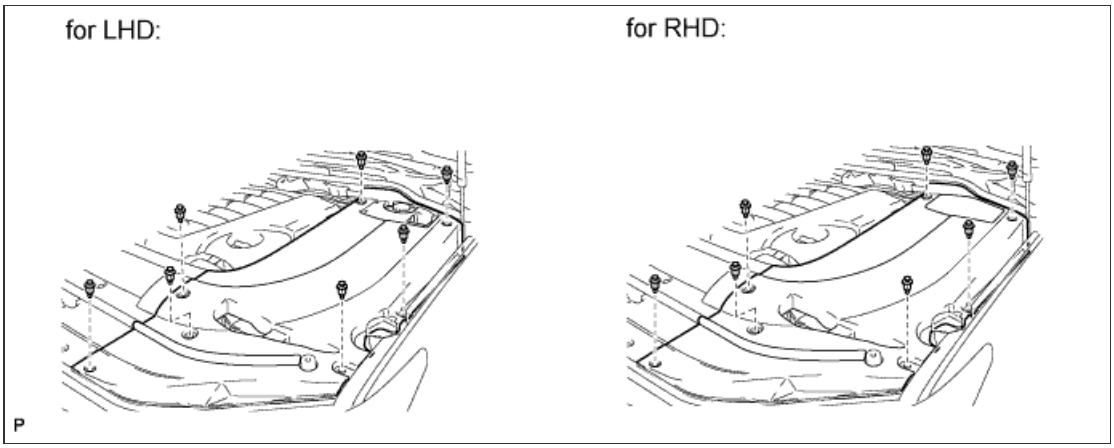
9. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

10. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



11. INSPECT STEERING PAD

a. With the steering pad installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the steering pad with a new one:
Cuts, minute cracks or marked discoloration on the steering pad top surface or in the grooved portion.

b. Make sure that the horn sounds.

HINT:

If the horn does not sound, inspect the horn system.

12. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here

1. INSTALL SPIRAL CABLE

a. Align the pins on the spiral cable with the installation holes on the steering sensor.

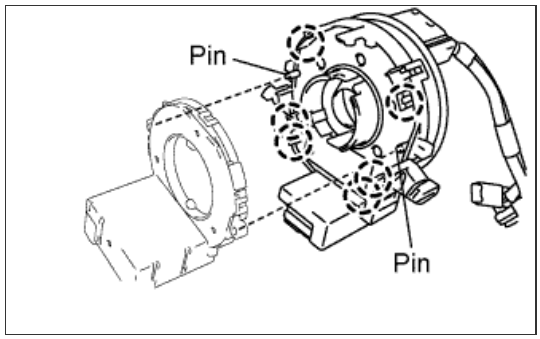
b. Attach the 6 claws and install the spiral cable to the steering sensor.

c. Check that the front wheels are facing straight ahead.

d. Set the turn signal switch to the neutral position.

CAUTION:

If it is not in the neutral position, the pin of the turn signal switch may be snapped.



e. Attach the 3 claws to install the spiral cable with steering sensor.

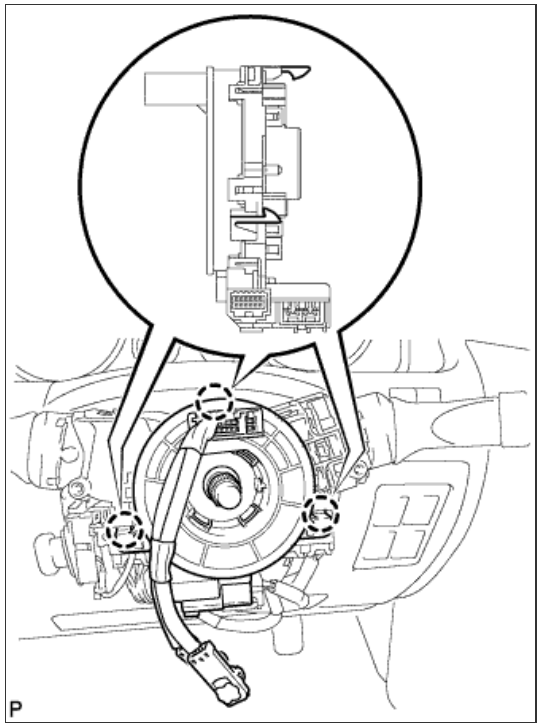
CAUTION:

When replacing the spiral cable with a new one, remove the lock pin before installing the steering wheel assembly.

f. Connect the connectors to the spiral cable with steering sensor.

NOTICE:

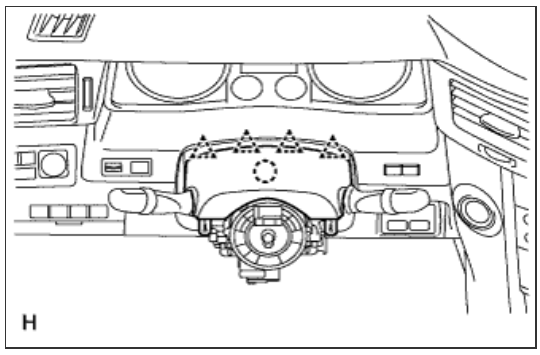
When handling the airbag connector, take care not to damage the airbag wire harness.



2. INSTALL UPPER STEERING COLUMN COVER

a. Attach the claw to install the upper steering column cover.

b. Attach the 4 clips to install the upper steering column cover onto the instrument cluster finish panel.



3. INSTALL LOWER STEERING COLUMN COVER

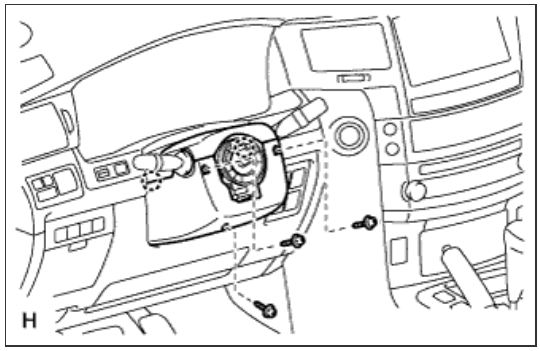
a. Attach the 2 claws to install the lower steering column cover.

NOTICE:

Do not damage the tilt and telescopic switch.

b. Install the 3 screws.

Torque:
1.5 N*m{ 15 kgf*cm , 13 in.*lbf }



4. ADJUST SPIRAL CABLE

a. Check that the engine switch is off.

b. Check that the cable is disconnected from the battery negative (-) terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

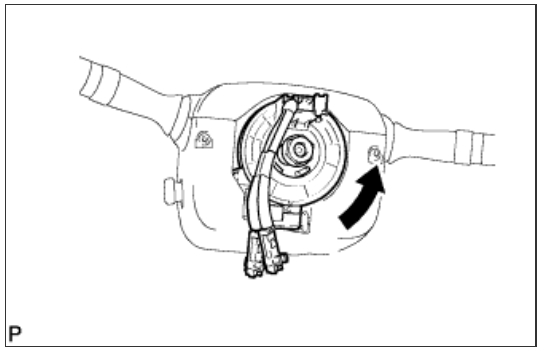
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

c. Rotate the spiral cable with steering sensor counterclockwise slowly by hand until it feels firm.

CAUTION:

Do not turn the spiral cable with steering sensor by the airbag wire harness.



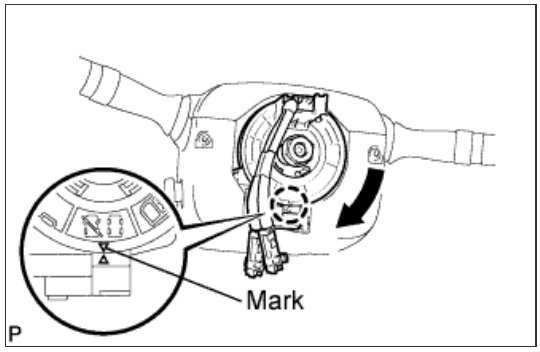
d. Rotate the spiral cable with steering sensor clockwise approximately 2.5 turns to align the marks.

CAUTION:

Do not turn the spiral cable with spiral sensor by the airbag wire harness.

HINT:

The spiral cable with steering sensor will rotate approximately 2.5 turns to both the left and right from the center.

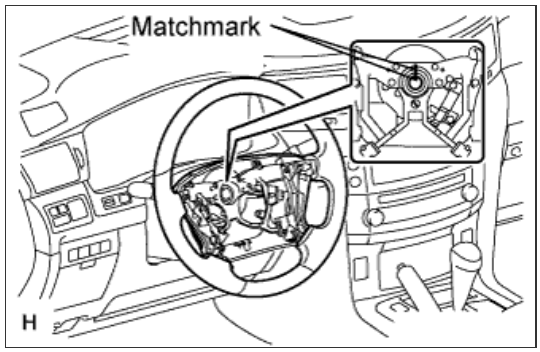


5. INSTALL STEERING WHEEL ASSEMBLY

a. Align the matchmarks on the steering wheel assembly and steering main shaft assembly.

b. Install the steering wheel assembly set nut.

Torque:
50 N*m{ 510 kgf*cm , 37 ft.*lbf }



6. INSTALL STEERING PAD

a. Support the steering pad with one hand.

b. Connect the 2 connectors to the steering pad.

NOTICE:

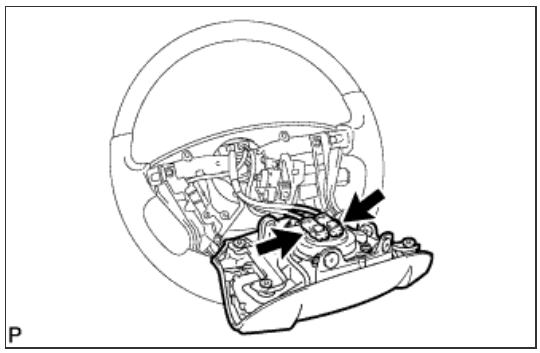
When handling the airbag connector, take care not to damage the airbag wire harness.

c. Connect the horn connector.

d. Confirm that the circumference groove of the "TORX" screw fits in the screw case, and place the steering pad onto the steering wheel.

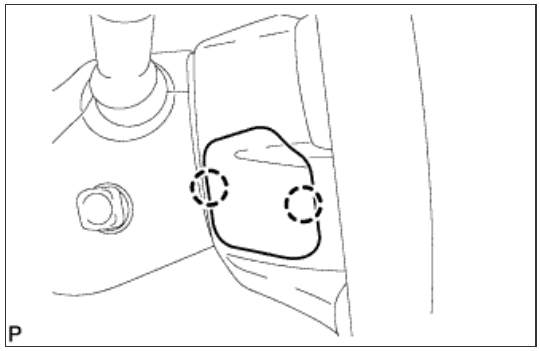
e. Using a T30 "TORX" socket wrench, tighten the 2 screws.

Torque:
8.8 N*m{ 90 kgf*cm , 78 in.*lbf }



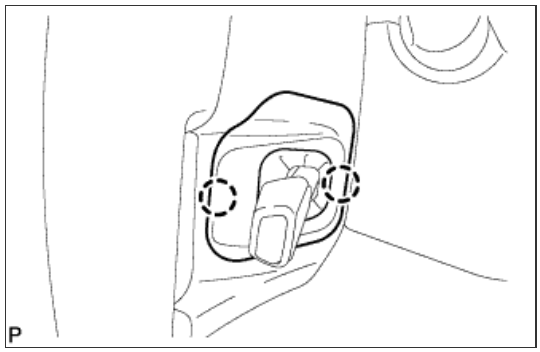
7. INSTALL LOWER NO. 3 STEERING WHEEL COVER

a. Attach the 2 claws to install the cover.



8. INSTALL LOWER NO. 2 STEERING WHEEL COVER

a. Attach the 2 claws to install the cover.



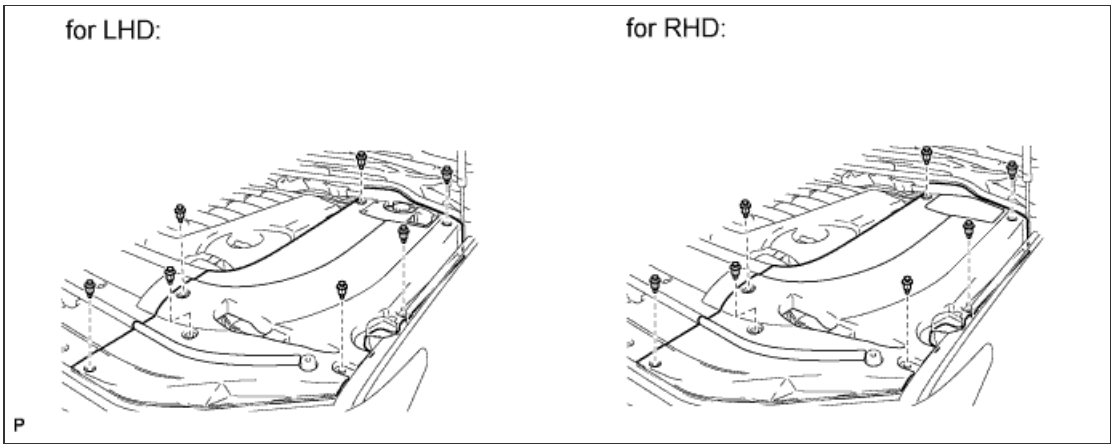
9. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

10. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



11. INSPECT STEERING PAD

a. With the steering pad installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the steering pad with a new one:
Cuts, minute cracks or marked discoloration on the steering pad top surface or in the grooved portion.

b. Make sure that the horn sounds.

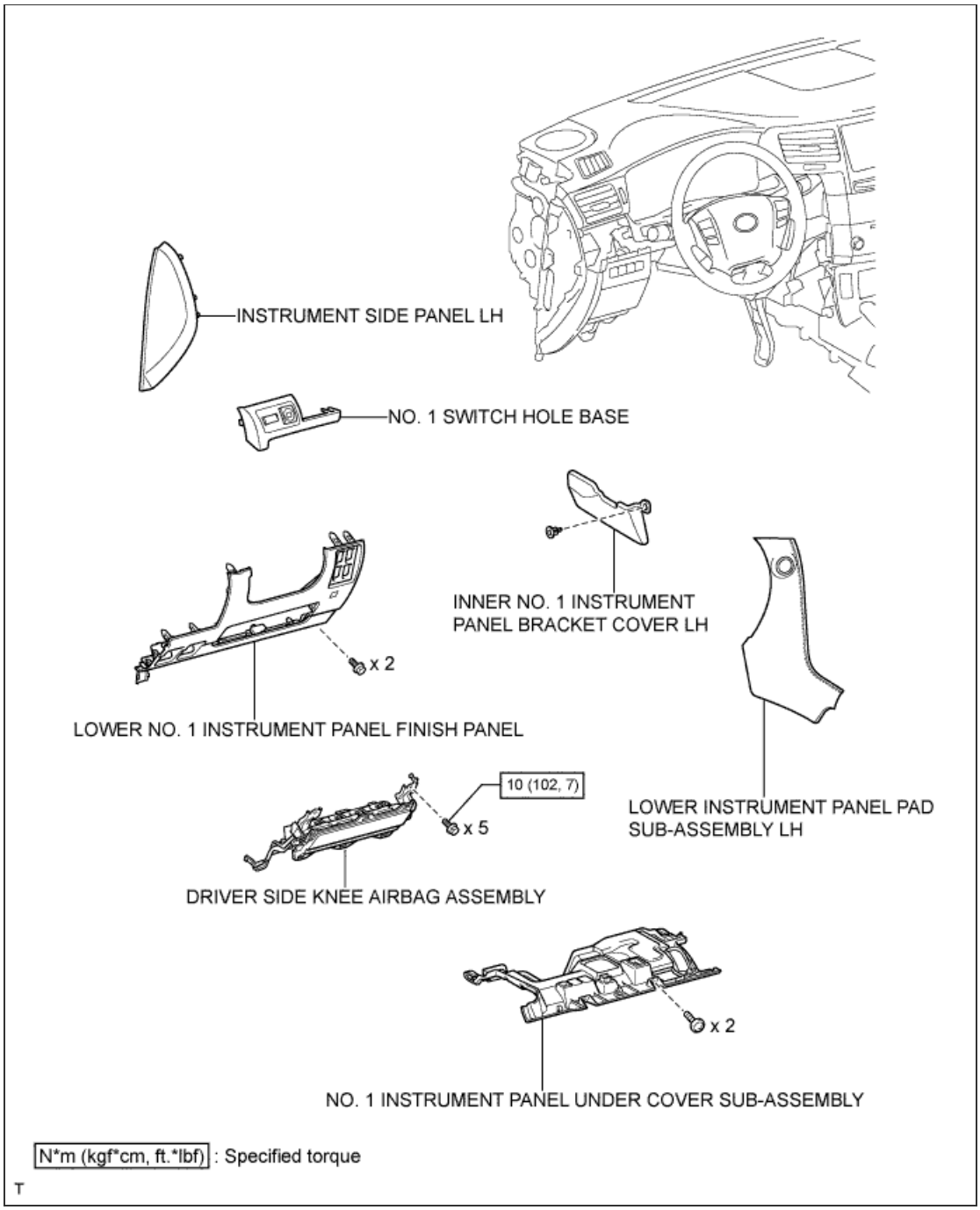
HINT:

If the horn does not sound, inspect the horn system.

12. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here

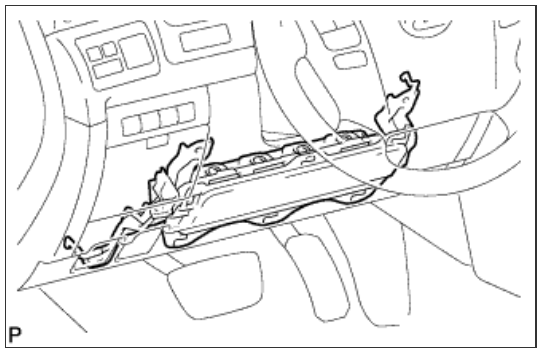


for Preparation Click here

1. CHECK DRIVER SIDE KNEE AIRBAG ASSEMBLY (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

b. With the driver side knee airbag installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the driver side knee airbag with a new one:
Cuts, minute cracks or marked discoloration on the driver side knee airbag.



2. CHECK DRIVER SIDE KNEE AIRBAG ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

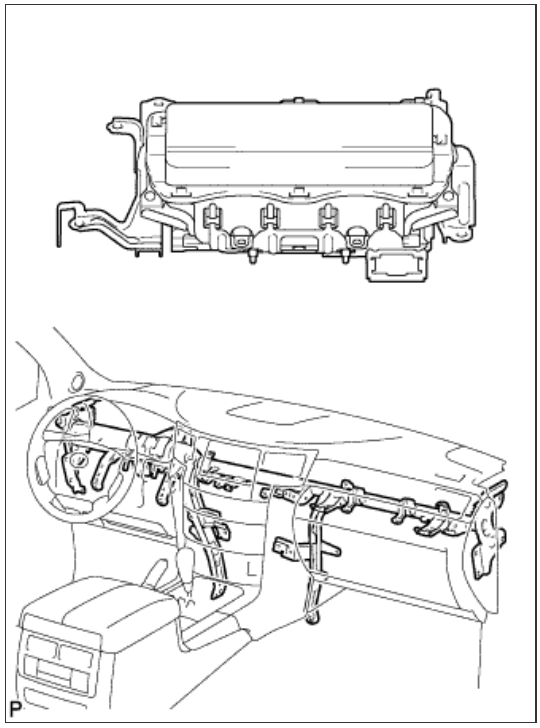
a. Perform a diagnostic system check (Click here).

b. With the driver side knee airbag removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the driver side knee airbag with a new one:

- Cuts, minute cracks or marked discoloration on the driver side knee airbag.
- Cracks or other damage to the connector.
- Deformation or cracks on the instrument panel reinforcement.

NOTICE:

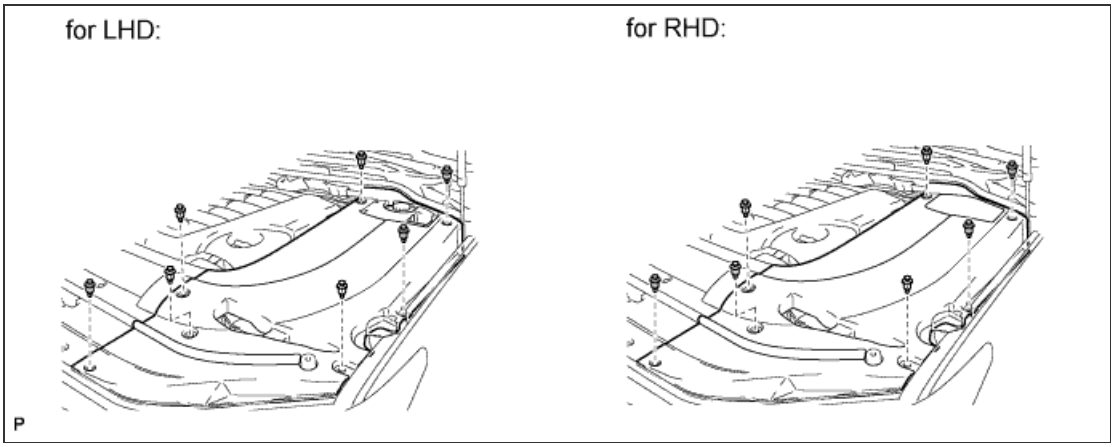
For removal and installation procedures of the driver side knee airbag, be sure to follow the correct procedure.



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

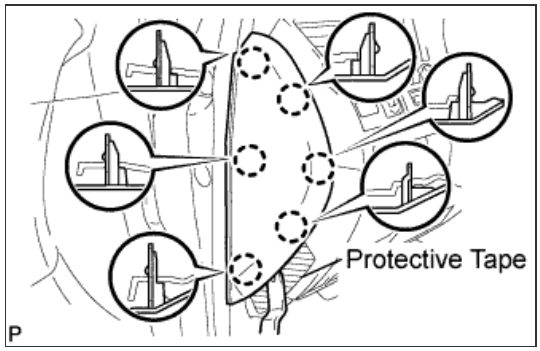
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE INSTRUMENT SIDE PANEL LH

a. Place protective tape as shown in the illustration.

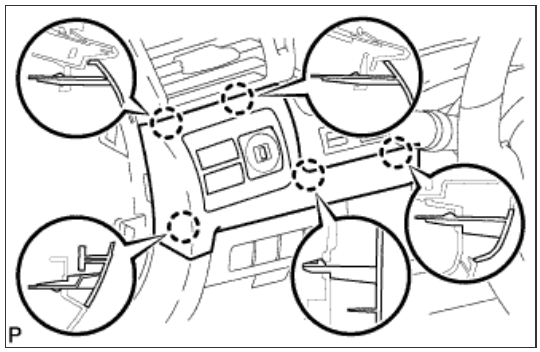
b. Using a moulding remover, detach the 6 claws and remove the side panel.



4. REMOVE NO. 1 SWITCH HOLE BASE

a. Detach the 5 claws.

b. Disconnect the connectors and remove the switch hole base.

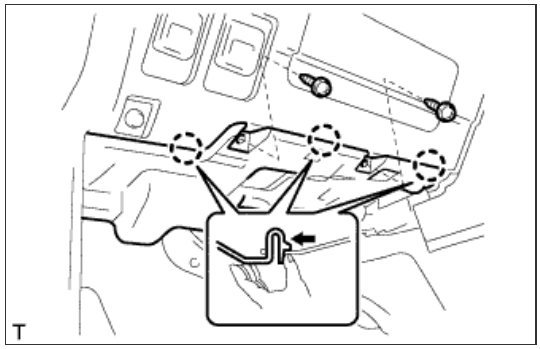


5. REMOVE NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Remove the 2 screws.

b. Detach the 3 claws.

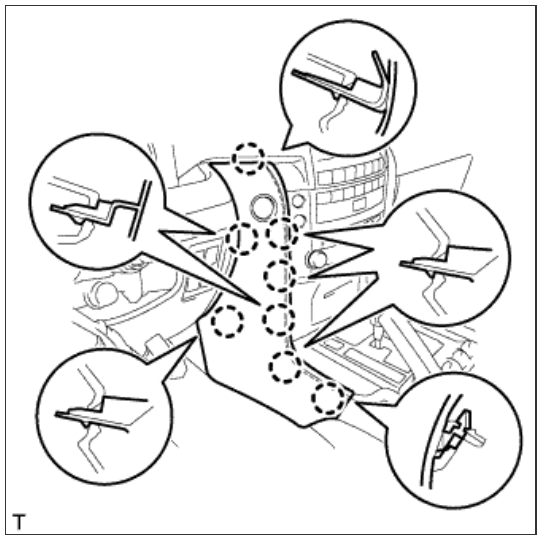
c. Remove the under cover and disconnect the connectors.



6. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Detach the 8 claws.

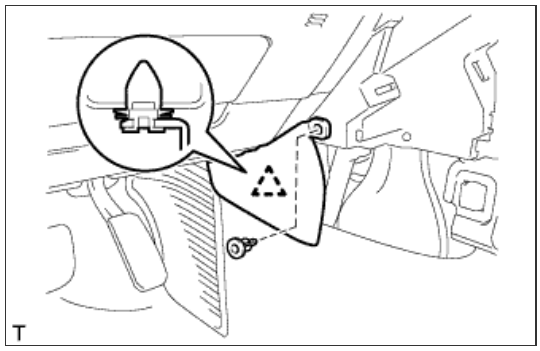
b. Disconnect the connector and remove the panel pad.



7. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Remove the clip.

b. Detach the clip and remove the cover.

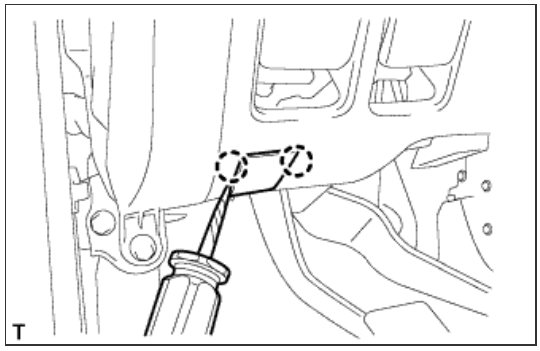


8. REMOVE LOWER NO. 1 INSTRUMENT PANEL FINISH PANEL

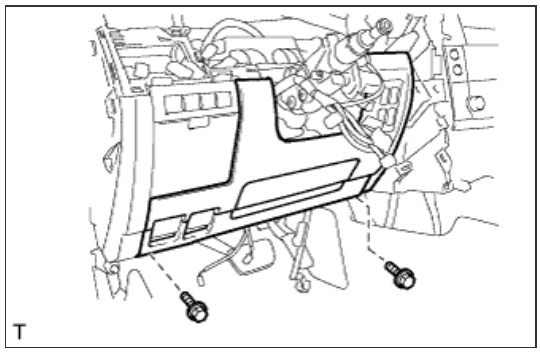
a. Using a screwdriver, detach the 2 claws and open the hole cover.

HINT:

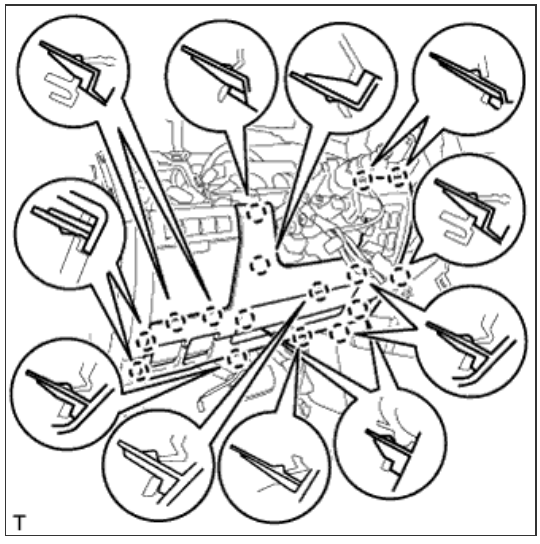
Tape the screwdriver tip before use.



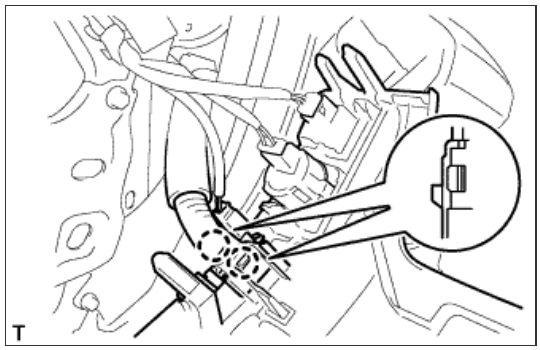
b. Remove the 2 bolts.



c. Detach the 16 claws.

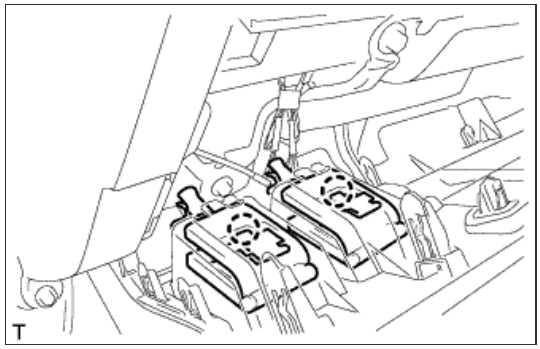


d. Detach the 2 claws and remove the sensor.



e. Detach the 2 claws and disconnect the 2 control cables.

f. Remove the finish panel and then disconnect the connectors.



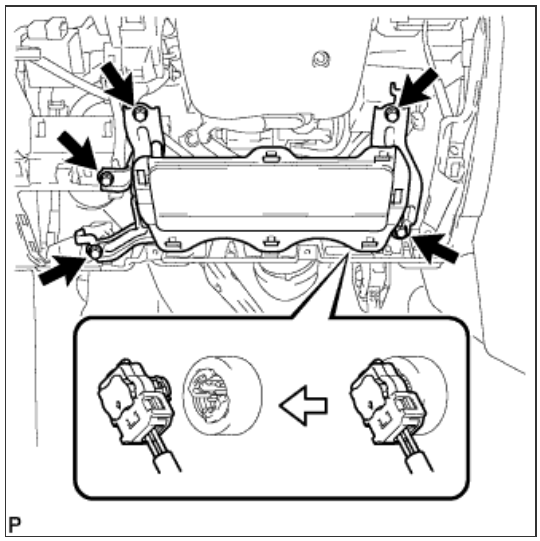
9. REMOVE DRIVER SIDE KNEE AIRBAG ASSEMBLY

a. Remove the 5 bolts and driver side knee airbag.

b. Disconnect the connector.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



for Preparation Click here

1. INSTALL DRIVER SIDE KNEE AIRBAG ASSEMBLY

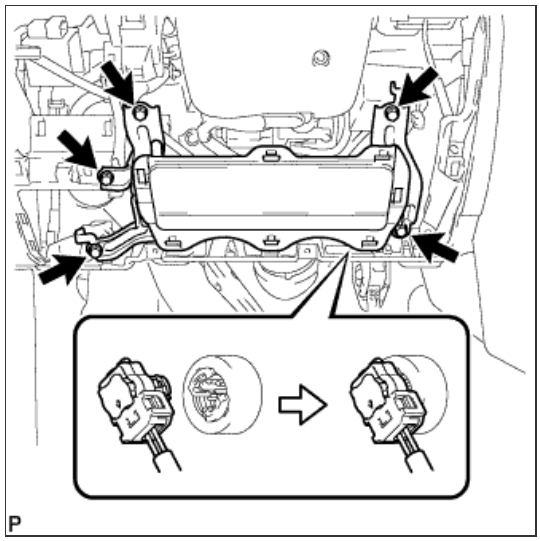
a. Connect the connector.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

b. Install the driver side knee airbag with the 5 bolts.

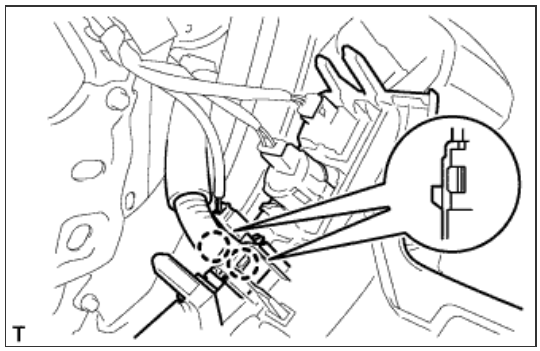
Torque:
10 N*m{ 102 kgf*cm , 7 ft.*lbf }



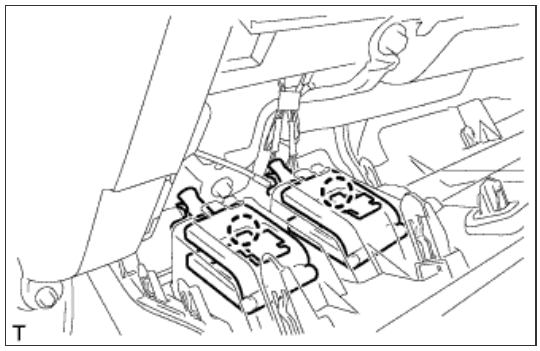
2. INSTALL LOWER NO. 1 INSTRUMENT PANEL FINISH PANEL

a. Connect the connectors.

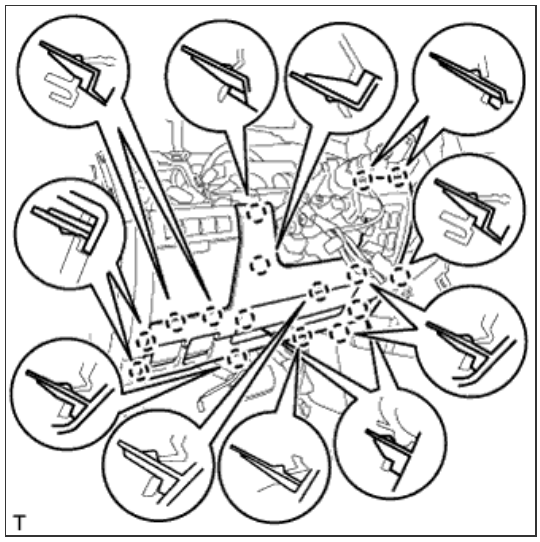
b. Attach the 2 claws to install the sensor.



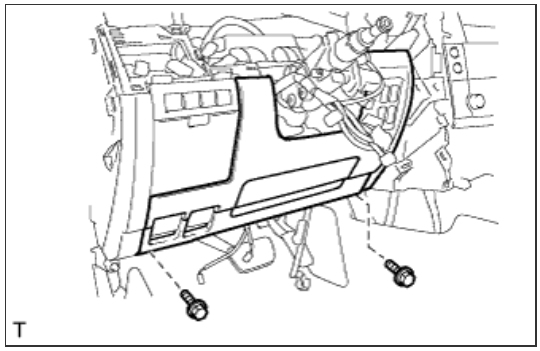
c. Attach the 2 claws to connect the 2 control cables.



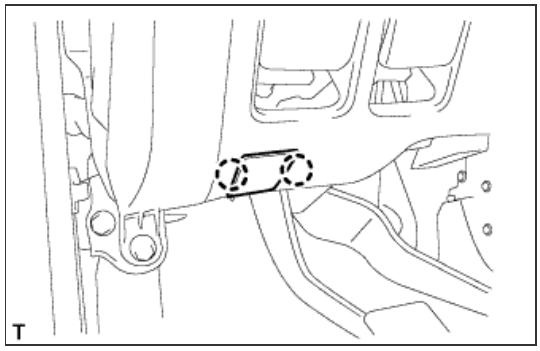
d. Attach the 16 claws to install the finish panel.



e. Install the 2 bolts.



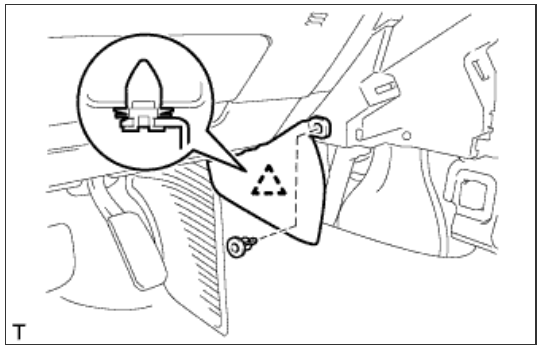
f. Attach the 2 claws to close the hole cover.



3. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Attach the clip to install the cover.

b. Install the clip.

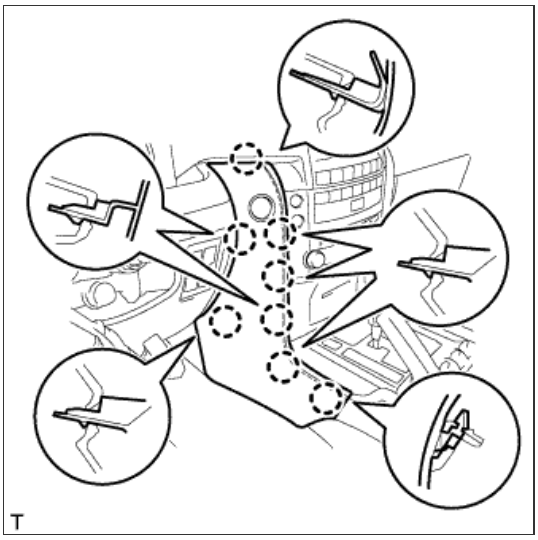


4. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Connect the connector.

a. Connect the connector.

b. Attach the 8 claws to install the panel pad.

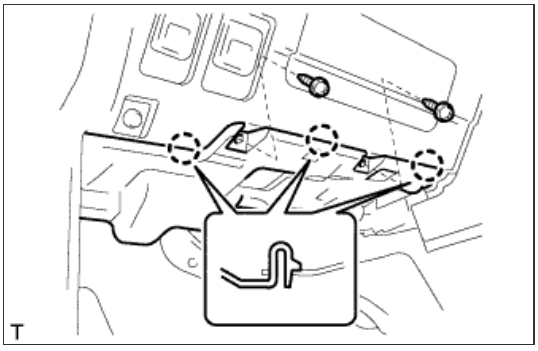


5. INSTALL NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Connect the connectors.

b. Attach the 3 claws to install the under cover.

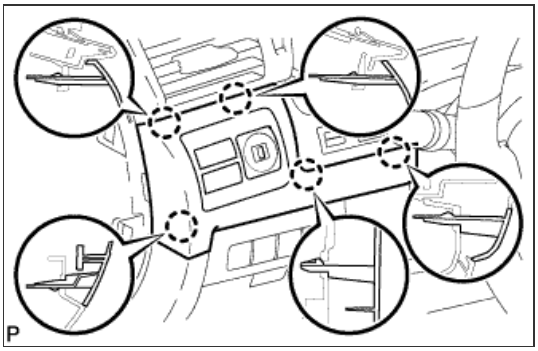
c. Install the 2 screws.



6. INSTALL NO. 1 SWITCH HOLE BASE

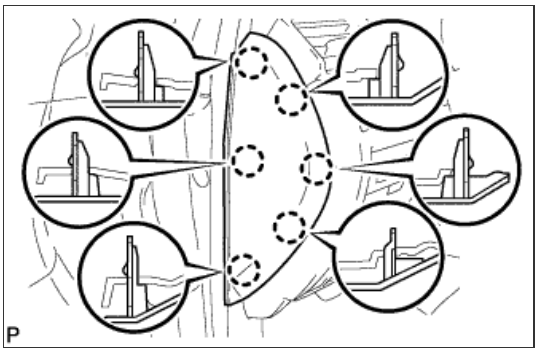
a. Connect the connectors.

b. Attach the 5 claws to install the switch hole base.



7. INSTALL INSTRUMENT SIDE PANEL LH

a. Attach the 6 claws to install the side panel.



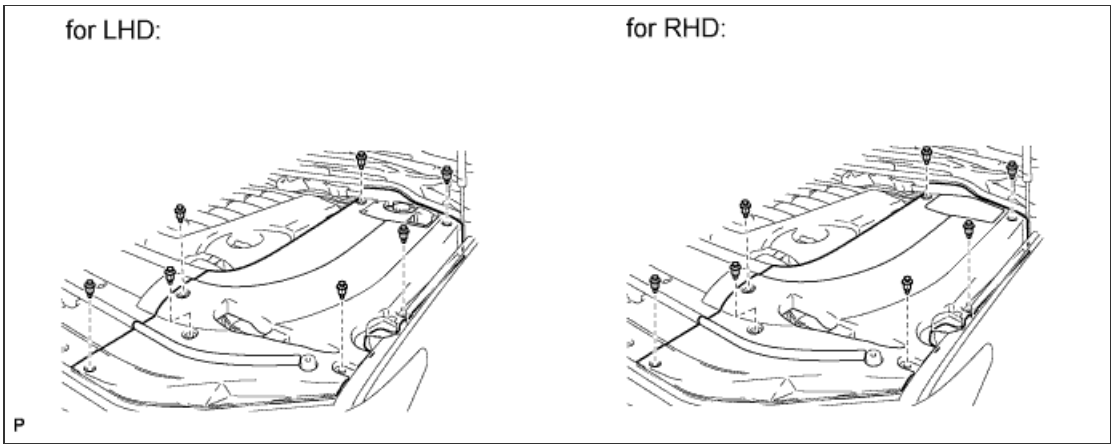
8. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

9. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



10. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here

CAUTION:

Before deploying any SRS components for disposal, carefully review and follow all applicable environmental and hazardous material regulations. Depending on the area, deployment of SRS components before disposal may be considered treatment of hazardous materials, which may require special training, certification or licensing.

1. PRECAUTION

HINT:

When scrapping a vehicle equipped with the SRS or disposing of the steering pad, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of the DISTRIBUTOR..

CAUTION:

- **Never dispose of a driver side knee airbag assembly that has an unactivated airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors and where it will not create a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (32.8 ft.) away from the driver side knee airbag.**
- **The driver side knee airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a driver side knee airbag with a deployed airbag.**
- **Do not apply water to a driver side knee airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**
- **An airbag or pretensioner may be activated by static electricity. To prevent this, be sure to touch a metal surface with bare hands to discharge static electricity before performing this procedure.**

2. DISPOSE OF DRIVER SIDE KNEE AIRBAG ASSEMBLY (WHEN INSTALLED IN VEHICLE)

HINT:

Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

b. Read the precaution (Click here).

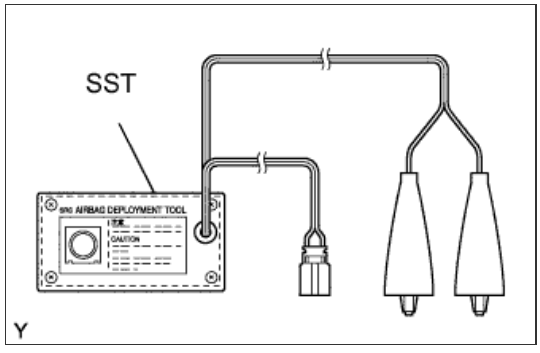
c. Disconnect the cable from the negative (-) battery terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).



d. Remove the driver side knee airbag (Click here).

e. Install SST.

i. Connect SST connector to the driver side knee airbag.

SST
09082-00700

09082-00780

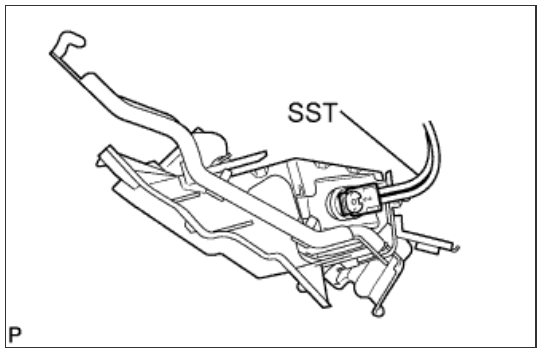
NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock.

ii. Install the driver side knee airbag (Click here).

NOTICE:

Take care not to damage SST wire harness.



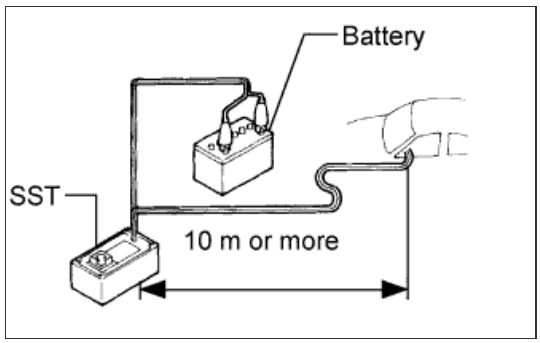
iii. Move SST at least 10 m (32.8 ft.) away from the vehicle front side window.

iv. Maintaining enough clearance for SST wire harness in the front side window, close all doors and windows of the vehicle.

NOTICE:

Take care not to damage SST wire harness.

v. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.



f. Deploy the airbag.

i. Check that no one is inside the vehicle or within a 10 m (32.8 ft.) radius of the vehicle.

ii. Press SST activation switch to deploy the airbag.

CAUTION:

- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The driver side knee airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a driver side knee airbag with a deployed airbag.**
- **Do not apply water to a driver side knee airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:

The airbag is deployed as the LED of SST activation switch comes on.

3. DISPOSE OF DRIVER SIDE KNEE AIRBAG ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)

NOTICE:

Be sure to follow the procedure detailed below when deploying the airbag.

HINT:

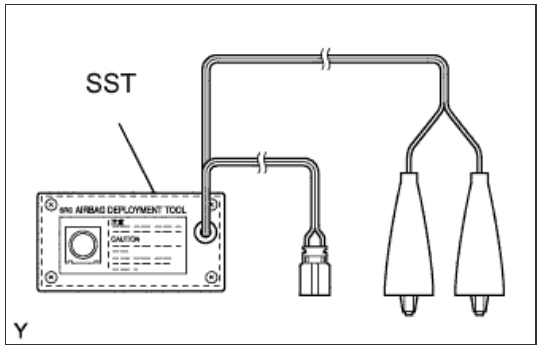
Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

b. Remove the driver side knee airbag (Click here).

CAUTION:

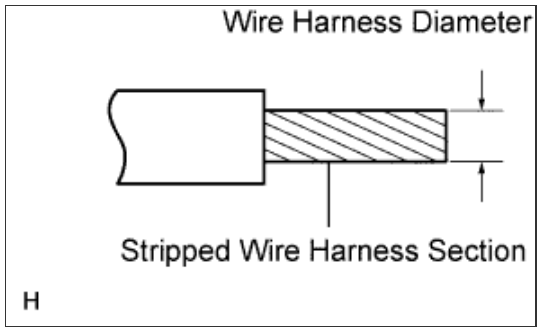
- **When removing the driver side knee airbag, wait at least 90 seconds after the engine switch is turned off and the cable is disconnected from the negative (-) battery terminal before starting work.**
- **When storing the driver side knee airbag, keep the airbag deployment side facing upward.**



c. Using a service-purpose wire harness for the vehicle, tie down the driver side

knee airbag to a tire.

Cross-sectional area of stripped wire harness section:
1.25 mm^2 or more (0.00192 $in.^2$ or more)



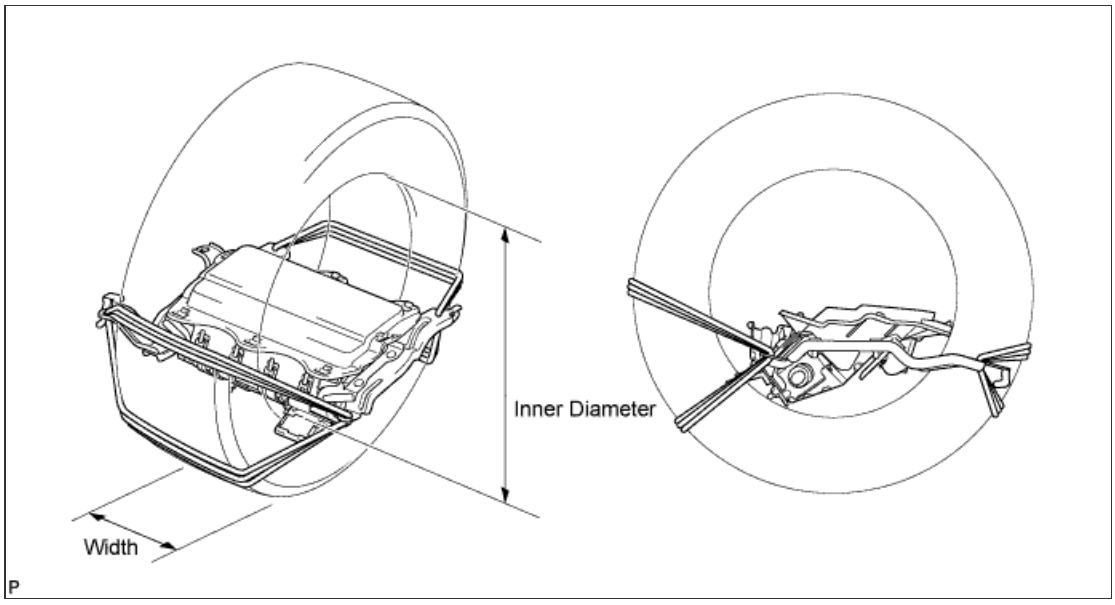
CAUTION:

If the wire harness is too thin or an alternative object is used to tie down the driver side knee airbag assembly, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with a cross-sectional area of at least 1.25 mm^2 (0.00192 $in.^2$).

HINT:

To calculate the cross-sectional area of the stripped wire harness section: Cross-sectional area = 3.14 x (Diameter) ^{2} divided by 4

i. Position the driver side knee airbag inside a tire with the airbag deployment side facing inside.



Tire size:
Must exceed the following dimensions
Width:
185 mm (7.28 in.)
Inner diameter:
360 mm (14.2 in.)

ii. Tie the driver side knee airbag to the tire with several wire harnesses.

CAUTION:

- **Make sure that the wire harnesses are tight. If there is slack in the wire harnesses, the driver side knee airbag may become loose due to the shock when the airbag is deployed.**
- **Always tie down the driver side knee airbag with the airbag deployment side facing inside the tire.**

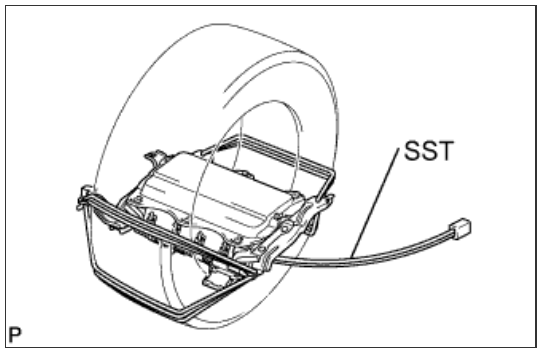
NOTICE:

As the tire may be damaged by the airbag deployment, use a tire that you are planning to throw away.

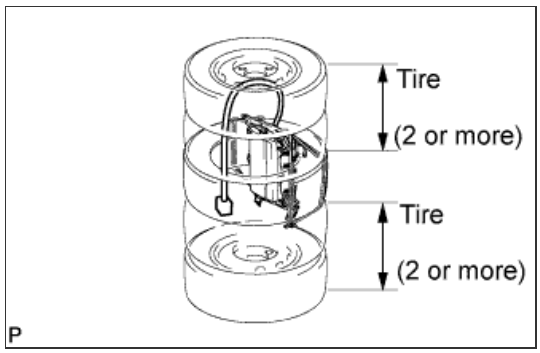
d. Install SST.

i. Connect SST connector to the driver side knee airbag.

SST
09082-00780



e. Place tires.



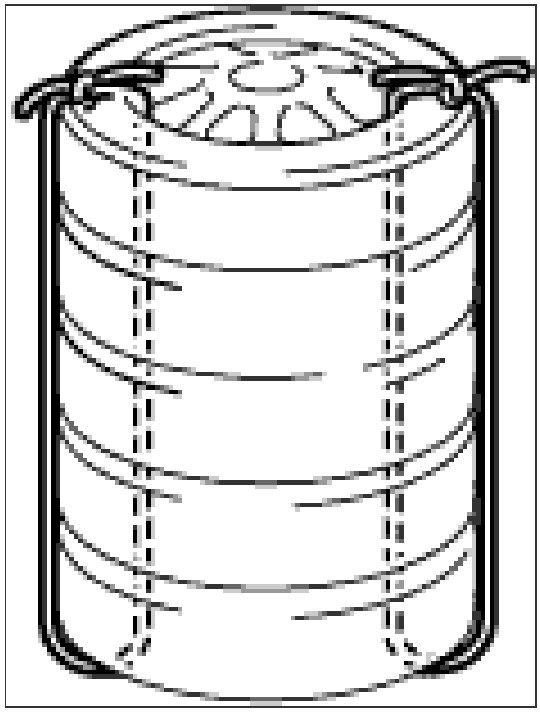
i. Place at least 2 tires under the tire which the driver side knee airbag is tied to.

ii. Place at least 2 tires over the tire which the driver side knee airbag is tied to. The top tire should have a disc wheel installed.

NOTICE:

- **Do not place SST connector under the tire because it could be damaged.**
- **As the disc wheel may be damaged by the airbag deployment, use discs wheel that you are planning to throw away.**
- **As the tires may be damaged by the airbag deployment, use tire that you are planning to throw away.**

iii. Tie the tires together with 2 wire harnesses.



CAUTION:

Make sure that the wire harnesses are tight. Looseness in the wire harnesses results in the tires coming free due to the shock when the airbag is deployed.

f. Install SST.

i. Connect SST connector.

SST
09082-00700

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for SST wire harness inside the tire.

g. Deploy the airbag.

i. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.

ii. Check that no one is within a 10 m (32.8 ft.) radius of the tire which the driver side knee airbag is tied to.

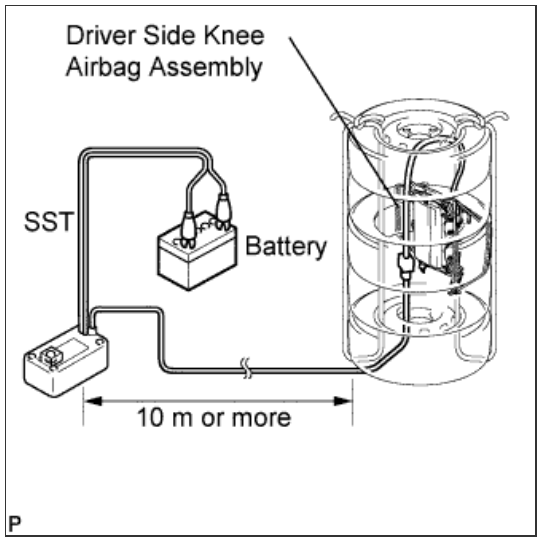
iii. Press SST activation switch to deploy the airbag.

CAUTION:

When deploying the airbag, make sure that no one is near the tire.

HINT:

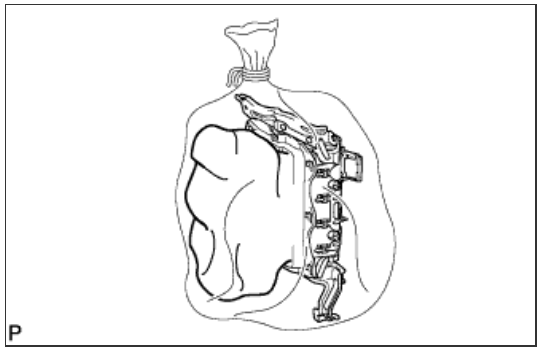
The airbag is deployed as the LED of SST activation switch comes on.



h. Dispose of the driver side knee airbag.

CAUTION:

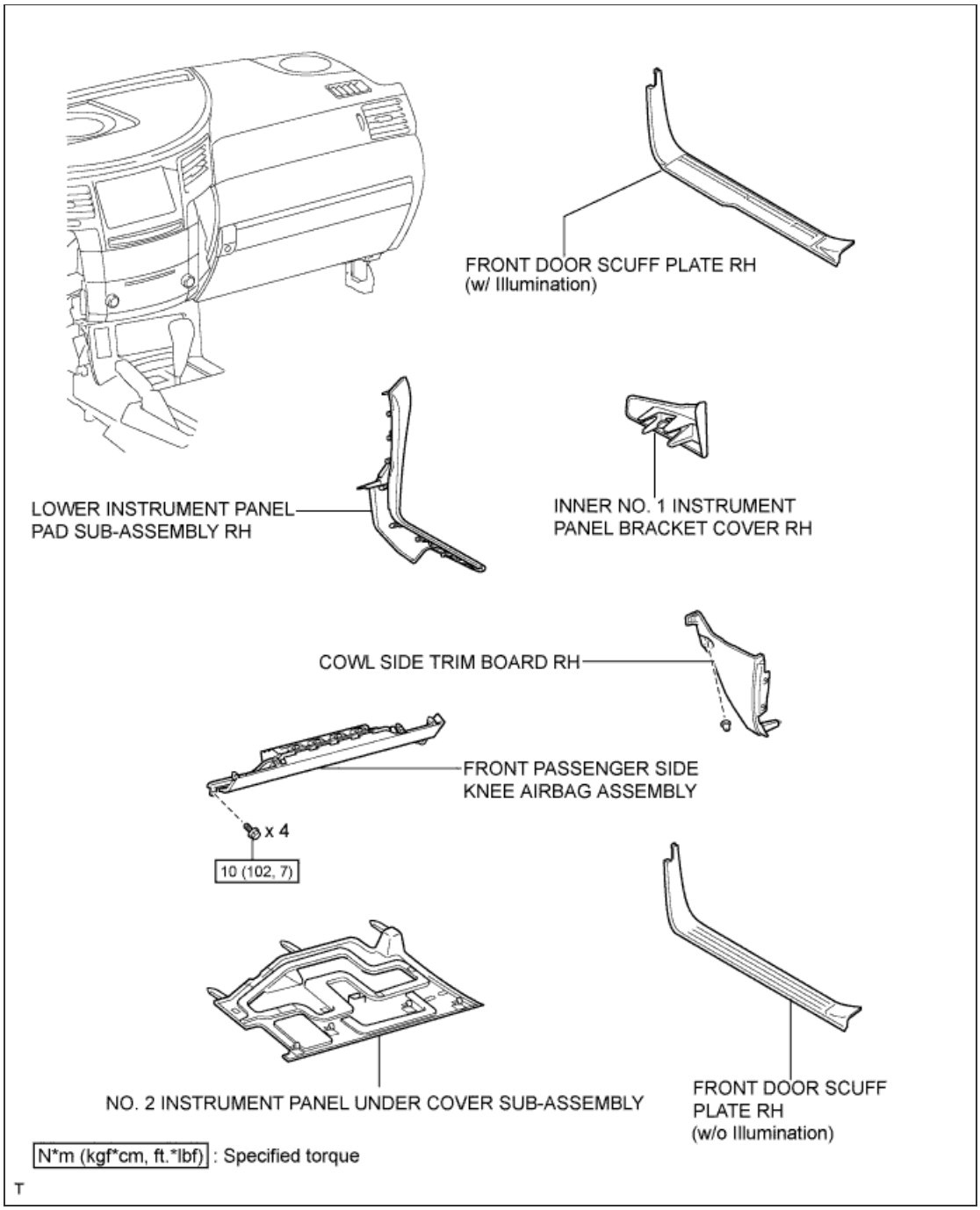
- **The driver side knee airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a driver side knee airbag with a deployed airbag.**
- **Do not apply water to a driver side knee airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**



i. Remove the driver side knee airbag from the tire.

ii. Place the driver side knee airbag in a plastic bag, tie it tightly and dispose of it in the same way as other general parts.

for Preparation Click here

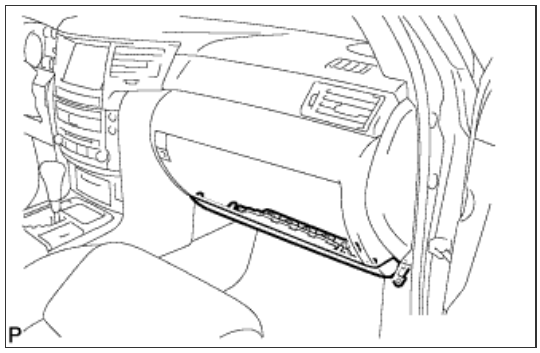


for Preparation Click here

1. CHECK FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

b. With the passenger side knee airbag installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the passenger side knee airbag with a new one:
Cuts, minute cracks or marked discoloration on the front passenger side knee airbag.



2. CHECK FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

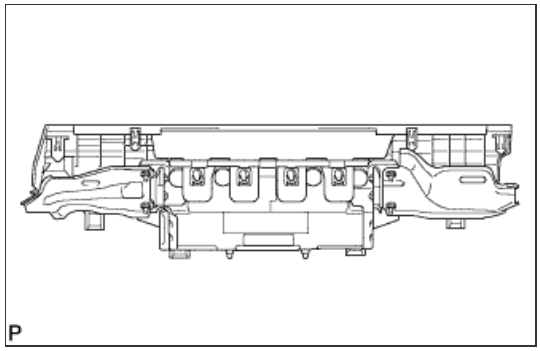
a. Perform a diagnostic system check (Click here).

b. With the front passenger side knee airbag removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the front passenger side knee airbag with a new one:

- Cuts, minute cracks or marked discoloration on the front passenger side knee airbag.
- Cracks or other damage to the connector.
- Deformation or cracks on the instrument panel reinforcement.

NOTICE:

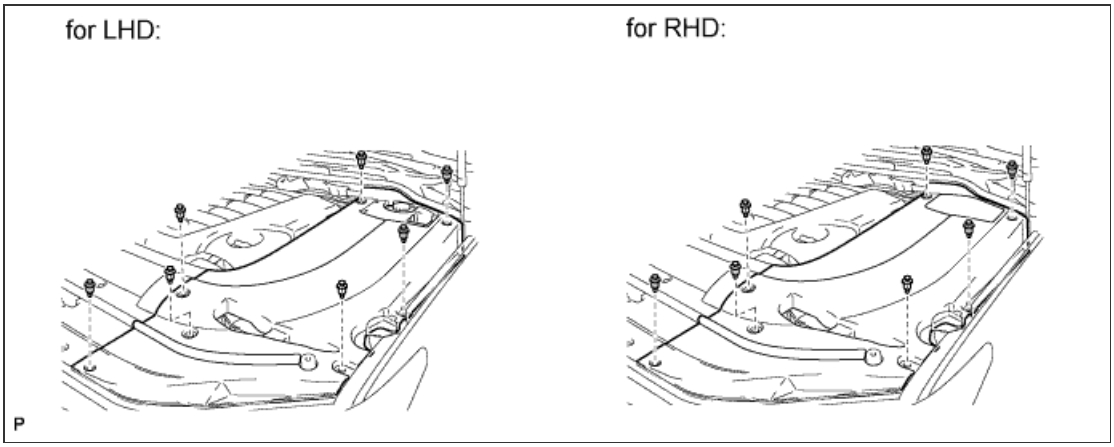
For removal and installation procedures of the front passenger side knee airbag, be sure to follow the correct procedure.



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE FRONT DOOR SCUFF PLATE RH

a. w/o Airbag Cut Off Switch:

i. Place protective tape as shown in the illustration.

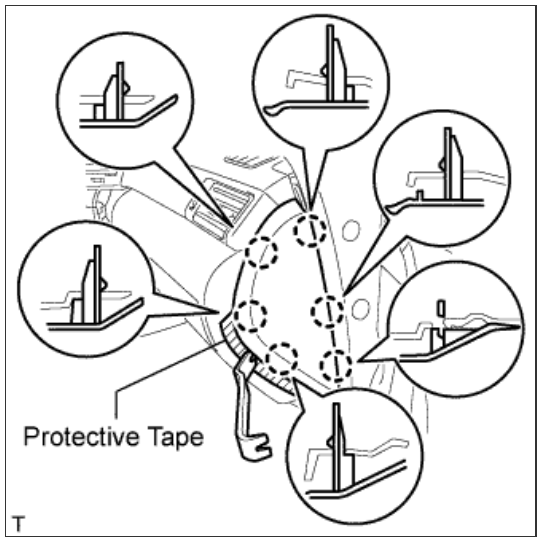
ii. Using a moulding remover, detach the 6 claws and remove the side panel.

b. w/ Airbag Cut Off Switch:

i. Place protective tape as shown in the illustration.

ii. Using a moulding remover, detach the 6 claws.

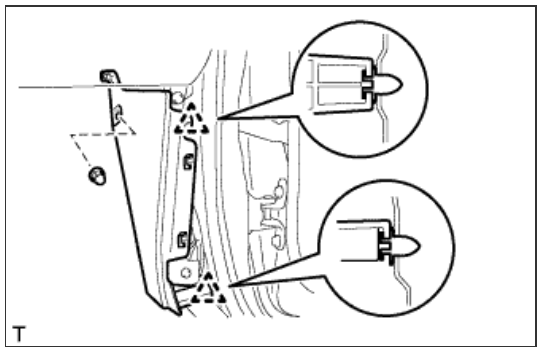
iii. Remove the side panel and disconnect the connector.



4. REMOVE COWL SIDE TRIM BOARD RH

a. Remove the cap nut.

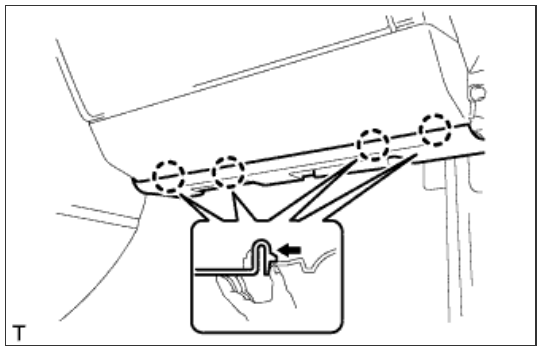
b. Detach the 2 clips and remove the trim board.



5. REMOVE NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

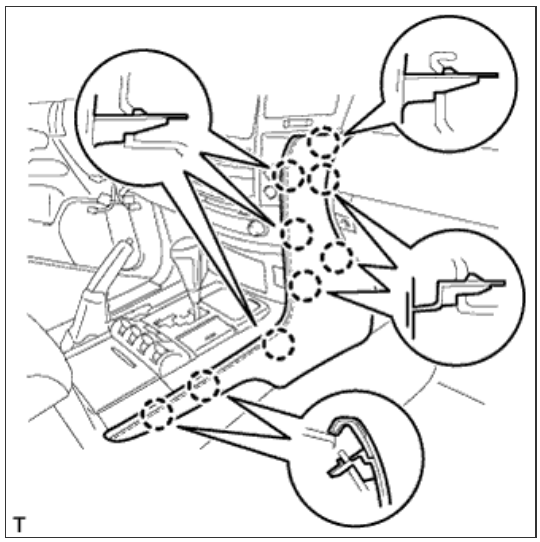
a. Detach the 4 claws.

b. Remove the under cover and disconnect the connector.



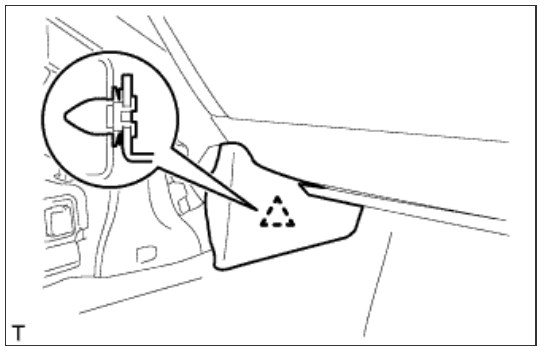
6. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

a. Detach the 9 claws and remove the panel pad.



7. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER RH

a. Detach the clip and remove the cover.



8. REMOVE FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY

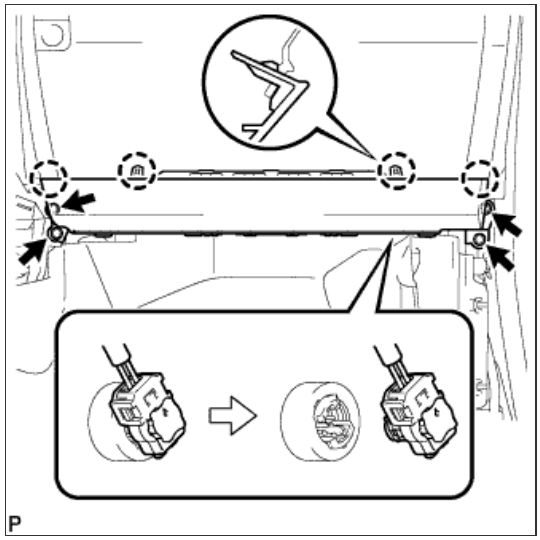
a. Remove the 4 bolts.

b. Detach the 4 claws and remove the front passenger side knee airbag.

c. Disconnect the connector.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



for Preparation Click here

1. INSTALL FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY

a. Connect the connector.

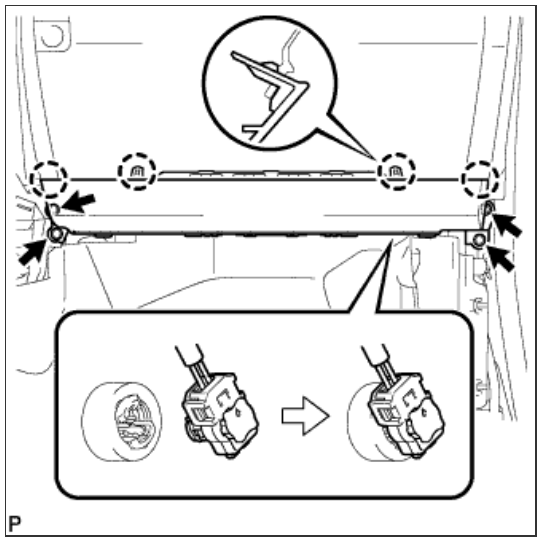
NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

b. Attach the 4 claws to install the front passenger side knee airbag.

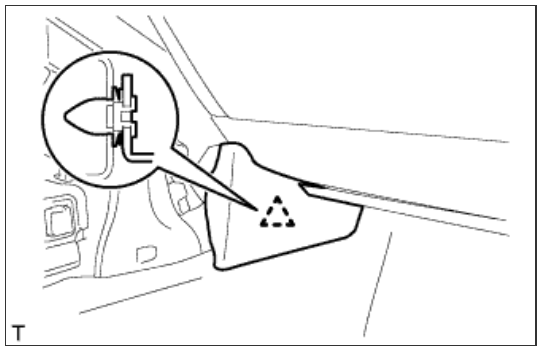
c. Install the 4 bolts.

Torque:
10 N*m{ 102 kgf*cm , 7 ft.*lbf }



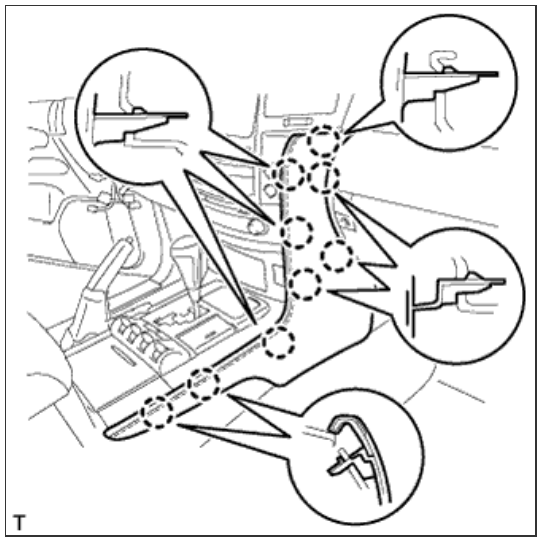
2. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER RH

a. Attach the clip to install the cover.



3. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

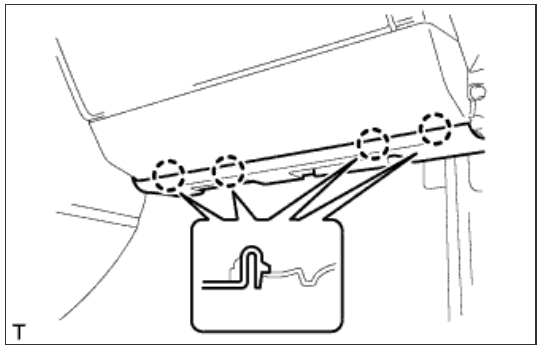
a. Attach the 9 claws to install the panel pad.



4. INSTALL NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Connect the connector.

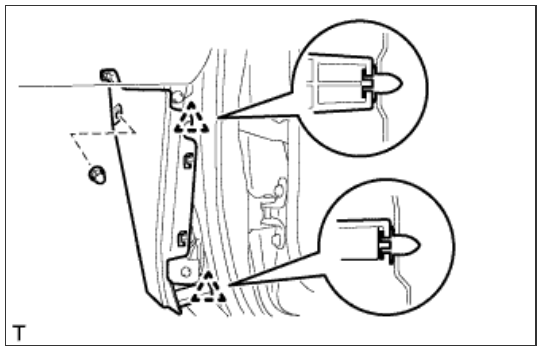
b. Attach the 4 claws to install the under cover.



5. INSTALL COWL SIDE TRIM BOARD RH

a. Attach the 2 clips to install the trim board.

b. Install the cap nut.



6. INSTALL FRONT DOOR SCUFF PLATE RH

HINT:

Use the same procedures described for the LH side.

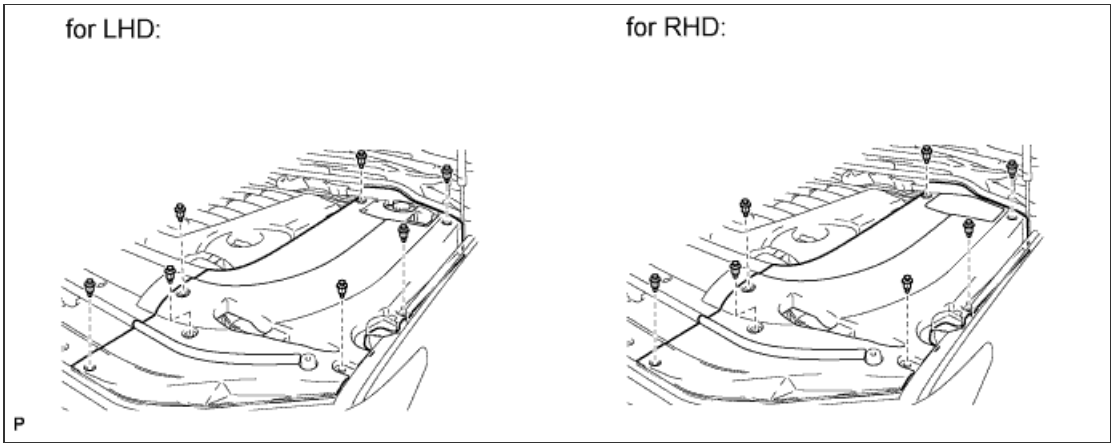
7. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

8. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



9. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here

CAUTION:

Before deploying any SRS components for disposal, carefully review and follow all applicable environmental and hazardous material regulations. Depending on the area, deployment of SRS components before disposal may be considered treatment of hazardous materials, which may require special training, certification or licensing.

1. PRECAUTION

HINT:

When scrapping a vehicle equipped with the SRS or disposing of the steering pad, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of the DISTRIBUTOR.

CAUTION:

- **Never dispose of a front passenger side knee airbag that has an unactivated airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors and where it will not create a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (32.8 ft.) away from the front passenger side knee airbag.**
- **The front passenger side knee airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front passenger side knee airbag with a deployed airbag.**
- **Do not apply water to a front passenger side knee airbag assembly with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**
- **An airbag or pretensioner may be activated by static electricity. To prevent this, be sure to touch a metal surface with bare hands to discharge static electricity before performing this procedure.**

2. DISPOSE OF FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY (WHEN INSTALLED IN VEHICLE)

HINT:

Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

b. Read the precaution (Click here).

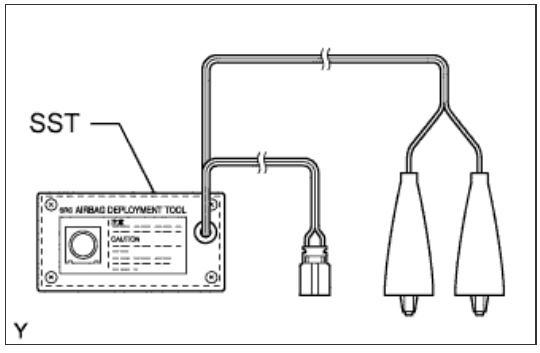
c. Disconnect the cable from the negative (-) battery terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).



d. Remove the front passenger side knee airbag (Click here).

e. Install SST.

i. Connect SST connector to the front passenger side knee airbag.

SST
09082-00700

09082-00770

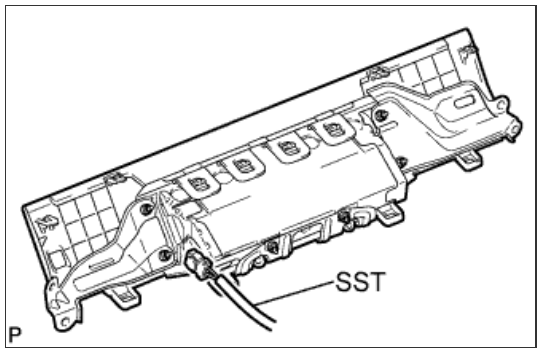
NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock.

ii. Install the front passenger side knee airbag (Click here).

NOTICE:

Take care not to damage SST wire harness.



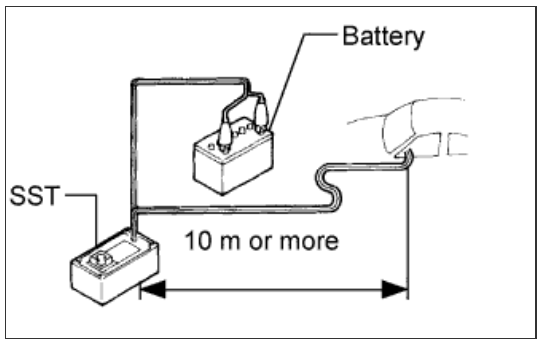
iii. Move SST at least 10 m (32.8 ft.) away from the vehicle front side window.

iv. Maintaining enough clearance for SST wire harness in the front side window, close all doors and windows of the vehicle.

NOTICE:

Take care not to damage SST wire harness.

v. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.



f. Deploy the airbag.

i. Check that no one is inside the vehicle or within a 10 m (32.8 ft.) radius of the vehicle.

ii. Press SST activation switch to deploy the airbag.

CAUTION:

- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The front passenger side knee airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front passenger side knee airbag assembly with a deployed airbag.**
- **Do not apply water to a front passenger side knee airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:

The airbag is deployed as the LED of SST activation switch comes on.

3. DISPOSE OF FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)

NOTICE:

Be sure to follow the procedure detailed below when deploying the airbag.

HINT:

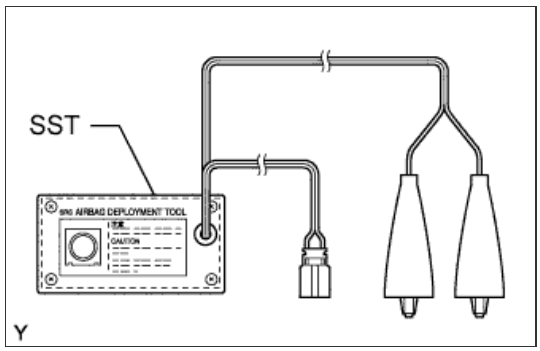
Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

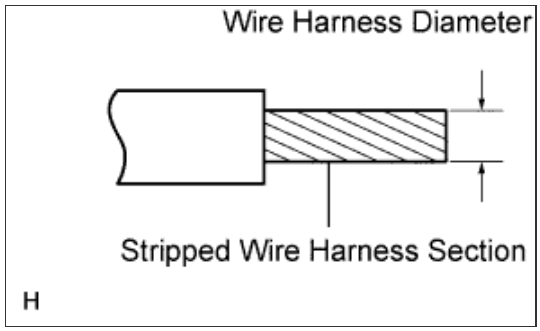
b. Remove the front passenger side knee airbag (Click here).

CAUTION:

- **When removing the front passenger side knee airbag, wait at least 90 seconds after the engine switch is turned off and the cable is disconnected from the negative (-) battery terminal before starting work.**
- **When storing the front passenger side knee airbag, keep the airbag deployment side facing upward.**



c. Using a service-purpose wire harness for the vehicle, tie down the front passenger side knee airbag to a tire.



Cross-sectional area of stripped wire harness section:
1.25 mm^2 or more (0.00192 $in.^2$ or more)

CAUTION:

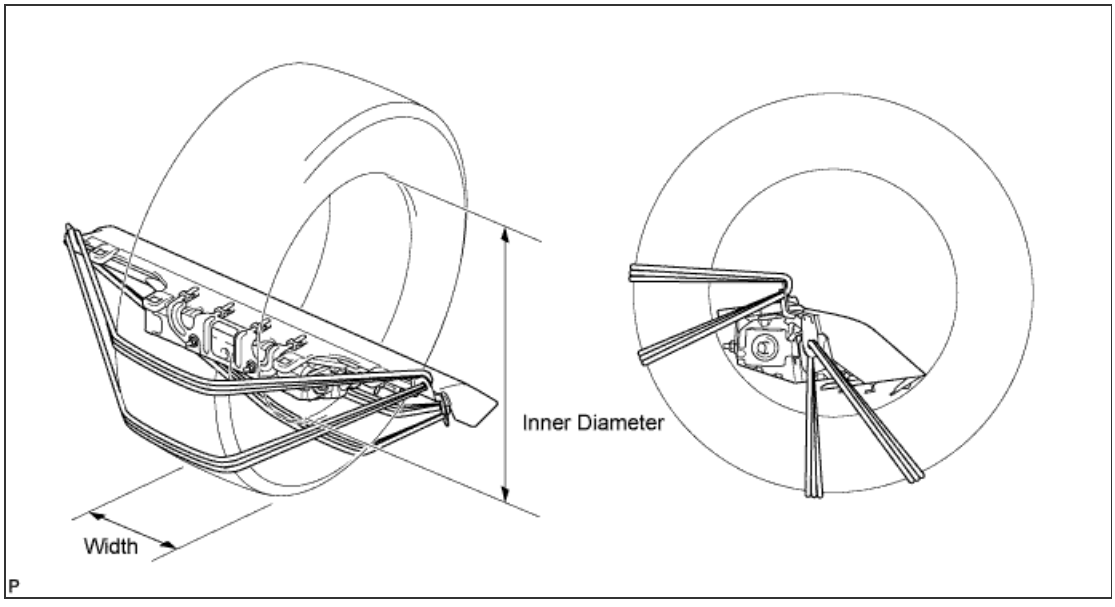
If the wire harness is too thin or an alternative object is used to tie down the front passenger side knee airbag assembly, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with a cross-sectional area of at least 1.25 mm^2 (0.00192 $in.^2$).

HINT:

To calculate the cross-sectional area of the stripped wire harness section: cross-sectional area = 3.14 x (Diameter) ^{2} divided by 4

i. Position the front passenger side knee airbag inside a tire with the airbag deployment side facing inside.

Tire size:
Must exceed the following dimensions
Width:
185 mm (7.28 in.)
Inner diameter:
360 mm (14.2 in.)



ii. Tie the front passenger side knee airbag to the tire with several wire harnesses.

CAUTION:

- **Make sure that the wire harnesses are tight. If there is slack in the wire harnesses, the front passenger side knee airbag may become loose due to the shock when the airbag is deployed.**
- **Always tie down the front passenger side knee airbag with the airbag deployment side facing inside the tire.**

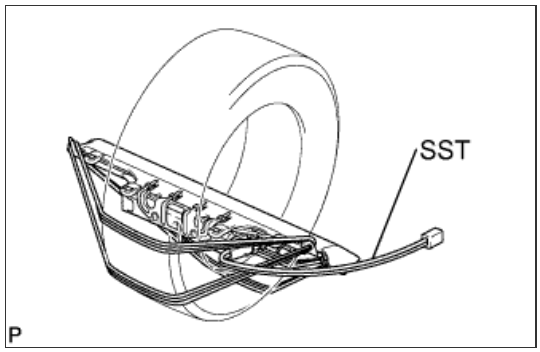
NOTICE:

As the tire may be damaged by the airbag deployment, use a tire that you are planning to throw away.

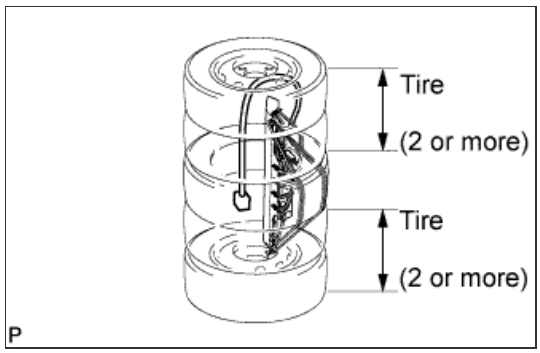
d. Install SST.

i. Connect SST connector to the front passenger side knee airbag.

SST
09082-00770



e. Place tires.



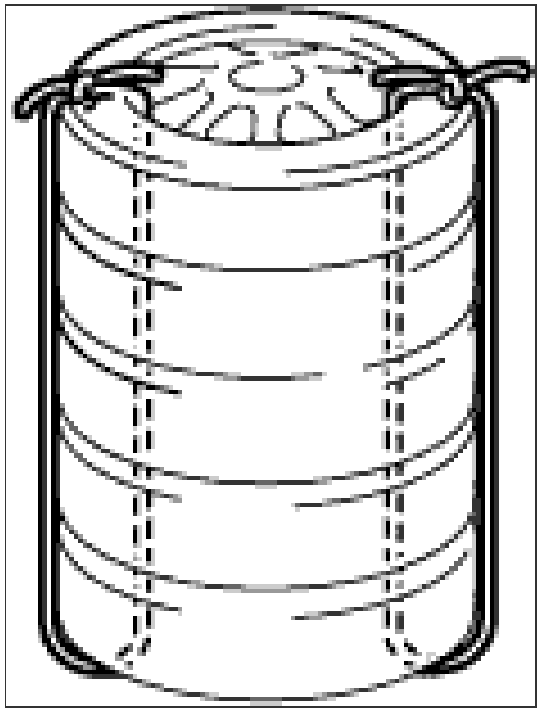
i. Place at least 2 tires under the tire which the front passenger side knee airbag is tied to.

ii. Place at least 2 tires over the tire which the front passenger side knee airbag is tied to. The top tire should have a disc wheel installed.

NOTICE:

- **Do not place SST connector under the tire because it could be damaged.**
- **As the disc wheel may be damaged by the airbag deployment, use a disc wheel that you are planning to throw away.**
- **As the tires may be damaged by the airbag deployment, use tires that you are planning to throw away.**

iii. Tie the tires together with 2 wire harnesses.



CAUTION:

Make sure that the wire harnesses are tight. Looseness in the wire harnesses results in the tires coming free due to the shock when the airbag is deployed.

f. Install SST.

i. Connect SST connector.

SST

09082-00700

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for SST wire harness inside the tire.

g. Deploy the airbag.

i. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.

ii. Check that no one is within a 10 m (32.8 ft.) radius of the tire which the front passenger side knee airbag is tied to.

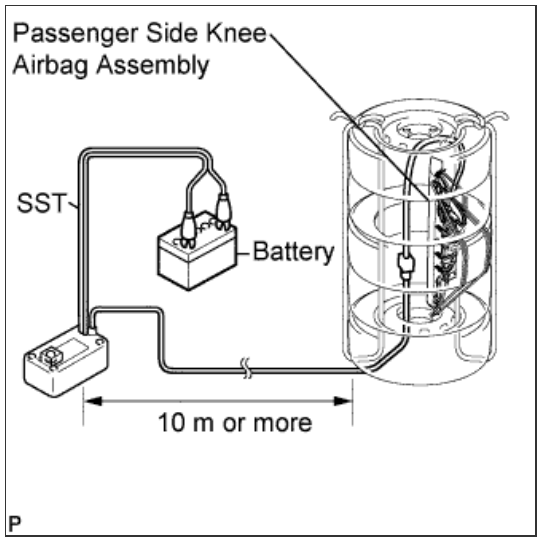
iii. Press SST activation switch to deploy the airbag.

CAUTION:

When deploying the airbag, make sure that no one is near the tire.

HINT:

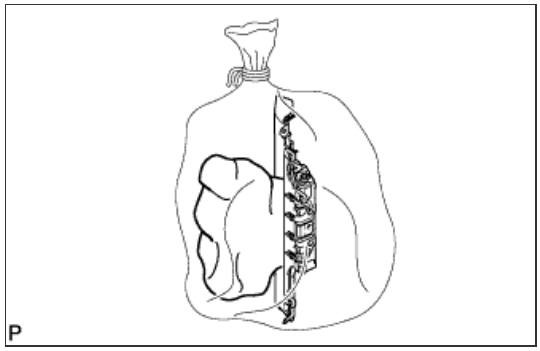
The airbag is deployed as the LED of SST activation switch comes on.



h. Dispose of the front passenger side knee airbag.

CAUTION:

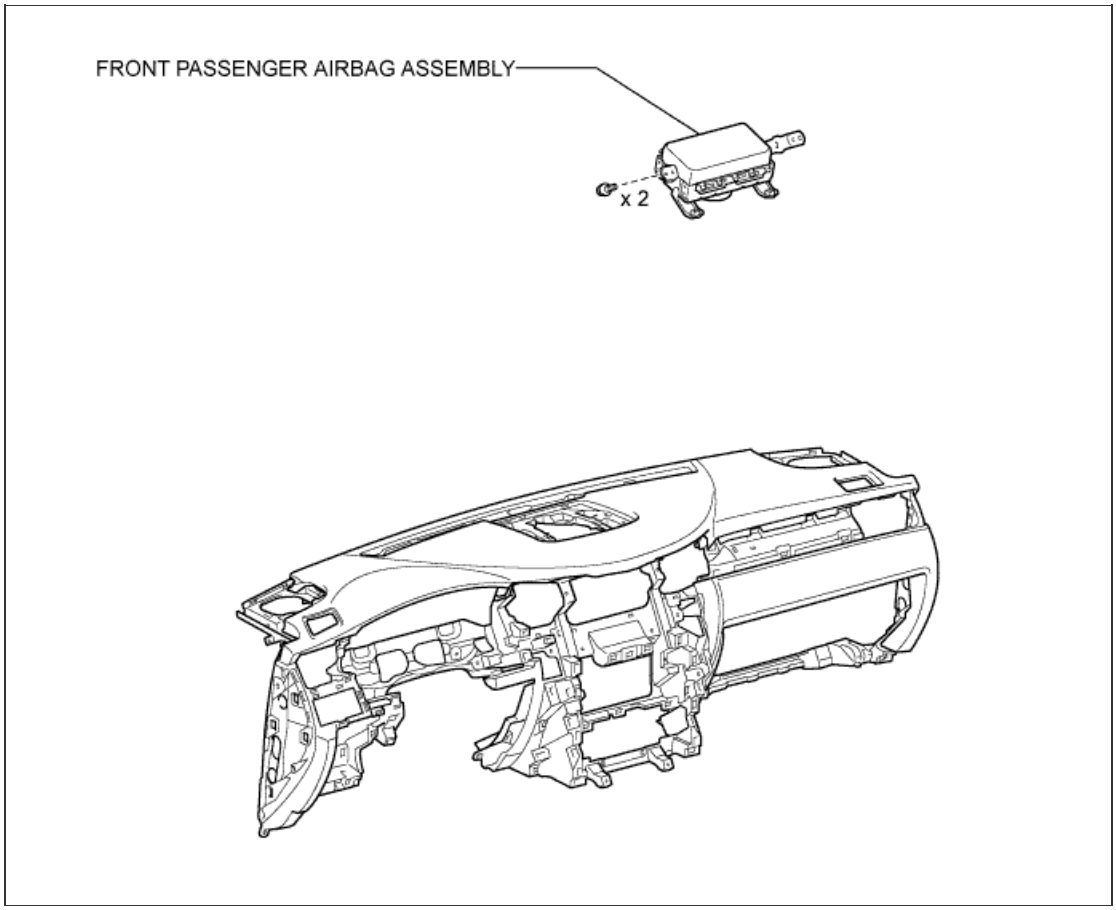
- **The front passenger side knee airbag assembly becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front passenger side knee airbag with a deployed airbag.**
- **Do not apply water to a front passenger side knee airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**



i. Remove the front passenger side knee airbag from the tire.

ii. Place the front passenger side knee airbag in a plastic bag, tie it tightly and dispose of it in the same way as other general parts.

for Preparation Click here

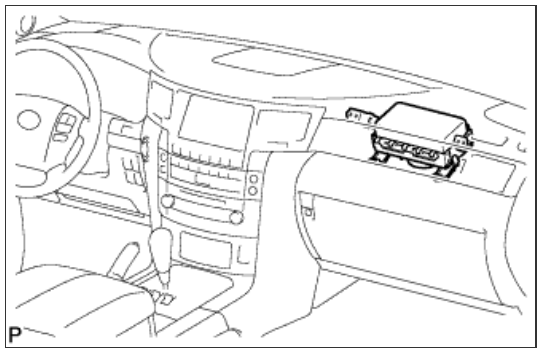


for Preparation Click here

1. CHECK FRONT PASSENGER AIRBAG ASSEMBLY (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

b. With the front passenger airbag installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the instrument panel with a new one:
Cuts, minute cracks or marked discoloration on the instrument panel around the front passenger airbag.



2. CHECK FRONT PASSENGER AIRBAG ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

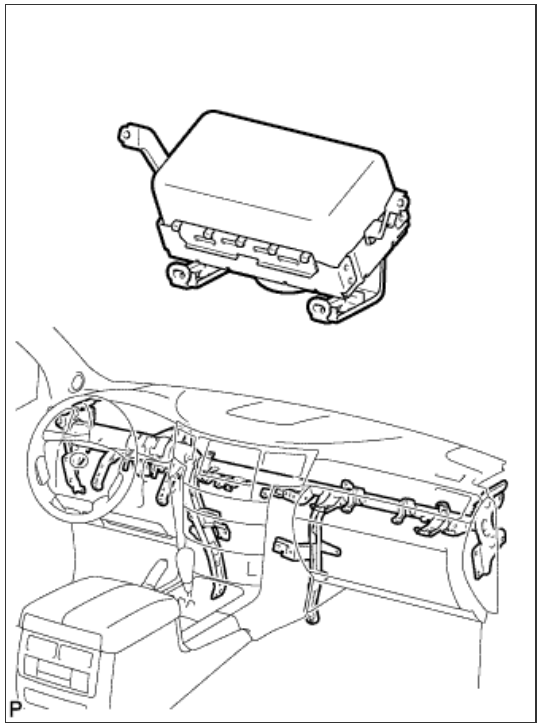
a. Perform a diagnostic system check (Click here).

b. With the front passenger airbag removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the front passenger airbag, instrument panel or instrument panel reinforcement with a new one:

- Cuts, minute cracks or marked discoloration on the front passenger airbag.
- Cracks or other damage to the connectors.
- Deformation or cracks on the instrument panel or instrument panel reinforcement.

NOTICE:

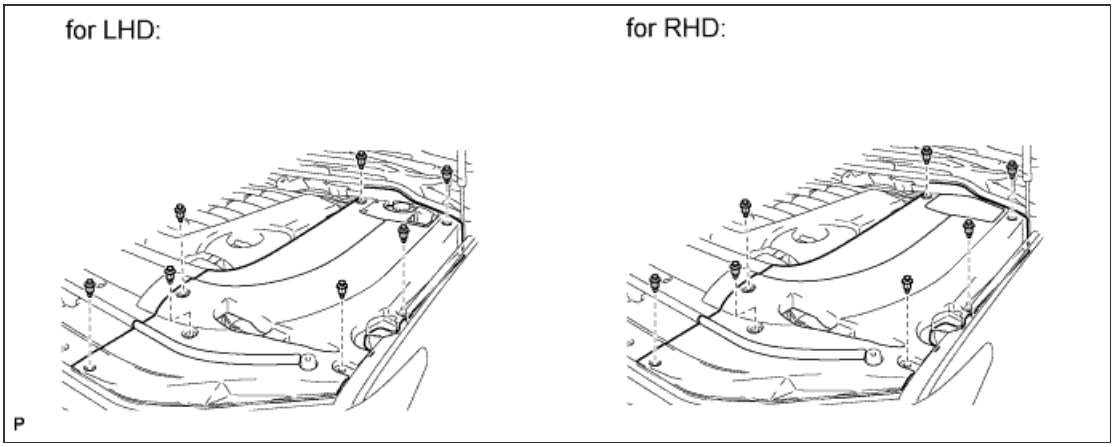
For removal and installation procedures of the front passenger airbag, be sure to follow the correct procedure.



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE INSTRUMENT PANEL SAFETY PAD

a. Remove the instrument panel safety pad (Click here).

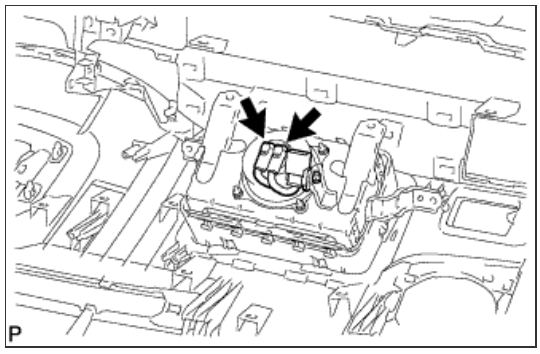
4. REMOVE FRONT PASSENGER AIRBAG ASSEMBLY

a. Detach the claw and remove the wire.

b. Disconnect the 2 connectors and remove the instrument panel wire from the front passenger airbag.

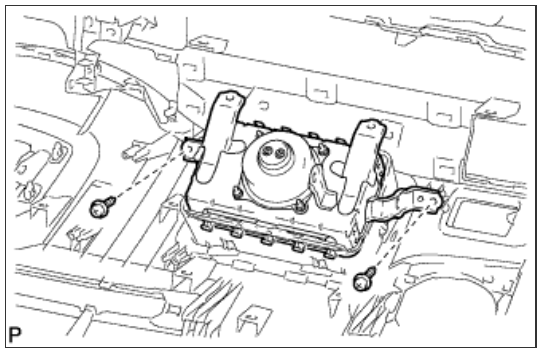
NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



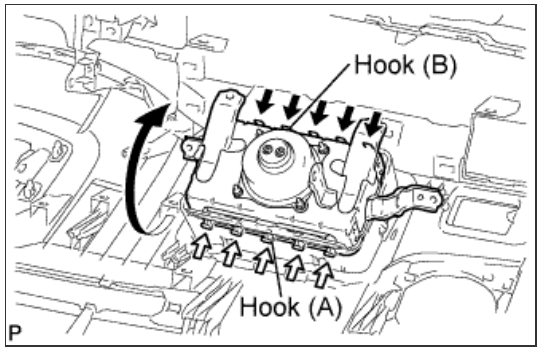
c. Remove the 2 screws.

c. Remove the 2 screws.



d. Detach the 5 hooks (A).

e. Detach the 5 hooks (B) and remove the front passenger airbag from the instrument panel.

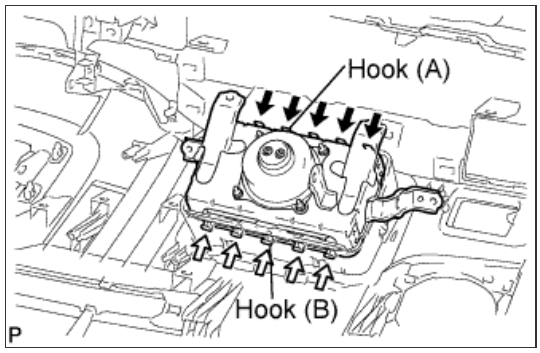


for Preparation Click here

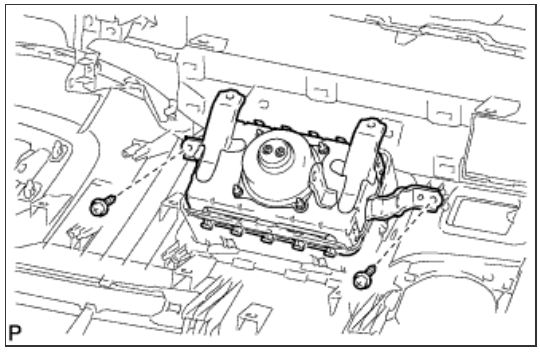
1. INSTALL FRONT PASSENGER AIRBAG ASSEMBLY

a. Attach the 5 hooks (A).

b. Attach the 5 hooks (B) to install the front passenger airbag on the instrument panel.



c. Install the 2 screws.

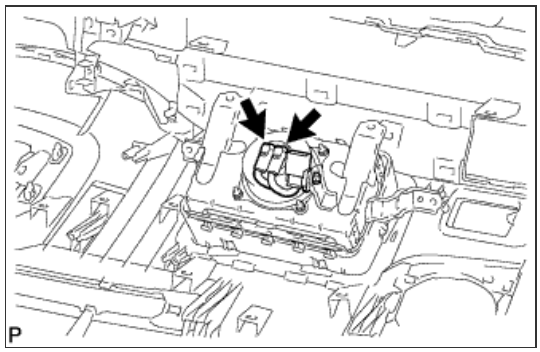


d. Connect the 2 connectors and install the instrument panel wire assembly to the front passenger airbag.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

e. Attach the claw and install the wire.



2. INSTALL INSTRUMENT PANEL SAFETY PAD

a. Install the instrument panel safety pad (Click here).

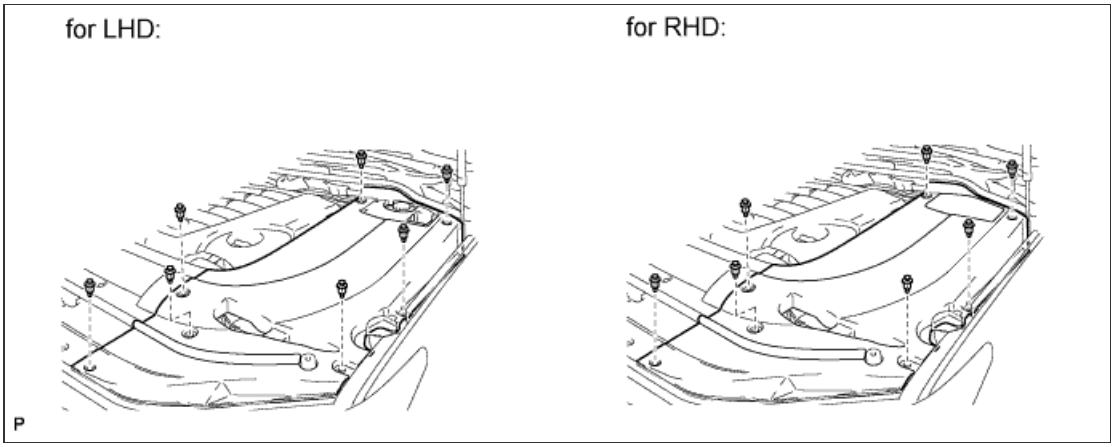
3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

4. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



5. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here

CAUTION:

Before deploying any SRS components for disposal, carefully review and follow all applicable environmental and hazardous material regulations. Depending on the area, deployment of SRS components before disposal may be considered treatment of hazardous materials, which may require special training, certification or licensing.

1. PRECAUTION

HINT:

When scrapping a vehicle equipped with the SRS or disposing of the steering pad, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of the DISTRIBUTOR..

CAUTION:

- **Never dispose of a front passenger airbag that has an unactivated airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors and where it will not create a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (32.8 ft.) away from the front passenger airbag.**
- **The front passenger airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front passenger airbag with a deployed airbag.**
- **Do not apply water to a front passenger airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**
- **An airbag or pretensioner may be activated by static electricity. To prevent this, be sure to touch a metal surface with bare hands to discharge static electricity before performing this procedure.**

2. DISPOSE OF FRONT PASSENGER AIRBAG ASSEMBLY (WHEN INSTALLED IN VEHICLE)

HINT:

Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

b. Read the precaution (Click here).

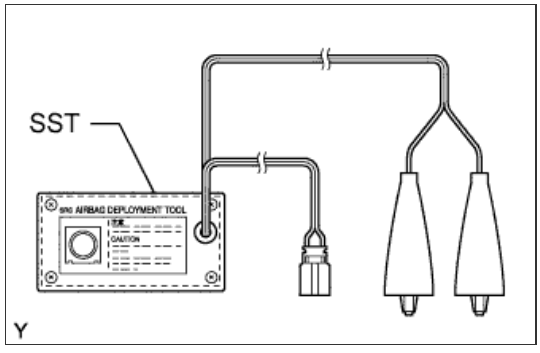
c. Disconnect the cable from the negative (-) battery terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).



d. Remove the front passenger airbag (Click here).

e. Install SST.

i. Disconnect the connector.

NOTICE:

When handling the airbag connector, take care not to damage the

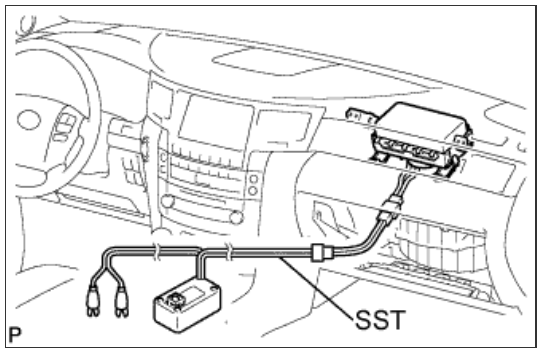
airbag wire harness.

ii. Connect SST connector to the instrument panel wire.

SST
09082-00700
09082-00780

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock.



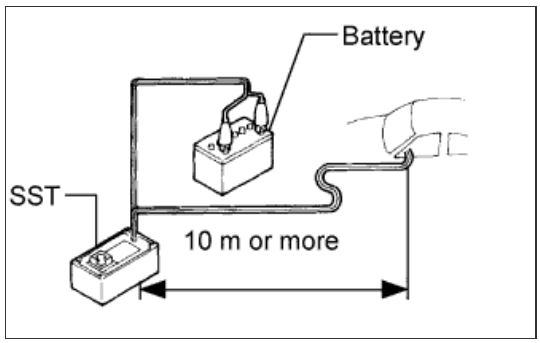
iii. Move SST at least 10 m (32.8 ft.) away from the vehicle front side window.

iv. Maintaining enough clearance for SST wire harness in the front side window, close all doors and windows of the vehicle.

NOTICE:

Take care not to damage SST wire harness.

v. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the negative (-) terminal.



f. Deploy the airbag.

i. Check that no one is inside the vehicle or within a 10 m (32.8 ft.) radius of the vehicle.

ii. Press SST activation switch to deploy the airbag.

CAUTION:

- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The front passenger airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front passenger airbag with a deployed airbag.**
- **Do not apply water to a front passenger airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:

The airbag is deployed as the LED of SST activation switch comes on.

3. DISPOSE OF FRONT PASSENGER AIRBAG ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)

NOTICE:

Be sure to follow the procedure detailed below when deploying the airbag.

HINT:

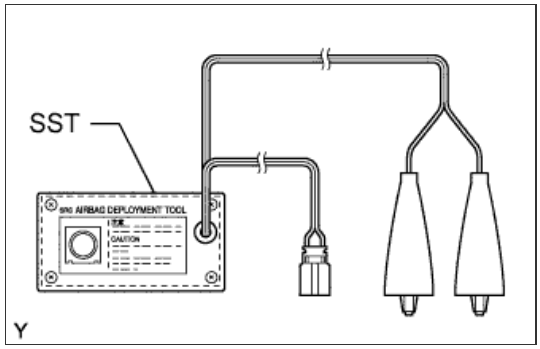
Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

b. Remove the front passenger airbag (Click here).

CAUTION:

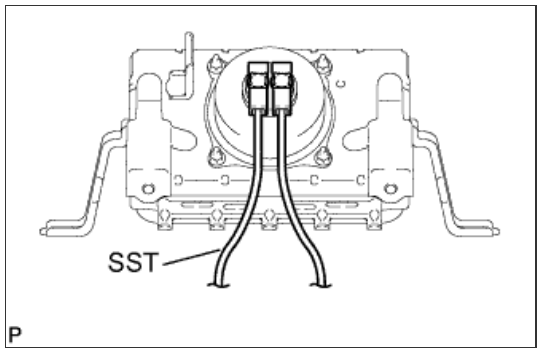
- **When removing the front passenger airbag assembly, wait at least 90 seconds after the engine switch is turned off and the cable is disconnected from the negative (-) battery terminal before starting work.**
- **When storing the front passenger airbag, keep the airbag deployment side facing upward.**



c. Install SST.

i. After connecting SST to each other, connect them to the front passenger airbag.

SST
09082-00802 (09082-10801, 09082-30801)

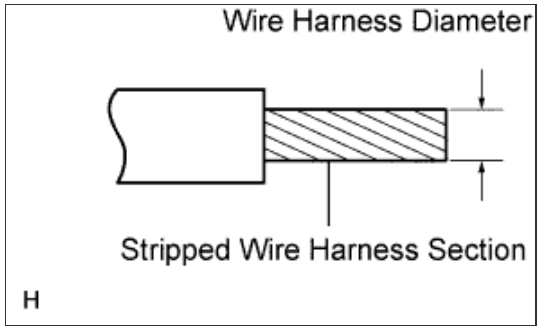


d. Using a service-purpose wire harness for the vehicle, tie down the front passenger airbag to a tire.

Cross-sectional area of stripped wire harness section:
1.25 mm^2 (0.00192 in.^{2}) or more

CAUTION:

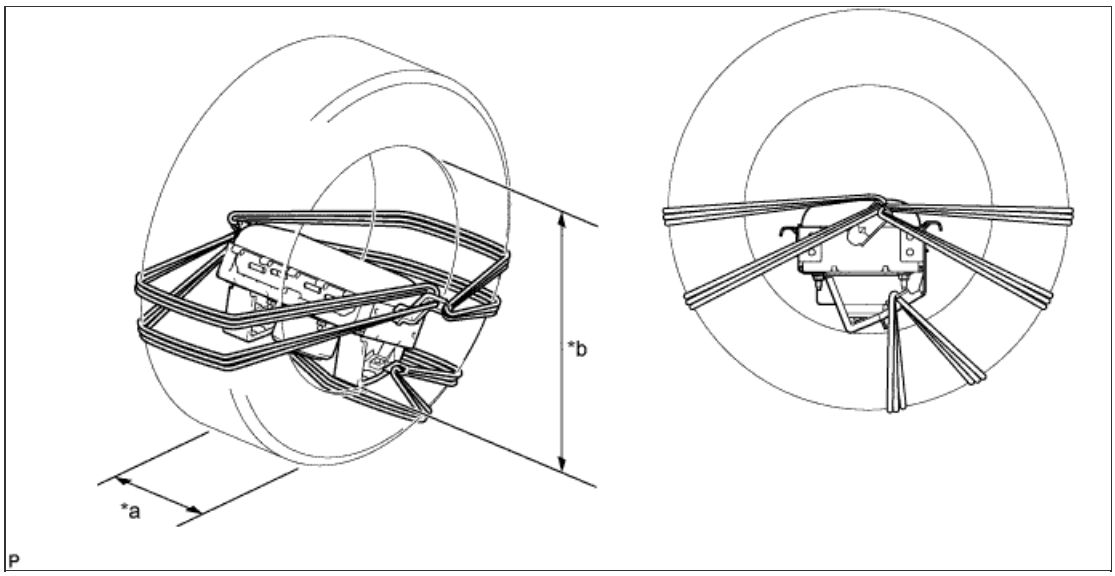
If the wire harness is too thin or an alternative object is used to tie down the front passenger airbag assembly, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with a cross-sectional area of at least 1.25 mm^2 (0.0019 in.^{2}).



HINT:

To calculate the cross-sectional area of the stripped wire harness section: Cross-sectional area= 3.14 x (Diameter) ^{2} divided by 4

i. Position the front passenger airbag inside a tire with the airbag deployment side facing inside.



Tire size:
Must exceed the following dimensions
Width:
185 mm (7.28 in.)
Inner diameter:
360 mm (14.2 in.)

ii. Tie the front passenger airbag to the tire with several wire harnesses.

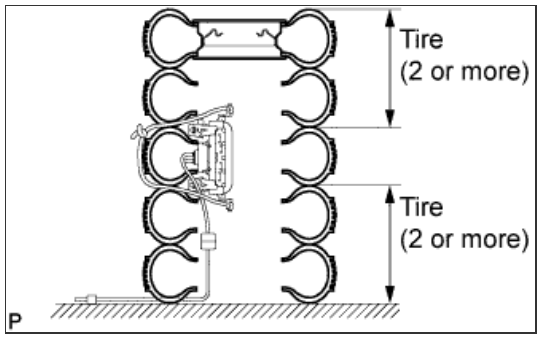
CAUTION:

- **Make sure that the wire harnesses are tight. If there is slack in the wire harnesses, the front passenger airbag may become loose due to the shock when the airbag is deployed.**
- **Always tie down the front passenger airbag with the airbag deployment side facing inside the tire.**

NOTICE:

As the tire may be damaged by the airbag deployment, use a tire that you are planning to throw away.

e. Place tires.



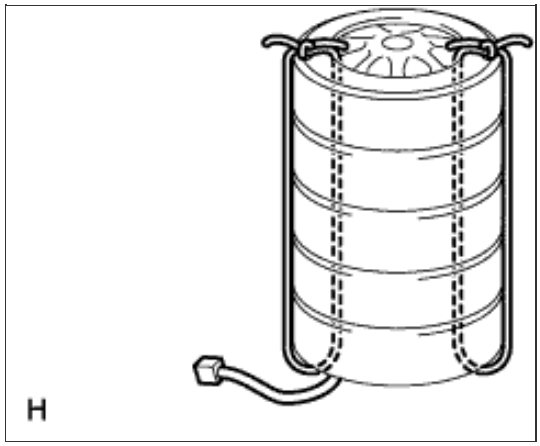
i. Place at least 2 tires under the tire which the front passenger airbag is tied to.

ii. Place at least 2 tires over the tire which the front passenger airbag is tied to. The top tire should have a disc wheel installed.

NOTICE:

- **Do not place SST connector under the tire because it could be damaged.**
- **As the disc wheel may be damaged by the airbag deployment, use a disc wheel that you are planning to throw away.**
- **As the tires may be damaged by the airbag deployment, use tires that you are planning to throw away.**

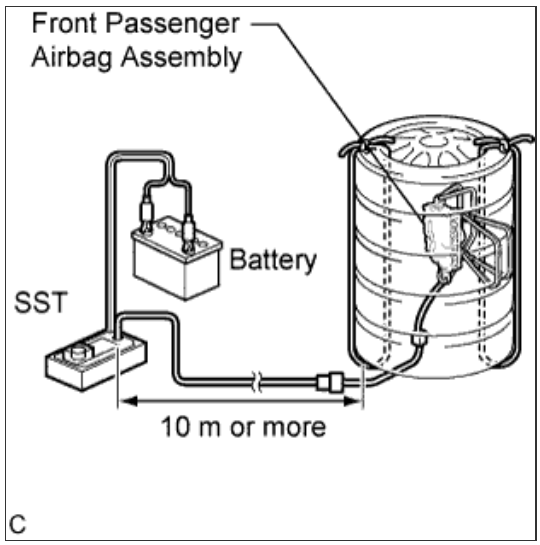
iii. Tie the tires together with 2 wire harnesses.



CAUTION:

Make sure that the wire harnesses are tight. Looseness in the wire harnesses results in the tires coming free due to the shock when the airbag is deployed.

f. Install SST.



i. Connect SST connector.

SST
09082-00700

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for SST wire harness inside the tire.

g. Deploy the airbag.

i. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.

ii. Check that no one is within a 10 m (32.8 ft.) radius of the tire which the front passenger airbag is tied to.

iii. Press SST activation switch to deploy the airbag.

CAUTION:

When deploying the airbag, make sure that no one is near the tire.

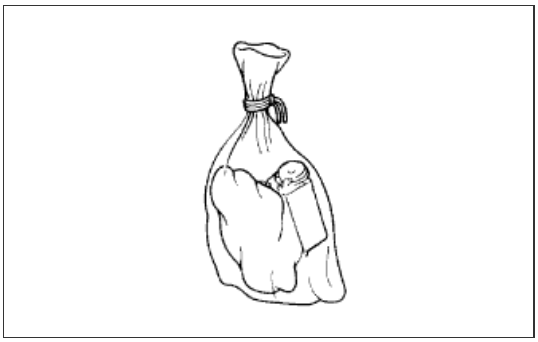
HINT:

The airbag is deployed as the LED of SST activation switch comes on.

h. Dispose of the front passenger airbag assembly.

CAUTION:

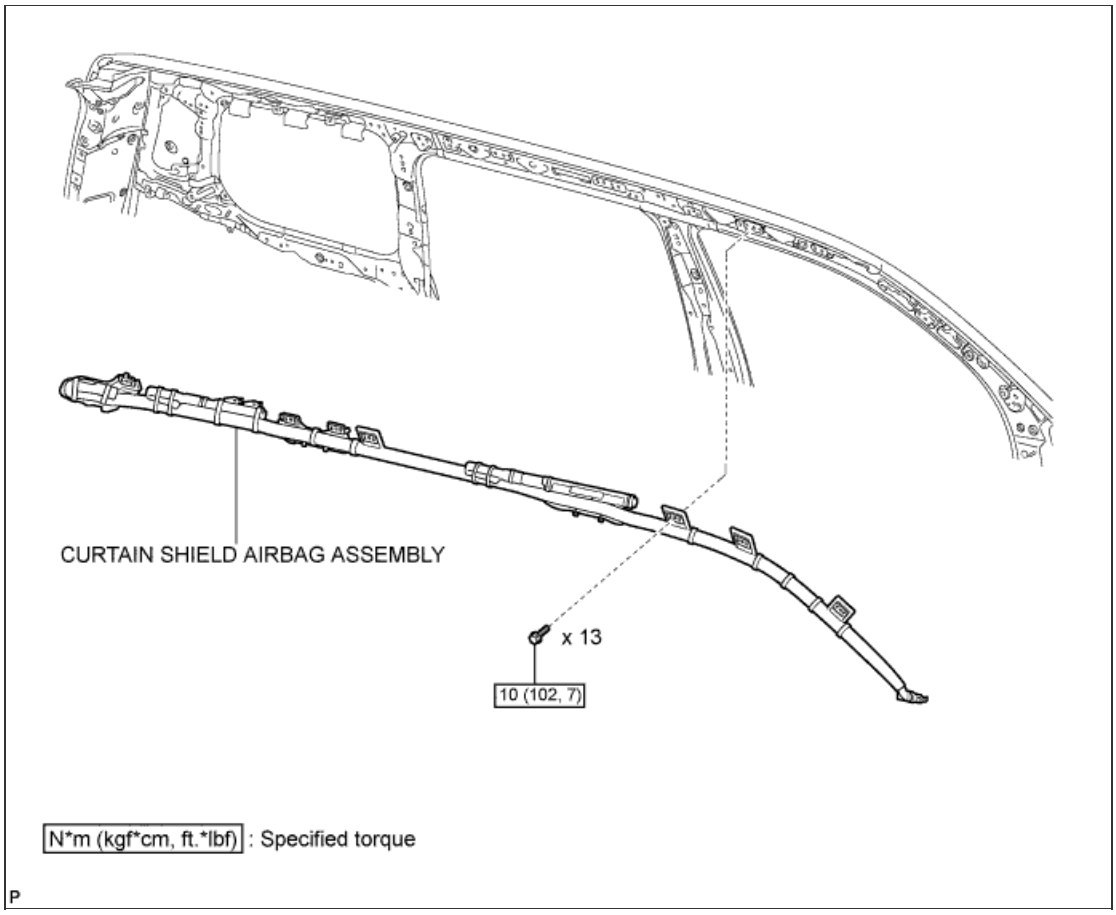
- **The front passenger airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front passenger airbag with a deployed airbag.**
- **Do not apply water to a front passenger airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**



i. Remove the front passenger airbag from the tire.

ii. Place the front passenger airbag in a plastic bag, tie it tightly and dispose of it in the same way as other general parts.

for Preparation Click here

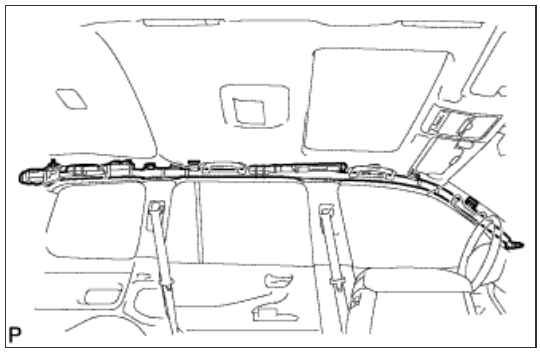


for Preparation Click here

1. CHECK CURTAIN SHIELD AIRBAG ASSEMBLY (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

b. With the curtain shield airbag installed on the vehicle, perform a visual check. If any of the defects mentioned below are present, replace the curtain shield airbag with a new one:
Cuts, minute cracks or marked discoloration on the curtain shield airbag.



2. CHECK CURTAIN SHIELD AIRBAG ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

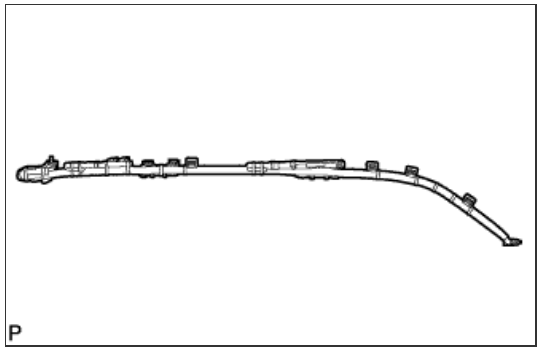
a. Perform a diagnostic system check (Click here).

b. With the curtain shield airbag removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the curtain shield airbag with a new one:

- Cuts, minute cracks or marked discoloration on the curtain shield airbag.
- Cracks or other damage to the connectors.

NOTICE:

For removal and installation procedures of the curtain shield airbag, be sure to follow the correct procedure.



CURTAIN SHIELD AIRBAG ASSEMBLY > REMOVAL

for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. OPEN BACK DOOR

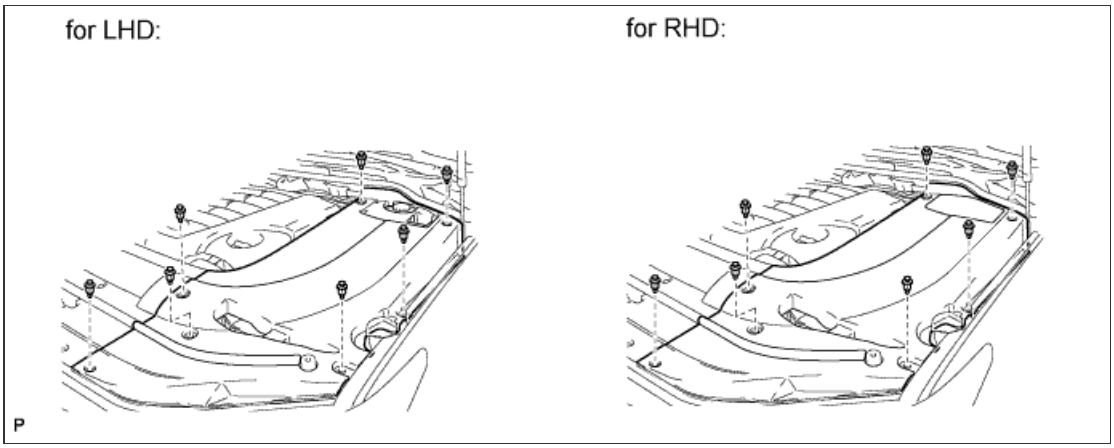
a. Open the back door before disconnecting the cable from the negative (-) battery terminal, as some procedures are performed with the back door open.

NOTICE:

The back door cannot be opened after the cable is disconnected from the negative (-) battery terminal.

2. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



3. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

4. REMOVE ROOF HEADLINING ASSEMBLY

a. Remove the roof headlining assembly (Click here).

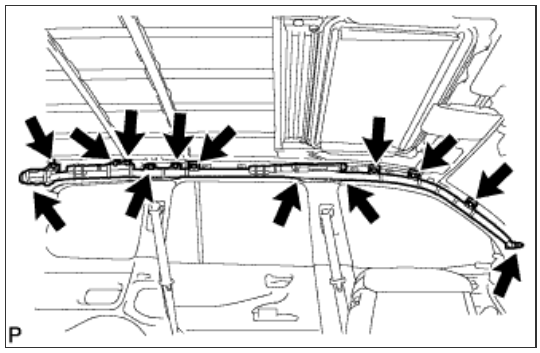
5. REMOVE CURTAIN SHIELD AIRBAG ASSEMBLY

a. Disconnect the connector.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

b. Remove the 13 bolts and curtain shield airbag.



for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

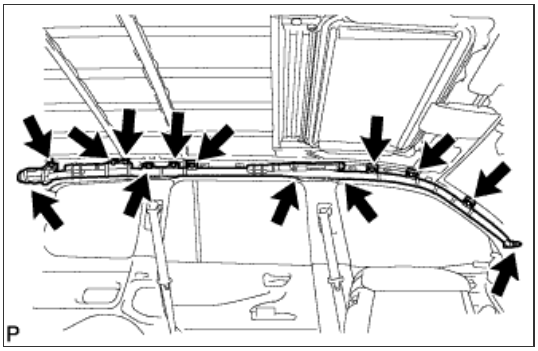
1. INSTALL CURTAIN SHIELD AIRBAG ASSEMBLY

a. Install the curtain shield airbag with the 13 bolts.

Torque:
10 N*m{ 102 kgf*cm , 7 ft.*lbf }

NOTICE:

Do not twist the curtain shield airbag when installing it.

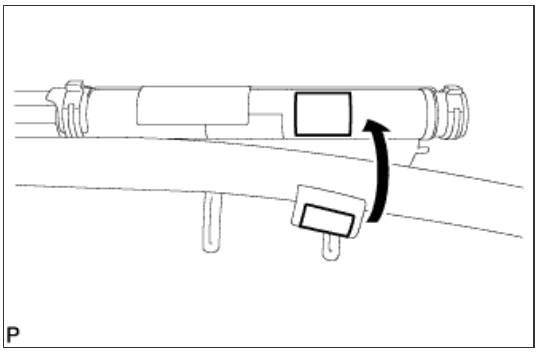


b. After installing the bolts, put the curtain shield airbag onto the bracket and close the lock fastener.

c. Connect the connector.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



2. INSTALL ROOF HEADLINING ASSEMBLY

a. Install the roof headlining assembly (Click here).

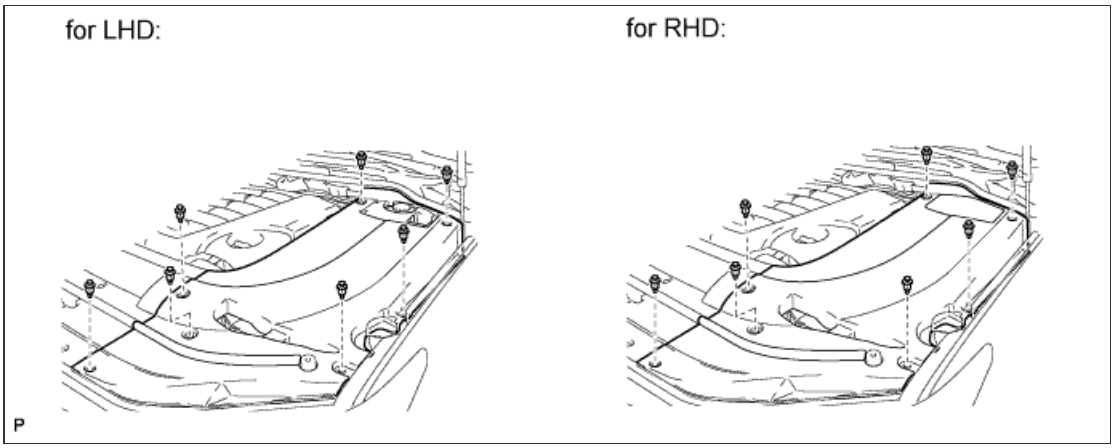
3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

4. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



5. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here

CAUTION:

Before deploying any SRS components for disposal, carefully review and follow all applicable environmental and hazardous material regulations. Depending on the area, deployment of SRS components before disposal may be considered treatment of hazardous materials, which may require special training, certification or licensing.

1. PRECAUTION

HINT:

When scrapping a vehicle equipped with the SRS or disposing of the steering pad, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of the DISTRIBUTOR..

CAUTION:

- **Never dispose of a curtain shield airbag that has an unactivated airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors and where it will not create a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (32.8 ft.) away from the curtain shield airbag.**
- **The curtain shield airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a curtain shield airbag with a deployed airbag.**
- **Do not apply water to a curtain shield airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**
- **An airbag or pretensioner may be activated by static electricity. To prevent this, be sure to touch a metal surface with bare hands to discharge static electricity before performing this procedure.**

2. DISPOSE OF CURTAIN SHIELD AIRBAG ASSEMBLY (WHEN INSTALLED IN VEHICLE)

HINT:

Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

b. Read the precaution (Click here).

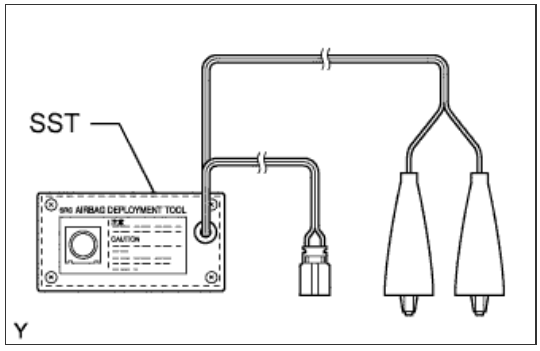
c. Disconnect the cable from the negative (-) battery terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).



d. Remove the roof headlining (Click here).

e. Install SST.

i. Disconnect the connector from the curtain shield airbag.

NOTICE:

When handling the airbag connector, take care not to damage the

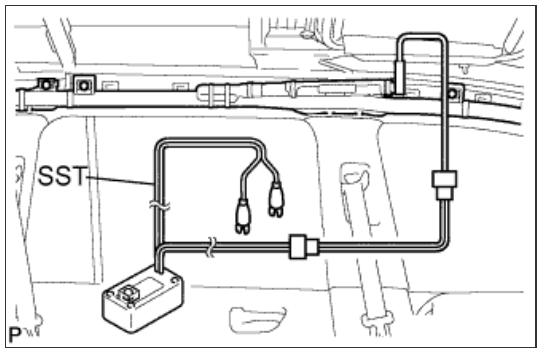
airbag wire harness.

ii. After connecting SST to each other, connect them to the curtain shield airbag.

SST
09082-00700
09082-00802 (09082-10801, 09082-40800)

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock.



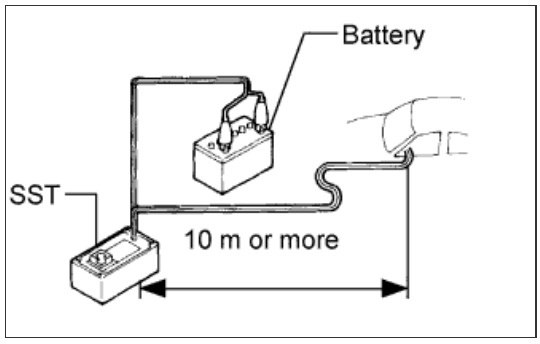
iii. Move SST at least 10 m (32.8 ft.) away from the vehicle rear side window.

iv. Maintaining enough clearance for SST wire harness in the rear side window, close all doors and windows of the vehicle.

NOTICE:

Take care not to damage SST wire harness.

v. Connect the red clip of SST to the battery positive (+) terminal and black clip of SST to the battery negative (-) terminal.



f. Deploy the airbag.

i. Check that no one is inside the vehicle or within a 10 m (32.8 ft.) radius of the vehicle.

ii. Press SST activation switch to deploy the airbag.

CAUTION:

- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The curtain shield airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a curtain shield airbag with a deployed airbag.**
- **Do not apply water to a curtain shield airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:

The airbag is deployed as the LED of SST activation switch comes on.

3. DISPOSE OF CURTAIN SHIELD AIRBAG ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)

CAUTION:

Be sure to follow the procedure detailed below when deploying the airbag.

HINT:

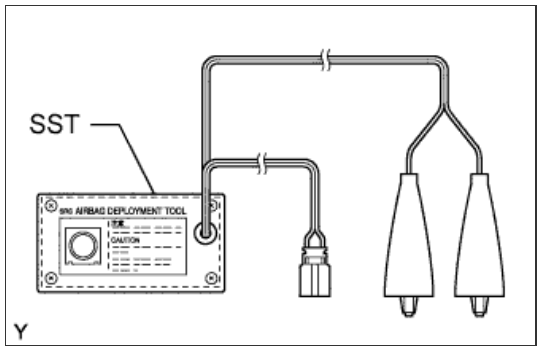
Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

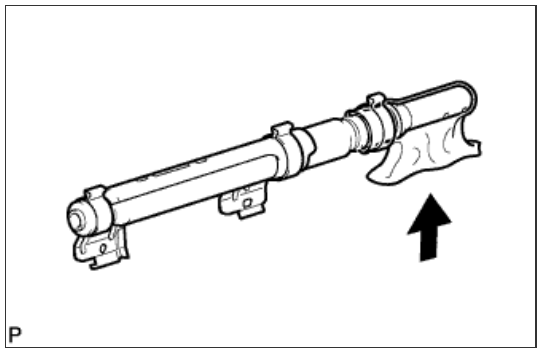
b. Remove the curtain shield airbag (Click here).

CAUTION:

When removing the curtain shield airbag assembly, wait at least 90 seconds after the engine switch is turned off and the cable is disconnected from the negative (-) battery terminal before starting work.



c. Cut off the deployment section of the curtain shield airbag.



d. Using a service-purpose wire harness for the vehicle, tie down the curtain shield airbag to a tire.

Cross-sectional area of stripped wire harness section:
1.25 mm^2 (0.00192 in.^{2})or more

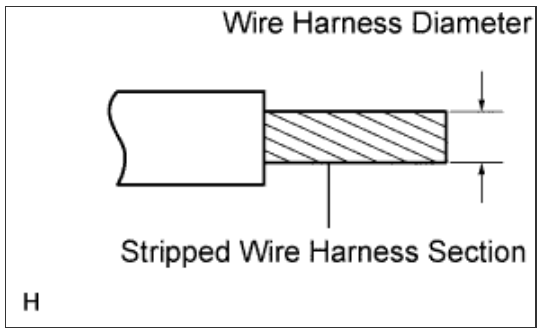
CAUTION:

If the wire harness is too thin or an alternative object is used to tie down the curtain shield airbag assembly, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with a cross-sectional area of at least 1.25 mm^2 (0.00192 in.^{2}).

HINT:

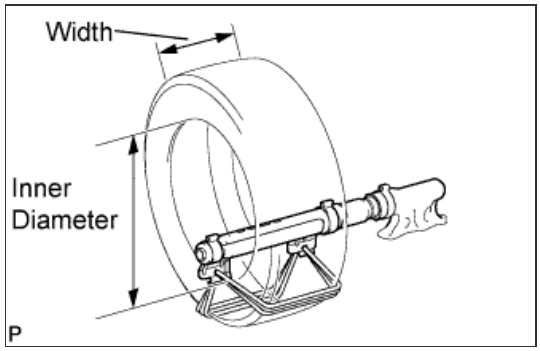
To calculate the cross-sectional area of the stripped wire harness section:

Cross-sectional area = 3.14 x (Diameter)^2 divided by 4



i. Position the curtain shield airbag inside a tire as shown in the illustration.

Tire size:
Must exceed the following dimensions
Width:
185 mm (7.28 in.)
Inner diameter:
360 mm (14.2 in.)



ii. Tie the curtain shield airbag to the tire with several wire harnesses.

CAUTION:

Make sure that the wire harnesses are tight. If there is slack in the wire harnesses, the curtain shield airbag may become loose due to the shock when the airbag is deployed.

NOTICE:

As the tire may be damaged by the airbag deployment, use a tire that you are planning to throw away.

e. Install SST.

i. After connecting SST to each other, connect them to the curtain shield airbag.

SST
09082-00802 (09082-10801, 09082-40800)

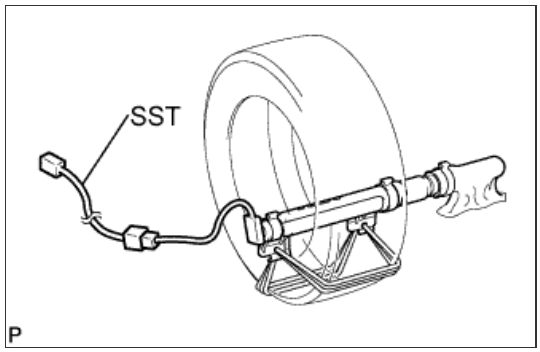
f. Place tires.

NOTICE:

Do not place the curtain shield airbag with the deployment direction facing the ground.

i. Place at least 2 tires under the tire which the curtain shield airbag is

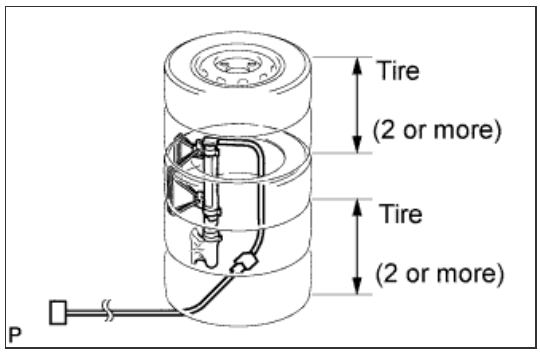
tied to.



ii. Place at least 2 tires over the tire which the curtain shield airbag is tied to. The top tire should have a disc wheel installed.

NOTICE:

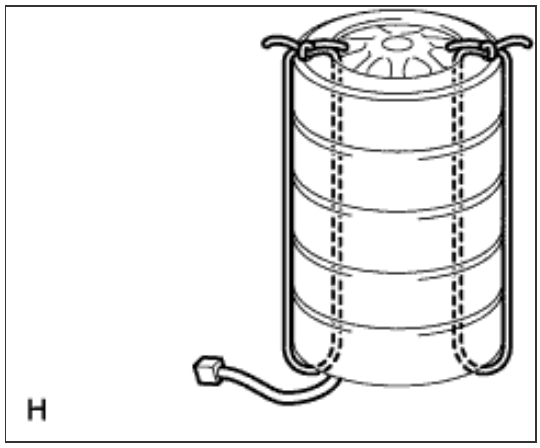
- **Do not place SST connector under the tire because it could be damaged.**
- **As the disc wheel may be damaged by the airbag deployment, use a disc wheel that you are planning to throw away.**
- **As the tires may be damaged by the airbag deployment, use tires that you are planning to throw away.**



iii. Tie the tires together with 2 wire harnesses.

NOTICE:

Make sure that the wire harnesses are tight. Looseness in the wire harnesses results in the tires coming free due to the shock when the airbag is deployed.



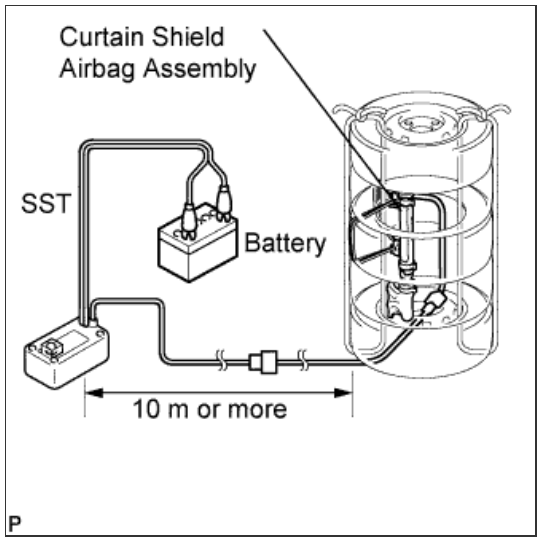
g. Install SST.

i. Connect SST connector.

SST
09082-00700

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for SST wire harness inside the tire.



h. Deploy the airbag.

i. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.

ii. Check that no one is within a 10 m (32.8 ft.) radius of the tire which the curtain shield airbag is tied to.

iii. Press SST activation switch to deploy the airbag.

CAUTION:

When deploying the airbag, make sure that no one is near the tire.

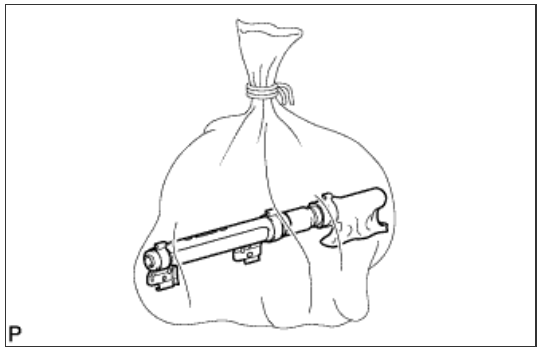
HINT:

The airbag is deployed as the LED of SST activation switch comes on.

i. Dispose of the curtain shield airbag.

CAUTION:

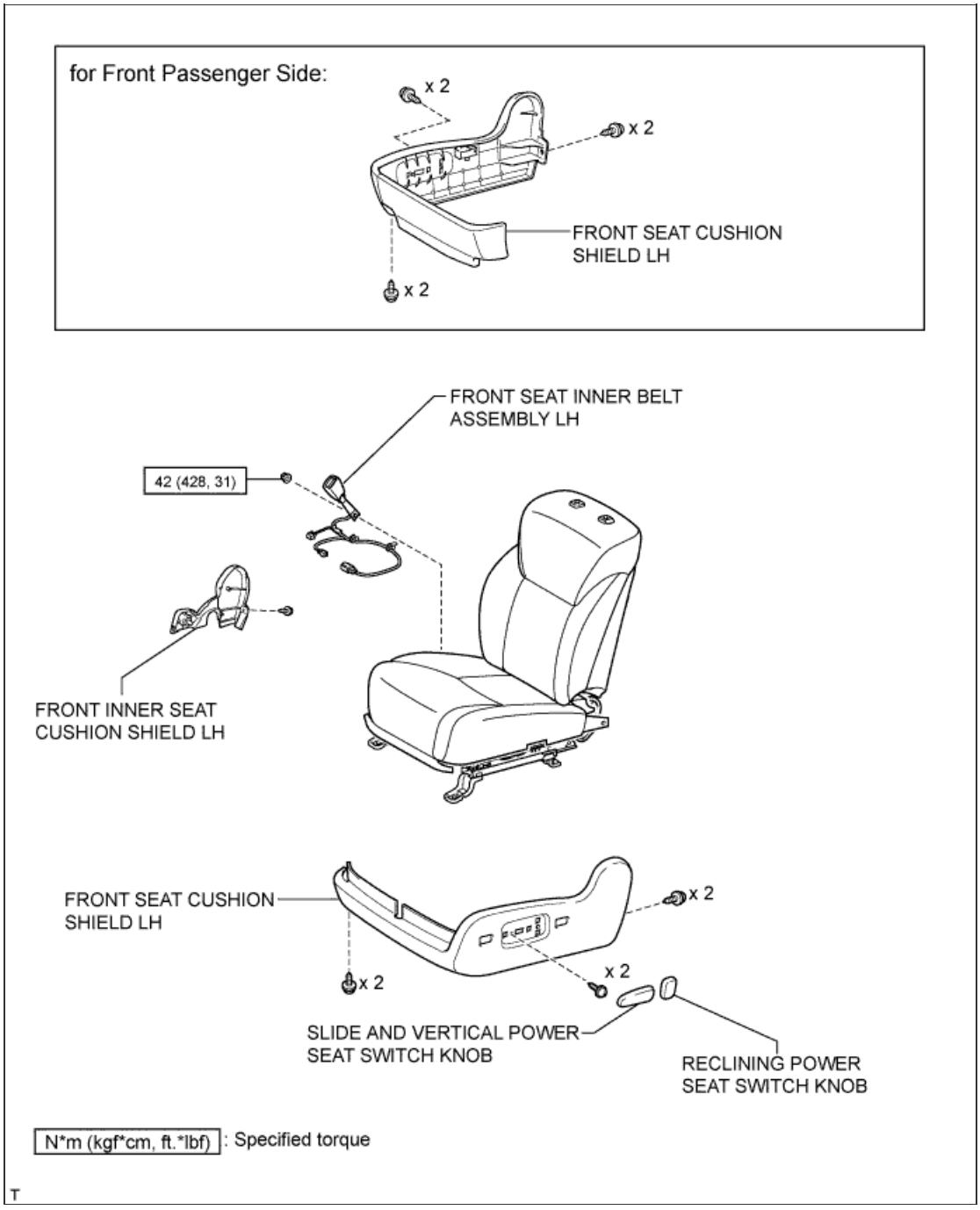
- **The curtain shield airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a curtain shield airbag with a deployed airbag.**
- **Do not apply water to a curtain shield airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

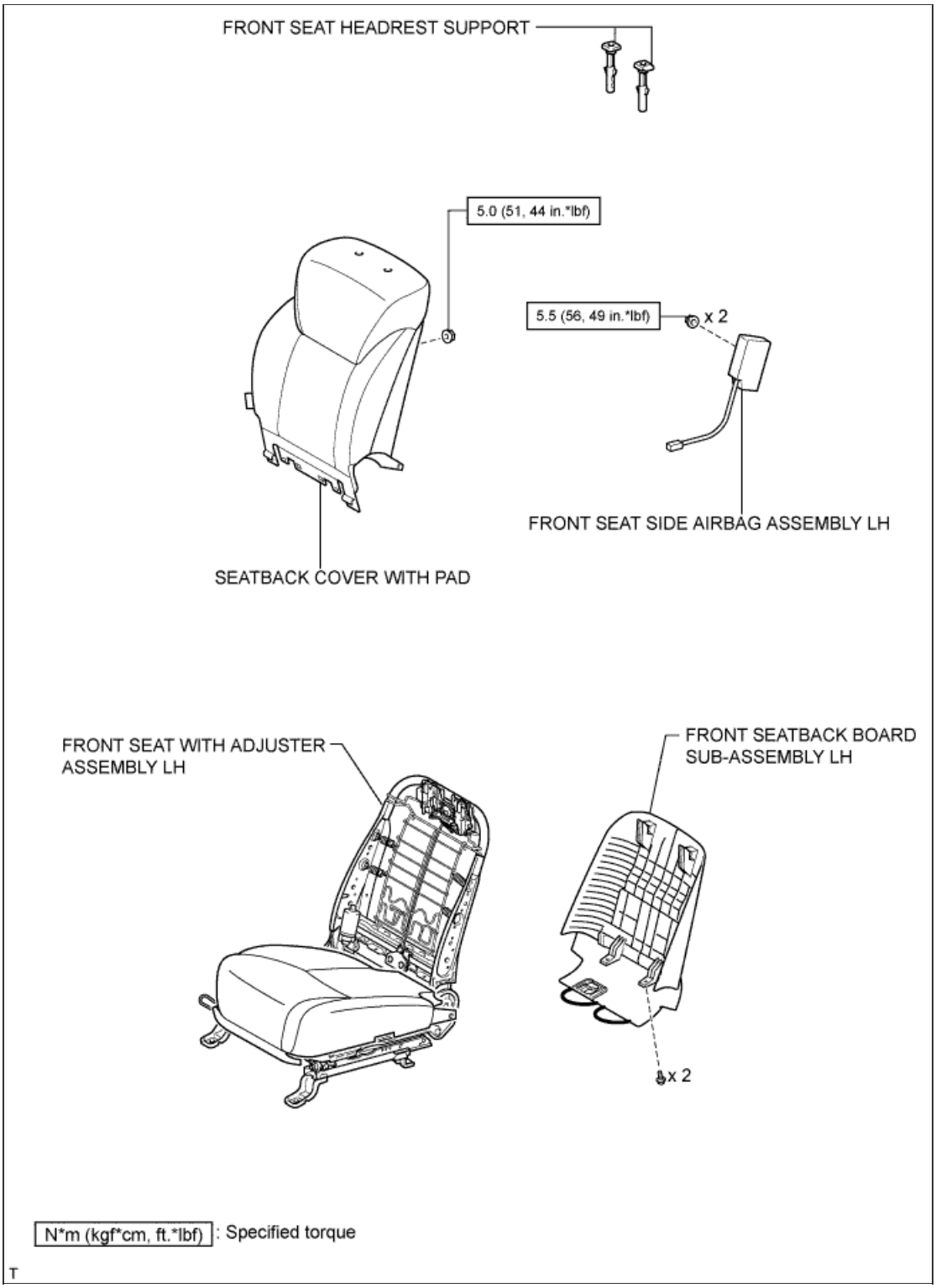


i. Remove the curtain shield airbag from the tire.

ii. Place the curtain shield airbag in a plastic bag, tie it tightly and dispose of it in the same way as other general parts.

for Preparation Click here



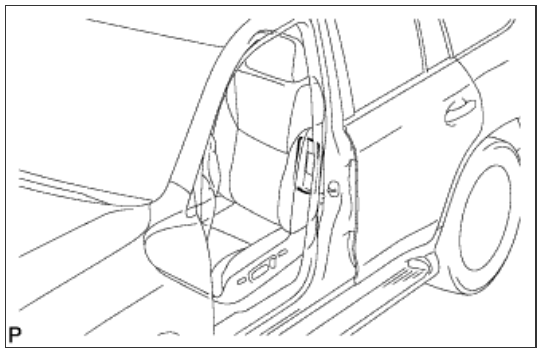

FRONT SEAT HEADREST SUPPORT
5.0 (51, 44 in.*lbf)
5.5 (56, 49 in.*lbf)
x 2
FRONT SEAT SIDE AIRBAG ASSEMBLY LH
SEATBACK COVER WITH PAD
FRONT SEAT WITH ADJUSTER ASSEMBLY LH
FRONT SEATBACK BOARD SUB-ASSEMBLY LH
x 2
N*m (kgf*cm, ft.*lbf) : Specified torque
T

for Preparation Click here

1. CHECK FRONT SEAT SIDE AIRBAG ASSEMBLY (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

b. With the front seat side airbag installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the front seat with a new one: Cuts, minute cracks or marked discoloration on the front seatback around the front seat side airbag.

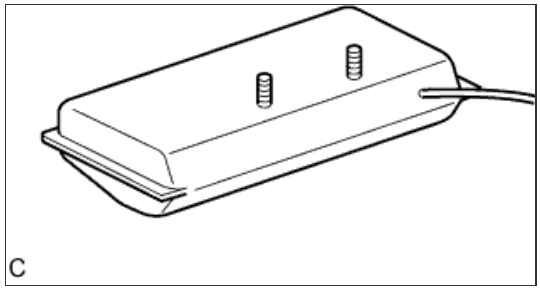


2. CHECK FRONT SEAT SIDE AIRBAG ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

a. Perform a diagnostic system check (Click here).

b. With the front seat side airbag removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the front seat side airbag with a new one:

- Cuts, minute cracks or marked discoloration on the front seat side airbag.
- Cracks or other damage to the wire harness or connector.



NOTICE:

For removal and installation procedures of the front seat side airbag, be sure to follow the correct procedure.

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly LH (Click here).

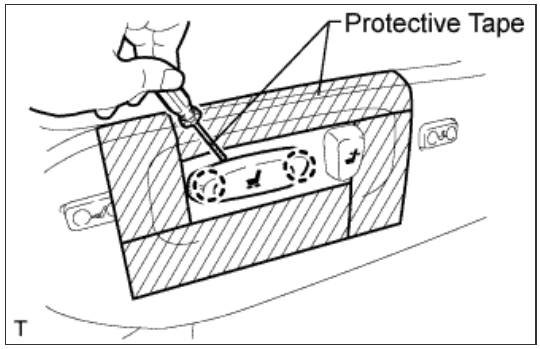
2. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

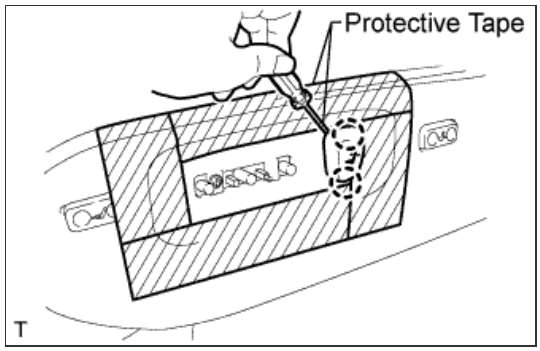


3. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

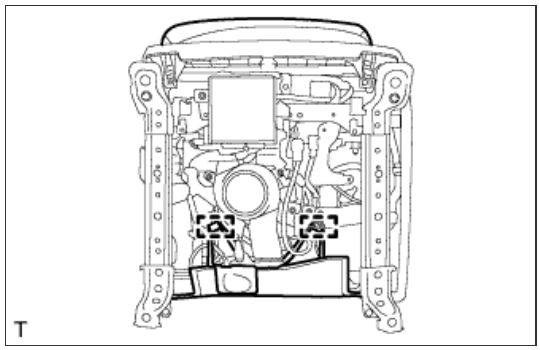
HINT:

Tape the screwdriver tip before use.

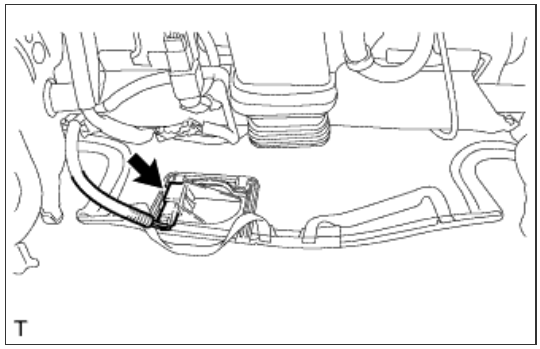


4. REMOVE FRONT SEAT CUSHION SHIELD LH

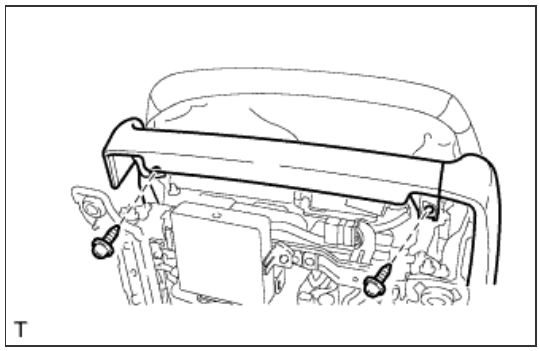
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

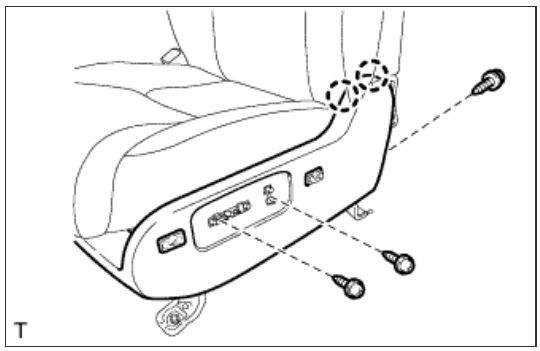


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

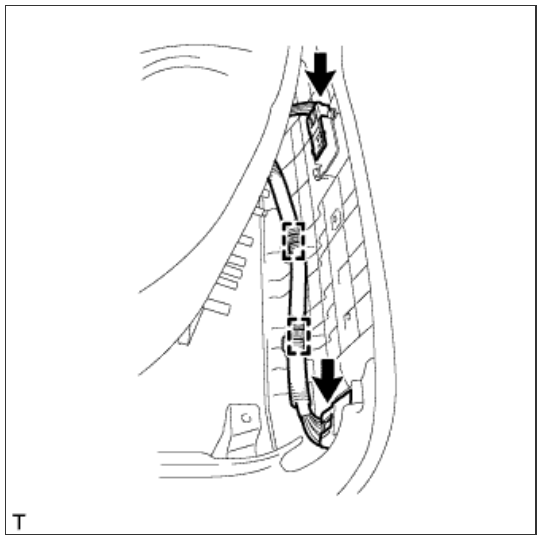


f. for Driver Side:

   i. Detach the 2 wire harness clamps.

   ii. Disconnect the 2 connectors.

g. for Front Passenger Side:
   Disconnect the connector.

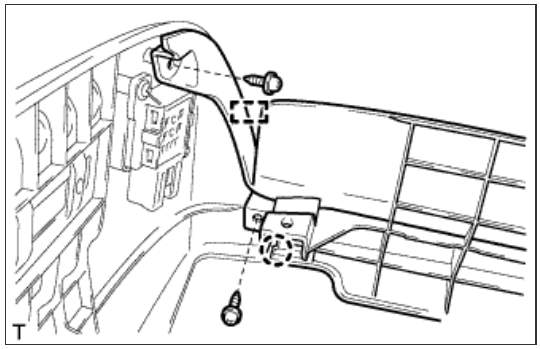


5. REMOVE FRONT INNER NO. 1 SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Remove the 2 screws.

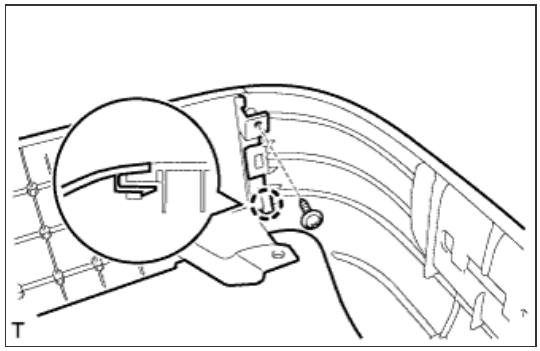
ii. Detach the claw and guide, and then remove the cushion shield.



b. for Front Passenger Side:

i. Remove the screw.

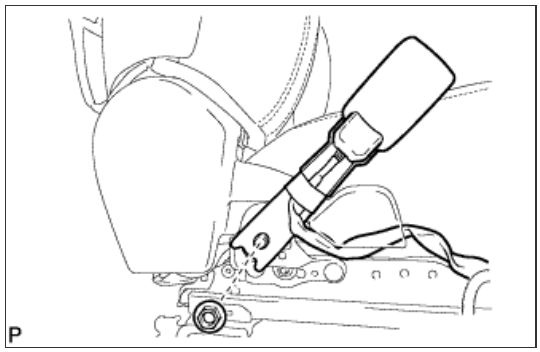
ii. Detach the claw and remove the cushion shield.



6. REMOVE FRONT SEAT INNER BELT ASSEMBLY LH

a. Disconnect the 3 connectors and detach the clamps.

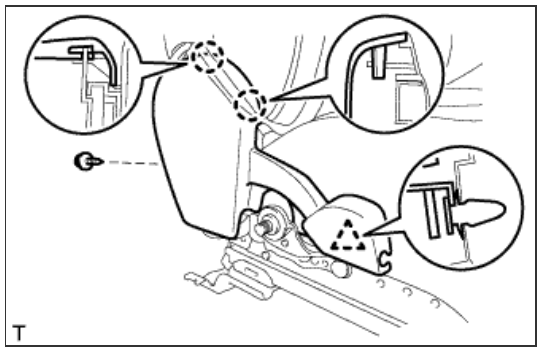
b. Remove the nut and front seat inner belt assembly.



7. REMOVE FRONT INNER SEAT CUSHION SHIELD LH

a. Remove the screw.

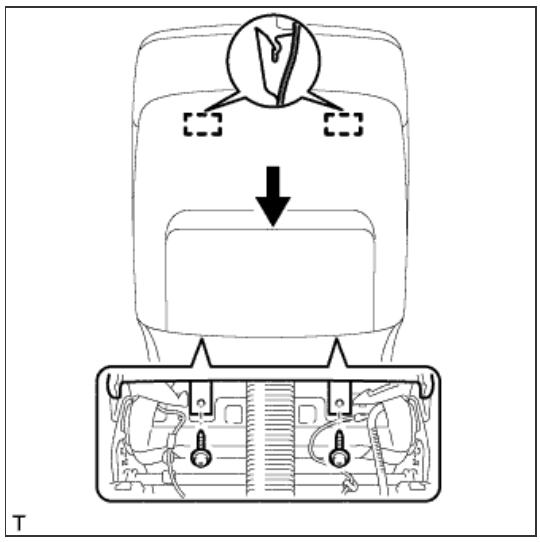
b. Detach the 2 claws and clip, and then remove the cushion shield.



8. REMOVE FRONT SEATBACK BOARD SUB-ASSEMBLY LH

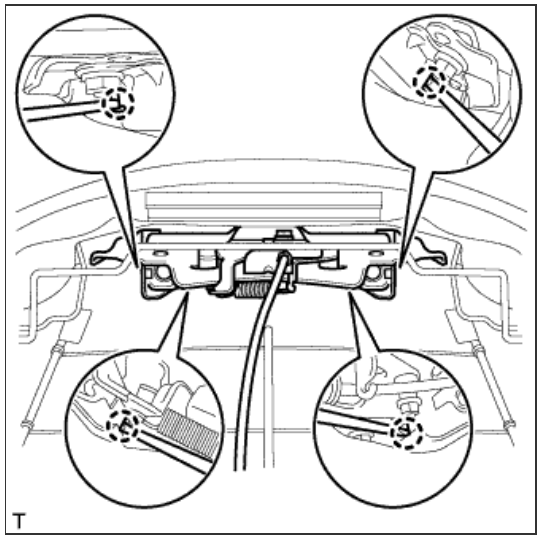
a. Remove the 2 screws.

b. Move the seatback board in the direction of the arrow to detach the 2 hooks and remove the seatback board.



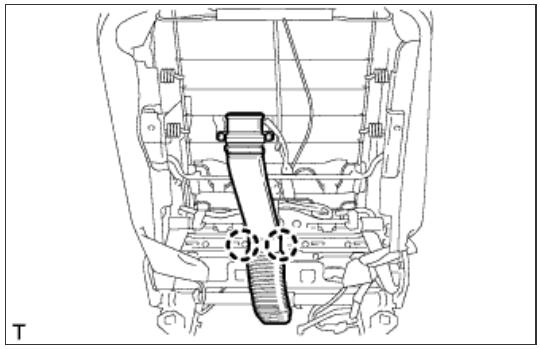
9. REMOVE FRONT SEAT HEADREST SUPPORT

a. Detach the 4 claws and remove the 2 headrest supports.

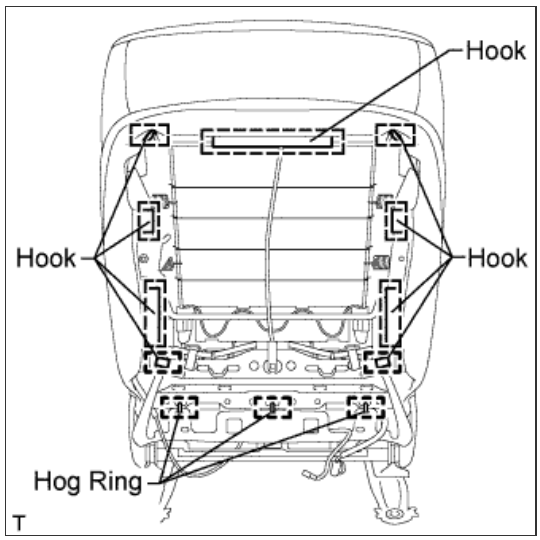


10. REMOVE SEATBACK COVER WITH PAD

a. w/ Climate Control Seat System:
Detach the 2 claws and disconnect the duct.

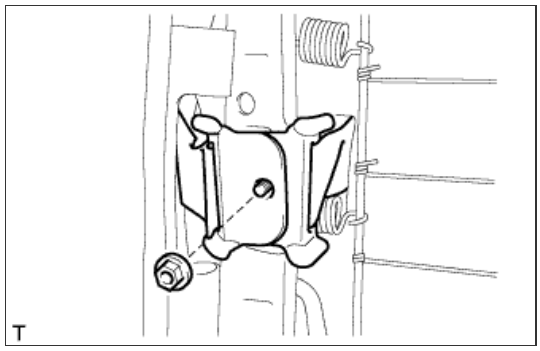


b. Remove the 3 hog rings and detach the 9 hooks.



c. Remove the nut and seatback cover bracket from the seat frame.

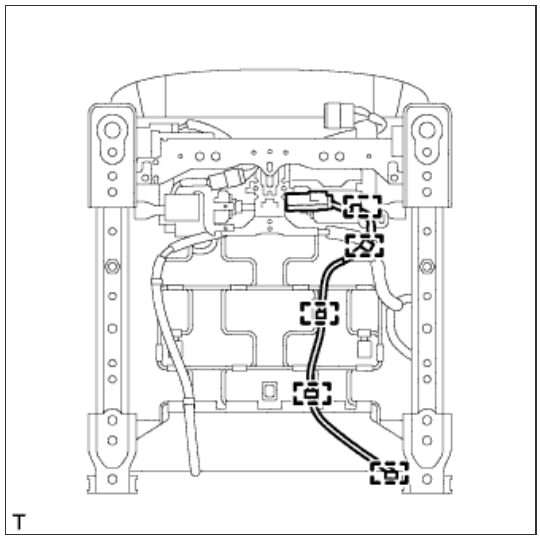
d. Remove the seatback cover with pad.



11. REMOVE FRONT SEAT SIDE AIRBAG ASSEMBLY LH

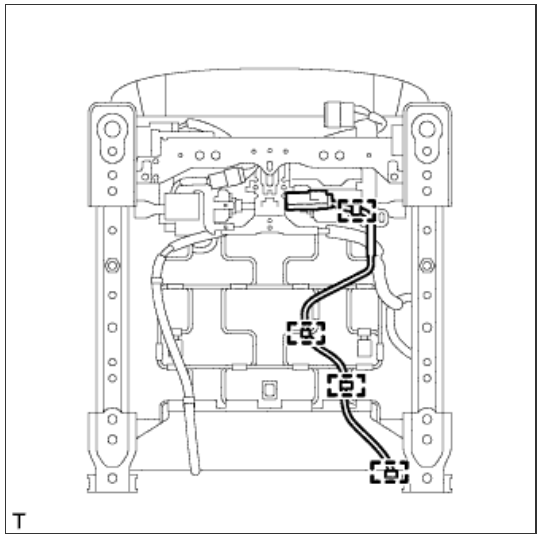
a. w/o Climate Control Seat System

i. Detach the 5 clamps and disconnect the wire harness.



b. w/ Climate Control Seat System

i. Detach the 4 clamps and disconnect the wire harness.

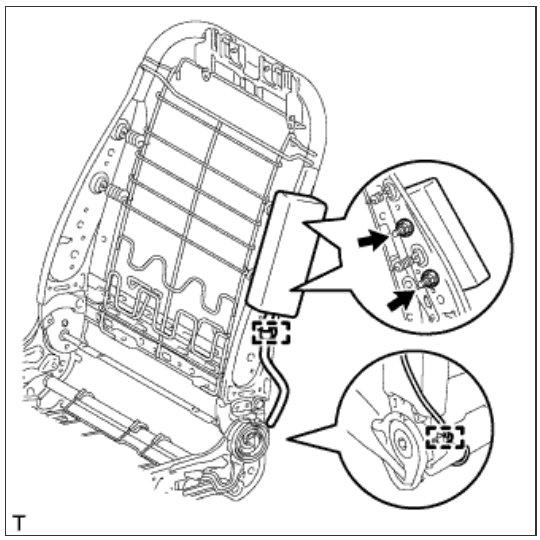


c. Detach the 2 clamps and disconnect the wire harness.

d. Remove the 2 nuts and front seat side airbag assembly LH.

CAUTION:

Make sure that the seat frame assembly is not deformed. If it is, replace it with a new one.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL FRONT SEAT SIDE AIRBAG ASSEMBLY LH

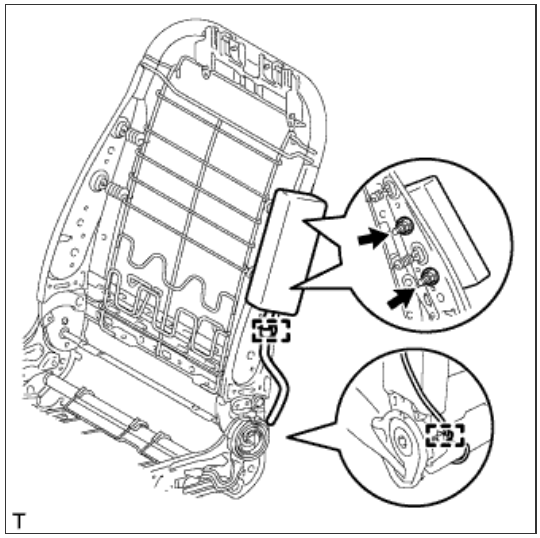
CAUTION:

Make sure that the seat frame assembly is not deformed. If it is, replace it with a new one.

a. Install the front seat side airbag assembly with 2 nuts.

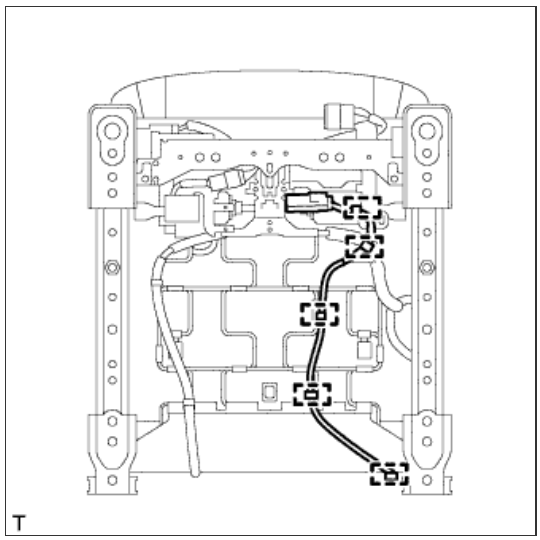
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

b. Attach the 2 clamps to connect the wire harness.



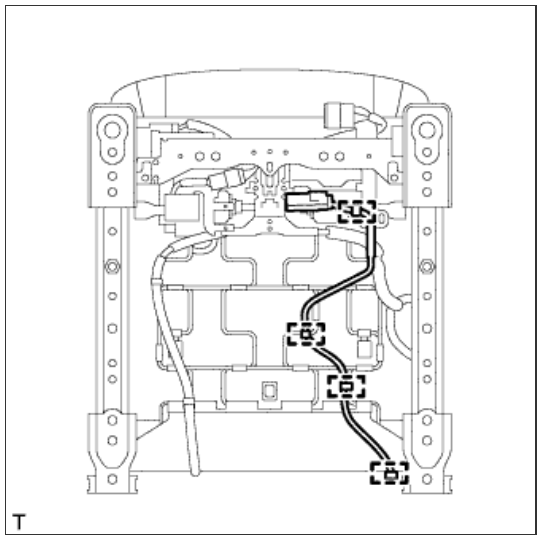
c. w/o Climate Control Seat System

i. Attach the 5 clamps to connect the wire harness.



d. w/ Climate Control Seat System

i. Attach the 4 clamps and disconnect the wire harness.



2. INSTALL SEATBACK COVER WITH PAD

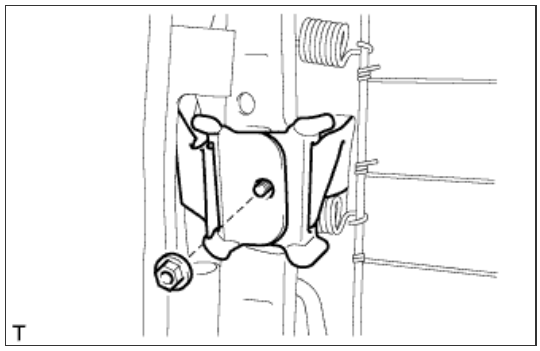
a. Install the seatback cover with pad to the seatback frame.

b. Install the seatback cover bracket to the seat frame with the nut.

Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }

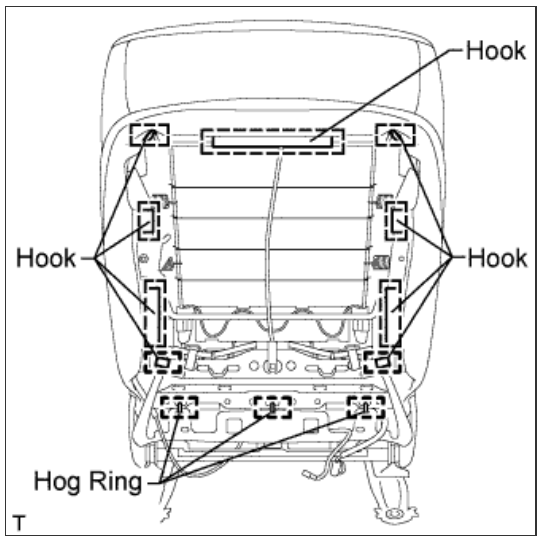
CAUTION:

After the seatback cover is assembled, make sure the side airbag strap is not twisted.

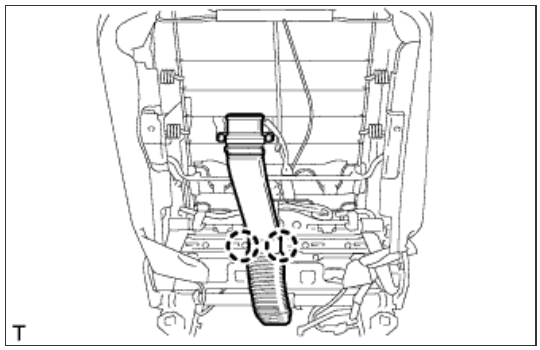


c. Attach the 9 hooks.

d. Using hog ring pliers, install 3 new hog rings to the seat frame.



e. w/ Climate Control Seat System:
Attach the 2 claws to connect the duct.



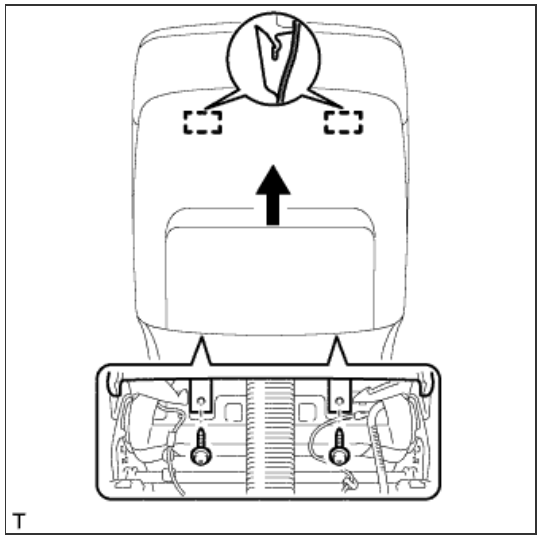
3. INSTALL FRONT SEAT HEADREST SUPPORT

a. Attach the 4 claws to install the 2 headrest supports.

4. INSTALL FRONT SEATBACK BOARD SUB-ASSEMBLY LH

a. Move the seatback board in the direction of the arrow to attach the 2 hooks and install the seatback board.

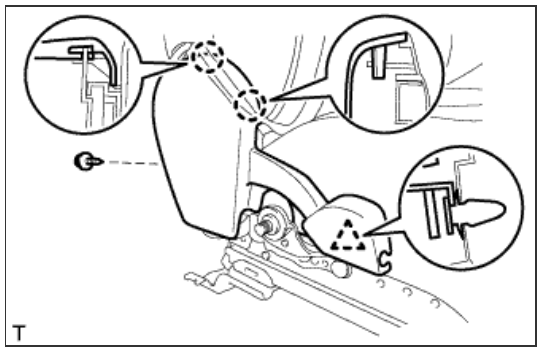
b. Install the 2 screws.



5. INSTALL FRONT INNER SEAT CUSHION SHIELD LH

a. Attach the 2 claws and clip to install the cushion shield.

b. Install the screw.



6. INSTALL FRONT SEAT INNER BELT ASSEMBLY LH

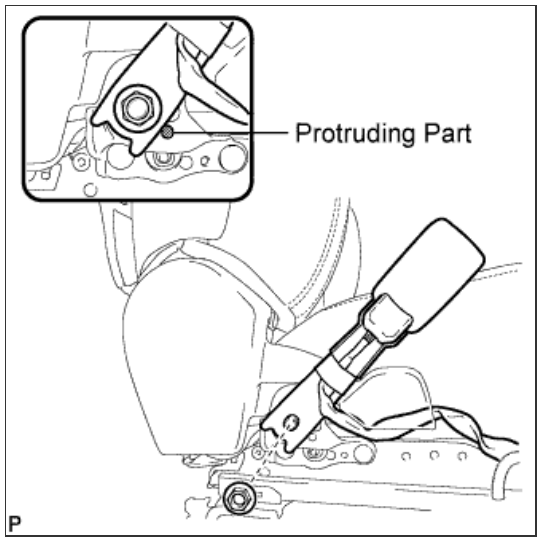
a. Install the front seat inner belt assembly with the nut.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not allow the anchor part of the front seat inner belt assembly to overlap the protruding part of the front seat adjuster.

b. Connect the 3 connectors and attach the clamps.

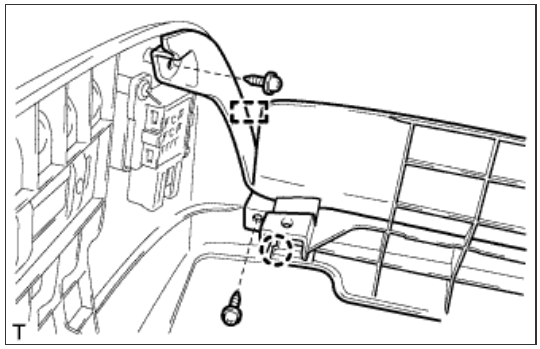


7. INSTALL FRONT INNER NO. 1 SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the claw and guide to install the cushion shield.

ii. Install the 2 screws.



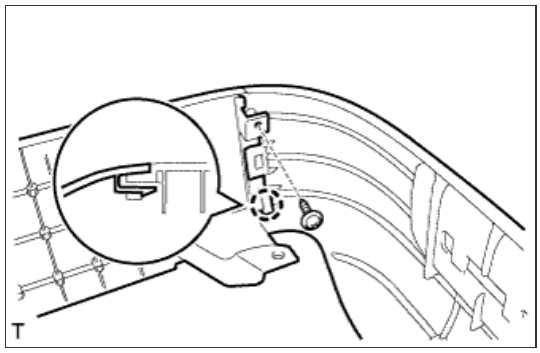
b. for Front Passenger Side:

i. Attach the claw to install the cushion shield.

ii. Install the screw.

c. Attach the claw to install the cushion shield.

d. Install the screw.



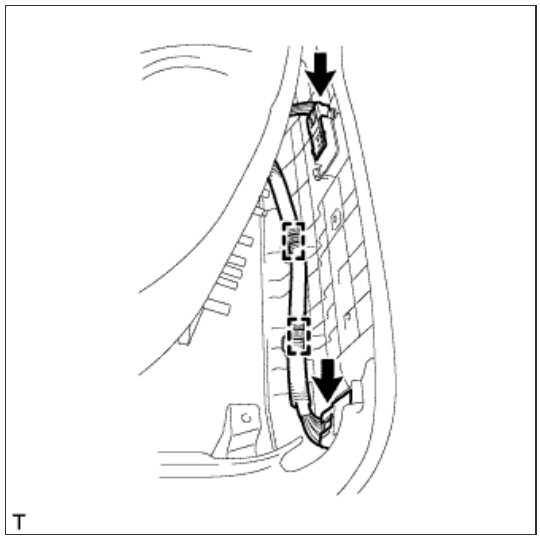
8. INSTALL FRONT SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

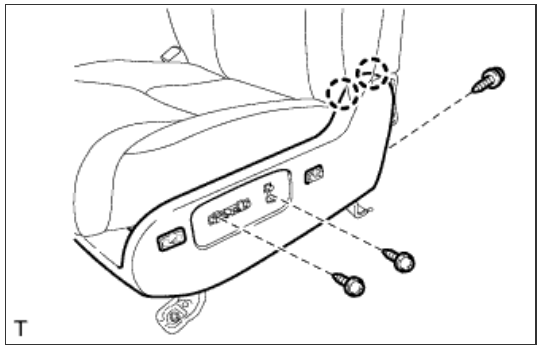
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

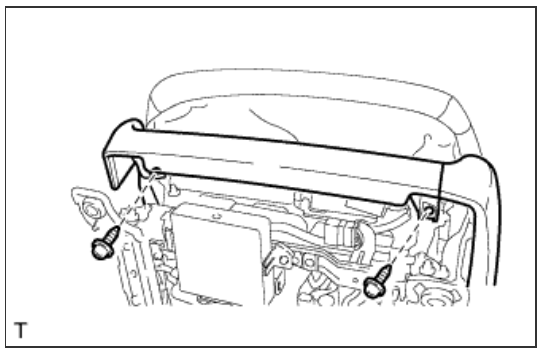


c. Attach the 2 claws to install the cushion shield.

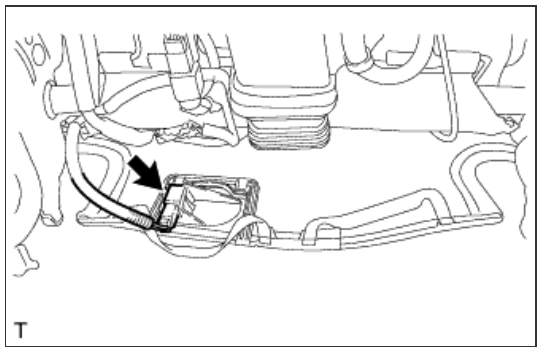
d. Install the 3 screws.



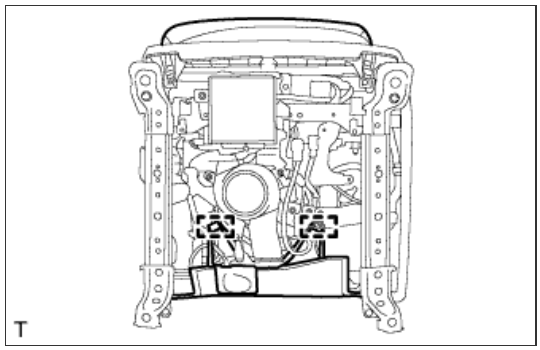
e. Install the 2 screws.



f. Connect the interior illumination light connector.

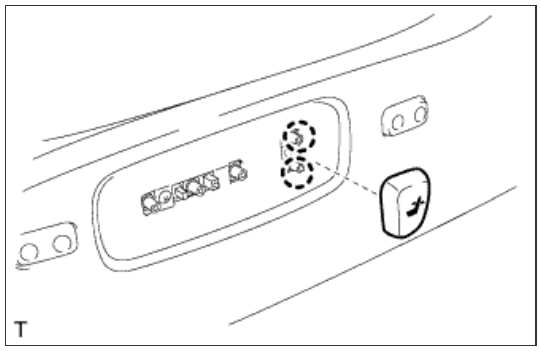


g. Attach the 2 rubber bands to the hooks.



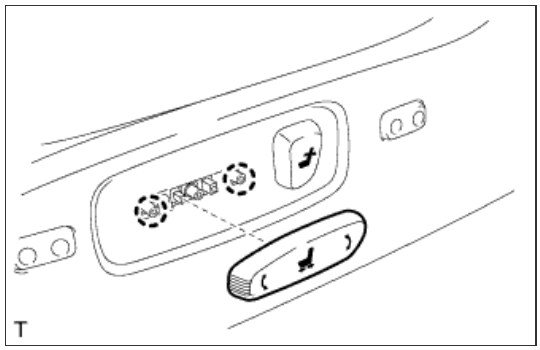
9. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



10. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



11. INSTALL FRONT SEAT ASSEMBLY LH

a. Install the front seat assembly LH (Click here).

for Preparation Click here

CAUTION:

Before deploying any SRS components for disposal, carefully review and follow all applicable environmental and hazardous material regulations. Depending on the area, deployment of SRS components before disposal may be considered treatment of hazardous materials, which may require special training, certification or licensing.

1. PRECAUTION

HINT:

When scrapping a vehicle equipped with the SRS or disposing of the steering pad, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of the DISTRIBUTOR..

CAUTION:

- **Never dispose of a front seat side airbag that has an unactivated airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors and where it will not create a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (32.8 ft.) away from the airbag.**
- **The front seat side airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front seat side airbag with a deployed airbag.**
- **Do not apply water to a front seat side airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**
- **An airbag or pretensioner may be activated by static electricity. To prevent this, be sure to touch a metal surface with bare hands to discharge static electricity before performing this procedure.**

2. DISPOSE OF FRONT SEAT SIDE AIRBAG ASSEMBLY (WHEN INSTALLED IN VEHICLE)

HINT:

Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

b. Read the precaution (Click here).

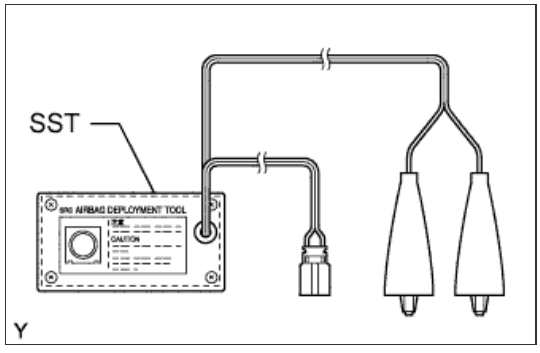
c. Disconnect the cable from the negative (-) battery terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).



d. Remove the front seat (Click here).

HINT:

Keep the front seat in the cabin.

e. Install SST.

i. Disconnect the connector (yellow colored) from the front seat side

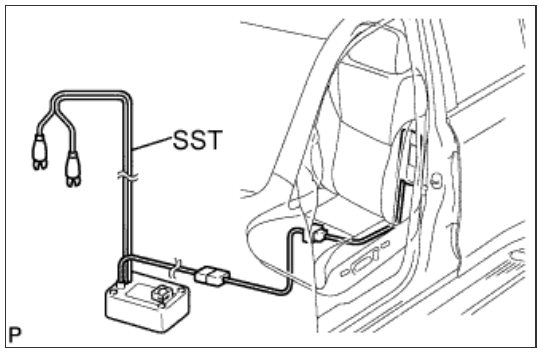
airbag.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

ii. Connect SST connector to the front seat side airbag connector.

SST
09082-00700
09082-00820



NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock.

iii. Install the front seat (Click here).

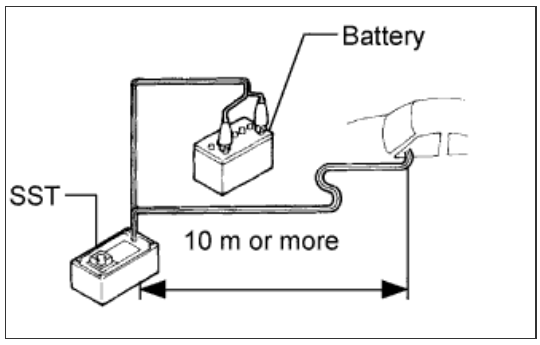
iv. Move SST at least 10 m (32.8 ft.) away from the vehicle front side window.

v. Maintaining enough clearance for SST wire harness in the front side window, close all doors and windows of the vehicle.

NOTICE:

Take care not to damage SST wire harness.

vi. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.



f. Deploy the airbag.

i. Check that no one is inside the vehicle or within a 10 m (32.8 ft.) radius of the vehicle.

ii. Press SST activation switch to deploy the airbag.

CAUTION:

- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The front seat side airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front seat side airbag with a deployed airbag.**
- **Do not apply water to a front seat side airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:

The airbag is deployed as the LED of SST activation switch comes on.

3. DISPOSE OF FRONT SEAT SIDE AIRBAG ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)

NOTICE:

Be sure to follow the procedure detailed below when deploying the airbag.

HINT:

Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

b. Remove the front seat side airbag.

i. Remove the front seat (Click here).

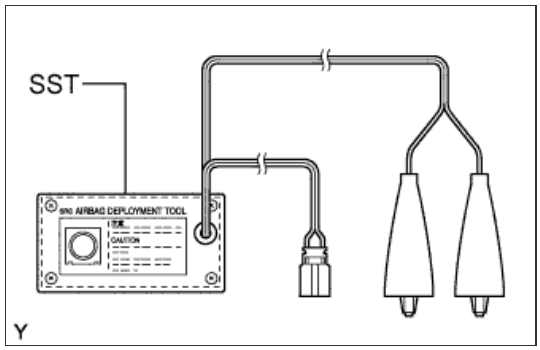
ii. Remove the 2 nuts and the front seat side airbag from the seatback.

CAUTION:

- **When removing the front seat side airbag, wait at**

least 90 seconds after the engine switch is turned off and the cable is disconnected from the negative (-) battery terminal before starting work.

- **When storing the front seat side airbag, keep the airbag deployment side facing upward.**

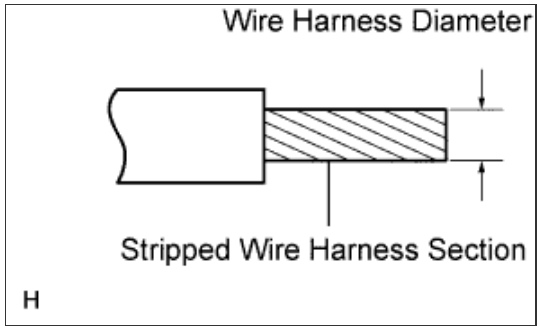


c. Using a service-purpose wire harness for the vehicle, tie down the front seat side airbag to a tire.

Cross-sectional area of stripped wire harness section:
1.25 mm^2 (0.00192 in.^{2}) or more

CAUTION:

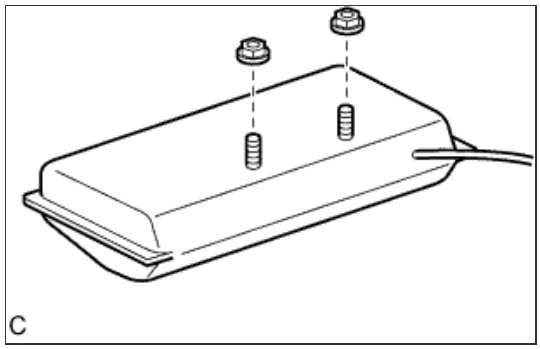
If the wire harness is too thin or an alternative object is used to tie down the front seat side airbag, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with a cross-sectional area of at least 1.25 mm^2 (0.00192 in.^{2}).



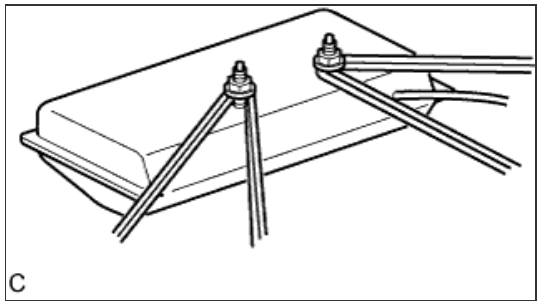
HINT:

To calculate the cross-sectional area of the stripped wire harness section: Cross-sectional area = 3.14 x (Diameter) ^{2} divided by 4

i. Install the 2 nuts to the front seat side airbag.



ii. Wind the wire harness around the stud bolts of the front seat side airbag as shown in the illustration.



iii. Position the front seat side airbag inside a tire.

Tire size:
Must exceed the following dimensions
Width:
185 mm (7.28 in.)
Inner diameter:
360 mm (14.2 in.)

CAUTION:

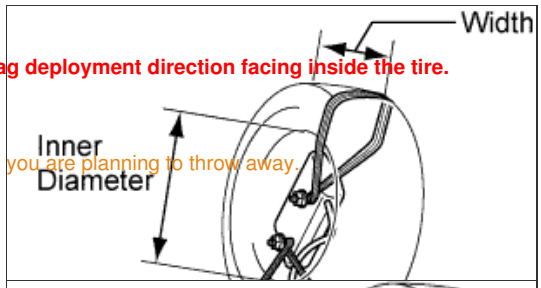
- **Make sure that the wire harnesses are tight. If there is slack in the wire harnesses, the front seat side airbag may become loose due to the shock when the airbag**

is deployed.

- **Always tie down the front seat side airbag with the airbag deployment direction facing inside the tire.**

NOTICE:

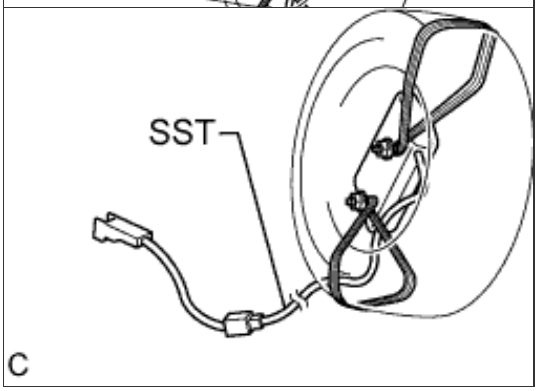
As the tire may be damaged by the airbag deployment, use a tire that you are planning to throw away.



d. Install SST.

i. Connect SST connector to the front seat side airbag connector.

SST
09082-00820



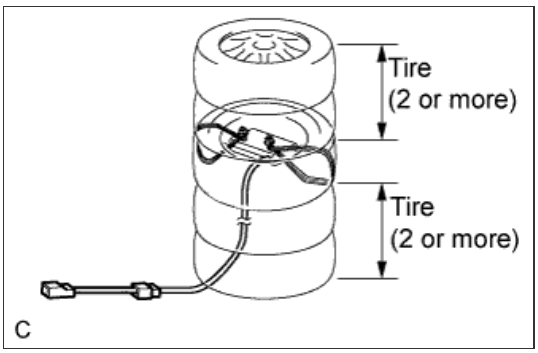
e. Place tires.

i. Place at least 2 tires under the tire which the front seat side airbag is tied to.

ii. Place at least 2 tires over the tire which the front seat side airbag is tied to. The top tire should have a disc wheel installed.

NOTICE:

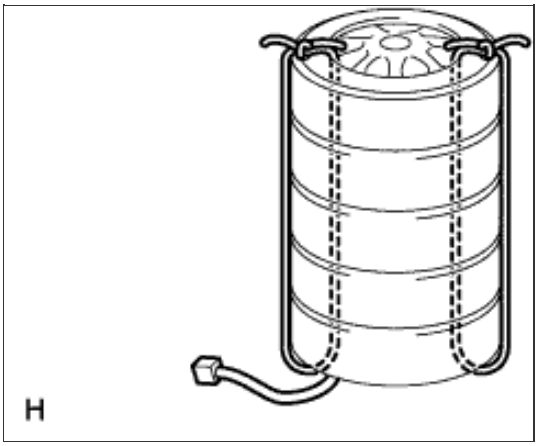
- **Do not place SST connector under the tire because it could be damaged.**
- **As the disc wheel may be damaged by the airbag deployment, use a disc wheel that you are planning to throw away.**
- **As the tires may be damaged by the airbag deployment, use tires that you are planning to throw away.**



iii. Tie the tires together with 2 wire harnesses.

CAUTION:

Make sure that the wire harnesses are tight. Looseness in the wire harnesses results in the tires coming free due to the shock when the airbag is deployed.



f. Install SST.

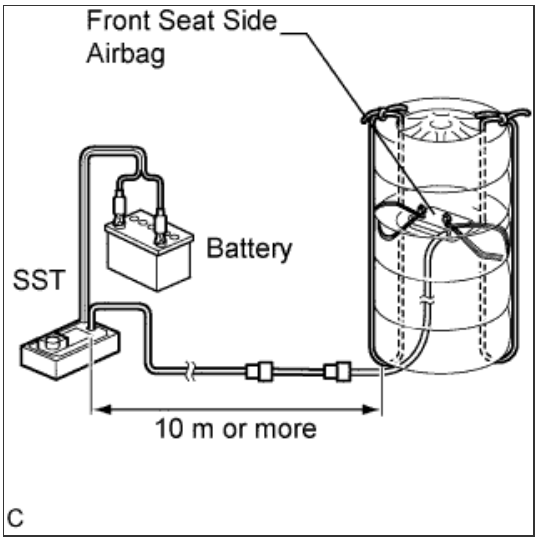
i. Connect SST connector.

SST
09082-00700

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for

SST wire harness inside the tire.



g. Deploy the airbag.

i. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.

ii. Check that no one is within a 10 m (32.8 ft.) radius of the tire which the front seat side airbag is tied to.

iii. Press SST activation switch to deploy the airbag.

CAUTION:

When deploying the airbag, make sure that no one is near the tire.

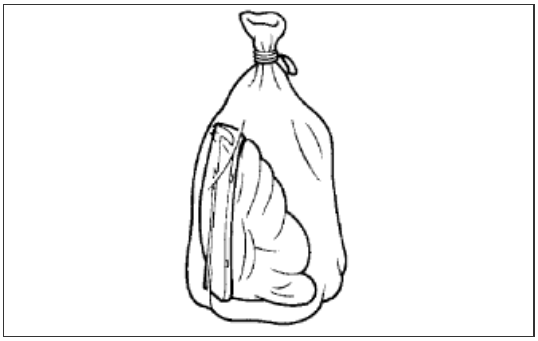
HINT:

The airbag is deployed as the LED of SST activation switch comes on.

h. Dispose of the front seat side airbag.

CAUTION:

- **The front seat side airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a front seat side airbag with a deployed airbag.**
- **Do not apply water to a front seat side airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**



i. Remove the front seat side airbag from the tire.

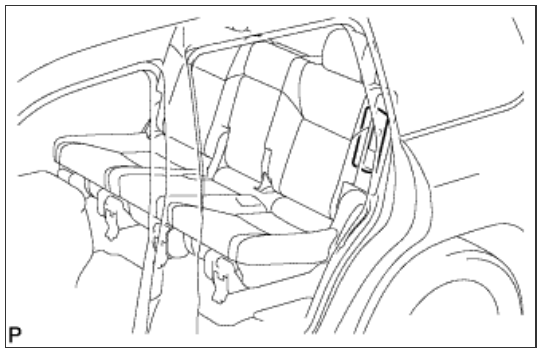
ii. Place the front seat side airbag in a plastic bag, tie it tightly and dispose of it in the same way as other general parts.

for Preparation Click here

1. CHECK REAR SEAT SIDE AIRBAG ASSEMBLY (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

b. With the rear seat side airbag installed on the vehicle, perform a visual check. If there are any defects as mentioned below, replace the rear seat with a new one: Cuts, minute cracks or marked discoloration on the rear seatback around the rear seat side airbag.

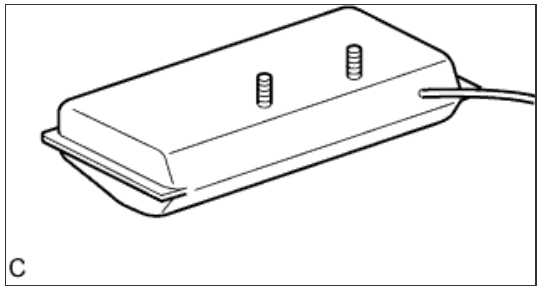


2. CHECK REAR SEAT SIDE AIRBAG ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

a. Perform a diagnostic system check (Click here).

b. With the rear seat side airbag removed from the vehicle, perform a visual check. If there are any defects as mentioned below, replace the rear seat side airbag with a new one:

- Cuts, minute cracks or marked discoloration on the rear seat side airbag.
- Cracks or other damage to the wire harness or connector.



NOTICE:

For removal and installation procedures of the rear seat side airbag, be sure to follow the correct procedure.

for Preparation Click here

CAUTION:

Before deploying any SRS components for disposal, carefully review and follow all applicable environmental and hazardous material regulations. Depending on the area, deployment of SRS components before disposal may be considered treatment of hazardous materials, which may require special training, certification or licensing.

1. PRECAUTION

HINT:

When scrapping a vehicle equipped with the SRS or disposing of the steering pad, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of the DISTRIBUTOR..

CAUTION:

- **Never dispose of a rear seat side airbag that has an unactivated airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors and where it will not create a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (32.8 ft.) away from the airbag.**
- **The rear seat side airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a rear seat side airbag with a deployed airbag.**
- **Do not apply water to a rear seat side airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**
- **An airbag or pretensioner may be activated by static electricity. To prevent this, be sure to touch a metal surface with bare hands to discharge static electricity before performing this procedure.**

2. DISPOSE OF REAR SEAT SIDE AIRBAG ASSEMBLY (WHEN INSTALLED IN VEHICLE)

HINT:

Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

b. Read the precaution (Click here).

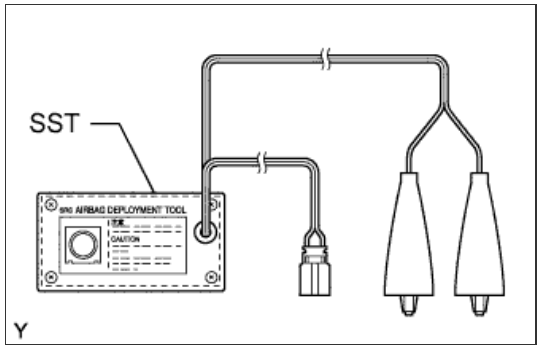
c. Disconnect the cable from the negative (-) battery terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).



d. Remove the rear seat (Click here).

HINT:

Keep the rear seat in the cabin.

e. Install SST.

i. Disconnect the connector (yellow colored) from the rear seat side

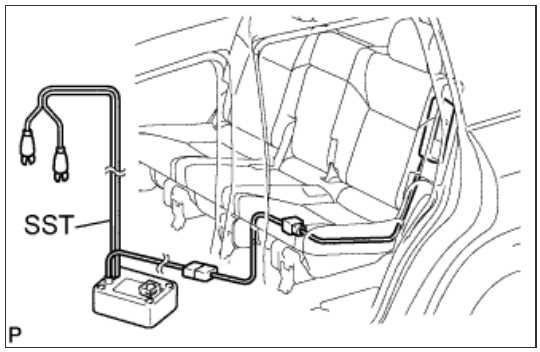
airbag.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

ii. Connect SST connector to the rear seat side airbag connector.

SST
09082-00700
09082-00820



NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock.

iii. Install the rear seat (Click here).

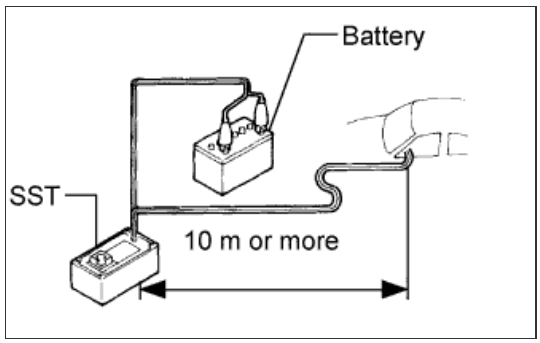
iv. Move SST at least 10 m (32.8 ft.) away from the vehicle front side window.

v. Maintaining enough clearance for SST wire harness in the front side window, close all doors and windows of the vehicle.

NOTICE:

Take care not to damage SST wire harness.

vi. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.



f. Deploy the airbag.

i. Check that no one is inside the vehicle or within a 10 m (32.8 ft.) radius of the vehicle.

ii. Press SST activation switch to deploy the airbag.

CAUTION:

- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The rear seat side airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a rear seat side airbag with a deployed airbag.**
- **Do not apply water to a rear seat side airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:

The airbag is deployed as the LED of SST activation switch comes on.

3. DISPOSE OF REAR SEAT SIDE AIRBAG ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)

NOTICE:

Be sure to follow the procedure detailed below when deploying the airbag.

HINT:

Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

b. Remove the rear seat side airbag.

i. Remove the rear seat (Click here).

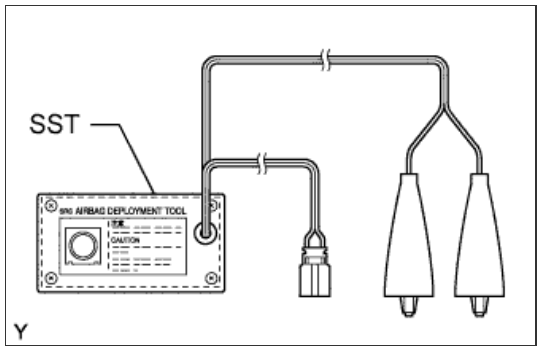
ii. Remove the 2 nuts and the rear seat side airbag from the seatback.

CAUTION:

- **When removing the rear seat side airbag, wait at least**

90 seconds after the engine switch is turned off and the cable is disconnected from the negative (-) battery terminal before starting work.

- **When storing the rear seat side airbag, keep the airbag deployment side facing upward.**

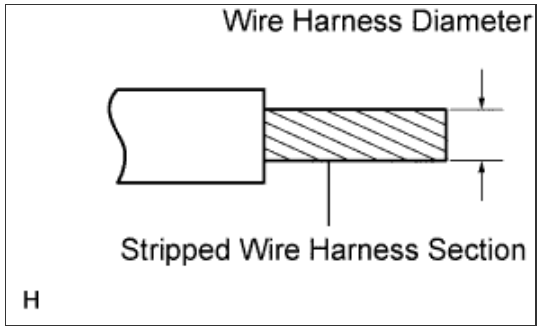


c. Using a service-purpose wire harness for the vehicle, tie down the rear seat side airbag to a tire.

Cross-sectional area of stripped wire harness section:
1.25 mm^2 (0.00192 in.^{2}) or more

CAUTION:

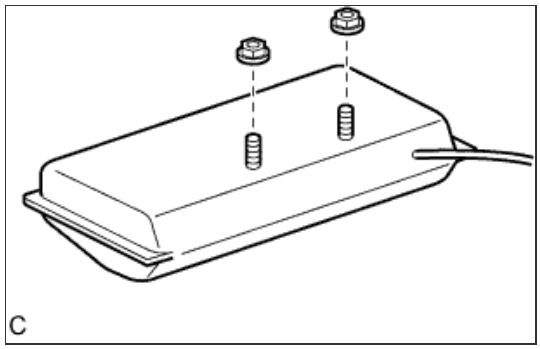
If the wire harness is too thin or an alternative object is used to tie down the rear seat side airbag, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with a cross-sectional area of at least 1.25 mm^2 (0.00192 in.^{2}).



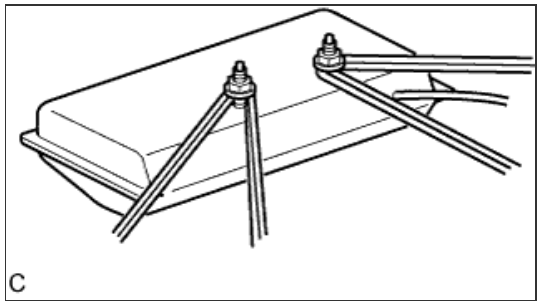
HINT:

To calculate the cross-sectional area of the stripped wire harness section: Cross-sectional area = 3.14 x (Diameter) ^{2} divided by 4

i. Install the 2 nuts to the rear seat side airbag.



ii. Wind the wire harness around the stud bolts of the rear seat side airbag as shown in the illustration.



iii. Position the rear seat side airbag inside a tire.

Tire size:
Must exceed the following dimensions
Width:
185 mm (7.28 in.)
Inner diameter:
360 mm (14.2 in.)

CAUTION:

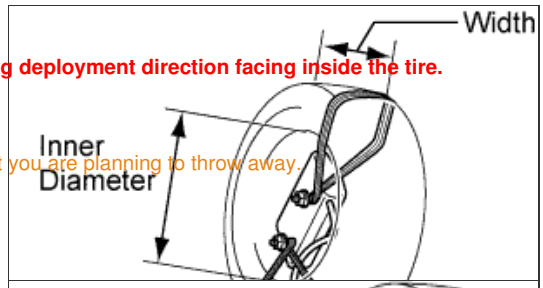
- **Make sure that the wire harnesses are tight. If there is slack in the wire harnesses, the rear seat side airbag may become loose due to the shock when the airbag**

is deployed.

- **Always tie down the rear seat side airbag with the airbag deployment direction facing inside the tire.**

NOTICE:

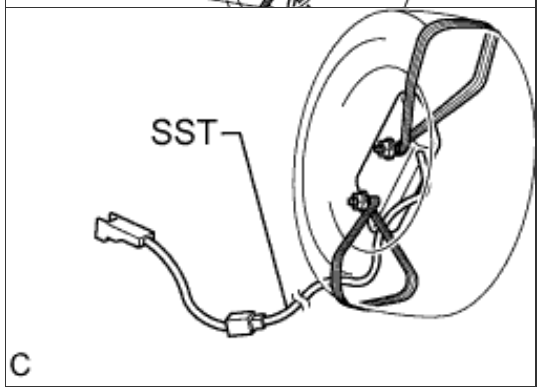
As the tire may be damaged by the airbag deployment, use a tire that you are planning to throw away.



d. Install SST.

i. Connect SST connector to the rear seat side airbag connector.

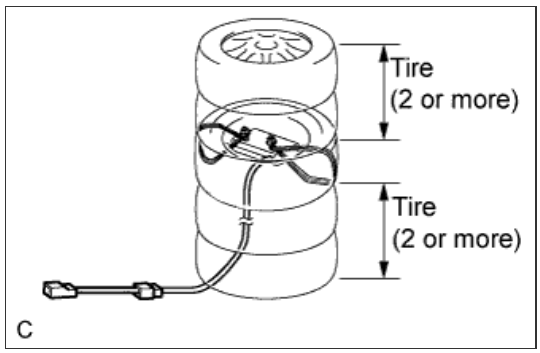
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e. Place tires.

i. Place at least 2 tires under the tire which the rear seat side airbag is tied to.

ii. Place at least 2 tires over the tire which the rear seat side airbag is tied to. The top tire should have a disc wheel installed.



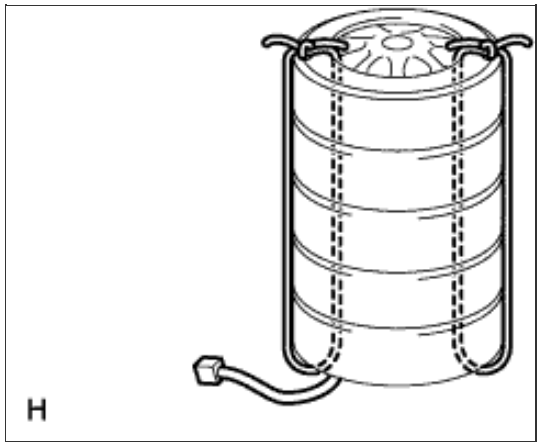
NOTICE:

- **Do not place SST connector under the tire because it could be damaged.**
- **As the disc wheel may be damaged by the airbag deployment, use a disc wheel that you are planning to throw away.**
- **As the tires may be damaged by the airbag deployment, use tires that you are planning to throw away.**

iii. Tie the tires together with 2 wire harnesses.

CAUTION:

Make sure that the wire harnesses are tight. Looseness in the wire harnesses results in the tires coming free due to the shock when the airbag is deployed.



f. Install SST.

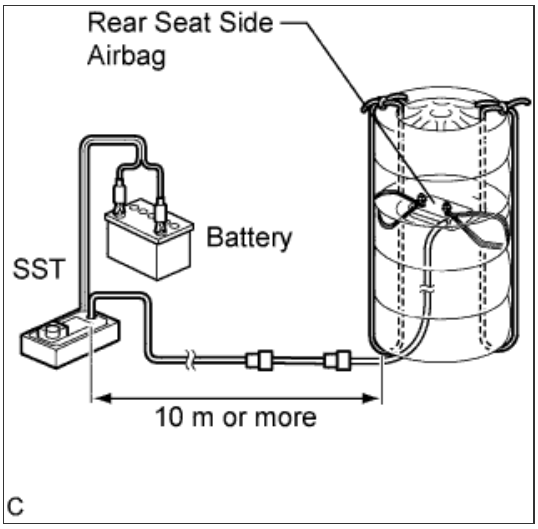
i. Connect SST connector.

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09082-00700

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for

SST wire harness inside the tire.



g. Deploy the airbag.

i. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.

ii. Check that no one is within a 10 m (32.8 ft.) radius of the tire which the rear seat side airbag is tied to.

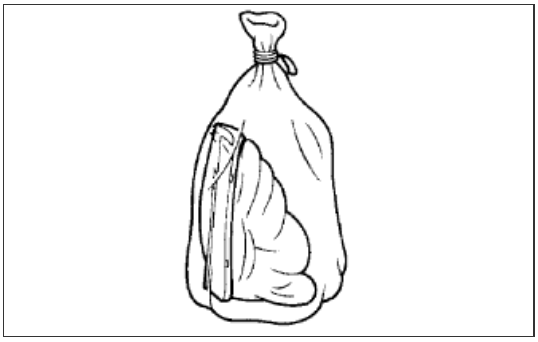
iii. Press SST activation switch to deploy the airbag.

CAUTION:

When deploying the airbag, make sure that no one is near the tire.

HINT:

The airbag is deployed as the LED of SST activation switch comes on.



h. Dispose of the rear seat side airbag.

CAUTION:

- **The rear seat side airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a rear seat side airbag with a deployed airbag.**
- **Do not apply water to a rear seat side airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

i. Remove the rear seat side airbag from the tire.

ii. Place the rear seat side airbag in a plastic bag, tie it tightly and dispose of it in the same way as other general parts.

for Preparation Click here

CAUTION:

Before deploying any SRS components for disposal, carefully review and follow all applicable environmental and hazardous material regulations. Depending on the area, deployment of SRS components before disposal may be considered treatment of hazardous materials, which may require special training, certification or licensing.

1. PRECAUTION

HINT:

When scrapping a vehicle equipped with the SRS or disposing of the steering pad, be sure to deploy the airbag first in accordance with the procedure described below. If any abnormality occurs with the airbag deployment, contact the SERVICE DEPT. of the DISTRIBUTOR..

CAUTION:

- **Never dispose of a rear seat side airbag that has an unactivated airbag.**
- **The airbag produces an exploding sound when it is deployed, so perform the operation outdoors and where it will not create a nuisance to nearby residents.**
- **When deploying the airbag, always use the specified SST (SRS Airbag Deployment Tool). Perform the operation in a place away from electrical noise.**
- **When deploying the airbag, perform the operation at least 10 m (32.8 ft.) away from the airbag.**
- **The rear seat side airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a rear seat side airbag with a deployed airbag.**
- **Do not apply water to a rear seat side airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**
- **An airbag or pretensioner may be activated by static electricity. To prevent this, be sure to touch a metal surface with bare hands to discharge static electricity before performing this procedure.**

2. DISPOSE OF REAR SEAT SIDE AIRBAG ASSEMBLY (WHEN INSTALLED IN VEHICLE)

HINT:

Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

b. Read the precaution (Click here).

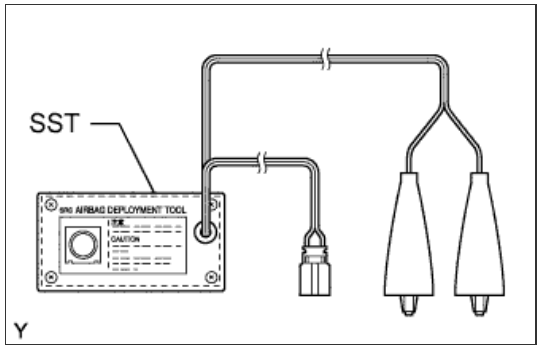
c. Disconnect the cable from the negative (-) battery terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).



d. Remove the rear seat (Click here).

HINT:

Keep the rear seat in the cabin.

e. Install SST.

i. Disconnect the connector (yellow colored) from the rear seat side

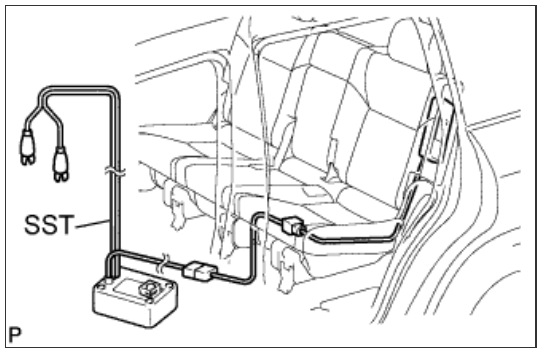
airbag.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

ii. Connect SST connector to the rear seat side airbag connector.

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09082-00700
09082-00820



NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock.

iii. Install the rear seat (Click here).

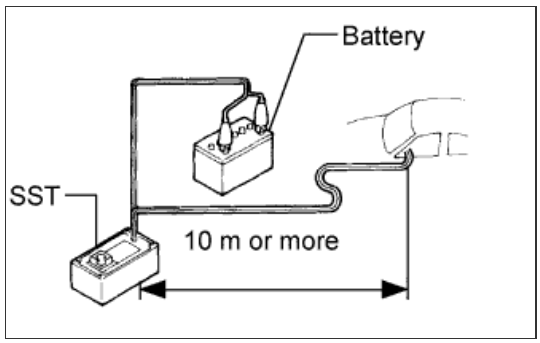
iv. Move SST at least 10 m (32.8 ft.) away from the vehicle front side window.

v. Maintaining enough clearance for SST wire harness in the front side window, close all doors and windows of the vehicle.

NOTICE:

Take care not to damage SST wire harness.

vi. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.



f. Deploy the airbag.

i. Check that no one is inside the vehicle or within a 10 m (32.8 ft.) radius of the vehicle.

ii. Press SST activation switch to deploy the airbag.

CAUTION:

- **When deploying the airbag, make sure that no one is near the vehicle.**
- **The rear seat side airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a rear seat side airbag with a deployed airbag.**
- **Do not apply water to a rear seat side airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

HINT:

The airbag is deployed as the LED of SST activation switch comes on.

3. DISPOSE OF REAR SEAT SIDE AIRBAG ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)

NOTICE:

Be sure to follow the procedure detailed below when deploying the airbag.

HINT:

Prepare a battery as the power source to deploy the airbag.

a. Check the function of SST (Click here).

b. Remove the rear seat side airbag.

i. Remove the rear seat (Click here).

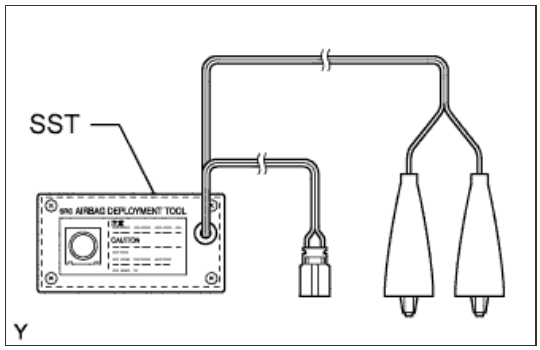
ii. Remove the 2 nuts and the rear seat side airbag from the seatback.

CAUTION:

- **When removing the rear seat side airbag, wait at least**

90 seconds after the engine switch is turned off and the cable is disconnected from the negative (-) battery terminal before starting work.

- **When storing the rear seat side airbag, keep the airbag deployment side facing upward.**

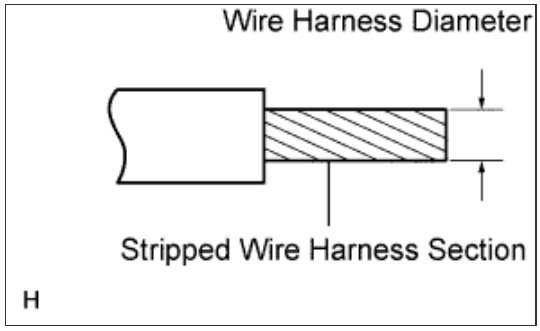


c. Using a service-purpose wire harness for the vehicle, tie down the rear seat side airbag to a tire.

Cross-sectional area of stripped wire harness section:
1.25 mm^2 (0.00192 in.^{2}) or more

CAUTION:

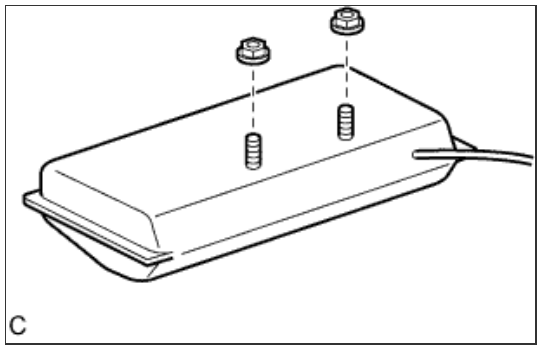
If the wire harness is too thin or an alternative object is used to tie down the rear seat side airbag, it may be snapped by the shock when the airbag is deployed. Always use a wire harness for vehicle use with a cross-sectional area of at least 1.25 mm^2 (0.00192 in.^{2}).



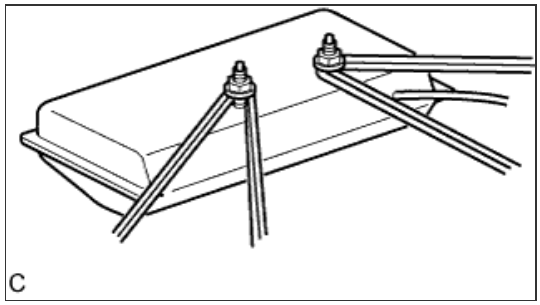
HINT:

To calculate the cross-sectional area of the stripped wire harness section: Cross-sectional area = 3.14 x (Diameter) ^{2} divided by 4

i. Install the 2 nuts to the rear seat side airbag.



ii. Wind the wire harness around the stud bolts of the rear seat side airbag as shown in the illustration.



iii. Position the rear seat side airbag inside a tire.

Tire size:
Must exceed the following dimensions
Width:
185 mm (7.28 in.)
Inner diameter:
360 mm (14.2 in.)

CAUTION:

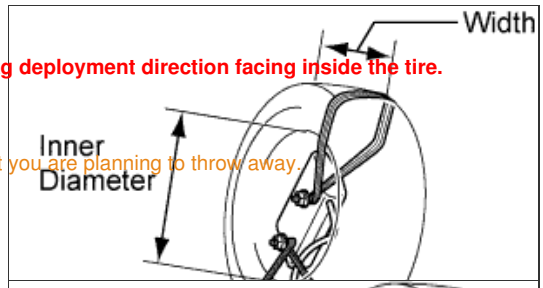
- **Make sure that the wire harnesses are tight. If there is slack in the wire harnesses, the rear seat side airbag may become loose due to the shock when the airbag**

is deployed.

- **Always tie down the rear seat side airbag with the airbag deployment direction facing inside the tire.**

NOTICE:

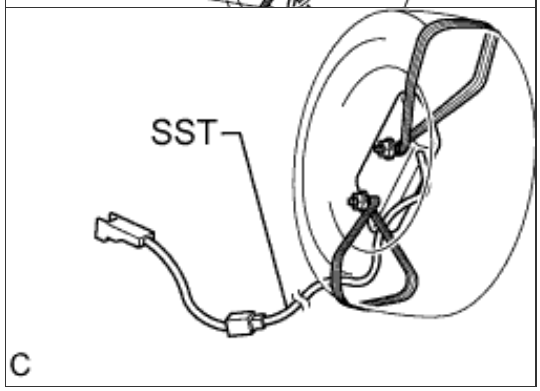
As the tire may be damaged by the airbag deployment, use a tire that you are planning to throw away.



d. Install SST.

i. Connect SST connector to the rear seat side airbag connector.

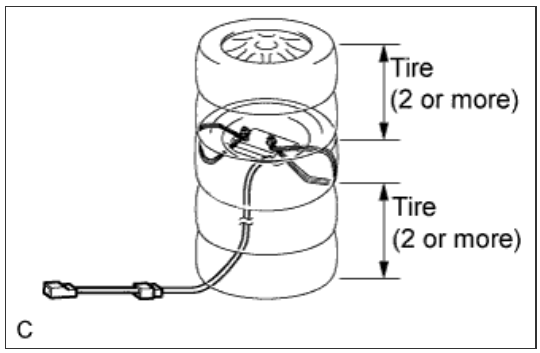
SST
09082-00820



e. Place tires.

i. Place at least 2 tires under the tire which the rear seat side airbag is tied to.

ii. Place at least 2 tires over the tire which the rear seat side airbag is tied to. The top tire should have a disc wheel installed.



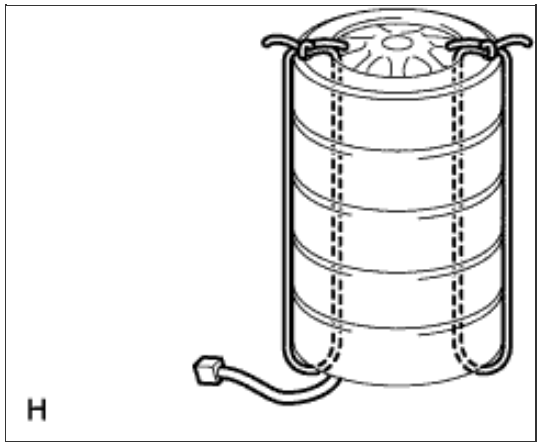
NOTICE:

- **Do not place SST connector under the tire because it could be damaged.**
- **As the disc wheel may be damaged by the airbag deployment, use a disc wheel that you are planning to throw away.**
- **As the tires may be damaged by the airbag deployment, use tires that you are planning to throw away.**

iii. Tie the tires together with 2 wire harnesses.

CAUTION:

Make sure that the wire harnesses are tight. Looseness in the wire harnesses results in the tires coming free due to the shock when the airbag is deployed.



f. Install SST.

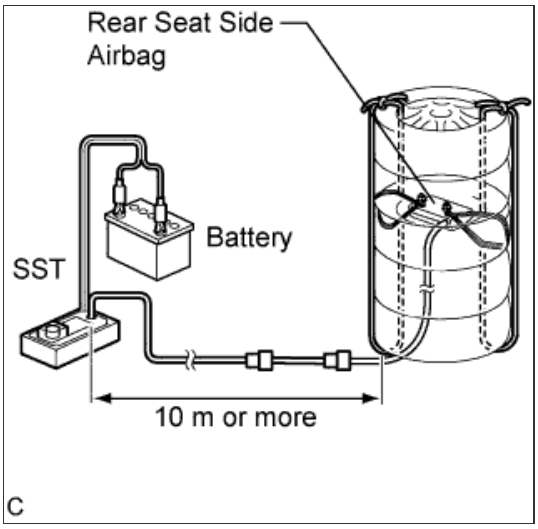
i. Connect SST connector.

SST
09082-00700

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock. Also, secure some slack for

SST wire harness inside the tire.



g. Deploy the airbag.

i. Connect the red clip of SST to the battery positive (+) terminal and the black clip of SST to the battery negative (-) terminal.

ii. Check that no one is within a 10 m (32.8 ft.) radius of the tire which the rear seat side airbag is tied to.

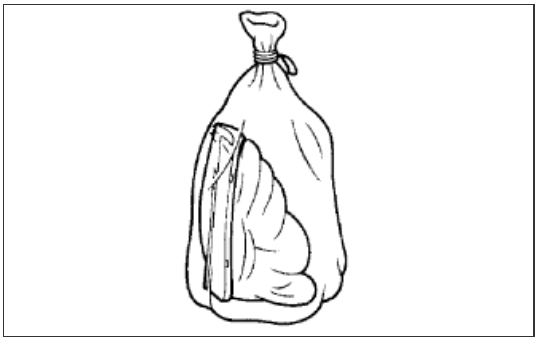
iii. Press SST activation switch to deploy the airbag.

CAUTION:

When deploying the airbag, make sure that no one is near the tire.

HINT:

The airbag is deployed as the LED of SST activation switch comes on.



h. Dispose of the rear seat side airbag.

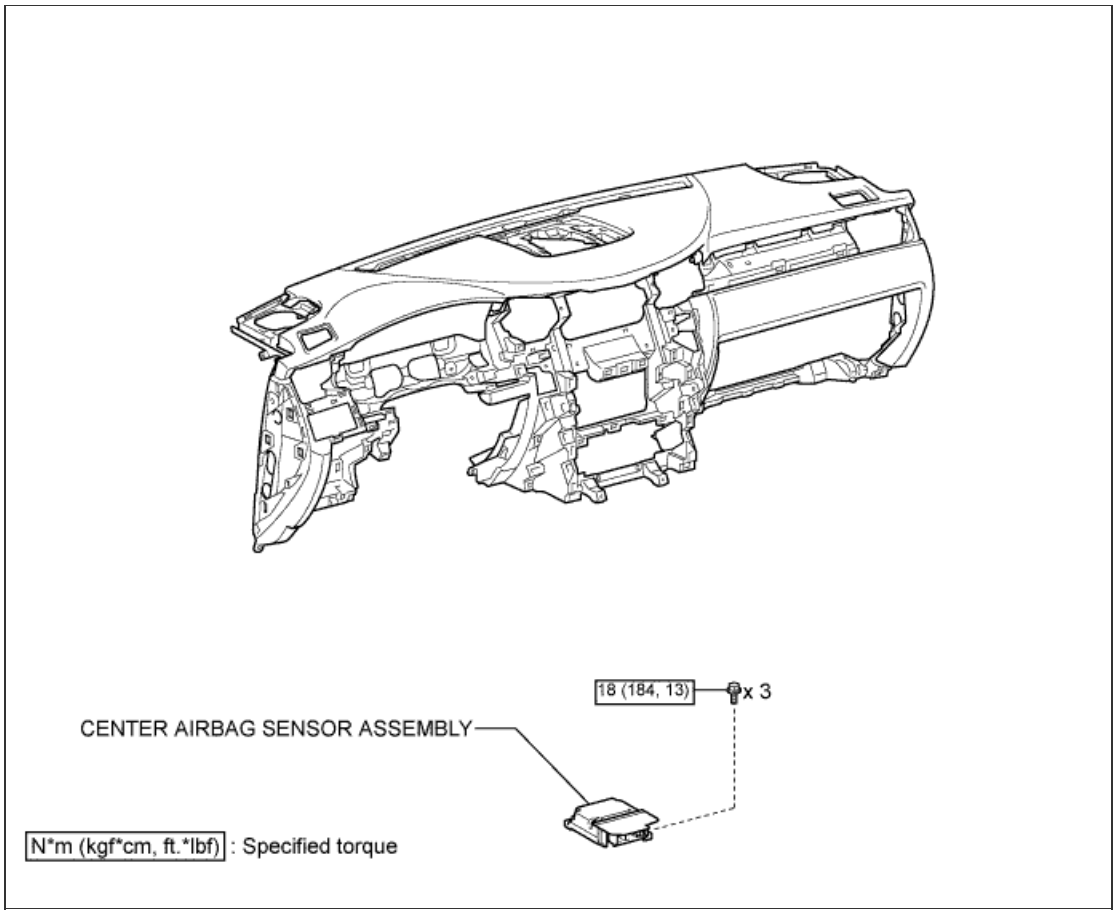
CAUTION:

- **The rear seat side airbag becomes extremely hot when the airbag is deployed, so do not touch it for at least 30 minutes after deployment.**
- **Use gloves and safety glasses when handling a rear seat side airbag with a deployed airbag.**
- **Do not apply water to a rear seat side airbag with a deployed airbag.**
- **Always wash your hands with water after completing the operation.**

i. Remove the rear seat side airbag from the tire.

ii. Place the rear seat side airbag in a plastic bag, tie it tightly and dispose of it in the same way as other general parts.

for Preparation Click here



for Preparation Click here

1. CHECK CENTER AIRBAG SENSOR ASSEMBLY (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

2. CHECK CENTER AIRBAG SENSOR ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

a. Perform a diagnostic system check (Click here).

3. CHECK CENTER AIRBAG SENSOR ASSEMBLY (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)

a. Replace the center airbag sensor.

CAUTION:

For removal and installation procedures of the center airbag sensor, be sure to follow the correct procedure.

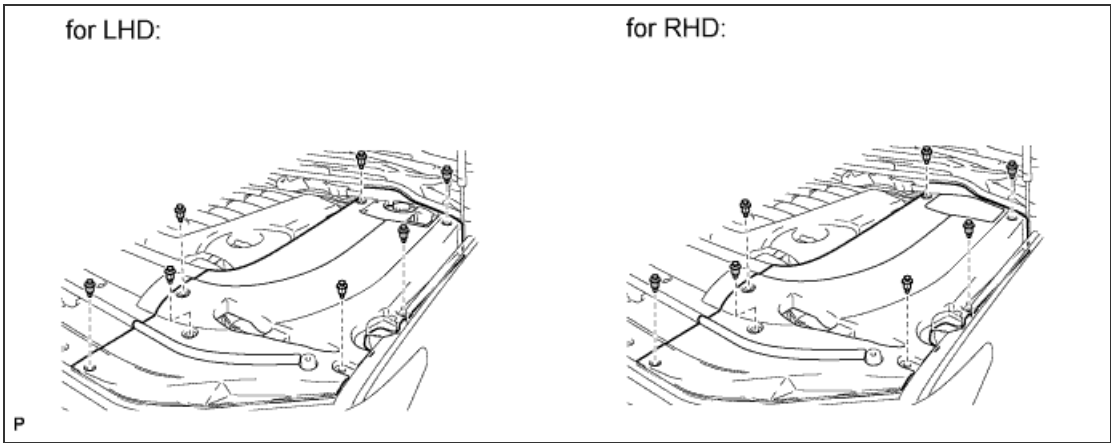
HINT:

The center airbag sensor should be replaced after any of the airbags has deployed, as it have been subjected to the impact.

for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

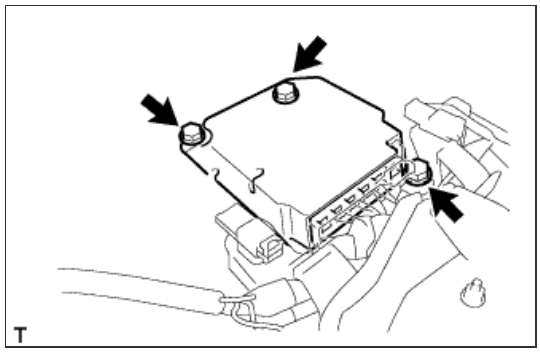
3. REMOVE FRONT AIR CONDITIONING UNIT

a. Remove the front air conditioning unit (Click here).

4. REMOVE CENTER AIRBAG SENSOR ASSEMBLY

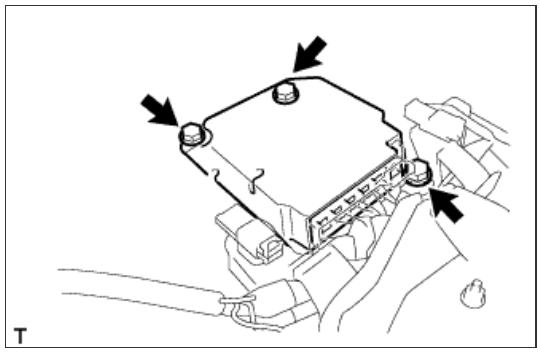
a. Disconnect the holder (with connectors).

b. Remove the 3 bolts and airbag sensor.



for Preparation Click here

1. INSTALL CENTER AIRBAG SENSOR ASSEMBLY



a. Check that the engine switch is off.

b. Check that the cable is disconnected from the battery negative (-) terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

c. Install the airbag sensor with the 3 bolts.

Torque:
18 N*m{ 184 kgf*cm , 13 ft.*lbf }

NOTICE:

- **If the center airbag sensor has been dropped, or there are any cracks, dents or other defects in the case, bracket or connector, replace it with a new one.**
- **When installing the center airbag sensor, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**

d. Check that there is no looseness in the installation parts of the center airbag sensor.

e. Connect the holder (with connectors).

f. Check that the waterproof sheet is properly set.

2. INSTALL FRONT AIR CONDITIONING UNIT

a. Install the front air conditioning unit (Click here).

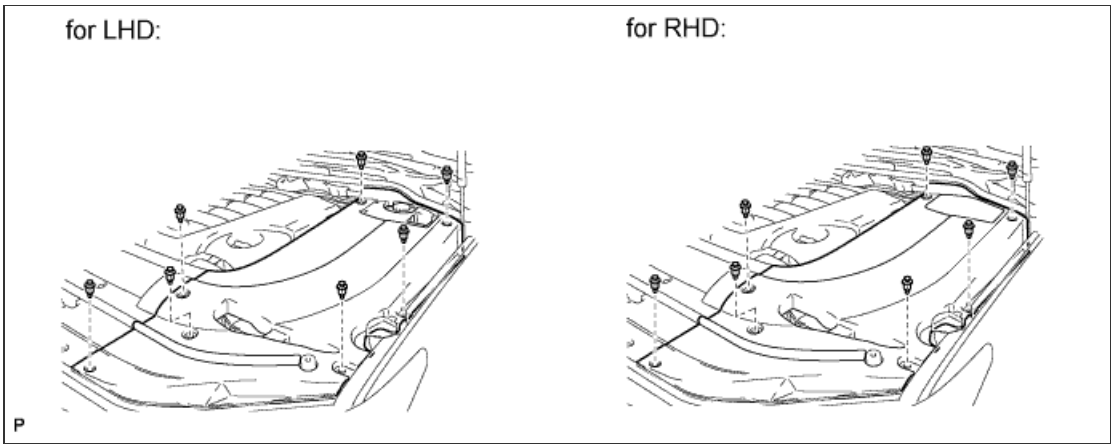
3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

4. INSTALL ENGINE ROOM SIDE COVER LH

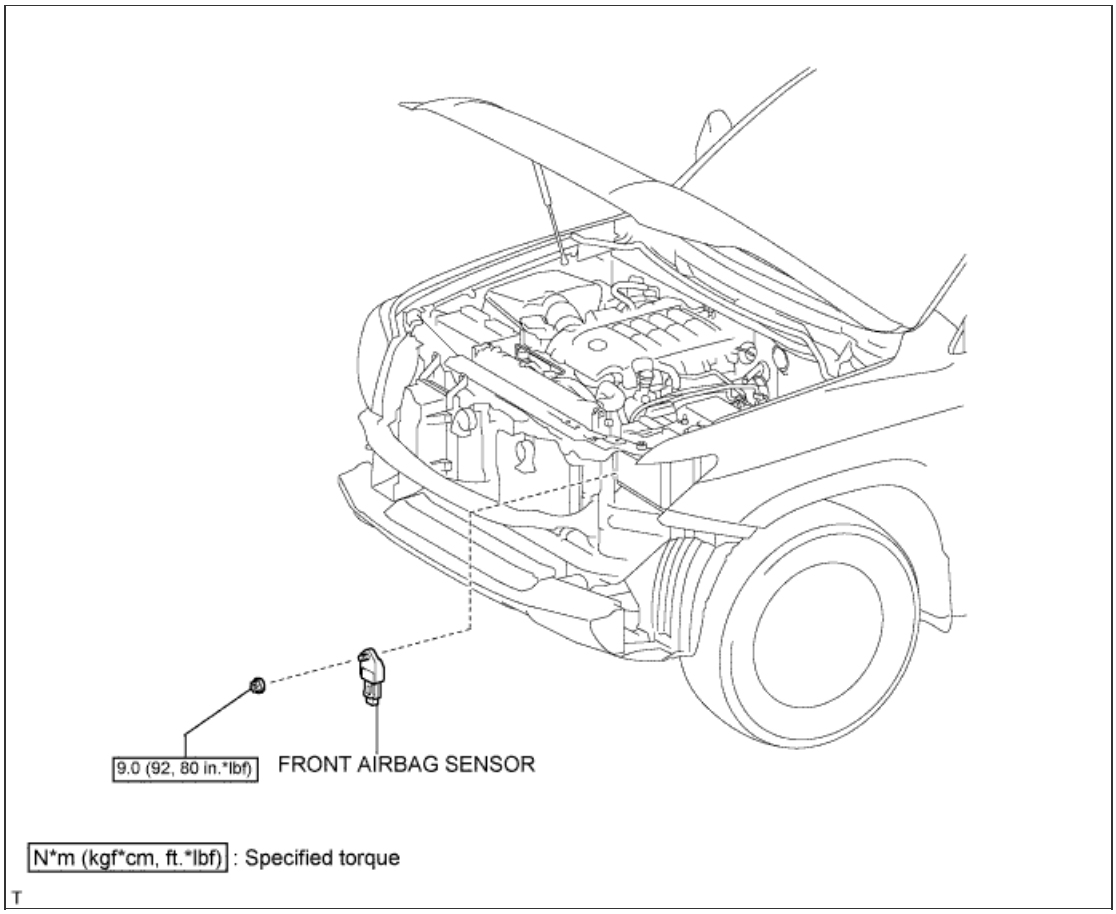
a. Install the engine room side cover with the 7 clips.



5. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here



for Preparation Click here

1. CHECK FRONT AIRBAG SENSOR (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

2. CHECK FRONT AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

a. Perform a diagnostic system check (Click here).

b. When the front bumper of the vehicle or its area is damaged, check if there is any damage to the front airbag sensor. If the front airbag sensor has defects as mentioned below, replace it with a new one:

- Cracks, dents or chips on the sensor housing.
- Cracks or other damage to the connector.
- Peeling off of the label or damage to the serial number.

CAUTION:

For removal and installation procedures of the front airbag sensor, be sure to follow the correct procedure.

3. CHECK FRONT AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)

a. When airbags have deployed as the result of a collision, be certain to replace the front airbag sensor when it is in the damaged area (anywhere in need of repair). Furthermore, it is also necessary to replace the front airbag sensor in an undamaged area that has registered a major collision, or which exhibits any of the following abnormalities:

- Cracks, dents or chips on the sensor housing.
- Cracks or other damage to the connector.
- Peeling off of the label or damage to the serial number.

CAUTION:

For removal and installation procedures of the front airbag sensor, be sure to follow the correct procedure.

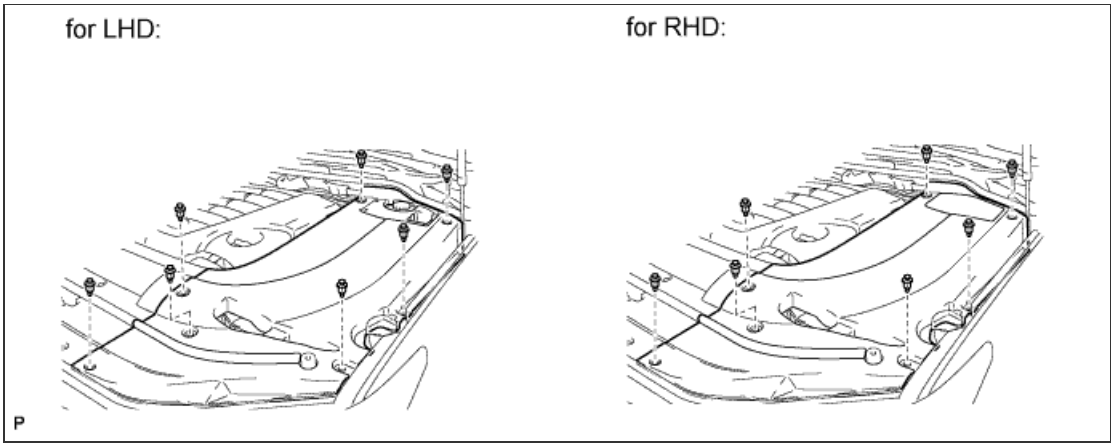
for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

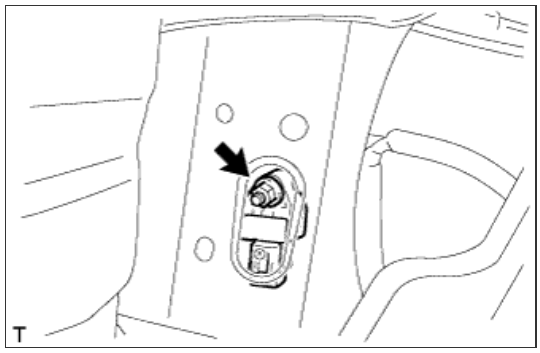
3. REMOVE HEADLIGHT ASSEMBLY

a. Remove the headlight assembly (Click here).

4. REMOVE FRONT AIRBAG SENSOR

a. Remove the nut and front airbag sensor from the body.

b. Disconnect the connector.

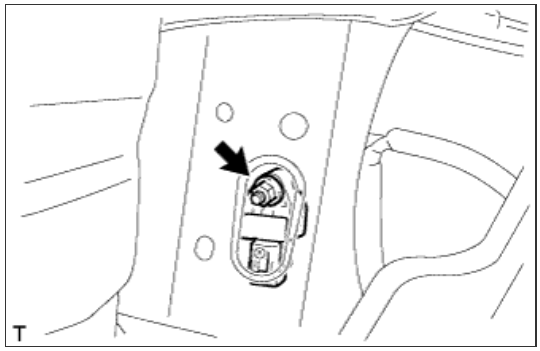

T

for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. INSTALL FRONT AIRBAG SENSOR



a. Check that the engine switch is off.

b. Check that the cable is disconnected from the battery negative (-) terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

c. Connect the connector.

d. Install the front airbag sensor with the nut.

Torque:
9.0 N*m{ 92 kgf*cm , 80 in.*lbf }

NOTICE:

- **If the front airbag sensor has been dropped, or there are any cracks, dents or other defects in the case, bracket or connector, replace it with a new one.**
- **When installing the front airbag sensor, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**

e. Check that there is no looseness in the installation parts of the front airbag sensor.

2. INSTALL HEADLIGHT ASSEMBLY

a. Install the headlight assembly (Click here).

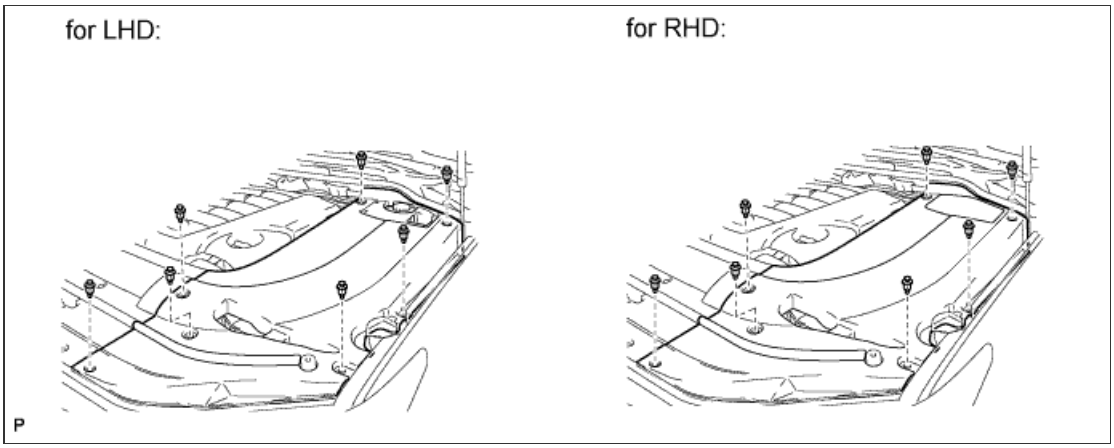
3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

4. INSTALL ENGINE ROOM SIDE COVER LH

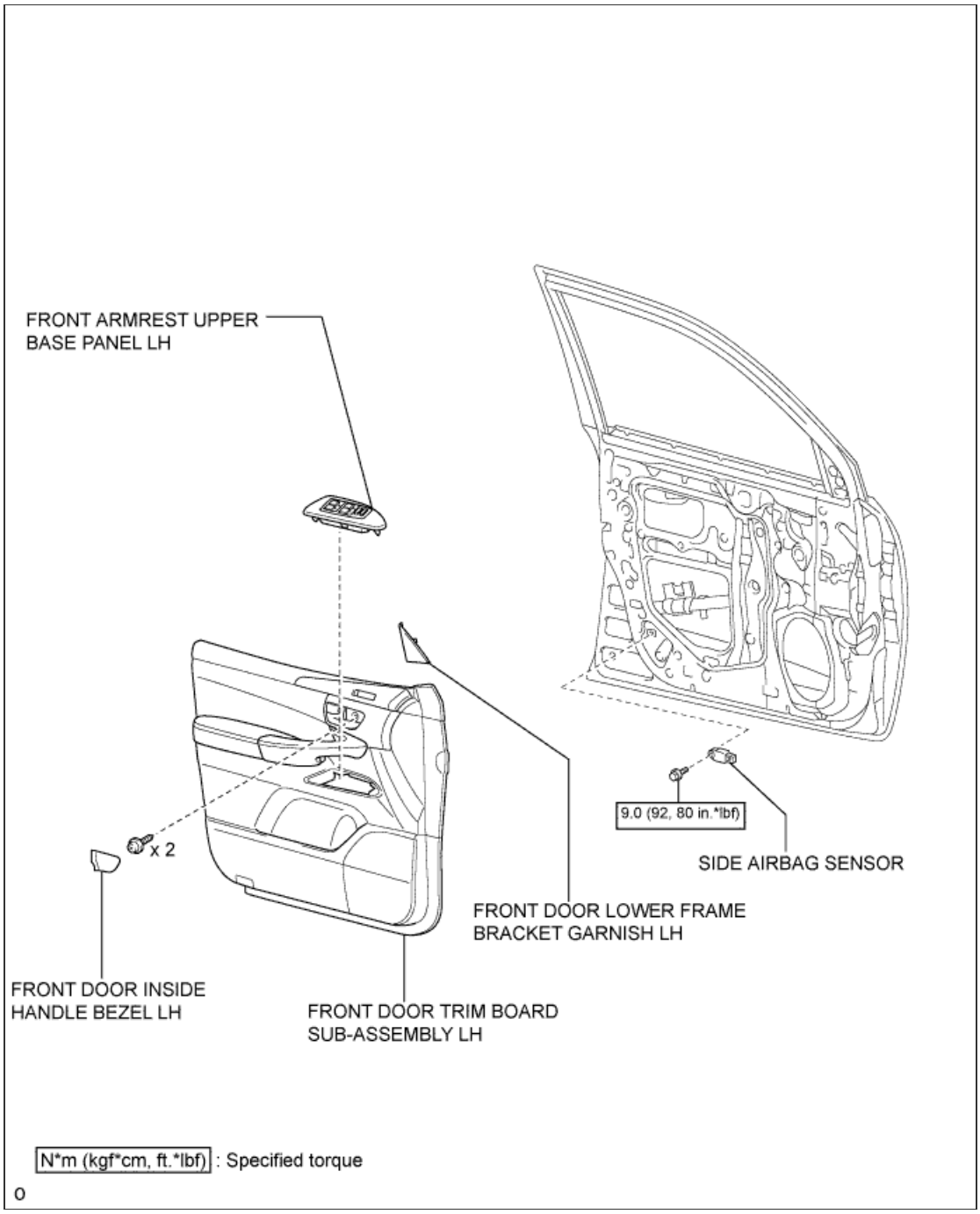
a. Install the engine room side cover with the 7 clips.



5. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here



for Preparation Click here

1. CHECK SIDE AIRBAG SENSOR (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

2. CHECK SIDE AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

a. Perform a diagnostic system check (Click here).

b. When the front door of the vehicle or its area is damaged, check if there is any damage to the side airbag sensor. If there are any defects as mentioned below, replace the side airbag sensor with a new one:

- Cracks, dents or chips on the sensor housing.
- Cracks or other damage to the connector.
- Peeling off of the label or damage to the serial number.

CAUTION:

For removal and installation procedures of the side airbag sensor, be sure to follow the correct procedure.

3. CHECK SIDE AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)

a. Replace the side airbag sensor.

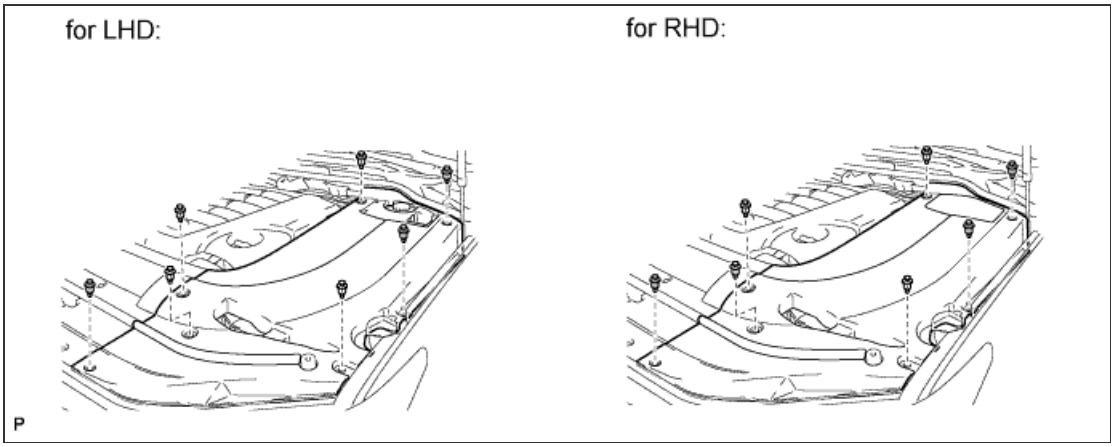
CAUTION:

- **For removal and installation procedures of the side airbag sensor, be sure to follow the correct procedure.**
- **If the airbags have deployed, replace the side airbag sensor on the side in which the collision occurred. Replace both if necessary.**

for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

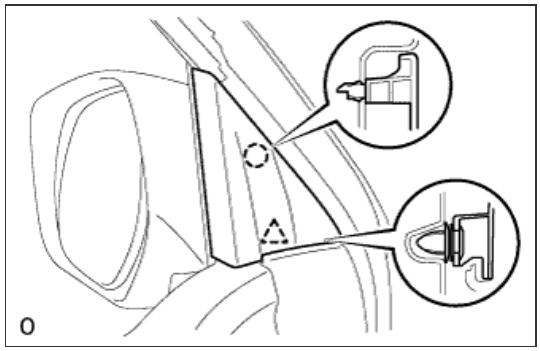
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE FRONT DOOR LOWER FRAME BRACKET GARNISH LH

a. Detach the clip and claw, and remove the front lower door frame bracket garnish.

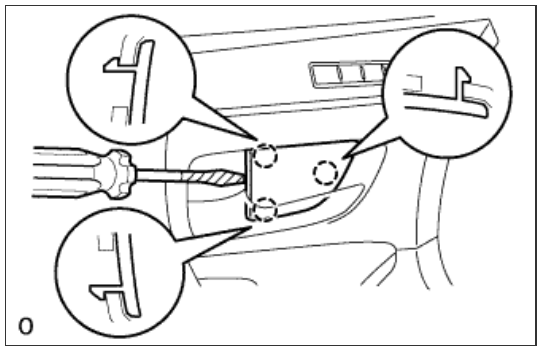


4. REMOVE FRONT DOOR INSIDE HANDLE BEZEL LH

a. Using a screwdriver, detach the 3 claws and remove the inside handle bezel plug.

HINT:

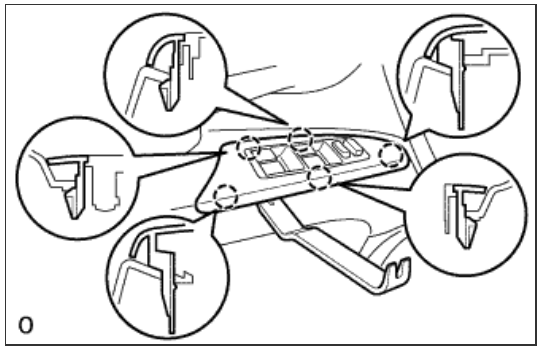
Tape the screwdriver tip before use.



5. REMOVE FRONT ARMREST UPPER BASE PANEL LH

a. Using a moulding remover, detach the 5 claws.

b. Disconnect the connector and remove the front upper armrest base panel and multiplex network master switch.

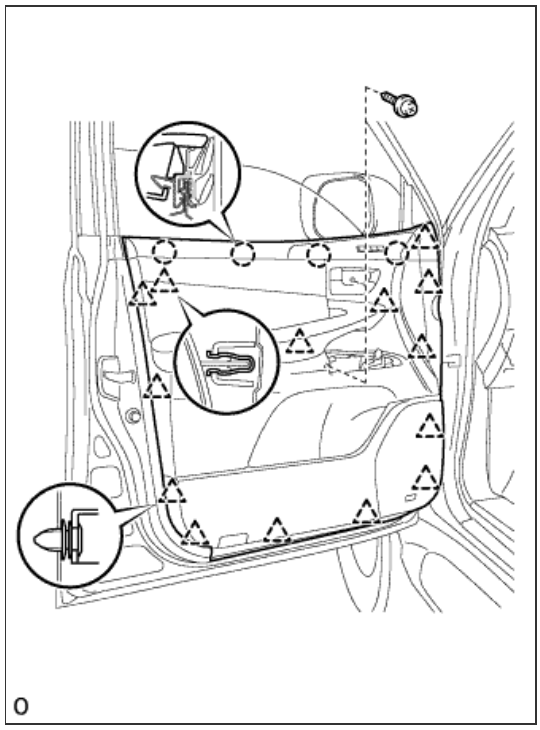


6. REMOVE FRONT DOOR TRIM BOARD SUB-ASSEMBLY LH

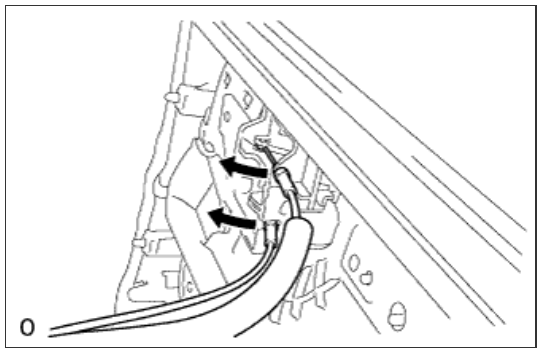
a. Remove the 2 screws.

b. Detach the 14 clips and 4 claws.

c. Disconnect the connector and remove the trim board.



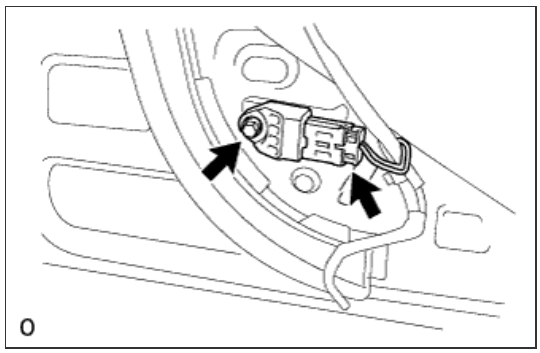
d. Disconnect the 2 cables from the inside handle.



7. REMOVE SIDE AIRBAG SENSOR

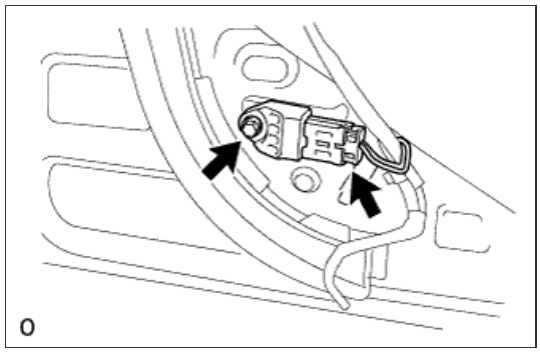
a. Disconnect the connector.

b. Remove the bolt and side airbag sensor.



for Preparation Click here

1. INSTALL SIDE AIRBAG SENSOR



a. Check that the engine switch is off.

b. Check that the cable is disconnected from the battery negative (-) terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

c. Install the side airbag sensor with the bolt.

Torque:
9.0 N*m{ 92 kgf*cm , 80 in.*lbf }

NOTICE:

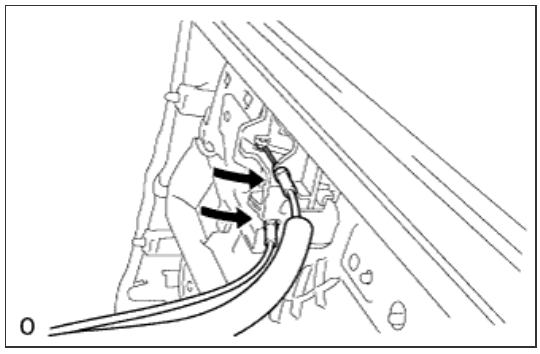
- **If the side airbag sensor has been dropped, or there are any cracks, dents or other defects in the case, bracket or connector, replace it with a new one.**
- **When installing the side airbag sensor, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**

d. Check that there is no looseness in the installation parts of the side airbag sensor.

e. Connect the connector.

2. INSTALL FRONT DOOR TRIM BOARD SUB-ASSEMBLY LH

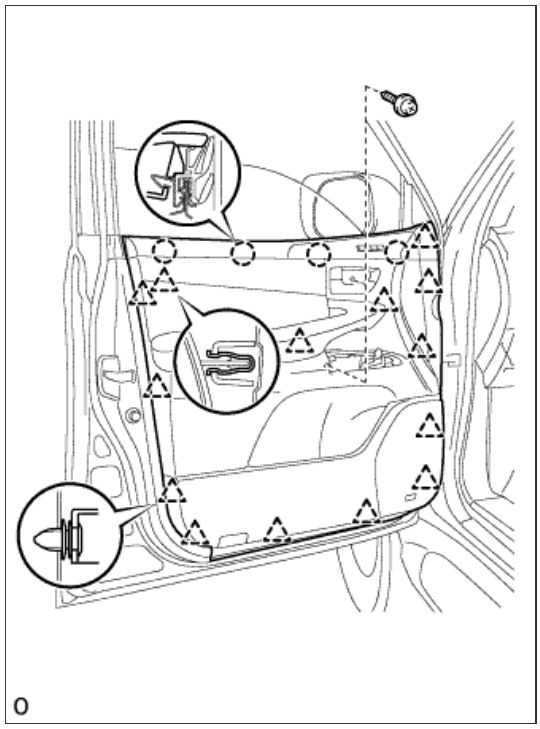
a. Connect the connector.



b. Connect the front door lock remote control cable and front door inside locking cable to the front door inside handle sub-assembly.

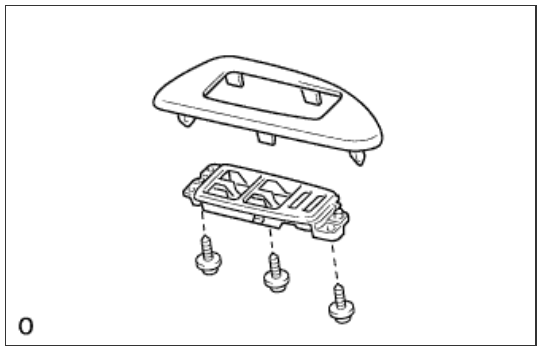
c. Attach the 4 claws and 14 clips to install the trim board.

d. Install the 2 screws.



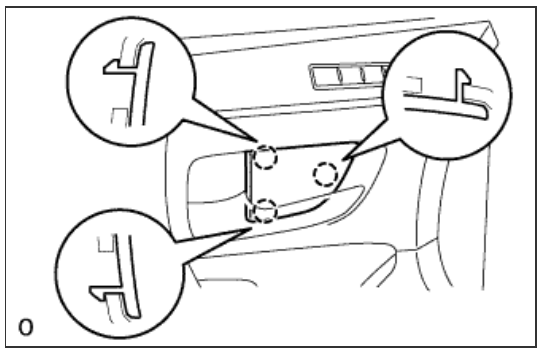
3. INSTALL FRONT ARMREST UPPER BASE PANEL LH

a. Install the front lower door armrest base panel with the 3 screws.



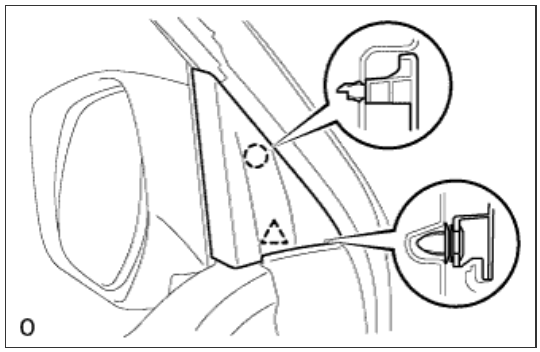
4. INSTALL FRONT DOOR INSIDE HANDLE BEZEL LH

a. Attach the 3 claws to install the inside handle bezel plug.



5. INSTALL FRONT DOOR LOWER FRAME BRACKET GARNISH LH

a. Attach the clip and claw to install the front door lower frame bracket garnish.



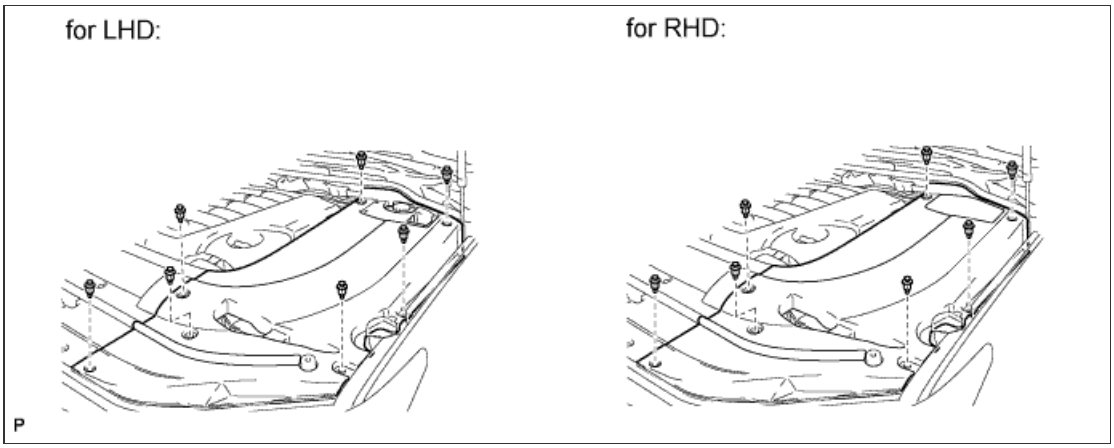
6. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

7. INSTALL ENGINE ROOM SIDE COVER LH

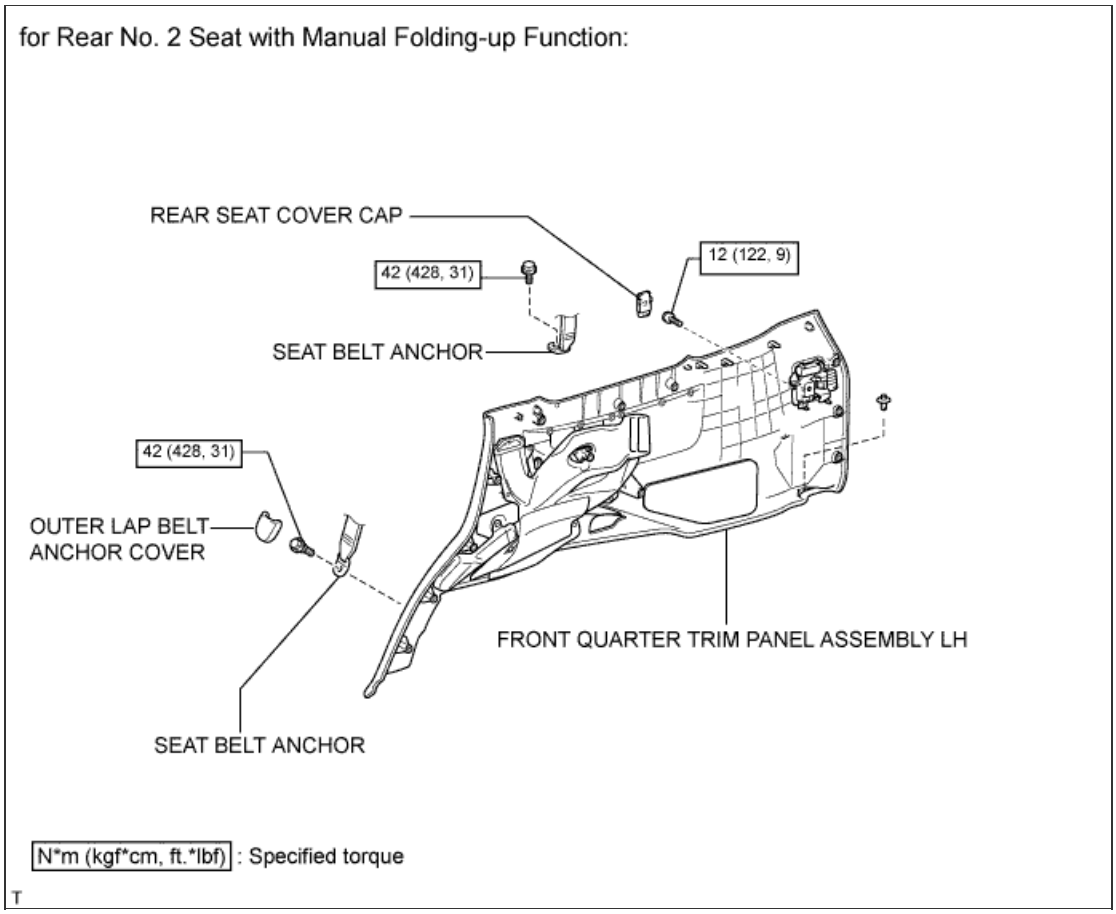
a. Install the engine room side cover with the 7 clips.



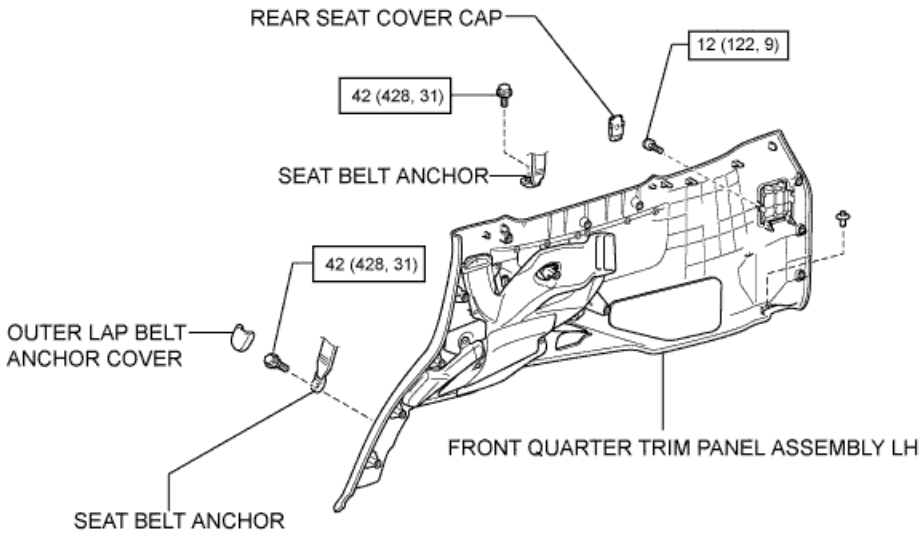
8. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here

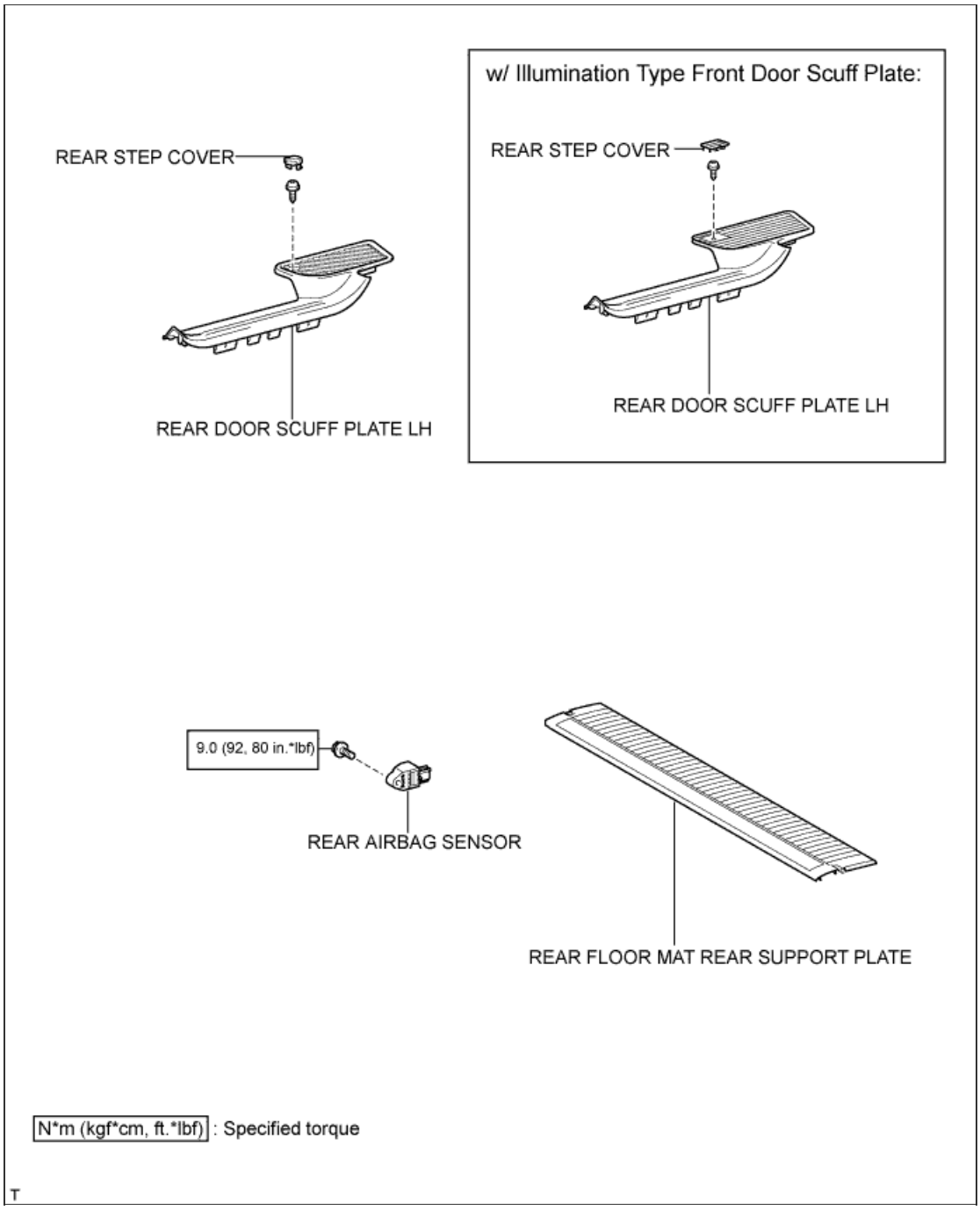


for Rear No. 2 Seat with Automatic Folding-up Function:



N*m (kgf*cm, ft.*lbf) : Specified torque

T


REAR STEP COVER
REAR DOOR SCUFF PLATE LH
w/ Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
9.0 (92, 80 in.*lbf)
REAR AIRBAG SENSOR
REAR FLOOR MAT REAR SUPPORT PLATE
N*m (kgf*cm, ft.*lbf) : Specified torque
T

for Preparation Click here

1. CHECK REAR AIRBAG SENSOR (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

2. CHECK REAR AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

a. Perform a diagnostic system check (Click here).

b. When the quarter panel of the vehicle or its area is damaged, check if there is any damage to the rear airbag sensor. If there are any defects as mentioned below, replace the rear airbag sensor with a new one:

- Cracks, dents or chips on the sensor housing.
- Cracks or other damage to the connector.
- Peeling off of the label or damage to the serial number.

CAUTION:

For removal and installation procedures of the rear airbag sensor, be sure to follow the correct procedure.

3. CHECK REAR AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)

a. When airbags have deployed as the result of a collision, be certain to replace all rear airbag sensors in the damaged area (anywhere in need of repair). Furthermore, it is also necessary to replace any rear airbag sensor in undamaged areas that have registered a major collision, or which exhibit any of the following abnormalities:

- Cracks, dents or chips on the sensor housing.
- Cracks or other damage to the connector.
- Peeling off of the label or damage to the serial number.

CAUTION:

For removal and installation procedures of the rear airbag sensor, be sure to follow the correct procedure.

for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE ENGINE ROOM SIDE COVER LH

2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

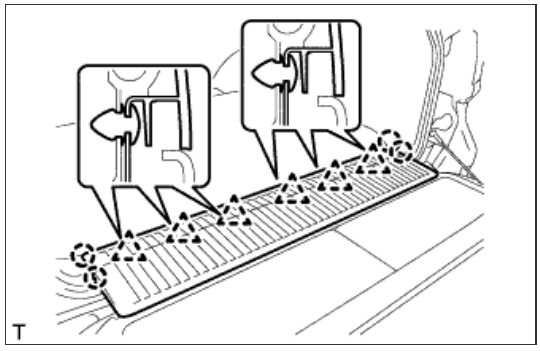
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE REAR NO. 2 SEAT ASSEMBLY LH

a. Remove the rear No. 2 seat assembly (Click here).

4. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.

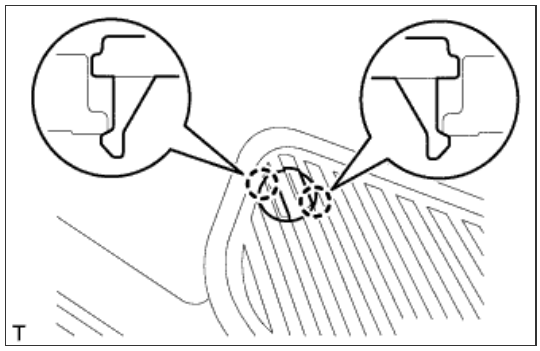


5. REMOVE REAR STEP COVER

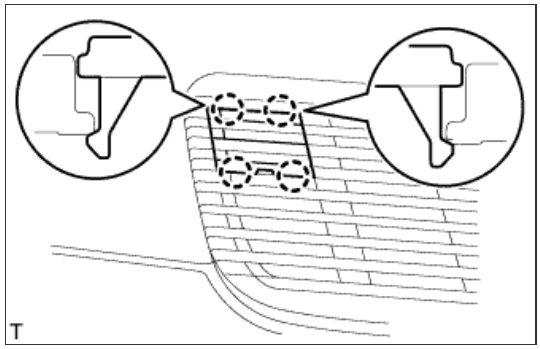
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

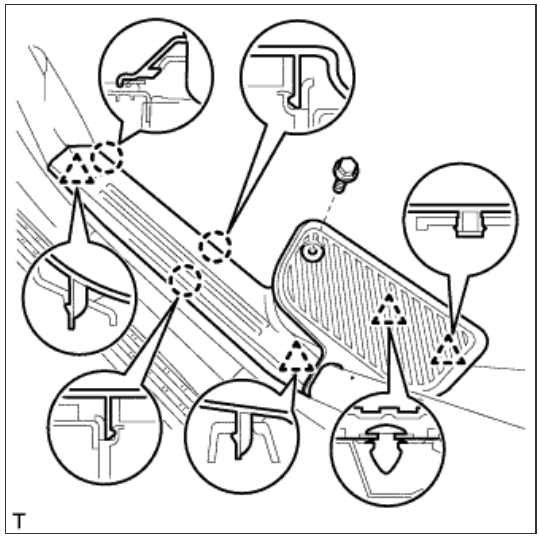


6. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

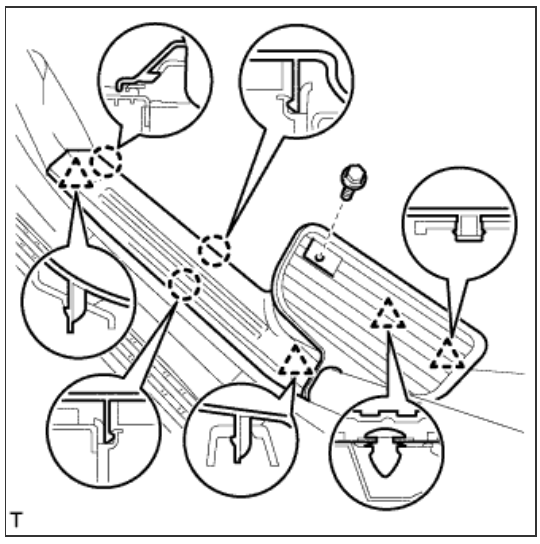
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



7. REMOVE REAR SEAT COVER CAP (for Semi Power Seat)

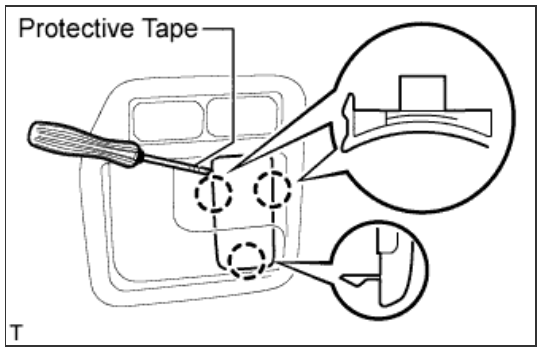
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

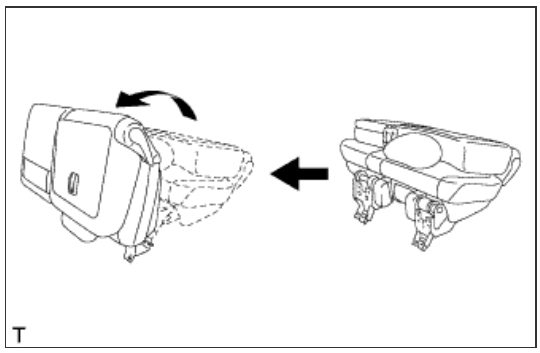
Tape the screwdriver tip before use.



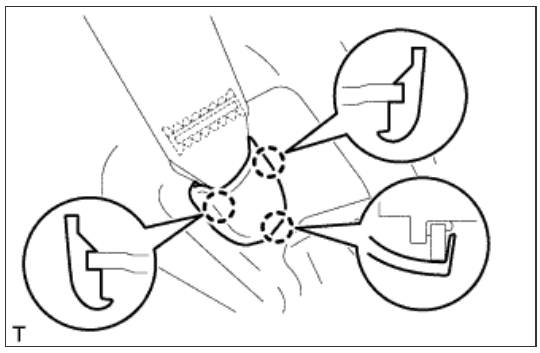
8. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

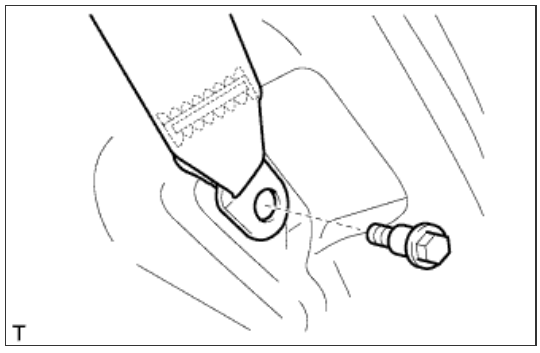
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



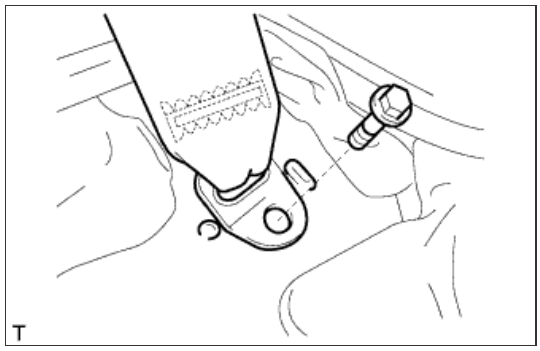
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

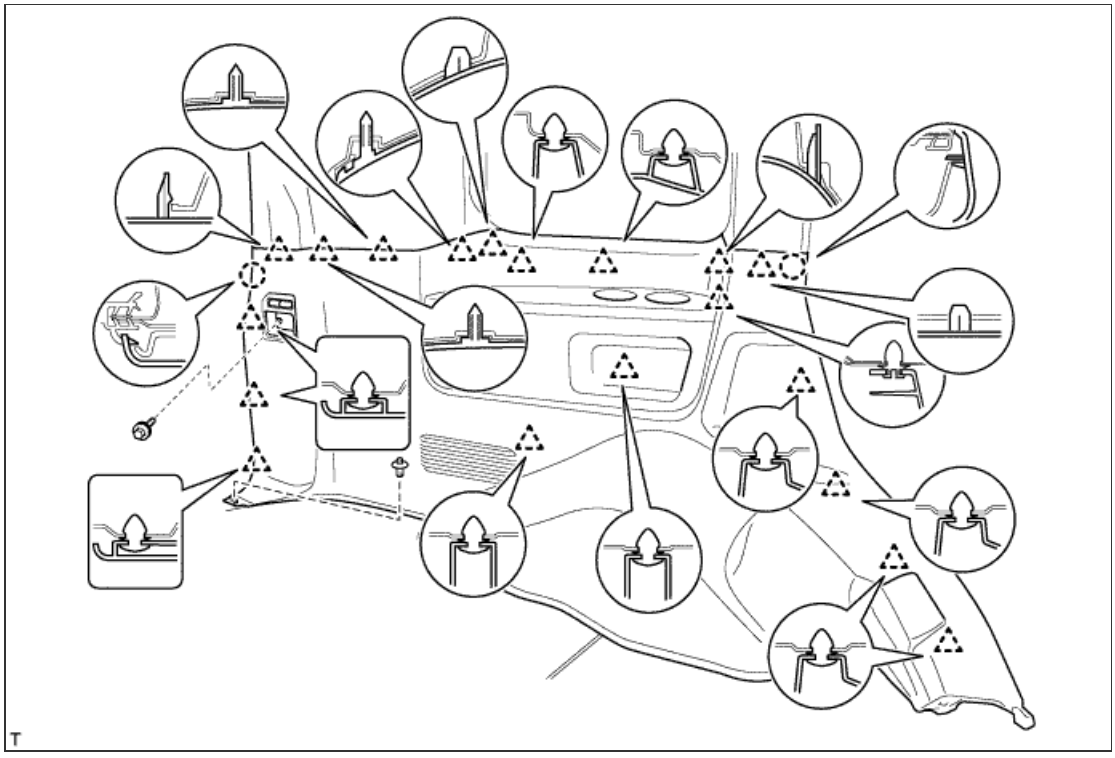


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

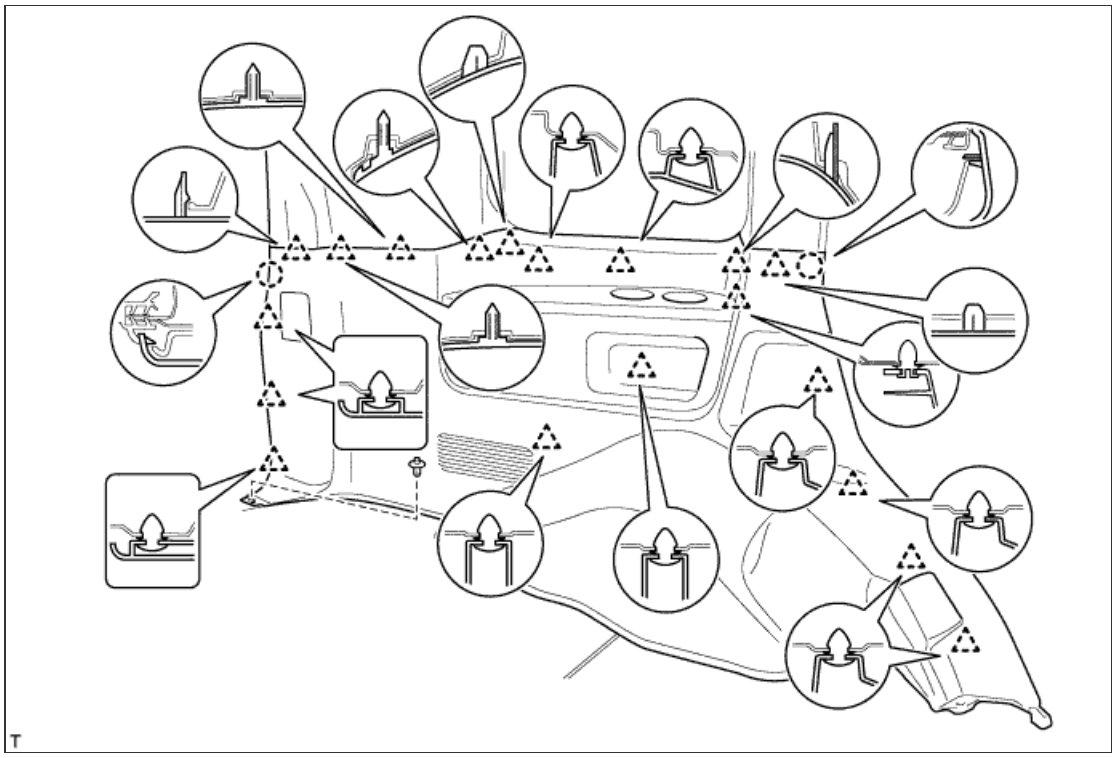


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 19 clips and 2 claws.

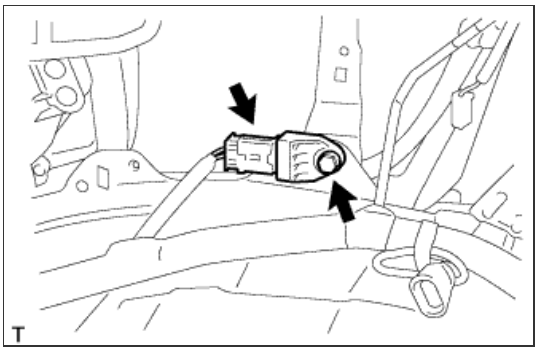
iii. Disconnect the thermistor connector and then remove the quarter trim panel.



9. REMOVE REAR AIRBAG SENSOR

a. Remove the bolt and rear airbag sensor.

b. Disconnect the connector.

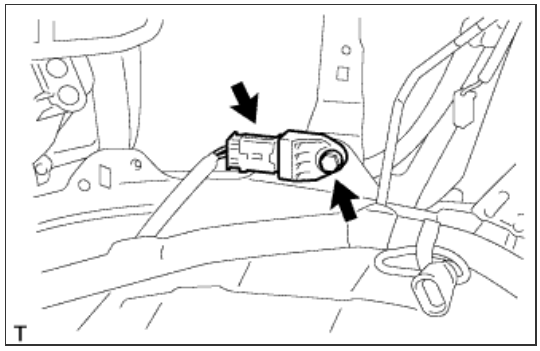


for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. INSTALL REAR AIRBAG SENSOR



a. Check that the engine switch is off.

b. Check that the cable is disconnected from the battery negative (-) terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

c. Install the rear airbag sensor with the bolt.

Torque:
9.0 N*m{ 92 kgf*cm , 80 in.*lbf }

NOTICE:

- **If the rear airbag sensor has been dropped, or there are any cracks, dents or other defects in the case, bracket or connector, replace it with a new one.**
- **When installing the rear airbag sensor, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**

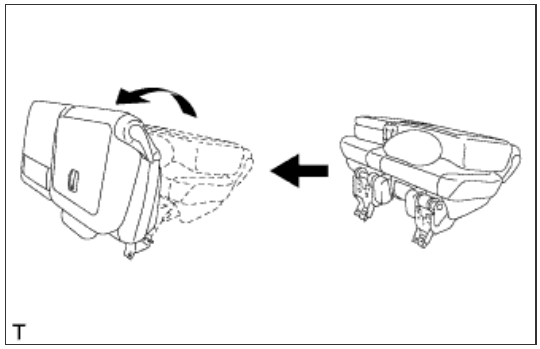
d. Check that there is no looseness in the installation parts of the rear airbag sensor.

e. Connect the connector.

2. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



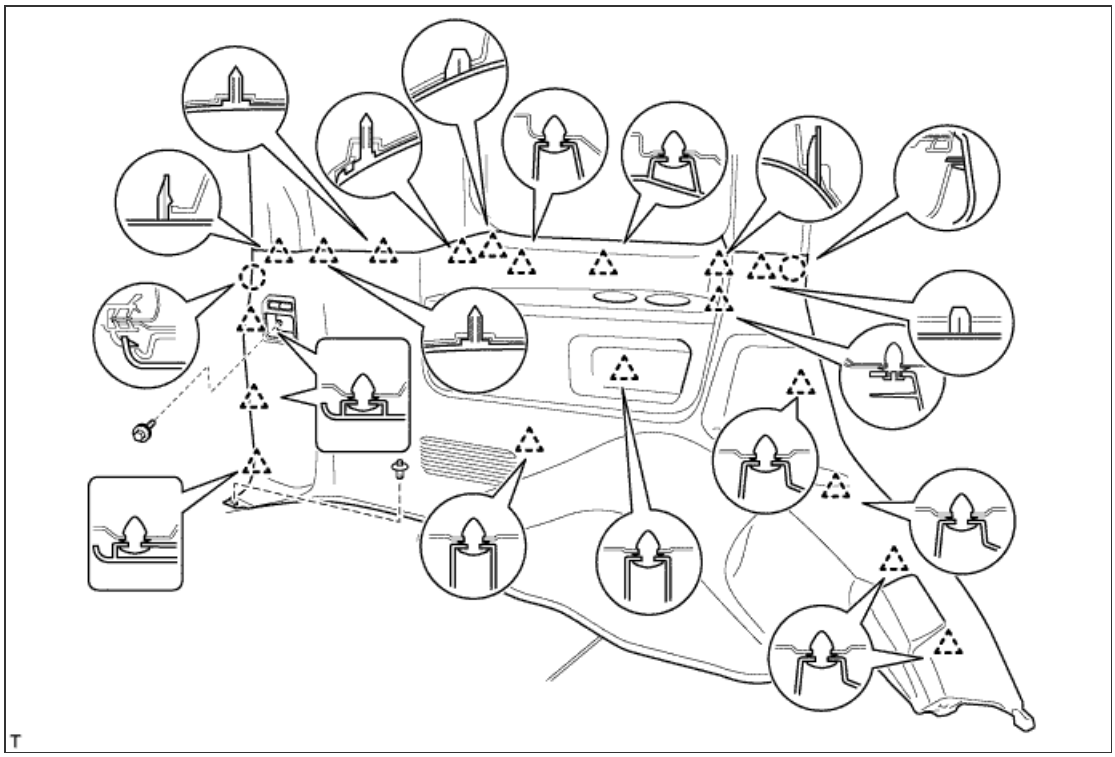
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

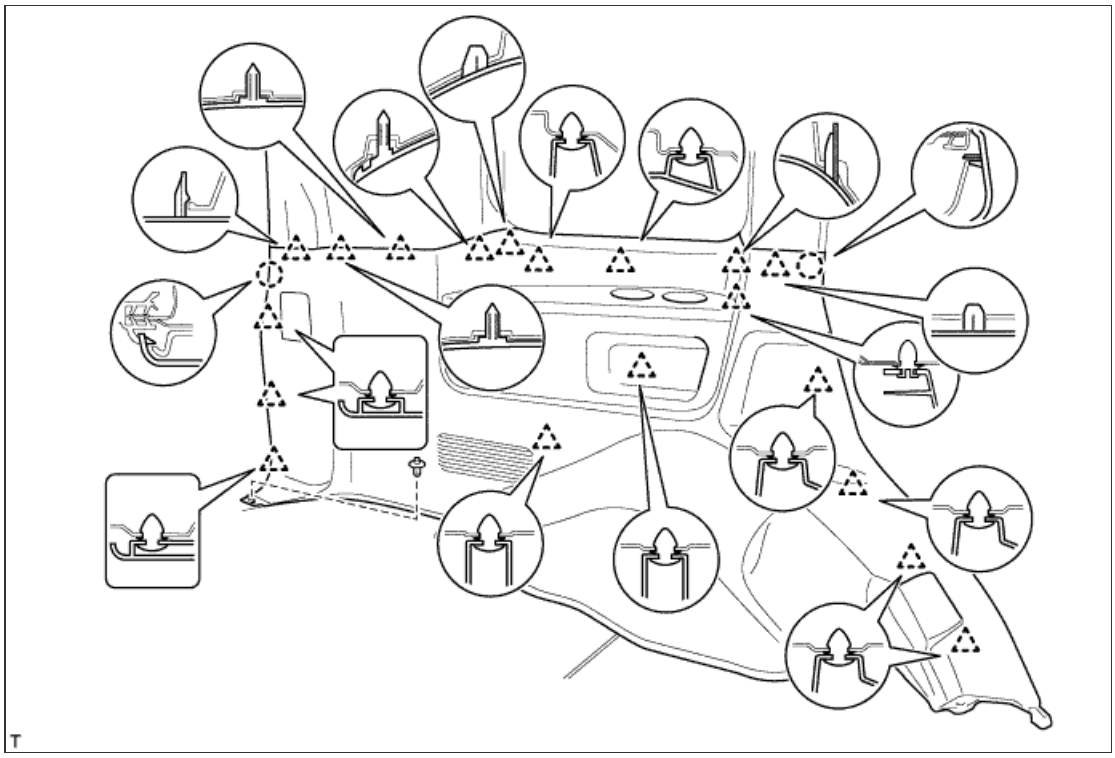


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

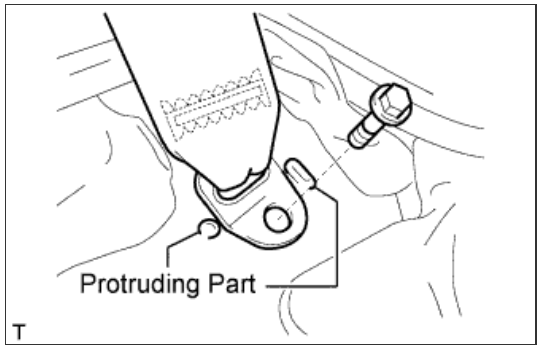


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

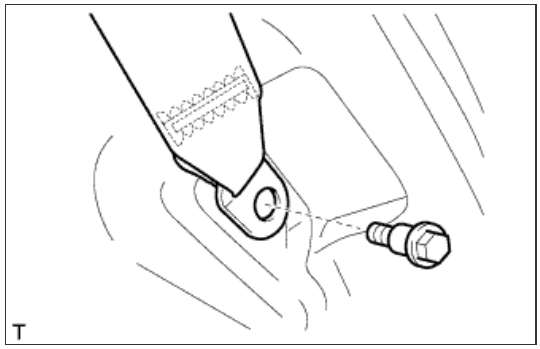
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

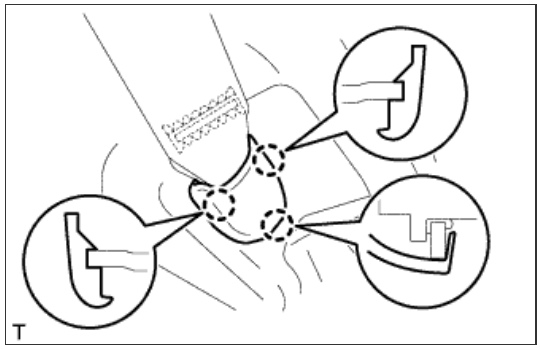


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



e. Attach the 3 claws to install the cover.

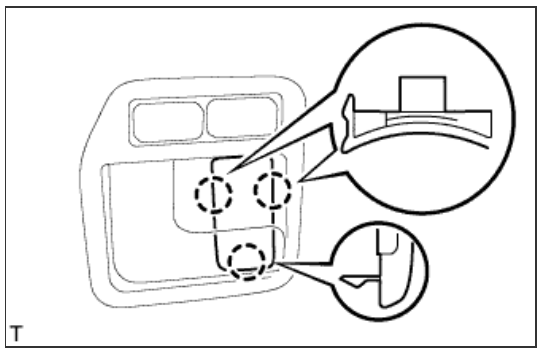


3. INSTALL REAR SEAT COVER CAP (for Semi Power Seat)

HINT:

Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.

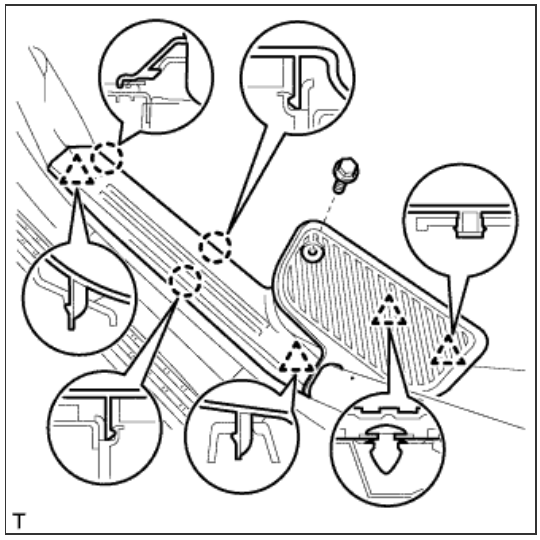


4. INSTALL REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

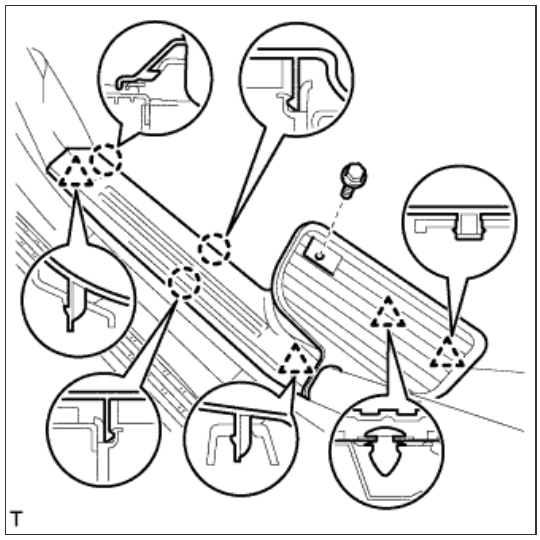
ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.



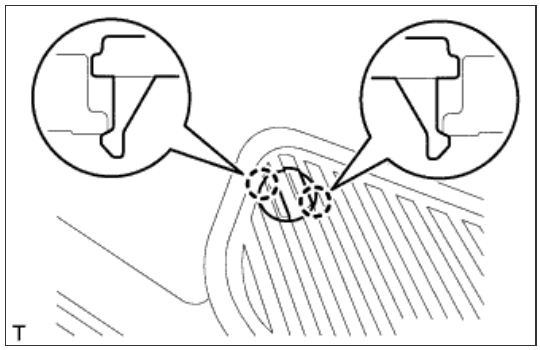
5. INSTALL REAR STEP COVER

HINT:

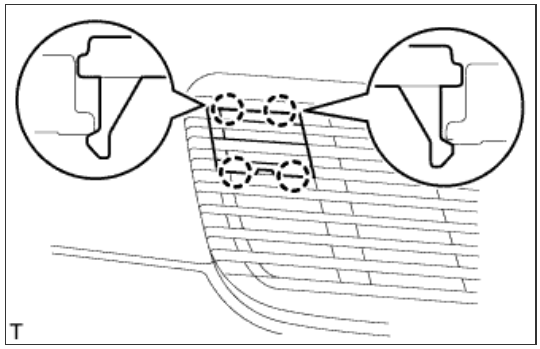
Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:

Attach the 2 claws to install the step cover.

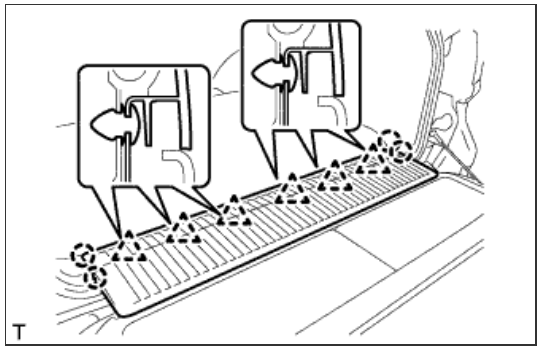


b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



6. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.



7. INSTALL REAR NO. 2 SEAT ASSEMBLY LH

a. Install the rear No. 2 seat assembly (Click here).

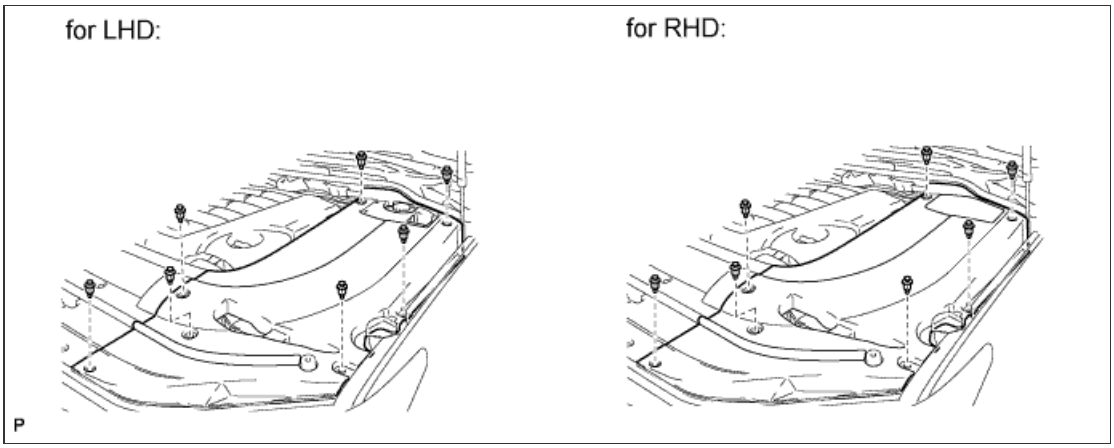
8. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

9. INSTALL ENGINE ROOM SIDE COVER LH

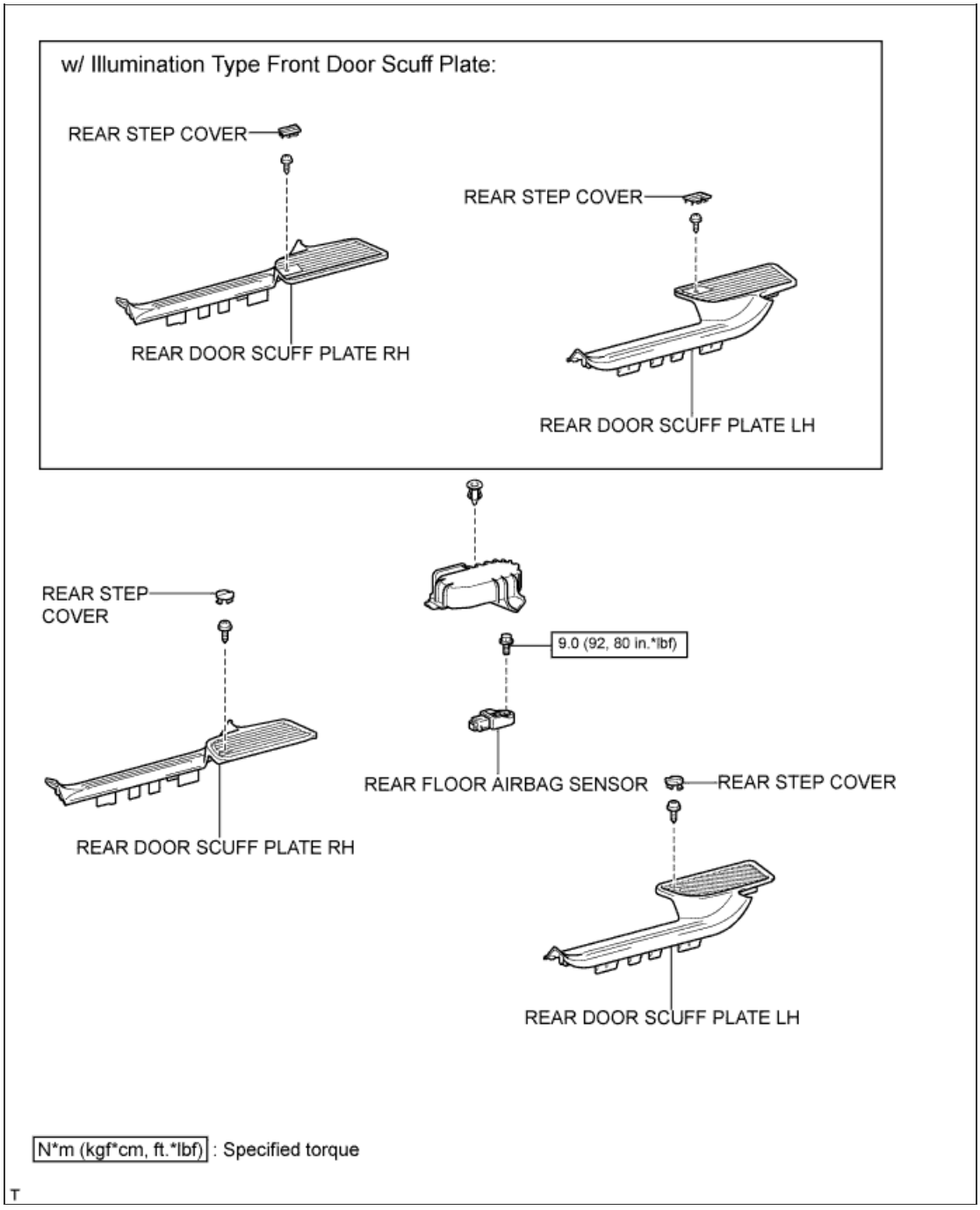
a. Install the engine room side cover with the 7 clips.



10. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here



for Preparation Click here

1. CHECK REAR FLOOR AIRBAG SENSOR (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

2. CHECK REAR FLOOR AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG HAS NOT DEPLOYED)

a. Perform a diagnostic system check (Click here).

b. When airbags have deployed as the result of a collision, be certain to replace the rear floor airbag sensor when it is in the damaged area (anywhere in need of repair). Furthermore, it is also necessary to replace the rear floor airbag sensor in an undamaged area that has registered a major collision, or which exhibits any of the following abnormalities:

- Cracks, dents or chips on the sensor housing.
- Cracks or other damage to the connector.
- Peeling off of the label or damage to the serial number.

CAUTION:

For removal and installation procedures of the rear floor airbag sensor, be sure to follow the correct procedure.

3. CHECK REAR FLOOR AIRBAG SENSOR (VEHICLE INVOLVED IN COLLISION AND AIRBAG IS DEPLOYED)

a. When airbags have deployed as the result of a collision, be certain to replace the rear floor airbag sensor in the damaged area (anywhere in need of repair). Furthermore, it is also necessary to replace the rear floor airbag sensor in an undamaged area that has registered a major collision, or which exhibits any of the following abnormalities:

- Cracks, dents or chips on the sensor housing.
- Cracks or other damage to the connector.
- Peeling off of the label or damage to the serial number.

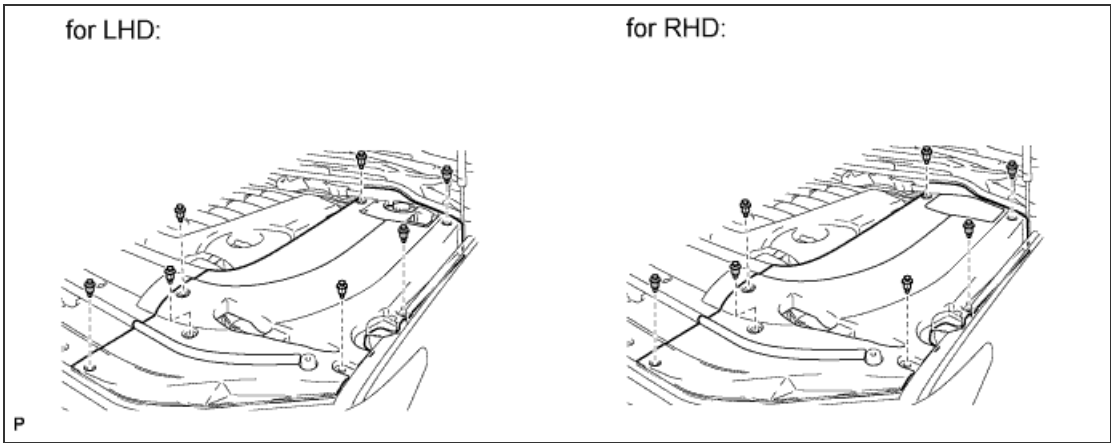
CAUTION:

For removal and installation procedures of the rear floor airbag sensor, be sure to follow the correct procedure.

for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

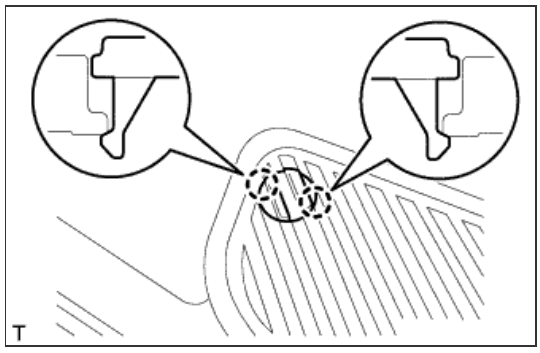
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE REAR STEP COVER

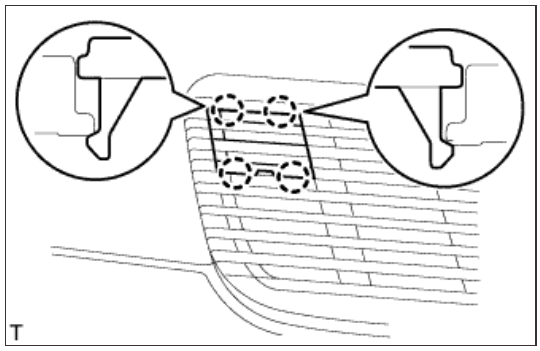
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

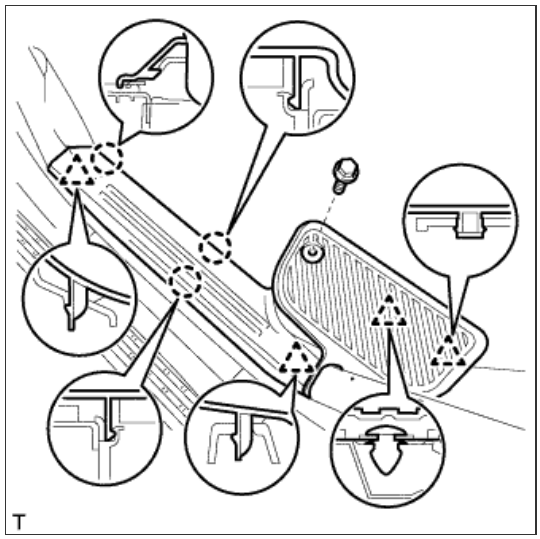


4. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

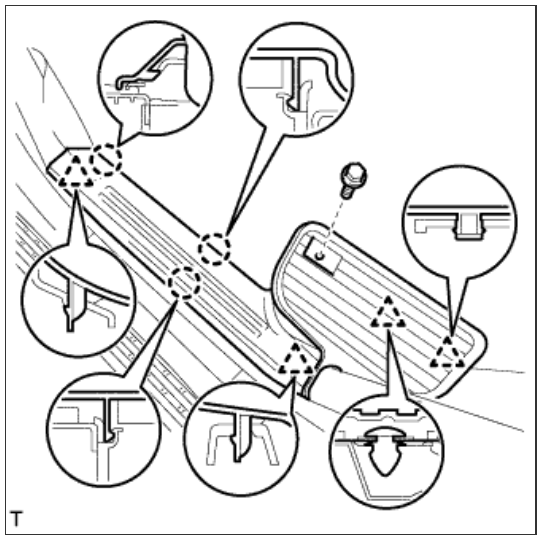
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



5. REMOVE REAR DOOR SCUFF PLATE RH

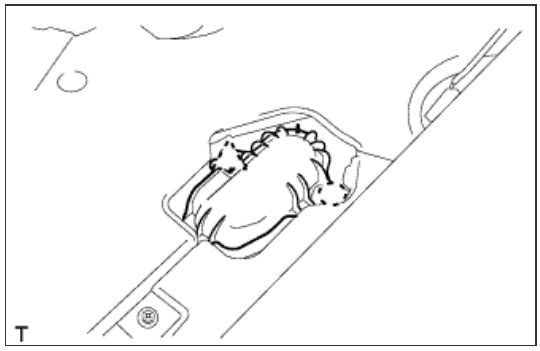
HINT:

Use the same procedures described for the LH side.

6. REMOVE REAR FLOOR AIRBAG SENSOR

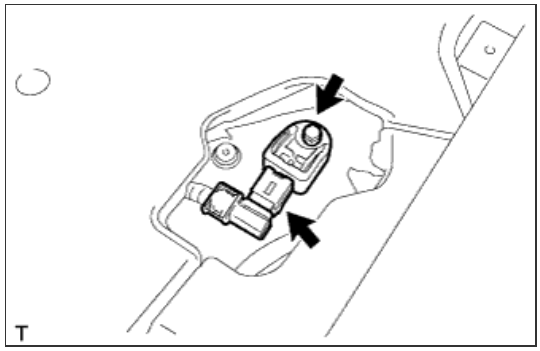
a. Fold back the floor carpet.

b. Detach the clip and claw, and remove the cover.



c. Remove the bolt and sensor.

d. Disconnect the connector.



for Preparation Click here

1. INSTALL REAR FLOOR AIRBAG SENSOR

a. Check that the engine switch is off.

b. Check that the cable is disconnected from the battery negative (-) terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

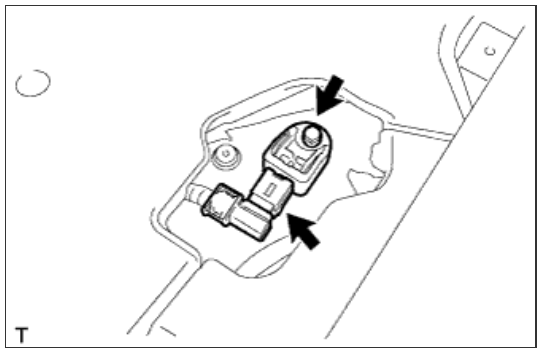
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

c. Install the rear floor airbag sensor with the bolt.

Torque:
9.0 N*m{ 92 kgf*cm , 80 in.*lbf }

NOTICE:

- **If the rear floor airbag sensor has been dropped, or there are any cracks, dents or other defects in the case, bracket or connector, replace it with a new one.**
- **When installing the rear floor airbag sensor, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**

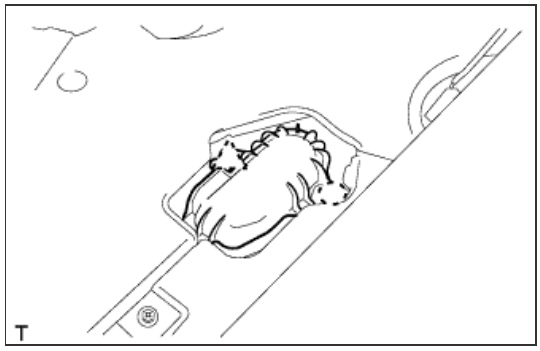


d. Check that there is no looseness in the installation parts of the rear floor airbag sensor.

e. Connect the connector.

f. Attach the clip and claw to install the cover.

g. Return the floor carpet to its original position.



2. INSTALL REAR DOOR SCUFF PLATE RH

HINT:

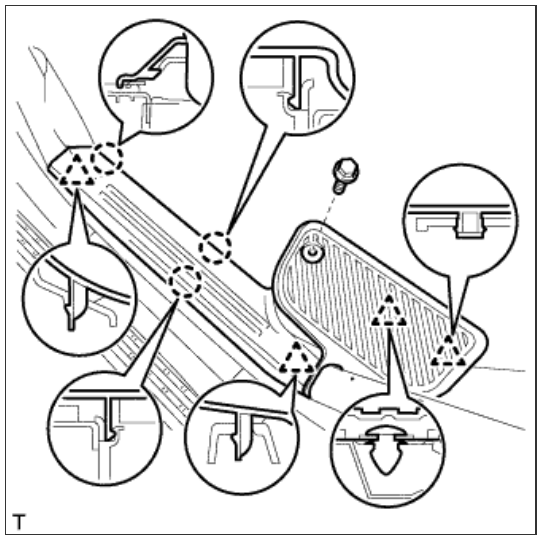
Use the same procedures described for the LH side.

3. INSTALL REAR DOOR SCUFF PLATE LH

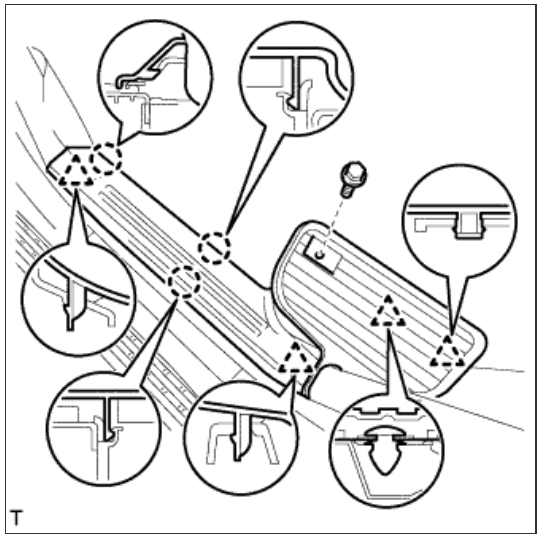
a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

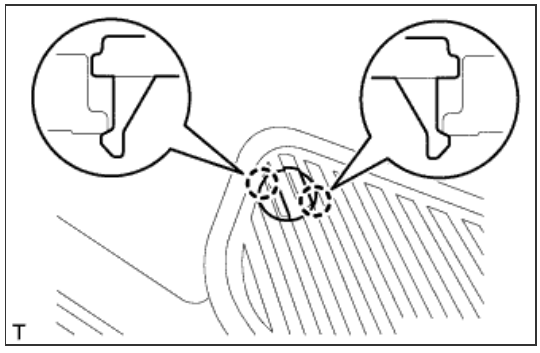
ii. Install the screw.

4. INSTALL REAR STEP COVER

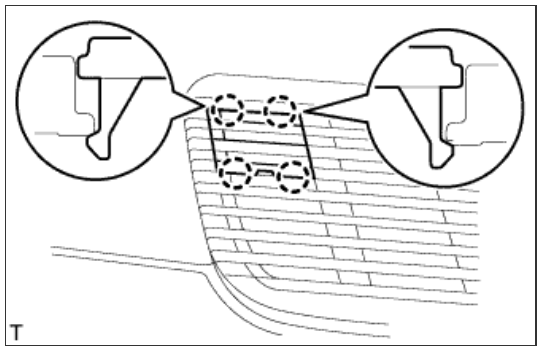
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



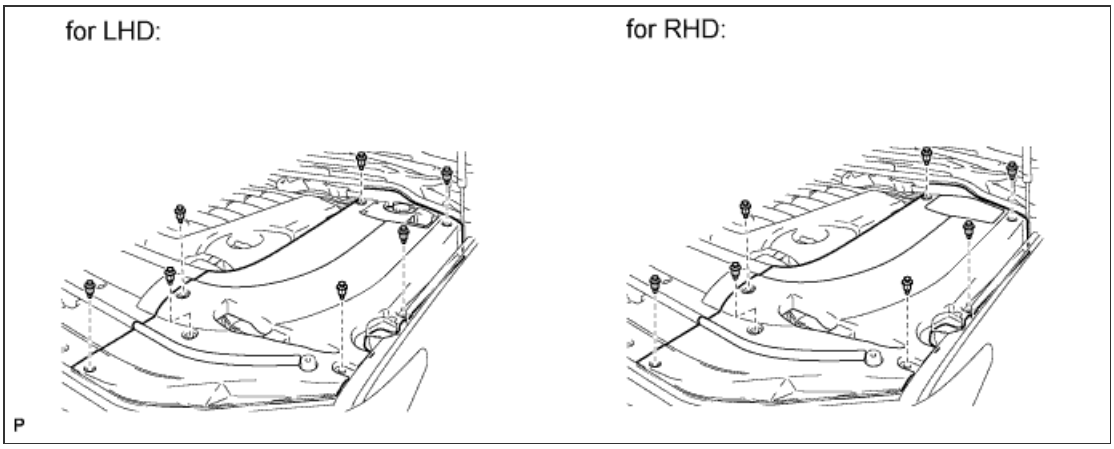
5. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

6. INSTALL ENGINE ROOM SIDE COVER LH

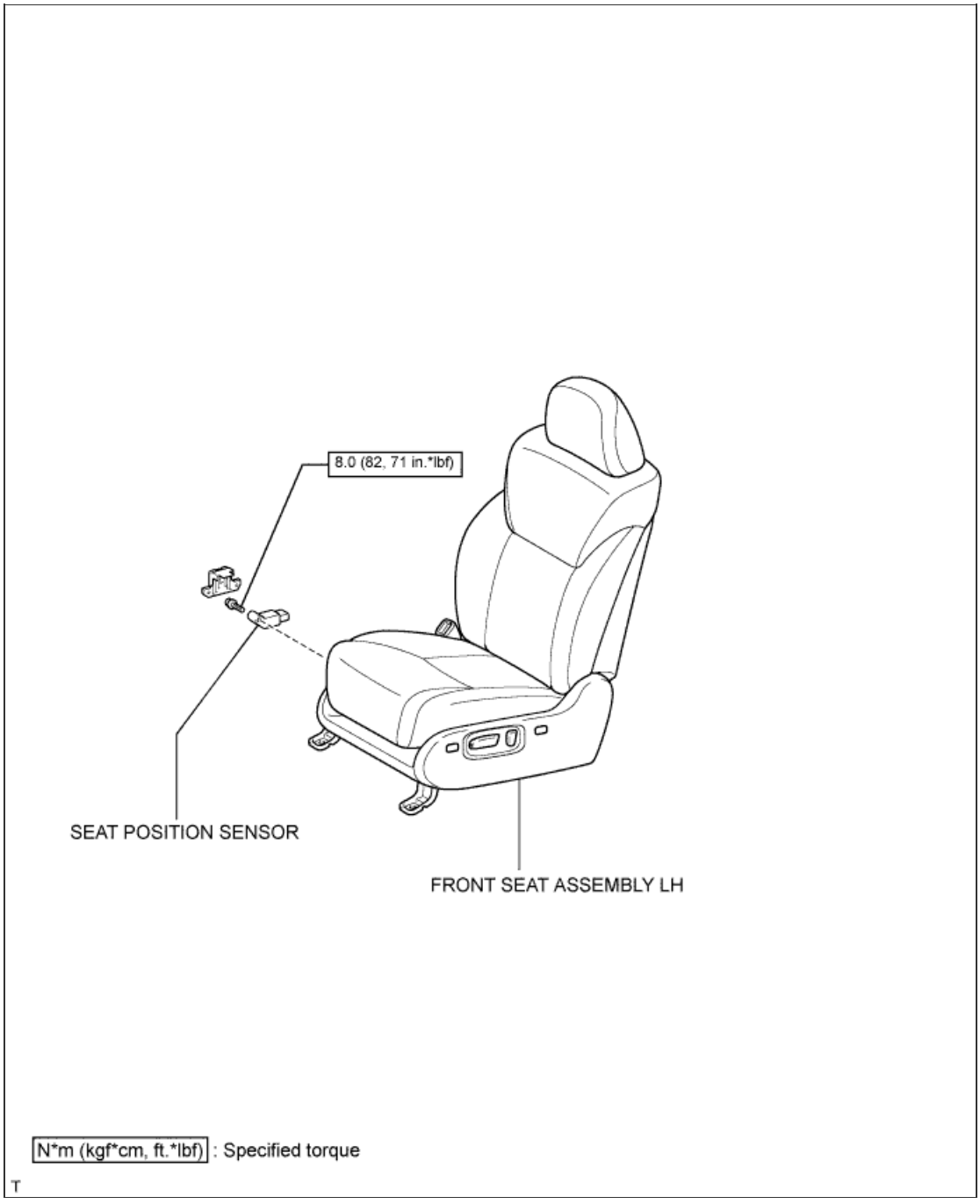
a. Install the engine room side cover with the 7 clips.



7. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here



for Preparation Click here

1. CHECK SEAT POSITION SENSOR (VEHICLE NOT INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

2. CHECK SEAT POSITION SENSOR (VEHICLE INVOLVED IN COLLISION)

a. Perform a diagnostic system check (Click here).

b. Even if the airbag was not deployed, check if there is any damage to the seat position sensor. If there are any defects as mentioned below, replace the seat position sensor with a new one:

- Cracks, dents or chips on the sensor housing.
- Cracks or other damage to the connector.

CAUTION:

For removal and installation procedures of the seat position sensor, be sure to follow the correct procedure.

for Preparation Click here

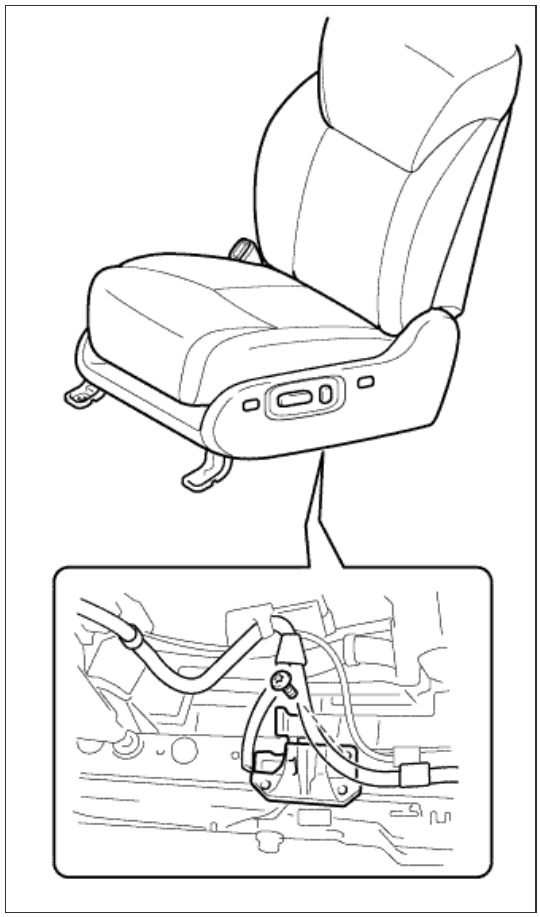
1. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat (Click here).

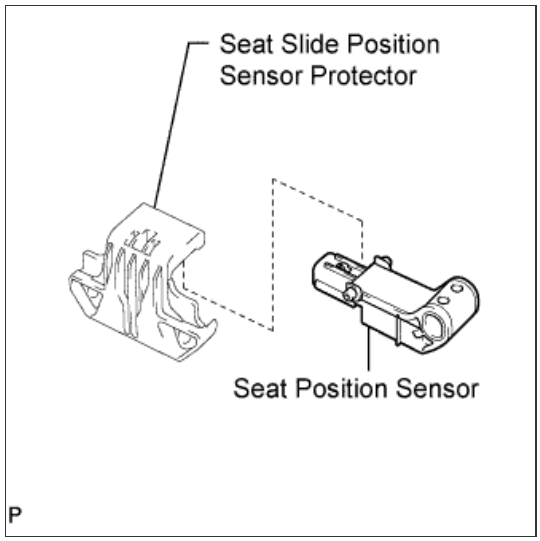
2. REMOVE SEAT POSITION SENSOR

a. Using a T30 "TORX" socket wrench, remove the screw and seat position sensor with sensor protector.

b. Disconnect the connector.



c. Remove the seat slide position sensor protector from the seat position sensor.



for Preparation Click here

1. INSTALL SEAT POSITION SENSOR

a. Check that the engine switch is off.

b. Check that the cable is disconnected from the battery negative (-) terminal.

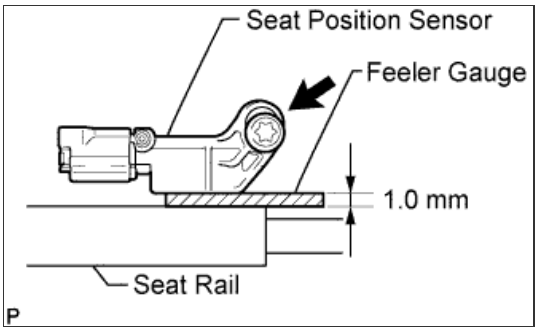
CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

c. Using a 1.0 mm (0.0393 in.) feeler gauge, install the seat position sensor.



NOTICE:

- **If the seat position sensor has been dropped, or there are any cracks, dents or other defects in the case or connector, replace the seat position sensor with a new one.**
- **When installing the seat position sensor, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**

HINT:

Be sure that the clearance between the seat position sensor and the seat rail is within 0.6 to 1.4 mm (0.0236 to 0.0551 in.).

d. Using a T30 "TORX" socket wrench, install the seat position sensor with the screw.

Torque:
8.0 N*m{ 82 kgf*cm , 71 in.*lbf }

e. Make sure that the clearance between the seat position sensor and the seat rail is within 0.6 to 1.4 mm (0.0236 to 0.0551 in.).

f. Check that there is no looseness in the installation parts of the seat position sensor.

g. Connect the connector.

h. Install the seat slide position sensor protector to the seat position sensor.

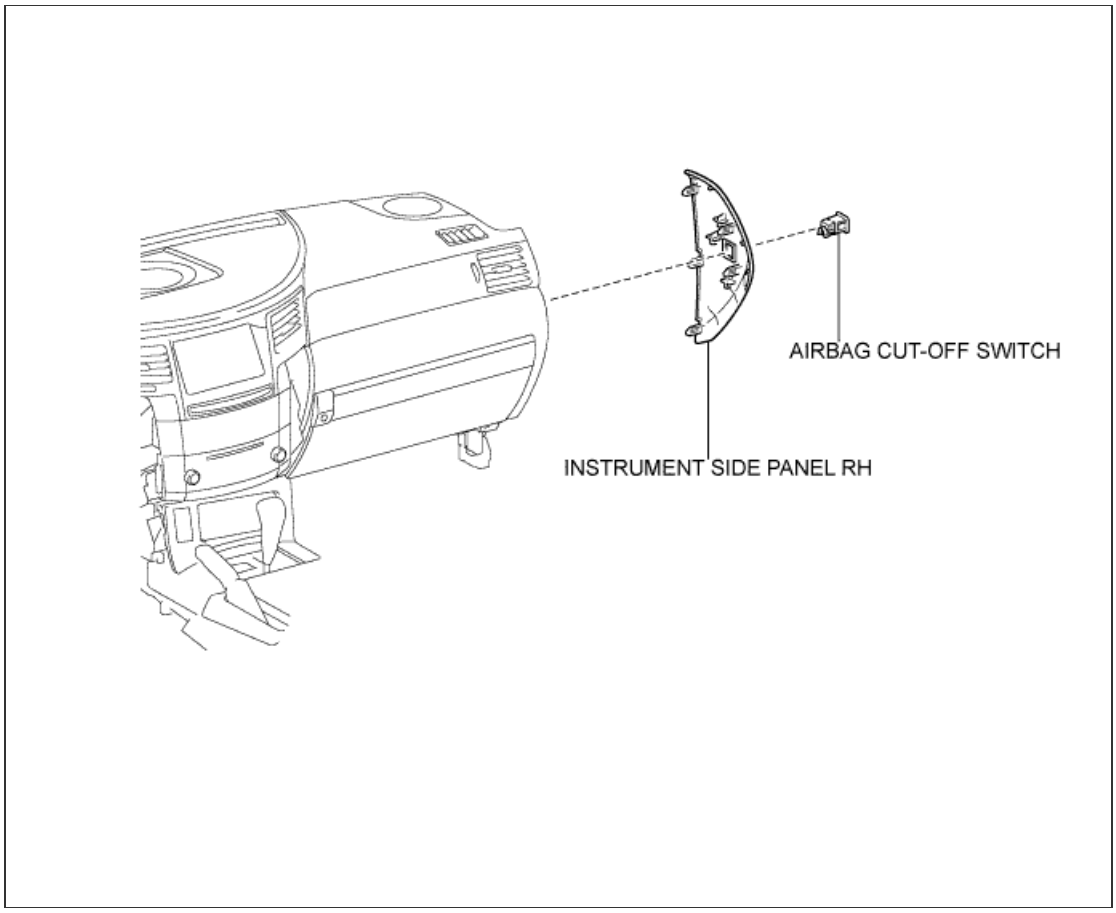
2. INSTALL FRONT SEAT ASSEMBLY LH

a. Install the front seat assembly LH (Click here).

3. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation [Click here]



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE INSTRUMENT SIDE PANEL RH

a. w/o Airbag Cut Off Switch:

i. Place protective tape as shown in the illustration.

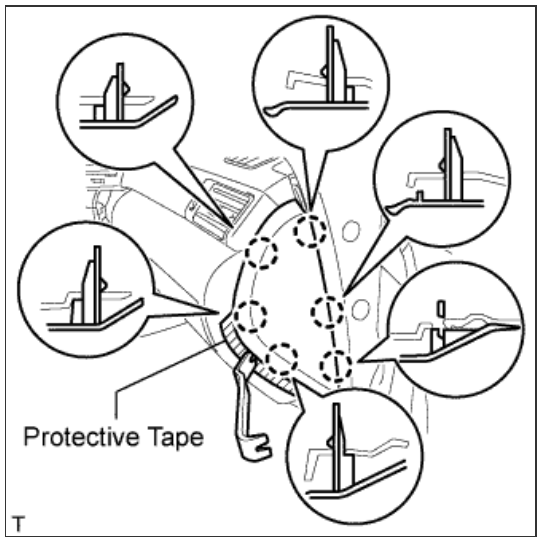
ii. Using a moulding remover, detach the 6 claws and remove the side panel.

b. w/ Airbag Cut Off Switch:

i. Place protective tape as shown in the illustration.

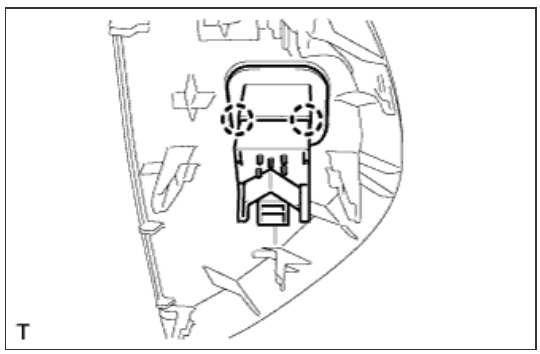
ii. Using a moulding remover, detach the 6 claws.

iii. Remove the side panel and disconnect the connector.



4. REMOVE AIRBAG CUT-OFF SWITCH

a. Detach the 2 claws and remove the airbag cut-off switch.



for Preparation Click here

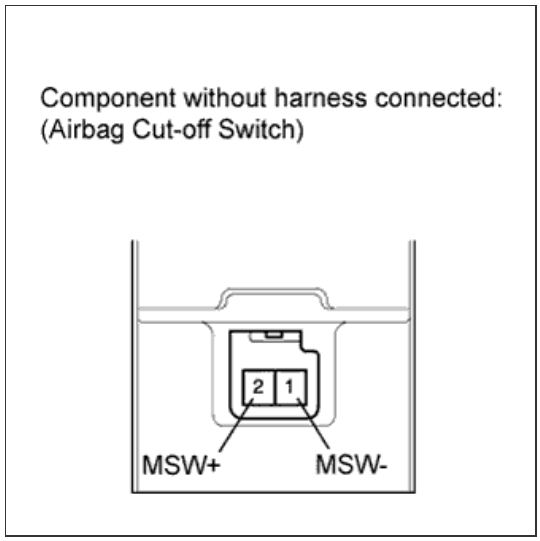
1. INSPECT AIRBAG CUT-OFF SWITCH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
1 (MSW-) - 2 (MSW+)	Off	400 Ω
1 (MSW-) - 2 (MSW+)	On	100 Ω

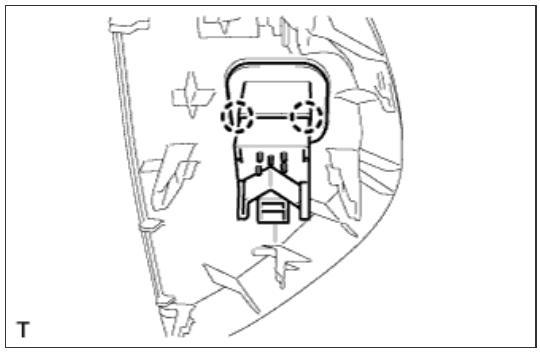
If the result is not as specified, replace the airbag cut-off switch.



for Preparation Click here

1. INSTALL AIRBAG CUT-OFF SWITCH

a. Attach the 2 claws to install the switch.



2. INSTALL INSTRUMENT SIDE PANEL RH

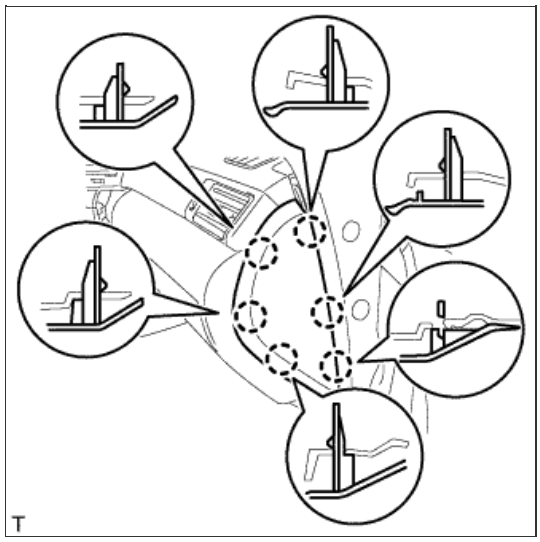
a. w/o Airbag Cut Off Switch:

i. Attach the 6 claws to install the side panel.

b. w/ Airbag Cut Off Switch:

i. Connect the connector.

ii. Attach the 6 claws to install the side panel.



3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

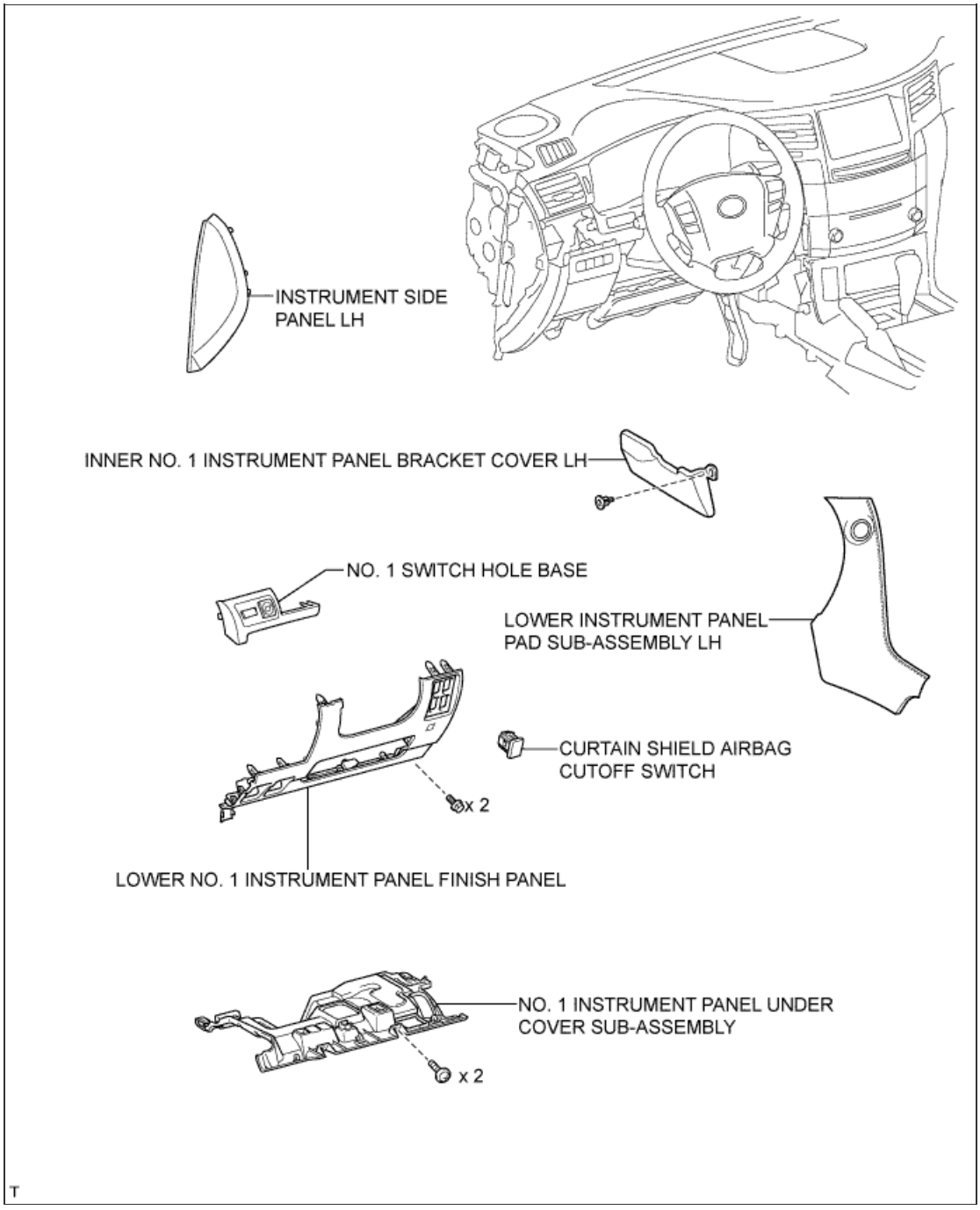
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

4. INSTALL ENGINE ROOM SIDE COVER LH

5. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here

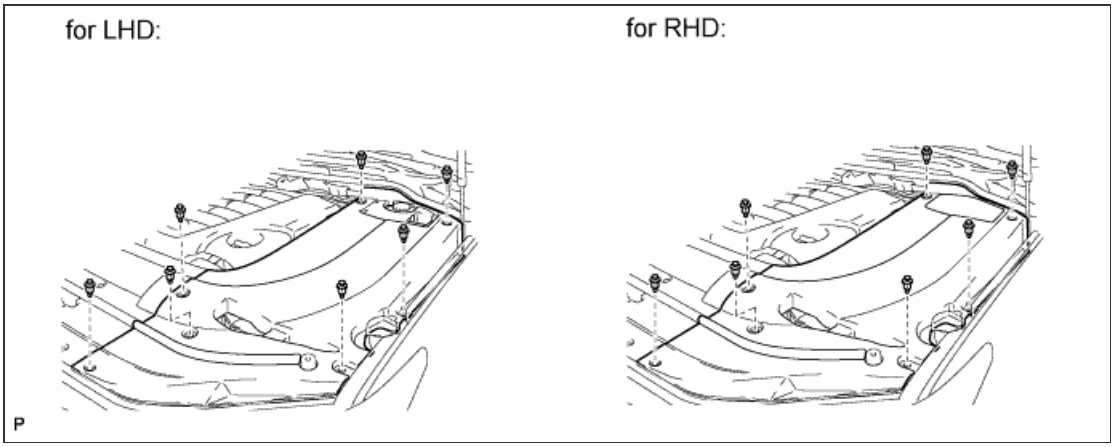


CURTAIN SHIELD AIRBAG CUTOFF SWITCH > REMOVAL

for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

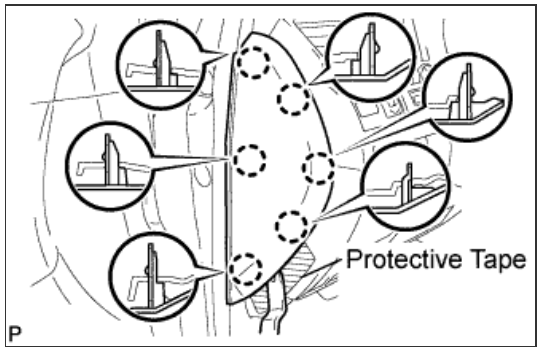
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE INSTRUMENT SIDE PANEL LH

a. Place protective tape as shown in the illustration.

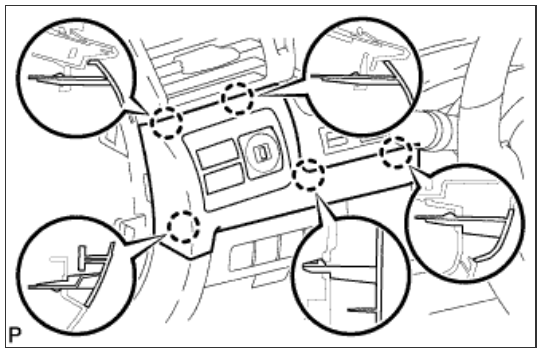
b. Using a moulding remover, detach the 6 claws and remove the side panel.



4. REMOVE NO. 1 SWITCH HOLE BASE

a. Detach the 5 claws.

b. Disconnect the connectors and remove the switch hole base.

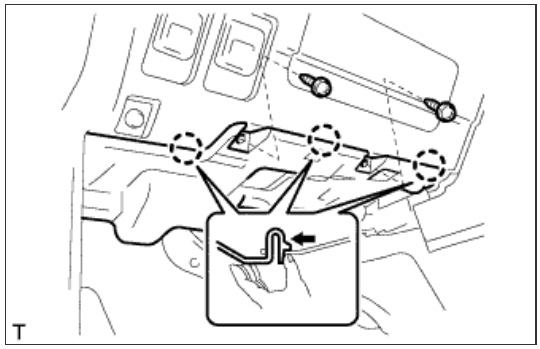


5. REMOVE NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Remove the 2 screws.

b. Detach the 3 claws.

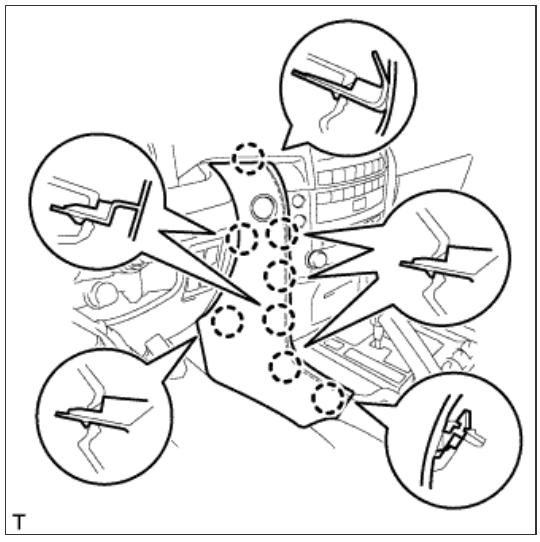
c. Remove the under cover and disconnect the connectors.



6. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Detach the 8 claws.

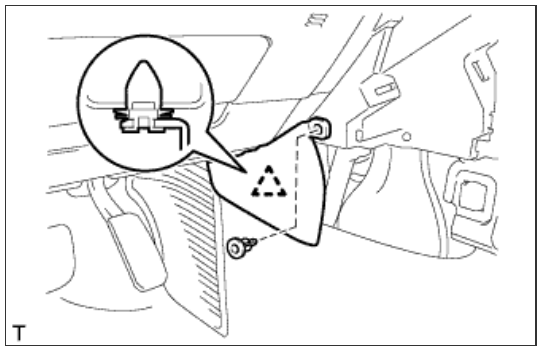
b. Disconnect the connector and remove the panel pad.



7. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Remove the clip.

b. Detach the clip and remove the cover.

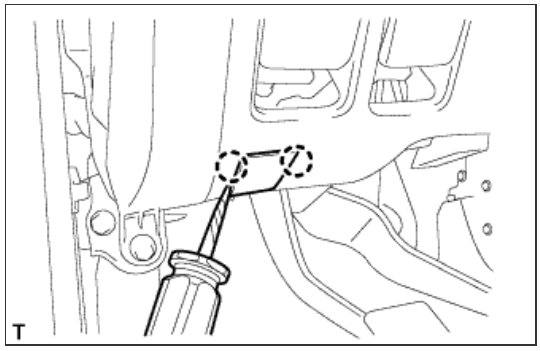


8. REMOVE LOWER NO. 1 INSTRUMENT PANEL FINISH PANEL

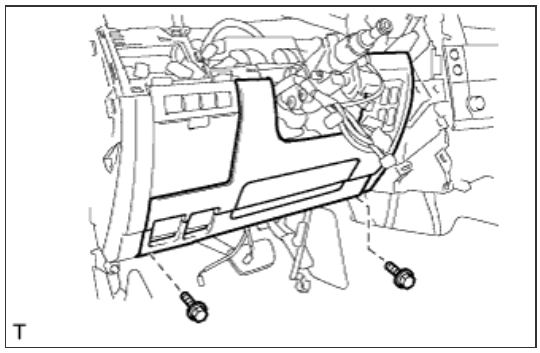
a. Using a screwdriver, detach the 2 claws and open the hole cover.

HINT:

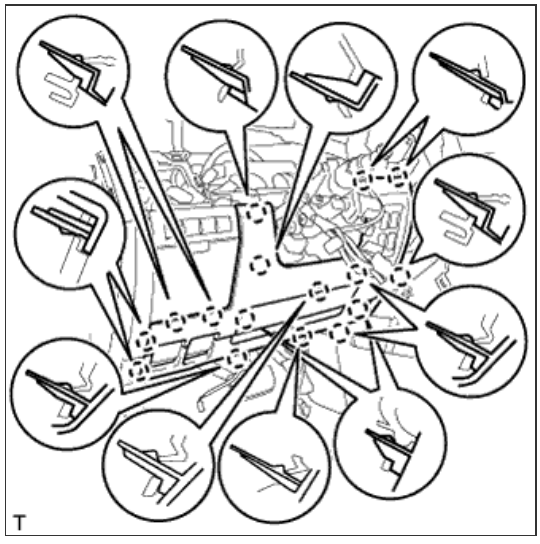
Tape the screwdriver tip before use.



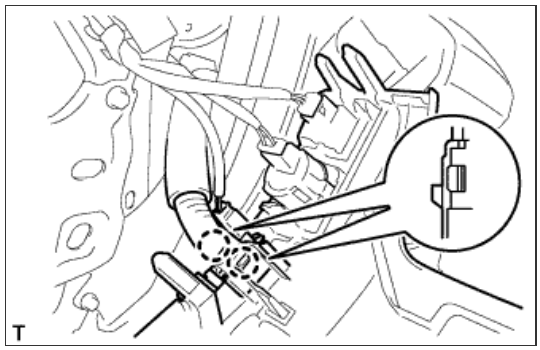
b. Remove the 2 bolts.



c. Detach the 16 claws.

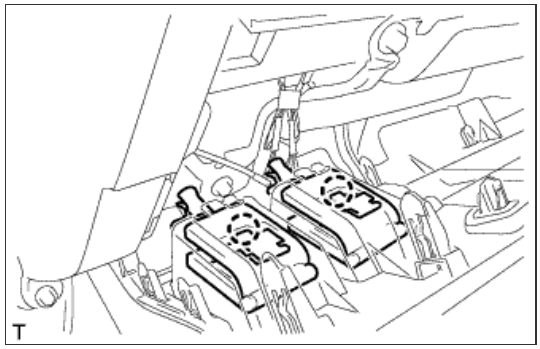


d. Detach the 2 claws and remove the sensor.



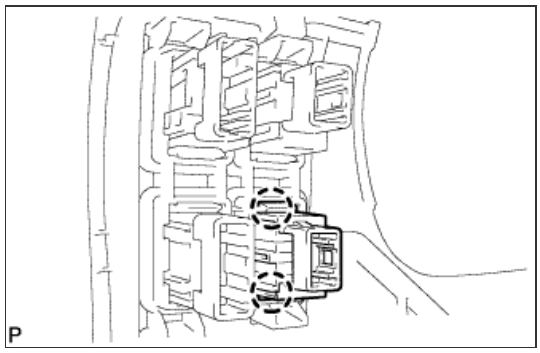
e. Detach the 2 claws and disconnect the 2 control cables.

f. Remove the finish panel and then disconnect the connectors.



9. REMOVE CURTAIN SHIELD AIRBAG CUTOFF SWITCH

a. Detach the 2 claws and remove the switch.



for Preparation Click here

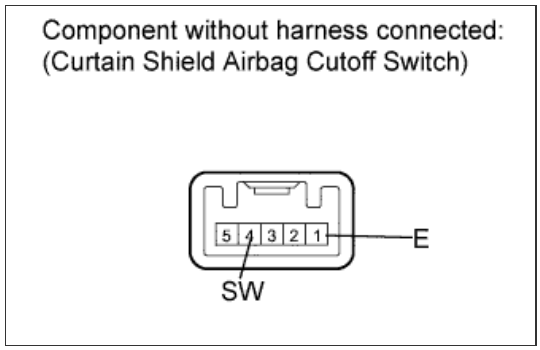
1. INSPECT CURTAIN SHIELD AIRBAG CUTOFF SWITCH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
4 (SW) - 1 (E)	Switch is not pressed	Below 1 Ω
	Switch is pressed	10 kΩ or higher

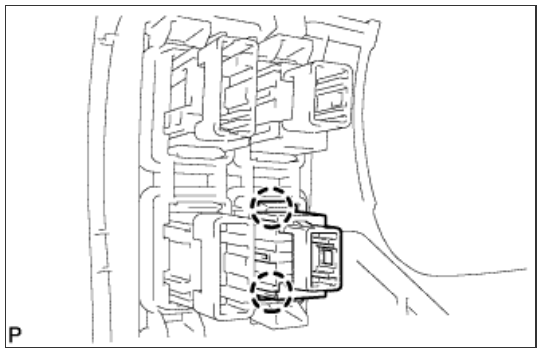
If the result is not as specified, replace the curtain shield airbag cutoff switch.



for Preparation Click here

1. INSTALL CURTAIN SHIELD AIRBAG CUTOFF SWITCH

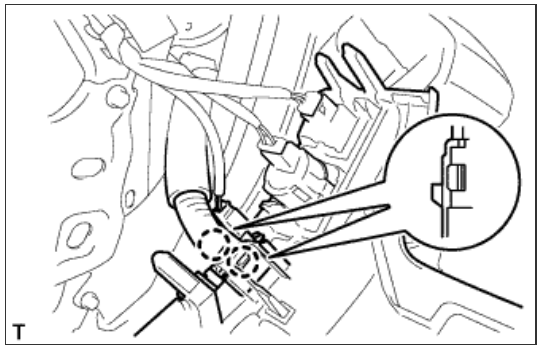
a. Attach the 2 claws to install the switch.



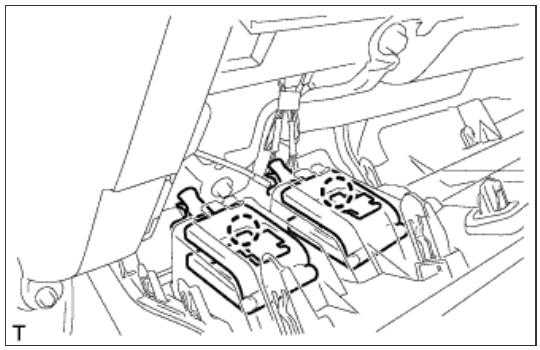
2. INSTALL LOWER NO. 1 INSTRUMENT PANEL FINISH PANEL

a. Connect the connectors.

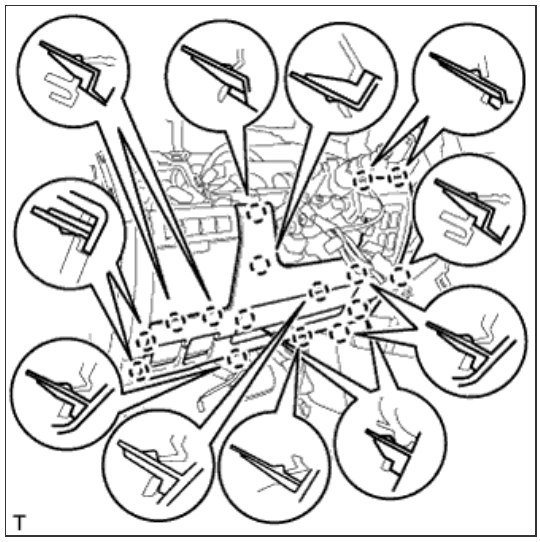
b. Attach the 2 claws to install the sensor.



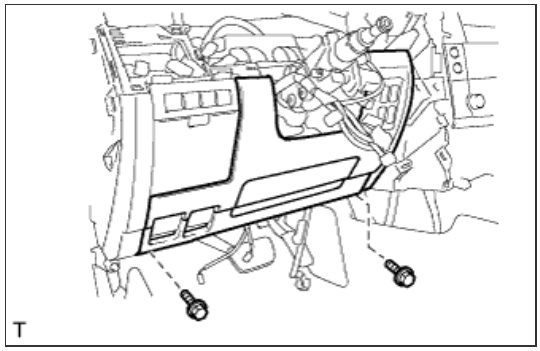
c. Attach the 2 claws to connect the 2 control cables.



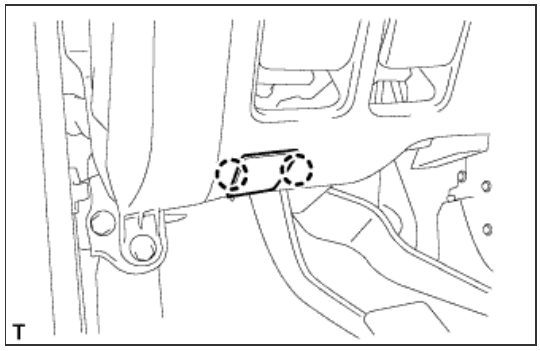
d. Attach the 16 claws to install the finish panel.



e. Install the 2 bolts.



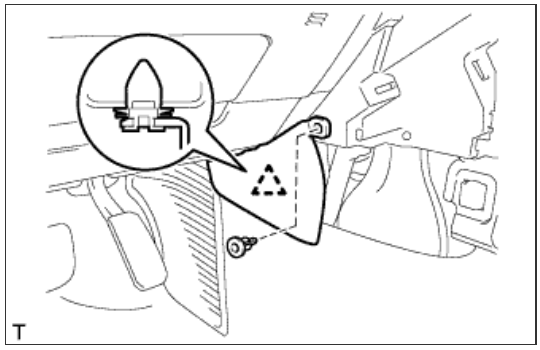
f. Attach the 2 claws to close the hole cover.



3. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Attach the clip to install the cover.

b. Install the clip.

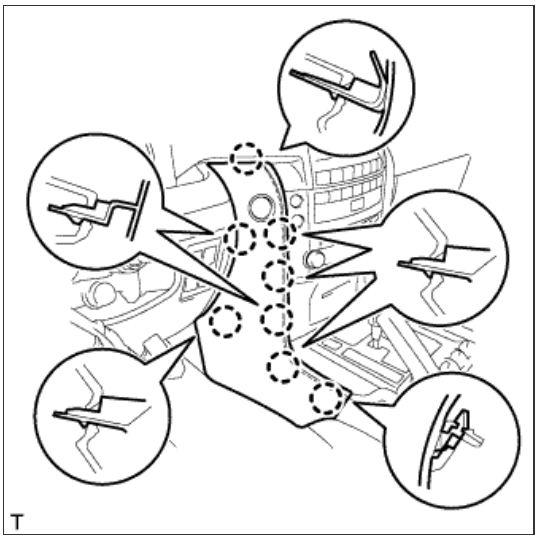


4. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Connect the connector.

a. Connect the connector.

b. Attach the 8 claws to install the panel pad.

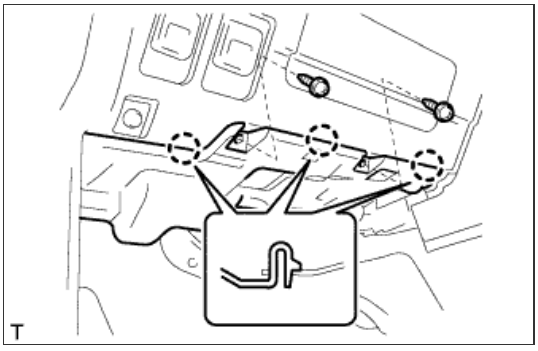


5. INSTALL NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Connect the connectors.

b. Attach the 3 claws to install the under cover.

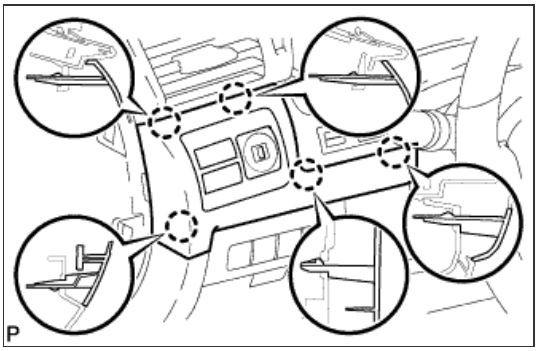
c. Install the 2 screws.



6. INSTALL NO. 1 SWITCH HOLE BASE

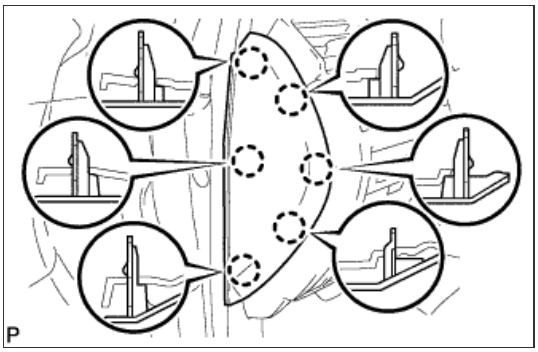
a. Connect the connectors.

b. Attach the 5 claws to install the switch hole base.



7. INSTALL INSTRUMENT SIDE PANEL LH

a. Attach the 6 claws to install the side panel.



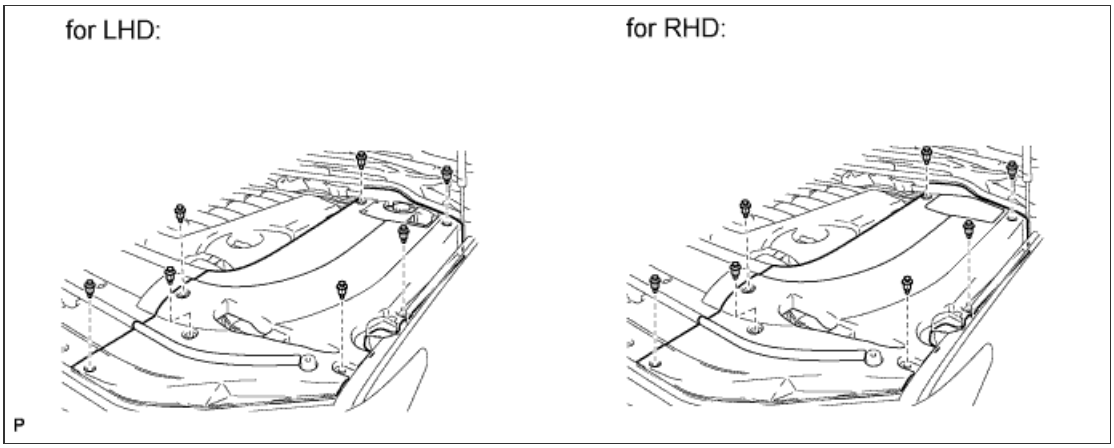
8. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

9. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



10. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here

1.TROUBLESHOOTING PRECAUTIONS

a. If a terminal contact point malfunction or part installation problem occurs, removal and reinstallation of the suspected part may return the system to normal. However, be aware that the normal condition may only be temporary.

b. Before disconnecting connectors or removing/installing parts, determine the malfunctioning area by checking and writing down the condition of the vehicle at the time of the malfunction (DTC outputs, etc.).

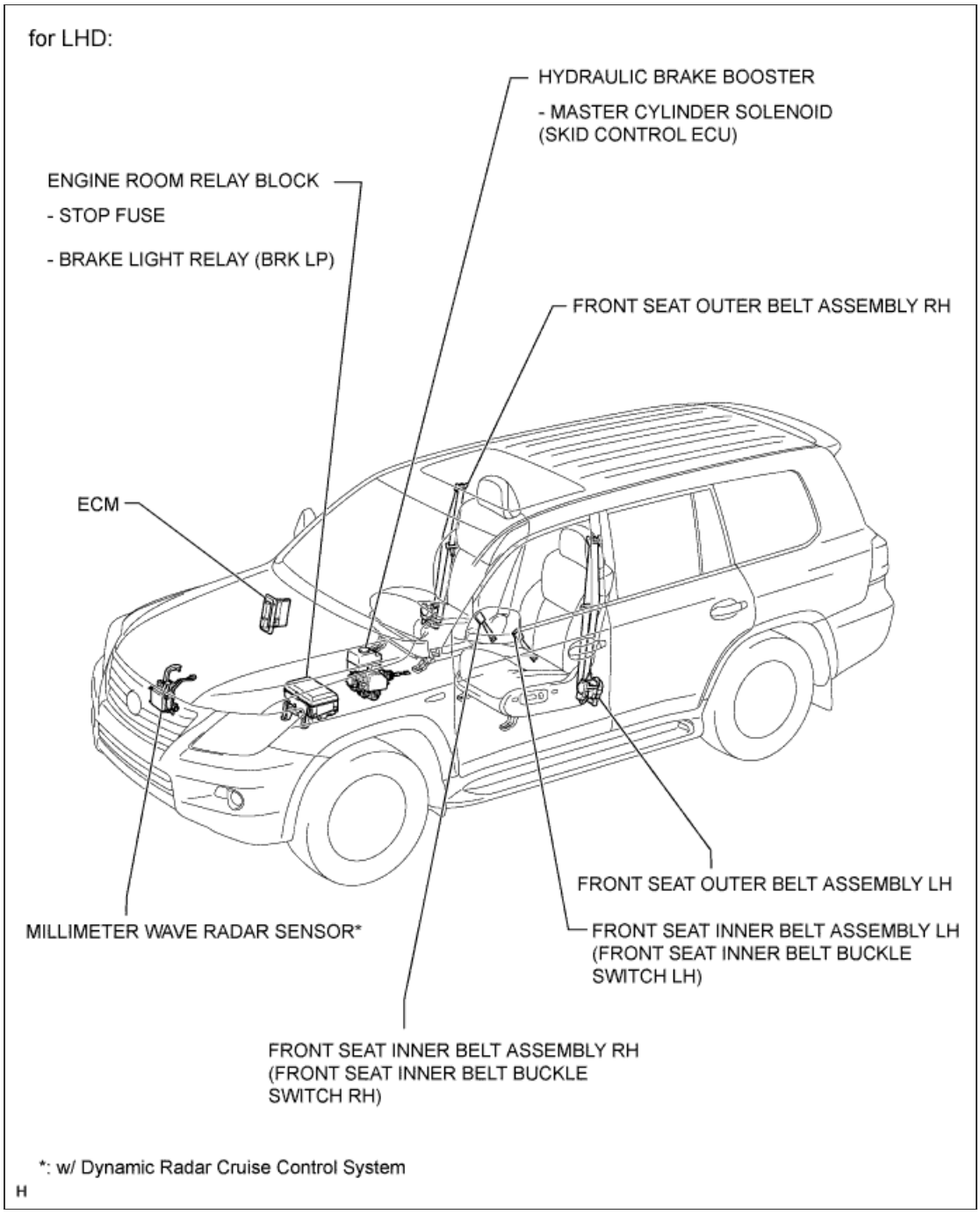
c. Be sure to check for DTCs related to other systems. The pre-crash safety system may be influenced by malfunctions in other systems.

2.HANDLING PRECAUTIONS

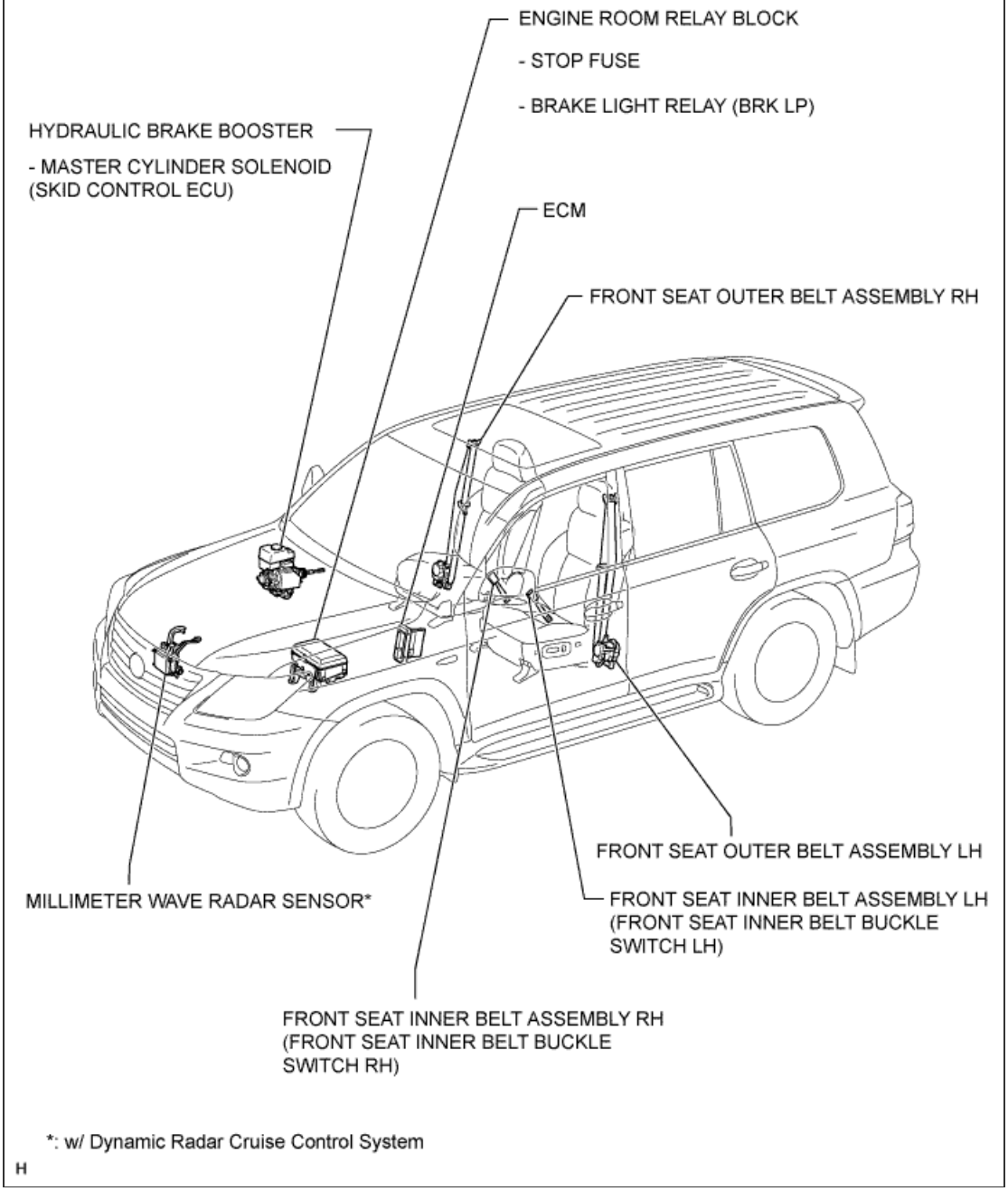
a. When removing and installing the ECUs, sensors, switches or other pre-crash safety system related parts, perform the following:

- Make sure the engine switch is off unless otherwise specified in the inspection procedures.
- After the removal/installation, check for DTCs and confirm that a normal system code is output.

for Preparation Click here



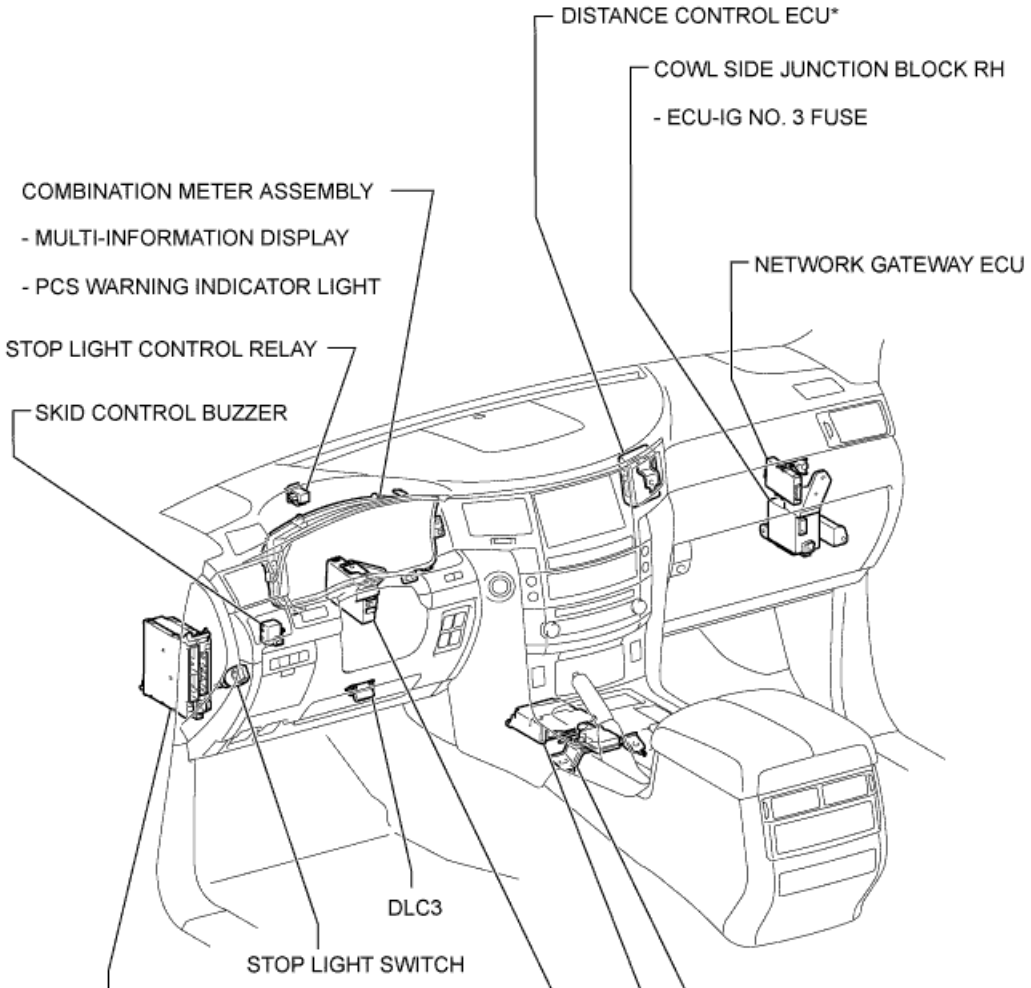
for RHD:



*: w/ Dynamic Radar Cruise Control System

H

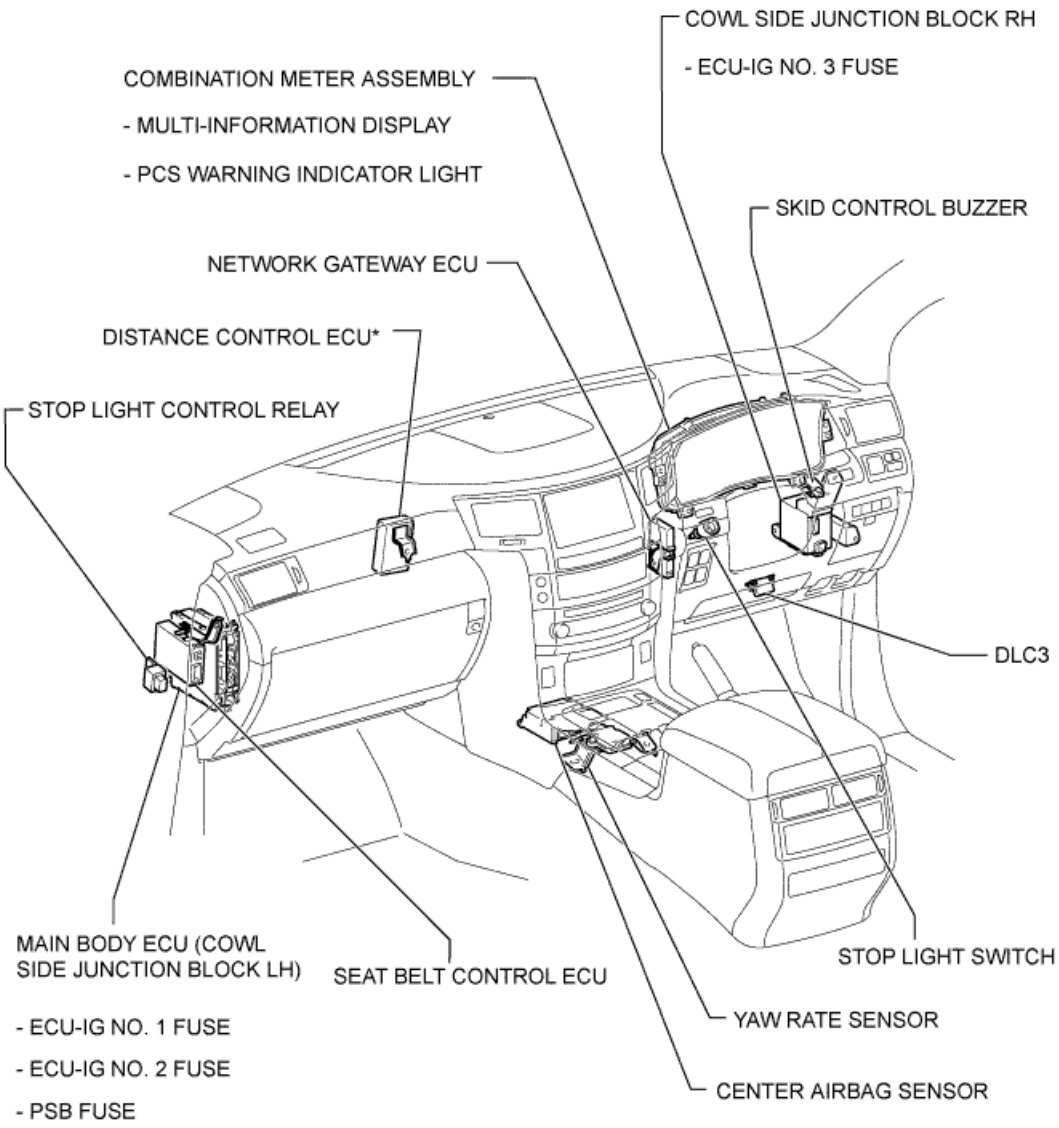
for LHD:



*: w/ Dynamic Radar Cruise Control System

H

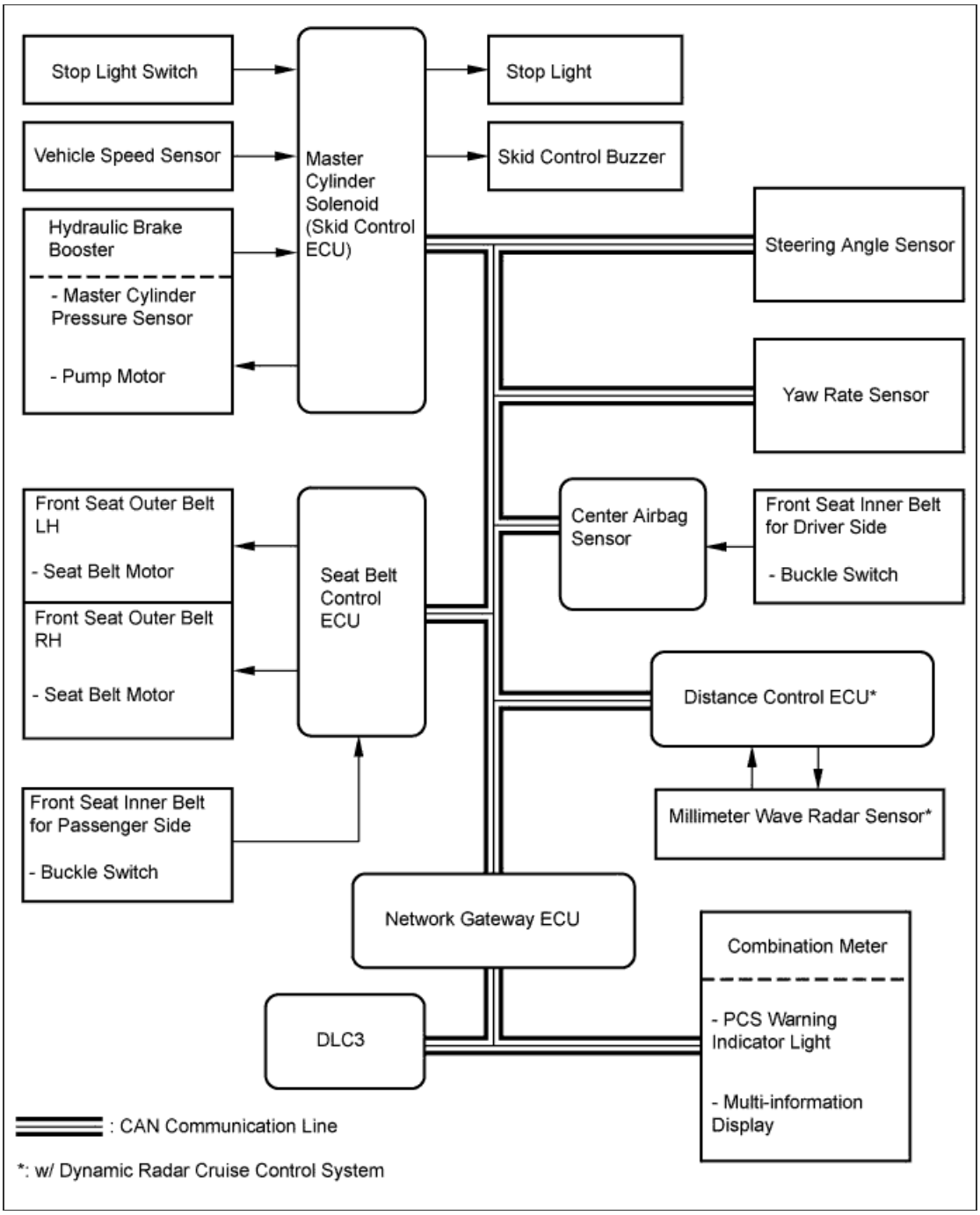
for RHD:



*: w/ Dynamic Radar Cruise Control System

H

for Preparation Click here



Communication Table

Transmitter	Receiver	Signal	Communication Line
Distance Control ECU	Seat Belt Control ECU	• Relative vehicle speed signal • Vehicle-to-vehicle distance signal • Seat belt operation signal	CAN
Master Cylinder Solenoid (Skid Control ECU)	Seat Belt Control ECU	• Seat belt operation signal • Sudden braking signal • VSC control signal • Vehicle speed signal	CAN
Center Airbag Sensor	Seat Belt Control ECU	• Buckle switch malfunction signal • Driver seat belt buckle switch signal	CAN

		• Passenger seat belt buckle switch signal	
Seat Belt Control ECU	Combination Meter	Pre-crash safety malfunction signal	CAN
Distance Control ECU	Master Cylinder Solenoid (Skid Control ECU)	Brake assist standby signal	CAN

for Preparation Click here

PRE-CRASH SAFETY SYSTEM

a. The pre-crash safety system optimizes and activates occupant protection equipment in an attempt to reduce injury in a collision.

OUTLINE OF PRE-CRASH SAFETY SYSTEM

Operating Condition	Control	Transmitting ECU	Receiving ECU	Part Operated
Operates according to sensor detection	Pre-crash safety seat belts	Distance control ECU	Seat belt control ECU	Front seat outer belts
Operates according to sensor detection	Pre-crash safety brake assist	Distance control ECU	Master cylinder solenoid (skid control ECU)	Brake assist system
Operates when sudden braking occurs	Pre-crash safety seat belts	Master cylinder solenoid (skid control ECU)	Seat belt control ECU	Front seat outer belts

a. When operating according to sensor detection:
The distance control ECU uses information from the millimeter wave radar sensor to determine if the pre-crash safety system should be activated. If so, the distance control ECU sends signals to the master cylinder solenoid (skid control ECU) and seat belt control ECU through CAN communication. In response to these signals, the pre-crash safety system operates as follows:

- The seat belt control ECU initiates control of the pre-crash safety seat belts.
- The master cylinder solenoid (skid control ECU) activates the pre-crash safety brake assist system.

b. When operating as a result of sudden braking:
The master cylinder solenoid (skid control ECU) uses brake pressure information and other data to determine if the driver has suddenly applied the brakes. If so, the master cylinder solenoid (skid control ECU) sends a signal to the seat belt control ECU through CAN communication and the pre-crash safety seat belt activates.

OUTLINE OF PRE-CRASH SAFETY SEAT BELT CONTROL

a. Pre-crash safety seat belt operation conditions:

- The driver firmly depresses the brake pedal suddenly.
- The driver oversteers or the vehicle is spinning.

b. Pre-crash safety seat belt non-operation conditions:
If any of the following conditions are met, the pre-crash safety seat belt does not operate.

- The seat belts are not fastened.
- The engine switch is off or on (ACC).
- The vehicle speed is approximately 30 km/h (18.6 mph) or less.
- When the pre-crash safety seat belts are repeatedly operated and the seat belt control ECU overheats, seat belt operation is prohibited to protect the ECU.

HINT:

The PCS warning indicator light in the combination meter will blink at this time.

OUTLINE OF PRE-CRASH SAFETY BRAKE ASSIST SYSTEM

a. The pre-crash safety brake assist system operates depending on what the sensor detects. The system then enters standby mode before a collision. When the driver depresses the brake pedal, brake fluid pressure is increased to improve fluid pressure response and improve vehicle speed reduction rate.

b. Operative condition

i. Refer to the sensor description under "outline of pre-crash safety system" (see above).

ii. When the driver depresses the brake pedal after the distance control ECU determines that a collision is unavoidable:
Brake fluid pressure is increased at the same time the driver depresses the brake pedal.

iii. When the driver depresses the brake pedal before the distance control ECU determines that a collision is unavoidable:
Brake fluid pressure is increased at the same time that the distance control ECU receives a pre-crash sensor signal (indicating that other vehicles or objects are in front of the vehicle).

OPERATIVE CONDITION AND INOPERATIVE CONDITION OF EACH CONTROL (REVIEW)

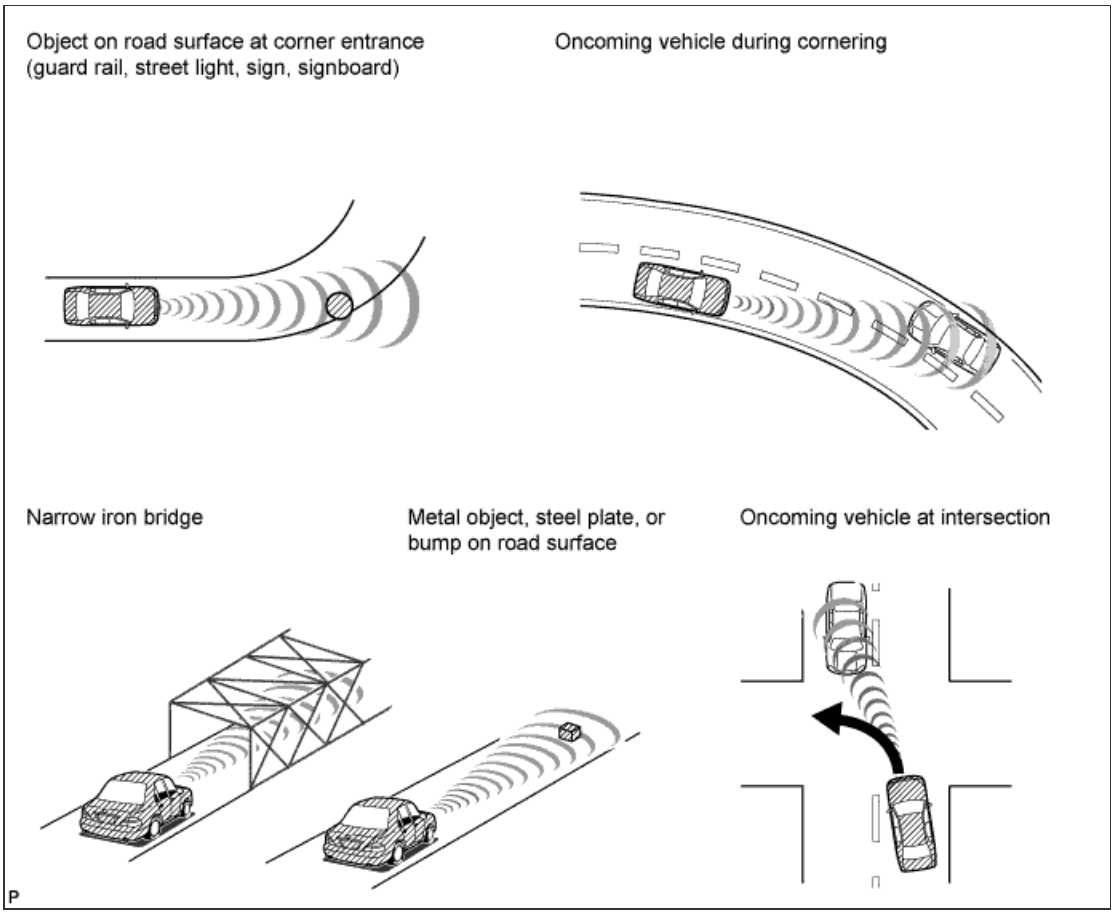
	Pre-crash Safety Seat Belts*1	Pre-crash Safety Seat Belts*2	Pre-crash Safety Brake Assist*2
When the engine switch is off or on (ACC).	-	-	-
When a warning message is displayed on the multi-information display.	*3	*3	*3
When the seat belt(s) is/are fastened.	*4	*4	○
Operates when the vehicle speed is 30 km/h (18.6 mph) or more, regardless of relative speed.	○	-	-
Operates when the vehicle speed is 5 km/h (3 mph) or more and relative speed is 30 km/h (18.6 mph).	-	○	-
Operates when the vehicle speed is 30 km/h (18.6 mph) or more and relative speed is 30 km/h (18.6 mph).	-	-	○
When the vehicle collides with an object outside the detection range of the millimeter wave radar sensor (side collision, rear collision, etc.).	*5	-	-
When the millimeter wave radar sensor cannot detect a possible collision object.	*5	-	-

HINT:

- ***1: Operates when brakes are suddenly applied**
- ***2: Operates according to sensor detection**
- ***3: Inoperative parts are different depending on malfunction areas**
- ***4: Only operates when a seat belt is fastened**
- ***5: Pre-crash safety seat belts may operate when brakes are suddenly applied**

PRECAUTION FOR PRE-CRASH SAFETY SYSTEM OPERATION

a. When the millimeter wave radar sensor detects an object in front of the vehicle under the conditions described below, the distance control ECU may determine that a collision is unavoidable, and activate the pre-crash safety system. However, this is not abnormal.



HINT:

- **The pre-crash safety system will not activate when the pre-crash safety sensor detects safety cones and other plastic objects.**
- **The pre-crash safety system may or may not activate when the pre-crash safety sensor detects the following objects: people, bicycles, motorcycles, trees, animals and snow fences.**

Object Type	Example
Objects that cannot be detected.	Plastic items (safety cones)
Objects that cannot be detected in a stable manner.	People, bicycles, motorcycles, trees, animals, snow fences, etc.

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the pre-crash safety system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK COMMUNICATION FUNCTION OF CAN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B. → GO TO CAN COMMUNICATION SYSTEM (Click here)

B. → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

4.CHECK INDICATOR

a. Check the indicator (Click here).

NEXT

5.CHECK FOR DTC*

a. Check for DTCs (Click here).

b. Clear the DTCs (Click here).

c. Recheck for DTCs (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output	B

B. GO TO DTC CHART (Click here)

A

6.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. Go to step 8

A

7.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Terminals of ECU (Click here).

b. Data List / Active Test (Click here).

NEXT

8.ADJUST, REPAIR OR REPLACE

NEXT

9.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the pre-crash safety system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK COMMUNICATION FUNCTION OF CAN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B. → GO TO CAN COMMUNICATION SYSTEM (Click here)

B. → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

4.CHECK INDICATOR

a. Check the indicator (Click here).

NEXT

5.CHECK FOR DTC*

a. Check for DTCs (Click here).

b. Clear the DTCs (Click here).

c. Recheck for DTCs (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output	B

B. GO TO DTC CHART (Click here)

A

6.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. Go to step 8

A

7.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Terminals of ECU (Click here).

b. Data List / Active Test (Click here).

NEXT

8.ADJUST, REPAIR OR REPLACE

NEXT

9.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the pre-crash safety system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK COMMUNICATION FUNCTION OF CAN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B. → GO TO CAN COMMUNICATION SYSTEM (Click here)

B. → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

4.CHECK INDICATOR

a. Check the indicator (Click here).

NEXT

5.CHECK FOR DTC*

a. Check for DTCs (Click here).

b. Clear the DTCs (Click here).

c. Recheck for DTCs (Click here).

Result

Result	Proceed to
DTC is not output	A
DTC is output	B

B. GO TO DTC CHART (Click here)

A

6.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. Go to step 8

A

7.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Terminals of ECU (Click here).

b. Data List / Active Test (Click here).

NEXT

8.ADJUST, REPAIR OR REPLACE

NEXT

9.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.**
- **Inspect the fuses and relays related to this system before inspecting the suspected areas below.**

w/o Dynamic Radar Cruise Control System

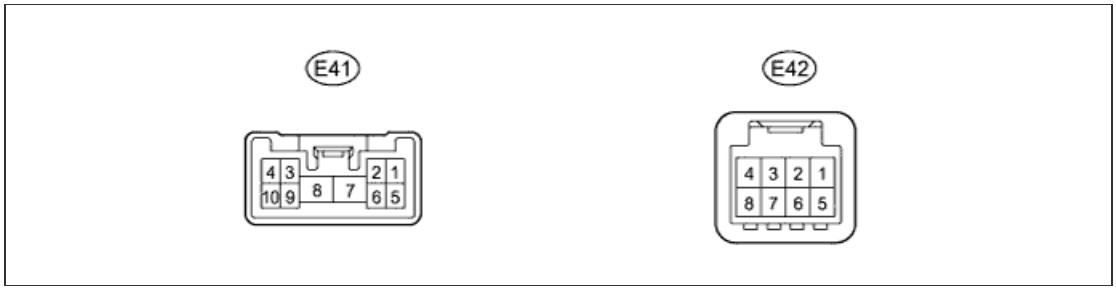
Symptom	Suspected Area	See page
All functions of pre-crash safety system do not operate	Power source circuit	Click here
	Seat belt control ECU	Click here
	Front seat inner belt LH assembly	-
	Front seat inner belt RH assembly	-
	Buckle switch error (malfunction in which DTC is not output)	-

w/ Dynamic Radar Cruise Control System

Symptom	Suspected Area	See page
All functions of pre-crash safety system do not operate	Power source circuit	Click here
	Seat belt control ECU	Click here
	Front seat inner belt LH assembly	-
	Front seat inner belt RH assembly	-
	Buckle switch error (malfunction in which DTC is not output)	-
"Check PCS System" is displayed	Seat belt control ECU	Click here
	Distance control ECU	Click here
"PCS Not available now" is displayed	System determines obstacles cannot be detected due to the millimeter wave radar sensor or the radiator grille being dirty. If the dirt is removed, normal control returns (dirt history can be checked using Data List).	-
	System determines the millimeter wave radar sensor cannot detect obstacles due to bad weather. If weather recovers, normal control returns (bad weather history can be checked using Data List).	-
	Overheating protection fail-safe of the seat belt control ECU operates. If the ECU temperature drops, normal control returns.	-
	Millimeter wave radar sensor	-
	Seat belt control ECU	Click here
	Distance control ECU	Click here
Although there is a possibility of collision, pre-crash safety control (all front collision controls) does not operate ("PCS Not available now" is not displayed)	Vehicle condition/environment does not match the pre-crash control operation conditions (confirm control operation conditions).	-
	Check the installation condition of the millimeter wave radar sensor.	-
	Perform the millimeter wave radar sensor adjustment.	-
	Millimeter wave radar sensor	-
	Distance control ECU	Click here
Only pre-crash safety seat belt does not operate	Buckle switch error (malfunction in which DTC is not output)	-
	Seat belt control ECU	Click here
Pre-crash brake cannot be canceled (pre-crash warning indicator does not blink)	Combination meter (check if the indicator blinks using Active Test)	-

for Preparation Click here

CHECK SEAT BELT CONTROL ECU



a. Disconnect the E41 and E42 seat belt control ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E42-8 (IG1) - Body ground	G - Body ground	Seat belt control ECU power source line	Engine switch on (IG)	11 to 14 V
			Engine switch off	Below 1 V
E41-7 (+B) - Body ground	R - W-B	Seat belt control ECU power source line	Always	11 to 14 V
E41-8 (PGND) - Body ground	W-B - Body ground	Seat belt control ECU ground line	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the E41 and E42 seat belt control ECU connectors.

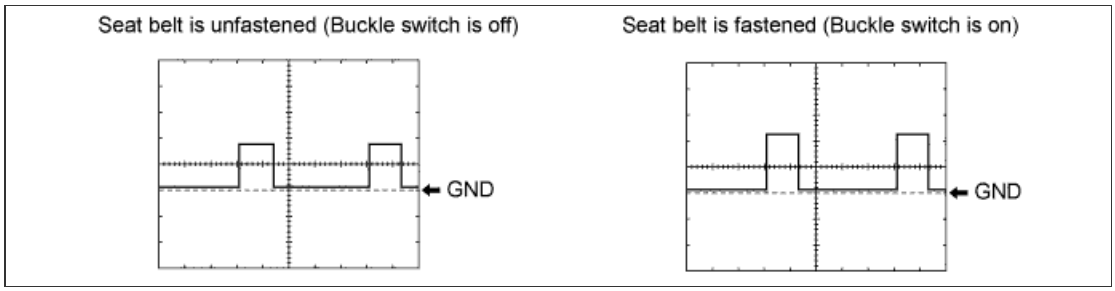
d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E41-2 (MOR+) - E41-8 (PGND)	L - W-B	RH side seat belt motor power source line	Engine switch on (IG)	4 to 8.5 V
E41-3 (MOL+) - E41-8 (PGND)	GR - W-B	LH side seat belt motor power source line	Engine switch on (IG)	4 to 8.5 V
E41-1 (MOR-) - Body ground	B - Body ground	RH side seat belt motor ground line	Engine switch on (IG)	4 to 8.5 V
E41-4 (MOL-) - Body ground	W - Body ground	LH side seat belt motor ground line	Engine switch on (IG)	4 to 8.5 V
E42-5 (PBK+) - E41-8 (PGND)	G - W-B	Passenger side buckle switch signal line	Engine switch on (IG) Front passenger side seat belt unfastened (Buckle switch off)	Waveform 1
			Engine switch on (IG) Front passenger side seat belt fastened (Buckle switch on)	

If the result is not as specified, the seat belt control ECU may have a malfunction.

e. Inspect using an oscilloscope.

i. Waveform 1 (Reference)



Item	Content
Terminal No. (Symbol)	E42-5 (PBK+) - E41-8 (PGND)
Tool Setting	5 V/DIV., 20 ms./DIV.
Switch Condition	Engine switch on (IG) Front passenger side seat belt unfastened (Buckle switch off)
	Engine switch on (IG) Front passenger side seat belt fastened (Buckle switch on)

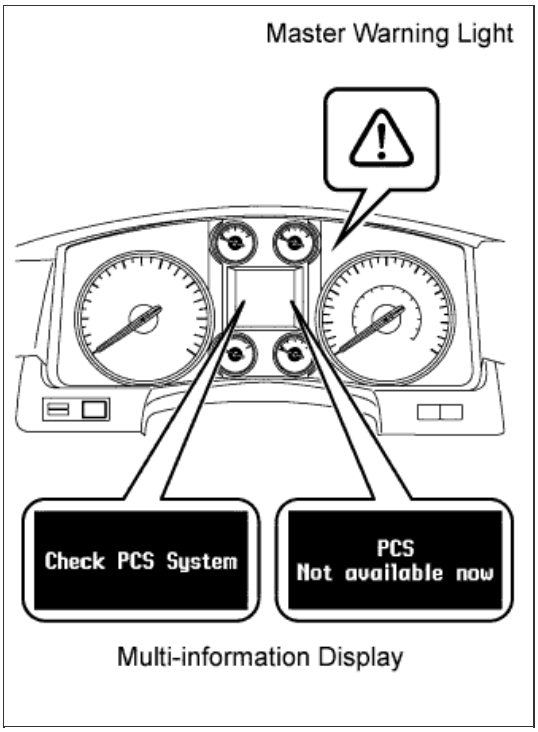
HINT:

Output voltage is between 4.5 and 5.5 V for 20 ms every 100 ms.

for Preparation Click here

FUNCTION OF WARNING INDICATOR AND MESSAGE

a. If the pre-crash safety system is not functioning properly, the driver is warned through the combination meter master warning indicator and the multi-information display warning message.



INITIAL CHECK

a. The initial check occurs when the engine switch is off for more than 2 seconds, and then turned on (IG). The initial check consists of the pre-crash safety system diagnostic check which lasts approximately 3 seconds.

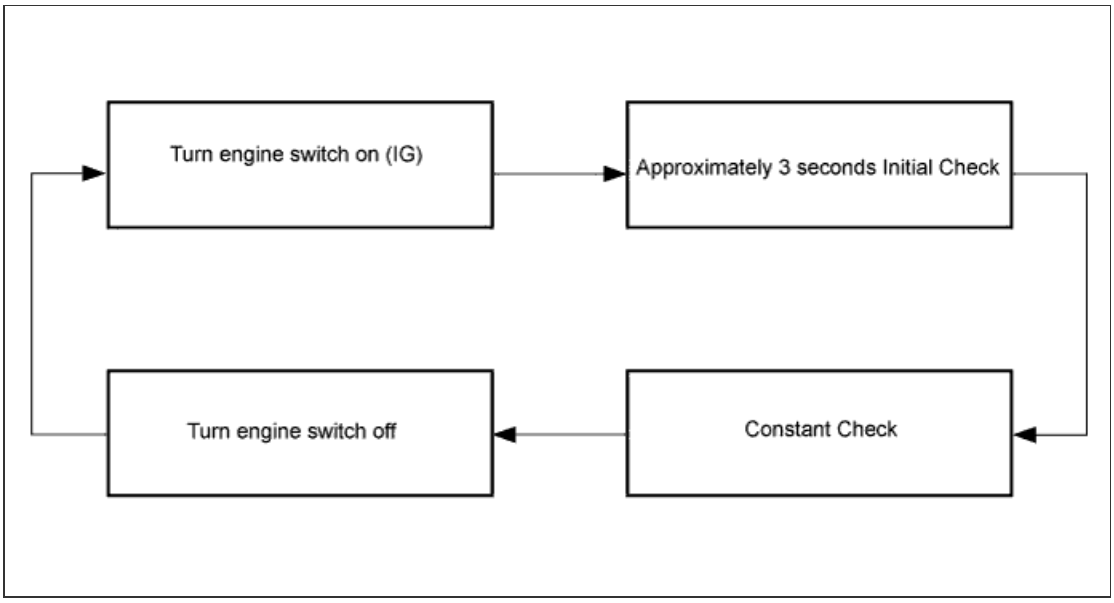
b. If a malfunction is detected during the initial check, the multi-information display displays "Check PCS System" or "PCS Not available now".

Warning Message	Detail	DTC	PCS Warning Indicator
Check PCS System	This message appears when the seat belt control ECU detects a system malfunction	DTC is output	ON
PCS Not available now	This message appears when the seat belt control ECU is in the fail-safe mode	DTC is not output	Blinking

CONSTANT CHECK

a. After completing the initial check, the pre-crash safety system will become operational. Then, the diagnosis circuit will perform a constant check to check that there is not a system malfunction.

b. If a malfunction is detected during the constant check, the multi-information display displays "Check PCS System" or "PCS Not available now".


Turn engine switch on (IG)
Approximately 3 seconds Initial Check
Constant Check
Turn engine switch off

for Preparation Click here

CHECK DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Pre-Crash / Trouble Codes.

e. Read the DTCs.

CLEAR DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Pre-Crash / Trouble Codes.

e. Clear the DTCs.

for Preparation Click here

The pre-crash safety system fail-safe function and details are indicated in the table below.

Cause	Warning Message	Fail-safe Operation	Conditions to Return to Normal Condition
Malfunction exists in part of pre-crash safety system	"Check PCS System" or "PCS Not available now"	Depending on the malfunctioning part, the pre-crash safety seat belts or the brake assist system may stop operating.*1	Repair the malfunctioning part
Radiator grille or millimeter wave radar sensor is dirty	"PCS Not available now"	Depending on the amount of dirt on the radiator grille or millimeter wave radar sensor, the pre-crash safety seat belts or the brake assist system may stop operating.*1	Clean the radiator grille or millimeter wave radar sensor
Pre-crash sensor cannot detect possible crash object because of bad weather, such as snow	"PCS Not available now"	Depending on the amount of dirt on the radiator grille, the pre-crash safety seat belts or the brake assist system may stop operating.*1	Sensor can detect an object
Overheating prevention function of seat belt control ECU operates*2	"PCS Not available now"	The pre-crash safety seat belts may stop operating.	Temperature of the seat belt goes down, and the seat belt control ECU becomes operative

HINT:

- ***1: The pre-crash safety seat belts operate only with sudden braking.**
- ***2: The overheating prevention function operates when the seat belt control ECU detects a rise in seat belt control ECU temperature because of excessive seat belt operation.**

for Preparation Click here

READ DATA LIST

HINT:

Using the intelligent tester to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Data List.

e. According to the display on the intelligent tester, read the Data List.

Pre-Crash

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Driver Buckle SW	Driver side buckle switch status / UNSET, SET or NG	UNSET: Driver side seat belt unfastened SET: Driver side seat belt fastened NG: Indeterminate data	-
Passenger Buckle SW	Front passenger side buckle switch status / UNSET, SET or NG	UNSET: Passenger side seat belt unfastened SET: Passenger side seat belt fastened NG: Indeterminate data	-
Driver Belt Control	Seat belt control status of driver side seat / STOP, ON or ERROR	STOP: Control stopped ON: Controlled ERROR: Indeterminate data	The driver side seat belt is fastened.
Passenger Belt Control	Seat belt control status of passenger side seat / STOP, ON or ERROR	STOP: Control stopped ON: Controlled ERROR: Indeterminate data	The passenger side seat belt is fastened.
Number of Trouble Codes	Number of stored trouble codes / Min.: 0, Max.: 255	Number of DTCs stored	-

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Vehicle Speed Meter	Vehicle speed/ Min.: 0 km/h (0 mph) Max.: 255 km/h (158 mph)	Almost same as actual speed (when driving)	The speed is indicated on the speedometer.

PERFORM ACTIVE TEST

HINT:

Using the intelligent tester to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: All ECUs / (desired system) / Active Test.

e. According to the display on the intelligent tester, perform the Active Test.

Pre-Crash

Tester Display	Test Part	Control Range	Diagnostic Note
Driver Seat Belt Motor	Driver side seat belt motor	OFF or ON	The driver side seat belt is fastened.
Passenger Seat Belt Motor	Passenger side seat belt motor	OFF or ON	The passenger side seat belt is fastened.
Driver and Passenger Seat Belt Motor	Driver and passenger side seat belt motors	OFF or ON	The driver and passenger side seat belts are fastened.

ABS/VSC/TRAC

Tester Display	Test Part	Control Range	Diagnostic Note
Buzzer	Skid control buzzer sounds	OFF or ON	-

for Preparation Click here

HINT:

If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.

Pre-Crash Safety System

DTC Code	Detection Item	Trouble Area	See page
B2000	Short to B+ in Seat Belt Motor RH Circuit	- Front seat outer belt RH - Harness or connector - Seat belt control ECU	Click here
B2001	Short to GND in Seat Belt Motor RH Circuit	- Front seat outer belt RH - Harness or connector - Seat belt control ECU	Click here
B2002	Open in Seat Belt Motor RH Circuit	- Front seat outer belt RH - Harness or connector - Seat belt control ECU	Click here
B2005	Short to B+ in Seat Belt Motor LH Circuit	- Front seat outer belt LH - Harness or connector - Seat belt control ECU	Click here
B2006	Short to GND in Seat Belt Motor LH Circuit	- Front seat outer belt LH - Harness or connector - Seat belt control ECU	Click here
B2007	Open in Seat Belt Motor LH Circuit	- Front seat outer belt LH - Harness or connector - Seat belt control ECU	Click here
B2015	Open in Right Side Upper MOS	Seat belt control ECU	Click here
B2016	Open in Right Side Lower MOS	Seat belt control ECU	Click here
B2020	Open in Left Side Upper MOS	Seat belt control ECU	Click here
B2021	Open in Left Side Lower MOS	Seat belt control ECU	Click here
B2025	Right Side Current Detection Circuit Malfunction Hi	Seat belt control ECU	Click here
B2026	Right Side Current Detection Circuit Malfunction Lo	Seat belt control ECU	Click here
B2027	Right Side Over-Current Malfunction	Seat belt control ECU	Click here
B2030	Left Side Current Detection Circuit Malfunction Hi	Seat belt control ECU	Click here
B2031	Left Side Current Detection Circuit Malfunction Lo	Seat belt control ECU	Click here
B2032	Left Side Over-Current Malfunction	Seat belt control ECU	Click here
B2035	Power Supply Relay Adherence Malfunction	Seat belt control ECU	Click here
B2036	Power Supply Relay Malfunction Open	- Harness or connector - Fuse - Seat belt control ECU	Click here
B2040	EEPROM Malfunction	Seat belt control ECU	Click here
B2041	Fall of Raised Voltage	Seat belt control ECU	Click here
B2043	Fall of B+ Voltage	Seat belt control ECU	Click here
B2047	Seat Belt Control ECU Inner Circuit Malfunction	Seat belt control ECU	Click here
B2055	Radar Sensor Malfunction	- Millimeter wave radar sensor - Seat belt control ECU - Distance control ECU	Click here
B2056	Axial Gap of Radar Sensor	- Millimeter wave radar sensor - Seat belt control ECU - Distance control ECU	Click here
B2057	Yaw Rate Sensor	- Yaw rate sensor - Seat belt control ECU - Distance control ECU	Click here
B2058	Steering Angle Sensor	- Steering angle sensor - Seat belt control ECU - Distance control ECU	Click here
B2059	Vehicle Speed Malfunction	- Combination meter - ECM - Master cylinder solenoid (skid control ECU) - Seat belt control ECU	Click here

		- Distance control ECU	
B2060	ABS Malfunction	- CAN communication system - Vehicle stability control system - Seat belt control ECU	Click here
B2065	Distance Control ECU Malfunction	- Dynamic radar cruise control system - Seat belt control ECU	Click here
B2070	VSC Buzzer	- Vehicle stability control system - Seat belt control ECU	Click here
B2071	Stop Light Control Relay Malfunction	- CAN communication system - Vehicle stability control system - Seat belt control ECU	Click here
B2074	Driver Side Seat Belt Buckle Switch Circuit Malfunction	- Front seat inner belt (for driver side) - Center airbag sensor - Seat belt control ECU - CAN communication system	Click here
B2075	Passenger Side Seat Belt Buckle Switch Circuit Malfunction	- Harness or connector - Front seat inner belt (for passenger side) - Seat belt control ECU	Click here
U0100	Lost Communication with ECM / PCM "A"	- CAN communication system - Distance control ECU - ECM	Click here
U0122	Lost Communication with Vehicle Dynamics Control Module	- CAN communication system - Master cylinder solenoid (skid control ECU) - Seat belt control ECU	Click here
U0151	Lost Communication with Airbag ECU	- CAN communication system - Center airbag sensor - Seat belt control ECU	Click here
U0235	Lost Communication with Cruise Control Front Distance Range Sensor	- CAN communication system - Millimeter wave radar sensor - Distance control ECU	Click here
U1101	Lost Communication with Distance Control ECU	- CAN communication system - Distance control ECU - Seat belt control ECU	Click here
U1102	Lost Communication with Radar Sensor	- CAN communication system - Distance control ECU - Millimeter wave radar sensor	Click here

for Preparation Click here

HINT:

If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.

Pre-Crash Safety System

DTC Code	Detection Item	Trouble Area	See page
B2000	Short to B+ in Seat Belt Motor RH Circuit	- Front seat outer belt RH - Harness or connector - Seat belt control ECU	Click here
B2001	Short to GND in Seat Belt Motor RH Circuit	- Front seat outer belt RH - Harness or connector - Seat belt control ECU	Click here
B2002	Open in Seat Belt Motor RH Circuit	- Front seat outer belt RH - Harness or connector - Seat belt control ECU	Click here
B2005	Short to B+ in Seat Belt Motor LH Circuit	- Front seat outer belt LH - Harness or connector - Seat belt control ECU	Click here
B2006	Short to GND in Seat Belt Motor LH Circuit	- Front seat outer belt LH - Harness or connector - Seat belt control ECU	Click here
B2007	Open in Seat Belt Motor LH Circuit	- Front seat outer belt LH - Harness or connector - Seat belt control ECU	Click here
B2015	Open in Right Side Upper MOS	Seat belt control ECU	Click here
B2016	Open in Right Side Lower MOS	Seat belt control ECU	Click here
B2020	Open in Left Side Upper MOS	Seat belt control ECU	Click here
B2021	Open in Left Side Lower MOS	Seat belt control ECU	Click here
B2025	Right Side Current Detection Circuit Malfunction Hi	Seat belt control ECU	Click here
B2026	Right Side Current Detection Circuit Malfunction Lo	Seat belt control ECU	Click here
B2027	Right Side Over-Current Malfunction	Seat belt control ECU	Click here
B2030	Left Side Current Detection Circuit Malfunction Hi	Seat belt control ECU	Click here
B2031	Left Side Current Detection Circuit Malfunction Lo	Seat belt control ECU	Click here
B2032	Left Side Over-Current Malfunction	Seat belt control ECU	Click here
B2035	Power Supply Relay Adherence Malfunction	Seat belt control ECU	Click here
B2036	Power Supply Relay Malfunction Open	- Harness or connector - Fuse - Seat belt control ECU	Click here
B2040	EEPROM Malfunction	Seat belt control ECU	Click here
B2041	Fall of Raised Voltage	Seat belt control ECU	Click here
B2043	Fall of B+ Voltage	Seat belt control ECU	Click here
B2047	Seat Belt Control ECU Inner Circuit Malfunction	Seat belt control ECU	Click here
B2055	Radar Sensor Malfunction	- Millimeter wave radar sensor - Seat belt control ECU - Distance control ECU	Click here
B2056	Axial Gap of Radar Sensor	- Millimeter wave radar sensor - Seat belt control ECU - Distance control ECU	Click here
B2057	Yaw Rate Sensor	- Yaw rate sensor - Seat belt control ECU - Distance control ECU	Click here
B2058	Steering Angle Sensor	- Steering angle sensor - Seat belt control ECU - Distance control ECU	Click here
B2059	Vehicle Speed Malfunction	- Combination meter - ECM - Master cylinder solenoid (skid control ECU) - Seat belt control ECU	Click here

		- Distance control ECU	
B2060	ABS Malfunction	- CAN communication system - Vehicle stability control system - Seat belt control ECU	Click here
B2065	Distance Control ECU Malfunction	- Dynamic radar cruise control system - Seat belt control ECU	Click here
B2070	VSC Buzzer	- Vehicle stability control system - Seat belt control ECU	Click here
B2071	Stop Light Control Relay Malfunction	- CAN communication system - Vehicle stability control system - Seat belt control ECU	Click here
B2074	Driver Side Seat Belt Buckle Switch Circuit Malfunction	- Front seat inner belt (for driver side) - Center airbag sensor - Seat belt control ECU - CAN communication system	Click here
B2075	Passenger Side Seat Belt Buckle Switch Circuit Malfunction	- Harness or connector - Front seat inner belt (for passenger side) - Seat belt control ECU	Click here
U0100	Lost Communication with ECM / PCM "A"	- CAN communication system - Distance control ECU - ECM	Click here
U0122	Lost Communication with Vehicle Dynamics Control Module	- CAN communication system - Master cylinder solenoid (skid control ECU) - Seat belt control ECU	Click here
U0151	Lost Communication with Airbag ECU	- CAN communication system - Center airbag sensor - Seat belt control ECU	Click here
U0235	Lost Communication with Cruise Control Front Distance Range Sensor	- CAN communication system - Millimeter wave radar sensor - Distance control ECU	Click here
U1101	Lost Communication with Distance Control ECU	- CAN communication system - Distance control ECU - Seat belt control ECU	Click here
U1102	Lost Communication with Radar Sensor	- CAN communication system - Distance control ECU - Millimeter wave radar sensor	Click here

for Preparation Click here

HINT:

If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.

Pre-Crash Safety System

DTC Code	Detection Item	Trouble Area	See page
B2000	Short to B+ in Seat Belt Motor RH Circuit	- Front seat outer belt RH - Harness or connector - Seat belt control ECU	Click here
B2001	Short to GND in Seat Belt Motor RH Circuit	- Front seat outer belt RH - Harness or connector - Seat belt control ECU	Click here
B2002	Open in Seat Belt Motor RH Circuit	- Front seat outer belt RH - Harness or connector - Seat belt control ECU	Click here
B2005	Short to B+ in Seat Belt Motor LH Circuit	- Front seat outer belt LH - Harness or connector - Seat belt control ECU	Click here
B2006	Short to GND in Seat Belt Motor LH Circuit	- Front seat outer belt LH - Harness or connector - Seat belt control ECU	Click here
B2007	Open in Seat Belt Motor LH Circuit	- Front seat outer belt LH - Harness or connector - Seat belt control ECU	Click here
B2015	Open in Right Side Upper MOS	Seat belt control ECU	Click here
B2016	Open in Right Side Lower MOS	Seat belt control ECU	Click here
B2020	Open in Left Side Upper MOS	Seat belt control ECU	Click here
B2021	Open in Left Side Lower MOS	Seat belt control ECU	Click here
B2025	Right Side Current Detection Circuit Malfunction Hi	Seat belt control ECU	Click here
B2026	Right Side Current Detection Circuit Malfunction Lo	Seat belt control ECU	Click here
B2027	Right Side Over-Current Malfunction	Seat belt control ECU	Click here
B2030	Left Side Current Detection Circuit Malfunction Hi	Seat belt control ECU	Click here
B2031	Left Side Current Detection Circuit Malfunction Lo	Seat belt control ECU	Click here
B2032	Left Side Over-Current Malfunction	Seat belt control ECU	Click here
B2035	Power Supply Relay Adherence Malfunction	Seat belt control ECU	Click here
B2036	Power Supply Relay Malfunction Open	- Harness or connector - Fuse - Seat belt control ECU	Click here
B2040	EEPROM Malfunction	Seat belt control ECU	Click here
B2041	Fall of Raised Voltage	Seat belt control ECU	Click here
B2043	Fall of B+ Voltage	Seat belt control ECU	Click here
B2047	Seat Belt Control ECU Inner Circuit Malfunction	Seat belt control ECU	Click here
B2055	Radar Sensor Malfunction	- Millimeter wave radar sensor - Seat belt control ECU - Distance control ECU	Click here
B2056	Axial Gap of Radar Sensor	- Millimeter wave radar sensor - Seat belt control ECU - Distance control ECU	Click here
B2057	Yaw Rate Sensor	- Yaw rate sensor - Seat belt control ECU - Distance control ECU	Click here
B2058	Steering Angle Sensor	- Steering angle sensor - Seat belt control ECU - Distance control ECU	Click here
B2059	Vehicle Speed Malfunction	- Combination meter - ECM - Master cylinder solenoid (skid control ECU) - Seat belt control ECU	Click here

		- Distance control ECU	
B2060	ABS Malfunction	- CAN communication system - Vehicle stability control system - Seat belt control ECU	Click here
B2065	Distance Control ECU Malfunction	- Dynamic radar cruise control system - Seat belt control ECU	Click here
B2070	VSC Buzzer	- Vehicle stability control system - Seat belt control ECU	Click here
B2071	Stop Light Control Relay Malfunction	- CAN communication system - Vehicle stability control system - Seat belt control ECU	Click here
B2074	Driver Side Seat Belt Buckle Switch Circuit Malfunction	- Front seat inner belt (for driver side) - Center airbag sensor - Seat belt control ECU - CAN communication system	Click here
B2075	Passenger Side Seat Belt Buckle Switch Circuit Malfunction	- Harness or connector - Front seat inner belt (for passenger side) - Seat belt control ECU	Click here
U0100	Lost Communication with ECM / PCM "A"	- CAN communication system - Distance control ECU - ECM	Click here
U0122	Lost Communication with Vehicle Dynamics Control Module	- CAN communication system - Master cylinder solenoid (skid control ECU) - Seat belt control ECU	Click here
U0151	Lost Communication with Airbag ECU	- CAN communication system - Center airbag sensor - Seat belt control ECU	Click here
U0235	Lost Communication with Cruise Control Front Distance Range Sensor	- CAN communication system - Millimeter wave radar sensor - Distance control ECU	Click here
U1101	Lost Communication with Distance Control ECU	- CAN communication system - Distance control ECU - Seat belt control ECU	Click here
U1102	Lost Communication with Radar Sensor	- CAN communication system - Distance control ECU - Millimeter wave radar sensor	Click here

DTC B2000 Short to B+ in Seat Belt Motor RH Circuit

DTC B2005 Short to B+ in Seat Belt Motor LH Circuit

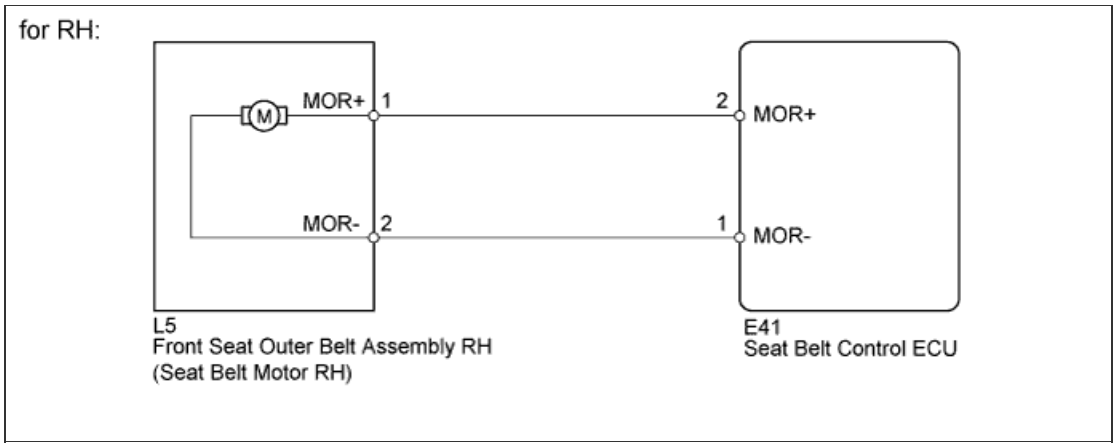
for Preparation Click here

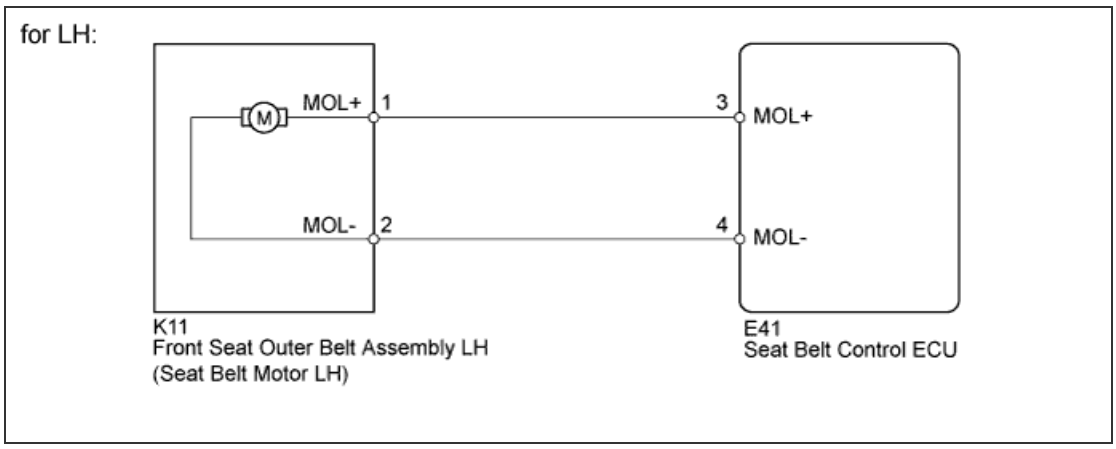
DESCRIPTION

The seat belt control ECU receives information from the master cylinder solenoid (skid control ECU) via the CAN communication line and tightens the seat belt by operating the motor in the front seat outer belt assembly RH or LH.

DTC Code	DTC Detection Condition	Trouble Area
B2000	• Short to B+ in the seat belt motor RH circuit continues for 1 second or more. • Short in the seat belt motor RH circuit.	• Front seat outer belt assembly RH • Harness or connector • Seat belt control ECU
B2005	• Short to B+ in the seat belt motor LH circuit continues for 1 second or more. • Short in the seat belt motor LH circuit.	• Front seat outer belt assembly LH • Harness or connector • Seat belt control ECU

WIRING DIAGRAM





INSPECTION PROCEDURE

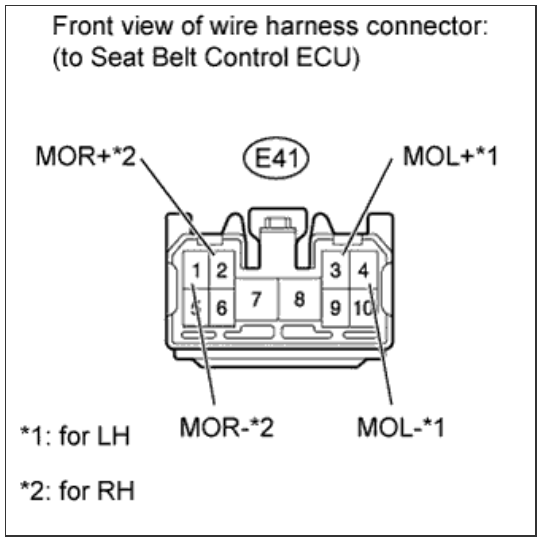
CAUTION:

The pretensioner is built into the front seat outer belt assembly. Be sure to follow the correct inspection procedure, as failure to follow the correct procedure (such as inspection of incorrect connectors) may deploy the pretensioner.

1.CHECK SEAT BELT CONTROL ECU

a. Disconnect the E41 seat belt control ECU connector.

b. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

for LH

Tester Connection	Switch Condition	Specified Condition
E41-3 (MOL+) - Body ground	Engine switch on (IG)	Below 1 V
E41-4 (MOL-) - Body ground		

for RH

Tester Connection	Switch Condition	Specified Condition
E41-1 (MOR-) - Body ground	Engine switch on (IG)	Below 1 V
E41-2 (MOR+) - Body ground		

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B	REPLACE SEAT BELT CONTROL ECU (Click here)
C	Go to step 2

A

REPLACE SEAT BELT CONTROL ECU (Click here)

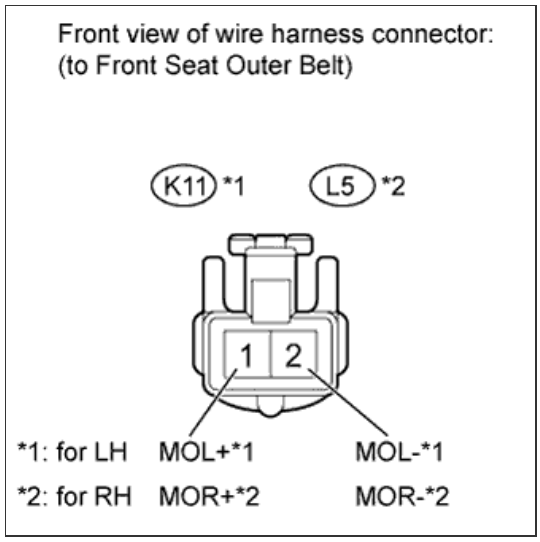
2.CHECK HARNESS AND CONNECTOR (FRONT SEAT OUTER BELT - SEAT BELT CONTROL ECU)

a. Disconnect the E41 seat belt control ECU connector.

b. Disconnect the K11*1 or L5*2 front seat outer belt connector.

*1: for LH
*2: for RH

c. Measure the voltage according to the value(s) in the table below.



Standard Voltage :

for LH

Tester Connection	Switch Condition	Specified Condition
K11-1 (MOL+) - Body ground	Engine switch on (IG)	Below 1 V
K11-2 (MOL-) - Body ground		

for RH

Tester Connection	Switch Condition	Specified Condition
L5-1 (MOR+) - Body ground	Engine switch on (IG)	Below 1 V
L5-2 (MOR-) - Body ground		

Result

Result	Proceed to
OK (for DTC B2000)	A
OK (for DTC B2005)	B
NG	C

B → REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH (Click here)

C → REPAIR OR REPLACE HARNESS OR CONNECTOR

A → REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH (Click here)

DTC B2057 Yaw Rate Sensor

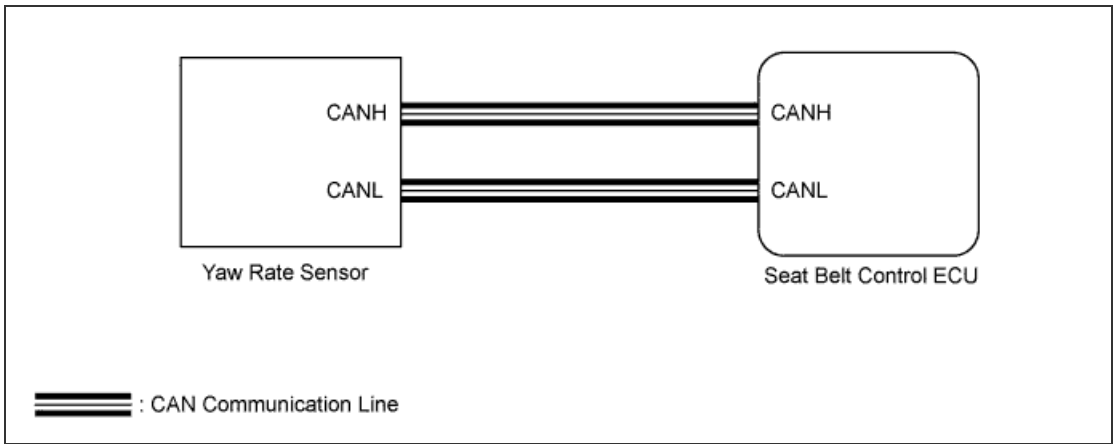
for Preparation Click here

DESCRIPTION

This DTC is stored when the vehicle is driven at a vehicle speed of 5 km/h (3 mph) or more and a malfunction occurs in the yaw rate sensor.
This circuit consists of the yaw rate sensor and seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2057	The vehicle speed is 5 km/h (3 mph) or more and a malfunction is detected in the yaw rate sensor.	• Yaw rate sensor • Seat belt control ECU • Distance control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK DTC (VEHICLE STABILITY CONTROL SYSTEM)

a. Using the intelligent tester, enter the following menus: Chassis / ABS/VSC/TRAC / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

OK:
DTC C1234 is not output.

NG → GO TO VEHICLE STABILITY CONTROL SYSTEM (Click here)

OK

2.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to
OK (DTC B2057 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2000 Short to B+ in Seat Belt Motor RH Circuit

DTC B2005 Short to B+ in Seat Belt Motor LH Circuit

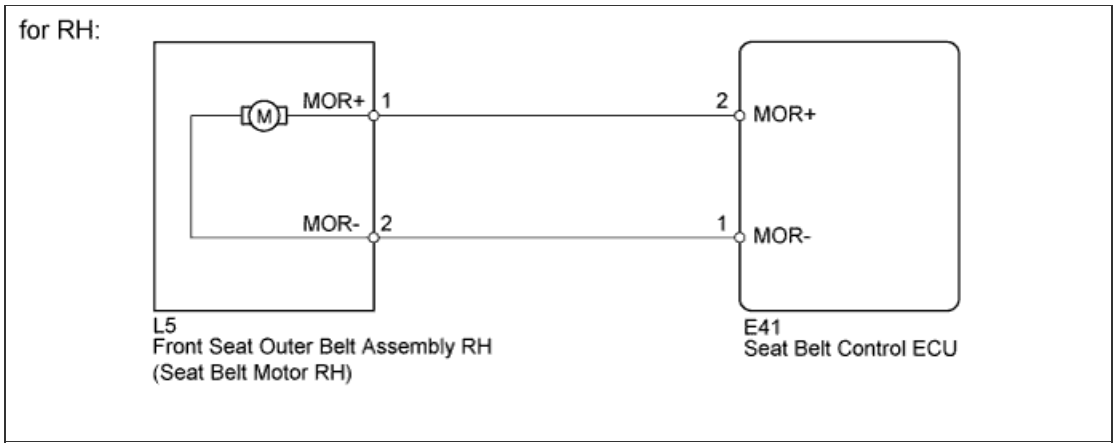
for Preparation Click here

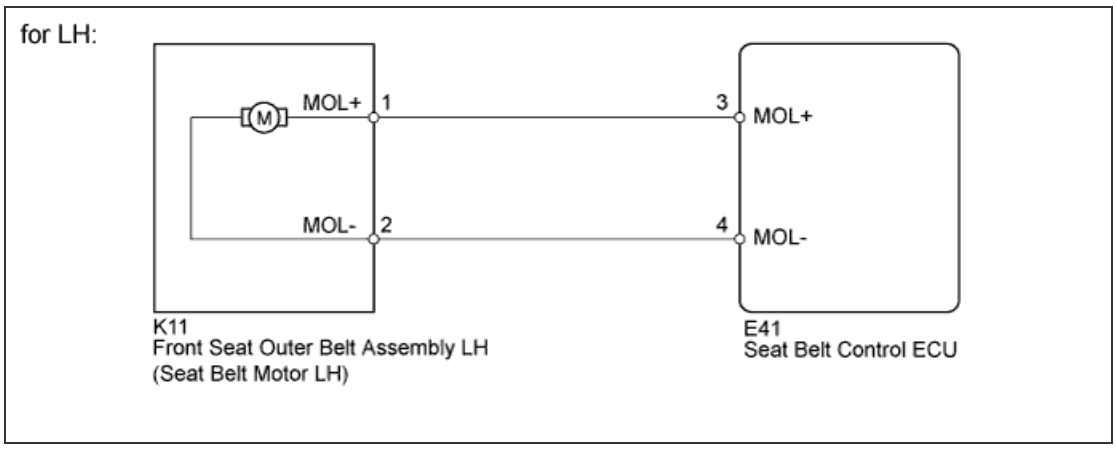
DESCRIPTION

The seat belt control ECU receives information from the master cylinder solenoid (skid control ECU) via the CAN communication line and tightens the seat belt by operating the motor in the front seat outer belt assembly RH or LH.

DTC Code	DTC Detection Condition	Trouble Area
B2000	• Short to B+ in the seat belt motor RH circuit continues for 1 second or more. • Short in the seat belt motor RH circuit.	• Front seat outer belt assembly RH • Harness or connector • Seat belt control ECU
B2005	• Short to B+ in the seat belt motor LH circuit continues for 1 second or more. • Short in the seat belt motor LH circuit.	• Front seat outer belt assembly LH • Harness or connector • Seat belt control ECU

WIRING DIAGRAM





INSPECTION PROCEDURE

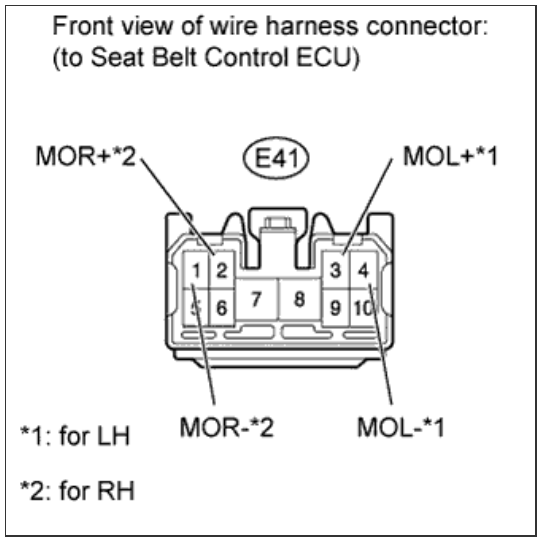
CAUTION:

The pretensioner is built into the front seat outer belt assembly. Be sure to follow the correct inspection procedure, as failure to follow the correct procedure (such as inspection of incorrect connectors) may deploy the pretensioner.

1.CHECK SEAT BELT CONTROL ECU

a. Disconnect the E41 seat belt control ECU connector.

b. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

for LH

Tester Connection	Switch Condition	Specified Condition
E41-3 (MOL+) - Body ground	Engine switch on (IG)	Below 1 V
E41-4 (MOL-) - Body ground		

for RH

Tester Connection	Switch Condition	Specified Condition
E41-1 (MOR-) - Body ground	Engine switch on (IG)	Below 1 V
E41-2 (MOR+) - Body ground		

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B	REPLACE SEAT BELT CONTROL ECU (Click here)
C	Go to step 2

A

REPLACE SEAT BELT CONTROL ECU (Click here)

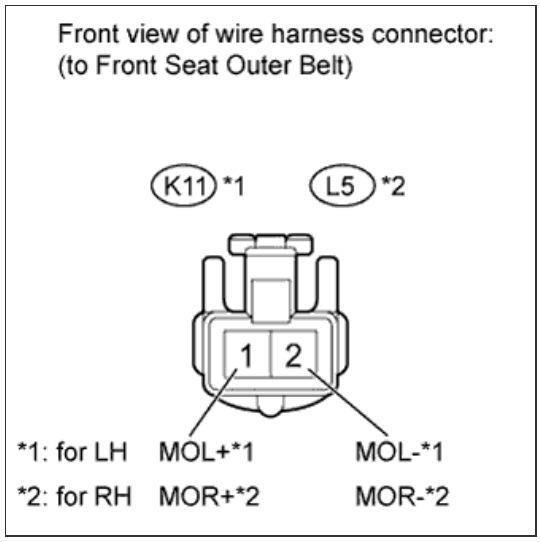
2.CHECK HARNESS AND CONNECTOR (FRONT SEAT OUTER BELT - SEAT BELT CONTROL ECU)

a. Disconnect the E41 seat belt control ECU connector.

b. Disconnect the K11*1 or L5*2 front seat outer belt connector.

*1: for LH
*2: for RH

c. Measure the voltage according to the value(s) in the table below.



Standard Voltage :

for LH

Tester Connection	Switch Condition	Specified Condition
K11-1 (MOL+) - Body ground	Engine switch on (IG)	Below 1 V
K11-2 (MOL-) - Body ground		

for RH

Tester Connection	Switch Condition	Specified Condition
L5-1 (MOR+) - Body ground	Engine switch on (IG)	Below 1 V
L5-2 (MOR-) - Body ground		

Result

Result	Proceed to
OK (for DTC B2000)	A
OK (for DTC B2005)	B
NG	C

B → REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH (Click here)

C → REPAIR OR REPLACE HARNESS OR CONNECTOR

A → REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH (Click here)

DTC B2057 Yaw Rate Sensor

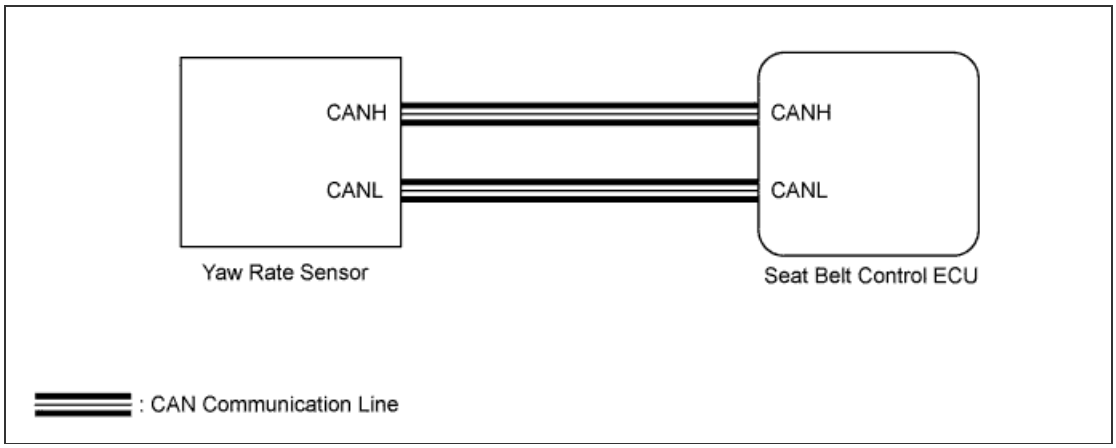
for Preparation Click here

DESCRIPTION

This DTC is stored when the vehicle is driven at a vehicle speed of 5 km/h (3 mph) or more and a malfunction occurs in the yaw rate sensor.
This circuit consists of the yaw rate sensor and seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2057	The vehicle speed is 5 km/h (3 mph) or more and a malfunction is detected in the yaw rate sensor.	• Yaw rate sensor • Seat belt control ECU • Distance control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK DTC (VEHICLE STABILITY CONTROL SYSTEM)

a. Using the intelligent tester, enter the following menus: Chassis / ABS/VSC/TRAC / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

OK:
DTC C1234 is not output.

NG → GO TO VEHICLE STABILITY CONTROL SYSTEM (Click here)

OK

2.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to
OK (DTC B2057 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2001 Short to GND in Seat Belt Motor RH Circuit

DTC B2006 Short to GND in Seat Belt Motor LH Circuit

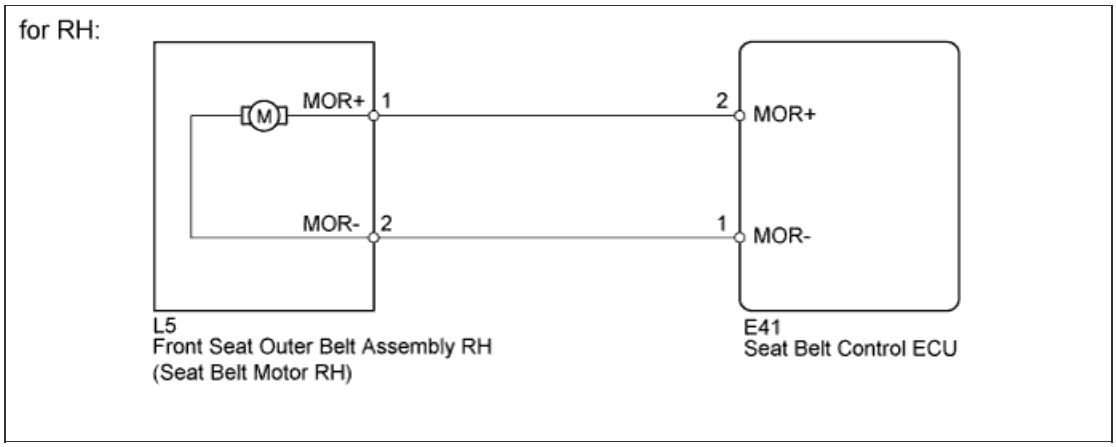
for Preparation Click here

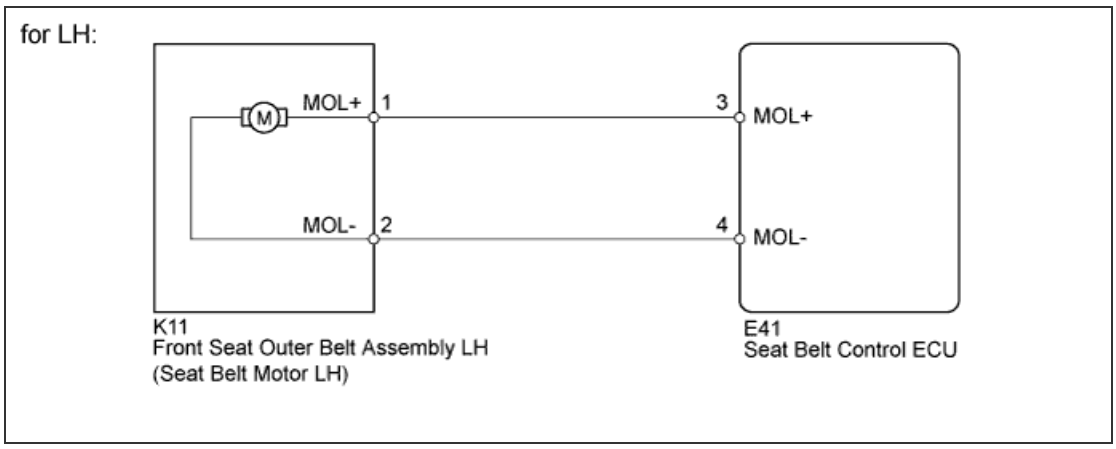
DESCRIPTION

The seat belt control ECU receives information from the master cylinder solenoid (skid control ECU) via the CAN communication line and tightens the seat belt by operating the motor in the front seat outer belt assembly RH or LH.

DTC Code	DTC Detection Condition	Trouble Area
B2001	• Short to ground in the seat belt motor RH circuit continues for 1 second or more. • Short in the seat belt motor RH circuit.	• Front seat outer belt assembly RH • Harness or connector • Seat belt control ECU
B2006	• Short to ground in the seat belt motor LH circuit continues for 1 second or more. • Short in the seat belt motor LH circuit.	• Front seat outer belt assembly LH • Harness or connector • Seat belt control ECU

WIRING DIAGRAM





INSPECTION PROCEDURE

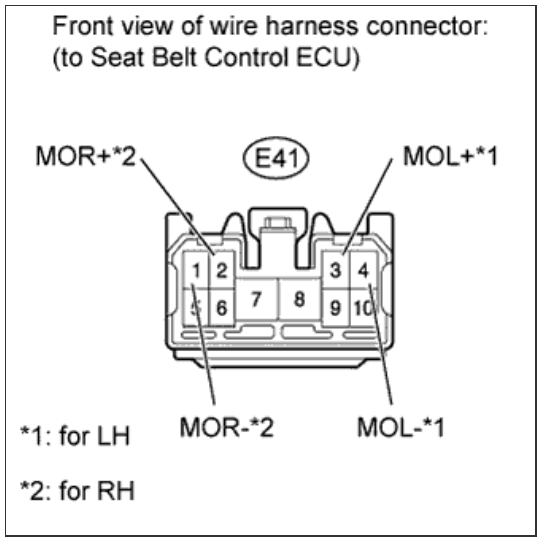
CAUTION:

The pretensioner is built into the front seat outer belt assembly. Be sure to follow the correct inspection procedure, as failure to follow the correct procedure (such as inspection of incorrect connectors) may deploy the pretensioner.

1.CHECK SEAT BELT CONTROL ECU

a. Disconnect the E41 seat belt control ECU connector.

b. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LH

Tester Connection	Condition	Specified Condition
E41-3 (MOL+) - Body ground	Always	1 MΩ or higher
E41-4 (MOL-) - Body ground		

for RH

Tester Connection	Condition	Specified Condition
E41-1 (MOR-) - Body ground	Always	1 MΩ or higher
E41-2 (MOR+) - Body ground		

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → Go to step 2

A

REPLACE SEAT BELT CONTROL ECU (Click here)

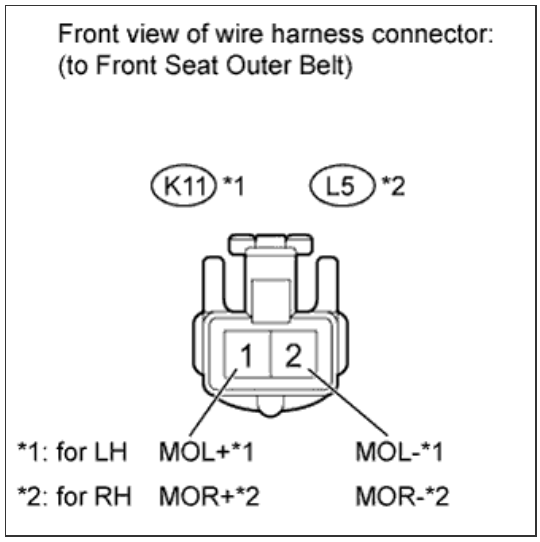
2.CHECK HARNESS AND CONNECTOR (FRONT SEAT OUTER BELT - SEAT BELT CONTROL ECU)

a. Disconnect the E41 seat belt control ECU connector.

b. Disconnect the K11*1 or L5*2 front seat outer belt connector.

*1: for LH
*2: for RH

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LH

Tester Connection	Condition	Specified Condition
K11-1 (MOL+) - Body ground	Always	1 MΩ or higher
K11-2 (MOL-) - Body ground		

for RH

Tester Connection	Condition	Specified Condition
L5-1 (MOR+) - Body ground	Always	1 MΩ or higher
L5-2 (MOR-) - Body ground		

Result

Result	Proceed to
OK (for DTC B2001)	A
OK (for DTC B2006)	B
NG	C

B → REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH (Click here)

C → REPAIR OR REPLACE HARNESS OR CONNECTOR

A → REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH (Click here)

DTC B2058 Steering Angle Sensor

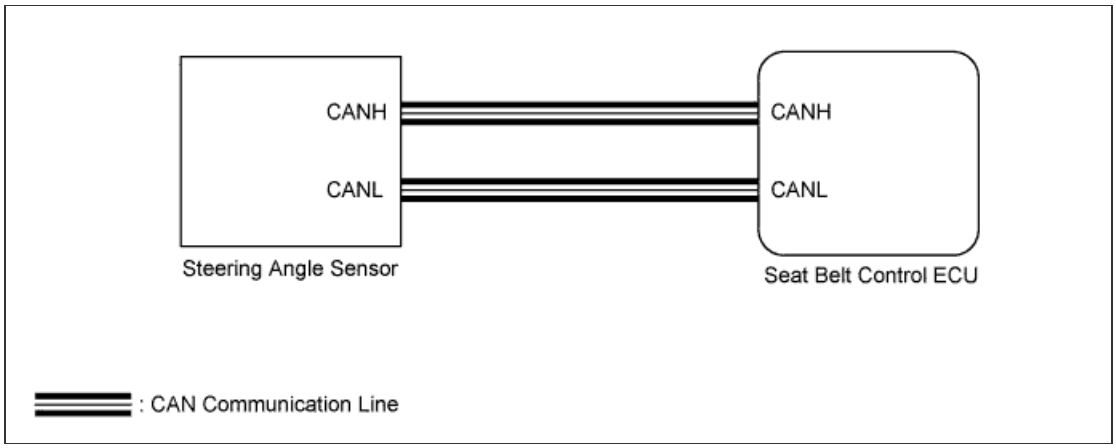
for Preparation Click here

DESCRIPTION

This DTC is stored when a malfunction occurs in the steering angle sensor.

DTC Code	DTC Detection Condition	Trouble Area
B2058	The vehicle speed is 50 km/h (31 mph) or more and a malfunction is detected in the steering angle sensor.	• Steering angle sensor • Seat belt control ECU • Distance control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC U0126 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

2.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to
OK (DTC B2058 is not output)	A
NG (for LHD)	B

NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2001 Short to GND in Seat Belt Motor RH Circuit

DTC B2006 Short to GND in Seat Belt Motor LH Circuit

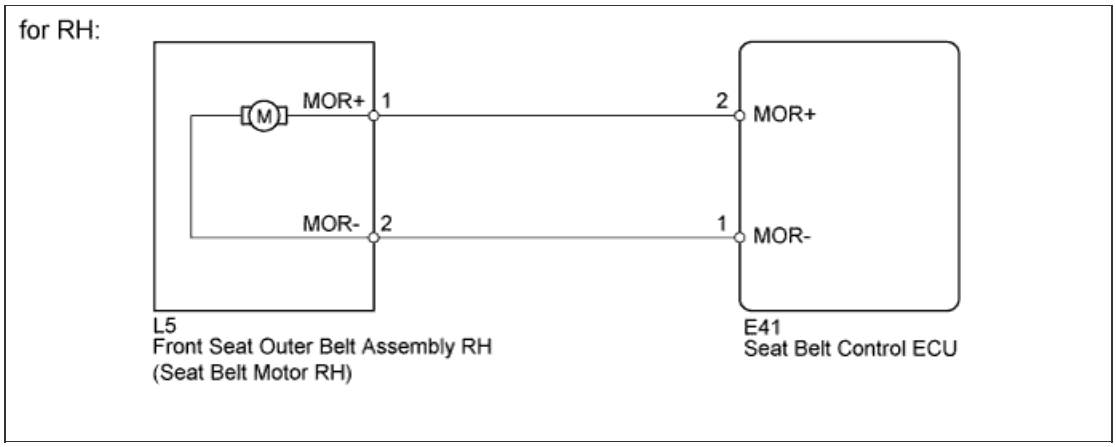
for Preparation Click here

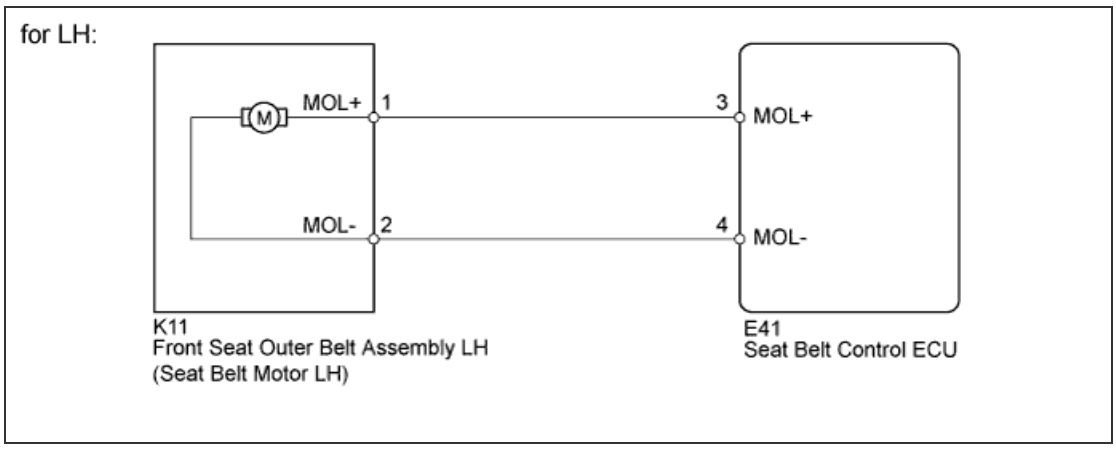
DESCRIPTION

The seat belt control ECU receives information from the master cylinder solenoid (skid control ECU) via the CAN communication line and tightens the seat belt by operating the motor in the front seat outer belt assembly RH or LH.

DTC Code	DTC Detection Condition	Trouble Area
B2001	• Short to ground in the seat belt motor RH circuit continues for 1 second or more. • Short in the seat belt motor RH circuit.	• Front seat outer belt assembly RH • Harness or connector • Seat belt control ECU
B2006	• Short to ground in the seat belt motor LH circuit continues for 1 second or more. • Short in the seat belt motor LH circuit.	• Front seat outer belt assembly LH • Harness or connector • Seat belt control ECU

WIRING DIAGRAM





INSPECTION PROCEDURE

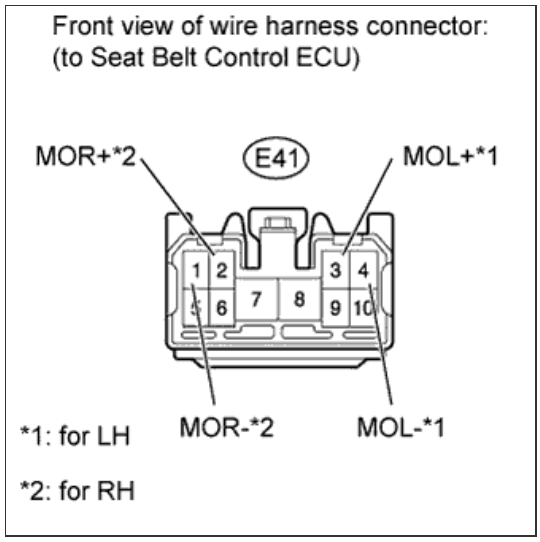
CAUTION:

The pretensioner is built into the front seat outer belt assembly. Be sure to follow the correct inspection procedure, as failure to follow the correct procedure (such as inspection of incorrect connectors) may deploy the pretensioner.

1.CHECK SEAT BELT CONTROL ECU

a. Disconnect the E41 seat belt control ECU connector.

b. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LH

Tester Connection	Condition	Specified Condition
E41-3 (MOL+) - Body ground	Always	1 MΩ or higher
E41-4 (MOL-) - Body ground		

for RH

Tester Connection	Condition	Specified Condition
E41-1 (MOR-) - Body ground	Always	1 MΩ or higher
E41-2 (MOR+) - Body ground		

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → Go to step 2

A

REPLACE SEAT BELT CONTROL ECU (Click here)

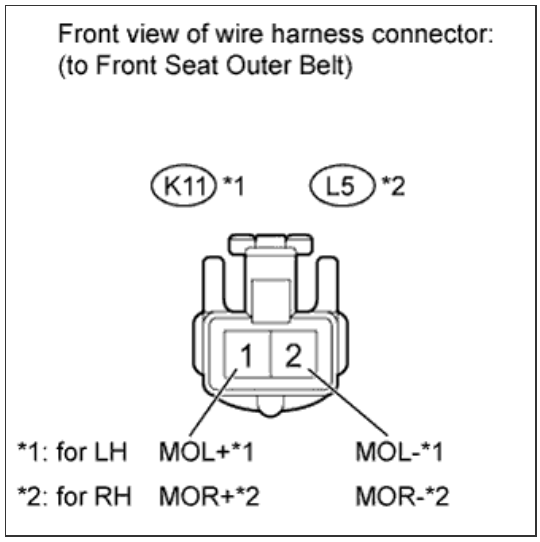
2.CHECK HARNESS AND CONNECTOR (FRONT SEAT OUTER BELT - SEAT BELT CONTROL ECU)

a. Disconnect the E41 seat belt control ECU connector.

b. Disconnect the K11*1 or L5*2 front seat outer belt connector.

*1: for LH
*2: for RH

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LH

Tester Connection	Condition	Specified Condition
K11-1 (MOL+) - Body ground	Always	1 MΩ or higher
K11-2 (MOL-) - Body ground		

for RH

Tester Connection	Condition	Specified Condition
L5-1 (MOR+) - Body ground	Always	1 MΩ or higher
L5-2 (MOR-) - Body ground		

Result

Result	Proceed to
OK (for DTC B2001)	A
OK (for DTC B2006)	B
NG	C

B → REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH (Click here)

C → REPAIR OR REPLACE HARNESS OR CONNECTOR

A → REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH (Click here)

DTC B2058 Steering Angle Sensor

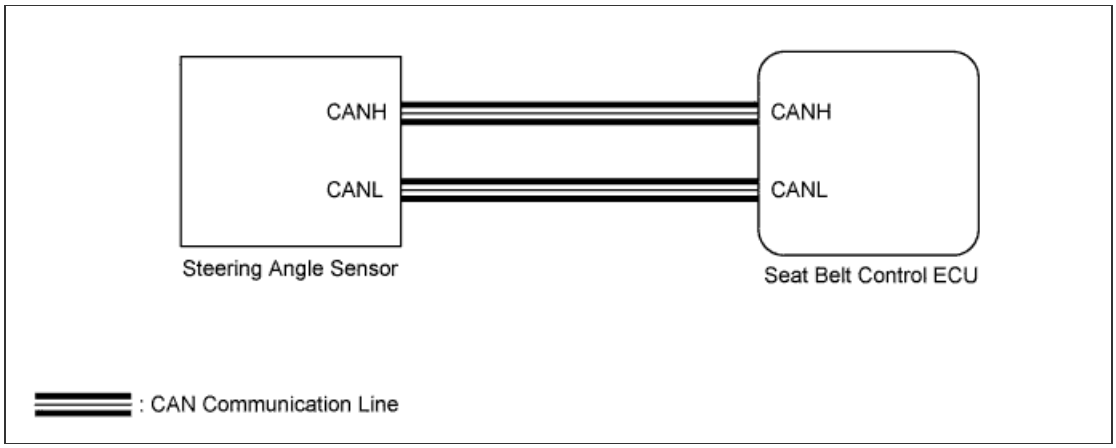
for Preparation Click here

DESCRIPTION

This DTC is stored when a malfunction occurs in the steering angle sensor.

DTC Code	DTC Detection Condition	Trouble Area
B2058	The vehicle speed is 50 km/h (31 mph) or more and a malfunction is detected in the steering angle sensor.	• Steering angle sensor • Seat belt control ECU • Distance control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC U0126 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

2.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to
OK (DTC B2058 is not output)	A
NG (for LHD)	B

NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2002 Open in Seat Belt Motor RH Circuit

DTC B2007 Open in Seat Belt Motor LH Circuit

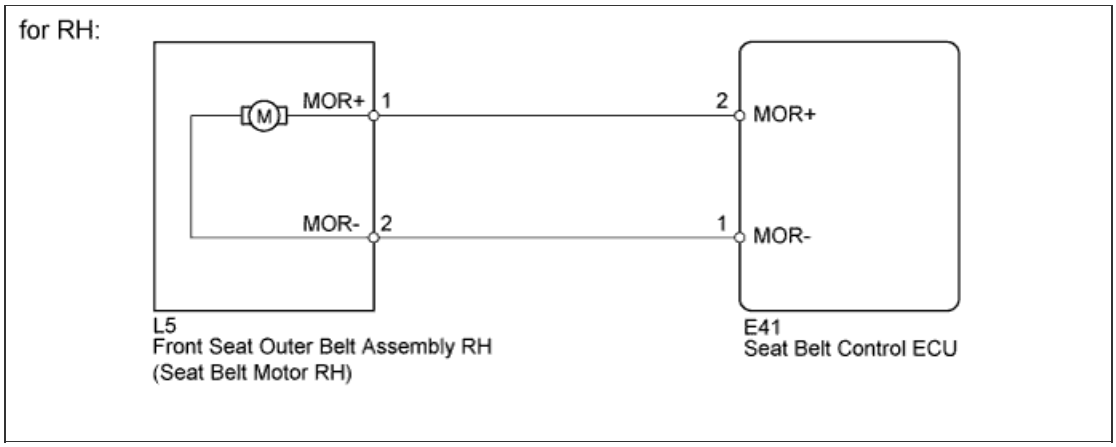
for Preparation Click here

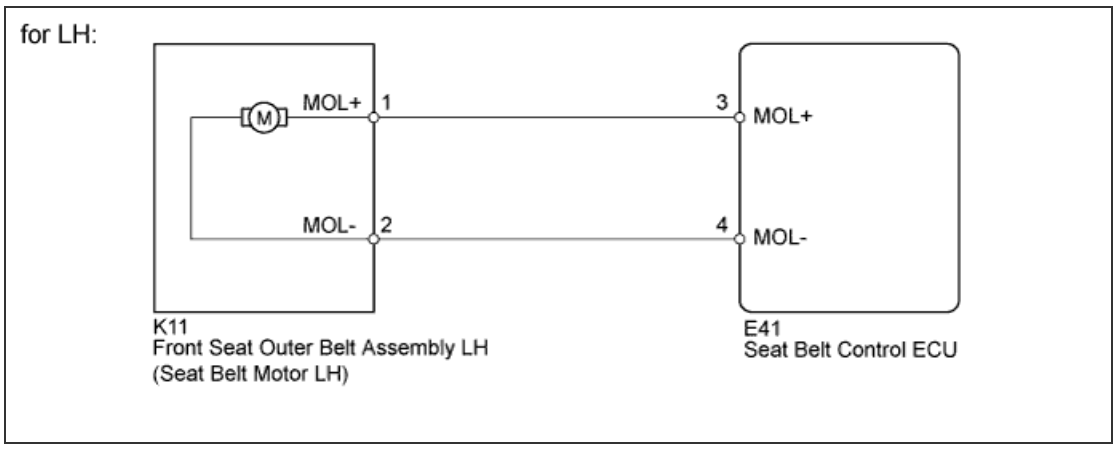
DESCRIPTION

The seat belt control ECU receives information from the master cylinder solenoid (skid control ECU) via the CAN communication line and tightens the seat belt by operating the motor in the front seat outer belt assembly RH or LH.

DTC Code	DTC Detection Condition	Trouble Area
B2002	Open in the seat belt motor RH circuit continues for 1 second or more.	• Front seat outer belt assembly RH • Harness or connector • Seat belt control ECU
B2007	Open in the seat belt motor LH circuit continues for 1 second or more.	• Front seat outer belt assembly LH • Harness or connector • Seat belt control ECU

WIRING DIAGRAM





INSPECTION PROCEDURE

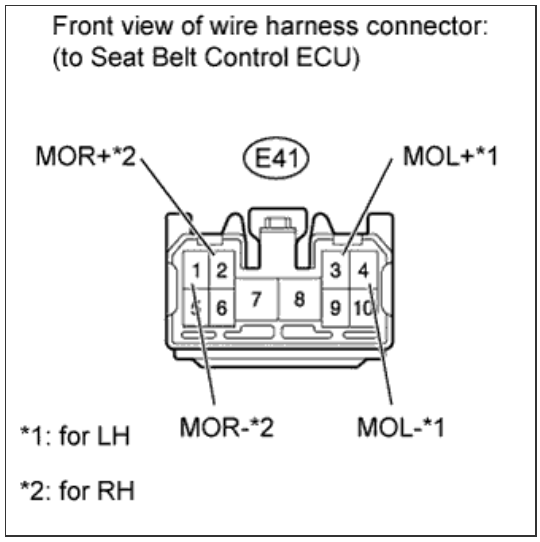
CAUTION:

The pretensioner is built into the front seat outer belt assembly. Be sure to follow the correct inspection procedure, as failure to follow the correct procedure (such as inspection of incorrect connectors) may deploy the pretensioner.

1.INSPECT SEAT BELT CONTROL ECU

a. Disconnect the E41 seat belt control ECU connector.

b. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LH

Tester Connection	Condition	Specified Condition
E41-3 (MOL+) - E41-4 (MOL-)	Always	Below 100 Ω

for RH

Tester Connection	Condition	Specified Condition
E41-1 (MOR-) - E41-2 (MOR+)	Always	Below 100 Ω

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → Go to step 2

A

REPLACE SEAT BELT CONTROL ECU (Click here)

2.CHECK HARNESS AND CONNECTOR (FRONT SEAT OUTER BELT - SEAT BELT CONTROL ECU)

a. Disconnect the E41 seat belt control ECU connector.

b. Disconnect the K11*1 or L5*2 front seat outer belt connector.

*1: for LH
*2: for RH

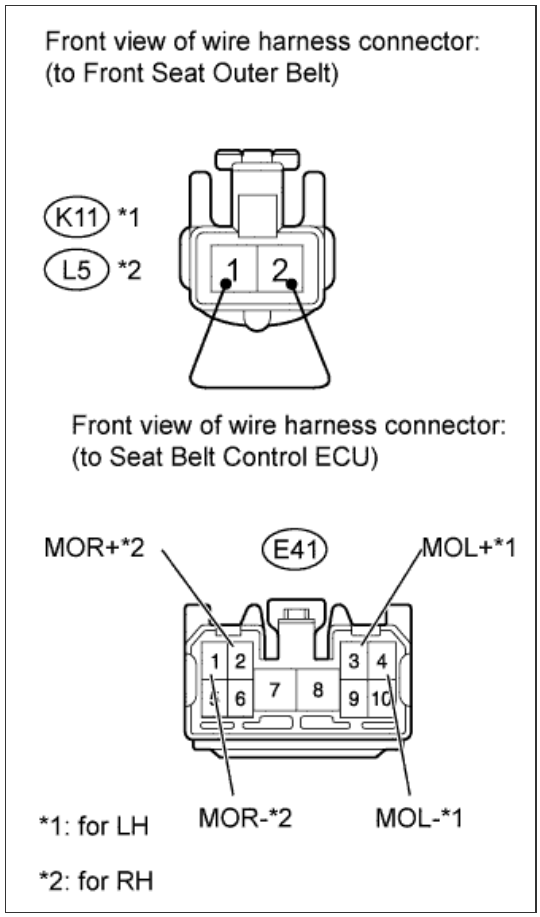
c. Using a service wire, connect the K11-1*1 and K11-2*1 or L5-1*2 and L5-2*2 of the connector on the front seat outer belt assembly.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector.

*1: for LH
*2: for RH

d. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LH

Tester Connection	Condition	Specified Condition
E41-3 (MOL+) - E41-4 (MOL-)	Always	Below 1 Ω

for RH

Tester Connection	Condition	Specified Condition
E41-1 (MOR-) - E41-2 (MOR+)	Always	Below 1 Ω

Result

Result	Proceed to
OK (for DTC B2002)	A
OK (for DTC B2007)	B
NG	C

B → REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH (Click here)

C → REPAIR OR REPLACE HARNESS OR CONNECTOR

A → REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH (Click here)

DTC B2059 Vehicle Speed Malfunction

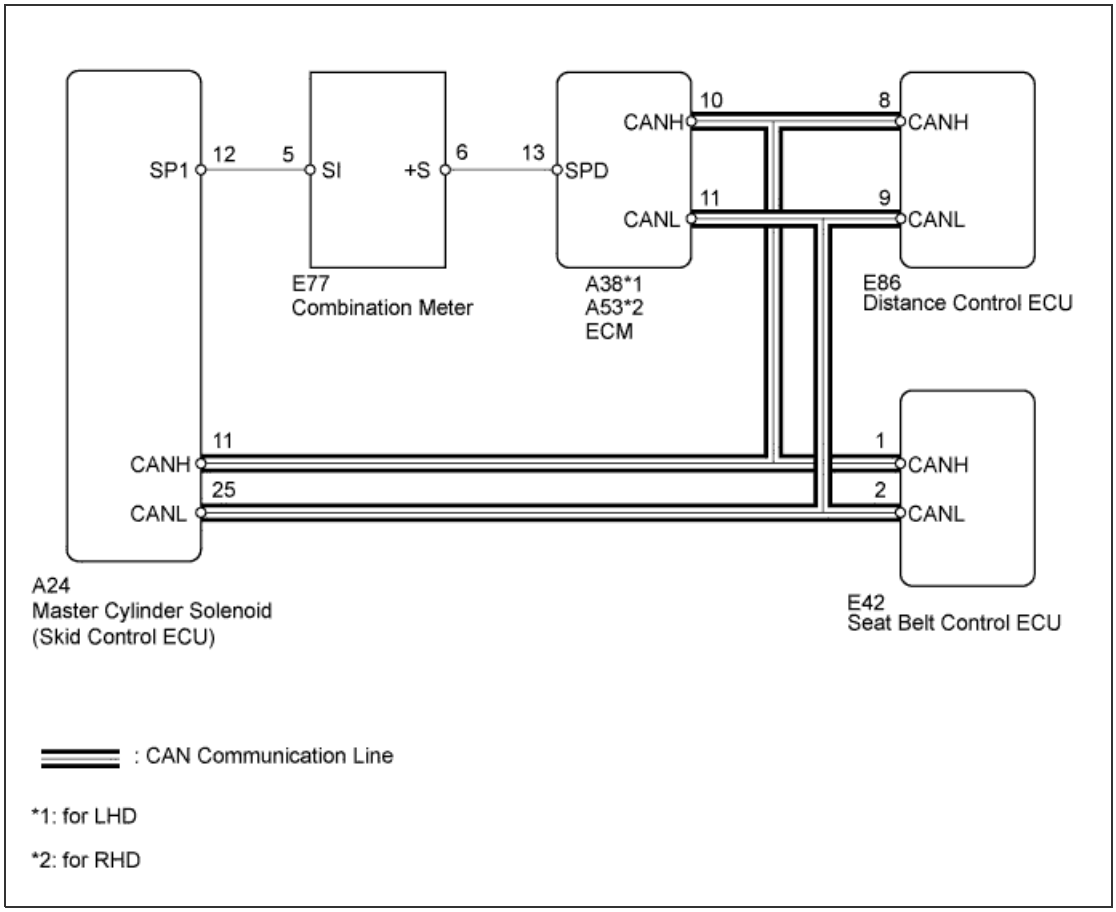
for Preparation Click here

DESCRIPTION

The seat belt control ECU receives vehicle speed information from the ECM and master cylinder solenoid (skid control ECU) via CAN communication.
The ECM receives vehicle speed information from the master cylinder solenoid (skid control ECU) through the combination meter.
This DTC is stored when there is a difference in the vehicle speed information from the ECM and master cylinder solenoid (skid control ECU).

DTC Code	DTC Detection Condition	Trouble Area
B2059	The vehicle speed information from the ECM and the vehicle speed information from the master cylinder solenoid (skid control ECU) are different.	• Combination meter • ECM • Master cylinder solenoid (skid control ECU) • Seat belt control ECU • Distance control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (VEHICLE SPEED)

a. Using the intelligent tester, enter the following menus: Body / Combination Meter / Data List.

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Vehicle Speed Meter	Vehicle speed/ Min.: 0 km/h (0 mph) Max.: 255 km/h (158 mph)	Almost same as actual speed (when driving)	The speed is indicated on the speedometer.

b. Read the value displayed on the intelligent tester.

OK:

Vehicle speed displayed on the intelligent tester is almost the same as actual vehicle speed measured using speedometer tester (calibrated chassis dynamometer).

NG → REPLACE COMBINATION METER (Click here)

OK

2.CHECK DTC (MALFUNCTION IN CAN COMMUNICATION SYSTEM WITH ECM)

a. Using the intelligent tester, clear the DTCs (Click here).

b. Check for DTCs (Click here).

Result

Result	Proceed to
DTC is not output	A
CAN communication system DTCs (U0073, U0100, U0122, U0126) are output (for LHD)	B
CAN communication system DTCs (U0073, U0100, U0122, U0126) are output (for RHD)	C
Pre-crash safety system DTC B2059 is output (for LHD)	D
Pre-crash safety system DTC B2059 is output (for RHD)	E

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

D → REPLACE SEAT BELT CONTROL ECU (Click here)

E → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2002 Open in Seat Belt Motor RH Circuit

DTC B2007 Open in Seat Belt Motor LH Circuit

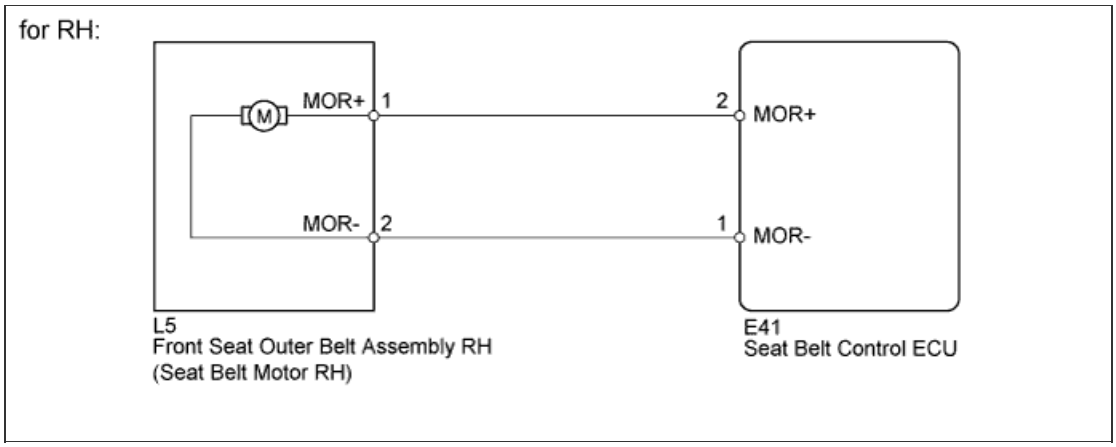
for Preparation Click here

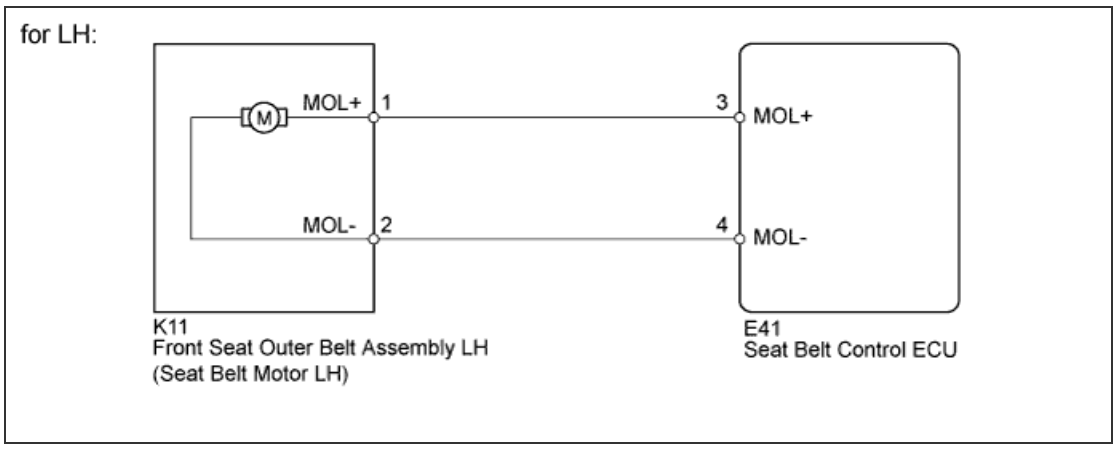
DESCRIPTION

The seat belt control ECU receives information from the master cylinder solenoid (skid control ECU) via the CAN communication line and tightens the seat belt by operating the motor in the front seat outer belt assembly RH or LH.

DTC Code	DTC Detection Condition	Trouble Area
B2002	Open in the seat belt motor RH circuit continues for 1 second or more.	• Front seat outer belt assembly RH • Harness or connector • Seat belt control ECU
B2007	Open in the seat belt motor LH circuit continues for 1 second or more.	• Front seat outer belt assembly LH • Harness or connector • Seat belt control ECU

WIRING DIAGRAM





INSPECTION PROCEDURE

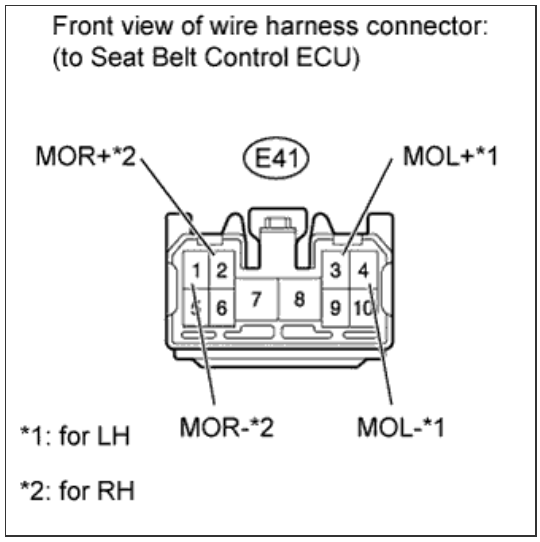
CAUTION:

The pretensioner is built into the front seat outer belt assembly. Be sure to follow the correct inspection procedure, as failure to follow the correct procedure (such as inspection of incorrect connectors) may deploy the pretensioner.

1.INSPECT SEAT BELT CONTROL ECU

a. Disconnect the E41 seat belt control ECU connector.

b. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LH

Tester Connection	Condition	Specified Condition
E41-3 (MOL+) - E41-4 (MOL-)	Always	Below 100 Ω

for RH

Tester Connection	Condition	Specified Condition
E41-1 (MOR-) - E41-2 (MOR+)	Always	Below 100 Ω

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → Go to step 2

A

REPLACE SEAT BELT CONTROL ECU (Click here)

2.CHECK HARNESS AND CONNECTOR (FRONT SEAT OUTER BELT - SEAT BELT CONTROL ECU)

a. Disconnect the E41 seat belt control ECU connector.

b. Disconnect the K11*1 or L5*2 front seat outer belt connector.

*1: for LH
*2: for RH

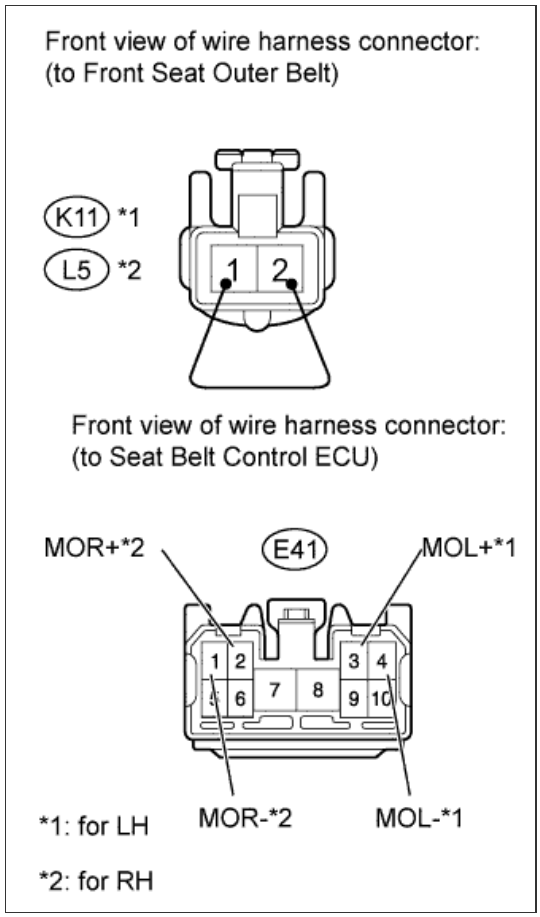
c. Using a service wire, connect the K11-1*1 and K11-2*1 or L5-1*2 and L5-2*2 of the connector on the front seat outer belt assembly.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector.

*1: for LH
*2: for RH

d. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LH

Tester Connection	Condition	Specified Condition
E41-3 (MOL+) - E41-4 (MOL-)	Always	Below 1 Ω

for RH

Tester Connection	Condition	Specified Condition
E41-1 (MOR-) - E41-2 (MOR+)	Always	Below 1 Ω

Result

Result	Proceed to
OK (for DTC B2002)	A
OK (for DTC B2007)	B
NG	C

B → REPLACE FRONT SEAT OUTER BELT ASSEMBLY LH (Click here)

C → REPAIR OR REPLACE HARNESS OR CONNECTOR

A → REPLACE FRONT SEAT OUTER BELT ASSEMBLY RH (Click here)

DTC B2059 Vehicle Speed Malfunction

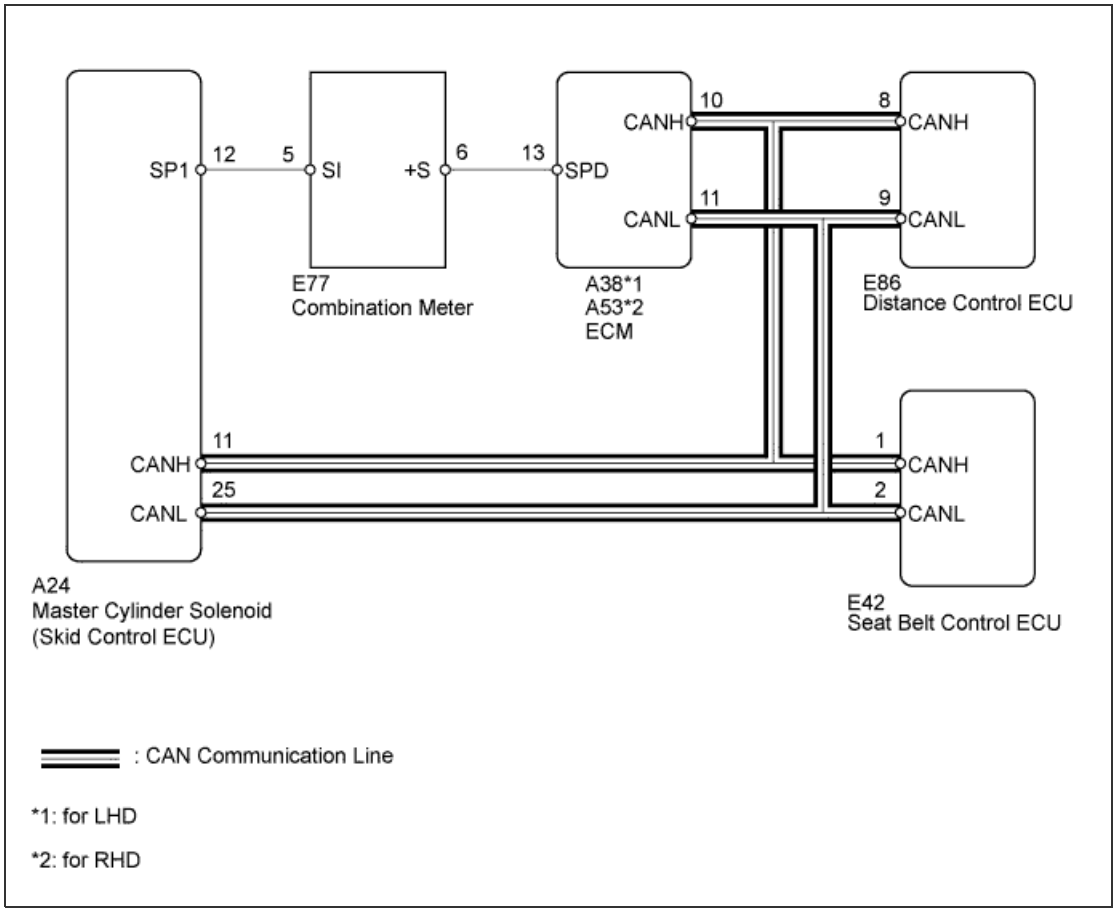
for Preparation Click here

DESCRIPTION

The seat belt control ECU receives vehicle speed information from the ECM and master cylinder solenoid (skid control ECU) via CAN communication.
The ECM receives vehicle speed information from the master cylinder solenoid (skid control ECU) through the combination meter.
This DTC is stored when there is a difference in the vehicle speed information from the ECM and master cylinder solenoid (skid control ECU).

DTC Code	DTC Detection Condition	Trouble Area
B2059	The vehicle speed information from the ECM and the vehicle speed information from the master cylinder solenoid (skid control ECU) are different.	• Combination meter • ECM • Master cylinder solenoid (skid control ECU) • Seat belt control ECU • Distance control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (VEHICLE SPEED)

a. Using the intelligent tester, enter the following menus: Body / Combination Meter / Data List.

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Vehicle Speed Meter	Vehicle speed/ Min.: 0 km/h (0 mph) Max.: 255 km/h (158 mph)	Almost same as actual speed (when driving)	The speed is indicated on the speedometer.

b. Read the value displayed on the intelligent tester.

OK:

Vehicle speed displayed on the intelligent tester is almost the same as actual vehicle speed measured using speedometer tester (calibrated chassis dynamometer).

NG → REPLACE COMBINATION METER (Click here)

OK

2.CHECK DTC (MALFUNCTION IN CAN COMMUNICATION SYSTEM WITH ECM)

a. Using the intelligent tester, clear the DTCs (Click here).

b. Check for DTCs (Click here).

Result

Result	Proceed to
DTC is not output	A
CAN communication system DTCs (U0073, U0100, U0122, U0126) are output (for LHD)	B
CAN communication system DTCs (U0073, U0100, U0122, U0126) are output (for RHD)	C
Pre-crash safety system DTC B2059 is output (for LHD)	D
Pre-crash safety system DTC B2059 is output (for RHD)	E

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

D → REPLACE SEAT BELT CONTROL ECU (Click here)

E → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2060 ABS Malfunction

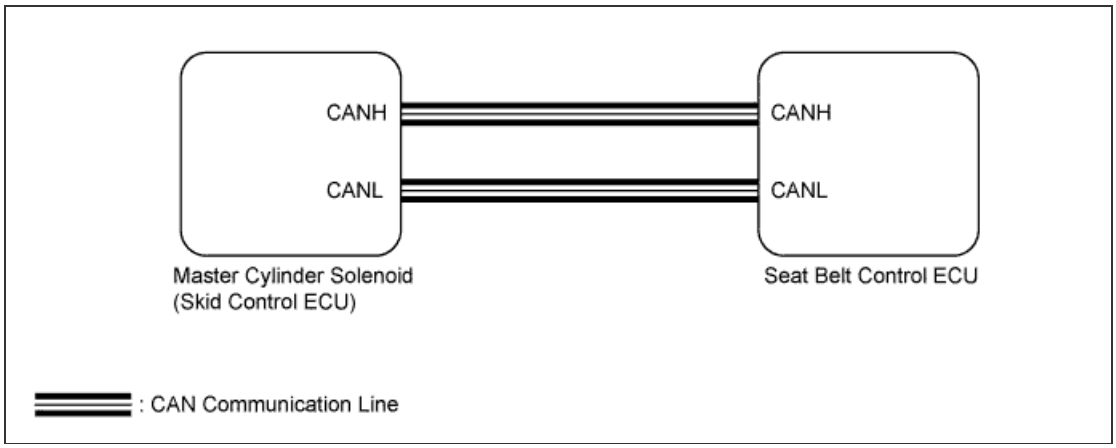
for Preparation Click here

DESCRIPTION

This DTC is stored when a malfunction in the vehicle stability control system is detected. This circuit consists of the master cylinder solenoid (skid control ECU) and seat belt control ECU. Signals are sent from the master cylinder solenoid (skid control ECU) via the CAN communication line.

DTC Code	DTC Detection Condition	Trouble Area
B2060	Malfunction in the brake system is detected.	• CAN communication system • Vehicle stability control system • Seat belt control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC U0122 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

2.CHECK DTC (VEHICLE STABILITY CONTROL SYSTEM)

a. Using the intelligent tester, enter the following menus: Chassis / ABS/VSC/TRAC / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

OK:
DTC is not output.

NG → GO TO VEHICLE STABILITY CONTROL SYSTEM (Click here)

OK

3.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to
OK (DTC B2060 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2060 ABS Malfunction

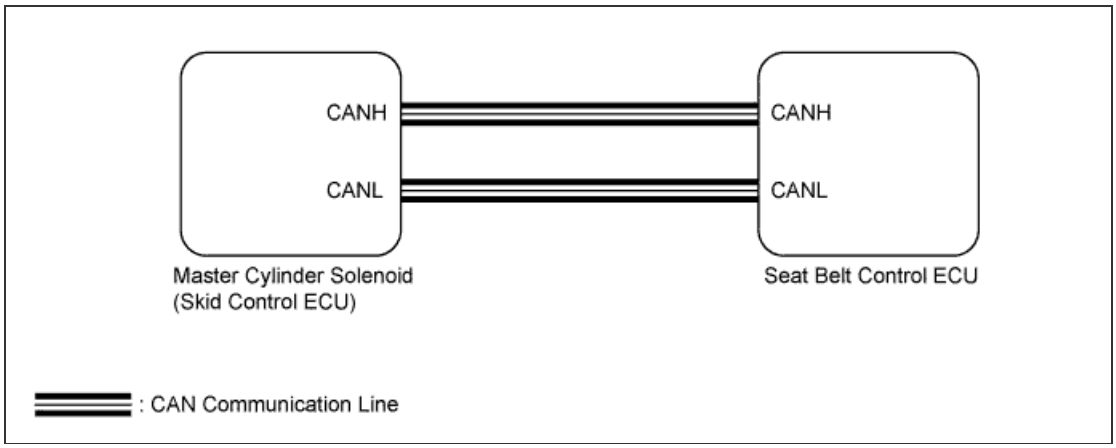
for Preparation Click here

DESCRIPTION

This DTC is stored when a malfunction in the vehicle stability control system is detected. This circuit consists of the master cylinder solenoid (skid control ECU) and seat belt control ECU. Signals are sent from the master cylinder solenoid (skid control ECU) via the CAN communication line.

DTC Code	DTC Detection Condition	Trouble Area
B2060	Malfunction in the brake system is detected.	• CAN communication system • Vehicle stability control system • Seat belt control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC U0122 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

2.CHECK DTC (VEHICLE STABILITY CONTROL SYSTEM)

a. Using the intelligent tester, enter the following menus: Chassis / ABS/VSC/TRAC / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

OK:
DTC is not output.

NG → GO TO VEHICLE STABILITY CONTROL SYSTEM (Click here)

OK

3.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to
OK (DTC B2060 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2065 Distance Control ECU Malfunction

for Preparation Click here

DESCRIPTION

DTC Code	DTC Detection Condition	Trouble Area
B2065	The collision determination of the distance control ECU is abnormal.	• Dynamic radar cruise control system • Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (DYNAMIC RADAR CRUISE CONTROL SYSTEM)

a. Using the intelligent tester, enter the following menus: Powertrain / Radar Cruise / Trouble Code.

b. Clear the DTC (Click here).

c. Perform the following to make sure the DTC detection conditions are met.

HINT:

If the detection conditions are not met, the system cannot detect the malfunction.

i. Drive the vehicle at a speed of 40 km/h (25 mph) or more.

ii. Turn the cruise control main switch on to set the vehicle-to-vehicle distance control mode to the standby state.

d. Check for DTCs (Click here).

OK:
DTC P1617 is not output.

NG → GO TO DYNAMIC RADAR CRUISE CONTROL SYSTEM (Click here)

OK

2.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to
OK (DTC B2065 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2070 VSC Buzzer

for Preparation Click here

DESCRIPTION

When the master cylinder solenoid (skid control ECU) detects a malfunction in the VSC warning buzzer circuit, a malfunction signal is sent to the seat belt control ECU, and this DTC is stored.

DTC Code	DTC Detection Condition	Trouble Area
B2070	While the engine switch is on (IG), the skid control ECU buzzer circuit malfunction signal is received by the seat belt control ECU.	• Vehicle stability control system • Seat belt control ECU

INSPECTION PROCEDURE

1.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (BUZZER)

a. Using the intelligent tester, enter the following menus: Chassis / ABS/VSC/TRAC / Active Test.

ABS/VSC/TRAC

Tester Display	Test Part	Control Range	Diagnostic Note
Buzzer	Skid control buzzer sounds	OFF or ON	-

OK:

Skid control buzzer sounds.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → GO TO VEHICLE STABILITY CONTROL SYSTEM (Click here)

A

REPLACE SEAT BELT CONTROL ECU (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2071 Stop Light Control Relay Malfunction

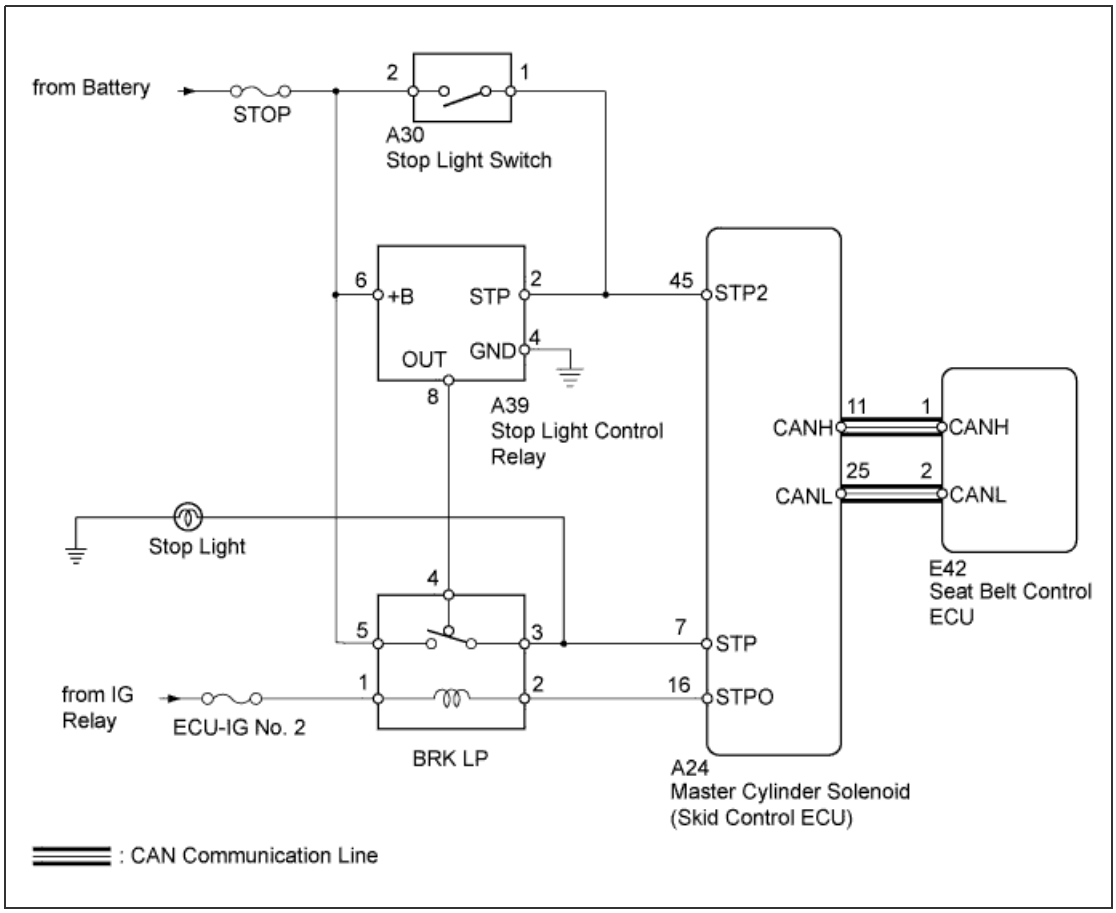
for Preparation Click here

DESCRIPTION

This DTC is stored when the master cylinder solenoid (skid control ECU) detects that the brake light relay is malfunctioning and transmits this to the seat belt control ECU via CAN communication.

DTC Code	DTC Detection Condition	Trouble Area
B2071	The brake light relay malfunctions.	• CAN communication system • Vehicle stability control system • Seat belt control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK DTC (VEHICLE STABILITY CONTROL SYSTEM)

a. Using the intelligent tester, enter the following menus: Chassis / ABS/VSC/TRAC / Trouble Code.

b. Check for DTCs (Click here).

OK:
DTC C1249 is not output.

NG → GO TO VEHICLE STABILITY CONTROL SYSTEM (Click here)

OK

2.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to
OK (DTC B2071 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2074 Driver Side Seat Belt Buckle Switch Circuit Malfunction

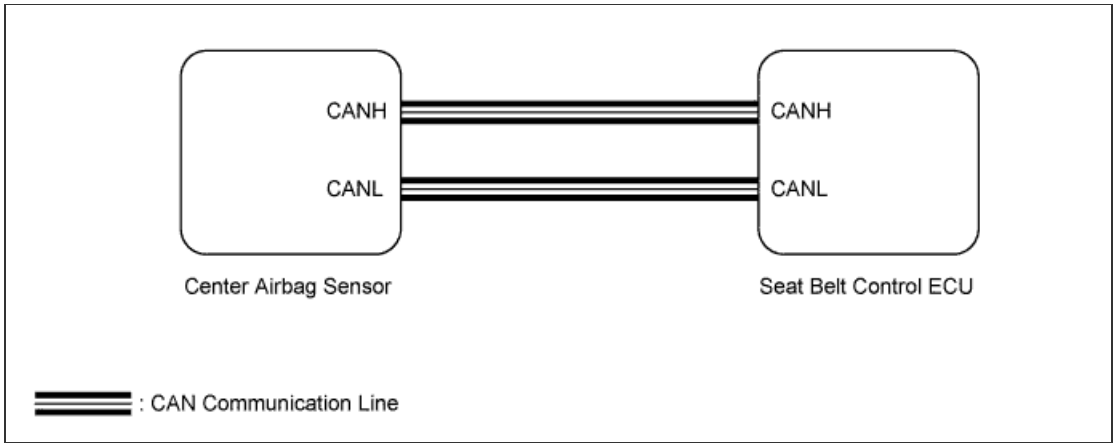
for Preparation Click here

DESCRIPTION

This DTC is stored when there is a malfunction in the front seat inner belt buckle switch circuit for the driver side. The seat belt control ECU receives buckle switch condition information from the center airbag sensor via the CAN communication line and controls the pre-crash safety system.
When DTC B2074 is stored, DTC B1655 is also stored.

DTC Code	DTC Detection Condition	Trouble Area
B2074	Malfunction in the front seat inner belt (buckle switch) circuit.	• Front seat inner belt LH assembly • Center airbag sensor • Seat belt control ECU • CAN communication system

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

If DTC B1655 is not cleared, DTC B2074 continues to be stored.

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC U0151 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

2.CHECK DTC (AIRBAG SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / SRS Airbag / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

OK:
DTC B1655 is not output.

NG → GO TO AIRBAG SYSTEM (Click here)

OK

3.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to
OK (DTC B2074 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2074 Driver Side Seat Belt Buckle Switch Circuit Malfunction

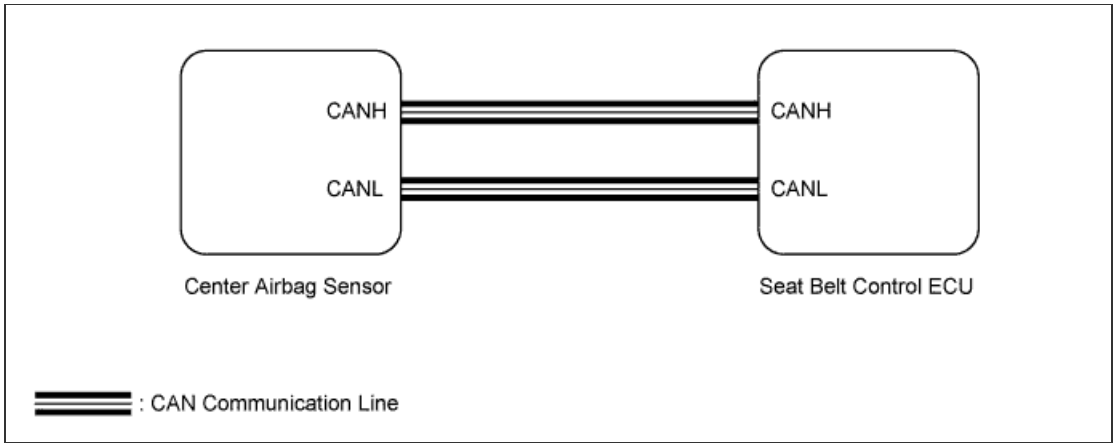
for Preparation Click here

DESCRIPTION

This DTC is stored when there is a malfunction in the front seat inner belt buckle switch circuit for the driver side. The seat belt control ECU receives buckle switch condition information from the center airbag sensor via the CAN communication line and controls the pre-crash safety system.
When DTC B2074 is stored, DTC B1655 is also stored.

DTC Code	DTC Detection Condition	Trouble Area
B2074	Malfunction in the front seat inner belt (buckle switch) circuit.	• Front seat inner belt LH assembly • Center airbag sensor • Seat belt control ECU • CAN communication system

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

If DTC B1655 is not cleared, DTC B2074 continues to be stored.

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC U0151 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

2.CHECK DTC (AIRBAG SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / SRS Airbag / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

OK:
DTC B1655 is not output.

NG → GO TO AIRBAG SYSTEM (Click here)

OK

3.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to
OK (DTC B2074 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2075 Passenger Side Seat Belt Buckle Switch Circuit Malfunction

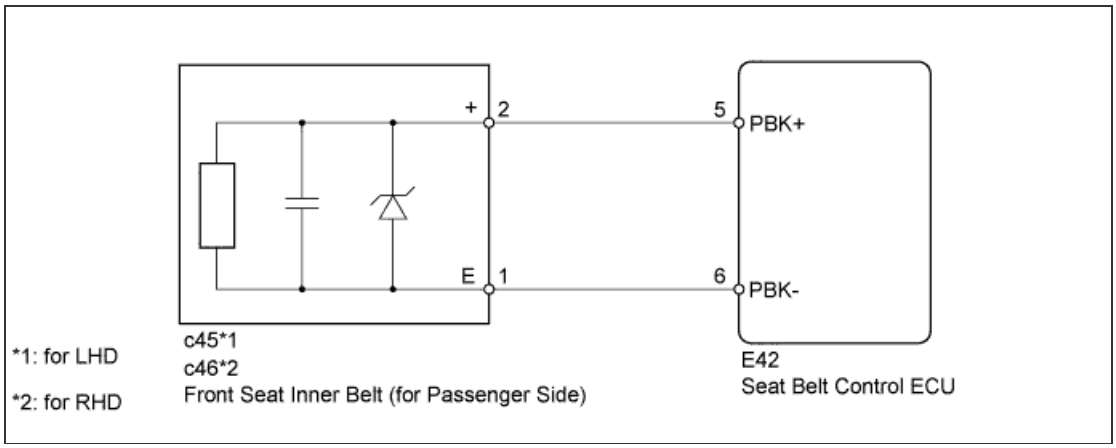
for Preparation Click here

DESCRIPTION

This DTC is stored when there is a malfunction in the front seat inner belt buckle switch circuit for the passenger side.

DTC Code	DTC Detection Condition	Trouble Area
B2075	Malfunction in the front seat inner belt (buckle switch) circuit.	• Harness or connector • Front seat inner belt (for passenger side) • Seat belt control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

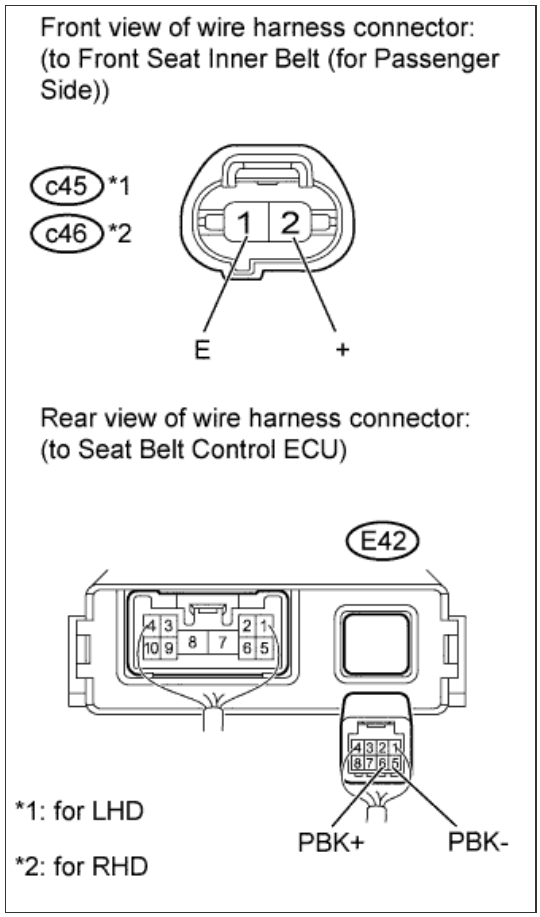
1.CHECK HARNESS AND CONNECTOR (FRONT SEAT INNER BELT - SEAT BELT CONTROL ECU)

a. Disconnect the c45*1 or c46*2 front seat inner belt connector.

*1: for LHD
*2: for RHD

b. Disconnect the E42 seat belt control ECU connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
c45-2 (+) - E42-5 (PBK+)	Always	Below 1 Ω
c45-1 (E) - E42-6 (PBK-)		
c45-2 (+) or E42-5 (PBK+) - Body ground		1 MΩ higher
c45-1 (E) or E42-6 (PBK-) - Body ground		

for RHD

Tester Connection	Condition	Specified Condition
c46-2 (+) - E42-5 (PBK+)	Always	Below 1 Ω
c46-1 (E) - E42-6 (PBK-)		
c46-2 (+) or E42-5 (PBK+) - Body ground		1 MΩ higher
c46-1 (E) or E42-6 (PBK-) - Body ground		

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

2.CHECK SEAT BELT CONTROL ECU

a. Reconnect the E42 seat belt control ECU connector.

b. Disconnect the c45*1 or c46*2 front seat inner belt connector.

*1: for LHD

*2: for RHD

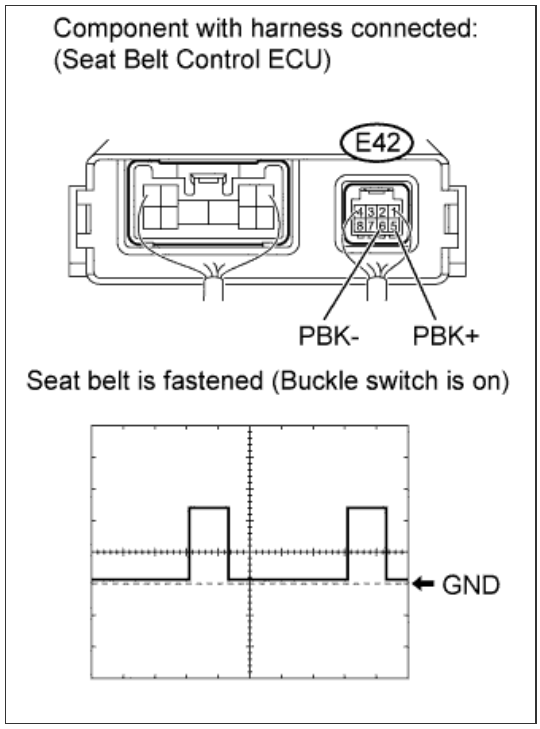
c. Use an oscilloscope to check the waveform of the seat belt control ECU between the connector terminals.

Measurement Condition

Item	Content
Tester Connection	E42-5 (PBK+) - E42-6 (PBK-)
Tool Setting	5 V/DIV., 20 ms./DIV.
Switch Condition	Engine switch on (IG) Front passenger side seat belt fastened (Buckle switch on)

OK:

Output voltage is between 4.5 and 5.5 V for 20 ms every 100 ms.



Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG (for LHD)	C
NG (for RHD)	D

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE FRONT SEAT INNER BELT RH (for Passenger Side) (Click here)

D → REPLACE FRONT SEAT INNER BELT LH (for Passenger Side) (Click here)

A

REPLACE SEAT BELT CONTROL ECU (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC U0100 Lost Communication with ECM / PCM "A"

DTC U0122 Lost Communication with Vehicle Dynamics Control Module

DTC U0151 Lost Communication with Airbag ECU

DTC U1101 Lost Communication with Distance Control ECU

for Preparation Click here

DESCRIPTION

The seat belt control ECU receives signals from the master cylinder solenoid (skid control ECU) and the center airbag sensor via the CAN communication line.
The distance control ECU receives signals from the ECM via the CAN communication line.

DTC Code	DTC Detection Item	Inspection Area
U0100	ECM communication error.	• CAN communication system • Distance control ECU • ECM
U0122	Skid control ECU communication error.	• CAN communication system • Master cylinder solenoid (skid control ECU) • Seat belt control ECU
U0151	Center airbag sensor communication error.	• CAN communication system • Seat belt control ECU • Center airbag sensor
U1101	Distance control ECU communication error.	• CAN communication system • Distance control ECU • Seat belt control ECU

INSPECTION PROCEDURE

HINT:

When 2 or more DTCs starting with "U" are output simultaneously, inspect the connectors and wire harnesses of each ECU.

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC U0100 Lost Communication with ECM / PCM "A"

DTC U0122 Lost Communication with Vehicle Dynamics Control Module

DTC U0151 Lost Communication with Airbag ECU

DTC U1101 Lost Communication with Distance Control ECU

for Preparation Click here

DESCRIPTION

The seat belt control ECU receives signals from the master cylinder solenoid (skid control ECU) and the center airbag sensor via the CAN communication line.
The distance control ECU receives signals from the ECM via the CAN communication line.

DTC Code	DTC Detection Item	Inspection Area
U0100	ECM communication error.	• CAN communication system • Distance control ECU • ECM
U0122	Skid control ECU communication error.	• CAN communication system • Master cylinder solenoid (skid control ECU) • Seat belt control ECU
U0151	Center airbag sensor communication error.	• CAN communication system • Seat belt control ECU • Center airbag sensor
U1101	Distance control ECU communication error.	• CAN communication system • Distance control ECU • Seat belt control ECU

INSPECTION PROCEDURE

HINT:

When 2 or more DTCs starting with "U" are output simultaneously, inspect the connectors and wire harnesses of each ECU.

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC U0100 Lost Communication with ECM / PCM "A"

DTC U0122 Lost Communication with Vehicle Dynamics Control Module

DTC U0151 Lost Communication with Airbag ECU

DTC U1101 Lost Communication with Distance Control ECU

for Preparation Click here

DESCRIPTION

The seat belt control ECU receives signals from the master cylinder solenoid (skid control ECU) and the center airbag sensor via the CAN communication line.
The distance control ECU receives signals from the ECM via the CAN communication line.

DTC Code	DTC Detection Item	Inspection Area
U0100	ECM communication error.	• CAN communication system • Distance control ECU • ECM
U0122	Skid control ECU communication error.	• CAN communication system • Master cylinder solenoid (skid control ECU) • Seat belt control ECU
U0151	Center airbag sensor communication error.	• CAN communication system • Seat belt control ECU • Center airbag sensor
U1101	Distance control ECU communication error.	• CAN communication system • Distance control ECU • Seat belt control ECU

INSPECTION PROCEDURE

HINT:

When 2 or more DTCs starting with "U" are output simultaneously, inspect the connectors and wire harnesses of each ECU.

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC U0100 Lost Communication with ECM / PCM "A"

DTC U0122 Lost Communication with Vehicle Dynamics Control Module

DTC U0151 Lost Communication with Airbag ECU

DTC U1101 Lost Communication with Distance Control ECU

for Preparation Click here

DESCRIPTION

The seat belt control ECU receives signals from the master cylinder solenoid (skid control ECU) and the center airbag sensor via the CAN communication line.
The distance control ECU receives signals from the ECM via the CAN communication line.

DTC Code	DTC Detection Item	Inspection Area
U0100	ECM communication error.	• CAN communication system • Distance control ECU • ECM
U0122	Skid control ECU communication error.	• CAN communication system • Master cylinder solenoid (skid control ECU) • Seat belt control ECU
U0151	Center airbag sensor communication error.	• CAN communication system • Seat belt control ECU • Center airbag sensor
U1101	Distance control ECU communication error.	• CAN communication system • Distance control ECU • Seat belt control ECU

INSPECTION PROCEDURE

HINT:

When 2 or more DTCs starting with "U" are output simultaneously, inspect the connectors and wire harnesses of each ECU.

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC U0100 Lost Communication with ECM / PCM "A"

DTC U0122 Lost Communication with Vehicle Dynamics Control Module

DTC U0151 Lost Communication with Airbag ECU

DTC U1101 Lost Communication with Distance Control ECU

for Preparation Click here

DESCRIPTION

The seat belt control ECU receives signals from the master cylinder solenoid (skid control ECU) and the center airbag sensor via the CAN communication line.
The distance control ECU receives signals from the ECM via the CAN communication line.

DTC Code	DTC Detection Item	Inspection Area
U0100	ECM communication error.	• CAN communication system • Distance control ECU • ECM
U0122	Skid control ECU communication error.	• CAN communication system • Master cylinder solenoid (skid control ECU) • Seat belt control ECU
U0151	Center airbag sensor communication error.	• CAN communication system • Seat belt control ECU • Center airbag sensor
U1101	Distance control ECU communication error.	• CAN communication system • Distance control ECU • Seat belt control ECU

INSPECTION PROCEDURE

HINT:

When 2 or more DTCs starting with "U" are output simultaneously, inspect the connectors and wire harnesses of each ECU.

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC U0100 Lost Communication with ECM / PCM "A"

DTC U0122 Lost Communication with Vehicle Dynamics Control Module

DTC U0151 Lost Communication with Airbag ECU

DTC U1101 Lost Communication with Distance Control ECU

for Preparation Click here

DESCRIPTION

The seat belt control ECU receives signals from the master cylinder solenoid (skid control ECU) and the center airbag sensor via the CAN communication line.
The distance control ECU receives signals from the ECM via the CAN communication line.

DTC Code	DTC Detection Item	Inspection Area
U0100	ECM communication error.	• CAN communication system • Distance control ECU • ECM
U0122	Skid control ECU communication error.	• CAN communication system • Master cylinder solenoid (skid control ECU) • Seat belt control ECU
U0151	Center airbag sensor communication error.	• CAN communication system • Seat belt control ECU • Center airbag sensor
U1101	Distance control ECU communication error.	• CAN communication system • Distance control ECU • Seat belt control ECU

INSPECTION PROCEDURE

HINT:

When 2 or more DTCs starting with "U" are output simultaneously, inspect the connectors and wire harnesses of each ECU.

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2015 Open in Right Side Upper MOS

DTC B2016 Open in Right Side Lower MOS

DTC B2020 Open in Left Side Upper MOS

DTC B2021 Open in Left Side Lower MOS

DTC B2025 Right Side Current Detection Circuit Malfunction Hi

DTC B2026 Right Side Current Detection Circuit Malfunction Lo

DTC B2027 Right Side Over-Current Malfunction

DTC B2030 Left Side Current Detection Circuit Malfunction Hi

DTC B2031 Left Side Current Detection Circuit Malfunction Lo

DTC B2032 Left Side Over-Current Malfunction

DTC B2035 Power Supply Relay Adherence Malfunction

DTC B2040 EEPROM Malfunction

DTC B2041 Fall of Raised Voltage

DTC B2043 Fall of B+ Voltage

DTC B2047 Seat Belt Control ECU Inner Circuit Malfunction

for Preparation Click here

DESCRIPTION

The DTCs above are stored during the self diagnosis of the seat belt control ECU.

DTC Code	DTC Detection Condition	Trouble Area
B2015	Open in the right side upper MOS.	Seat belt control ECU
B2016	Open in the right side lower MOS.	Seat belt control ECU
B2020	Open in the left side upper MOS.	Seat belt control ECU
B2021	Open in the left side lower MOS.	Seat belt control ECU
B2025	Malfunction in the right side current detection HI circuit.	Seat belt control ECU
B2026	Malfunction in the right side current detection LO circuit.	Seat belt control ECU
B2027	Overcurrent in the right side circuit.	Seat belt control ECU
B2030	Malfunction in the left side current detection HI circuit.	Seat belt control ECU
B2031	Malfunction in the left side current detection LO circuit.	Seat belt control ECU
B2032	Overcurrent in the left side circuit.	Seat belt control ECU
B2035	Adherence malfunction in the power supply relay.	Seat belt control ECU
B2040	EEPROM malfunction.	Seat belt control ECU
B2041	Decline in raised voltage.	Seat belt control ECU
B2043	Decline in B+ voltage.	Seat belt control ECU
B2047	Malfunction in the inner circuit of the seat belt control ECU.	Seat belt control ECU

INSPECTION PROCEDURE

1.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to

OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC U0100 Lost Communication with ECM / PCM "A"

DTC U0122 Lost Communication with Vehicle Dynamics Control Module

DTC U0151 Lost Communication with Airbag ECU

DTC U1101 Lost Communication with Distance Control ECU

for Preparation Click here

DESCRIPTION

The seat belt control ECU receives signals from the master cylinder solenoid (skid control ECU) and the center airbag sensor via the CAN communication line.
The distance control ECU receives signals from the ECM via the CAN communication line.

DTC Code	DTC Detection Item	Inspection Area
U0100	ECM communication error.	• CAN communication system • Distance control ECU • ECM
U0122	Skid control ECU communication error.	• CAN communication system • Master cylinder solenoid (skid control ECU) • Seat belt control ECU
U0151	Center airbag sensor communication error.	• CAN communication system • Seat belt control ECU • Center airbag sensor
U1101	Distance control ECU communication error.	• CAN communication system • Distance control ECU • Seat belt control ECU

INSPECTION PROCEDURE

HINT:

When 2 or more DTCs starting with "U" are output simultaneously, inspect the connectors and wire harnesses of each ECU.

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2036 Power Supply Relay Malfunction Open

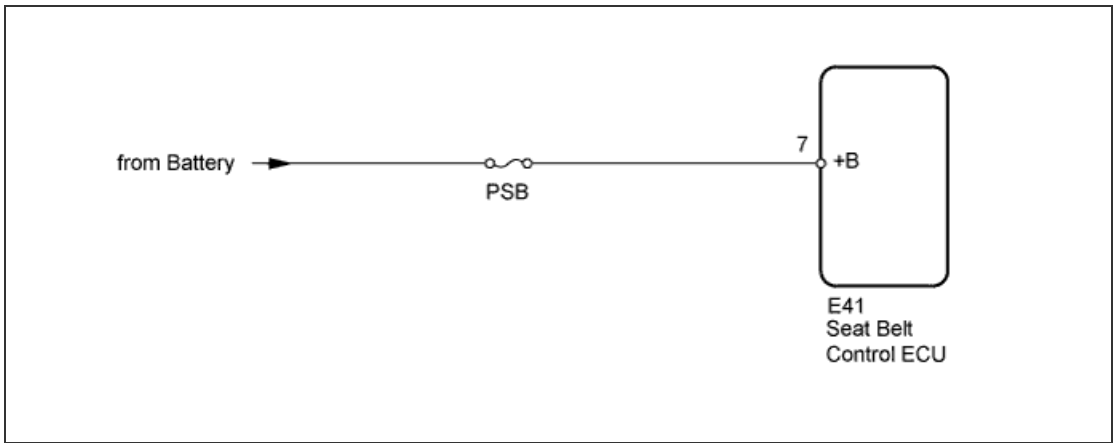
for Preparation Click here

DESCRIPTION

If the seat belt control ECU judges that there is a malfunction in its internal circuit as a result of self-diagnosis, or if the power source voltage (+B) is not input to the seat belt control ECU, this DTC will be stored.

DTC Code	DTC Detection Condition	Trouble Area
B2036	• Malfunction in seat belt control ECU • Power source voltage (+B) is not input to the seat belt control ECU.	• Harness or connector • Fuse • Seat belt control ECU

WIRING DIAGRAM



INSPECTION PROCEDURE

CAUTION:

The pretensioner is built into the front seat outer belt assembly. Be sure to follow the correct inspection procedure, as failure to follow the correct procedure (such as inspection of incorrect connectors) may deploy the pretensioner.

NOTICE:

Inspect the fuses for circuits related to this system before performing the following inspection procedure.

1.INSPECT SEAT BELT CONTROL ECU (+B TERMINAL VOLTAGE)

a. Disconnect the negative (-) battery terminal.

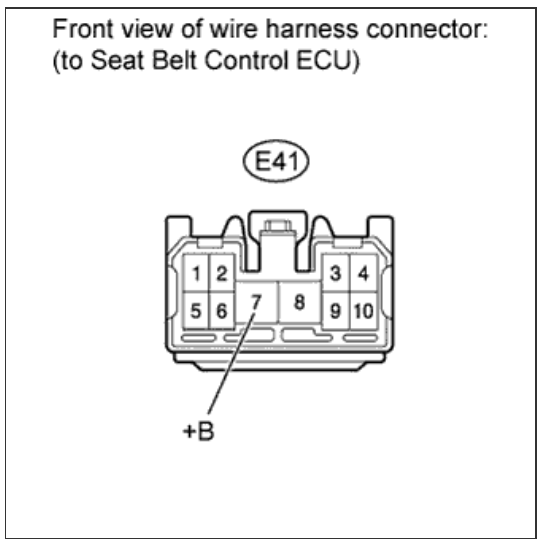
CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

b. Disconnect the E41 connector of the seat belt control ECU.

c. Connect the negative (-) battery terminal.

d. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Condition	Specified Condition
E41-7 (+B) - Body ground	Always	11 to 14 V

Result

Result	Proceed to
OK	

(for LHD)	A
OK (for RHD)	B
NG	C

e. Disconnect the negative (-) battery terminal.

f. Reconnect the E41 seat belt control ECU connector.

g. Connect the negative (-) battery terminal.

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPAIR OR REPLACE HARNESS OR CONNECTOR

A

REPLACE SEAT BELT CONTROL ECU (Click here)

DTC U0100 Lost Communication with ECM / PCM "A"

DTC U0122 Lost Communication with Vehicle Dynamics Control Module

DTC U0151 Lost Communication with Airbag ECU

DTC U1101 Lost Communication with Distance Control ECU

for Preparation Click here

DESCRIPTION

The seat belt control ECU receives signals from the master cylinder solenoid (skid control ECU) and the center airbag sensor via the CAN communication line.
The distance control ECU receives signals from the ECM via the CAN communication line.

DTC Code	DTC Detection Item	Inspection Area
U0100	ECM communication error.	• CAN communication system • Distance control ECU • ECM
U0122	Skid control ECU communication error.	• CAN communication system • Master cylinder solenoid (skid control ECU) • Seat belt control ECU
U0151	Center airbag sensor communication error.	• CAN communication system • Seat belt control ECU • Center airbag sensor
U1101	Distance control ECU communication error.	• CAN communication system • Distance control ECU • Seat belt control ECU

INSPECTION PROCEDURE

HINT:

When 2 or more DTCs starting with "U" are output simultaneously, inspect the connectors and wire harnesses of each ECU.

1.CHECK DTC (CAN COMMUNICATION SYSTEM)

a. Use the intelligent tester to check if the CAN communication system is functioning normally (Click here for LHD, Click here for RHD).

Result

Result	Proceed to
OK (DTC is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B2055 Radar Sensor Malfunction

for Preparation Click here

DESCRIPTION

This DTC is stored when there is a malfunction in the communication from the millimeter wave radar sensor. This DTC is also stored when the vehicle information sent from the millimeter wave radar sensor is abnormal.
In these cases, perform initialization so that the millimeter wave radar sensor recognizes the vehicle information.

DTC Code	DTC Detection Condition	Trouble Area
B2055	There is a malfunction in the millimeter wave radar sensor or there is a problem with the initialization.	• Millimeter wave radar sensor • Seat belt control ECU • Distance control ECU

INSPECTION PROCEDURE

1.CHECK DTC (DYNAMIC RADAR CRUISE CONTROL SYSTEM)

a. Using the intelligent tester, enter the following menus: Powertrain / Radar Cruise / Trouble Code.

b. Clear the DTC (Click here).

c. Perform the following to make sure the DTC detection conditions are met.

HINT:

If the detection conditions are not met, the system cannot detect the malfunction.

i. Drive the vehicle at a speed of 40 km/h (25 mph) or more.

ii. Turn the cruise control main switch on to set the vehicle-to-vehicle distance control mode to the standby state.

d. Check for DTCs (Click here).

OK:
DTC P1570 is not output.

NG → GO TO DYNAMIC RADAR CRUISE CONTROL SYSTEM (Click here)

OK

2.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to
OK (DTC B2055 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC U0235 Lost Communication with Cruise Control Front Distance Range Sensor

DTC U1102 Lost Communication with Radar Sensor

for Preparation Click here

DESCRIPTION

The millimeter wave radar sensor and the distance control ECU transmit the data for general vehicle control and diagnosis function via the CAN communication line.

DTC Code	DTC Detection Condition	Trouble Area
U0235	The ECM detects a communication error signal sent from the millimeter wave radar sensor to the distance control ECU for 0.15 sec. or more while dynamic radar cruise control is in operation.	• CAN communication system • Millimeter wave radar sensor • Distance control ECU
U1102	The ECM detects a communication error signal sent from the distance control ECU to the millimeter wave radar sensor for 0.15 sec. or more while dynamic radar cruise control is in operation.	• CAN communication system • Millimeter wave radar sensor • Distance control ECU

INSPECTION PROCEDURE

Refer to dynamic radar cruise control system DTC U0235 (Click here).
Refer to dynamic radar cruise control system DTC U1102 (Click here).

DTC B2056 Axial Gap of Radar Sensor

for Preparation Click here

DESCRIPTION

This DTC is stored when the beam axis of the millimeter wave radar sensor is not aligned with the direction the vehicle is traveling. If the beam axis adjustment is not performed after installing a new millimeter wave radar sensor, the pre-crash safety system DTC B2056 is output, and when the vehicle speed is 40 km/h (25 mph) or more, the dynamic radar cruise control system DTC P1572 is output.

DTC Code	DTC Detection Condition	Trouble Area
B2056	The engine switch is on (IG) and the beam axis of the millimeter wave radar sensor is determined to be misaligned.	• Millimeter wave radar sensor • Seat belt control ECU • Distance control ECU

INSPECTION PROCEDURE

1.CHECK DTC (DYNAMIC RADAR CRUISE CONTROL SYSTEM)

a. Using the intelligent tester, enter the following menus: Powertrain / Radar Cruise / Trouble Code.

b. Clear the DTC (Click here).

c. Perform the following to make sure the DTC detection conditions are met.

HINT:

If the detection conditions are not met, the system cannot detect the malfunction.

i. Drive the vehicle at a speed of 40 km/h (25 mph) or more.

ii. Turn the cruise control main switch on to set the vehicle-to-vehicle distance control mode to the standby state.

d. Check for DTCs (Click here).

OK:
DTC P1572 is not output.

NG → GO TO DYNAMIC RADAR CRUISE CONTROL SYSTEM (Click here)

OK

2.CHECK DTC (PRE-CRASH SAFETY SYSTEM)

a. Using the intelligent tester, enter the following menus: Body / Pre-Crash / Trouble Code.

b. Clear the DTCs (Click here).

c. Check for DTCs (Click here).

Result

Result	Proceed to
OK (DTC B2056 is not output)	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPLACE SEAT BELT CONTROL ECU (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC U0235 Lost Communication with Cruise Control Front Distance Range Sensor

DTC U1102 Lost Communication with Radar Sensor

for Preparation Click here

DESCRIPTION

The millimeter wave radar sensor and the distance control ECU transmit the data for general vehicle control and diagnosis function via the CAN communication line.

DTC Code	DTC Detection Condition	Trouble Area
U0235	The ECM detects a communication error signal sent from the millimeter wave radar sensor to the distance control ECU for 0.15 sec. or more while dynamic radar cruise control is in operation.	• CAN communication system • Millimeter wave radar sensor • Distance control ECU
U1102	The ECM detects a communication error signal sent from the distance control ECU to the millimeter wave radar sensor for 0.15 sec. or more while dynamic radar cruise control is in operation.	• CAN communication system • Millimeter wave radar sensor • Distance control ECU

INSPECTION PROCEDURE

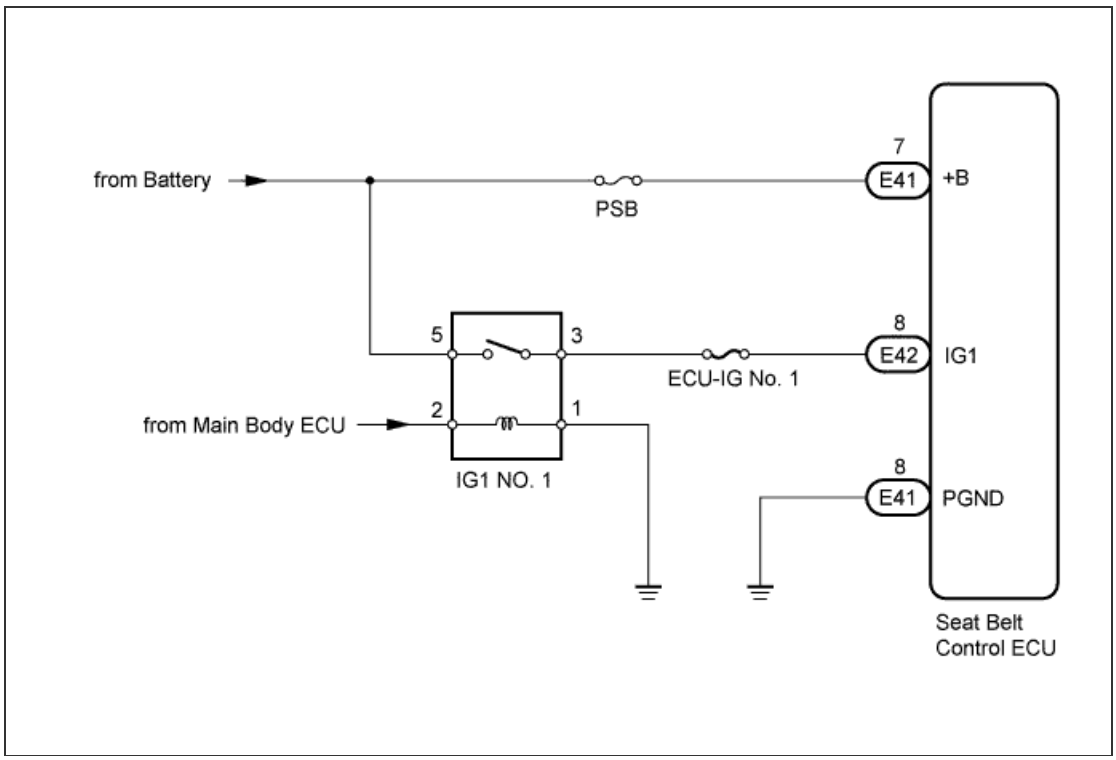
Refer to dynamic radar cruise control system DTC U0235 (Click here).
Refer to dynamic radar cruise control system DTC U1102 (Click here).

for Preparation Click here

DESCRIPTION

This circuit supplies power to the seat belt control ECU when the engine switch is on (IG).

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

Start the engine before inspection. Check the IG1 NO. 1 relay or battery if the starting system does not start.

1.INSPECT FUSE (ECU-IG No. 1, PSB)

a. Remove the ECU-IG No. 1 and PSB fuses from the cowl side junction block LH.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
ECU-IG No. 1 fuse	Always	Below 1 Ω
PSB fuse		

NG → REPLACE FUSE

OK

2.CHECK HARNESS AND CONNECTOR (SEAT BELT CONTROL ECU - BATTERY AND BODY GROUND)

a. Disconnect the E41 and E42 seat belt control ECU connectors.

b. Measure the voltage according to the value(s) in the table below.

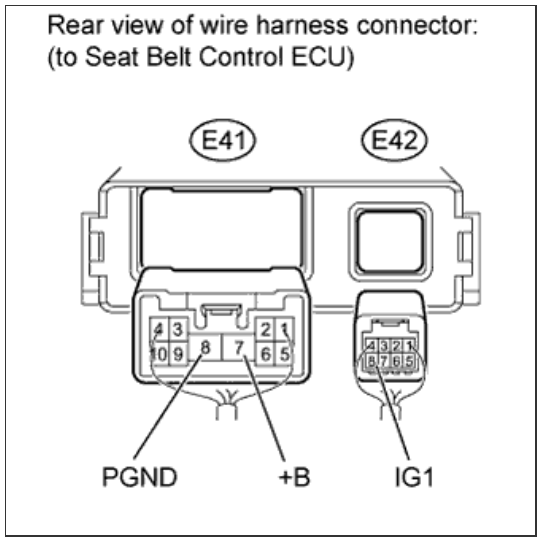
Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E42-8 (IG1) - Body ground	Engine switch on (IG)	11 to 14 V
	Engine switch off	Below 1 V
E41-7 (+B) - Body ground	Always	11 to 14 V

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E41-8 (PGND) - Body ground	Always	Below 1 Ω



Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

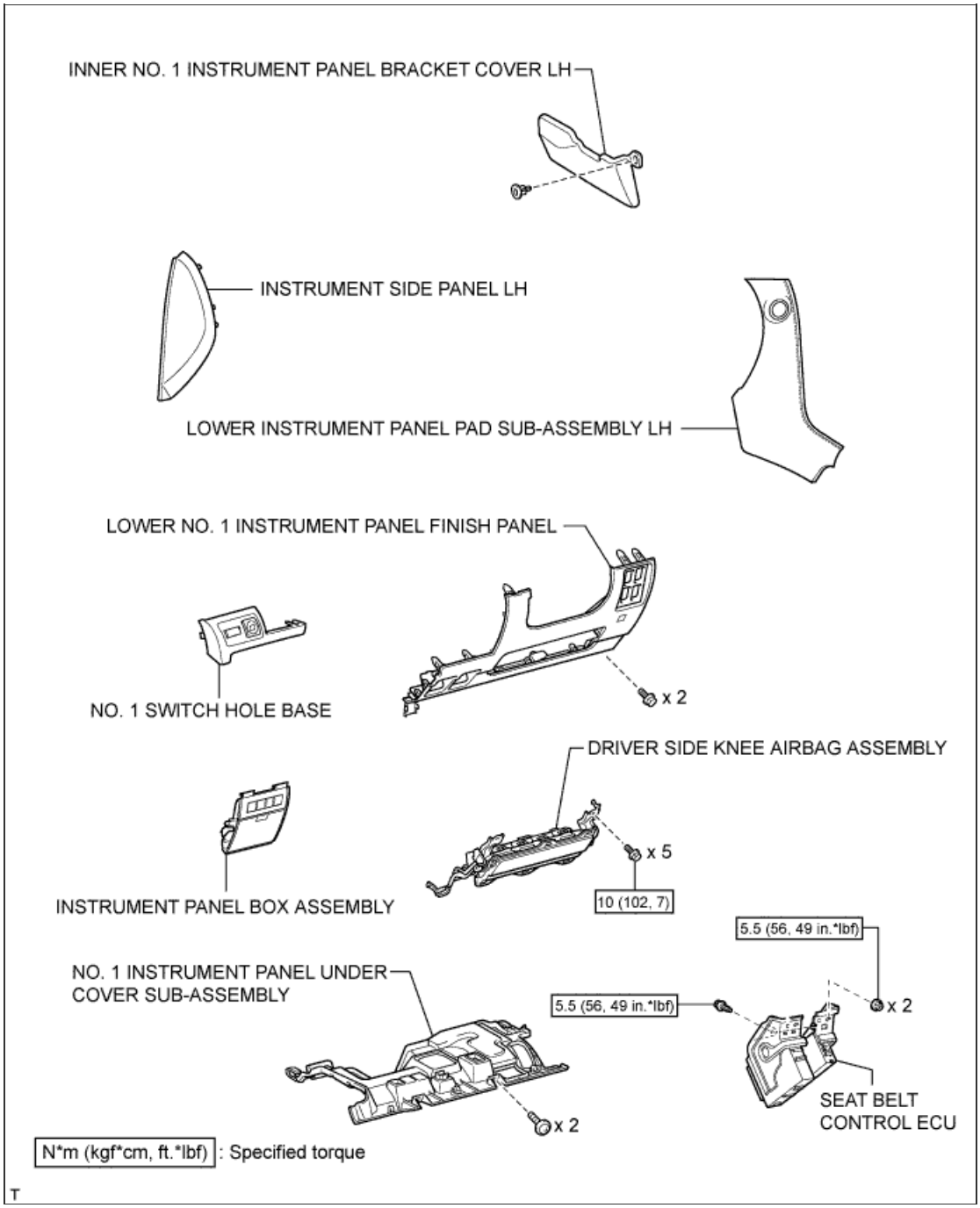
B → REPLACE SEAT BELT CONTROL ECU (Click here)

C → REPAIR OR REPLACE HARNESS OR CONNECTOR

A

REPLACE SEAT BELT CONTROL ECU (Click here)

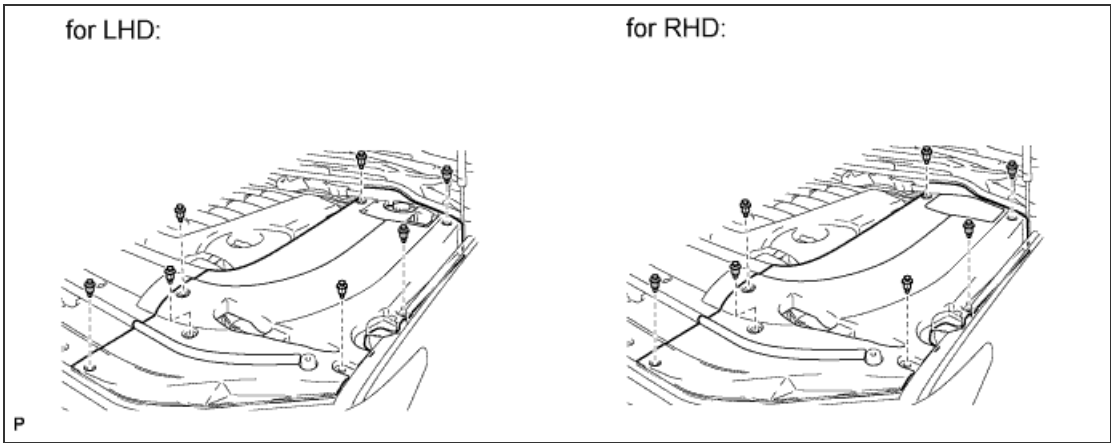
for Preparation Click here



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

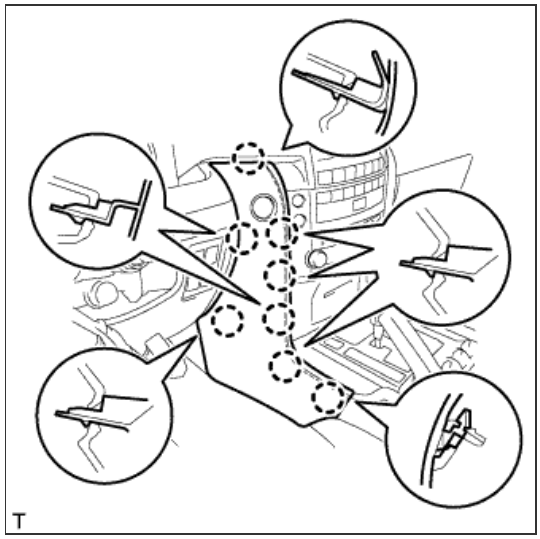
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Detach the 8 claws.

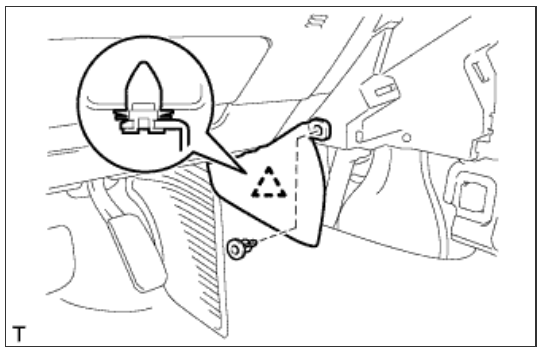
b. Disconnect the connector and remove the panel pad.



4. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Remove the clip.

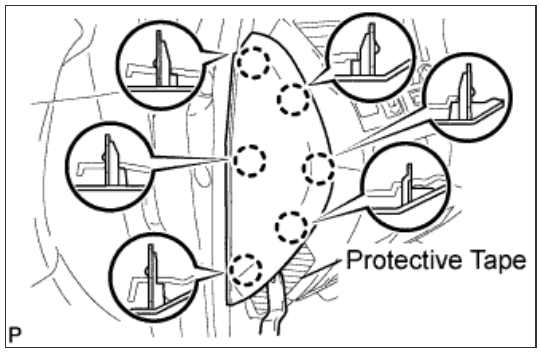
b. Detach the clip and remove the cover.



5. REMOVE INSTRUMENT SIDE PANEL LH

a. Place protective tape as shown in the illustration.

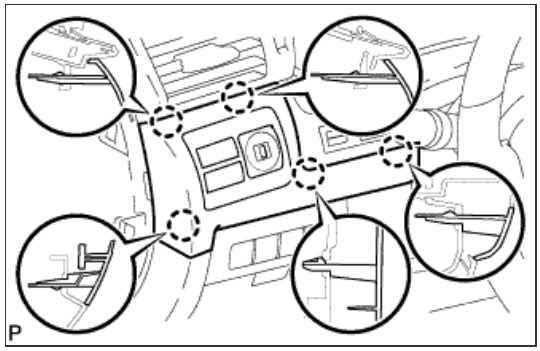
b. Using a moulding remover, detach the 6 claws and remove the side panel.



6. REMOVE NO. 1 SWITCH HOLE BASE

a. Detach the 5 claws.

b. Disconnect the connectors and remove the switch hole base.

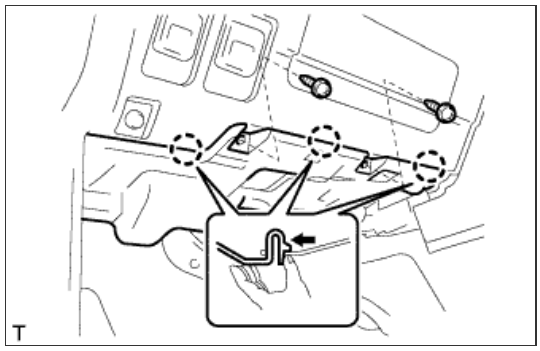


7. REMOVE NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Remove the 2 screws.

b. Detach the 3 claws.

c. Remove the under cover and disconnect the connectors.

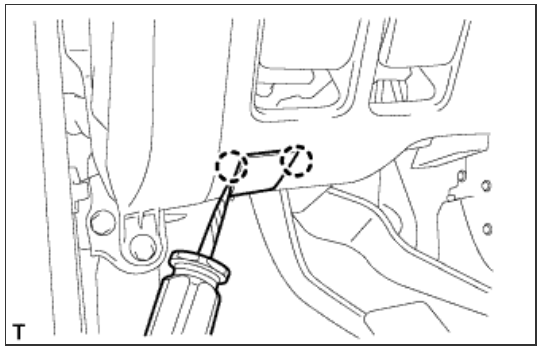


8. REMOVE LOWER NO. 1 INSTRUMENT PANEL FINISH PANEL

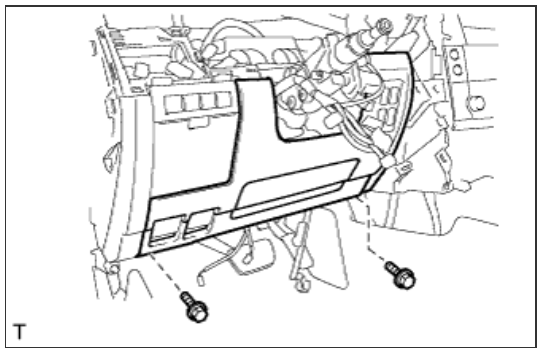
a. Using a screwdriver, detach the 2 claws and open the hole cover.

HINT:

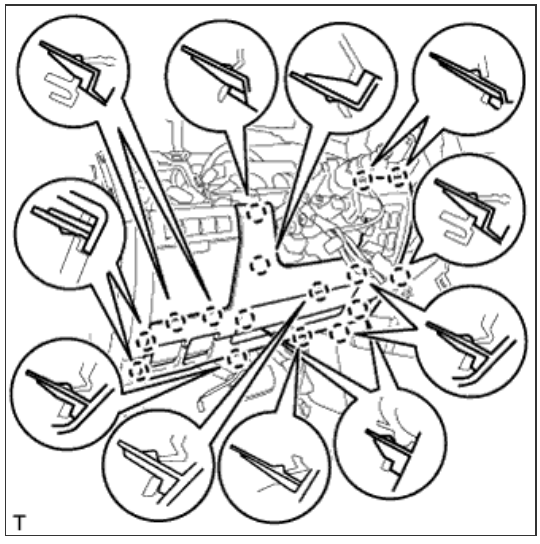
Tape the screwdriver tip before use.



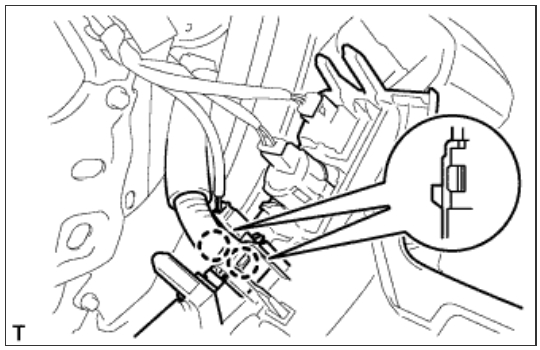
b. Remove the 2 bolts.



c. Detach the 16 claws.

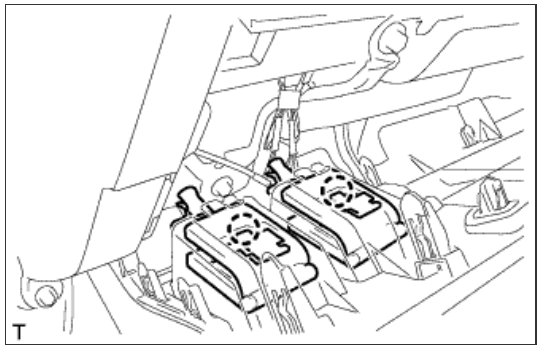


d. Detach the 2 claws and remove the sensor.



e. Detach the 2 claws and disconnect the 2 control cables.

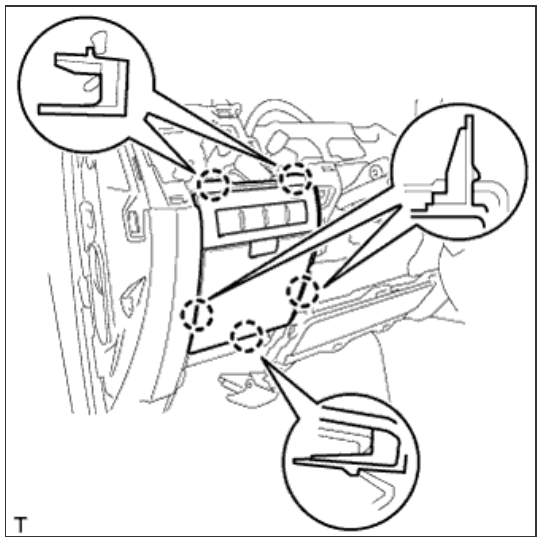
f. Remove the finish panel and then disconnect the connectors.



9. REMOVE INSTRUMENT PANEL BOX ASSEMBLY

a. Detach the 5 claws.

b. Remove the box and then disconnect the connectors.



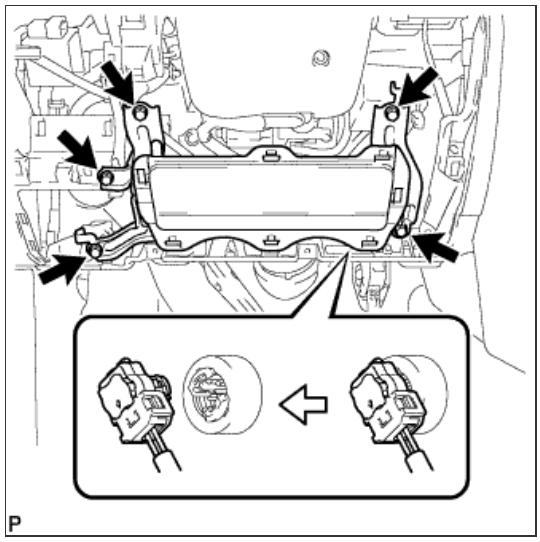
10. REMOVE DRIVER SIDE KNEE AIRBAG ASSEMBLY

a. Remove the 5 bolts and driver side knee airbag.

b. Disconnect the connector.

NOTICE:

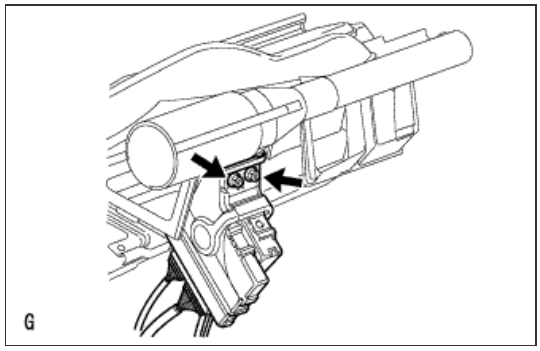
When handling the airbag connector, take care not to damage the airbag wire harness.



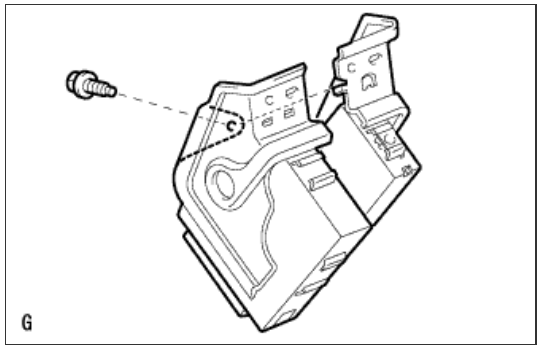
11. REMOVE SEAT BELT CONTROL ECU

a. Disconnect the connectors.

b. Remove the 2 nuts and seat belt control ECU.



c. Remove the bolt and seat belt control ECU.

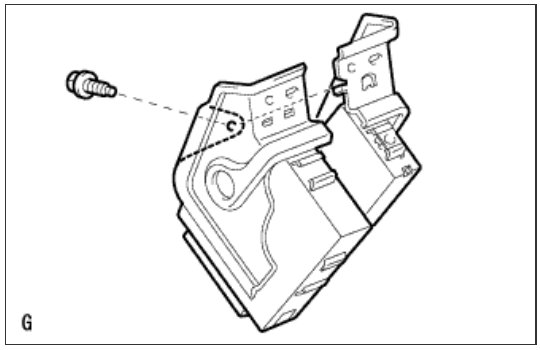


for Preparation Click here

1. INSTALL SEAT BELT CONTROL ECU

a. Install the seat belt control ECU with the bolt.

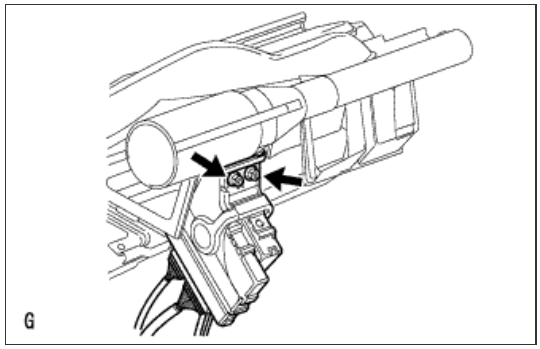
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }



b. Install the seat belt control ECU with the 2 nuts.

Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

c. Connect the connectors.



2. INSTALL DRIVER SIDE KNEE AIRBAG ASSEMBLY

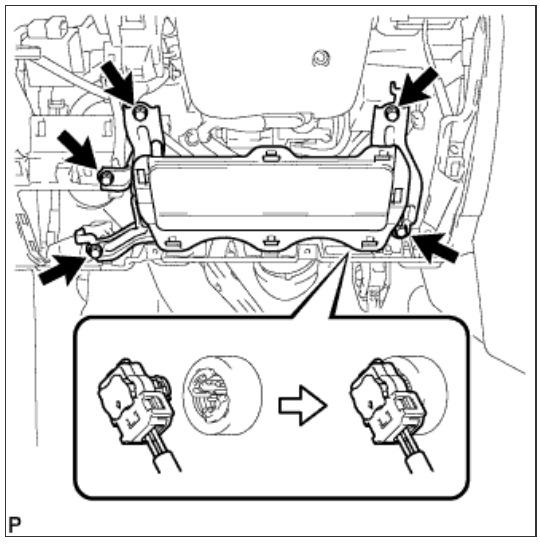
a. Connect the connector.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

b. Install the driver side knee airbag with the 5 bolts.

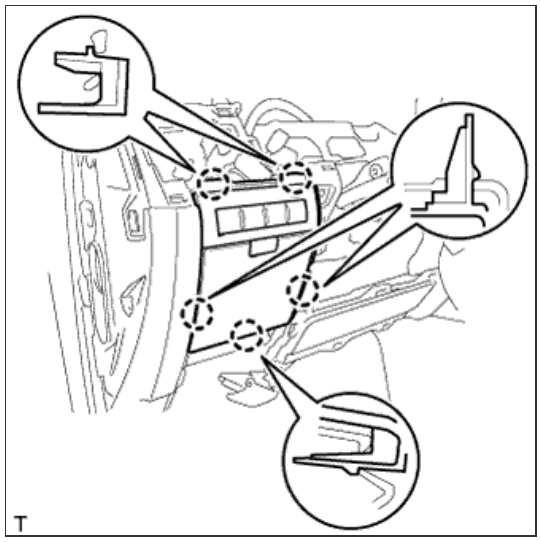
Torque:
10 N*m{ 102 kgf*cm , 7 ft.*lbf }



3. INSTALL INSTRUMENT PANEL BOX ASSEMBLY

a. Connect the connectors.

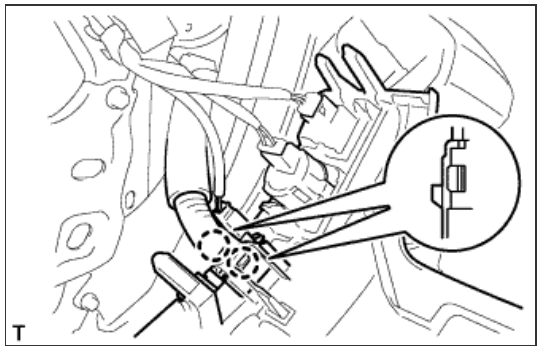
b. Attach the 5 claws to install the box.



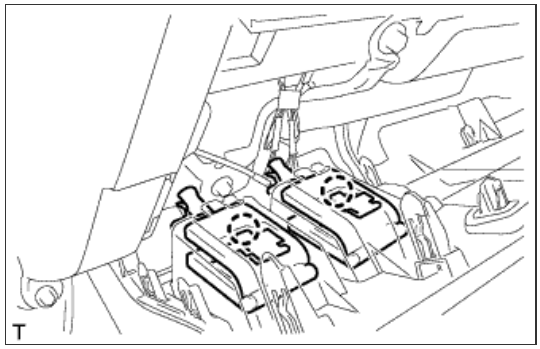
4. INSTALL LOWER NO. 1 INSTRUMENT PANEL FINISH PANEL

a. Connect the connectors.

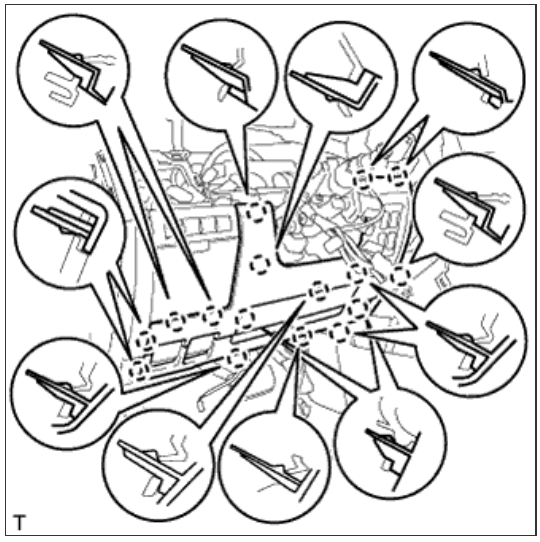
b. Attach the 2 claws to install the sensor.



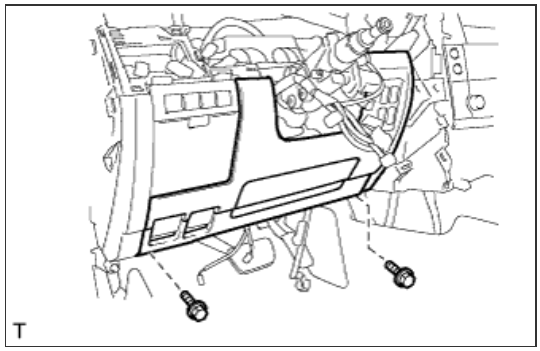
c. Attach the 2 claws to connect the 2 control cables.



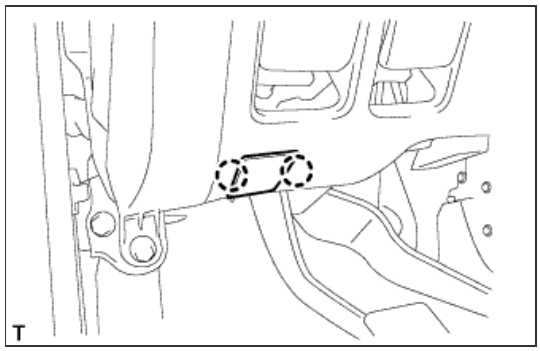
d. Attach the 16 claws to install the finish panel.



e. Install the 2 bolts.



f. Attach the 2 claws to close the hole cover.

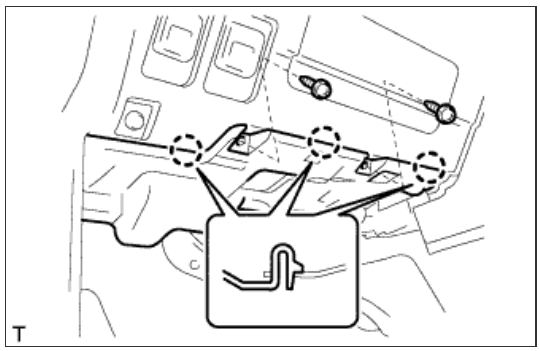


5. INSTALL NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Connect the connectors.

b. Attach the 3 claws to install the under cover.

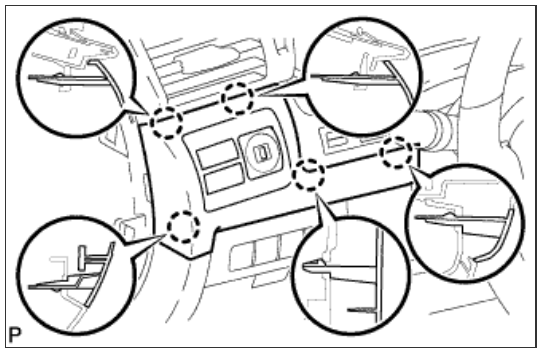
c. Install the 2 screws.



6. INSTALL NO. 1 SWITCH HOLE BASE

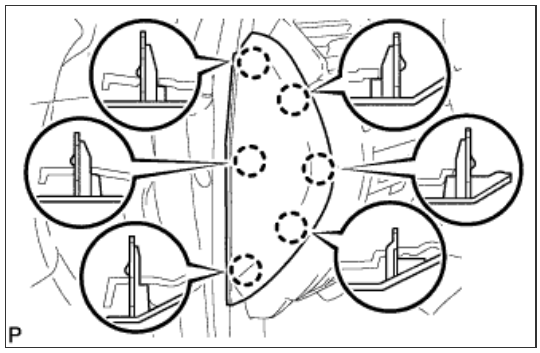
a. Connect the connectors.

b. Attach the 5 claws to install the switch hole base.



7. INSTALL INSTRUMENT SIDE PANEL LH

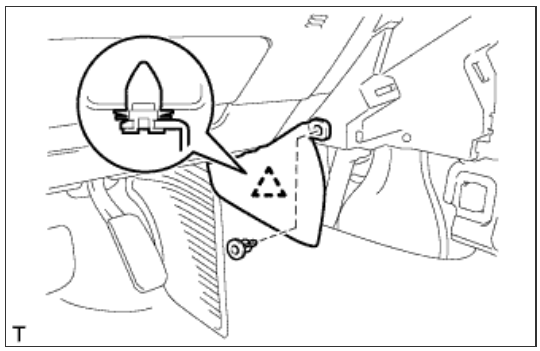
a. Attach the 6 claws to install the side panel.



8. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Attach the clip to install the cover.

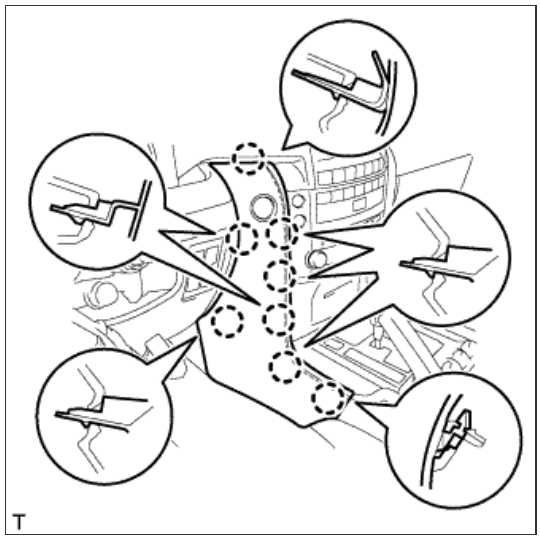
b. Install the clip.



9. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Connect the connector.

b. Attach the 8 claws to install the panel pad.



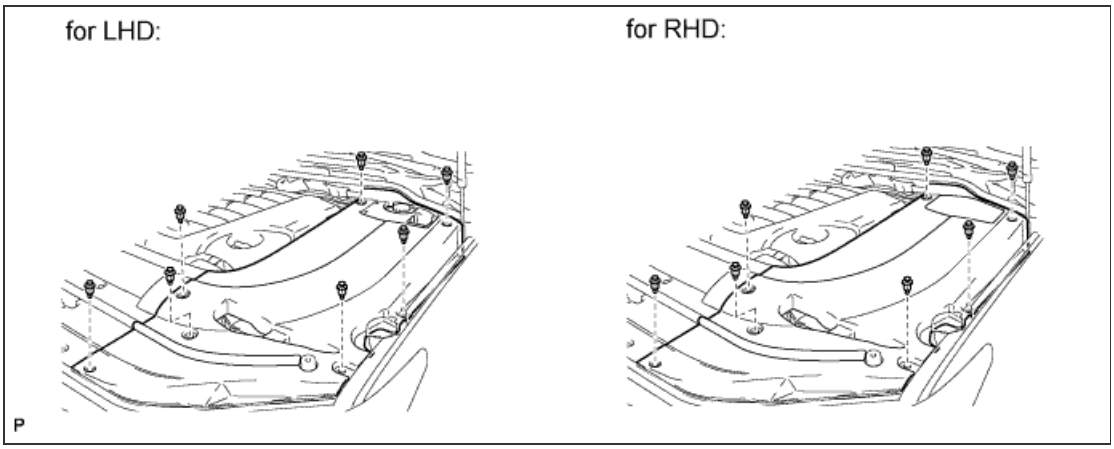
10. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

11. INSTALL ENGINE ROOM SIDE COVER LH

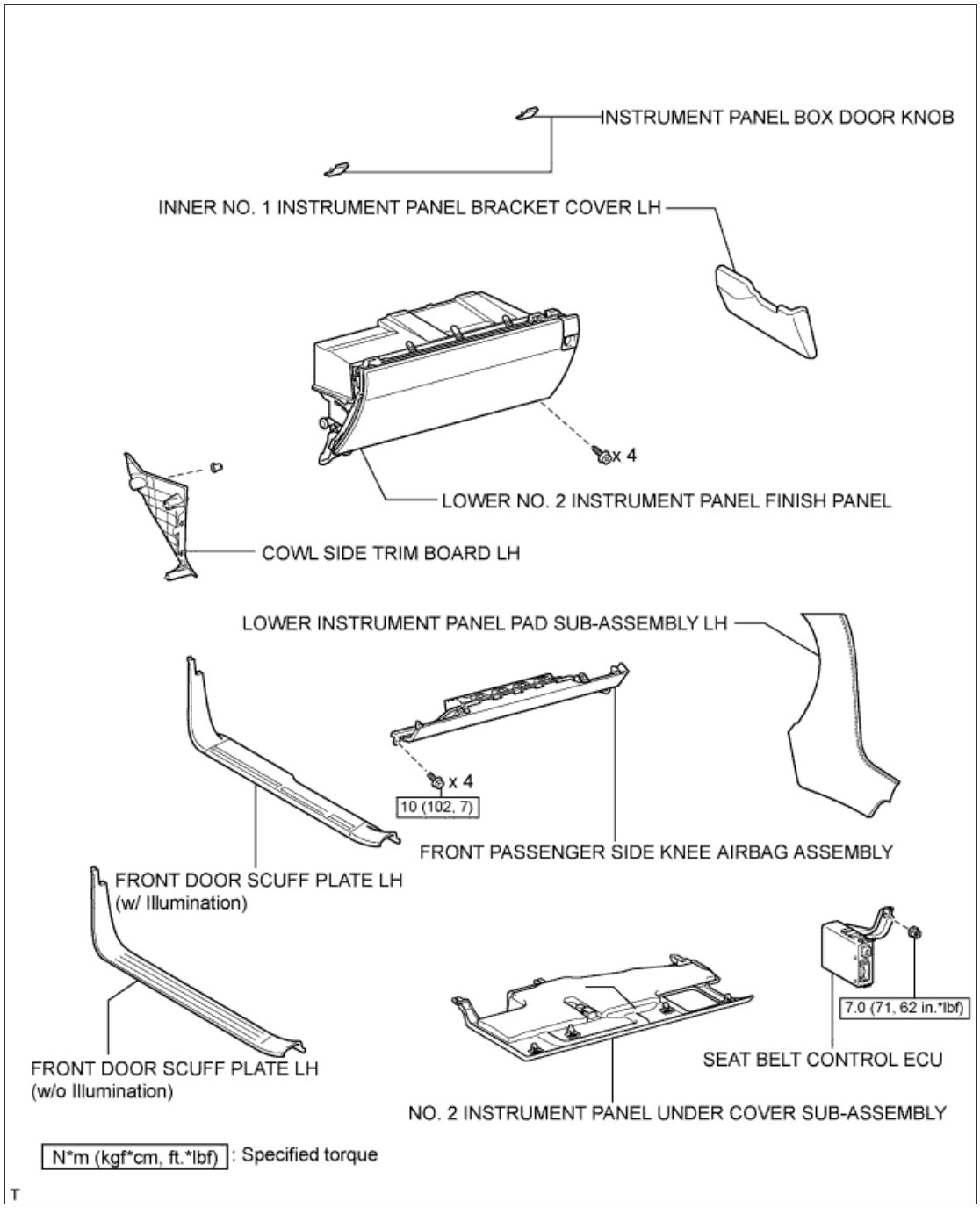
a. Install the engine room side cover with the 7 clips.



12. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

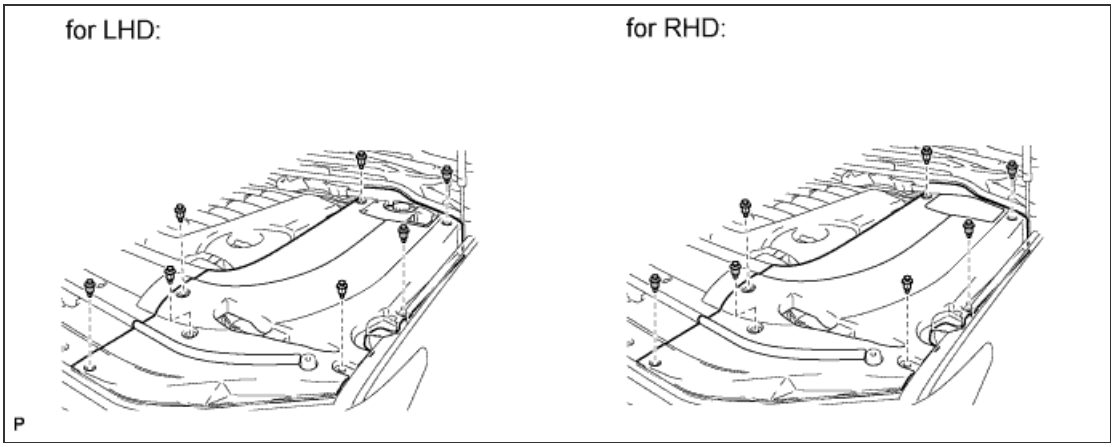
for Preparation Click here



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

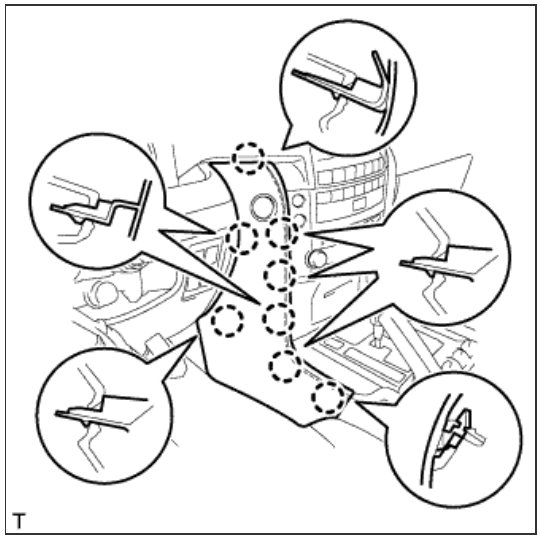
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Detach the 8 claws.

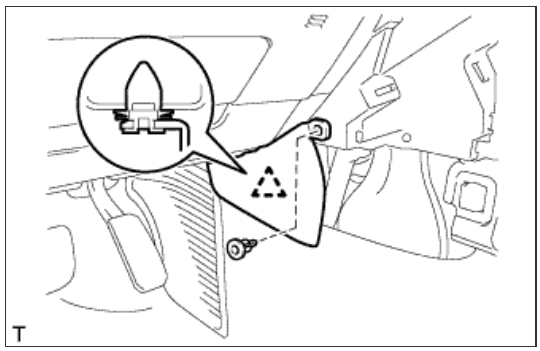
b. Disconnect the connector and remove the panel pad.



4. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Remove the clip.

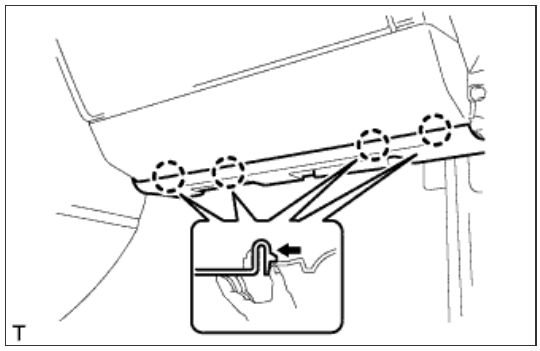
b. Detach the clip and remove the cover.



5. REMOVE NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Detach the 4 claws.

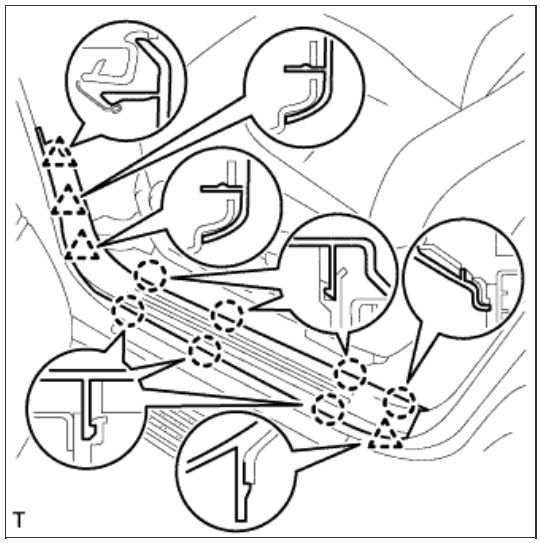
b. Remove the under cover and disconnect the connector.



6. REMOVE FRONT DOOR SCUFF PLATE LH

a. w/o Illumination:

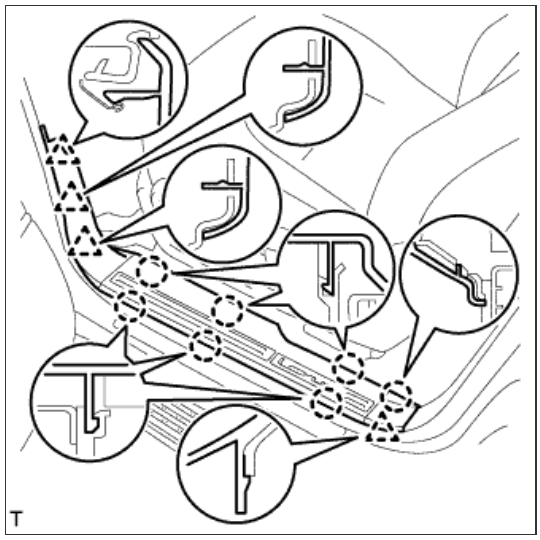
i. Detach the 7 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination:

i. Detach the 7 claws and 4 clips.

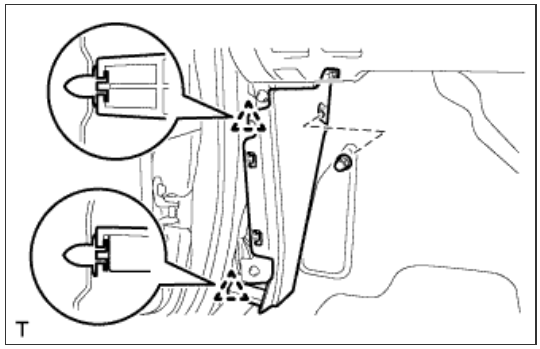
ii. Disconnect the connector and remove the scuff plate.



7. REMOVE COWL SIDE TRIM BOARD LH

a. Remove the cap nut.

b. Detach the 2 clips and remove the trim board.



8. REMOVE FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY

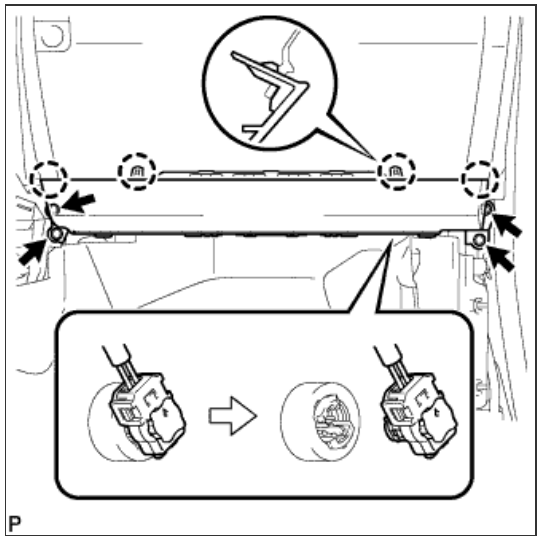
a. Remove the 4 bolts.

b. Detach the 4 claws and remove the front passenger side knee airbag.

c. Disconnect the connector.

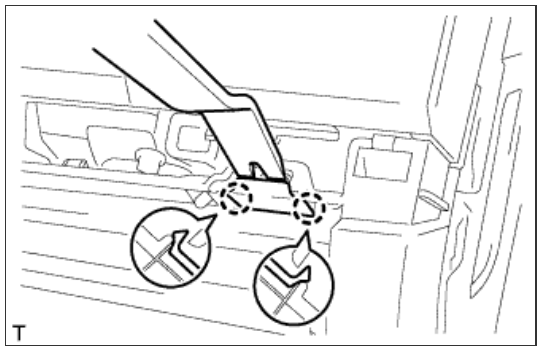
NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



9. REMOVE INSTRUMENT PANEL BOX DOOR KNOB

a. Using a moulding remover, detach the 2 claws and remove the knob.

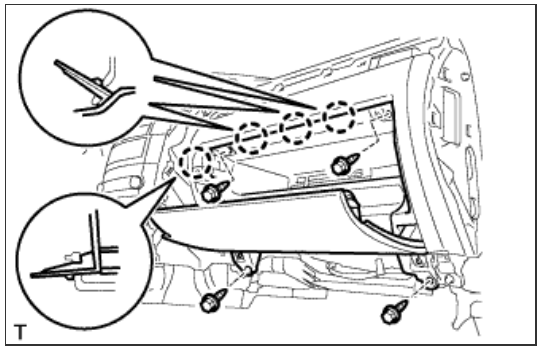


10. REMOVE LOWER NO. 2 INSTRUMENT PANEL FINISH PANEL

a. Remove the 4 bolts.

b. Detach the 4 claws.

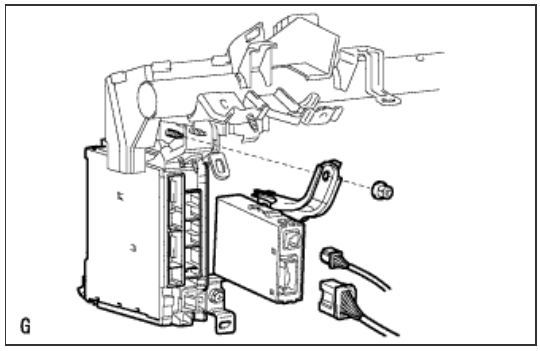
c. Remove the finish panel and then disconnect the connector.



11. REMOVE SEAT BELT CONTROL ECU

a. Disconnect the 2 connectors.

b. Remove the nut and ECU.



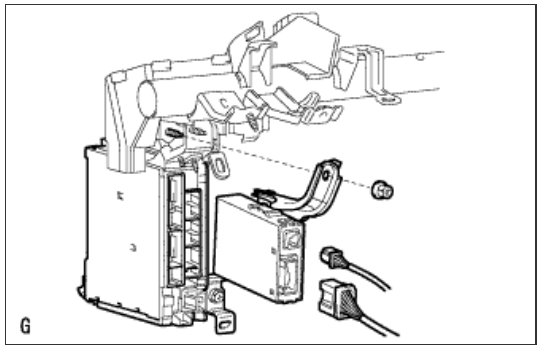
for Preparation Click here

1. INSTALL SEAT BELT CONTROL ECU

a. Install the ECU with the nut.

Torque:
7.0 N*m{ 71 kgf*cm , 62 in.*lbf }

b. Connect the 2 connectors.

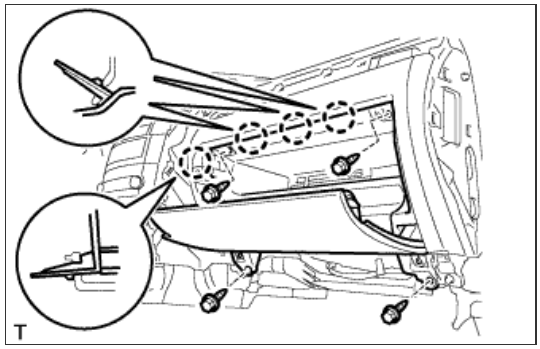


2. INSTALL LOWER NO. 2 INSTRUMENT PANEL FINISH PANEL

a. Connect the connector.

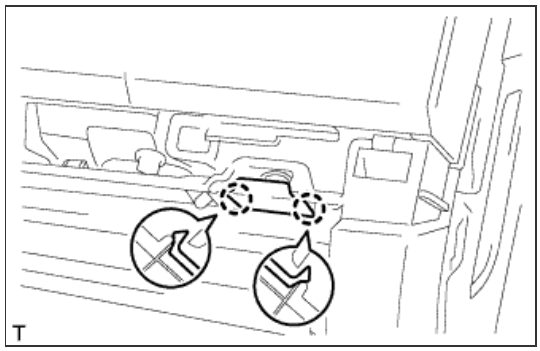
b. Attach the 4 claws to install the finish panel.

c. Install the 4 bolts.



3. INSTALL INSTRUMENT PANEL BOX DOOR KNOB

a. Attach the 2 claws to install the knob.



4. INSTALL FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY

a. Connect the connector.

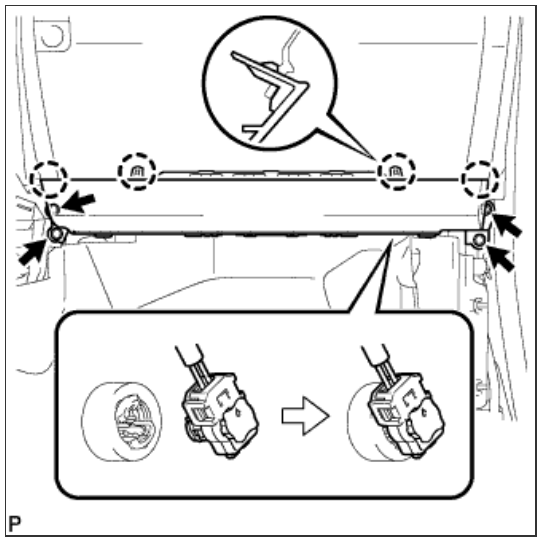
NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

b. Attach the 4 claws to install the front passenger side knee airbag.

c. Install the 4 bolts.

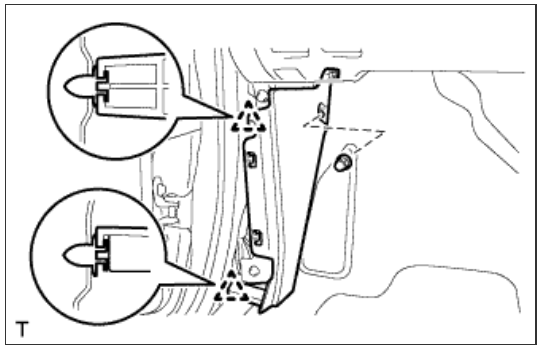
Torque:
10 N*m{ 102 kgf*cm , 7 ft.*lbf }



5. INSTALL COWL SIDE TRIM BOARD LH

a. Attach the 2 clips to install the trim board.

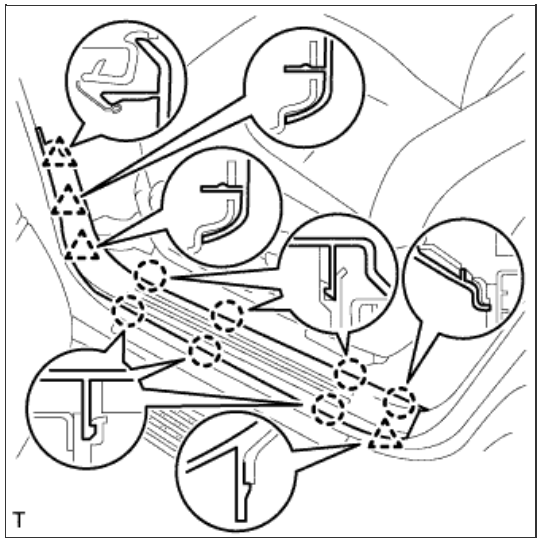
b. Install the cap nut.



6. INSTALL FRONT DOOR SCUFF PLATE LH

a. w/o Illumination:

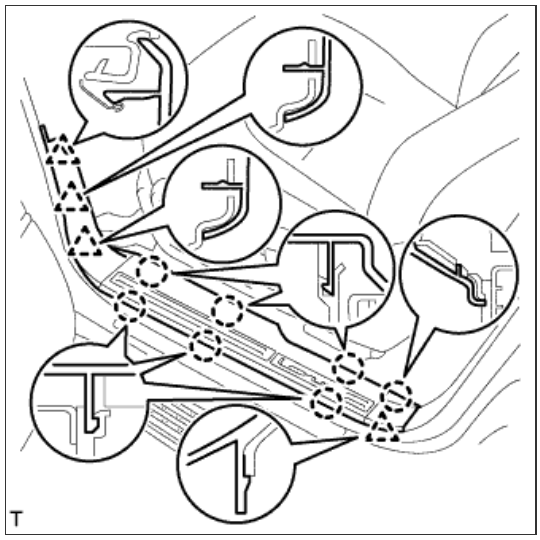
i. Attach the 7 claws and 4 clips to install the scuff plate.



b. w/ Illumination:

i. Connect the connector.

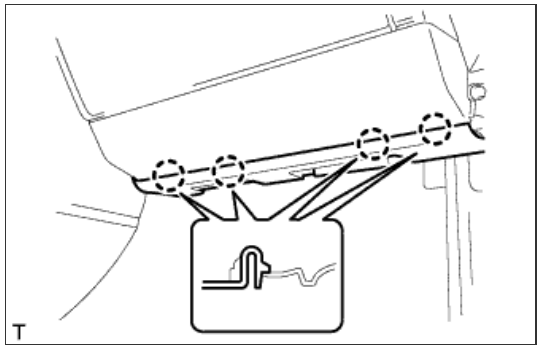
ii. Attach the 7 claws and 4 clips to install the scuff plate.



7. INSTALL NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Connect the connector.

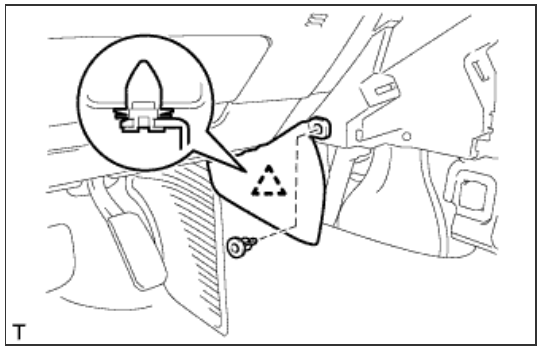
b. Attach the 4 claws to install the under cover.



8. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Attach the clip to install the cover.

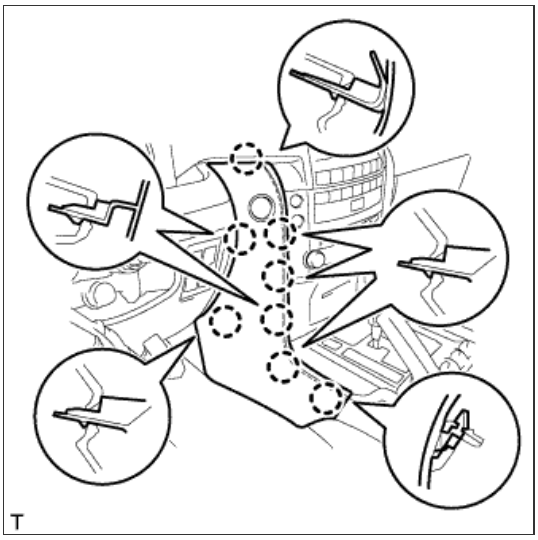
b. Install the clip.



9. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Connect the connector.

b. Attach the 8 claws to install the panel pad.



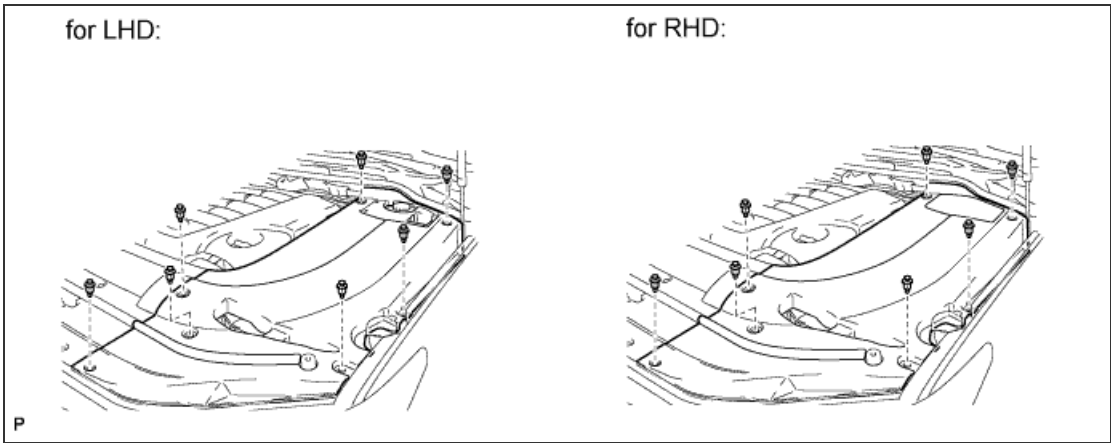
10. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

11. INSTALL ENGINE ROOM SIDE COVER LH

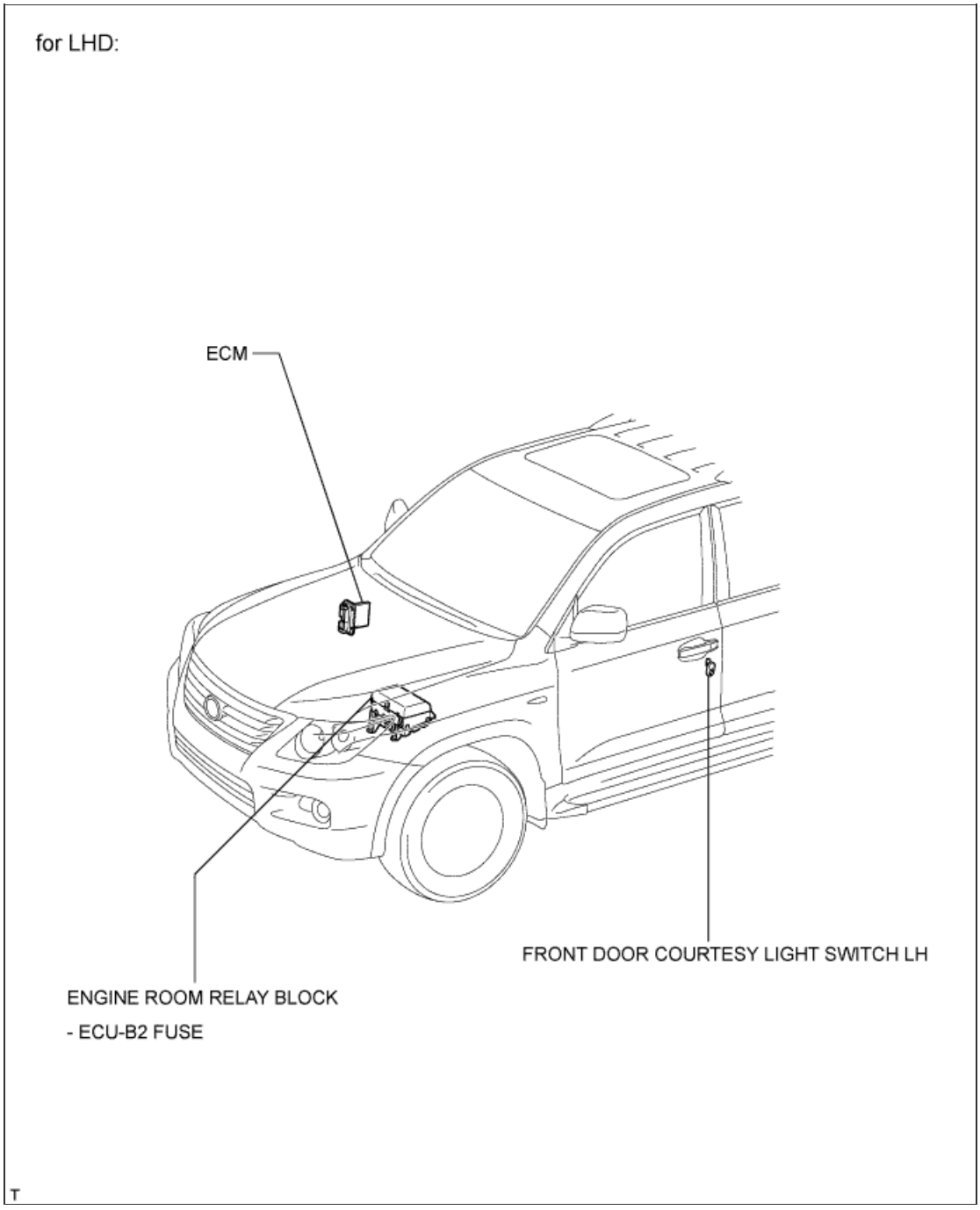
a. Install the engine room side cover with the 7 clips.



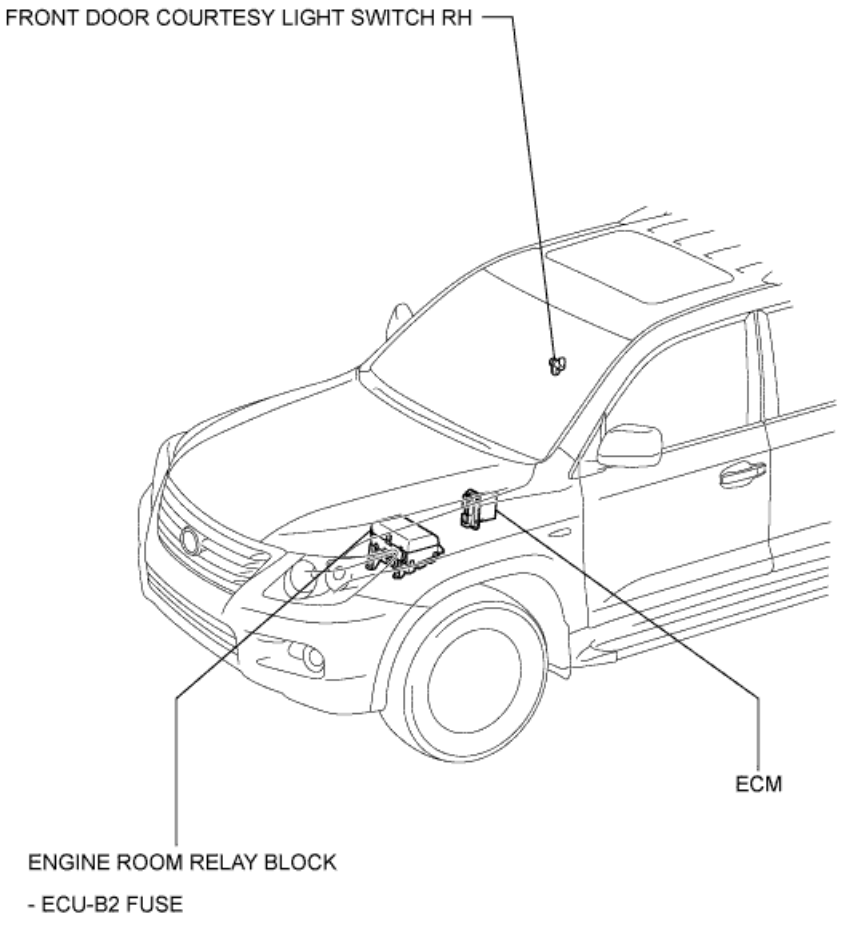
12. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here

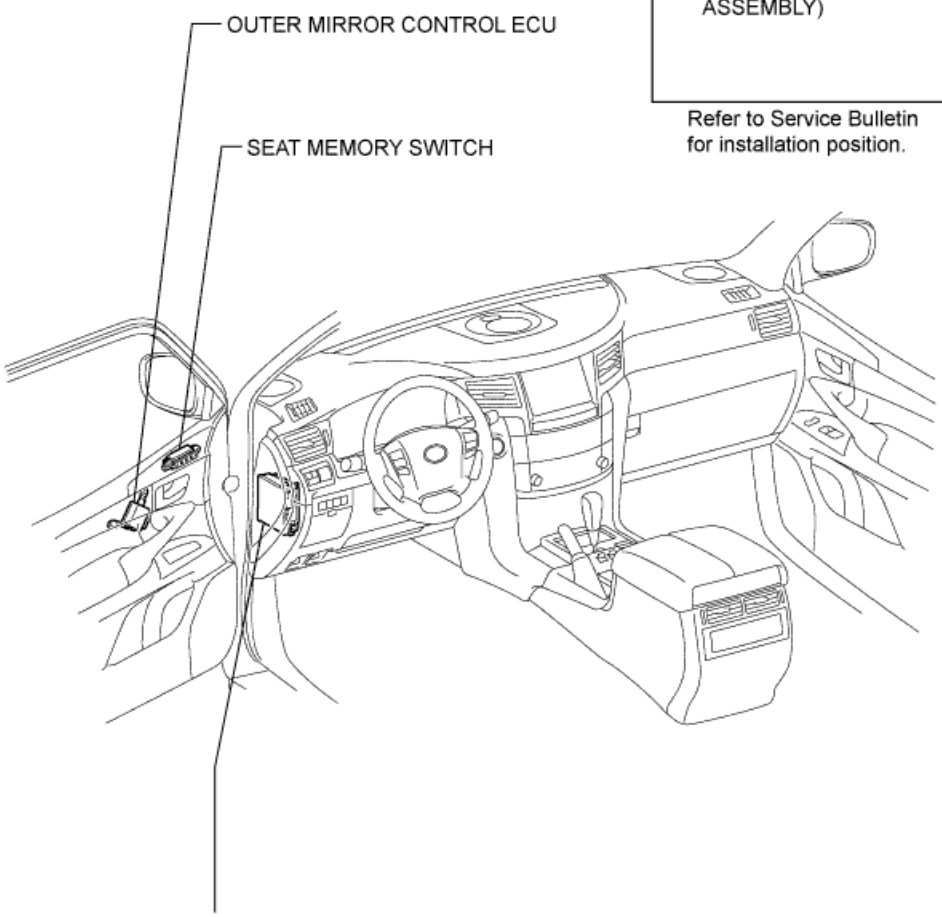


for RHD:


FRONT DOOR COURTESY LIGHT SWITCH RH
ECM
ENGINE ROOM RELAY BLOCK
- ECU-B2 FUSE

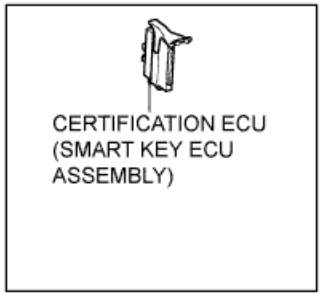
T

for LHD:

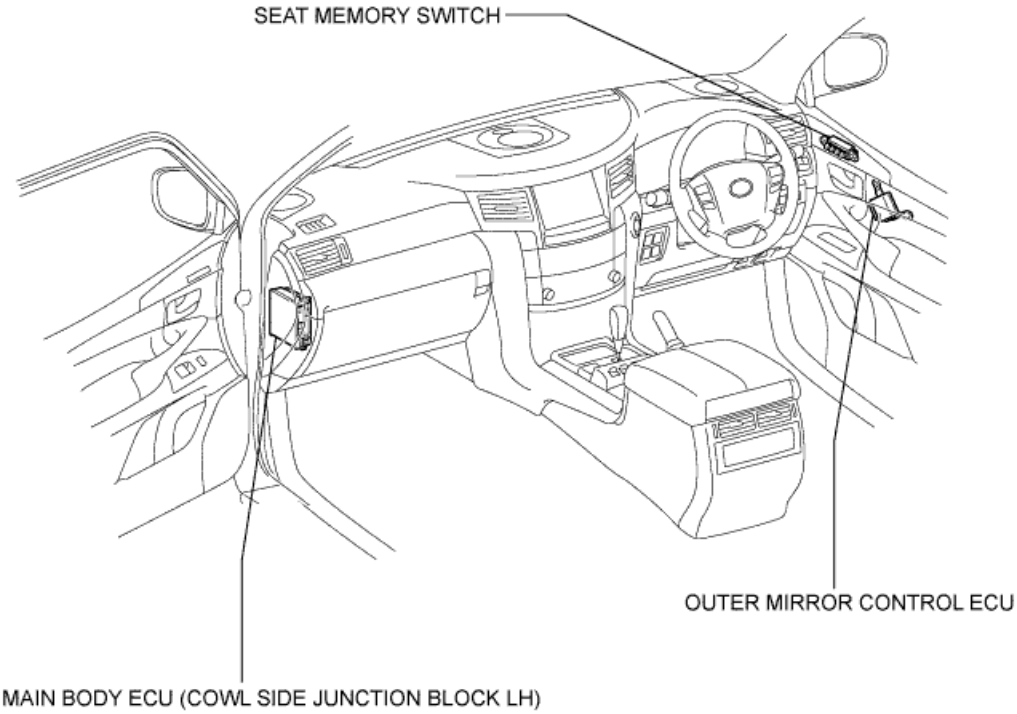

CERTIFICATION ECU
(SMART KEY ECU
ASSEMBLY)
Refer to Service Bulletin
for installation position.
OUTER MIRROR CONTROL ECU
SEAT MEMORY SWITCH
MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)
- FR P/SEAT LH FUSE
- FR P/SEAT RH FUSE

T

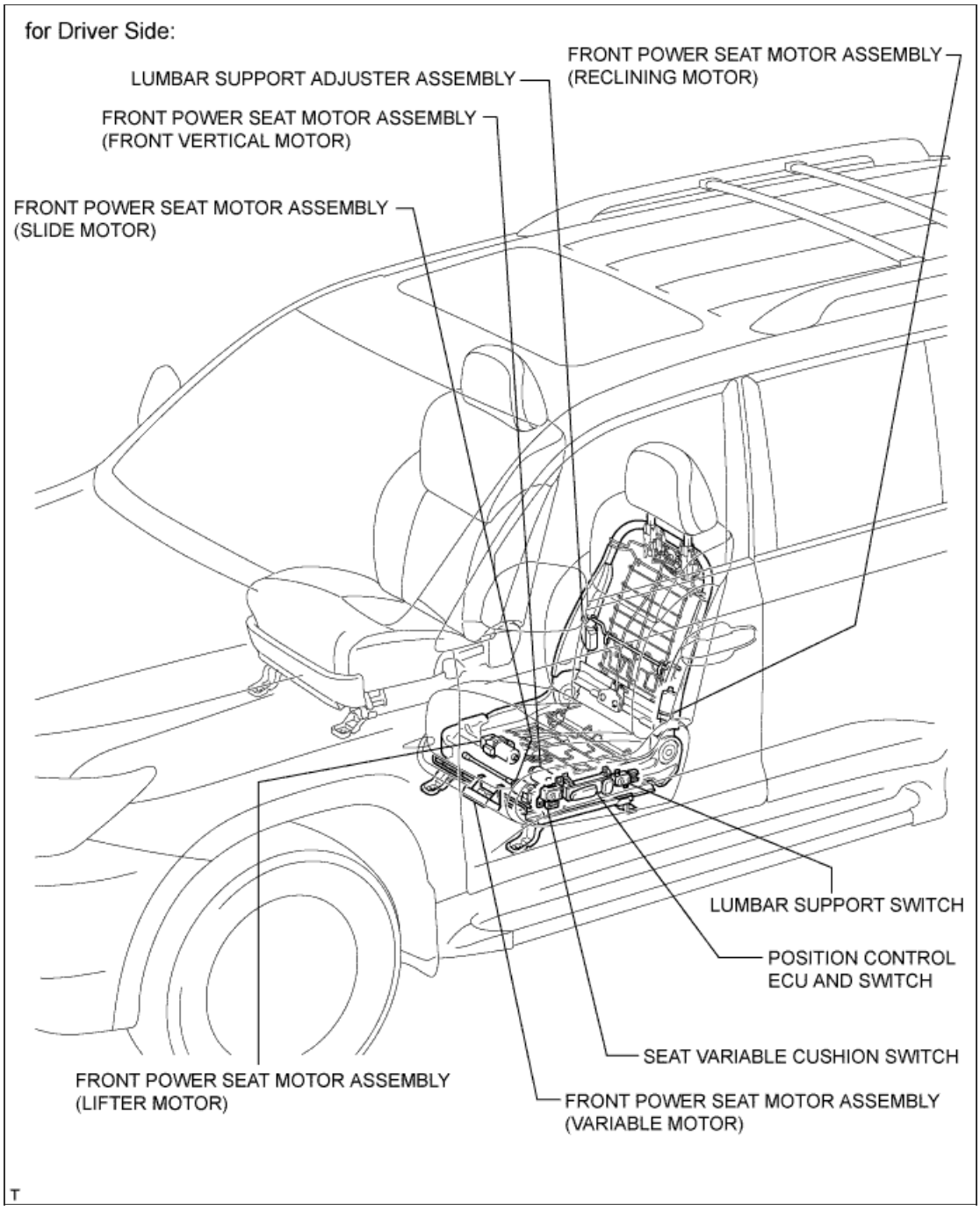
for RHD:

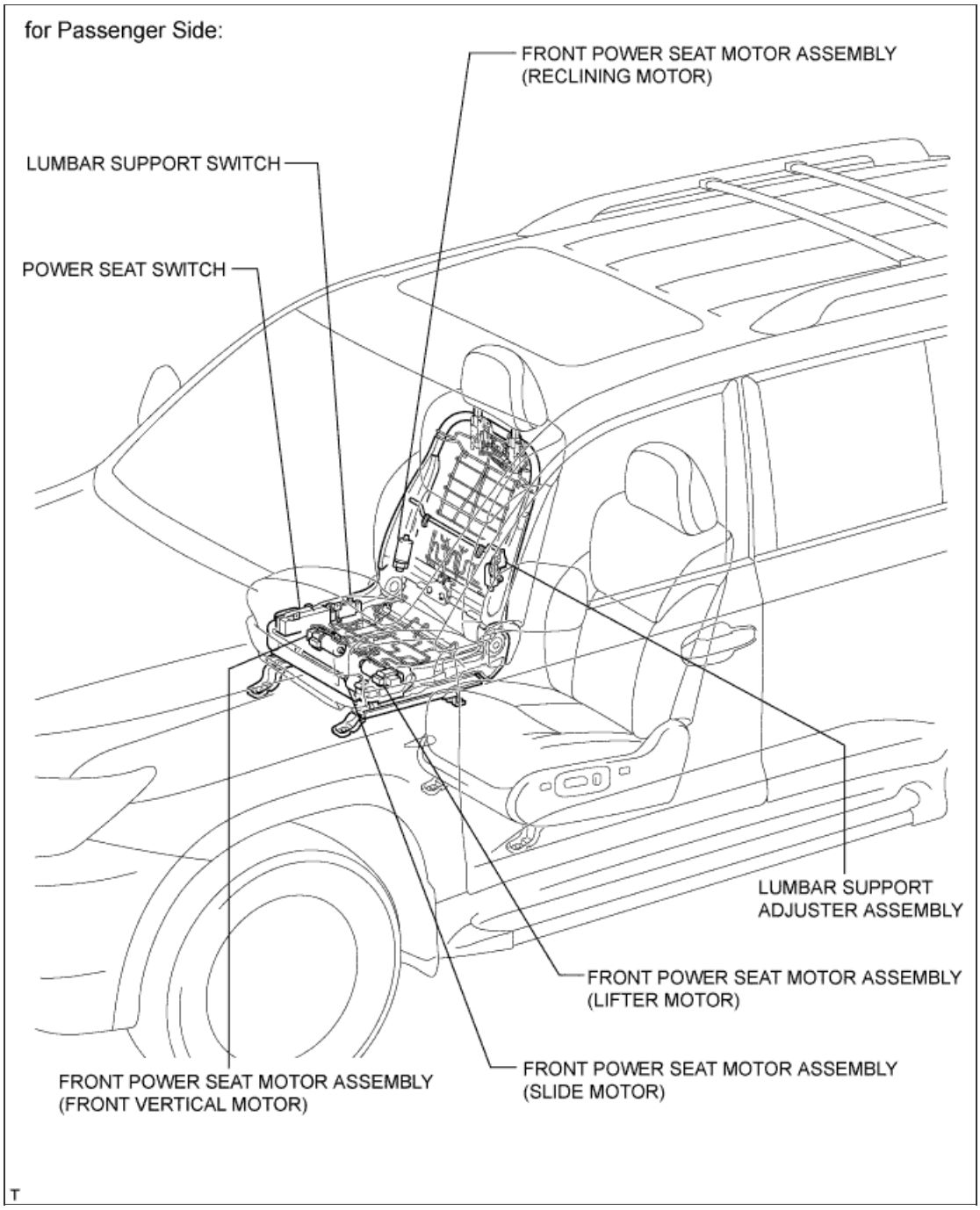


Refer to Service Bulletin
for installation position.

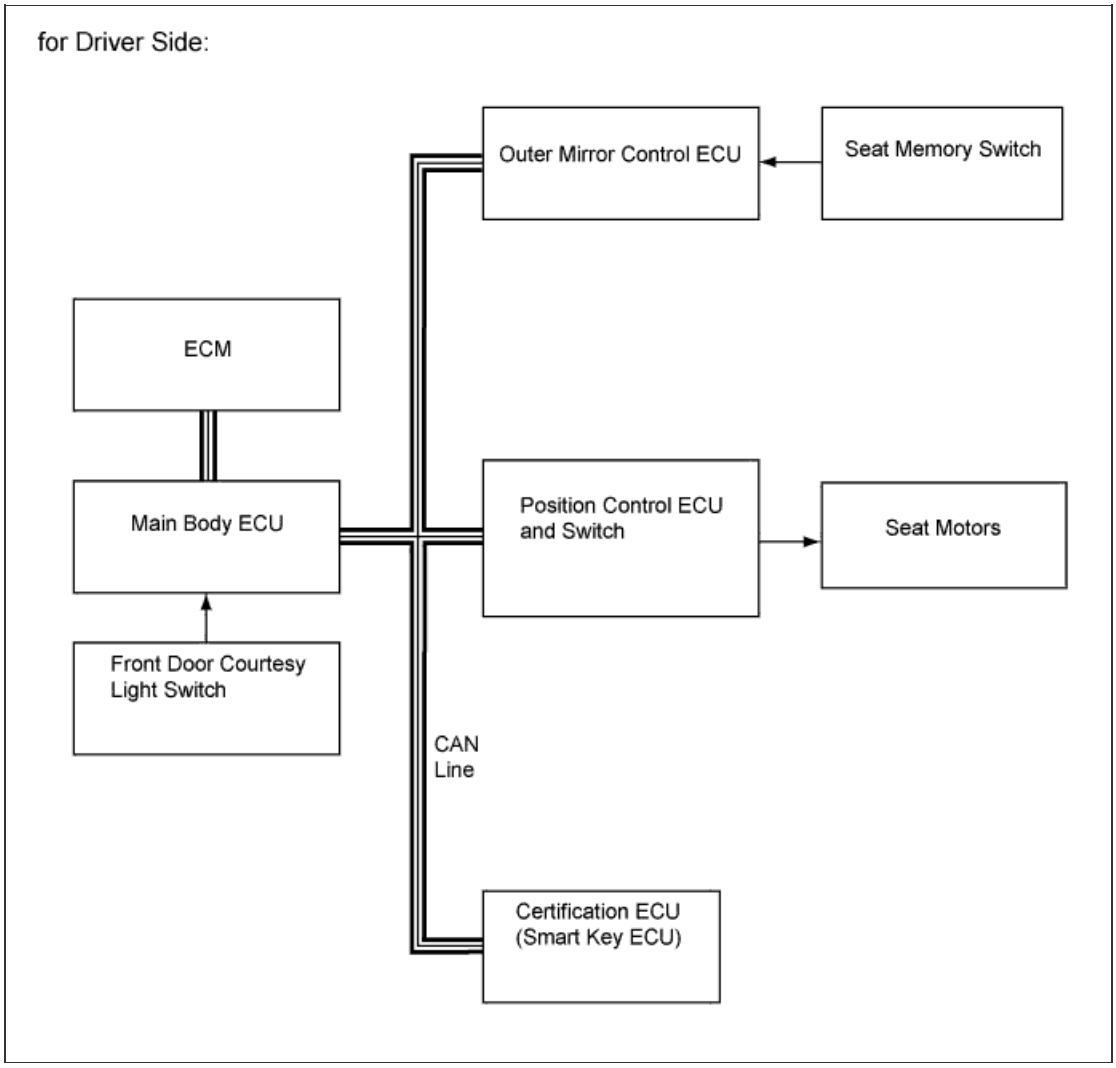


T


for Driver Side:
FRONT POWER SEAT MOTOR ASSEMBLY
(RECLINING MOTOR)
LUMBAR SUPPORT ADJUSTER ASSEMBLY
FRONT POWER SEAT MOTOR ASSEMBLY
(FRONT VERTICAL MOTOR)
FRONT POWER SEAT MOTOR ASSEMBLY
(SLIDE MOTOR)
LUMBAR SUPPORT SWITCH
POSITION CONTROL
ECU AND SWITCH
SEAT VARIABLE CUSHION SWITCH
FRONT POWER SEAT MOTOR ASSEMBLY
(LIFTER MOTOR)
FRONT POWER SEAT MOTOR ASSEMBLY
(VARIABLE MOTOR)
T

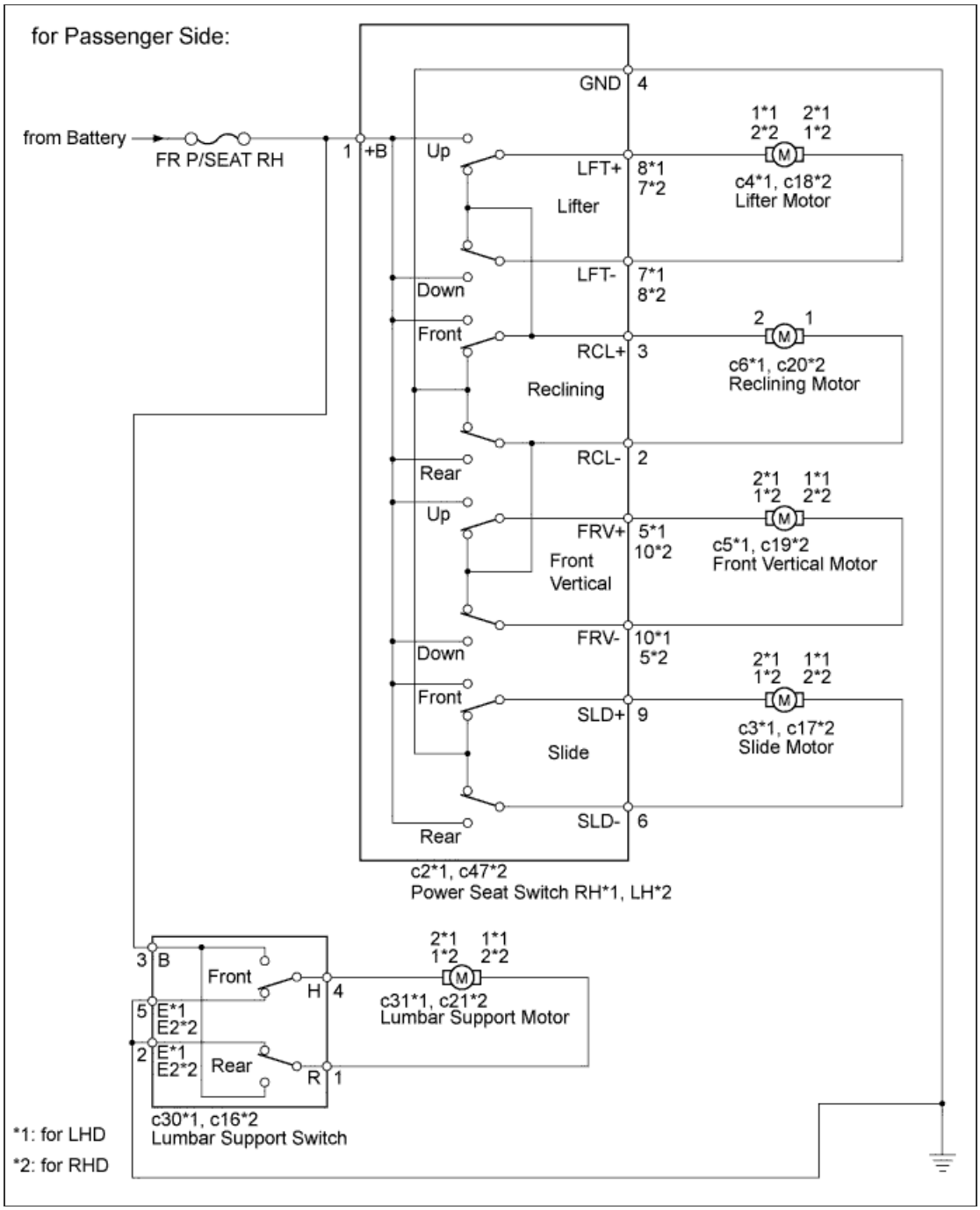

for Passenger Side:
FRONT POWER SEAT MOTOR ASSEMBLY
(RECLINING MOTOR)
LUMBAR SUPPORT SWITCH
POWER SEAT SWITCH
LUMBAR SUPPORT
ADJUSTER ASSEMBLY
FRONT POWER SEAT MOTOR ASSEMBLY
(LIFTER MOTOR)
FRONT POWER SEAT MOTOR ASSEMBLY
(SLIDE MOTOR)
FRONT POWER SEAT MOTOR ASSEMBLY
(FRONT VERTICAL MOTOR)
T

for Preparation Click here



Communication Table

Sender	Receiver	Signal	Line
ECM	Position Control ECU and Switch	Shift position signal	CAN
Outer Mirror Control ECU	Position Control ECU and Switch	• Seat memory switch 1 signal • Seat memory switch 2 signal • Seat memory switch 3 signal	CAN
Main Body ECU	Position Control ECU and Switch	Driver door courtesy light switch signal	CAN
Certification ECU (Smart Key ECU)	Position Control ECU and Switch	• Door lock/unlock signal • Key ID signal	CAN
Position Control ECU and Switch	Outer Mirror Control ECU	• Seat memory switch 1 command signal • Seat memory switch 2 command signal • Seat memory switch 3 command signal	CAN


for Passenger Side:
from Battery
FR P/SEAT RH
1 +B
GND 4
Up
LFT+ 8*1 7*2
Lifter
LFT- 7*1 8*2
Down
Front
RCL+ 3
Reclining
RCL- 2
Rear
Up
FRV+ 5*1 10*2
Front Vertical
FRV- 10*1 5*2
Down
Front
SLD+ 9
Slide
SLD- 6
Rear
c2*1, c47*2
Power Seat Switch RH*1, LH*2
1*1 2*1 2*2 1*2
c4*1, c18*2
Lifter Motor
2 1
c6*1, c20*2
Reclining Motor
2*1 1*1 1*2 2*2
c5*1, c19*2
Front Vertical Motor
2*1 1*1 1*2 2*2
c3*1, c17*2
Slide Motor
3 B
Front
H 4
5 E*1 E2*2
2 E*1 E2*2
Rear
R 1
c30*1, c16*2
Lumbar Support Switch
2*1 1*1 1*2 2*2
c31*1, c21*2
Lumbar Support Motor
*1: for LHD
*2: for RHD

for Preparation Click here

FRONT POWER SEAT CONTROL SYSTEM DESCRIPTION

- The driver seat is equipped with slide, reclining, lifter, front vertical, variable and lumbar support adjustment functions.
- The passenger seat is equipped with slide, reclining, lifter, front vertical and lumbar support adjustment functions.
- The memory call function uses the key ID code of the key to memorize and reproduce the appropriate driving position for each individual who possesses a master key or sub key.

FUNCTION OF MAIN COMPONENT

The following functions are available.

Component	Function
Seat slide motor	Receives signal from front power seat switch, and slides seat forward and rearward.
Seat reclining motor	Receives signal from front power seat switch, and tilts and reclines seat.
Seat front vertical motor	Receives signal from front power seat switch, and raises and lowers front of seat cushion.
Seat lifter motor	Receives signal from front power seat switch, and raises and lowers seat cushion.
Seat variable cushion motor	Receives signal from seat variable cushion switch and varies length of driver side seat cushion.
Lumbar support adjuster motor	Activated based on signal from lumbar support switch. Adjusts lumbar support.
Seat control switch	Based on switches operated, seat adjuster signals are input into position control ECU and seat is adjusted accordingly.
Seat memory switch	When seat memory SET switch and seat memory switch are pressed simultaneously, signal is input to outer mirror control ECU and seat position is recorded. Then, when seat memory switch is pressed, signal is input to outer mirror control ECU and seat position changes according to memory.

SYSTEM OPERATION

The front power seat functions which can be adjusted with power seat motors and/or memorized are shown in the chart below.
For the driver side memory function, the seat memory switch operation is first transferred from the outer mirror control ECU to the position control ECU and switch via the CAN communication line. Then, either the seat position is stored in memory or a previously stored seat position is recalled.

Seat Adjustment Function	Driver Seat	Passenger Seat
Fore-and-Aft Slide	Power and memory	Power
Reclining	Power and memory	Power
Front Vertical Height	Power and memory	Power
Lifter	Power and memory	Power
Variable	Power	-
Lumbar support	Power	Power

for Preparation Click here

HINT:

- **Use the following procedures to troubleshoot the front power seat control system.**
- *: Use the intelligent tester.

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.INSPECT COMMUNICATION FUNCTION OF CAN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the CAN communication system is functioning normally.

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B. → Go to CAN COMMUNICATION SYSTEM (for LHD) (Click here)

C. → Go to CAN COMMUNICATION SYSTEM (for RHD) (Click here)

A

4.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. → Go to step 6

A

5.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Data List / Active Test (Click here)

b. Terminals of ECU (Click here)

c. Operation Check (Click here)

NEXT

6.REPAIR OR REPLACE

NEXT

7.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use the following procedures to troubleshoot the front power seat control system.**
- *: Use the intelligent tester.

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.INSPECT COMMUNICATION FUNCTION OF CAN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the CAN communication system is functioning normally.

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B. → Go to CAN COMMUNICATION SYSTEM (for LHD) (Click here)

C. → Go to CAN COMMUNICATION SYSTEM (for RHD) (Click here)

A

4.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. → Go to step 6

A

5.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Data List / Active Test (Click here)

b. Terminals of ECU (Click here)

c. Operation Check (Click here)

NEXT

6.REPAIR OR REPLACE

NEXT

7.CONFIRMATION TEST

NEXT

END

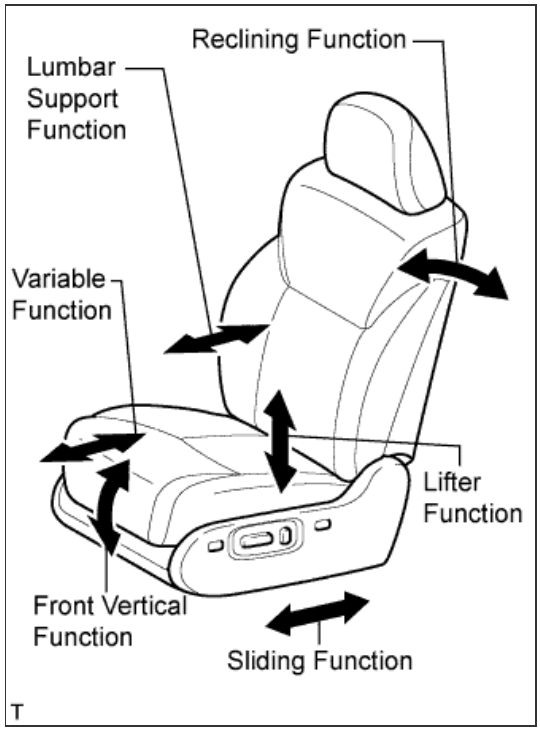
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CHECK POWER SEAT FUNCTION

a. Check the basic functions.

i. Operate the power seat switches and check to make sure each seat function works:

- Sliding
- Front vertical
- Lifter
- Reclining
- Lumbar support
- Variable (Driver seat only)



CHECK POWER SEAT MOTOR ASSEMBLY (SLIDING, FRONT VERTICAL, LIFTER, AND RECLINING FUNCTIONS)

a. Check the PTC operation inside the power seat motor.

HINT:

The resistance of the PTC thermistor increases when the power seat switch is held down even after the seat has been moved to the farthest possible position in one direction. If the resistance increases beyond a specified level, the current is shut off to prevent a short circuit.

NOTICE:

- **The inspection should be performed with the seat installed in the vehicle.**
- **Perform the 4 steps below to check the full range of motion for each power seat function.**

i. Choose a power seat function. Operate the power seat switch and move the seat to the farthest possible position in one direction. Keep the seat in that position for approximately 60 seconds.

ii. Operate the power seat switch again and continue to try to move the seat in the same direction as in the previous step. Measure the time until the current is shut off (motor operation sound will stop).

Standard:
4 to 90 seconds

iii. After the current is shut off, release the power seat switch and wait for approximately 60 seconds.

iv. Operate the same power seat switch and move the seat in the opposite direction. Check that the motor operates.

CHECK POWER SEAT MOTOR ASSEMBLY (VARIABLE FUNCTION)

a. Check the PTC operation inside the power seat motor.

NOTICE:

The inspection should be performed with the seat installed in the vehicle.

i. Operate the seat variable cushion switch and move the seat cushion to either the foremost or rearmost position. Keep the seat in

that position for approximately 60 seconds.

ii. Operate the seat variable cushion switch again and continue to try to move the seat cushion in the same direction as in the previous step. Measure the time until the current is shut off (motor operation sound will stop).

Standard:
4 to 90 seconds

iii. After the current is shut off, release the seat variable cushion switch and wait for approximately 60 seconds.

iv. Operate the seat variable cushion switch and move the seat in the opposite direction. Check that the motor operates.

CHECK LUMBAR SUPPORT ADJUSTER ASSEMBLY

a. Check the PTC operation inside the power seat motor.

NOTICE:

The inspection should be performed with the seat installed in the vehicle.

i. Operate the lumbar support switch and move the lumbar support to either the foremost or rearmost position. Keep the seat in that position for approximately 60 seconds.

ii. Operate the lumbar support switch again and continue to try to move the lumbar support in the same direction as in the previous step. Measure the time until the current is shut off (motor operation sound will stop).

Standard:
4 to 90 seconds

iii. After the current is shut off, release the lumbar support switch and wait for approximately 60 seconds.

iv. Operate the lumbar support switch and move the seat in the opposite direction. Check that the motor operates.

CHECK MEMORY AND SEAT RESTORING OPERATION

HINT:

The seat position will not be stored if the seat memory SET switch and 2 or more of the seat memory switches (for example, seat memory switch 1 and seat memory switch 2) are pressed simultaneously.

a. Turn the engine switch on (IG) and move the shift lever to P.

b. Move the seat to the foremost and uppermost position using the seat switch.

c. Check that the buzzer sounds for 0.5 seconds and the seat position is memorized when seat memory switch 1 is pressed while the seat memory SET switch is being pressed.

d. Move the seat from the foremost and uppermost position using the seat switch.

e. Check that the buzzer sounds for 0.5 seconds and the seat position is memorized when seat memory switch 2 is pressed while the seat memory SET switch is being pressed.

f. Move the seat to the rearmost and lowermost position using the seat switch.

g. Check that the buzzer sounds for 0.5 seconds and the seat position is memorized when seat memory switch 3 is pressed while the seat memory SET switch is being pressed.

h. Check that the buzzer sounds for 0.1 seconds and the seat automatically moves to the foremost and uppermost position (memorized position) when seat memory switch 1 of the seat memory switch is pressed.

i. Check that the buzzer sounds for 0.1 seconds and the seat automatically moves out of the foremost and uppermost position (memorized position) when seat memory switch 2 of the seat memory switch is pressed.

j. Check that the buzzer sounds for 0.1 seconds and the seat automatically moves to the rearmost and lowermost position (memorized position) when seat memory switch 3 of the seat memory switch is pressed.

k. After the engine switch is turned off and the driver side door is opened, check that the buzzer sounds for 0.1 seconds and the seat automatically moves to the memorized position when seat memory switch 1, seat memory switch 2 or seat memory switch 3 is pressed within 30 seconds.

l. Check that the following procedures clear the memorized seat positions of seat memory switch 1, seat memory switch 2 or seat memory switch 3: slide the seat fully forward or rearward; hold seat memory switch 1, seat memory switch 2 or seat memory switch 3; disconnect the cable from the negative (-) battery terminal; release seat memory switch 1, seat memory switch 2, or seat memory switch 3; and wait for 3 minutes.

CHECK MEMORY CALL FUNCTION

a. AUTOMATIC MEMORY CALL OPERATION INSPECTION

i. With the transmitter's recognition code registered into the memory system, perform an entry unlock or wireless unlock operation. Open the driver door and check that the front seat, front seat belt anchor, steering wheel and outer rear view mirror automatically move to the positions recorded in memory.

b. MEMORY REGISTRATION (WITH WIRELESS FUNCTION)

i. Prepare by recording the driving position through the seat memory switch (seat memory switch 1, seat memory switch 2 or seat memory switch 3).

ii. With the engine switch off and the driver door closed, press and hold both of the following: a seat memory switch (seat memory switch 1, seat memory switch 2 or seat memory switch 3) and transmitter unlock switch. Continue holding the switches until the answer-back buzzer sounds.

c. MEMORY REGISTRATION (WITH WIRELESS FUNCTION, CARD TYPE)

i. Prepare by recording the driving position through the seat memory switch (seat memory switch 1, seat memory switch 2 or seat memory switch 3).

ii. Hold only the transmitter to be registered.

iii. With the engine switch off and the driver door closed, press and hold both of the following: a seat memory switch (seat memory switch 1, seat memory switch 2 or seat memory switch 3) and door lock control switch. Continue holding the switches until the answer-back buzzer sounds.

NOTICE:

Do not bring 2 or more keys into the vehicle.

HINT:

- **Either the lock or unlock switch on the door control switch can be pressed.**
- **The door control switch on the driver side or front passenger side can be used.**

d. MEMORY ERASURE (WITH WIRELESS FUNCTION)

i. With the engine switch off and the driver door closed, press and hold both of the following: the seat memory SET switch and transmitter unlock switch. Continue holding the switches until the answer-back buzzer sounds.

e. MEMORY ERASURE (WITH WIRELESS FUNCTION, CARD TYPE)

i. Hold only the transmitter of which registration is to be erased.

ii. With the engine switch off and the driver door closed, press and hold both of the following: the seat memory SET switch and door lock control switch. Continue holding the switches until the answer-back buzzer sounds.

NOTICE:

Do not bring 2 or more keys into the vehicle.

HINT:

- **Either the lock or unlock switch on the door control switch can be pressed.**
- **The door control switch on the driver side or front passenger side can be used.**

MEMORY CALL EMERGENCY STOP FUNCTION

a. While a memory call function is operating, check that performing one of the following will stop the memory call operation: 1) press the seat memory SET switch, seat memory switch 1, seat memory switch 2 or seat memory switch 3 switch, or 2) press the front power seat switch (position control ECU).

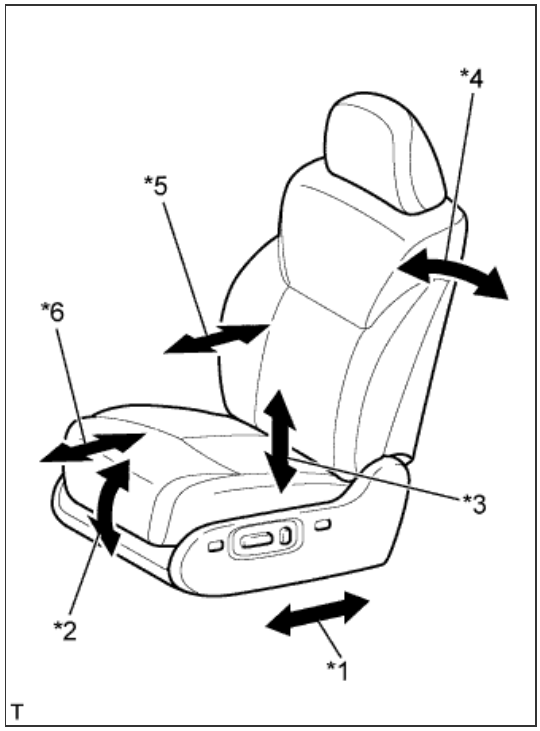
for Preparation Click here

CHECK POWER SEAT FUNCTION

a. Check the basic functions.

i. Operate the power seat switches and check to make sure each seat function works:

- Sliding (*1)
- Front vertical (*2)
- Lifter (*3)
- Reclining (*4)
- Lumbar support (*5)
- Variable (Driver seat only) (*6)



CHECK POWER SEAT MOTOR ASSEMBLY (SLIDING, FRONT VERTICAL, LIFTER, AND RECLINING FUNCTIONS)

a. Check the PTC operation inside the power seat motor.

HINT:

The resistance of the PTC thermistor increases when the power seat switch is held down even after the seat has been moved to the farthest possible position in one direction. If the resistance increases beyond a specified level, the current is shut off to prevent a short circuit.

NOTICE:

- **The inspection should be performed with the seat installed in the vehicle.**
- **Perform the 4 steps below to check the full range of motion for each power seat function.**

i. Choose a power seat function. Operate the power seat switch and move the seat to the farthest possible position in one direction. Keep the seat in that position for approximately 60 seconds.

ii. Operate the power seat switch again and continue to try to move the seat in the same direction as in the previous step. Measure the time until the current is shut off (motor operation sound will stop).

Standard:
4 to 90 seconds

iii. After the current is shut off, release the power seat switch and wait for approximately 60 seconds.

iv. Operate the same power seat switch and move the seat in the opposite direction. Check that the motor operates.

CHECK POWER SEAT MOTOR ASSEMBLY (VARIABLE FUNCTION)

a. Check the PTC operation inside the power seat motor.

NOTICE:

The inspection should be performed with the seat installed in the vehicle.

i. Operate the seat variable cushion switch and move the seat cushion to either the foremost or rearmost position. Keep the seat in

that position for approximately 60 seconds.

ii. Operate the seat variable cushion switch again and continue to try to move the seat cushion in the same direction as in the previous step. Measure the time until the current is shut off (motor operation sound will stop).

Standard:
4 to 90 seconds

iii. After the current is shut off, release the seat variable cushion switch and wait for approximately 60 seconds.

iv. Operate the seat variable cushion switch and move the seat in the opposite direction. Check that the motor operates.

CHECK LUMBAR SUPPORT ADJUSTER ASSEMBLY

a. Check the PTC operation inside the power seat motor.

NOTICE:

The inspection should be performed with the seat installed in the vehicle.

i. Operate the lumbar support switch and move the lumbar support to either the foremost or rearmost position. Keep the seat in that position for approximately 60 seconds.

ii. Operate the lumbar support switch again and continue to try to move the lumbar support in the same direction as in the previous step. Measure the time until the current is shut off (motor operation sound will stop).

Standard:
4 to 90 seconds

iii. After the current is shut off, release the lumbar support switch and wait for approximately 60 seconds.

iv. Operate the lumbar support switch and move the seat in the opposite direction. Check that the motor operates.

CHECK MEMORY AND SEAT RESTORING OPERATION

HINT:

The seat position will not be stored if the seat memory SET switch and 2 or more of the seat memory switches (for example, seat memory switch 1 and seat memory switch 2) are pressed simultaneously.

a. Turn the engine switch on (IG).

b. Move the seat to the foremost and uppermost position using the seat switch.

c. Check that the buzzer sounds for 0.5 seconds and the seat position is memorized when seat memory switch 1 is pressed within 3 seconds after the SET switch being pressed.

d. Move the seat from the foremost and uppermost position using the seat switch.

e. Check that the buzzer sounds for 0.5 seconds and the seat position is memorized when seat memory switch 2 is pressed within 3 seconds after the SET switch being pressed.

f. Move the seat to the rearmost and lowermost position using the seat switch.

g. Check that the buzzer sounds for 0.5 seconds and the seat position is memorized when seat memory switch 3 is pressed within 3 seconds after the SET switch being pressed.

h. Check that the buzzer sounds for 0.1 seconds and the seat automatically moves to the foremost and uppermost position (memorized position) when seat memory switch 1 of the seat memory switch is pressed.

i. Check that the buzzer sounds for 0.1 seconds and the seat automatically moves out of the foremost and uppermost position (memorized position) when seat memory switch 2 of the seat memory switch is pressed.

j. Check that the buzzer sounds for 0.1 seconds and the seat automatically moves to the rearmost and lowermost position (memorized position) when seat memory switch 3 of the seat memory switch is pressed.

k. Turn the engine switch off and open the driver door. Check that the buzzer sounds for 0.1 seconds and the seat automatically moves to the memorized position by pressing seat memory switch 1, seat memory switch 2 or seat memory switch 3 within 180 seconds after the engine switch is turned off.

l. Turn the engine switch off and close the driver door. Check that the buzzer sounds for 0.1 seconds and the seat automatically moves to the memorized position by pressing seat memory switch 1, seat memory switch 2 or seat memory switch 3 within 60 seconds after the engine switch is turned off.

m. Operate the front vertical function of the power seat switch to tilt the seat down 3 times; Within 10 seconds after operating the front vertical function of the power seat switch, operate the lifter function of the power seat switch to tilt up and the reclining function of the power seat switch to recline the seat simultaneously, and hold both switches for 10 seconds.

CHECK MEMORY CALL FUNCTION

a. AUTOMATIC MEMORY CALL OPERATION INSPECTION

i. With the transmitter's recognition code registered into the memory system, perform an entry unlock or wireless unlock operation. Open the driver door and check that the front seat, front seat belt anchor, steering wheel and outer rear view mirror automatically move to the positions recorded in memory.

b. MEMORY REGISTRATION (WITH WIRELESS FUNCTION)

i. Prepare by recording the driving position through the seat memory switch (seat memory switch 1, seat memory switch 2 or seat memory switch 3).

ii. With the driver door closed, turn the engine switch from ON to OFF, then press and hold both of the following: a seat memory switch (seat memory switch 1, seat memory switch 2 or seat memory switch 3) and transmitter unlock switch. Continue holding the switches until the answer-back buzzer sounds.

c. MEMORY REGISTRATION (WITH WIRELESS FUNCTION, CARD TYPE)

i. Prepare by recording the driving position through the seat memory switch (seat memory switch 1, seat memory switch 2 or seat memory switch 3).

ii. Hold only the transmitter to be registered.

iii. With the driver door closed, turn the engine switch from ON to OFF, then press and hold both of the following: a seat memory switch (seat memory switch 1, seat memory switch 2 or seat memory switch 3) and door lock control switch. Continue holding the switches until the answer-back buzzer sounds.

NOTICE:

Do not bring 2 or more keys into the vehicle.

HINT:

- **Either the lock or unlock switch on the door control switch can be pressed.**
- **The door control switch on the driver side or front passenger side can be used.**

d. MEMORY ERASURE (WITH WIRELESS FUNCTION)

i. With the driver door closed, turn the engine switch from ON to OFF, then press and hold both of the following: the seat memory SET switch and transmitter unlock switch. Continue holding the switches until the answer-back buzzer sounds.

e. MEMORY ERASURE (WITH WIRELESS FUNCTION, CARD TYPE)

i. Hold only the transmitter of which registration is to be erased.

ii. With the driver door closed, turn the engine switch from ON to OFF, then press and hold both of the following: the seat memory SET switch and door lock control switch. Continue holding the switches until the answer-back buzzer sounds.

NOTICE:

Do not bring 2 or more keys into the vehicle.

HINT:

- **Either the lock or unlock switch on the door control switch can be pressed.**
- **The door control switch on the driver side or front passenger side can be used.**

MEMORY CALL EMERGENCY STOP FUNCTION

a. While a memory call function is operating, check that performing one of the following will stop the memory call operation: 1) press the seat memory SET switch, seat memory switch 1, seat memory switch 2 or seat memory switch 3 switch, or 2) press the front power seat switch (position control ECU).

for Preparation Click here

HINT:

- **Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.**
- **Inspect the fuses and relays related to the system before inspecting the suspected areas below.**

Front Power Seat Control System (for Driver Side)

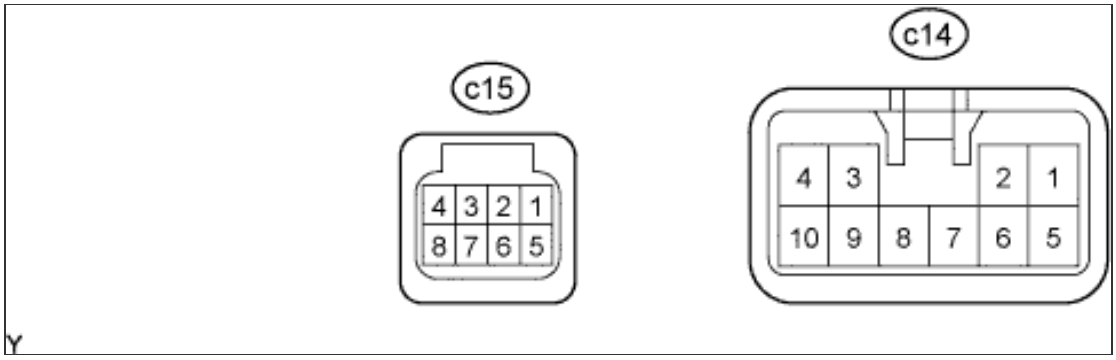
Symptom	Suspected Area	See page
Front power seat does not operate with front power seat switch	Front Power Seat does not Operate with Front Power Seat Switch	Click here
One or more power seat motors do not operate	One or more Power Seat Motors do not Operate	Click here
Power seat position is not memorized	Power Seat Position is not Memorized	Click here
Power seat does not return to memorized position	Position control ECU and switch	-
Wireless transmitter memory function does not operate	Wireless Transmitter Memory Function does not Operate	Click here
Wireless-linked return function does not operate	Wireless-linked Return Function does not Operate	Click here

Front Power Seat Control System (for Passenger Side)

Symptom	Suspected Area	See page
Front power seat does not operate (slide, front vertical, lifter, reclining)	FR P/SEAT RH fuse (for LHD)	-
	FR P/SEAT LH fuse (for RHD)	-
	Power seat switch	Click here
	Harness or connector	-
Only slide operation function does not operate	Power seat switch	Click here
	Slide motor	Click here
	Harness or connector	-
Only front vertical operation function does not operate	Power seat switch	Click here
	Front vertical motor	Click here
	Harness or connector	-
Only lifter operation function does not operate	Power seat switch	Click here
	Lifter motor	Click here
	Harness or connector	-
Only reclining operation function does not operate	Power seat switch	Click here
	Reclining motor	Click here
	Harness or connector	-
Only lumbar support operation function does not operate	Lumbar support switch	Click here
	Lumbar support adjuster	Click here
	Harness or connector	-

for Preparation Click here

CHECK POSITION CONTROL ECU AND SWITCH (for LHD)



a. Disconnect the c14 and c15 switch connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
c14-1 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
c14-5 (+B) - c14-1 (GND)	L - W-B	Power source	Always	11 to 14 V
c15-4 (IG) - c14-1 (GND)	G - W-B	Engine switch signal	Engine switch off	Below 1 V
			Engine switch on (IG)	11 to 14 V
c15-8 (SYSB) - c14-1 (GND)	R - W-B	System power source	Always	11 to 14 V

If the result is not as specified, there may be a malfunction on the wire harness side.

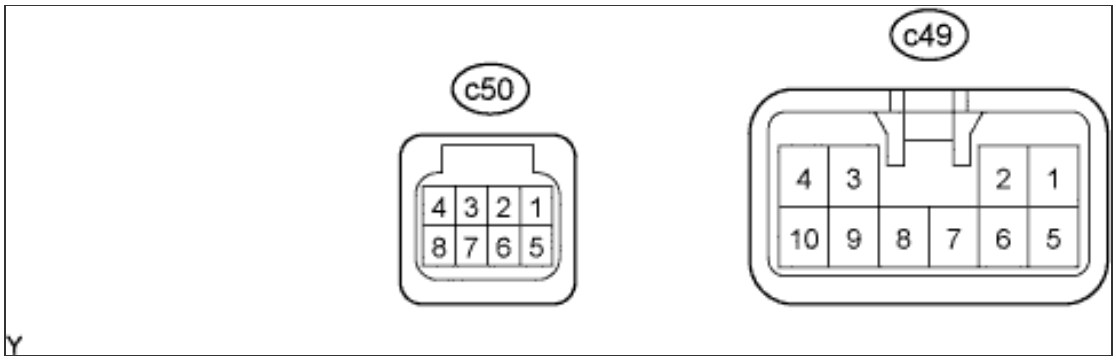
c. Reconnect the c14 and c15 switch connectors.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
c14-2 (SLD+) - c14-1 (GND)	B - W-B	Sliding motor signal (forward)	Slide switch off	Below 1 V
			Slide switch front on	11 to 14 V
c14-3 (SLD-) - c14-1 (GND)	P - W-B	Sliding motor signal (rearward)	Slide switch off	Below 1 V
			Slide switch rear on	11 to 14 V
c14-6 (FRV+) - c14-1 (GND)	R - W-B	Front vertical motor signal (upward)	Front vertical switch off	Below 1 V
			Front vertical switch up on	11 to 14 V
c14-4 (FRV-) - c14-1 (GND)	LG - W-B	Front vertical motor signal (downward)	Front vertical switch off	Below 1 V
			Front vertical switch down on	11 to 14 V
c14-7 (LFT+) - c14-1 (GND)	G - W-B	Lifter motor signal (upward)	Lifter switch off	Below 1 V
			Lifter switch up on	11 to 14 V
c14-9 (LFT-) - c14-1 (GND)	W - W-B	Lifter motor signal (downward)	Lifter switch off	Below 1 V
			Lifter switch down on	11 to 14 V
c14-8 (RCL+) - c14-1 (GND)	GR - W-B	Reclining motor signal (forward)	Reclining switch off	Below 1 V
			Reclining switch front on	11 to 14 V
c14-10 (RCL-) - c14-1 (GND)	Y - W-B	Reclining motor signal (rearward)	Reclining switch off	Below 1 V
			Reclining switch rear on	11 to 14 V

If the result is not as specified, the position control ECU and switch may have a malfunction.

CHECK POSITION CONTROL ECU AND SWITCH (for RHD)



a. Disconnect the c49 and c50 switch connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
c49-1 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
c49-5 (+B) - c49-1 (GND)	L - W-B	Power source	Always	11 to 14 V
c50-4 (IG) - c49-1 (GND)	G - W-B	Engine switch signal	Engine switch off	Below 1 V
			Engine switch on (IG)	11 to 14 V
c50-8 (SYSB) - c49-1 (GND)	R - W-B	System power source	Always	11 to 14 V

If the result is not as specified, there may be a malfunction on the wire harness side.

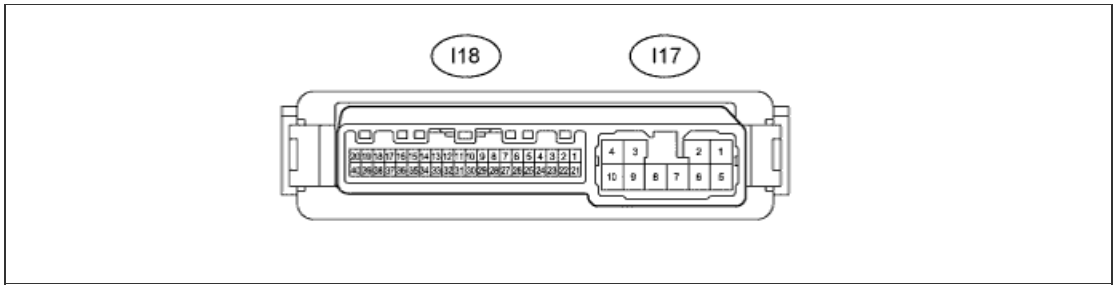
c. Reconnect the c49 and c50 switch connectors.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
c49-2 (SLD+) - c49-1 (GND)	B - W-B	Sliding motor signal (forward)	Slide switch off	Below 1 V
			Slide switch front on	11 to 14 V
c49-3 (SLD-) - c49-1 (GND)	P - W-B	Sliding motor signal (rearward)	Slide switch off	Below 1 V
			Slide switch rear on	11 to 14 V
c49-6 (FRV+) - c49-1 (GND)	R - W-B	Front vertical motor signal (upward)	Front vertical switch off	Below 1 V
			Front vertical switch up on	11 to 14 V
c49-4 (FRV-) - c49-1 (GND)	LG - W-B	Front vertical motor signal (downward)	Front vertical switch off	Below 1 V
			Front vertical switch down on	11 to 14 V
c49-7 (LFT+) - c49-1 (GND)	G - W-B	Lifter motor signal (upward)	Lifter switch off	Below 1 V
			Lifter switch up on	11 to 14 V
c49-9 (LFT-) - c49-1 (GND)	W - W-B	Lifter motor signal (downward)	Lifter switch off	Below 1 V
			Lifter switch down on	11 to 14 V
c49-8 (RCL+) - c49-1 (GND)	GR - W-B	Reclining motor signal (forward)	Reclining switch off	Below 1 V
			Reclining switch front on	11 to 14 V
c49-10 (RCL-) - c49-1 (GND)	Y - W-B	Reclining motor signal (rearward)	Reclining switch off	Below 1 V
			Reclining switch rear on	11 to 14 V

If the result is not as specified, the position control ECU and switch may have a malfunction.

CHECK OUTER MIRROR CONTROL ECU (for LHD)



a. Disconnect the I17 and I18 ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
I18-10 (MSWE) - I17-9 (GND)	BR - W-B	Ground for seat memory switch	Always	Below 1 Ω
I17-9 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
I17-3 (B) - I17-9 (GND)	R - W-B	Battery (ECU power source)	Always	11 to 14 V
I17-4 (ACC) - I17-9 (GND)	GR - W-B	Engine switch (ACC) power source supply	Engine switch off	Below 1 V
			Engine switch on (ACC)	11 to 14 V

If the result is not as specified, there may be a malfunction on the wire harness side.

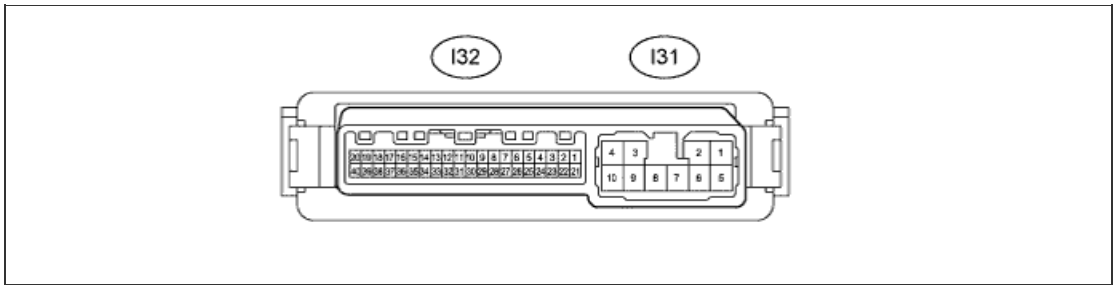
c. Reconnect the I17 and I18 ECU connectors.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
I18-6 (M3) - I18-10 (MSWE)	R - BR	Seat memory switch 3 signal for seat memory switch	Seat memory switch 3 on	11 to 14 V
			Seat memory switch 3 off	Below 1 V
I18-7 (M2) - I18-10 (MSWE)	W - BR	Seat memory switch 2 signal for seat memory switch	Seat memory switch 2 on	11 to 14 V
			Seat memory switch 2 off	Below 1 V
I18-8 (M1) - I18-10 (MSWE)	G - BR	Seat memory switch 1 signal for seat memory switch	Seat memory switch 1 on	11 to 14 V
			Seat memory switch 1 off	Below 1 V
I18-9 (MM) - I18-10 (MSWE)	B - BR	Seat memory SET switch signal for seat memory switch	Seat memory SET switch on	11 to 14 V
			Seat memory SET switch off	Below 1 V

If the result is not as specified, the outer mirror control ECU may have a malfunction.

CHECK OUTER MIRROR CONTROL ECU (for RHD)



a. Disconnect the I31 and I32 ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
I32-10 (MSWE) - I31-9 (GND)	BR - W-B	Ground for seat memory switch	Always	Below 1 Ω
I31-9 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
I31-3 (B) - I31-9 (GND)	R - W-B	Battery (ECU power source)	Always	11 to 14 V
I31-4 (ACC) - I31-9 (GND)	GR - W-B	Engine switch (ACC) power source supply	Engine switch off	Below 1 V
			Engine switch on (ACC)	11 to 14 V

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the I31 and I32 ECU connectors.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
I32-6 (M3) - I32-10 (MSWE)	R - BR	Seat memory switch 3 signal for seat memory switch	Seat memory switch 3 on	11 to 14 V
			Seat memory switch 3 off	Below 1 V
I32-7 (M2) - I32-10 (MSWE)	W - BR	Seat memory switch 2 signal for seat memory switch	Seat memory switch 2 on	11 to 14 V
			Seat memory switch 2 off	Below 1 V
I32-8 (M1) - I32-10 (MSWE)	G - BR	Seat memory switch 1 signal for seat memory switch	Seat memory switch 1 on	11 to 14 V
			Seat memory switch 1 off	Below 1 V
I32-9 (MM) - I32-10 (MSWE)	B - BR	Seat memory SET switch signal for seat memory switch	Seat memory SET switch on	11 to 14 V
			Seat memory SET switch off	Below 1 V

If the result is not as specified, the outer mirror control ECU may have a malfunction.

for Preparation Click here

DATA LIST

HINT:

Using the intelligent tester to read the Data List allows the values or states of switches, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Turn the engine switch off.

b. Connect the intelligent tester to the DLC3.

c. Turn the engine switch on (IG).

d. Turn the intelligent tester on.

e. Enter the following menus: Body / (desired system) / Data List.

f. According to the display on the intelligent tester, read the Data List.

Mirror

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Driver Side SET Mem SW	Driver side seat memory SET switch / ON or OFF	ON: Driver side seat memory SET switch on OFF: Driver side seat memory SET switch off	-
Driver Side Memory SW 1	Driver side seat memory switch 1 / ON or OFF	ON: Driver side seat memory switch 1 on OFF: Driver side seat memory switch 1 off	-
Driver Side Memory SW 2	Driver side seat memory switch 2 / ON or OFF	ON: Driver side seat memory switch 2 on OFF: Driver side seat memory switch 2 off	-
Driver Side Memory SW 3	Driver side seat memory switch 3 / ON or OFF	ON: Driver side seat memory switch 3 on OFF: Driver side seat memory switch 3 off	-

Driver Seat

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Reclining Rear	Reclining switch signal (Rearward) / ON or OFF	ON: Reclining switch (Rearward) on OFF: Reclining switch (Rearward) off	-
Reclining Front	Reclining switch signal (Forward) / ON or OFF	ON: Reclining switch (Forward) on OFF: Reclining switch (Forward) off	-
Front Vertical Down	Front vertical switch signal (Downward) / ON or OFF	ON: Front vertical switch (Downward) on OFF: Front vertical switch (Downward) off	-
Front Vertical Up	Front vertical switch signal (Upward) / ON or OFF	ON: Front vertical switch (Upward) on OFF: Front vertical switch (Upward) off	-
Lifter Switch Down	Lifter switch signal (Downward) / ON or OFF	ON: Lifter switch (Downward) on OFF: Lifter switch (Downward) off	-
		ON: Lifter switch (Upward) on	

Lifter Switch Up	Lifter switch signal (Upward) / ON or OFF	OFF: Lifter switch (Upward) off	-
Slide Rear	Sliding switch signal (Rearward) / ON or OFF	ON: Sliding switch (Rearward) on OFF: Sliding switch (Rearward) off	-
Slide Front	Sliding switch signal (Forward) / ON or OFF	ON: Sliding switch (Forward) on OFF: Sliding switch (Forward) off	-
SET Switch	Seat memory SET switch signal / ON or OFF	ON: Seat memory SET switch on OFF: Seat memory SET switch off	-
M1 Switch	Seat memory switch 1 signal / ON or OFF	ON: Seat memory switch 1 on OFF: Seat memory switch 1 off	-
M2 Switch	Seat memory switch 2 signal / ON or OFF	ON: Seat memory switch 2 on OFF: Seat memory switch 2 off	-
M3 Switch	Seat memory switch 3 signal / ON or OFF	ON: Seat memory switch 3 on OFF: Seat memory switch 3 off	-
Seat Memory No1	Seat position memorized with seat memory switch 1 / Mem or Not Mem	Mem: Memorized Not Mem: Not memorized	-
Seat Memory No2	Seat position memorized with seat memory switch 2 / Mem or Not Mem	Mem: Memorized Not Mem: Not memorized	-
Seat Memory No3	Seat position memorized with seat memory switch 3 / Mem or Not Mem	Mem: Memorized Not Mem: Not memorized	-
Ignition Switch	Communication state of engine switch signal / ON or OFF	ON: Engine switch on (IG) signal is received OFF: Engine switch off signal is not received	-
Key Switch	Engine switch status (IG) / ON or OFF	ON: Engine switch on (IG) OFF: Engine switch off	-
Key Code Conf	Recognition code is registered / ON or OFF	ON: One more recognition codes registered OFF: No recognition code registered	-
D-Door Courtesy	Door courtesy switch signal / ON or OFF	ON: Driver side door open OFF: Driver side door closed	-
P Switch	Shift lever position P signal / ON or OFF	ON: Shift lever in P OFF: Shift lever not in P	-
Parking Brake SW	Parking brake switch status / ON or OFF	ON: Parking brake operated OFF: Parking brake released	-
Vehicle Speed	Vehicle speed data / Min.: 0 km/h (0 mph), Max.: 255 km/h (158 mph)	Actual vehicle speed	-
Power Voltage	Power supply for position control ECU and switch / MIN: 0 V, MAX: 19.89 V	Within range from 11 V to 14 V	-
Slide Position	Seat sliding position / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-
Reclining Position	Seatback position / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-
Front Vertical Position	Seat front vertical position / MIN: 4096 MAX: 61440	Within range from 4096 to 61440	-
Lifter Position	Seat lifter position / MIN: 4096 MAX: 61440	Within range from 4096 to 61440	-
Slide Pos Mem No1	Seat sliding position memorized with seat memory switch 1 / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-
Reclining Pos Mem No1	Seatback position memorized with seat memory switch 1 / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-
Frnt Vrtcl Pos Mem No1	Front vertical position memorized with seat memory switch 1 / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-
Lifter Pos Mem No1	Lifter position memorized with seat memory switch 1 / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-
Slide Pos Mem No2	Seat sliding position memorized with seat memory switch 2 / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-
Reclining Pos Mem No2	Seatback position memorized with seat memory switch 2 / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-
Frnt Vrtcl Pos Mem No2	Front vertical position memorized with seat memory switch 2 / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-
Lifter Pos Mem No2	Lifter position memorized with seat memory switch 2 / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-

Slide Pos Mem No3	Seat sliding position memorized with seat memory switch 3 / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-
Reclining Pos Mem No3	Seatback position memorized with seat memory switch 3 / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-
Frnt Vrtcl Pos Mem No3	Front vertical position memorized with seat memory switch 3 / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-
Lifter Pos Mem No3	Lifter position memorized with seat memory switch 3 / MIN: 4096, MAX: 61440	Within range from 4096 to 61440	-

ACTIVE TEST

HINT:

Using the intelligent tester to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

a. Turn the engine switch off.

b. Connect the intelligent tester to the DLC3.

c. Turn the engine switch on (IG).

d. Turn the intelligent tester on.

e. Enter the following menus: Body / Driver Seat / Active Test.

f. According to the display on the intelligent tester, perform the Active Test.

Driver Seat

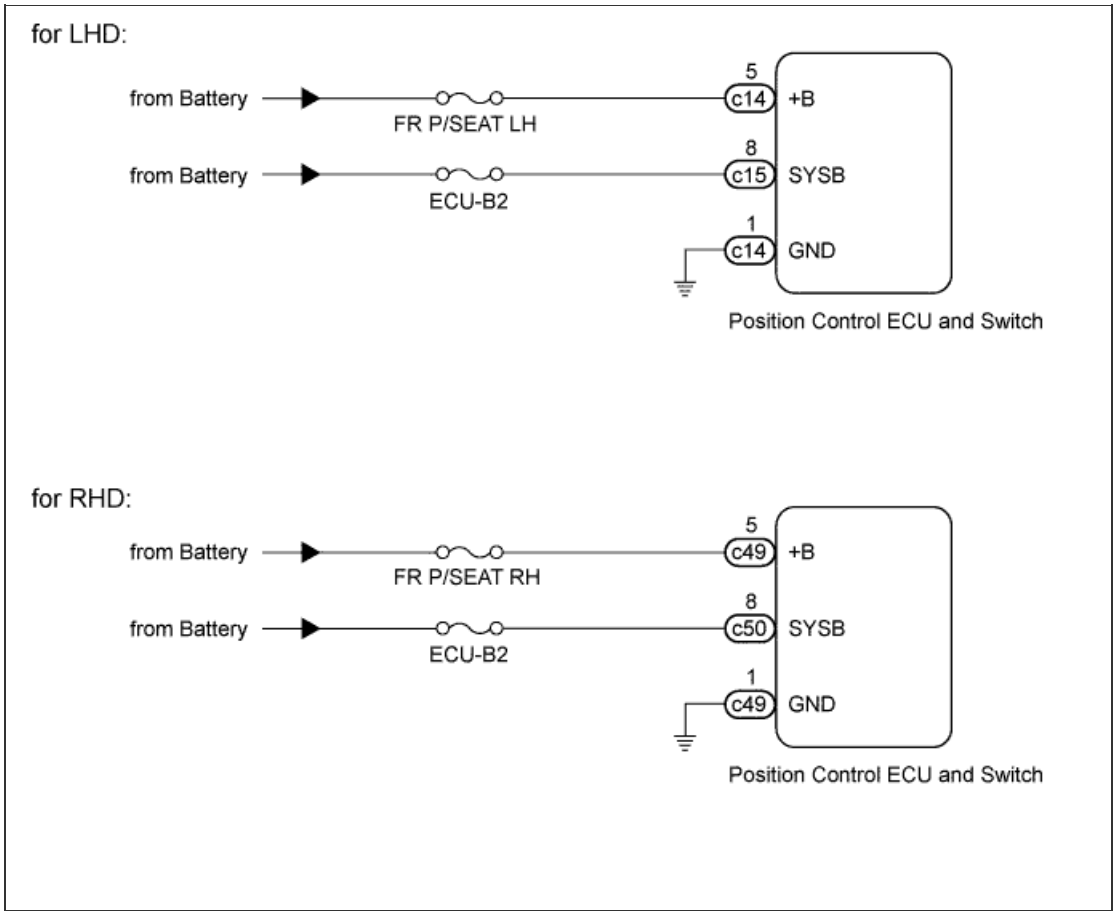
Tester Display	Test Part	Control Range	Diagnostic Note
Seat Reclining	Seat reclining operation	Front / OFF / Rear	-
Front Vertical Operation	Seat front vertical operation	Up / OFF / Down	-
Lifter Operation	Seat lifter operation	Up / OFF / Down	-
Seat Slide Operation	Seat sliding operation	Front / OFF / Rear	-
Buzzer	Buzzer operation	ON / OFF	-

for Preparation Click here

DESCRIPTION

When a signal is input into the position control ECU, the ECU manages the signals received from the front power seat switch LH, and operates each motor. When 2 or more signals are input, the motors only operate when the signals are from the slide switch and reclining switch.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (FR P/SEAT LH, FR P/SEAT RH, ECU-B2)

a. Remove the FR P/SEAT LH*1, FR P/SEAT RH*2 and ECU-B2 fuses from the main body ECU.

*1: for LHD
*2: for RHD

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
FR P/SEAT LH fuse	Always	Below 1 Ω
ECU-B2 fuse	Always	Below 1 Ω

for RHD

Tester Connection	Condition	Specified Condition
FR P/SEAT RH fuse	Always	Below 1 Ω
ECU-B2 fuse	Always	Below 1 Ω

NG → REPLACE FUSE

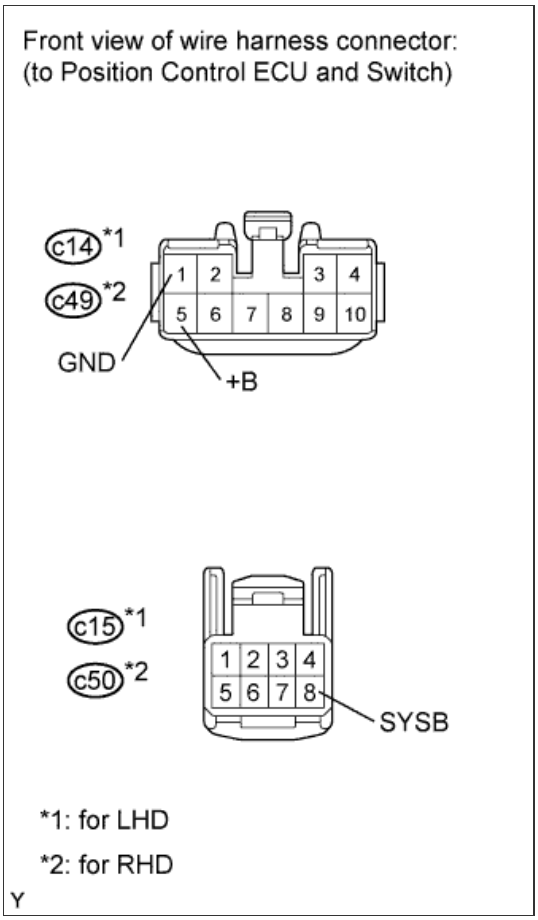
OK

2.CHECK HARNESS AND CONNECTOR (POSITION CONTROL ECU AND SWITCH - BATTERY AND BODY GROUND)

a. Disconnect the c14*1, c15*1 or c49*2, c50*2 switch connectors.

*1: for LHD
*2: for RHD

b. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

for LHD

Tester Connection	Condition	Specified Condition
c14-5 (+B) - Body ground	Always	11 to 14 V
c15-8 (SYSB) - Body ground	Always	11 to 14 V

for RHD

Tester Connection	Condition	Specified Condition
c49-5 (+B) - Body ground	Always	11 to 14 V
c50-8 (SYSB) - Body ground	Always	11 to 14 V

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
c14-1 (GND) - Body ground	Always	Below 1 Ω

for RHD

Tester Connection	Condition	Specified Condition
c49-1 (GND) - Body ground	Always	Below 1 Ω

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

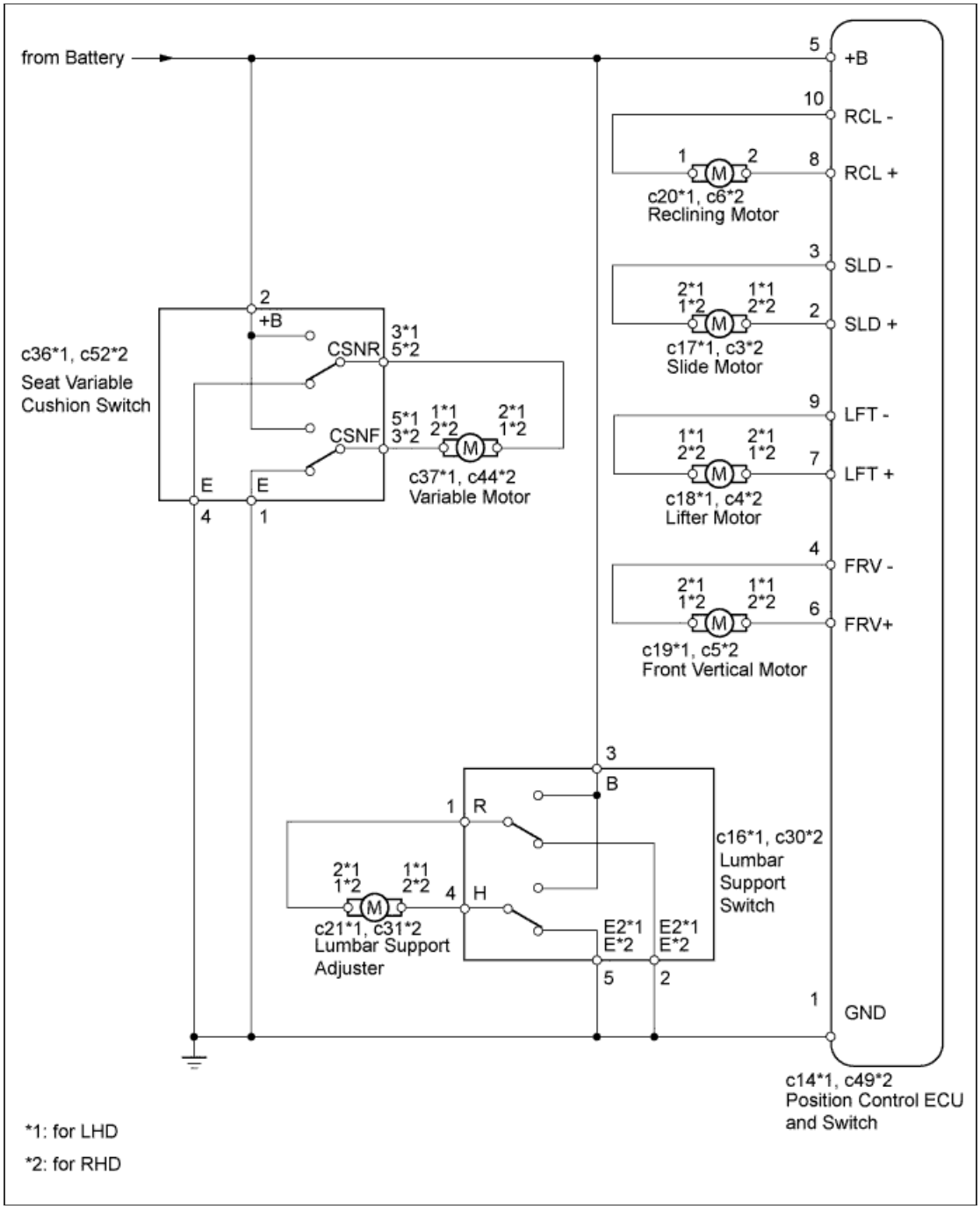
REPLACE POSITION CONTROL ECU AND SWITCH (Click here)

for Preparation Click here

DESCRIPTION

When the front power seat switch is operated, a command signal is sent to the position control ECU. The position control ECU then controls the appropriate seat motor as needed. The position control ECU is designed so that a malfunction of the seat memory system will not interfere with manual seat control.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FRONT POWER SEAT OPERATION

a. Check that each function of the power seat operates normally by using the front power seat switches.

Result

Result	Proceed to

All front power seat switch operations are malfunctioning except lumbar support switch and seat variable cushion switch operation	A
Only lumbar support switch operation is malfunctioning	B
Only seat variable cushion switch operation is malfunctioning	C

B → Go to step 6

C → Go to step 9

A

2.READ VALUE USING INTELLIGENT TESTER (FRONT POWER SEAT SWITCH)

a. Using the intelligent tester, read the Data List.

Driver Seat

Item	Measurement Item/Display (Range)	Normal Condition	Diagnostic Note
Reclining Rear	Reclining switch signal (Rearward) / ON or OFF	ON: Reclining switch (Rearward) on OFF: Reclining switch (Rearward) off	-
Reclining Front	Reclining switch signal (Forward) / ON or OFF	ON: Reclining switch (Forward) on OFF: Reclining switch (Forward) off	-
Front Vertical Down	Front vertical switch signal (Downward) / ON or OFF	ON: Front vertical switch (Downward) on OFF: Front vertical switch (Downward) off	-
Front Vertical Up	Front vertical switch signal (Upward) / ON or OFF	ON: Front vertical switch (Upward) on OFF: Front vertical switch (Upward) off	-
Lifter Switch Down	Lifter switch signal (Downward) / ON or OFF	ON: Lifter switch (Downward) on OFF: Lifter switch (Downward) off	-
Lifter Switch Up	Lifter switch signal (Upward) / ON or OFF	ON: Lifter switch (Upward) on OFF: Lifter switch (Upward) off	-
Slide Rear	Sliding switch signal (Rearward) / ON or OFF	ON: Sliding switch (Rearward) on OFF: Sliding switch (Rearward) off	-
Slide Front	Sliding switch signal (Forward) / ON or OFF	ON: Sliding switch (Forward) on OFF: Sliding switch (Forward) off	-

OK:
On intelligent tester screen, each item changes between ON and OFF according to above chart.

NG → REPLACE POSITION CONTROL ECU AND SWITCH (Click here)

OK

3.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (FRONT POWER SEAT MOTOR)

a. Using the intelligent tester, perform the Active Test.

Driver Seat

Tester Display	Test Part	Control Range	Diagnostic Note
Seat Reclining	Seat reclining operation	Front / OFF / Rear	-
Front Vertical Operation	Seat front vertical operation	Up / OFF / Down	-
Lifter Operation	Seat lifter operation	Up / OFF / Down	-
Seat Slide Operation	Seat sliding operation	Front / OFF / Rear	-

OK:
The power seat motors operate normally.

NG → Go to step 4

OK

REPLACE POSITION CONTROL ECU AND SWITCH (Click here)

4.INSPECT FRONT SEAT ASSEMBLY (FRONT POWER SEAT MOTOR)

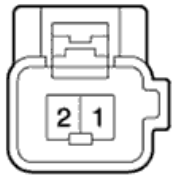
a. Remove the front seat assembly LH (for LHD) (Click here).

b. Remove the front seat assembly RH (for RHD) (Click here).

c. Check operation of the slide motor.

i. Check if the seat moves smoothly when the battery is connected to the slide motor connector terminals.

Component without harness connected:
(Slide Motor)



OK:

for LHD

Measurement Condition	Specified Condition
Battery positive (+) → 1 Battery negative (-) → 2	Forward
Battery positive (+) → 2 Battery negative (-) → 1	Rearward

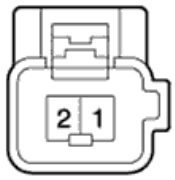
for RHD

Measurement Condition	Specified Condition
Battery positive (+) → 2 Battery negative (-) → 1	Forward
Battery positive (+) → 1 Battery negative (-) → 2	Rearward

d. Check operation of the front vertical motor.

i. Check if the seat moves smoothly when the battery is connected to the front vertical motor connector terminals.

Component without harness connected:
(Front Vertical Motor)



OK:

for LHD

Measurement Condition	Specified Condition
Battery positive (+) → 1	

Battery negative (-) → 2	Upward
Battery positive (+) → 2 Battery negative (-) → 1	Downward

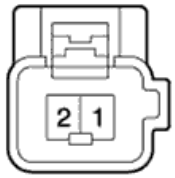
for RHD

Measurement Condition	Specified Condition
Battery positive (+) → 2 Battery negative (-) → 1	Upward
Battery positive (+) → 1 Battery negative (-) → 2	Downward

e. Check operation of the lifter motor.

i. Check if the seat moves smoothly when the battery is connected to the lifter motor connector terminals.

Component without harness connected:
(Lifter Motor)



OK:

for LHD

Measurement Condition	Specified Condition
Battery positive (+) → 2 Battery negative (-) → 1	Upward
Battery positive (+) → 1 Battery negative (-) → 2	Downward

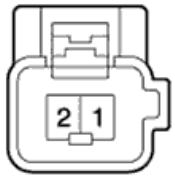
for RHD

Measurement Condition	Specified Condition
Battery positive (+) → 1 Battery negative (-) → 2	Upward
Battery positive (+) → 2 Battery negative (-) → 1	Downward

f. Check operation of the reclining motor.

i. Check if the seat moves smoothly when the battery is connected to the reclining motor connector terminals.

Component without harness connected:
(Reclining Motor)



OK:

Measurement Condition	Specified Condition
Battery positive (+) → 2 Battery negative (-) → 1	Forward
Battery positive (+) → 1 Battery negative (-) → 2	Rearward

Result

Result	Proceed to
OK	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE FRONT SEAT ASSEMBLY LH (Click here)

C → REPLACE FRONT SEAT ASSEMBLY RH (Click here)

A

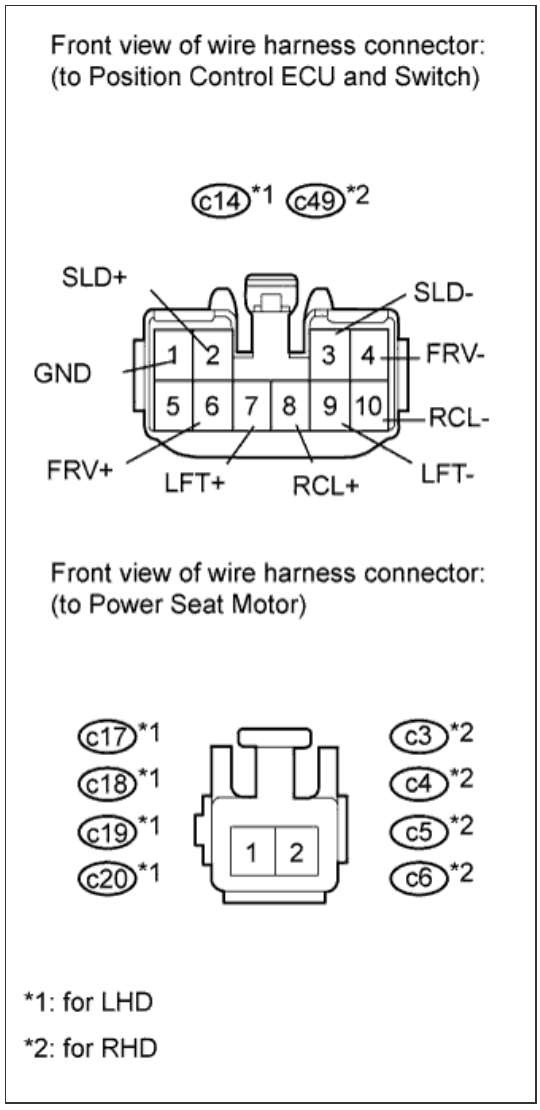
5.CHECK HARNESS AND CONNECTOR (POSITION CONTROL ECU AND SWITCH - POWER SEAT MOTOR)

a. Disconnect the c14*1 or c49*2 switch connector.

b. Disconnect the c17*1, c18*1, c19*1, c20*1 or c3*2, c4*2, c5*2, c6*2 motor connectors.

*1: for LHD
*2: for RHD

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
c14-3 (SLD-) - c17-2	Always	Below 1 Ω
c14-2 (SLD+) - c17-1	Always	Below 1 Ω
c14-4 (FRV-) - c19-2	Always	Below 1 Ω
c14-6 (FRV+) - c19-1	Always	Below 1 Ω
c14-9 (LFT-) - c18-1	Always	Below 1 Ω
c14-7 (LFT+) - c18-2	Always	Below 1 Ω
c14-10 (RCL-) - c20-1	Always	Below 1 Ω
c14-8 (RCL+) - c20-2	Always	Below 1 Ω
c14-1 (GND) - Body ground	Always	Below 1 Ω
c14-3 (SLD-) or c17-2 - Body ground	Always	10 kΩ or higher
c14-2 (SLD+) or c17-1 - Body ground	Always	10 kΩ or higher
c14-4 (FRV-) or c19-2 - Body ground	Always	10 kΩ or higher
c14-6 (FRV+) or c19-1 - Body		10 kΩ or

ground	Always	higher
c14-9 (LFT-) or c18-1 - Body ground	Always	10 kΩ or higher
c14-7 (LFT+) or c18-2 - Body ground	Always	10 kΩ or higher
c14-10 (RCL-) or c20-1 - Body ground	Always	10 kΩ or higher
c14-8 (RCL+) or c20-2 - Body ground	Always	10 kΩ or higher

for RHD

Tester Connection	Condition	Specified Condition
c49-3 (SLD-) - c3-1	Always	Below 1 Ω
c49-2 (SLD+) - c3-2	Always	Below 1 Ω
c49-4 (FRV-) - c5-1	Always	Below 1 Ω
c49-6 (FRV+) - c5-2	Always	Below 1 Ω
c49-9 (LFT-) - c4-2	Always	Below 1 Ω
c49-7 (LFT+) - c4-1	Always	Below 1 Ω
c49-10 (RCL-) - c6-1	Always	Below 1 Ω
c49-8 (RCL+) - c6-2	Always	Below 1 Ω
c49-1 (GND) - Body ground	Always	Below 1 Ω
c49-3 (SLD-) or c3-1 - Body ground	Always	10 kΩ or higher
c49-2 (SLD+) or c3-2 - Body ground	Always	10 kΩ or higher
c49-4 (FRV-) or c5-1 - Body ground	Always	10 kΩ or higher
c49-6 (FRV+) or c5-2 - Body ground	Always	10 kΩ or higher
c49-9 (LFT-) or c4-2 - Body ground	Always	10 kΩ or higher
c49-7 (LFT+) or c4-1 - Body ground	Always	10 kΩ or higher
c49-10 (RCL-) or c6-1 - Body ground	Always	10 kΩ or higher
c49-8 (RCL+) or c6-2 - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE POSITION CONTROL ECU AND SWITCH (**Click here**)

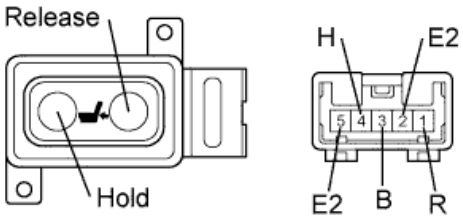
6.INSPECT LUMBAR SUPPORT SWITCH

a. Remove the lumbar support switch (Click here).

b. Measure the resistance according to the value(s) in the table below.

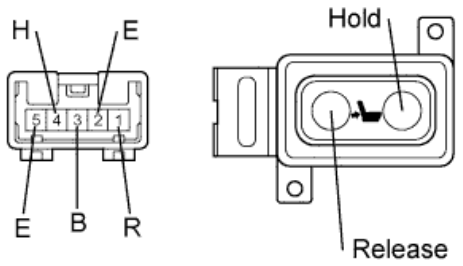
for LHD:

Component without harness connected:
(Lumbar Support Switch)



for RHD:

Component without harness connected:
(Lumbar Support Switch)



Standard Resistance:

for LHD

Tester Connection	Switch Condition	Specified Condition
3 (B) - 4 (H)	Hold	Below 1 Ω
1 (R) - 2 (E2)		
4 (H) - 5 (E2)	Off	
1 (R) - 2 (E2)		
4 (H) - 5 (E2)	Release	
1 (R) - 3 (B)		

for RHD

Tester Connection	Switch Condition	Specified Condition
3 (B) - 4 (H)	Hold	Below 1 Ω
1 (R) - 2 (E)		
4 (H) - 5 (E)	Off	
1 (R) - 2 (E)		
4 (H) - 5 (E)	Release	
1 (R) - 3 (B)		

NG → REPLACE LUMBAR SUPPORT SWITCH (Click here)

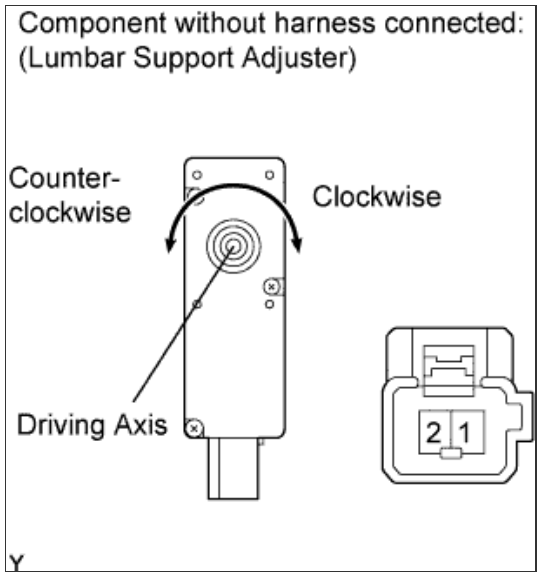
OK

7.INSPECT LUMBAR SUPPORT ADJUSTER ASSEMBLY

a. Remove the lumbar support adjuster (Click here).

b. Check operation of the lumbar support adjuster.

i. Check that the lumbar support adjuster moves smoothly when the battery is connected to the lumbar support adjuster motor connector terminals.



OK:

for LHD

Measurement Condition	Specified Condition
Battery positive (+) → 1 Battery negative (-) → 2	Clockwise
Battery positive (+) → 2 Battery negative (-) → 1	Counterclockwise

for RHD

Measurement Condition	Specified Condition
Battery positive (+) → 2 Battery negative (-) → 1	Clockwise
Battery positive (+) → 1 Battery negative (-) → 2	Counterclockwise

NG → REPLACE LUMBAR SUPPORT ADJUSTER ASSEMBLY (Click here)

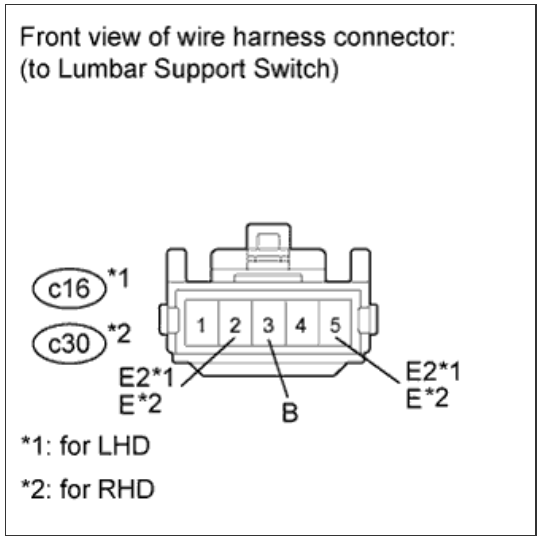
OK

8.CHECK HARNESS AND CONNECTOR (LUMBAR SUPPORT SWITCH - BATTERY AND BODY GROUND)

a. Disconnect the c16*1 or c30*2 switch connector.

*1: for LHD
*2: for RHD

b. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

for LHD

Tester Connection	Condition	Specified Condition
c16-3 (B) - Body ground	Always	11 to 14 V

for RHD

Tester Connection	Condition	Specified Condition
c30-3 (B) - Body ground	Always	11 to 14 V

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
c16-5 (E2) - Body ground	Always	Below 1 Ω
c16-2 (E2) - Body ground		

for RHD

Tester Connection	Condition	Specified Condition
c30-5 (E) - Body ground	Always	Below 1 Ω
c30-2 (E) - Body ground		

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

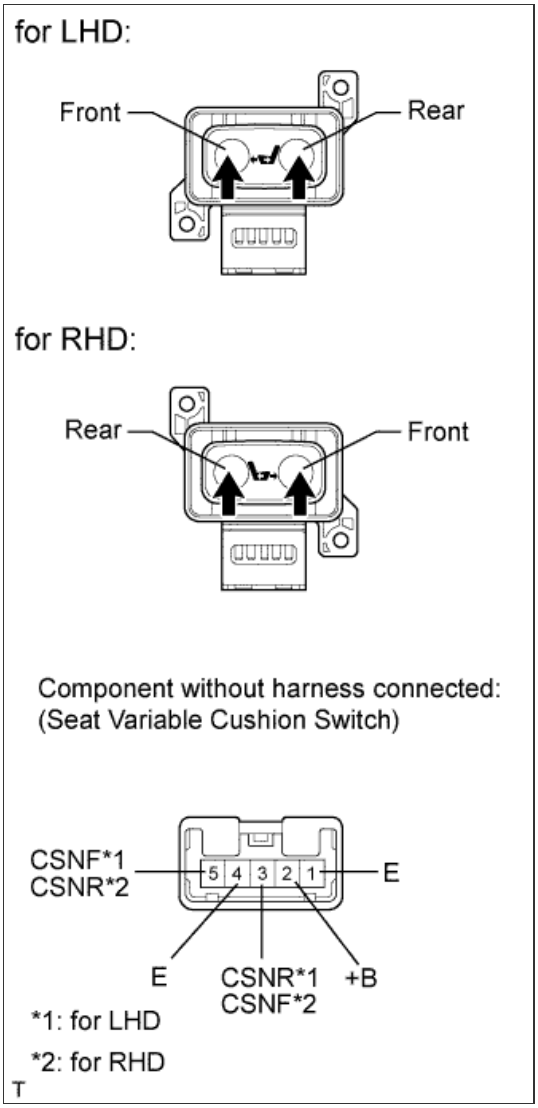
OK

REPAIR OR REPLACE HARNESS OR CONNECTOR (LUMBAR SUPPORT SWITCH - LUMBAR SUPPORT ADJUSTER ASSEMBLY)

9.INSPECT SEAT VARIABLE CUSHION SWITCH

a. Remove the seat variable cushion switch (Click here).

b. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD

Tester Connection	Switch Condition	Specified Condition
2 (+B) - 5 (CSNF)	Front	

3 (CSNR) - 4 (E)		Below 1 Ω
3 (CSNR) - 4 (E)	Off	
1 (E) - 5 (CSNF)		
2 (+B) - 3 (CSNR)	Rear	
1 (E) - 5 (CSNF)		

for RHD

Tester Connection	Switch Condition	Specified Condition
2 (+B) - 3 (CSNF)	Front	Below 1 Ω
5 (CSNR) - 4 (E)		
3 (CSNF) - 1 (E)	Off	
5 (CSNR) - 4 (E)		
2 (+B) - 5 (CSNR)	Rear	
3 (CSNF) - 1 (E)		

NG → REPLACE SEAT VARIABLE CUSHION SWITCH (Click here)

OK

10.INSPECT FRONT SEAT ASSEMBLY (VARIABLE MOTOR)

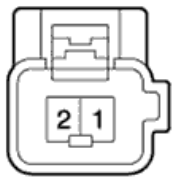
a. Remove the front seat assembly LH (for LHD) (Click here).

b. Remove the front seat assembly RH (for RHD) (Click here).

c. Check operation of the variable motor.

i. Check if the seat cushion moves smoothly when the battery is connected to the variable motor connector terminals.

Component without harness connected:
(Variable Motor)



OK:

for LHD

Measurement Condition	Specified Condition
Battery positive (+) → 1 Battery negative (-) → 2	Forward
Battery positive (+) → 2 Battery negative (-) → 1	Rearward

for RHD

Measurement Condition	Specified Condition
Battery positive (+) → 2 Battery negative (-) → 1	Forward
Battery positive (+) → 1 Battery negative (-) → 2	Rearward

Result

Result	Proceed to
OK	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE FRONT SEAT ASSEMBLY LH (Click here)

C → REPLACE FRONT SEAT ASSEMBLY RH (Click here)

A

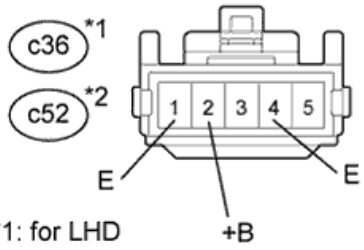
11.CHECK HARNESS AND CONNECTOR (SEAT VARIABLE CUSHION SWITCH - BATTERY AND BODY GROUND)

a. Disconnect the c36*1 or c52*2 switch connector.

*1: for LHD
*2: for RHD

b. Measure the voltage according to the value(s) in the table below.

Front view of wire harness connector:
(to Seat Variable Cushion Switch)



*1: for LHD
*2: for RHD

Standard Voltage:

for LHD

Tester Connection	Condition	Specified Condition
c36-2 (+B) - Body ground	Always	11 to 14 V

for RHD

Tester Connection	Condition	Specified Condition
c52-2 (+B) - Body ground	Always	11 to 14 V

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
c36-1 (E) - Body ground	Always	Below 1 Ω
c36-4 (E) - Body ground		

for RHD

Tester Connection	Condition	Specified Condition
c52-1 (E) - Body ground	Always	Below 1 Ω
c52-4 (E) - Body ground		

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

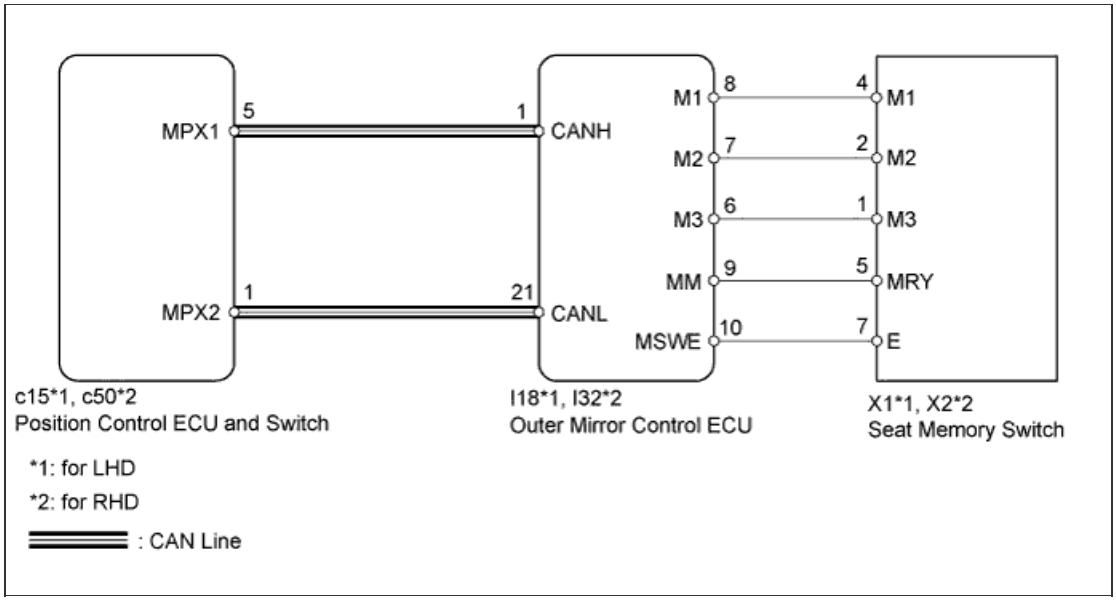
REPAIR OR REPLACE HARNESS OR CONNECTOR (SEAT VARIABLE CUSHION SWITCH - VARIABLE MOTOR)

for Preparation Click here

DESCRIPTION

When the seat memory SET switch and a seat memory switch (seat memory switch 1, seat memory switch 2 or seat memory switch 3) are pressed simultaneously, the outer mirror control ECU commands the position control ECU and switch through CAN communication to record each position value.

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

First perform the communication function inspections in How to Proceed with Troubleshooting to confirm that there are no CAN communication malfunctions before troubleshooting this symptom.

1.CHECK FRONT POWER SEAT CONTROL FUNCTION

a. Check that each function of the power seat operates normally by using the front power seat switches.

OK:

Each function of power seat operates normally by using seat switches.

NG → GO TO PROBLEM SYMPTOMS TABLE (Click here)

OK

2.CHECK SEAT MEMORY SWITCH FUNCTION

a. Perform a memory operation properly. Check that the buzzer sounds to indicate the completion of the memory operation.

NOTICE:

- **The seat position will not be recorded if the seat memory SET switch and 2 or more of the seat memory switches (for example, seat memory switch 1 and seat memory switch 2) are pressed simultaneously.**
- **If a memorizing operation has failed, release all switches. The seat memory function does not operate unless the switches are released.**

OK:

Seat memory switch function operates normally.

NG → Go to step 3

OK

END

3.CHECK COMBINATION METER FUNCTION

a. When the engine switch is on (IG) and the shift lever is in P, check that the combination meter shows that the shift lever is in P.

OK:
Meter shows that shift lever is in P.

NG → GO TO METER / GAUGE SYSTEM (Click here)

OK

4.READ VALUE USING INTELLIGENT TESTER (SEAT MEMORY SWITCH)

a. Check the Data List for proper functioning of the seat memory switch.

Driver Seat

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
SET Switch	Seat memory SET switch signal / ON or OFF	ON: Seat memory SET switch on OFF: Seat memory SET switch off	-
M1 Switch	Seat memory switch 1 signal / ON or OFF	ON: Seat memory switch 1 on OFF: Seat memory switch 1 off	-
M2 Switch	Seat memory switch 2 signal / ON or OFF	ON: Seat memory switch 2 on OFF: Seat memory switch 2 off	-
M3 Switch	Seat memory switch 3 signal / ON or OFF	ON: Seat memory switch 3 on OFF: Seat memory switch 3 off	-

OK:
On intelligent tester screen, each item changes between ON and OFF according to above chart.

NG → Go to step 5

OK

REPLACE POSITION CONTROL ECU AND SWITCH (Click here)

5.INSPECT SEAT MEMORY SWITCH

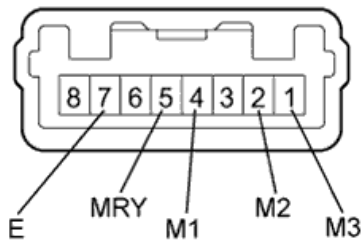
a. Remove the seat memory switch (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
4 (M1) - 7 (E)	Seat memory switch 1 pressed	Below 1 Ω
2 (M2) - 7 (E)	Seat memory switch 2 pressed	Below 1 Ω
1 (M3) - 7 (E)	Seat memory switch 3 pressed	Below 1 Ω
5 (MRY) - 7 (E)	Seat memory SET switch pressed	Below 1 Ω

Component without harness connected:
(Seat Memory Switch)



NG → REPLACE SEAT MEMORY SWITCH (Click here)

OK

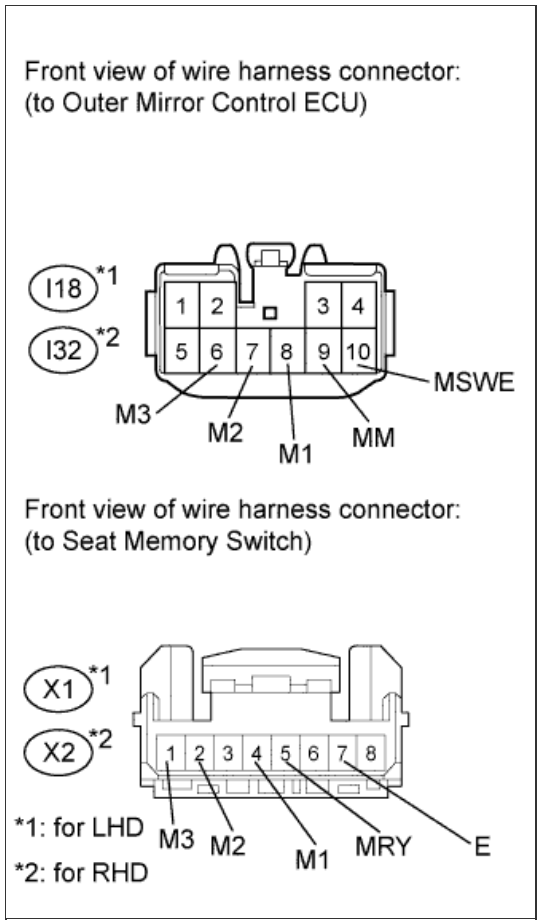
6.CHECK HARNESS AND CONNECTOR (OUTER MIRROR CONTROL ECU - SEAT MEMORY SWITCH)

a. Disconnect the I18*1 or I32*2 ECU connector.

b. Disconnect the X1*1 or X2*2 switch connector.

*1: for LHD
*2: for RHD

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
I18-8 (M1) - X1-4 (M1)	Always	Below 1 Ω
I18-7 (M2) - X1-2 (M2)	Always	Below 1 Ω
I18-6 (M3) - X1-1 (M3)	Always	Below 1 Ω
I18-9 (MM) - X1-5 (MRY)	Always	Below 1 Ω
I18-10 (MSWE) - X1-7 (E)	Always	Below 1 Ω
I18-8 (M1) - Body ground	Always	10 kΩ or higher
I18-7 (M2) - Body ground	Always	10 kΩ or higher
I18-6 (M3) - Body ground	Always	10 kΩ or higher
I18-9 (MM) - Body ground	Always	10 kΩ or higher
I18-10 (MSWE) - Body ground	Always	10 kΩ or higher

for RHD

Tester Connection	Condition	Specified Condition
I32-8 (M1) - X2-4 (M1)	Always	Below 1 Ω
I32-7 (M2) - X2-2 (M2)	Always	Below 1 Ω
I32-6 (M3) - X2-1 (M3)	Always	Below 1 Ω
I32-9 (MM) - X2-5 (MRY)	Always	Below 1 Ω
I32-10 (MSWE) - X2-7 (E)	Always	Below 1 Ω
I32-8 (M1) - Body ground	Always	10 kΩ or higher
I32-7 (M2) - Body ground	Always	10 kΩ or higher
I32-6 (M3) - Body ground	Always	10 kΩ or higher
I32-9 (MM) - Body ground	Always	10 kΩ or higher
I32-10 (MSWE) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

7.CHECK OUTER MIRROR CONTROL ECU (OPERATION)

a. After replacing the outer mirror control ECU, check that the front power seat control functions operate normally using the front seat switches and seat memory switch.

OK:
Front power seat control functions operate normally.

NG → REPLACE POSITION CONTROL ECU AND SWITCH (Click here)

OK

END (REPLACE OUTER MIRROR CONTROL ECU)

for Preparation Click here

DESCRIPTION

With the engine switch off and the driver door closed, press the transmitter lock or unlock switch while holding a seat memory switch (seat memory switch 1, seat memory switch 2 or seat memory switch 3). Doing so will register the transmitter recognition code into the seat memory switch that was pressed. After the registration is complete, the answer-back buzzer sounds.

INSPECTION PROCEDURE

1.CHECK WIRELESS DOOR LOCK CONTROL FUNCTIONS

a. Using the standard operation procedure, check that the wireless door lock/unlock operates normally.

OK:
Wireless door lock/unlock operates normally.

HINT:

The standard operating procedure is as follows:

Hold the transmitter approximately 1 m (3.28 ft.) from the driver door outside handle. Press and hold the transmitter lock or unlock switch for 1 second.

NG → GO TO WIRELESS DOOR LOCK CONTROL SYSTEM (Click here)

OK ↓

2.CHECK POWER DOOR LOCK CONTROL FUNCTION

a. Using the standard operation procedure, check that the power door lock/unlock operates normally.

OK:
Power door lock/unlock operates normally.

NG → GO TO POWER DOOR LOCK CONTROL SYSTEM (Click here)

OK ↓

3.CHECK SEAT MEMORY SWITCH FUNCTION (SEAT POSITION MEMORY FUNCTION)

a. Perform a memory operation properly. Check that the buzzer sounds to indicate the completion of the memory operation.

NOTICE:

- **The seat position will not be recorded if the seat memory SET switch and 2 or more of the seat memory switches (for example, seat memory switch 1 and seat memory switch 2) are pressed simultaneously.**
- **If a memorizing operation has failed, release all switches. The seat memory function does not operate unless the switches are released.**

OK:
Seat memory switch function operates normally.

NG → GO TO PROBLEM SYMPTOMS TABLE (Click here)

OK ↓

4.CHECK MEMORY CALL FUNCTION (REGISTER RECOGNITION CODE)

a. While pressing the seat memory switch 1, seat memory switch 2 or seat memory switch 3, press the transmitter lock or unlock switch. Then check that the buzzer sounds normally.

OK:
Buzzer sounds normally.

NG → REPLACE POSITION CONTROL ECU AND SWITCH (Click here)

OK

END

for Preparation Click here

DESCRIPTION

When a door is unlocked, the certification ECU (smart key ECU assembly) sends a door unlock signal and key ID signal to the position control ECU and switch. When the position control ECU and switch receives the door unlock signal, it stores the key ID. When the driver door is opened, the memory call and memory command information of the stored key ID is sent to each driving position related control ECU. Each control ECU receives the memory commands and performs the memory call operation according to predetermined control timing values.

INSPECTION PROCEDURE

1.CHECK ENTRY UNLOCK FUNCTION AND WIRELESS UNLOCK FUNCTION

a. Check that the driver side door unlocks when holding the driver side door outside handle, or when pressing the transmitter unlock switch.

OK:
Driver side door unlocks normally.

NG → GO TO ENTRY AND START SYSTEM OR WIRELESS DOOR LOCK CONTROL SYSTEM

OK

2.CHECK POWER SEAT CONTROL FUNCTION

a. Manually operate the driver seat power seat switches, and check if the seat operates normally.

OK:
Seat operates normally through manual operation.

NG → GO TO PROBLEM SYMPTOMS TABLE (Click here)

OK

3.CHECK SEAT MEMORY SWITCH FUNCTION (SEAT POSITION MEMORY FUNCTION)

a. Perform a memory operation properly. Check that the buzzer sounds to indicate the completion of the memory operation.

NOTICE:

- **The seat position will not be recorded if the seat memory SET switch and 2 or more of the seat memory switches (for example, seat memory switch 1 and seat memory switch 2) are pressed simultaneously.**
- **If a memorizing operation has failed, release all switches. The seat memory function does not operate unless the switches are released.**

OK:
Seat memory switch function operates normally.

NG → GO TO PROBLEM SYMPTOMS TABLE (Click here)

OK

4.CHECK SEAT MEMORY SWITCH FUNCTION (SEAT RESTORING OPERATION)

a. Press the seat memory switch 1, seat memory switch 2 or seat memory switch 3 and check that the seat moves to a recorded position.

OK:
Seat moves to recorded position.

NG → GO TO PROBLEM SYMPTOMS TABLE (Click here)

OK

5.CHECK MEMORY CALL FUNCTION (REGISTER RECOGNITION CODE)

a. While pressing the seat memory switch 1, seat memory switch 2 or seat memory switch 3, press the transmitter lock or unlock switch. Then check that the buzzer sounds normally.

OK:
Buzzer sounds normally.

NG → GO TO PROBLEM SYMPTOMS TABLE (Click here)

OK ↓

6.CHECK MEMORY CALL FUNCTION (SEAT MEMORY CALL)

a. With a recognition code stored in memory, open the driver door by performing an entry unlock operation or by pressing the transmitter unlock switch. Check that the driver side power seat moves to the memorized position.

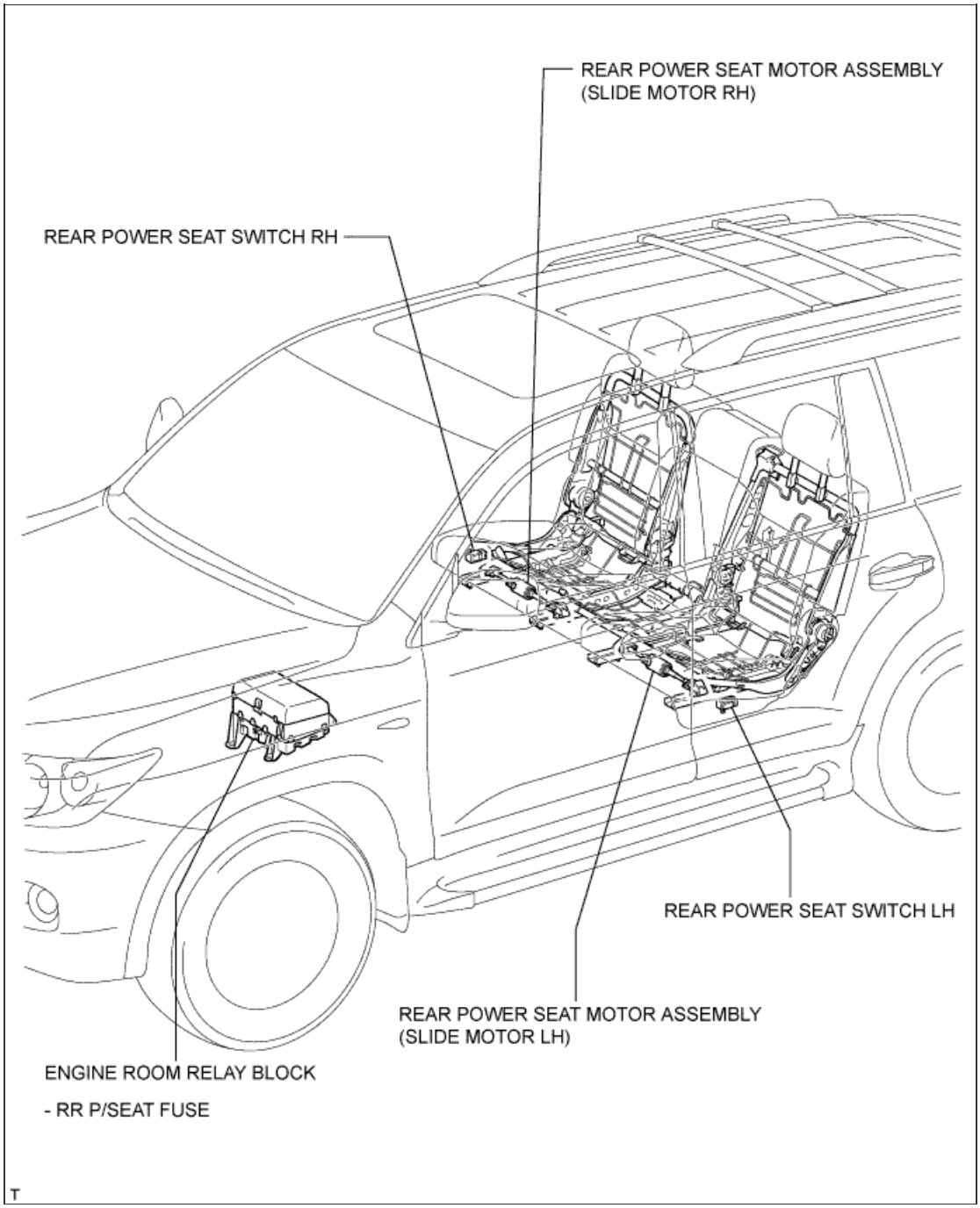
OK:
Driver side power seat moves to the memorized position.

NG → REPLACE POSITION CONTROL ECU AND SWITCH (Click here)

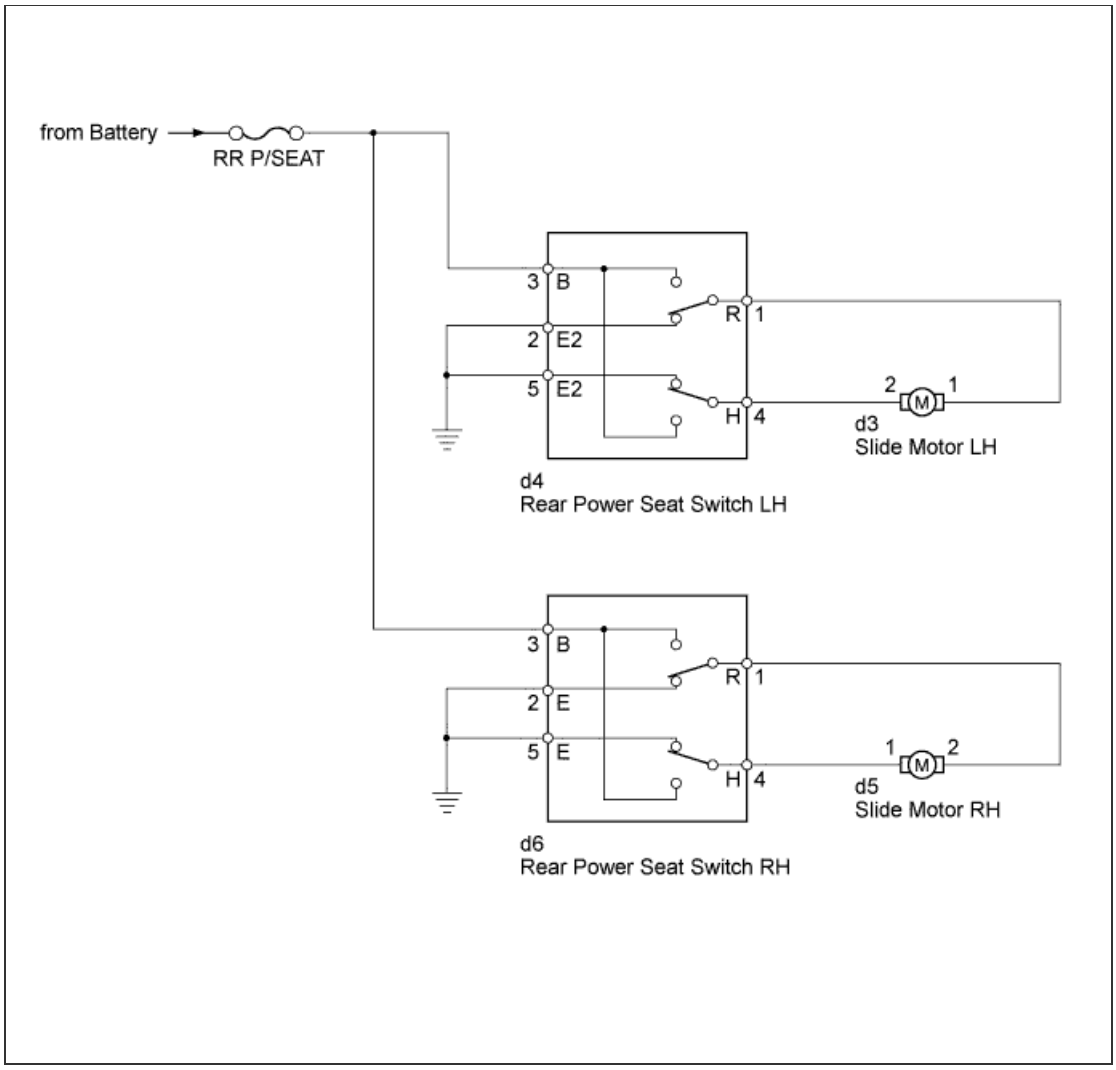
OK ↓

END

for Preparation Click here

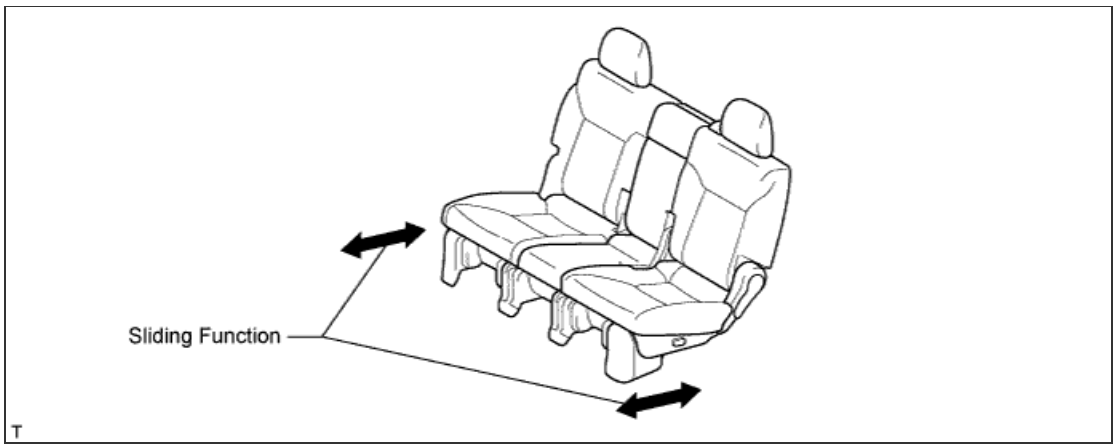


for Preparation Click here



for Preparation Click here

CHECK REAR POWER SEAT FUNCTION



a. Check the basic functions.

i. Operate the rear power seat switches and check to make sure each seat function works:

- Sliding

CHECK REAR POWER SEAT MOTOR ASSEMBLY (SLIDING FUNCTION)

a. Check the PTC operation inside the power seat motor.

HINT:

The resistance of the PTC thermistor increases when the power seat switch is held down even after the seat has been moved to the farthest possible position in one direction. If the resistance increases beyond a specified level, the current is shut off to prevent a short circuit.

NOTICE:

- **The inspection should be performed with the seat installed in the vehicle.**
- **Perform the 4 steps below to check the full range of motion for each power seat function.**

i. Operate the power seat switch and move the seat to the farthest possible position in one direction. Keep the seat in that position for approximately 60 seconds.

ii. Operate the power seat switch again and continue to try to move the seat in the same direction as in the previous step. Measure the time until the current is shut off (motor operation sound will stop).

Standard:
4 to 90 seconds

iii. After the current is shut off, release the power seat switch and wait for approximately 60 seconds.

iv. Operate the same power seat switch and move the seat in the opposite direction. Check that the motor operates.

for Preparation Click here

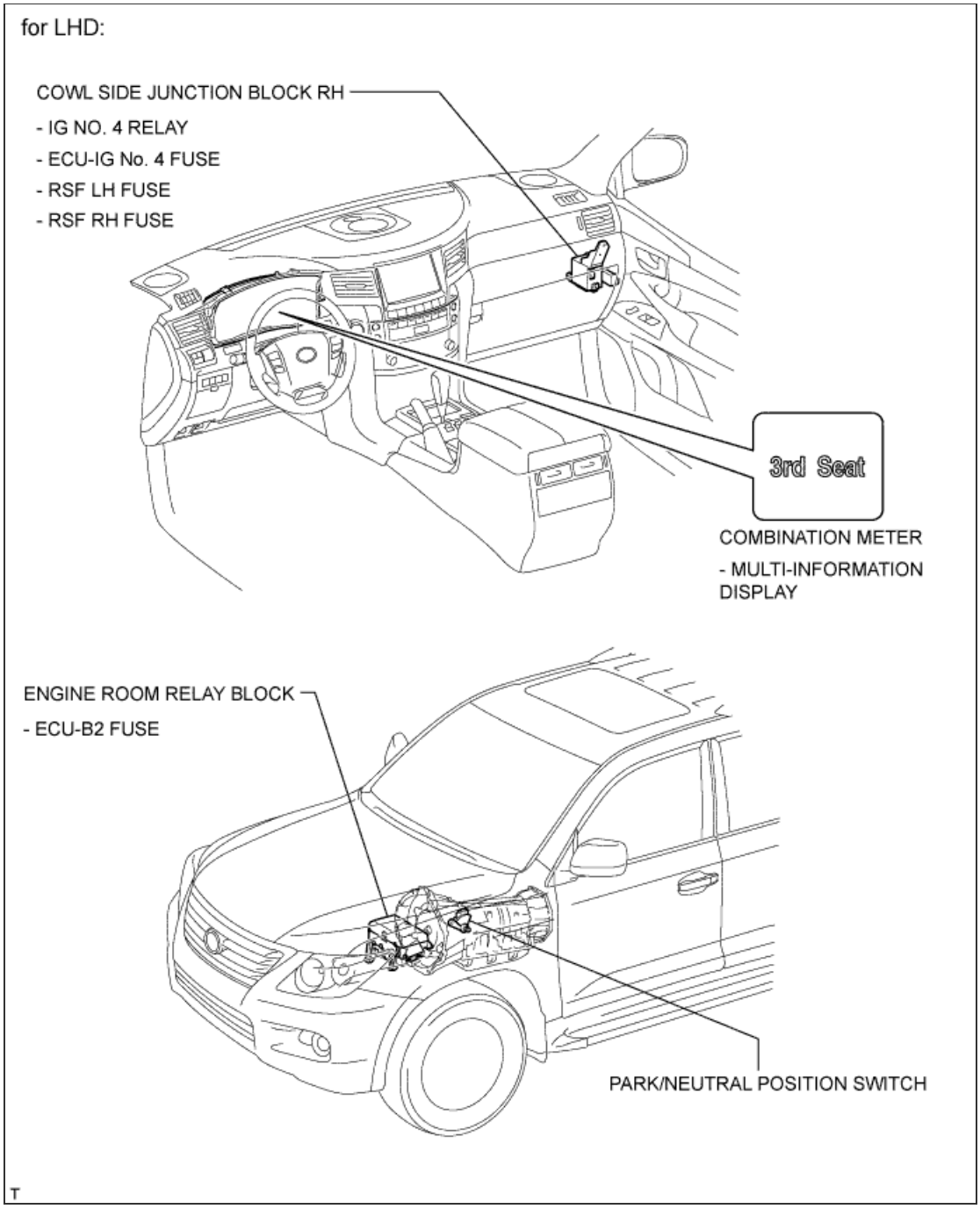
HINT:

- **Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.**
- **Inspect the fuses and relays related to the system before inspecting the suspected areas below.**

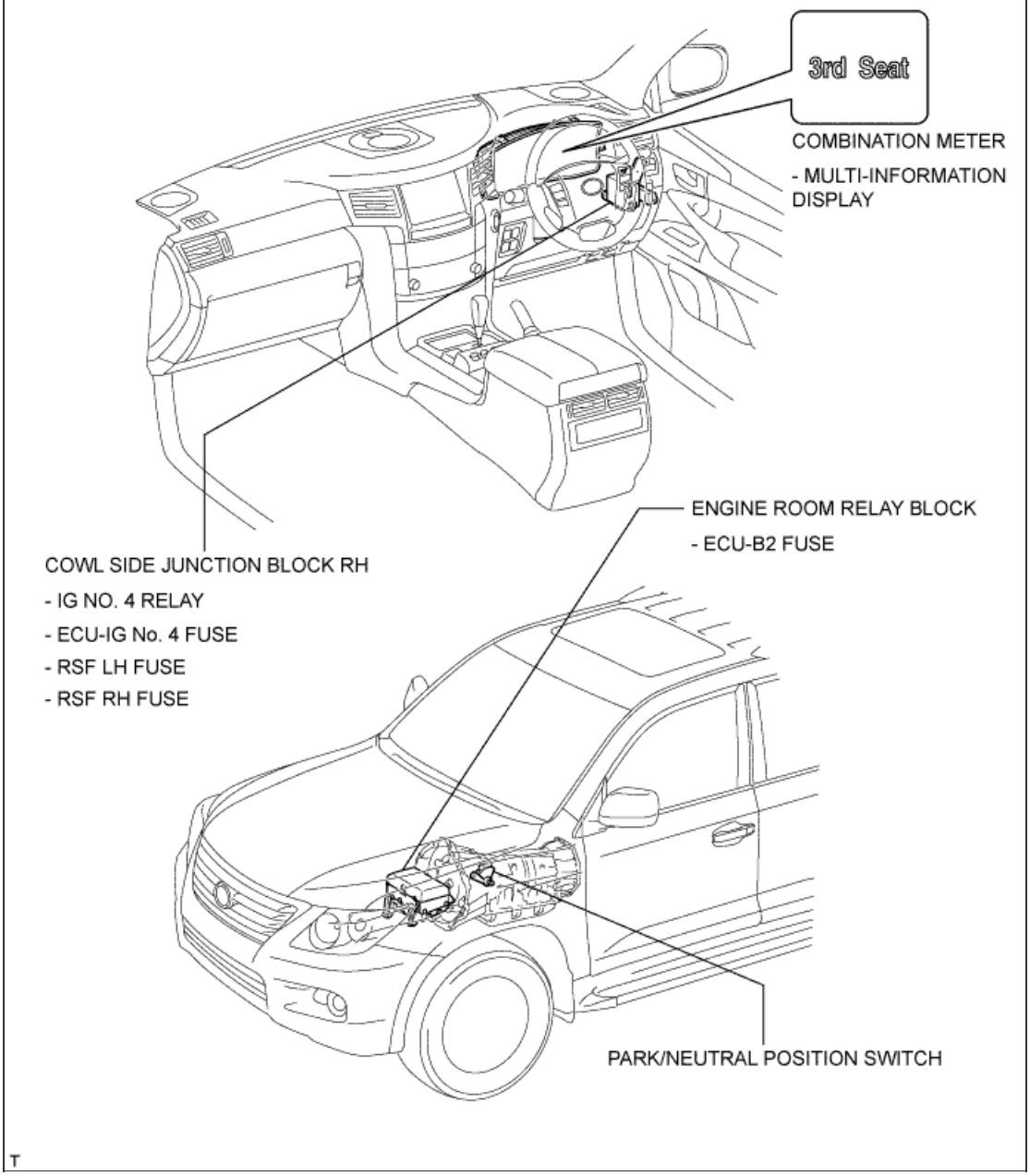
Rear Power Seat Control System

Symptom	Suspected Area	See page
Rear power seat LH does not operate	Rear power seat switch LH	Click here
	Slide motor LH	Click here
	Harness or connector	-
Rear power seat RH does not operate	Rear power seat switch RH	Click here
	Slide motor RH	Click here
	Harness or connector	-

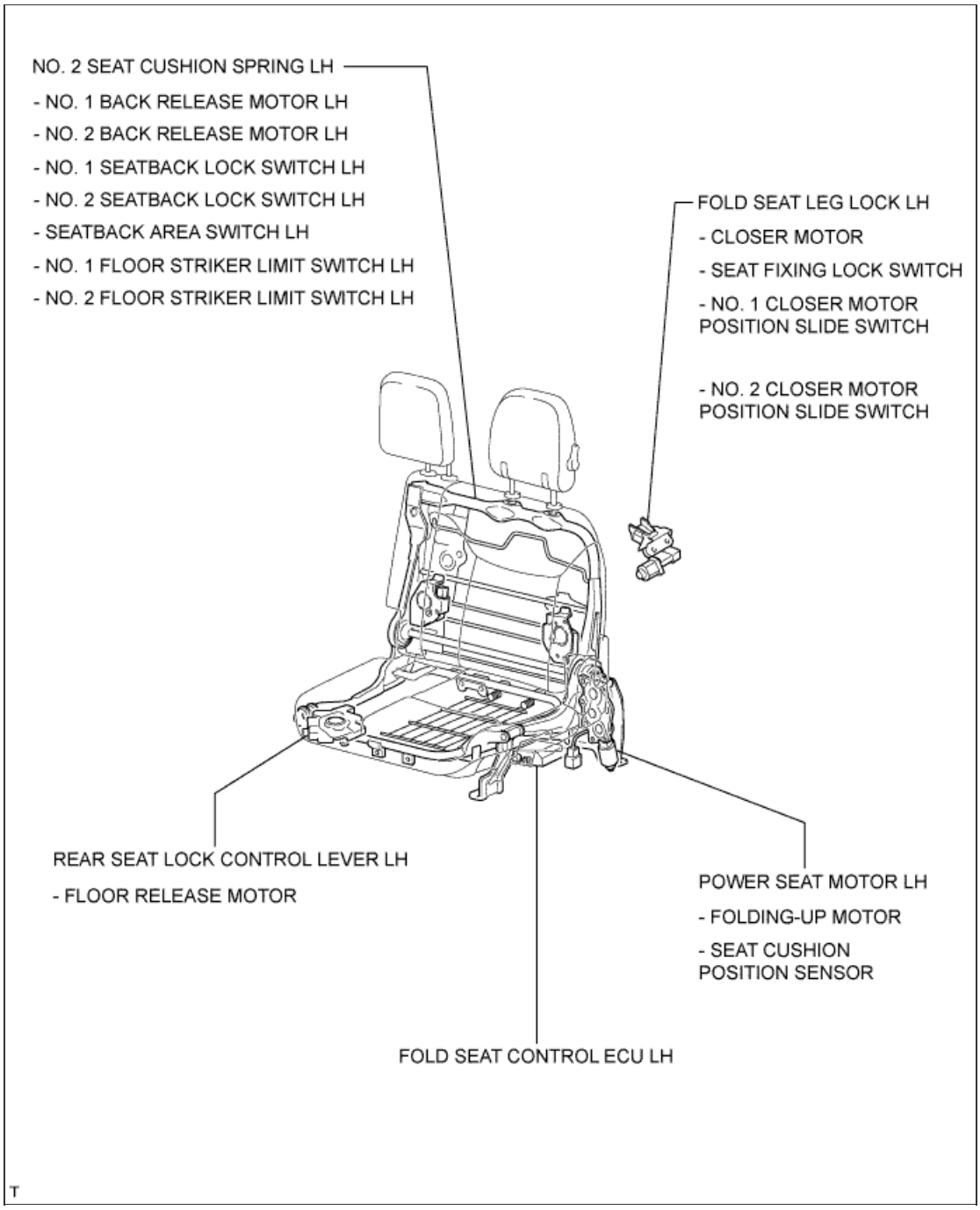
for Preparation Click here

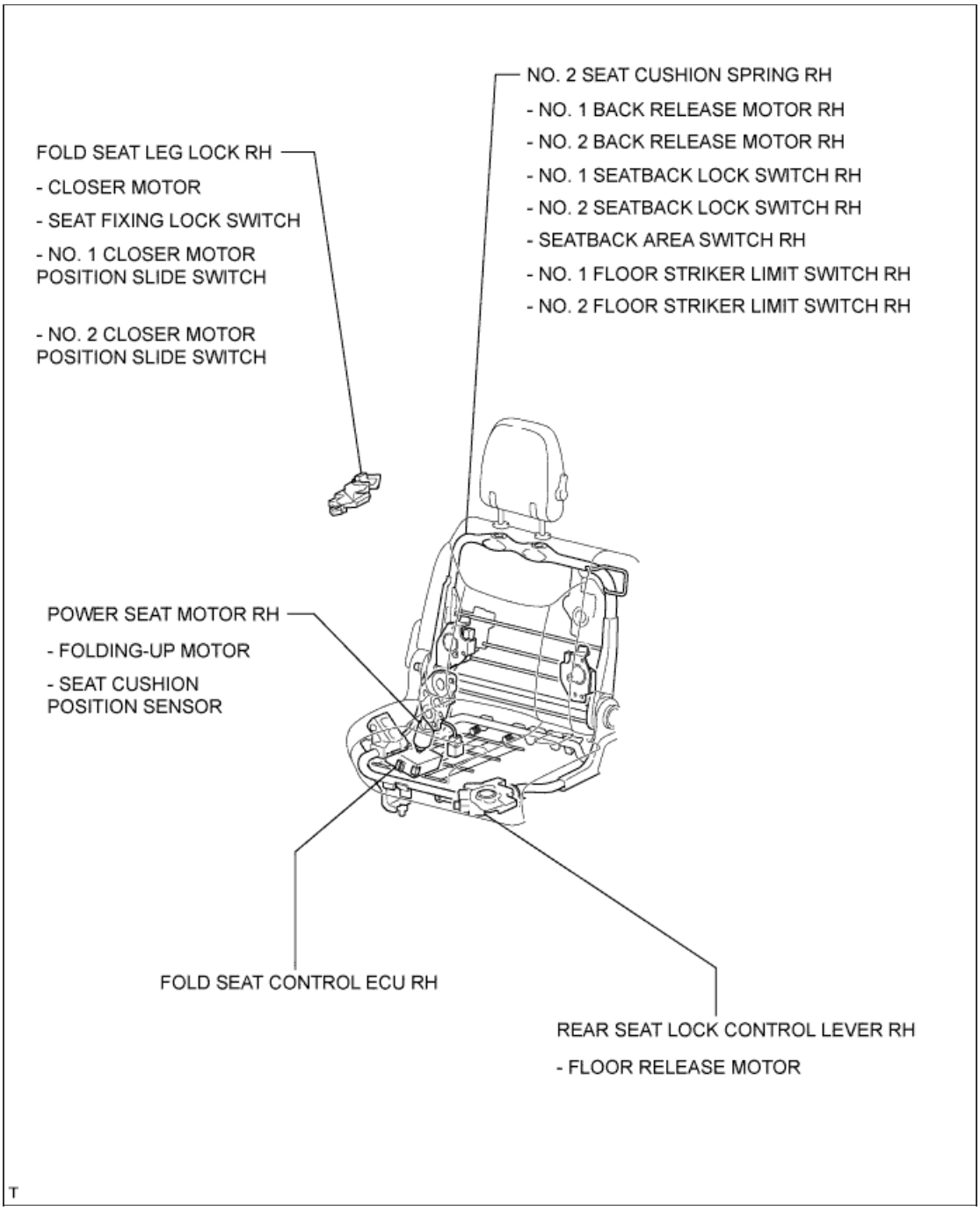


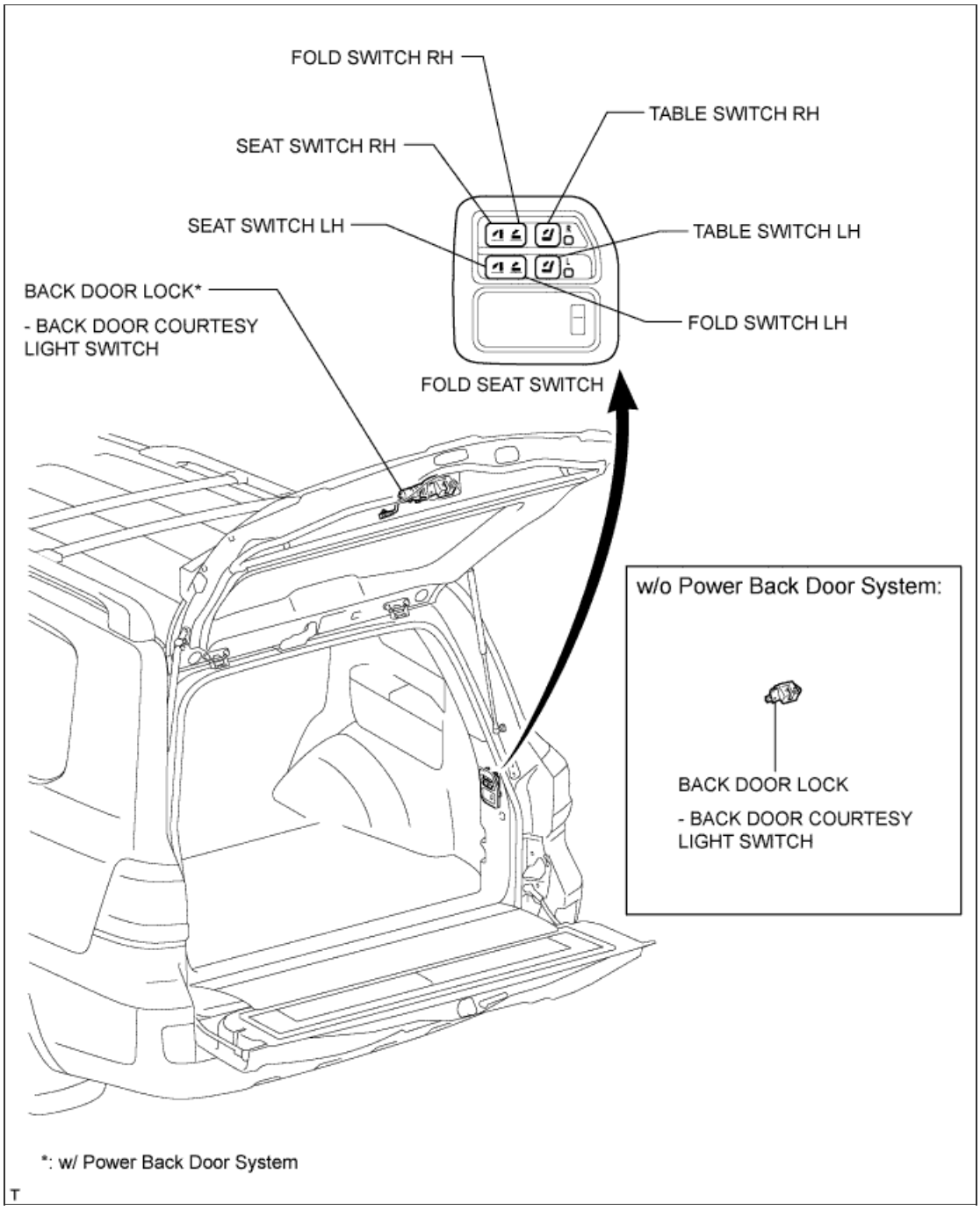
for RHD:


3rd Seat
COMBINATION METER
- MULTI-INFORMATION DISPLAY
ENGINE ROOM RELAY BLOCK
- ECU-B2 FUSE
COWL SIDE JUNCTION BLOCK RH
- IG NO. 4 RELAY
- ECU-IG No. 4 FUSE
- RSF LH FUSE
- RSF RH FUSE
PARK/NEUTRAL POSITION SWITCH

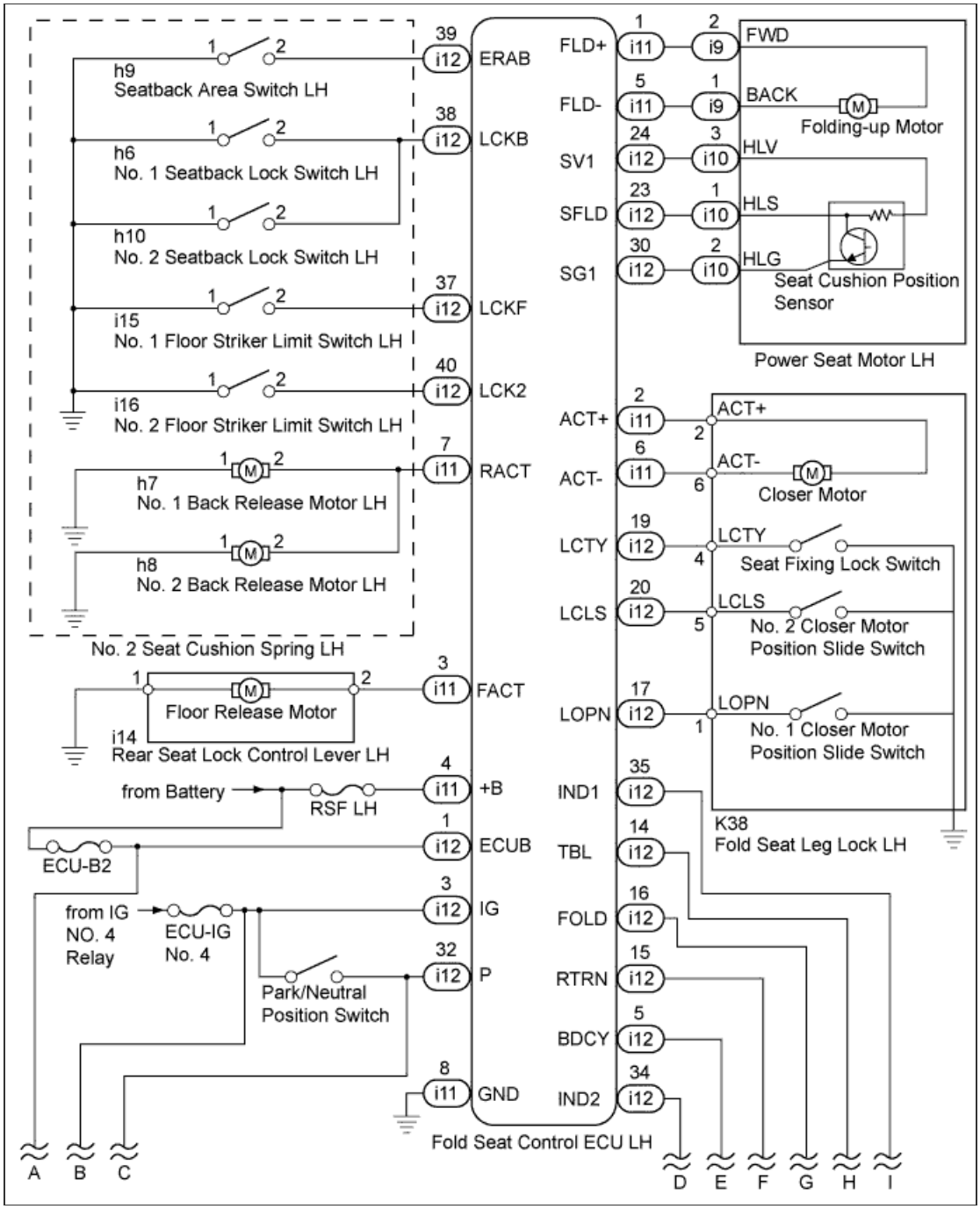
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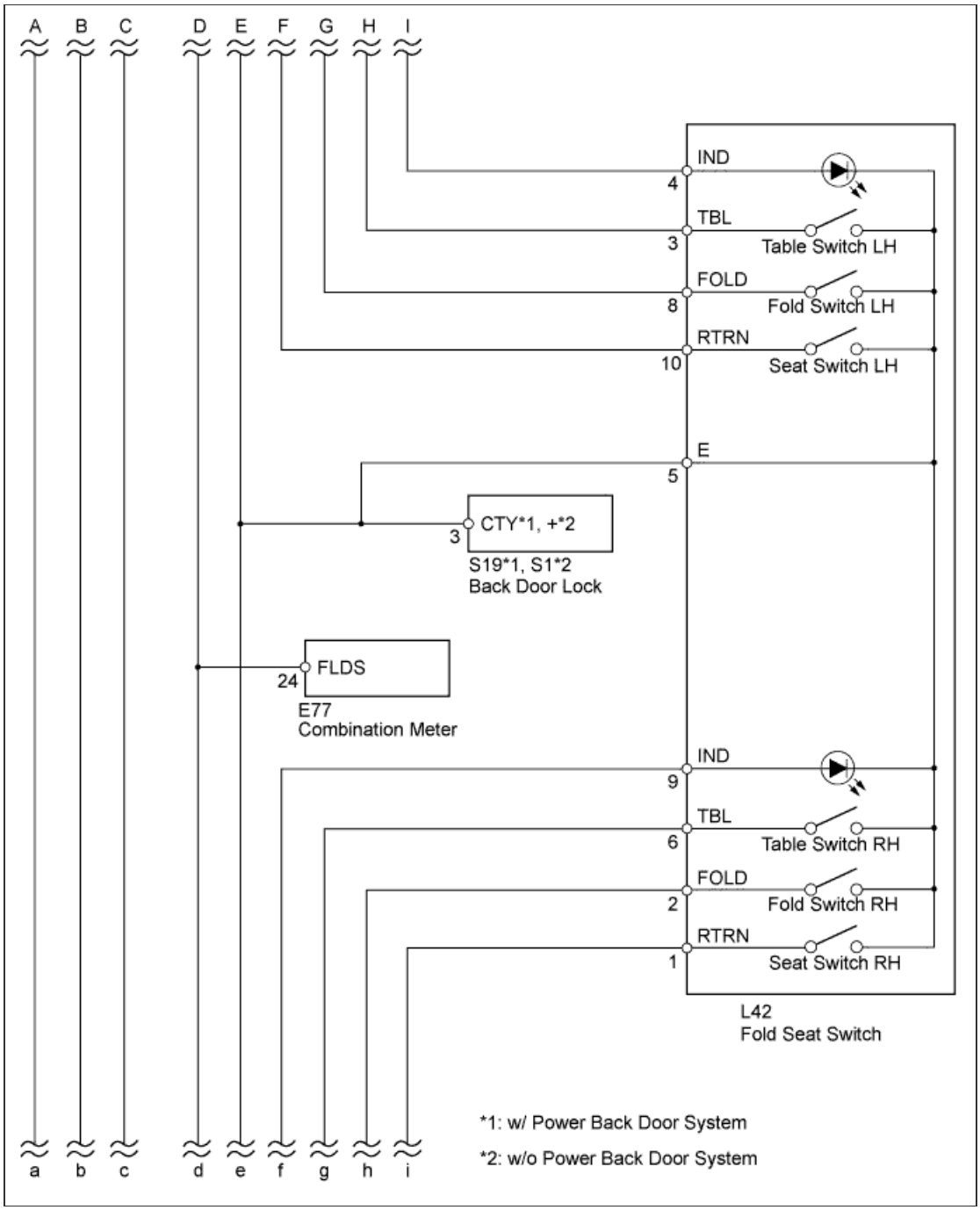

NO. 2 SEAT CUSHION SPRING LH
- NO. 1 BACK RELEASE MOTOR LH
- NO. 2 BACK RELEASE MOTOR LH
- NO. 1 SEATBACK LOCK SWITCH LH
- NO. 2 SEATBACK LOCK SWITCH LH
- SEATBACK AREA SWITCH LH
- NO. 1 FLOOR STRIKER LIMIT SWITCH LH
- NO. 2 FLOOR STRIKER LIMIT SWITCH LH
FOLD SEAT LEG LOCK LH
- CLOSER MOTOR
- SEAT FIXING LOCK SWITCH
- NO. 1 CLOSER MOTOR POSITION SLIDE SWITCH
- NO. 2 CLOSER MOTOR POSITION SLIDE SWITCH
REAR SEAT LOCK CONTROL LEVER LH
- FLOOR RELEASE MOTOR
POWER SEAT MOTOR LH
- FOLDING-UP MOTOR
- SEAT CUSHION POSITION SENSOR
FOLD SEAT CONTROL ECU LH
T

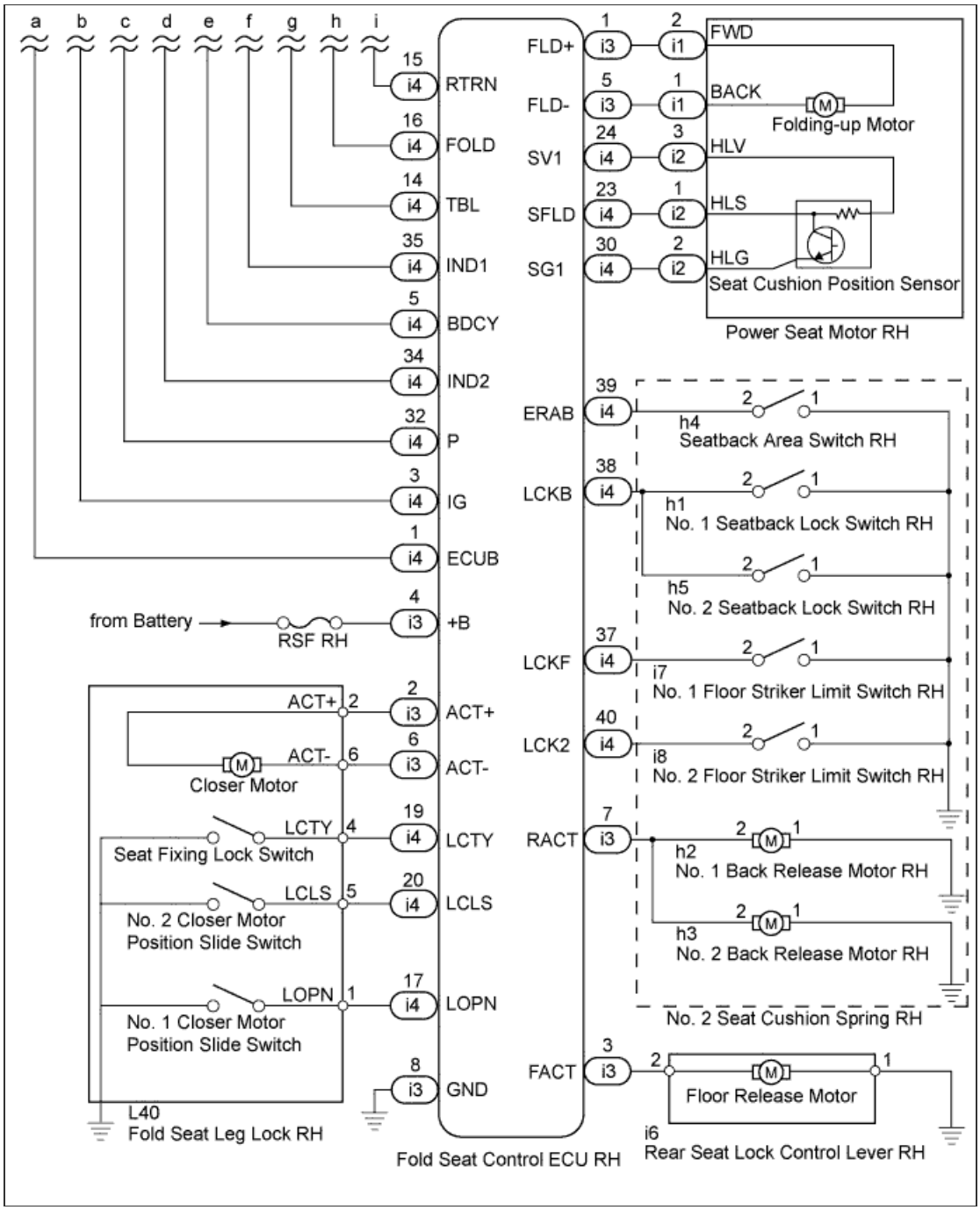

NO. 2 SEAT CUSHION SPRING RH
- NO. 1 BACK RELEASE MOTOR RH
- NO. 2 BACK RELEASE MOTOR RH
- NO. 1 SEATBACK LOCK SWITCH RH
- NO. 2 SEATBACK LOCK SWITCH RH
- SEATBACK AREA SWITCH RH
- NO. 1 FLOOR STRIKER LIMIT SWITCH RH
- NO. 2 FLOOR STRIKER LIMIT SWITCH RH
FOLD SEAT LEG LOCK RH
- CLOSER MOTOR
- SEAT FIXING LOCK SWITCH
- NO. 1 CLOSER MOTOR POSITION SLIDE SWITCH
- NO. 2 CLOSER MOTOR POSITION SLIDE SWITCH
POWER SEAT MOTOR RH
- FOLDING-UP MOTOR
- SEAT CUSHION POSITION SENSOR
FOLD SEAT CONTROL ECU RH
REAR SEAT LOCK CONTROL LEVER RH
- FLOOR RELEASE MOTOR
T


FOLD SWITCH RH
TABLE SWITCH RH
SEAT SWITCH RH
SEAT SWITCH LH
TABLE SWITCH LH
BACK DOOR LOCK*
- BACK DOOR COURTESY LIGHT SWITCH
FOLD SWITCH LH
FOLD SEAT SWITCH
w/o Power Back Door System:
BACK DOOR LOCK
- BACK DOOR COURTESY LIGHT SWITCH
*: w/ Power Back Door System
T

for Preparation Click here




A B C D E F G H I
IND
4
TBL
3
Table Switch LH
FOLD
8
Fold Switch LH
RTRN
10
Seat Switch LH
E
5
CTY*1, +*2
3
S19*1, S1*2
Back Door Lock
FLDS
24
E77
Combination Meter
IND
9
TBL
6
Table Switch RH
FOLD
2
Fold Switch RH
RTRN
1
Seat Switch RH
L42
Fold Seat Switch
*1: w/ Power Back Door System
*2: w/o Power Back Door System
a b c d e f g h i


a b c d e f g h i
15 i4 RTNR
16 i4 FOLD
14 i4 TBL
35 i4 IND1
5 i4 BDCY
34 i4 IND2
32 i4 P
3 i4 IG
1 i4 ECUB
from Battery
RSF RH
4 i3 +B
2 i3 ACT+
6 i3 ACT-
19 i4 LCTY
20 i4 LCLS
17 i4 LOPN
8 i3 GND
ACT+ 2
ACT- 6
Closer Motor
LCTY 4
Seat Fixing Lock Switch
LCLS 5
No. 2 Closer Motor
Position Slide Switch
LOPN 1
No. 1 Closer Motor
Position Slide Switch
L40
Fold Seat Leg Lock RH
FLD+ 1 i3 2 i1 FWD
FLD- 5 i3 1 i1 BACK
Folding-up Motor
SV1 24 i4 3 i2 HLV
SFLD 23 i4 1 i2 HLS
SG1 30 i4 2 i2 HLG
Seat Cushion Position Sensor
Power Seat Motor RH
ERAB 39 i4
h4
Seatback Area Switch RH
LCKB 38 i4
h1
No. 1 Seatback Lock Switch RH
h5
No. 2 Seatback Lock Switch RH
LCKF 37 i4
i7
No. 1 Floor Striker Limit Switch RH
LCK2 40 i4
i8
No. 2 Floor Striker Limit Switch RH
RACT 7 i3
h2
No. 1 Back Release Motor RH
h3
No. 2 Back Release Motor RH
No. 2 Seat Cushion Spring RH
FACT 3 i3
Floor Release Motor
i6
Rear Seat Lock Control Lever RH
Fold Seat Control ECU RH

for Preparation Click here

FOLDING-UP SEAT DESCRIPTION

- The folding-up seat function electrically and mechanically stows and returns the rear No. 2 seat when the fold seat switch is operated.
- This system is used for both the left and right seats. Each system operates independently.

FUNCTIONS OF MAIN COMPONENT

Component	Function
Folding-up Motor (Seat Cushion Position Sensor)	The fold seat control ECU provides the voltage that is used to operate the folding-up motor. The folding-up motor stows and returns the rear No. 2 seat. (A Hall type position sensor is installed in the folding-up motor to detect the seat cushion position.)
Closer Motor (Seat Fixing Lock Switch, No. 1 Closer Motor Position Slide Switch, No. 2 Closer Motor Position Slide Switch)	The fold seat control ECU provides the voltage that is used to operate the closer motor. The closer motor locks and releases the rear No. 2 seat when it is stowed. (The seat fixing lock switch, and No. 1 and No. 2 closer motor position slide switches are built into the closer motor. The seat fixing lock switch detects the lock/release status of the rear No. 2 seat when it is stowed, and the No. 1 and No. 2 closer motor position slide switches detect the position of the closer motor.)
Floor Release Motor	The fold seat control ECU provides the voltage that is used to operate the floor release motor. The floor release motor releases the rear No. 2 seat from the floor.
No. 1 Back Release Motor and No. 2 Back Release Motor	The fold seat control ECU provides the voltage that is used to operate the No. 1 back release motor and No. 2 back release motor. The No. 1 and No. 2 back release motors release the seatback of the rear No. 2 seat when it is locked in the original position.
Seatback Area Switch	The seatback area switch detects the position of the seatback (original position, table position).
No. 1 Seatback Lock Switch and No. 2 Seatback Lock Switch	The No. 1 and No. 2 seatback lock switches detect the lock/release status of the seatback.
No. 1 Floor Striker Limit Switch and No. 2 Floor Striker Limit Switch	The No. 1 and No. 2 floor striker limit switches detect whether the rear No. 2 seat is locked to the floor.
Fold Seat Switch	Sends a rear No. 2 seat table, fold, or return operation signal to the fold seat control ECU when operated. The rear No. 2 seat is folded down, stowed, or returned to the original position based on this signal.

for Preparation Click here

HINT:

Use the following procedures to troubleshoot the rear power seat control system.

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. → Go to step 5

A

4.OVERALL ANALYSIS AND TROUBLESHOOTING

a. Terminals of ECU (Click here)

NEXT

5.REPAIR OR REPLACE

NEXT

6.CONFIRMATION TEST

NEXT

END

for Preparation Click here

CHECK POWER FOLDING-UP FUNCTION

CAUTION:

- **Make sure the surrounding area is safe and then perform each operation.**
- **Open the back door and perform each operation from the rear of the vehicle.**

HINT:

The power folding-up function operates when the following conditions are met:

- **The back door is open.**
- **The engine switch is off, or on (ACC) or on (IG) with the shift lever in P.**

a. Table mode operation (from the original position to the table position)



Push the table switch on the fold seat switch.

Upper row: RH seat

Lower row: LH seat





The seatback lock is released and the seatback folds down by the force of the springs.





As the seatback is folding down, the headrest also folds down automatically.





The table mode operation is complete.

: Automatic

: Manual

T

b. Folding-up operation (from the original position to the stowed position)



Hold down the fold switch on the fold seat switch.
(Operation only occurs while the switch is held down.)

Upper row: RH seat

Lower row: LH seat



The seatback lock is released and the seatback folds down by the force of the springs.



As the seatback is folding down, the headrest also folds down automatically.



The floor lock is released.



The seat is lifted up by the motor and the striker automatically rises up.



The seat is locked to the body automatically by the motor.

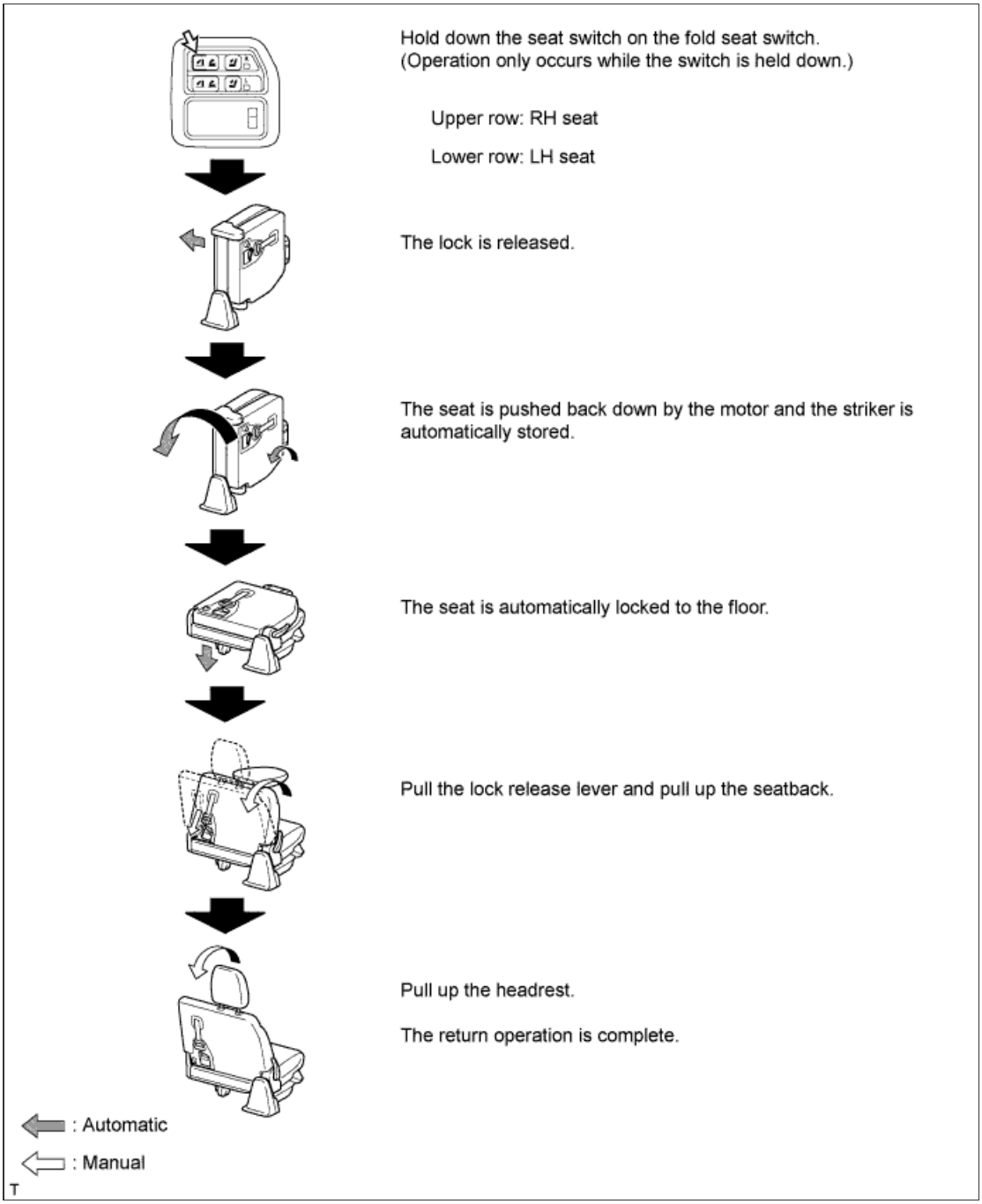
The folding-up operation is complete.

: Automatic

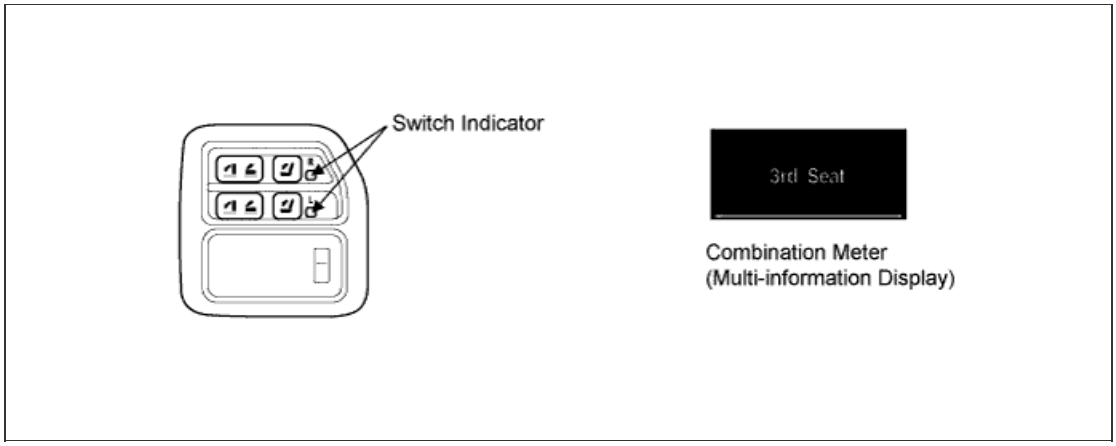
: Manual

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c. Return operation (from the stowed position to the original position)



CHECK INDICATOR FUNCTION



a. Indicator and buzzer operation conditions.

Warning Type	Buzzer (Sounds for 10 seconds)	Switch Indicator Blinking Pattern				Multi-information Display (in Combination Meter) turns on*
		Illuminates	Blinking 1	Blinking 2	Blinking 3	
The operation stops during operation due to an operation condition not being met (no fold seat switch operation, shift lever not in P when engine switch is on (IG), etc.).	○	○	-	-	-	○
The folding-up motor stops due to a malfunction being detected during operation (excessive current, abnormal pulse signal, etc.).	○	-	○	-	-	○
The seatback does not reach the table position from the original position after pressing and holding the fold switch for 10 seconds.	○	-	○	-	-	○
The closer motor stops due to a malfunction being detected during operation (excessive current, position cannot be determined, etc.).	○	-	-	-	○	○
The seat is stopped between normal positions when operation conditions have been met.	-	○	-	-	-	○
An operation condition is not met when the fold switch is pressed (shift lever is not in P when the engine switch is on (IG), etc.).	-	-	○	-	-	-
An operation condition is not met when the seat switch is pressed (shift lever is not in P when the engine switch is on (IG), etc.).	-	-	○	-	-	-
An operation condition is not met when the table switch is pressed (shift	-	-	-	○	-	-

lever is not in P when the engine switch is on (IG), etc.).						

HINT:

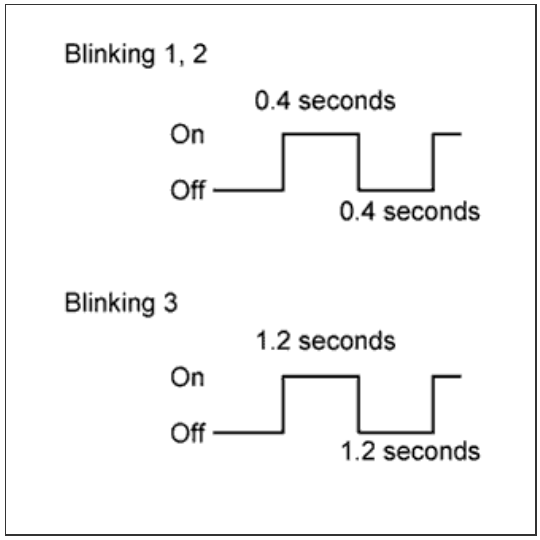
*: An on signal is output but the display only turns on when the engine switch is on (IG).

i. Indicator blinking pattern.

HINT:

Blinking 1: Turns on and off once every 0.8 +/-0.08 seconds (while operation conditions are met)

Blinking 2: Turns on and off once every 0.8 +/-0.08 seconds (3 times)
Blinking 3: Turns on and off once every 2.4 +/-0.24 seconds (while operation conditions are met)



for Preparation Click here

HINT:

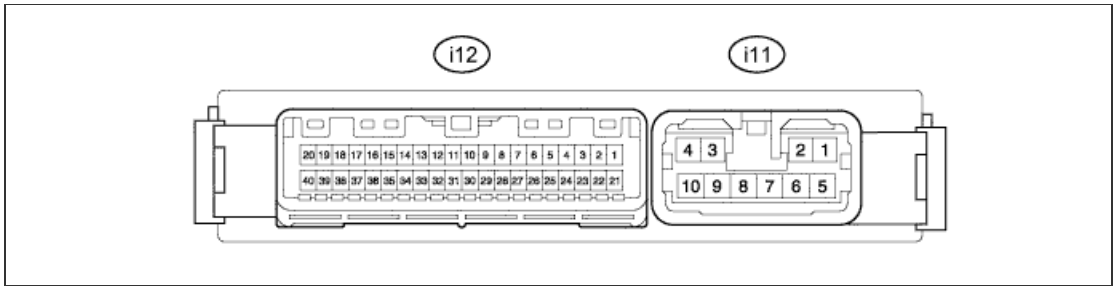
Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Rear Power Seat Control System (for Rear No. 2 Seat with Automatic Folding-up Function)

Symptom	Suspected Area	See page
Folding-up seat function does not operate (LH and RH)	IG-NO. 4 relay	-
	ECU-B2 fuse	-
	ECU-IG No. 4 fuse	-
	Fold seat switch	Click here
	Back door lock (Back door courtesy switch)	Click here
	Park/neutral position switch	Click here
	Harness or connector	-
Folding-up seat function does not operate (LH)	RSF LH fuse	-
	Fold seat switch	Click here
	Power seat motor LH	Click here
	Fold seat leg lock LH	Click here
	Rear seat lock control lever LH	Click here
	No. 2 seat cushion spring LH	Click here
	Fold seat control ECU LH	-
	Harness or connector	-
Folding-up seat function does not operate (RH)	RSF RH fuse	-
	Fold seat switch	Click here
	Power seat motor RH	Click here
	Fold seat leg lock RH	Click here
	Rear seat lock control lever RH	Click here
	No. 2 seat cushion spring RH	Click here
	Fold seat control ECU RH	-
	Harness or connector	-
The indicator does not come on or blink (Combination meter)	Fold seat control ECU	-
	Combination meter	-
	Harness or connector	-
The indicator does not come on or blink (Fold seat switch)	Fold seat switch	Click here
	Fold seat control ECU	-
	Harness or connector	-

for Preparation Click here

CHECK FOLD SEAT CONTROL ECU LH



a. Disconnect the i11 and i12 ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
i11-4 (+B) - i11-8 (GND)	R - W-B	Power source	Always	11 to 14 V
i11-8 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
i12-1 (ECUB) - i11-8 (GND)	R - W-B	Power source	Always	11 to 14 V
i12-3 (IG) - i11-8 (GND)	G - W-B	Engine switch signal	Engine switch on (IG)	6 V or higher
			Engine switch off	Below 2 V

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the i11 and i12 ECU connectors.

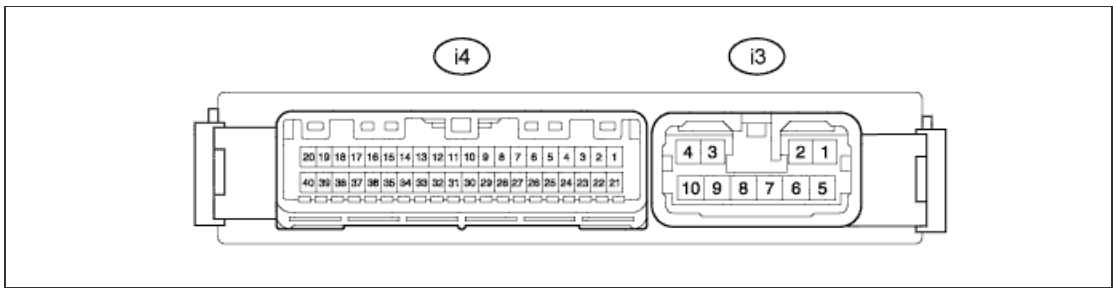
d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
i11-1 (FLD+) - i11-8 (GND)	G - W-B	Folding-up motor LH operation signal	Rear No. 2 seat LH folding-up operation	9 to 14 V
i11-2 (ACT+) - i11-8 (GND)	B - W-B	Closer motor LH operation signal	Closer motor LH lock operation	9 to 14 V
i11-3 (FACT) - i11-8 (GND)	B - W-B	Floor release motor LH operation signal	Floor release motor LH operating	9 to 14 V
i11-5 (FLD-) - i11-8 (GND)	R - W-B	Folding-up motor LH operation signal	Rear No. 2 seat LH return operation	9 to 14 V
i11-6 (ACT-) - i11-8 (GND)	W - W-B	Closer motor LH operation signal	Closer motor LH unlock operation	9 to 14 V
i11-7 (RACT) - i11-8 (GND)	L - W-B	No. 1 back release motor LH operation signal	No. 1 back release motor LH operating	9 to 14 V
		No. 2 back release motor LH operation signal	No. 2 back release motor LH operating	
i12-5 (BDCY) - i11-8 (GND)	W - W-B	Back door courtesy switch signal	Back door open	Below 1 V
			Back door closed	9 to 14 V
i12-14 (TBL) - i11-8 (GND)	Y - W-B	Fold seat switch signal (Table switch LH)	Back door open Fold seat switch (Table switch LH) off	9 to 14 V
			Back door open Fold seat switch (Table switch LH) on	Below 1 V
i12-15 (RTRN) - i11-8 (GND)	GR - W-B	Fold seat switch signal (Seat switch LH)	Back door open Fold seat switch (Seat switch LH) off	9 to 14 V
			Back door open Fold seat switch (Seat	Below 1 V

			switch LH) on	
i12-16 (FOLD) - i11-8 (GND)	G - W-B	Fold seat switch signal (Fold switch LH)	Back door open Fold seat switch (Fold switch LH) off	9 to 14 V
			Back door open Fold seat switch (Fold switch LH) on	Below 1 V
i12-17 (LOPN) - i11-8 (GND)	V - W-B	No. 1 closer motor position slide switch LH signal	No. 1 closer motor position slide switch LH off	9 to 14 V
			No. 1 closer motor position slide switch LH on	Below 1 V
i12-19 (LCTY) - i11-8 (GND)	L - W-B	Seat fixing lock switch LH signal	Seat fixing lock switch LH off	9 to 14 V
			Seat fixing lock switch LH on	Below 1 V
i12-20 (LCLS) - i11-8 (GND)	P - W-B	No. 2 closer motor position slide switch LH signal	No. 2 closer motor position slide switch LH off	9 to 14 V
			No. 2 closer motor position slide switch LH on	Below 1 V
i12-23 (SFLD) - i12-30 (SG1)	W - B	Seat cushion position sensor LH signal	Folding-up motor LH operating	Pulse generation
i12-24 (SV1) - i11-8 (GND)	G - W-B	Power supply for seat cushion position sensor LH	Back door open	4.8 V or higher
			Back door closed	Below 1 V
i12-30 (SG1) - Body ground	B - Body ground	Ground for seat cushion position sensor LH	Always	Below 1 Ω
i12-32 (P) - i11-8 (GND)	G - W-B	Park/neutral position switch signal	Engine switch on (IG) Park/neutral position switch in P position	6 V or higher
			Engine switch on (IG) Park/neutral position switch not in P position	Below 2 V
i12-34 (IND2) - i11-8 (GND)	B - W-B	3rd seat indicator signal	Engine switch on (IG) 3rd seat indicator off	9 to 14 V
			Engine switch on (IG) 3rd seat indicator on	Below 1 V
i12-35 (IND1) - i11-8 (GND)	W - W-B	Fold seat switch indicator LH signal	Back door open Fold seat switch indicator LH off	Below 1 V
			Back door open Fold seat switch indicator LH on	8.6 to 14 V
i12-37 (LCKF) - i11-8 (GND)	SB - W-B	No. 1 floor striker limit switch LH signal	No. 1 floor striker limit switch LH off	9 to 14 V
			No. 1 floor striker limit switch LH on	Below 1 V
i12-38 (LCKB) - i11-8 (GND)	L - W-B	No. 1 seatback lock switch LH signal	No. 1 seatback lock switch LH off	9 to 14 V
			No. 1 seatback lock switch LH on	Below 1 V
		No. 2 seatback lock switch LH signal	No. 2 seatback lock switch LH off	9 to 14 V
			No. 2 seatback lock switch LH on	Below 1 V
i12-39 (ERAB) - i11-8 (GND)	BR - W-B	Seatback area switch LH signal	Seatback area switch LH off	9 to 14 V
			Seatback area switch LH on	Below 1 V
i12-40 (LCK2) - i11-8 (GND)	R - W-B	No. 2 floor striker limit switch LH signal	No. 2 floor striker limit switch LH off	9 to 14 V
			No. 2 floor striker limit switch LH on	Below 1 V

If the result is not as specified, the fold seat control ECU may have a malfunction.

CHECK FOLD SEAT CONTROL ECU RH



a. Disconnect the i3 and i4 ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
i3-4 (+B) - i3-8 (GND)	L- W-B	Power source	Always	11 to 14 V
i3-8 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
i4-1 (ECUB) - i3-8 (GND)	R - W-B	Power source	Always	11 to 14 V
i4-3 (IG) - i3-8 (GND)	G - W-B	Engine switch signal	Engine switch on (IG)	6 V or higher
			Engine switch off	Below 2 V

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the i3 and i4 ECU connectors.

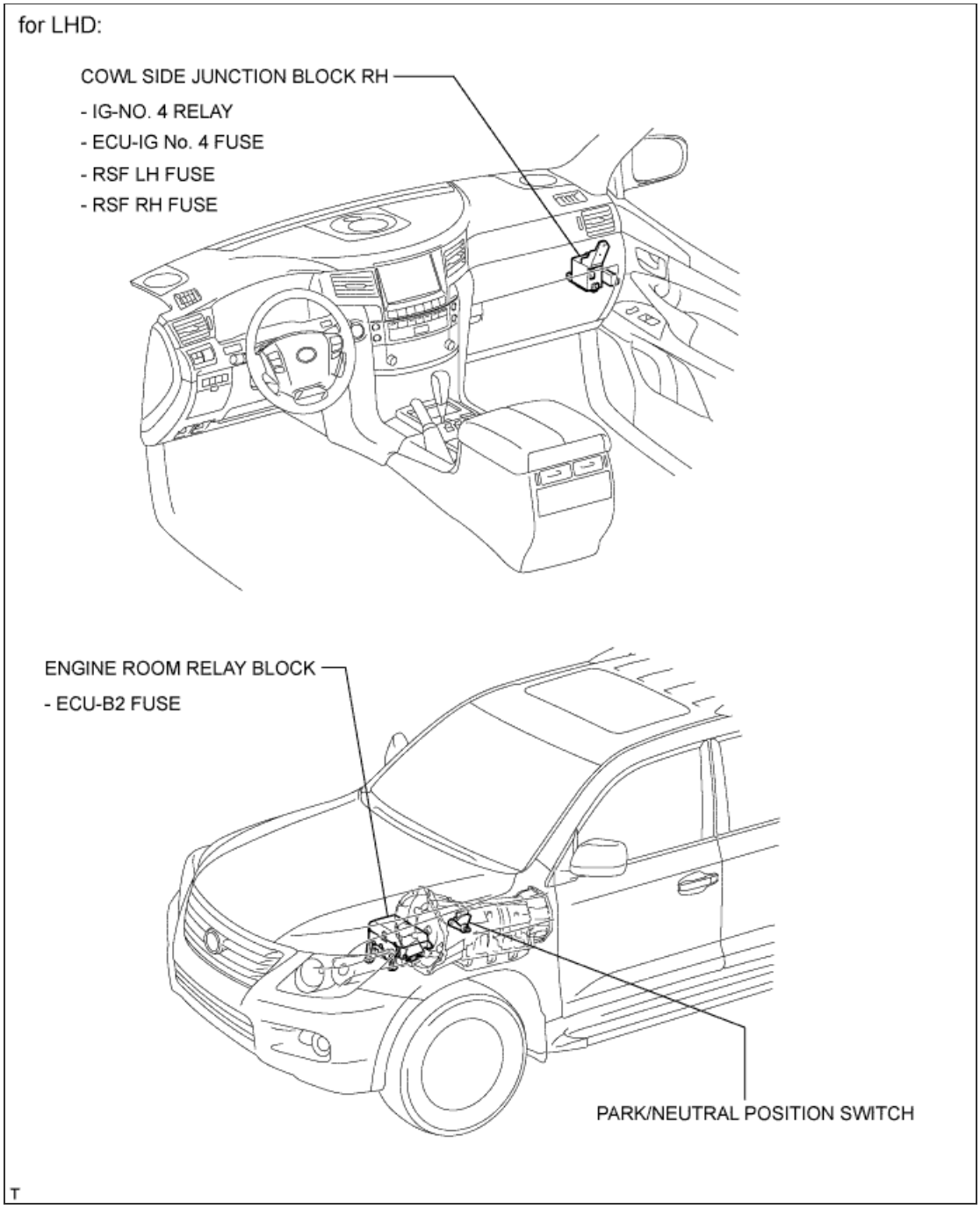
d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
i3-1 (FLD+) - i3-8 (GND)	L - W-B	Folding-up motor RH operation signal	Rear No. 2 seat RH folding-up operation	9 to 14 V
i3-2 (ACT+) - i3-8 (GND)	B - W-B	Closer motor RH operation signal	Closer motor RH lock operation	9 to 14 V
i3-3 (FACT) - i3-8 (GND)	B - W-B	Floor release motor RH operation signal	Floor release motor RH operating	9 to 14 V
i3-5 (FLD-) - i3-8 (GND)	GR - W-B	Folding-up motor RH operation signal	Rear No. 2 seat RH return operation	9 to 14 V
i3-6 (ACT-) - i3-8 (GND)	W - W-B	Closer motor RH operation signal	Closer motor RH unlock operation	9 to 14 V
i3-7 (RACT) - i3-8 (GND)	L - W-B	No. 1 back release motor RH operation signal	No. 1 back release motor RH operating	9 to 14 V
		No. 2 back release motor RH operation signal	No. 2 back release motor RH operating	
i4-5 (BDCY) - i3-8 (GND)	W - W-B	Back door courtesy switch signal	Back door open	Below 1 V
			Back door closed	9 to 14 V
i4-14 (TBL) - i3-8 (GND)	Y - W-B	Fold seat switch signal (Table switch RH)	Back door open Fold seat switch (Table switch RH) off	9 to 14 V
			Back door open Fold seat switch (Table switch RH) on	Below 1 V
i4-15 (RTRN) - i3-8 (GND)	GR - W-B	Fold seat switch signal (Seat switch RH)	Back door open Fold seat switch (Seat switch RH) off	9 to 14 V
			Back door open Fold seat switch (Seat switch RH) on	Below 1 V
i4-16 (FOLD) - i3-8 (GND)	G - W-B	Fold seat switch signal (Fold switch RH)	Back door open Fold seat switch (Fold switch RH) off	9 to 14 V
			Back door open Fold seat switch (Fold switch RH) on	Below 1 V

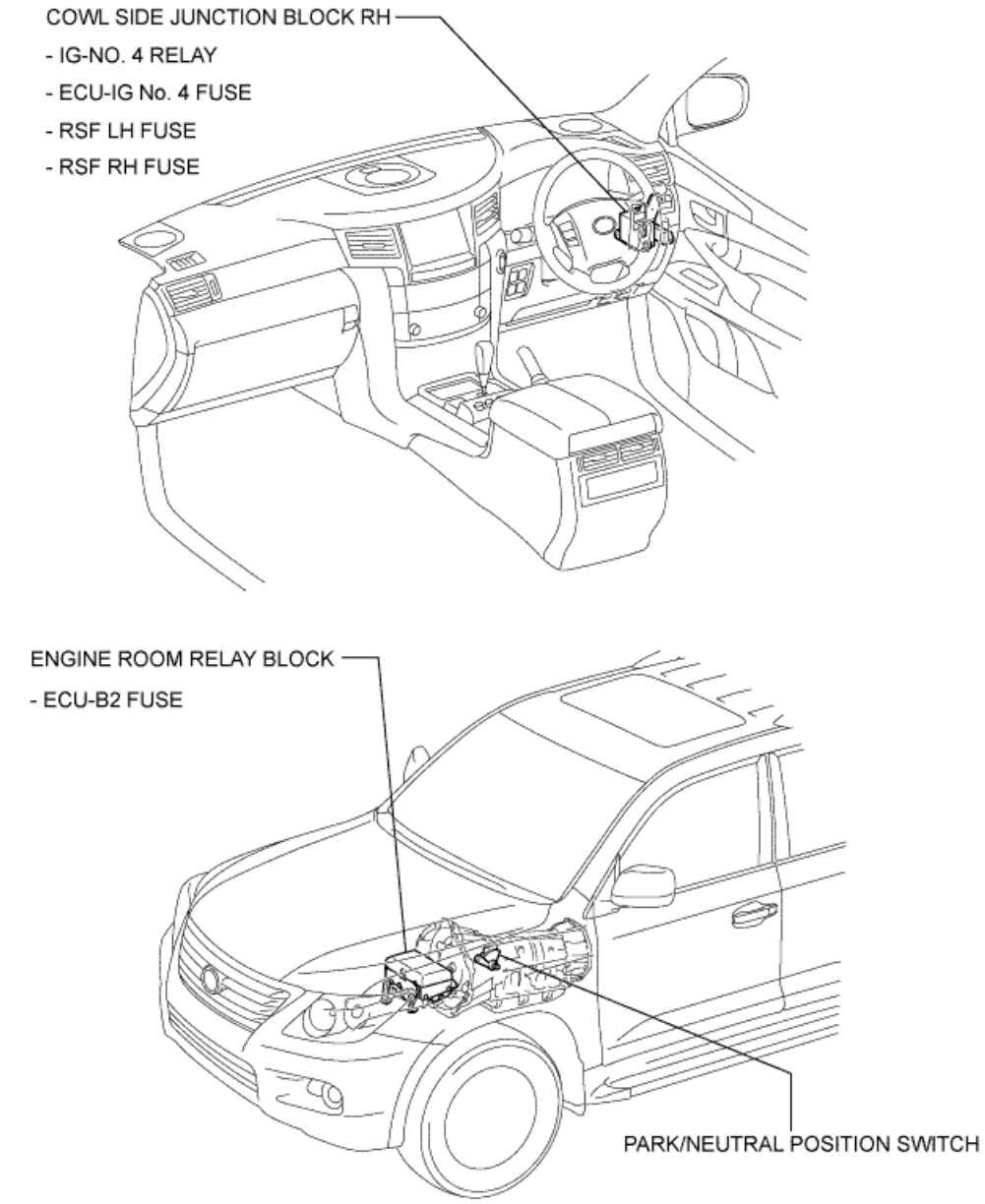
i4-17 (LOPN) - i3-8 (GND)	V - W-B	No. 1 closer motor position slide switch RH signal	No. 1 closer motor position slide switch RH off	9 to 14 V
			No. 1 closer motor position slide switch RH on	Below 1 V
i4-19 (LCTY) - i3-8 (GND)	L - W-B	Seat fixing lock switch RH signal	Seat fixing lock switch RH off	9 to 14 V
			Seat fixing lock switch RH on	Below 1 V
i4-20 (LCLS) - i3-8 (GND)	P - W-B	No. 2 closer motor position slide switch RH signal	No. 2 closer motor position slide switch RH off	9 to 14 V
			No. 2 closer motor position slide switch RH on	Below 1 V
i4-23 (SFLD) - i4-30 (SG1)	W - B	Seat cushion position sensor RH signal	Folding-up motor RH operating	Pulse generation
i4-24 (SV1) - i3-8 (GND)	G - W-B	Power supply for seat cushion position sensor RH	Back door open	4.8 V or higher
			Back door closed	Below 1 V
i4-30 (SG1) - Body ground	B - Body ground	Ground for seat cushion position sensor RH	Always	Below 1 Ω
i4-32 (P) - i3-8 (GND)	G - W-B	Park/neutral position switch signal	Engine switch on (IG) Park/neutral position switch in P position	6 V or higher
			Engine switch on (IG) Park/neutral position switch not in P position	Below 2 V
i4-34 (IND2) - i3-8 (GND)	B - W-B	3rd seat indicator signal	Engine switch on (IG) 3rd seat indicator off	9 to 14 V
			Engine switch on (IG) 3rd seat indicator on	Below 1 V
i4-35 (IND1) - i3-8 (GND)	W - W-B	Fold seat switch indicator RH signal	Back door open Fold seat switch indicator RH off	Below 1 V
			Back door open Fold seat switch indicator RH on	8.6 to 14 V
i4-37 (LCKF) - i3-8 (GND)	SB - W-B	No. 1 floor striker limit switch RH signal	No. 1 floor striker limit switch RH off	9 to 14 V
			No. 1 floor striker limit switch RH on	Below 1 V
i4-38 (LCKB) - i3-8 (GND)	L - W-B	No. 1 seatback lock switch RH signal	No. 1 seatback lock switch RH off	9 to 14 V
			No. 1 seatback lock switch RH on	Below 1 V
		No. 2 seatback lock switch RH signal	No. 2 seatback lock switch RH off	9 to 14 V
			No. 2 seatback lock switch RH on	Below 1 V
i4-39 (ERAB) - i3-8 (GND)	BR - W-B	Seatback area switch RH signal	Seatback area switch RH off	9 to 14 V
			Seatback area switch RH on	Below 1 V
i4-40 (LCK2) - i3-8 (GND)	R - W-B	No. 2 floor striker limit switch RH signal	No. 2 floor striker limit switch RH off	9 to 14 V
			No. 2 floor striker limit switch RH on	Below 1 V

If the result is not as specified, the fold seat control ECU may have a malfunction.

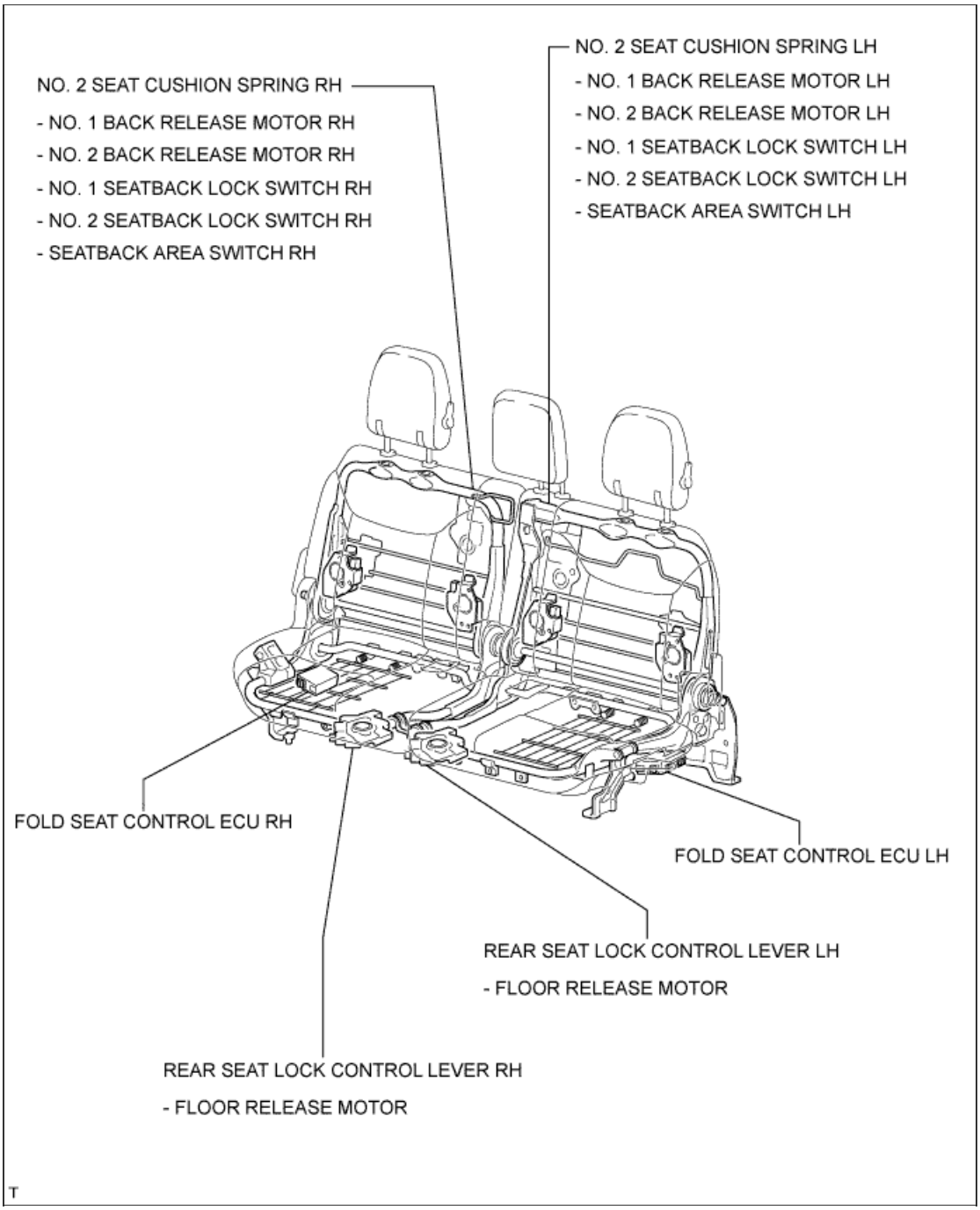
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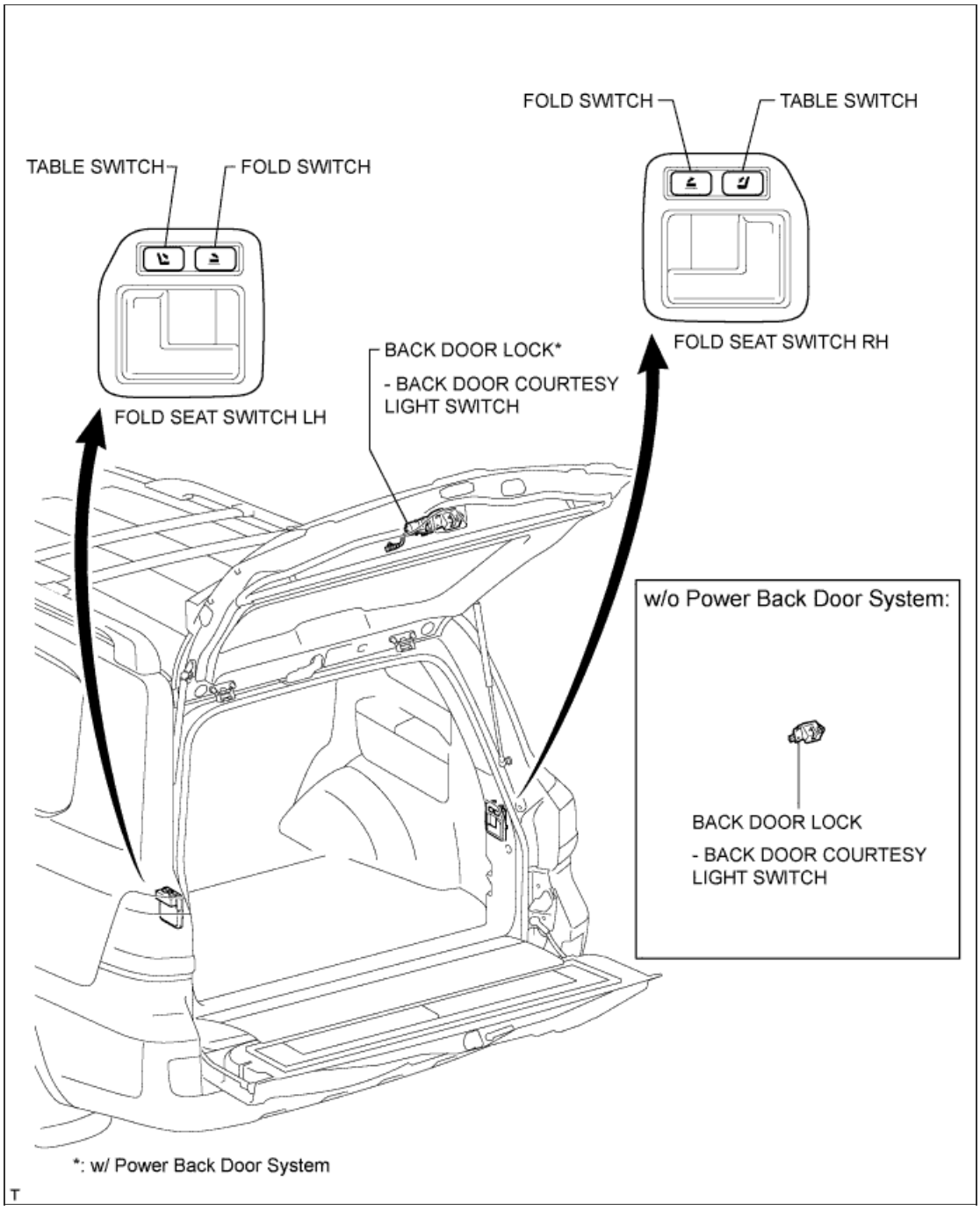


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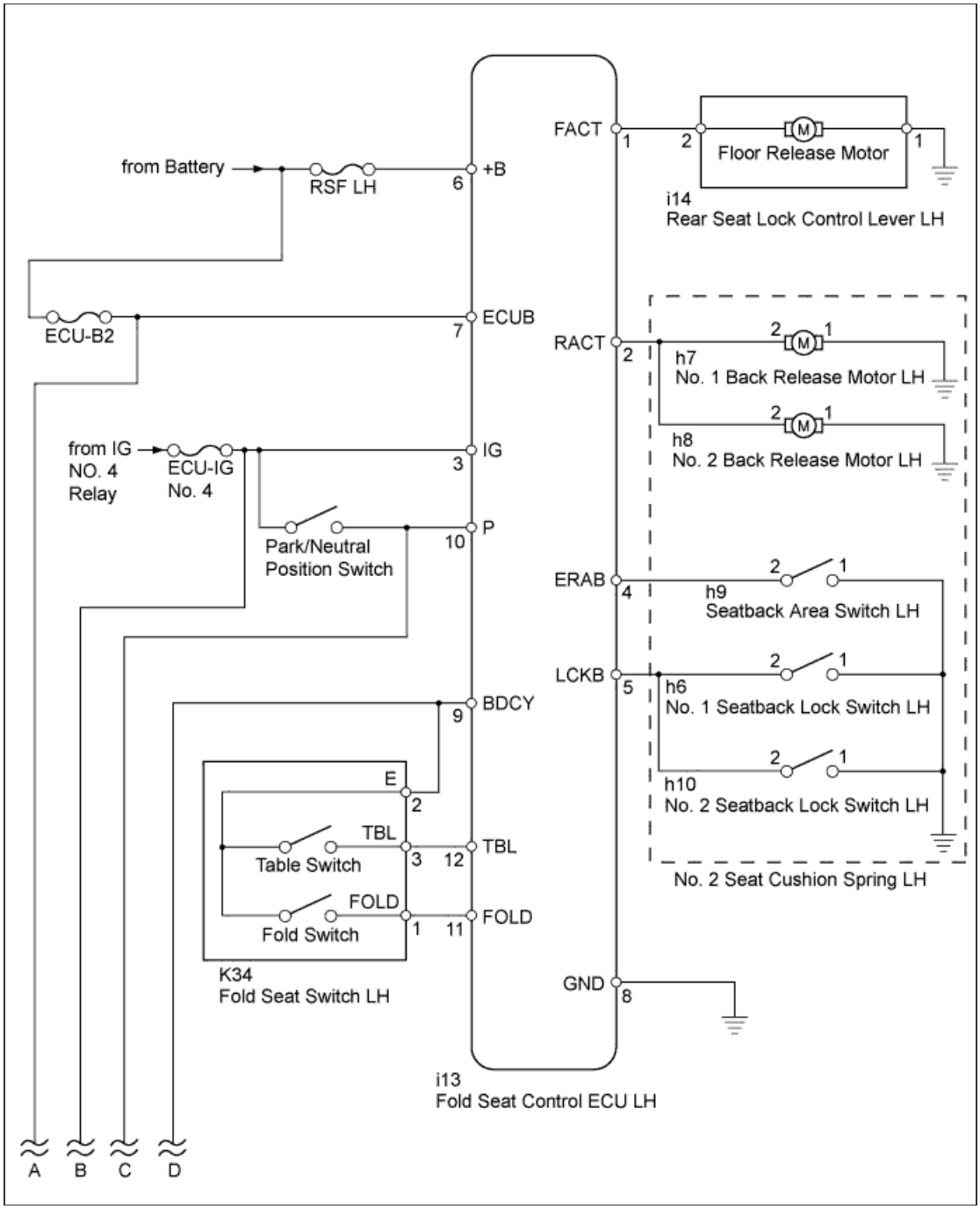

COWL SIDE JUNCTION BLOCK RH
- IG-NO. 4 RELAY
- ECU-IG No. 4 FUSE
- RSF LH FUSE
- RSF RH FUSE
ENGINE ROOM RELAY BLOCK
- ECU-B2 FUSE
PARK/NEUTRAL POSITION SWITCH

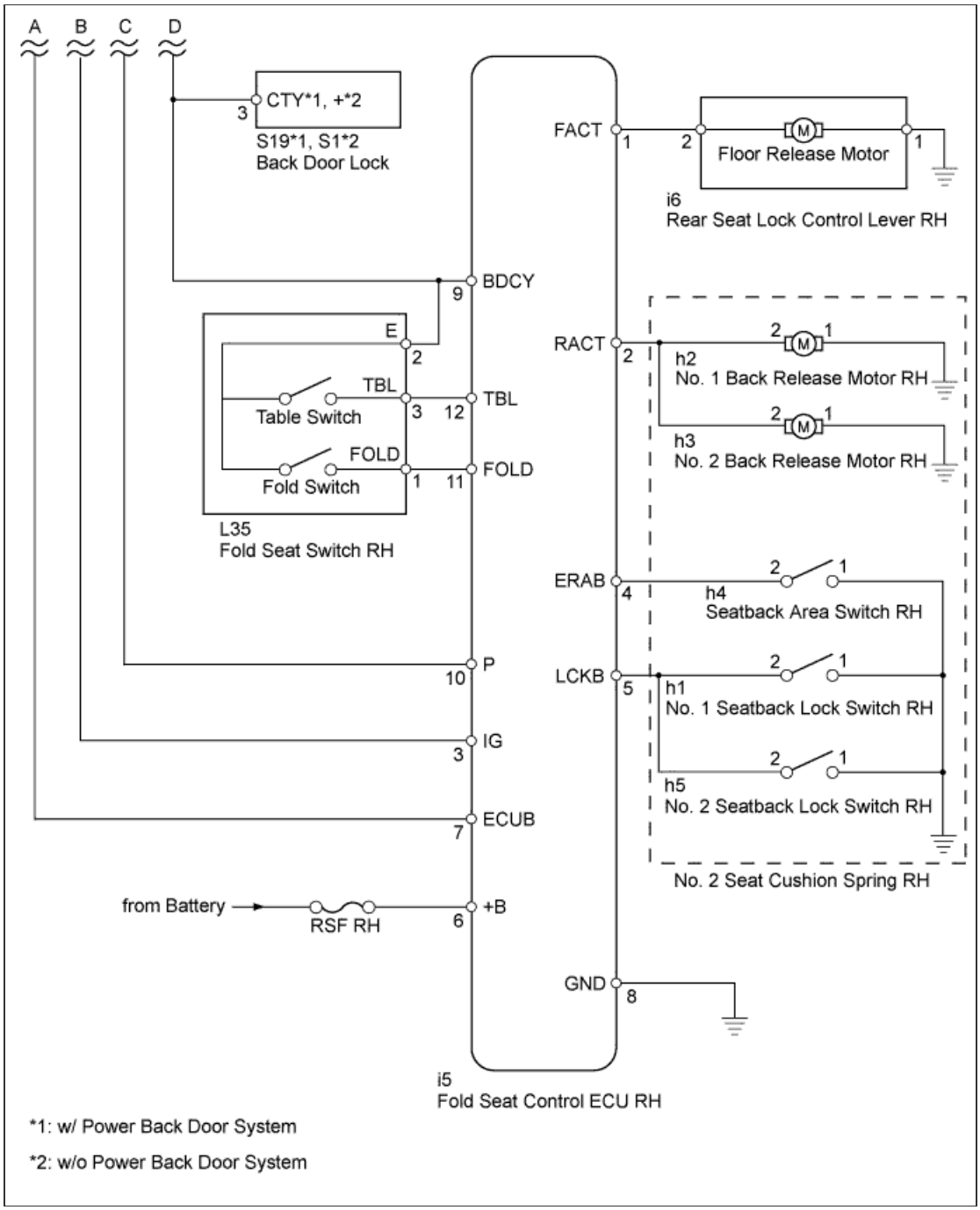
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NO. 2 SEAT CUSHION SPRING RH
- NO. 1 BACK RELEASE MOTOR RH
- NO. 2 BACK RELEASE MOTOR RH
- NO. 1 SEATBACK LOCK SWITCH RH
- NO. 2 SEATBACK LOCK SWITCH RH
- SEATBACK AREA SWITCH RH
NO. 2 SEAT CUSHION SPRING LH
- NO. 1 BACK RELEASE MOTOR LH
- NO. 2 BACK RELEASE MOTOR LH
- NO. 1 SEATBACK LOCK SWITCH LH
- NO. 2 SEATBACK LOCK SWITCH LH
- SEATBACK AREA SWITCH LH
FOLD SEAT CONTROL ECU RH
FOLD SEAT CONTROL ECU LH
REAR SEAT LOCK CONTROL LEVER LH
- FLOOR RELEASE MOTOR
REAR SEAT LOCK CONTROL LEVER RH
- FLOOR RELEASE MOTOR
T


FOLD SWITCH
TABLE SWITCH
TABLE SWITCH
FOLD SWITCH
FOLD SEAT SWITCH RH
BACK DOOR LOCK*
- BACK DOOR COURTESY LIGHT SWITCH
FOLD SEAT SWITCH LH
w/o Power Back Door System:
BACK DOOR LOCK
- BACK DOOR COURTESY LIGHT SWITCH
*: w/ Power Back Door System
T

for Preparation Click here





*1: w/ Power Back Door System

*2: w/o Power Back Door System

for Preparation Click here

FOLDING-UP SEAT DESCRIPTION

- The folding-up seat function electrically and mechanically stows and returns the rear No. 2 seat when the fold seat switch is operated.
- This system is used for both the left and right seats. Each system operates independently.

FUNCTIONS OF MAIN COMPONENT

Component	Function
Floor Release Motor	The fold seat control ECU provides the voltage that is used to operate the floor release motor. The floor release motor releases the rear No. 2 seat from the floor.
No. 1 Back Release Motor and No. 2 Back Release Motor	The fold seat control ECU provides the voltage that is used to operate the No. 1 back release motor and No. 2 back release motor. The No. 1 and No. 2 back release motors release the seatback of the rear No. 2 seat when it is locked in the original position.
Seatback Area Switch	The seatback area switch detects the position of the seatback (original position, table position).
No. 1 Seatback Lock Switch and No. 2 Seatback Lock Switch	The No. 1 and No. 2 seatback lock switches detect the lock/release status of the seatback.
Fold Seat Switch	Sends a rear No. 2 seat table or fold operation signal to the fold seat control ECU when operated. The rear No. 2 seat is folded down or stowed.

for Preparation Click here

HINT:

Use the following procedures to troubleshoot the rear power seat control system.

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. → Go to step 5

A

4.OVERALL ANALYSIS AND TROUBLESHOOTING

a. Terminals of ECU (Click here)

NEXT

5.REPAIR OR REPLACE

NEXT

6.CONFIRMATION TEST

NEXT

END

for Preparation Click here

CHECK POWER FOLDING-UP FUNCTION

CAUTION:

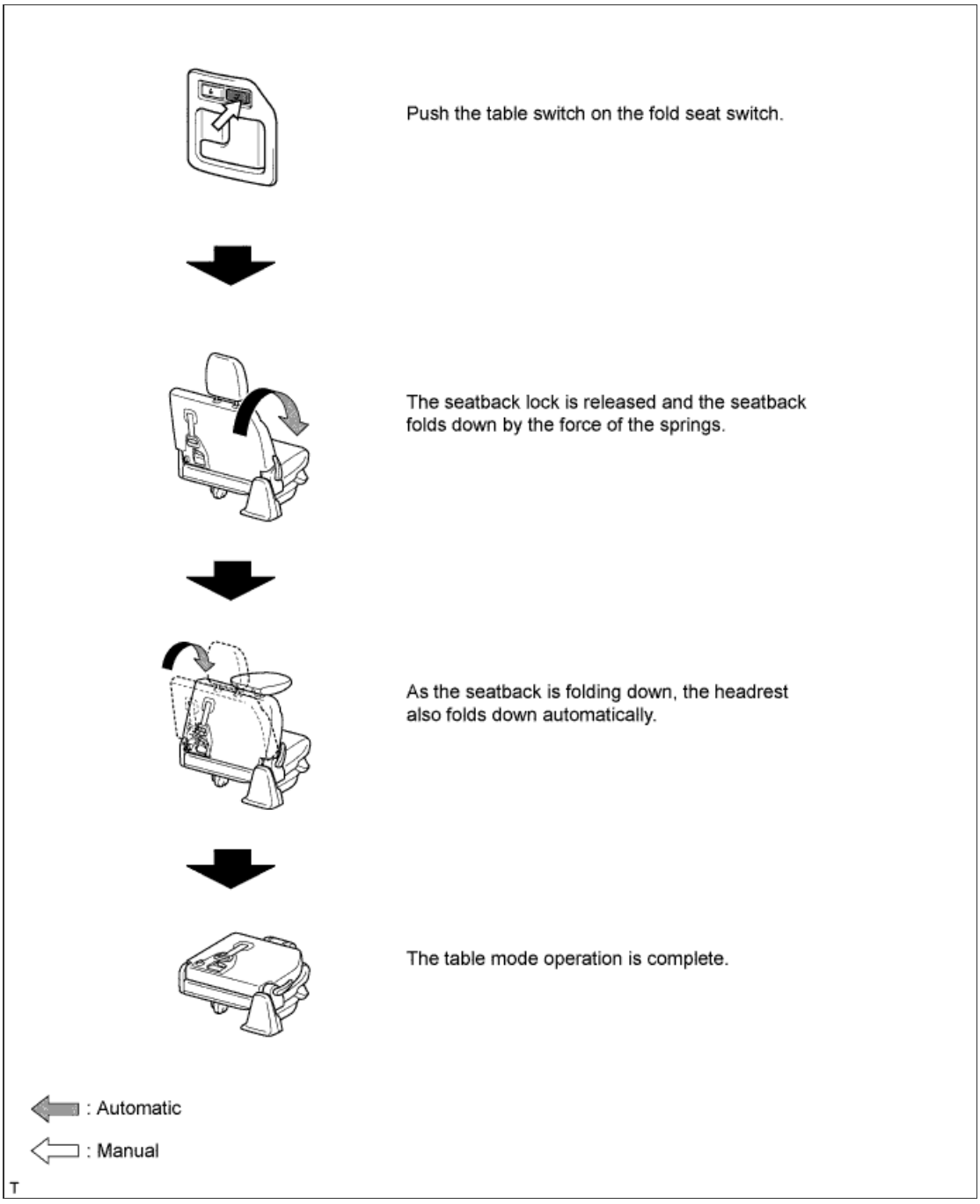
- **Make sure the surrounding area is safe and then perform each operation.**
- **Open the back door and perform each operation from the rear of the vehicle.**

HINT:

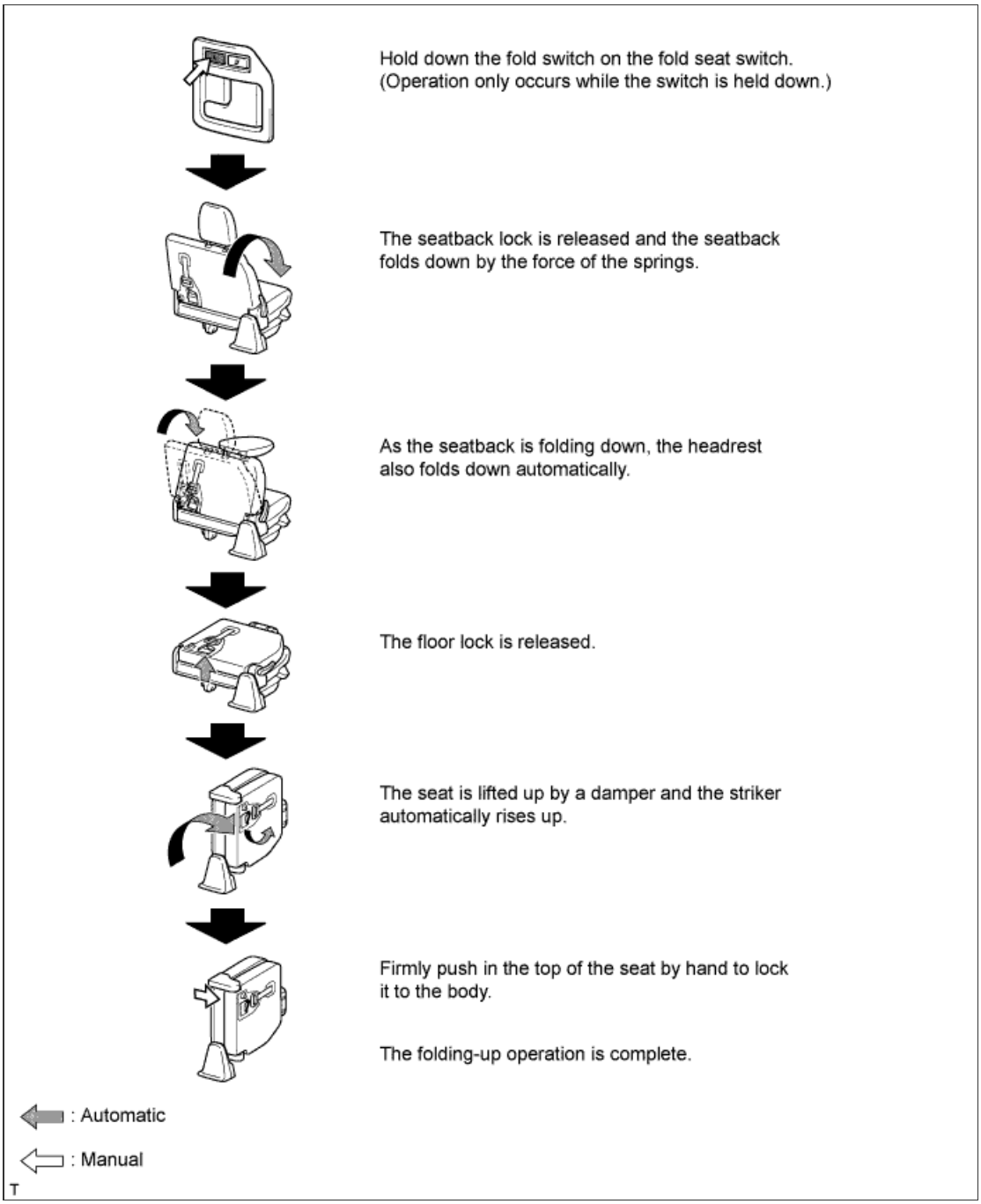
The power folding-up function operates when the following conditions are met:

- **The back door is open.**
- **The engine switch is off, or on (ACC) or on (IG) with the shift lever in P.**

a. Table mode operation (from the original position to the table position)



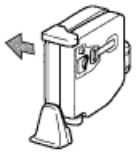
b. Folding-up operation (from the original position to the stowed position)



c. Return operation (from the stowed position to the original position)



Pull the lock release lever.



The lock is released.



Push the seatback down by hand and the striker is automatically stored at the same time.



Firmly push down the seat by hand to lock it to the floor.



Pull the lock release lever and pull up the seatback.



Pull up the headrest.

The return operation is complete.

: Automatic

: Manual

T

for Preparation Click here

HINT:

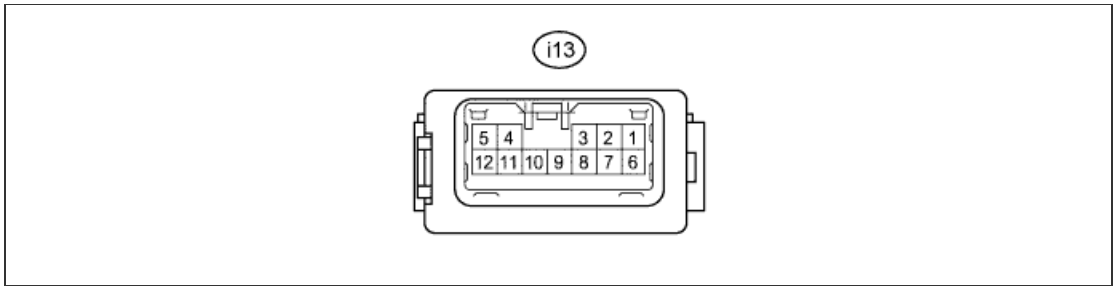
Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Rear Power Seat Control System (for Rear No. 2 Seat with Manual Folding-up Function)

Symptom	Suspected Area	See page
Folding-up seat function does not operate (LH and RH)	IG-NO. 4 relay	-
	ECU-B2 fuse	-
	ECU-IG No. 4 fuse	-
	Back door lock (Back door courtesy switch)	Click here
	Park/neutral position switch	Click here
	Harness or connector	-
Folding-up seat function does not operate (LH)	RSF LH fuse	-
	Fold seat switch LH	Click here
	Rear seat lock control lever LH	Click here
	No. 2 seat cushion spring LH	Click here
	Fold seat control ECU LH	-
	Harness or connector	-
Folding-up seat function does not operate (RH)	RSF RH fuse	-
	Fold seat switch RH	Click here
	Rear seat lock control lever RH	Click here
	No. 2 seat cushion spring RH	Click here
	Fold seat control ECU RH	-
	Harness or connector	-

for Preparation Click here

CHECK FOLD SEAT CONTROL ECU LH



a. Disconnect the i13 ECU connector.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
i13-6 (+B) - i13-8 (GND)	R - W-B	Power source	Always	11 to 14 V
i13-8 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
i13-7 (ECUB) - i13-8 (GND)	R - W-B	Power source	Always	11 to 14 V
i13-3 (IG) - i13-8 (GND)	G - W-B	Engine switch signal	Engine switch on (IG)	11 to 14 V
			Engine switch off	Below 1 V

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the i13 ECU connector.

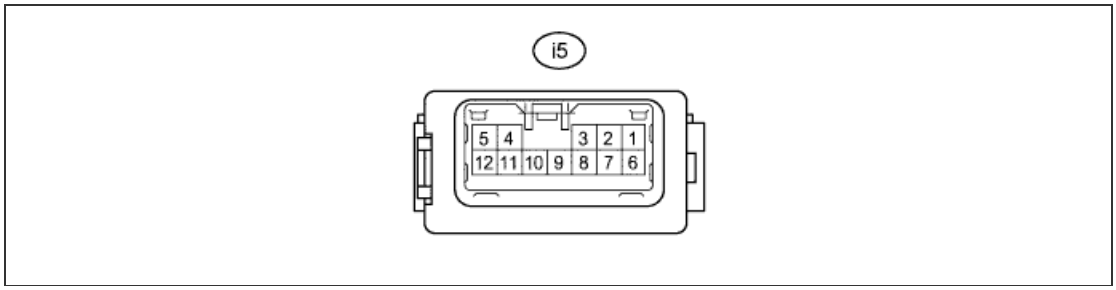
d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
i13-1 (FACT) - i13-8 (GND)	B - W-B	Floor release motor LH operation signal	Floor release motor LH operating	9 to 14 V
i13-2 (RACT) - i13-8 (GND)	L - W-B	No. 1 back release motor LH operation signal	No. 1 back release motor LH operating	9 to 14 V
		No. 2 back release motor LH operation signal	No. 2 back release motor LH operating	
i13-9 (BDCY) - i13-8 (GND)	W - W-B	Back door courtesy switch signal	Back door open	Below 1 V
			Back door closed	9 to 14 V
i13-12 (TBL) - i13-8 (GND)	Y - W-B	Fold seat switch LH signal (Table switch)	Back door open Fold seat switch LH (Table switch) off	9 to 14 V
			Back door open Fold seat switch LH (Table switch) on	Below 1 V
i13-11 (FOLD) - i13-8 (GND)	G - W-B	Fold seat switch LH signal (Fold switch)	Back door open Fold seat switch LH (Fold switch) off	9 to 14 V
			Back door open Fold seat switch LH (Fold switch) on	Below 1 V
i13-10 (P) - i13-8 (GND)	G - W-B	Park/neutral position switch signal	Engine switch on (IG) Park/neutral position switch in P position	9 to 14 V
			Engine switch on (IG) Park/neutral position switch not in P position	Below 1 V
			No. 1 seatback lock	

i13-5 (LCKB) - i13-8 (GND)	L - W-B	No. 1 seatback lock switch LH signal	switch LH off	9 to 14 V
			No. 1 seatback lock switch LH on	Below 1 V
		No. 2 seatback lock switch LH signal	No. 2 seatback lock switch LH off	9 to 14 V
			No. 2 seatback lock switch LH on	Below 1 V
i13-4 (ERAB) - i13-8 (GND)	BR - W-B	Seatback area switch LH signal	Seatback area switch LH off	9 to 14 V
			Seatback area switch LH on	Below 1 V

If the result is not as specified, the fold seat control ECU may have a malfunction.

CHECK FOLD SEAT CONTROL ECU RH



a. Disconnect the i5 ECU connector.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
i5-6 (+B) - i5-8 (GND)	L - W-B	Power source	Always	11 to 14 V
i5-8 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
i5-7 (ECUB) - i5-8 (GND)	R - W-B	Power source	Always	11 to 14 V
i5-3 (IG) - i5-8 (GND)	G - W-B	Engine switch signal	Engine switch on (IG)	11 to 14 V
			Engine switch off	Below 1 V

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the i5 ECU connector.

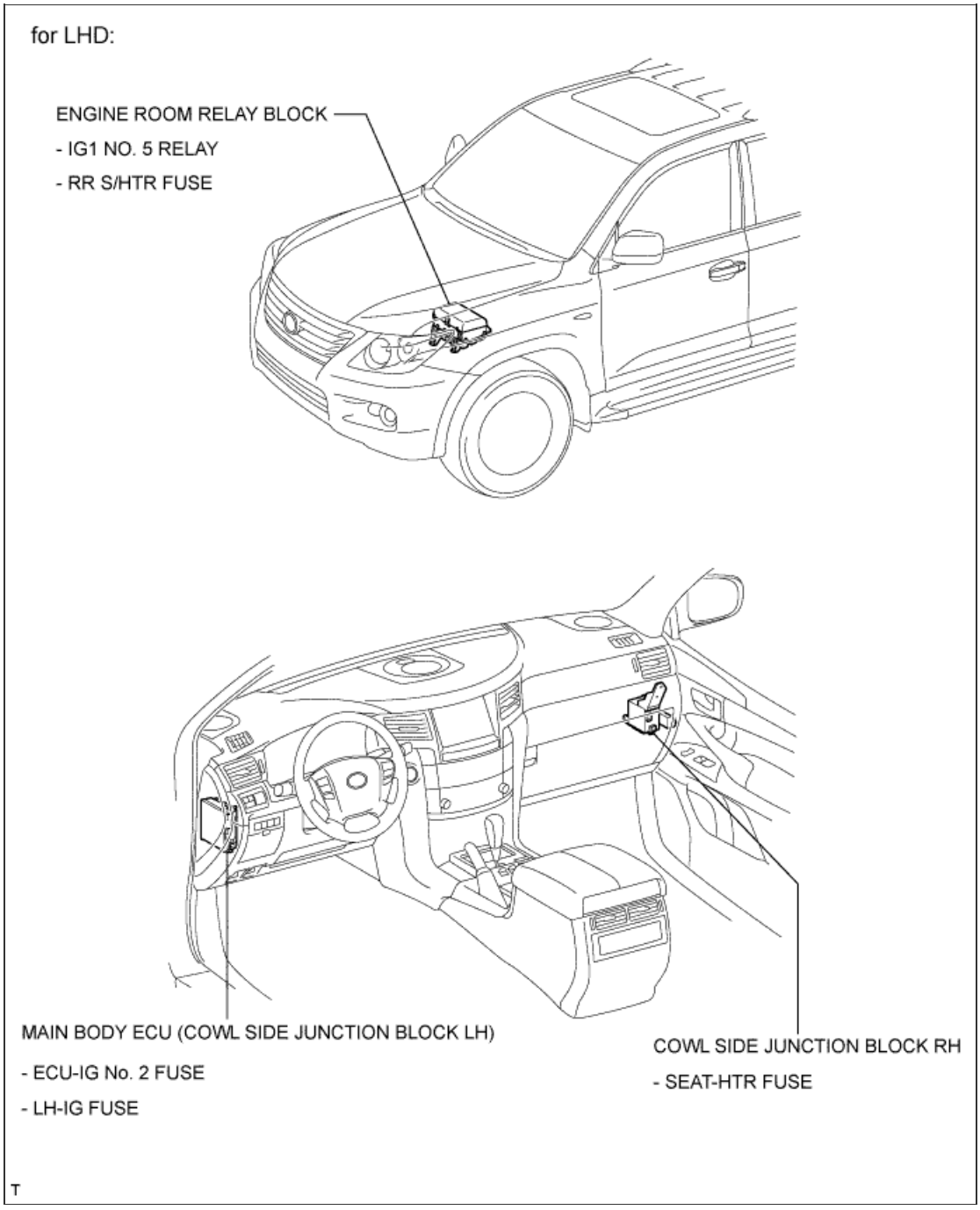
d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
i5-1 (FACT) - i5-8 (GND)	B - W-B	Floor release motor RH operation signal	Floor release motor RH operating	9 to 14 V
i5-2 (RACT) - i5-8 (GND)	L - W-B	No. 1 back release motor RH operation signal	No. 1 back release motor RH operating	9 to 14 V
		No. 2 back release motor RH operation signal	No. 2 back release motor RH operating	
i5-9 (BDCY) - i5-8 (GND)	W - W-B	Back door courtesy switch signal	Back door open	Below 1 V
			Back door closed	9 to 14 V
i5-12 (TBL) - i5-8 (GND)	Y - W-B	Fold seat switch RH signal (Table switch)	Back door open Fold seat switch RH (Table switch) off	9 to 14 V
			Back door open Fold seat switch RH (Table switch) on	Below 1 V
i5-11 (FOLD) - i5-8 (GND)	G - W-B	Fold seat switch RH signal (Fold switch)	Back door open Fold seat switch RH (Fold switch) off	9 to 14 V
			Back door open Fold seat switch RH (Fold switch) on	Below 1 V

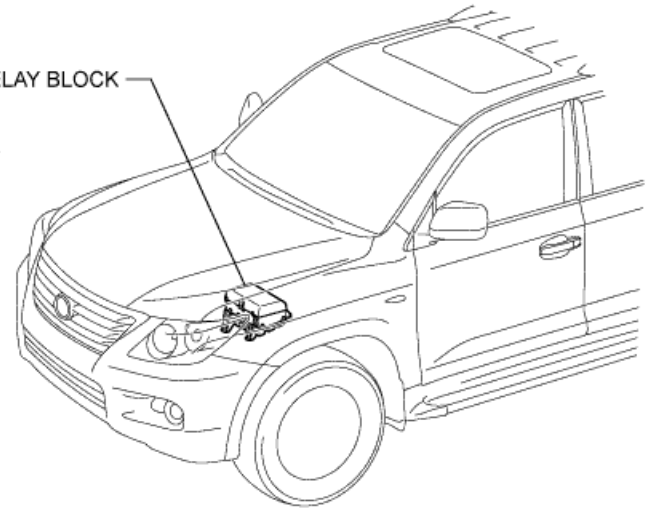
i5-10 (P) - i5-8 (GND)	G - W-B	Park/neutral position switch signal	Engine switch on (IG) Park/neutral position switch in P position	9 to 14 V
			Engine switch on (IG) Park/neutral position switch not in P position	Below 1 V
i5-5 (LCKB) - i5-8 (GND)	L - W-B	No. 1 seatback lock switch RH signal	No. 1 seatback lock switch RH off	9 to 14 V
			No. 1 seatback lock switch RH on	Below 1 V
		No. 2 seatback lock switch RH signal	No. 2 seatback lock switch RH off	9 to 14 V
			No. 2 seatback lock switch RH on	Below 1 V
i5-4 (ERAB) - i5-8 (GND)	BR - W-B	Seatback area switch RH signal	Seatback area switch RH off	9 to 14 V
			Seatback area switch RH on	Below 1 V

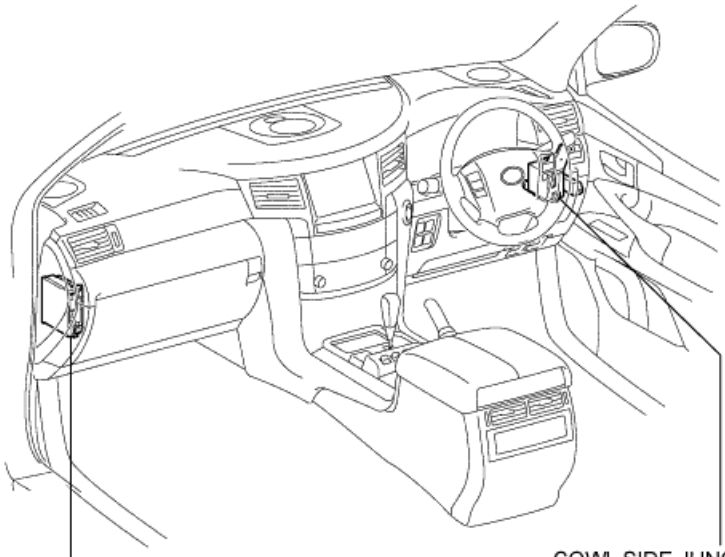
If the result is not as specified, the fold seat control ECU may have a malfunction.

for Preparation Click here

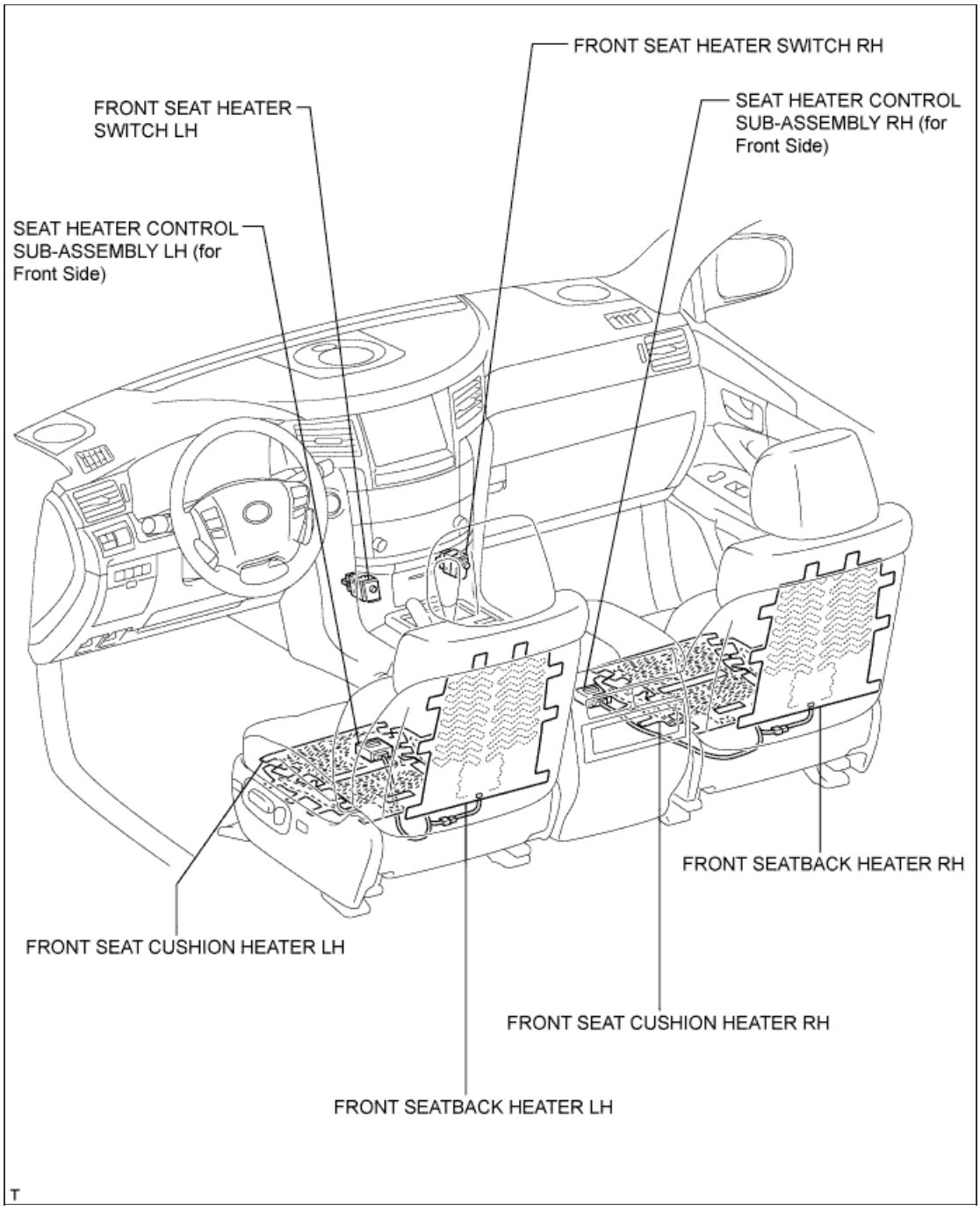


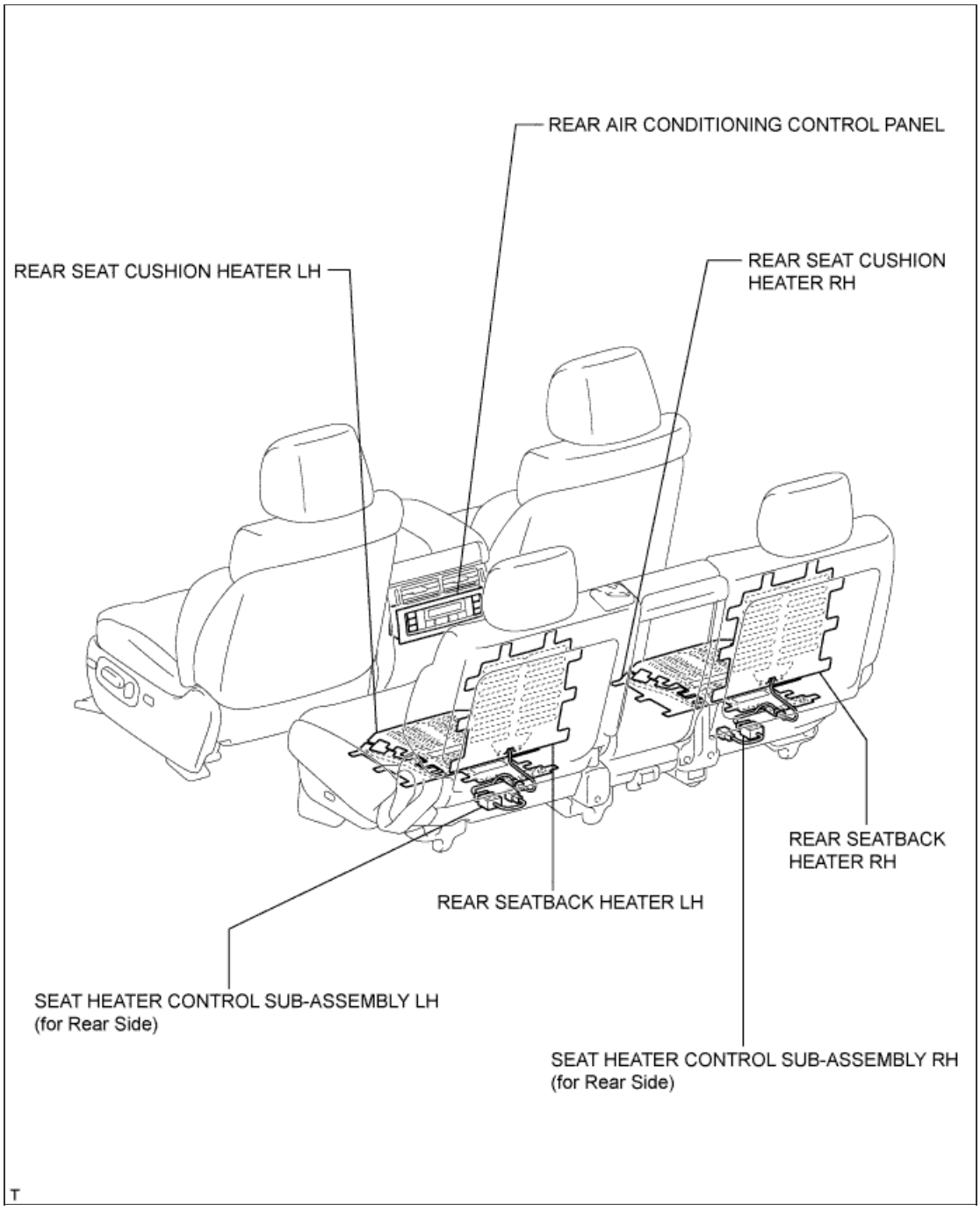
for RHD:


ENGINE ROOM RELAY BLOCK
- IG1 NO. 5 RELAY
- RR S/HTR RELAY

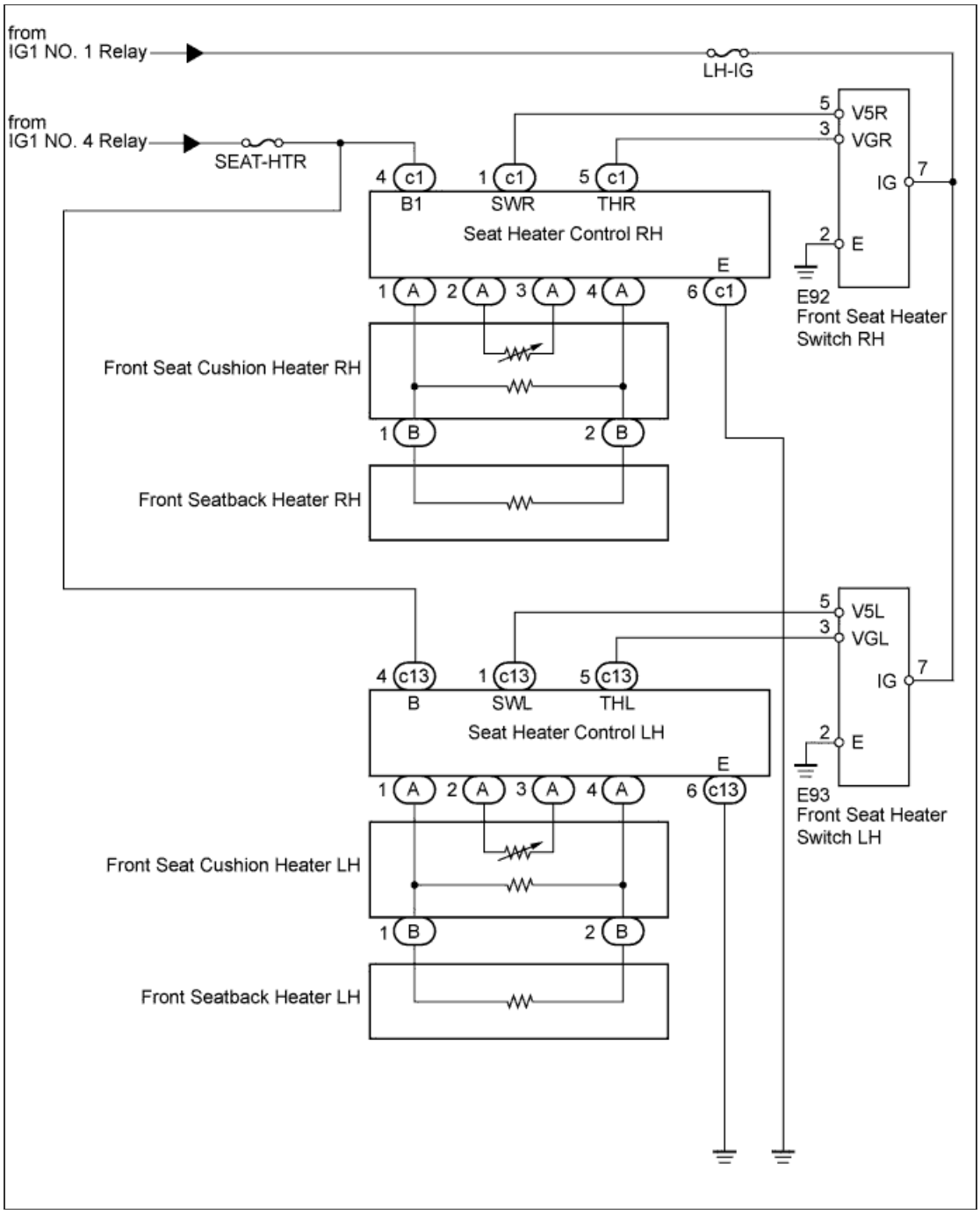

MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)
- ECU-IG No. 2 FUSE
- LH-IG FUSE
COWL SIDE JUNCTION BLOCK RH
- SEAT-HTR FUSE

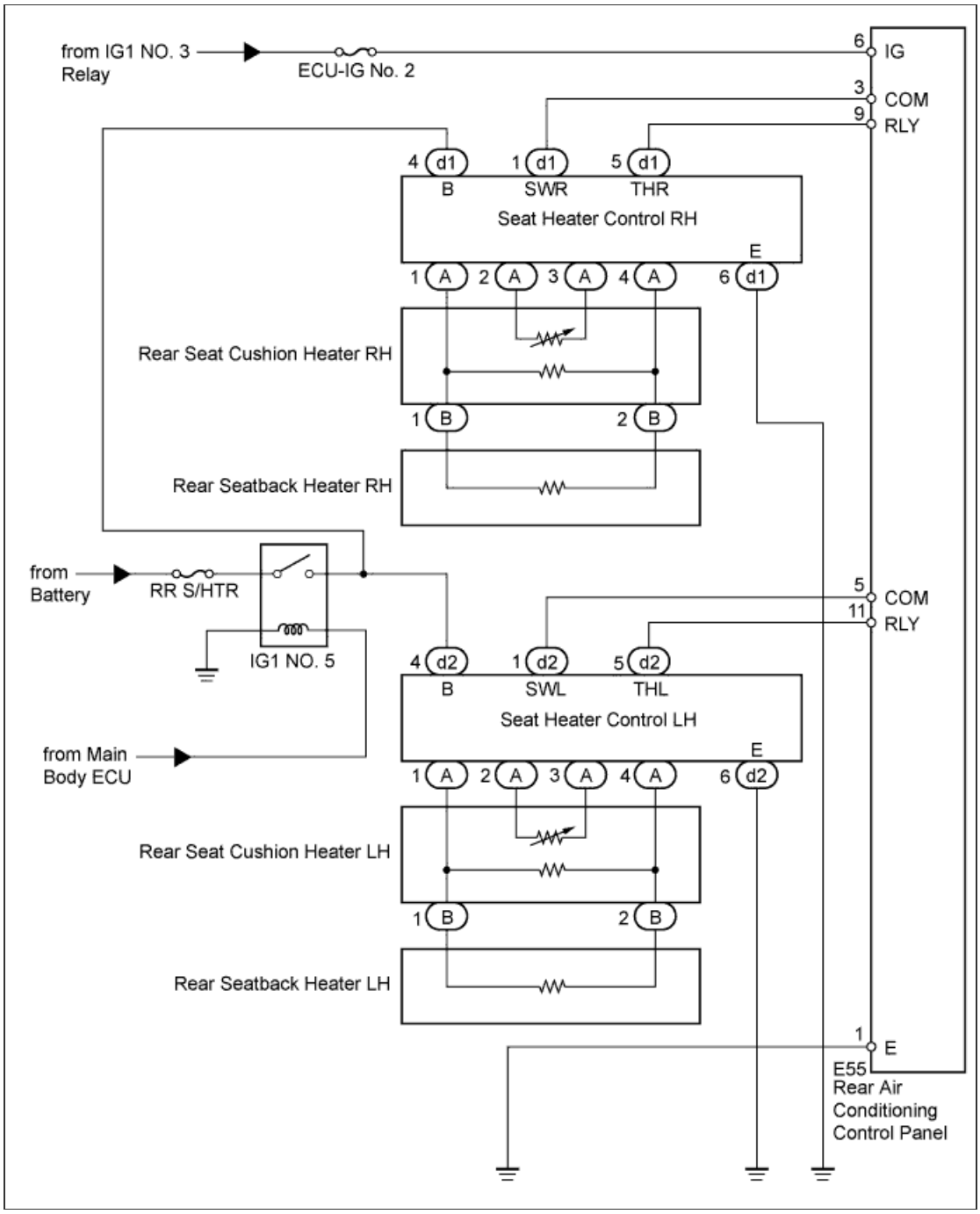
T


FRONT SEAT HEATER SWITCH RH
FRONT SEAT HEATER SWITCH LH
SEAT HEATER CONTROL SUB-ASSEMBLY RH (for Front Side)
SEAT HEATER CONTROL SUB-ASSEMBLY LH (for Front Side)
FRONT SEATBACK HEATER RH
FRONT SEAT CUSHION HEATER LH
FRONT SEAT CUSHION HEATER RH
FRONT SEATBACK HEATER LH
T


REAR AIR CONDITIONING CONTROL PANEL
REAR SEAT CUSHION HEATER LH
REAR SEAT CUSHION HEATER RH
REAR SEATBACK HEATER RH
REAR SEATBACK HEATER LH
SEAT HEATER CONTROL SUB-ASSEMBLY LH (for Rear Side)
SEAT HEATER CONTROL SUB-ASSEMBLY RH (for Rear Side)
T

for Preparation Click here




from IG1 NO. 3 Relay
ECU-IG No. 2
6 IG
3 COM
9 RLY
4 d1 B
1 d1 SWR
5 d1 THR
Seat Heater Control RH
E
1 A
2 A
3 A
4 A
6 d1
Rear Seat Cushion Heater RH
1 B
2 B
Rear Seatback Heater RH
from Battery
RR S/HTR
IG1 NO. 5
5 COM
11 RLY
4 d2 B
1 d2 SWL
5 d2 THL
Seat Heater Control LH
from Main Body ECU
E
1 A
2 A
3 A
4 A
6 d2
Rear Seat Cushion Heater LH
1 B
2 B
Rear Seatback Heater LH
1 E
E55 Rear Air Conditioning Control Panel

for Preparation Click here

GENERAL

a. By operating the seat heater switch which is located in the console box, the temperature can be controlled within the range of 30 to 40°C (86 to 104°F).

b. Whether the seat heater is on or off can be determined by checking if the seat heater switch indicator light is on or off.

c. The seat heaters of both seats are controlled by the seat heater controls, which are located under the respective seat.

for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Seat Heater System

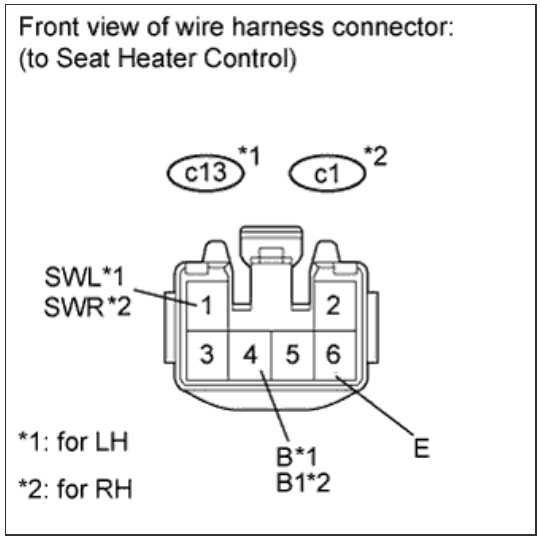
Symptom	Suspected Area	See page
Both Front Seat Heaters do not Operate	LH-IG fuse	-
	SEAT-HTR fuse	-
	Harness or connector	-
Front Seat Heater LH does not Operate	Front seat heater switch LH	Click here
	Seat heater control LH	Click here
	Front seat cushion heater LH	Click here
	Front seatback heater LH	Click here
	Harness or connector	-
Front Seat Heater RH does not Operate	Front seat heater switch RH	Click here
	Seat heater control RH	Click here
	Front seat cushion heater RH	Click here
	Front seatback heater RH	Click here
	Harness or connector	-
Both Rear Seat Heaters do not Operate	ECU-IG No. 2 fuse	-
	RR S/HTR fuse	-
	IG1 NO. 5 relay	-
	Rear air conditioning control panel	-
	Harness or connector	-
Rear Seat Heater LH does not Operate	Seat heater control LH	-
	Rear air conditioning control panel	-
	Rear seat cushion heater LH	Click here
	Rear seatback heater LH	Click here
	Harness or connector	-
Rear Seat Heater RH does not Operate	Seat heater control RH	-
	Rear air conditioning control panel	-
	Rear seat cushion heater RH	Click here
	Rear seatback heater RH	Click here
	Harness or connector	-

for Preparation Click here

1. INSPECT SEAT HEATER CONTROL SUB-ASSEMBLY (for Front Side)

a. Disconnect the c13 and c1 heater control connectors.

b. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LH

Tester Connection	Condition	Specified Condition
c13-6 (E) - Body ground	Always	Below 1 Ω

for RH

Tester Connection	Condition	Specified Condition
c1-6 (E) - Body ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

for LH

Tester Connection	Switch Condition	Specified Condition
c13-1 (SWL) - c13-6 (E)	Engine switch on (IG), seat heater switch off	Below 1 V
	Engine switch on (IG), seat heater switch on	11 to 14 V
c13-4 (B) - c13-6 (E)	Engine switch off	Below 1 V
	Engine switch on (IG)	11 to 14 V

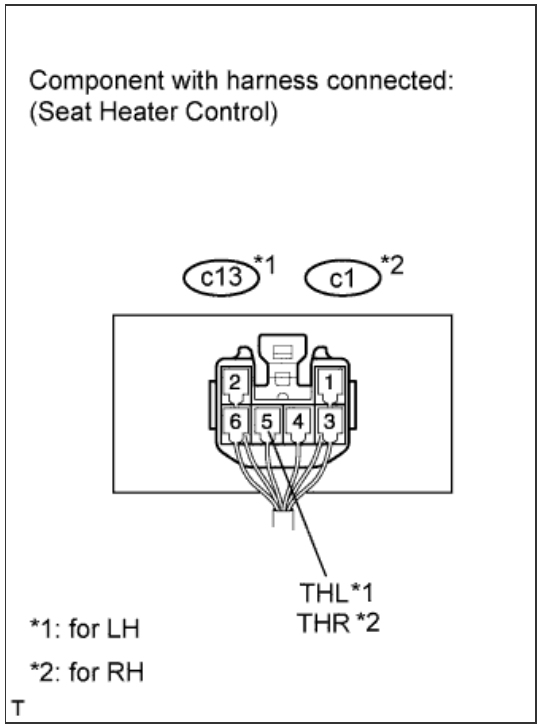
for RH

Tester Connection	Switch Condition	Specified Condition
c1-1 (SWR) - c1-6 (E)	Engine switch on (IG), seat heater switch off	Below 1 V
	Engine switch on (IG), seat heater switch on	11 to 14 V
c1-4 (B1) - c1-6 (E)	Engine switch off	Below 1 V
	Engine switch on (IG)	11 to 14 V

If the result is not as specified, there may be a malfunction on the wire harness side.

d. Connect the c13 and c1 heater control connectors.

e. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

for LH

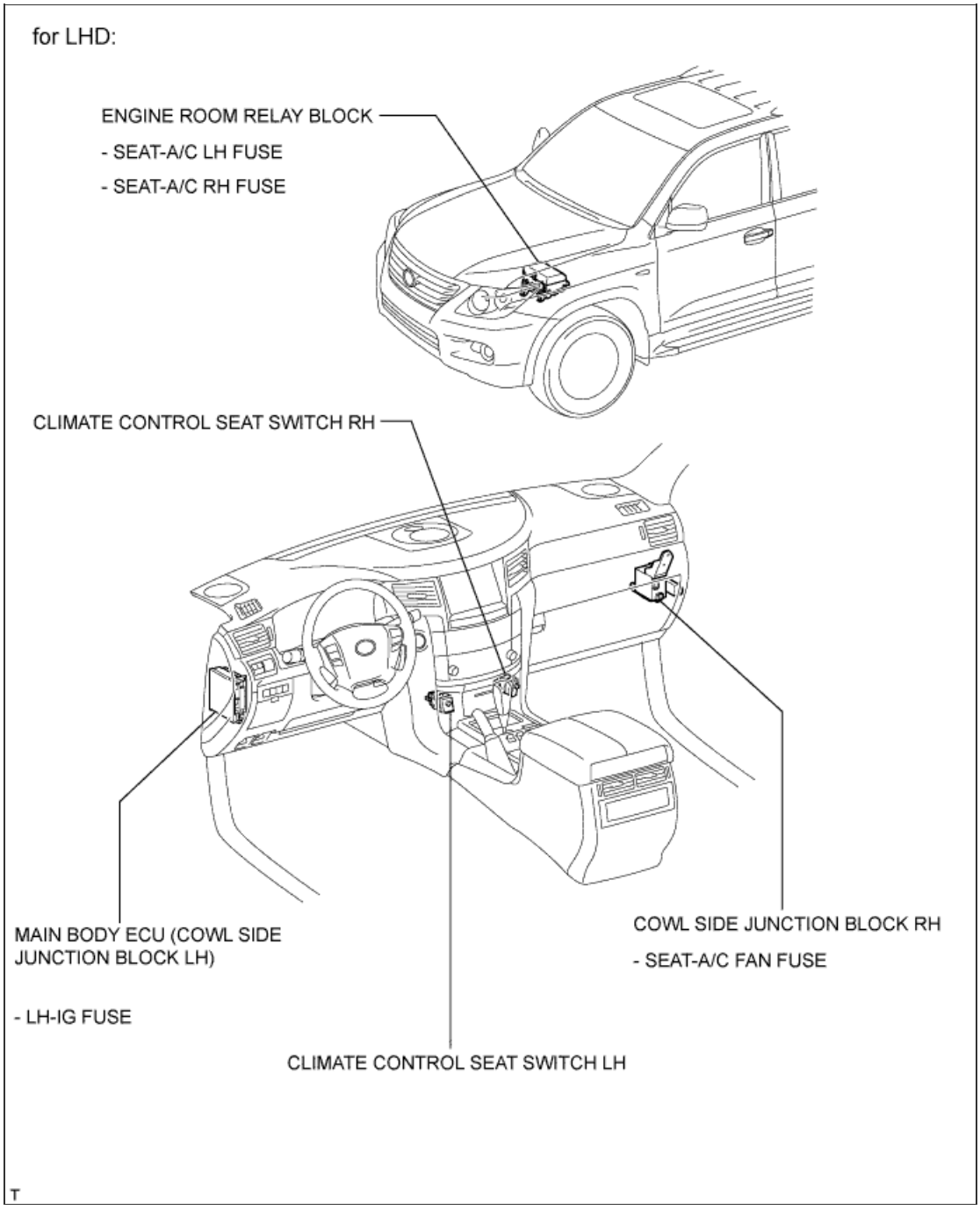
Tester Connection	Switch Condition	Specified Condition
c13-5 (THL) - Body ground	Engine switch on (IG), seat heater switch on, volume Min → Max	Gradual increase from below 1 V to 11 to 14 V

for RH

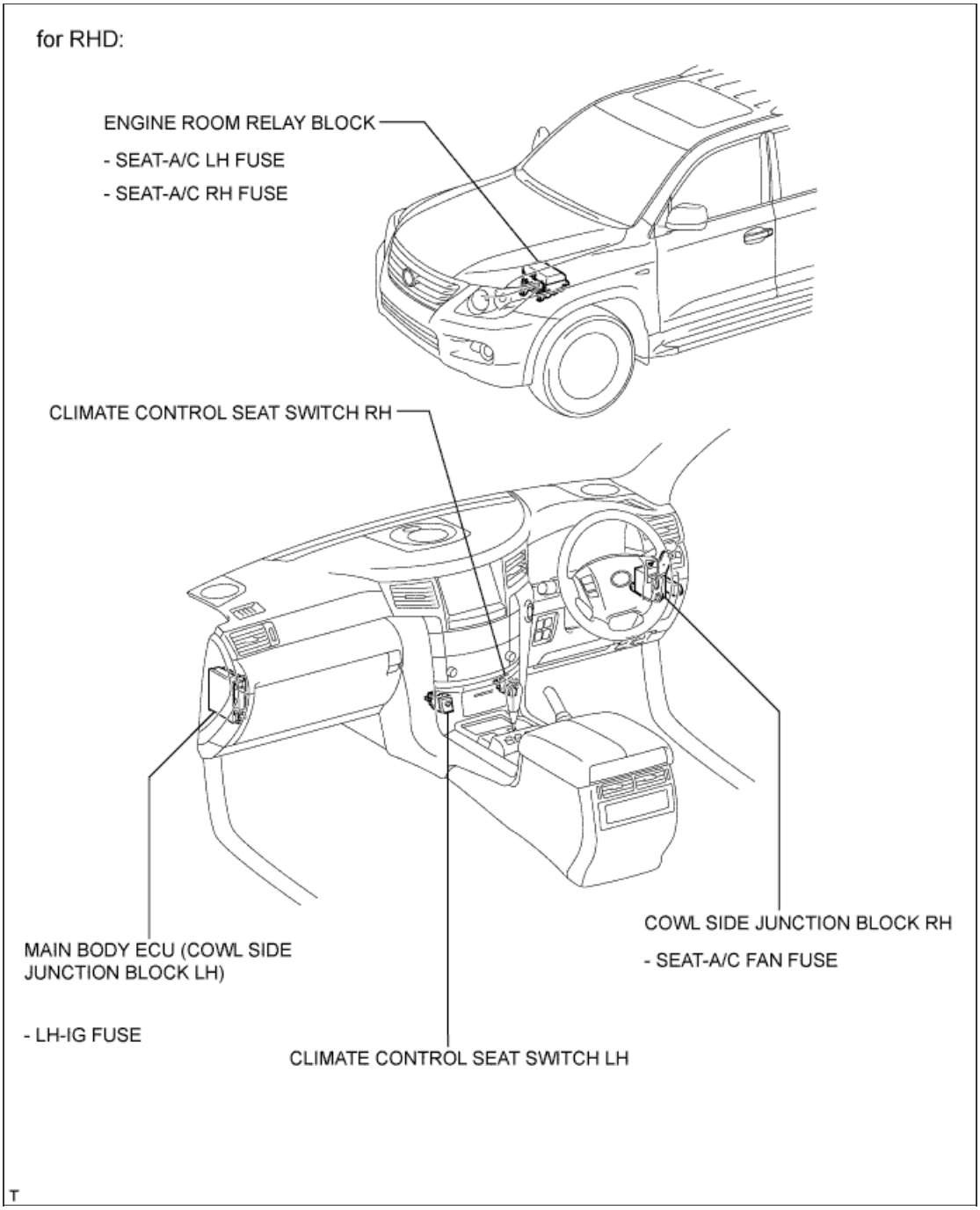
Tester Connection	Switch Condition	Specified Condition
c1-5 (THR) - Body ground	Engine switch on (IG), seat heater switch on, volume Min → Max	Gradual increase from below 1 V to 11 to 14 V

If the result is not as specified, the seat heater control may have a malfunction.

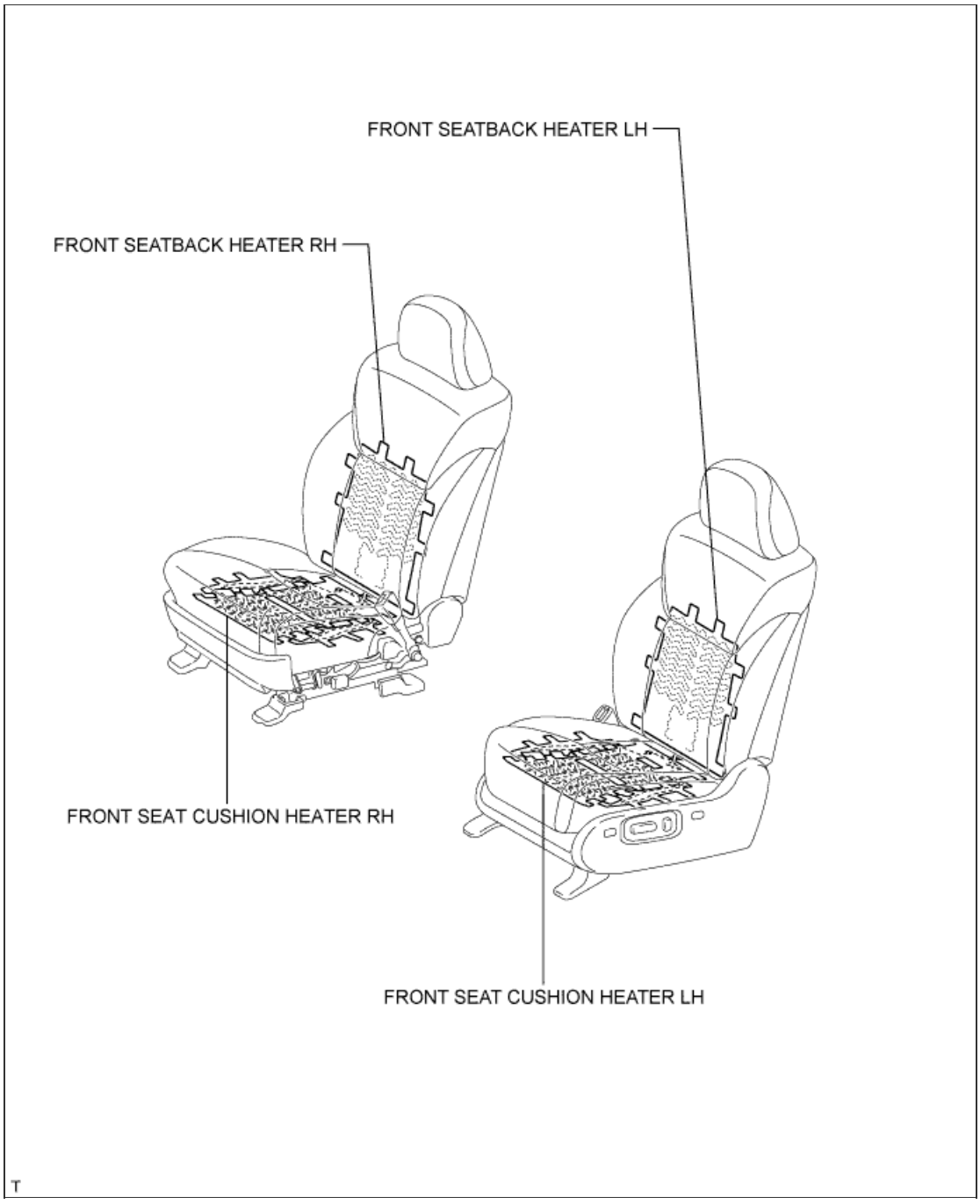
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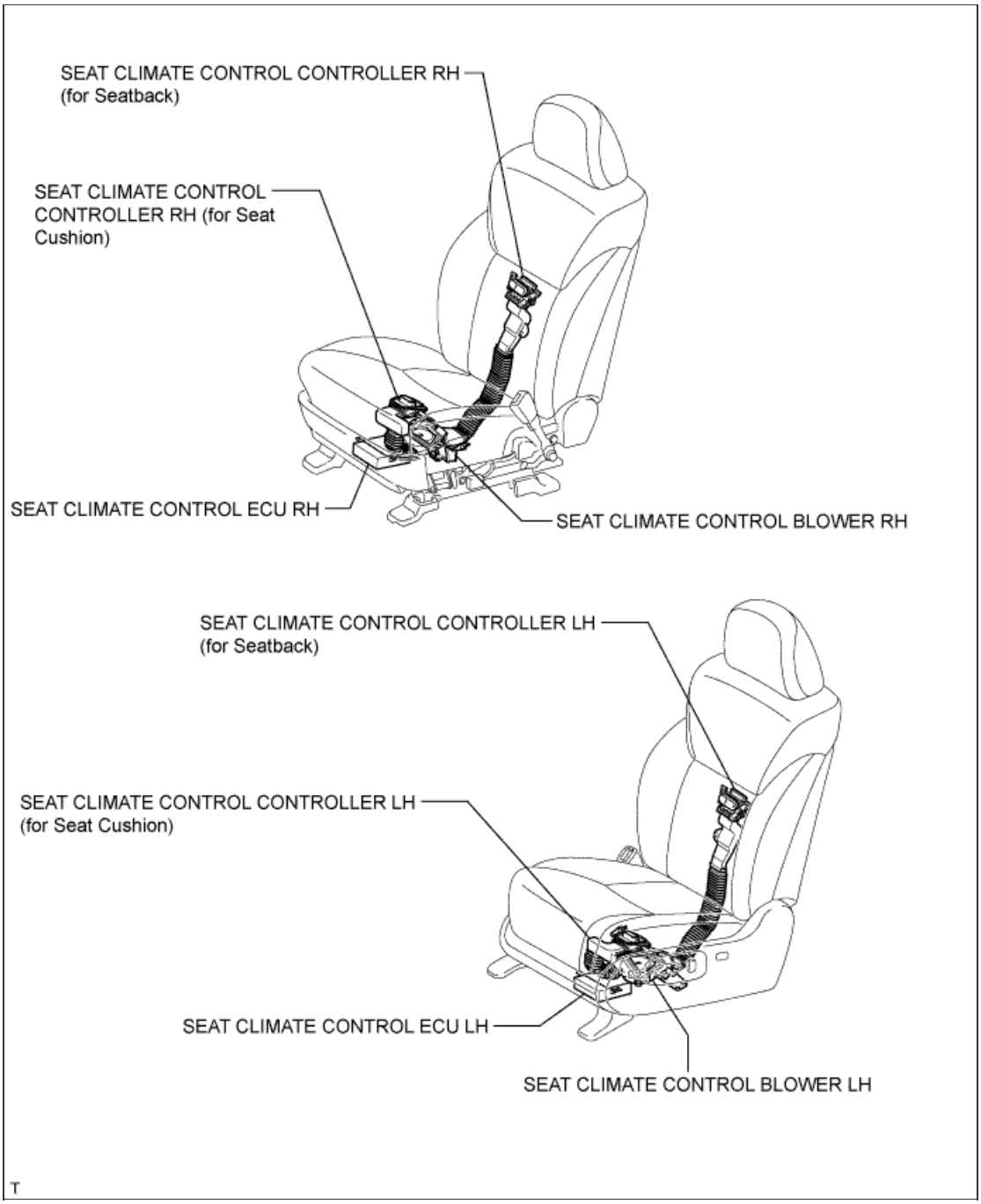
for RHD:


ENGINE ROOM RELAY BLOCK
- SEAT-A/C LH FUSE
- SEAT-A/C RH FUSE
CLIMATE CONTROL SEAT SWITCH RH
MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)
- LH-IG FUSE
CLIMATE CONTROL SEAT SWITCH LH
COWL SIDE JUNCTION BLOCK RH
- SEAT-A/C FAN FUSE

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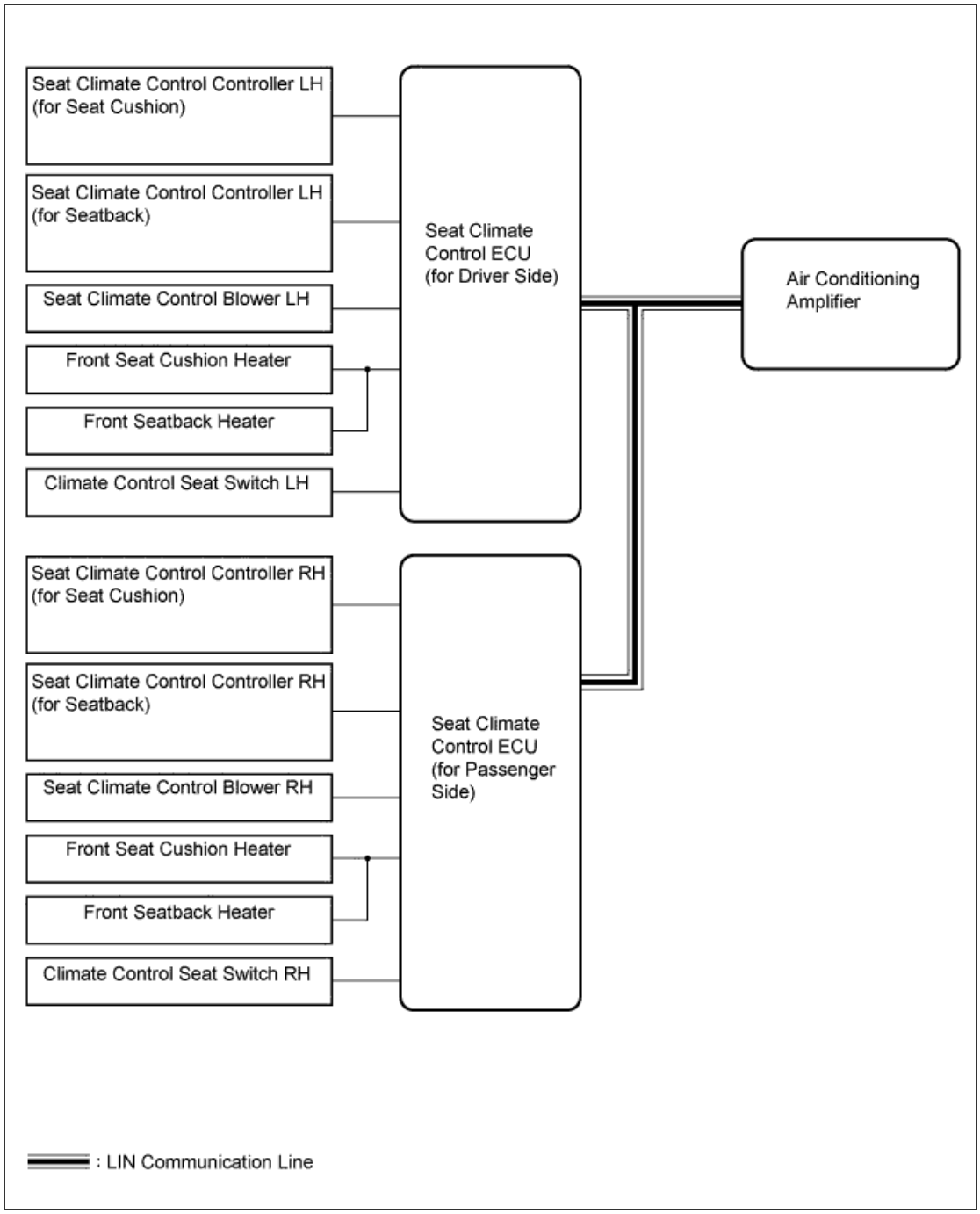

FRONT SEATBACK HEATER LH
FRONT SEATBACK HEATER RH
FRONT SEAT CUSHION HEATER RH
FRONT SEAT CUSHION HEATER LH

T


SEAT CLIMATE CONTROL CONTROLLER RH
(for Seatback)
SEAT CLIMATE CONTROL CONTROLLER RH (for Seat Cushion)
SEAT CLIMATE CONTROL ECU RH
SEAT CLIMATE CONTROL BLOWER RH
SEAT CLIMATE CONTROL CONTROLLER LH
(for Seatback)
SEAT CLIMATE CONTROL CONTROLLER LH
(for Seat Cushion)
SEAT CLIMATE CONTROL ECU LH
SEAT CLIMATE CONTROL BLOWER LH

T

for Preparation Click here



Communication Table

Sender	Receiver	Signal	Line
Climate control ECU	A/C amplifier	A/C signal	LIN

for Preparation Click here

GENERAL

The climate control seat system creates cold or warm air to increase the comfort of seats that have become hot or cold.
The air is heated or cooled by the Peltier element on the seat cushion pad and seatback. The air is then sent to the seat cushion and seatback by the blower installed under the seat. The blower is operated by pressing the climate control seat switch.
The climate control seat switch has several modes that vary the quantity of air to be sent to the seat. There are 7 modes in total: 3 cooled air modes, 3 heated air modes and ventilation mode.

HINT:

When the highest level for cooled air operates for 15 minutes, the quantity of air falls 1 level.

FUNCTION OF MAIN COMPONENT

Component	Outline
Climate Control Seat Switch	Selects between modes: 3 cooled air modes, 3 heated air modes and ventilation mode.
Seat Climate Control Controller (Thermistor)	Detects surface temperature of seatback and seat cushion.
Seat Climate Control Controller (TED)	Cools and heats through function of Peltier element.
Seat Climate Control Blower	Provides airflow to seatback and seat cushion upon receiving instructions from climate control ECU in accordance with seat climate control switch mode.
Seat Climate Control ECU	• Controls system based on signals from temperature sensor and seat climate control switch • While system is activated, only driver side climate control ECU outputs A/C signals. • Monitors output amperage of seat climate control blower.
Front Seat Heater (Seat Cushion and Seatback)	Fast acting seat heater warms seat in initial stage of heating mode.
Rear Seat Heater (Seat Cushion and Seatback)	Fast acting seat heater warms seat in initial stage of heating mode.

SYSTEM OPERATION

Function	Outline	Driver Seat	Front Passenger Seat
Normal control	This system operates the seat climate control blower located underneath the seat to provide airflow to the seat cushion and seatback. Airflow is warmed or cooled by the Peltier element in the seat climate control controller. The air that flows to the seat surface is distributed by passing through grooves that are provided on the seat pad surface. The air is then dissipated throughout seat surface through slab urethane foam and is discharged through the seat cover.	○	○
Power ON full-power control	This control outputs the maximum voltage to the seat climate control controller and seat climate control blower for approximately 15 minutes only when the conditions listed below have been met: • The engine switch is on (IG). • After the climate control seat switch is turned on, the switch mode is subsequently turned to max warm or	○	○

	max cool within approximately 10 minutes.		
A/C output control	The climate control seat ECU outputs an A/C signal to the A/C amplifier while it controls the climate control seat system. The climate control ECU sends a demand signal for A/C control to the A/C amplifier.	○	○

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the climate control seat system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.INSPECT COMMUNICATION FUNCTION OF LIN COMMUNICATION SYSTEM*

a. Using the intelligent tester, check if the LIN communication system is functioning normally.

Result

Result	Proceed to
LIN DTC is not output	A
LIN DTC is output	B

B. → Go to LIN COMMUNICATION SYSTEM (Click here)

A

4.CHECK FOR DTC*

a. Check for DTCs (Click here).

b. Clear the DTCs (Click here).

c. Recheck for DTCs (Click here).

Result

Result	Proceed to
DTC does not reoccur	A
DTC reoccurs	B

B. → Go to step 7

A

5.PROBLEM SYMPTOMS TABLE

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A

Fault is listed in problem symptoms table	B

B. → Go to step 7

A

6.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Data List / Active Test (Click here).

b. Terminals of ECU (Click here).

c. Operation Check (Click here).

NEXT

7.REPAIR OR REPLACE

NEXT

8.CONFIRMATION TEST

NEXT

END

for Preparation Click here

CLEAN AIR FILTER AND PERFORM DUCT INSPECTION

a. Remove the rear seatback assembly and rear seat cushion assembly.

b. Check if the duct of the seat climate control controller is disconnected or cracked.

c. Clean the air filter of the seat climate control controller.

HINT:

The amount of air passing through the seat climate control controller (Peltier) may decrease if one of the following occurs: 1) duct disconnection; 2) duct cracks; 3) severe clogging of the air filter; or 4) deterioration of blower performance. If any of these occurs, the thermistor operates excessively, which may cause the seat to be unable to heat up or cool down properly.

INSPECT CLIMATE CONTROL SEAT OPERATION

a. When the climate control seat switch is turned on, check that the seat heater and blower operate based on the seat temperature.

b. If the seat temperature increases as a result of the seat heater operation, check that the seat heater operation stops and the blower operation continues.

HINT:

Based on the cabin temperature, seat temperature, etc., the seat heater operation time varies.

for Preparation Click here

HINT:

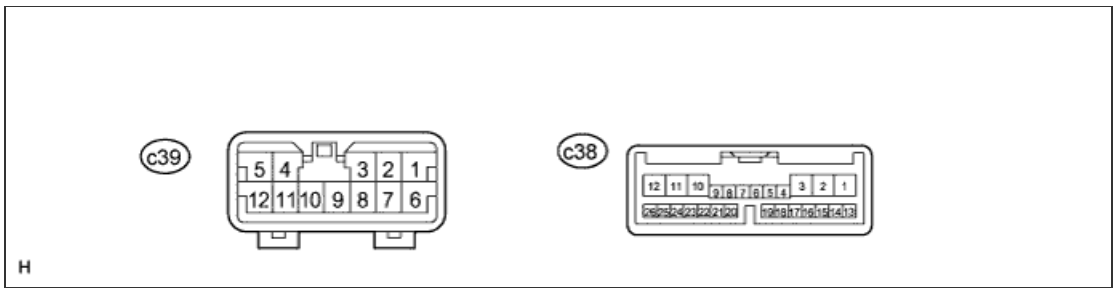
- **Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.**
- **Inspect the fuses and relays related to the system before inspecting the suspected areas below.**
- **Problem symptoms may occur if the functions of the electric power control system malfunction. Follow the "How to Proceed with Troubleshooting" procedures.**
- **The electrical equipment operation may be limited by the load control of the electric power control system. Follow the "How to Proceed with Troubleshooting" procedures.**

Climate Control Seat System

Symptom	Suspected Area	See page
Climate Control System does not Operate on Driver Side	Seat climate control ECU	Click here
	Climate control seat switch	Click here
	Harness or connector	Click here
Climate Control System does not Operate on Passenger Side	Seat climate control ECU	Click here
	Climate control seat switch	Click here
	Harness or connector	Click here

for Preparation Click here

CHECK SEAT CLIMATE CONTROL ECU LH



a. Disconnect the c38 and c39 ECU connectors.

b. Measure the voltage and resistance of the wire harness side connectors.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
c38-1 (IG) - Body ground	G - Body ground	Power source	Engine switch on (IG)	11 to 14 V
c38-2 (B) - Body ground	G - Body ground	Power source	Always	11 to 14 V
c38-12 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the c38 and c39 ECU connectors.

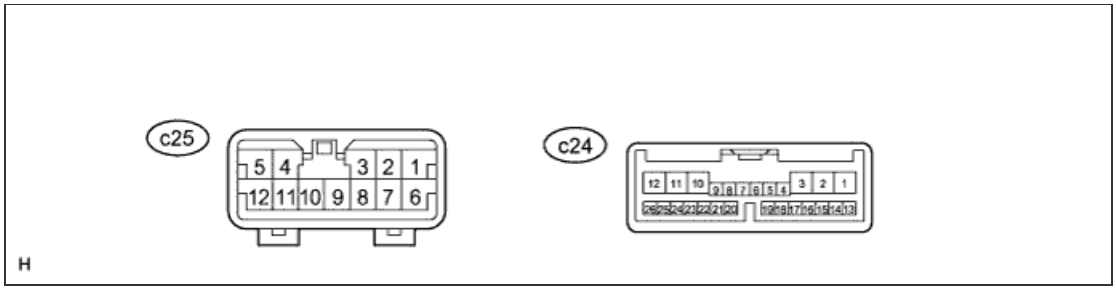
d. Measure the voltage and resistance of the connectors.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
c39-1 (B) - Body ground	W - Body ground	Power supply for seat heater	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch max warm	11 to 14 V
c39-5 (E) - Body ground	B - Body ground	Ground	Always	Below 1 Ω
c39-9 (H5) - Body ground	LG - Body ground	Seat heater temperature signal	Engine switch off	Below 1 V
			Engine switch on (IG)	1 to 4 V
c39-10 (HS) - Body ground	O - Body ground	Seat heater temperature signal ground	Always	Below 1 Ω
c38-4 (BFC+) - Body ground	LG - Body ground	Seat climate control blower signal (for seat cushion)	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch on	11 to 14 V
c38-5 (BCS) - Body ground	L - Body ground	Seat climate control blower signal (for seat cushion)	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch on (blower position)	3 to 8 V
c38-6 (BFC-) - Body ground	B - Body ground	Seat climate control blower signal (for seat cushion)	Always	Below 1 Ω
c38-7 (TDC-) - Body ground	L - Body ground	Power supply for seat cushion Peltier element (Cool)	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch max cool	Pulse generation

c38-8 (TDC+) - Body ground	R - Body ground	Power supply for seat cushion Peltier element (Warm)	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch max warm	Pulse generation
c38-9 (TDB-) - Body ground	SB - Body ground	Power supply for seatback Peltier element (COOL)	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch max cool	Pulse generation
c38-10 (TDB+) - Body ground	R - Body ground	Power supply for seatback Peltier element (Warm)	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch max warm	Pulse generation
c38-14 (V5) - Body ground	B - Body ground	Climate control seat switch signal	Engine switch on (IG)	5 V
c38-15 (VG) - Body ground	BR - Body ground	Climate control seat switch signal ground	Always	Below 1 Ω
c38-16 (TCS) - Body ground	V - Body ground	Seat climate control controller temperature signal ground (for seat cushion)	Always	Below 1 Ω
c38-17 (TBS) - Body ground	GR - Body ground	Seat climate control controller temperature signal ground (for seatback)	Always	Below 1 Ω
c38-18 (VS) - Body ground	W - Body ground	Climate control seat switch signal	Engine switch on (IG) Climate control seat switch max cool	Below 1 V
			Engine switch on (IG) Climate control seat switch max warm	5 V
c38-19 (TC5) - Body ground	Y - Body ground	Seat climate control controller temperature signal (for seat cushion)	Engine switch off	Below 1 V
			Engine switch on (IG)	1 to 4 V
c38-20 (TB5) - Body ground	G - Body ground	Seat climate control controller temperature signal (for seatback)	Engine switch off	Below 1 V
			Engine switch on (IG)	1 to 4 V
c38-21 (IND) - Body ground	R - Body ground	Illumination signal	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch on	11 to 14 V

If the result is not as specified, the ECU may have a malfunction.

CHECK SEAT CLIMATE CONTROL ECU RH



a. Disconnect the c24 and c25 ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
c24-1 (IG) - Body ground	G - Body ground	Power source	Engine switch on (IG)	11 to 14 V
c24-2 (B) - Body ground	G - Body ground	Power source	Always	11 to 14 V
c24-11 (VER) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
c24-12 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the c24 and c25 ECU connectors.

d. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
c25-1 (B) - Body ground	W - Body ground	Power supply for seat heater	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch max warm	11 to 14 V
c25-5 (E) - Body ground	B - Body ground	Ground	Always	Below 1 Ω
c25-9 (H5) - Body ground	LG - Body ground	Seat heater temperature signal	Engine switch off	Below 1 V
			Engine switch on (IG)	1 to 4 V
c25-10 (HS) - Body ground	O - Body ground	Seat heater temperature signal ground	Always	Below 1 Ω
c24-4 (BFC+) - Body ground	LG - Body ground	Seat climate control blower signal (for seat cushion)	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch on	11 to 14 V
c24-5 (BCS) - Body ground	L - Body ground	Seat climate control blower signal (for seat cushion)	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch on (blower position)	3 to 8 V
c24-6 (BFC-) - Body ground	B - Body ground	Seat climate control blower signal (for seat cushion)	Always	Below 1 Ω
c24-7 (TDC-) - Body ground	Y - Body ground	Power supply for seat cushion Peltier element (Cool)	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch max cool	Pulse generation
c24-8 (TDC+) - Body ground	R - Body ground	Power supply for seat cushion Peltier element (Warm)	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch max warm	Pulse generation
c24-9 (TDB-) - Body ground	SB - Body ground	Power supply for seatback Peltier element (Cool)	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch max cool	Pulse generation
c24-10 (TDB+) - Body ground	R - Body ground	Power supply for seatback Peltier element (Warm)	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch max warm	Pulse generation
c24-14 (V5) - Body ground	B - Body ground	Climate control seat switch signal	Engine switch on (IG)	5 V
c24-15 (VG) - Body		Climate control seat		

ground	BR - Body ground	switch signal ground	Always	Below 1 Ω
c24-16 (TCS) - Body ground	V - Body ground	Seat climate control controller temperature signal ground (for seat cushion)	Always	Below 1 Ω
c24-17 (TBS) - Body ground	GR - Body ground	Seat climate control controller temperature signal ground (for seatback)	Always	Below 1 Ω
c24-18 (VS) - Body ground	W - Body ground	Climate control seat switch signal	Engine switch on (IG) Climate control seat switch max cool	Below 1 V
			Engine switch on (IG) Climate control seat switch max warm	5 V
c24-19 (TC5) - Body ground	L - Body ground	Seat climate control controller temperature signal (for seat cushion)	Engine switch off	Below 1 V
			Engine switch on (IG)	1 to 4 V
c24-20 (TB5) - Body ground	G - Body ground	Seat climate control controller temperature signal (for seatback)	Engine switch off	Below 1 V
			Engine switch on (IG)	1 to 4 V
c24-21 (IND) - Body ground	R - Body ground	Illumination signal	Engine switch on (IG) Climate control seat switch off	Below 1 V
			Engine switch on (IG) Climate control seat switch on	11 to 14 V

If the result is not as specified, the ECU may have a malfunction.

for Preparation Click here

CHECK DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Trouble Codes.

e. Check the DTCs.

CLEAR DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Trouble Codes.

e. Clear the DTCs.

for Preparation Click here

READ DATA LIST

HINT:

Using the intelligent tester to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Warm up the engine.

b. Turn the engine switch off.

c. Connect the intelligent tester to the DLC3.

d. Turn the engine switch on (IG).

e. Turn the intelligent tester on.

f. Enter the following menus: Body / (desired system) / Data List.

g. According to the display on the intelligent tester, read the Data List.

Front Left Seat A/C

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Cushion Temp	Seat cushion temperature sensor signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-
Seatback Temp	Seatback temperature sensor signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-
Seat Heat Temp	Seat heater temperature sensor signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-
Cushion Blower	Seat cushion blower signal / MIN: 0, MAX: 31	Within range from 0 to 31	-
Cushion Duty	Seat cushion peltier output signal / MIN: -100%, MAX: 100%	Within range from -100 to 100%	-
Seatback Duty	Seat heater target temperature signal / MIN: -100%, MAX: 100%	Within range from -100 to 100%	-
Seat Target Temp	Seat heater target temperature sensor signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-
+B	Power source / MIN: 0, MAX: 20	Within range from 11 to 14	-
Number of Trouble Codes	Number of Past DTCs / MIN: 0, MAX: 255	Within range from 0 to 255	-

Front Right Seat A/C

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Cushion Temp	Seat cushion temperature sensor signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-
Seatback Temp	Seatback temperature sensor signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-
Seat Heat Temp	Seat heater temperature sensor signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-
Cushion Blower	Seat cushion fan blower signal / MIN: 0, MAX: 31	Within range from 0 to 31	-
Cushion Duty	Seat cushion peltier output signal / MIN: -100%, MAX: 100%	Within range from -100 to 100%	-
Seatback Duty	Seatback peltier output signal / MIN: -100%, MAX: 100%	Within range from -100 to 100%	-
Seat Target Temp	Seat heater target temperature signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-
+B	Power source / MIN: 0, MAX: 20	Within range from 11 to 14	-
Number of Trouble	Number of Past DTCs / MIN: 0, MAX: 255	Within range from 0 to 255	-

Codes			

PERFORM ACTIVE TEST

HINT:

Using the intelligent tester to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

a. Warm up the engine.

b. Turn the engine switch off.

c. Connect the intelligent tester to the DLC3.

d. Turn the engine switch on (IG).

e. Turn the intelligent tester on.

f. Enter the following menus: Body / (desired system) / Active Test.

g. According to the display on the intelligent tester, perform the Active Test.

Front Left Seat A/C

Tester Display	Test Part	Control Range	Diagnostic Note
Seat Heater Target Temperature	Seat heater target operation	0 to 85°C (5°C increments) {32 to 185°F (9°F increments)}	-
Airflow	Airflow operation	OFF / Low / High	-
Warm air	Warm air operation	OFF / ON	-
Cool air	Cool air operation	OFF / ON	-

Front Right Seat A/C

Tester Display	Test Part	Control Range	Diagnostic Note
Seat Heater Target Temperature	Seat heater target operation	0 to 85°C (5°C increments) {32 to 185°F (9°F increments)}	-
Airflow	Airflow operation	OFF / Low / High	-
Warm air	Warm air operation	OFF / ON	-
Cool air	Cool air operation	OFF / ON	-

for Preparation Click here

HINT:

If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.

Climate Control Seat System

DTC Code	Detection Item	Trouble Area	See page
B14F0	Cushion Peltier Temperature Sensor Malfunction	- Seat climate control controller - Seat climate control ECU - Harness or connector	Click here
B14F1	Seatback Peltier Temperature Sensor Malfunction	- Seat climate control controller - Seat climate control ECU - Harness or connector	Click here
B14F2	Seat Heater Temperature Sensor Malfunction	- Front seat cushion heater - Seat climate control ECU - Harness or connector	Click here
B14F3	Overcurrent Detected in Cushion Peltier	- Seat climate control controller - Seat climate control ECU - Harness or connector	Click here
B14F4	Overcurrent Detected in Seatback Peltier	- Seat climate control controller - Seat climate control ECU - Harness or connector	Click here
B14F5	Overcurrent Detected in Seat Heater	- Front seat cushion heater - Seat climate control ECU - Harness or connector	Click here

DTC B14F0 Cushion Peltier Temperature Sensor Malfunction

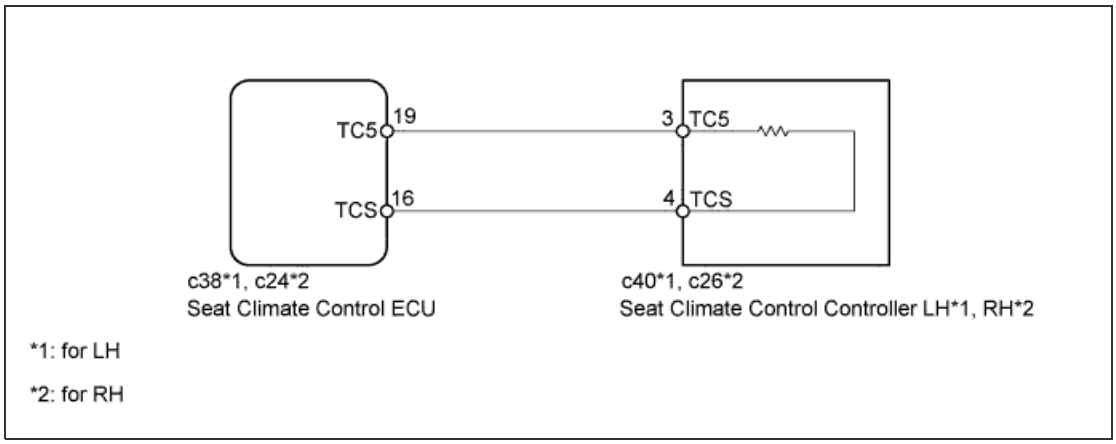
for Preparation Click here

DESCRIPTION

Outputs from the seat climate control controller stop if one of the following occurs: 1) the temperature sensor of the seat climate control controller is open or shorted; or 2) the temperature sensor is damaged and its output value does not change.

DTC Code	DTC Detection Condition	Trouble Area
B14F0	Cushion peltier temperature sensor malfunction.	• Seat climate control controller • Seat climate control ECU • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs (Click here).

Result

Result	Proceed to
DTC is output (Seat climate control ECU LH)	A
DTC is output (Seat climate control ECU RH)	B

B → Go to step 5

A

2.READ VALUE USING INTELLIGENT TESTER (SEAT CUSHION TEMPERATURE SENSOR)

a. Check the Data List for proper functioning of the temperature sensor.

Front Left Seat A/C

Item	Measurement Item/Range	Normal Condition	Diagnostic Note
Cushion Temp	Seat cushion temperature sensor signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-

OK:
The display is as specified in the normal condition.

NG → Go to step 3

OK

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

3.INSPECT SEAT CLIMATE CONTROL CONTROLLER LH

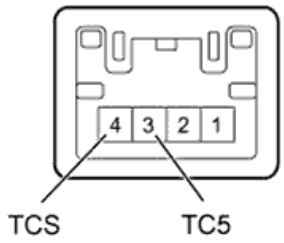
a. Disconnect the c40 climate control controller connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
3 (TC5) - 4 (TCS)	Outside air temperature 10 to 30°C (50 to 86°F)	1.85 to 0.8 kΩ

Component without harness connected:
(Seat Climate Control Controller LH)



H

NG → REPLACE SEAT CLIMATE CONTROL CONTROLLER LH (Click here)

OK

4.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - SEAT CLIMATE CONTROL CONTROLLER LH)

a. Disconnect the c38 ECU connector.

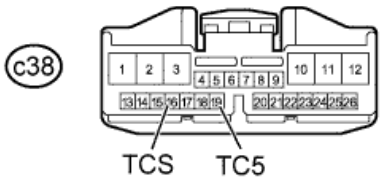
b. Disconnect the c40 climate control controller connector.

c. Measure the resistance according to the value(s) in the table below.

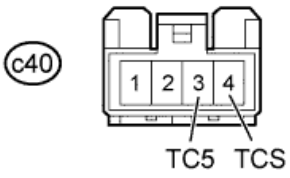
Standard Resistance:

Tester Connection	Condition	Specified Condition
c38-19 (TC5) - c40-3 (TC5)	Always	Below 1 Ω
c38-16 (TCS) - c40-4 (TCS)	Always	Below 1 Ω
c38-19 (TC5) - Body ground	Always	10 kΩ or higher
c38-16 (TCS) - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Seat Climate Control ECU)



Front view of wire harness connector:
(to Seat Climate Control Controller LH)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

5.READ VALUE USING INTELLIGENT TESTER (SEAT CUSHION TEMPERATURE SENSOR)

a. Check the Data List for proper functioning of the temperature sensor.

Front Right Seat A/C

Item	Measurement Item/Range	Normal Condition	Diagnostic Note

Cushion Temp	Seat cushion temperature sensor signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-

OK:
The display is as specified in the normal condition.

NG → Go to step 6

OK ↓

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

6.INSPECT SEAT CLIMATE CONTROL CONTROLLER RH

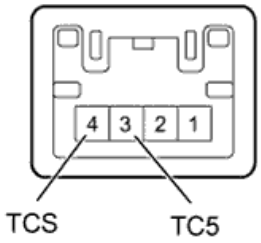
a. Disconnect the c26 climate control controller connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
3 (TC5) - 4 (TCS)	Outside air temperature 10 to 30°C (50 to 86°F)	1.85 to 0.8 kΩ

Component without harness connected:
(Seat Climate Control Controller RH)



H

NG → REPLACE SEAT CLIMATE CONTROL CONTROLLER RH (Click here)

OK ↓

7.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - SEAT CLIMATE CONTROL CONTROLLER RH)

a. Disconnect the c24 ECU connector.

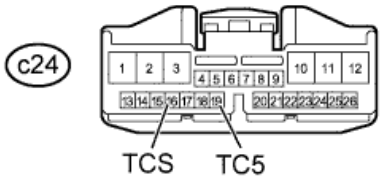
b. Disconnect the c26 climate control controller connector.

c. Measure the resistance according to the value(s) in the table below.

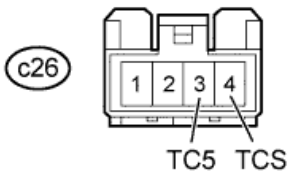
Standard Resistance:

Tester Connection	Condition	Specified Condition
c24-19 (TC5) - c26-3 (TC5)	Always	Below 1 Ω
c24-16 (TCS) - c26-4 (TCS)	Always	Below 1 Ω
c24-19 (TC5) - Body ground	Always	10 kΩ or higher
c24-16 (TCS) - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Seat Climate Control ECU)



Front view of wire harness connector:
(to Seat Climate Control Controller RH)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK ↓

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

DTC B14F3 Overcurrent Detected in Cushion Peltier

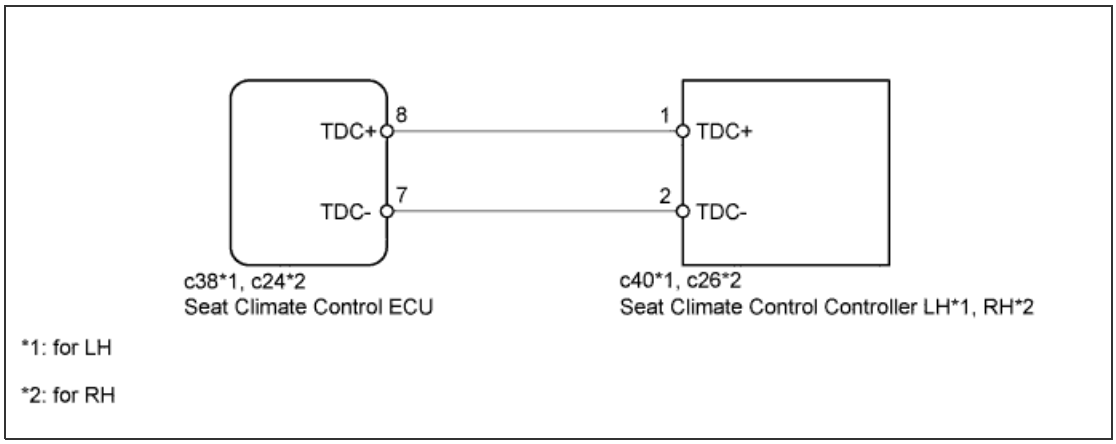
for Preparation Click here

DESCRIPTION

The seat climate control ECU stops outputs to the seat climate control controller if a short, etc. in the seat climate control controller, wire harness or ECU interior circuit causes overcurrent.

DTC Code	DTC Detection Condition	Trouble Area
B14F3	Overcurrent detected in the cushion peltier.	• Seat climate control ECU • Seat climate control controller • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs (Click here).

Result

Result	Proceed to
DTC is output (Seat climate control ECU LH)	A
DTC is output (Seat climate control ECU RH)	B

B → Go to step 4

A

2.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - SEAT CLIMATE CONTROL CONTROLLER LH)

a. Disconnect the c38 ECU connector.

b. Disconnect the c40 climate control controller connector.

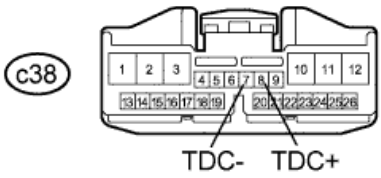
c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

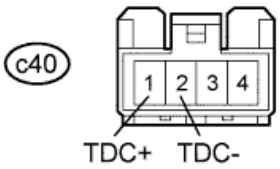
Tester Connection	Condition	Specified Condition
c38-8 (TDC+) - c40-1 (TDC+)	Always	Below 1 Ω
c38-8 (TDC+) - Body ground	Always	10 kΩ or higher
c38-7 (TDC-) -		

c40-2 (TDC-)	Always	Below 1 Ω
c38-7 (TDC-) - Body ground	Always	10 kΩ or higher
c38-8 (TDC+) - c38-7 (TDC-)	Always	10 kΩ or higher

Front view of wire harness connector:
(to Seat Climate Control ECU)



Front view of wire harness connector:
(to Seat Climate Control Controller LH)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK SEAT CLIMATE CONTROL ECU (OPERATION)

a. Replace the seat climate control ECU with a new one or normally operating one and check if a DTC is output.

OK:
DTC is not output.

NG → REPLACE SEAT CLIMATE CONTROL CONTROLLER LH (Click here)

OK

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

4.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - SEAT CLIMATE CONTROL CONTROLLER RH)

a. Disconnect the c24 ECU connector.

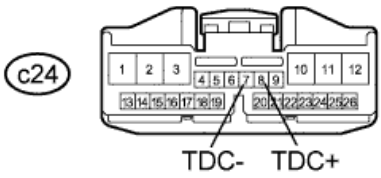
b. Disconnect the c26 climate control controller connector.

c. Measure the resistance according to the value(s) in the table below.

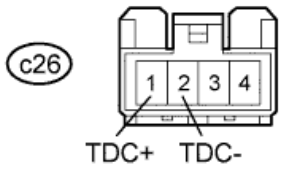
Standard Resistance:

Tester Connection	Condition	Specified Condition
c24-8 (TDC+) - c26-1 (TDC+)	Always	Below 1 Ω
c24-8 (TDC+) - Body ground	Always	10 kΩ or higher
c24-7 (TDC-) - c26-2 (TDC-)	Always	Below 1 Ω
c24-7 (TDC-) - Body ground	Always	10 kΩ or higher
c24-8 (TDC+) - c24-7 (TDC-)	Always	10 kΩ or higher

Front view of wire harness connector:
(to Seat Climate Control ECU)



Front view of wire harness connector:
(to Seat Climate Control Controller RH)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5.CHECK SEAT CLIMATE CONTROL ECU (OPERATION)

a. Replace the seat climate control ECU with a new one or normally operating one and check if a DTC is output.

OK:
DTC is not output.

NG → REPLACE SEAT CLIMATE CONTROL CONTROLLER RH (Click here)

OK

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

DTC B14F1 Seatback Peltier Temperature Sensor Malfunction

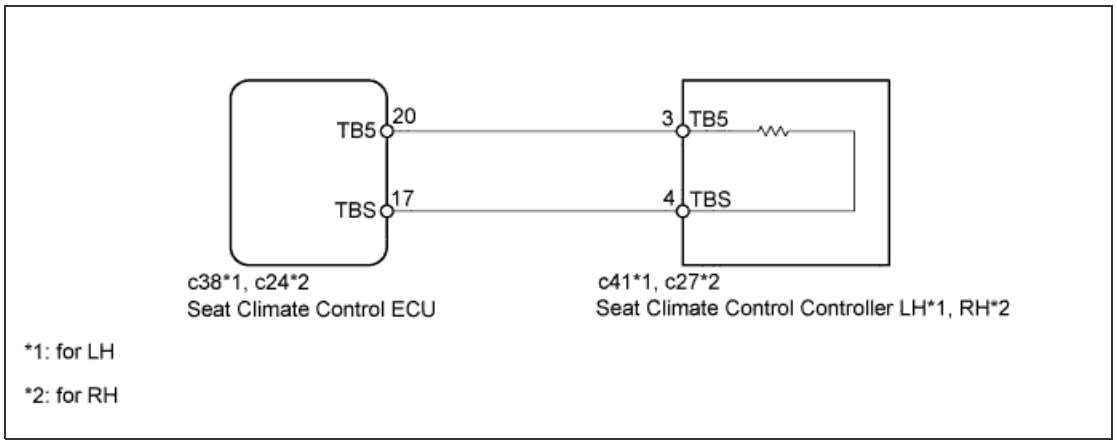
for Preparation Click here

DESCRIPTION

Outputs to the seat climate control controller stop if one of the following occurs: 1) the seat climate control controller temperature sensor is open or shorted; 2) the temperature sensor is damaged and its output value does not change.

DTC Code	DTC Detection Condition	Trouble Area
B14F1	Seatback peltier temperature sensor malfunction.	• Seat climate control controller • Seat climate control ECU • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs (Click here).

Result

Result	Proceed to
DTC is output (Seat climate control ECU LH)	A
DTC is output (Seat climate control ECU RH)	B

B → **Go to step 5**

A

2.READ VALUE USING INTELLIGENT TESTER (SEATBACK TEMPERATURE SENSOR)

a. Check the Data List for proper functioning of the temperature sensor.

Front Left Seat A/C

Item	Measurement Item/Range	Normal Condition	Diagnostic Note
Seatback Temp	Seatback temperature sensor signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-

OK:
The display is as specified in the normal condition.

NG → **Go to step 3**

OK

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

3.INSPECT SEAT CLIMATE CONTROL CONTROLLER LH

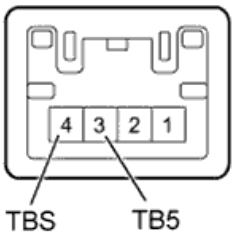
a. Disconnect the c41 climate control controller connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
3 (TB5) - 4 (TBS)	Outside air temperature 10 to 30°C (50 to 86°F)	1.85 to 0.8 kΩ

Component without harness connected:
(Seat Climate Control Controller LH)



H

NG → REPLACE SEAT CLIMATE CONTROL CONTROLLER LH (Click here)

OK

4.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - SEAT CLIMATE CONTROL CONTROLLER LH)

a. Disconnect the c38 ECU connector.

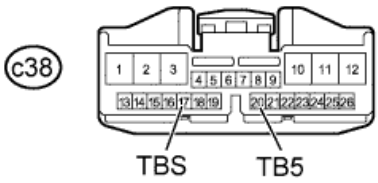
b. Disconnect the c41 climate control controller connector.

c. Measure the resistance according to the value(s) in the table below.

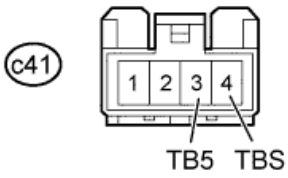
Standard Resistance:

Tester Connection	Condition	Specified Condition
c38-20 (TB5) - c41-3 (TB5)	Always	Below 1 Ω
c38-17 (TBS) - c41-4 (TBS)	Always	Below 1 Ω
c38-20 (TB5) - Body ground	Always	10 kΩ or higher
c38-17 (TBS) - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Seat Climate Control ECU)



Front view of wire harness connector:
(to Seat Climate Control Controller LH)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

5.READ VALUE USING INTELLIGENT TESTER (SEATBACK TEMPERATURE SENSOR)

a. Check the Data List for proper functioning of the temperature sensor.

Front Right Seat A/C

Item	Measurement Item/Range	Normal Condition	Diagnostic Note

Seatback Temp	Seatback temperature sensor signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-

OK:
The display is as specified in the normal condition.

NG → Go to step 6

OK ↓

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

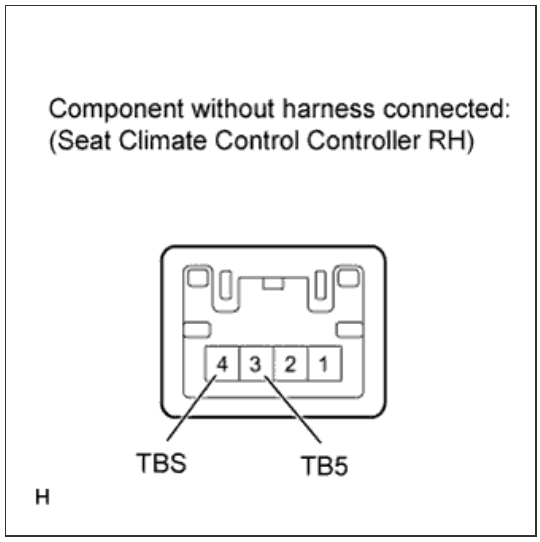
6.INSPECT SEAT CLIMATE CONTROL CONTROLLER RH

a. Disconnect the c27 climate control controller connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
3 (TB5) - 4 (TBS)	Outside air temperature 10 to 30°C (50 to 86°F)	1.85 to 0.8 kΩ



NG → REPLACE SEAT CLIMATE CONTROL CONTROLLER RH (Click here)

OK ↓

7.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - SEAT CLIMATE CONTROL CONTROLLER RH)

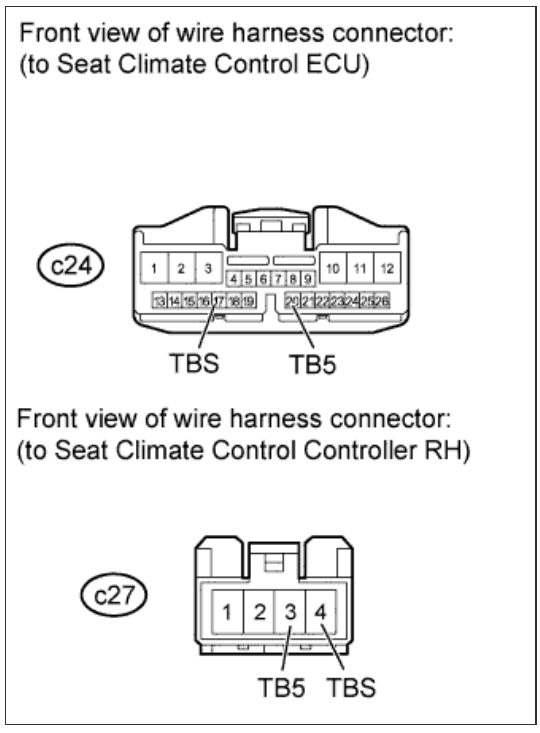
a. Disconnect the c24 ECU connector.

b. Disconnect the c27 climate control controller connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
c24-20 (TB5) - c27-3 (TB5)	Always	Below 1 Ω
c24-17 (TBS) - c27-4 (TBS)	Always	Below 1 Ω
c24-20 (TB5) - Body ground	Always	10 kΩ or higher
c24-17 (TBS) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK ↓

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

DTC B14F4 Overcurrent Detected in Seatback Peltier

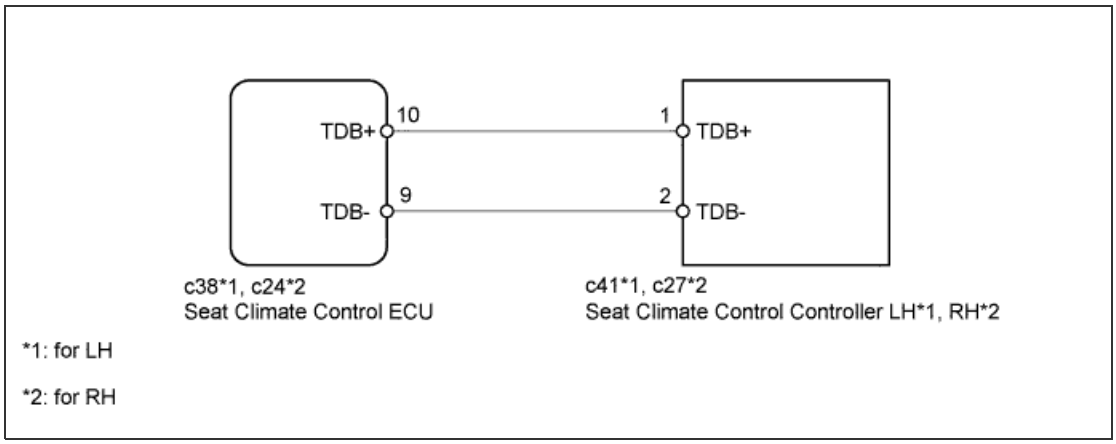
for Preparation Click here

DESCRIPTION

The seat climate control ECU stops outputs to the seat climate control controller if a short, etc. in the seat climate control controller, wire harness or ECU interior circuit causes overcurrent.

DTC Code	DTC Detection Condition	Trouble Area
B14F4	Overcurrent detected in seatback peltier.	• Seat climate control controller • Seat climate control ECU • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs (Click here).

Result

Result	Proceed to
DTC is output (Seat climate control ECU LH)	A
DTC is output (Seat climate control ECU RH)	B

B → Go to step 4

A

2.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - SEAT CLIMATE CONTROL CONTROLLER LH)

a. Disconnect the c38 ECU connector.

b. Disconnect the c41 climate control controller connector.

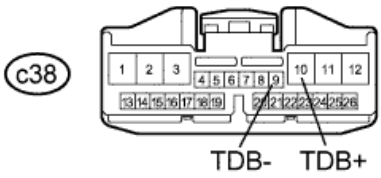
c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

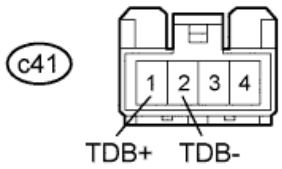
Tester Connection	Condition	Specified Condition
c38-10 (TDB+) - c41-1 (TDB+)	Always	Below 1 Ω
c38-10 (TDB+) - Body ground	Always	10 kΩ or higher
c38-9 (TDB-) -		

c41-2 (TDB-)	Always	Below 1 Ω
c38-9 (TDB-) - Body ground	Always	10 kΩ or higher
c38-10 (TDB+) - c38-9 (TDB-)	Always	10 kΩ or higher

Front view of wire harness connector:
(to Seat Climate Control ECU)



Front view of wire harness connector:
(to Seat Climate Control Controller LH)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK SEAT CLIMATE CONTROL ECU (OPERATION)

a. Replace the seat climate control ECU with a new one or normally operating one and check if a DTC is output.

OK:
DTC is not output.

NG → REPLACE SEAT CLIMATE CONTROL CONTROLLER LH (Click here)

OK

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

4.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - SEAT CLIMATE CONTROL CONTROLLER RH)

a. Disconnect the c24 ECU connector.

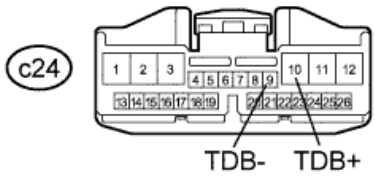
b. Disconnect the c27 climate control controller connector.

c. Measure the resistance according to the value(s) in the table below.

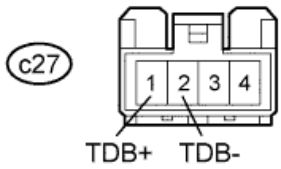
Standard Resistance:

Tester Connection	Condition	Specified Condition
c24-10 (TDB+) - c27-1 (TDB+)	Always	Below 1 Ω
c24-10 (TDB+) - Body ground	Always	10 kΩ or higher
c24-9 (TDB-) - c27-2 (TDB-)	Always	Below 1 Ω
c24-9 (TDB-) - Body ground	Always	10 kΩ or higher
c24-10 (TDB+) - c24-9 (TDB-)	Always	10 kΩ or higher

Front view of wire harness connector:
(to Seat Climate Control ECU)



Front view of wire harness connector:
(to Seat Climate Control Controller RH)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5.CHECK SEAT CLIMATE CONTROL ECU (OPERATION)

a. Replace the seat climate control ECU with a new one or normally operating one and check if a DTC is output.

OK:
DTC is not output.

NG → REPLACE SEAT CLIMATE CONTROL CONTROLLER RH (Click here)

OK

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

DTC B14F2 Seat Heater Temperature Sensor Malfunction

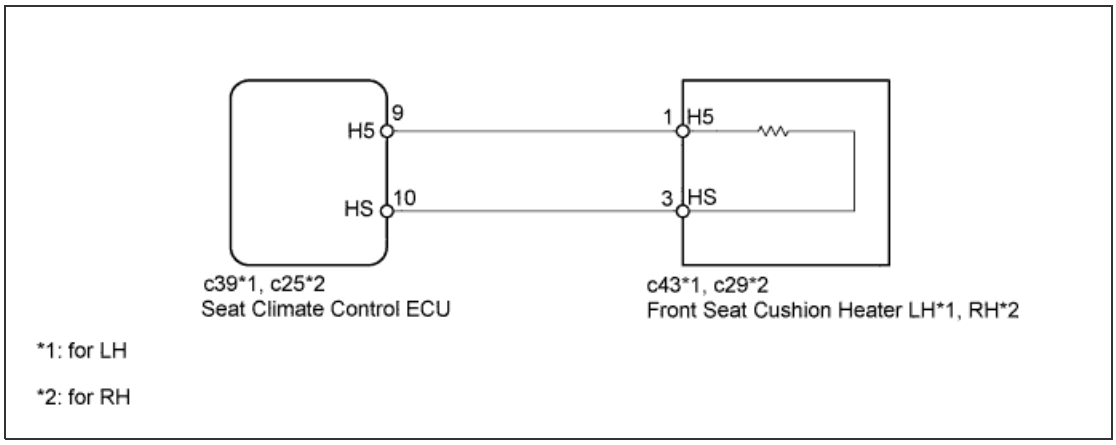
for Preparation Click here

DESCRIPTION

Outputs to the temperature sensor of the front seat cushion heater stop if one of the following occurs: 1) the temperature sensor is open or shorted; or 2) the temperature sensor is damaged and its output value does not change.

DTC Code	DTC Detection Condition	Trouble Area
B14F2	Seat heater temperature sensor malfunction.	• Front seat cushion heater • Seat climate control ECU • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs (Click here).

Result

Result	Proceed to
DTC is output (Seat climate control ECU LH)	A
DTC is output (Seat climate control ECU RH)	B

B → **Go to step 5**

A

2.READ VALUE USING INTELLIGENT TESTER (SEAT HEATER TEMPERATURE SENSOR)

a. Check the Data List for proper functioning of the temperature sensor.

Front Left Seat A/C

Item	Measurement Item/Range	Normal Condition	Diagnostic Note
Seat Heat Temp	Seat heater temperature sensor signal / MIN: 0°C (32°F), MAX: 85°C (185°F)	Within range from 0 to 85°C (32 to 185°F)	-

OK:
The display is as specified in the normal condition.

NG → **Go to step 3**

OK

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

3.INSPECT FRONT SEAT CUSHION HEATER LH

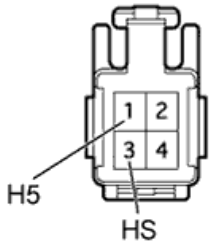
a. Disconnect the c43 cushion heater connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 (H5) - 3 (HS)	Outside air temperature 20 to 40°C (68 to 104°F)	10.5 to 4 kΩ

Component without harness connected:
(Front Seat Cushion Heater LH)



NG → REPLACE FRONT SEAT CUSHION HEATER LH (Click here)

OK

4.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - FRONT SEAT CUSHION HEATER LH)

a. Disconnect the c39 ECU connector.

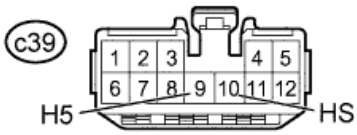
b. Disconnect the c43 cushion heater connector.

c. Measure the resistance according to the value(s) in the table below.

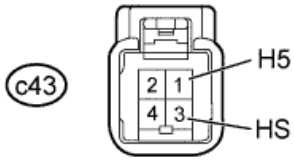
Standard Resistance:

Tester Connection	Condition	Specified Condition
c39-9 (H5) - c43-1 (H5)	Always	Below 1 Ω
c39-10 (HS) - c43-3 (HS)	Always	Below 1 Ω
c39-9 (H5) - Body ground	Always	10 kΩ or higher
c39-10 (HS) - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Seat Climate Control ECU)



Front view of wire harness connector:
(to Front Seat Cushion Heater LH)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

5.READ VALUE USING INTELLIGENT TESTER (SEAT HEATER TEMPERATURE SENSOR)

a. Check the Data List for proper functioning of the temperature sensor.

Front Right Seat A/C

Item	Measurement Item/Range	Normal Condition	Diagnostic Note
Seat Heat	Seat heater temperature sensor signal / MIN: 0°C (32°F), MAX:	Within range from 0 to 85°C (32 to	

Temp	85°C (185°F)	185°F)	-

OK:
The display is as specified in the normal condition.

NG → Go to step 6

OK ↓

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

6.INSPECT FRONT SEAT CUSHION HEATER RH

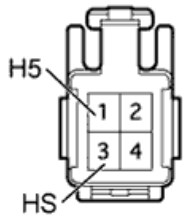
a. Disconnect the c29 cushion heater connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 (H5) - 3 (HS)	Outside air temperature 20 to 40°C (68 to 104°F)	10.5 to 4 kΩ

Component without harness connected:
(Front Seat Cushion Heater RH)



NG → REPLACE FRONT SEAT CUSHION HEATER RH (Click here)

OK ↓

7.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - FRONT SEAT CUSHION HEATER RH)

a. Disconnect the c25 ECU connector.

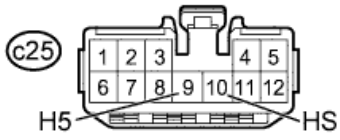
b. Disconnect the c29 cushion heater connector.

c. Measure the resistance according to the value(s) in the table below.

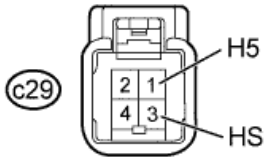
Standard Resistance:

Tester Connection	Condition	Specified Condition
c25-9 (H5) - c29-1 (H5)	Always	Below 1 Ω
c25-10 (HS) - c29-3 (HS)	Always	Below 1 Ω
c25-9 (H5) - Body ground	Always	10 kΩ or higher
c25-10 (HS) - Body ground	Always	10 kΩ or higher

Front view of wire harness connector:
(to Seat Climate Control ECU)



Front view of wire harness connector:
(to Front Seat Cushion Heater RH)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK ↓

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

DTC B14F5 Overcurrent Detected in Seat Heater

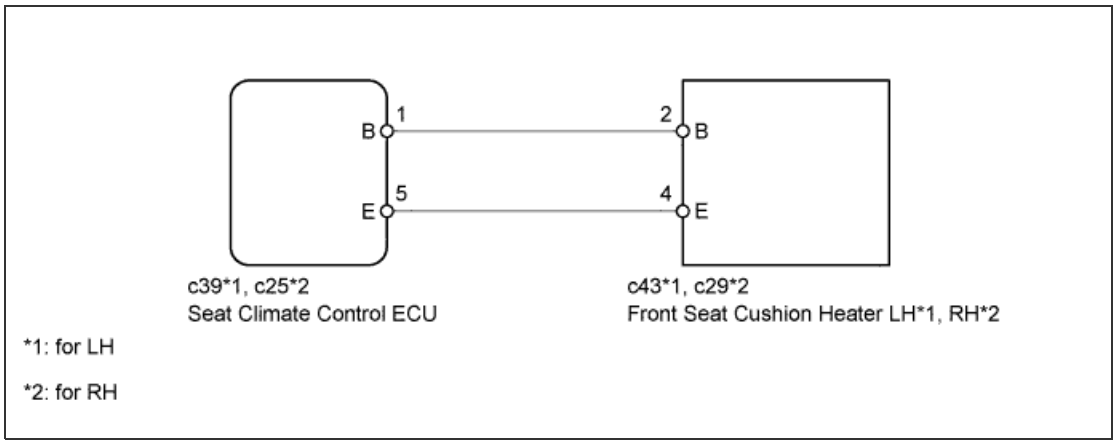
for Preparation Click here

DESCRIPTION

The seat climate control ECU stops outputs to the seat climate control controller if a short, etc. in the seat heater, wire harness or ECU interior circuit causes overcurrent.

DTC Code	DTC Detection Condition	Trouble Area
B14F5	Overcurrent detected in the seat heater.	• Front seat cushion heater • Seat climate control ECU • Harness or connector

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs (Click here).

Result

Result	Proceed to
DTC is output (Seat climate control ECU LH)	A
DTC is output (Seat climate control ECU RH)	B

B → Go to step 4

A

2.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - FRONT SEAT CUSHION HEATER LH)

a. Disconnect the c39 ECU connector.

b. Disconnect the c43 cushion heater connector.

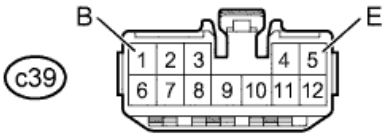
c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
c39-1 (B) - c43-2 (B)	Always	Below 1 Ω
c39-1 (B) - Body ground	Always	10 kΩ or higher
c39-5 (E) - c43-4		

(E)	Always	Below 1 Ω
c39-5 (E) - Body ground	Always	10 kΩ or higher
c39-1 (B) - c39-5 (E)	Always	10 kΩ or higher

Front view of wire harness connector:
(to Seat Climate Control ECU)



Front view of wire harness connector:
(to Front Seat Cushion Heater LH)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK SEAT CLIMATE CONTROL ECU (OPERATION)

a. Replace the seat climate control ECU with a new one or normally operating one and check if a DTC is output.

OK:
DTC is not output.

NG → REPLACE FRONT SEAT CUSHION HEATER LH (Click here)

OK

REPLACE SEAT CLIMATE CONTROL ECU (Click here)

4.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - FRONT SEAT CUSHION HEATER RH)

a. Disconnect the c25 ECU connector.

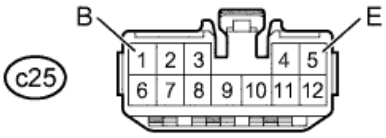
b. Disconnect the c29 cushion heater connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
c25-1 (B) - c29-2 (B)	Always	Below 1 Ω
c25-1 (B) - Body ground	Always	10 kΩ or higher
c25-5 (E) - c29-4 (E)	Always	Below 1 Ω
c25-5 (E) - Body ground	Always	10 kΩ or higher
c25-1 (B) - c25-5 (E)	Always	10 kΩ or higher

Front view of wire harness connector:
(to Seat Climate Control ECU)



Front view of wire harness connector:
(to Front Seat Cushion Heater RH)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5.CHECK SEAT CLIMATE CONTROL ECU (OPERATION)

a. Replace the seat climate control ECU with a new one or normally operating one and check if a DTC is output.

OK:
DTC is not output.

NG → REPLACE FRONT SEAT CUSHION HEATER RH (Click here)

OK

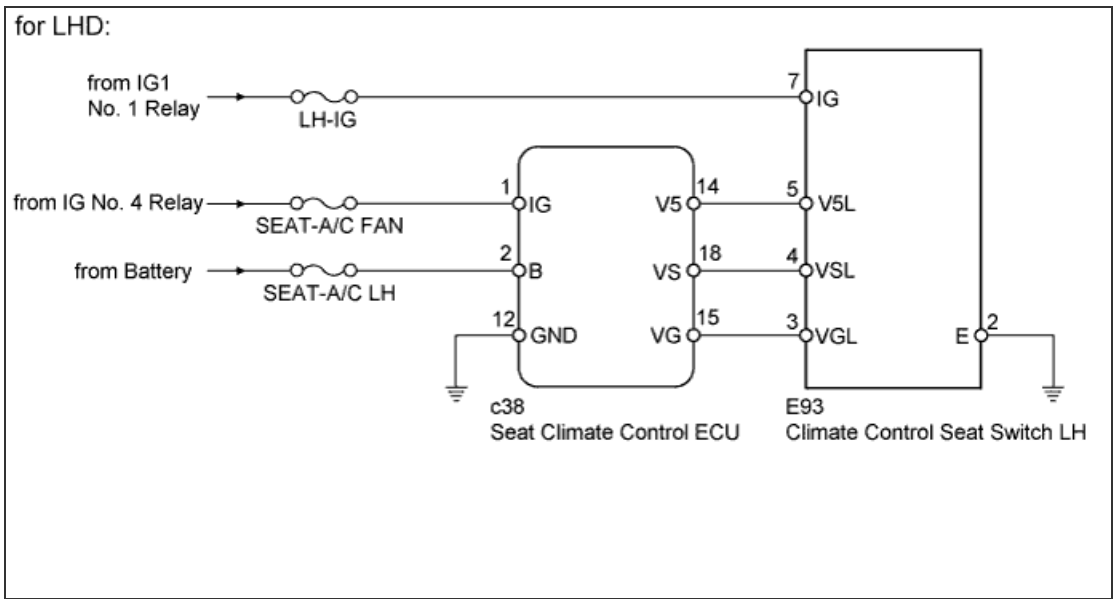
REPLACE SEAT CLIMATE CONTROL ECU (Click here)

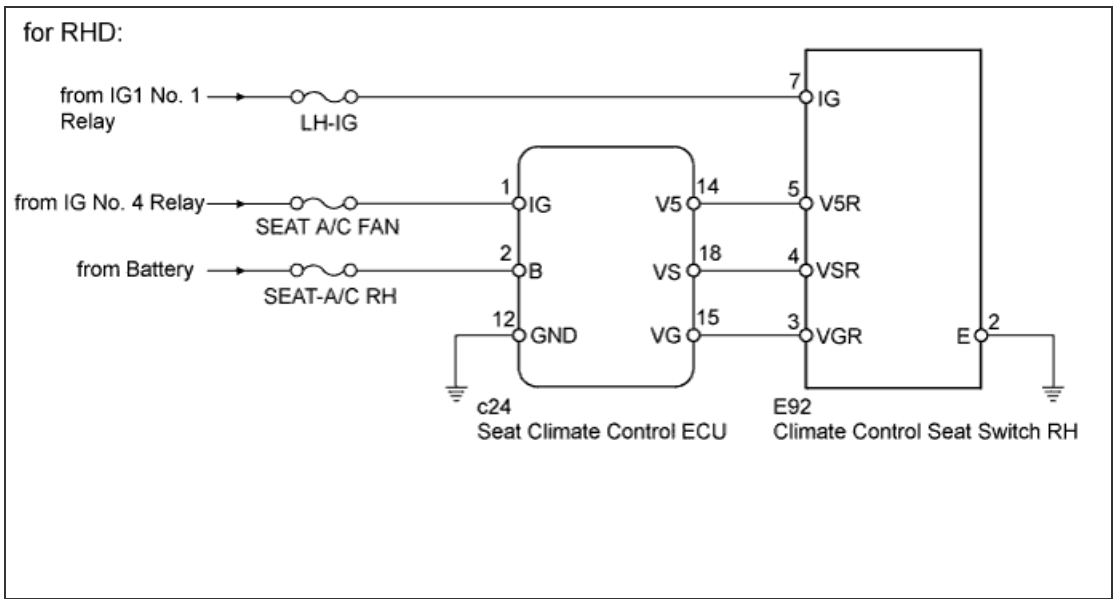
for Preparation Click here

DESCRIPTION

When the climate control seat switch is operated, the seat climate control ECU receives the signal and operates the climate control system.

WIRING DIAGRAM





INSPECTION PROCEDURE

1.CHECK FUSE (SEAT-A/C FAN, SEAT-A/C LH, SEAT-A/C RH, LH-IG)

a. Remove the SEAT-A/C FAN fuse from the cowl side junction block RH.

b. for LHD:
Remove the SEAT-A/C LH fuse from the engine room relay block.

c. for RHD:
Remove the SEAT-A/C RH fuse from the engine room relay block.

d. Remove the LH-IG fuse from the main body ECU.

e. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
SEAT-A/C FAN fuse	Always	Below 1 Ω
SEAT-A/C LH fuse	Always	Below 1 Ω
LH-IG fuse	Always	Below 1 Ω

for RHD

Tester Connection	Condition	Specified Condition
SEAT-A/C FAN fuse	Always	Below 1 Ω
SEAT-A/C RH fuse	Always	Below 1 Ω
LH-IG fuse	Always	Below 1 Ω

NG → REPLACE FUSE

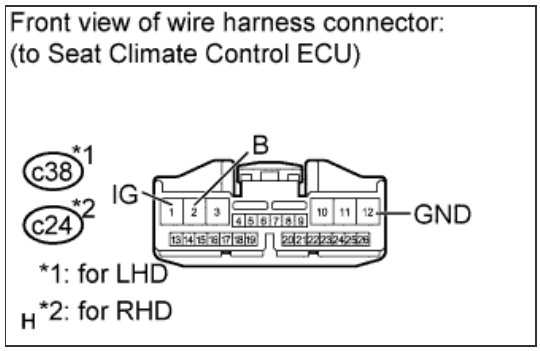
OK

2.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - BATTERY AND BODY GROUND)

a. for LHD:
Disconnect the c38 ECU connector.

b. for RHD:
Disconnect the c24 ECU connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
c38-12 (GND) - Body ground	Always	Below 1 Ω

for RHD

Tester Connection	Condition	Specified Condition
c24-12 (GND) - Body ground	Always	Below 1 Ω

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

for LHD

Tester Connection	Switch Condition	Specified Condition
c38-1 (IG) - Body ground	Engine switch on (IG)	11 to 14 V
c38-2 (B) - Body ground	Always	11 to 14 V

for RHD

Tester Connection	Switch Condition	Specified Condition
c24-1 (IG) - Body ground	Engine switch on (IG)	11 to 14 V
c24-2 (B) - Body ground	Always	11 to 14 V

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

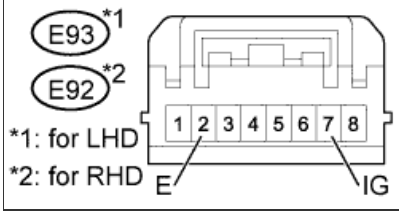
3.CHECK HARNESS AND CONNECTOR (CLIMATE CONTROL SEAT SWITCH - BATTERY AND BODY GROUND)

a. for LHD:
Disconnect the E93 switch connector.

b. for RHD:
Disconnect the E92 switch connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector:
(to Climate Control Seat Switch)



Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
E93-2 (E) - Body ground	Always	Below 1 Ω

for RHD

Tester Connection	Condition	Specified Condition
E92-2 (E) - Body ground	Always	Below 1 Ω

d. Measure the voltage of the wire harness side connector.

Standard Voltage:

for LHD

Tester Connection	Switch Condition	Specified Condition
E93-7 (IG) - Body ground	Engine switch on (IG)	11 to 14 V

for RHD

Tester Connection	Switch Condition	Specified Condition
E92-7 (IG) - Body ground	Engine switch on (IG)	11 to 14 V

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

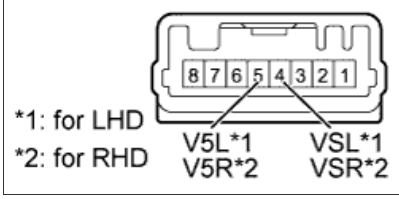
4.INSPECT CLIMATE CONTROL SEAT SWITCH

a. for LHD:
Disconnect the E93 switch connector.

b. for RHD:
Disconnect the E92 switch connector.

c. Measure the resistance according to the value(s) in the table below.

Component without harness connected:
(Climate Control Seat Switch)



Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
5 (V5L) - 4 (VSL)	Max cool → Max warm	Below 1 Ω → 5 kΩ

NG → REPLACE CLIMATE CONTROL SEAT SWITCH LH (Click here)

OK

5.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - CLIMATE CONTROL SEAT SWITCH LH)

a. for LHD:

i. Disconnect the c38 ECU connector.

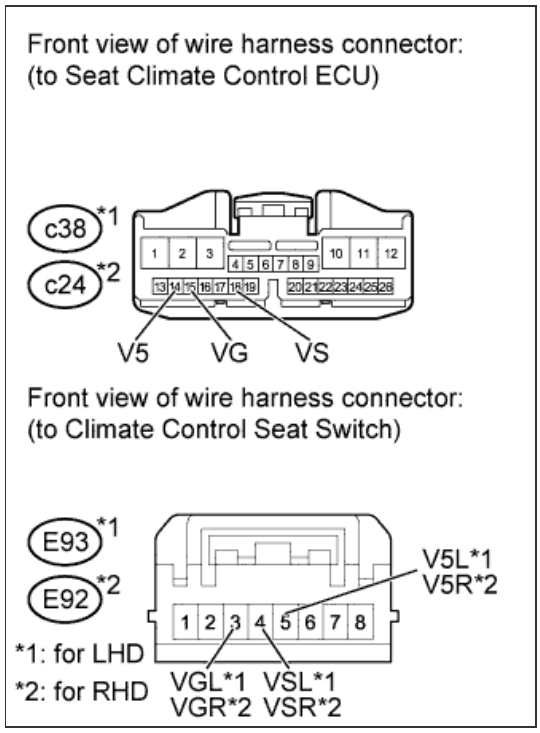
ii. Disconnect the E93 switch connector.

b. for RHD:

i. Disconnect the c24 ECU connector.

ii. Disconnect the E92 switch connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
c38-14 (V5) - E93-5 (V5L)	Always	Below 1 Ω
c38-18 (VS) - E93-4 (VSL)	Always	Below 1 Ω
c38-15 (VG) - E93-3 (VGL)	Always	Below 1 Ω
c38-14 (V5) - Body ground	Always	10 kΩ or higher
c38-18 (VS) - Body ground	Always	10 kΩ or higher
c38-15 (VG) - Body ground	Always	10 kΩ or higher

for RHD

Tester Connection	Condition	Specified Condition
c24-14 (V5) - E92-5 (V5R)	Always	Below 1 Ω
c24-18 (VS) - E92-4 (VSR)	Always	Below 1 Ω
c24-15 (VG) - E92-3 (VGR)	Always	Below 1 Ω
c24-14 (V5) - Body ground	Always	10 kΩ or higher
c24-18 (VS) - Body ground	Always	10 kΩ or higher
c24-15 (VG) - Body ground	Always	10 kΩ or higher

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

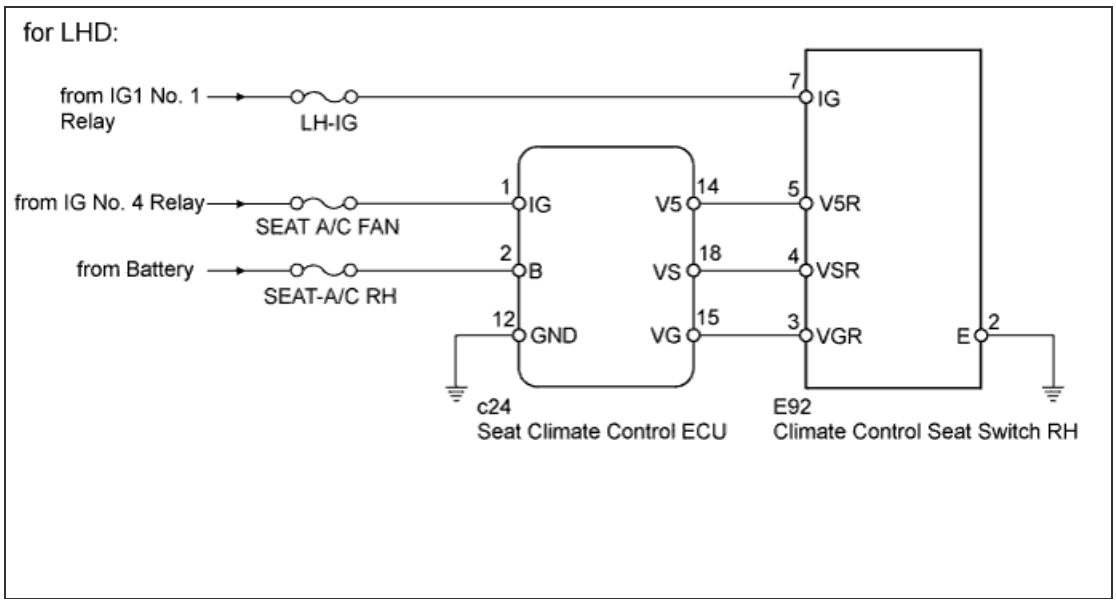
REPLACE SEAT CLIMATE CONTROL ECU (Click here)

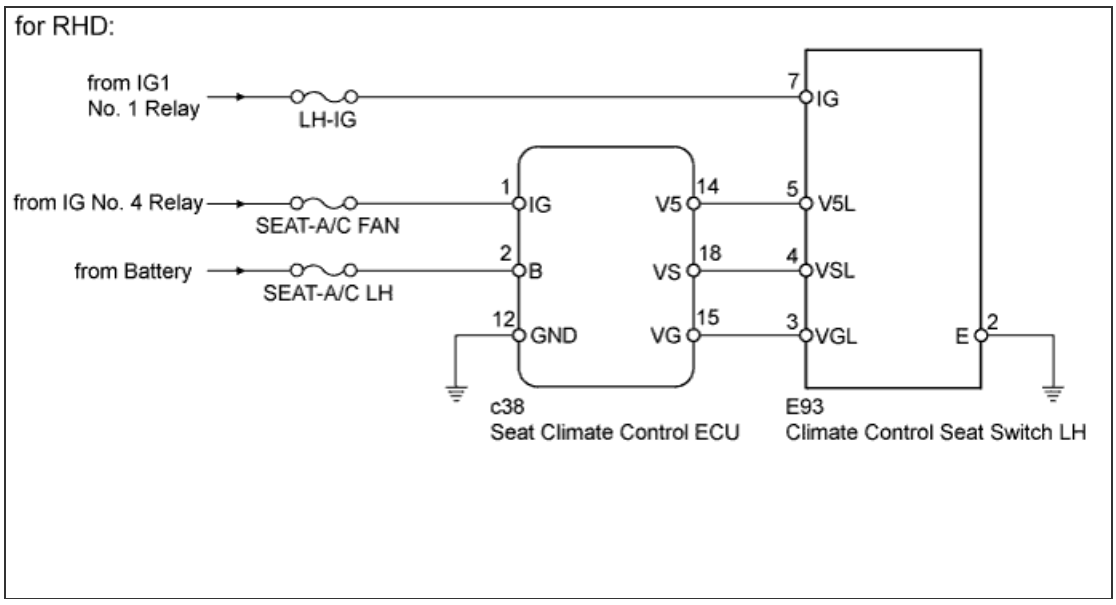
for Preparation Click here

DESCRIPTION

When the climate control seat switch is operated, the seat climate control ECU receives the signal and operates the climate control system.

WIRING DIAGRAM





INSPECTION PROCEDURE

1.CHECK FUSE (SEAT-A/C FAN, SEAT-A/C LH, SEAT-A/C RH, LH-IG)

a. Remove the SEAT-A/C FAN fuse from the cowl side junction block RH.

b. for LHD:
Remove the SEAT-A/C RH fuse from the engine room relay block.

c. for RHD:
Remove the SEAT-A/C LH fuse from the engine room relay block.

d. Remove the LH-IG fuse from the main body ECU.

e. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
SEAT-A/C FAN fuse	Always	Below 1 Ω
SEAT-A/C RH fuse	Always	Below 1 Ω
LH-IG fuse	Always	Below 1 Ω

for RHD

Tester Connector	Condition	Specified Condition
SEAT-A/C FAN fuse	Always	Below 1 Ω
SEAT-A/C LH fuse	Always	Below 1 Ω
LH-IG fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

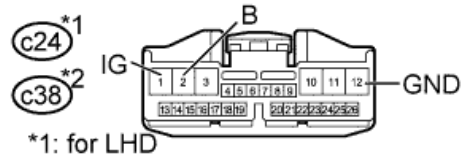
2.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - BATTERY AND BODY GROUND)

a. for LHD:
Disconnect the c24 ECU connector.

b. for RHD:
Disconnect the c38 ECU connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector:
(to Seat Climate Control ECU)



Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
c24-12 (GND) - Body ground	Always	Below 1 Ω

for RHD

Tester Connection	Condition	Specified Condition
c38-12 (GND) - Body ground	Always	Below 1 Ω

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

for LHD

Tester Connection	Switch Condition	Specified Condition
c24-1 (IG) - Body ground	Engine switch on (IG)	11 to 14 V
c24-2 (B) - Body ground	Always	11 to 14 V

for RHD

Tester Connection	Switch Condition	Specified Condition
c38-1 (IG) - Body ground	Engine switch on (IG)	11 to 14 V
c38-2 (B) - Body ground	Always	11 to 14 V

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

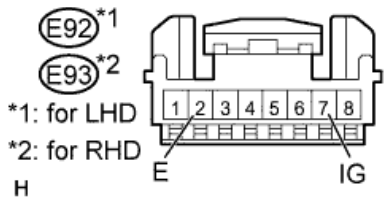
3.CHECK HARNESS AND CONNECTOR (CLIMATE CONTROL SEAT SWITCH - BATTERY AND BODY GROUND)

a. for LHD:
Disconnect the E92 switch connector.

b. for RHD:
Disconnect the E93 switch connector.

c. Measure the resistance according to the value(s) in the table below.

Front view of wire harness connector:
(to Climate Control Seat Switch)



Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
E92-2 (E) - Body ground	Always	Below 1 Ω

for RHD

Tester Connection	Condition	Specified Condition
E93-2 (E) - Body ground	Always	Below 1 Ω

d. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

for LHD

Tester Connection	Switch Condition	Specified Condition
E92-7 (IG) - Body ground	Engine switch on (IG)	11 to 14 V

for RHD

Tester Connection	Switch Condition	Specified Condition
E93-7 (IG) - Body ground	Engine switch on (IG)	11 to 14 V

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

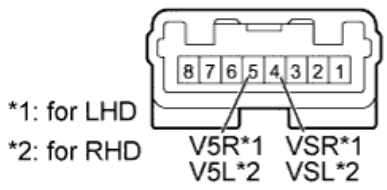
4.INSPECT CLIMATE CONTROL SEAT SWITCH

a. for LHD:
Remove the E92 switch connector.

b. for RHD:
Remove the E93 switch connector.

c. Measure the resistance according to the value(s) in the table below.

Component without harness connected:
(Climate Control Switch)



Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
5 (V5R) - 4 (VSR)	Cooler MAX → Heater MAX	Below 1 Ω → 5 kΩ

NG → REPLACE CLIMATE CONTROL SEAT SWITCH RH (Click here)

OK

5.CHECK HARNESS AND CONNECTOR (SEAT CLIMATE CONTROL ECU - CLIMATE CONTROL SEAT SWITCH RH)

a. for LHD:

i. Disconnect the c24 ECU connector.

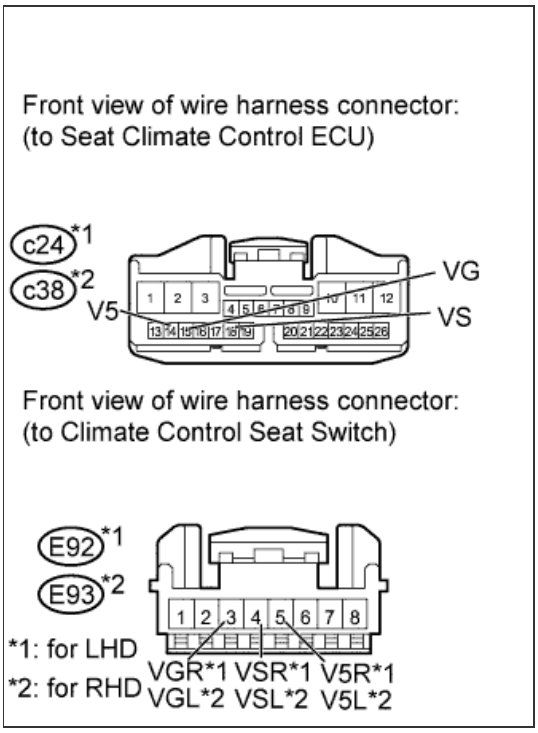
ii. Disconnect the E92 switch connector.

b. for RHD:

i. Disconnect the c38 ECU connector.

ii. Disconnect the E93 switch connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

for LHD

Tester Connection	Condition	Specified Condition
c24-14 (V5) - E92-5 (V5R)	Always	Below 1 Ω
c24-18 (VS) - E92-4 (VSR)	Always	Below 1 Ω
c24-15 (VG) - E92-3 (VGR)	Always	Below 1 Ω
c24-14 (V5) - Body ground	Always	10 kΩ or higher
c24-18 (VS) - Body ground	Always	10 kΩ or higher
c24-15 (VG) - Body ground	Always	10 kΩ or higher

for RHD

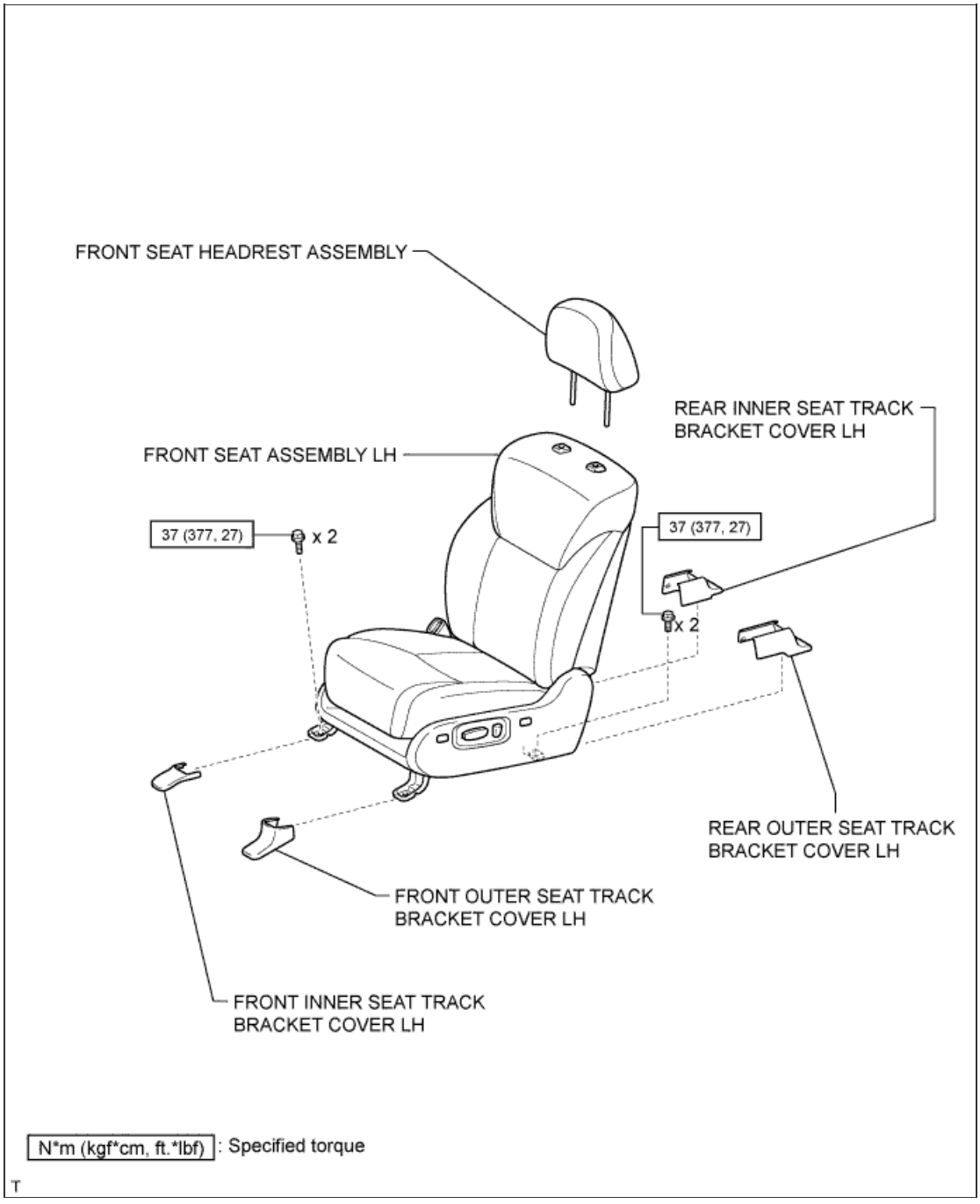
Tester Connection	Condition	Specified Condition
c38-14 (V5) - E93-5 (V5L)	Always	Below 1 Ω
c38-18 (VS) - E93-4 (VSL)	Always	Below 1 Ω
c38-15 (VG) - E93-3 (VGL)	Always	Below 1 Ω
c38-14 (V5) - Body ground	Always	10 kΩ or higher
c38-18 (VS) - Body ground	Always	10 kΩ or higher
c38-15 (VG) - Body ground	Always	10 kΩ or higher

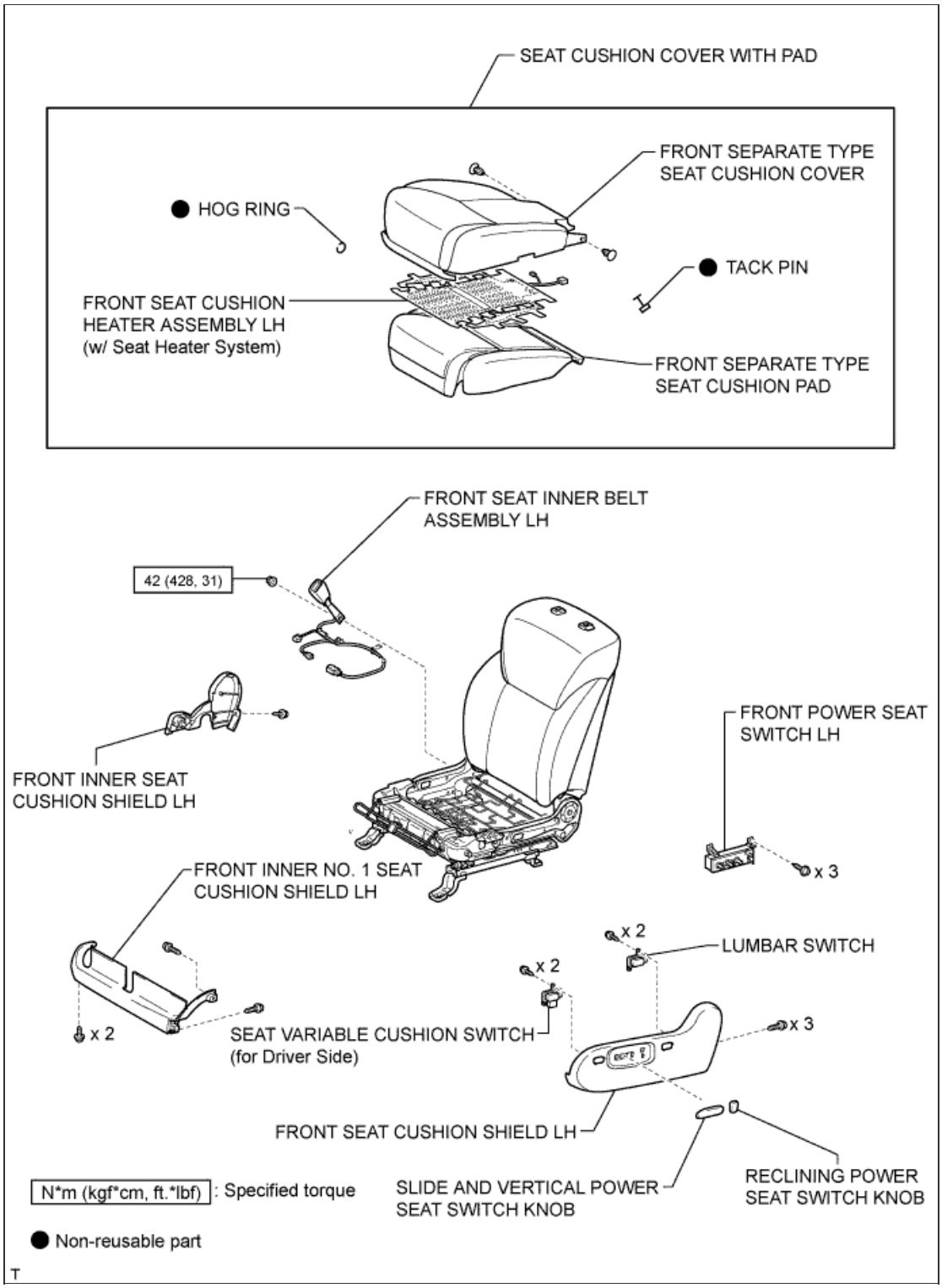
NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

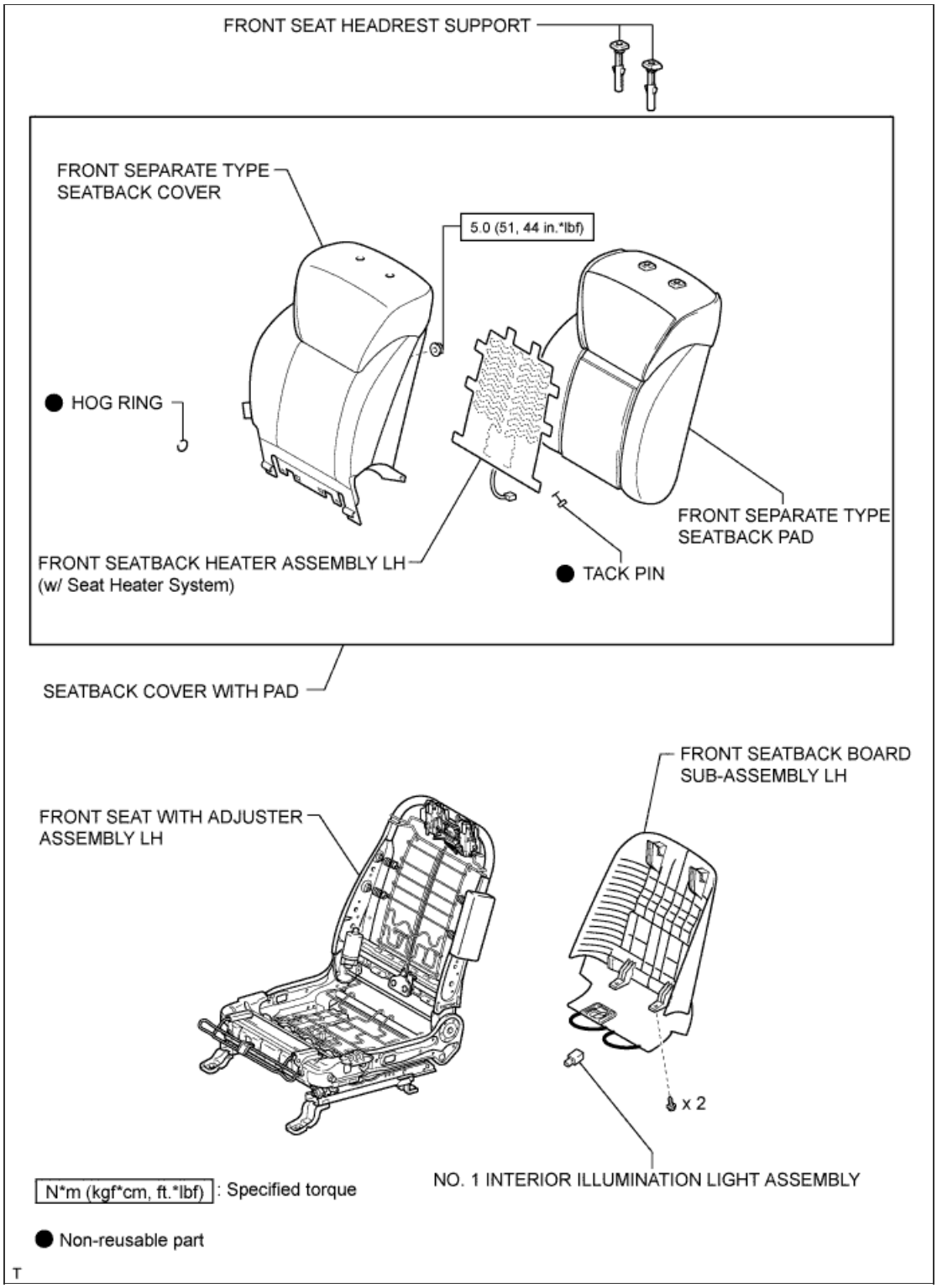
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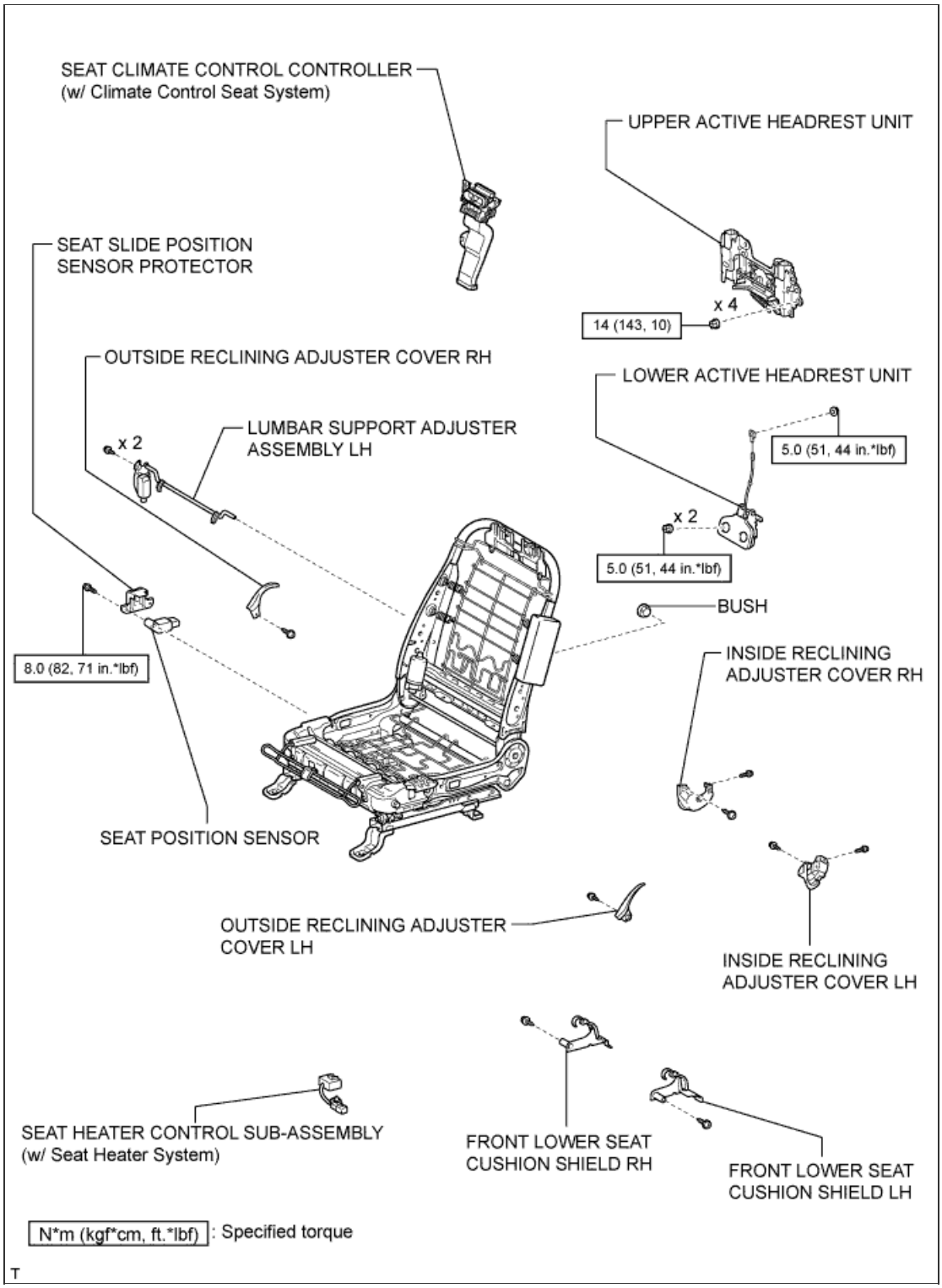
REPLACE SEAT CLIMATE CONTROL ECU (Click here)

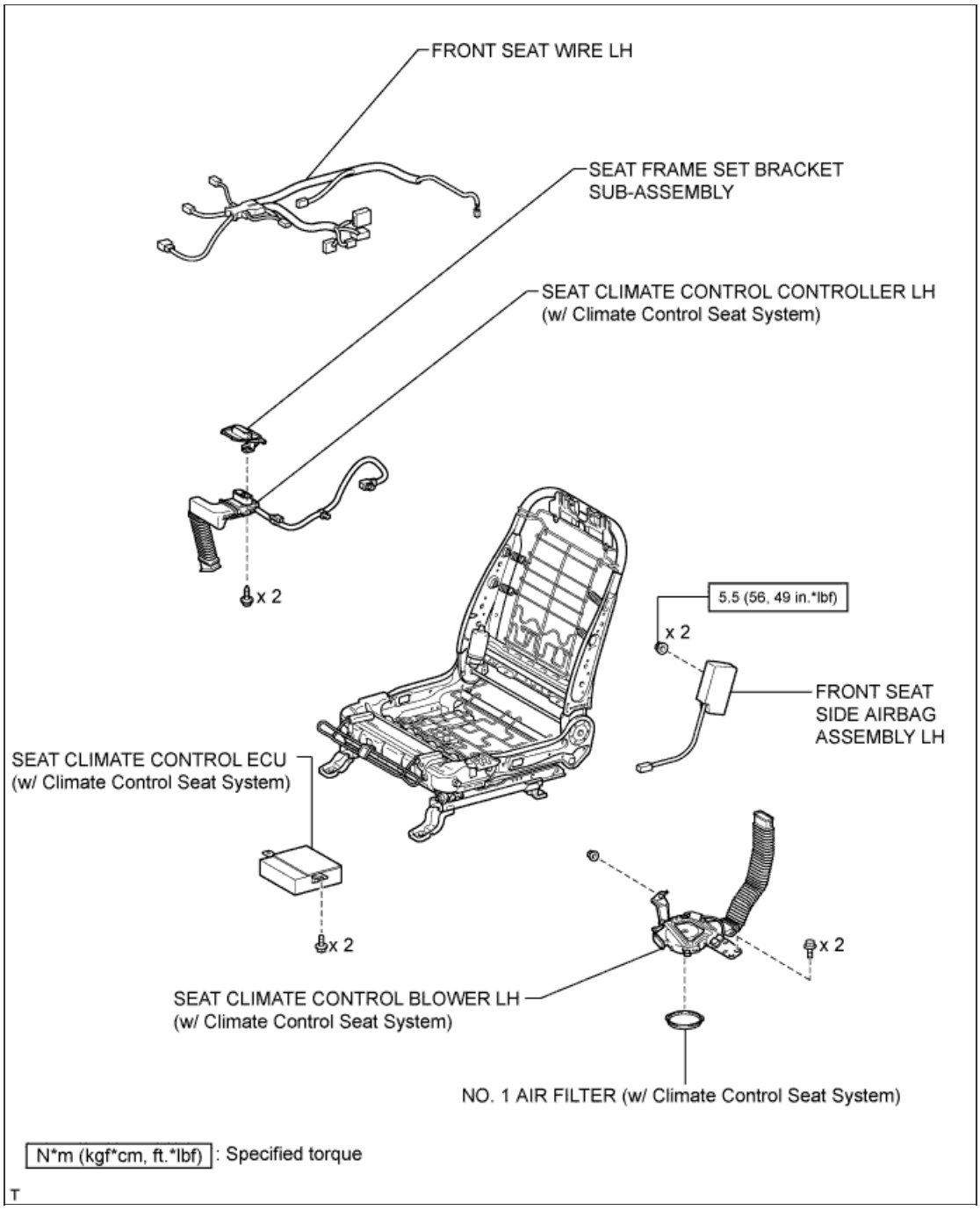
for Preparation Click here




SEAT CUSHION COVER WITH PAD
FRONT SEPARATE TYPE SEAT CUSHION COVER
HOG RING
TACK PIN
FRONT SEAT CUSHION HEATER ASSEMBLY LH (w/ Seat Heater System)
FRONT SEPARATE TYPE SEAT CUSHION PAD
FRONT SEAT INNER BELT ASSEMBLY LH
42 (428, 31)
FRONT INNER SEAT CUSHION SHIELD LH
FRONT POWER SEAT SWITCH LH
x 3
FRONT INNER NO. 1 SEAT CUSHION SHIELD LH
x 2
LUMBAR SWITCH
x 2
x 2
SEAT VARIABLE CUSHION SWITCH (for Driver Side)
x 3
FRONT SEAT CUSHION SHIELD LH
SLIDE AND VERTICAL POWER SEAT SWITCH KNOB
RECLINING POWER SEAT SWITCH KNOB
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
T


FRONT SEAT HEADREST SUPPORT
FRONT SEPARATE TYPE SEATBACK COVER
5.0 (51, 44 in.*lbf)
HOG RING
FRONT SEPARATE TYPE SEATBACK PAD
FRONT SEATBACK HEATER ASSEMBLY LH (w/ Seat Heater System)
TACK PIN
SEATBACK COVER WITH PAD
FRONT SEATBACK BOARD SUB-ASSEMBLY LH
FRONT SEAT WITH ADJUSTER ASSEMBLY LH
x 2
NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
T


SEAT CLIMATE CONTROL CONTROLLER
(w/ Climate Control Seat System)
UPPER ACTIVE HEADREST UNIT
SEAT SLIDE POSITION
SENSOR PROTECTOR
x 4
14 (143, 10)
OUTSIDE RECLINING ADJUSTER COVER RH
LOWER ACTIVE HEADREST UNIT
LUMBAR SUPPORT ADJUSTER
ASSEMBLY LH
x 2
5.0 (51, 44 in.*lbf)
x 2
5.0 (51, 44 in.*lbf)
BUSH
8.0 (82, 71 in.*lbf)
INSIDE RECLINING
ADJUSTER COVER RH
SEAT POSITION SENSOR
OUTSIDE RECLINING ADJUSTER
COVER LH
INSIDE RECLINING
ADJUSTER COVER LH
SEAT HEATER CONTROL SUB-ASSEMBLY
(w/ Seat Heater System)
FRONT LOWER SEAT
CUSHION SHIELD RH
FRONT LOWER SEAT
CUSHION SHIELD LH
N*m (kgf*cm, ft.*lbf) : Specified torque
T


FRONT SEAT WIRE LH
SEAT FRAME SET BRACKET SUB-ASSEMBLY
SEAT CLIMATE CONTROL CONTROLLER LH (w/ Climate Control Seat System)
x 2
5.5 (56, 49 in.*lbf)
x 2
FRONT SEAT SIDE AIRBAG ASSEMBLY LH
SEAT CLIMATE CONTROL ECU (w/ Climate Control Seat System)
x 2
x 2
SEAT CLIMATE CONTROL BLOWER LH (w/ Climate Control Seat System)
NO. 1 AIR FILTER (w/ Climate Control Seat System)
N*m (kgf*cm, ft.*lbf) : Specified torque
T

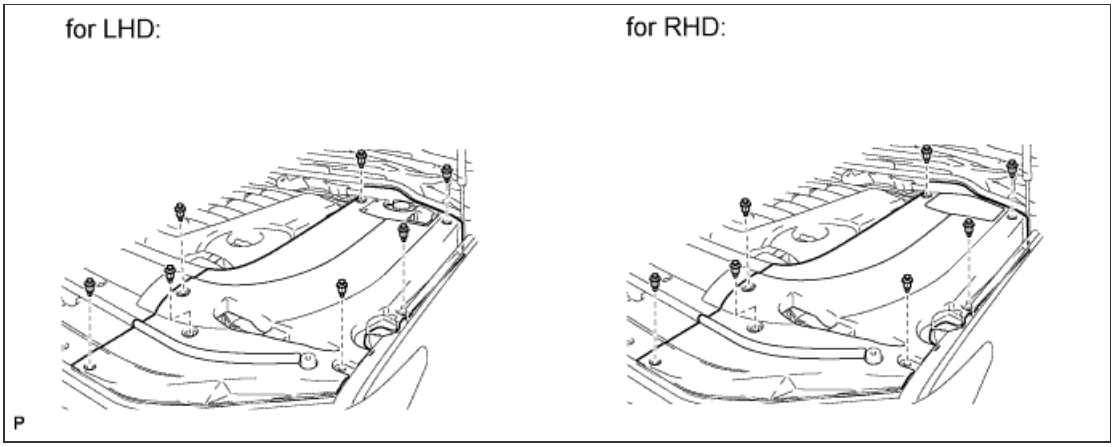
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT HEADREST ASSEMBLY

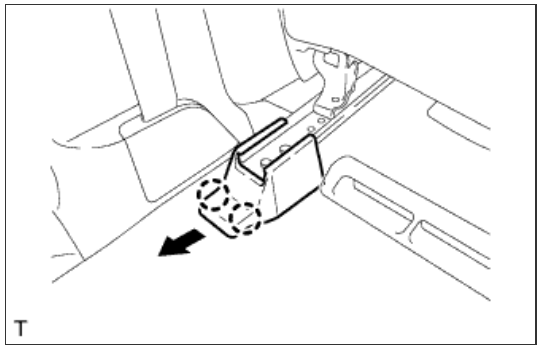
3. REMOVE REAR OUTER SEAT TRACK BRACKET COVER LH

a. Operate the power seat switch (slide switch) to move the seat to the foremost position.

b. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

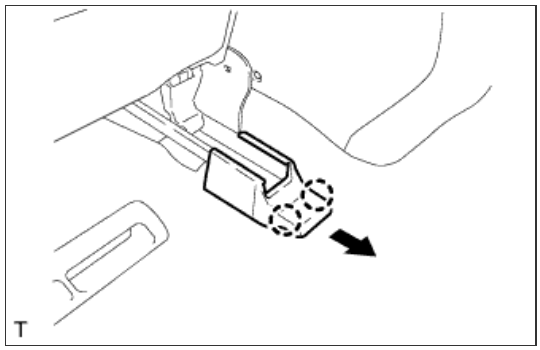


4. REMOVE REAR INNER SEAT TRACK BRACKET COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.



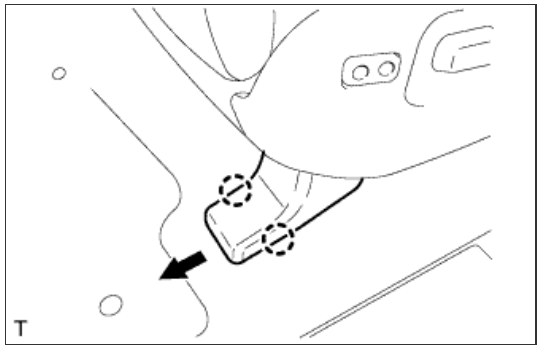
5. REMOVE FRONT OUTER SEAT TRACK BRACKET COVER LH

a. Operate the power seat switch (slide switch) to move the seat to the rearmost position.

b. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

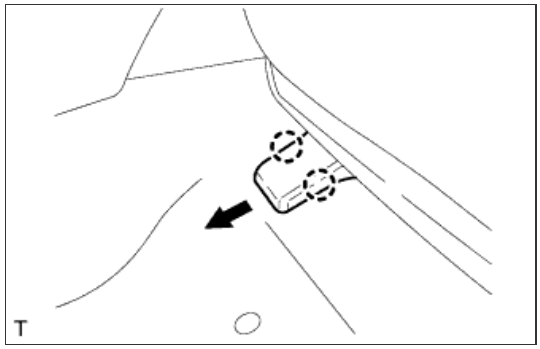


6. REMOVE FRONT INNER SEAT TRACK BRACKET COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.



7. REMOVE FRONT SEAT ASSEMBLY LH

a. Disable the Autoaway/Return function by changing the customize parameter (Click here).

NOTICE:

Record the current customize parameter setting (whether the Autoaway/Return function is enabled or disabled) in order to restore the current setting after finishing the operation.

HINT:

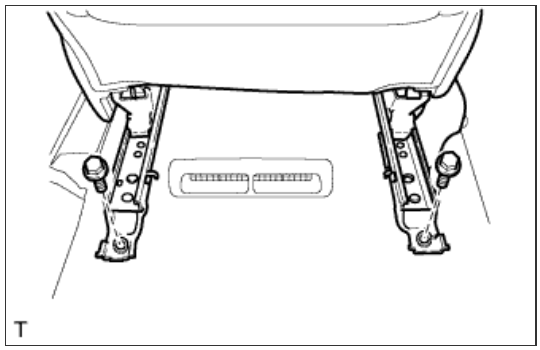
Performing the above operation causes the Autoaway/Return function to be disabled when the engine switch is turned off.

b. Turn the engine switch on (IG). Operate the tilt and telescopic switch to fully retract and tilt up the steering column assembly.

c. Turn the engine switch off.

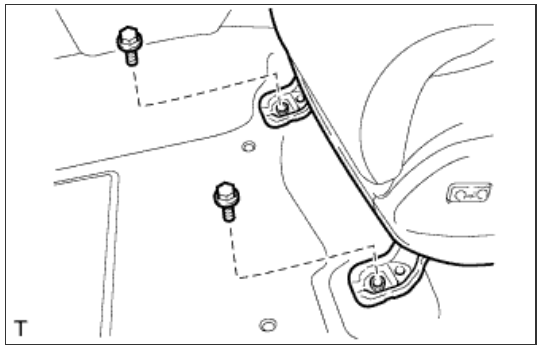
d. Remove the 2 bolts.

e. Operate the power seat switch (slide switch) to move the seat to the foremost position.



f. Remove the 2 bolts.

g. Operate the power seat switch (slide switch) and move the seat to the center position, operate the power seat switch (reclining switch) and move the seatback to the upright position, and operate the power seat switch (lifter switch) and move the seat to the uppermost position.



h. for Driver Side:
Operate the seat variable cushion switch to move the seat cushion to the open position.

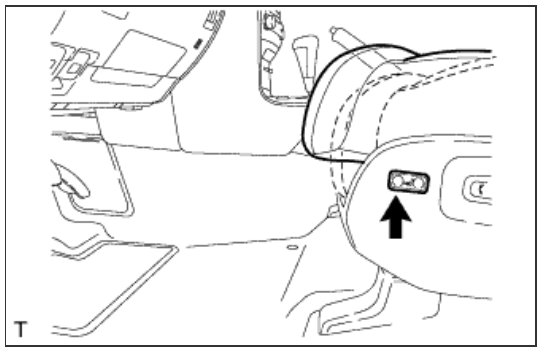
i. Disconnect the cable from the negative (-) battery terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).



j. Disconnect the connectors under the seat.

k. Remove the front seat assembly.

NOTICE:

Be careful not to damage the vehicle body.

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

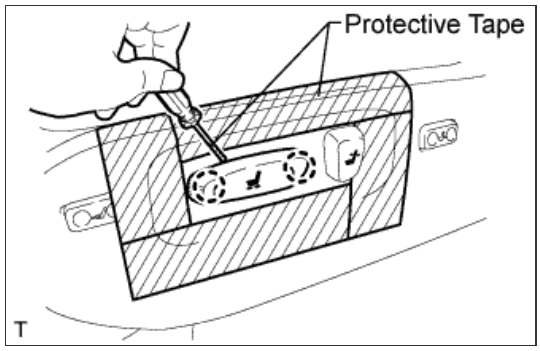
1. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

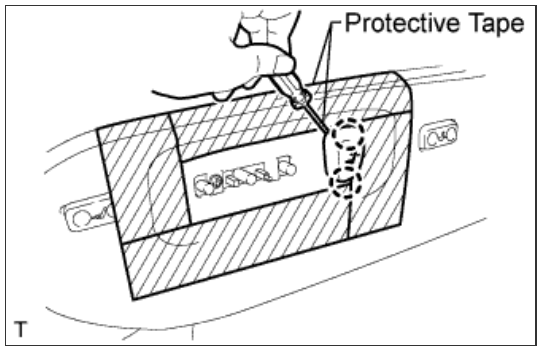


2. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

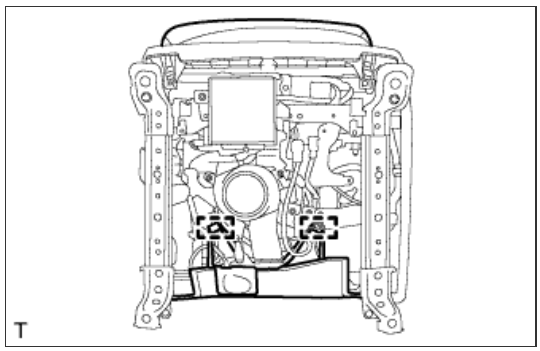
HINT:

Tape the screwdriver tip before use.

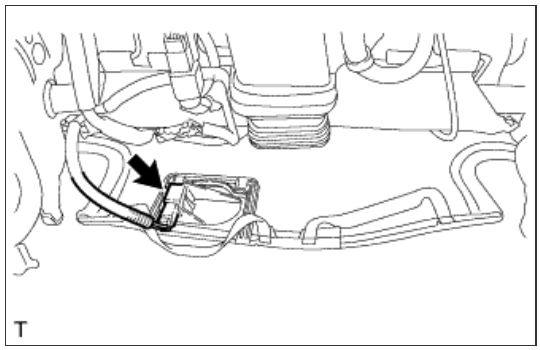


3. REMOVE FRONT SEAT CUSHION SHIELD LH

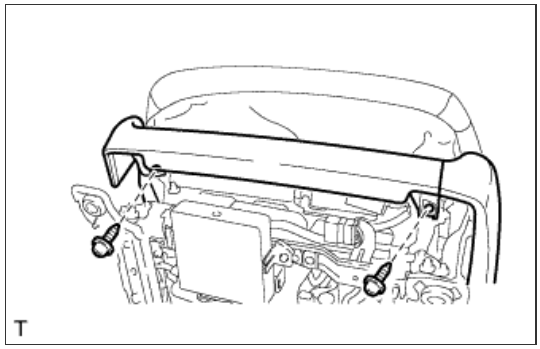
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

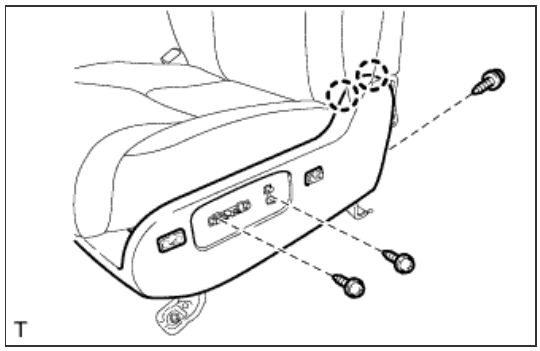


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

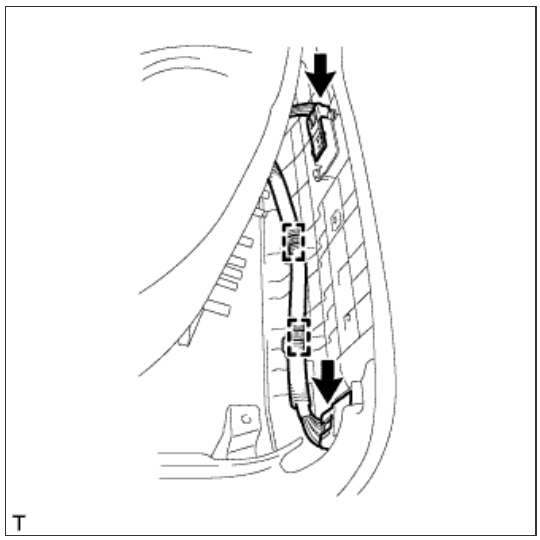


f. for Driver Side:

i. Detach the 2 wire harness clamps.

ii. Disconnect the 2 connectors.

g. for Front Passenger Side:
Disconnect the connector.

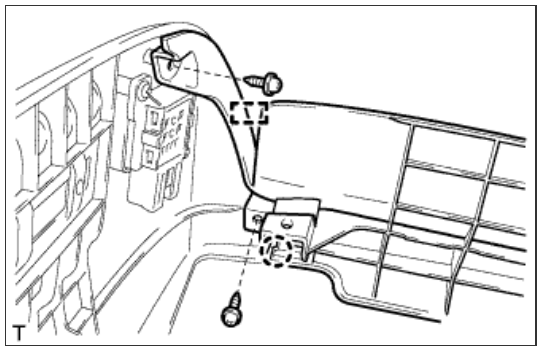


4. REMOVE FRONT INNER NO. 1 SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Remove the 2 screws.

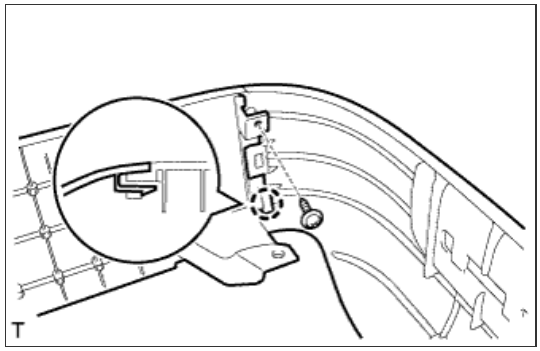
ii. Detach the claw and guide, and then remove the cushion shield.



b. for Front Passenger Side:

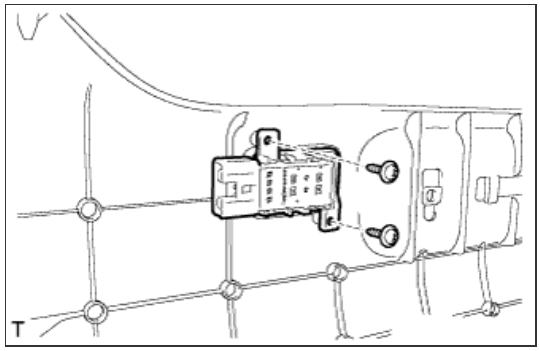
i. Remove the screw.

ii. Detach the claw and remove the cushion shield.



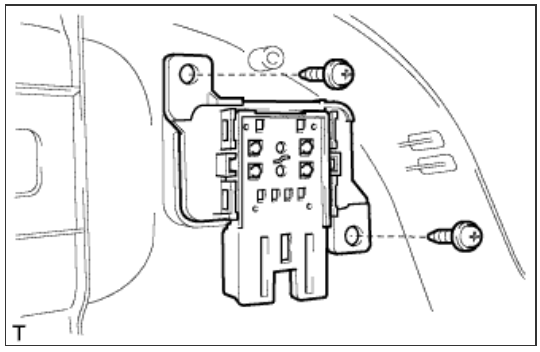
5. REMOVE LUMBAR SWITCH

a. Remove the 2 screws and switch.



6. REMOVE SEAT VARIABLE CUSHION SWITCH (for Driver Side)

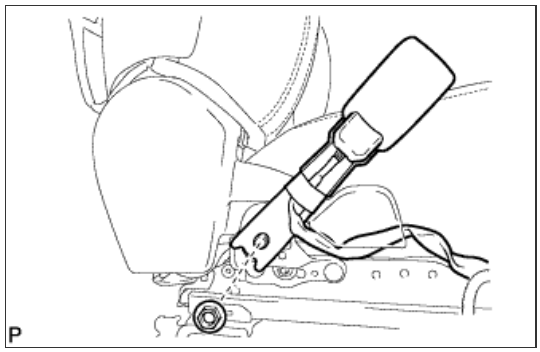
a. Remove the 2 screws and switch.



7. REMOVE FRONT SEAT INNER BELT ASSEMBLY LH

a. Disconnect the 3 connectors and detach the clamps.

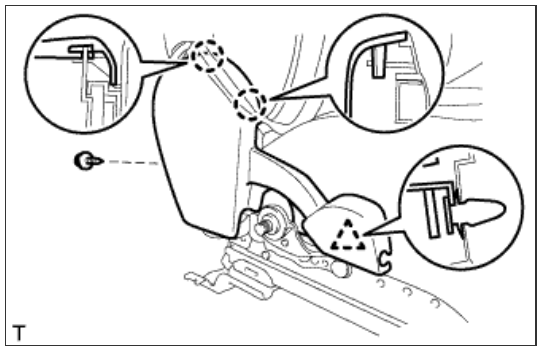
b. Remove the nut and front seat inner belt assembly.



8. REMOVE FRONT INNER SEAT CUSHION SHIELD LH

a. Remove the screw.

b. Detach the 2 claws and clip, and then remove the cushion shield.

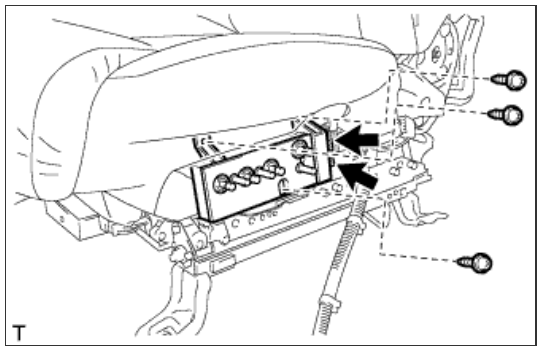


9. REMOVE FRONT POWER SEAT SWITCH LH

a. for Driver Side:
Disconnect the 2 connectors.

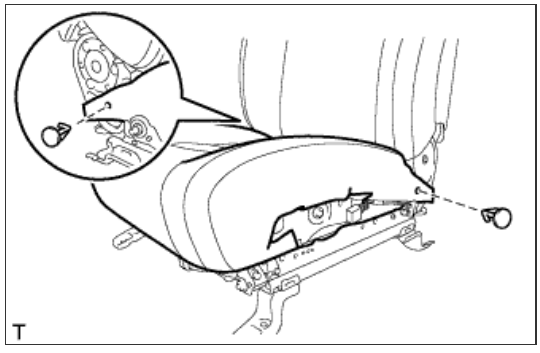
b. for Front Passenger Side:
Disconnect the connector.

c. Remove the 3 screws and switch.



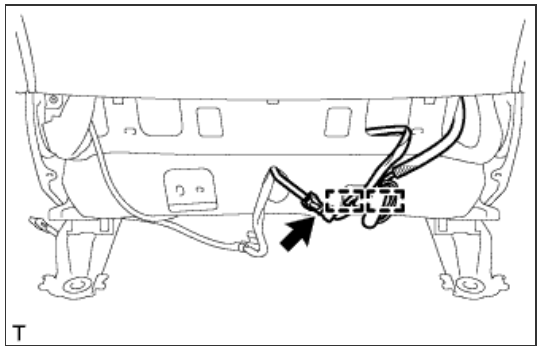
10. REMOVE SEAT CUSHION COVER WITH PAD

a. Using a clip remover, remove the 2 clips.

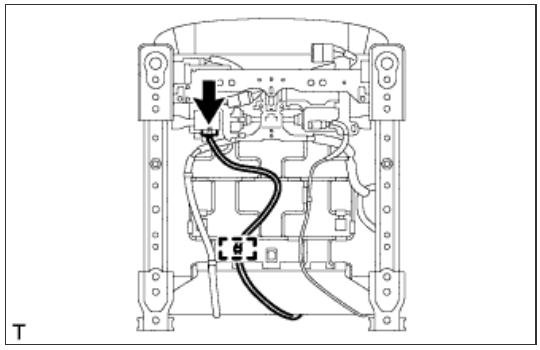


b. w/ Seat Heater System:

i. Disconnect the seat heater connector and detach the 2 wire harness clamps.

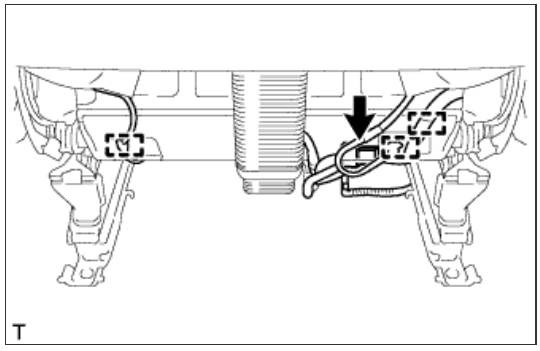


ii. Disconnect the seat heater control connector and detach the wire harness clamp.



c. w/ Climate Control Seat System:

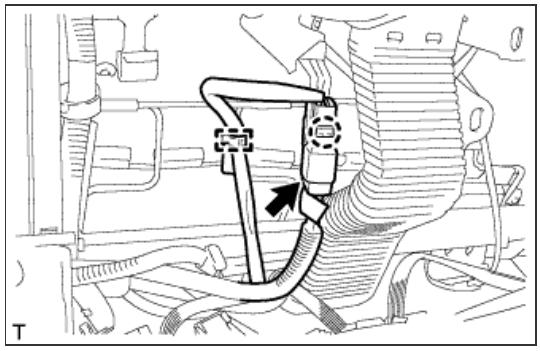
i. Disconnect the seat heater connector and detach the 3 wire harness clamps.



ii. Disconnect the control connector.

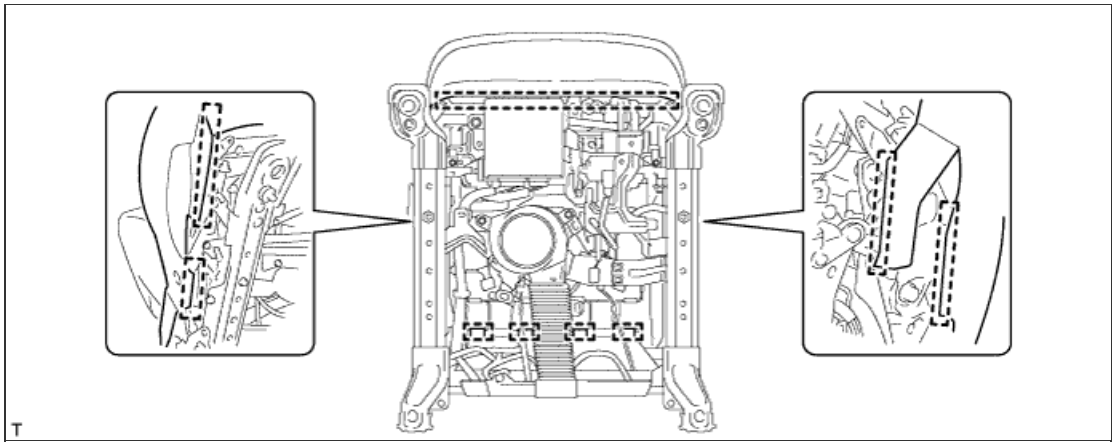
iii. Detach the claw and remove the connector.

iv. Detach the wire harness clamp.

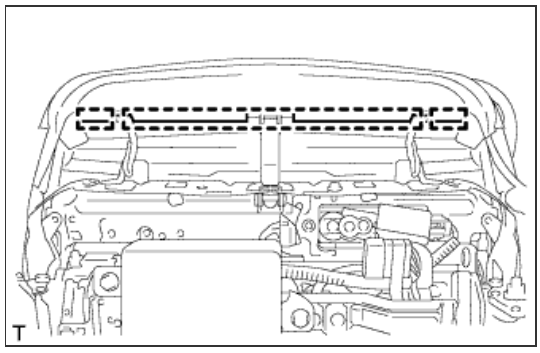


d. for Driver Side:

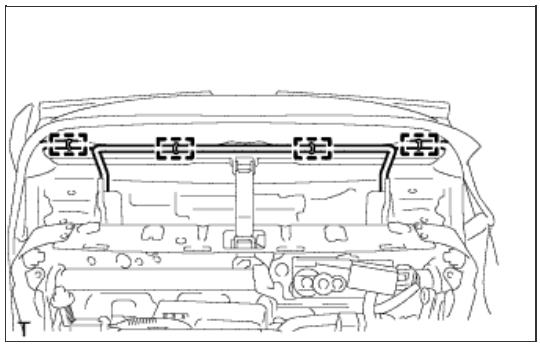
i. Detach the hooks.



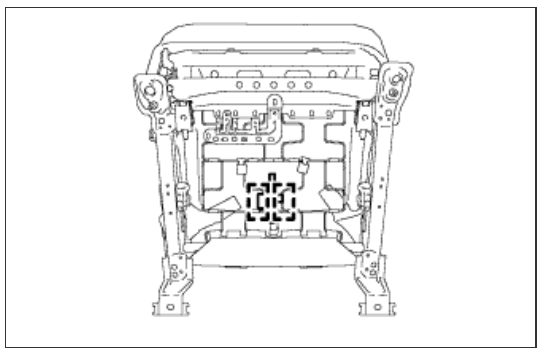
ii. Detach the hooks.



iii. Remove the hog rings and seat cushion cover with pad.



e. for Front Passenger Side:

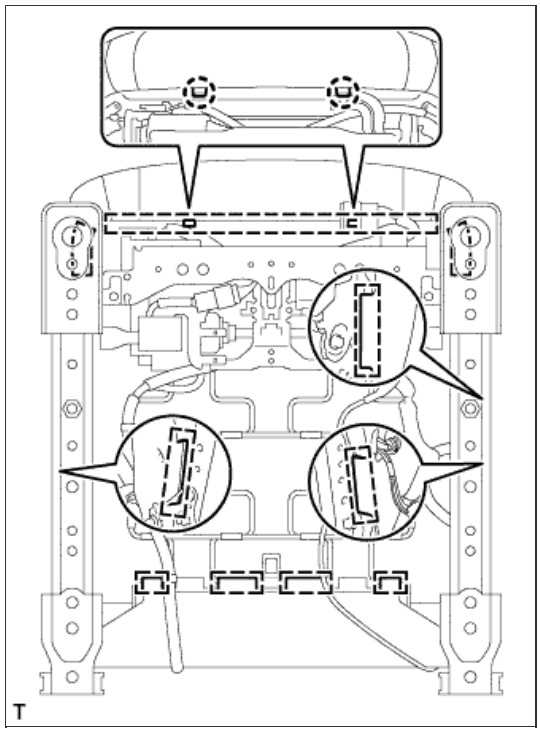


i. Disconnect the seat belt warning sensor connector.

ii. Detach the 2 clamps and remove the seat belt warning sensor connector.

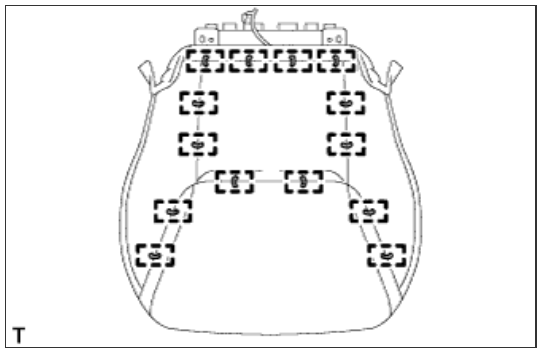
iii. Bend the 2 seat frame claws upward.

iv. Detach the hooks and remove the seat cushion cover with pad.



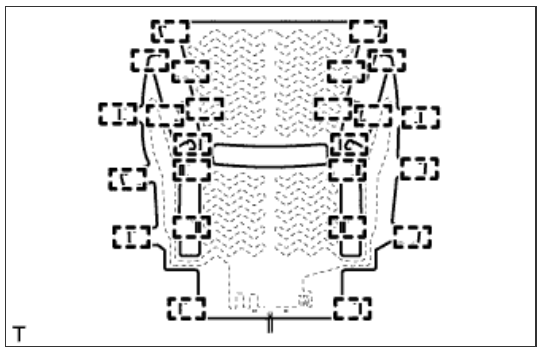
11. REMOVE FRONT SEPARATE TYPE SEAT CUSHION COVER

a. Remove the hog rings and front seat cushion cover.



12. REMOVE FRONT SEAT CUSHION HEATER ASSEMBLY LH (w/ Seat Heater System)

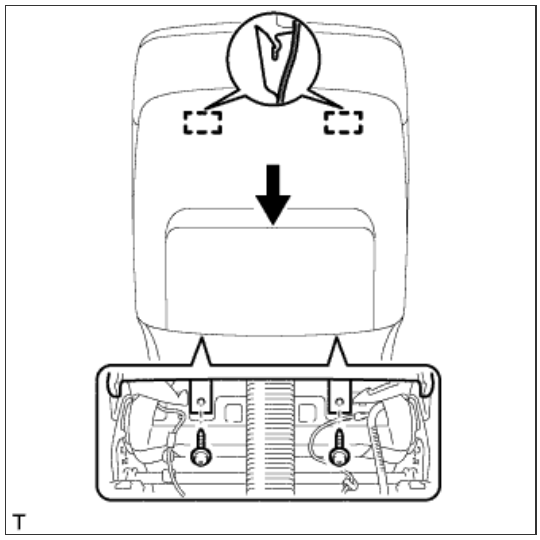
a. Cut off the tack pins which fasten the seat heater to the seat cushion cover, and then remove the seat cushion heater from the seat cushion cover.



13. REMOVE FRONT SEATBACK BOARD SUB-ASSEMBLY LH

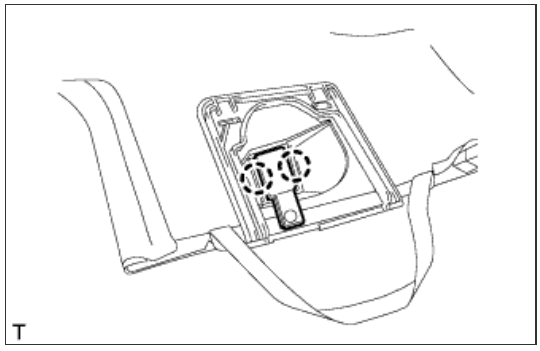
a. Remove the 2 screws.

b. Move the seatback board in the direction of the arrow to detach the 2 hooks and remove the seatback board.



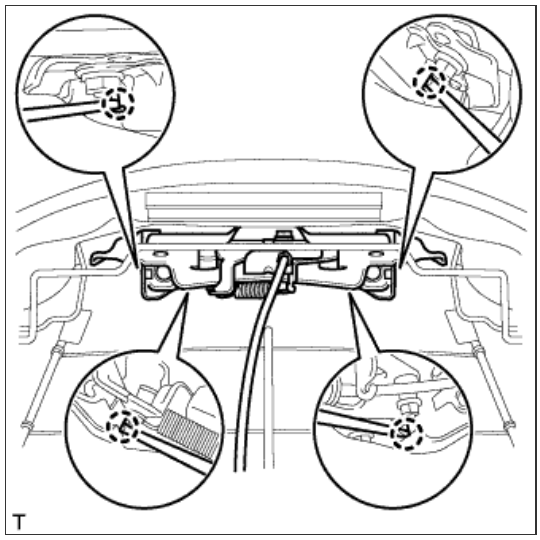
14. REMOVE NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY

a. Detach the 2 claws and remove the light.



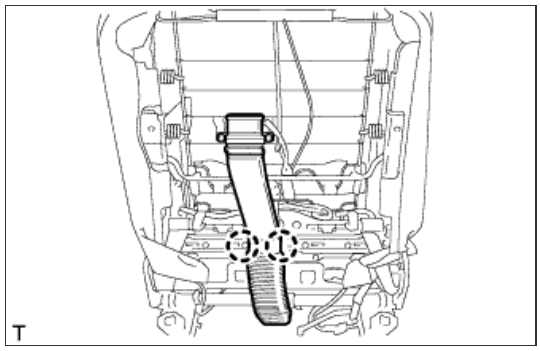
15. REMOVE FRONT SEAT HEADREST SUPPORT

a. Detach the 4 claws and remove the 2 headrest supports.

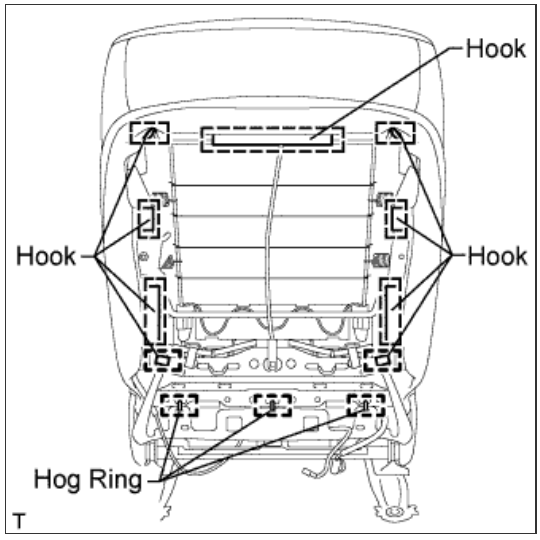


16. REMOVE SEATBACK COVER WITH PAD

a. w/ Climate Control Seat System:
Detach the 2 claws and disconnect the duct.

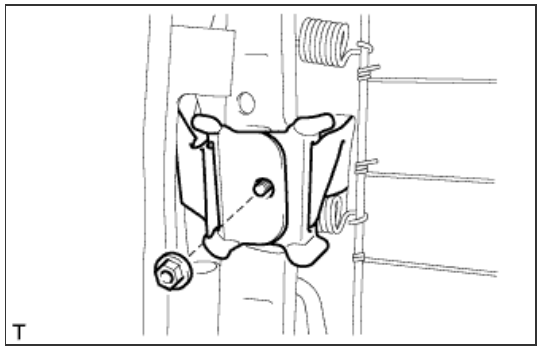


b. Remove the 3 hog rings and detach the 9 hooks.



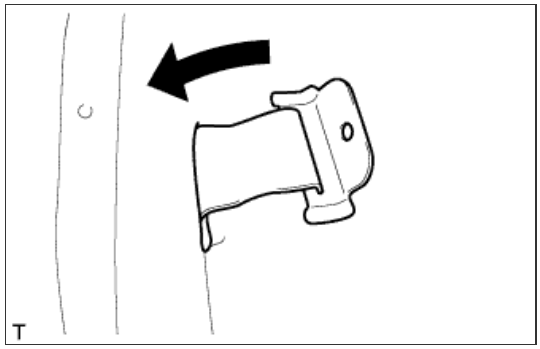
c. Remove the nut and seatback cover bracket from the seat frame.

d. Remove the seatback cover with pad.



17. REMOVE FRONT SEPARATE TYPE SEATBACK COVER

a. Disconnect the seatback cover bracket from the seatback pad.

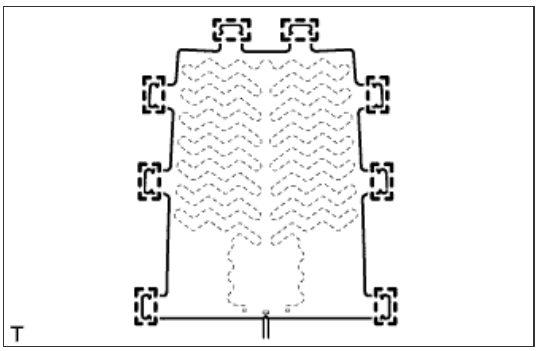


b. Remove the hog rings and seatback cover.



18. REMOVE FRONT SEATBACK HEATER ASSEMBLY LH (w/ Seat Heater System)

a. Cut off the tack pins which fasten the seatback heater to the seatback cover, and then remove the seatback heater from the seatback cover.

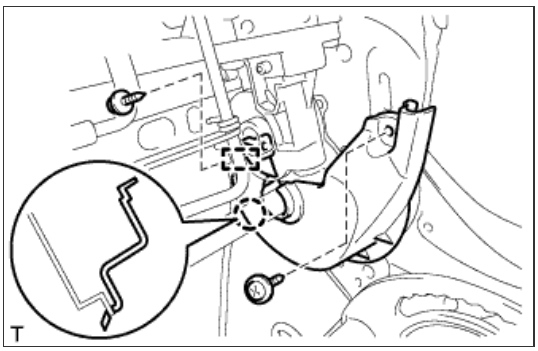


19. REMOVE INSIDE RECLINING ADJUSTER COVER LH

a. Detach the wire harness clamp.

b. Remove the 2 screws.

c. Detach the claw and remove the reclining adjuster cover.



20. REMOVE INSIDE RECLINING ADJUSTER COVER RH

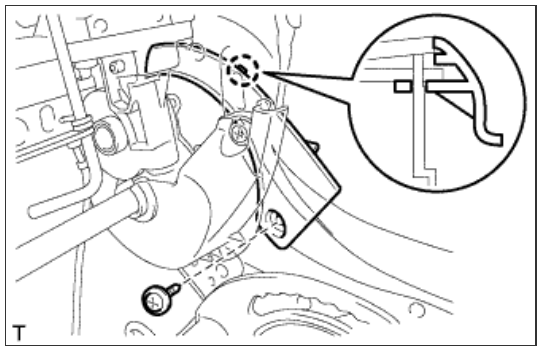
a. Detach the wire harness clamp.

b. Remove the 2 screws.

c. Detach the claw and remove the reclining adjuster cover.

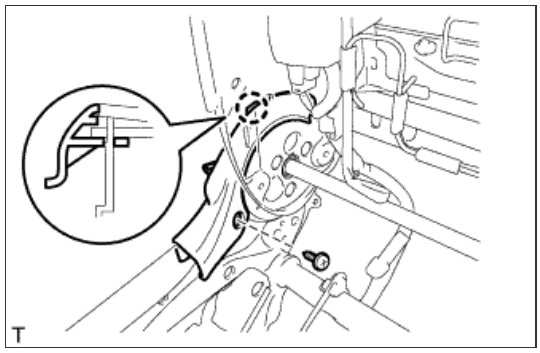
21. REMOVE OUTSIDE RECLINING ADJUSTER COVER LH

a. Remove the screw and detach the claw, and then remove the reclining adjuster cover.



22. REMOVE OUTSIDE RECLINING ADJUSTER COVER RH

a. Remove the screw and detach the claw, and then remove the reclining adjuster cover.

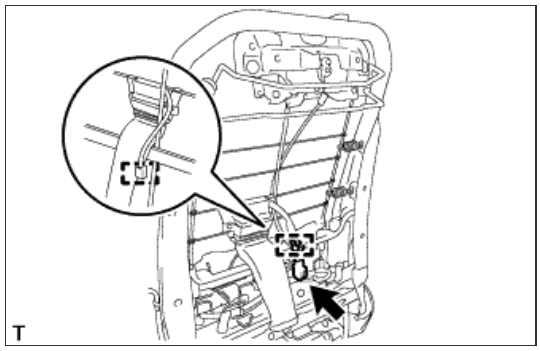


23. REMOVE SEAT CLIMATE CONTROL CONTROLLER (w/ Climate Control Seat System)

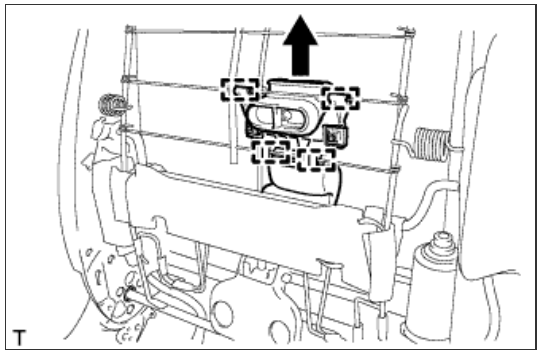
a. Remove the clamp.

b. Disconnect the connector.

c. Detach the connector clamp.



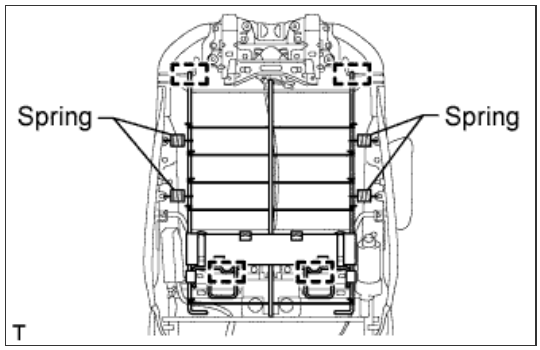
d. Detach the 2 hooks on the top of the controller. Then, while lifting the controller in the direction of the arrow, detach the 2 hooks on the bottom and remove the controller.



24. REMOVE LUMBAR SUPPORT ADJUSTER ASSEMBLY LH

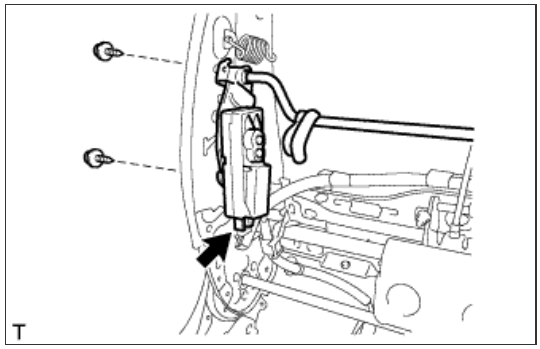
a. Remove the 4 springs.

b. Detach the 4 hooks and remove the seatback spring.

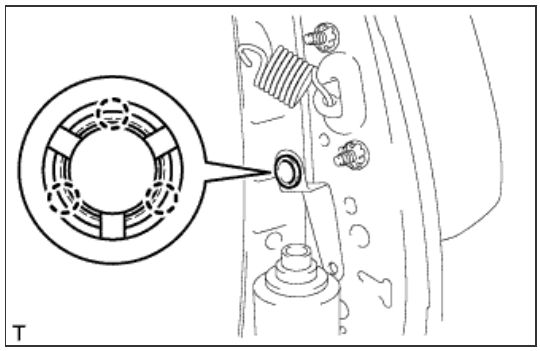


c. Disconnect the lumbar support adjuster connector.

d. Remove the 2 screws and lumbar support adjuster.

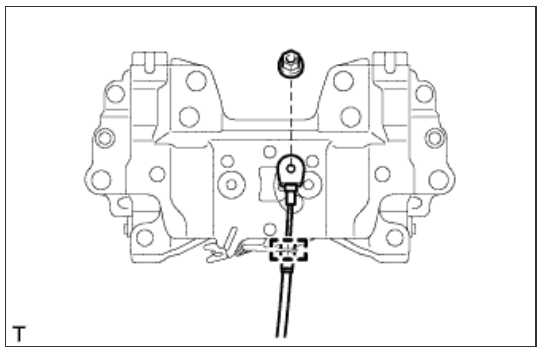


e. Detach the 3 claws and remove the bush from the seat frame.

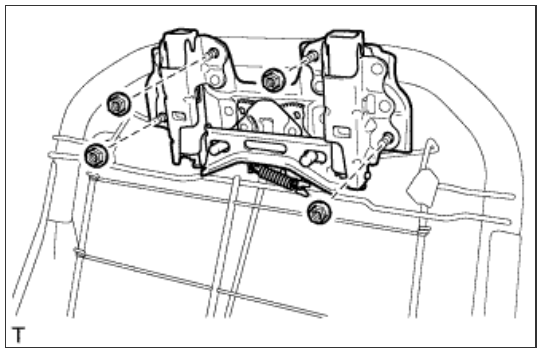


25. REMOVE UPPER ACTIVE HEADREST UNIT

a. Remove the nut and cable clamp to remove the upper active headrest unit from the lower active headrest unit.

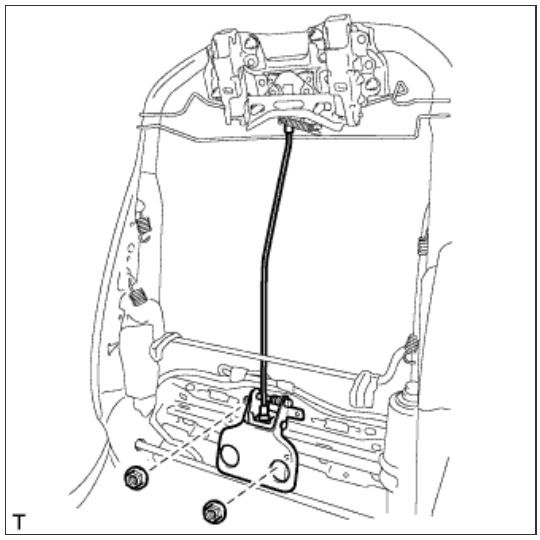


b. Remove the 4 nuts and upper active headrest unit.



26. REMOVE LOWER ACTIVE HEADREST UNIT

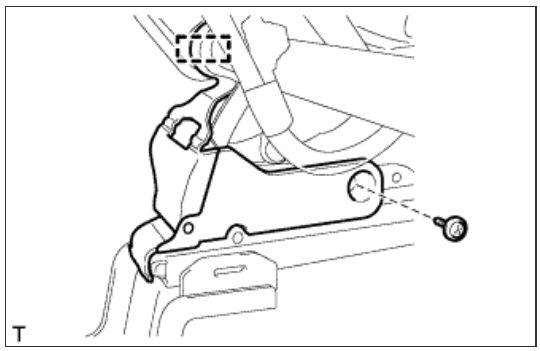
a. Remove the 2 nuts and lower active headrest unit.



27. REMOVE FRONT LOWER SEAT CUSHION SHIELD LH

a. Remove the screw.

b. Detach the hook and remove the lower seat cushion shield.



28. REMOVE FRONT LOWER SEAT CUSHION SHIELD RH

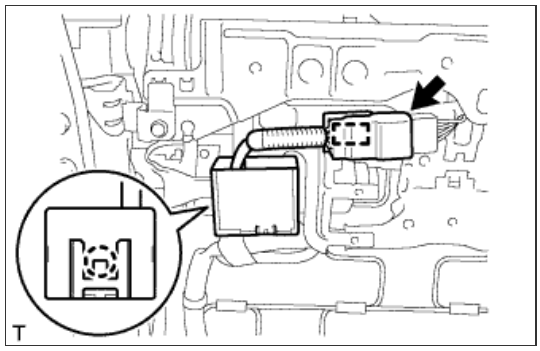
a. Remove the screw.

b. Detach the hook and remove the lower seat cushion shield.

29. REMOVE SEAT HEATER CONTROL SUB-ASSEMBLY (w/ Seat Heater System)

a. Disconnect the seat heater control connector and detach the clamp.

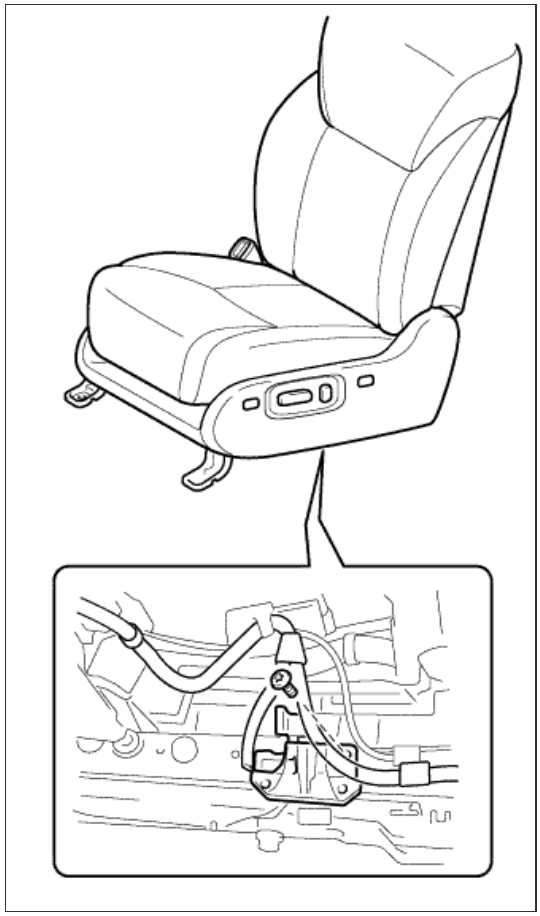
b. Using a screwdriver, detach the claw and remove the seat heater control.



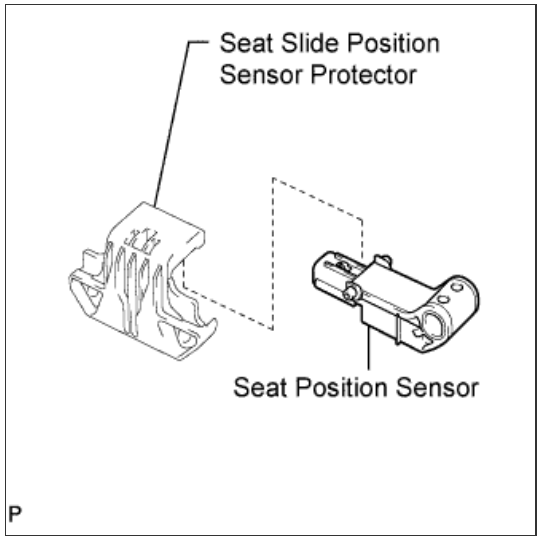
30. REMOVE SEAT POSITION SENSOR

a. Using a T30 "TORX" socket wrench, remove the screw and seat position sensor with sensor protector.

b. Disconnect the connector.



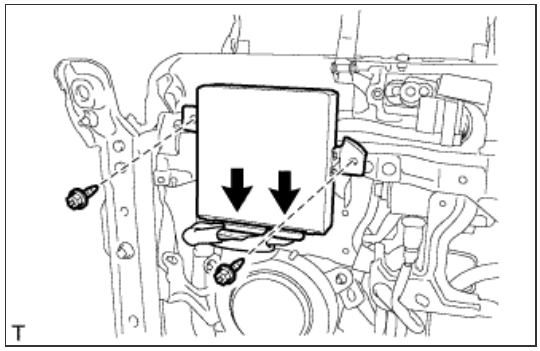
c. Remove the seat slide position sensor protector from the seat position sensor.



31. REMOVE SEAT CLIMATE CONTROL ECU (w/ Climate Control Seat System)

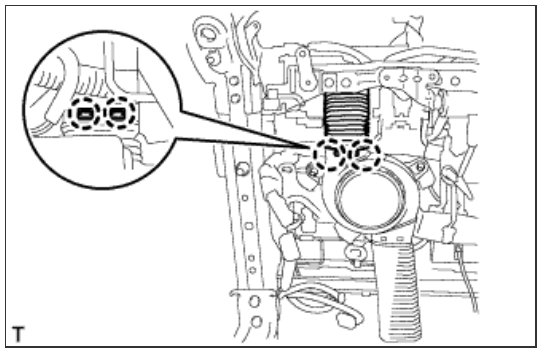
a. Disconnect the 2 connectors.

b. Remove the 2 bolts and ECU.



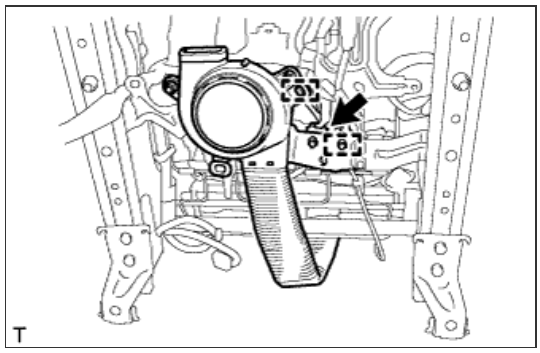
32. REMOVE SEAT CLIMATE CONTROL BLOWER LH (w/ Climate Control Seat System)

a. Detach the 4 claws and disconnect the duct.

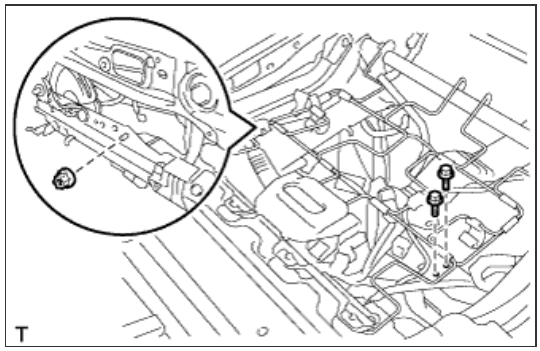


b. Detach the 2 clamps.

c. Disconnect the connector.

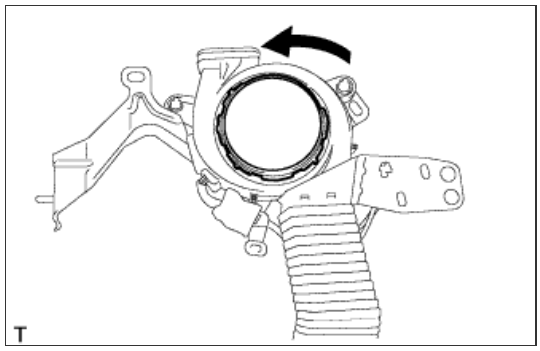


d. Remove the 2 bolts, nut and blower.



33. REMOVE NO. 1 AIR FILTER (w/ Climate Control Seat System)

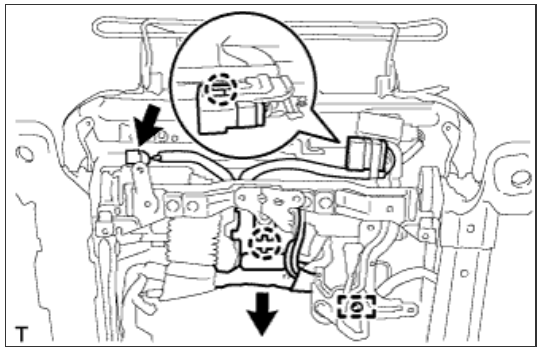
a. Rotate the filter counterclockwise to detach the claws, and then remove it.



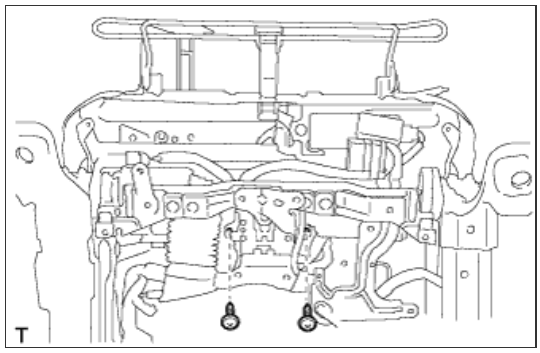
34. REMOVE SEAT CLIMATE CONTROL CONTROLLER LH (w/ Climate Control Seat System)

a. Disconnect the connector.

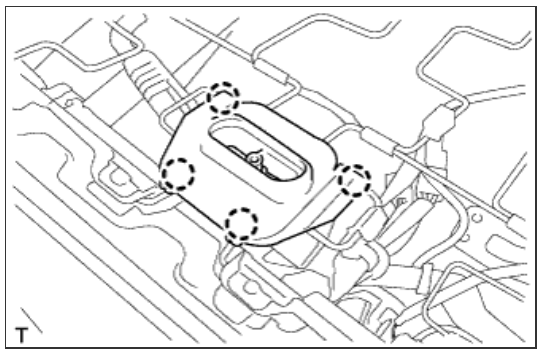
b. Detach the clamp and 2 claws, and then move the wire harness in the direction of the arrow.



c. Remove the 2 screws.

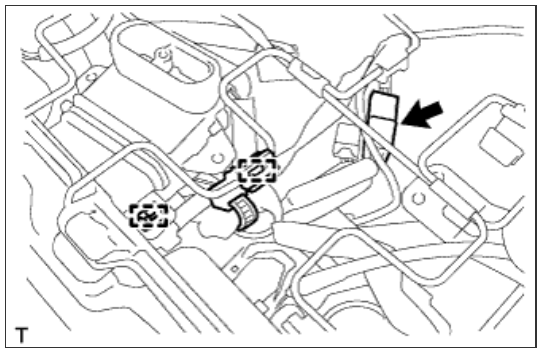


d. Detach the 4 claws and remove the bracket.



e. Detach the 2 wire harness clamps and disconnect the connector.

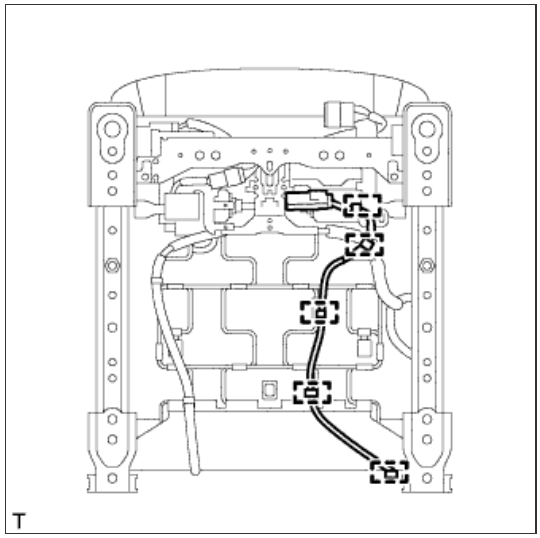
f. Remove the controller.



35. REMOVE FRONT SEAT SIDE AIRBAG ASSEMBLY LH

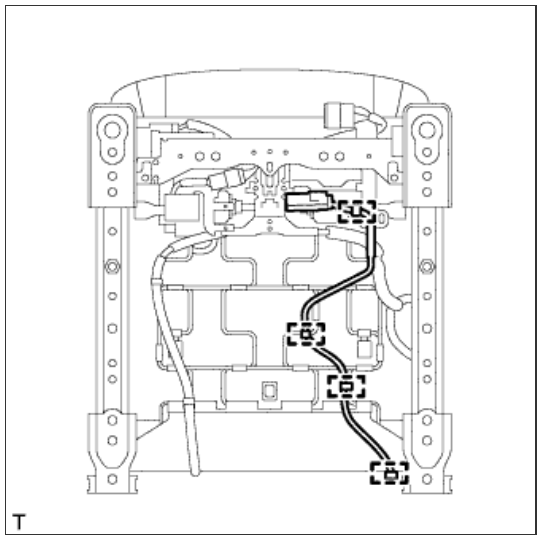
a. w/o Climate Control Seat System

i. Detach the 5 clamps and disconnect the wire harness.



b. w/ Climate Control Seat System

i. Detach the 4 clamps and disconnect the wire harness.

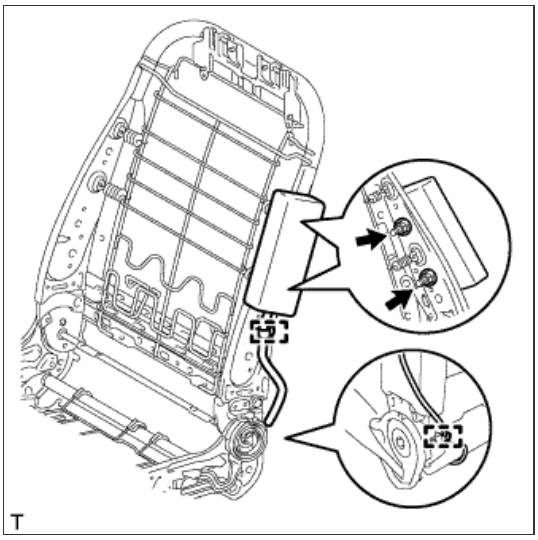


c. Detach the 2 clamps and disconnect the wire harness.

d. Remove the 2 nuts and front seat side airbag assembly LH.

CAUTION:

Make sure that the seat frame assembly is not deformed. If it is, replace it with a new one.



36. REMOVE FRONT SEAT WIRE LH

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

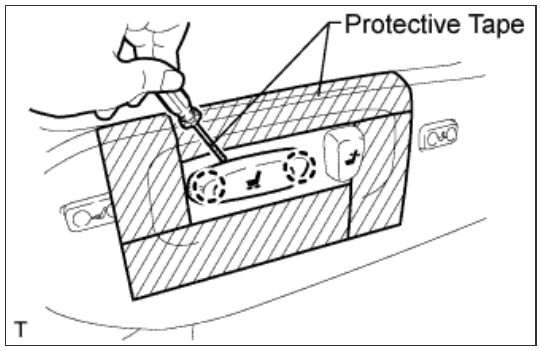
1. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

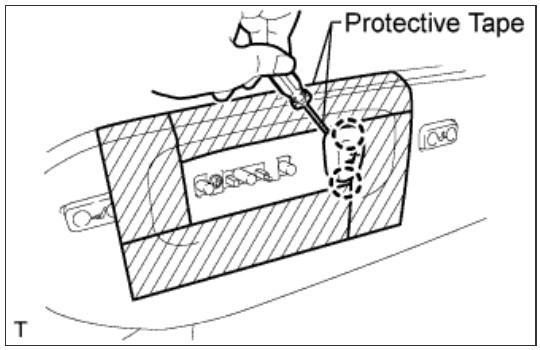


2. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

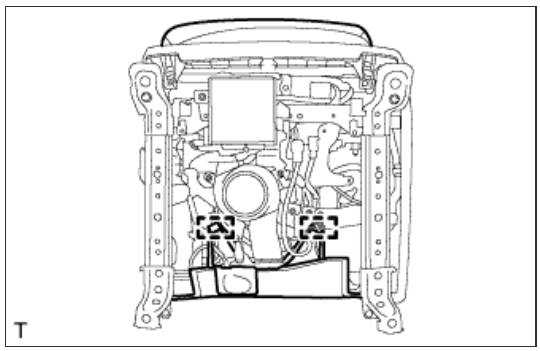
HINT:

Tape the screwdriver tip before use.

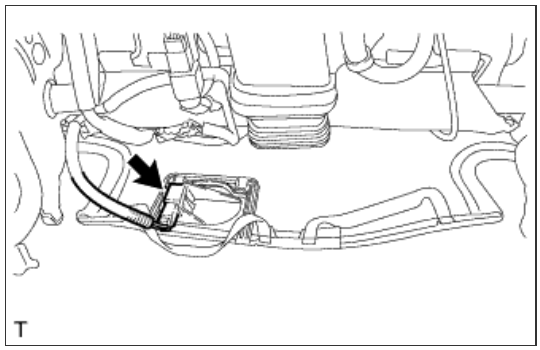


3. REMOVE FRONT SEAT CUSHION SHIELD LH

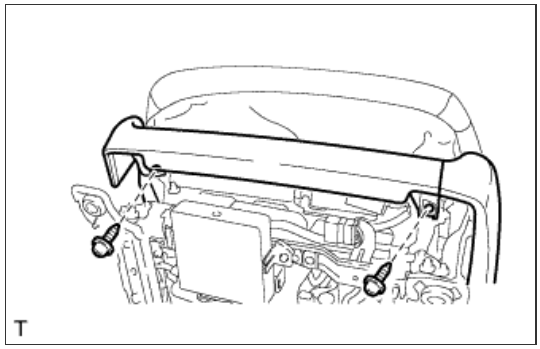
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

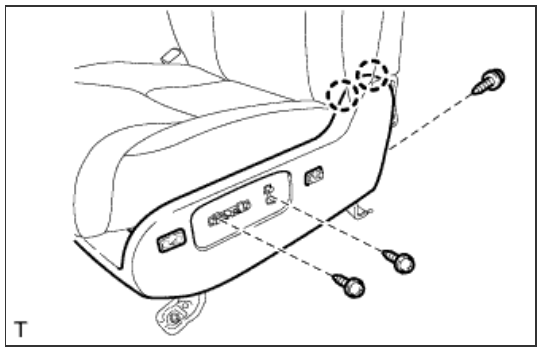


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

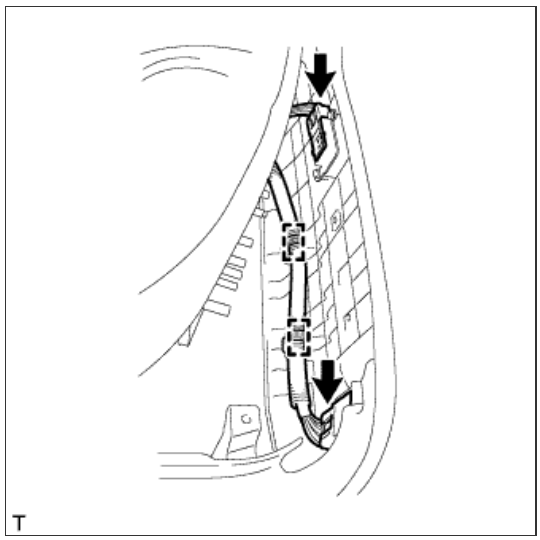


f. for Driver Side:

i. Detach the 2 wire harness clamps.

ii. Disconnect the 2 connectors.

g. for Front Passenger Side:
Disconnect the connector.

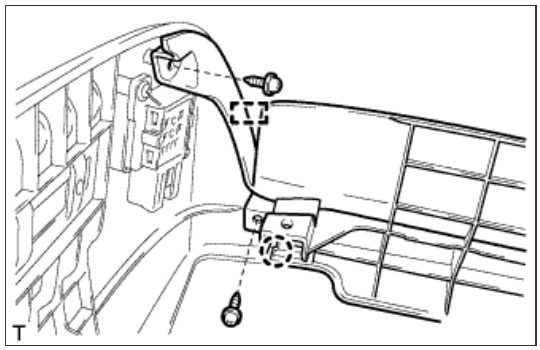


4. REMOVE FRONT INNER NO. 1 SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Remove the 2 screws.

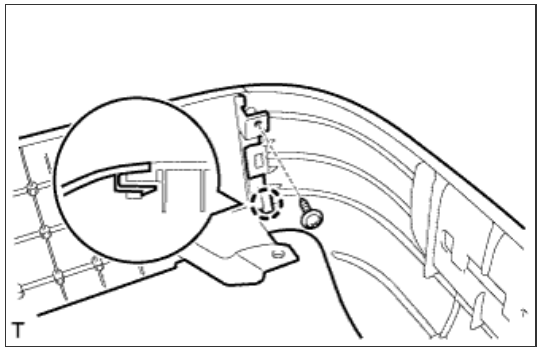
ii. Detach the claw and guide, and then remove the cushion shield.



b. for Front Passenger Side:

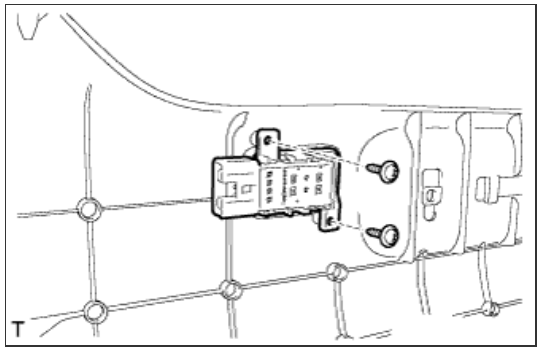
i. Remove the screw.

ii. Detach the claw and remove the cushion shield.



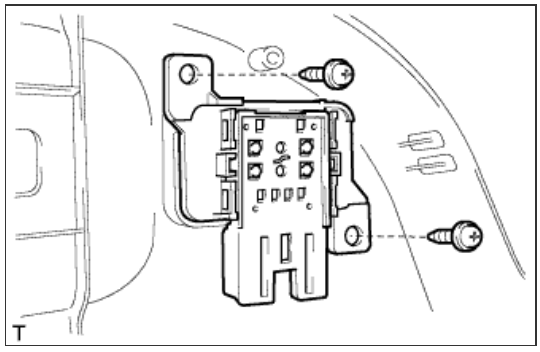
5. REMOVE LUMBAR SWITCH

a. Remove the 2 screws and switch.



6. REMOVE SEAT VARIABLE CUSHION SWITCH (for Driver Side)

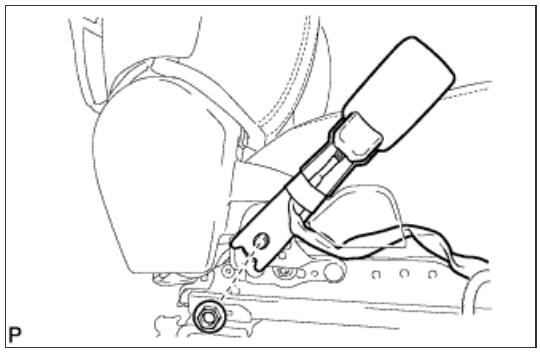
a. Remove the 2 screws and switch.



7. REMOVE FRONT SEAT INNER BELT ASSEMBLY LH

a. Disconnect the 3 connectors and detach the clamps.

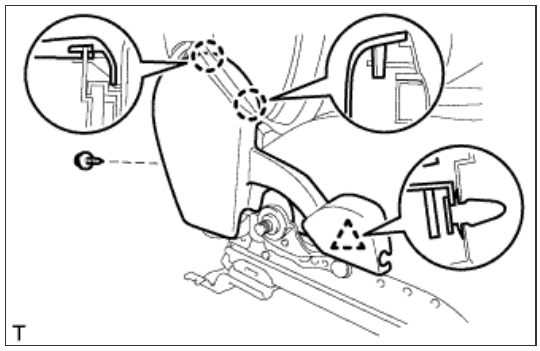
b. Remove the nut and front seat inner belt assembly.



8. REMOVE FRONT INNER SEAT CUSHION SHIELD LH

a. Remove the screw.

b. Detach the 2 claws and clip, and then remove the cushion shield.

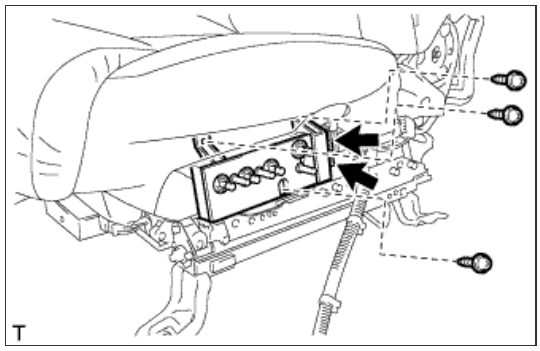


9. REMOVE FRONT POWER SEAT SWITCH LH

a. for Driver Side:
Disconnect the 2 connectors.

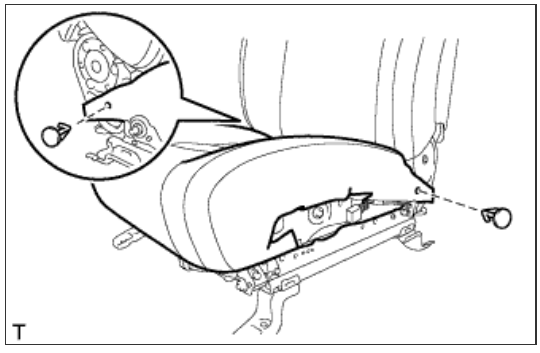
b. for Front Passenger Side:
Disconnect the connector.

c. Remove the 3 screws and switch.



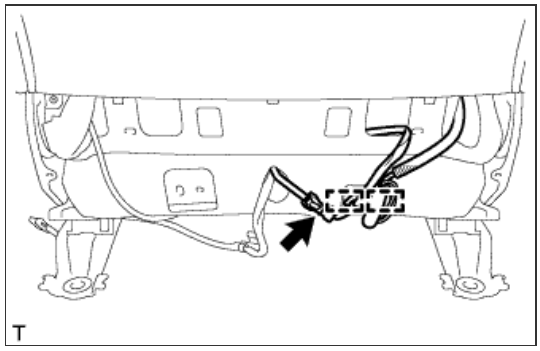
10. REMOVE SEAT CUSHION COVER WITH PAD

a. Using a clip remover, remove the 2 clips.

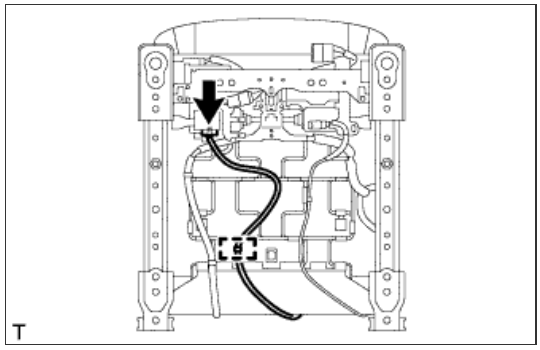


b. w/ Seat Heater System:

i. Disconnect the seat heater connector and detach the 2 wire harness clamps.

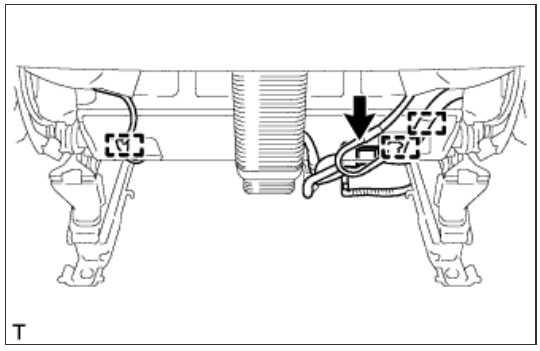


ii. Disconnect the seat heater control connector and detach the wire harness clamp.



c. w/ Climate Control Seat System:

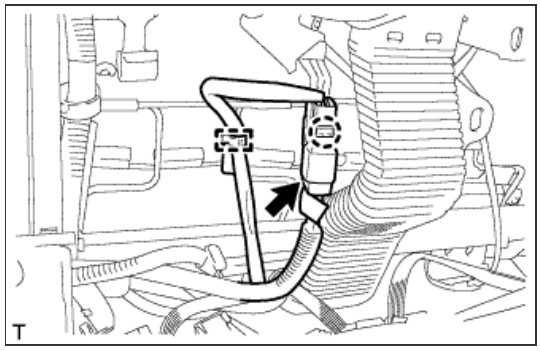
i. Disconnect the seat heater connector and detach the 3 wire harness clamps.



ii. Disconnect the control connector.

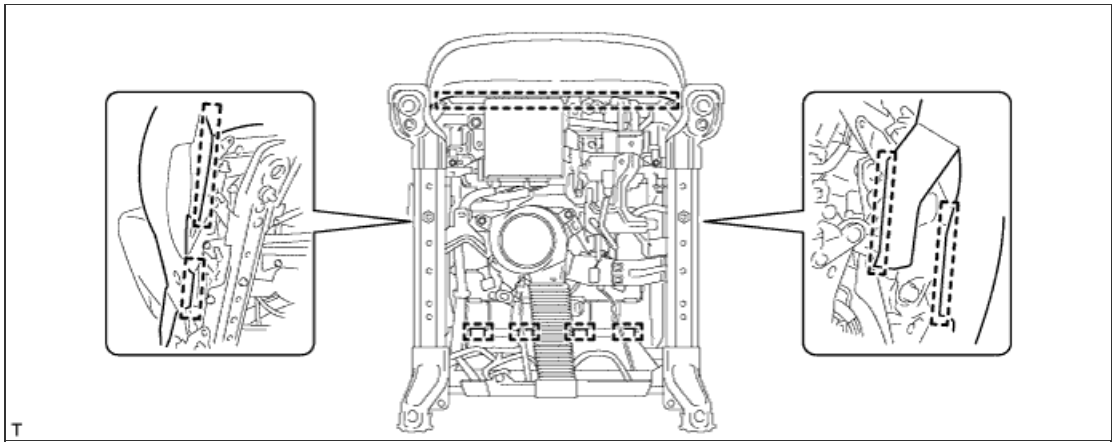
iii. Detach the claw and remove the connector.

iv. Detach the wire harness clamp.

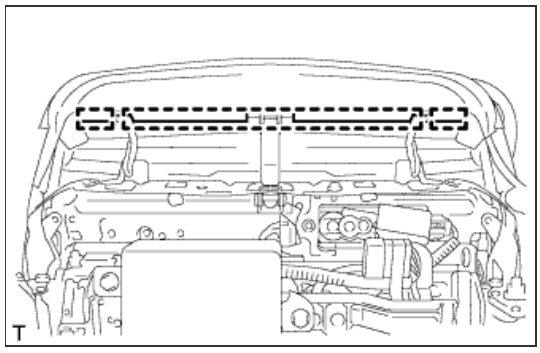


d. for Driver Side:

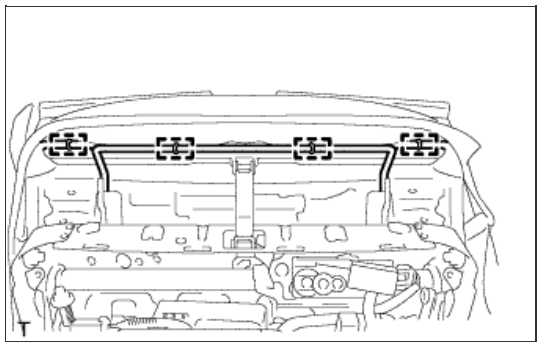
i. Detach the hooks.



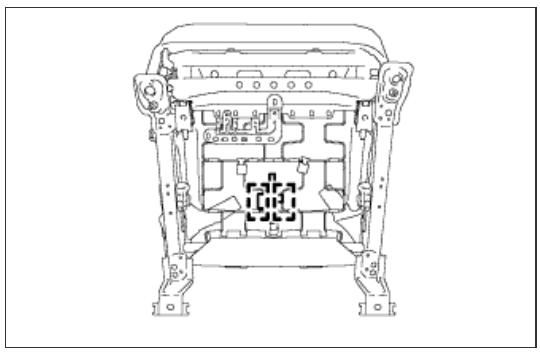
ii. Detach the hooks.



iii. Remove the hog rings and seat cushion cover with pad.



e. for Front Passenger Side:

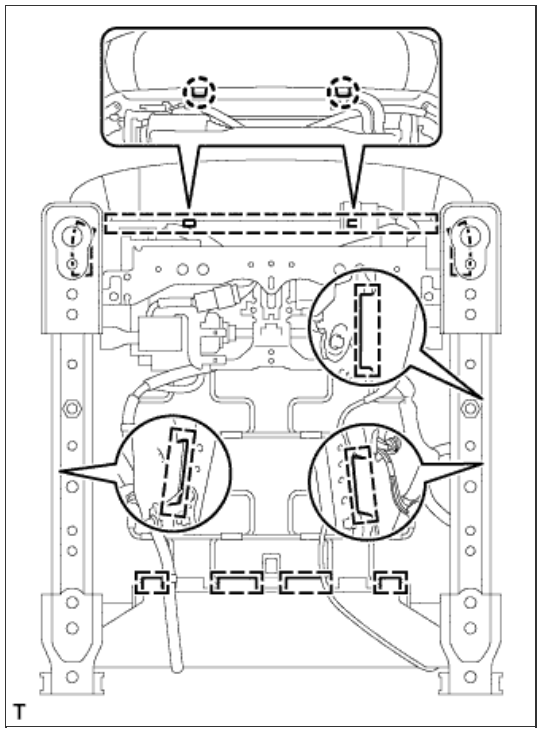


i. Disconnect the seat belt warning sensor connector.

ii. Detach the 2 clamps and remove the seat belt warning sensor connector.

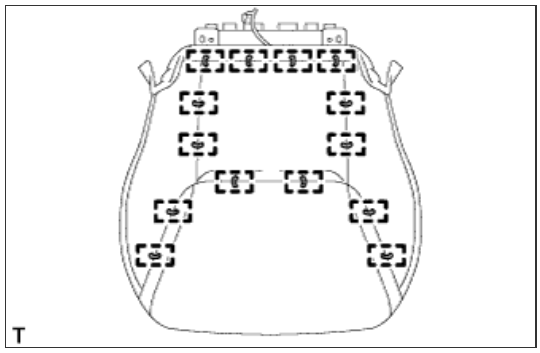
iii. Bend the 2 seat frame claws upward.

iv. Detach the hooks and remove the seat cushion cover with pad.



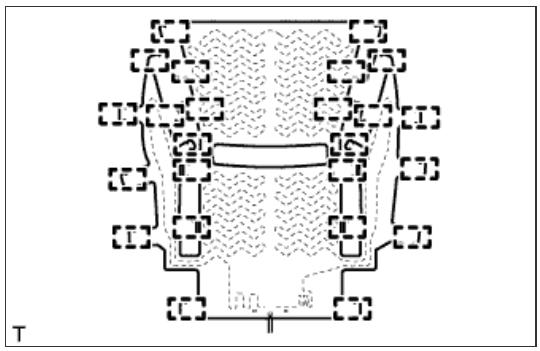
11. REMOVE FRONT SEPARATE TYPE SEAT CUSHION COVER

a. Remove the hog rings and front seat cushion cover.



12. REMOVE FRONT SEAT CUSHION HEATER ASSEMBLY LH (w/ Seat Heater System)

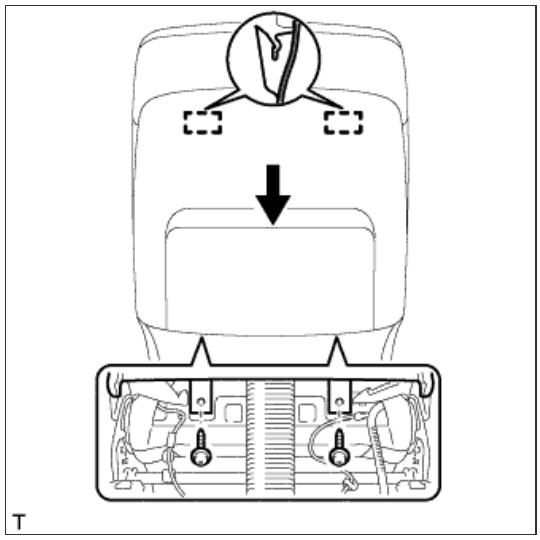
a. Cut off the tack pins which fasten the seat heater to the seat cushion cover, and then remove the seat cushion heater from the seat cushion cover.



13. REMOVE FRONT SEATBACK BOARD SUB-ASSEMBLY LH

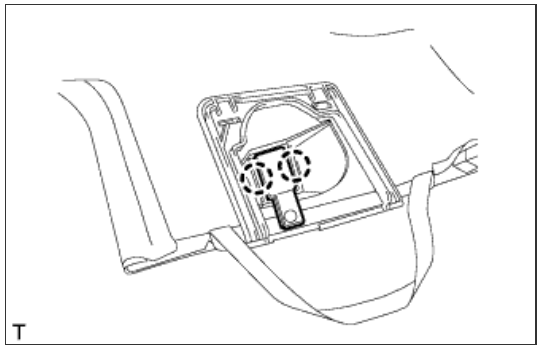
a. Remove the 2 screws.

b. Move the seatback board in the direction of the arrow to detach the 2 hooks and remove the seatback board.



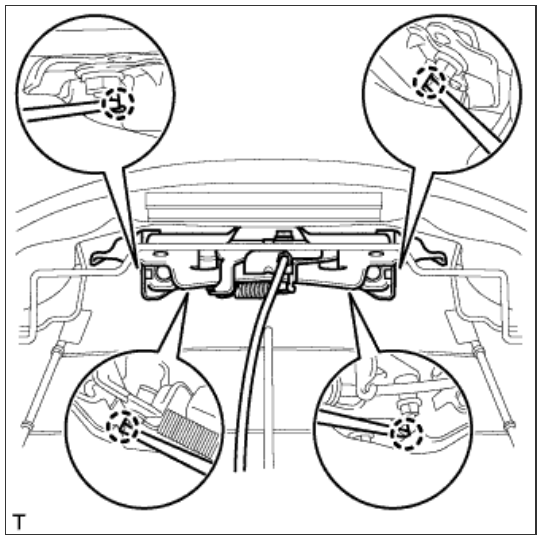
14. REMOVE NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY

a. Detach the 2 claws and remove the light.



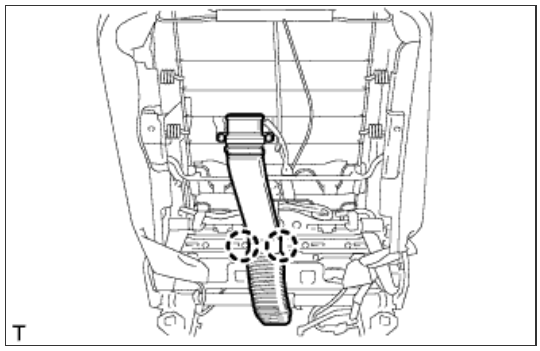
15. REMOVE FRONT SEAT HEADREST SUPPORT

a. Detach the 4 claws and remove the 2 headrest supports.

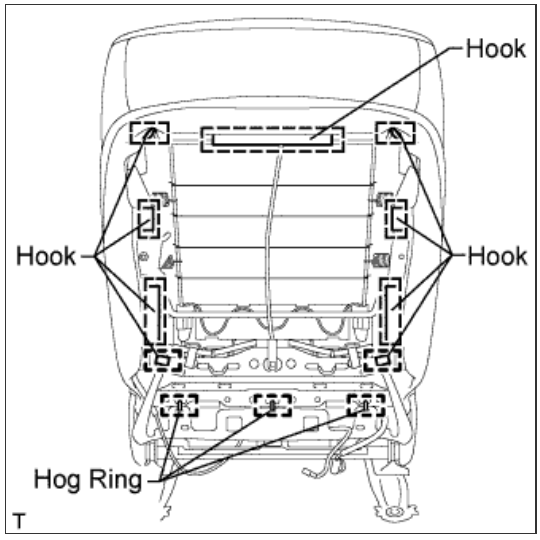


16. REMOVE SEATBACK COVER WITH PAD

a. w/ Climate Control Seat System:
Detach the 2 claws and disconnect the duct.

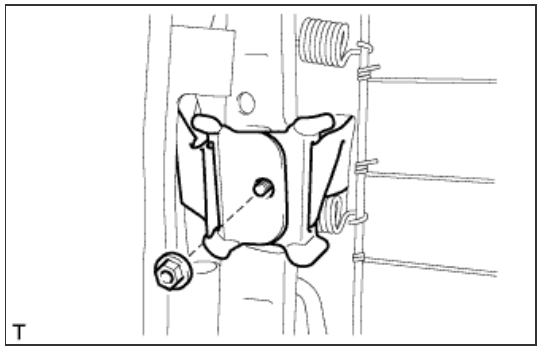


b. Remove the 3 hog rings and detach the 9 hooks.



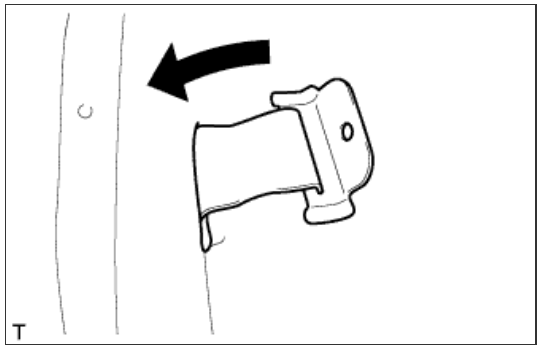
c. Remove the nut and seatback cover bracket from the seat frame.

d. Remove the seatback cover with pad.

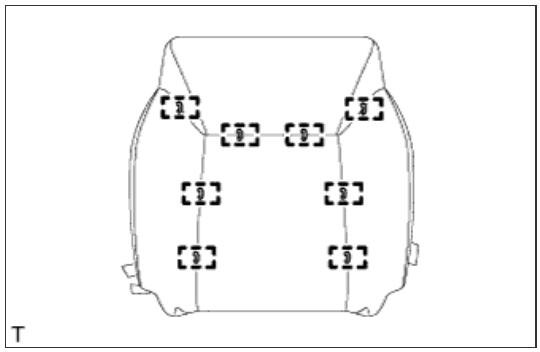


17. REMOVE FRONT SEPARATE TYPE SEATBACK COVER

a. Disconnect the seatback cover bracket from the seatback pad.

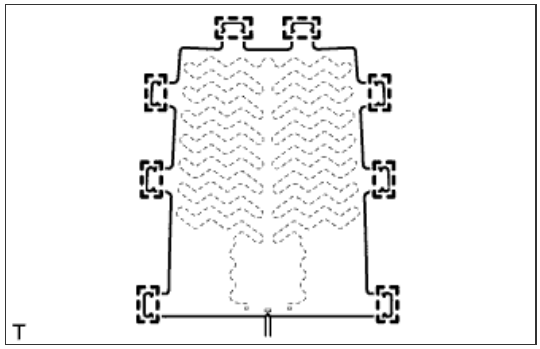


b. Remove the hog rings and seatback cover.



18. REMOVE FRONT SEATBACK HEATER ASSEMBLY LH (w/ Seat Heater System)

a. Cut off the tack pins which fasten the seatback heater to the seatback cover, and then remove the seatback heater from the seatback cover.

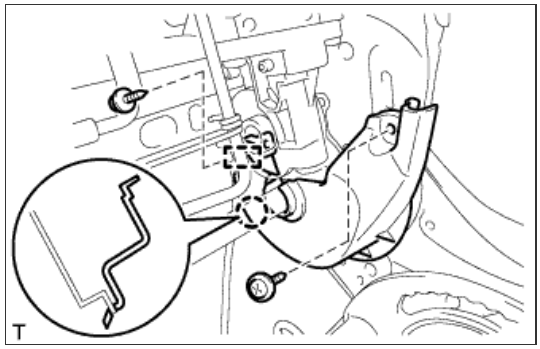


19. REMOVE INSIDE RECLINING ADJUSTER COVER LH

a. Detach the wire harness clamp.

b. Remove the 2 screws.

c. Detach the claw and remove the reclining adjuster cover.



20. REMOVE INSIDE RECLINING ADJUSTER COVER RH

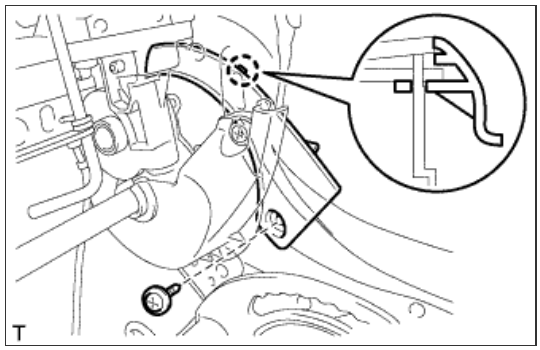
a. Detach the wire harness clamp.

b. Remove the 2 screws.

c. Detach the claw and remove the reclining adjuster cover.

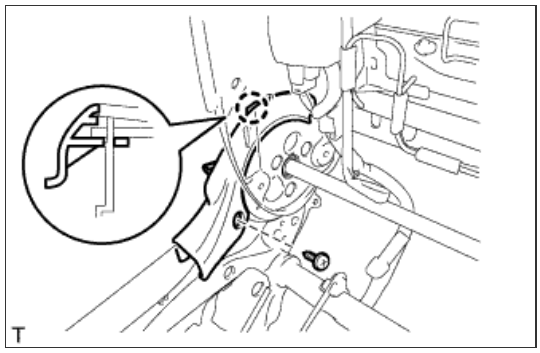
21. REMOVE OUTSIDE RECLINING ADJUSTER COVER LH

a. Remove the screw and detach the claw, and then remove the reclining adjuster cover.



22. REMOVE OUTSIDE RECLINING ADJUSTER COVER RH

a. Remove the screw and detach the claw, and then remove the reclining adjuster cover.

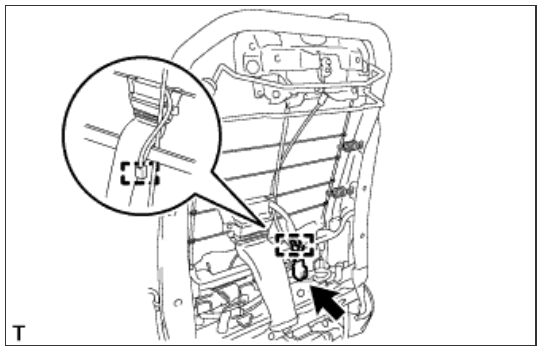


23. REMOVE SEAT CLIMATE CONTROL CONTROLLER (w/ Climate Control Seat System)

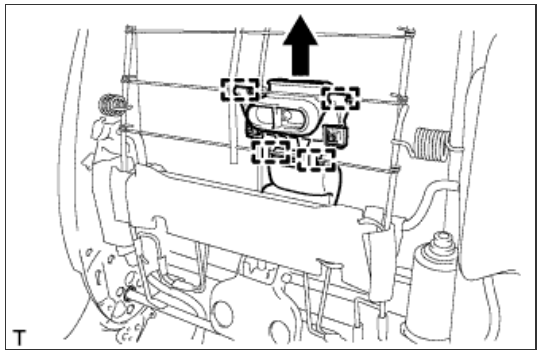
a. Remove the clamp.

b. Disconnect the connector.

c. Detach the connector clamp.



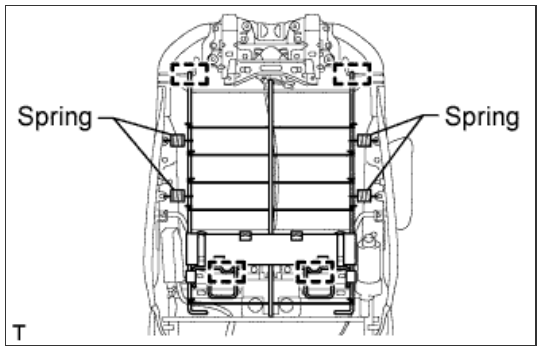
d. Detach the 2 hooks on the top of the controller. Then, while lifting the controller in the direction of the arrow, detach the 2 hooks on the bottom and remove the controller.



24. REMOVE LUMBAR SUPPORT ADJUSTER ASSEMBLY LH

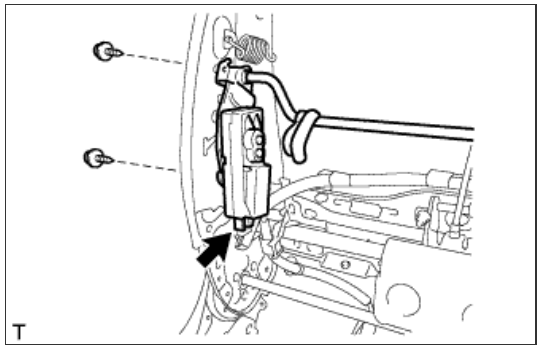
a. Remove the 4 springs.

b. Detach the 4 hooks and remove the seatback spring.

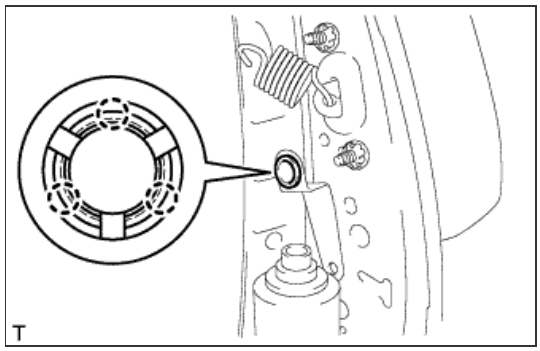


c. Disconnect the lumbar support adjuster connector.

d. Remove the 2 screws and lumbar support adjuster.

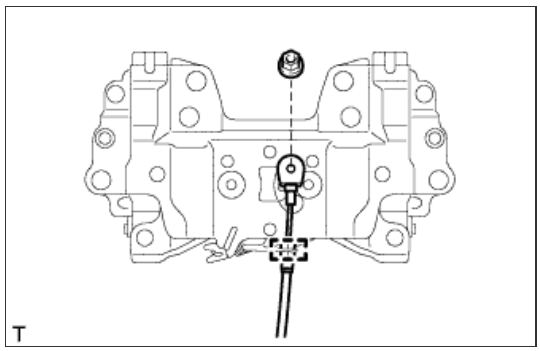


e. Detach the 3 claws and remove the bush from the seat frame.

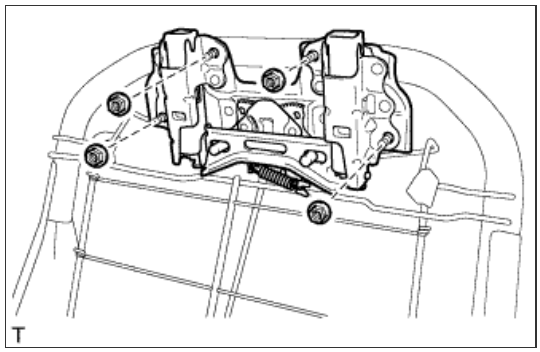


25. REMOVE UPPER ACTIVE HEADREST UNIT

a. Remove the nut and cable clamp to remove the upper active headrest unit from the lower active headrest unit.

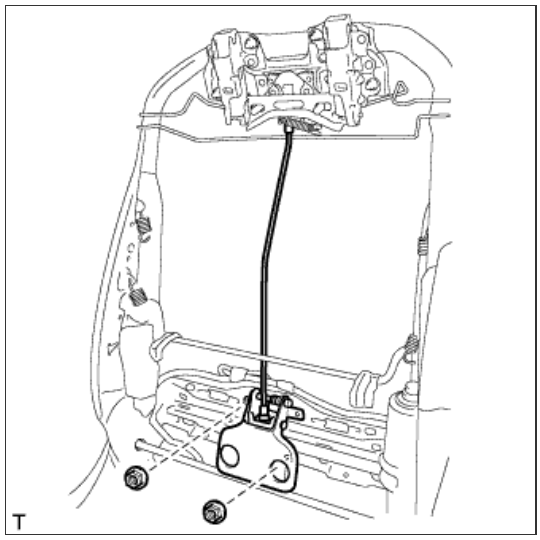


b. Remove the 4 nuts and upper active headrest unit.



26. REMOVE LOWER ACTIVE HEADREST UNIT

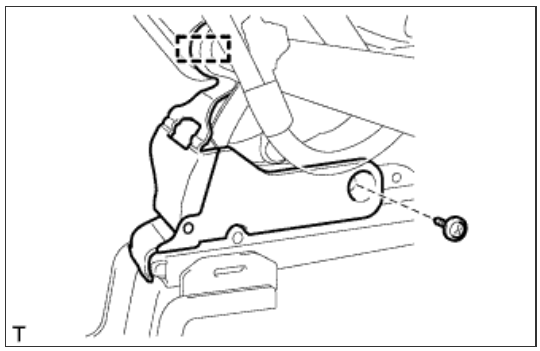
a. Remove the 2 nuts and lower active headrest unit.



27. REMOVE FRONT LOWER SEAT CUSHION SHIELD LH

a. Remove the screw.

b. Detach the hook and remove the lower seat cushion shield.



28. REMOVE FRONT LOWER SEAT CUSHION SHIELD RH

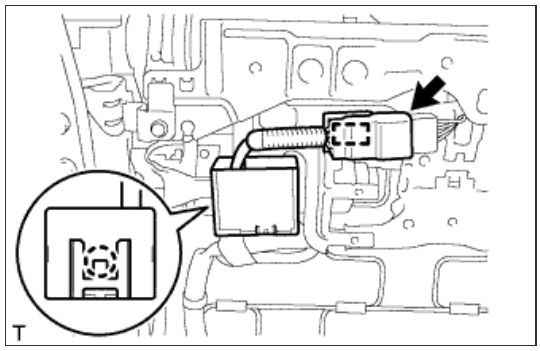
a. Remove the screw.

b. Detach the hook and remove the lower seat cushion shield.

29. REMOVE SEAT HEATER CONTROL SUB-ASSEMBLY (w/ Seat Heater System)

a. Disconnect the seat heater control connector and detach the clamp.

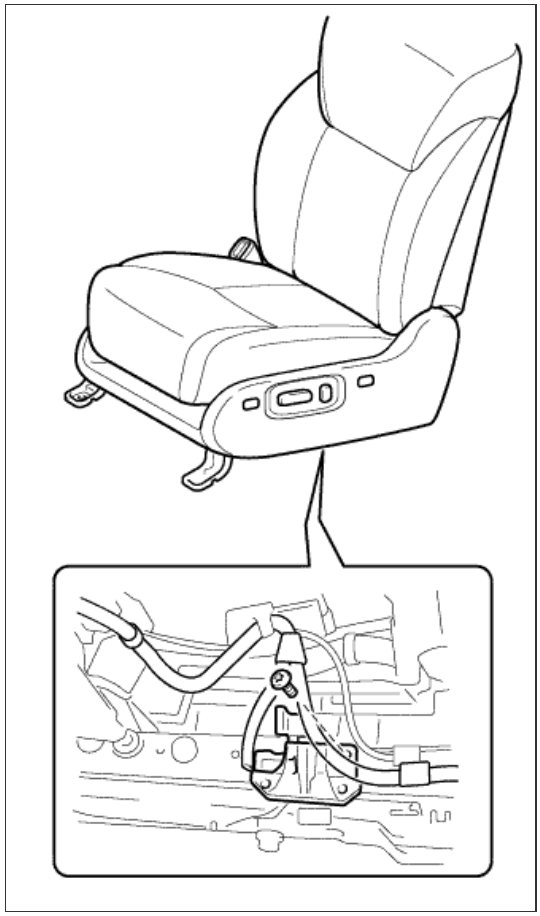
b. Using a screwdriver, detach the claw and remove the seat heater control.



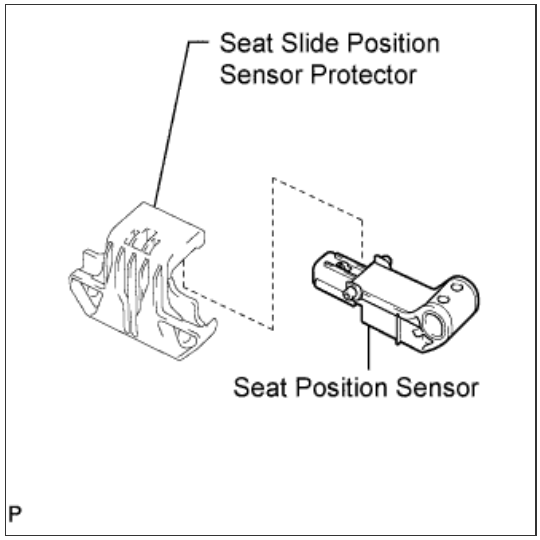
30. REMOVE SEAT POSITION SENSOR

a. Using a T30 "TORX" socket wrench, remove the screw and seat position sensor with sensor protector.

b. Disconnect the connector.



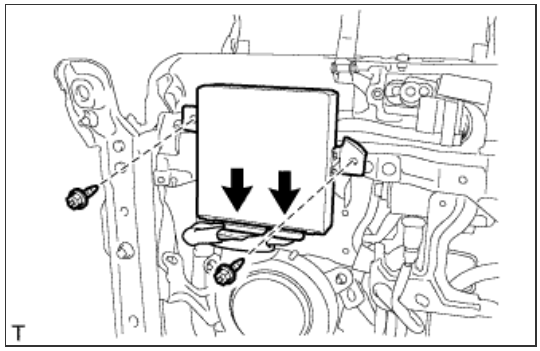
c. Remove the seat slide position sensor protector from the seat position sensor.



31. REMOVE SEAT CLIMATE CONTROL ECU (w/ Climate Control Seat System)

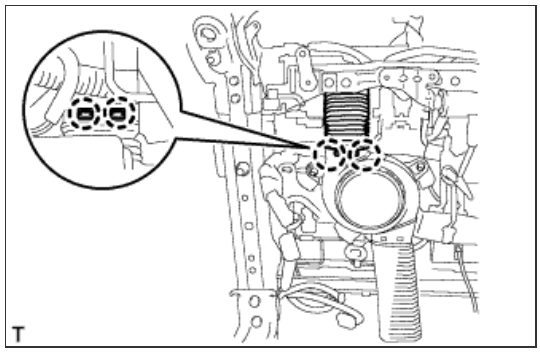
a. Disconnect the 2 connectors.

b. Remove the 2 bolts and ECU.



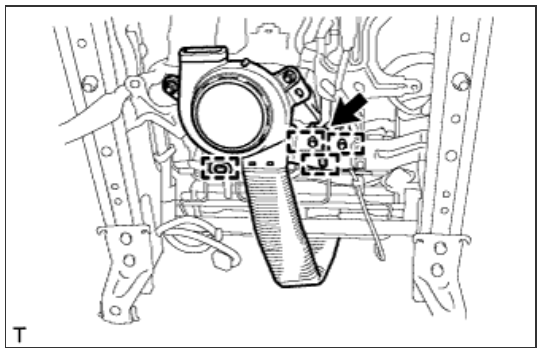
32. REMOVE SEAT CLIMATE CONTROL BLOWER LH (w/ Climate Control Seat System)

a. Detach the 4 claws and disconnect the duct.

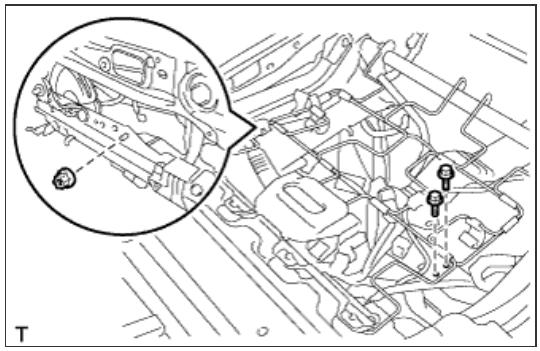


b. Detach the 4 clamps.

c. Disconnect the connector.

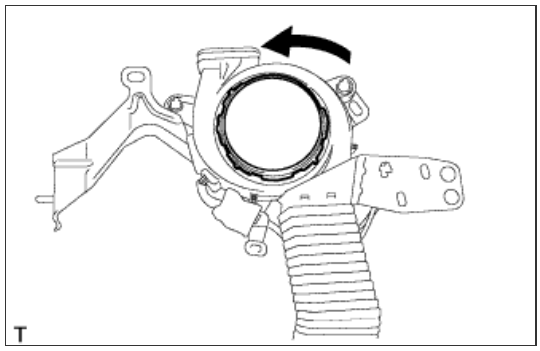


d. Remove the 2 bolts, nut and blower.



33. REMOVE NO. 1 AIR FILTER (w/ Climate Control Seat System)

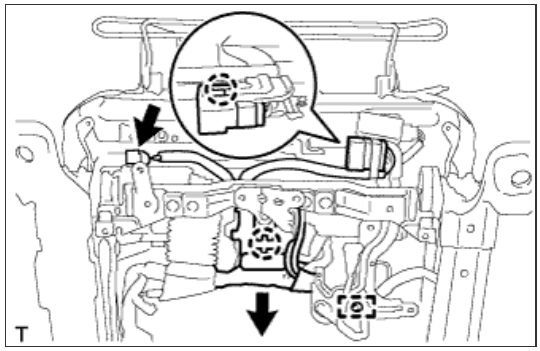
a. Rotate the filter counterclockwise to detach the claws, and then remove it.



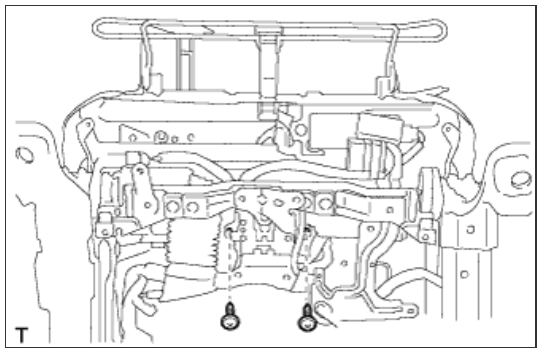
34. REMOVE SEAT CLIMATE CONTROL CONTROLLER LH (w/ Climate Control Seat System)

a. Disconnect the connector.

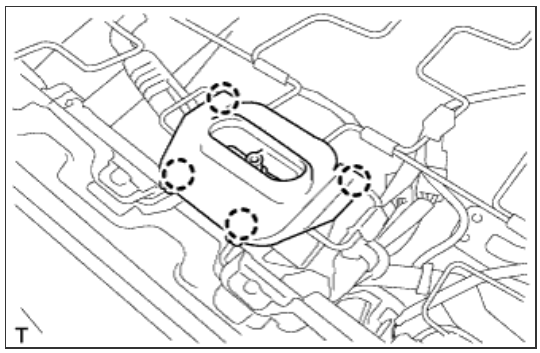
b. Detach the clamp and 2 claws, and then move the wire harness in the direction of the arrow.



c. Remove the 2 screws.

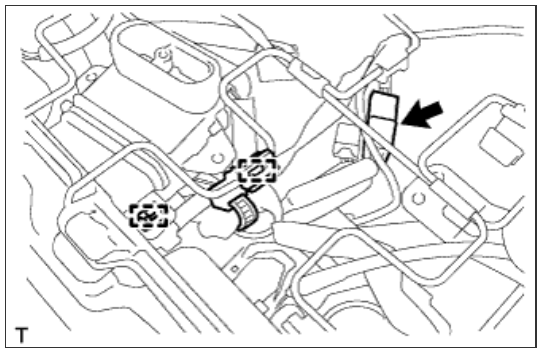


d. Detach the 4 claws and remove the bracket.



e. Detach the 2 wire harness clamps and disconnect the connector.

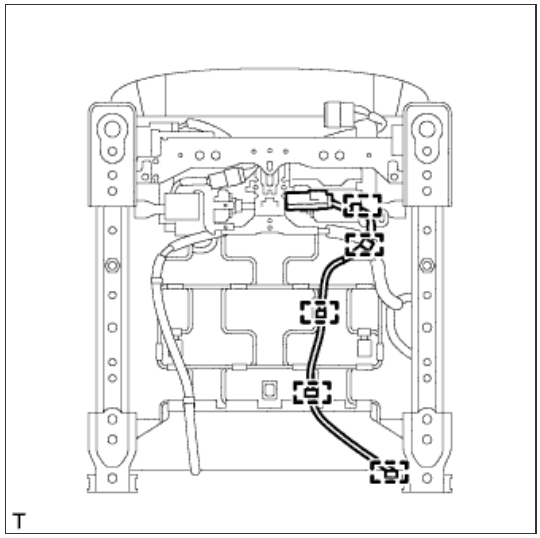
f. Remove the controller.



35. REMOVE FRONT SEAT SIDE AIRBAG ASSEMBLY LH

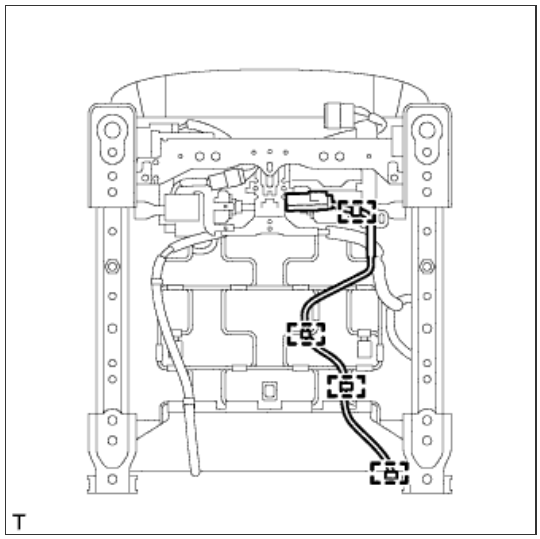
a. w/o Climate Control Seat System

i. Detach the 5 clamps and disconnect the wire harness.



b. w/ Climate Control Seat System

i. Detach the 4 clamps and disconnect the wire harness.

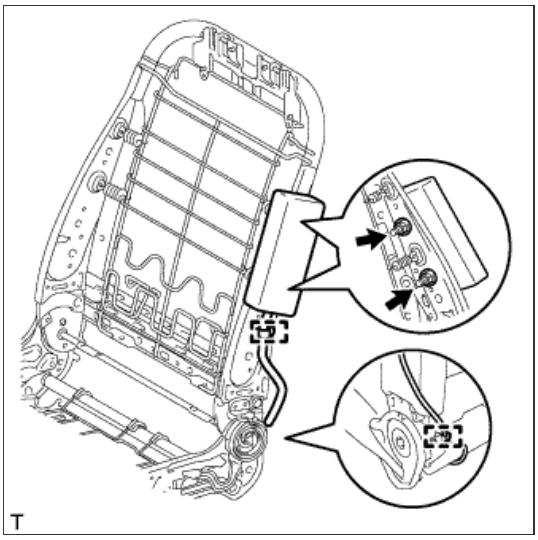


c. Detach the 2 clamps and disconnect the wire harness.

d. Remove the 2 nuts and front seat side airbag assembly LH.

CAUTION:

Make sure that the seat frame assembly is not deformed. If it is, replace it with a new one.



36. REMOVE FRONT SEAT WIRE LH

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL FRONT SEAT WIRE LH

2. INSTALL FRONT SEAT SIDE AIRBAG ASSEMBLY LH

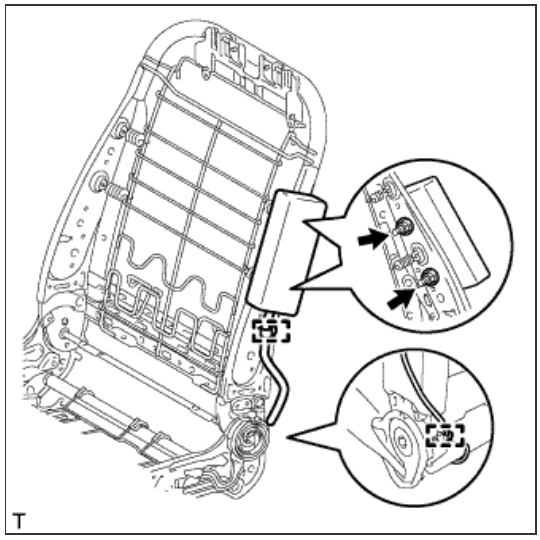
CAUTION:

Make sure that the seat frame assembly is not deformed. If it is, replace it with a new one.

a. Install the front seat side airbag assembly with 2 nuts.

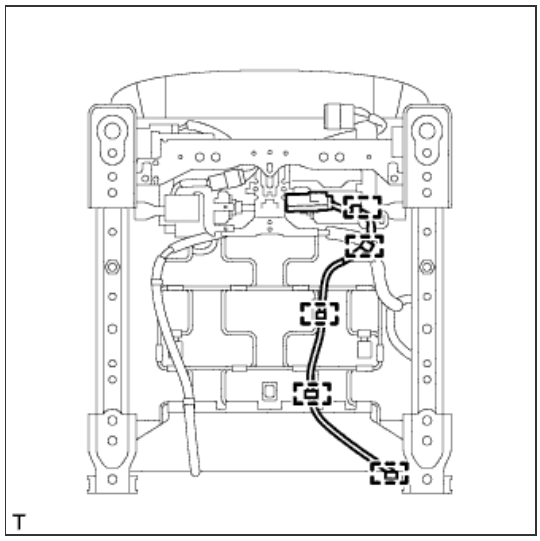
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

b. Attach the 2 clamps to connect the wire harness.



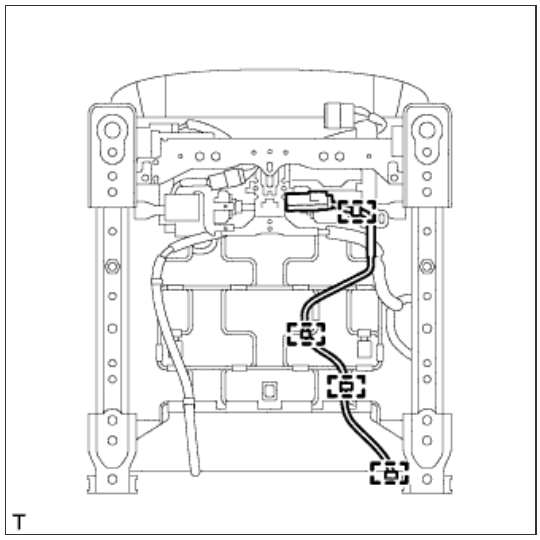
c. w/o Climate Control Seat System

i. Attach the 5 clamps to connect the wire harness.



d. w/ Climate Control Seat System

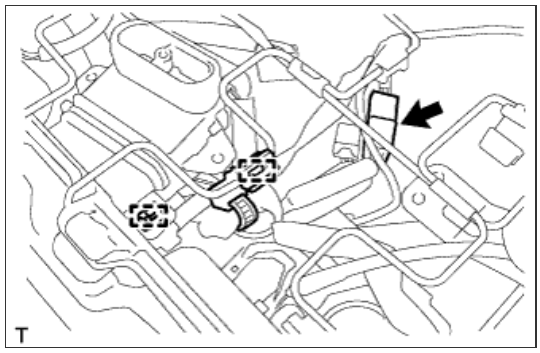
i. Attach the 4 clamps and disconnect the wire harness.



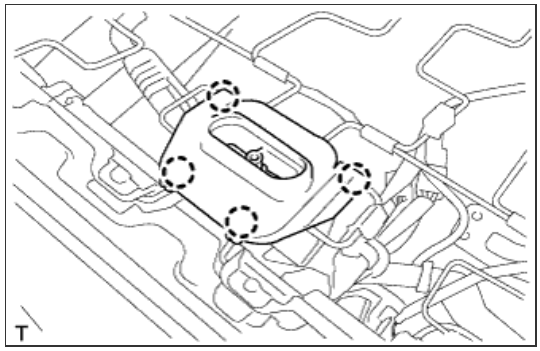
3. INSTALL SEAT CLIMATE CONTROL CONTROLLER LH (w/ Climate Control Seat System)

a. Install the controller.

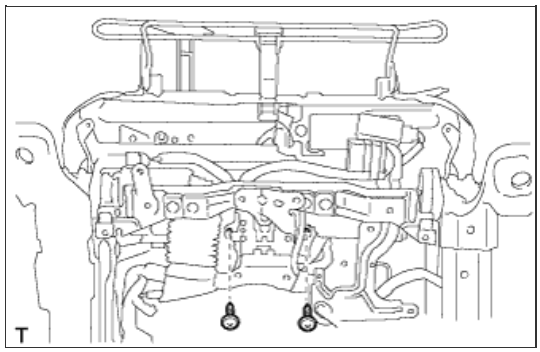
b. Attach the 2 wire harness clamps and connect the connector.



c. Attach the 4 claws to install the bracket.

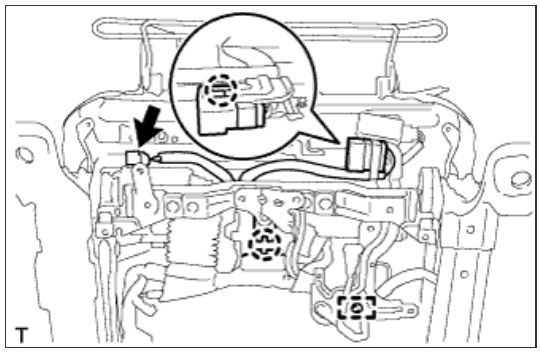


d. Install the 2 screws.



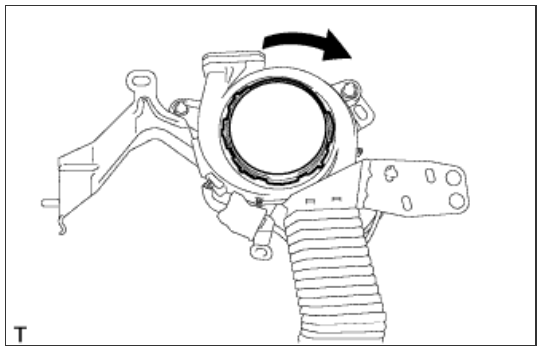
e. Attach the clamp and 2 claws to install the wire harness.

f. Connect the connector.



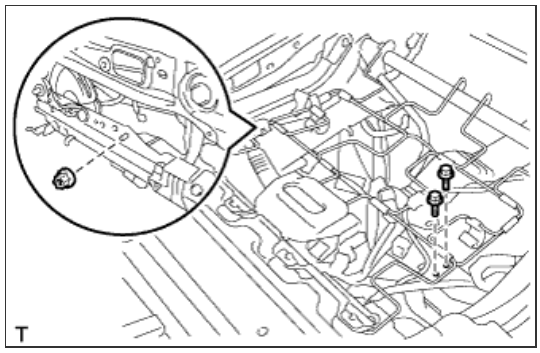
4. INSTALL NO. 1 AIR FILTER (w/ Climate Control Seat System)

a. Rotate the filter clockwise to attach the claws and install it.



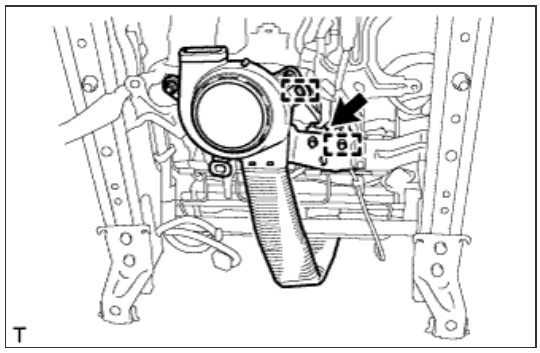
5. INSTALL SEAT CLIMATE CONTROL BLOWER LH (w/ Climate Control Seat System)

a. Install the blower with the 2 bolts and nut.

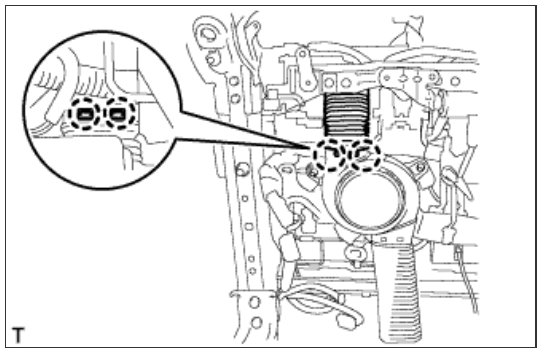


b. Attach the 2 clamps.

c. Connect the connector.



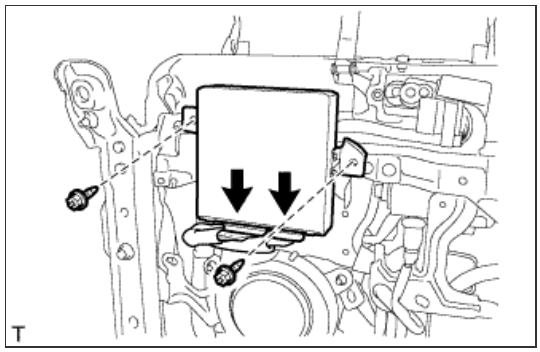
d. Attach the 4 claws to connect the duct.



6. INSTALL SEAT CLIMATE CONTROL ECU (w/ Climate Control Seat System)

a. Install the ECU with the 2 bolts.

b. Connect the 2 connectors.



7. INSTALL SEAT POSITION SENSOR

a. Check that the engine switch is off.

b. Check that the cable is disconnected from the battery negative (-) terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

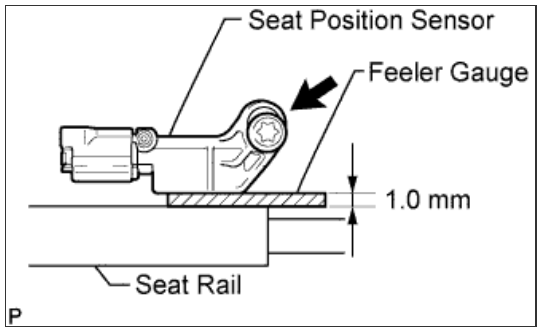
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

c. Using a 1.0 mm (0.0393 in.) feeler gauge, install the seat position sensor.

NOTICE:

- **If the seat position sensor has been dropped, or there are any cracks, dents or other defects in the case or connector, replace the seat position sensor with a new one.**
- **When installing the seat position sensor, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**



HINT:

Be sure that the clearance between the seat position sensor and the seat rail is within 0.6 to 1.4 mm (0.0236 to 0.0551 in.).

d. Using a T30 "TORX" socket wrench, install the seat position sensor with the screw.

Torque:
8.0 N*m{ 82 kgf*cm , 71 in.*lbf }

e. Make sure that the clearance between the seat position sensor and the seat rail is within 0.6 to 1.4 mm (0.0236 to 0.0551 in.).

f. Check that there is no looseness in the installation parts of the seat position sensor.

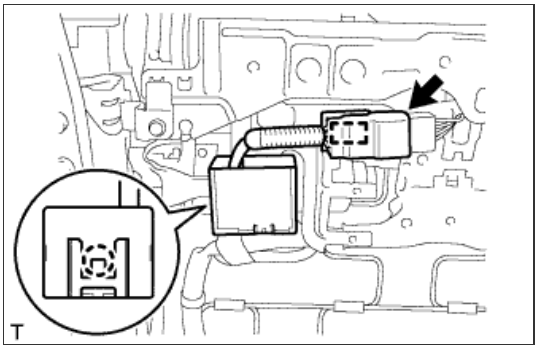
g. Connect the connector.

h. Install the seat slide position sensor protector to the seat position sensor.

8. INSTALL SEAT HEATER CONTROL SUB-ASSEMBLY (w/ Seat Heater System)

a. Attach the claw to install the seat heater control.

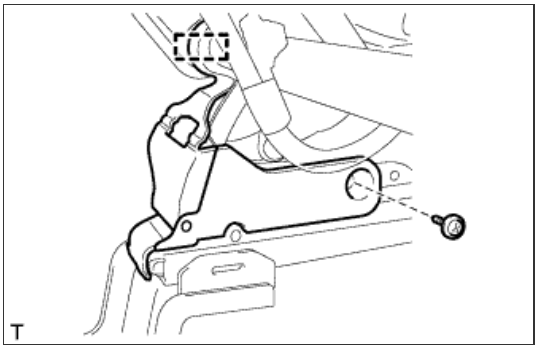
b. Attach the clamp and connect the seat heater control connector.



9. INSTALL FRONT LOWER SEAT CUSHION SHIELD RH

a. Attach the hook to install the lower seat cushion shield.

b. Install the screw.



10. INSTALL FRONT LOWER SEAT CUSHION SHIELD LH

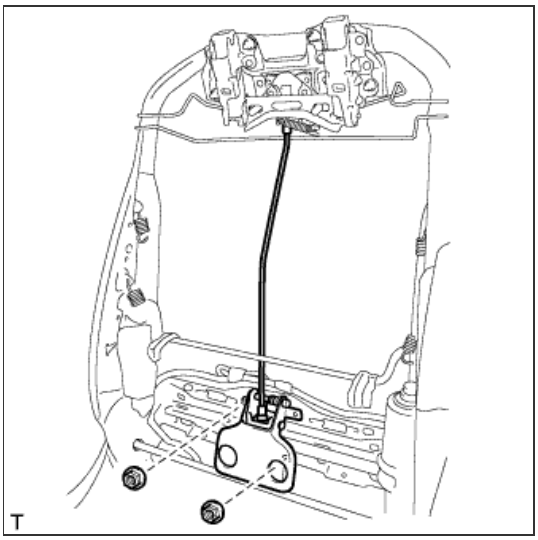
a. Attach the hook to install the lower seat cushion shield.

b. Install the screw.

11. INSTALL LOWER ACTIVE HEADREST UNIT

a. Install the lower active headrest unit with the 2 nuts.

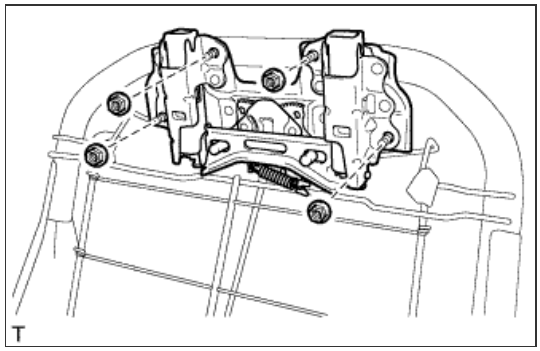
Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }



12. INSTALL UPPER ACTIVE HEADREST UNIT

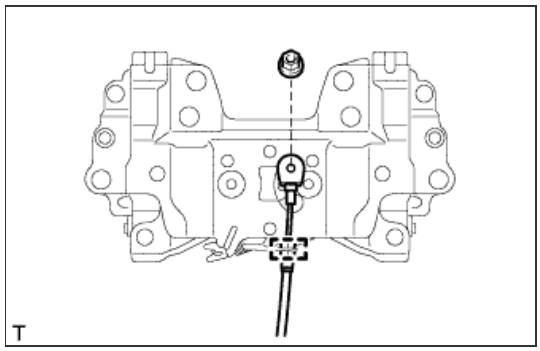
a. Install the upper active headrest unit with 4 nuts.

Torque:
14 N*m{ 143 kgf*cm , 10 ft.*lbf }



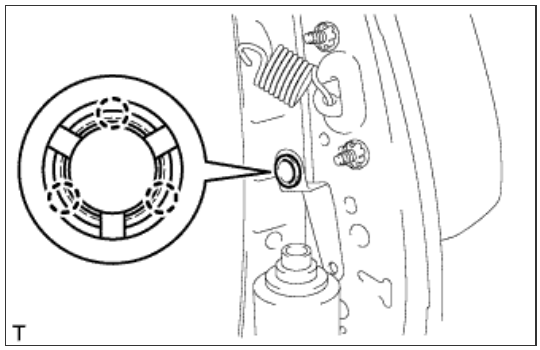
b. Install the upper active headrest unit to the lower active headrest unit with the cable clamp and nut.

Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }



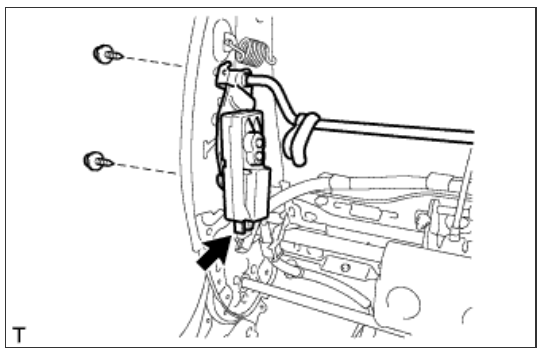
13. INSTALL LUMBAR SUPPORT ADJUSTER ASSEMBLY LH

a. Attach the 3 claws to install the bush.



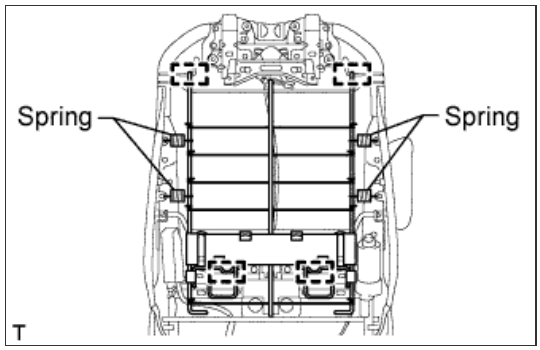
b. Install the lumbar support adjuster with the 2 screws.

c. Connect the lumbar support adjuster connector.



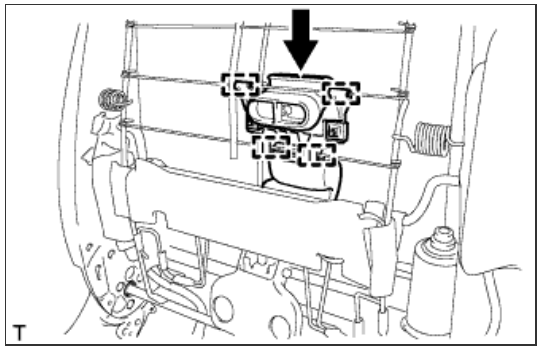
d. Attach the 4 hooks to install the seatback spring.

e. Install the 4 springs.



14. INSTALL SEAT CLIMATE CONTROL CONTROLLER (w/ Climate Control Seat System)

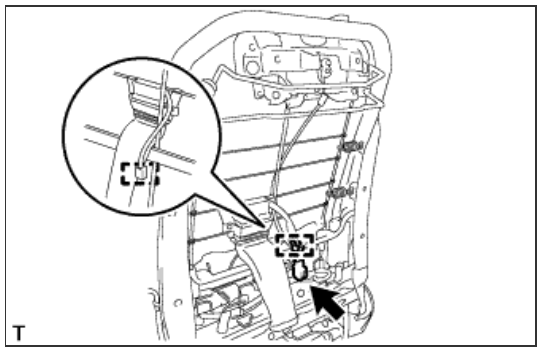
a. Move the controller in the direction of the arrow and attach the 2 hooks on the bottom. Then attach the 2 hooks on the top to install the controller.



b. Attach the connector clamp.

c. Connect the connector.

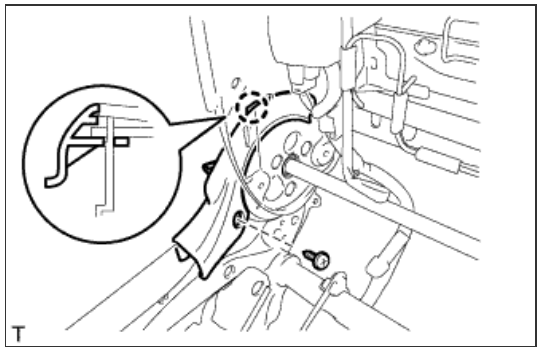
d. Install the clamp.



15. INSTALL OUTSIDE RECLINING ADJUSTER COVER RH

a. Attach the claw to install the reclining adjuster cover.

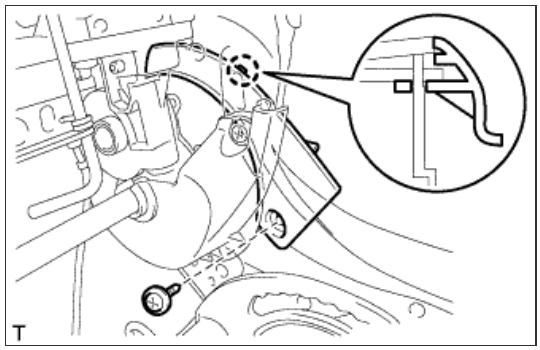
b. Install the screw.



16. INSTALL OUTSIDE RECLINING ADJUSTER COVER LH

a. Attach the claw to install the reclining adjuster cover.

b. Install the screw.

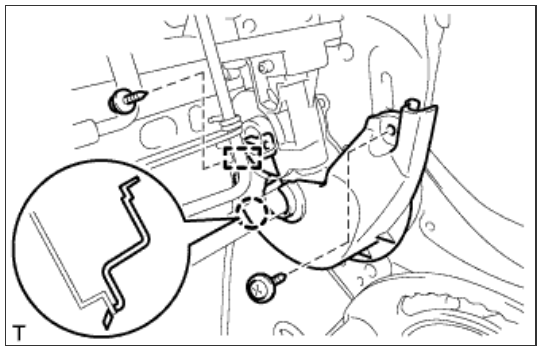


17. INSTALL INSIDE RECLINING ADJUSTER COVER RH

a. Attach the claw to install the reclining adjuster cover.

b. Install the 2 screws.

c. Attach the wire harness clamp.



18. INSTALL INSIDE RECLINING ADJUSTER COVER LH

a. Attach the claw to install the reclining adjuster cover.

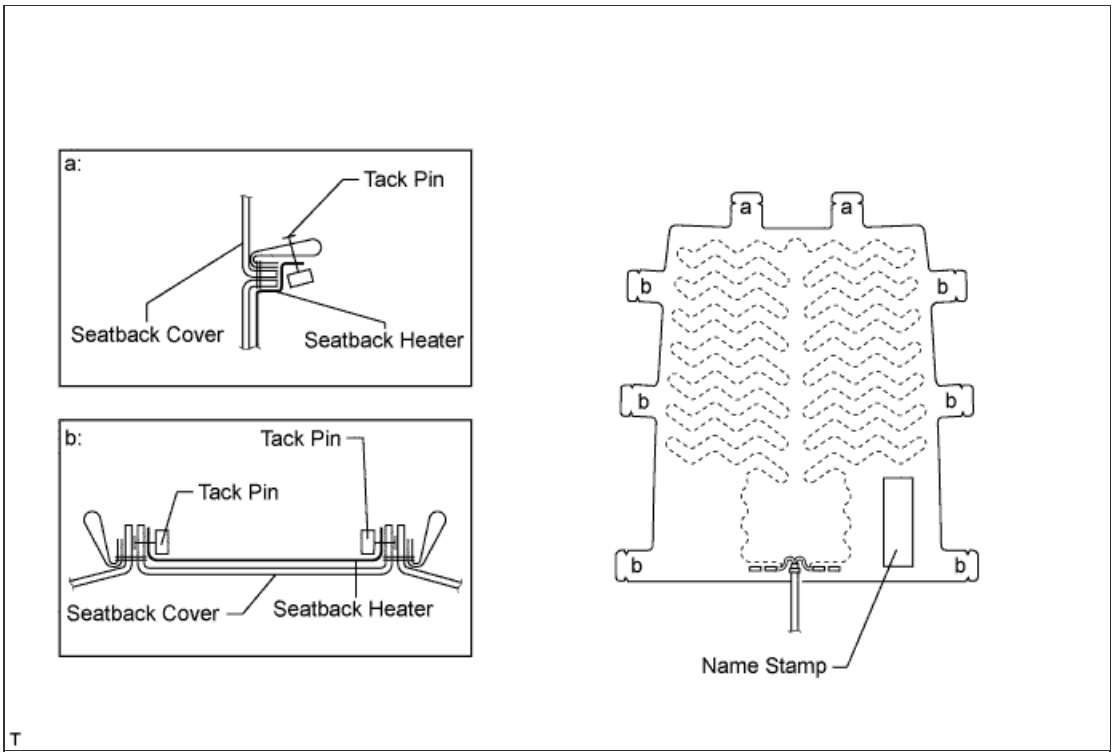
b. Install the 2 screws.

c. Attach the wire harness clamp.

19. INSTALL FRONT SEATBACK HEATER ASSEMBLY LH (w/ Seat Heater System)

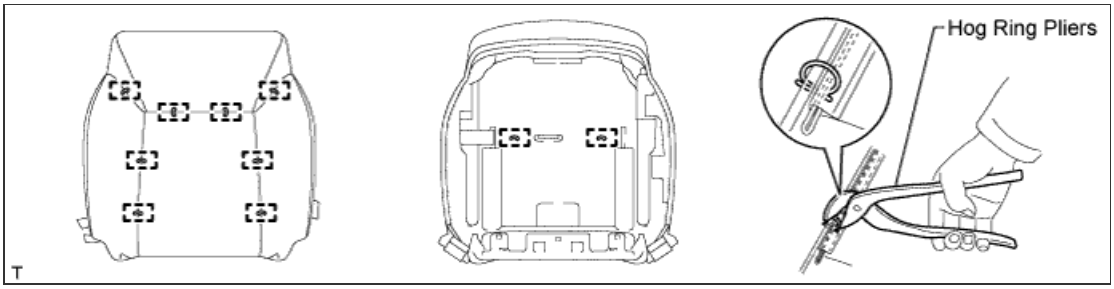
a. Set the seatback heater with the name stamp side facing the seatback cover.

b. Install the seatback heater with new tack pins.



20. INSTALL FRONT SEPARATE TYPE SEATBACK COVER

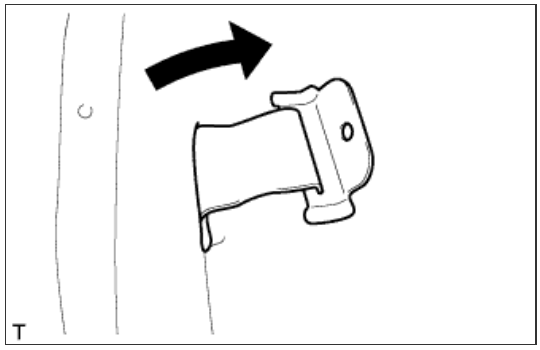
a. Using hog ring pliers, install the seatback cover with new hog rings.



NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**

b. Connect the seatback cover bracket to the seatback pad.



21. INSTALL SEATBACK COVER WITH PAD

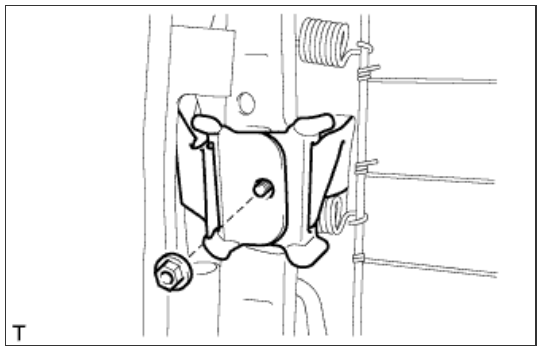
a. Install the seatback cover with pad to the seatback frame.

b. Install the seatback cover bracket to the seat frame with the nut.

Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }

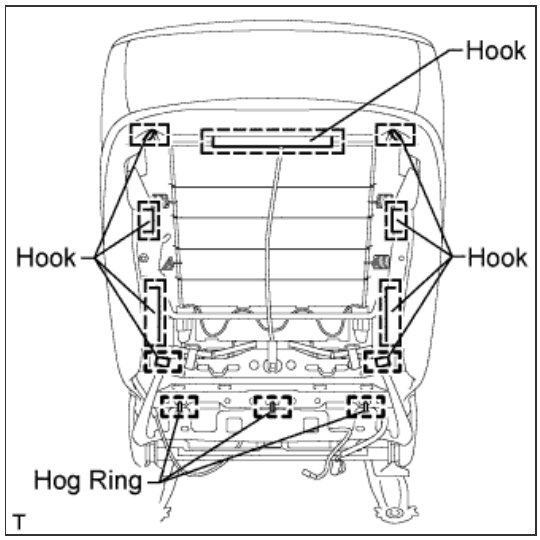
CAUTION:

After the seatback cover is assembled, make sure the side airbag strap is not twisted.

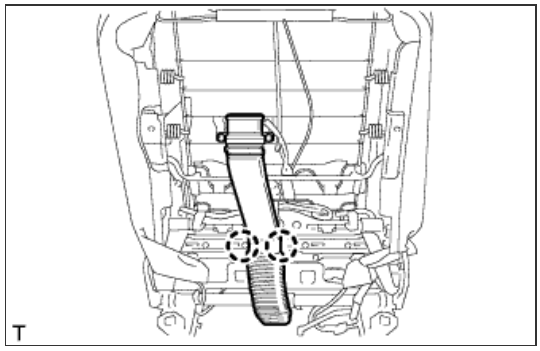


c. Attach the 9 hooks.

d. Using hog ring pliers, install 3 new hog rings to the seat frame.



e. w/ Climate Control Seat System:
Attach the 2 claws to connect the duct.

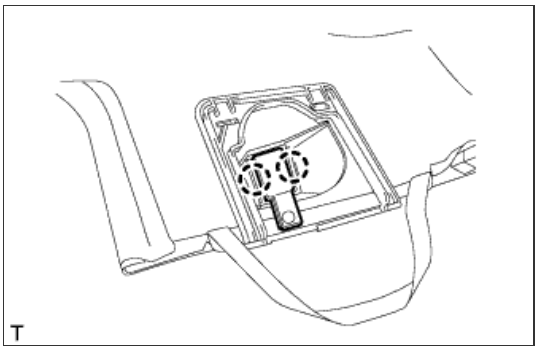


22. INSTALL FRONT SEAT HEADREST SUPPORT

a. Attach the 4 claws to install the 2 headrest supports.

23. INSTALL NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY

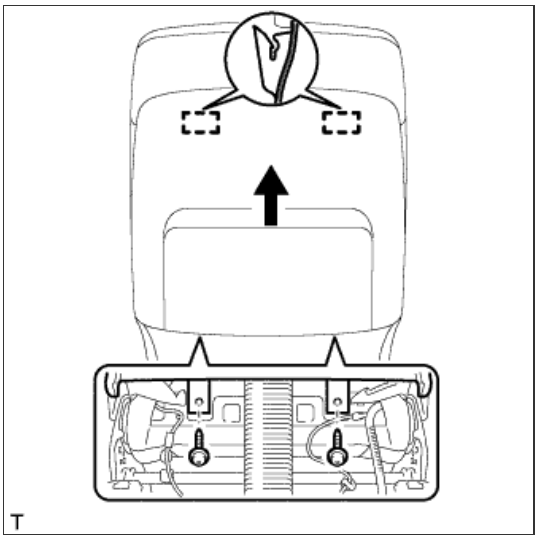
a. Attach the 2 claws to install the light.



24. INSTALL FRONT SEATBACK BOARD SUB-ASSEMBLY LH

a. Move the seatback board in the direction of the arrow to attach the 2 hooks and install the seatback board.

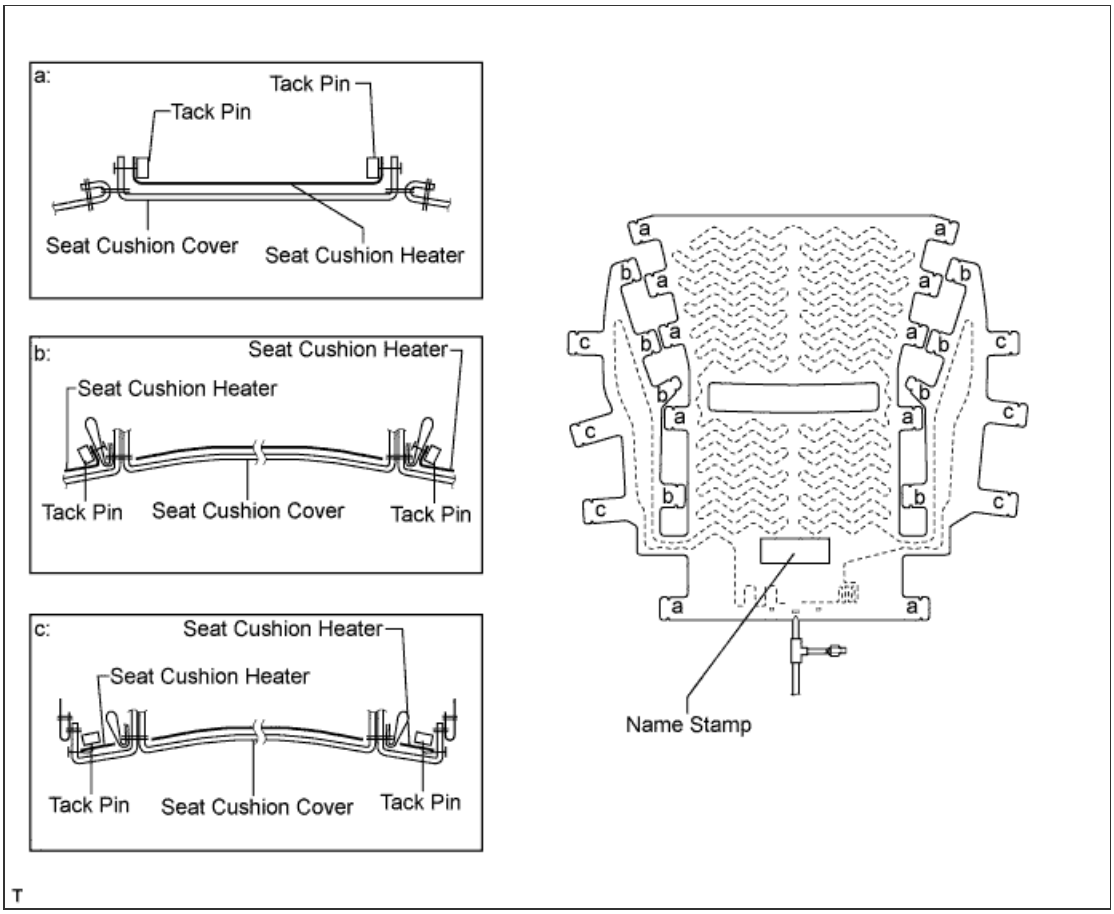
b. Install the 2 screws.



25. INSTALL FRONT SEAT CUSHION HEATER ASSEMBLY LH (w/ Seat Heater System)

a. Set the seat cushion heater with the name stamp side facing the seat cushion cover.

b. Install the seat cushion heater with new tack pins.

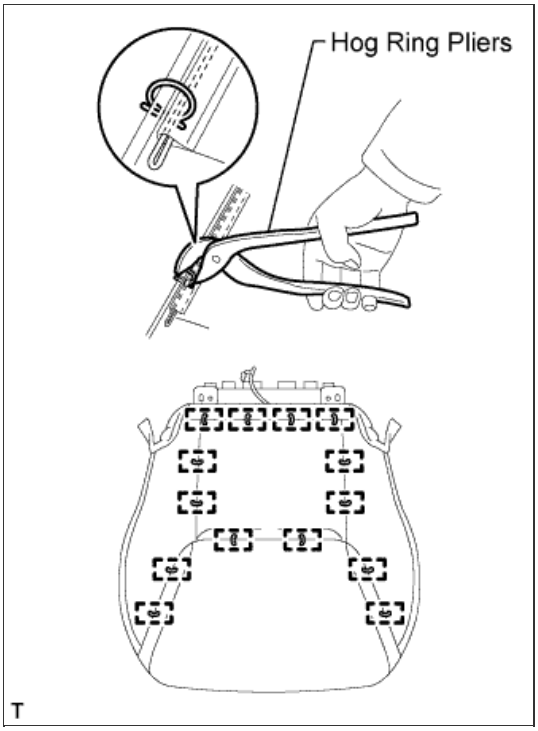


26. INSTALL FRONT SEPARATE TYPE SEAT CUSHION COVER

a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

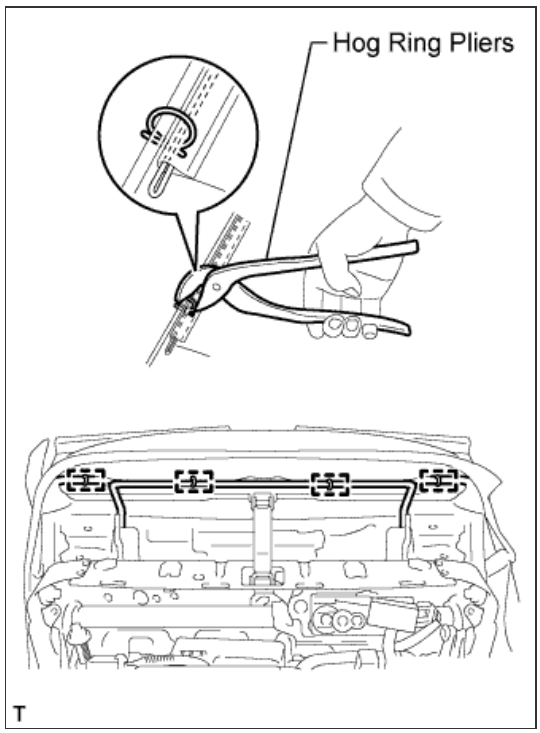
- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



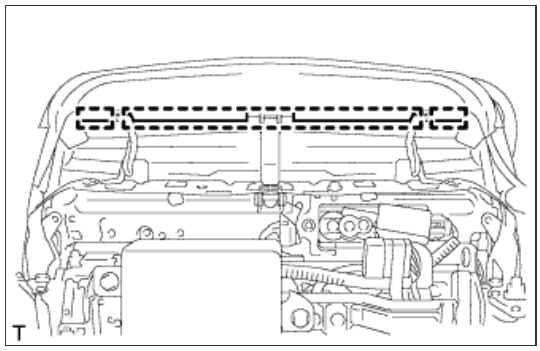
27. INSTALL SEAT CUSHION COVER WITH PAD

a. for Driver Side:

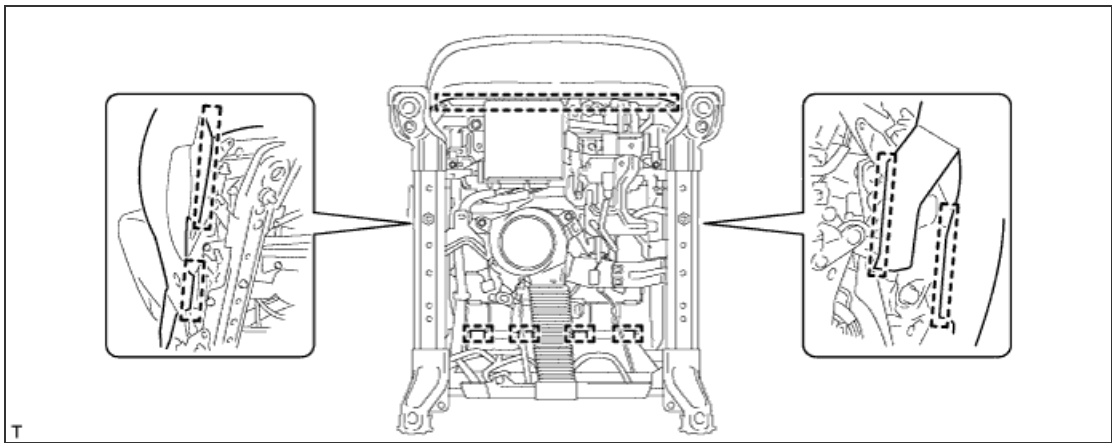
i. Using hog ring pliers, install the seat cushion cover with pad to the seat frame with new hog rings.



ii. Attach the hooks.



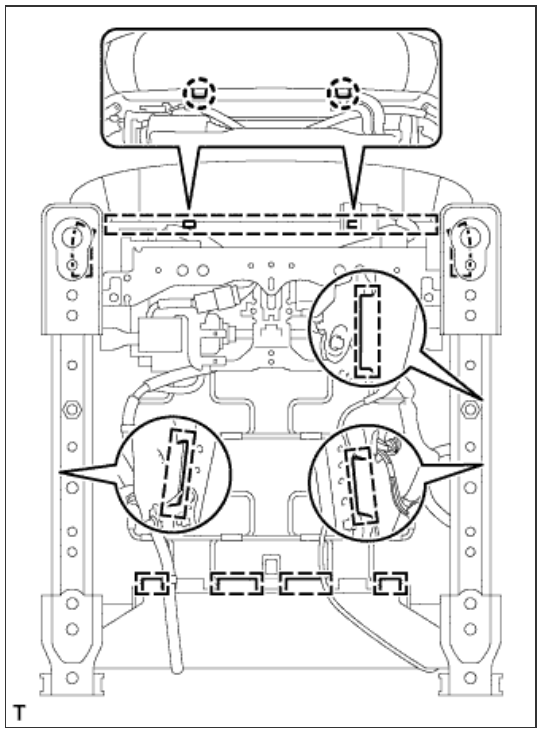
iii. Attach the hooks.



b. for Front Passenger Side:

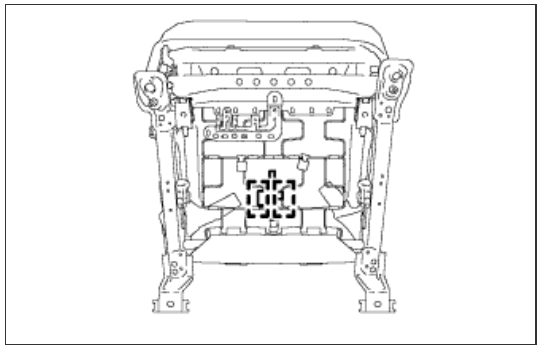
i. Attach the hooks to install the seat cushion cover with pad.

ii. Bend the 2 seat frame claws downward.



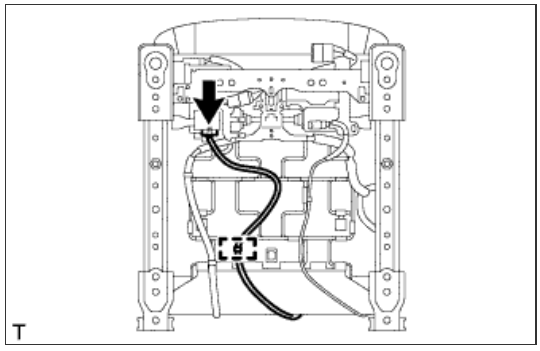
iii. Attach the 2 clamps to install the seat belt warning sensor connector.

iv. Connect the seat belt warning sensor connector.

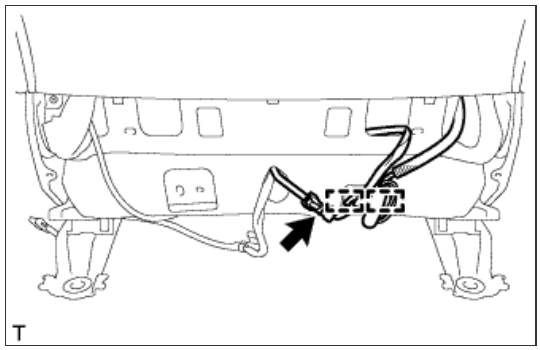


c. w/ Seat Heater System:

i. Connect the seat heater control connector and attach the wire harness clamp.



ii. Connect the seat heater connector and attach the 2 wire harness clamps.

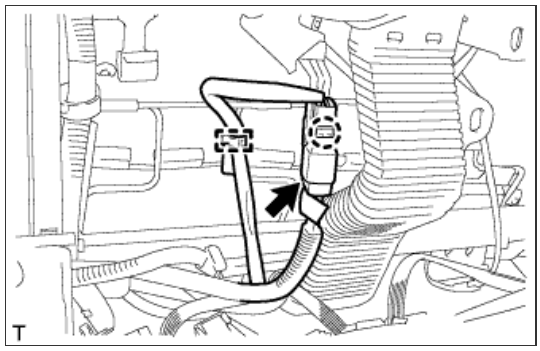


d. w/ Climate Control Seat System:

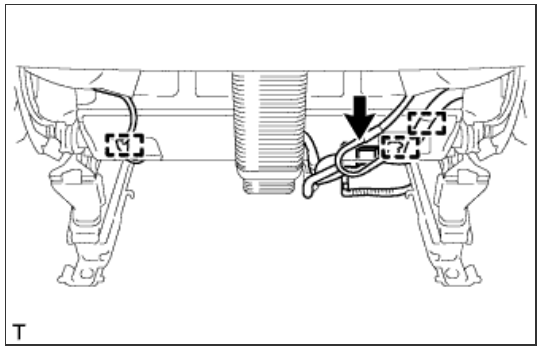
i. Attach the claw to install the connector.

ii. Attach the wire harness clamp.

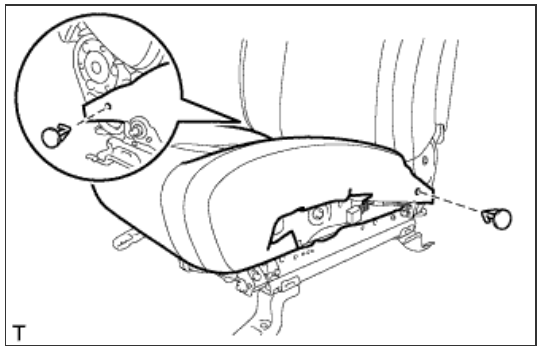
iii. Connect the connector.



iv. Connect the seat heater connector and attach the 3 wire harness clamps.



e. Install the 2 clips.



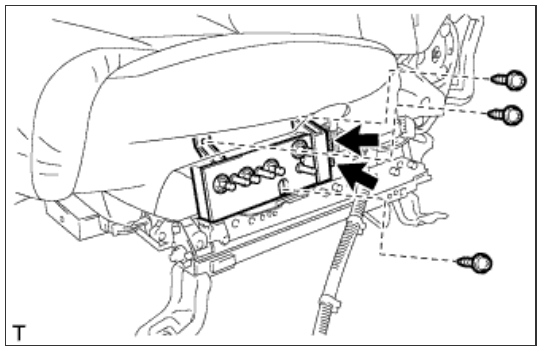
28. INSTALL FRONT POWER SEAT SWITCH LH

a. Install the switch with the 3 screws.

b. for Driver Side:
Connect the 2 connectors.

c. for Front Passenger Side:

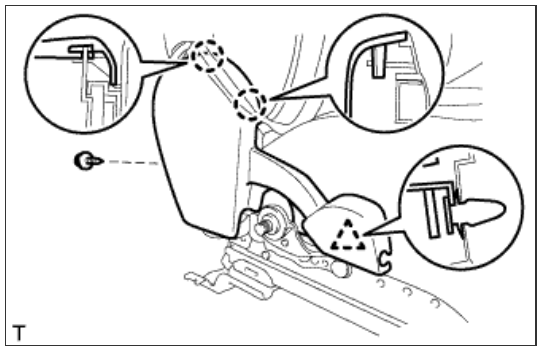
Connect the connector.



29. INSTALL FRONT INNER SEAT CUSHION SHIELD LH

a. Attach the 2 claws and clip to install the cushion shield.

b. Install the screw.



30. INSTALL FRONT SEAT INNER BELT ASSEMBLY LH

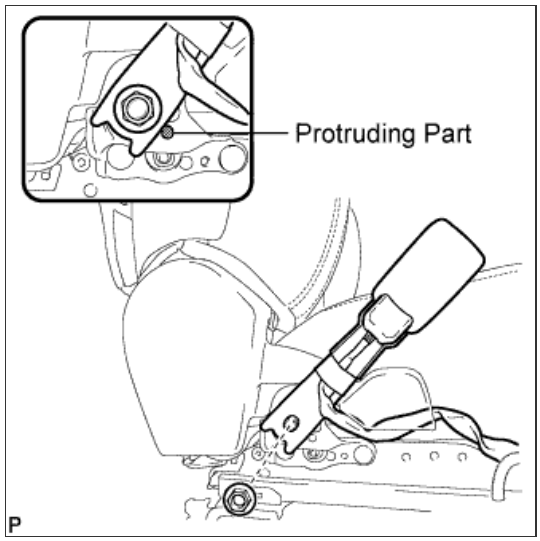
a. Install the front seat inner belt assembly with the nut.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

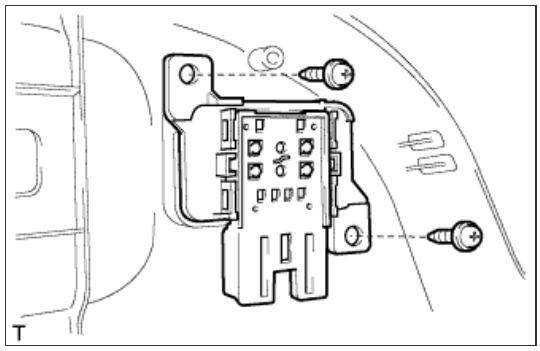
Do not allow the anchor part of the front seat inner belt assembly to overlap the protruding part of the front seat adjuster.

b. Connect the 3 connectors and attach the clamps.



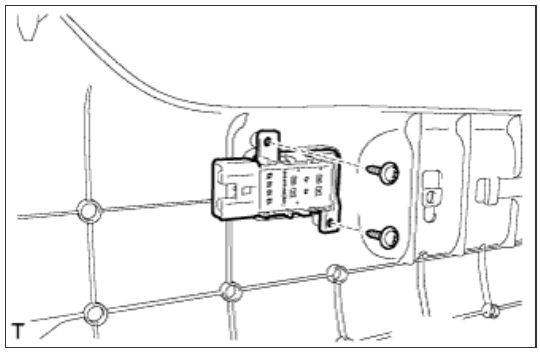
31. INSTALL SEAT VARIABLE CUSHION SWITCH (for Driver Side)

a. Install the switch with the 2 screws.



32. INSTALL LUMBAR SWITCH

a. Install the lumbar switch with the 2 screws.

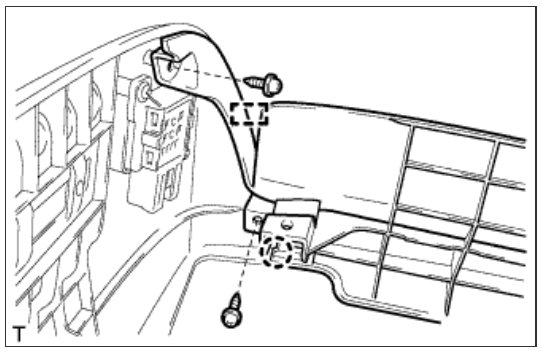


33. INSTALL FRONT INNER NO. 1 SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the claw and guide to install the cushion shield.

ii. Install the 2 screws.



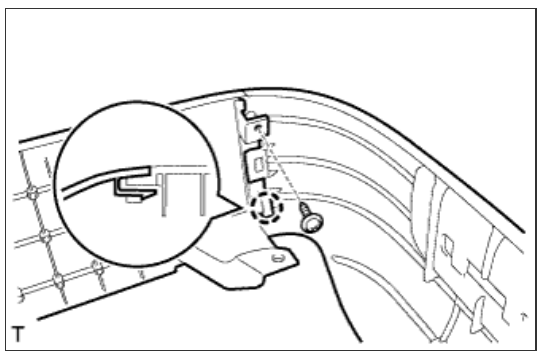
b. for Front Passenger Side:

i. Attach the claw to install the cushion shield.

ii. Install the screw.

c. Attach the claw to install the cushion shield.

d. Install the screw.



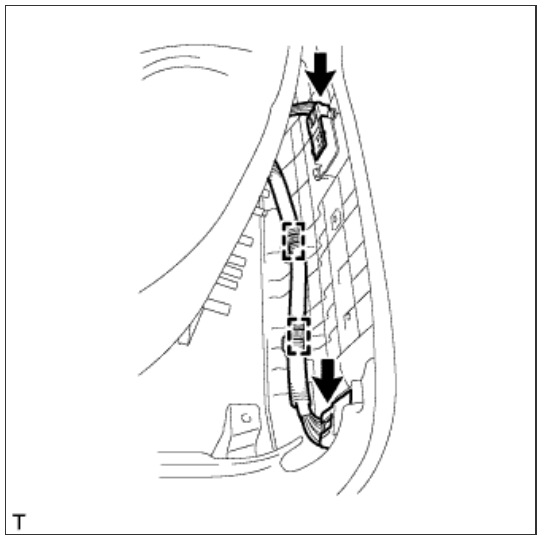
34. INSTALL FRONT SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

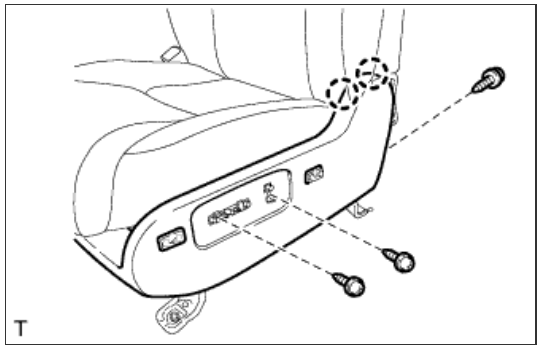
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

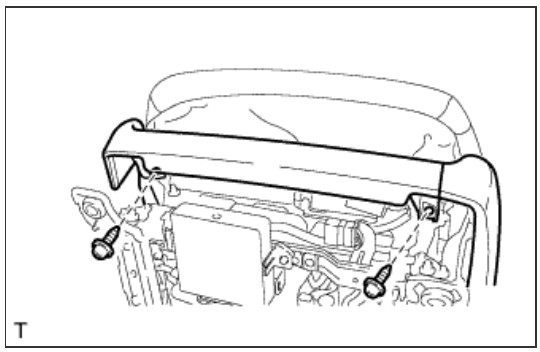


c. Attach the 2 claws to install the cushion shield.

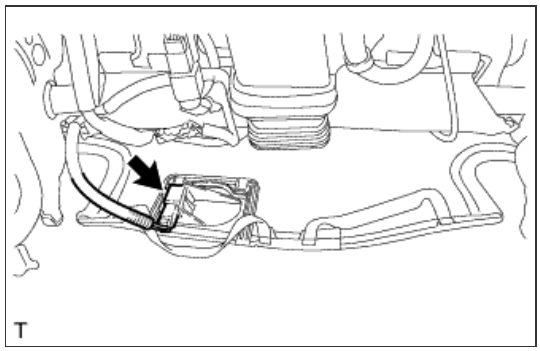
d. Install the 3 screws.



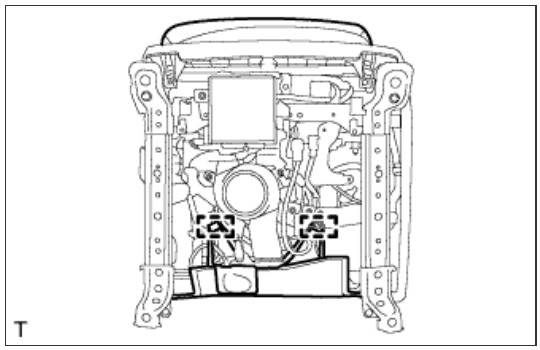
e. Install the 2 screws.



f. Connect the interior illumination light connector.

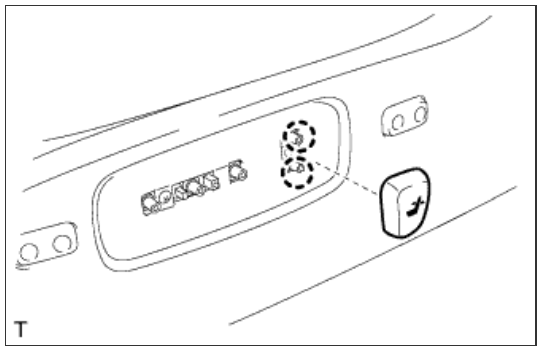


g. Attach the 2 rubber bands to the hooks.



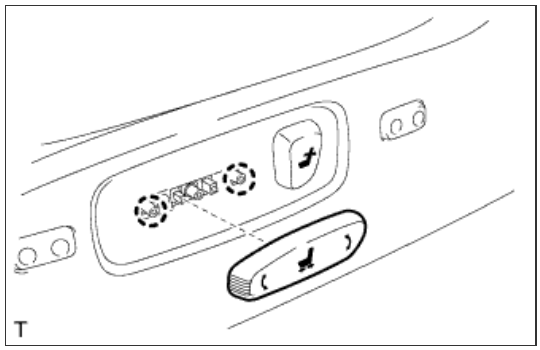
35. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



36. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL FRONT SEAT WIRE LH

2. INSTALL FRONT SEAT SIDE AIRBAG ASSEMBLY LH

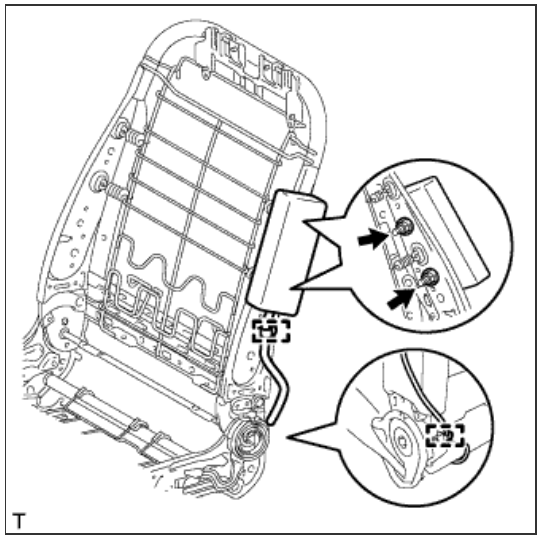
CAUTION:

Make sure that the seat frame assembly is not deformed. If it is, replace it with a new one.

a. Install the front seat side airbag assembly with 2 nuts.

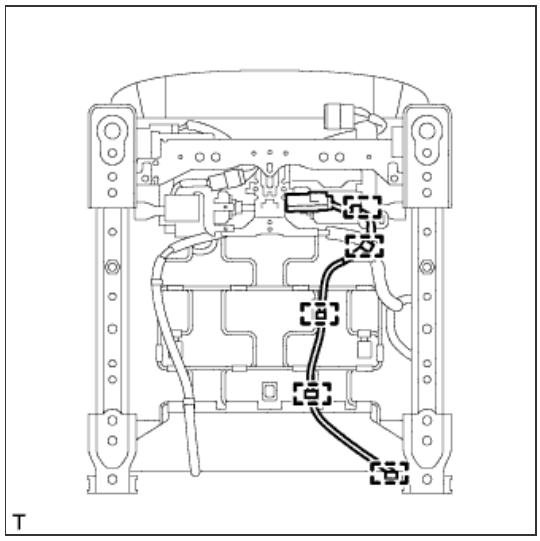
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

b. Attach the 2 clamps to connect the wire harness.



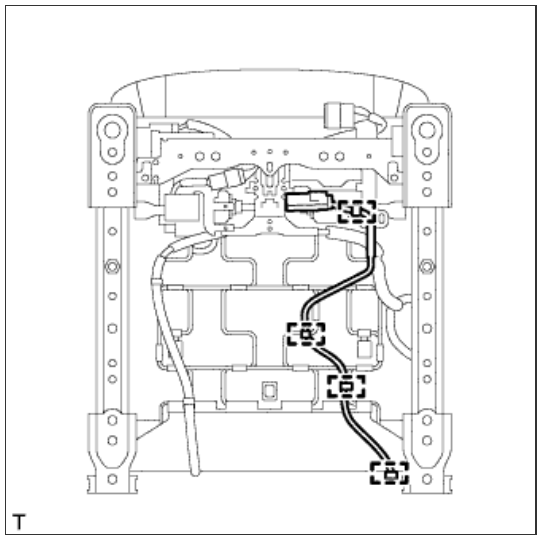
c. w/o Climate Control Seat System

i. Attach the 5 clamps to connect the wire harness.



d. w/ Climate Control Seat System

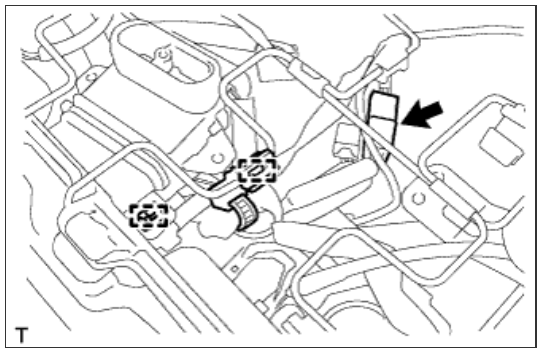
i. Attach the 4 clamps and disconnect the wire harness.



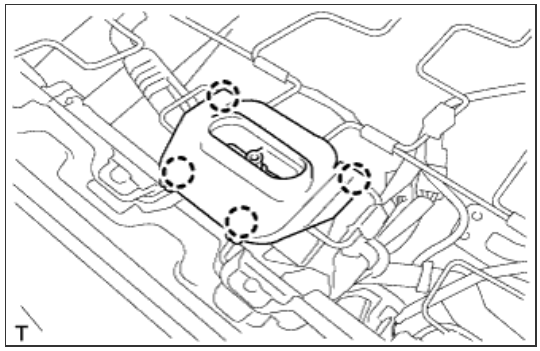
3. INSTALL SEAT CLIMATE CONTROL CONTROLLER LH (w/ Climate Control Seat System)

a. Install the controller.

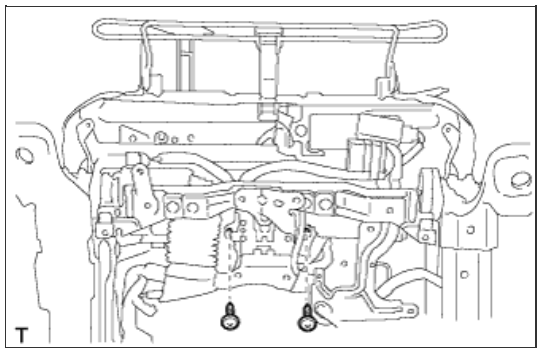
b. Attach the 2 wire harness clamps and connect the connector.



c. Attach the 4 claws to install the bracket.

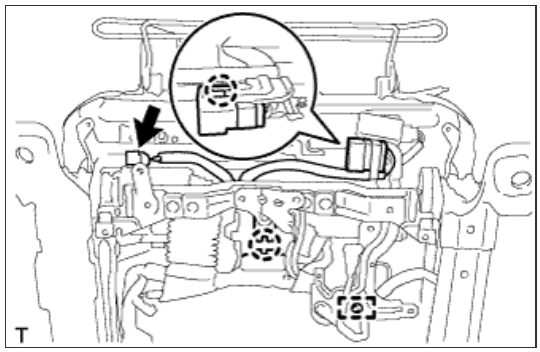


d. Install the 2 screws.



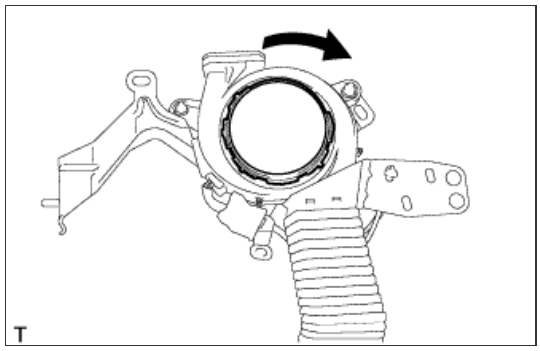
e. Attach the clamp and 2 claws to install the wire harness.

f. Connect the connector.



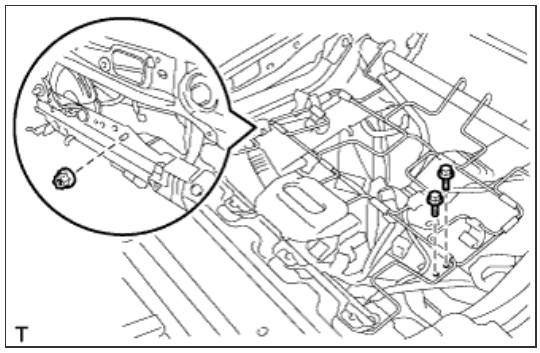
4. INSTALL NO. 1 AIR FILTER (w/ Climate Control Seat System)

a. Rotate the filter clockwise to attach the claws and install it.



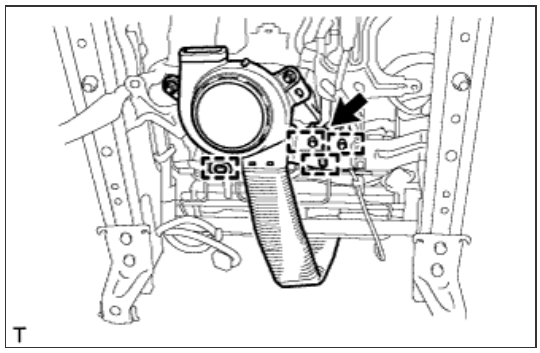
5. INSTALL SEAT CLIMATE CONTROL BLOWER LH (w/ Climate Control Seat System)

a. Install the blower with the 2 bolts and nut.

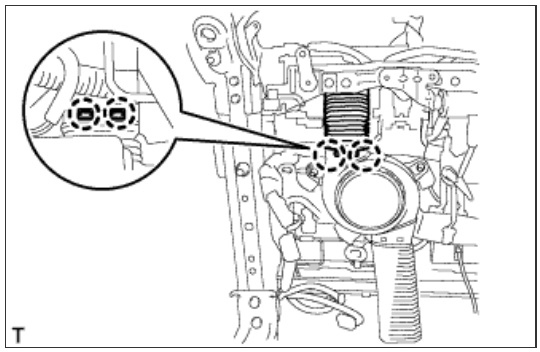


b. Attach the 4 clamps.

c. Connect the connector.



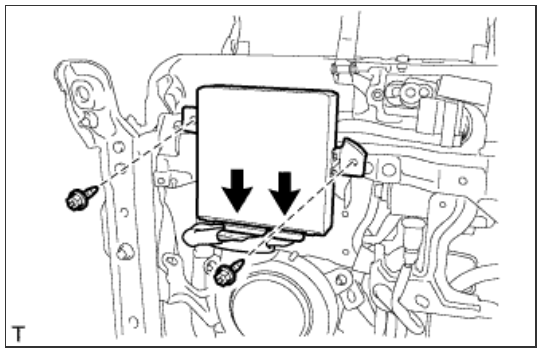
d. Attach the 4 claws to connect the duct.



6. INSTALL SEAT CLIMATE CONTROL ECU (w/ Climate Control Seat System)

a. Install the ECU with the 2 bolts.

b. Connect the 2 connectors.



7. INSTALL SEAT POSITION SENSOR

a. Check that the engine switch is off.

b. Check that the cable is disconnected from the battery negative (-) terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

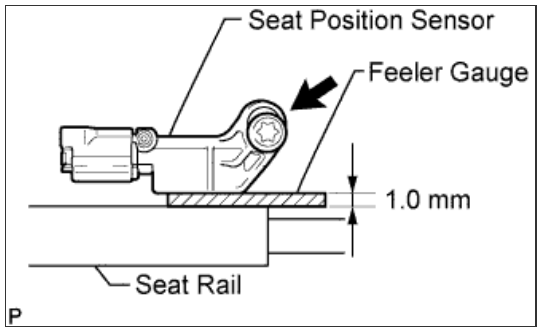
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

c. Using a 1.0 mm (0.0393 in.) feeler gauge, install the seat position sensor.

NOTICE:

- **If the seat position sensor has been dropped, or there are any cracks, dents or other defects in the case or connector, replace the seat position sensor with a new one.**
- **When installing the seat position sensor, be careful that the SRS wiring does not interfere with other parts and that it is not pinched between other parts.**



HINT:

Be sure that the clearance between the seat position sensor and the seat rail is within 0.6 to 1.4 mm (0.0236 to 0.0551 in.).

d. Using a T30 "TORX" socket wrench, install the seat position sensor with the screw.

Torque:
8.0 N*m{ 82 kgf*cm , 71 in.*lbf }

e. Make sure that the clearance between the seat position sensor and the seat rail is within 0.6 to 1.4 mm (0.0236 to 0.0551 in.).

f. Check that there is no looseness in the installation parts of the seat position sensor.

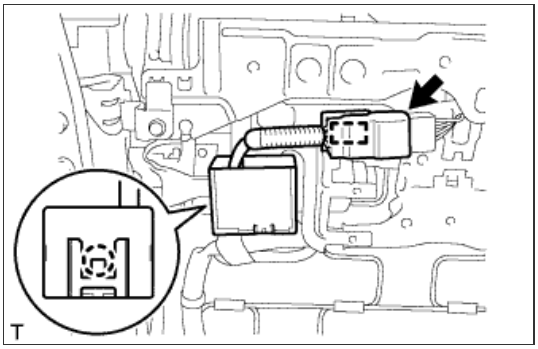
g. Connect the connector.

h. Install the seat slide position sensor protector to the seat position sensor.

8. INSTALL SEAT HEATER CONTROL SUB-ASSEMBLY (w/ Seat Heater System)

a. Attach the claw to install the seat heater control.

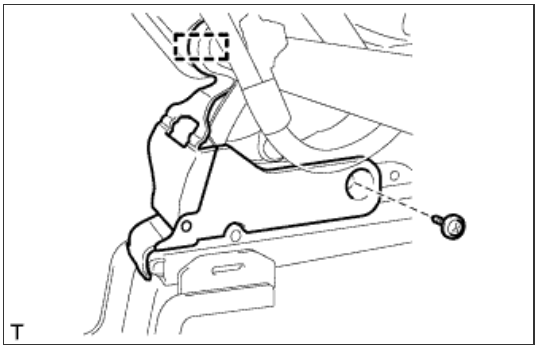
b. Attach the clamp and connect the seat heater control connector.



9. INSTALL FRONT LOWER SEAT CUSHION SHIELD RH

a. Attach the hook to install the lower seat cushion shield.

b. Install the screw.



10. INSTALL FRONT LOWER SEAT CUSHION SHIELD LH

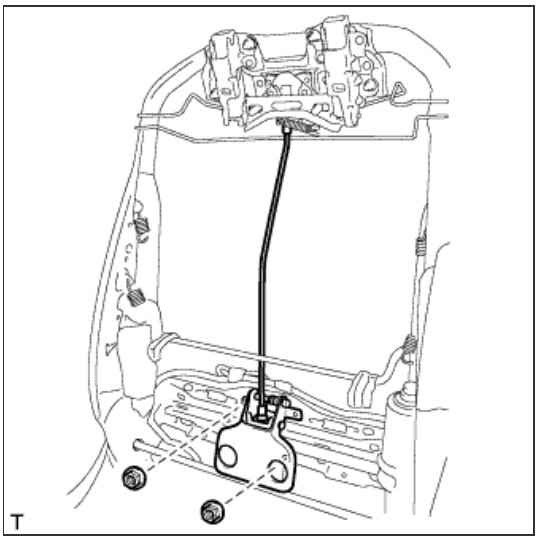
a. Attach the hook to install the lower seat cushion shield.

b. Install the screw.

11. INSTALL LOWER ACTIVE HEADREST UNIT

a. Install the lower active headrest unit with the 2 nuts.

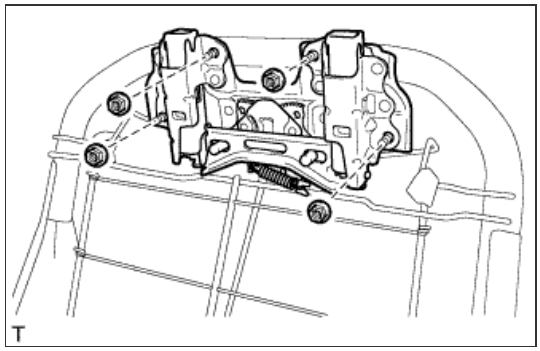
Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }



12. INSTALL UPPER ACTIVE HEADREST UNIT

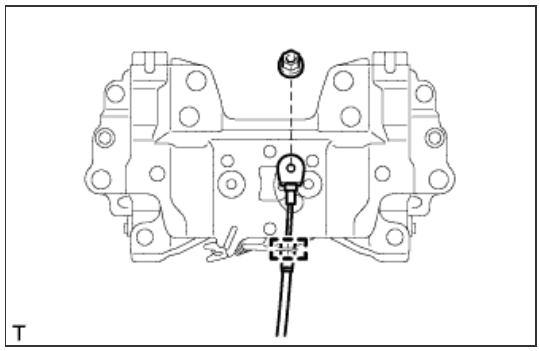
a. Install the upper active headrest unit with 4 nuts.

Torque:
14 N*m{ 143 kgf*cm , 10 ft.*lbf }



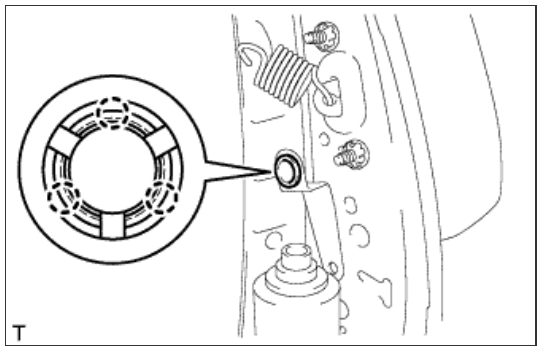
b. Install the upper active headrest unit to the lower active headrest unit with the cable clamp and nut.

Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }



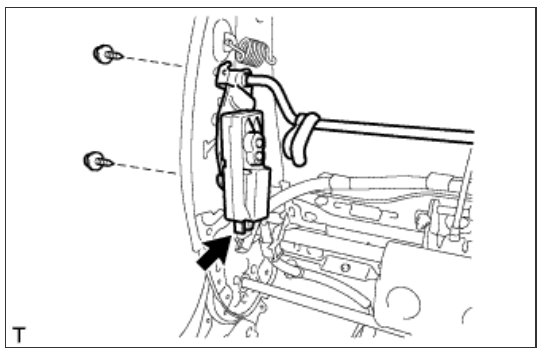
13. INSTALL LUMBAR SUPPORT ADJUSTER ASSEMBLY LH

a. Attach the 3 claws to install the bush.



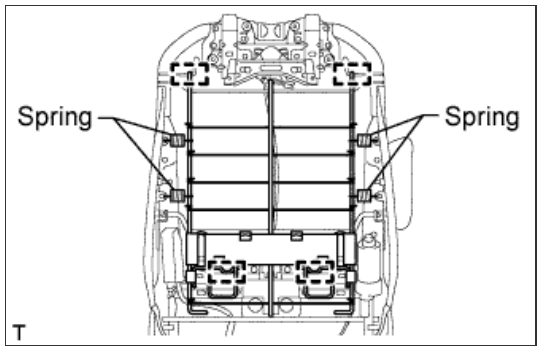
b. Install the lumbar support adjuster with the 2 screws.

c. Connect the lumbar support adjuster connector.



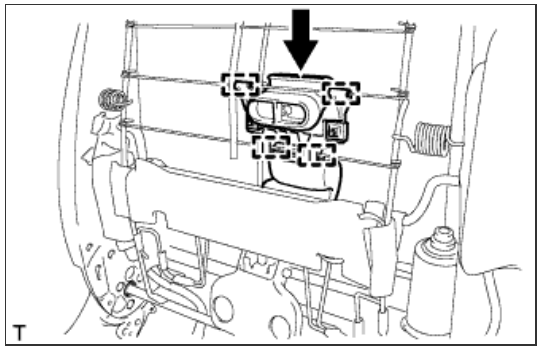
d. Attach the 4 hooks to install the seatback spring.

e. Install the 4 springs.



14. INSTALL SEAT CLIMATE CONTROL CONTROLLER (w/ Climate Control Seat System)

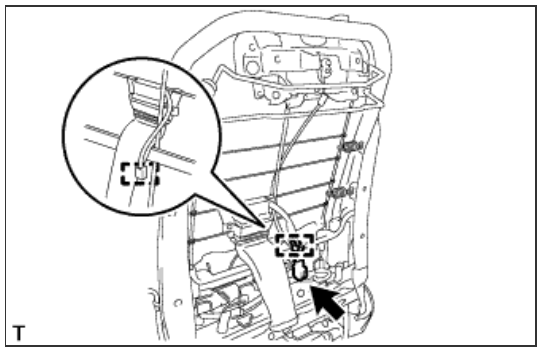
a. Move the controller in the direction of the arrow and attach the 2 hooks on the bottom. Then attach the 2 hooks on the top to install the controller.



b. Attach the connector clamp.

c. Connect the connector.

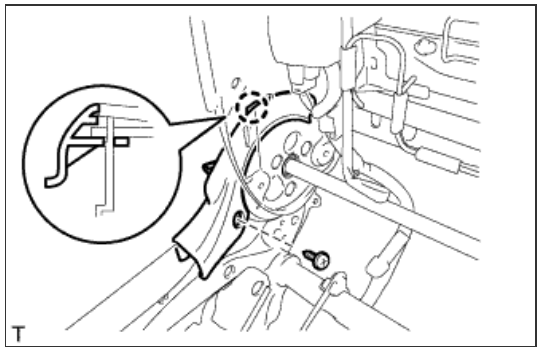
d. Install the clamp.



15. INSTALL OUTSIDE RECLINING ADJUSTER COVER RH

a. Attach the claw to install the reclining adjuster cover.

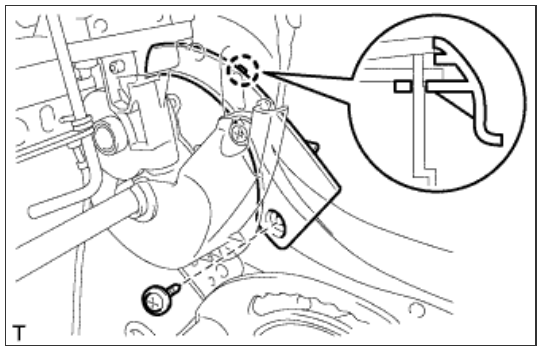
b. Install the screw.



16. INSTALL OUTSIDE RECLINING ADJUSTER COVER LH

a. Attach the claw to install the reclining adjuster cover.

b. Install the screw.

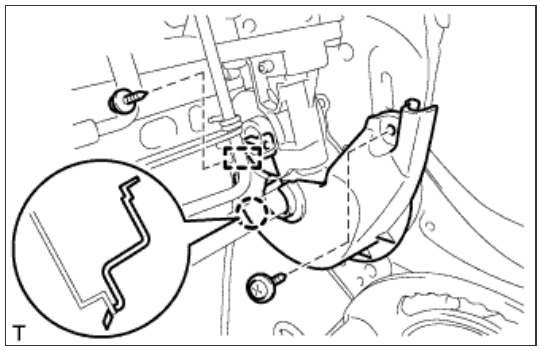


17. INSTALL INSIDE RECLINING ADJUSTER COVER RH

a. Attach the claw to install the reclining adjuster cover.

b. Install the 2 screws.

c. Attach the wire harness clamp.



18. INSTALL INSIDE RECLINING ADJUSTER COVER LH

a. Attach the claw to install the reclining adjuster cover.

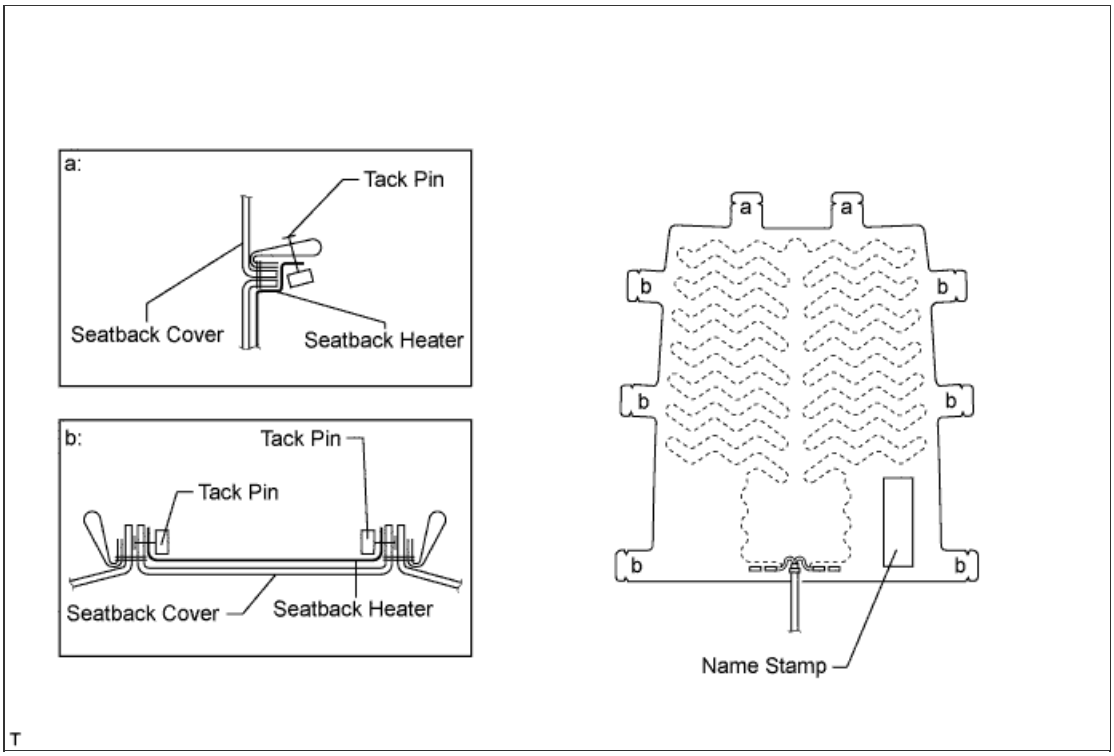
b. Install the 2 screws.

c. Attach the wire harness clamp.

19. INSTALL FRONT SEATBACK HEATER ASSEMBLY LH (w/ Seat Heater System)

a. Set the seatback heater with the name stamp side facing the seatback cover.

b. Install the seatback heater with new tack pins.

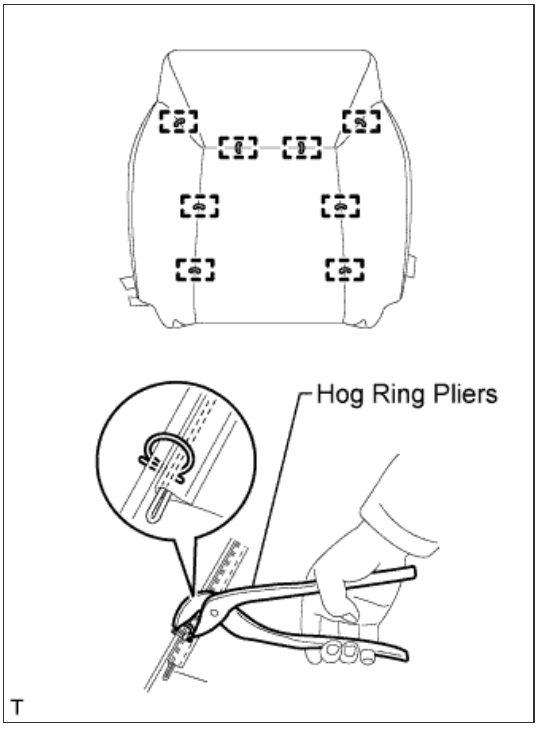


20. INSTALL FRONT SEPARATE TYPE SEATBACK COVER

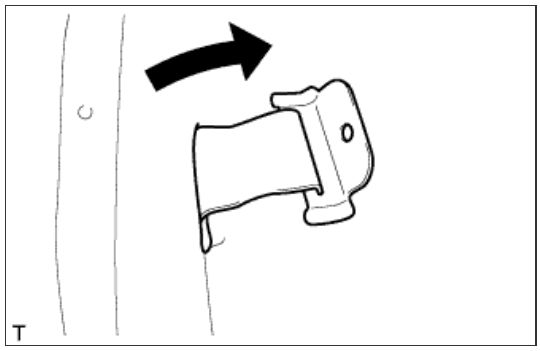
a. Using hog ring pliers, install the seatback cover with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Connect the seatback cover bracket to the seatback pad.



21. INSTALL SEATBACK COVER WITH PAD

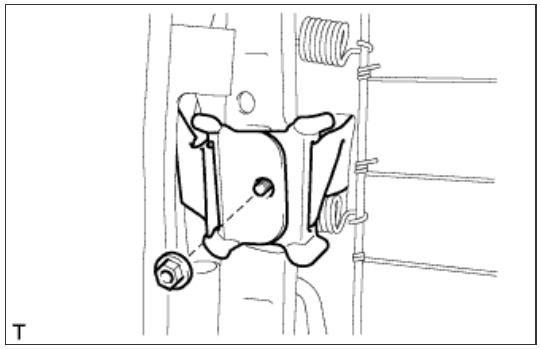
a. Install the seatback cover with pad to the seatback frame.

b. Install the seatback cover bracket to the seat frame with the nut.

Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }

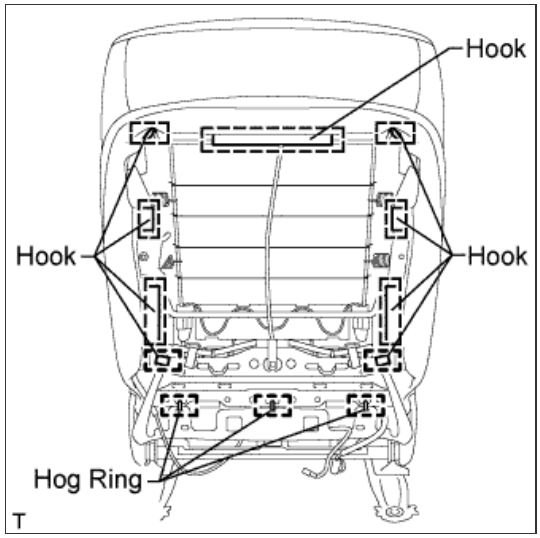
CAUTION:

After the seatback cover is assembled, make sure the side airbag strap is not twisted.

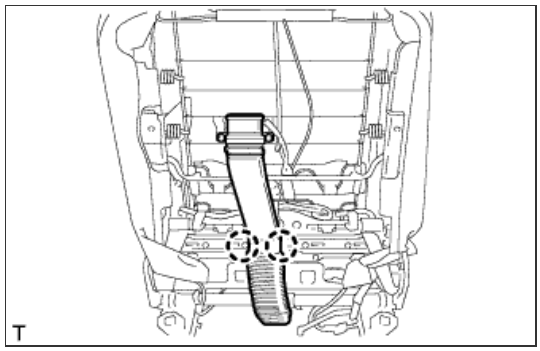


c. Attach the 9 hooks.

d. Using hog ring pliers, install 3 new hog rings to the seat frame.



e. w/ Climate Control Seat System:
Attach the 2 claws to connect the duct.

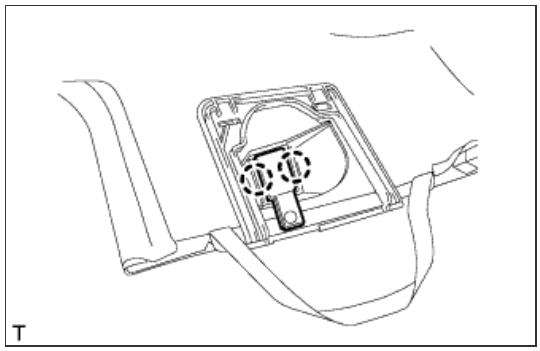


22. INSTALL FRONT SEAT HEADREST SUPPORT

a. Attach the 4 claws to install the 2 headrest supports.

23. INSTALL NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY

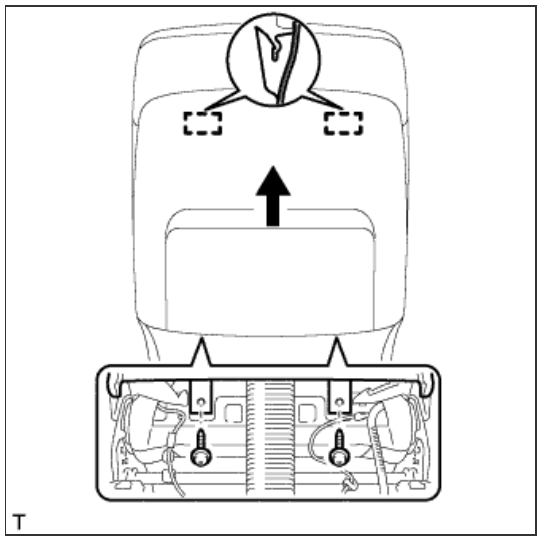
a. Attach the 2 claws to install the light.



24. INSTALL FRONT SEATBACK BOARD SUB-ASSEMBLY LH

a. Move the seatback board in the direction of the arrow to attach the 2 hooks and install the seatback board.

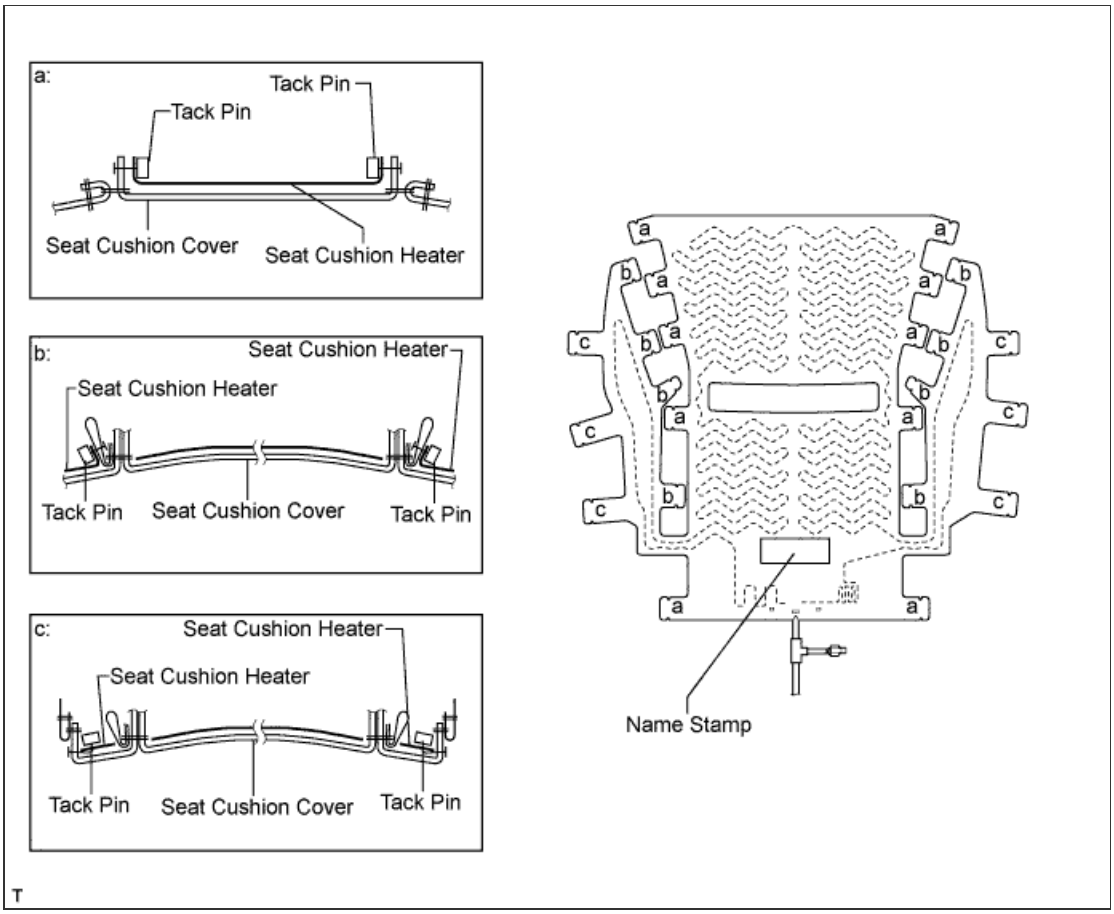
b. Install the 2 screws.



25. INSTALL FRONT SEAT CUSHION HEATER ASSEMBLY LH (w/ Seat Heater System)

a. Set the seat cushion heater with the name stamp side facing the seat cushion cover.

b. Install the seat cushion heater with new tack pins.

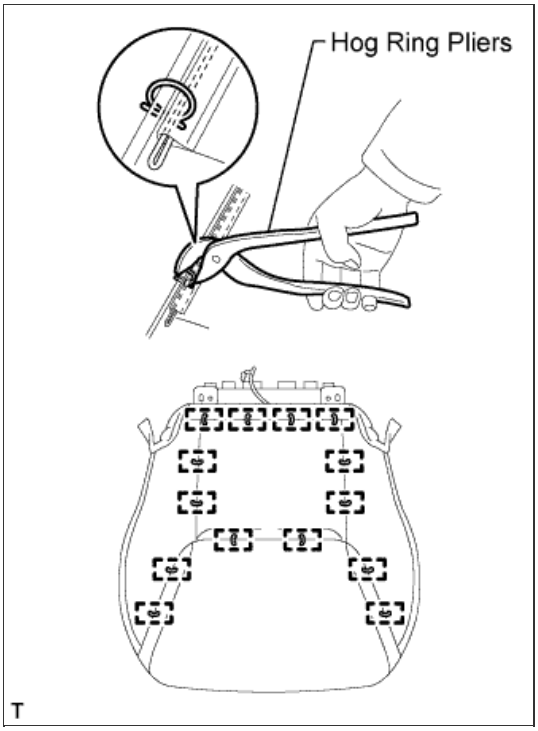


26. INSTALL FRONT SEPARATE TYPE SEAT CUSHION COVER

a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

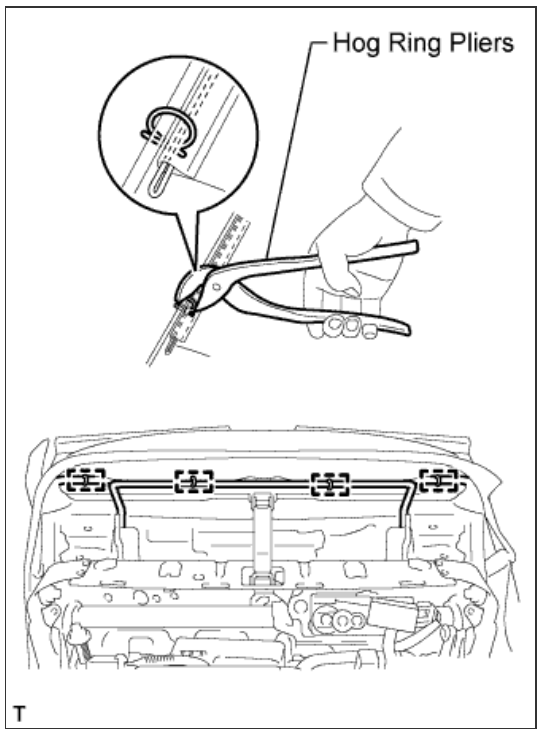
- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



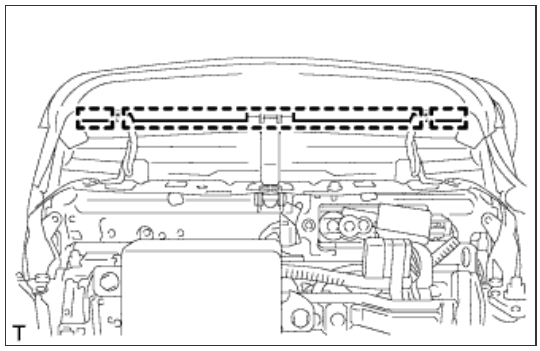
27. INSTALL SEAT CUSHION COVER WITH PAD

a. for Driver Side:

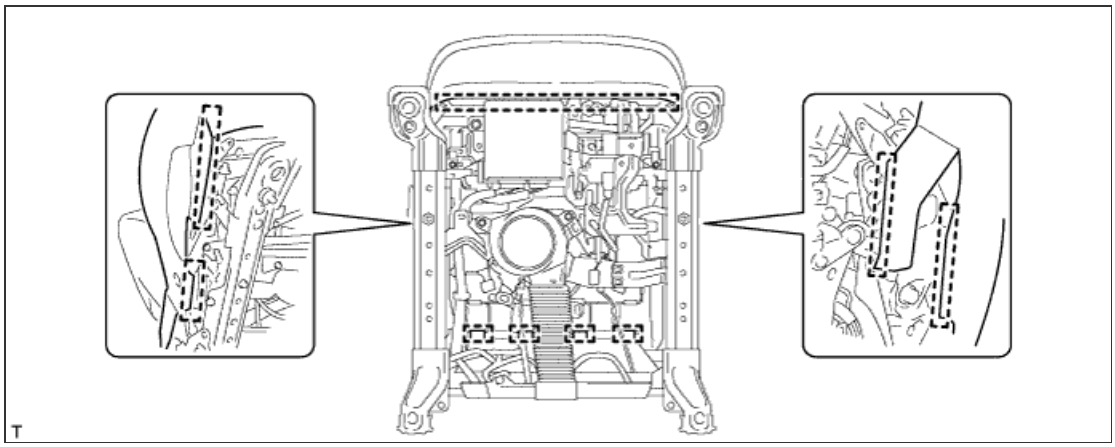
i. Using hog ring pliers, install the seat cushion cover with pad to the seat frame with new hog rings.



ii. Attach the hooks.



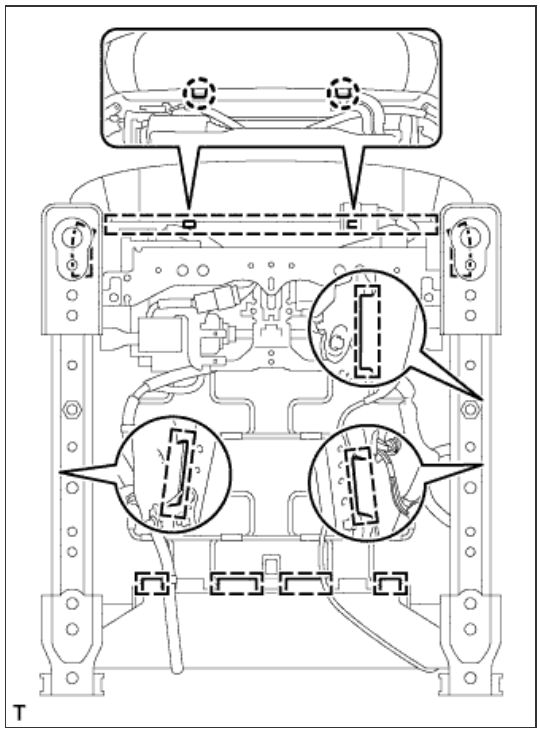
iii. Attach the hooks.



b. for Front Passenger Side:

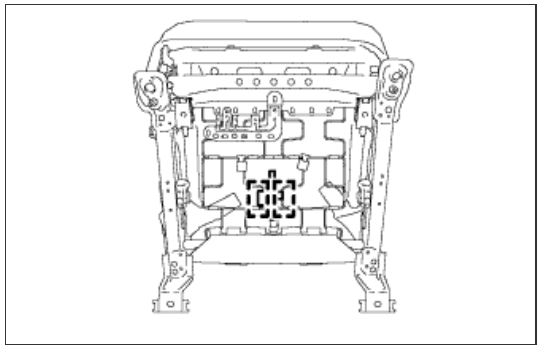
i. Attach the hooks to install the seat cushion cover with pad.

ii. Bend the 2 seat frame claws downward.



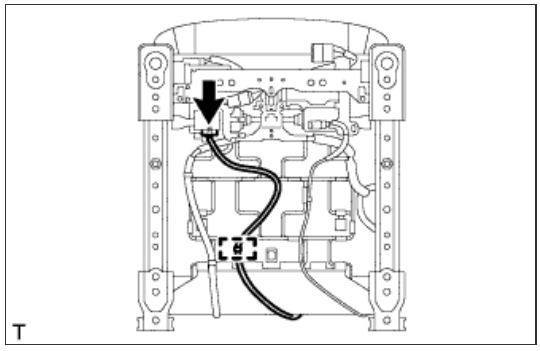
iii. Attach the 2 clamps to install the seat belt warning sensor connector.

iv. Connect the seat belt warning sensor connector.

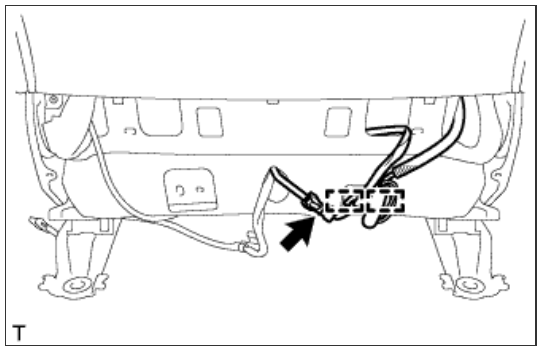


c. w/ Seat Heater System:

i. Connect the seat heater control connector and attach the wire harness clamp.



ii. Connect the seat heater connector and attach the 2 wire harness clamps.

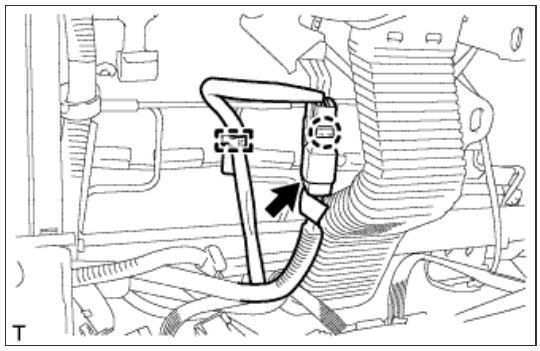


d. w/ Climate Control Seat System:

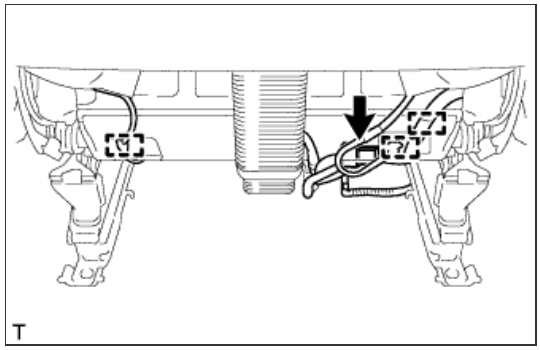
i. Attach the claw to install the connector.

ii. Attach the wire harness clamp.

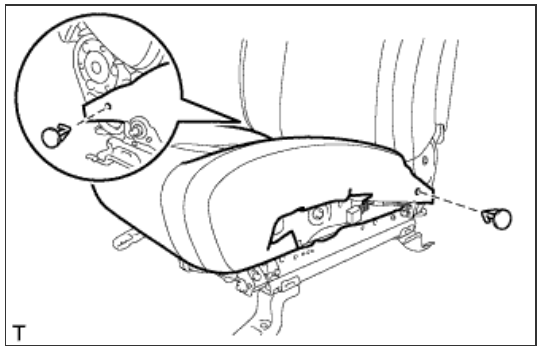
iii. Connect the connector.



iv. Connect the seat heater connector and attach the 3 wire harness clamps.



e. Install the 2 clips.



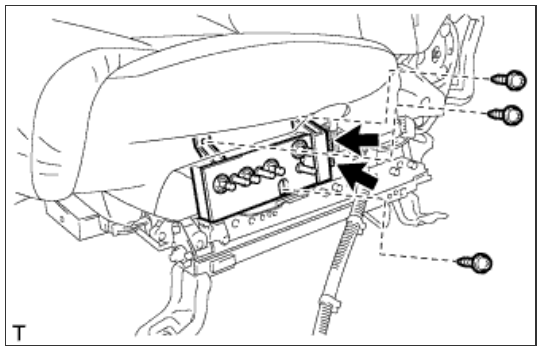
28. INSTALL FRONT POWER SEAT SWITCH LH

a. Install the switch with the 3 screws.

b. for Driver Side:
Connect the 2 connectors.

c. for Front Passenger Side:

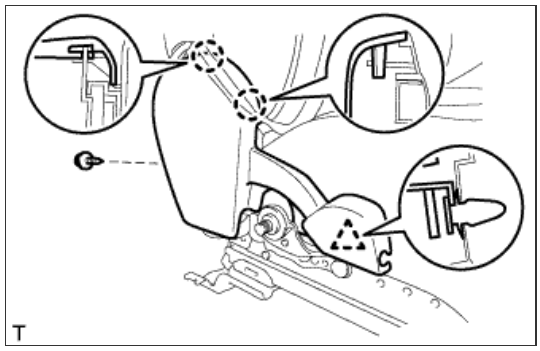
Connect the connector.



29. INSTALL FRONT INNER SEAT CUSHION SHIELD LH

a. Attach the 2 claws and clip to install the cushion shield.

b. Install the screw.



30. INSTALL FRONT SEAT INNER BELT ASSEMBLY LH

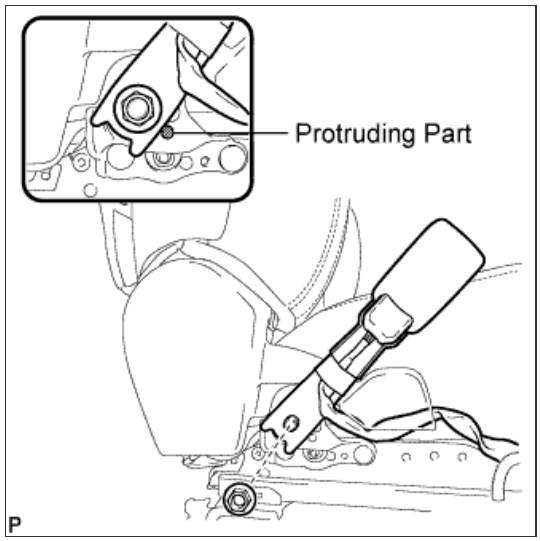
a. Install the front seat inner belt assembly with the nut.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

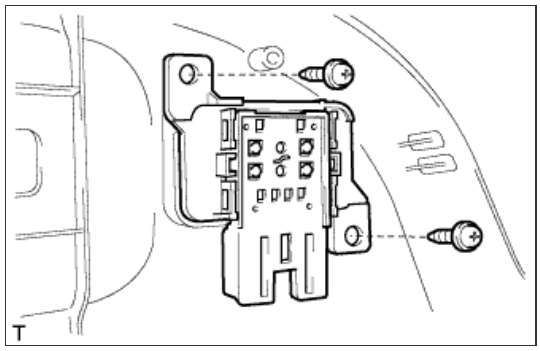
Do not allow the anchor part of the front seat inner belt assembly to overlap the protruding part of the front seat adjuster.

b. Connect the 3 connectors and attach the clamps.



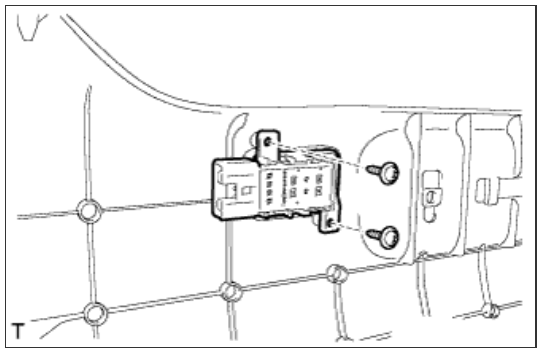
31. INSTALL SEAT VARIABLE CUSHION SWITCH (for Driver Side)

a. Install the switch with the 2 screws.



32. INSTALL LUMBAR SWITCH

a. Install the lumbar switch with the 2 screws.

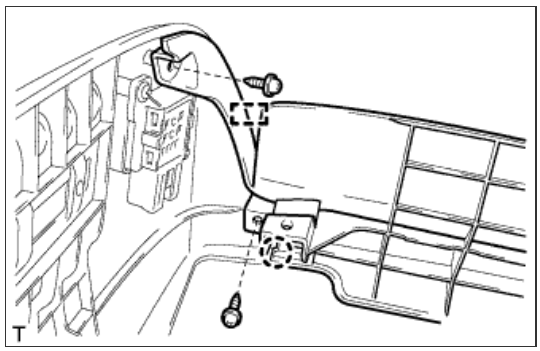


33. INSTALL FRONT INNER NO. 1 SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the claw and guide to install the cushion shield.

ii. Install the 2 screws.



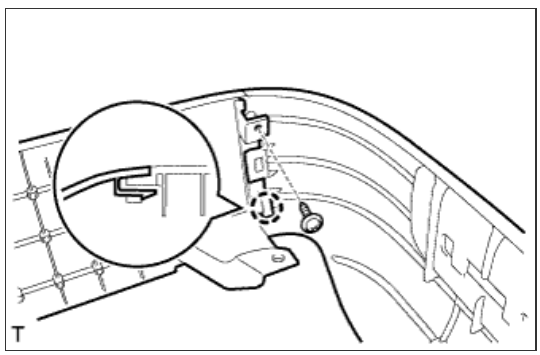
b. for Front Passenger Side:

i. Attach the claw to install the cushion shield.

ii. Install the screw.

c. Attach the claw to install the cushion shield.

d. Install the screw.



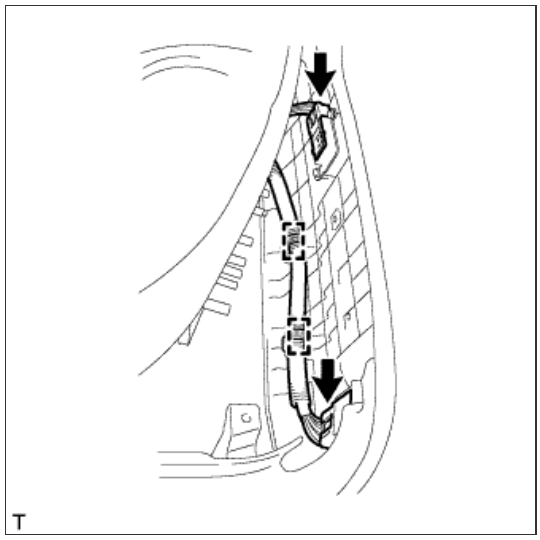
34. INSTALL FRONT SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

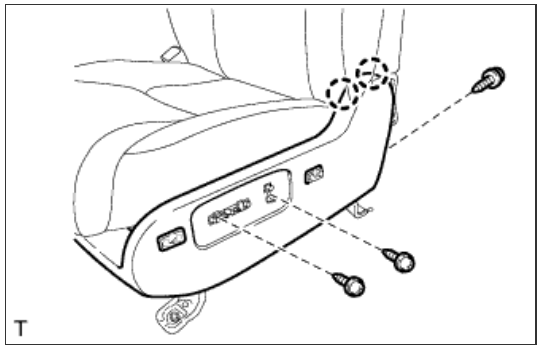
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

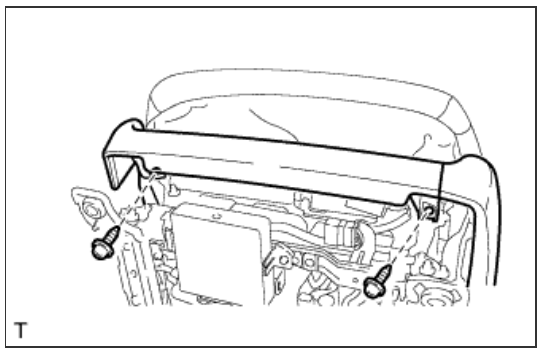


c. Attach the 2 claws to install the cushion shield.

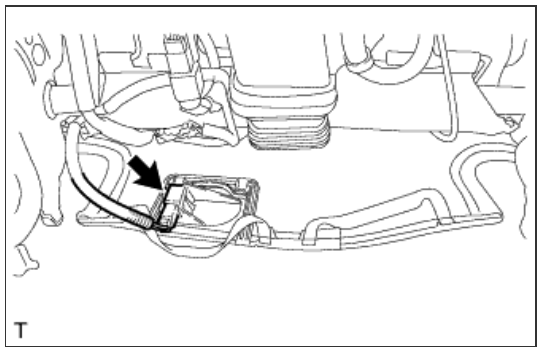
d. Install the 3 screws.



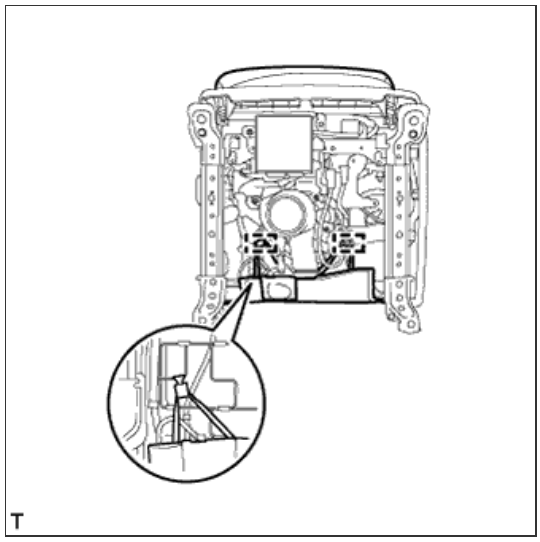
e. Install the 2 screws.



f. Connect the interior illumination light connector.

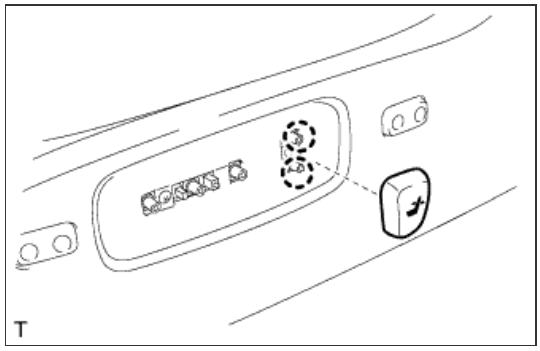


g. Attach the 2 rubber bands to the hooks.



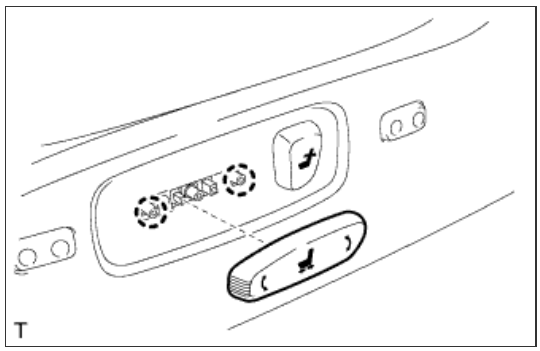
35. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



36. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL FRONT SEAT ASSEMBLY LH

a. Place the front seat assembly in the cabin.

NOTICE:

Be careful not to damage the vehicle body.

b. Connect the seat wire connectors under the seat.

c. Connect the cable to the negative (-) battery terminal.

NOTICE:

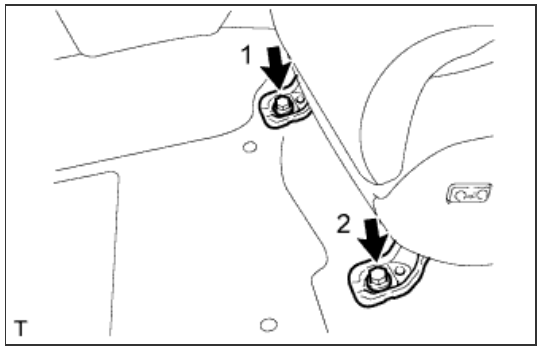
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

d. Temporarily install the front seat assembly with the 4 bolts.

e. Operate the power seat switch (slide switch) to move the seat to the rearmost position.

f. Tighten the bolts in the order shown in the illustration.

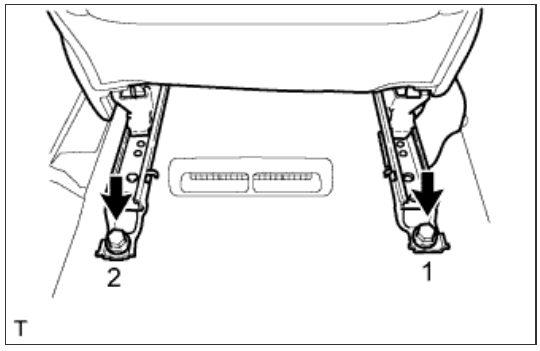
Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



g. Operate the power seat switch (slide switch) to move the seat to the foremost position.

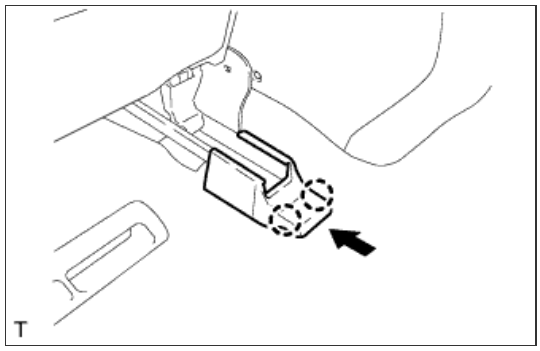
h. Tighten the bolts in the order shown in the illustration.

Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



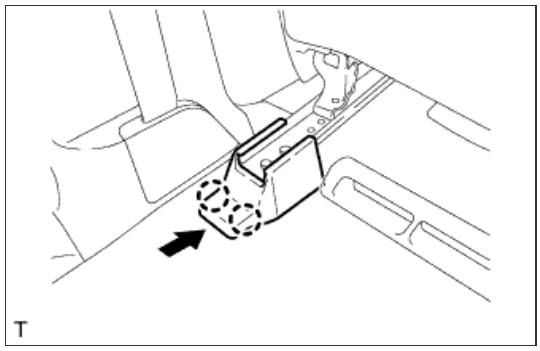
2. INSTALL REAR INNER SEAT TRACK BRACKET COVER LH

a. Attach the 2 claws to install the cover.



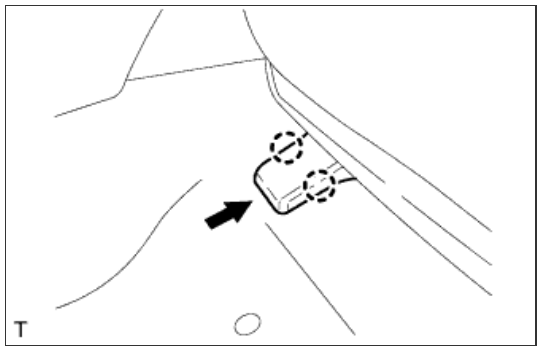
3. INSTALL REAR OUTER SEAT TRACK BRACKET COVER LH

a. Attach the 2 claws to install the cover.



4. INSTALL FRONT INNER SEAT TRACK BRACKET COVER LH

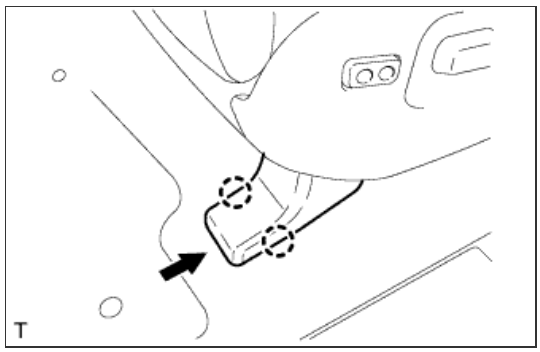
a. Attach the 2 claws to install the cover.



5. INSTALL FRONT OUTER SEAT TRACK BRACKET COVER LH

a. Attach the 2 claws to install the cover.

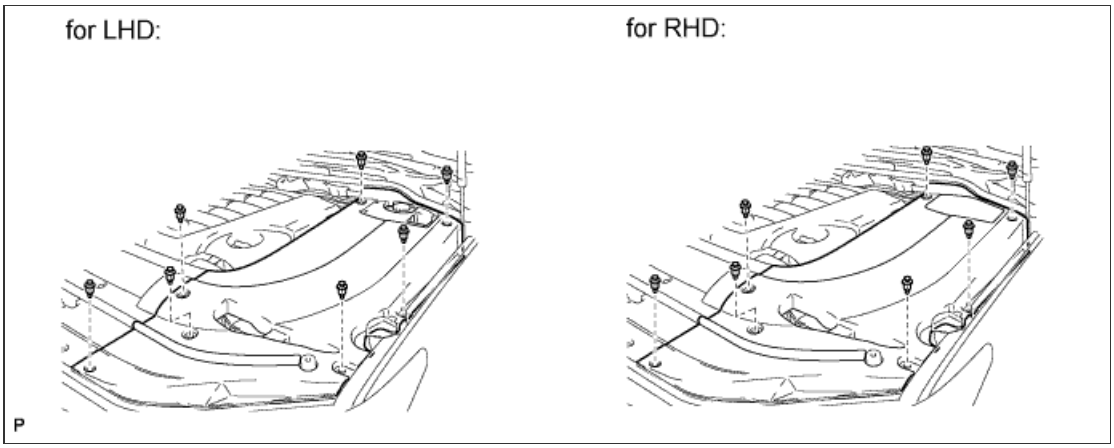
b. Reset the Autoaway/Return function setting to the previous condition by changing the customize parameter (Click here).



6. INSTALL FRONT SEAT HEADREST ASSEMBLY

7. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



8. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

9. INSPECT FRONT SEAT ASSEMBLY

a. Check the power seat operation (Click here).

b. w/ Seat Heater System:
Check the seat heater operation.

i. Turn the engine switch on (IG).

ii. Turn the seat heater switch on.

iii. Wait 5 minutes or more and confirm that the seat surface becomes warm.

c. w/ Climate Control Seat System:
Check the climate seat operation (Click here).

for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL FRONT SEAT ASSEMBLY LH

a. Place the front seat assembly in the cabin.

NOTICE:

Be careful not to damage the vehicle body.

b. Connect the seat wire connectors under the seat.

c. Connect the cable to the negative (-) battery terminal.

NOTICE:

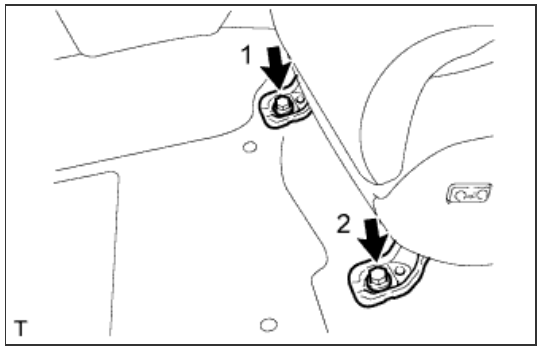
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

d. Temporarily install the front seat assembly with the 4 bolts.

e. Operate the power seat switch (slide switch) to move the seat to the rearmost position.

f. Tighten the bolts in the order shown in the illustration.

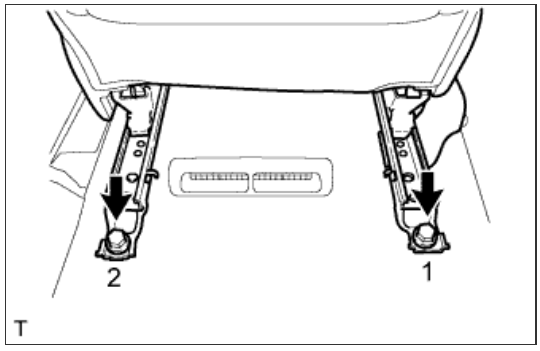
Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



g. Operate the power seat switch (slide switch) to move the seat to the foremost position.

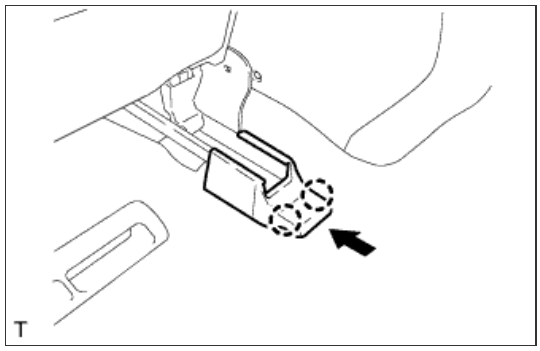
h. Tighten the bolts in the order shown in the illustration.

Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



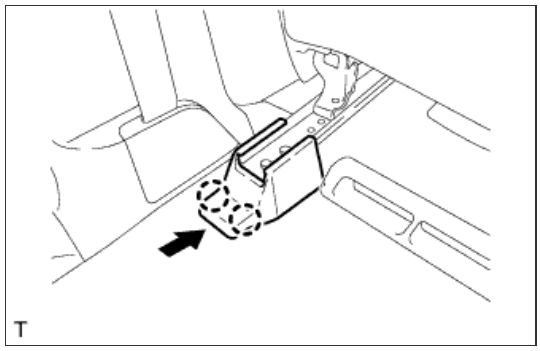
2. INSTALL REAR INNER SEAT TRACK BRACKET COVER LH

a. Attach the 2 claws to install the cover.



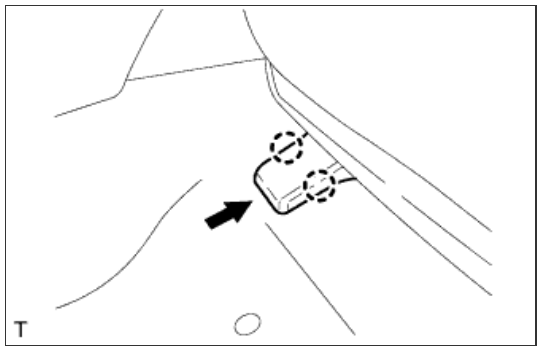
3. INSTALL REAR OUTER SEAT TRACK BRACKET COVER LH

a. Attach the 2 claws to install the cover.



4. INSTALL FRONT INNER SEAT TRACK BRACKET COVER LH

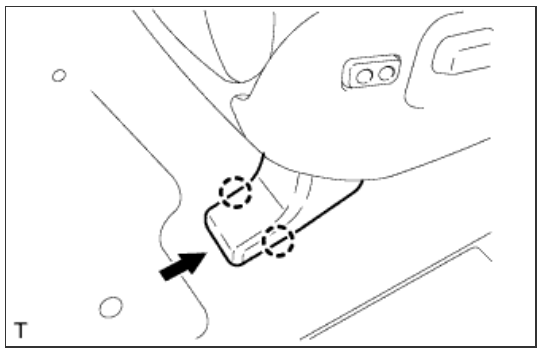
a. Attach the 2 claws to install the cover.



5. INSTALL FRONT OUTER SEAT TRACK BRACKET COVER LH

a. Attach the 2 claws to install the cover.

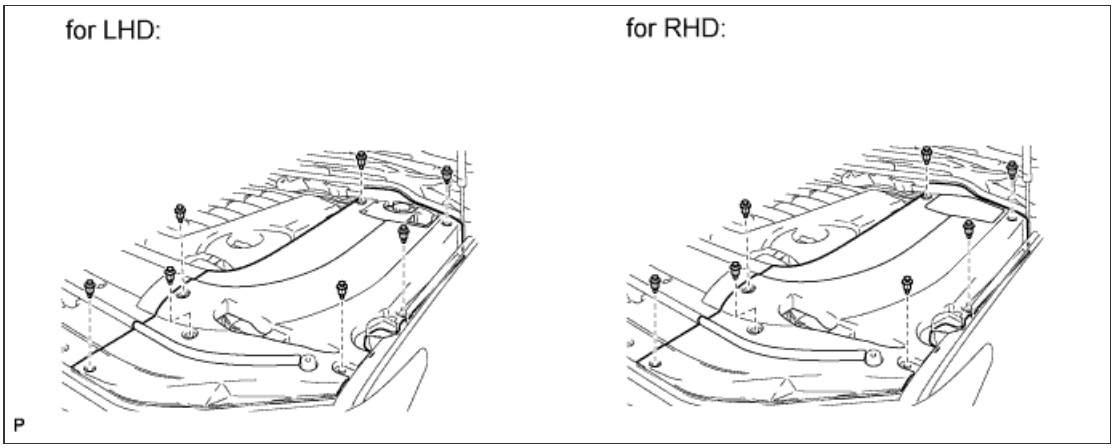
b. Reset the Autoaway/Return function setting to the previous condition by changing the customize parameter (Click here).



6. INSTALL FRONT SEAT HEADREST ASSEMBLY

7. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



8. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

9. INSPECT FRONT SEAT ASSEMBLY

a. Check the power seat operation (Click here).

b. w/ Seat Heater System:
Check the seat heater operation.

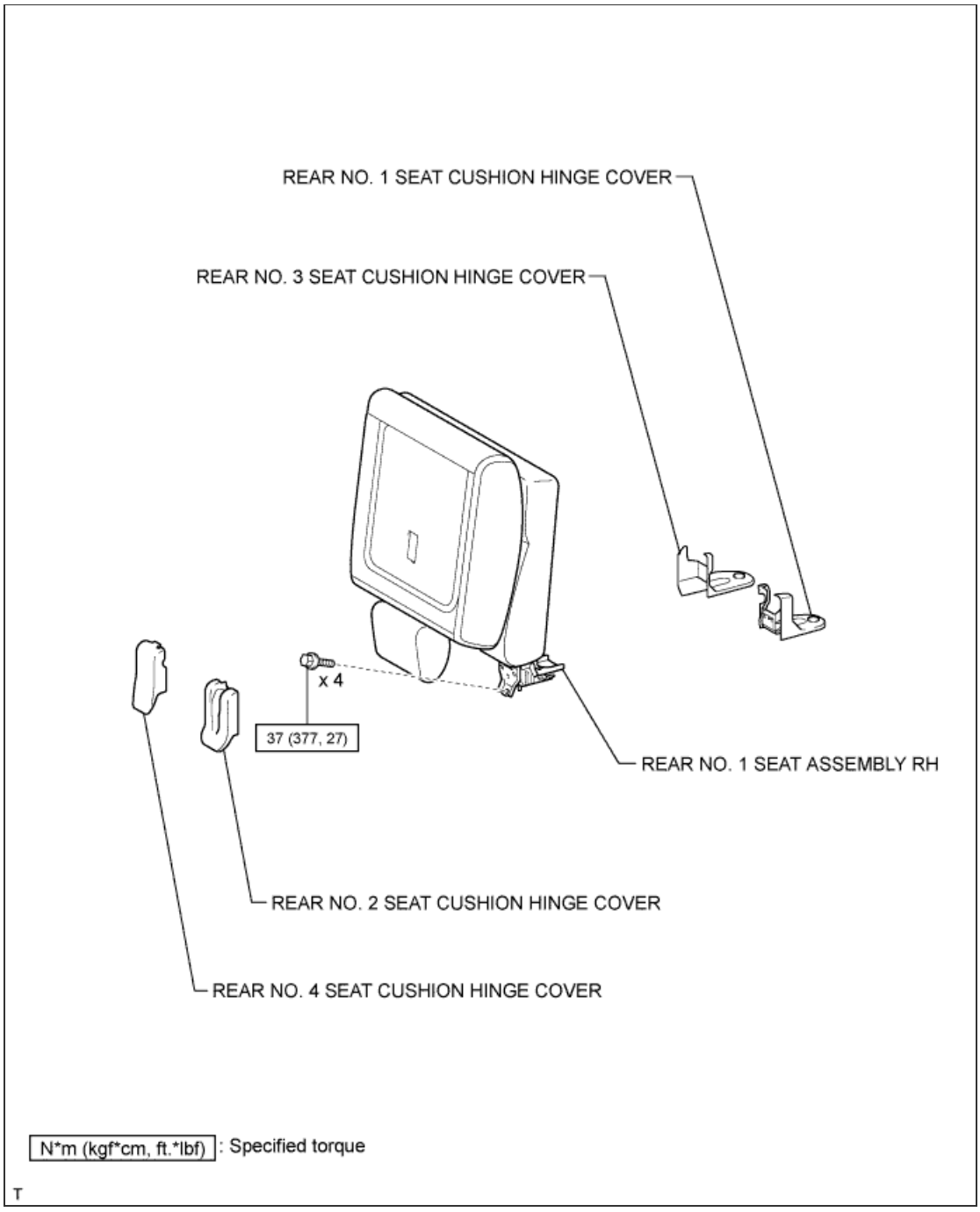
i. Turn the engine switch on (IG).

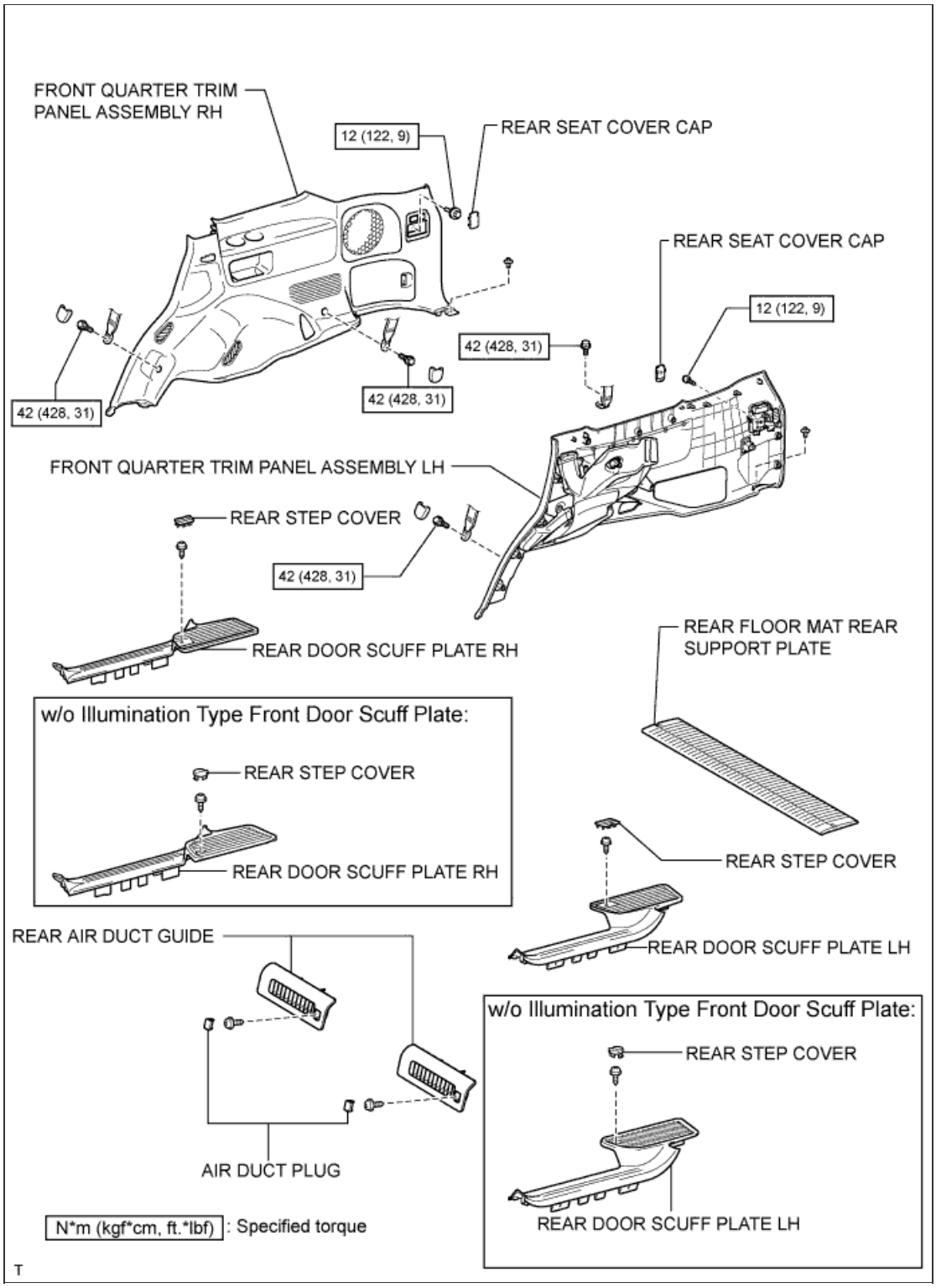
ii. Turn the seat heater switch on.

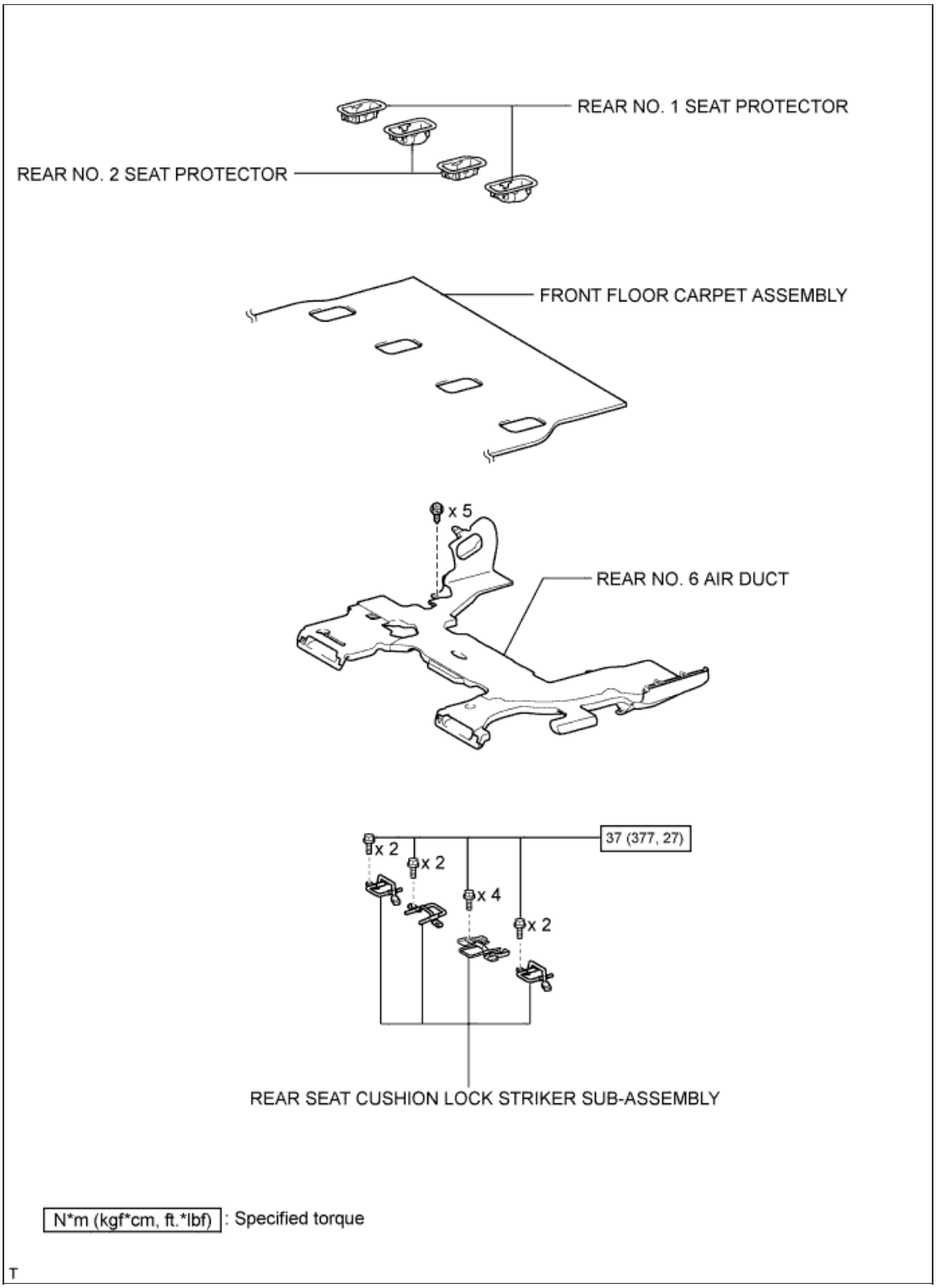
iii. Wait 5 minutes or more and confirm that the seat surface becomes warm.

c. w/ Climate Control Seat System:
Check the climate seat operation (Click here).

for Preparation Click here

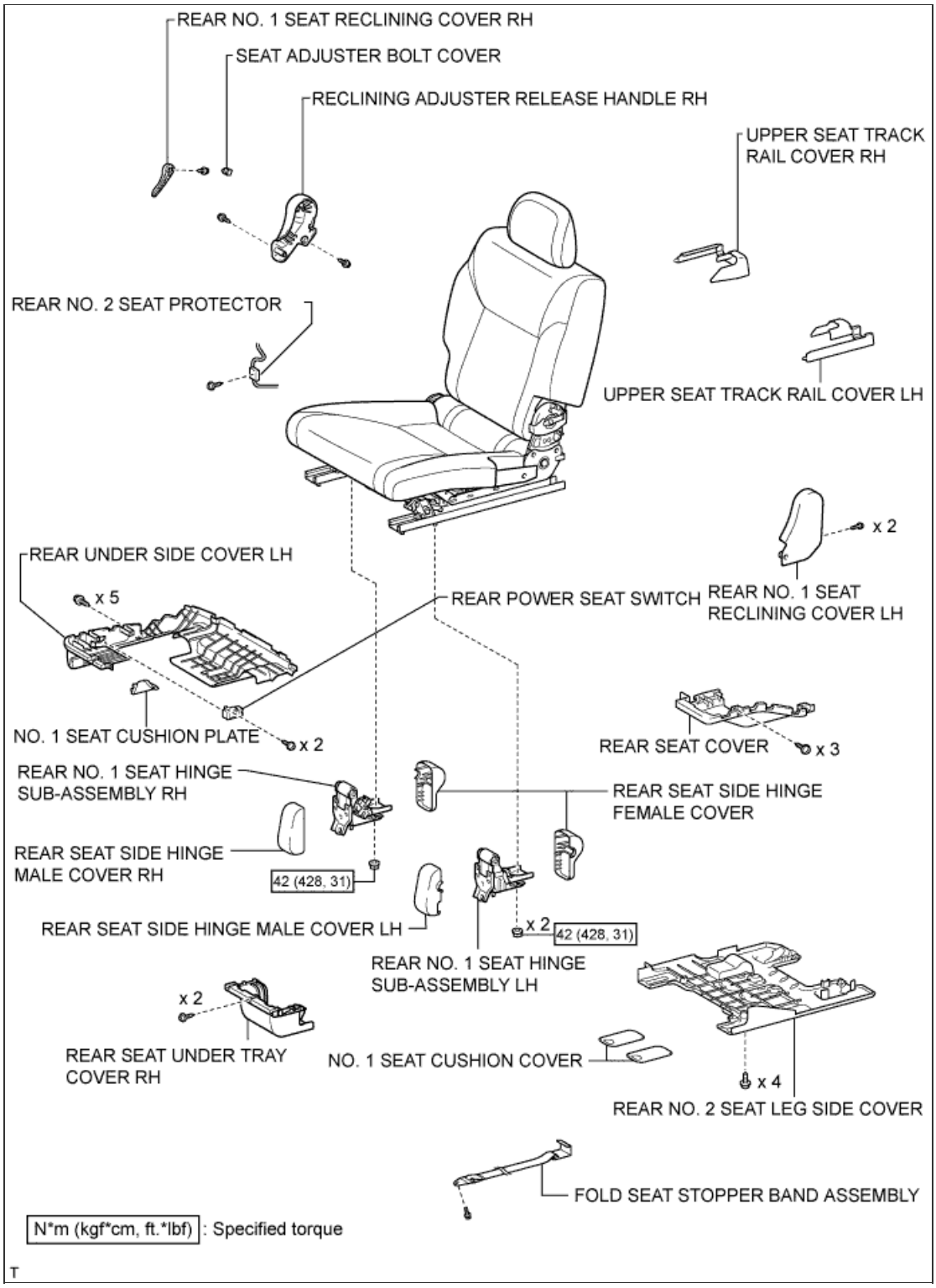


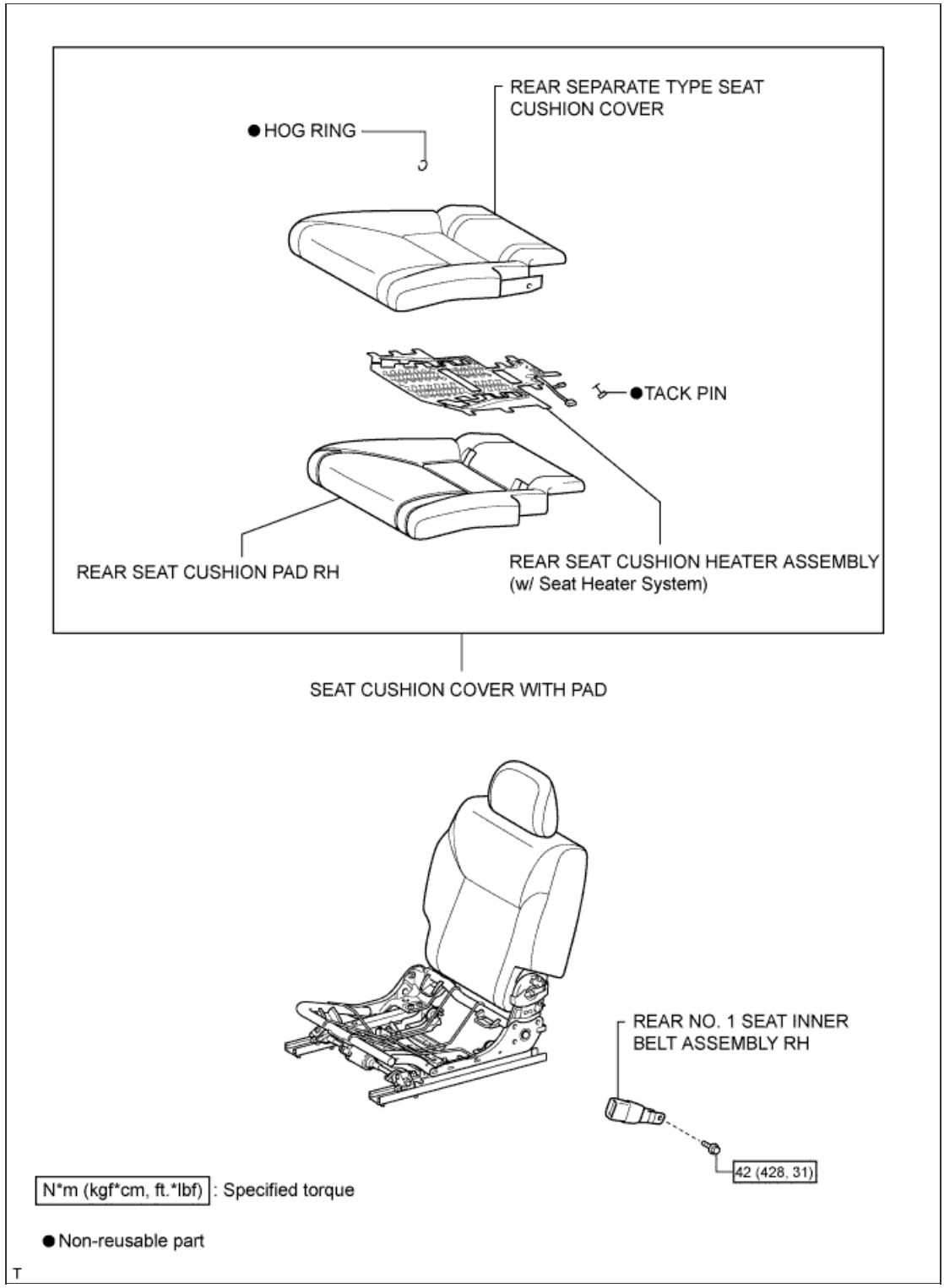

FRONT QUARTER TRIM PANEL ASSEMBLY RH
12 (122, 9)
REAR SEAT COVER CAP
REAR SEAT COVER CAP
12 (122, 9)
42 (428, 31)
42 (428, 31)
42 (428, 31)
FRONT QUARTER TRIM PANEL ASSEMBLY LH
REAR STEP COVER
42 (428, 31)
REAR DOOR SCUFF PLATE RH
REAR FLOOR MAT REAR SUPPORT PLATE
w/o Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE RH
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
REAR AIR DUCT GUIDE
AIR DUCT PLUG
w/o Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
N*m (kgf*cm, ft.*lbf) : Specified torque
T



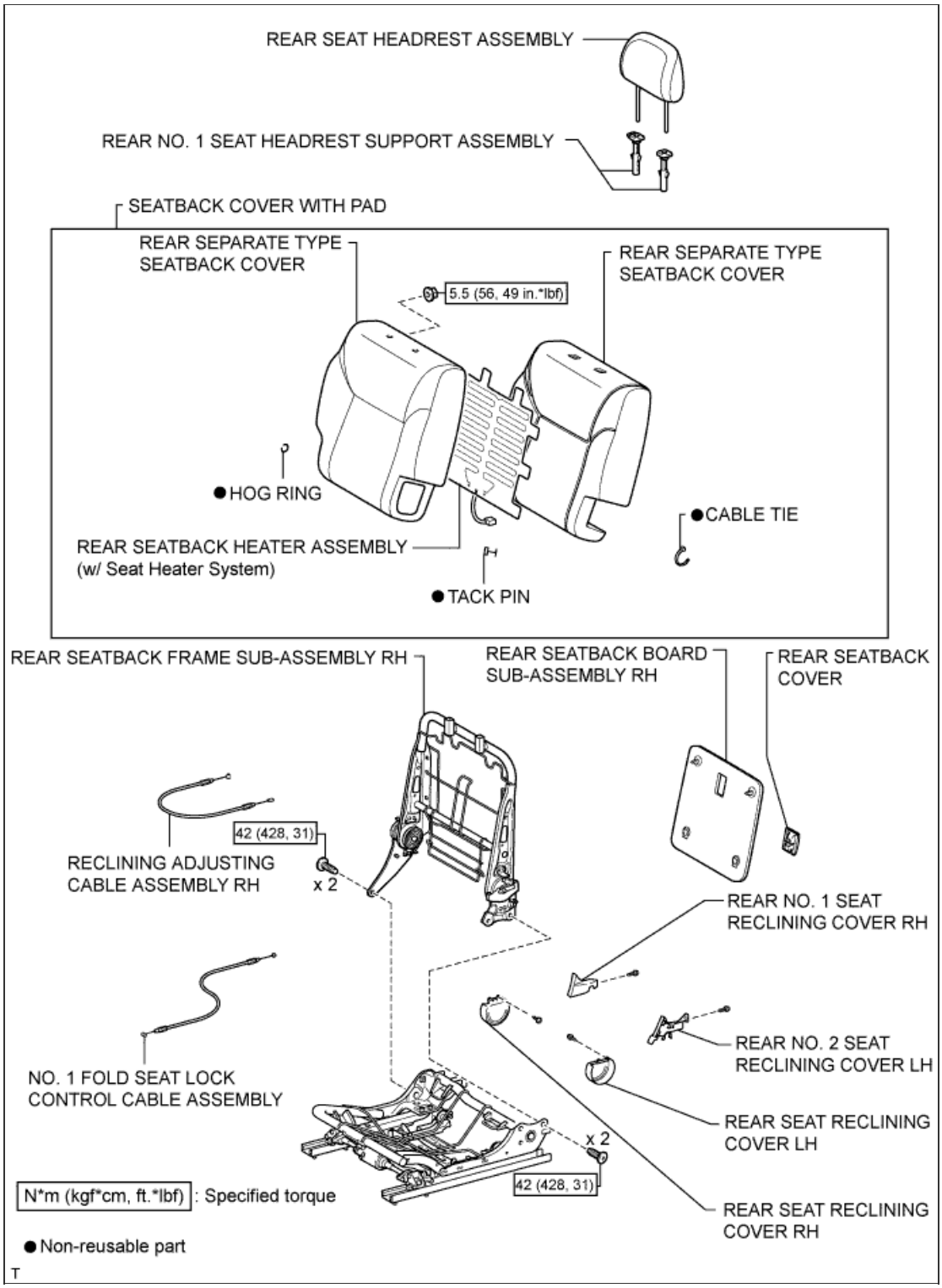
N*m (kgf*cm, ft.*lbf) : Specified torque

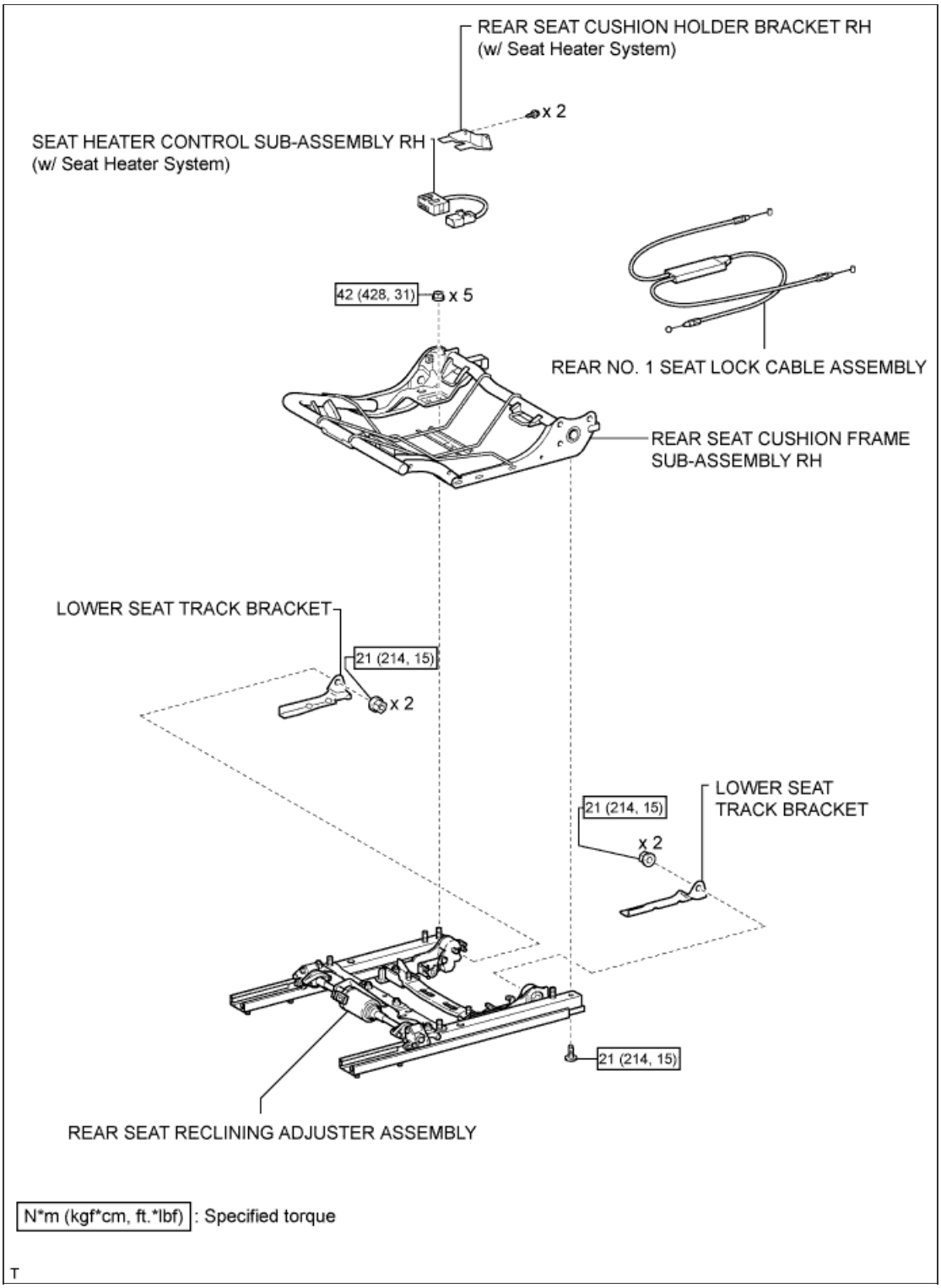
T


REAR NO. 1 SEAT RECLINING COVER RH
SEAT ADJUSTER BOLT COVER
RECLINING ADJUSTER RELEASE HANDLE RH
UPPER SEAT TRACK RAIL COVER RH
REAR NO. 2 SEAT PROTECTOR
UPPER SEAT TRACK RAIL COVER LH
x 2
REAR NO. 1 SEAT RECLINING COVER LH
REAR UNDER SIDE COVER LH
x 5
REAR POWER SEAT SWITCH
NO. 1 SEAT CUSHION PLATE
x 2
REAR SEAT COVER
x 3
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH
REAR SEAT SIDE HINGE FEMALE COVER
REAR SEAT SIDE HINGE MALE COVER RH
42 (428, 31)
REAR SEAT SIDE HINGE MALE COVER LH
x 2
42 (428, 31)
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH
x 2
REAR SEAT UNDER TRAY COVER RH
NO. 1 SEAT CUSHION COVER
x 4
REAR NO. 2 SEAT LEG SIDE COVER
FOLD SEAT STOPPER BAND ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
T


REAR SEPARATE TYPE SEAT CUSHION COVER
● HOG RING
● TACK PIN
REAR SEAT CUSHION PAD RH
REAR SEAT CUSHION HEATER ASSEMBLY (w/ Seat Heater System)
SEAT CUSHION COVER WITH PAD
REAR NO. 1 SEAT INNER BELT ASSEMBLY RH
42 (428, 31)
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part

T


REAR SEAT HEADREST ASSEMBLY
REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY
SEATBACK COVER WITH PAD
REAR SEPARATE TYPE SEATBACK COVER
5.5 (56, 49 in.*lbf)
REAR SEPARATE TYPE SEATBACK COVER
● HOG RING
● CABLE TIE
REAR SEATBACK HEATER ASSEMBLY (w/ Seat Heater System)
● TACK PIN
REAR SEATBACK FRAME SUB-ASSEMBLY RH
REAR SEATBACK BOARD SUB-ASSEMBLY RH
REAR SEATBACK COVER
42 (428, 31)
RECLINING ADJUSTING CABLE ASSEMBLY RH
x 2
REAR NO. 1 SEAT RECLINING COVER RH
REAR NO. 2 SEAT RECLINING COVER LH
NO. 1 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY
REAR SEAT RECLINING COVER LH
x 2
42 (428, 31)
N*m (kgf*cm, ft.*lbf) : Specified torque
REAR SEAT RECLINING COVER RH
● Non-reusable part
T


REAR SEAT CUSHION HOLDER BRACKET RH
(w/ Seat Heater System)
x 2
SEAT HEATER CONTROL SUB-ASSEMBLY RH
(w/ Seat Heater System)
42 (428, 31)
x 5
REAR NO. 1 SEAT LOCK CABLE ASSEMBLY
REAR SEAT CUSHION FRAME
SUB-ASSEMBLY RH
LOWER SEAT TRACK BRACKET
21 (214, 15)
x 2
21 (214, 15)
x 2
LOWER SEAT
TRACK BRACKET
21 (214, 15)
REAR SEAT RECLINING ADJUSTER ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
T

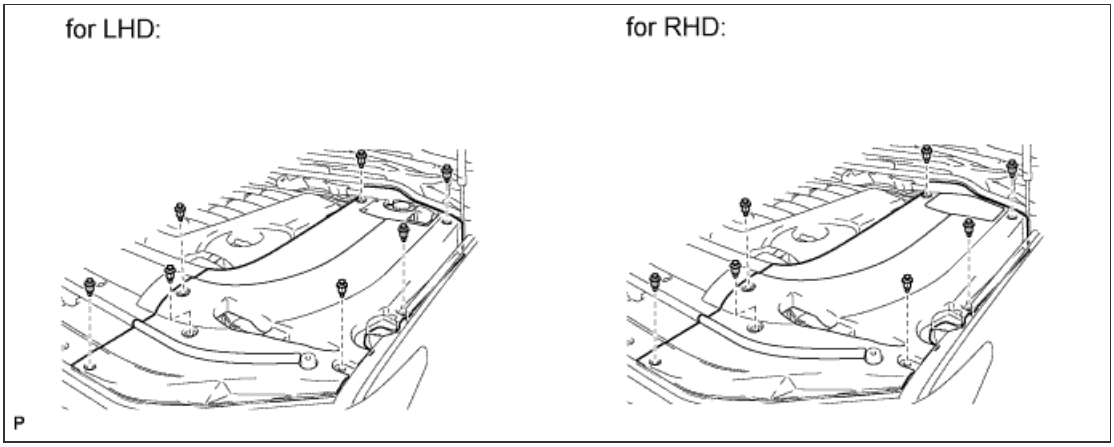
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

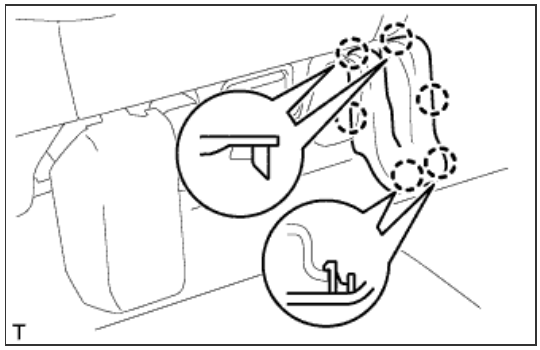
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE REAR NO. 2 SEAT CUSHION HINGE COVER

a. Using a screwdriver, detach the 6 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

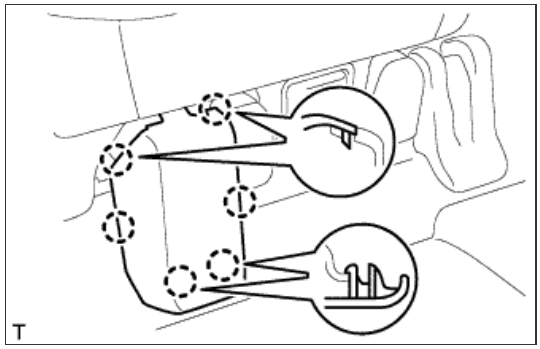


4. REMOVE REAR NO. 4 SEAT CUSHION HINGE COVER

a. Using a screwdriver, detach the 6 claws and remove the cover.

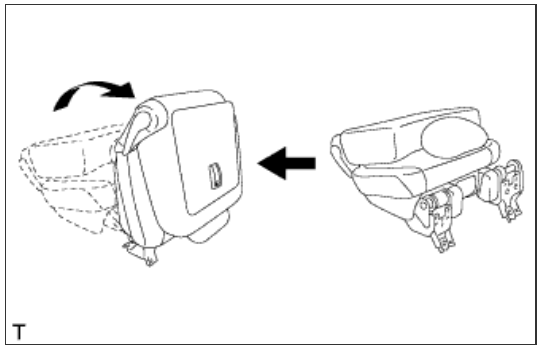
HINT:

Tape the screwdriver tip before use.



5. REMOVE REAR NO. 1 SEAT CUSHION HINGE COVER

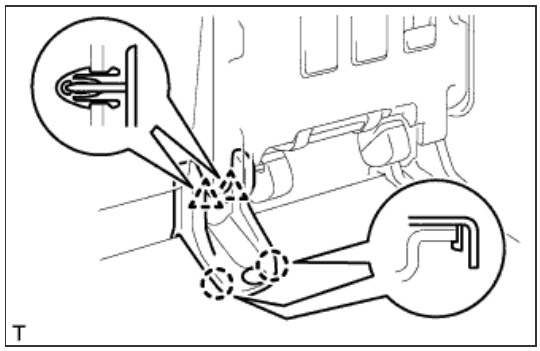
a. Operate the reclining adjuster release handle to move the seat into the position shown in the illustration.



b. Using a screwdriver, detach the 2 claws and 2 clips, and remove the cover.

HINT:

Tape the screwdriver tip before use.

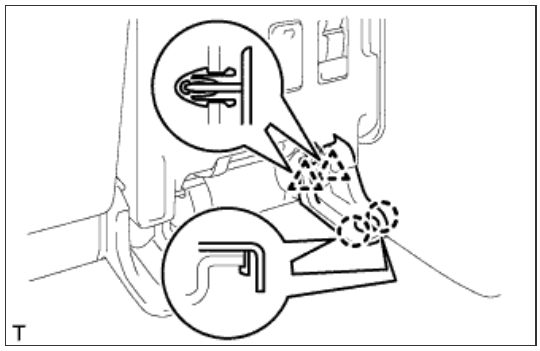


6. REMOVE REAR NO. 3 SEAT CUSHION HINGE COVER

a. Using a screwdriver, detach the 2 claws and 2 clips, and remove the cover.

HINT:

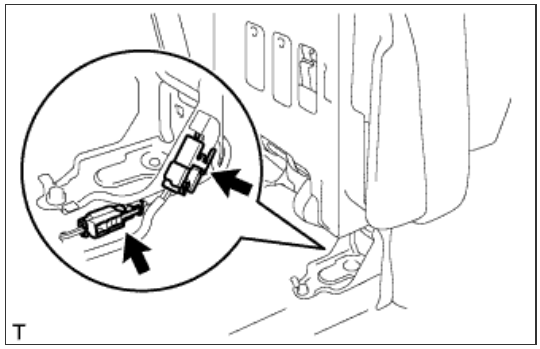
Tape the screwdriver tip before use.



7. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

a. Disconnect the connector.

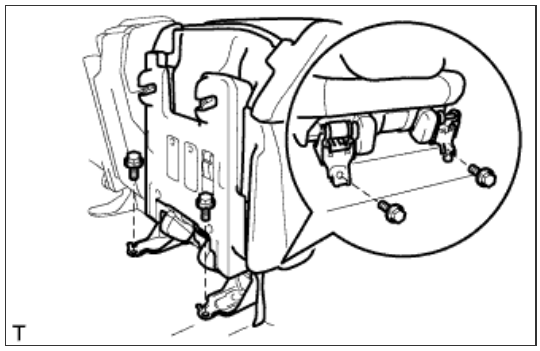
b. w/ Seat Heater System:
Disconnect the connector.



c. Remove the 4 bolts and seat assembly.

NOTICE:

Be careful not to damage the vehicle body.

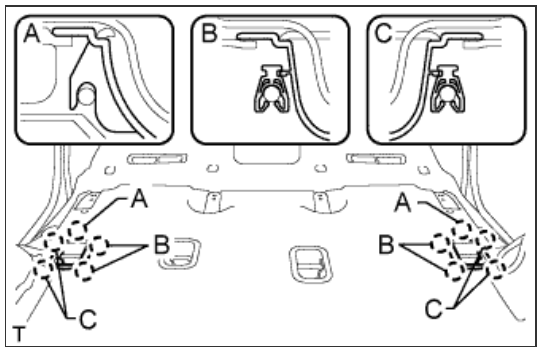


8. REMOVE REAR NO. 1 SEAT ASSEMBLY LH

a. Remove the rear No. 1 seat assembly LH (Click here).

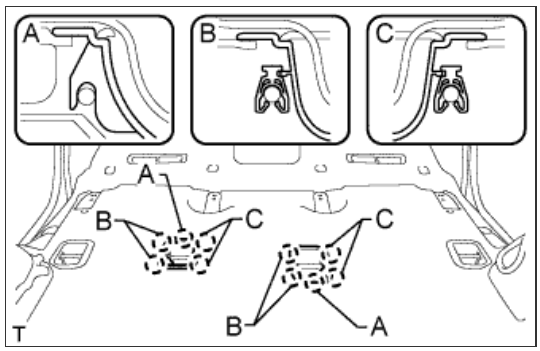
9. REMOVE REAR NO. 1 SEAT PROTECTOR

a. Detach the 10 claws and remove the 2 seat protectors.



10. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the 10 claws and remove the 2 seat protectors.

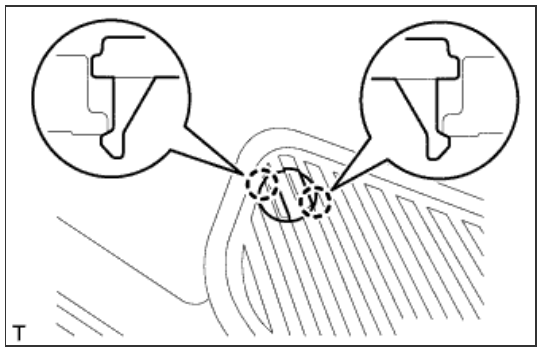


11. REMOVE REAR STEP COVER

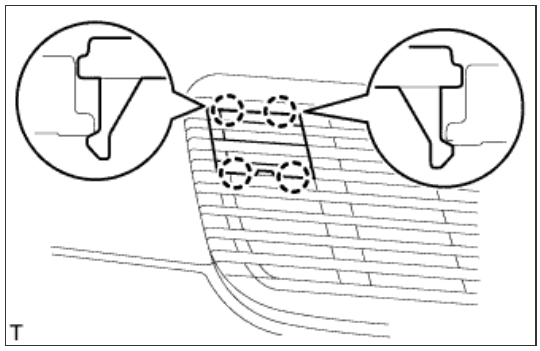
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

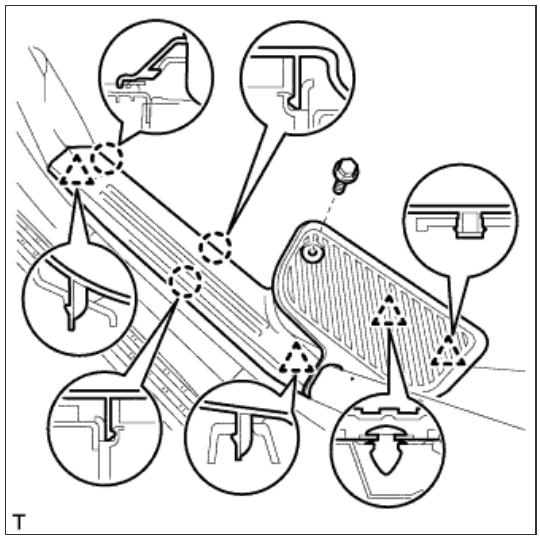


12. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

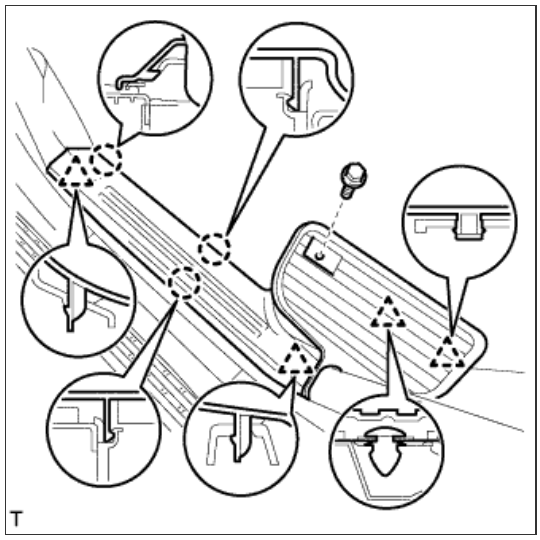
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



13. REMOVE REAR DOOR SCUFF PLATE RH

HINT:

Use the same procedures described for the LH side.

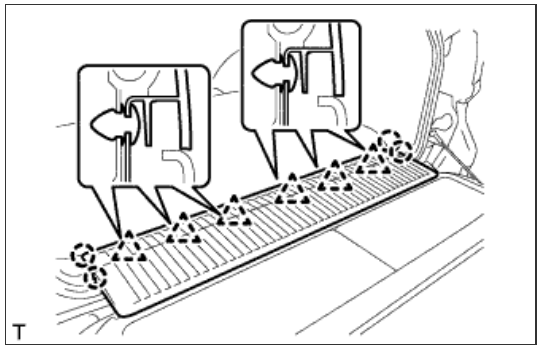
14. REMOVE REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

15. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.



16. REMOVE REAR SEAT COVER CAP

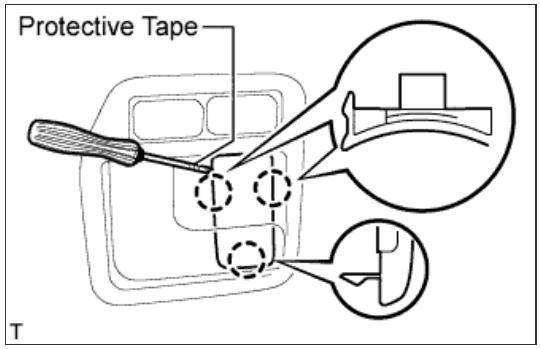
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

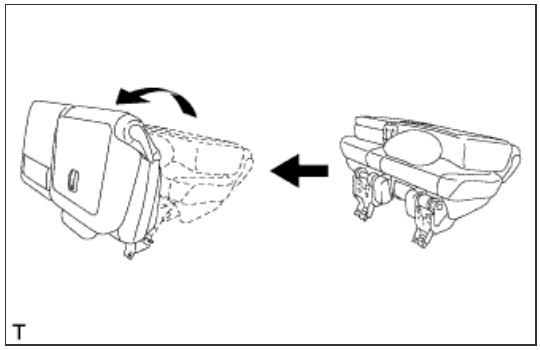
Tape the screwdriver tip before use.



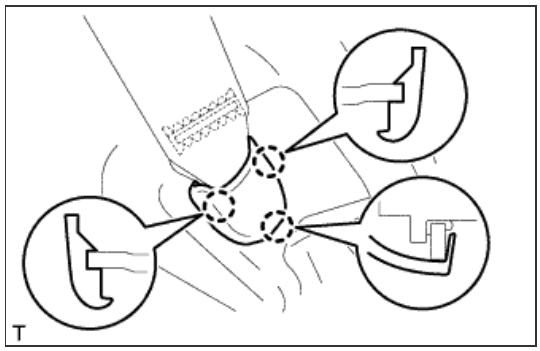
17. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

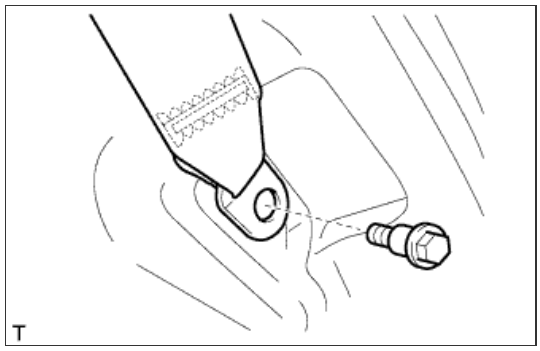
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



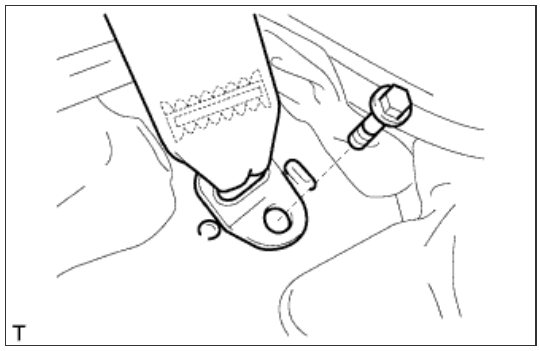
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

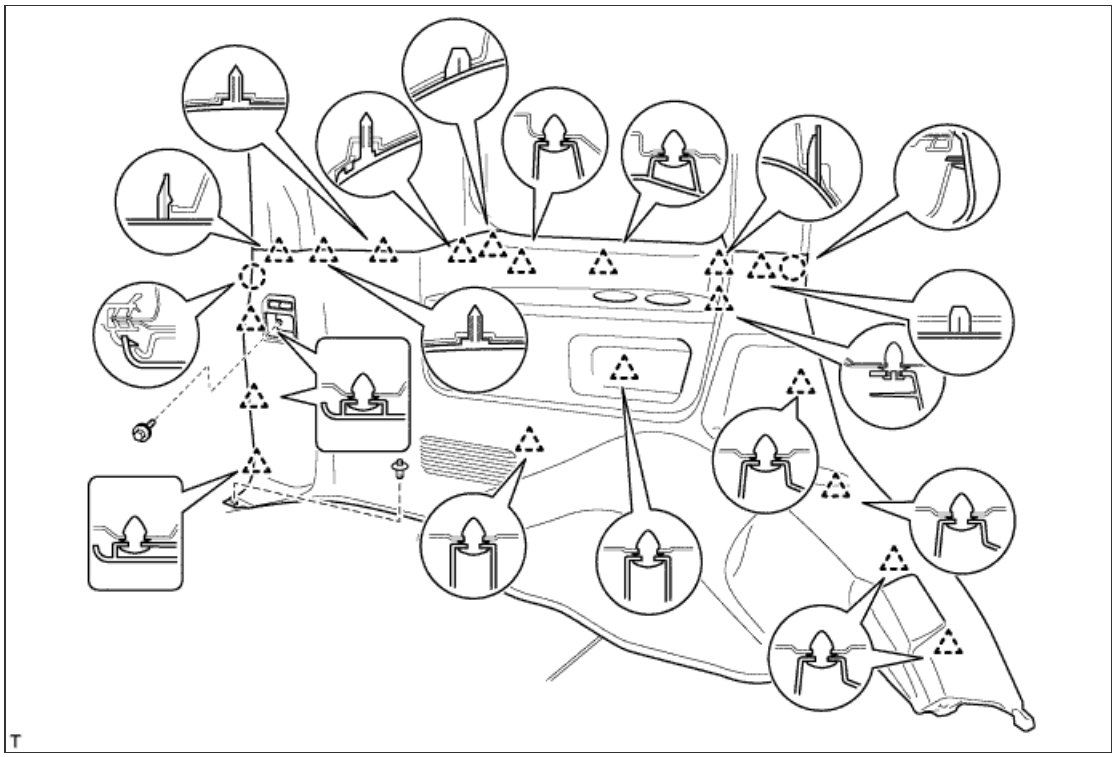


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

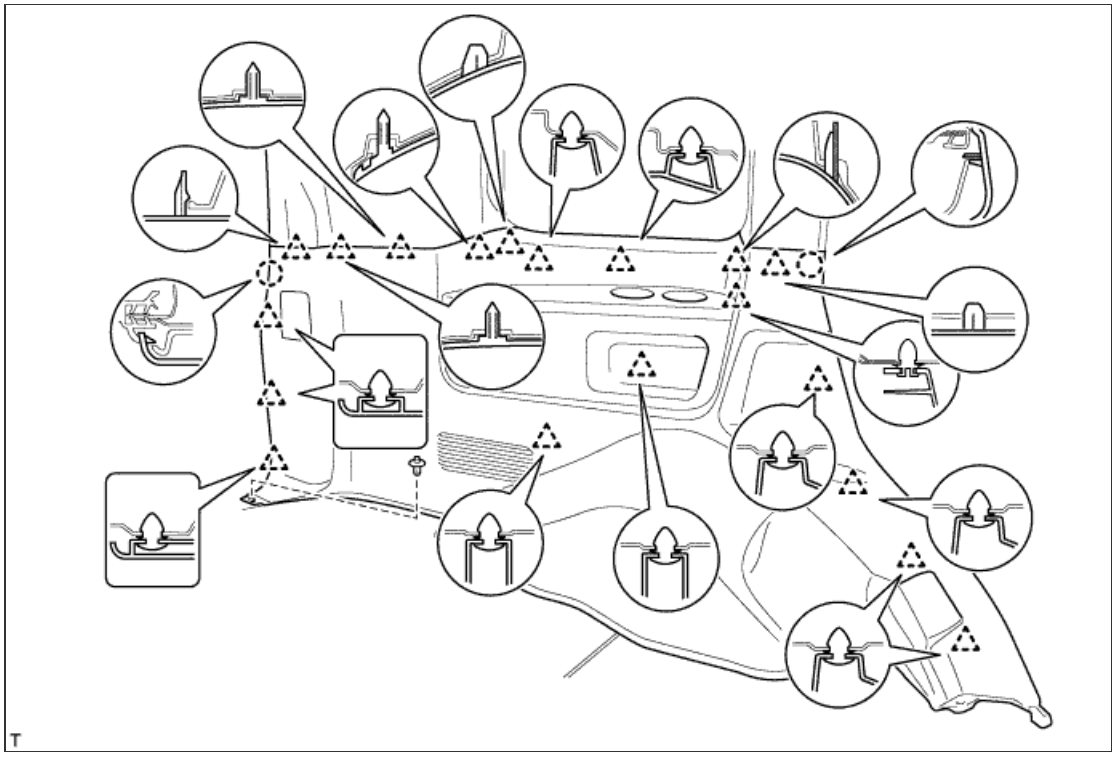


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 19 clips and 2 claws.

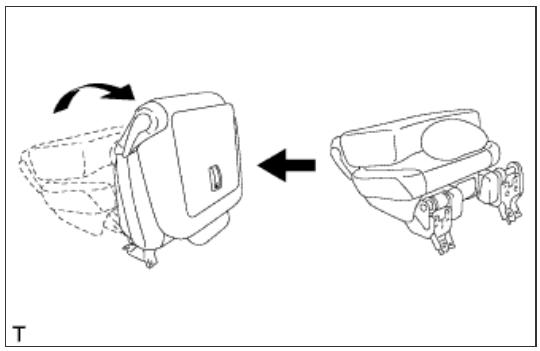
iii. Disconnect the thermistor connector and then remove the quarter trim panel.



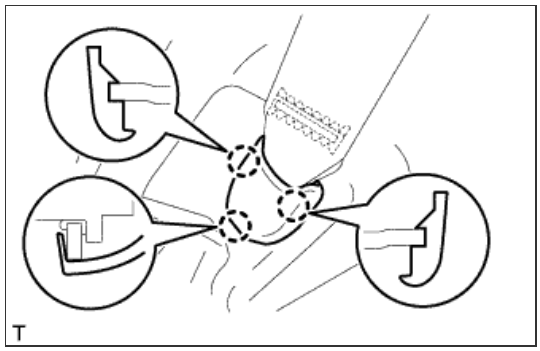
18. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

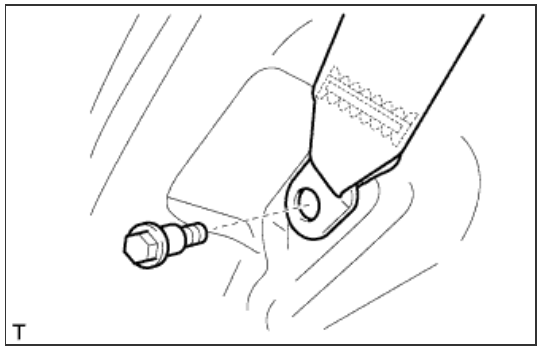
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



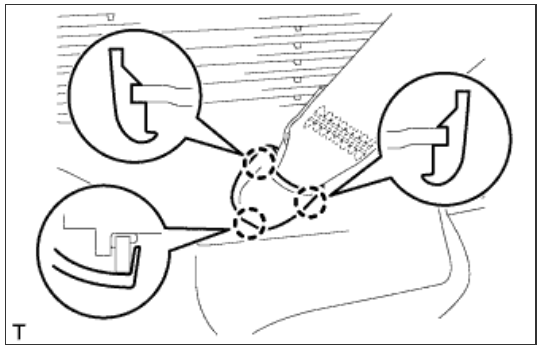
a. Detach the 3 claws and remove the cover.



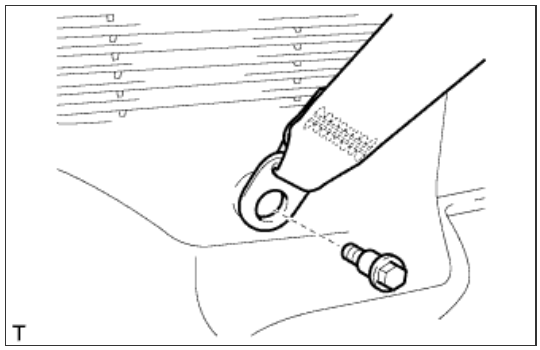
b. Remove the bolt and rear No. 1 seat belt anchor.



c. Detach the 3 claws and remove the cover.



d. Remove the bolt and rear No. 2 seat belt anchor.

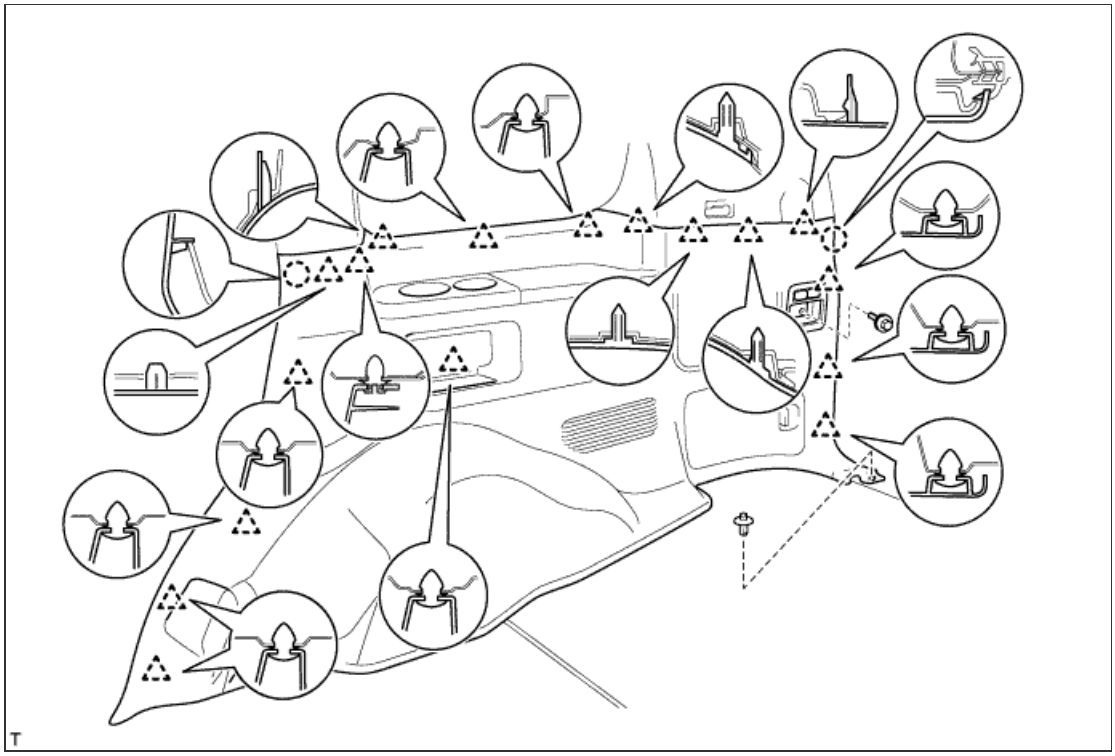


e. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

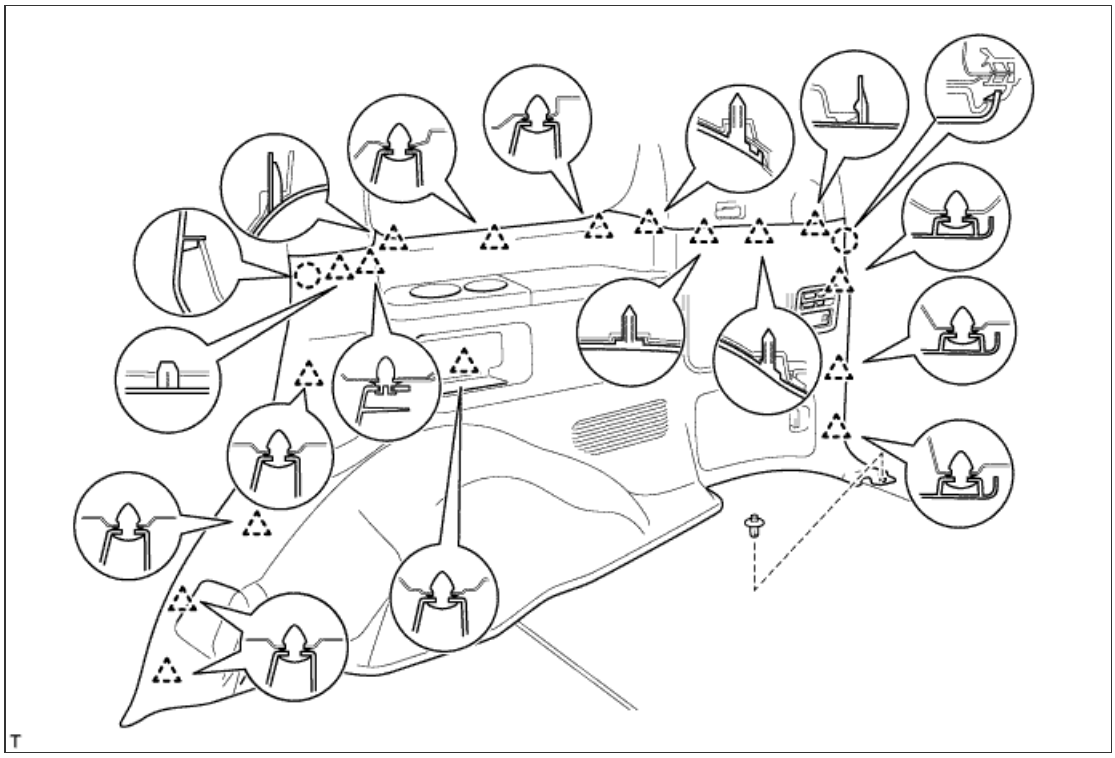


f. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.

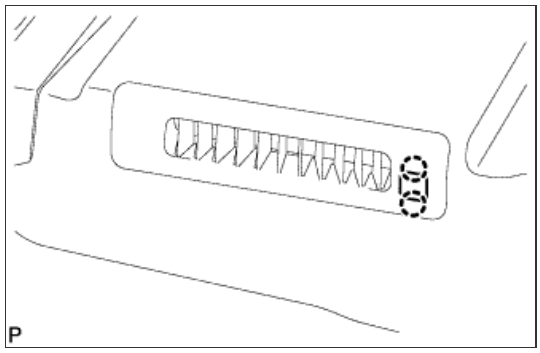


19. REMOVE AIR DUCT PLUG

a. Detach the 2 claws and remove the plug.

HINT:

Use the same procedures for both sides.



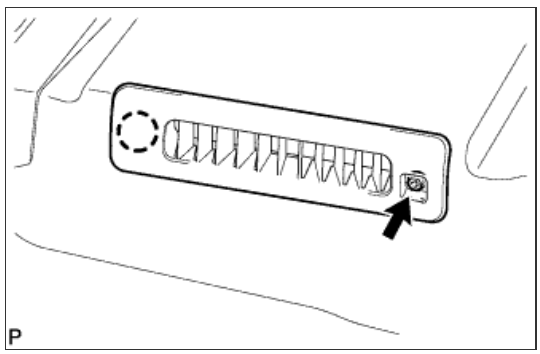
20. REMOVE REAR AIR DUCT GUIDE

HINT:

Use the same procedures for both sides.

a. Remove the screw.

b. Detach the claw and remove the guide.



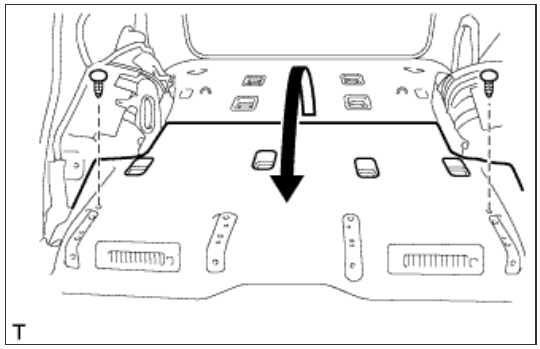
21. REMOVE FRONT FLOOR CARPET ASSEMBLY

a. Remove the 2 clips.

b. Fold back the floor carpet.

HINT:

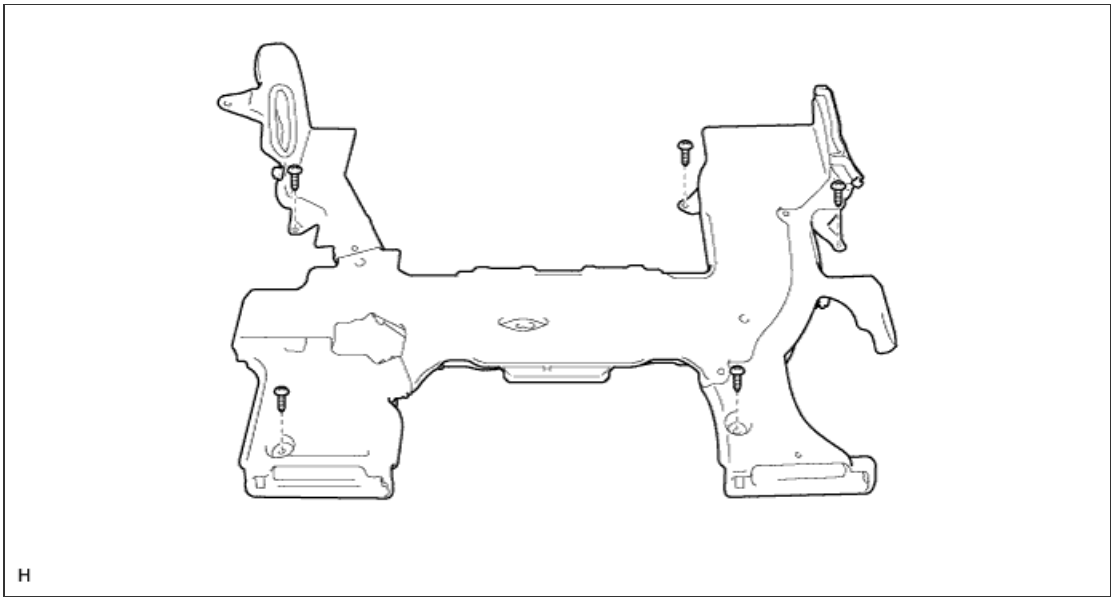
Fold back the carpet until it is possible to remove the rear No. 6 air duct.



22. REMOVE REAR NO. 6 AIR DUCT

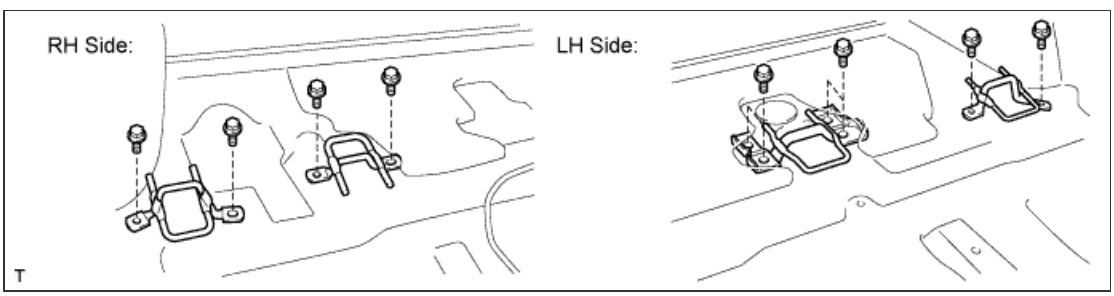
a. Disconnect the 2 connectors.

b. Remove the 5 screws and duct.



23. REMOVE REAR SEAT CUSHION LOCK STRIKER SUB-ASSEMBLY

a. Remove the 10 bolts and 4 lock strikers.



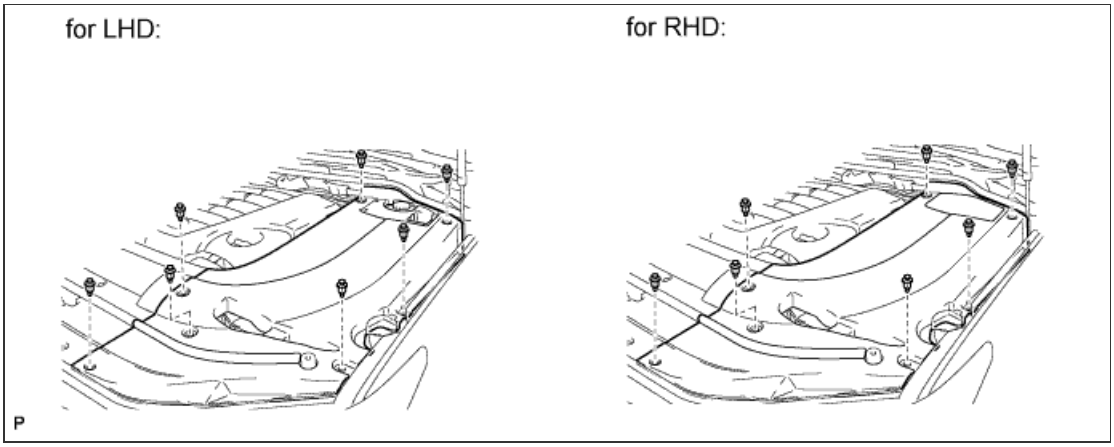
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

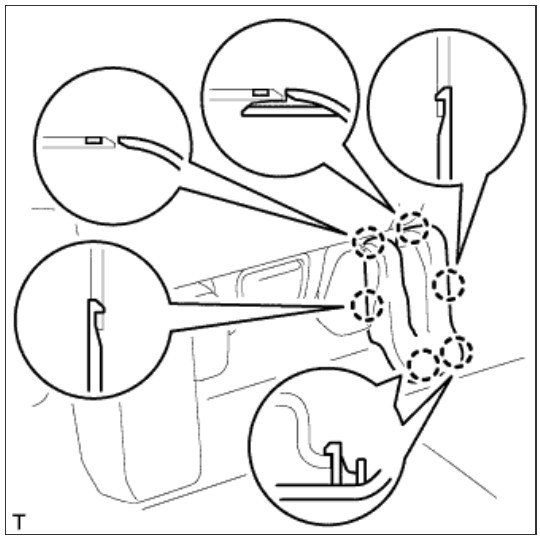
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE REAR NO. 2 SEAT CUSHION HINGE COVER

a. Using a screwdriver, detach the 6 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

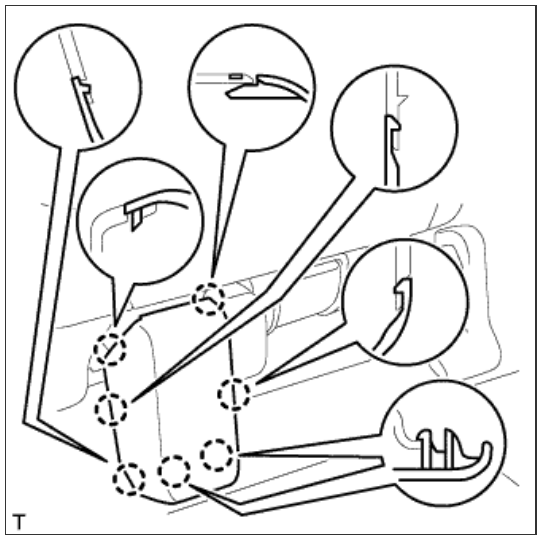


4. REMOVE REAR NO. 4 SEAT CUSHION HINGE COVER

a. Using a screwdriver, detach the 7 claws and remove the cover.

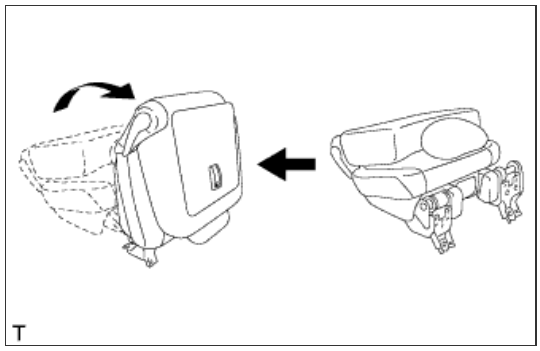
HINT:

Tape the screwdriver tip before use.



5. REMOVE REAR NO. 1 SEAT CUSHION HINGE COVER

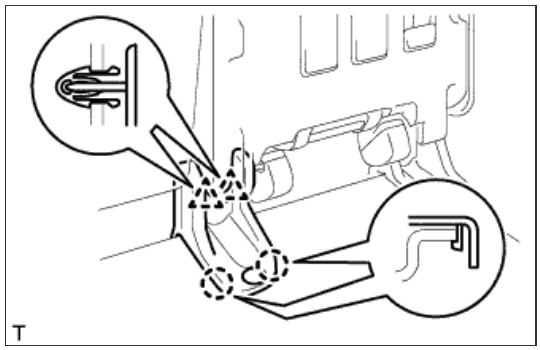
a. Operate the reclining adjuster release handle to move the seat into the position shown in the illustration.



b. Using a screwdriver, detach the 2 claws and 2 clips, and remove the cover.

HINT:

Tape the screwdriver tip before use.

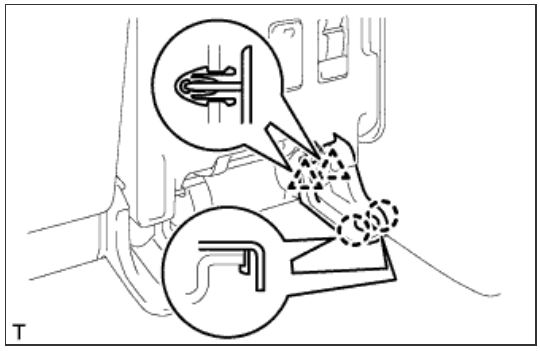


6. REMOVE REAR NO. 3 SEAT CUSHION HINGE COVER

a. Using a screwdriver, detach the 2 claws and 2 clips, and remove the cover.

HINT:

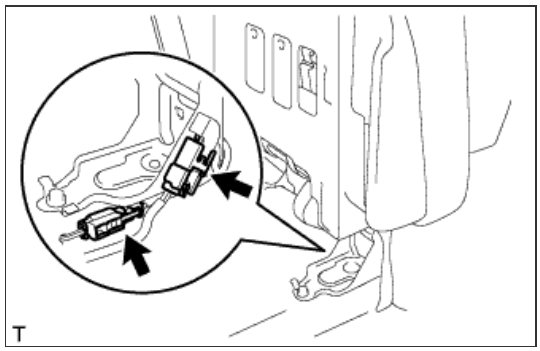
Tape the screwdriver tip before use.



7. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

a. Disconnect the connector.

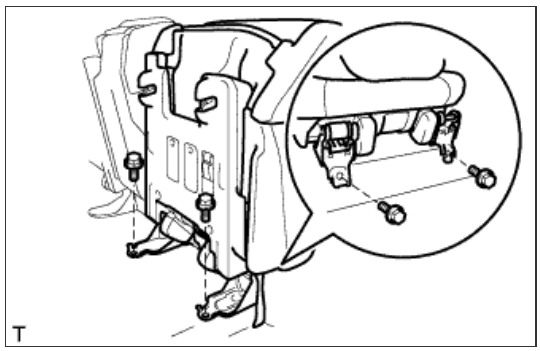
b. w/ Seat Heater System:
Disconnect the connector.



c. Remove the 4 bolts and seat assembly.

NOTICE:

Be careful not to damage the vehicle body.

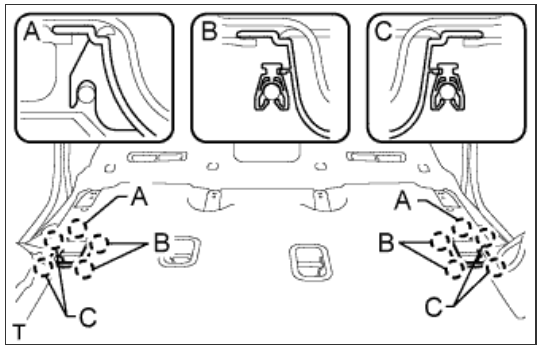


8. REMOVE REAR NO. 1 SEAT ASSEMBLY LH

a. Remove the rear No. 1 seat assembly LH (Click here).

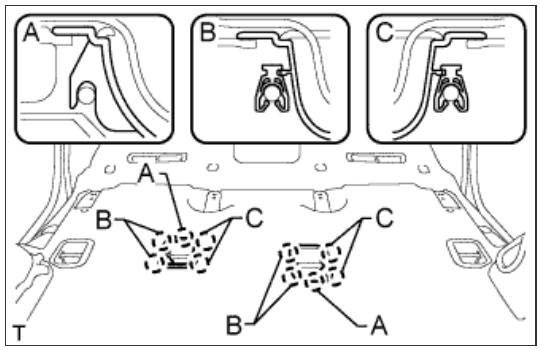
9. REMOVE REAR NO. 1 SEAT PROTECTOR

a. Detach the 10 claws and remove the 2 seat protectors.



10. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the 10 claws and remove the 2 seat protectors.

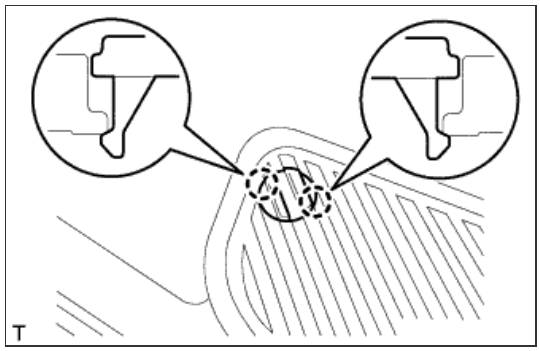


11. REMOVE REAR STEP COVER

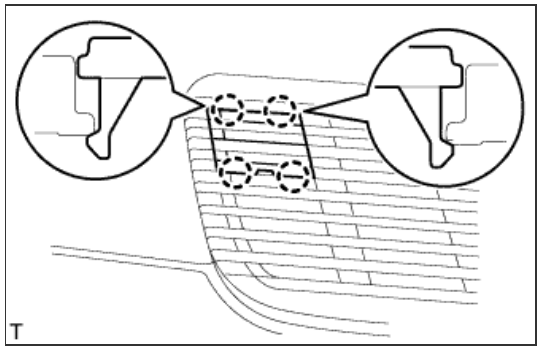
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

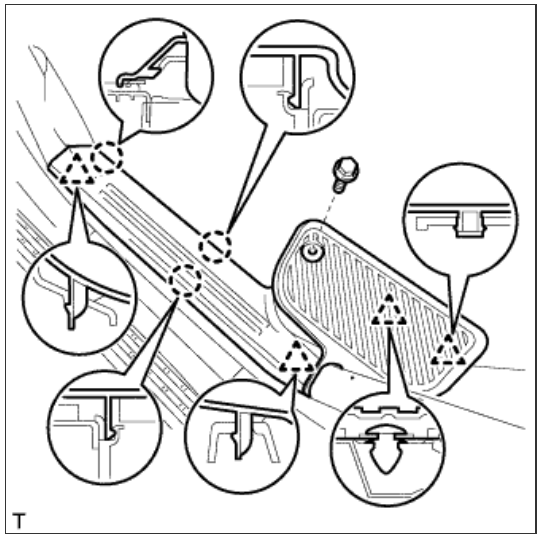


12. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

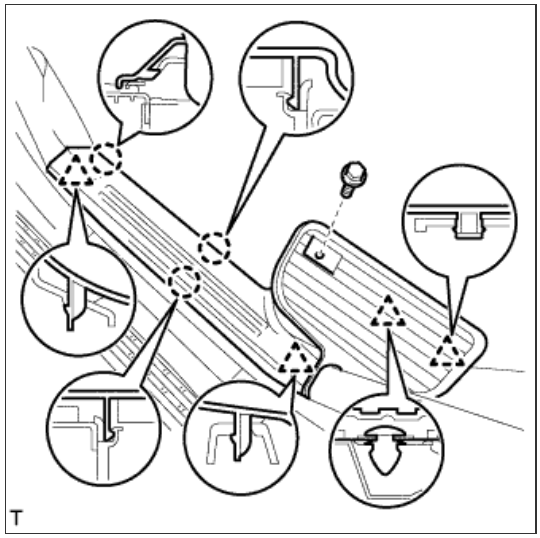
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



13. REMOVE REAR DOOR SCUFF PLATE RH

HINT:

Use the same procedures described for the LH side.

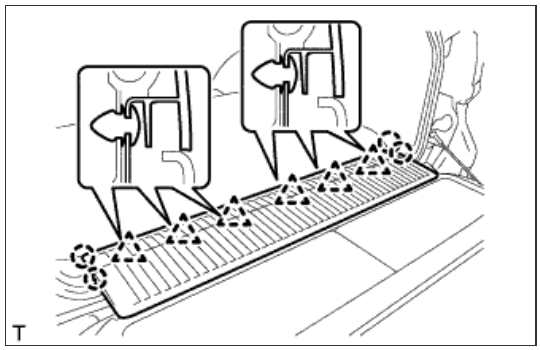
14. REMOVE REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

15. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.



16. REMOVE REAR SEAT COVER CAP

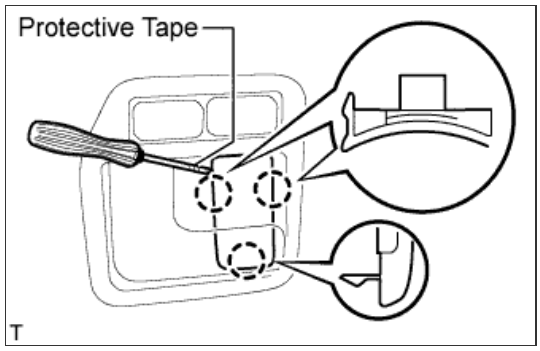
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

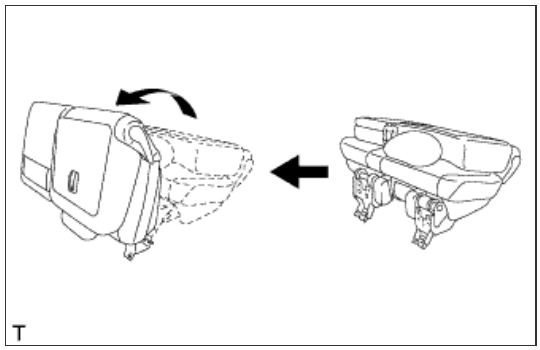
Tape the screwdriver tip before use.



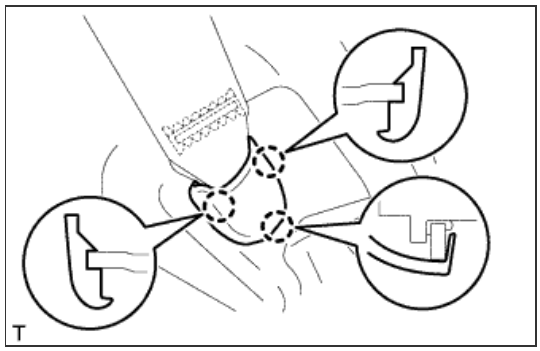
17. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

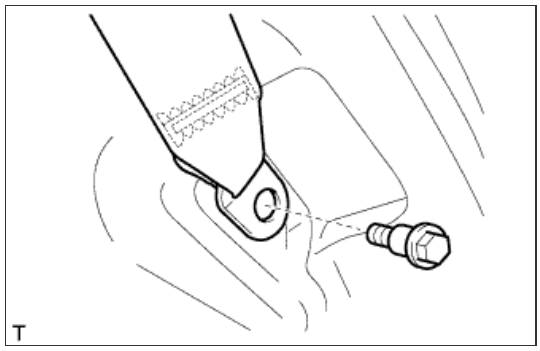
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



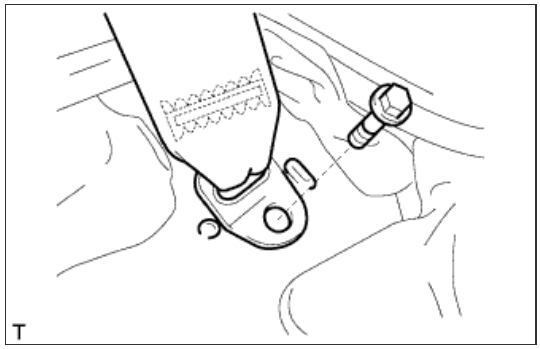
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

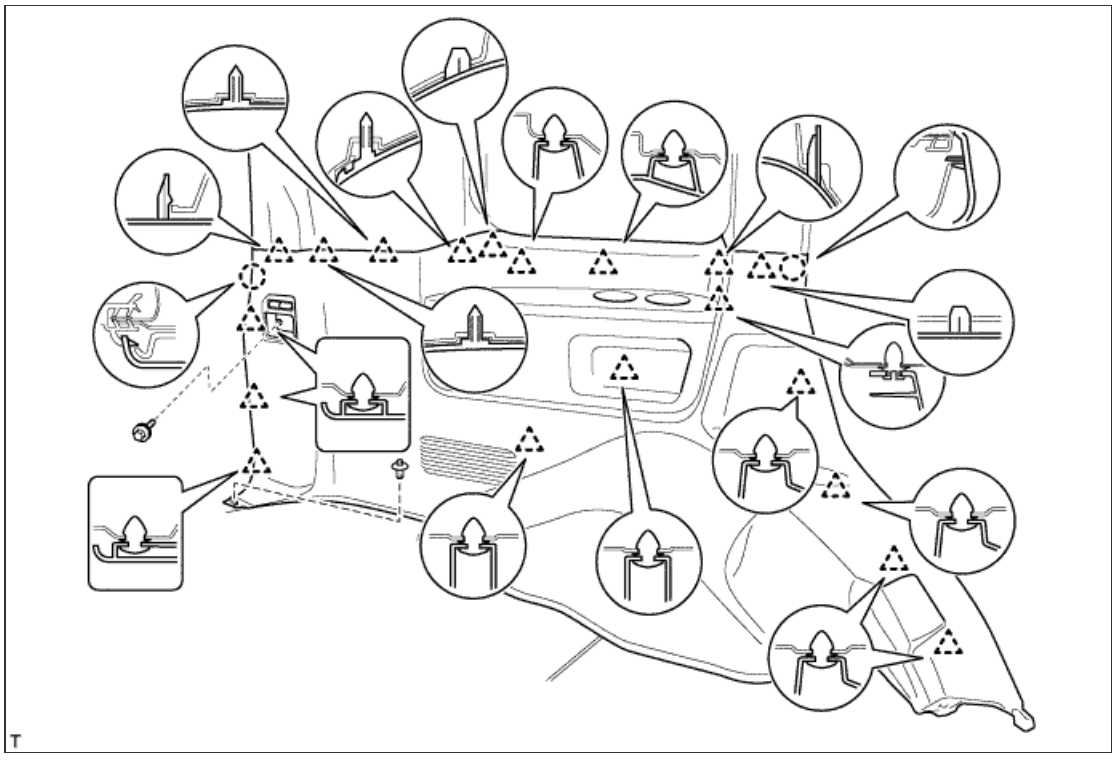


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

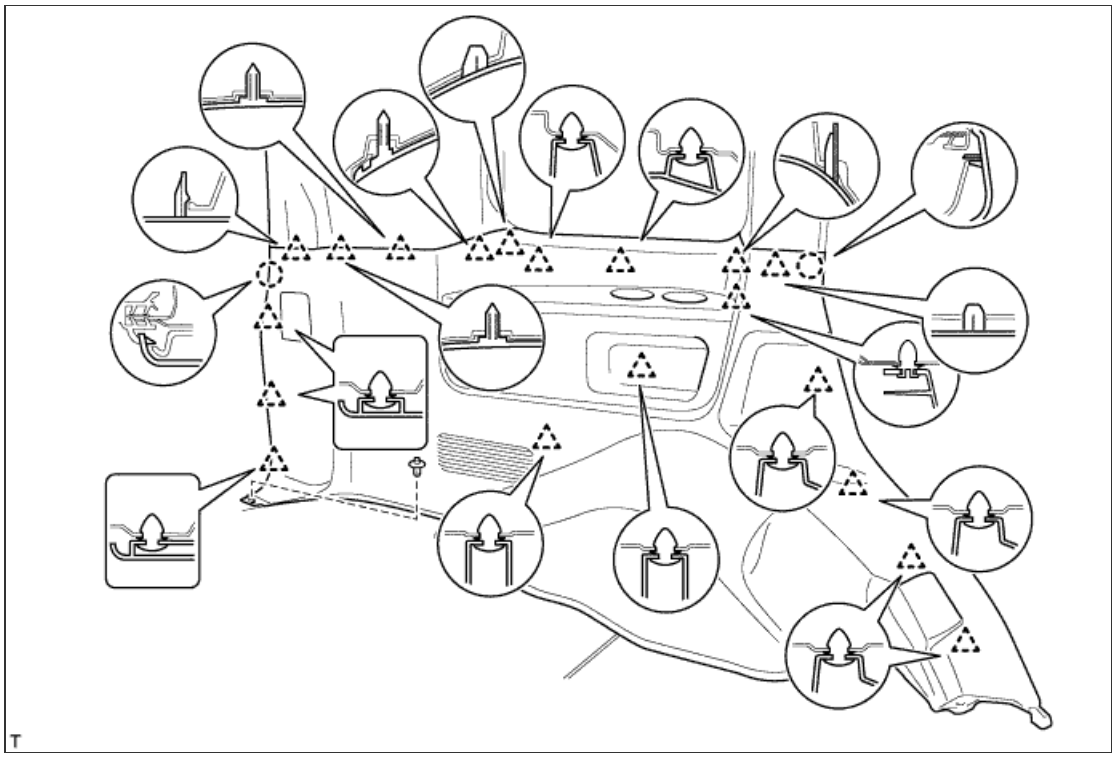


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 19 clips and 2 claws.

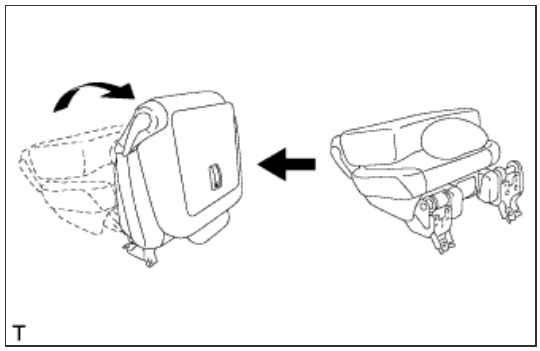
iii. Disconnect the thermistor connector and then remove the quarter trim panel.



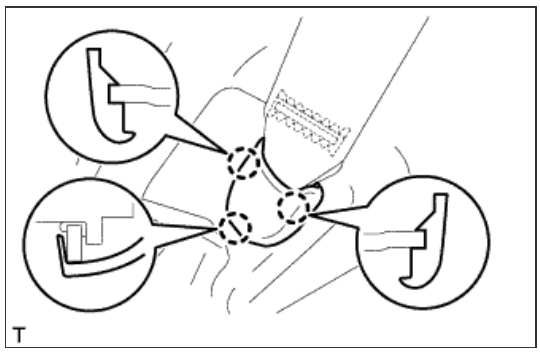
18. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

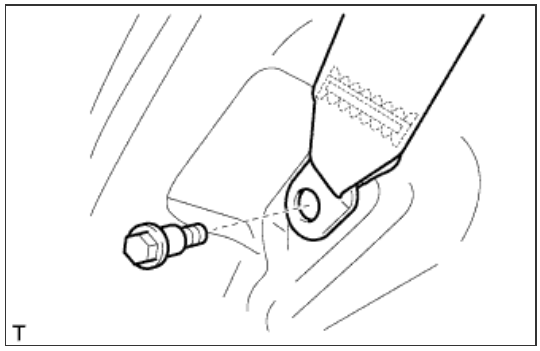
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



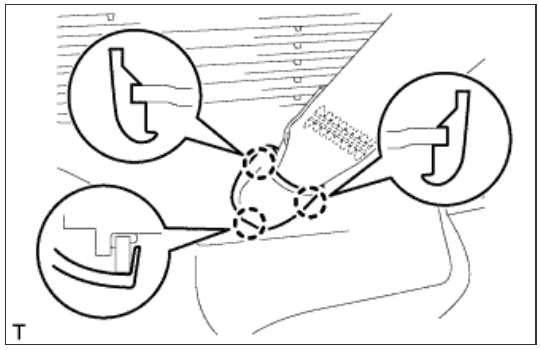
a. Detach the 3 claws and remove the cover.



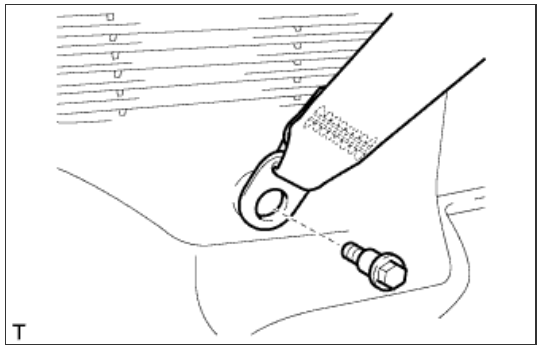
b. Remove the bolt and rear No. 1 seat belt anchor.



c. Detach the 3 claws and remove the cover.



d. Remove the bolt and rear No. 2 seat belt anchor.

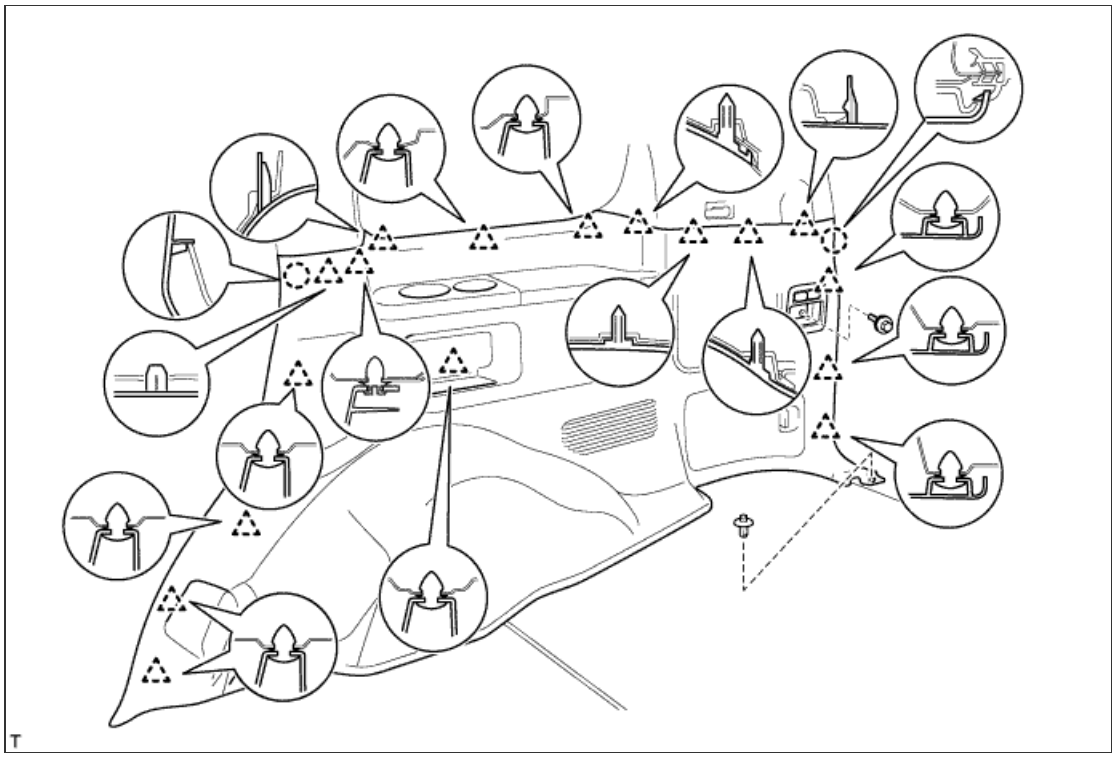


e. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

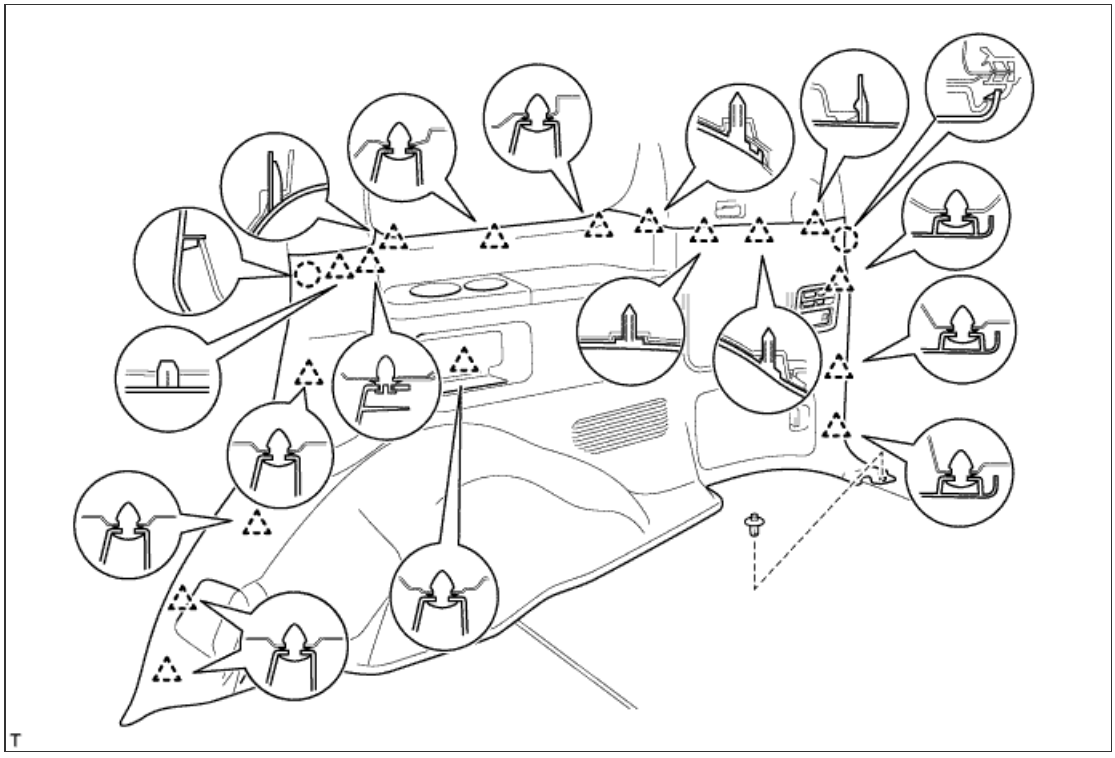


f. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.

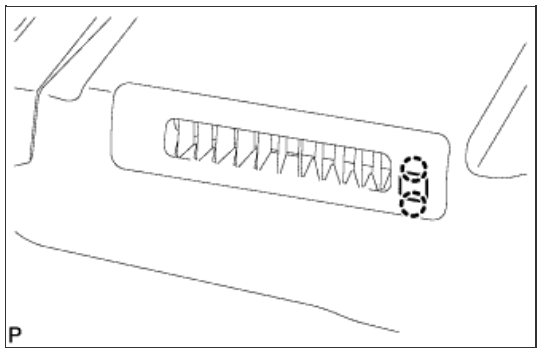


19. REMOVE AIR DUCT PLUG

a. Detach the 2 claws and remove the plug.

HINT:

Use the same procedures for both sides.



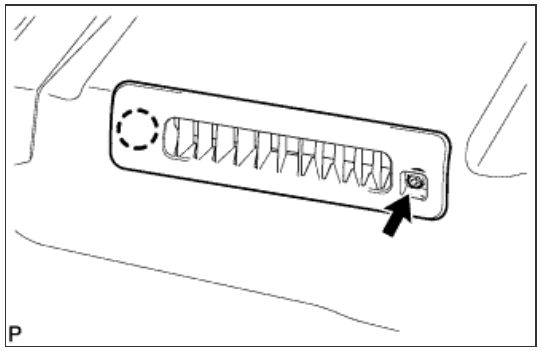
20. REMOVE REAR AIR DUCT GUIDE

HINT:

Use the same procedures for both sides.

a. Remove the screw.

b. Detach the claw and remove the guide.



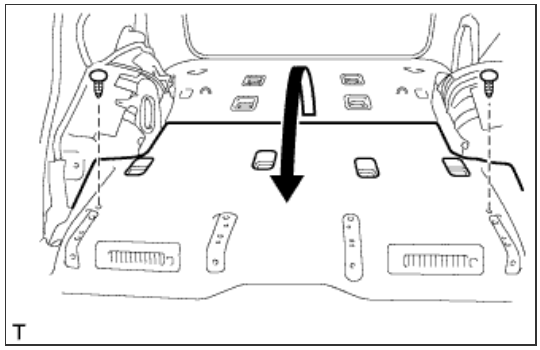
21. REMOVE FRONT FLOOR CARPET ASSEMBLY

a. Remove the 2 clips.

b. Fold back the floor carpet.

HINT:

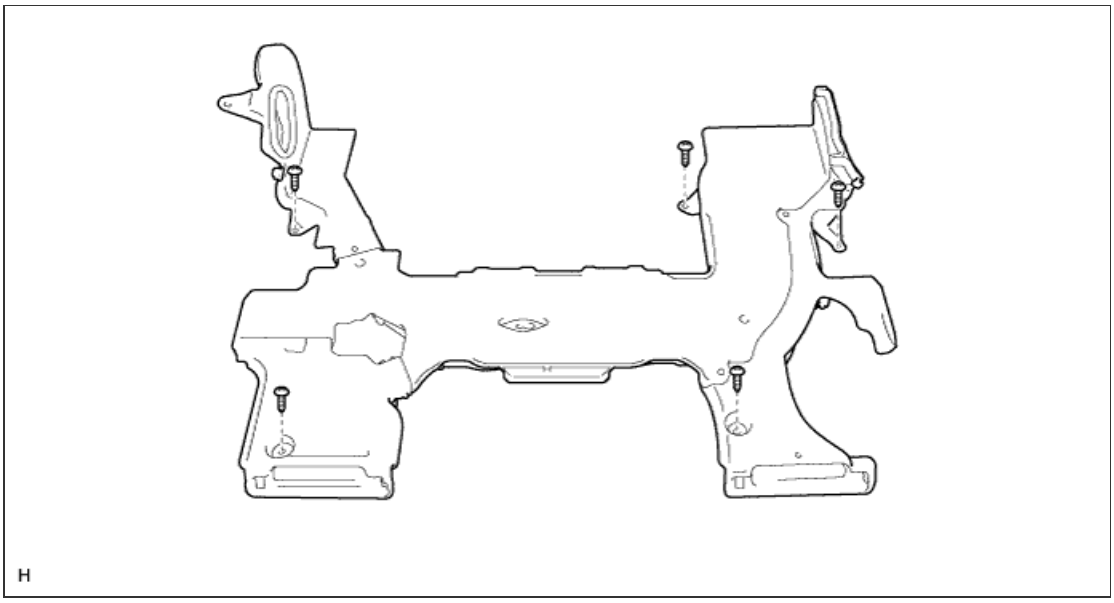
Fold back the carpet until it is possible to remove the rear No. 6 air duct.



22. REMOVE REAR NO. 6 AIR DUCT

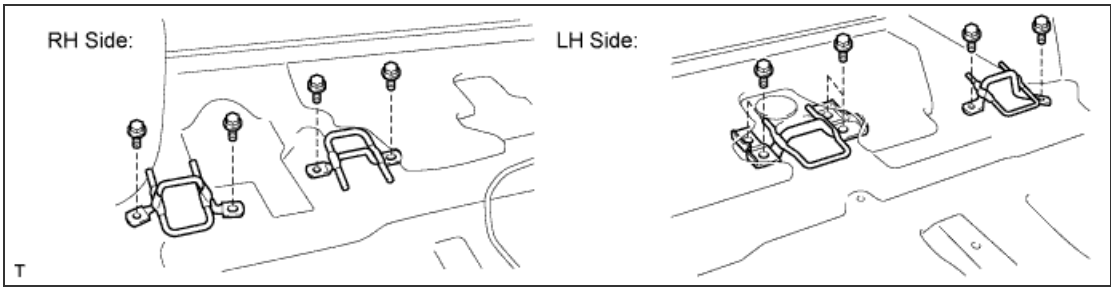
a. Disconnect the 2 connectors.

b. Remove the 5 screws and duct.



23. REMOVE REAR SEAT CUSHION LOCK STRIKER SUB-ASSEMBLY

a. Remove the 10 bolts and 4 lock strikers.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

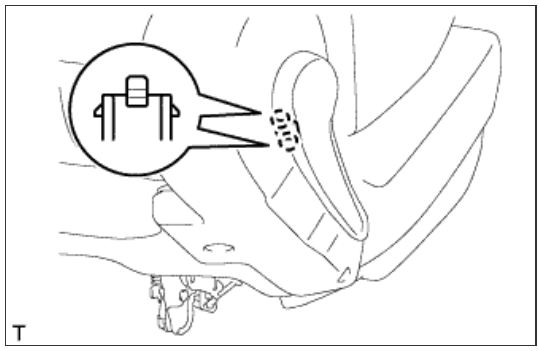
- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

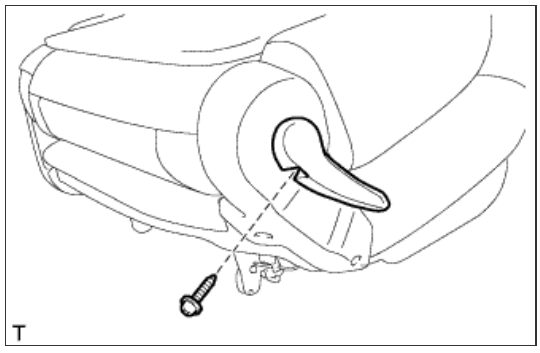
HINT:

Tape the screwdriver tip before use.



2. REMOVE RECLINING ADJUSTER RELEASE HANDLE RH

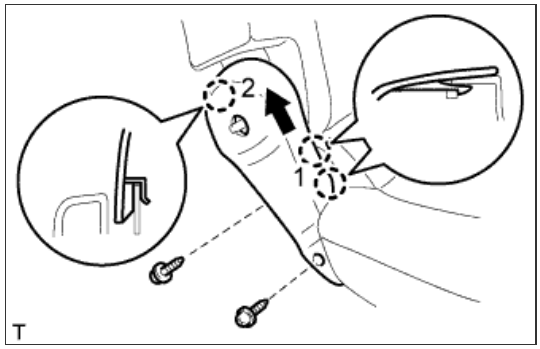
a. Remove the screw and release handle.



3. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

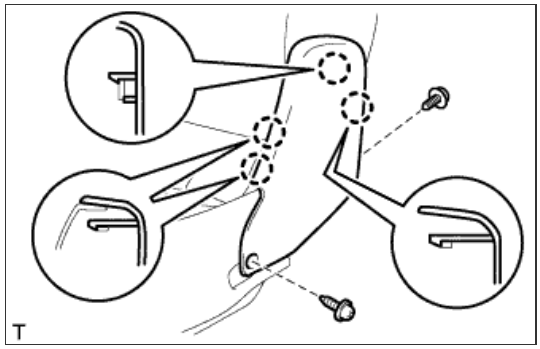
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

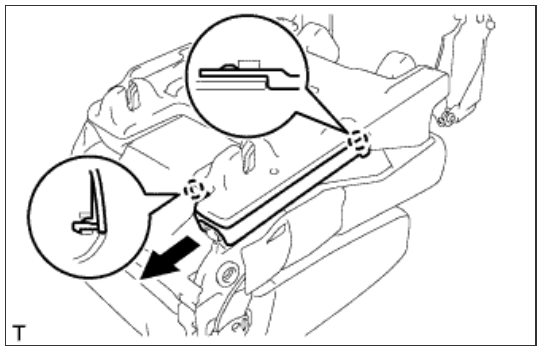


5. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

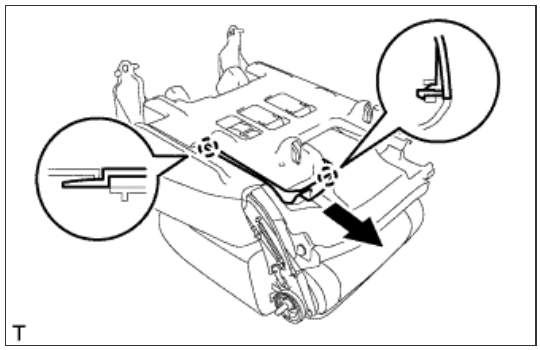


6. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

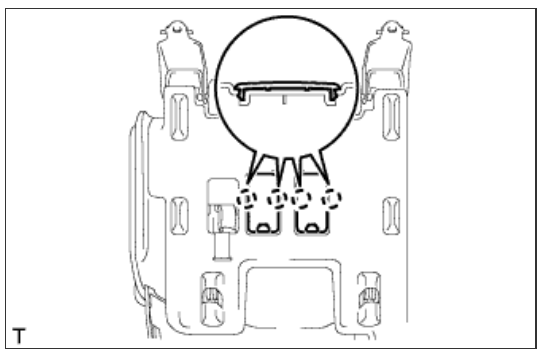
HINT:

Tape the screwdriver tip before use.



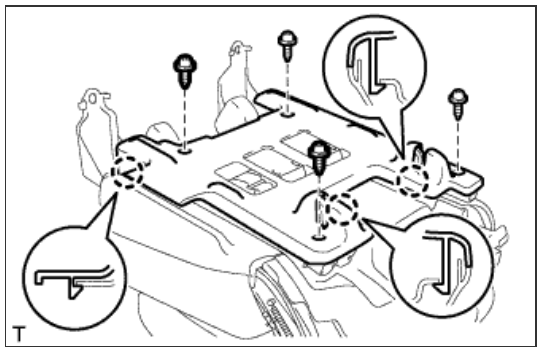
7. REMOVE NO. 1 SEAT CUSHION COVER

a. Detach the 4 claws and remove the 2 covers.

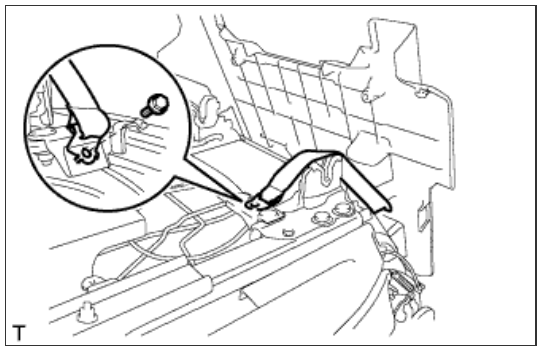


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 3 claws.



b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE FOLD SEAT STOPPER BAND ASSEMBLY

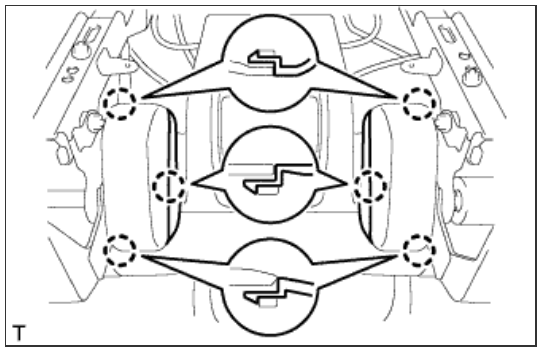
a. Remove the fold seat stopper band from the seat leg side cover.

10. REMOVE REAR SEAT SIDE HINGE FEMALE COVER

a. Using a screwdriver, detach the 6 claws and remove the 2 covers.

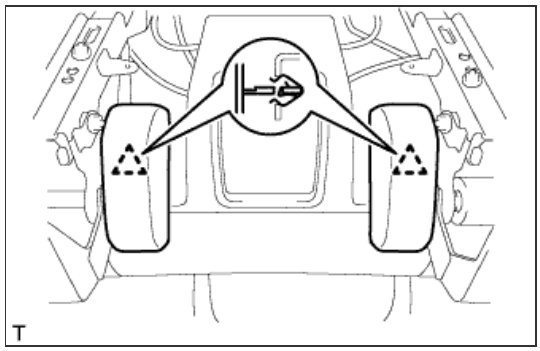
HINT:

Tape the screwdriver tip before use.



11. REMOVE REAR SEAT SIDE HINGE MALE COVER LH

a. Detach the clip and remove the cover.



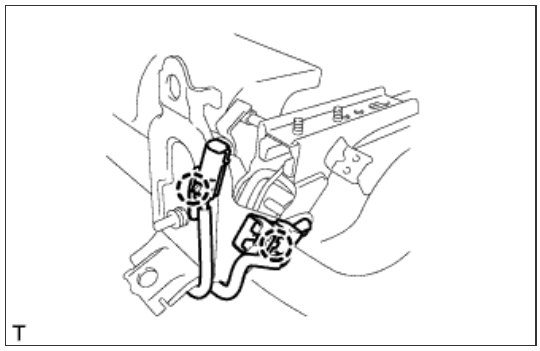
12. REMOVE REAR SEAT SIDE HINGE MALE COVER RH

a. Detach the clip and remove the cover.

13. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

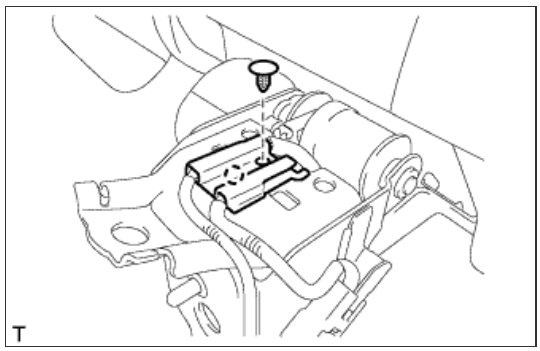
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

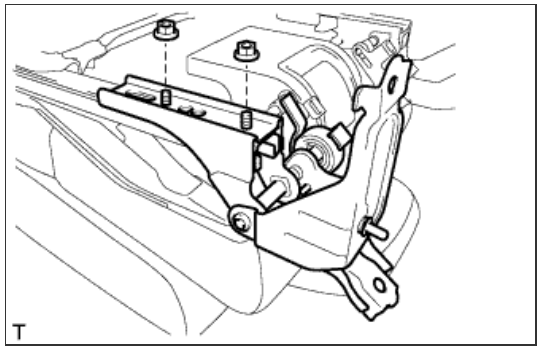
d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.



14. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Remove the 2 nuts and hinge.

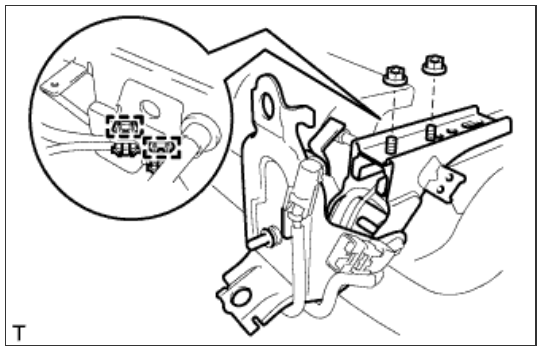


15. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Detach the wire harness clamp.

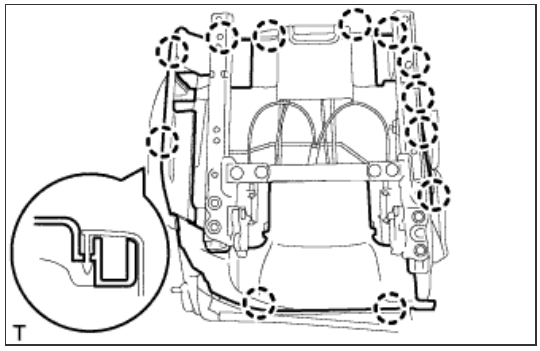
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



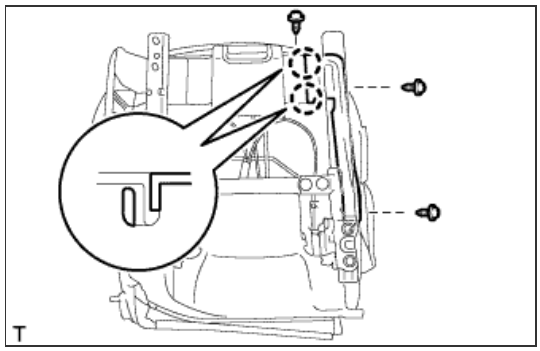
16. REMOVE REAR SEAT COVER

a. Detach the 12 claws.



b. Remove the 3 screws.

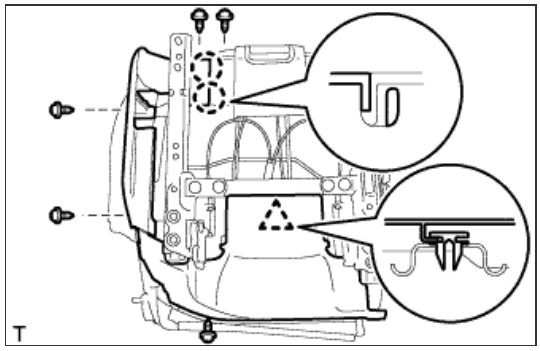
c. Detach the 2 claws and remove the cover.



17. REMOVE REAR UNDER SIDE COVER LH

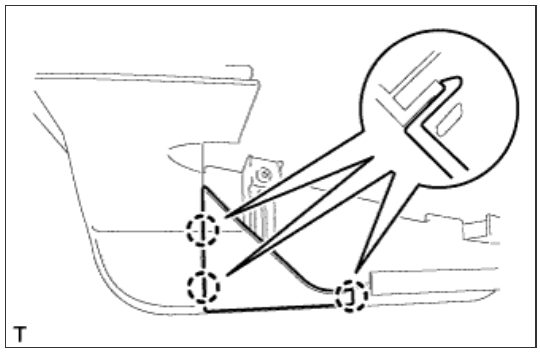
a. Remove the 5 screws.

b. Detach the clip and 2 claws, and remove the cover.



18. REMOVE NO. 1 SEAT CUSHION PLATE

a. Detach the 3 claws and remove the seat cushion plate.



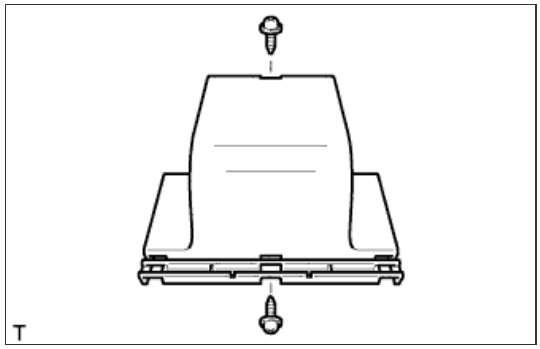
19. REMOVE REAR POWER SEAT SWITCH

a. Remove the 2 screws and power seat switch.

20. REMOVE REAR SEAT UNDER TRAY COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



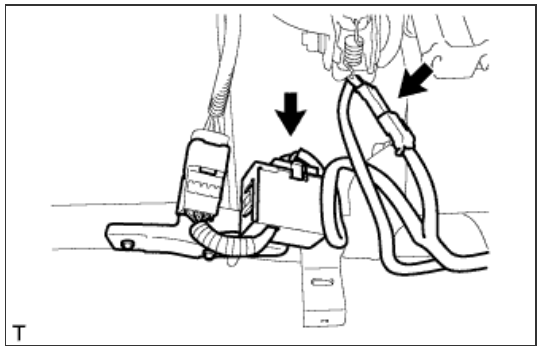
21. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

b. Remove the side airbag wire harness through the hole in the seat cushion.

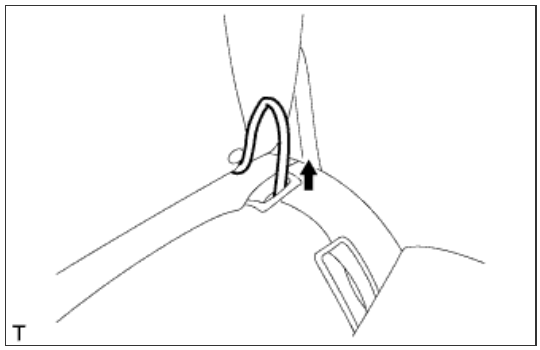
c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.

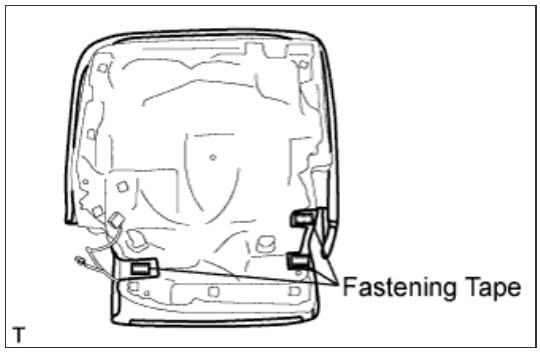
d. Remove the seat cushion cover with pad.



22. REMOVE REAR SEPARATE TYPE SEAT CUSHION COVER

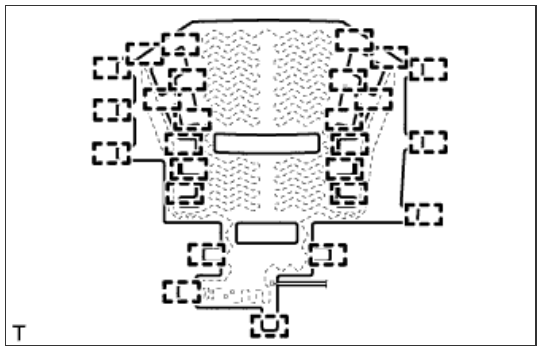
a. Detach the 3 pieces of fastening tape.

b. Remove the hog rings and cover.



23. REMOVE REAR SEAT CUSHION HEATER ASSEMBLY (w/ Seat Heater System)

a. Cut off the tack pins which fasten the seat heater to the seat cushion cover, and then remove the seat cushion heater from the seat cushion cover.

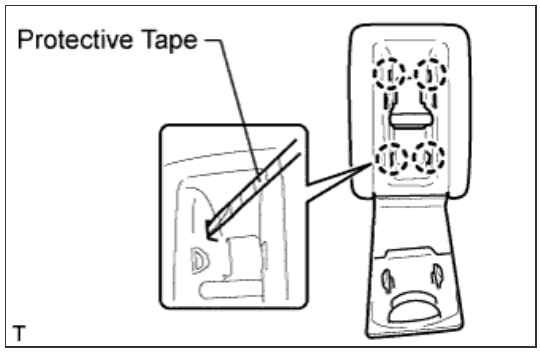


24. REMOVE REAR SEATBACK COVER

a. Using a screwdriver, detach the 4 claws and remove the cover.

HINT:

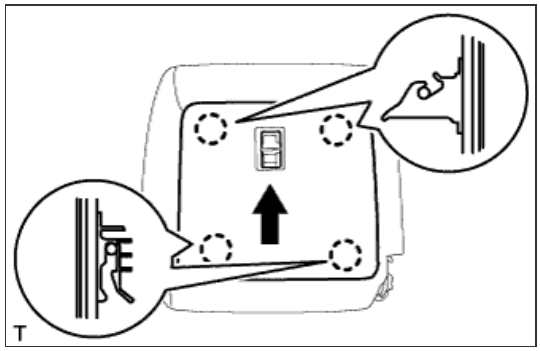
Tape the screwdriver tip before use.



25. REMOVE REAR SEATBACK BOARD SUB-ASSEMBLY RH

a. Detach the 2 claws on the top of the board.

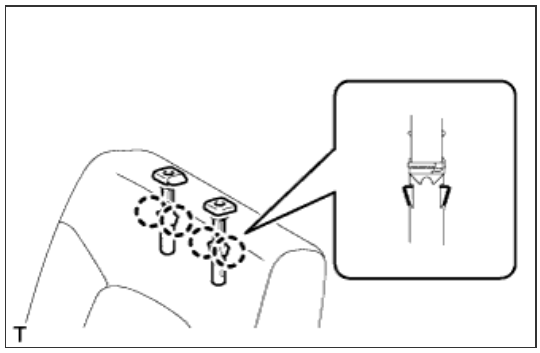
b. Pull up the board to detach the 2 claws on the bottom of the board and remove it.



26. REMOVE REAR SEAT HEADREST ASSEMBLY

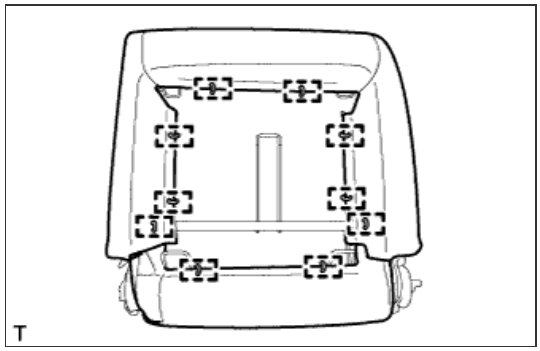
27. REMOVE REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Detach the 4 claws and remove the 2 supports.



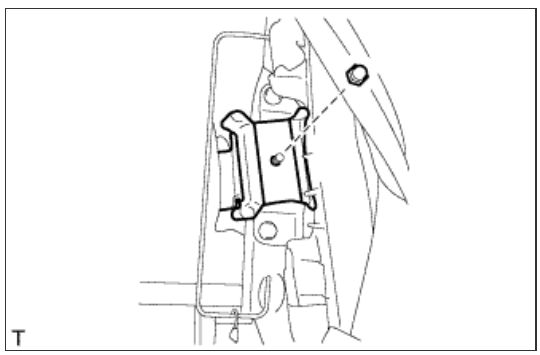
28. REMOVE SEATBACK COVER WITH PAD

a. Remove the hog rings.



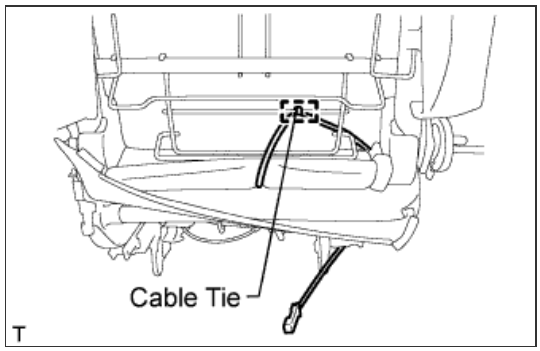
b. Remove the cap nut and seatback cover bracket from the seat frame.

c. Remove the side airbag wire harness through the hole in the seatback.

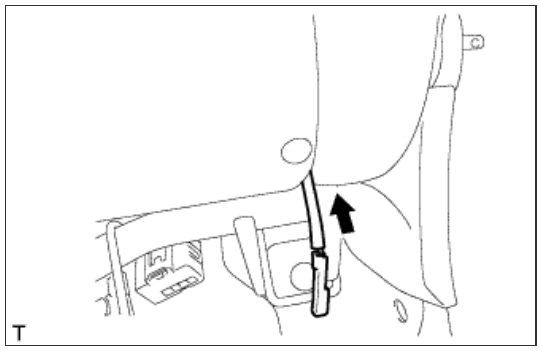


d. w/ Seat Heater System:

i. Cut the cable tie and disconnect the seatback heater wire harness.



ii. Remove the seatback heater wire harness through the hole in the seatback.

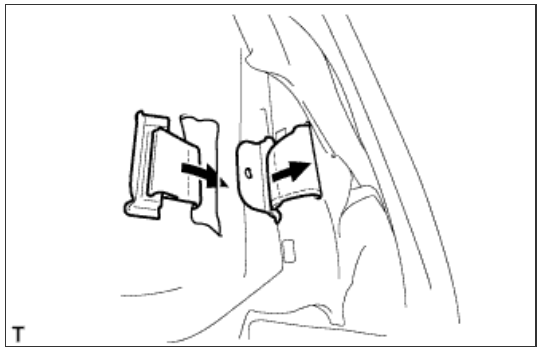


e. Remove the seatback cover with pad.

29. REMOVE REAR SEPARATE TYPE SEATBACK COVER

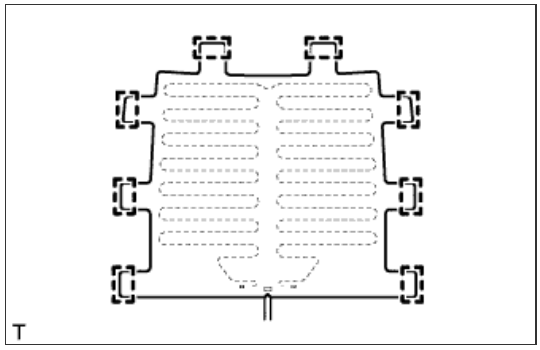
a. Disconnect the seatback cover bracket from the seatback pad.

b. Remove the hog rings and rear seatback cover.



30. REMOVE REAR SEATBACK HEATER ASSEMBLY (w/ Seat Heater System)

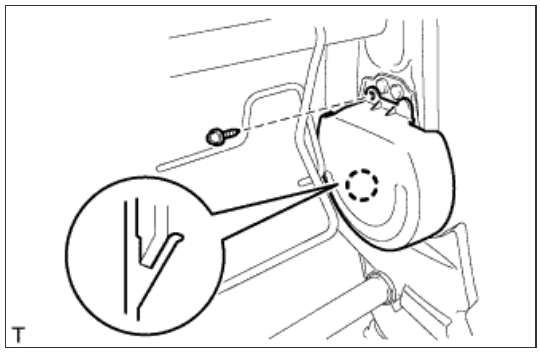
a. Cut off the tack pins which fasten the seatback heater to the seatback cover, and then remove the seatback heater from the seatback cover.



31. REMOVE REAR SEAT RECLINING COVER LH

a. Remove the screw.

b. Detach the claw and remove the cover.



32. REMOVE REAR SEAT RECLINING COVER RH

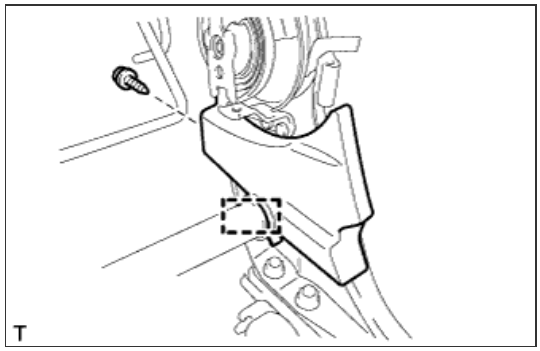
a. Remove the screw.

b. Detach the claw and remove the cover.

33. REMOVE REAR NO. 2 SEAT RECLINING COVER LH

a. Remove the screw.

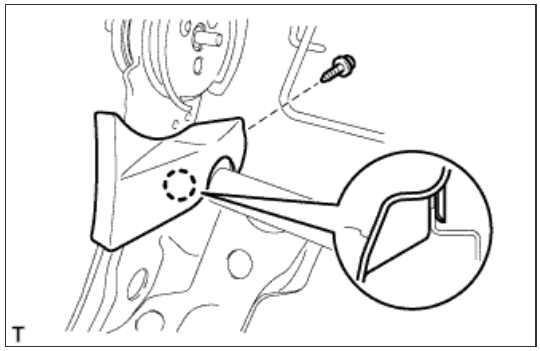
b. Detach the clamp and remove the cover.



34. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the screw.

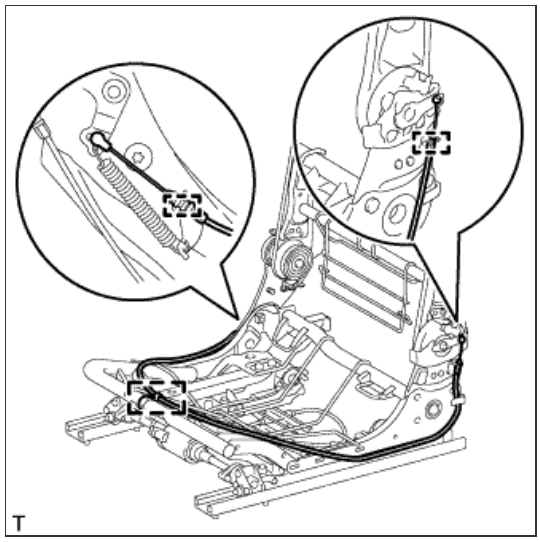
b. Detach the claw and remove the cover.



35. REMOVE RECLINING ADJUSTING CABLE ASSEMBLY RH

a. Detach the 2 cable clamps and disconnect the cable.

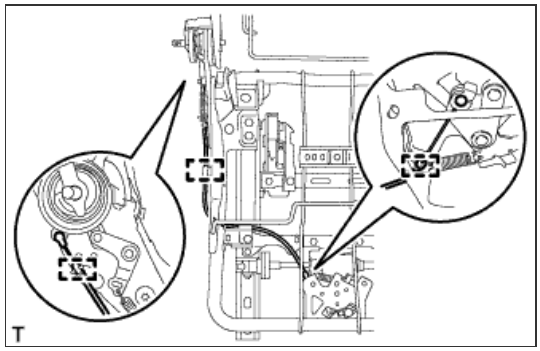
b. Detach the clamp and remove the adjusting cable.



36. REMOVE NO. 1 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Detach the 2 cable clamps and disconnect the cable.

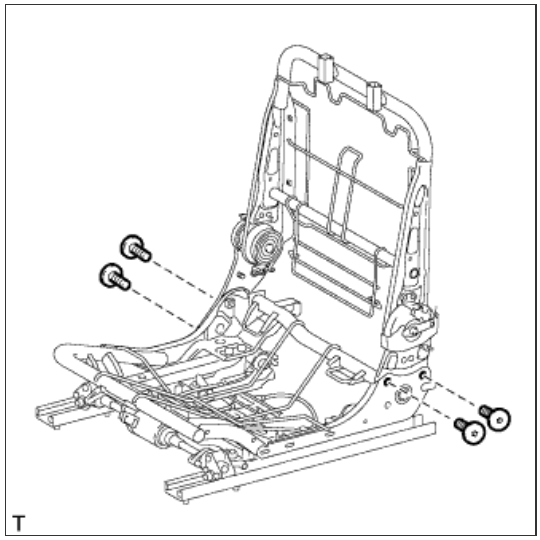
b. Detach the clamp and remove the lock control cable.



37. REMOVE REAR SEATBACK FRAME SUB-ASSEMBLY RH

a. Using a T40 "TORX" socket, remove the 4 bolts.

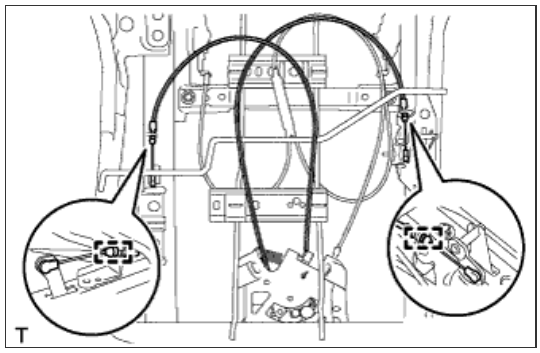
b. Remove the seatback frame.



38. REMOVE FOLD SEAT LOCK CONTROL CABLE SUB-ASSEMBLY

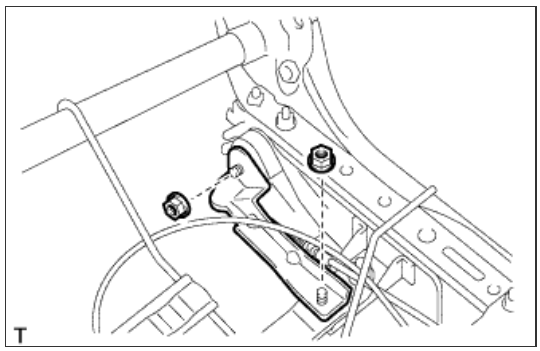
a. Detach the 2 cable clamps and disconnect the 2 cables.

b. Remove the 2 fold seat lock control cables.

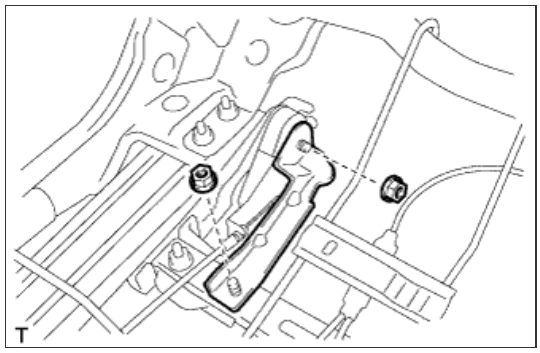


39. REMOVE REAR NO. 1 SEAT LOCK CABLE ASSEMBLY

a. Remove the 2 nuts and lower seat track bracket.

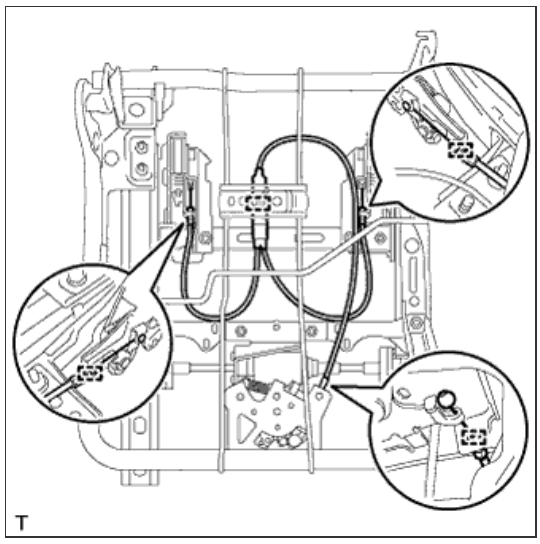


b. Remove the 2 nuts and lower seat track bracket.



c. Detach the 3 cable clamps and disconnect the 3 cables.

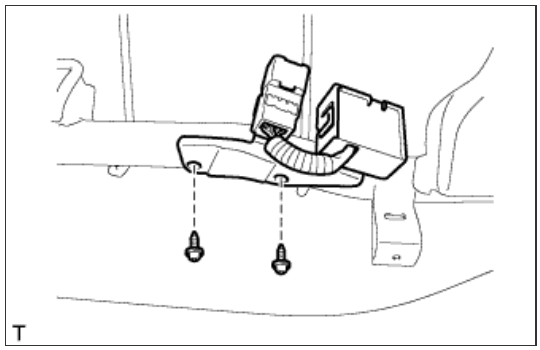
d. Detach the clamp and remove the seat lock cable.



40. REMOVE REAR SEAT CUSHION HOLDER BRACKET RH (w/ Seat Heater System)

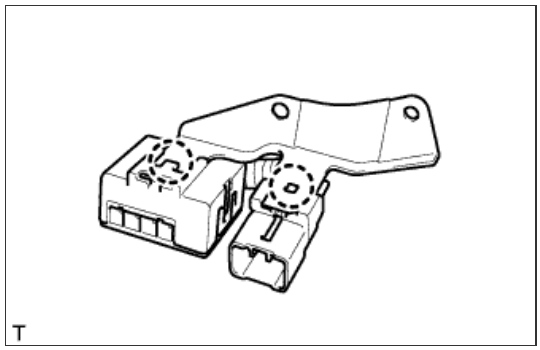
a. Disconnect the seat wire connector.

b. Remove the 2 screws and holder bracket.



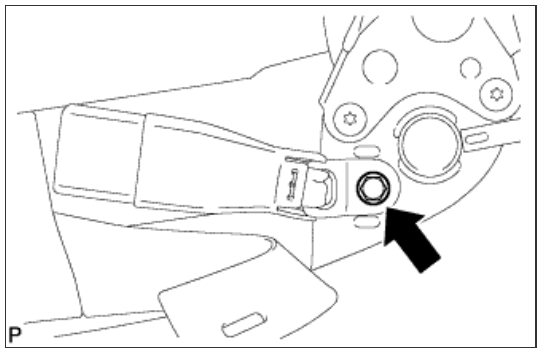
41. REMOVE SEAT HEATER CONTROL SUB-ASSEMBLY RH (w/ Seat Heater System)

a. Detach the 2 claws and remove the seat heater control.



42. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY RH

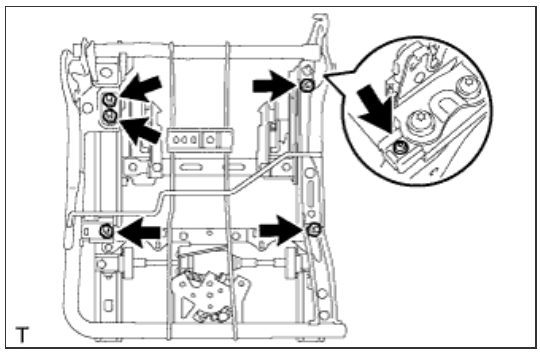
a. Remove the bolt and belt.



43. REMOVE REAR SEAT CUSHION FRAME SUB-ASSEMBLY RH

a. Using a T40 "TORX" socket, remove the bolt.

b. Remove the 5 nuts and seat cushion frame.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

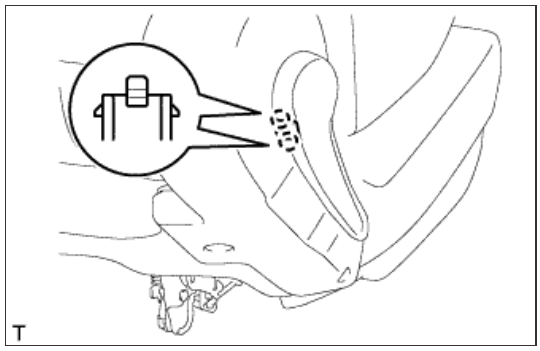
- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

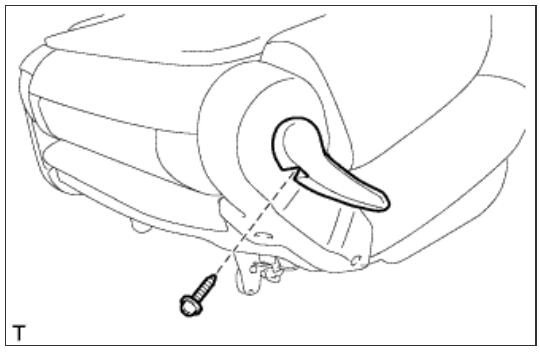
HINT:

Tape the screwdriver tip before use.



2. REMOVE RECLINING ADJUSTER RELEASE HANDLE RH

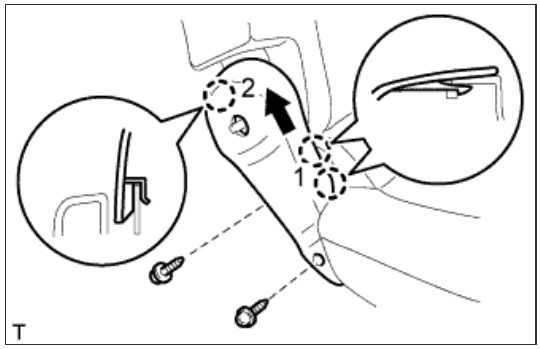
a. Remove the screw and release handle.



3. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

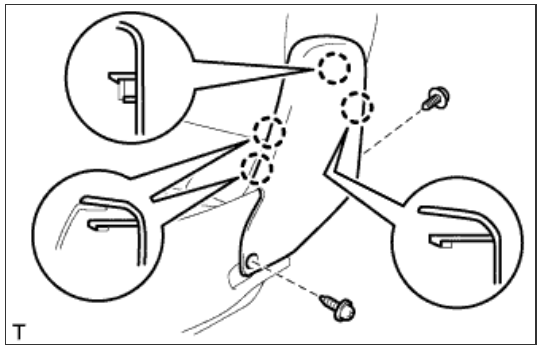
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

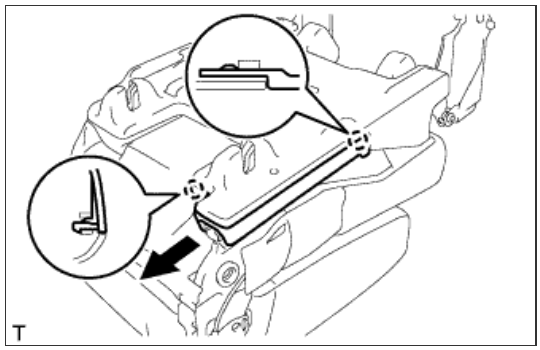


5. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

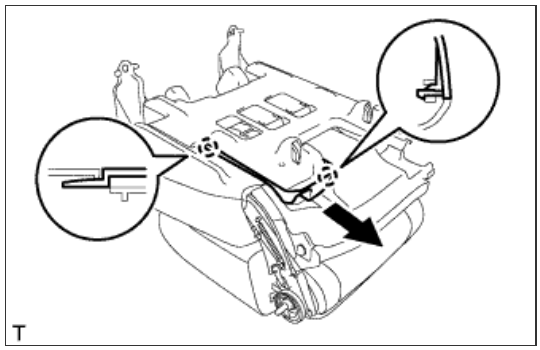


6. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

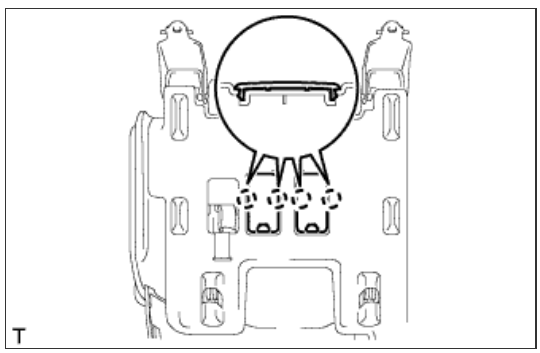
HINT:

Tape the screwdriver tip before use.



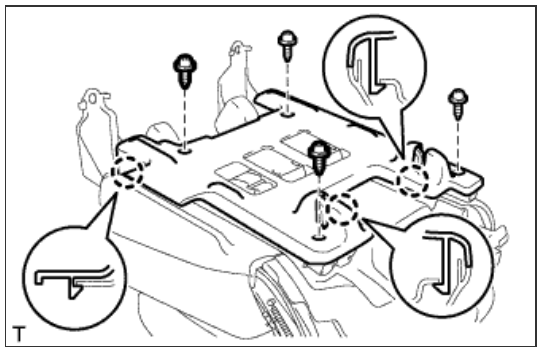
7. REMOVE NO. 1 SEAT CUSHION COVER

a. Detach the 4 claws and remove the 2 covers.

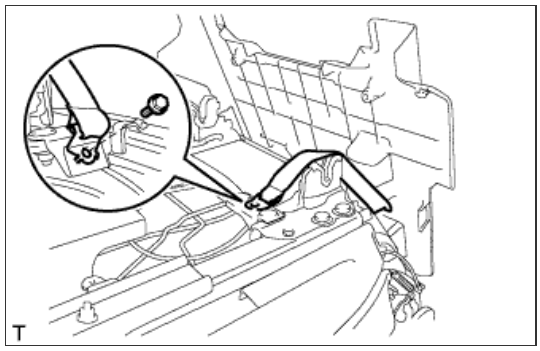


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 3 claws.



b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE FOLD SEAT STOPPER BAND ASSEMBLY

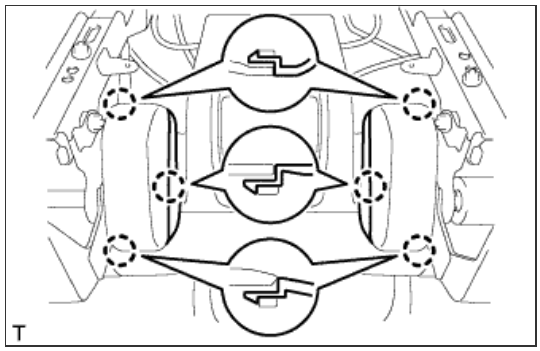
a. Remove the fold seat stopper band from the seat leg side cover.

10. REMOVE REAR SEAT SIDE HINGE FEMALE COVER

a. Using a screwdriver, detach the 6 claws and remove the 2 covers.

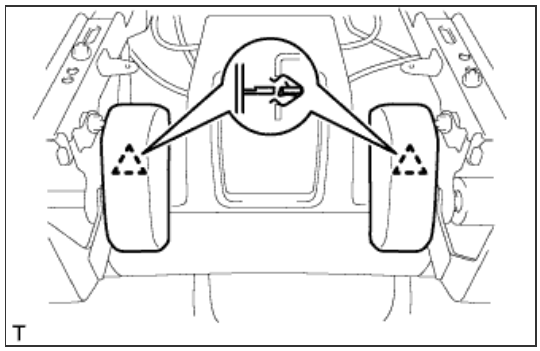
HINT:

Tape the screwdriver tip before use.



11. REMOVE REAR SEAT SIDE HINGE MALE COVER LH

a. Detach the clip and remove the cover.



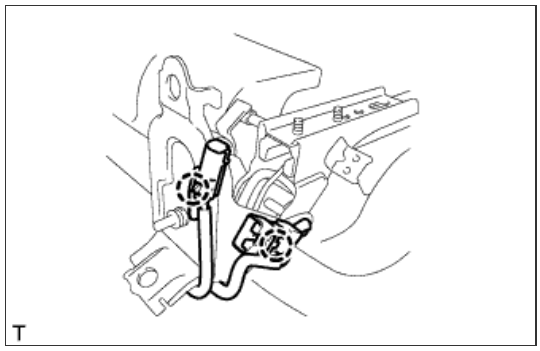
12. REMOVE REAR SEAT SIDE HINGE MALE COVER RH

a. Detach the clip and remove the cover.

13. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

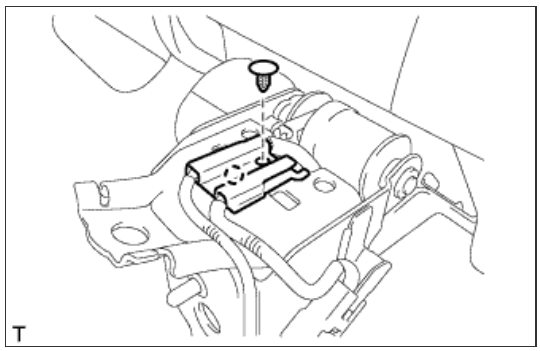
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

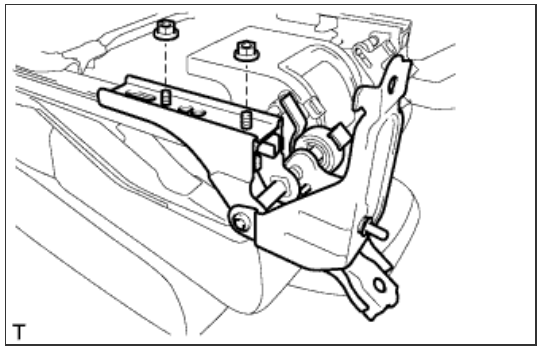
d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.



14. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Remove the 2 nuts and hinge.

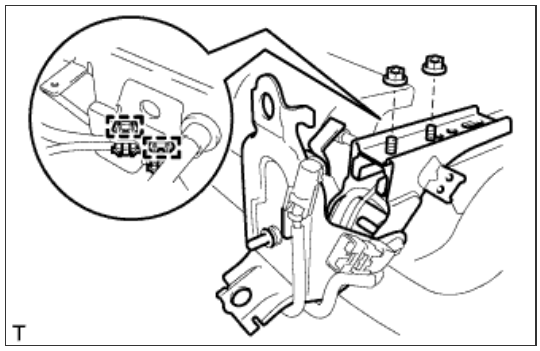


15. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Detach the wire harness clamp.

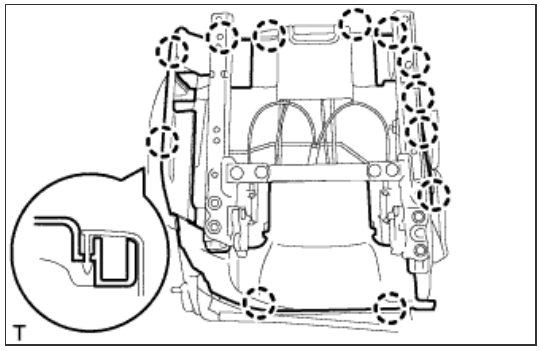
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



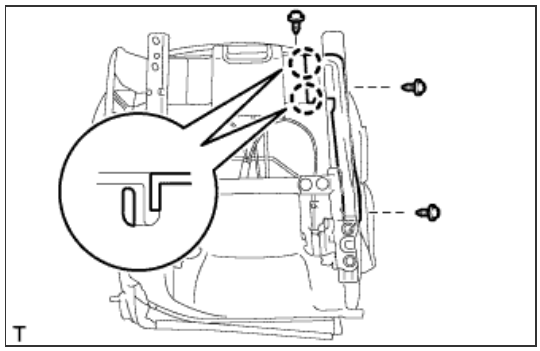
16. REMOVE REAR SEAT COVER

a. Detach the 12 claws.



b. Remove the 3 screws.

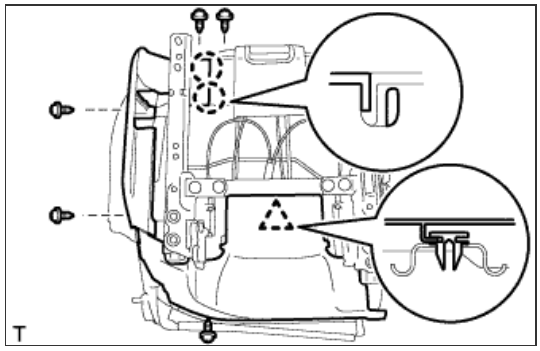
c. Detach the 2 claws and remove the cover.



17. REMOVE REAR UNDER SIDE COVER LH

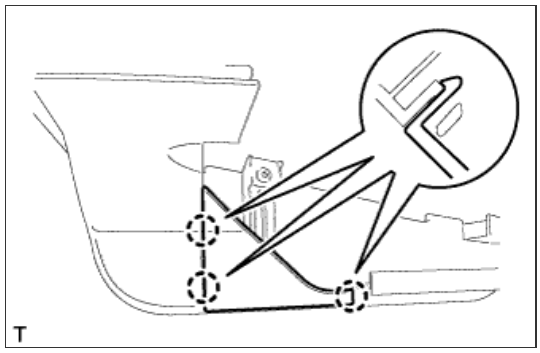
a. Remove the 5 screws.

b. Detach the clip and 2 claws, and remove the cover.



18. REMOVE NO. 1 SEAT CUSHION PLATE

a. Detach the 3 claws and remove the seat cushion plate.



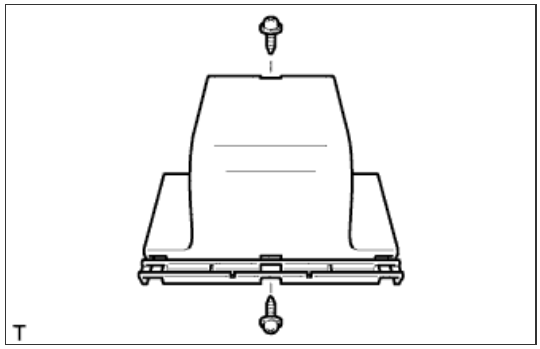
19. REMOVE REAR POWER SEAT SWITCH

a. Remove the 2 screws and power seat switch.

20. REMOVE REAR SEAT UNDER TRAY COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



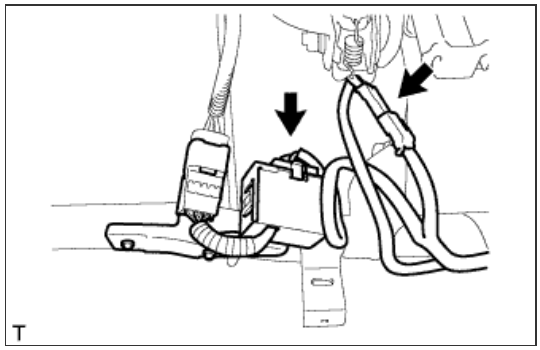
21. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

b. Remove the side airbag wire harness through the hole in the seat cushion.

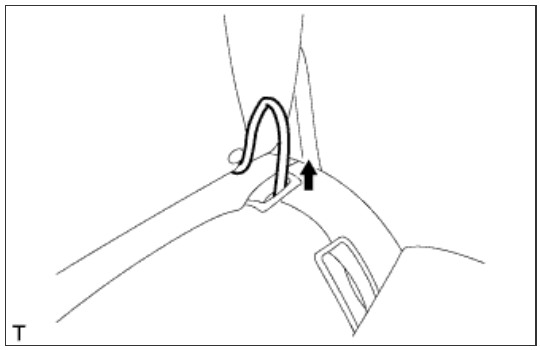
c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.

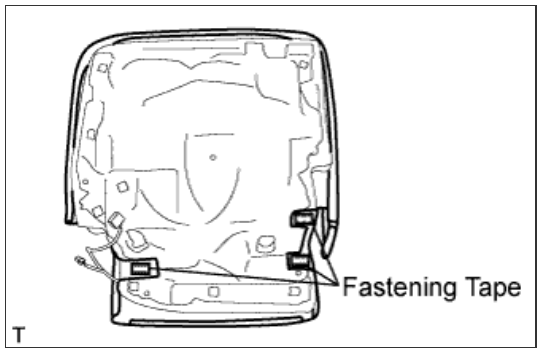
d. Remove the seat cushion cover with pad.



22. REMOVE REAR SEPARATE TYPE SEAT CUSHION COVER

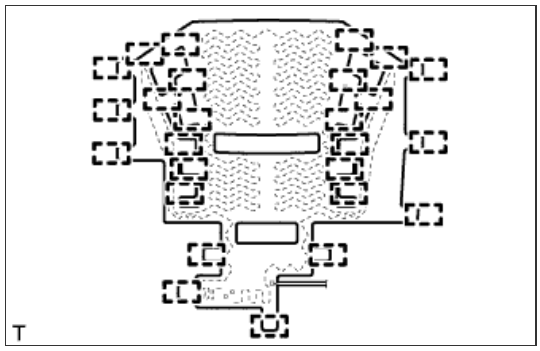
a. Detach the 3 pieces of fastening tape.

b. Remove the hog rings and cover.



23. REMOVE REAR SEAT CUSHION HEATER ASSEMBLY (w/ Seat Heater System)

a. Cut off the tack pins which fasten the seat heater to the seat cushion cover, and then remove the seat cushion heater from the seat cushion cover.

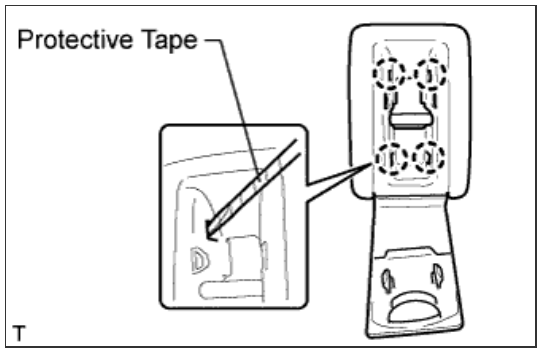


24. REMOVE REAR SEATBACK COVER

a. Using a screwdriver, detach the 4 claws and remove the cover.

HINT:

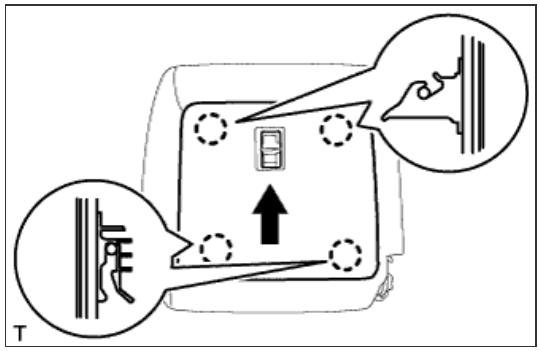
Tape the screwdriver tip before use.



25. REMOVE REAR SEATBACK BOARD SUB-ASSEMBLY RH

a. Detach the 2 claws on the top of the board.

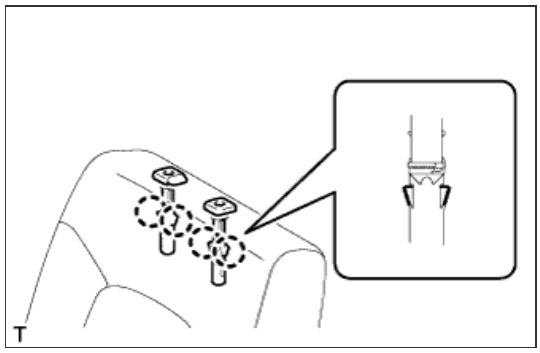
b. Pull up the board to detach the 2 claws on the bottom of the board and remove it.



26. REMOVE REAR SEAT HEADREST ASSEMBLY

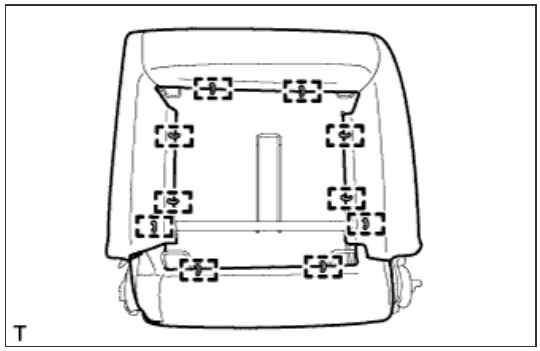
27. REMOVE REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Detach the 4 claws and remove the 2 supports.



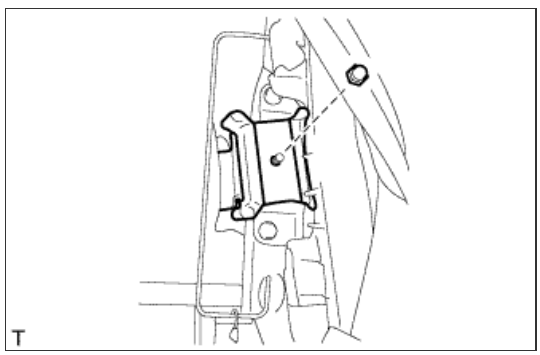
28. REMOVE SEATBACK COVER WITH PAD

a. Remove the hog rings.



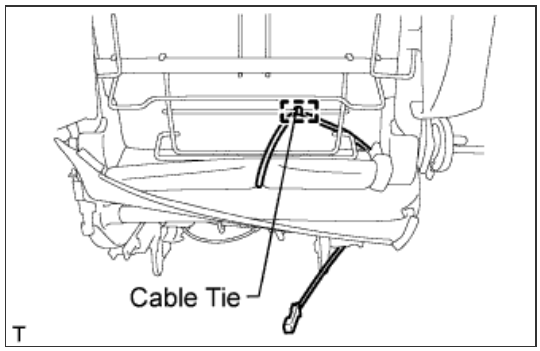
b. Remove the cap nut and seatback cover bracket from the seat frame.

c. Remove the side airbag wire harness through the hole in the seatback.

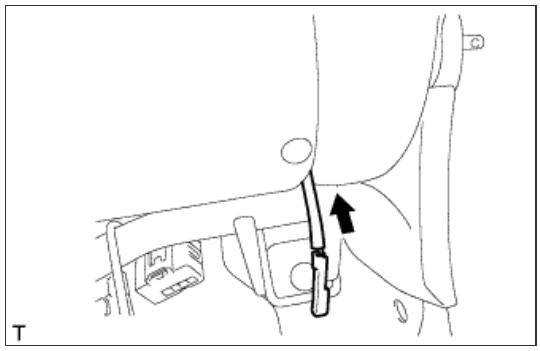


d. w/ Seat Heater System:

i. Cut the cable tie and disconnect the seatback heater wire harness.



ii. Remove the seatback heater wire harness through the hole in the seatback.

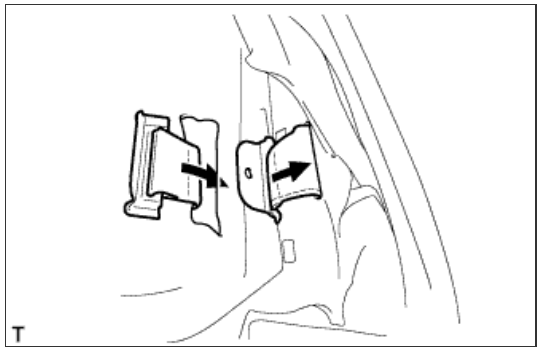


e. Remove the seatback cover with pad.

29. REMOVE REAR SEPARATE TYPE SEATBACK COVER

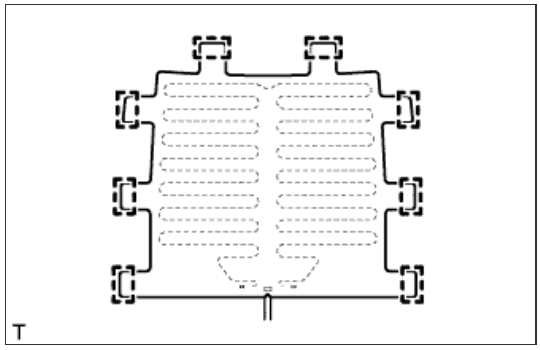
a. Disconnect the seatback cover bracket from the seatback pad.

b. Remove the hog rings and rear seatback cover.



30. REMOVE REAR SEATBACK HEATER ASSEMBLY (w/ Seat Heater System)

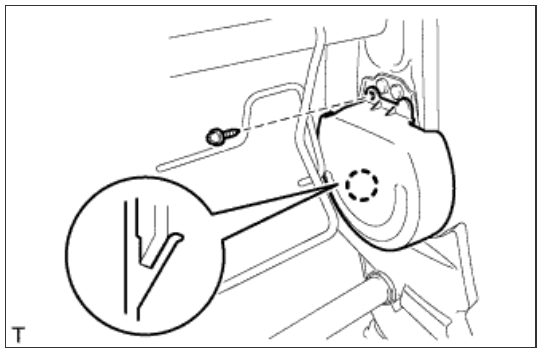
a. Cut off the tack pins which fasten the seatback heater to the seatback cover, and then remove the seatback heater from the seatback cover.



31. REMOVE REAR SEAT RECLINING COVER LH

a. Remove the screw.

b. Detach the claw and remove the cover.



32. REMOVE REAR SEAT RECLINING COVER RH

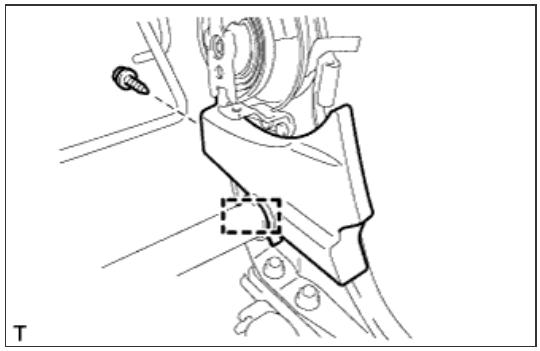
a. Remove the screw.

b. Detach the claw and remove the cover.

33. REMOVE REAR NO. 2 SEAT RECLINING COVER LH

a. Remove the screw.

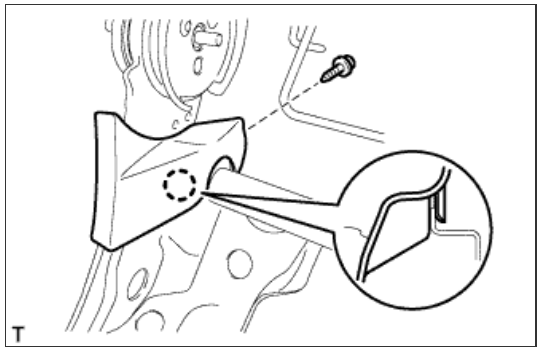
b. Detach the clamp and remove the cover.



34. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the screw.

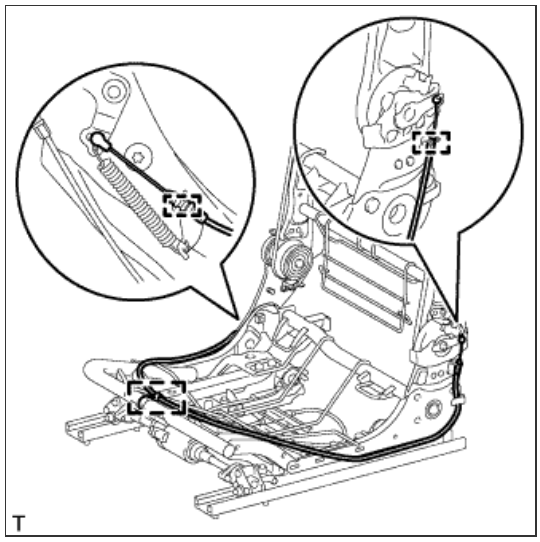
b. Detach the claw and remove the cover.



35. REMOVE RECLINING ADJUSTING CABLE ASSEMBLY RH

a. Detach the 2 cable clamps and disconnect the cable.

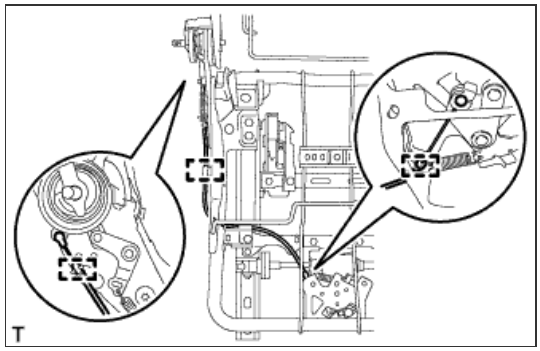
b. Detach the clamp and remove the adjusting cable.



36. REMOVE NO. 1 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Detach the 2 cable clamps and disconnect the cable.

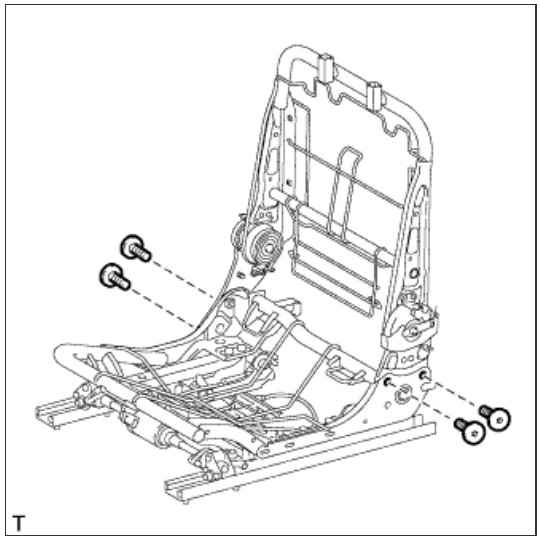
b. Detach the clamp and remove the lock control cable.



37. REMOVE REAR SEATBACK FRAME SUB-ASSEMBLY RH

a. Using a T40 "TORX" socket, remove the 4 bolts.

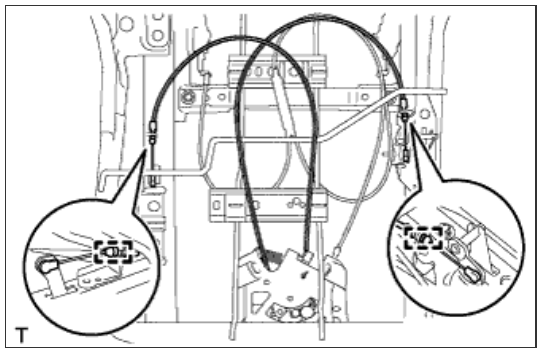
b. Remove the seatback frame.



38. REMOVE FOLD SEAT LOCK CONTROL CABLE SUB-ASSEMBLY

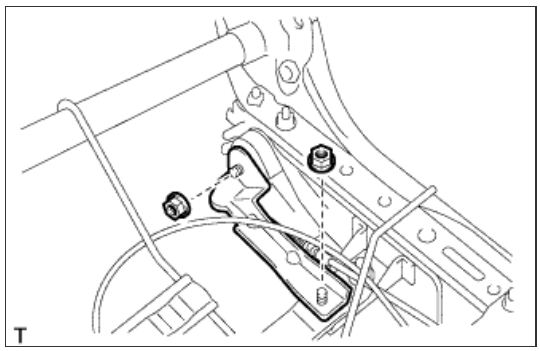
a. Detach the 2 cable clamps and disconnect the 2 cables.

b. Remove the 2 fold seat lock control cables.

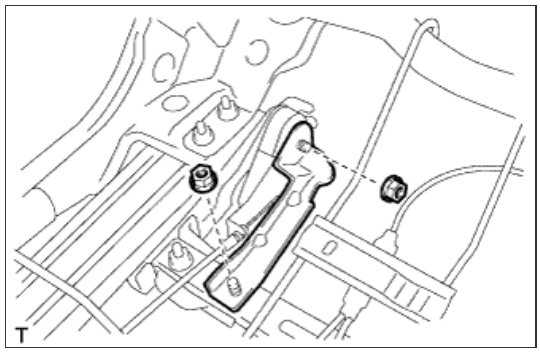


39. REMOVE REAR NO. 1 SEAT LOCK CABLE ASSEMBLY

a. Remove the 2 nuts and lower seat track bracket.

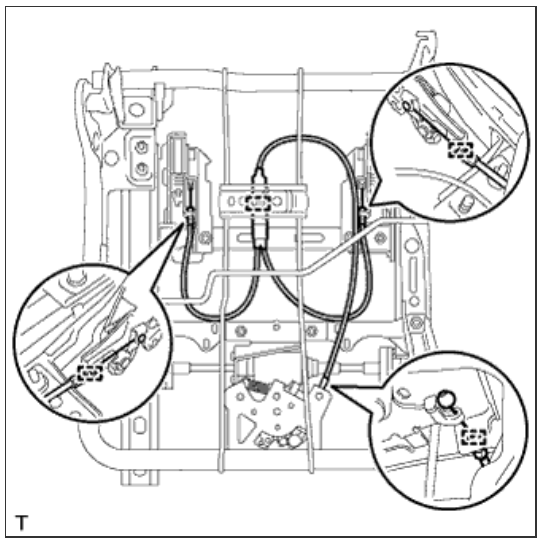


b. Remove the 2 nuts and lower seat track bracket.



c. Detach the 3 cable clamps and disconnect the 3 cables.

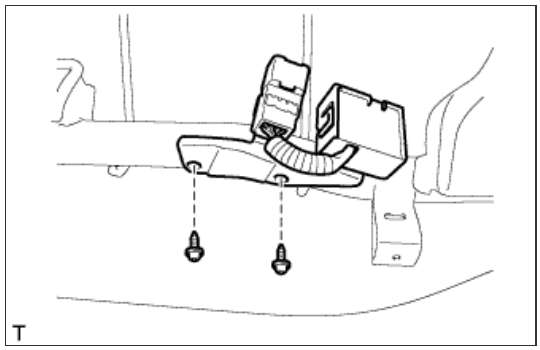
d. Detach the clamp and remove the seat lock cable.



40. REMOVE REAR SEAT CUSHION HOLDER BRACKET RH (w/ Seat Heater System)

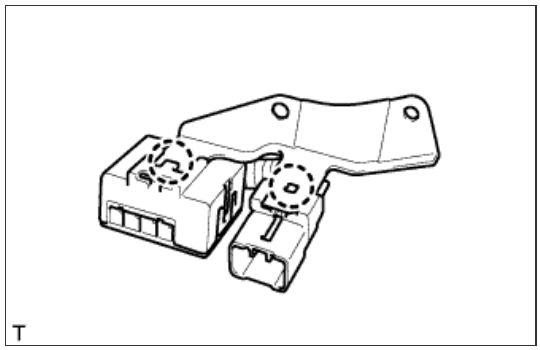
a. Disconnect the seat wire connector.

b. Remove the 2 screws and holder bracket.



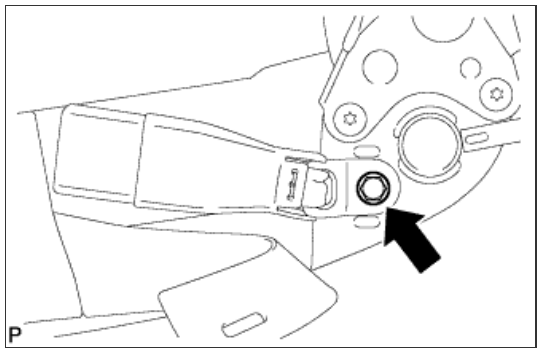
41. REMOVE SEAT HEATER CONTROL SUB-ASSEMBLY RH (w/ Seat Heater System)

a. Detach the 2 claws and remove the seat heater control.



42. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY RH

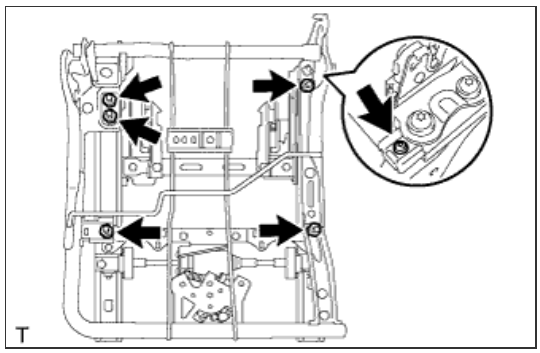
a. Remove the bolt and belt.



43. REMOVE REAR SEAT CUSHION FRAME SUB-ASSEMBLY RH

a. Using a T40 "TORX" socket, remove the bolt.

b. Remove the 5 nuts and seat cushion frame.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEAT CUSHION FRAME SUB-ASSEMBLY RH

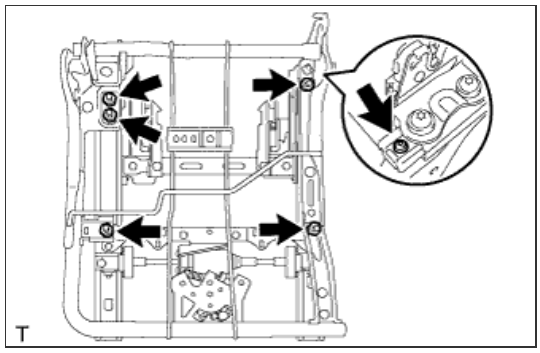
a. Temporarily install the seat cushion frame with the 5 nuts and bolt.

b. Tighten the 5 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

c. Using a T40 "TORX" socket, tighten the bolt.

Torque:
21 N*m{ 214 kgf*cm , 15 ft.*lbf }



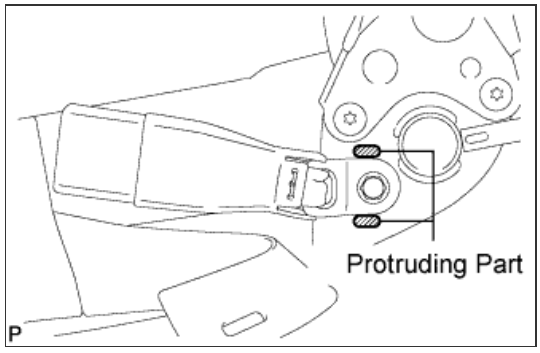
2. INSTALL REAR NO. 1 SEAT INNER BELT ASSEMBLY RH

a. Install the belt with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

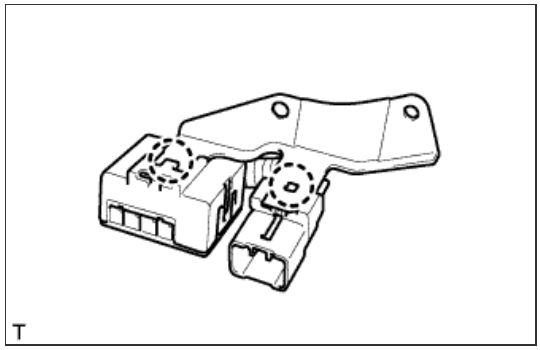
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the seat.



3. INSTALL SEAT HEATER CONTROL SUB-ASSEMBLY RH (w/ Seat Heater System)

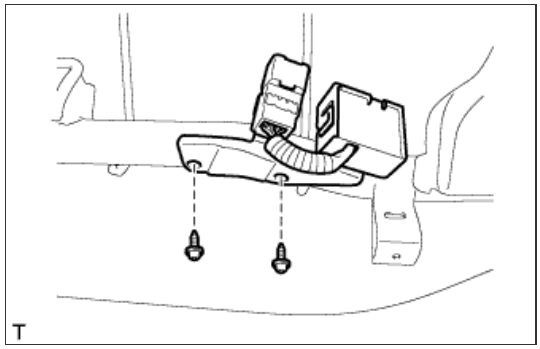
a. Attach the 2 claws to install the seat heater control.



4. INSTALL REAR SEAT CUSHION HOLDER BRACKET RH (w/ Seat Heater System)

a. Install the holder bracket with the 2 screws.

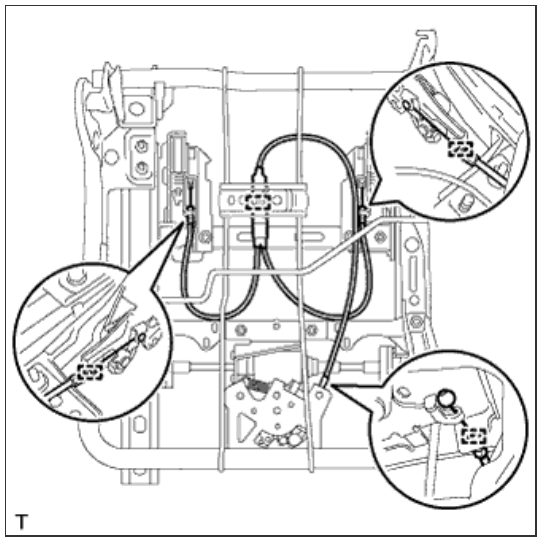
b. Connect the seat wire connector.



5. INSTALL REAR NO. 1 SEAT LOCK CABLE ASSEMBLY

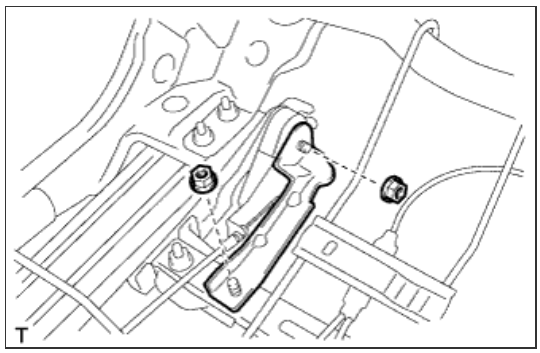
a. Attach the clamp to install the seat lock cable.

b. Attach the 3 cable clamps to connect the 3 cables.



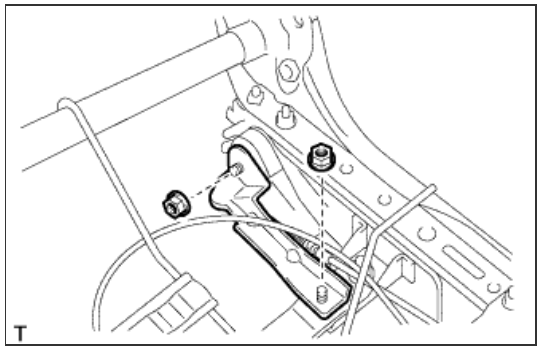
c. Install the lower seat track bracket with the 2 nuts.

Torque:
21 N*m{ 214 kgf*cm , 15 ft.*lbf }



d. Install the lower seat track bracket with the 2 nuts.

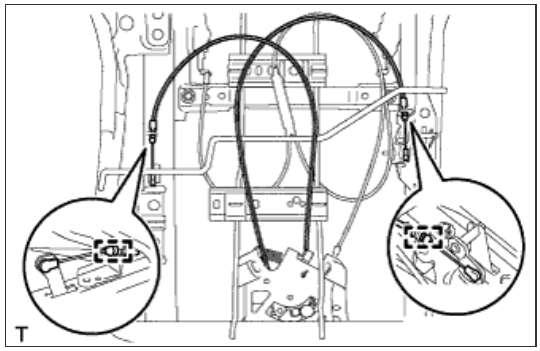
Torque:
21 N*m{ 214 kgf*cm , 15 ft.*lbf }



6. INSTALL FOLD SEAT LOCK CONTROL CABLE SUB-ASSEMBLY

a. Install the 2 fold seat lock control cables.

b. Attach the 2 cable clamps to connect the 2 cables.

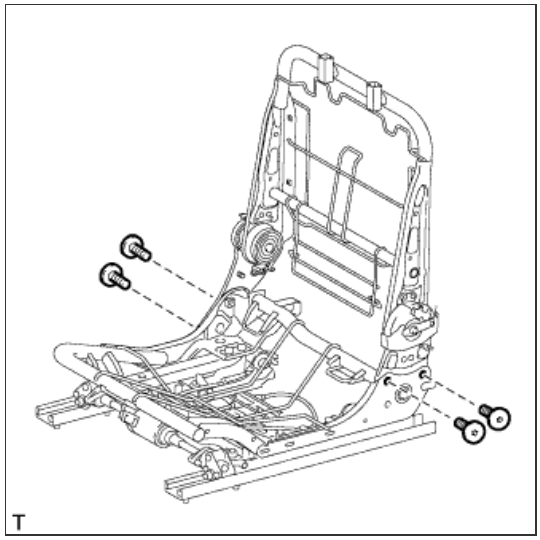


7. INSTALL REAR SEATBACK FRAME SUB-ASSEMBLY RH

a. Temporarily install the seatback frame with the 4 bolts.

b. Using a T40 "TORX" socket, tighten the 4 bolts.

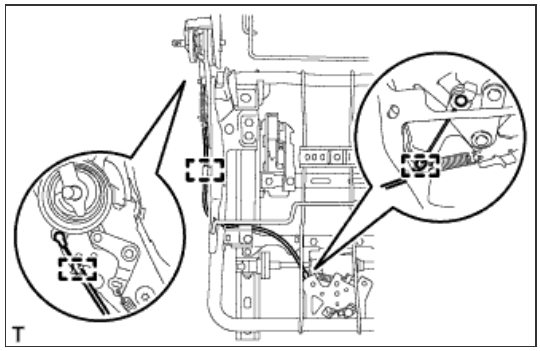
Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



8. INSTALL NO. 1 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Attach the clamp to install the lock control cable.

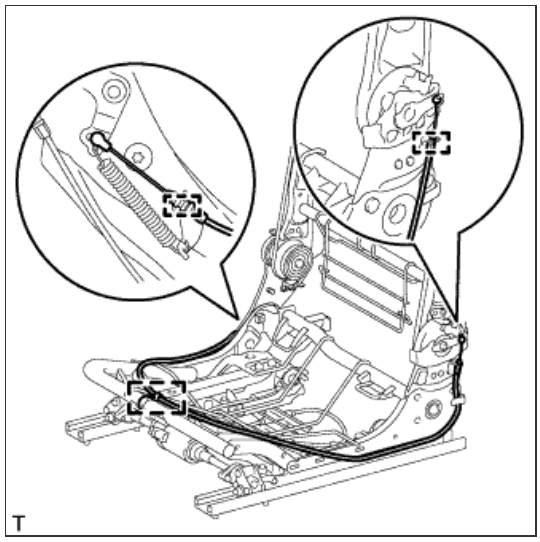
b. Attach the 2 cable clamps to connect the cable.



9. INSTALL RECLINING ADJUSTING CABLE ASSEMBLY RH

a. Attach the clamp to install the adjusting cable.

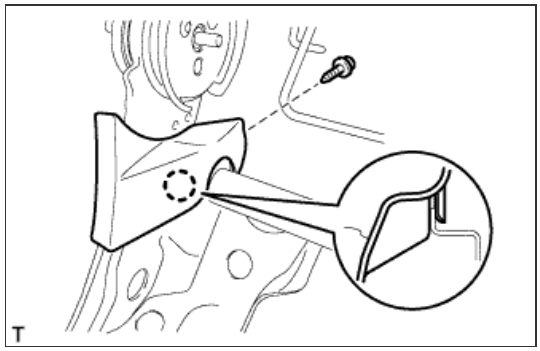
b. Attach the 2 cable clamps to connect the cable.



10. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the claw to install the cover.

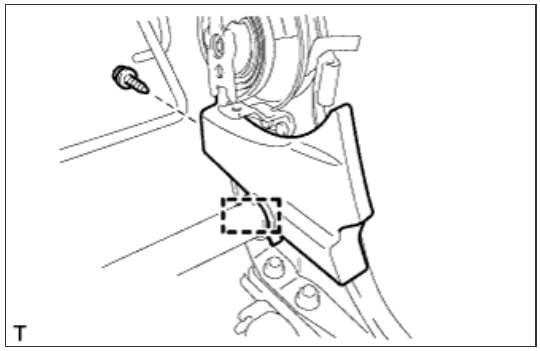
b. Install the screw.



11. INSTALL REAR NO. 2 SEAT RECLINING COVER LH

a. Attach the clamp to install the cover.

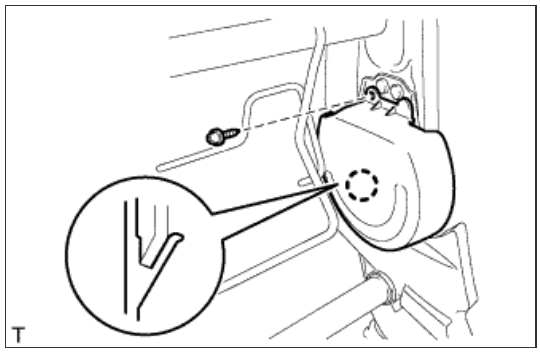
b. Install the screw.



12. INSTALL REAR SEAT RECLINING COVER RH

a. Attach the claw to install the cover.

b. Install the screw.



13. INSTALL REAR SEAT RECLINING COVER LH

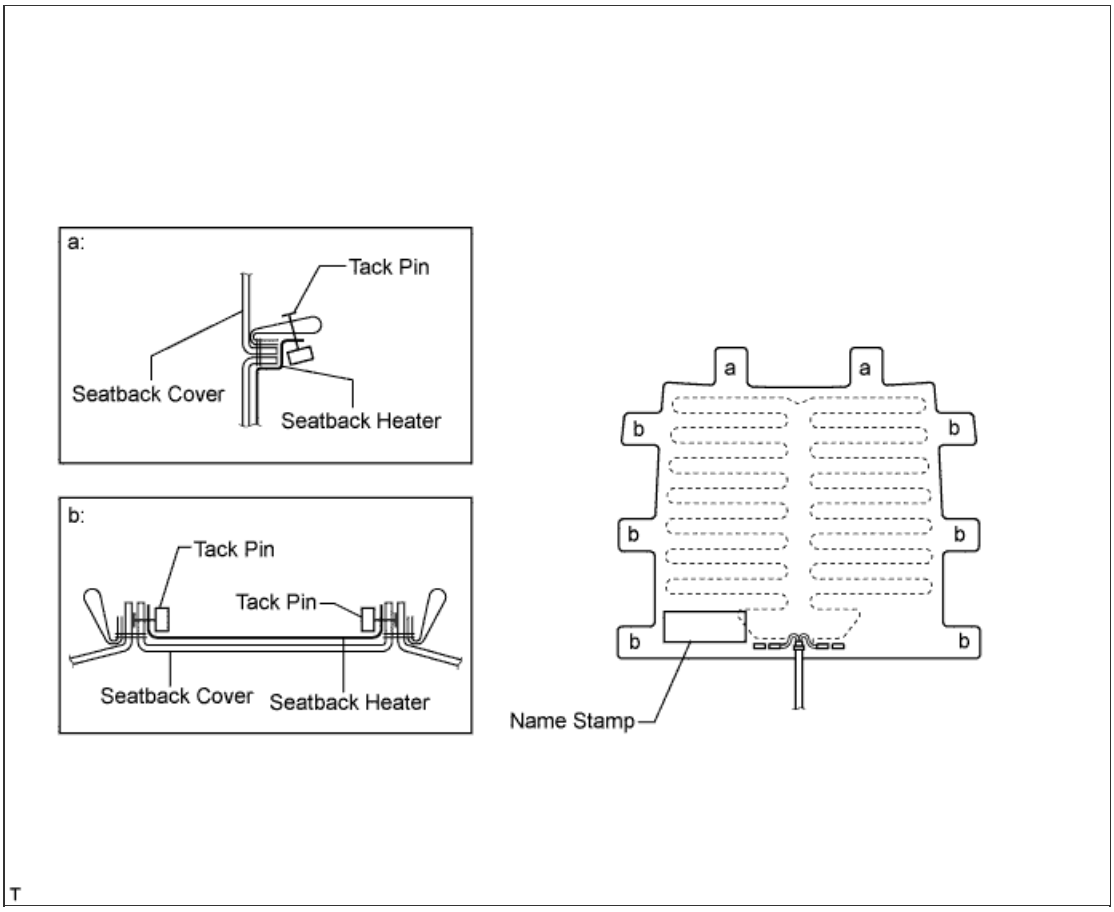
a. Attach the claw to install the cover.

b. Install the screw.

14. INSTALL REAR SEATBACK HEATER ASSEMBLY (w/ Seat Heater System)

a. Set the seatback heater with the name stamp side facing the seatback cover.

b. Install the seatback heater with new tack pins.

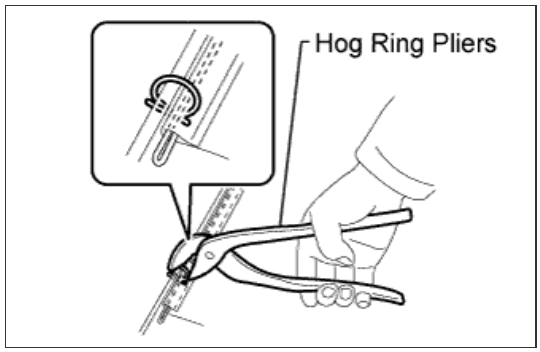


15. INSTALL REAR SEPARATE TYPE SEATBACK COVER

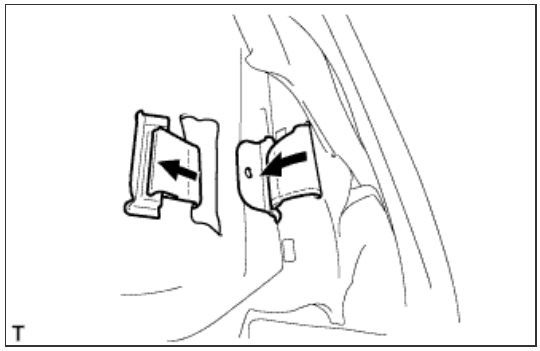
a. Using hog ring pliers, install the seatback cover with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Connect the seatback cover bracket to the seatback pad.



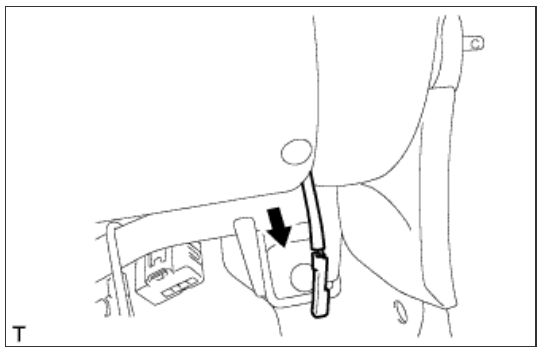
16. INSTALL SEATBACK COVER WITH PAD

a. Install the seatback cover with pad.

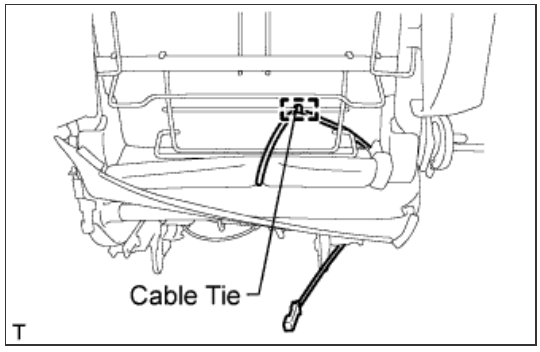
b. Pass the side airbag wire harness through the hole in the seatback.

c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seatback.



ii. Connect the seatback heater wire harness and install a new cable tie.

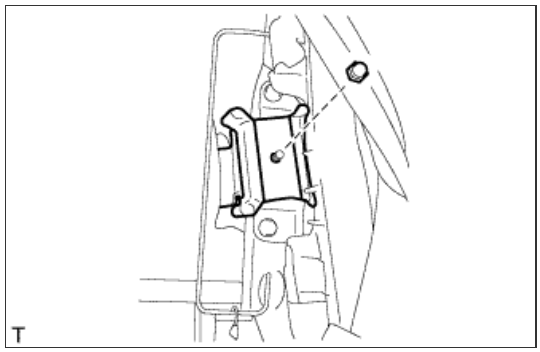


d. Install the seatback cover bracket to the seat frame with the cap nut.

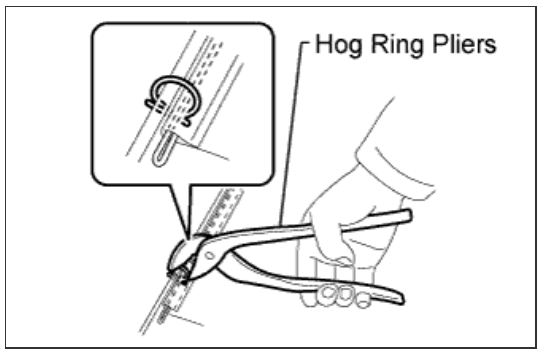
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

CAUTION:

After the seatback trim cover is assembled, make sure the side airbag strap is not twisted.

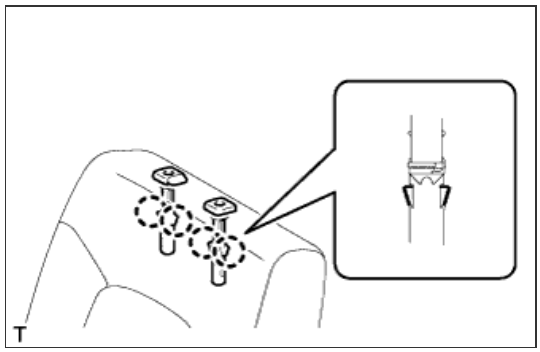


e. Using hog ring pliers, install new hog rings to the seatback frame.



17. INSTALL REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Attach the 4 claws to install the 2 supports.

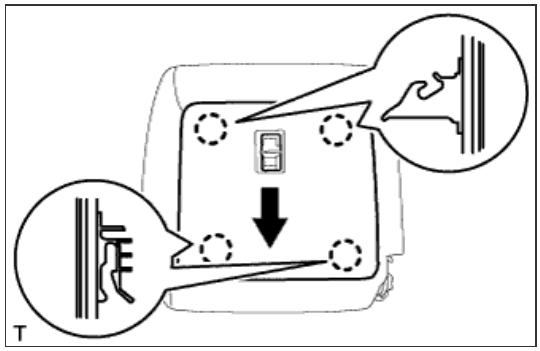


18. INSTALL REAR SEAT HEADREST ASSEMBLY

19. INSTALL REAR SEATBACK BOARD SUB-ASSEMBLY RH

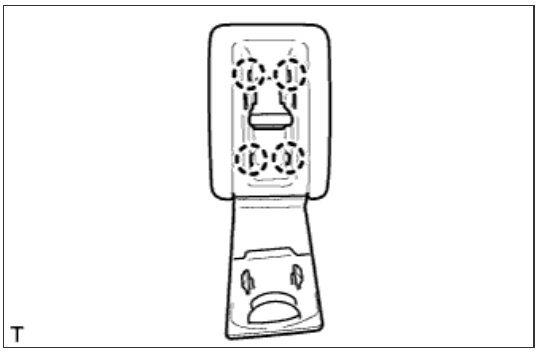
a. Push the board down to attach the 2 claws on the bottom.

b. Attach the 2 claws on the top of the board to install it.



20. INSTALL REAR SEATBACK COVER

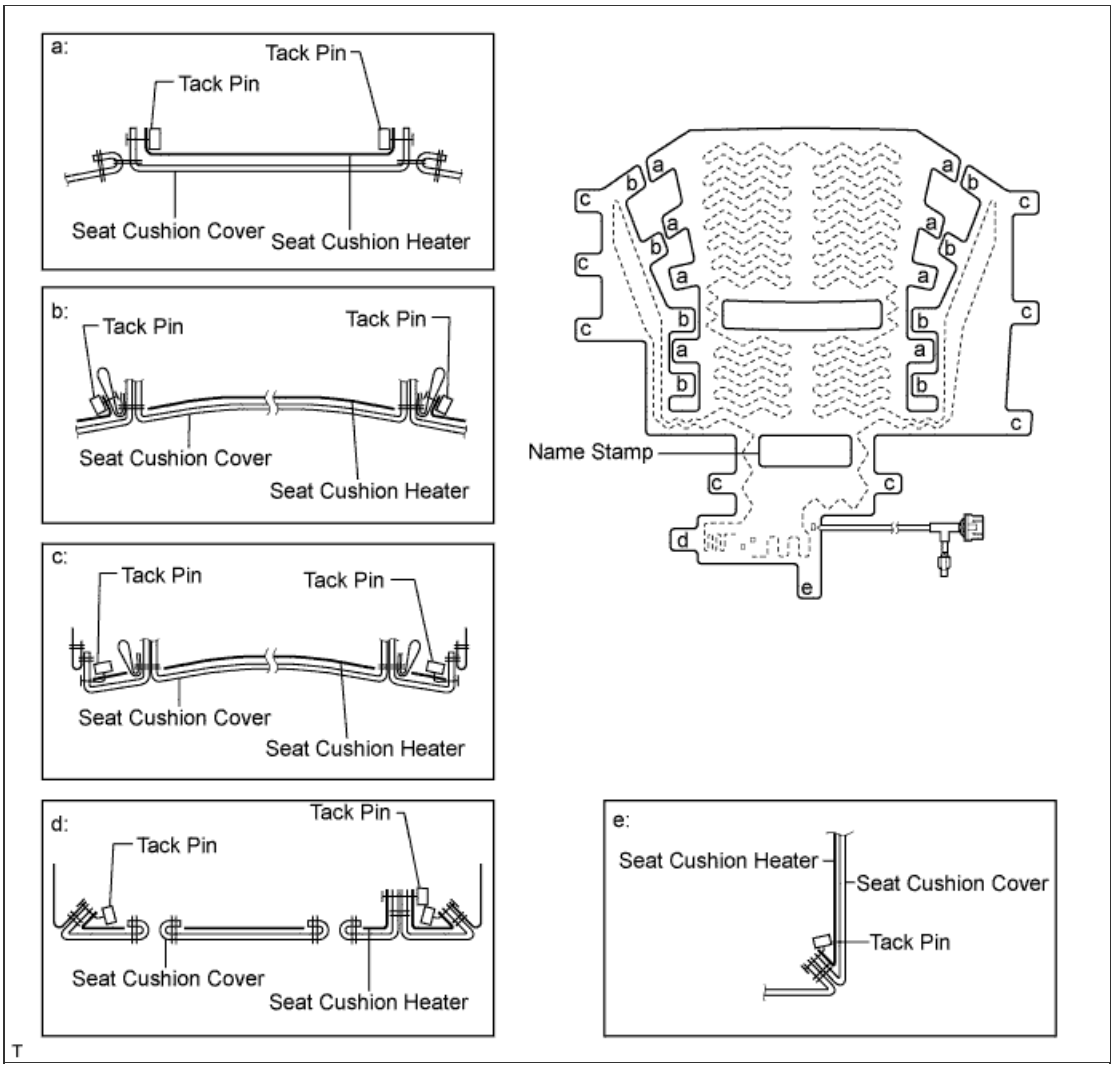
a. Attach the 4 claws to install the cover.



21. INSTALL REAR SEAT CUSHION HEATER ASSEMBLY (w/ Seat Heater System)

a. Set the seat cushion heater with the name stamp side facing the seat cushion cover.

b. Install the seat cushion heater with new tack pins.

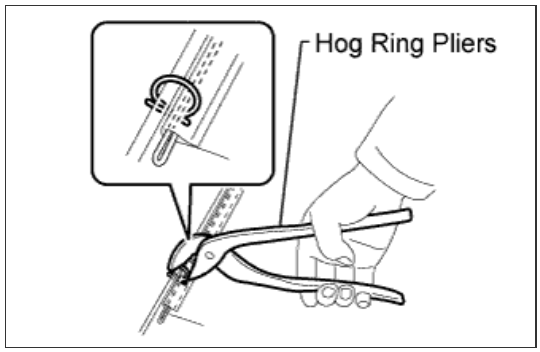


22. INSTALL REAR SEPARATE TYPE SEAT CUSHION COVER

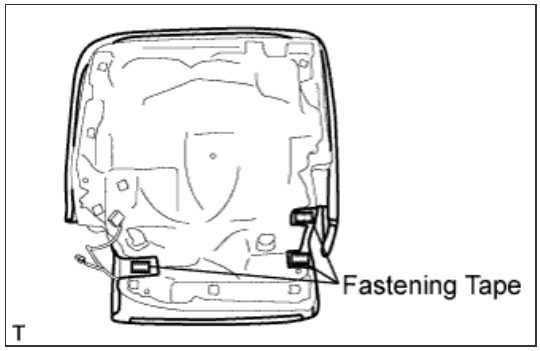
a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Attach the 3 pieces of fastening tape.



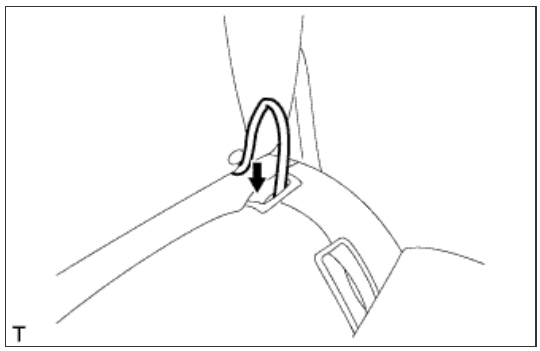
23. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

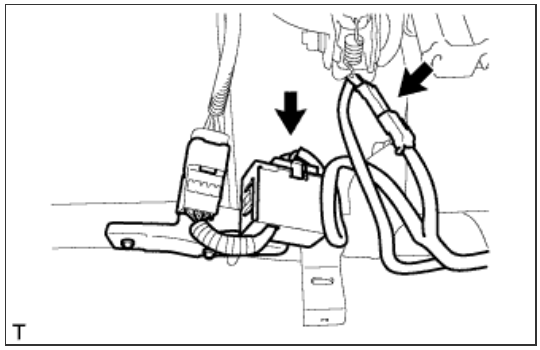
b. Pass the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.

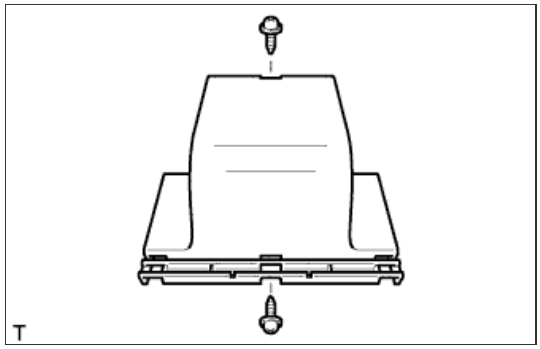


d. Attach the side airbag wire harness clamps.

24. INSTALL REAR SEAT UNDER TRAY COVER RH

a. Attach the 4 claws to install the cover.

b. Install the 2 screws.

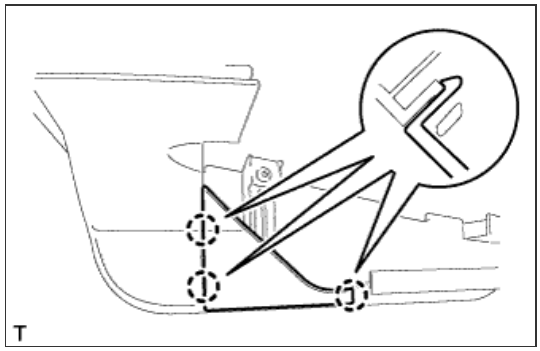


25. INSTALL REAR POWER SEAT SWITCH

a. Install the power seat switch with the 2 screws.

26. INSTALL NO. 1 SEAT CUSHION PLATE

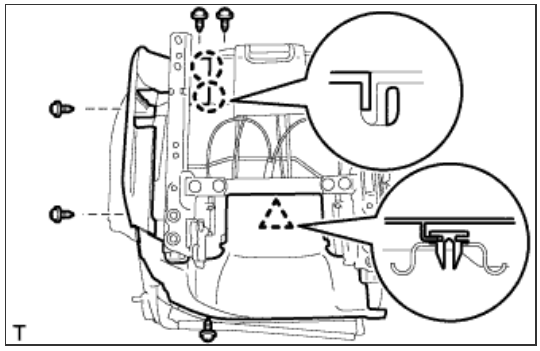
a. Attach the 3 claws to install the seat cushion plate.



27. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and clip to install the cover.

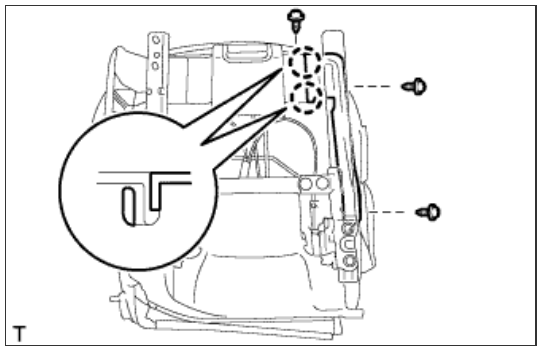
b. Install the 5 screws.



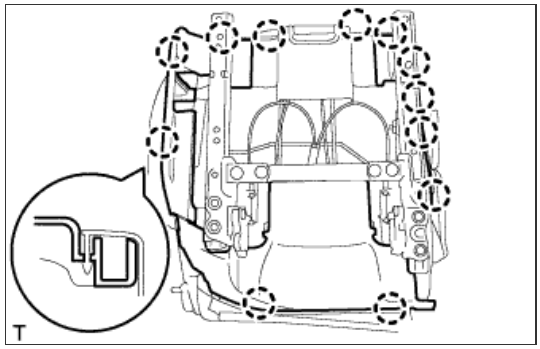
28. INSTALL REAR SEAT COVER

a. Attach the 2 claws to install the cover.

b. Install the 3 screws.



c. Attach the 12 claws.



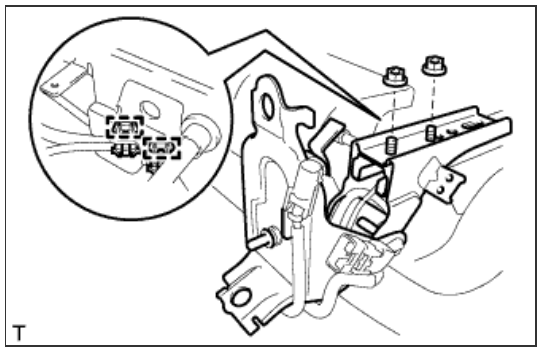
29. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

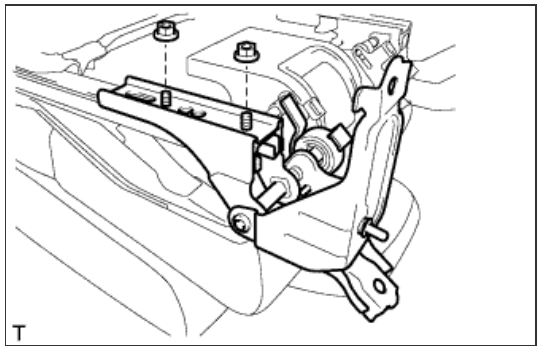
c. w/ Seat Heater System:
Attach the wire harness clamp.



30. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

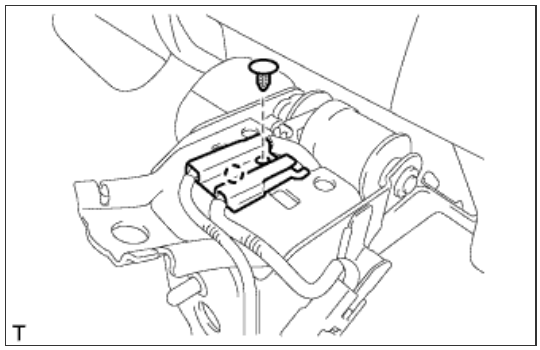


31. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

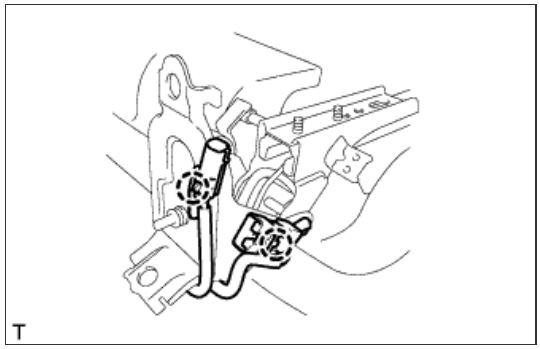
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



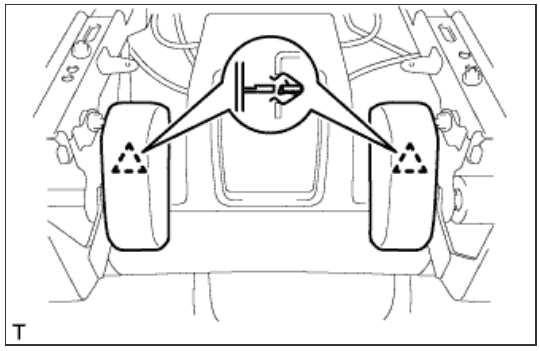
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



32. INSTALL REAR SEAT SIDE HINGE MALE COVER RH

a. Attach the clip to install the cover.

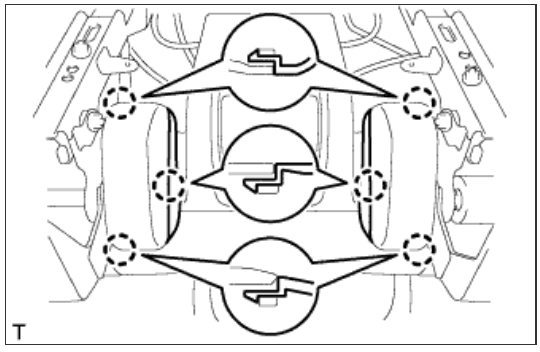


33. INSTALL REAR SEAT SIDE HINGE MALE COVER LH

a. Attach the clip to install the cover.

34. INSTALL REAR SEAT SIDE HINGE FEMALE COVER

a. Attach the 6 claws to install the 2 covers.

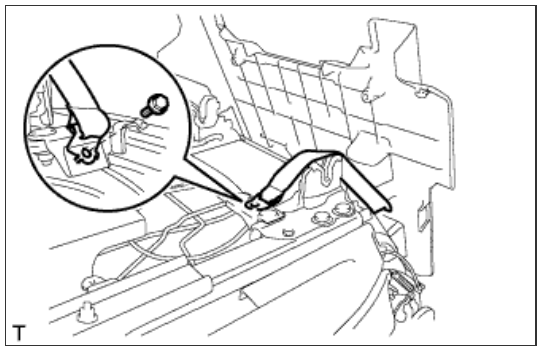


35. INSTALL FOLD SEAT STOPPER BAND ASSEMBLY

a. Install the fold seat stopper band to the seat leg side cover.

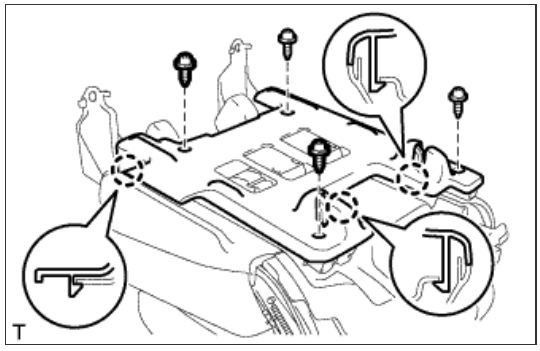
36. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



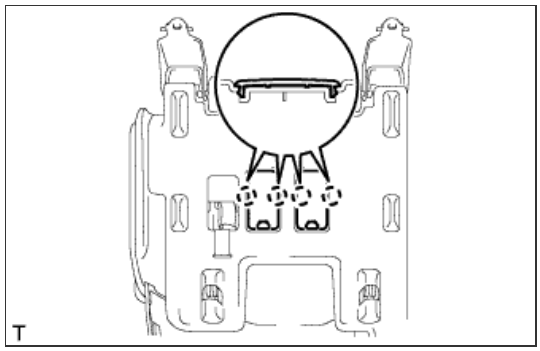
b. Attach the 3 claws to install the seat leg side cover.

c. Install the 4 screws.



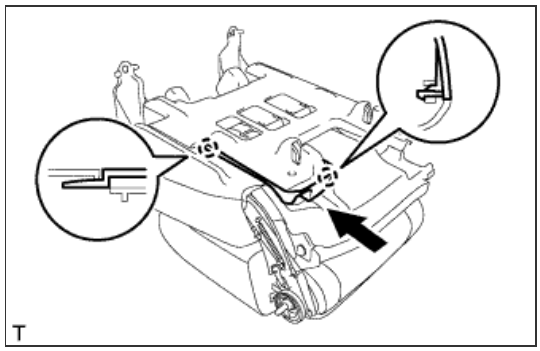
37. INSTALL NO. 1 SEAT CUSHION COVER

a. Attach the 4 claws to install the 2 covers.



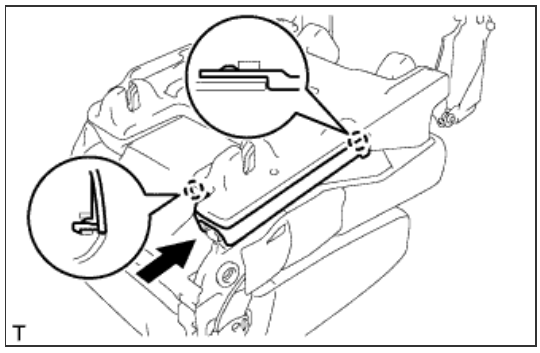
38. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



39. INSTALL UPPER SEAT TRACK RAIL COVER LH

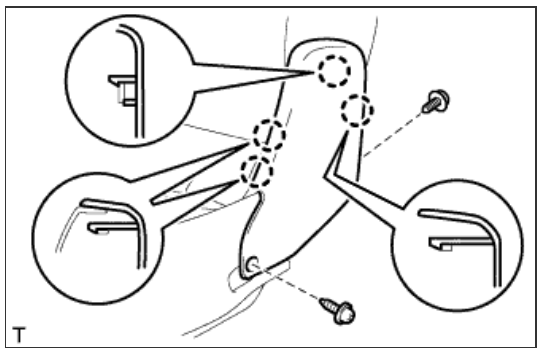
a. Attach the 2 claws to install the cover.



40. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

a. Attach the 4 claws to install the cover.

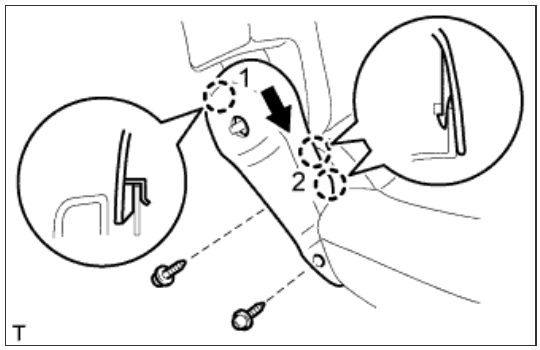
b. Install the 2 screws.



41. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

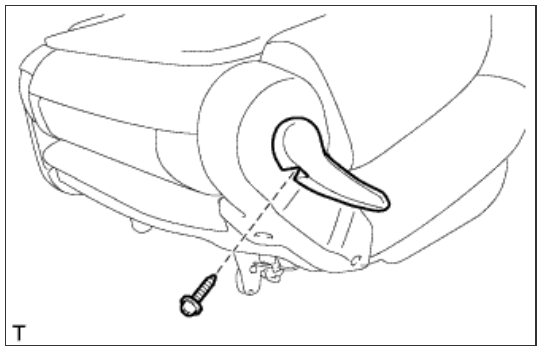
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



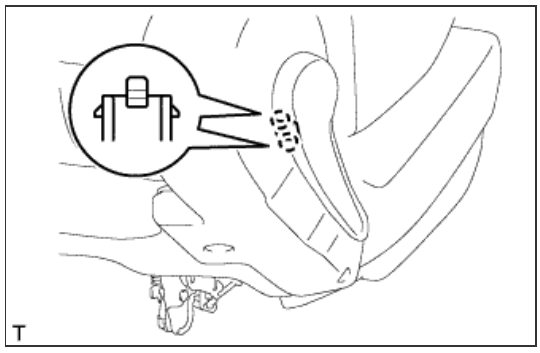
42. INSTALL RECLINING ADJUSTER RELEASE HANDLE RH

a. Install the release handle with the screw.



43. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEAT CUSHION FRAME SUB-ASSEMBLY RH

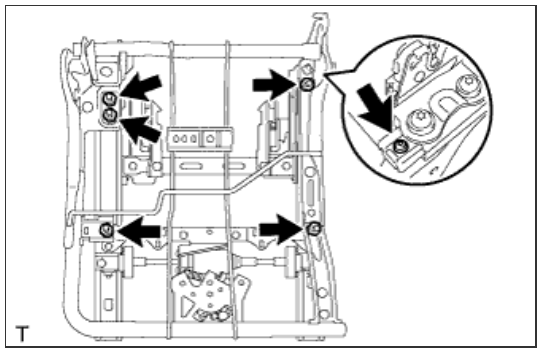
a. Temporarily install the seat cushion frame with the 5 nuts and bolt.

b. Tighten the 5 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

c. Using a T40 "TORX" socket, tighten the bolt.

Torque:
21 N*m{ 214 kgf*cm , 15 ft.*lbf }



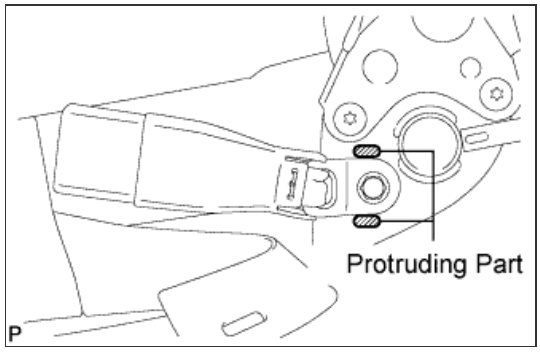
2. INSTALL REAR NO. 1 SEAT INNER BELT ASSEMBLY RH

a. Install the belt with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

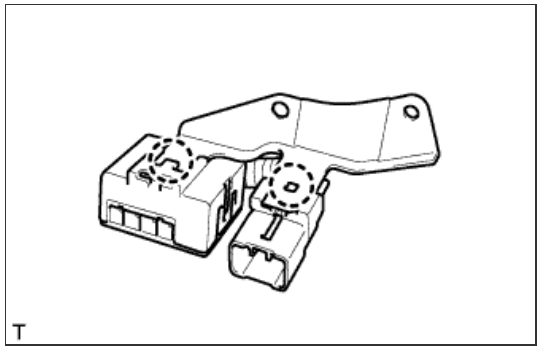
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the seat.



3. INSTALL SEAT HEATER CONTROL SUB-ASSEMBLY RH (w/ Seat Heater System)

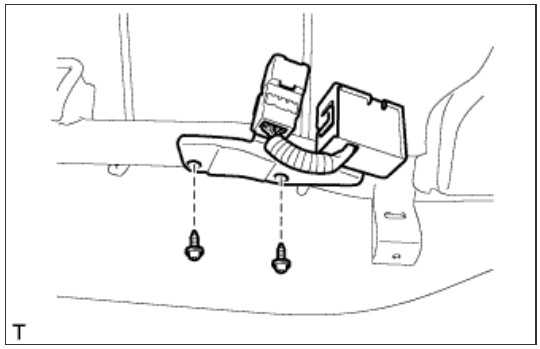
a. Attach the 2 claws to install the seat heater control.



4. INSTALL REAR SEAT CUSHION HOLDER BRACKET RH (w/ Seat Heater System)

a. Install the holder bracket with the 2 screws.

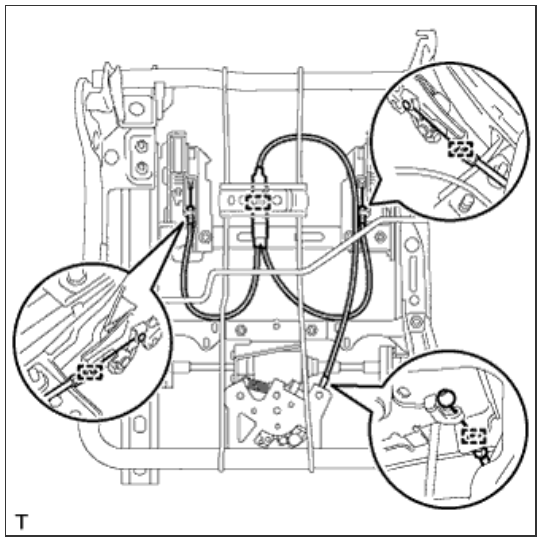
b. Connect the seat wire connector.



5. INSTALL REAR NO. 1 SEAT LOCK CABLE ASSEMBLY

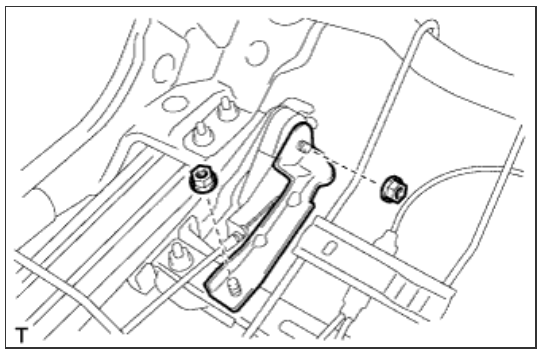
a. Attach the clamp to install the seat lock cable.

b. Attach the 3 cable clamps to connect the 3 cables.



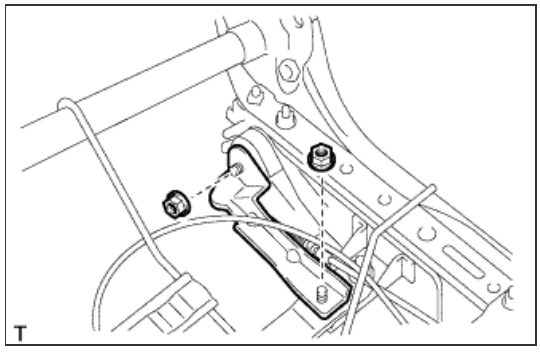
c. Install the lower seat track bracket with the 2 nuts.

Torque:
21 N*m{ 214 kgf*cm , 15 ft.*lbf }



d. Install the lower seat track bracket with the 2 nuts.

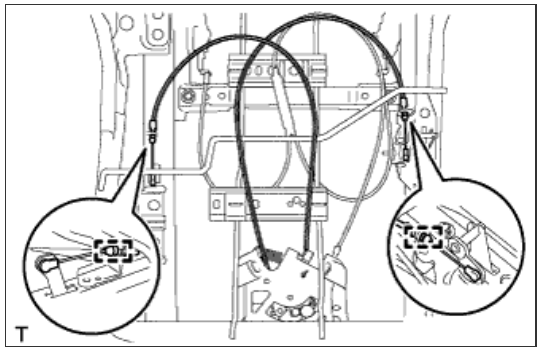
Torque:
21 N*m{ 214 kgf*cm , 15 ft.*lbf }



6. INSTALL FOLD SEAT LOCK CONTROL CABLE SUB-ASSEMBLY

a. Install the 2 fold seat lock control cables.

b. Attach the 2 cable clamps to connect the 2 cables.

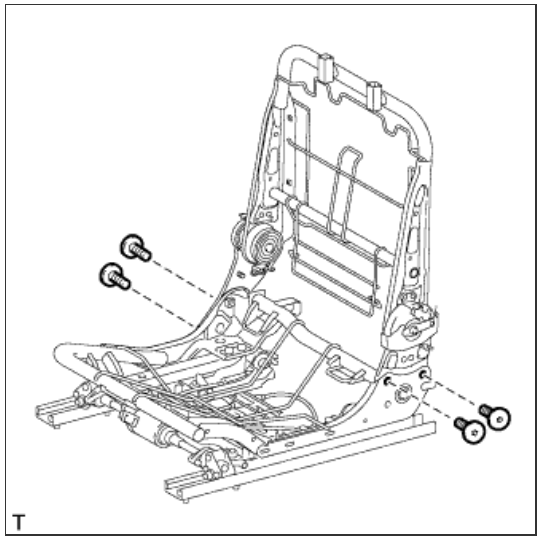


7. INSTALL REAR SEATBACK FRAME SUB-ASSEMBLY RH

a. Temporarily install the seatback frame with the 4 bolts.

b. Using a T40 "TORX" socket, tighten the 4 bolts.

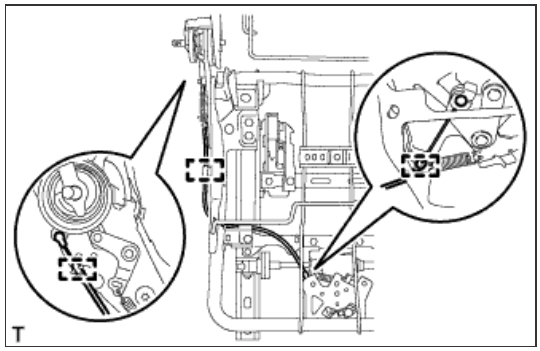
Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



8. INSTALL NO. 1 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Attach the clamp to install the lock control cable.

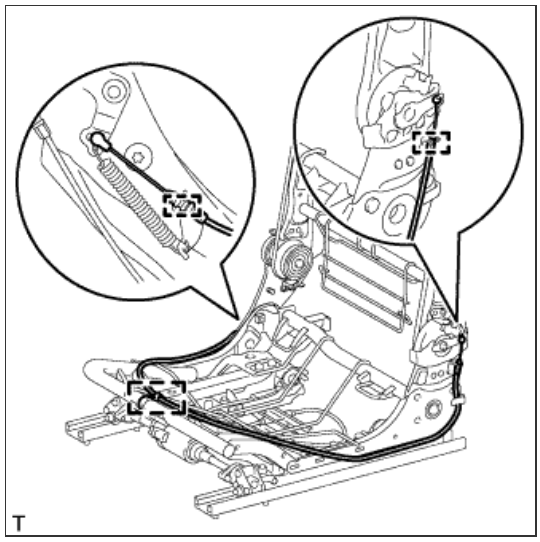
b. Attach the 2 cable clamps to connect the cable.



9. INSTALL RECLINING ADJUSTING CABLE ASSEMBLY RH

a. Attach the clamp to install the adjusting cable.

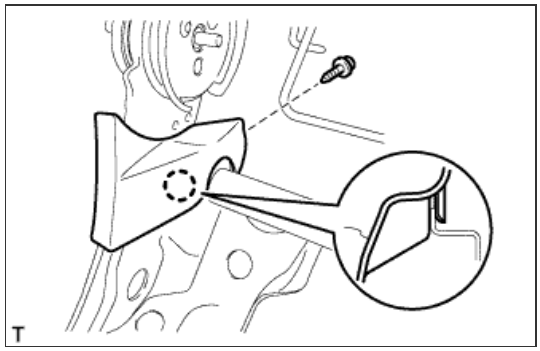
b. Attach the 2 cable clamps to connect the cable.



10. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the claw to install the cover.

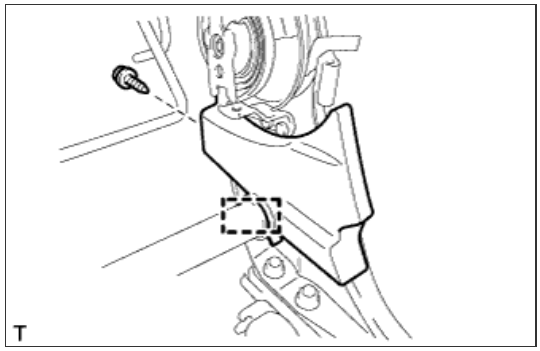
b. Install the screw.



11. INSTALL REAR NO. 2 SEAT RECLINING COVER LH

a. Attach the clamp to install the cover.

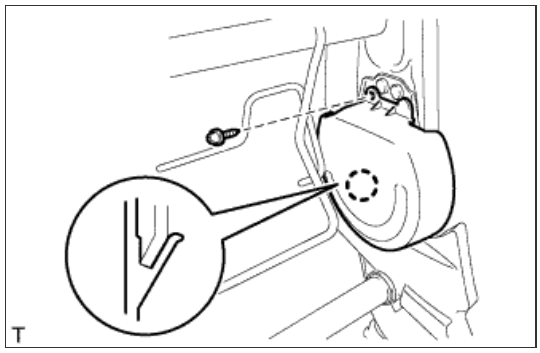
b. Install the screw.



12. INSTALL REAR SEAT RECLINING COVER RH

a. Attach the claw to install the cover.

b. Install the screw.



13. INSTALL REAR SEAT RECLINING COVER LH

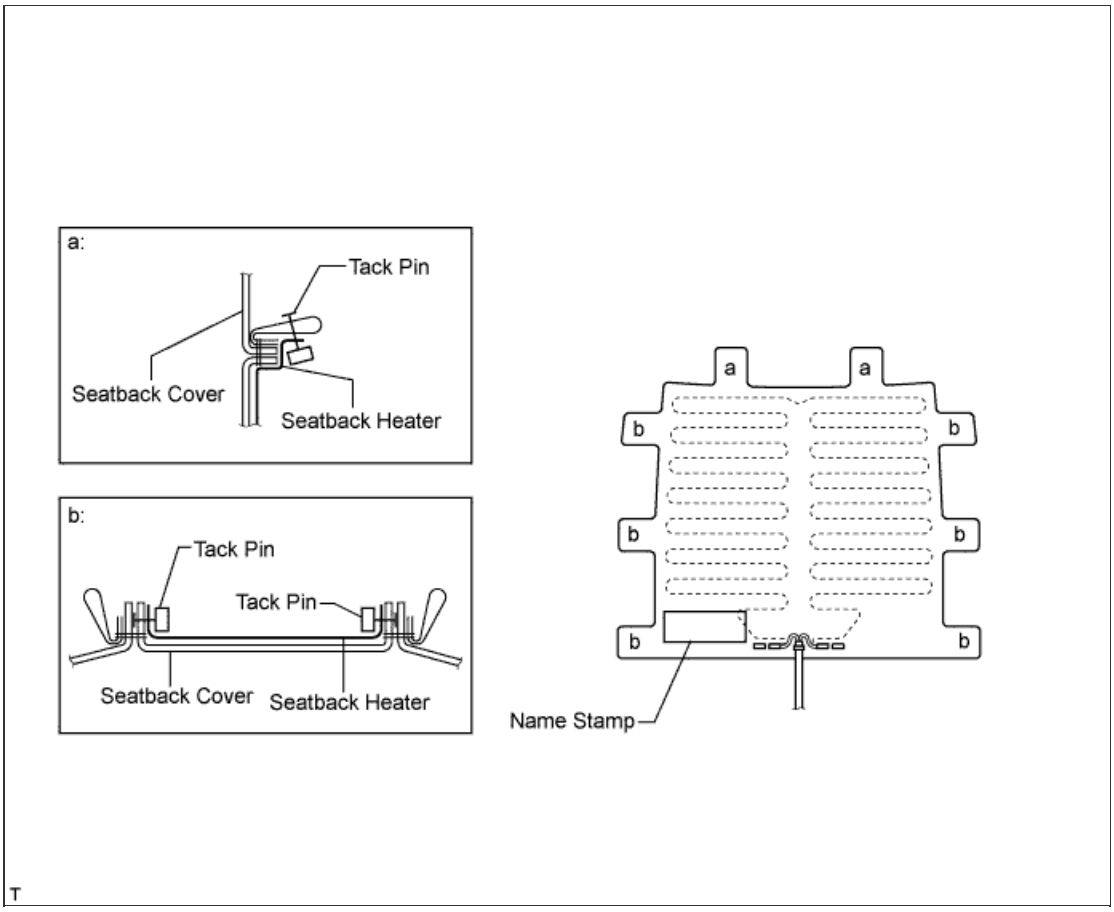
a. Attach the claw to install the cover.

b. Install the screw.

14. INSTALL REAR SEATBACK HEATER ASSEMBLY (w/ Seat Heater System)

a. Set the seatback heater with the name stamp side facing the seatback cover.

b. Install the seatback heater with new tack pins.

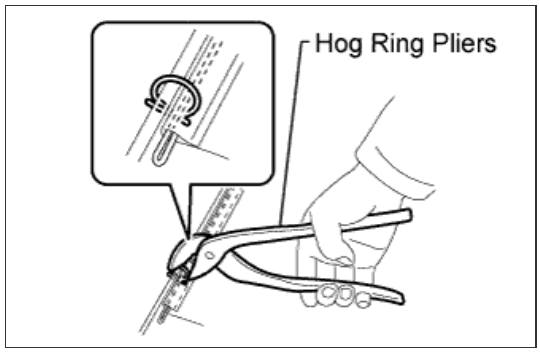


15. INSTALL REAR SEPARATE TYPE SEATBACK COVER

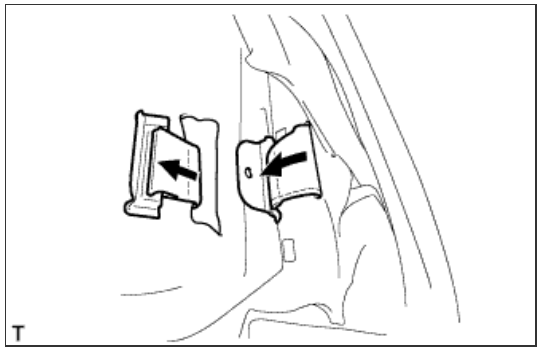
a. Using hog ring pliers, install the seatback cover with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Connect the seatback cover bracket to the seatback pad.



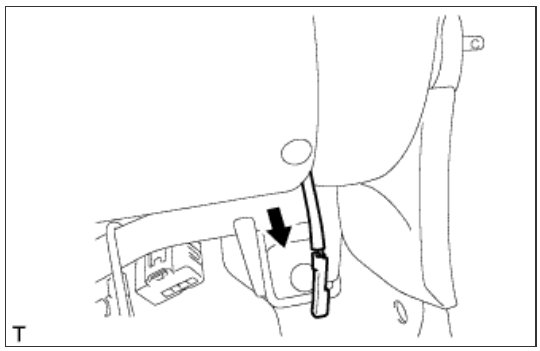
16. INSTALL SEATBACK COVER WITH PAD

a. Install the seatback cover with pad.

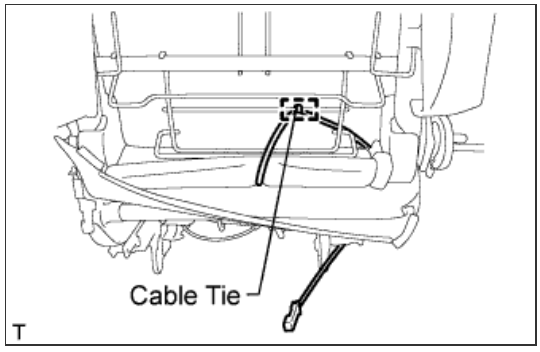
b. Pass the side airbag wire harness through the hole in the seatback.

c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seatback.



ii. Connect the seatback heater wire harness and install a new cable tie.

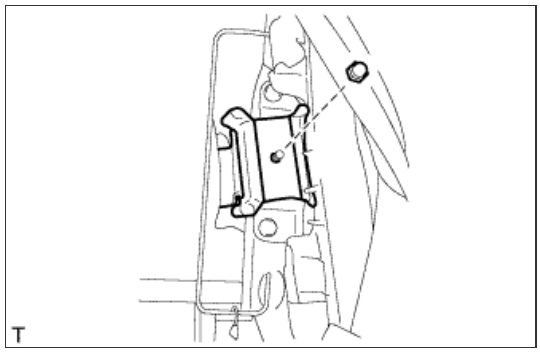


d. Install the seatback cover bracket to the seat frame with the cap nut.

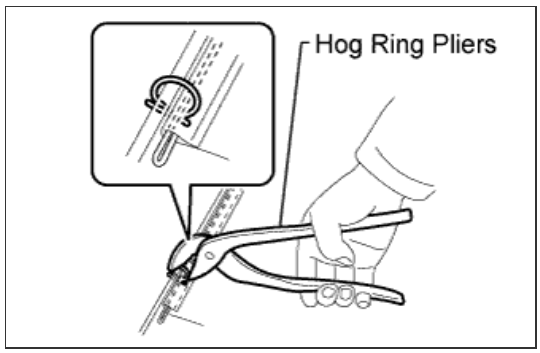
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

CAUTION:

After the seatback trim cover is assembled, make sure the side airbag strap is not twisted.

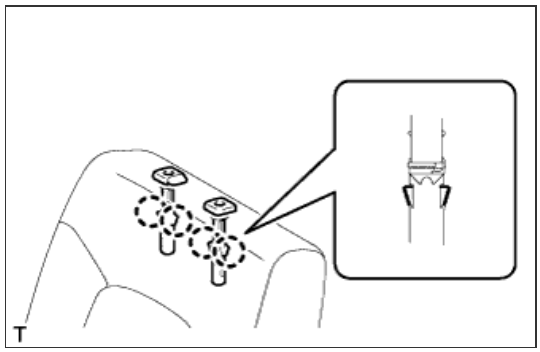


e. Using hog ring pliers, install new hog rings to the seatback frame.



17. INSTALL REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Attach the 4 claws to install the 2 supports.

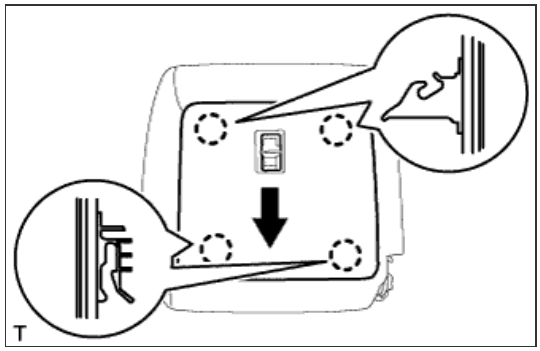


18. INSTALL REAR SEAT HEADREST ASSEMBLY

19. INSTALL REAR SEATBACK BOARD SUB-ASSEMBLY RH

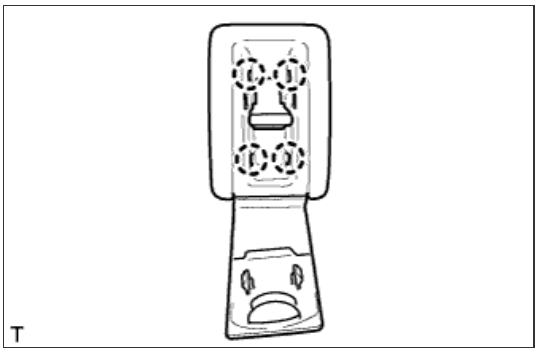
a. Push the board down to attach the 2 claws on the bottom.

b. Attach the 2 claws on the top of the board to install it.



20. INSTALL REAR SEATBACK COVER

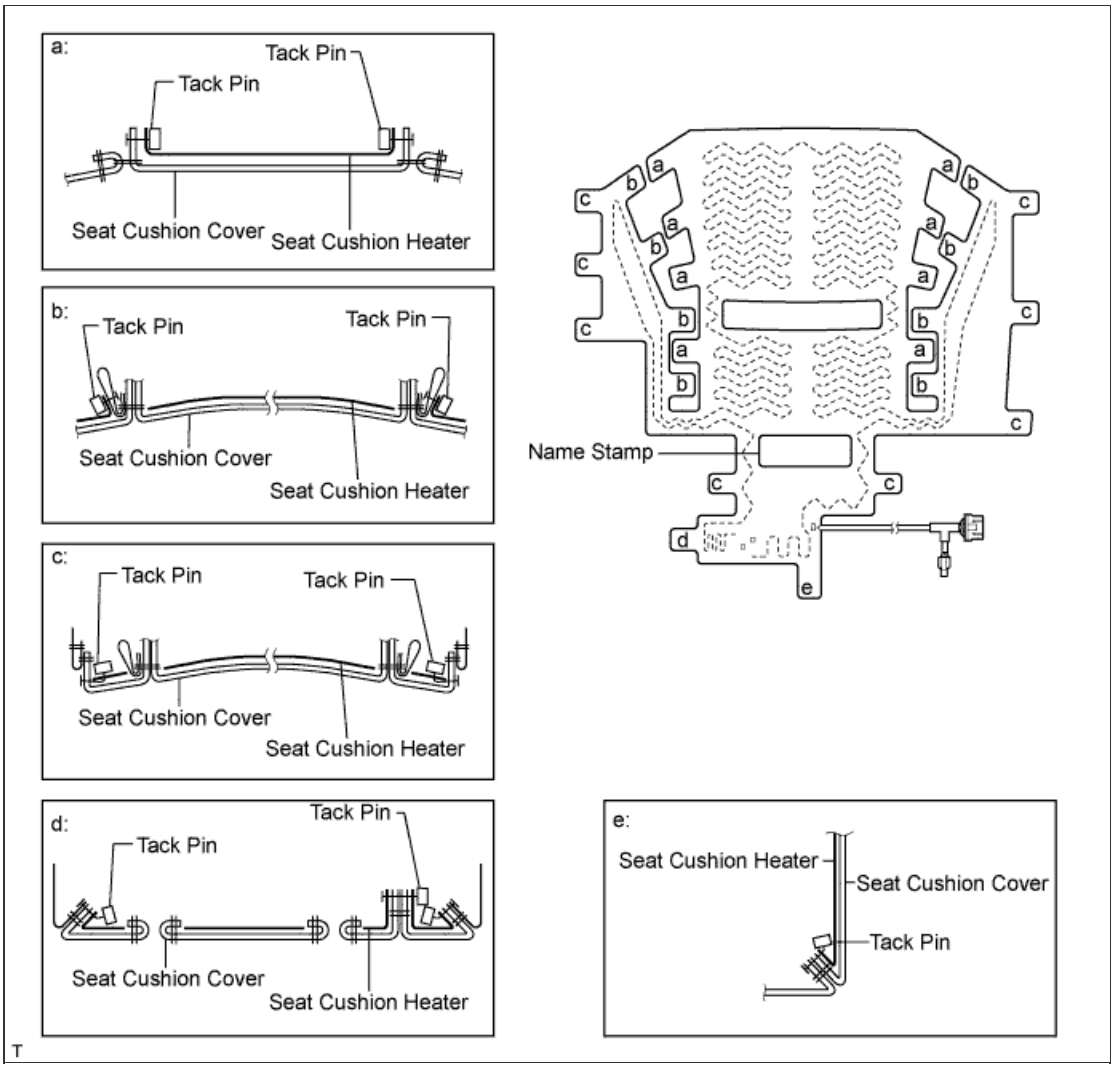
a. Attach the 4 claws to install the cover.



21. INSTALL REAR SEAT CUSHION HEATER ASSEMBLY (w/ Seat Heater System)

a. Set the seat cushion heater with the name stamp side facing the seat cushion cover.

b. Install the seat cushion heater with new tack pins.

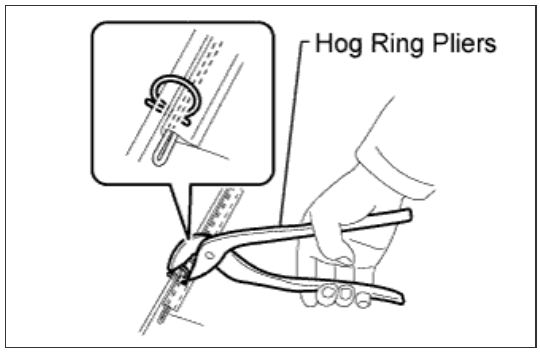


22. INSTALL REAR SEPARATE TYPE SEAT CUSHION COVER

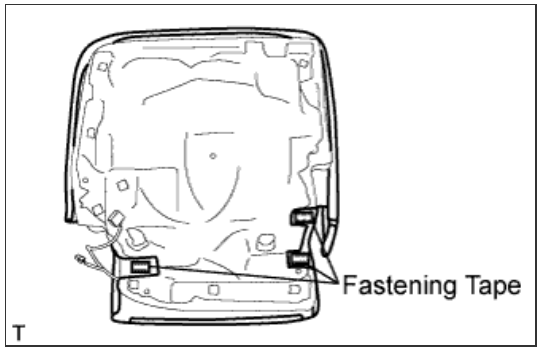
a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Attach the 3 pieces of fastening tape.



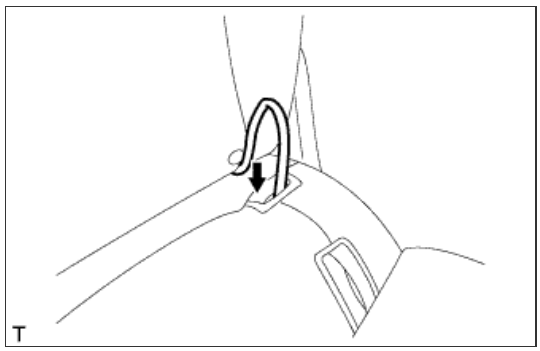
23. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

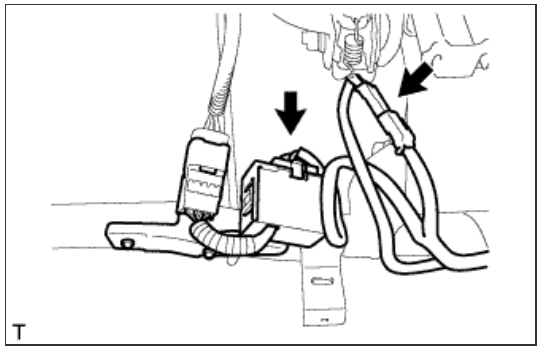
b. Pass the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.

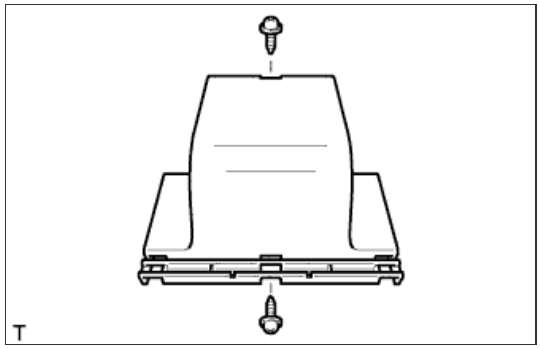


d. Attach the side airbag wire harness clamps.

24. INSTALL REAR SEAT UNDER TRAY COVER RH

a. Attach the 4 claws to install the cover.

b. Install the 2 screws.

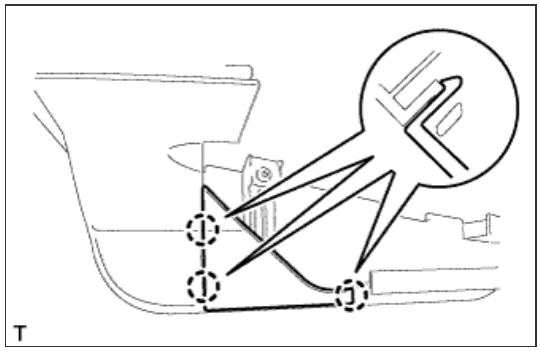


25. INSTALL REAR POWER SEAT SWITCH

a. Install the power seat switch with the 2 screws.

26. INSTALL NO. 1 SEAT CUSHION PLATE

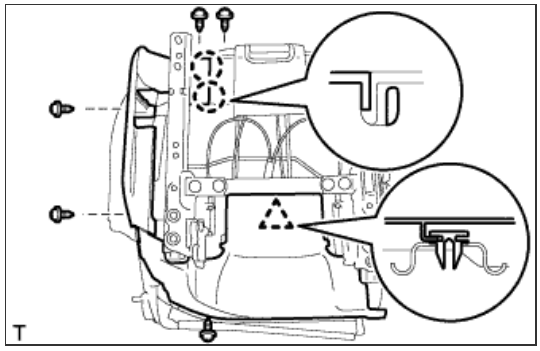
a. Attach the 3 claws to install the seat cushion plate.



27. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and clip to install the cover.

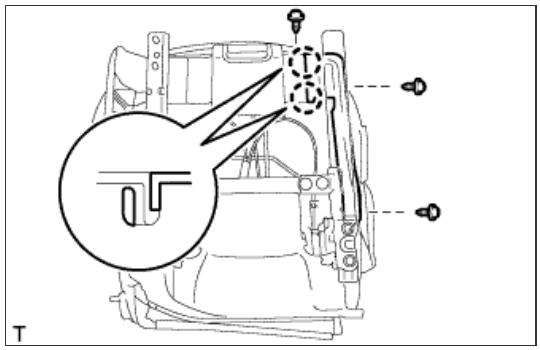
b. Install the 5 screws.



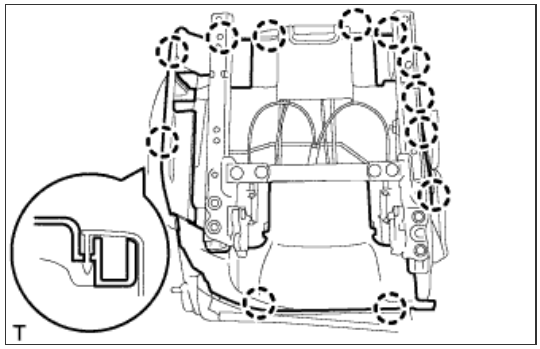
28. INSTALL REAR SEAT COVER

a. Attach the 2 claws to install the cover.

b. Install the 3 screws.



c. Attach the 12 claws.



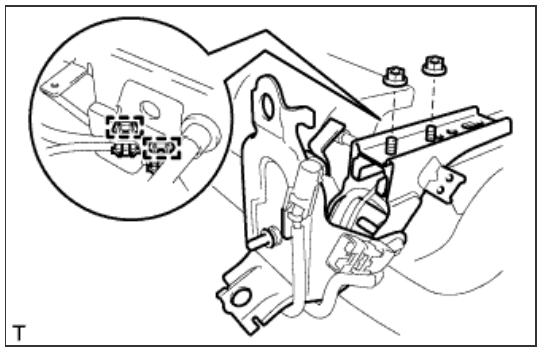
29. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

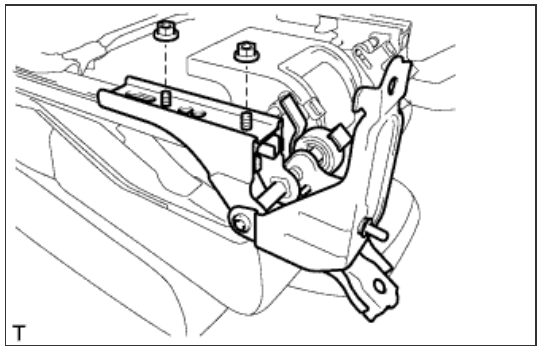
c. w/ Seat Heater System:
Attach the wire harness clamp.



30. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

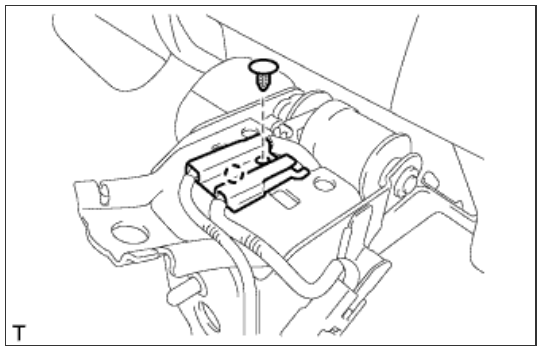


31. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

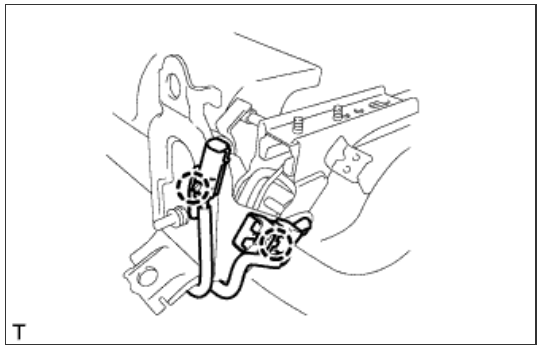
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



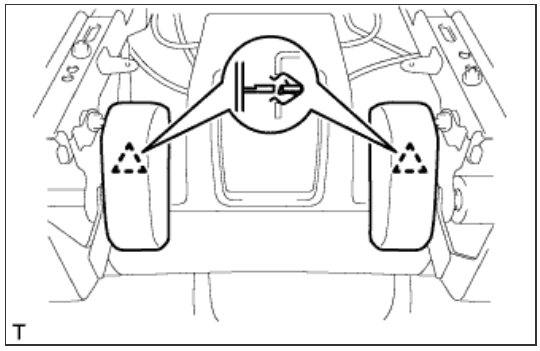
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



32. INSTALL REAR SEAT SIDE HINGE MALE COVER RH

a. Attach the clip to install the cover.

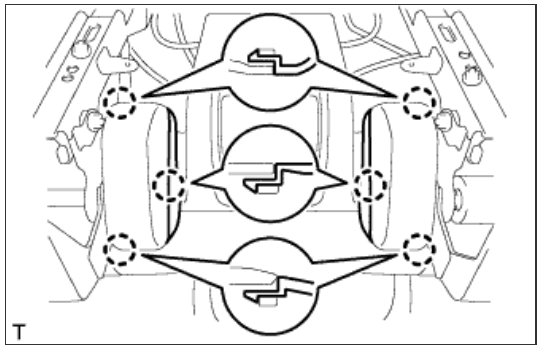


33. INSTALL REAR SEAT SIDE HINGE MALE COVER LH

a. Attach the clip to install the cover.

34. INSTALL REAR SEAT SIDE HINGE FEMALE COVER

a. Attach the 6 claws to install the 2 covers.

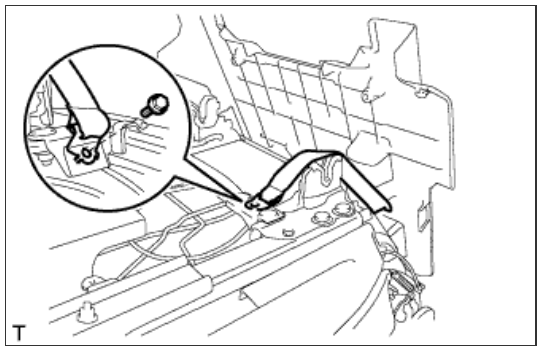


35. INSTALL FOLD SEAT STOPPER BAND ASSEMBLY

a. Install the fold seat stopper band to the seat leg side cover.

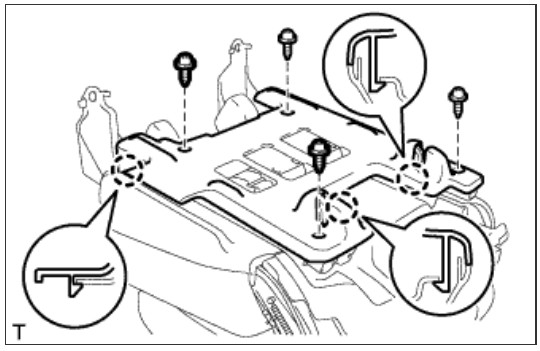
36. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



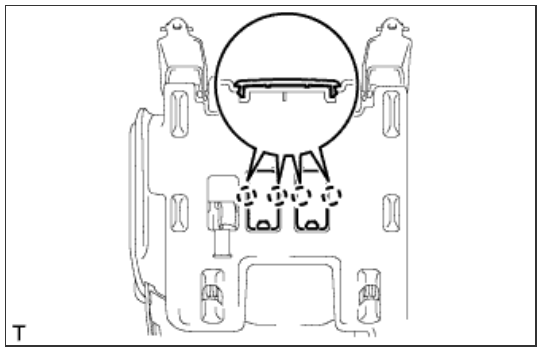
b. Attach the 3 claws to install the seat leg side cover.

c. Install the 4 screws.



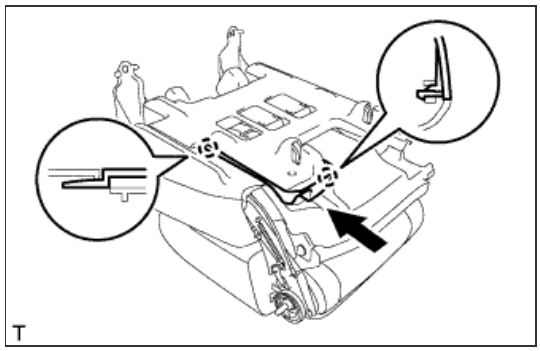
37. INSTALL NO. 1 SEAT CUSHION COVER

a. Attach the 4 claws to install the 2 covers.



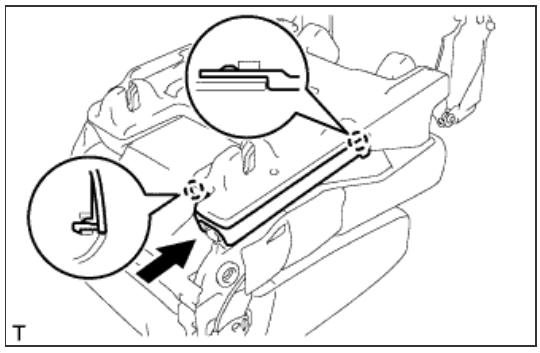
38. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



39. INSTALL UPPER SEAT TRACK RAIL COVER LH

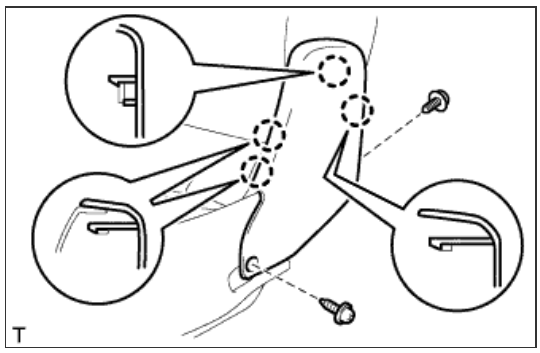
a. Attach the 2 claws to install the cover.



40. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

a. Attach the 4 claws to install the cover.

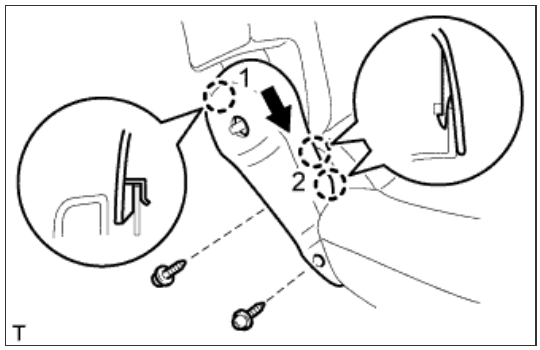
b. Install the 2 screws.



41. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

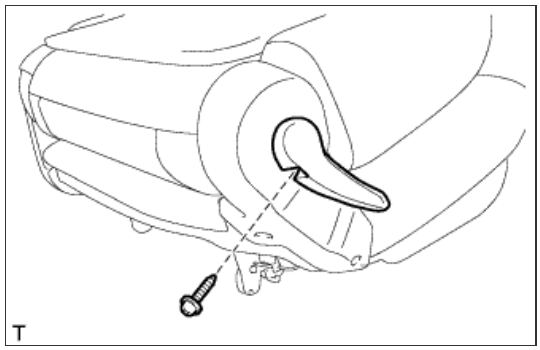
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



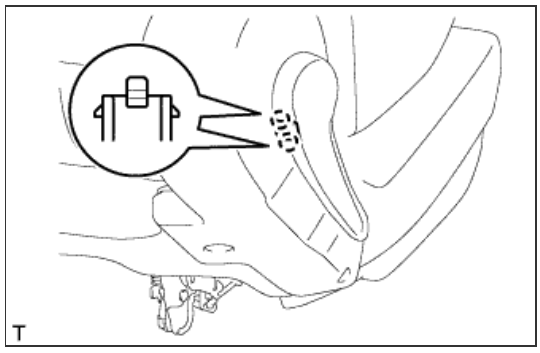
42. INSTALL RECLINING ADJUSTER RELEASE HANDLE RH

a. Install the release handle with the screw.



43. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



for Preparation Click here

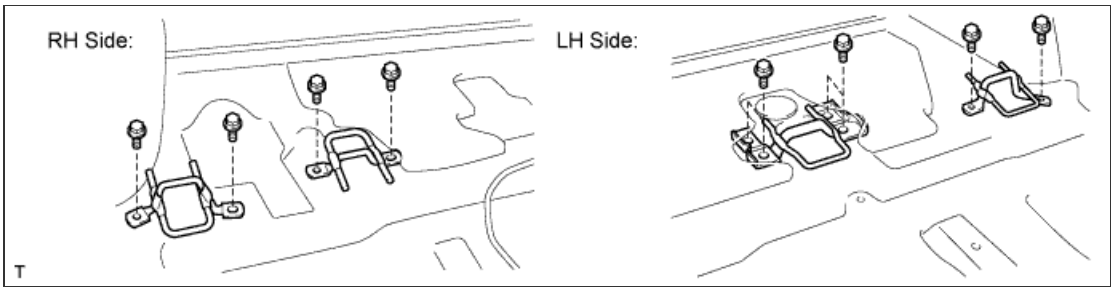
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEAT CUSHION LOCK STRIKER SUB-ASSEMBLY

a. Install the 4 strikers with the 10 bolts.

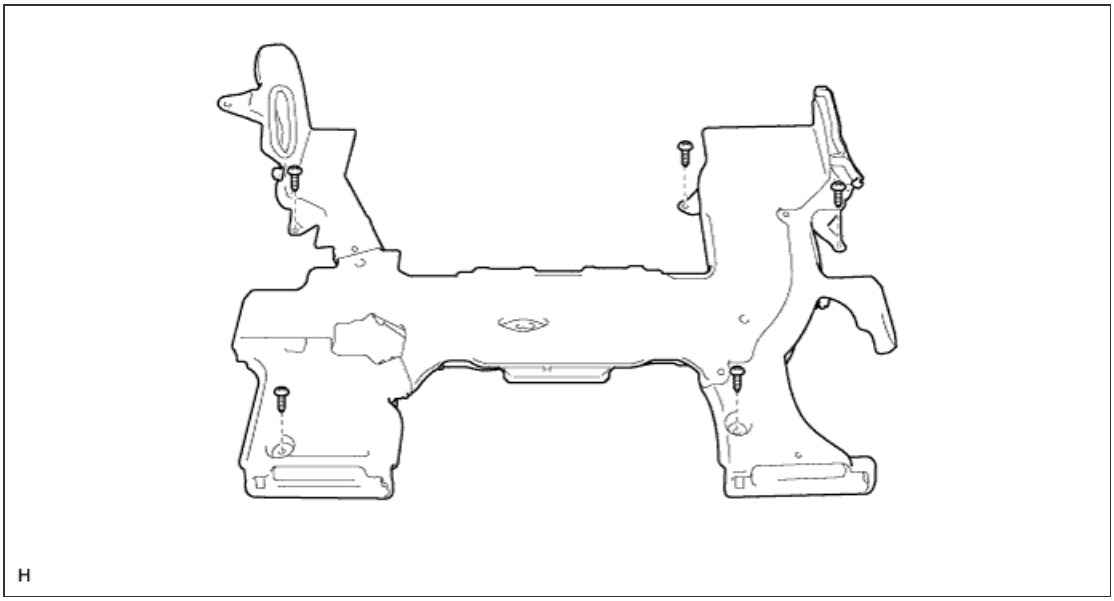
Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



2. INSTALL REAR NO. 6 AIR DUCT

a. Install the duct with the 5 screws.

b. Connect the 2 connectors.



3. INSTALL FRONT FLOOR CARPET ASSEMBLY

a. Install the floor carpet.

b. Install the 2 clips.

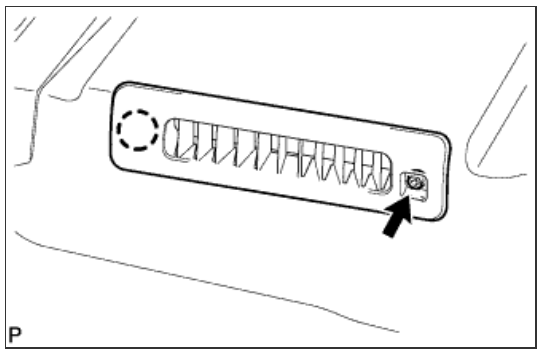
4. INSTALL REAR AIR DUCT GUIDE

HINT:

Use the same procedures for both sides.

a. Attach the claw to install the guide.

b. Install the screw.

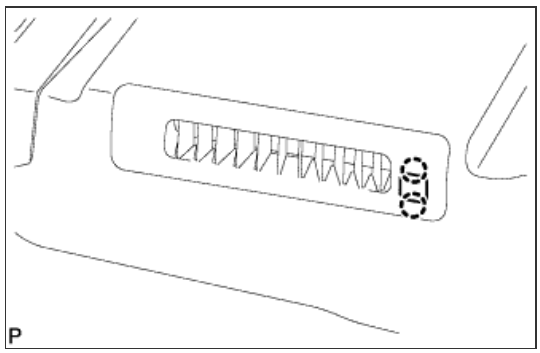


5. INSTALL AIR DUCT PLUG

a. Attach the 2 claws to install the plug.

HINT:

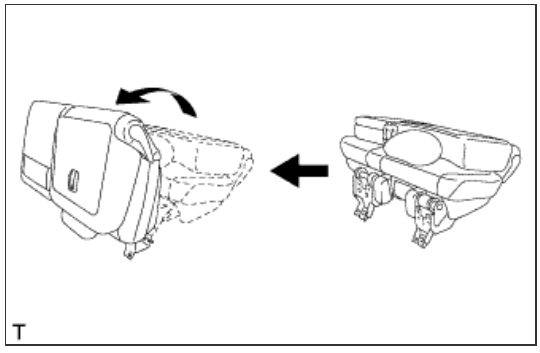
Use the same procedures for both sides.



6. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



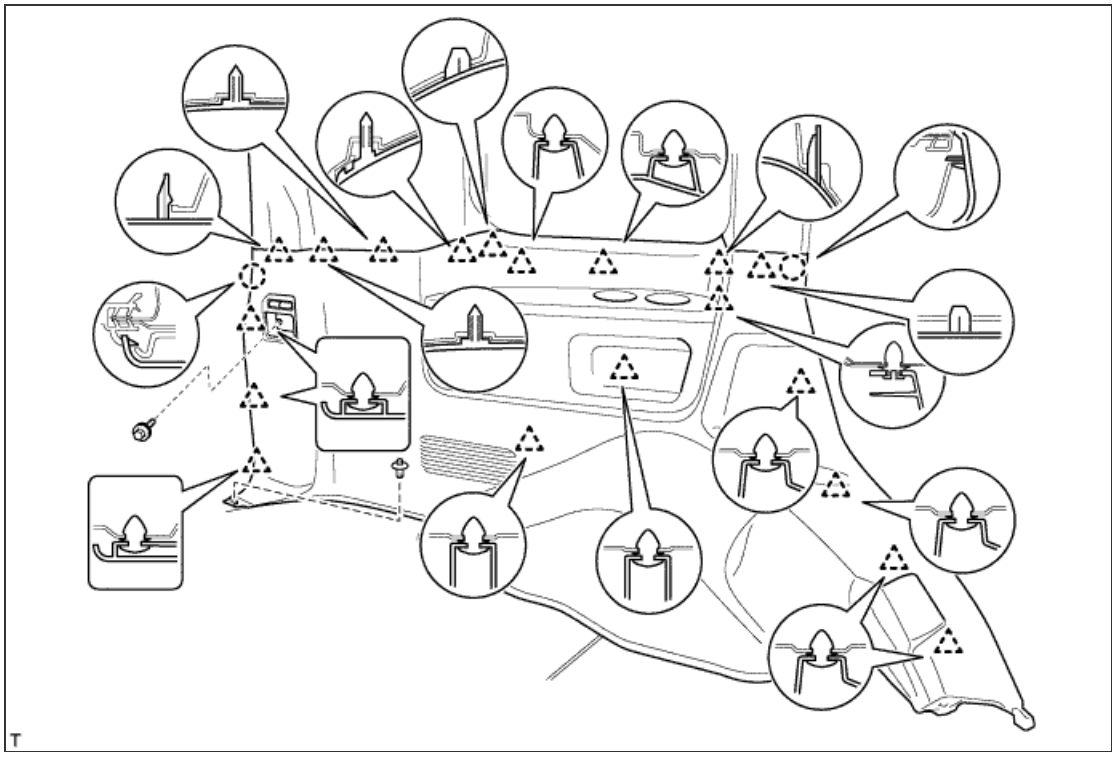
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

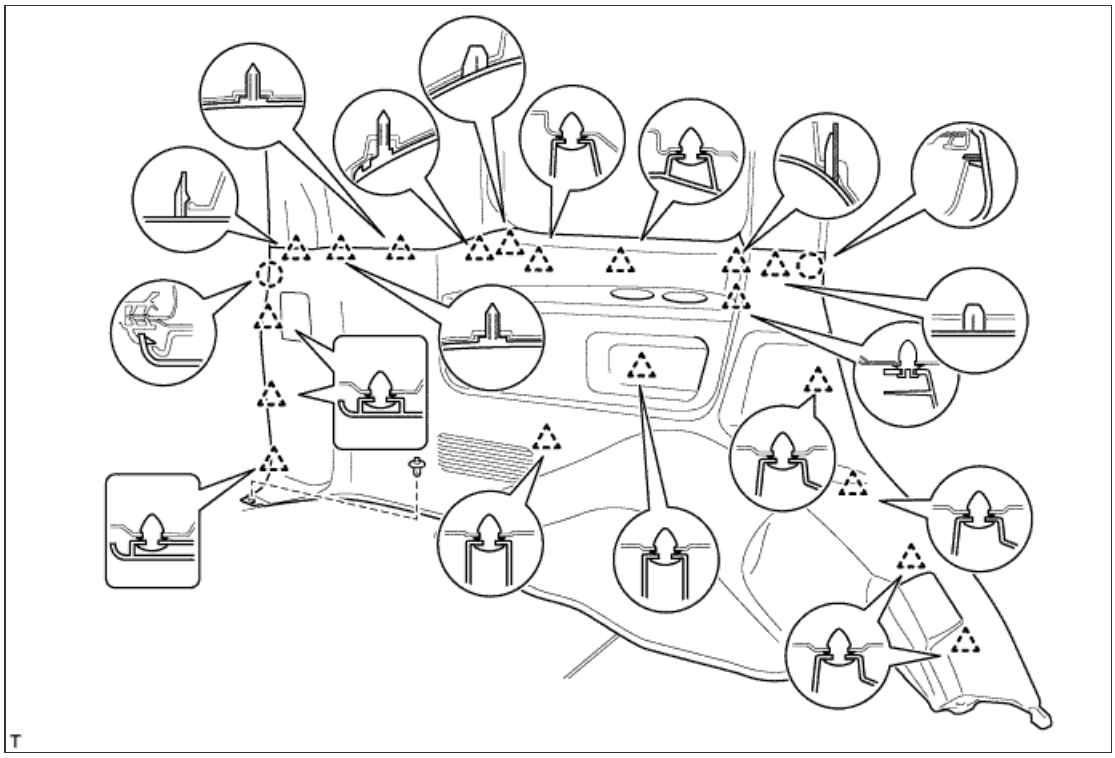


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

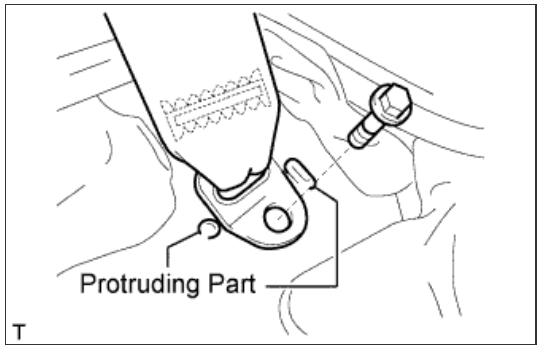


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

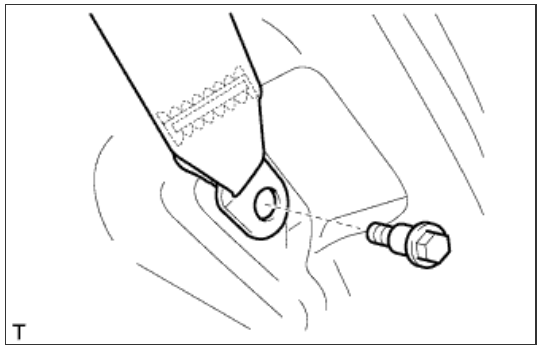
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

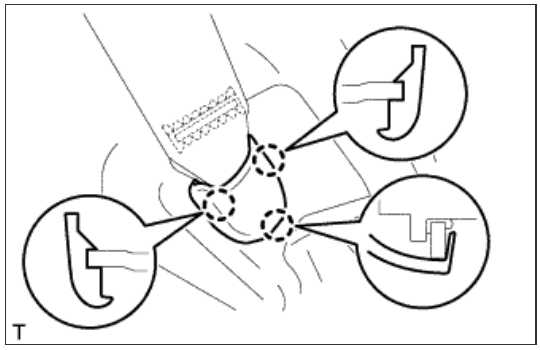


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



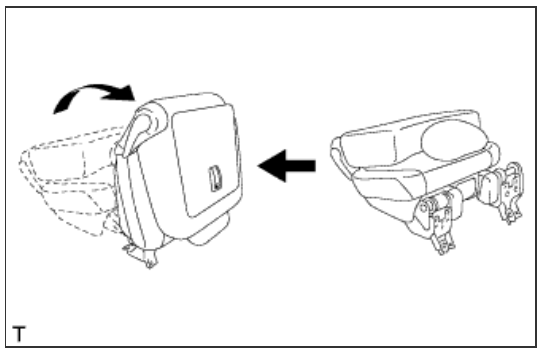
e. Attach the 3 claws to install the cover.



7. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



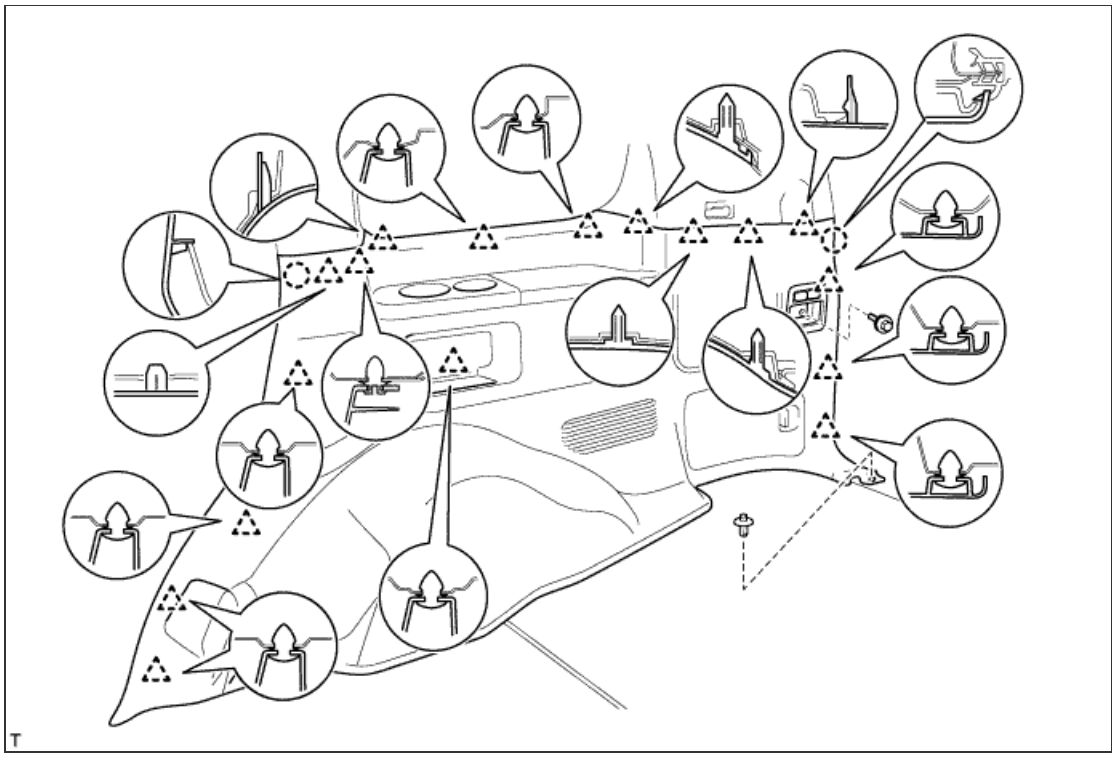
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

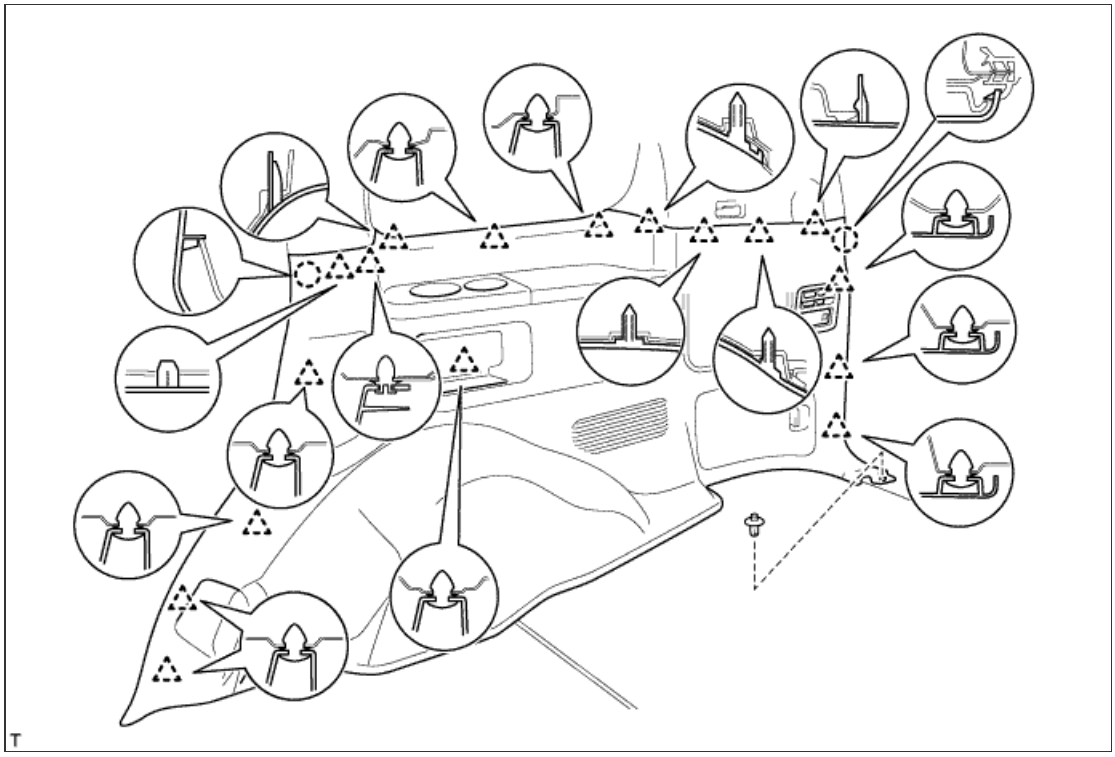


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

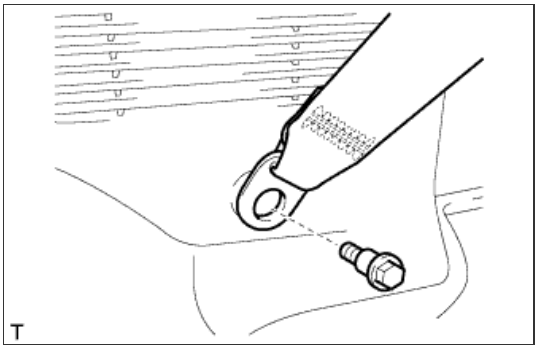
ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

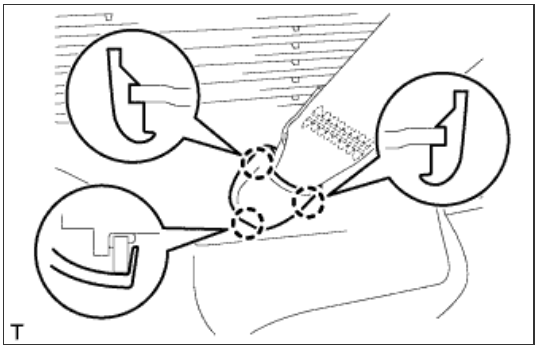


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

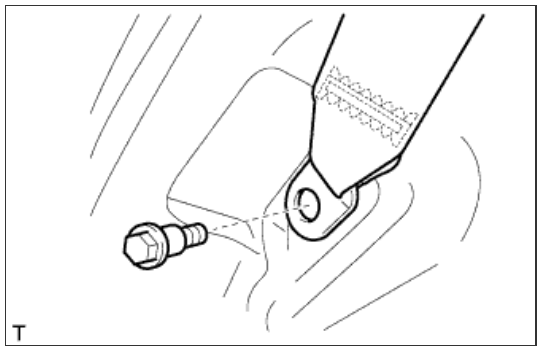


d. Attach the 3 claws to install the cover.

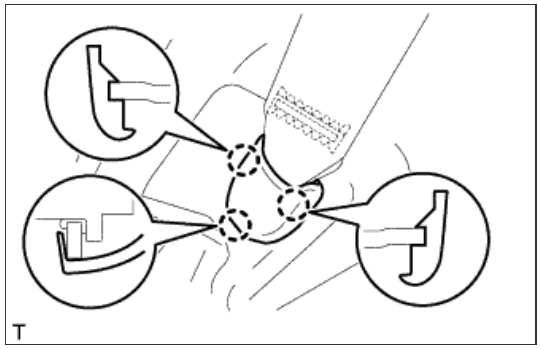


e. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



f. Attach the 3 claws to install the cover.

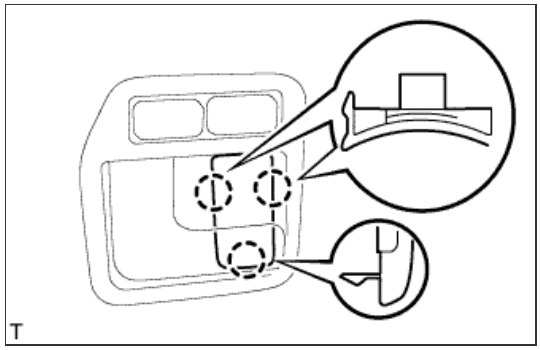


8. INSTALL REAR SEAT COVER CAP

HINT:

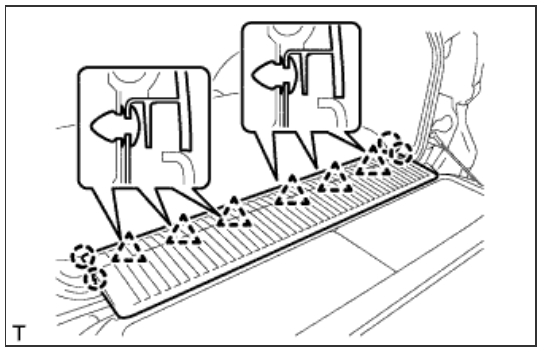
Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.



9. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.



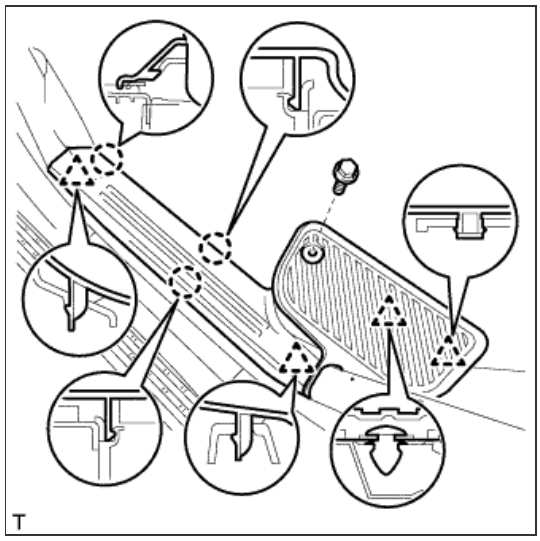
10. INSTALL REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding-up Function:
Install the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Install the rear No. 2 seat assembly (Click here).

11. INSTALL REAR DOOR SCUFF PLATE LH

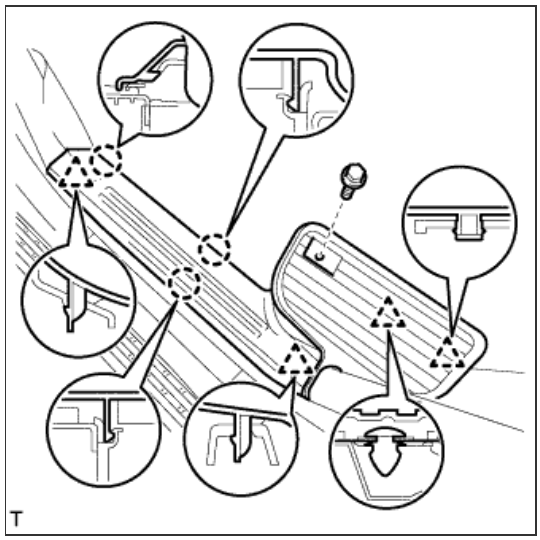
a. w/o Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.

b. w/ Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.

12. INSTALL REAR DOOR SCUFF PLATE RH

HINT:

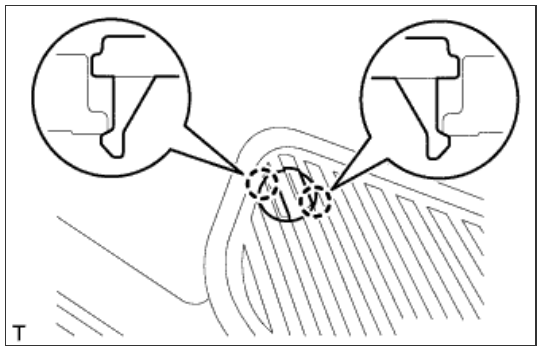
Use the same procedures described for the LH side.

13. INSTALL REAR STEP COVER

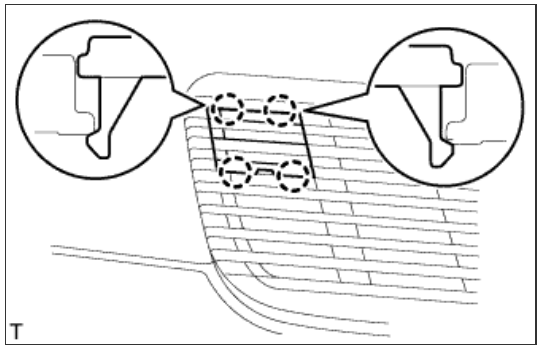
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.

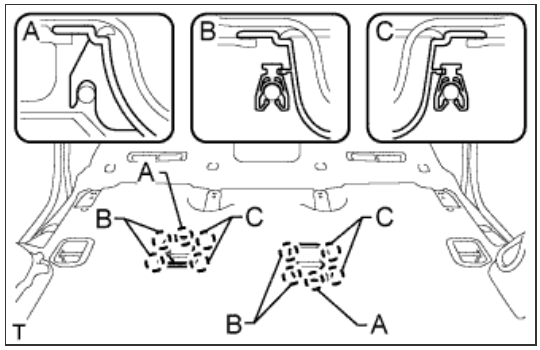


b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



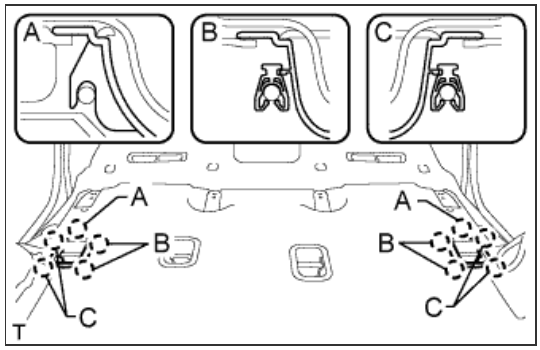
14. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Attach the 10 claws to install the 2 seat protectors.



15. INSTALL REAR NO. 1 SEAT PROTECTOR

a. Attach the 10 claws to install the 2 seat protectors.



16. INSTALL REAR NO. 1 SEAT ASSEMBLY LH

a. Install the rear No. 1 seat assembly LH (Click here).

17. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

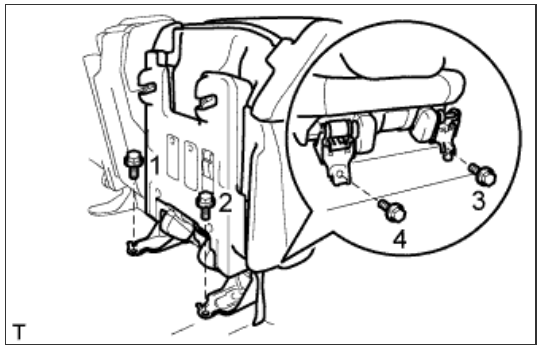
a. Temporarily install the seat assembly with the 4 bolts.

NOTICE:

Be careful not to damage the vehicle body.

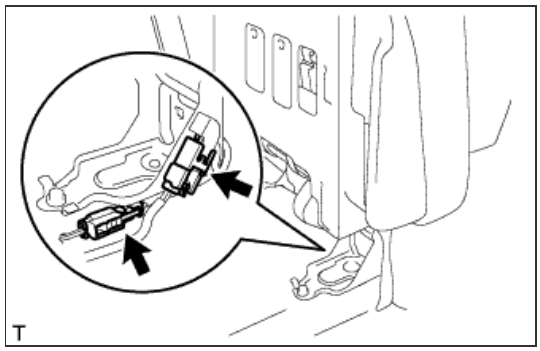
b. Tighten the bolts in the order shown in the illustration.

Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



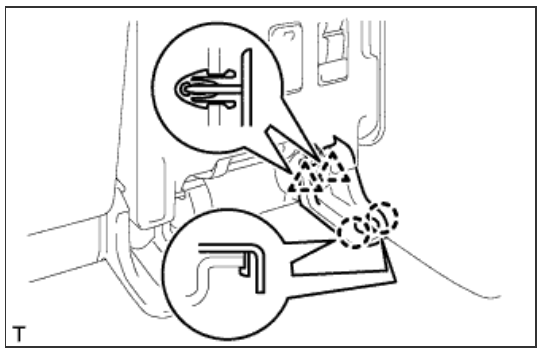
c. Connect the connector.

d. w/ Seat Heater System:
Connect the connector.



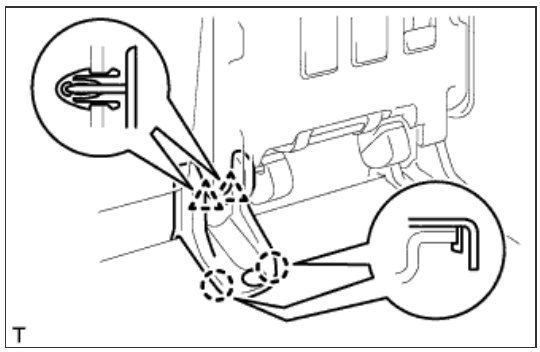
18. INSTALL REAR NO. 3 SEAT CUSHION HINGE COVER

a. Attach the 2 clips and 2 claws to install the cover.



19. INSTALL REAR NO. 1 SEAT CUSHION HINGE COVER

a. Attach the 2 clips and 2 claws to install the cover.

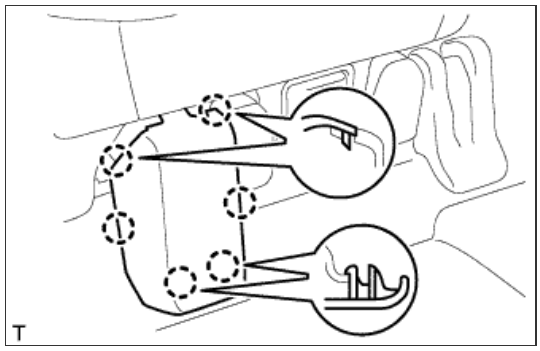


20. INSTALL REAR NO. 4 SEAT CUSHION HINGE COVER

a. Return the seat to the upright position.

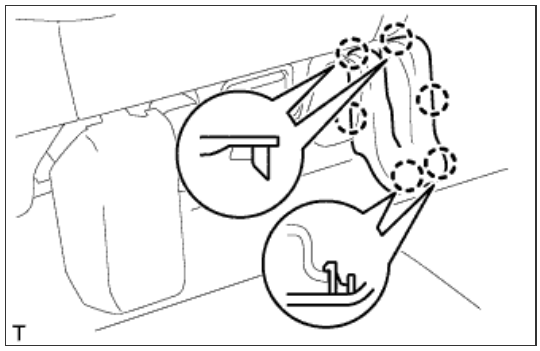
b. Attach the 6 claws to install the cover.

b. Attach the 6 claws to install the cover.



21. INSTALL REAR NO. 2 SEAT CUSHION HINGE COVER

a. Attach the 6 claws to install the cover.



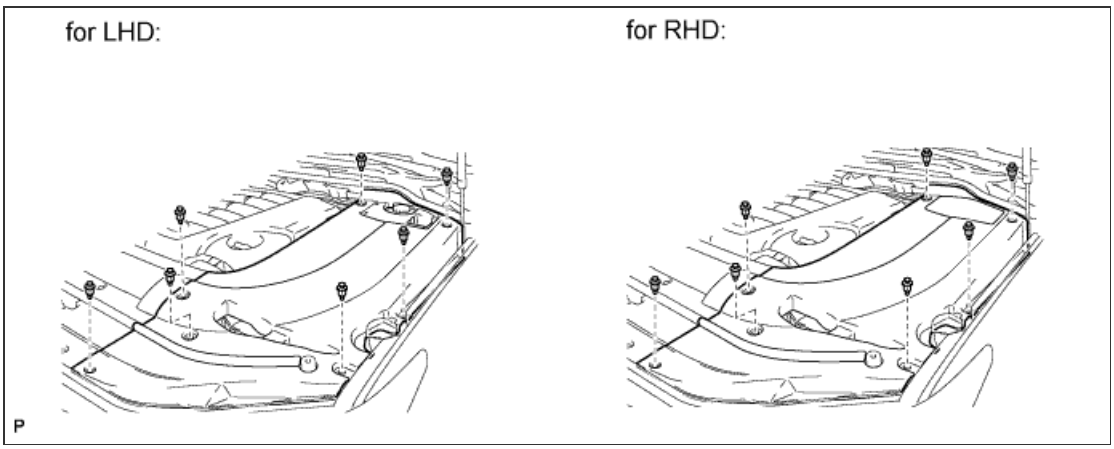
22. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

23. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



24. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

25. INSPECT REAR NO. 1 SEAT ASSEMBLY RH

a. w/ Seat Heater System:
Check the seat heater operation.

i. Turn the engine switch on (IG).

ii. Turn the seat heater switch on.

iii. Wait 5 minutes or more and confirm that the seat surface becomes warm.

for Preparation Click here

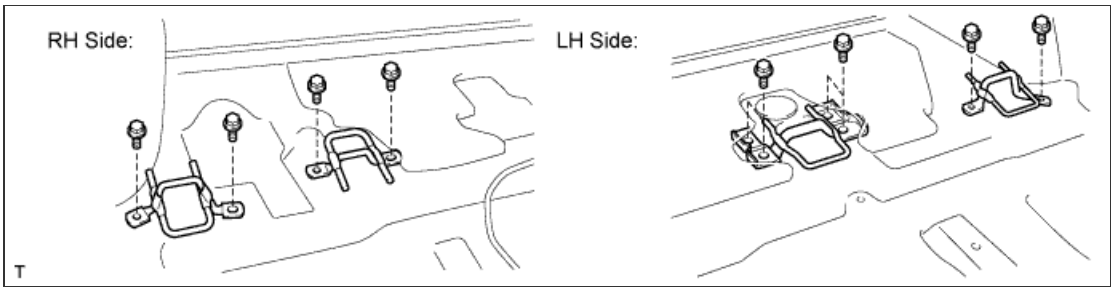
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEAT CUSHION LOCK STRIKER SUB-ASSEMBLY

a. Install the 4 strikers with the 10 bolts.

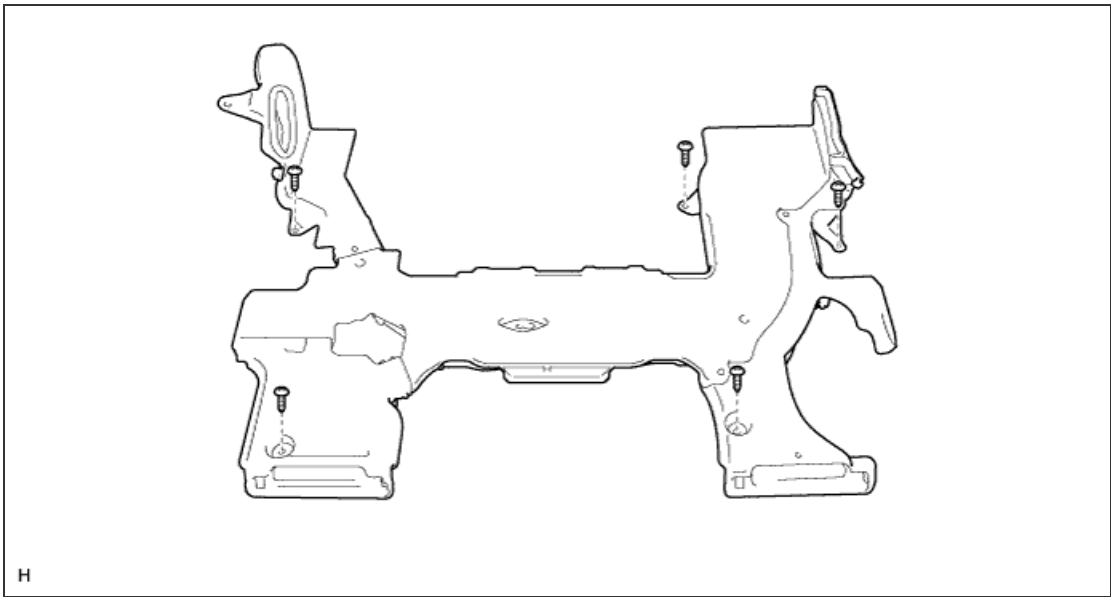
Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



2. INSTALL REAR NO. 6 AIR DUCT

a. Install the duct with the 5 screws.

b. Connect the 2 connectors.



3. INSTALL FRONT FLOOR CARPET ASSEMBLY

a. Install the floor carpet.

b. Install the 2 clips.

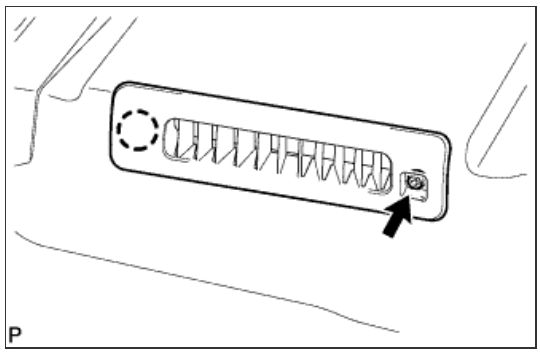
4. INSTALL REAR AIR DUCT GUIDE

HINT:

Use the same procedures for both sides.

a. Attach the claw to install the guide.

b. Install the screw.

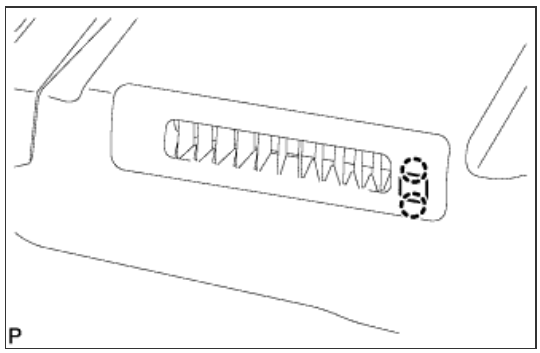


5. INSTALL AIR DUCT PLUG

a. Attach the 2 claws to install the plug.

HINT:

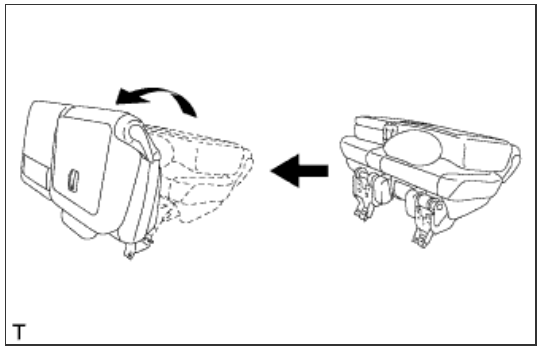
Use the same procedures for both sides.



6. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



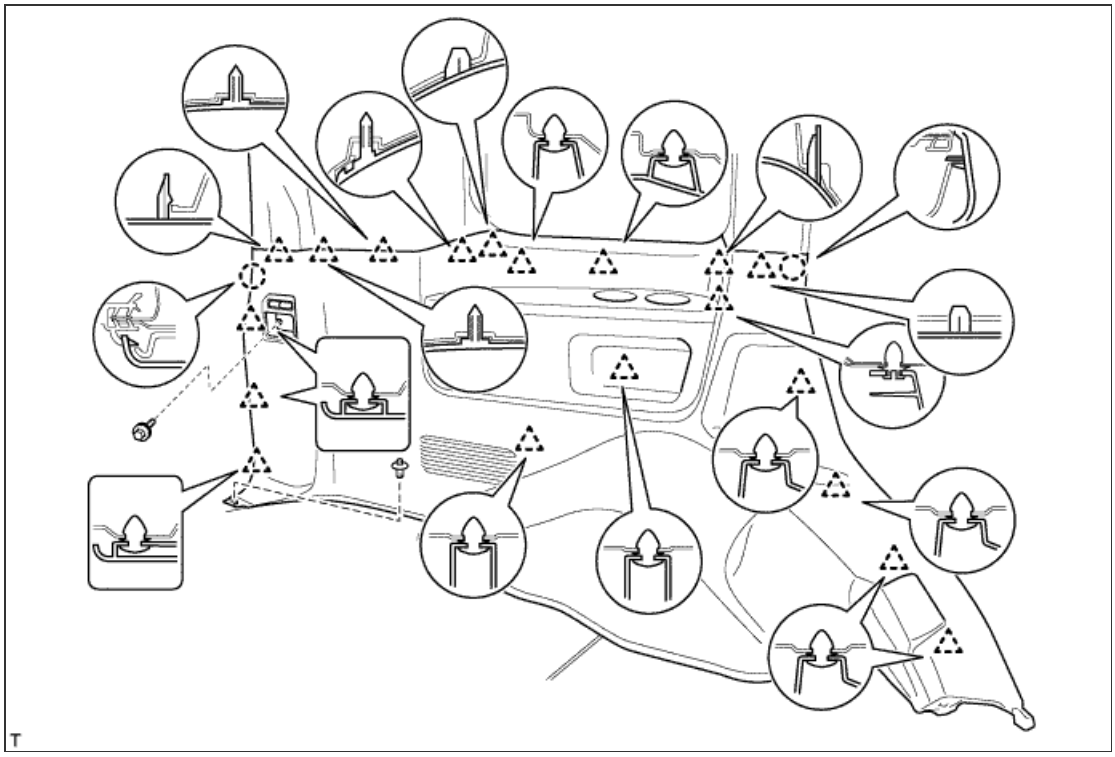
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

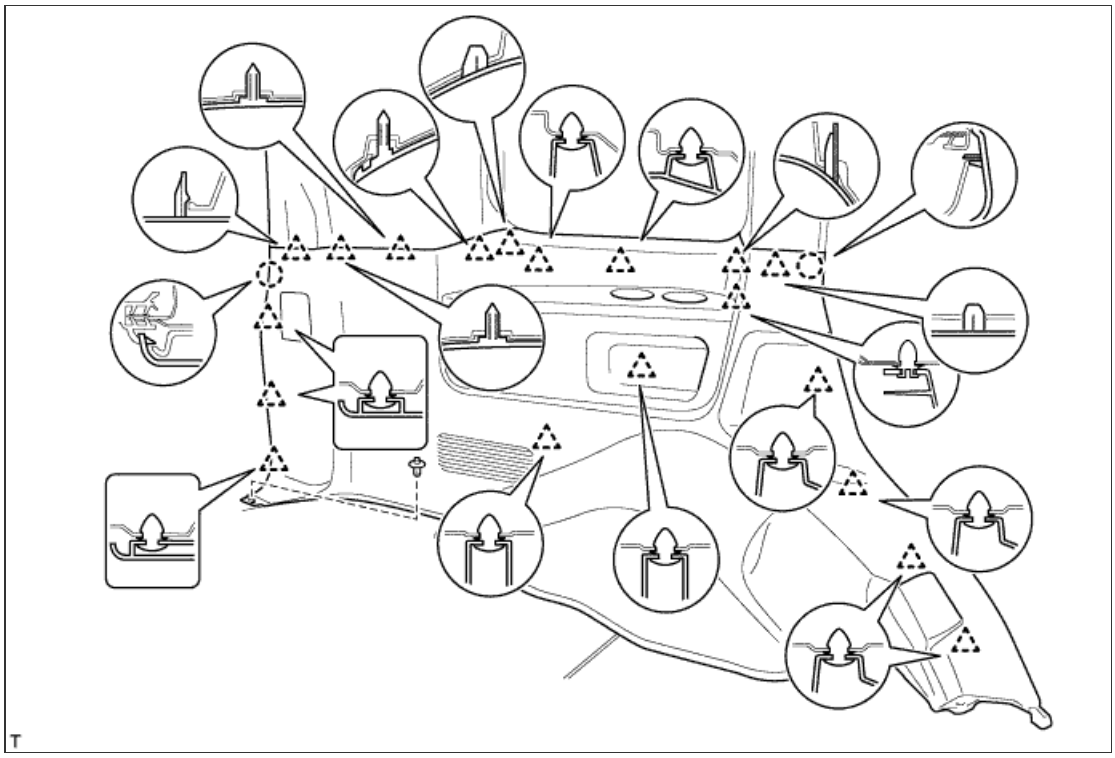


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

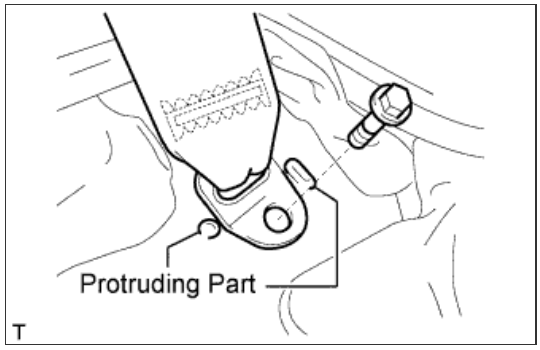


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

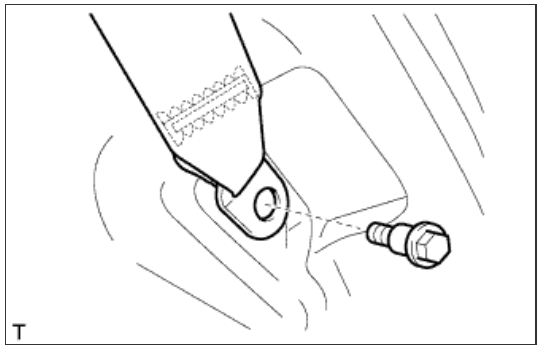
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

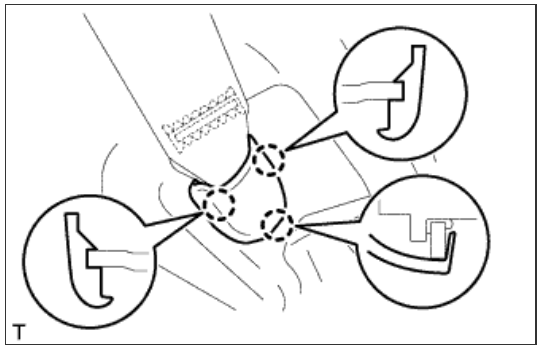


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



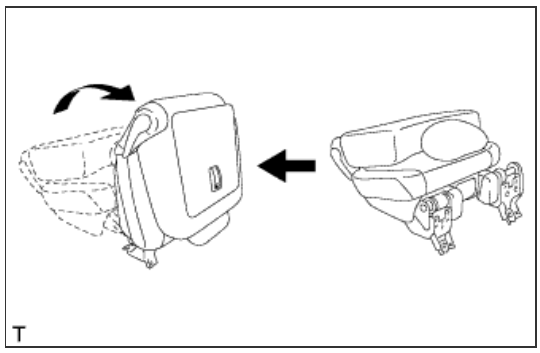
e. Attach the 3 claws to install the cover.



7. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



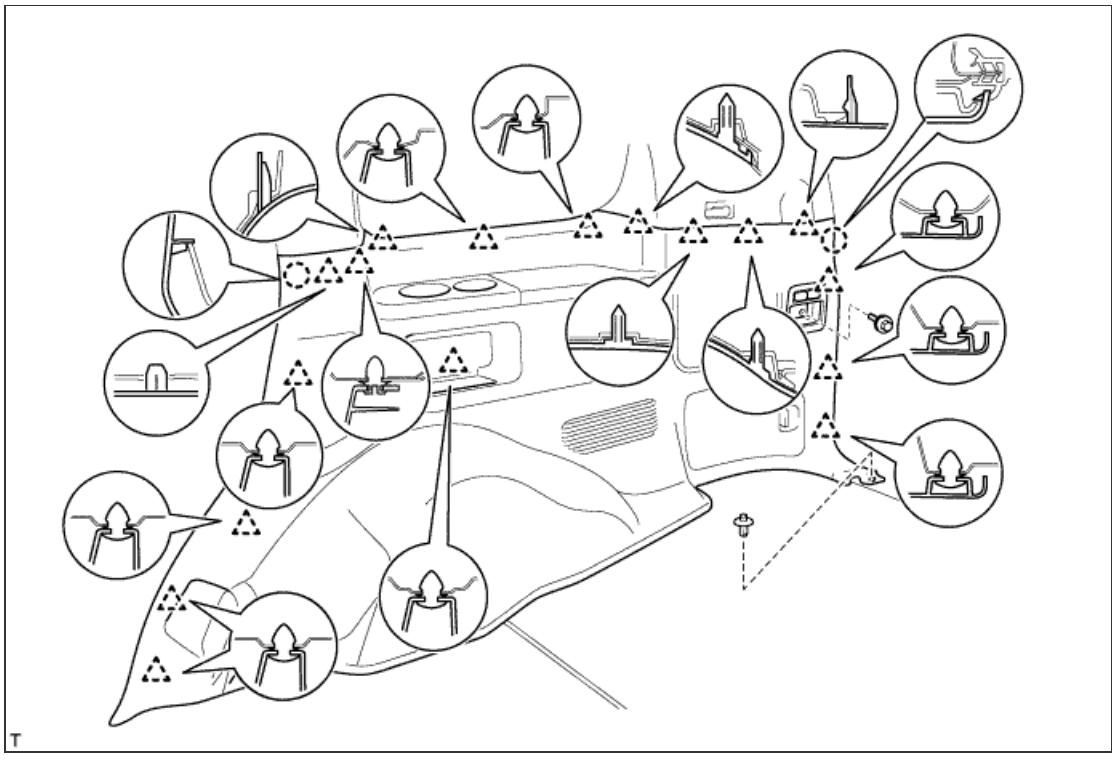
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

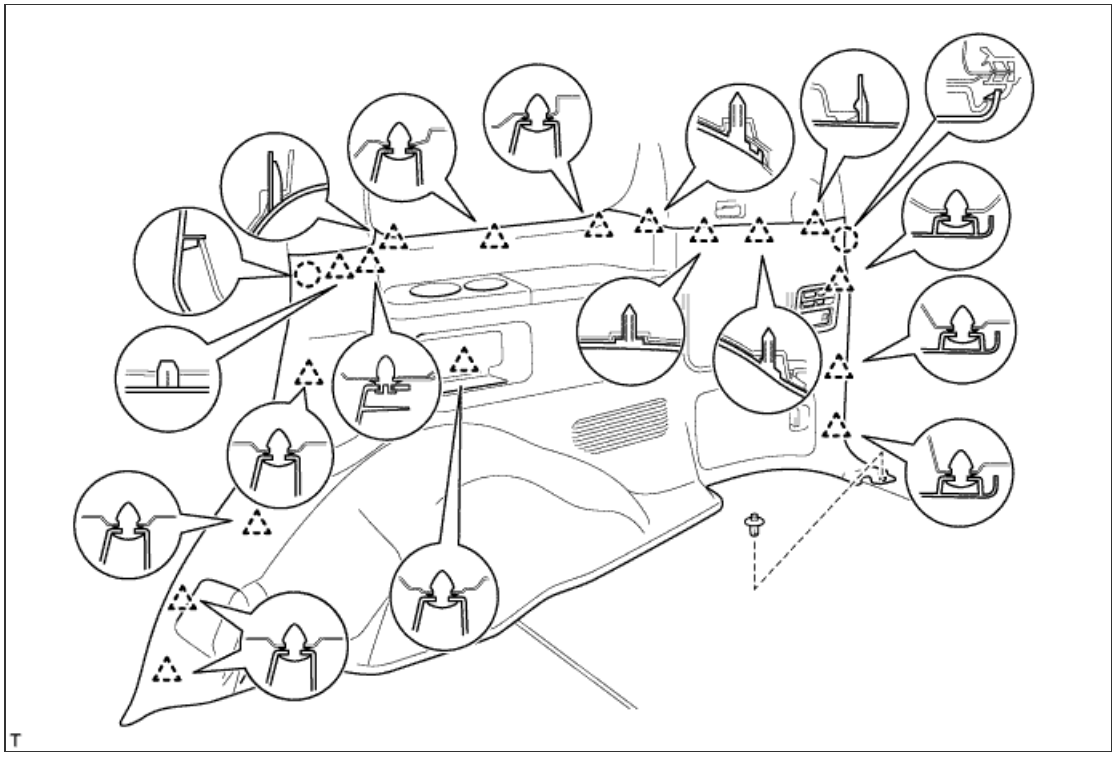


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

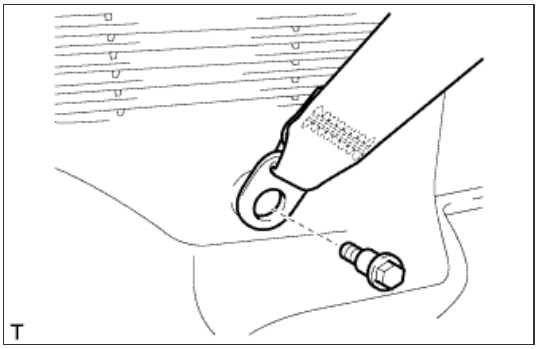
ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

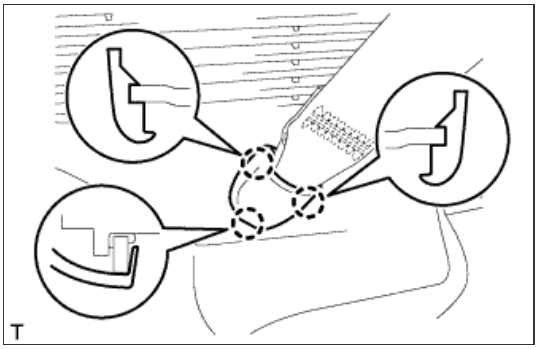


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

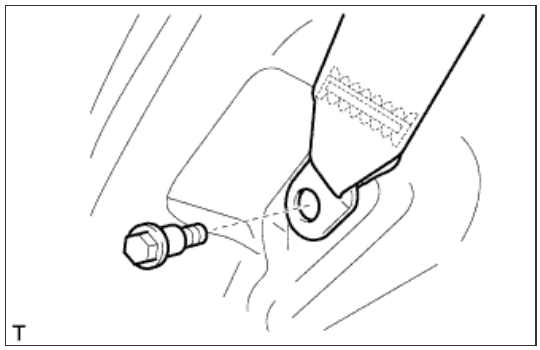


d. Attach the 3 claws to install the cover.

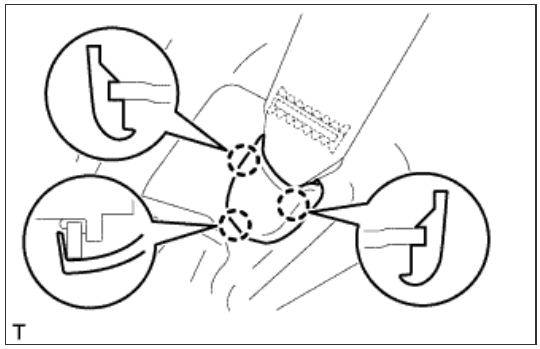


e. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



f. Attach the 3 claws to install the cover.

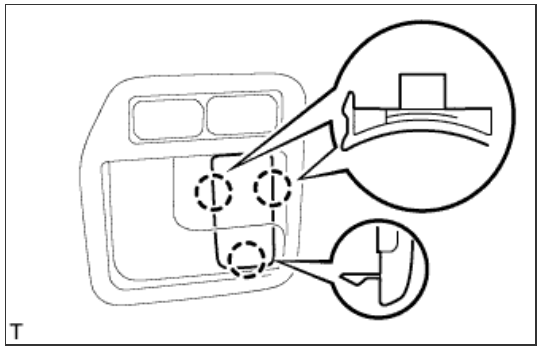


8. INSTALL REAR SEAT COVER CAP

HINT:

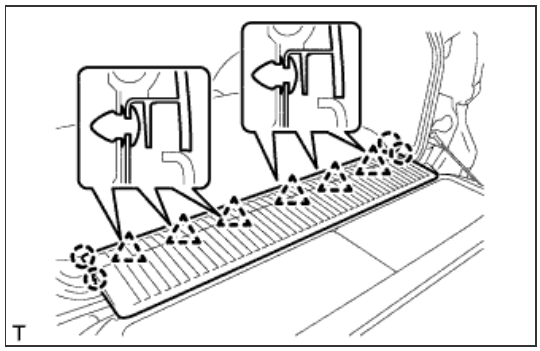
Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.



9. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.



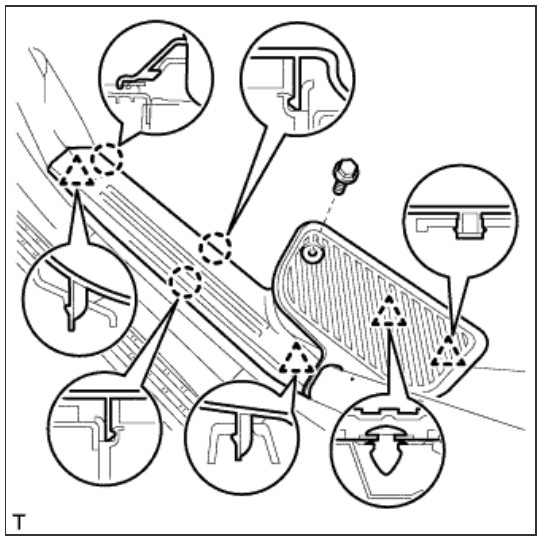
10. INSTALL REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding-up Function:
Install the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Install the rear No. 2 seat assembly (Click here).

11. INSTALL REAR DOOR SCUFF PLATE LH

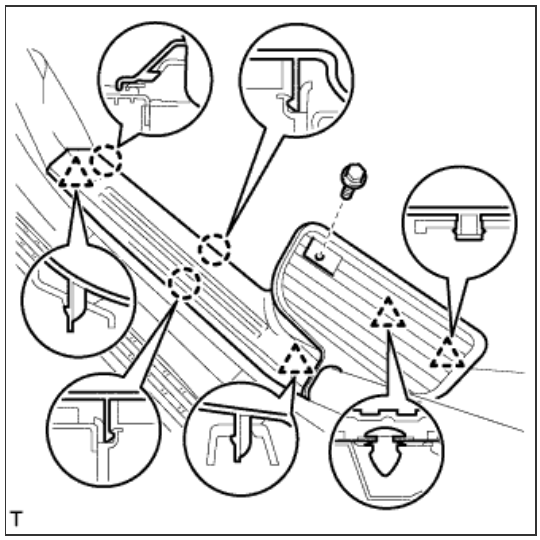
a. w/o Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.

b. w/ Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.

12. INSTALL REAR DOOR SCUFF PLATE RH

HINT:

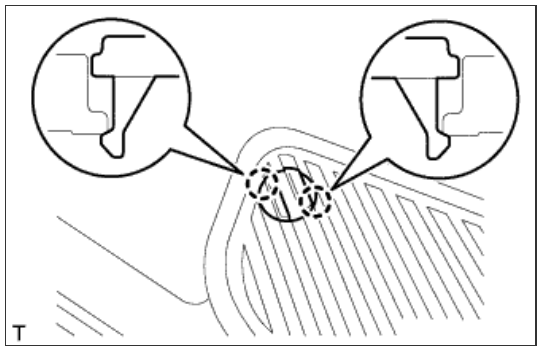
Use the same procedures described for the LH side.

13. INSTALL REAR STEP COVER

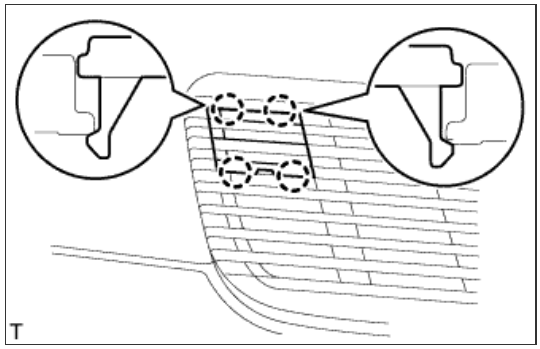
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.

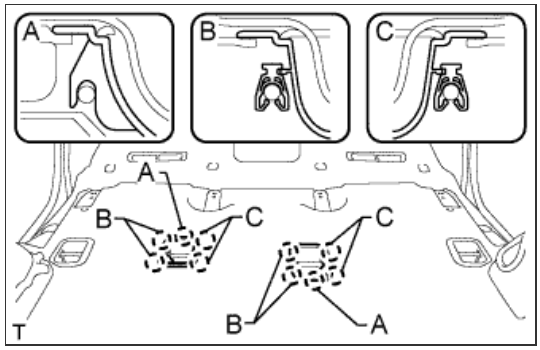


b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



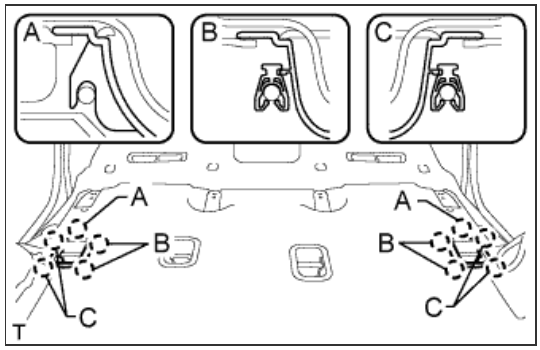
14. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Attach the 10 claws to install the 2 seat protectors.



15. INSTALL REAR NO. 1 SEAT PROTECTOR

a. Attach the 10 claws to install the 2 seat protectors.



16. INSTALL REAR NO. 1 SEAT ASSEMBLY LH

a. Install the rear No. 1 seat assembly LH (Click here).

17. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

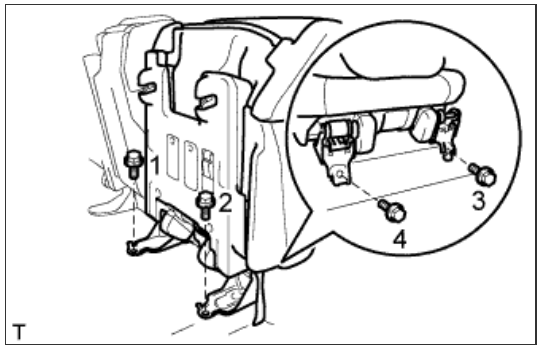
a. Temporarily install the seat assembly with the 4 bolts.

NOTICE:

Be careful not to damage the vehicle body.

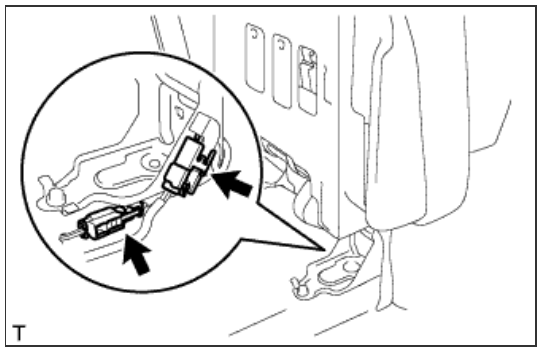
b. Tighten the bolts in the order shown in the illustration.

Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



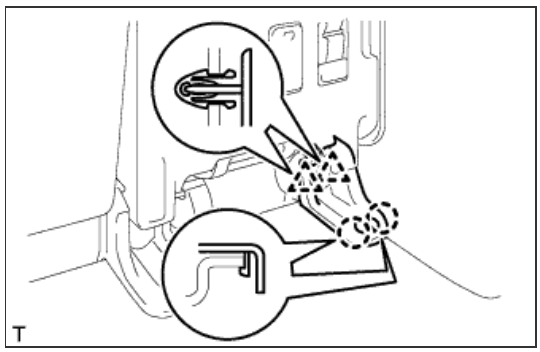
c. Connect the connector.

d. w/ Seat Heater System:
Connect the connector.



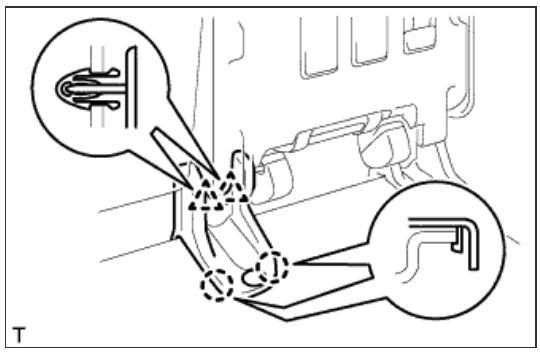
18. INSTALL REAR NO. 3 SEAT CUSHION HINGE COVER

a. Attach the 2 clips and 2 claws to install the cover.



19. INSTALL REAR NO. 1 SEAT CUSHION HINGE COVER

a. Attach the 2 clips and 2 claws to install the cover.

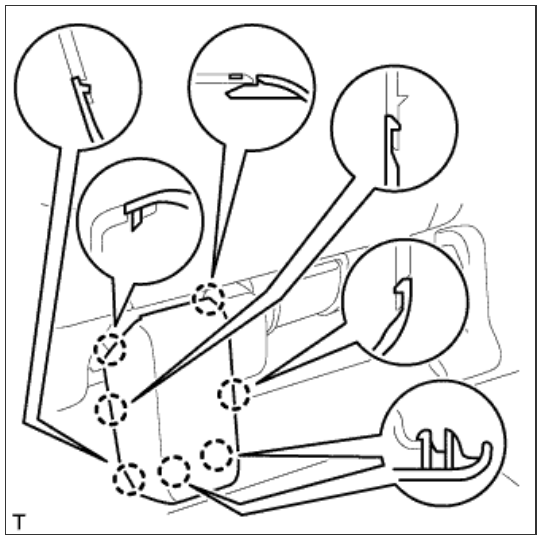


20. INSTALL REAR NO. 4 SEAT CUSHION HINGE COVER

a. Return the seat to the upright position.

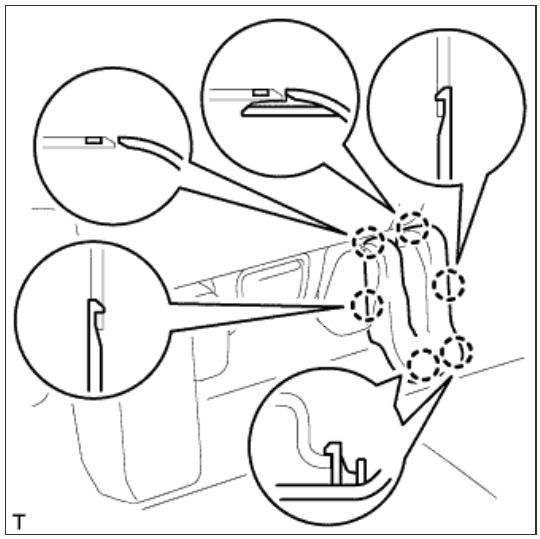
b. Attach the 7 claws to install the cover.

b. Attach the 7 claws to install the cover.



21. INSTALL REAR NO. 2 SEAT CUSHION HINGE COVER

a. Attach the 6 claws to install the cover.



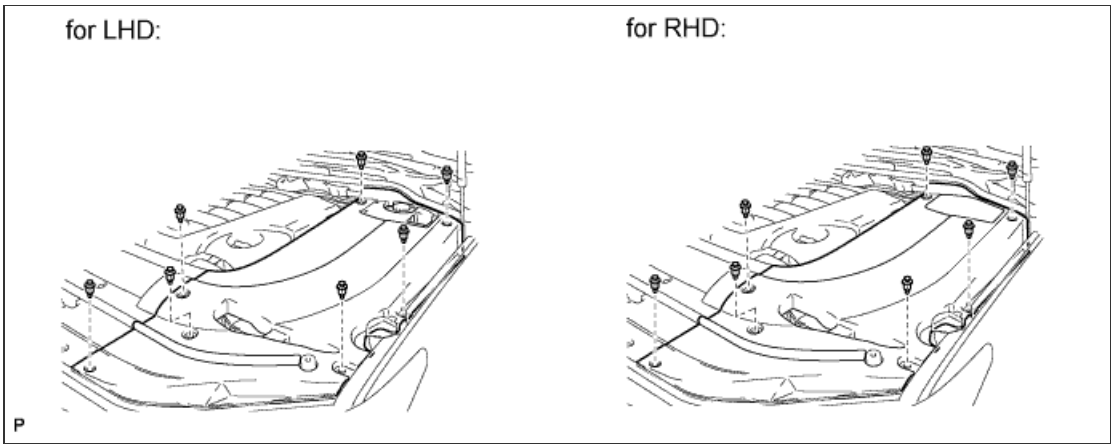
22. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

23. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



24. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

25. INSPECT REAR NO. 1 SEAT ASSEMBLY RH

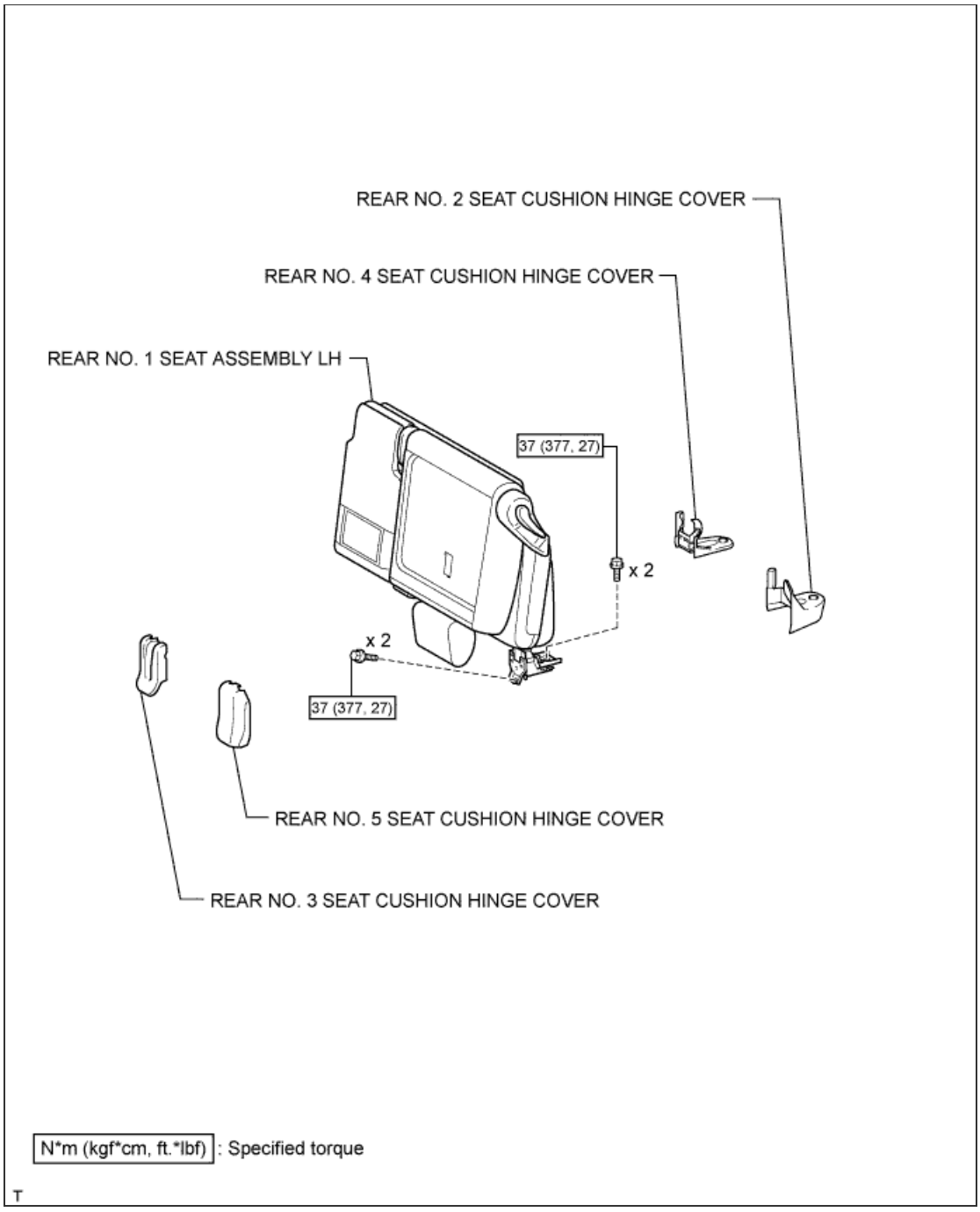
a. w/ Seat Heater System:
Check the seat heater operation.

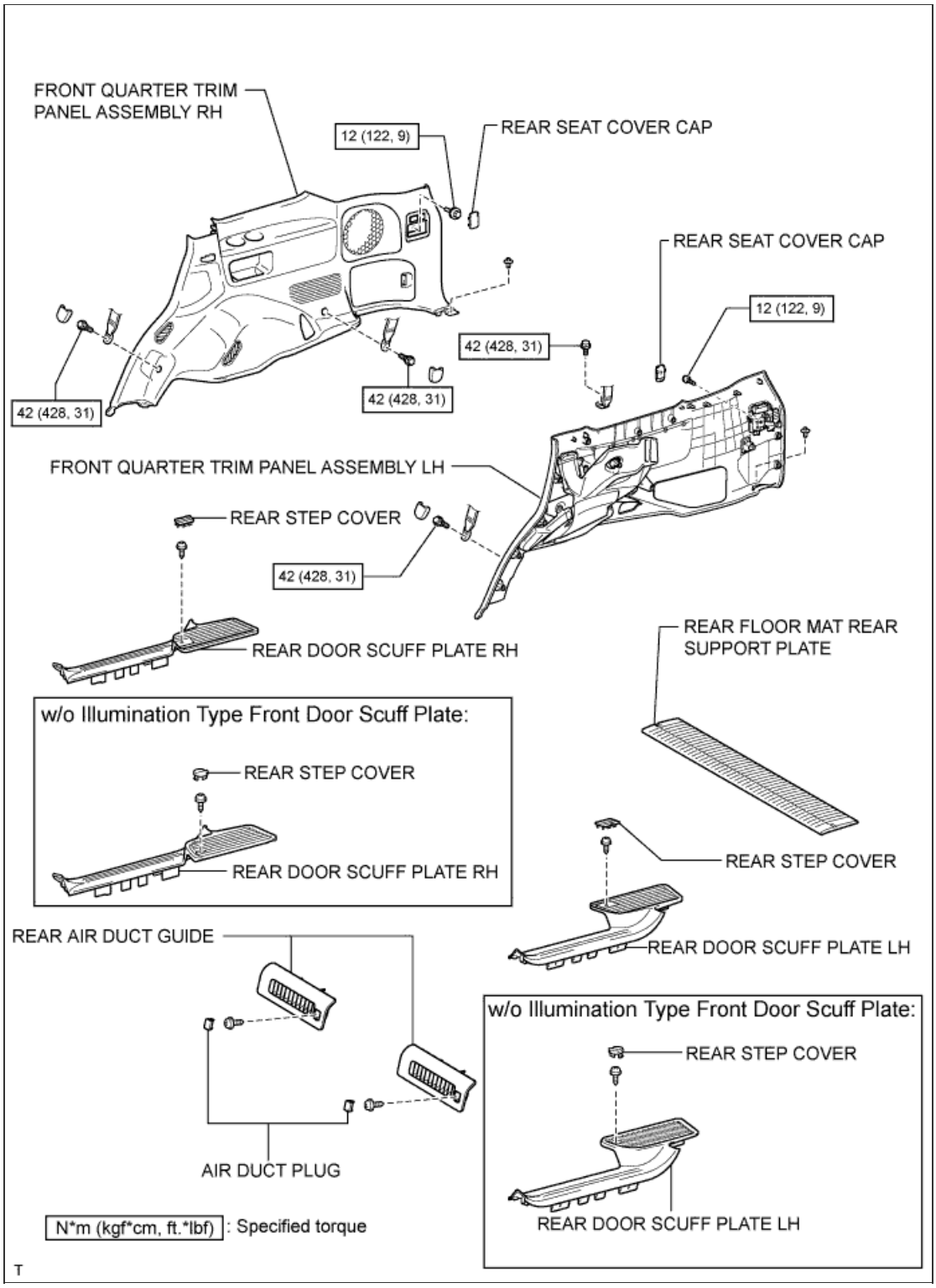
i. Turn the engine switch on (IG).

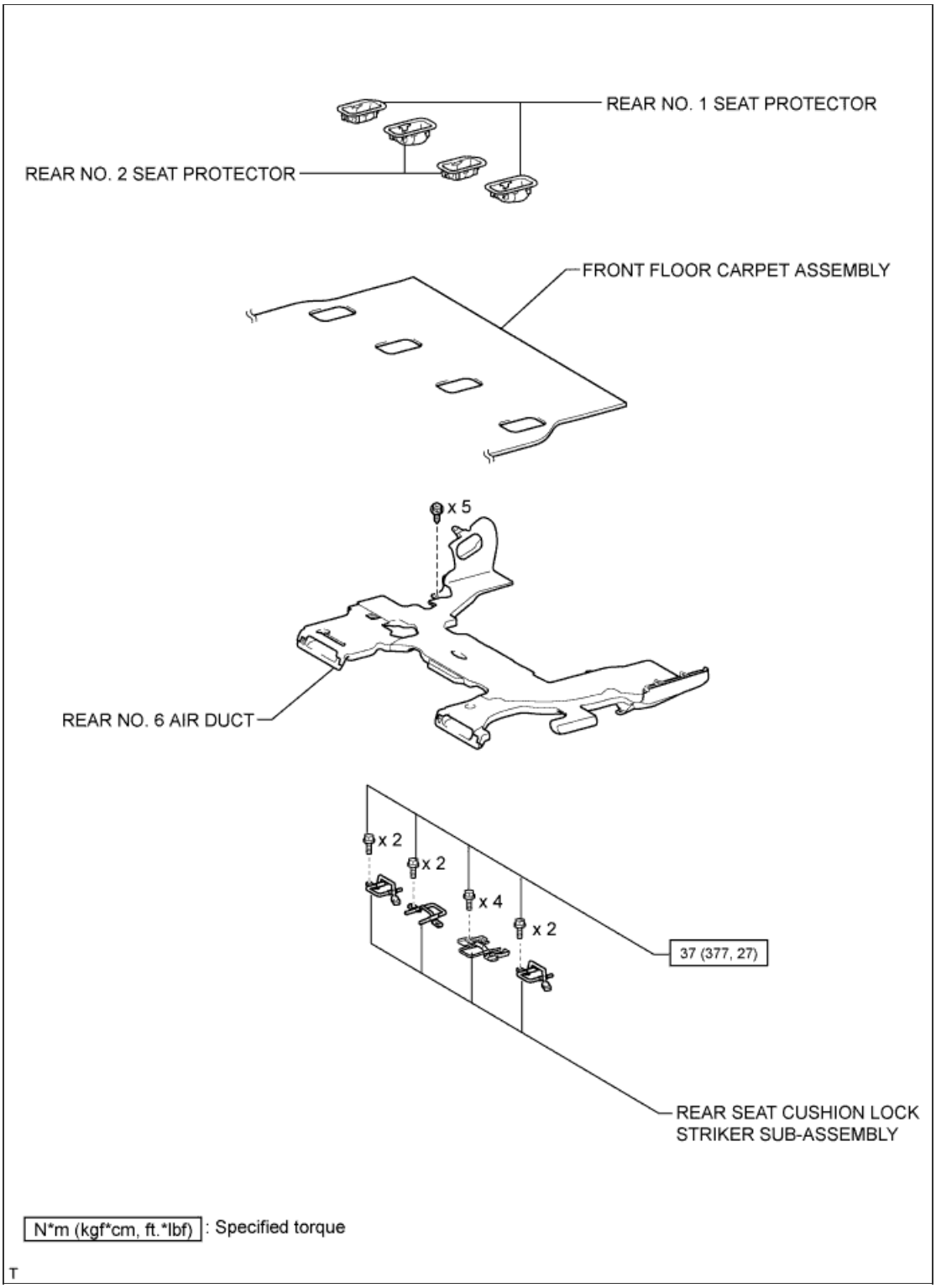
ii. Turn the seat heater switch on.

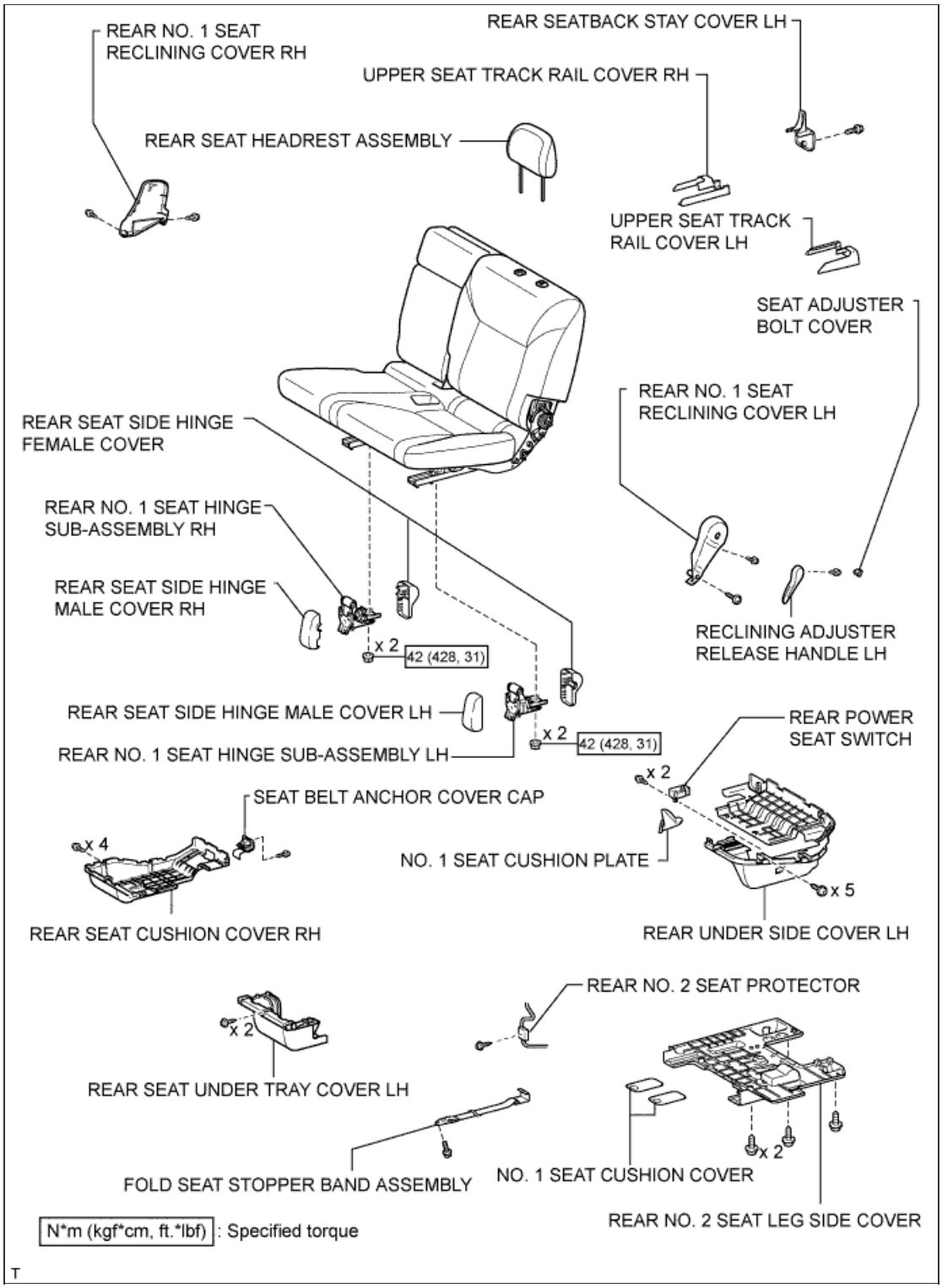
iii. Wait 5 minutes or more and confirm that the seat surface becomes warm.

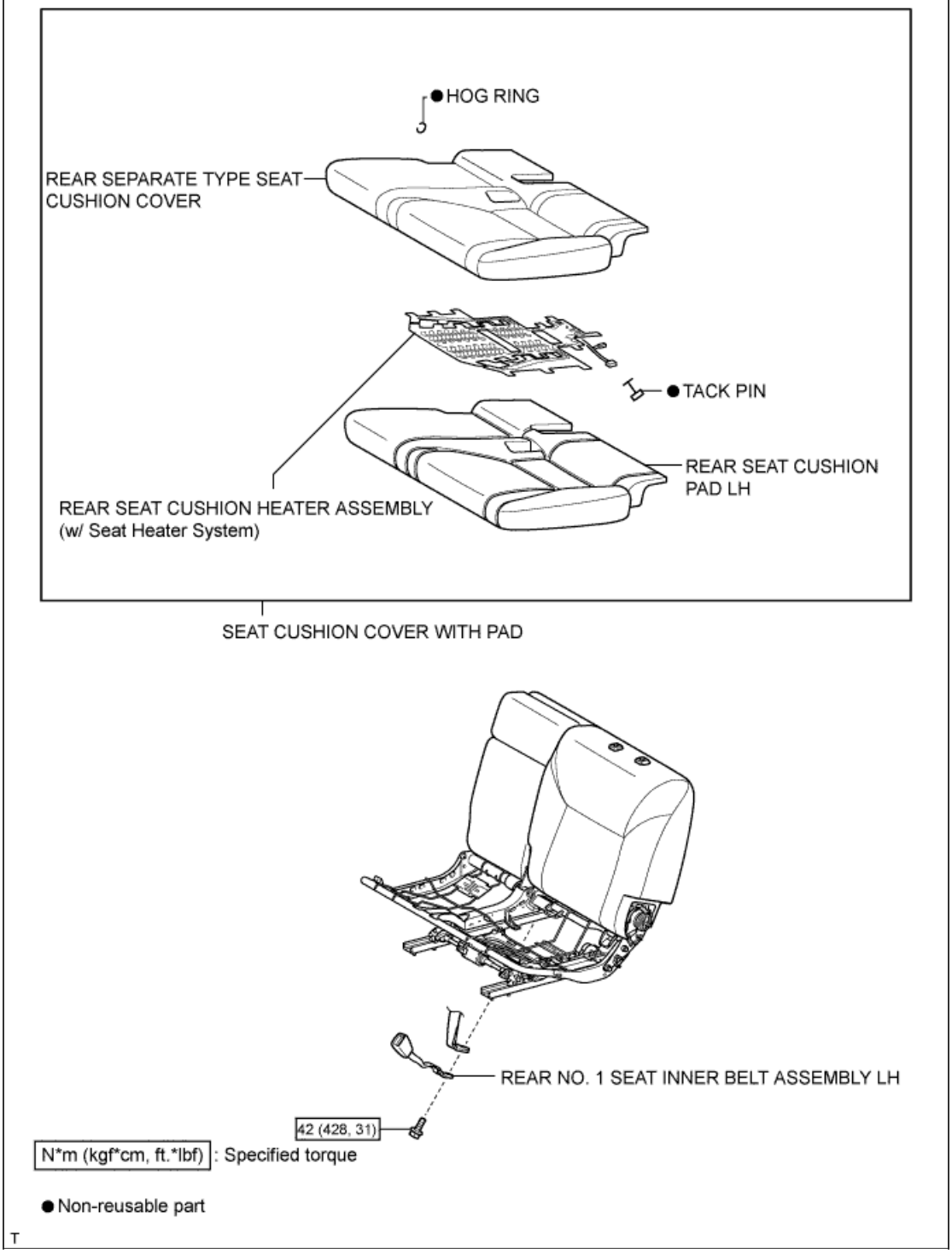
for Preparation Click here



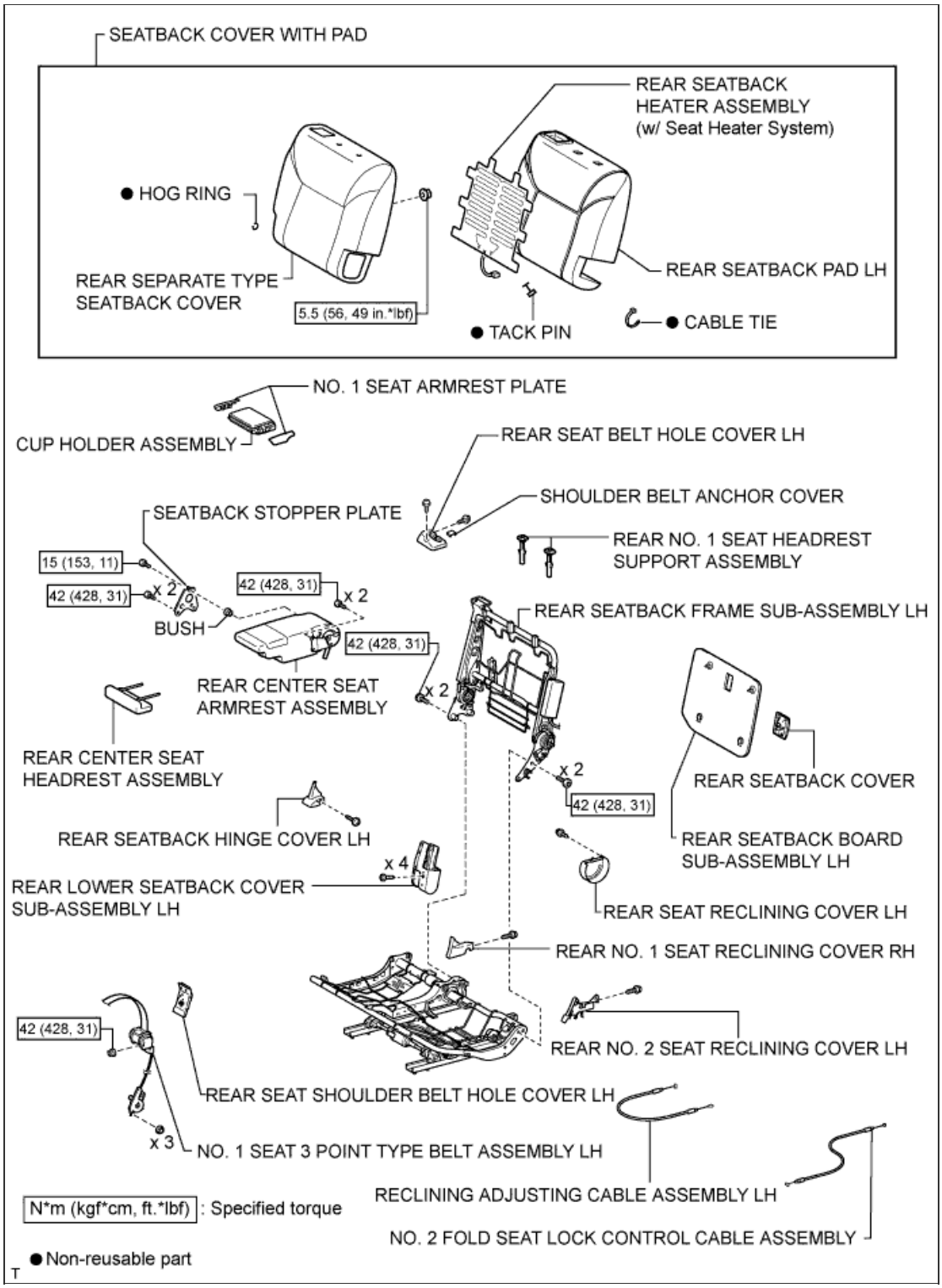

FRONT QUARTER TRIM PANEL ASSEMBLY RH
12 (122, 9)
REAR SEAT COVER CAP
REAR SEAT COVER CAP
12 (122, 9)
42 (428, 31)
42 (428, 31)
42 (428, 31)
FRONT QUARTER TRIM PANEL ASSEMBLY LH
REAR STEP COVER
42 (428, 31)
REAR DOOR SCUFF PLATE RH
REAR FLOOR MAT REAR SUPPORT PLATE
w/o Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE RH
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
REAR AIR DUCT GUIDE
AIR DUCT PLUG
w/o Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
N*m (kgf*cm, ft.*lbf) : Specified torque
T

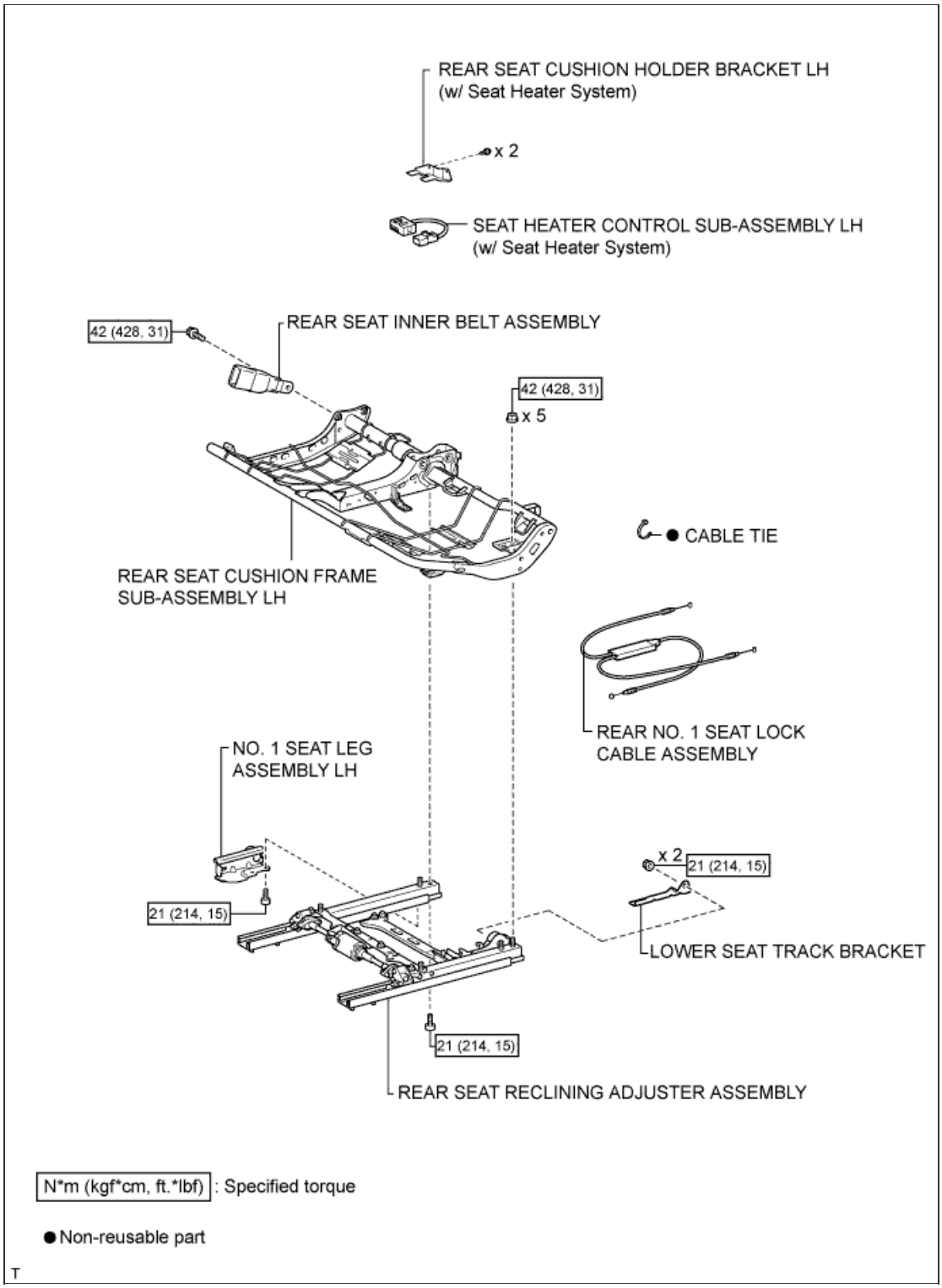

REAR NO. 1 SEAT PROTECTOR
REAR NO. 2 SEAT PROTECTOR
FRONT FLOOR CARPET ASSEMBLY
x 5
REAR NO. 6 AIR DUCT
x 2
x 2
x 4
x 2
37 (377, 27)
REAR SEAT CUSHION LOCK STRIKER SUB-ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
T


REAR NO. 1 SEAT RECLINING COVER RH
REAR SEATBACK STAY COVER LH
UPPER SEAT TRACK RAIL COVER RH
REAR SEAT HEADREST ASSEMBLY
UPPER SEAT TRACK RAIL COVER LH
SEAT ADJUSTER BOLT COVER
REAR SEAT SIDE HINGE FEMALE COVER
REAR NO. 1 SEAT RECLINING COVER LH
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH
REAR SEAT SIDE HINGE MALE COVER RH
x 2
42 (428, 31)
RECLINING ADJUSTER RELEASE HANDLE LH
REAR SEAT SIDE HINGE MALE COVER LH
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH
x 2
42 (428, 31)
REAR POWER SEAT SWITCH
x 2
SEAT BELT ANCHOR COVER CAP
x 4
NO. 1 SEAT CUSHION PLATE
x 5
REAR SEAT CUSHION COVER RH
REAR UNDER SIDE COVER LH
REAR NO. 2 SEAT PROTECTOR
x 2
REAR SEAT UNDER TRAY COVER LH
x 2
FOLD SEAT STOPPER BAND ASSEMBLY
NO. 1 SEAT CUSHION COVER
REAR NO. 2 SEAT LEG SIDE COVER
N*m (kgf*cm, ft.*lbf) : Specified torque
T


●HOG RING
REAR SEPARATE TYPE SEAT CUSHION COVER
●TACK PIN
REAR SEAT CUSHION PAD LH
REAR SEAT CUSHION HEATER ASSEMBLY (w/ Seat Heater System)
SEAT CUSHION COVER WITH PAD
REAR NO. 1 SEAT INNER BELT ASSEMBLY LH
42 (428, 31)
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part

T


SEATBACK COVER WITH PAD
REAR SEATBACK HEATER ASSEMBLY (w/ Seat Heater System)
● HOG RING
REAR SEPARATE TYPE SEATBACK COVER
5.5 (56, 49 in.*lbf)
REAR SEATBACK PAD LH
● TACK PIN
● CABLE TIE
NO. 1 SEAT ARMREST PLATE
CUP HOLDER ASSEMBLY
REAR SEAT BELT HOLE COVER LH
SHOULDER BELT ANCHOR COVER
SEATBACK STOPPER PLATE
REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY
15 (153, 11)
42 (428, 31)
x 2
42 (428, 31)
x 2
BUSH
42 (428, 31)
REAR SEATBACK FRAME SUB-ASSEMBLY LH
REAR CENTER SEAT ARMREST ASSEMBLY
x 2
REAR CENTER SEAT HEADREST ASSEMBLY
x 2
42 (428, 31)
REAR SEATBACK COVER
REAR SEATBACK HINGE COVER LH
REAR SEATBACK BOARD SUB-ASSEMBLY LH
x 4
REAR LOWER SEATBACK COVER SUB-ASSEMBLY LH
REAR SEAT RECLINING COVER LH
REAR NO. 1 SEAT RECLINING COVER RH
42 (428, 31)
REAR NO. 2 SEAT RECLINING COVER LH
REAR SEAT SHOULDER BELT HOLE COVER LH
x 3
NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH
RECLINING ADJUSTING CABLE ASSEMBLY LH
N*m (kgf*cm, ft.*lbf) : Specified torque
NO. 2 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY
● Non-reusable part
T


REAR SEAT CUSHION HOLDER BRACKET LH
(w/ Seat Heater System)
x 2
SEAT HEATER CONTROL SUB-ASSEMBLY LH
(w/ Seat Heater System)
42 (428, 31)
REAR SEAT INNER BELT ASSEMBLY
42 (428, 31)
x 5
CABLE TIE
REAR SEAT CUSHION FRAME
SUB-ASSEMBLY LH
REAR NO. 1 SEAT LOCK
CABLE ASSEMBLY
NO. 1 SEAT LEG
ASSEMBLY LH
x 2
21 (214, 15)
21 (214, 15)
LOWER SEAT TRACK BRACKET
21 (214, 15)
REAR SEAT RECLINING ADJUSTER ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part

T

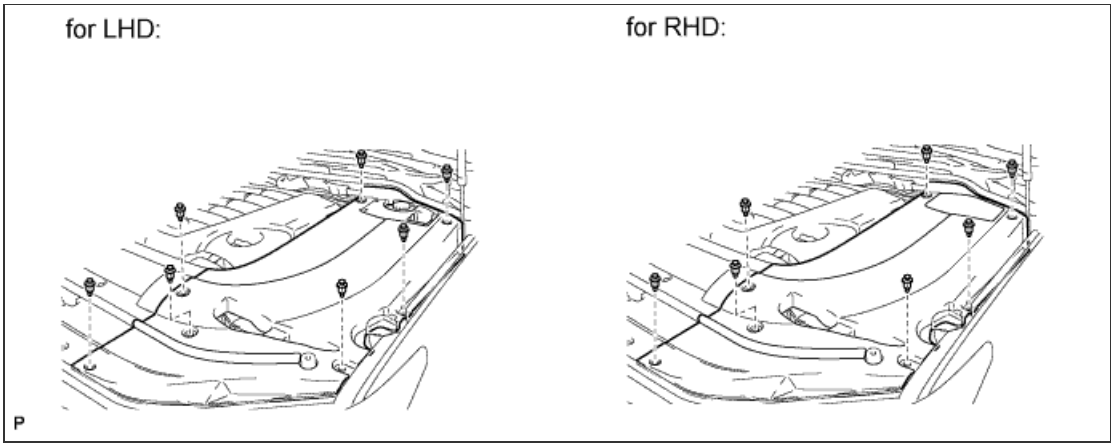
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

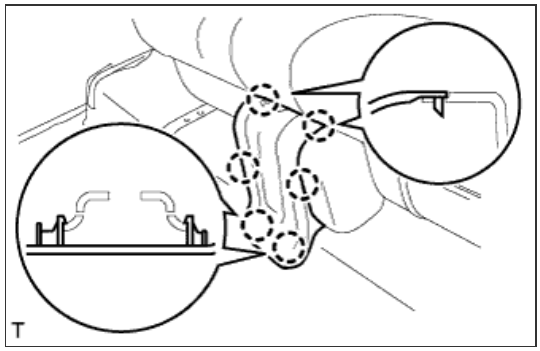
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE REAR NO. 3 SEAT CUSHION HINGE COVER

a. Using a screwdriver, detach the 6 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

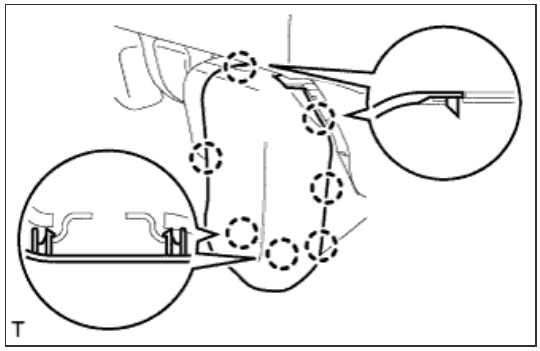


4. REMOVE REAR NO. 5 SEAT CUSHION HINGE COVER

a. Using a screwdriver, detach the 7 claws and remove the cover.

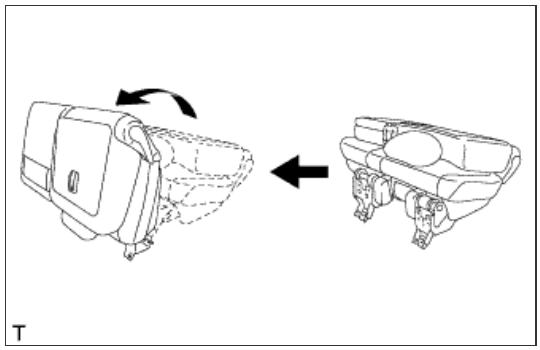
HINT:

Tape the screwdriver tip before use.



5. REMOVE REAR NO. 2 SEAT CUSHION HINGE COVER

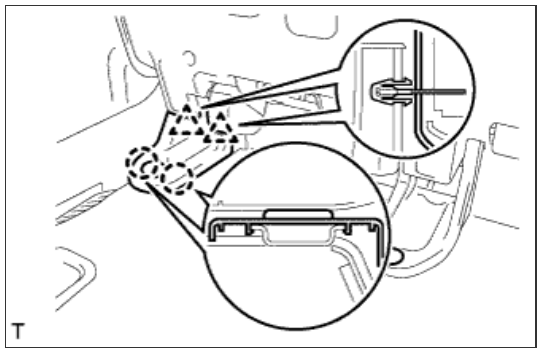
a. Operate the reclining adjuster release handle to move the seat into the position shown in the illustration.



b. Using a screwdriver, detach the 2 claws and 2 clips, and remove the cover.

HINT:

Tape the screwdriver tip before use.

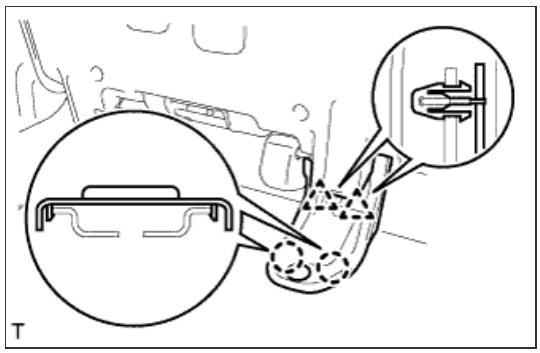


6. REMOVE REAR NO. 4 SEAT CUSHION HINGE COVER

a. Using a screwdriver, detach the 2 claws and 2 clips, and remove the cover.

HINT:

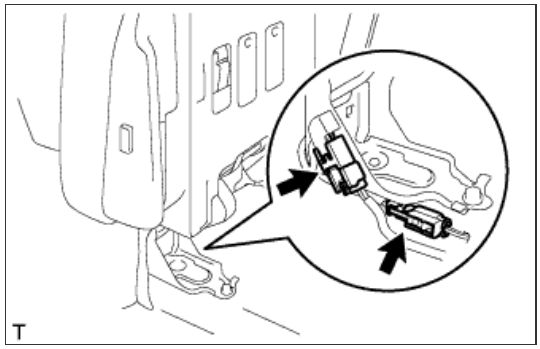
Tape the screwdriver tip before use.



7. REMOVE REAR NO. 1 SEAT ASSEMBLY LH

a. Disconnect the connector.

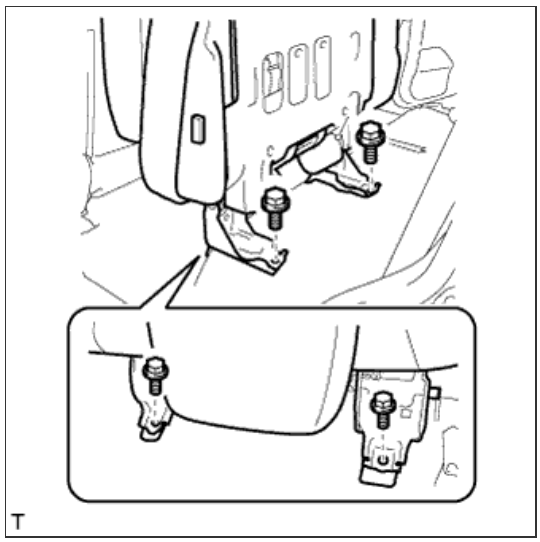
b. w/ Seat Heater System:
Disconnect the connector.



c. Remove the 4 bolts and seat assembly.

NOTICE:

Be careful not to damage the vehicle body.

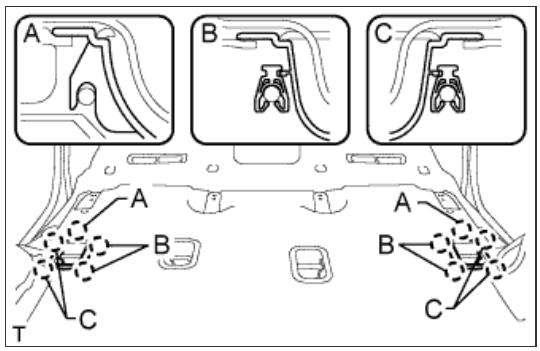


8. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

a. Remove the rear No. 1 seat assembly RH (Click here).

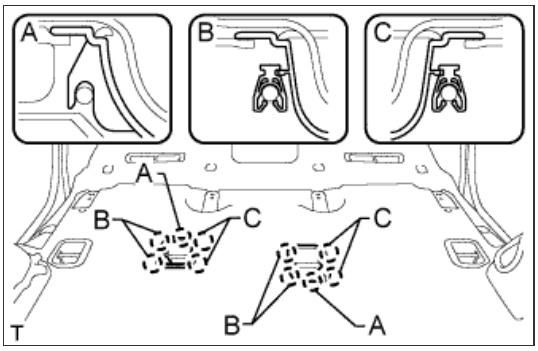
9. REMOVE REAR NO. 1 SEAT PROTECTOR

a. Detach the 10 claws and remove the 2 seat protectors.



10. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the 10 claws and remove the 2 seat protectors.

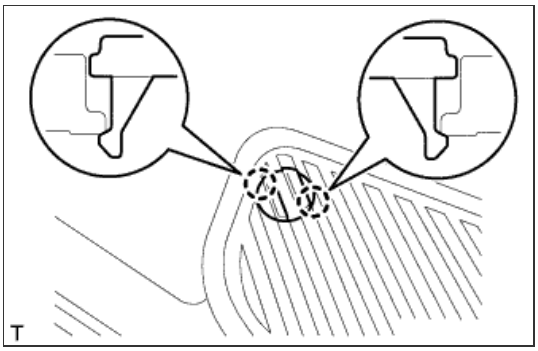


11. REMOVE REAR STEP COVER

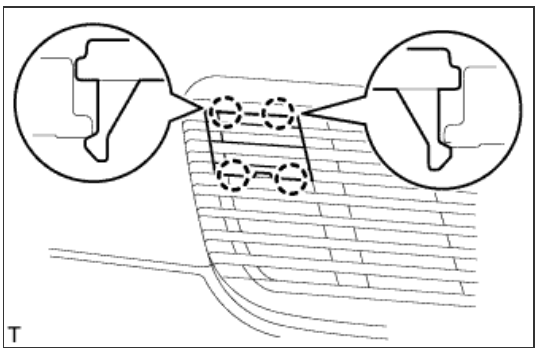
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

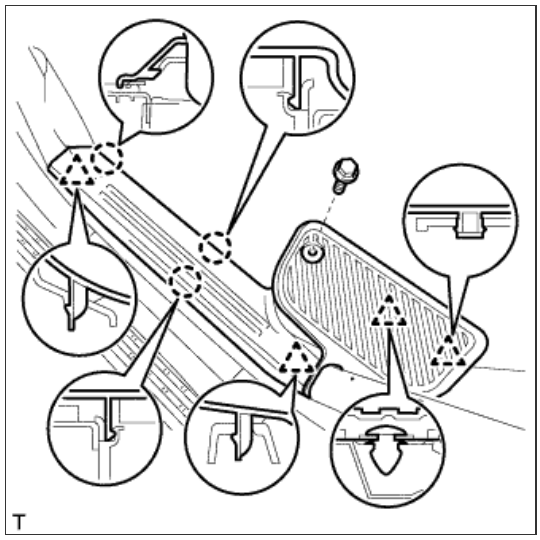


12. REMOVE REAR DOOR SCUFF PLATE LH

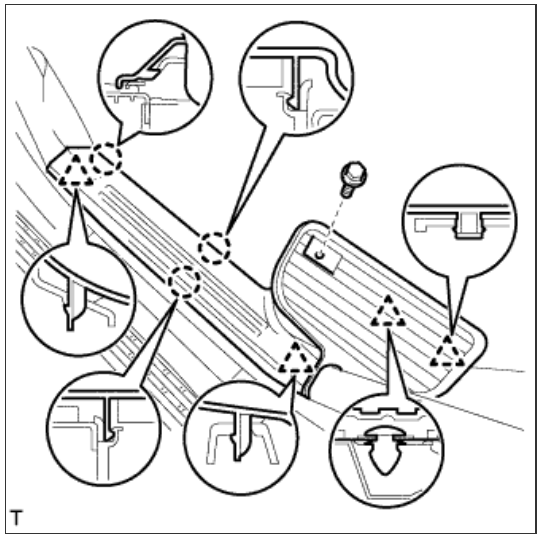
a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.



i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.

13. REMOVE REAR DOOR SCUFF PLATE RH

HINT:

Use the same procedures described for the LH side.

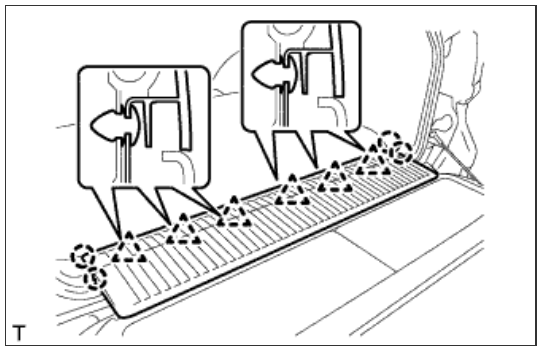
14. REMOVE REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

15. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.



16. REMOVE REAR SEAT COVER CAP

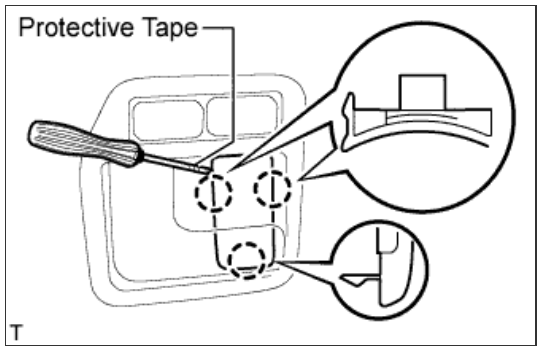
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

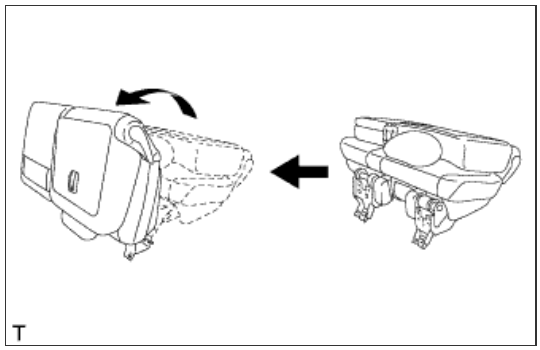
Tape the screwdriver tip before use.



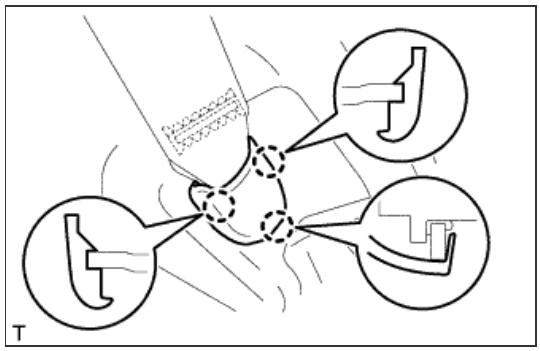
17. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

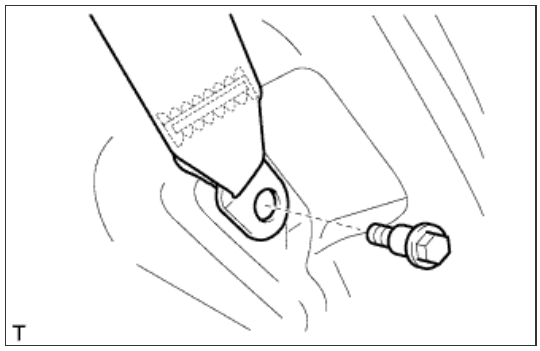
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



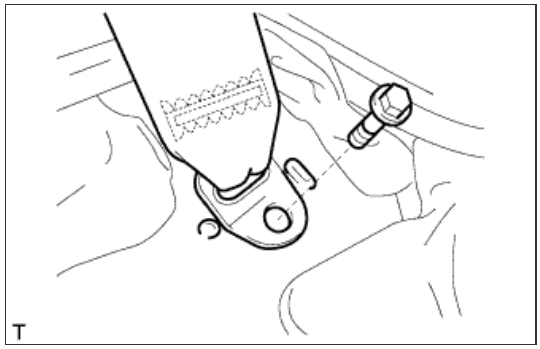
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

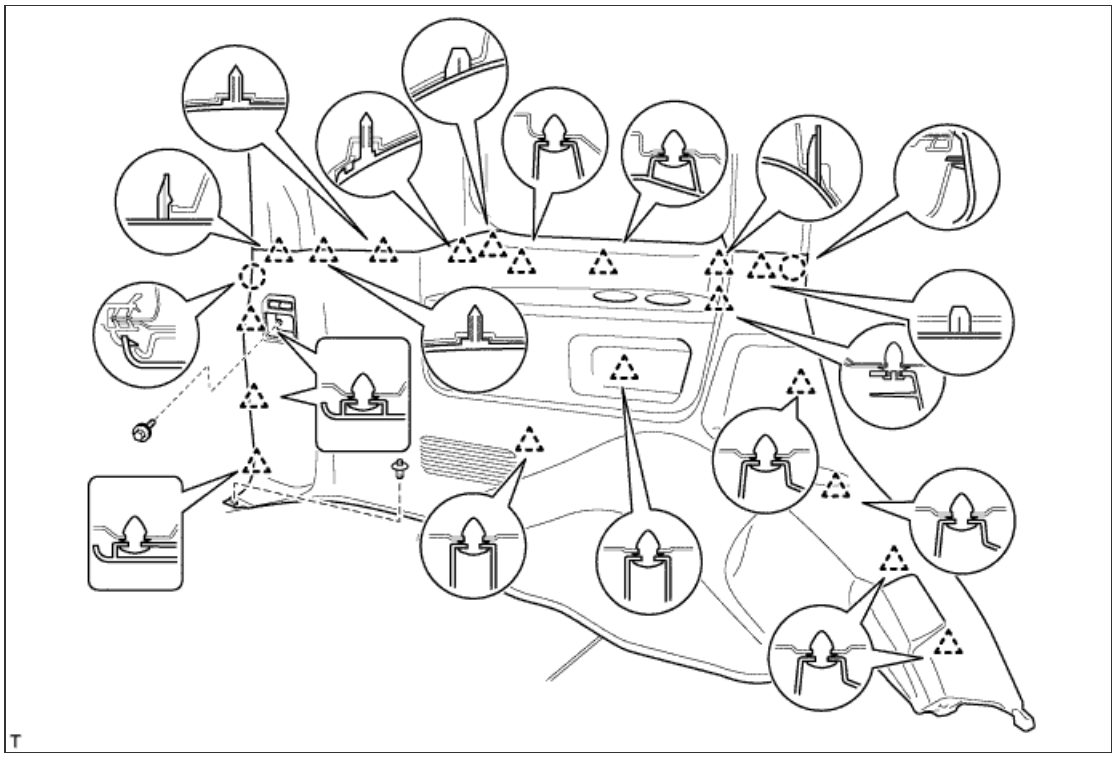


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

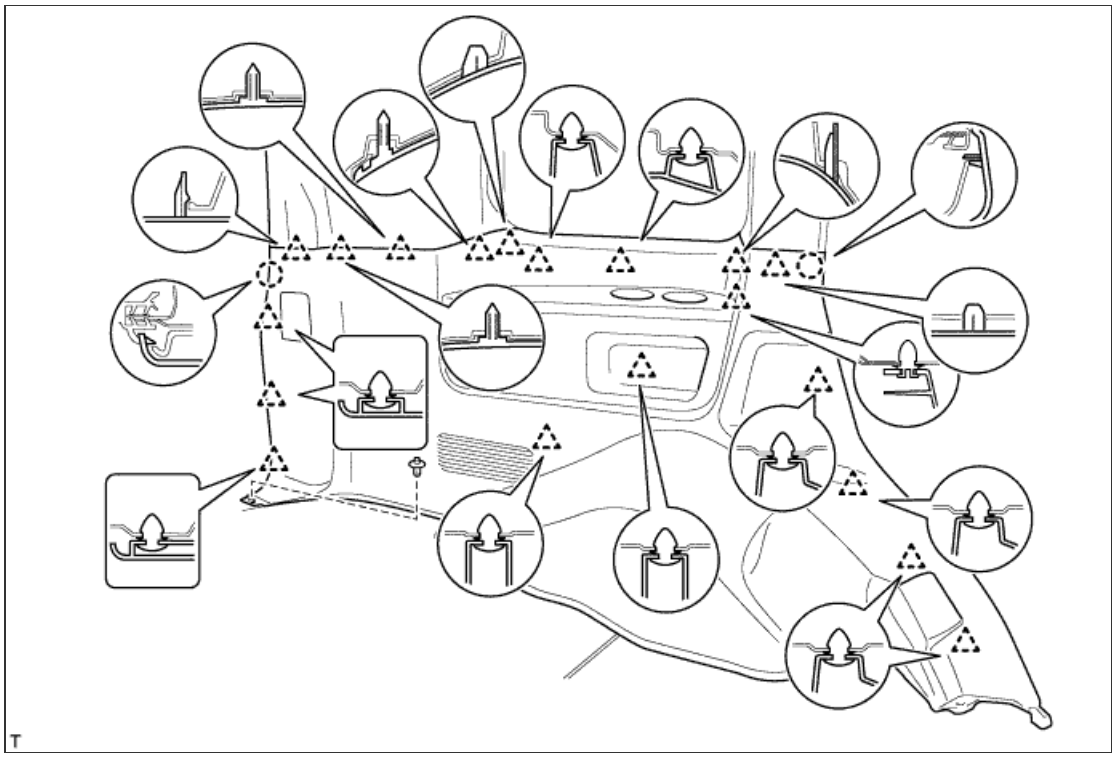


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 19 clips and 2 claws.

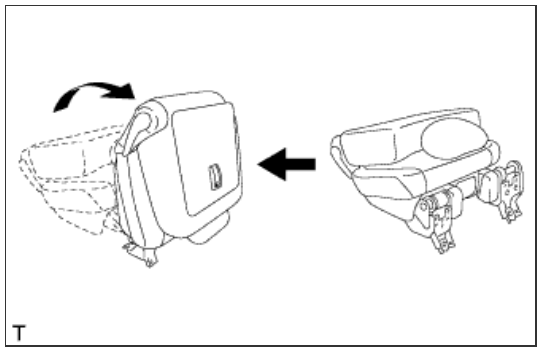
iii. Disconnect the thermistor connector and then remove the quarter trim panel.



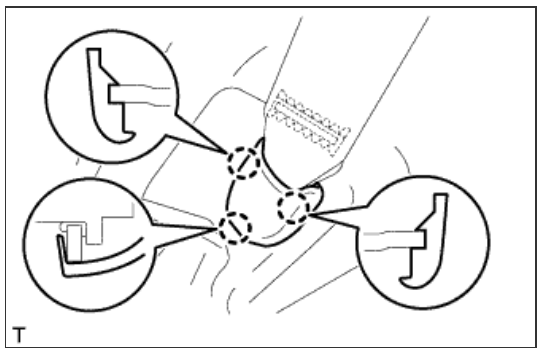
18. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

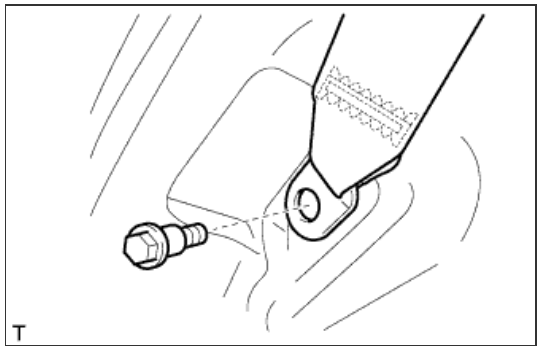
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



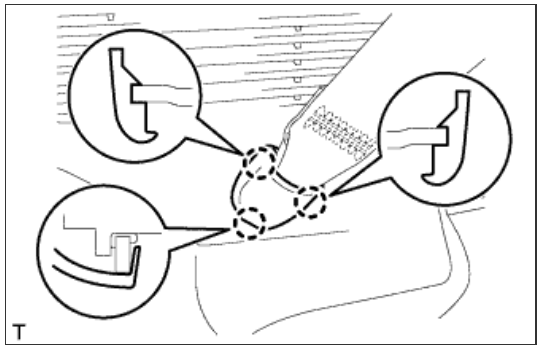
a. Detach the 3 claws and remove the cover.



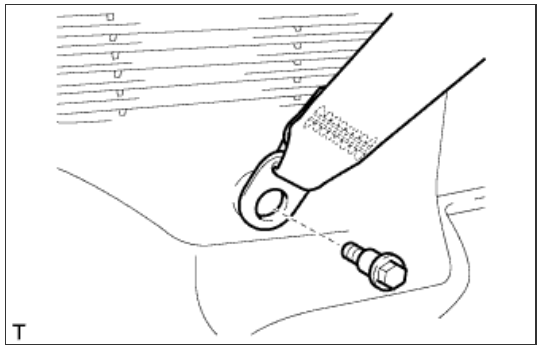
b. Remove the bolt and rear No. 1 seat belt anchor.



c. Detach the 3 claws and remove the cover.



d. Remove the bolt and rear No. 2 seat belt anchor.

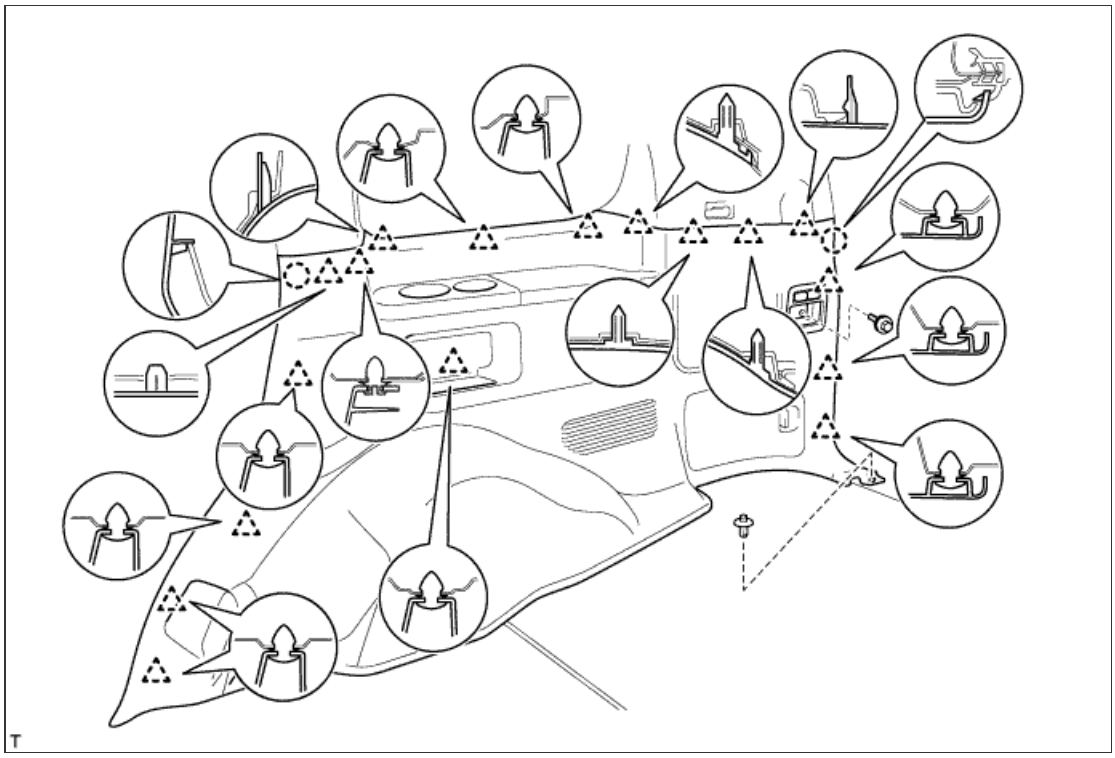


e. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

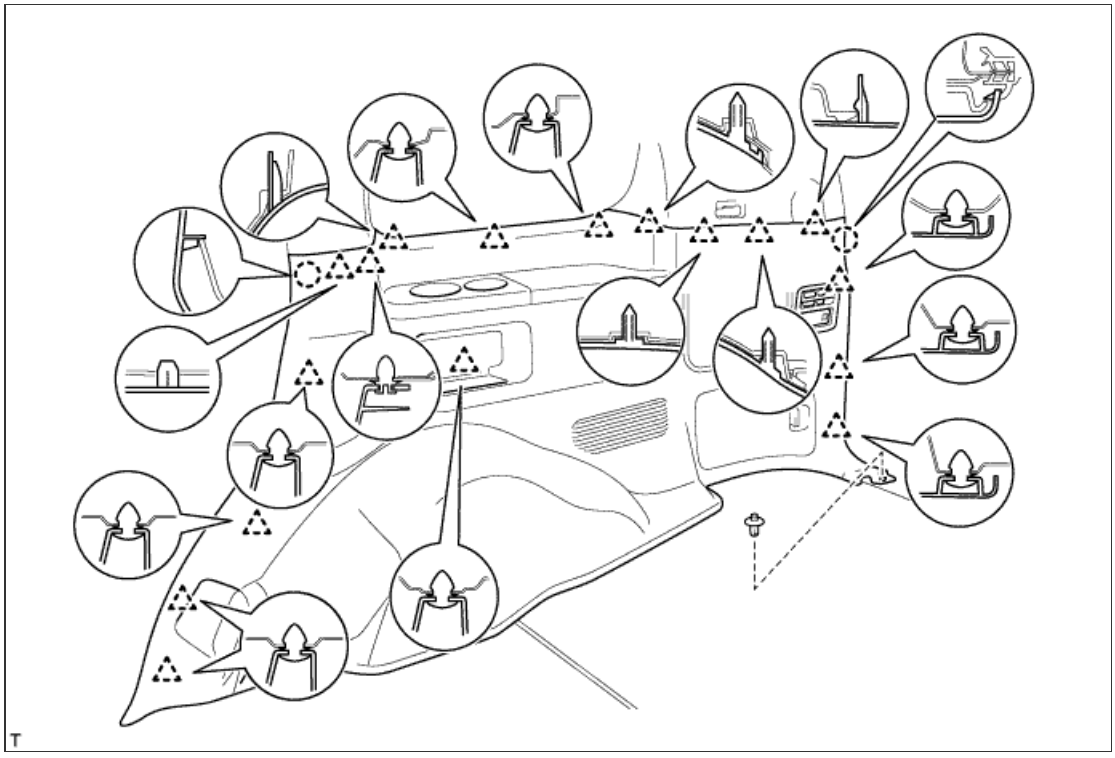


f. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.

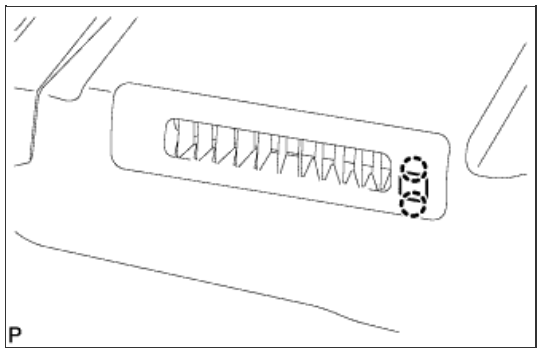


19. REMOVE AIR DUCT PLUG

a. Detach the 2 claws and remove the plug.

HINT:

Use the same procedures for both sides.



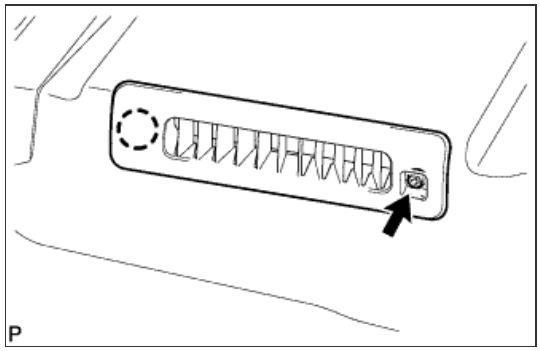
20. REMOVE REAR AIR DUCT GUIDE

HINT:

Use the same procedures for both sides.

a. Remove the screw.

b. Detach the claw and remove the guide.



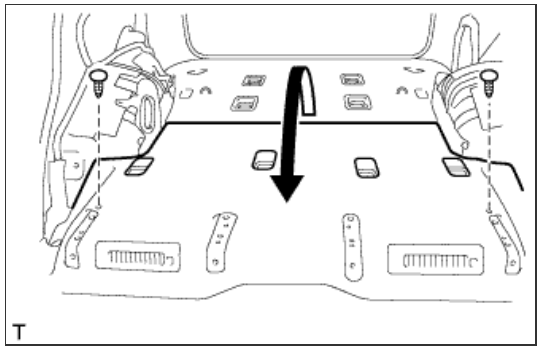
21. REMOVE FRONT FLOOR CARPET ASSEMBLY

a. Remove the 2 clips.

b. Fold back the floor carpet.

HINT:

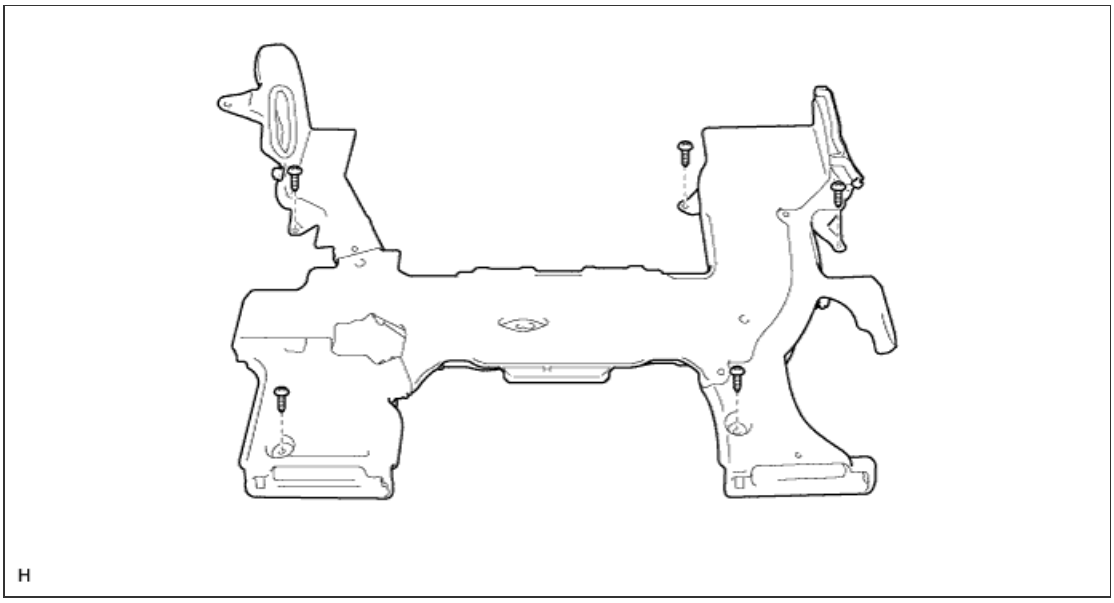
Fold back the carpet until it is possible to remove the rear No. 6 air duct.



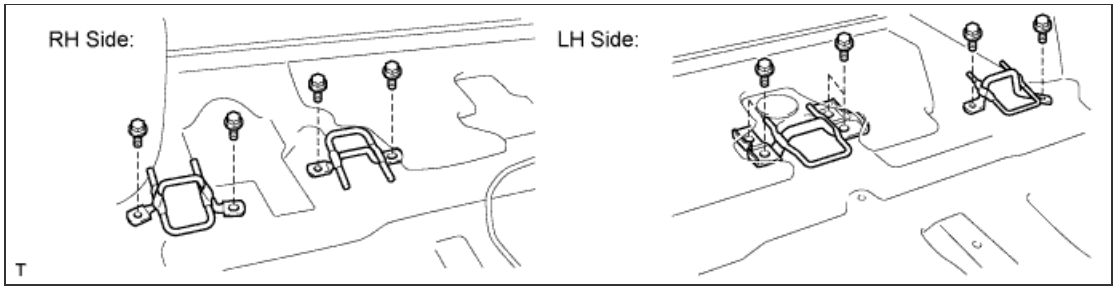
22. REMOVE REAR NO. 6 AIR DUCT

a. Disconnect the 2 connectors.

b. Remove the 5 screws and duct.



23. REMOVE REAR SEAT CUSHION LOCK STRIKER SUB-ASSEMBLY



a. Remove the 10 bolts and 4 lock strikers.

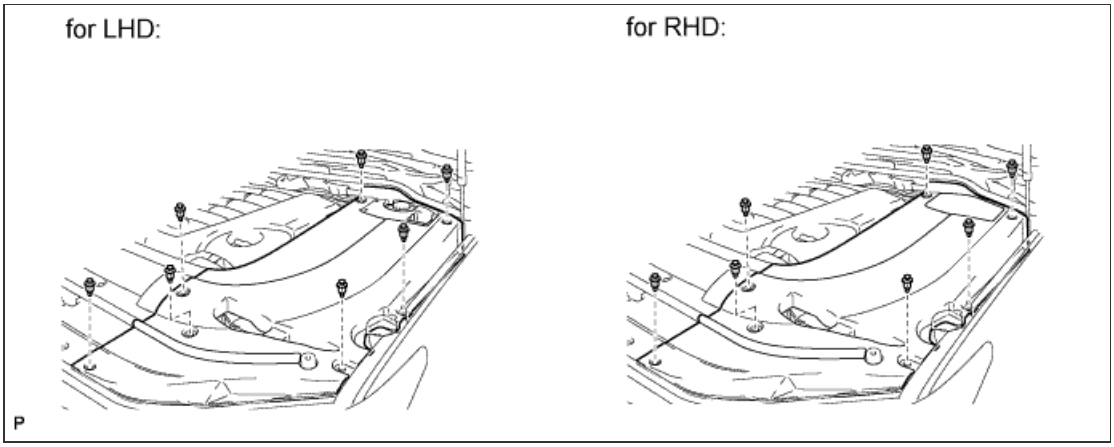
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

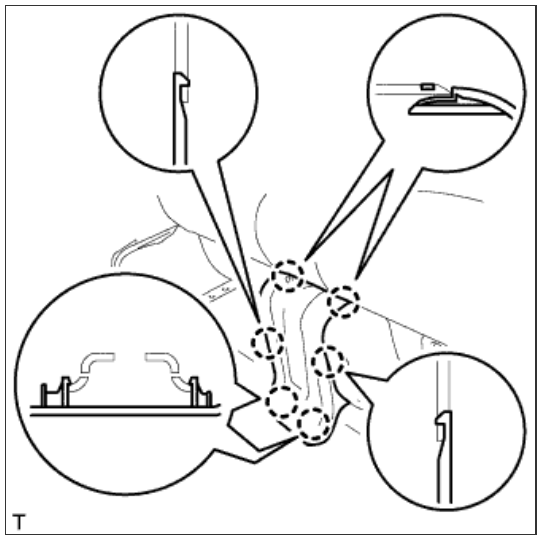
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE REAR NO. 3 SEAT CUSHION HINGE COVER

a. Using a screwdriver, detach the 6 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

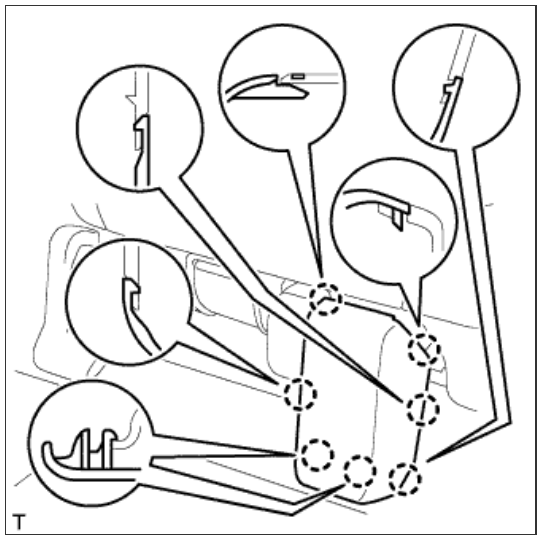


4. REMOVE REAR NO. 5 SEAT CUSHION HINGE COVER

a. Using a screwdriver, detach the 7 claws and remove the cover.

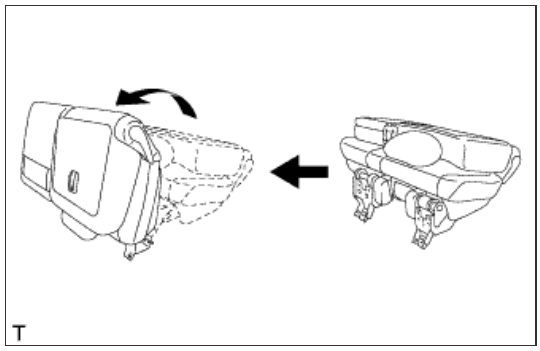
HINT:

Tape the screwdriver tip before use.



5. REMOVE REAR NO. 2 SEAT CUSHION HINGE COVER

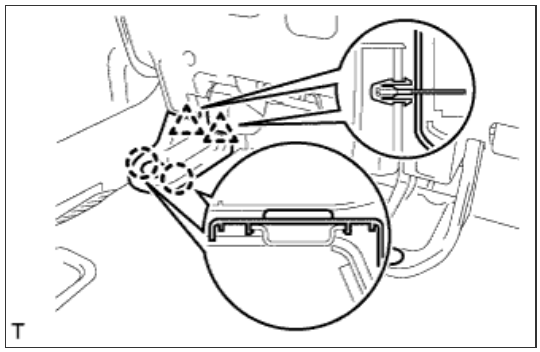
a. Operate the reclining adjuster release handle to move the seat into the position shown in the illustration.



b. Using a screwdriver, detach the 2 claws and 2 clips, and remove the cover.

HINT:

Tape the screwdriver tip before use.

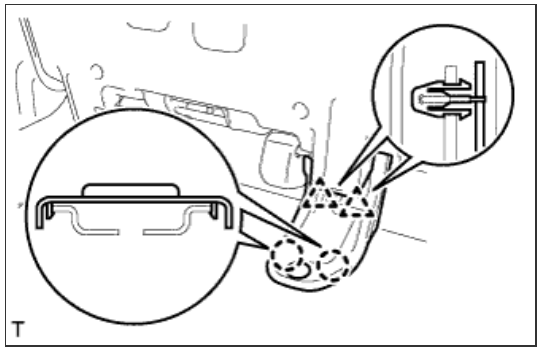


6. REMOVE REAR NO. 4 SEAT CUSHION HINGE COVER

a. Using a screwdriver, detach the 2 claws and 2 clips, and remove the cover.

HINT:

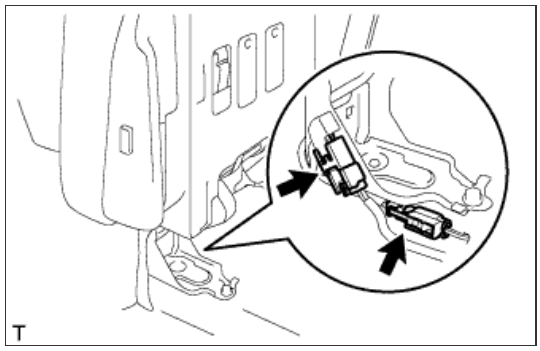
Tape the screwdriver tip before use.



7. REMOVE REAR NO. 1 SEAT ASSEMBLY LH

a. Disconnect the connector.

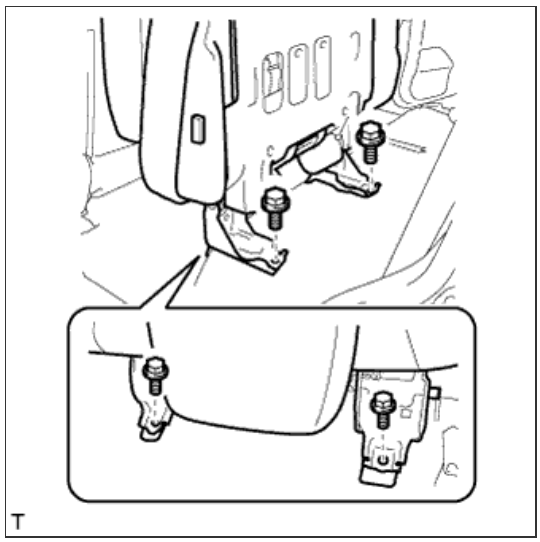
b. w/ Seat Heater System:
Disconnect the connector.



c. Remove the 4 bolts and seat assembly.

NOTICE:

Be careful not to damage the vehicle body.

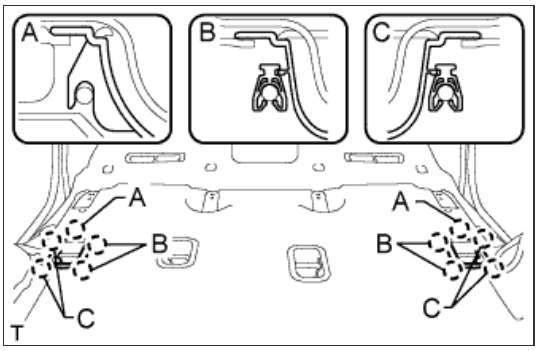


8. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

a. Remove the rear No. 1 seat assembly RH (Click here).

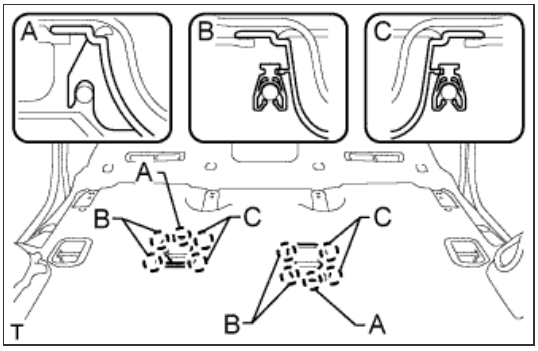
9. REMOVE REAR NO. 1 SEAT PROTECTOR

a. Detach the 10 claws and remove the 2 seat protectors.



10. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the 10 claws and remove the 2 seat protectors.

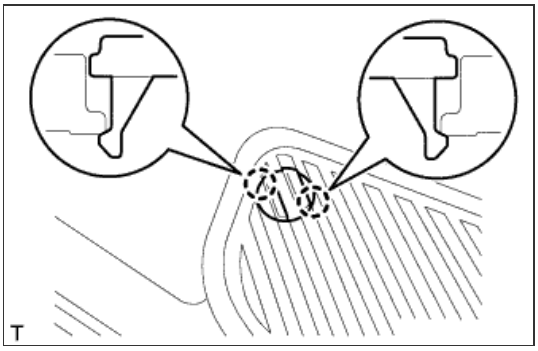


11. REMOVE REAR STEP COVER

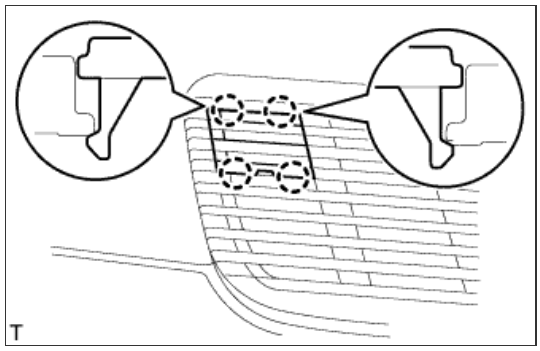
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

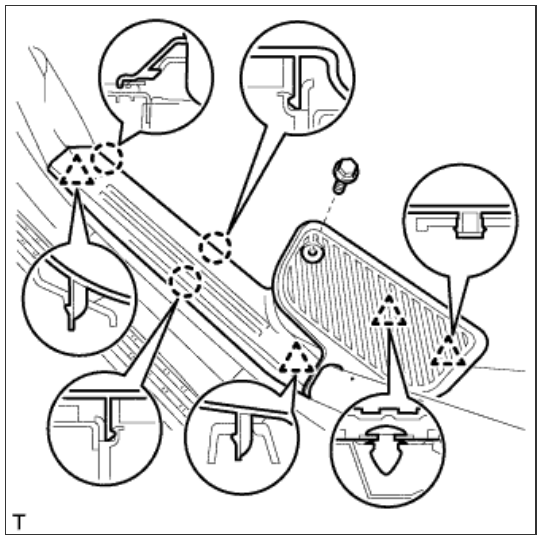


12. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

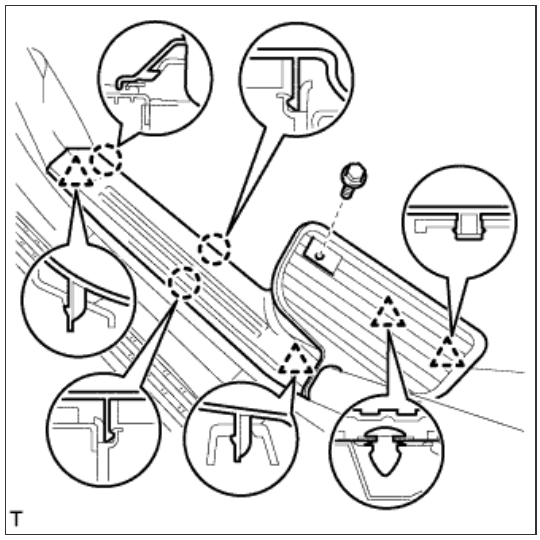
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



13. REMOVE REAR DOOR SCUFF PLATE RH

HINT:

Use the same procedures described for the LH side.

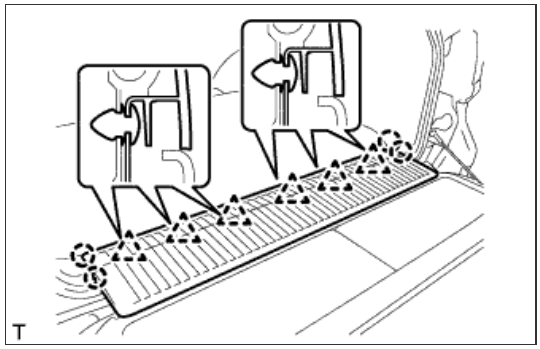
14. REMOVE REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

15. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.



16. REMOVE REAR SEAT COVER CAP

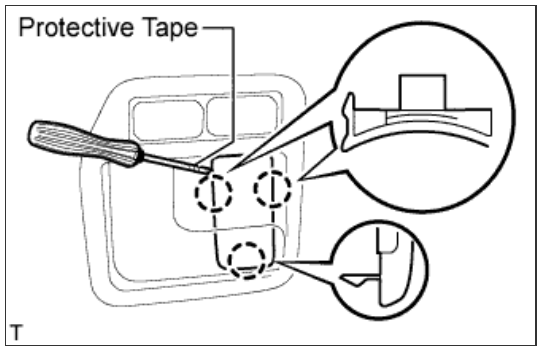
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

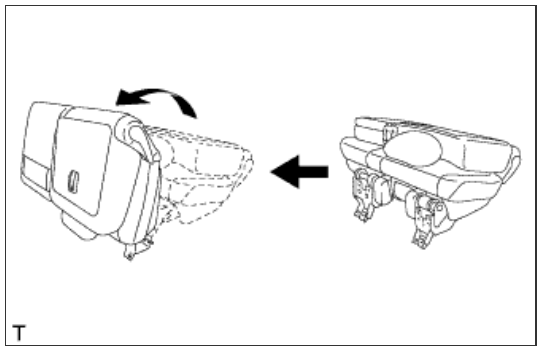
Tape the screwdriver tip before use.



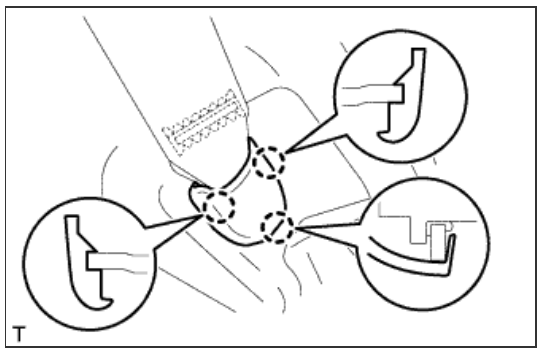
17. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

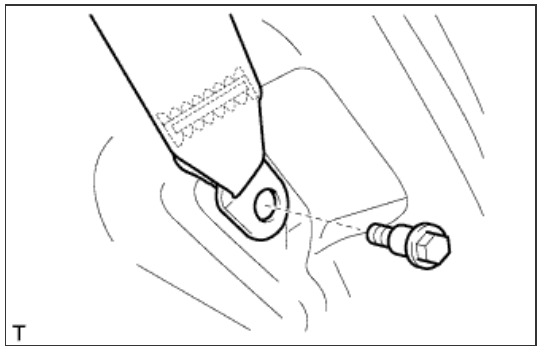
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



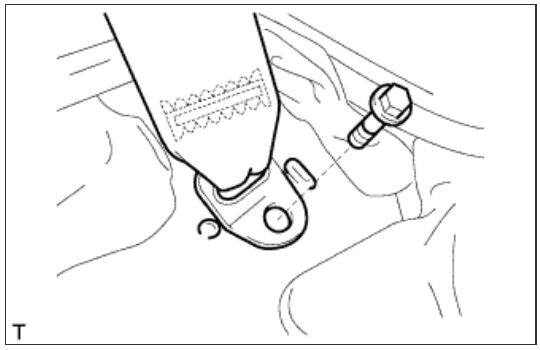
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

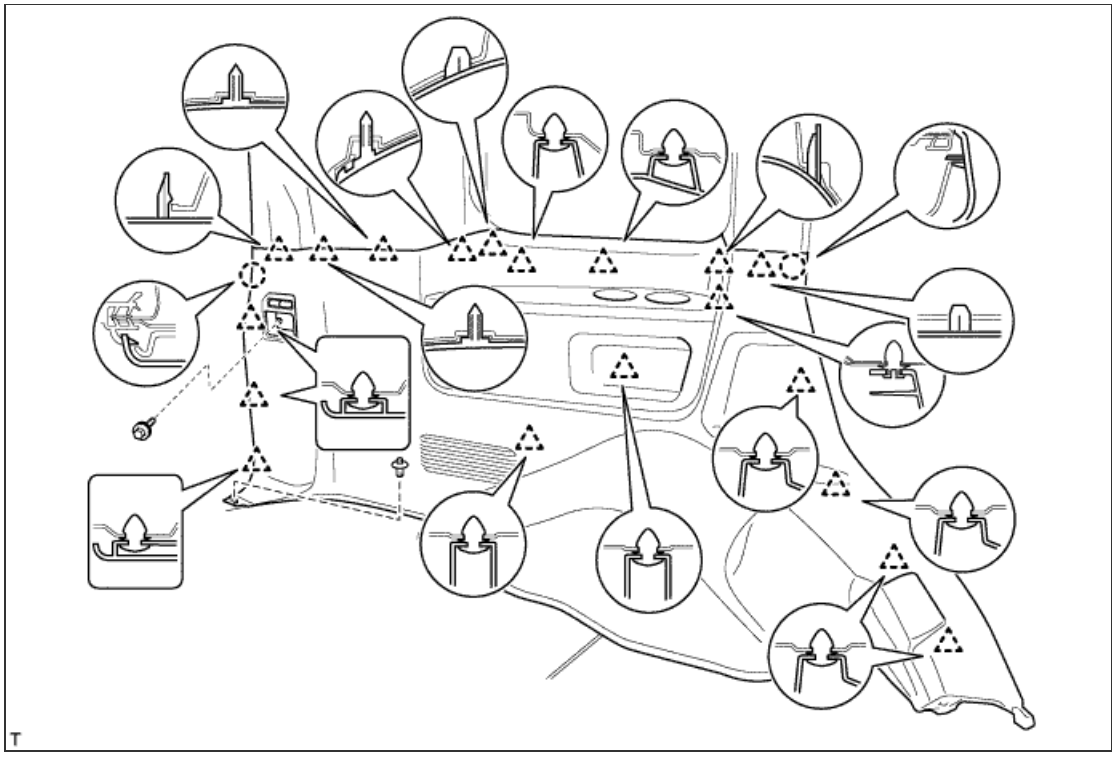


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

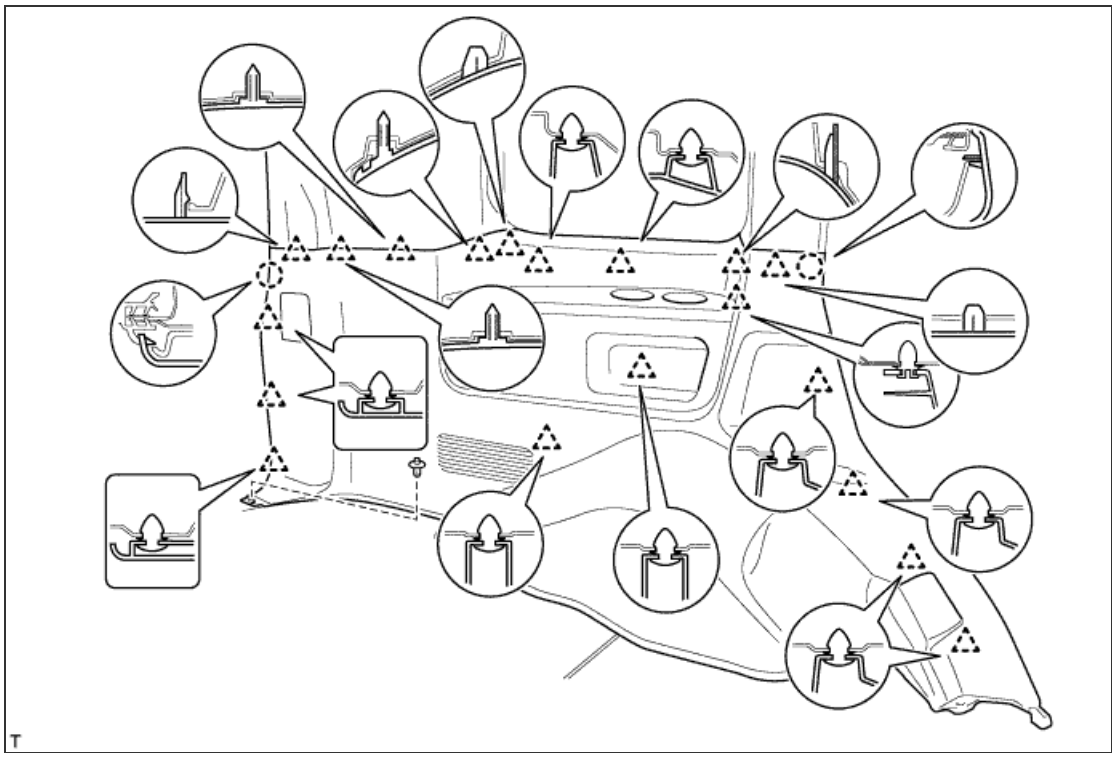


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 19 clips and 2 claws.

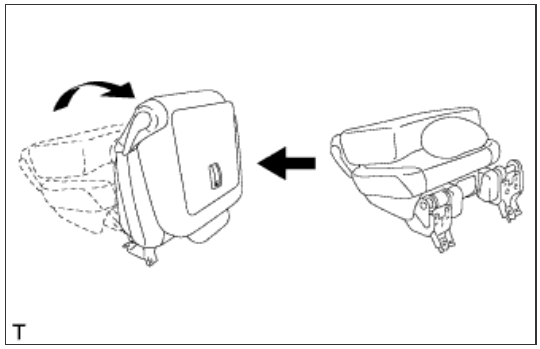
iii. Disconnect the thermistor connector and then remove the quarter trim panel.



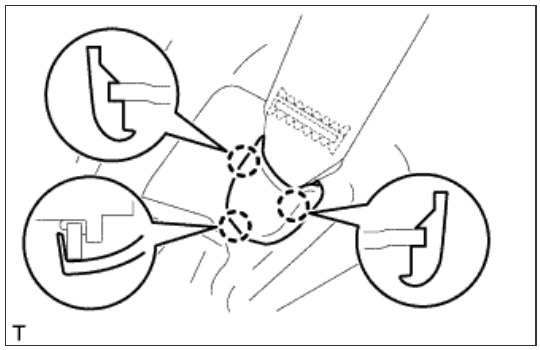
18. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

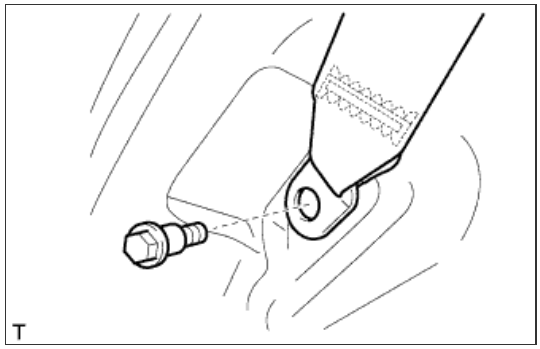
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



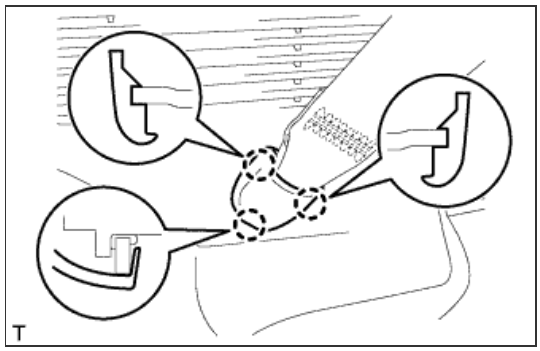
a. Detach the 3 claws and remove the cover.



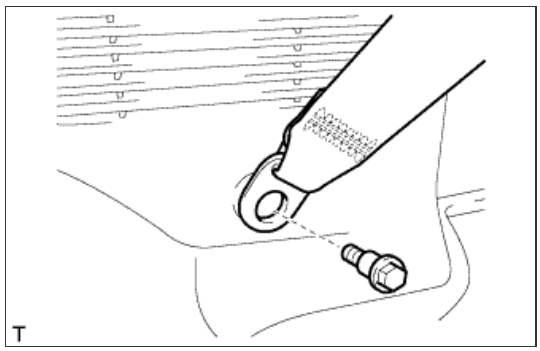
b. Remove the bolt and rear No. 1 seat belt anchor.



c. Detach the 3 claws and remove the cover.



d. Remove the bolt and rear No. 2 seat belt anchor.

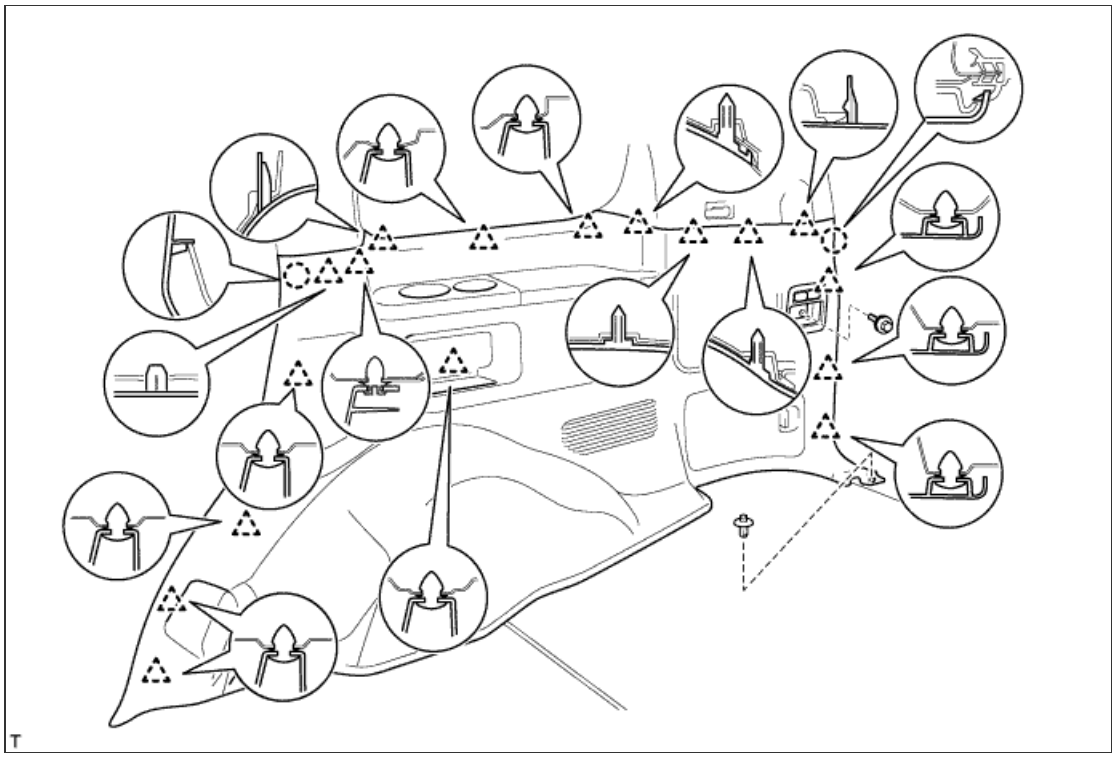


e. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

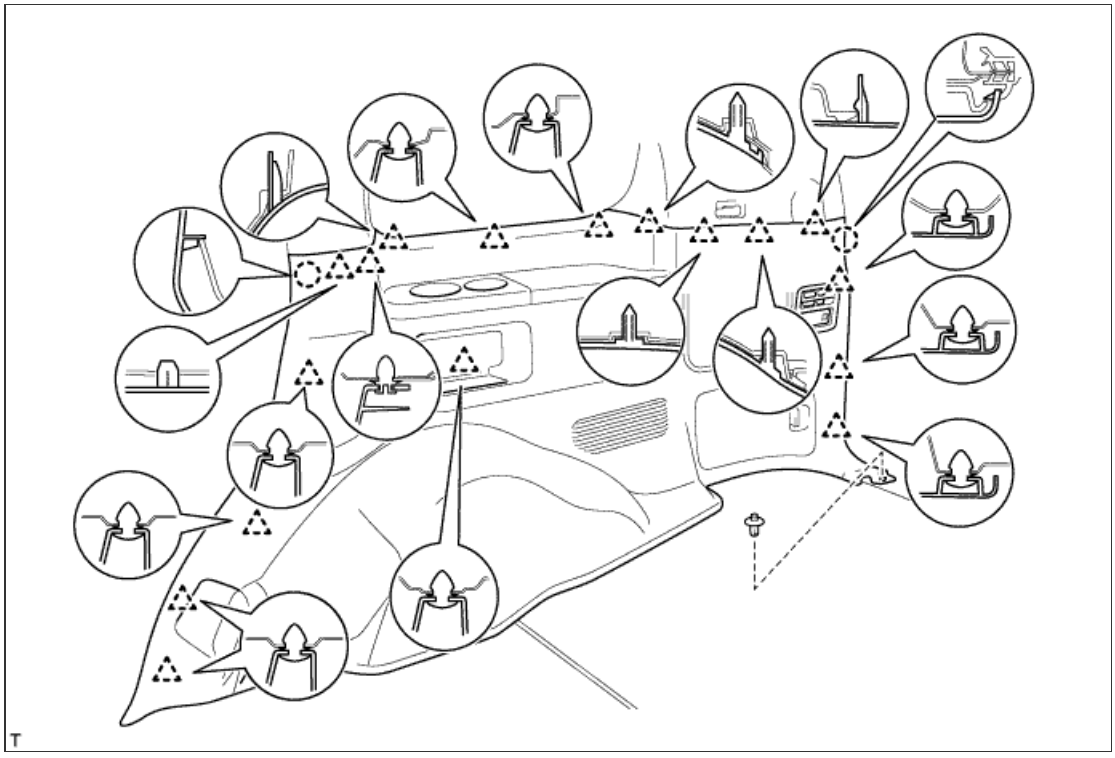


f. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.

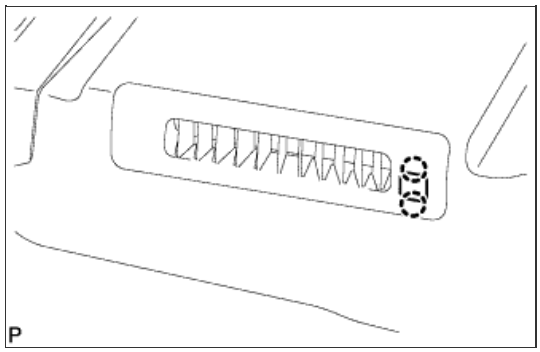


19. REMOVE AIR DUCT PLUG

a. Detach the 2 claws and remove the plug.

HINT:

Use the same procedures for both sides.



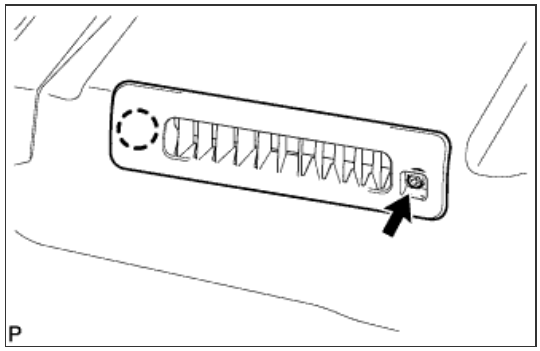
20. REMOVE REAR AIR DUCT GUIDE

HINT:

Use the same procedures for both sides.

a. Remove the screw.

b. Detach the claw and remove the guide.



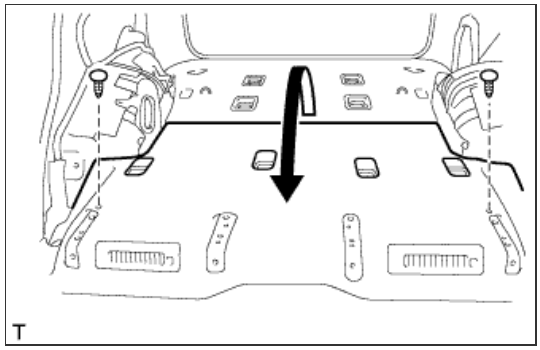
21. REMOVE FRONT FLOOR CARPET ASSEMBLY

a. Remove the 2 clips.

b. Fold back the floor carpet.

HINT:

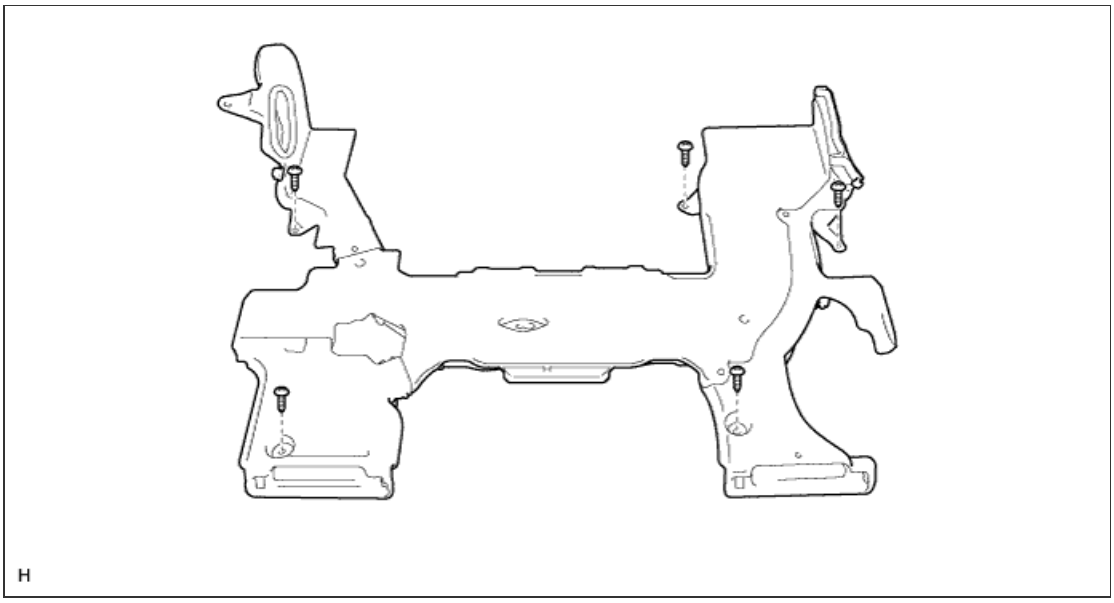
Fold back the carpet until it is possible to remove the rear No. 6 air duct.



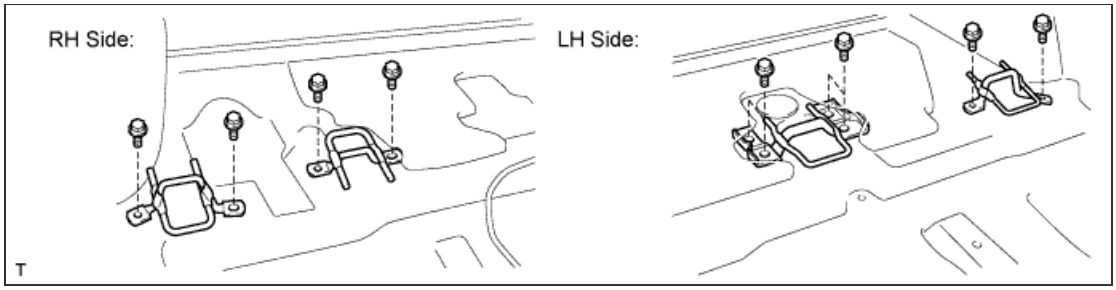
22. REMOVE REAR NO. 6 AIR DUCT

a. Disconnect the 2 connectors.

b. Remove the 5 screws and duct.



23. REMOVE REAR SEAT CUSHION LOCK STRIKER SUB-ASSEMBLY



a. Remove the 10 bolts and 4 lock strikers.

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

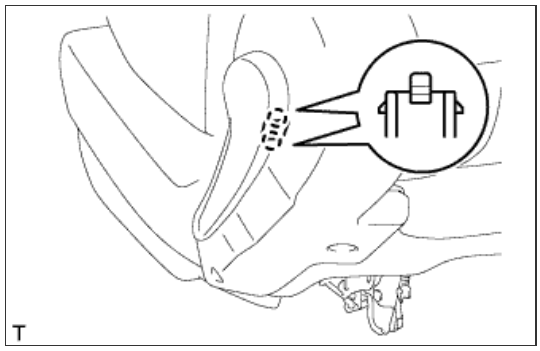
- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

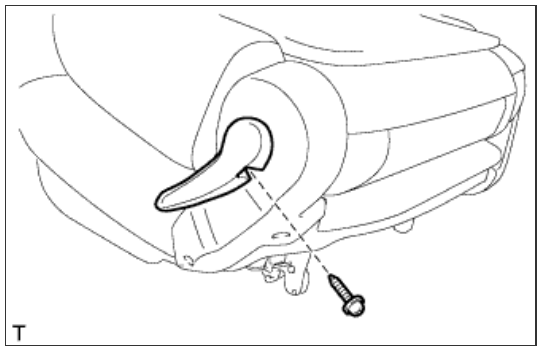
HINT:

Tape the screwdriver tip before use.



2. REMOVE RECLINING ADJUSTER RELEASE HANDLE LH

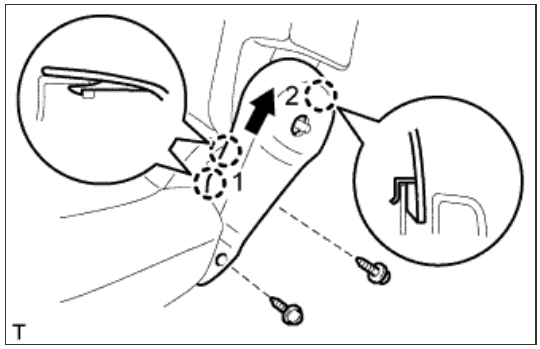
a. Remove the screw and release handle.



3. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

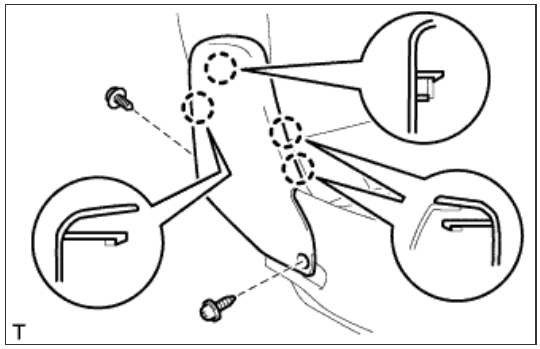
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

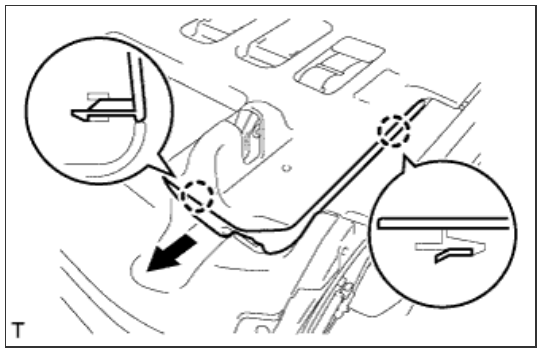


5. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

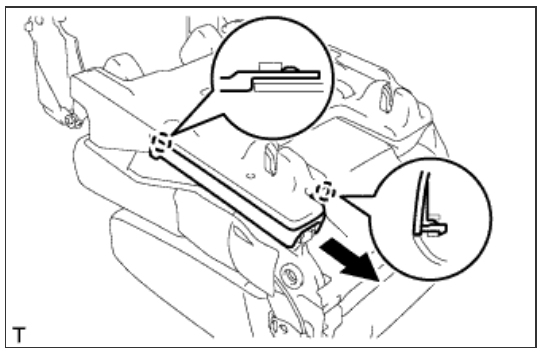


6. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

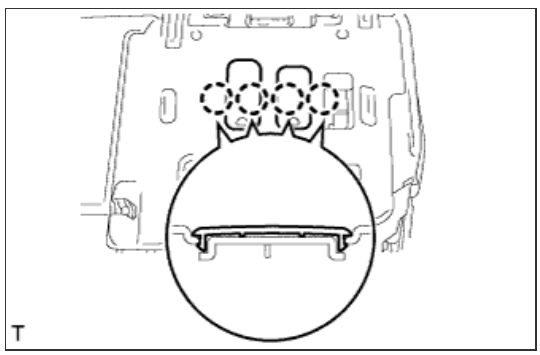
HINT:

Tape the screwdriver tip before use.



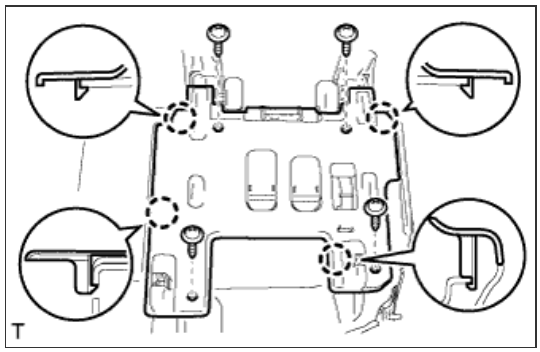
7. REMOVE NO. 1 SEAT CUSHION COVER

a. Detach the 4 claws and remove the 2 covers.

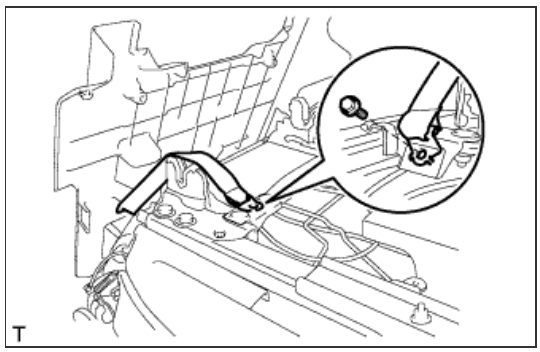


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 4 claws.



b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE FOLD SEAT STOPPER BAND ASSEMBLY

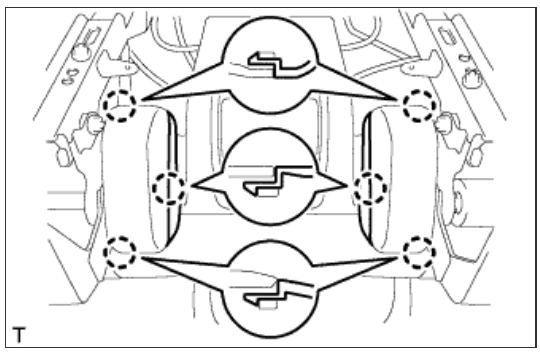
a. Remove the fold seat stopper band from the seat leg side cover.

10. REMOVE REAR SEAT SIDE HINGE FEMALE COVER

a. Using a screwdriver, detach the 6 claws and remove the 2 covers.

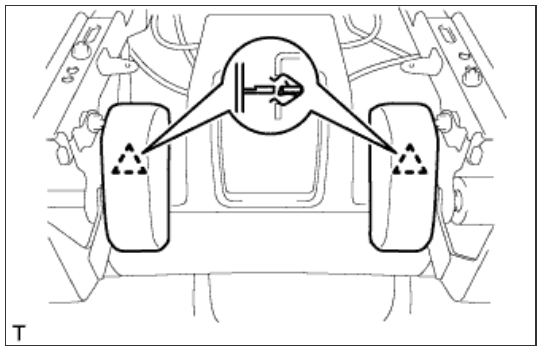
HINT:

Tape the screwdriver tip before use.



11. REMOVE REAR SEAT SIDE HINGE MALE COVER LH

a. Detach the clip and remove the cover.



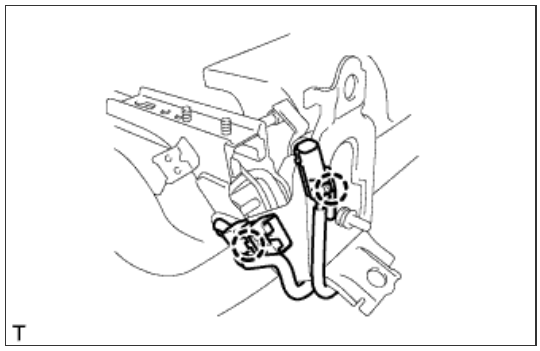
12. REMOVE REAR SEAT SIDE HINGE MALE COVER RH

a. Detach the clip and remove the cover.

13. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

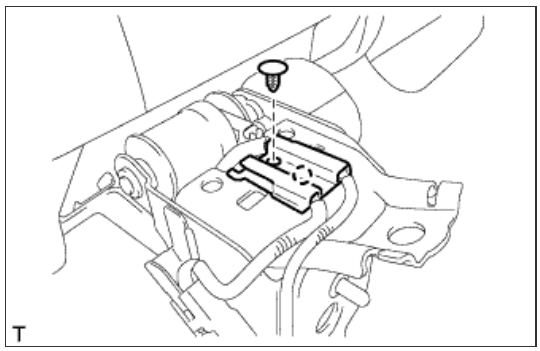
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.

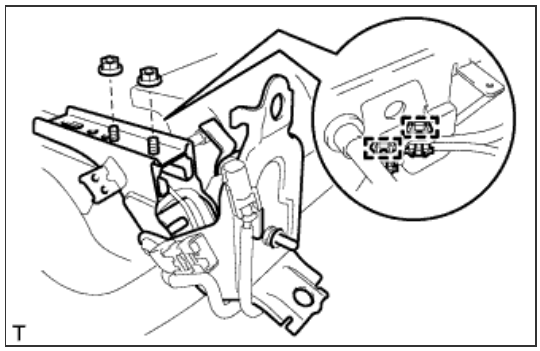


14. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Detach the wire harness clamp.

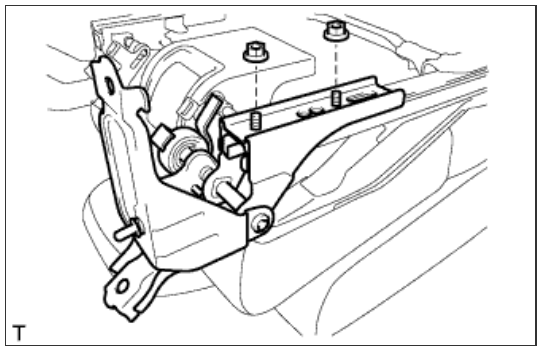
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



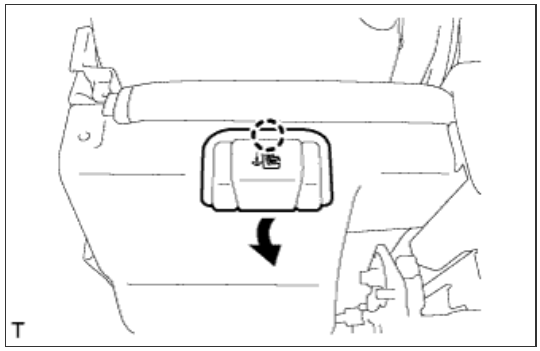
15. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Remove the 2 nuts and hinge.

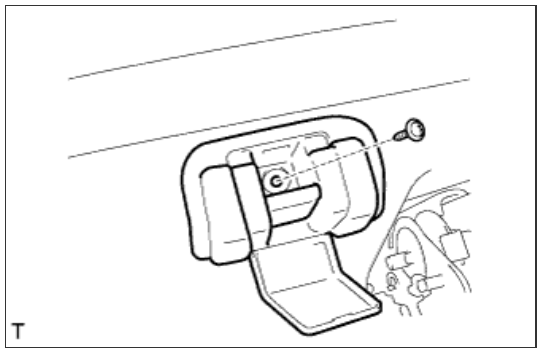


16. REMOVE SEAT BELT ANCHOR COVER CAP

a. Detach the claw and open the cap.



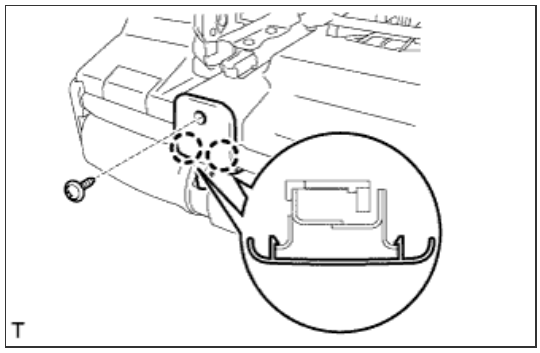
b. Remove the screw and anchor cover cap.



17. REMOVE REAR SEATBACK STAY COVER LH

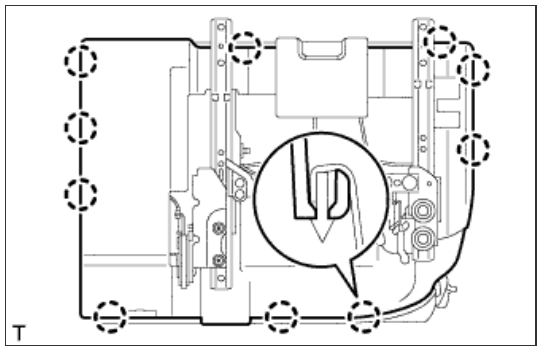
a. Remove the screw.

b. Detach the 2 claws and remove the cover.



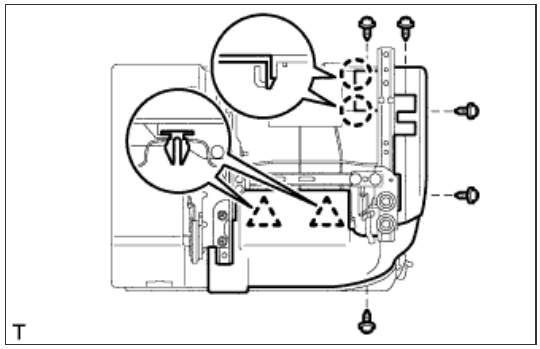
18. REMOVE REAR UNDER SIDE COVER LH

a. Detach the 10 claws.



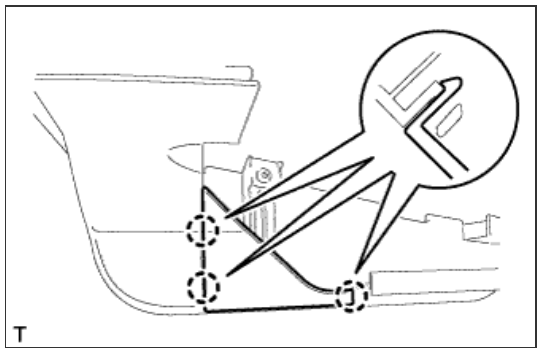
b. Remove the 5 screws.

c. Detach the 2 clips and 2 claws, and remove the cover.



19. REMOVE NO. 1 SEAT CUSHION PLATE

a. Detach the 3 claws and remove the seat cushion plate.



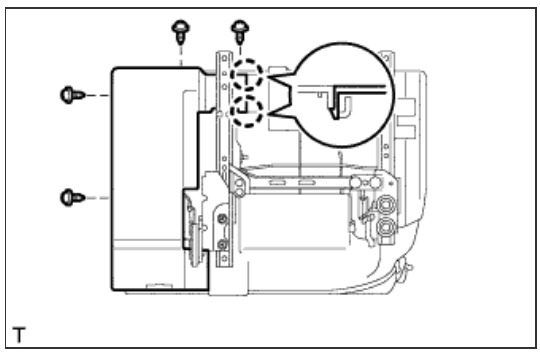
20. REMOVE REAR POWER SEAT SWITCH

a. Remove the 2 screws and power seat switch.

21. REMOVE REAR SEAT CUSHION COVER RH

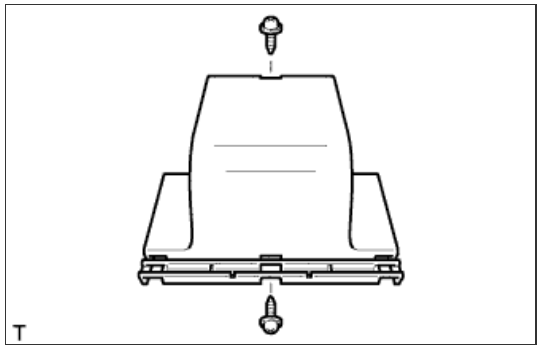
a. Remove the 4 screws.

b. Detach the 2 claws and remove the cover.



22. REMOVE REAR SEAT UNDER TRAY COVER LH

a. Remove the 2 screws and cover.

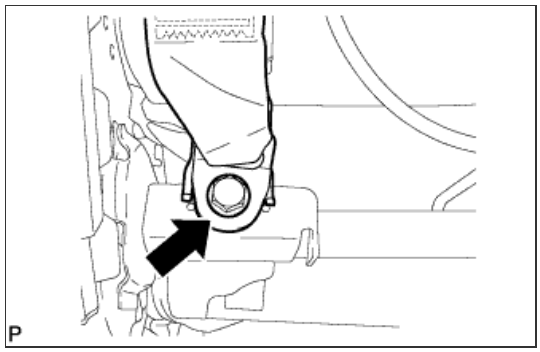


23. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Remove the bolt and belt.

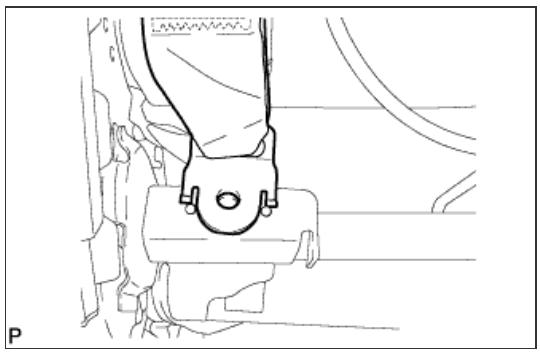
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, it becomes disconnected when the bolt is removed.



24. DISCONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Disconnect the belt anchor.



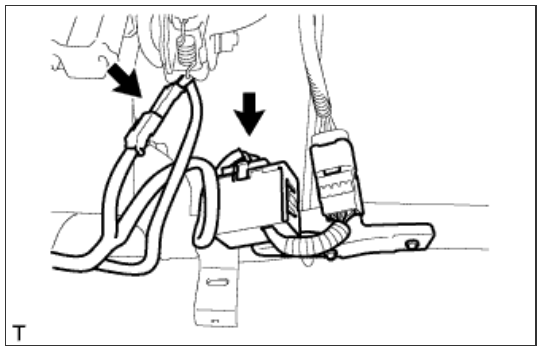
25. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

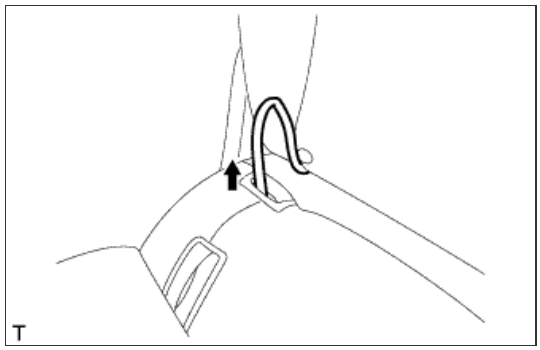
b. Remove the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.

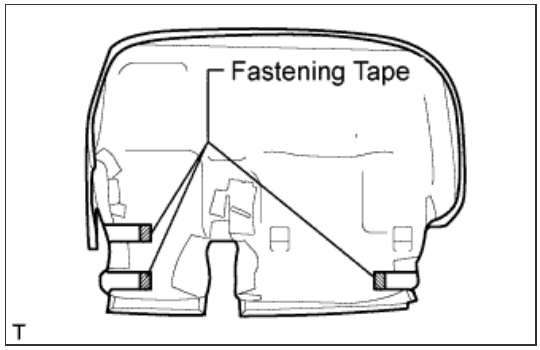


d. Remove the seat cushion cover with pad.

26. REMOVE REAR SEPARATE TYPE SEAT CUSHION COVER

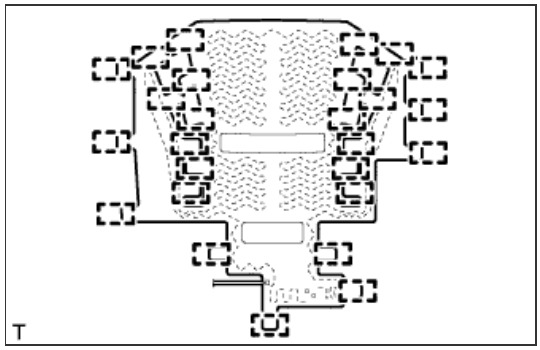
a. Detach the 3 pieces of fastening tape.

b. Remove the hog rings and cover.



27. REMOVE REAR SEAT CUSHION HEATER ASSEMBLY (w/ Seat Heater System)

a. Cut off the tack pins which fasten the seat heater to the seat cushion cover, and then remove the seat cushion heater from the seat cushion cover.

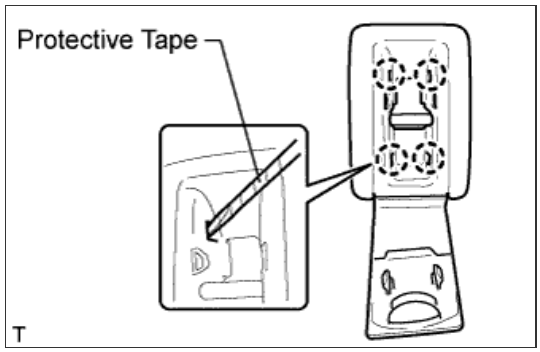


28. REMOVE REAR SEATBACK COVER

a. Using a screwdriver, detach the 4 claws and remove the cover.

HINT:

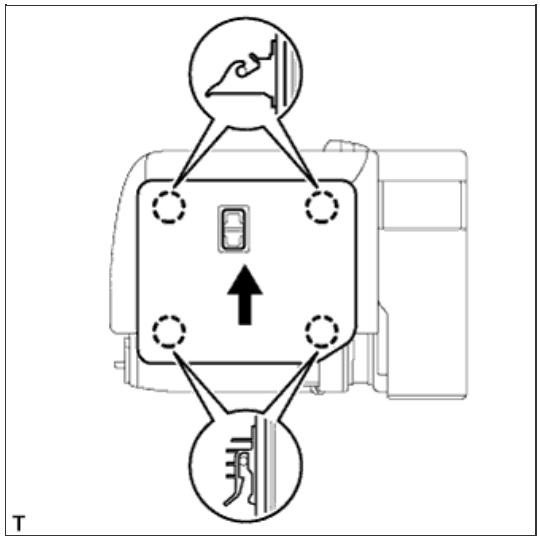
Tape the screwdriver tip before use.



29. REMOVE REAR SEATBACK BOARD SUB-ASSEMBLY LH

a. Detach the 2 claws on the top of the board.

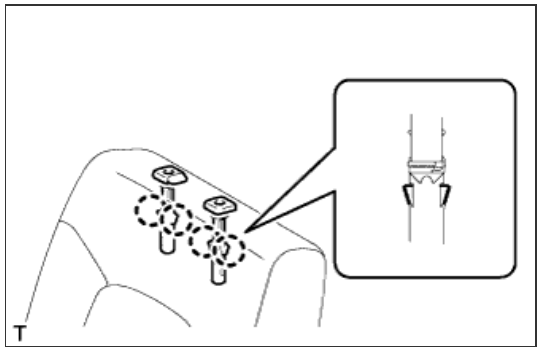
b. Pull up the board to detach the 2 claws on the bottom of the board and remove it.



30. REMOVE REAR SEAT HEADREST ASSEMBLY

31. REMOVE REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Detach the 4 claws and remove the 2 supports.

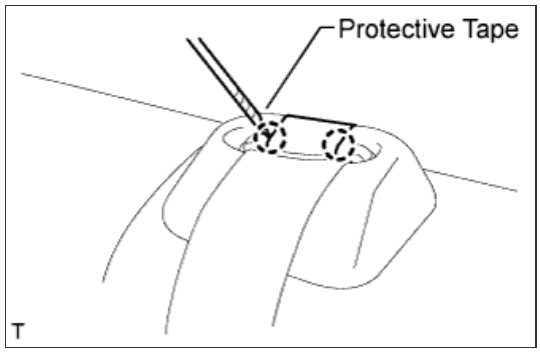


32. REMOVE SHOULDER BELT ANCHOR COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

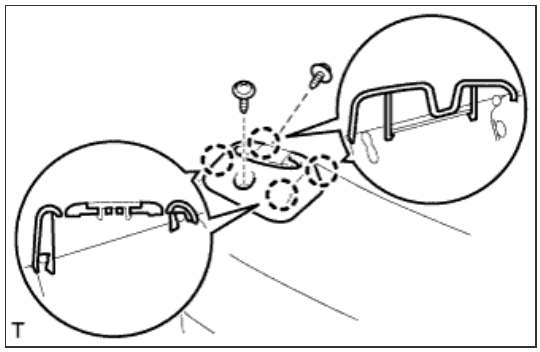
Tape the screwdriver tip before use.



33. REMOVE REAR SEAT BELT HOLE COVER LH

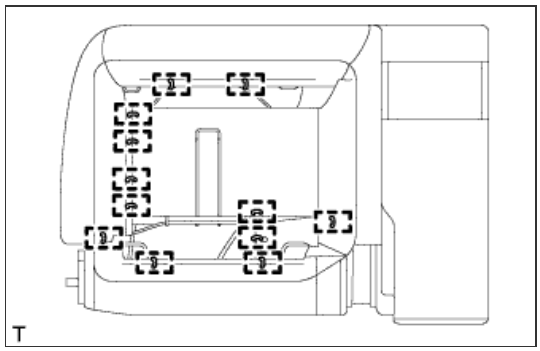
a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



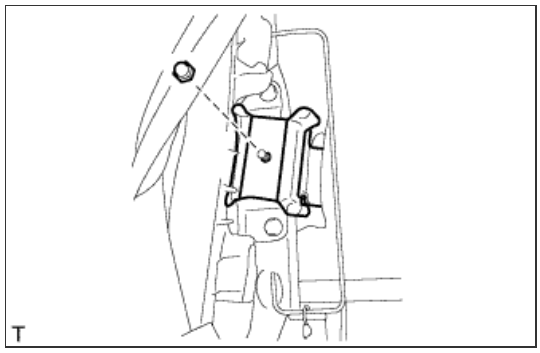
34. REMOVE SEATBACK COVER WITH PAD

a. Remove the hog rings.



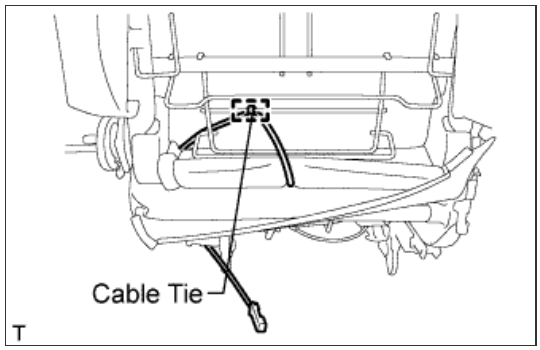
b. Remove the cap nut and seatback cover bracket from the seat frame.

c. Remove the side airbag wire harness through the hole in the seatback.

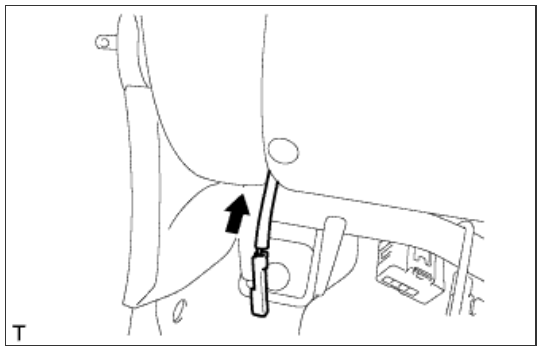


d. w/ Seat Heater System:

i. Cut the cable tie and disconnect the seatback heater wire harness.

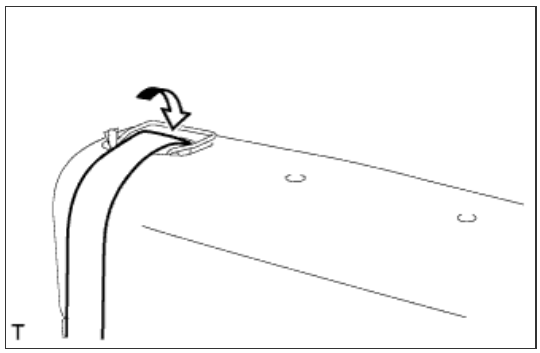


ii. Remove the seatback heater wire harness through the hole in the seatback.



e. Pull the seat belt into the inside of the seat.

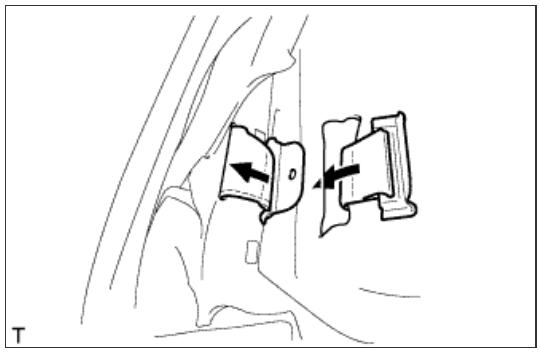
f. Remove the seatback cover with pad.



35. REMOVE REAR SEPARATE TYPE SEATBACK COVER

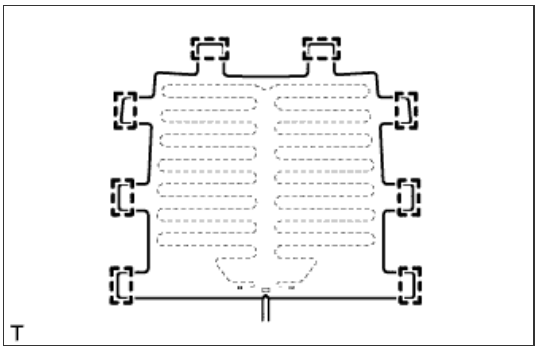
a. Disconnect the seatback cover bracket from the seatback pad.

b. Remove the hog rings and rear seatback cover.



36. REMOVE REAR SEATBACK HEATER ASSEMBLY (w/ Seat Heater System)

a. Cut off the tack pins which fasten the seatback heater to the seatback cover, and then remove the seatback heater from the seatback cover.

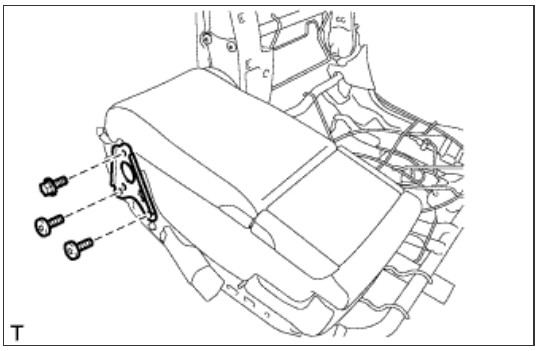


37. REMOVE SEATBACK STOPPER PLATE

a. Using a T40 "TORX" socket, remove the 2 bolts.

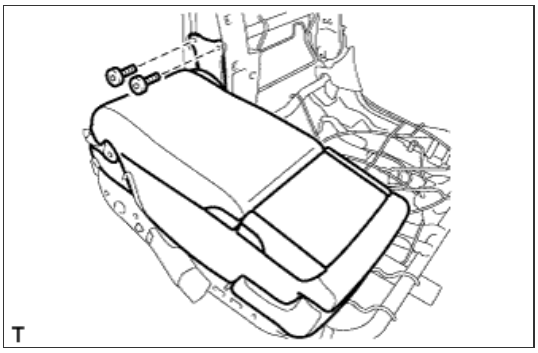
b. Remove the bolt and stopper plate.

c. Remove the bush from the stopper plate.



38. REMOVE REAR CENTER SEAT ARMREST ASSEMBLY

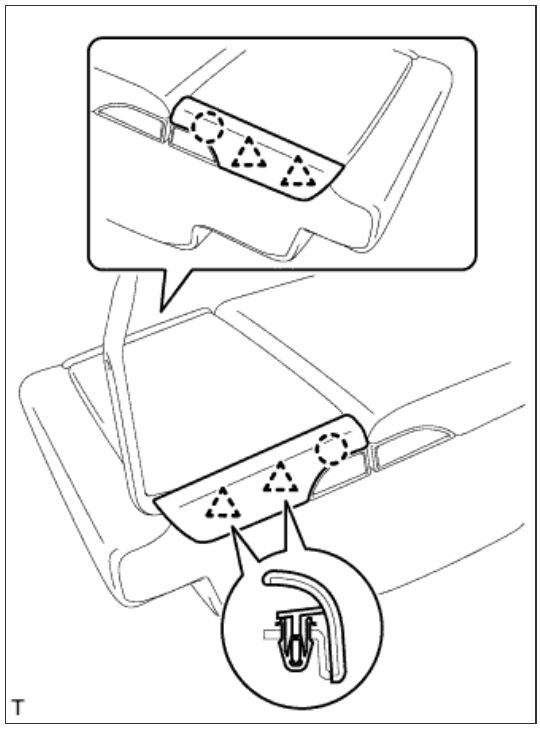
a. Using a T40 "TORX" socket, remove the 2 bolts and center seat armrest.



39. REMOVE REAR CENTER SEAT HEADREST ASSEMBLY

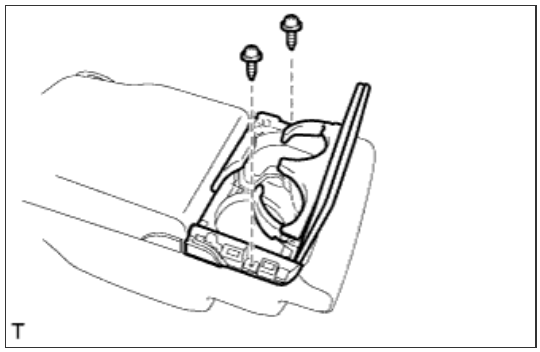
40. REMOVE NO. 1 SEAT ARMREST PLATE

a. Using a moulding remover, detach the 4 clips and 2 claws, and then remove the 2 armrest plates.

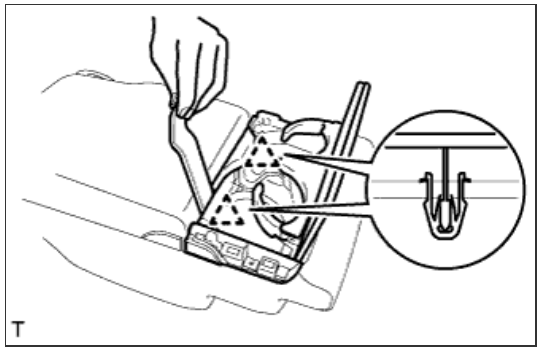


41. REMOVE CUP HOLDER ASSEMBLY

a. Remove the 2 screws.



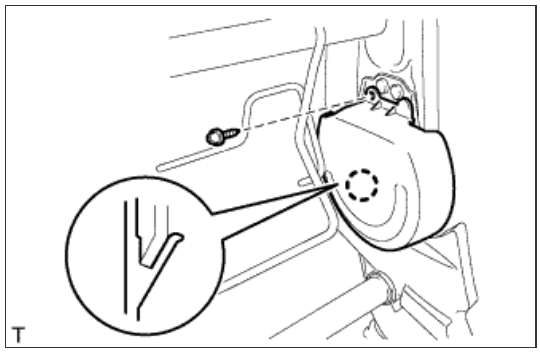
b. Using a moulding remover, detach the 2 clips and remove the cup holder.



42. REMOVE REAR SEAT RECLINING COVER LH

a. Remove the screw.

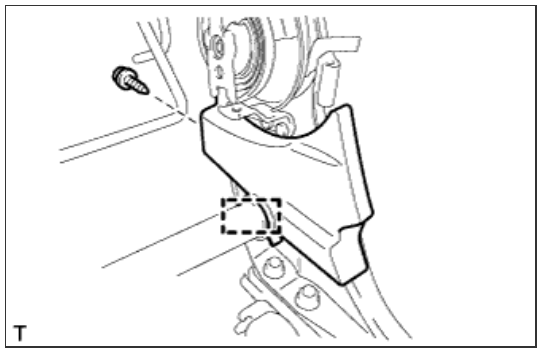
b. Detach the claw and remove the cover.



43. REMOVE REAR NO. 2 SEAT RECLINING COVER LH

a. Remove the screw.

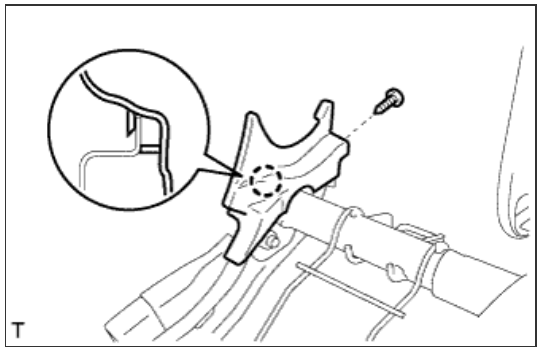
b. Detach the clamp and remove the cover.



44. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the screw.

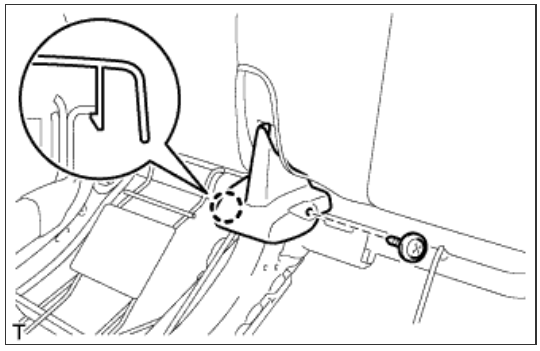
b. Detach the claw and remove the cover.



45. REMOVE REAR SEATBACK HINGE COVER LH

a. Remove the screw.

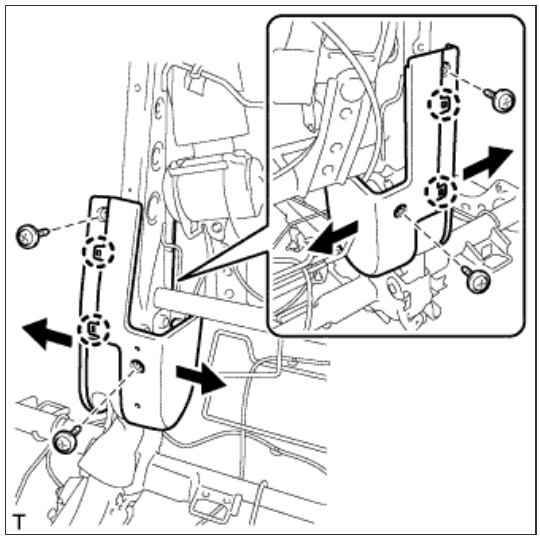
b. Detach the claw and remove the cover.



46. REMOVE REAR LOWER SEATBACK COVER SUB-ASSEMBLY LH

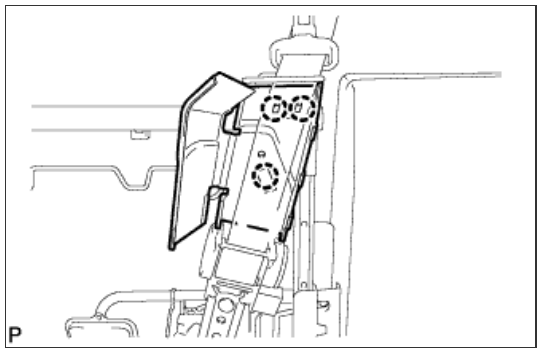
a. Remove the 4 screws.

b. Detach the 4 claws and remove the cover.



47. REMOVE REAR SEAT SHOULDER BELT HOLE COVER LH

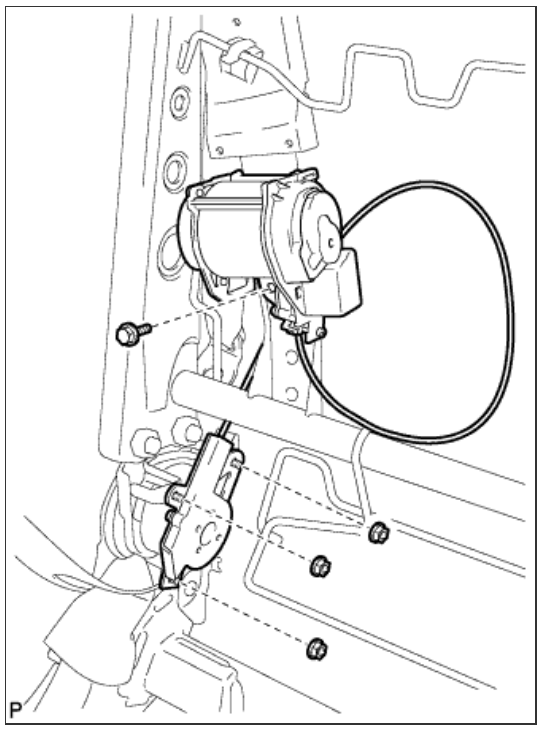
a. Using a screwdriver, detach the 3 claws and remove the shoulder belt hole cover.



48. REMOVE NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Remove the 3 nuts and belt sensor.

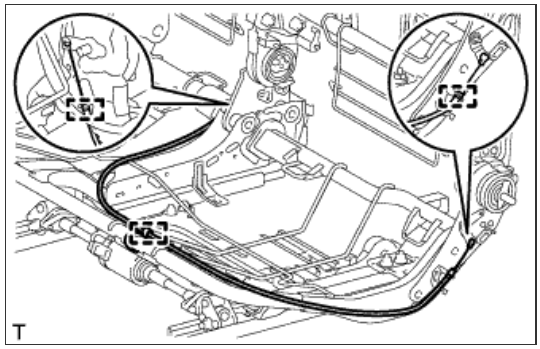
b. Remove the nut and outer belt.



49. REMOVE RECLINING ADJUSTING CABLE ASSEMBLY LH

a. Detach the 2 cable clamps and disconnect the cable.

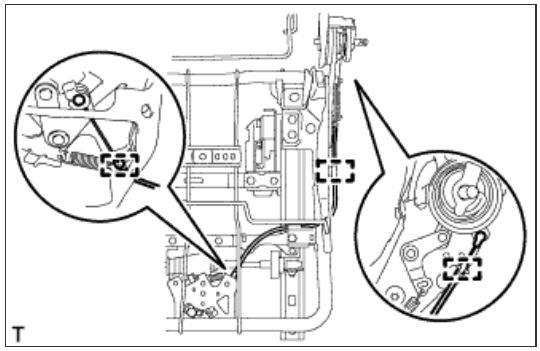
b. Detach the clamp and remove the adjusting cable.



50. REMOVE NO. 2 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Detach the 2 cable clamps and disconnect the cable.

b. Detach the clamp and remove the lock control cable.

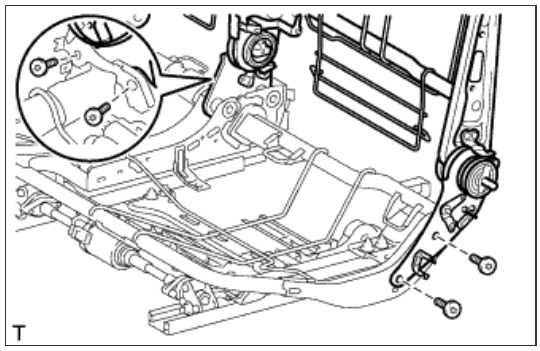


51. REMOVE REAR SEATBACK FRAME SUB-ASSEMBLY LH

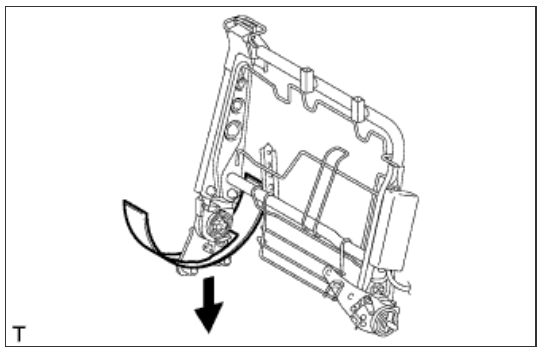
a. LH Side:
Using a T40 "TORX" socket, remove the 2 bolts.

b. RH Side:
Using a T55 "TORX" socket, remove the 2 bolts.

c. Remove the seatback frame.

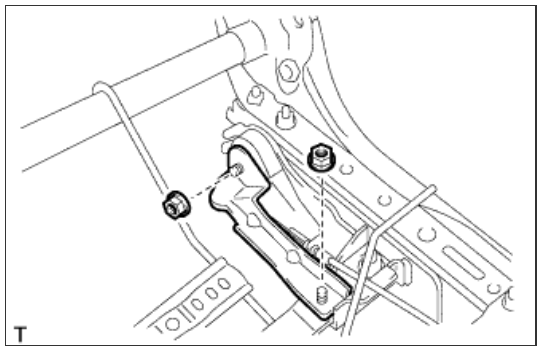


d. Remove the lower seatback cover.



52. REMOVE REAR NO. 1 SEAT LOCK CABLE ASSEMBLY

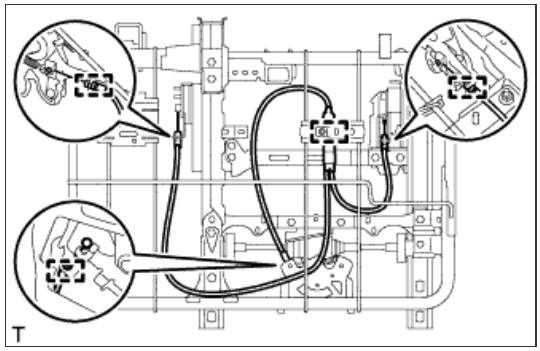
a. Remove the 2 nuts and lower seat track bracket.



b. Cut the cable tie and disconnect the cable.

c. Detach the 3 cable clamps and disconnect the 3 cables.

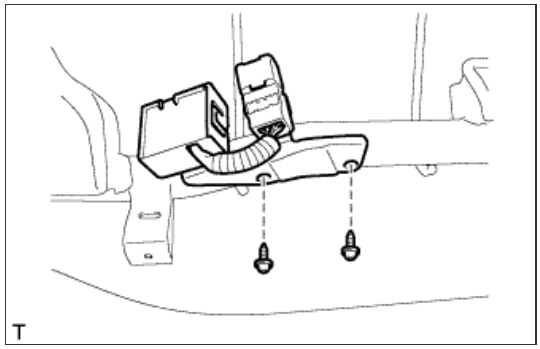
d. Detach the clamp and remove the seat lock cable.



53. REMOVE REAR SEAT CUSHION HOLDER BRACKET LH (w/ Seat Heater System)

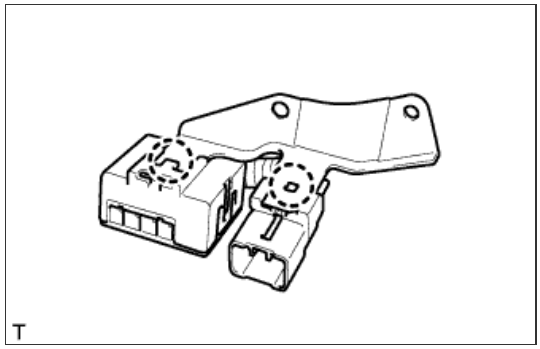
a. Disconnect the seat wire connector.

b. Remove the 2 screws and holder bracket.



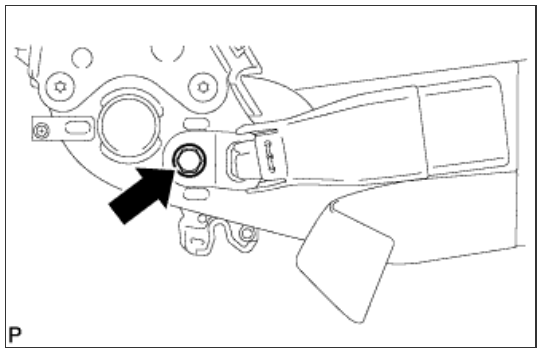
54. REMOVE SEAT HEATER CONTROL SUB-ASSEMBLY LH (w/ Seat Heater System)

a. Detach the 2 claws and remove the seat heater control.



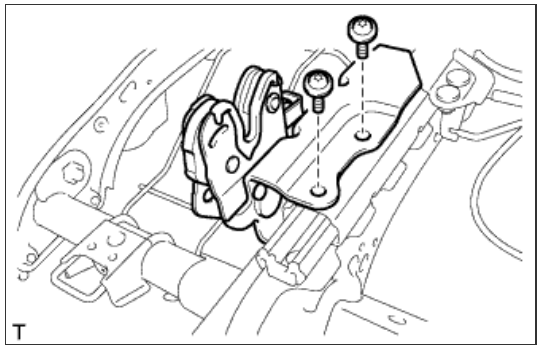
55. REMOVE REAR SEAT INNER BELT ASSEMBLY

a. Remove the bolt and belt.



56. REMOVE NO. 1 SEAT LEG ASSEMBLY LH

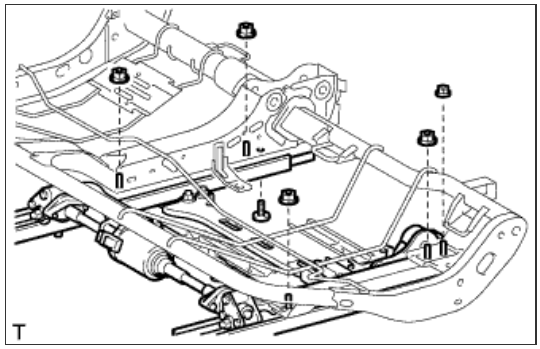
a. Using T40 "TORX" socket, remove the 2 bolts and seat leg assembly.



57. REMOVE REAR SEAT CUSHION FRAME SUB-ASSEMBLY LH

a. Using a T40 "TORX" socket, remove the bolt.

b. Remove the 5 nuts and seat cushion frame.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

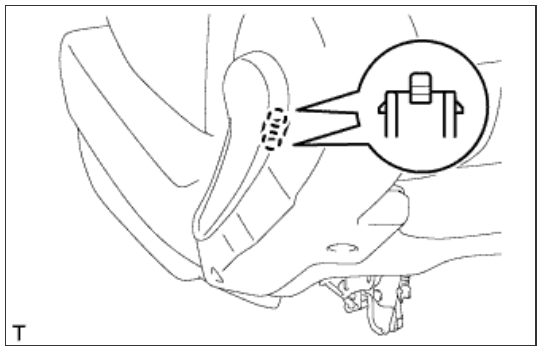
- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

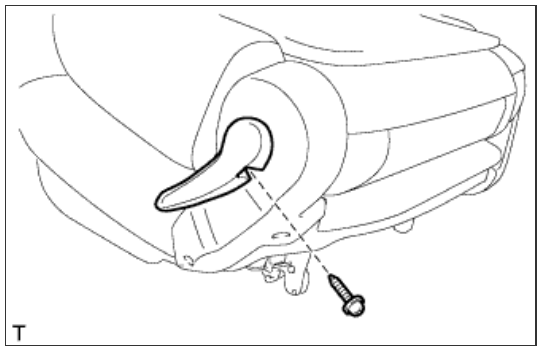
HINT:

Tape the screwdriver tip before use.



2. REMOVE RECLINING ADJUSTER RELEASE HANDLE LH

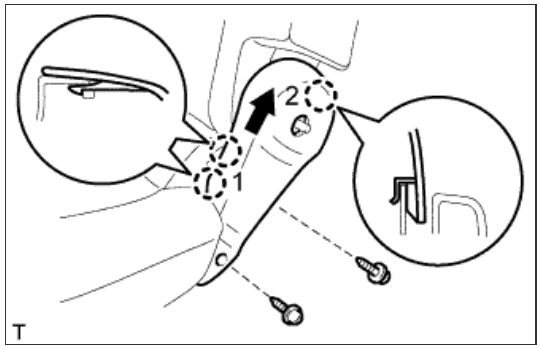
a. Remove the screw and release handle.



3. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

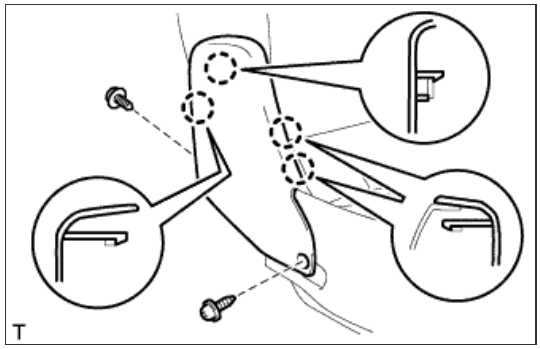
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

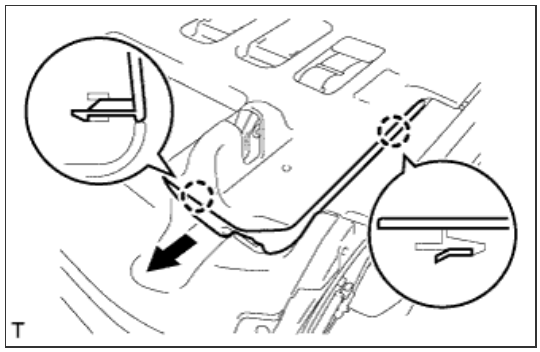


5. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

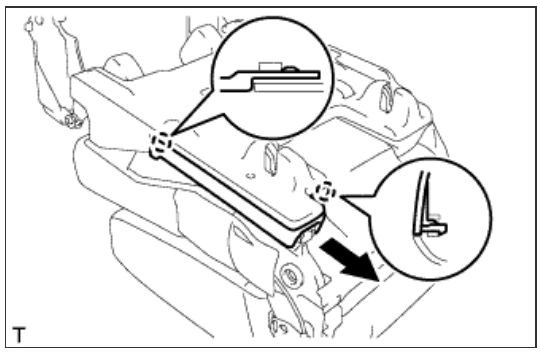


6. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

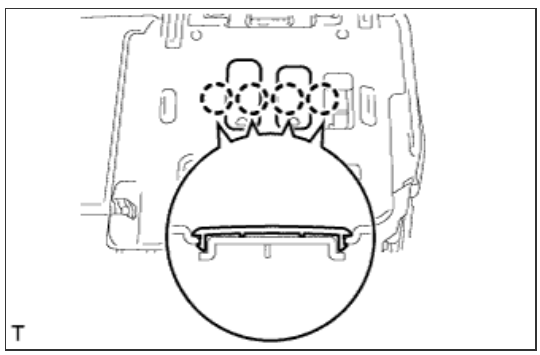
HINT:

Tape the screwdriver tip before use.



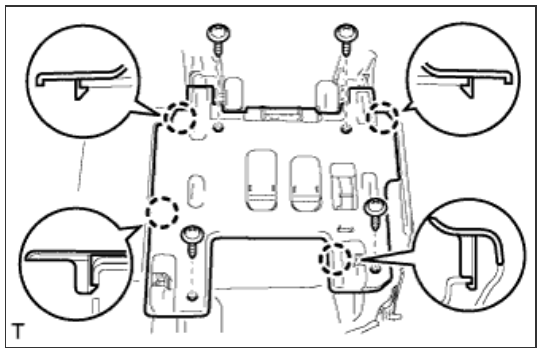
7. REMOVE NO. 1 SEAT CUSHION COVER

a. Detach the 4 claws and remove the 2 covers.

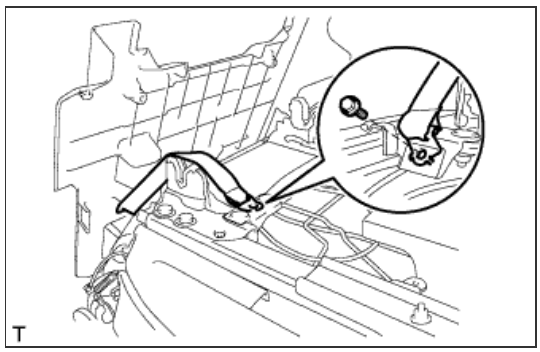


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 4 claws.



b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE FOLD SEAT STOPPER BAND ASSEMBLY

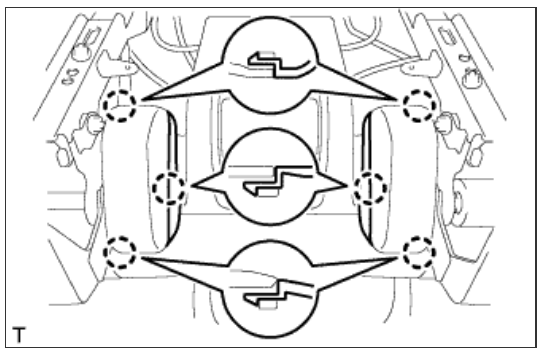
a. Remove the fold seat stopper band from the seat leg side cover.

10. REMOVE REAR SEAT SIDE HINGE FEMALE COVER

a. Using a screwdriver, detach the 6 claws and remove the 2 covers.

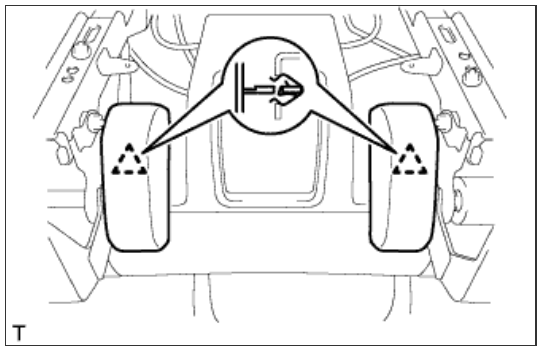
HINT:

Tape the screwdriver tip before use.



11. REMOVE REAR SEAT SIDE HINGE MALE COVER LH

a. Detach the clip and remove the cover.



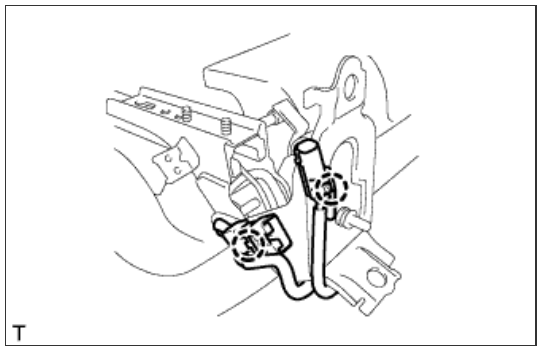
12. REMOVE REAR SEAT SIDE HINGE MALE COVER RH

a. Detach the clip and remove the cover.

13. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

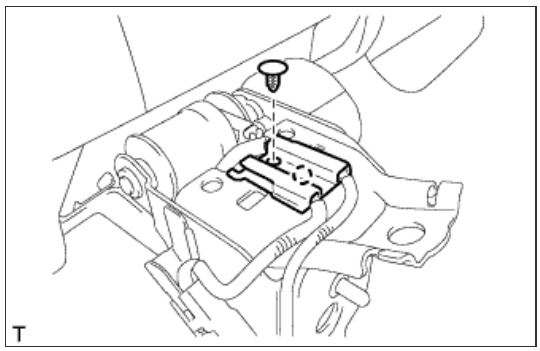
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.

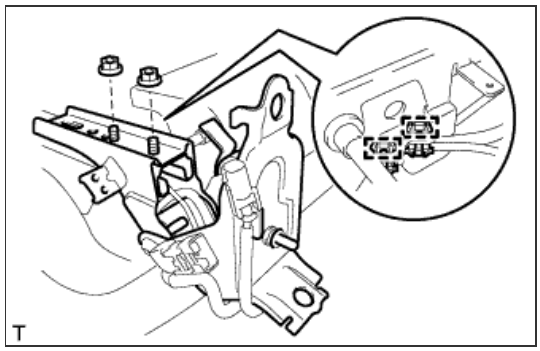


14. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Detach the wire harness clamp.

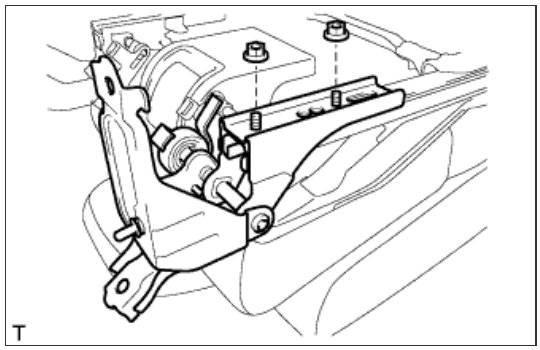
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



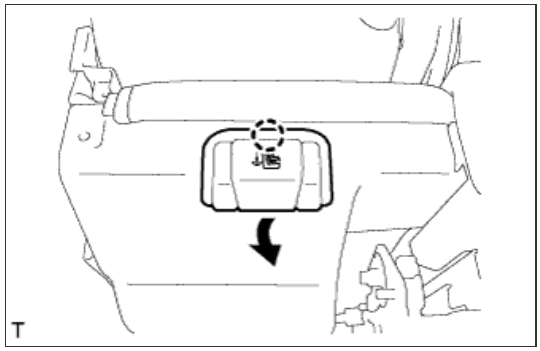
15. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Remove the 2 nuts and hinge.

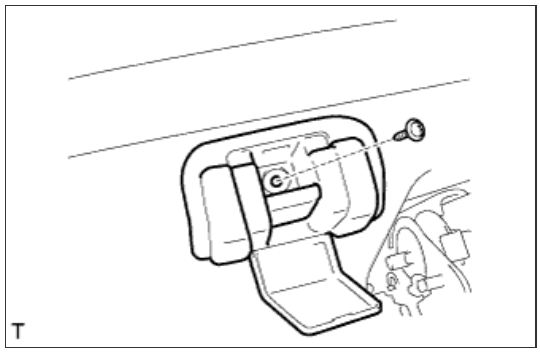


16. REMOVE SEAT BELT ANCHOR COVER CAP

a. Detach the claw and open the cap.



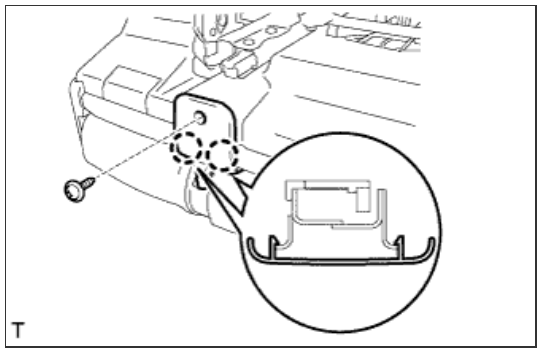
b. Remove the screw and anchor cover cap.



17. REMOVE REAR SEATBACK STAY COVER LH

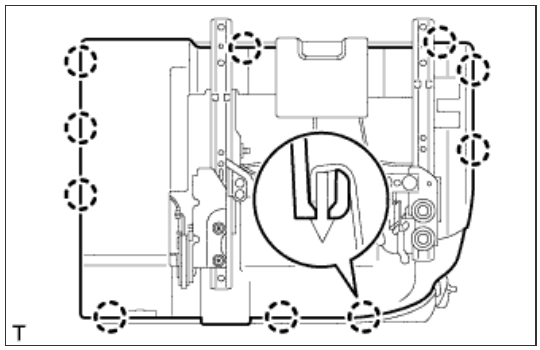
a. Remove the screw.

b. Detach the 2 claws and remove the cover.



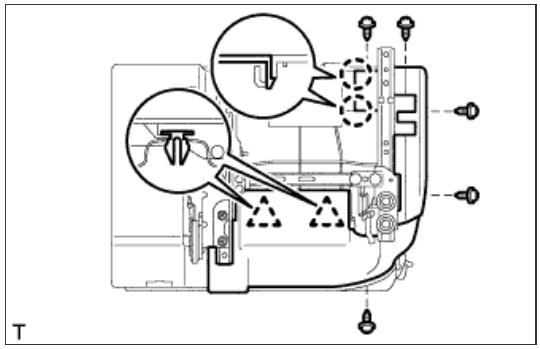
18. REMOVE REAR UNDER SIDE COVER LH

a. Detach the 10 claws.



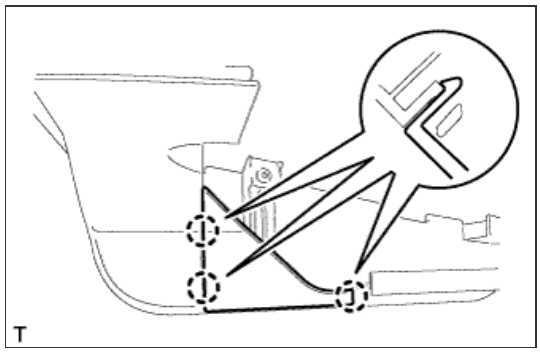
b. Remove the 5 screws.

c. Detach the 2 clips and 2 claws, and remove the cover.



19. REMOVE NO. 1 SEAT CUSHION PLATE

a. Detach the 3 claws and remove the seat cushion plate.



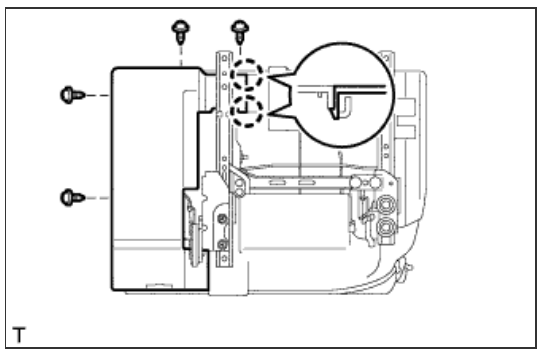
20. REMOVE REAR POWER SEAT SWITCH

a. Remove the 2 screws and power seat switch.

21. REMOVE REAR SEAT CUSHION COVER RH

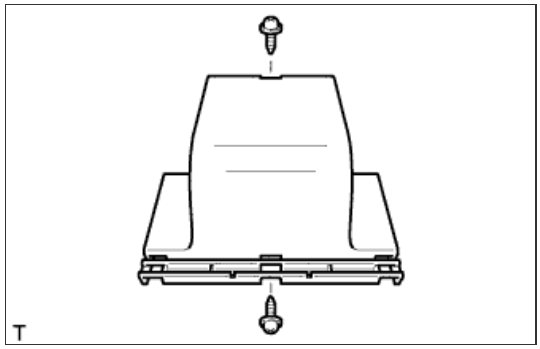
a. Remove the 4 screws.

b. Detach the 2 claws and remove the cover.



22. REMOVE REAR SEAT UNDER TRAY COVER LH

a. Remove the 2 screws and cover.

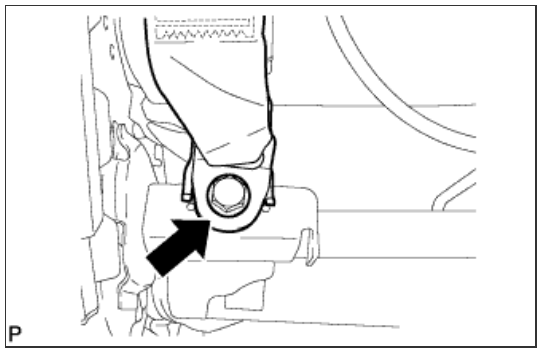


23. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Remove the bolt and belt.

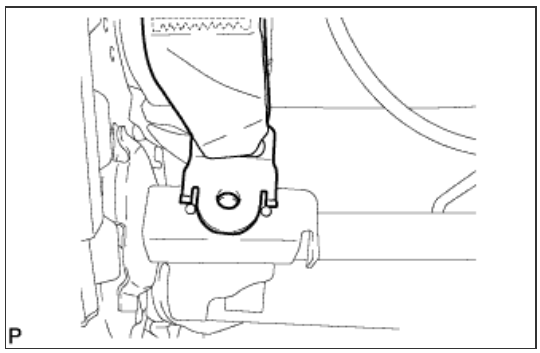
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, it becomes disconnected when the bolt is removed.



24. DISCONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Disconnect the belt anchor.



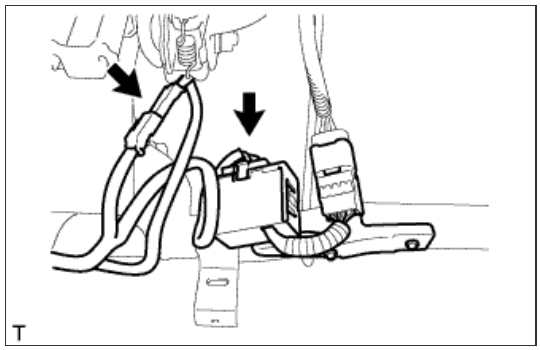
25. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

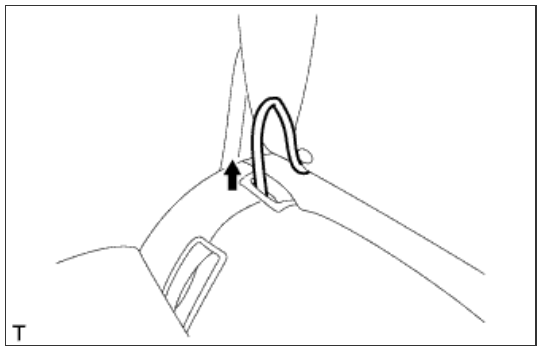
b. Remove the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.

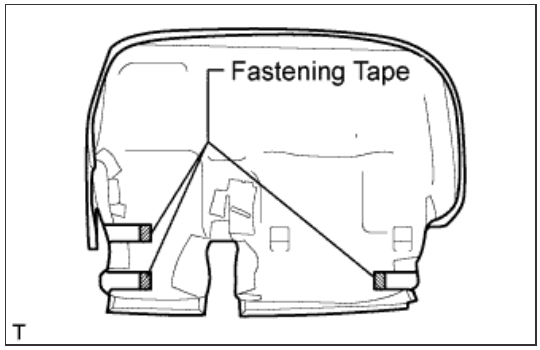


d. Remove the seat cushion cover with pad.

26. REMOVE REAR SEPARATE TYPE SEAT CUSHION COVER

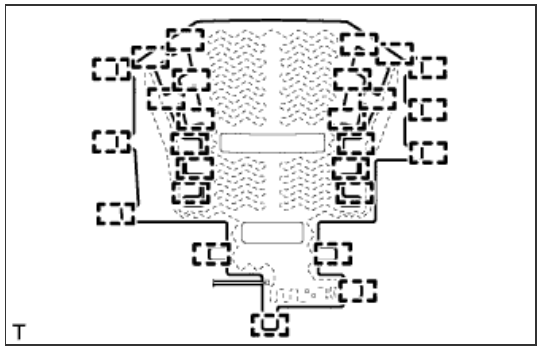
a. Detach the 3 pieces of fastening tape.

b. Remove the hog rings and cover.



27. REMOVE REAR SEAT CUSHION HEATER ASSEMBLY (w/ Seat Heater System)

a. Cut off the tack pins which fasten the seat heater to the seat cushion cover, and then remove the seat cushion heater from the seat cushion cover.

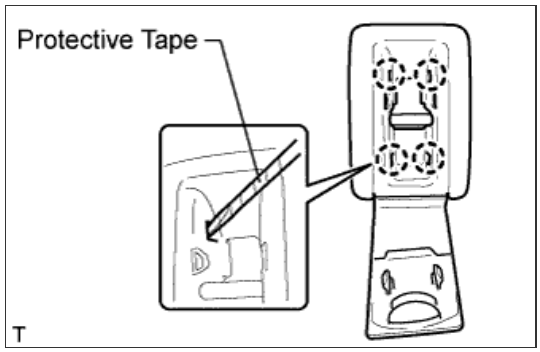


28. REMOVE REAR SEATBACK COVER

a. Using a screwdriver, detach the 4 claws and remove the cover.

HINT:

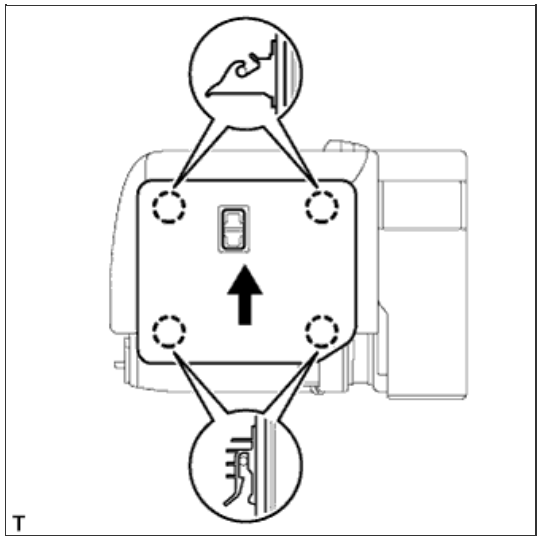
Tape the screwdriver tip before use.



29. REMOVE REAR SEATBACK BOARD SUB-ASSEMBLY LH

a. Detach the 2 claws on the top of the board.

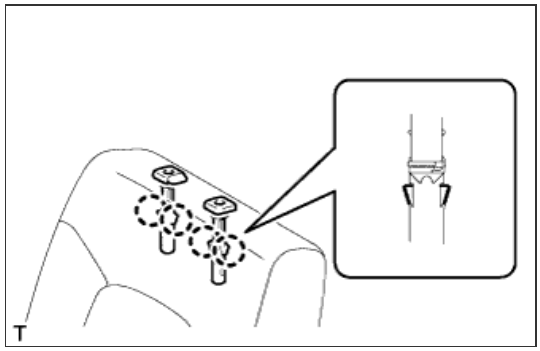
b. Pull up the board to detach the 2 claws on the bottom of the board and remove it.



30. REMOVE REAR SEAT HEADREST ASSEMBLY

31. REMOVE REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Detach the 4 claws and remove the 2 supports.

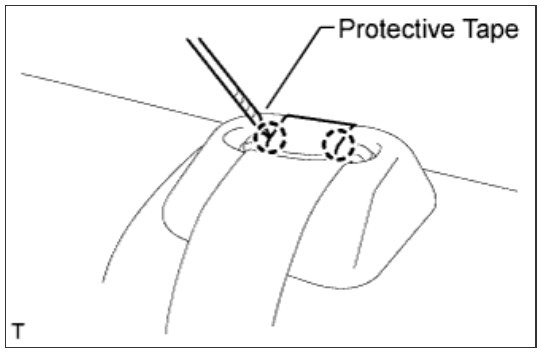


32. REMOVE SHOULDER BELT ANCHOR COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

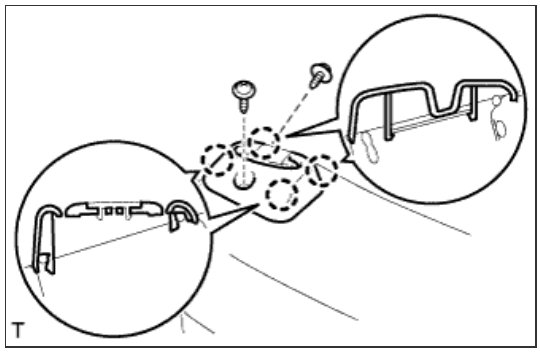
Tape the screwdriver tip before use.



33. REMOVE REAR SEAT BELT HOLE COVER LH

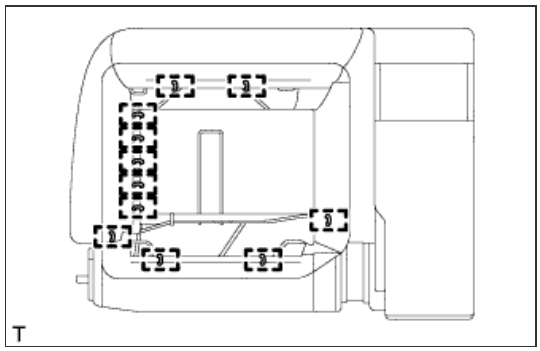
a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



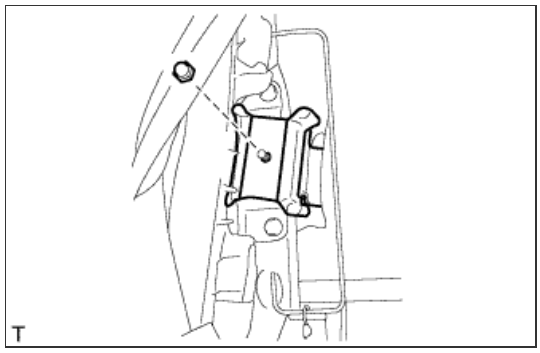
34. REMOVE SEATBACK COVER WITH PAD

a. Remove the hog rings.



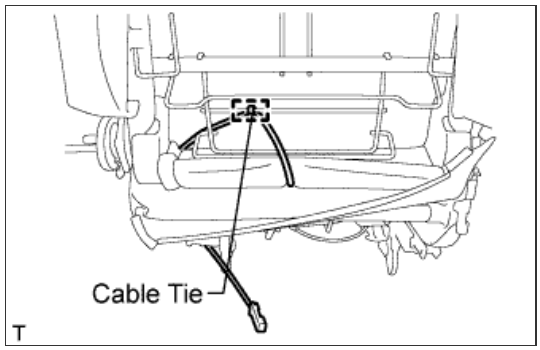
b. Remove the cap nut and seatback cover bracket from the seat frame.

c. Remove the side airbag wire harness through the hole in the seatback.

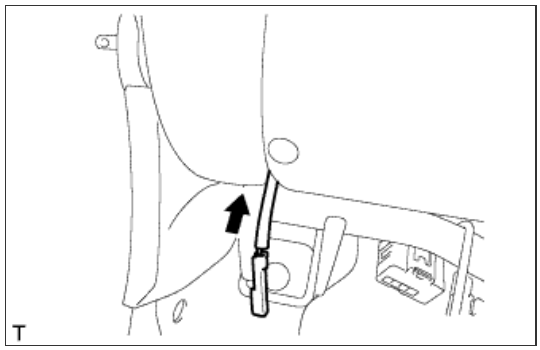


d. w/ Seat Heater System:

i. Cut the cable tie and disconnect the seatback heater wire harness.

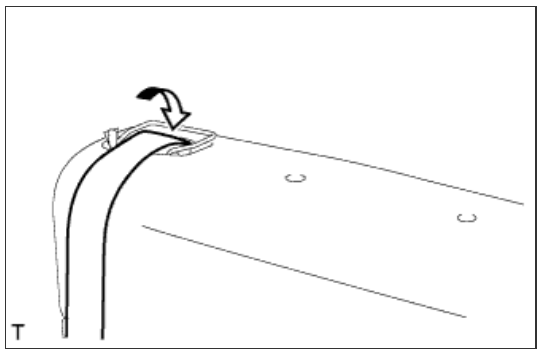


ii. Remove the seatback heater wire harness through the hole in the seatback.



e. Pull the seat belt into the inside of the seat.

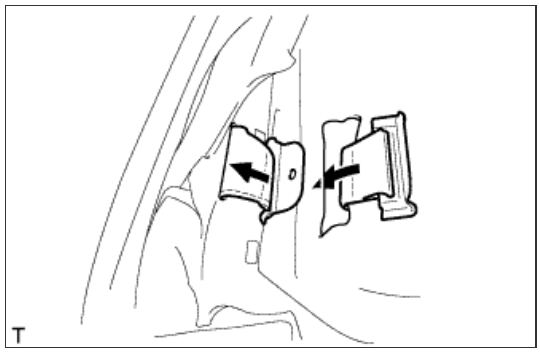
f. Remove the seatback cover with pad.



35. REMOVE REAR SEPARATE TYPE SEATBACK COVER

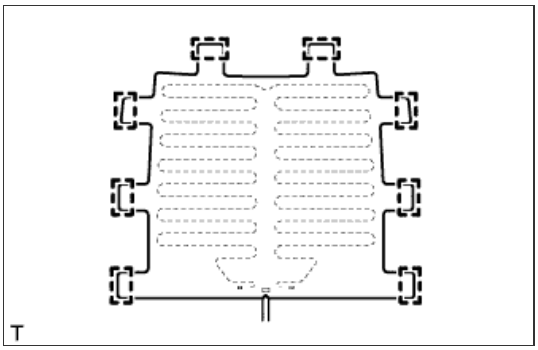
a. Disconnect the seatback cover bracket from the seatback pad.

b. Remove the hog rings and rear seatback cover.



36. REMOVE REAR SEATBACK HEATER ASSEMBLY (w/ Seat Heater System)

a. Cut off the tack pins which fasten the seatback heater to the seatback cover, and then remove the seatback heater from the seatback cover.

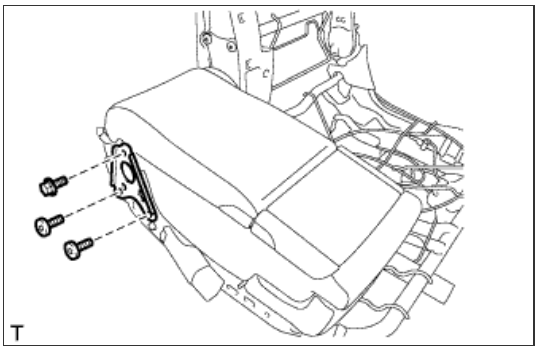


37. REMOVE SEATBACK STOPPER PLATE

a. Using a T40 "TORX" socket, remove the 2 bolts.

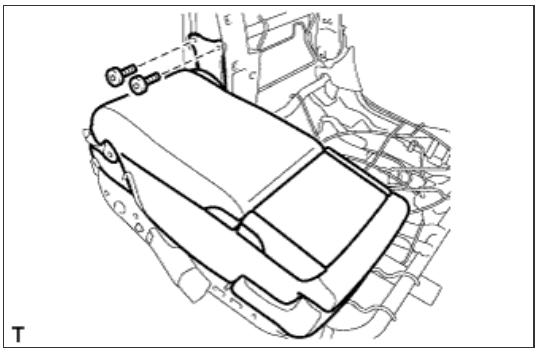
b. Remove the bolt and stopper plate.

c. Remove the bush from the stopper plate.



38. REMOVE REAR CENTER SEAT ARMREST ASSEMBLY

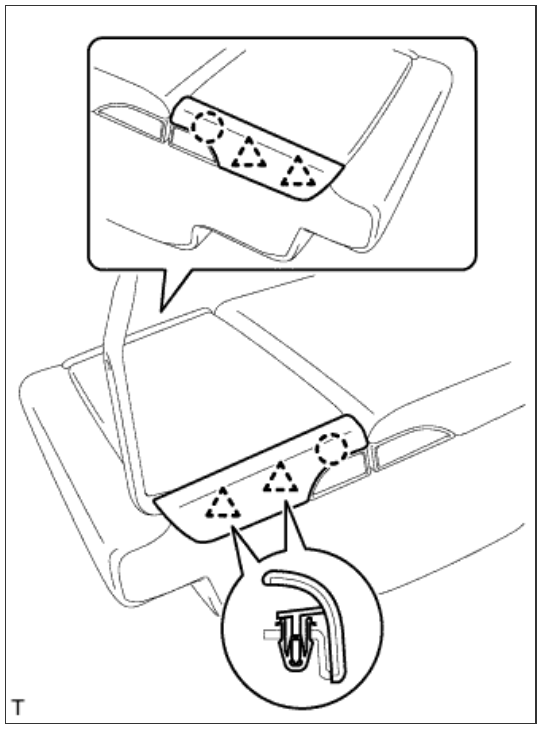
a. Using a T40 "TORX" socket, remove the 2 bolts and center seat armrest.



39. REMOVE REAR CENTER SEAT HEADREST ASSEMBLY

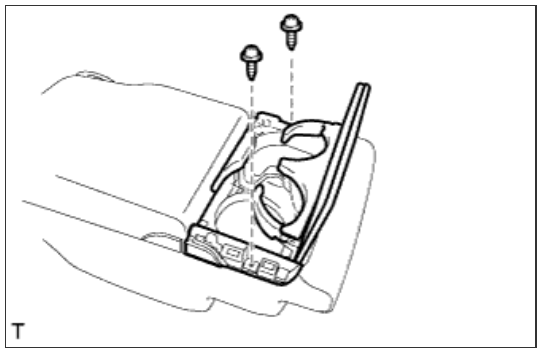
40. REMOVE NO. 1 SEAT ARMREST PLATE

a. Using a moulding remover, detach the 4 clips and 2 claws, and then remove the 2 armrest plates.

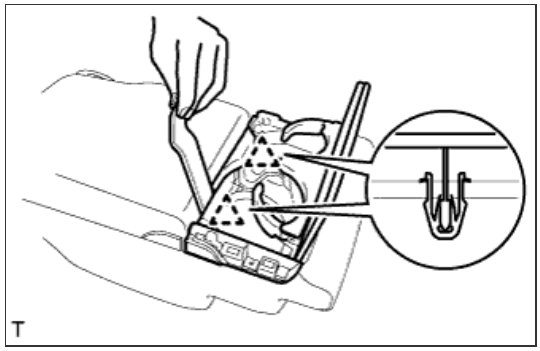


41. REMOVE CUP HOLDER ASSEMBLY

a. Remove the 2 screws.



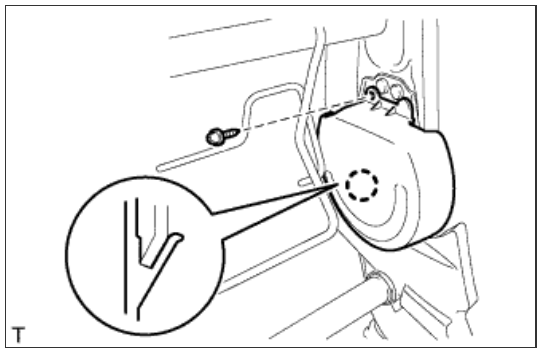
b. Using a moulding remover, detach the 2 clips and remove the cup holder.



42. REMOVE REAR SEAT RECLINING COVER LH

a. Remove the screw.

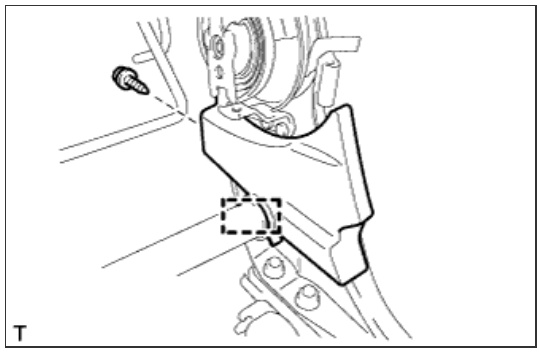
b. Detach the claw and remove the cover.



43. REMOVE REAR NO. 2 SEAT RECLINING COVER LH

a. Remove the screw.

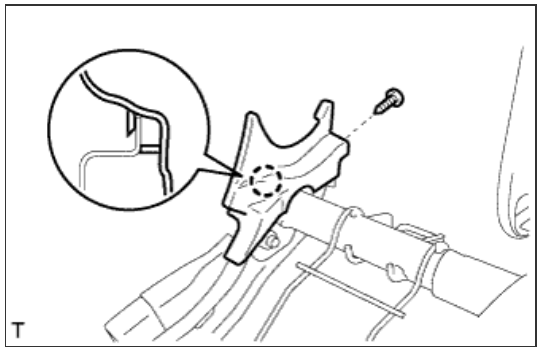
b. Detach the clamp and remove the cover.



44. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the screw.

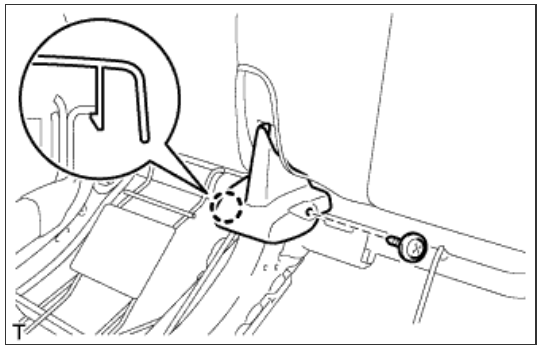
b. Detach the claw and remove the cover.



45. REMOVE REAR SEATBACK HINGE COVER LH

a. Remove the screw.

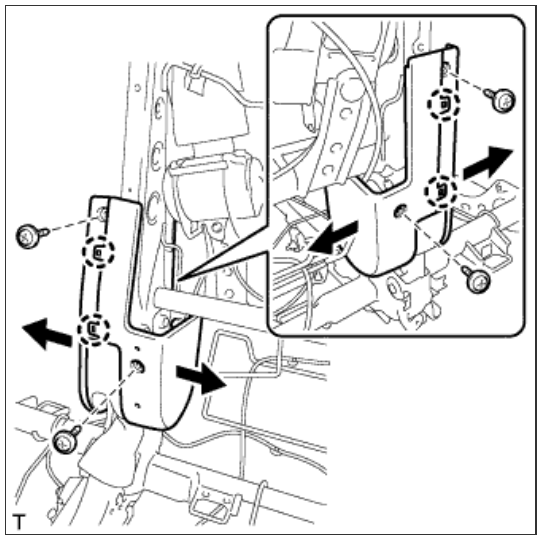
b. Detach the claw and remove the cover.



46. REMOVE REAR LOWER SEATBACK COVER SUB-ASSEMBLY LH

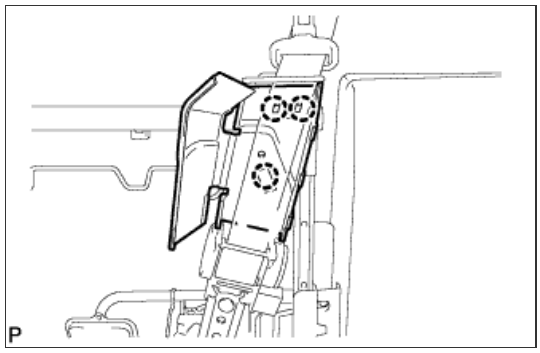
a. Remove the 4 screws.

b. Detach the 4 claws and remove the cover.



47. REMOVE REAR SEAT SHOULDER BELT HOLE COVER LH

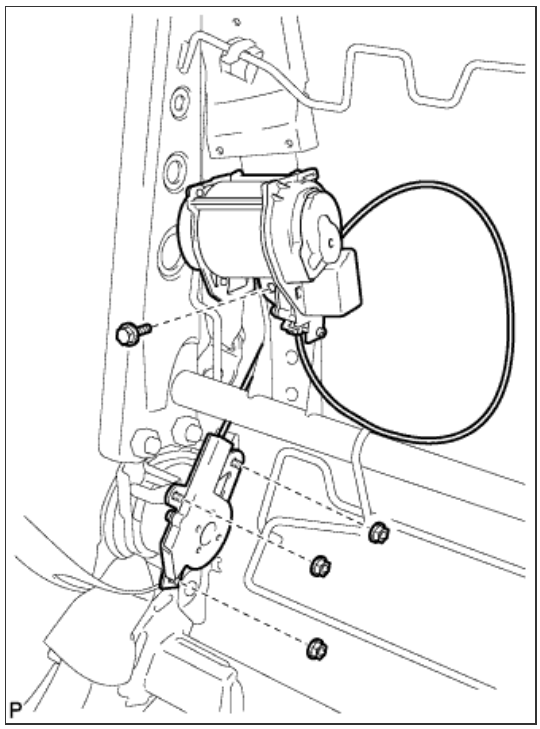
a. Using a screwdriver, detach the 3 claws and remove the shoulder belt hole cover.



48. REMOVE NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Remove the 3 nuts and belt sensor.

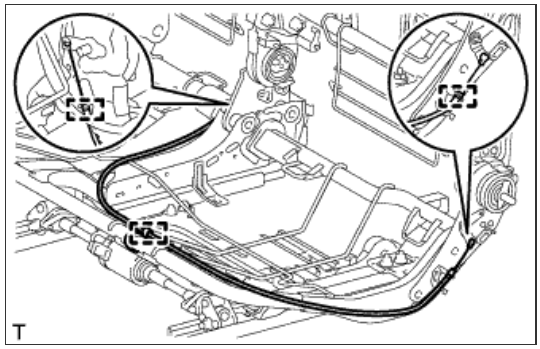
b. Remove the nut and outer belt.



49. REMOVE RECLINING ADJUSTING CABLE ASSEMBLY LH

a. Detach the 2 cable clamps and disconnect the cable.

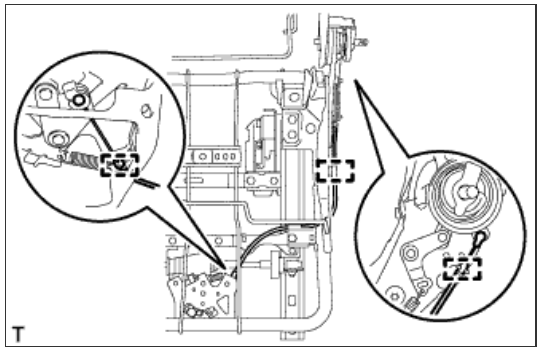
b. Detach the clamp and remove the adjusting cable.



50. REMOVE NO. 2 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Detach the 2 cable clamps and disconnect the cable.

b. Detach the clamp and remove the lock control cable.

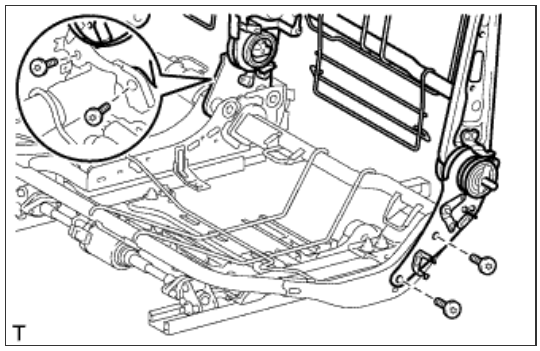


51. REMOVE REAR SEATBACK FRAME SUB-ASSEMBLY LH

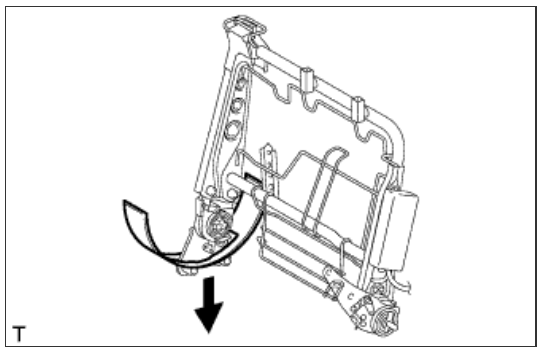
a. LH Side:
Using a T40 "TORX" socket, remove the 2 bolts.

b. RH Side:
Using a T55 "TORX" socket, remove the 2 bolts.

c. Remove the seatback frame.

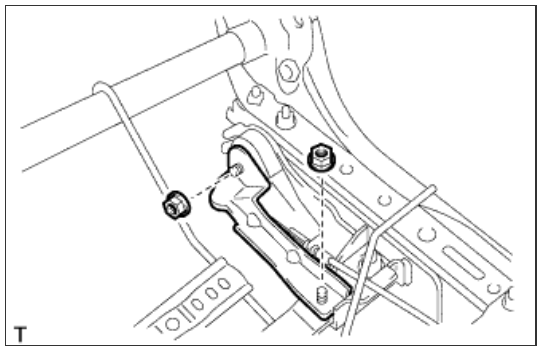


d. Remove the lower seatback cover.



52. REMOVE REAR NO. 1 SEAT LOCK CABLE ASSEMBLY

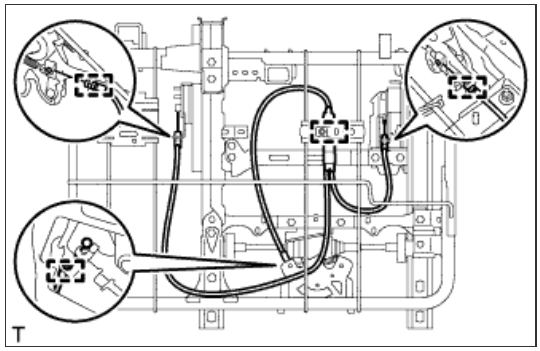
a. Remove the 2 nuts and lower seat track bracket.



b. Cut the cable tie and disconnect the cable.

c. Detach the 3 cable clamps and disconnect the 3 cables.

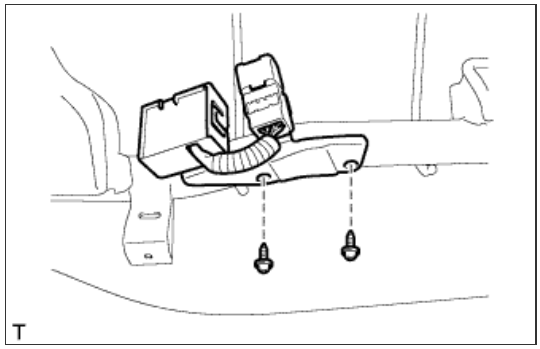
d. Detach the clamp and remove the seat lock cable.



53. REMOVE REAR SEAT CUSHION HOLDER BRACKET LH (w/ Seat Heater System)

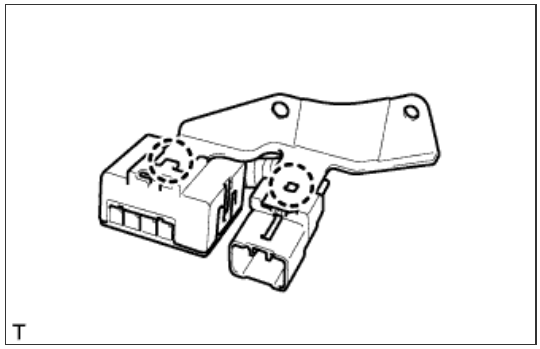
a. Disconnect the seat wire connector.

b. Remove the 2 screws and holder bracket.



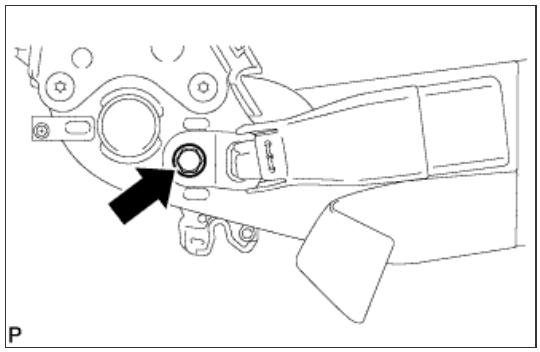
54. REMOVE SEAT HEATER CONTROL SUB-ASSEMBLY LH (w/ Seat Heater System)

a. Detach the 2 claws and remove the seat heater control.



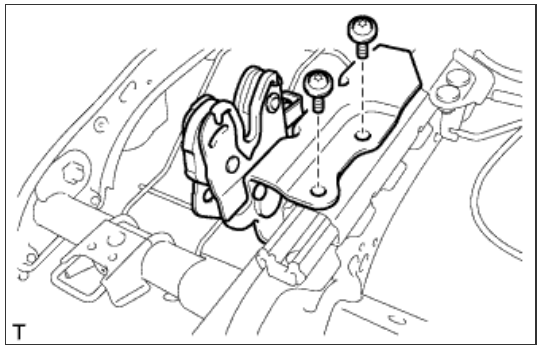
55. REMOVE REAR SEAT INNER BELT ASSEMBLY

a. Remove the bolt and belt.



56. REMOVE NO. 1 SEAT LEG ASSEMBLY LH

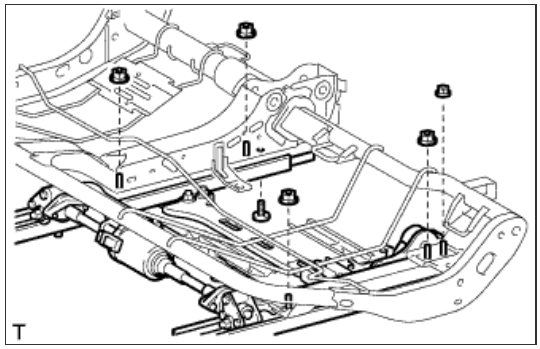
a. Using T40 "TORX" socket, remove the 2 bolts and seat leg assembly.



57. REMOVE REAR SEAT CUSHION FRAME SUB-ASSEMBLY LH

a. Using a T40 "TORX" socket, remove the bolt.

b. Remove the 5 nuts and seat cushion frame.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEAT CUSHION FRAME SUB-ASSEMBLY LH

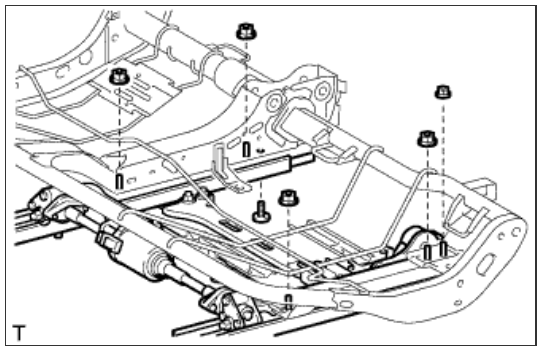
a. Temporarily install the seat cushion frame with the 5 nuts and bolt.

b. Tighten the 5 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

c. Using a T40 "TORX" socket, tighten the bolt.

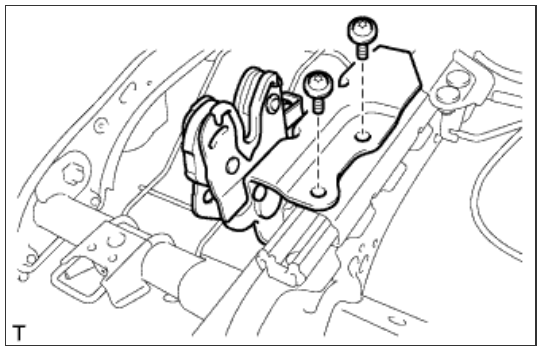
Torque:
21 N*m{ 214 kgf*cm , 15 ft.*lbf }



2. INSTALL NO. 1 SEAT LEG ASSEMBLY LH

a. Using a T40 "TORX" socket, install the seat leg assembly with the 2 bolts.

Torque:
21 N*m{ 214 kgf*cm , 15 ft.*lbf }



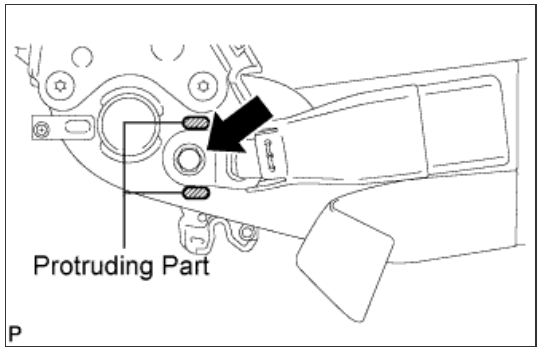
3. INSTALL REAR SEAT INNER BELT ASSEMBLY

a. Install the seat belt with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

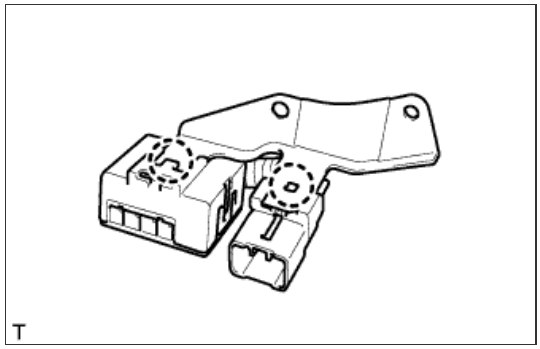
NOTICE:

The anchor part of the seat belt must not overlap the protruding part.



4. INSTALL SEAT HEATER CONTROL SUB-ASSEMBLY LH (w/ Seat Heater System)

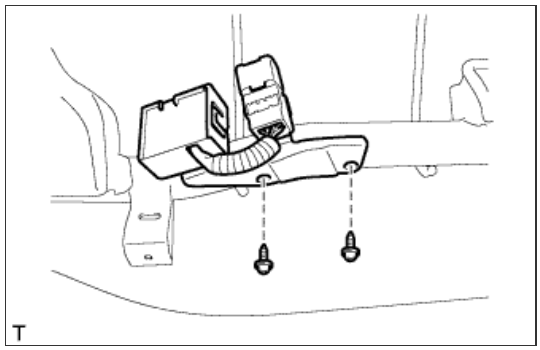
a. Attach the 2 claws to install the seat heater control.



5. INSTALL REAR SEAT CUSHION HOLDER BRACKET LH (w/ Seat Heater System)

a. Install the holder bracket with the 2 screws.

b. Connect the seat wire connector.

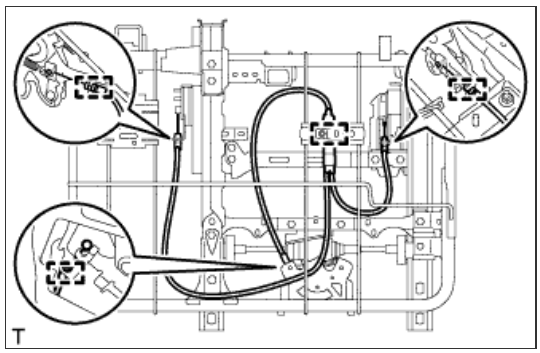


6. INSTALL REAR NO. 1 SEAT LOCK CABLE ASSEMBLY

a. Attach the clamp to install the seat lock cable.

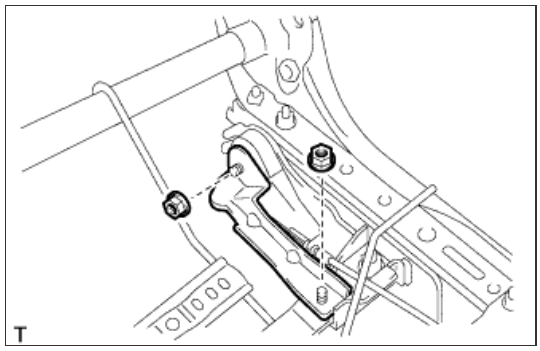
b. Attach the 3 cable clamps to connect the 3 cables.

c. Connect the cable and install a new cable tie.



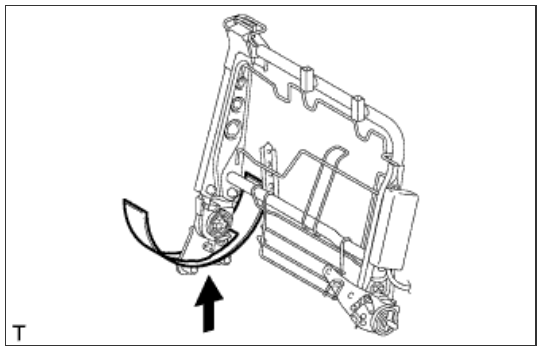
d. Install the lower seat track bracket with the 2 nuts.

Torque:
21 N*m{ 214 kgf*cm , 15 ft.*lbf }



7. INSTALL REAR SEATBACK FRAME SUB-ASSEMBLY LH

a. Install the lower seatback cover.



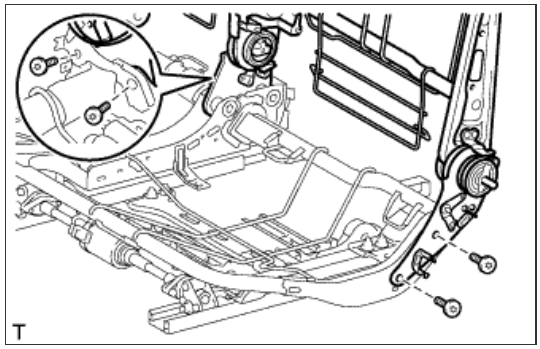
b. Temporarily install the seatback frame with the 4 bolts.

c. for LH Side:
Using a T40 "TORX" socket, tighten the 2 bolts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

d. for RH Side:
Using a T55 "TORX" socket, tighten the 2 bolts.

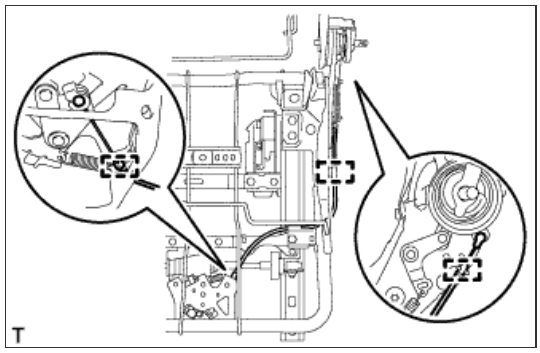
Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



8. INSTALL NO. 2 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Attach the clamp to install the lock control cable.

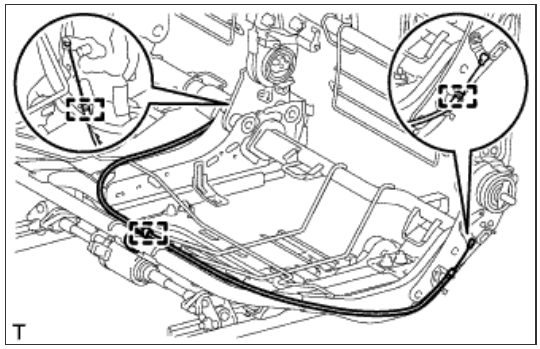
b. Attach the 2 cable clamps to connect the cable.



9. INSTALL RECLINING ADJUSTING CABLE ASSEMBLY LH

a. Attach the clamp to install the adjusting cable.

b. Attach the 2 cable clamps to connect the cable.



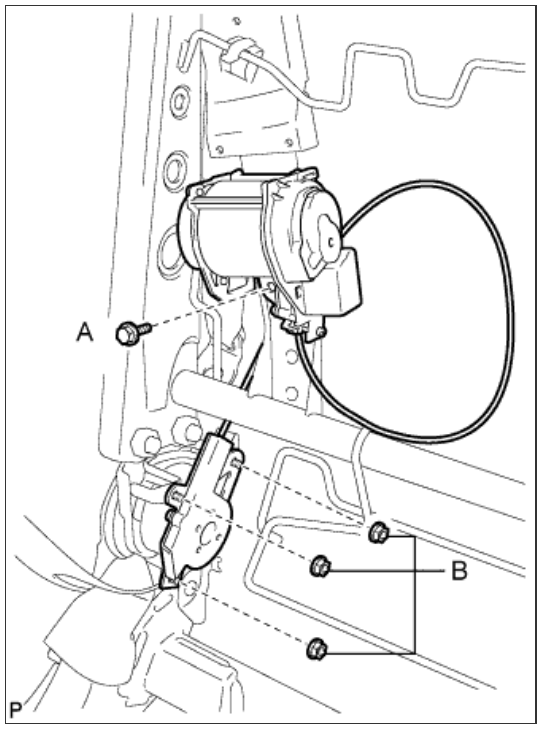
10. INSTALL NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Install the belt with the nut labeled A.

Torque:

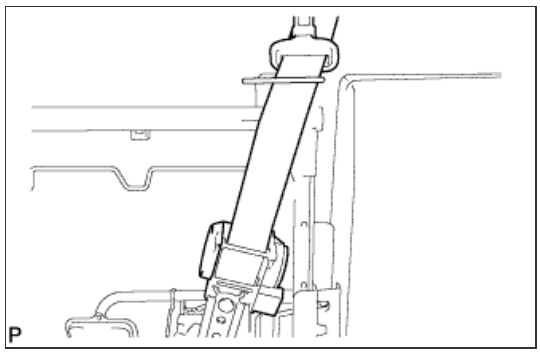
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Install the belt sensor with the 3 nuts labeled B.

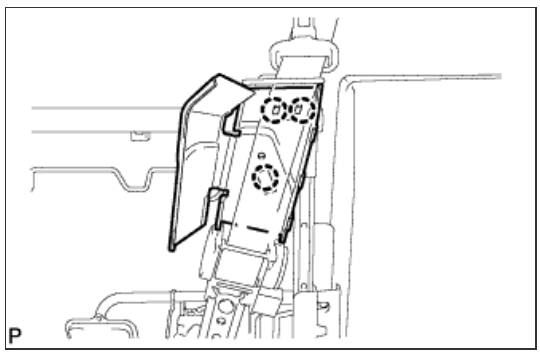


11. INSTALL REAR SEAT SHOULDER BELT HOLE COVER LH

a. Install the seat belt as shown in the illustration.



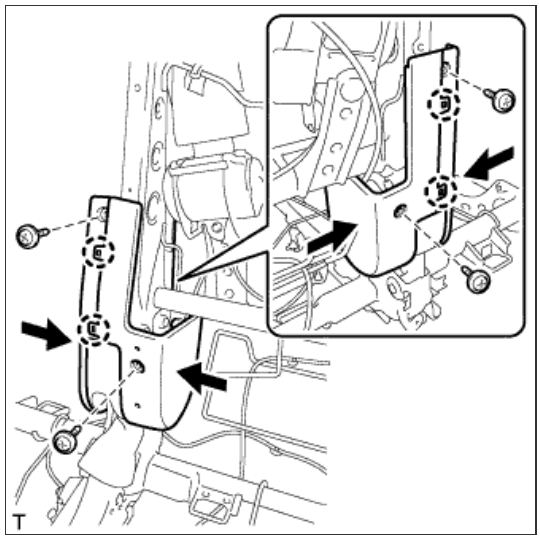
b. Attach the 3 claws to install the shoulder belt hole cover.



12. INSTALL REAR LOWER SEATBACK COVER SUB-ASSEMBLY LH

a. Attach the 4 claws to install the cover.

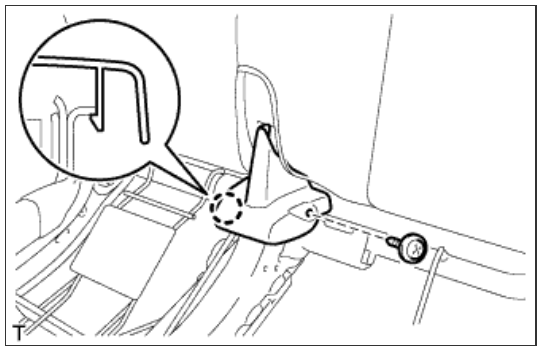
b. Install the 4 screws.



13. INSTALL REAR SEATBACK HINGE COVER LH

a. Attach the claw to install the cover.

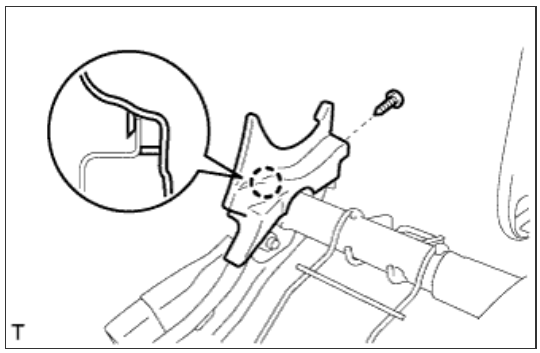
b. Install the screw.



14. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the claw to install the cover.

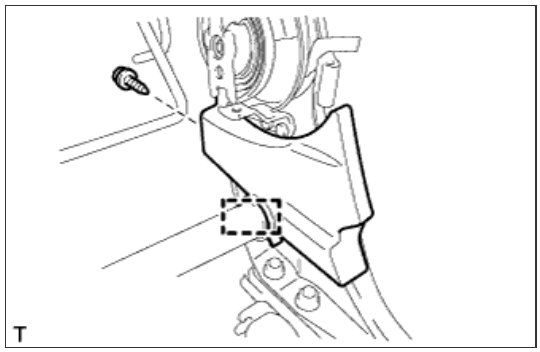
b. Install the screw.



15. INSTALL REAR NO. 2 SEAT RECLINING COVER LH

a. Attach the clamp to install the cover.

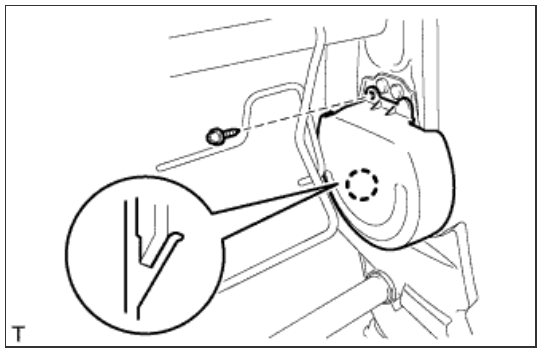
b. Install the screw.



16. INSTALL REAR SEAT RECLINING COVER LH

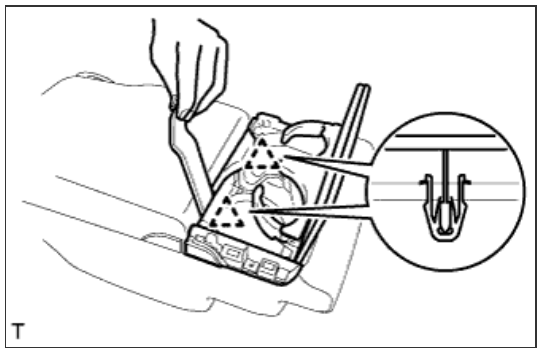
a. Attach the claw to install the cover.

b. Install the screw.

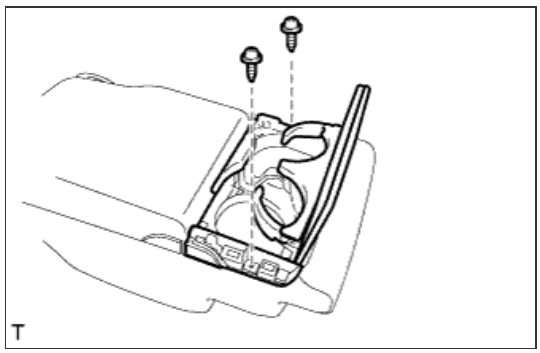


17. INSTALL CUP HOLDER ASSEMBLY

a. Attach the 2 clips to install the cup holder.

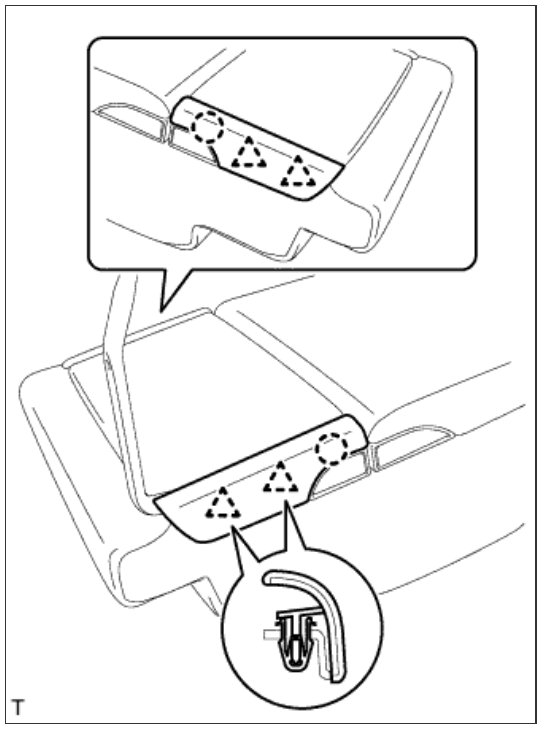


b. Install the 2 screws.



18. INSTALL NO. 1 SEAT ARMREST PLATE

a. Attach the 2 claws and 4 clips to install the 2 armrest plates.

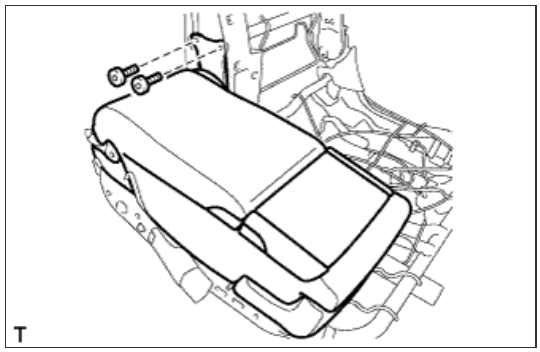


19. INSTALL REAR CENTER SEAT HEADREST ASSEMBLY

20. INSTALL REAR CENTER SEAT ARMREST ASSEMBLY

a. Using a T40 "TORX" socket, install the center seat armrest with the 2 bolts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



21. INSTALL SEATBACK STOPPER PLATE

a. Install the bush to the stopper plate.

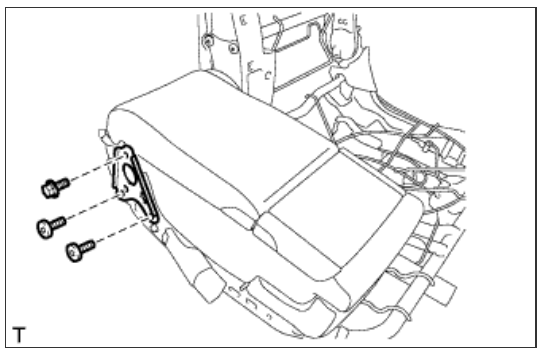
b. Temporarily install the stopper plate with the 3 bolts.

c. Using a T40 "TORX" socket, tighten the 2 bolts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

d. Tighten the bolt.

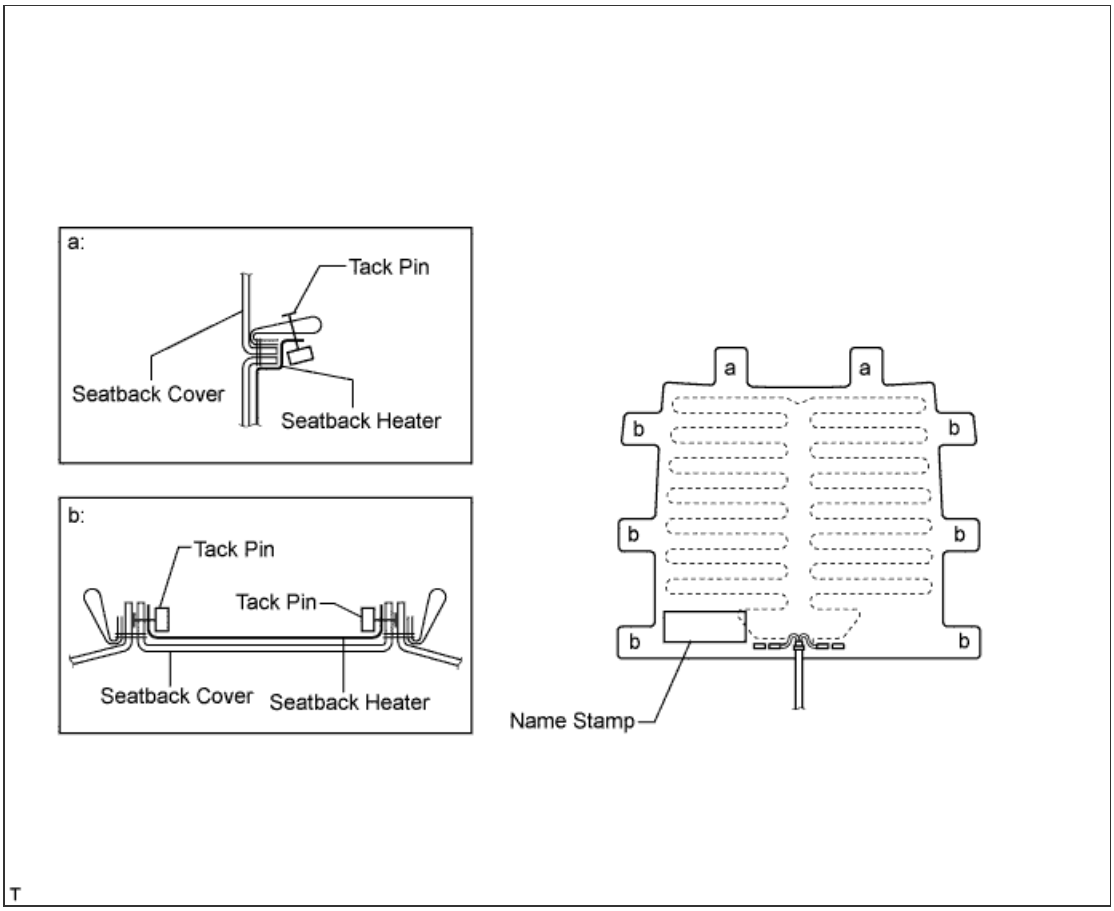
Torque:
15 N*m{ 153 kgf*cm , 11 ft.*lbf }



22. INSTALL REAR SEATBACK HEATER ASSEMBLY (w/ Seat Heater System)

a. Set the seatback heater with the name stamp side facing the seatback cover.

b. Install the seatback heater with new tack pins.

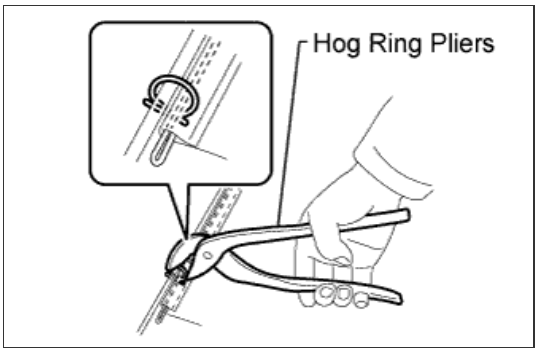


23. INSTALL REAR SEPARATE TYPE SEATBACK COVER

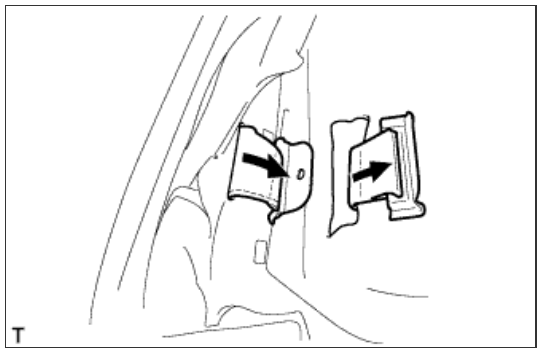
a. Using hog ring pliers, install the seatback cover with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Connect the seatback cover bracket to the seatback pad.

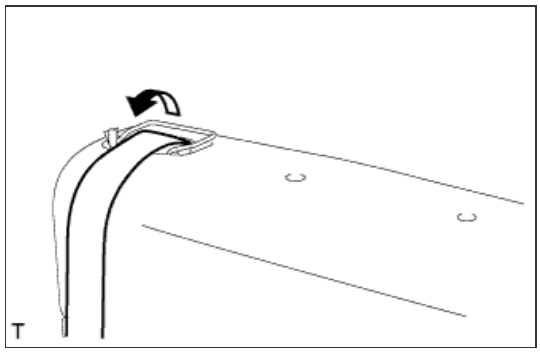


24. INSTALL SEATBACK COVER WITH PAD

a. Install the seatback cover with pad.

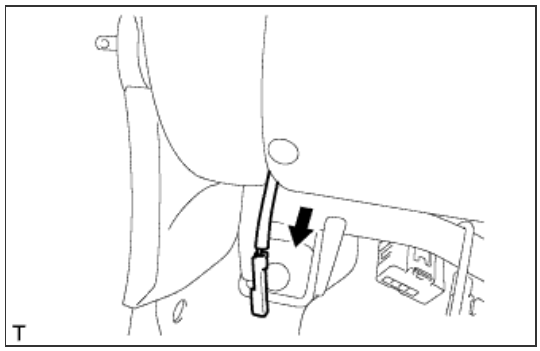
b. Pull out the seat belt.

c. Pass the side airbag wire harness through the hole in the seatback.

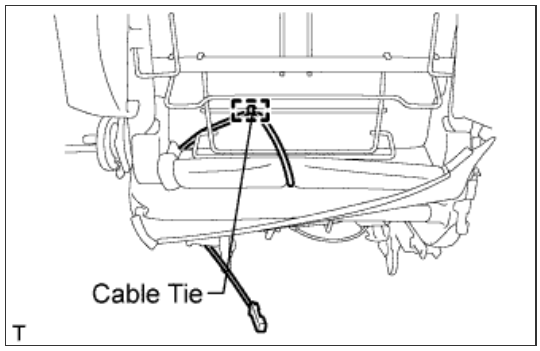


d. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seatback.



ii. Connect the seatback heater wire harness and install a new cable tie.

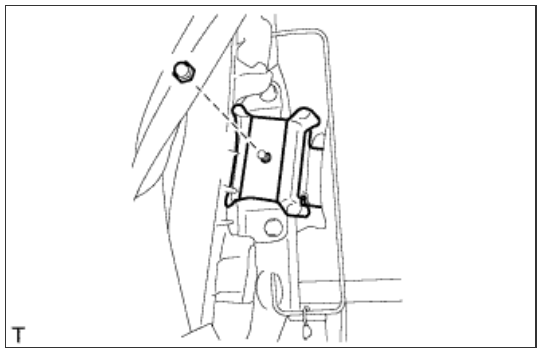


e. Install the seatback cover bracket to the seat frame with the cap nut.

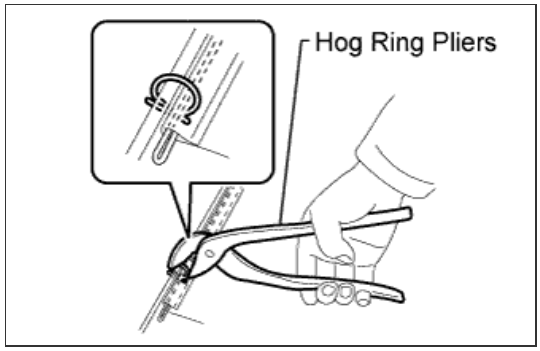
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

NOTICE:

After the seatback trim cover is assembled, make sure the side airbag strap is not twisted.



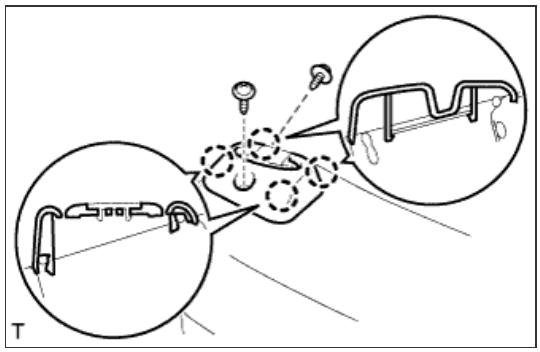
f. Using hog ring pliers, install new hog rings to the seatback frame.



25. INSTALL REAR SEAT BELT HOLE COVER LH

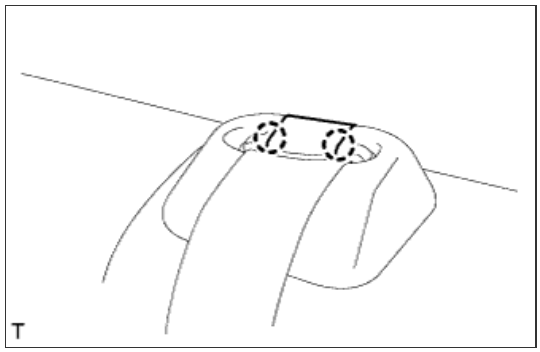
a. Attach the 4 claws to install the cover.

b. Install the 2 screws.



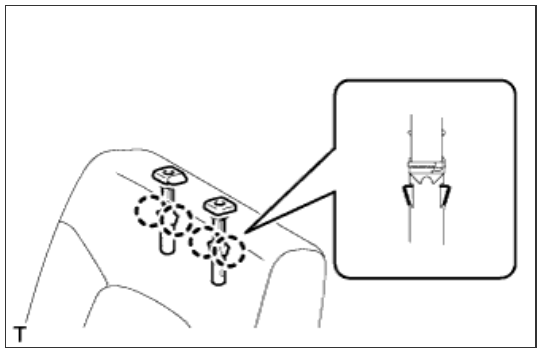
26. INSTALL SHOULDER BELT ANCHOR COVER

a. Attach the 2 claws to install the cover.



27. INSTALL REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Attach the 4 claws to install the 2 supports.

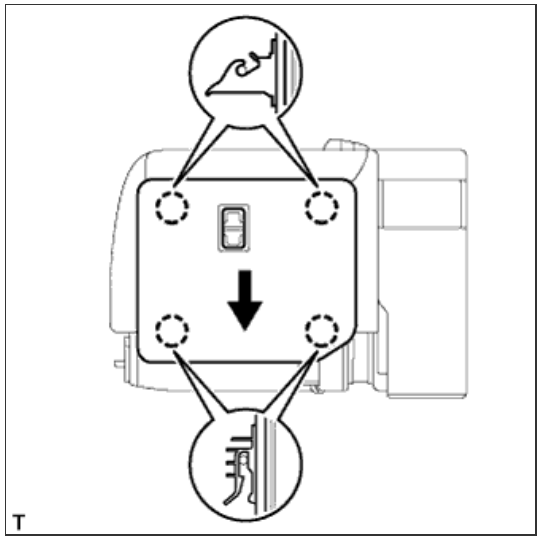


28. INSTALL REAR SEAT HEADREST ASSEMBLY

29. INSTALL REAR SEATBACK BOARD SUB-ASSEMBLY LH

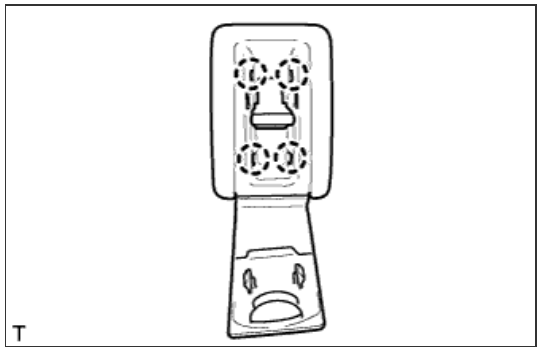
a. Push the board down to attach the 2 claws on the bottom.

b. Attach the 2 claws on the top of the board to install it.



30. INSTALL REAR SEATBACK COVER

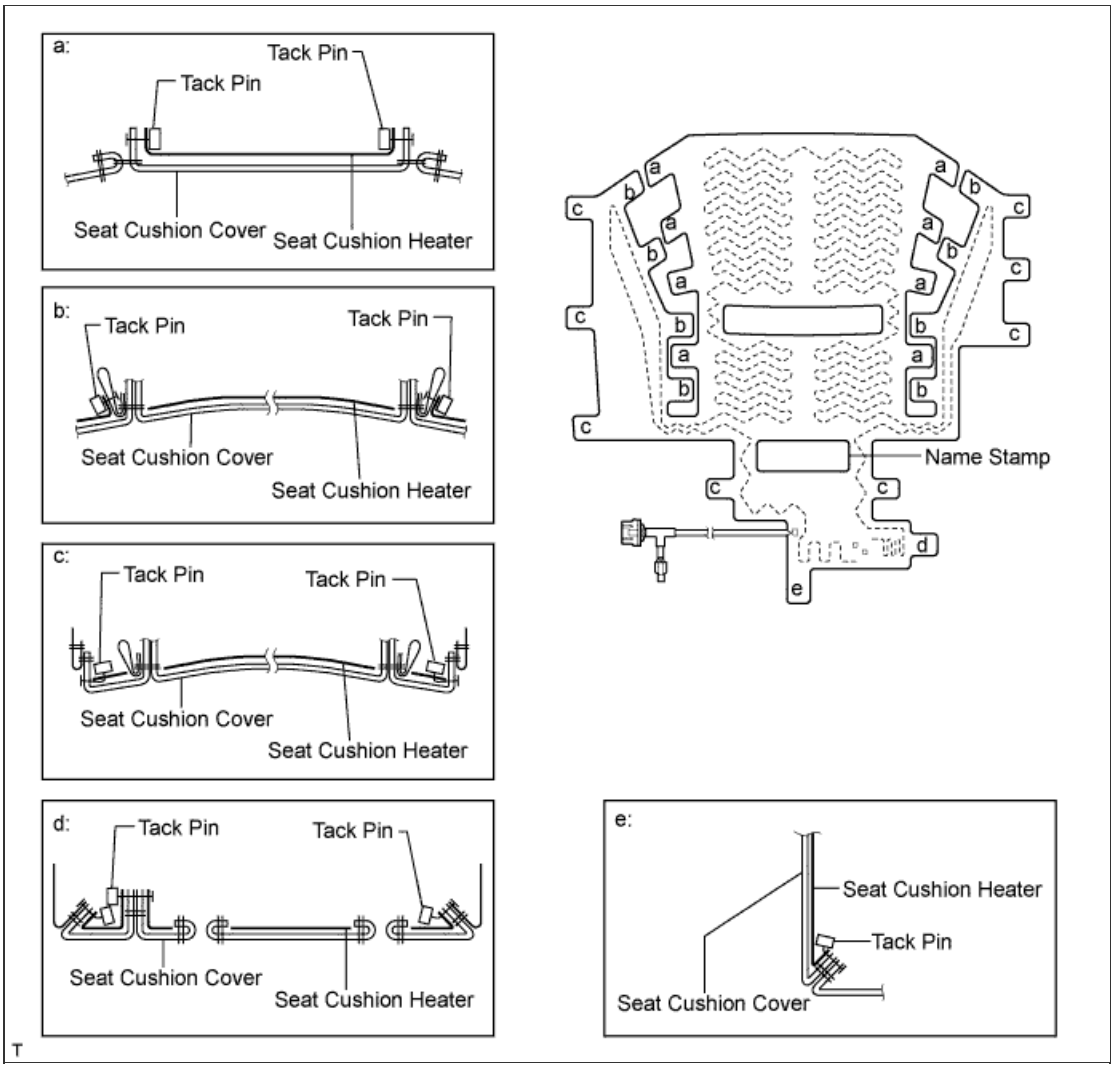
a. Attach the 4 claws to install the cover.



31. INSTALL REAR SEAT CUSHION HEATER ASSEMBLY (w/ Seat Heater System)

a. Set the seat cushion heater with the name stamp side facing the seat cushion cover.

b. Install the seat cushion heater with new tack pins.

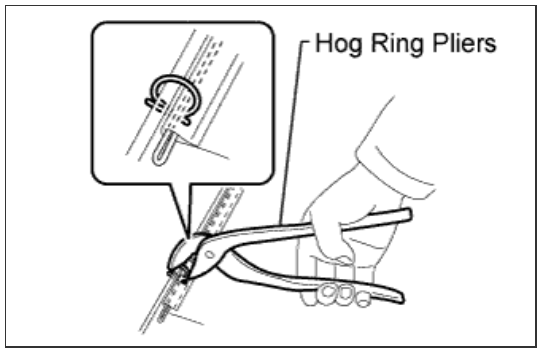


32. INSTALL REAR SEPARATE TYPE SEAT CUSHION COVER

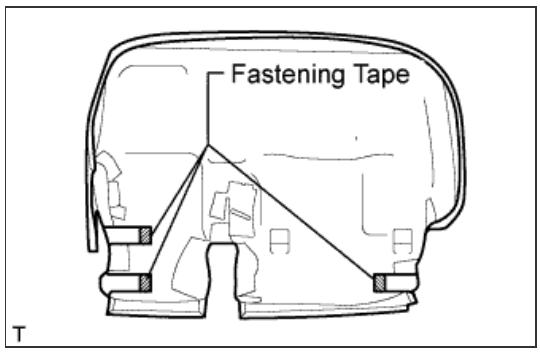
a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Attach the 3 pieces of fastening tape.



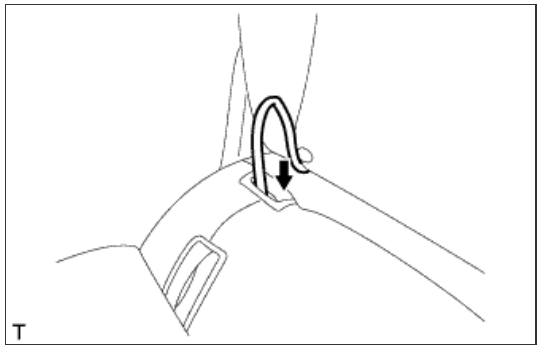
33. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

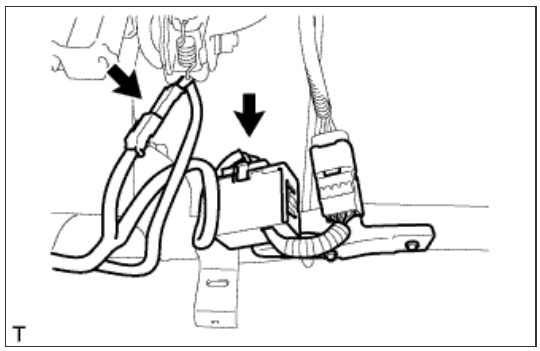
b. Pass the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.



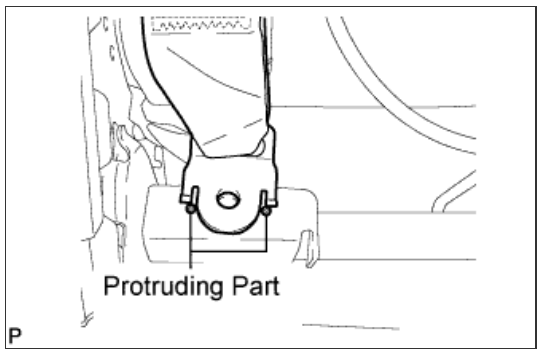
d. Attach the side airbag wire harness clamps.

34. CONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Connect the belt anchor.

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.



35. INSTALL REAR NO. 1 SEAT BELT INNER ASSEMBLY LH

a. Install the belt with the bolt.

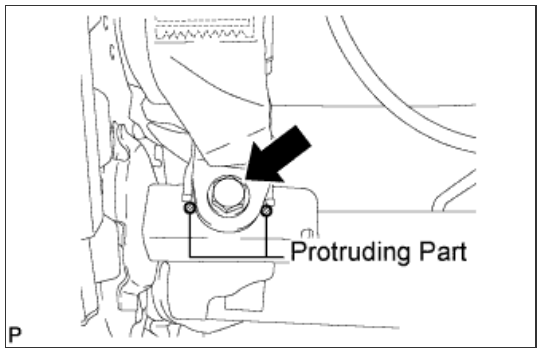
Torque:
42 N*m{ 4287 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

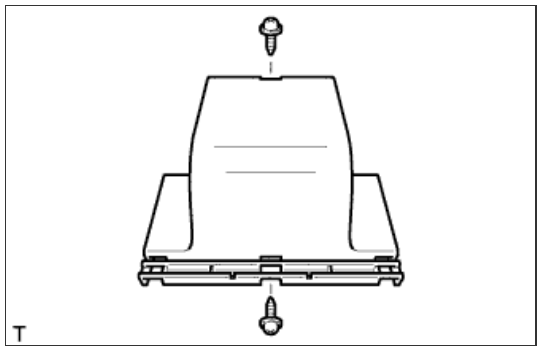
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, connect it when installing the rear No. 1 seat inner belt LH.



36. INSTALL REAR SEAT UNDER TRAY COVER LH

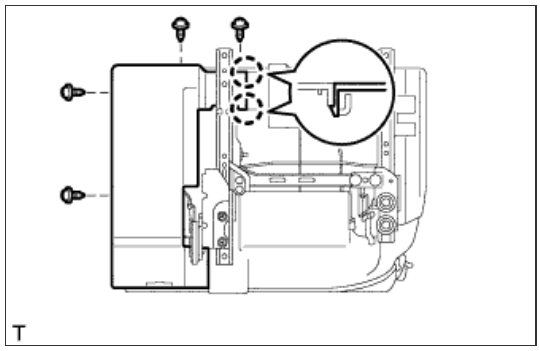
a. Install the cover with the 2 screws.



37. INSTALL REAR SEAT CUSHION COVER RH

a. Attach the 2 claws to install the cover.

b. Install the 4 screws.

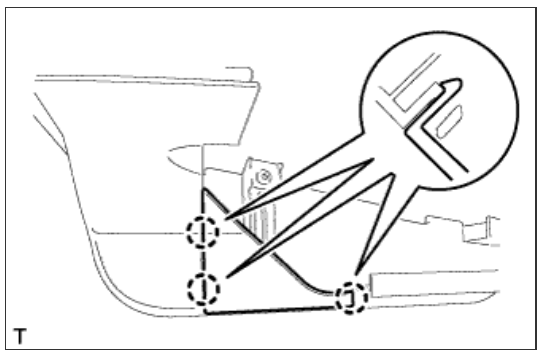


38. INSTALL REAR POWER SEAT SWITCH

a. Install the power seat switch with the 2 screws.

39. INSTALL NO. 1 SEAT CUSHION PLATE

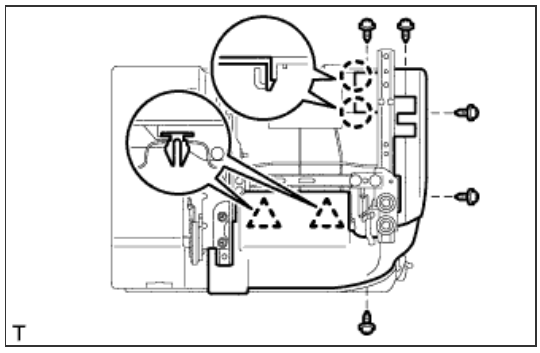
a. Attach the 3 claws to install the seat cushion plate.



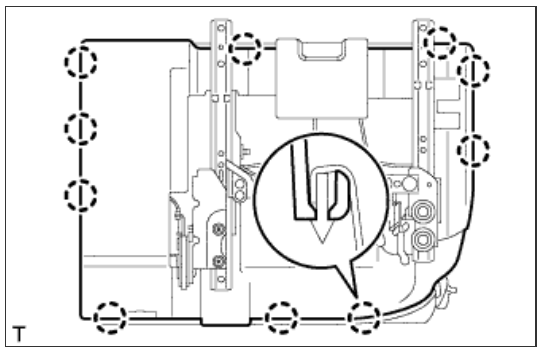
40. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and 2 clips to install the cover.

b. Install the 5 screws.



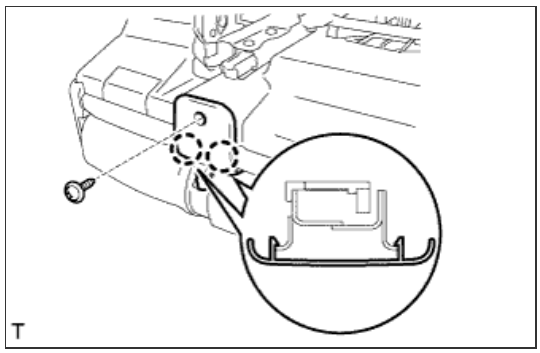
c. Attach the 10 claws.



41. INSTALL REAR SEATBACK STAY COVER LH

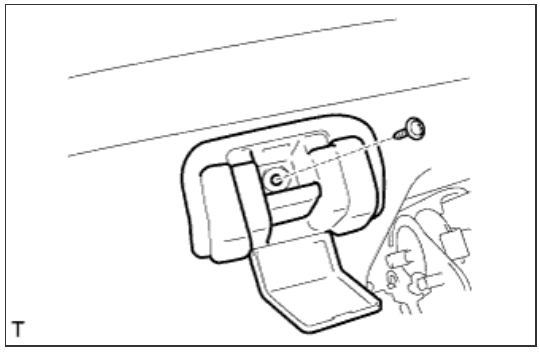
a. Attach the 2 claws to install the cover.

b. Install the screw.

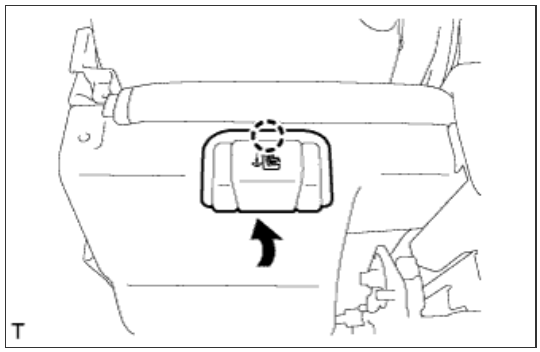


42. INSTALL SEAT BELT ANCHOR COVER CAP

a. Install the anchor cover cap with the screw.



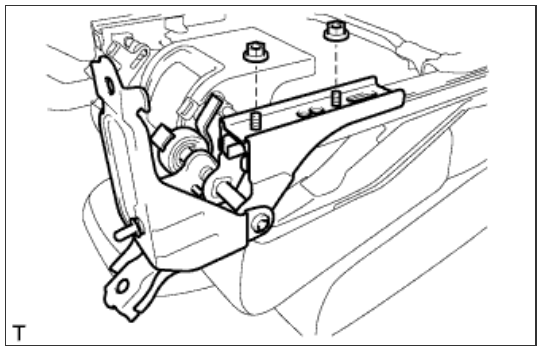
b. Attach the claw to close the cap.



43. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



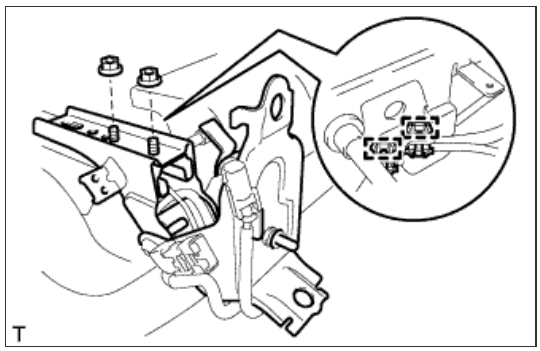
44. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

c. w/ Seat Heater System:
Attach the wire harness clamp.

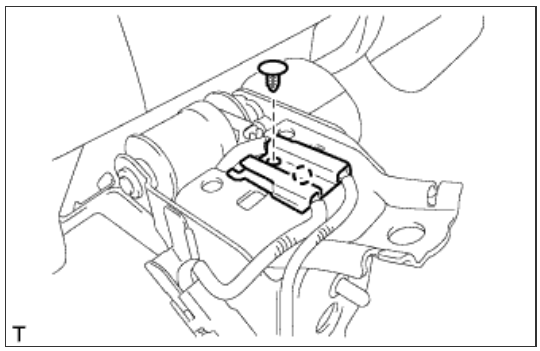


45. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

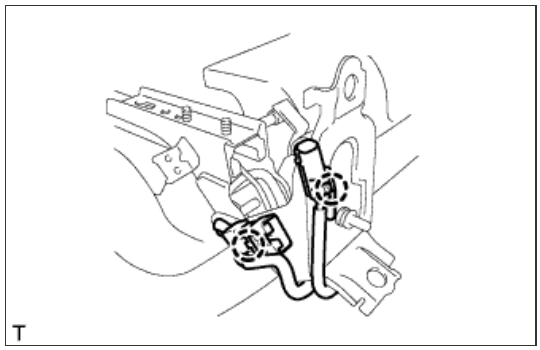
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



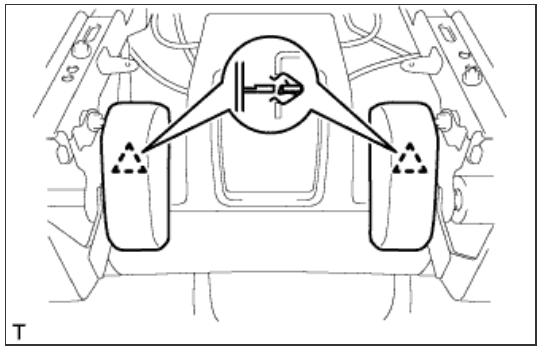
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



46. INSTALL REAR SEAT SIDE HINGE MALE COVER RH

a. Attach the clip to install the cover.

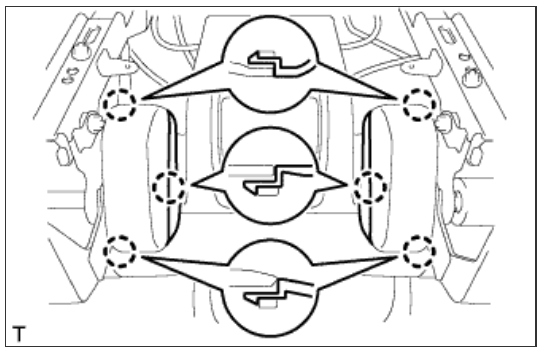


47. INSTALL REAR SEAT SIDE HINGE MALE COVER LH

a. Attach the clip to install the cover.

48. INSTALL REAR SEAT SIDE HINGE FEMALE COVER

a. Attach the 6 claws to install the 2 covers.

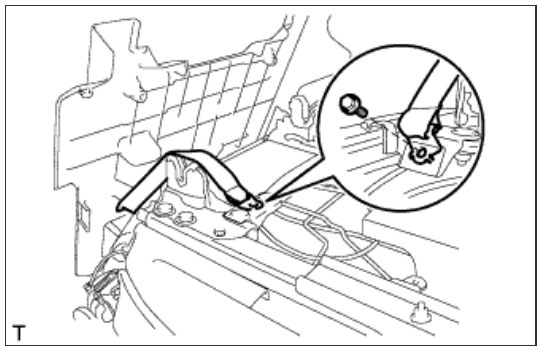


49. INSTALL FOLD SEAT STOPPER BAND ASSEMBLY

a. Install the fold seat stopper band to the seat leg side cover.

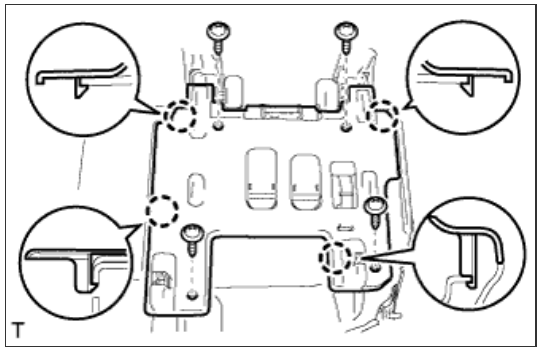
50. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



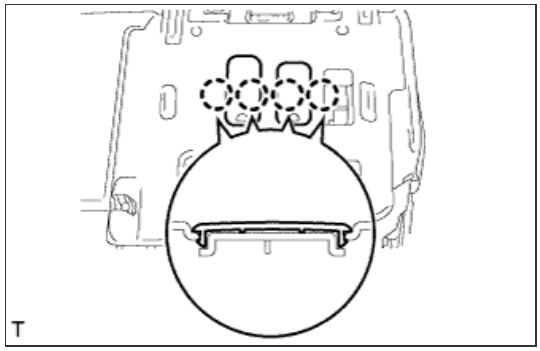
b. Attach the 4 claws to install the seat leg side cover.

c. Install the 4 screws.



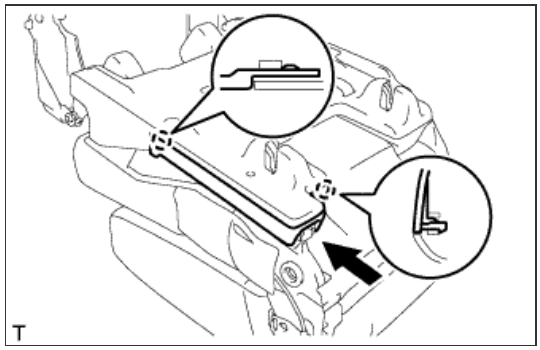
51. INSTALL NO. 1 SEAT CUSHION COVER

a. Attach the 4 claws to install the 2 covers.



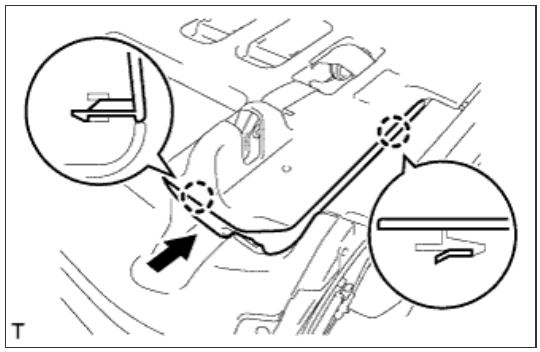
52. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



53. INSTALL UPPER SEAT TRACK RAIL COVER LH

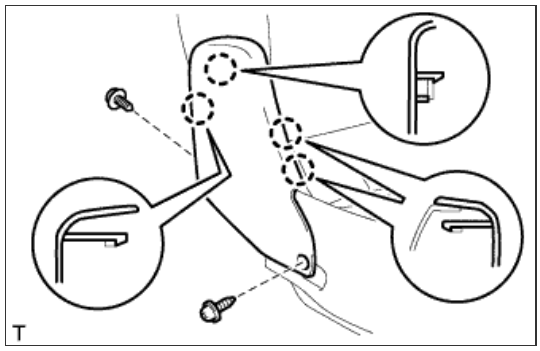
a. Attach the 2 claws to install the cover.



54. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 4 claws to install the cover.

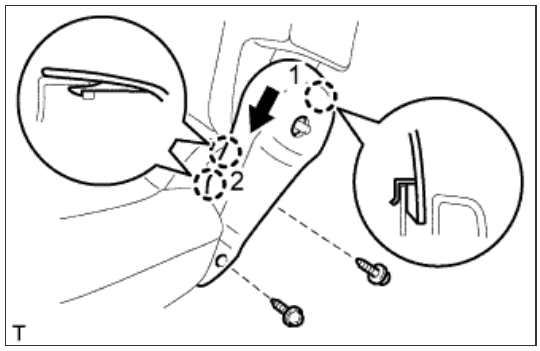
b. Install the 2 screws.



55. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

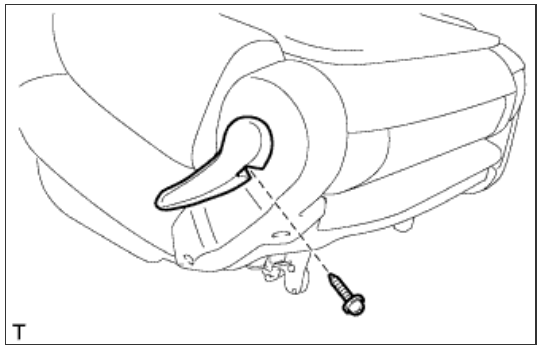
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



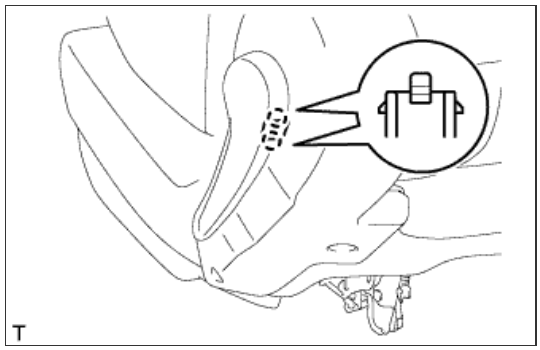
56. INSTALL RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



57. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEAT CUSHION FRAME SUB-ASSEMBLY LH

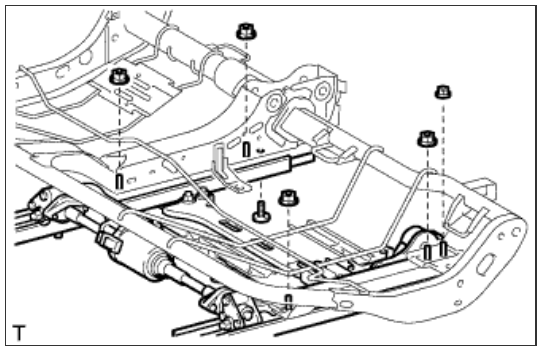
a. Temporarily install the seat cushion frame with the 5 nuts and bolt.

b. Tighten the 5 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

c. Using a T40 "TORX" socket, tighten the bolt.

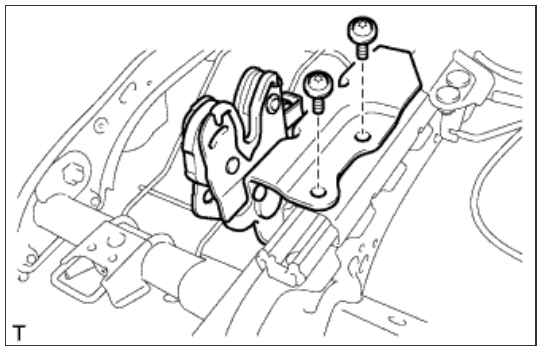
Torque:
21 N*m{ 214 kgf*cm , 15 ft.*lbf }



2. INSTALL NO. 1 SEAT LEG ASSEMBLY LH

a. Using a T40 "TORX" socket, install the seat leg assembly with the 2 bolts.

Torque:
21 N*m{ 214 kgf*cm , 15 ft.*lbf }



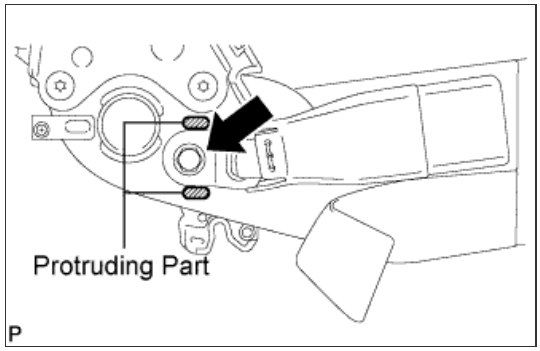
3. INSTALL REAR SEAT INNER BELT ASSEMBLY

a. Install the seat belt with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

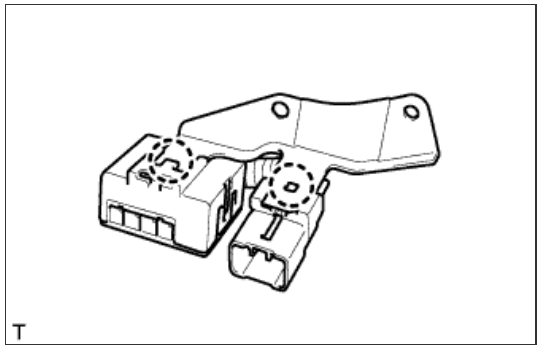
NOTICE:

The anchor part of the seat belt must not overlap the protruding part.



4. INSTALL SEAT HEATER CONTROL SUB-ASSEMBLY LH (w/ Seat Heater System)

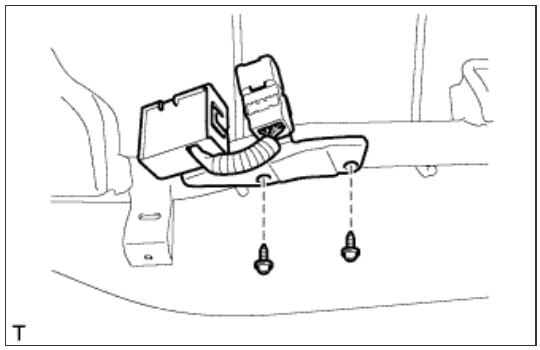
a. Attach the 2 claws to install the seat heater control.



5. INSTALL REAR SEAT CUSHION HOLDER BRACKET LH (w/ Seat Heater System)

a. Install the holder bracket with the 2 screws.

b. Connect the seat wire connector.

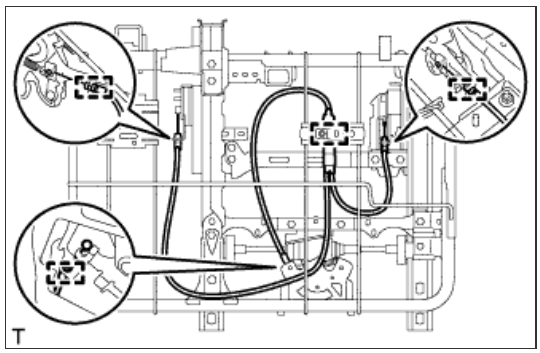


6. INSTALL REAR NO. 1 SEAT LOCK CABLE ASSEMBLY

a. Attach the clamp to install the seat lock cable.

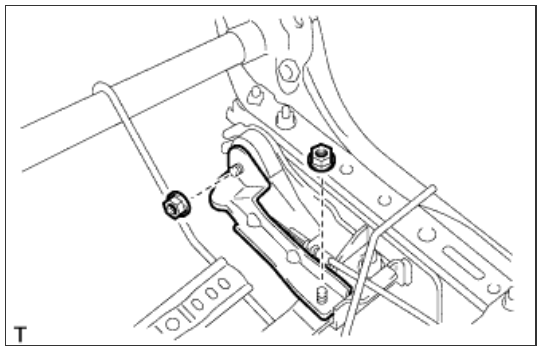
b. Attach the 3 cable clamps to connect the 3 cables.

c. Connect the cable and install a new cable tie.



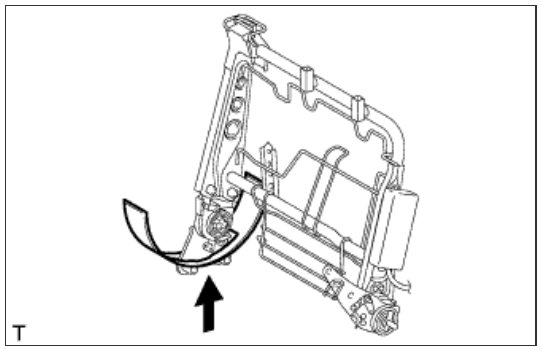
d. Install the lower seat track bracket with the 2 nuts.

Torque:
21 N*m{ 214 kgf*cm , 15 ft.*lbf }



7. INSTALL REAR SEATBACK FRAME SUB-ASSEMBLY LH

a. Install the lower seatback cover.



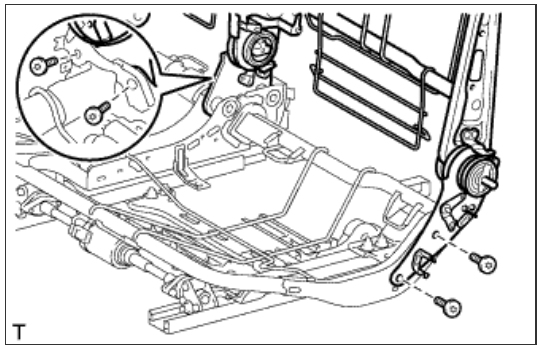
b. Temporarily install the seatback frame with the 4 bolts.

c. for LH Side:
Using a T40 "TORX" socket, tighten the 2 bolts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

d. for RH Side:
Using a T55 "TORX" socket, tighten the 2 bolts.

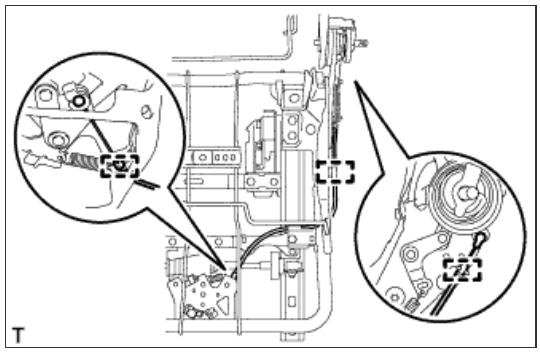
Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



8. INSTALL NO. 2 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Attach the clamp to install the lock control cable.

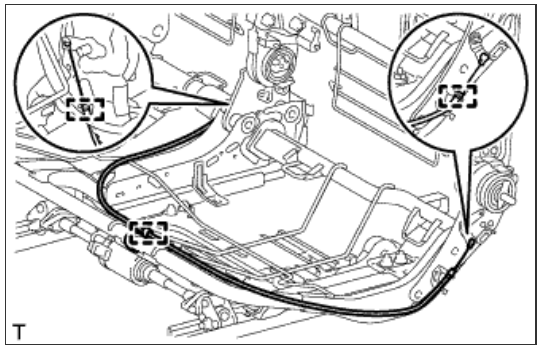
b. Attach the 2 cable clamps to connect the cable.



9. INSTALL RECLINING ADJUSTING CABLE ASSEMBLY LH

a. Attach the clamp to install the adjusting cable.

b. Attach the 2 cable clamps to connect the cable.



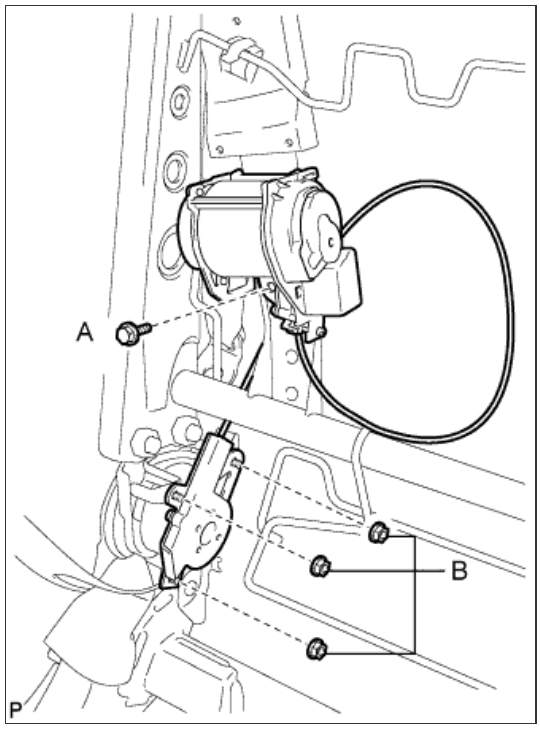
10. INSTALL NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Install the belt with the nut labeled A.

Torque:

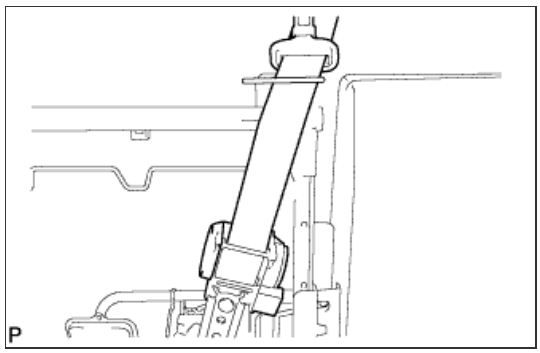
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Install the belt sensor with the 3 nuts labeled B.

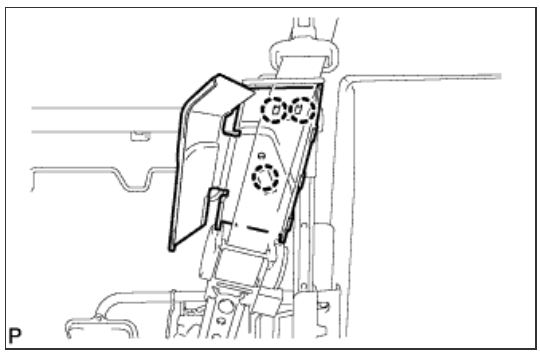


11. INSTALL REAR SEAT SHOULDER BELT HOLE COVER LH

a. Install the seat belt as shown in the illustration.



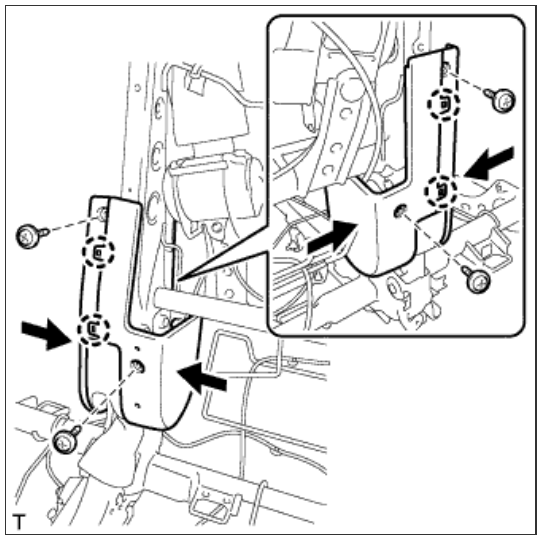
b. Attach the 3 claws to install the shoulder belt hole cover.



12. INSTALL REAR LOWER SEATBACK COVER SUB-ASSEMBLY LH

a. Attach the 4 claws to install the cover.

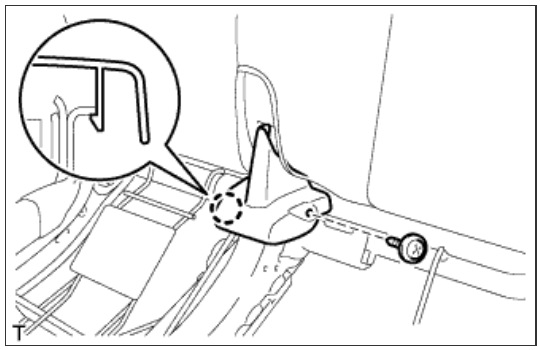
b. Install the 4 screws.



13. INSTALL REAR SEATBACK HINGE COVER LH

a. Attach the claw to install the cover.

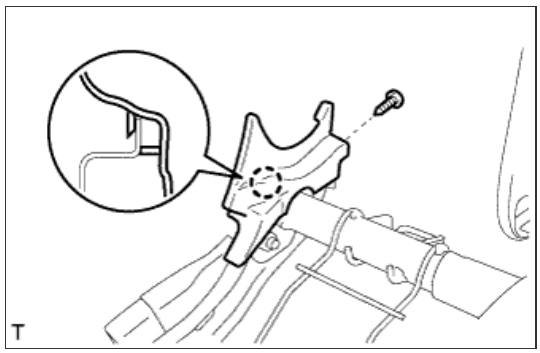
b. Install the screw.



14. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the claw to install the cover.

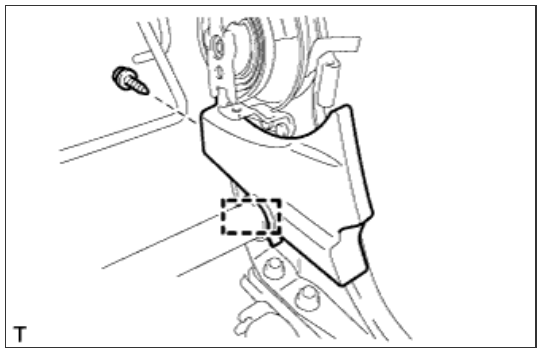
b. Install the screw.



15. INSTALL REAR NO. 2 SEAT RECLINING COVER LH

a. Attach the clamp to install the cover.

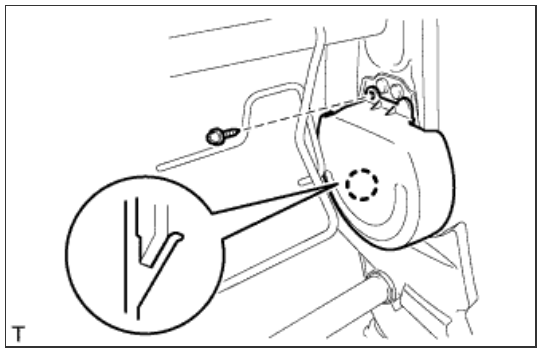
b. Install the screw.



16. INSTALL REAR SEAT RECLINING COVER LH

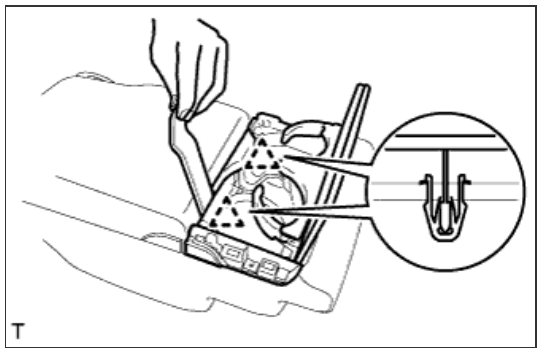
a. Attach the claw to install the cover.

b. Install the screw.

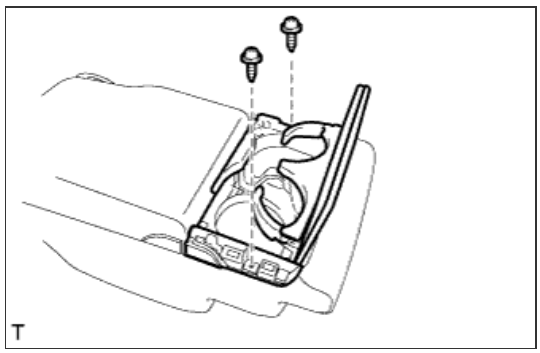


17. INSTALL CUP HOLDER ASSEMBLY

a. Attach the 2 clips to install the cup holder.

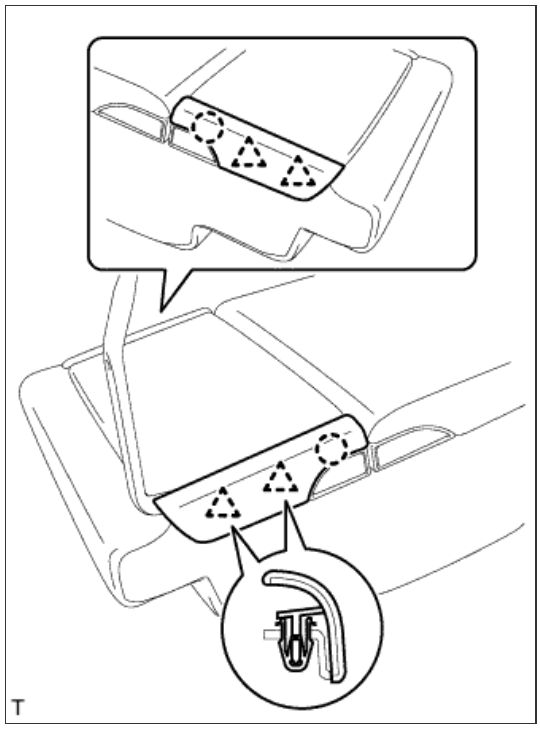


b. Install the 2 screws.



18. INSTALL NO. 1 SEAT ARMREST PLATE

a. Attach the 2 claws and 4 clips to install the 2 armrest plates.

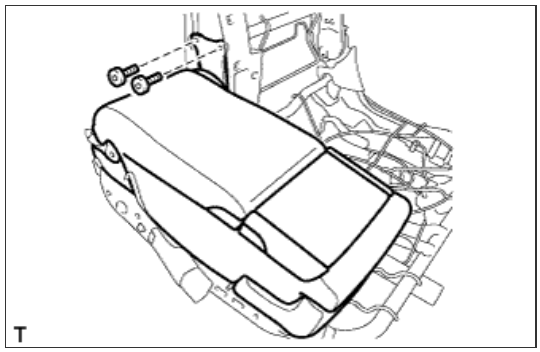


19. INSTALL REAR CENTER SEAT HEADREST ASSEMBLY

20. INSTALL REAR CENTER SEAT ARMREST ASSEMBLY

a. Using a T40 "TORX" socket, install the center seat armrest with the 2 bolts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



21. INSTALL SEATBACK STOPPER PLATE

a. Install the bush to the stopper plate.

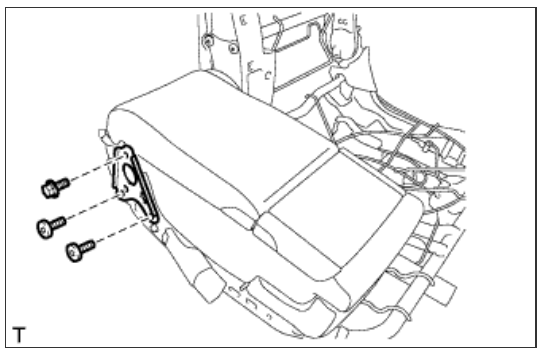
b. Temporarily install the stopper plate with the 3 bolts.

c. Using a T40 "TORX" socket, tighten the 2 bolts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

d. Tighten the bolt.

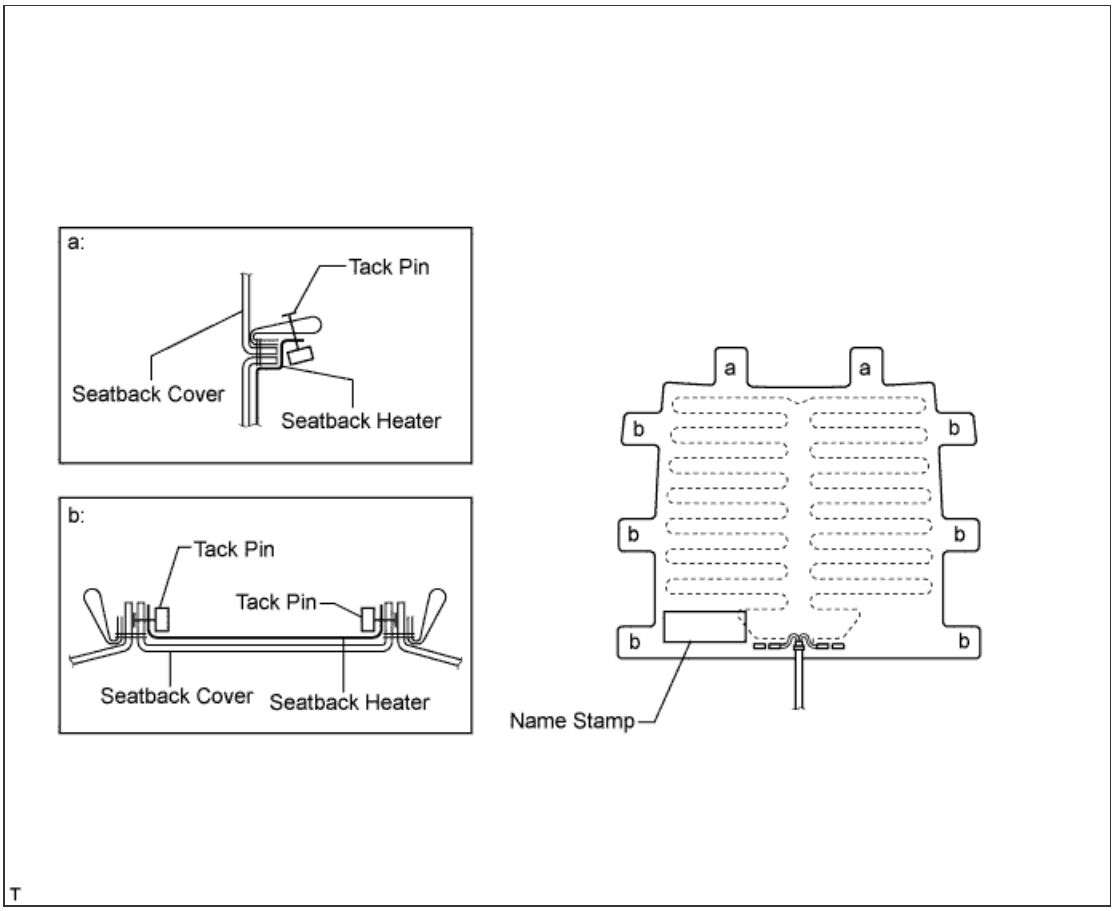
Torque:
15 N*m{ 153 kgf*cm , 11 ft.*lbf }



22. INSTALL REAR SEATBACK HEATER ASSEMBLY (w/ Seat Heater System)

a. Set the seatback heater with the name stamp side facing the seatback cover.

b. Install the seatback heater with new tack pins.

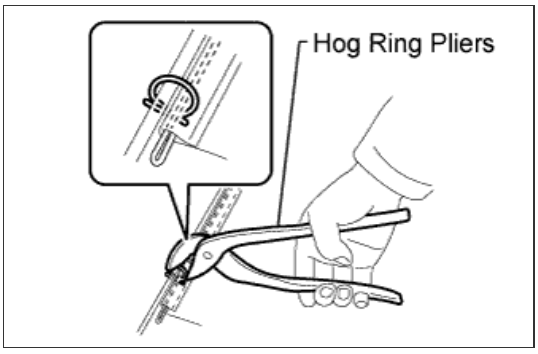


23. INSTALL REAR SEPARATE TYPE SEATBACK COVER

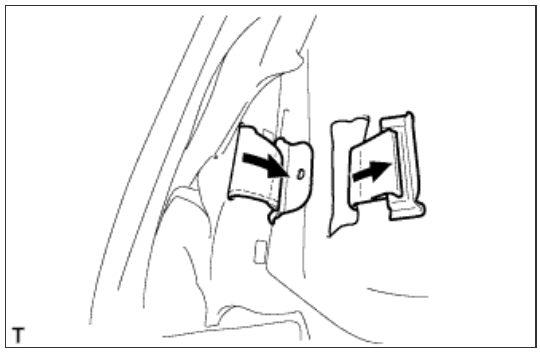
a. Using hog ring pliers, install the seatback cover with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Connect the seatback cover bracket to the seatback pad.

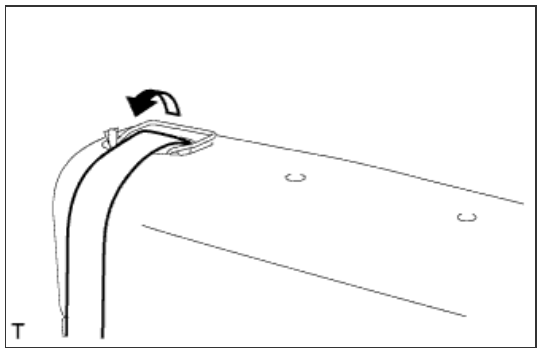


24. INSTALL SEATBACK COVER WITH PAD

a. Install the seatback cover with pad.

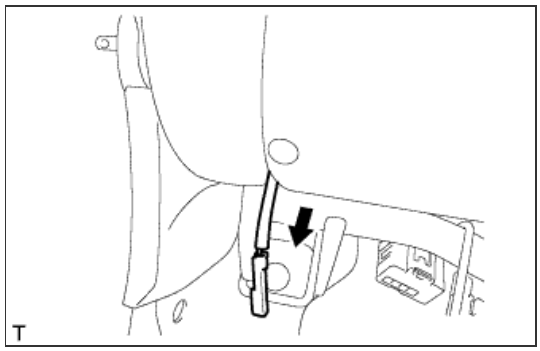
b. Pull out the seat belt.

c. Pass the side airbag wire harness through the hole in the seatback.

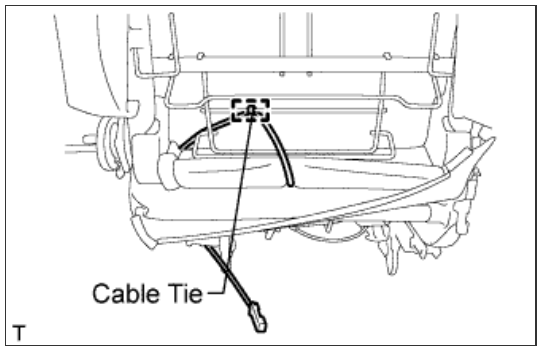


d. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seatback.



ii. Connect the seatback heater wire harness and install a new cable tie.

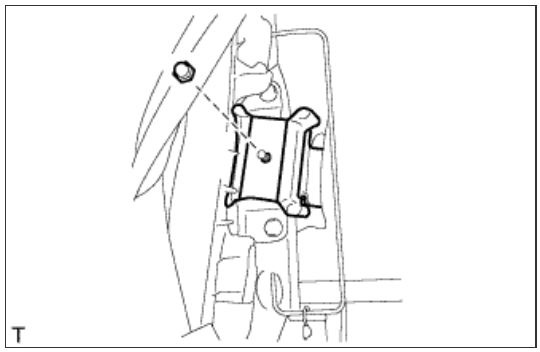


e. Install the seatback cover bracket to the seat frame with the cap nut.

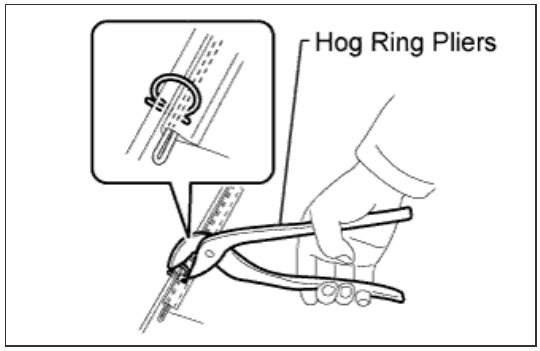
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

NOTICE:

After the seatback trim cover is assembled, make sure the side airbag strap is not twisted.



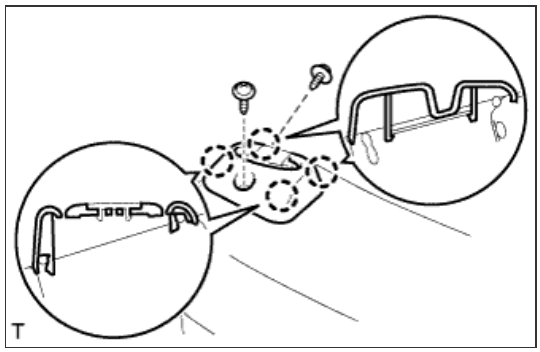
f. Using hog ring pliers, install new hog rings to the seatback frame.



25. INSTALL REAR SEAT BELT HOLE COVER LH

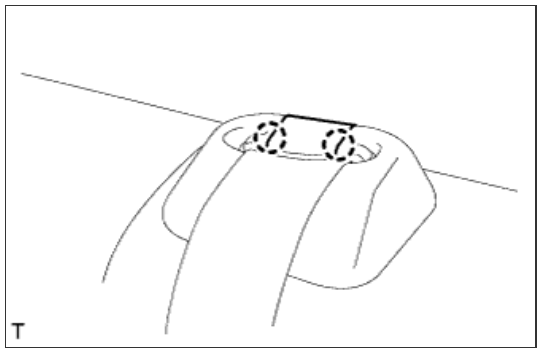
a. Attach the 4 claws to install the cover.

b. Install the 2 screws.



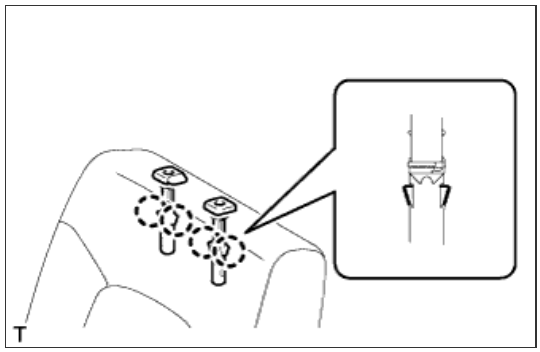
26. INSTALL SHOULDER BELT ANCHOR COVER

a. Attach the 2 claws to install the cover.



27. INSTALL REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Attach the 4 claws to install the 2 supports.

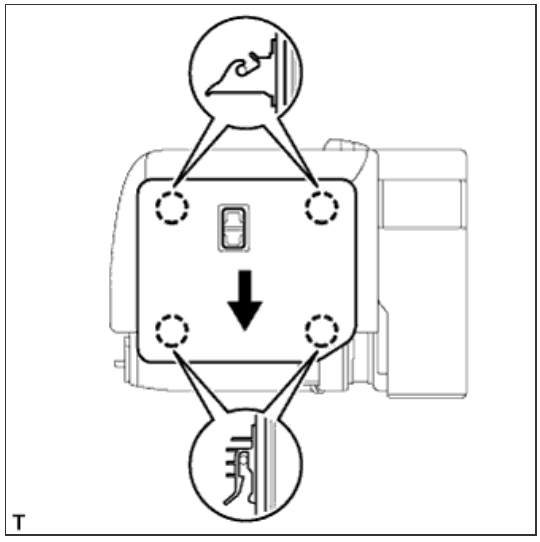


28. INSTALL REAR SEAT HEADREST ASSEMBLY

29. INSTALL REAR SEATBACK BOARD SUB-ASSEMBLY LH

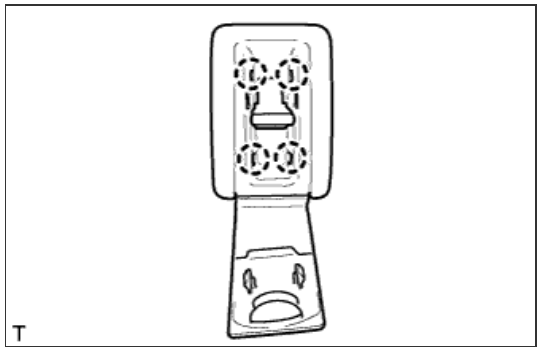
a. Push the board down to attach the 2 claws on the bottom.

b. Attach the 2 claws on the top of the board to install it.



30. INSTALL REAR SEATBACK COVER

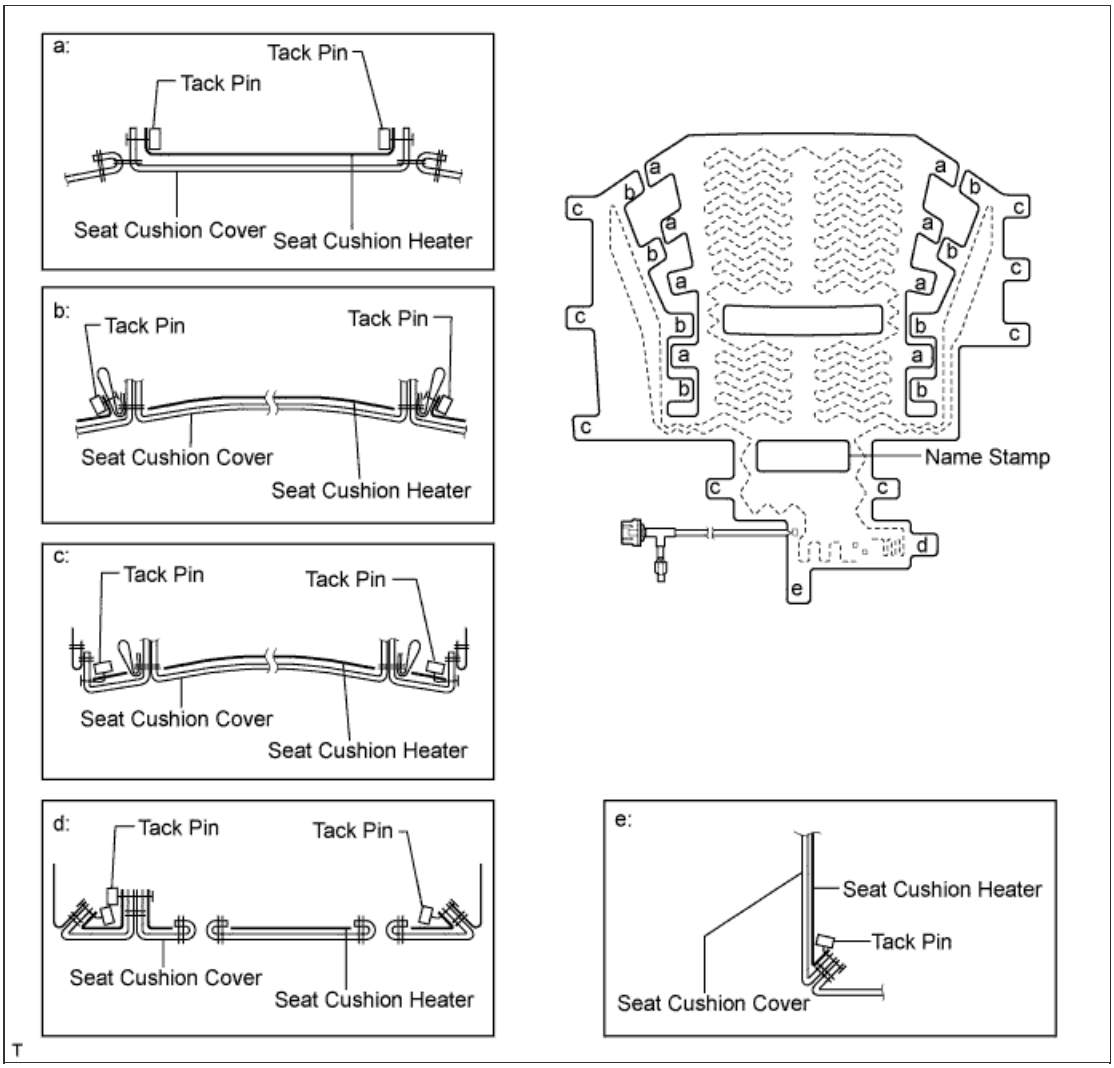
a. Attach the 4 claws to install the cover.



31. INSTALL REAR SEAT CUSHION HEATER ASSEMBLY (w/ Seat Heater System)

a. Set the seat cushion heater with the name stamp side facing the seat cushion cover.

b. Install the seat cushion heater with new tack pins.

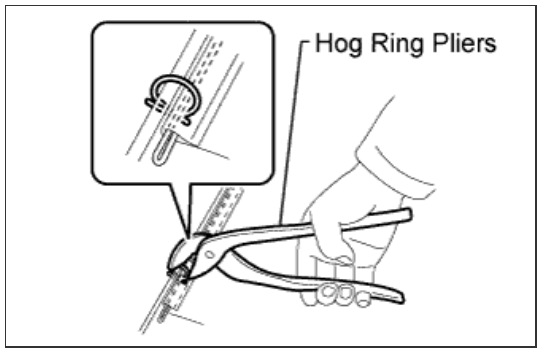


32. INSTALL REAR SEPARATE TYPE SEAT CUSHION COVER

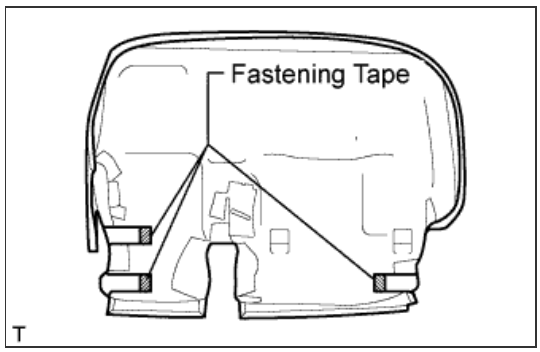
a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Attach the 3 pieces of fastening tape.



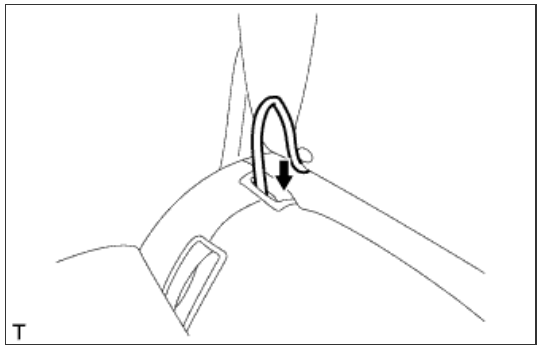
33. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

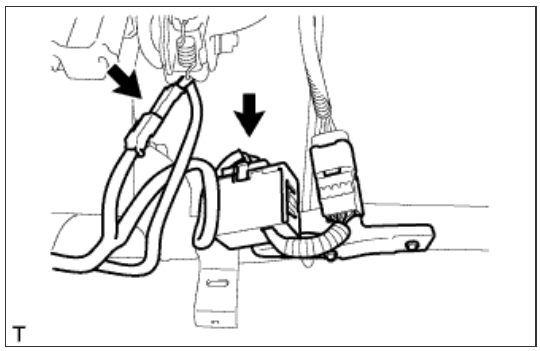
b. Pass the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.



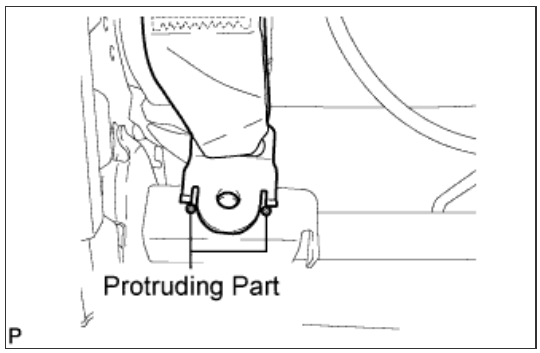
d. Attach the side airbag wire harness clamps.

34. CONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Connect the belt anchor.

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.



35. INSTALL REAR NO. 1 SEAT BELT INNER ASSEMBLY LH

a. Install the belt with the bolt.

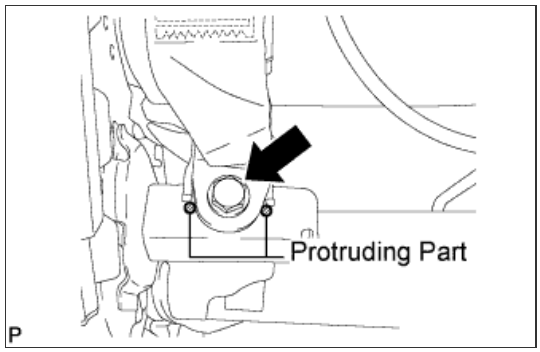
Torque:
42 N*m{ 4287 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

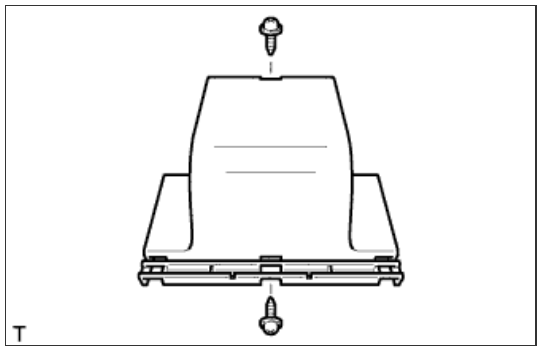
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, connect it when installing the rear No. 1 seat inner belt LH.



36. INSTALL REAR SEAT UNDER TRAY COVER LH

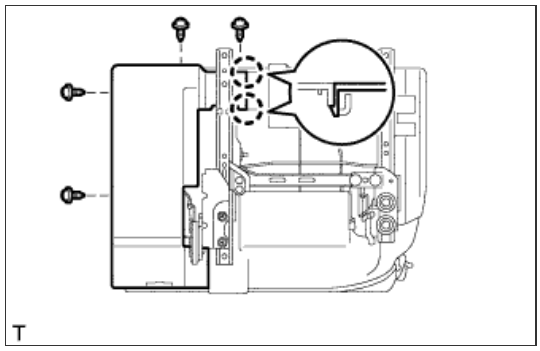
a. Install the cover with the 2 screws.



37. INSTALL REAR SEAT CUSHION COVER RH

a. Attach the 2 claws to install the cover.

b. Install the 4 screws.

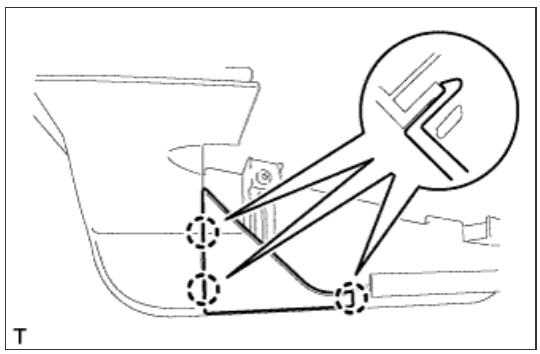


38. INSTALL REAR POWER SEAT SWITCH

a. Install the power seat switch with the 2 screws.

39. INSTALL NO. 1 SEAT CUSHION PLATE

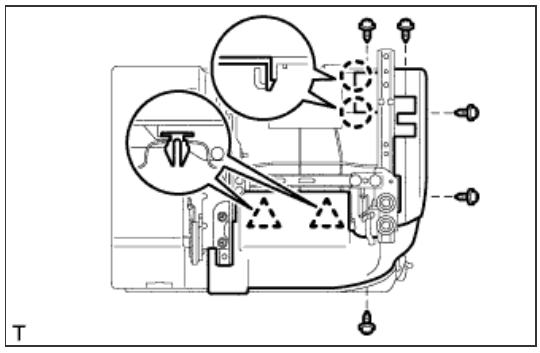
a. Attach the 3 claws to install the seat cushion plate.



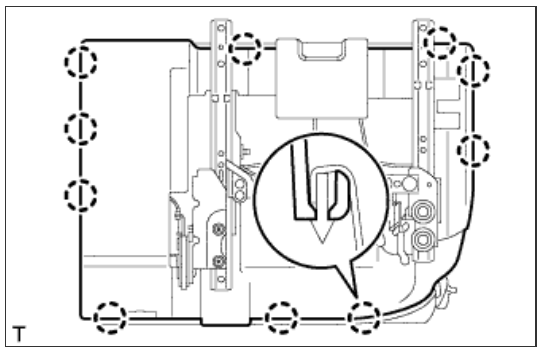
40. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and 2 clips to install the cover.

b. Install the 5 screws.



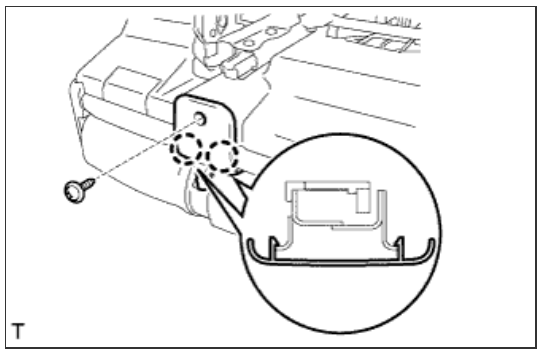
c. Attach the 10 claws.



41. INSTALL REAR SEATBACK STAY COVER LH

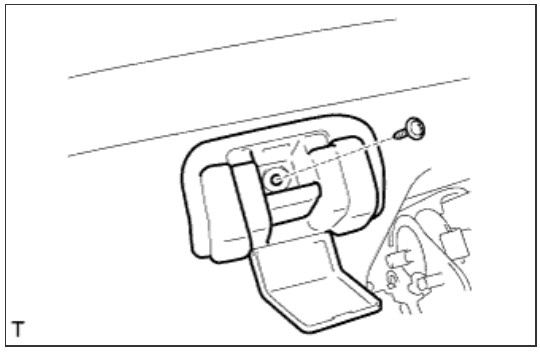
a. Attach the 2 claws to install the cover.

b. Install the screw.

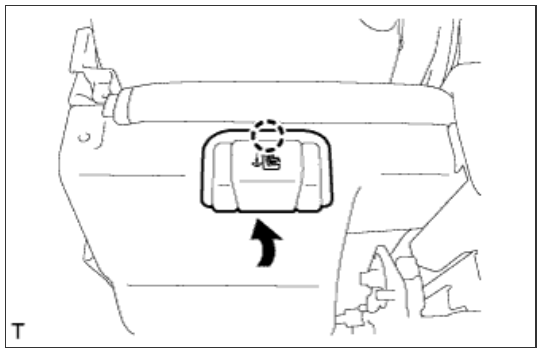


42. INSTALL SEAT BELT ANCHOR COVER CAP

a. Install the anchor cover cap with the screw.



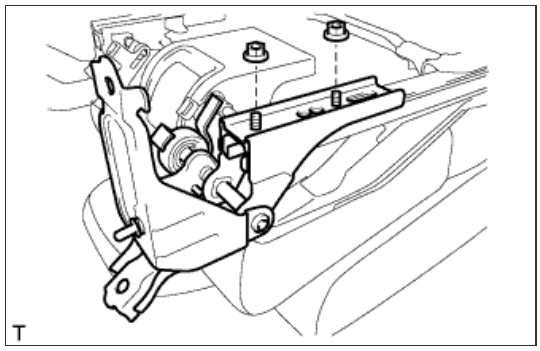
b. Attach the claw to close the cap.



43. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



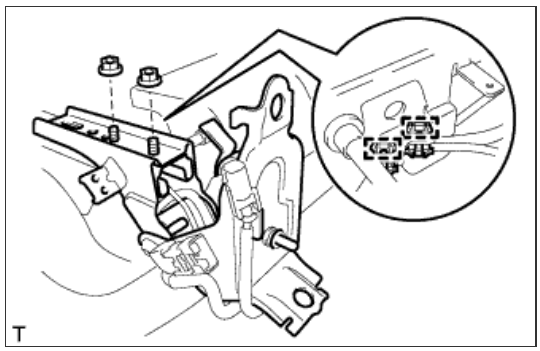
44. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

c. w/ Seat Heater System:
Attach the wire harness clamp.

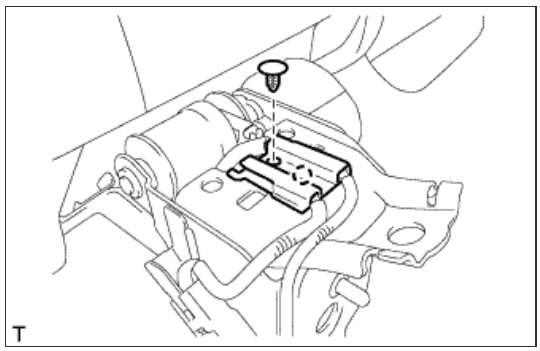


45. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

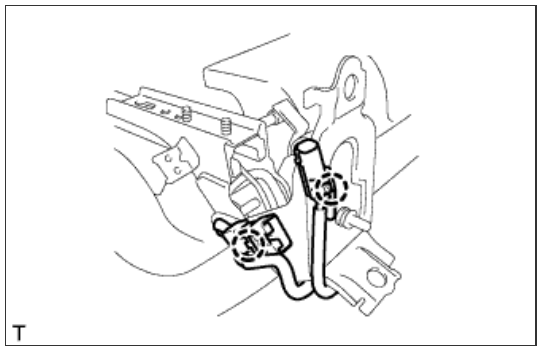
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



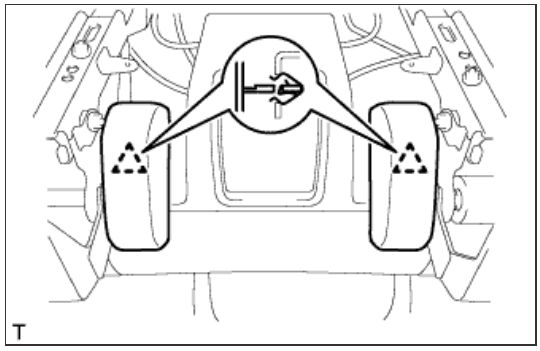
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



46. INSTALL REAR SEAT SIDE HINGE MALE COVER RH

a. Attach the clip to install the cover.

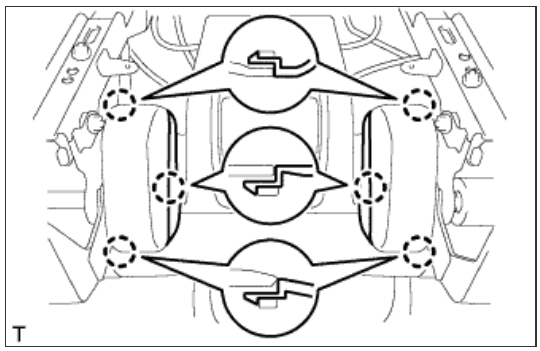


47. INSTALL REAR SEAT SIDE HINGE MALE COVER LH

a. Attach the clip to install the cover.

48. INSTALL REAR SEAT SIDE HINGE FEMALE COVER

a. Attach the 6 claws to install the 2 covers.

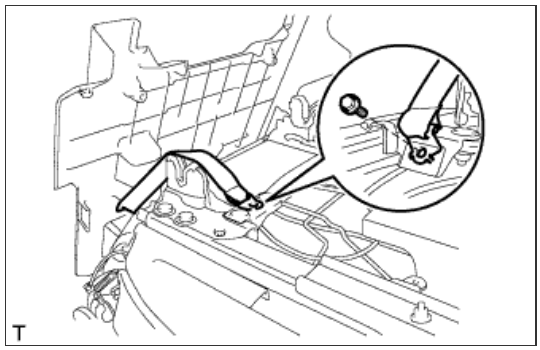


49. INSTALL FOLD SEAT STOPPER BAND ASSEMBLY

a. Install the fold seat stopper band to the seat leg side cover.

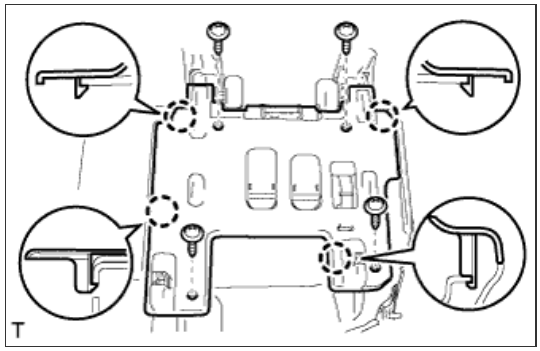
50. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



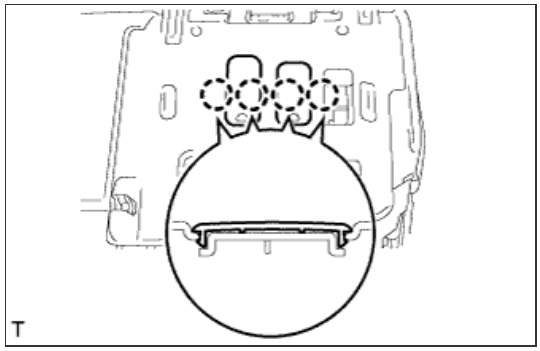
b. Attach the 4 claws to install the seat leg side cover.

c. Install the 4 screws.



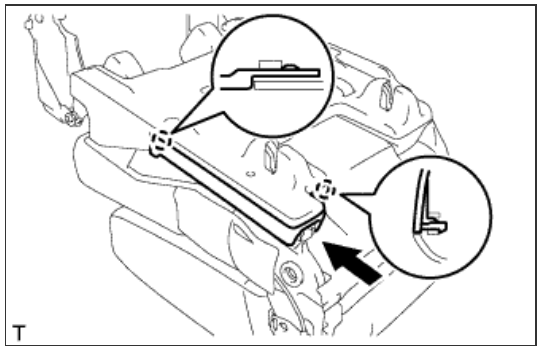
51. INSTALL NO. 1 SEAT CUSHION COVER

a. Attach the 4 claws to install the 2 covers.



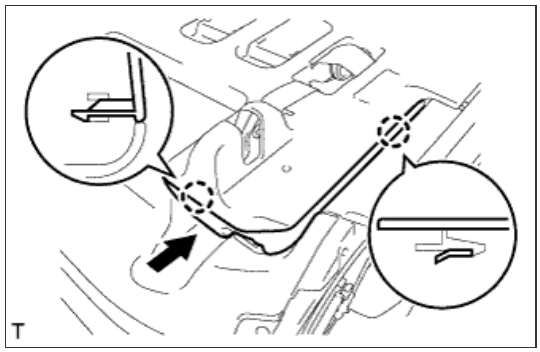
52. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



53. INSTALL UPPER SEAT TRACK RAIL COVER LH

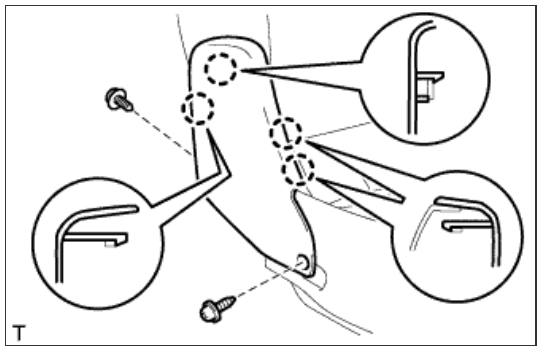
a. Attach the 2 claws to install the cover.



54. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 4 claws to install the cover.

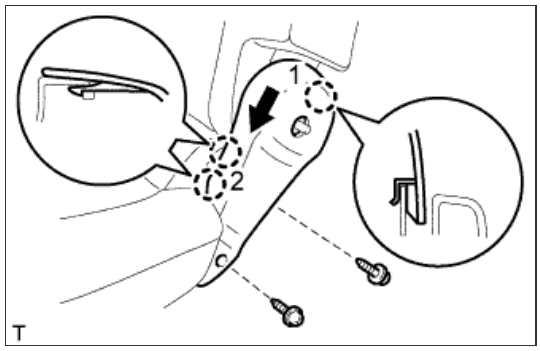
b. Install the 2 screws.



55. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

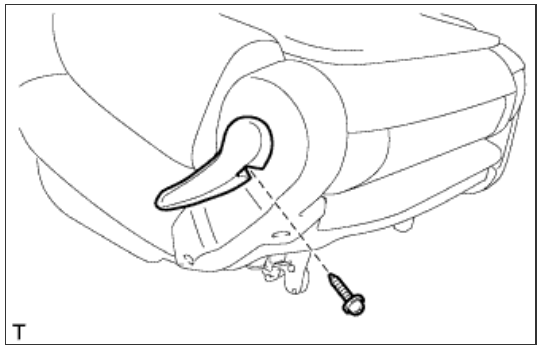
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



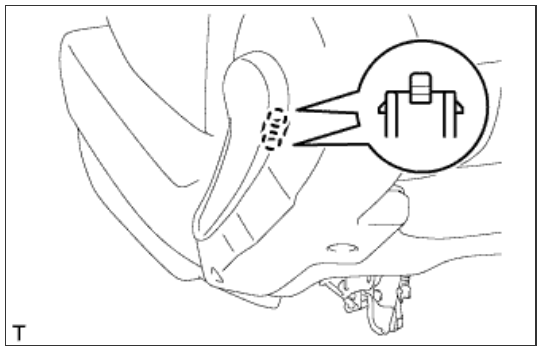
56. INSTALL RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



57. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



for Preparation Click here

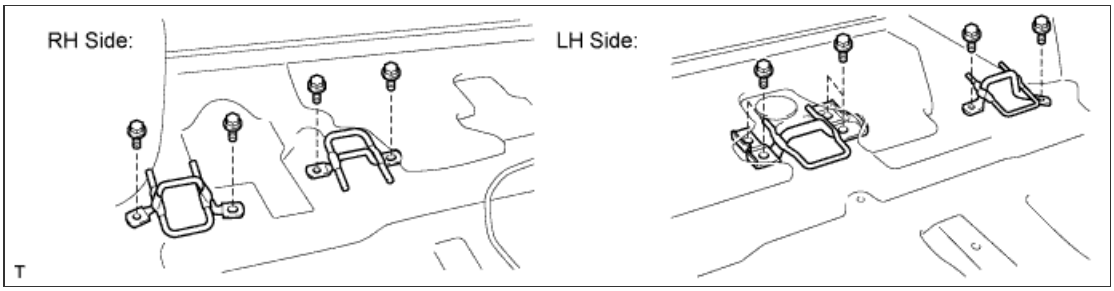
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEAT CUSHION LOCK STRIKER SUB-ASSEMBLY

a. Install the 4 lock strikers with the 10 bolts.

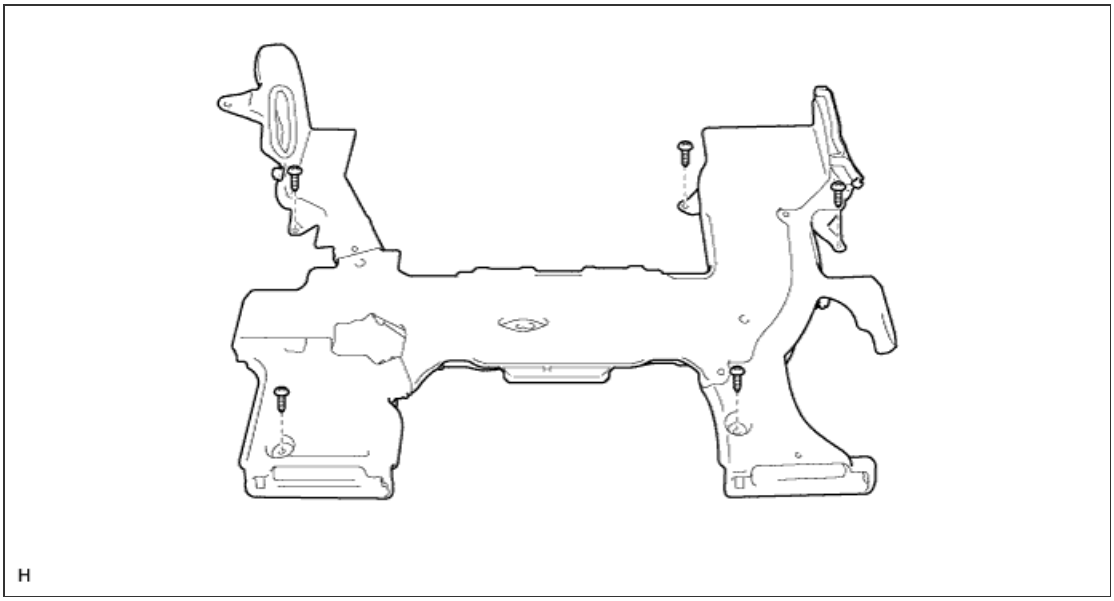
Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



2. INSTALL REAR NO. 6 AIR DUCT

a. Install the duct with the 5 screws.

b. Connect the 2 connectors.



3. INSTALL FRONT FLOOR CARPET ASSEMBLY

a. Install the floor carpet.

b. Install the 2 clips.

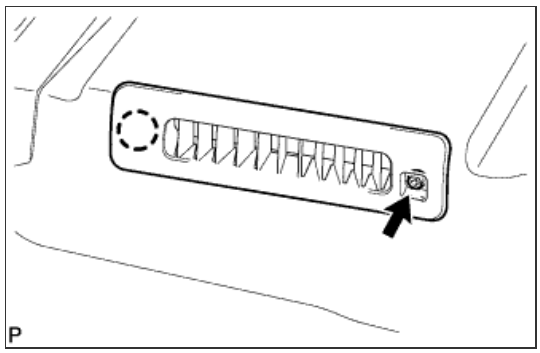
4. INSTALL REAR AIR DUCT GUIDE

HINT:

Use the same procedures for both sides.

a. Attach the claw to install the guide.

b. Install the screw.

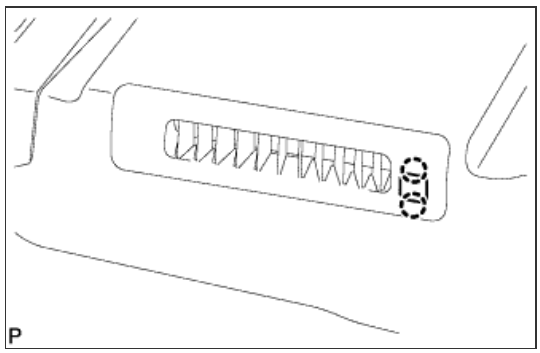


5. INSTALL AIR DUCT PLUG

a. Attach the 2 claws to install the plug.

HINT:

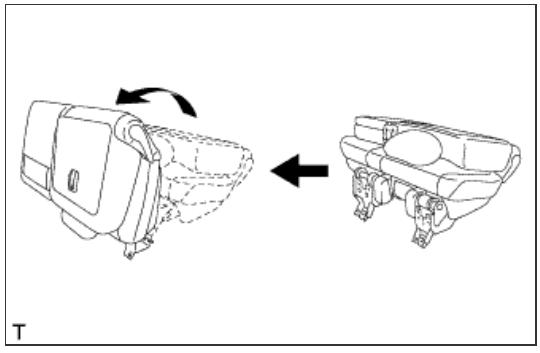
Use the same procedures for both sides.



6. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



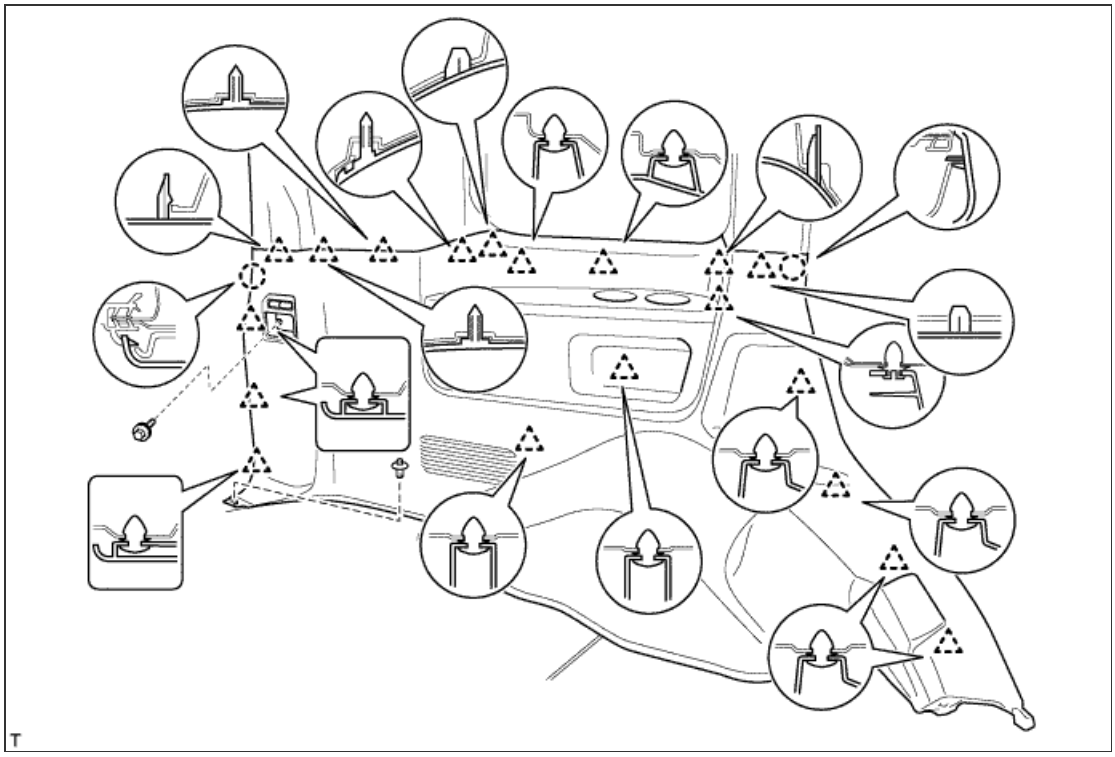
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

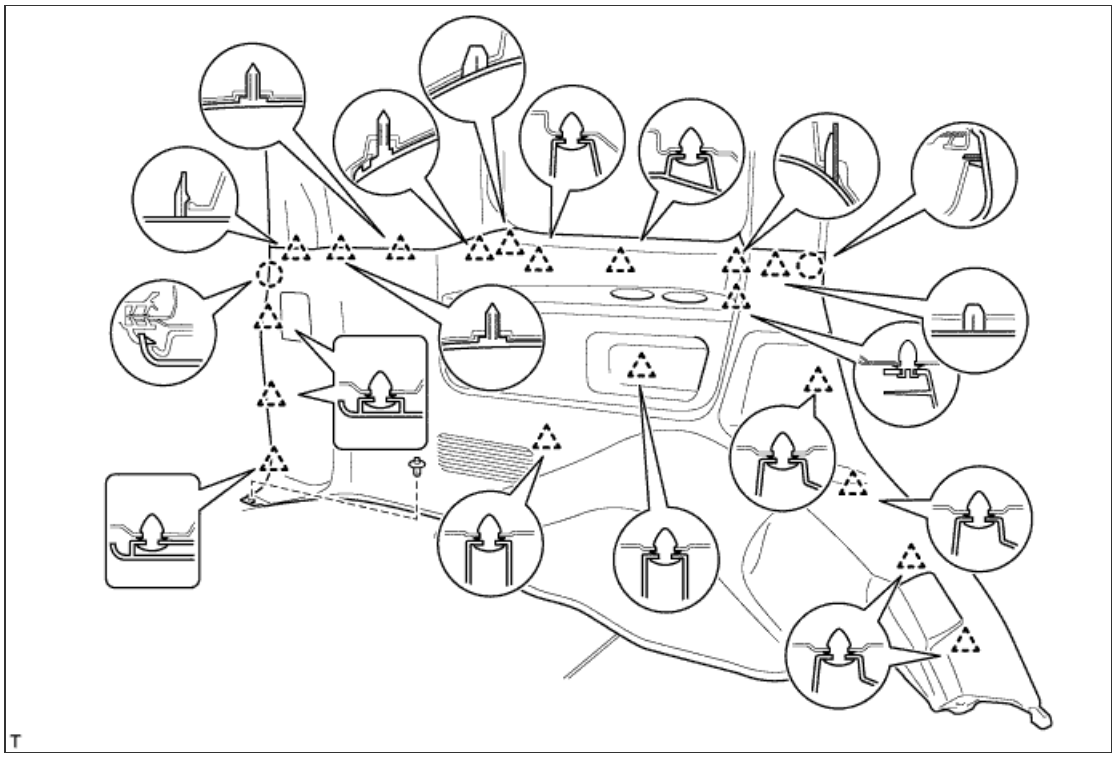


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

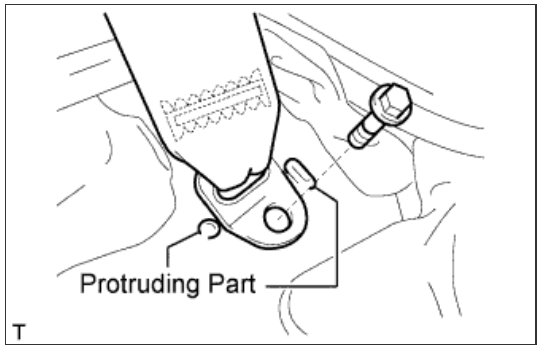


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

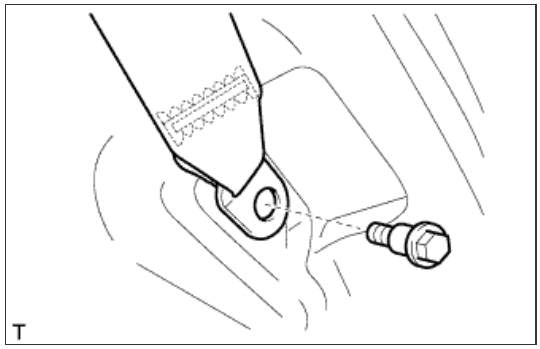
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

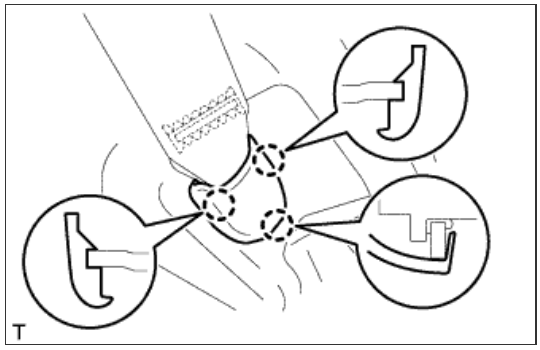


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



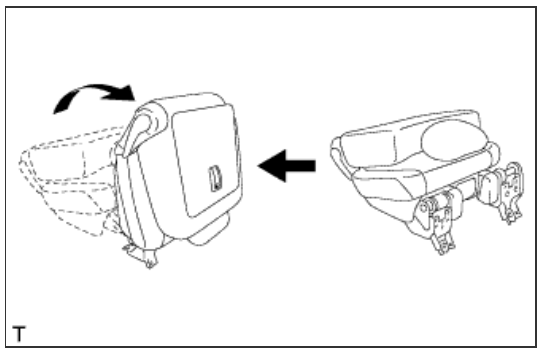
e. Attach the 3 claws to install the cover.



7. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



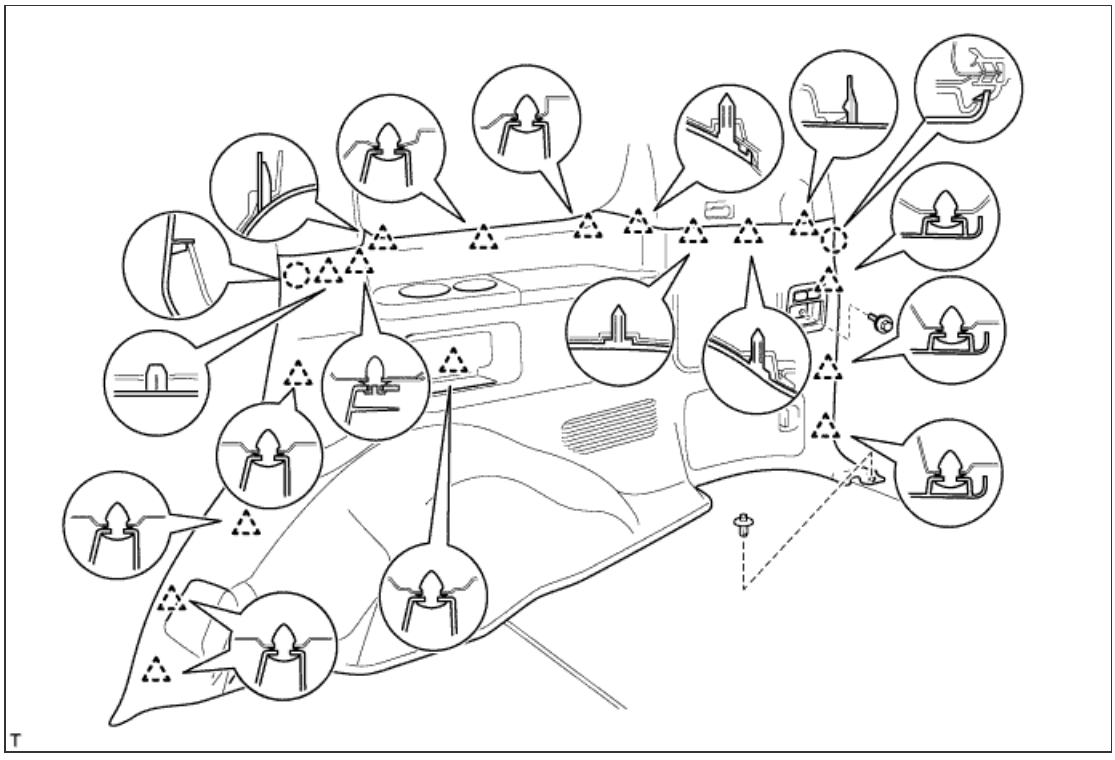
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

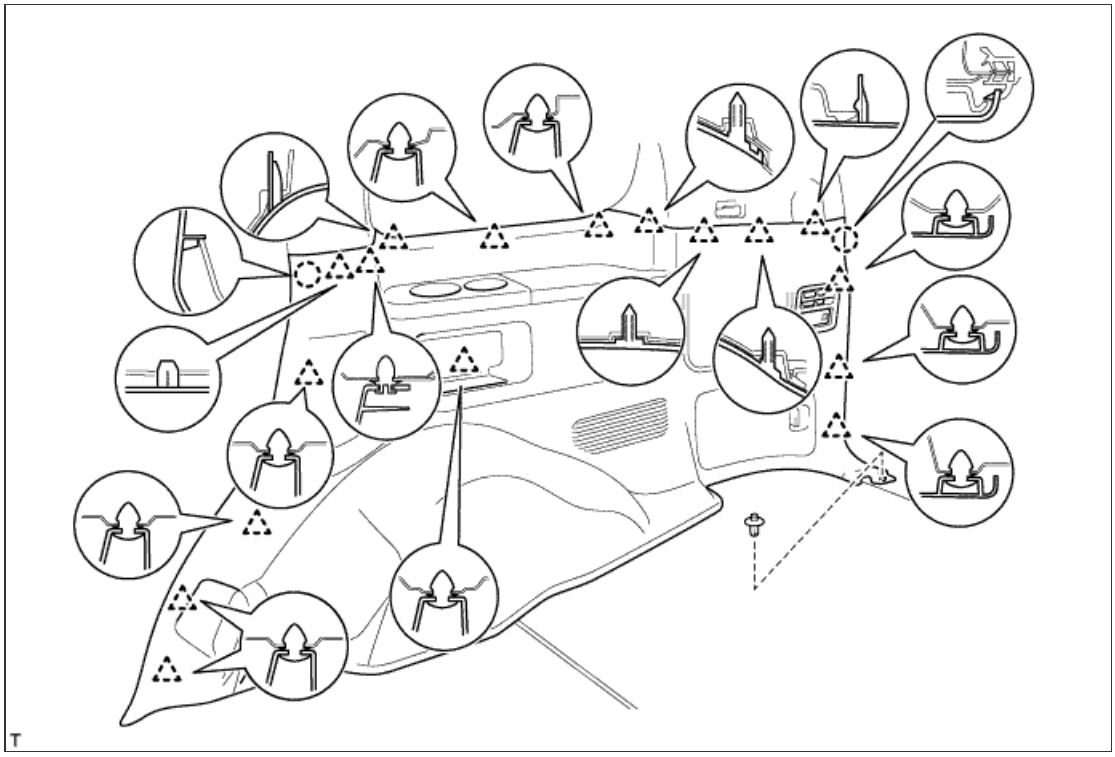


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

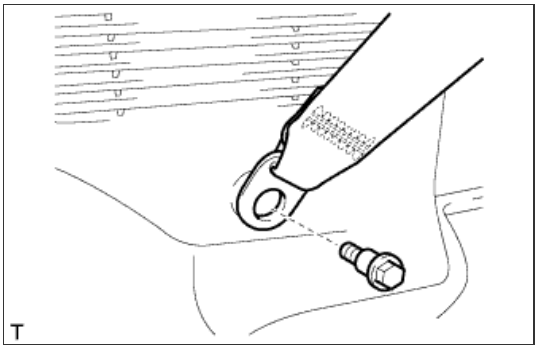
ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

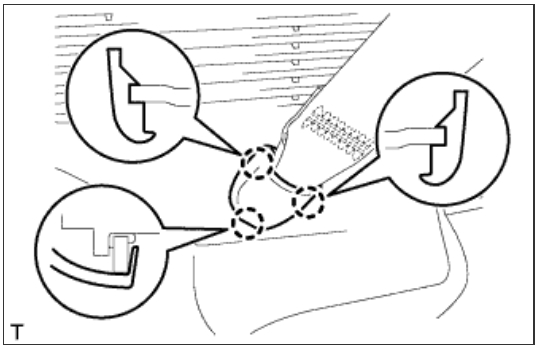


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

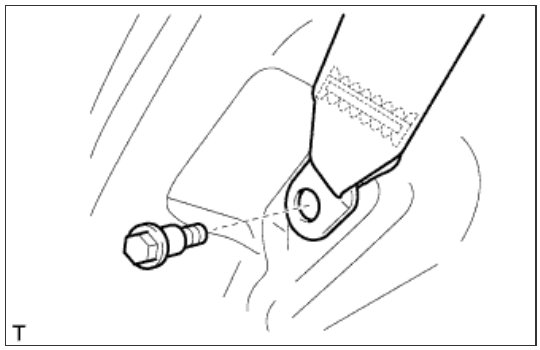


d. Attach the 3 claws to install the cover.

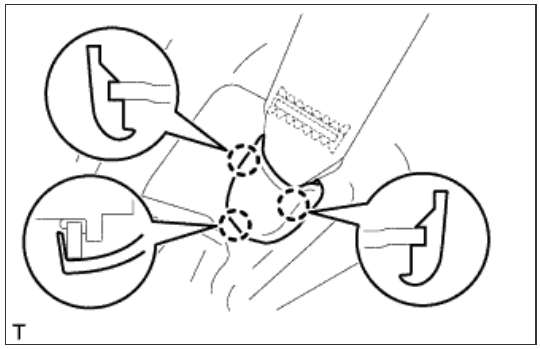


e. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



f. Attach the 3 claws to install the cover.

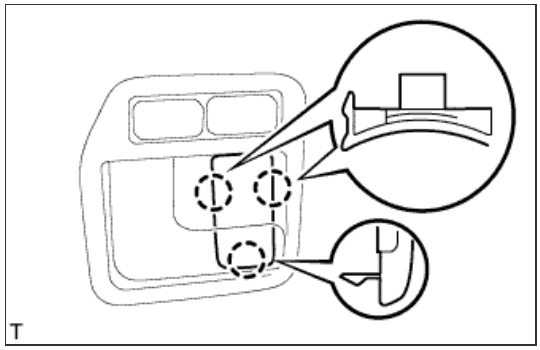


8. INSTALL REAR SEAT COVER CAP

HINT:

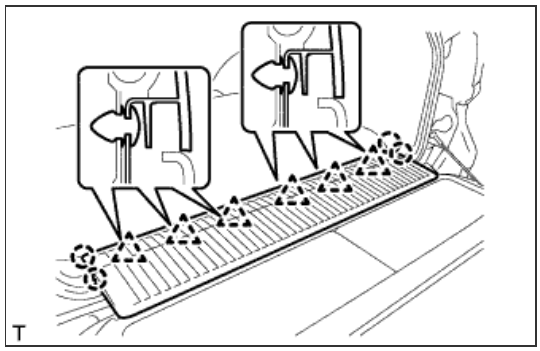
Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.



9. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.



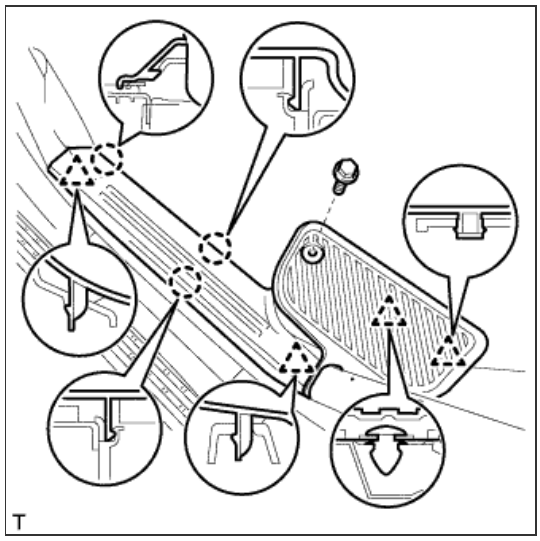
10. INSTALL REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding -up Function:
Install the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding -up Function:
Install the rear No. 2 seat assembly (Click here).

11. INSTALL REAR DOOR SCUFF PLATE LH

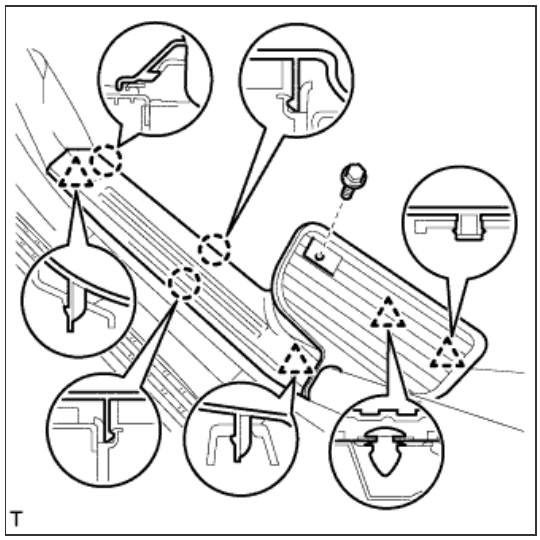
a. w/o Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.

b. w/ Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.

12. INSTALL REAR DOOR SCUFF PLATE RH

HINT:

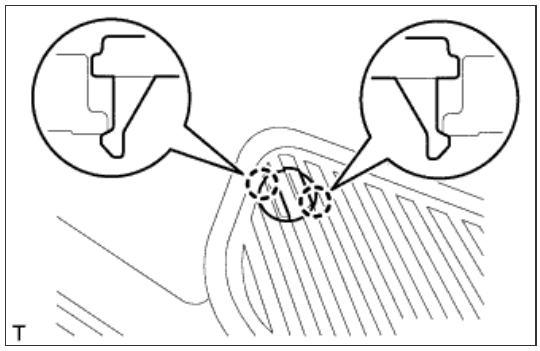
Use the same procedures described for the LH side.

13. INSTALL REAR STEP COVER

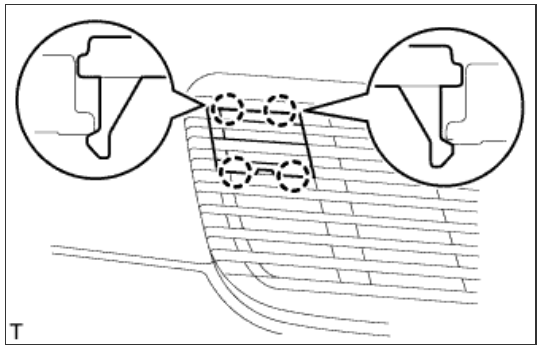
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.

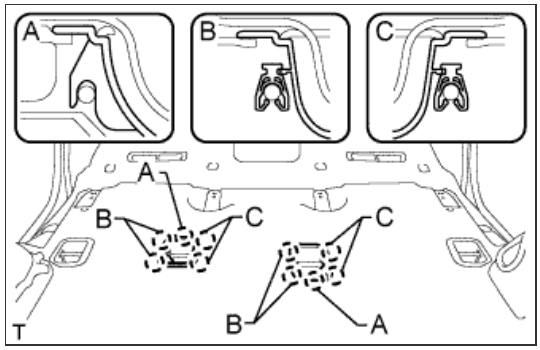


b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



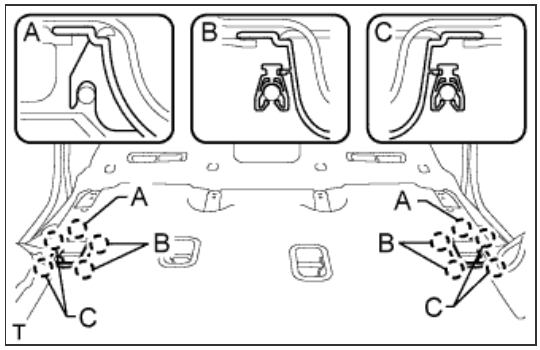
14. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Attach the 10 claws to install the 2 seat protectors.



15. INSTALL REAR NO. 1 SEAT PROTECTOR

a. Attach the 10 claws to install the 2 seat protectors.



16. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

a. Install the rear No. 1 seat assembly RH (Click here).

17. INSTALL REAR NO. 1 SEAT ASSEMBLY LH

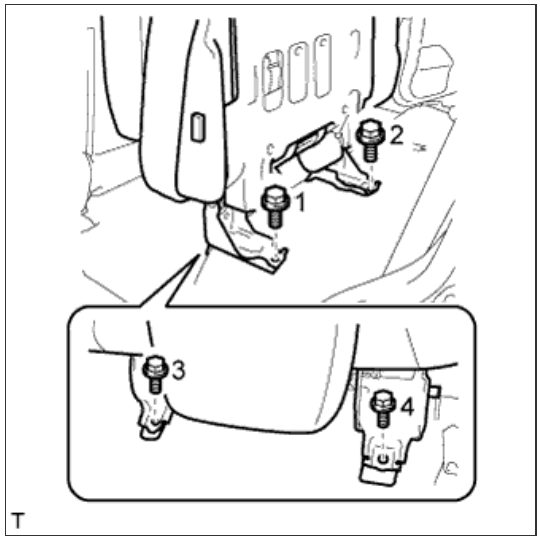
a. Temporarily install the seat assembly with the 4 bolts.

NOTICE:

Be careful not to damage the vehicle body.

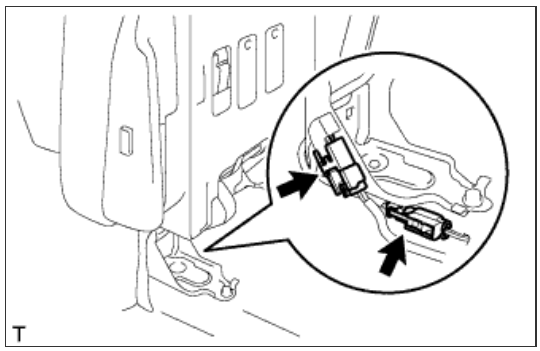
b. Tighten the bolts in the order shown in the illustration.

Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



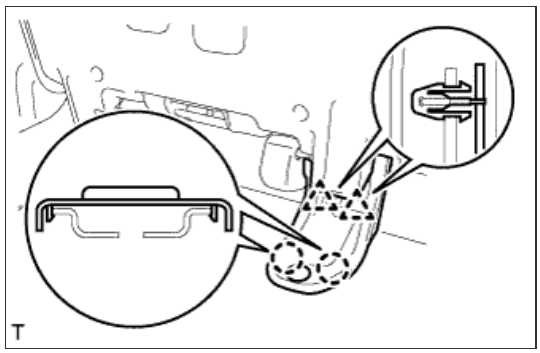
c. Connect the connector.

d. w/ Seat Heater System:
Connect the connector.



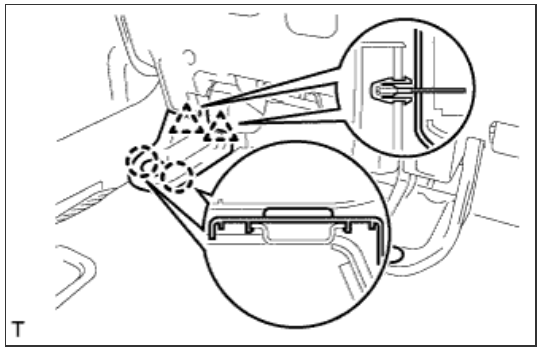
18. INSTALL REAR NO. 4 SEAT CUSHION HINGE COVER

a. Attach the 2 clips and 2 claws to install the cover.



19. INSTALL REAR NO. 2 SEAT CUSHION HINGE COVER

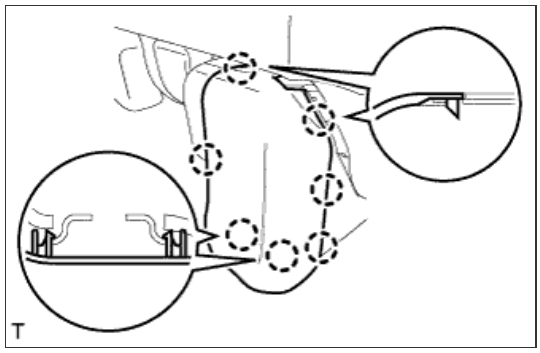
a. Attach the 2 clips and 2 claws to install the cover.



20. INSTALL REAR NO. 5 SEAT CUSHION HINGE COVER

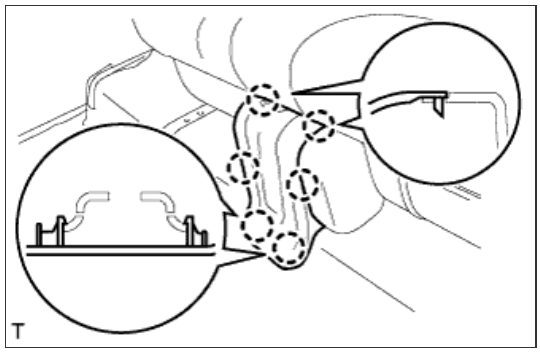
a. Return the seat to the upright position.

b. Attach the 7 claws to install the cover.



21. INSTALL REAR NO. 3 SEAT CUSHION HINGE COVER

a. Attach the 6 claws to install the cover.



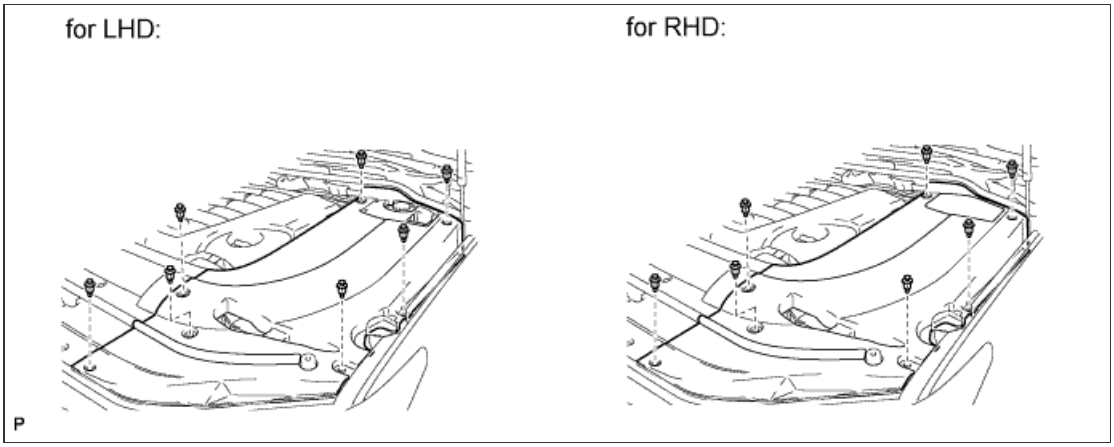
22. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

23. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



24. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

25. INSPECT REAR NO. 1 SEAT ASSEMBLY LH

a. w/ Seat Heater System:
Check the seat heater operation.

i. Turn the engine switch on (IG).

ii. Turn the seat heater switch on.

iii. Wait 5 minutes or more and confirm that the seat surface becomes warm.

for Preparation Click here

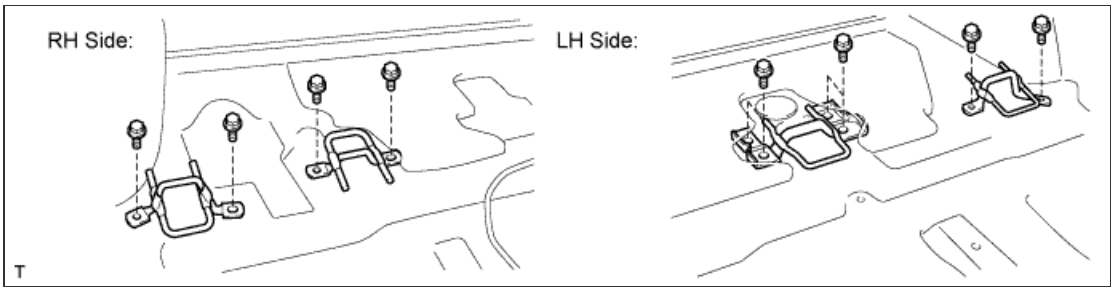
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEAT CUSHION LOCK STRIKER SUB-ASSEMBLY

a. Install the 4 lock strikers with the 10 bolts.

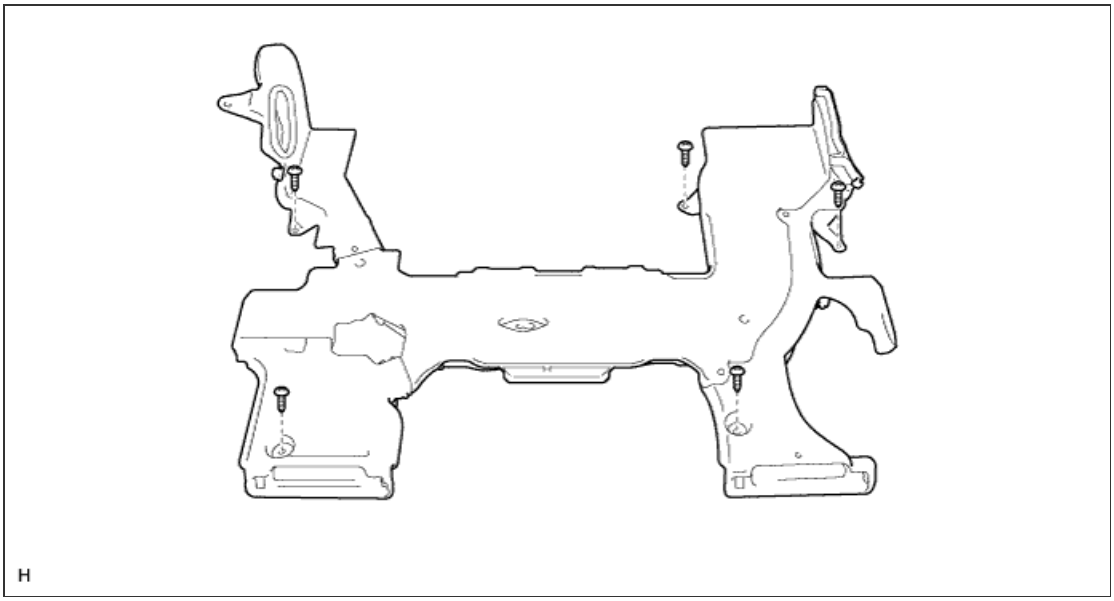
Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



2. INSTALL REAR NO. 6 AIR DUCT

a. Install the duct with the 5 screws.

b. Connect the 2 connectors.



3. INSTALL FRONT FLOOR CARPET ASSEMBLY

a. Install the floor carpet.

b. Install the 2 clips.

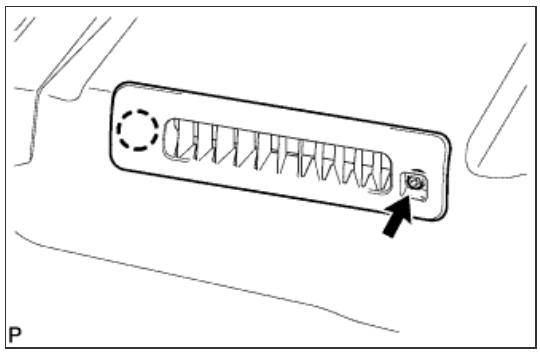
4. INSTALL REAR AIR DUCT GUIDE

HINT:

Use the same procedures for both sides.

a. Attach the claw to install the guide.

b. Install the screw.

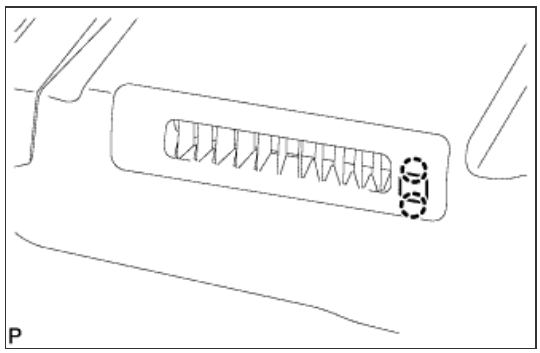


5. INSTALL AIR DUCT PLUG

a. Attach the 2 claws to install the plug.

HINT:

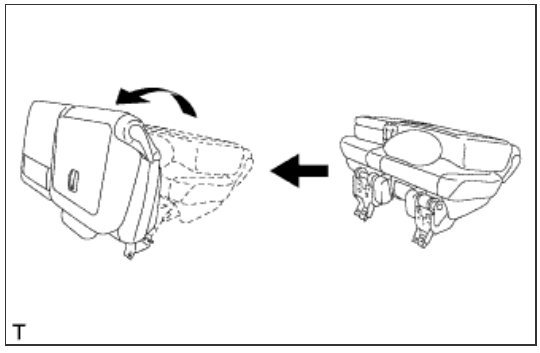
Use the same procedures for both sides.



6. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



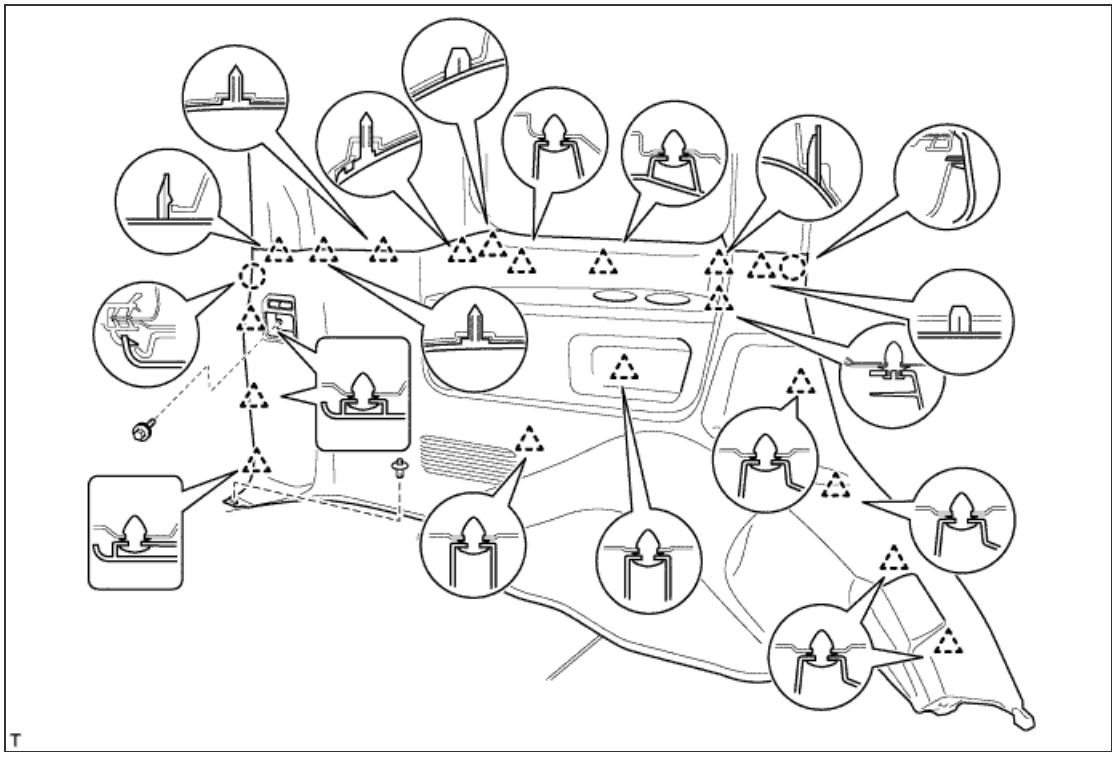
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

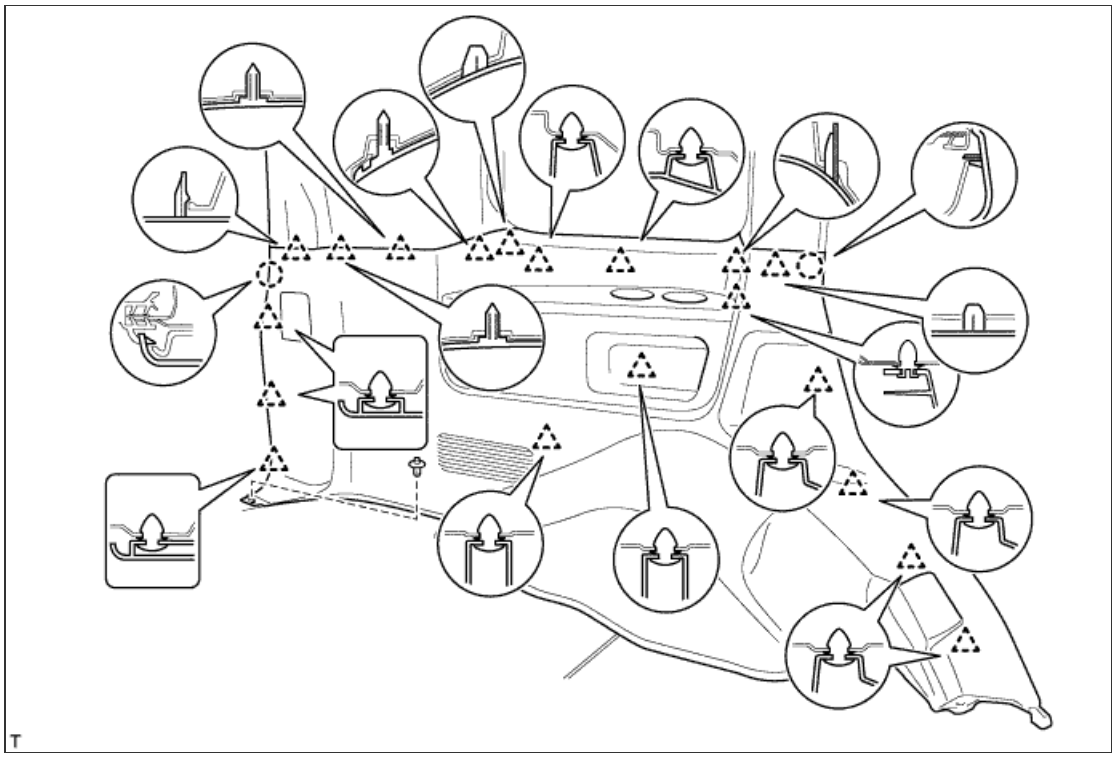


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

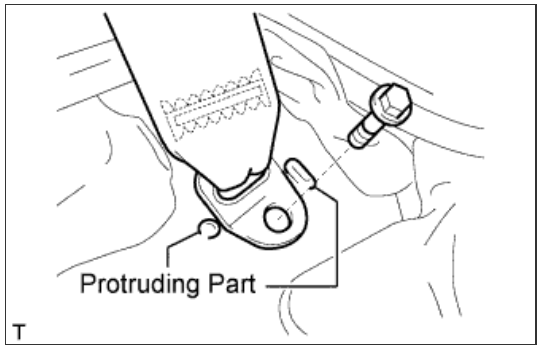


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

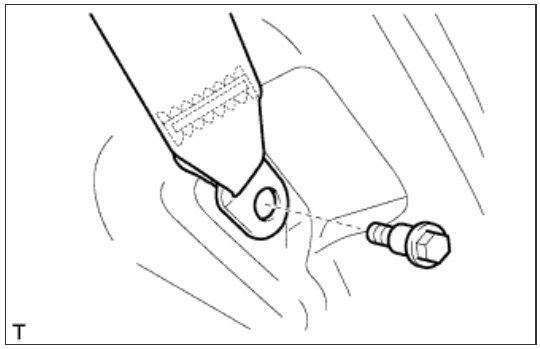
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

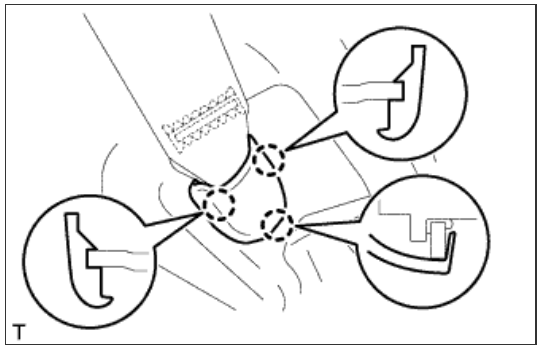


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



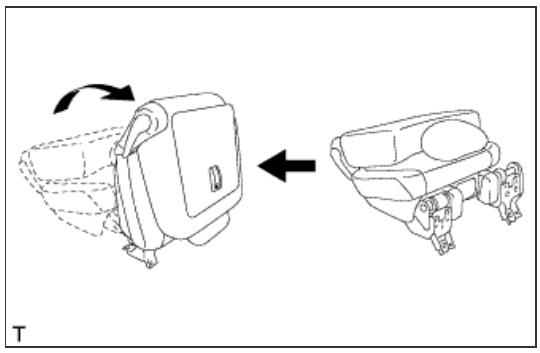
e. Attach the 3 claws to install the cover.



7. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



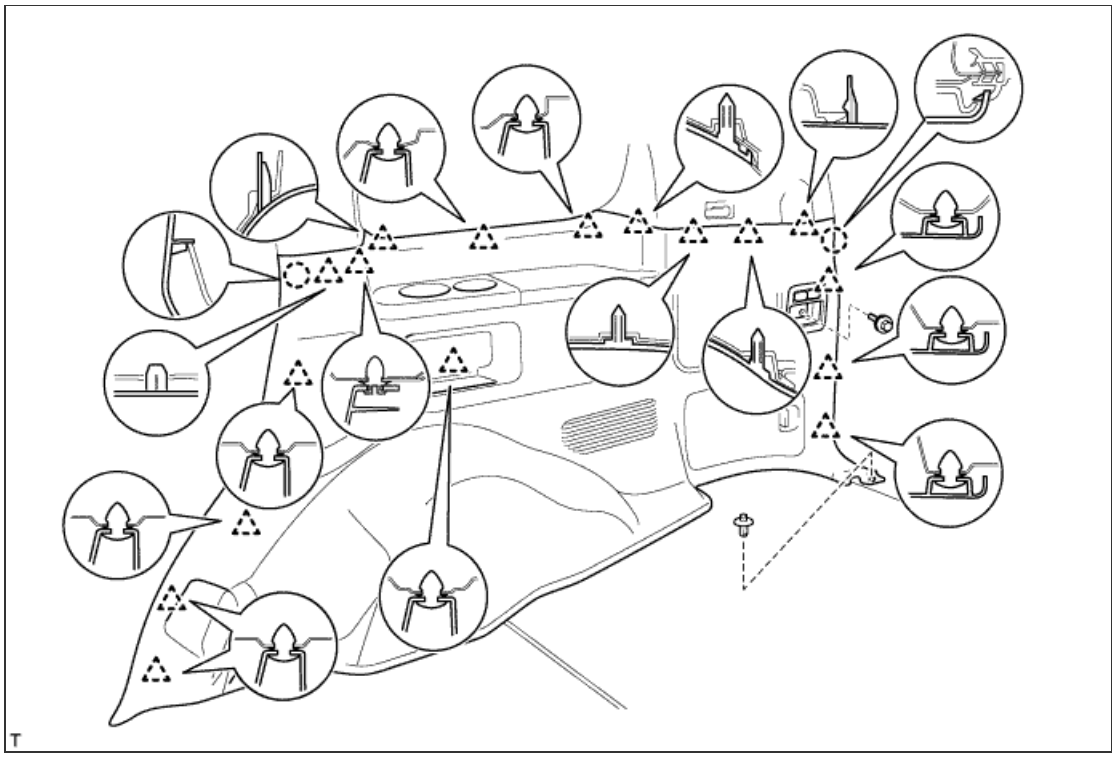
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

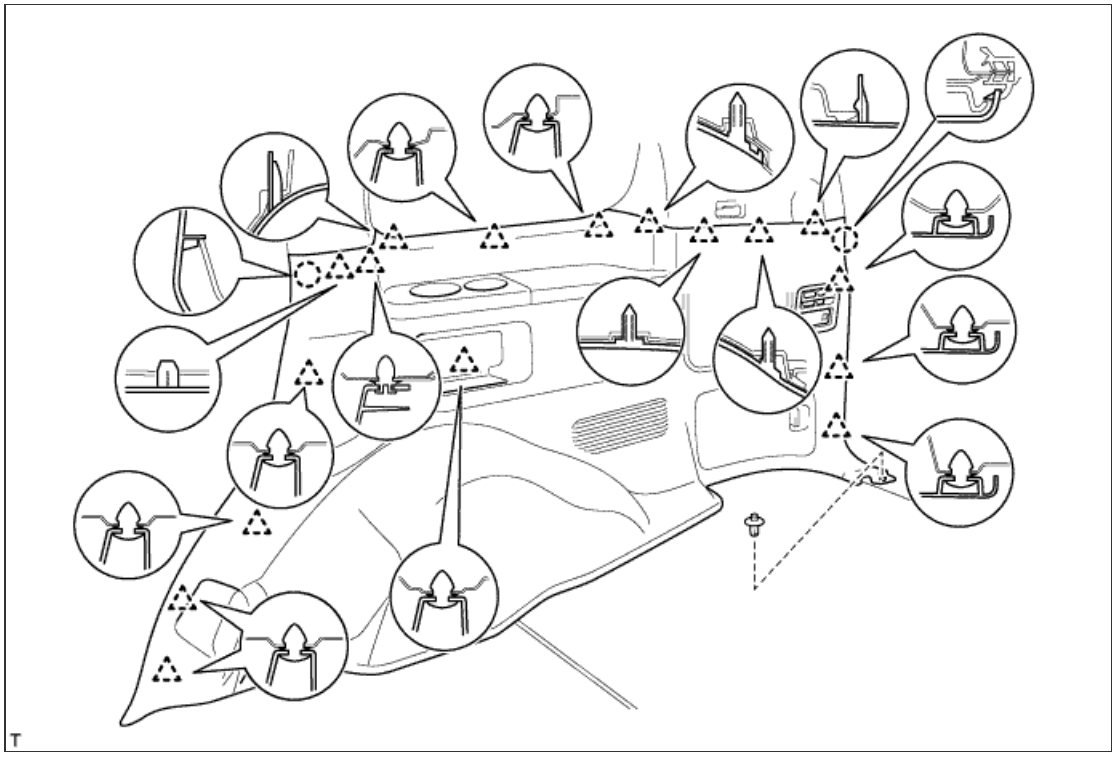


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

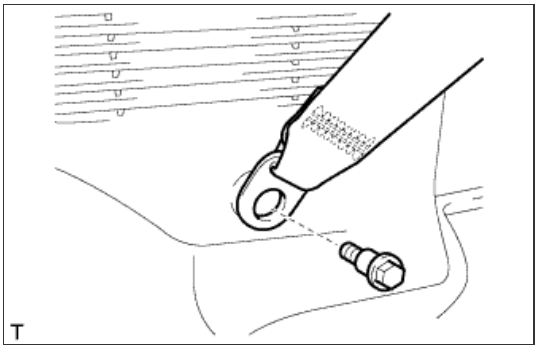
ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

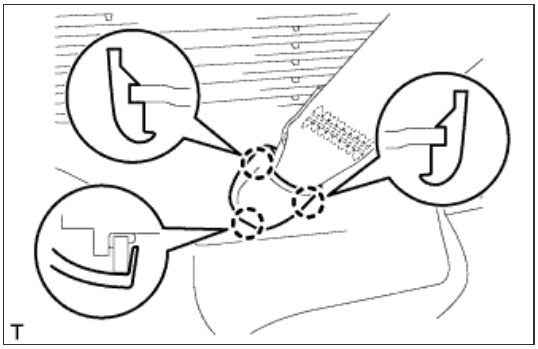


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

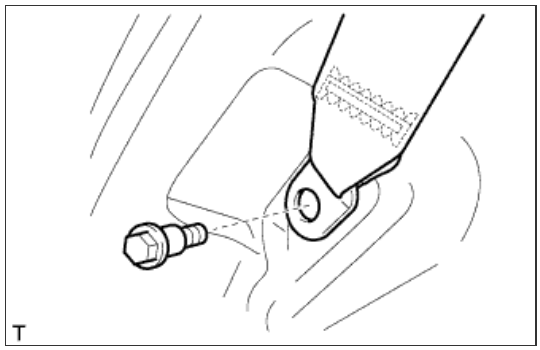


d. Attach the 3 claws to install the cover.

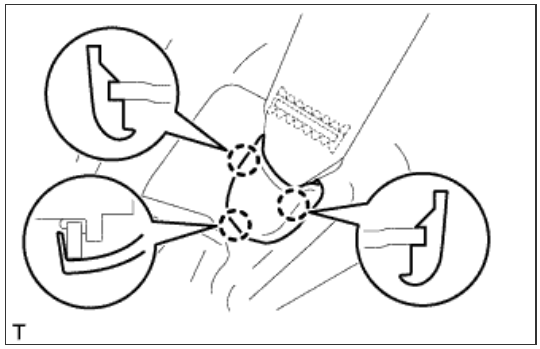


e. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



f. Attach the 3 claws to install the cover.

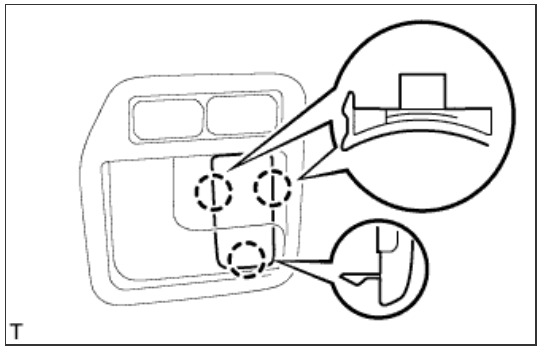


8. INSTALL REAR SEAT COVER CAP

HINT:

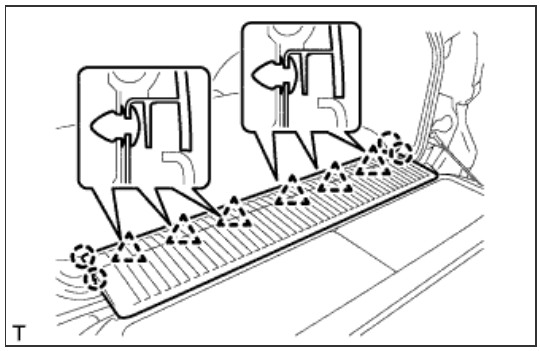
Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.



9. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.



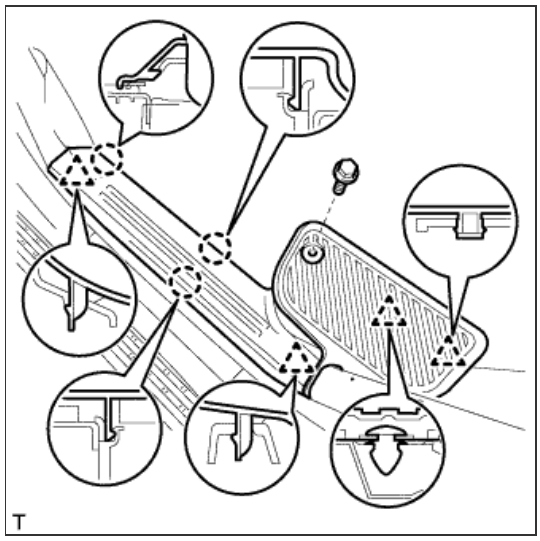
10. INSTALL REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding -up Function:
Install the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding -up Function:
Install the rear No. 2 seat assembly (Click here).

11. INSTALL REAR DOOR SCUFF PLATE LH

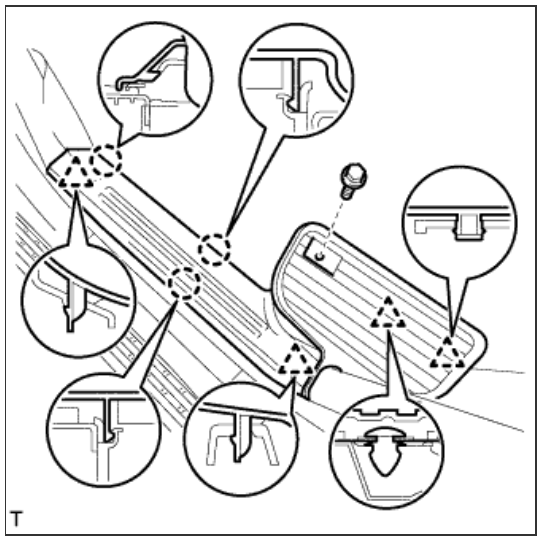
a. w/o Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.

b. w/ Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.

12. INSTALL REAR DOOR SCUFF PLATE RH

HINT:

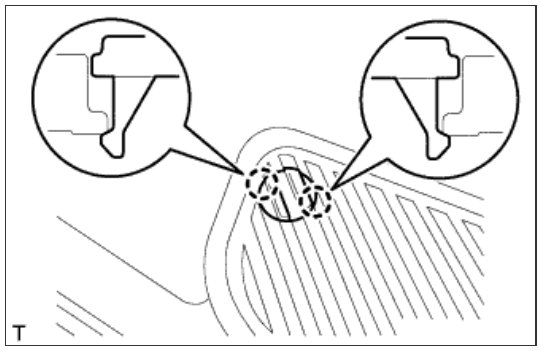
Use the same procedures described for the LH side.

13. INSTALL REAR STEP COVER

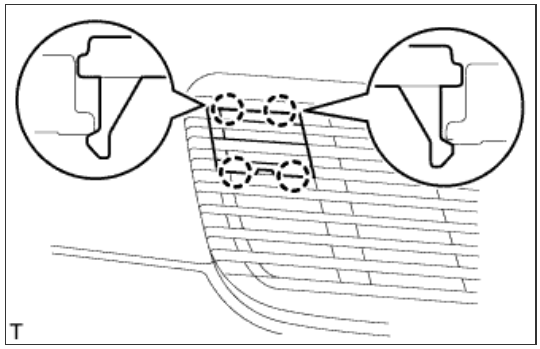
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.

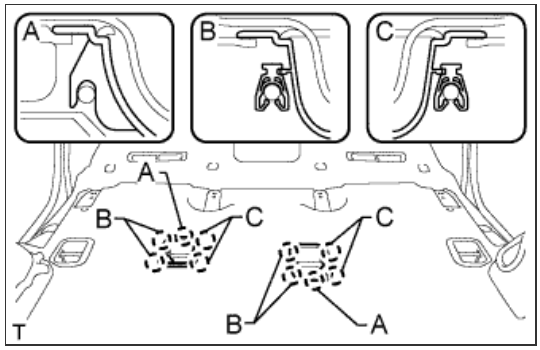


b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



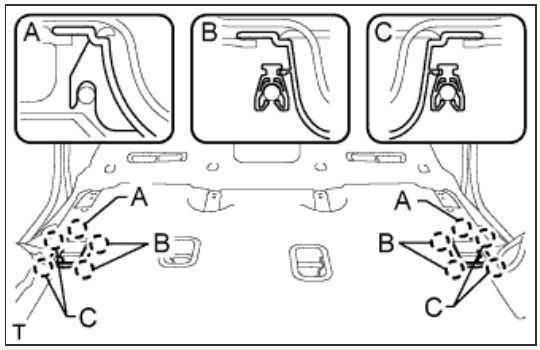
14. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Attach the 10 claws to install the 2 seat protectors.



15. INSTALL REAR NO. 1 SEAT PROTECTOR

a. Attach the 10 claws to install the 2 seat protectors.



16. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

a. Install the rear No. 1 seat assembly RH (Click here).

17. INSTALL REAR NO. 1 SEAT ASSEMBLY LH

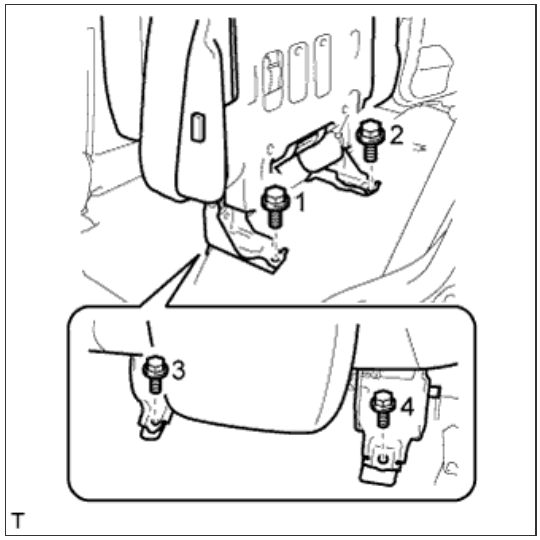
a. Temporarily install the seat assembly with the 4 bolts.

NOTICE:

Be careful not to damage the vehicle body.

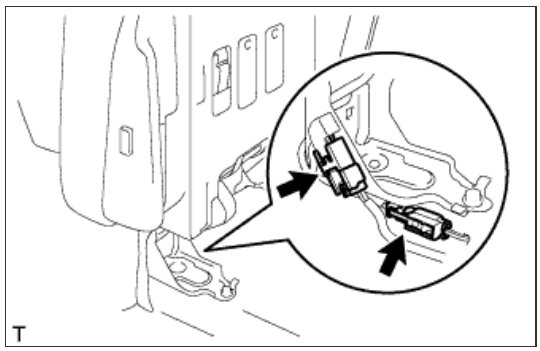
b. Tighten the bolts in the order shown in the illustration.

Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



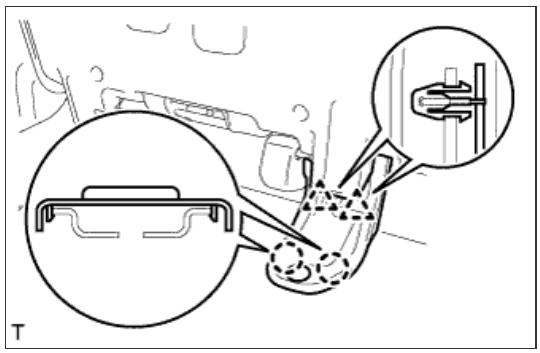
c. Connect the connector.

d. w/ Seat Heater System:
Connect the connector.



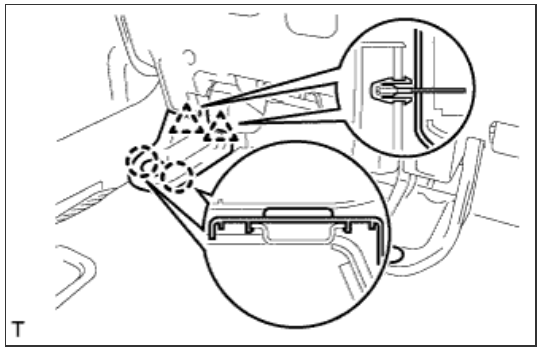
18. INSTALL REAR NO. 4 SEAT CUSHION HINGE COVER

a. Attach the 2 clips and 2 claws to install the cover.



19. INSTALL REAR NO. 2 SEAT CUSHION HINGE COVER

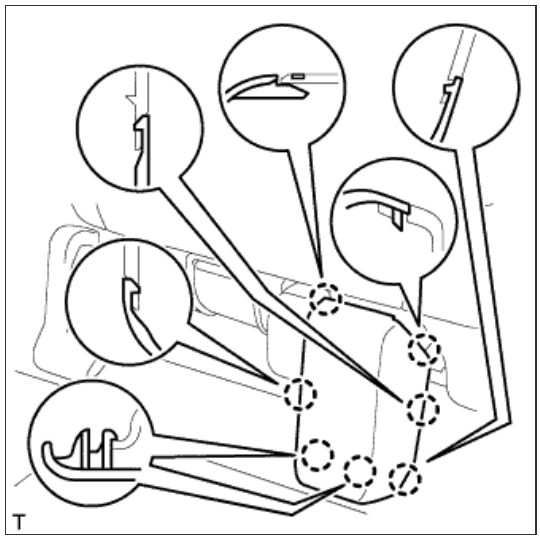
a. Attach the 2 clips and 2 claws to install the cover.



20. INSTALL REAR NO. 5 SEAT CUSHION HINGE COVER

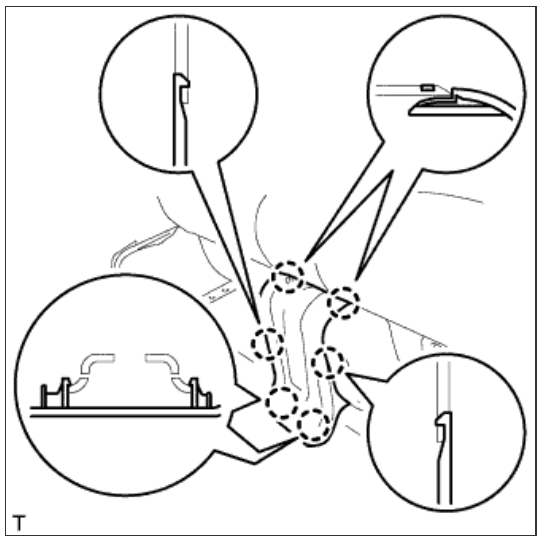
a. Return the seat to the upright position.

b. Attach the 7 claws to install the cover.



21. INSTALL REAR NO. 3 SEAT CUSHION HINGE COVER

a. Attach the 6 claws to install the cover.



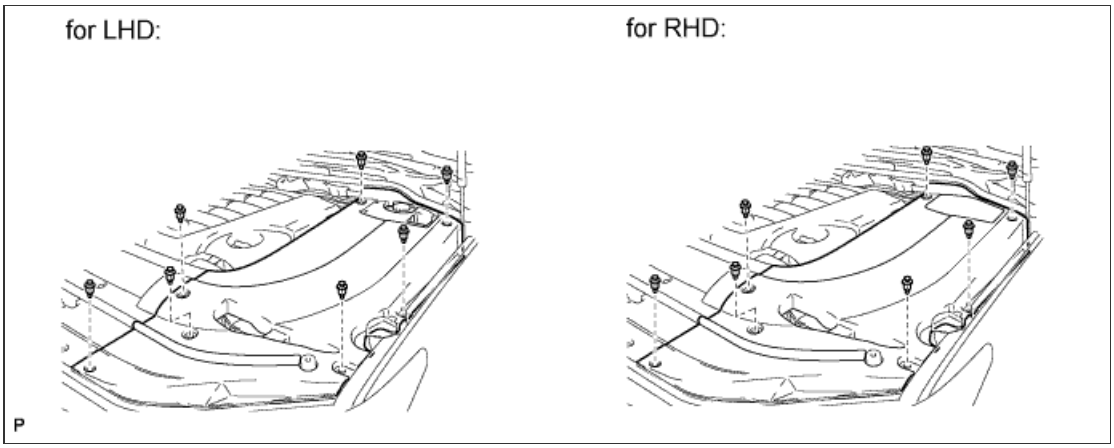
22. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

23. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



24. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

25. INSPECT REAR NO. 1 SEAT ASSEMBLY LH

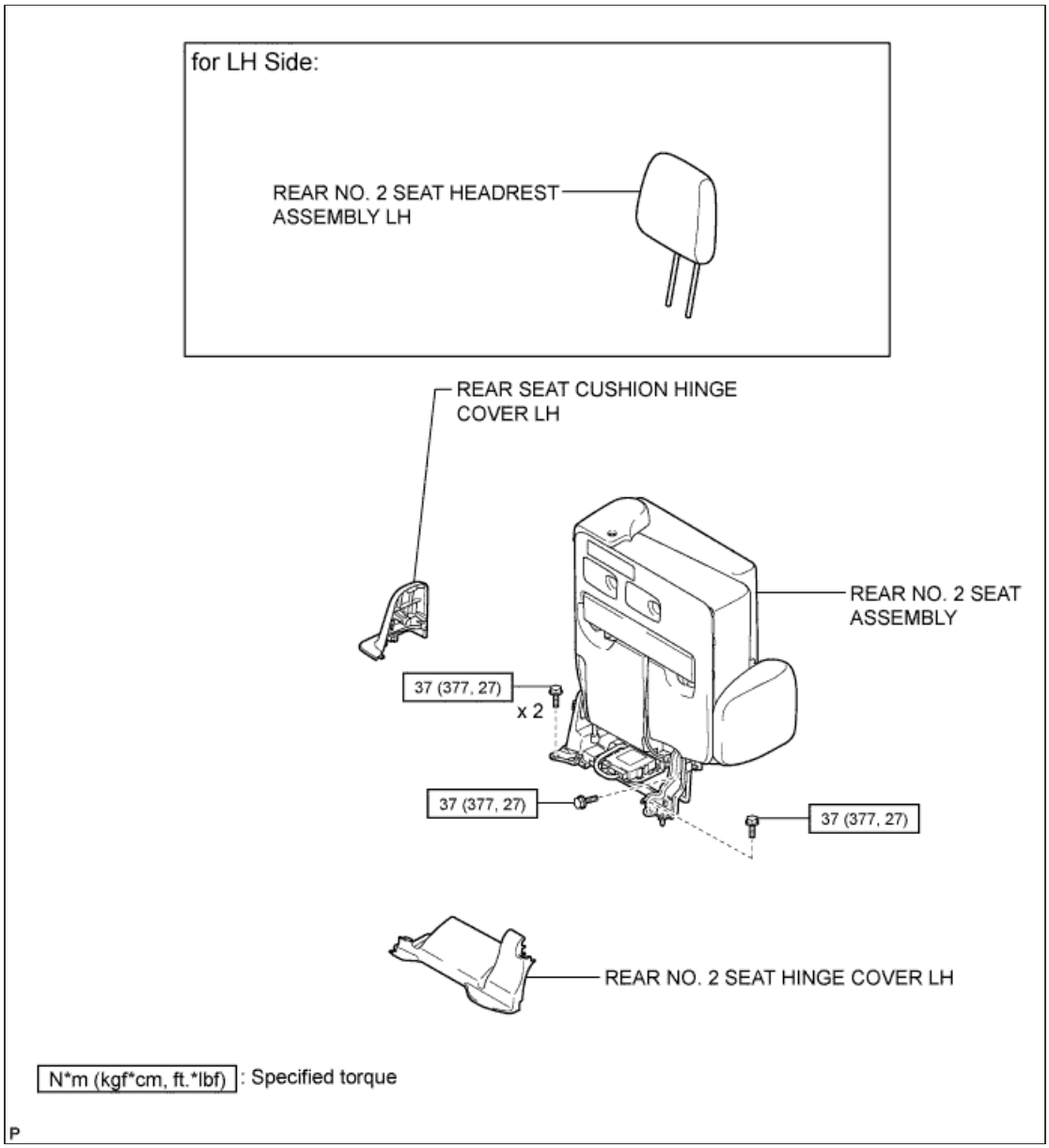
a. w/ Seat Heater System:
Check the seat heater operation.

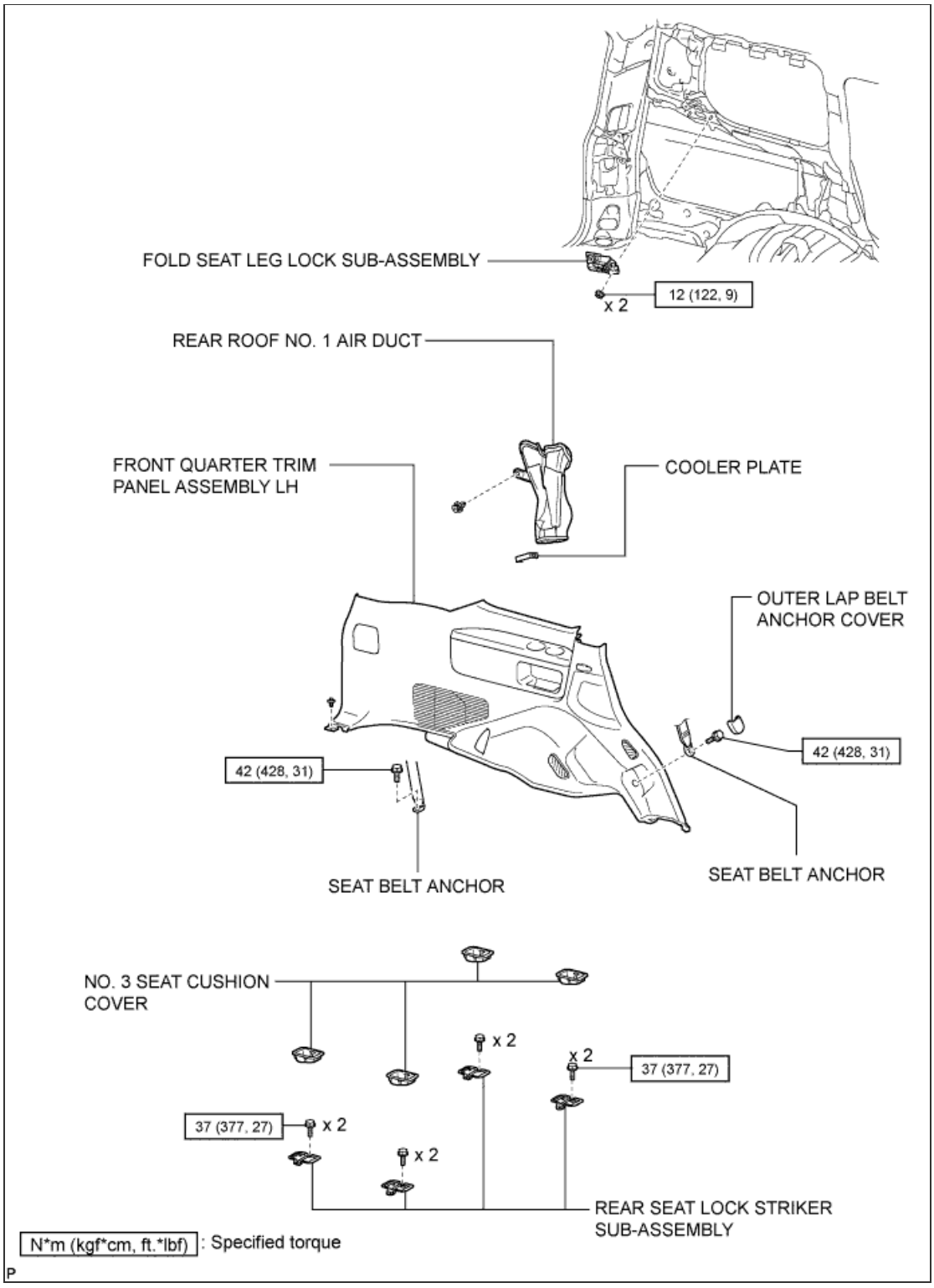
i. Turn the engine switch on (IG).

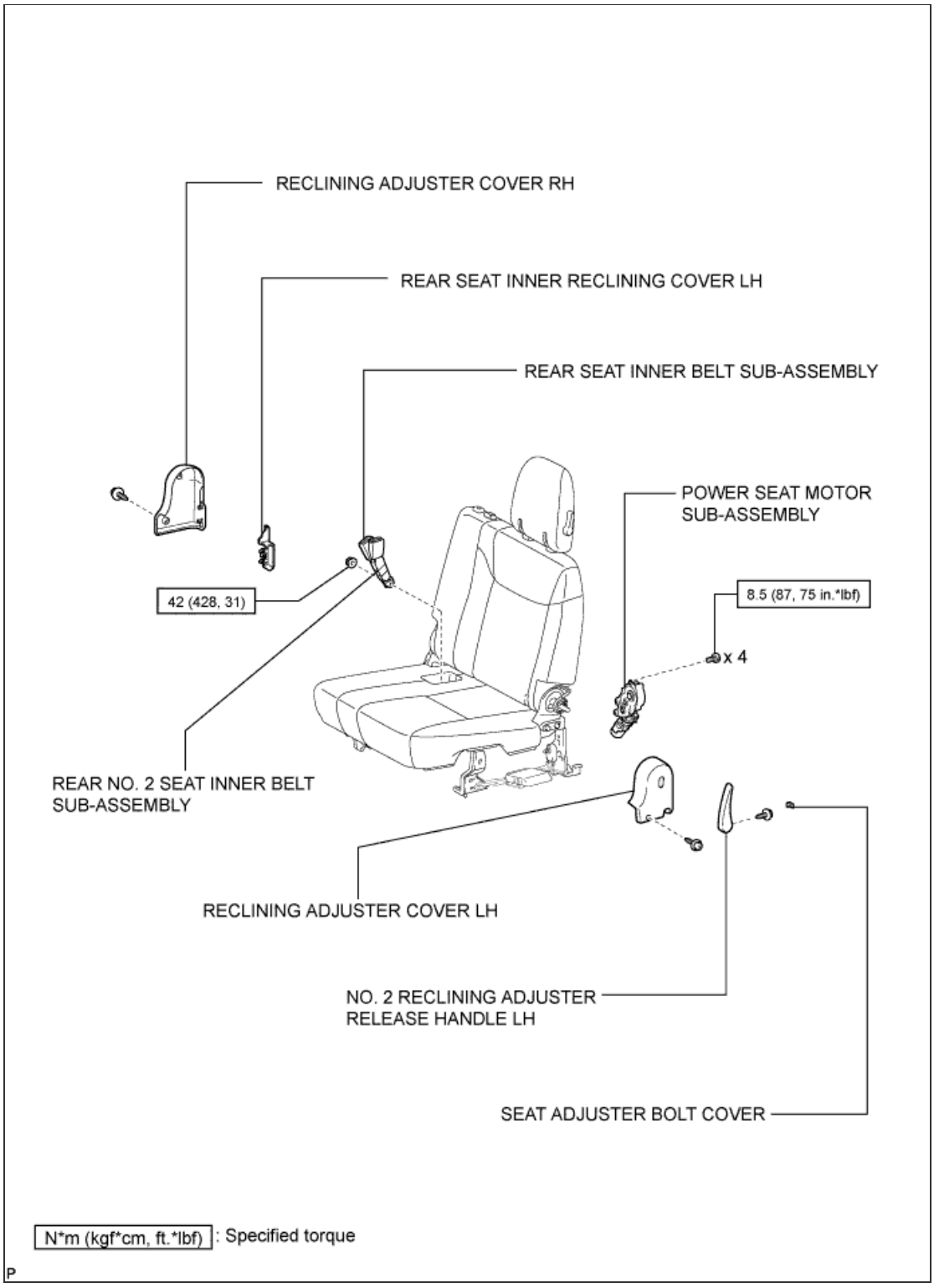
ii. Turn the seat heater switch on.

iii. Wait 5 minutes or more and confirm that the seat surface becomes warm.

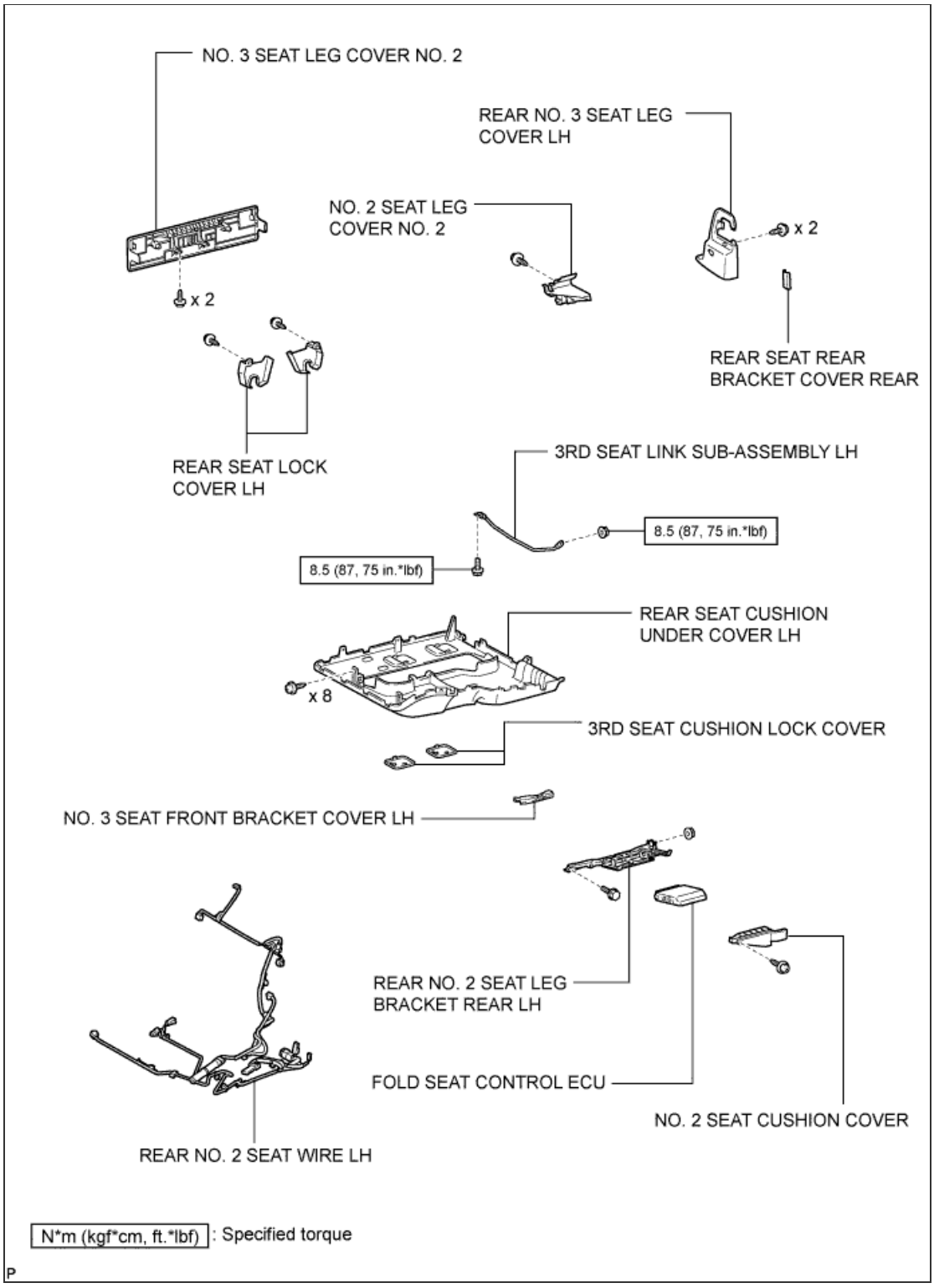
for Preparation Click here

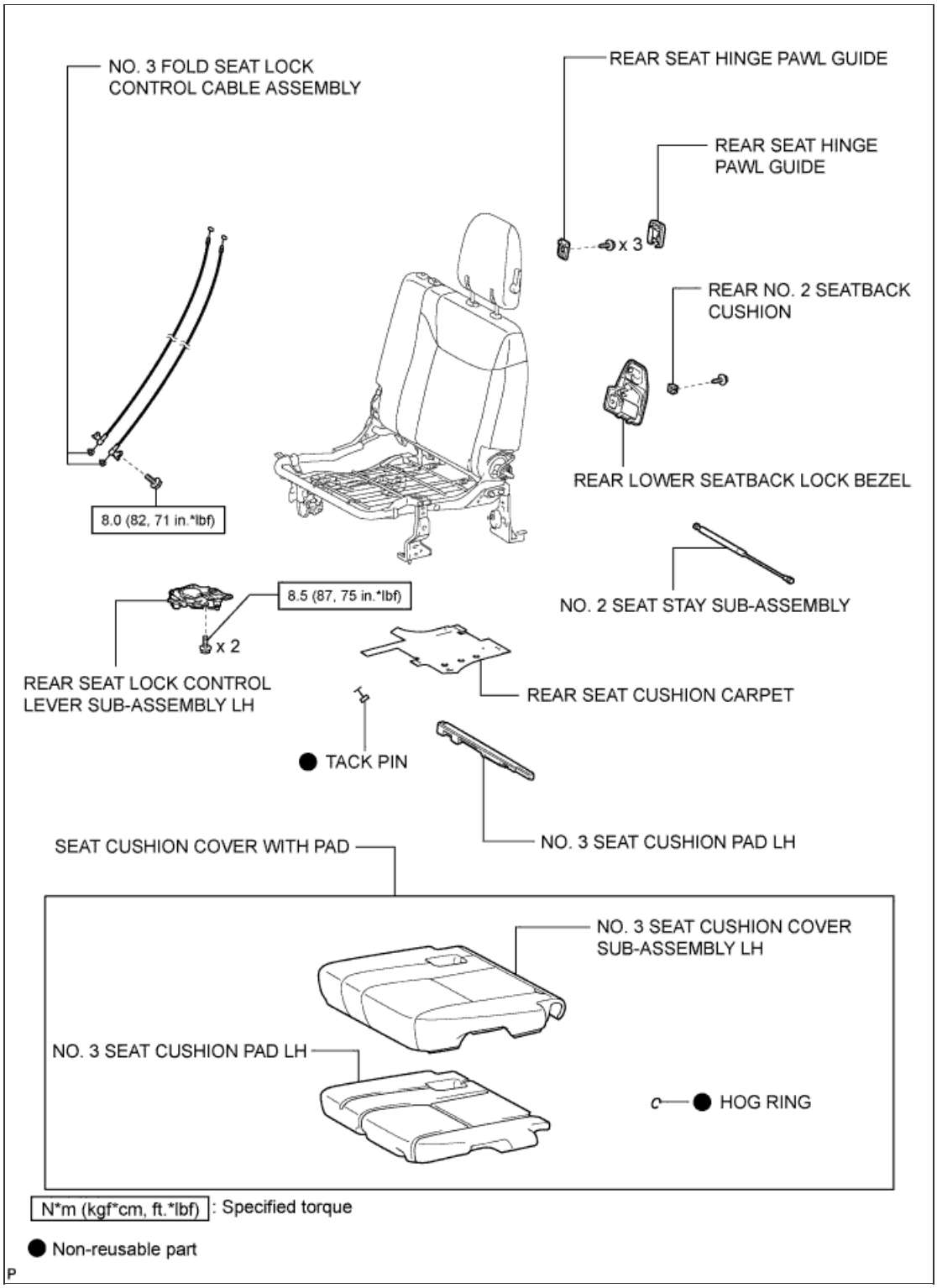


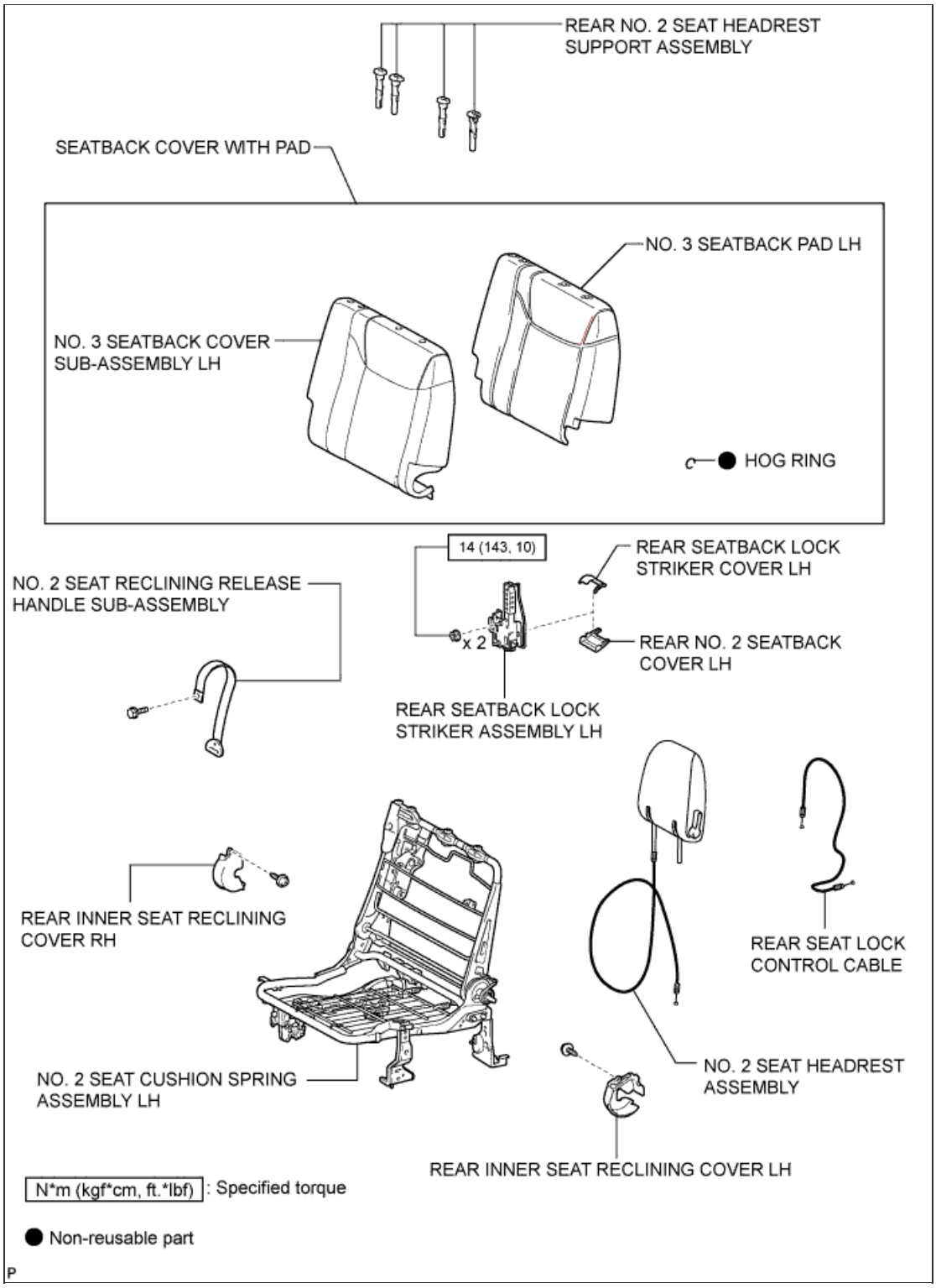

FOLD SEAT LEG LOCK SUB-ASSEMBLY
x 2
12 (122, 9)
REAR ROOF NO. 1 AIR DUCT
FRONT QUARTER TRIM PANEL ASSEMBLY LH
COOLER PLATE
OUTER LAP BELT ANCHOR COVER
42 (428, 31)
42 (428, 31)
SEAT BELT ANCHOR
SEAT BELT ANCHOR
NO. 3 SEAT CUSHION COVER
x 2
x 2
37 (377, 27)
37 (377, 27)
x 2
x 2
REAR SEAT LOCK STRIKER SUB-ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
P


RECLINING ADJUSTER COVER RH
REAR SEAT INNER RECLINING COVER LH
REAR SEAT INNER BELT SUB-ASSEMBLY
POWER SEAT MOTOR SUB-ASSEMBLY
42 (428, 31)
8.5 (87, 75 in.*lbf)
x 4
REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY
RECLINING ADJUSTER COVER LH
NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH
SEAT ADJUSTER BOLT COVER
N*m (kgf*cm, ft.*lbf) : Specified torque

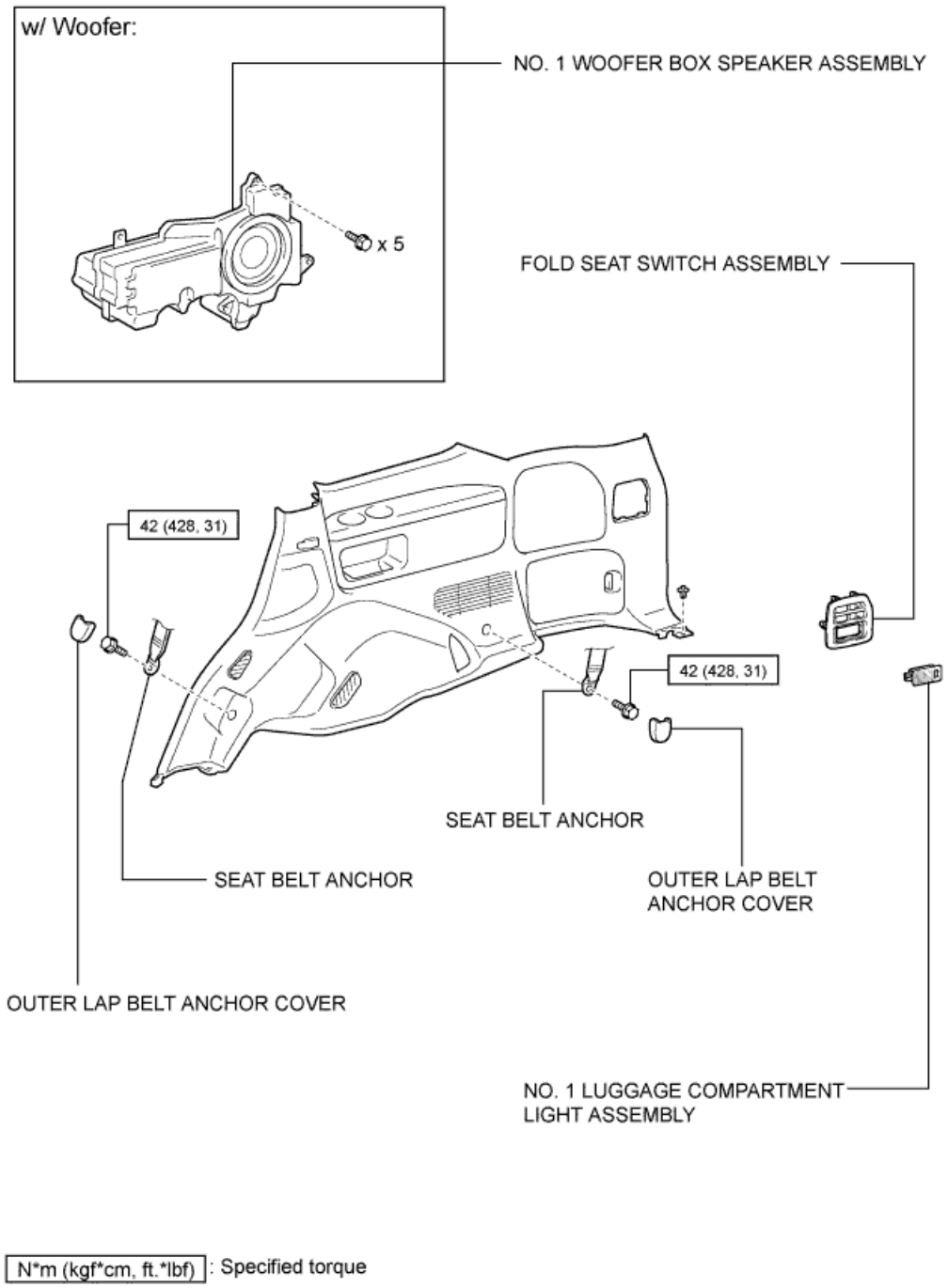
P


NO. 3 SEAT LEG COVER NO. 2
REAR NO. 3 SEAT LEG COVER LH
NO. 2 SEAT LEG COVER NO. 2
x 2
x 2
REAR SEAT REAR BRACKET COVER REAR
REAR SEAT LOCK COVER LH
3RD SEAT LINK SUB-ASSEMBLY LH
8.5 (87, 75 in.*lbf)
8.5 (87, 75 in.*lbf)
REAR SEAT CUSHION UNDER COVER LH
x 8
3RD SEAT CUSHION LOCK COVER
NO. 3 SEAT FRONT BRACKET COVER LH
REAR NO. 2 SEAT LEG BRACKET REAR LH
FOLD SEAT CONTROL ECU
NO. 2 SEAT CUSHION COVER
REAR NO. 2 SEAT WIRE LH
N*m (kgf*cm, ft.*lbf) : Specified torque
P


NO. 3 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY
REAR SEAT HINGE PAWL GUIDE
REAR SEAT HINGE PAWL GUIDE
x 3
REAR NO. 2 SEATBACK CUSHION
REAR LOWER SEATBACK LOCK BEZEL
8.0 (82, 71 in.*lbf)
NO. 2 SEAT STAY SUB-ASSEMBLY
8.5 (87, 75 in.*lbf)
x 2
REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH
REAR SEAT CUSHION CARPET
TACK PIN
NO. 3 SEAT CUSHION PAD LH
SEAT CUSHION COVER WITH PAD
NO. 3 SEAT CUSHION COVER SUB-ASSEMBLY LH
NO. 3 SEAT CUSHION PAD LH
HOG RING
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
P

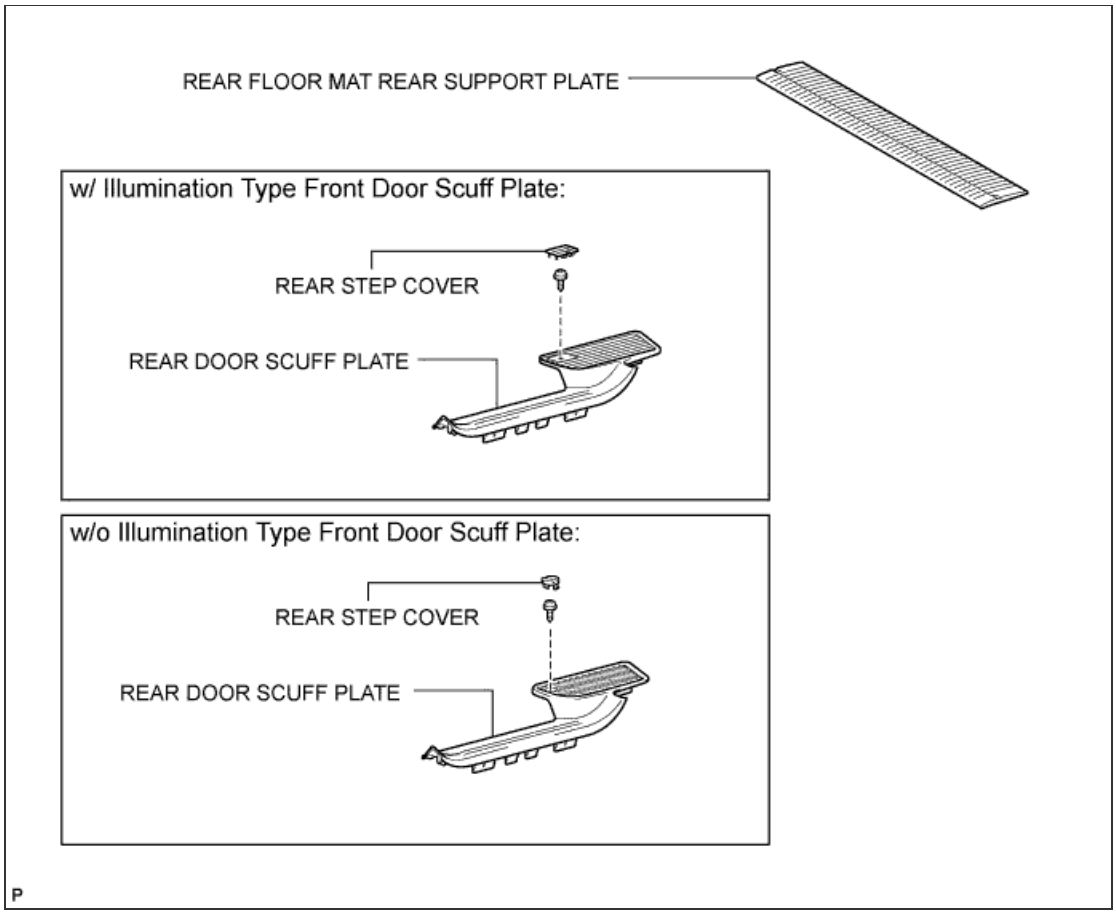

REAR NO. 2 SEAT HEADREST SUPPORT ASSEMBLY
SEATBACK COVER WITH PAD
NO. 3 SEATBACK PAD LH
NO. 3 SEATBACK COVER SUB-ASSEMBLY LH
HOG RING
14 (143, 10)
REAR SEATBACK LOCK STRIKER COVER LH
NO. 2 SEAT RECLINING RELEASE HANDLE SUB-ASSEMBLY
x 2
REAR NO. 2 SEATBACK COVER LH
REAR SEATBACK LOCK STRIKER ASSEMBLY LH
REAR INNER SEAT RECLINING COVER RH
REAR SEAT LOCK CONTROL CABLE
NO. 2 SEAT CUSHION SPRING ASSEMBLY LH
NO. 2 SEAT HEADREST ASSEMBLY
REAR INNER SEAT RECLINING COVER LH
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
P

for RH Side:

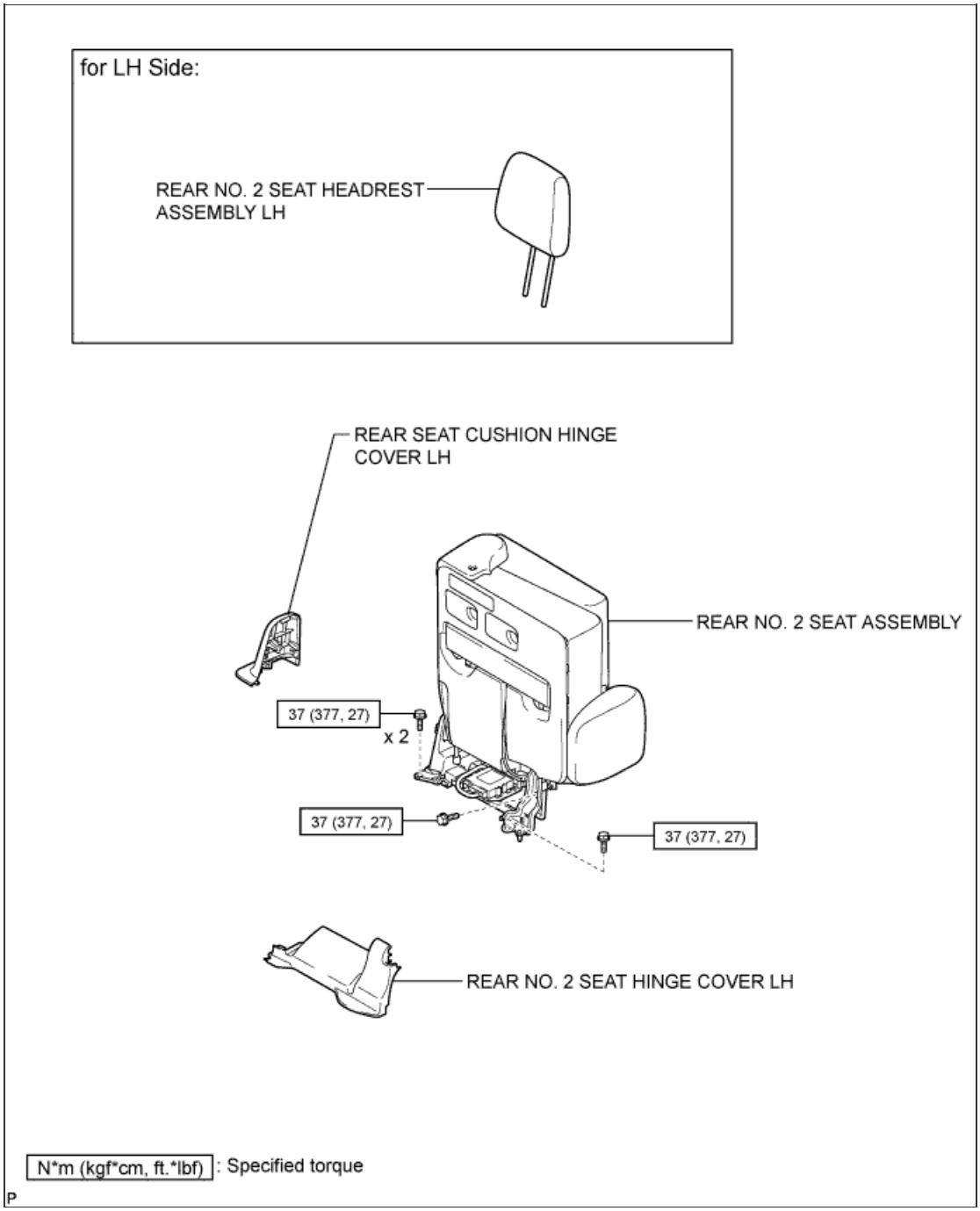


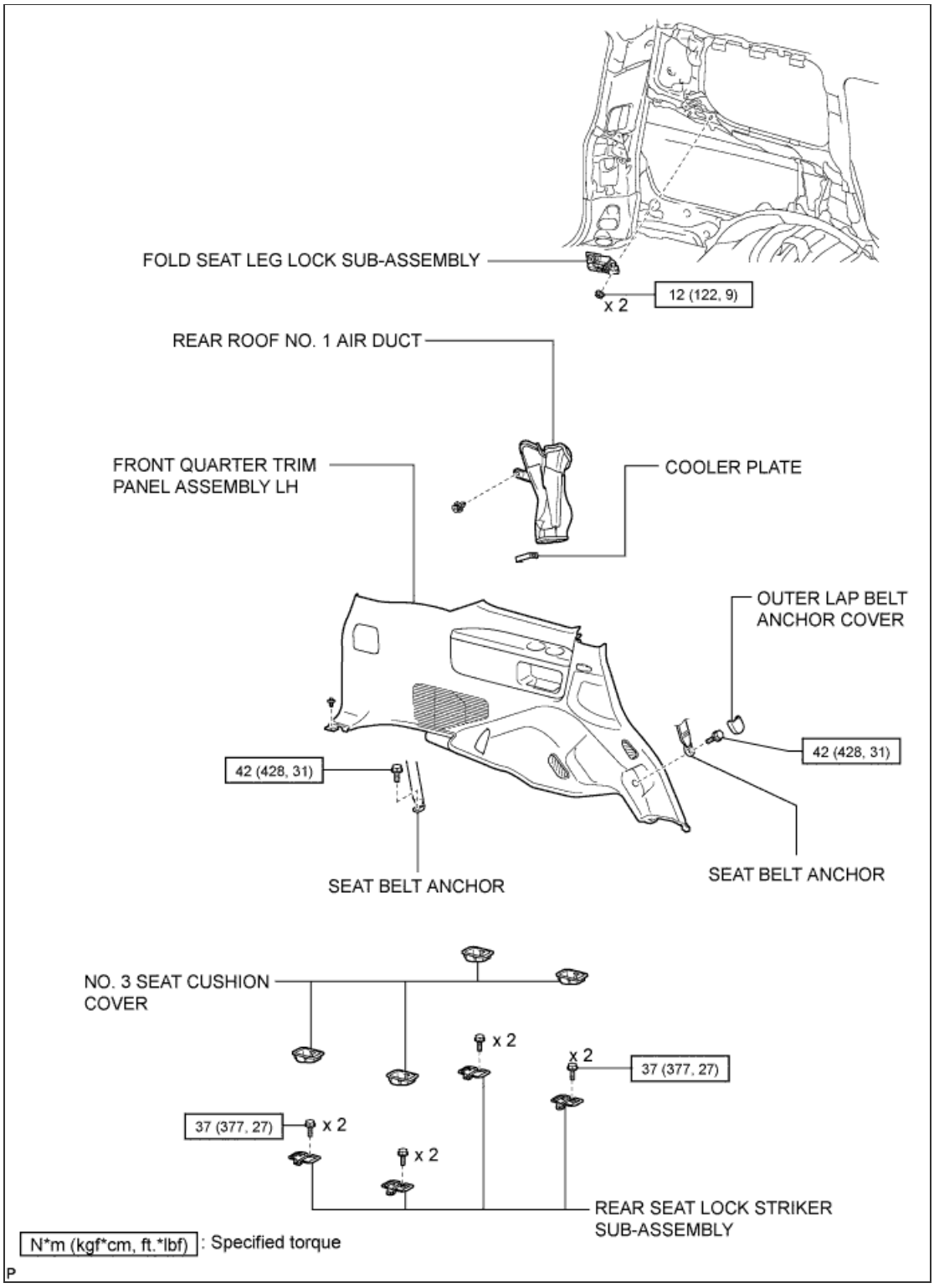
N*m (kgf*cm, ft.*lbf) : Specified torque

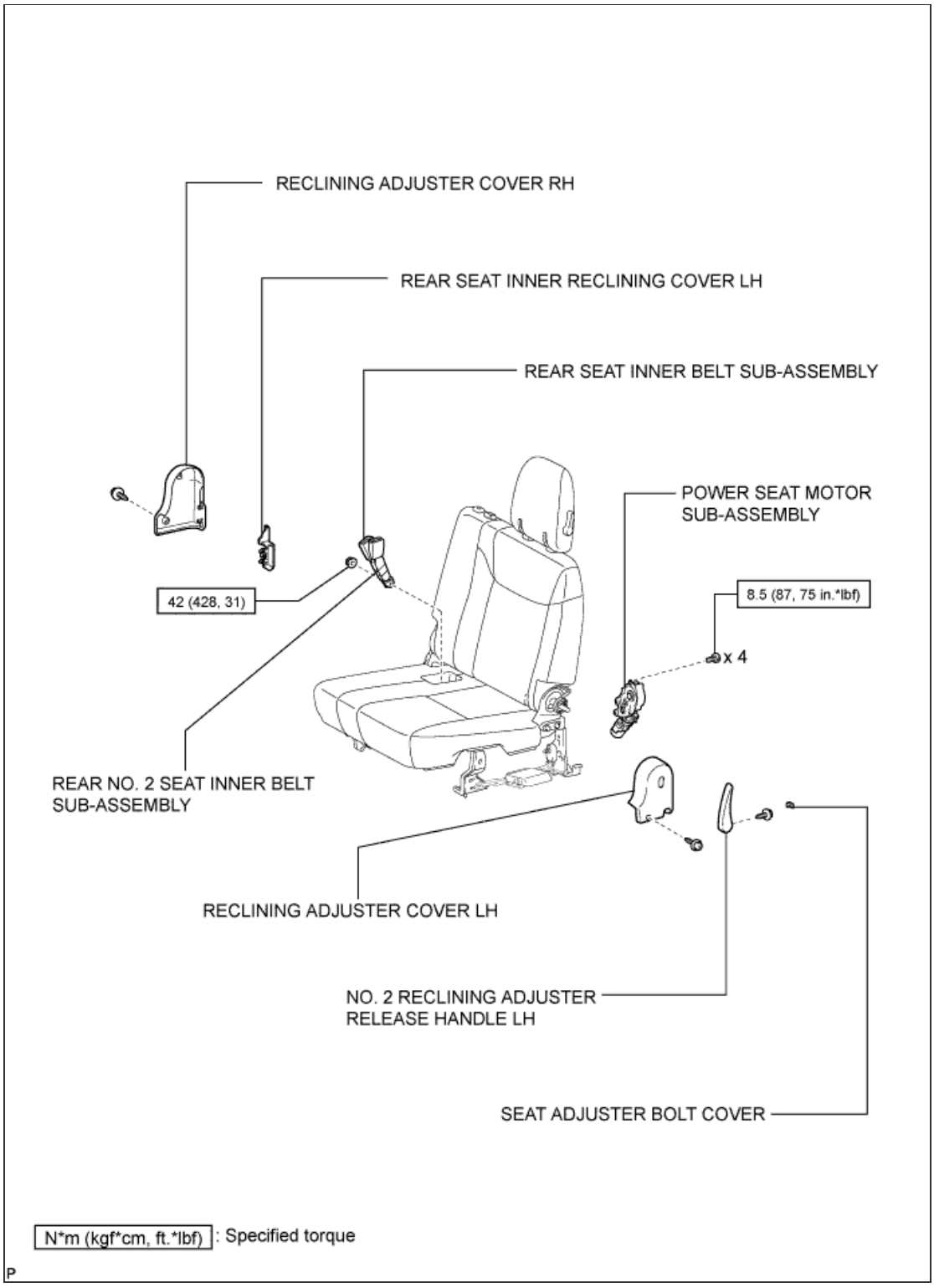
P


REAR FLOOR MAT REAR SUPPORT PLATE
w/ Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE
w/o Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE
P

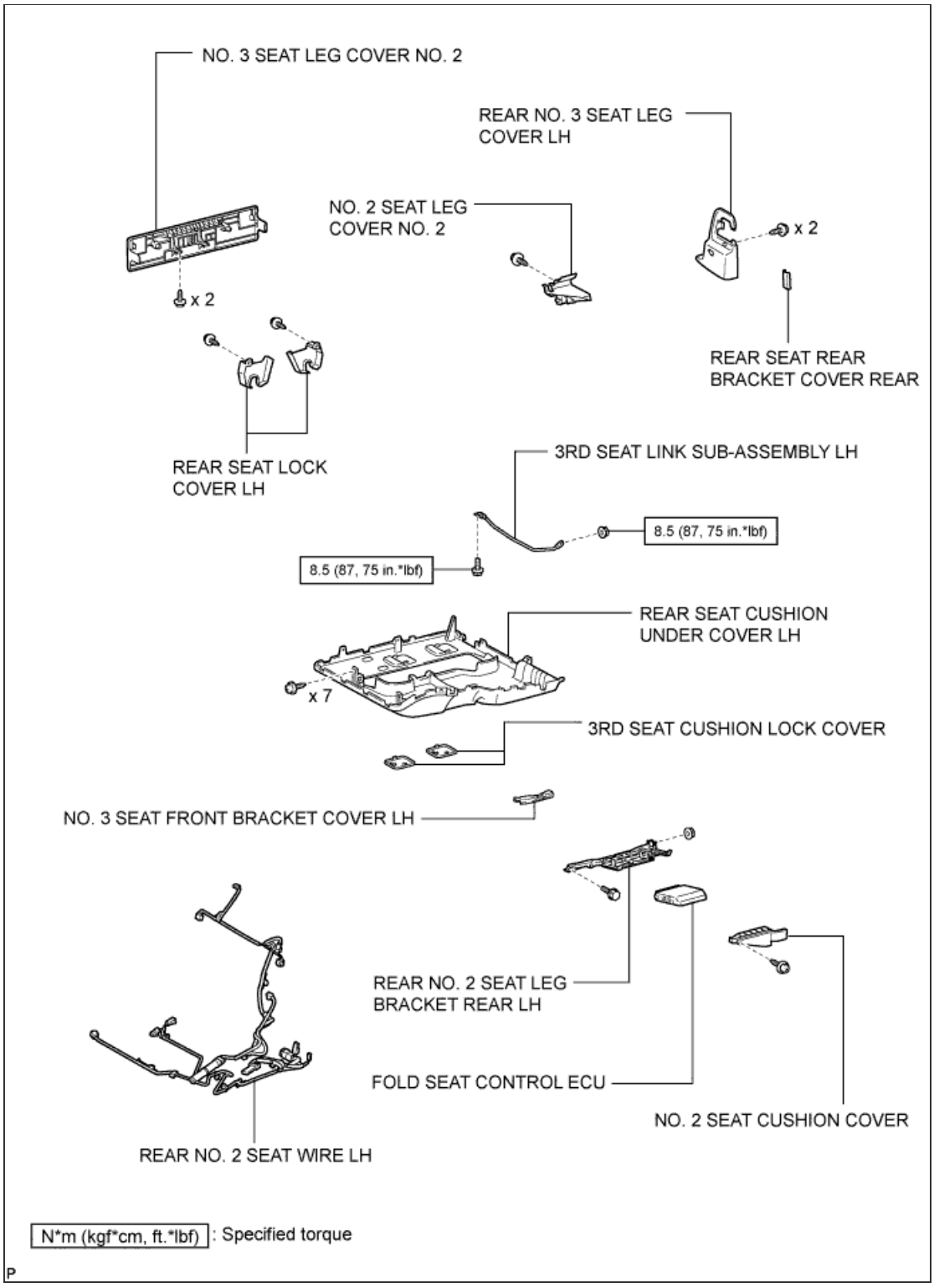
for Preparation Click here

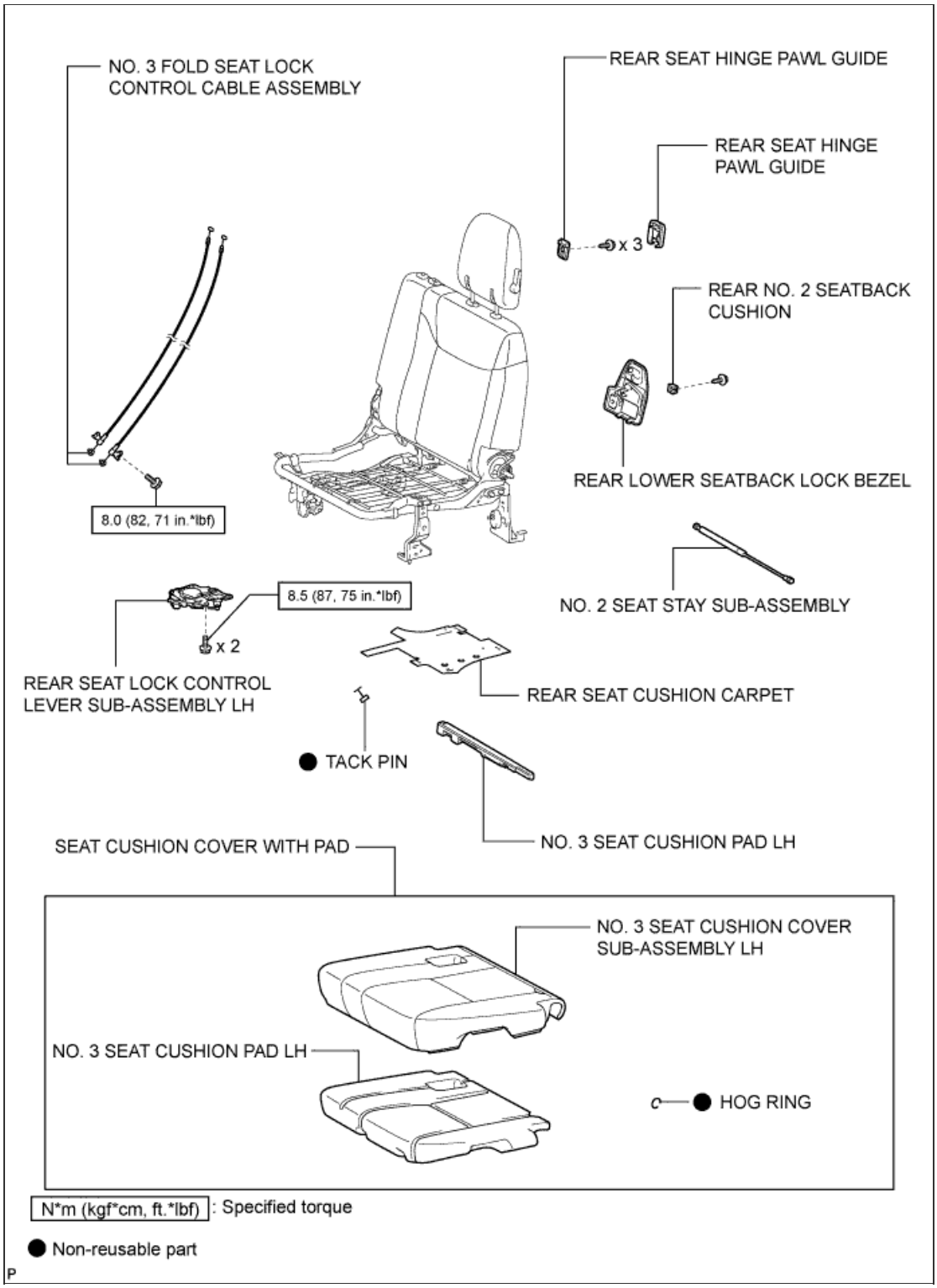


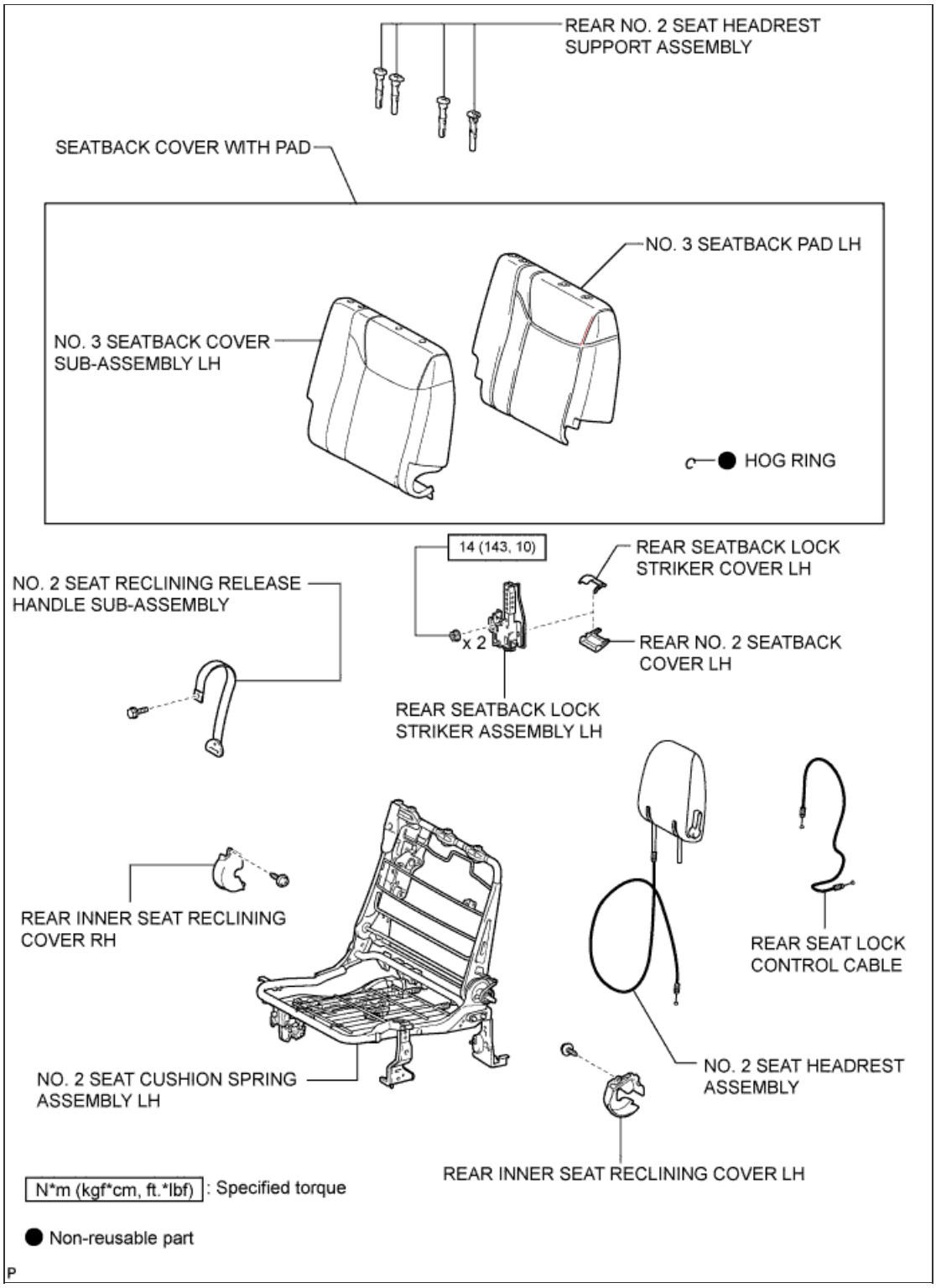

FOLD SEAT LEG LOCK SUB-ASSEMBLY
x 2
12 (122, 9)
REAR ROOF NO. 1 AIR DUCT
FRONT QUARTER TRIM PANEL ASSEMBLY LH
COOLER PLATE
OUTER LAP BELT ANCHOR COVER
42 (428, 31)
42 (428, 31)
SEAT BELT ANCHOR
SEAT BELT ANCHOR
NO. 3 SEAT CUSHION COVER
x 2
x 2
37 (377, 27)
37 (377, 27)
x 2
x 2
REAR SEAT LOCK STRIKER SUB-ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
P


RECLINING ADJUSTER COVER RH
REAR SEAT INNER RECLINING COVER LH
REAR SEAT INNER BELT SUB-ASSEMBLY
POWER SEAT MOTOR SUB-ASSEMBLY
42 (428, 31)
8.5 (87, 75 in.*lbf)
x 4
REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY
RECLINING ADJUSTER COVER LH
NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH
SEAT ADJUSTER BOLT COVER
N*m (kgf*cm, ft.*lbf) : Specified torque

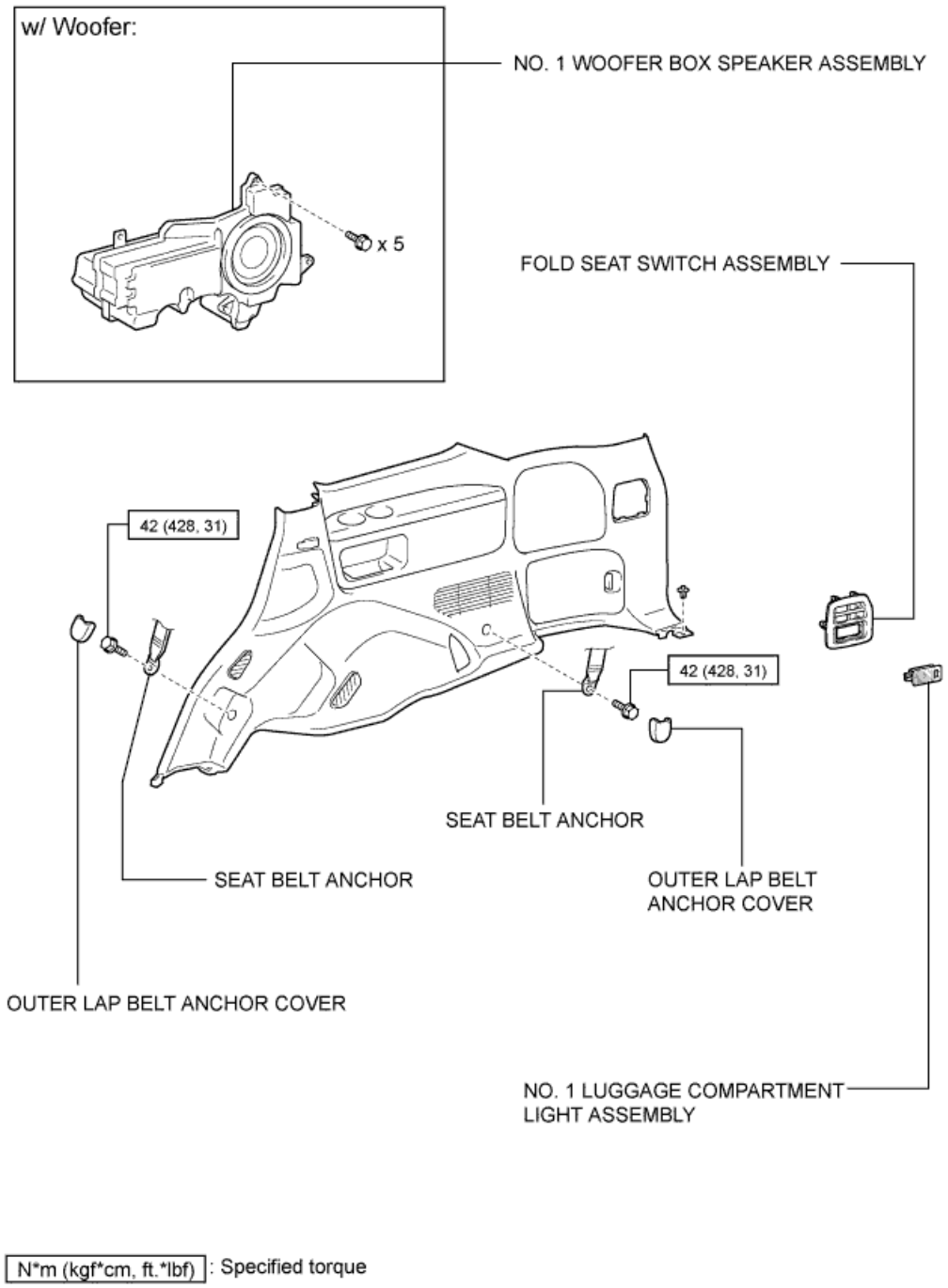
P


NO. 3 SEAT LEG COVER NO. 2
REAR NO. 3 SEAT LEG COVER LH
NO. 2 SEAT LEG COVER NO. 2
x 2
x 2
REAR SEAT REAR BRACKET COVER REAR
REAR SEAT LOCK COVER LH
3RD SEAT LINK SUB-ASSEMBLY LH
8.5 (87, 75 in.*lbf)
8.5 (87, 75 in.*lbf)
REAR SEAT CUSHION UNDER COVER LH
x 7
3RD SEAT CUSHION LOCK COVER
NO. 3 SEAT FRONT BRACKET COVER LH
REAR NO. 2 SEAT LEG BRACKET REAR LH
FOLD SEAT CONTROL ECU
NO. 2 SEAT CUSHION COVER
REAR NO. 2 SEAT WIRE LH
N*m (kgf*cm, ft.*lbf) : Specified torque
P


NO. 3 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY
REAR SEAT HINGE PAWL GUIDE
REAR SEAT HINGE PAWL GUIDE
x 3
REAR NO. 2 SEATBACK CUSHION
REAR LOWER SEATBACK LOCK BEZEL
8.0 (82, 71 in.*lbf)
NO. 2 SEAT STAY SUB-ASSEMBLY
8.5 (87, 75 in.*lbf)
x 2
REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH
REAR SEAT CUSHION CARPET
TACK PIN
NO. 3 SEAT CUSHION PAD LH
SEAT CUSHION COVER WITH PAD
NO. 3 SEAT CUSHION COVER SUB-ASSEMBLY LH
NO. 3 SEAT CUSHION PAD LH
HOG RING
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
P

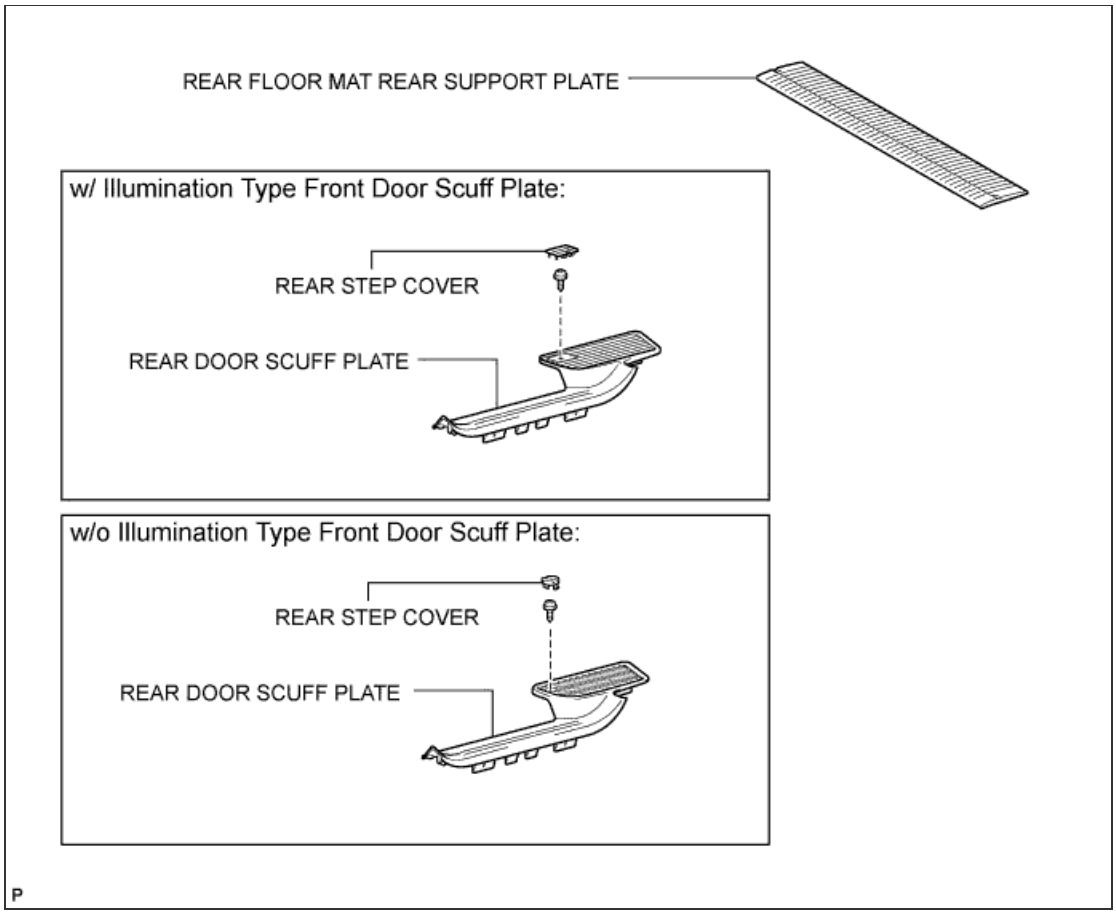

REAR NO. 2 SEAT HEADREST SUPPORT ASSEMBLY
SEATBACK COVER WITH PAD
NO. 3 SEATBACK PAD LH
NO. 3 SEATBACK COVER SUB-ASSEMBLY LH
HOG RING
14 (143, 10)
REAR SEATBACK LOCK STRIKER COVER LH
NO. 2 SEAT RECLINING RELEASE HANDLE SUB-ASSEMBLY
x 2
REAR NO. 2 SEATBACK COVER LH
REAR SEATBACK LOCK STRIKER ASSEMBLY LH
REAR INNER SEAT RECLINING COVER RH
REAR SEAT LOCK CONTROL CABLE
NO. 2 SEAT CUSHION SPRING ASSEMBLY LH
NO. 2 SEAT HEADREST ASSEMBLY
REAR INNER SEAT RECLINING COVER LH
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
P

for RH Side:



N*m (kgf*cm, ft.*lbf) : Specified torque

P


REAR FLOOR MAT REAR SUPPORT PLATE
w/ Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE
w/o Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE
P

for Preparation Click here

1. INSPECT POWER SEAT MOTOR ASSEMBLY

a. Check the PTC operation inside the power seat motor.

HINT:

The resistance of the PTC thermistor increases when the power seat switch is held down even after the power seat has been moved to the maximum in one direction. If the resistance increases beyond a specified level, current is cut to prevent a short circuit.

NOTICE:

- **The inspection should be performed with the seat installed in the vehicle.**
- **Perform the 4 steps below for each power seat function.**

i. Choose a power seat function. Operate the power seat switch and move the seat as much as possible in one direction. Keep the seat in that position for approximately 60 seconds.

ii. Operate the power seat switch again and continue to try to move the seat in the same direction as in the previous step. Measure the amount of time elapsed before current is automatically cut (the sound of the motor has stopped).

Standard:
4 to 90 seconds

iii. After current has been cut, release the power seat switch and wait for approximately 60 seconds.

iv. Operate the same power seat switch and move the seat in the opposite direction. Check that the motor operates.

for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

REMOVE REAR SEAT CUSHION HINGE COVER LH

a. Remove the rear seat cushion hinge cover LH (Click here).

REMOVE REAR NO. 2 SEAT HINGE COVER LH

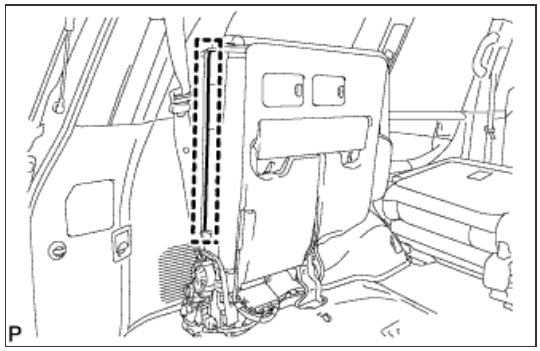
a. Remove the rear No. 2 seat hinge cover LH (Click here).

REMOVE RECLINING ADJUSTER COVER RH

a. Remove the reclining adjuster cover RH (Click here).

OPEN BOTTOM OF SEATBACK COVER

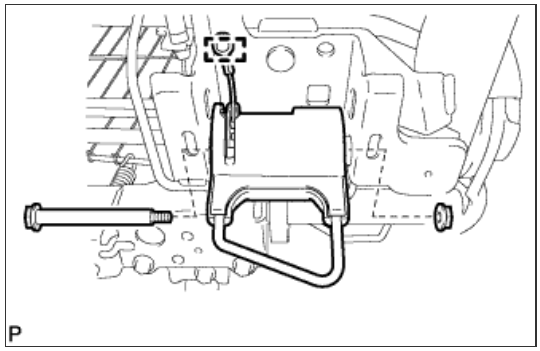
a. Detach the hook.



REMOVE REAR SEATBACK LOCK STRIKER ASSEMBLY LH

a. Detach the clamp.

b. Remove the nut, bolt and striker.



REMOVE POWER SEAT MOTOR SUB-ASSEMBLY

a. Remove the power seat motor sub-assembly (Click here).

REMOVE REAR NO. 2 SEAT ASSEMBLY

a. Remove the rear No. 2 seat (Click here).

REMOVE REAR STEP COVER

REMOVE REAR DOOR SCUFF PLATE LH

REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

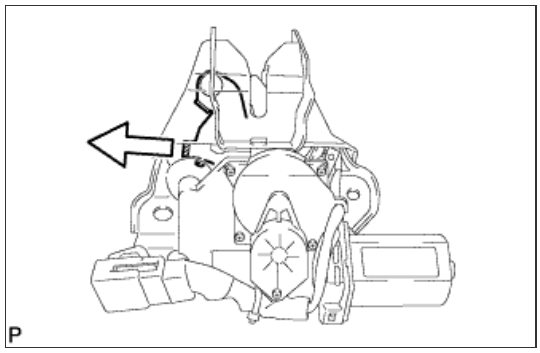
REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

REMOVE REAR ROOF NO. 1 AIR DUCT

REMOVE NO. 1 WOOFER BOX SPEAKER ASSEMBLY (for RH Side, w/ Woofer)

UNLOCK FOLD SEAT LEG LOCK SUB-ASSEMBLY BY HAND

a. Pull the release lever in the direction shown in the illustration to release the lock.



for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE REAR NO. 2 SEAT HEADREST ASSEMBLY LH

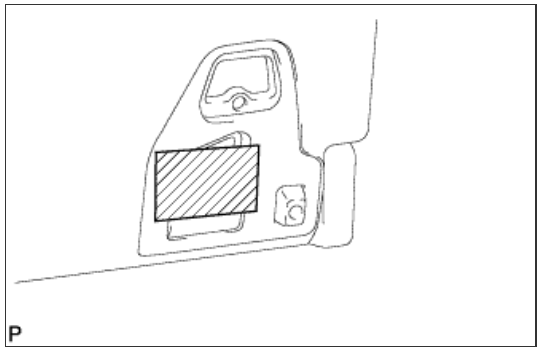
2. REMOVE REAR SEAT CUSHION HINGE COVER LH

a. Apply protective tape to the rear seatback lock striker as shown in the illustration to prevent the seat from locking.

b. Operate the power seat switch and move the seat to the storage position.

HINT:

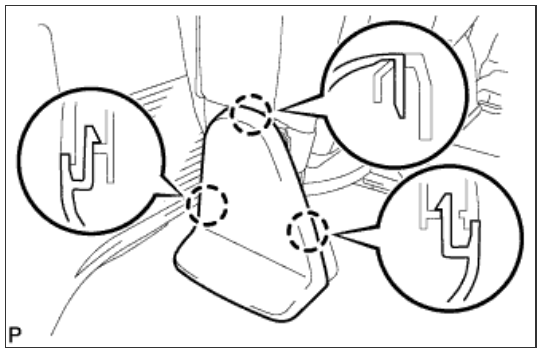
Make sure that the lock and striker are not engaged.



c. Using a screwdriver, detach the 3 claws and remove the cover.

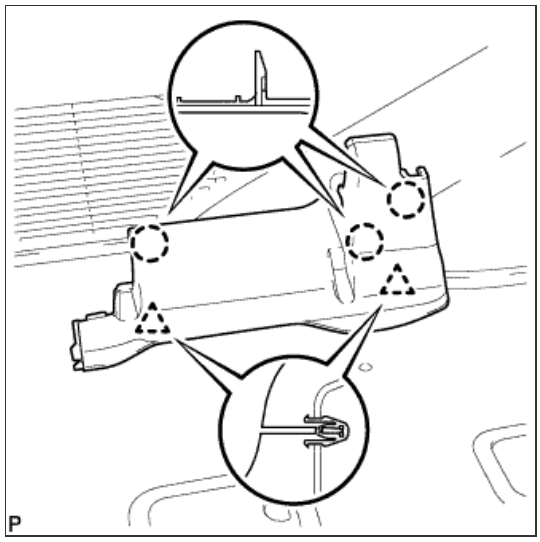
HINT:

Tape the screwdriver tip before use.



3. REMOVE REAR NO. 2 SEAT HINGE COVER LH

a. Detach the 3 claws and 2 clips, and then remove the cover.



4. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

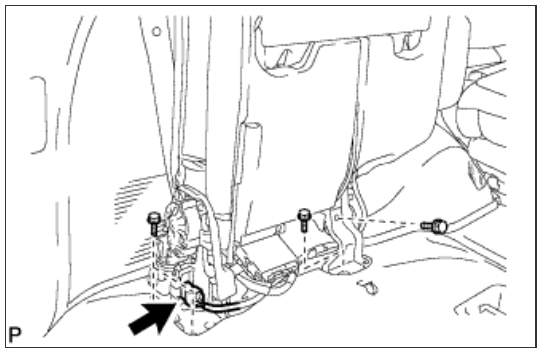
5. REMOVE REAR NO. 2 SEAT ASSEMBLY

a. Disconnect the connector.

b. Remove the 4 bolts and seat assembly.

NOTICE:

Be careful not to damage the vehicle body.

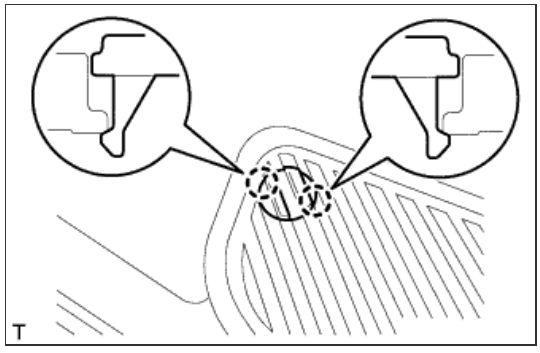


6. REMOVE REAR STEP COVER

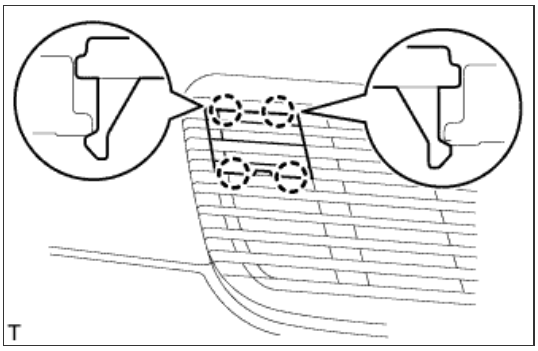
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

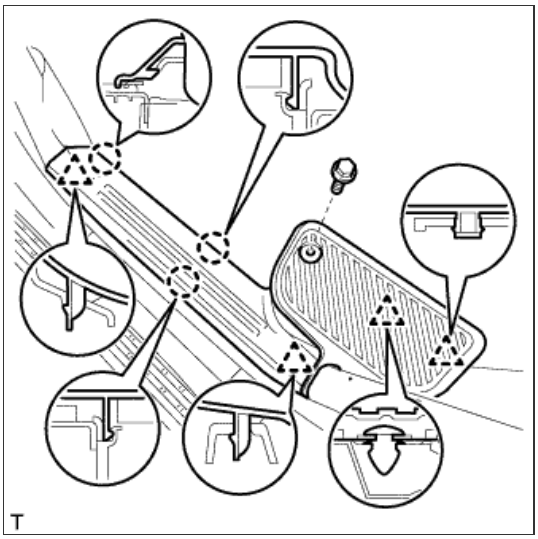


7. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

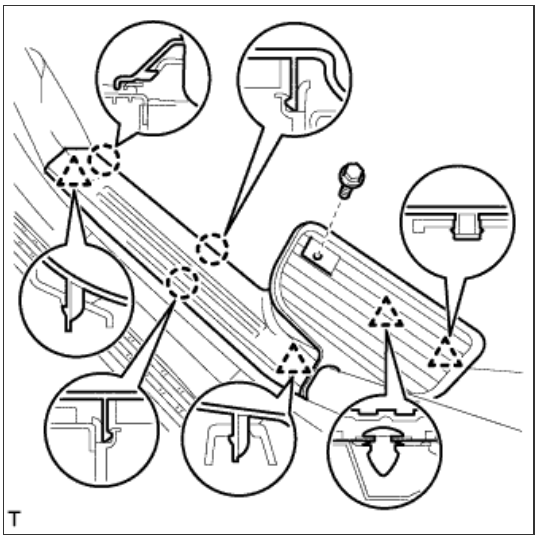
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

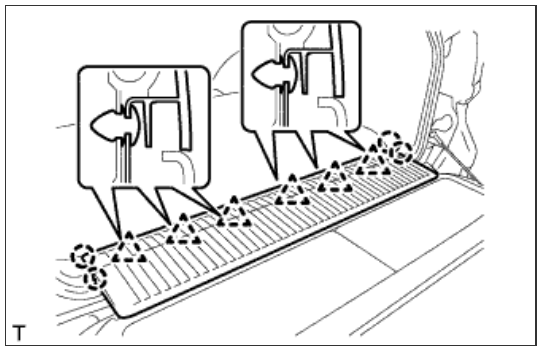
i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



8. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

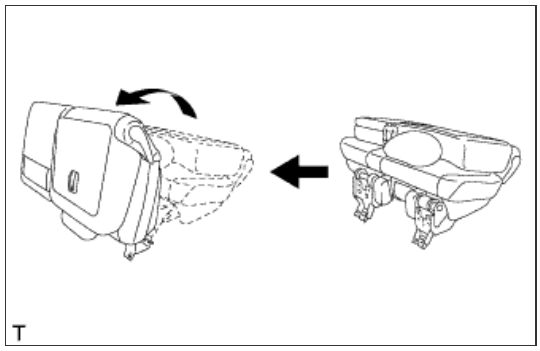
a. Detach the 6 clips and 4 claws, and remove the support plate.



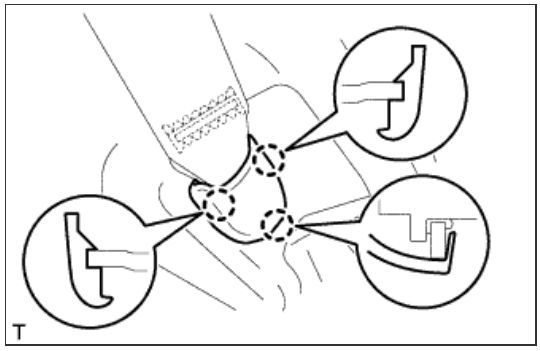
9. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

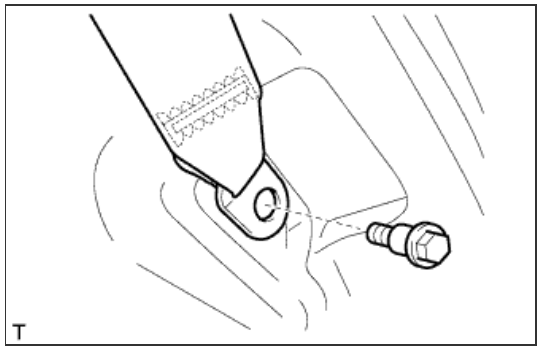
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



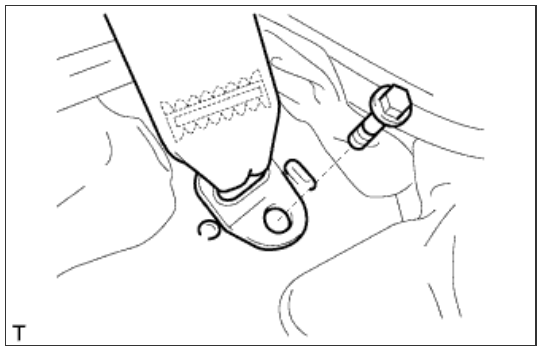
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

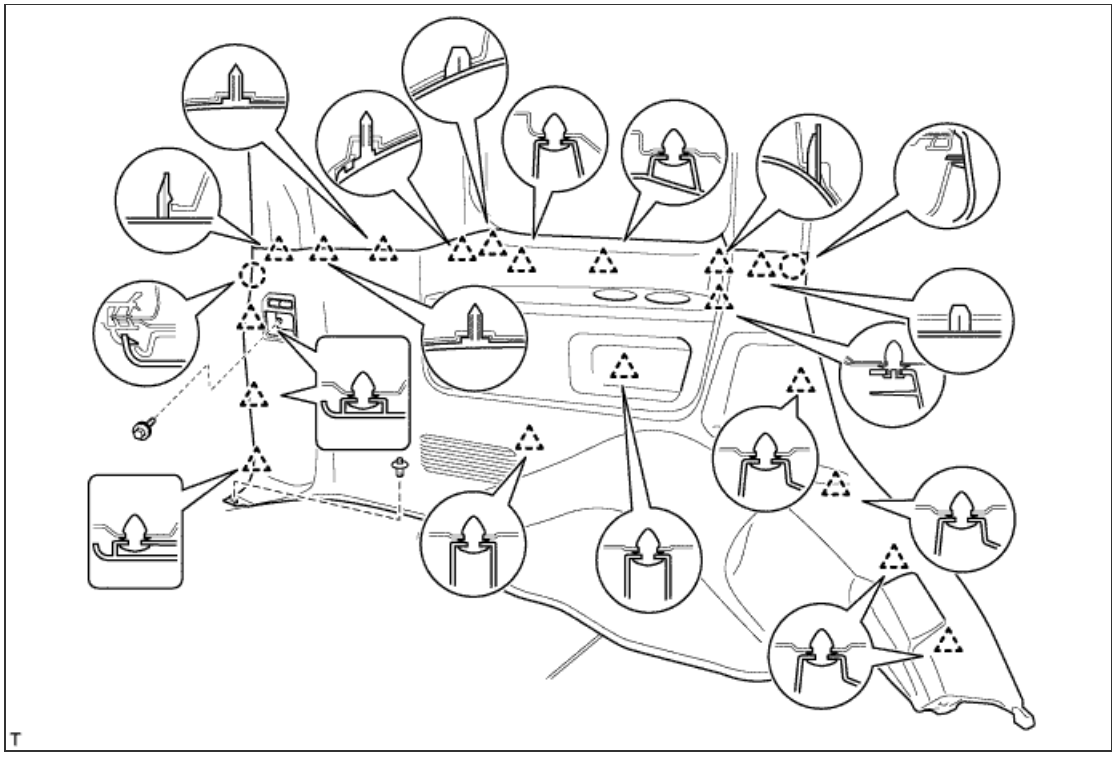


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

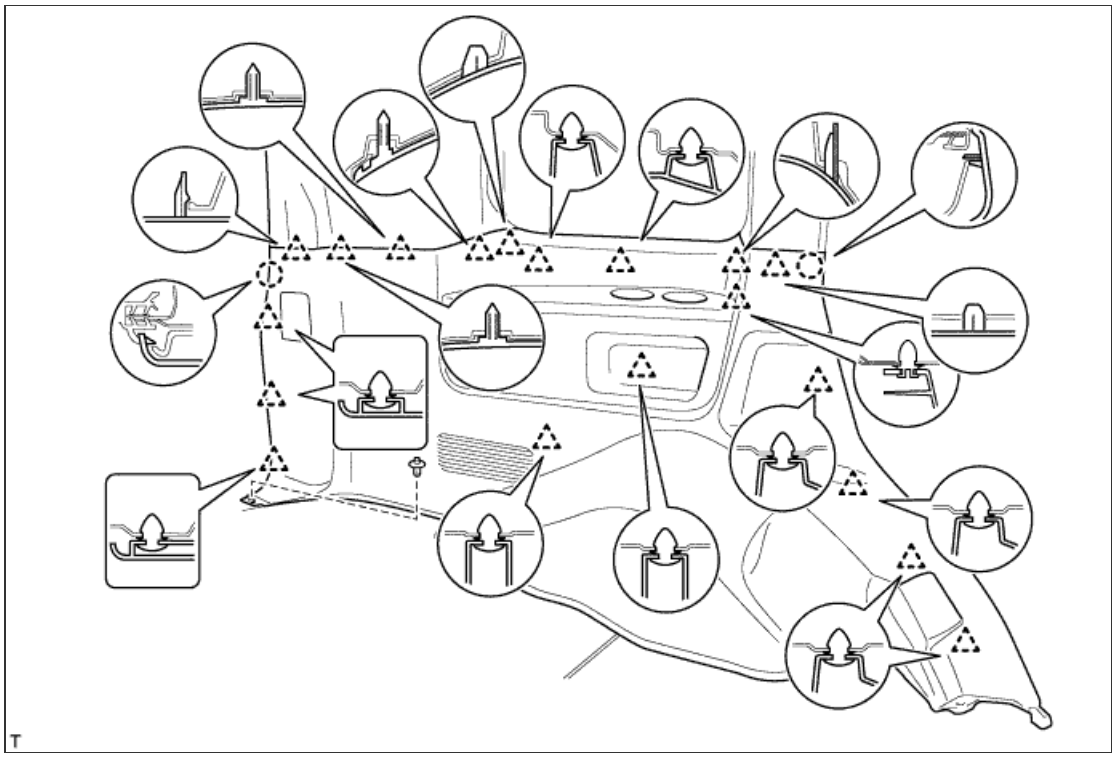


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

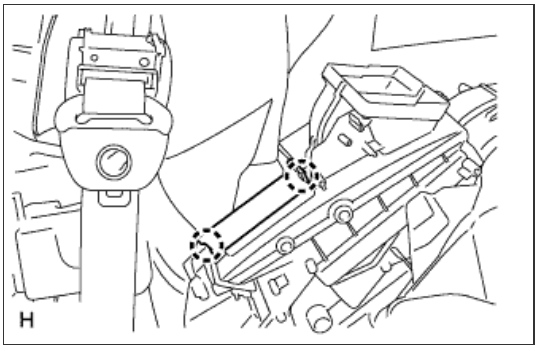
ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.

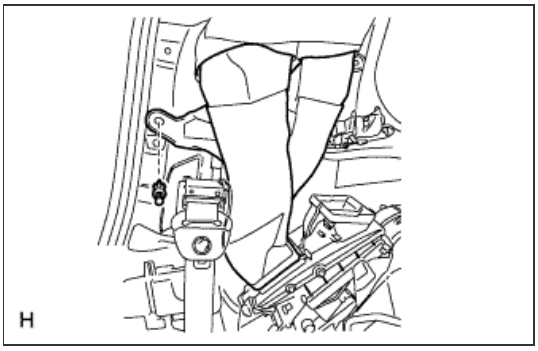


10. REMOVE REAR ROOF NO. 1 AIR DUCT (for LH Side)

a. Detach the 2 claws and remove the cooler plate.



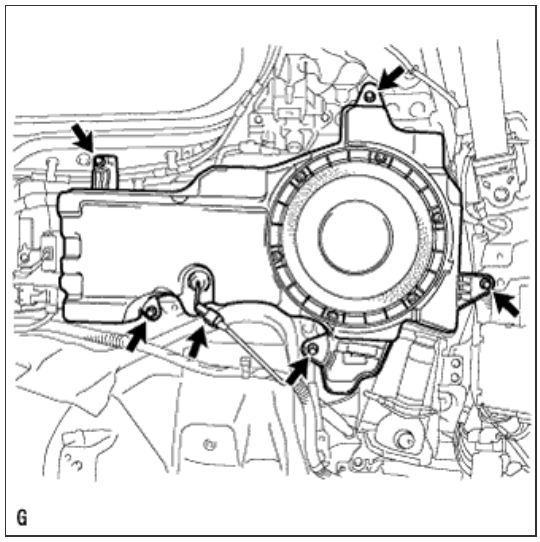
b. Remove the clip and duct.



11. REMOVE NO. 1 WOOFER BOX SPEAKER ASSEMBLY (for RH Side, w/ Woofer)

a. Disconnect the connector.

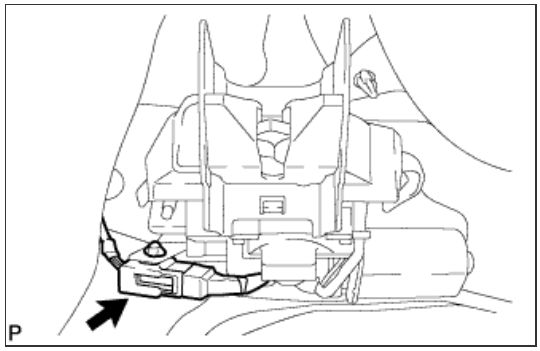
b. Remove the 5 bolts and box speaker.



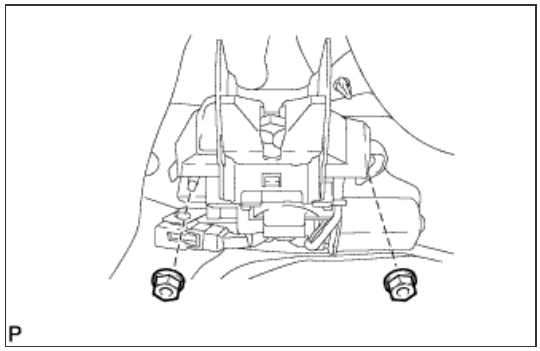
12. REMOVE FOLD SEAT LEG LOCK SUB-ASSEMBLY

a. Disconnect the connector.

b. Detach the 2 cable clamps.

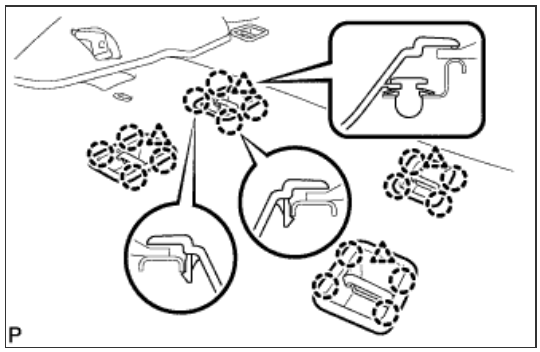


c. Remove the 2 nuts and fold seat leg lock.



13. REMOVE NO. 3 SEAT CUSHION COVER

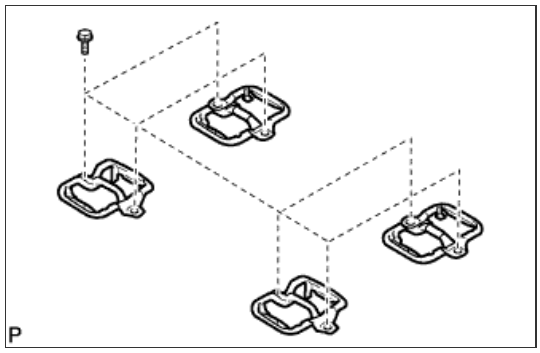
a. Detach the 4 clips and 16 claws, and remove the 4 seat cushion covers.



14. REMOVE REAR SEAT LOCK STRIKER SUB-ASSEMBLY

a. Fold back the floor carpet.

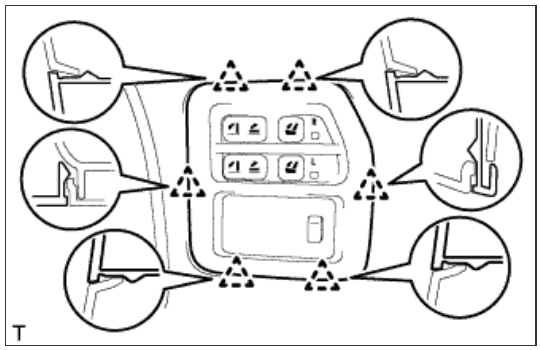
b. Remove the 8 bolts and 4 seat lock strikers.



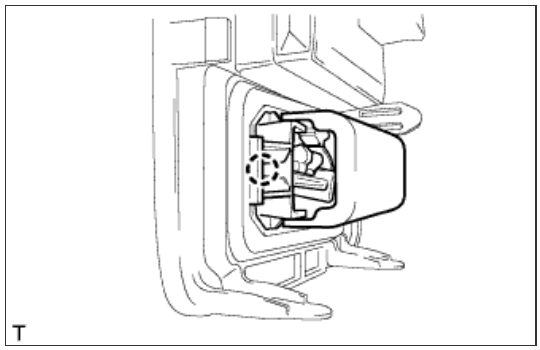
15. REMOVE FOLD SEAT SWITCH ASSEMBLY

a. Detach the 6 clips.

b. Disconnect the connector and then remove the fold seat switch.



c. Detach the claw and remove the light.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

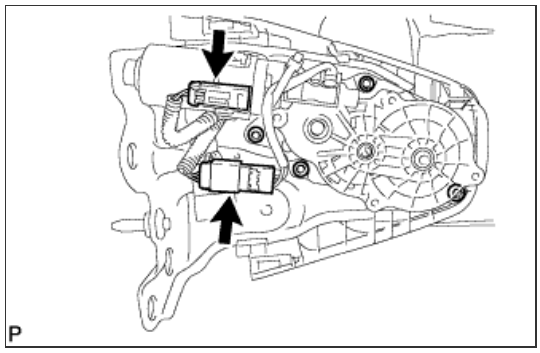
HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE POWER SEAT MOTOR ASSEMBLY

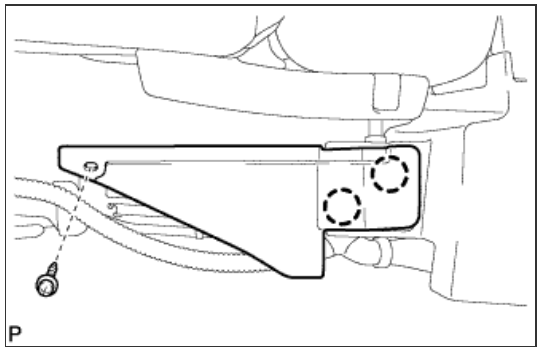
a. Disconnect the 2 connectors.

b. Using a 5 mm hexagon socket wrench, remove the 4 bolts and motor.



2. REMOVE NO. 2 SEAT CUSHION COVER

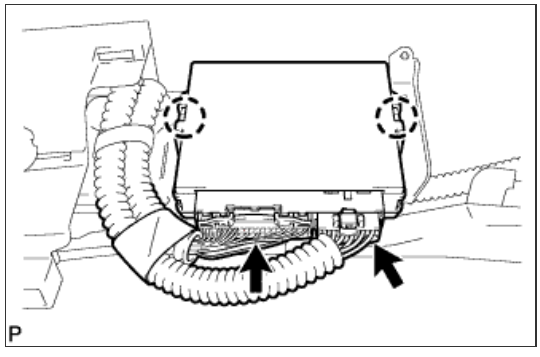
a. Remove the screw and detach the 2 claws to remove the cover.



3. REMOVE FOLD SEAT CONTROL ECU

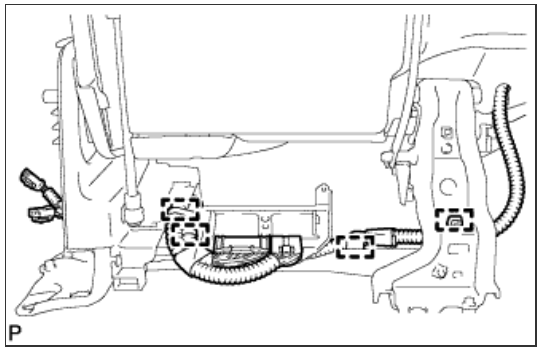
a. Disconnect the 2 connectors.

b. Detach the 2 claws and remove the ECU.

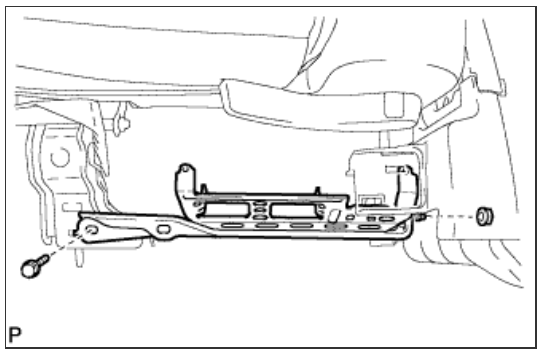


4. REMOVE REAR NO. 2 SEAT LEG BRACKET REAR LH

a. Detach the 4 clamps.



b. Remove the bolt, nut and bracket.

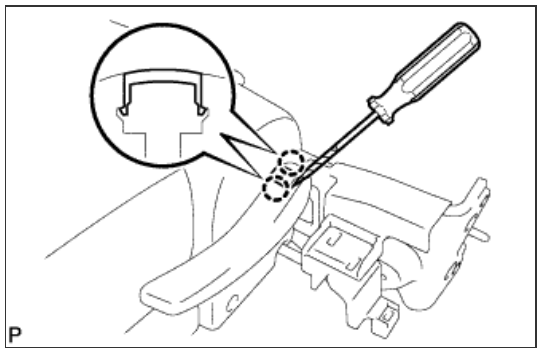


5. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

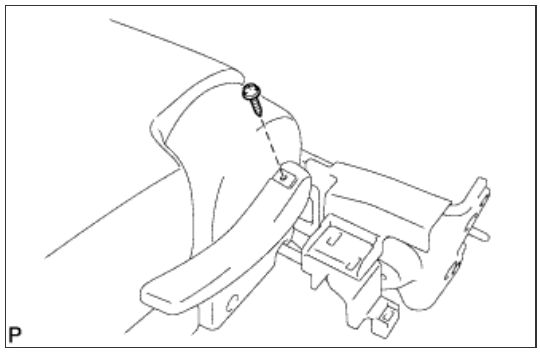
HINT:

Tape the screwdriver tip before use.



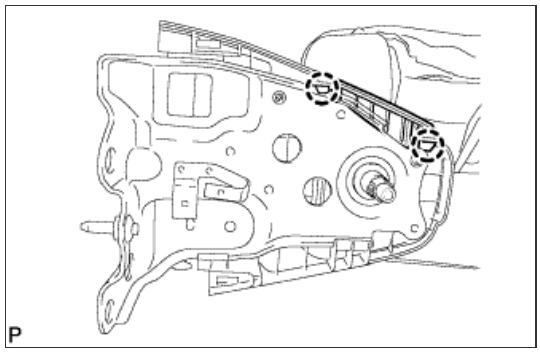
6. REMOVE NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH

a. Remove the screw and release handle.



7. REMOVE REAR SEAT REAR BRACKET COVER REAR

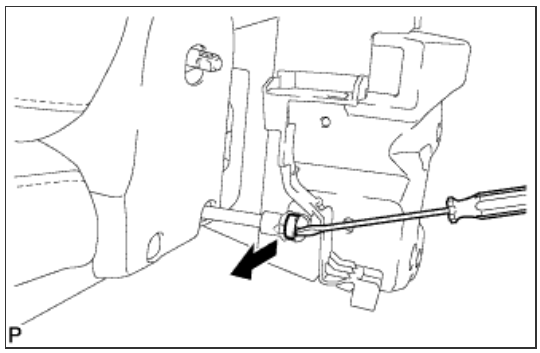
a. Detach the 2 claws and remove the cover.



8. REMOVE REAR NO. 3 SEAT LEG COVER LH

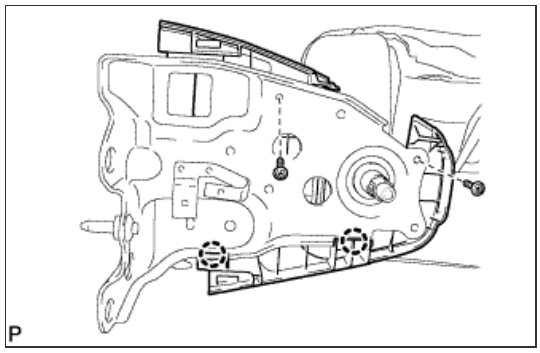
a. Using a screwdriver, remove the spring of the seat stay ball joint.

b. Disconnect the seat stay.



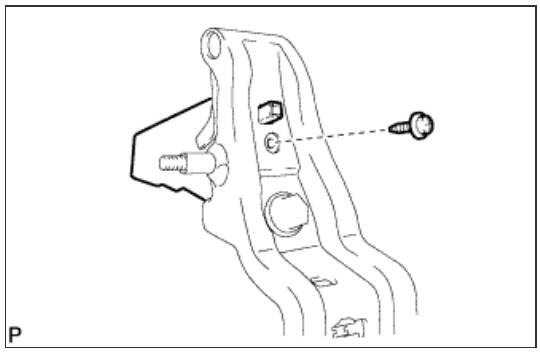
c. Remove the 2 screws.

d. Detach the 2 claws and remove the seat leg cover.



9. REMOVE NO. 2 SEAT LEG COVER NO. 2

a. Remove the screw and cover.

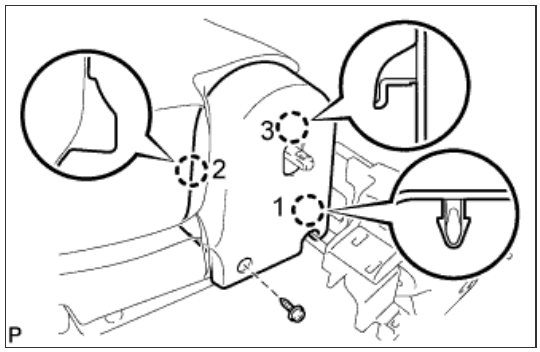


10. REMOVE RECLINING ADJUSTER COVER LH

a. Remove the screw.

b. Detach the 3 claws in the order shown in the illustration, and then remove the

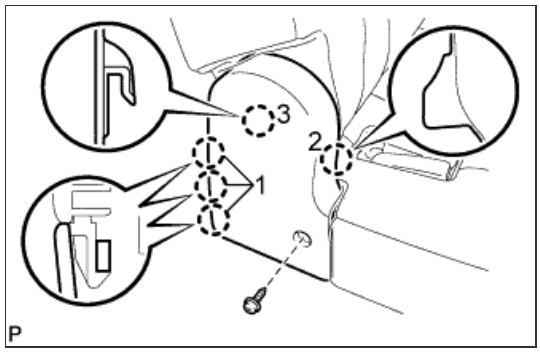
cover.



11. REMOVE RECLINING ADJUSTER COVER RH

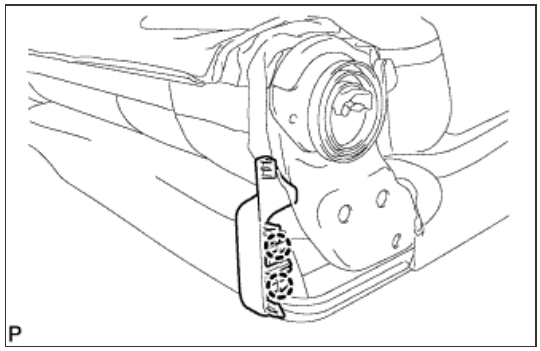
a. Remove the screw.

b. Detach the 5 claws in the order shown in the illustration, and then remove the cover.



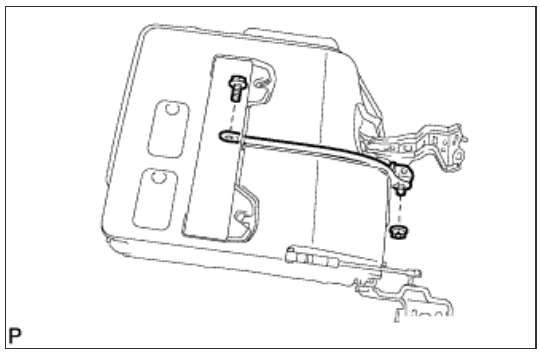
12. REMOVE REAR SEAT INNER RECLINING COVER LH

a. Detach the 2 claws and remove the cover.



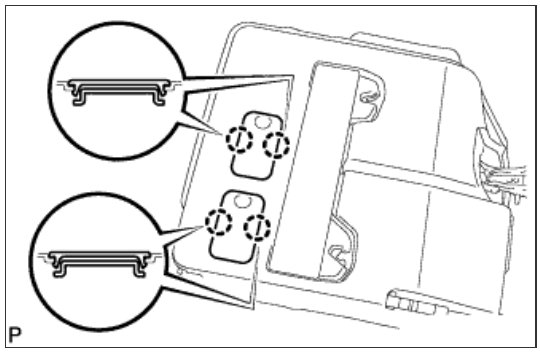
13. REMOVE 3RD SEAT LINK SUB-ASSEMBLY LH

a. Remove the bolt, nut and seat link.



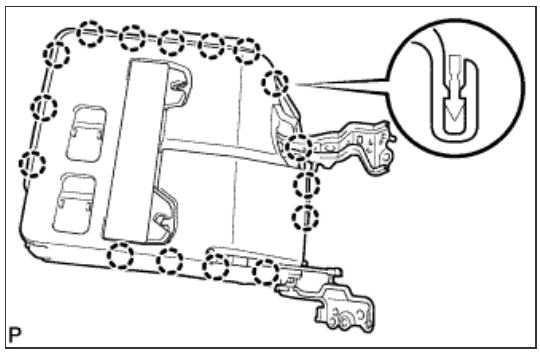
14. REMOVE 3RD SEAT CUSHION LOCK COVER

a. Detach the 4 claws and remove the 2 covers.

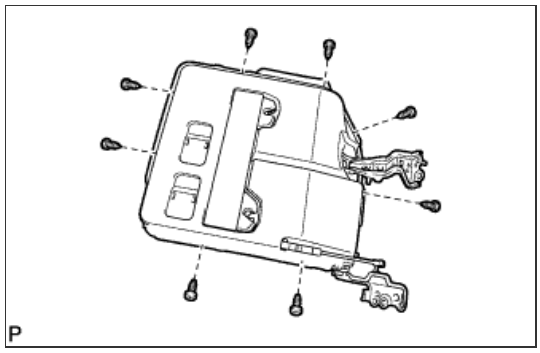


15. REMOVE REAR SEAT CUSHION UNDER COVER LH

a. Detach the 16 claws.

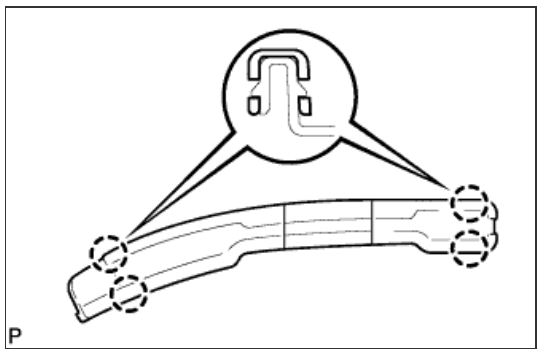


b. Remove the 8 screws and cover.



16. REMOVE NO. 3 SEAT FRONT BRACKET COVER LH

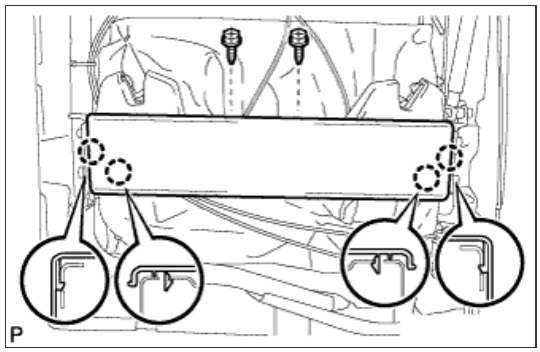
a. Detach the 4 claws and remove the cover.



17. REMOVE NO. 3 SEAT LEG COVER NO. 2

a. Remove the 2 screws.

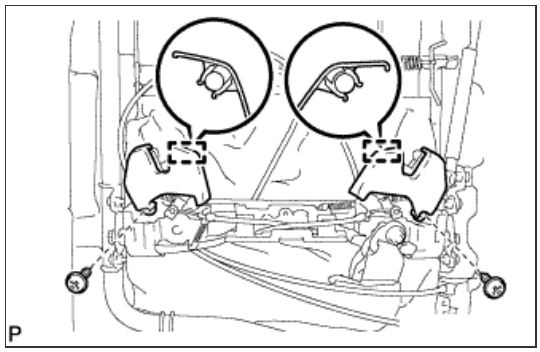
b. Detach the 4 claws and remove the cover.



18. REMOVE REAR SEAT LOCK COVER LH

a. Remove the 2 screws.

b. Detach the 2 clamps and remove the 2 covers.

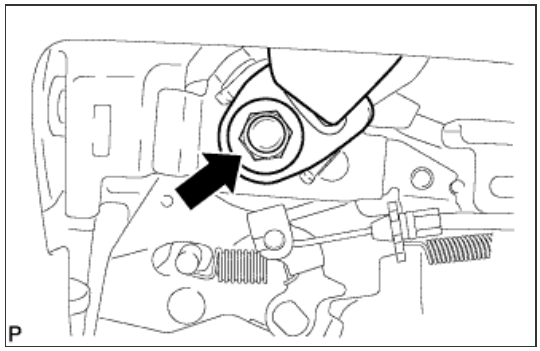


19. REMOVE REAR SEAT INNER BELT SUB-ASSEMBLY (for LH Side)

a. Remove the nut and belt.

HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat inner belt. Therefore, it becomes disconnected when the nut is removed.



20. REMOVE REAR SEAT OUTER BELT SUB-ASSEMBLY (for RH Side)

a. Remove the bolt and disconnect the seat belt shoulder anchor.

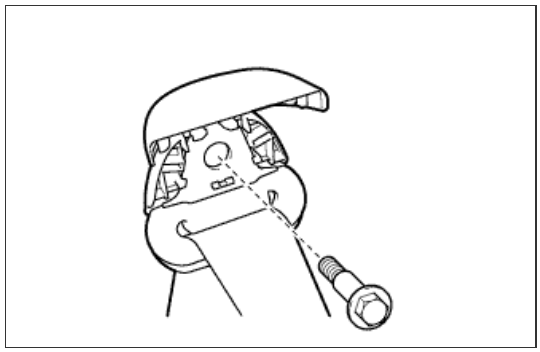
i. Using a screwdriver, detach the 2 claws and open the seat belt anchor cover as shown in the illustration.

HINT:

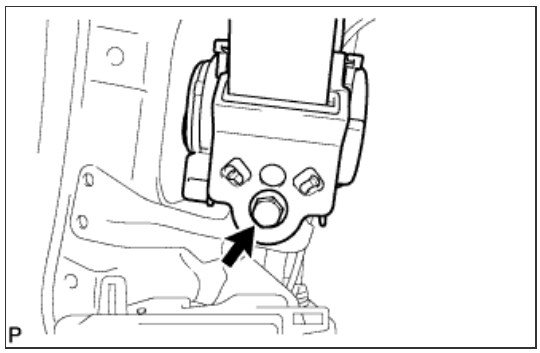
Tape the screwdriver tip before use.



ii. Remove the bolt and seat belt shoulder anchor.

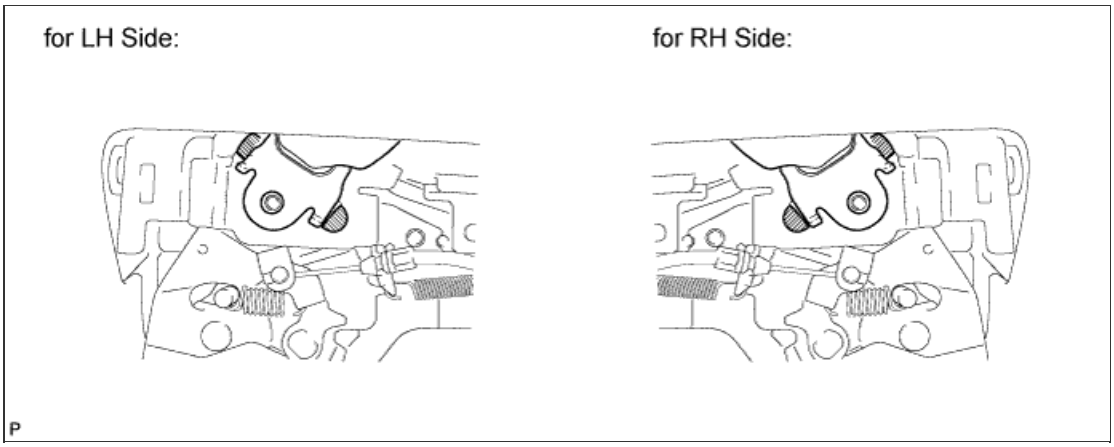


b. Remove the bolt and rear No. 2 seat outer belt.



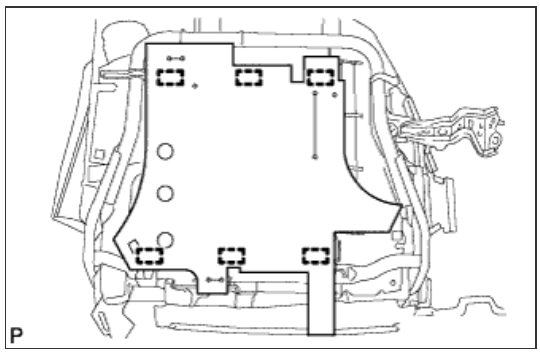
21. REMOVE REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY

a. Remove the 2 belts.



22. REMOVE REAR SEAT CUSHION CARPET

a. Cut off the tack pins which fasten the seat cushion carpet to the seat cushion pad, and then remove the seat cushion carpet from the seat cushion pad.



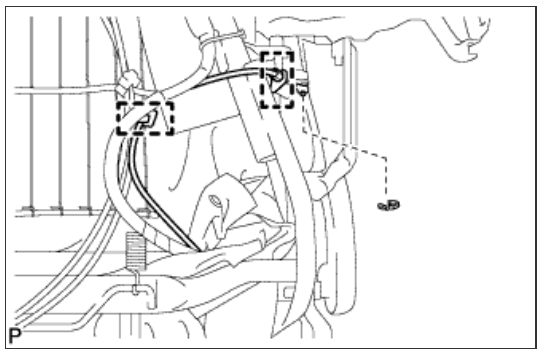
23. REMOVE SEAT CUSHION COVER WITH PAD

24. REMOVE NO. 3 SEAT CUSHION PAD LH

25. REMOVE NO. 3 SEAT CUSHION COVER SUB-ASSEMBLY LH

a. Remove the E-ring and detach the clamp.

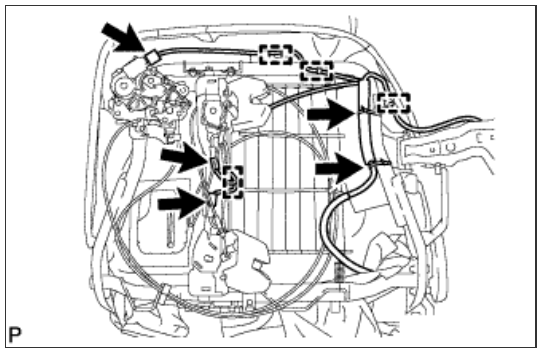
b. Detach the cable clamp and disconnect the cable.



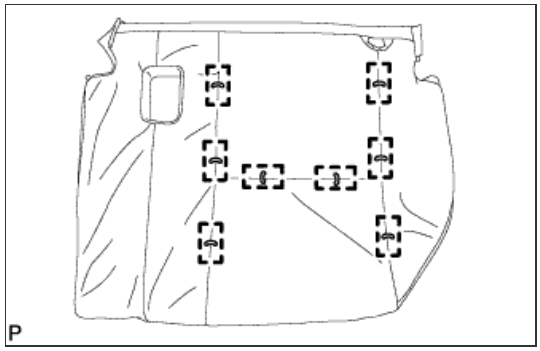
c. Detach the 4 clamps.

d. Disconnect the 3 connectors.

e. Remove the 2 cable ties.

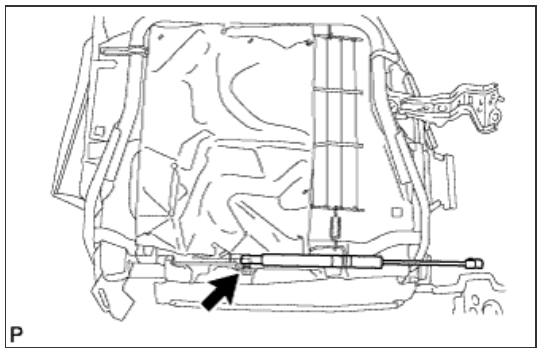


f. Remove the hog rings and seat cushion cover.



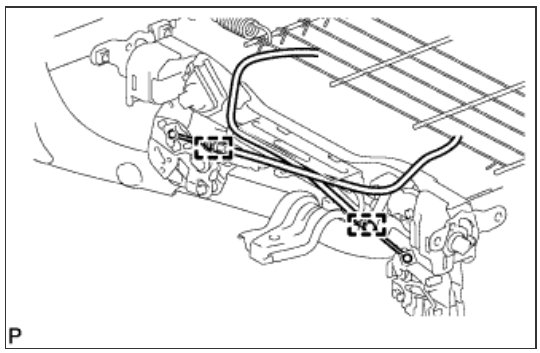
26. REMOVE NO. 2 SEAT STAY SUB-ASSEMBLY

a. Remove the bolt and seat stay.

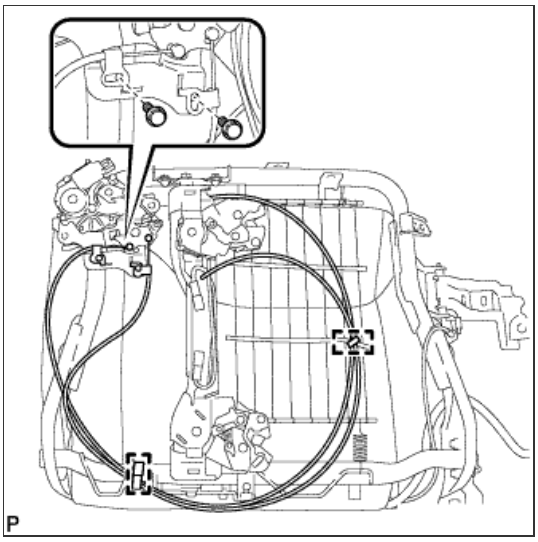


27. REMOVE NO. 3 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Detach the 2 cable clamps and disconnect the 2 cables.

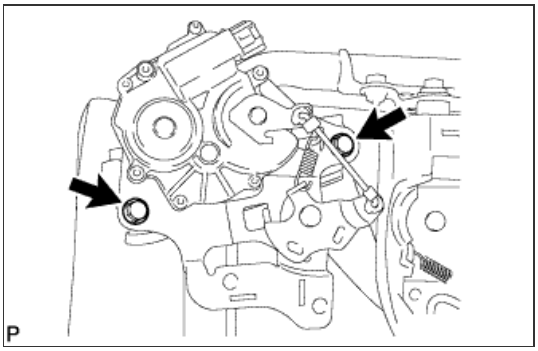


b. Detach the 2 clamps and remove the 2 bolts and control cable.



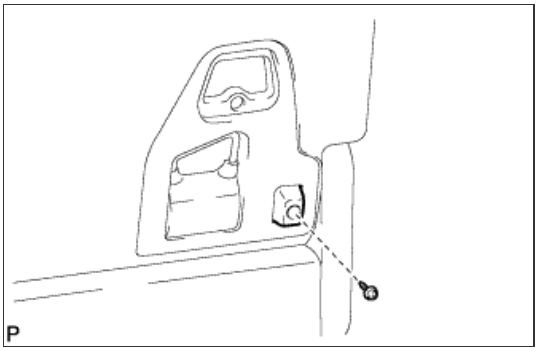
28. REMOVE REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH

a. Remove the 2 bolts and lever.



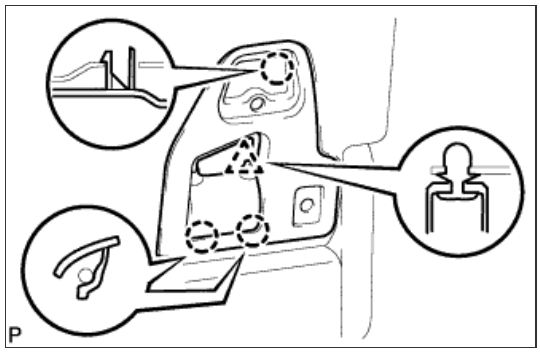
29. REMOVE REAR NO. 2 SEATBACK CUSHION

a. Remove the screw and seatback cushion.



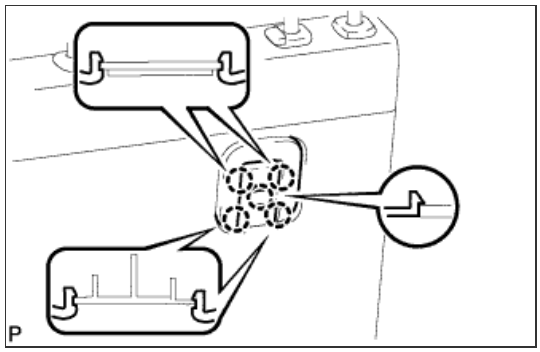
30. REMOVE REAR LOWER SEATBACK LOCK BEZEL

a. Detach the 3 claws and clip, and remove the seatback lock bezel.



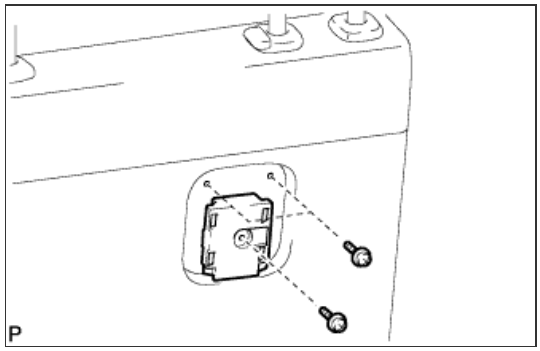
31. REMOVE REAR SEAT HINGE PAWL GUIDE

a. Detach the 5 claws and remove the guide.



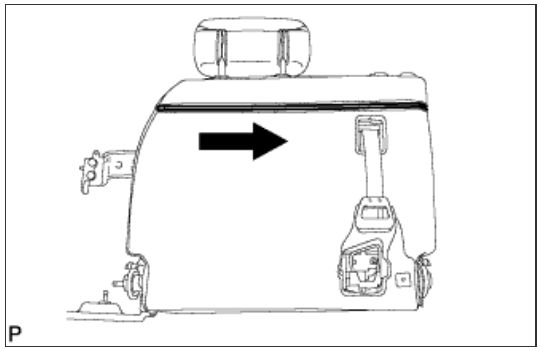
32. REMOVE REAR SEAT HINGE PAWL GUIDE

a. Remove the 3 screws and guide.

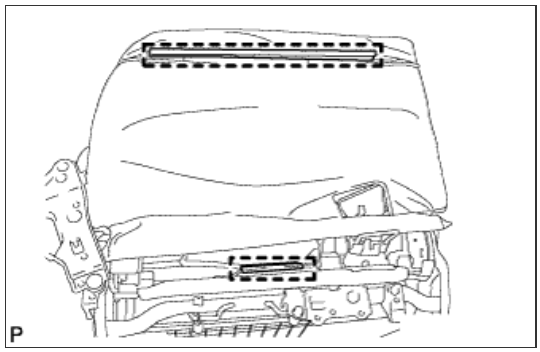


33. REMOVE SEATBACK COVER WITH PAD

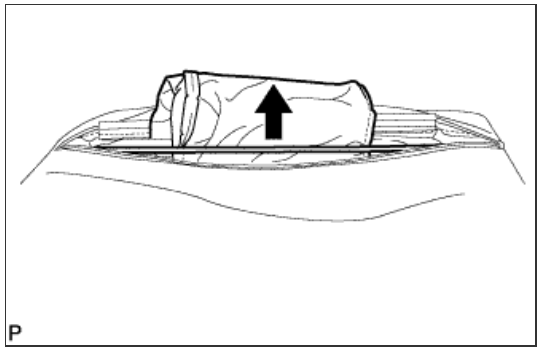
a. Open the fastener.



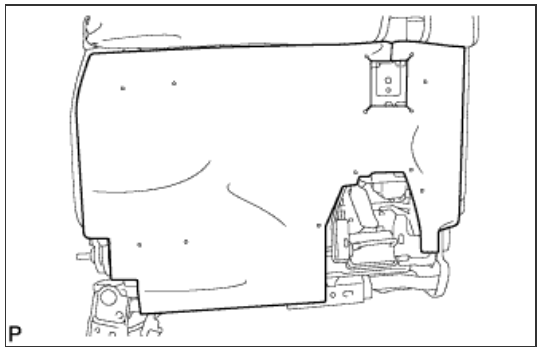
b. Detach the 2 hooks.



c. Pull out the center headrest storage bag.

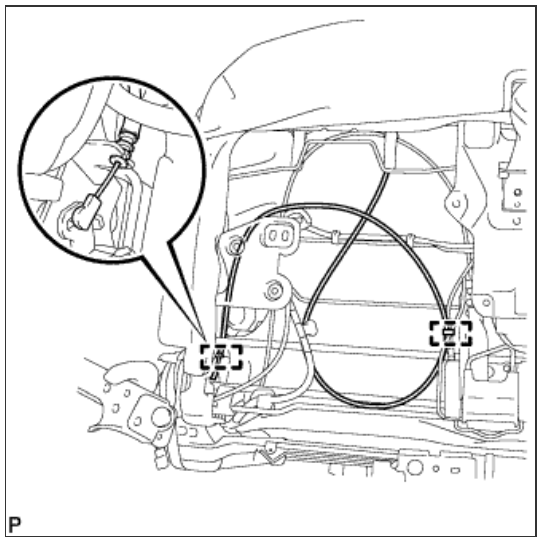


d. Remove the rear seat protector.



e. Detach the cable clamp and disconnect the cable.

f. Detach the clamp.

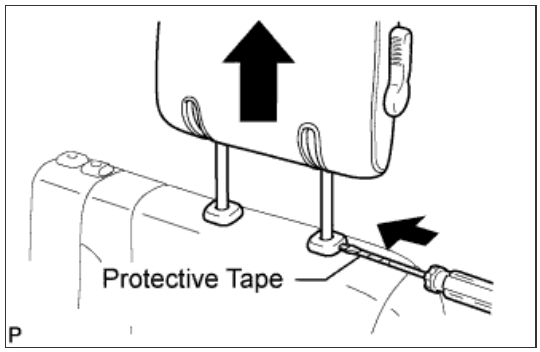


g. for LH Side:

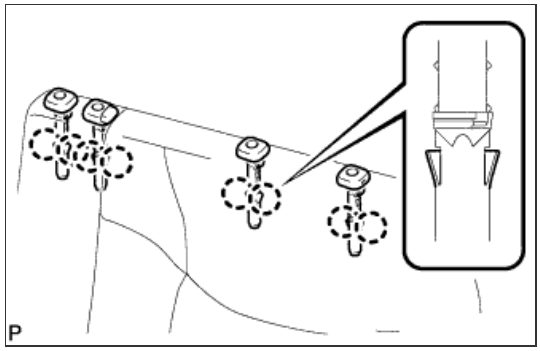
i. While releasing the lock inside the headrest support with a screwdriver, remove the headrest.

HINT:

Tape the screwdriver tip before use.



ii. Detach the 8 claws and remove the 4 headrest supports.

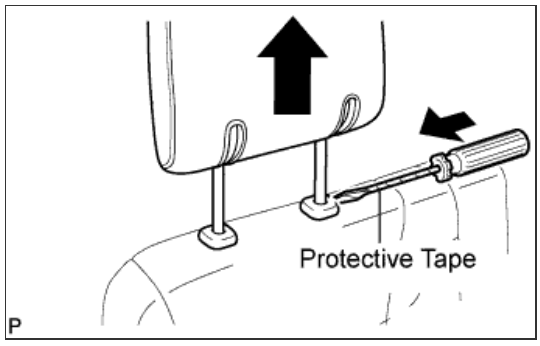


h. for RH Side:

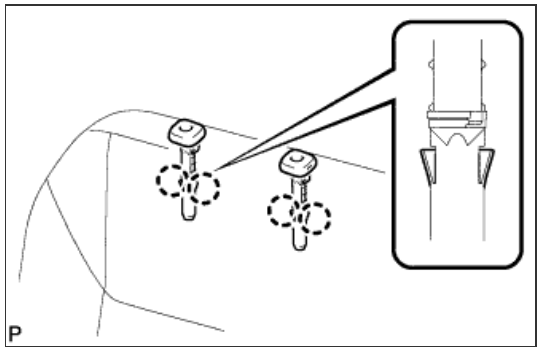
i. While releasing the lock inside the headrest support with a screwdriver, remove the headrest.

HINT:

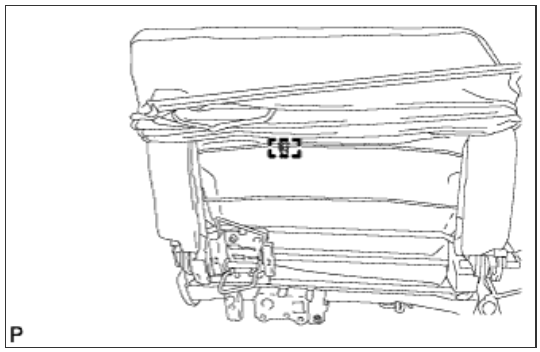
Tape the screwdriver tip before use.



ii. Detach the 4 claws and remove the 2 headrest supports.

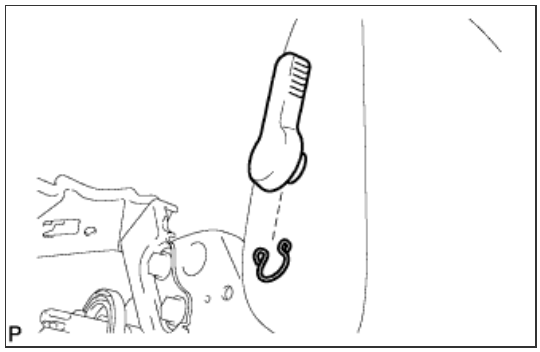


i. Remove the hog ring and seatback cover with pad.



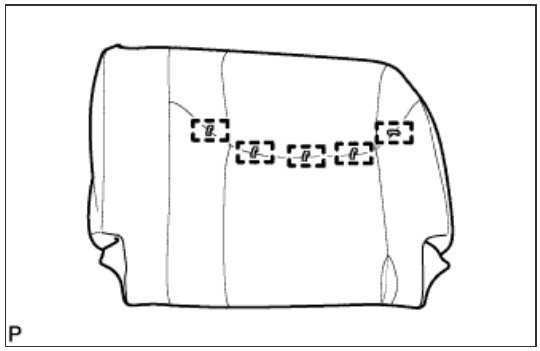
34. REMOVE REAR SEAT HEADREST HANDLE

a. Remove the snap ring and headrest handle.



35. REMOVE NO. 3 SEATBACK COVER SUB-ASSEMBLY LH

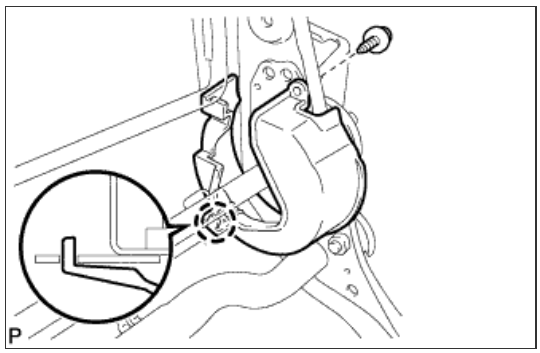
a. Remove the hog rings and seatback cover.



36. REMOVE REAR INNER SEAT RECLINING COVER LH

a. Remove the screw.

b. Detach the claw and remove the cover.



37. REMOVE REAR INNER SEAT RECLINING COVER RH

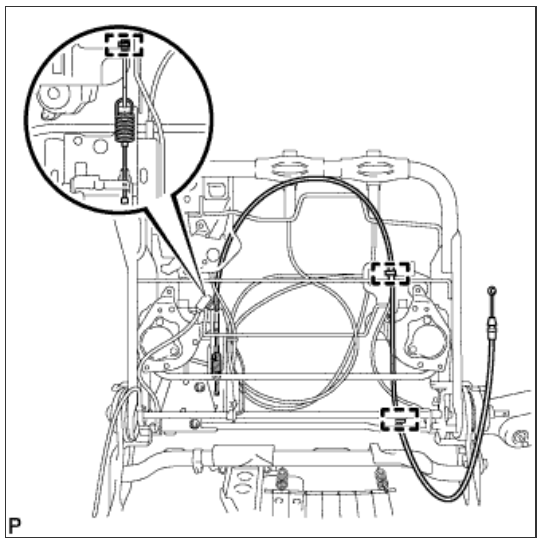
a. Remove the screw.

b. Detach the claw and remove the cover.

38. REMOVE REAR SEAT LOCK CONTROL CABLE

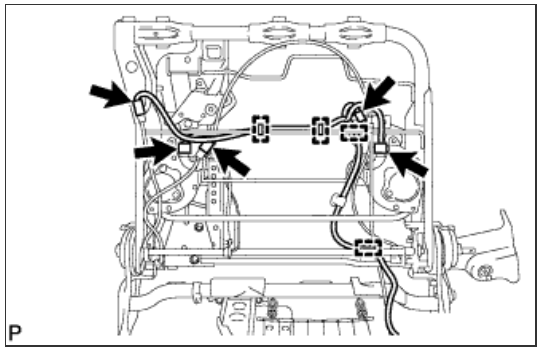
a. Detach the cable clamp and disconnect the cable.

b. Detach the 2 clamps and remove the lock control cable.



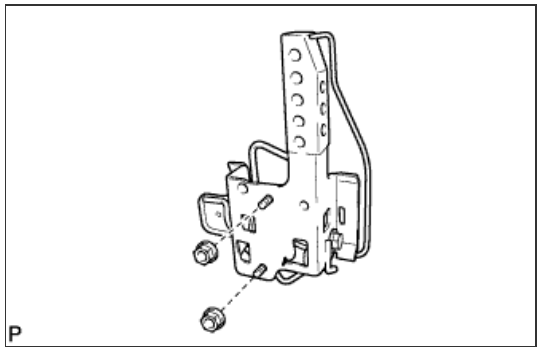
39. REMOVE REAR NO. 2 SEAT WIRE LH

a. Disconnect the 5 connectors and detach the 4 clamps, and then remove the rear No. 2 seat wire LH.



40. REMOVE REAR SEATBACK LOCK STRIKER ASSEMBLY LH

a. Remove the 2 nuts and lock striker.



41. REMOVE REAR NO. 2 SEATBACK COVER LH

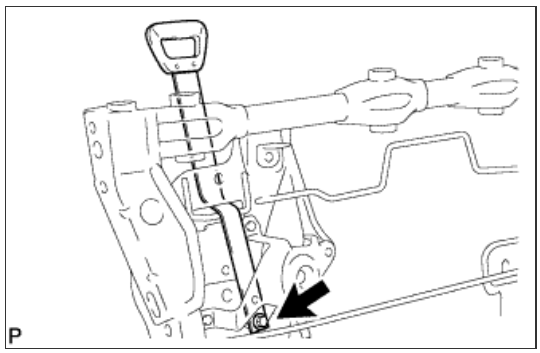
a. Detach the 3 claws and remove the cover.

42. REMOVE REAR SEATBACK LOCK STRIKER COVER LH

a. Detach the 2 clamps and remove the cover.

43. REMOVE NO. 2 SEAT RECLINING RELEASE HANDLE SUB-ASSEMBLY

a. Remove the bolt and release handle.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

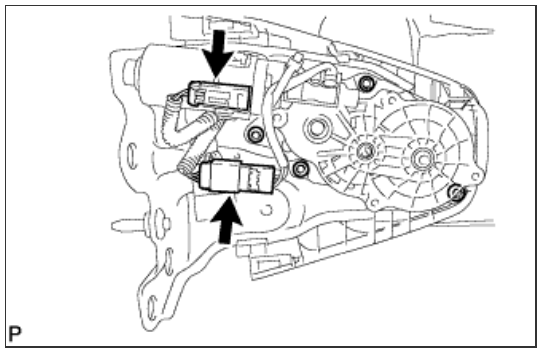
HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE POWER SEAT MOTOR ASSEMBLY

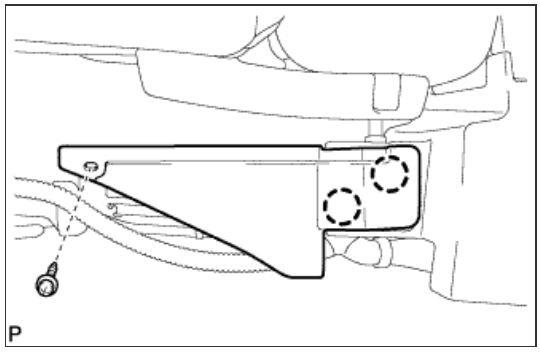
a. Disconnect the 2 connectors.

b. Using a 5 mm hexagon socket wrench, remove the 4 bolts and motor.



2. REMOVE NO. 2 SEAT CUSHION COVER

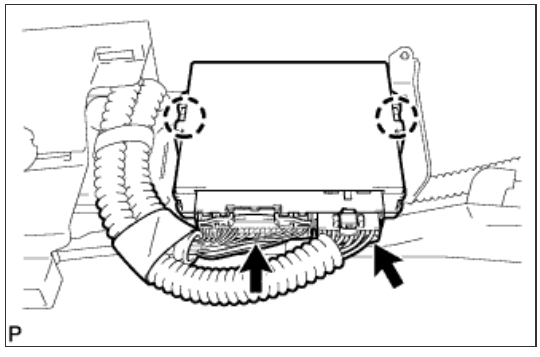
a. Remove the screw and detach the 2 claws to remove the cover.



3. REMOVE FOLD SEAT CONTROL ECU

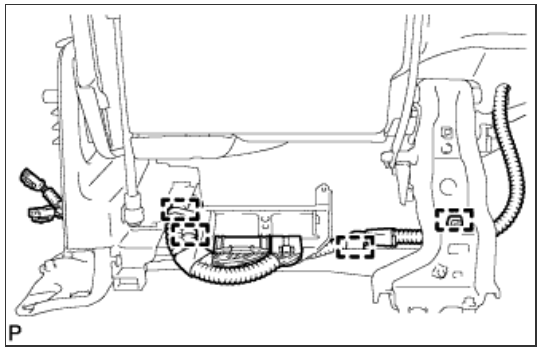
a. Disconnect the 2 connectors.

b. Detach the 2 claws and remove the ECU.

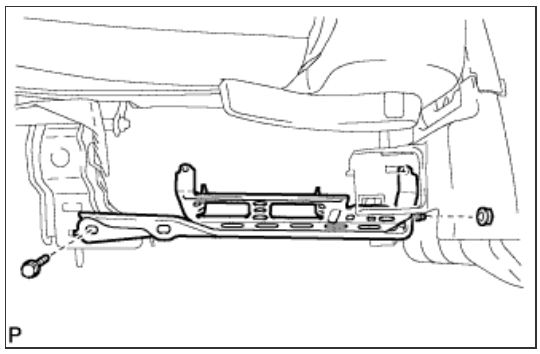


4. REMOVE REAR NO. 2 SEAT LEG BRACKET REAR LH

a. Detach the 4 clamps.



b. Remove the bolt, nut and bracket.

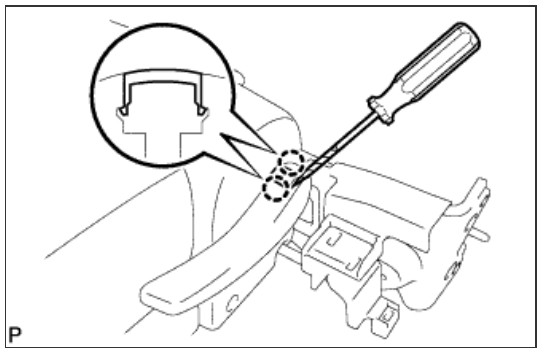


5. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

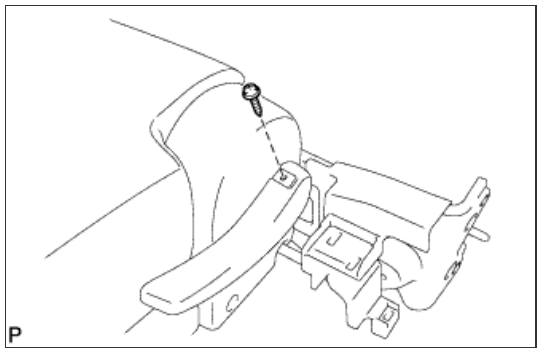
HINT:

Tape the screwdriver tip before use.



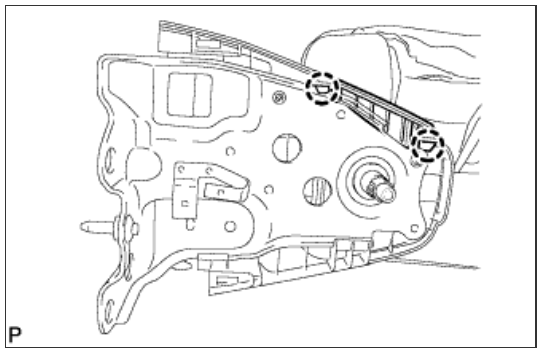
6. REMOVE NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH

a. Remove the screw and release handle.



7. REMOVE REAR SEAT REAR BRACKET COVER REAR

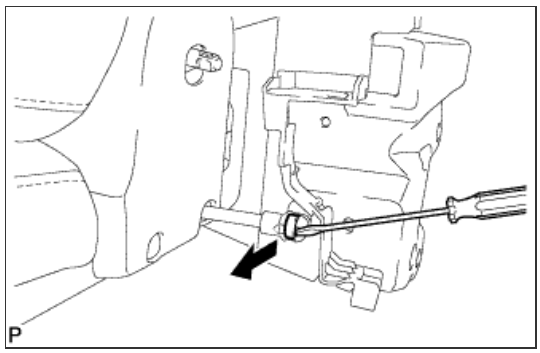
a. Detach the 2 claws and remove the cover.



8. REMOVE REAR NO. 3 SEAT LEG COVER LH

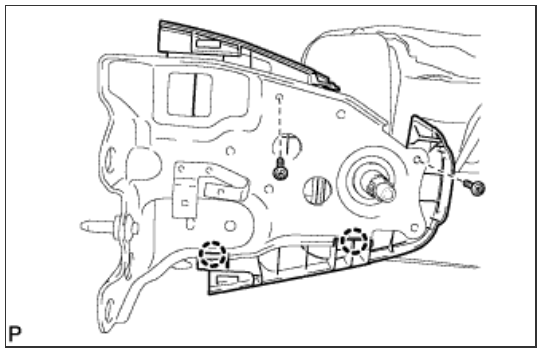
a. Using a screwdriver, remove the spring of the seat stay ball joint.

b. Disconnect the seat stay.



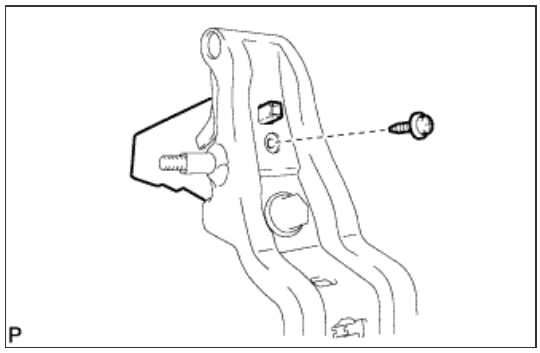
c. Remove the 2 screws.

d. Detach the 2 claws and remove the seat leg cover.



9. REMOVE NO. 2 SEAT LEG COVER NO. 2

a. Remove the screw and cover.

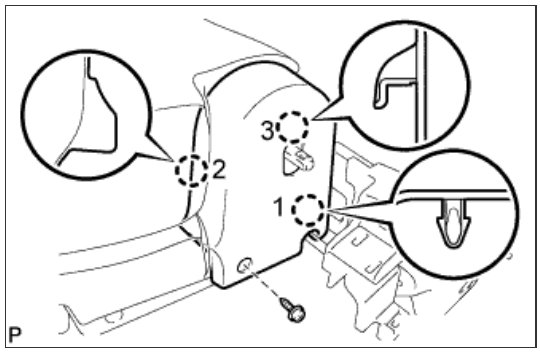


10. REMOVE RECLINING ADJUSTER COVER LH

a. Remove the screw.

b. Detach the 3 claws in the order shown in the illustration, and then remove the

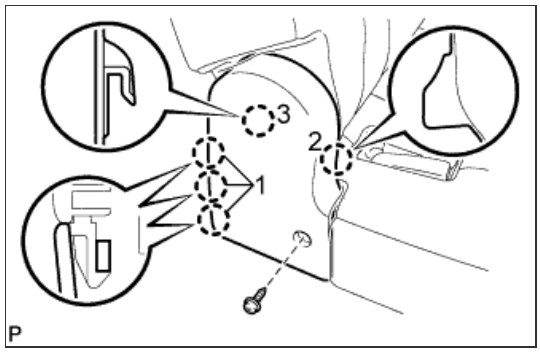
cover.



11. REMOVE RECLINING ADJUSTER COVER RH

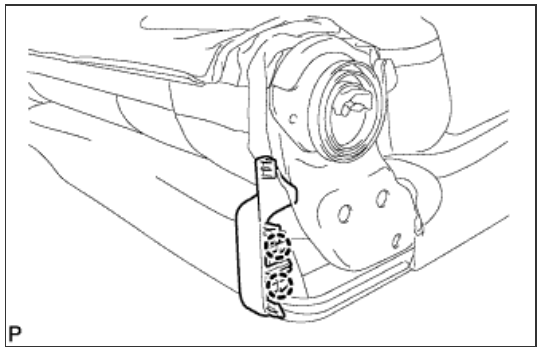
a. Remove the screw.

b. Detach the 5 claws in the order shown in the illustration, and then remove the cover.



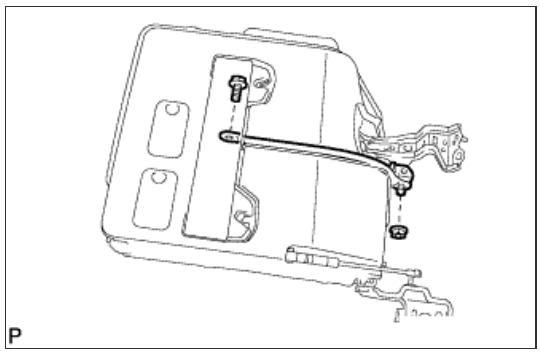
12. REMOVE REAR SEAT INNER RECLINING COVER LH

a. Detach the 2 claws and remove the cover.



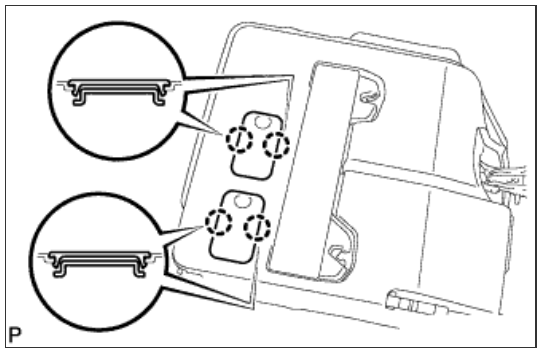
13. REMOVE 3RD SEAT LINK SUB-ASSEMBLY LH

a. Remove the bolt, nut and seat link.



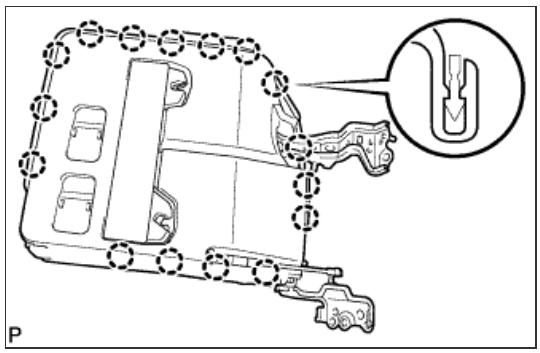
14. REMOVE 3RD SEAT CUSHION LOCK COVER

a. Detach the 4 claws and remove the 2 covers.

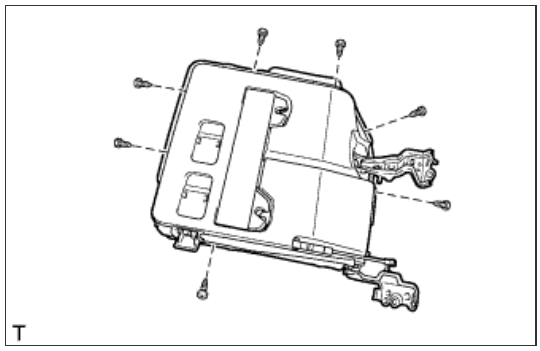


15. REMOVE REAR SEAT CUSHION UNDER COVER LH

a. Detach the 16 claws.

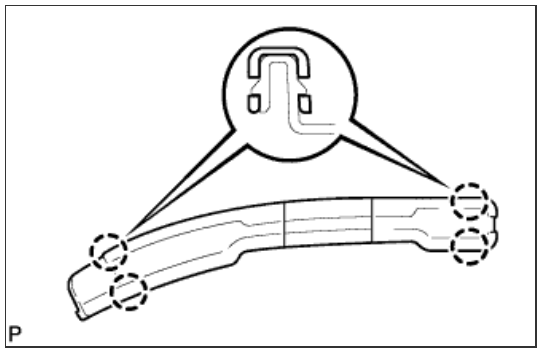


b. Remove the 7 screws and cover.



16. REMOVE NO. 3 SEAT FRONT BRACKET COVER LH

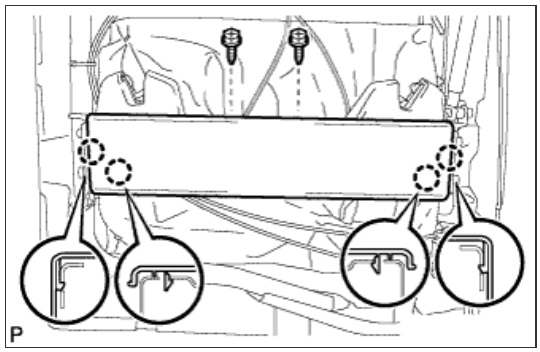
a. Detach the 4 claws and remove the cover.



17. REMOVE NO. 3 SEAT LEG COVER NO. 2

a. Remove the 2 screws.

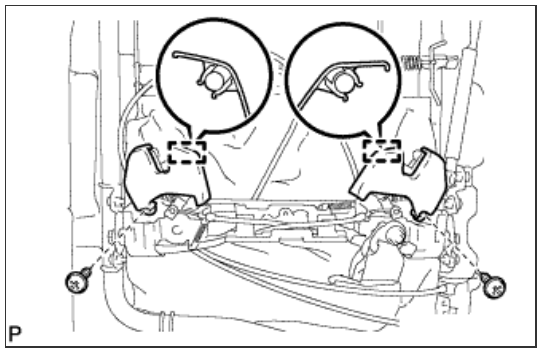
b. Detach the 4 claws and remove the cover.



18. REMOVE REAR SEAT LOCK COVER LH

a. Remove the 2 screws.

b. Detach the 2 clamps and remove the 2 covers.

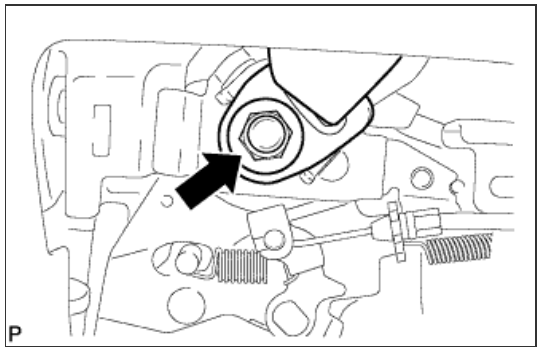


19. REMOVE REAR SEAT INNER BELT SUB-ASSEMBLY (for LH Side)

a. Remove the nut and belt.

HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat inner belt. Therefore, it becomes disconnected when the nut is removed.

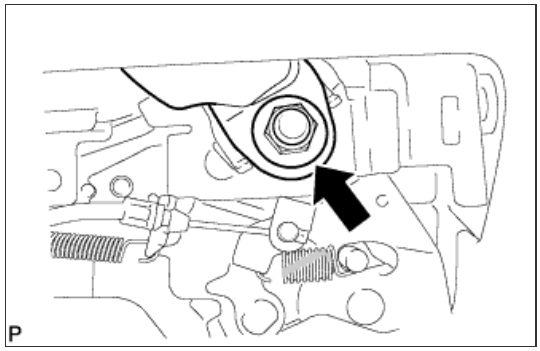


20. REMOVE REAR SEAT OUTER BELT SUB-ASSEMBLY (for RH Side)

a. Remove the nut and belt.

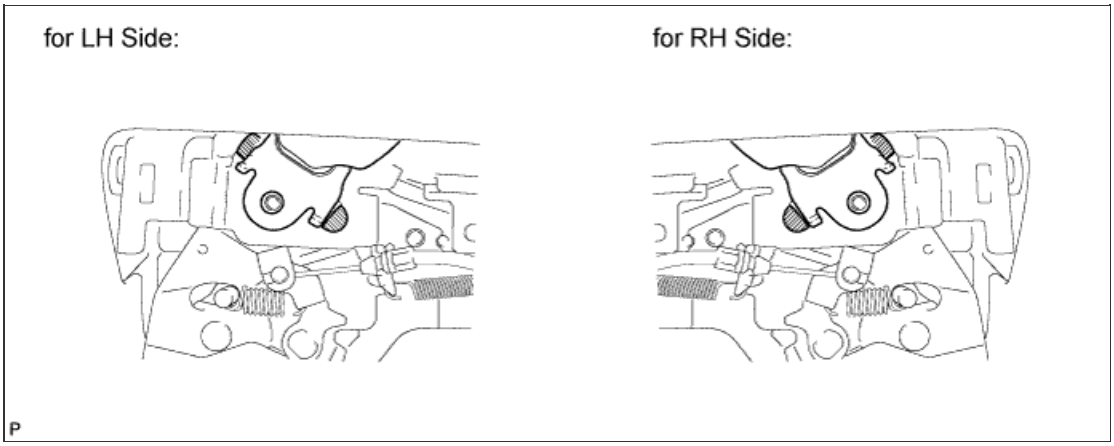
HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat outer belt. Therefore, it becomes disconnected when the nut is removed.



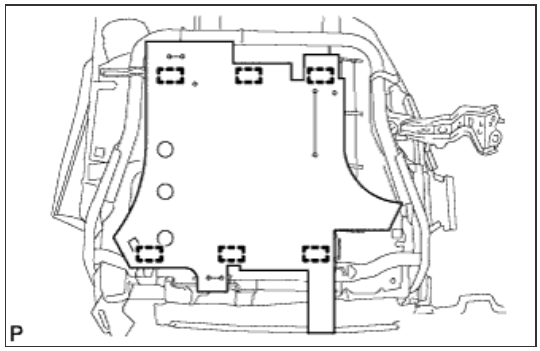
21. REMOVE REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY

a. Remove the 2 belts.



22. REMOVE REAR SEAT CUSHION CARPET

a. Cut off the tack pins which fasten the seat cushion carpet to the seat cushion pad, and then remove the seat cushion carpet from the seat cushion pad.



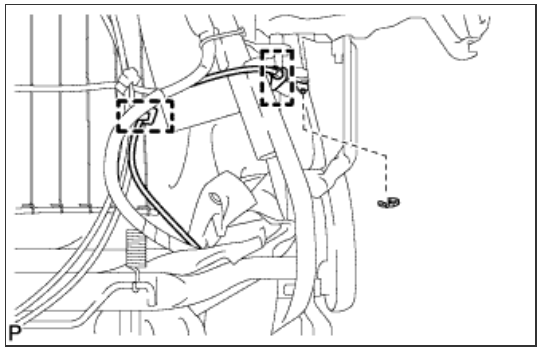
23. REMOVE SEAT CUSHION COVER WITH PAD

24. REMOVE NO. 3 SEAT CUSHION PAD LH

25. REMOVE NO. 3 SEAT CUSHION COVER SUB-ASSEMBLY LH

a. Remove the E-ring and detach the clamp.

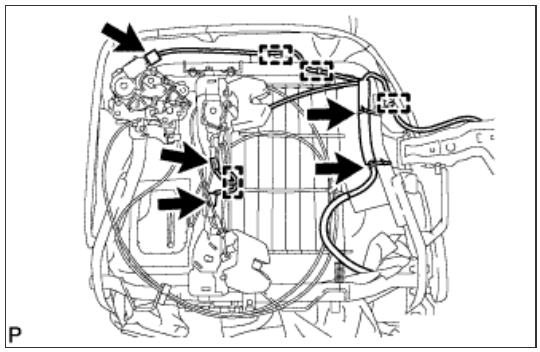
b. Detach the cable clamp and disconnect the cable.



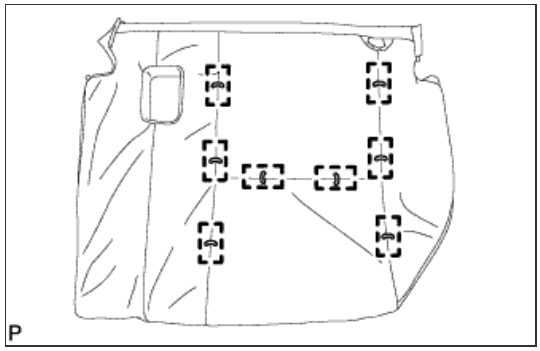
c. Detach the 4 clamps.

d. Disconnect the 3 connectors.

e. Remove the 2 cable ties.

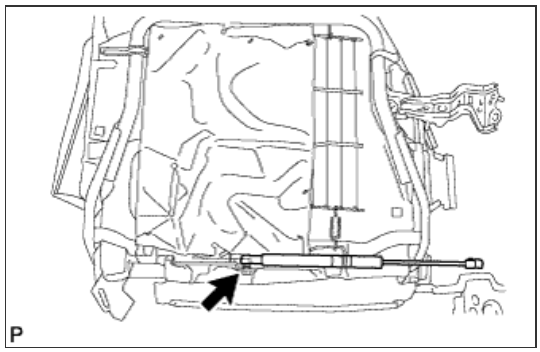


f. Remove the hog rings and seat cushion cover.



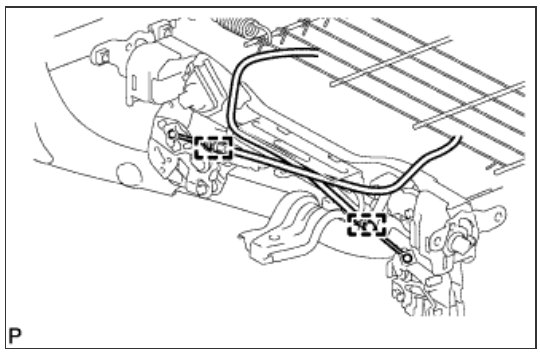
26. REMOVE NO. 2 SEAT STAY SUB-ASSEMBLY

a. Remove the bolt and seat stay.

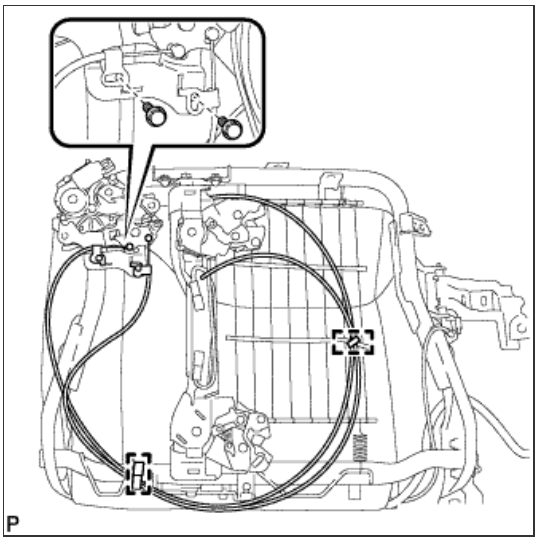


27. REMOVE NO. 3 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Detach the 2 cable clamps and disconnect the 2 cables.

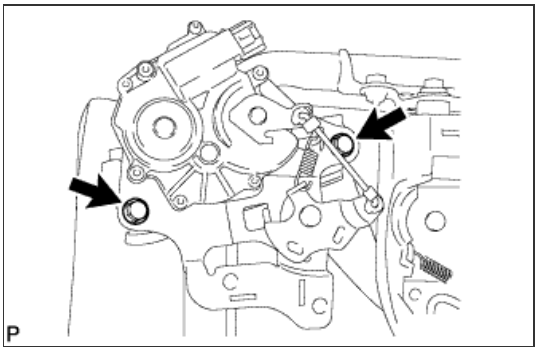


b. Detach the 2 clamps and remove the 2 bolts and control cable.



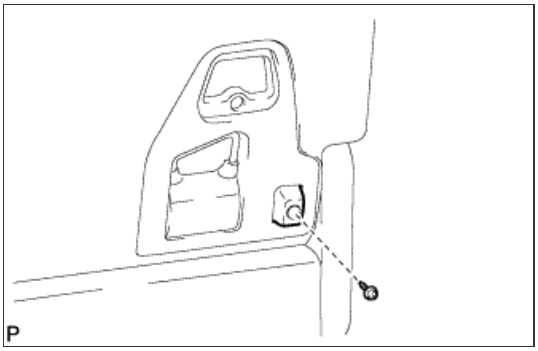
28. REMOVE REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH

a. Remove the 2 bolts and lever.



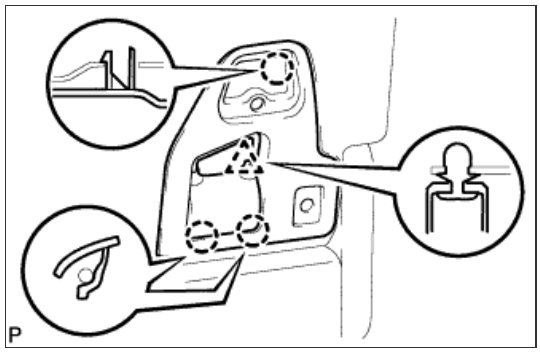
29. REMOVE REAR NO. 2 SEATBACK CUSHION

a. Remove the screw and seatback cushion.



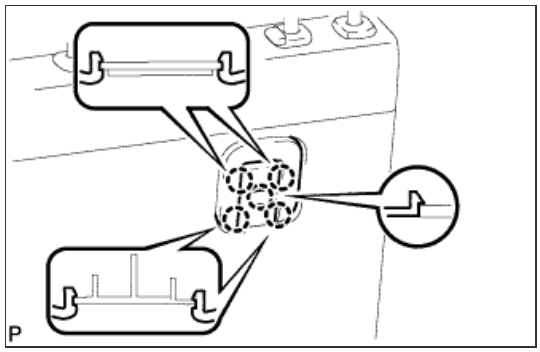
30. REMOVE REAR LOWER SEATBACK LOCK BEZEL

a. Detach the 3 claws and clip, and remove the seatback lock bezel.



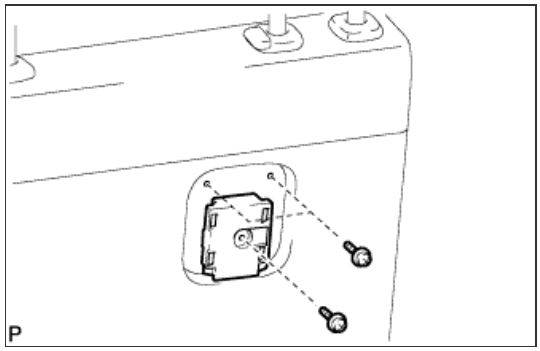
31. REMOVE REAR SEAT HINGE PAWL GUIDE

a. Detach the 5 claws and remove the guide.



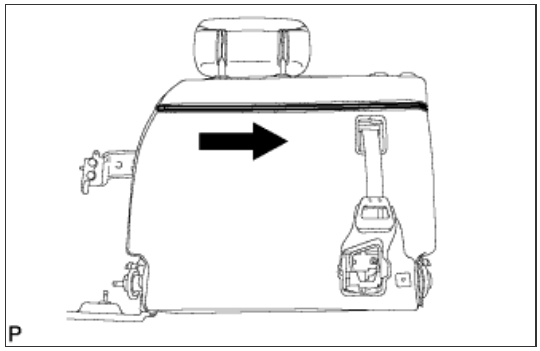
32. REMOVE REAR SEAT HINGE PAWL GUIDE

a. Remove the 3 screws and guide.

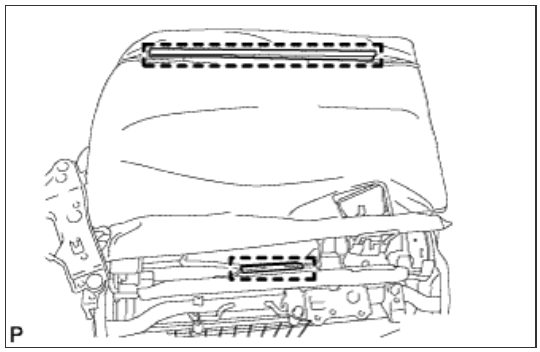


33. REMOVE SEATBACK COVER WITH PAD

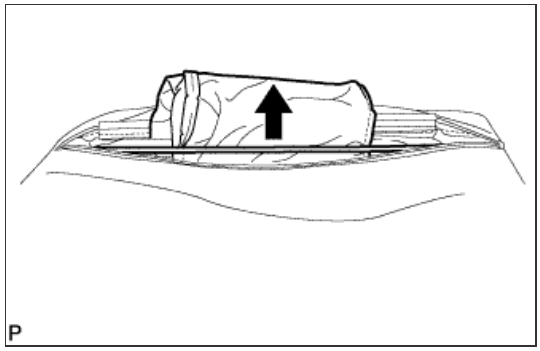
a. Open the fastener.



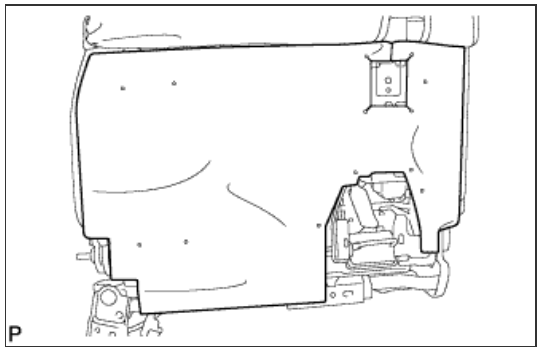
b. Detach the 2 hooks.



c. Pull out the center headrest storage bag.

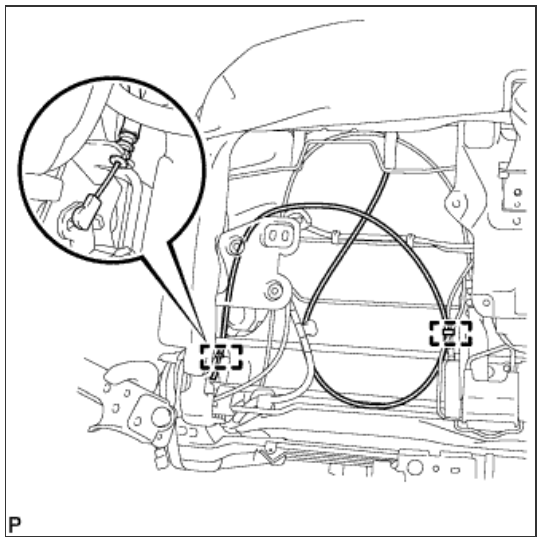


d. Remove the rear seat protector.



e. Detach the cable clamp and disconnect the cable.

f. Detach the clamp.

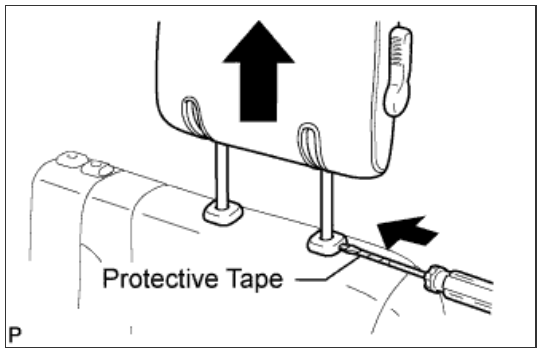


g. for LH Side:

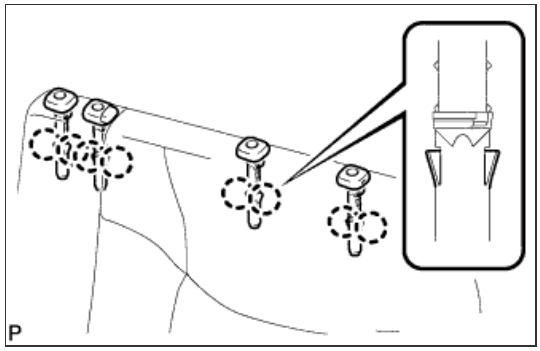
i. While releasing the lock inside the headrest support with a screwdriver, remove the headrest.

HINT:

Tape the screwdriver tip before use.



ii. Detach the 8 claws and remove the 4 headrest supports.

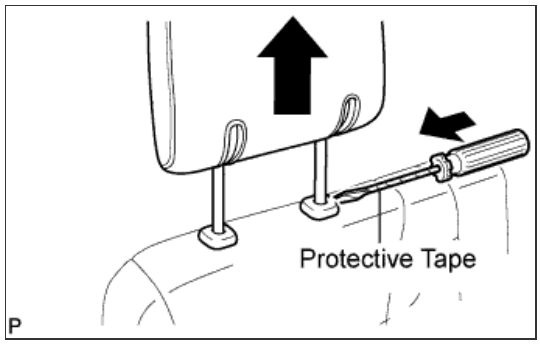


h. for RH Side:

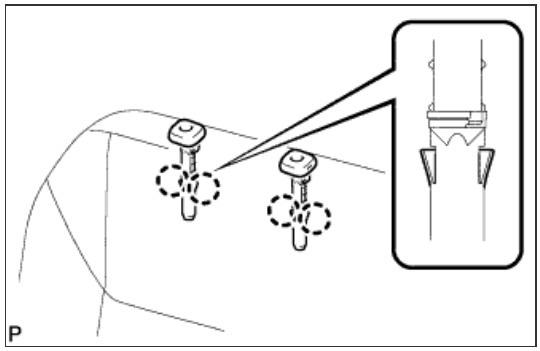
i. While releasing the lock inside the headrest support with a screwdriver, remove the headrest.

HINT:

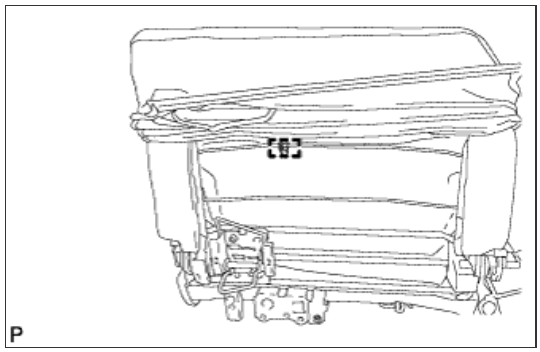
Tape the screwdriver tip before use.



ii. Detach the 4 claws and remove the 2 headrest supports.

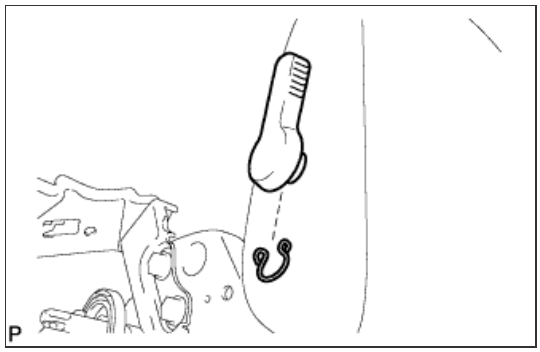


i. Remove the hog ring and seatback cover with pad.



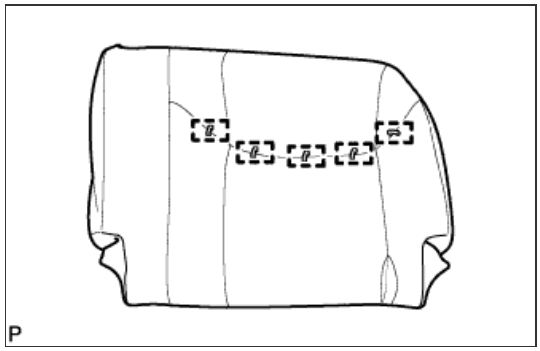
34. REMOVE REAR SEAT HEADREST HANDLE

a. Remove the snap ring and headrest handle.



35. REMOVE NO. 3 SEATBACK COVER SUB-ASSEMBLY LH

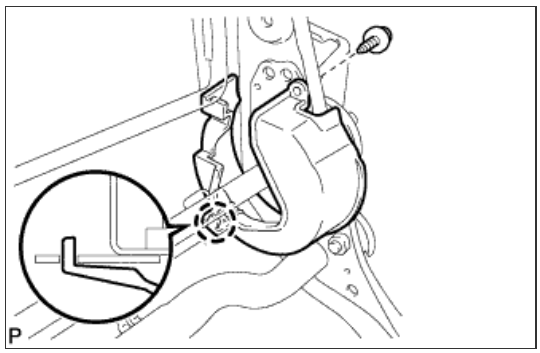
a. Remove the hog rings and seatback cover.



36. REMOVE REAR INNER SEAT RECLINING COVER LH

a. Remove the screw.

b. Detach the claw and remove the cover.



37. REMOVE REAR INNER SEAT RECLINING COVER RH

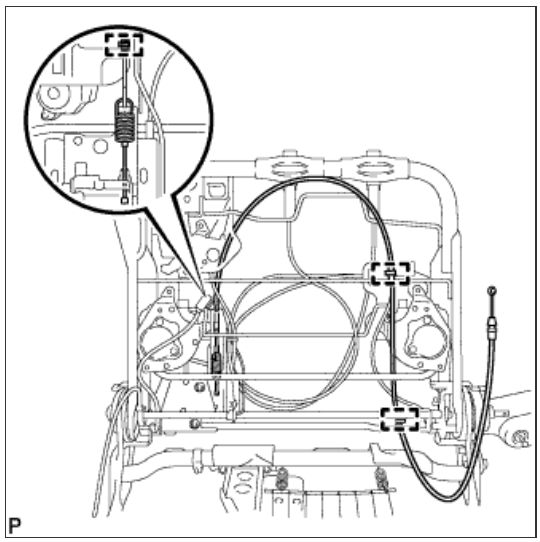
a. Remove the screw.

b. Detach the claw and remove the cover.

38. REMOVE REAR SEAT LOCK CONTROL CABLE

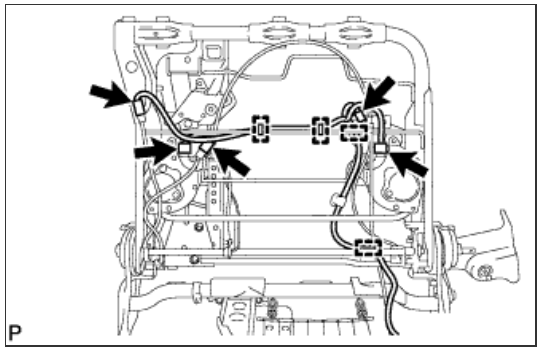
a. Detach the cable clamp and disconnect the cable.

b. Detach the 2 clamps and remove the lock control cable.



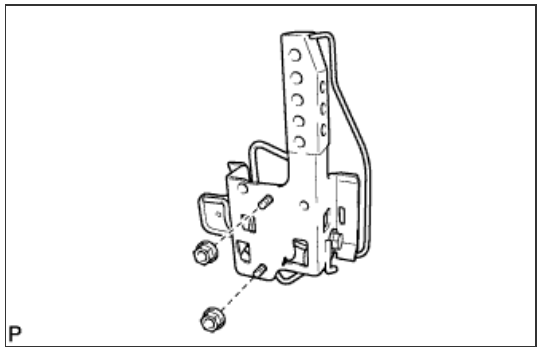
39. REMOVE REAR NO. 2 SEAT WIRE LH

a. Disconnect the 5 connectors and detach the 4 clamps, and then remove the rear No. 2 seat wire LH.



40. REMOVE REAR SEATBACK LOCK STRIKER ASSEMBLY LH

a. Remove the 2 nuts and lock striker.



41. REMOVE REAR NO. 2 SEATBACK COVER LH

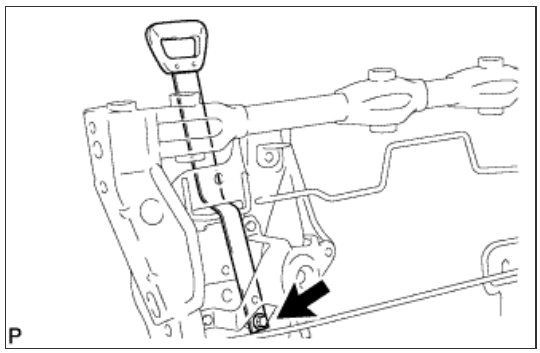
a. Detach the 3 claws and remove the cover.

42. REMOVE REAR SEATBACK LOCK STRIKER COVER LH

a. Detach the 2 clamps and remove the cover.

43. REMOVE NO. 2 SEAT RECLINING RELEASE HANDLE SUB-ASSEMBLY

a. Remove the bolt and release handle.



for Preparation Click here

1. INSPECT REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY

a. Apply battery voltage to the lock control lever and check the operation of the lever.

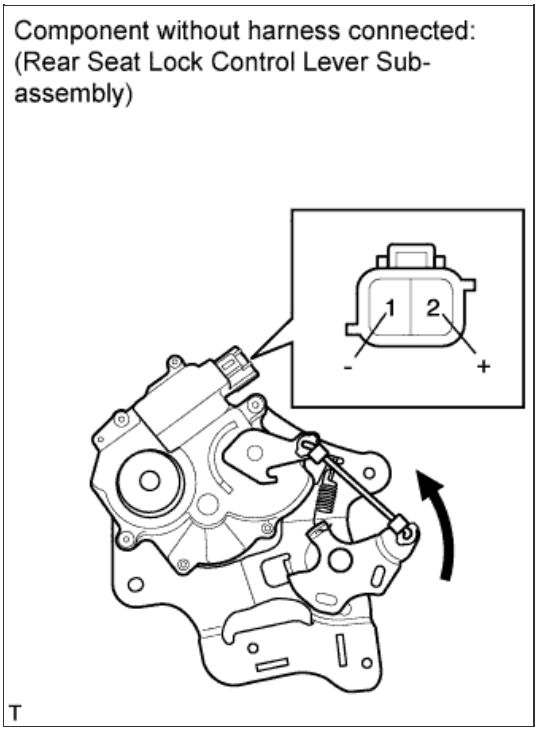
OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 (+) Battery negative (-) → Terminal 1 (-)	Rotates counterclockwise

NOTICE:

To prevent damage to the unit, do not reverse the connection.

If the result is not as specified, replace the rear seat lock control lever sub-assembly.



2. INSPECT POWER SEAT MOTOR ASSEMBLY

CAUTION:

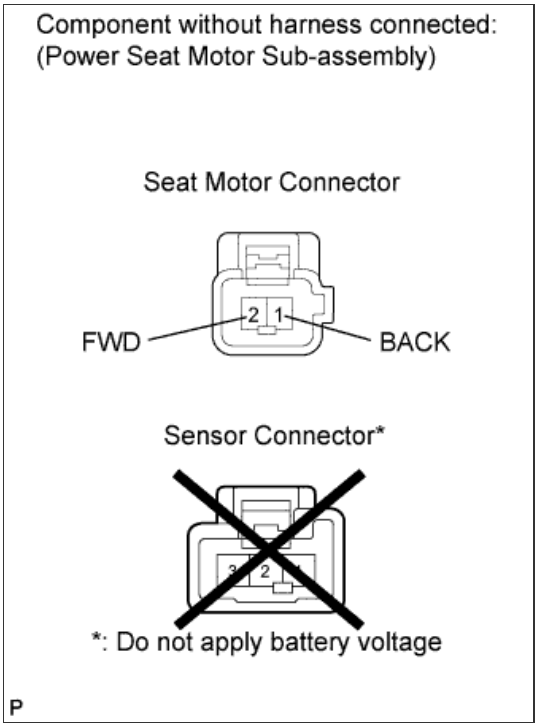
Do not apply battery voltage to the sensor connector.

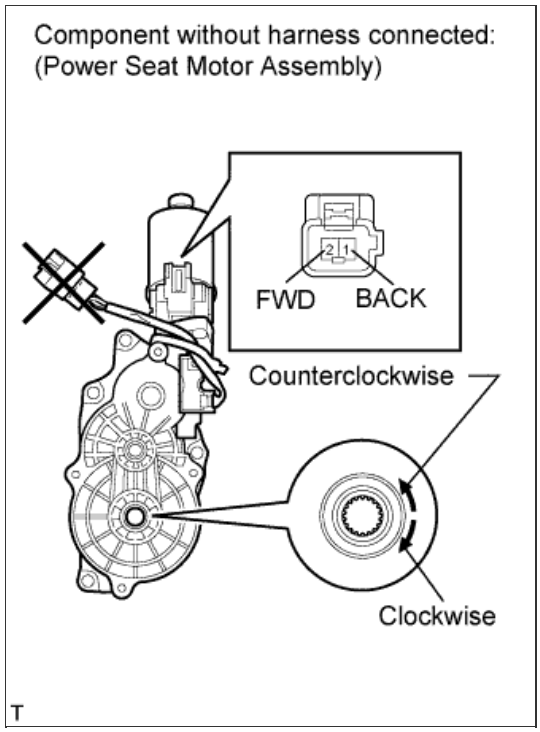
a. Apply battery voltage to the power seat motor and check the operation of the motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 (FWD) Battery negative (-) → Terminal 1 (BACK)	Rotates counterclockwise
Battery positive (+) → Terminal 1 (BACK) Battery negative (-) → Terminal 2 (FWD)	Rotates clockwise

If the result is not as specified, replace the power seat motor assembly.





3. INSPECT FOLD SEAT LEG LOCK SUB-ASSEMBLY

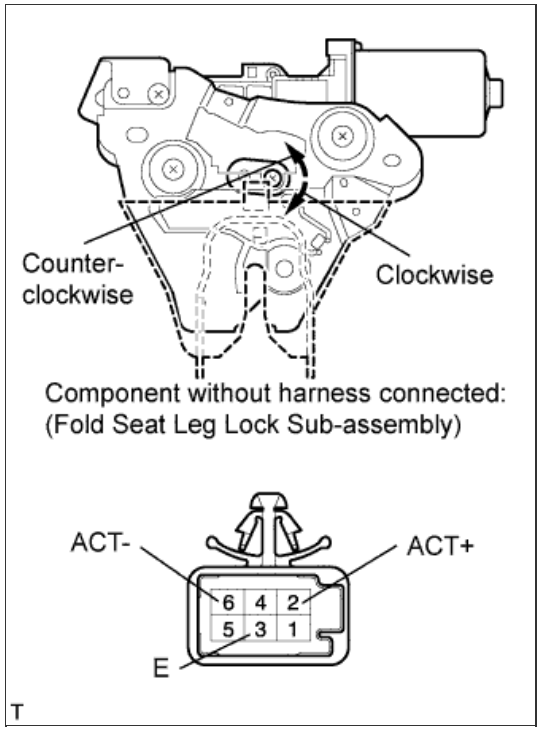
a. Apply battery voltage to the lock motor and check the operation of the motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 (ACT+) Battery negative (-) → Terminal 3 (E)	Rotates clockwise
Battery positive (+) → Terminal 6 (ACT-) Battery negative (-) → Terminal 3 (E)	Rotates counterclockwise

If the result is not as specified, replace the fold seat leg lock sub-assembly.

b. Set the fold seat leg lock sub-assembly to half latch.

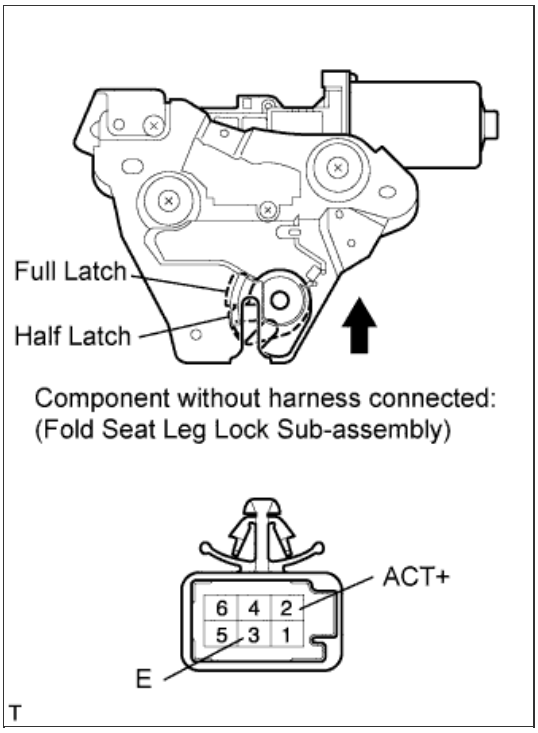


c. Apply battery voltage to the lock motor connector and check the closer operation.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 (ACT+) Battery negative (-) → Terminal 3 (E)	Moves from half latch to full latch

If the result is not as specified, replace the fold seat leg lock sub-assembly.


Full Latch
Half Latch
Component without harness connected:
(Fold Seat Leg Lock Sub-assembly)
6 4 2
5 3 1
ACT+
E
T

for Preparation Click here

CAUTION:

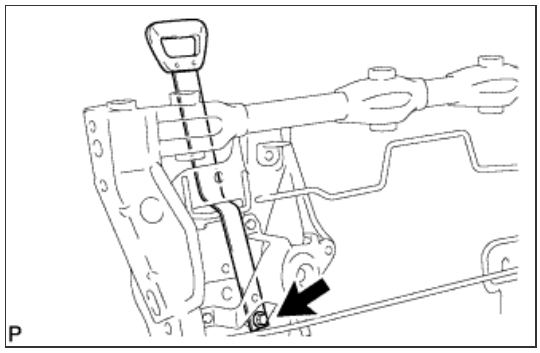
Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. INSTALL NO. 2 SEAT RECLINING RELEASE HANDLE SUB-ASSEMBLY

a. Install the release handle with the bolt.



2. INSTALL REAR SEATBACK LOCK STRIKER COVER LH

a. Attach the 2 clamps to install the cover.

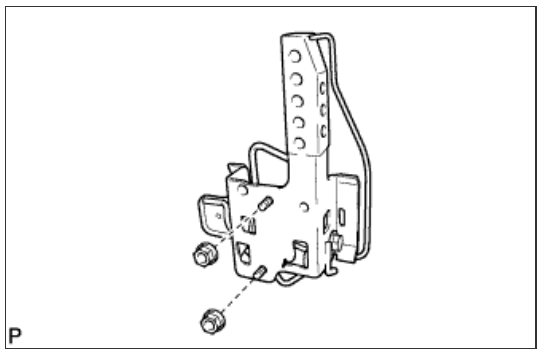
3. INSTALL REAR NO. 2 SEATBACK COVER LH

a. Attach the 3 claws to install the cover.

4. INSTALL REAR SEATBACK LOCK STRIKER ASSEMBLY LH

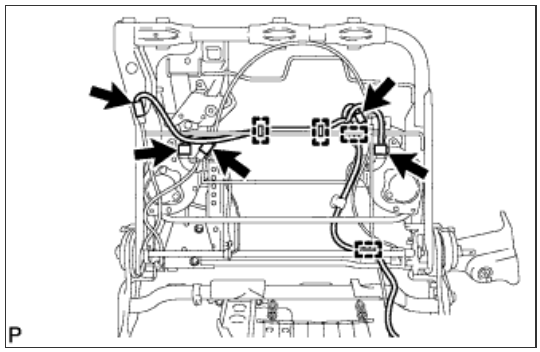
a. Install the lock striker with the 2 nuts.

Torque:
14 N*m{ 143 kgf*cm , 10 ft.*lbf }



5. INSTALL REAR NO. 2 SEAT WIRE LH

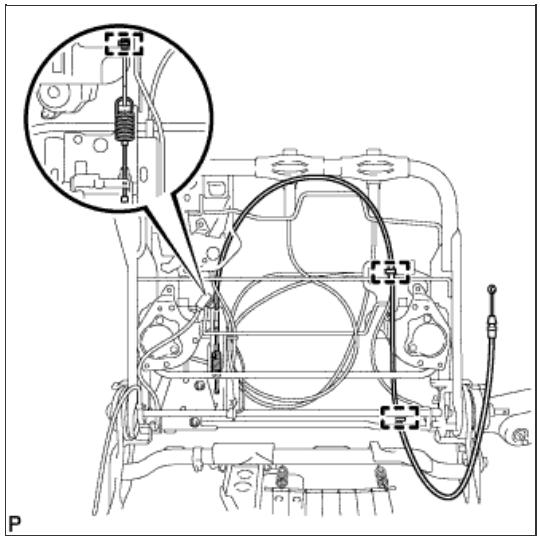
a. Connect the 5 connectors and attach the 4 clamps to install the rear No. 2 seat wire LH.



6. INSTALL REAR SEAT LOCK CONTROL CABLE

a. Attach the 2 clamps to install the lock control cable.

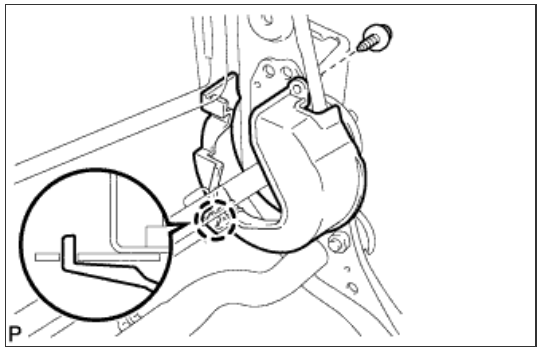
b. Attach the cable clamp to connect the cable.



7. INSTALL REAR INNER SEAT RECLINING COVER LH

a. Attach the claw to install the cover.

b. Install the screw.



8. INSTALL REAR INNER SEAT RECLINING COVER RH

a. Attach the claw to install the cover.

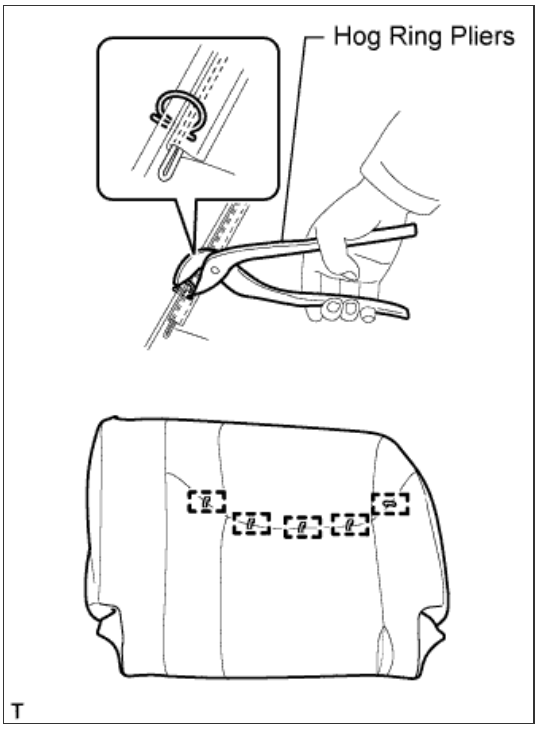
b. Install the screw.

9. INSTALL NO. 3 SEATBACK COVER SUB-ASSEMBLY LH

a. Using hog ring pliers, install the seatback cover to the seatback pad with new hog rings.

NOTICE:

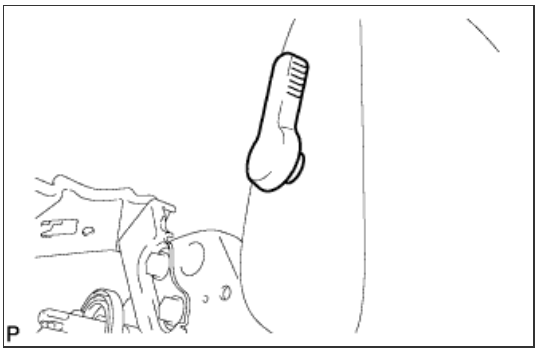
- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



10. INSTALL REAR SEAT HEADREST HANDLE

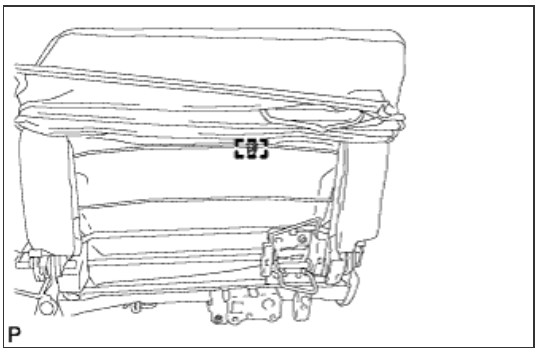
a. Install the snap ring to the headrest handle.

b. Install the headrest handle to the headrest.



11. INSTALL SEATBACK COVER WITH PAD

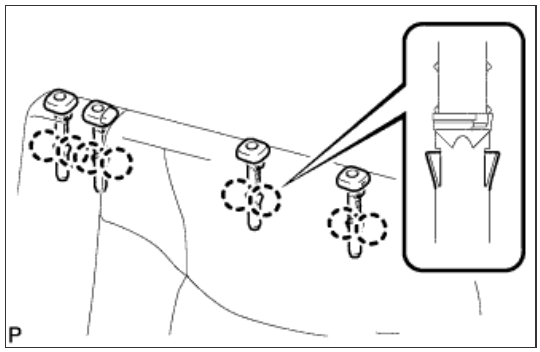
a. Using hog ring pliers, install the seatback cover with pad to the seatback frame with a new hog ring.



b. for LH Side:

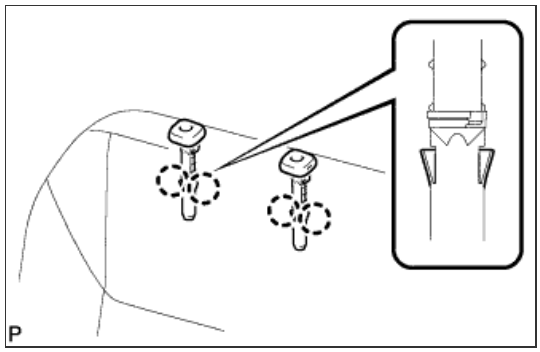
i. Attach the 8 claws to install the 4 headrest supports.

ii. Install the rear seat protector.



c. for RH Side:

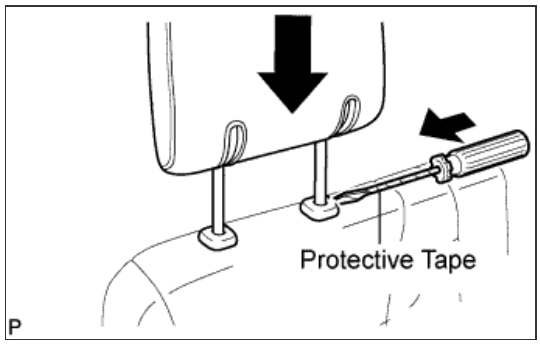
i. Attach the 4 claws to install the 2 headrest supports.



d. While releasing the lock inside the headrest support with a screwdriver, install the headrest.

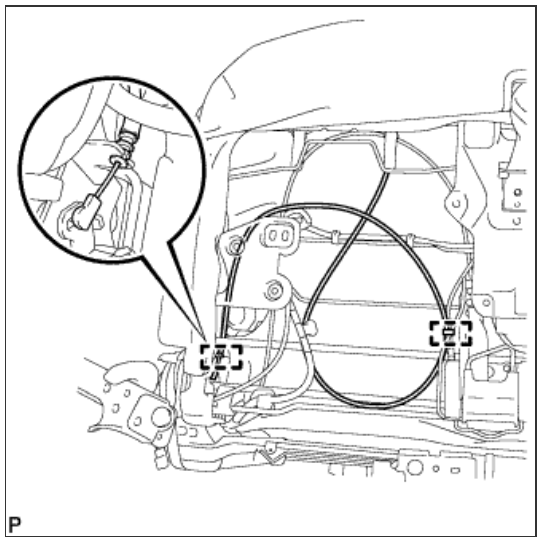
HINT:

Tape the screwdriver tip before use.

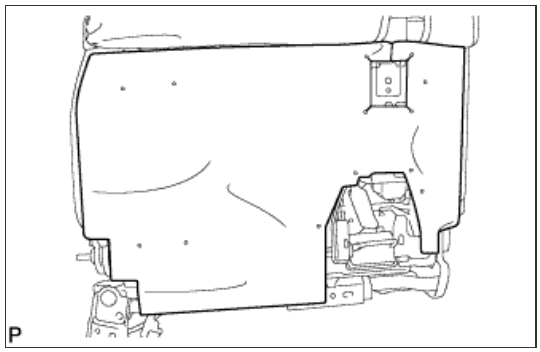


e. Attach the clamp.

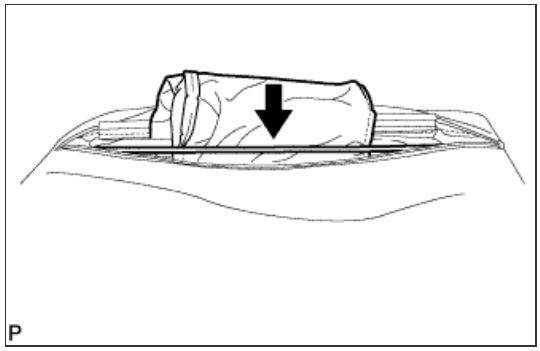
f. Attach the cable clamp to connect the cable.



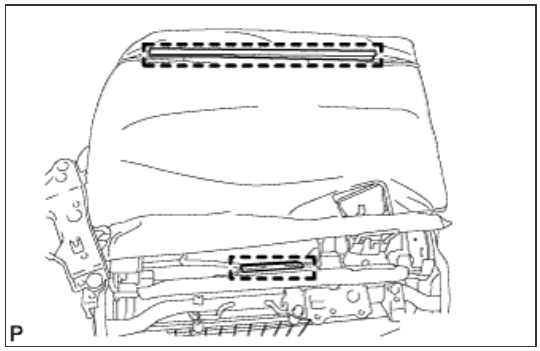
g. Install the seat protector.



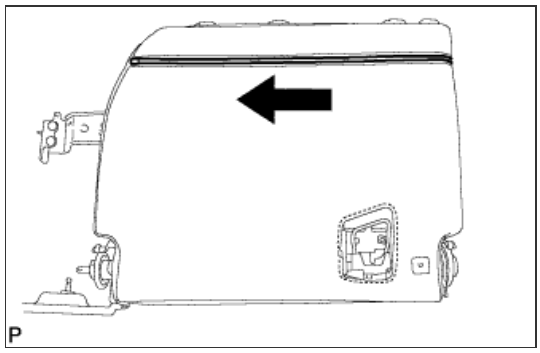
h. Insert the center headrest storage bag.



i. Attach the 2 hooks.

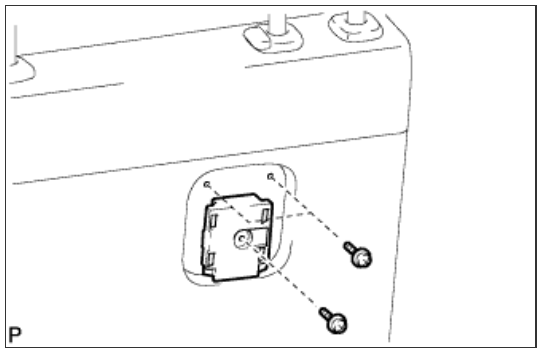


j. Close the fastener.



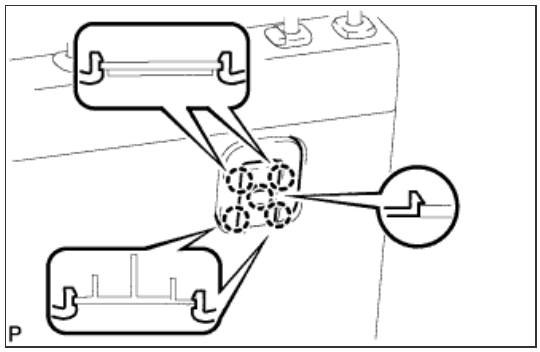
12. INSTALL REAR SEAT HINGE PAWL GUIDE

a. Install the guide with the 3 screws.



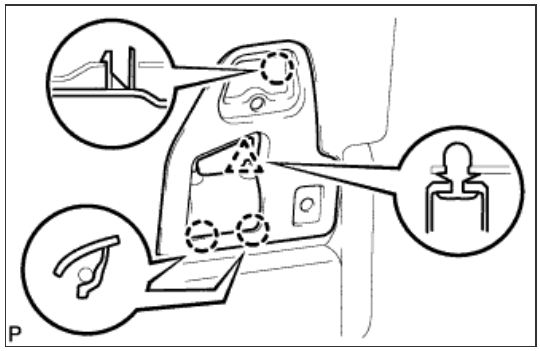
13. INSTALL REAR SEAT HINGE PAWL GUIDE

a. Attach the 5 claws to install the guide.



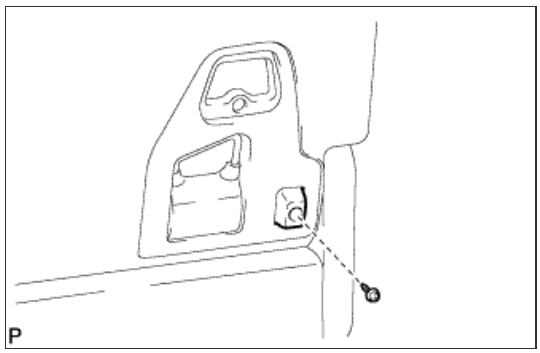
14. INSTALL REAR LOWER SEATBACK LOCK BEZEL

a. Attach the 3 claws and clip to install the seatback lock bezel.



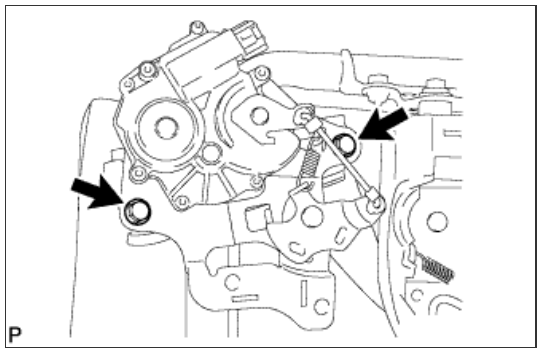
15. INSTALL REAR NO. 2 SEATBACK CUSHION

a. Install the seatback cushion with the screw.



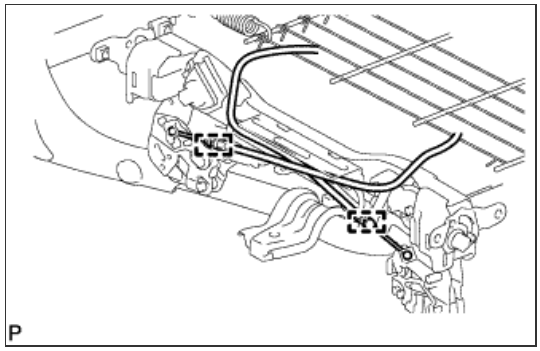
16. INSTALL REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH

a. Install the lever with the 2 bolts.

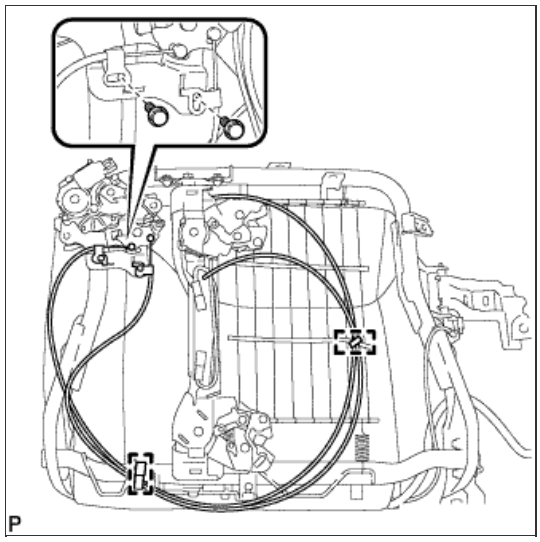


17. INSTALL NO. 3 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Attach the 2 cable clamps to connect the 2 cables.

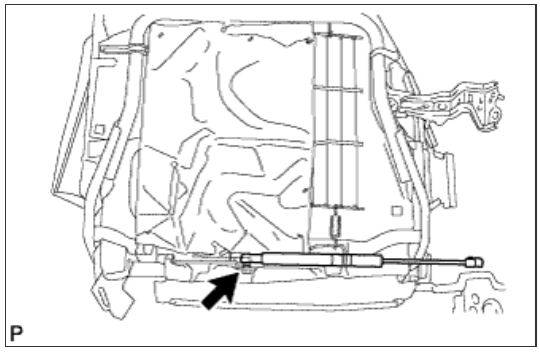


b. Attach the 2 clamps and then install the 2 cables with the 2 bolts.



18. INSTALL NO. 2 SEAT STAY SUB-ASSEMBLY

a. Install the seat stay with the bolt.

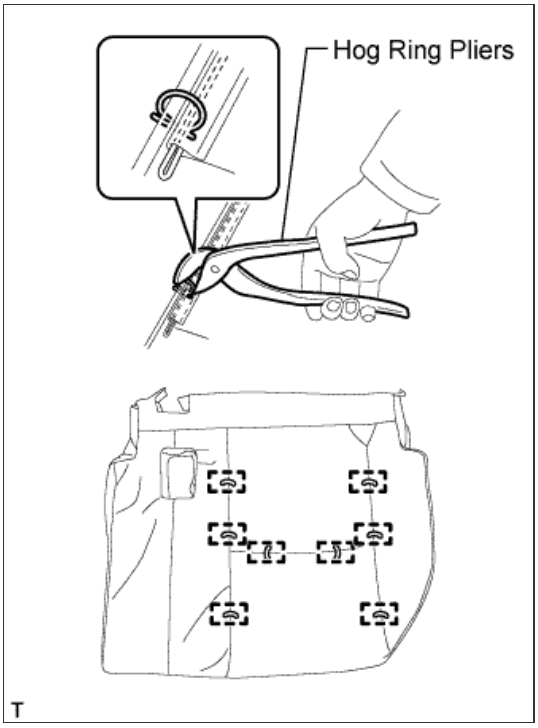


19. INSTALL NO. 3 SEAT CUSHION COVER SUB-ASSEMBLY LH

a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

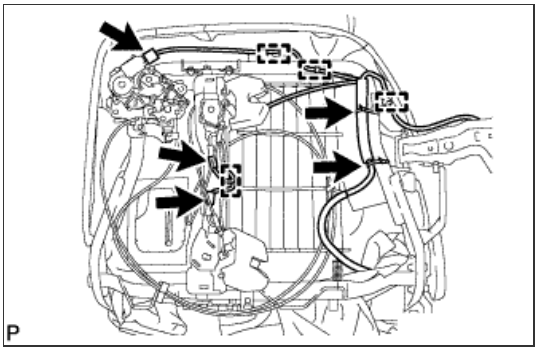
- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Attach the 4 clamps.

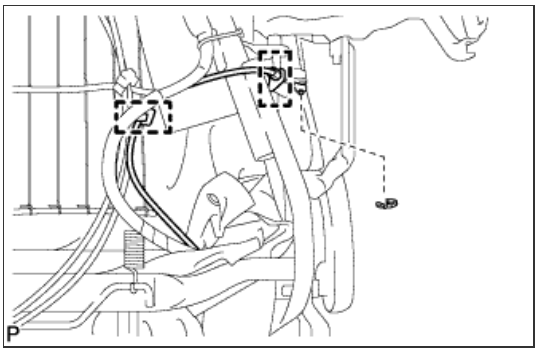
c. Connect the 3 connectors.

d. Install 2 new cable ties.



e. Install the E-ring and attach the clamp.

f. Attach the cable clamp and connect the cable.

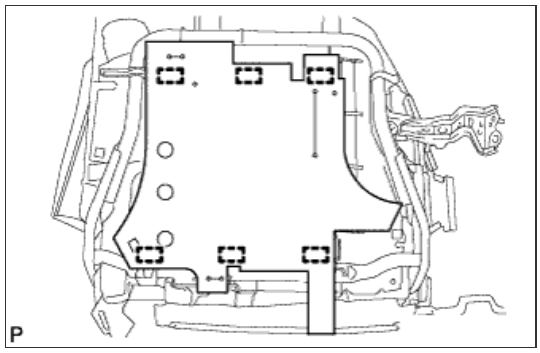


20. INSTALL NO. 3 SEAT CUSHION PAD LH

21. INSTALL SEAT CUSHION COVER WITH PAD

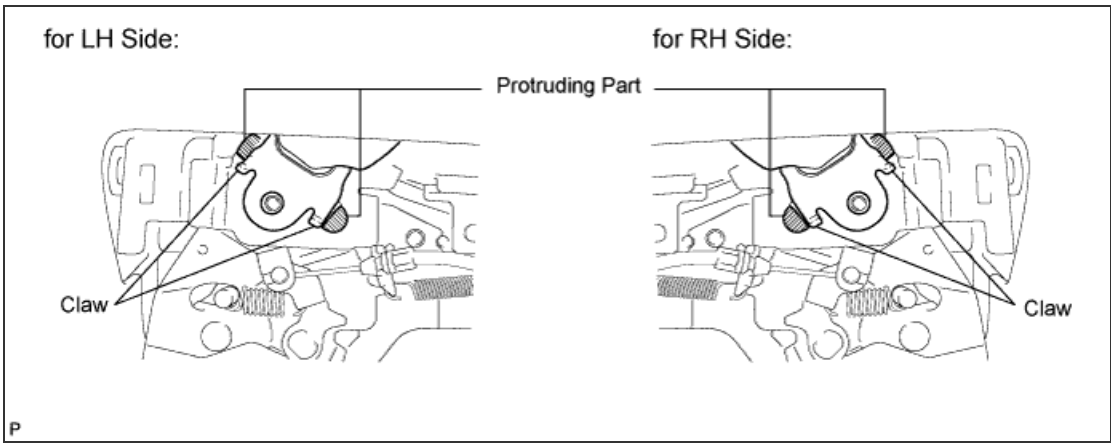
22. INSTALL REAR SEAT CUSHION CARPET

a. Install the seat cushion carpet with new tack pins.



23. INSTALL REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY

a. Install the 2 belts.



NOTICE:

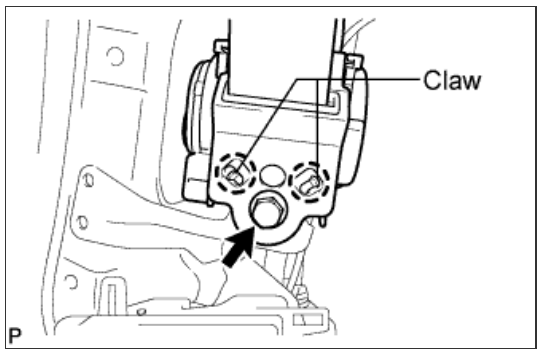
- **Make sure the claws are facing away from the seat.**
- **Do not overlap the anchor part of the seat belt and protruding parts of the seat.**

24. INSTALL REAR SEAT OUTER BELT SUB-ASSEMBLY (for RH Side)

a. Align the claws with the seat belt positioning holes and install the retractor of the seat belt as shown in the illustration.

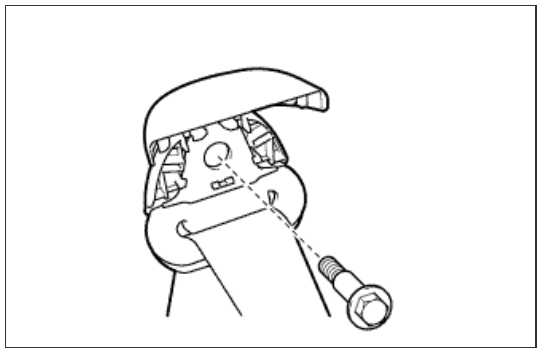
b. Install the seat belt with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

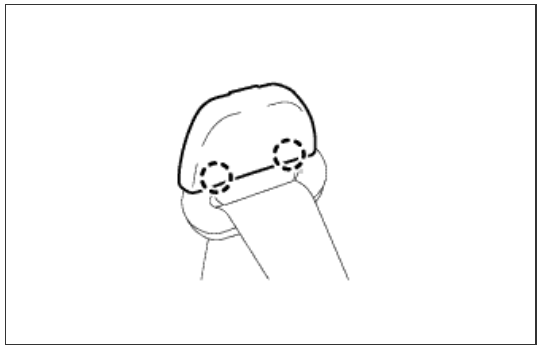


c. Install the seat belt shoulder anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

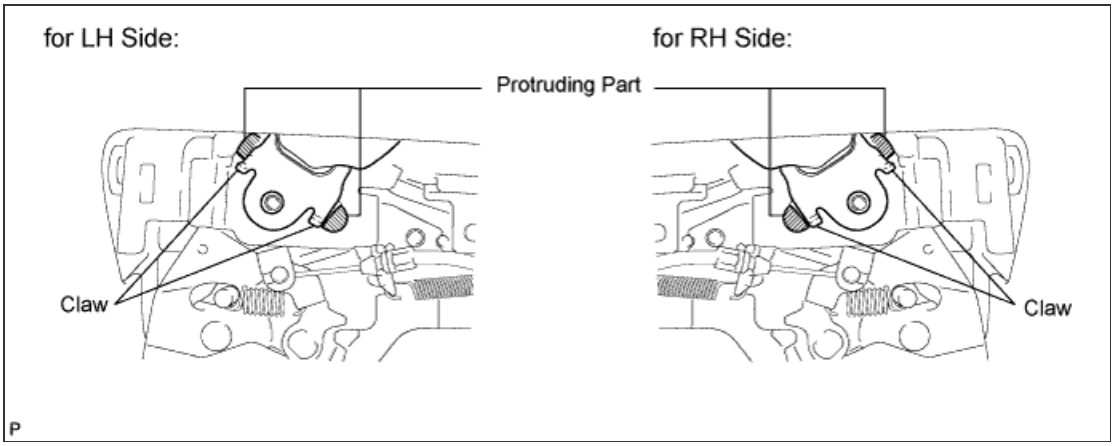


d. Attach the 2 claws to close the seat belt shoulder anchor cover.



25. INSTALL REAR SEAT INNER BELT SUB-ASSEMBLY (for LH Side)

a. Install the 2 belts.



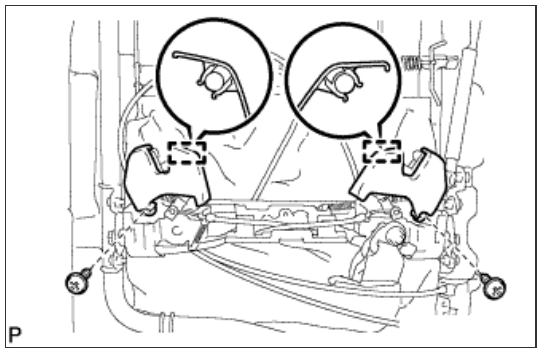
NOTICE:

- **Make sure the claws are facing away from the seat.**
- **Do not overlap the anchor part of the seat belt and protruding parts of the seat.**

26. INSTALL REAR SEAT LOCK COVER LH

a. Attach the 2 clamps to install the 2 covers.

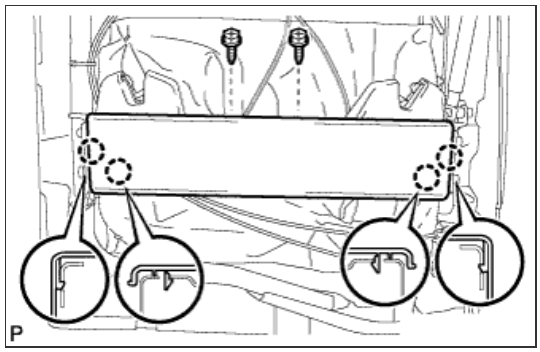
b. Install the 2 screws.



27. INSTALL NO. 3 SEAT LEG COVER NO. 2

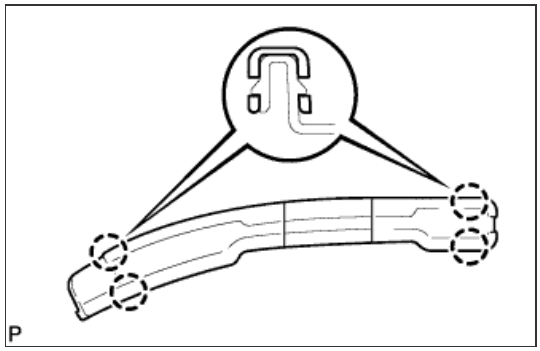
a. Attach the 4 claws to install the cover.

b. Install the 2 screws.



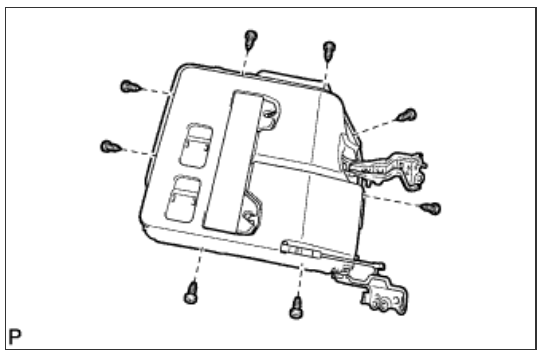
28. INSTALL NO. 3 SEAT FRONT BRACKET COVER LH

a. Attach the 4 claws to install the cover.

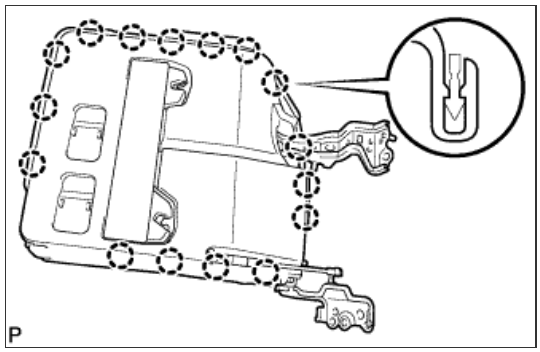


29. INSTALL REAR SEAT CUSHION UNDER COVER LH

a. Install the cover with the 8 screws.

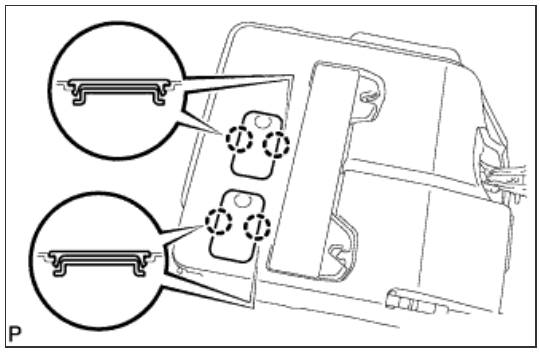


b. Attach the 16 claws.



30. INSTALL 3RD SEAT CUSHION LOCK COVER

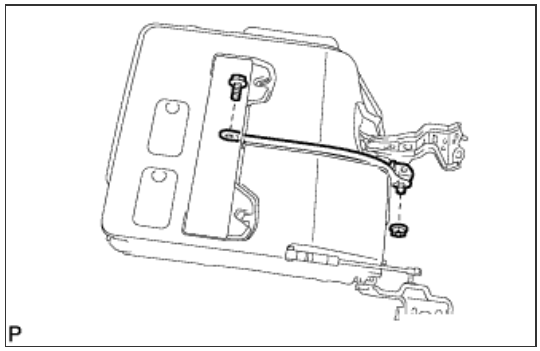
a. Attach the 4 claws to install the 2 covers.



31. INSTALL 3RD SEAT LINK SUB-ASSEMBLY LH

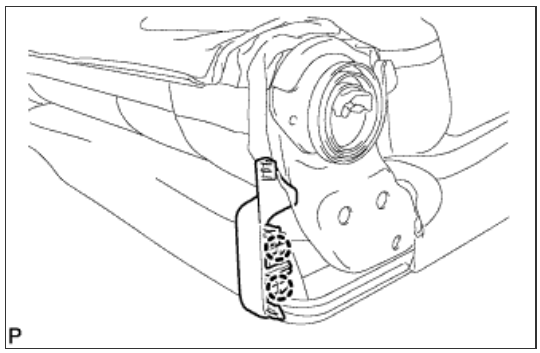
a. Install the seat link with the bolt and nut.

Torque:
8.5 N*m{ 87 kgf*cm , 75 in.*lbf }



32. INSTALL REAR SEAT INNER RECLINING COVER LH

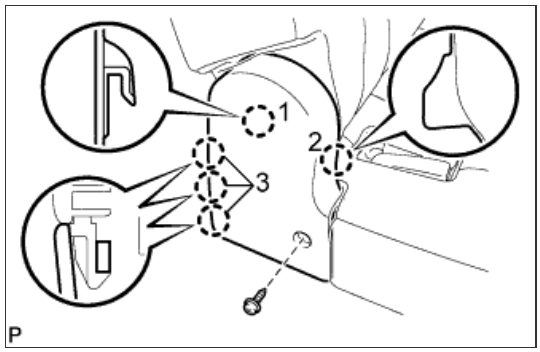
a. Attach the 2 claws to install the cover.



33. INSTALL RECLINING ADJUSTER COVER RH

a. Attach the 5 claws in the order shown in the illustration to install the cover.

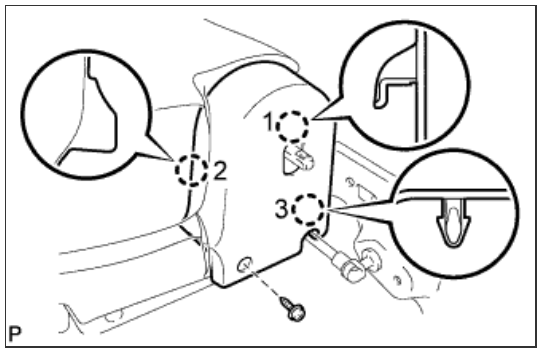
b. Install the screw.



34. INSTALL RECLINING ADJUSTER COVER LH

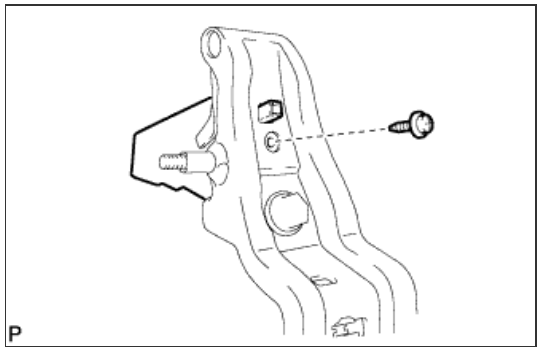
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the screw.



35. INSTALL NO. 2 SEAT LEG COVER NO. 2

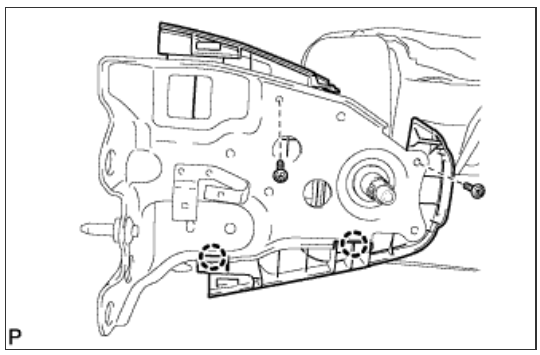
a. Install the seat leg cover with the screw.



36. INSTALL REAR NO. 3 SEAT LEG COVER LH

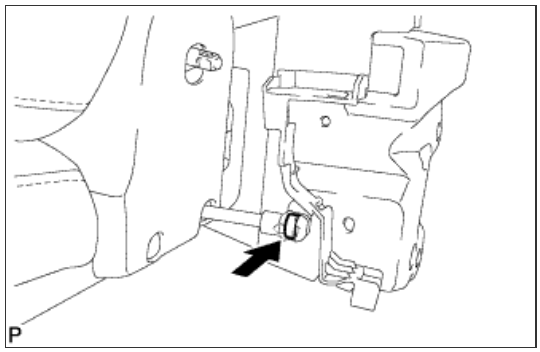
a. Attach the 2 claws to install the seat leg cover.

b. Install the 2 screws.



c. Install the spring of the seat stay ball joint.

d. Connect the seat stay to the seat frame.

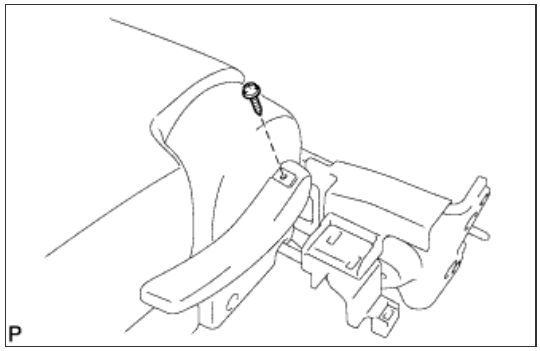


37. INSTALL REAR SEAT REAR BRACKET COVER REAR

a. Attach the 2 claws to install the cover.

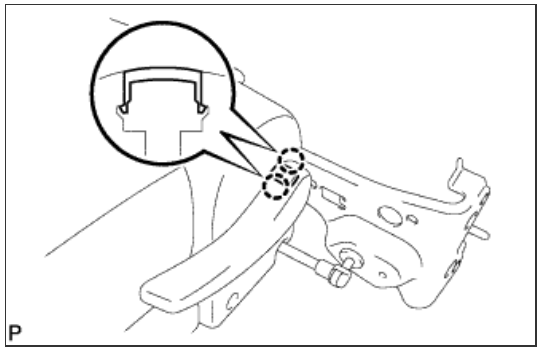
38. INSTALL NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



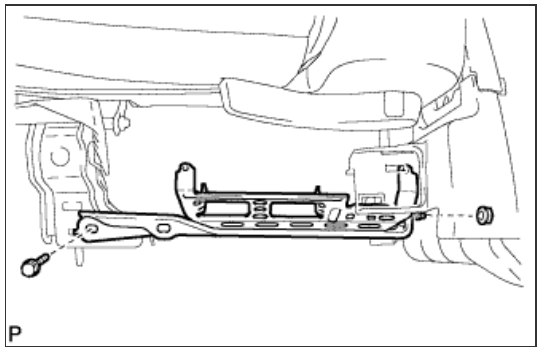
39. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.

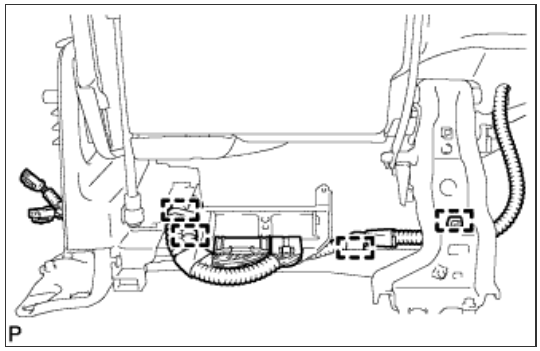


40. INSTALL REAR NO. 2 SEAT LEG BRACKET REAR LH

a. Install the bracket with the bolt and nut.



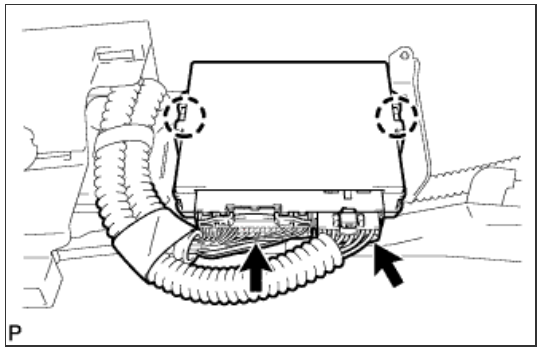
b. Attach the 4 clamps.



41. INSTALL FOLD SEAT CONTROL ECU

a. Attach the 2 claws to install the ECU.

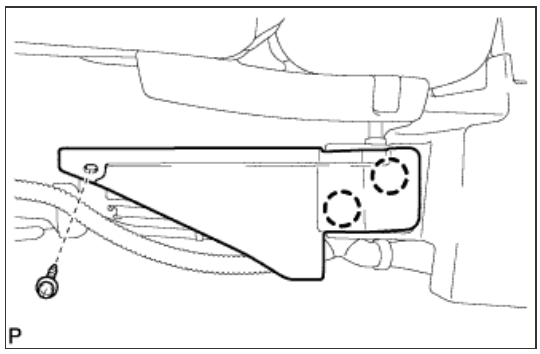
b. Connect the 2 connectors.



42. INSTALL NO. 2 SEAT CUSHION COVER

a. Attach the 2 claws to install the cover.

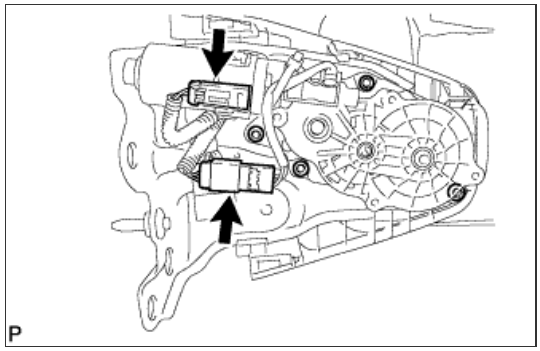
b. Install the screw.



43. INSTALL POWER SEAT MOTOR SUB-ASSEMBLY

a. Using a 5 mm hexagon socket wrench, install the motor with the 4 bolts.

b. Connect the 2 connectors.



for Preparation Click here

CAUTION:

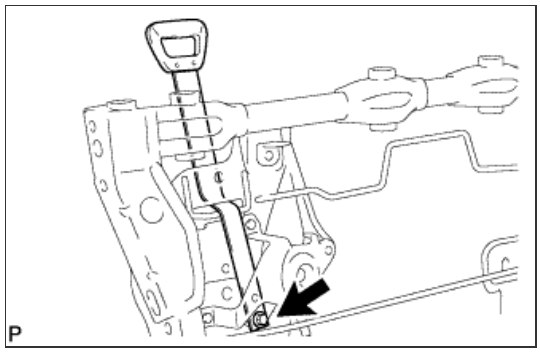
Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. INSTALL NO. 2 SEAT RECLINING RELEASE HANDLE SUB-ASSEMBLY

a. Install the release handle with the bolt.



2. INSTALL REAR SEATBACK LOCK STRIKER COVER LH

a. Attach the 2 clamps to install the cover.

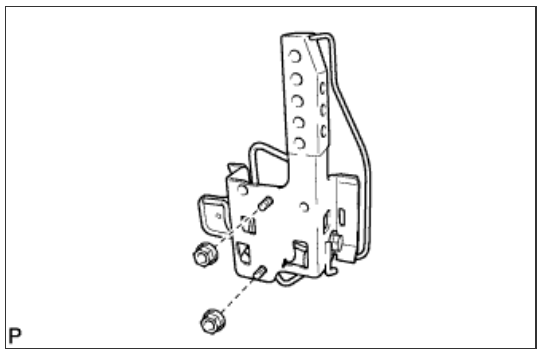
3. INSTALL REAR NO. 2 SEATBACK COVER LH

a. Attach the 3 claws to install the cover.

4. INSTALL REAR SEATBACK LOCK STRIKER ASSEMBLY LH

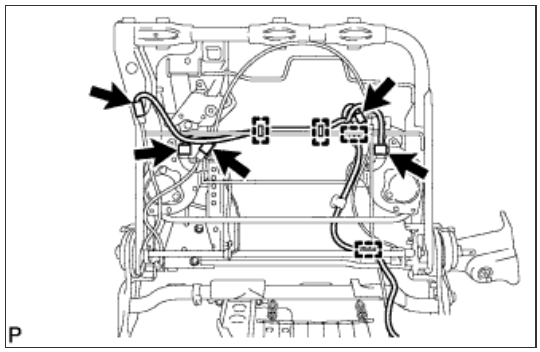
a. Install the lock striker with the 2 nuts.

Torque:
14 N*m{ 143 kgf*cm , 10 ft.*lbf }



5. INSTALL REAR NO. 2 SEAT WIRE LH

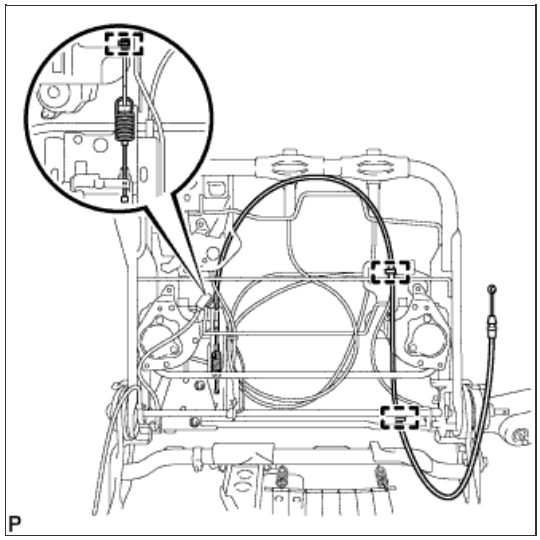
a. Connect the 5 connectors and attach the 4 clamps to install the rear No. 2 seat wire LH.



6. INSTALL REAR SEAT LOCK CONTROL CABLE

a. Attach the 2 clamps to install the lock control cable.

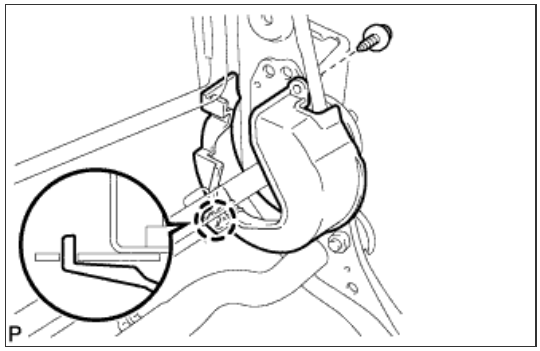
b. Attach the cable clamp to connect the cable.



7. INSTALL REAR INNER SEAT RECLINING COVER LH

a. Attach the claw to install the cover.

b. Install the screw.



8. INSTALL REAR INNER SEAT RECLINING COVER RH

a. Attach the claw to install the cover.

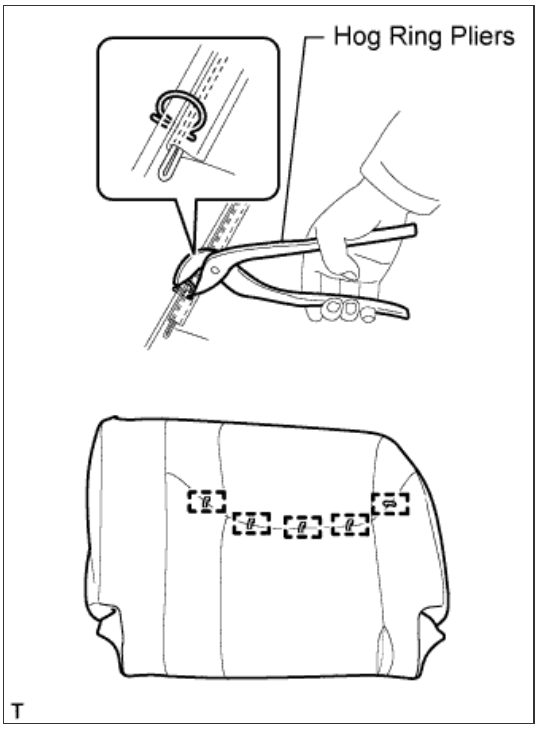
b. Install the screw.

9. INSTALL NO. 3 SEATBACK COVER SUB-ASSEMBLY LH

a. Using hog ring pliers, install the seatback cover to the seatback pad with new hog rings.

NOTICE:

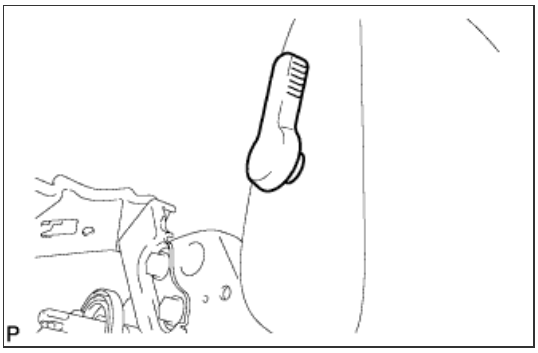
- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



10. INSTALL REAR SEAT HEADREST HANDLE

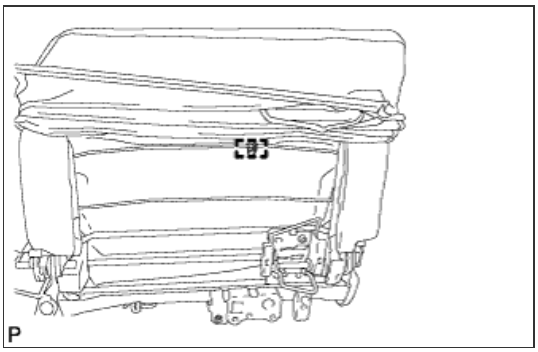
a. Install the snap ring to the headrest handle.

b. Install the headrest handle to the headrest.



11. INSTALL SEATBACK COVER WITH PAD

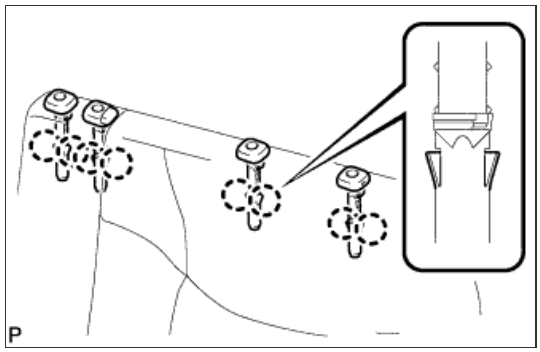
a. Using hog ring pliers, install the seatback cover with pad to the seatback frame with a new hog ring.



b. for LH Side:

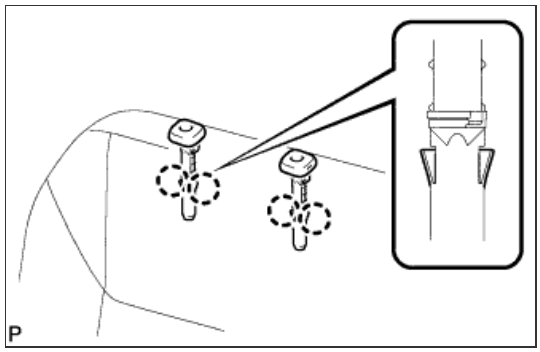
i. Attach the 8 claws to install the 4 headrest supports.

ii. Install the rear seat protector.



c. for RH Side:

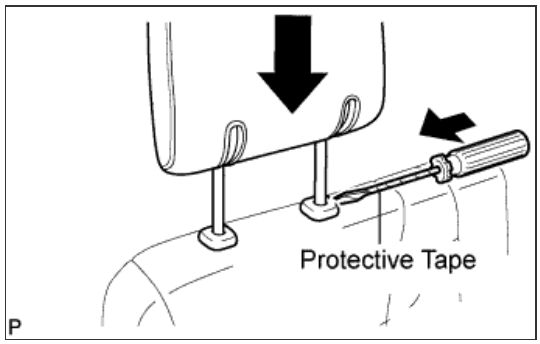
i. Attach the 4 claws to install the 2 headrest supports.



d. While releasing the lock inside the headrest support with a screwdriver, install the headrest.

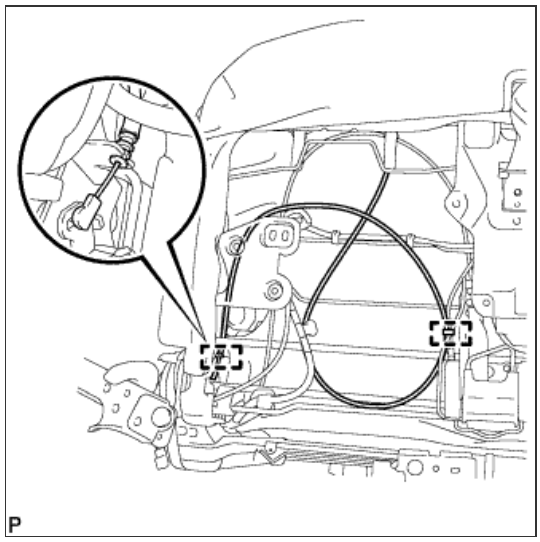
HINT:

Tape the screwdriver tip before use.

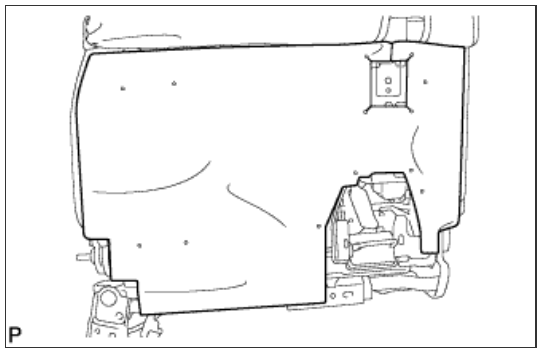


e. Attach the clamp.

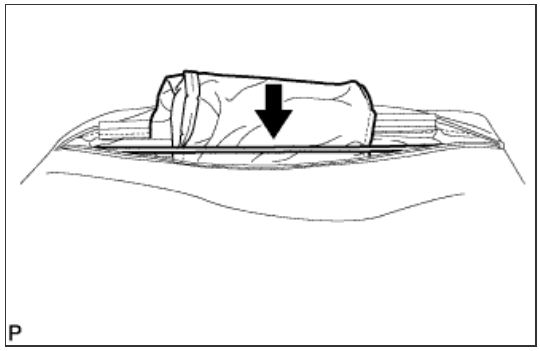
f. Attach the cable clamp to connect the cable.



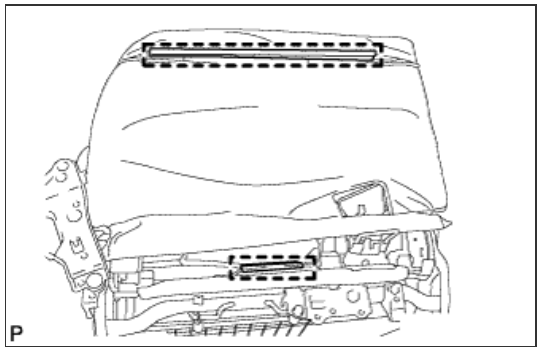
g. Install the seat protector.



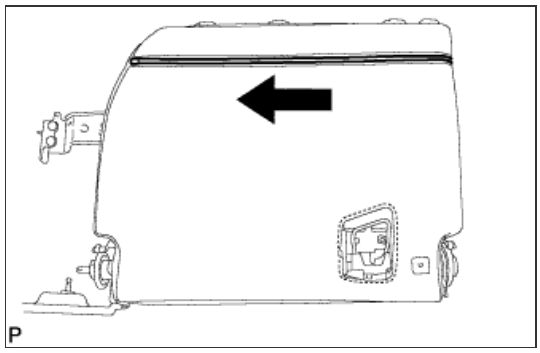
h. Insert the center headrest storage bag.



i. Attach the 2 hooks.

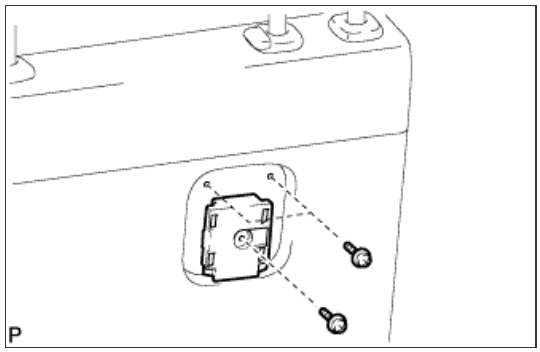


j. Close the fastener.



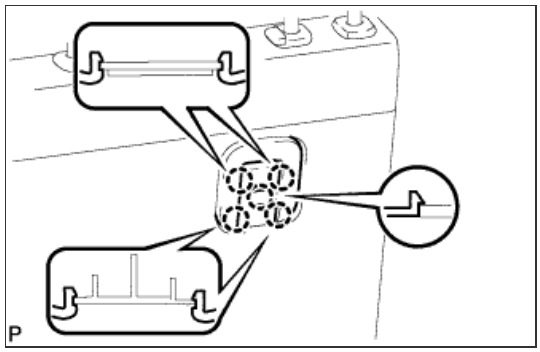
12. INSTALL REAR SEAT HINGE PAWL GUIDE

a. Install the guide with the 3 screws.



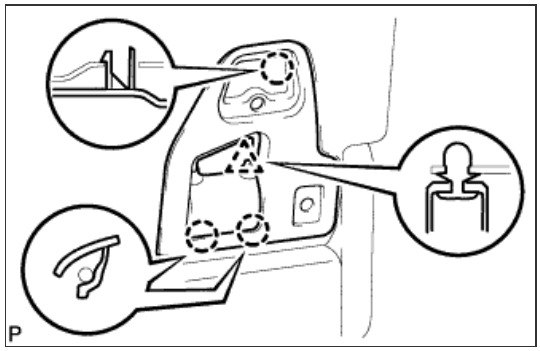
13. INSTALL REAR SEAT HINGE PAWL GUIDE

a. Attach the 5 claws to install the guide.



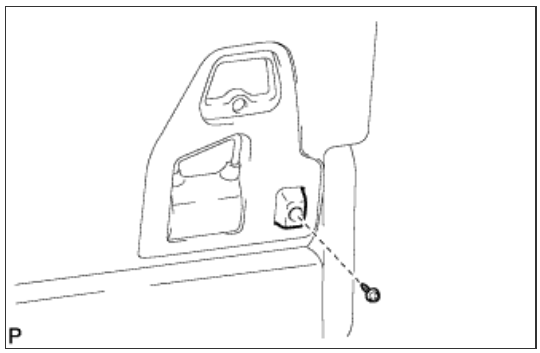
14. INSTALL REAR LOWER SEATBACK LOCK BEZEL

a. Attach the 3 claws and clip to install the seatback lock bezel.



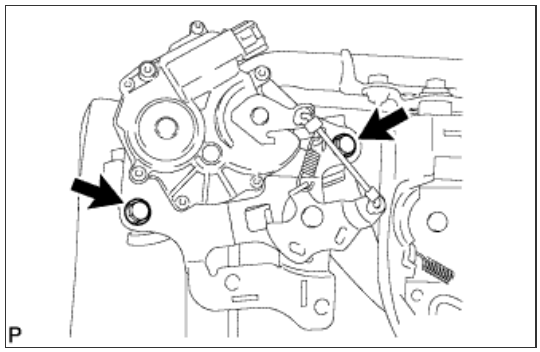
15. INSTALL REAR NO. 2 SEATBACK CUSHION

a. Install the seatback cushion with the screw.



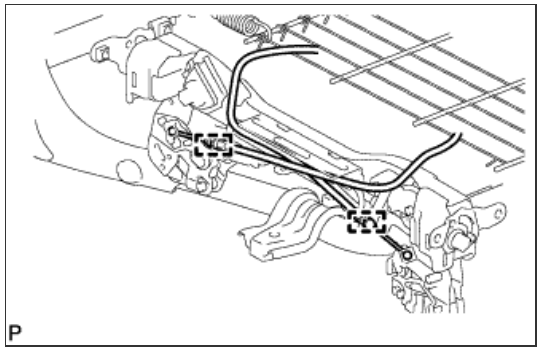
16. INSTALL REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH

a. Install the lever with the 2 bolts.

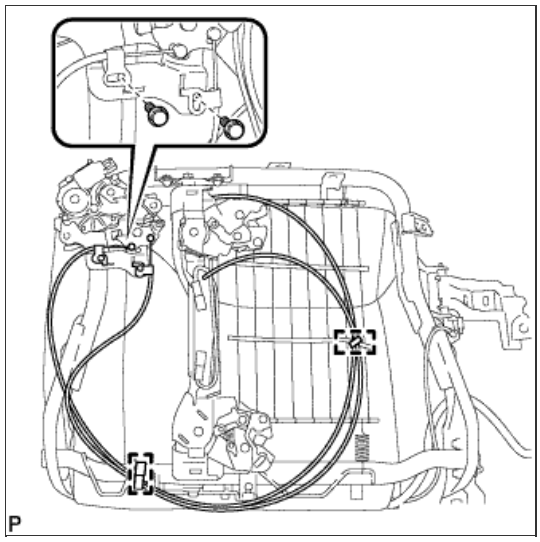


17. INSTALL NO. 3 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Attach the 2 cable clamps to connect the 2 cables.

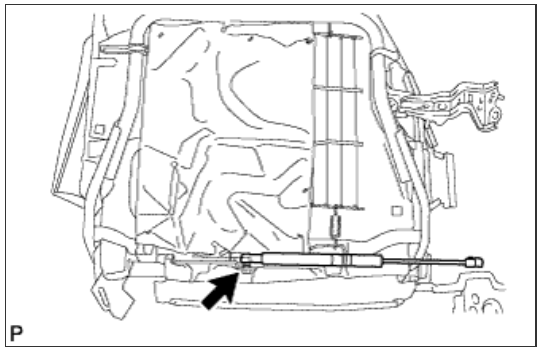


b. Attach the 2 clamps and then install the 2 cables with the 2 bolts.



18. INSTALL NO. 2 SEAT STAY SUB-ASSEMBLY

a. Install the seat stay with the bolt.

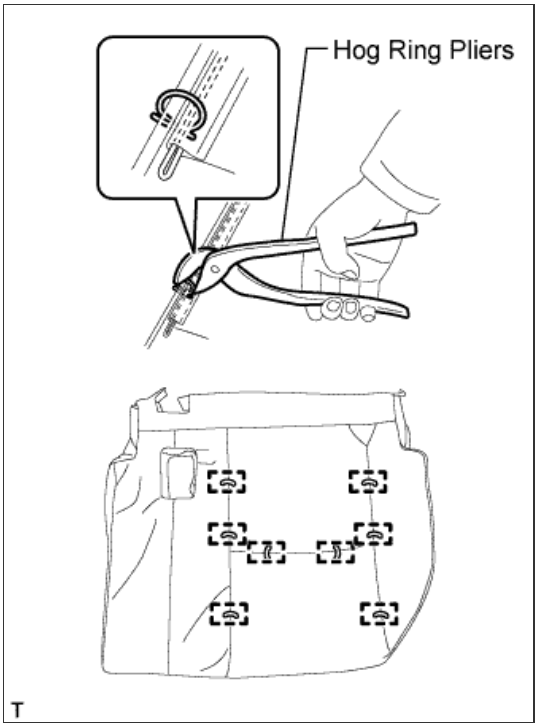


19. INSTALL NO. 3 SEAT CUSHION COVER SUB-ASSEMBLY LH

a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

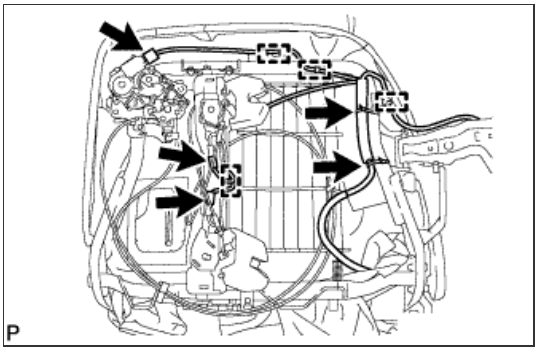
- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Attach the 4 clamps.

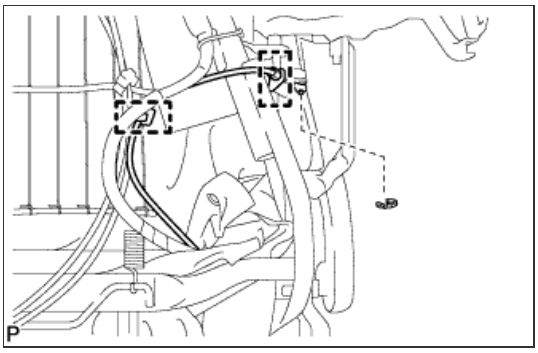
c. Connect the 3 connectors.

d. Install 2 new cable ties.



e. Install the E-ring and attach the clamp.

f. Attach the cable clamp and connect the cable.

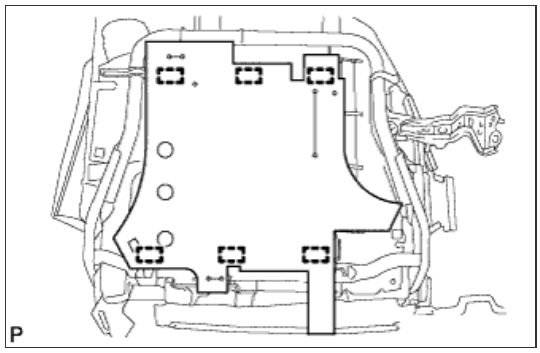


20. INSTALL NO. 3 SEAT CUSHION PAD LH

21. INSTALL SEAT CUSHION COVER WITH PAD

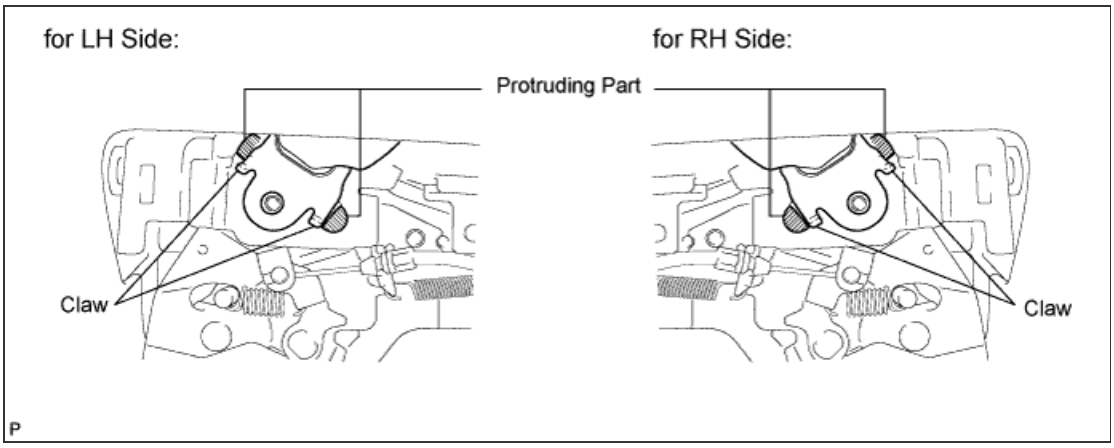
22. INSTALL REAR SEAT CUSHION CARPET

a. Install the seat cushion carpet with new tack pins.



23. INSTALL REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY

a. Install the 2 belts.



NOTICE:

- **Make sure the claws are facing away from the seat.**
- **Do not overlap the anchor part of the seat belt and protruding parts of the seat.**

24. INSTALL REAR SEAT OUTER BELT SUB-ASSEMBLY (for RH Side)

a. Install the belt with the nut.

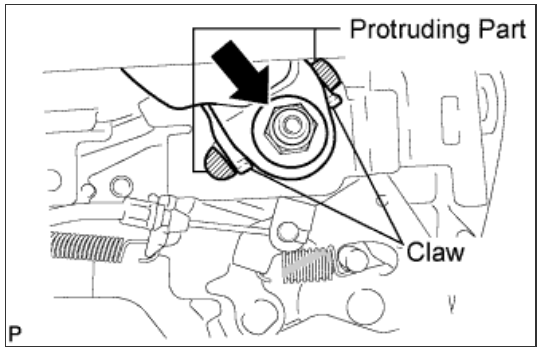
Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the seat.

HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat outer belt. Therefore, connect it when installing the rear seat outer belt.



25. INSTALL REAR SEAT INNER BELT SUB-ASSEMBLY (for LH Side)

a. Install the belt with the nut.

Torque:

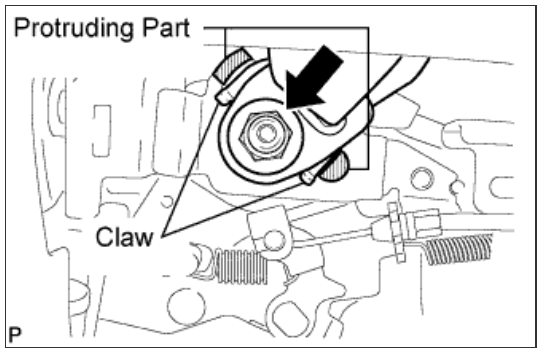
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the seat.

HINT:

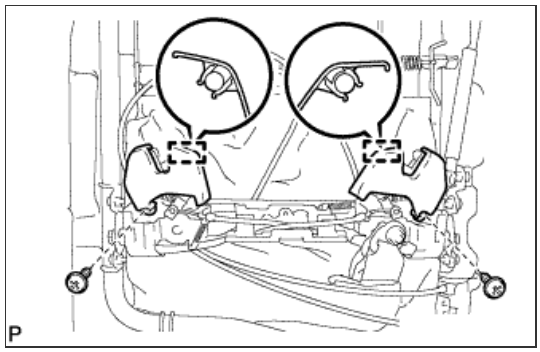
The rear No. 2 seat inner belt is fixed with the same nut as the rear seat inner belt. Therefore, connect it when installing the rear seat inner belt.



26. INSTALL REAR SEAT LOCK COVER LH

a. Attach the 2 clamps to install the 2 covers.

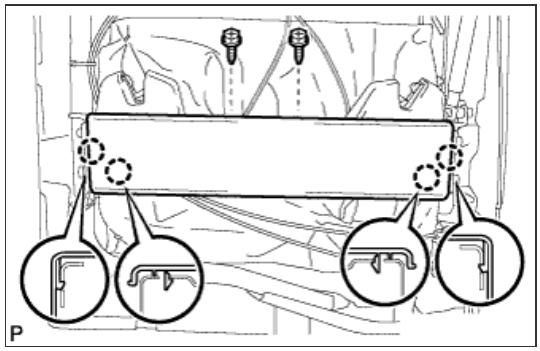
b. Install the 2 screws.



27. INSTALL NO. 3 SEAT LEG COVER NO. 2

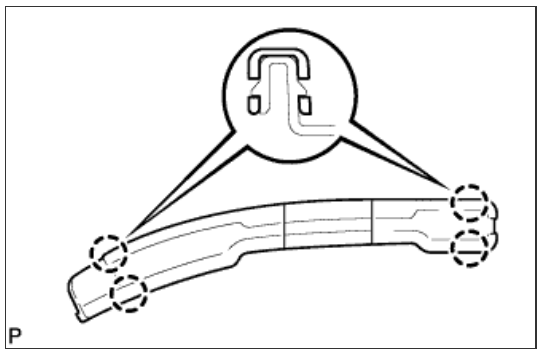
a. Attach the 4 claws to install the cover.

b. Install the 2 screws.



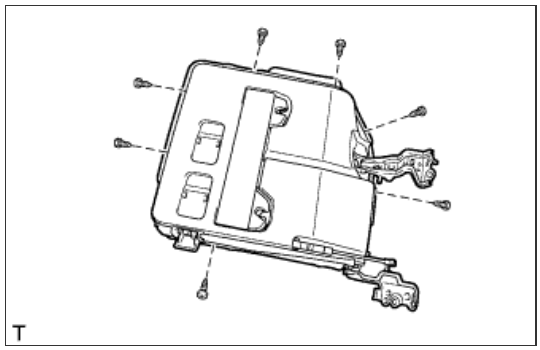
28. INSTALL NO. 3 SEAT FRONT BRACKET COVER LH

a. Attach the 4 claws to install the cover.

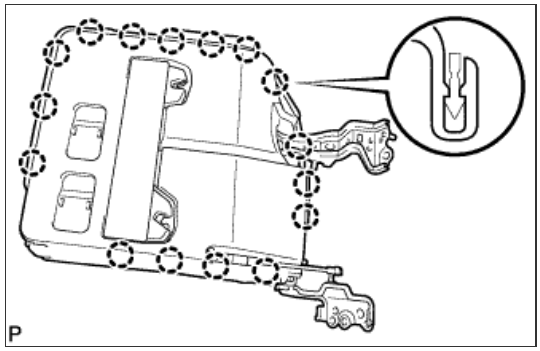


29. INSTALL REAR SEAT CUSHION UNDER COVER LH

a. Install the cover with the 7 screws.

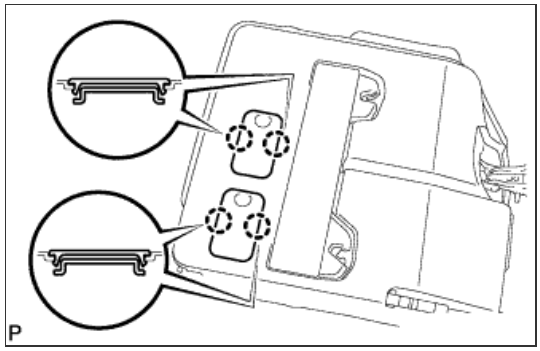


b. Attach the 16 claws.



30. INSTALL 3RD SEAT CUSHION LOCK COVER

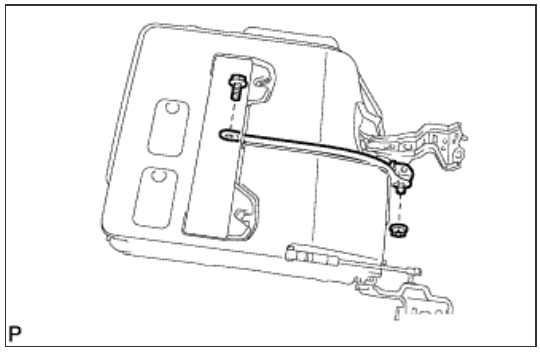
a. Attach the 4 claws to install the 2 covers.



31. INSTALL 3RD SEAT LINK SUB-ASSEMBLY LH

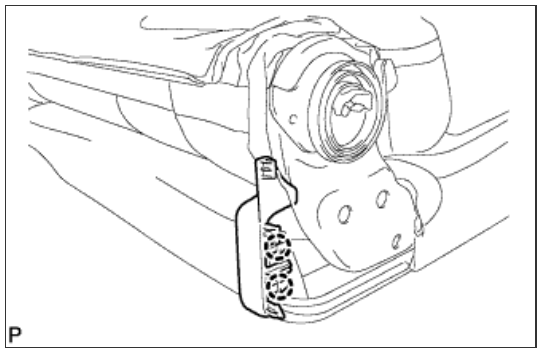
a. Install the seat link with the bolt and nut.

Torque:
8.5 N*m{ 87 kgf*cm , 75 in.*lbf }



32. INSTALL REAR SEAT INNER RECLINING COVER LH

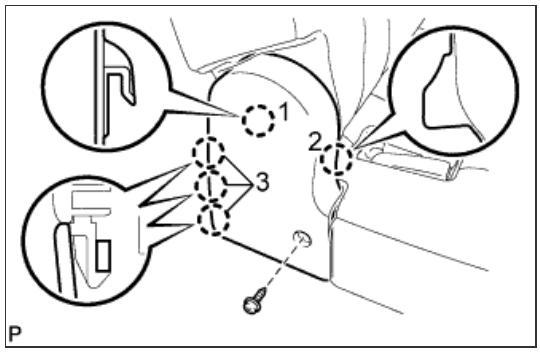
a. Attach the 2 claws to install the cover.



33. INSTALL RECLINING ADJUSTER COVER RH

a. Attach the 5 claws in the order shown in the illustration to install the cover.

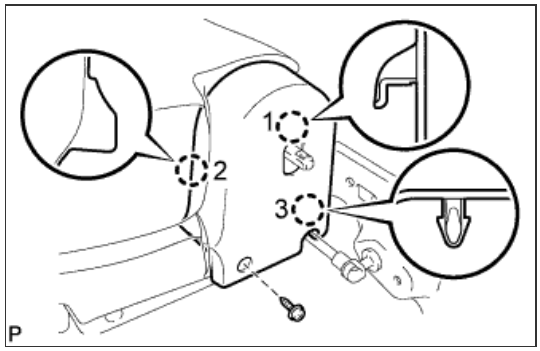
b. Install the screw.



34. INSTALL RECLINING ADJUSTER COVER LH

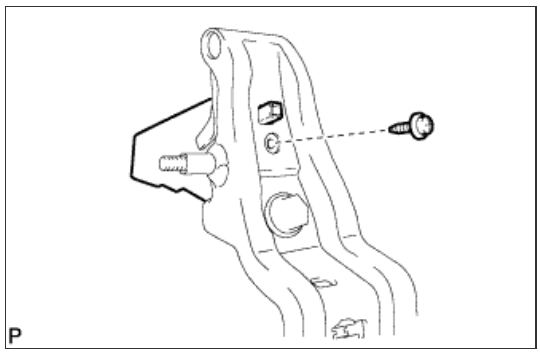
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the screw.



35. INSTALL NO. 2 SEAT LEG COVER NO. 2

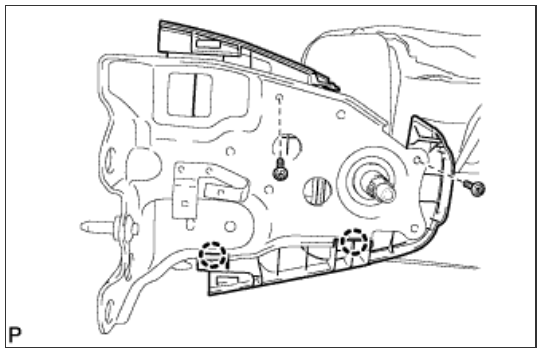
a. Install the seat leg cover with the screw.



36. INSTALL REAR NO. 3 SEAT LEG COVER LH

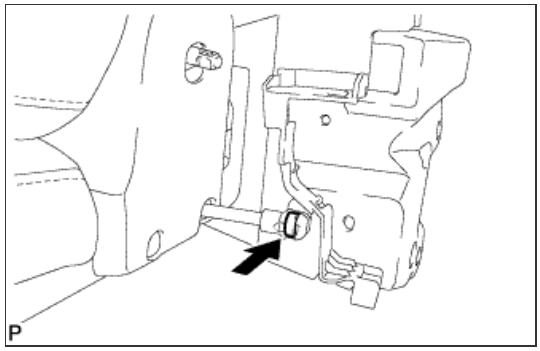
a. Attach the 2 claws to install the seat leg cover.

b. Install the 2 screws.



c. Install the spring of the seat stay ball joint.

d. Connect the seat stay to the seat frame.

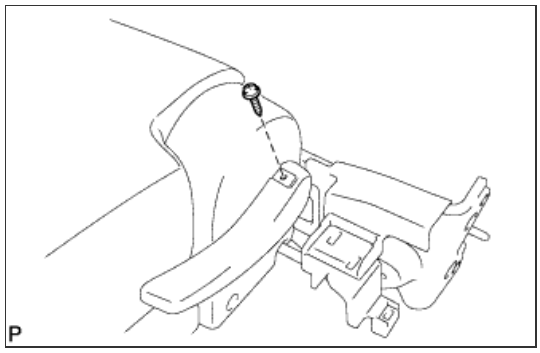


37. INSTALL REAR SEAT REAR BRACKET COVER REAR

a. Attach the 2 claws to install the cover.

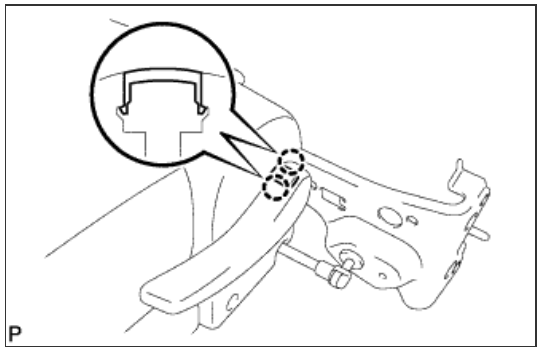
38. INSTALL NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



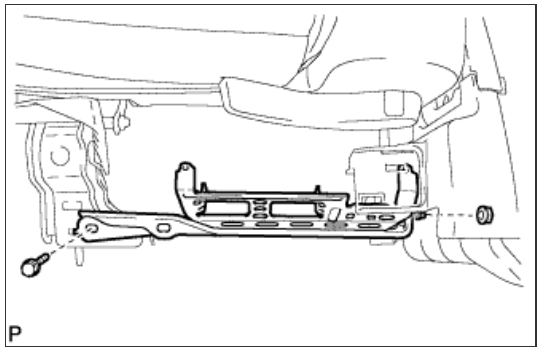
39. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.

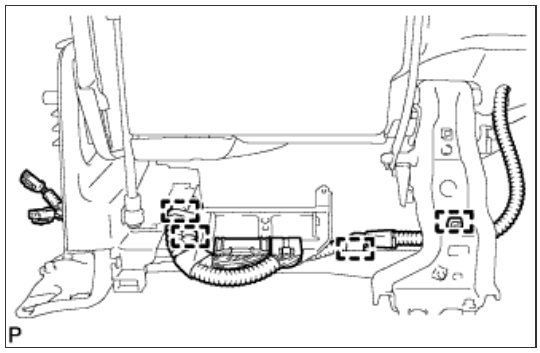


40. INSTALL REAR NO. 2 SEAT LEG BRACKET REAR LH

a. Install the bracket with the bolt and nut.



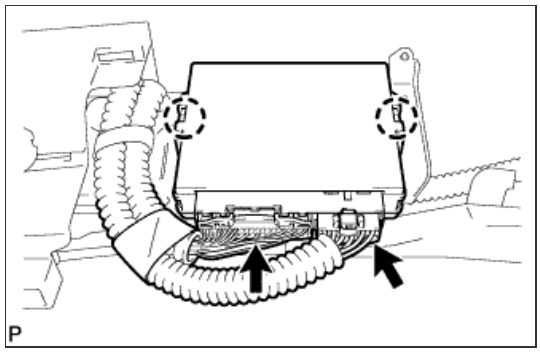
b. Attach the 4 clamps.



41. INSTALL FOLD SEAT CONTROL ECU

a. Attach the 2 claws to install the ECU.

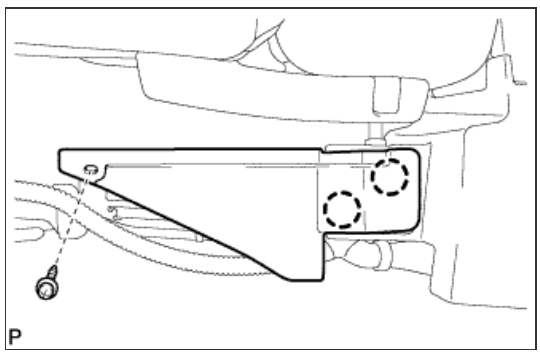
b. Connect the 2 connectors.



42. INSTALL NO. 2 SEAT CUSHION COVER

a. Attach the 2 claws to install the cover.

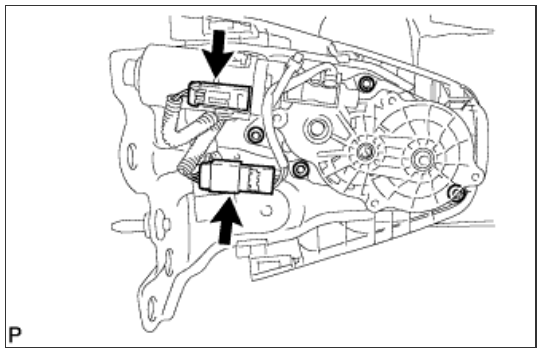
b. Install the screw.



43. INSTALL POWER SEAT MOTOR SUB-ASSEMBLY

a. Using a 5 mm hexagon socket wrench, install the motor with the 4 bolts.

b. Connect the 2 connectors.



for Preparation Click here

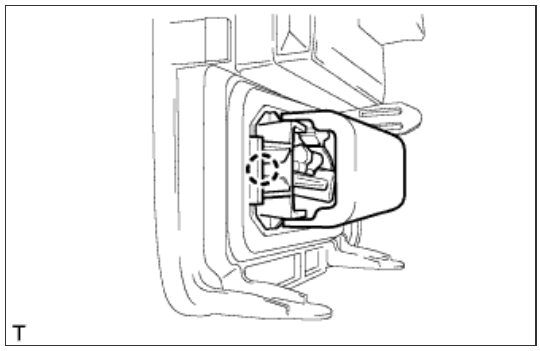
HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

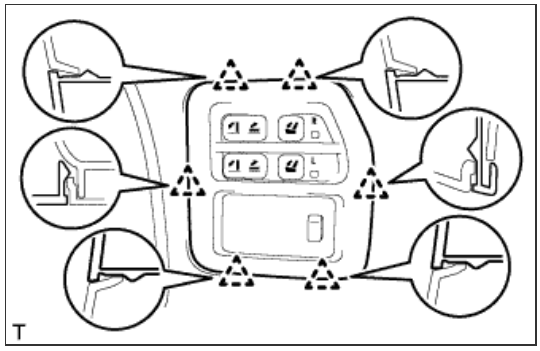
1. INSTALL FOLD SEAT SWITCH ASSEMBLY

a. Attach the claw to install the light.

b. Connect the connector.



c. Attach the 6 clips to install the fold seat switch.

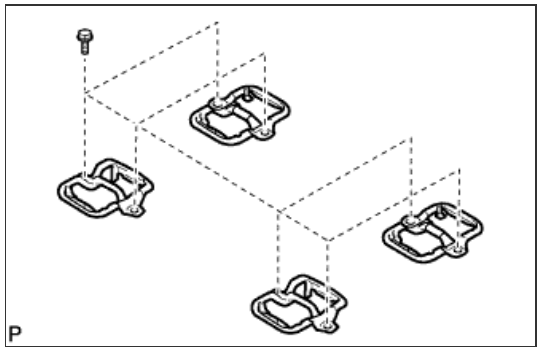


2. INSTALL REAR SEAT LOCK STRIKER SUB-ASSEMBLY

a. Install the 4 seat lock strikers with the 8 bolts.

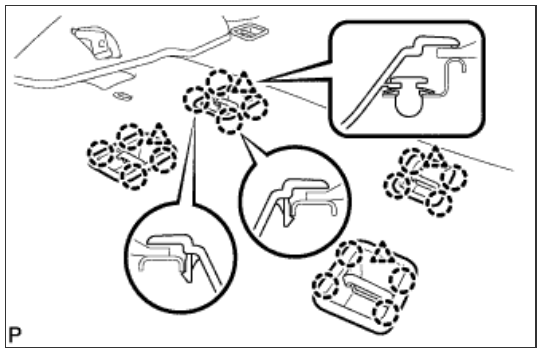
Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }

b. Return the floor carpet to its original position.



3. INSTALL NO. 3 SEAT CUSHION COVER

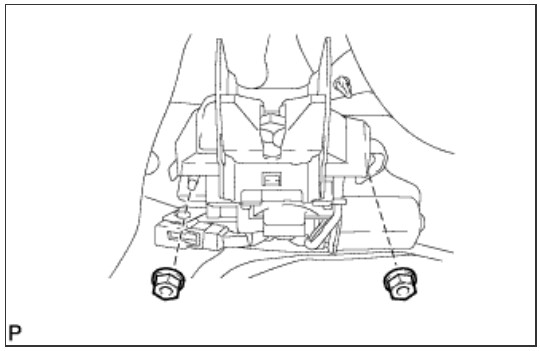
a. Attach the 16 claws and 4 clips to install the 4 seat cushion covers.



4. INSTALL FOLD SEAT LEG LOCK SUB-ASSEMBLY

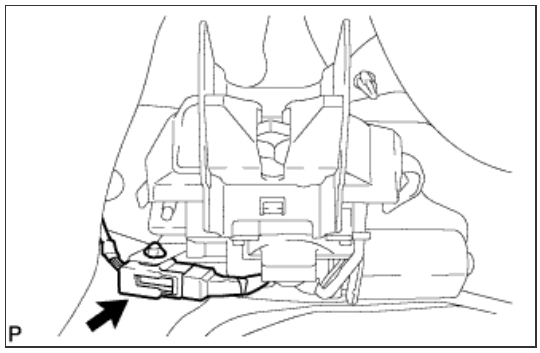
a. Install the fold seat leg lock with the 2 nuts.

Torque:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }



b. Attach the 2 cable clamps.

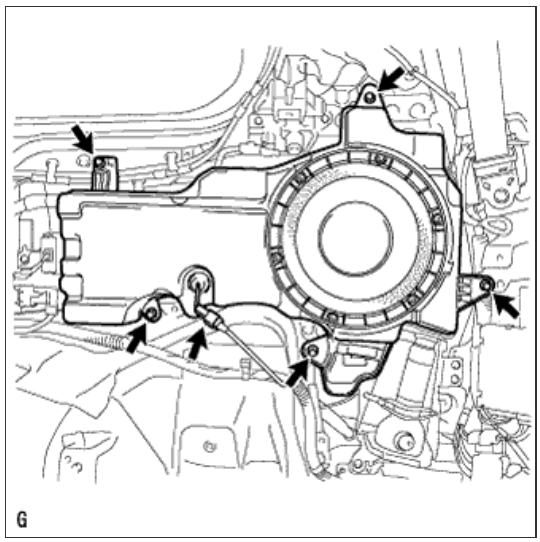
c. Connect the connector.



5. INSTALL NO. 1 WOOFER BOX SPEAKER ASSEMBLY (for RH Side, w/ Woofer)

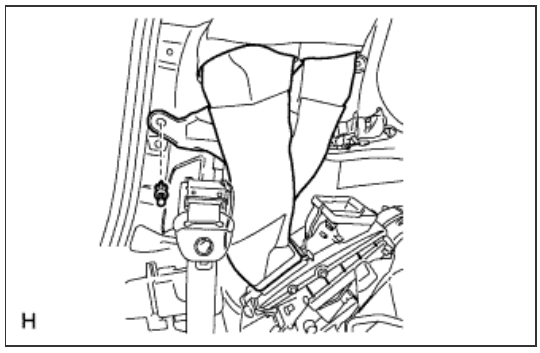
a. Install the box speaker with the 5 bolts.

b. Connect the connector.

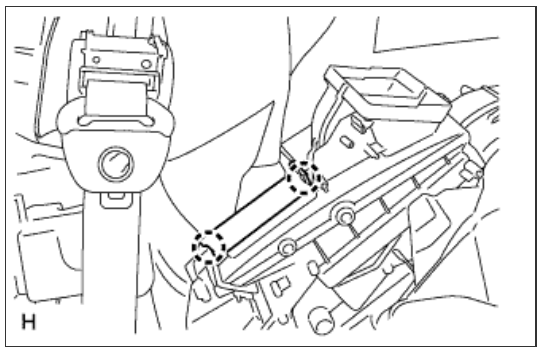


6. INSTALL REAR ROOF NO. 1 AIR DUCT (for LH Side)

a. Install the duct with the clip.



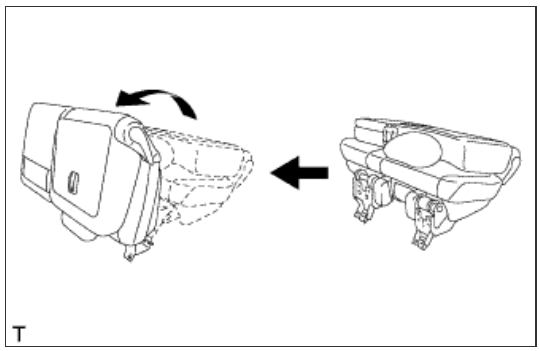
b. Attach the 2 claws to install the cooler plate.



7. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



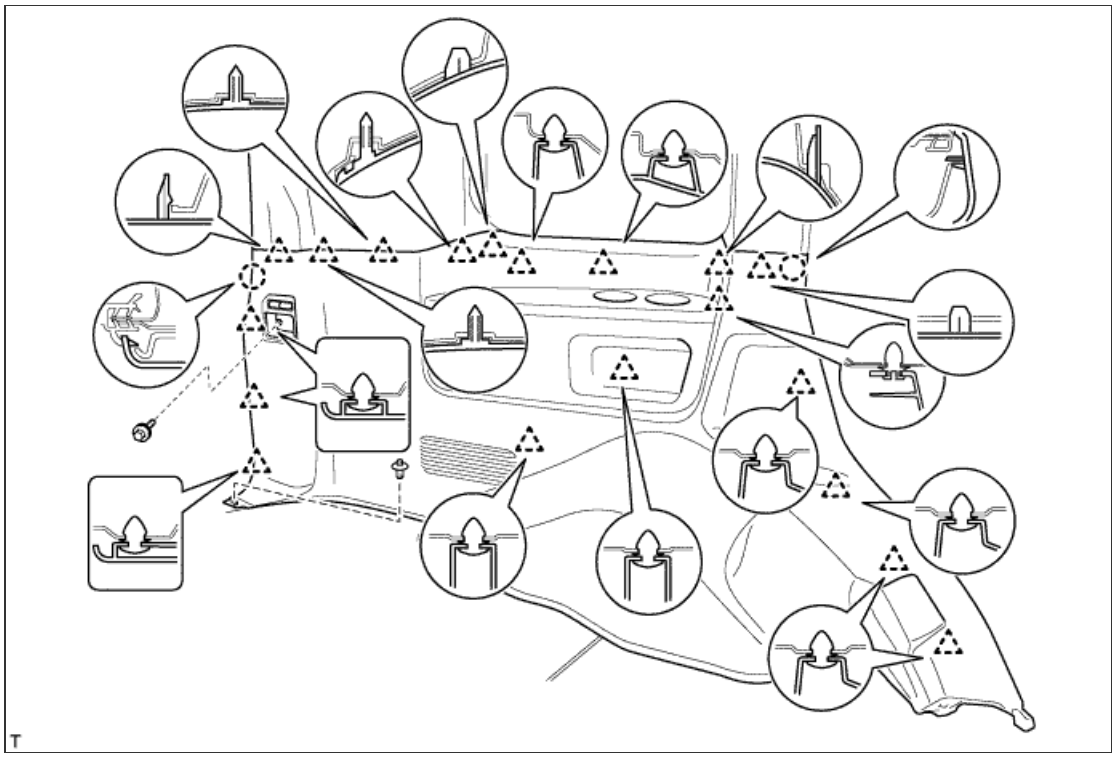
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

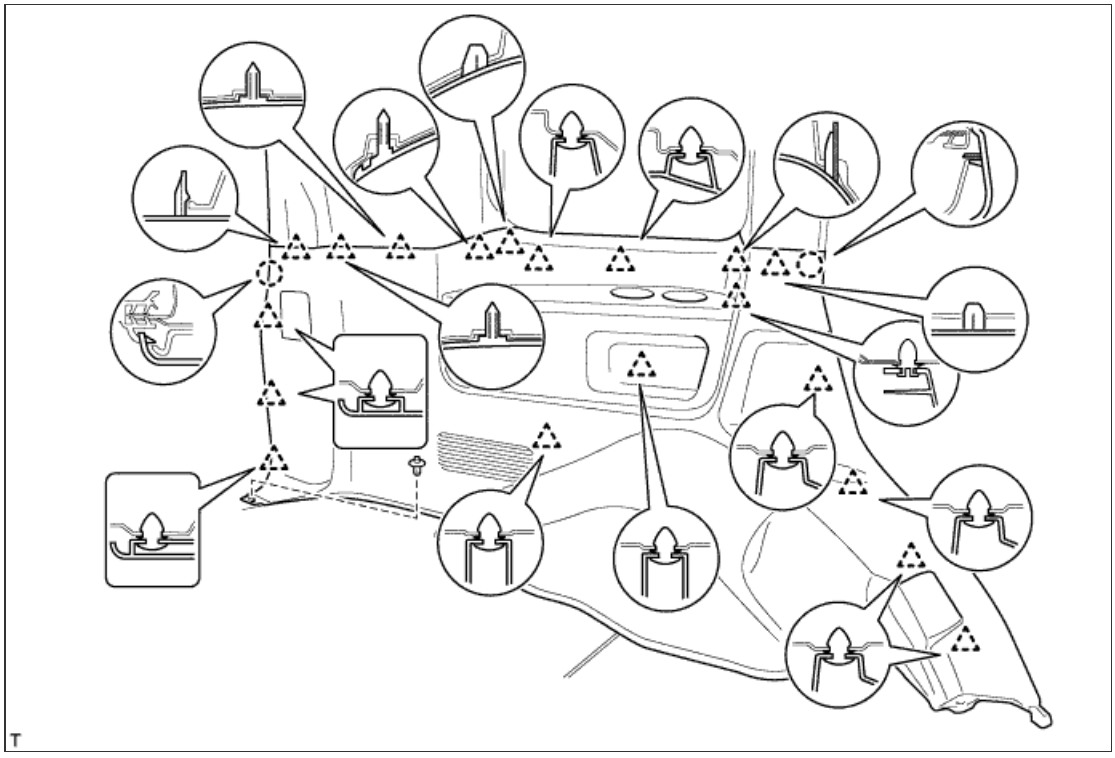


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

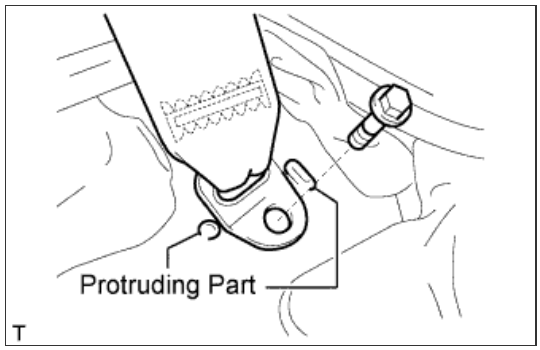


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

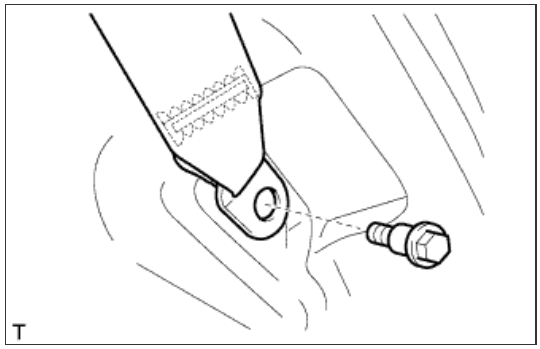
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

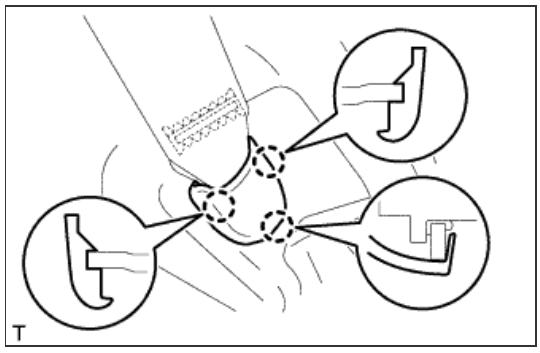


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

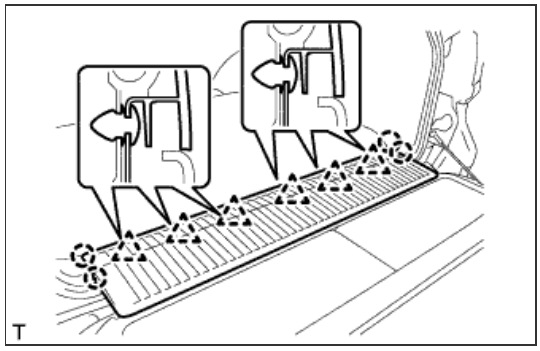


e. Attach the 3 claws to install the cover.



8. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.

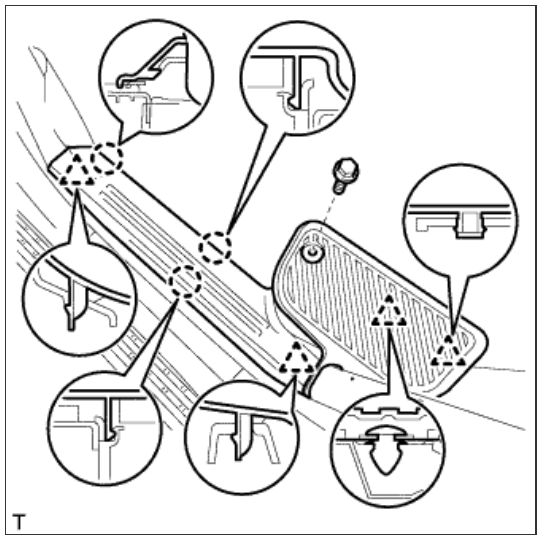


9. INSTALL REAR DOOR SCUFF PLATE LH

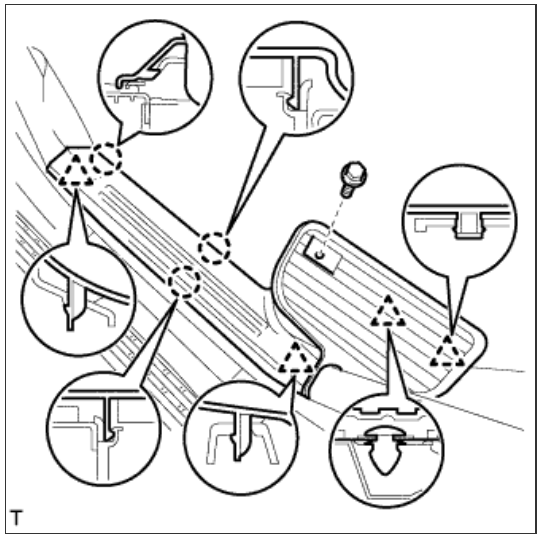
a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

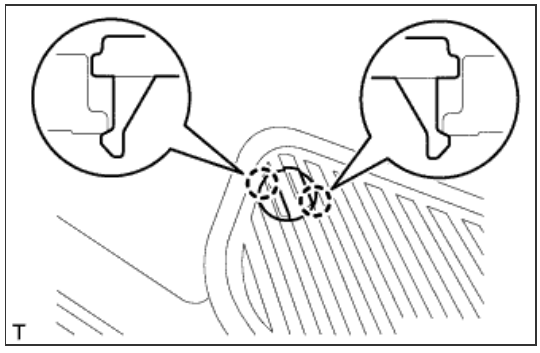
ii. Install the screw.

10. INSTALL REAR STEP COVER

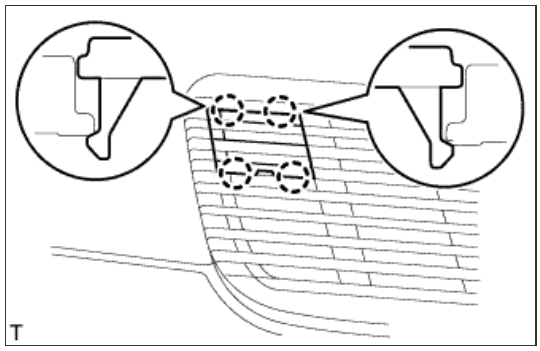
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



11. INSTALL REAR NO. 2 SEAT ASSEMBLY

a. Temporarily install the seat with the 4 bolts.

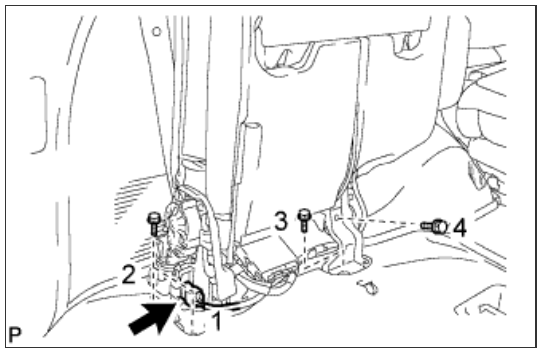
NOTICE:

Be careful not to damage the vehicle body.

b. Tighten the bolts in the order shown in the illustration.

Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }

c. Connect the connector.



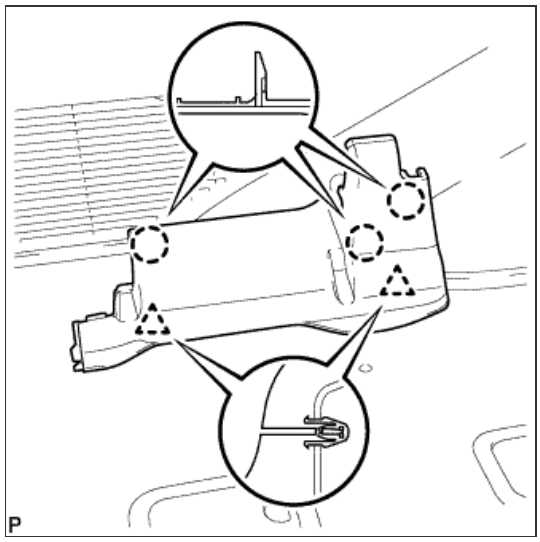
12. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

13. INSTALL REAR NO. 2 SEAT HINGE COVER LH

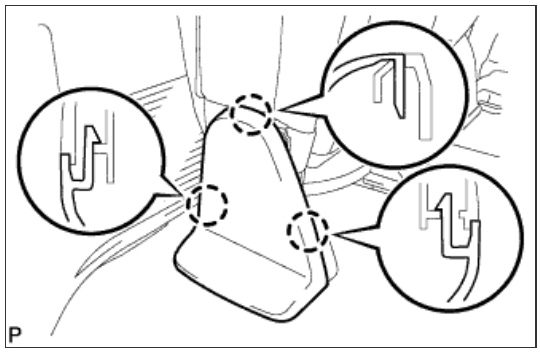
a. Attach the 3 claws and 2 clips to install the cover.



14. INSTALL REAR SEAT CUSHION HINGE COVER LH

a. Attach the 3 claws to install the cover.

b. Return the seat to the upright position.



15. INSTALL REAR NO. 2 SEAT HEADREST ASSEMBLY LH

for Preparation Click here

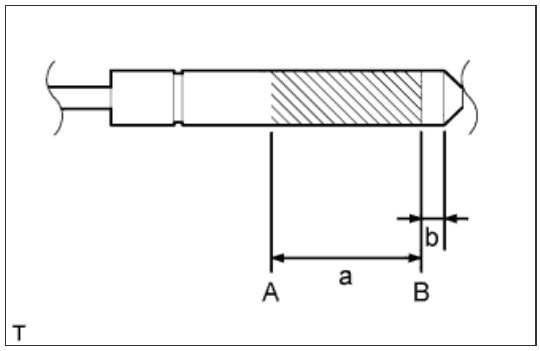
HINT:

- **Use the same procedures for the LH side and RH side**
- **The procedures listed below are for the LH side.**

1. DISPOSE OF NO. 2 SEAT STAY SUB-ASSEMBLY

a. Horizontally fix the seat stay in a vise with the piston rod pulled out.

b. Wear safety glasses. Gradually cut an area between A and B shown in the illustration using a metal saw and gradually release the gas.



Standard:

Area	Specified Condition
a	80 mm (3.15 in.)
b	10 mm (0.394 in.)

CAUTION:

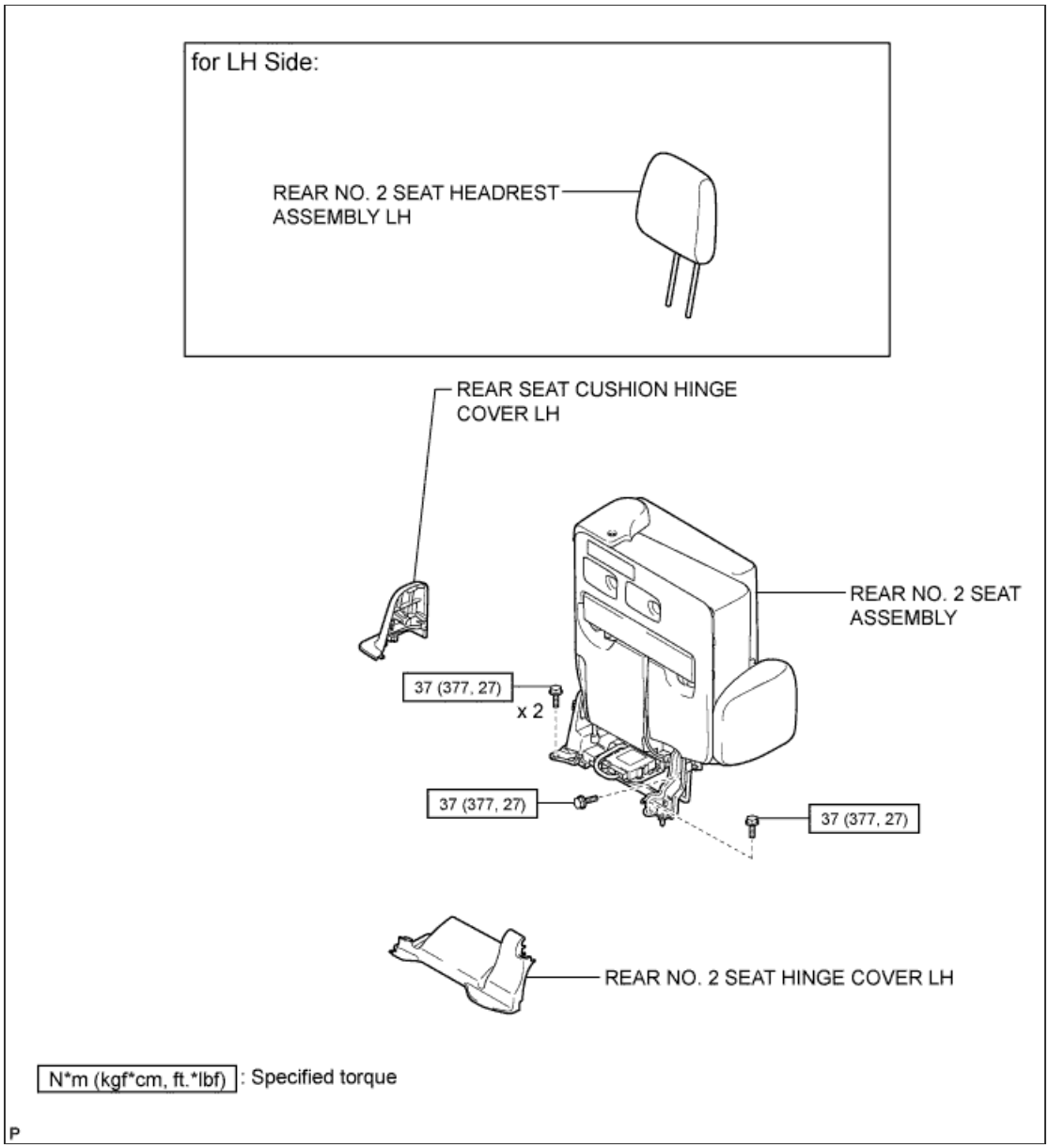
As metal debris may be blown outward by the gas, you must:

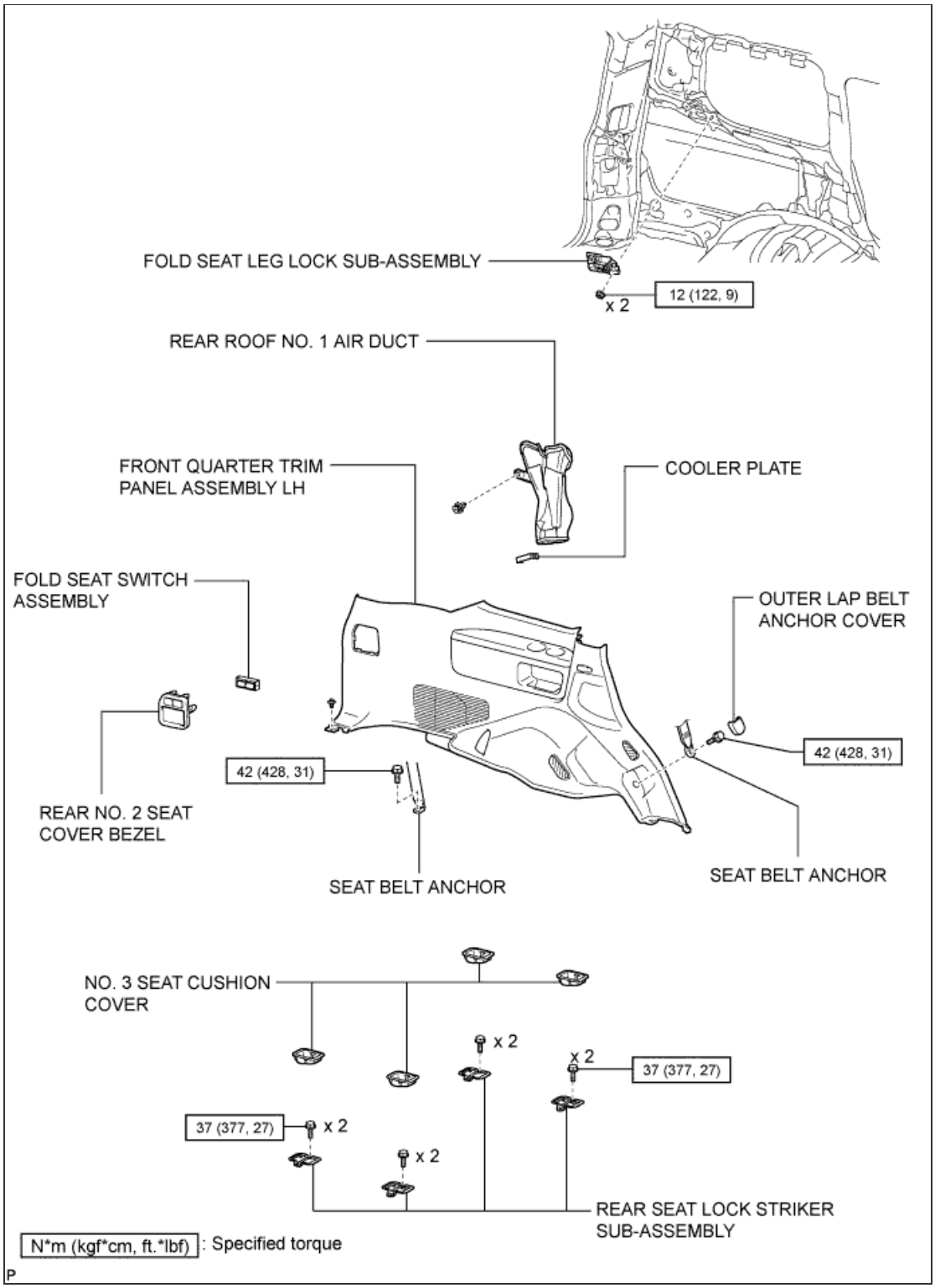
- **Wear protective glasses.**
- **Cover the area being cut.**

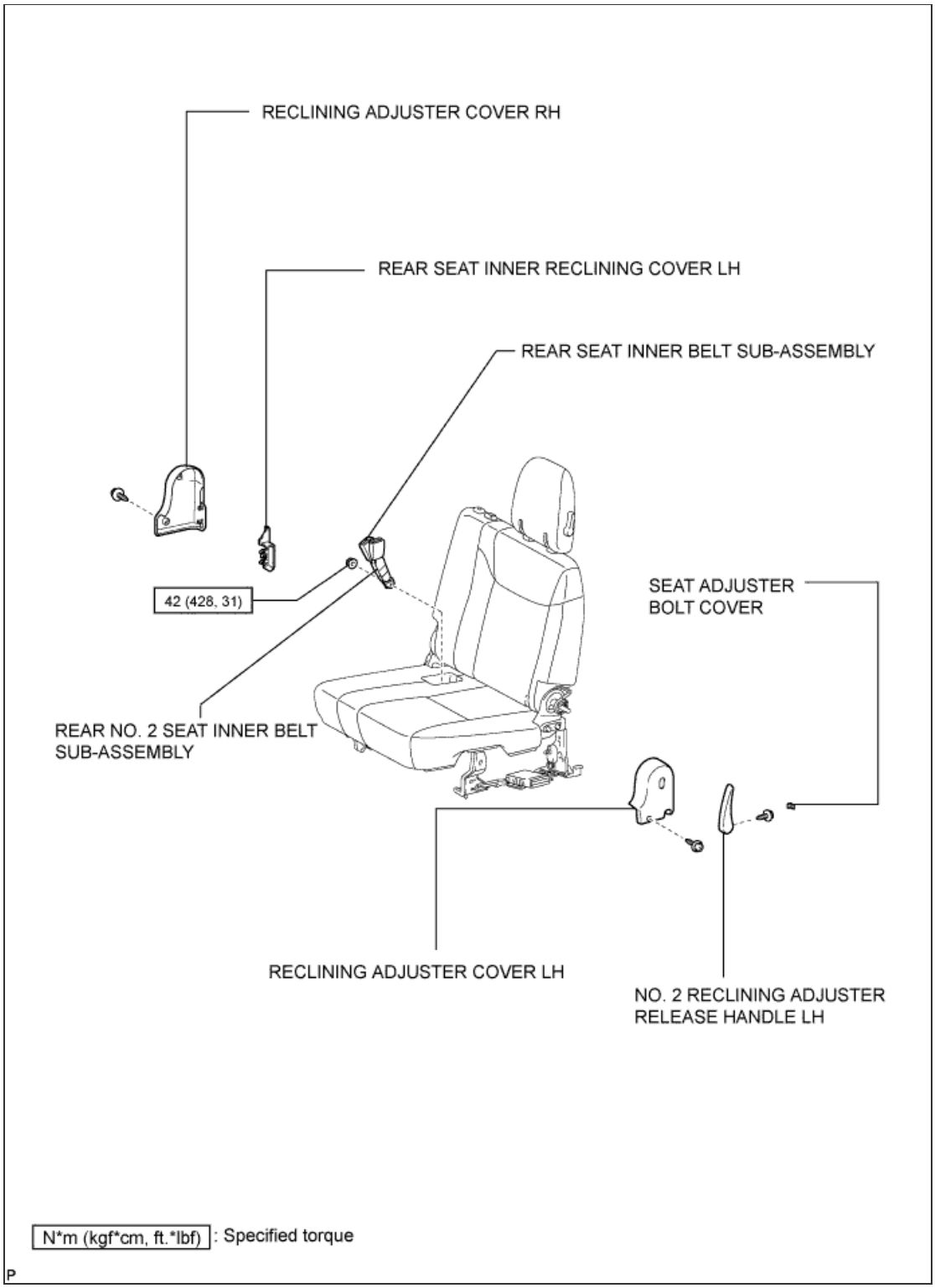
NOTICE:

The gas inside the seat stay is colorless, odorless and harmless. There is a possibility that metal debris could scatter, so cover the part with a piece of cloth or other material.

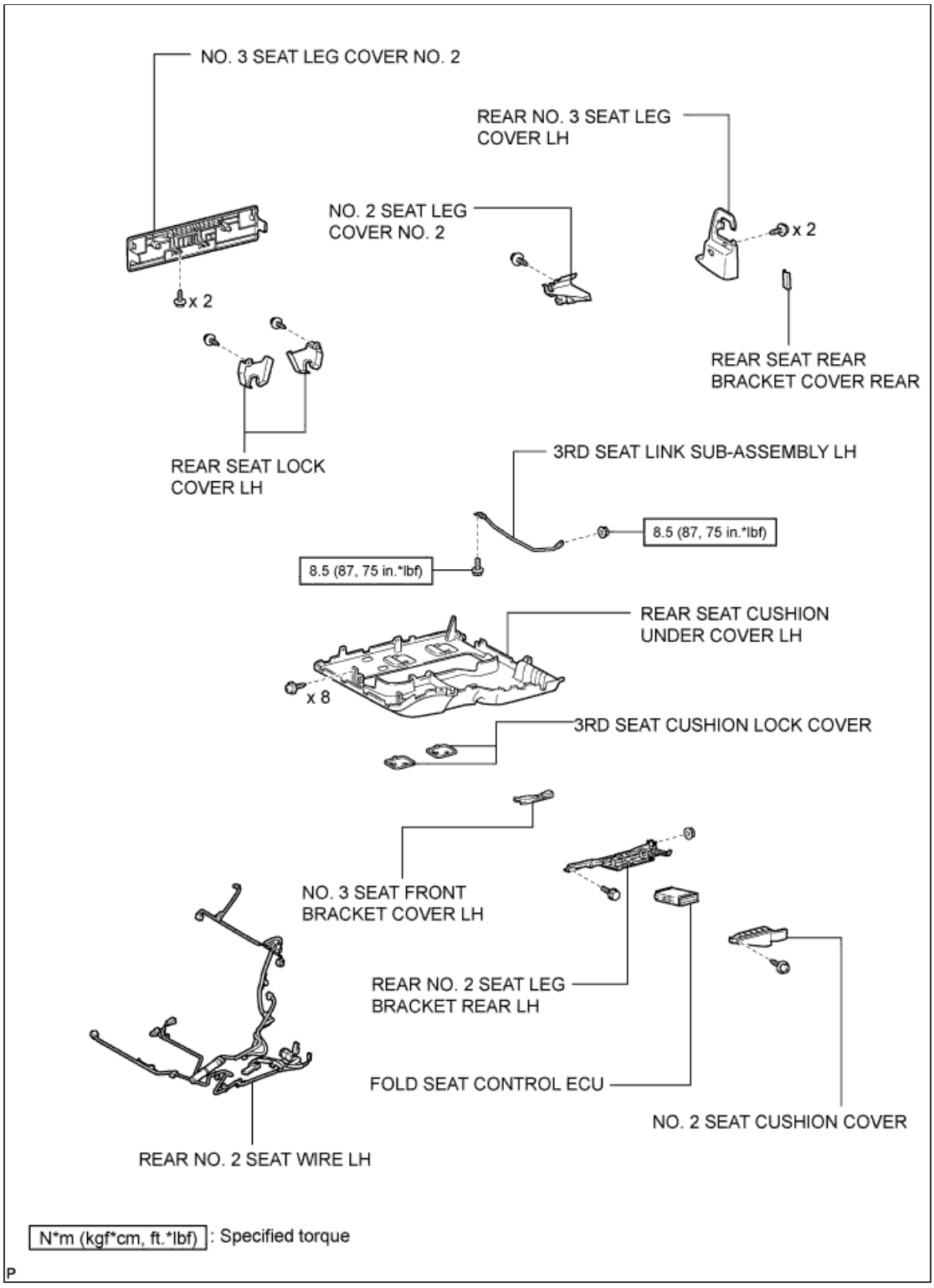
for Preparation Click here



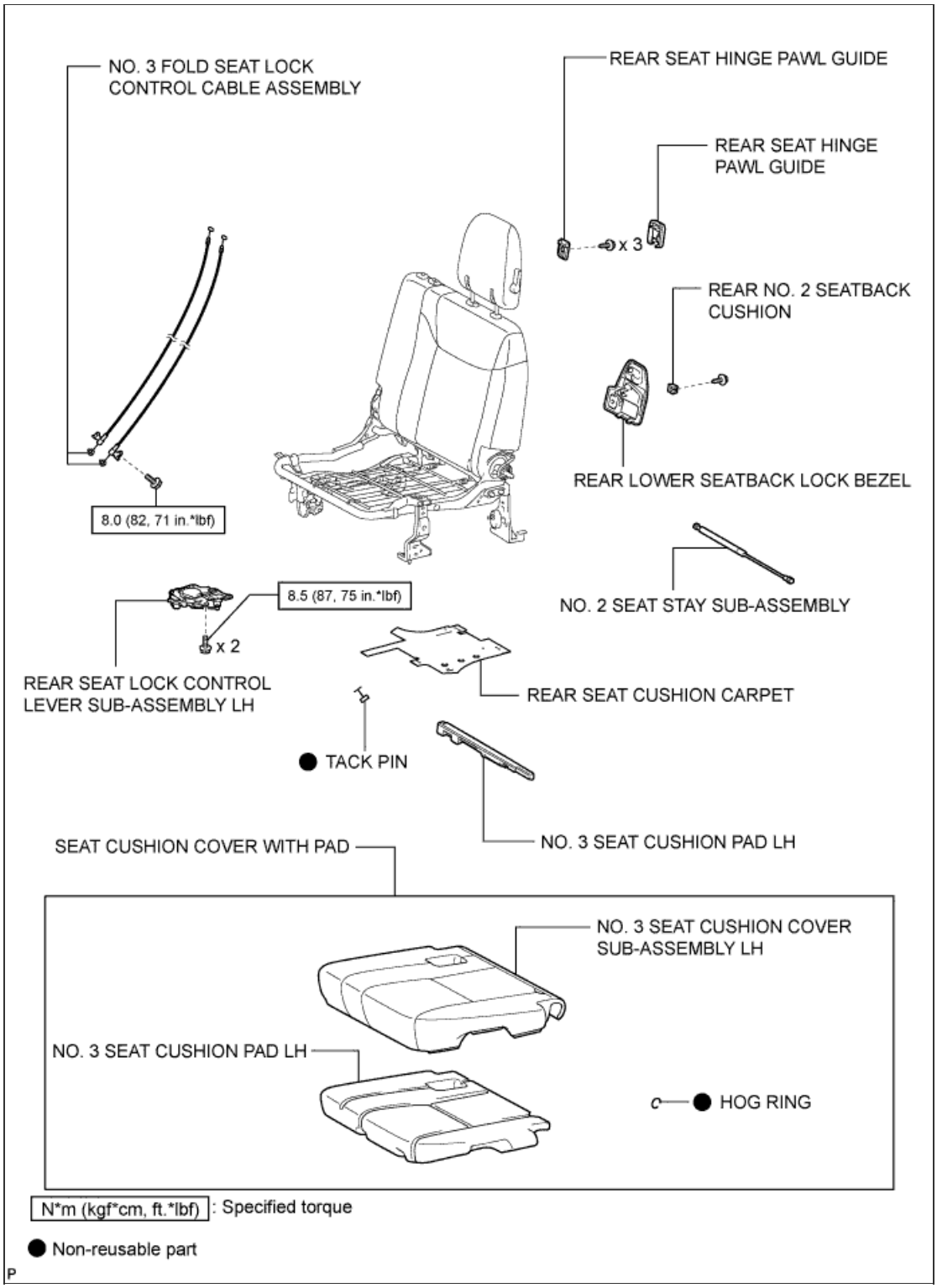

FOLD SEAT LEG LOCK SUB-ASSEMBLY
x 2
12 (122, 9)
REAR ROOF NO. 1 AIR DUCT
FRONT QUARTER TRIM PANEL ASSEMBLY LH
COOLER PLATE
FOLD SEAT SWITCH ASSEMBLY
OUTER LAP BELT ANCHOR COVER
42 (428, 31)
42 (428, 31)
REAR NO. 2 SEAT COVER BEZEL
SEAT BELT ANCHOR
SEAT BELT ANCHOR
NO. 3 SEAT CUSHION COVER
x 2
x 2
37 (377, 27)
37 (377, 27)
x 2
x 2
REAR SEAT LOCK STRIKER SUB-ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
P

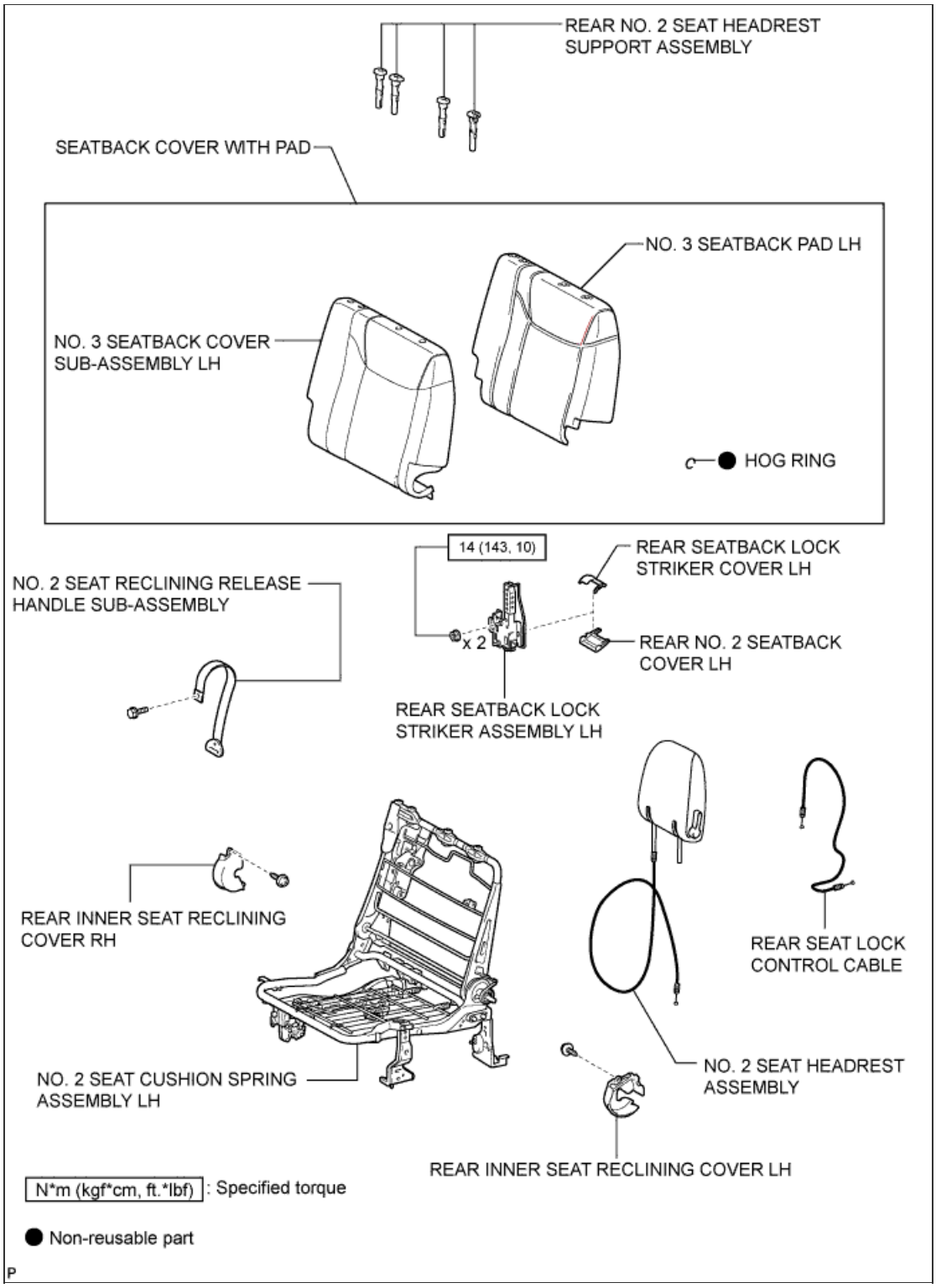

RECLINING ADJUSTER COVER RH
REAR SEAT INNER RECLINING COVER LH
REAR SEAT INNER BELT SUB-ASSEMBLY
42 (428, 31)
SEAT ADJUSTER BOLT COVER
REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY
RECLINING ADJUSTER COVER LH
NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH
N*m (kgf*cm, ft.*lbf) : Specified torque

P

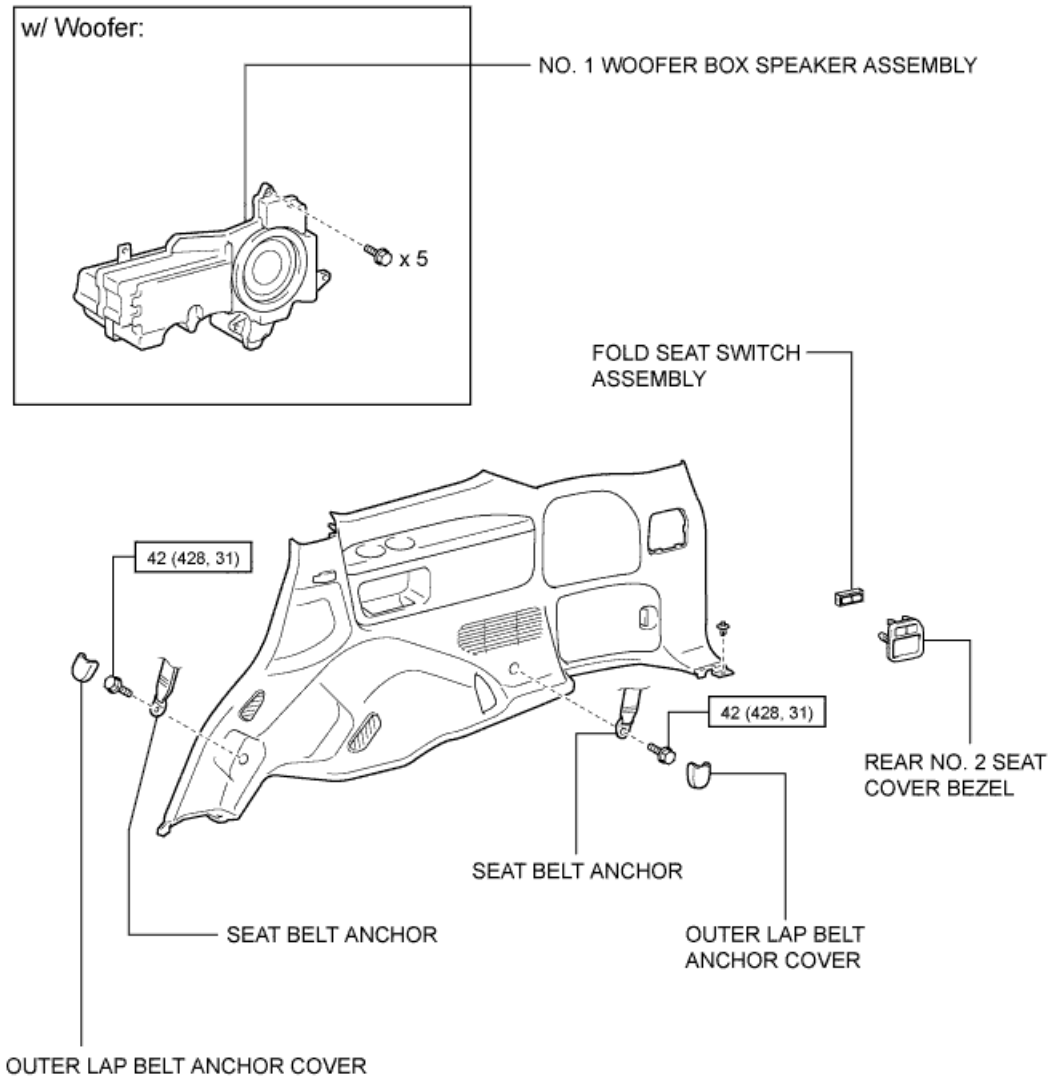

NO. 3 SEAT LEG COVER NO. 2
REAR NO. 3 SEAT LEG COVER LH
NO. 2 SEAT LEG COVER NO. 2
x 2
x 2
REAR SEAT REAR BRACKET COVER REAR
REAR SEAT LOCK COVER LH
3RD SEAT LINK SUB-ASSEMBLY LH
8.5 (87, 75 in.*lbf)
8.5 (87, 75 in.*lbf)
REAR SEAT CUSHION UNDER COVER LH
x 8
3RD SEAT CUSHION LOCK COVER
NO. 3 SEAT FRONT BRACKET COVER LH
REAR NO. 2 SEAT LEG BRACKET REAR LH
FOLD SEAT CONTROL ECU
NO. 2 SEAT CUSHION COVER
REAR NO. 2 SEAT WIRE LH
N*m (kgf*cm, ft.*lbf) : Specified torque

P


NO. 3 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY
REAR SEAT HINGE PAWL GUIDE
REAR SEAT HINGE PAWL GUIDE
x 3
REAR NO. 2 SEATBACK CUSHION
REAR LOWER SEATBACK LOCK BEZEL
8.0 (82, 71 in.*lbf)
NO. 2 SEAT STAY SUB-ASSEMBLY
8.5 (87, 75 in.*lbf)
x 2
REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH
REAR SEAT CUSHION CARPET
TACK PIN
NO. 3 SEAT CUSHION PAD LH
SEAT CUSHION COVER WITH PAD
NO. 3 SEAT CUSHION COVER SUB-ASSEMBLY LH
NO. 3 SEAT CUSHION PAD LH
HOG RING
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
P

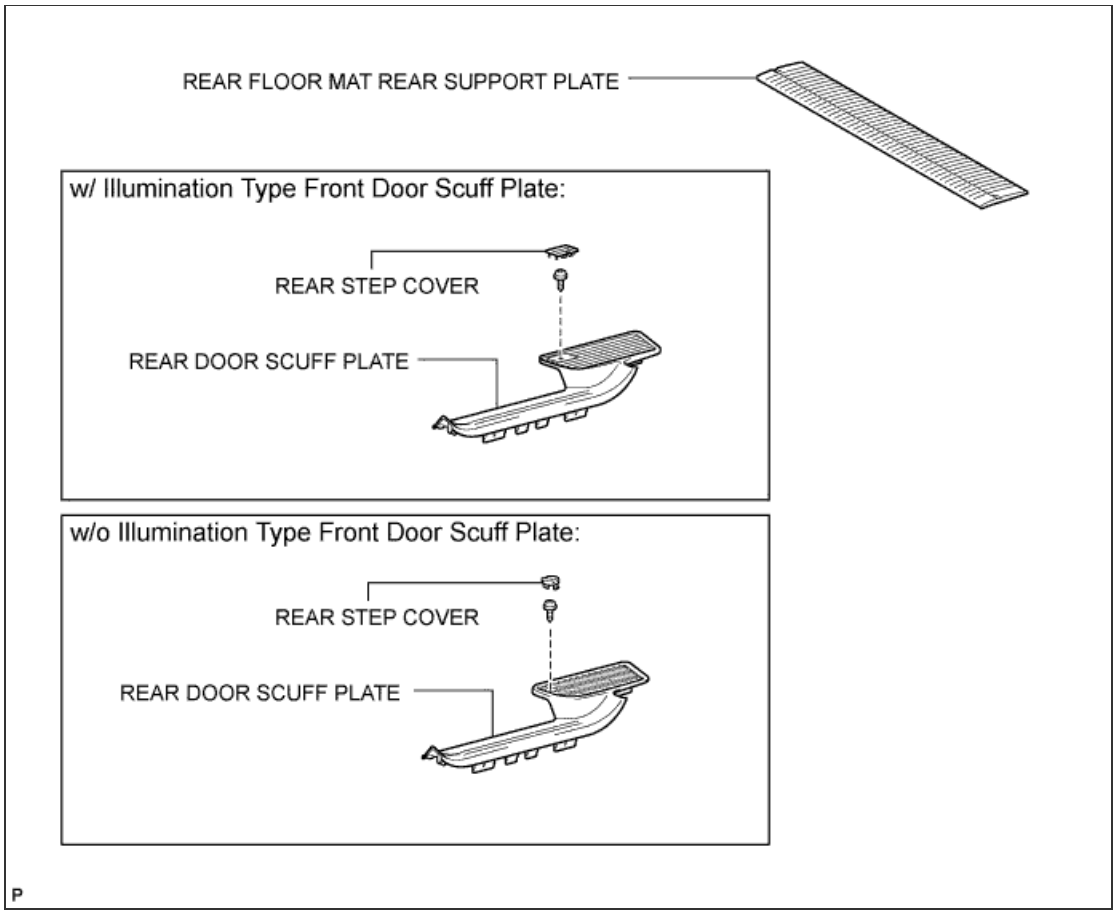

REAR NO. 2 SEAT HEADREST SUPPORT ASSEMBLY
SEATBACK COVER WITH PAD
NO. 3 SEATBACK PAD LH
NO. 3 SEATBACK COVER SUB-ASSEMBLY LH
HOG RING
14 (143, 10)
REAR SEATBACK LOCK STRIKER COVER LH
NO. 2 SEAT RECLINING RELEASE HANDLE SUB-ASSEMBLY
x 2
REAR NO. 2 SEATBACK COVER LH
REAR SEATBACK LOCK STRIKER ASSEMBLY LH
REAR INNER SEAT RECLINING COVER RH
REAR SEAT LOCK CONTROL CABLE
NO. 2 SEAT CUSHION SPRING ASSEMBLY LH
NO. 2 SEAT HEADREST ASSEMBLY
REAR INNER SEAT RECLINING COVER LH
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
P

for RH Side:

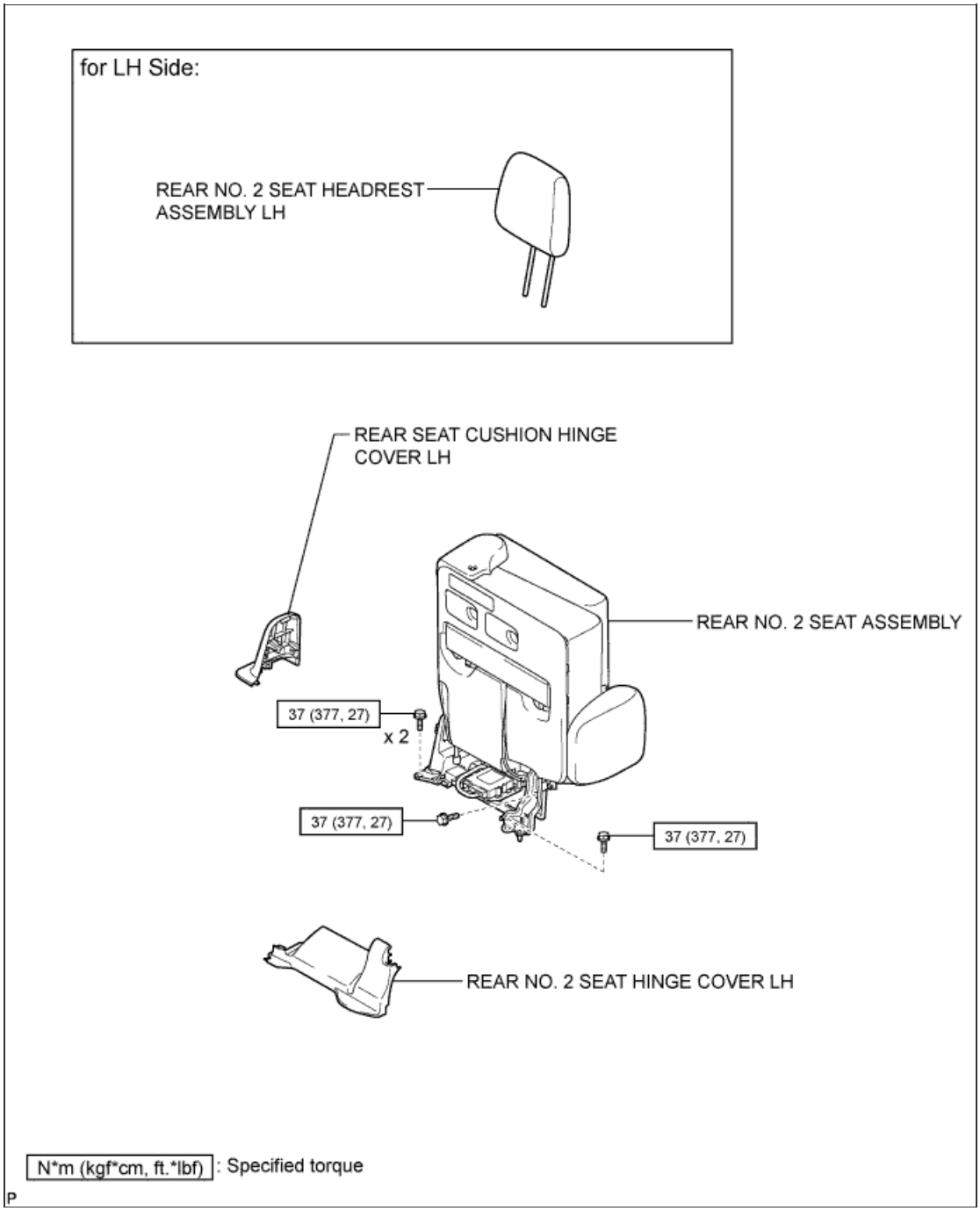


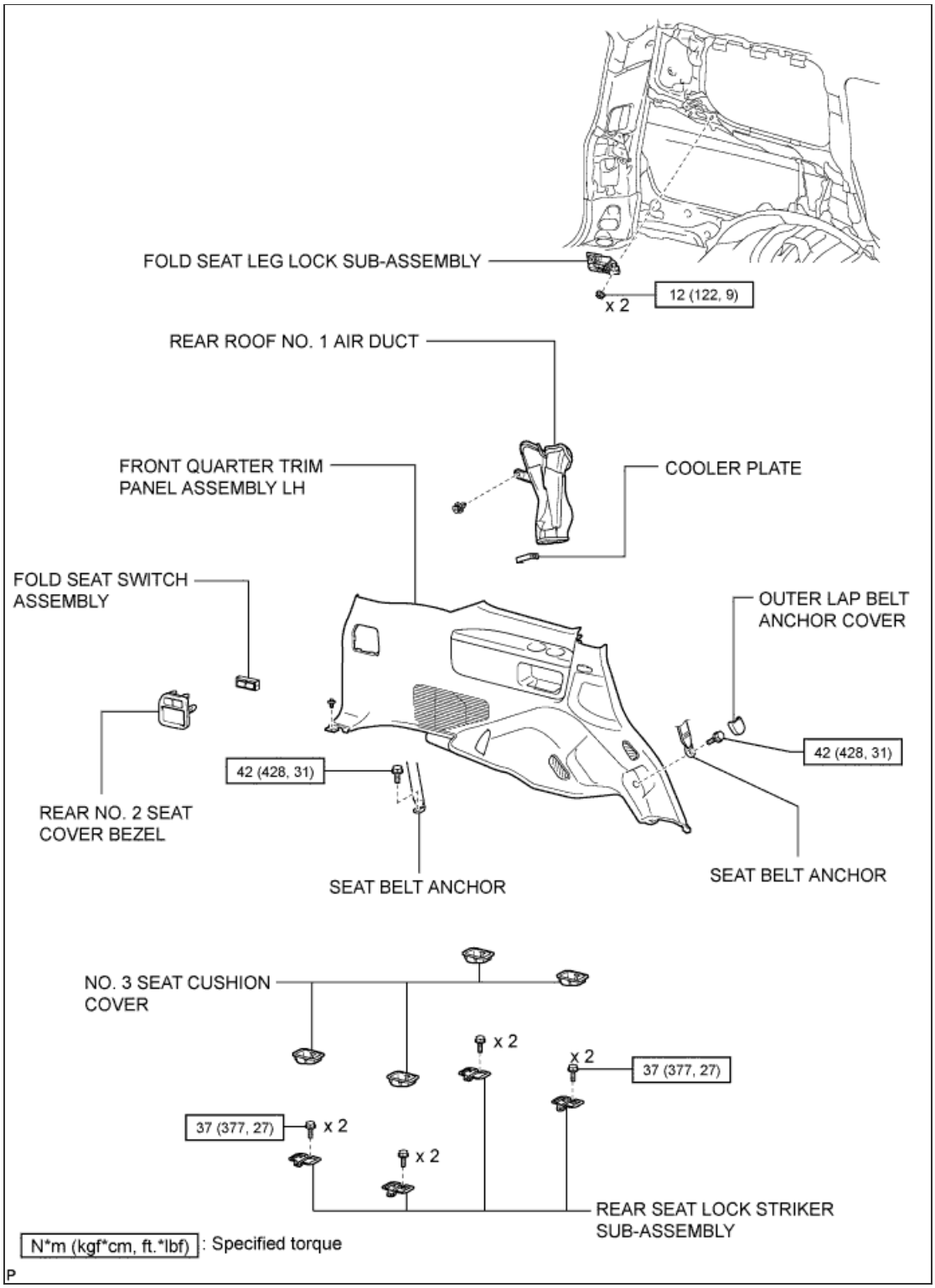
N*m (kgf*cm, ft.*lbf) : Specified torque

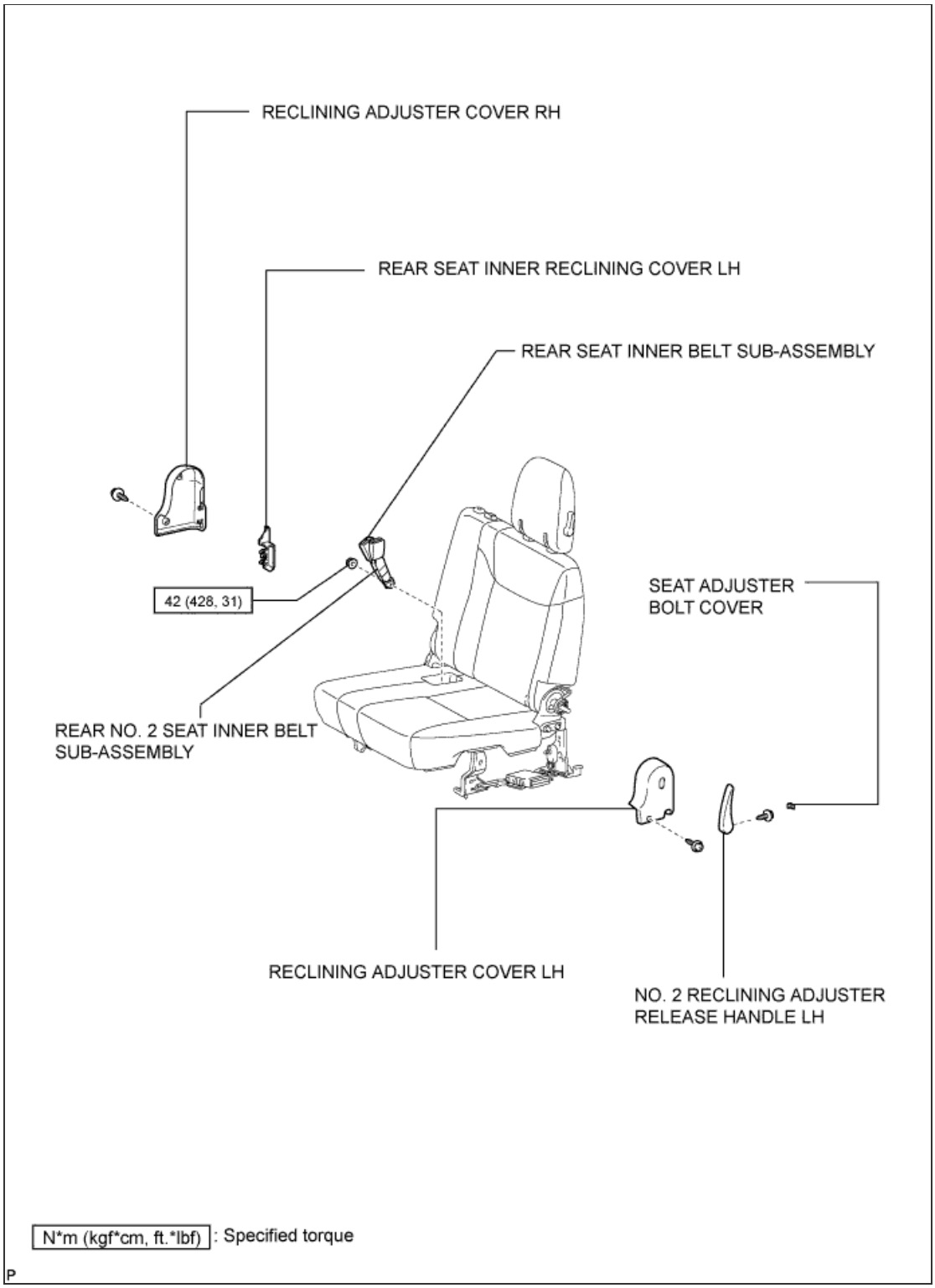
P


REAR FLOOR MAT REAR SUPPORT PLATE
w/ Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE
w/o Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE
P

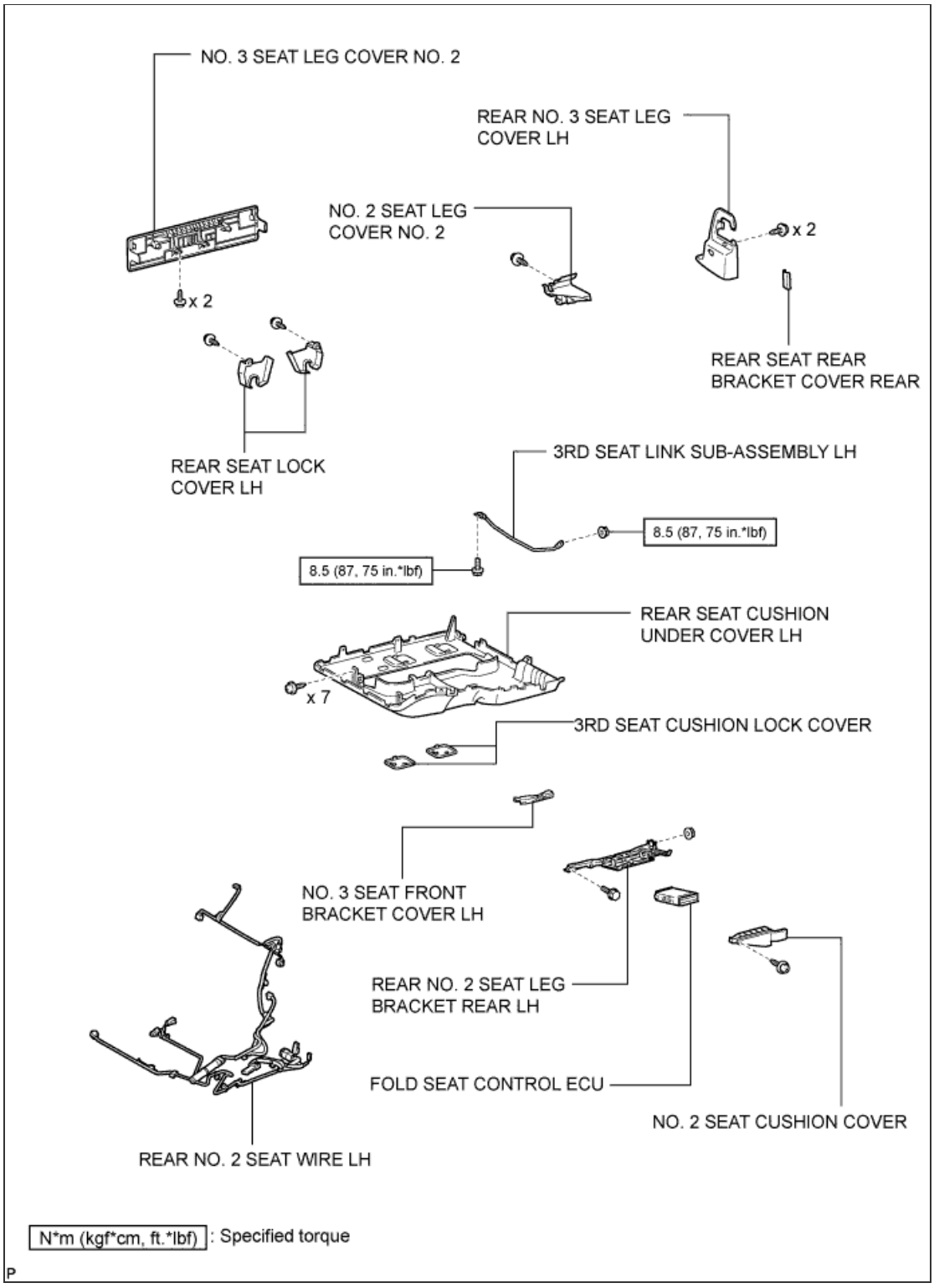
for Preparation Click here



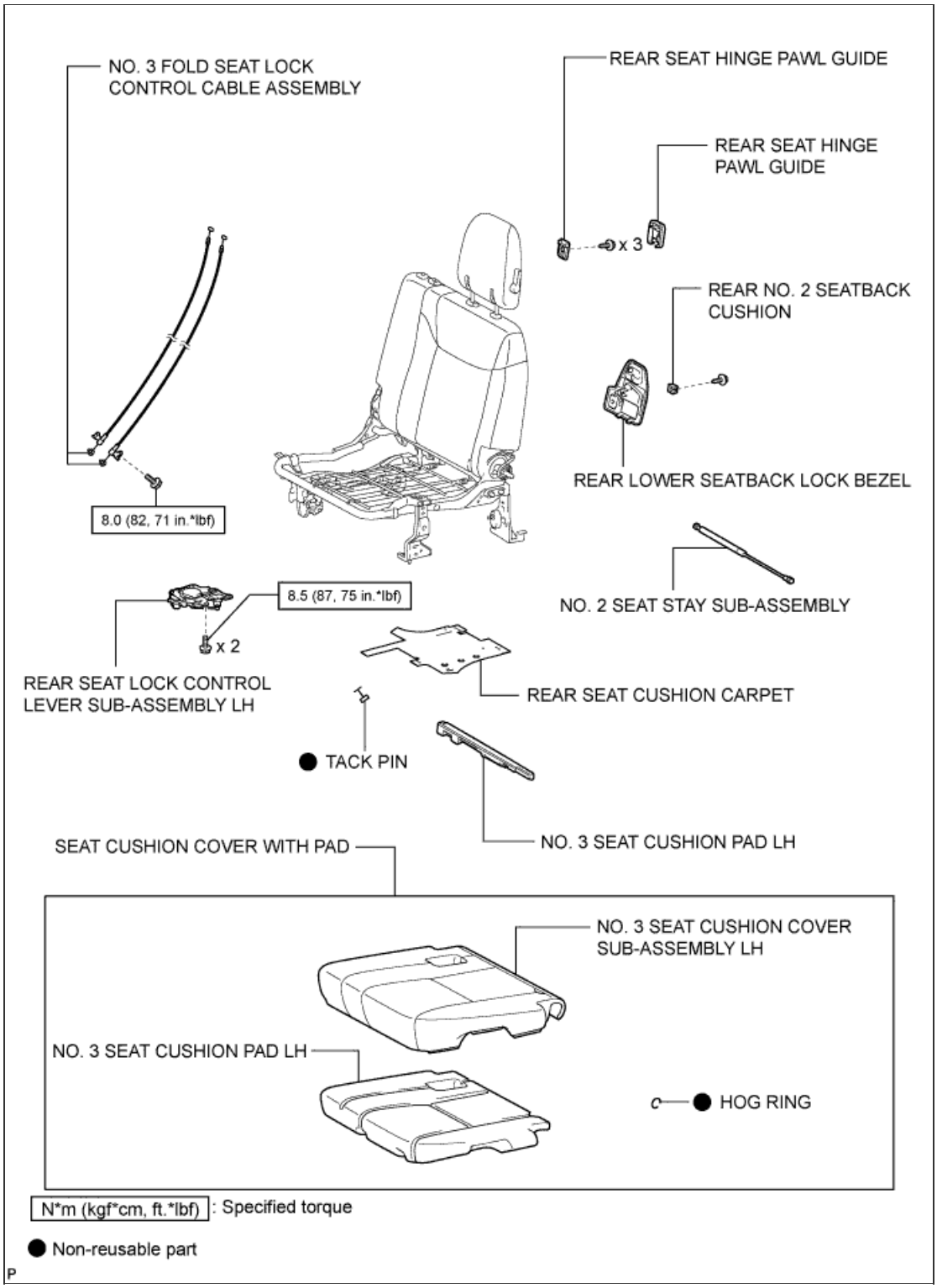

FOLD SEAT LEG LOCK SUB-ASSEMBLY
x 2
12 (122, 9)
REAR ROOF NO. 1 AIR DUCT
FRONT QUARTER TRIM PANEL ASSEMBLY LH
COOLER PLATE
FOLD SEAT SWITCH ASSEMBLY
OUTER LAP BELT ANCHOR COVER
42 (428, 31)
42 (428, 31)
REAR NO. 2 SEAT COVER BEZEL
SEAT BELT ANCHOR
SEAT BELT ANCHOR
NO. 3 SEAT CUSHION COVER
x 2
x 2
37 (377, 27)
37 (377, 27)
x 2
x 2
REAR SEAT LOCK STRIKER SUB-ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
P

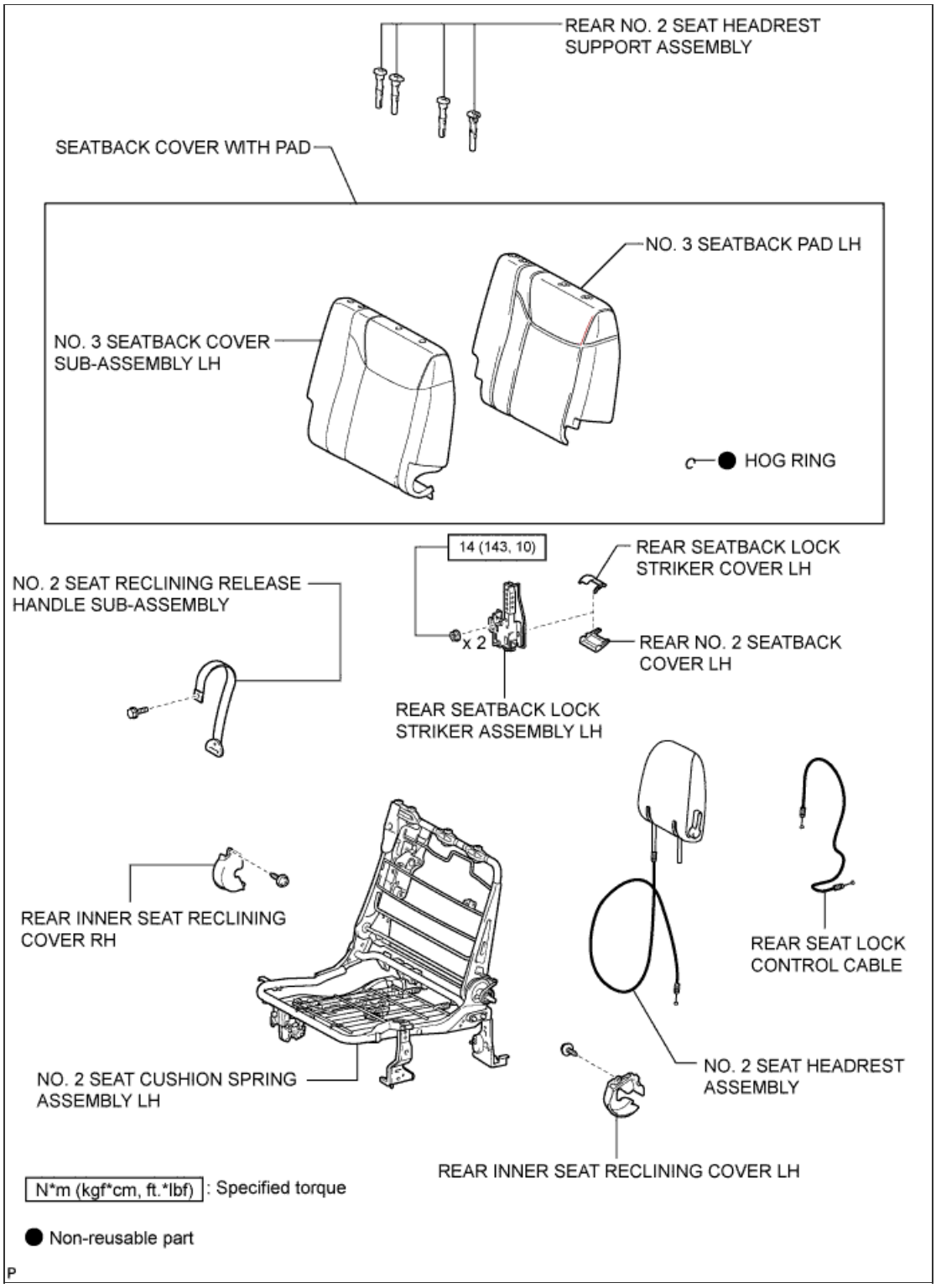

RECLINING ADJUSTER COVER RH
REAR SEAT INNER RECLINING COVER LH
REAR SEAT INNER BELT SUB-ASSEMBLY
42 (428, 31)
SEAT ADJUSTER BOLT COVER
REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY
RECLINING ADJUSTER COVER LH
NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH
N*m (kgf*cm, ft.*lbf) : Specified torque

P

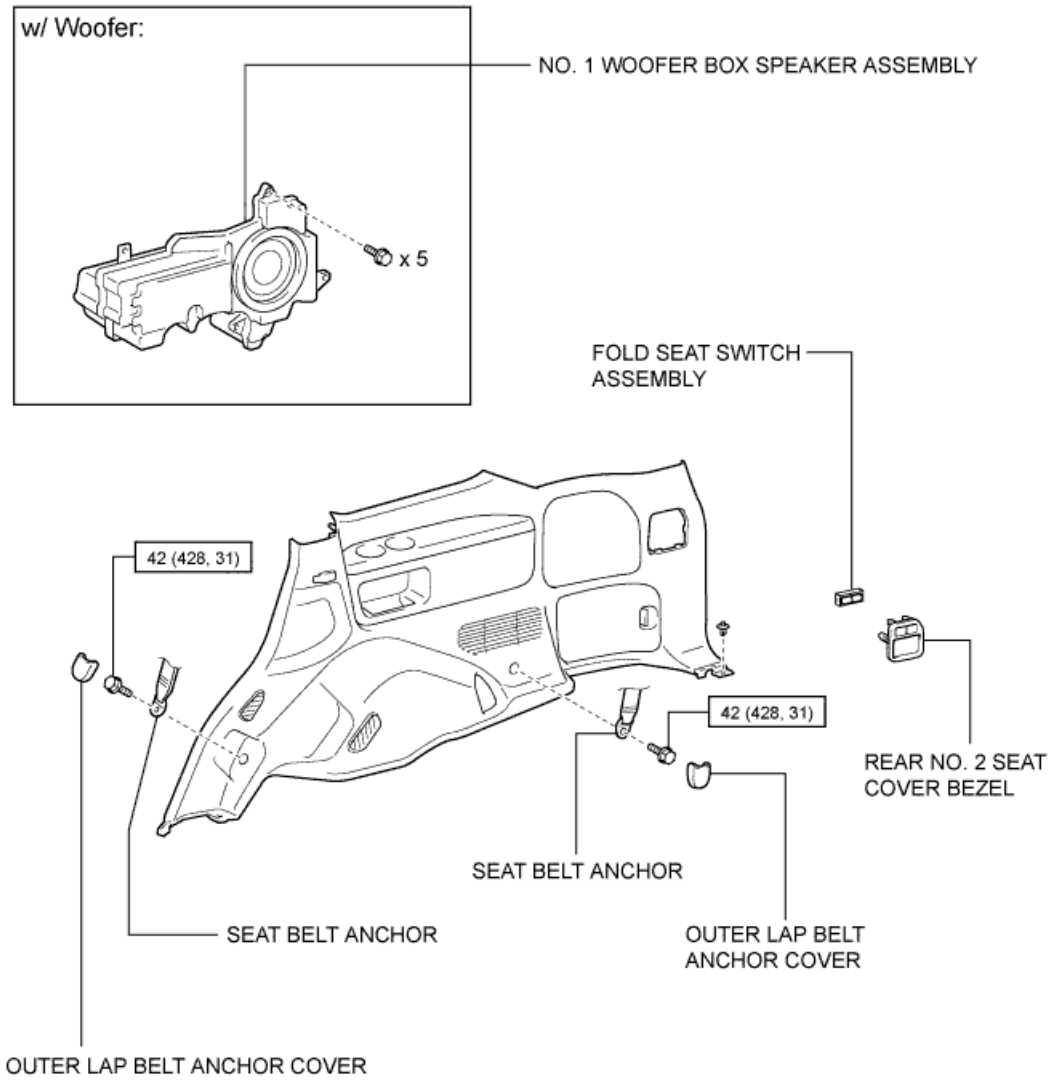

NO. 3 SEAT LEG COVER NO. 2
REAR NO. 3 SEAT LEG COVER LH
NO. 2 SEAT LEG COVER NO. 2
x 2
x 2
REAR SEAT REAR BRACKET COVER REAR
REAR SEAT LOCK COVER LH
3RD SEAT LINK SUB-ASSEMBLY LH
8.5 (87, 75 in.*lbf)
8.5 (87, 75 in.*lbf)
REAR SEAT CUSHION UNDER COVER LH
x 7
3RD SEAT CUSHION LOCK COVER
NO. 3 SEAT FRONT BRACKET COVER LH
REAR NO. 2 SEAT LEG BRACKET REAR LH
FOLD SEAT CONTROL ECU
NO. 2 SEAT CUSHION COVER
REAR NO. 2 SEAT WIRE LH
N*m (kgf*cm, ft.*lbf) : Specified torque

P


NO. 3 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY
REAR SEAT HINGE PAWL GUIDE
REAR SEAT HINGE PAWL GUIDE
x 3
REAR NO. 2 SEATBACK CUSHION
REAR LOWER SEATBACK LOCK BEZEL
8.0 (82, 71 in.*lbf)
NO. 2 SEAT STAY SUB-ASSEMBLY
8.5 (87, 75 in.*lbf)
x 2
REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH
REAR SEAT CUSHION CARPET
TACK PIN
NO. 3 SEAT CUSHION PAD LH
SEAT CUSHION COVER WITH PAD
NO. 3 SEAT CUSHION COVER SUB-ASSEMBLY LH
NO. 3 SEAT CUSHION PAD LH
HOG RING
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
P

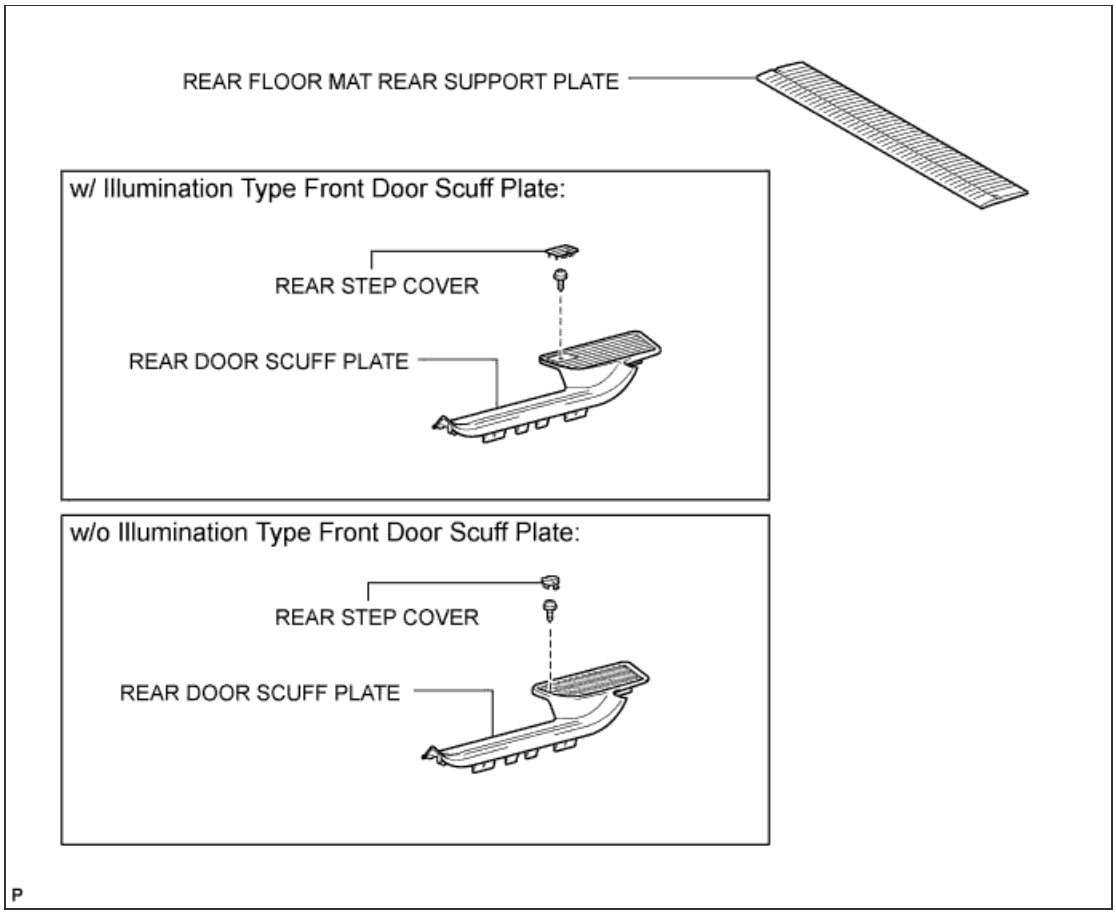

REAR NO. 2 SEAT HEADREST SUPPORT ASSEMBLY
SEATBACK COVER WITH PAD
NO. 3 SEATBACK PAD LH
NO. 3 SEATBACK COVER SUB-ASSEMBLY LH
HOG RING
14 (143, 10)
REAR SEATBACK LOCK STRIKER COVER LH
NO. 2 SEAT RECLINING RELEASE HANDLE SUB-ASSEMBLY
x 2
REAR NO. 2 SEATBACK COVER LH
REAR SEATBACK LOCK STRIKER ASSEMBLY LH
REAR INNER SEAT RECLINING COVER RH
REAR SEAT LOCK CONTROL CABLE
NO. 2 SEAT CUSHION SPRING ASSEMBLY LH
NO. 2 SEAT HEADREST ASSEMBLY
REAR INNER SEAT RECLINING COVER LH
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
P

for RH Side:



N*m (kgf*cm, ft.*lbf) : Specified torque

P


REAR FLOOR MAT REAR SUPPORT PLATE
w/ Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE
w/o Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE
P

for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE REAR NO. 2 SEAT HEADREST ASSEMBLY LH

2. REMOVE REAR SEAT CUSHION HINGE COVER LH

a. Operate the power seat switch and move the seat to the storage position.

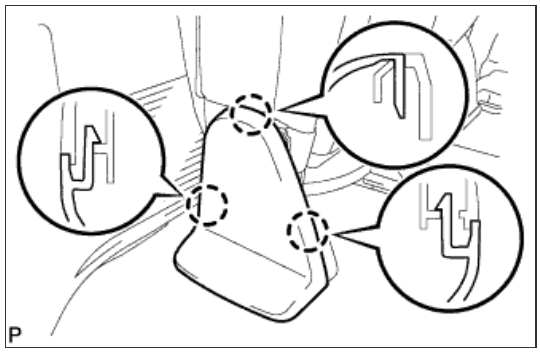
HINT:

In order to remove the seat, do not engage the striker.

b. Using a screwdriver, detach the 3 claws and remove the cover.

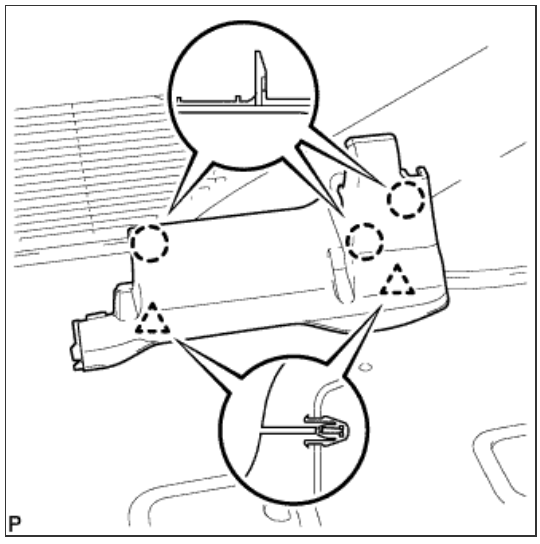
HINT:

Tape the screwdriver tip before use.



3. REMOVE REAR NO. 2 SEAT HINGE COVER LH

a. Detach the 3 claws and 2 clips, and remove the cover.



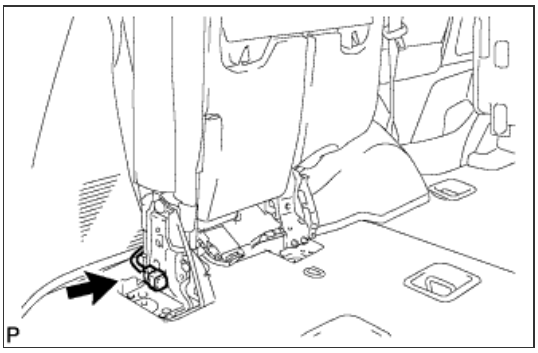
4. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

5. REMOVE REAR NO. 2 SEAT ASSEMBLY

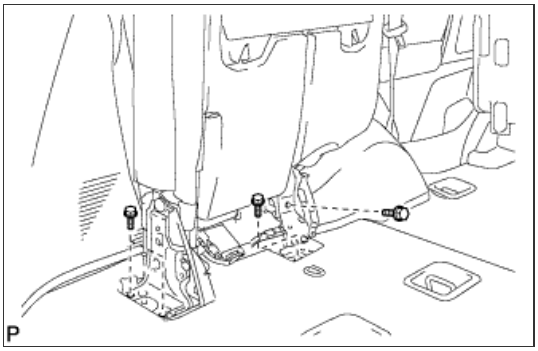
a. Disconnect the connector.



b. Remove the 4 bolts and seat assembly.

NOTICE:

Be careful not to damage the vehicle body.

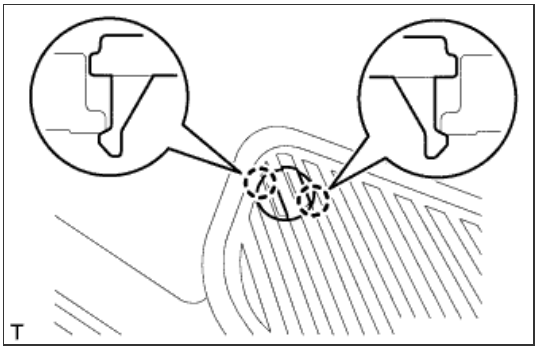


6. REMOVE REAR STEP COVER

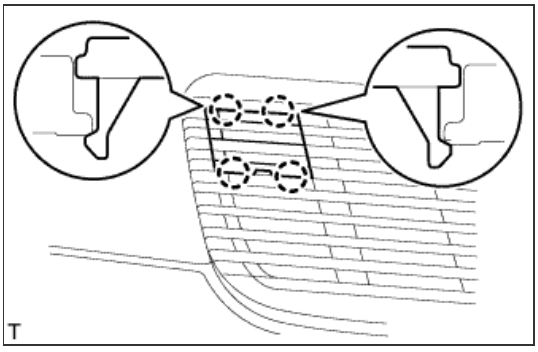
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

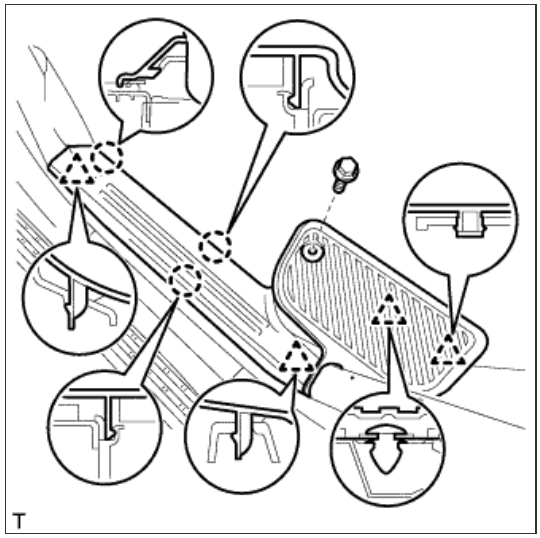


7. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

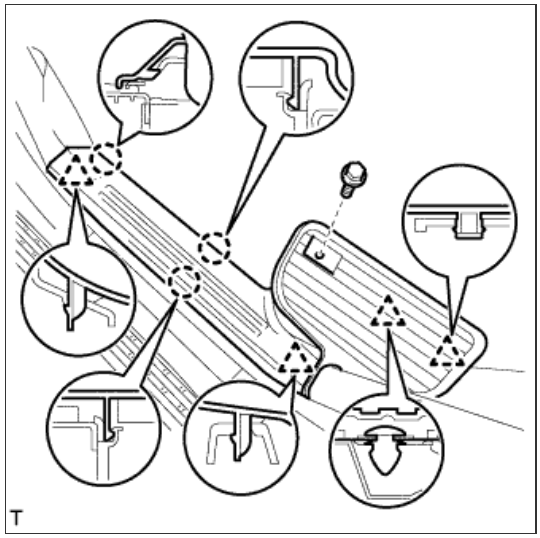
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

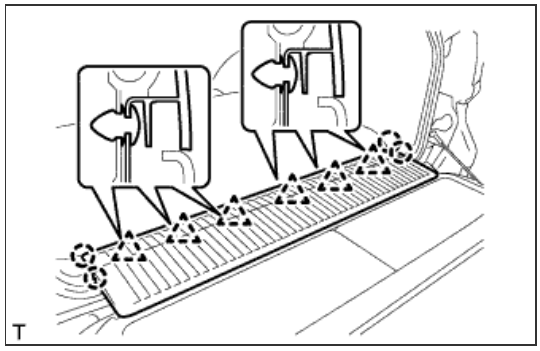
i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



8. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

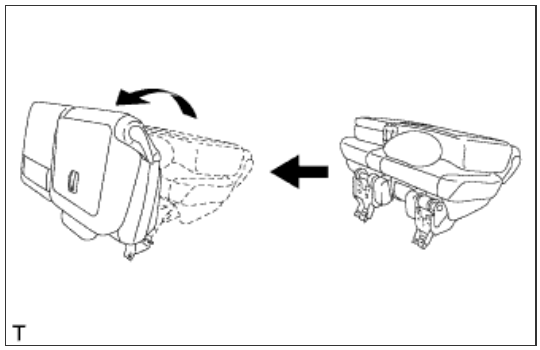
a. Detach the 6 clips and 4 claws, and remove the support plate.



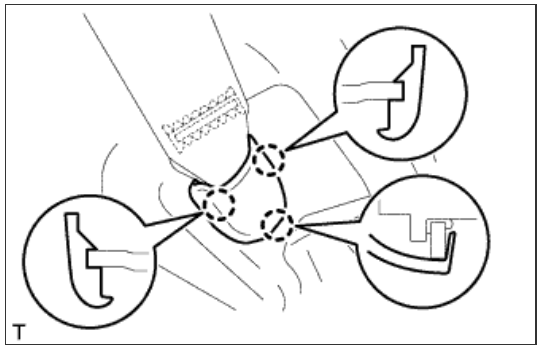
9. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

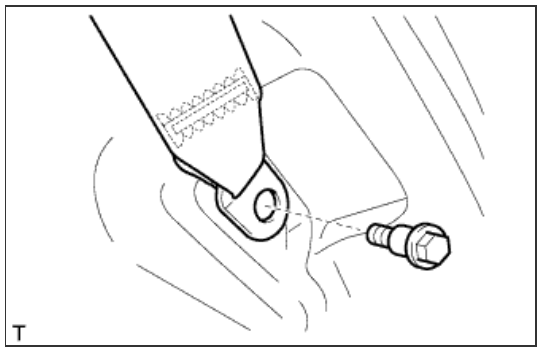
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



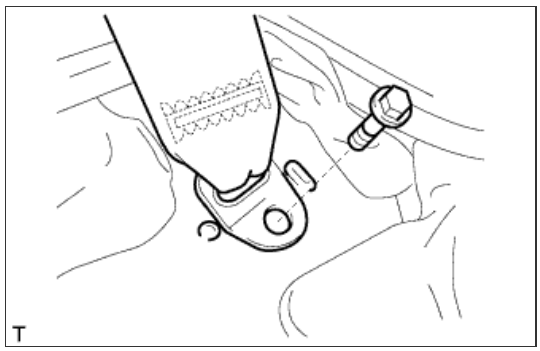
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

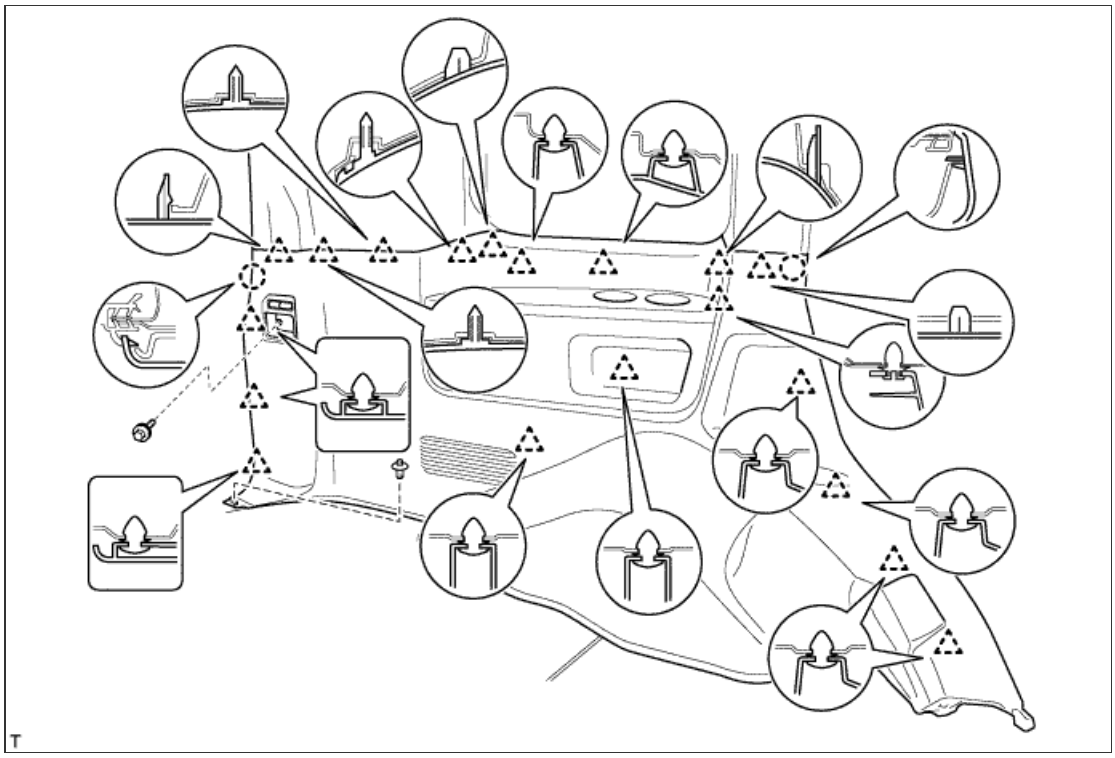


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

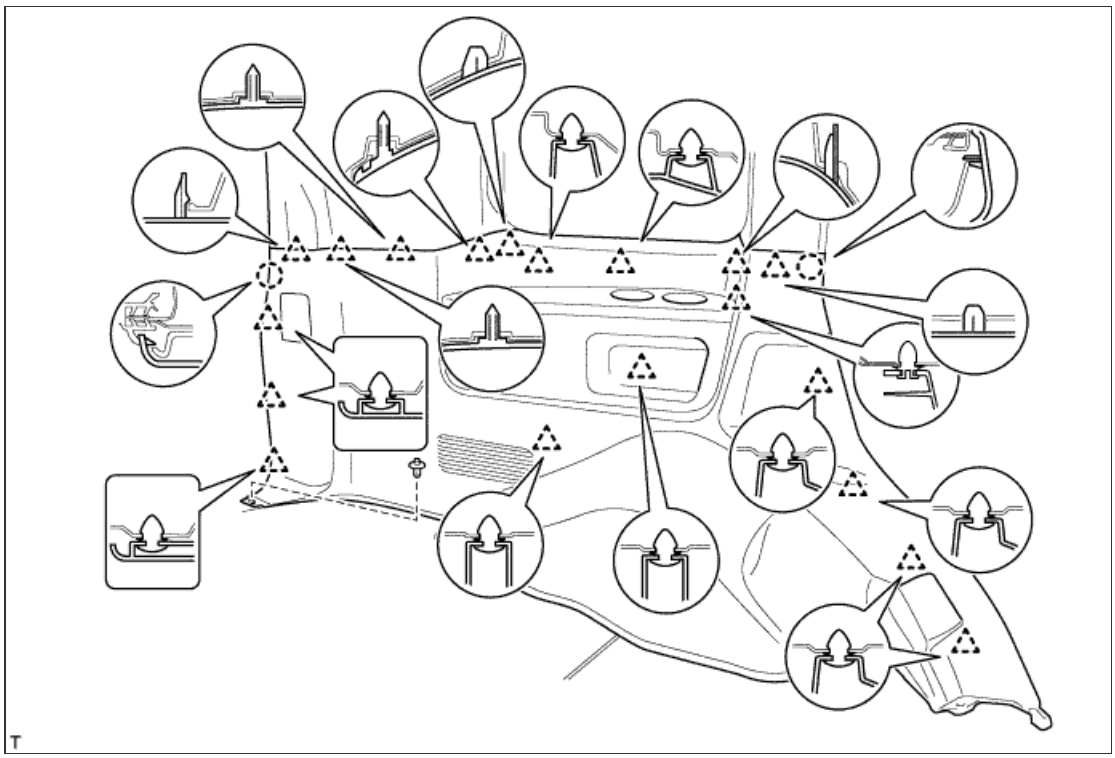


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.

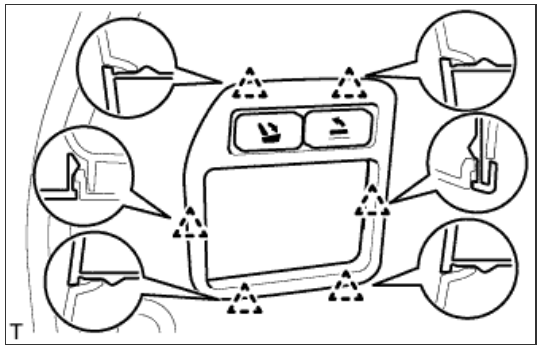


10. REMOVE REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH

a. Detach the 4 claws and remove the seat lock control lever.

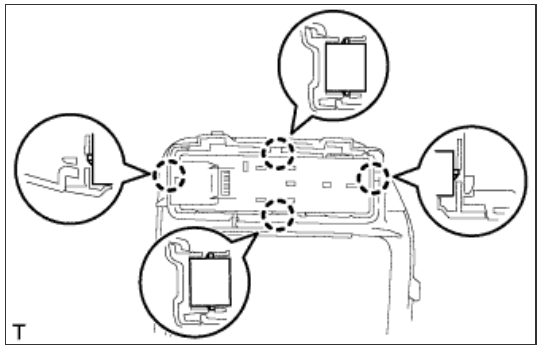
11. REMOVE REAR NO. 2 SEAT COVER BEZEL

a. Detach the 6 clips and remove the rear No. 2 seat cover bezel.



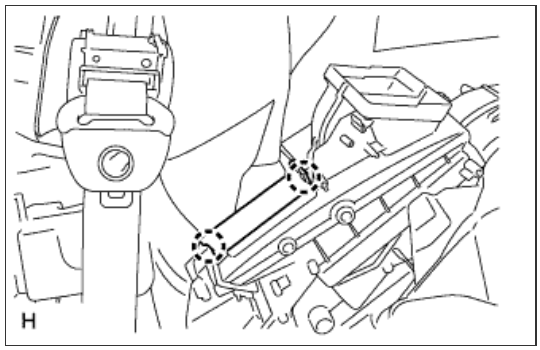
12. REMOVE FOLD SEAT SWITCH ASSEMBLY

a. Using a screwdriver, detach the 4 claws and remove the switch.

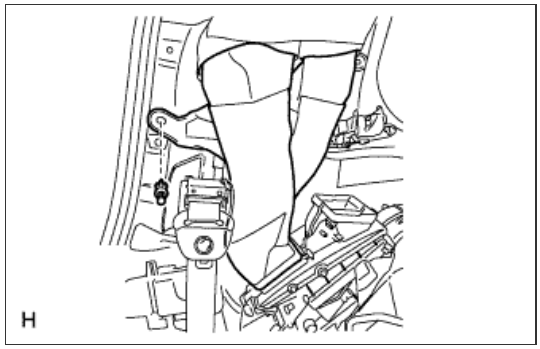


13. REMOVE REAR ROOF NO. 1 AIR DUCT (for LH Side)

a. Detach the 2 claws and remove the cooler plate.



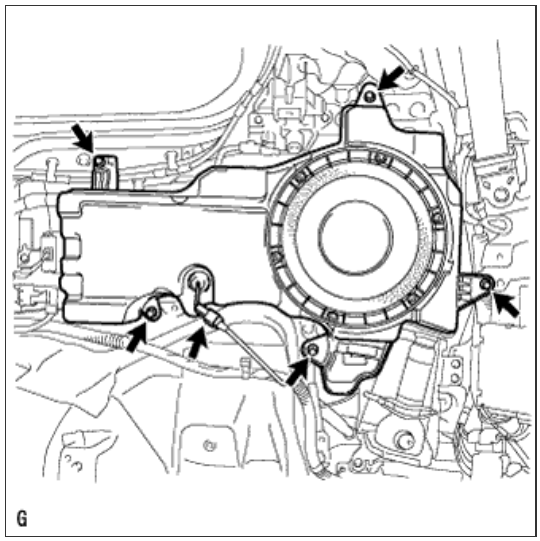
b. Remove the clip and duct.



14. REMOVE NO. 1 WOOFER BOX SPEAKER ASSEMBLY (for RH Side, w/ Woofer)

a. Disconnect the connector.

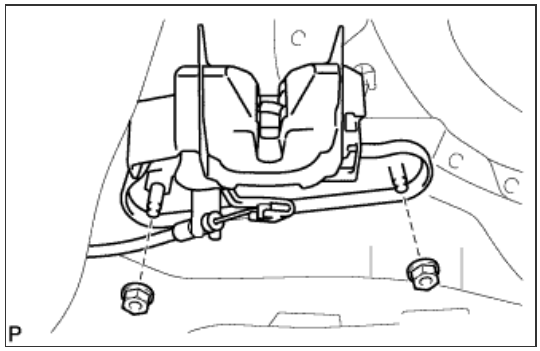
b. Remove the 5 bolts and box speaker.



15. REMOVE FOLD SEAT LEG LOCK SUB-ASSEMBLY

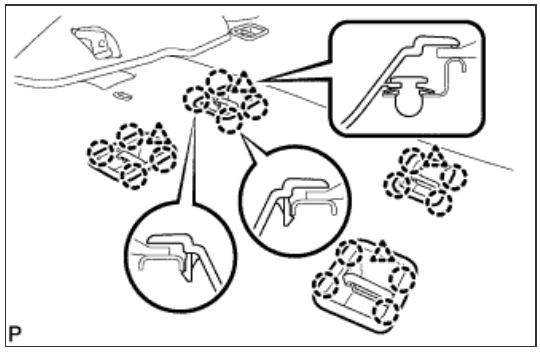
a. Detach the 2 cable clamps.

b. Remove the 2 nuts and fold seat leg lock.



16. REMOVE NO. 3 SEAT CUSHION COVER

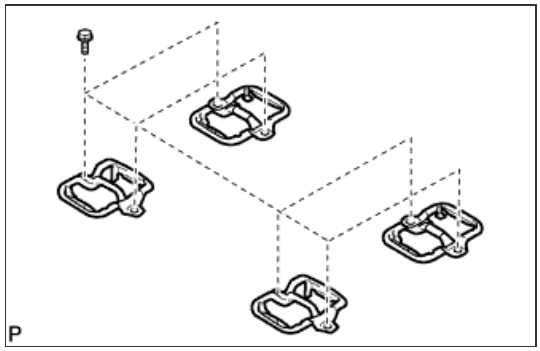
a. Detach the 4 clips and 16 claws, and remove the 4 seat cushion covers.



17. REMOVE REAR SEAT LOCK STRIKER SUB-ASSEMBLY

a. Fold back the floor carpet.

b. Remove the 8 bolts and 4 seat lock strikers.



for Preparation Click here

CAUTION:

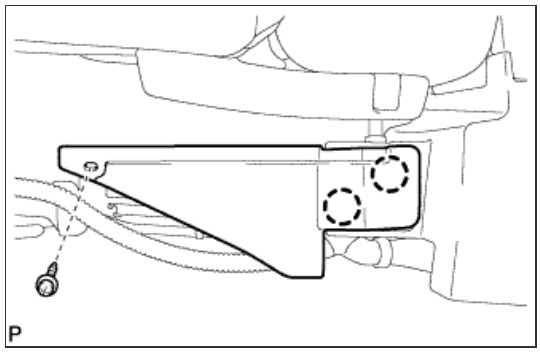
Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE NO. 2 SEAT CUSHION COVER

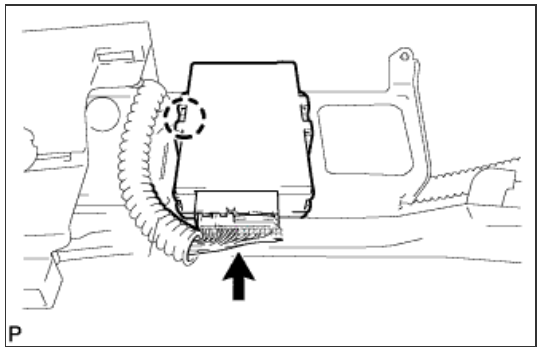
a. Remove the screw and detach the 2 claws to remove the cover.



2. REMOVE FOLD SEAT CONTROL ECU

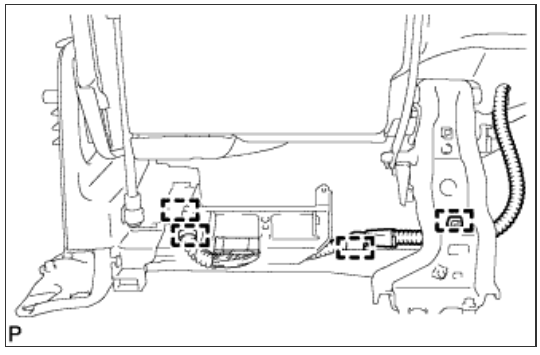
a. Disconnect the connector.

b. Detach the claw and remove the ECU.

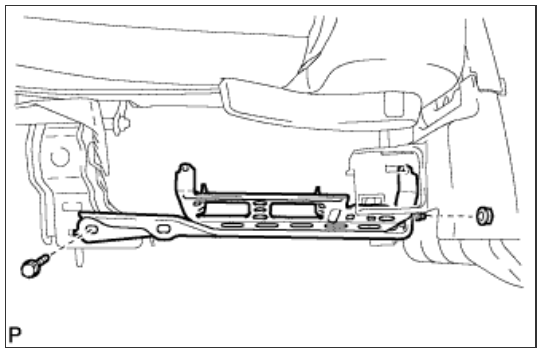


3. REMOVE REAR NO. 2 SEAT LEG BRACKET REAR LH

a. Detach the 4 clamps.



b. Remove the bolt, nut and bracket.

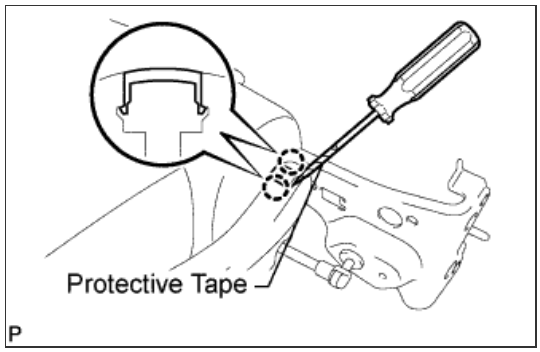


4. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

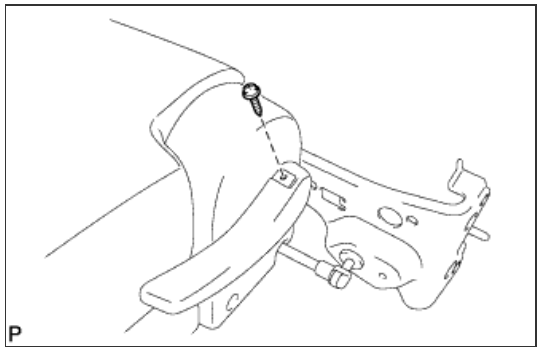
HINT:

Tape the screwdriver tip before use.



5. REMOVE NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH

a. Remove the screw and release handle.



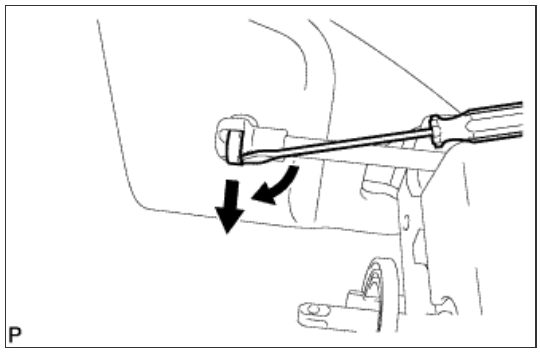
6. REMOVE REAR SEAT REAR BRACKET COVER LH

a. Detach the 2 claws and remove the cover.

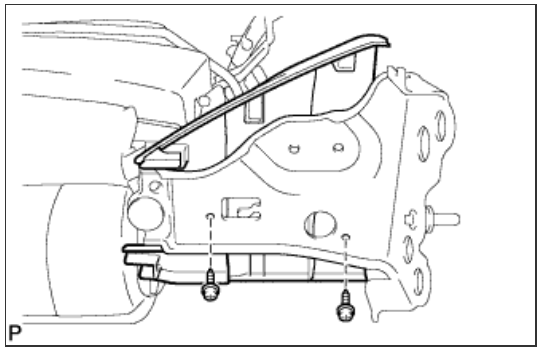
7. REMOVE REAR NO. 3 SEAT LEG COVER LH

a. Using a screwdriver, remove the spring of the seat stay ball joint.

b. Disconnect the seat stay.

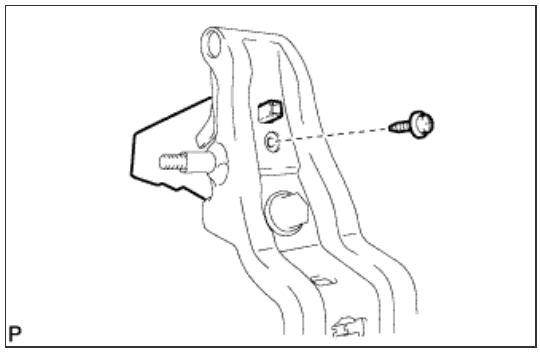


c. Remove the 2 screws and seat leg cover.



8. REMOVE NO. 2 SEAT LEG COVER NO. 2

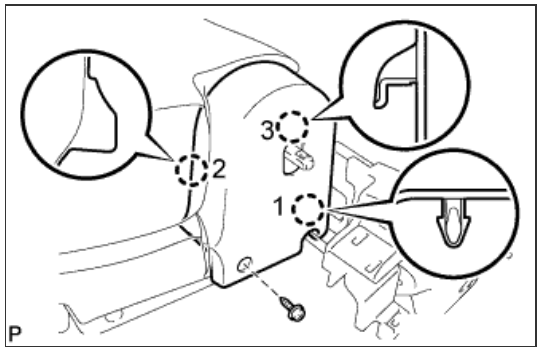
a. Remove the screw and cover.



9. REMOVE RECLINING ADJUSTER COVER LH

a. Remove the screw.

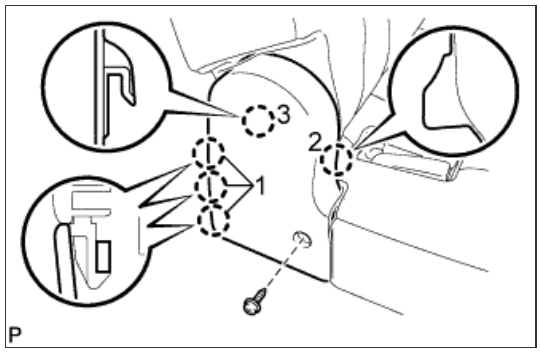
b. Detach the 3 claws in the order shown in the illustration, and remove the cover.



10. REMOVE RECLINING ADJUSTER COVER RH

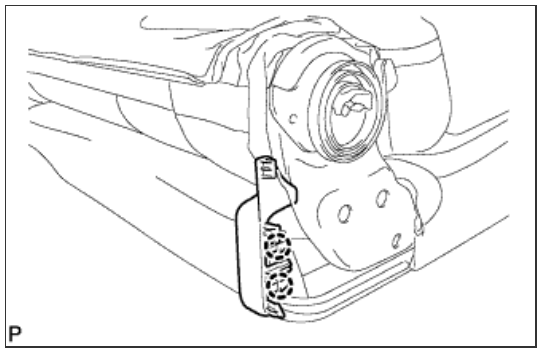
a. Remove the screw.

b. Detach the 5 claws in the order shown in the illustration, and then remove the cover.



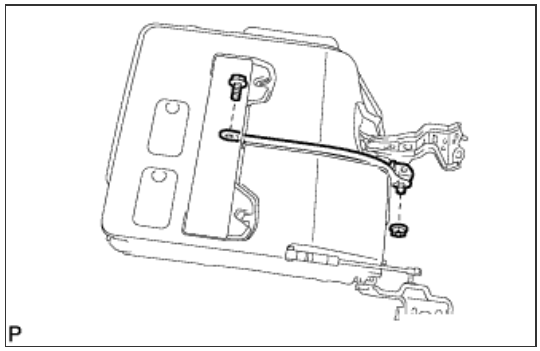
11. REMOVE REAR SEAT INNER RECLINING COVER LH

a. Detach the 2 claws and remove the cover.



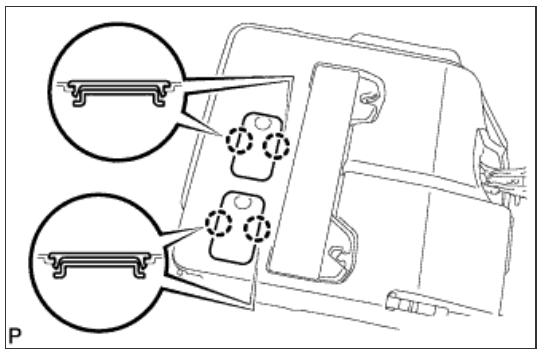
12. REMOVE 3RD SEAT LINK SUB-ASSEMBLY LH

a. Remove the bolt, nut and seat link.



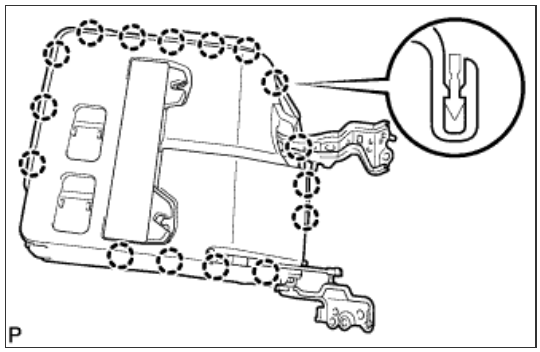
13. REMOVE 3RD SEAT CUSHION LOCK COVER

a. Detach the 4 claws and remove the 2 covers.

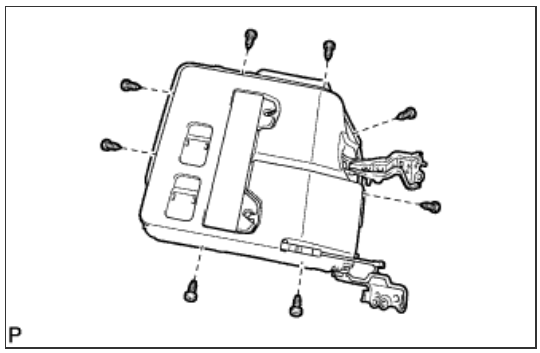


14. REMOVE REAR SEAT CUSHION UNDER COVER LH

a. Detach the 16 claws.

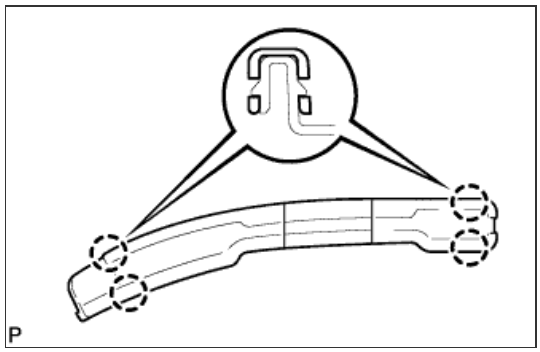


b. Remove the 8 screws and cover.



15. REMOVE NO. 3 SEAT FRONT BRACKET COVER LH

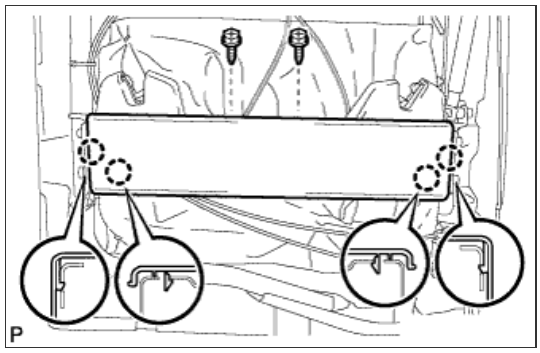
a. Detach the 4 claws and remove the cover.



16. REMOVE NO. 3 SEAT LEG COVER NO. 2

a. Remove the 2 screws.

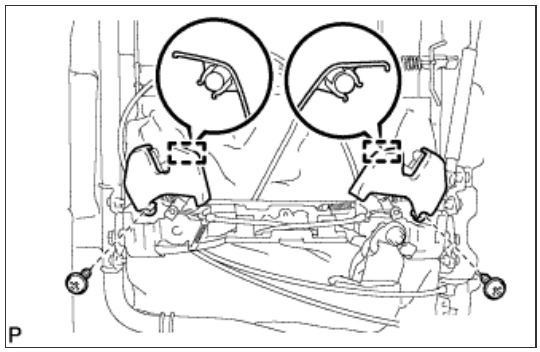
b. Detach the 4 claws and remove the cover.



17. REMOVE REAR SEAT LOCK COVER LH

a. Remove the 2 screws.

b. Detach the 2 clamps and remove the 2 covers.

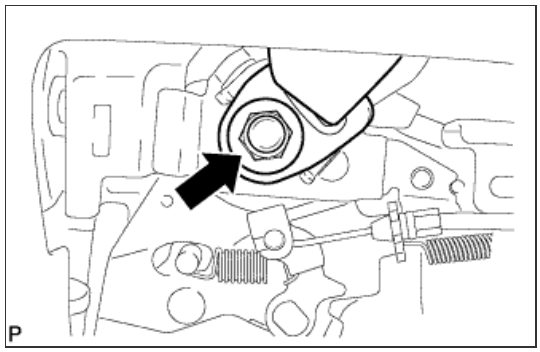


18. REMOVE REAR SEAT INNER BELT SUB-ASSEMBLY (for LH Side)

a. Remove the nut and belt.

HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat inner belt. Therefore, it becomes disconnected when the nut is removed.

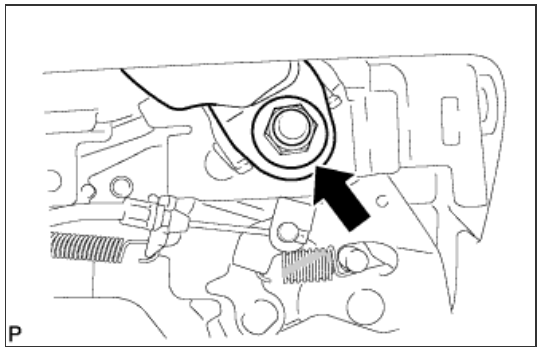


19. REMOVE REAR SEAT OUTER BELT SUB-ASSEMBLY (for RH Side)

a. Remove the nut and belt.

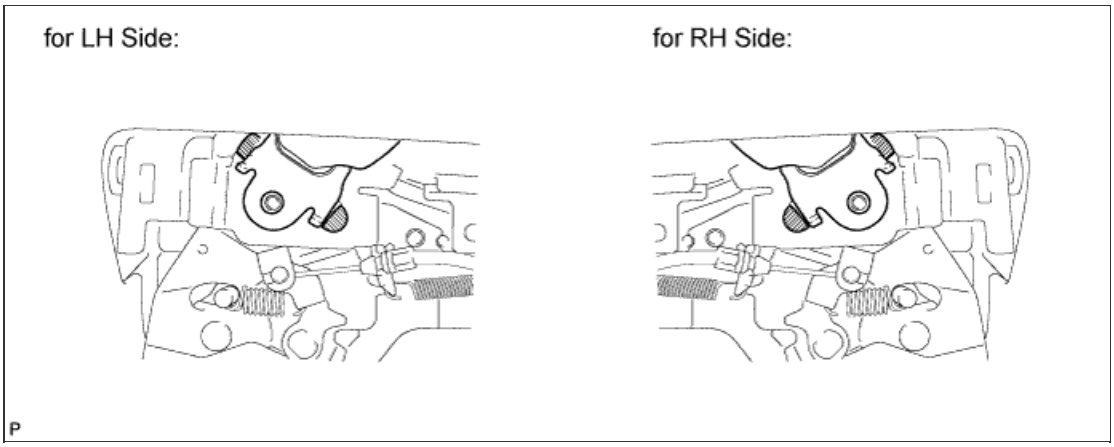
HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat outer belt. Therefore, it becomes disconnected when the nut is removed.



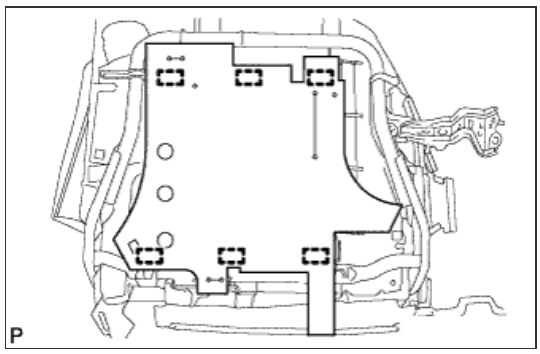
20. REMOVE REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY

a. Remove the 2 belts.



21. REMOVE REAR SEAT CUSHION CARPET

a. Cut off the tack pins which fasten the seat cushion carpet to the seat cushion pad, and then remove the seat cushion carpet from the seat cushion pad.



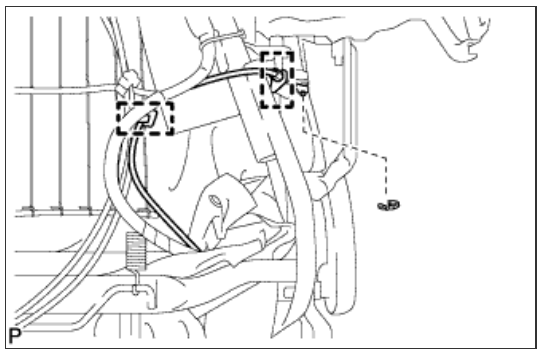
22. REMOVE SEAT CUSHION COVER WITH PAD

23. REMOVE NO. 3 SEAT CUSHION PAD LH

24. REMOVE NO. 3 SEAT CUSHION COVER SUB-ASSEMBLY LH

a. Remove the E-ring and detach the clamp.

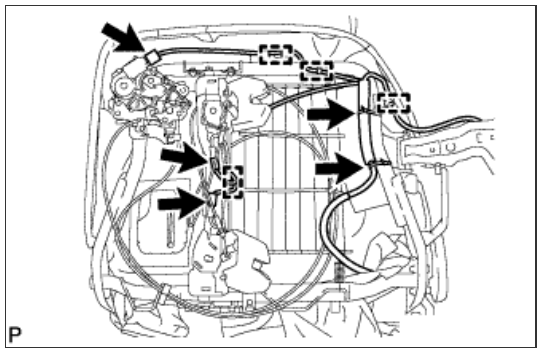
b. Detach the cable clamp and disconnect the cable.



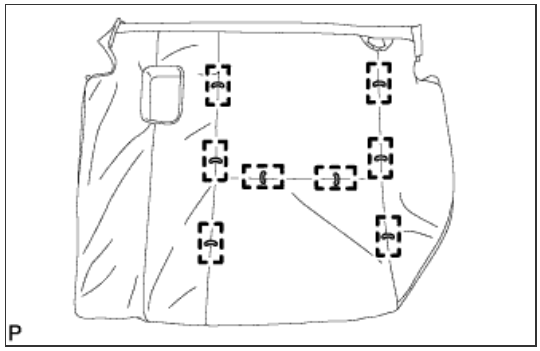
c. Detach the 4 clamps.

d. Disconnect the 3 connectors.

e. Remove the 2 cable ties.

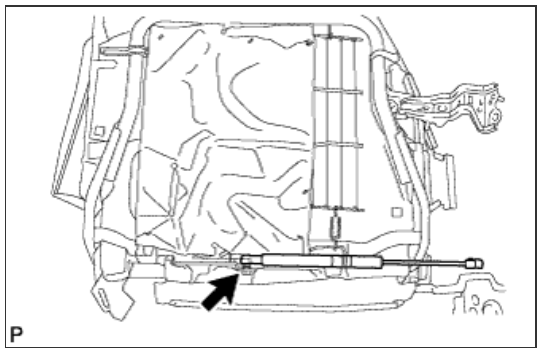


f. Remove the hog rings and seat cushion cover.



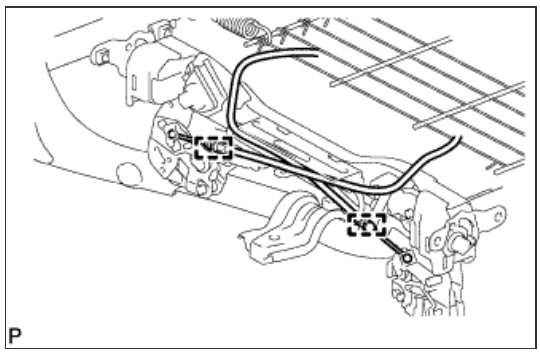
25. REMOVE NO. 2 SEAT STAY SUB-ASSEMBLY

a. Remove the bolt and seat stay.

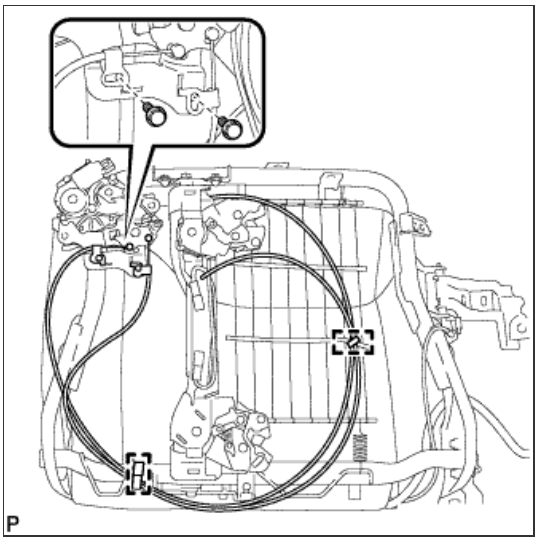


26. REMOVE NO. 3 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Detach the 2 cable clamps and disconnect the 2 cables.

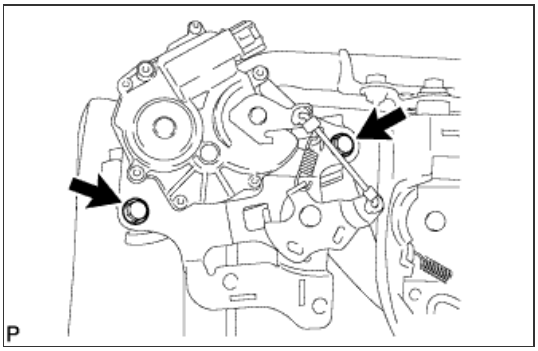


b. Detach the 2 clamps and remove the 2 bolts and control cable.



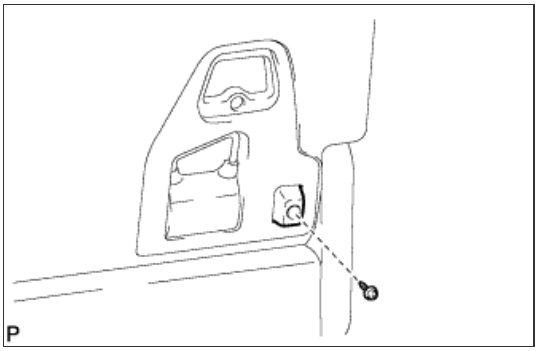
27. REMOVE REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH

a. Remove the 2 bolts and lever.



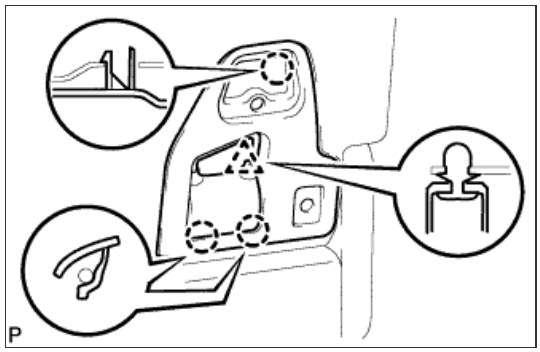
28. REMOVE REAR NO. 2 SEATBACK CUSHION

a. Remove the screw and seatback cushion.



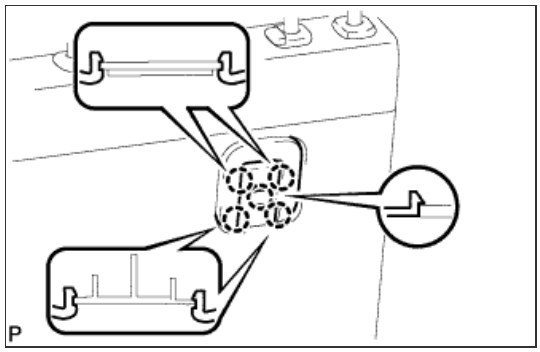
29. REMOVE REAR LOWER SEATBACK LOCK BEZEL

a. Detach the 3 claws and clip, and remove the seatback lock bezel.



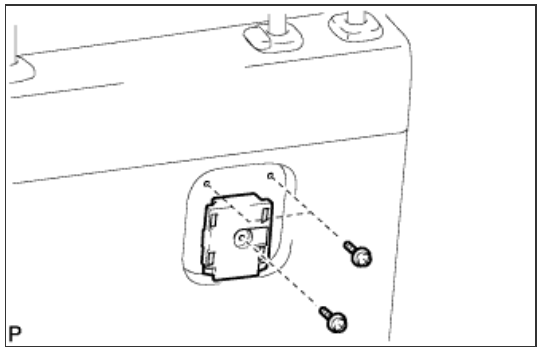
30. REMOVE REAR SEAT HINGE PAWL GUIDE

a. Detach the 5 claws and remove the guide.



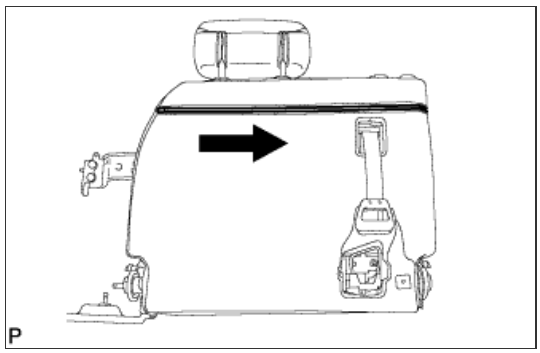
31. REMOVE REAR SEAT HINGE PAWL GUIDE

a. Remove the 3 screws and guide.

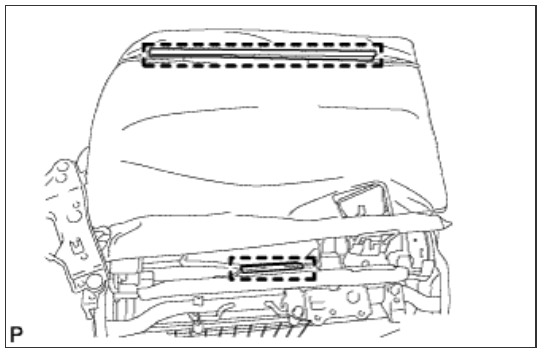


32. REMOVE SEATBACK COVER WITH PAD

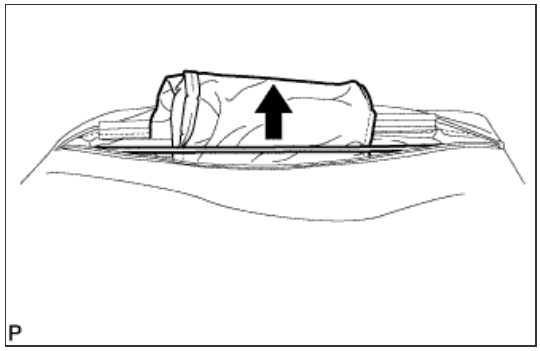
a. Open the fastener.



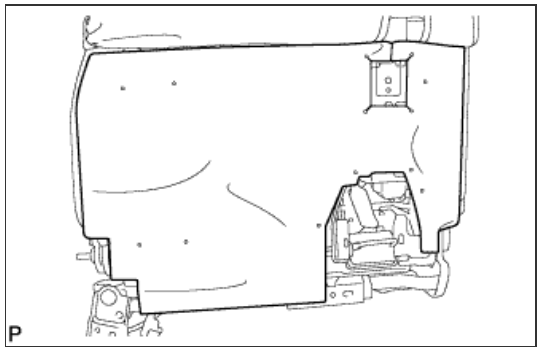
b. Detach the 2 hooks.



c. Pull out the center headrest storage bag.

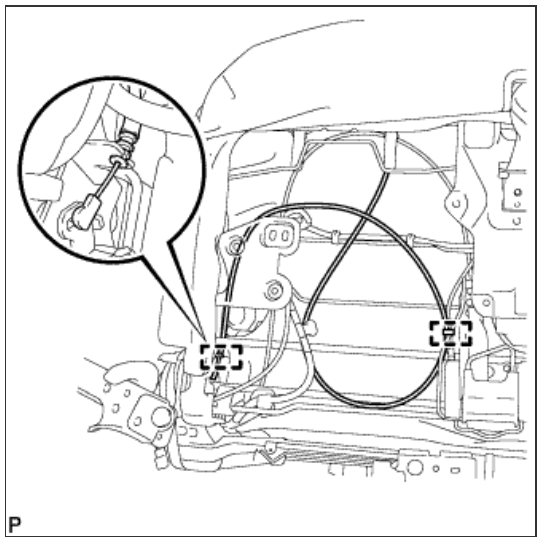


d. Remove the rear seat protector.



e. Detach the cable clamp and disconnect the cable.

f. Detach the clamp.

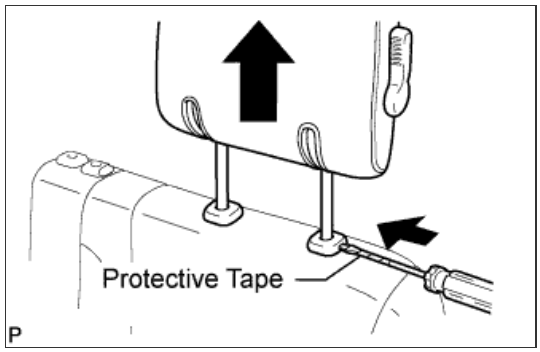


g. for LH Side:

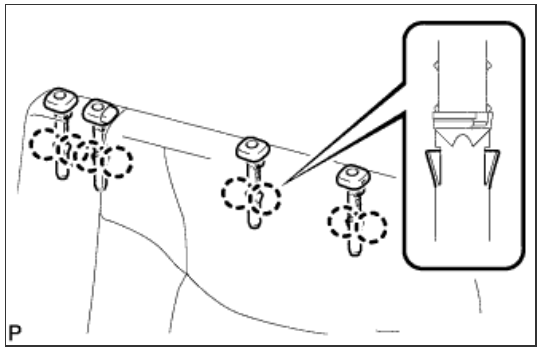
i. While releasing the lock inside the headrest support with a screwdriver, remove the headrest.

HINT:

Tape the screwdriver tip before use.



ii. Detach the 8 claws and remove the 4 headrest supports.

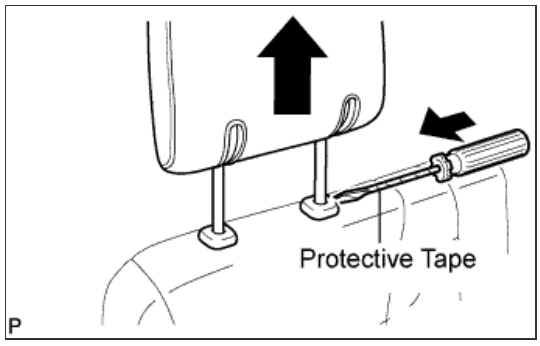


h. for RH Side:

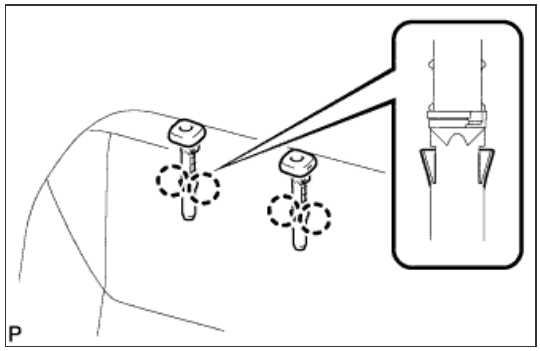
i. While releasing the lock inside the headrest support with a screwdriver, remove the headrest.

HINT:

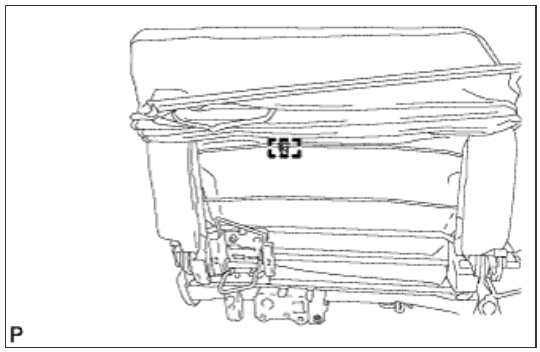
Tape the screwdriver tip before use.



ii. Detach the 4 claws and remove the 2 headrest supports.

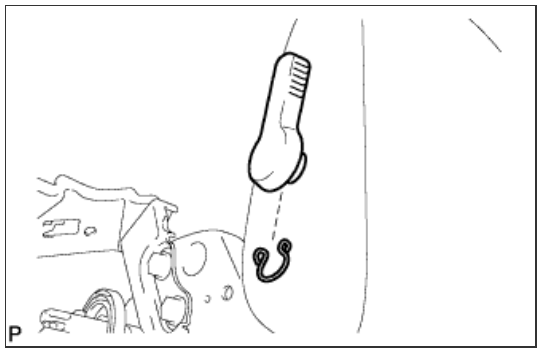


i. Remove the hog ring and seatback cover with pad.



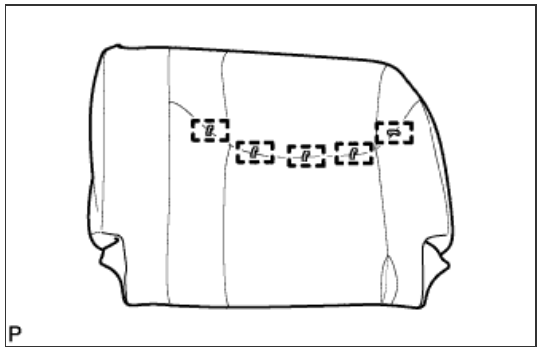
33. REMOVE REAR SEAT HEADREST HANDLE

a. Remove the snap ring and headrest handle.



34. REMOVE NO. 3 SEATBACK COVER SUB-ASSEMBLY LH

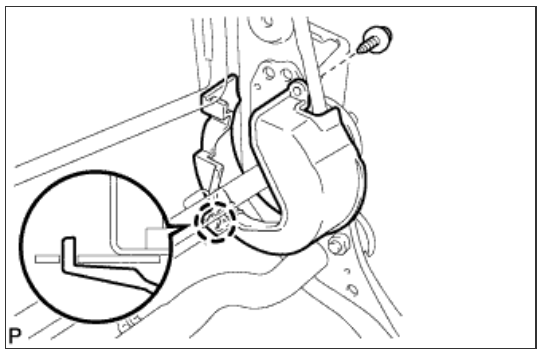
a. Remove the hog rings and seatback cover.



35. REMOVE REAR INNER SEAT RECLINING COVER LH

a. Remove the screw.

b. Detach the claw and remove the cover.



36. REMOVE REAR INNER SEAT RECLINING COVER RH

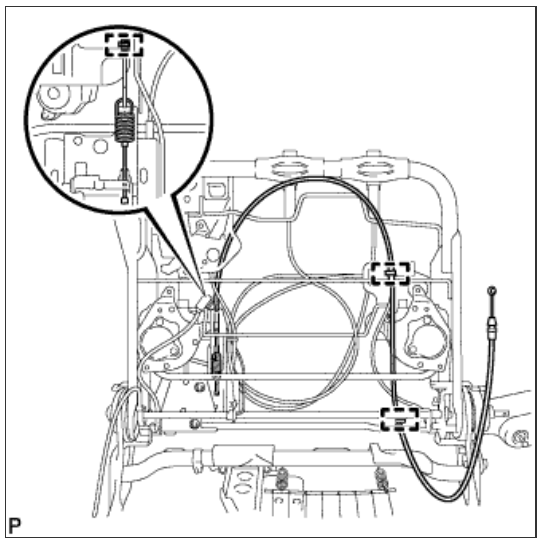
a. Remove the screw.

b. Detach the claw and remove the cover.

37. REMOVE REAR SEAT LOCK CONTROL CABLE

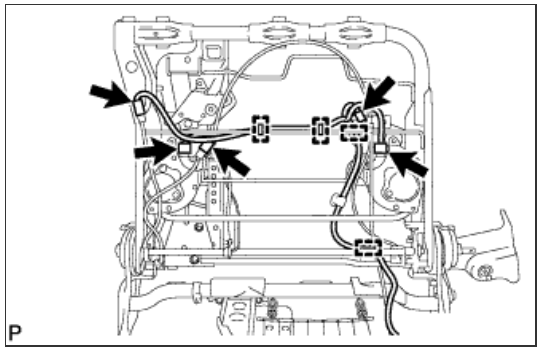
a. Detach the cable clamp and disconnect the cable.

b. Detach the 2 clamps and remove the lock control cable.



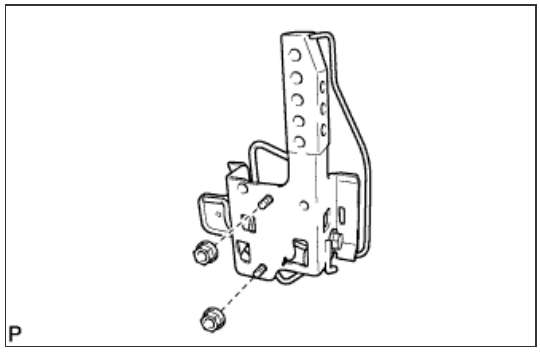
38. REMOVE REAR NO. 2 SEAT WIRE LH

a. Disconnect the 5 connectors and detach the 4 clamps, and then remove the rear No. 2 seat wire LH.



39. REMOVE REAR SEATBACK LOCK STRIKER ASSEMBLY LH

a. Remove the 2 nuts and lock striker.



40. REMOVE REAR NO. 2 SEATBACK COVER LH

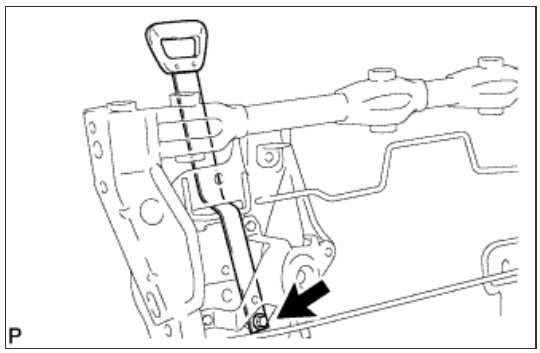
a. Detach the 3 claws and remove the cover.

41. REMOVE REAR SEATBACK LOCK STRIKER COVER LH

a. Detach the 2 clamps and remove the cover.

42. REMOVE NO. 2 SEAT RECLINING RELEASE HANDLE SUB-ASSEMBLY

a. Remove the bolt and release handle.



for Preparation Click here

CAUTION:

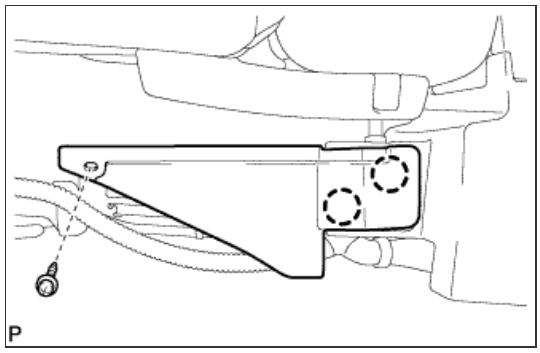
Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE NO. 2 SEAT CUSHION COVER

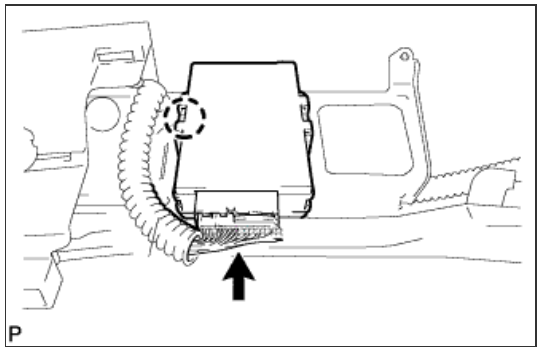
a. Remove the screw and detach the 2 claws to remove the cover.



2. REMOVE FOLD SEAT CONTROL ECU

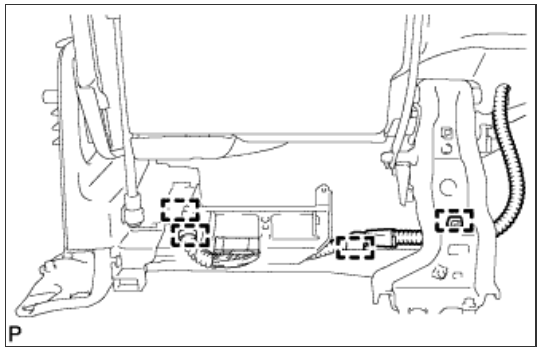
a. Disconnect the connector.

b. Detach the claw and remove the ECU.

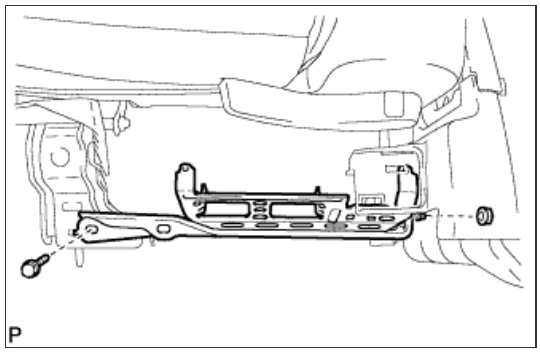


3. REMOVE REAR NO. 2 SEAT LEG BRACKET REAR LH

a. Detach the 4 clamps.



b. Remove the bolt, nut and bracket.

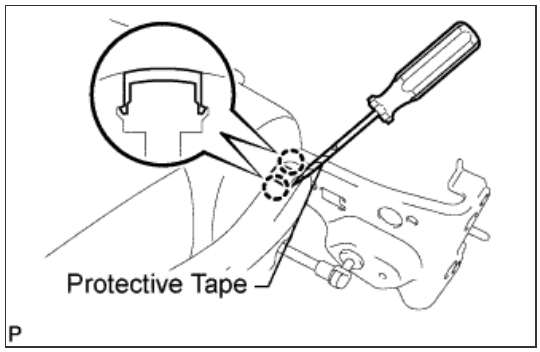


4. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

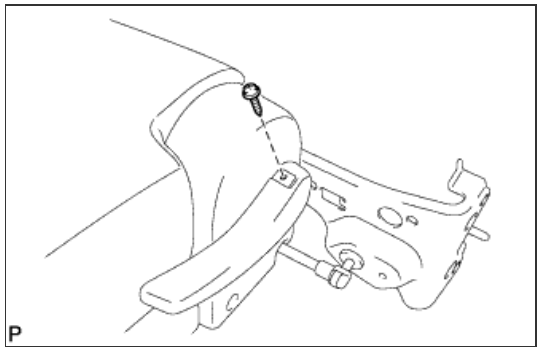
HINT:

Tape the screwdriver tip before use.



5. REMOVE NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH

a. Remove the screw and release handle.



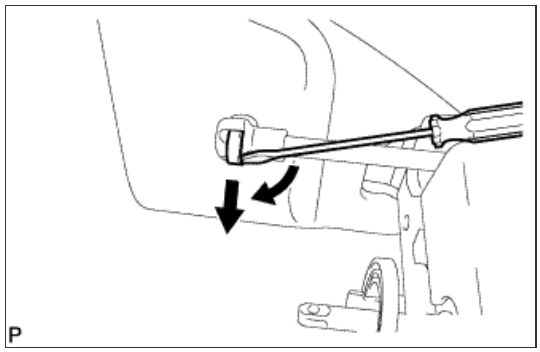
6. REMOVE REAR SEAT REAR BRACKET COVER LH

a. Detach the 2 claws and remove the cover.

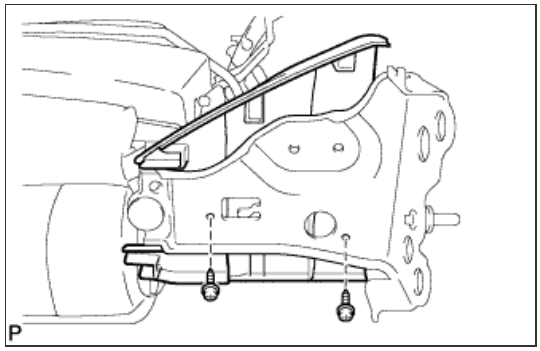
7. REMOVE REAR NO. 3 SEAT LEG COVER LH

a. Using a screwdriver, remove the spring of the seat stay ball joint.

b. Disconnect the seat stay.

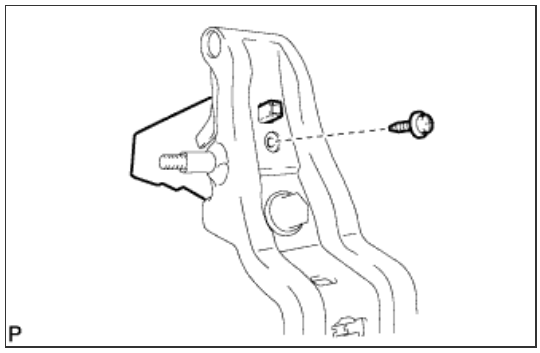


c. Remove the 2 screws and seat leg cover.



8. REMOVE NO. 2 SEAT LEG COVER NO. 2

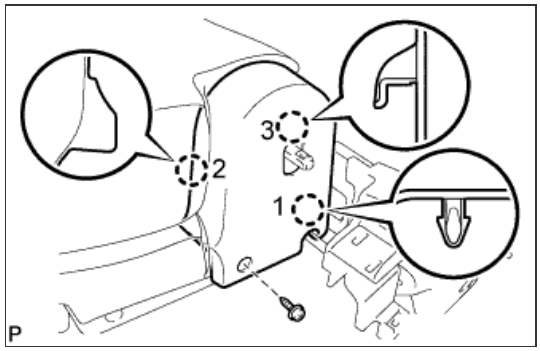
a. Remove the screw and cover.



9. REMOVE RECLINING ADJUSTER COVER LH

a. Remove the screw.

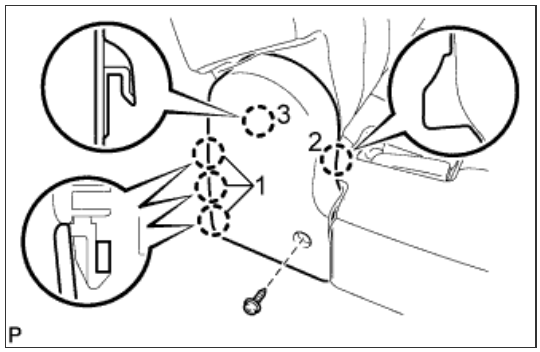
b. Detach the 3 claws in the order shown in the illustration, and remove the cover.



10. REMOVE RECLINING ADJUSTER COVER RH

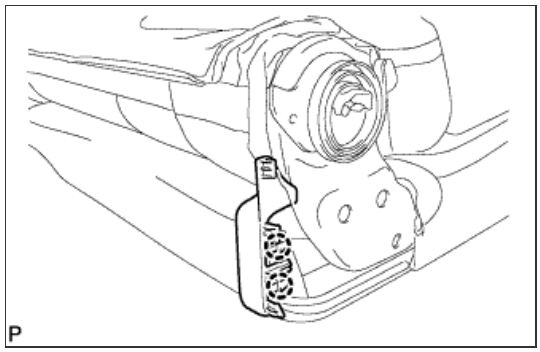
a. Remove the screw.

b. Detach the 5 claws in the order shown in the illustration, and then remove the cover.



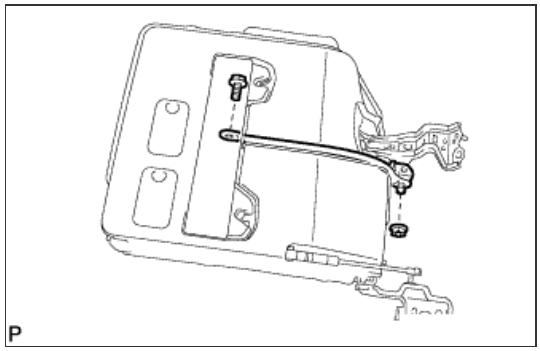
11. REMOVE REAR SEAT INNER RECLINING COVER LH

a. Detach the 2 claws and remove the cover.



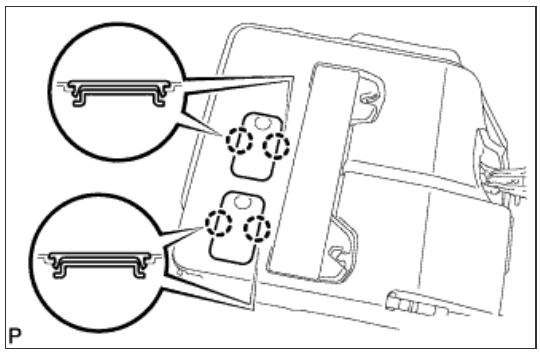
12. REMOVE 3RD SEAT LINK SUB-ASSEMBLY LH

a. Remove the bolt, nut and seat link.



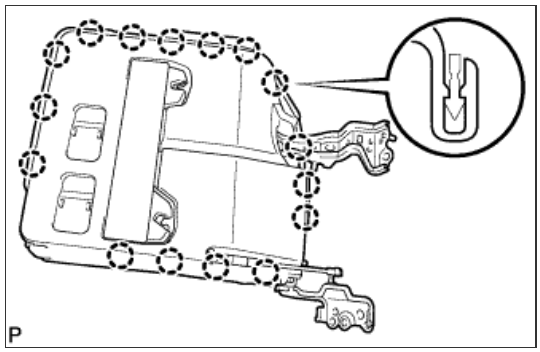
13. REMOVE 3RD SEAT CUSHION LOCK COVER

a. Detach the 4 claws and remove the 2 covers.

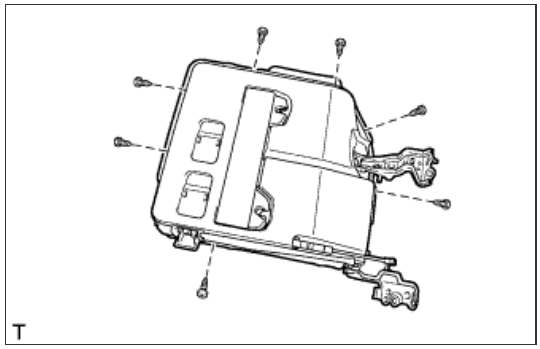


14. REMOVE REAR SEAT CUSHION UNDER COVER LH

a. Detach the 16 claws.

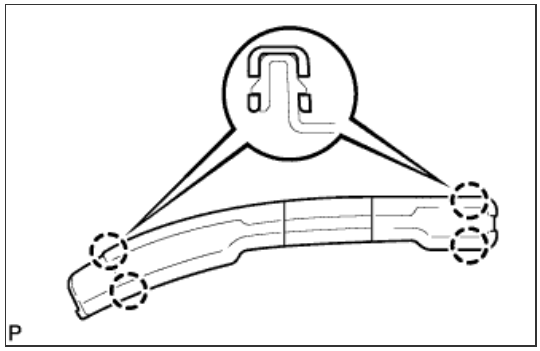


b. Remove the 7 screws and cover.



15. REMOVE NO. 3 SEAT FRONT BRACKET COVER LH

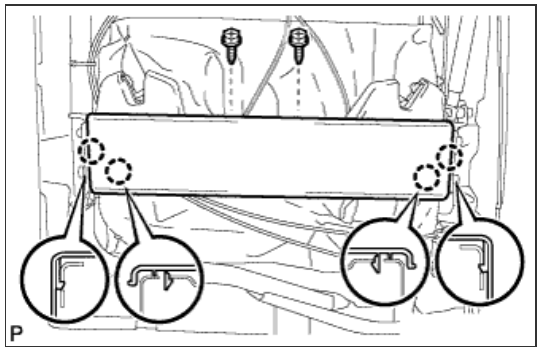
a. Detach the 4 claws and remove the cover.



16. REMOVE NO. 3 SEAT LEG COVER NO. 2

a. Remove the 2 screws.

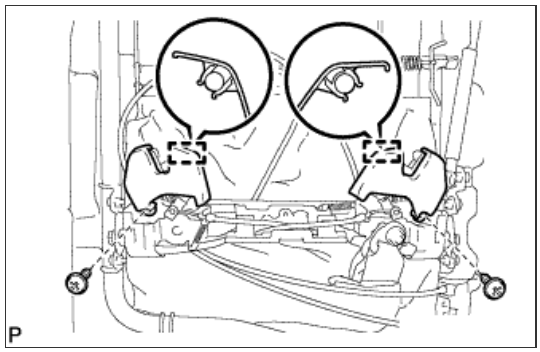
b. Detach the 4 claws and remove the cover.



17. REMOVE REAR SEAT LOCK COVER LH

a. Remove the 2 screws.

b. Detach the 2 clamps and remove the 2 covers.

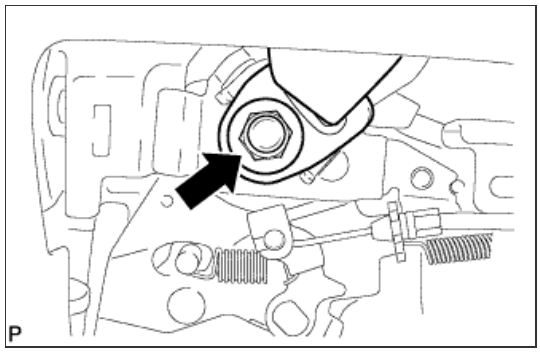


18. REMOVE REAR SEAT INNER BELT SUB-ASSEMBLY (for LH Side)

a. Remove the nut and belt.

HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat inner belt. Therefore, it becomes disconnected when the nut is removed.

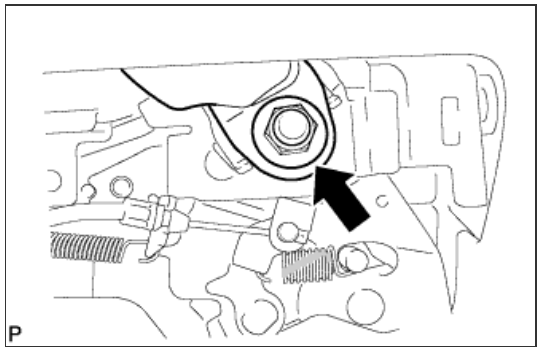


19. REMOVE REAR SEAT OUTER BELT SUB-ASSEMBLY (for RH Side)

a. Remove the nut and belt.

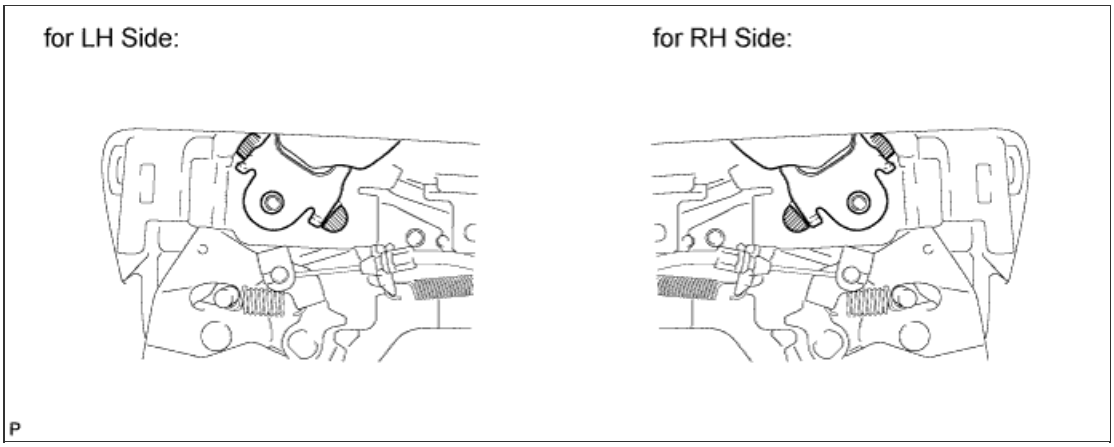
HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat outer belt. Therefore, it becomes disconnected when the nut is removed.



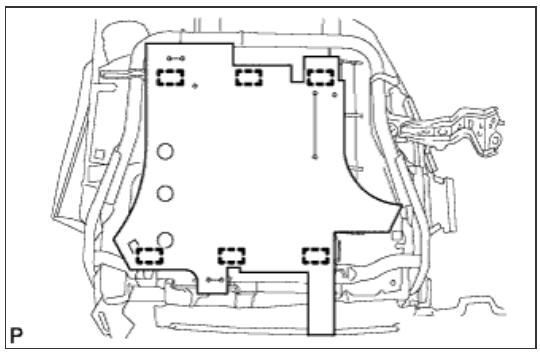
20. REMOVE REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY

a. Remove the 2 belts.



21. REMOVE REAR SEAT CUSHION CARPET

a. Cut off the tack pins which fasten the seat cushion carpet to the seat cushion pad, and then remove the seat cushion carpet from the seat cushion pad.



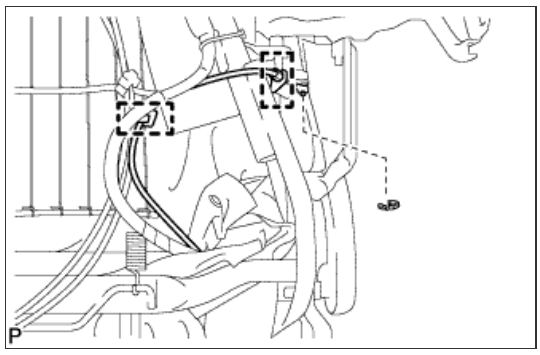
22. REMOVE SEAT CUSHION COVER WITH PAD

23. REMOVE NO. 3 SEAT CUSHION PAD LH

24. REMOVE NO. 3 SEAT CUSHION COVER SUB-ASSEMBLY LH

a. Remove the E-ring and detach the clamp.

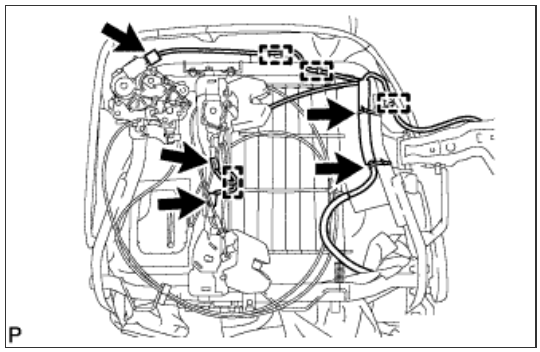
b. Detach the cable clamp and disconnect the cable.



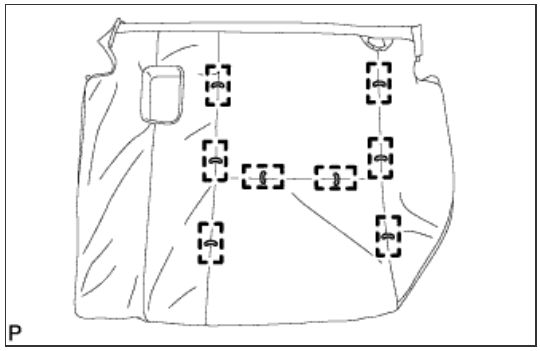
c. Detach the 4 clamps.

d. Disconnect the 3 connectors.

e. Remove the 2 cable ties.

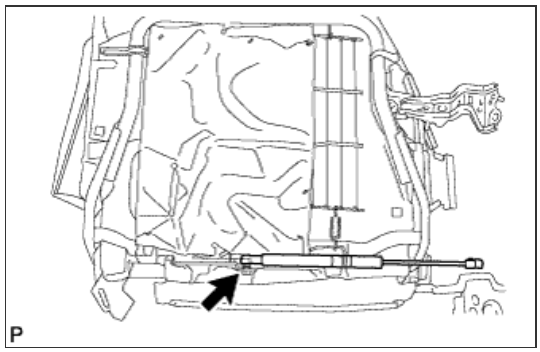


f. Remove the hog rings and seat cushion cover.



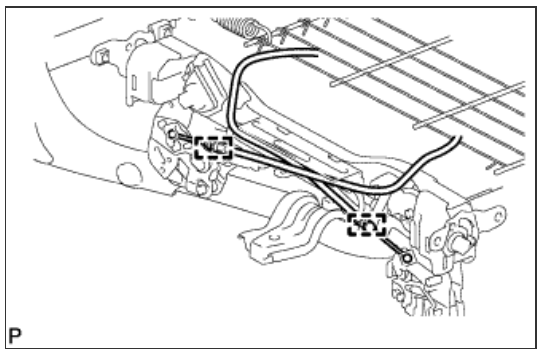
25. REMOVE NO. 2 SEAT STAY SUB-ASSEMBLY

a. Remove the bolt and seat stay.

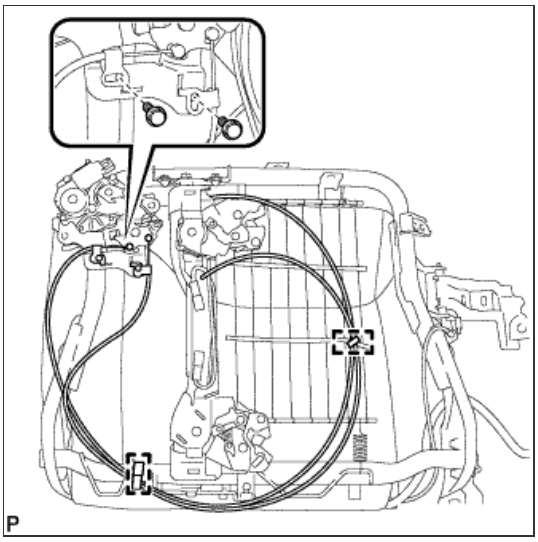


26. REMOVE NO. 3 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Detach the 2 cable clamps and disconnect the 2 cables.

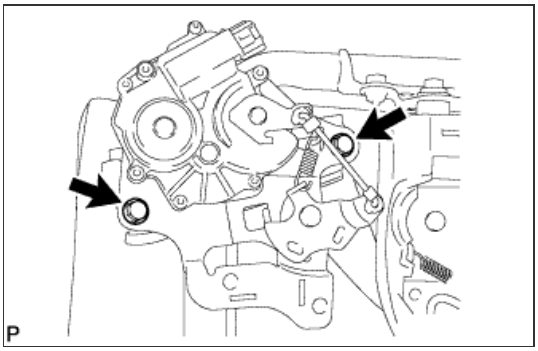


b. Detach the 2 clamps and remove the 2 bolts and control cable.



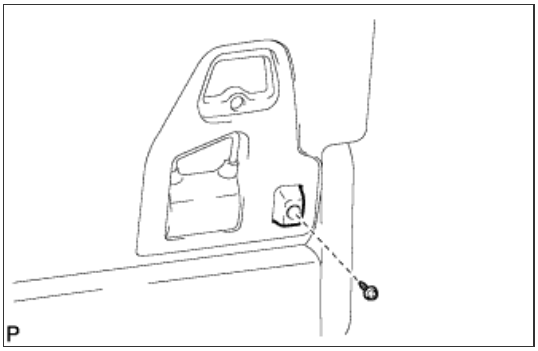
27. REMOVE REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH

a. Remove the 2 bolts and lever.



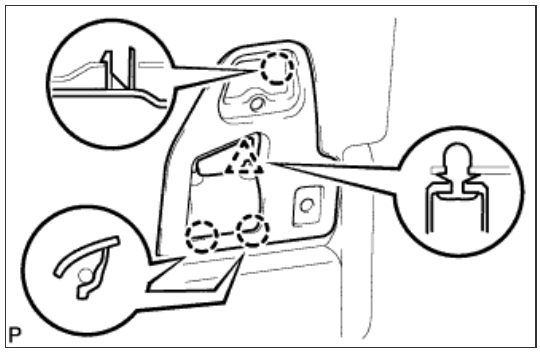
28. REMOVE REAR NO. 2 SEATBACK CUSHION

a. Remove the screw and seatback cushion.



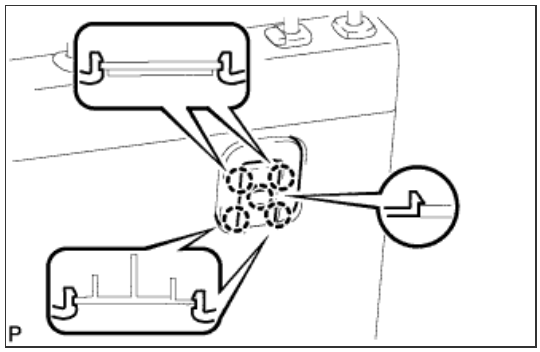
29. REMOVE REAR LOWER SEATBACK LOCK BEZEL

a. Detach the 3 claws and clip, and remove the seatback lock bezel.



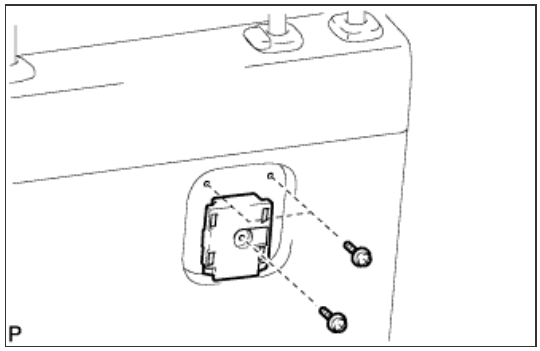
30. REMOVE REAR SEAT HINGE PAWL GUIDE

a. Detach the 5 claws and remove the guide.



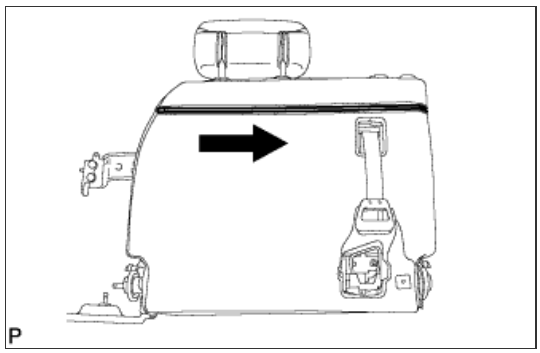
31. REMOVE REAR SEAT HINGE PAWL GUIDE

a. Remove the 3 screws and guide.

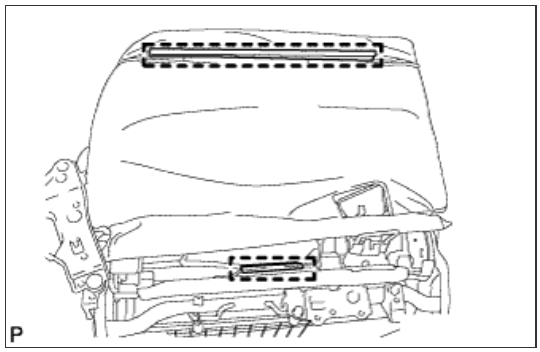


32. REMOVE SEATBACK COVER WITH PAD

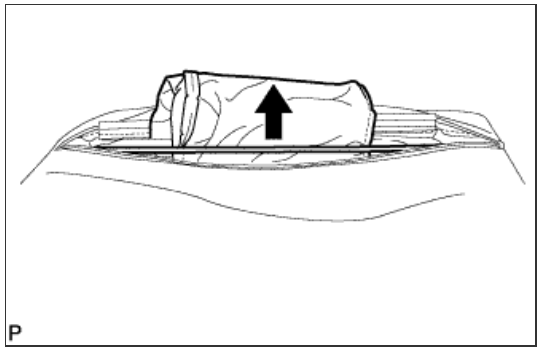
a. Open the fastener.



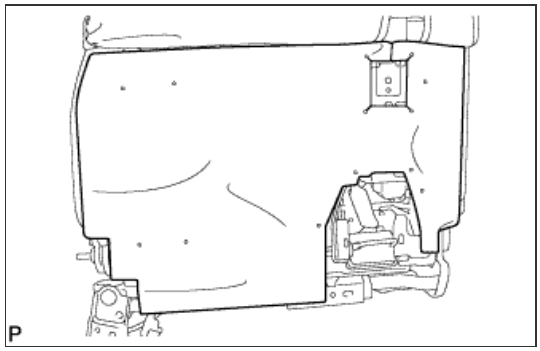
b. Detach the 2 hooks.



c. Pull out the center headrest storage bag.

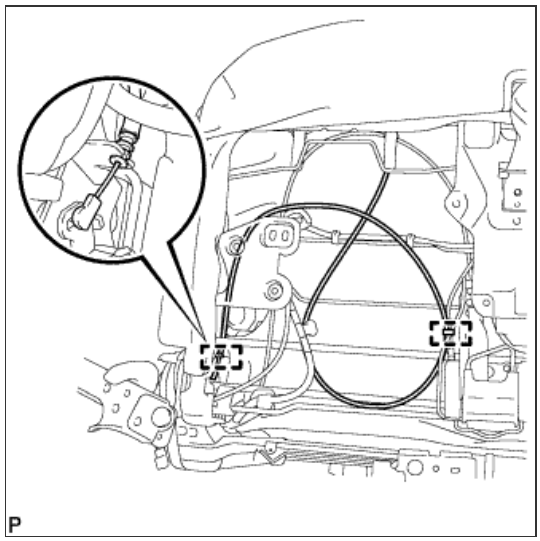


d. Remove the rear seat protector.



e. Detach the cable clamp and disconnect the cable.

f. Detach the clamp.

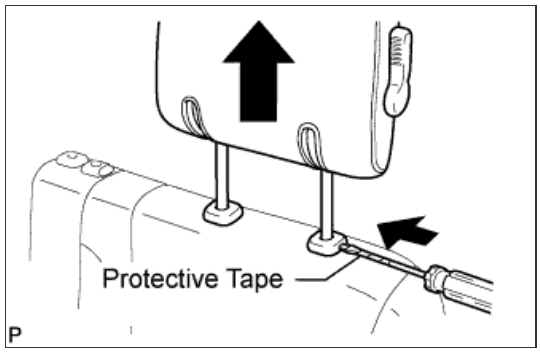


g. for LH Side:

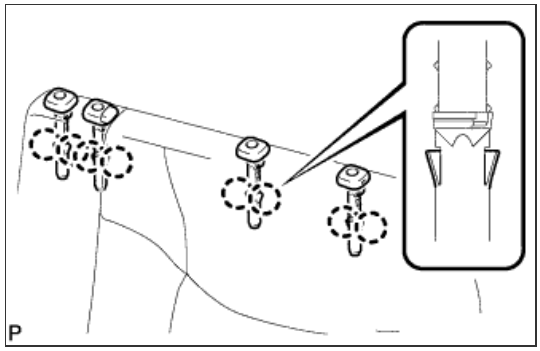
i. While releasing the lock inside the headrest support with a screwdriver, remove the headrest.

HINT:

Tape the screwdriver tip before use.



ii. Detach the 8 claws and remove the 4 headrest supports.

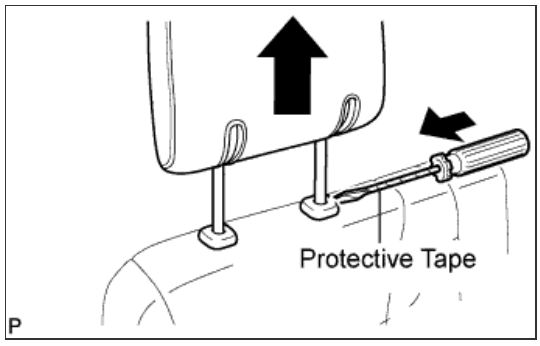


h. for RH Side:

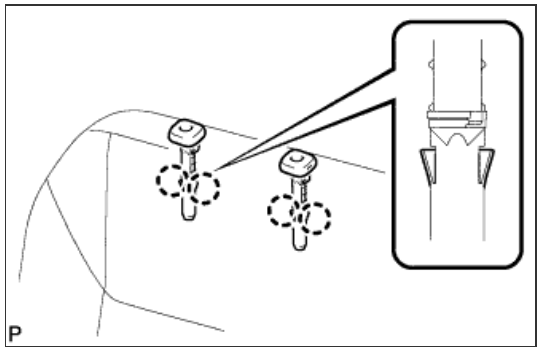
i. While releasing the lock inside the headrest support with a screwdriver, remove the headrest.

HINT:

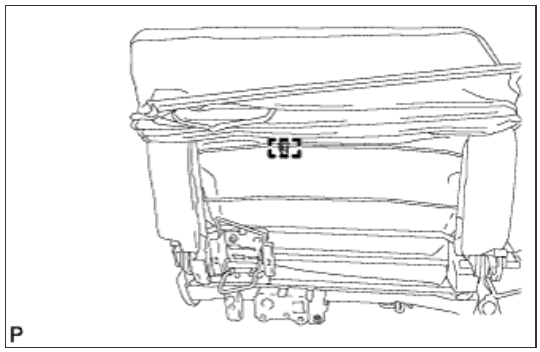
Tape the screwdriver tip before use.



ii. Detach the 4 claws and remove the 2 headrest supports.

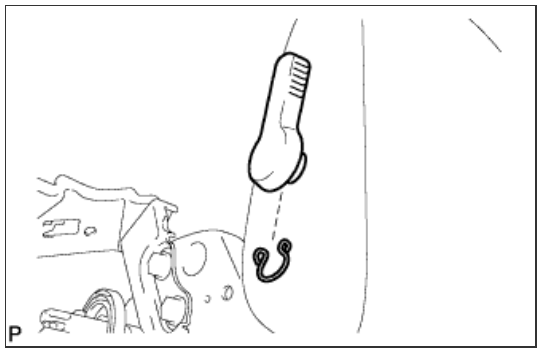


i. Remove the hog ring and seatback cover with pad.



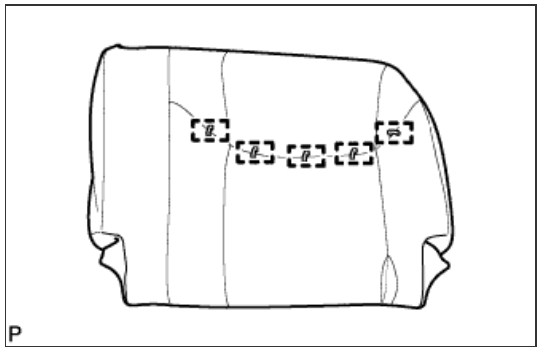
33. REMOVE REAR SEAT HEADREST HANDLE

a. Remove the snap ring and headrest handle.



34. REMOVE NO. 3 SEATBACK COVER SUB-ASSEMBLY LH

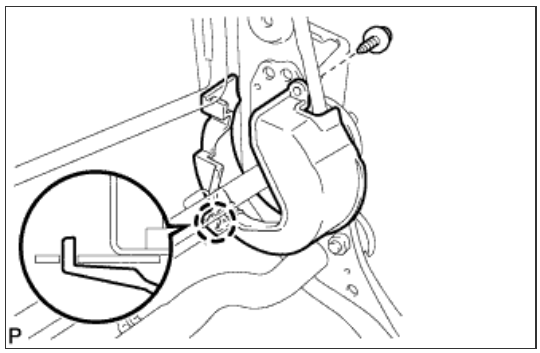
a. Remove the hog rings and seatback cover.



35. REMOVE REAR INNER SEAT RECLINING COVER LH

a. Remove the screw.

b. Detach the claw and remove the cover.



36. REMOVE REAR INNER SEAT RECLINING COVER RH

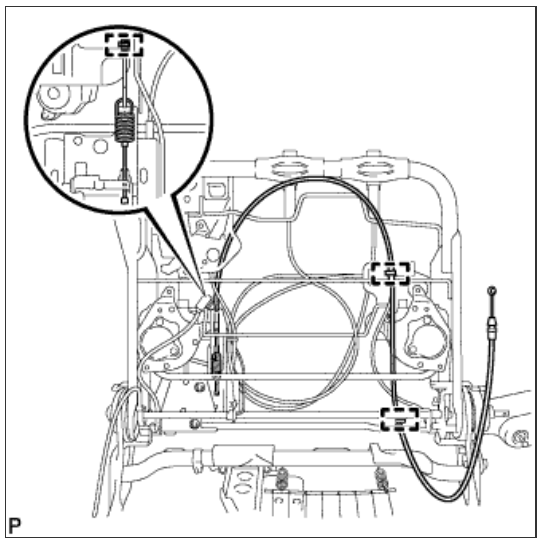
a. Remove the screw.

b. Detach the claw and remove the cover.

37. REMOVE REAR SEAT LOCK CONTROL CABLE

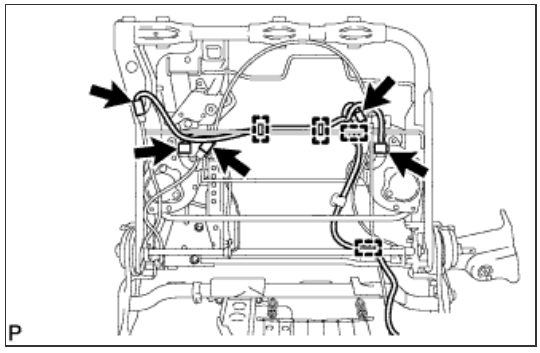
a. Detach the cable clamp and disconnect the cable.

b. Detach the 2 clamps and remove the lock control cable.



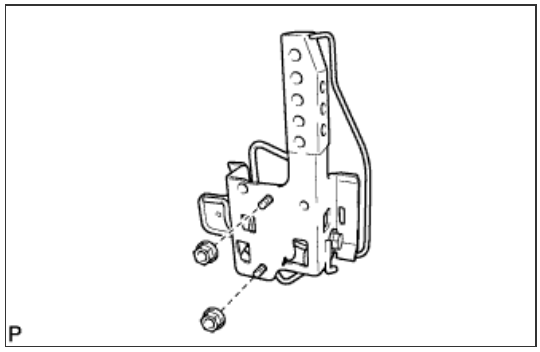
38. REMOVE REAR NO. 2 SEAT WIRE LH

a. Disconnect the 5 connectors and detach the 4 clamps, and then remove the rear No. 2 seat wire LH.



39. REMOVE REAR SEATBACK LOCK STRIKER ASSEMBLY LH

a. Remove the 2 nuts and lock striker.



40. REMOVE REAR NO. 2 SEATBACK COVER LH

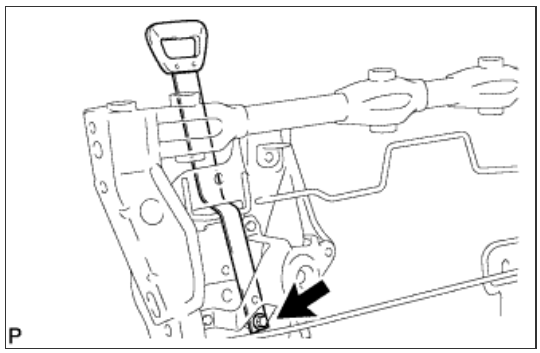
a. Detach the 3 claws and remove the cover.

41. REMOVE REAR SEATBACK LOCK STRIKER COVER LH

a. Detach the 2 clamps and remove the cover.

42. REMOVE NO. 2 SEAT RECLINING RELEASE HANDLE SUB-ASSEMBLY

a. Remove the bolt and release handle.



for Preparation Click here

1. INSPECT REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY

a. Apply battery voltage to the lock control lever connector and check the operation of the lever.

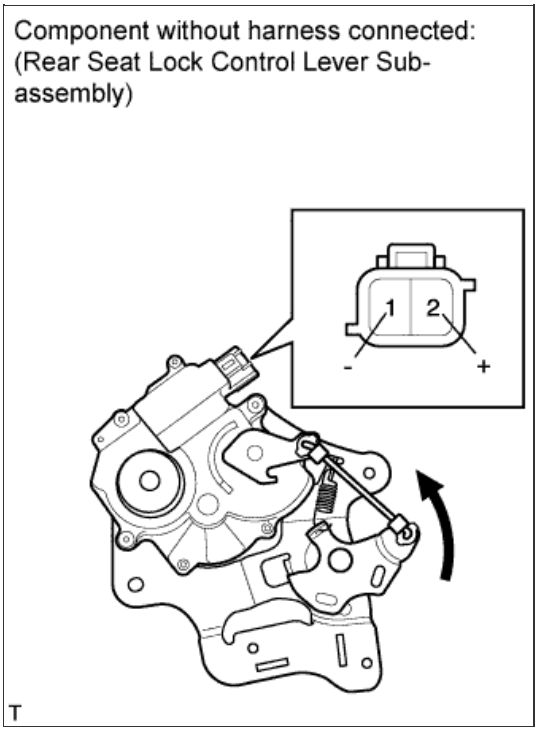
OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 (+) Battery negative (-) → Terminal 1 (-)	Rotates counterclockwise

NOTICE:

To prevent damage to the unit, do not reverse the connection.

If the result is not as specified, replace the rear seat lock control lever sub-assembly.



for Preparation Click here

CAUTION:

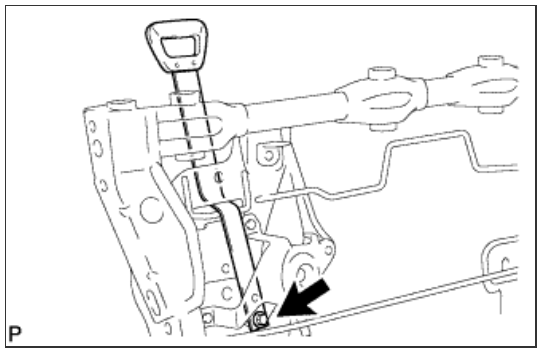
Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. INSTALL NO. 2 SEAT RECLINING RELEASE HANDLE SUB-ASSEMBLY

a. Install the release handle with the bolt.



2. INSTALL REAR SEATBACK LOCK STRIKER COVER LH

a. Attach the 2 clamps to install the cover.

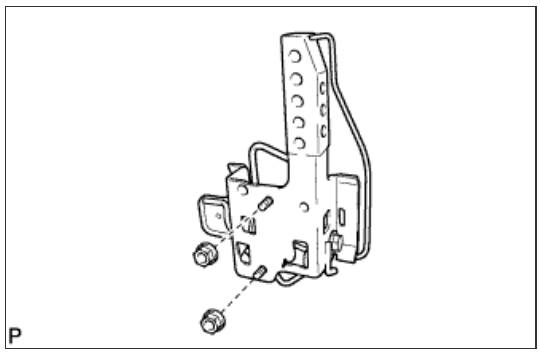
3. INSTALL REAR NO. 2 SEATBACK COVER LH

a. Attach the 3 claws to install the cover.

4. INSTALL REAR SEATBACK LOCK STRIKER ASSEMBLY LH

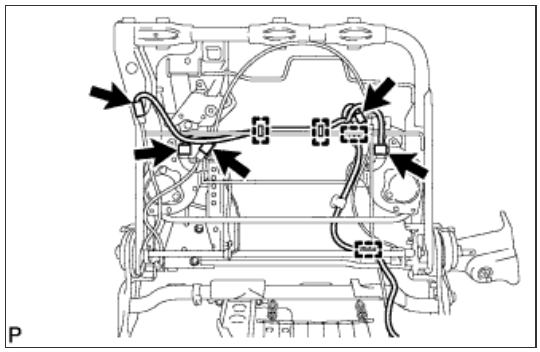
a. Install the lock striker with the 2 nuts.

Torque:
14 N*m{ 143 kgf*cm , 10 ft.*lbf }



5. INSTALL REAR NO. 2 SEAT WIRE LH

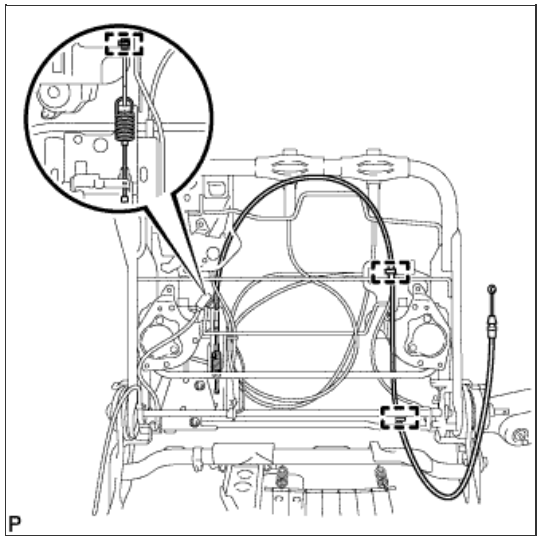
a. Connect the 5 connectors and attach the 4 clamps to install the No. 2 seat wire LH.



6. INSTALL REAR SEAT LOCK CONTROL CABLE

a. Attach the 2 clamps to install the lock control cable.

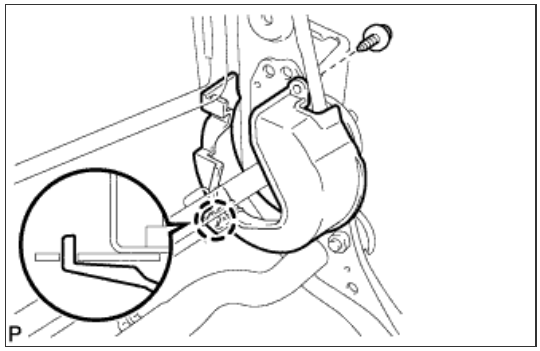
b. Attach the cable clamp to connect the cable.



7. INSTALL REAR INNER SEAT RECLINING COVER LH

a. Attach the claw to install the cover.

b. Install the screw.



8. INSTALL REAR INNER SEAT RECLINING COVER RH

a. Attach the claw to install the cover.

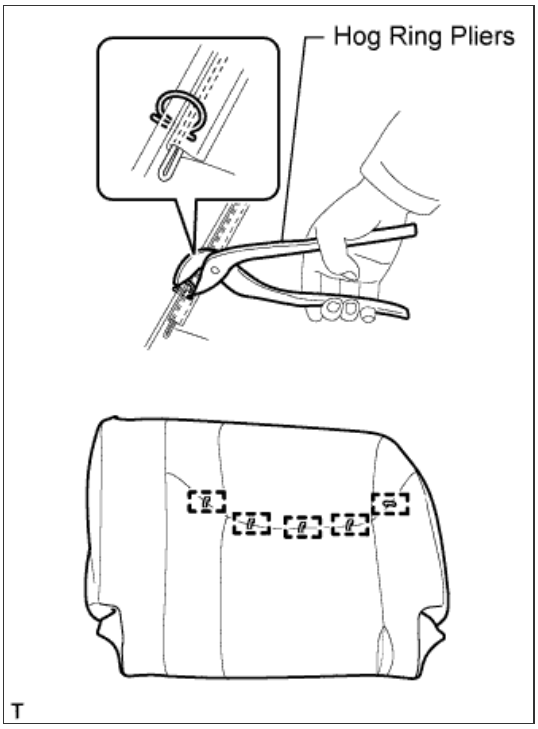
b. Install the screw.

9. INSTALL NO. 3 SEATBACK COVER SUB-ASSEMBLY LH

a. Using hog ring pliers, install the seatback cover to the seatback pad with new hog rings.

NOTICE:

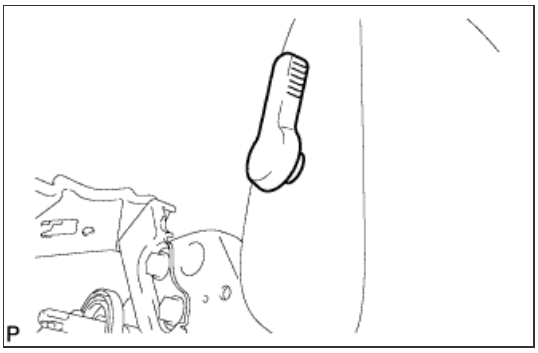
- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



10. INSTALL REAR SEAT HEADREST HANDLE

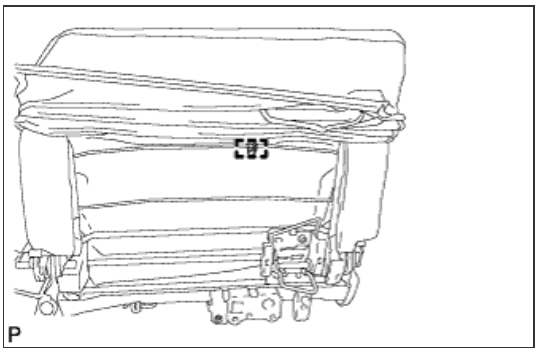
a. Install the snap ring to the headrest handle.

b. Install the headrest handle to the headrest.



11. INSTALL SEATBACK COVER WITH PAD

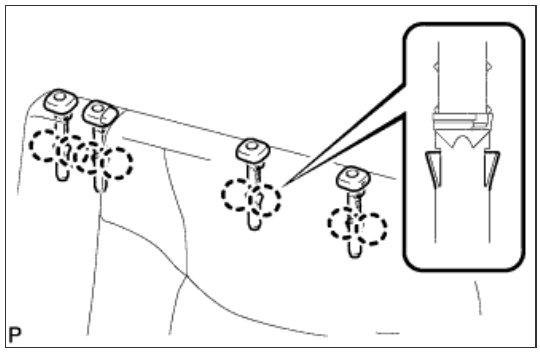
a. Using hog ring pliers, install the seatback cover with pad to the seatback frame with a new hog ring.



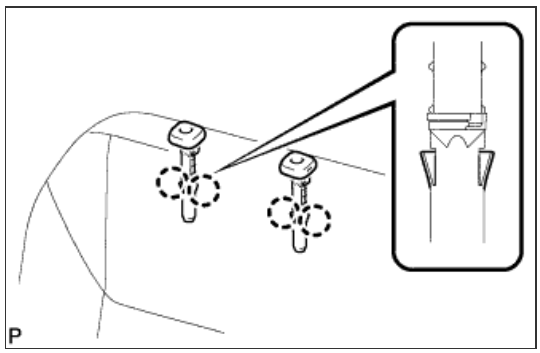
b. for LH Side:

i. Attach the 8 claws to install the 4 headrest supports.

ii. Install the rear seat protector.



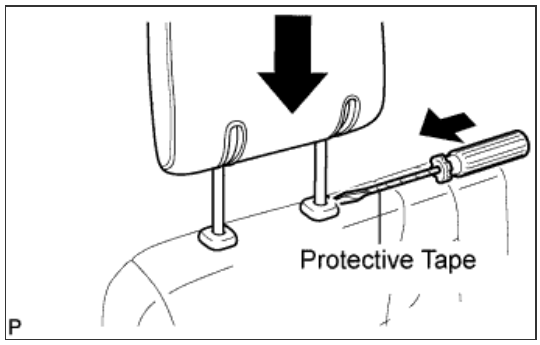
c. for RH Side:
Attach the 4 claws to install the 2 headrest supports.



d. While releasing the lock inside the headrest support with a screwdriver, install the headrest.

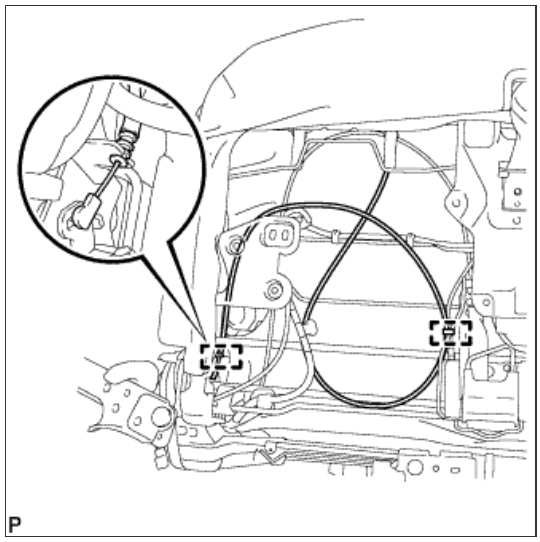
HINT:

Tape the screwdriver tip before use.

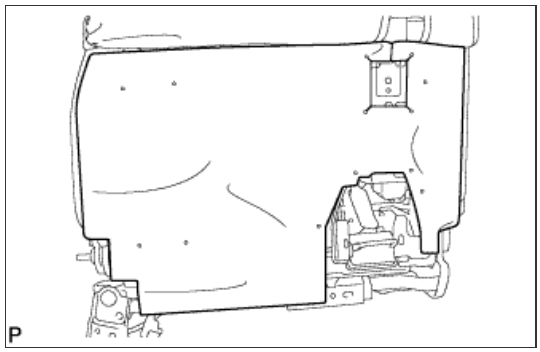


e. Attach the clamp.

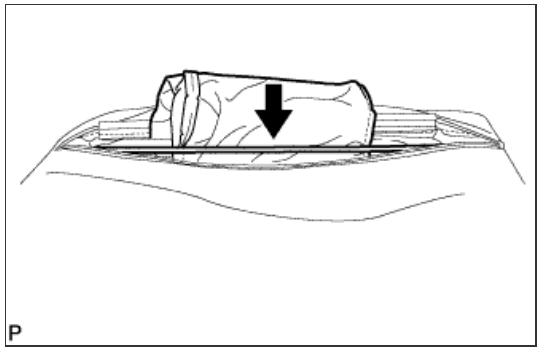
f. Attach the cable clamp to connect the cable.



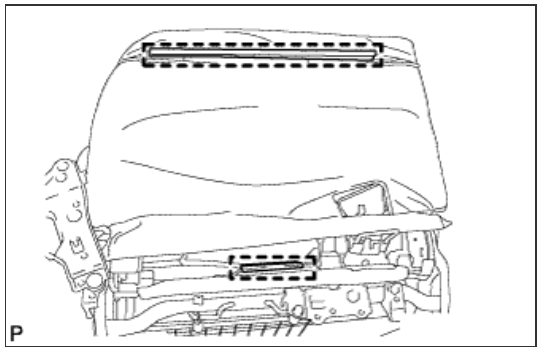
g. Install the seat protector.



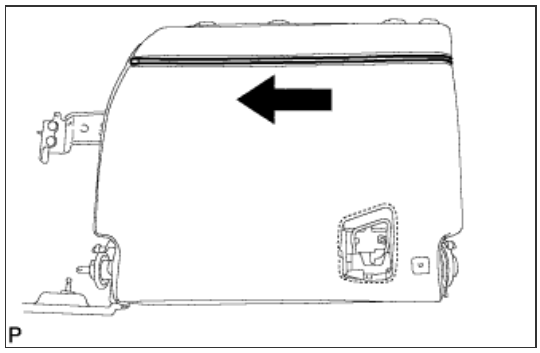
h. Insert the center headrest storage bag.



i. Attach the 2 hooks.

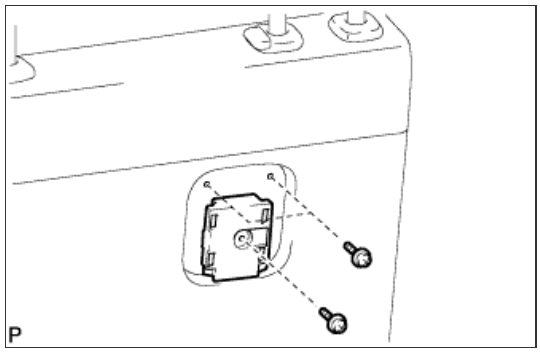


j. Close the fastener.



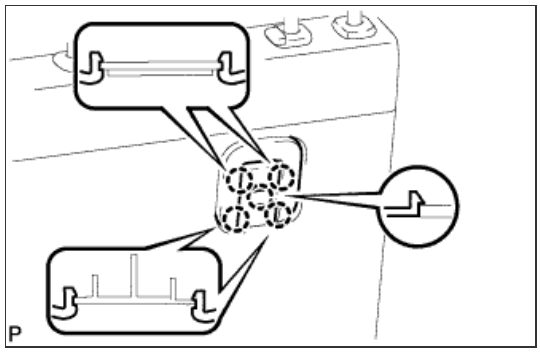
12. INSTALL REAR SEAT HINGE PAWL GUIDE

a. Install the guide with the 3 screws.



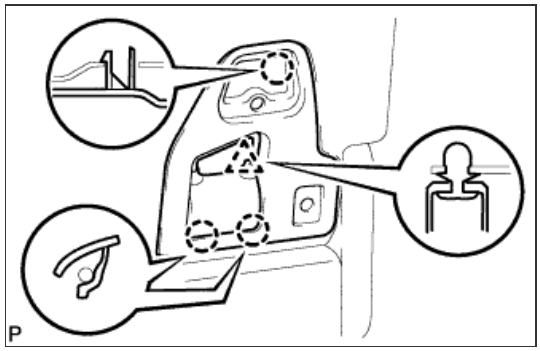
13. INSTALL REAR SEAT HINGE PAWL GUIDE

a. Attach the 5 claws to install the guide.



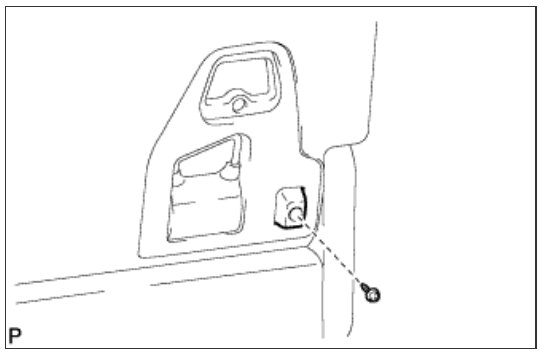
14. INSTALL REAR LOWER SEATBACK LOCK BEZEL

a. Attach the 3 claws and clip to install the seatback lock bezel.



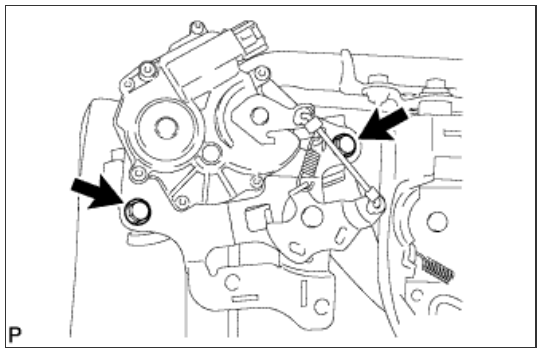
15. INSTALL REAR NO. 2 SEATBACK CUSHION

a. Install the seatback cushion with the screw.



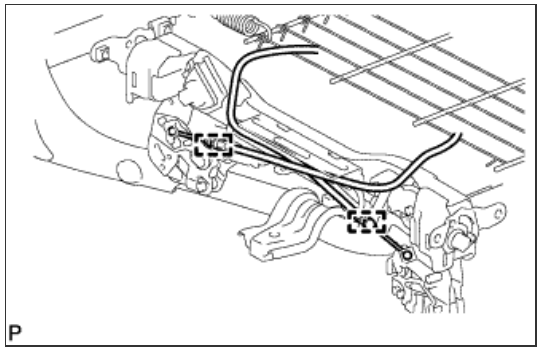
16. INSTALL REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH

a. Install the lever with the 2 bolts.

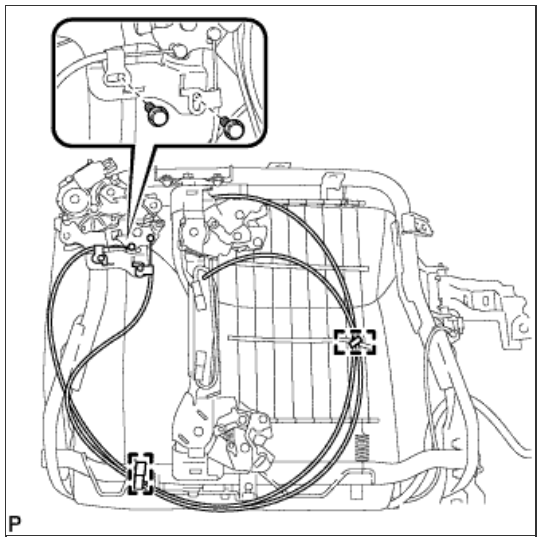


17. INSTALL NO. 3 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Attach the 2 cable clamps to connect the 2 cables.

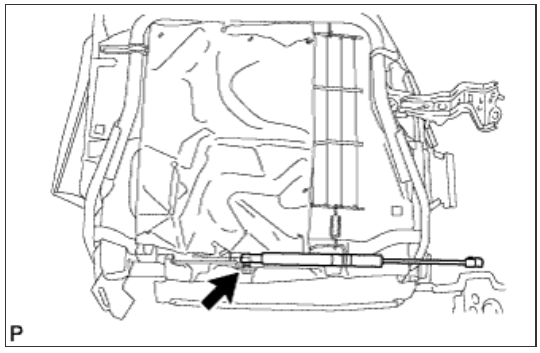


b. Attach the 2 clamps and then install the 2 cables with the 2 bolts.



18. INSTALL NO. 2 SEAT STAY SUB-ASSEMBLY

a. Install the seat stay with the bolt.

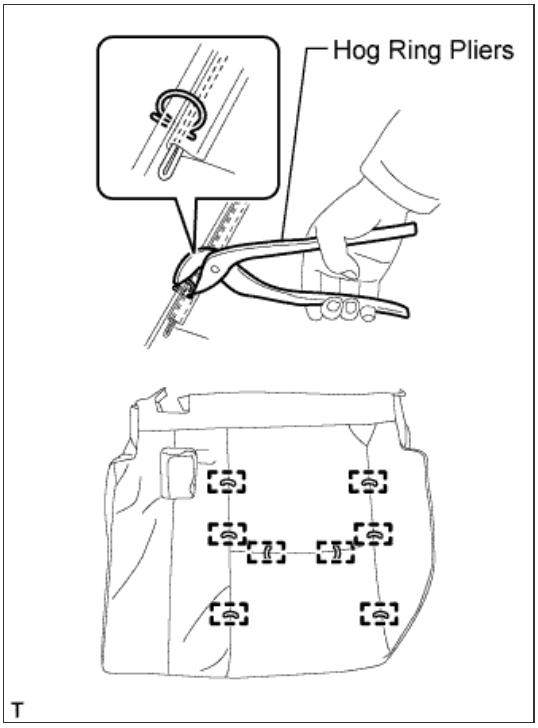


19. INSTALL NO. 3 SEAT CUSHION COVER SUB-ASSEMBLY LH

a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

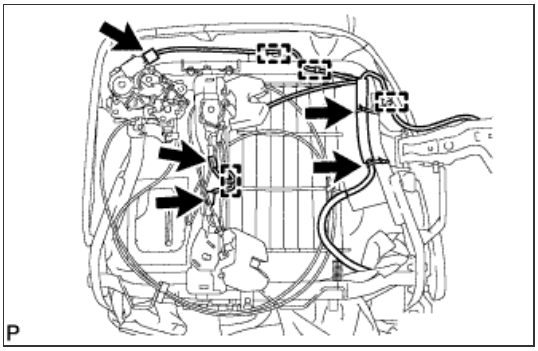
- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Attach the 4 clamps.

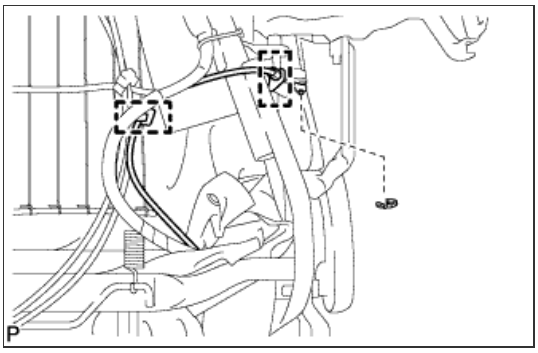
c. Connect the 3 connectors.

d. Install 2 new cable ties.



e. Install the E-ring and attach the clamp.

f. Attach the cable clamp and connect the cable.

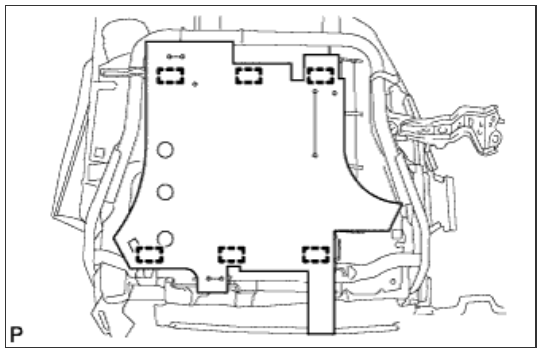


20. INSTALL NO. 3 SEAT CUSHION PAD LH

21. INSTALL SEAT CUSHION COVER WITH PAD

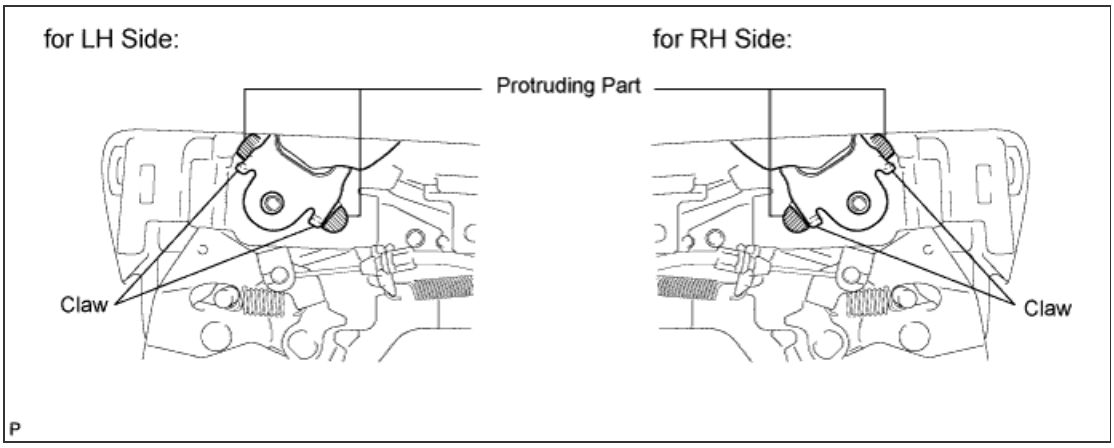
22. INSTALL REAR SEAT CUSHION CARPET

a. Install the seat cushion carpet with new tack pins.



23. INSTALL REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY

a. Install the 2 belts.



NOTICE:

- **Make sure the claws are facing away from the seat.**
- **Do not overlap the anchor part of the seat belt and protruding parts of the seat.**

24. INSTALL REAR SEAT OUTER BELT SUB-ASSEMBLY (for RH Side)

a. Install the belt with the nut.

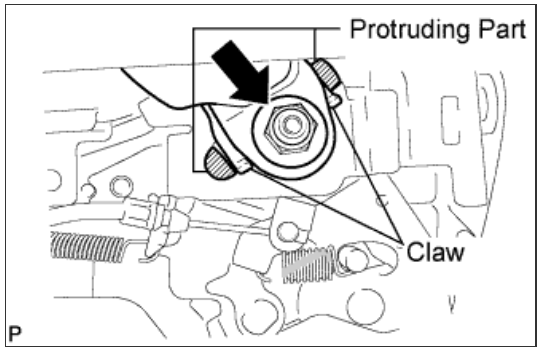
Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the seat.

HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat outer belt. Therefore, connect it when installing the rear seat outer belt.



25. INSTALL REAR SEAT INNER BELT SUB-ASSEMBLY (for LH Side)

a. Install the belt with the nut.

Torque:

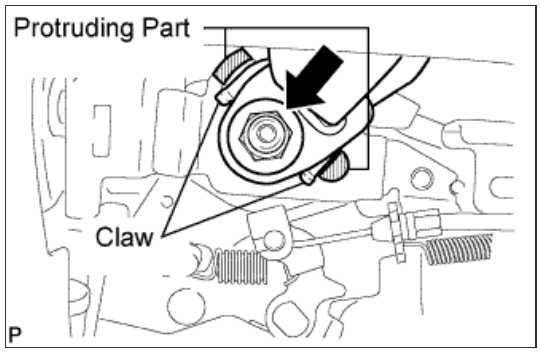
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the seat.

HINT:

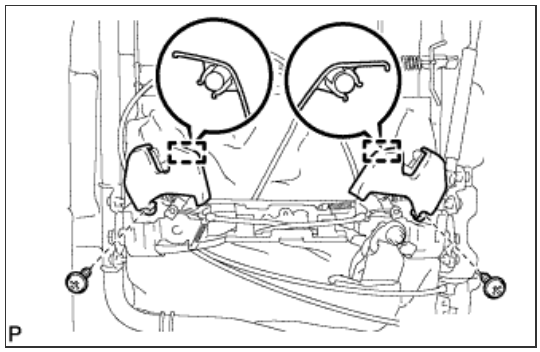
The rear No. 2 seat inner belt is fixed with the same nut as the rear seat inner belt. Therefore, connect it when installing the rear seat inner belt.



26. INSTALL REAR SEAT LOCK COVER LH

a. Attach the 2 clamps to install the 2 covers.

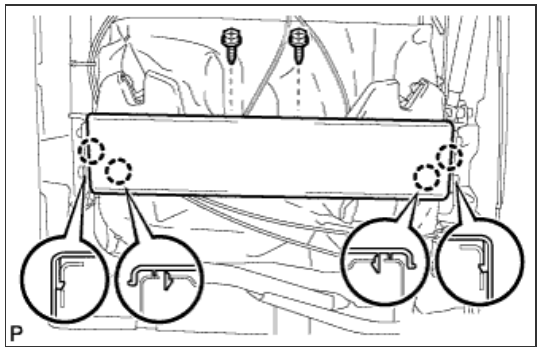
b. Install the 2 screws.



27. INSTALL NO. 3 SEAT LEG COVER NO. 2

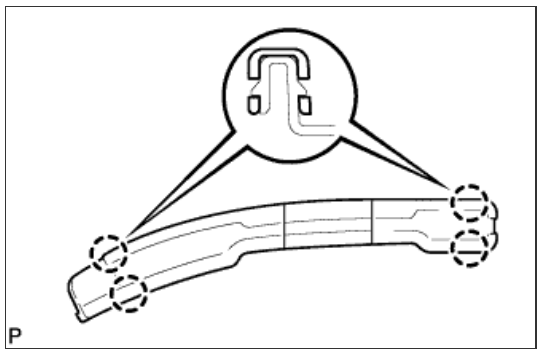
a. Attach the 4 claws to install the cover.

b. Install the 2 screws.



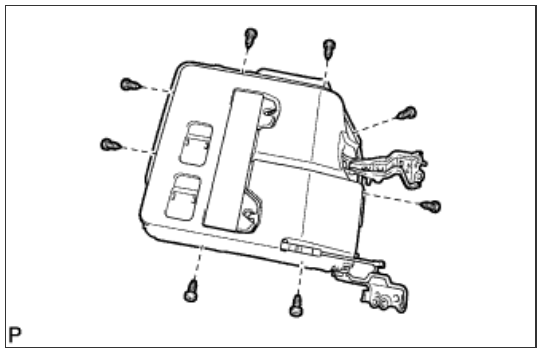
28. INSTALL NO. 3 SEAT FRONT BRACKET COVER LH

a. Attach the 4 claws to install the cover.

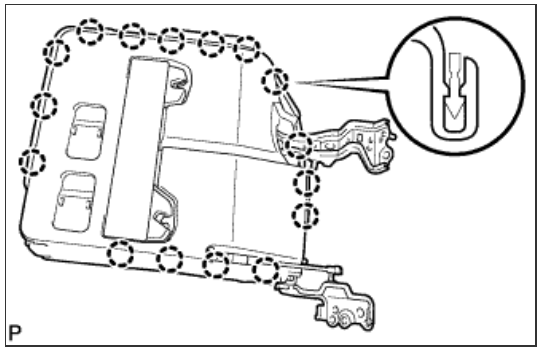


29. INSTALL REAR SEAT CUSHION UNDER COVER LH

a. Install the cover with the 8 screws.

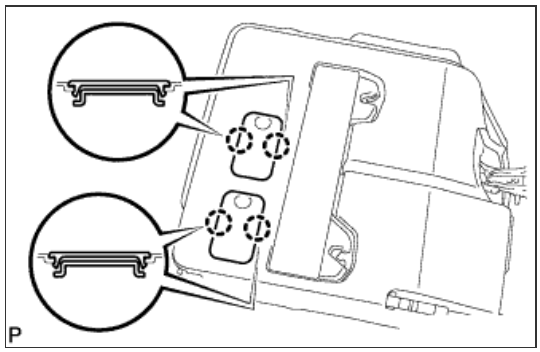


b. Attach the 16 claws.



30. INSTALL 3RD SEAT CUSHION LOCK COVER

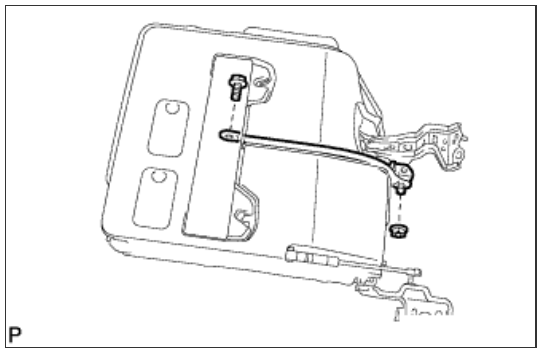
a. Attach the 4 claws to install the 2 covers.



31. INSTALL 3RD SEAT LINK SUB-ASSEMBLY LH

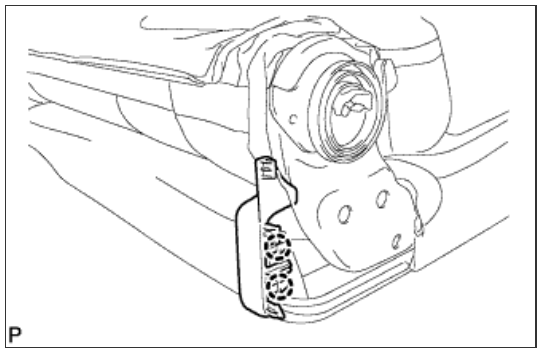
a. Install the seat link with the bolt and nut.

Torque:
8.5 N*m{ 87 kgf*cm , 75 in.*lbf }



32. INSTALL REAR SEAT INNER RECLINING COVER LH

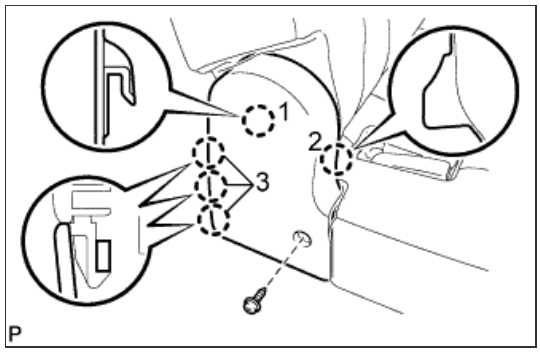
a. Attach the 2 claws to install the cover.



33. INSTALL RECLINING ADJUSTER COVER RH

a. Attach the 5 claws in the order shown in the illustration to install the cover.

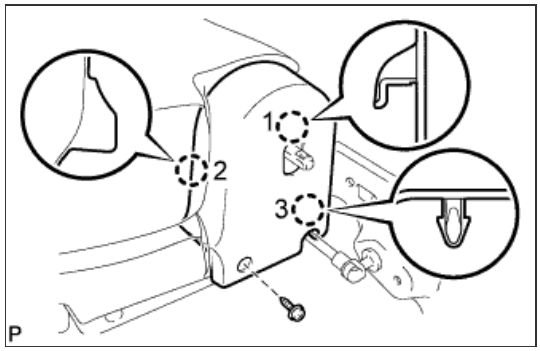
b. Install the screw.



34. INSTALL RECLINING ADJUSTER COVER LH

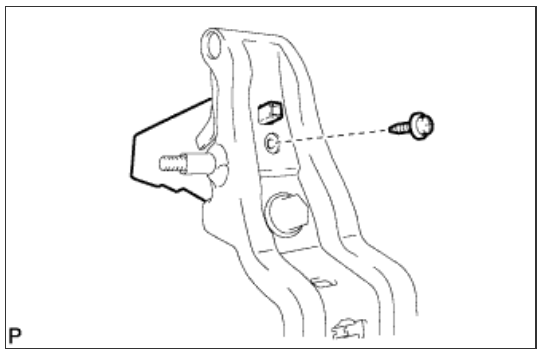
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the screw.



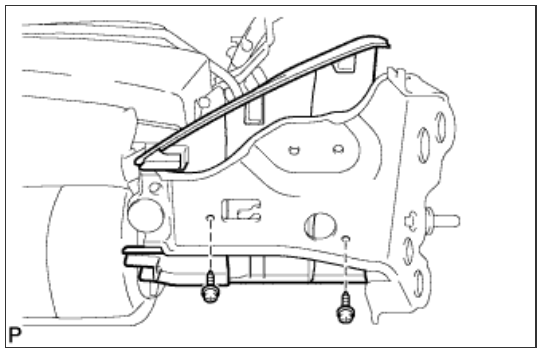
35. INSTALL NO. 2 SEAT LEG COVER NO. 2

a. Install the seat leg cover with the screw.



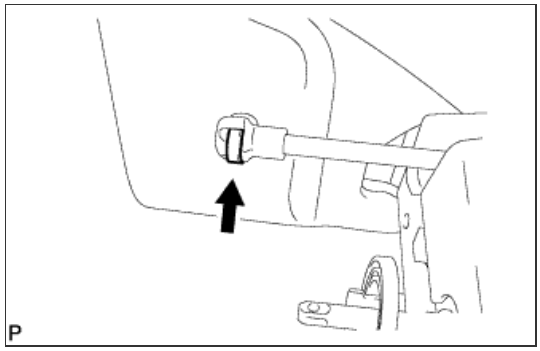
36. INSTALL REAR NO. 3 SEAT LEG COVER LH

a. Install the seat leg cover with the 2 screws.



b. Install the spring of the seat stay ball joint.

c. Connect the seat stay to the seat frame.

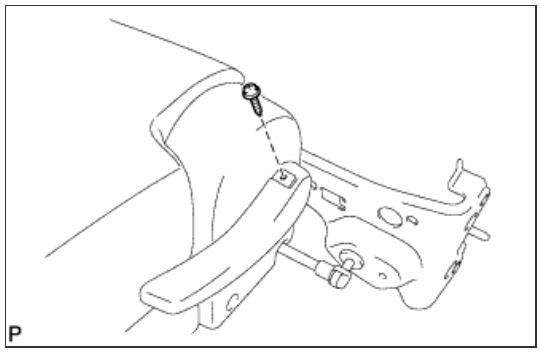


37. INSTALL REAR SEAT REAR BRACKET COVER REAR

a. Attach the 2 claws to install the cover.

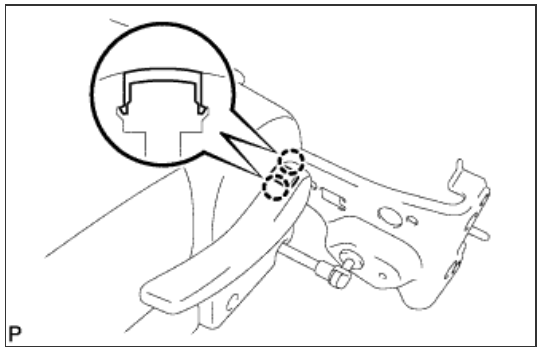
38. INSTALL NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



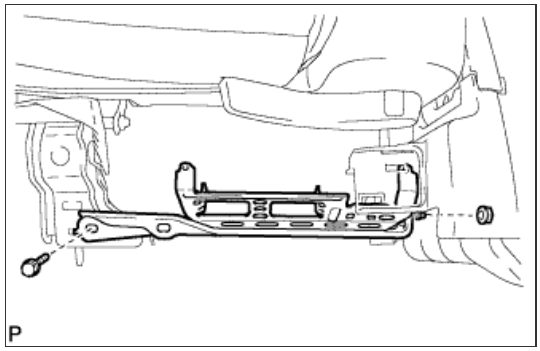
39. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.

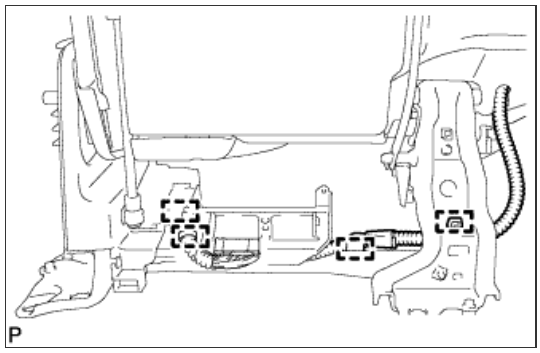


40. INSTALL REAR NO. 2 SEAT LEG BRACKET REAR LH

a. Install the bracket with the bolt and nut.



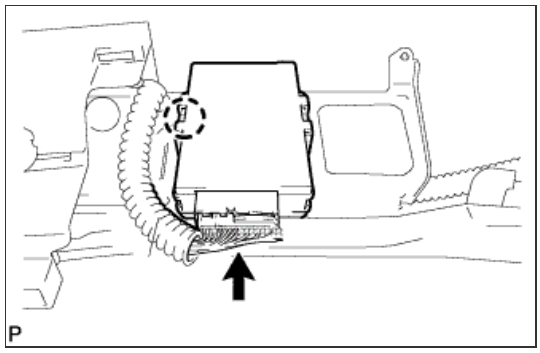
b. Attach the 4 clamps.



41. INSTALL FOLD SEAT CONTROL ECU

a. Attach the 2 claws to install the ECU.

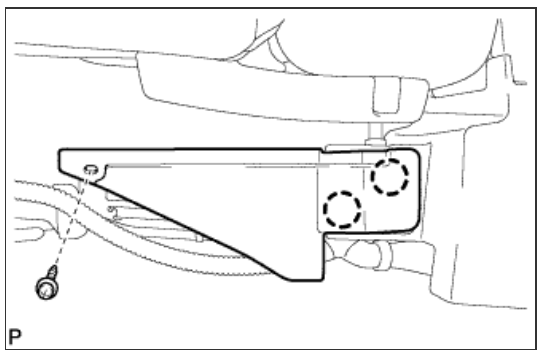
b. Connect the 2 connectors.



42. INSTALL NO. 2 SEAT CUSHION COVER

a. Attach the 2 claws to install the cover.

b. Install the screw.



for Preparation Click here

CAUTION:

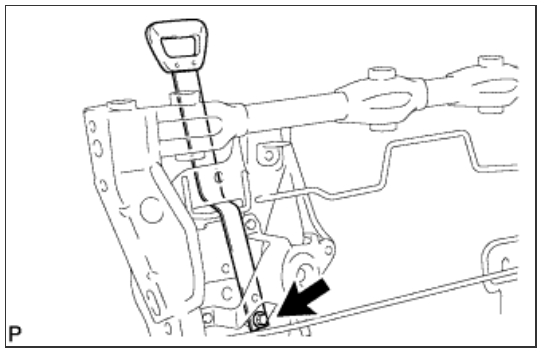
Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. INSTALL NO. 2 SEAT RECLINING RELEASE HANDLE SUB-ASSEMBLY

a. Install the release handle with the bolt.



2. INSTALL REAR SEATBACK LOCK STRIKER COVER LH

a. Attach the 2 clamps to install the cover.

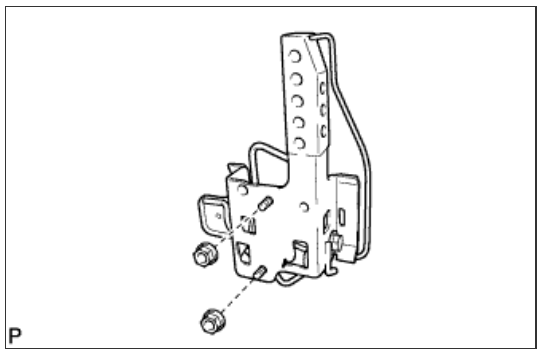
3. INSTALL REAR NO. 2 SEATBACK COVER LH

a. Attach the 3 claws to install the cover.

4. INSTALL REAR SEATBACK LOCK STRIKER ASSEMBLY LH

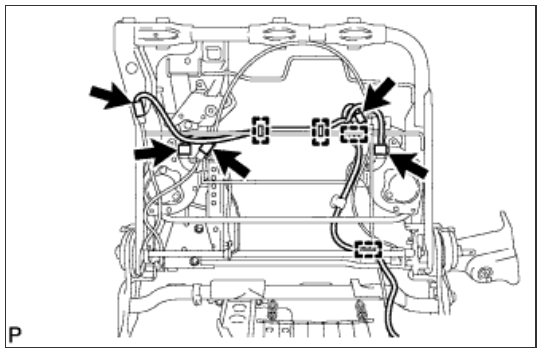
a. Install the lock striker with the 2 nuts.

Torque:
14 N*m{ 143 kgf*cm , 10 ft.*lbf }



5. INSTALL REAR NO. 2 SEAT WIRE LH

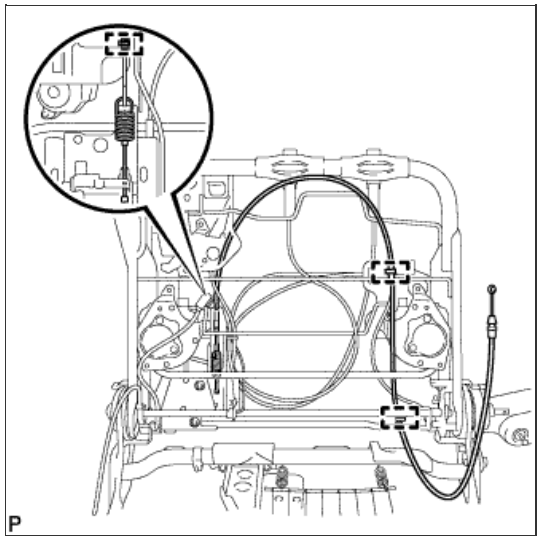
a. Connect the 5 connectors and attach the 4 clamps to install the No. 2 seat wire LH.



6. INSTALL REAR SEAT LOCK CONTROL CABLE

a. Attach the 2 clamps to install the lock control cable.

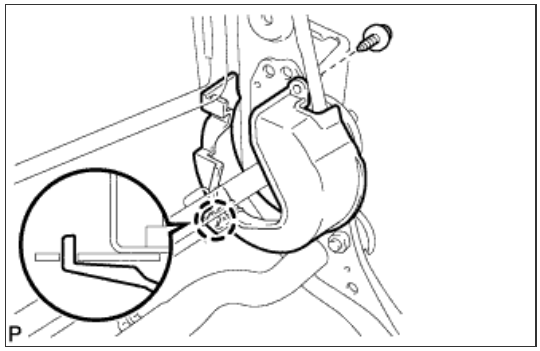
b. Attach the cable clamp to connect the cable.



7. INSTALL REAR INNER SEAT RECLINING COVER LH

a. Attach the claw to install the cover.

b. Install the screw.



8. INSTALL REAR INNER SEAT RECLINING COVER RH

a. Attach the claw to install the cover.

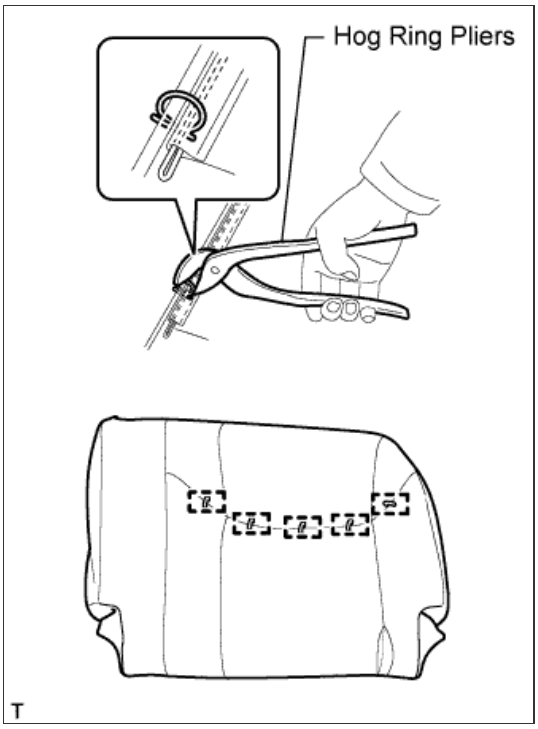
b. Install the screw.

9. INSTALL NO. 3 SEATBACK COVER SUB-ASSEMBLY LH

a. Using hog ring pliers, install the seatback cover to the seatback pad with new hog rings.

NOTICE:

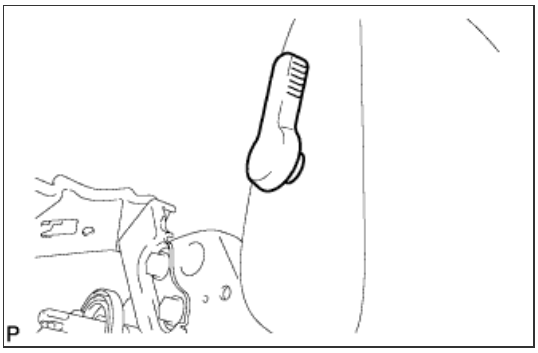
- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



10. INSTALL REAR SEAT HEADREST HANDLE

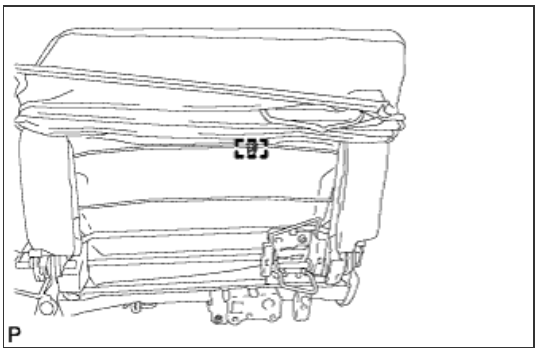
a. Install the snap ring to the headrest handle.

b. Install the headrest handle to the headrest.



11. INSTALL SEATBACK COVER WITH PAD

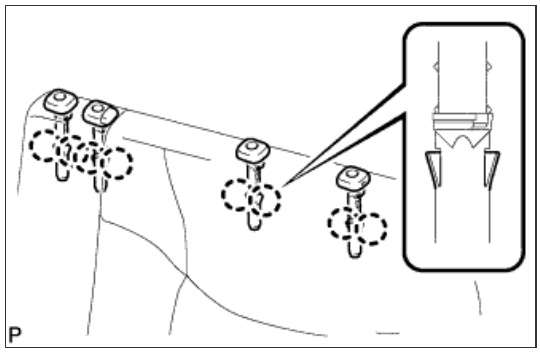
a. Using hog ring pliers, install the seatback cover with pad to the seatback frame with a new hog ring.



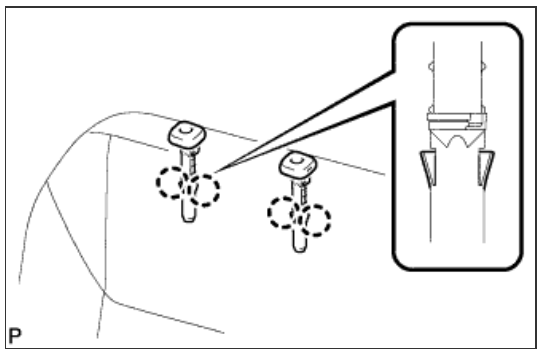
b. for LH Side:

i. Attach the 8 claws to install the 4 headrest supports.

ii. Install the rear seat protector.



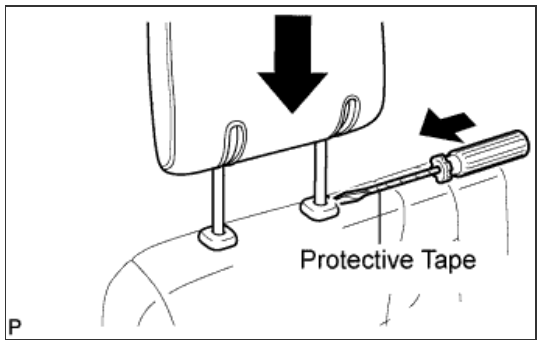
c. for RH Side:
Attach the 4 claws to install the 2 headrest supports.



d. While releasing the lock inside the headrest support with a screwdriver, install the headrest.

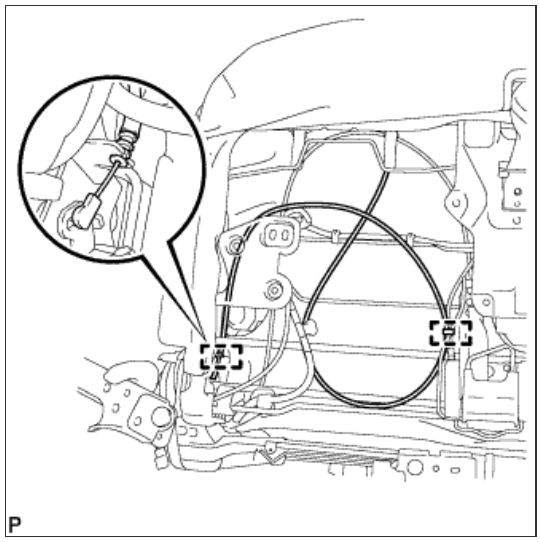
HINT:

Tape the screwdriver tip before use.

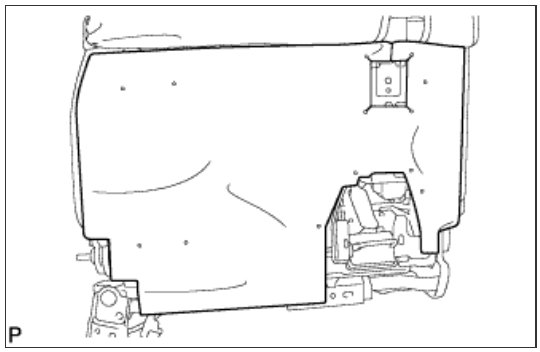


e. Attach the clamp.

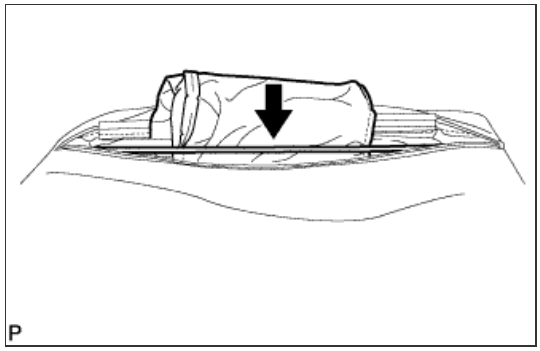
f. Attach the cable clamp to connect the cable.



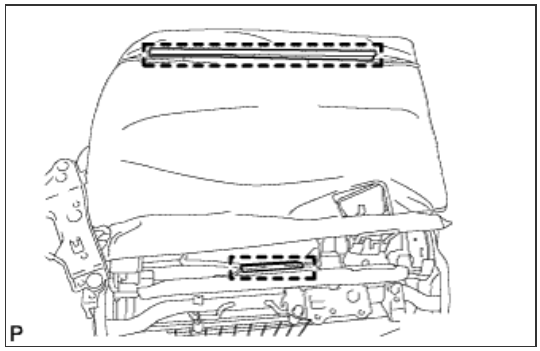
g. Install the seat protector.



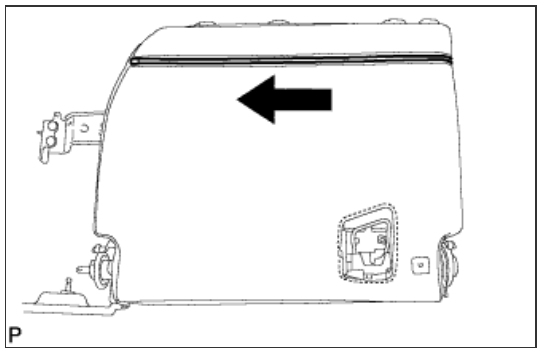
h. Insert the center headrest storage bag.



i. Attach the 2 hooks.

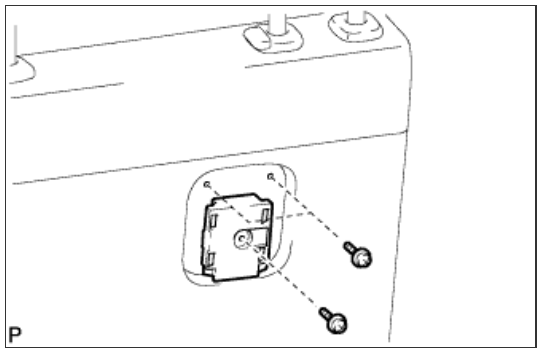


j. Close the fastener.



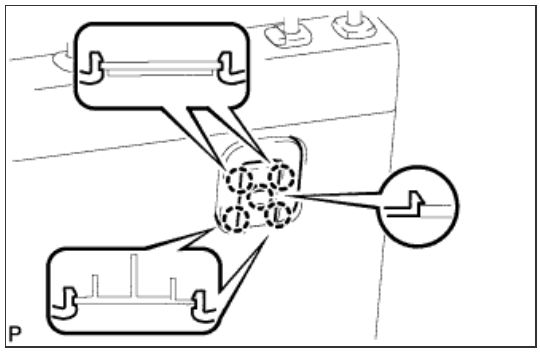
12. INSTALL REAR SEAT HINGE PAWL GUIDE

a. Install the guide with the 3 screws.



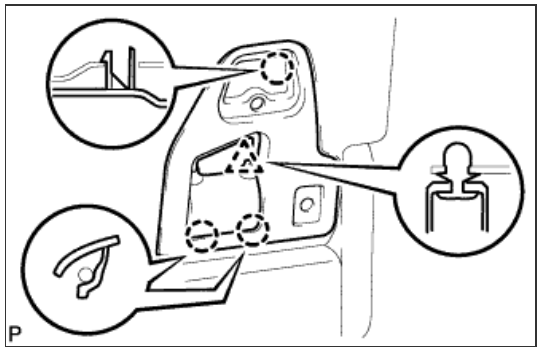
13. INSTALL REAR SEAT HINGE PAWL GUIDE

a. Attach the 5 claws to install the guide.



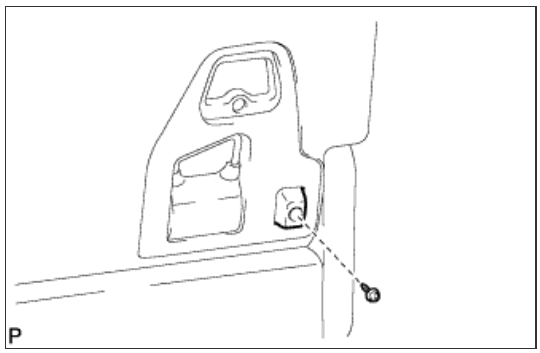
14. INSTALL REAR LOWER SEATBACK LOCK BEZEL

a. Attach the 3 claws and clip to install the seatback lock bezel.



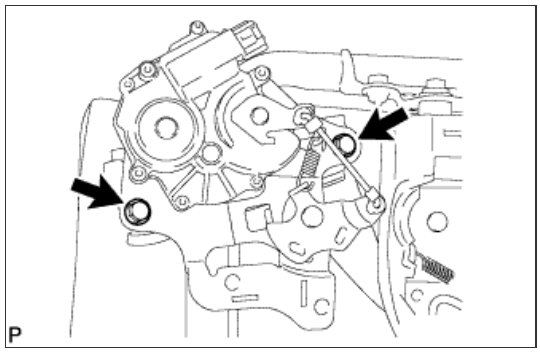
15. INSTALL REAR NO. 2 SEATBACK CUSHION

a. Install the seatback cushion with the screw.



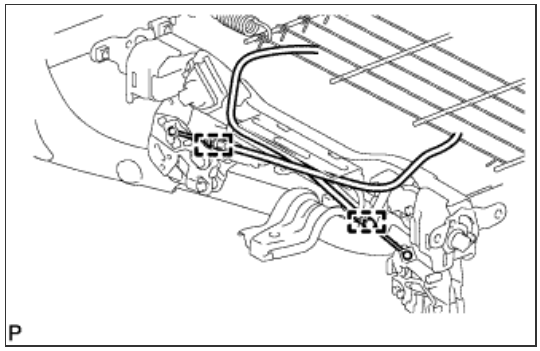
16. INSTALL REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH

a. Install the lever with the 2 bolts.

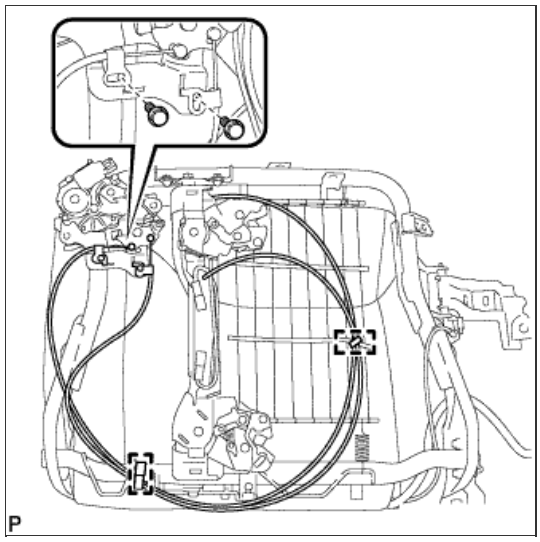


17. INSTALL NO. 3 FOLD SEAT LOCK CONTROL CABLE ASSEMBLY

a. Attach the 2 cable clamps to connect the 2 cables.

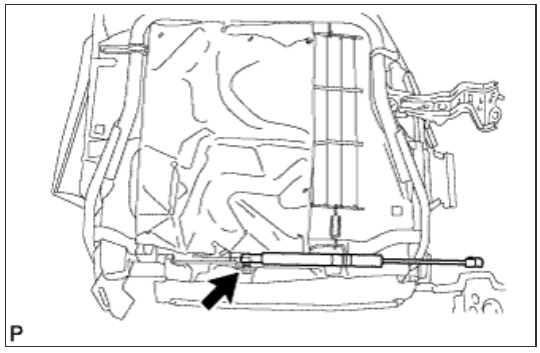


b. Attach the 2 clamps and then install the 2 cables with the 2 bolts.



18. INSTALL NO. 2 SEAT STAY SUB-ASSEMBLY

a. Install the seat stay with the bolt.

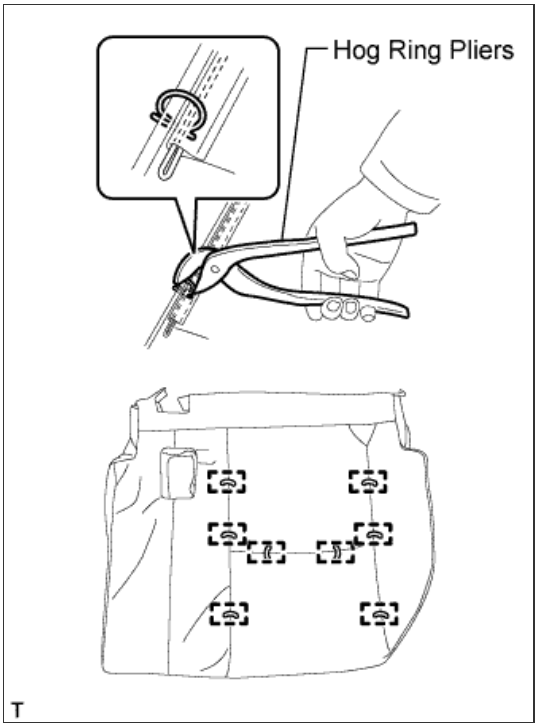


19. INSTALL NO. 3 SEAT CUSHION COVER SUB-ASSEMBLY LH

a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

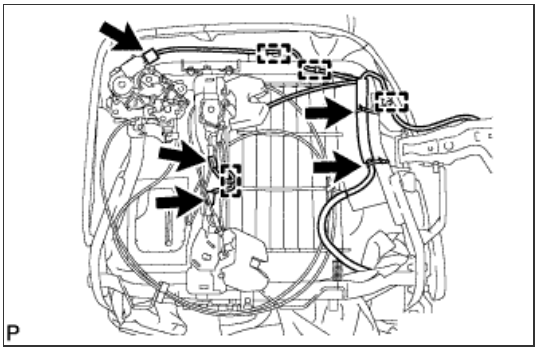
- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Attach the 4 clamps.

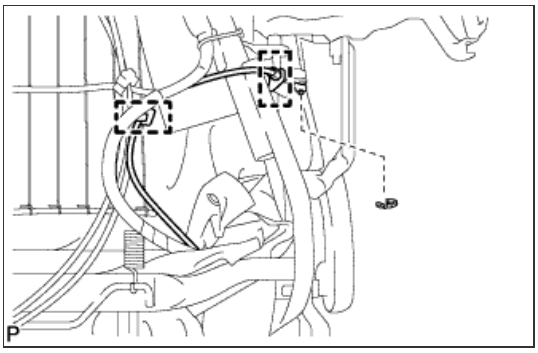
c. Connect the 3 connectors.

d. Install 2 new cable ties.



e. Install the E-ring and attach the clamp.

f. Attach the cable clamp and connect the cable.

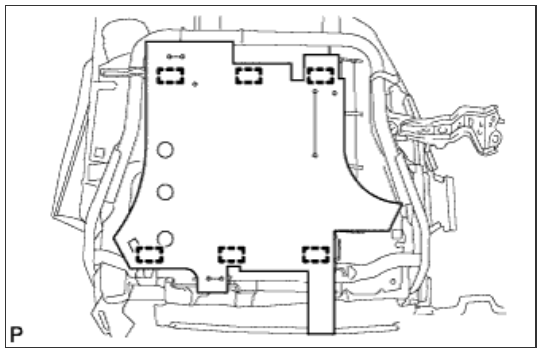


20. INSTALL NO. 3 SEAT CUSHION PAD LH

21. INSTALL SEAT CUSHION COVER WITH PAD

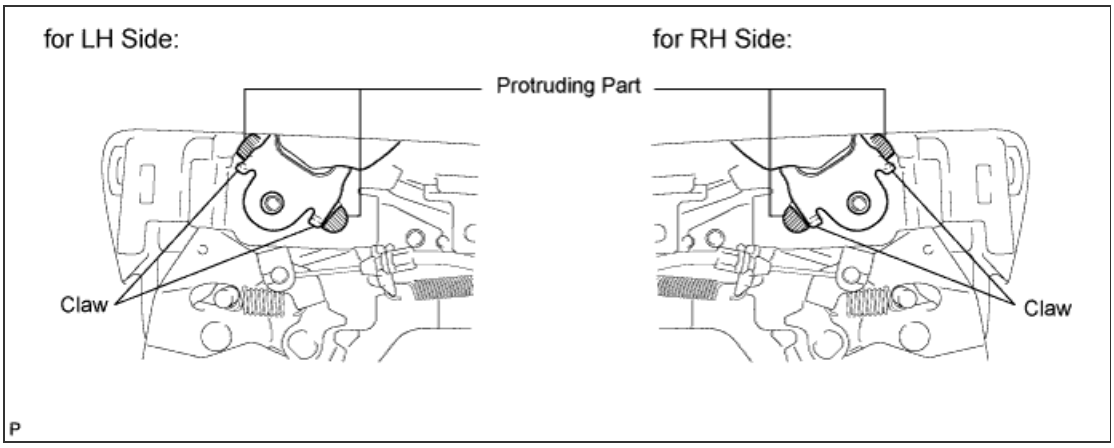
22. INSTALL REAR SEAT CUSHION CARPET

a. Install the seat cushion carpet with new tack pins.



23. INSTALL REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY

a. Install the 2 belts.



NOTICE:

- **Make sure the claws are facing away from the seat.**
- **Do not overlap the anchor part of the seat belt and protruding parts of the seat.**

24. INSTALL REAR SEAT OUTER BELT SUB-ASSEMBLY (for RH Side)

a. Install the belt with the nut.

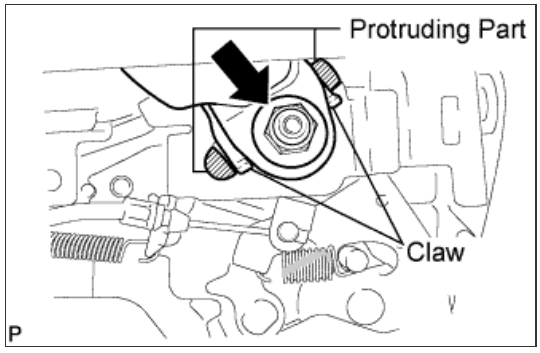
Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the seat.

HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat outer belt. Therefore, connect it when installing the rear seat outer belt.



25. INSTALL REAR SEAT INNER BELT SUB-ASSEMBLY (for LH Side)

a. Install the belt with the nut.

Torque:

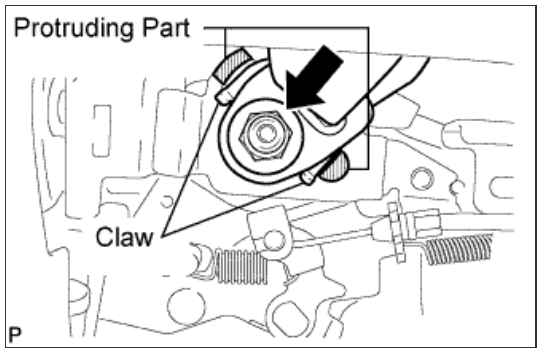
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the seat.

HINT:

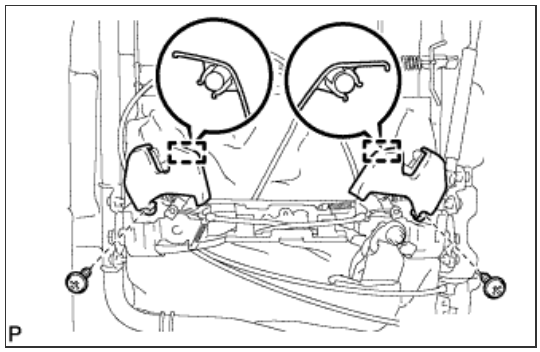
The rear No. 2 seat inner belt is fixed with the same nut as the rear seat inner belt. Therefore, connect it when installing the rear seat inner belt.



26. INSTALL REAR SEAT LOCK COVER LH

a. Attach the 2 clamps to install the 2 covers.

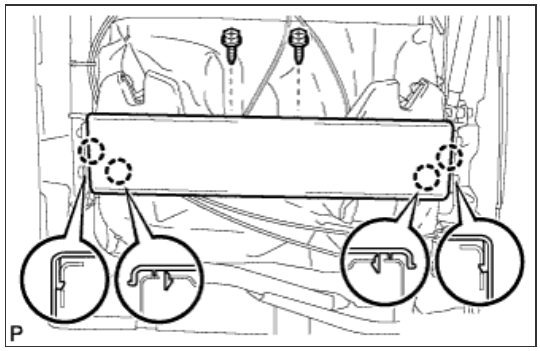
b. Install the 2 screws.



27. INSTALL NO. 3 SEAT LEG COVER NO. 2

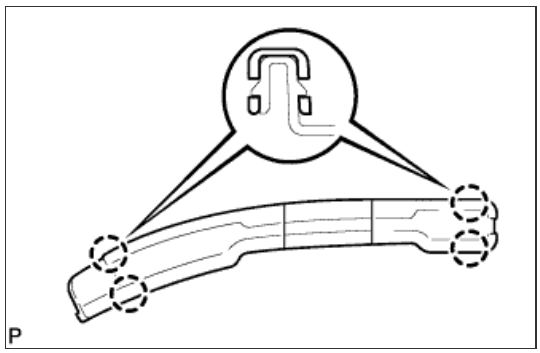
a. Attach the 4 claws to install the cover.

b. Install the 2 screws.



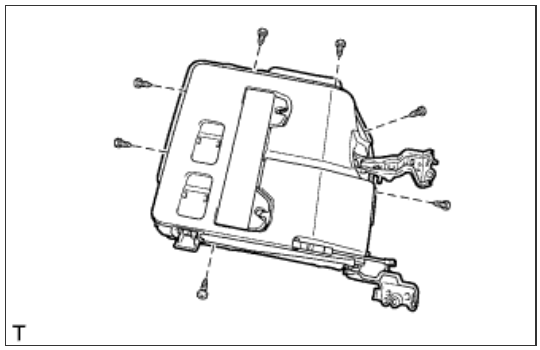
28. INSTALL NO. 3 SEAT FRONT BRACKET COVER LH

a. Attach the 4 claws to install the cover.

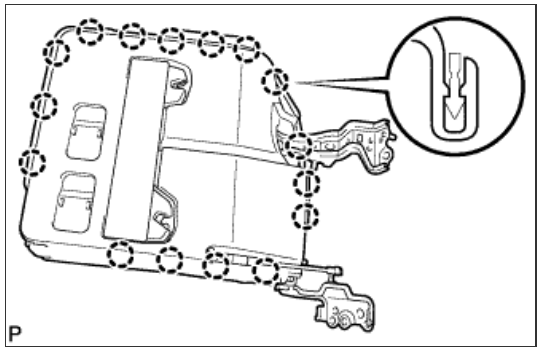


29. INSTALL REAR SEAT CUSHION UNDER COVER LH

a. Install the cover with the 7 screws.

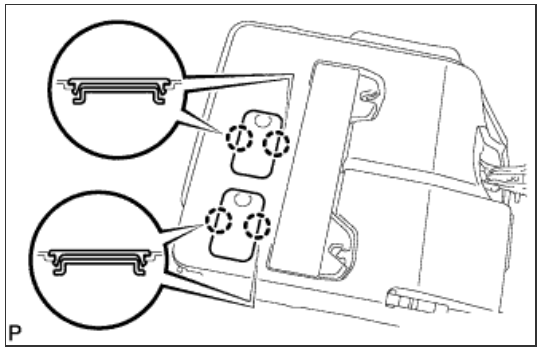


b. Attach the 16 claws.



30. INSTALL 3RD SEAT CUSHION LOCK COVER

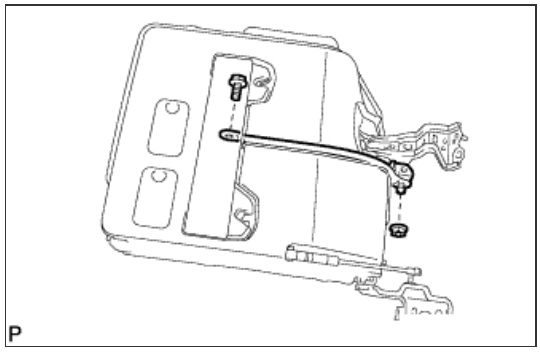
a. Attach the 4 claws to install the 2 covers.



31. INSTALL 3RD SEAT LINK SUB-ASSEMBLY LH

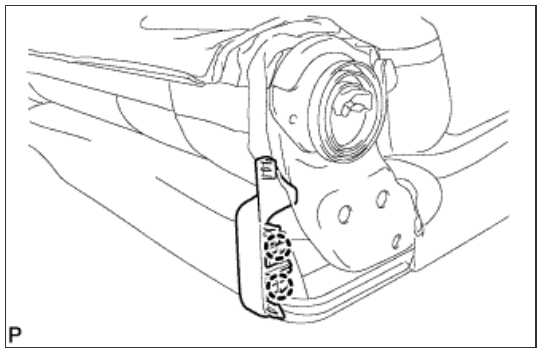
a. Install the seat link with the bolt and nut.

Torque:
8.5 N*m{ 87 kgf*cm , 75 in.*lbf }



32. INSTALL REAR SEAT INNER RECLINING COVER LH

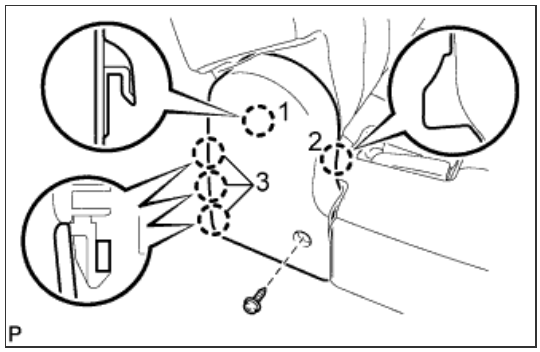
a. Attach the 2 claws to install the cover.



33. INSTALL RECLINING ADJUSTER COVER RH

a. Attach the 5 claws in the order shown in the illustration to install the cover.

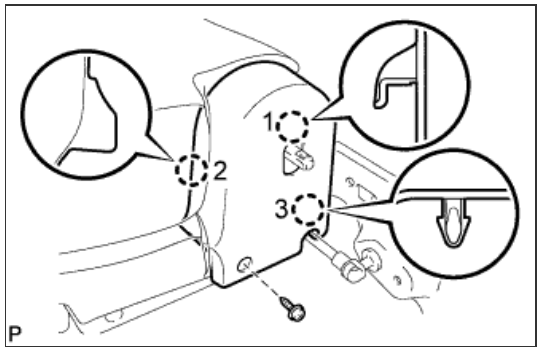
b. Install the screw.



34. INSTALL RECLINING ADJUSTER COVER LH

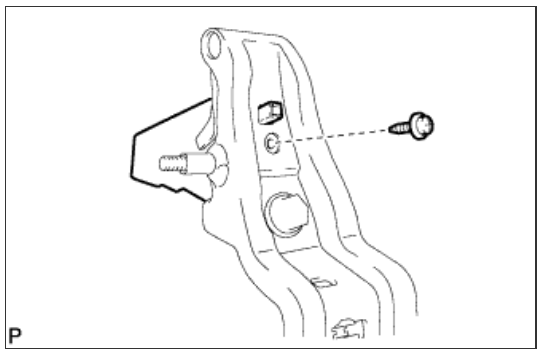
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the screw.



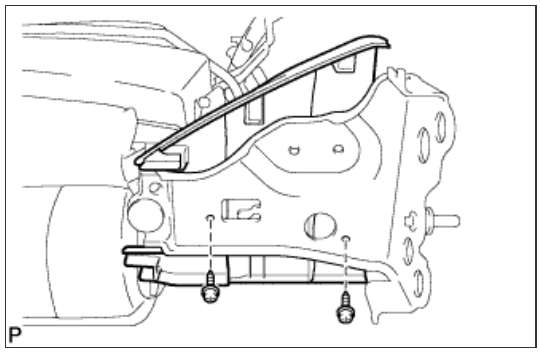
35. INSTALL NO. 2 SEAT LEG COVER NO. 2

a. Install the seat leg cover with the screw.



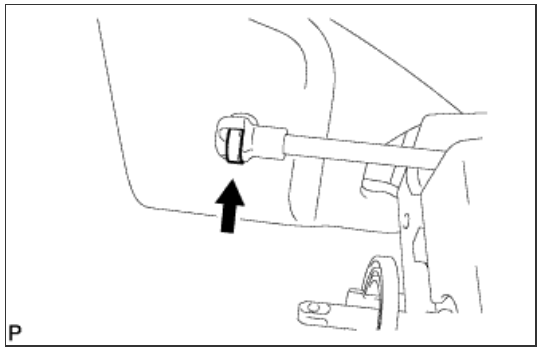
36. INSTALL REAR NO. 3 SEAT LEG COVER LH

a. Install the seat leg cover with the 2 screws.



b. Install the spring of the seat stay ball joint.

c. Connect the seat stay to the seat frame.

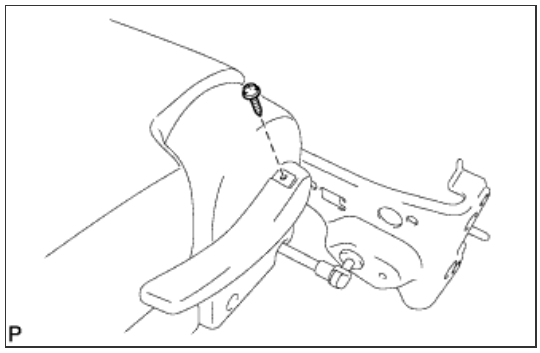


37. INSTALL REAR SEAT REAR BRACKET COVER REAR

a. Attach the 2 claws to install the cover.

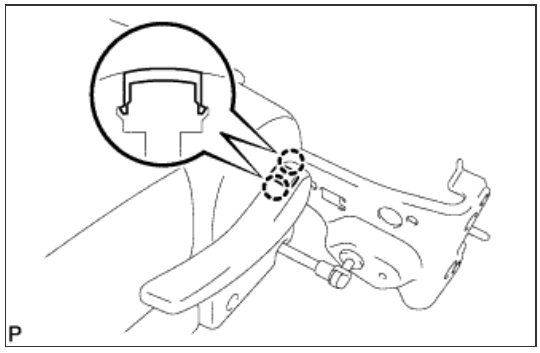
38. INSTALL NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



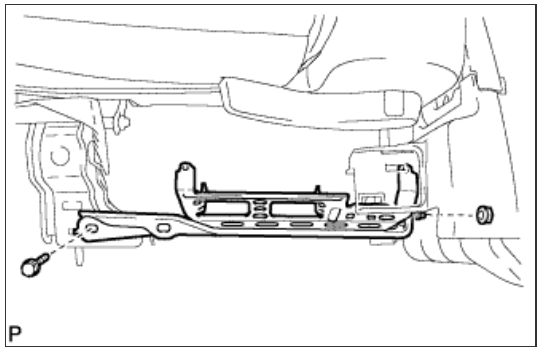
39. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.

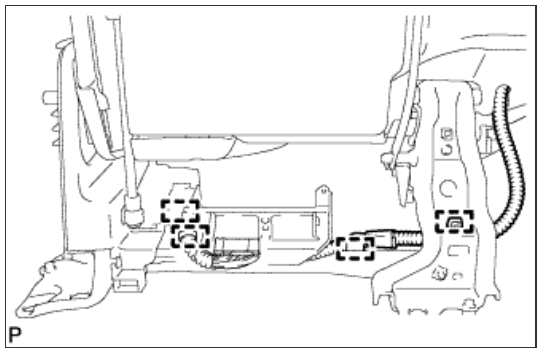


40. INSTALL REAR NO. 2 SEAT LEG BRACKET REAR LH

a. Install the bracket with the bolt and nut.



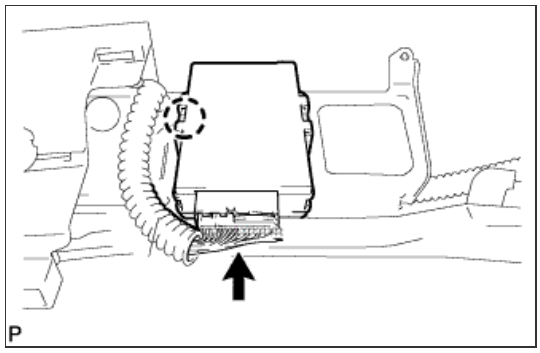
b. Attach the 4 clamps.



41. INSTALL FOLD SEAT CONTROL ECU

a. Attach the 2 claws to install the ECU.

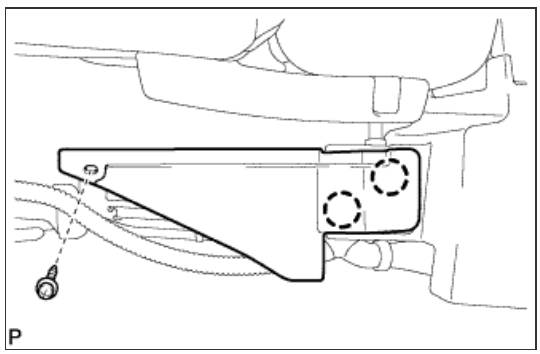
b. Connect the 2 connectors.



42. INSTALL NO. 2 SEAT CUSHION COVER

a. Attach the 2 claws to install the cover.

b. Install the screw.



for Preparation Click here

HINT:

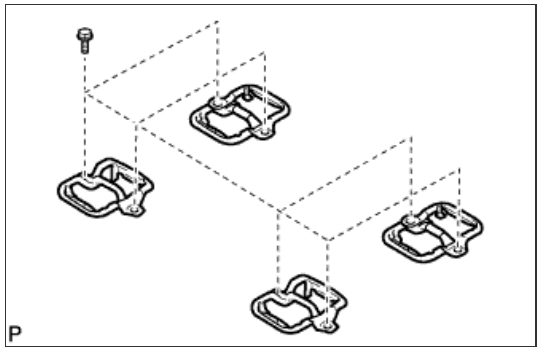
- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. INSTALL REAR SEAT LOCK STRIKER SUB-ASSEMBLY

a. Install the 4 seat lock strikers with the 8 bolts.

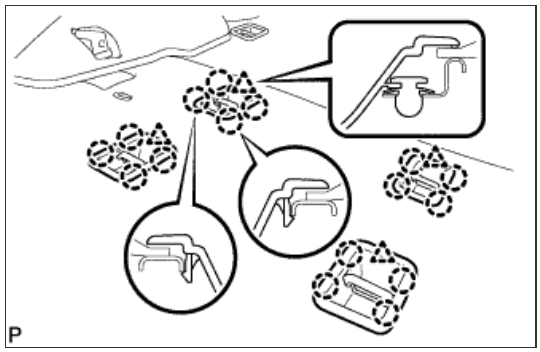
Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }

b. Return the floor carpet to its original position.



2. INSTALL NO. 3 SEAT CUSHION COVER

a. Attach the 16 claws and 4 clips to install the 4 seat cushion covers.

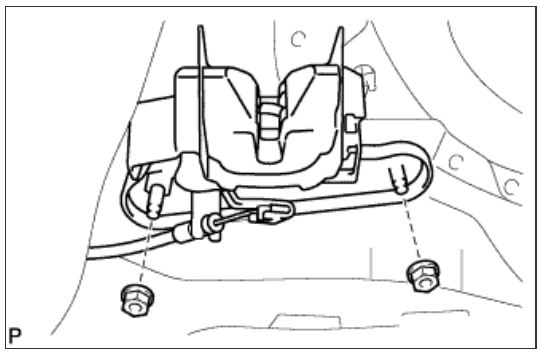


3. INSTALL FOLD SEAT LEG LOCK SUB-ASSEMBLY

a. Install the fold seat leg lock with the 2 nuts.

Torque:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

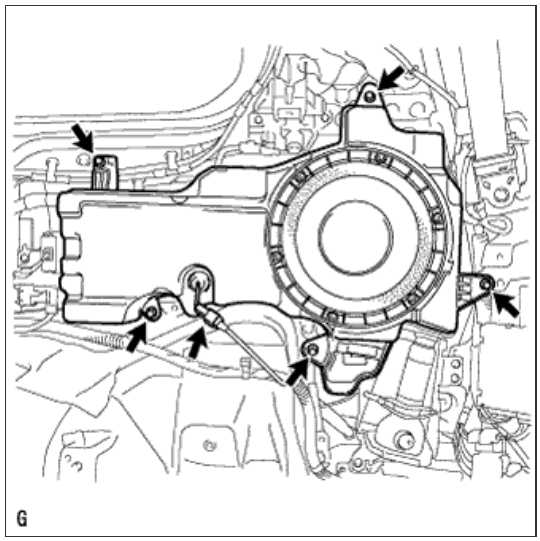
b. Attach the 2 cable clamps.



4. INSTALL NO. 1 WOOFER BOX SPEAKER ASSEMBLY (for RH Side, w/ Woofer)

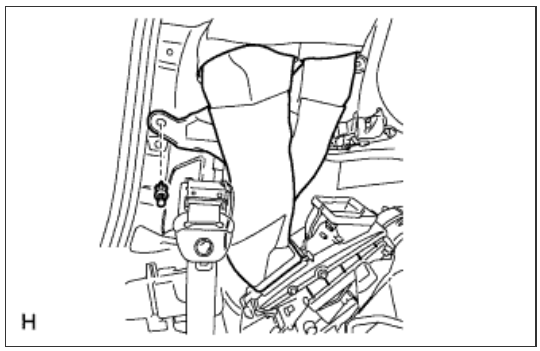
a. Install the box speaker with the 5 bolts.

b. Connect the connector.

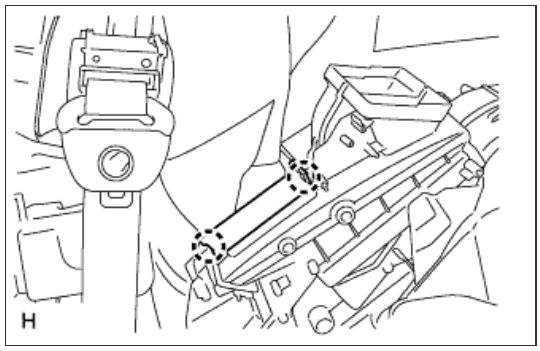


5. INSTALL REAR ROOF NO. 1 AIR DUCT (for LH Side)

a. Install the duct with the clip.

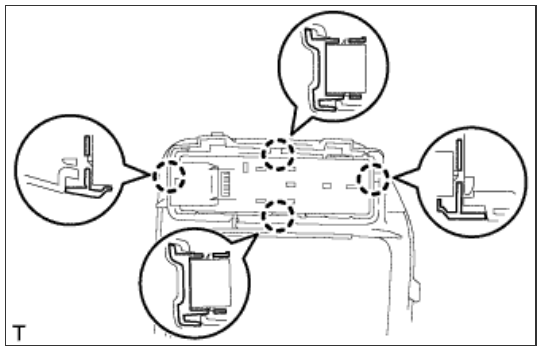


b. Attach the 2 claws to install the cooler plate.



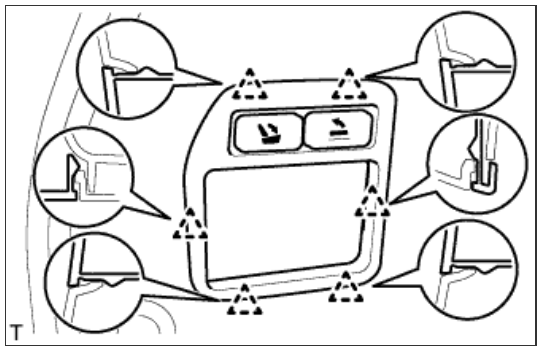
6. INSTALL FOLD SEAT SWITCH ASSEMBLY

a. Attach the 4 claws to install the switch.



7. INSTALL REAR NO. 2 SEAT COVER BEZEL

a. Attach the 6 clips to install the No. 2 seat cover bezel.



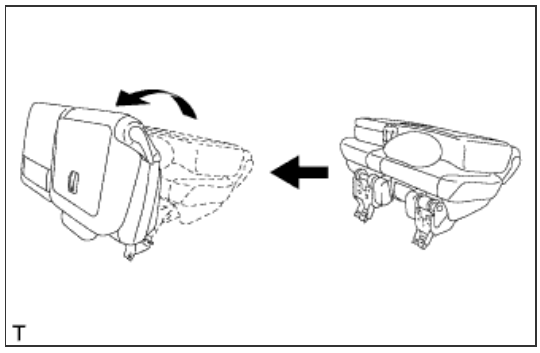
8. INSTALL REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH

a. Attach the 4 claws to install the seat lock control lever.

9. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



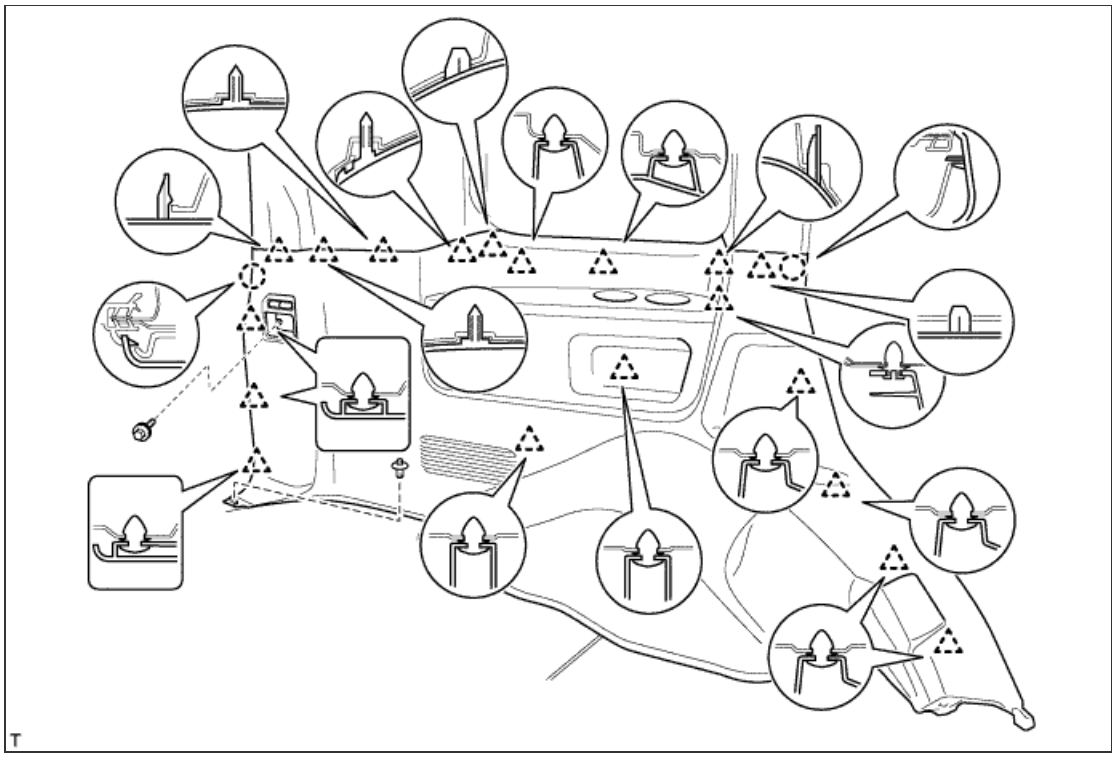
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

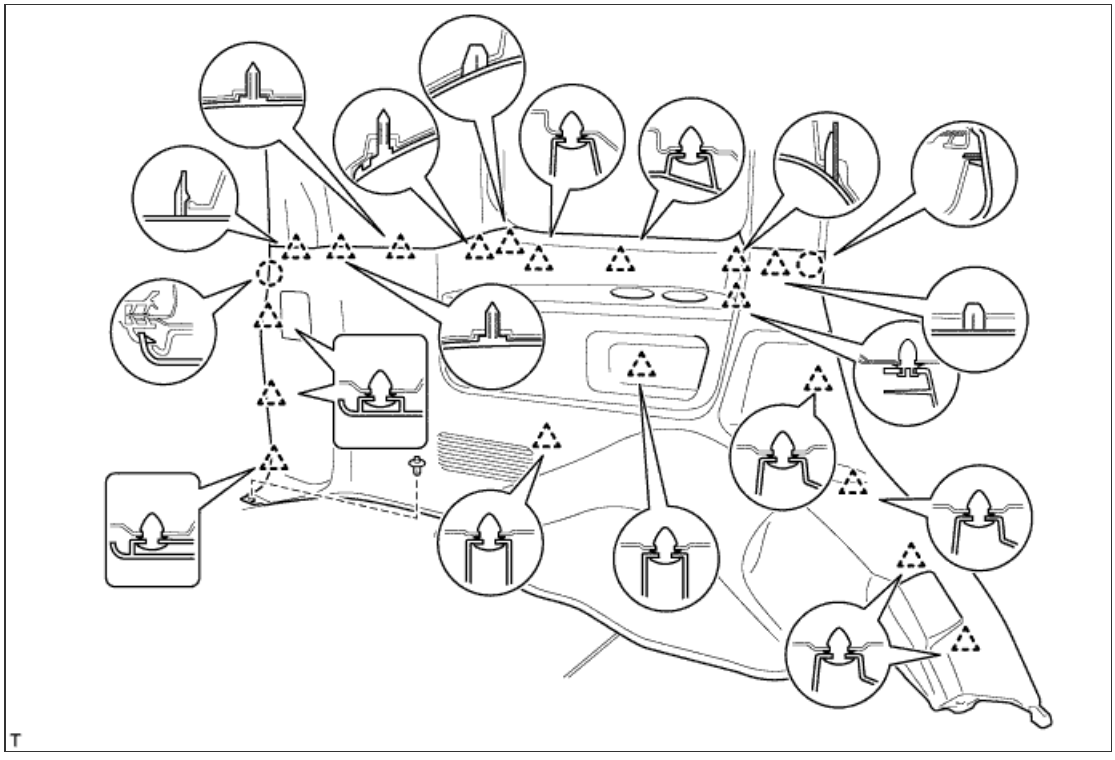


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

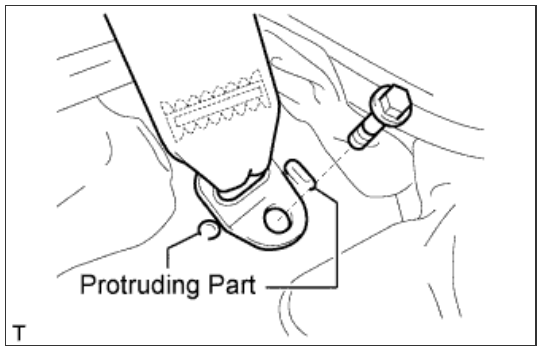


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

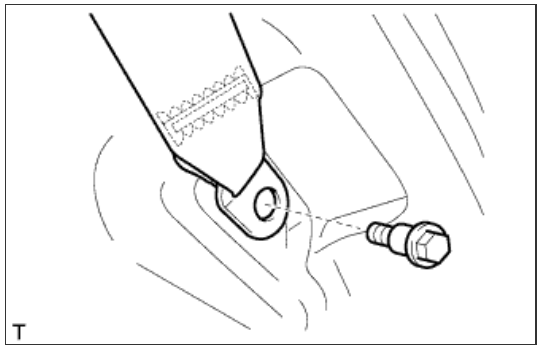
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

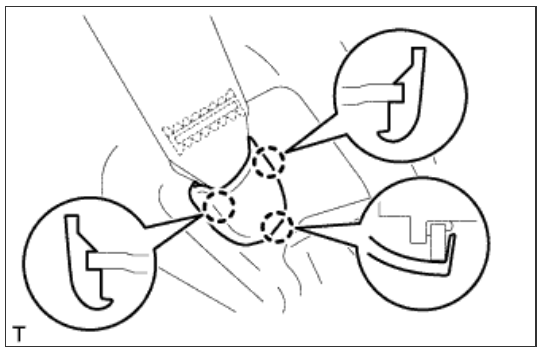


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

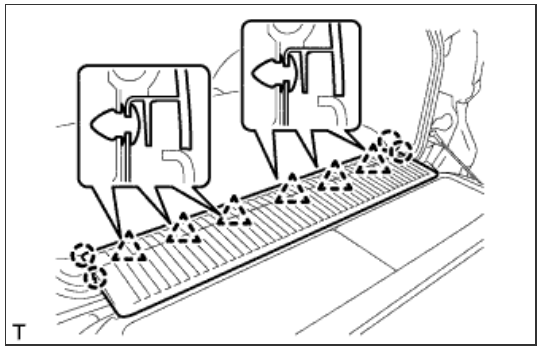


e. Attach the 3 claws to install the cover.



10. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.

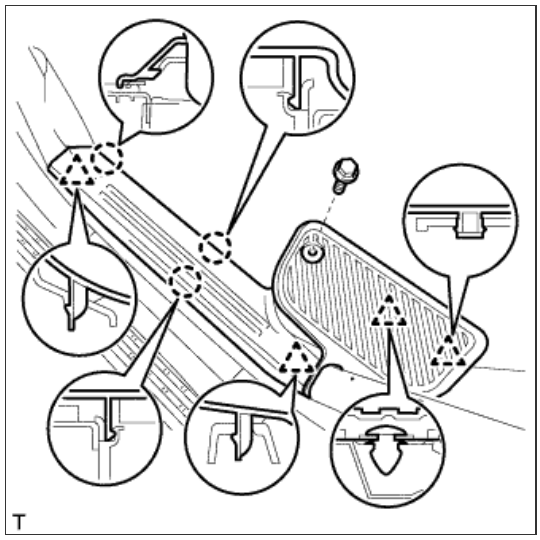


11. INSTALL REAR DOOR SCUFF PLATE LH

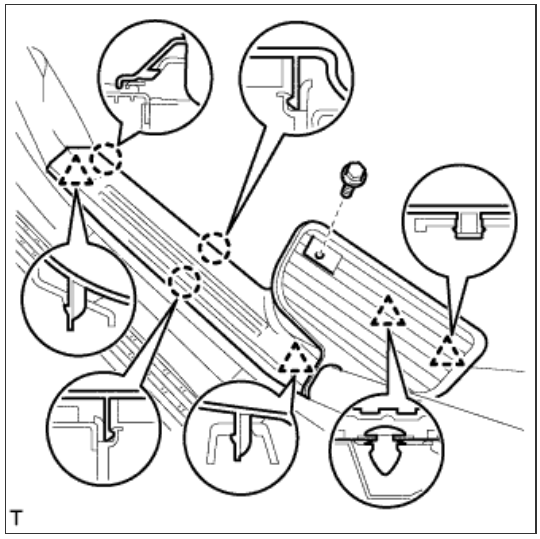
a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

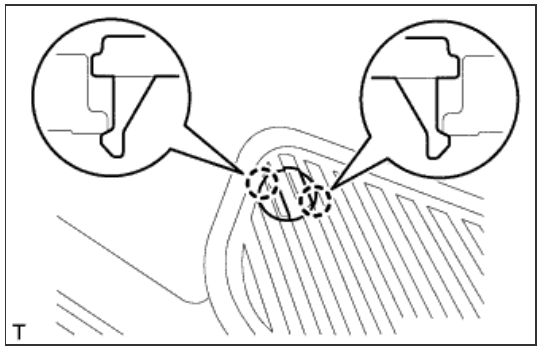
ii. Install the screw.

12. INSTALL REAR STEP COVER

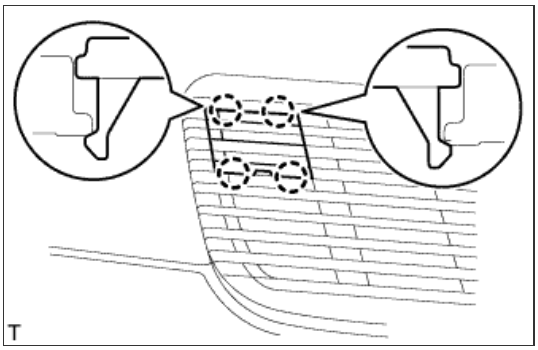
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



13. INSTALL REAR NO. 2 SEAT ASSEMBLY

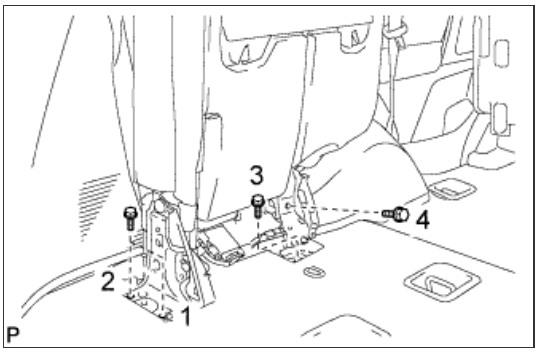
a. Temporarily install the seat assembly with the 4 bolts.

NOTICE:

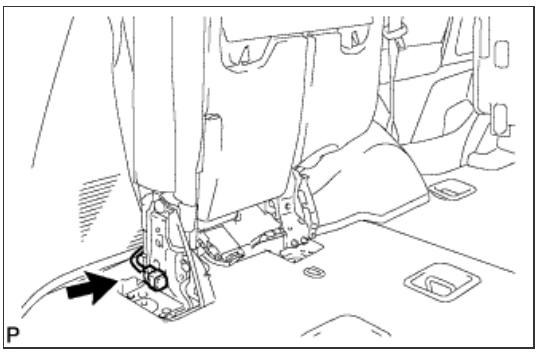
Be careful not to damage the vehicle body.

b. Tighten the bolts in the order shown in the illustration.

Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }



c. Connect the connector.



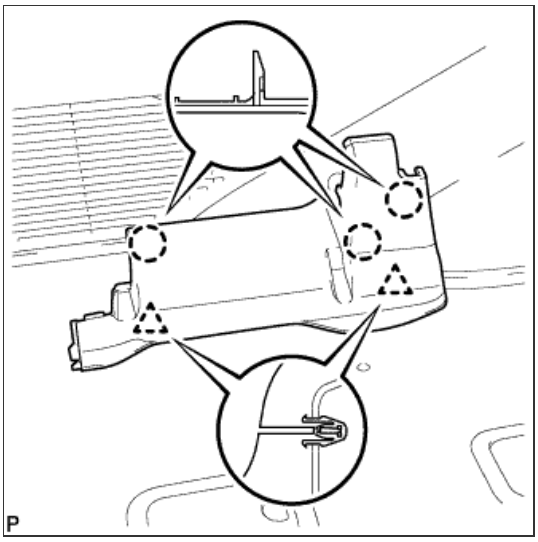
14. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

15. INSTALL REAR NO. 2 SEAT HINGE COVER LH

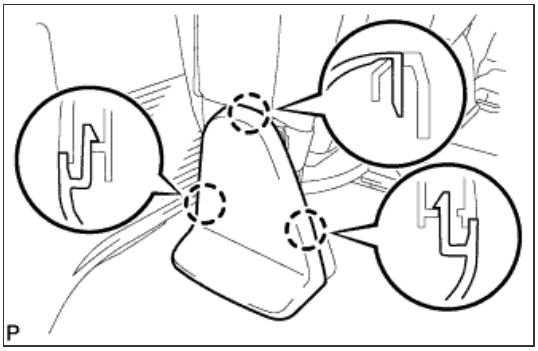
a. Attach the 3 claws and 2 clips to install the cover.



16. INSTALL REAR SEAT CUSHION HINGE COVER LH

a. Attach the 3 claws to install the cover.

b. Return the seat to the upright position.



17. INSTALL REAR NO. 2 SEAT HEADREST ASSEMBLY LH

for Preparation Click here

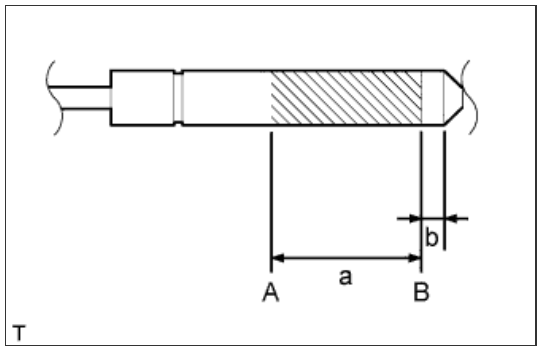
HINT:

- **Use the same procedures for the LH side and RH side**
- **The procedures listed below are for the LH side.**

1. DISPOSE OF NO. 2 SEAT STAY SUB-ASSEMBLY

a. Horizontally fix the seat stay in a vise with the piston rod pulled out.

b. Wear safety glasses. Gradually cut an area between A and B shown in the illustration using a metal saw and gradually release the gas.



Standard:

Area	Specified Condition
a	80 mm (3.15 in.)
b	10 mm (0.394 in.)

CAUTION:

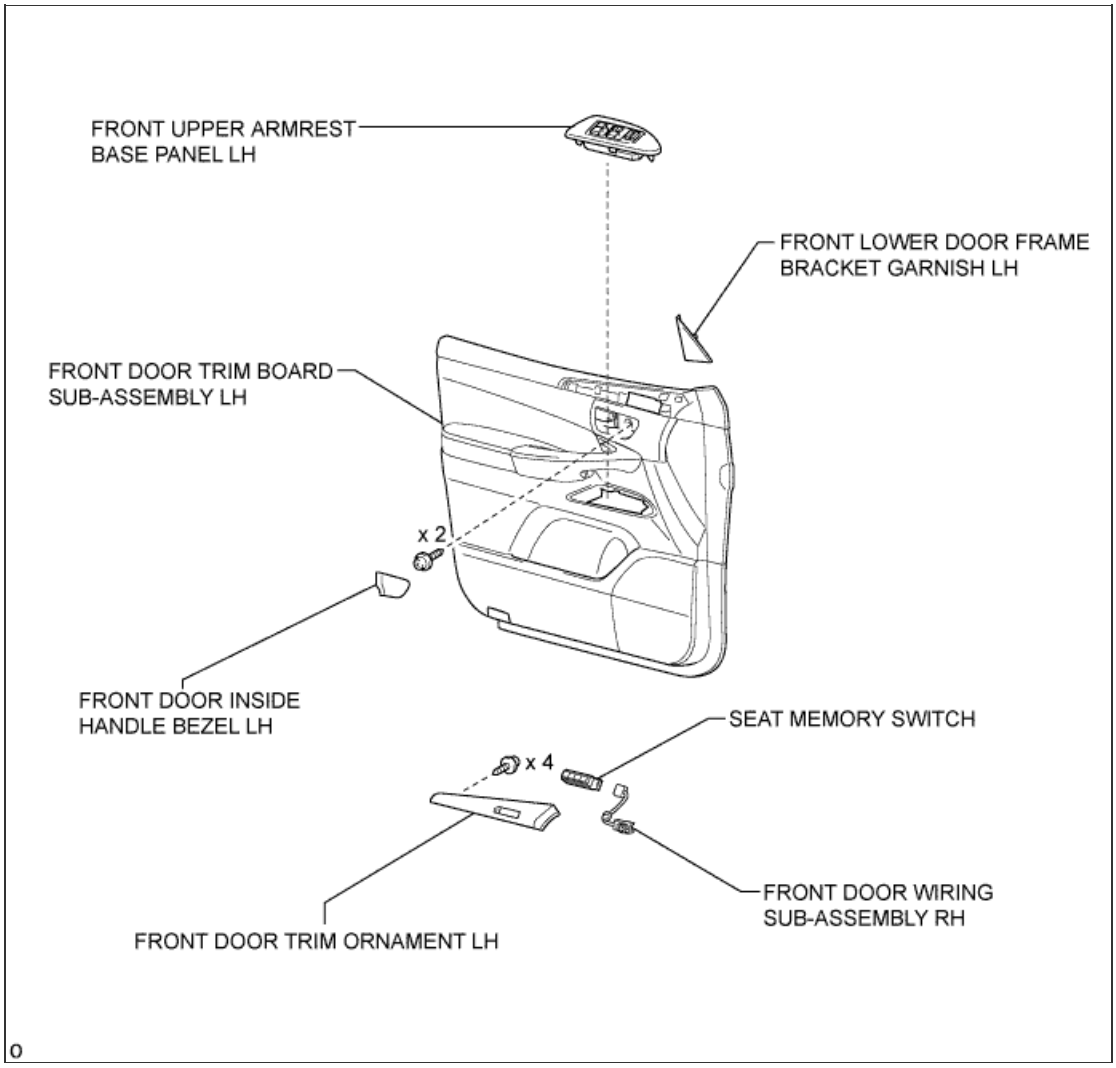
As metal debris may be blown outward by the gas, you must:

- **Wear protective glasses.**
- **Cover the area being cut.**

NOTICE:

The gas inside the seat stay is colorless, odorless and harmless. There is a possibility that metal debris could scatter, so cover the part with a piece of cloth or other material.

for Preparation Click here



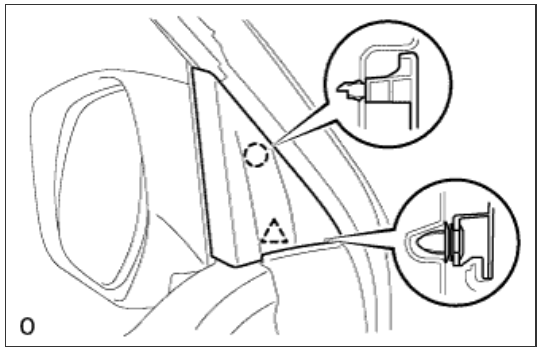
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE FRONT LOWER DOOR FRAME BRACKET GARNISH LH

a. Detach the clip and claw, and remove the front lower door frame bracket garnish.

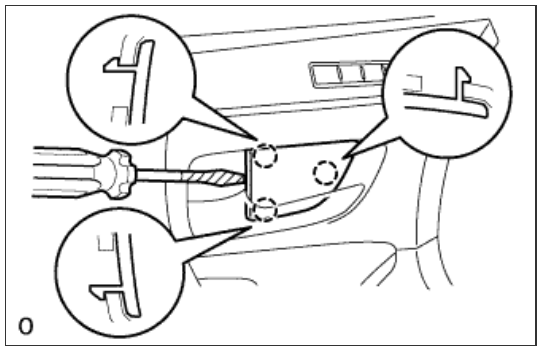


2. REMOVE FRONT DOOR INSIDE HANDLE BEZEL LH

a. Using a screwdriver, detach the 3 claws and remove the inside handle bezel plug.

HINT:

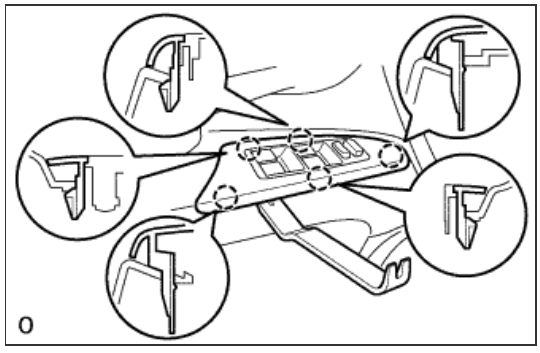
Tape the screwdriver tip before use.



3. REMOVE FRONT UPPER ARMREST BASE PANEL LH

a. Using a moulding remover, detach the 5 claws.

b. Disconnect the connector and remove the front upper armrest base panel and multiplex network master switch.

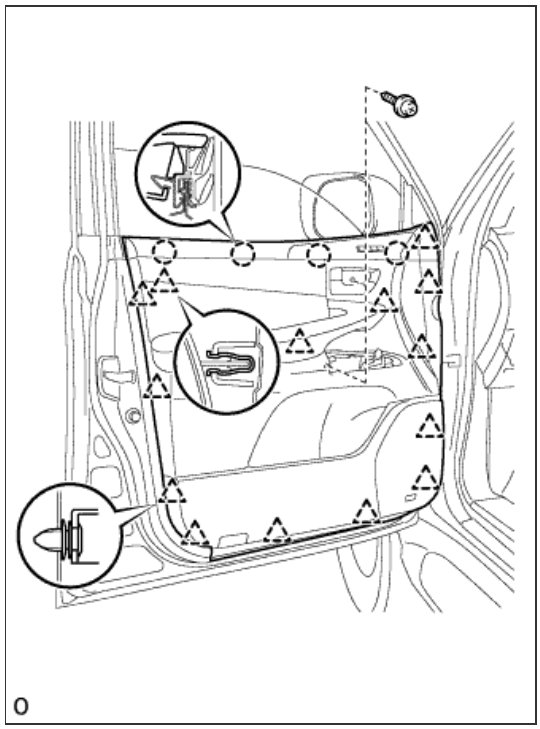


4. REMOVE FRONT DOOR TRIM BOARD SUB-ASSEMBLY LH

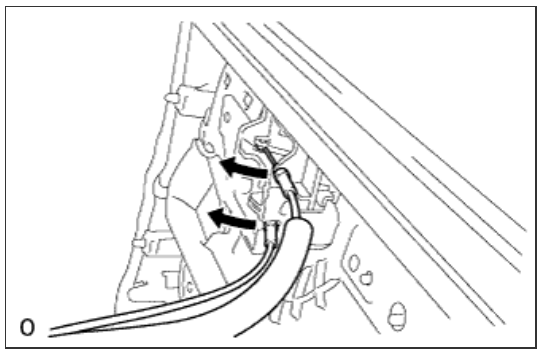
a. Remove the 2 screws.

b. Detach the 14 clips and 4 claws.

c. Disconnect the connector and remove the trim board.



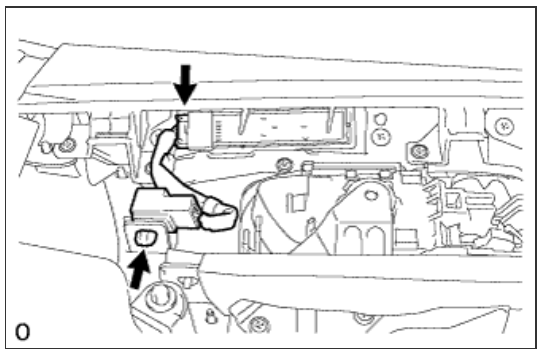
d. Disconnect the 2 cables from the inside handle.



5. REMOVE FRONT DOOR WIRING SUB-ASSEMBLY RH

a. Disconnect the connector.

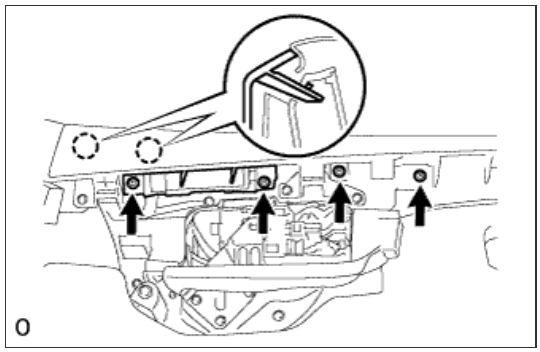
b. Detach the clamp and remove the front door wiring sub-assembly RH.



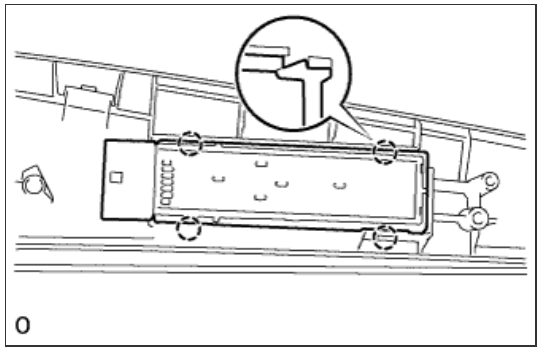
6. REMOVE SEAT MEMORY SWITCH

a. Remove the 4 screws.

b. Detach the 2 claws and remove the front door trim ornament.



c. Detach the 4 claws and remove the seat memory switch.



for Preparation [Click here]

1. INSPECT SEAT MEMORY SWITCH (for LHD)

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
4 (M1) - 7 (E)	Switch 1 pressed	Below 1 Ω
2 (M2) - 7 (E)	Switch 2 pressed	
1 (M3) - 7 (E)	Switch 3 pressed	
5 (MRY) - 7 (E)	SET switch pressed	

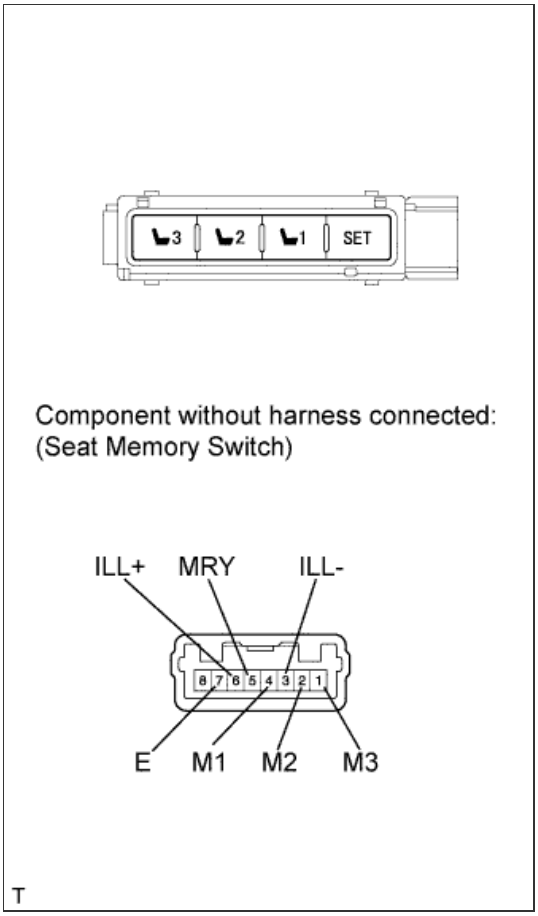
If the result is not as specified, replace the seat memory switch.

b. Apply battery voltage to the switch connector, and check that the seat memory switch illuminates.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 6 (ILL+) Battery negative (-) → 3 (ILL-)	Switch illuminates

If the result is not as specified, replace the seat memory switch.



2. INSPECT SEAT MEMORY SWITCH (for RHD)

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
4 (M1) - 7 (E)	Switch 1 pressed	Below 1 Ω
2 (M2) - 7 (E)	Switch 2 pressed	
1 (M3) - 7 (E)	Switch 3 pressed	
5 (MRY) - 7 (E)	SET switch pressed	

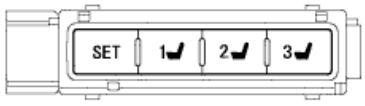
If the result is not as specified, replace the seat memory switch.

b. Apply battery voltage to the switch connector, and check that the seat memory switch illuminates.

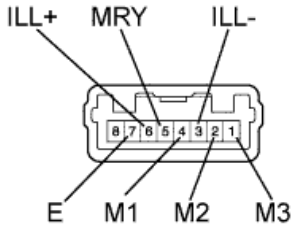
OK:

Measurement Condition	Specified Condition
Battery positive (+) → 6 (ILL+) Battery negative (-) → 3 (ILL-)	Switch illuminates

If the result is not as specified, replace the seat memory switch.



Component without harness connected:
(Seat Memory Switch)



T

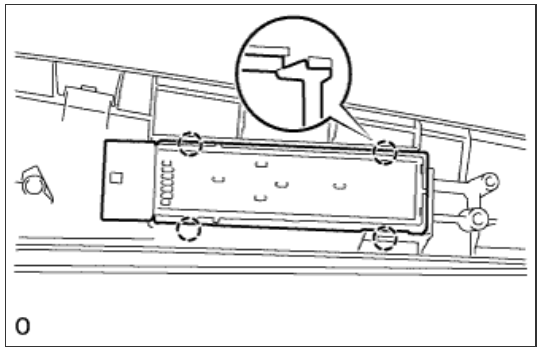
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

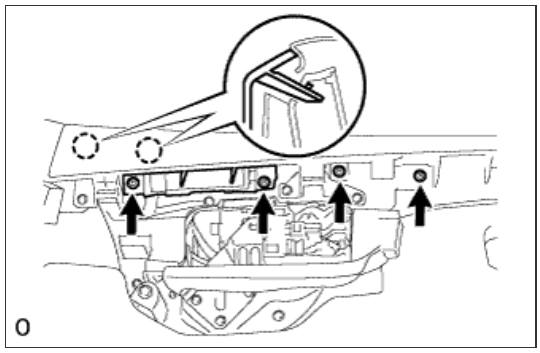
1. INSTALL SEAT MEMORY SWITCH

a. Attach the 4 claws to install the seat memory switch.



b. Attach the 2 claws to install the front door trim ornament.

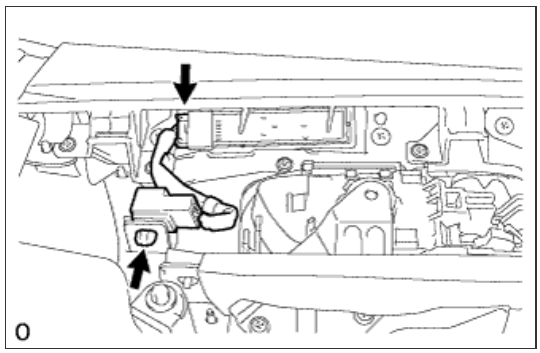
c. Install the 4 screws.



2. INSTALL FRONT DOOR WIRING SUB-ASSEMBLY RH

a. Connect the connector.

b. Attach the clamp to install the front door wiring sub-assembly.

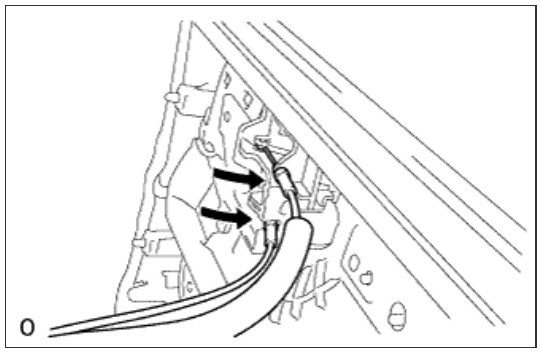


3. INSTALL FRONT DOOR TRIM BOARD SUB-ASSEMBLY LH

a. Connect the connector.

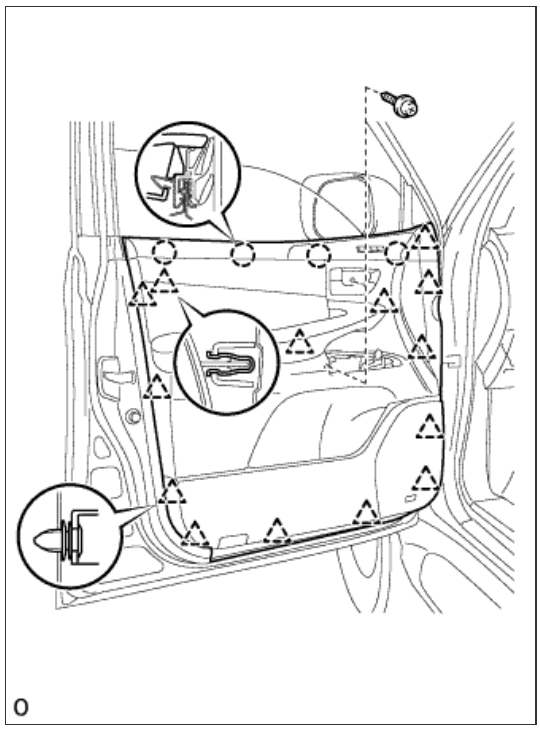
b. Connect the front door lock remote control cable and front door inside locking

b. Connect the front door lock remote control cable and front door inside locking cable to the front door inside handle sub-assembly.



c. Attach the 4 claws and 14 clips to install the trim board.

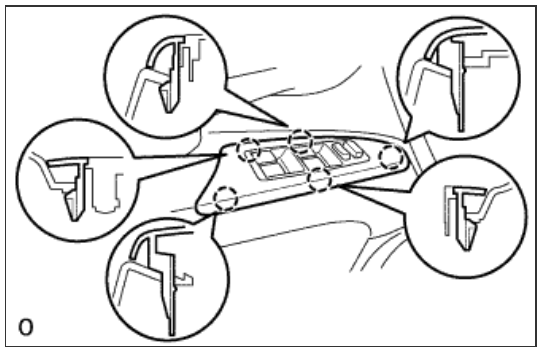
d. Install the 2 screws.



4. INSTALL FRONT UPPER ARMREST BASE PANEL LH

a. Connect the connector.

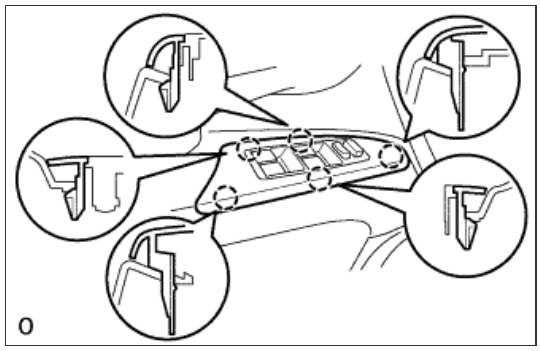
b. Attach the 5 claws to install the front upper armrest base panel.



5. INSTALL FRONT DOOR INSIDE HANDLE BEZEL LH

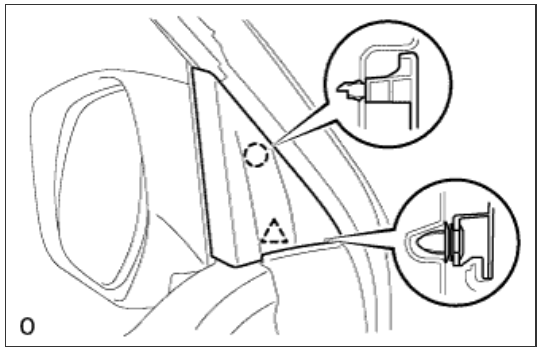
a. Connect the connector.

b. Attach the 5 claws to install the front upper armrest base panel.

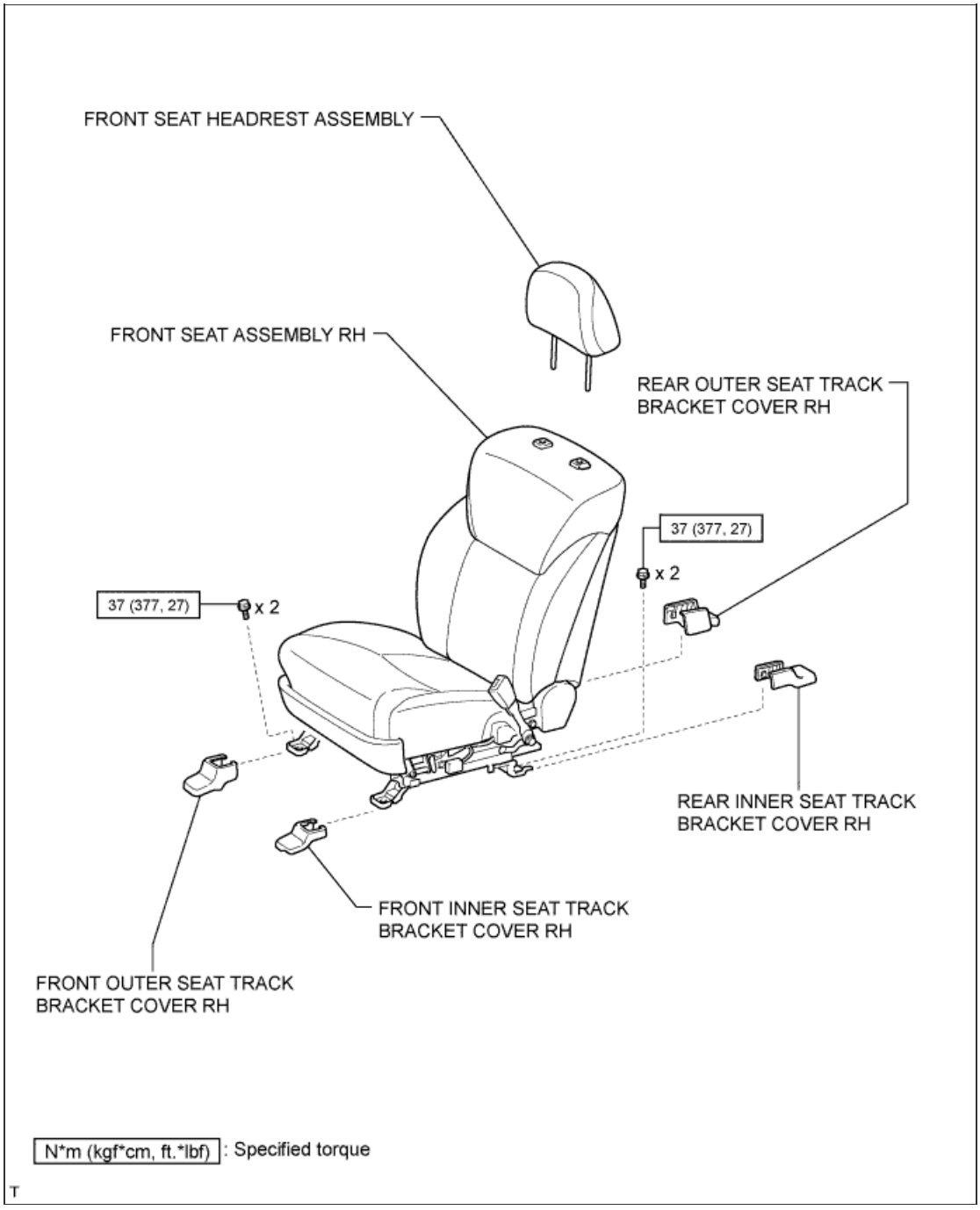


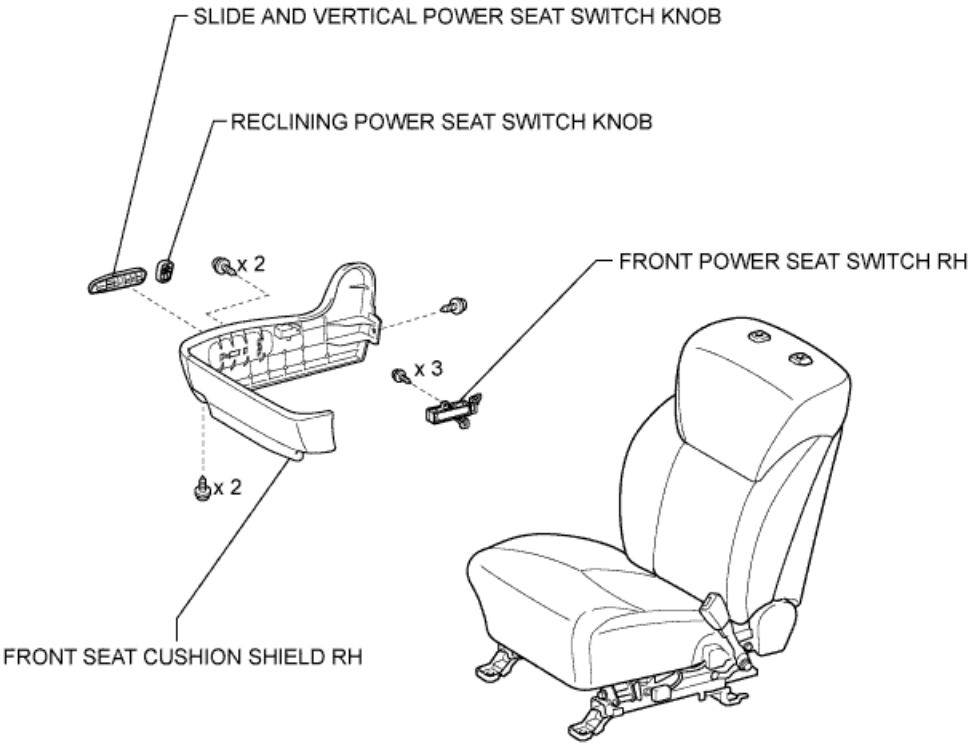
6. INSTALL FRONT LOWER DOOR FRAME BRACKET GARNISH LH

a. Attach the clip and claw to install the front door lower frame bracket garnish.



for Preparation Click here





N*m (kgf*cm, ft.*lbf) : Specified torque

T

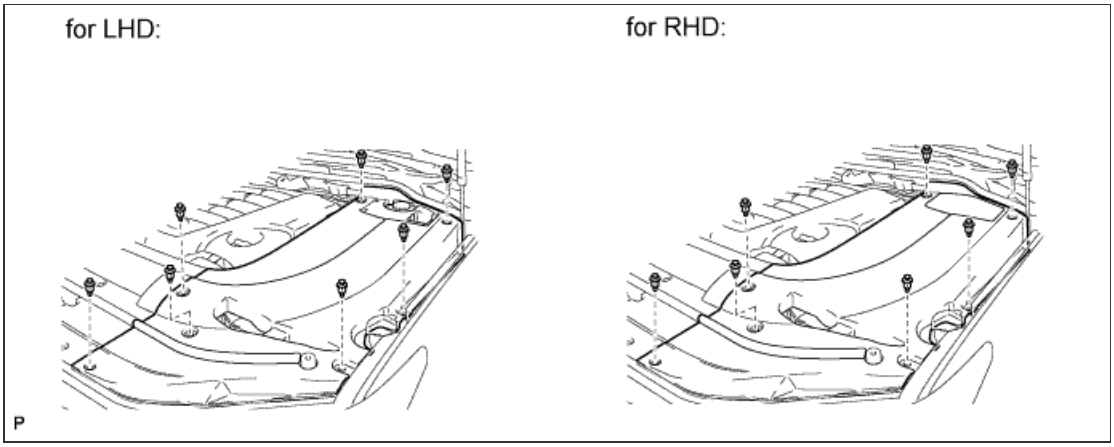
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT ASSEMBLY RH

a. Remove the front seat assembly (Click here).

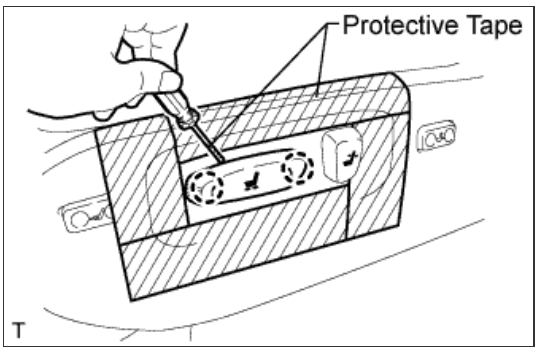
3. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

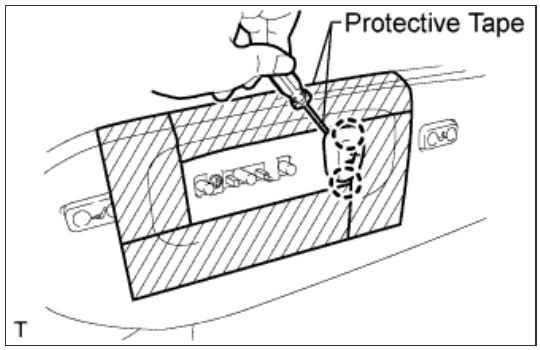


4. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

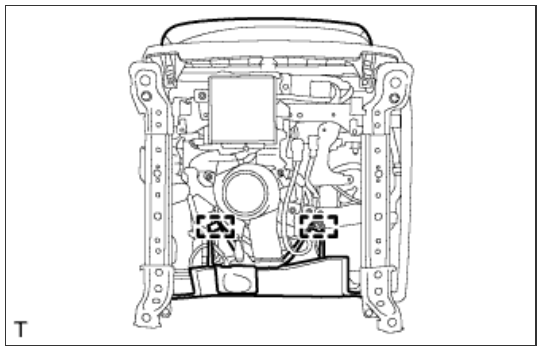
HINT:

Tape the screwdriver tip before use.

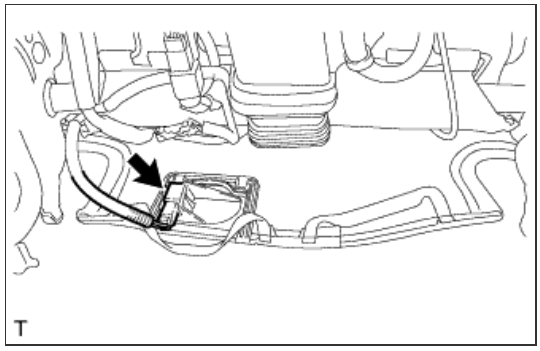


5. REMOVE FRONT SEAT CUSHION SHIELD RH

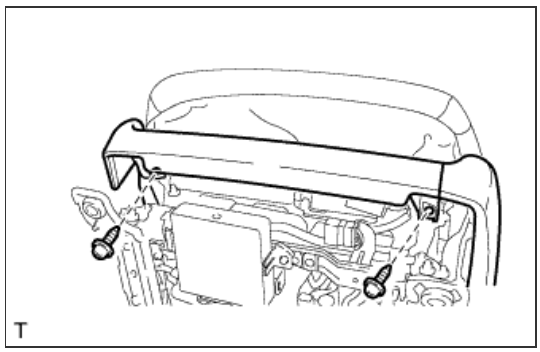
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

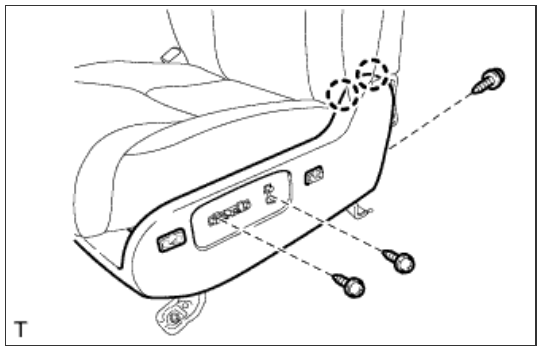


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

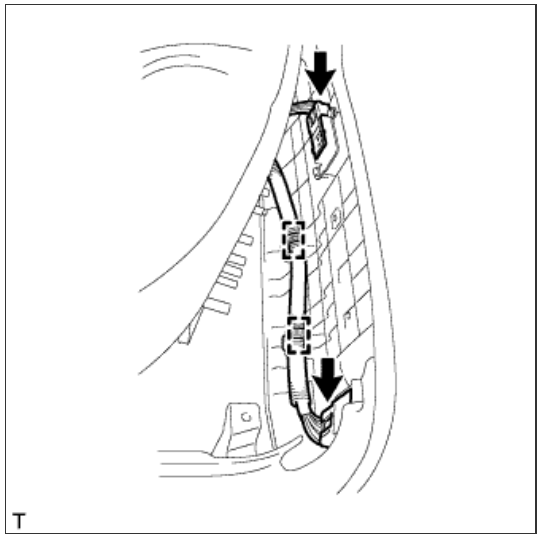


f. for Driver Side:

i. Detach the 2 wire harness clamps.

ii. Disconnect the 2 connectors.

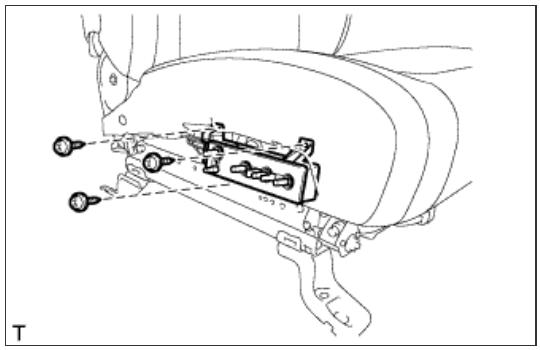
g. for Front Passenger Side:
Disconnect the connector.



6. REMOVE FRONT POWER SEAT SWITCH RH

a. Disconnect the switch connector.

b. Remove the 3 screws and switch.



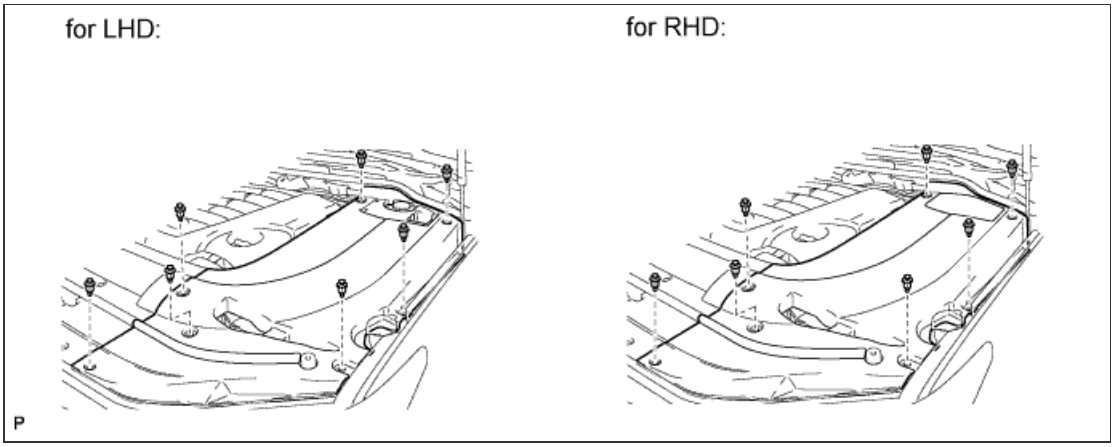
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT ASSEMBLY RH

a. Remove the front seat assembly (Click here).

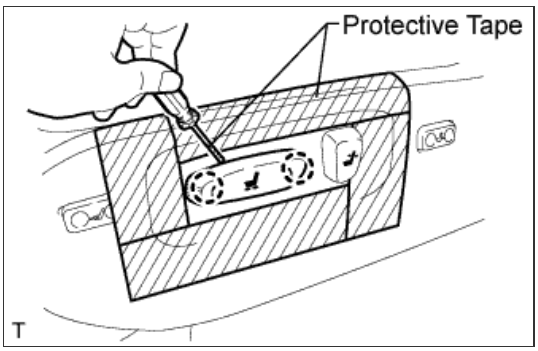
3. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

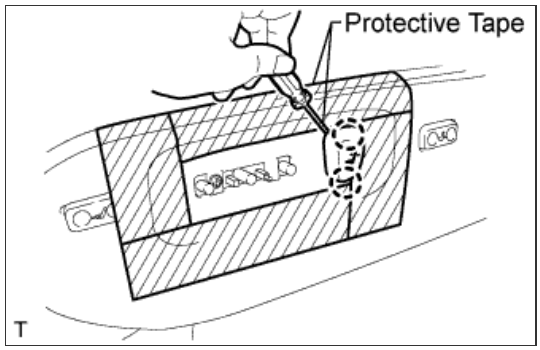


4. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

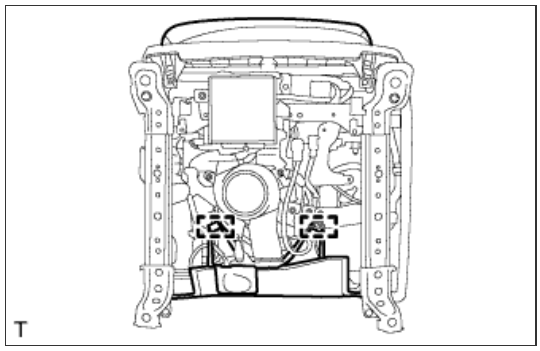
HINT:

Tape the screwdriver tip before use.

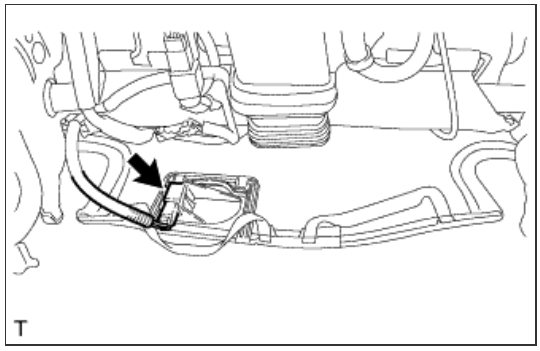


5. REMOVE FRONT SEAT CUSHION SHIELD RH

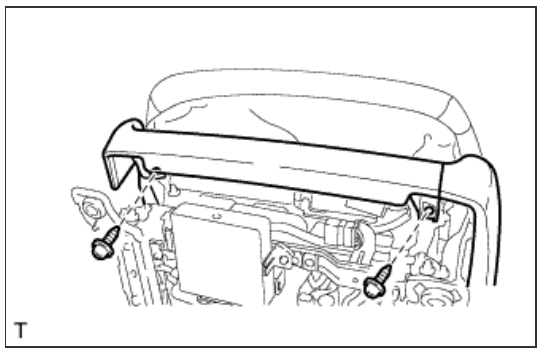
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

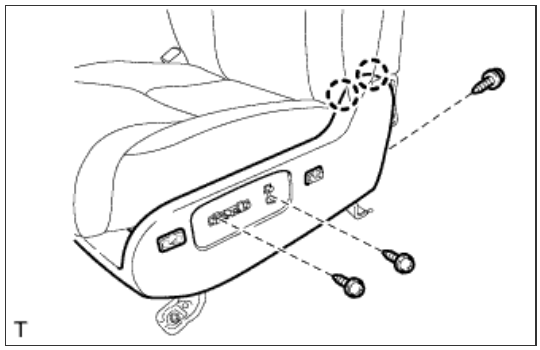


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

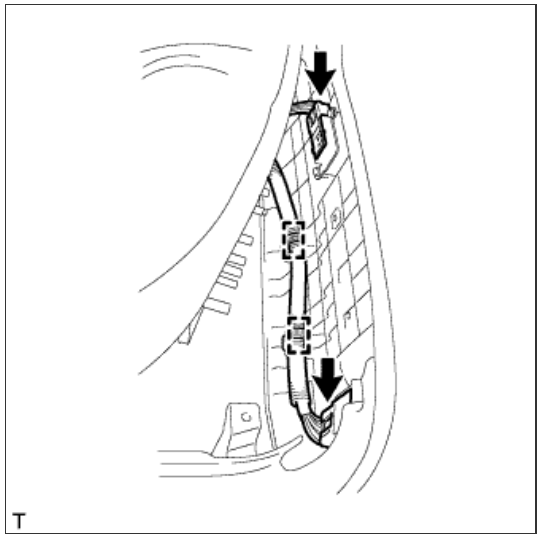


f. for Driver Side:

i. Detach the 2 wire harness clamps.

ii. Disconnect the 2 connectors.

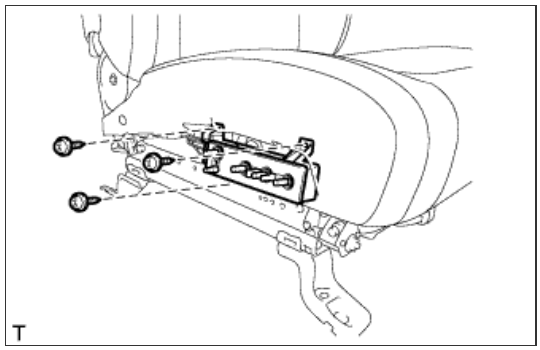
g. for Front Passenger Side:
Disconnect the connector.



6. REMOVE FRONT POWER SEAT SWITCH RH

a. Disconnect the switch connector.

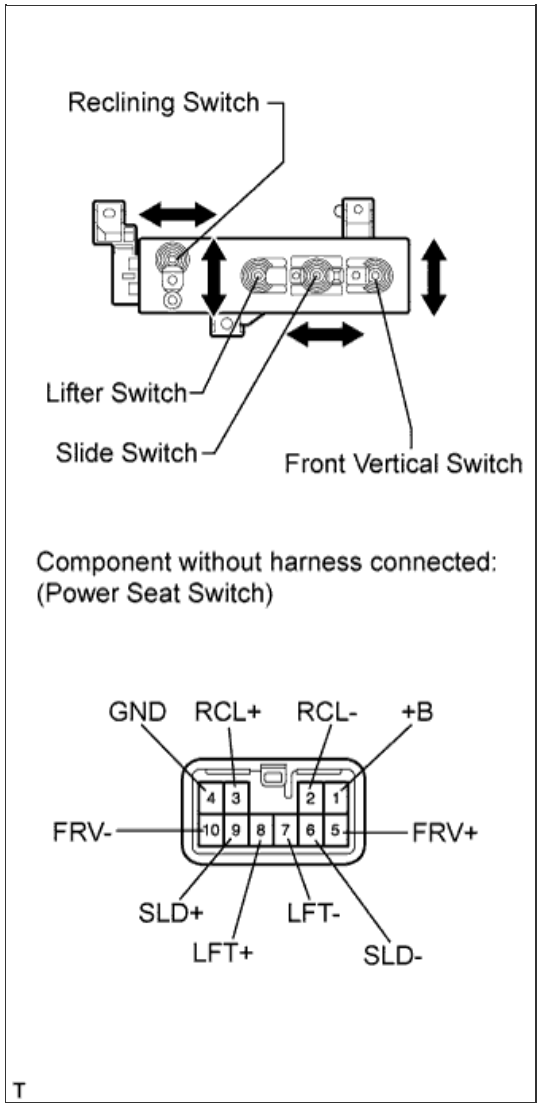
b. Remove the 3 screws and switch.



for Preparation Click here

1. INSPECT FRONT POWER SEAT SWITCH RH (for LHD)

a. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

Slide Switch:

Tester Connection	Switch Condition	Specified Condition
9 (SLD+) - 1 (+B)	Front	Below 1 Ω
6 (SLD-) - 4 (GND)		
9 (SLD+) - 4 (GND)	Off	
6 (SLD-) - 4 (GND)		
9 (SLD+) - 4 (GND)	Rear	
6 (SLD-) - 1 (+B)		

Front Vertical Switch:

Tester Connection	Switch Condition	Specified Condition
5 (FRV+) - 1 (+B)	Up	
10 (FRV-) - 4 (GND)		
5 (FRV+) - 4		

(GND)	Off	Below 1 Ω
10 (FRV-) - 4 (GND)		
5 (FRV+) - 4 (GND)	Down	
10 (FRV-) - 1 (+B)		

Lifter Switch:

Tester Connection	Switch Condition	Specified Condition
8 (LFT+) - 1 (+B)	Up	Below 1 Ω
7 (LFT-) - 4 (GND)		
8 (LFT+) - 4 (GND)	Off	
7 (LFT-) - 4 (GND)		
8 (LFT+) - 4 (GND)	Down	
7 (LFT-) - 1 (+B)		

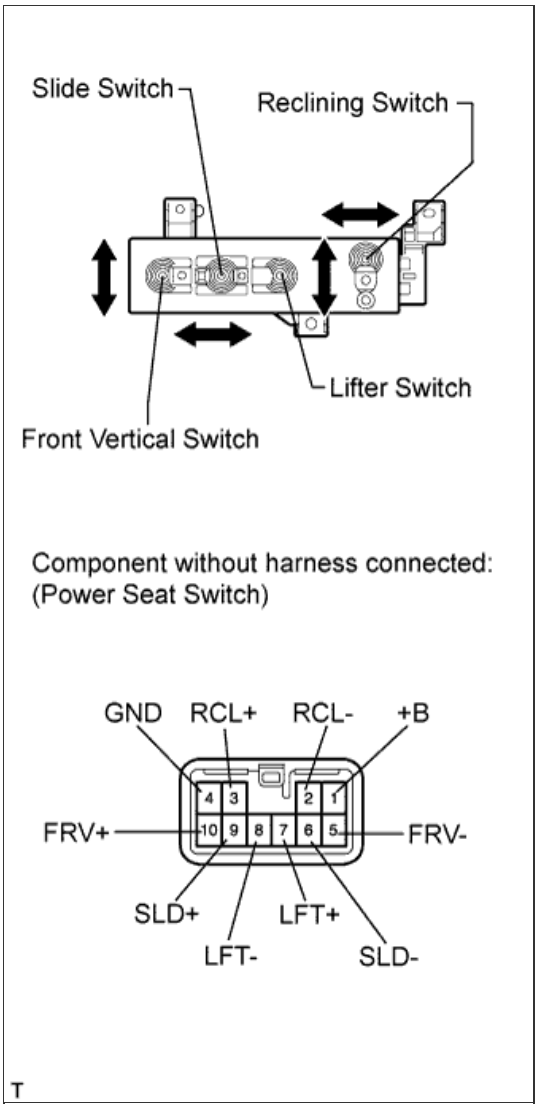
Reclining Switch:

Tester Connection	Switch Condition	Specified Condition
3 (RCL+) - 1 (+B)	Front	Below 1 Ω
2 (RCL-) - 4 (GND)		
3 (RCL+) - 4 (GND)	Off	
2 (RCL-) - 4 (GND)		
3 (RCL+) - 4 (GND)	Rear	
2 (RCL-) - 1 (+B)		

If the result is not as specified, replace the front power seat switch.

2. INSPECT FRONT POWER SEAT SWITCH LH (for RHD)

a. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

Slide Switch:

Tester Connection	Switch Condition	Specified Condition
9 (SLD+) - 1 (+B)	Front	Below 1 Ω
6 (SLD-) - 4 (GND)		
9 (SLD+) - 4 (GND)	Off	
6 (SLD-) - 4 (GND)		
9 (SLD+) - 4 (GND)	Rear	
6 (SLD-) - 1 (+B)		

Front Vertical Switch:

Tester Connection	Switch Condition	Specified Condition
10 (FRV+) - 1 (+B)	Up	Below 1 Ω
5 (FRV-) - 4 (GND)		
10 (FRV+) - 4 (GND)	Off	
5 (FRV-) - 4 (GND)		
10 (FRV+) - 4 (GND)	Down	
5 (FRV-) - 1 (+B)		

Lifter Switch:

Tester Connection	Switch Condition	Specified Condition
7 (LFT+) - 1 (+B)	Up	
8 (LFT-) - 4 (GND)		

7 (LFT+) - 4 (GND)	Off	Below 1 Ω
8 (LFT-) - 4 (GND)		
7 (LFT+) - 4 (GND)	Down	
8 (LFT-) - 1 (+B)		

Reclining Switch:

Tester Connection	Switch Condition	Specified Condition
3 (RCL+) - 1 (+B)	Front	Below 1 Ω
2 (RCL-) - 4 (GND)		
3 (RCL+) - 4 (GND)	Off	
2 (RCL-) - 4 (GND)		
3 (RCL+) - 4 (GND)	Rear	
2 (RCL-) - 1 (+B)		

If the result is not as specified, replace the front power seat switch.

for Preparation Click here

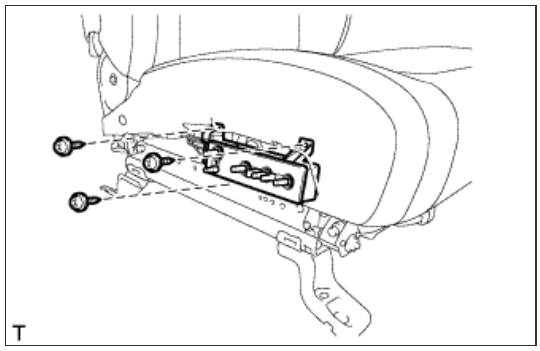
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL FRONT POWER SEAT SWITCH RH

a. Install the switch with the 3 screws.

b. Connect the switch connector.



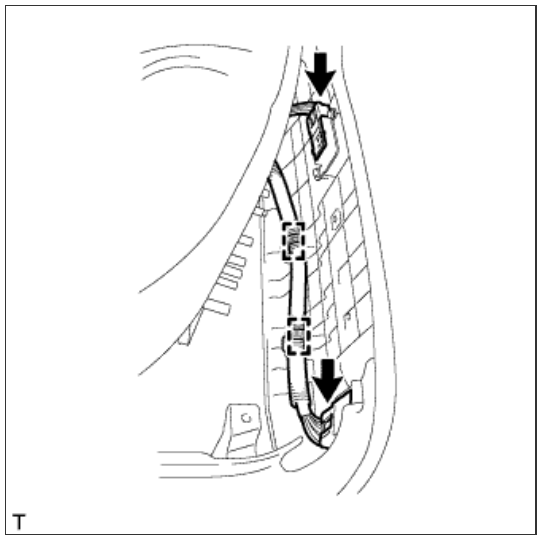
2. INSTALL FRONT SEAT CUSHION SHIELD RH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

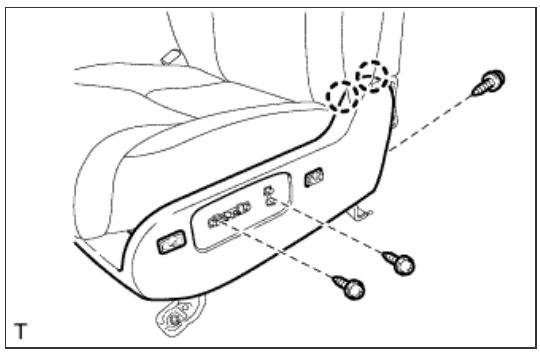
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

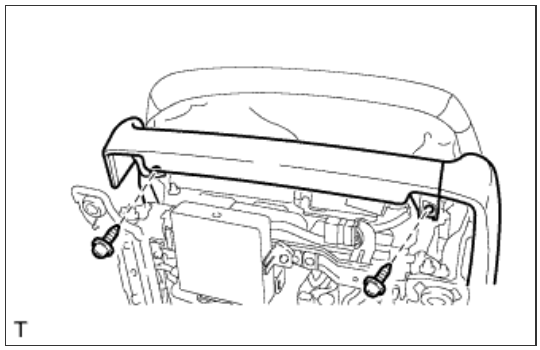


c. Attach the 2 claws to install the cushion shield.

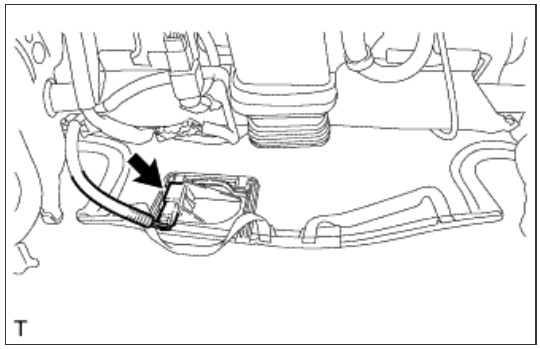
d. Install the 3 screws.



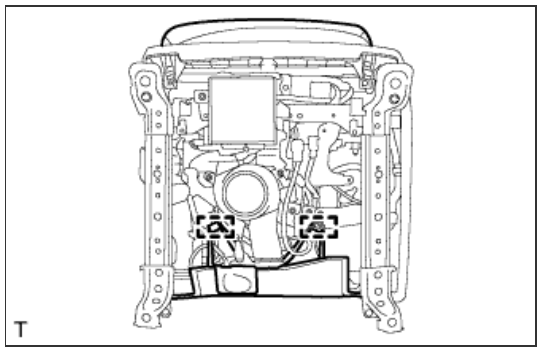
e. Install the 2 screws.



f. Connect the interior illumination light connector.

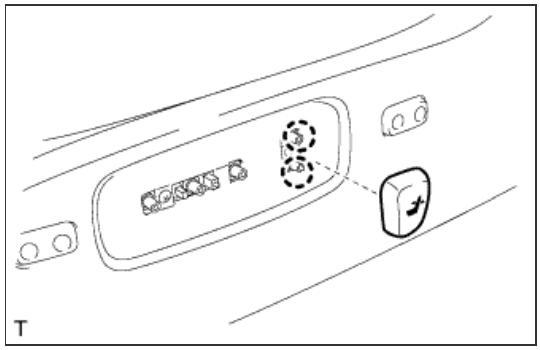


g. Attach the 2 rubber bands to the hooks.



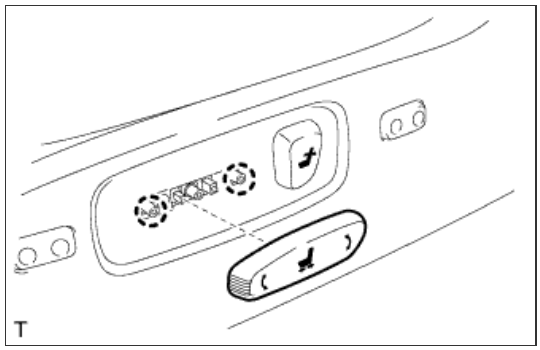
3. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



4. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.

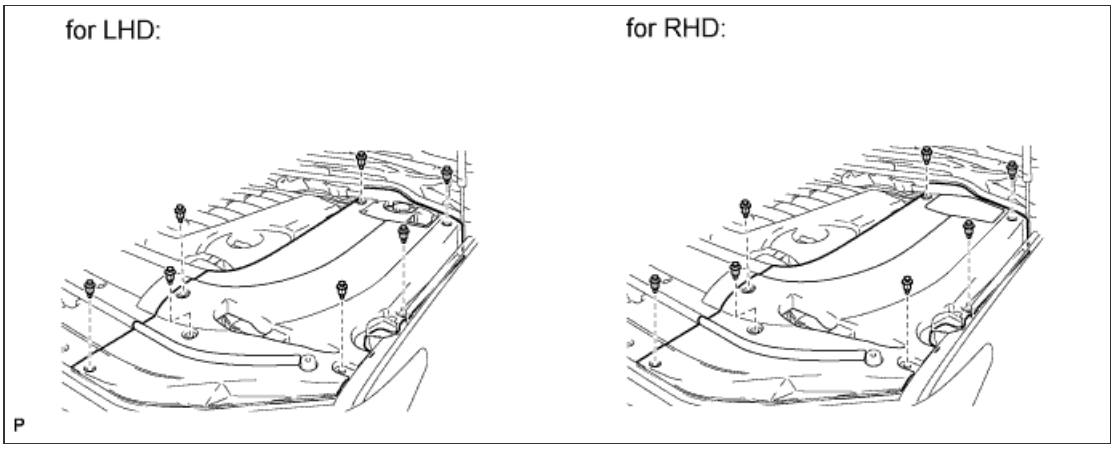


5. INSTALL FRONT SEAT ASSEMBLY RH

a. Install the front seat assembly (Click here).

6. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here

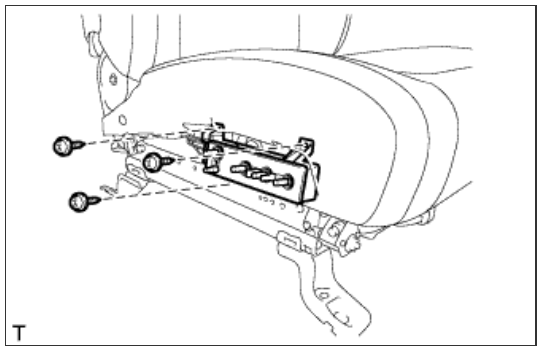
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL FRONT POWER SEAT SWITCH RH

a. Install the switch with the 3 screws.

b. Connect the switch connector.



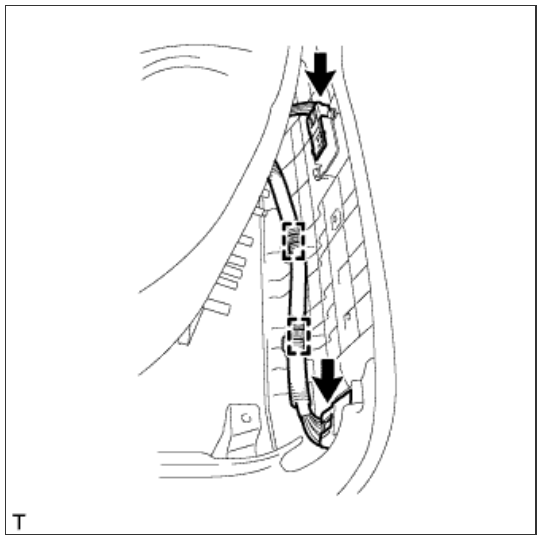
2. INSTALL FRONT SEAT CUSHION SHIELD RH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

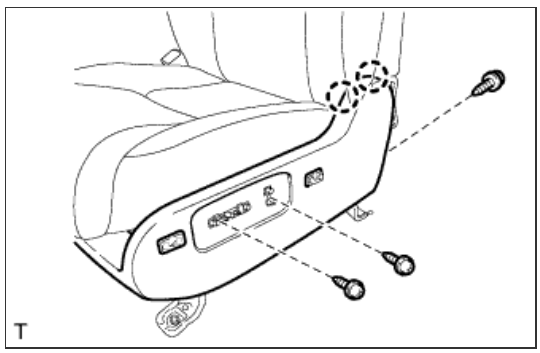
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

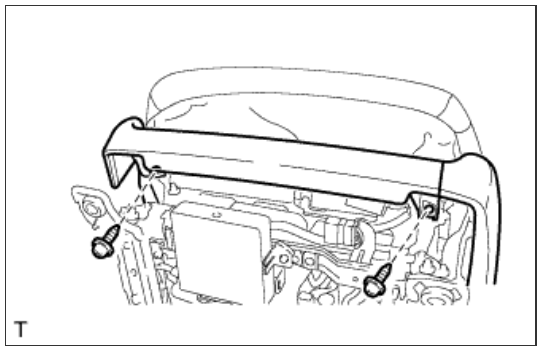


c. Attach the 2 claws to install the cushion shield.

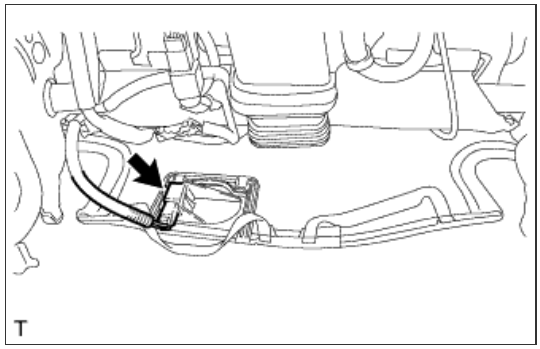
d. Install the 3 screws.



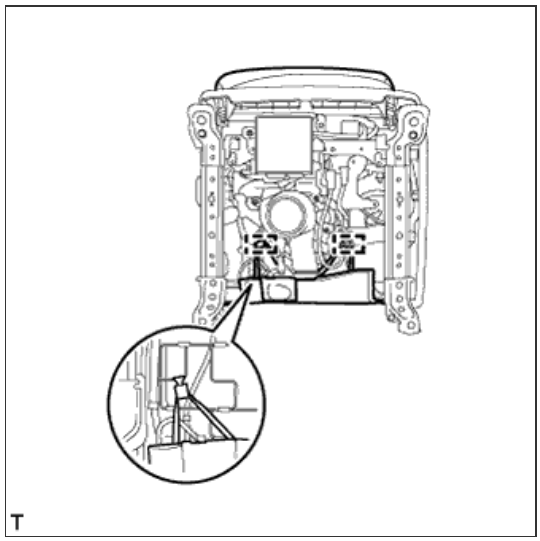
e. Install the 2 screws.



f. Connect the interior illumination light connector.

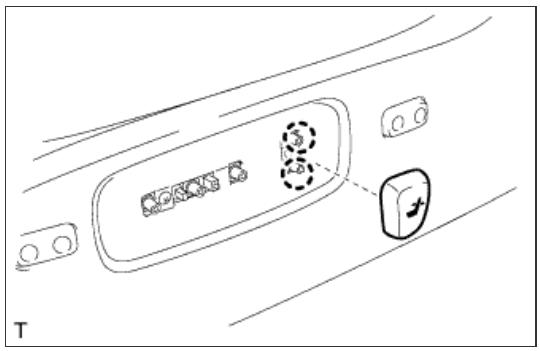


g. Attach the 2 rubber bands to the hooks.



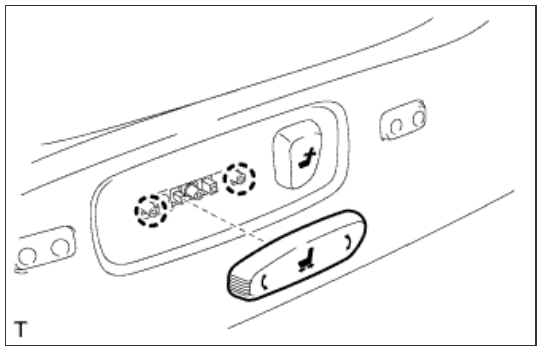
3. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



4. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.

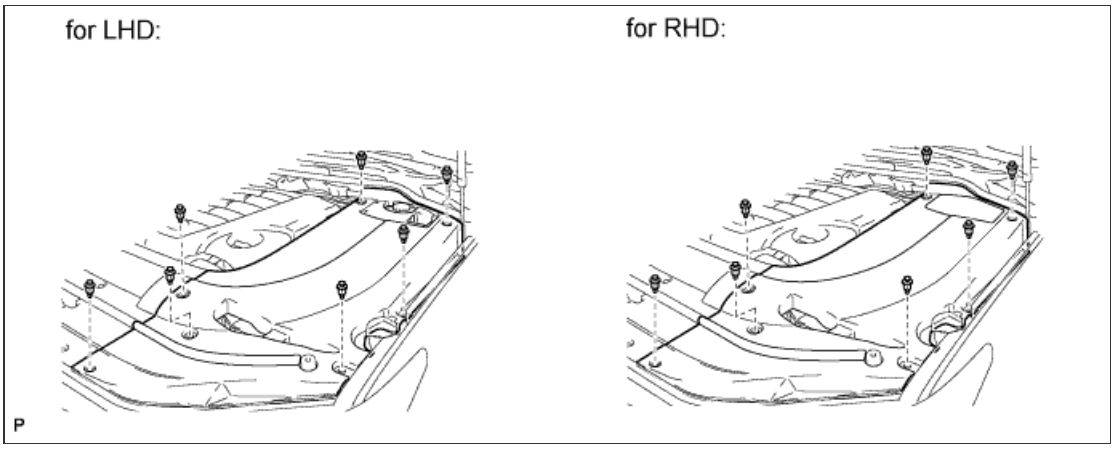


5. INSTALL FRONT SEAT ASSEMBLY RH

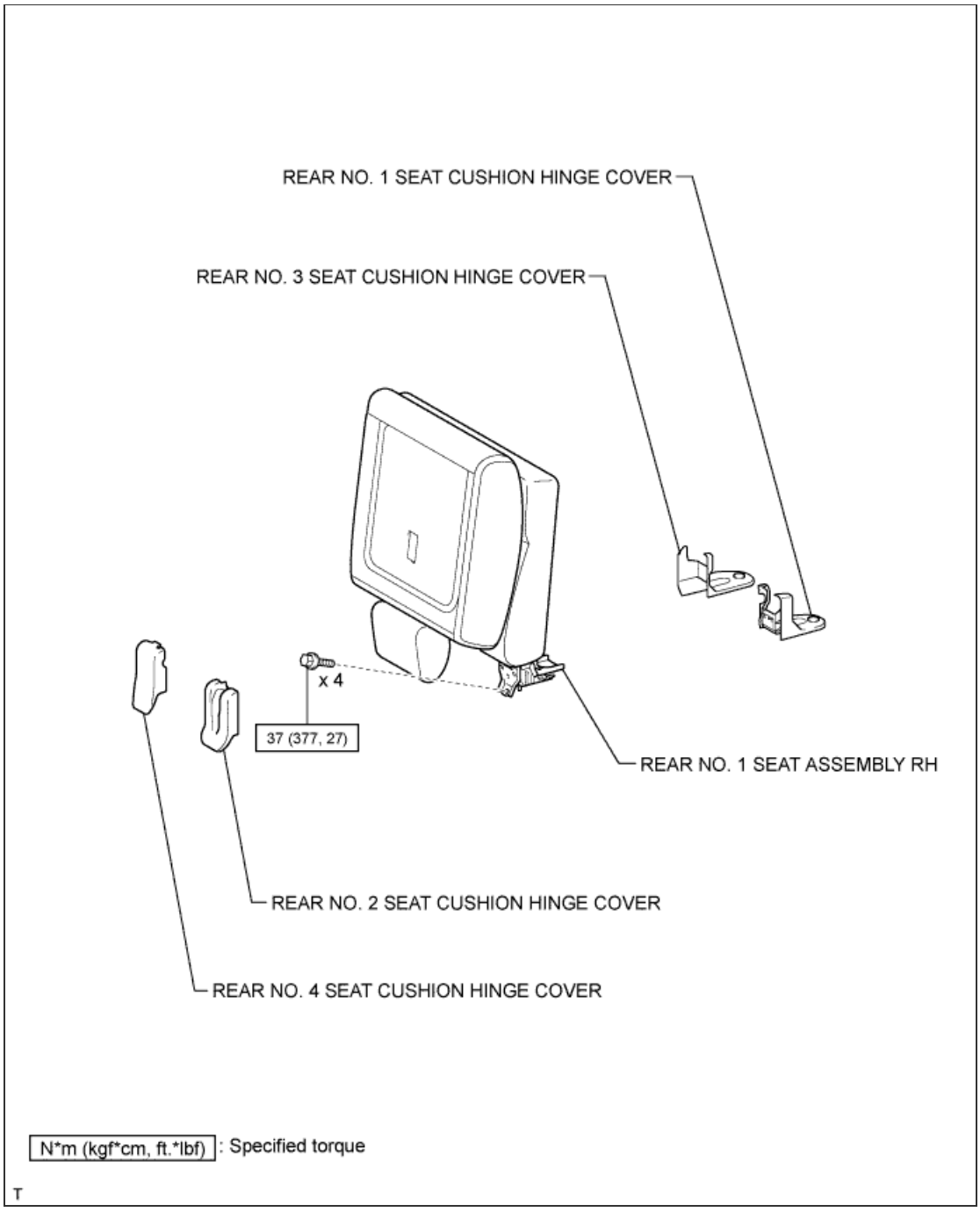
a. Install the front seat assembly (Click here).

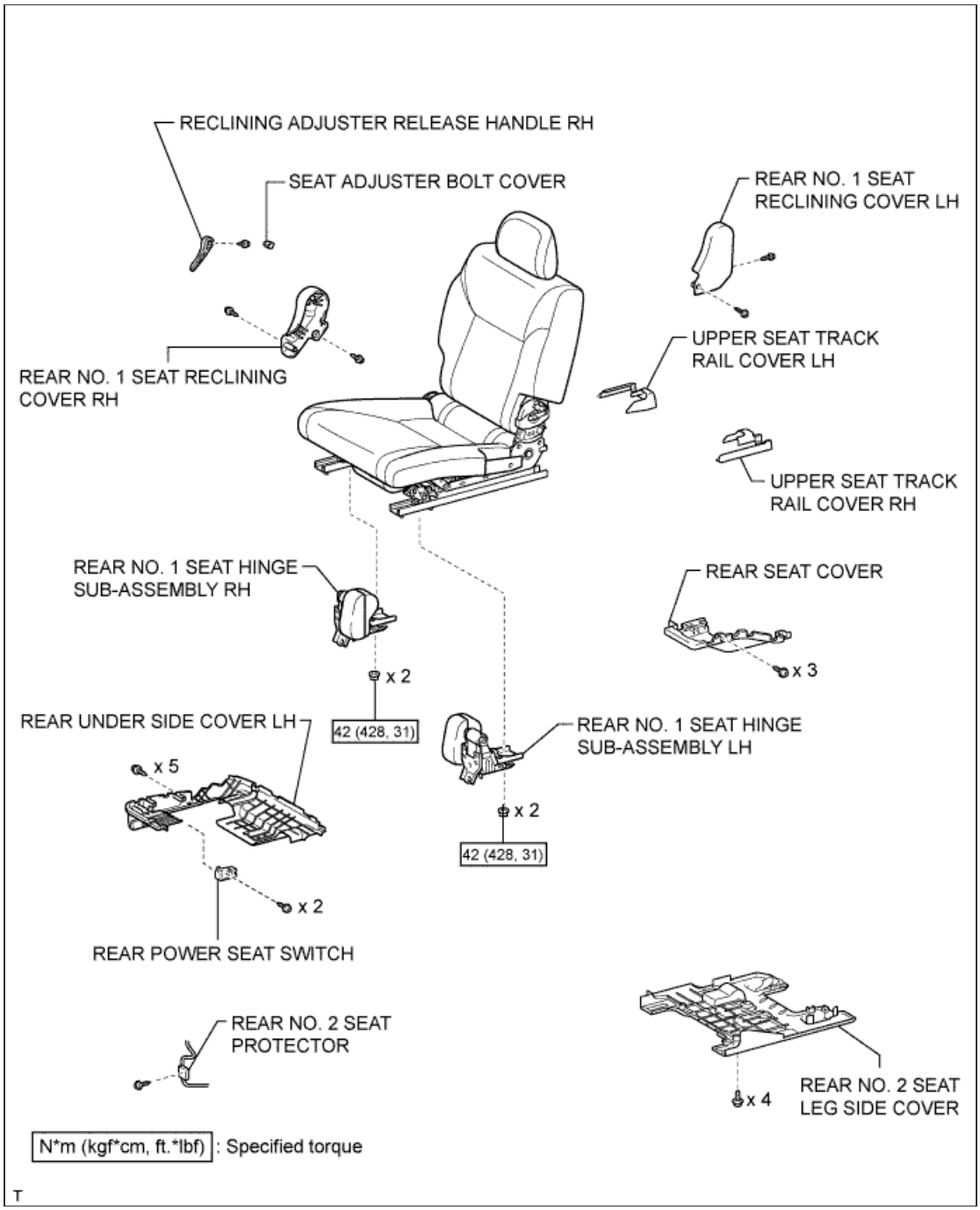
6. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here




RECLINING ADJUSTER RELEASE HANDLE RH
SEAT ADJUSTER BOLT COVER
REAR NO. 1 SEAT RECLINING COVER LH
REAR NO. 1 SEAT RECLINING COVER RH
UPPER SEAT TRACK RAIL COVER LH
UPPER SEAT TRACK RAIL COVER RH
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH
REAR SEAT COVER
x 2
x 3
42 (428, 31)
REAR UNDER SIDE COVER LH
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH
x 5
x 2
42 (428, 31)
x 2
REAR POWER SEAT SWITCH
REAR NO. 2 SEAT PROTECTOR
x 4
REAR NO. 2 SEAT LEG SIDE COVER
N*m (kgf*cm, ft.*lbf) : Specified torque
T

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

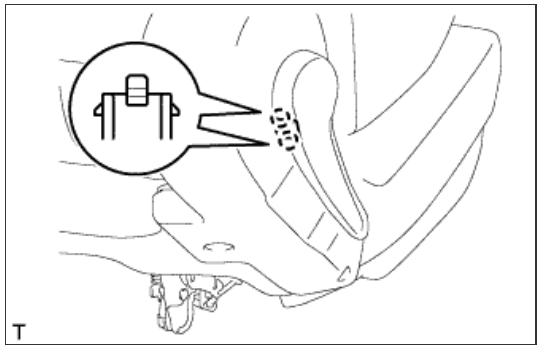
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

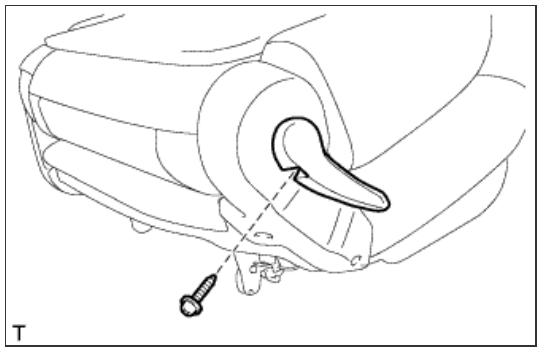
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE RH

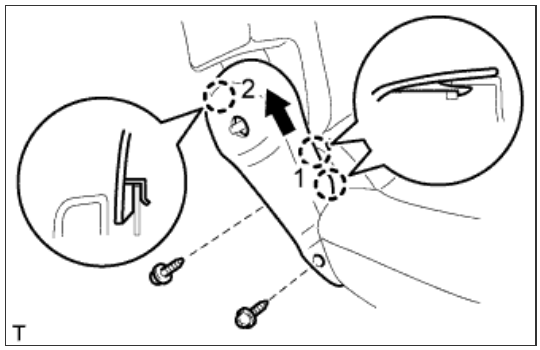
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

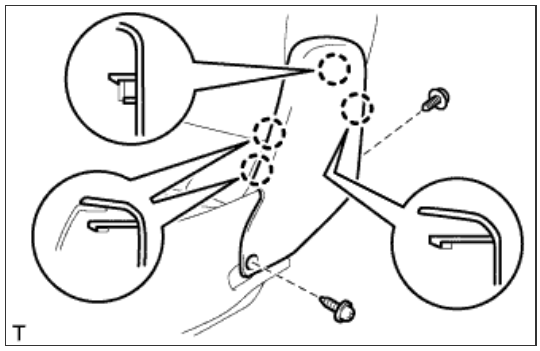
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

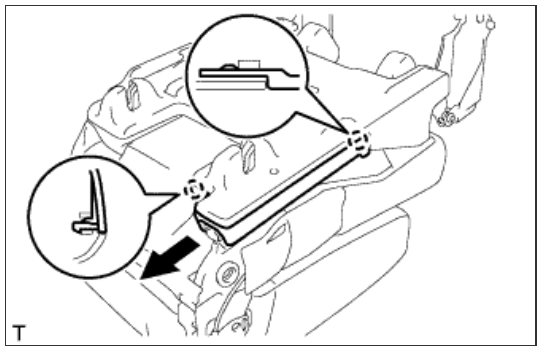


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

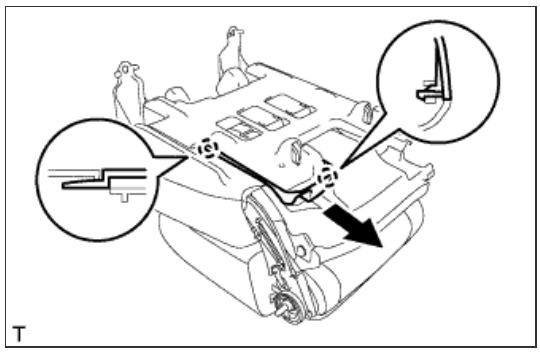


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

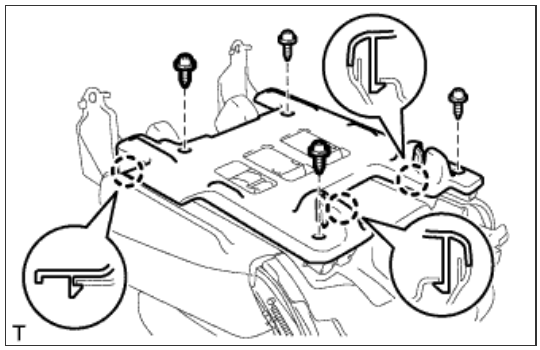
HINT:

Tape the screwdriver tip before use.

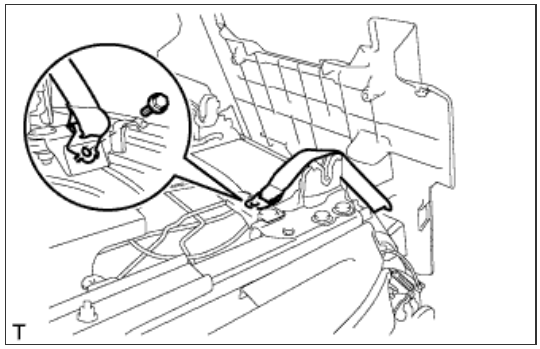


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 3 claws.



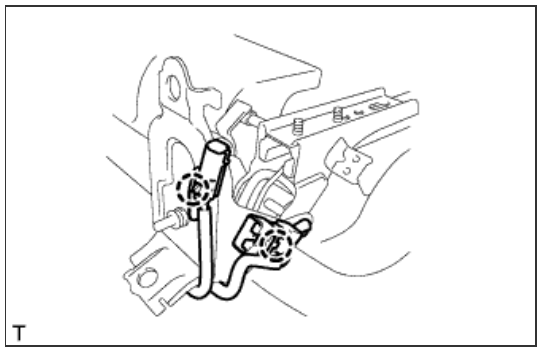
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

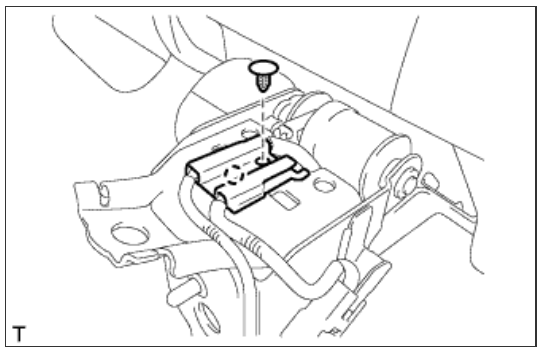
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

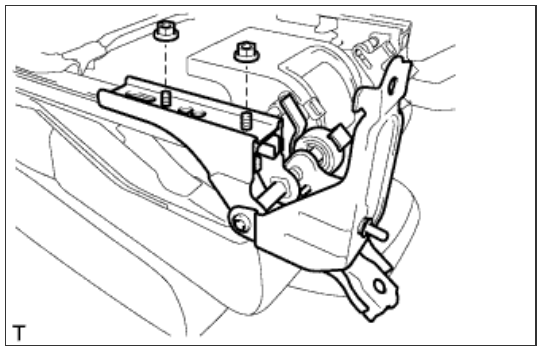
d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.



10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Remove the 2 nuts and hinge.

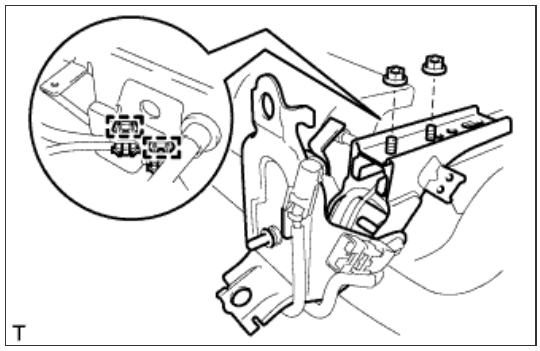


11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Detach the wire harness clamp.

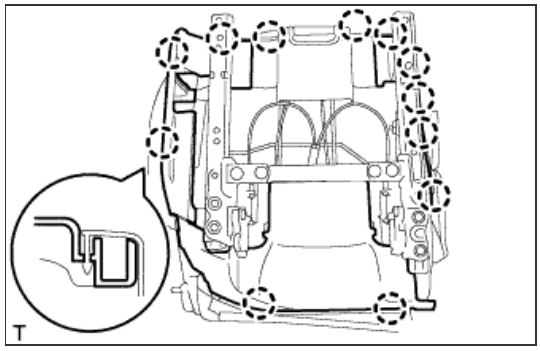
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



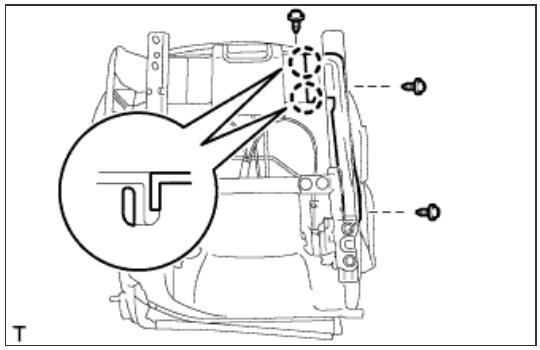
12. REMOVE REAR SEAT COVER

a. Detach the 12 claws.



b. Remove the 3 screws.

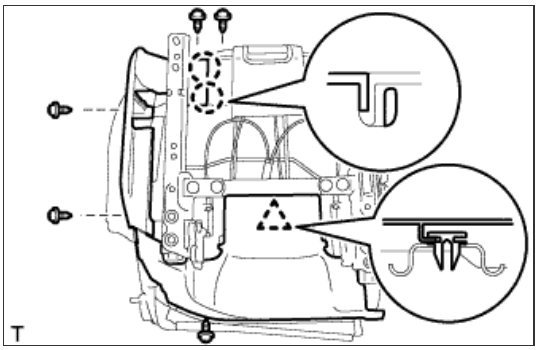
c. Detach the 2 claws and remove the cover.



13. REMOVE REAR UNDER SIDE COVER LH

a. Remove the 5 screws.

b. Detach the clip and 2 claws, and remove the cover.



14. REMOVE REAR POWER SEAT SWITCH

a. Remove the 2 screws and power seat switch.

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

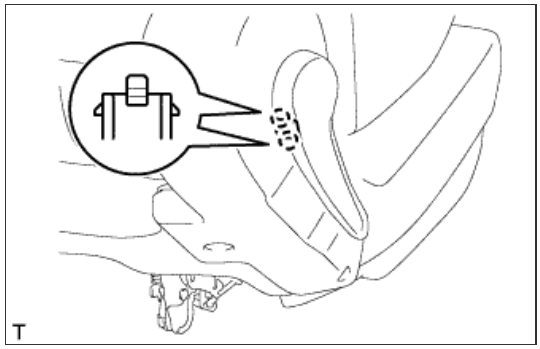
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

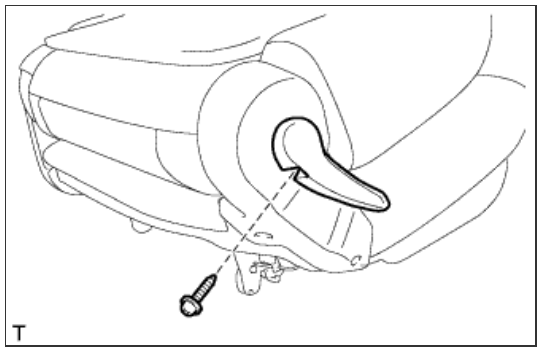
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE RH

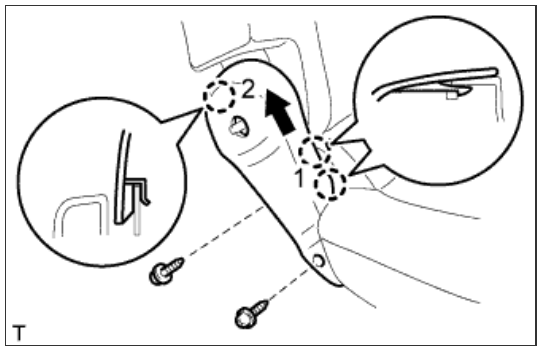
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

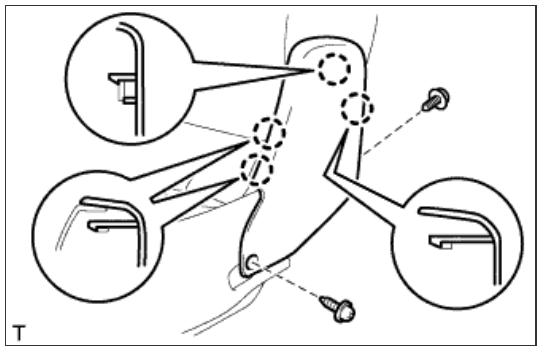
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

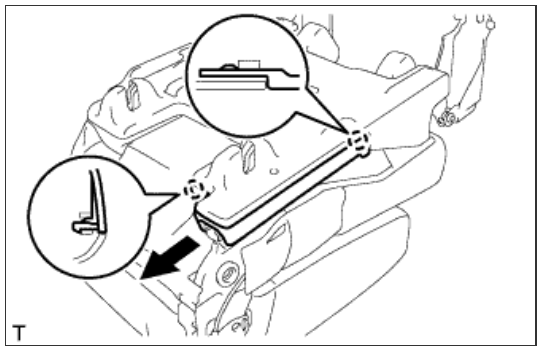


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

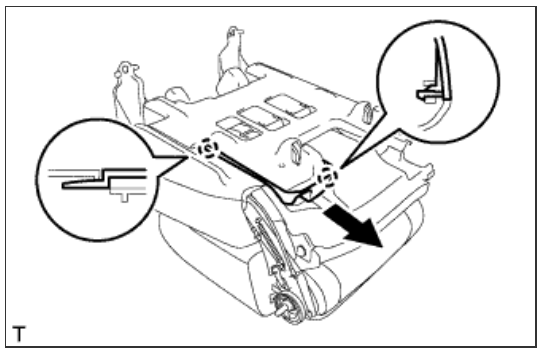


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

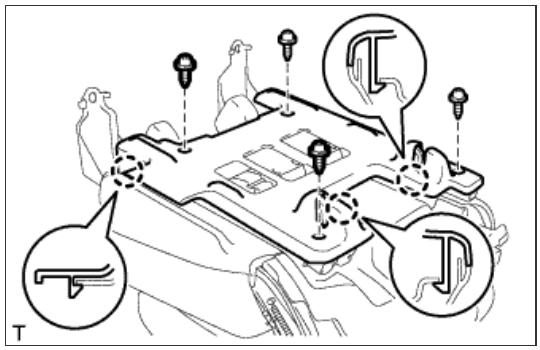
HINT:

Tape the screwdriver tip before use.

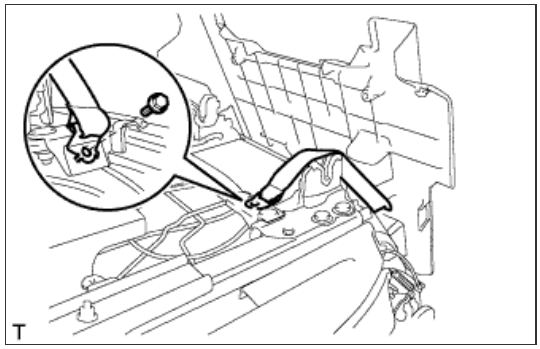


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 3 claws.



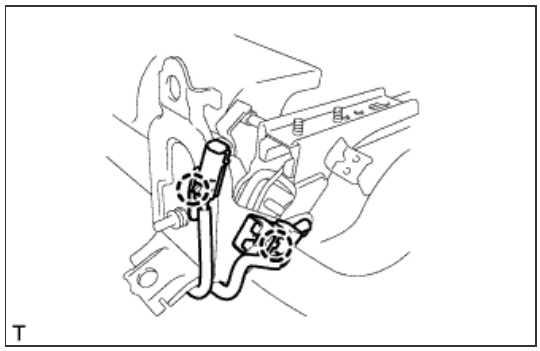
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

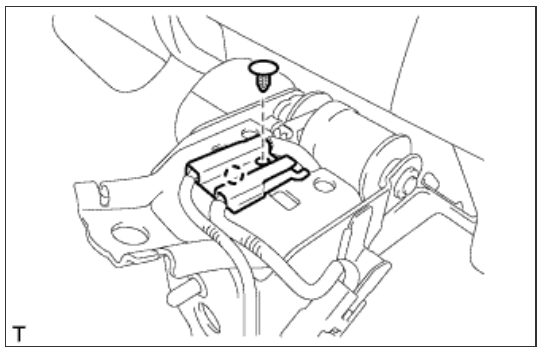
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

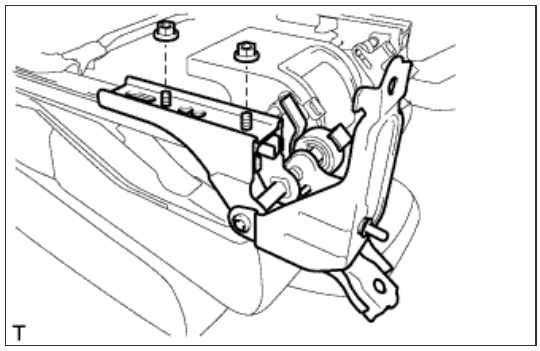
d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.



10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Remove the 2 nuts and hinge.

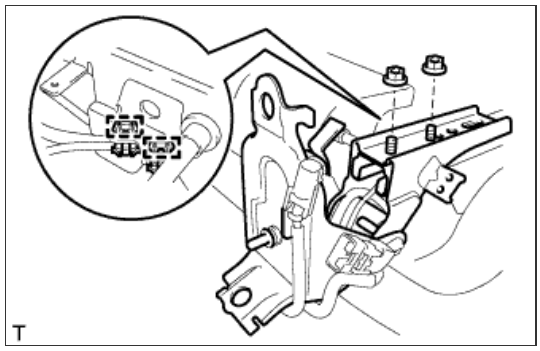


11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Detach the wire harness clamp.

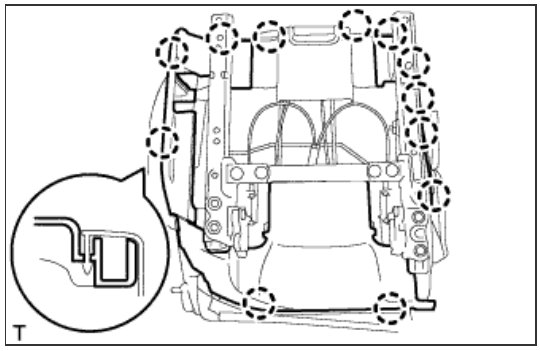
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



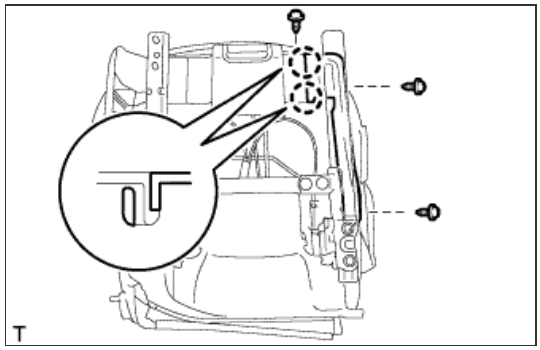
12. REMOVE REAR SEAT COVER

a. Detach the 12 claws.



b. Remove the 3 screws.

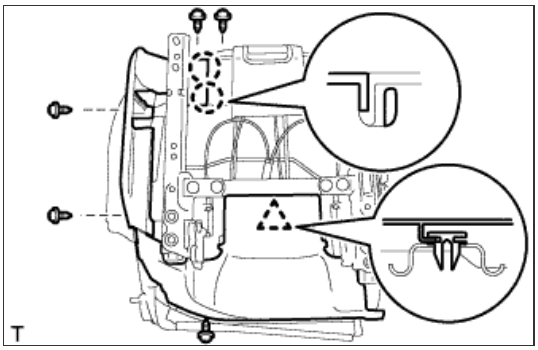
c. Detach the 2 claws and remove the cover.



13. REMOVE REAR UNDER SIDE COVER LH

a. Remove the 5 screws.

b. Detach the clip and 2 claws, and remove the cover.



14. REMOVE REAR POWER SEAT SWITCH

a. Remove the 2 screws and power seat switch.

for Preparation Click here

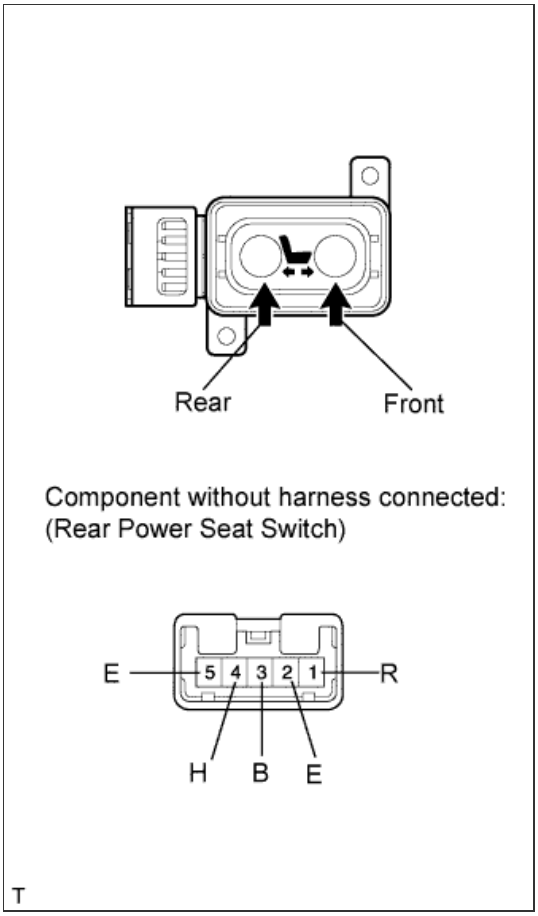
1. INSPECT REAR POWER SEAT SWITCH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
3 (B) - 4 (H)	Front	Below 1 Ω
1 (R) - 2 (E)		
1 (R) - 2 (E)	Off	
4 (H) - 5 (E)		
1 (R) - 3 (B)	Rear	
4 (H) - 5 (E)		

If the result is not as specified, replace the rear power seat switch.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

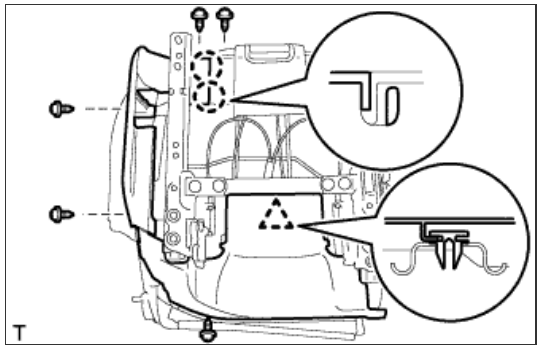
1. INSTALL REAR POWER SEAT SWITCH

a. Install the power seat switch with the 2 screws.

2. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and clip to install the cover.

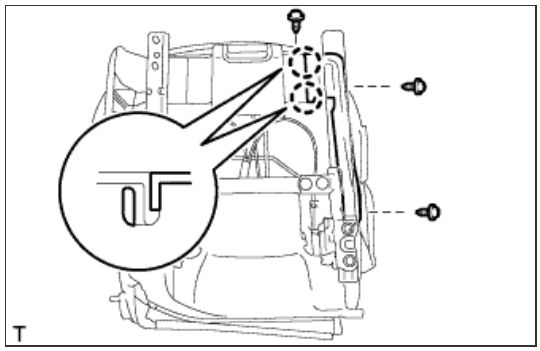
b. Install the 5 screws.



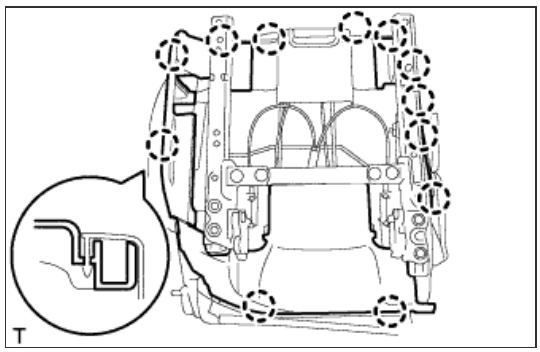
3. INSTALL REAR SEAT COVER

a. Attach the 2 claws to install the cover.

b. Install the 3 screws.



c. Attach the 12 claws.



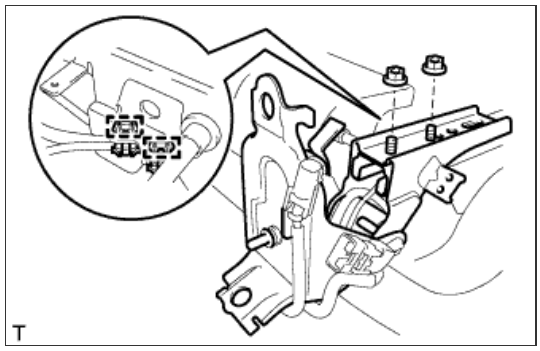
4. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

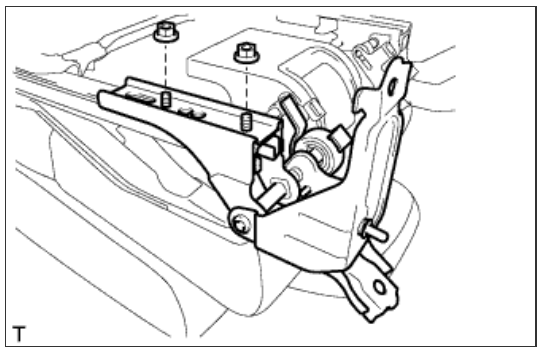
c. w/ Seat Heater System:
Attach the wire harness clamp.



5. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

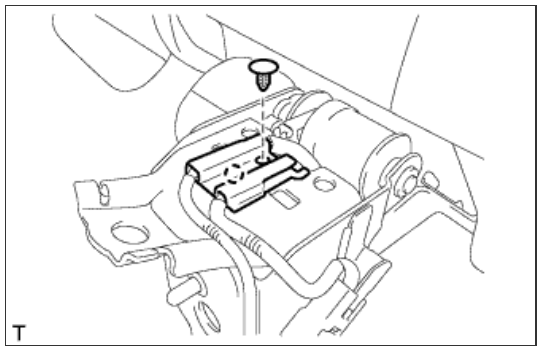


6. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

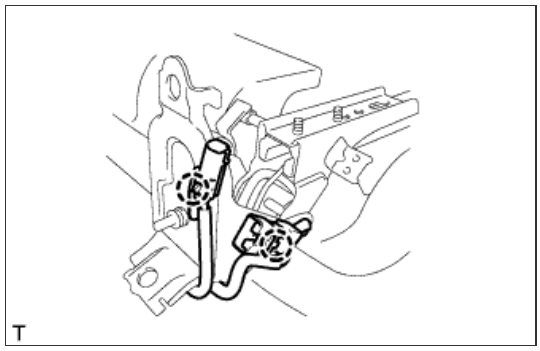
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



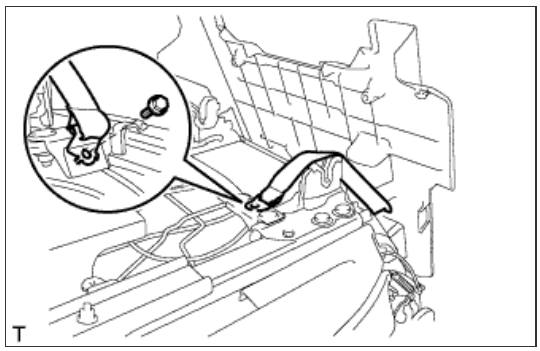
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



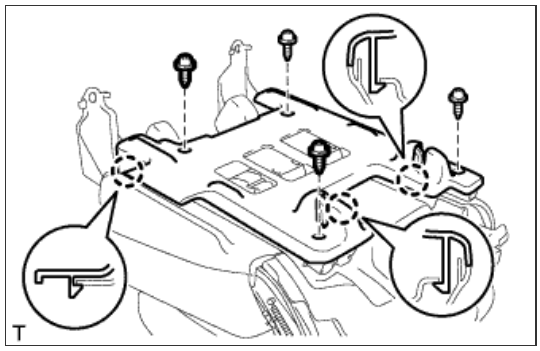
7. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



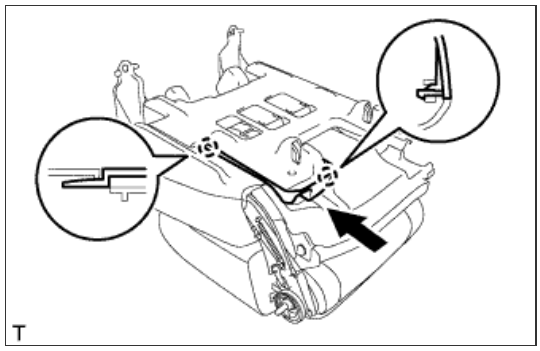
b. Attach the 3 claws to install the seat leg side cover.

c. Install the 4 screws.



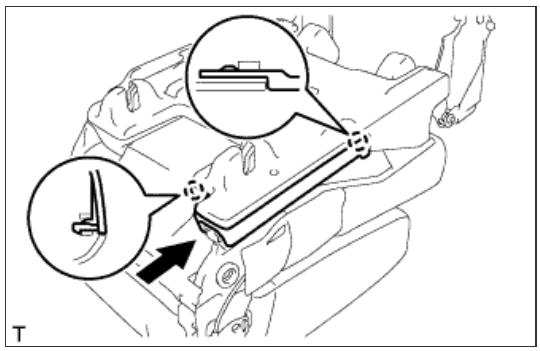
8. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



9. INSTALL UPPER SEAT TRACK RAIL COVER LH

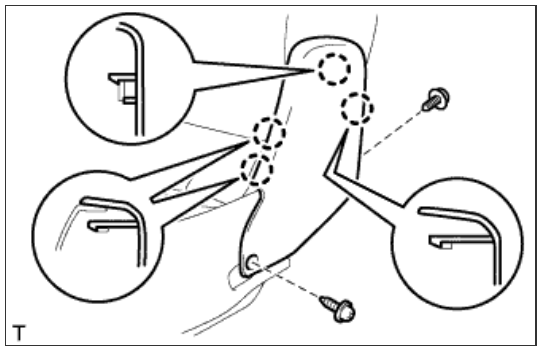
a. Attach the 2 claws to install the cover.



10. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

a. Attach the 4 claws to install the cover.

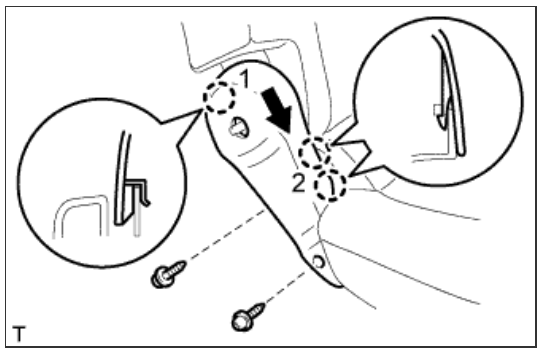
b. Install the 2 screws.



11. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

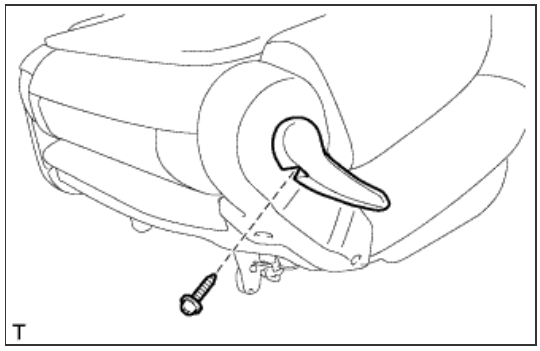
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



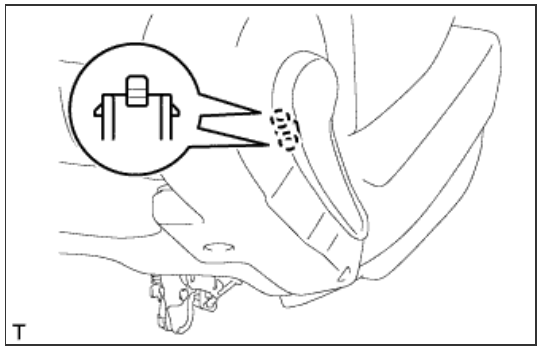
12. INSTALL RECLINING ADJUSTER RELEASE HANDLE RH

a. Install the release handle with the screw.



13. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



14. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

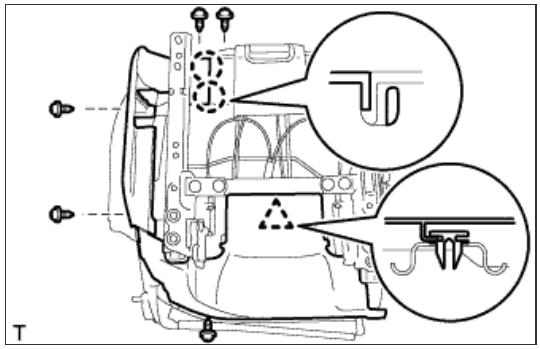
1. INSTALL REAR POWER SEAT SWITCH

a. Install the power seat switch with the 2 screws.

2. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and clip to install the cover.

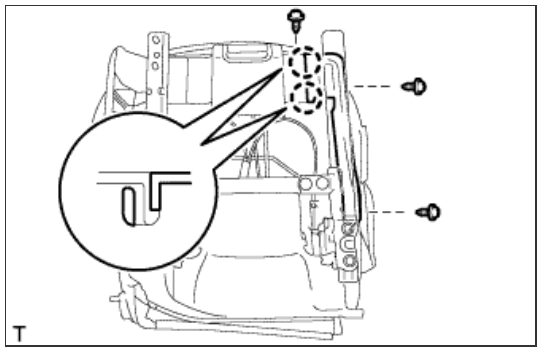
b. Install the 5 screws.



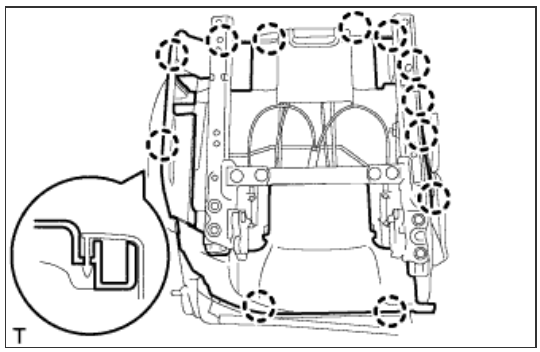
3. INSTALL REAR SEAT COVER

a. Attach the 2 claws to install the cover.

b. Install the 3 screws.



c. Attach the 12 claws.



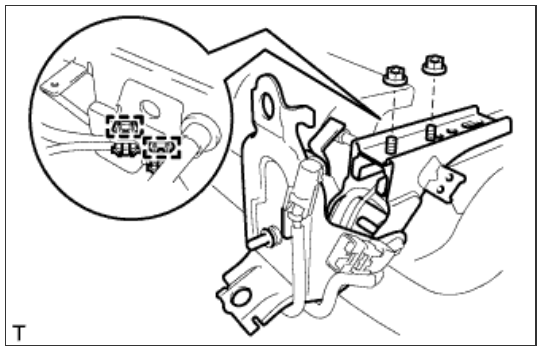
4. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

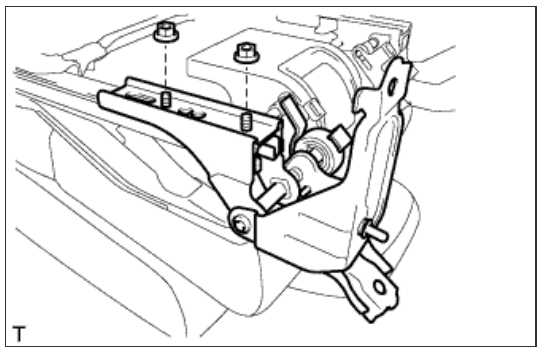
c. w/ Seat Heater System:
Attach the wire harness clamp.



5. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

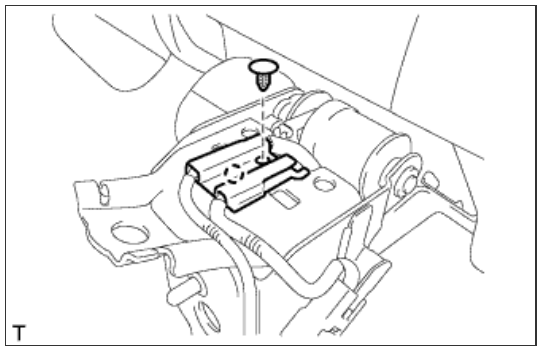


6. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

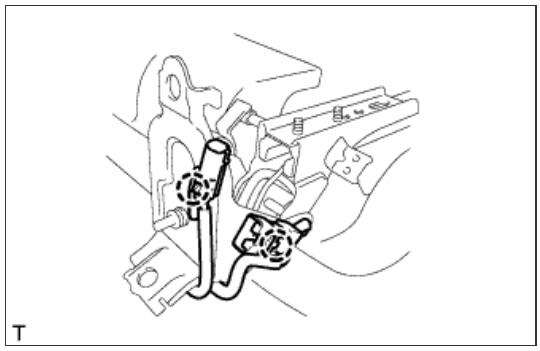
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



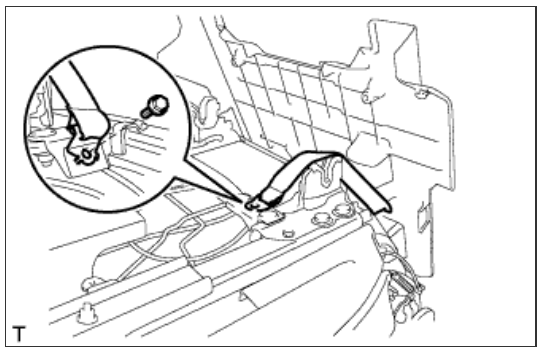
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



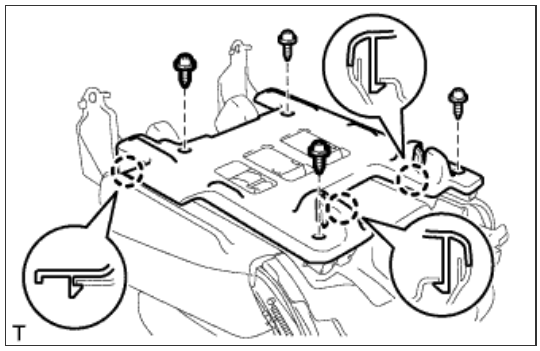
7. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



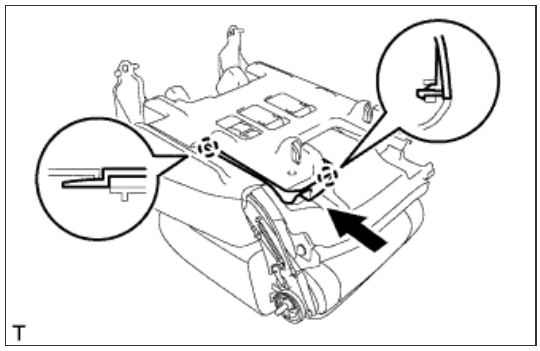
b. Attach the 3 claws to install the seat leg side cover.

c. Install the 4 screws.



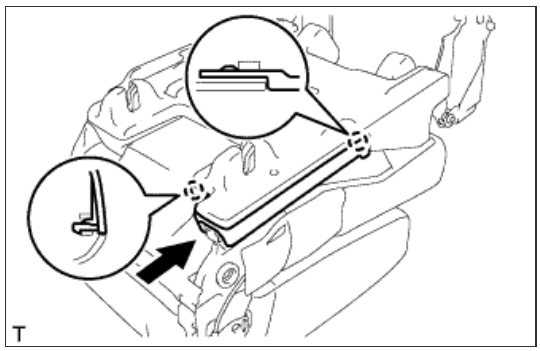
8. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



9. INSTALL UPPER SEAT TRACK RAIL COVER LH

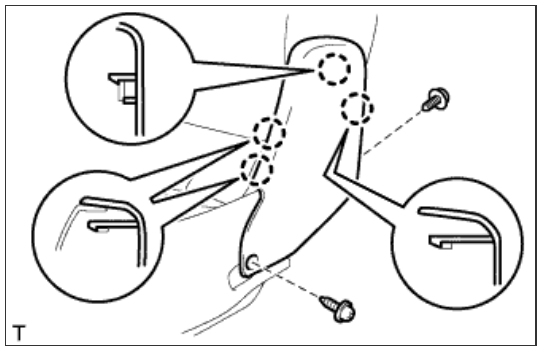
a. Attach the 2 claws to install the cover.



10. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

a. Attach the 4 claws to install the cover.

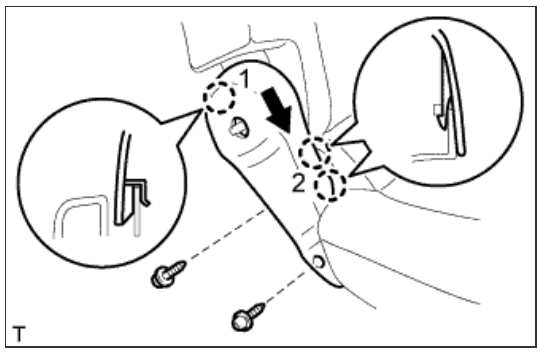
b. Install the 2 screws.



11. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

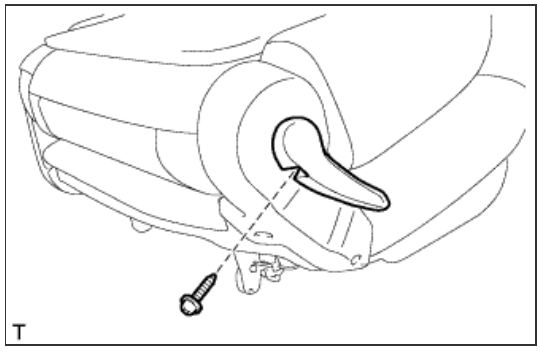
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



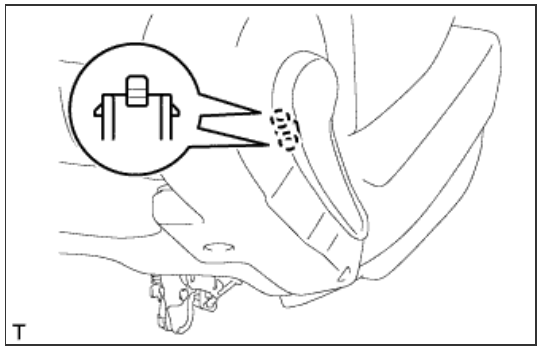
12. INSTALL RECLINING ADJUSTER RELEASE HANDLE RH

a. Install the release handle with the screw.



13. INSTALL SEAT ADJUSTER BOLT COVER

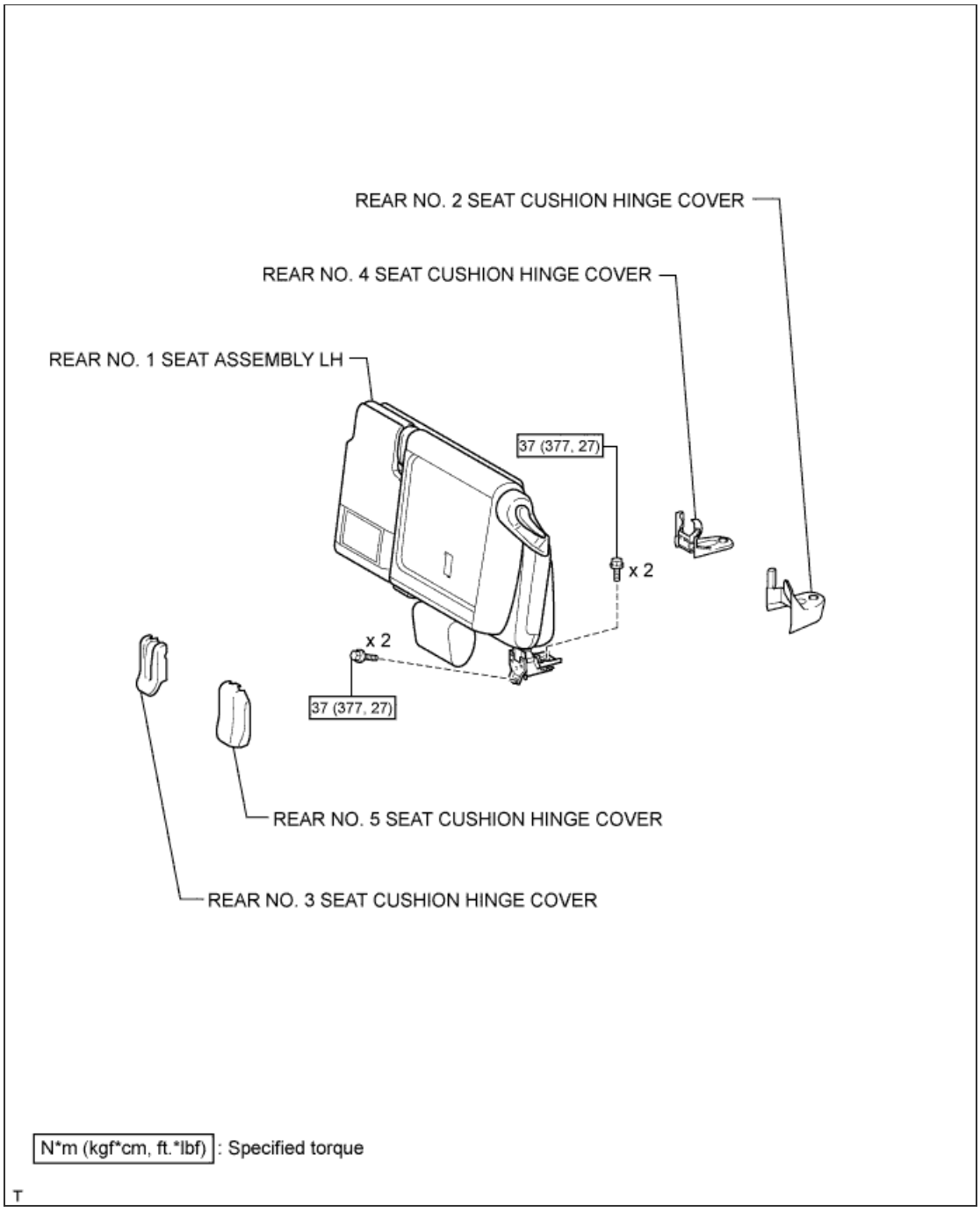
a. Attach the 2 claws to install the cover.

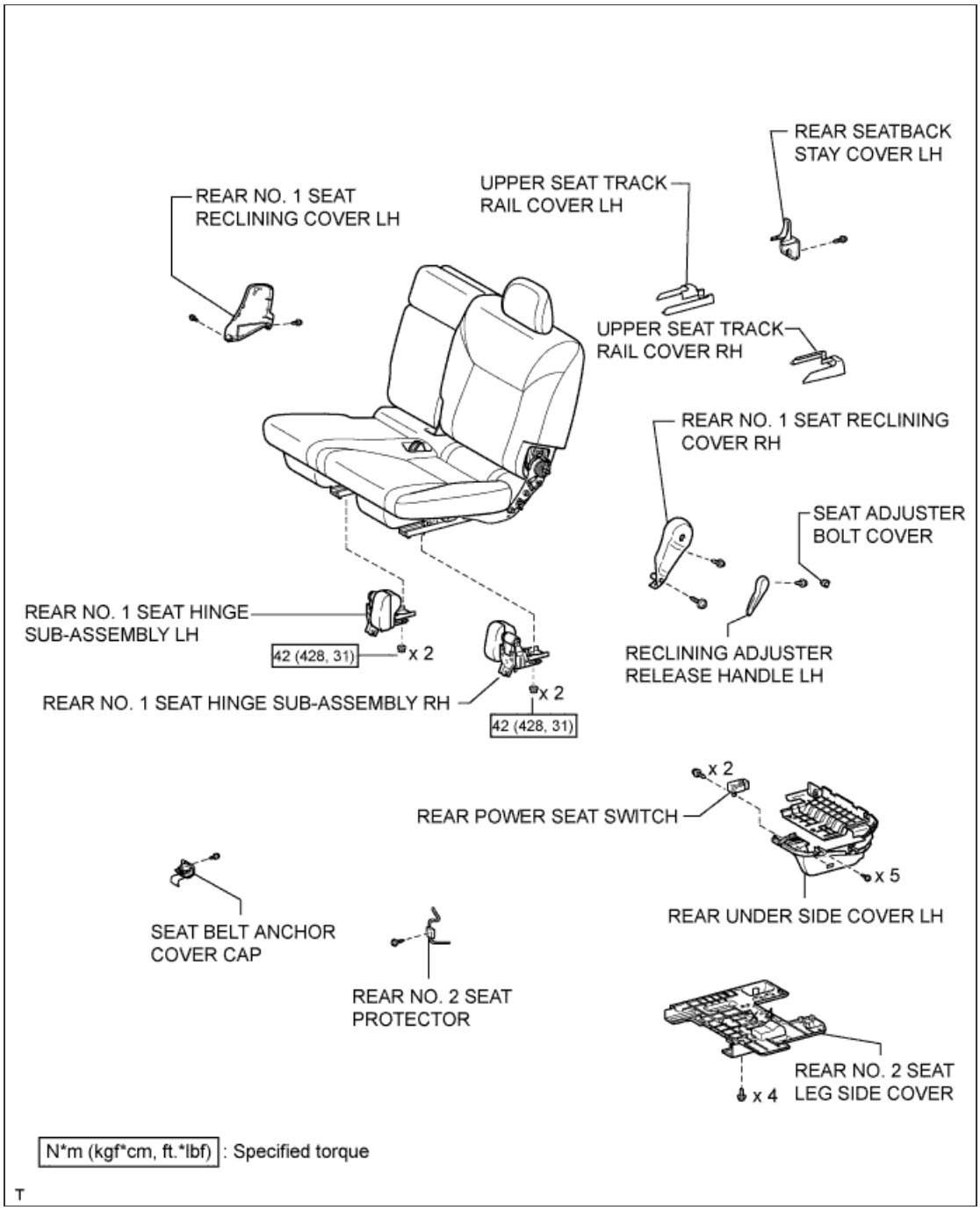


14. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here




REAR SEATBACK STAY COVER LH
UPPER SEAT TRACK RAIL COVER LH
REAR NO. 1 SEAT RECLINING COVER LH
UPPER SEAT TRACK RAIL COVER RH
REAR NO. 1 SEAT RECLINING COVER RH
SEAT ADJUSTER BOLT COVER
RECLINING ADJUSTER RELEASE HANDLE LH
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH
42 (428, 31)
x 2
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH
x 2
42 (428, 31)
x 2
REAR POWER SEAT SWITCH
x 5
REAR UNDER SIDE COVER LH
SEAT BELT ANCHOR COVER CAP
REAR NO. 2 SEAT PROTECTOR
REAR NO. 2 SEAT LEG SIDE COVER
x 4
N*m (kgf*cm, ft.*lbf) : Specified torque
T

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY

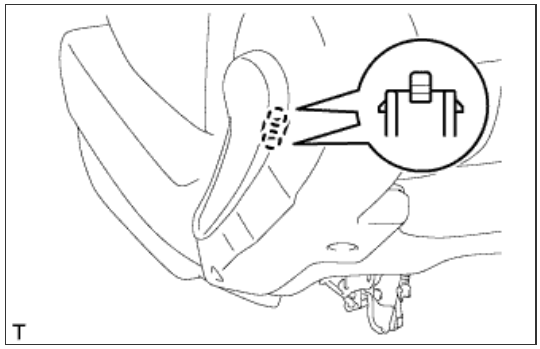
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

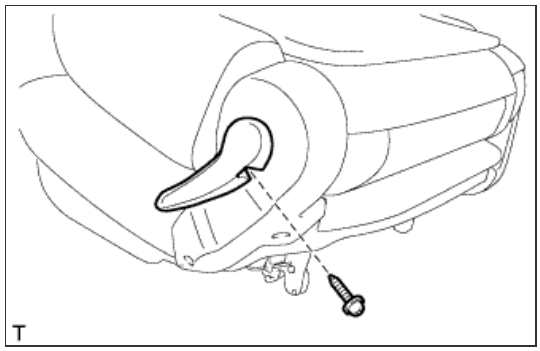
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE LH

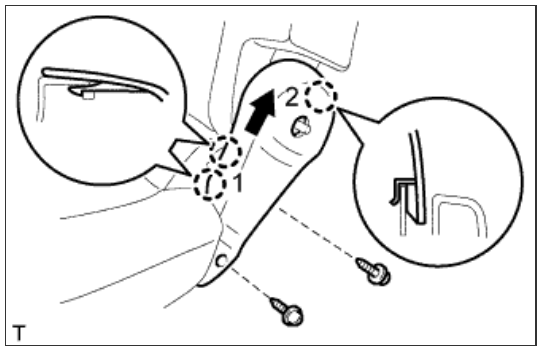
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

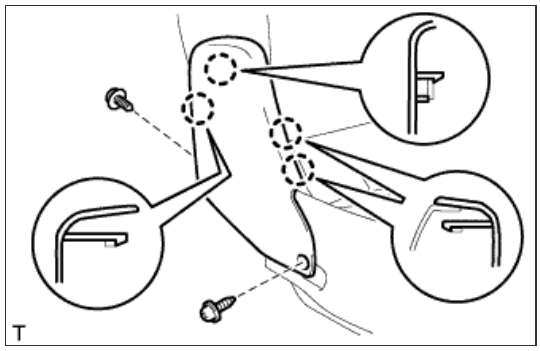
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

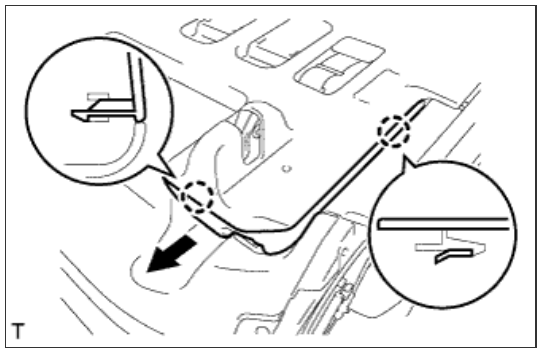


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

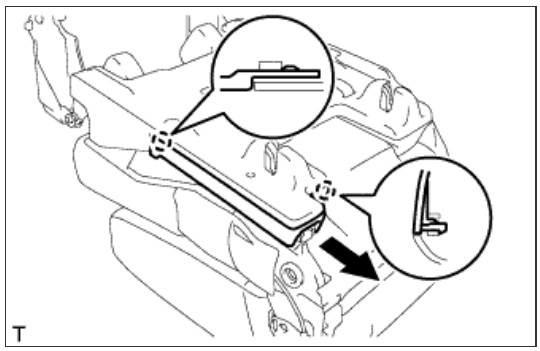


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

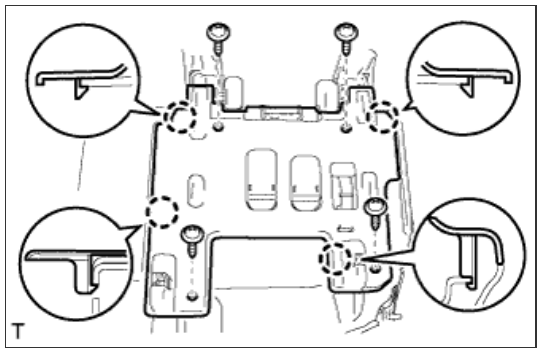
HINT:

Tape the screwdriver tip before use.

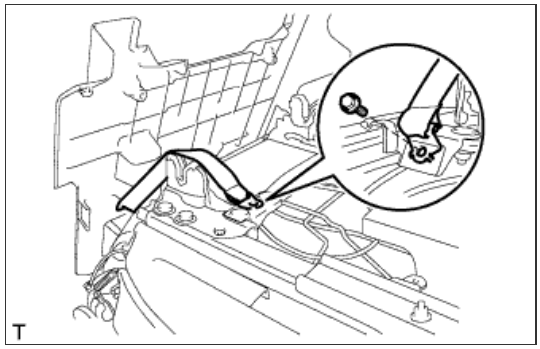


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 4 claws.



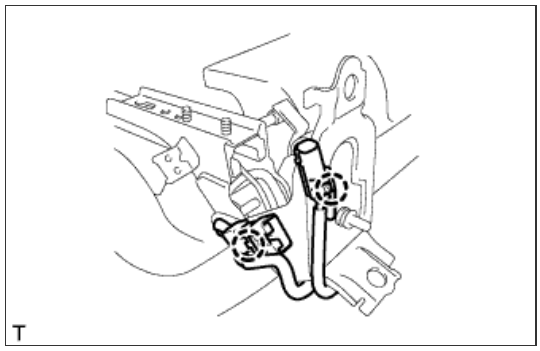
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

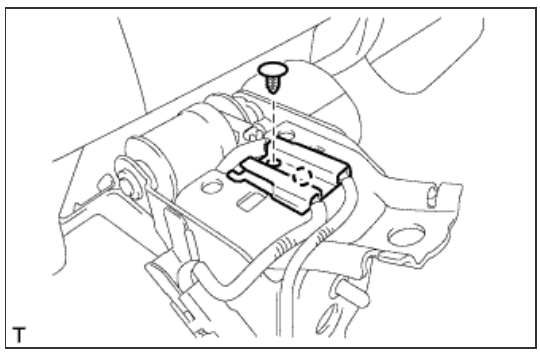
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.

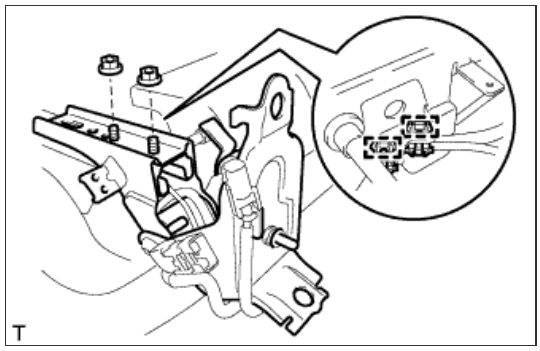


10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Detach the wire harness clamp.

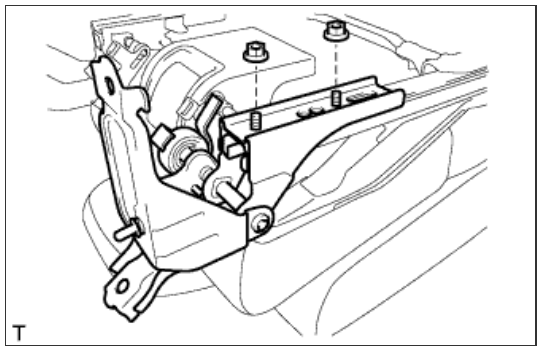
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



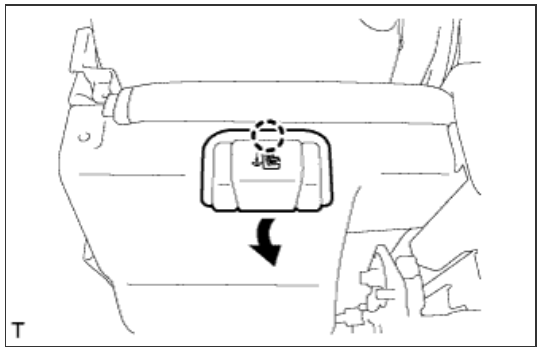
11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Remove the 2 nuts and hinge.

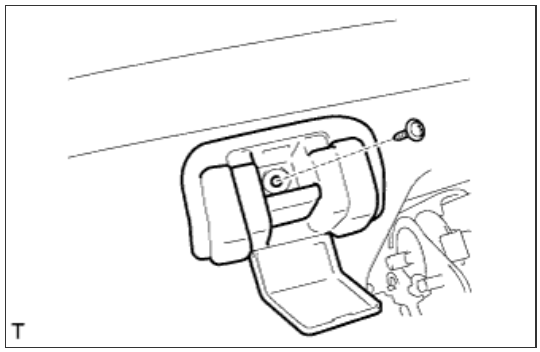


12. REMOVE SEAT BELT ANCHOR COVER CAP

a. Detach the claw and open the cap.



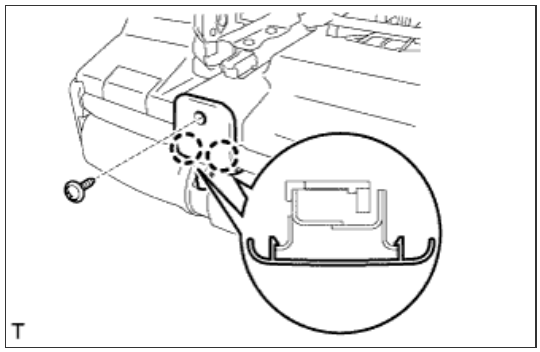
b. Remove the screw and anchor cover cap.



13. REMOVE REAR SEATBACK STAY COVER LH

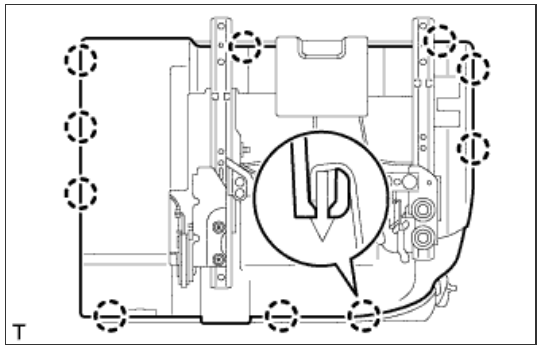
a. Remove the screw.

b. Detach the 2 claws and remove the cover.



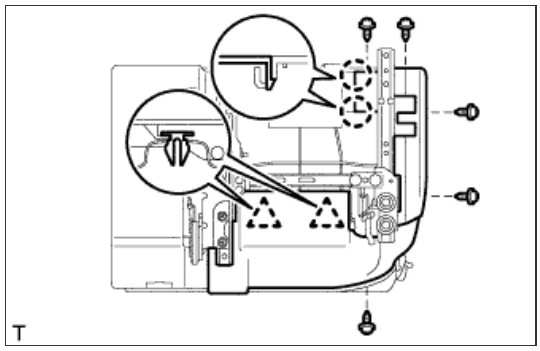
14. REMOVE REAR UNDER SIDE COVER LH

a. Detach the 10 claws.



b. Remove the 5 screws.

c. Detach the 2 clips and 2 claws, and remove the cover.



15. REMOVE REAR POWER SEAT SWITCH

a. Remove the 2 screws and power seat switch.

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY

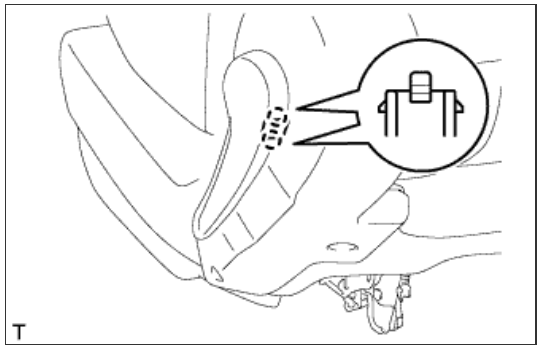
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

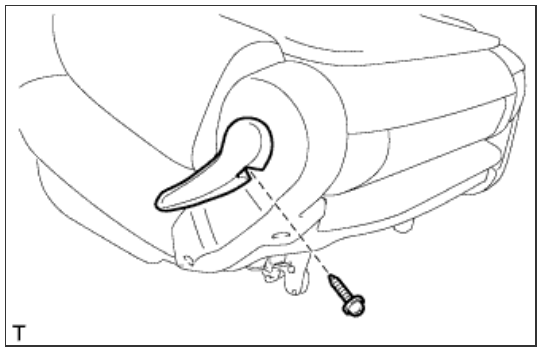
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE LH

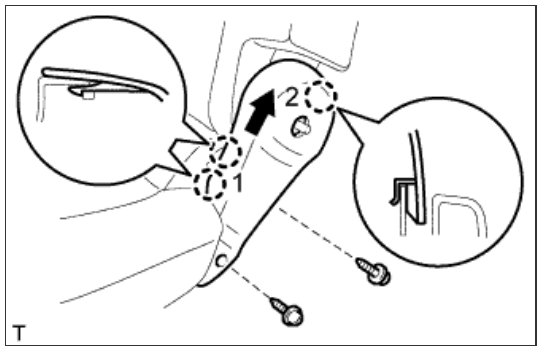
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

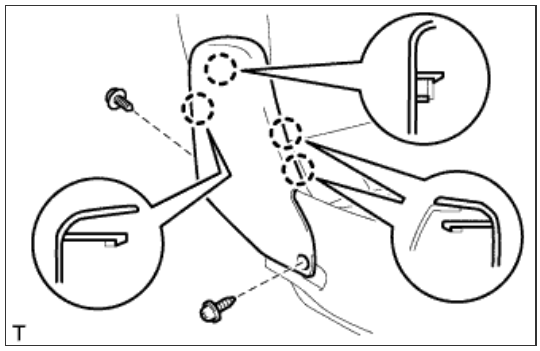
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

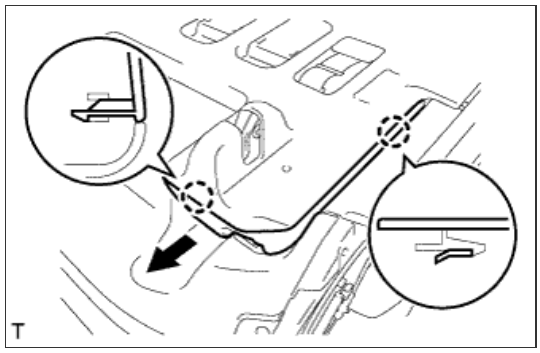


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

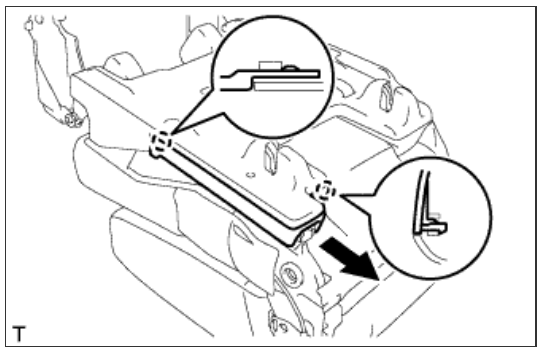


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

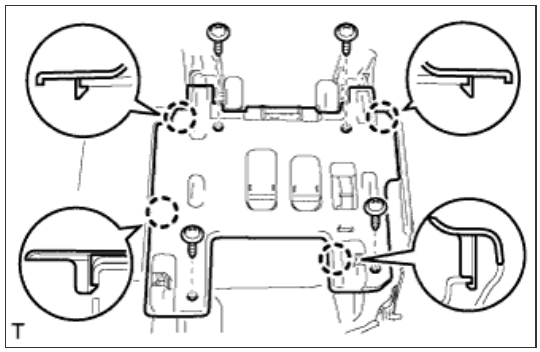
HINT:

Tape the screwdriver tip before use.

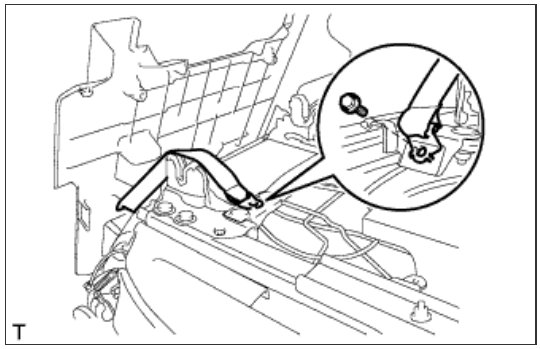


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 4 claws.



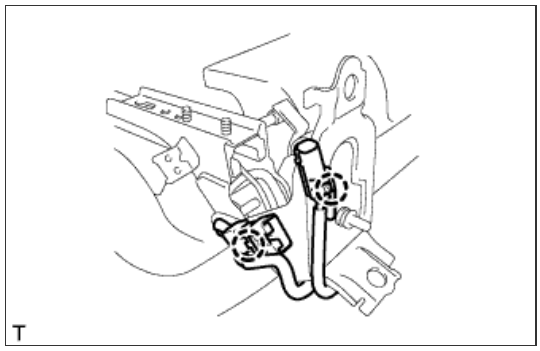
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

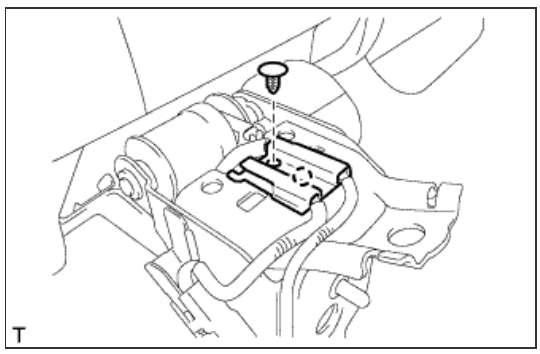
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.

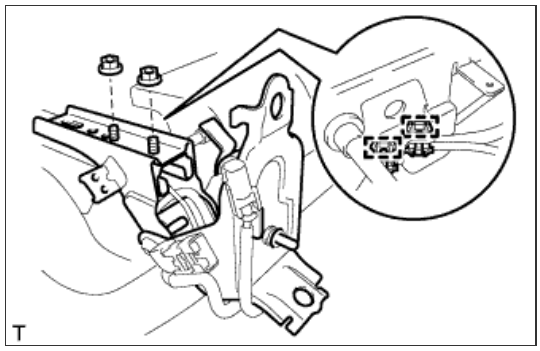


10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Detach the wire harness clamp.

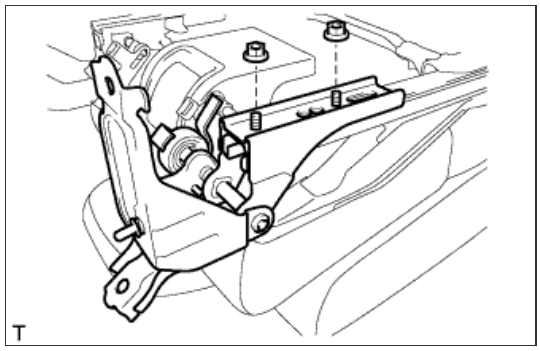
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



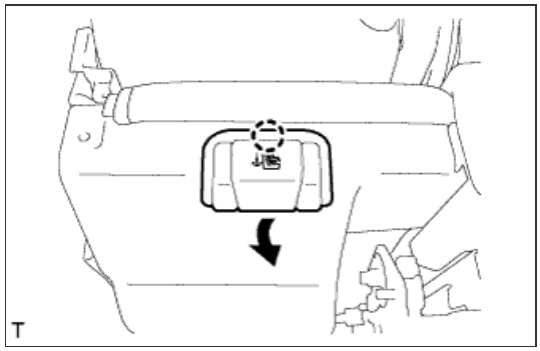
11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Remove the 2 nuts and hinge.

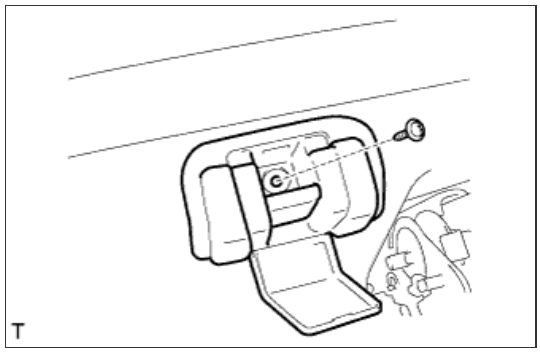


12. REMOVE SEAT BELT ANCHOR COVER CAP

a. Detach the claw and open the cap.



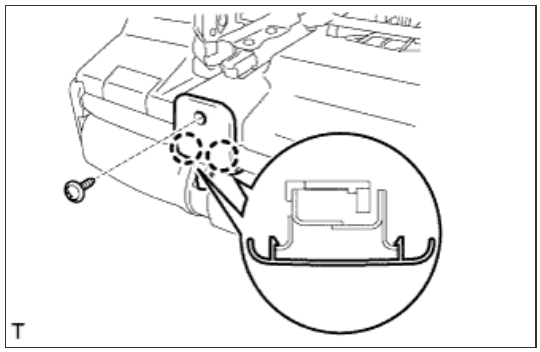
b. Remove the screw and anchor cover cap.



13. REMOVE REAR SEATBACK STAY COVER LH

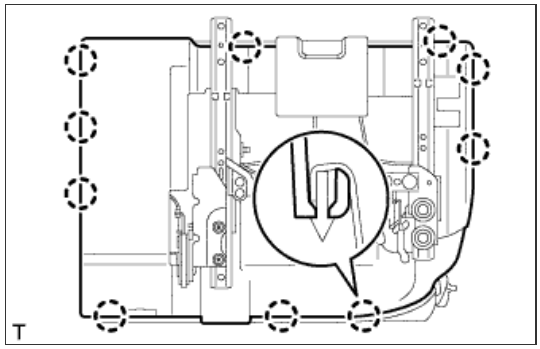
a. Remove the screw.

b. Detach the 2 claws and remove the cover.



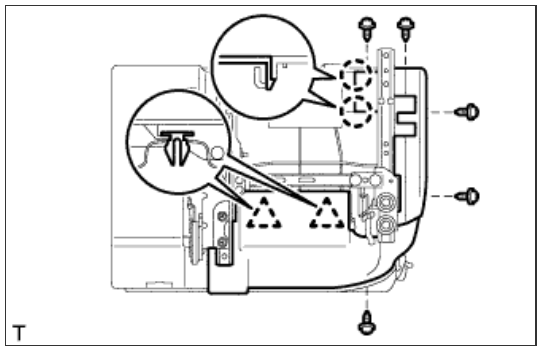
14. REMOVE REAR UNDER SIDE COVER LH

a. Detach the 10 claws.



b. Remove the 5 screws.

c. Detach the 2 clips and 2 claws, and remove the cover.



15. REMOVE REAR POWER SEAT SWITCH

a. Remove the 2 screws and power seat switch.

for Preparation Click here

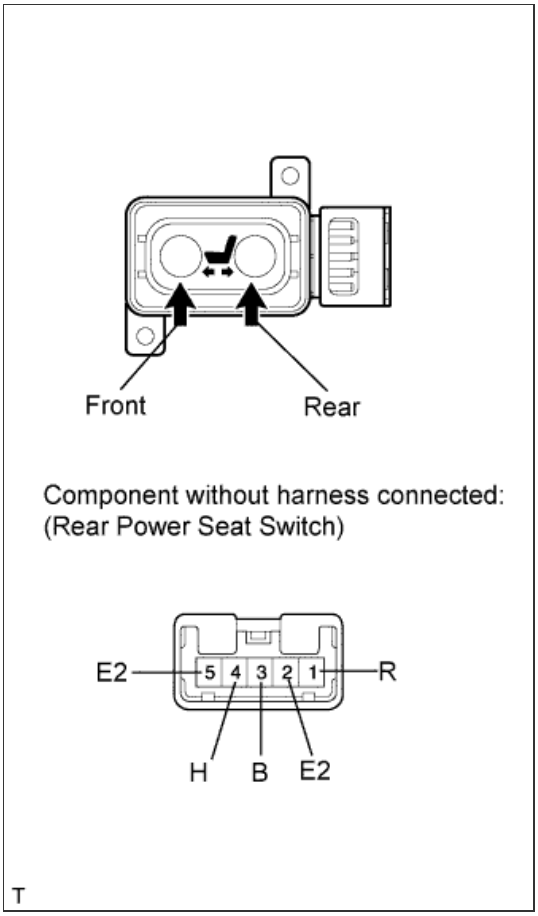
1. INSPECT REAR POWER SEAT SWITCH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
3 (B) - 4 (H)	Front	Below 1 Ω
1 (R) - 2 (E2)		
1 (R) - 2 (E2)	Off	
4 (H) - 5 (E2)		
1 (R) - 3 (B)	Rear	
4 (H) - 5 (E2)		

If the result is not as specified, replace the rear power seat switch.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

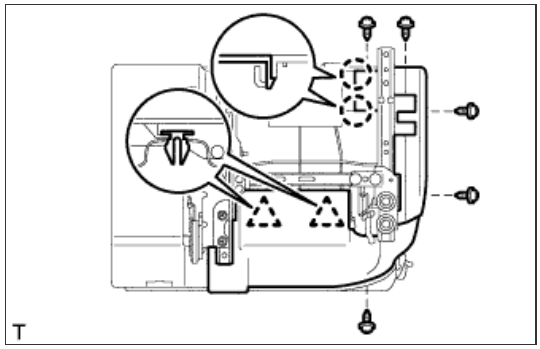
1. INSTALL REAR POWER SEAT SWITCH

a. Install the power seat switch with the 2 screws.

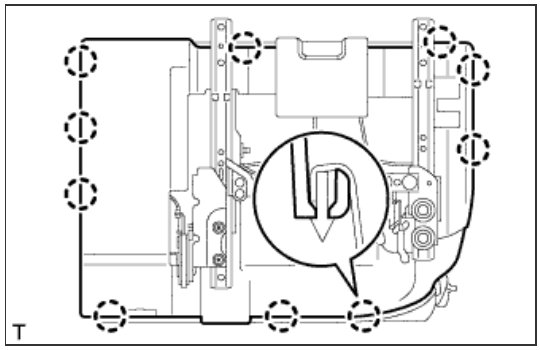
2. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and 2 clips to install the cover.

b. Install the 5 screws.



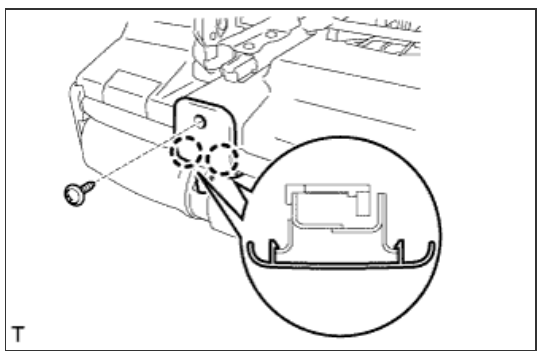
c. Attach the 10 claws.



3. INSTALL REAR SEATBACK STAY COVER LH

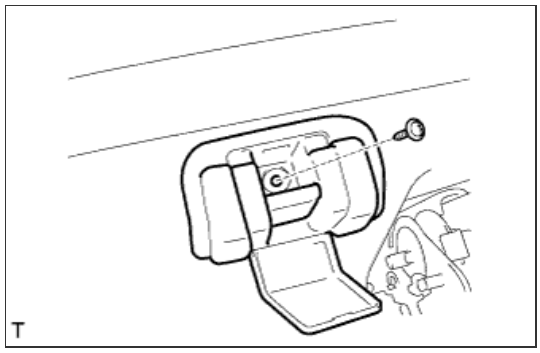
a. Attach the 2 claws to install the cover.

b. Install the screw.

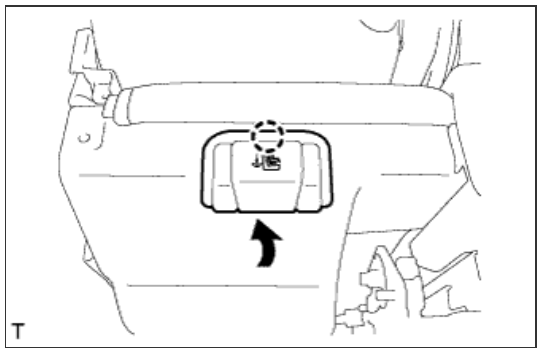


4. INSTALL SEAT BELT ANCHOR COVER CAP

a. Install the anchor cover cap with the screw.



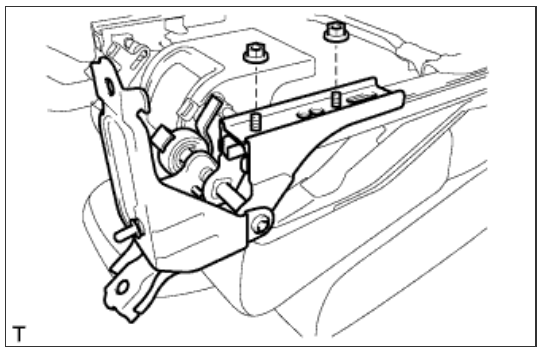
b. Attach the claw to close the cap.



5. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



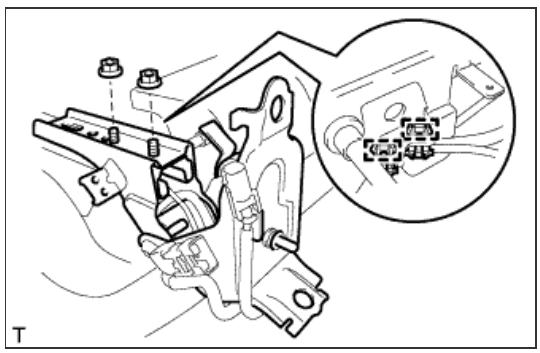
6. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

c. w/ Seat Heater System:
Attach the wire harness clamp.

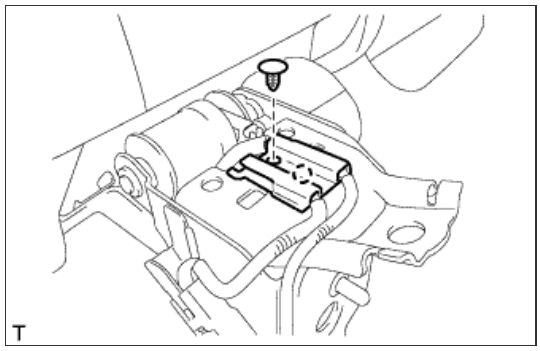


7. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

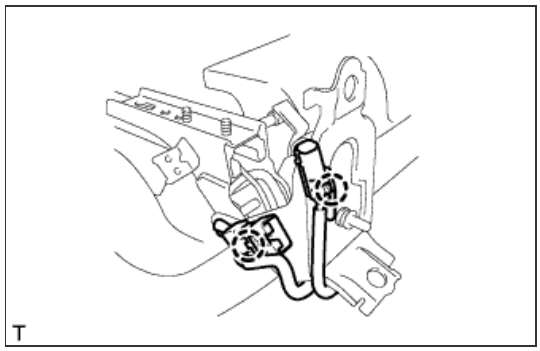
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



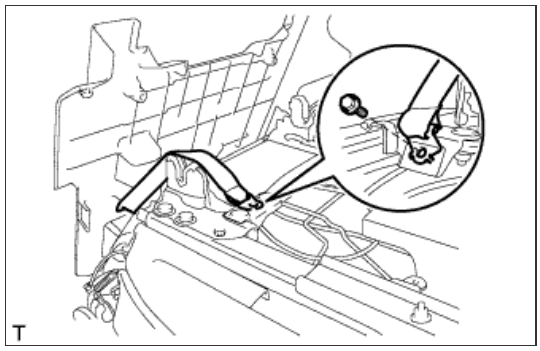
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



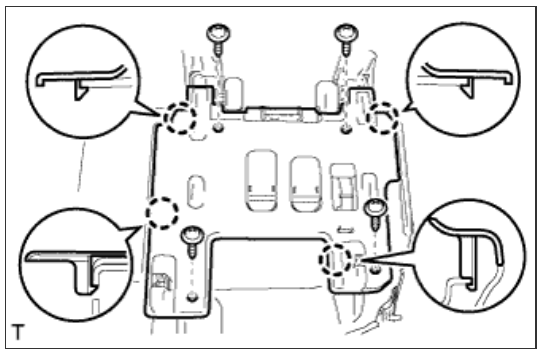
8. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



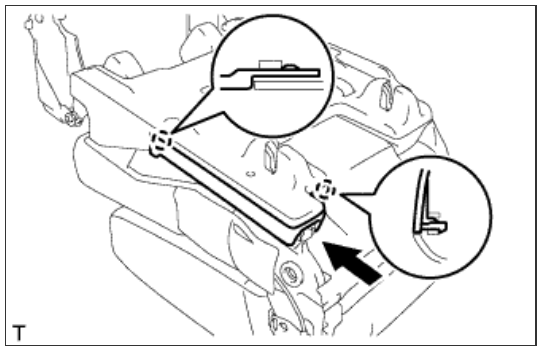
b. Attach the 4 claws to install the seat leg side cover.

c. Install the 4 screws.



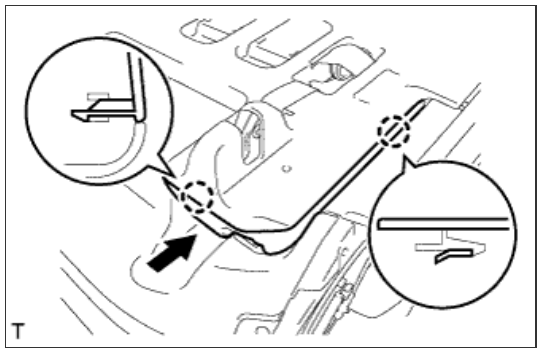
9. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



10. INSTALL UPPER SEAT TRACK RAIL COVER LH

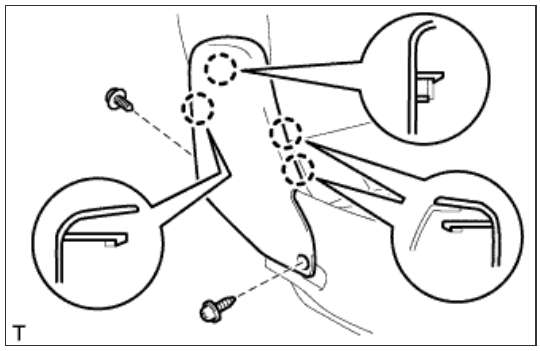
a. Attach the 2 claws to install the cover.



11. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 4 claws to install the cover.

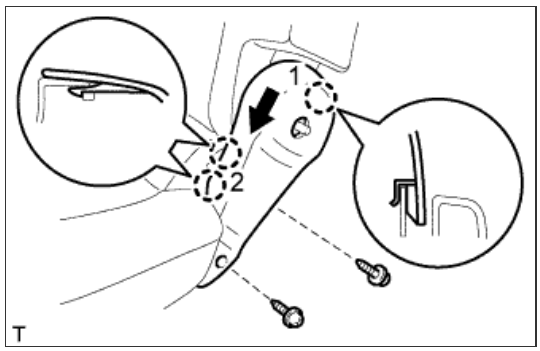
b. Install the 2 screws.



12. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

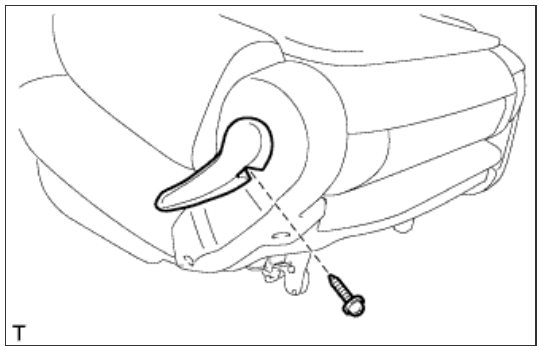
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



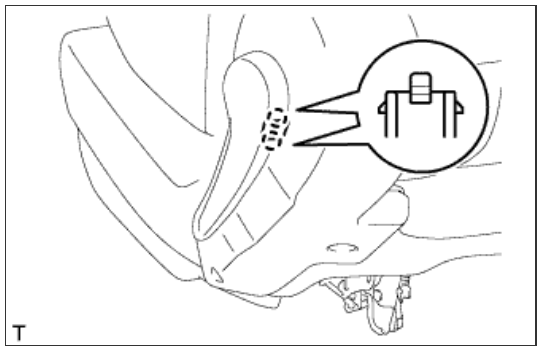
13. INSTALL RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



14. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



15. INSTALL REAR NO. 1 SEAT ASSEMBLY

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

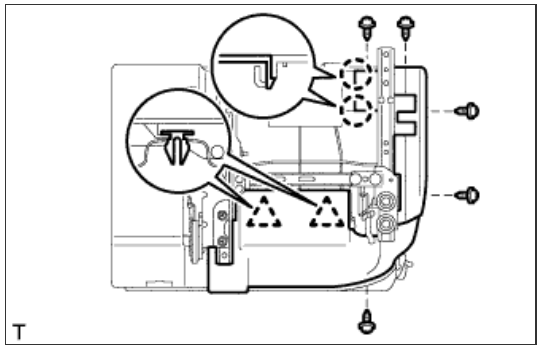
1. INSTALL REAR POWER SEAT SWITCH

a. Install the power seat switch with the 2 screws.

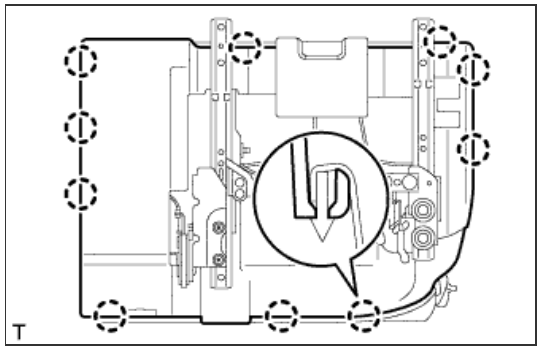
2. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and 2 clips to install the cover.

b. Install the 5 screws.



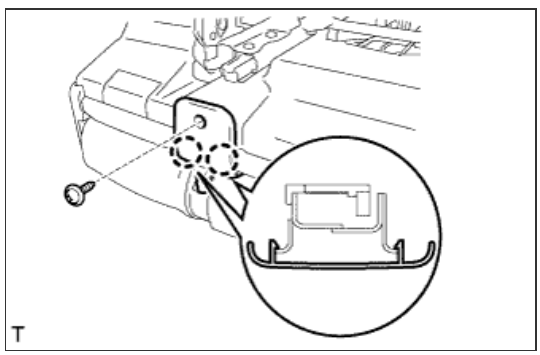
c. Attach the 10 claws.



3. INSTALL REAR SEATBACK STAY COVER LH

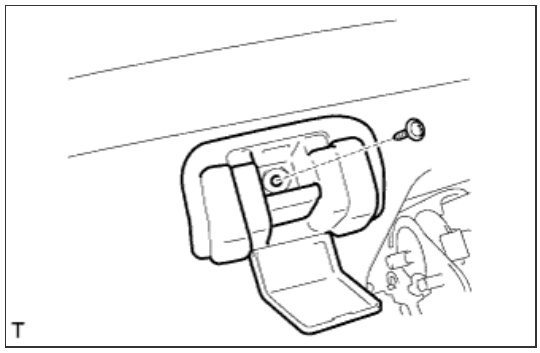
a. Attach the 2 claws to install the cover.

b. Install the screw.

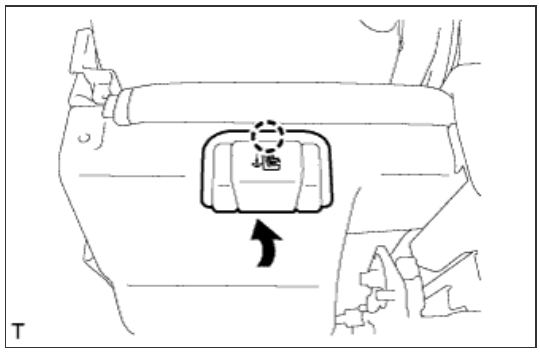


4. INSTALL SEAT BELT ANCHOR COVER CAP

a. Install the anchor cover cap with the screw.



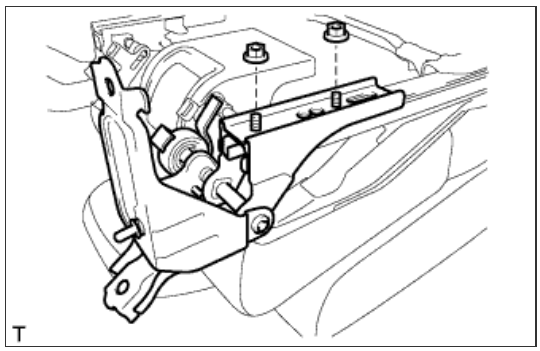
b. Attach the claw to close the cap.



5. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



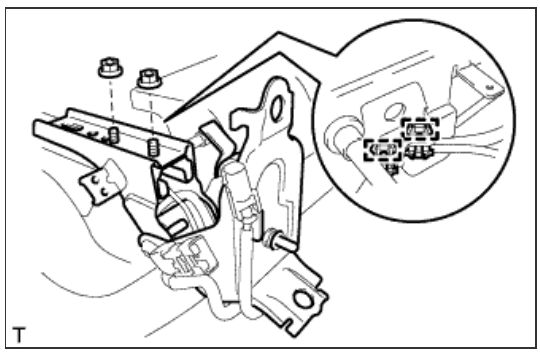
6. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

c. w/ Seat Heater System:
Attach the wire harness clamp.

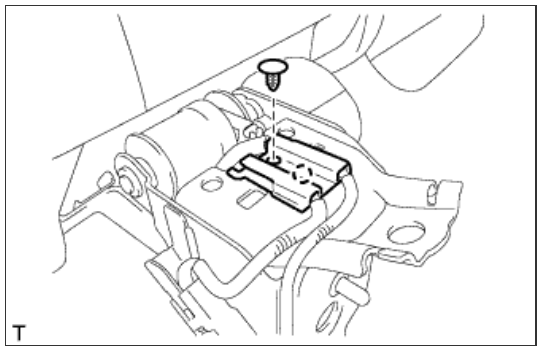


7. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

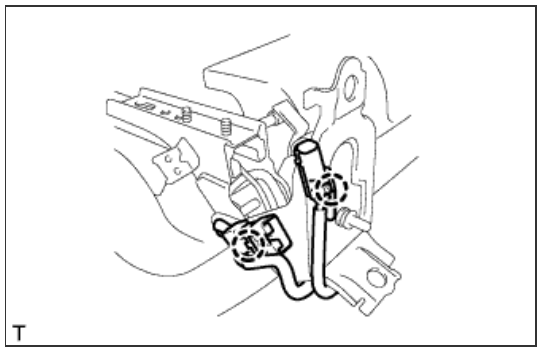
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



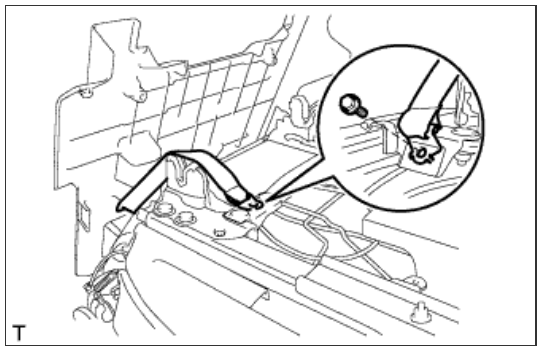
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



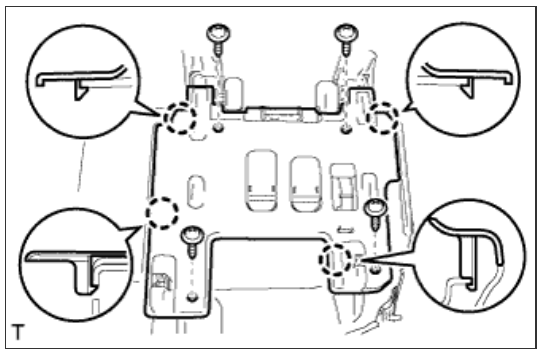
8. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



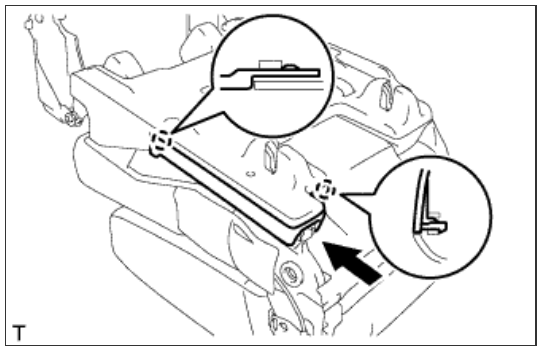
b. Attach the 4 claws to install the seat leg side cover.

c. Install the 4 screws.



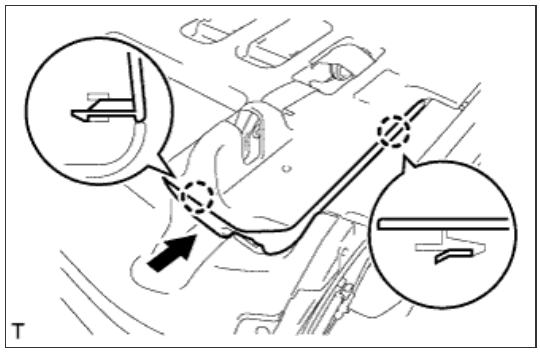
9. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



10. INSTALL UPPER SEAT TRACK RAIL COVER LH

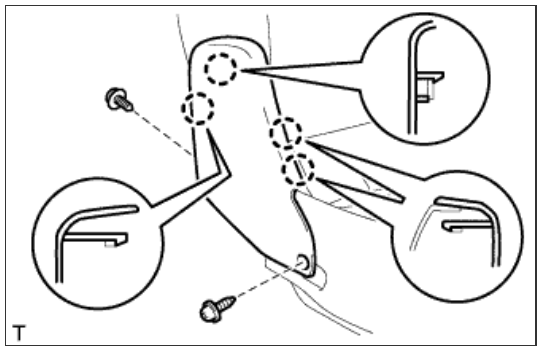
a. Attach the 2 claws to install the cover.



11. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 4 claws to install the cover.

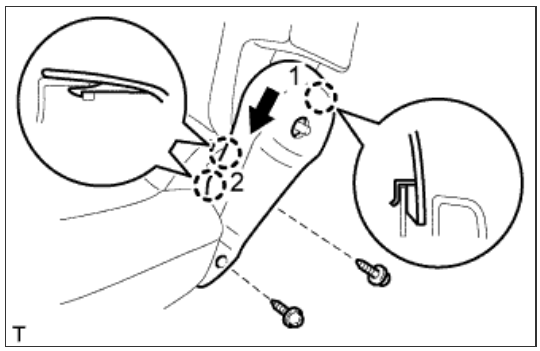
b. Install the 2 screws.



12. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

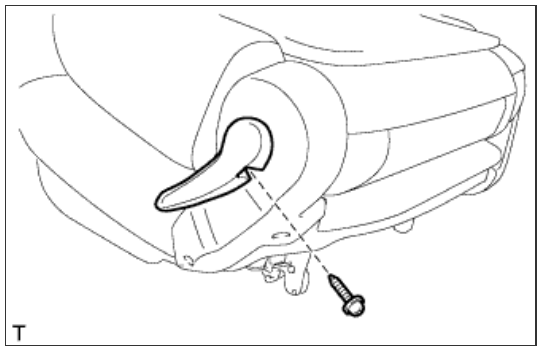
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



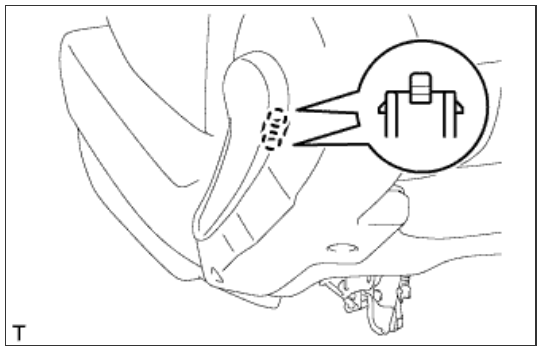
13. INSTALL RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



14. INSTALL SEAT ADJUSTER BOLT COVER

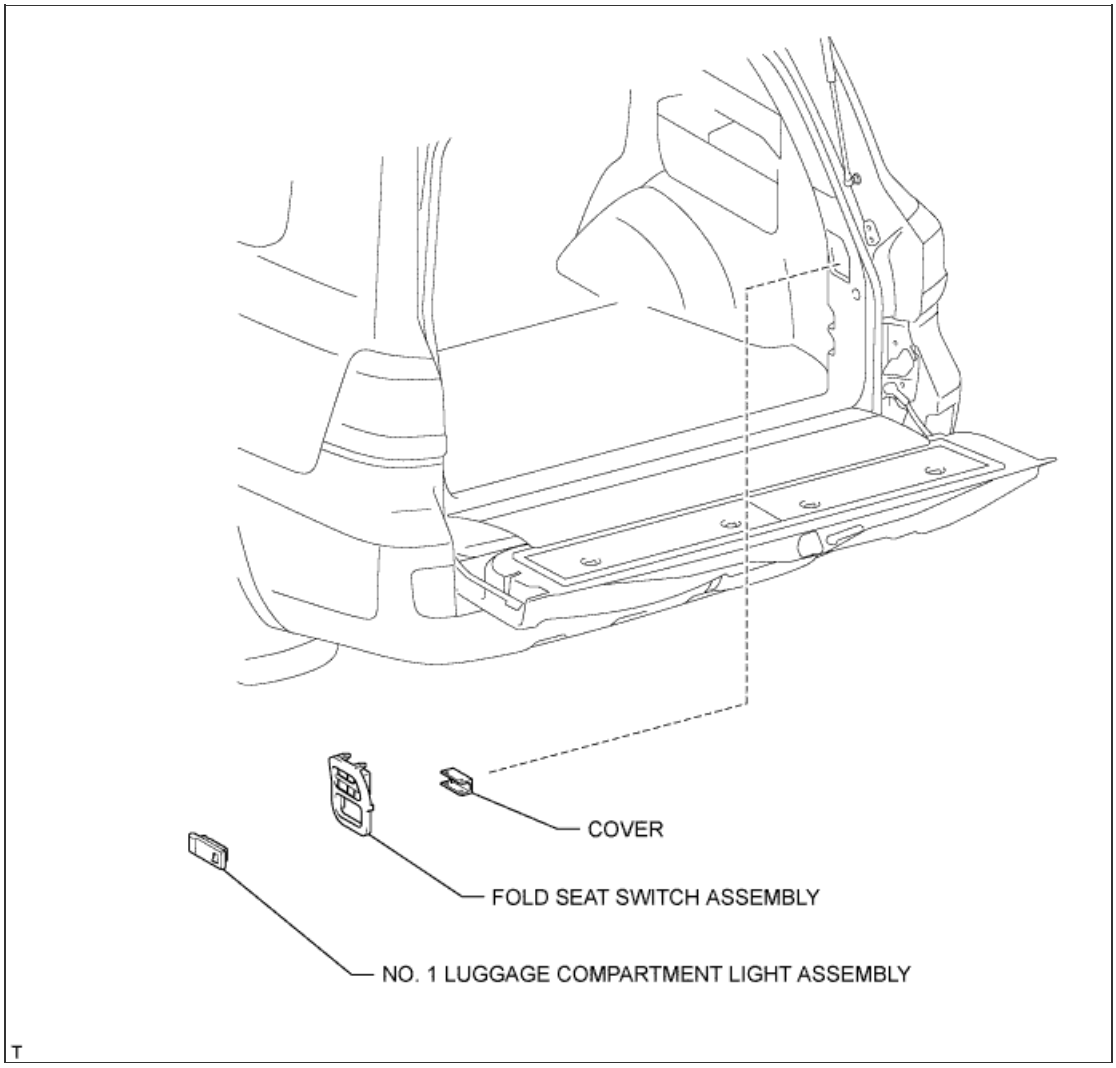
a. Attach the 2 claws to install the cover.



15. INSTALL REAR NO. 1 SEAT ASSEMBLY

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here

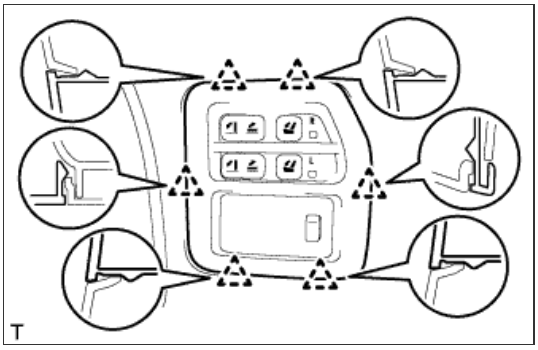


for Preparation Click here

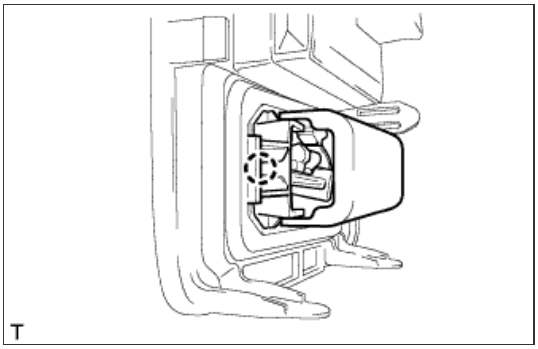
1. REMOVE FOLD SEAT SWITCH ASSEMBLY

a. Detach the 6 clips.

b. Disconnect the connector and then remove the fold seat switch.

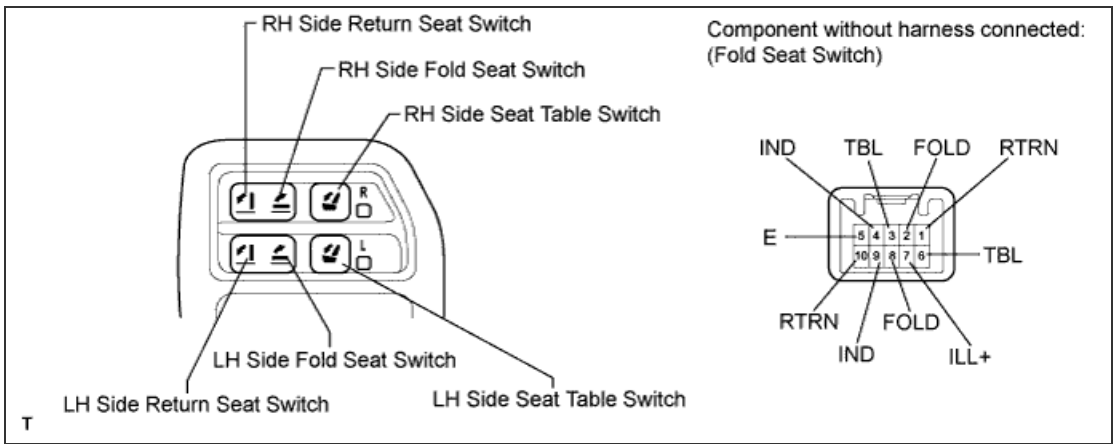


c. Detach the claw and remove the light.



for Preparation Click here

1. INSPECT FOLD SEAT SWITCH ASSEMBLY



a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
3 (TBL) - 5 (E)	LH side seat table switch pressed	Below 1 Ω
8 (FOLD) - 5 (E)	LH side fold seat switch pressed	
10 (RTRN) - 5 (E)	LH side return seat switch pressed	
6 (TBL) - 5 (E)	RH side seat table switch pressed	
2 (FOLD) - 5 (E)	RH side fold seat switch pressed	
1 (RTRN) - 5 (E)	RH side return seat switch pressed	

If the result is not as specified, replace the fold seat switch assembly.

b. Apply battery voltage to the switch connector, and check that the fold seat switch illuminates.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 7 (ILL+) Battery negative (-) → 5 (E)	Switch illuminates
Battery positive (+) → 4 (IND) Battery negative (-) → 5 (E)	L indicator illuminates
Battery positive (+) → 9 (IND) Battery negative (-) → 5 (E)	R indicator illuminates

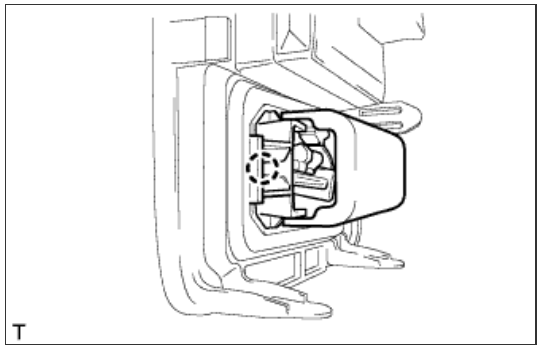
If the result is not as specified, replace the fold seat switch assembly.

for Preparation Click here

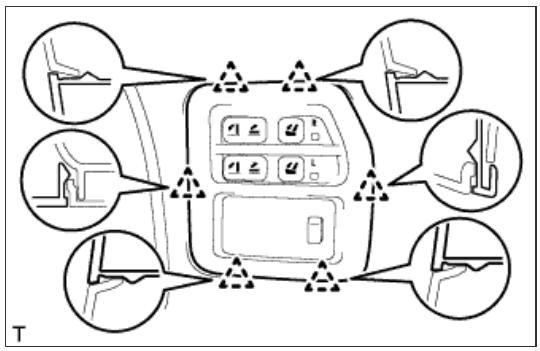
1. INSTALL FOLD SEAT SWITCH ASSEMBLY

a. Attach the claw to install the light.

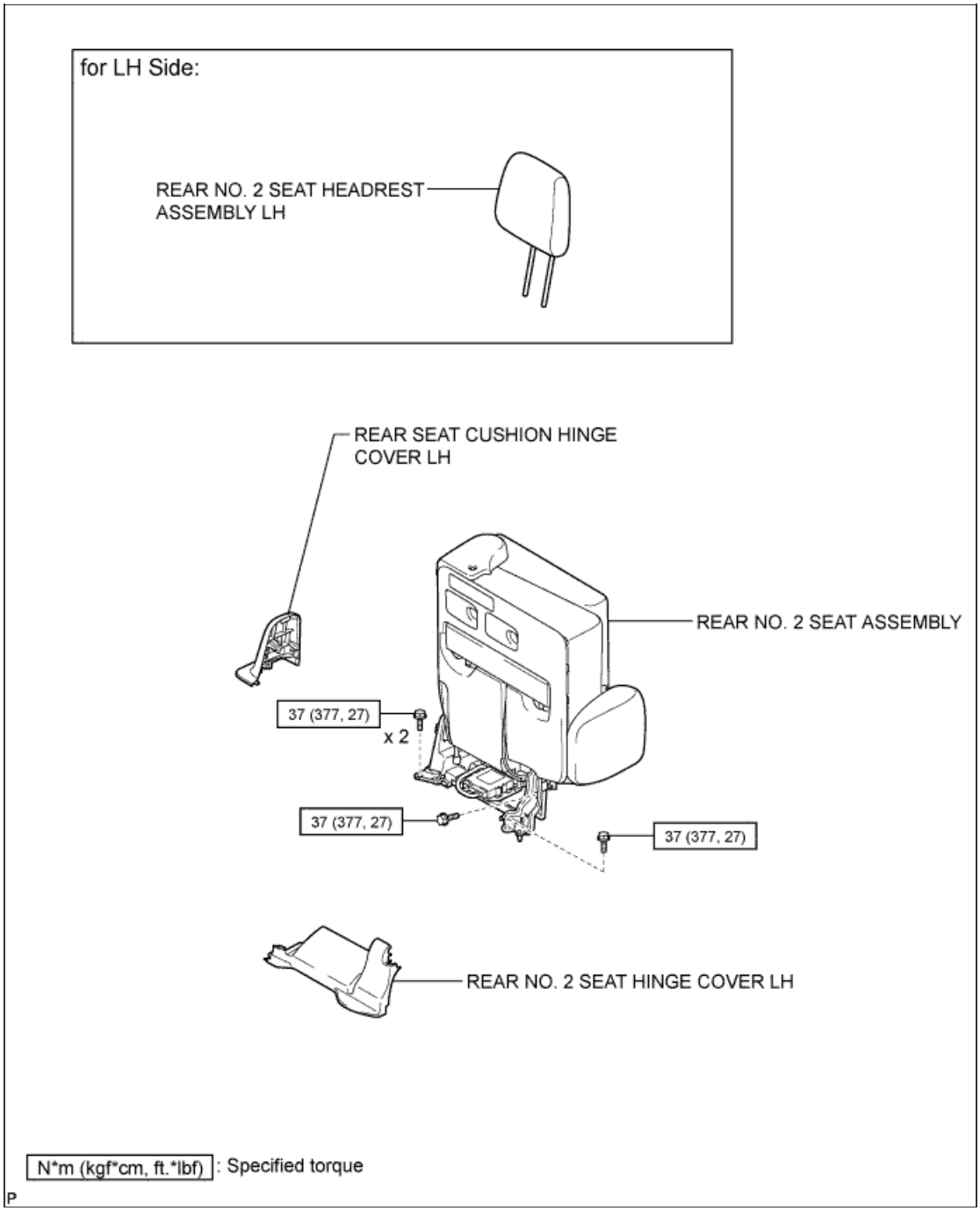
b. Connect the connector.

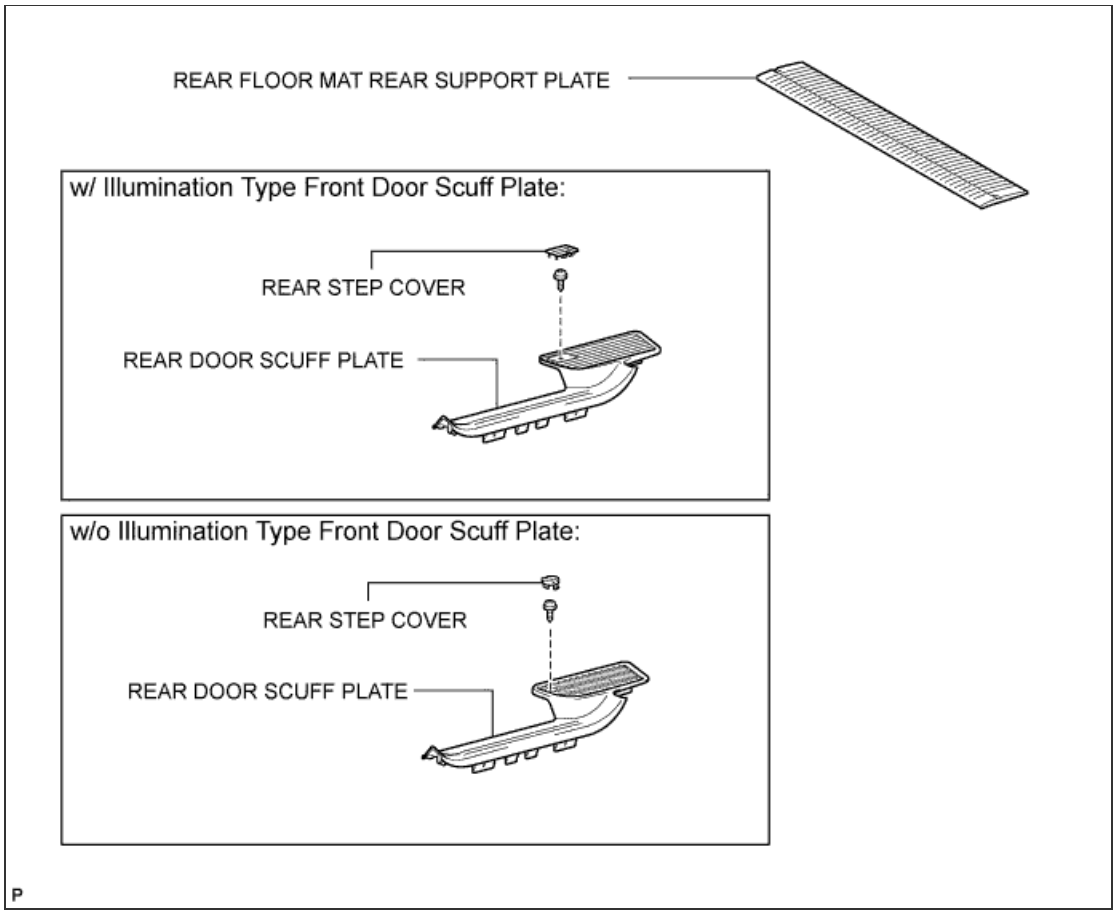


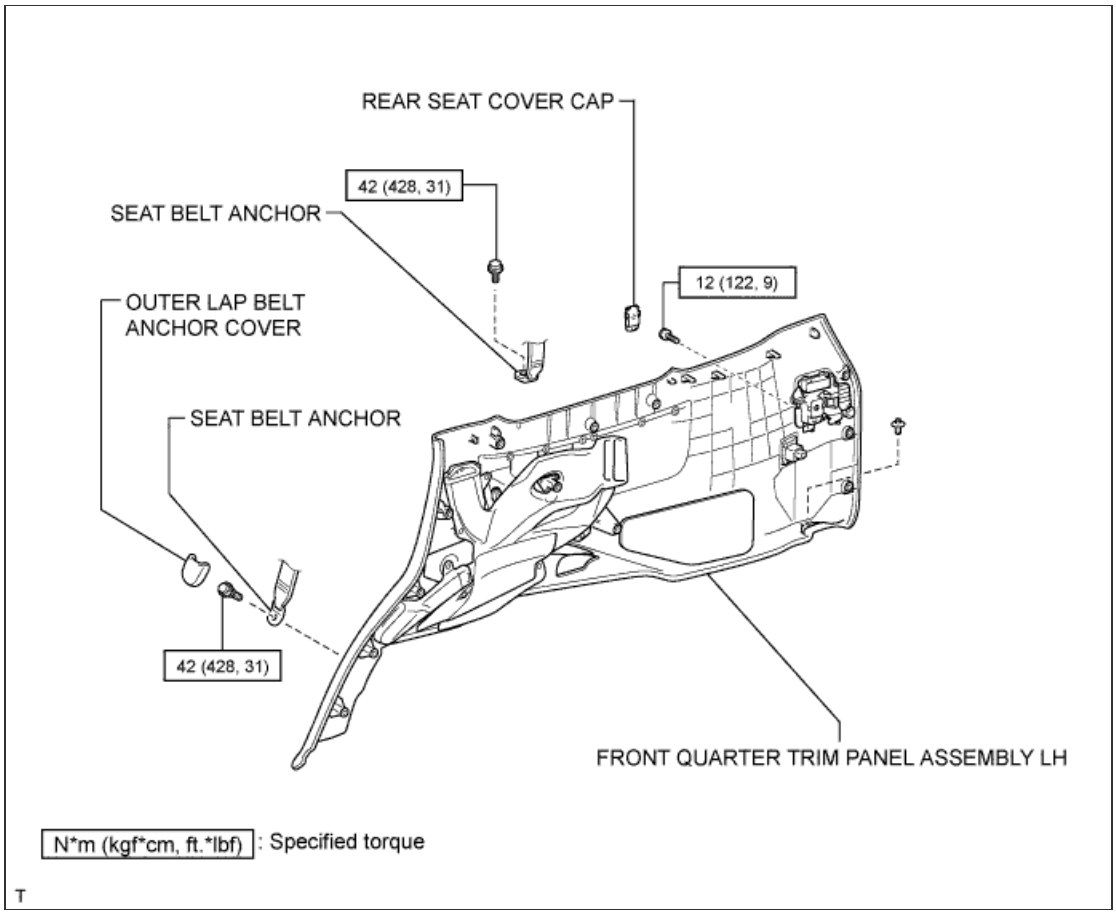
c. Attach the 6 clips to install the fold seat switch.

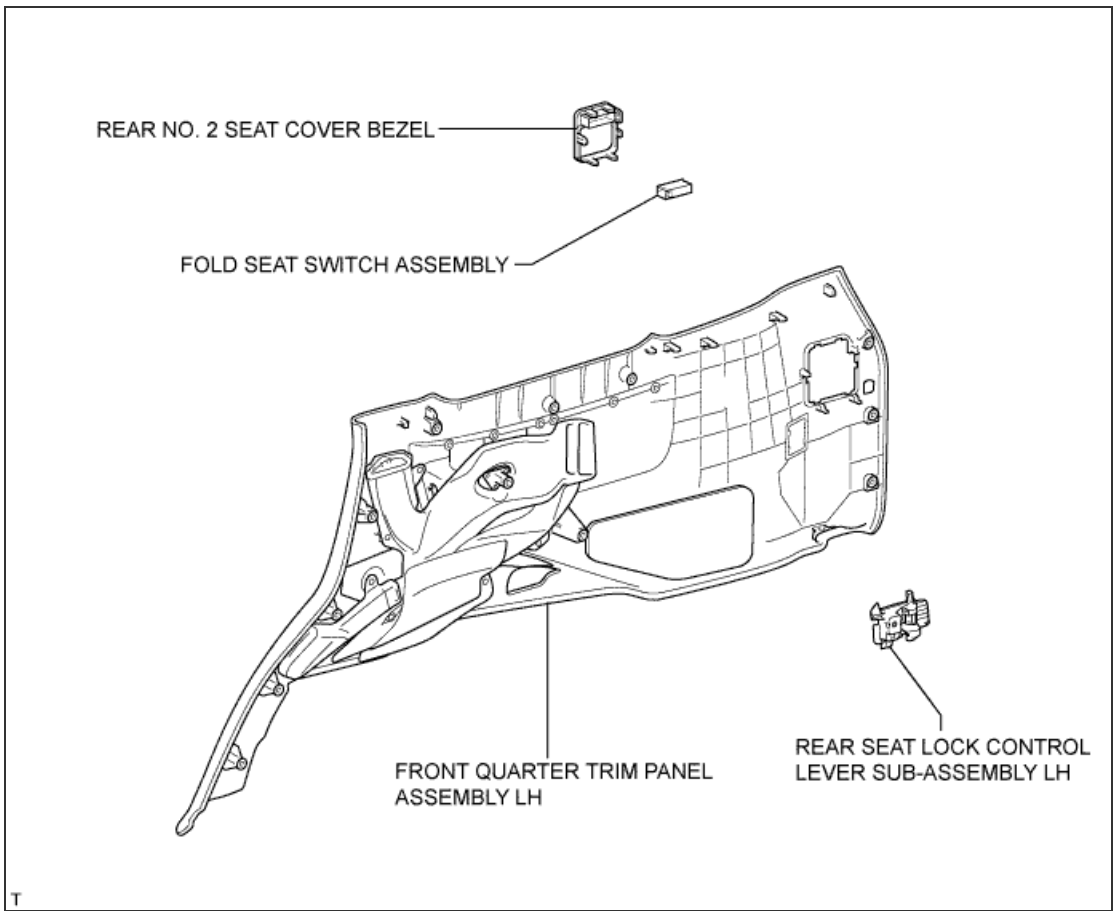


for Preparation Click here




REAR FLOOR MAT REAR SUPPORT PLATE
w/ Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE
w/o Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE
P


REAR SEAT COVER CAP
42 (428, 31)
SEAT BELT ANCHOR
12 (122, 9)
OUTER LAP BELT ANCHOR COVER
SEAT BELT ANCHOR
42 (428, 31)
FRONT QUARTER TRIM PANEL ASSEMBLY LH
N*m (kgf*cm, ft.*lbf) : Specified torque
T


REAR NO. 2 SEAT COVER BEZEL
FOLD SEAT SWITCH ASSEMBLY
FRONT QUARTER TRIM PANEL ASSEMBLY LH
REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH
T

for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. REMOVE REAR NO. 2 SEAT HEADREST ASSEMBLY LH

2. REMOVE REAR SEAT CUSHION HINGE COVER LH

a. Operate the power seat switch and move the seat to the storage position.

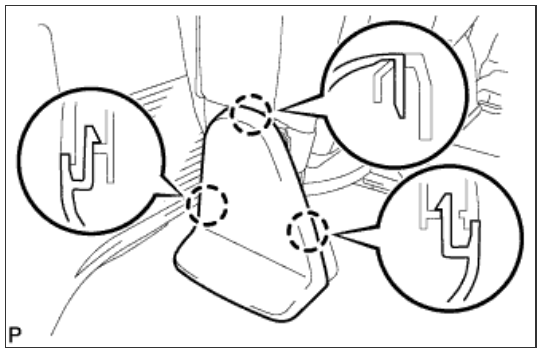
HINT:

In order to remove the seat, do not engage the striker.

b. Using a screwdriver, detach the 3 claws and remove the cover.

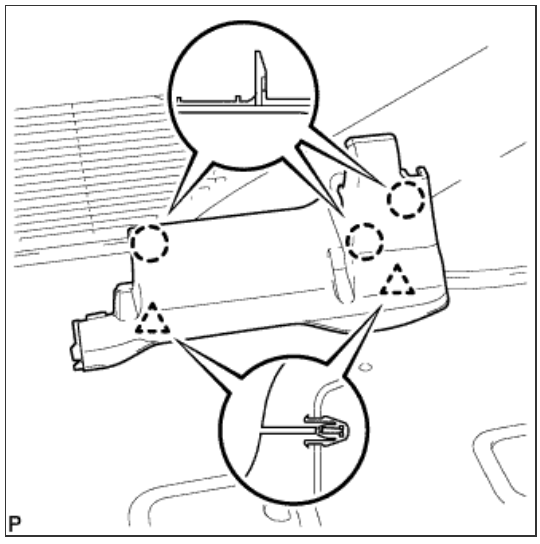
HINT:

Tape the screwdriver tip before use.



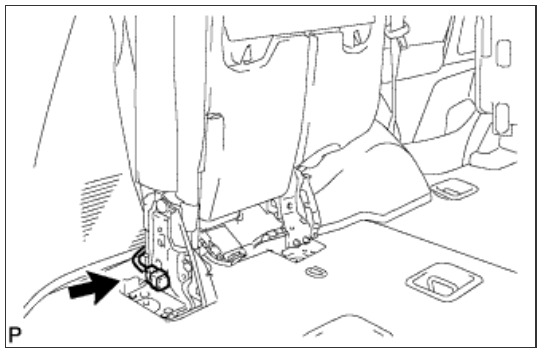
3. REMOVE REAR NO. 2 SEAT HINGE COVER LH

a. Detach the 3 claws and 2 clips, and remove the cover.



4. REMOVE REAR NO. 2 SEAT ASSEMBLY

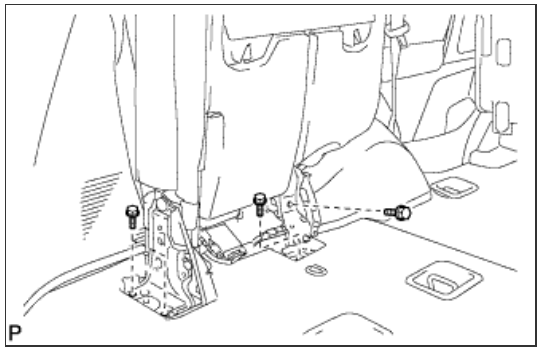
a. Disconnect the connector.



b. Remove the 4 bolts and seat assembly.

NOTICE:

Be careful not to damage the vehicle body.

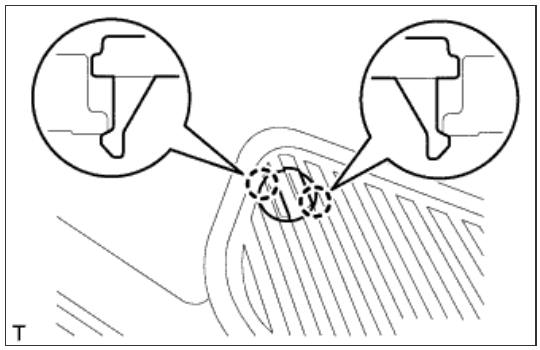


5. REMOVE REAR STEP COVER

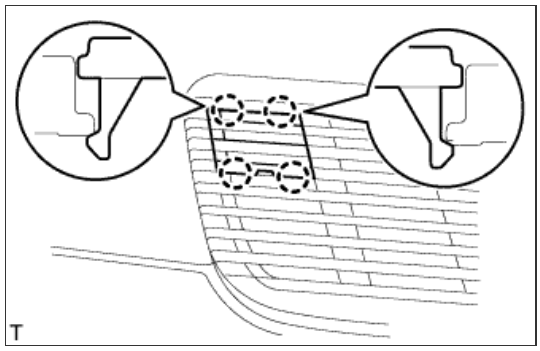
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

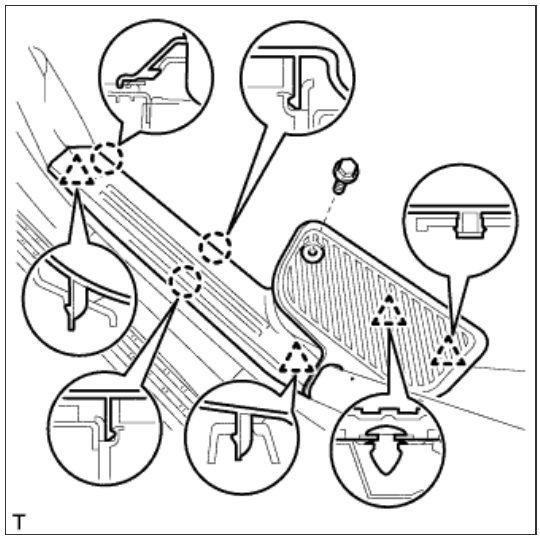


6. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

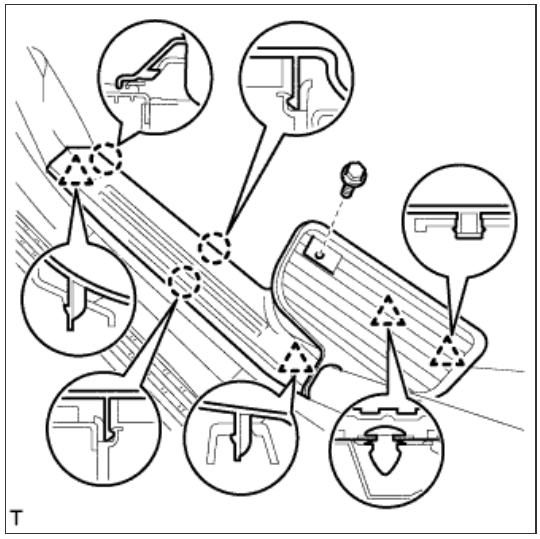
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

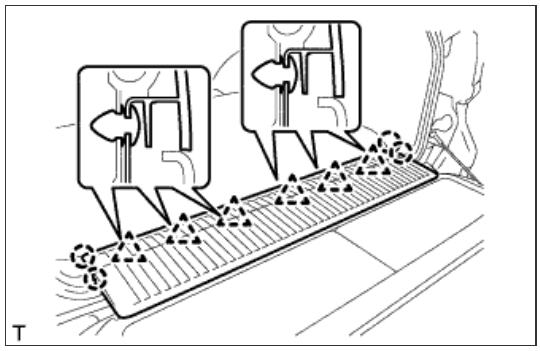
i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



7. REMOVE REAR FLOOR MAT SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.



8. REMOVE REAR SEAT COVER CAP

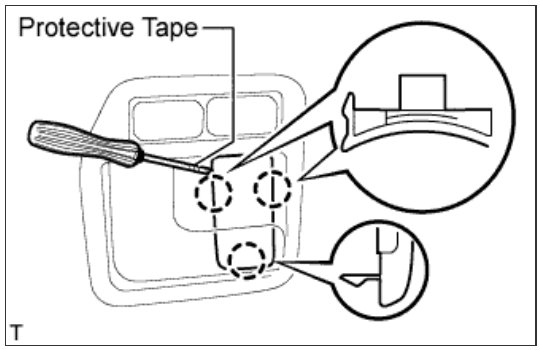
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

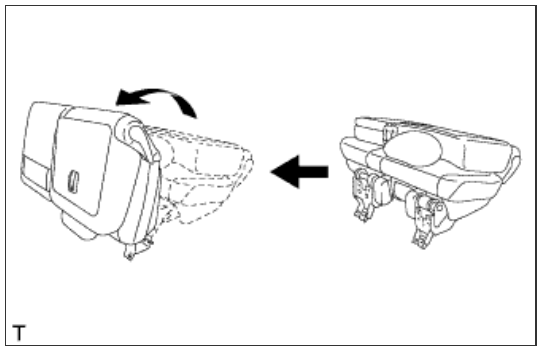
Tape the screwdriver tip before use.



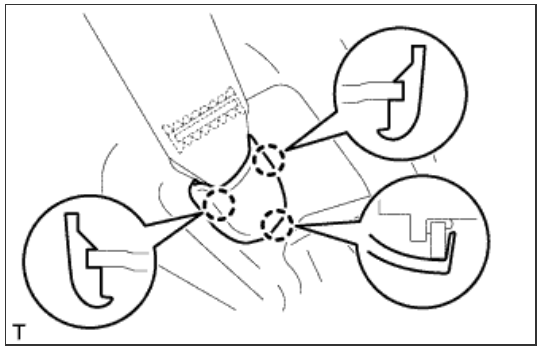
9. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

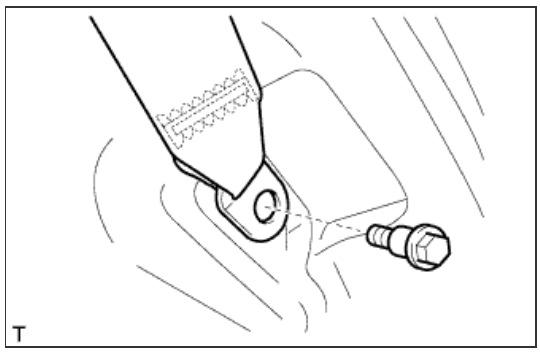
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



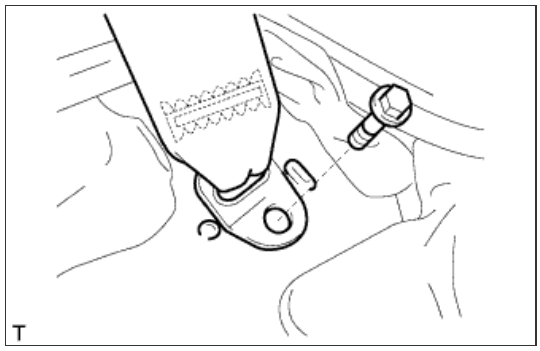
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

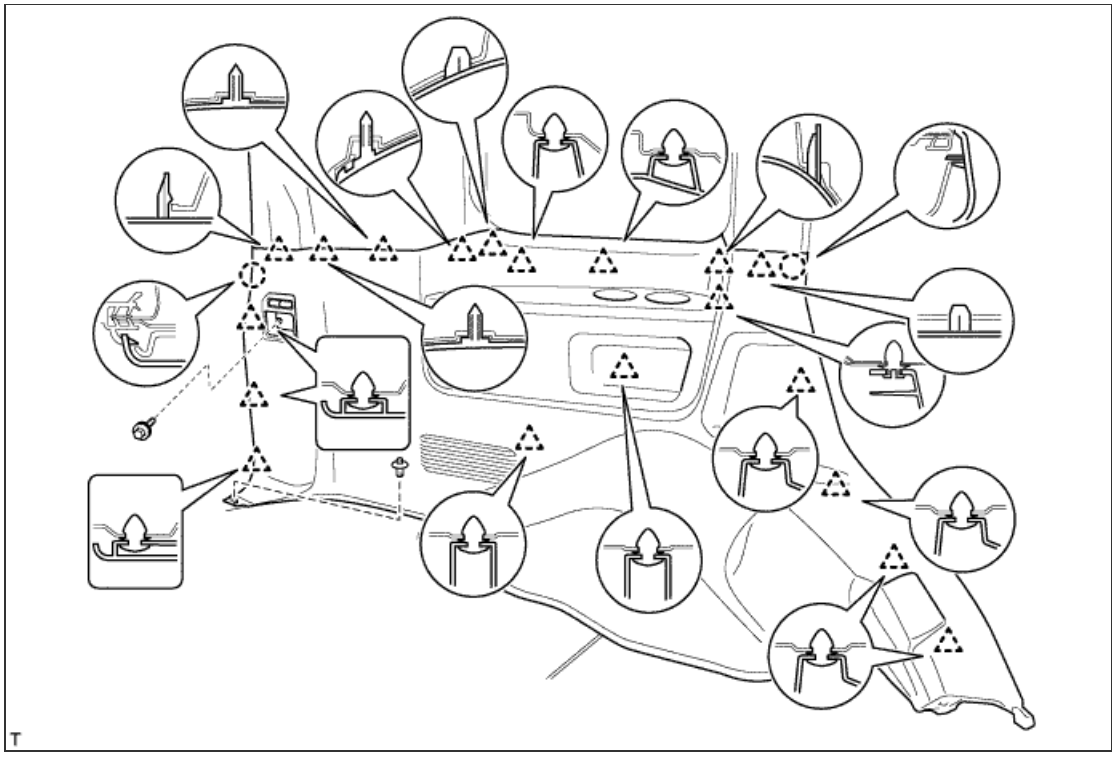


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

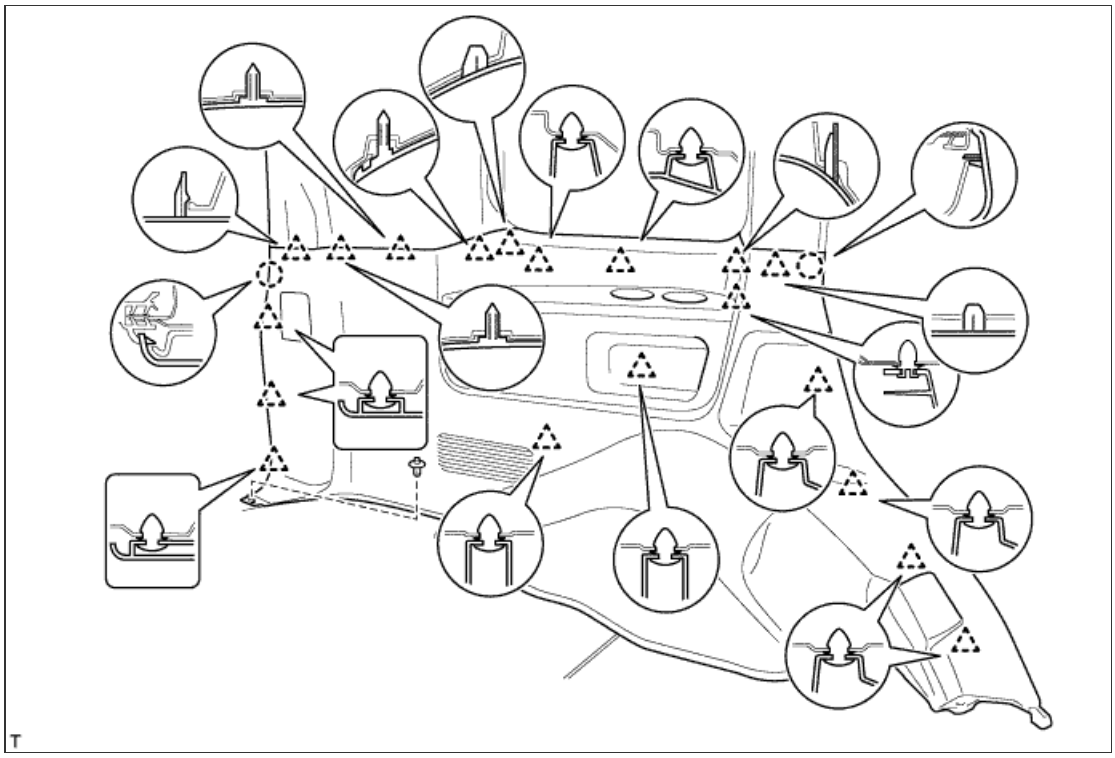


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.

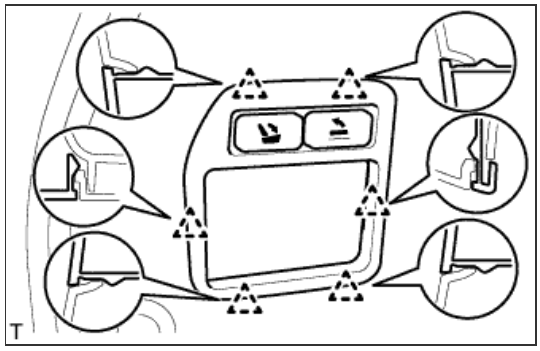


10. REMOVE REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH

a. Detach the 4 claws and remove the seat lock control lever.

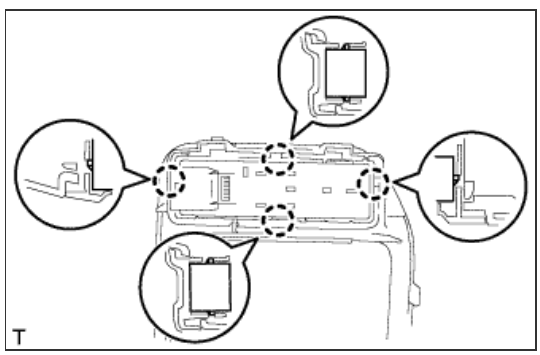
11. REMOVE REAR NO. 2 SEAT COVER BEZEL

a. Detach the 6 clips and remove the rear No. 2 seat cover bezel.



12. REMOVE FOLD SEAT SWITCH ASSEMBLY

a. Using a screwdriver, detach the 4 claws and remove the switch.



for Preparation Click here

1. INSPECT FOLD SEAT SWITCH ASSEMBLY LH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
3 (TBL) - 2 (E)	Seat table switch pressed	Below 1 Ω
1 (FOLD) - 2 (E)	Fold seat switch pressed	

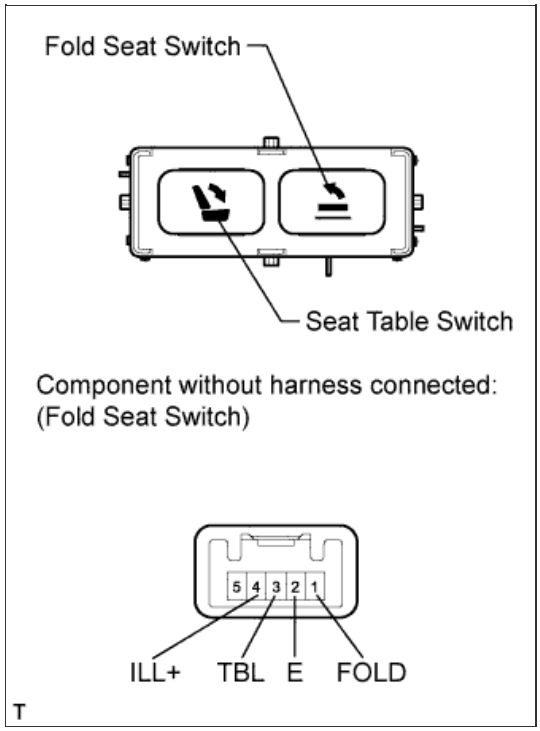
If the result is not as specified, replace the fold seat switch assembly.

b. Apply battery voltage to the switch connector, and check that the fold seat switch illuminates.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 4 (ILL+) Battery negative (-) → 2 (E)	Switch illuminates

If the result is not as specified, replace the fold seat switch assembly.



2. INSPECT FOLD SEAT SWITCH ASSEMBLY RH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
3 (TBL) - 2 (E)	Seat table switch pressed	Below 1 Ω
1 (FOLD) - 2 (E)	Fold seat switch pressed	

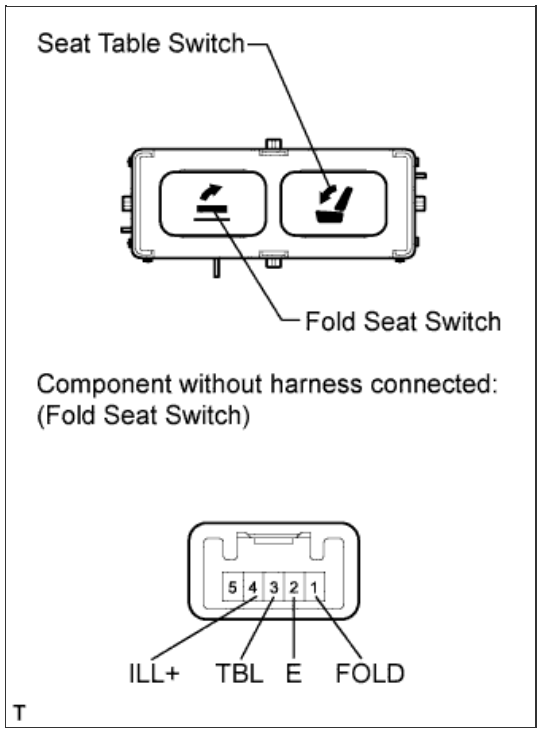
If the result is not as specified, replace the fold seat switch assembly.

b. Apply battery voltage to the switch connector, and check that the fold seat switch illuminates.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 4 (ILL+) Battery negative (-) → 2 (E)	Switch illuminates

If the result is not as specified, replace the fold seat switch assembly.



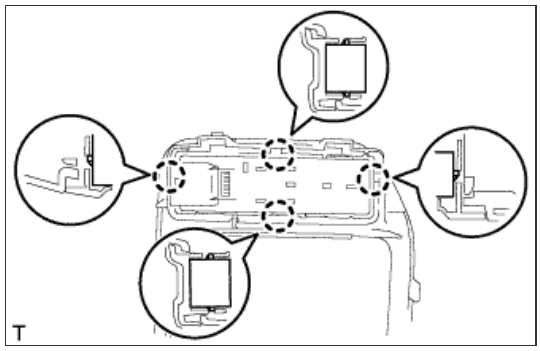
for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

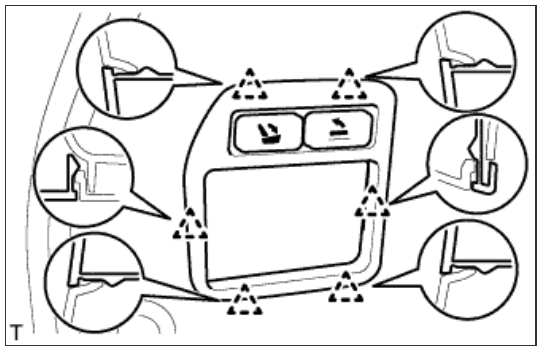
1. INSTALL FOLD SEAT SWITCH ASSEMBLY

a. Attach the 4 claws to install the switch.



2. INSTALL REAR NO. 2 SEAT COVER BEZEL

a. Attach the 6 clips to install the No. 2 seat cover bezel.



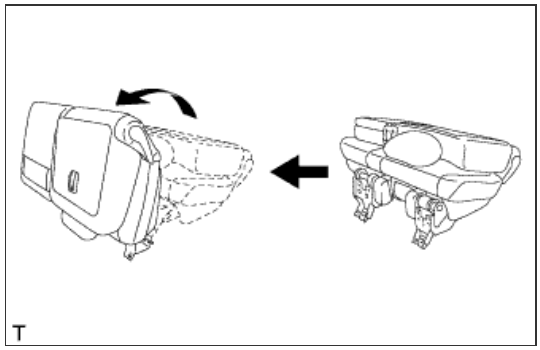
3. INSTALL REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH

a. Attach the 4 claws to install the seat lock control lever.

4. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



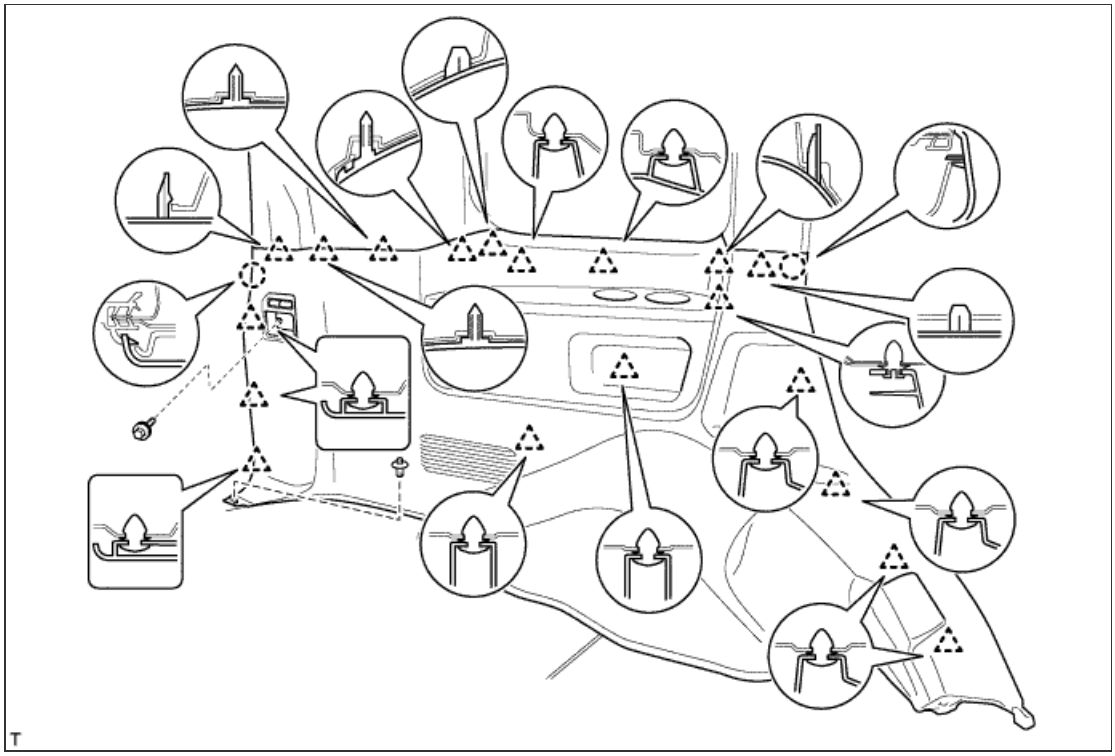
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

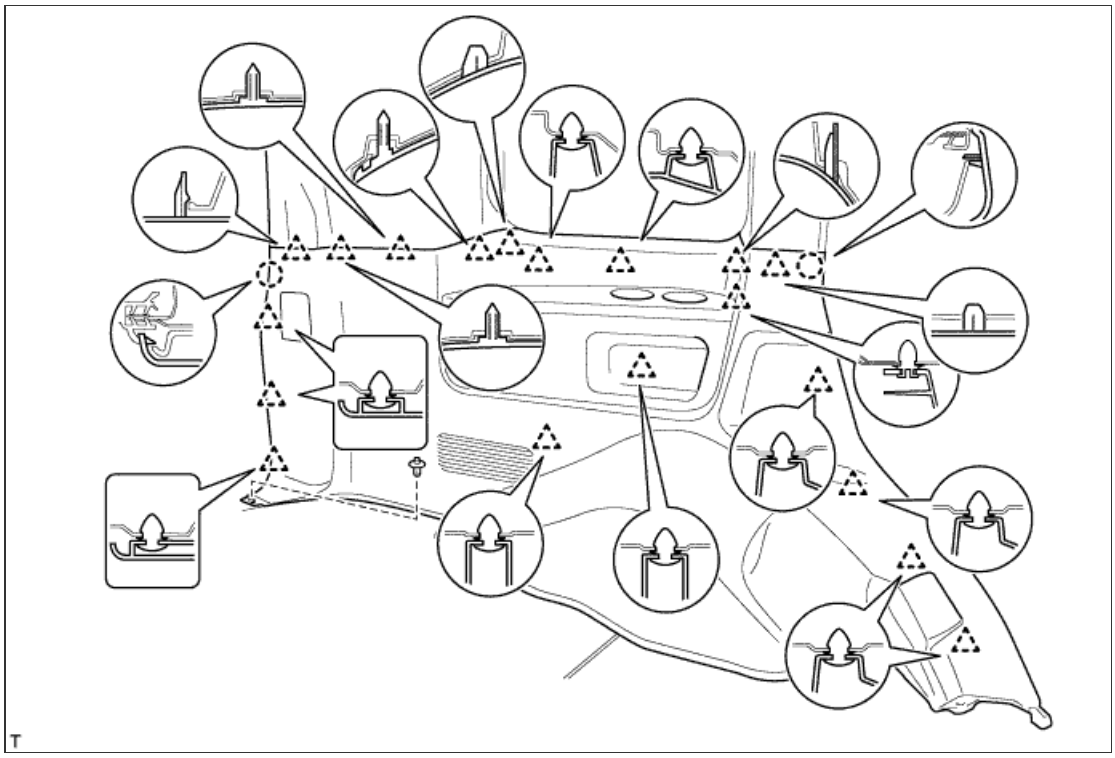


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

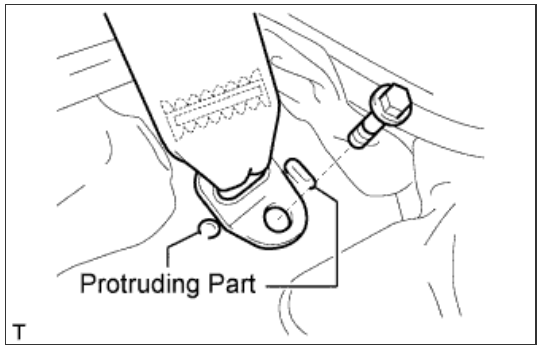


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

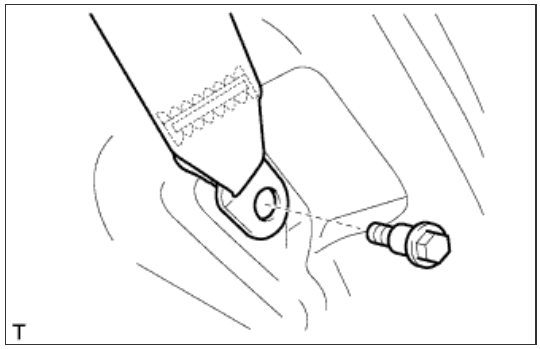
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

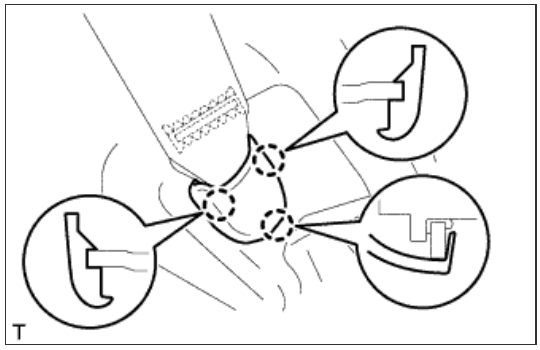


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



e. Attach the 3 claws to install the cover.

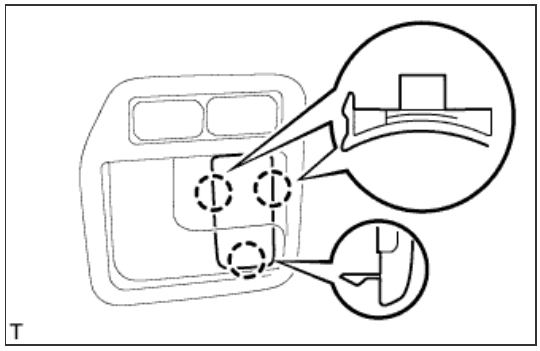


5. INSTALL REAR SEAT COVER CAP

HINT:

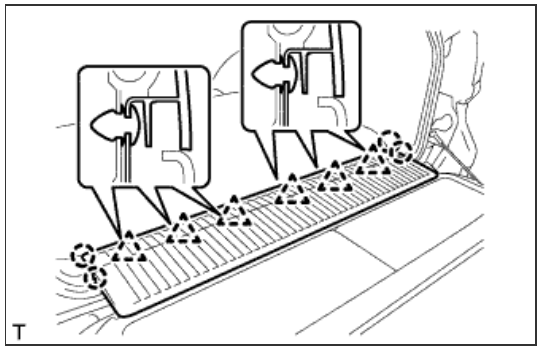
Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.



6. INSTALL REAR FLOOR MAT SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.

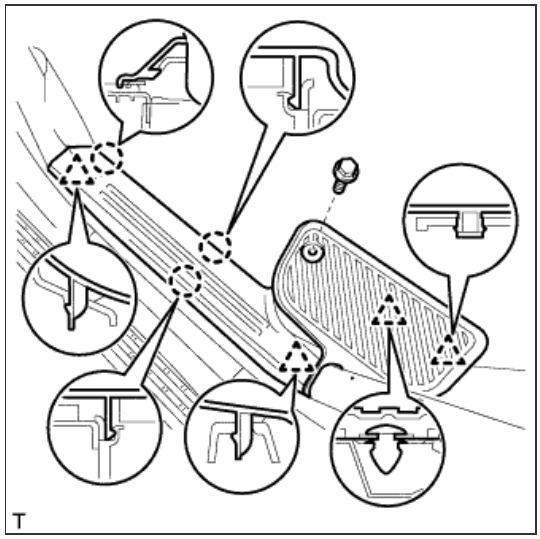


7. INSTALL REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

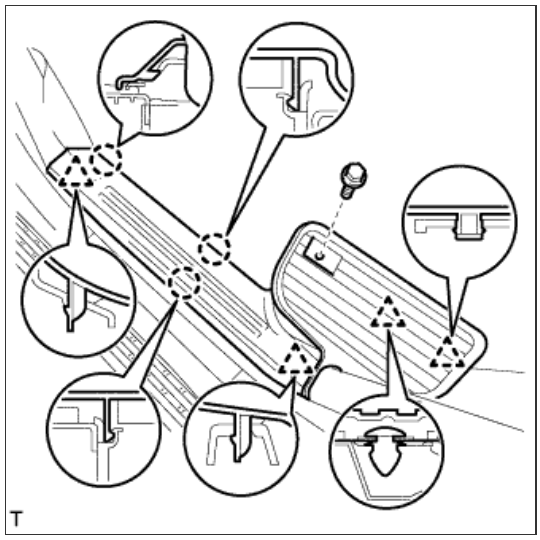
ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.

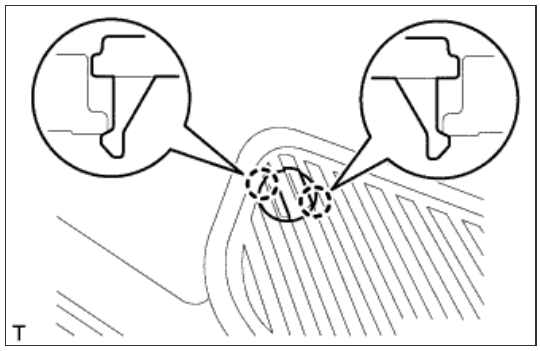


8. INSTALL REAR STEP COVER

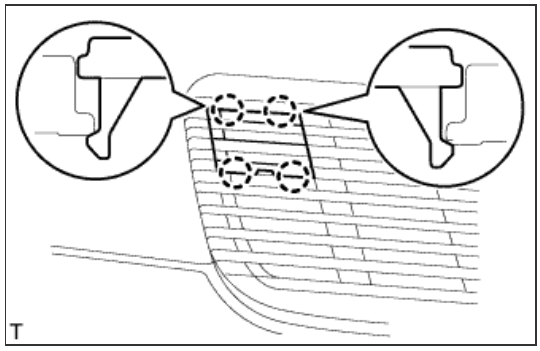
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



9. INSTALL REAR NO. 2 SEAT ASSEMBLY

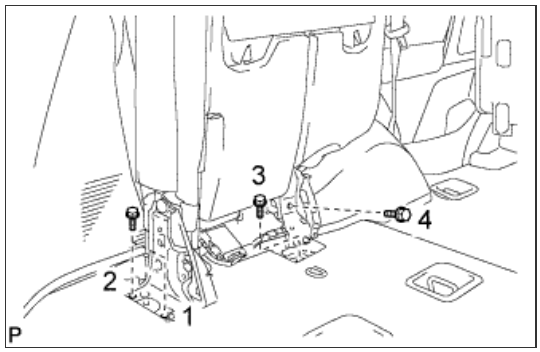
a. Temporarily install the seat assembly with the 4 bolts.

NOTICE:

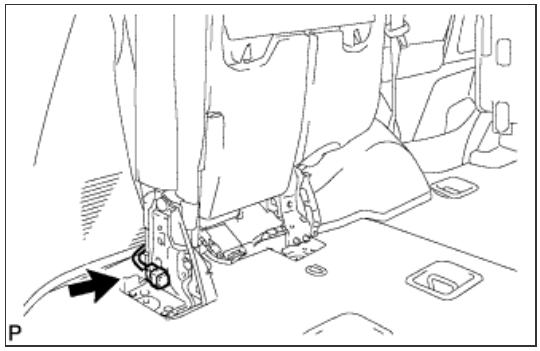
Be careful not to damage the vehicle body.

b. Tighten the bolts in the order shown in the illustration.

Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }

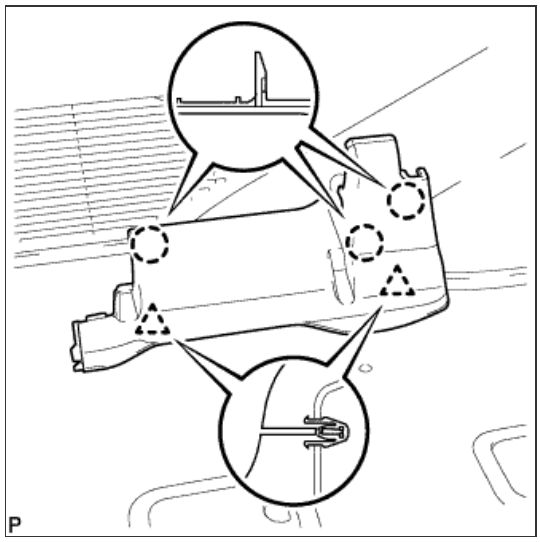


c. Connect the connector.



10. INSTALL REAR NO. 2 SEAT HINGE COVER LH

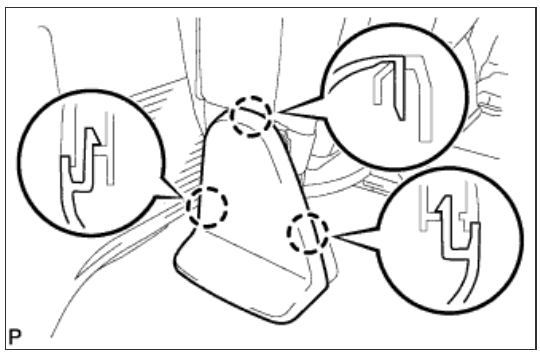
a. Attach the 3 claws and 2 clips to install the cover.



11. INSTALL REAR SEAT CUSHION HINGE COVER LH

a. Attach the 3 claws to install the cover.

b. Return the seat to the upright position.



12. INSTALL REAR NO. 2 SEAT HEADREST ASSEMBLY LH

for Preparation Click here

1. INSPECT POWER SEAT MOTOR ASSEMBLY

a. Check the PTC operation inside the power seat motor.

HINT:

The resistance of the PTC thermistor increases when the power seat switch is held down even after the power seat has been moved to the maximum in one direction. If the resistance increases beyond a specified level, current is cut to prevent a short circuit.

NOTICE:

- **The inspection should be performed with the seat installed in the vehicle.**
- **Perform the 4 steps below for each power seat function.**

i. Choose a power seat function. Operate the power seat switch and move the seat as much as possible in one direction. Keep the seat in that position for approximately 60 seconds.

ii. Operate the power seat switch again and continue to try to move the seat in the same direction as in the previous step. Measure the amount of time elapsed before current is automatically cut (the sound of the motor has stopped).

Standard:
4 to 90 seconds

iii. After current has been cut, release the power seat switch and wait for approximately 60 seconds.

iv. Operate the same power seat switch and move the seat in the opposite direction. Check that the motor operates.

for Preparation Click here

1. INSPECT POWER SEAT MOTOR ASSEMBLY

a. Check the PTC operation inside the power seat motor.

HINT:

The resistance of the PTC thermistor increases when the power seat switch is held down even after the power seat has been moved to the maximum in one direction. If the resistance increases beyond a specified level, current is cut to prevent a short circuit.

NOTICE:

- **The inspection should be performed with the seat installed in the vehicle.**
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i. Choose a power seat function. Operate the power seat switch and move the seat as much as possible in one direction. Keep the seat in that position for approximately 60 seconds.

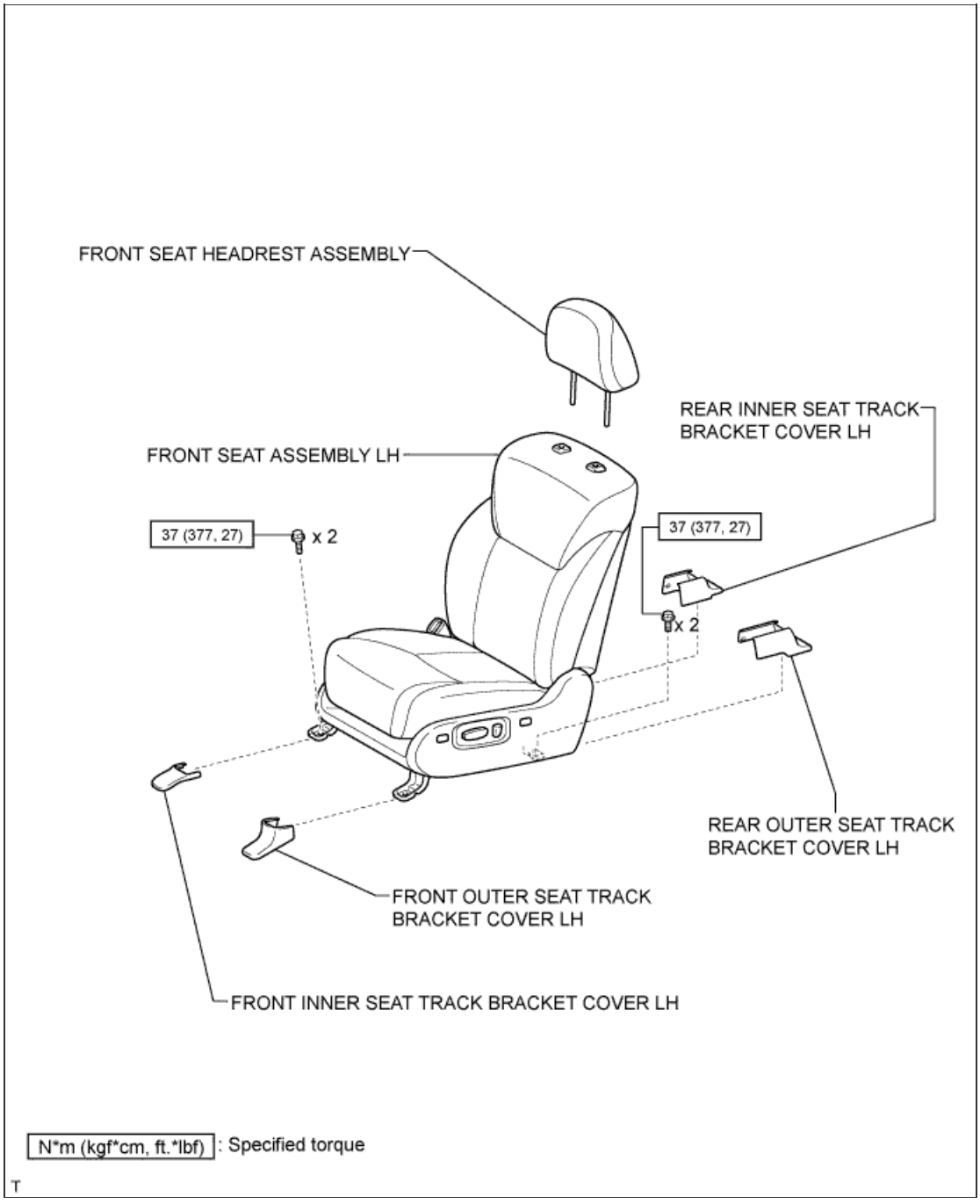
ii. Operate the power seat switch again and continue to try to move the seat in the same direction as in the previous step. Measure the amount of time elapsed before current is automatically cut (the sound of the motor has stopped).

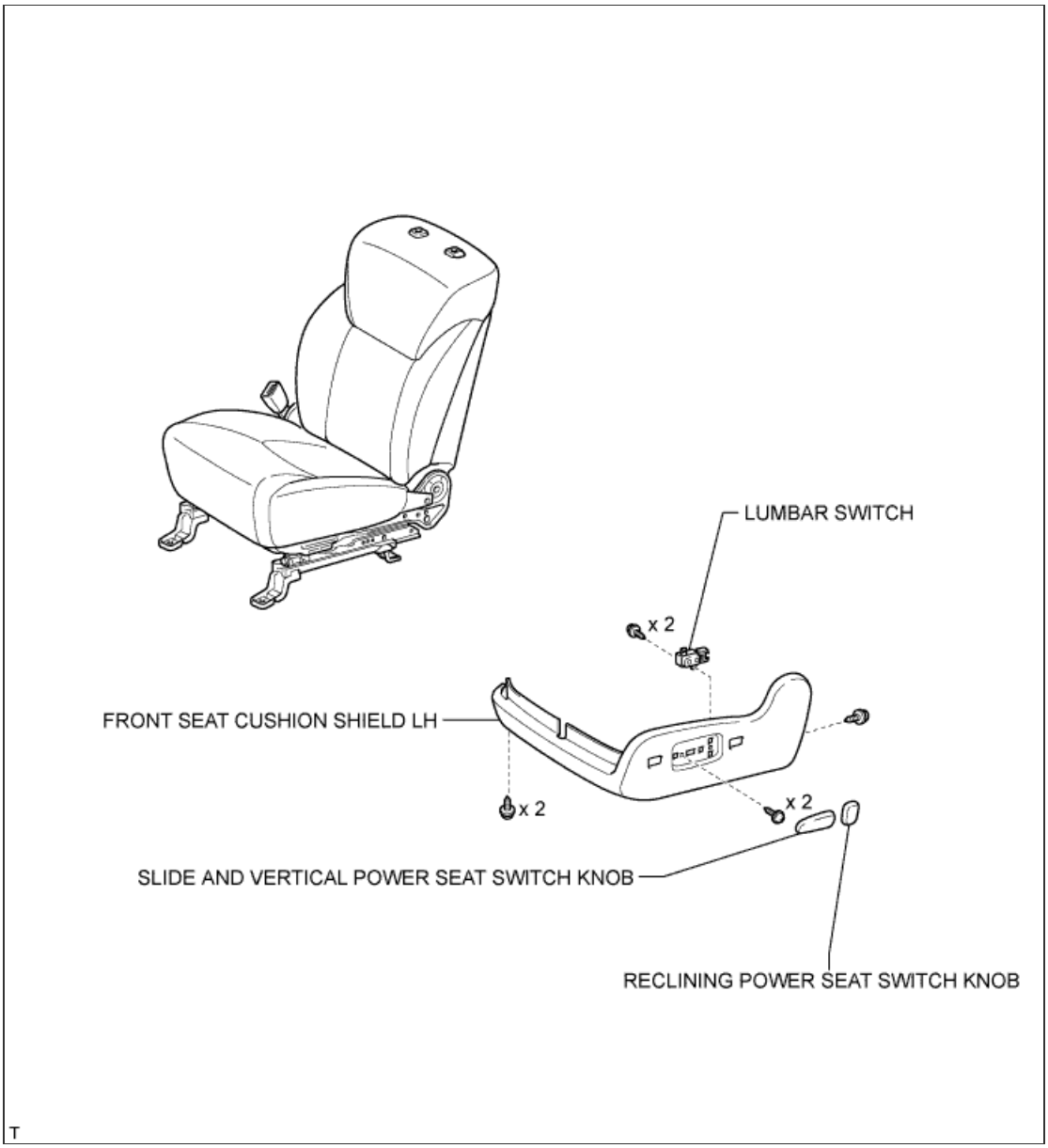
Standard:
4 to 90 seconds

iii. After current has been cut, release the power seat switch and wait for approximately 60 seconds.

iv. Operate the same power seat switch and move the seat in the opposite direction. Check that the motor operates.

for Preparation Click here




LUMBAR SWITCH
x 2
FRONT SEAT CUSHION SHIELD LH
x 2
x 2
SLIDE AND VERTICAL POWER SEAT SWITCH KNOB
RECLINING POWER SEAT SWITCH KNOB

T

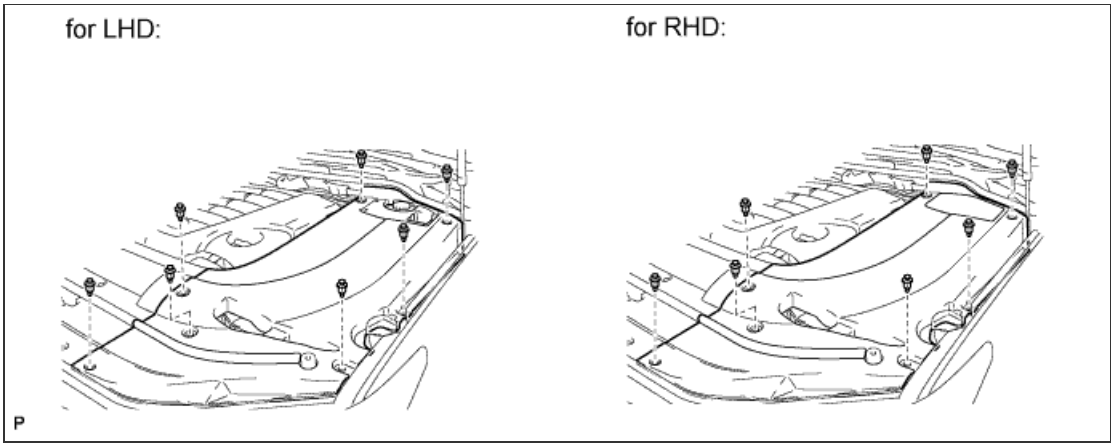
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly (Click here).

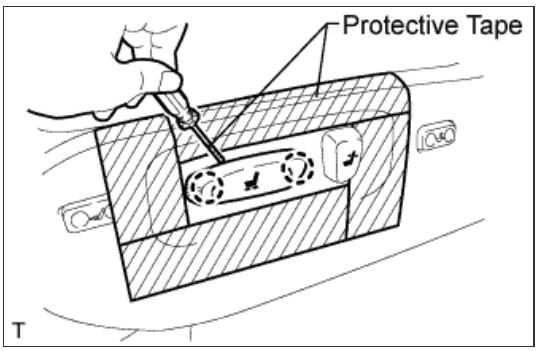
3. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

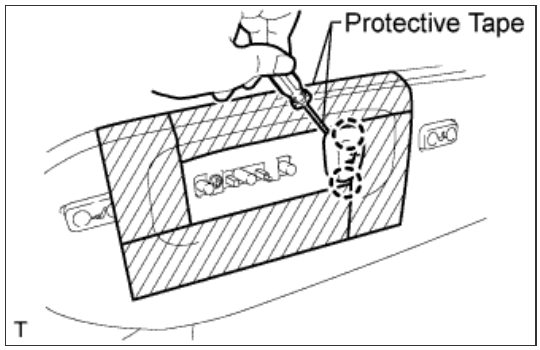


4. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

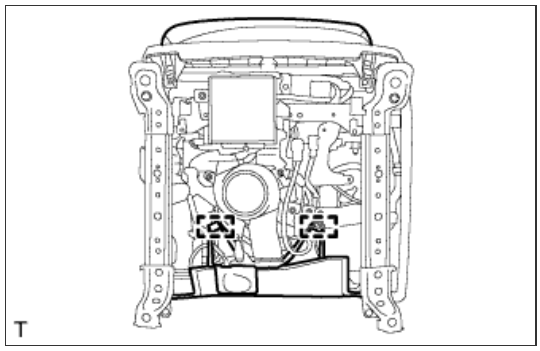
HINT:

Tape the screwdriver tip before use.

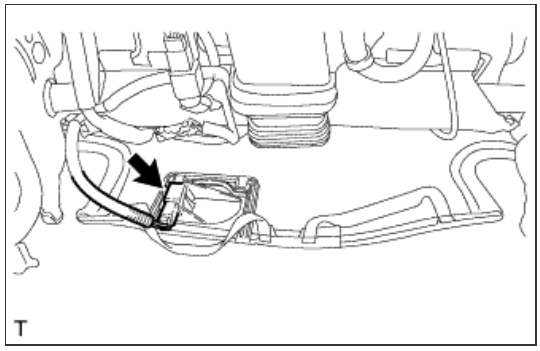


5. REMOVE FRONT SEAT CUSHION SHIELD LH

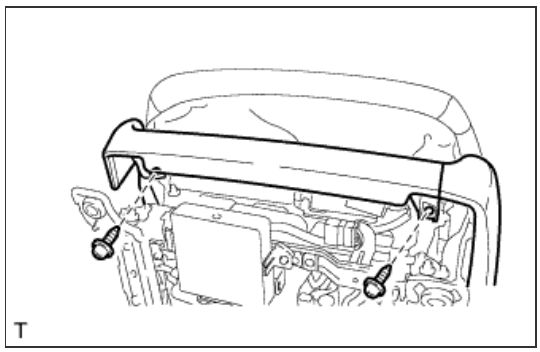
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

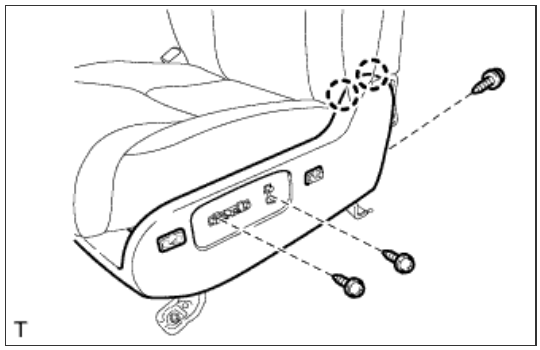


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

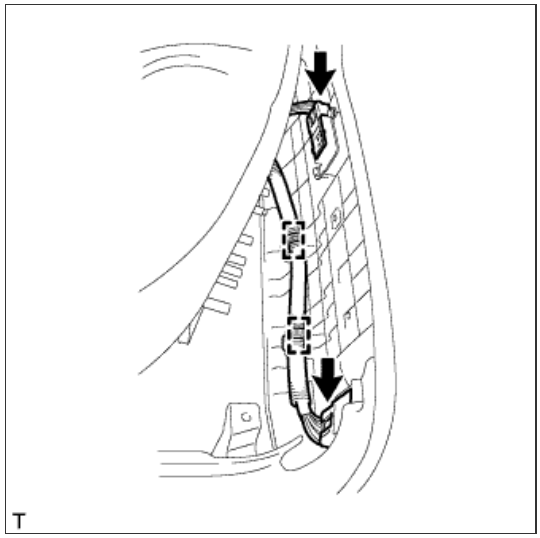


f. for Driver Side:

i. Detach the 2 wire harness clamps.

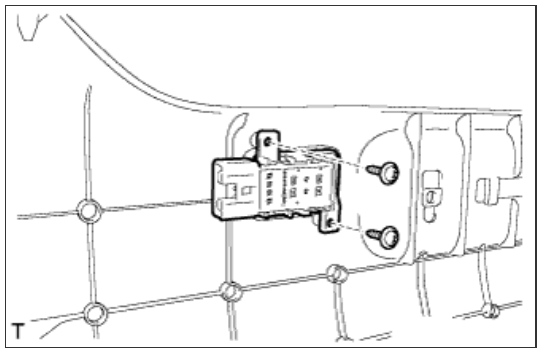
ii. Disconnect the 2 connectors.

g. for Front Passenger Side:
Disconnect the connector.



6. REMOVE LUMBAR SWITCH

a. Remove the 2 screws and switch.



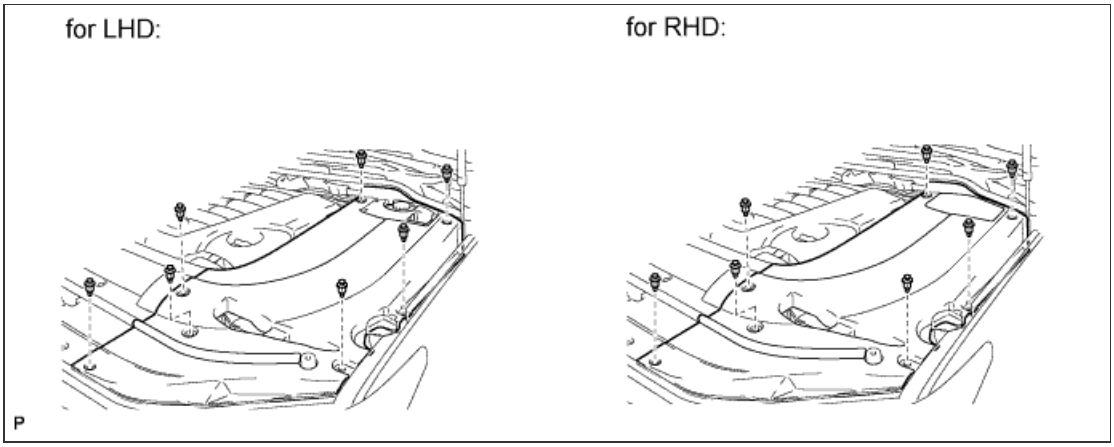
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly (Click here).

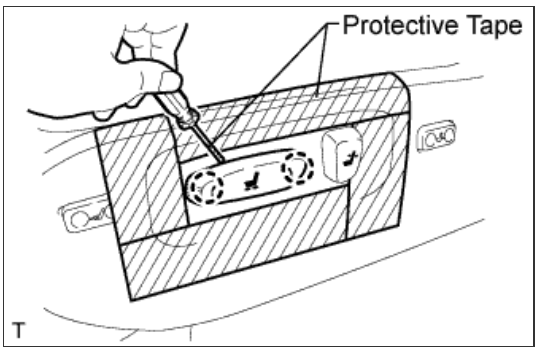
3. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

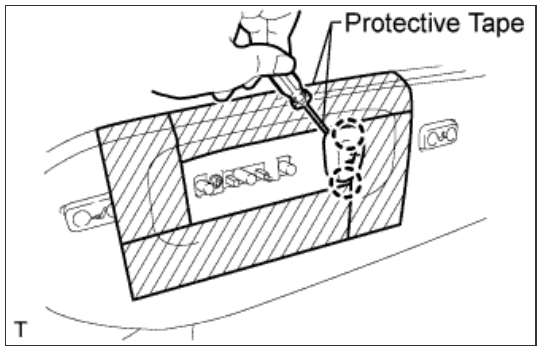


4. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

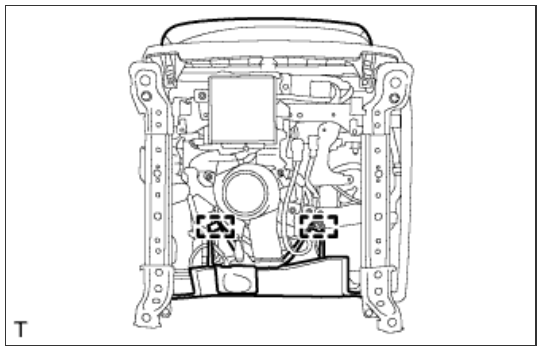
HINT:

Tape the screwdriver tip before use.

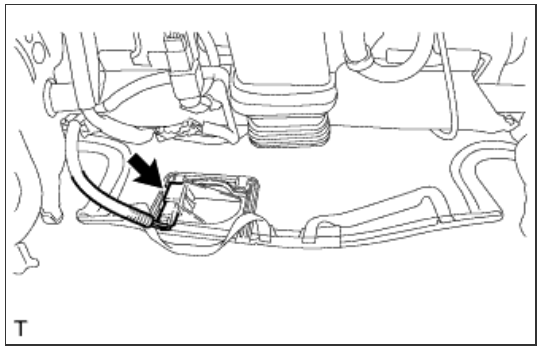


5. REMOVE FRONT SEAT CUSHION SHIELD LH

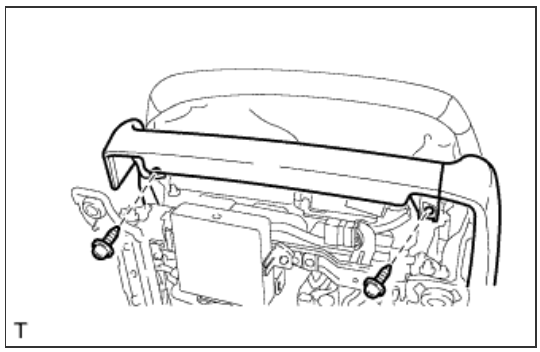
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

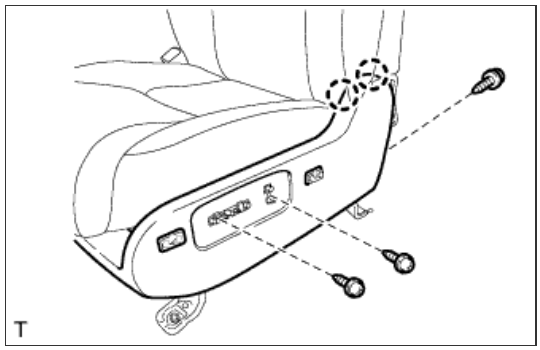


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

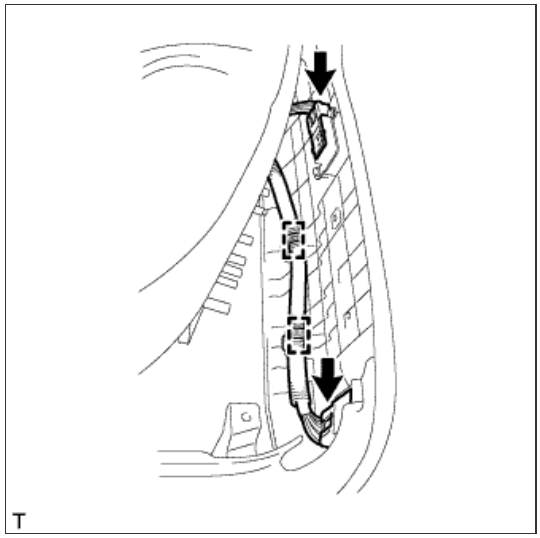


f. for Driver Side:

i. Detach the 2 wire harness clamps.

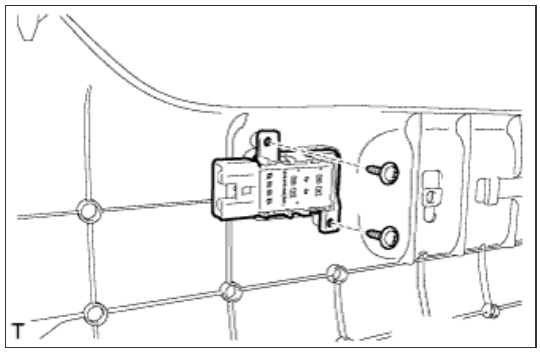
ii. Disconnect the 2 connectors.

g. for Front Passenger Side:
Disconnect the connector.



6. REMOVE LUMBAR SWITCH

a. Remove the 2 screws and switch.



for Preparation Click here

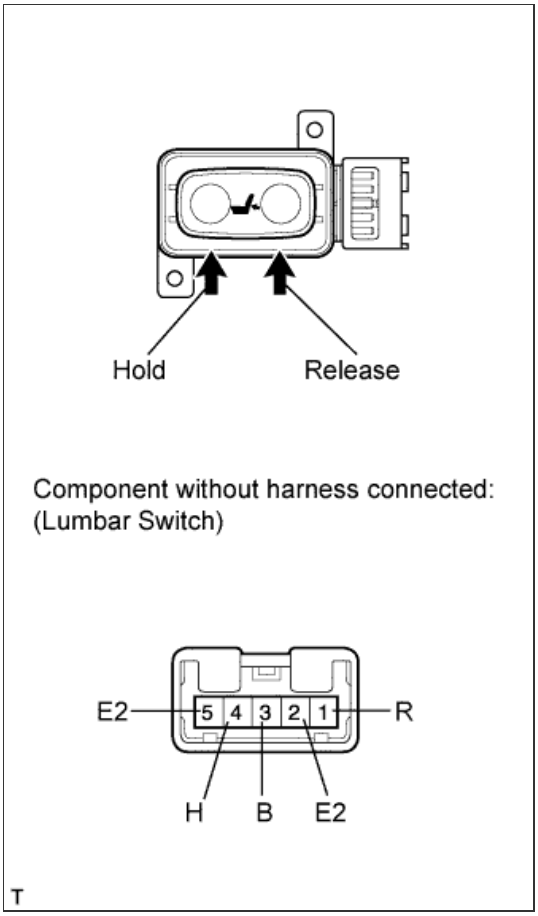
1. INSPECT LUMBAR SWITCH LH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
3 (B) - 4 (H)	Hold	Below 1 Ω
1 (R) - 2 (E2)		
1 (R) - 2 (E2)	Off	
4 (H) - 5 (E2)		
1 (R) - 3 (B)	Release	
4 (H) - 5 (E2)		

If the result is not as specified, replace the lumbar switch.



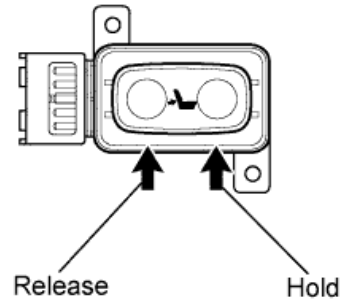
2. INSPECT LUMBAR SWITCH RH

a. Measure the resistance according to the value(s) in the table below.

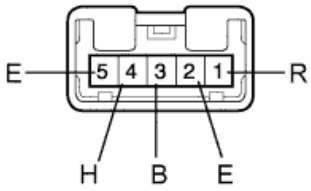
Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
3 (B) - 4 (H)	Hold	Below 1 Ω
1 (R) - 2 (E)		
1 (R) - 2 (E)	Off	
4 (H) - 5 (E)		
1 (R) - 3 (B)	Release	
4 (H) - 5 (E)		

If the result is not as specified, replace the lumbar switch.



Component without harness connected:
(Lumbar Switch)



T

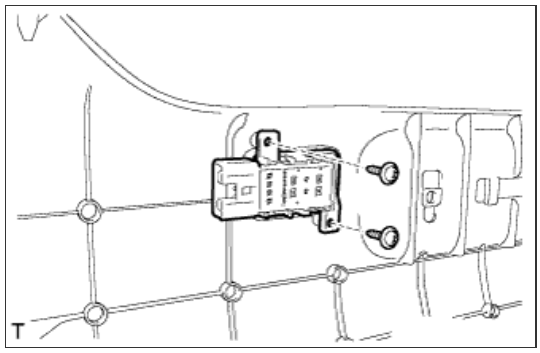
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL LUMBAR SWITCH

a. Install the switch with the 2 screws.



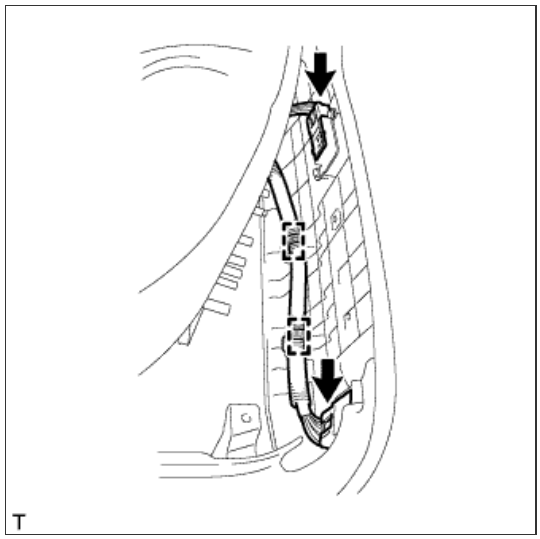
2. INSTALL FRONT SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

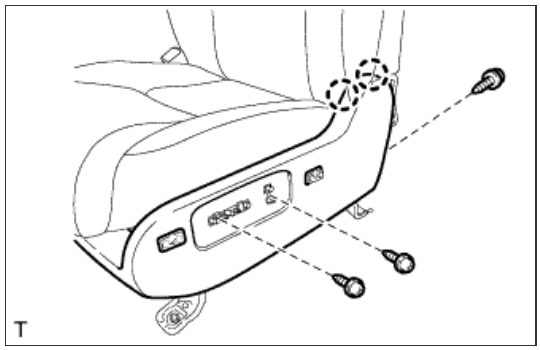
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

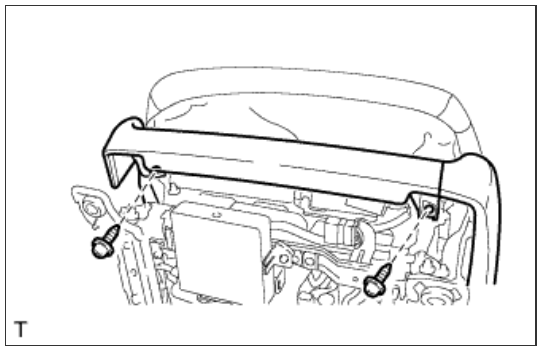


c. Attach the 2 claws to install the cushion shield.

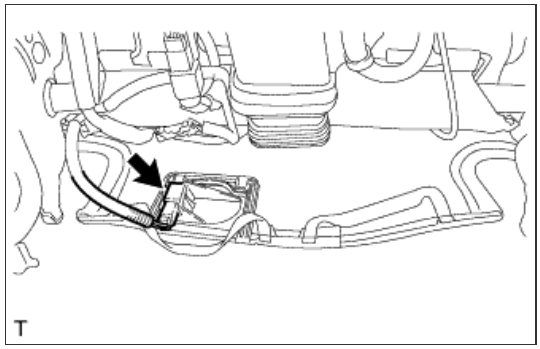
d. Install the 3 screws.



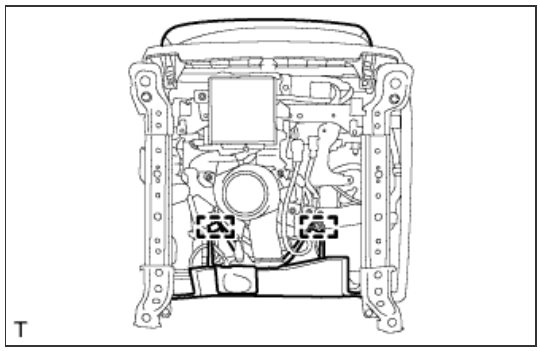
e. Install the 2 screws.



f. Connect the interior illumination light connector.

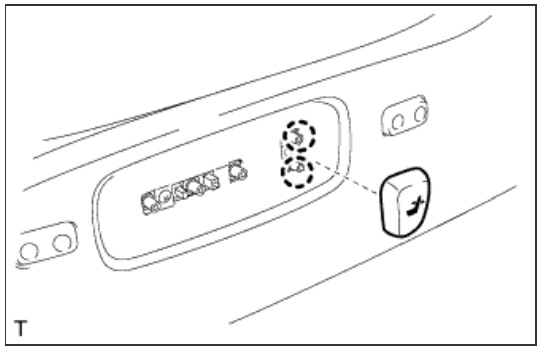


g. Attach the 2 rubber bands to the hooks.



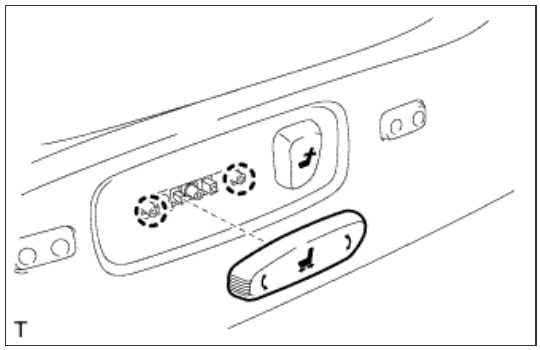
3. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



4. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.

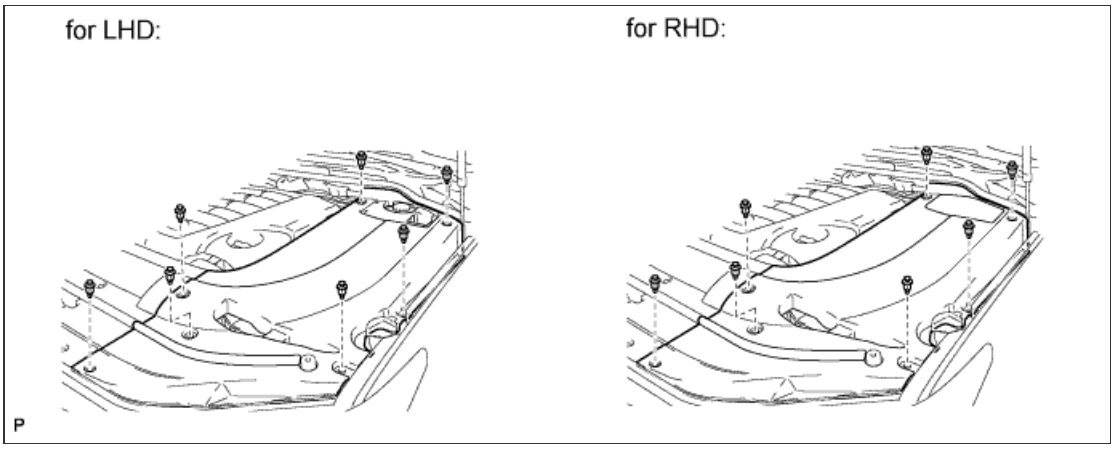


5. INSTALL FRONT SEAT ASSEMBLY LH

a. Install the front seat assembly (Click here).

6. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



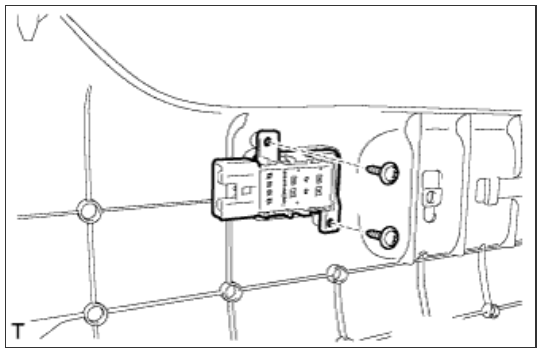
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL LUMBAR SWITCH

a. Install the switch with the 2 screws.



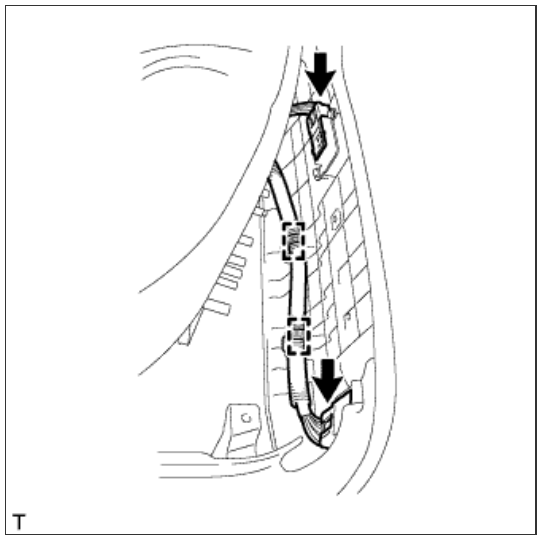
2. INSTALL FRONT SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

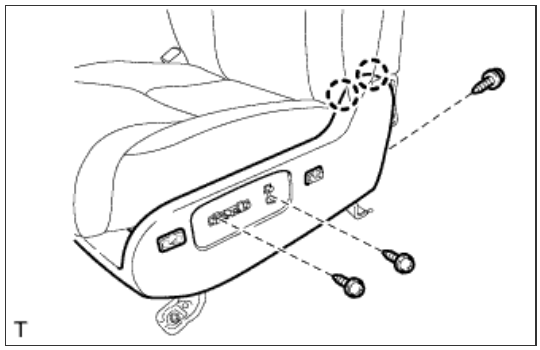
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

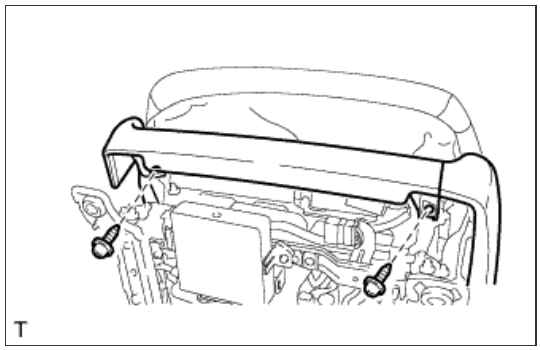


c. Attach the 2 claws to install the cushion shield.

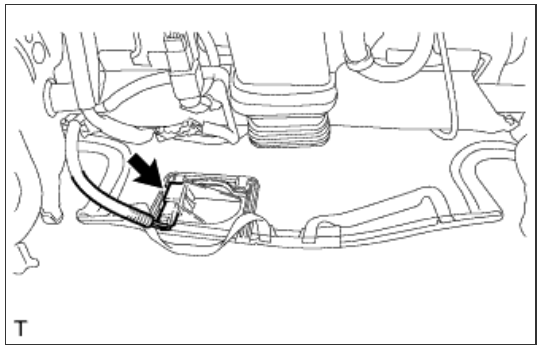
d. Install the 3 screws.



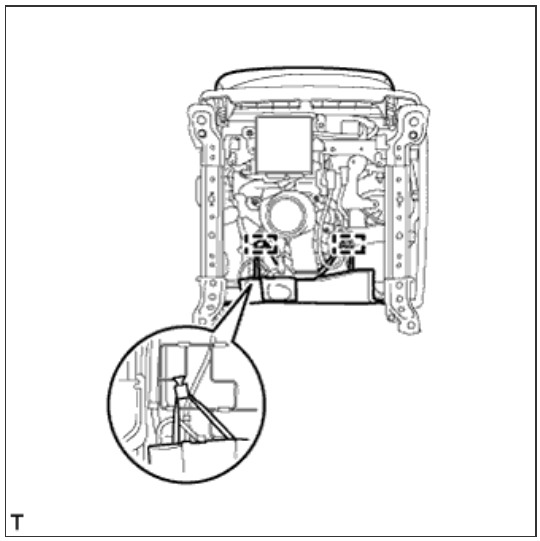
e. Install the 2 screws.



f. Connect the interior illumination light connector.

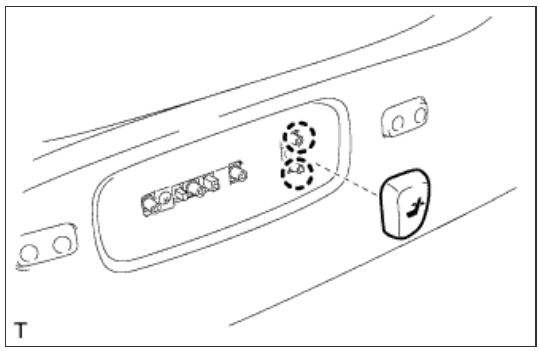


g. Attach the 2 rubber bands to the hooks.



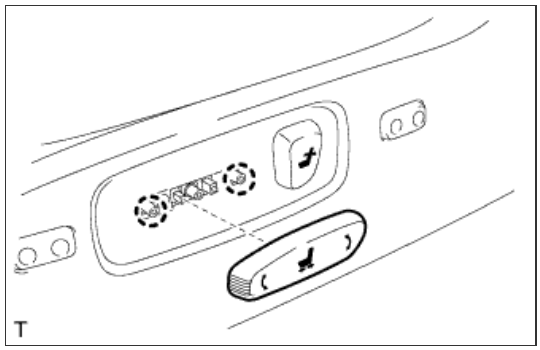
3. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



4. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.

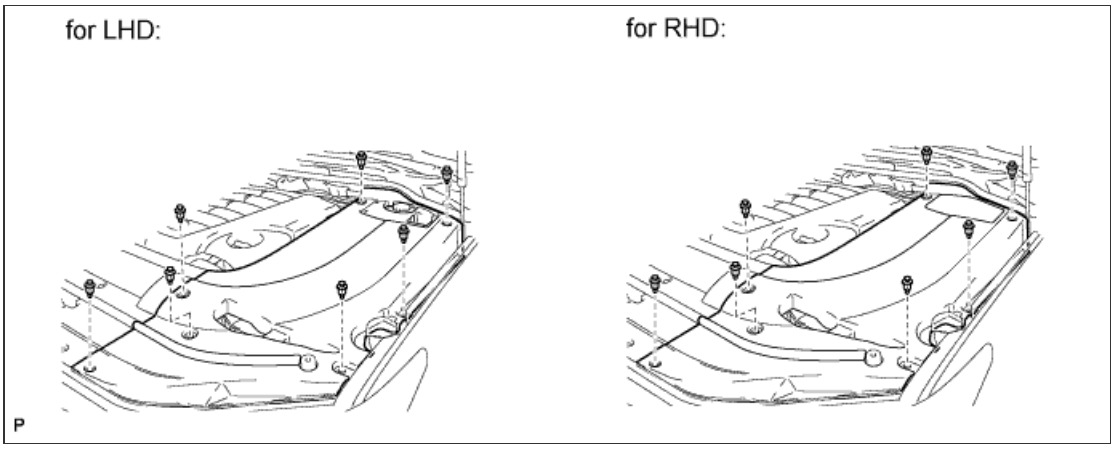


5. INSTALL FRONT SEAT ASSEMBLY LH

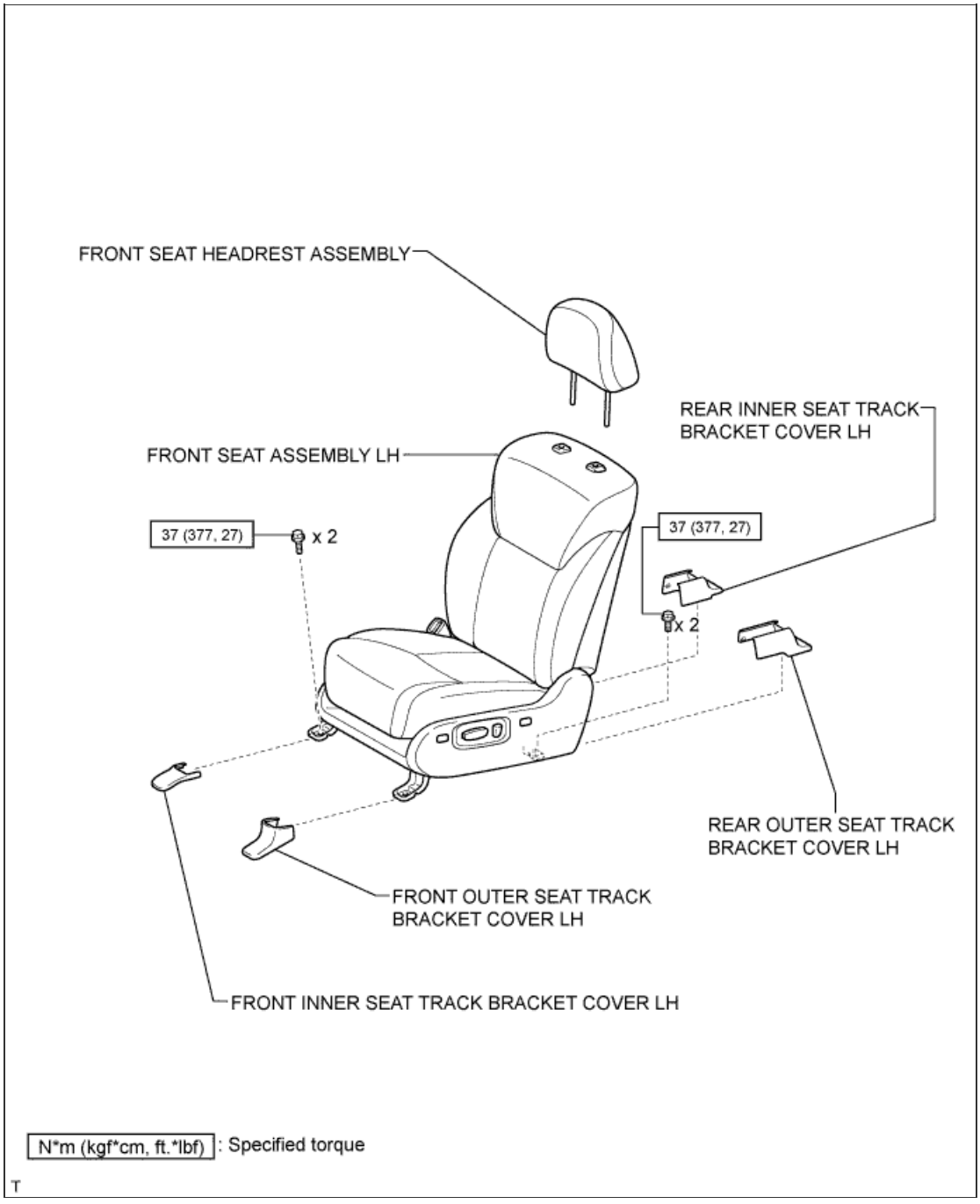
a. Install the front seat assembly (Click here).

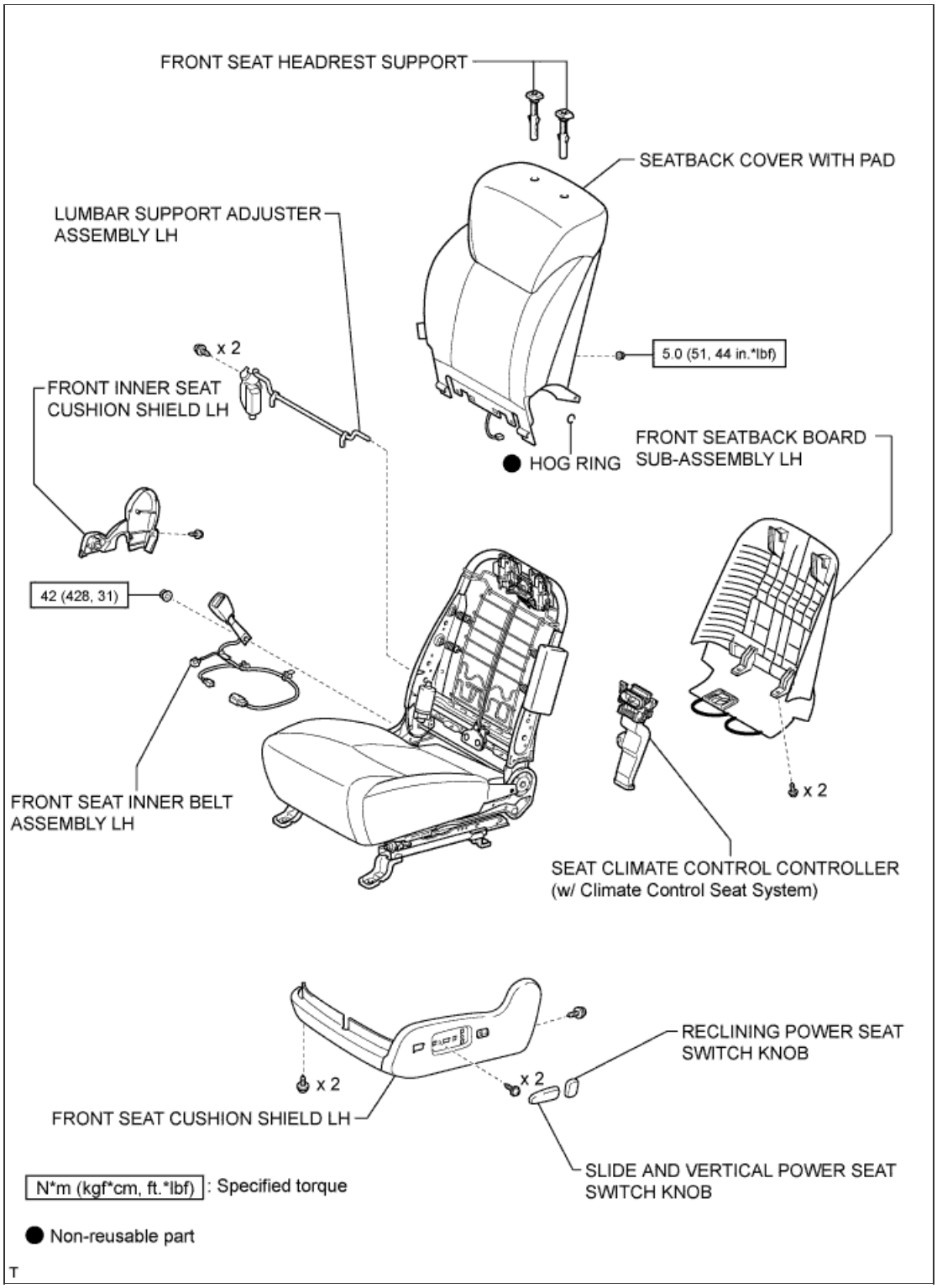
6. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here




FRONT SEAT HEADREST SUPPORT
SEATBACK COVER WITH PAD
LUMBAR SUPPORT ADJUSTER ASSEMBLY LH
x 2
5.0 (51, 44 in.*lbf)
FRONT INNER SEAT CUSHION SHIELD LH
HOG RING
FRONT SEATBACK BOARD SUB-ASSEMBLY LH
42 (428, 31)
x 2
FRONT SEAT INNER BELT ASSEMBLY LH
SEAT CLIMATE CONTROL CONTROLLER (w/ Climate Control Seat System)
x 2
x 2
RECLINING POWER SEAT SWITCH KNOB
FRONT SEAT CUSHION SHIELD LH
SLIDE AND VERTICAL POWER SEAT SWITCH KNOB
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part

T

for Preparation Click here

CAUTION:

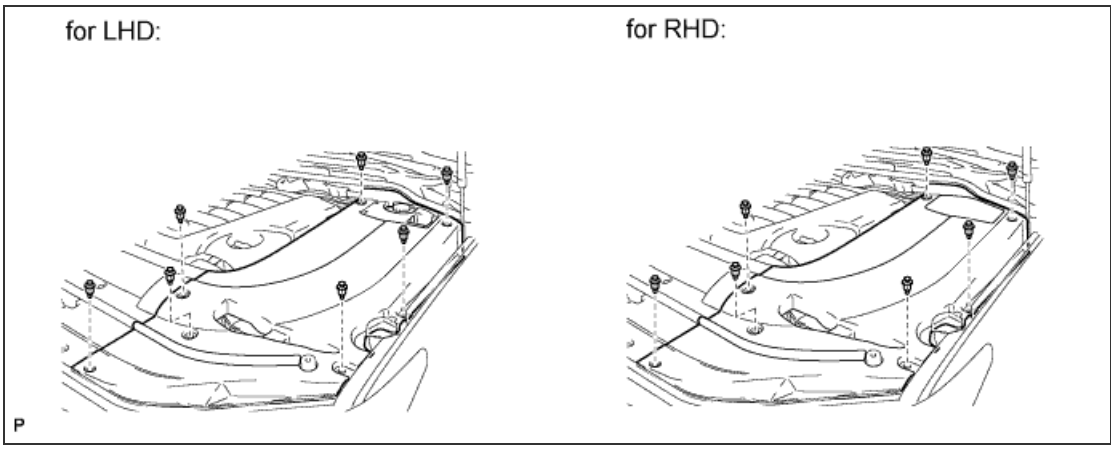
Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly (Click here).

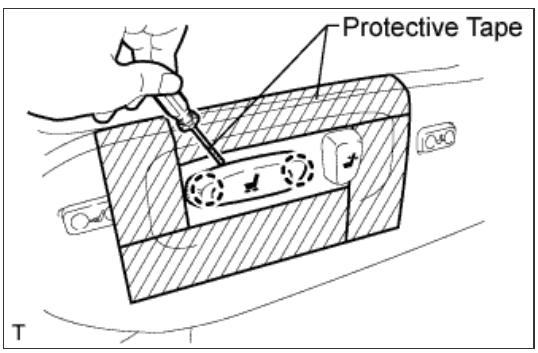
3. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

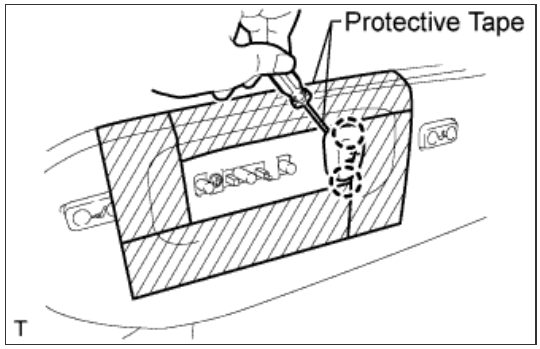


4. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

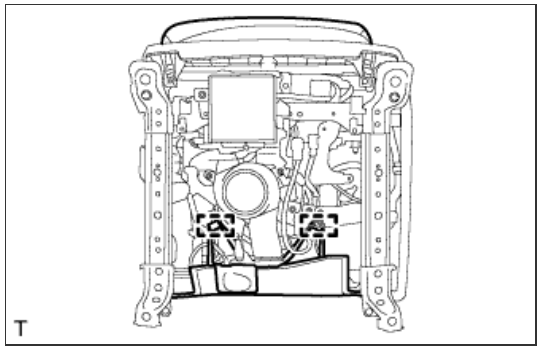
HINT:

Tape the screwdriver tip before use.

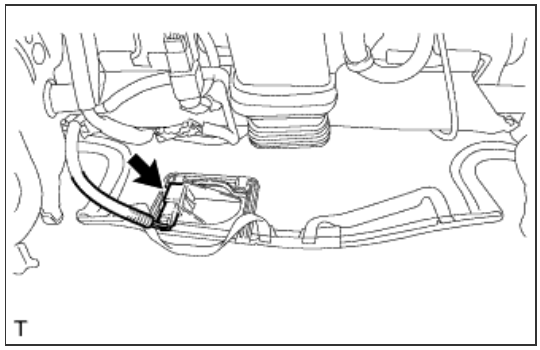


5. REMOVE FRONT SEAT CUSHION SHIELD LH

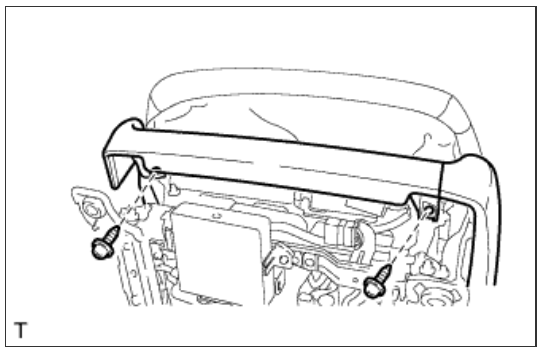
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

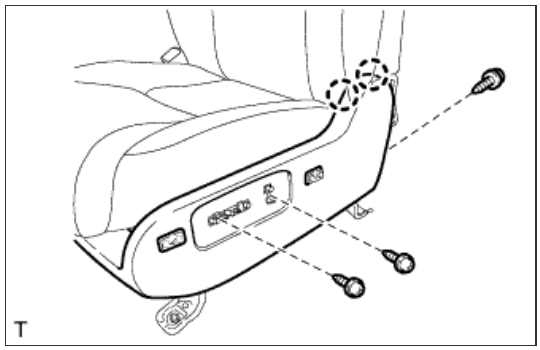


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

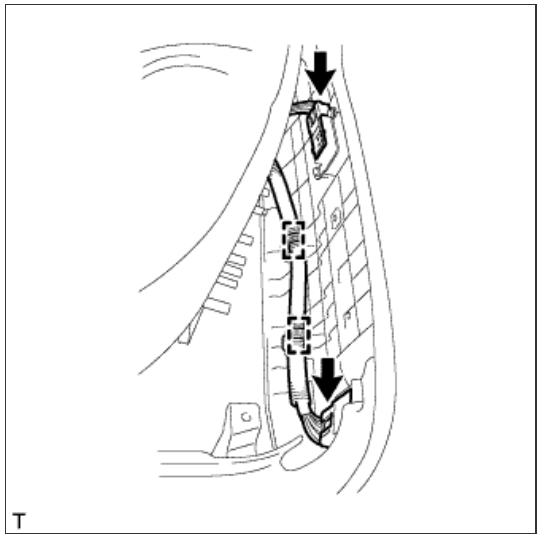


f. for Driver Side:

i. Detach the 2 wire harness clamps.

ii. Disconnect the 2 connectors.

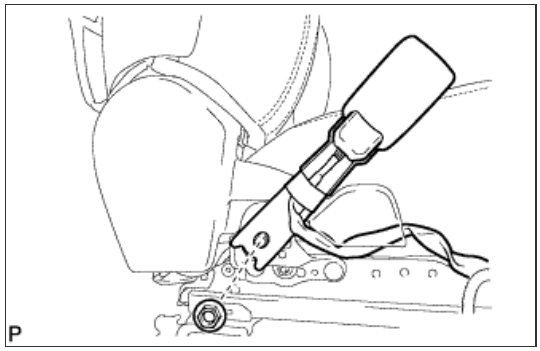
g. for Front Passenger Side:
Disconnect the connector.



6. REMOVE FRONT SEAT INNER BELT ASSEMBLY LH

a. Disconnect the 3 connectors and detach the clamps.

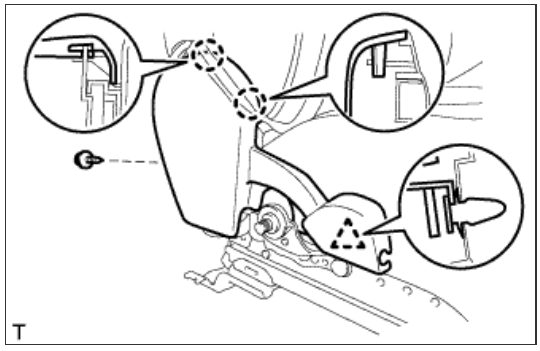
b. Remove the nut and front seat inner belt assembly.



7. REMOVE FRONT INNER SEAT CUSHION SHIELD LH

a. Remove the screw.

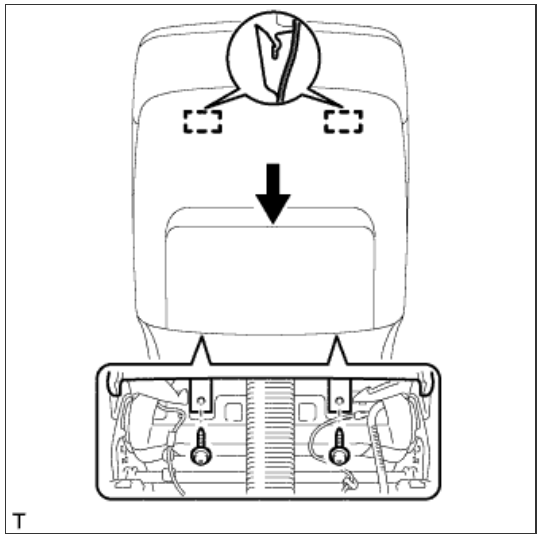
b. Detach the 2 claws and clip, and then remove the cushion shield.



8. REMOVE FRONT SEATBACK BOARD SUB-ASSEMBLY LH

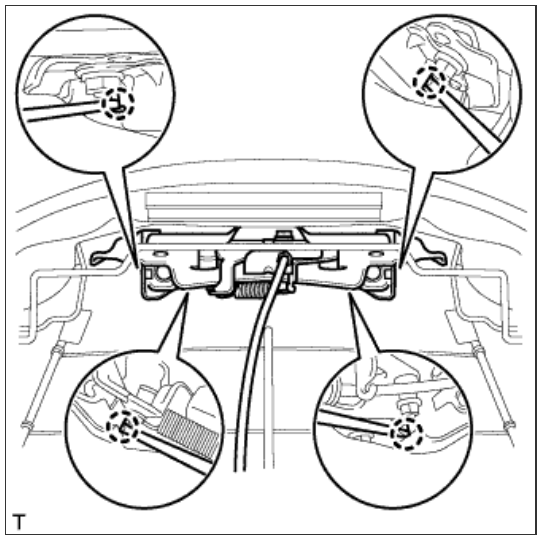
a. Remove the 2 screws.

b. Move the seatback board in the direction of the arrow to detach the 2 hooks and remove the seatback board.



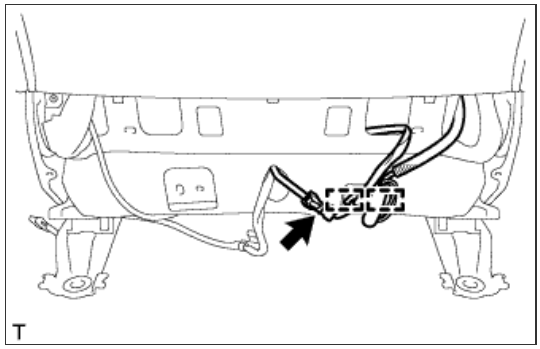
9. REMOVE FRONT SEAT HEADREST SUPPORT

a. Detach the 4 claws and remove the 2 headrest supports.



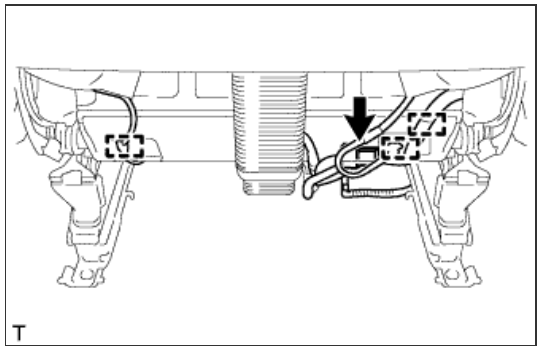
10. REMOVE SEATBACK COVER WITH PAD

a. w/ Seat Heater System:
Disconnect the seat heater connector and detach the 2 wire harness clamps.

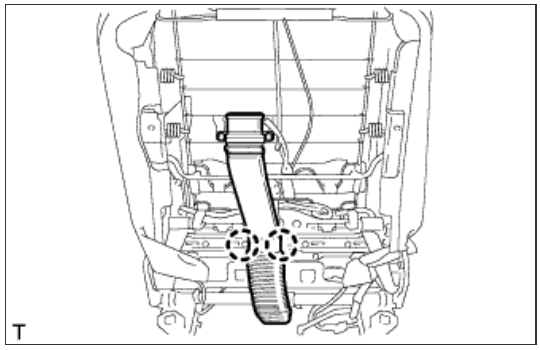


b. w/ Climate Control Seat System:

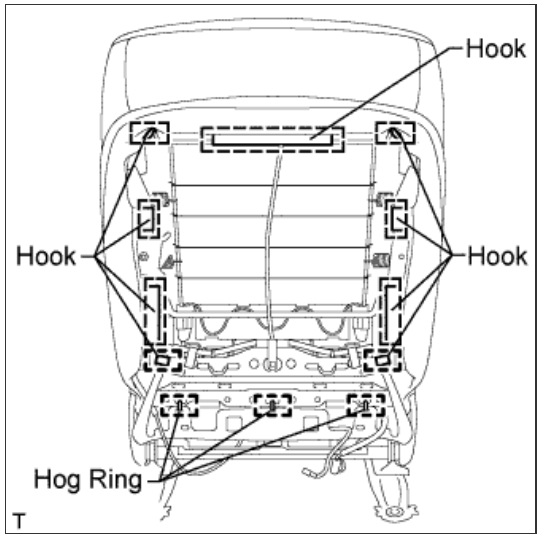
i. Disconnect the seat heater connector and detach the 3 wire harness clamps.



ii. Detach the 2 claws and disconnect the duct.

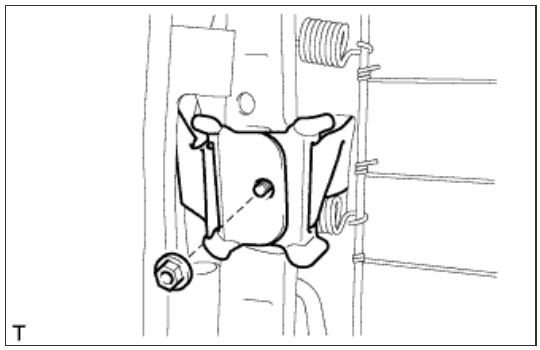


c. Remove the 3 hog rings and detach the 9 hooks.



d. Remove the nut and seatback cover bracket from the seat frame.

e. Remove the seatback cover with pad.

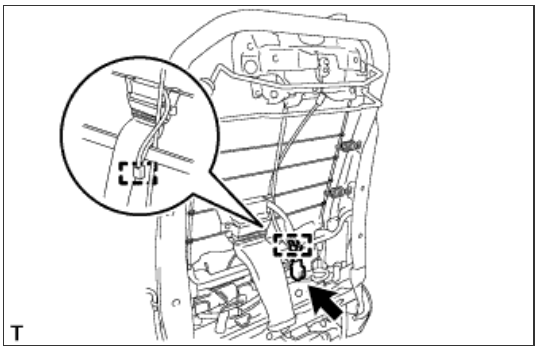


11. REMOVE SEAT CLIMATE CONTROL CONTROLLER (w/ Climate Control Seat System)

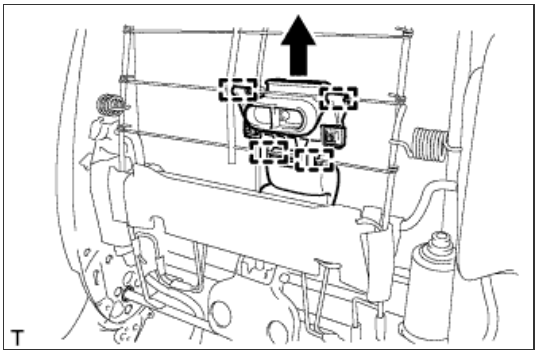
a. Remove the clamp.

b. Disconnect the connector.

c. Detach the connector clamp.



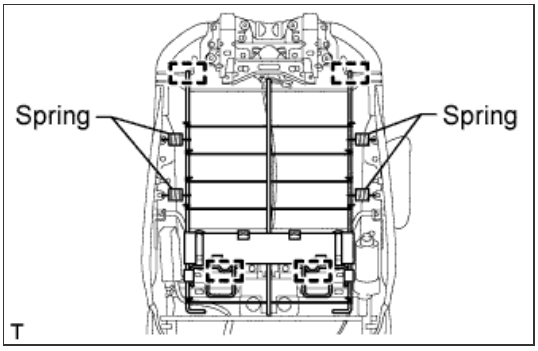
d. Detach the 2 hooks on the top of the controller. Then, while lifting the controller in the direction of the arrow, detach the 2 hooks on the bottom and remove the controller.



12. REMOVE LUMBAR SUPPORT ADJUSTER ASSEMBLY LH

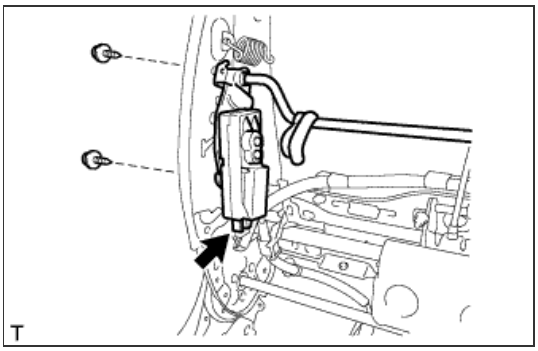
a. Remove the 4 springs.

b. Detach the 4 hooks and remove the seatback spring.



c. Disconnect the lumbar support adjuster connector.

d. Remove the 2 screws and lumbar support adjuster.



for Preparation Click here

CAUTION:

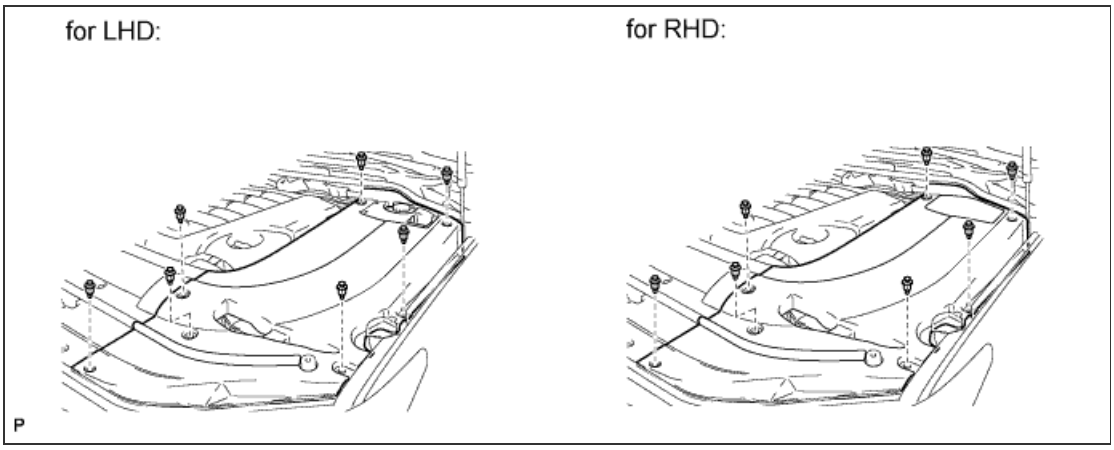
Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly (Click here).

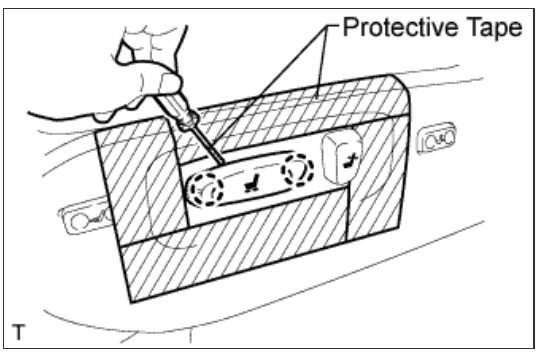
3. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

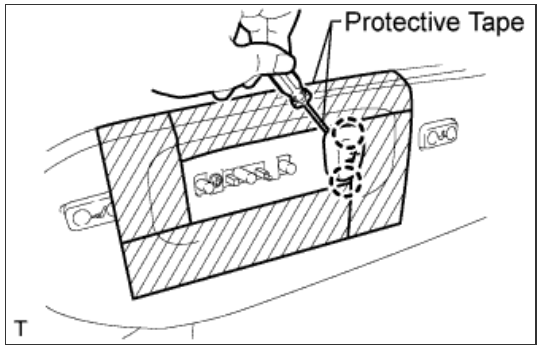


4. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

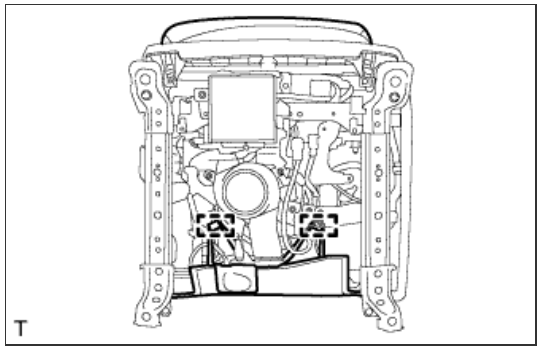
HINT:

Tape the screwdriver tip before use.

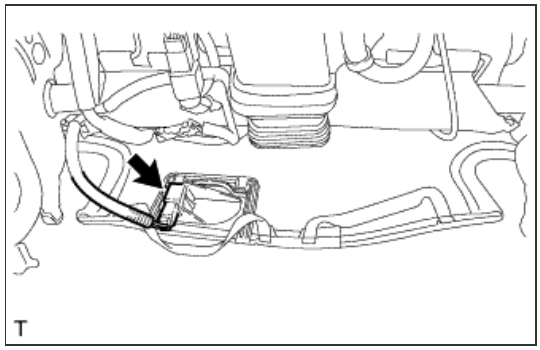


5. REMOVE FRONT SEAT CUSHION SHIELD LH

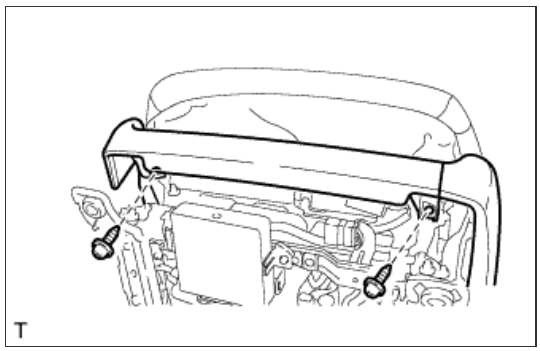
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

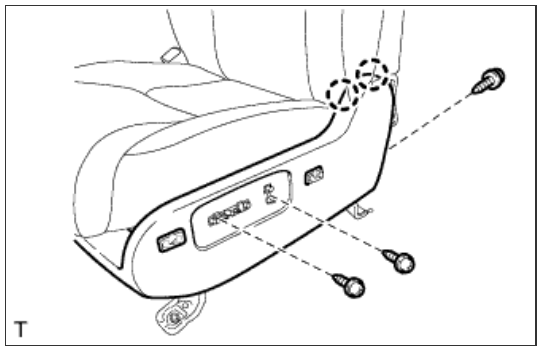


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

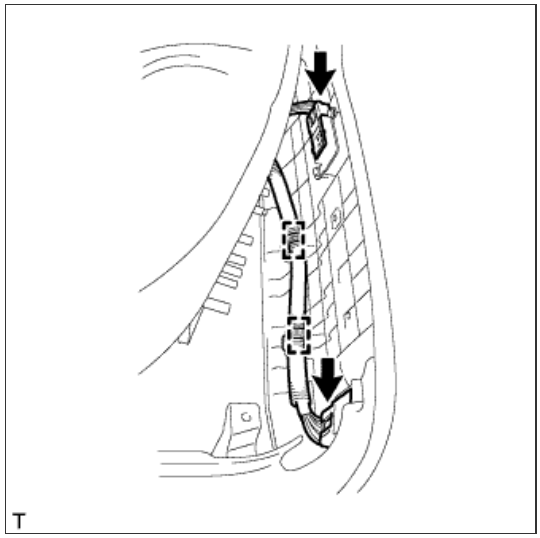


f. for Driver Side:

i. Detach the 2 wire harness clamps.

ii. Disconnect the 2 connectors.

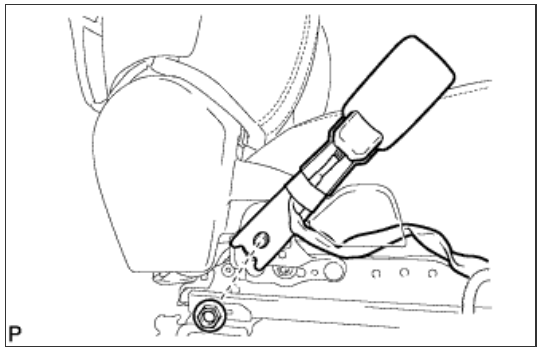
g. for Front Passenger Side:
Disconnect the connector.



6. REMOVE FRONT SEAT INNER BELT ASSEMBLY LH

a. Disconnect the 3 connectors and detach the clamps.

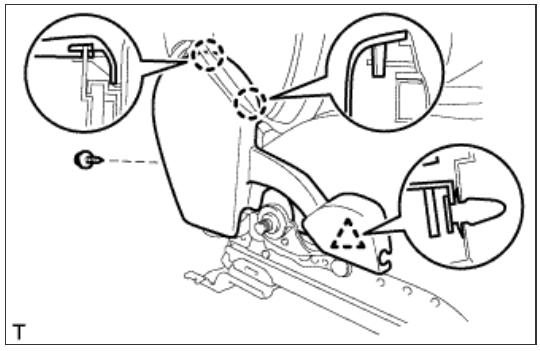
b. Remove the nut and front seat inner belt assembly.



7. REMOVE FRONT INNER SEAT CUSHION SHIELD LH

a. Remove the screw.

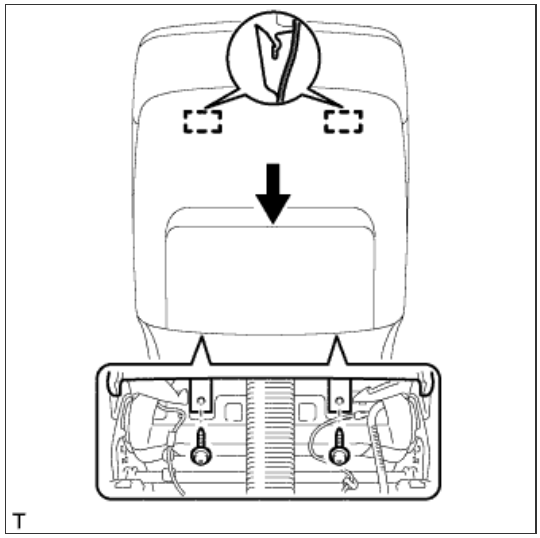
b. Detach the 2 claws and clip, and then remove the cushion shield.



8. REMOVE FRONT SEATBACK BOARD SUB-ASSEMBLY LH

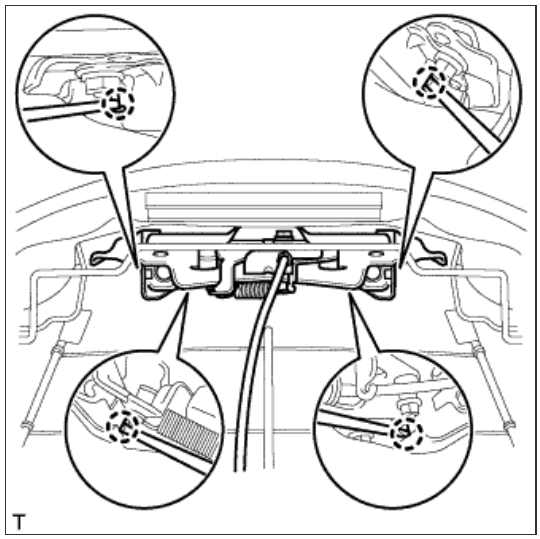
a. Remove the 2 screws.

b. Move the seatback board in the direction of the arrow to detach the 2 hooks and remove the seatback board.



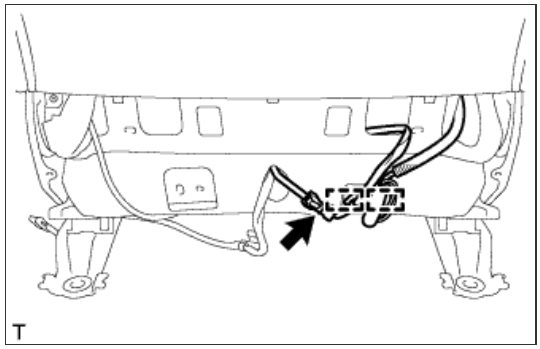
9. REMOVE FRONT SEAT HEADREST SUPPORT

a. Detach the 4 claws and remove the 2 headrest supports.



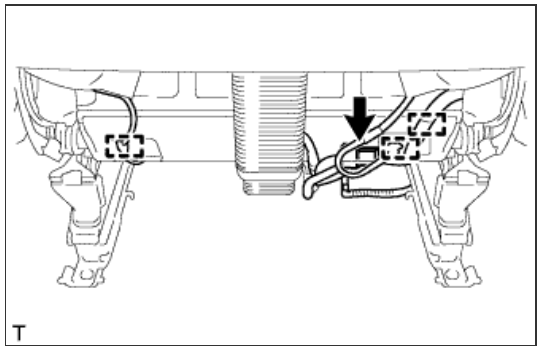
10. REMOVE SEATBACK COVER WITH PAD

a. w/ Seat Heater System:
Disconnect the seat heater connector and detach the 2 wire harness clamps.

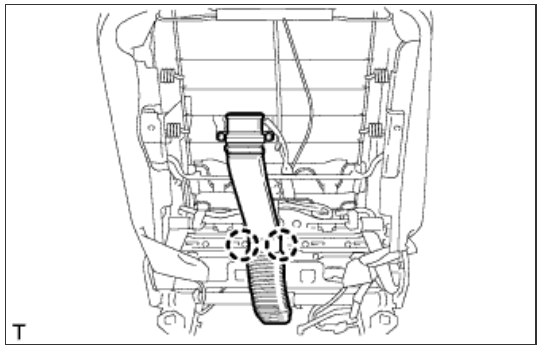


b. w/ Climate Control Seat System:

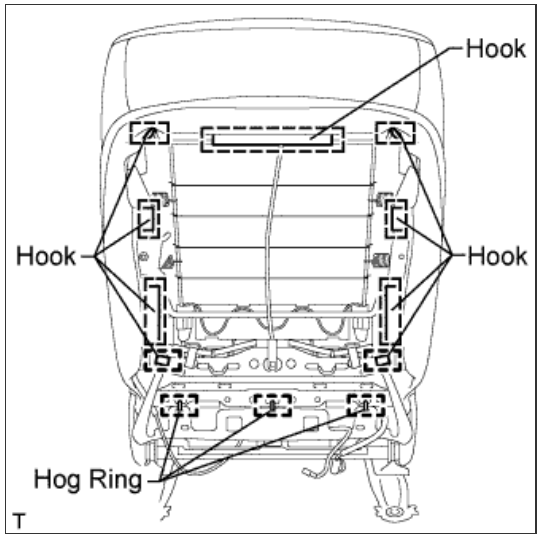
i. Disconnect the seat heater connector and detach the 3 wire harness clamps.



ii. Detach the 2 claws and disconnect the duct.

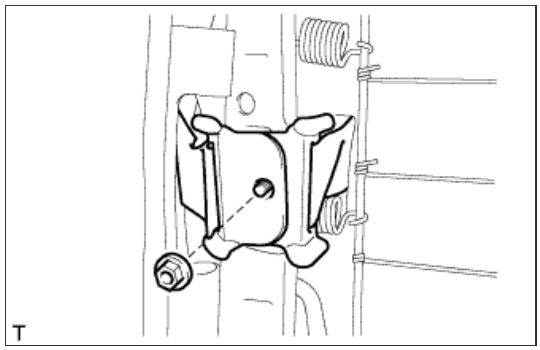


c. Remove the 3 hog rings and detach the 9 hooks.



d. Remove the nut and seatback cover bracket from the seat frame.

e. Remove the seatback cover with pad.

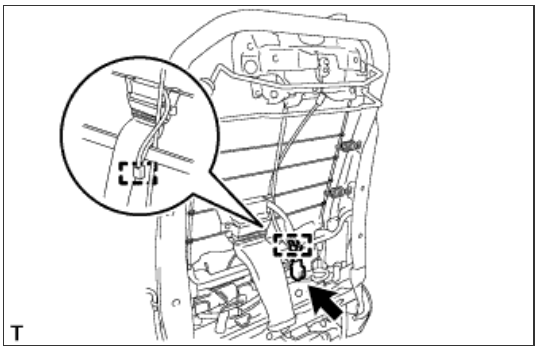


11. REMOVE SEAT CLIMATE CONTROL CONTROLLER (w/ Climate Control Seat System)

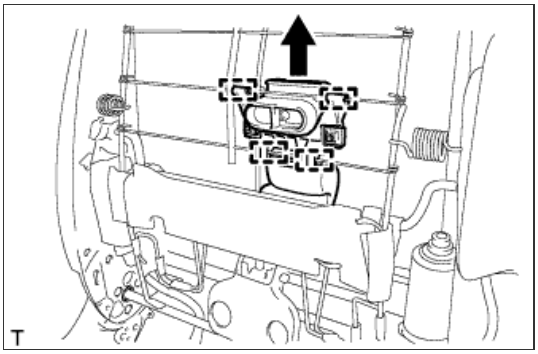
a. Remove the clamp.

b. Disconnect the connector.

c. Detach the connector clamp.



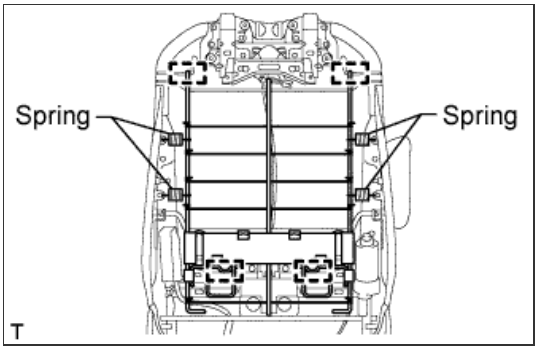
d. Detach the 2 hooks on the top of the controller. Then, while lifting the controller in the direction of the arrow, detach the 2 hooks on the bottom and remove the controller.



12. REMOVE LUMBAR SUPPORT ADJUSTER ASSEMBLY LH

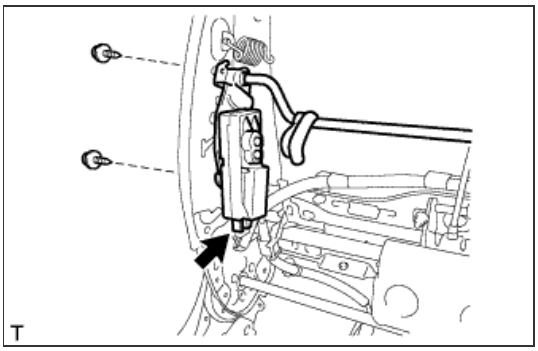
a. Remove the 4 springs.

b. Detach the 4 hooks and remove the seatback spring.



c. Disconnect the lumbar support adjuster connector.

d. Remove the 2 screws and lumbar support adjuster.



for Preparation Click here

1. INSPECT LUMBAR SUPPORT ADJUSTER ASSEMBLY LH

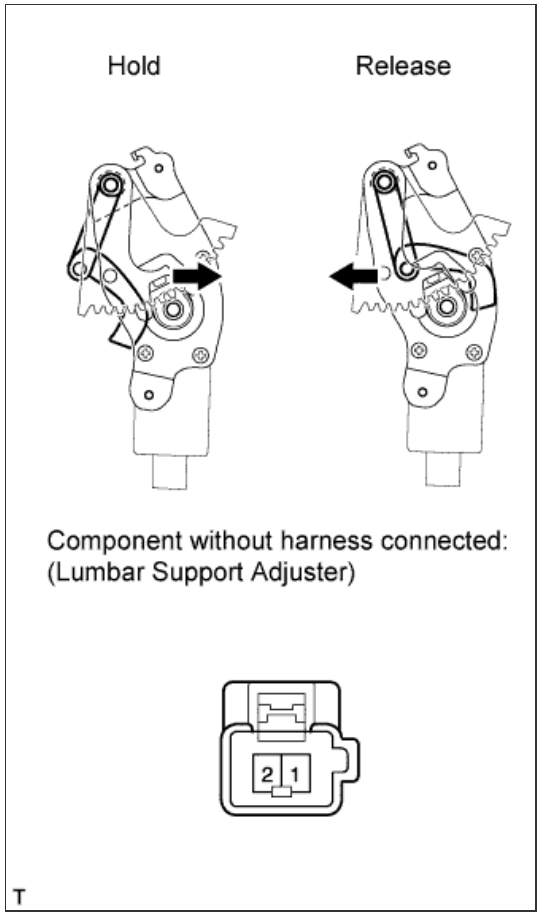
a. Check the operation of the lumbar support adjuster.

i. Check if the lumbar support adjuster moves smoothly when the battery is connected to the lumbar support adjuster motor connector terminals.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 1 Battery negative (-) → 2	Hold
Battery positive (+) → 2 Battery negative (-) → 1	Release

If the result is not as specified, replace the lumbar support adjuster assembly.



2. INSPECT LUMBAR SUPPORT ADJUSTER ASSEMBLY RH

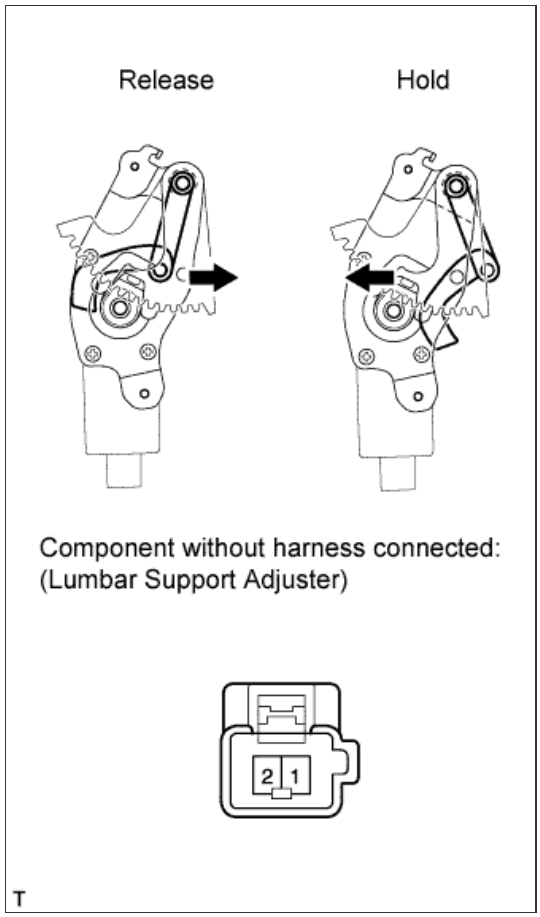
a. Check the operation of the lumbar support adjuster.

i. Check if the lumbar support adjuster moves smoothly when the battery is connected to the lumbar support adjuster motor connector terminals.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 2 Battery negative (-) → 1	Hold
Battery positive (+) → 1 Battery negative (-) → 2	Release

If the result is not as specified, replace the lumbar support adjuster assembly.


Release
Hold
Component without harness connected:
(Lumbar Support Adjuster)
2
1
T

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

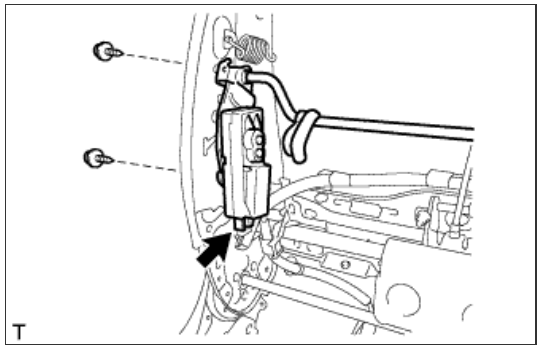
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL LUMBAR SUPPORT ADJUSTER ASSEMBLY LH

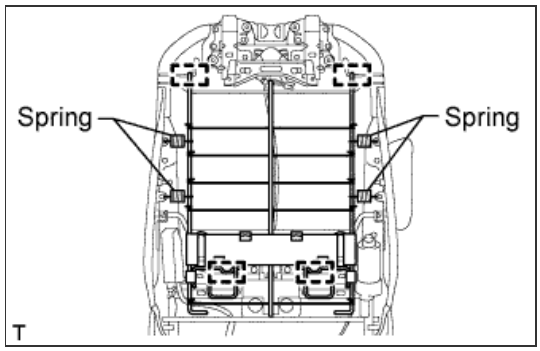
a. Install the lumbar support adjuster with the 2 screws.

b. Connect the lumbar support adjuster connector.



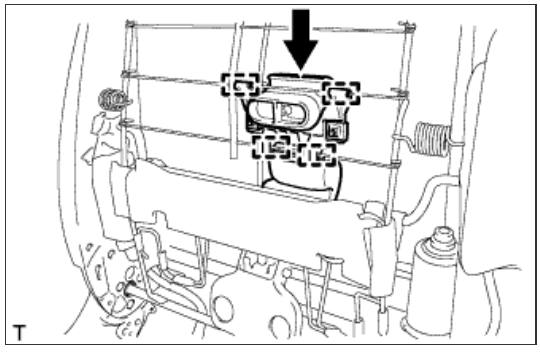
c. Attach the 4 hooks to install the seatback spring.

d. Install the 4 springs.



2. INSTALL SEAT CLIMATE CONTROL CONTROLLER (w/ Climate Control Seat System)

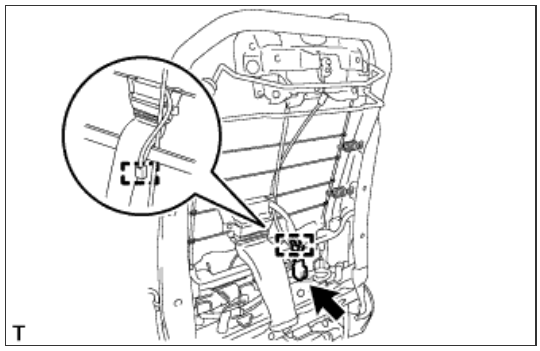
a. Move the controller in the direction of the arrow and attach the 2 hooks on the bottom. Then attach the 2 hooks on the top to install the controller.



b. Attach the connector clamp.

c. Connect the connector.

d. Install the clamp.



3. INSTALL SEATBACK COVER WITH PAD

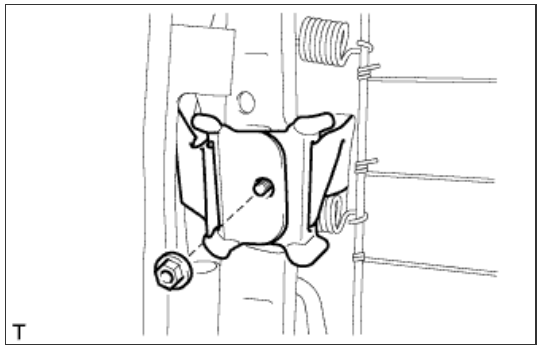
a. Install the seatback cover with pad to the seatback frame.

b. Install the seatback cover bracket to the seat frame with the nut.

Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }

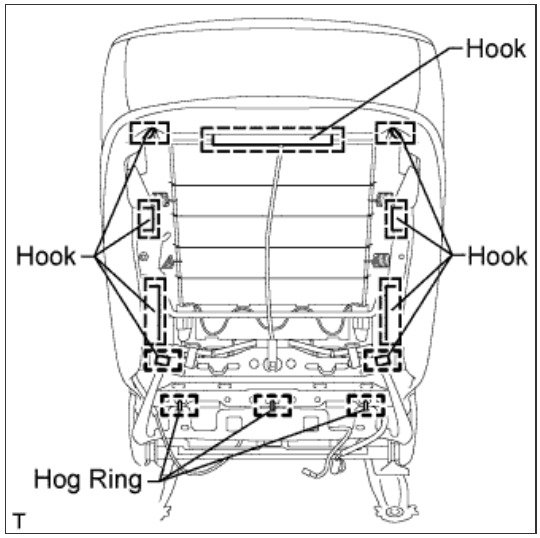
CAUTION:

After the seatback cover is assembled, make sure the side airbag strap is not twisted.

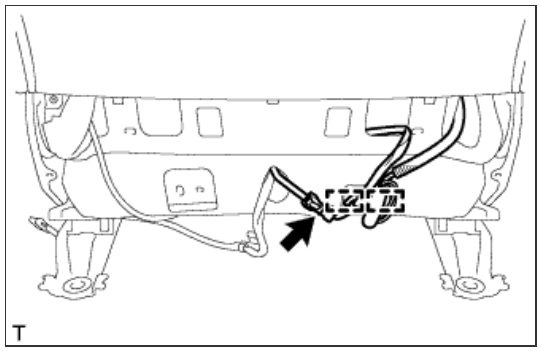


c. Attach the 9 hooks.

d. Using hog ring pliers, install 3 new hog rings to the seat frame.

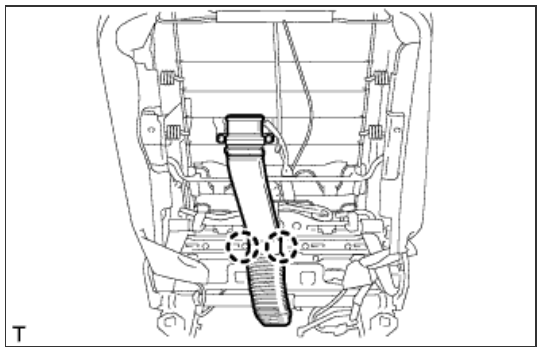


e. w/ Seat Heater System:
Connect the seat heater connector and attach the 2 wire harness clamps.

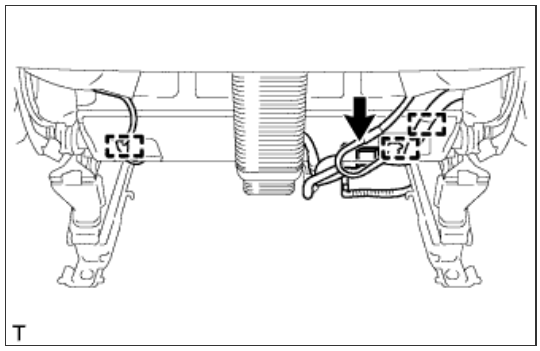


f. w/ Climate Control Seat System:

i. Attach the 2 claws to connect the duct.



ii. Connect the seat heater connector and attach the 3 wire harness clamps.



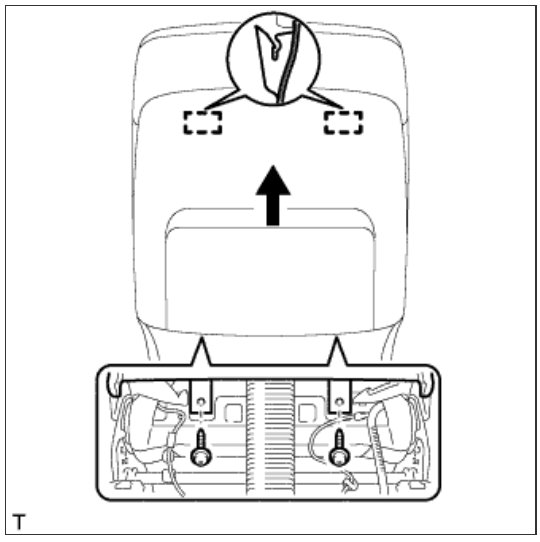
4. INSTALL FRONT SEAT HEADREST SUPPORT

a. Attach the 4 claws to install the 2 headrest supports.

5. INSTALL FRONT SEATBACK BOARD SUB-ASSEMBLY LH

a. Move the seatback board in the direction of the arrow to attach the 2 hooks and install the seatback board.

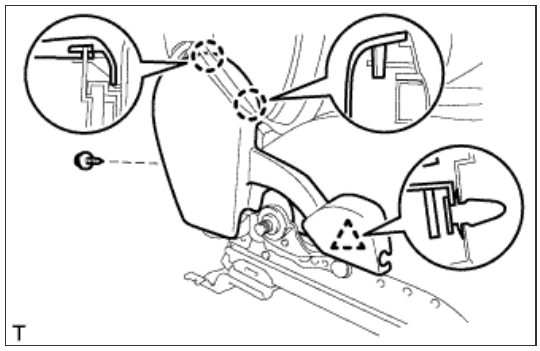
b. Install the 2 screws.



6. INSTALL FRONT INNER SEAT CUSHION SHIELD LH

a. Attach the 2 claws and clip to install the cushion shield.

b. Install the screw.



7. INSTALL FRONT SEAT INNER BELT ASSEMBLY LH

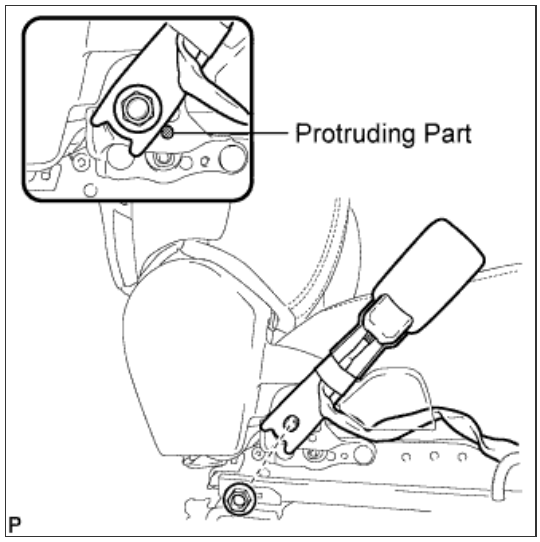
a. Install the front seat inner belt assembly with the nut.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

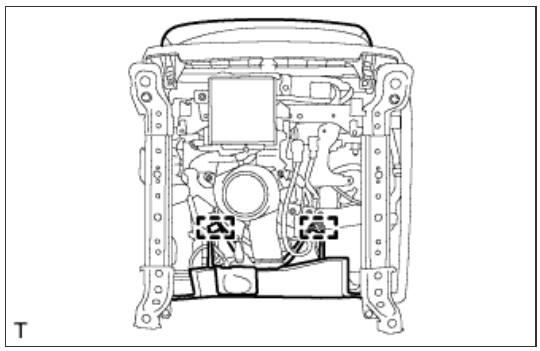
Do not allow the anchor part of the front seat inner belt assembly to overlap the protruding part of the front seat adjuster.

b. Connect the 3 connectors and attach the clamps.

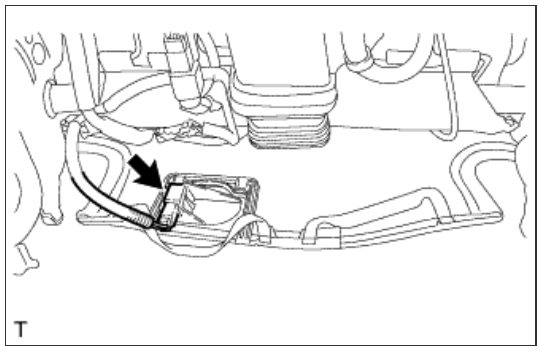


8. INSTALL FRONT SEAT CUSHION SHIELD LH

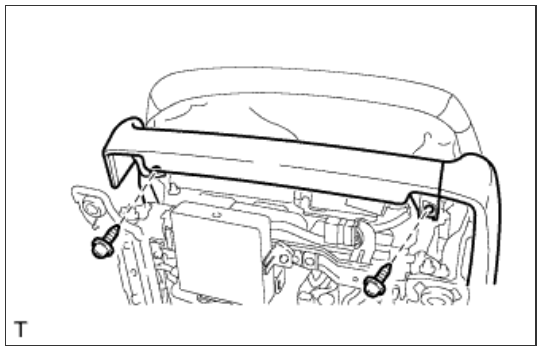
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

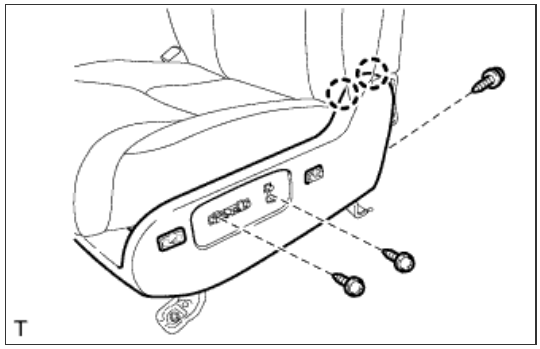


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

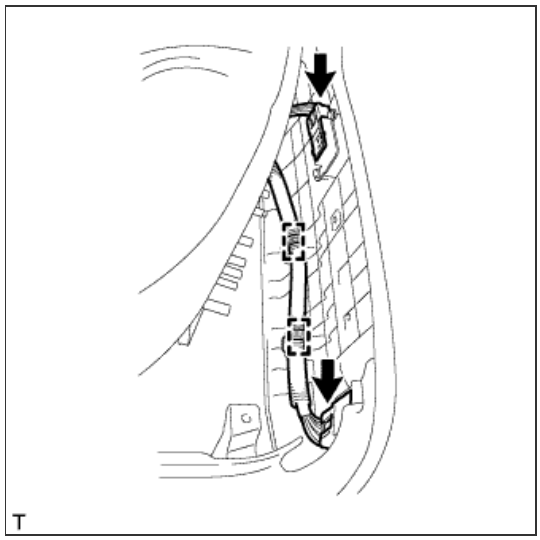


f. for Driver Side:

i. Detach the 2 wire harness clamps.

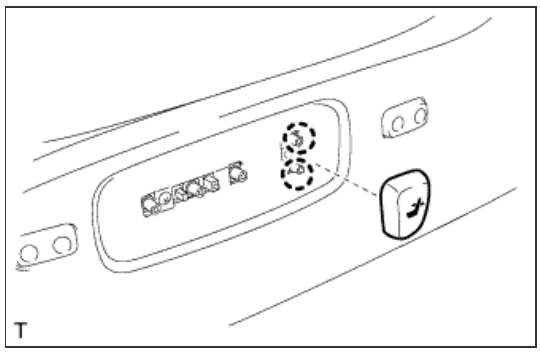
ii. Disconnect the 2 connectors.

g. for Front Passenger Side:
Disconnect the connector.



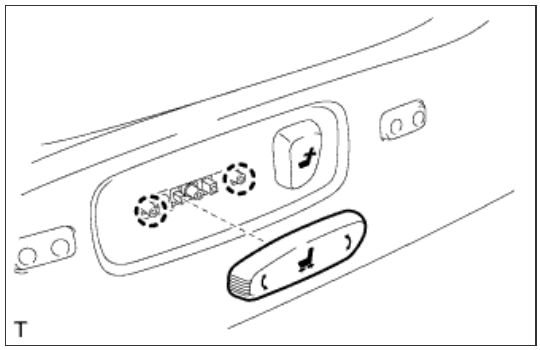
9. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



10. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.

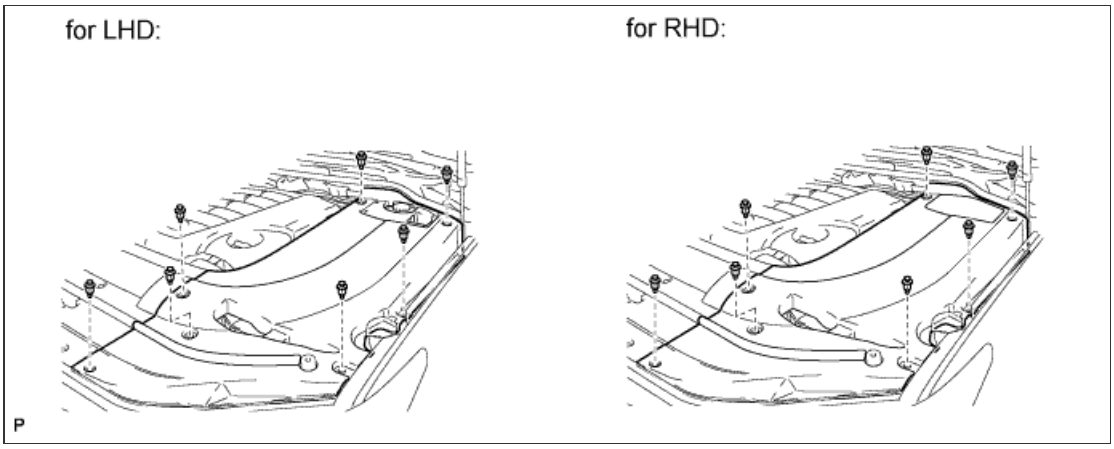


11. INSTALL FRONT SEAT ASSEMBLY LH

a. Install the front seat assembly (Click here).

12. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

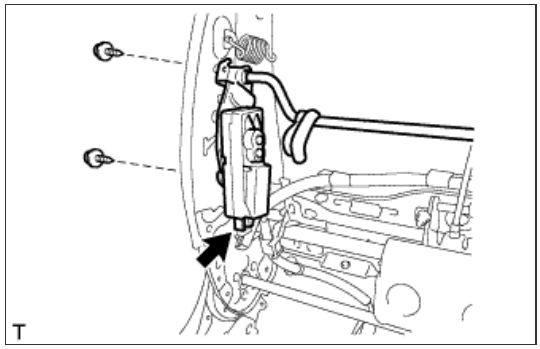
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL LUMBAR SUPPORT ADJUSTER ASSEMBLY LH

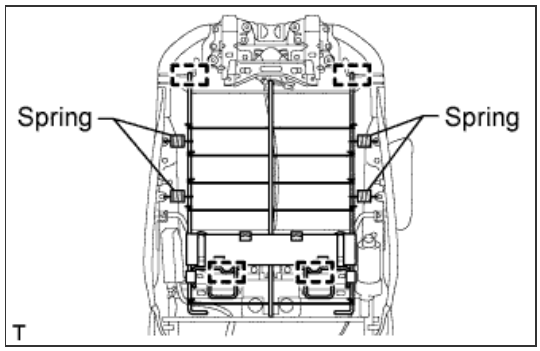
a. Install the lumbar support adjuster with the 2 screws.

b. Connect the lumbar support adjuster connector.



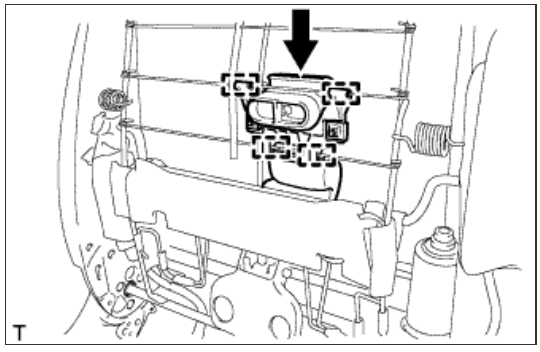
c. Attach the 4 hooks to install the seatback spring.

d. Install the 4 springs.



2. INSTALL SEAT CLIMATE CONTROL CONTROLLER (w/ Climate Control Seat System)

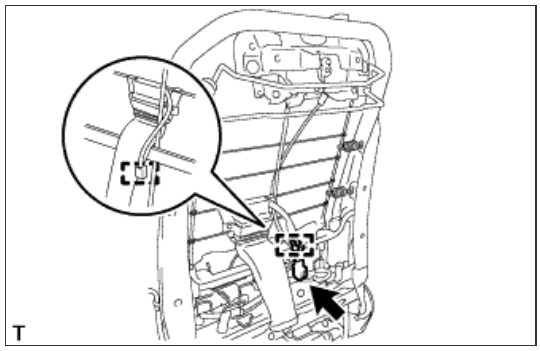
a. Move the controller in the direction of the arrow and attach the 2 hooks on the bottom. Then attach the 2 hooks on the top to install the controller.



b. Attach the connector clamp.

c. Connect the connector.

d. Install the clamp.



3. INSTALL SEATBACK COVER WITH PAD

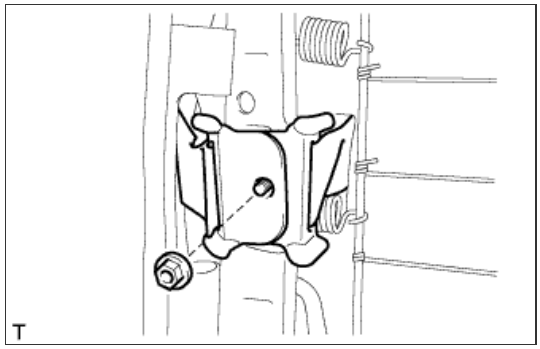
a. Install the seatback cover with pad to the seatback frame.

b. Install the seatback cover bracket to the seat frame with the nut.

Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }

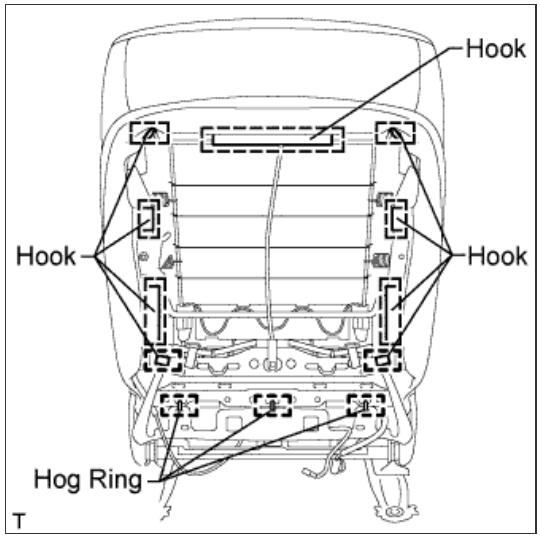
CAUTION:

After the seatback cover is assembled, make sure the side airbag strap is not twisted.

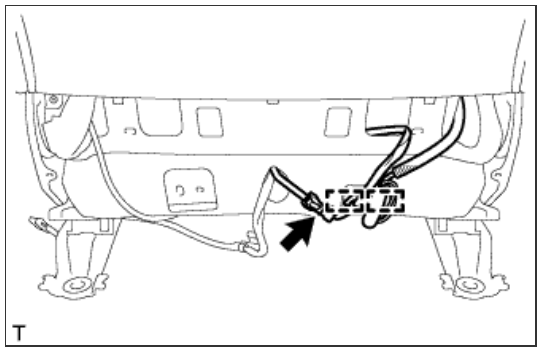


c. Attach the 9 hooks.

d. Using hog ring pliers, install 3 new hog rings to the seat frame.

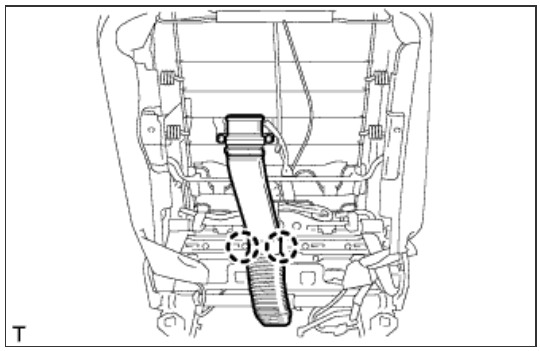


e. w/ Seat Heater System:
Connect the seat heater connector and attach the 2 wire harness clamps.

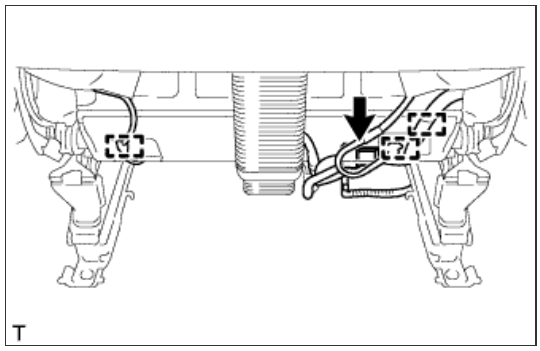


f. w/ Climate Control Seat System:

i. Attach the 2 claws to connect the duct.



ii. Connect the seat heater connector and attach the 3 wire harness clamps.



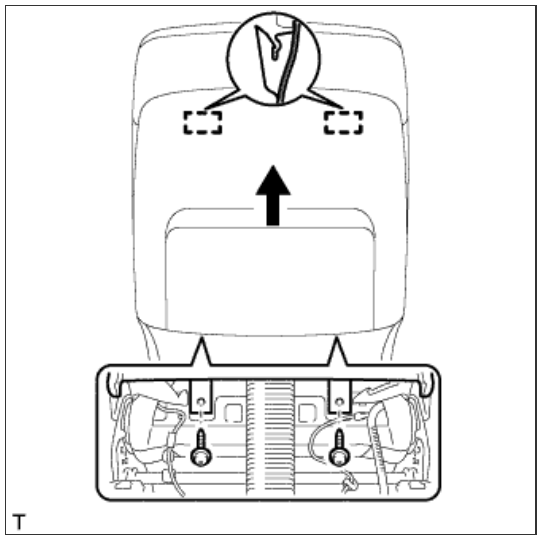
4. INSTALL FRONT SEAT HEADREST SUPPORT

a. Attach the 4 claws to install the 2 headrest supports.

5. INSTALL FRONT SEATBACK BOARD SUB-ASSEMBLY LH

a. Move the seatback board in the direction of the arrow to attach the 2 hooks and install the seatback board.

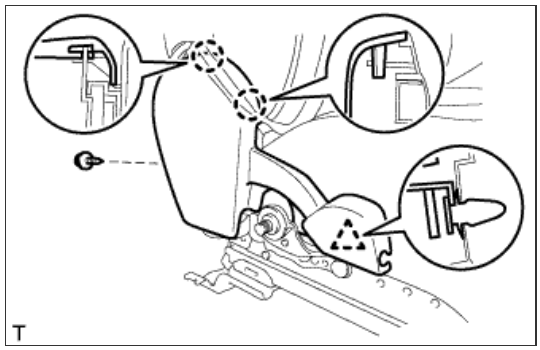
b. Install the 2 screws.



6. INSTALL FRONT INNER SEAT CUSHION SHIELD LH

a. Attach the 2 claws and clip to install the cushion shield.

b. Install the screw.



7. INSTALL FRONT SEAT INNER BELT ASSEMBLY LH

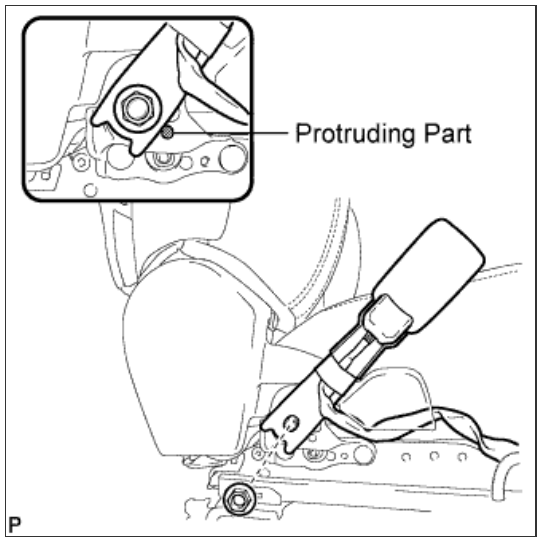
a. Install the front seat inner belt assembly with the nut.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not allow the anchor part of the front seat inner belt assembly to overlap the protruding part of the front seat adjuster.

b. Connect the 3 connectors and attach the clamps.



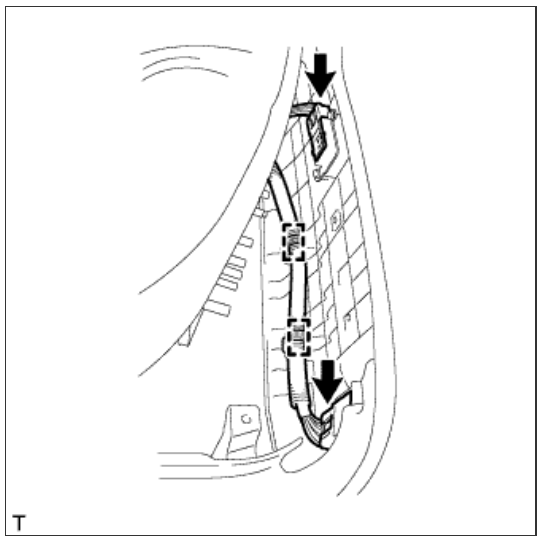
8. INSTALL FRONT SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

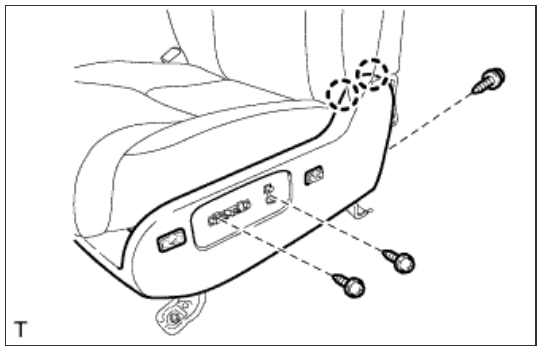
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

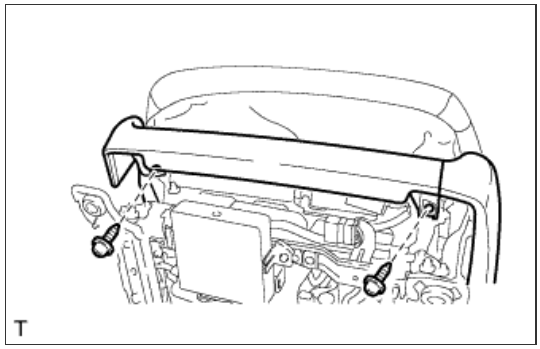


c. Attach the 2 claws to install the cushion shield.

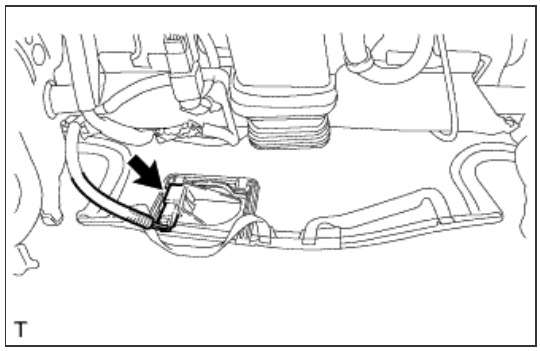
d. Install the 3 screws.



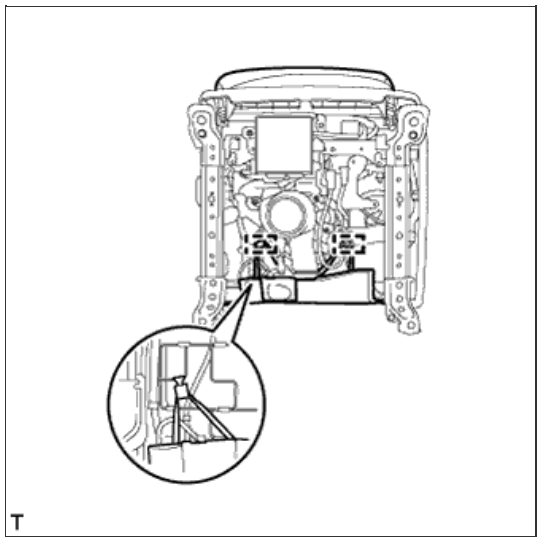
e. Install the 2 screws.



f. Connect the interior illumination light connector.

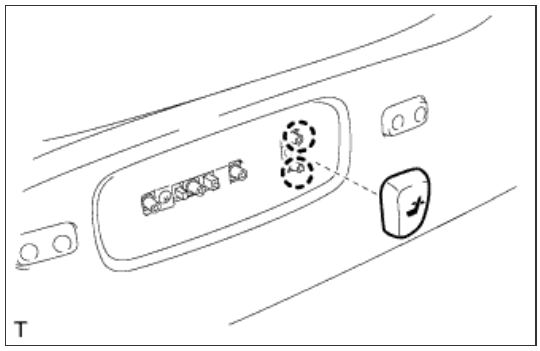


g. Attach the 2 rubber bands to the hooks.



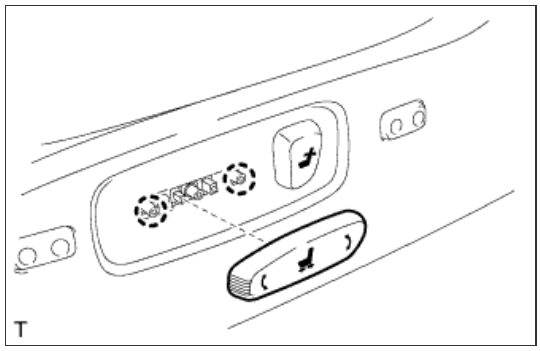
9. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



10. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.

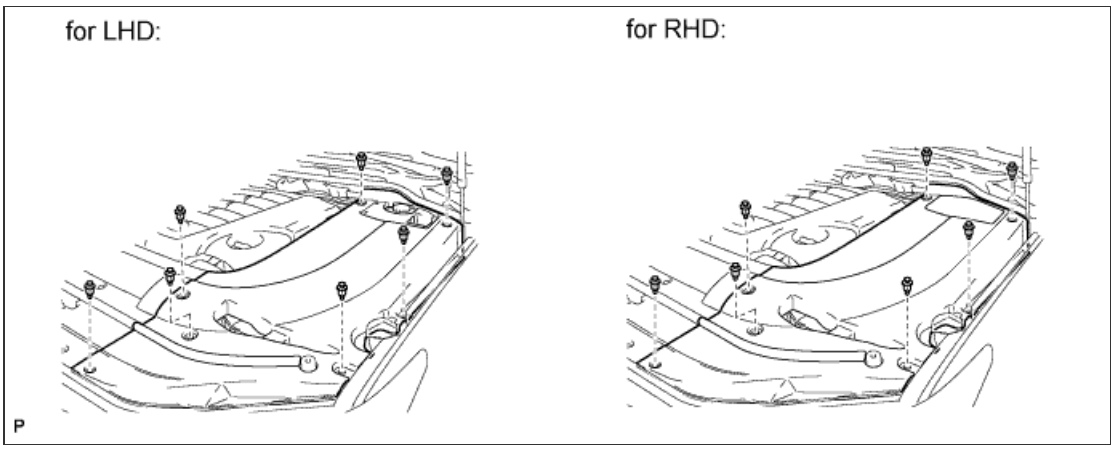


11. INSTALL FRONT SEAT ASSEMBLY LH

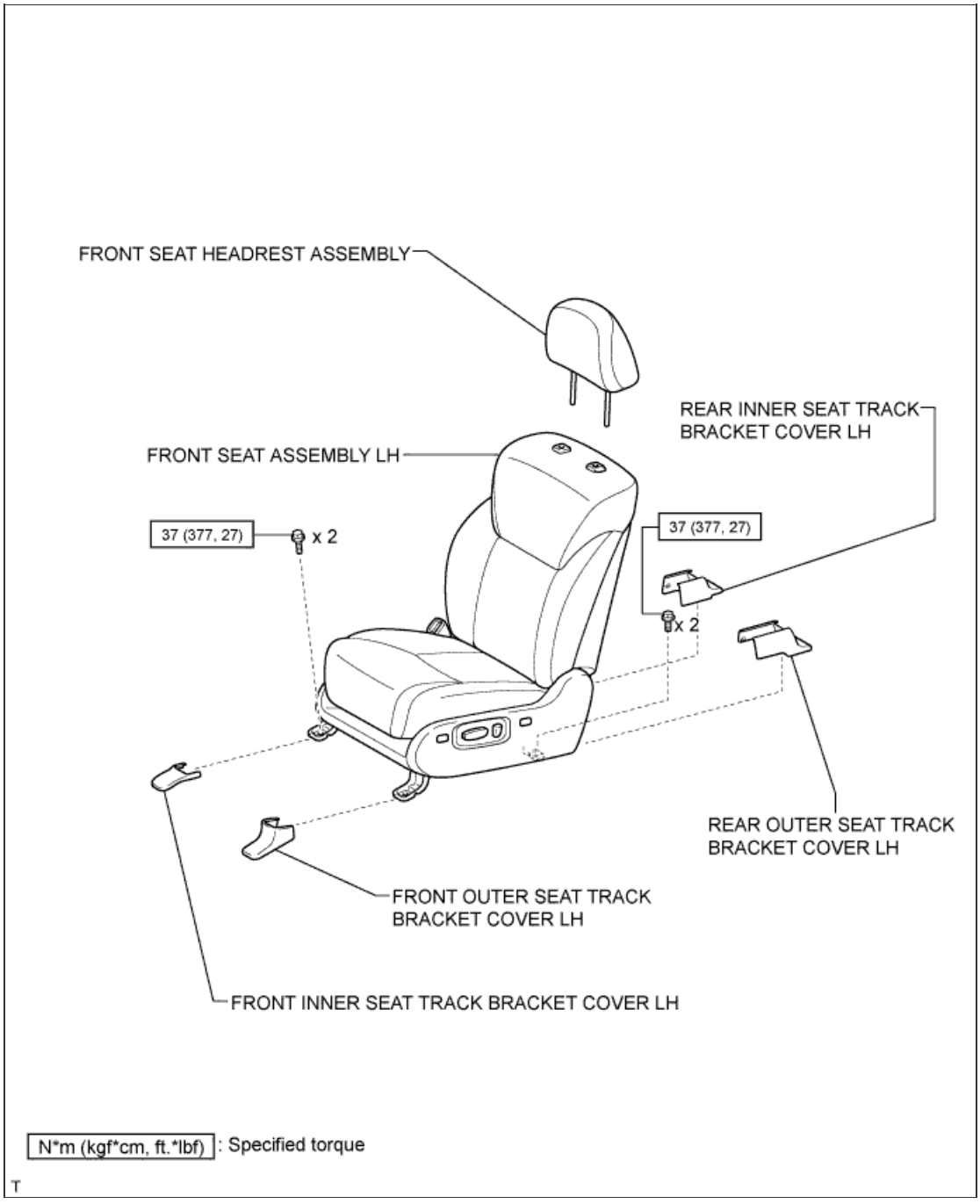
a. Install the front seat assembly (Click here).

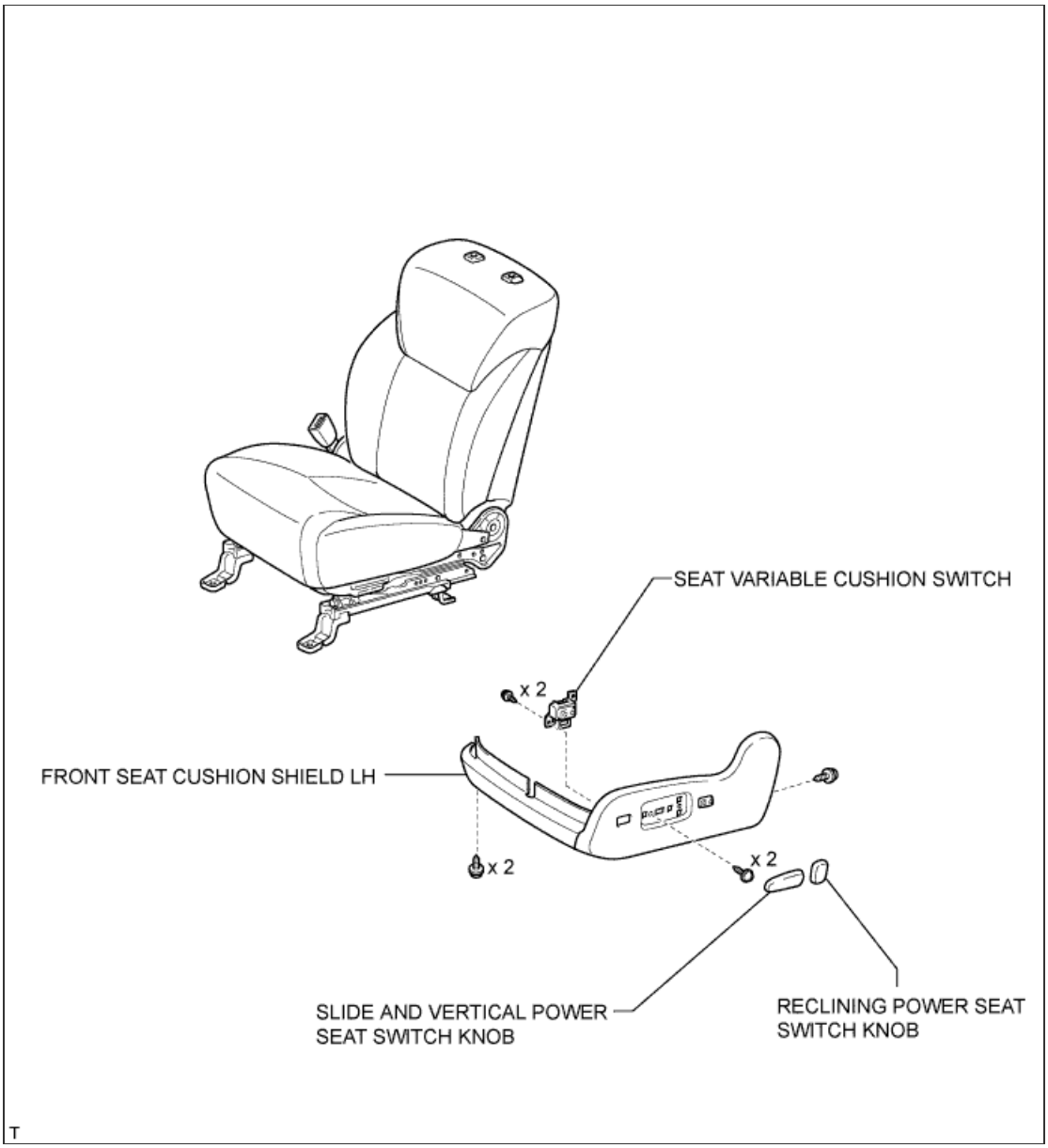
12. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here




SEAT VARIABLE CUSHION SWITCH
x 2
FRONT SEAT CUSHION SHIELD LH
x 2
x 2
SLIDE AND VERTICAL POWER SEAT SWITCH KNOB
RECLINING POWER SEAT SWITCH KNOB

T

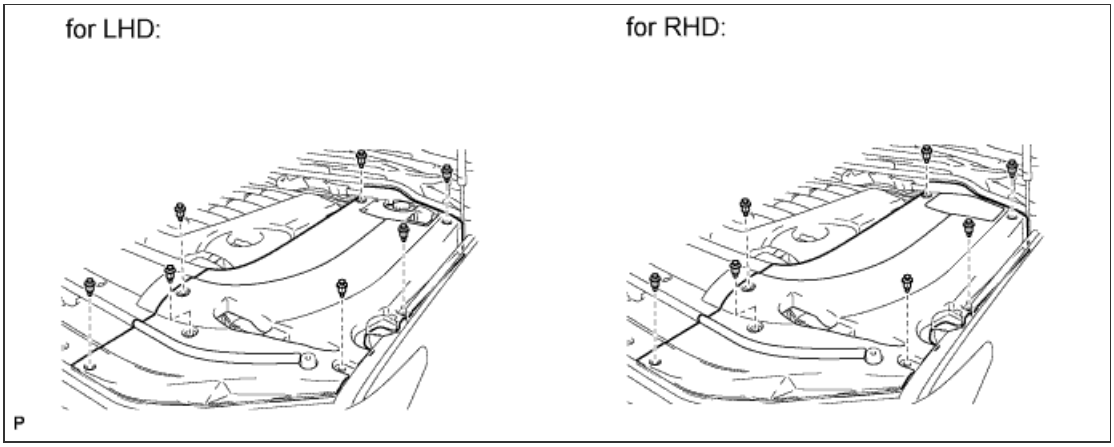
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly (Click here).

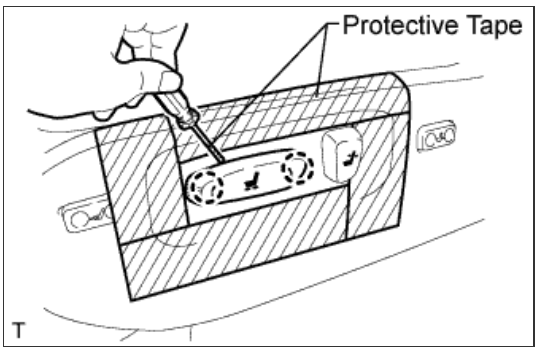
3. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

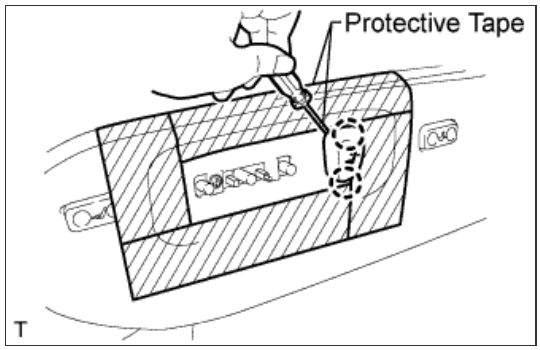


4. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

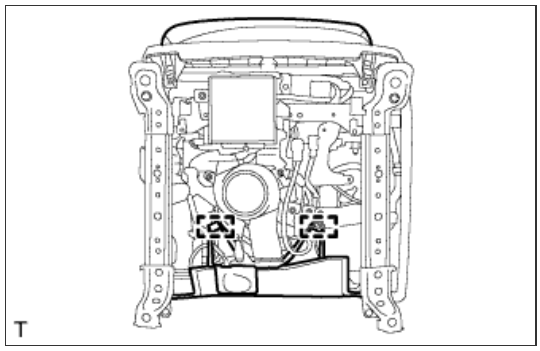
HINT:

Tape the screwdriver tip before use.

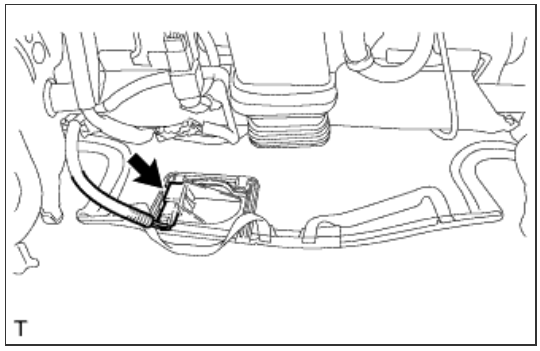


5. REMOVE FRONT SEAT CUSHION SHIELD LH

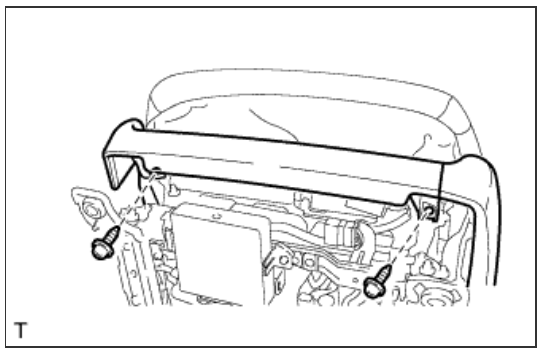
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

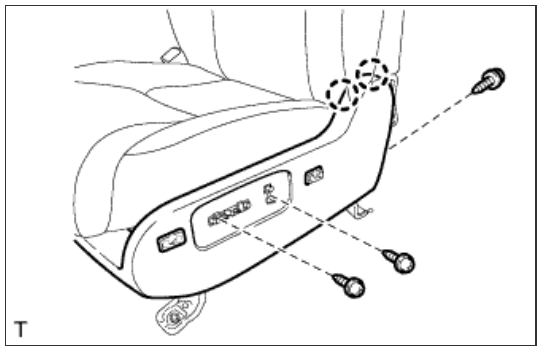


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

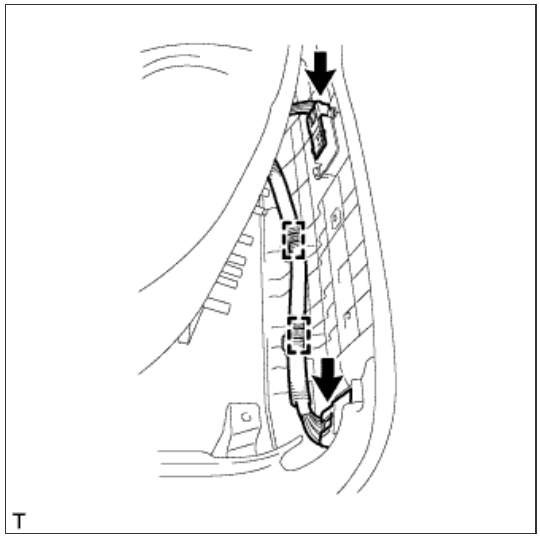


f. for Driver Side:

i. Detach the 2 wire harness clamps.

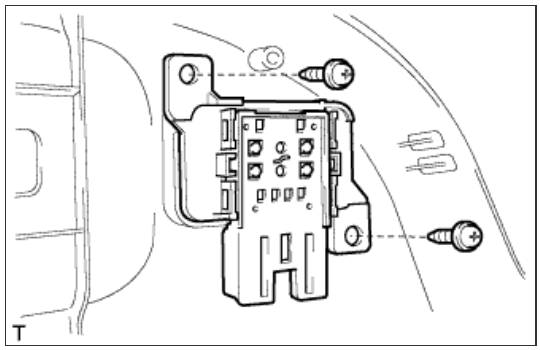
ii. Disconnect the 2 connectors.

g. for Front Passenger Side:
Disconnect the connector.



6. REMOVE SEAT VARIABLE CUSHION SWITCH

a. Remove the 2 screws and switch.



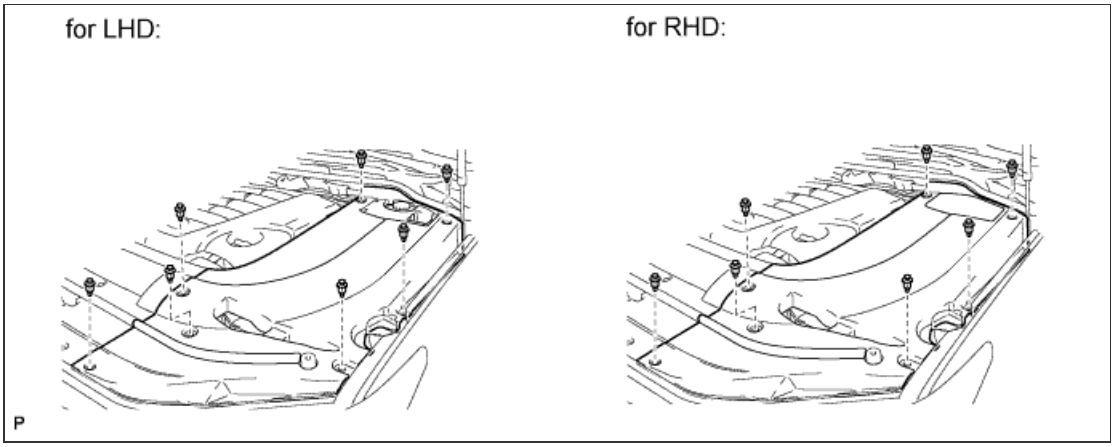
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly (Click here).

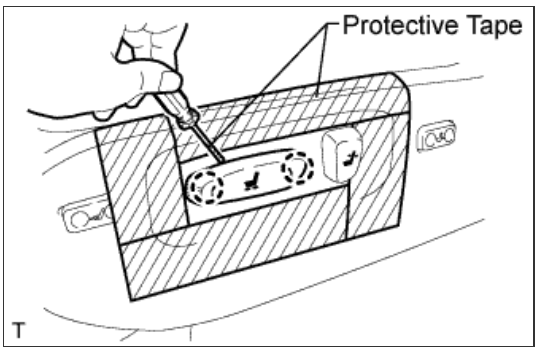
3. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

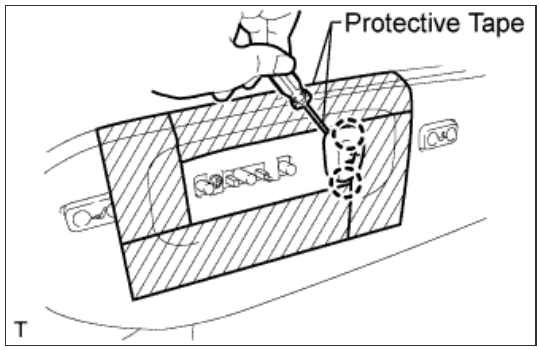


4. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

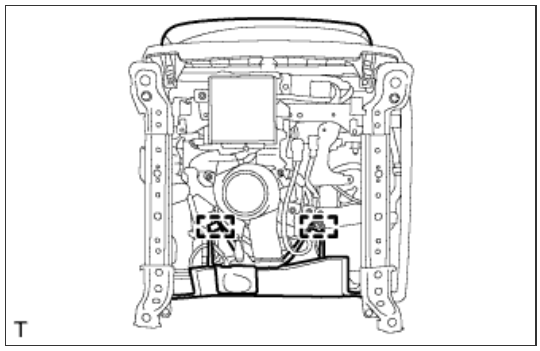
HINT:

Tape the screwdriver tip before use.

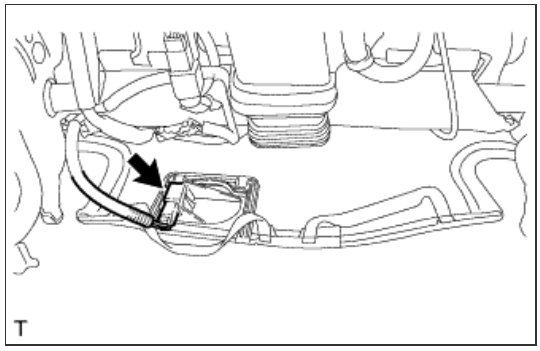


5. REMOVE FRONT SEAT CUSHION SHIELD LH

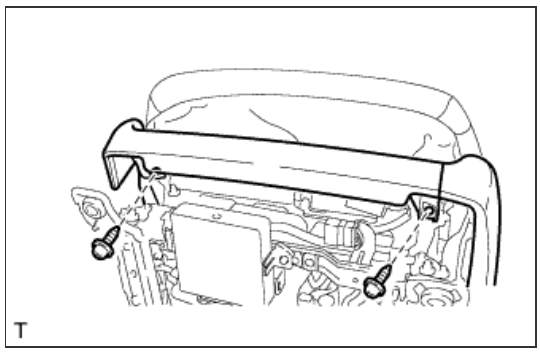
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

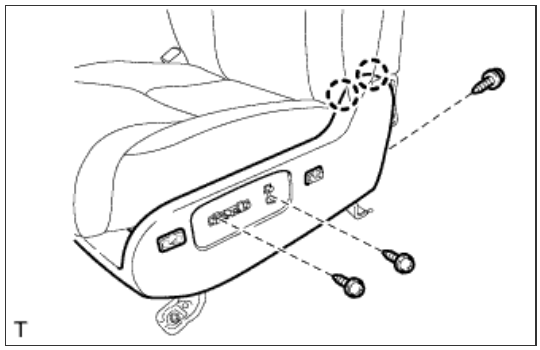


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

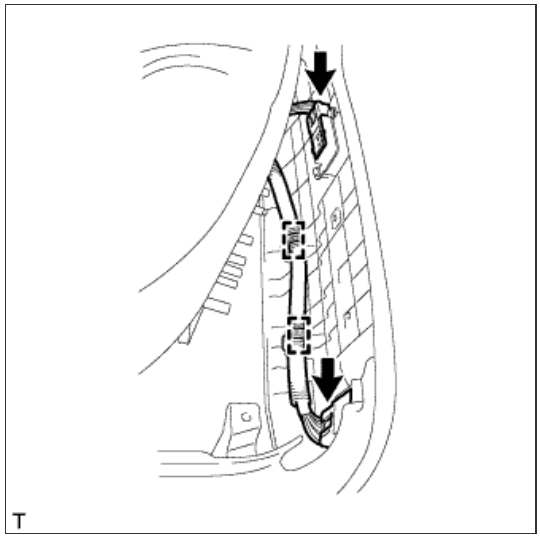


f. for Driver Side:

i. Detach the 2 wire harness clamps.

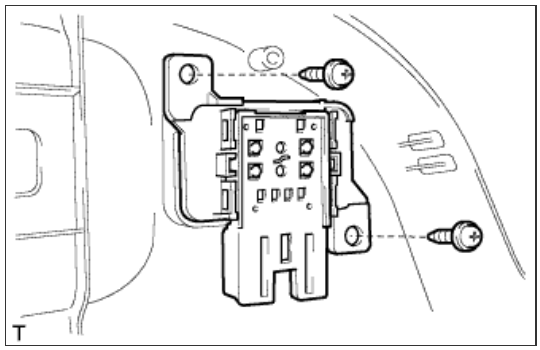
ii. Disconnect the 2 connectors.

g. for Front Passenger Side:
Disconnect the connector.



6. REMOVE SEAT VARIABLE CUSHION SWITCH

a. Remove the 2 screws and switch.



for Preparation Click here

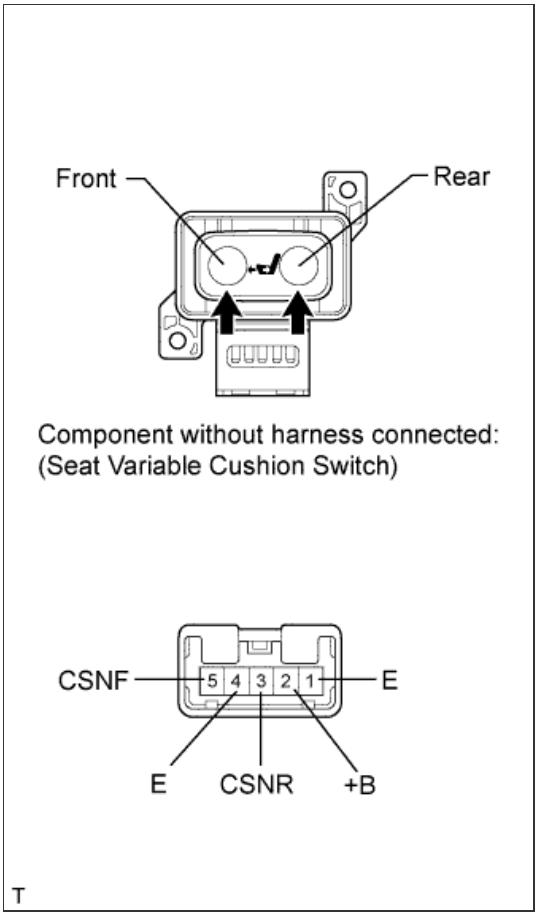
1. INSPECT SEAT VARIABLE CUSHION SWITCH (for LHD)

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
2 (+B) - 5 (CSNF)	Front	Below 1 Ω
3 (CSNR) - 4 (E)		
3 (CSNR) - 4 (E)	Off	
1 (E) - 5 (CSNF)		
2 (+B) - 3 (CSNR)	Rear	
1 (E) - 5 (CSNF)		

If the result is not as specified, replace the seat variable cushion switch.



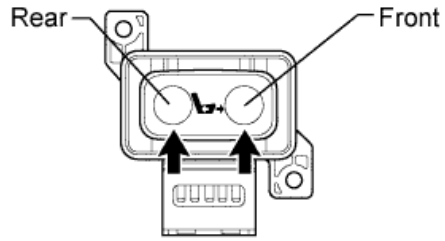
2. INSPECT SEAT VARIABLE CUSHION SWITCH (for RHD)

a. Measure the resistance according to the value(s) in the table below.

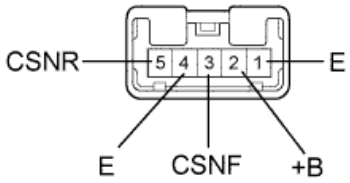
Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
2 (+B) - 3 (CSNF)	Front	Below 1 Ω
5 (CSNR) - 1 (E)		
5 (CSNR) - 1 (E)	Off	
3 (CSNF) - 4 (E)		
2 (+B) - 5 (CSNR)	Rear	
3 (CSNF) - 4 (E)		

If the result is not as specified, replace the seat variable cushion switch.



Component without harness connected:
(Seat Variable Cushion Switch)



T

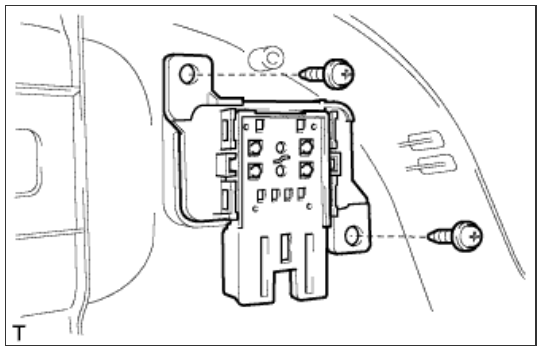
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL SEAT VARIABLE CUSHION SWITCH

a. Install the switch with the 2 screws.



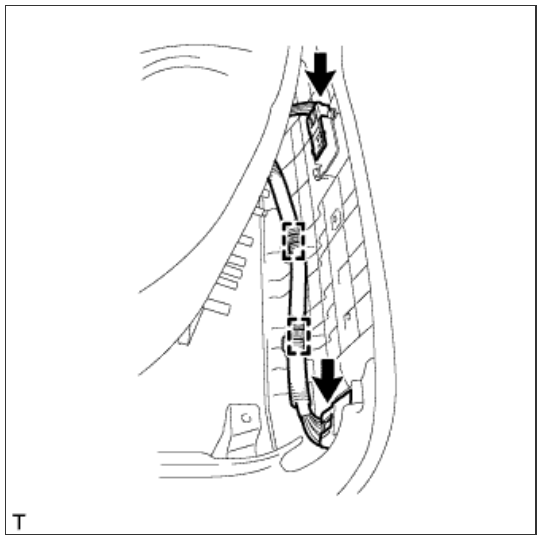
2. INSTALL FRONT SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

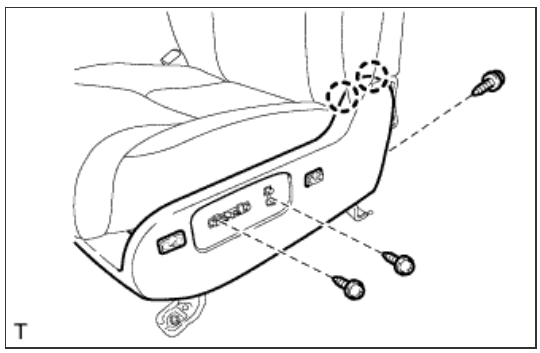
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

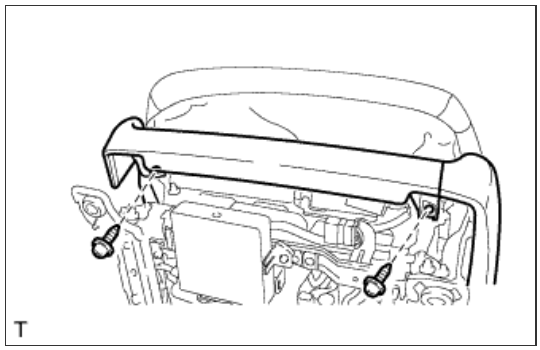


c. Attach the 2 claws to install the cushion shield.

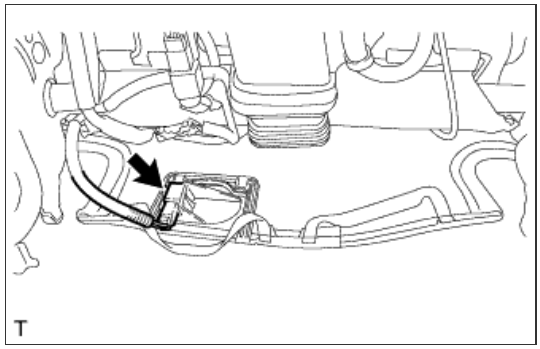
d. Install the 3 screws.



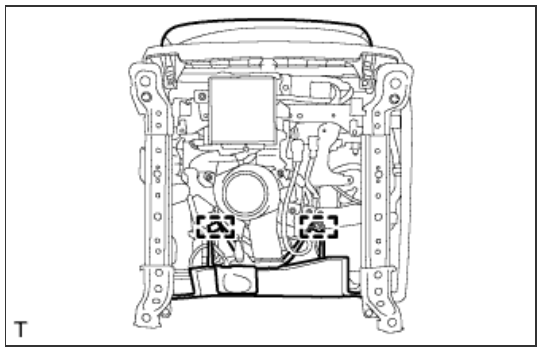
e. Install the 2 screws.



f. Connect the interior illumination light connector.

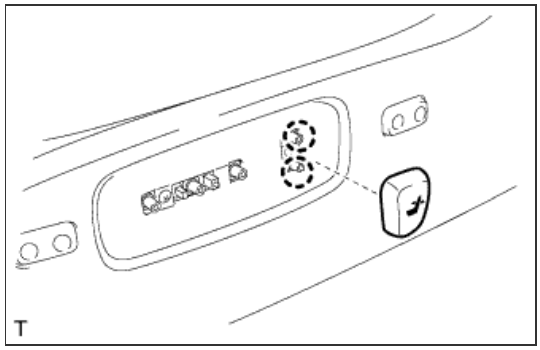


g. Attach the 2 rubber bands to the hooks.



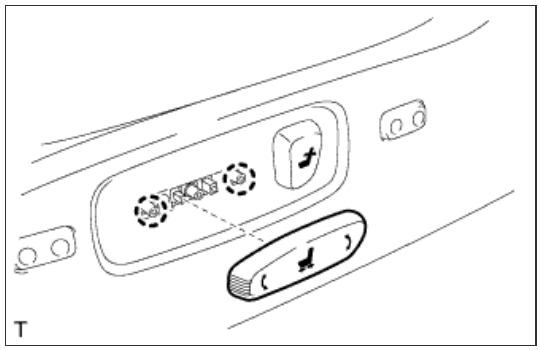
3. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



4. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.

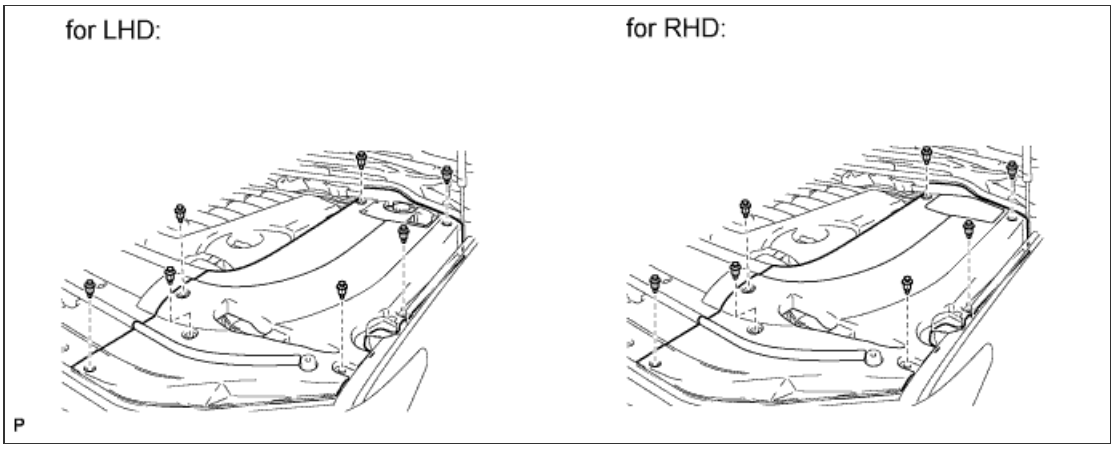


5. INSTALL FRONT SEAT ASSEMBLY LH

a. Install the front seat assembly (Click here).

6. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



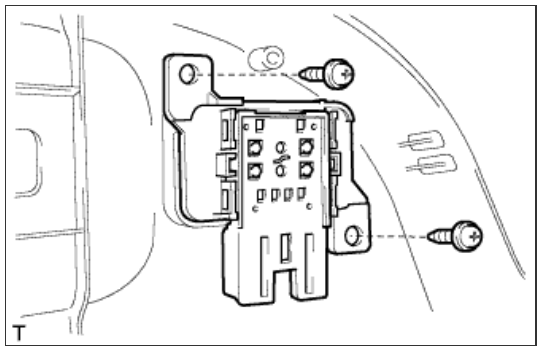
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL SEAT VARIABLE CUSHION SWITCH

a. Install the switch with the 2 screws.



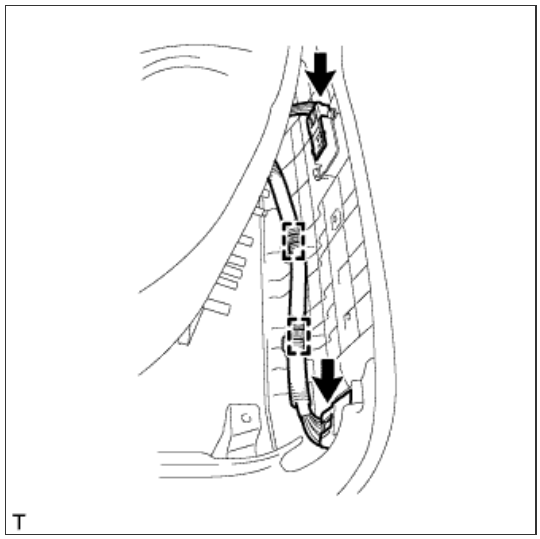
2. INSTALL FRONT SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

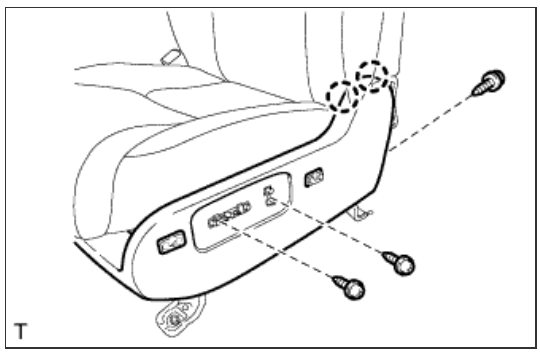
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

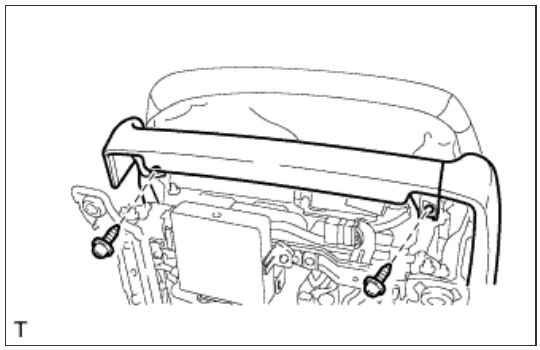


c. Attach the 2 claws to install the cushion shield.

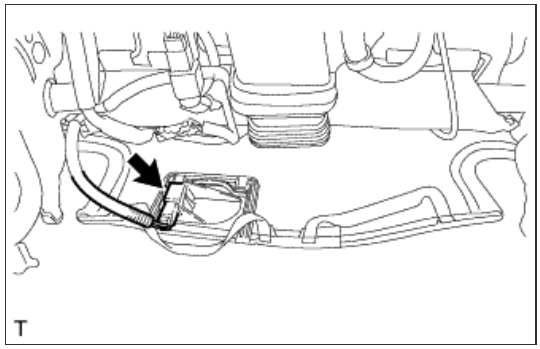
d. Install the 3 screws.



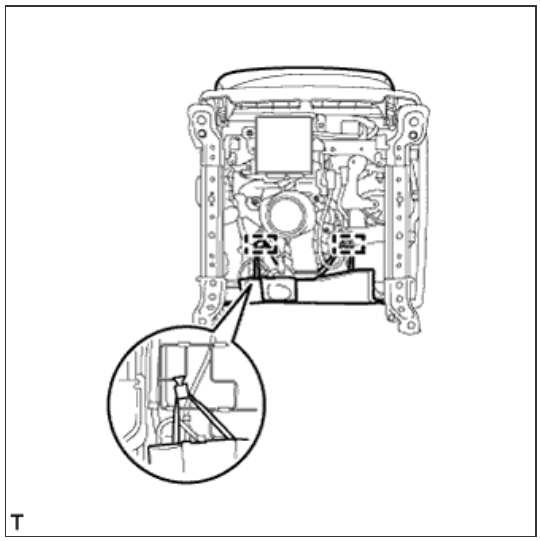
e. Install the 2 screws.



f. Connect the interior illumination light connector.

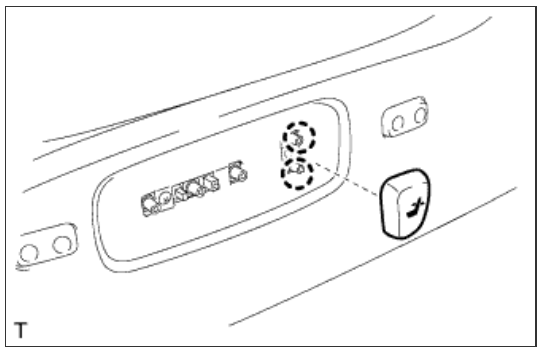


g. Attach the 2 rubber bands to the hooks.



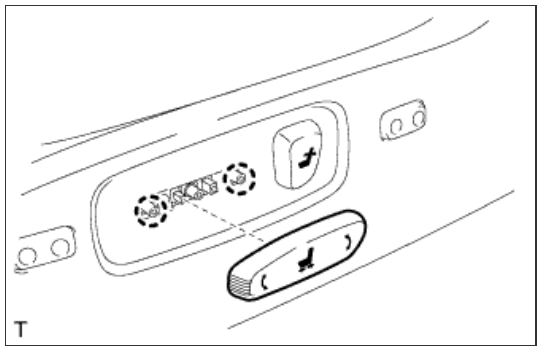
3. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



4. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.

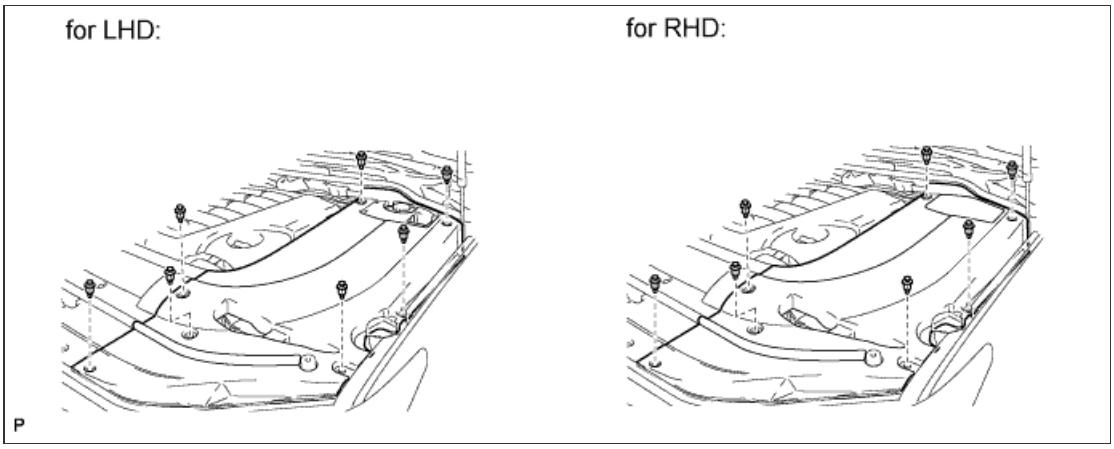


5. INSTALL FRONT SEAT ASSEMBLY LH

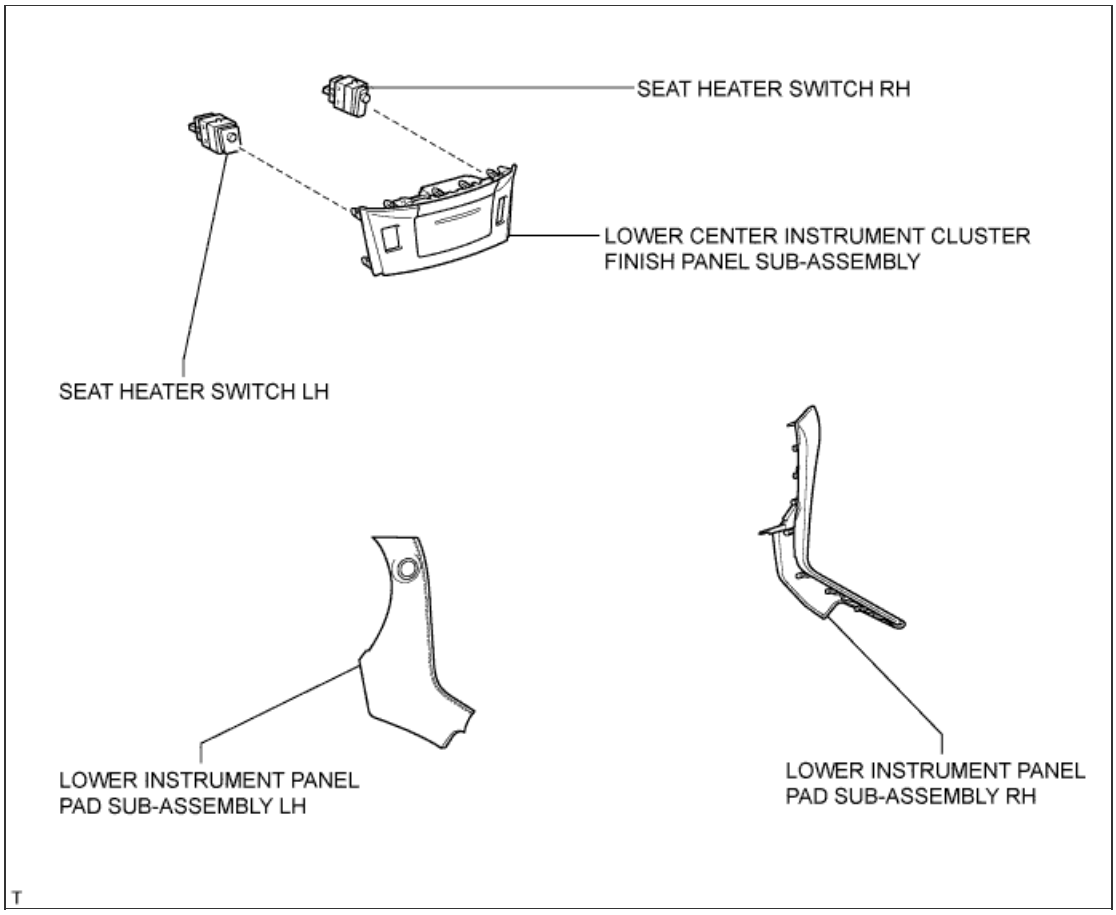
a. Install the front seat assembly (Click here).

6. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here



for Preparation Click here

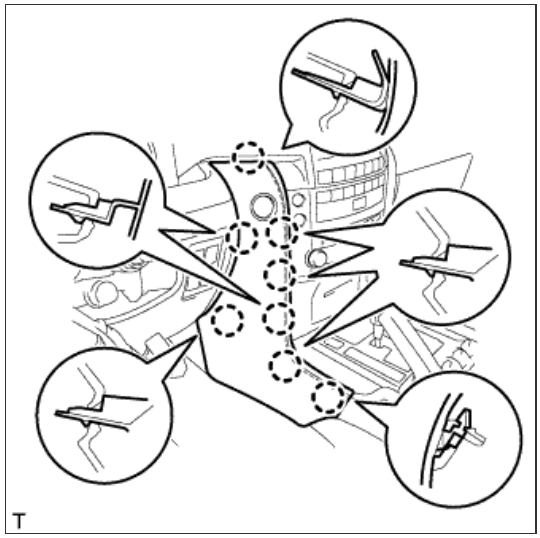
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

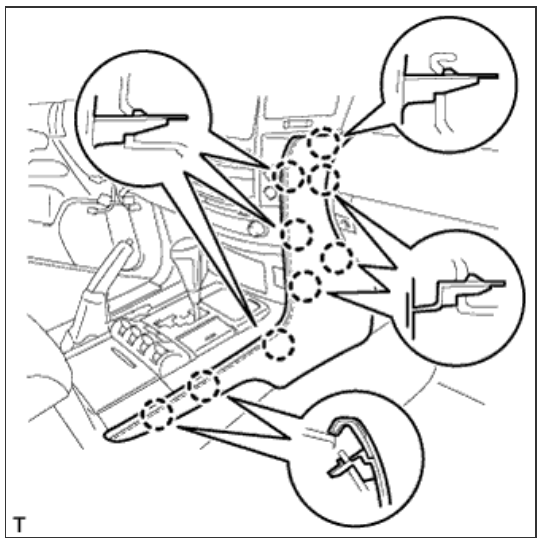
a. Detach the 8 claws.

b. Disconnect the connector and remove the panel pad.



2. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

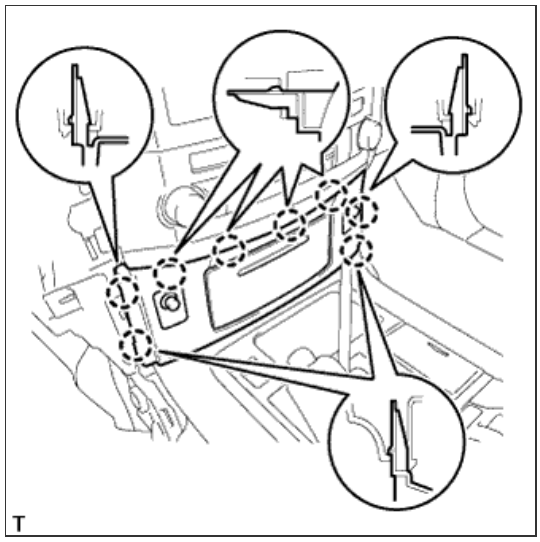
a. Detach the 9 claws and remove the panel pad.



3. REMOVE LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

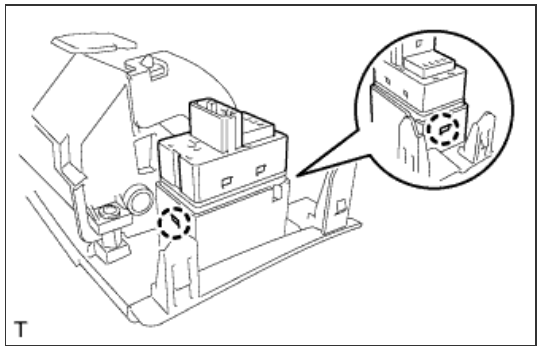
a. Detach the 8 claws.

b. Disconnect the connectors and remove the panel.



4. REMOVE SEAT HEATER SWITCH LH

a. Using a screwdriver, detach the 2 claws and remove the switch.



5. REMOVE SEAT HEATER SWITCH RH

HINT:

Use the same procedures described for the LH side.

for Preparation Click here

1. INSPECT SEAT HEATER SWITCH LH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
3 (VGL) - 5 (V5L)	Switch off	2.7 to 4.1 kΩ
	Switch on (Min.)	
	Switch on (Max.)	0.28 to 0.42 kΩ

HINT:

As the dial is being turned, the resistance changes gradually.

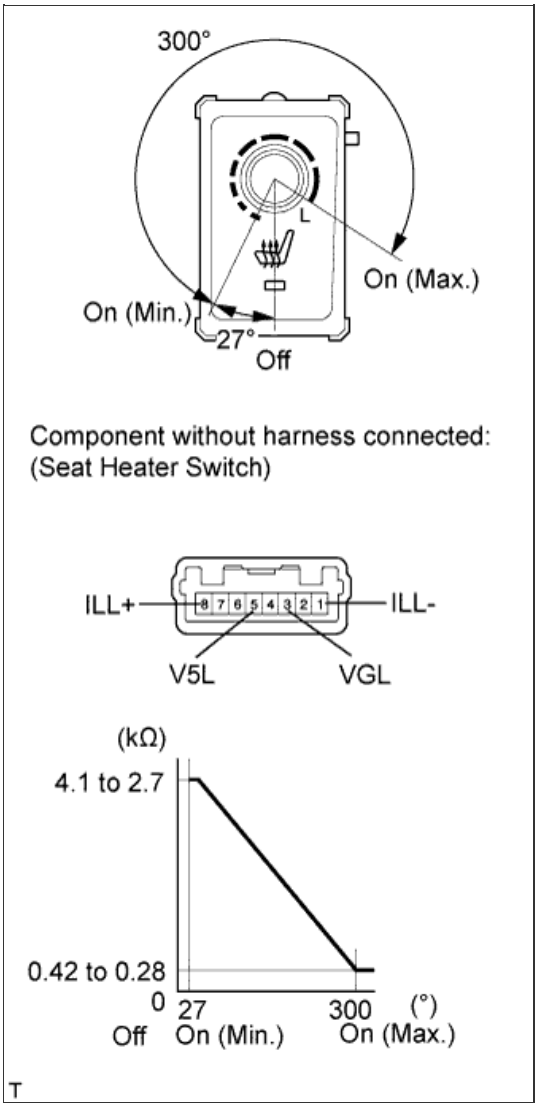
If the result is not as specified, replace the seat heater switch.

b. Apply battery voltage to the switch connector, and check that the seat heater switch illuminates.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 8 (ILL+) Battery negative (-) → 5 (ILL-)	Switch illuminates

If the result is not as specified, replace the seat heater switch.



2. INSPECT SEAT HEATER SWITCH RH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
3 (VGR) - 5 (V5R)	Switch off	2.7 to 4.1 kΩ
	Switch on (Min.)	
	Switch on (Max.)	0.28 to 0.42 kΩ

HINT:

As the dial is being turned, the resistance changes gradually.

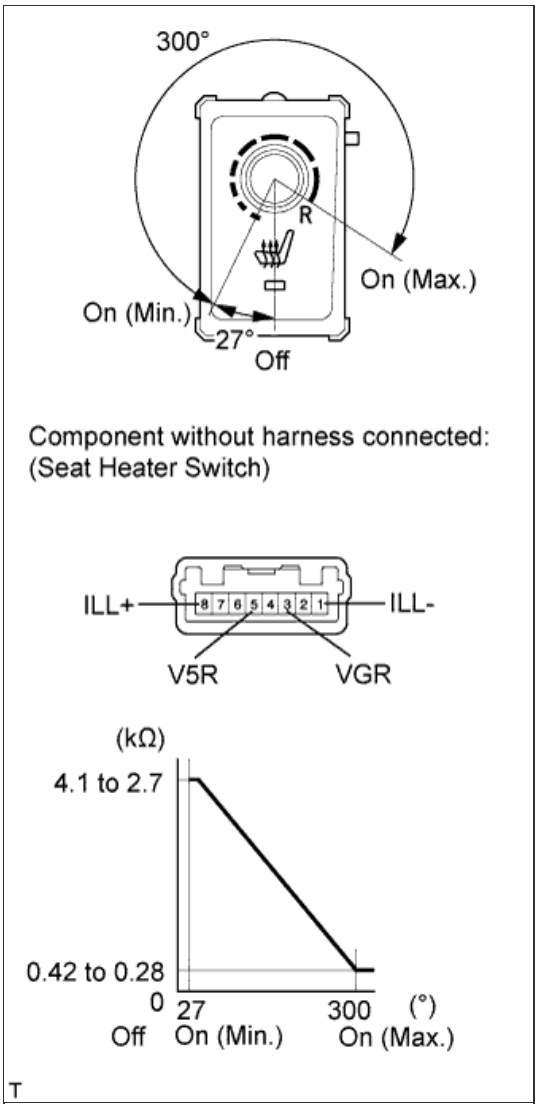
If the result is not as specified, replace the seat heater switch.

b. Apply battery voltage to the switch connector, and check that the seat heater switch illuminates.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 8 (ILL+) Battery negative (-) → 5 (ILL-)	Switch illuminates

If the result is not as specified, replace the seat heater switch.



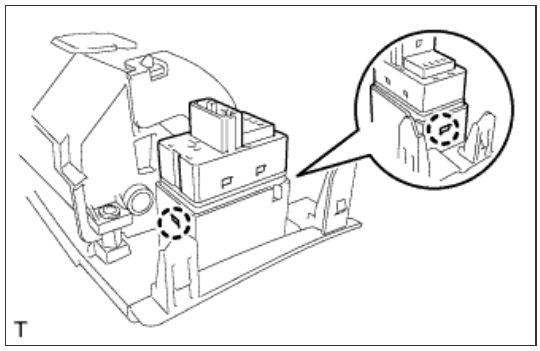
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL SEAT HEATER SWITCH LH

a. Attach the 2 claws to install the switch.



2. INSTALL SEAT HEATER SWITCH RH

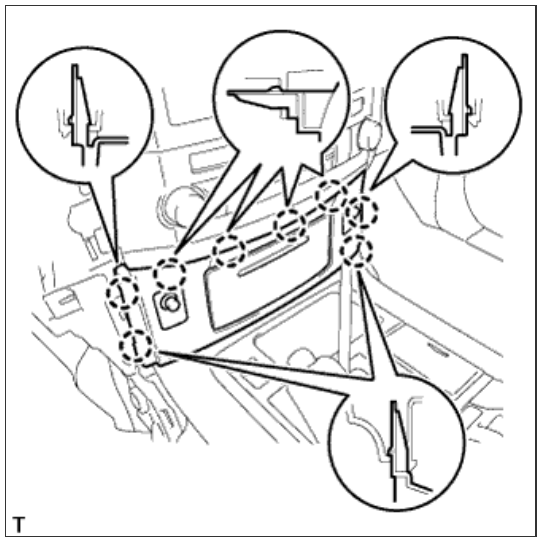
HINT:

Use the same procedures described for the LH side.

3. INSTALL LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

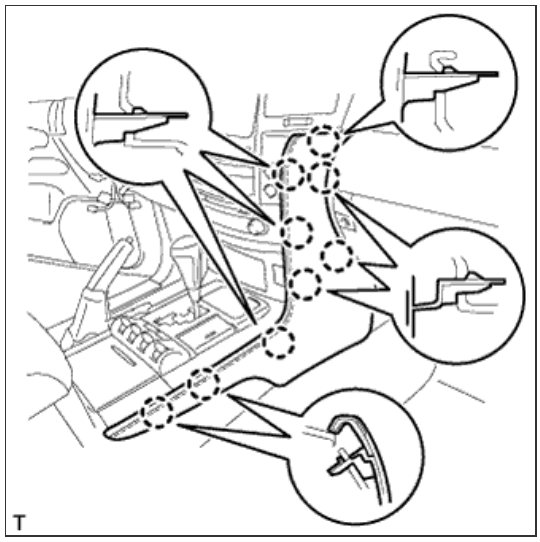
a. Connect the connectors.

b. Attach the 8 claws to install the panel.



4. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

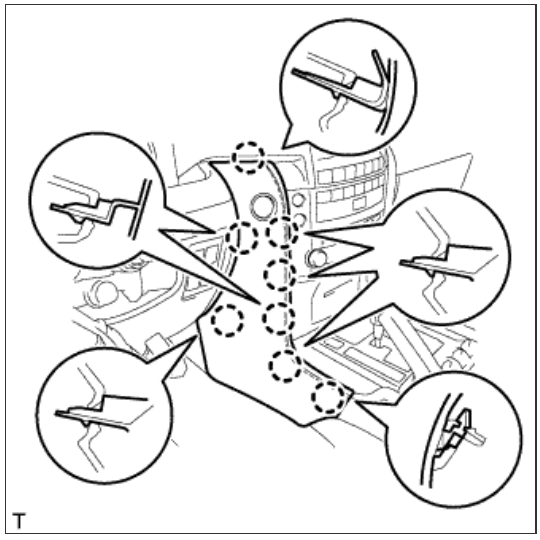
a. Attach the 9 claws to install the panel pad.



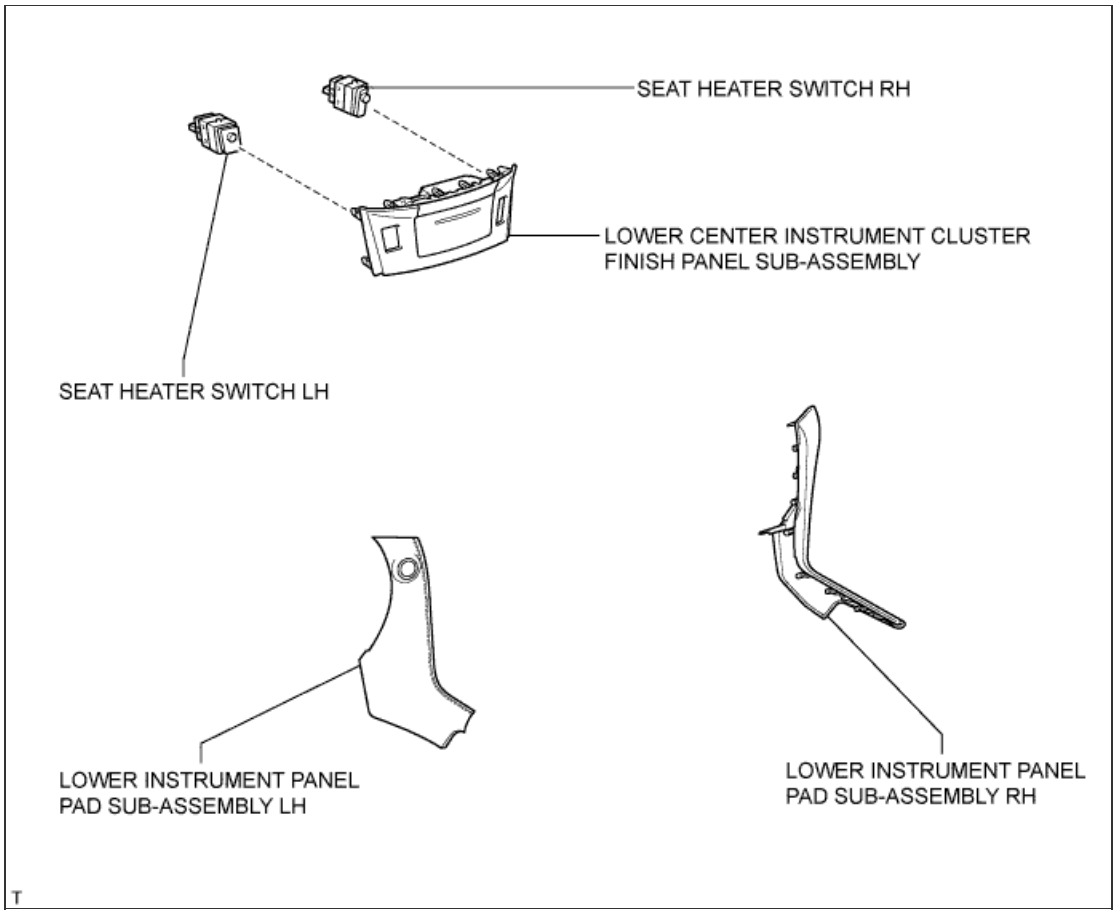
5. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Connect the connector.

b. Attach the 8 claws to install the panel pad.



for Preparation Click here



for Preparation Click here

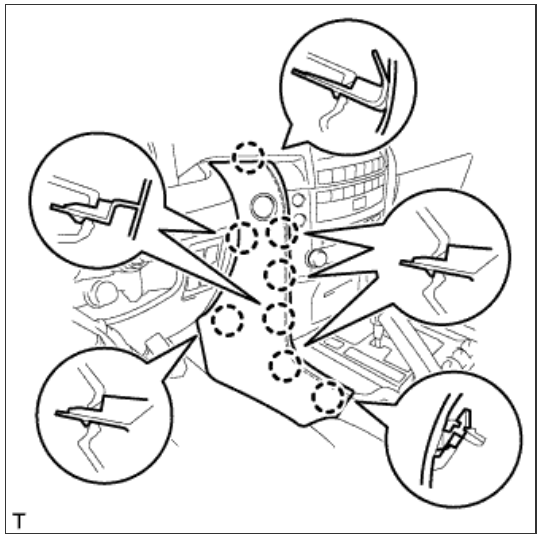
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

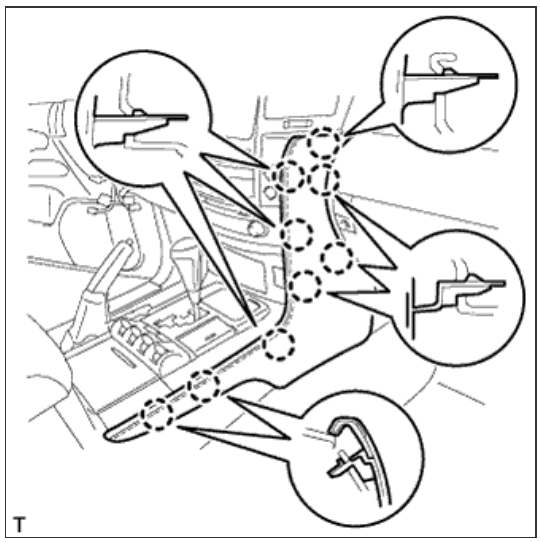
a. Detach the 8 claws.

b. Disconnect the connector and remove the panel pad.



2. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

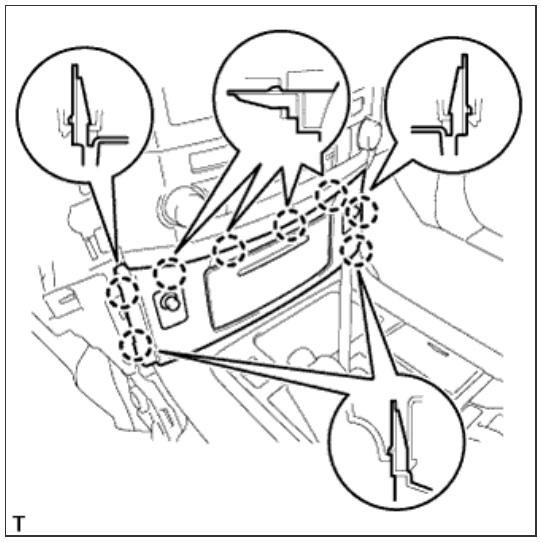
a. Detach the 9 claws and remove the panel pad.



3. REMOVE LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

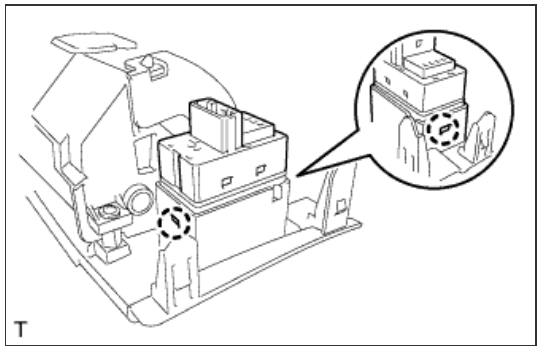
a. Detach the 8 claws.

b. Disconnect the connectors and remove the panel.



4. REMOVE CLIMATE CONTROL SEAT SWITCH LH

a. Using a screwdriver, detach the 2 claws and remove the switch.



5. REMOVE CLIMATE CONTROL SEAT SWITCH RH

HINT:

Use the same procedures described for the LH side.

for Preparation Click here

1. INSPECT CLIMATE CONTROL SEAT SWITCH LH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
5 (V5L) - 4 (VSL)	Cold (Hi) to Hot (Hi)	1 Ω to 5 kΩ

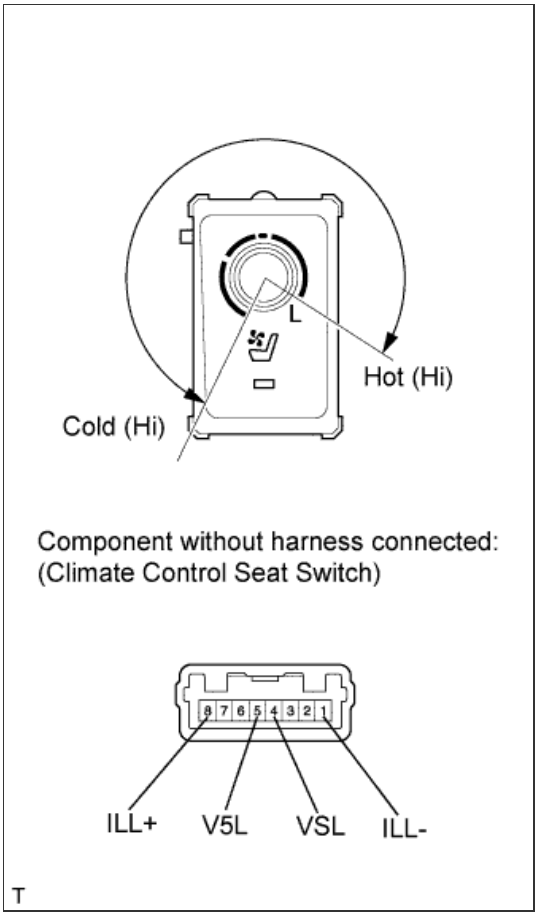
If the result is not as specified, replace the climate control seat switch.

b. Apply battery voltage to the switch connector, and check that the climate control seat switch illuminates.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → 8 (ILL+) Battery negative (-) → 1 (ILL-)	Switch illuminates

If the result is not as specified, replace the climate control seat switch.



2. INSPECT CLIMATE CONTROL SEAT SWITCH RH

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
5 (V5R) - 4 (VSR)	Cold (Hi) to Hot (Hi)	1 Ω to 5 kΩ

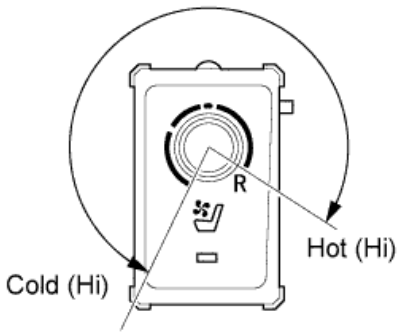
If the result is not as specified, replace the climate control seat switch.

b. Apply battery voltage to the switch connector, and check that the climate control seat switch illuminates.

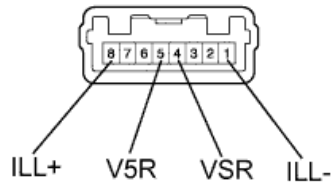
OK:

Measurement Condition	Specified Condition
Battery positive (+) → 8 (ILL+) Battery negative (-) → 1 (ILL-)	Switch illuminates

If the result is not as specified, replace the climate control seat switch.



Component without harness connected:
(Climate Control Seat Switch)



T

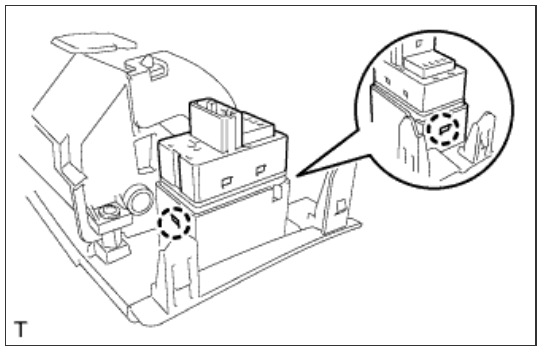
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL CLIMATE CONTROL SEAT SWITCH LH

a. Attach the 2 claws to install the switch.



2. INSTALL CLIMATE CONTROL SEAT SWITCH RH

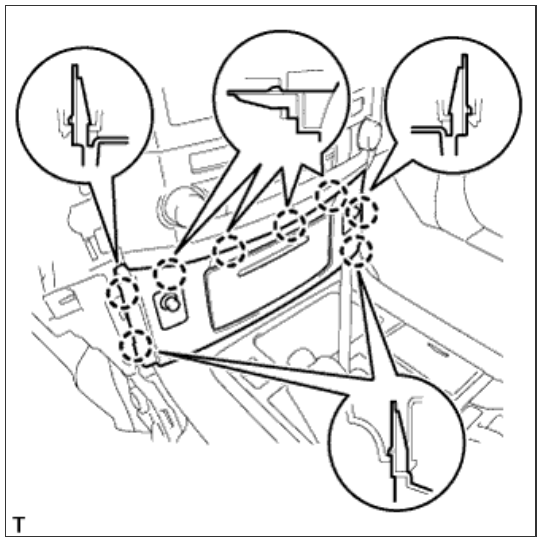
HINT:

Use the same procedures described for the LH side.

3. INSTALL LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

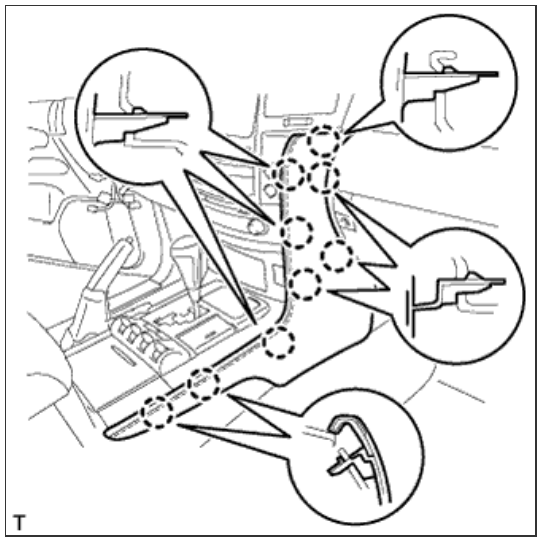
a. Connect the connectors.

b. Attach the 8 claws to install the panel.



4. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

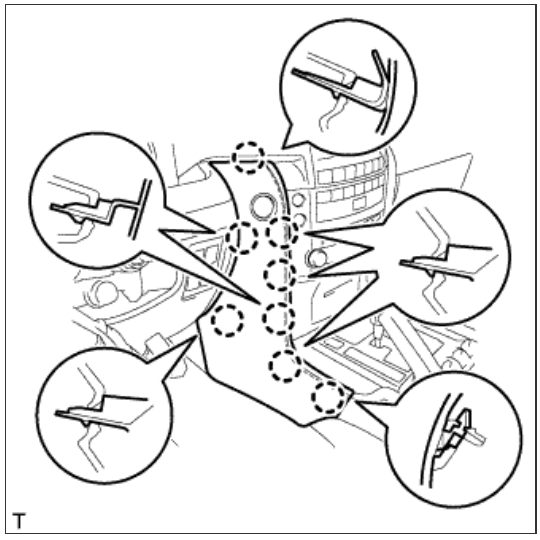
a. Attach the 9 claws to install the panel pad.



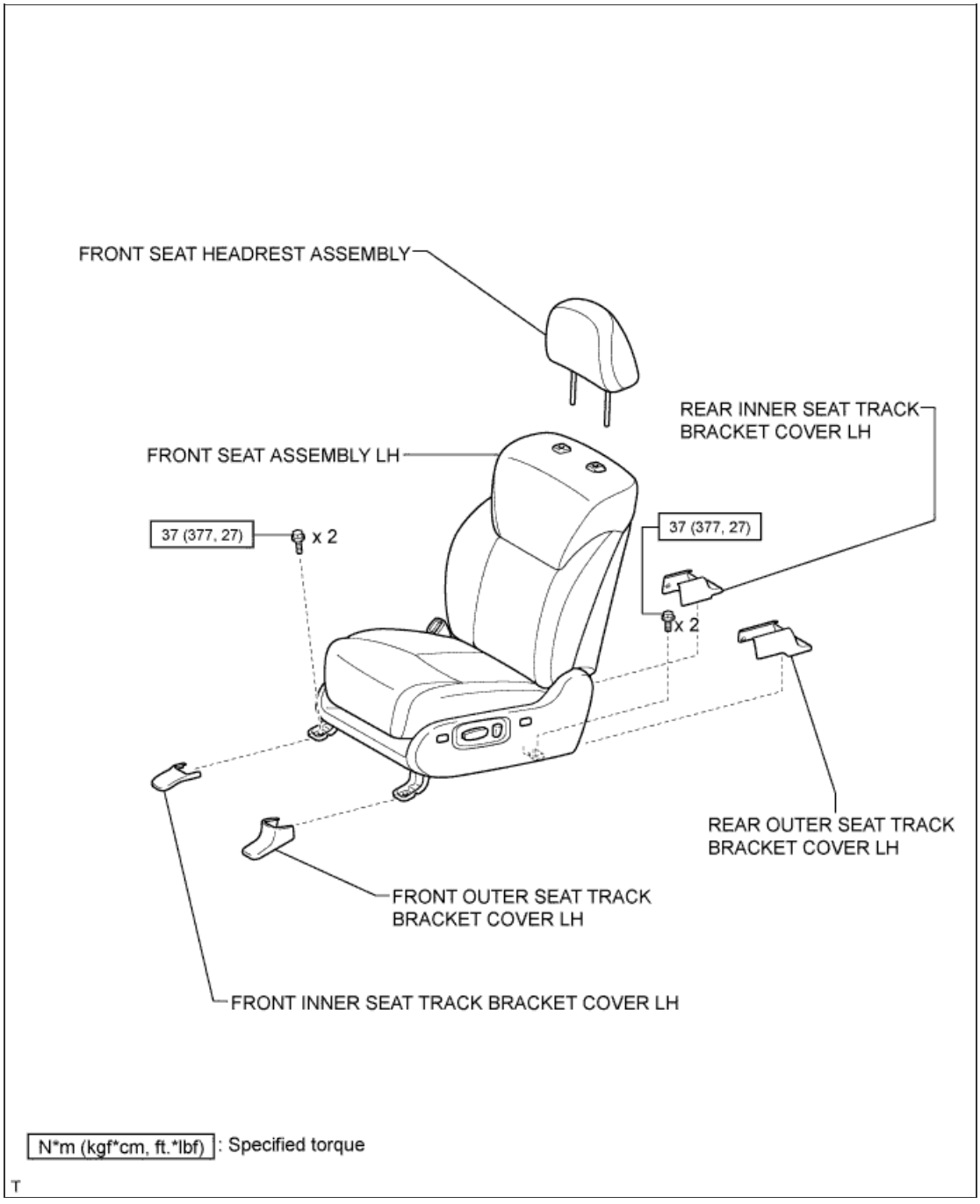
5. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

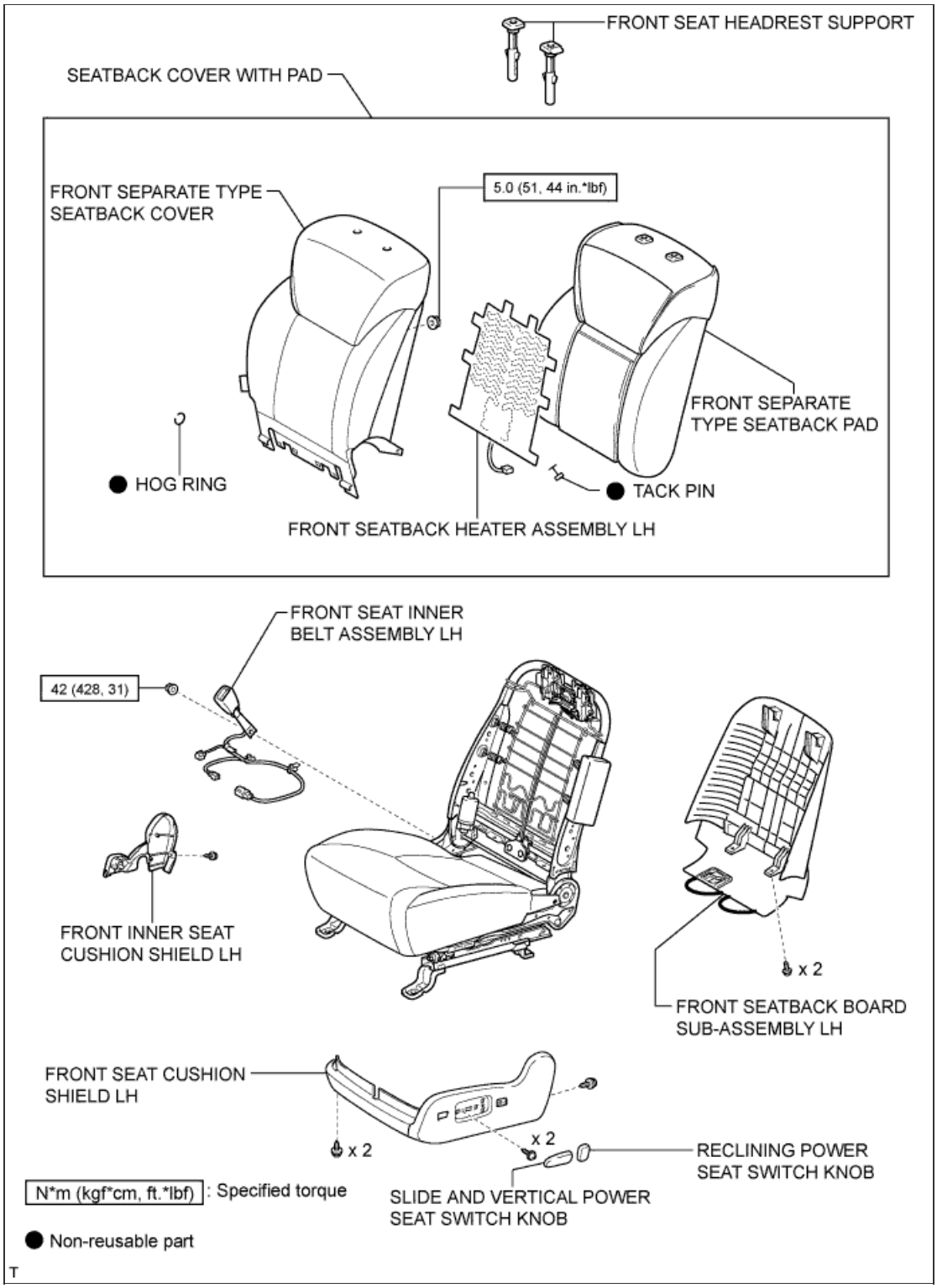
a. Connect the connector.

b. Attach the 8 claws to install the panel pad.



for Preparation Click here




FRONT SEAT HEADREST SUPPORT
SEATBACK COVER WITH PAD
FRONT SEPARATE TYPE SEATBACK COVER
5.0 (51, 44 in.*lbf)
FRONT SEPARATE TYPE SEATBACK PAD
HOG RING
TACK PIN
FRONT SEATBACK HEATER ASSEMBLY LH
FRONT SEAT INNER BELT ASSEMBLY LH
42 (428, 31)
FRONT INNER SEAT CUSHION SHIELD LH
x 2
FRONT SEATBACK BOARD SUB-ASSEMBLY LH
FRONT SEAT CUSHION SHIELD LH
x 2
x 2
RECLINING POWER SEAT SWITCH KNOB
SLIDE AND VERTICAL POWER SEAT SWITCH KNOB
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
T

for Preparation Click here

CAUTION:

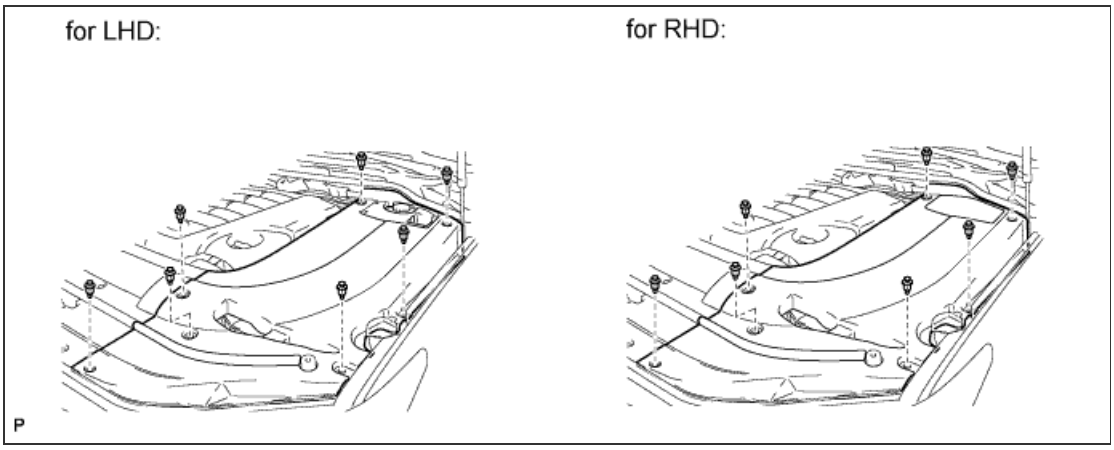
Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly (Click here).

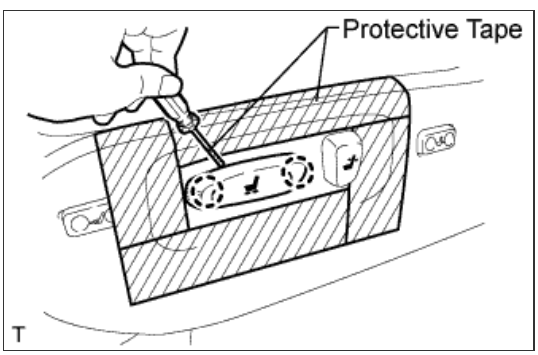
3. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

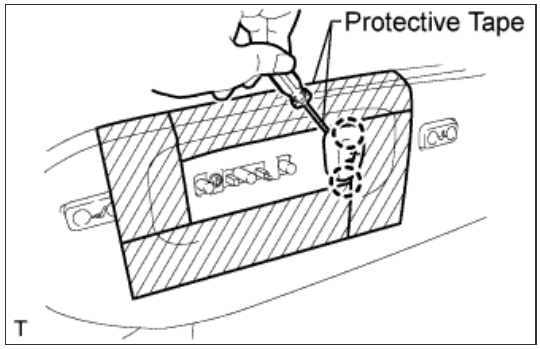


4. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

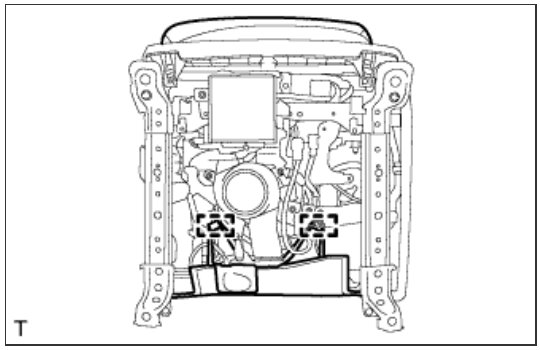
HINT:

Tape the screwdriver tip before use.

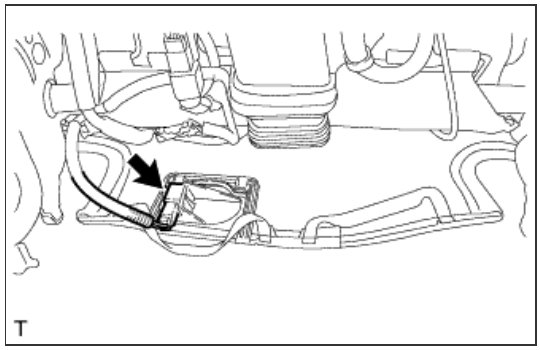


5. REMOVE FRONT SEAT CUSHION SHIELD LH

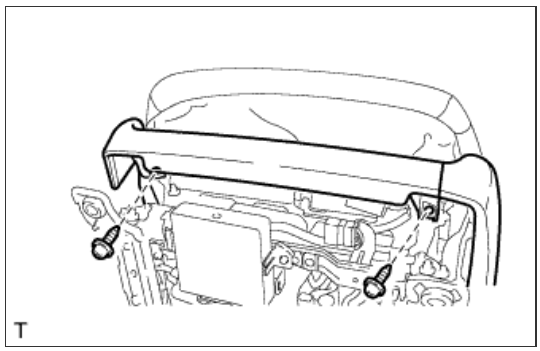
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

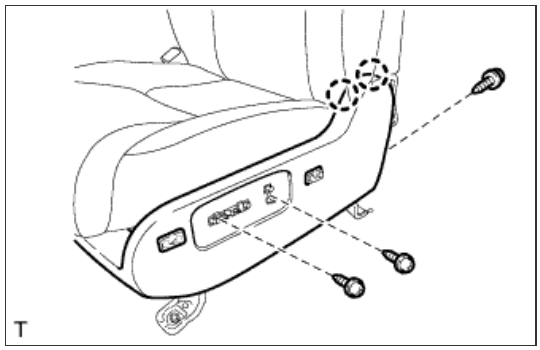


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

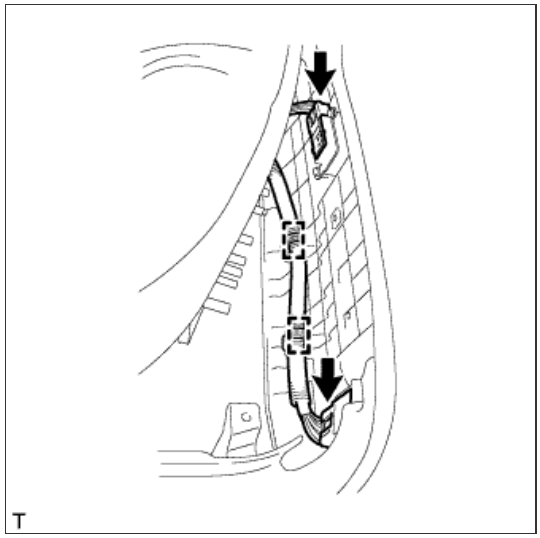


f. for Driver Side:

i. Detach the 2 wire harness clamps.

ii. Disconnect the 2 connectors.

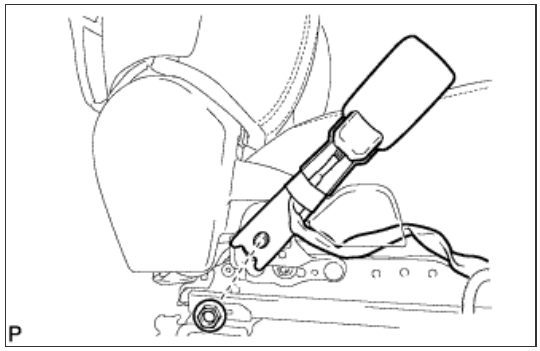
g. for Front Passenger Side:
Disconnect the connector.



6. REMOVE FRONT SEAT INNER BELT ASSEMBLY LH

a. Disconnect the 3 connectors and detach the clamps.

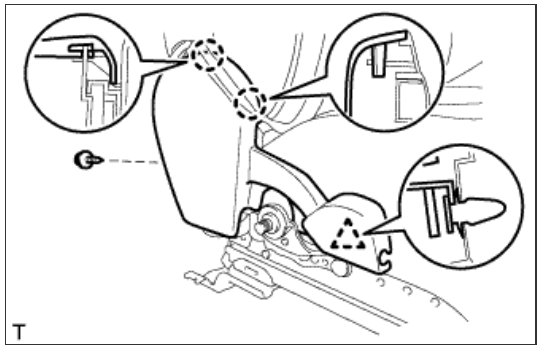
b. Remove the nut and front seat inner belt assembly.



7. REMOVE FRONT INNER SEAT CUSHION SHIELD LH

a. Remove the screw.

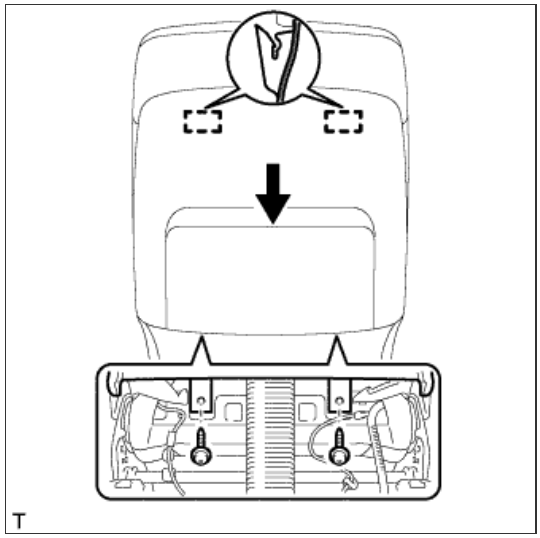
b. Detach the 2 claws and clip, and then remove the cushion shield.



8. REMOVE FRONT SEATBACK BOARD SUB-ASSEMBLY LH

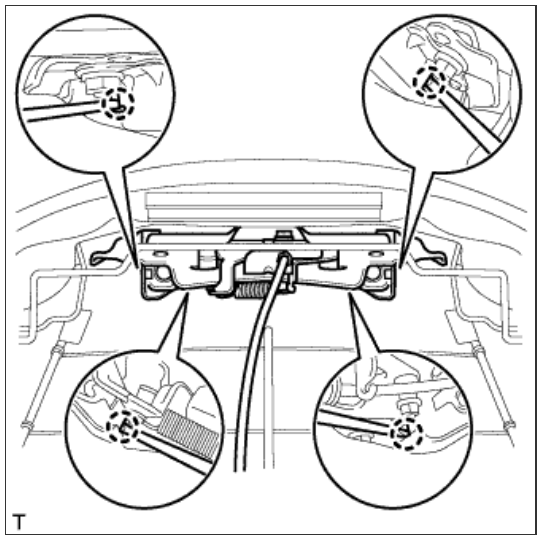
a. Remove the 2 screws.

b. Move the seatback board in the direction of the arrow to detach the 2 hooks and remove the seatback board.



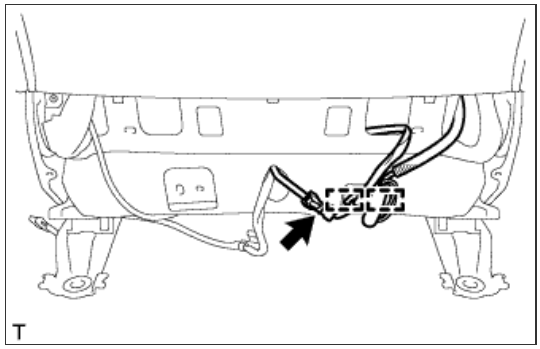
9. REMOVE FRONT SEAT HEADREST SUPPORT

a. Detach the 4 claws and remove the 2 headrest supports.



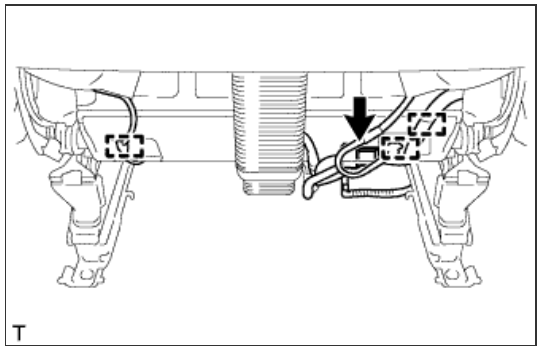
10. REMOVE SEATBACK COVER WITH PAD

a. w/ Seat Heater System:
Disconnect the seat heater connector and detach the 2 wire harness clamps.

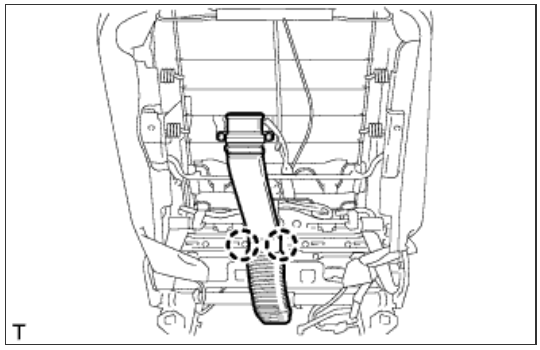


b. w/ Climate Control Seat System:

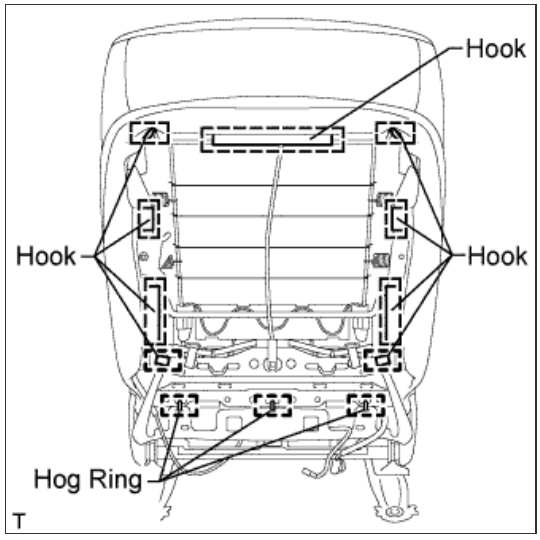
i. Disconnect the seat heater connector and detach the 3 wire harness clamps.



ii. Detach the 2 claws and disconnect the duct.

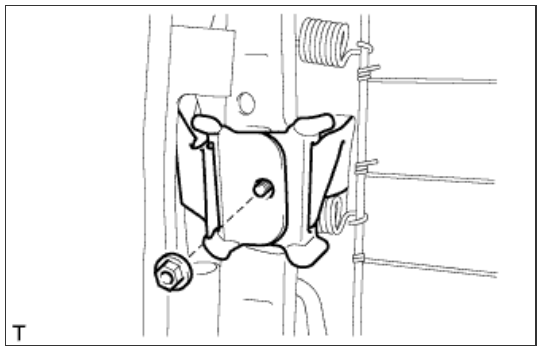


c. Remove the 3 hog rings and detach the 9 hooks.



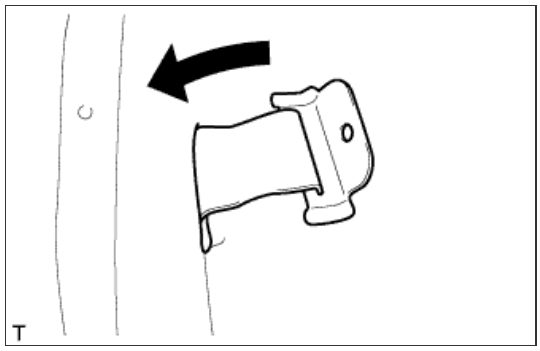
d. Remove the nut and seatback cover bracket from the seat frame.

e. Remove the seatback cover with pad.

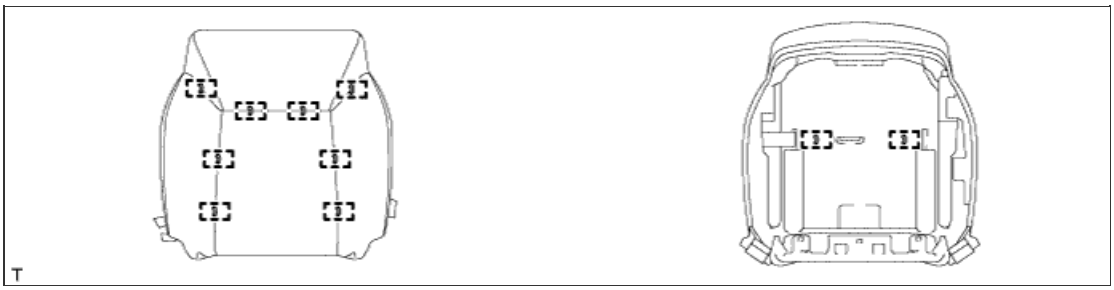


11. REMOVE FRONT SEPARATE TYPE SEATBACK COVER

a. Disconnect the seatback cover bracket from the seatback pad.

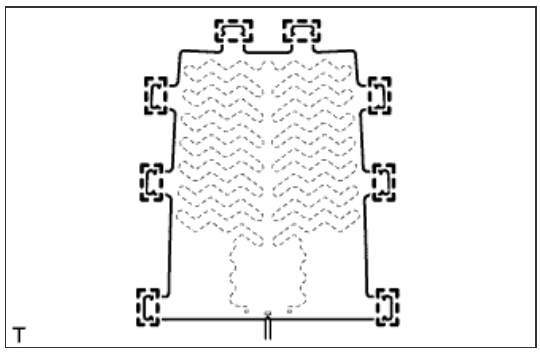


b. Remove the hog rings and seatback cover.



12. REMOVE FRONT SEATBACK HEATER ASSEMBLY LH

a. Cut off the tack pins which fasten the seatback heater to the seatback cover, and then remove the seatback heater from the seatback cover.



for Preparation Click here

CAUTION:

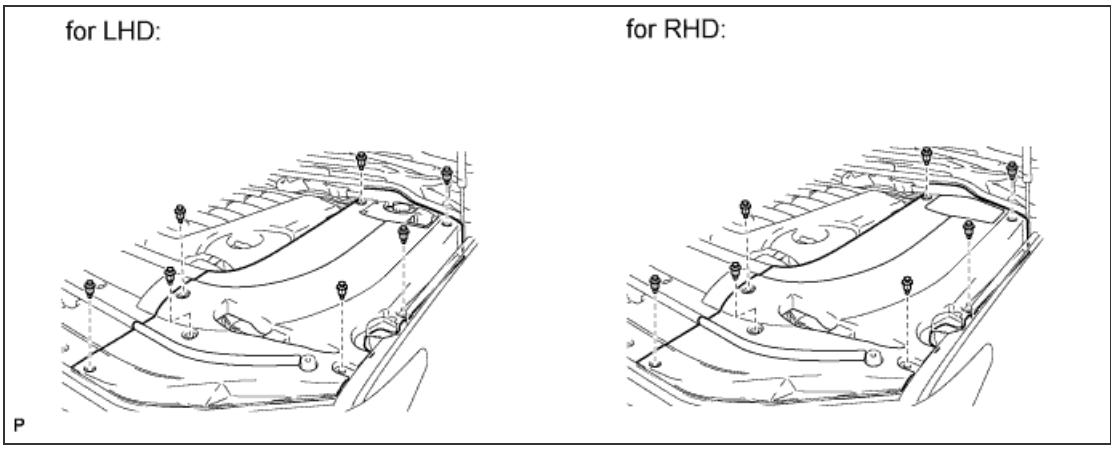
Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly (Click here).

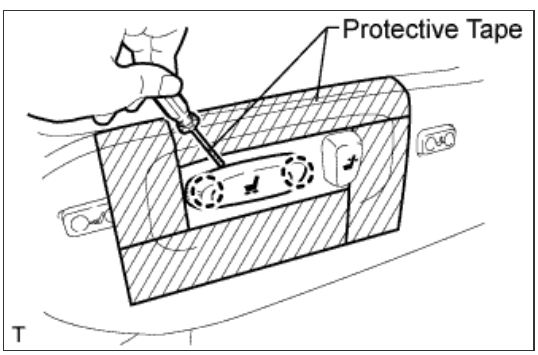
3. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

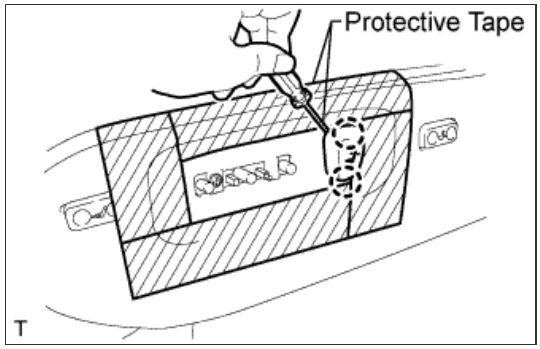


4. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

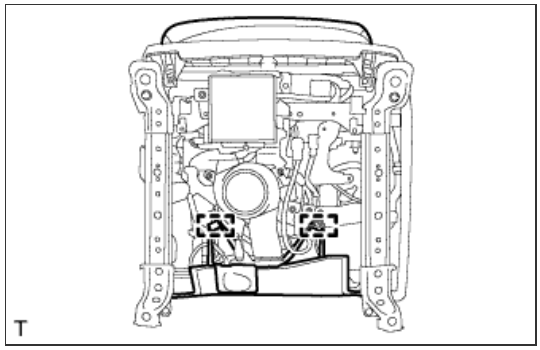
HINT:

Tape the screwdriver tip before use.

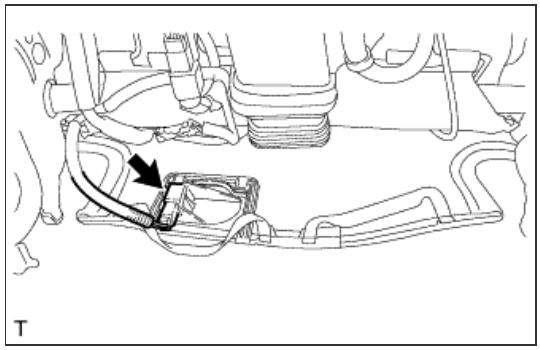


5. REMOVE FRONT SEAT CUSHION SHIELD LH

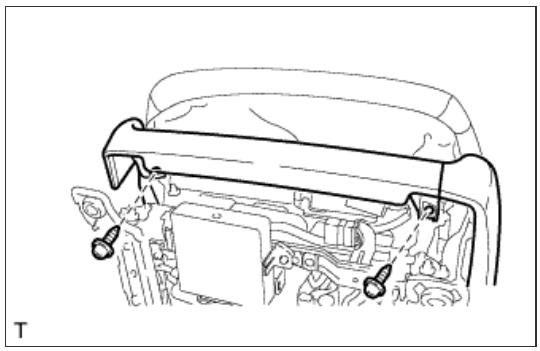
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

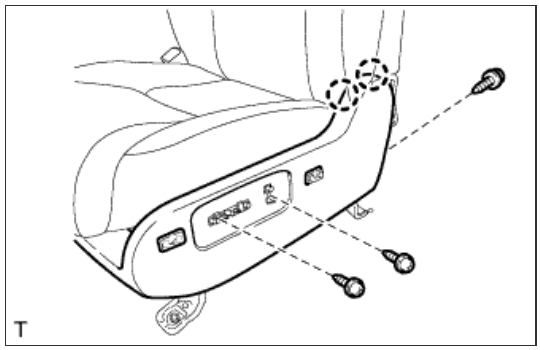


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

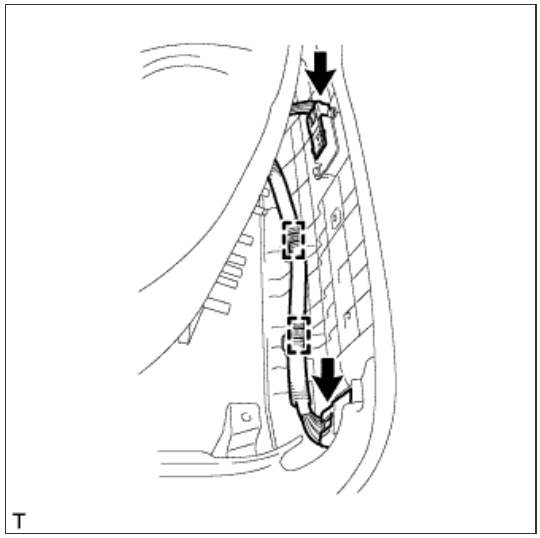


f. for Driver Side:

i. Detach the 2 wire harness clamps.

ii. Disconnect the 2 connectors.

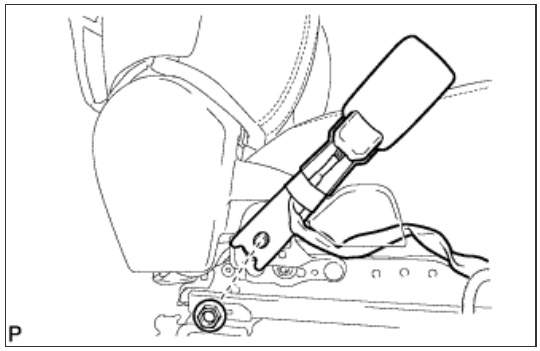
g. for Front Passenger Side:
Disconnect the connector.



6. REMOVE FRONT SEAT INNER BELT ASSEMBLY LH

a. Disconnect the 3 connectors and detach the clamps.

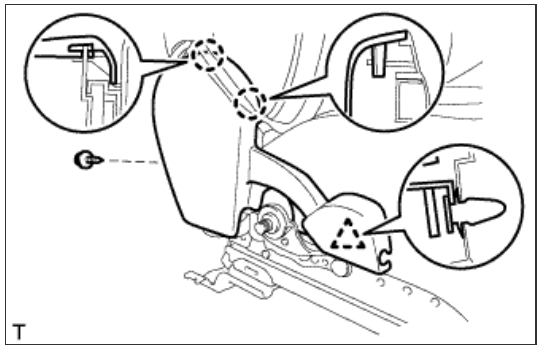
b. Remove the nut and front seat inner belt assembly.



7. REMOVE FRONT INNER SEAT CUSHION SHIELD LH

a. Remove the screw.

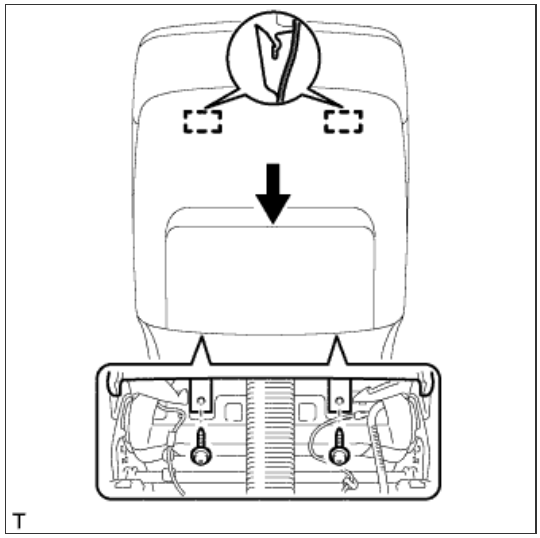
b. Detach the 2 claws and clip, and then remove the cushion shield.



8. REMOVE FRONT SEATBACK BOARD SUB-ASSEMBLY LH

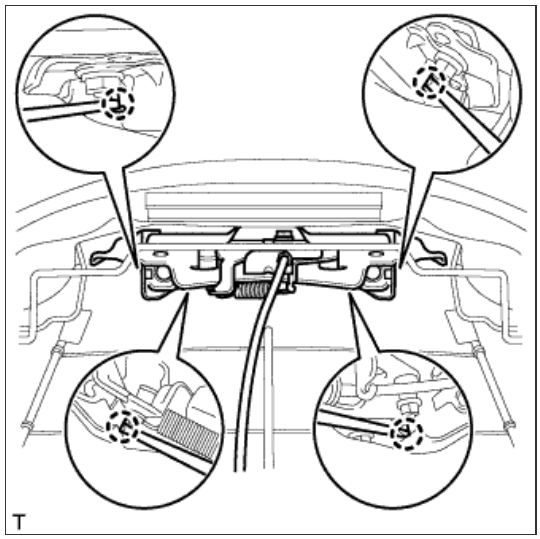
a. Remove the 2 screws.

b. Move the seatback board in the direction of the arrow to detach the 2 hooks and remove the seatback board.



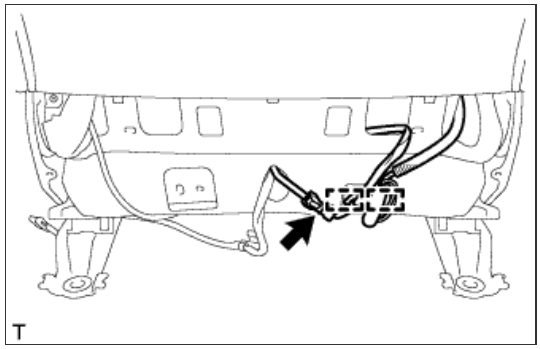
9. REMOVE FRONT SEAT HEADREST SUPPORT

a. Detach the 4 claws and remove the 2 headrest supports.



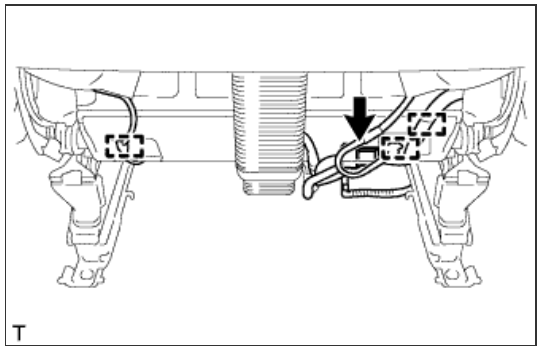
10. REMOVE SEATBACK COVER WITH PAD

a. w/ Seat Heater System:
Disconnect the seat heater connector and detach the 2 wire harness clamps.

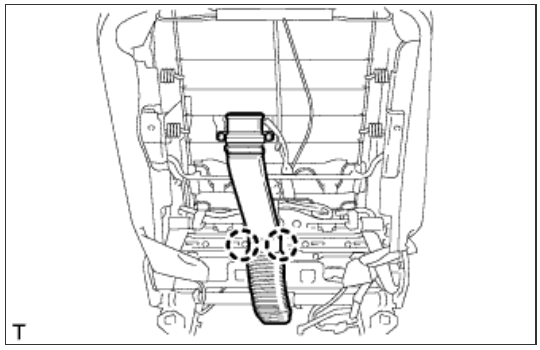


b. w/ Climate Control Seat System:

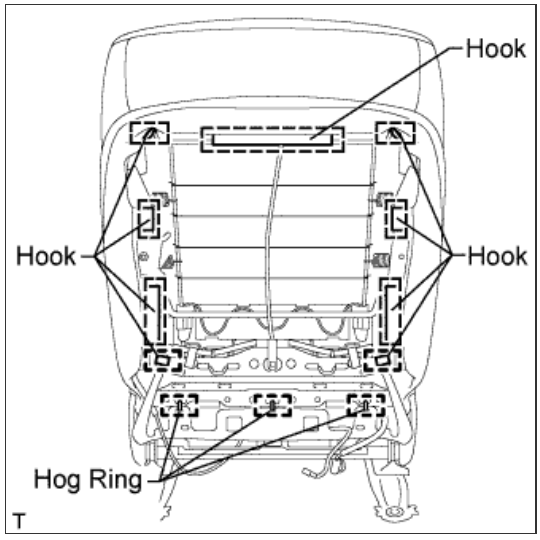
i. Disconnect the seat heater connector and detach the 3 wire harness clamps.



ii. Detach the 2 claws and disconnect the duct.

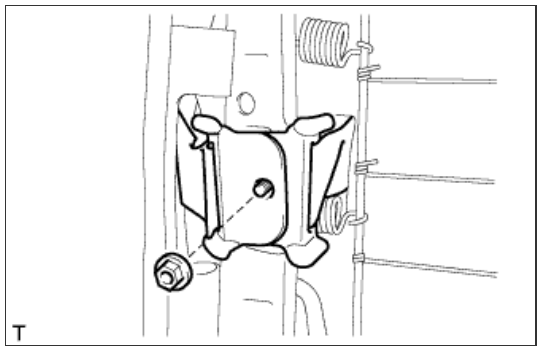


c. Remove the 3 hog rings and detach the 9 hooks.



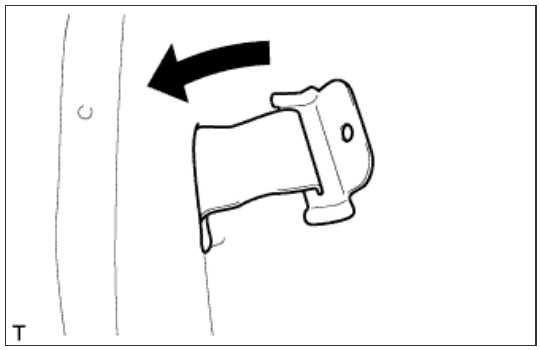
d. Remove the nut and seatback cover bracket from the seat frame.

e. Remove the seatback cover with pad.

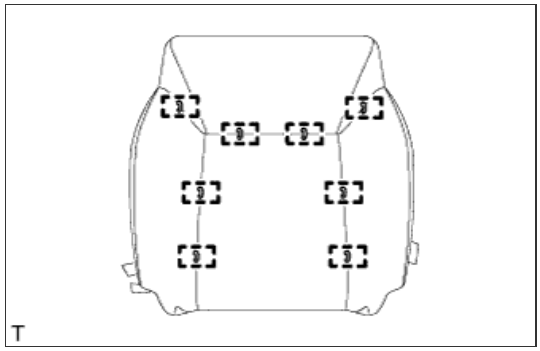


11. REMOVE FRONT SEPARATE TYPE SEATBACK COVER

a. Disconnect the seatback cover bracket from the seatback pad.

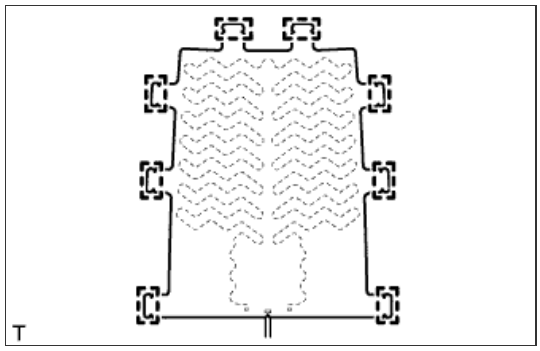


b. Remove the hog rings and seatback cover.



12. REMOVE FRONT SEATBACK HEATER ASSEMBLY LH

a. Cut off the tack pins which fasten the seatback heater to the seatback cover, and then remove the seatback heater from the seatback cover.



for Preparation Click here

1. INSPECT FRONT SEATBACK HEATER ASSEMBLY LH

a. Check the seatback heater.

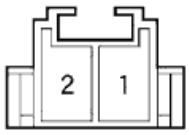
i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	Seatback heater temperature 25°C (77°F)	6.6 to 8.0 Ω

If the result is not as specified, replace the seatback heater assembly.

Component without harness connected:
(Front Seatback Heater)



2. INSPECT FRONT SEATBACK HEATER ASSEMBLY RH

a. Check the seatback heater.

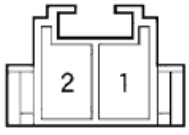
i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	Seatback heater temperature 25°C (77°F)	6.6 to 8.0 Ω

If the result is not as specified, replace the seatback heater assembly.

Component without harness connected:
(Front Seatback Heater)



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

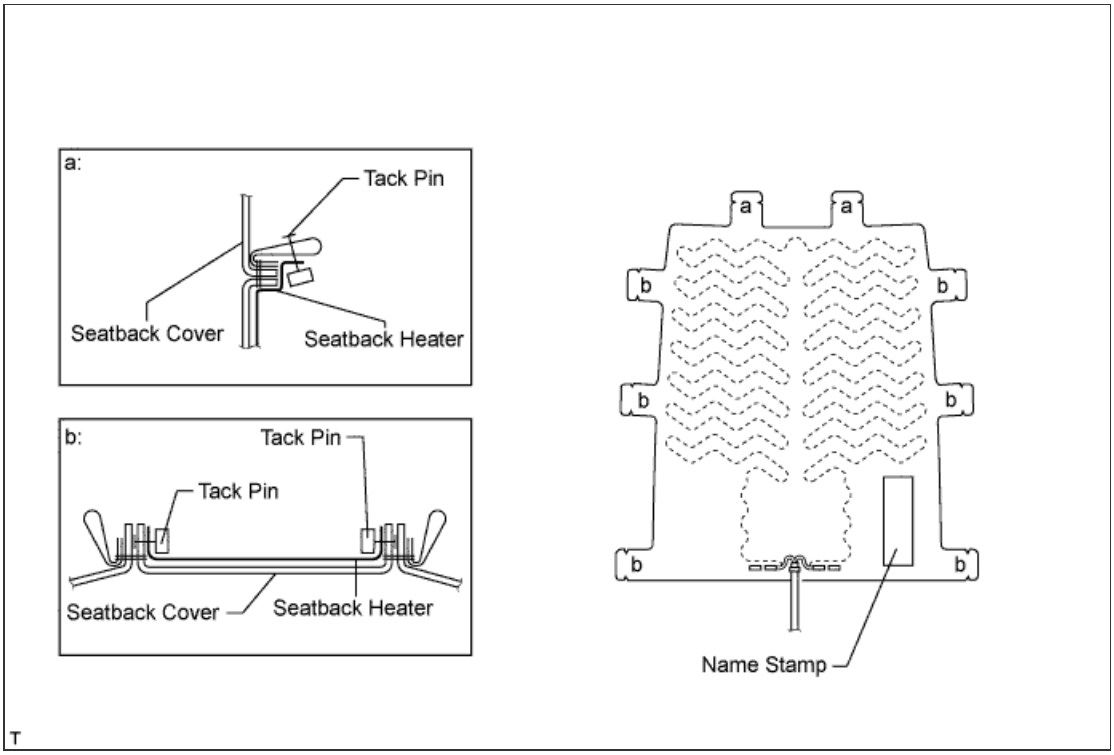
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL FRONT SEATBACK HEATER ASSEMBLY LH

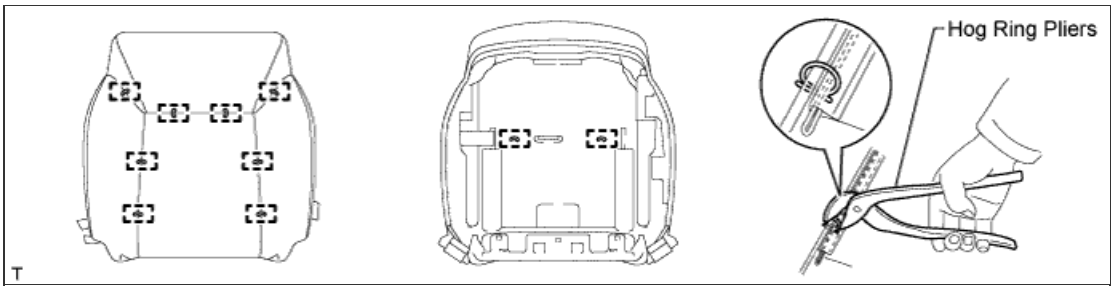
a. Set the seatback heater with the name stamp side facing the seatback cover.

b. Install the seatback heater with new tack pins.



2. INSTALL FRONT SEPARATE TYPE SEATBACK COVER

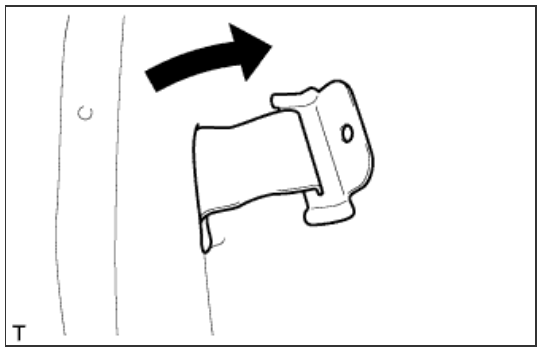
a. Using hog ring pliers, install the seatback cover with new hog rings.



NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**

b. Connect the seatback cover bracket to the seatback pad.



3. INSTALL SEATBACK COVER WITH PAD

a. Install the seatback cover with pad to the seatback frame.

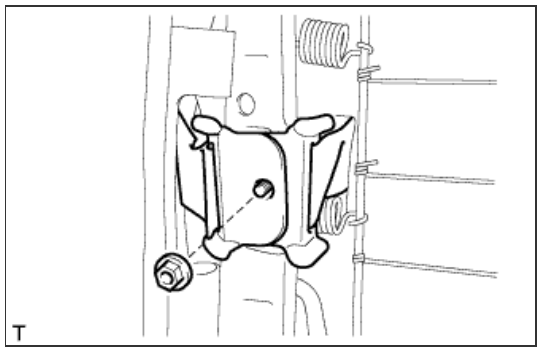
b. Install the seatback cover bracket to the seat frame with the nut.

Torque:

5.0 N*m{ 51 kgf*cm , 44 in.*lbf }

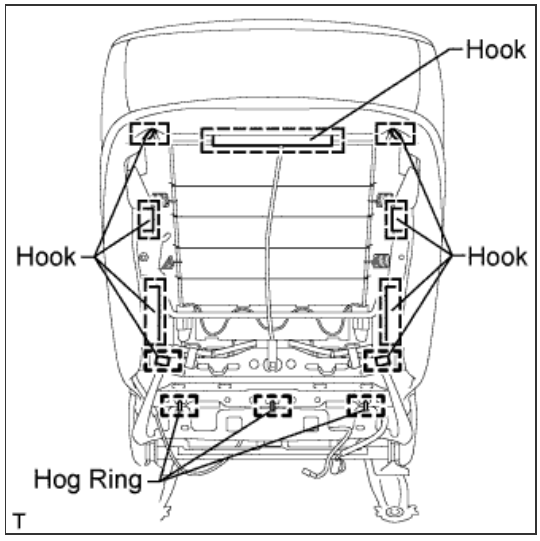
CAUTION:

After the seatback cover is assembled, make sure the side airbag strap is not twisted.

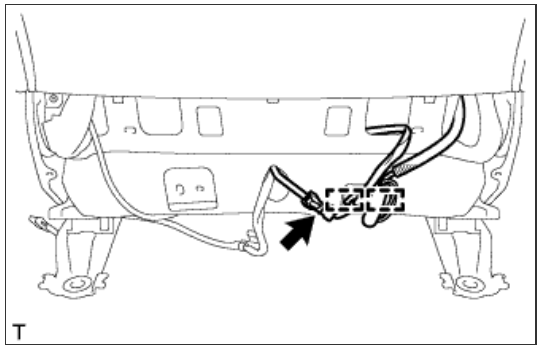


c. Attach the 9 hooks.

d. Using hog ring pliers, install 3 new hog rings to the seat frame.

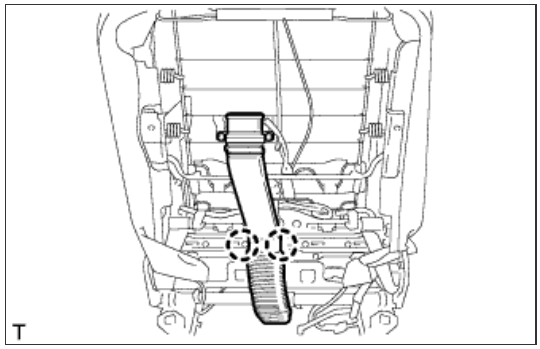


e. w/ Seat Heater System:
Connect the seat heater connector and attach the 2 wire harness clamps.

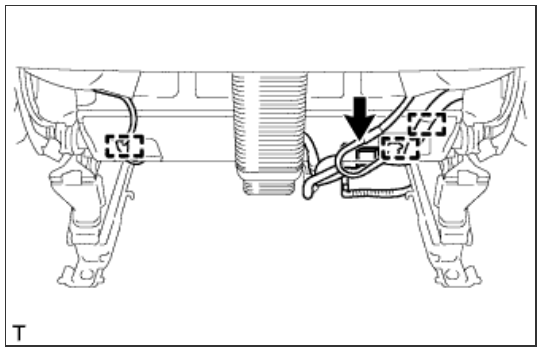


f. w/ Climate Control Seat System:

i. Attach the 2 claws to connect the duct.



ii. Connect the seat heater connector and attach the 3 wire harness clamps.



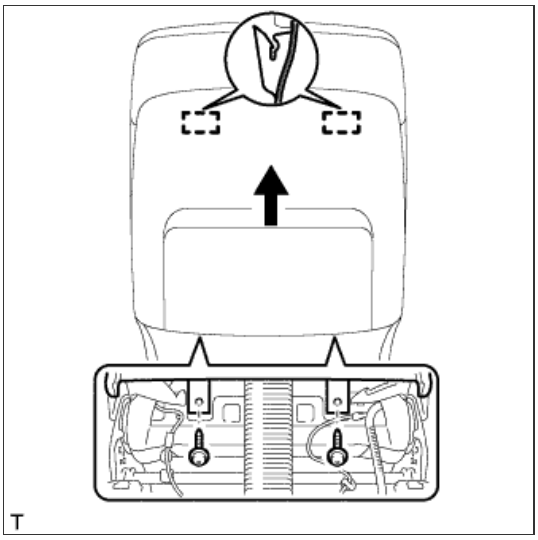
4. INSTALL FRONT SEAT HEADREST SUPPORT

a. Attach the 4 claws to install the 2 headrest supports.

5. INSTALL FRONT SEATBACK BOARD SUB-ASSEMBLY LH

a. Move the seatback board in the direction of the arrow to attach the 2 hooks and install the seatback board.

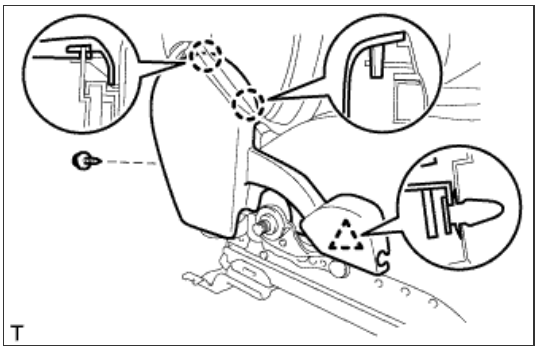
b. Install the 2 screws.



6. INSTALL FRONT INNER SEAT CUSHION SHIELD LH

a. Attach the 2 claws and clip to install the cushion shield.

b. Install the screw.



7. INSTALL FRONT SEAT INNER BELT ASSEMBLY LH

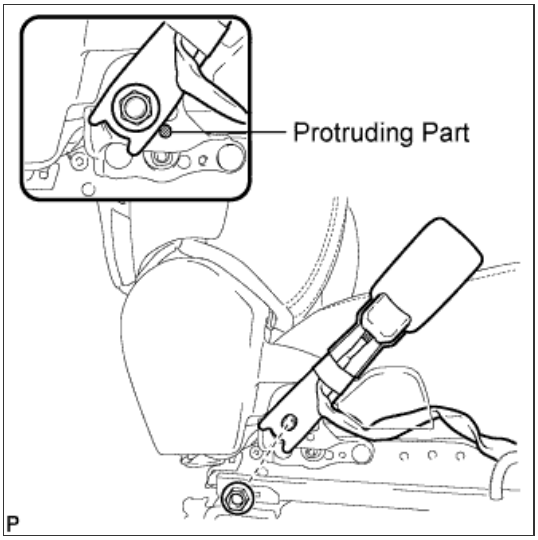
a. Install the front seat inner belt assembly with the nut.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not allow the anchor part of the front seat inner belt assembly to overlap the protruding part of the front seat adjuster.

b. Connect the 3 connectors and attach the clamps.



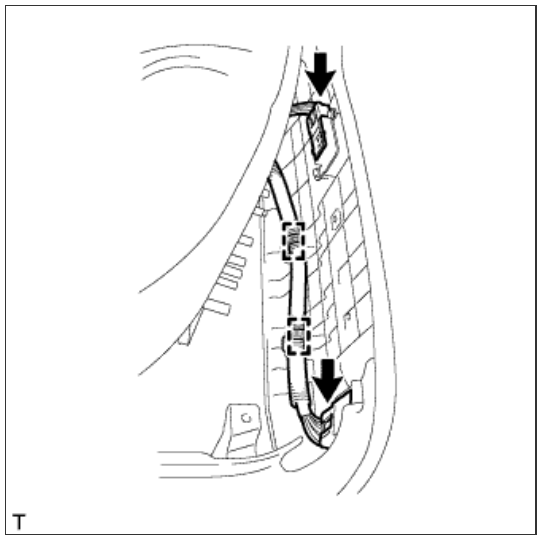
8. INSTALL FRONT SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

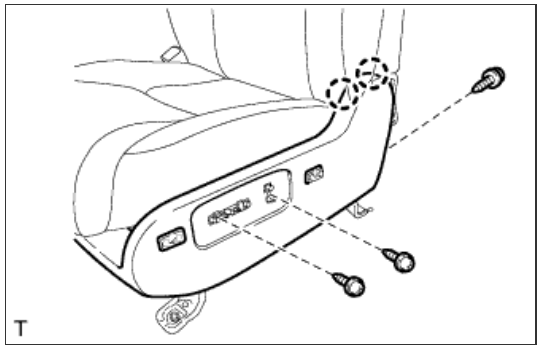
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

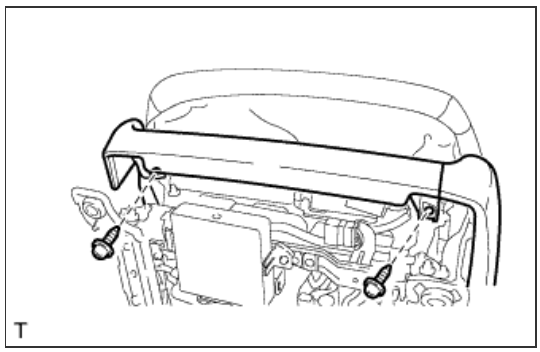


c. Attach the 2 claws to install the cushion shield.

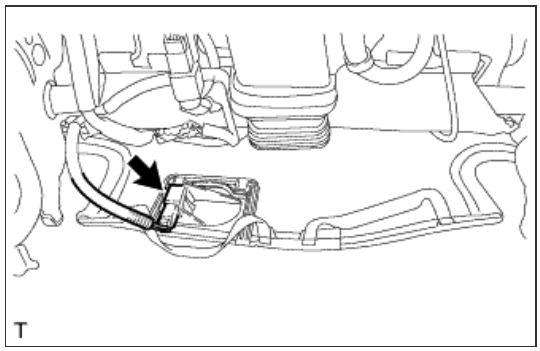
d. Install the 3 screws.



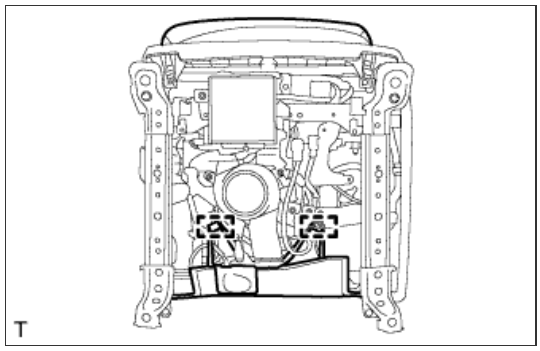
e. Install the 2 screws.



f. Connect the interior illumination light connector.

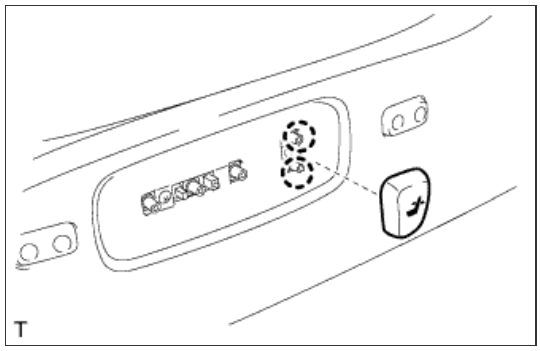


g. Attach the 2 rubber bands to the hooks.



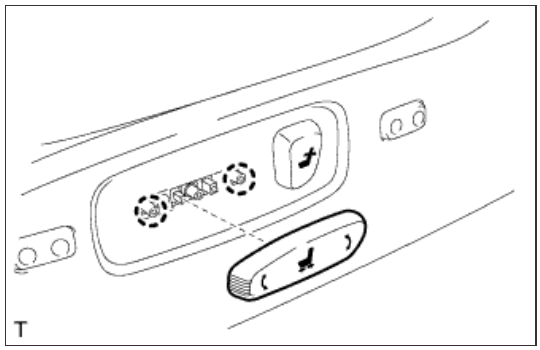
9. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



10. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



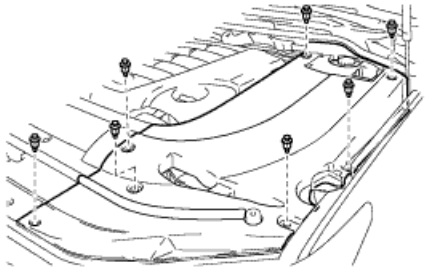
11. INSTALL FRONT SEAT ASSEMBLY LH

a. Install the front seat assembly (Click here).

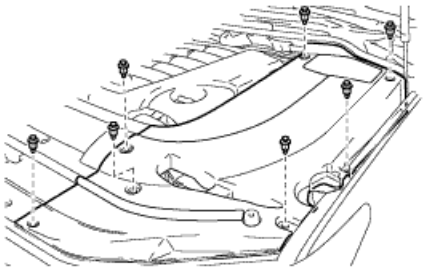
12. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.

for LHD:



for RHD:



P

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

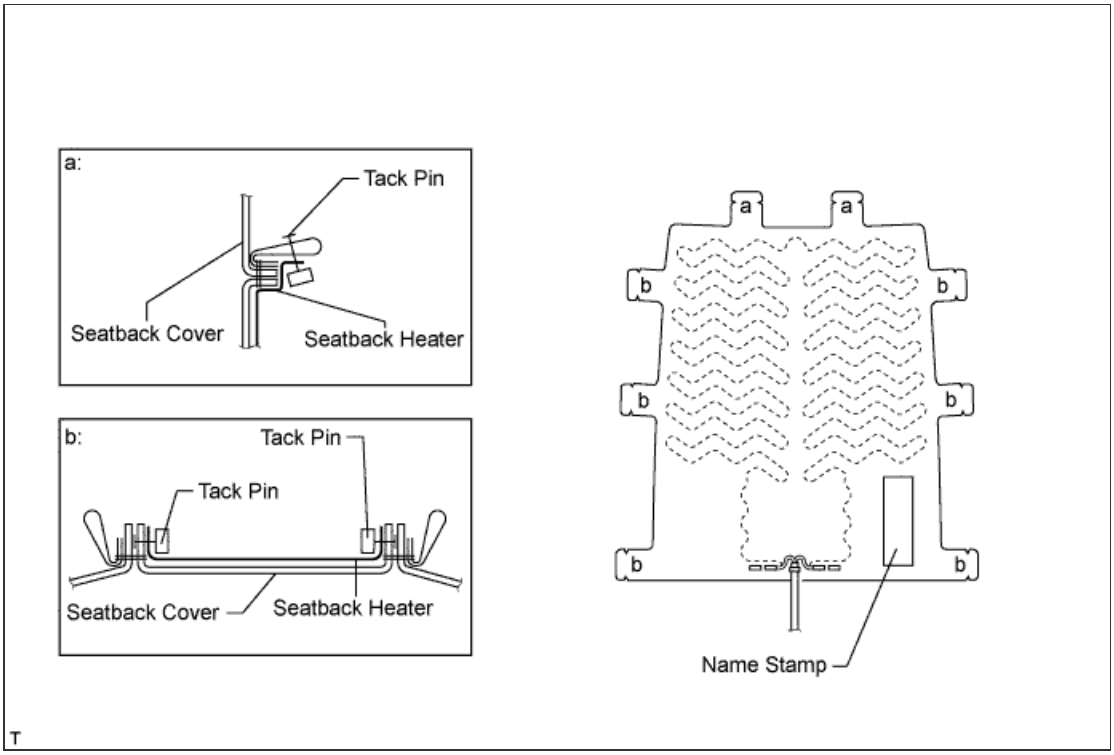
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL FRONT SEATBACK HEATER ASSEMBLY LH

a. Set the seatback heater with the name stamp side facing the seatback cover.

b. Install the seatback heater with new tack pins.

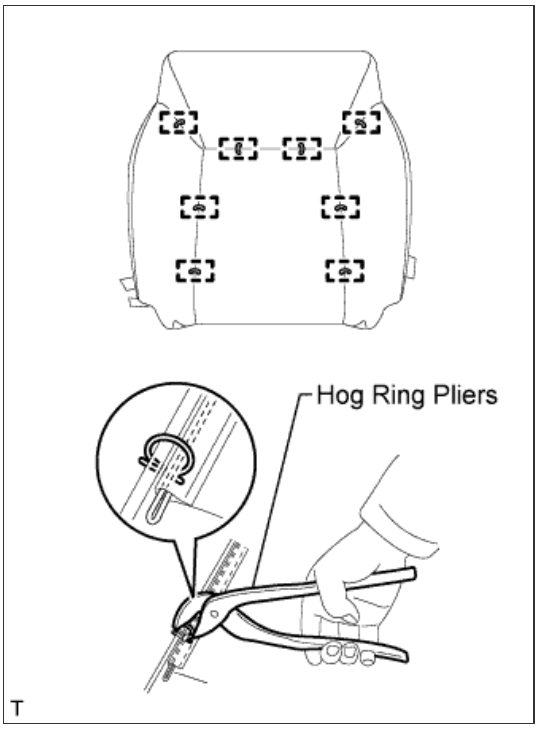


2. INSTALL FRONT SEPARATE TYPE SEATBACK COVER

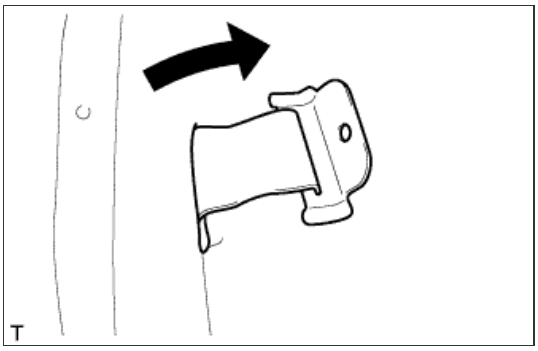
a. Using hog ring pliers, install the seatback cover with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Connect the seatback cover bracket to the seatback pad.



3. INSTALL SEATBACK COVER WITH PAD

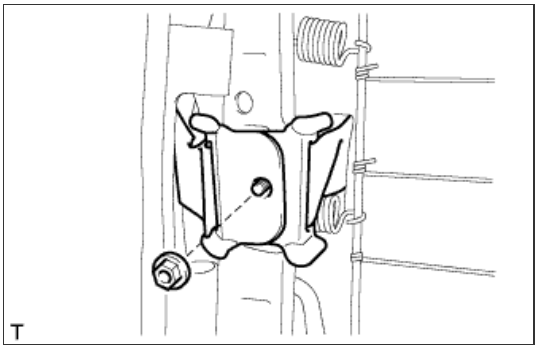
a. Install the seatback cover with pad to the seatback frame.

b. Install the seatback cover bracket to the seat frame with the nut.

Torque:
5.0 N*m{ 51 kgf*cm , 44 in.*lbf }

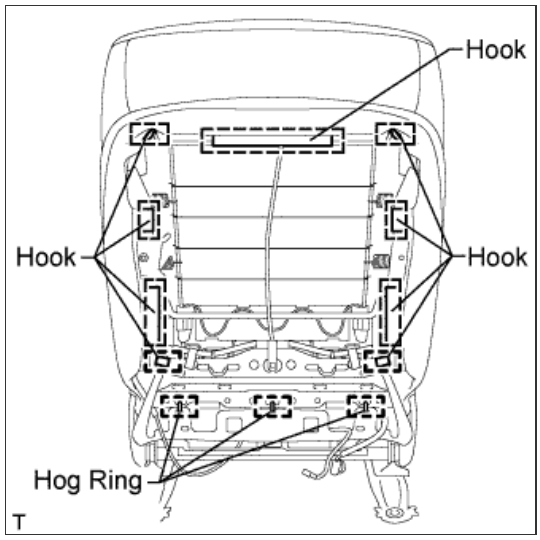
CAUTION:

After the seatback cover is assembled, make sure the side airbag strap is not twisted.

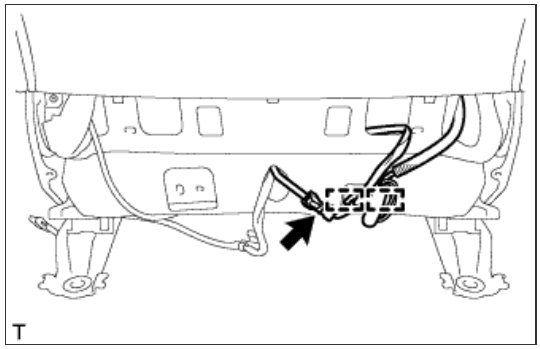


c. Attach the 9 hooks.

d. Using hog ring pliers, install 3 new hog rings to the seat frame.

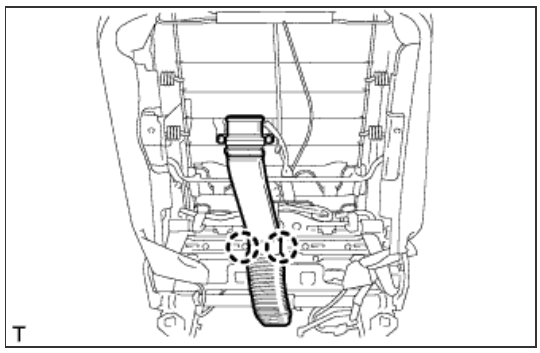


e. w/ Seat Heater System:
Connect the seat heater connector and attach the 2 wire harness clamps.

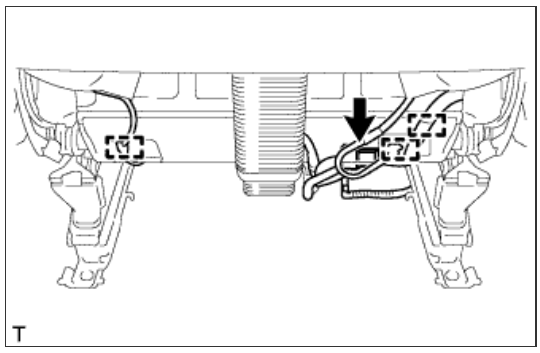


f. w/ Climate Control Seat System:

i. Attach the 2 claws to connect the duct.



ii. Connect the seat heater connector and attach the 3 wire harness clamps.



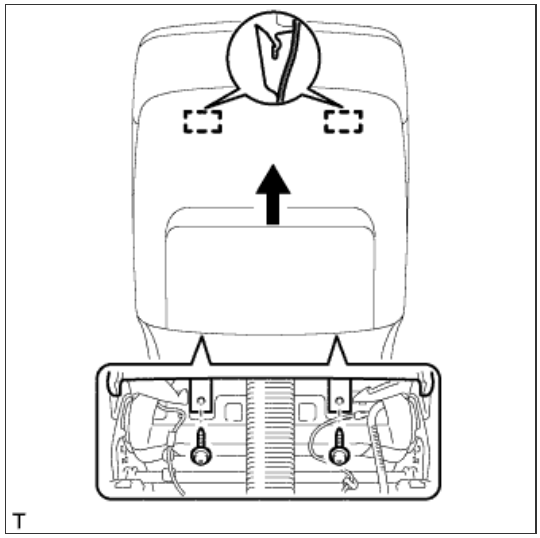
4. INSTALL FRONT SEAT HEADREST SUPPORT

a. Attach the 4 claws to install the 2 headrest supports.

5. INSTALL FRONT SEATBACK BOARD SUB-ASSEMBLY LH

a. Move the seatback board in the direction of the arrow to attach the 2 hooks and install the seatback board.

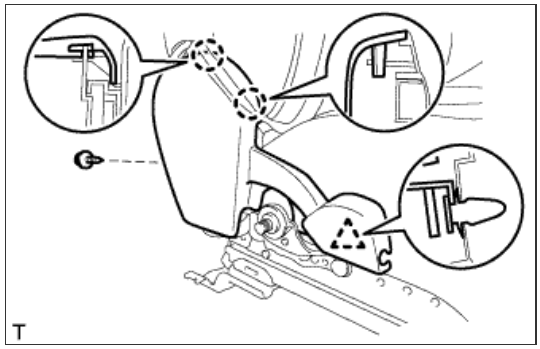
b. Install the 2 screws.



6. INSTALL FRONT INNER SEAT CUSHION SHIELD LH

a. Attach the 2 claws and clip to install the cushion shield.

b. Install the screw.



7. INSTALL FRONT SEAT INNER BELT ASSEMBLY LH

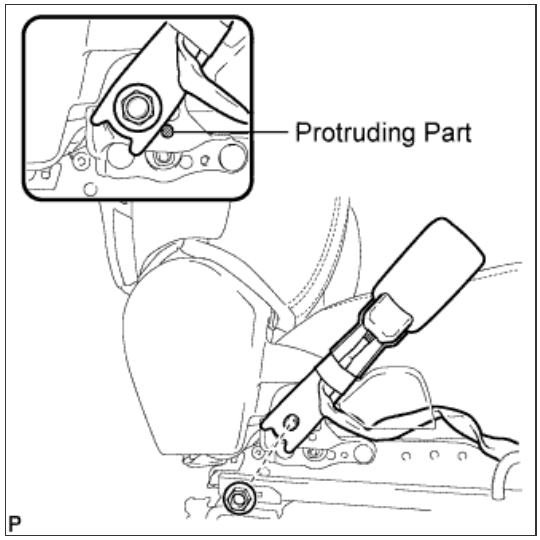
a. Install the front seat inner belt assembly with the nut.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not allow the anchor part of the front seat inner belt assembly to overlap the protruding part of the front seat adjuster.

b. Connect the 3 connectors and attach the clamps.



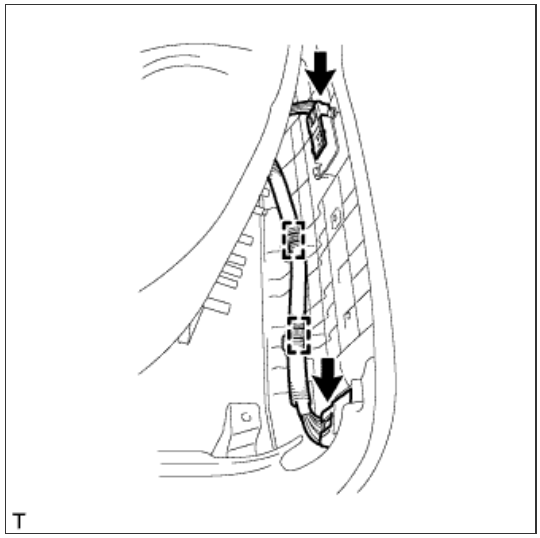
8. INSTALL FRONT SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

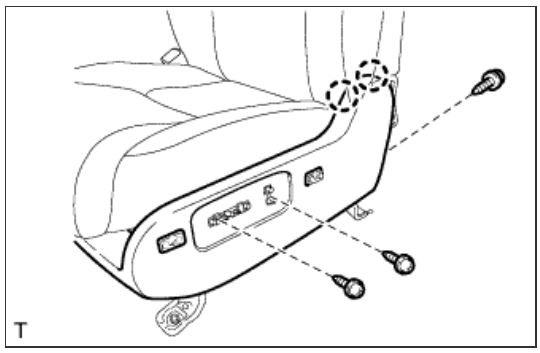
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

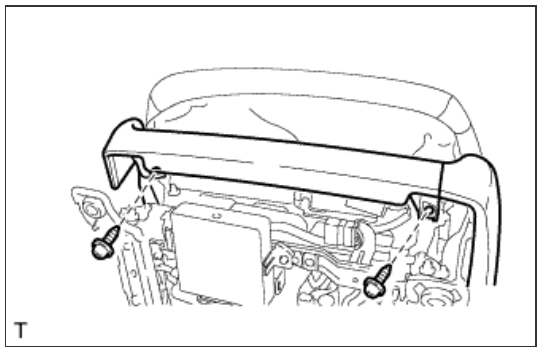


c. Attach the 2 claws to install the cushion shield.

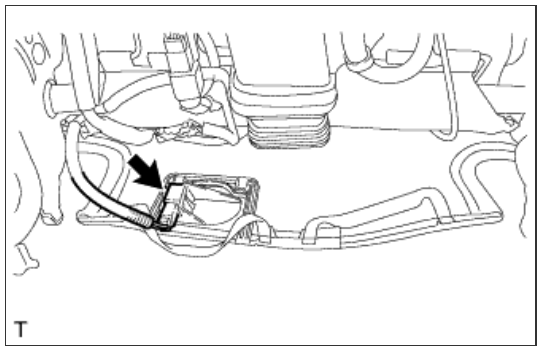
d. Install the 3 screws.



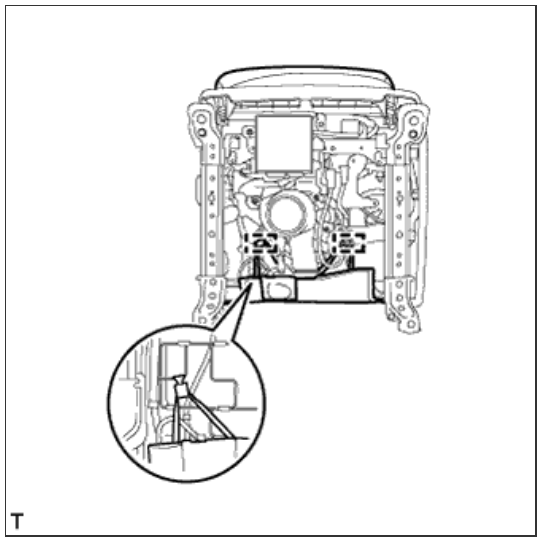
e. Install the 2 screws.



f. Connect the interior illumination light connector.

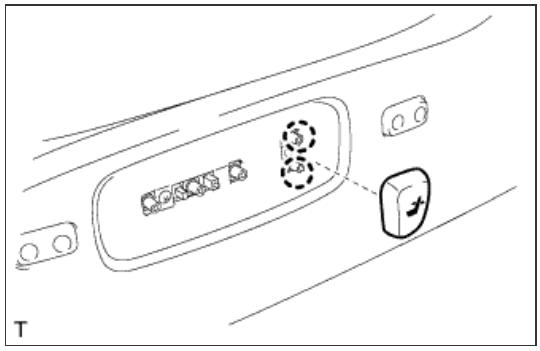


g. Attach the 2 rubber bands to the hooks.



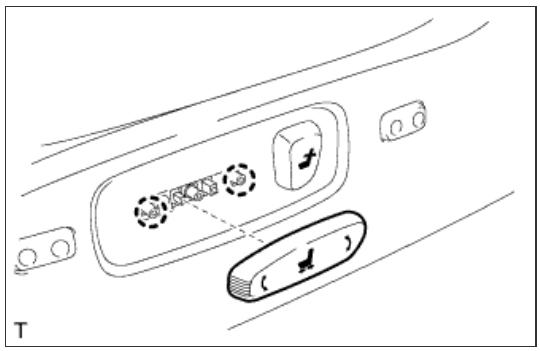
9. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



10. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



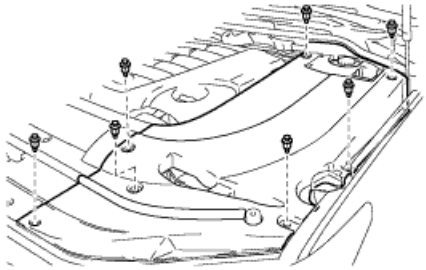
11. INSTALL FRONT SEAT ASSEMBLY LH

a. Install the front seat assembly (Click here).

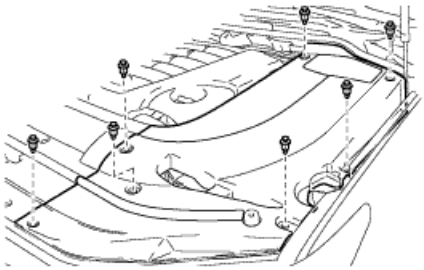
12. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.

for LHD:

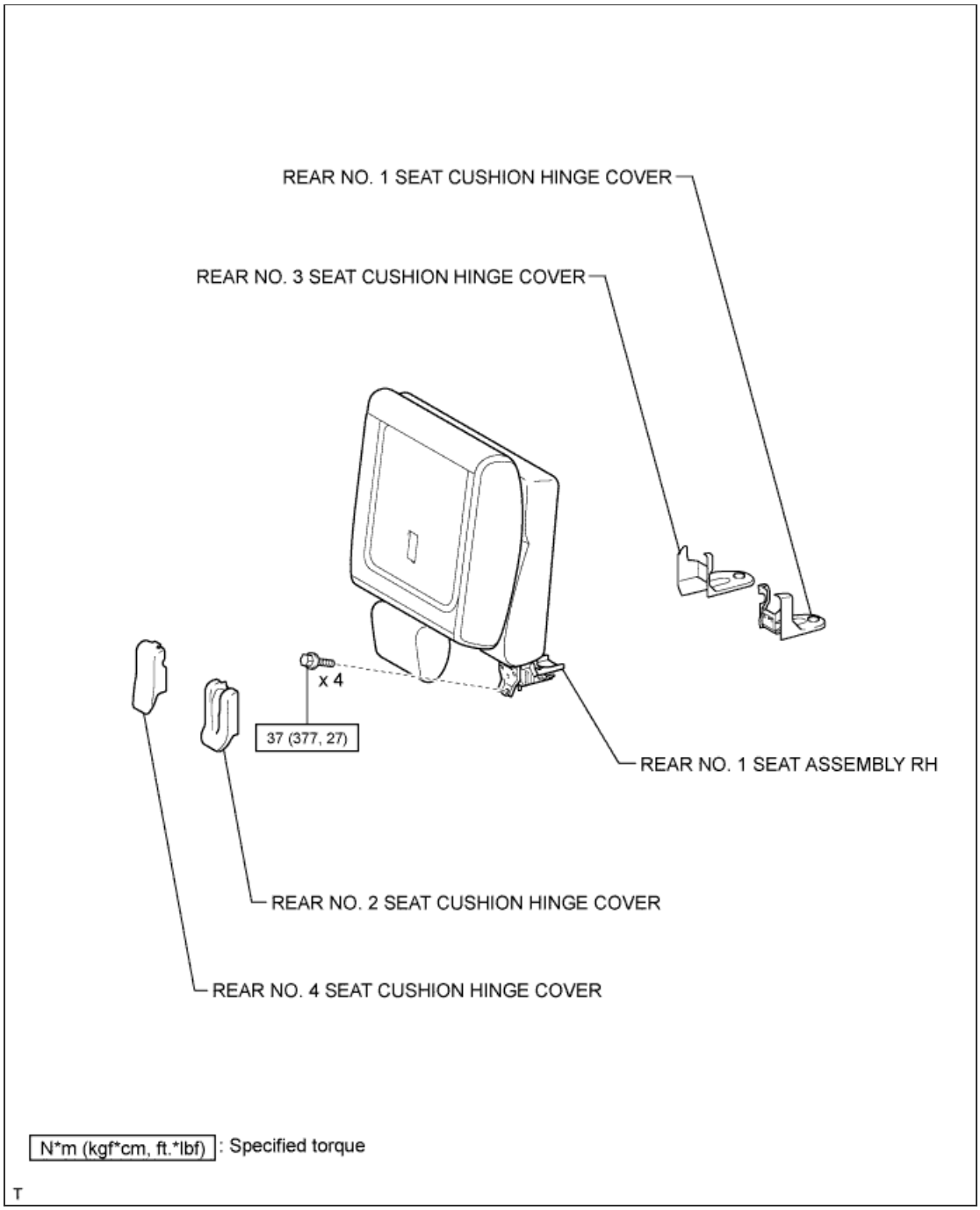


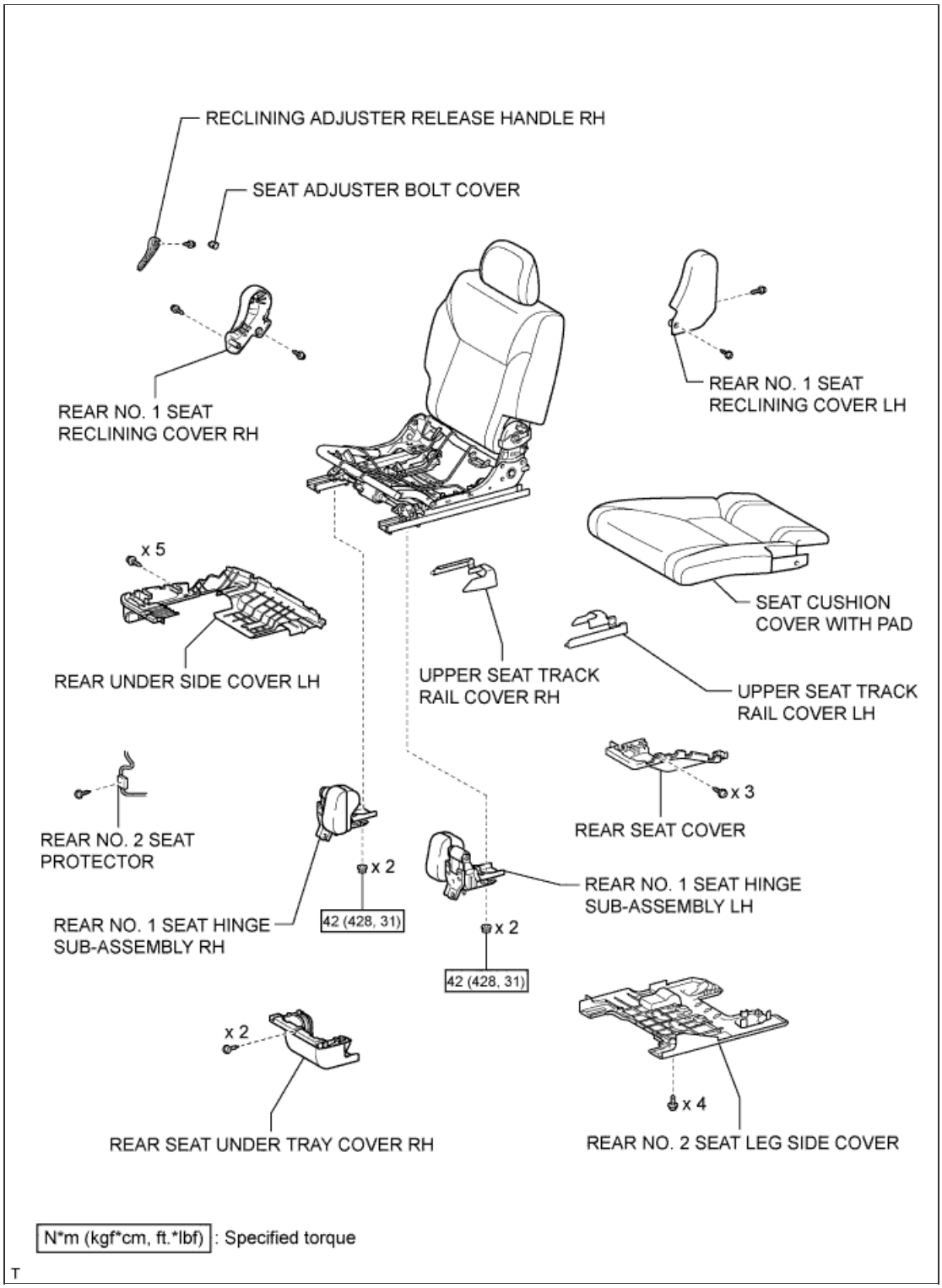
for RHD:

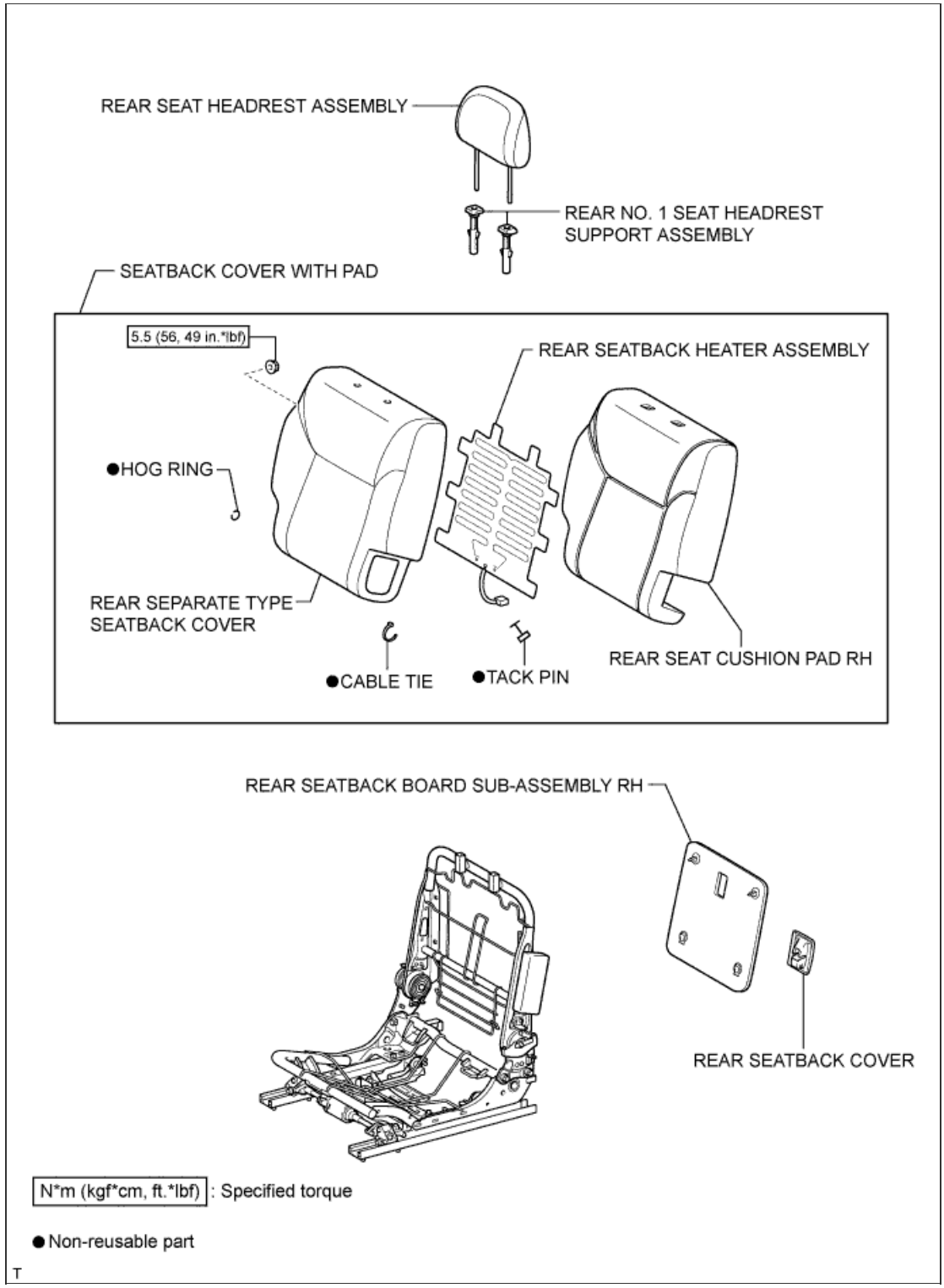


P

for Preparation Click here




RECLINING ADJUSTER RELEASE HANDLE RH
SEAT ADJUSTER BOLT COVER
REAR NO. 1 SEAT RECLINING COVER RH
REAR NO. 1 SEAT RECLINING COVER LH
x 5
REAR UNDER SIDE COVER LH
SEAT CUSHION COVER WITH PAD
UPPER SEAT TRACK RAIL COVER RH
UPPER SEAT TRACK RAIL COVER LH
REAR NO. 2 SEAT PROTECTOR
x 3
REAR SEAT COVER
x 2
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH
42 (428, 31)
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH
x 2
42 (428, 31)
x 2
REAR SEAT UNDER TRAY COVER RH
x 4
REAR NO. 2 SEAT LEG SIDE COVER
N*m (kgf*cm, ft.*lbf) : Specified torque
T


REAR SEAT HEADREST ASSEMBLY
REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY
SEATBACK COVER WITH PAD
5.5 (56, 49 in.*lbf)
REAR SEATBACK HEATER ASSEMBLY
●HOG RING
REAR SEPARATE TYPE SEATBACK COVER
●CABLE TIE
●TACK PIN
REAR SEAT CUSHION PAD RH
REAR SEATBACK BOARD SUB-ASSEMBLY RH
REAR SEATBACK COVER
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part

T

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

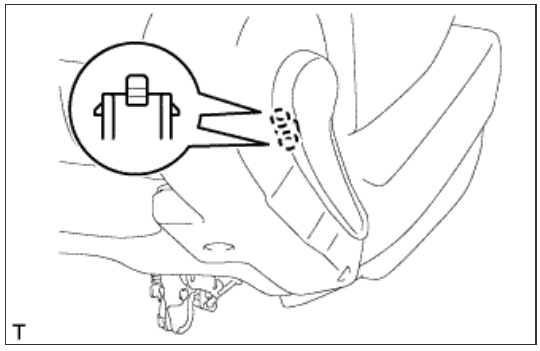
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

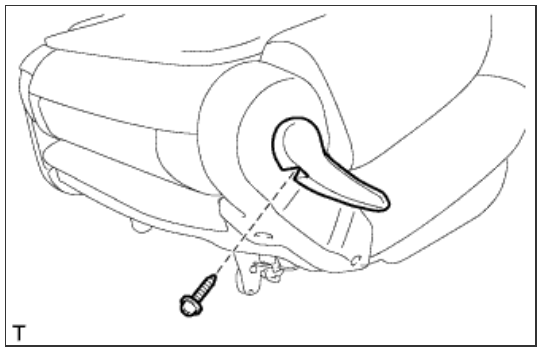
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE RH

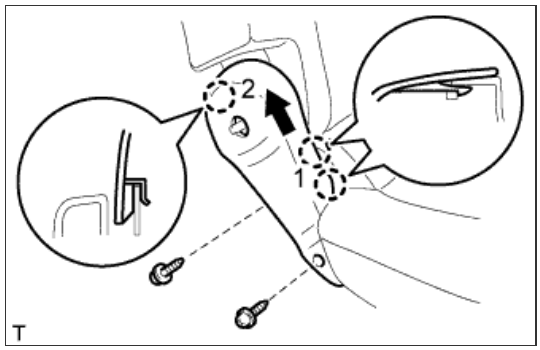
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

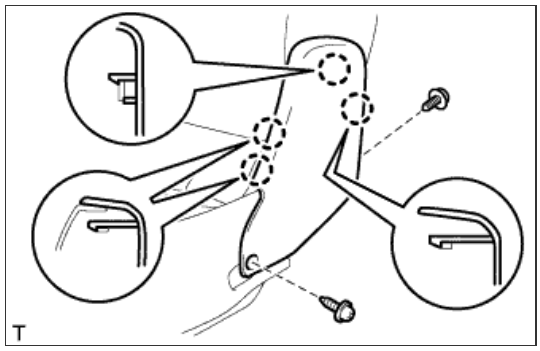
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

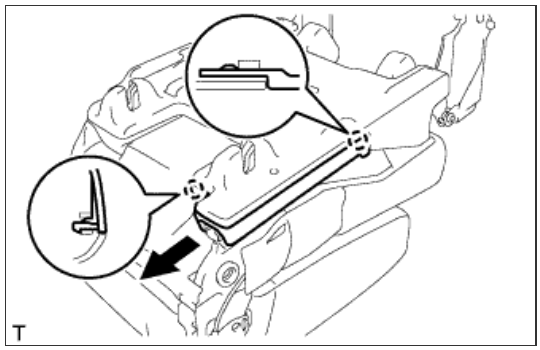


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

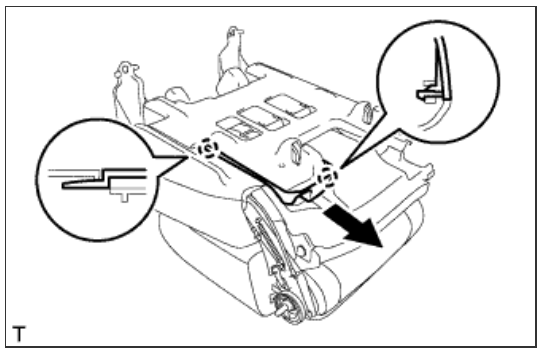


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

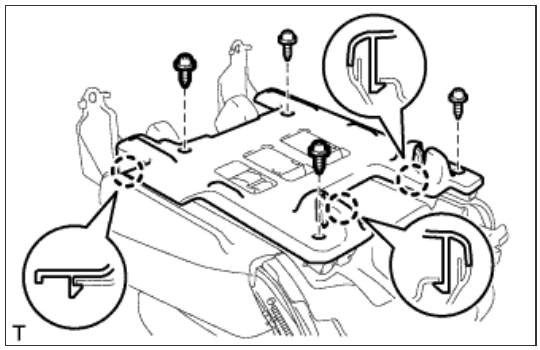
HINT:

Tape the screwdriver tip before use.

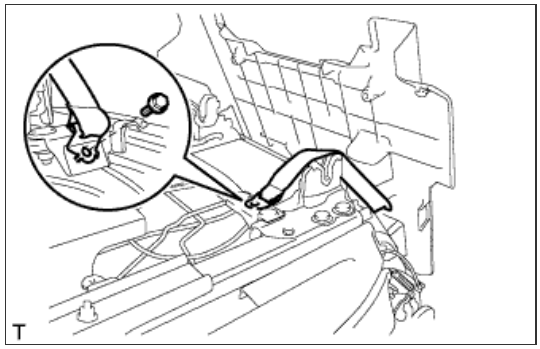


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 3 claws.



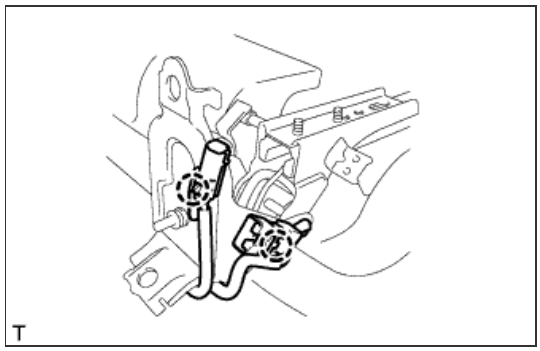
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

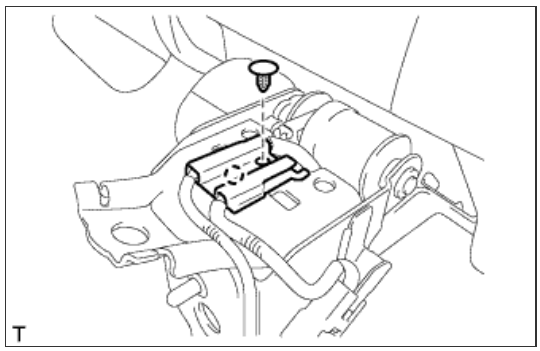
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

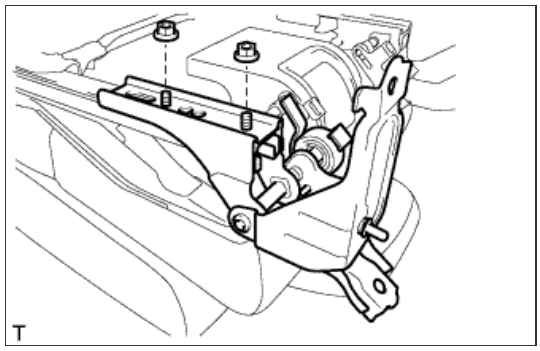
d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.



10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Remove the 2 nuts and hinge.

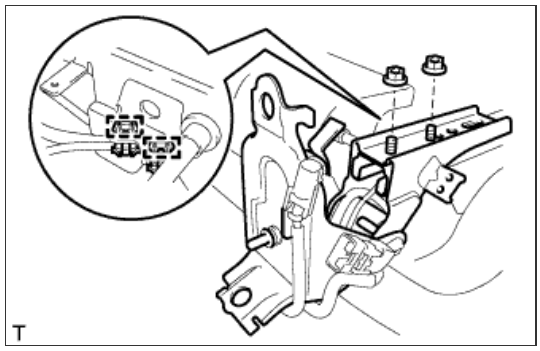


11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Detach the wire harness clamp.

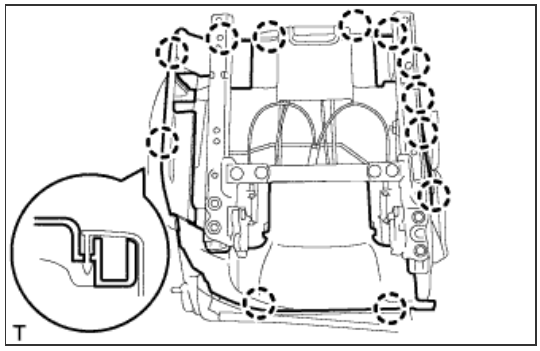
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



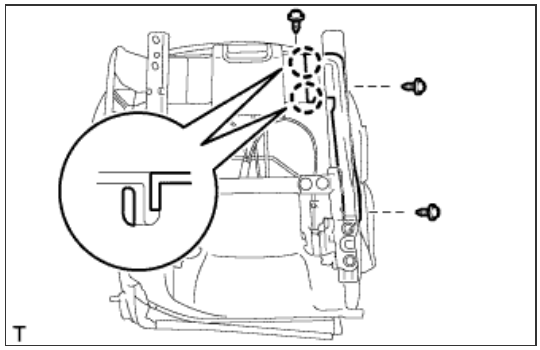
12. REMOVE REAR SEAT COVER

a. Detach the 12 claws.



b. Remove the 3 screws.

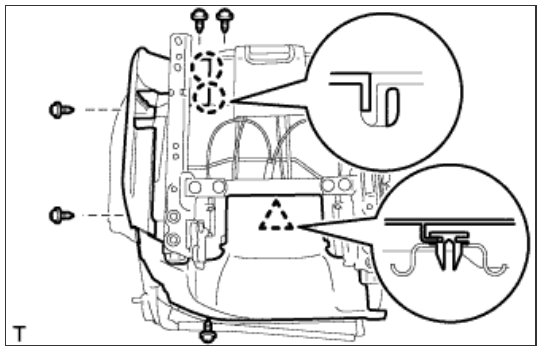
c. Detach the 2 claws and remove the cover.



13. REMOVE REAR UNDER SIDE COVER LH

a. Remove the 5 screws.

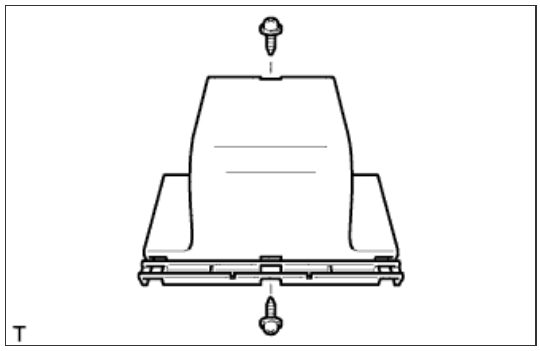
b. Detach the clip and 2 claws, and remove the cover.



14. REMOVE REAR SEAT UNDER TRAY COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



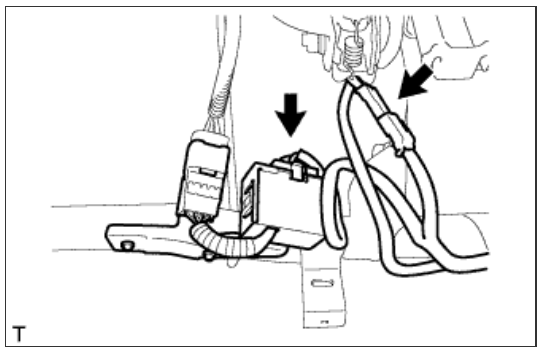
15. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

b. Remove the side airbag wire harness through the hole in the seat cushion.

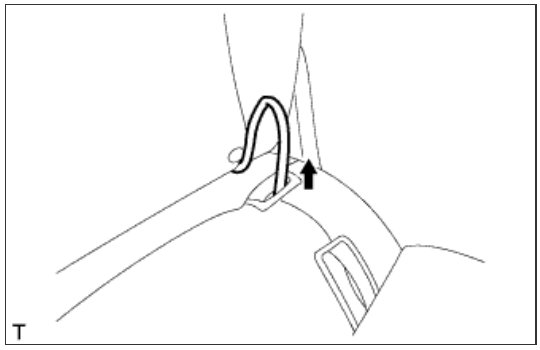
c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.

d. Remove the seat cushion cover with pad.

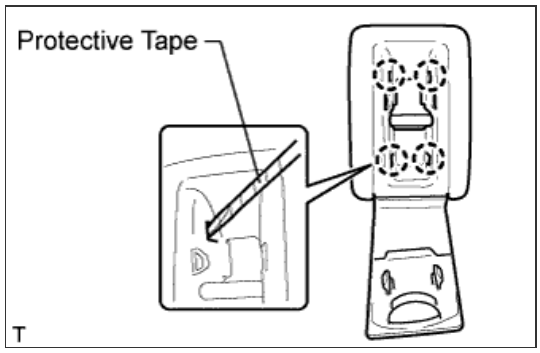


16. REMOVE REAR SEATBACK COVER

a. Using a screwdriver, detach the 4 claws and remove the cover.

HINT:

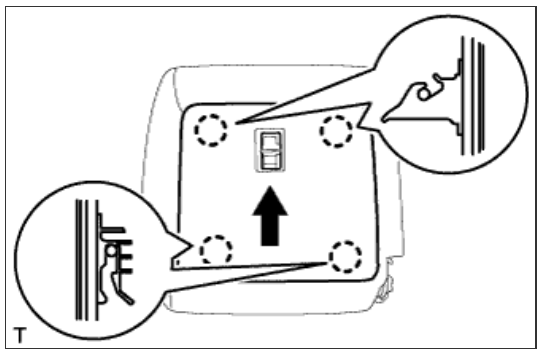
Tape the screwdriver tip before use.



17. REMOVE REAR SEATBACK BOARD SUB-ASSEMBLY RH

a. Detach the 2 claws on the top of the board.

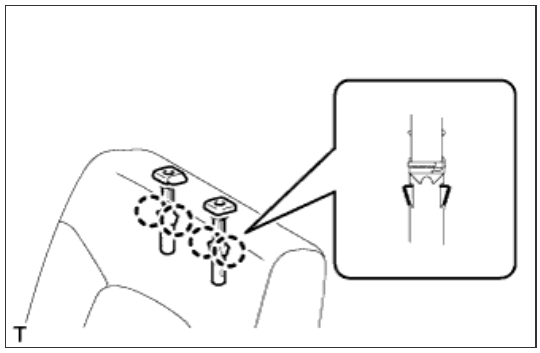
b. Pull up the board to detach the 2 claws on the bottom of the board and remove it.



18. REMOVE REAR SEAT HEADREST ASSEMBLY

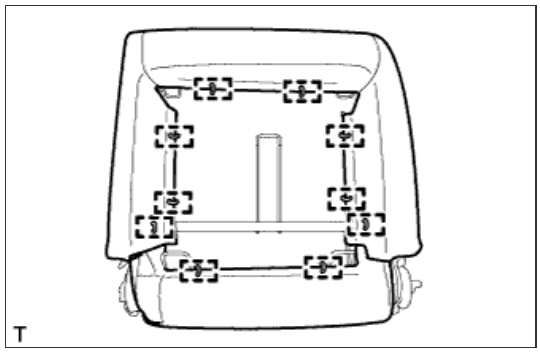
19. REMOVE REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Detach the 4 claws and remove the 2 supports.



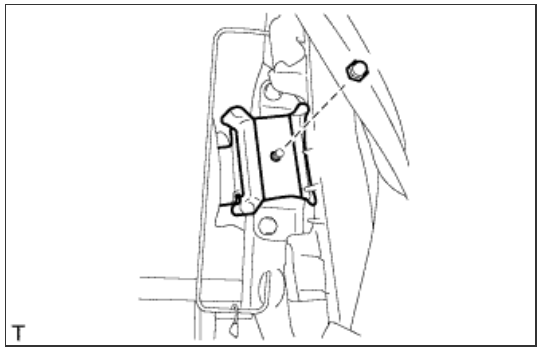
20. REMOVE SEATBACK COVER WITH PAD

a. Remove the hog rings.



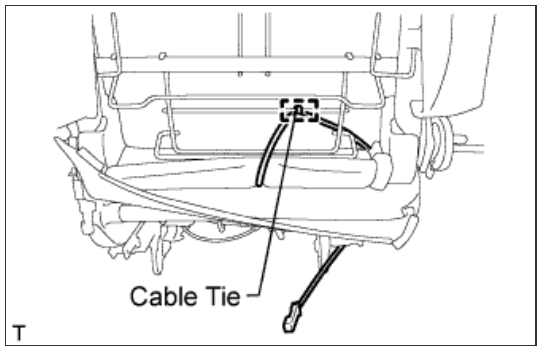
b. Remove the cap nut and seatback cover bracket from the seat frame.

c. Remove the side airbag wire harness through the hole in the seatback.



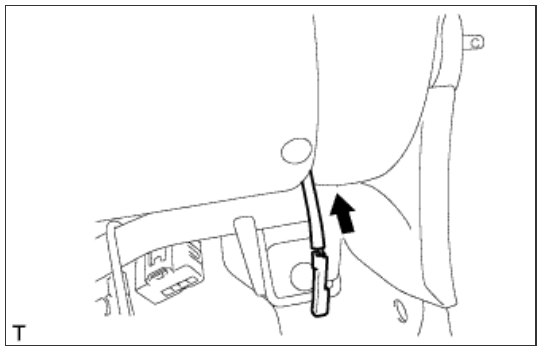
d. w/ Seat Heater System:

i. Cut the cable tie and disconnect the seatback heater wire harness.



ii. Remove the seatback heater wire harness through the hole in the seatback.

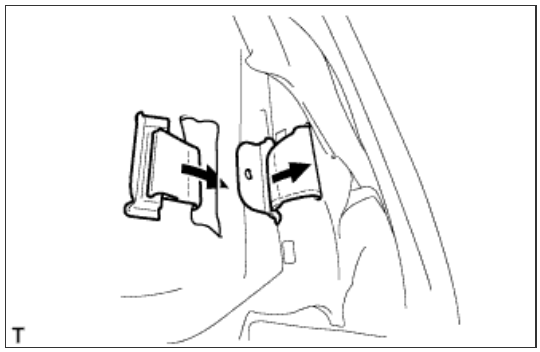
e. Remove the seatback cover with pad.



21. REMOVE REAR SEPARATE TYPE SEATBACK COVER

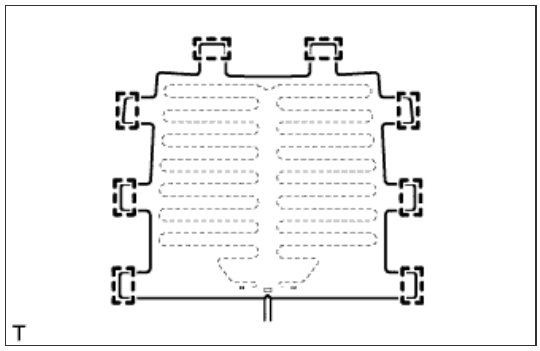
a. Disconnect the seatback cover bracket from the seatback pad.

b. Remove the hog rings and rear seatback cover.



22. REMOVE REAR SEATBACK HEATER ASSEMBLY

a. Cut off the tack pins which fasten the seatback heater to the seatback cover, and then remove the seatback heater from the seatback cover.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

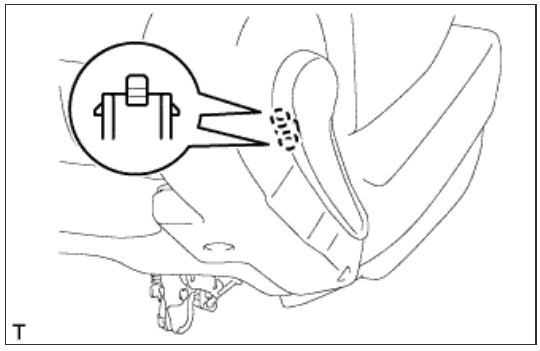
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

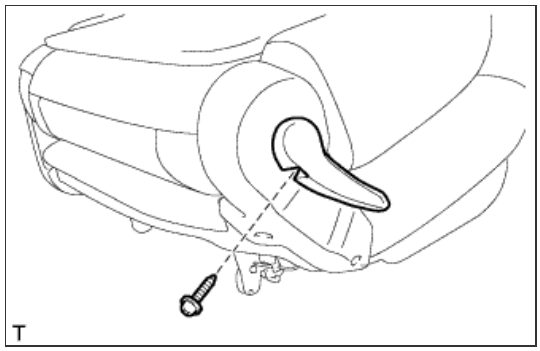
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE RH

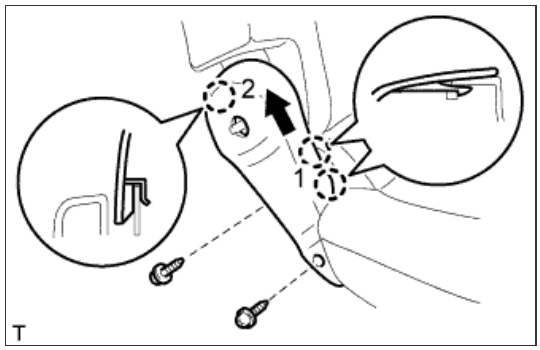
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

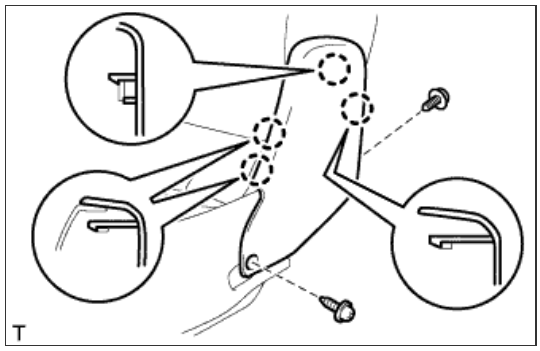
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

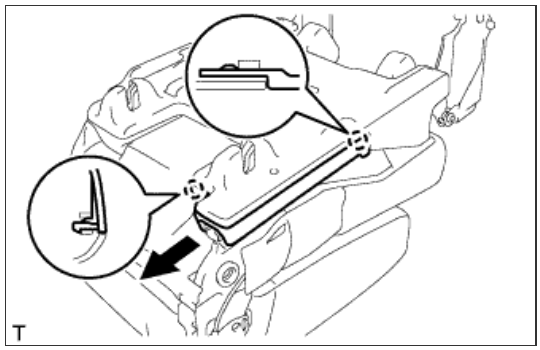


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

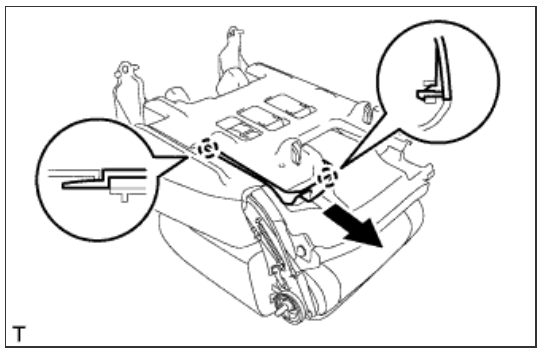


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

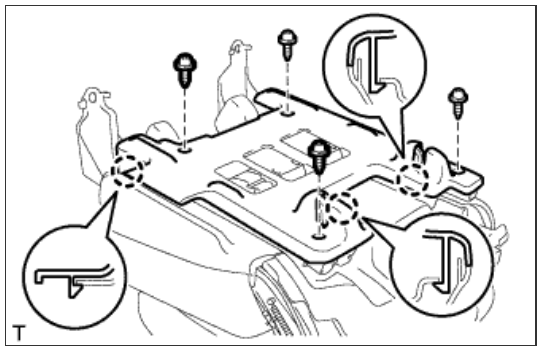
HINT:

Tape the screwdriver tip before use.

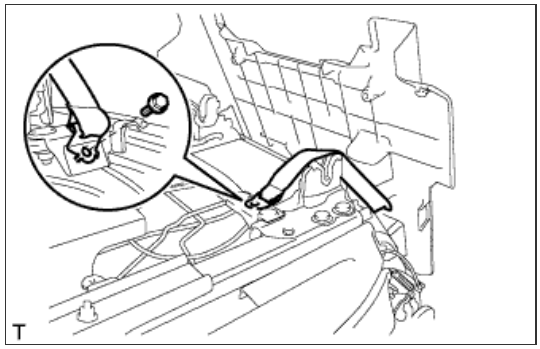


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 3 claws.



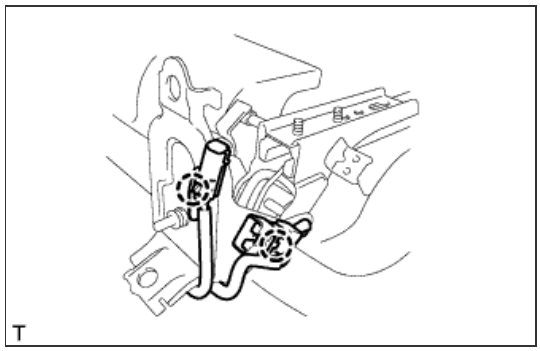
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

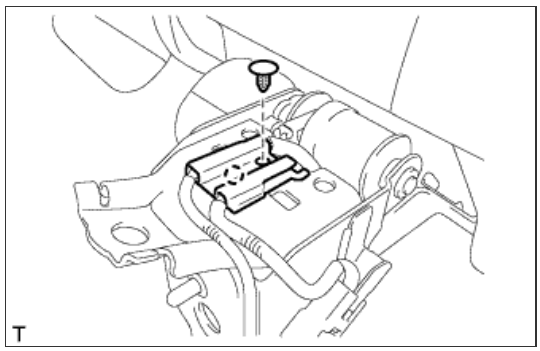
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

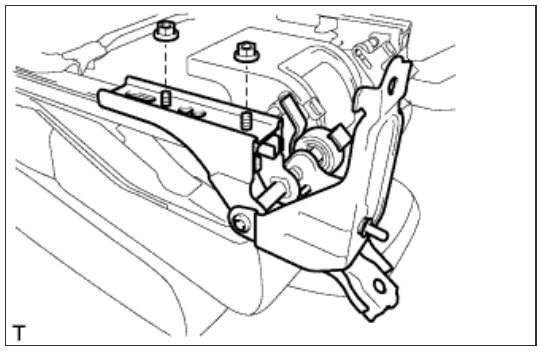
d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.



10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Remove the 2 nuts and hinge.

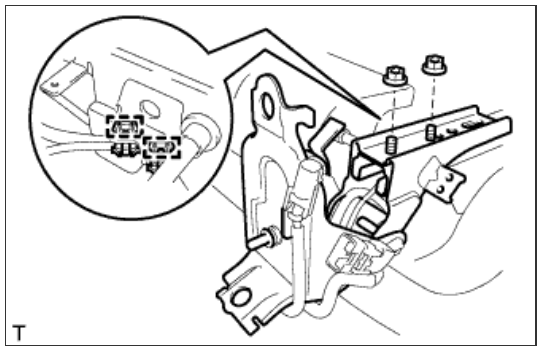


11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Detach the wire harness clamp.

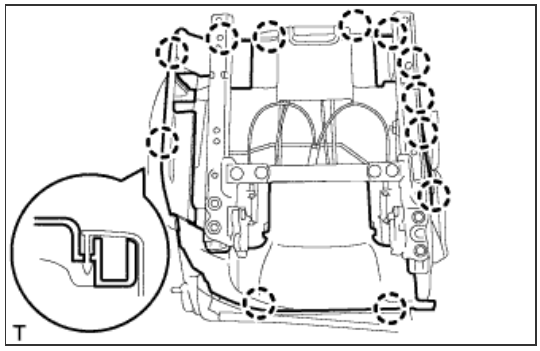
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



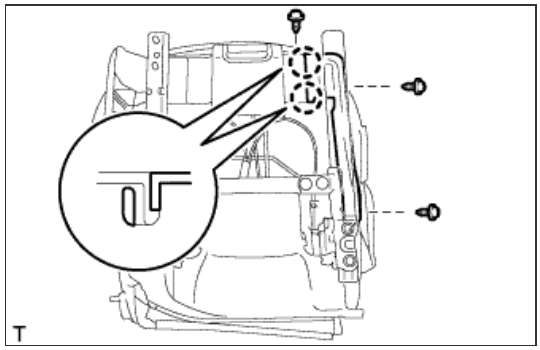
12. REMOVE REAR SEAT COVER

a. Detach the 12 claws.



b. Remove the 3 screws.

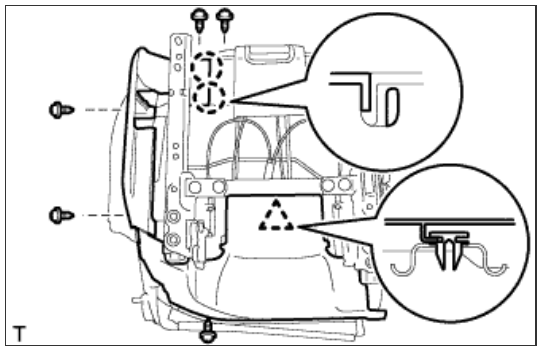
c. Detach the 2 claws and remove the cover.



13. REMOVE REAR UNDER SIDE COVER LH

a. Remove the 5 screws.

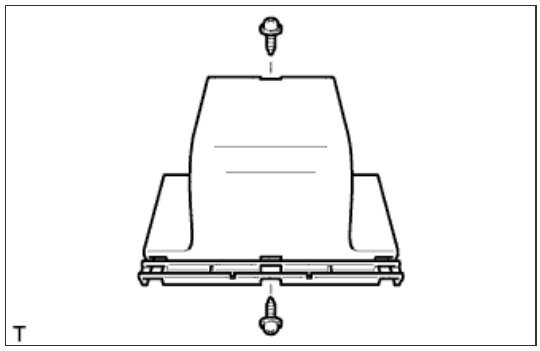
b. Detach the clip and 2 claws, and remove the cover.



14. REMOVE REAR SEAT UNDER TRAY COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



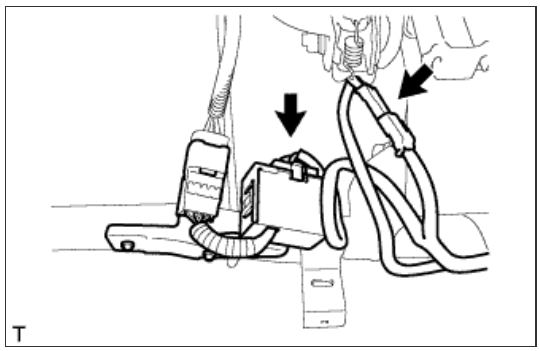
15. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

b. Remove the side airbag wire harness through the hole in the seat cushion.

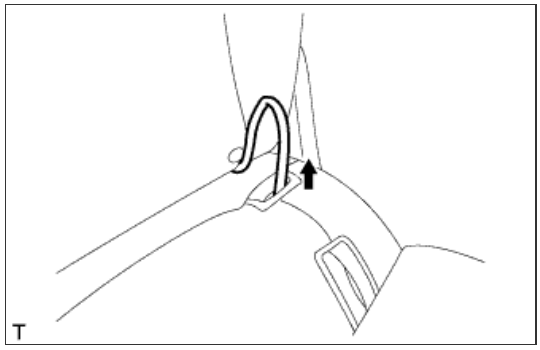
c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.

d. Remove the seat cushion cover with pad.

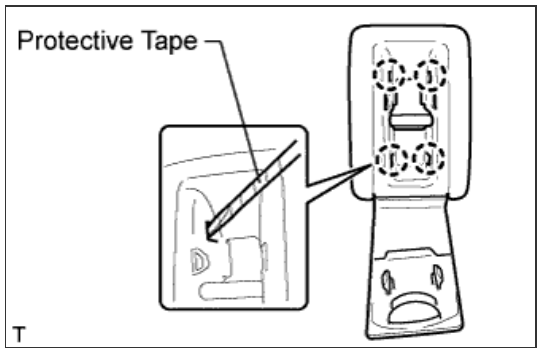


16. REMOVE REAR SEATBACK COVER

a. Using a screwdriver, detach the 4 claws and remove the cover.

HINT:

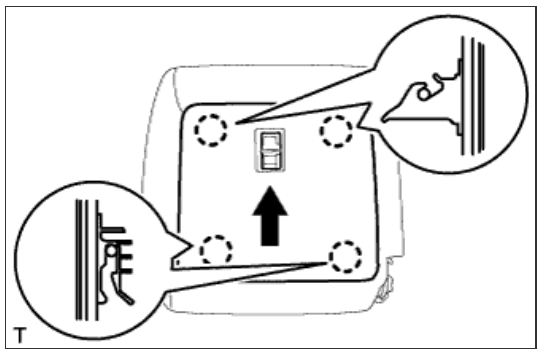
Tape the screwdriver tip before use.



17. REMOVE REAR SEATBACK BOARD SUB-ASSEMBLY RH

a. Detach the 2 claws on the top of the board.

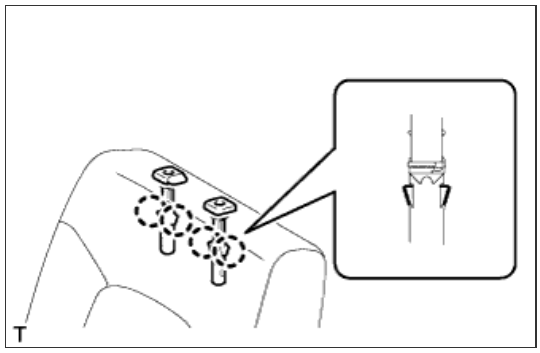
b. Pull up the board to detach the 2 claws on the bottom of the board and remove it.



18. REMOVE REAR SEAT HEADREST ASSEMBLY

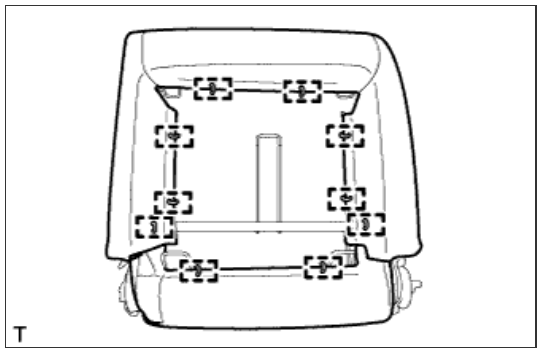
19. REMOVE REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Detach the 4 claws and remove the 2 supports.



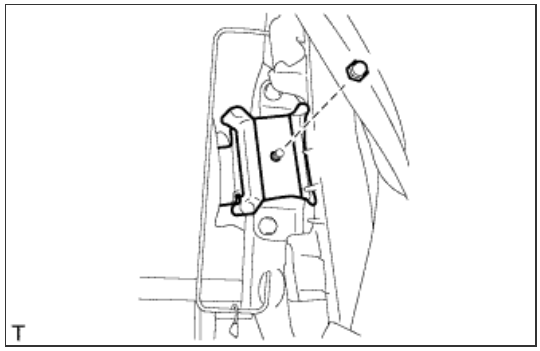
20. REMOVE SEATBACK COVER WITH PAD

a. Remove the hog rings.



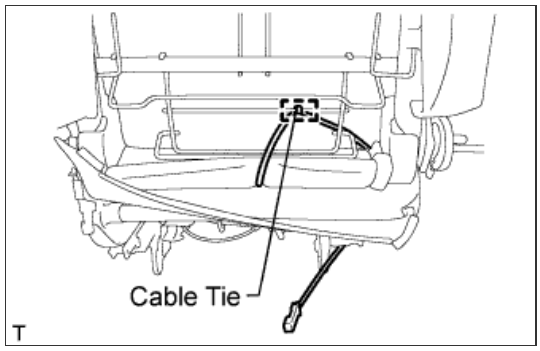
b. Remove the cap nut and seatback cover bracket from the seat frame.

c. Remove the side airbag wire harness through the hole in the seatback.



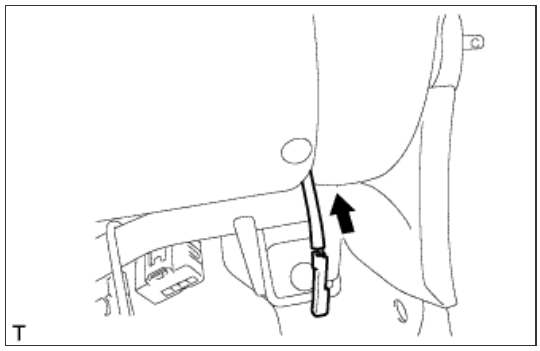
d. w/ Seat Heater System:

i. Cut the cable tie and disconnect the seatback heater wire harness.



ii. Remove the seatback heater wire harness through the hole in the seatback.

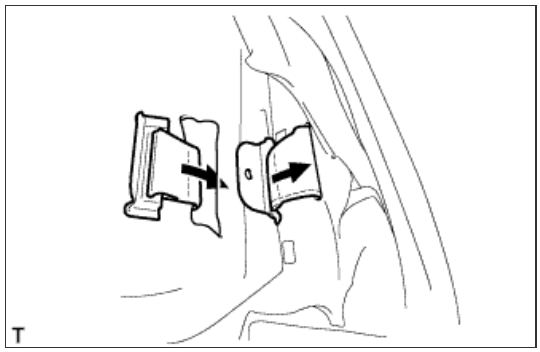
e. Remove the seatback cover with pad.



21. REMOVE REAR SEPARATE TYPE SEATBACK COVER

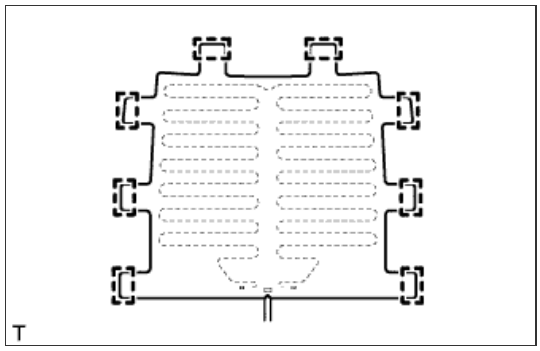
a. Disconnect the seatback cover bracket from the seatback pad.

b. Remove the hog rings and rear seatback cover.



22. REMOVE REAR SEATBACK HEATER ASSEMBLY

a. Cut off the tack pins which fasten the seatback heater to the seatback cover, and then remove the seatback heater from the seatback cover.



for Preparation Click here

1. INSPECT REAR SEATBACK HEATER ASSEMBLY RH

a. Check the seatback heater.

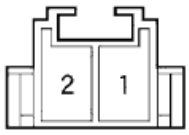
i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	Seatback heater temperature 25°C (77°F)	6.6 to 8.0 Ω

If the result is not as specified, replace the seatback heater assembly.

Component without harness connected:
(Rear Seatback Heater)



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

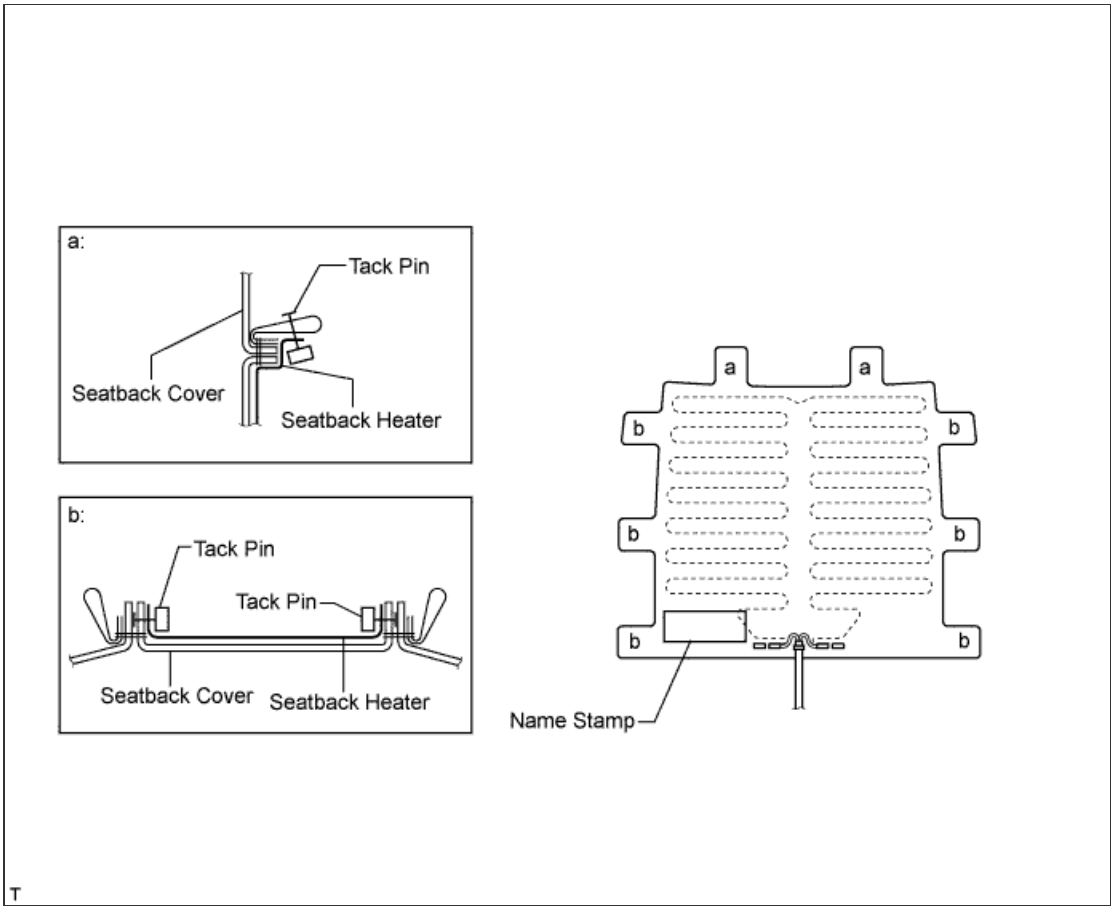
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEATBACK HEATER ASSEMBLY

a. Set the seatback heater with the name stamp side facing the seatback cover.

b. Install the seatback heater with new tack pins.

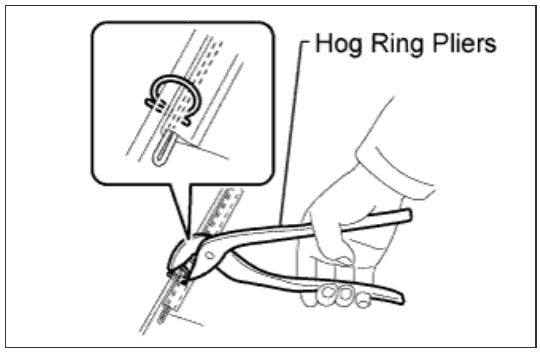


2. INSTALL REAR SEPARATE TYPE SEATBACK COVER

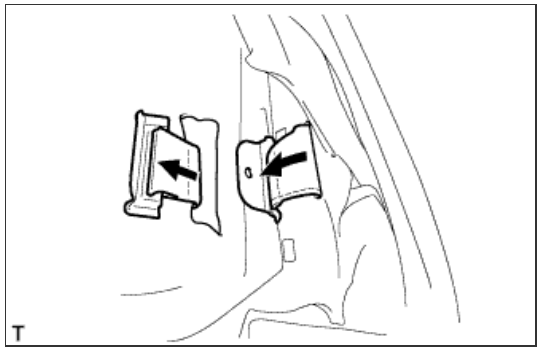
a. Using hog ring pliers, install the seatback cover with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Connect the seatback cover bracket to the seatback pad.



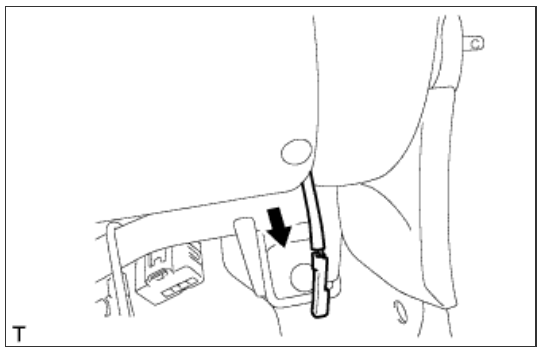
3. INSTALL SEATBACK COVER WITH PAD

a. Install the seatback cover with pad.

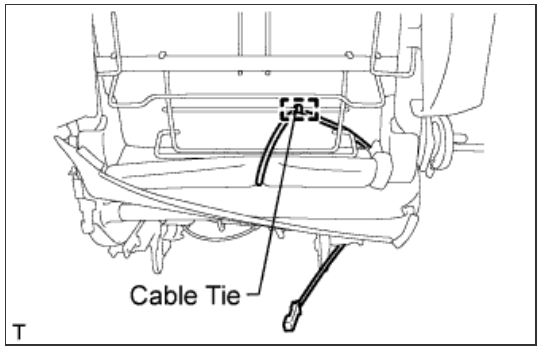
b. Pass the side airbag wire harness through the hole in the seatback.

c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seatback.



ii. Connect the seatback heater wire harness and install a new cable tie.

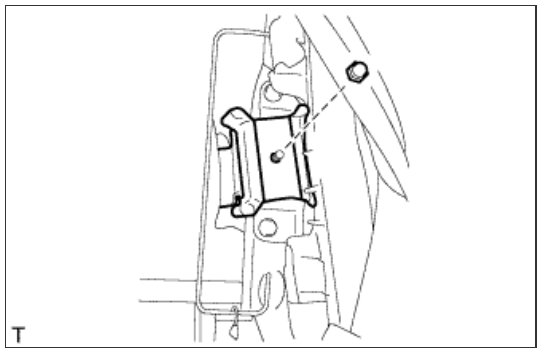


d. Install the seatback cover bracket to the seat frame with the cap nut.

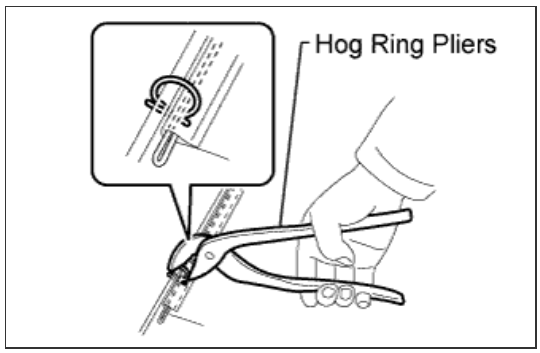
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

CAUTION:

After the seatback trim cover is assembled, make sure the side airbag strap is not twisted.

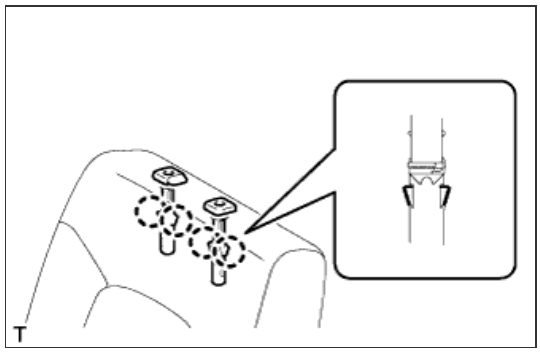


e. Using hog ring pliers, install new hog rings to the seatback frame.



4. INSTALL REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Attach the 4 claws to install the 2 supports.

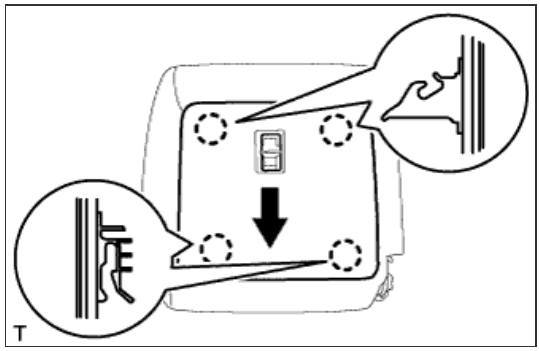


5. INSTALL REAR SEAT HEADREST ASSEMBLY

6. INSTALL REAR SEATBACK BOARD SUB-ASSEMBLY RH

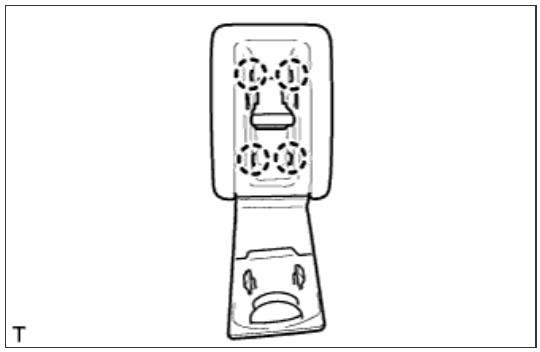
a. Push the board down to attach the 2 claws on the bottom.

b. Attach the 2 claws on the top of the board to install it.



7. INSTALL REAR SEATBACK COVER

a. Attach the 4 claws to install the cover.



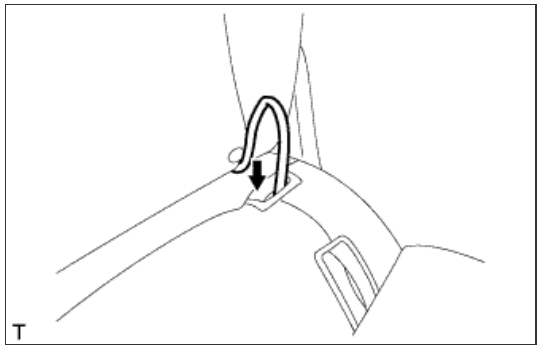
8. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

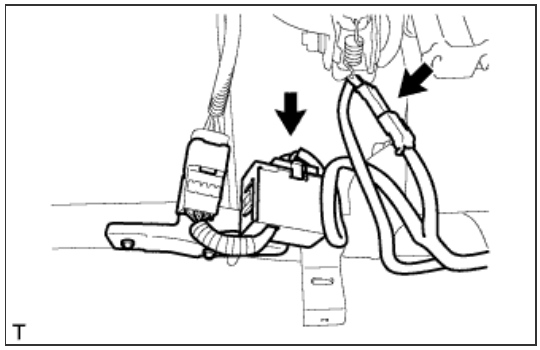
b. Pass the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.

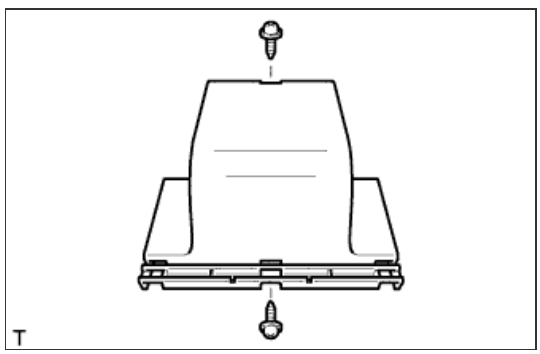


d. Attach the side airbag wire harness clamps.

9. INSTALL REAR SEAT UNDER TRAY COVER RH

a. Attach the 4 claws to install the cover.

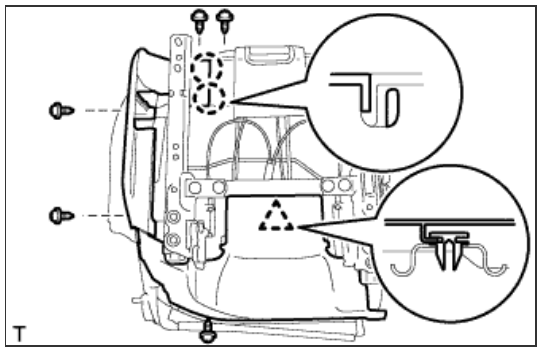
b. Install the 2 screws.



10. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and clip to install the cover.

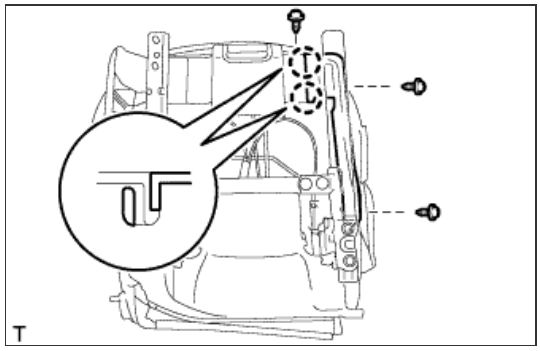
b. Install the 5 screws.



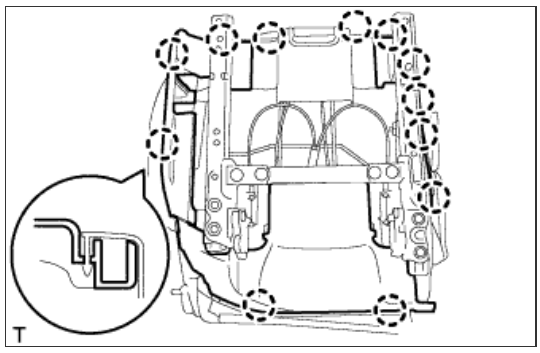
11. INSTALL REAR SEAT COVER

a. Attach the 2 claws to install the cover.

b. Install the 3 screws.



c. Attach the 12 claws.



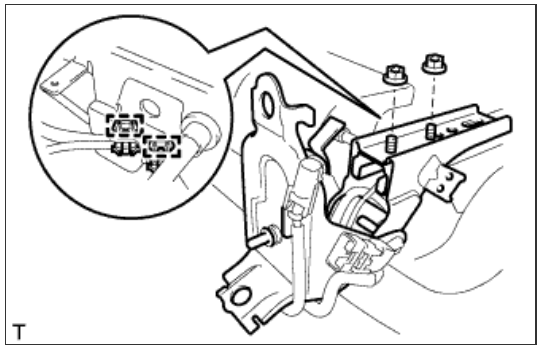
12. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

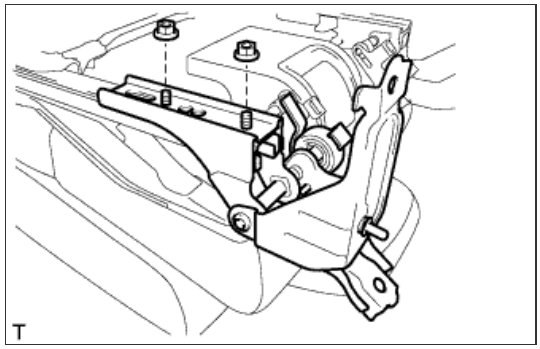
c. w/ Seat Heater System:
Attach the wire harness clamp.



13. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

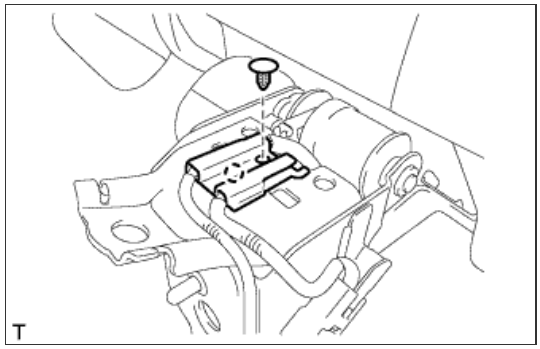


14. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

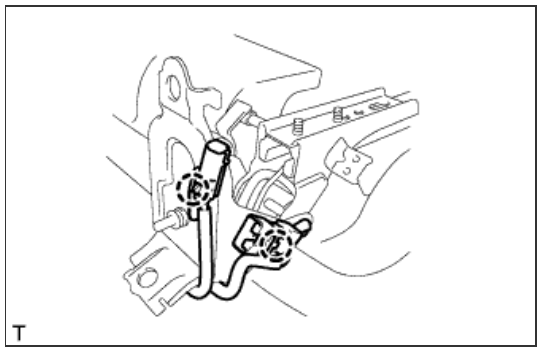
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



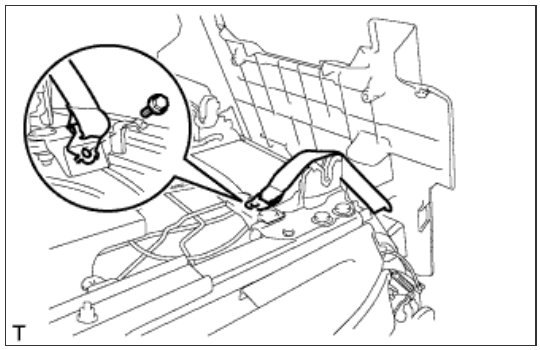
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



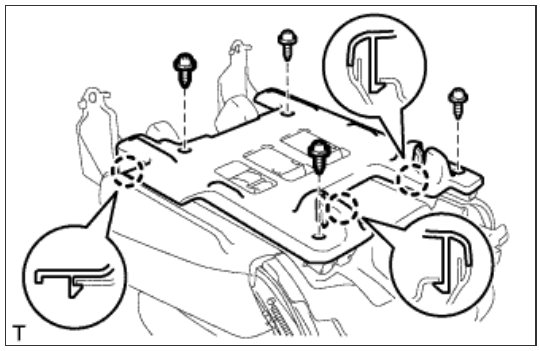
15. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



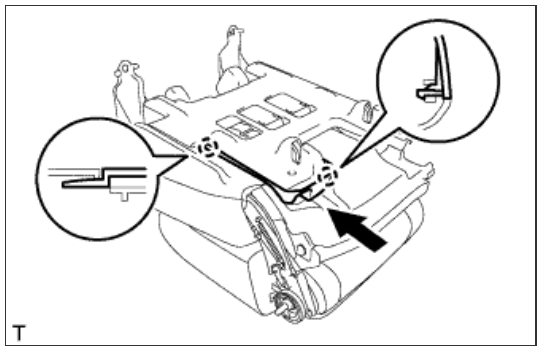
b. Attach the 3 claws to install the seat leg side cover.

c. Install the 4 screws.



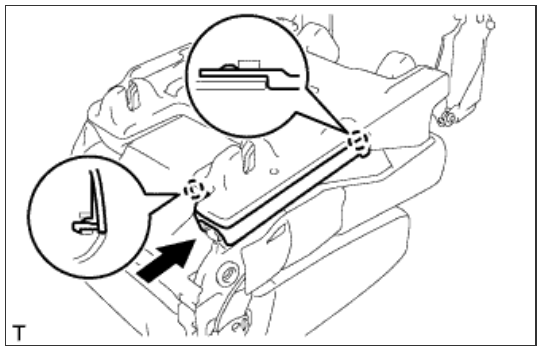
16. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



17. INSTALL UPPER SEAT TRACK RAIL COVER LH

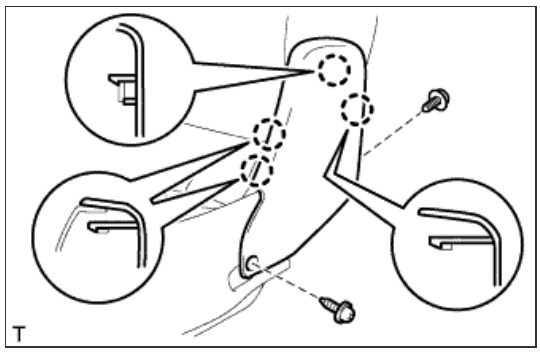
a. Attach the 2 claws to install the cover.



18. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

a. Attach the 4 claws to install the cover.

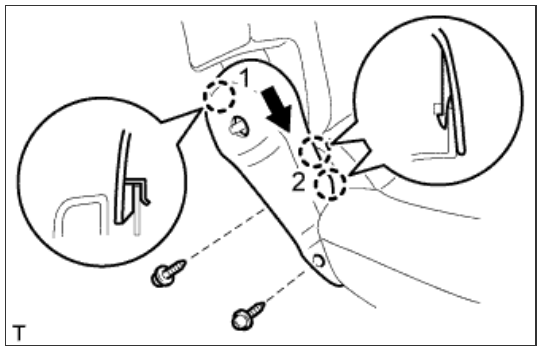
b. Install the 2 screws.



19. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

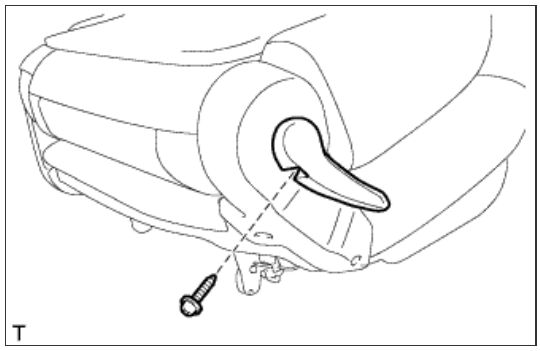
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



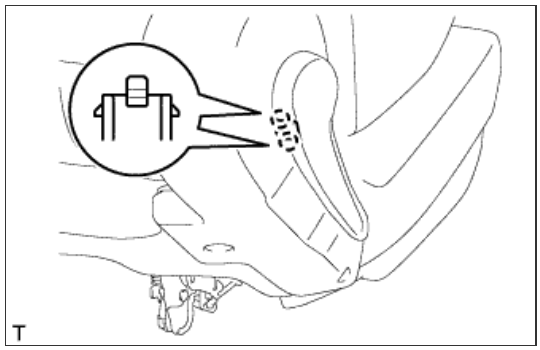
20. INSTALL RECLINING ADJUSTER RELEASE HANDLE RH

a. Install the release handle with the screw.



21. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



22. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

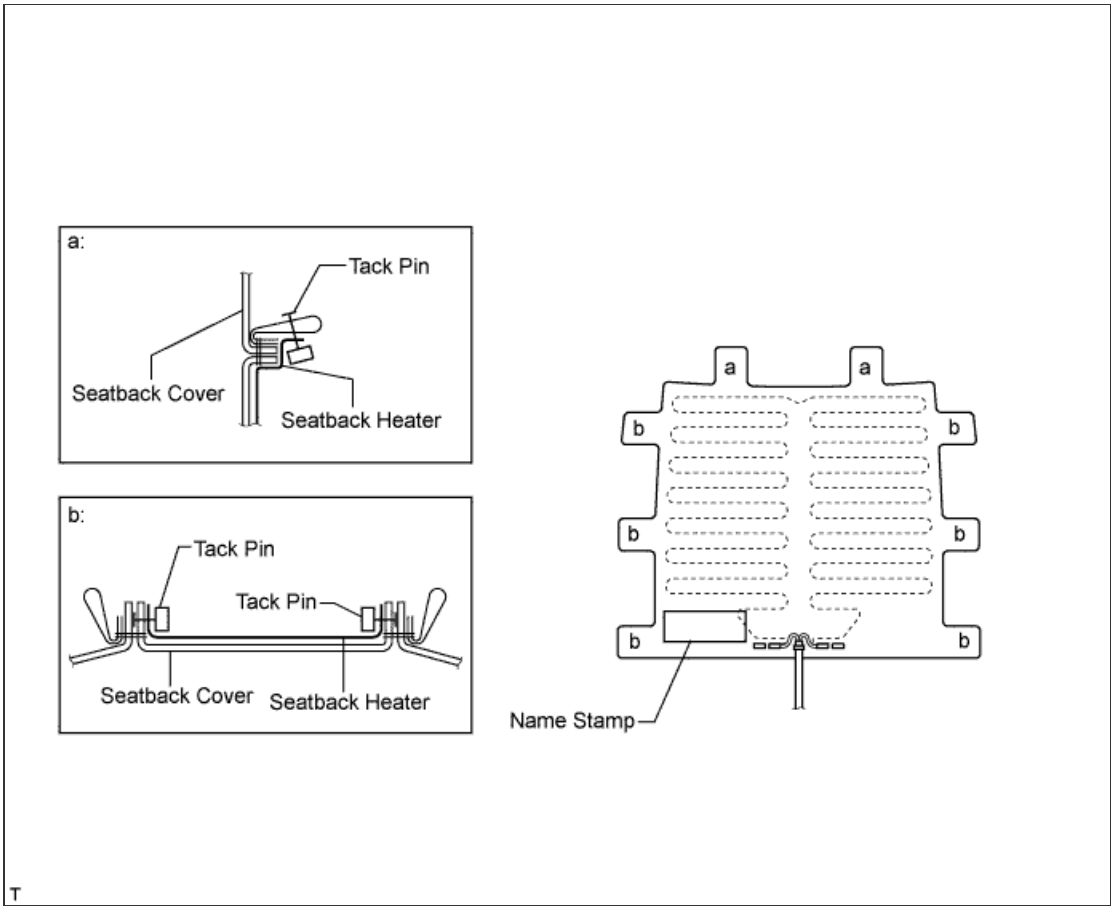
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEATBACK HEATER ASSEMBLY

a. Set the seatback heater with the name stamp side facing the seatback cover.

b. Install the seatback heater with new tack pins.

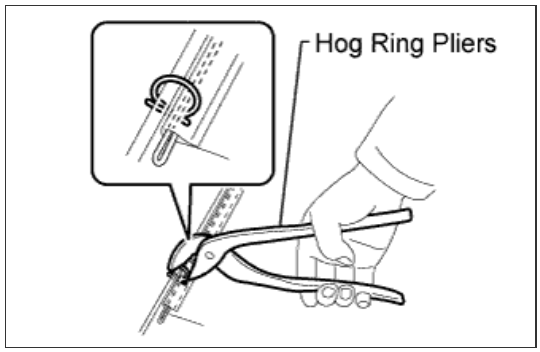


2. INSTALL REAR SEPARATE TYPE SEATBACK COVER

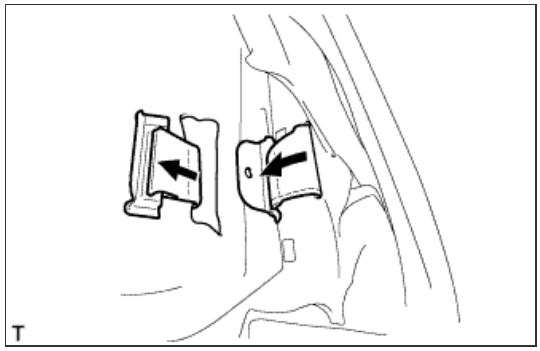
a. Using hog ring pliers, install the seatback cover with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Connect the seatback cover bracket to the seatback pad.



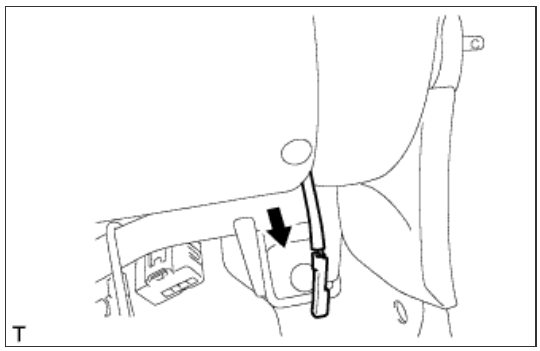
3. INSTALL SEATBACK COVER WITH PAD

a. Install the seatback cover with pad.

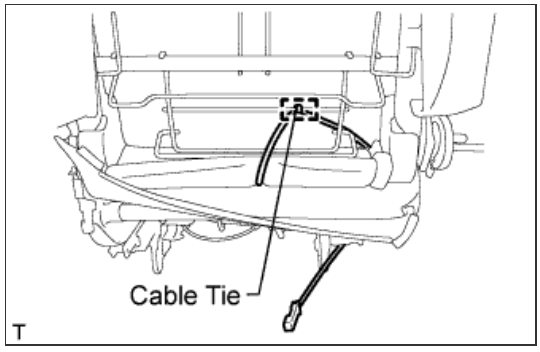
b. Pass the side airbag wire harness through the hole in the seatback.

c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seatback.



ii. Connect the seatback heater wire harness and install a new cable tie.

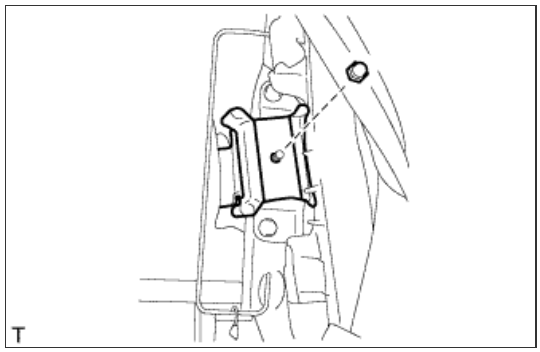


d. Install the seatback cover bracket to the seat frame with the cap nut.

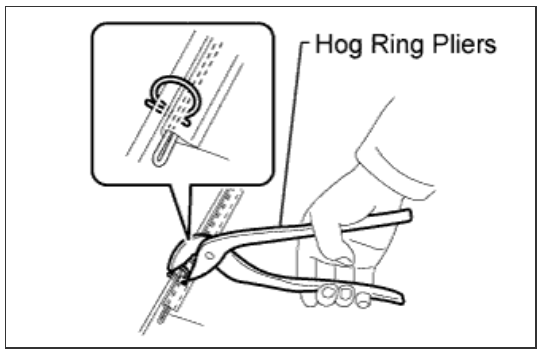
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

CAUTION:

After the seatback trim cover is assembled, make sure the side airbag strap is not twisted.

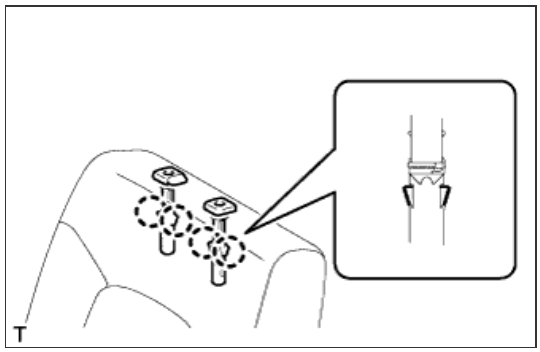


e. Using hog ring pliers, install new hog rings to the seatback frame.



4. INSTALL REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Attach the 4 claws to install the 2 supports.

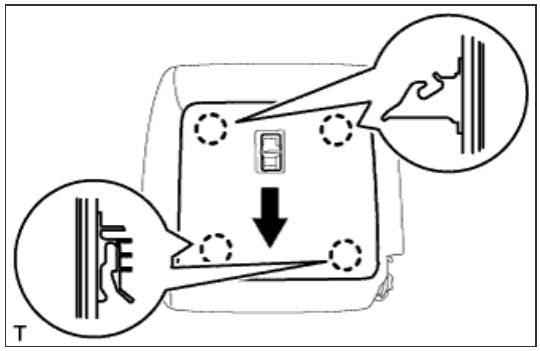


5. INSTALL REAR SEAT HEADREST ASSEMBLY

6. INSTALL REAR SEATBACK BOARD SUB-ASSEMBLY RH

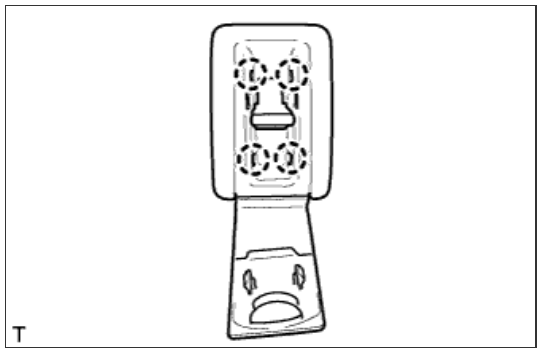
a. Push the board down to attach the 2 claws on the bottom.

b. Attach the 2 claws on the top of the board to install it.



7. INSTALL REAR SEATBACK COVER

a. Attach the 4 claws to install the cover.



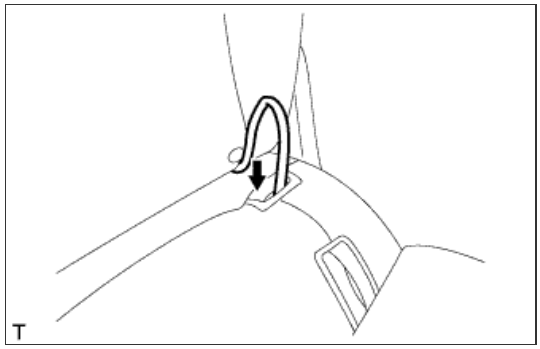
8. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

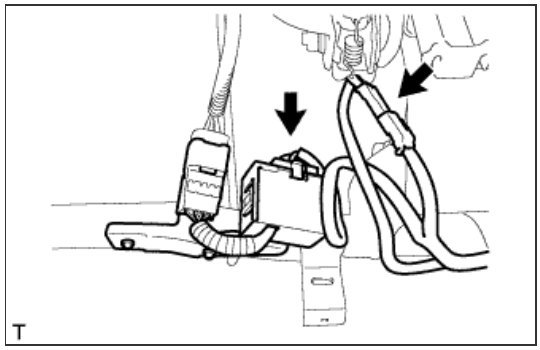
b. Pass the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.

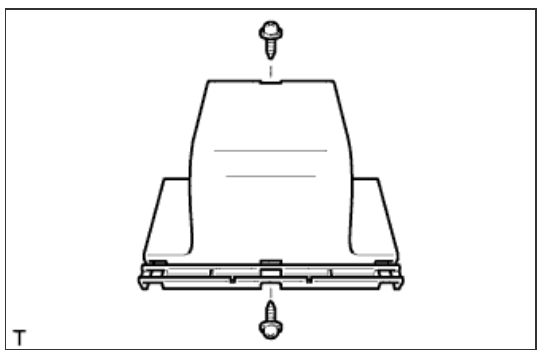


d. Attach the side airbag wire harness clamps.

9. INSTALL REAR SEAT UNDER TRAY COVER RH

a. Attach the 4 claws to install the cover.

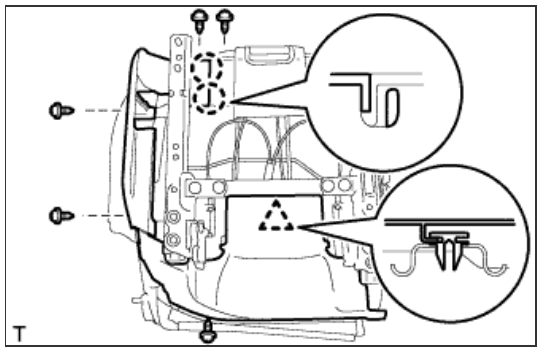
b. Install the 2 screws.



10. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and clip to install the cover.

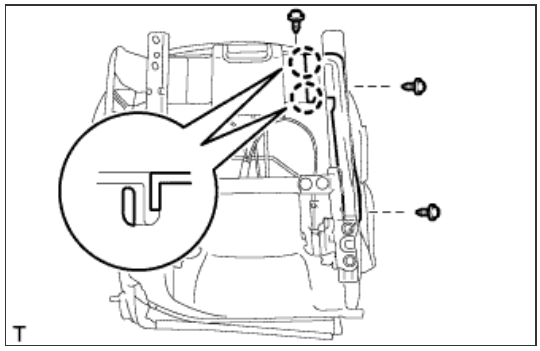
b. Install the 5 screws.



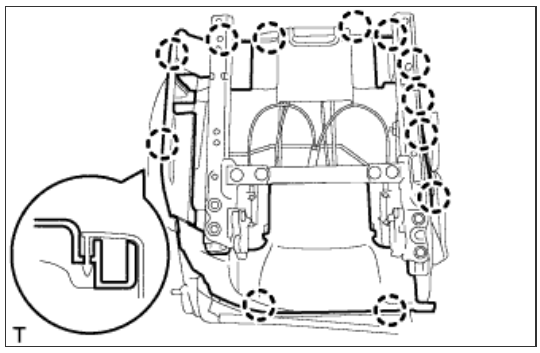
11. INSTALL REAR SEAT COVER

a. Attach the 2 claws to install the cover.

b. Install the 3 screws.



c. Attach the 12 claws.



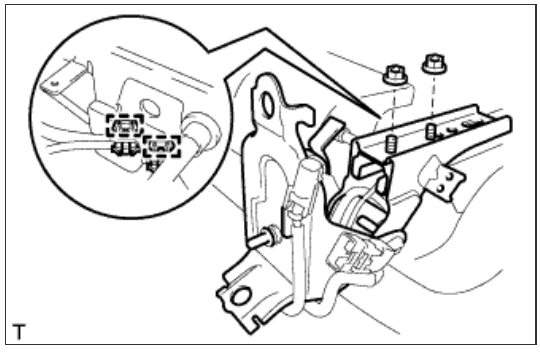
12. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

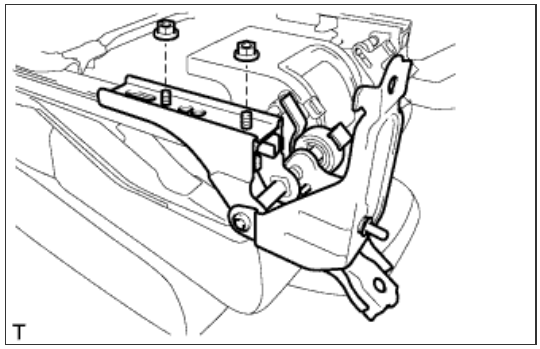
c. w/ Seat Heater System:
Attach the wire harness clamp.



13. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

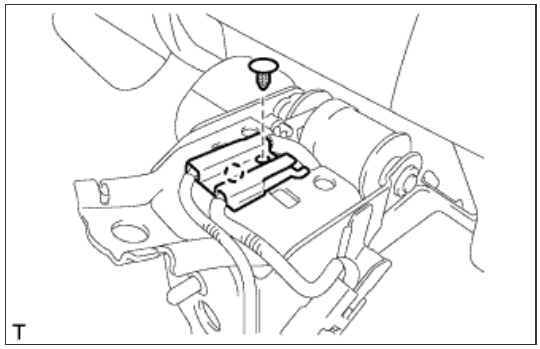


14. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

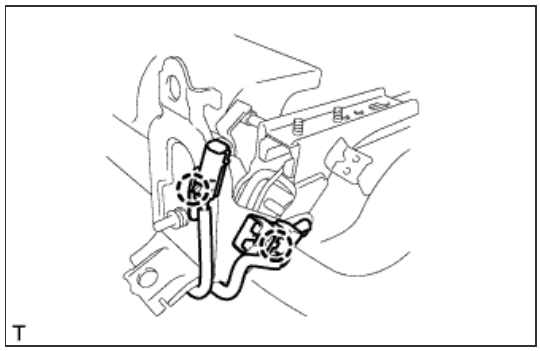
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



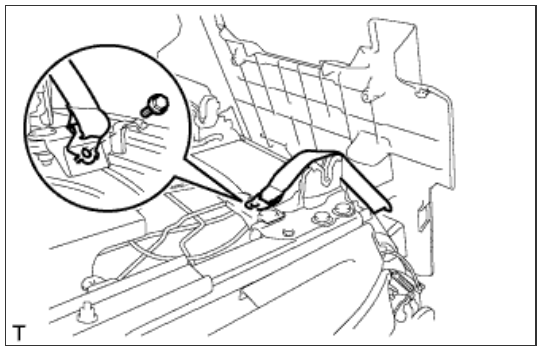
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



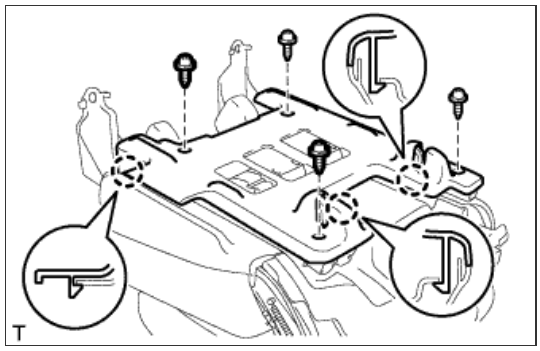
15. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



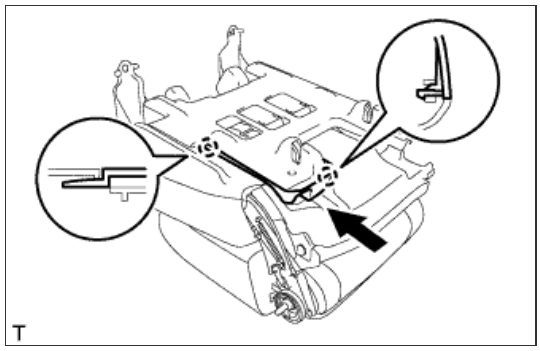
b. Attach the 3 claws to install the seat leg side cover.

c. Install the 4 screws.



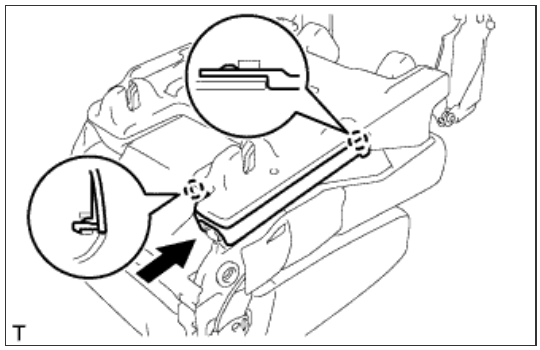
16. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



17. INSTALL UPPER SEAT TRACK RAIL COVER LH

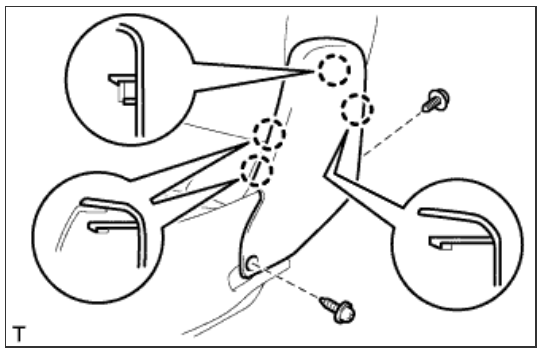
a. Attach the 2 claws to install the cover.



18. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

a. Attach the 4 claws to install the cover.

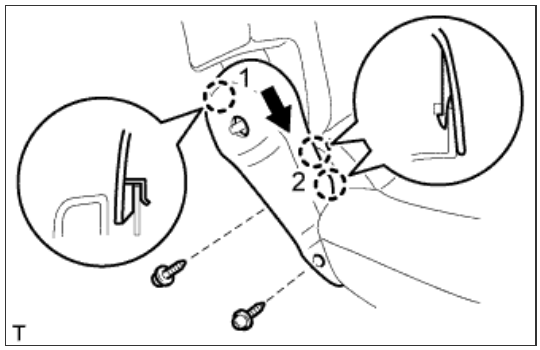
b. Install the 2 screws.



19. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

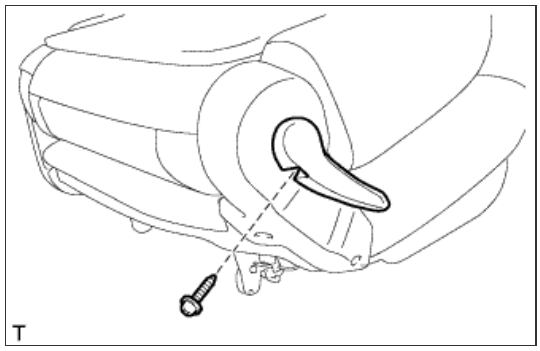
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



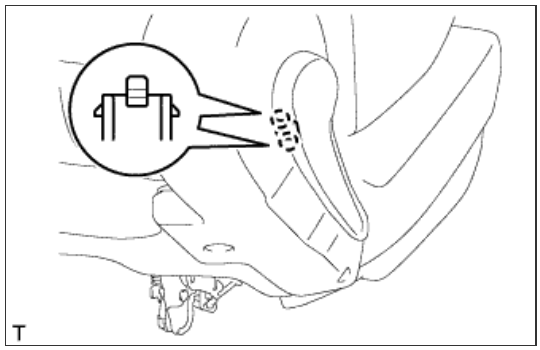
20. INSTALL RECLINING ADJUSTER RELEASE HANDLE RH

a. Install the release handle with the screw.



21. INSTALL SEAT ADJUSTER BOLT COVER

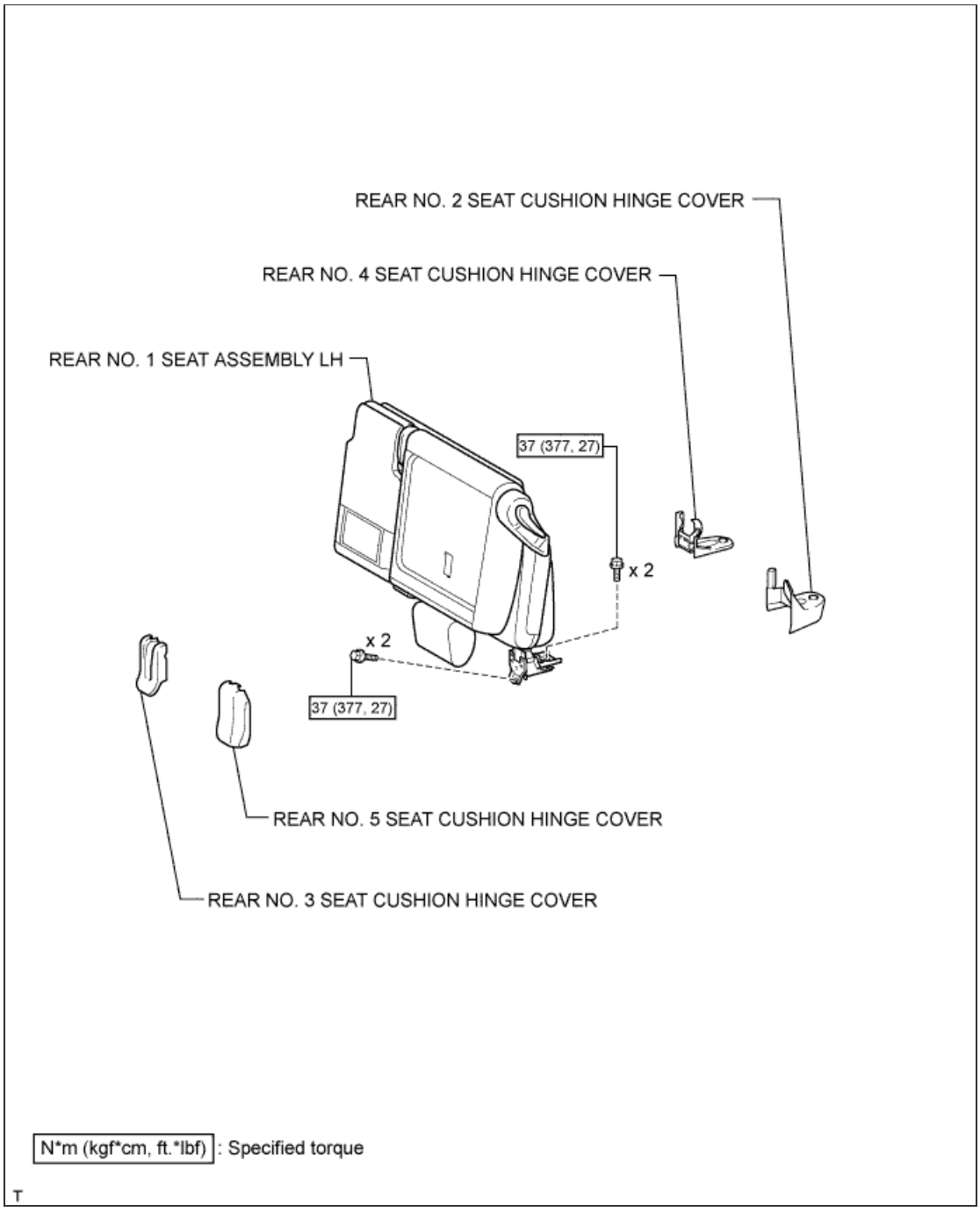
a. Attach the 2 claws to install the cover.

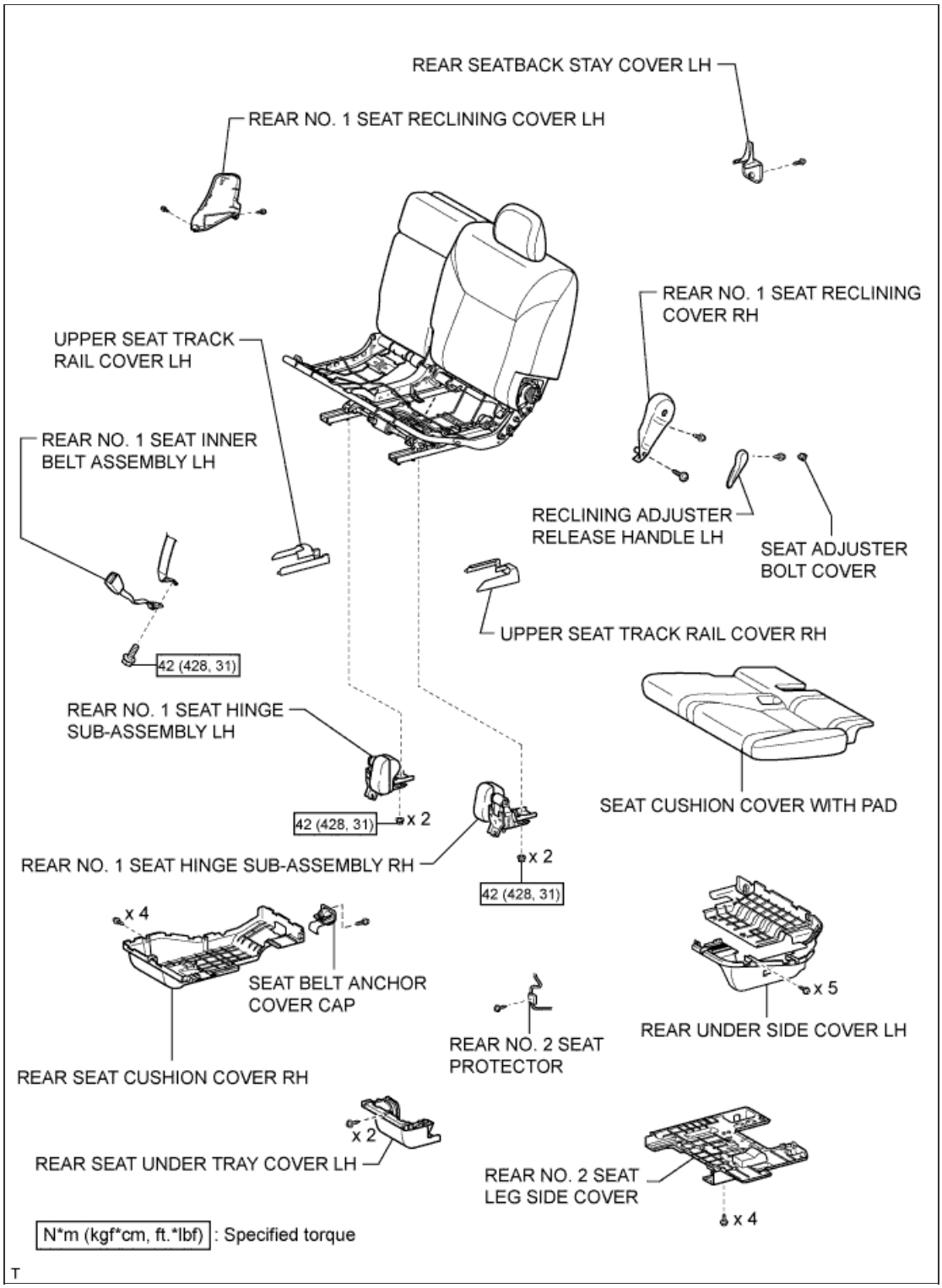


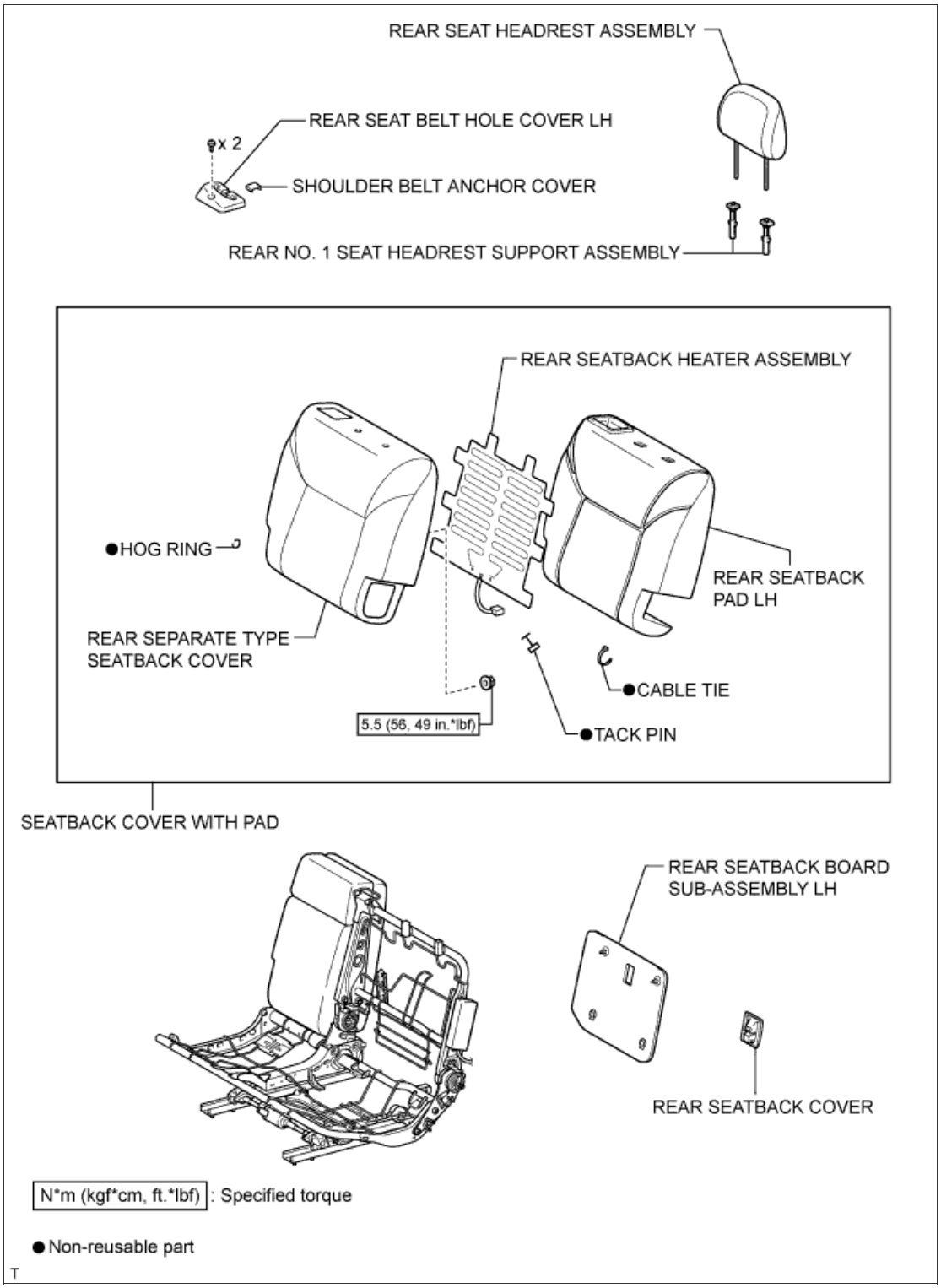
22. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here




REAR SEATBACK STAY COVER LH
REAR NO. 1 SEAT RECLINING COVER LH
REAR NO. 1 SEAT RECLINING COVER RH
UPPER SEAT TRACK RAIL COVER LH
REAR NO. 1 SEAT INNER BELT ASSEMBLY LH
RECLINING ADJUSTER RELEASE HANDLE LH
SEAT ADJUSTER BOLT COVER
UPPER SEAT TRACK RAIL COVER RH
42 (428, 31)
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH
SEAT CUSHION COVER WITH PAD
42 (428, 31) x 2
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH
x 2
42 (428, 31)
x 4
SEAT BELT ANCHOR COVER CAP
x 5
REAR UNDER SIDE COVER LH
REAR NO. 2 SEAT PROTECTOR
REAR SEAT CUSHION COVER RH
x 2
REAR SEAT UNDER TRAY COVER LH
REAR NO. 2 SEAT LEG SIDE COVER
x 4
N*m (kgf*cm, ft.*lbf) : Specified torque
T


REAR SEAT HEADREST ASSEMBLY
REAR SEAT BELT HOLE COVER LH
x 2
SHOULDER BELT ANCHOR COVER
REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY
REAR SEATBACK HEATER ASSEMBLY
●HOG RING
REAR SEATBACK PAD LH
REAR SEPARATE TYPE SEATBACK COVER
●CABLE TIE
5.5 (56, 49 in.*lbf)
●TACK PIN
SEATBACK COVER WITH PAD
REAR SEATBACK BOARD SUB-ASSEMBLY LH
REAR SEATBACK COVER
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part

T

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY

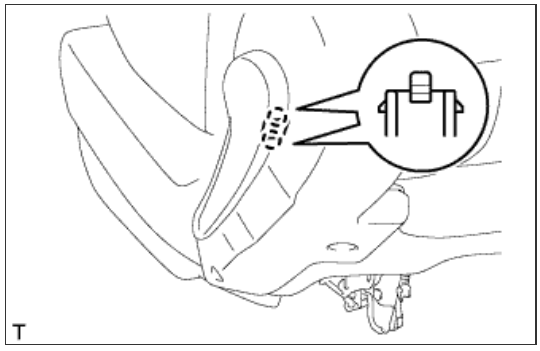
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

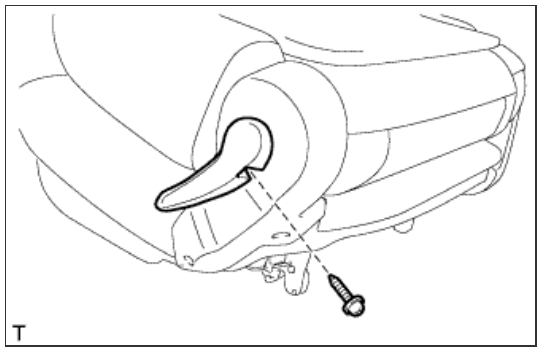
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE LH

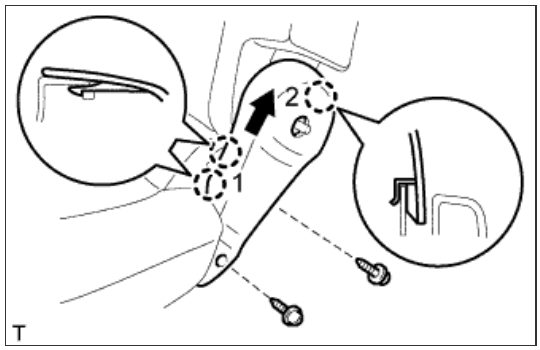
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

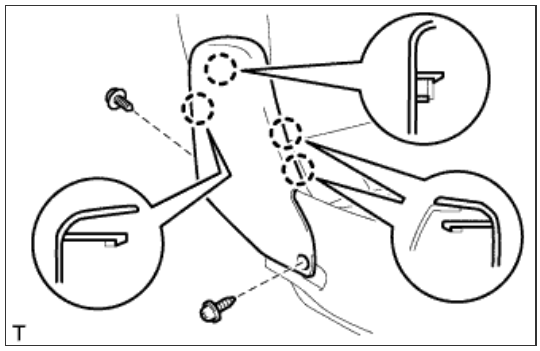
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

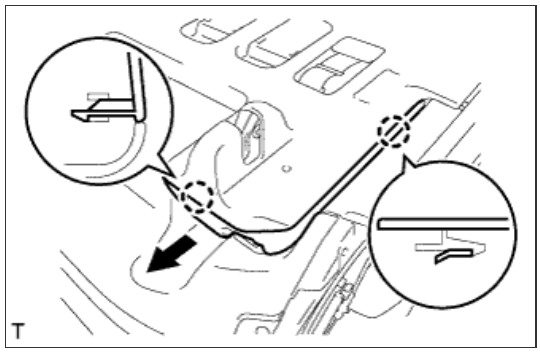


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

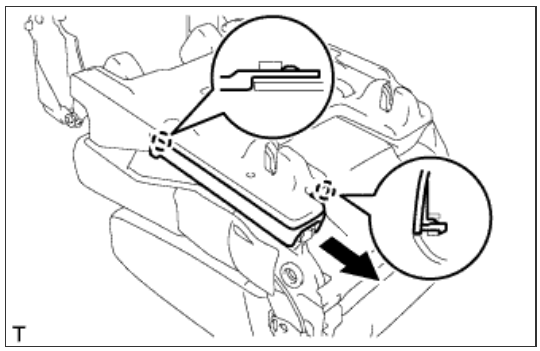


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

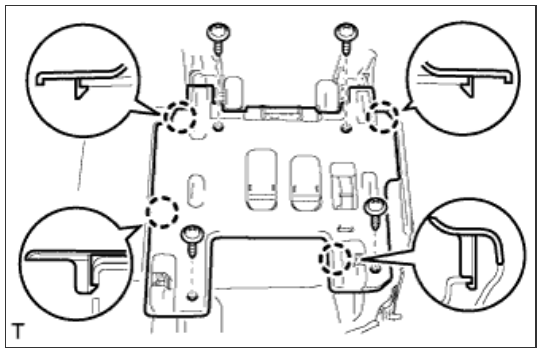
HINT:

Tape the screwdriver tip before use.

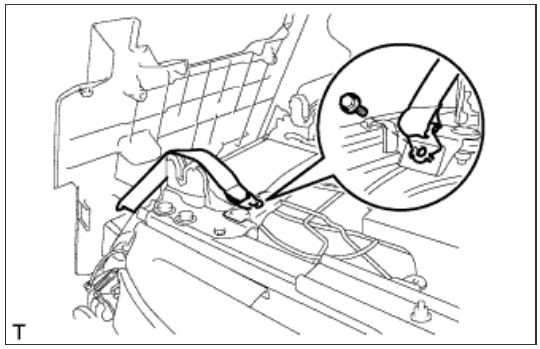


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 4 claws.



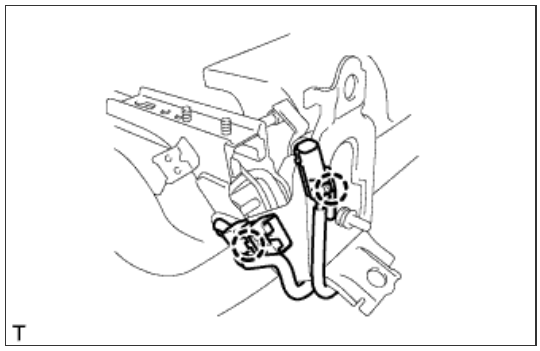
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

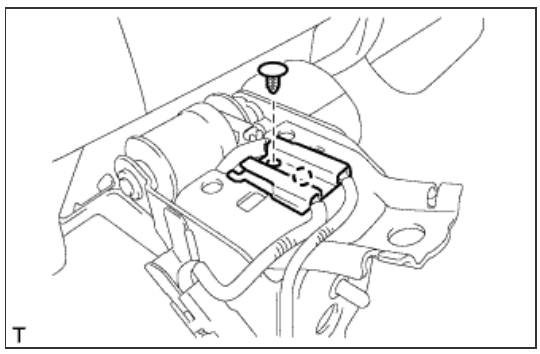
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.

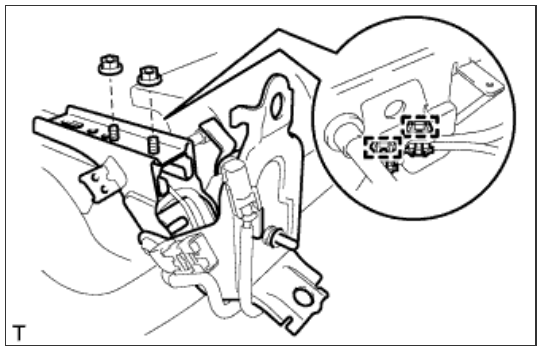


10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Detach the wire harness clamp.

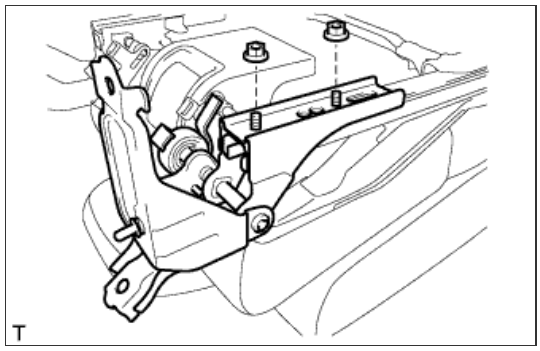
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



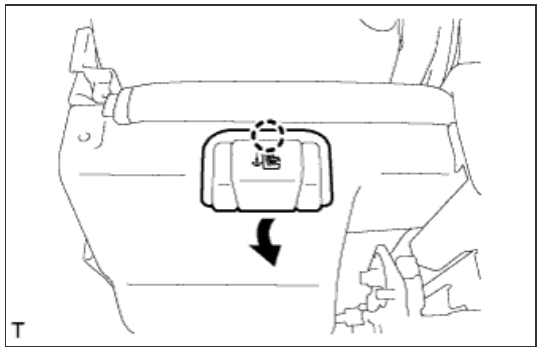
11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Remove the 2 nuts and hinge.

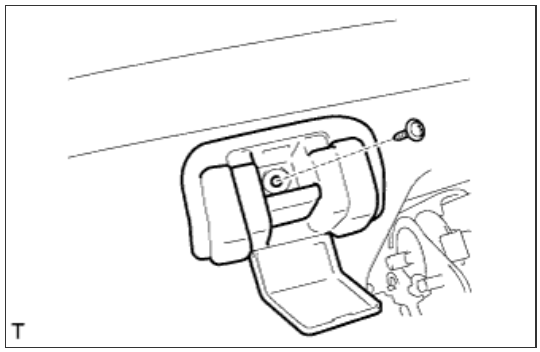


12. REMOVE SEAT BELT ANCHOR COVER CAP

a. Detach the claw and open the cap.



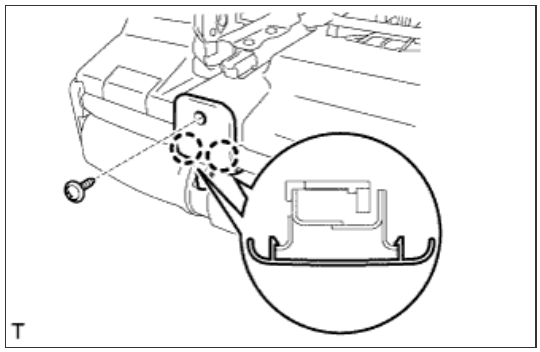
b. Remove the screw and anchor cover cap.



13. REMOVE REAR SEATBACK STAY COVER LH

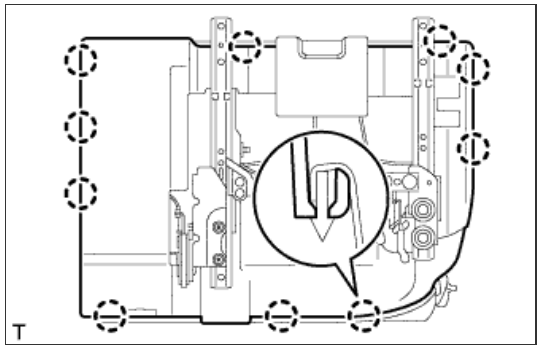
a. Remove the screw.

b. Detach the 2 claws and remove the cover.



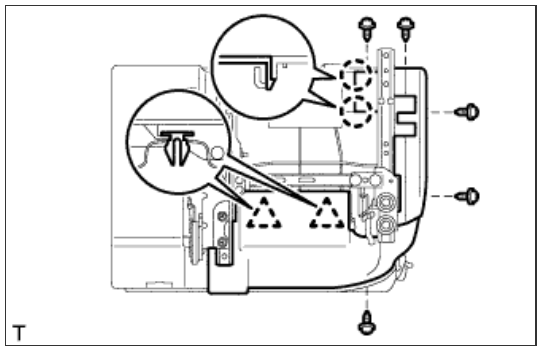
14. REMOVE REAR UNDER SIDE COVER LH

a. Detach the 10 claws.



b. Remove the 5 screws.

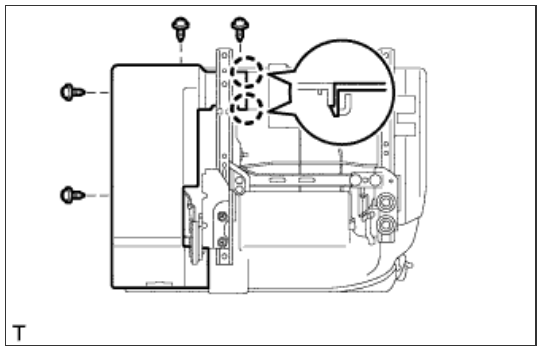
c. Detach the 2 clips and 2 claws, and remove the cover.



15. REMOVE REAR SEAT CUSHION COVER RH

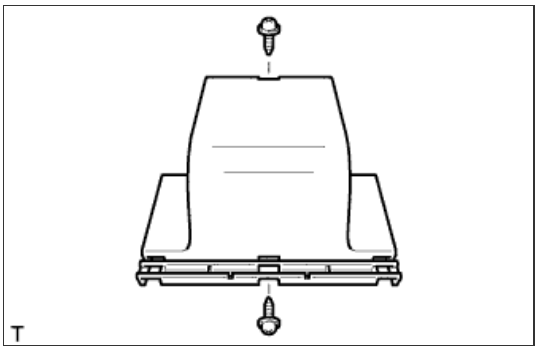
a. Attach the 2 claws to install the cover.

b. Install the 4 screws.



16. REMOVE REAR SEAT UNDER TRAY COVER LH

a. Remove the 2 screws and cover.

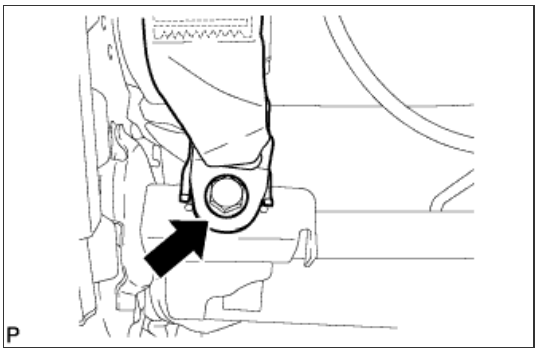


17. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Remove the bolt and belt.

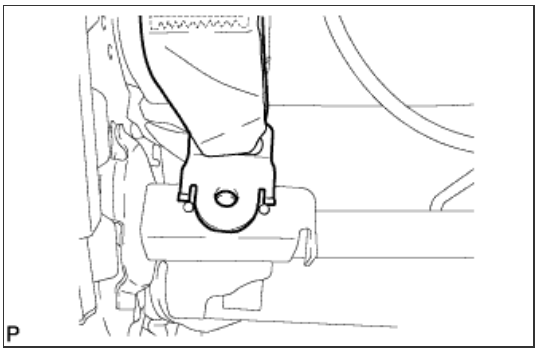
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, it becomes disconnected when the bolt is removed.



18. DISCONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Disconnect the belt anchor.



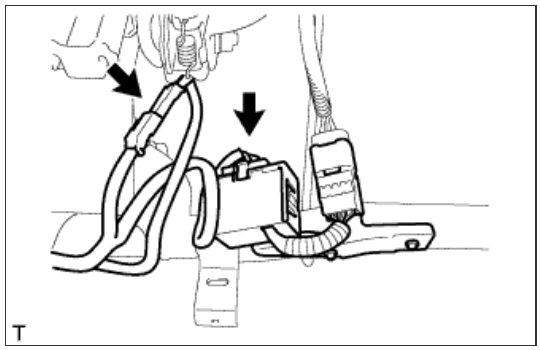
19. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

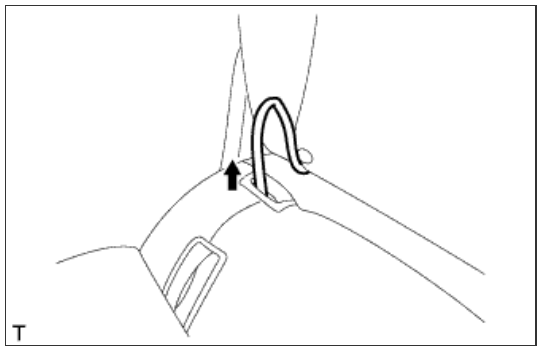
b. Remove the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.



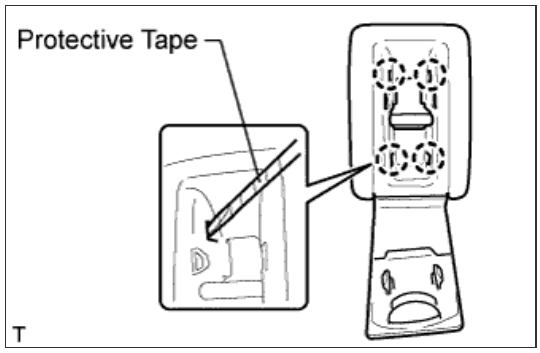
d. Remove the seat cushion cover with pad.

20. REMOVE REAR SEATBACK COVER

a. Using a screwdriver, detach the 4 claws and remove the cover.

HINT:

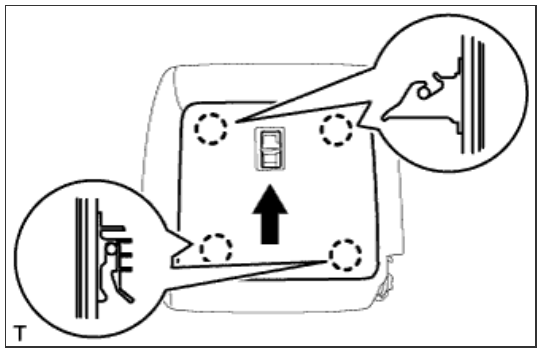
Tape the screwdriver tip before use.



21. REMOVE REAR SEATBACK BOARD SUB-ASSEMBLY LH

a. Detach the 2 claws on the top of the board.

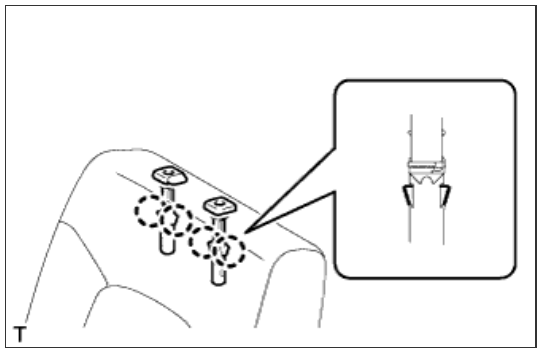
b. Pull up the board to detach the 2 claws on the bottom of the board and remove it.



22. REMOVE REAR SEAT HEADREST ASSEMBLY

23. REMOVE REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Detach the 4 claws and remove the 2 supports.

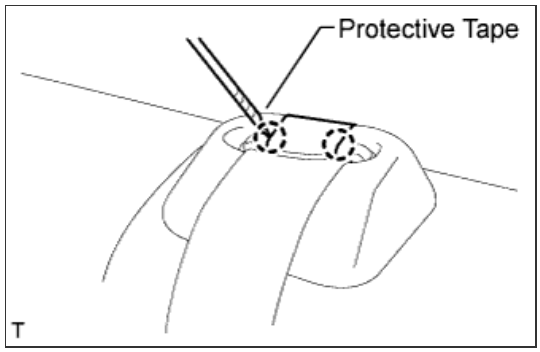


24. REMOVE SHOULDER BELT ANCHOR COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

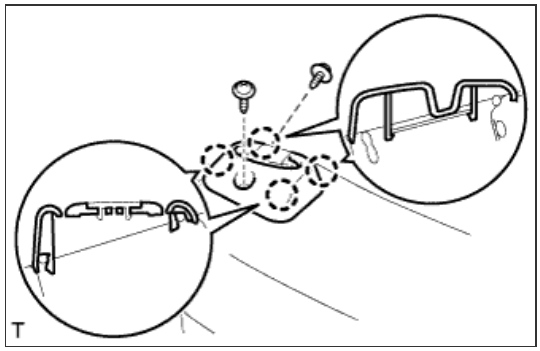
Tape the screwdriver tip before use.



25. REMOVE REAR SEAT BELT HOLE COVER LH

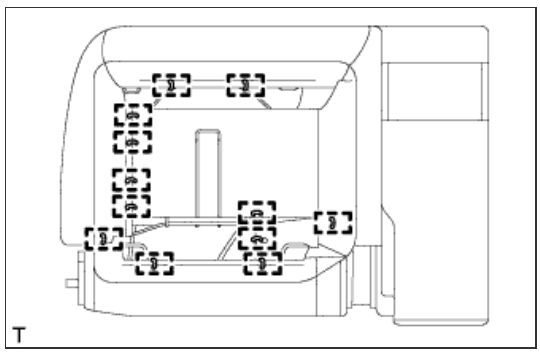
a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



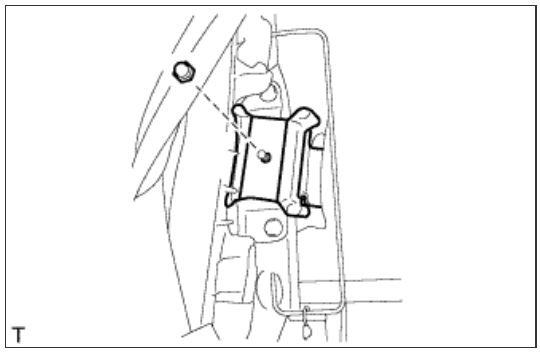
26. REMOVE SEATBACK COVER WITH PAD

a. Remove the hog rings.



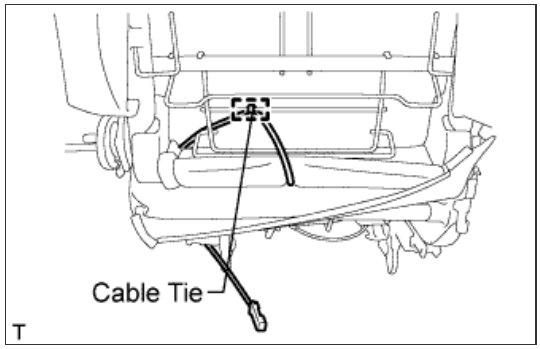
b. Remove the cap nut and seatback cover bracket from the seat frame.

c. Remove the side airbag wire harness through the hole in the seatback.

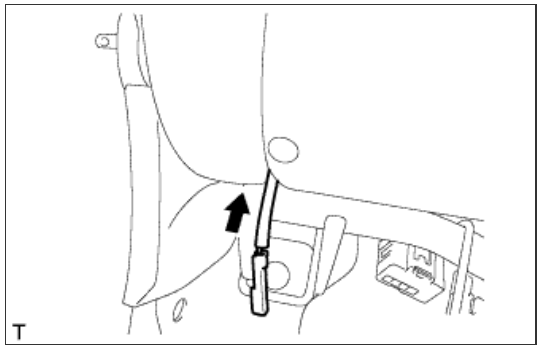


d. w/ Seat Heater System:

i. Cut the cable tie and disconnect the seatback heater wire harness.

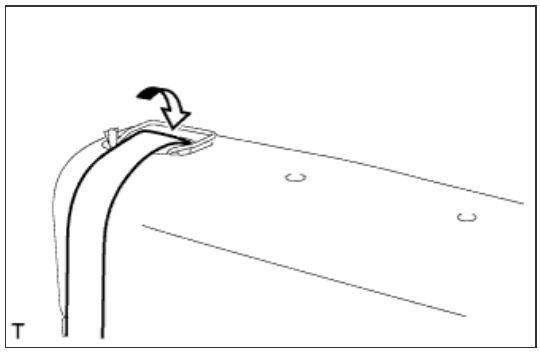


ii. Remove the seatback heater wire harness through the hole in the seatback.



e. Pull the seat belt into the inside of the seat.

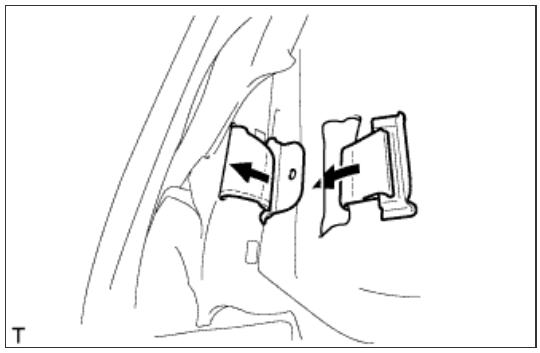
f. Remove the seatback cover with pad.



27. REMOVE REAR SEPARATE TYPE SEATBACK COVER

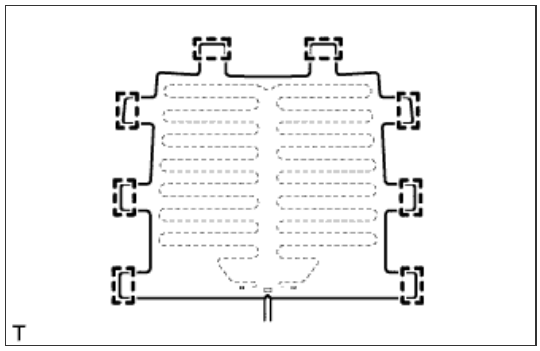
a. Disconnect the seatback cover bracket from the seatback pad.

b. Remove the hog rings and rear seatback cover.



28. REMOVE REAR SEATBACK HEATER ASSEMBLY

a. Cut off the tack pins which fasten the seatback heater to the seatback cover, and then remove the seatback heater from the seatback cover.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY

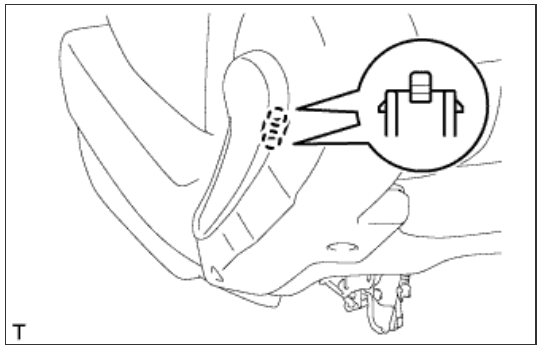
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

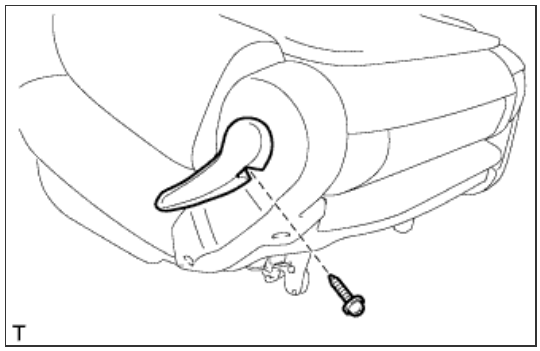
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE LH

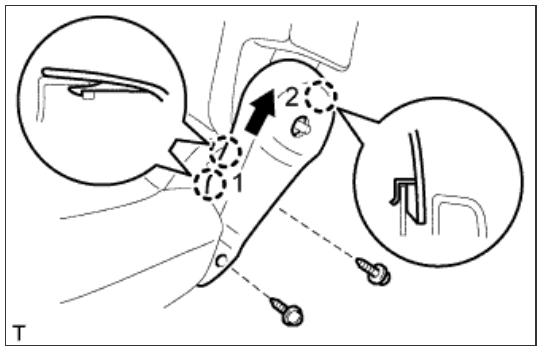
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

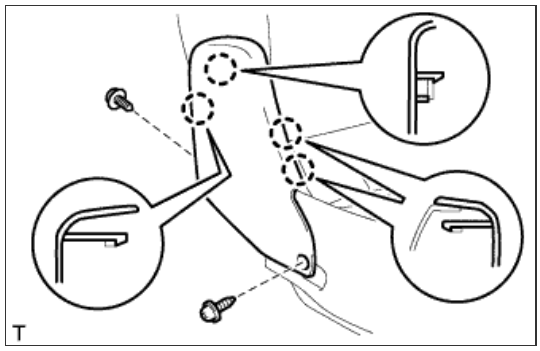
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

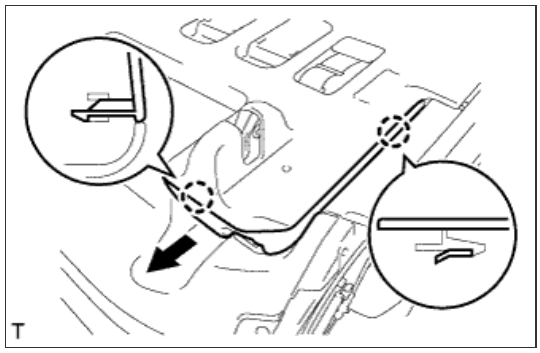


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

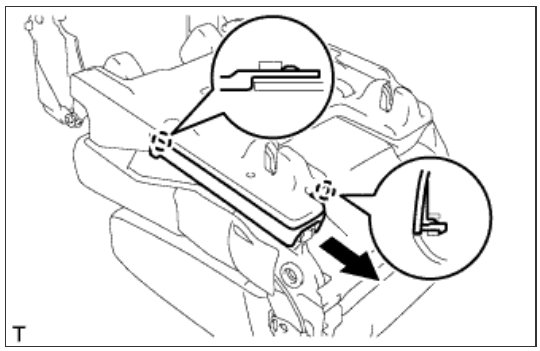


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

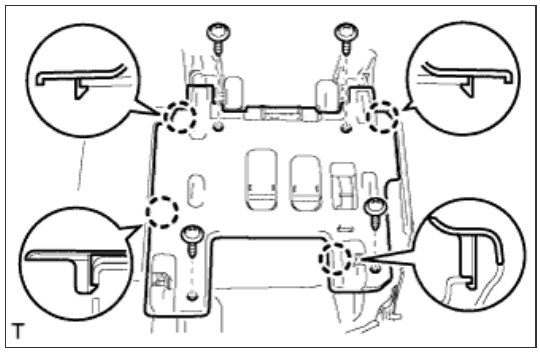
HINT:

Tape the screwdriver tip before use.

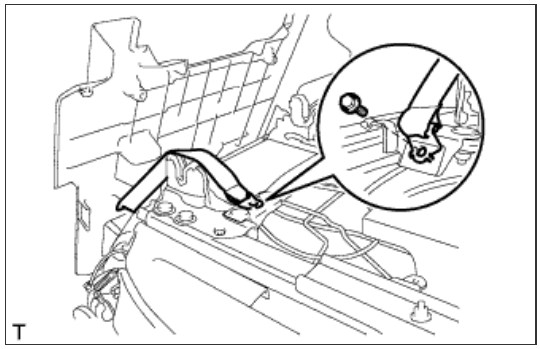


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 4 claws.



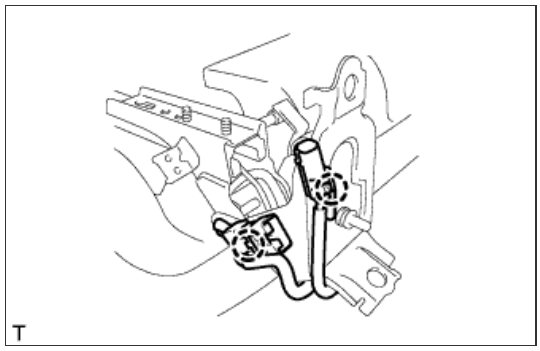
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

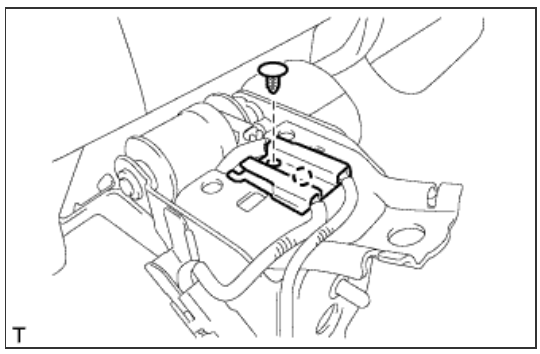
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.

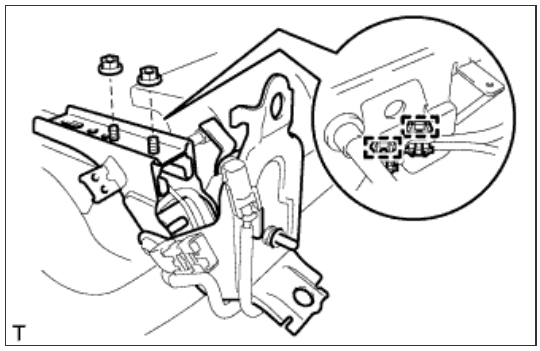


10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Detach the wire harness clamp.

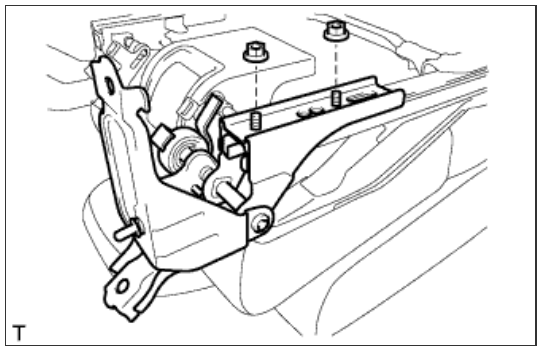
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



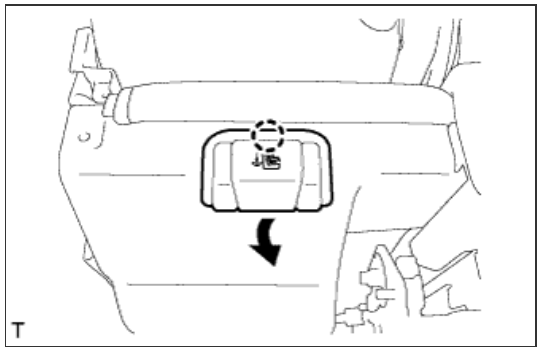
11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Remove the 2 nuts and hinge.

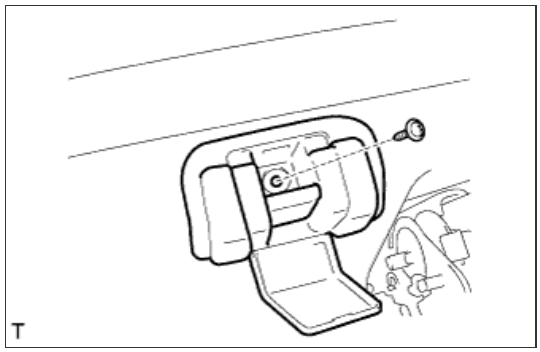


12. REMOVE SEAT BELT ANCHOR COVER CAP

a. Detach the claw and open the cap.



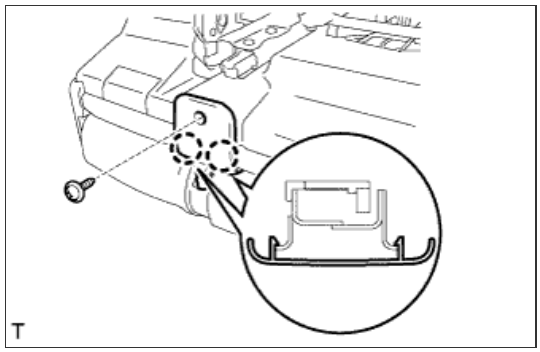
b. Remove the screw and anchor cover cap.



13. REMOVE REAR SEATBACK STAY COVER LH

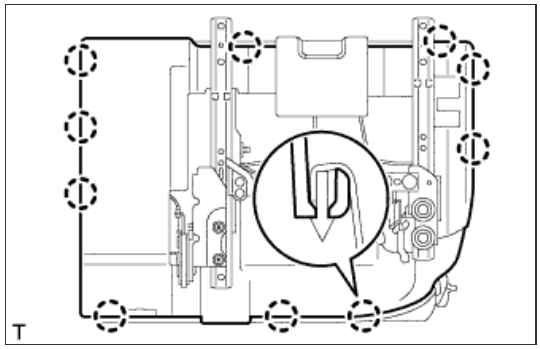
a. Remove the screw.

b. Detach the 2 claws and remove the cover.



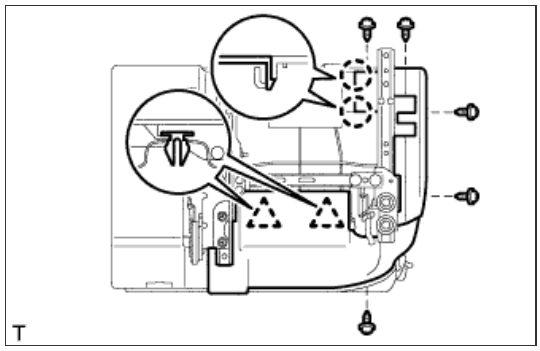
14. REMOVE REAR UNDER SIDE COVER LH

a. Detach the 10 claws.



b. Remove the 5 screws.

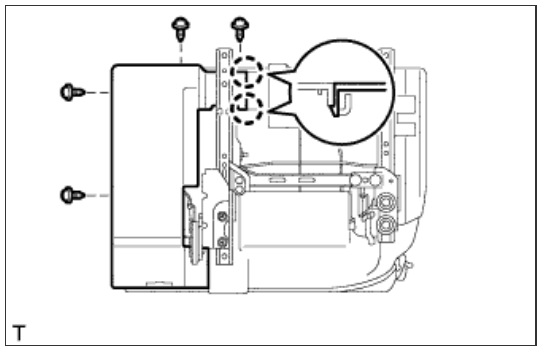
c. Detach the 2 clips and 2 claws, and remove the cover.



15. REMOVE REAR SEAT CUSHION COVER RH

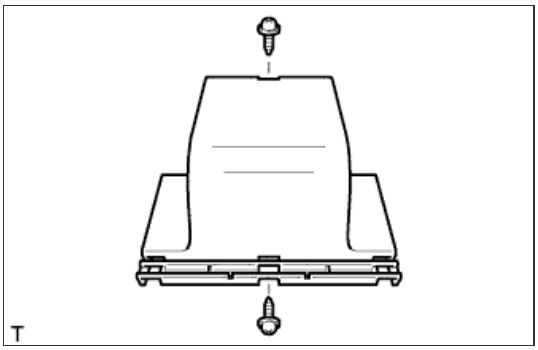
a. Remove the 4 screws.

b. Detach the 2 claws and remove the cover.



16. REMOVE REAR SEAT UNDER TRAY COVER LH

a. Remove the 2 screws and cover.

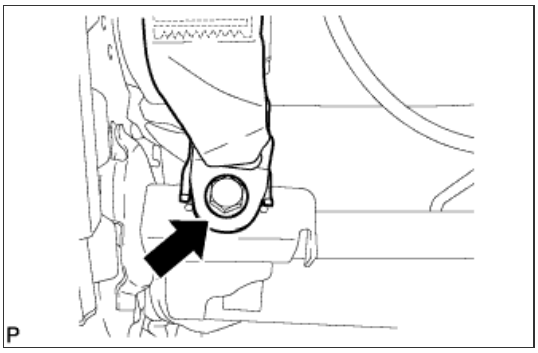


17. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Remove the bolt and belt.

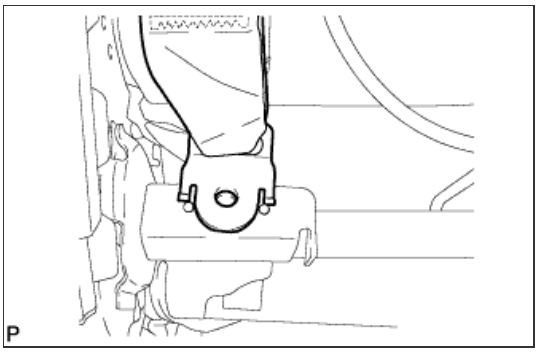
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, it becomes disconnected when the bolt is removed.



18. DISCONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Disconnect the belt anchor.



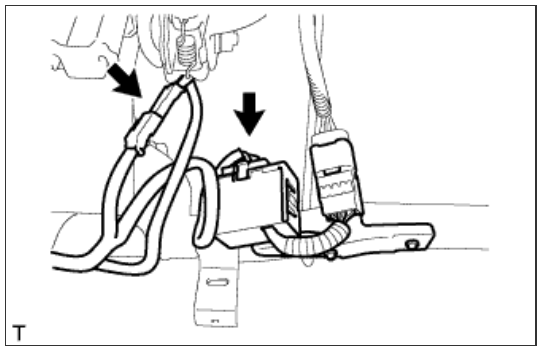
19. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

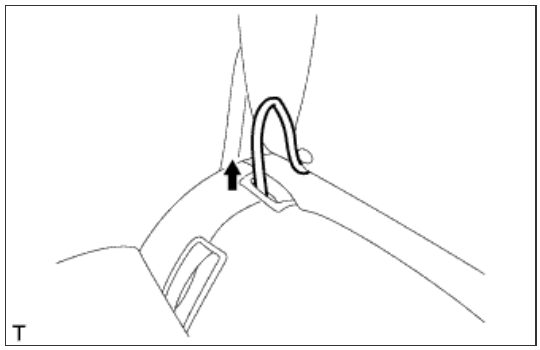
b. Remove the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.



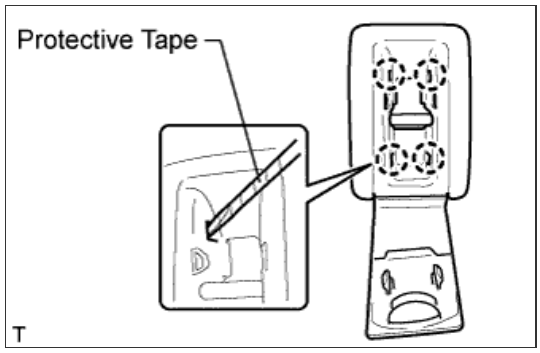
d. Remove the seat cushion cover with pad.

20. REMOVE REAR SEATBACK COVER

a. Using a screwdriver, detach the 4 claws and remove the cover.

HINT:

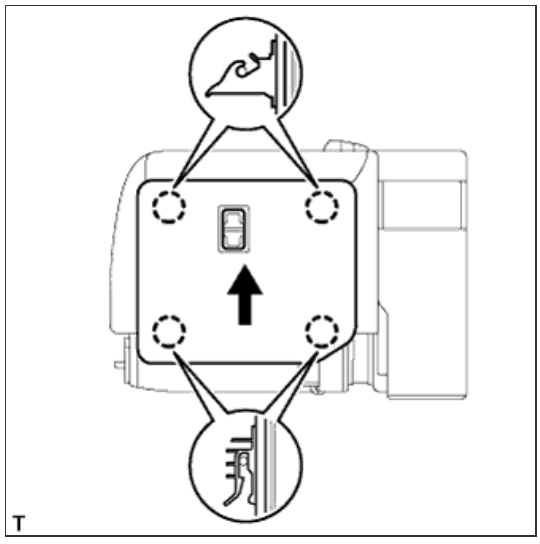
Tape the screwdriver tip before use.



21. REMOVE REAR SEATBACK BOARD SUB-ASSEMBLY LH

a. Detach the 2 claws on the top of the board.

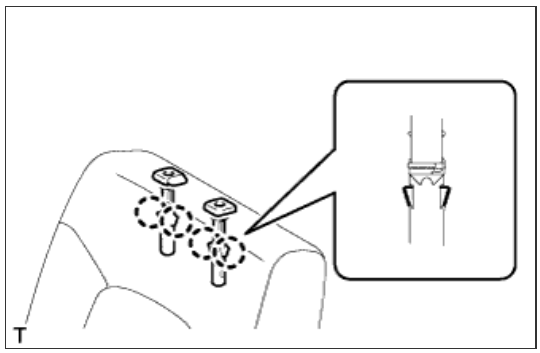
b. Pull up the board to detach the 2 claws on the bottom of the board and remove it.



22. REMOVE REAR SEAT HEADREST ASSEMBLY

23. REMOVE REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Detach the 4 claws and remove the 2 supports.

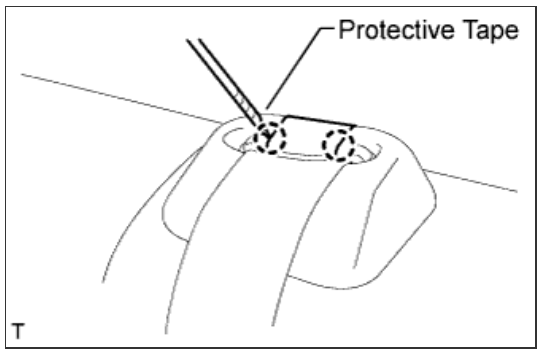


24. REMOVE SHOULDER BELT ANCHOR COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

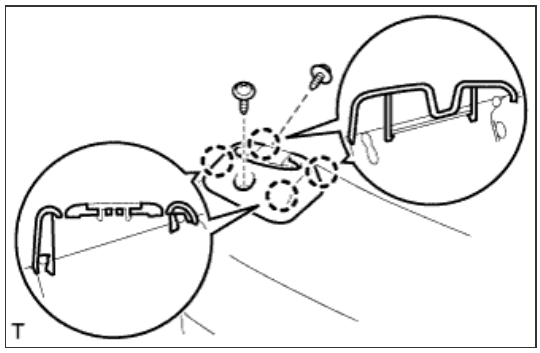
Tape the screwdriver tip before use.



25. REMOVE REAR SEAT BELT HOLE COVER LH

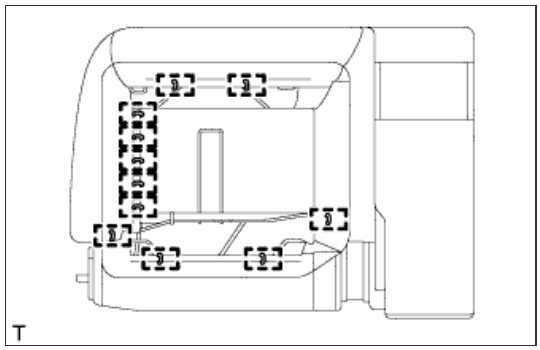
a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



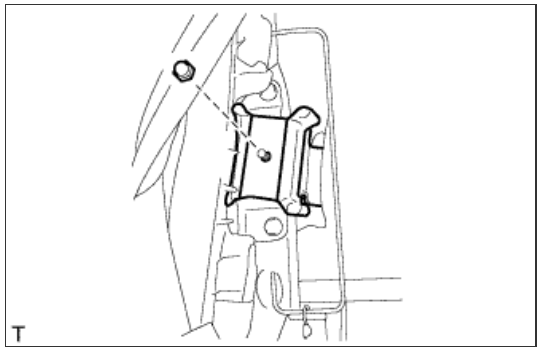
26. REMOVE SEATBACK COVER WITH PAD

a. Remove the hog rings.



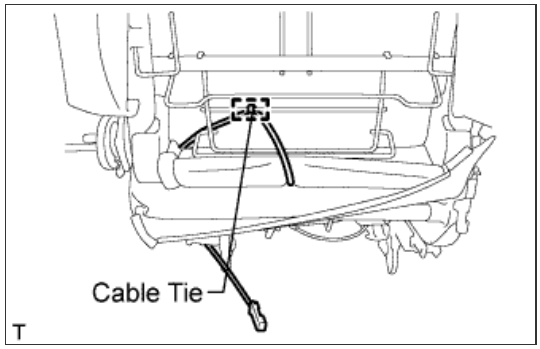
b. Remove the cap nut and seatback cover bracket from the seat frame.

c. Remove the side airbag wire harness through the hole in the seatback.

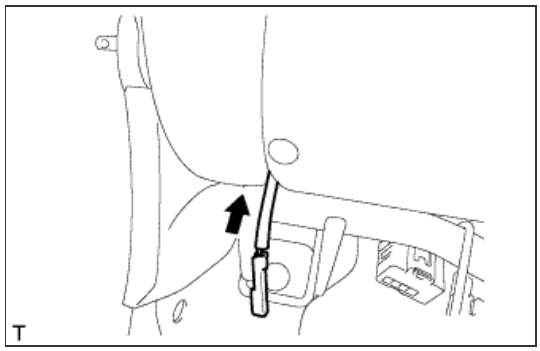


d. w/ Seat Heater System:

i. Cut the cable tie and disconnect the seatback heater wire harness.

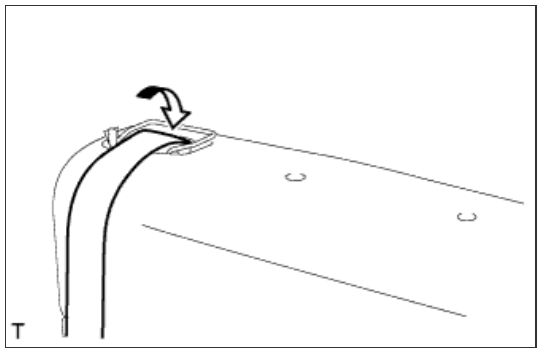


ii. Remove the seatback heater wire harness through the hole in the seatback.



e. Pull the seat belt into the inside of the seat.

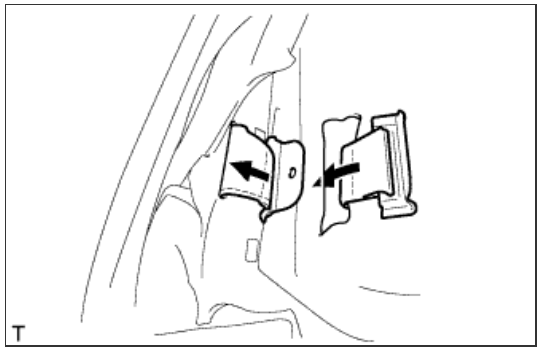
f. Remove the seatback cover with pad.



27. REMOVE REAR SEPARATE TYPE SEATBACK COVER

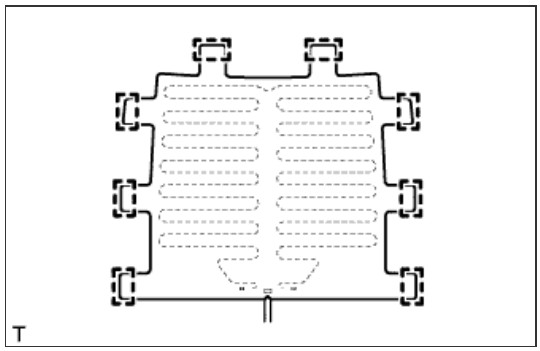
a. Disconnect the seatback cover bracket from the seatback pad.

b. Remove the hog rings and rear seatback cover.



28. REMOVE REAR SEATBACK HEATER ASSEMBLY

a. Cut off the tack pins which fasten the seatback heater to the seatback cover, and then remove the seatback heater from the seatback cover.



for Preparation Click here

1. INSPECT REAR SEATBACK HEATER ASSEMBLY LH

a. Check the seatback heater.

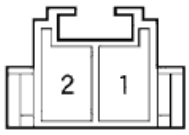
i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	Seatback heater temperature 25°C (77°F)	6.6 to 8.0 Ω

If the result is not as specified, replace the seatback heater assembly.

Component without harness connected:
(Rear Seatback Heater)



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

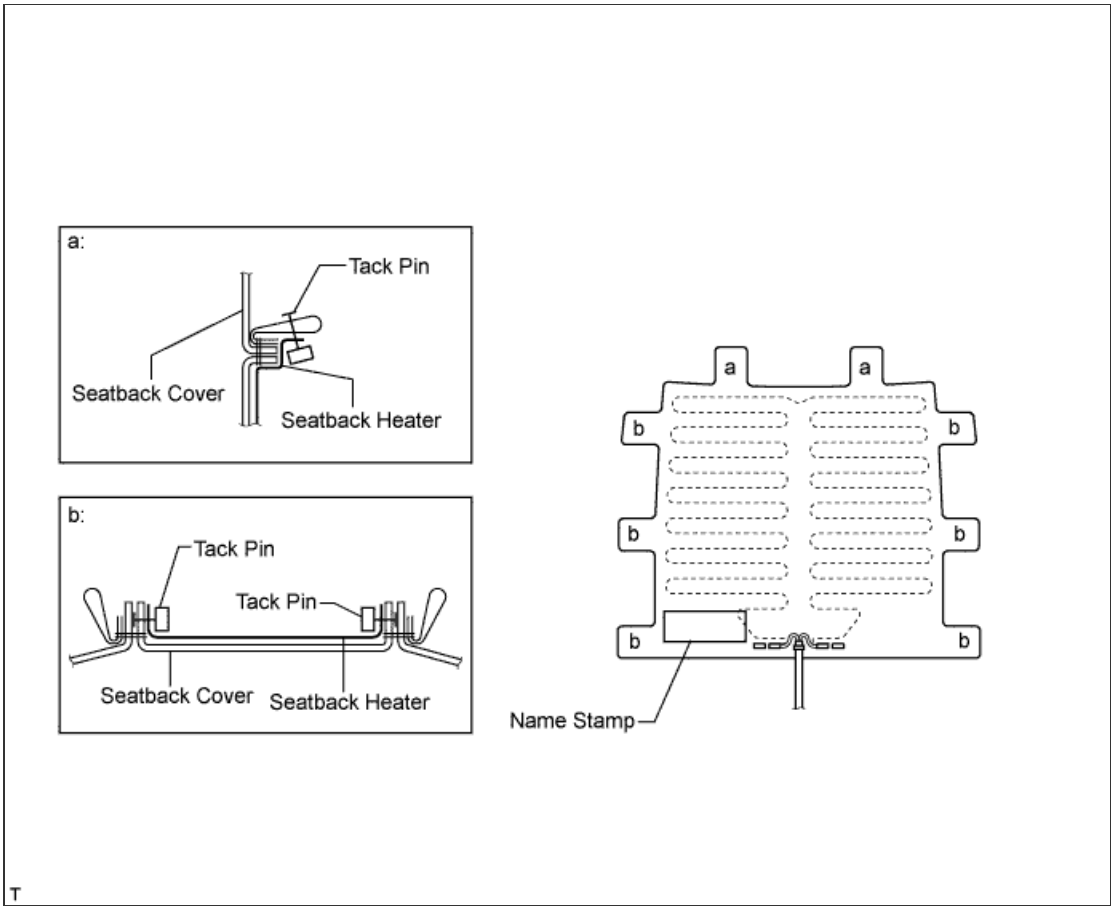
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEATBACK HEATER ASSEMBLY

a. Set the seatback heater with the name stamp side facing the seatback cover.

b. Install the seatback heater with new tack pins.



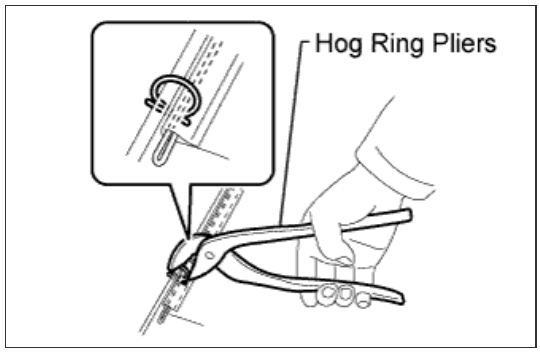
2. INSTALL REAR SEPARATE TYPE SEATBACK COVER

a. Using hog ring pliers, install the seatback cover with new hog rings.

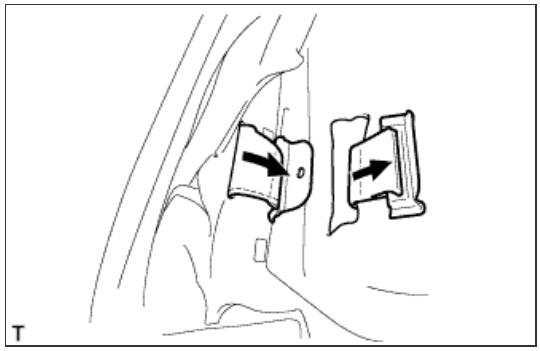
NOTICE:

- **Be careful not to damage the cover.**

- **When installing the hog rings, avoid wrinkling the cover.**



b. Connect the seatback cover bracket to the seatback pad.

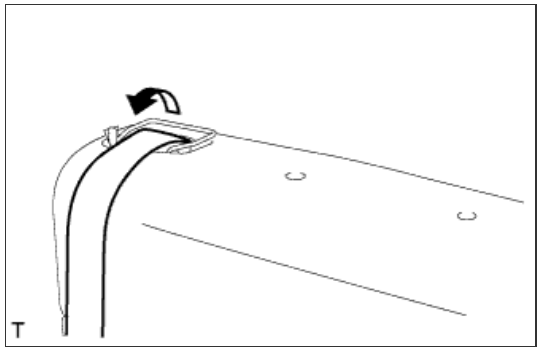


3. INSTALL SEATBACK COVER WITH PAD

a. Install the seatback cover with pad.

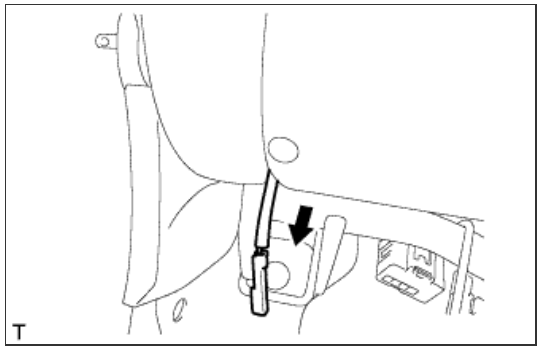
b. Pull out the seat belt.

c. Pass the side airbag wire harness through the hole in the seatback.

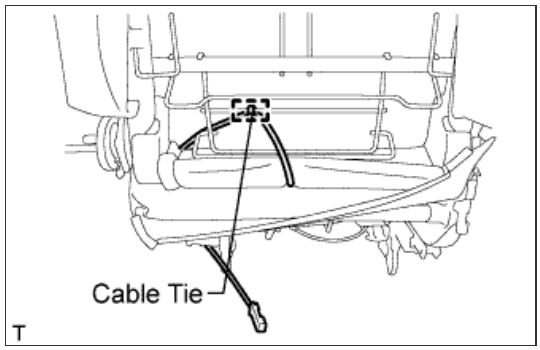


d. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seatback.



ii. Connect the seatback heater wire harness and install a new cable tie.

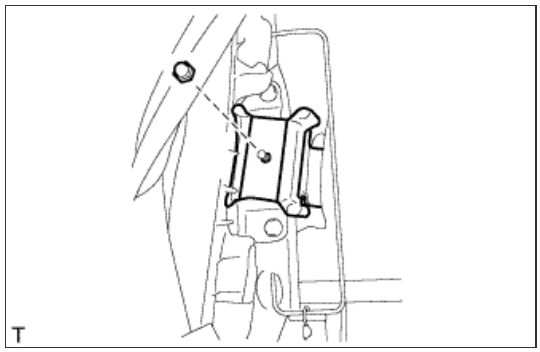


e. Install the seatback cover bracket to the seat frame with the cap nut.

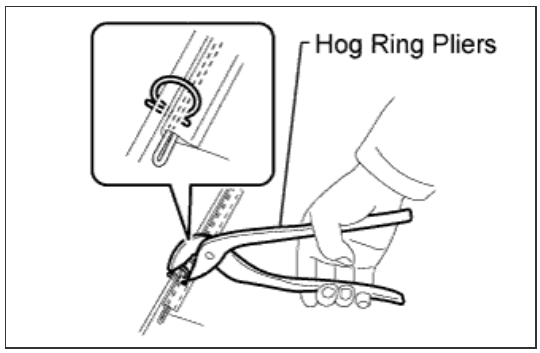
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

NOTICE:

After the seatback trim cover is assembled, make sure the side airbag strap is not twisted.



f. Using hog ring pliers, install new hog rings to the seatback frame.

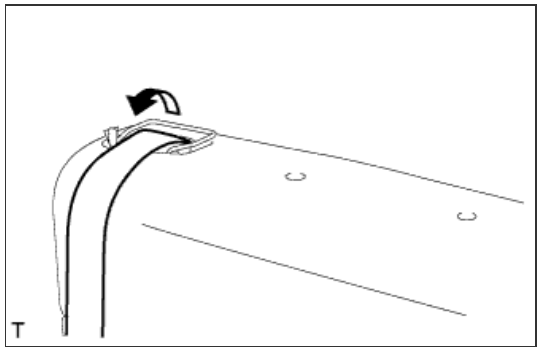


4. INSTALL REAR SEAT BELT HOLE COVER LH

a. Install the seatback cover with pad.

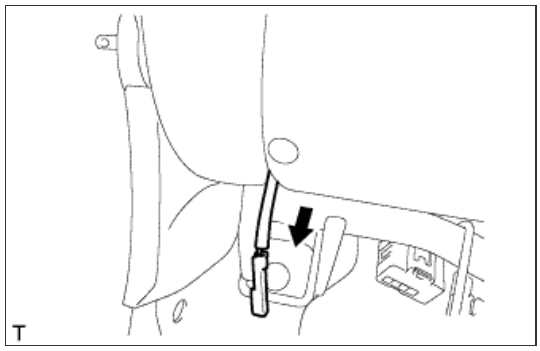
b. Pull out the seat belt.

c. Pass the side airbag wire harness through the hole in the seatback.

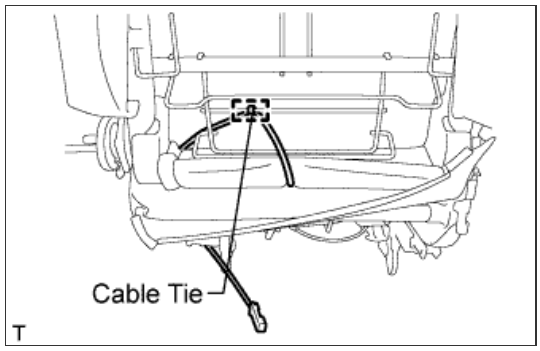


d. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seatback.



ii. Connect the seatback heater wire harness and install a new cable tie.

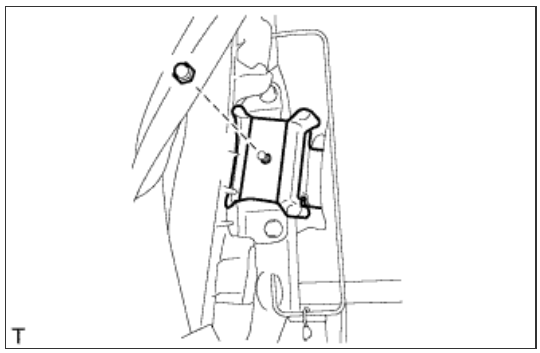


e. Install the seatback cover bracket to the seat frame with the cap nut.

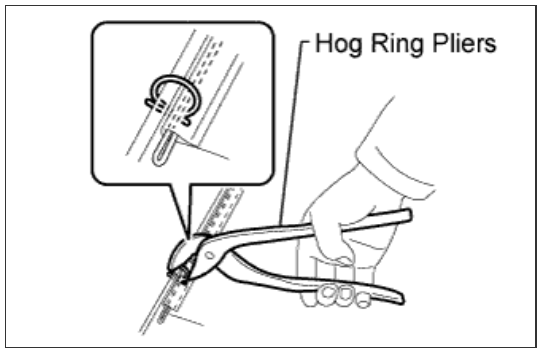
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

NOTICE:

After the seatback trim cover is assembled, make sure the side airbag strap is not twisted.

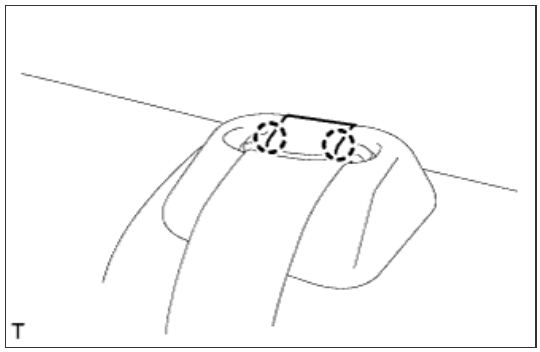


f. Using hog ring pliers, install new hog rings to the seatback frame.



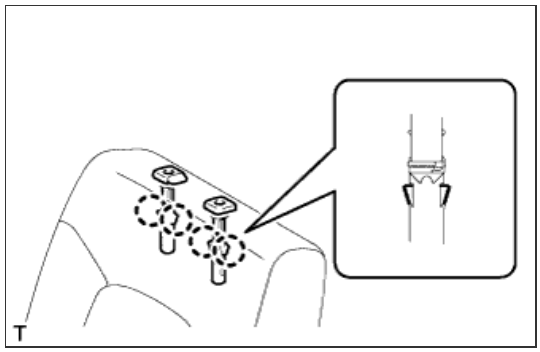
5. INSTALL SHOULDER BELT ANCHOR COVER

a. Attach the 2 claws to install the cover.



6. INSTALL REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Attach the 4 claws to install the 2 supports.

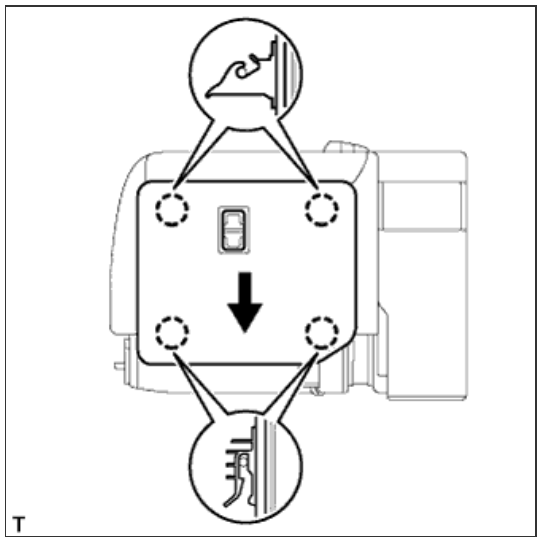


7. INSTALL REAR SEAT HEADREST ASSEMBLY

8. INSTALL REAR SEATBACK BOARD SUB-ASSEMBLY LH

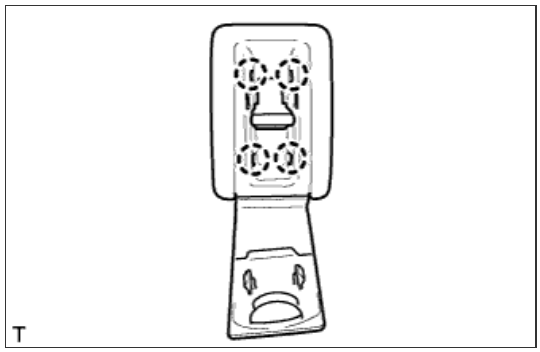
a. Push the board down to attach the 2 claws on the bottom.

b. Attach the 2 claws on the top of the board to install it.



9. INSTALL REAR SEATBACK COVER

a. Attach the 4 claws to install the cover.



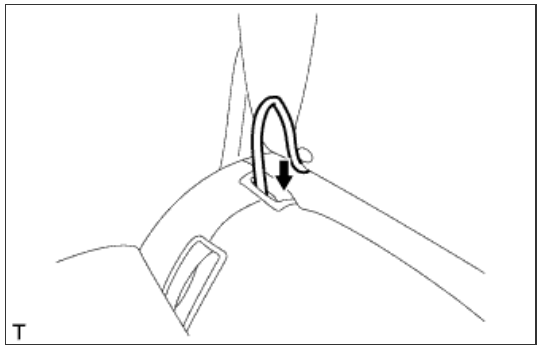
10. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

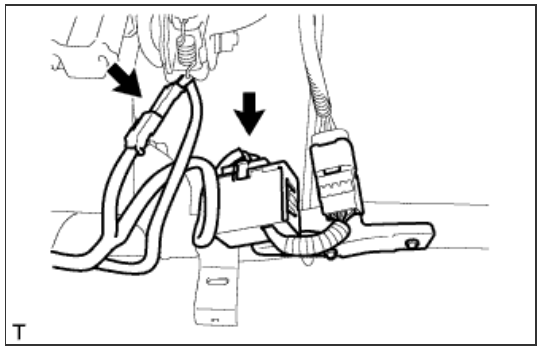
b. Pass the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.



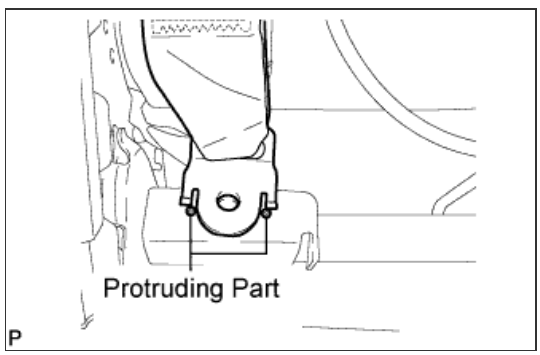
d. Attach the side airbag wire harness clamps.

11. CONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Connect the belt anchor.

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.



12. INSTALL REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Install the belt with the bolt.

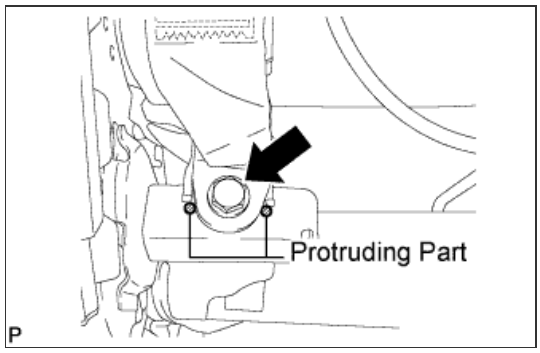
Torque:
42 N*m{ 4287 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

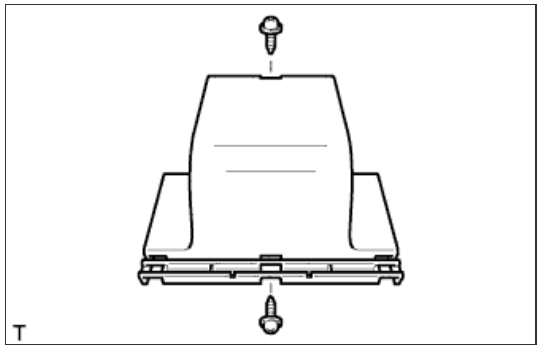
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, connect it when installing the rear No. 1 seat inner belt LH.



13. INSTALL REAR SEAT UNDER TRAY COVER LH

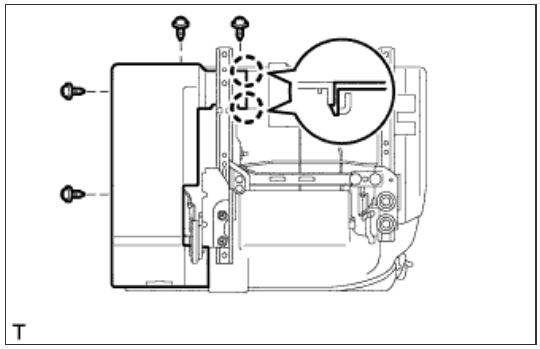
a. Install the cover with the 2 screws.



14. INSTALL REAR SEAT CUSHION COVER RH

a. Attach the 2 claws to install the cover.

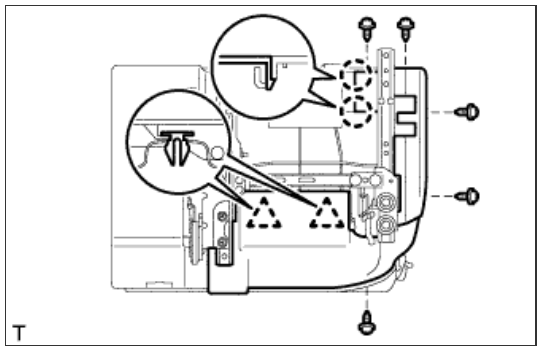
b. Install the 4 screws.



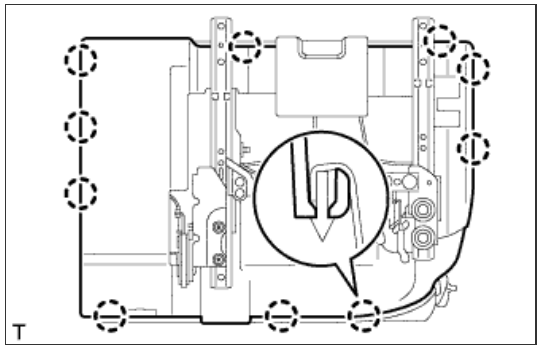
15. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and 2 clips to install the cover.

b. Install the 5 screws.



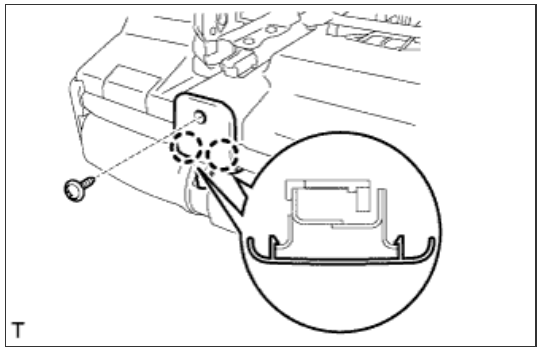
c. Attach the 10 claws.



16. INSTALL REAR SEATBACK STAY COVER LH

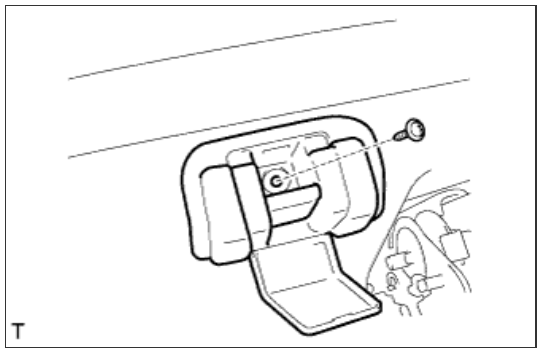
a. Attach the 2 claws to install the cover.

b. Install the screw.

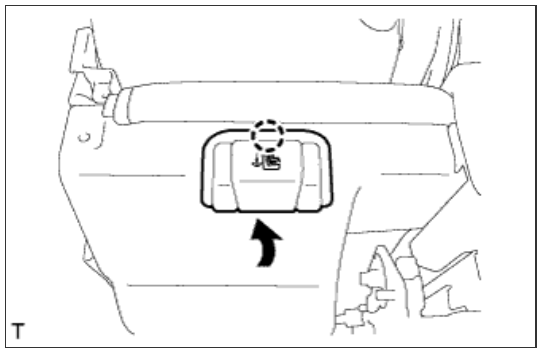


17. INSTALL SEAT BELT ANCHOR COVER CAP

a. Install the anchor cover cap with the screw.



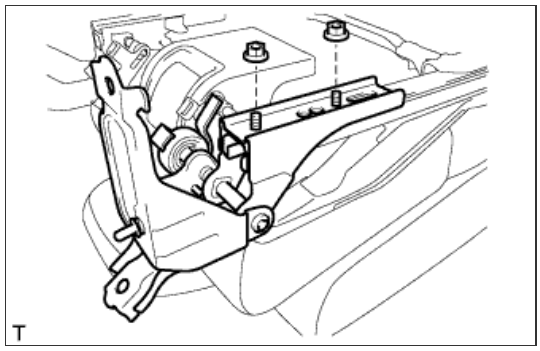
b. Attach the claw to close the cap.



18. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



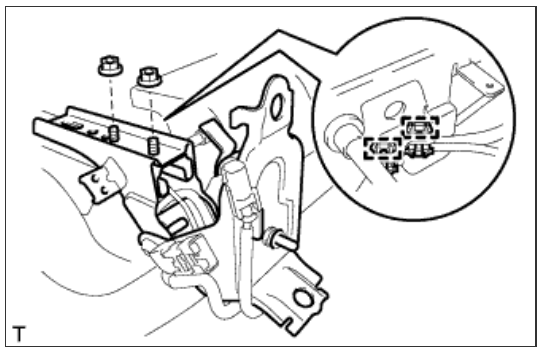
19. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

c. w/ Seat Heater System:
Attach the wire harness clamp.

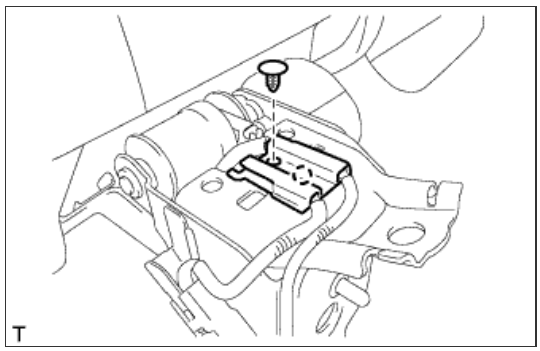


20. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

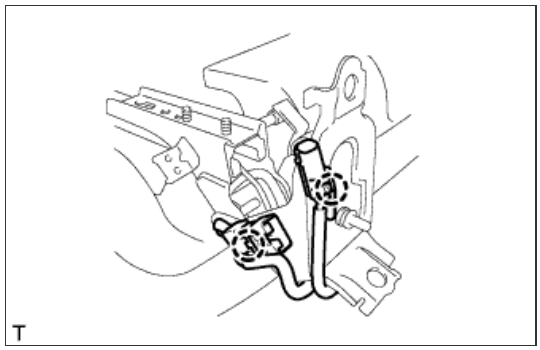
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



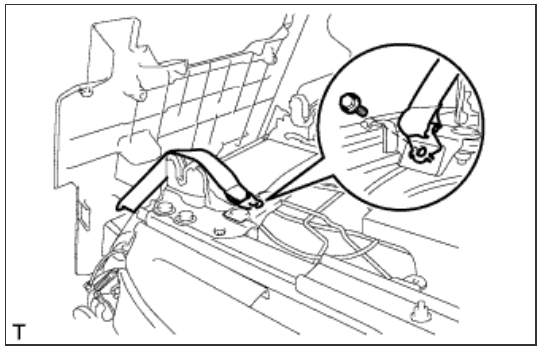
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



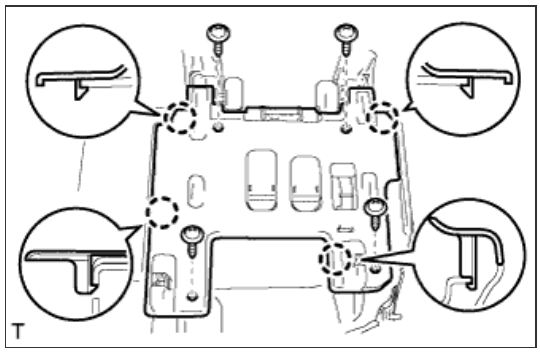
21. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



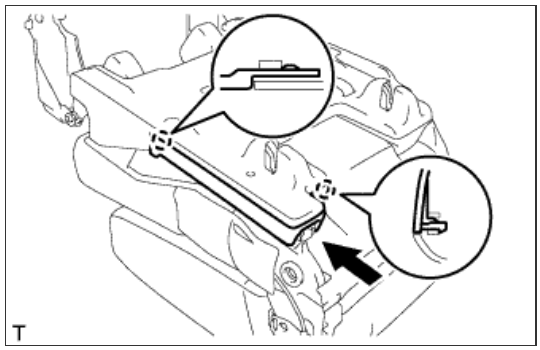
b. Attach the 4 claws to install the seat leg side cover.

c. Install the 4 screws.



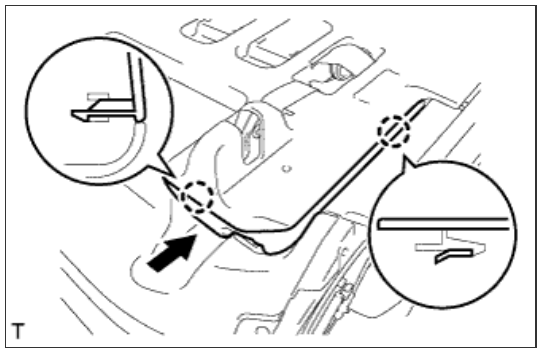
22. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



23. INSTALL UPPER SEAT TRACK RAIL COVER LH

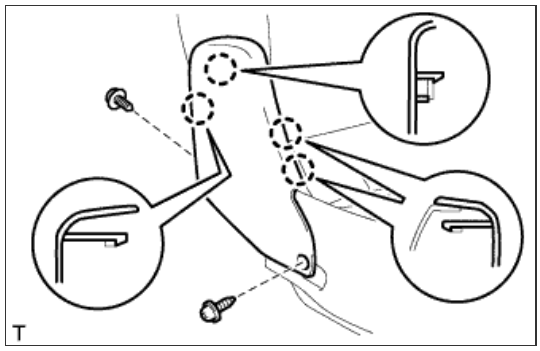
a. Attach the 2 claws to install the cover.



24. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 4 claws to install the cover.

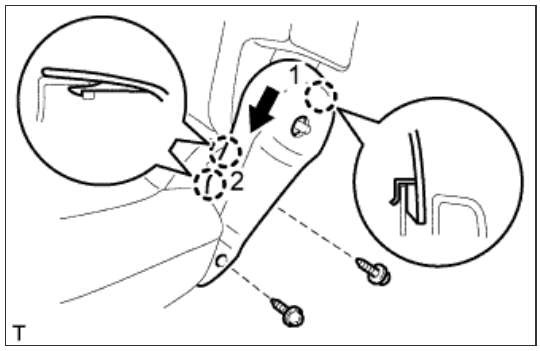
b. Install the 2 screws.



25. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

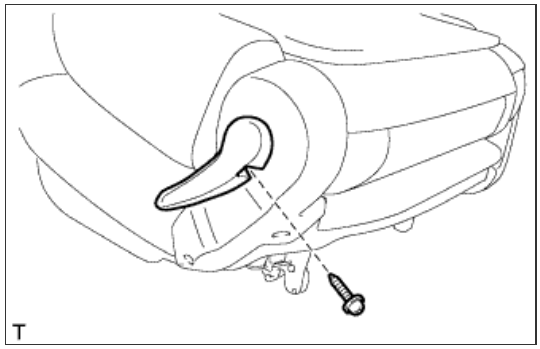
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



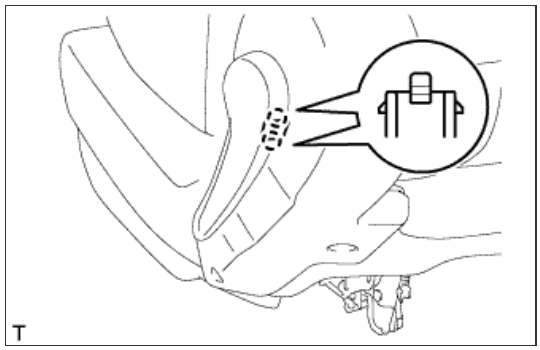
26. INSTALL RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



27. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



28. INSTALL REAR NO. 1 SEAT ASSEMBLY

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

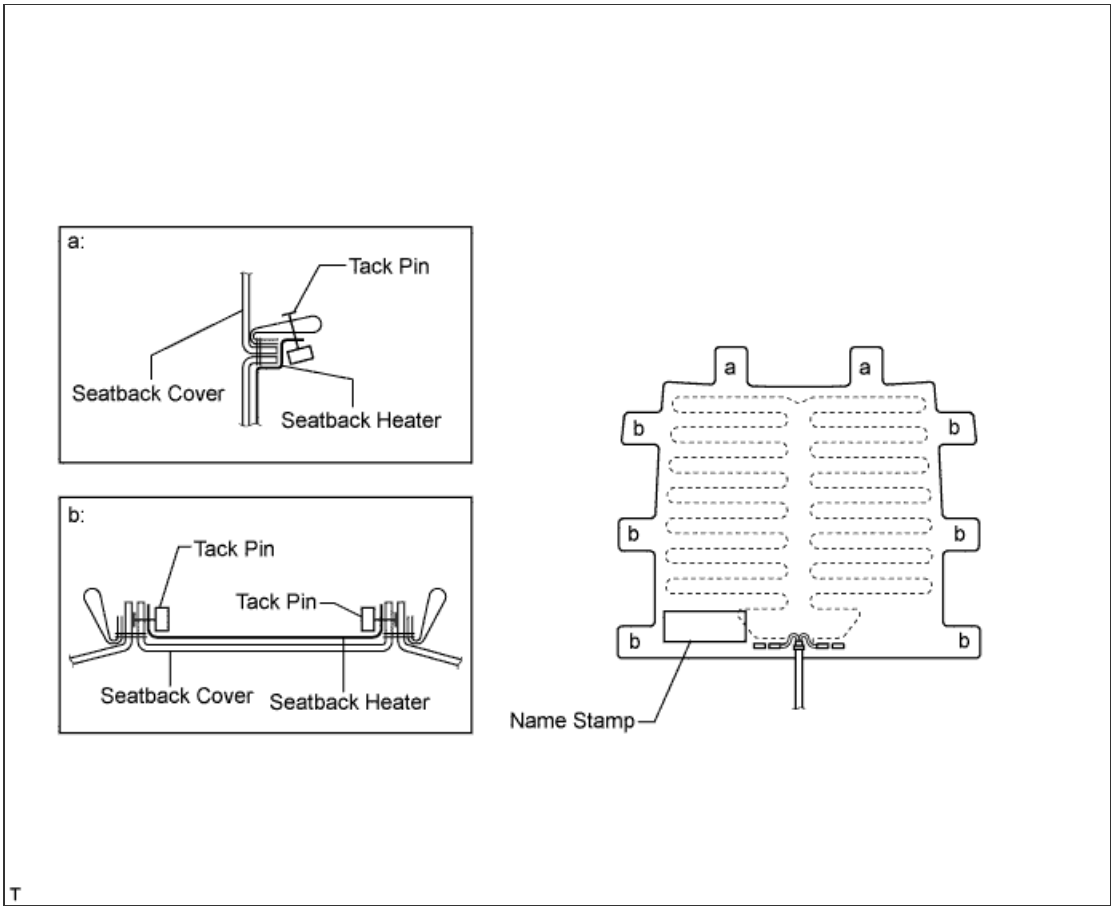
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEATBACK HEATER ASSEMBLY

a. Set the seatback heater with the name stamp side facing the seatback cover.

b. Install the seatback heater with new tack pins.



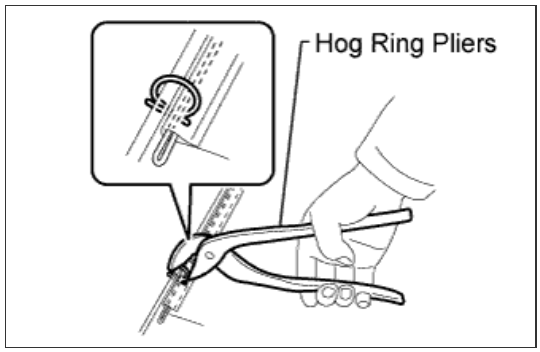
2. INSTALL REAR SEPARATE TYPE SEATBACK COVER

a. Using hog ring pliers, install the seatback cover with new hog rings.

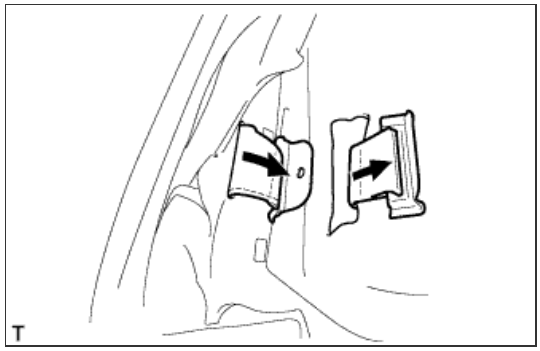
NOTICE:

- **Be careful not to damage the cover.**

- **When installing the hog rings, avoid wrinkling the cover.**



b. Connect the seatback cover bracket to the seatback pad.

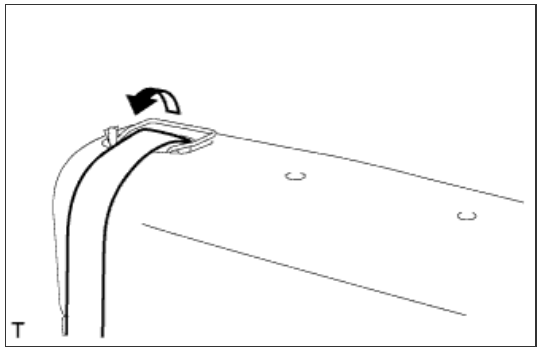


3. INSTALL SEATBACK COVER WITH PAD

a. Install the seatback cover with pad.

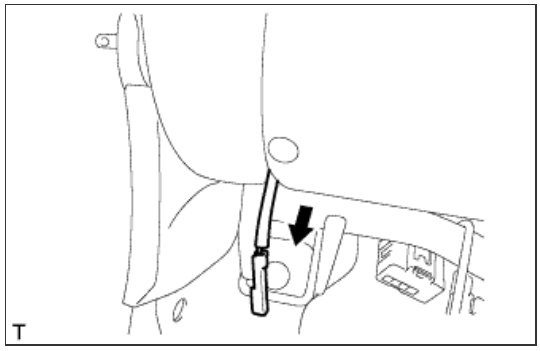
b. Pull out the seat belt.

c. Pass the side airbag wire harness through the hole in the seatback.

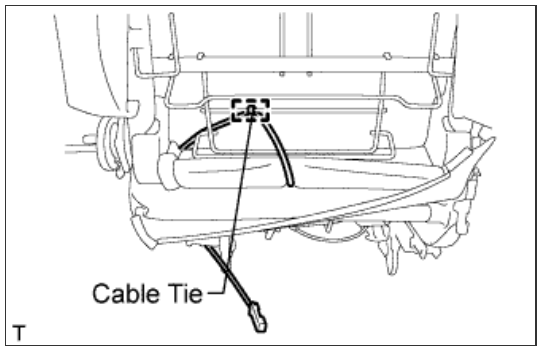


d. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seatback.



ii. Connect the seatback heater wire harness and install a new cable tie.

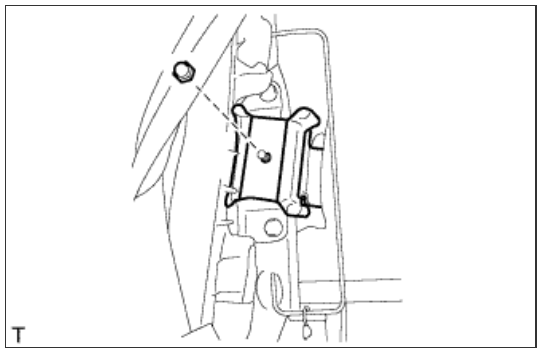


e. Install the seatback cover bracket to the seat frame with the cap nut.

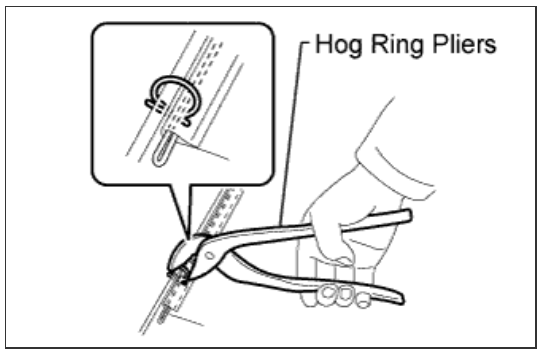
Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

NOTICE:

After the seatback trim cover is assembled, make sure the side airbag strap is not twisted.



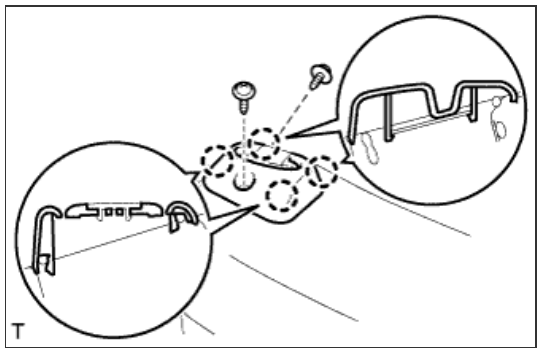
f. Using hog ring pliers, install new hog rings to the seatback frame.



4. INSTALL REAR SEAT BELT HOLE COVER LH

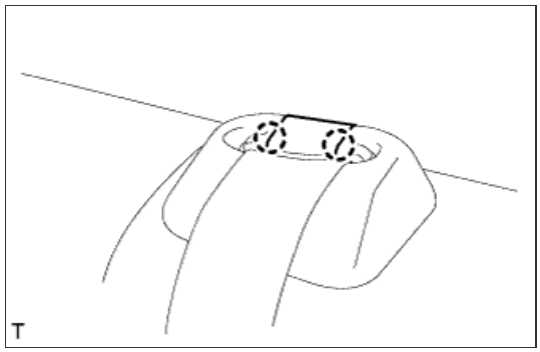
a. Attach the 4 claws to install the cover.

b. Install the 2 screws.



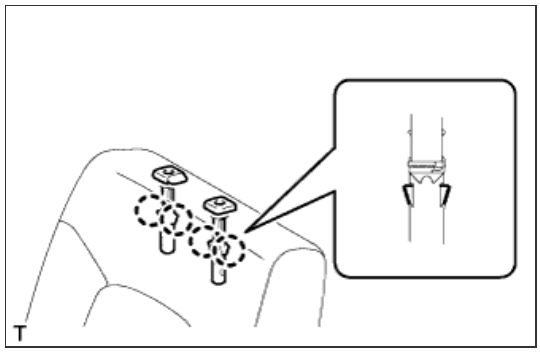
5. INSTALL SHOULDER BELT ANCHOR COVER

a. Attach the 2 claws to install the cover.



6. INSTALL REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Attach the 4 claws to install the 2 supports.

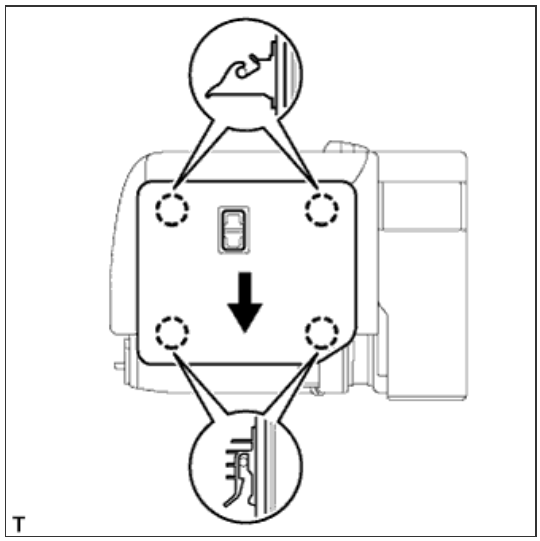


7. INSTALL REAR SEAT HEADREST ASSEMBLY

8. INSTALL REAR SEATBACK BOARD SUB-ASSEMBLY LH

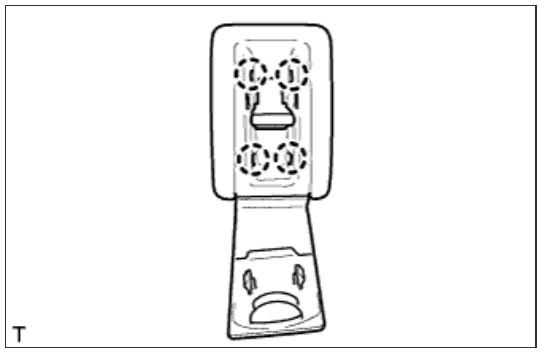
a. Push the board down to attach the 2 claws on the bottom.

b. Attach the 2 claws on the top of the board to install it.



9. INSTALL REAR SEATBACK COVER

a. Attach the 4 claws to install the cover.



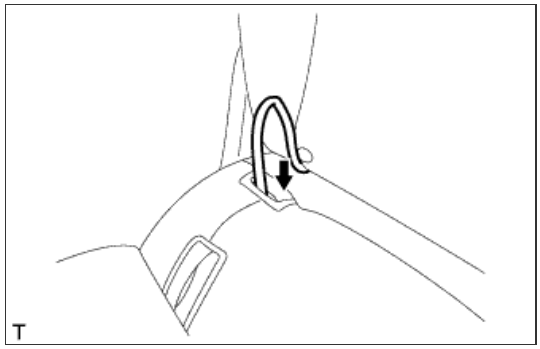
10. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

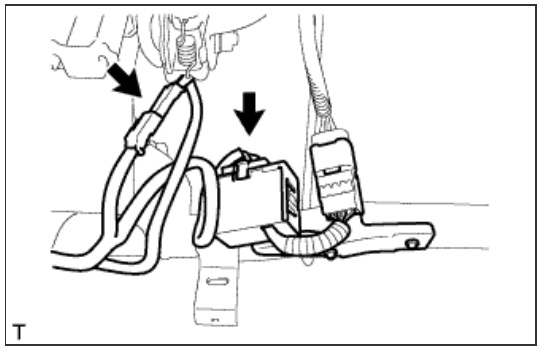
b. Pass the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.



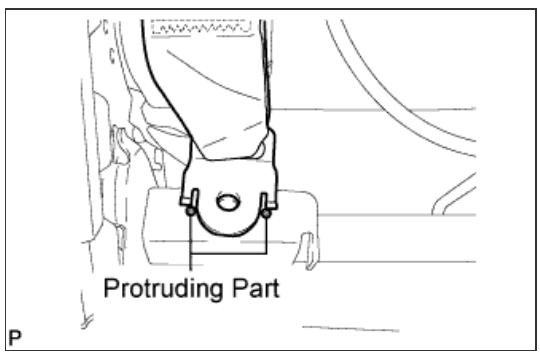
d. Attach the side airbag wire harness clamps.

11. CONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Connect the belt anchor.

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.



12. INSTALL REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Install the belt with the bolt.

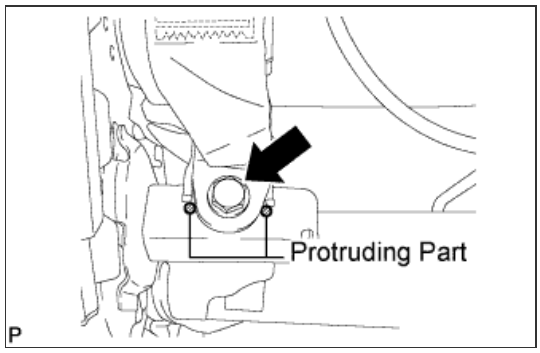
Torque:
42 N*m{ 4287 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

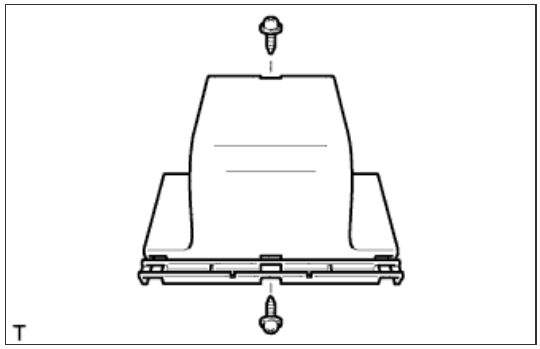
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, connect it when installing the rear No. 1 seat inner belt LH.



13. INSTALL REAR SEAT UNDER TRAY COVER LH

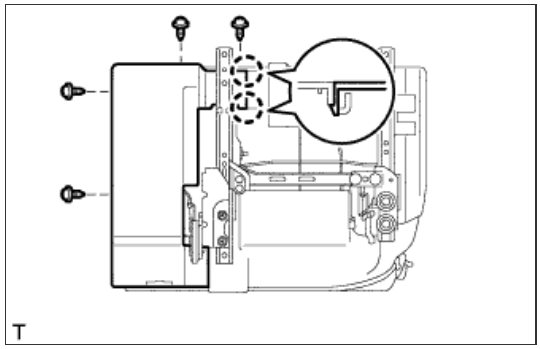
a. Install the cover with the 2 screws.



14. INSTALL REAR SEAT CUSHION COVER RH

a. Attach the 2 claws to install the cover.

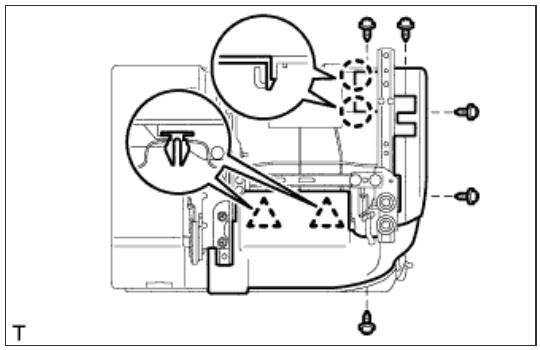
b. Install the 4 screws.



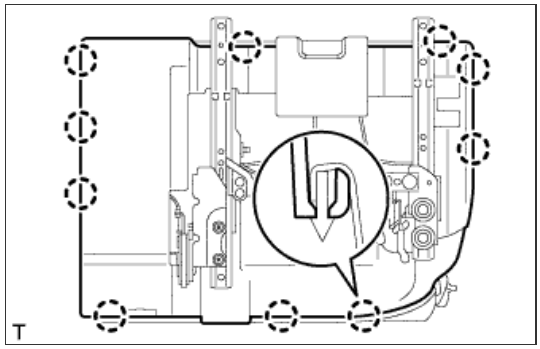
15. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and 2 clips to install the cover.

b. Install the 5 screws.



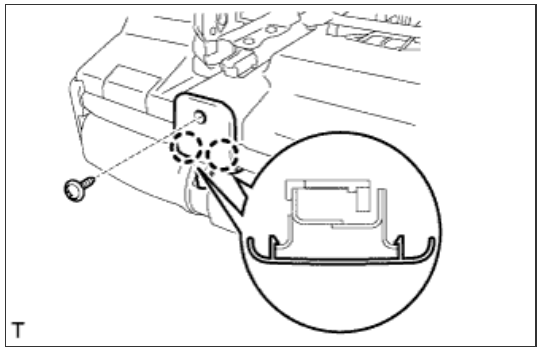
c. Attach the 10 claws.



16. INSTALL REAR SEATBACK STAY COVER LH

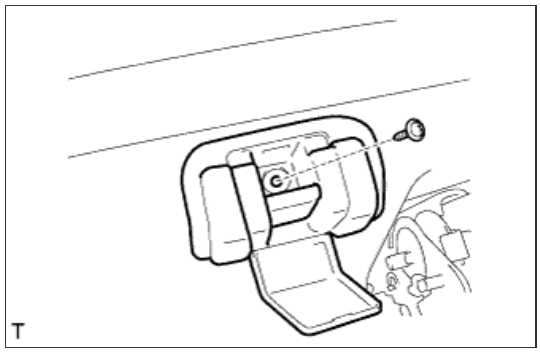
a. Attach the 2 claws to install the cover.

b. Install the screw.

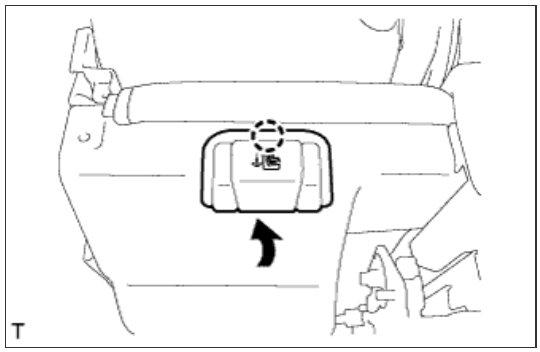


17. INSTALL SEAT BELT ANCHOR COVER CAP

a. Install the anchor cover cap with the screw.



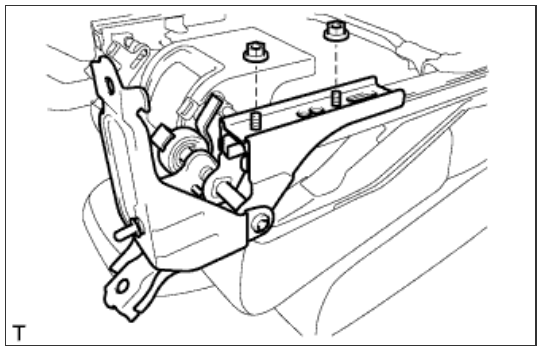
b. Attach the claw to close the cap.



18. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



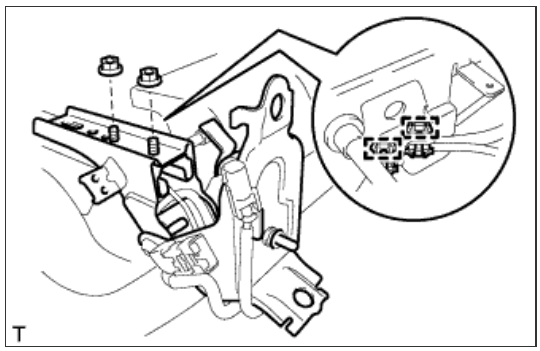
19. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

c. w/ Seat Heater System:
Attach the wire harness clamp.

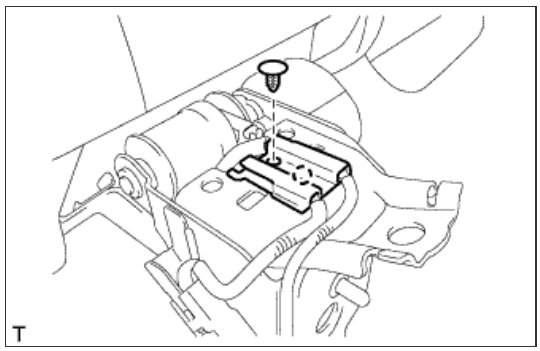


20. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

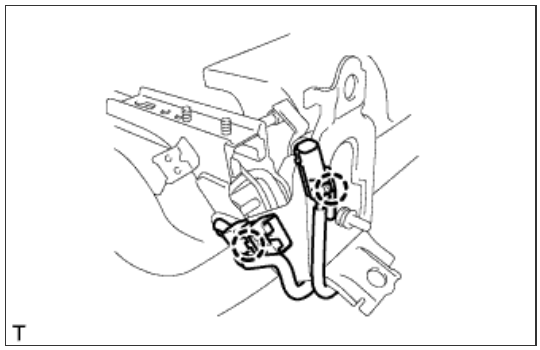
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



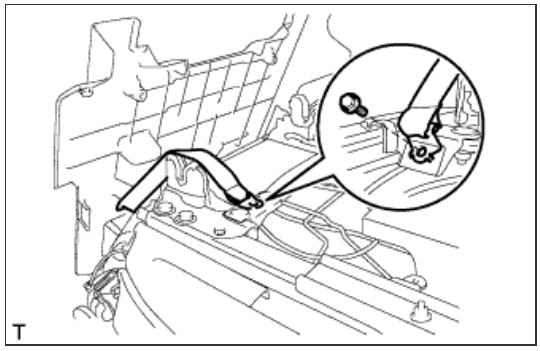
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



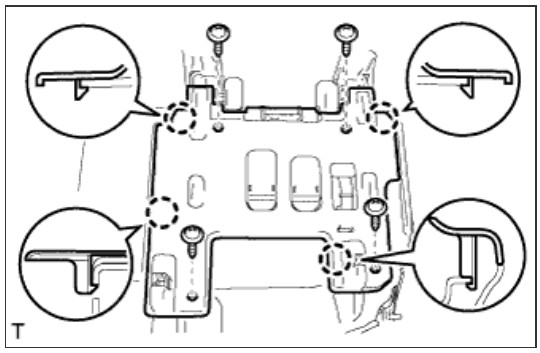
21. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



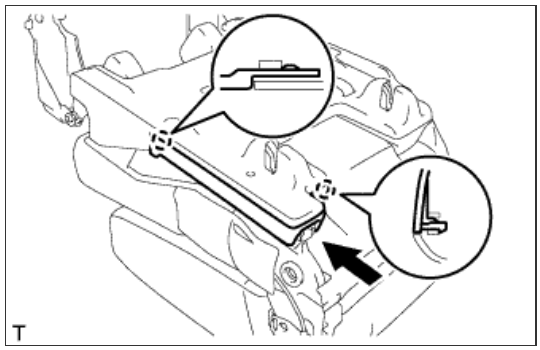
b. Attach the 4 claws to install the seat leg side cover.

c. Install the 4 screws.



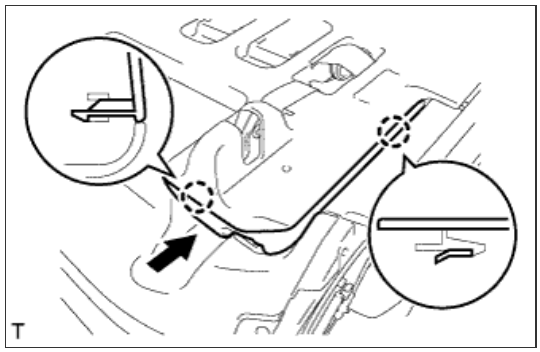
22. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



23. INSTALL UPPER SEAT TRACK RAIL COVER LH

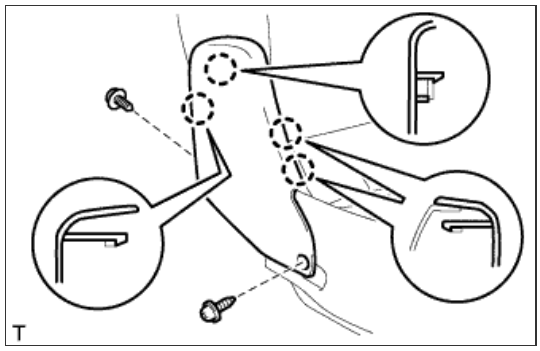
a. Attach the 2 claws to install the cover.



24. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 4 claws to install the cover.

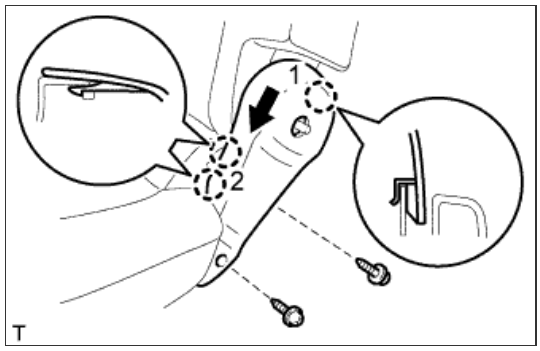
b. Install the 2 screws.



25. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

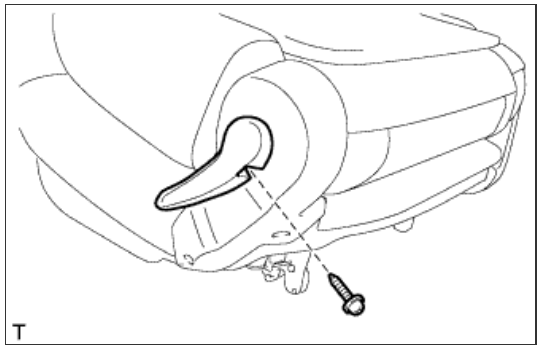
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



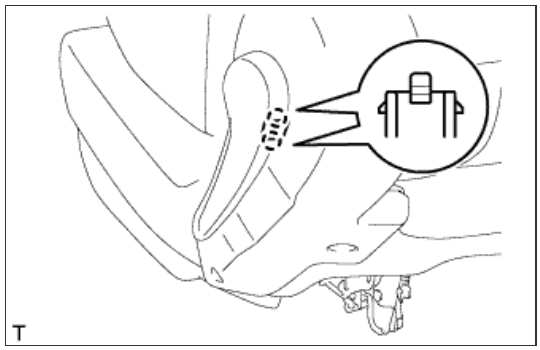
26. INSTALL RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



27. INSTALL SEAT ADJUSTER BOLT COVER

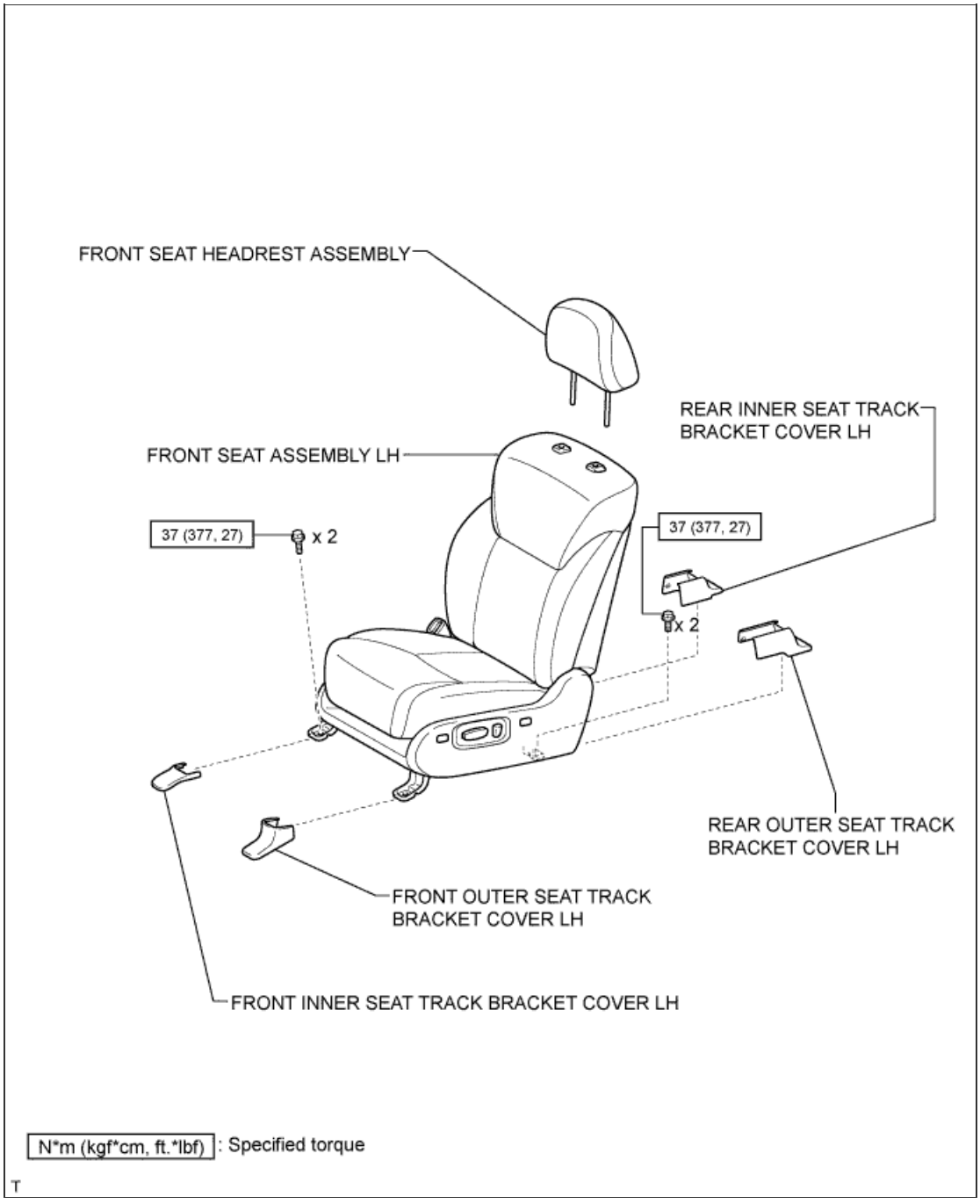
a. Attach the 2 claws to install the cover.

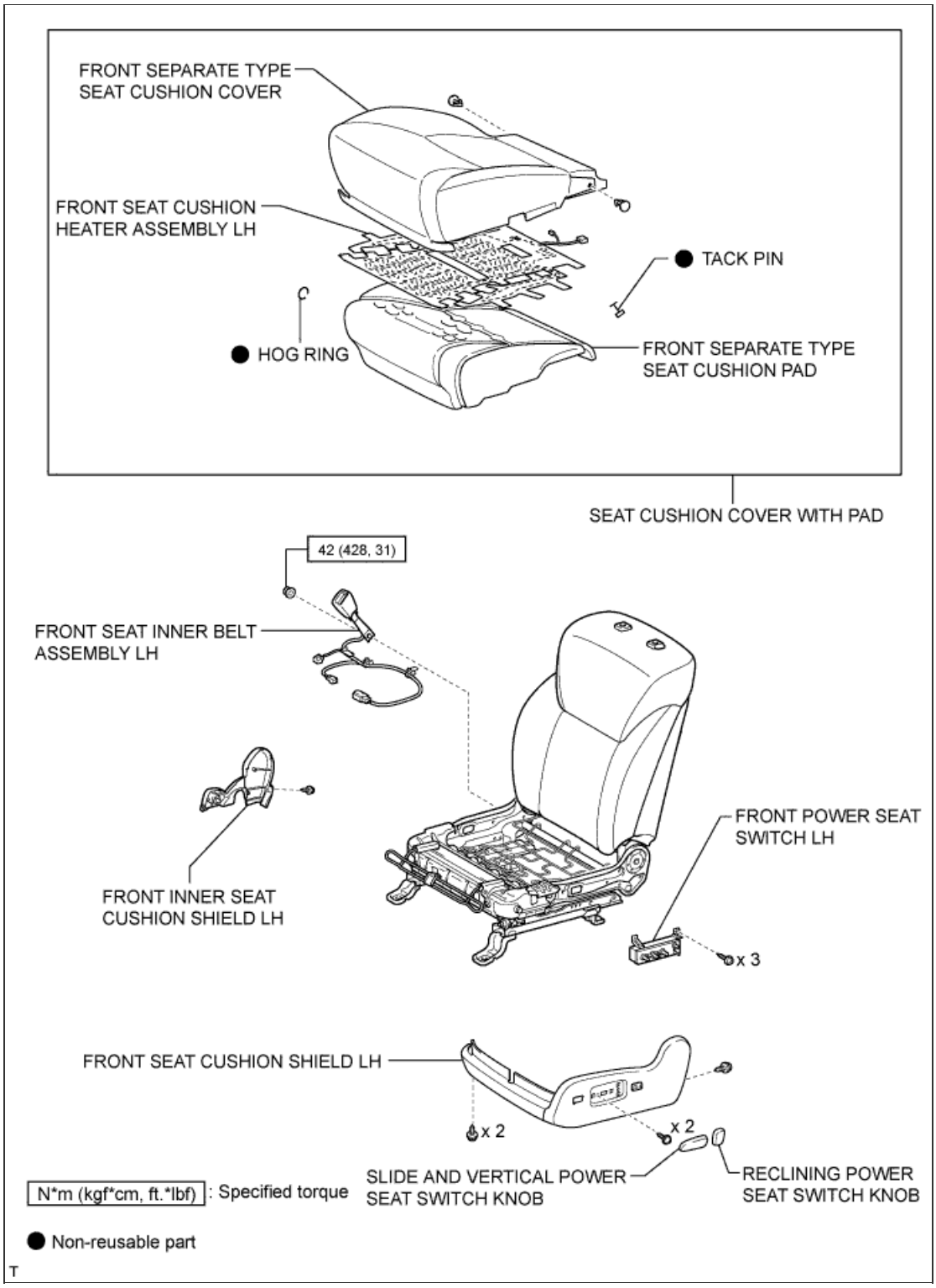


28. INSTALL REAR NO. 1 SEAT ASSEMBLY

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here




FRONT SEPARATE TYPE SEAT CUSHION COVER
FRONT SEAT CUSHION HEATER ASSEMBLY LH
TACK PIN
HOG RING
FRONT SEPARATE TYPE SEAT CUSHION PAD
SEAT CUSHION COVER WITH PAD
42 (428, 31)
FRONT SEAT INNER BELT ASSEMBLY LH
FRONT POWER SEAT SWITCH LH
FRONT INNER SEAT CUSHION SHIELD LH
x 3
FRONT SEAT CUSHION SHIELD LH
x 2
x 2
SLIDE AND VERTICAL POWER SEAT SWITCH KNOB
RECLINING POWER SEAT SWITCH KNOB
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part

T

for Preparation Click here

CAUTION:

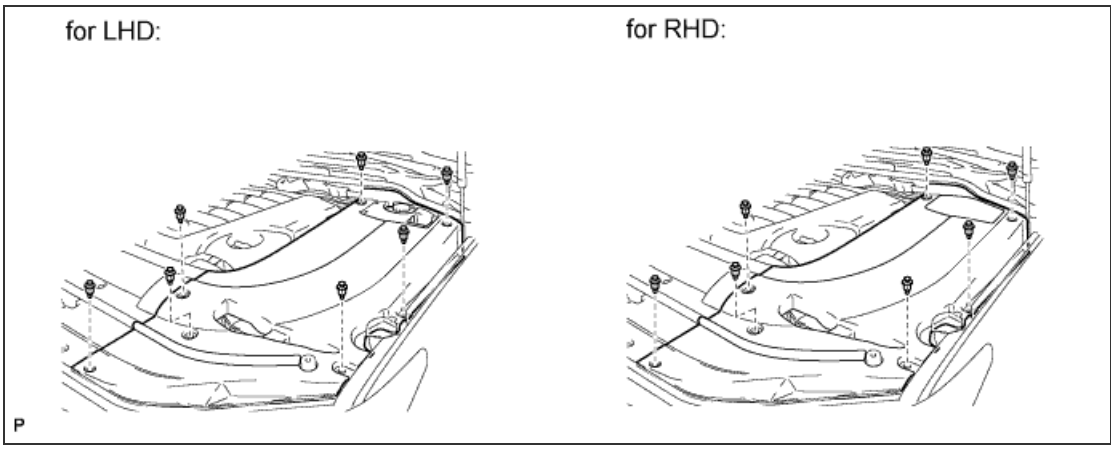
Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly (Click here).

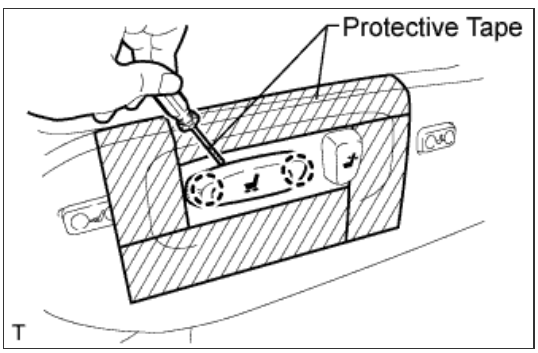
3. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

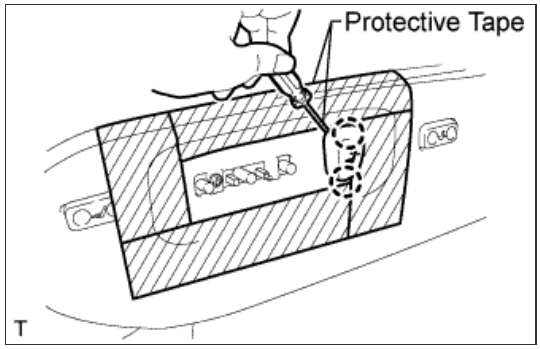


4. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

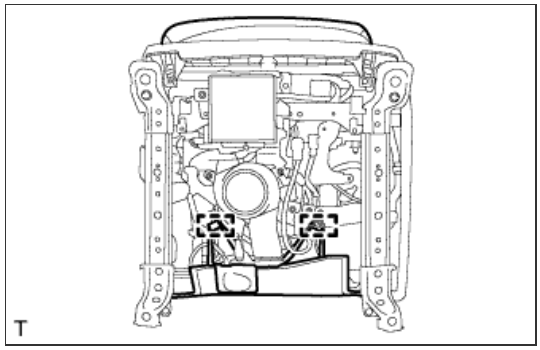
HINT:

Tape the screwdriver tip before use.

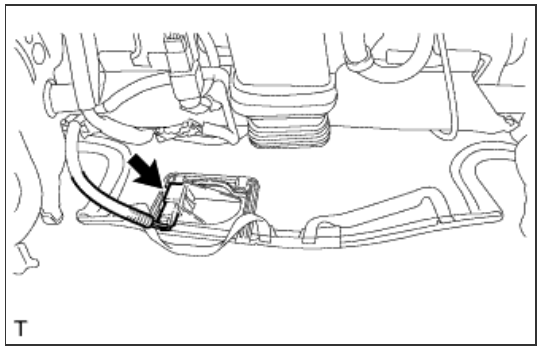


5. REMOVE FRONT SEAT CUSHION SHIELD LH

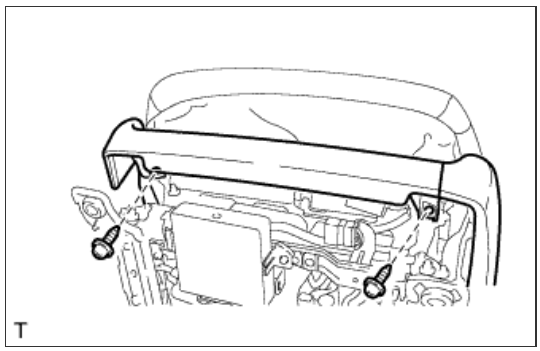
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

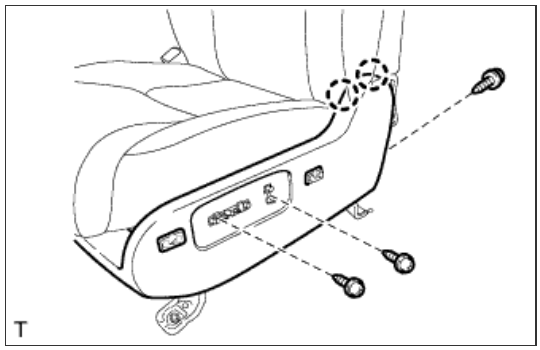


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

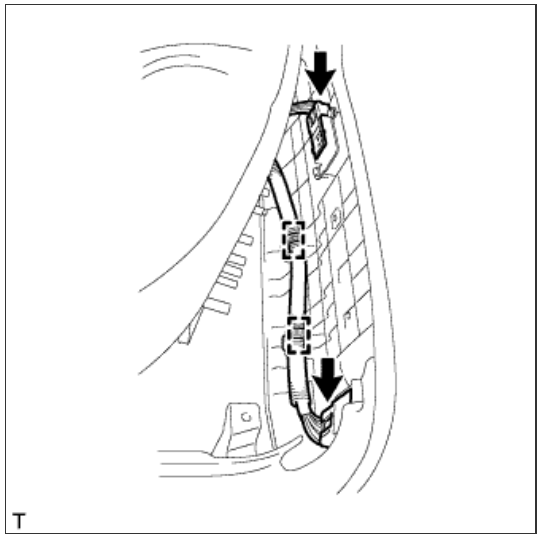


f. for Driver Side:

i. Detach the 2 wire harness clamps.

ii. Disconnect the 2 connectors.

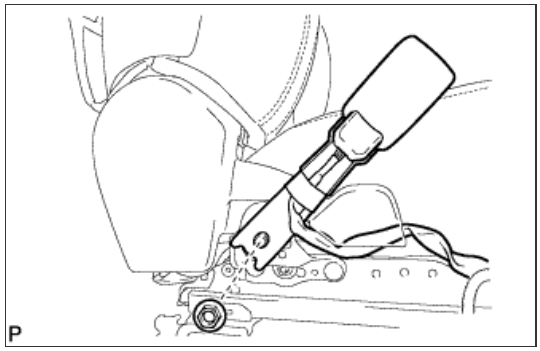
g. for Front Passenger Side:
Disconnect the connector.



6. REMOVE FRONT SEAT INNER BELT ASSEMBLY LH

a. Disconnect the 3 connectors and detach the clamps.

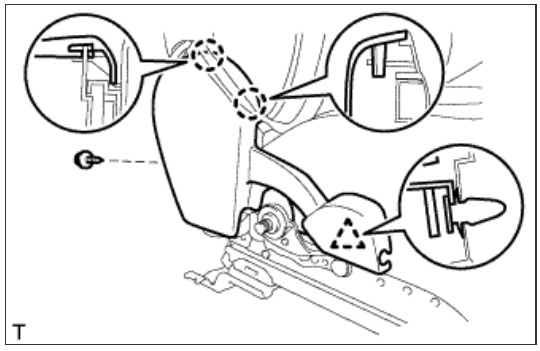
b. Remove the nut and front seat inner belt assembly.



7. REMOVE FRONT INNER SEAT CUSHION SHIELD LH

a. Remove the screw.

b. Detach the 2 claws and clip, and then remove the cushion shield.

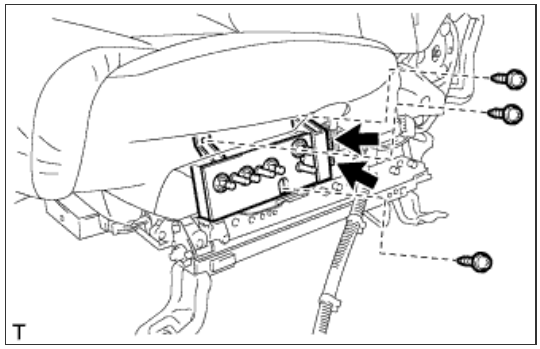


8. REMOVE FRONT POWER SEAT SWITCH LH

a. for Driver Side:
Disconnect the 2 connectors.

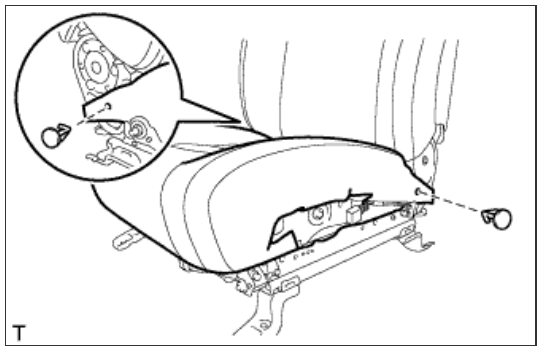
b. for Front Passenger Side:
Disconnect the connector.

c. Remove the 3 screws and switch.



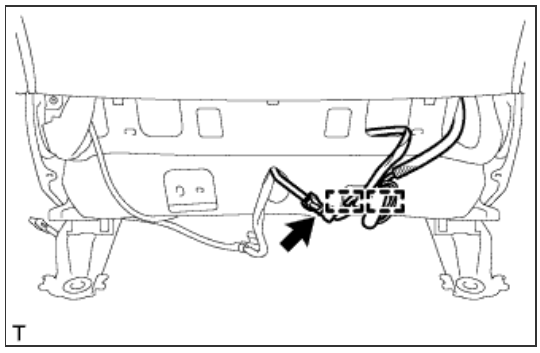
9. REMOVE SEAT CUSHION COVER WITH PAD

a. Using a clip remover, remove the 2 clips.

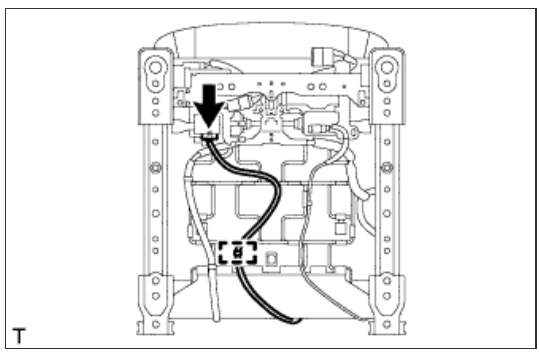


b. w/ Seat Heater System:

i. Disconnect the seat heater connector and detach the 2 wire harness clamps.

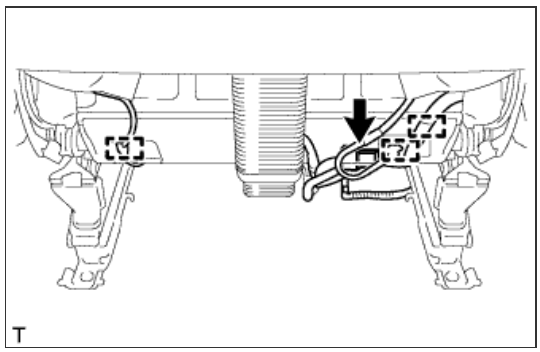


ii. Disconnect the seat heater control connector and detach the wire harness clamp.



c. w/ Climate Control Seat System:

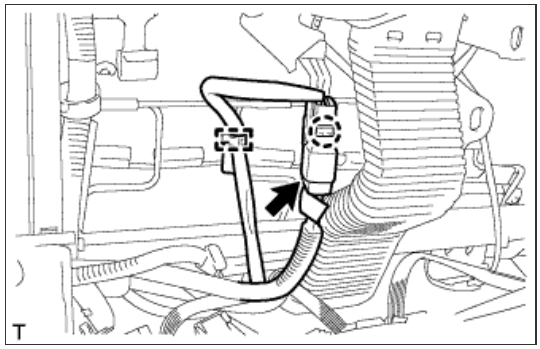
i. Disconnect the seat heater connector and detach the 3 wire harness clamps.



ii. Disconnect the control connector.

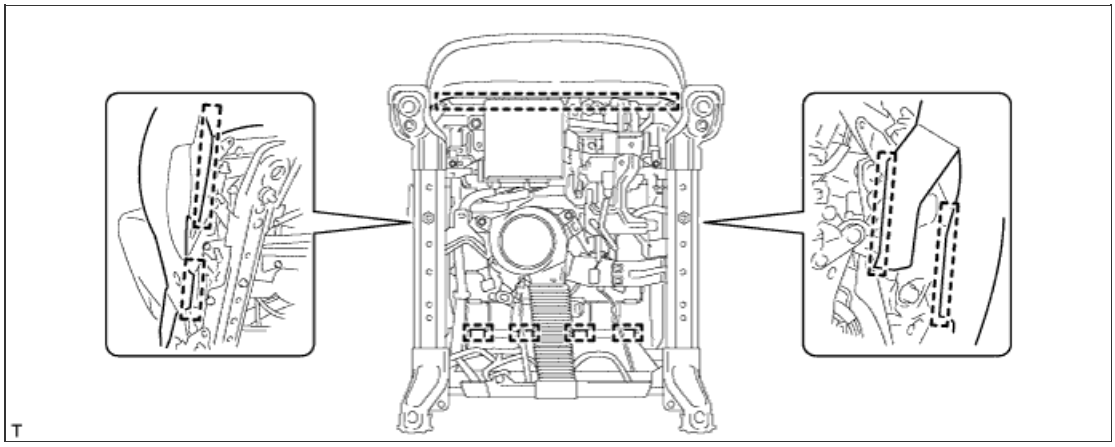
iii. Detach the claw and remove the connector.

iv. Detach the wire harness clamp.

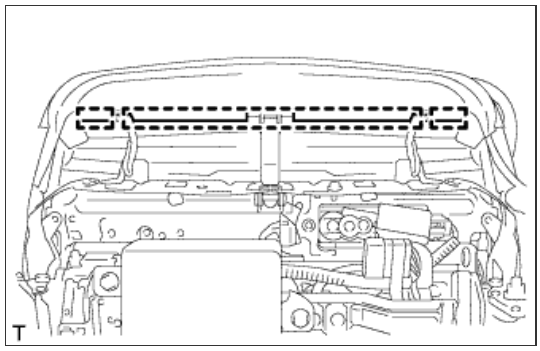


d. for Driver Side:

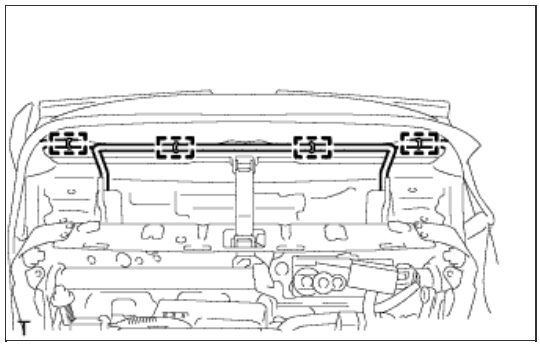
i. Detach the hooks.



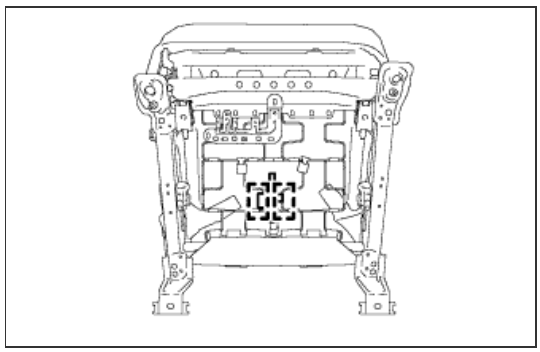
ii. Detach the hooks.



iii. Remove the hog rings and seat cushion cover with pad.



e. for Front Passenger Side:

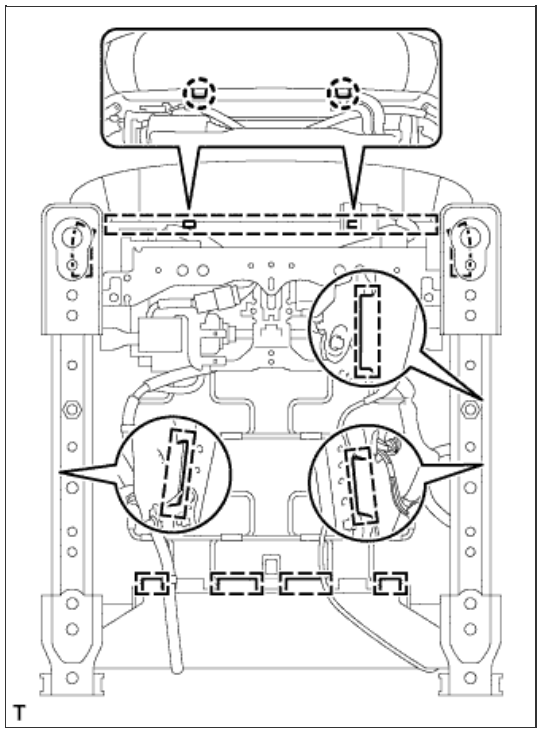


i. Disconnect the seat belt warning sensor connector.

ii. Detach the 2 clamps and remove the seat belt warning sensor connector.

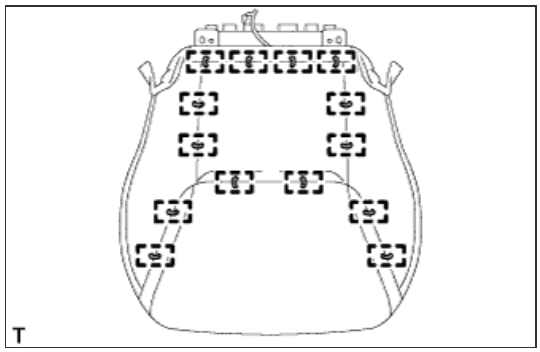
iii. Bend the 2 seat frame claws upward.

iv. Detach the hooks and remove the seat cushion cover with pad.



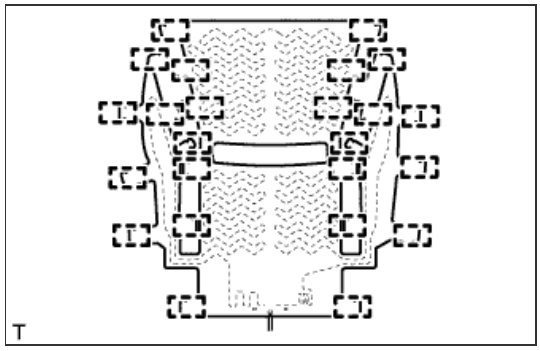
10. REMOVE FRONT SEPARATE TYPE SEAT CUSHION COVER

a. Remove the hog rings and front seat cushion cover.



11. REMOVE FRONT SEAT CUSHION HEATER ASSEMBLY LH

a. Cut off the tack pins which fasten the seat heater to the seat cushion cover, and then remove the seat cushion heater from the seat cushion cover.



for Preparation Click here

CAUTION:

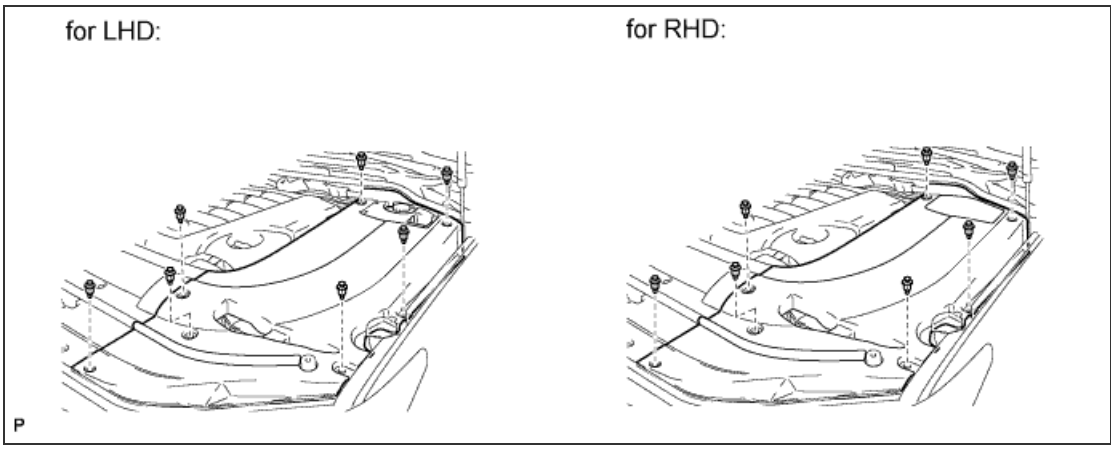
Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly (Click here).

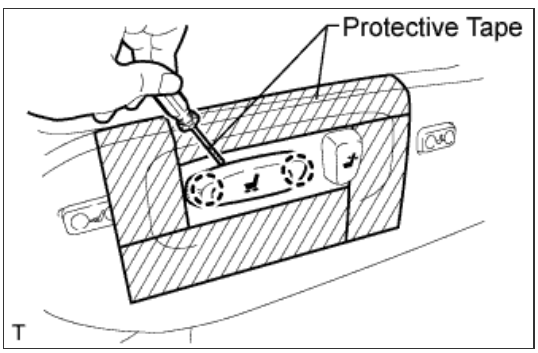
3. REMOVE SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Apply protective tape around the cushion shield.

b. Using a screwdriver, detach the 2 claws and remove the knob.

HINT:

Tape the screwdriver tip before use.

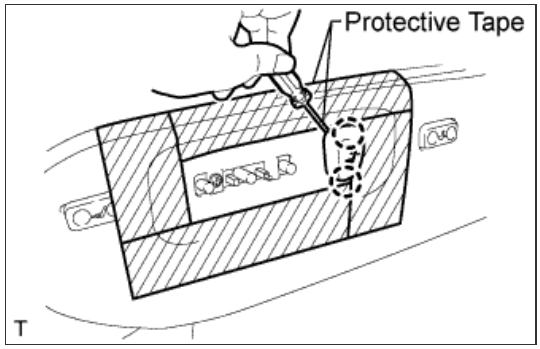


4. REMOVE RECLINING POWER SEAT SWITCH KNOB

a. Using a screwdriver, detach the 2 claws and remove the knob.

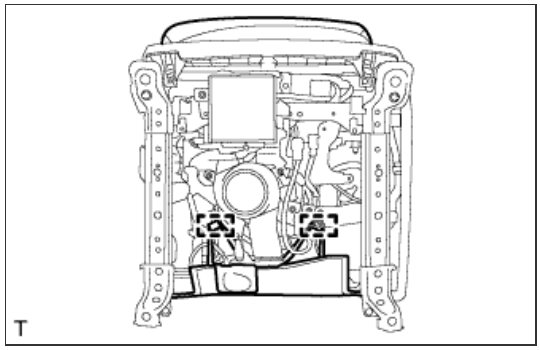
HINT:

Tape the screwdriver tip before use.

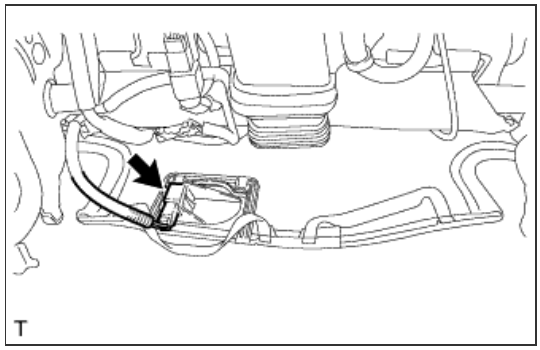


5. REMOVE FRONT SEAT CUSHION SHIELD LH

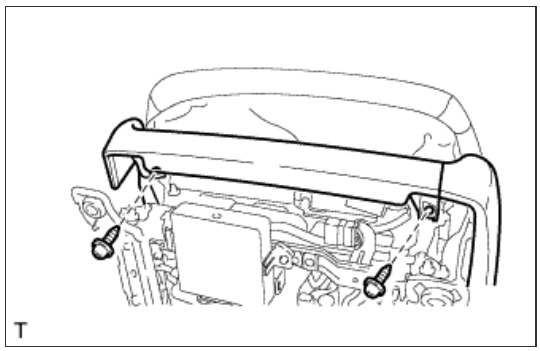
a. Remove the 2 rubber bands from the hooks.



b. Disconnect the interior illumination light connector.

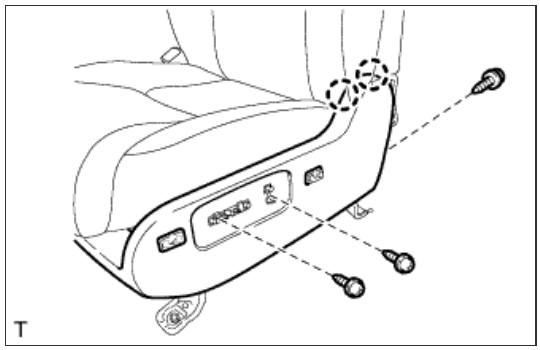


c. Remove the 2 screws.



d. Remove the 3 screws.

e. Detach the 2 claws and remove the cushion shield.

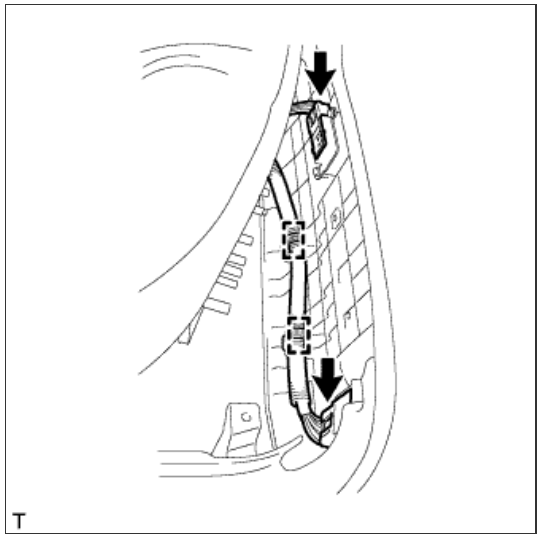


f. for Driver Side:

i. Detach the 2 wire harness clamps.

ii. Disconnect the 2 connectors.

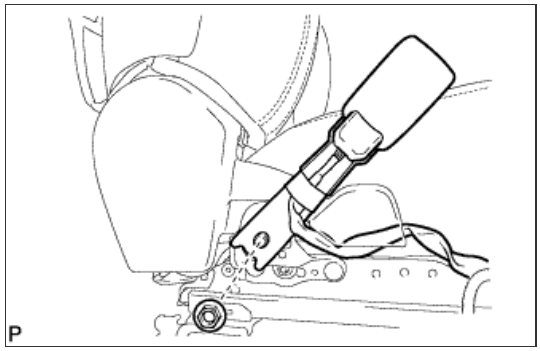
g. for Front Passenger Side:
Disconnect the connector.



6. REMOVE FRONT SEAT INNER BELT ASSEMBLY LH

a. Disconnect the 3 connectors and detach the clamps.

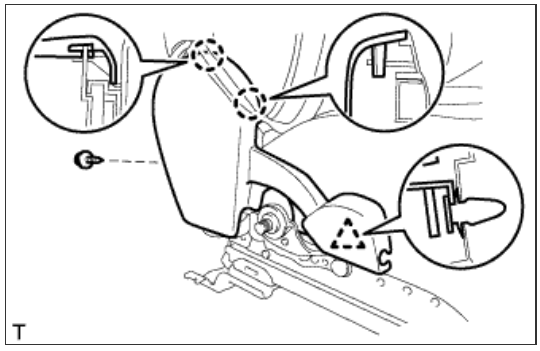
b. Remove the nut and front seat inner belt assembly.



7. REMOVE FRONT INNER SEAT CUSHION SHIELD LH

a. Remove the screw.

b. Detach the 2 claws and clip, and then remove the cushion shield.

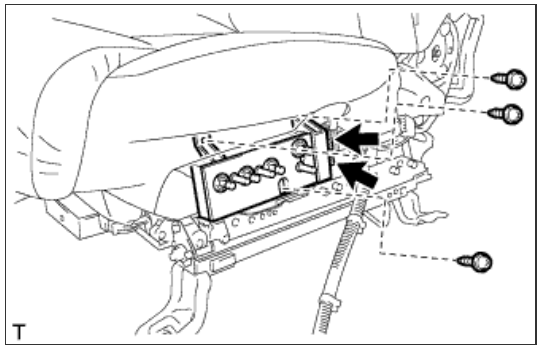


8. REMOVE FRONT POWER SEAT SWITCH LH

a. for Driver Side:
Disconnect the 2 connectors.

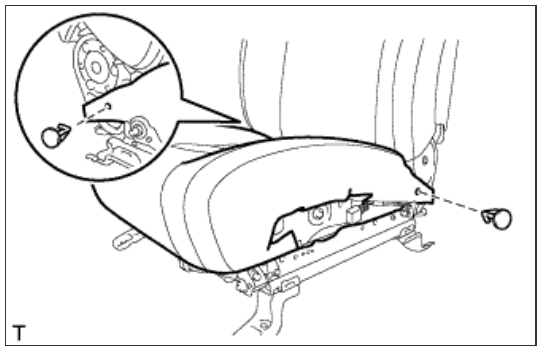
b. for Front Passenger Side:
Disconnect the connector.

c. Remove the 3 screws and switch.



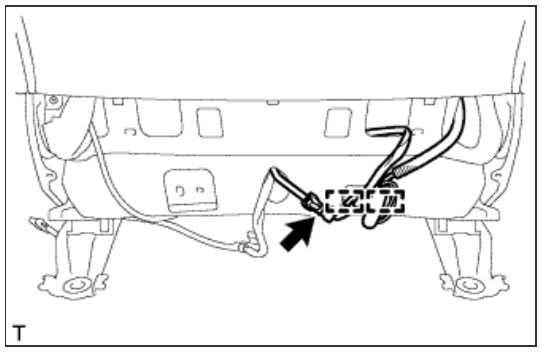
9. REMOVE SEAT CUSHION COVER WITH PAD

a. Using a clip remover, remove the 2 clips.

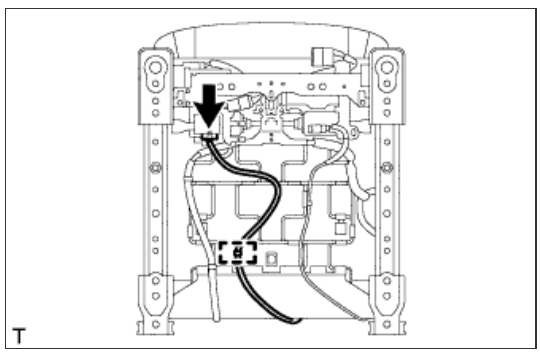


b. w/ Seat Heater System:

i. Disconnect the seat heater connector and detach the 2 wire harness clamps.

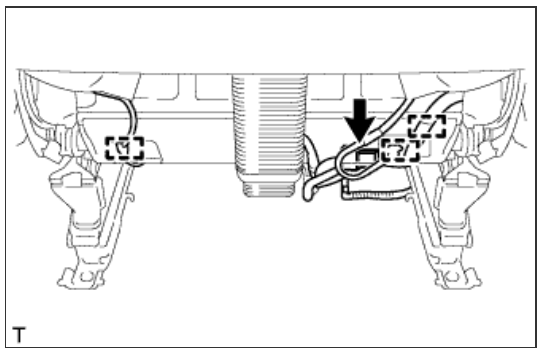


ii. Disconnect the seat heater control connector and detach the wire harness clamp.



c. w/ Climate Control Seat System:

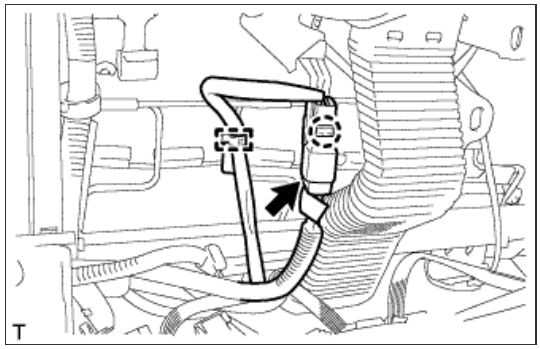
i. Disconnect the seat heater connector and detach the 3 wire harness clamps.



ii. Disconnect the control connector.

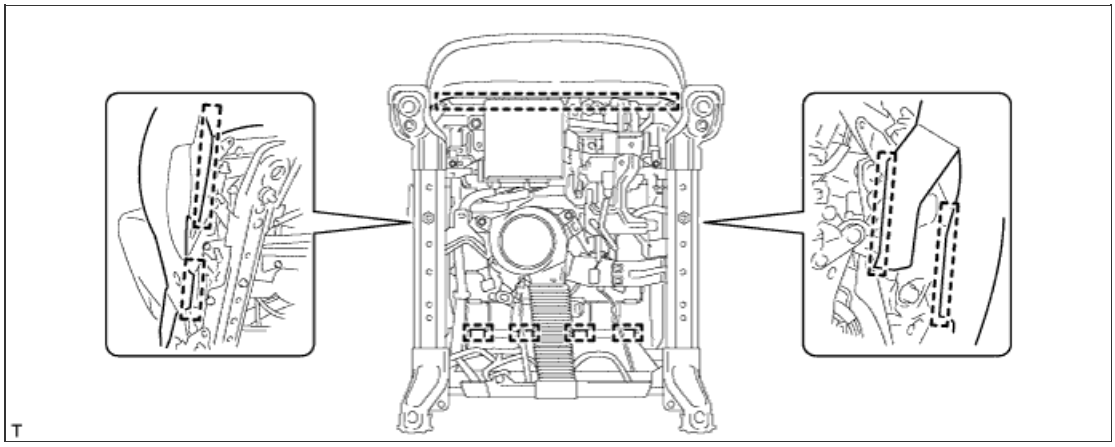
iii. Detach the claw and remove the connector.

iv. Detach the wire harness clamp.

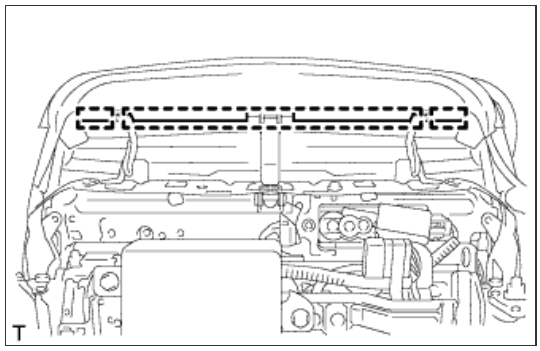


d. for Driver Side:

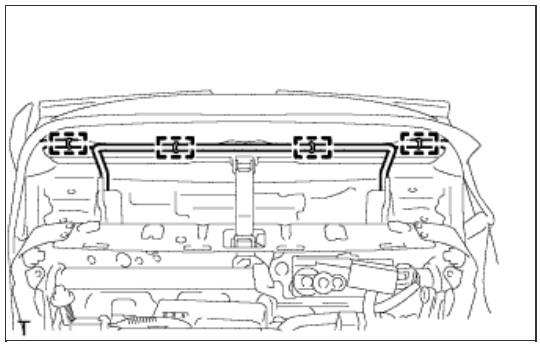
i. Detach the hooks.



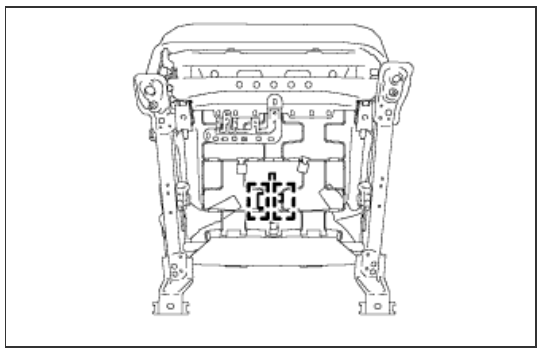
ii. Detach the hooks.



iii. Remove the hog rings and seat cushion cover with pad.



e. for Front Passenger Side:

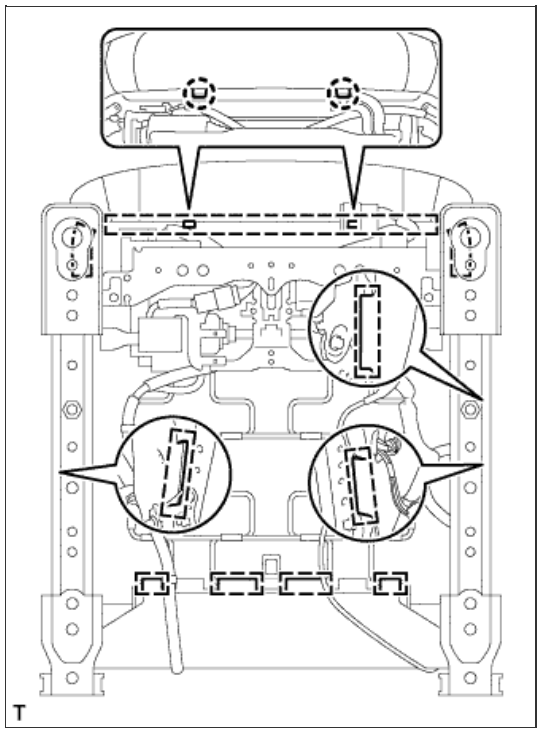


i. Disconnect the seat belt warning sensor connector.

ii. Detach the 2 clamps and remove the seat belt warning sensor connector.

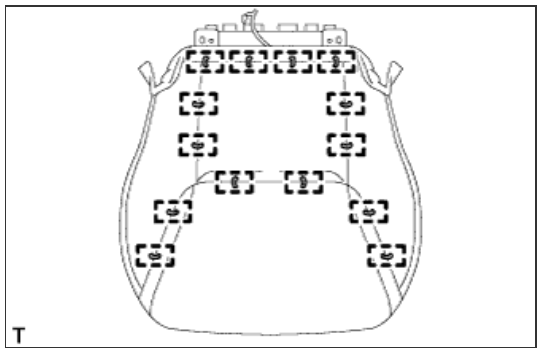
iii. Bend the 2 seat frame claws upward.

iv. Detach the hooks and remove the seat cushion cover with pad.



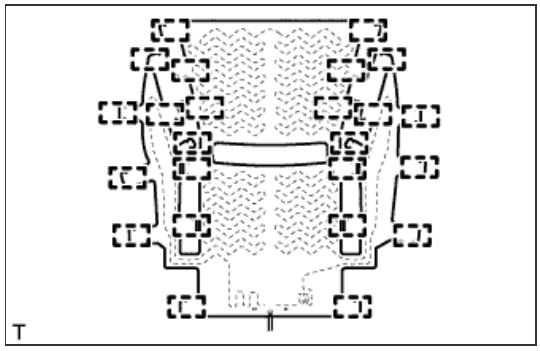
10. REMOVE FRONT SEPARATE TYPE SEAT CUSHION COVER

a. Remove the hog rings and front seat cushion cover.



11. REMOVE FRONT SEAT CUSHION HEATER ASSEMBLY LH

a. Cut off the tack pins which fasten the seat heater to the seat cushion cover, and then remove the seat cushion heater from the seat cushion cover.



for Preparation Click here

1. INSPECT FRONT SEAT CUSHION HEATER ASSEMBLY LH

a. Heat the thermostat with a light.

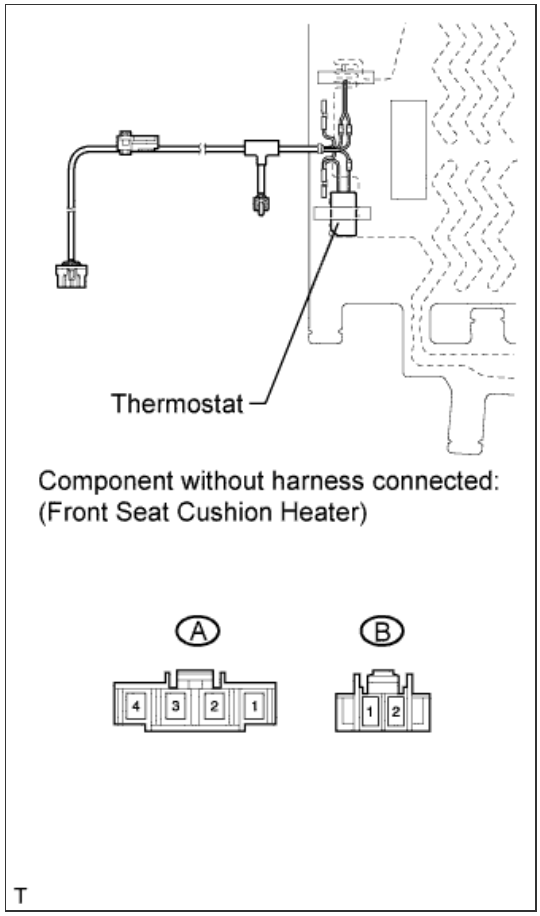
b. Check the seat cushion heater.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A-1 - B-1	Seat cushion heater temperature 25°C (77°F)	3.05 to 3.65 Ω
A-4 - B-2		
A-1 - A-4		
A-2 - A-3		8 to 12 kΩ

If the result is not as specified, replace the seat cushion heater assembly.



2. INSPECT FRONT SEAT CUSHION HEATER ASSEMBLY RH

a. Heat the thermostat with a light.

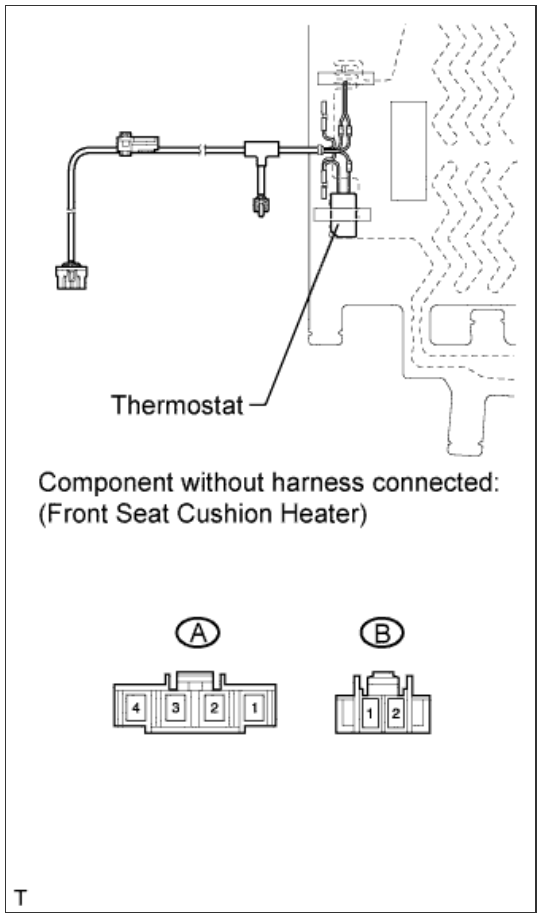
b. Check the seat cushion heater.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A-1 - B-1	Seat cushion heater temperature 25°C (77°F)	3.05 to 3.65 Ω
A-4 - B-2		
A-1 - A-4		
A-2 - A-3		8 to 12 kΩ

If the result is not as specified, replace the seat cushion heater assembly.



3. INSPECT FRONT SEAT CUSHION HEATER ASSEMBLY LH (w/ Climate Control Seat System)

a. Heat the thermostat with a light.

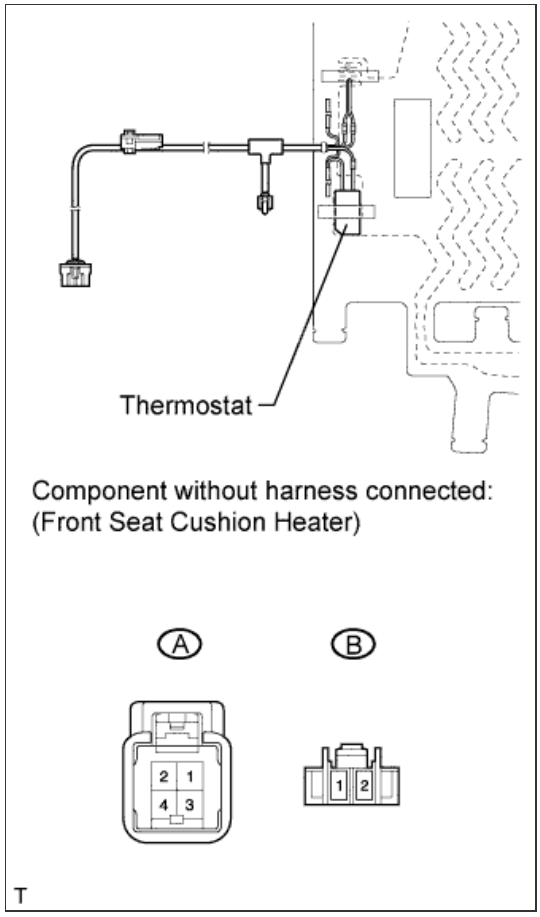
b. Check the seat cushion heater.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A-1 - B-1	Seat cushion heater temperature 25°C (77°F)	3.05 to 3.65 Ω
A-1 - A-3		
A-3 - B-2		
A-2 - A-4		8 to 12 kΩ

If the result is not as specified, replace the seat cushion heater assembly.



4. INSPECT FRONT SEAT CUSHION HEATER ASSEMBLY RH (w/ Climate Control Seat System)

a. Heat the thermostat with a light.

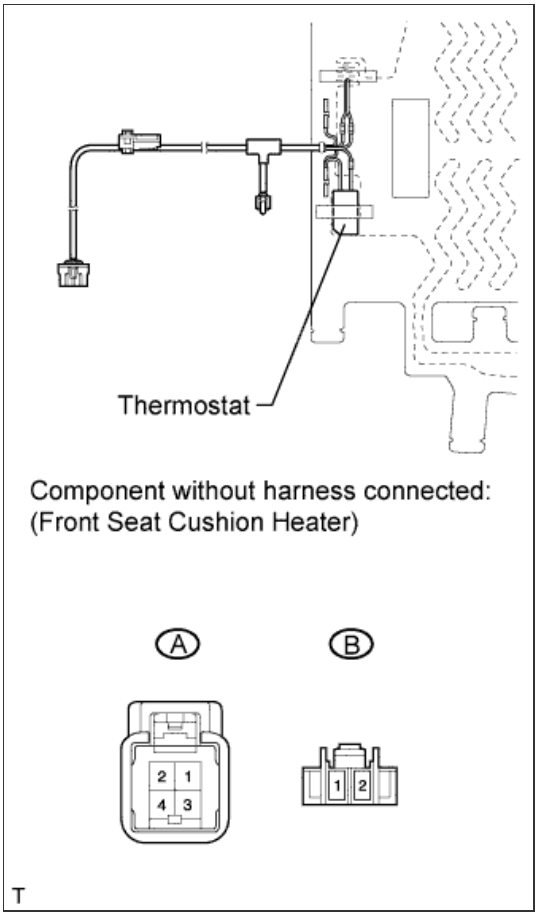
b. Check the seat cushion heater.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A-1 - B-1	Seat cushion heater temperature 25°C (77°F)	3.05 to 3.65 Ω
A-1 - A-3		
A-3 - B-2		
A-2 - A-4		8 to 12 kΩ

If the result is not as specified, replace the seat cushion heater assembly.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

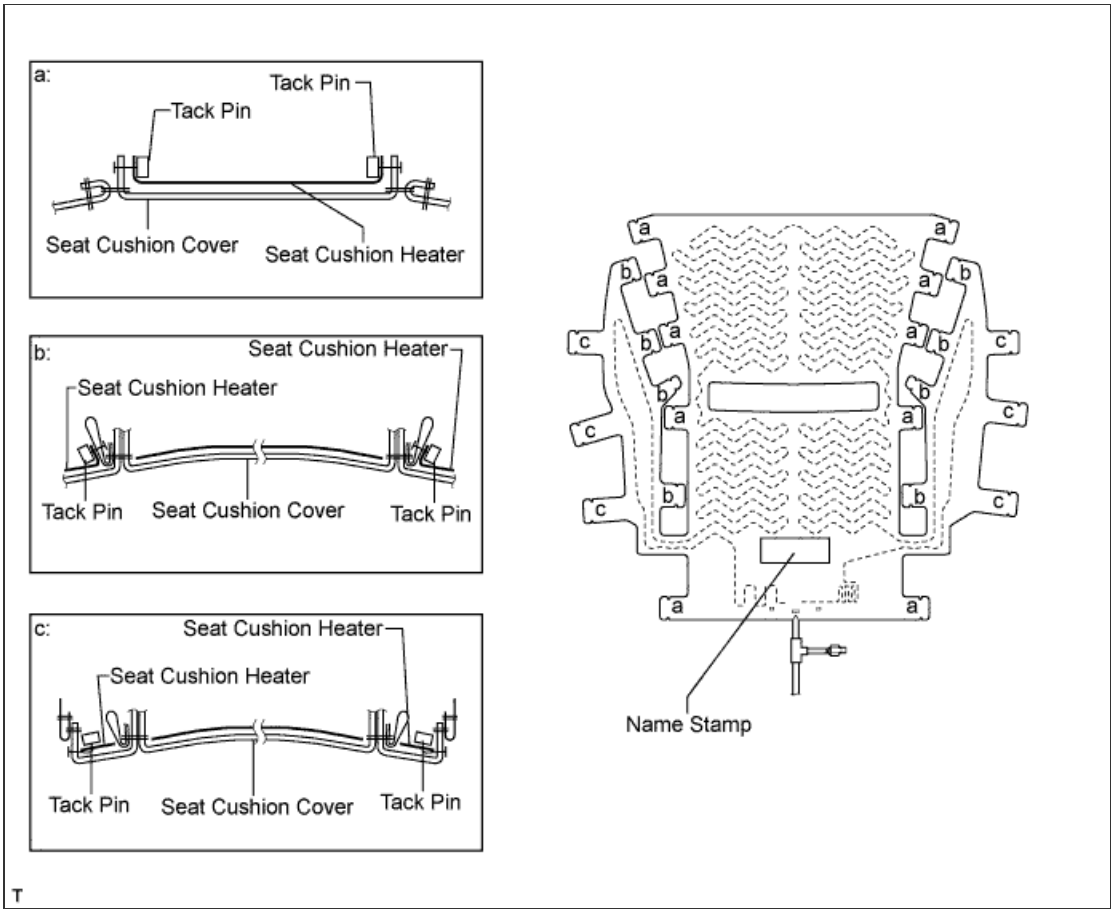
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL FRONT SEAT CUSHION HEATER ASSEMBLY LH

a. Set the seat cushion heater with the name stamp side facing the seat cushion cover.

b. Install the seat cushion heater with new tack pins.



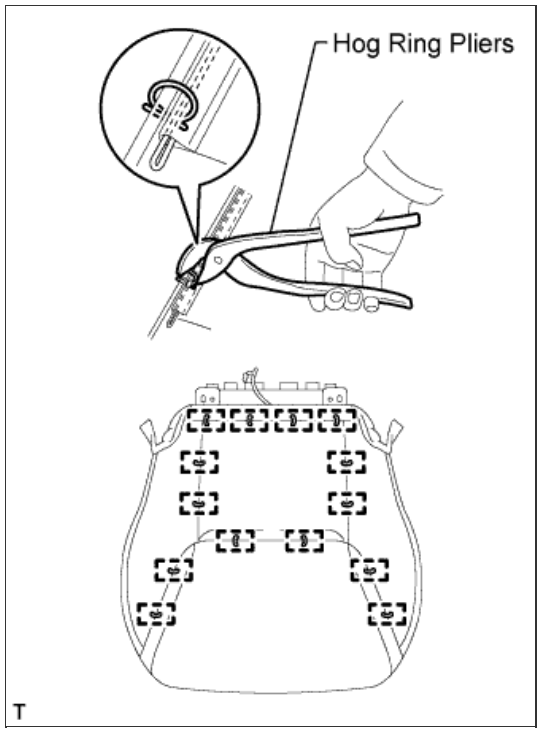
2. INSTALL FRONT SEPARATE TYPE SEAT CUSHION COVER

a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**

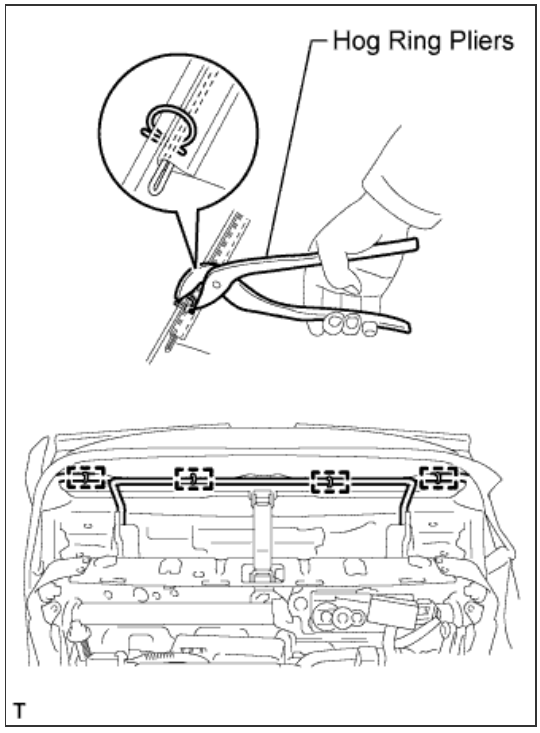
- **When installing the hog rings, avoid wrinkling the cover.**



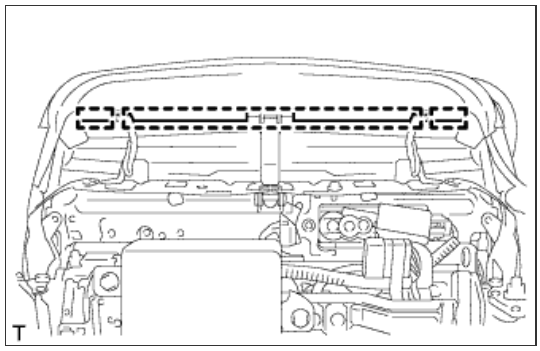
3. INSTALL SEAT CUSHION COVER WITH PAD

a. for Driver Side:

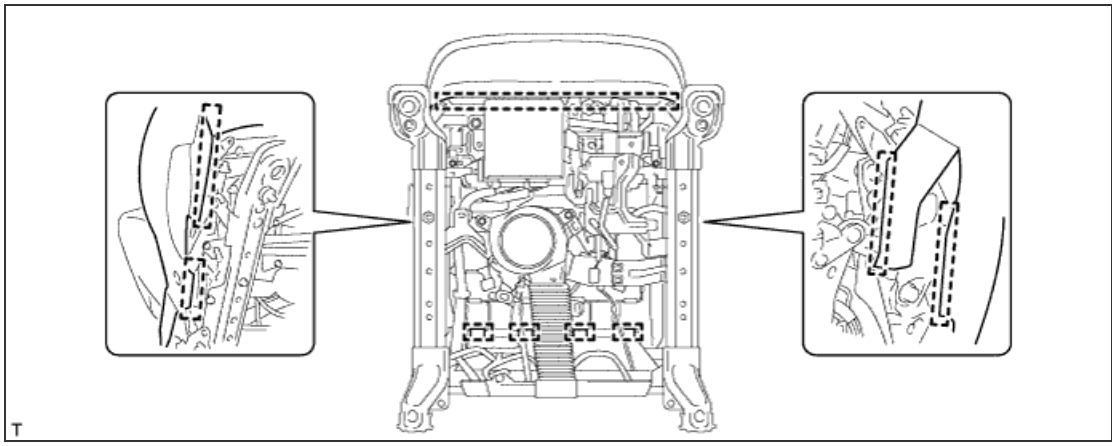
i. Using hog ring pliers, install the seat cushion cover with pad to the seat frame with new hog rings.



ii. Attach the hooks.



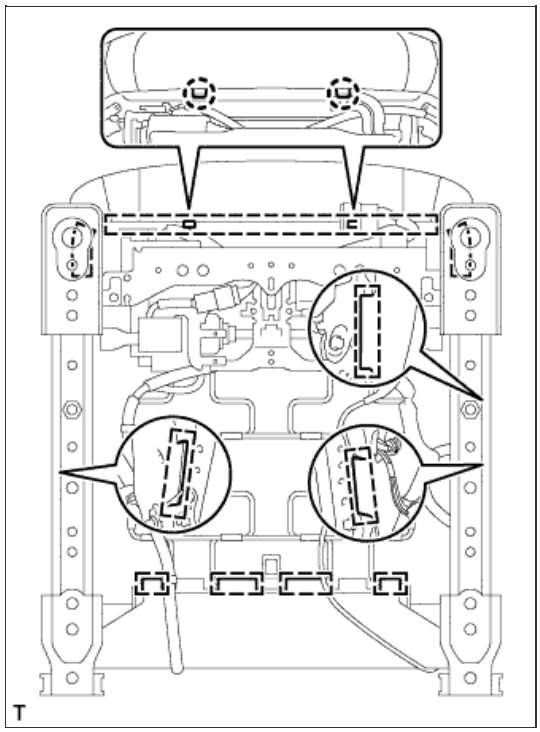
iii. Attach the hooks.



b. for Front Passenger Side:

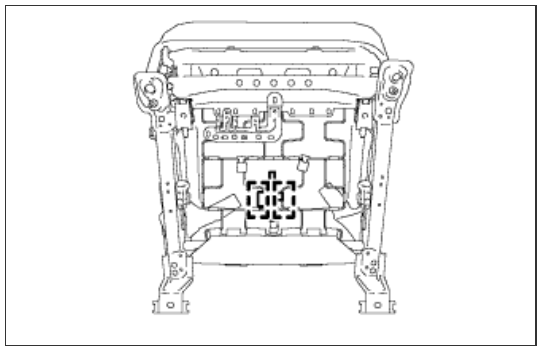
i. Attach the hooks to install the seat cushion cover with pad.

ii. Bend the 2 seat frame claws downward.



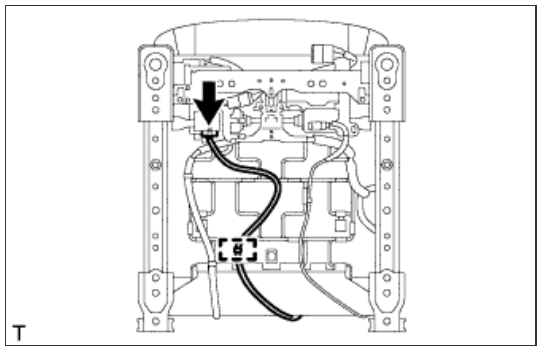
iii. Attach the 2 clamps to install the seat belt warning sensor connector.

iv. Connect the seat belt warning sensor connector.

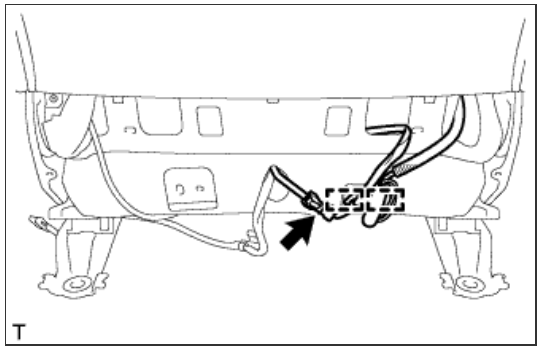


c. w/ Seat Heater System:

i. Connect the seat heater control connector and attach the wire harness clamp.



ii. Connect the seat heater connector and attach the 2 wire harness clamps.

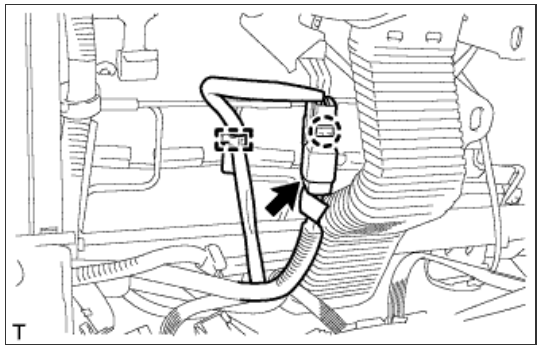


d. w/ Climate Control Seat System:

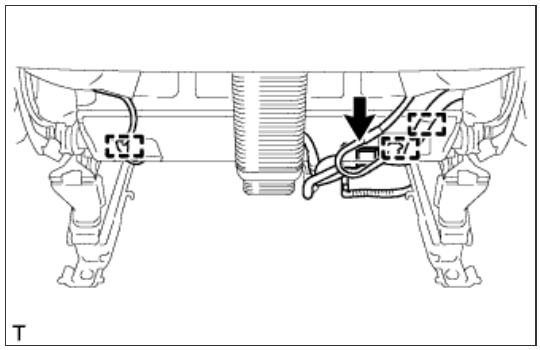
i. Attach the claw to install the connector.

ii. Attach the wire harness clamp.

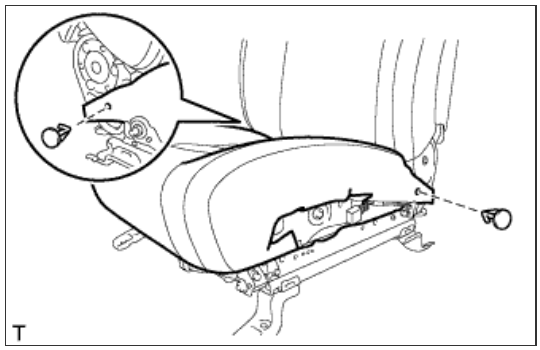
iii. Connect the connector.



iv. Connect the seat heater connector and attach the 3 wire harness clamps.



e. Install the 2 clips.

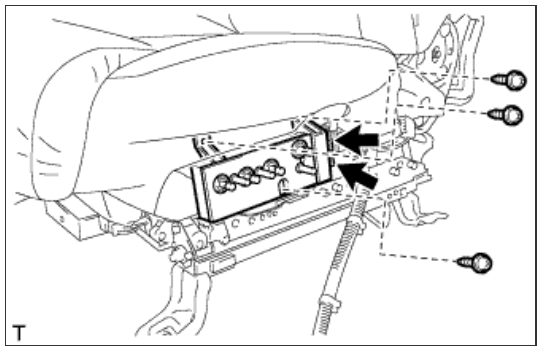


4. INSTALL FRONT POWER SEAT SWITCH LH

a. Install the switch with the 3 screws.

b. for Driver Side:
Connect the 2 connectors.

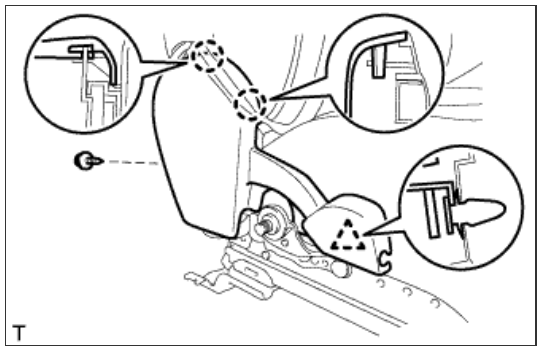
c. for Front Passenger Side:
Connect the connector.



5. INSTALL FRONT INNER SEAT CUSHION SHIELD LH

a. Attach the 2 claws and clip to install the cushion shield.

b. Install the screw.



6. INSTALL FRONT SEAT INNER BELT ASSEMBLY LH

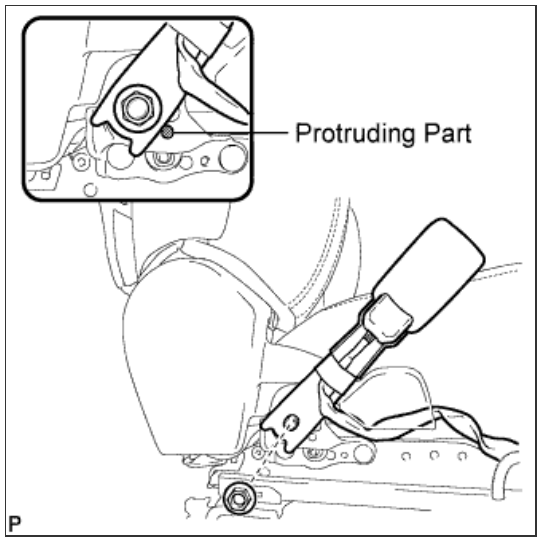
a. Install the front seat inner belt assembly with the nut.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not allow the anchor part of the front seat inner belt assembly to overlap the protruding part of the front seat adjuster.

b. Connect the 3 connectors and attach the clamps.



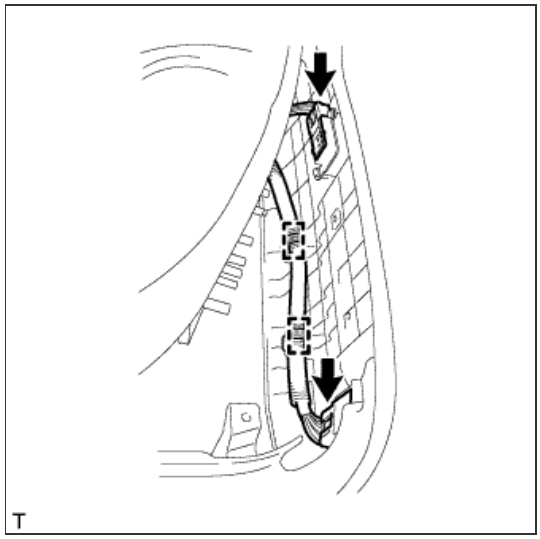
7. INSTALL FRONT SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

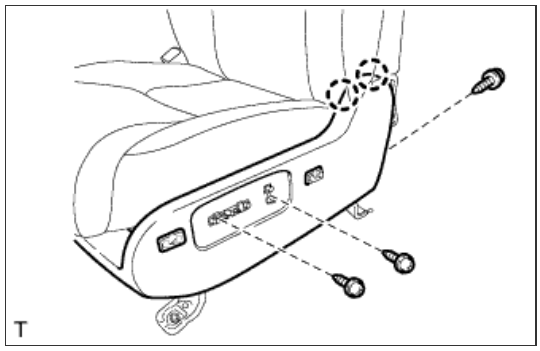
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

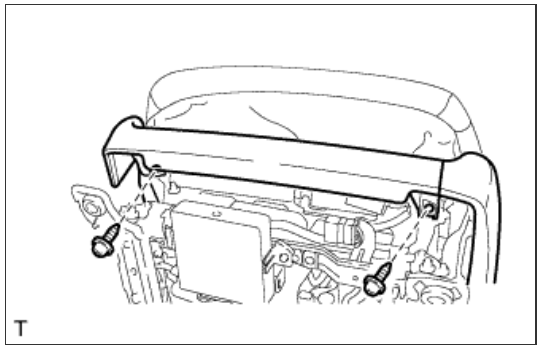


c. Attach the 2 claws to install the cushion shield.

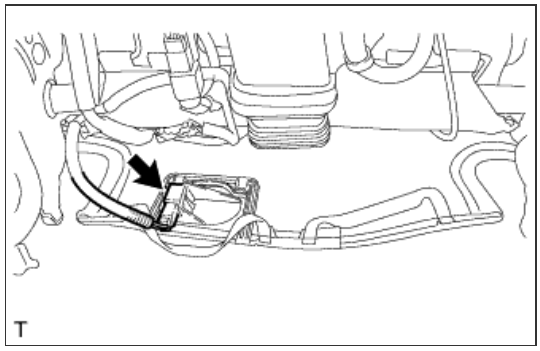
d. Install the 3 screws.



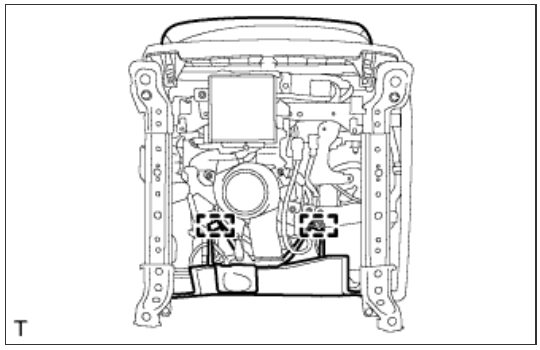
e. Install the 2 screws.



f. Connect the interior illumination light connector.

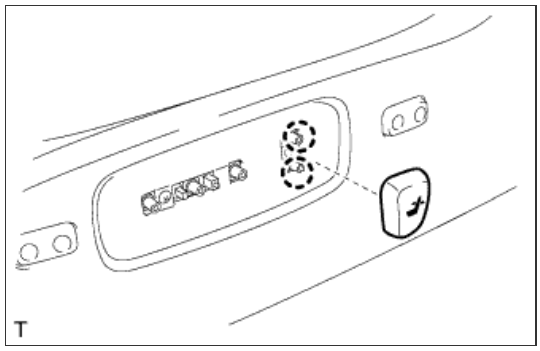


g. Attach the 2 rubber bands to the hooks.



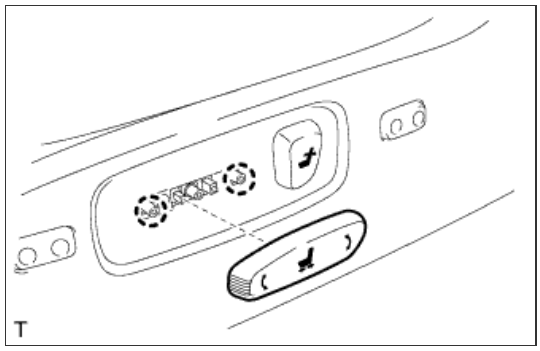
8. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



9. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.

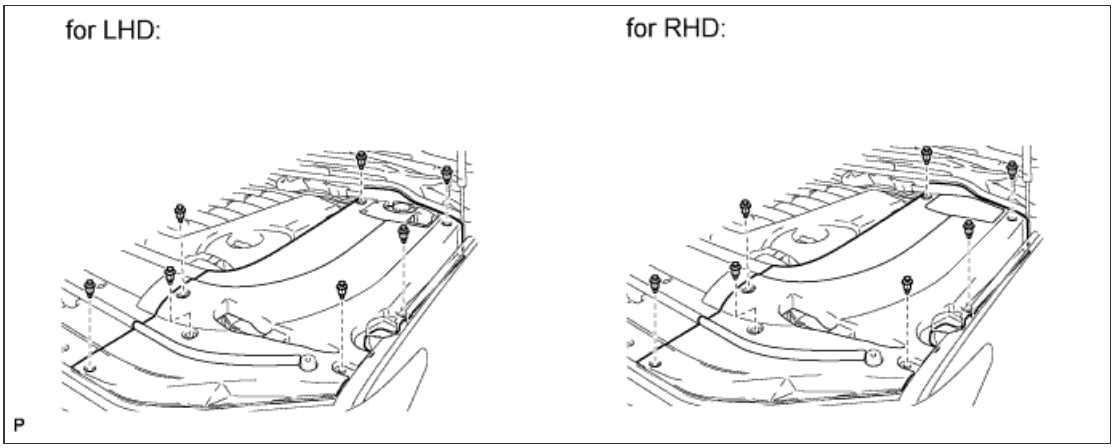


10. INSTALL FRONT SEAT ASSEMBLY LH

a. Install the front seat assembly (Click here).

11. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

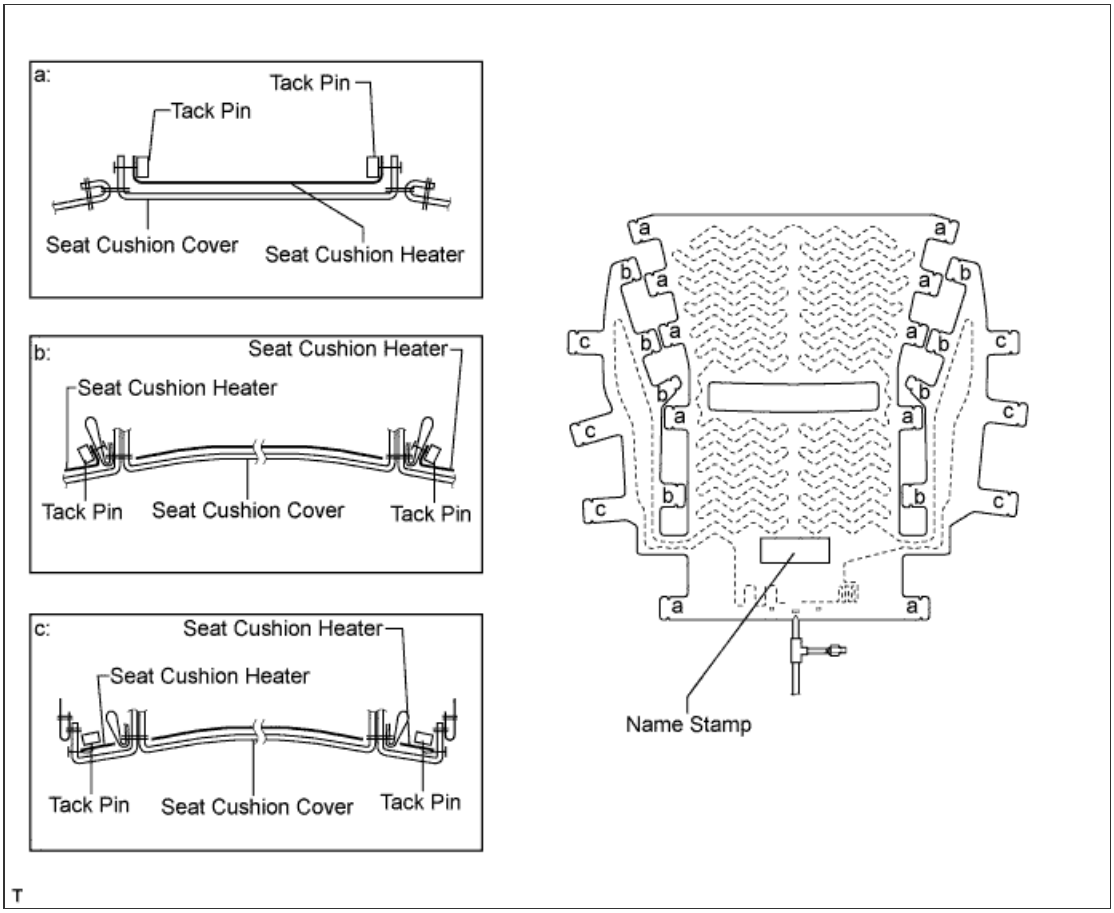
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL FRONT SEAT CUSHION HEATER ASSEMBLY LH

a. Set the seat cushion heater with the name stamp side facing the seat cushion cover.

b. Install the seat cushion heater with new tack pins.



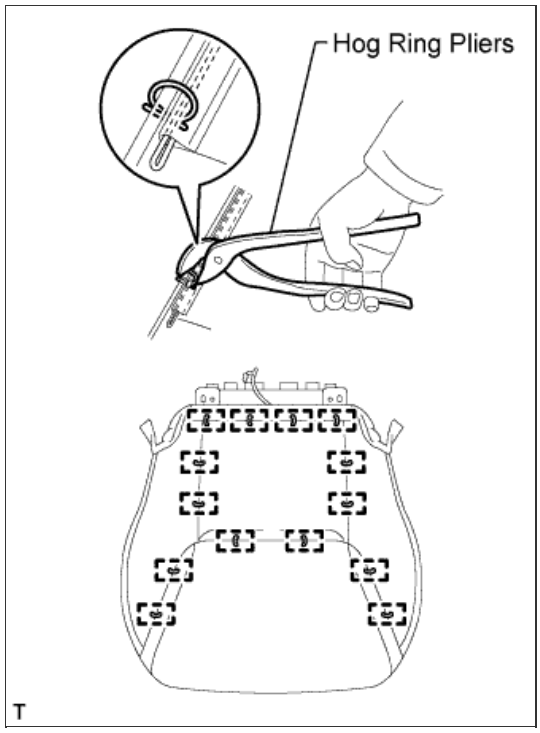
2. INSTALL FRONT SEPARATE TYPE SEAT CUSHION COVER

a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**

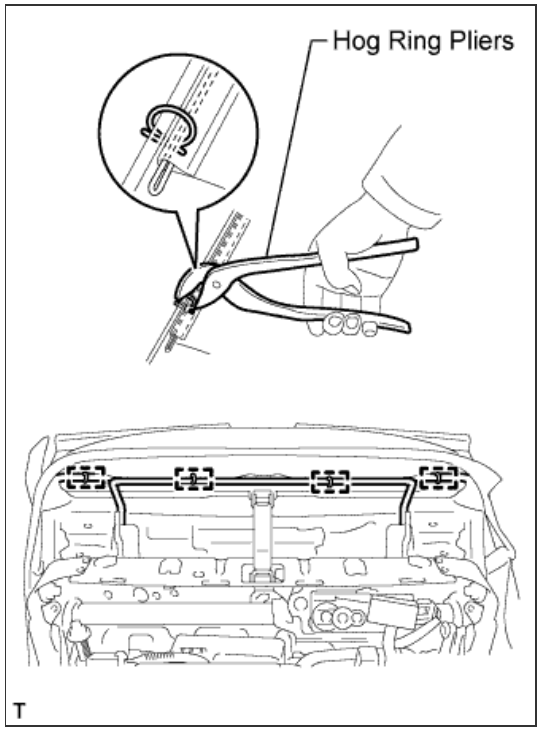
- **When installing the hog rings, avoid wrinkling the cover.**



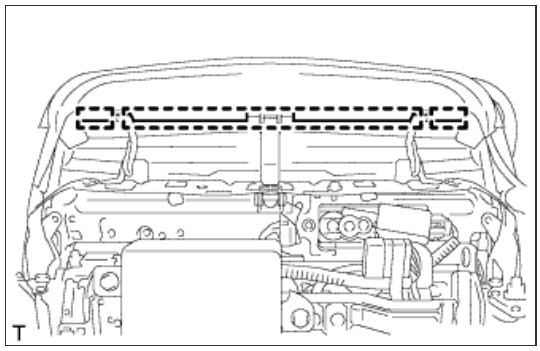
3. INSTALL SEAT CUSHION COVER WITH PAD

a. for Driver Side:

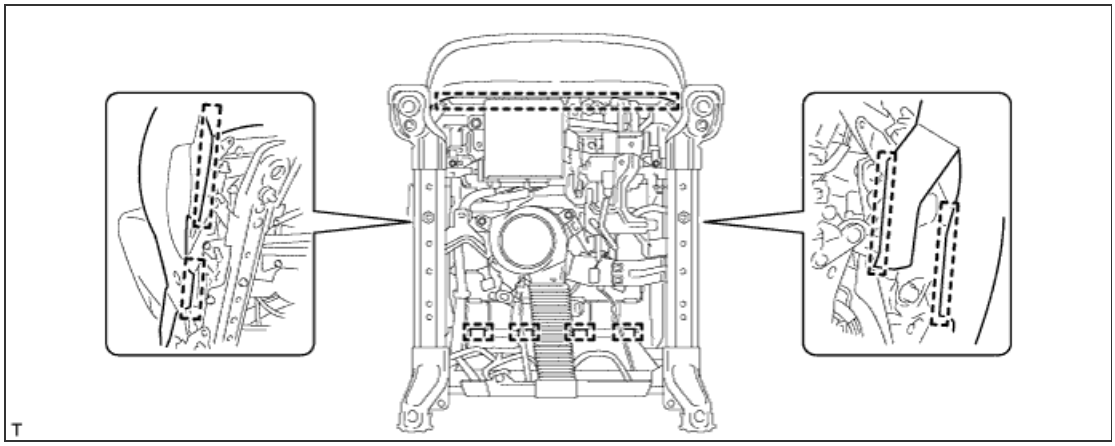
i. Using hog ring pliers, install the seat cushion cover with pad to the seat frame with new hog rings.



ii. Attach the hooks.



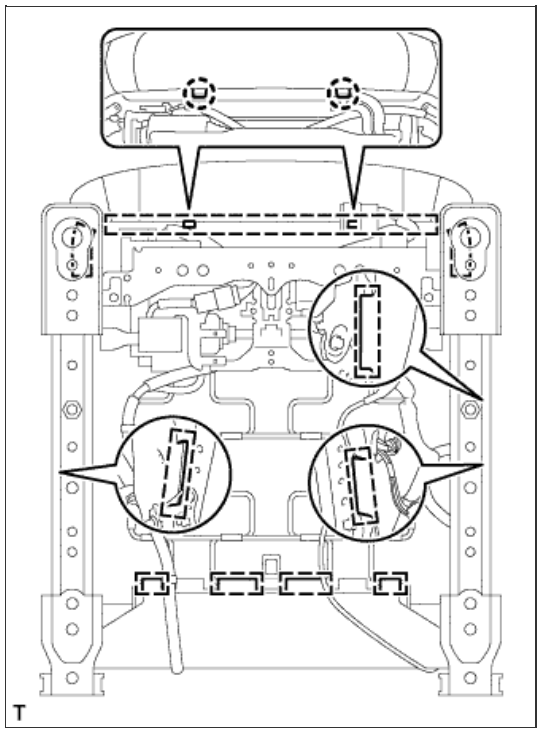
iii. Attach the hooks.



b. for Front Passenger Side:

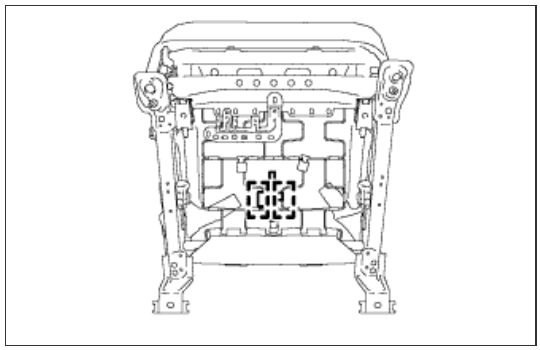
i. Attach the hooks to install the seat cushion cover with pad.

ii. Bend the 2 seat frame claws downward.



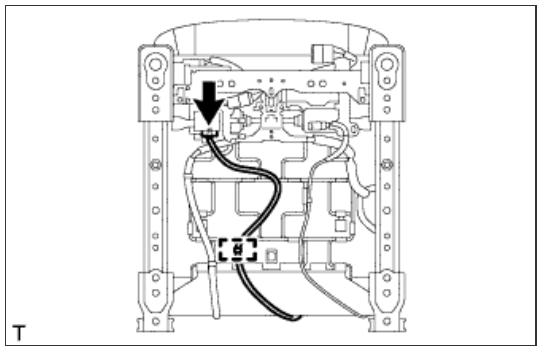
iii. Attach the 2 clamps to install the seat belt warning sensor connector.

iv. Connect the seat belt warning sensor connector.

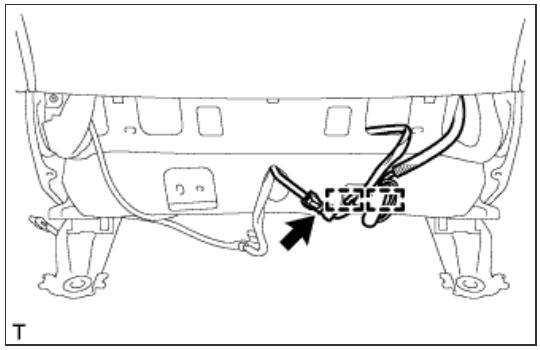


c. w/ Seat Heater System:

i. Connect the seat heater control connector and attach the wire harness clamp.



ii. Connect the seat heater connector and attach the 2 wire harness clamps.

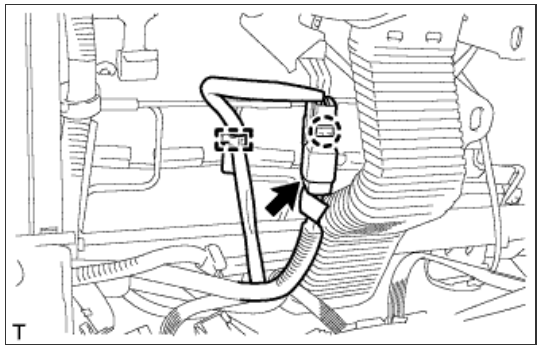


d. w/ Climate Control Seat System:

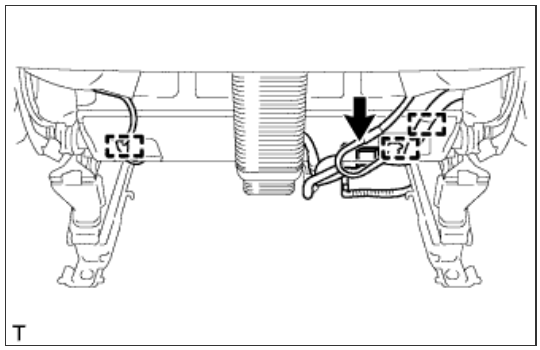
i. Attach the claw to install the connector.

ii. Attach the wire harness clamp.

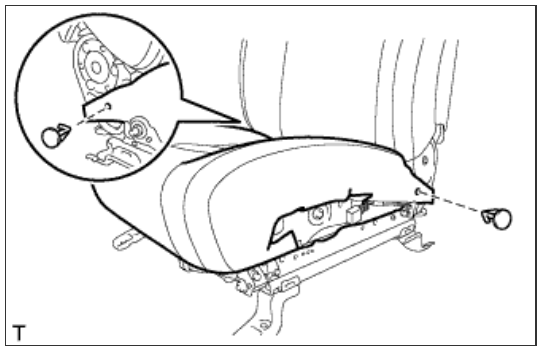
iii. Connect the connector.



iv. Connect the seat heater connector and attach the 3 wire harness clamps.



e. Install the 2 clips.

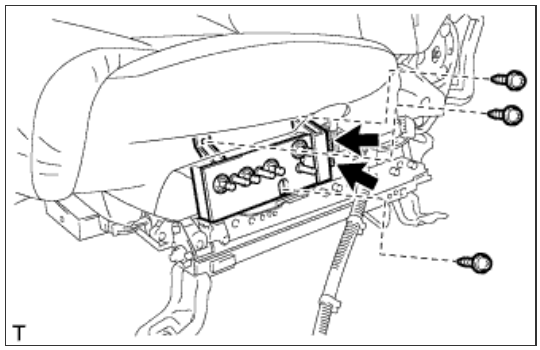


4. INSTALL FRONT POWER SEAT SWITCH LH

a. Install the switch with the 3 screws.

b. for Driver Side:
Connect the 2 connectors.

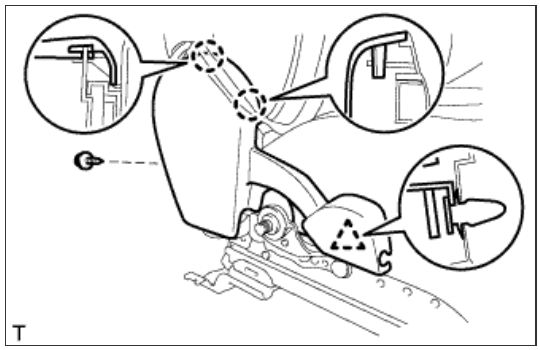
c. for Front Passenger Side:
Connect the connector.



5. INSTALL FRONT INNER SEAT CUSHION SHIELD LH

a. Attach the 2 claws and clip to install the cushion shield.

b. Install the screw.



6. INSTALL FRONT SEAT INNER BELT ASSEMBLY LH

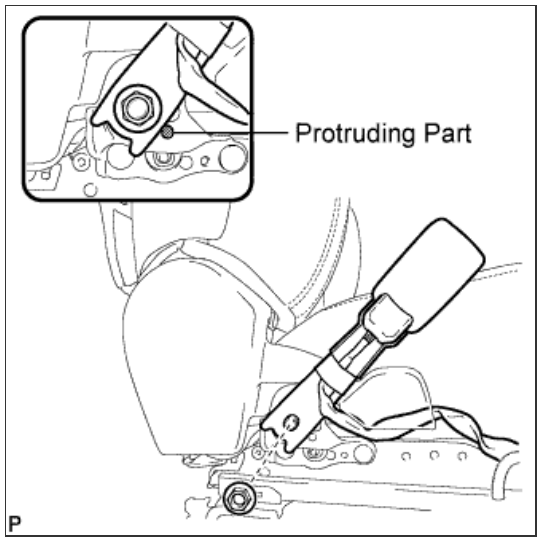
a. Install the front seat inner belt assembly with the nut.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not allow the anchor part of the front seat inner belt assembly to overlap the protruding part of the front seat adjuster.

b. Connect the 3 connectors and attach the clamps.



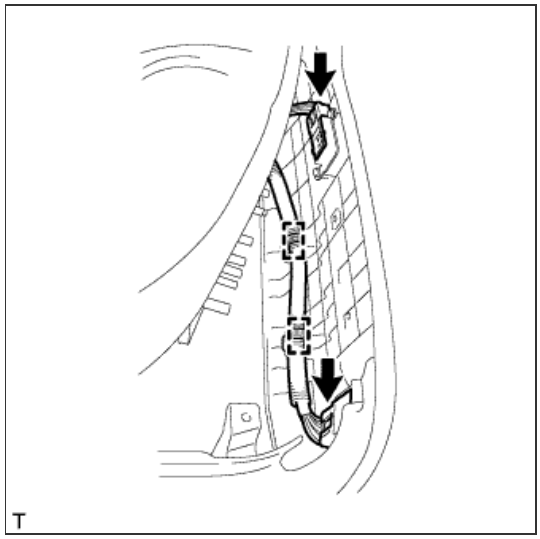
7. INSTALL FRONT SEAT CUSHION SHIELD LH

a. for Driver Side:

i. Attach the 2 wire harness clamps.

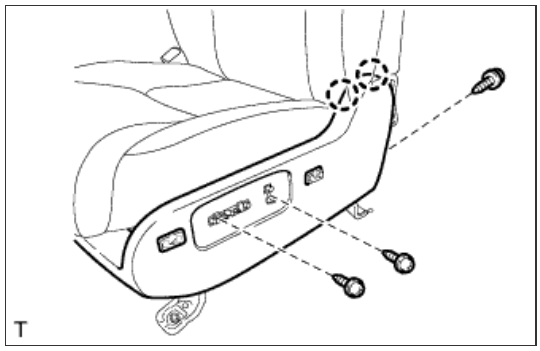
ii. Connect the 2 connectors.

b. for Front Passenger Side:
Connect the connector.

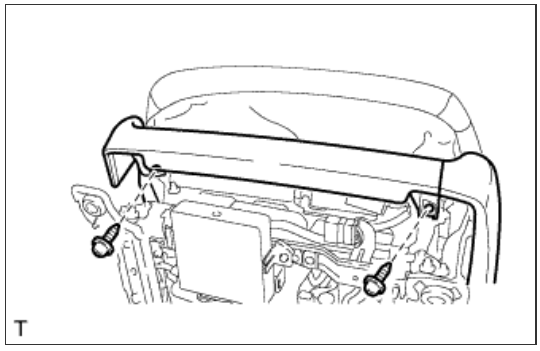


c. Attach the 2 claws to install the cushion shield.

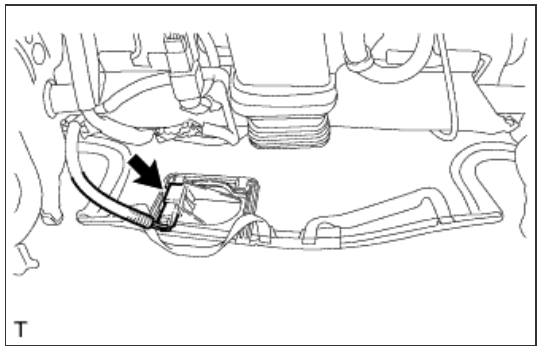
d. Install the 3 screws.



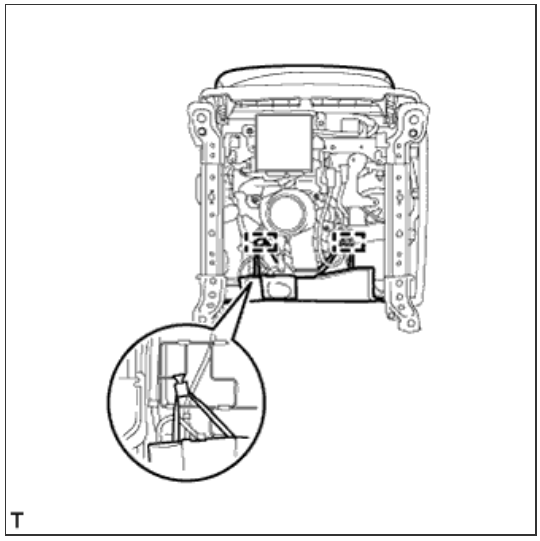
e. Install the 2 screws.



f. Connect the interior illumination light connector.

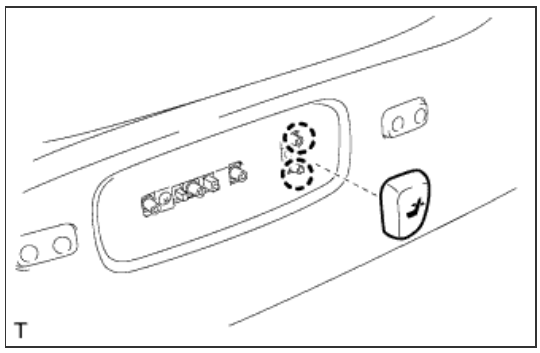


g. Attach the 2 rubber bands to the hooks.



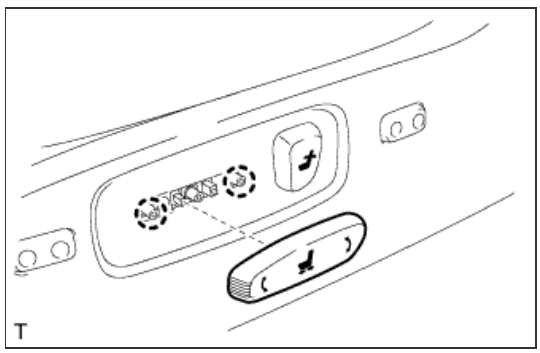
8. INSTALL RECLINING POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.



9. INSTALL SLIDE AND VERTICAL POWER SEAT SWITCH KNOB

a. Attach the 2 claws to install the knob.

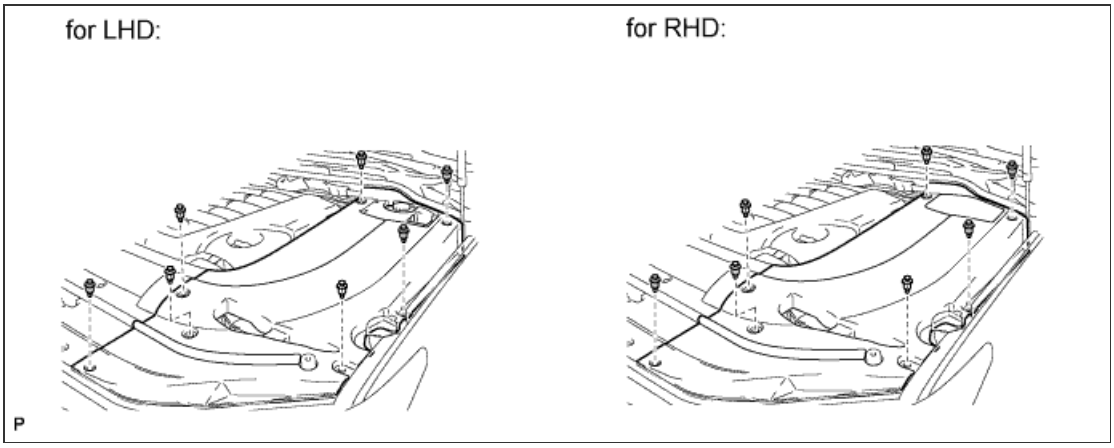


10. INSTALL FRONT SEAT ASSEMBLY LH

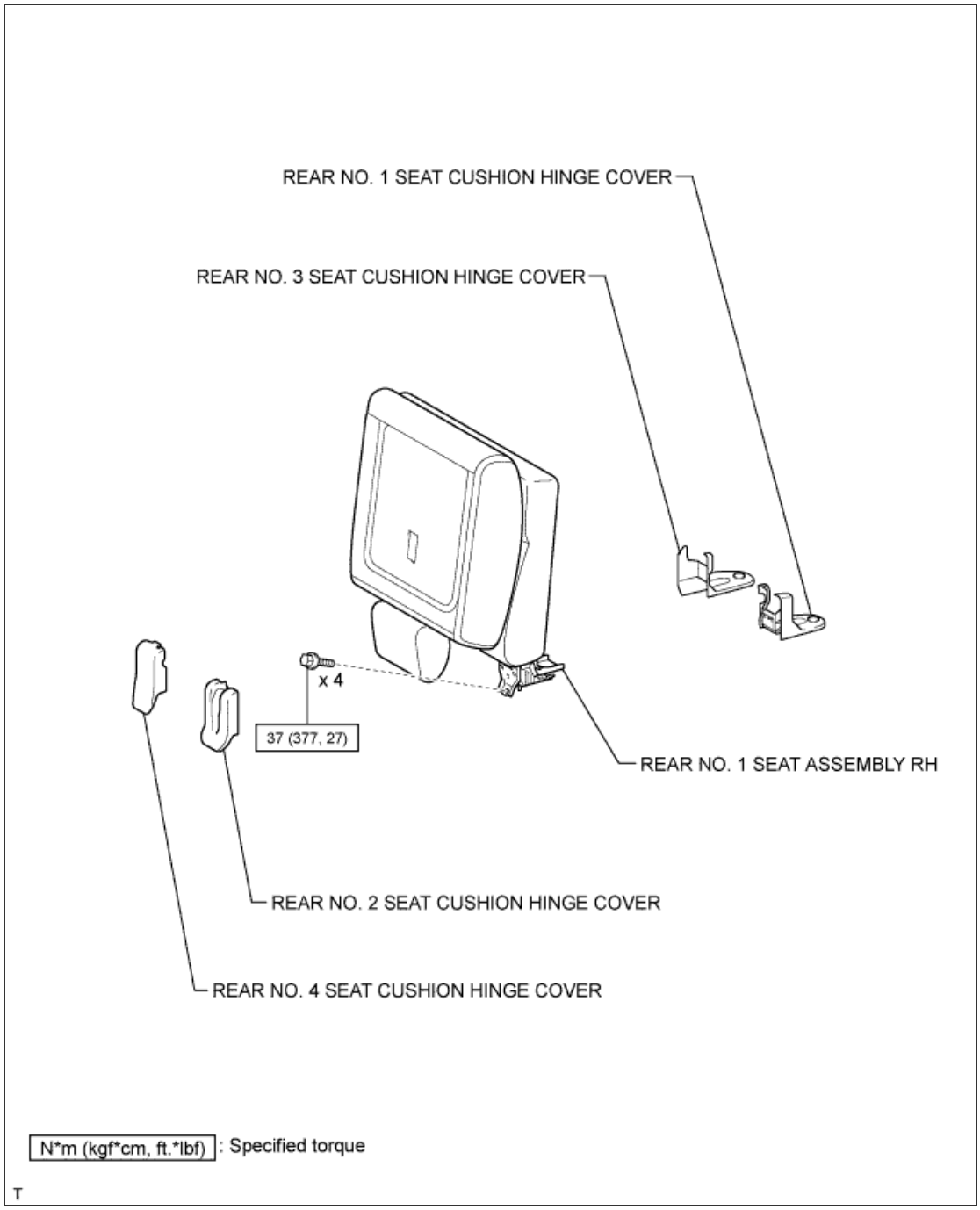
a. Install the front seat assembly (Click here).

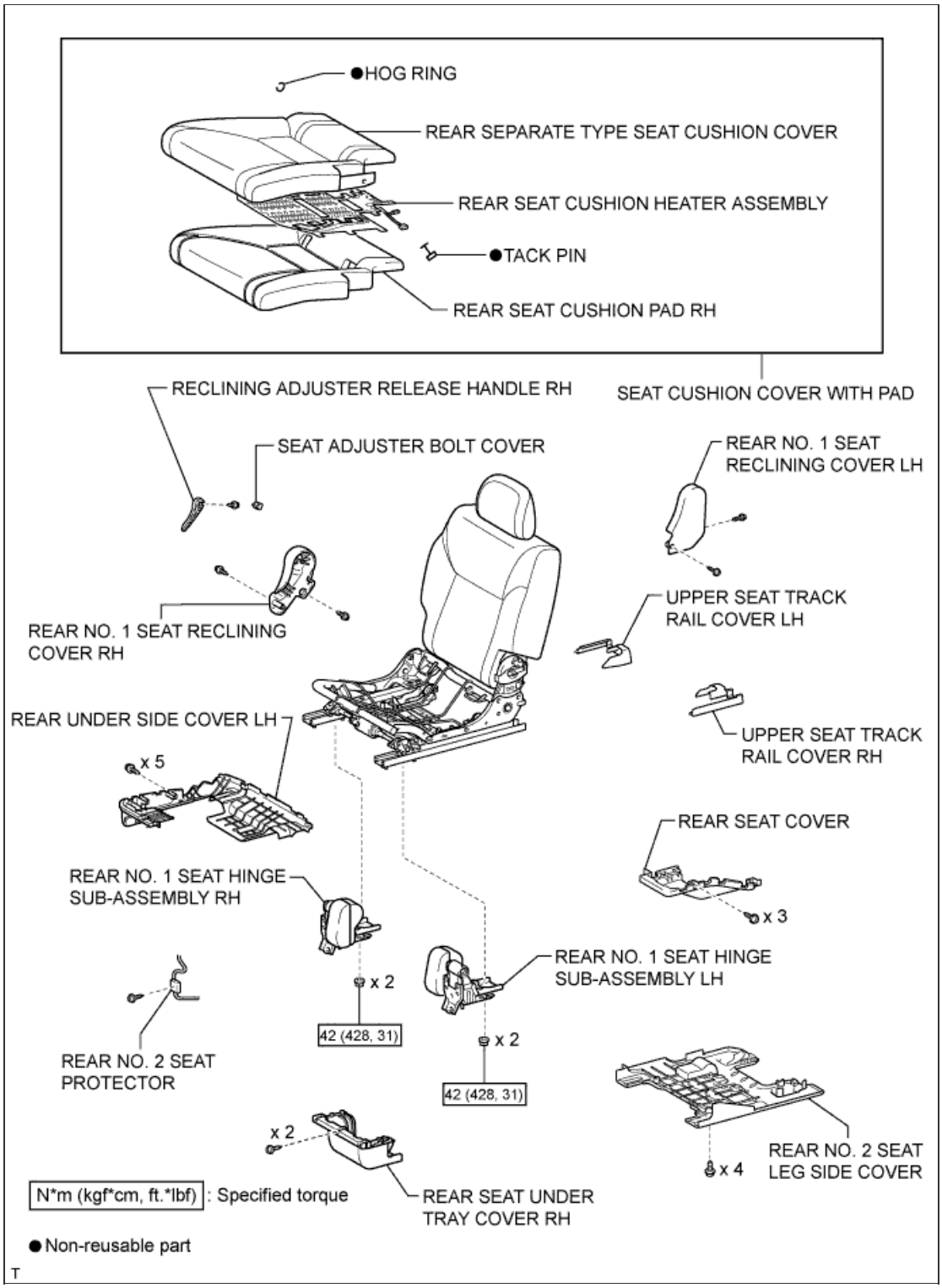
11. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here




●HOG RING
REAR SEPARATE TYPE SEAT CUSHION COVER
REAR SEAT CUSHION HEATER ASSEMBLY
●TACK PIN
REAR SEAT CUSHION PAD RH
SEAT CUSHION COVER WITH PAD
RECLINING ADJUSTER RELEASE HANDLE RH
SEAT ADJUSTER BOLT COVER
REAR NO. 1 SEAT RECLINING COVER LH
REAR NO. 1 SEAT RECLINING COVER RH
UPPER SEAT TRACK RAIL COVER LH
UPPER SEAT TRACK RAIL COVER RH
REAR UNDER SIDE COVER LH
x 5
REAR SEAT COVER
x 3
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH
x 2
42 (428, 31)
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH
x 2
42 (428, 31)
REAR NO. 2 SEAT PROTECTOR
x 2
REAR NO. 2 SEAT LEG SIDE COVER
x 4
REAR SEAT UNDER TRAY COVER RH
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
T

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

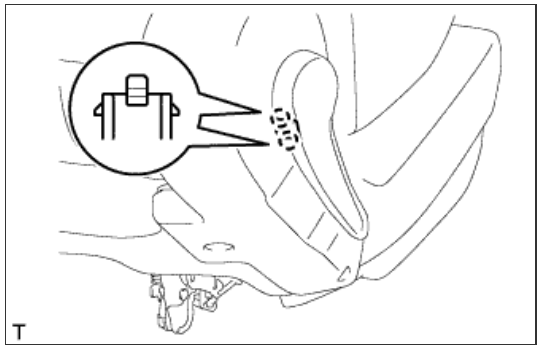
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

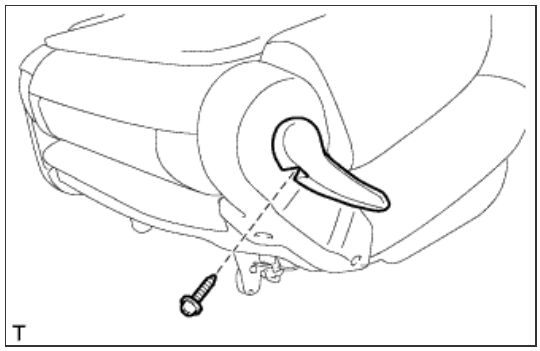
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE RH

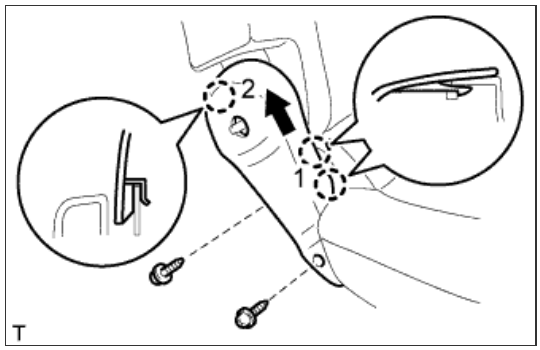
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

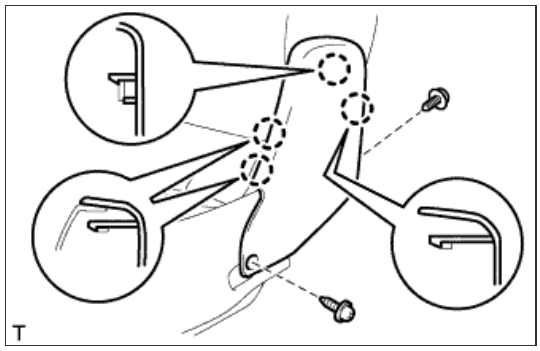
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

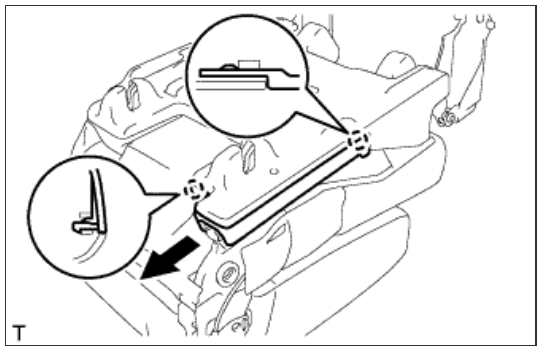


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

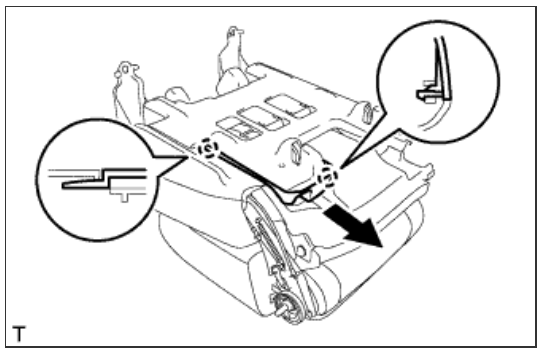


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

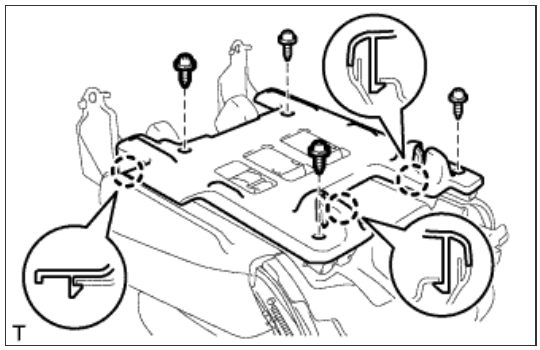
HINT:

Tape the screwdriver tip before use.

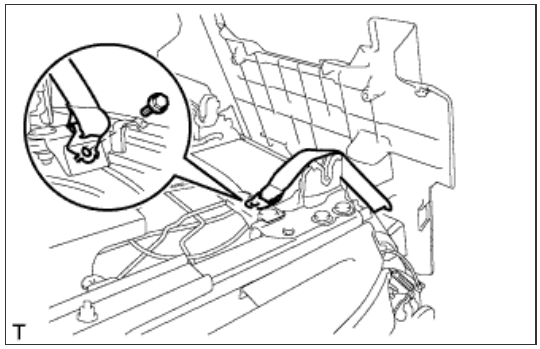


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 3 claws.



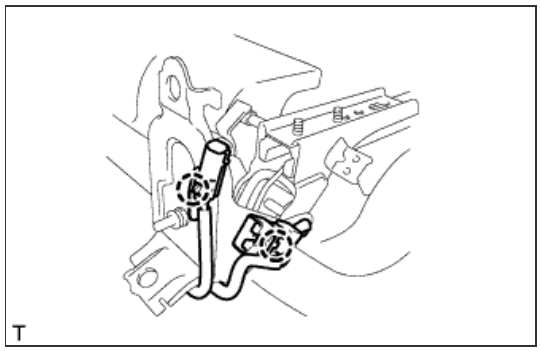
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

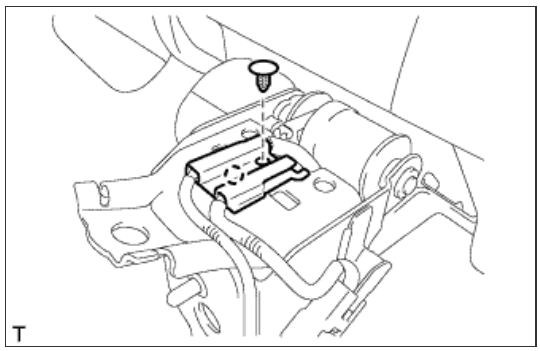
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

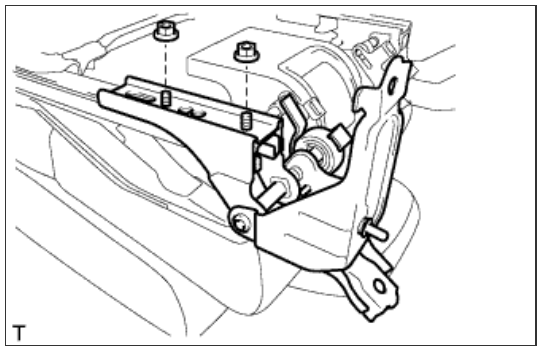
d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.



10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Remove the 2 nuts and hinge.

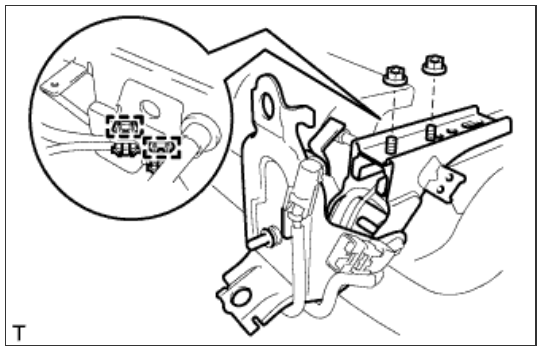


11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Detach the wire harness clamp.

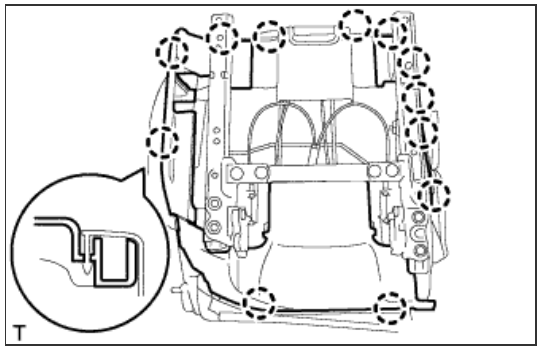
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



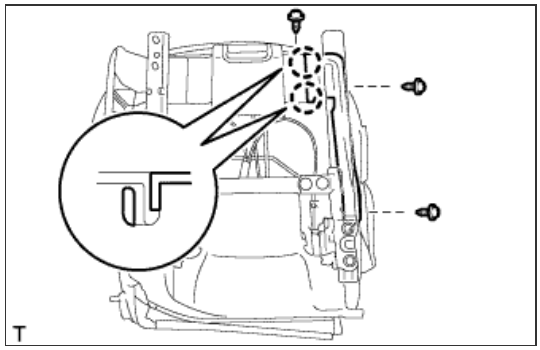
12. REMOVE REAR SEAT COVER

a. Detach the 12 claws.



b. Remove the 3 screws.

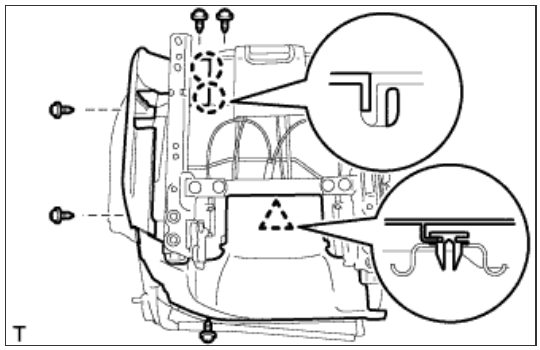
c. Detach the 2 claws and remove the cover.



13. REMOVE REAR UNDER SIDE COVER LH

a. Remove the 5 screws.

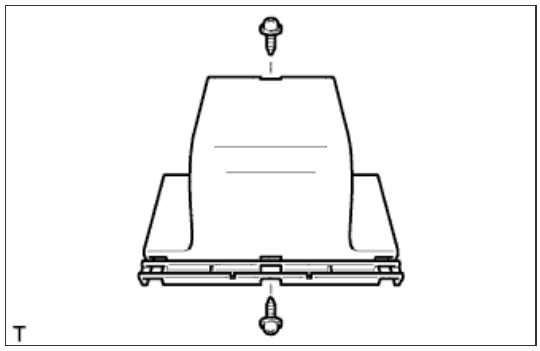
b. Detach the clip and 2 claws, and remove the cover.



14. REMOVE REAR SEAT UNDER TRAY COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



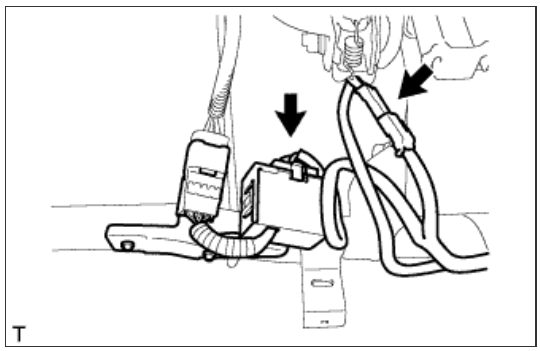
15. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

b. Remove the side airbag wire harness through the hole in the seat cushion.

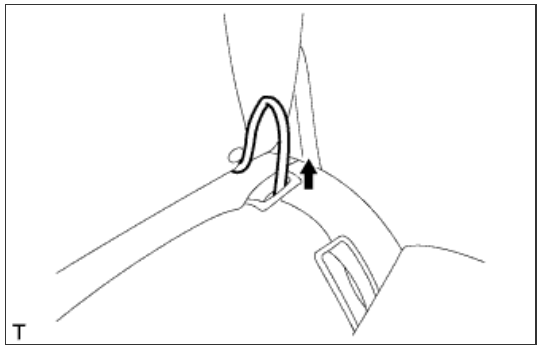
c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.

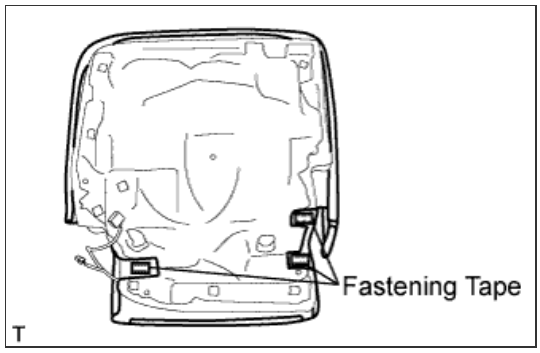
d. Remove the seat cushion cover with pad.



16. REMOVE REAR SEPARATE TYPE SEAT CUSHION COVER

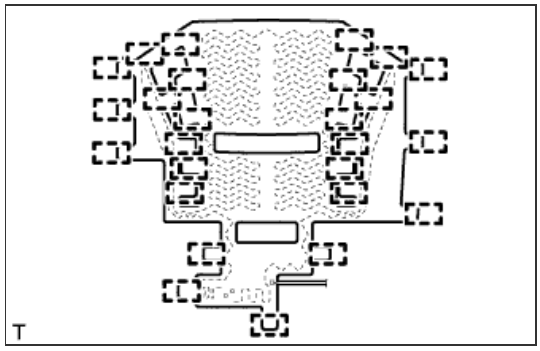
a. Detach the 3 pieces of fastening tape.

b. Remove the hog rings and cover.



17. REMOVE REAR SEAT CUSHION HEATER ASSEMBLY

a. Cut off the tack pins which fasten the seat heater to the seat cushion cover, and then remove the seat cushion heater from the seat cushion cover.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

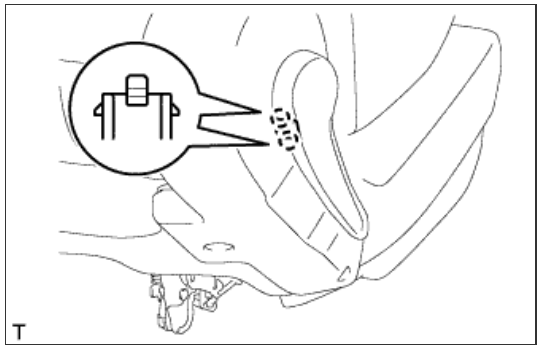
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

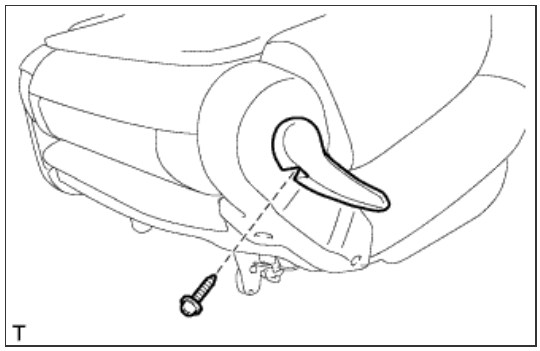
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE RH

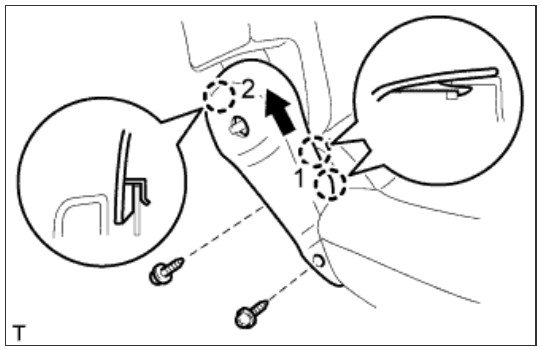
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

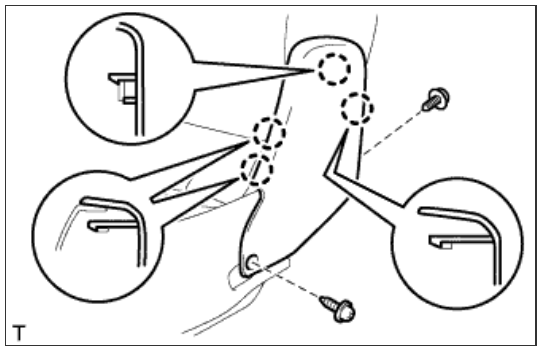
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

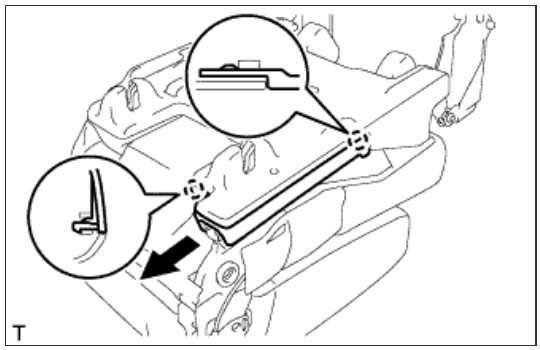


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

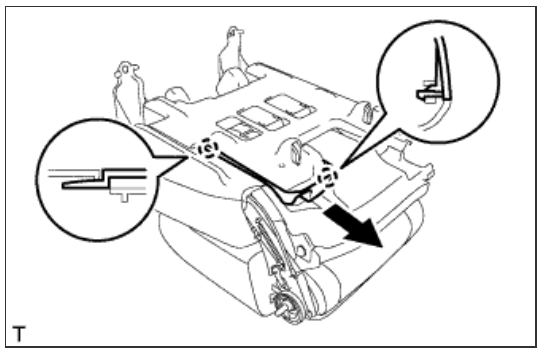


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

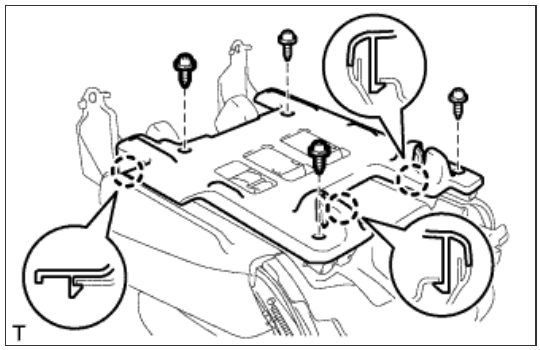
HINT:

Tape the screwdriver tip before use.

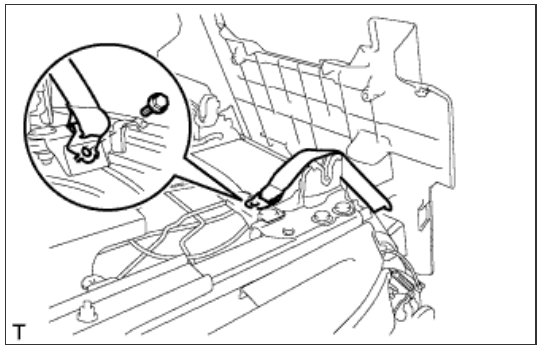


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 3 claws.



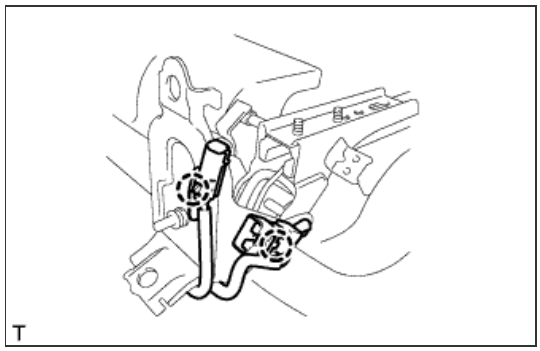
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

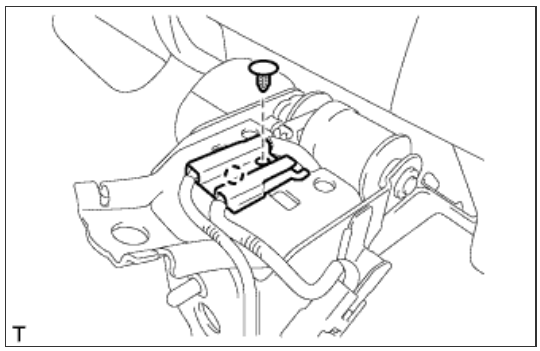
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

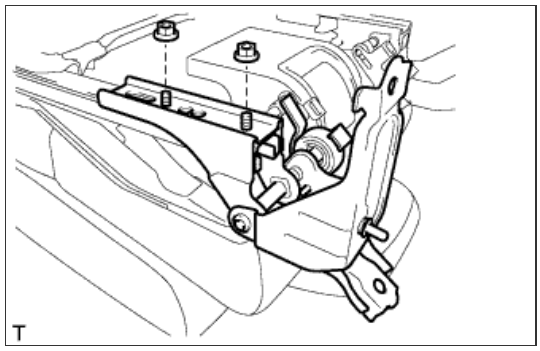
d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.



10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Remove the 2 nuts and hinge.

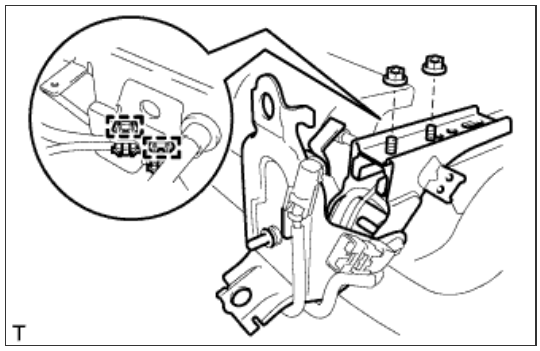


11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Detach the wire harness clamp.

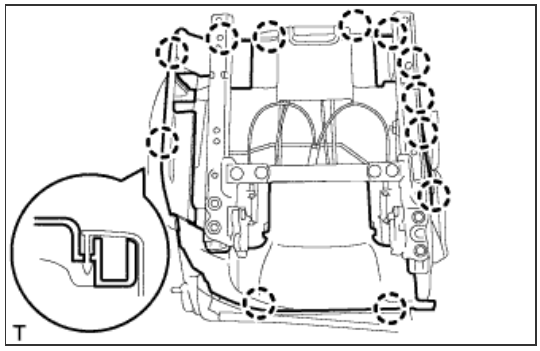
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



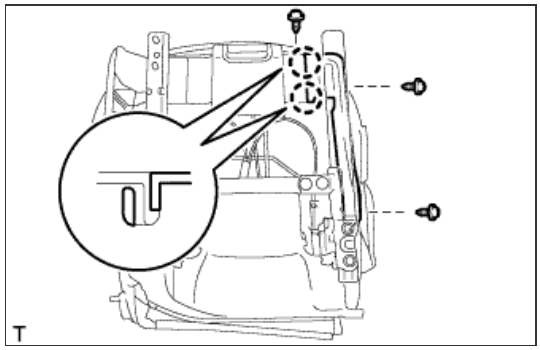
12. REMOVE REAR SEAT COVER

a. Detach the 12 claws.



b. Remove the 3 screws.

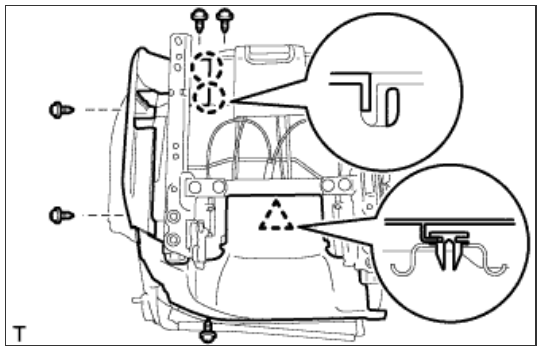
c. Detach the 2 claws and remove the cover.



13. REMOVE REAR UNDER SIDE COVER LH

a. Remove the 5 screws.

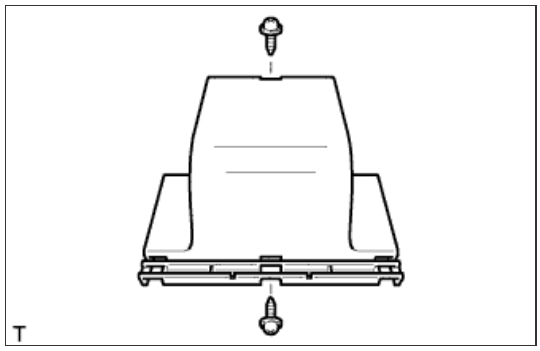
b. Detach the clip and 2 claws, and remove the cover.



14. REMOVE REAR SEAT UNDER TRAY COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



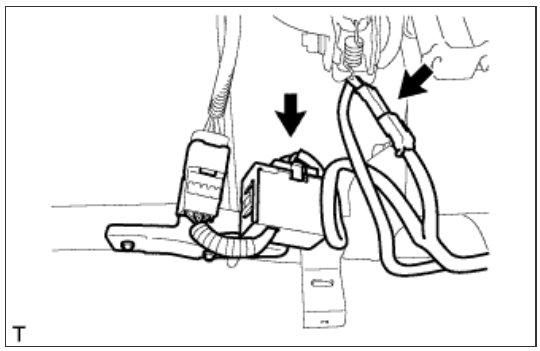
15. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

b. Remove the side airbag wire harness through the hole in the seat cushion.

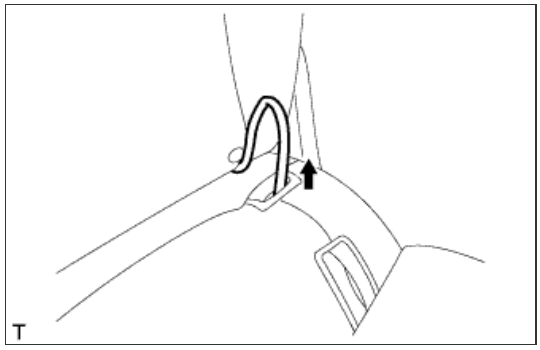
c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.

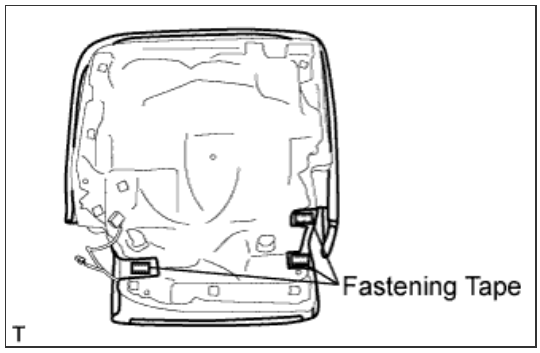
d. Remove the seat cushion cover with pad.



16. REMOVE REAR SEPARATE TYPE SEAT CUSHION COVER

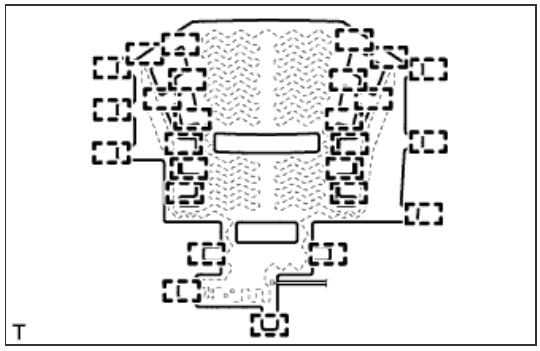
a. Detach the 3 pieces of fastening tape.

b. Remove the hog rings and cover.



17. REMOVE REAR SEAT CUSHION HEATER ASSEMBLY

a. Cut off the tack pins which fasten the seat heater to the seat cushion cover, and then remove the seat cushion heater from the seat cushion cover.



for Preparation Click here

1. INSPECT REAR SEAT CUSHION HEATER ASSEMBLY RH

a. Heat the thermostat with a light.

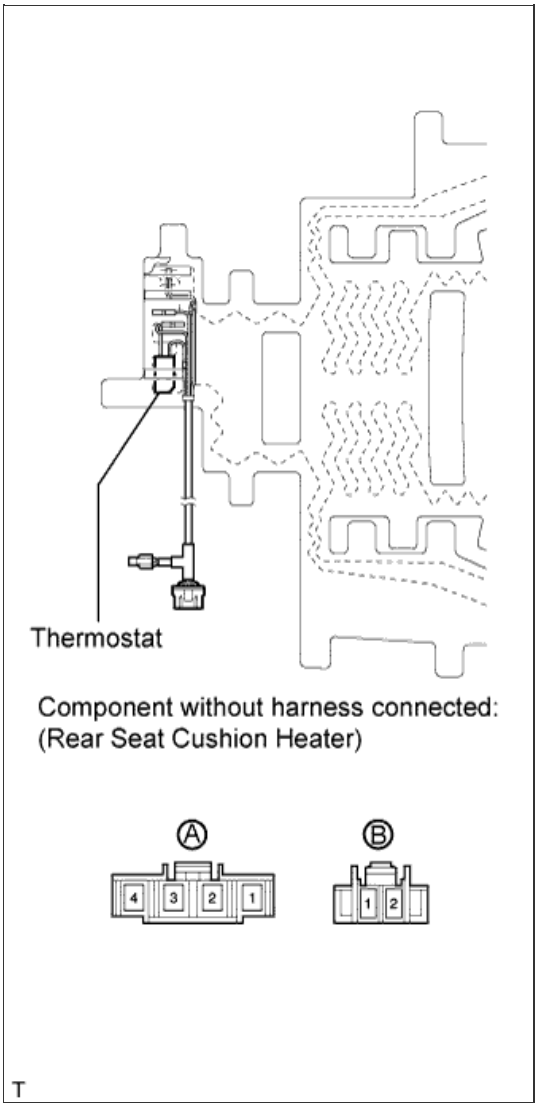
b. Check the seat cushion heater.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A-1 - B-1	Seat cushion heater temperature 25°C (77°F)	3.05 to 3.65 Ω
A-4 - B-2		
A-1 - A-4		
A-2 - A-3		8 to 12 kΩ

If the result is not as specified, replace the seat cushion heater assembly.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

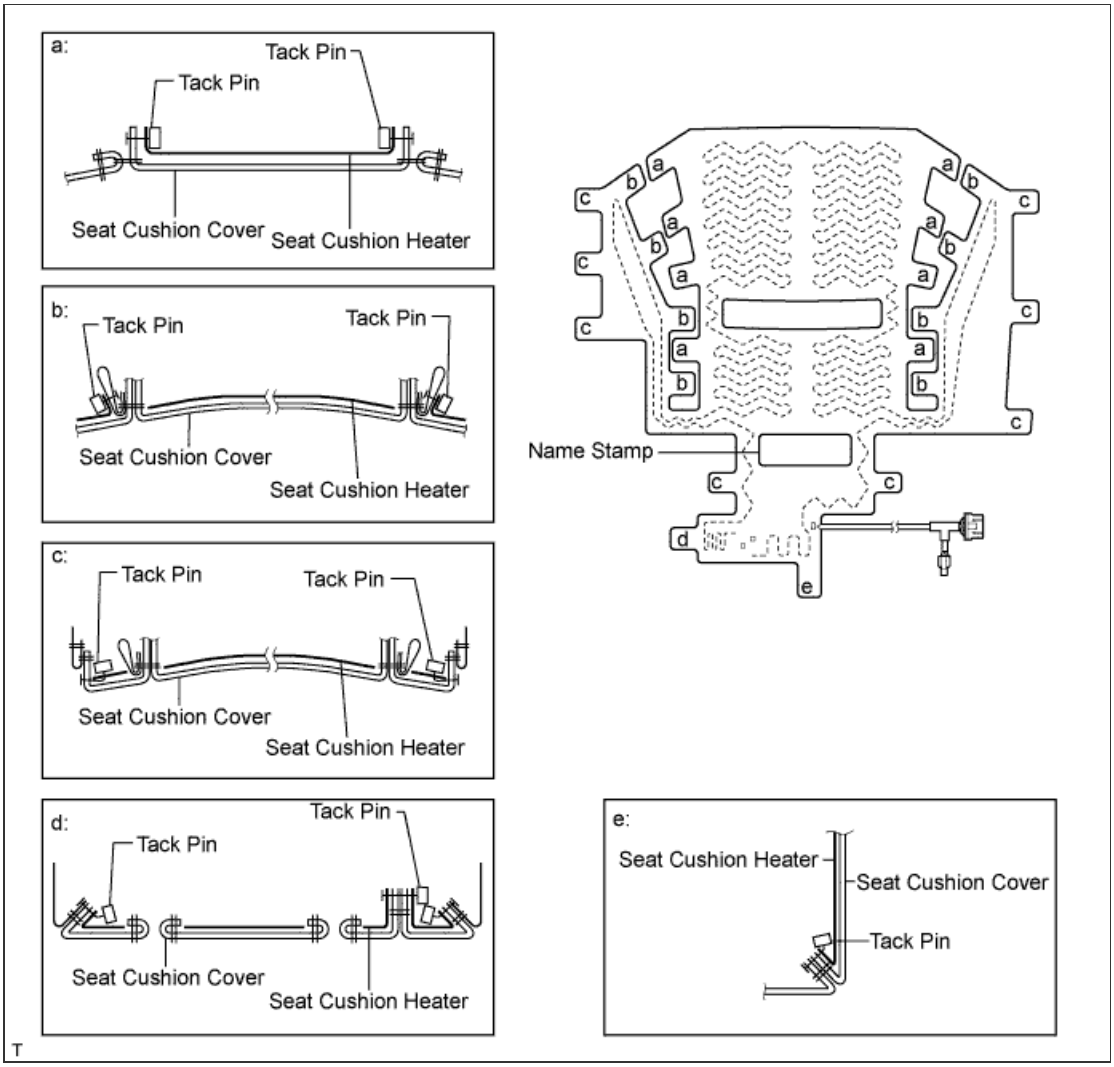
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEAT CUSHION HEATER ASSEMBLY

a. Set the seat cushion heater with the name stamp side facing the seat cushion cover.

b. Install the seat cushion heater with new tack pins.

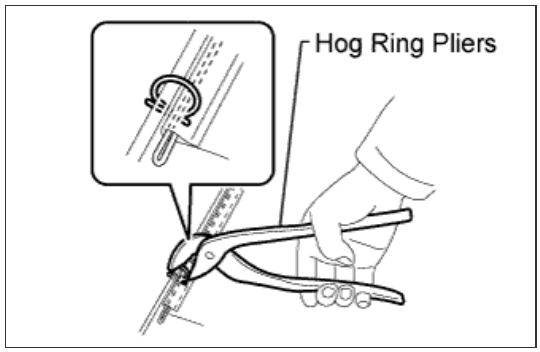


2. INSTALL REAR SEPARATE TYPE SEAT CUSHION COVER

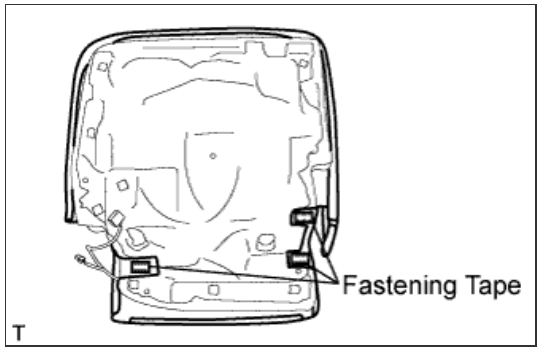
a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Attach the 3 pieces of fastening tape.



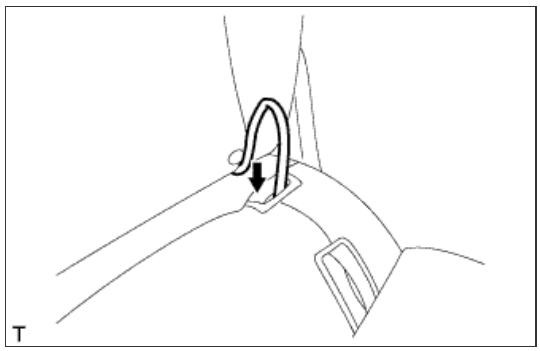
3. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

b. Pass the side airbag wire harness through the hole in the seat cushion.

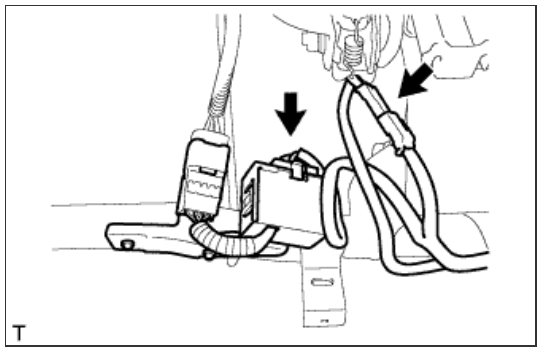
c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.

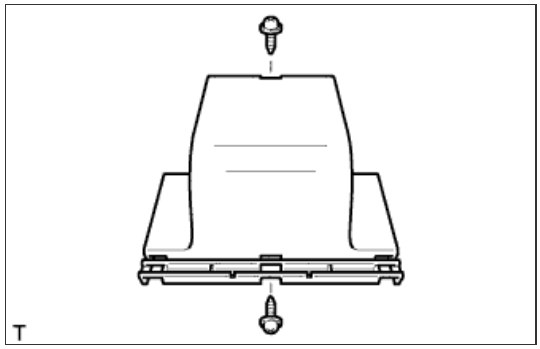
d. Attach the side airbag wire harness clamps.



4. INSTALL REAR SEAT UNDER TRAY COVER RH

a. Attach the 4 claws to install the cover.

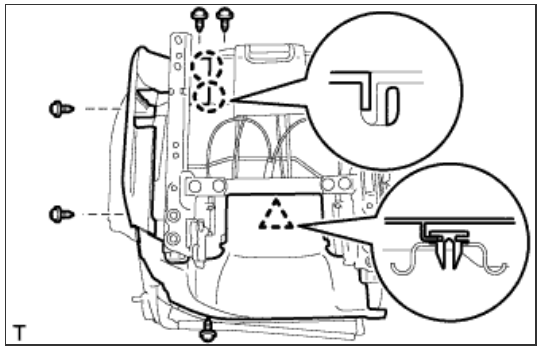
b. Install the 2 screws.



5. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and clip to install the cover.

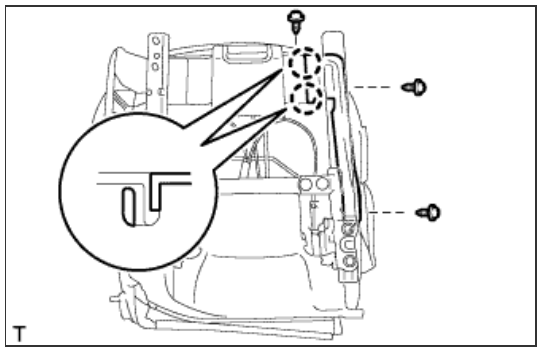
b. Install the 5 screws.



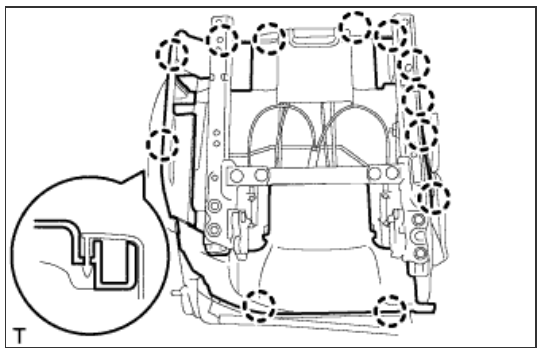
6. INSTALL REAR SEAT COVER

a. Attach the 2 claws to install the cover.

b. Install the 3 screws.



c. Attach the 12 claws.



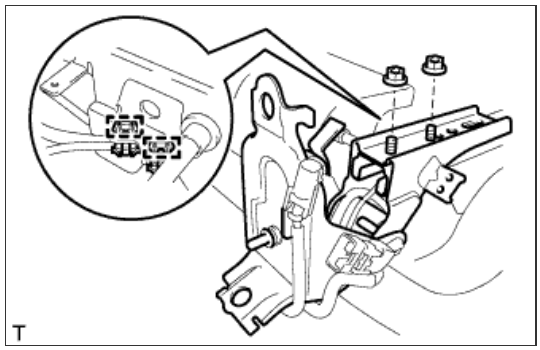
7. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

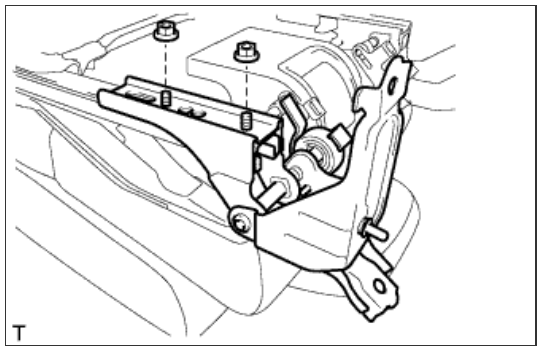
c. w/ Seat Heater System:
Attach the wire harness clamp.



8. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

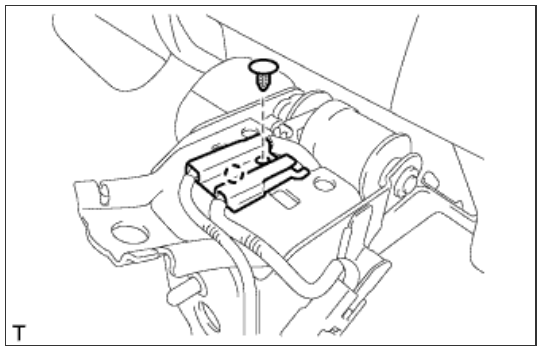


9. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

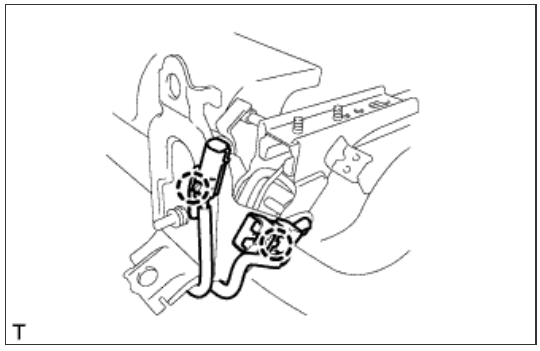
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



d. Attach the claw to install the wire harness connector.

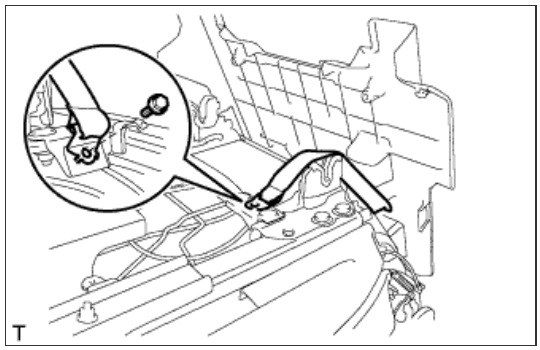
e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



10. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

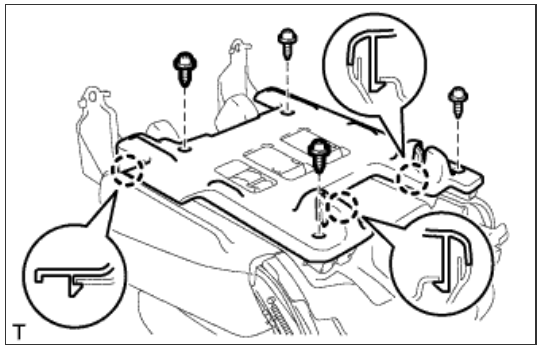
a. Pass the fold seat stopper band through the seat leg side cover and attach it to

the seat cushion frame with the bolt.



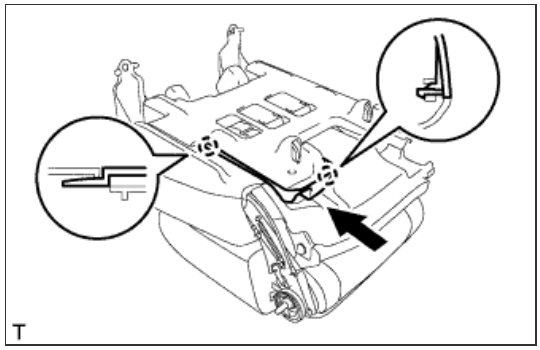
b. Attach the 3 claws to install the seat leg side cover.

c. Install the 4 screws.



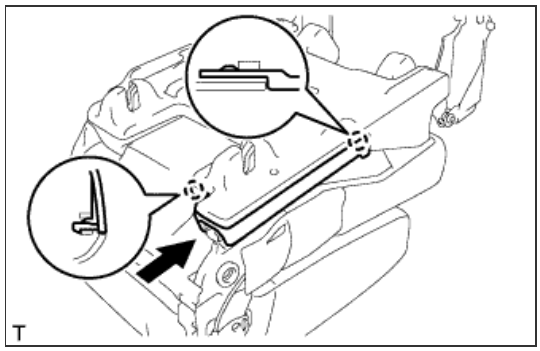
11. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



12. INSTALL UPPER SEAT TRACK RAIL COVER LH

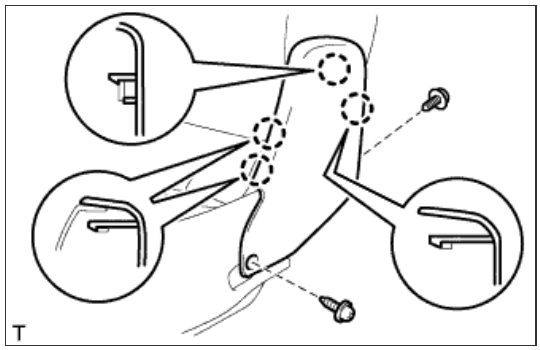
a. Attach the 2 claws to install the cover.



13. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

a. Attach the 4 claws to install the cover.

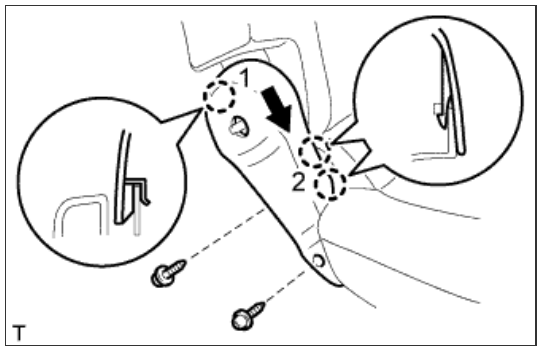
b. Install the 2 screws.



14. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

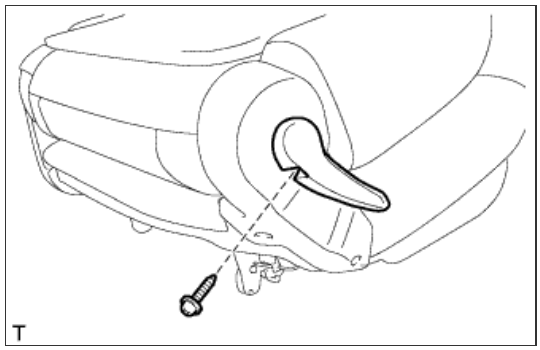
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



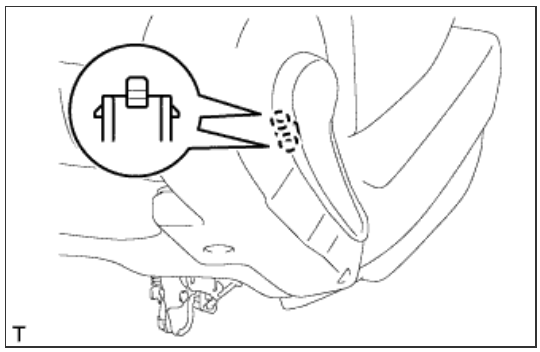
15. INSTALL RECLINING ADJUSTER RELEASE HANDLE RH

a. Install the release handle with the screw.



16. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



17. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

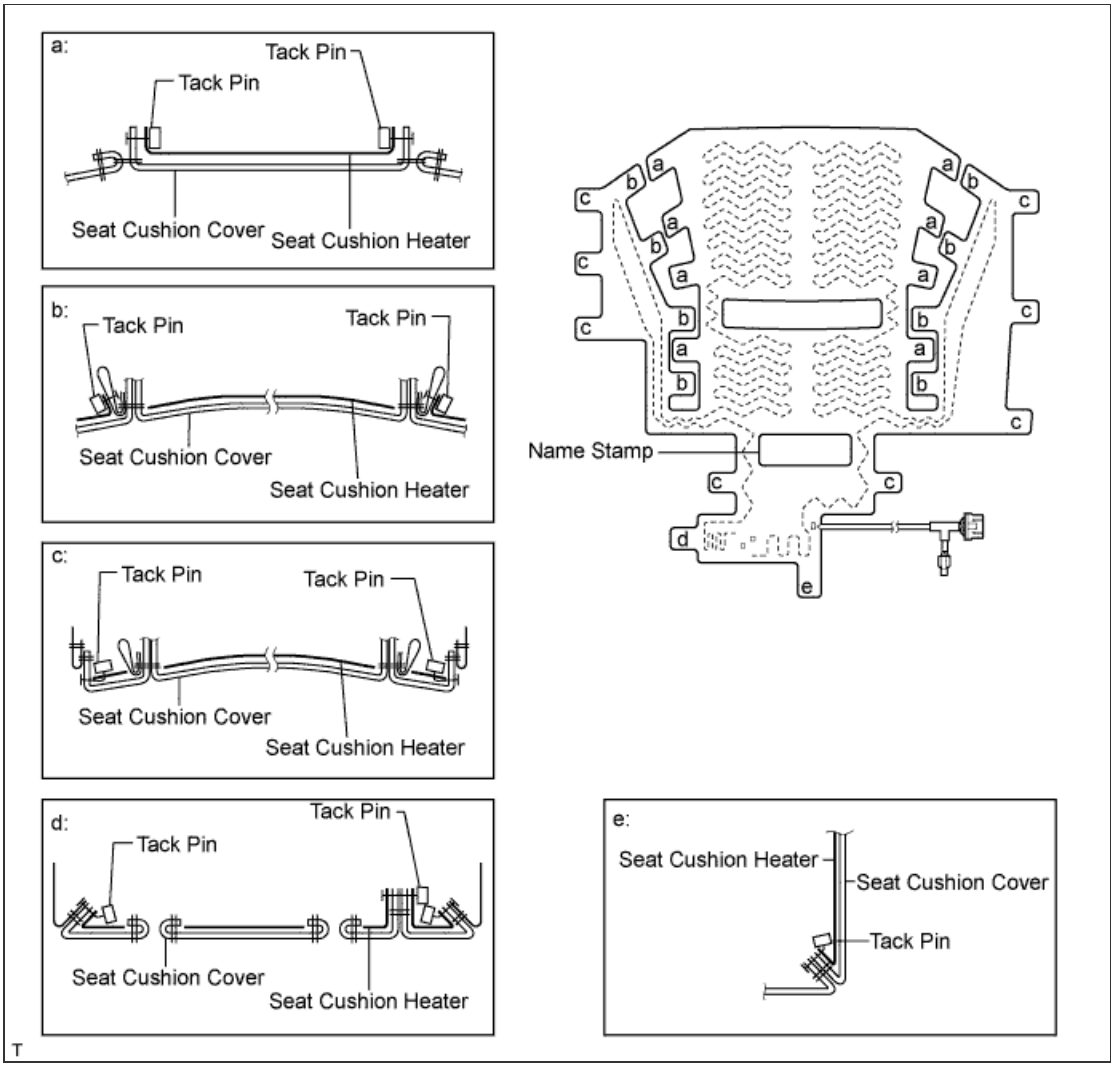
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEAT CUSHION HEATER ASSEMBLY

a. Set the seat cushion heater with the name stamp side facing the seat cushion cover.

b. Install the seat cushion heater with new tack pins.

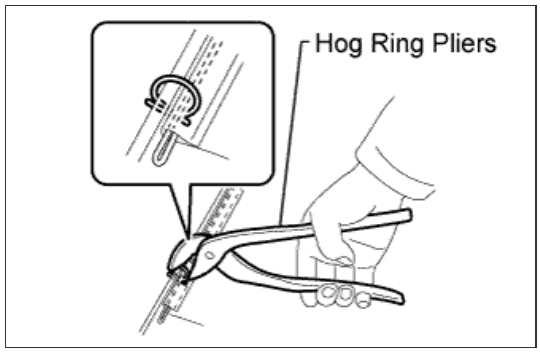


2. INSTALL REAR SEPARATE TYPE SEAT CUSHION COVER

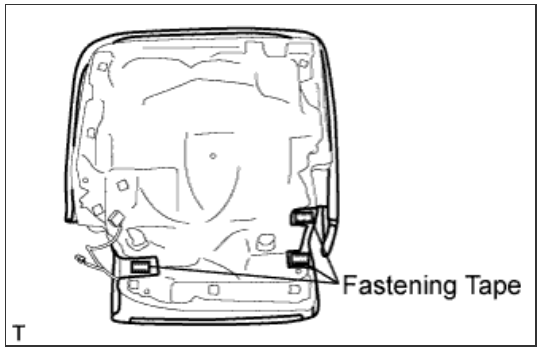
a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Attach the 3 pieces of fastening tape.



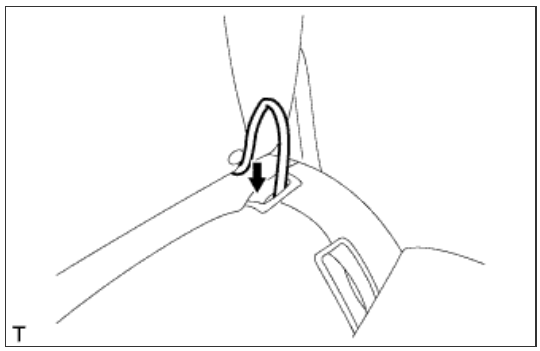
3. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

b. Pass the side airbag wire harness through the hole in the seat cushion.

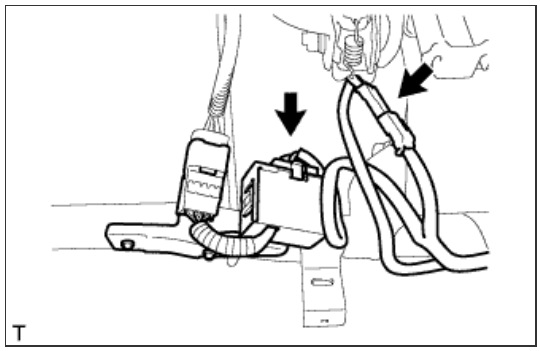
c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.

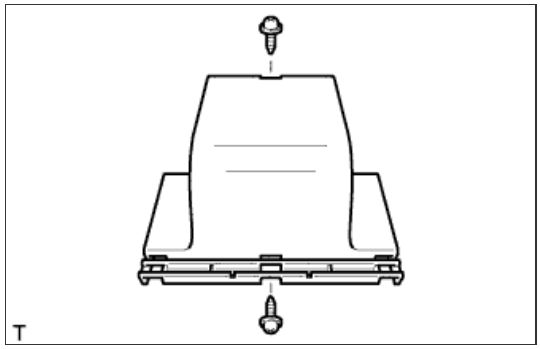
d. Attach the side airbag wire harness clamps.



4. INSTALL REAR SEAT UNDER TRAY COVER RH

a. Attach the 4 claws to install the cover.

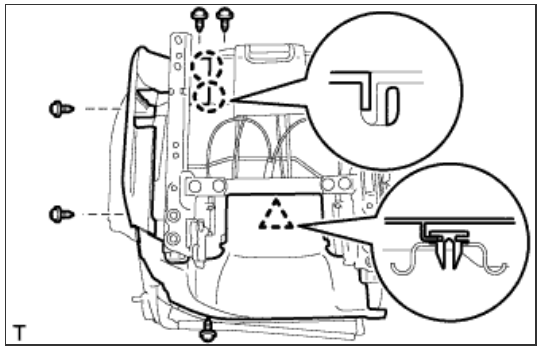
b. Install the 2 screws.



5. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and clip to install the cover.

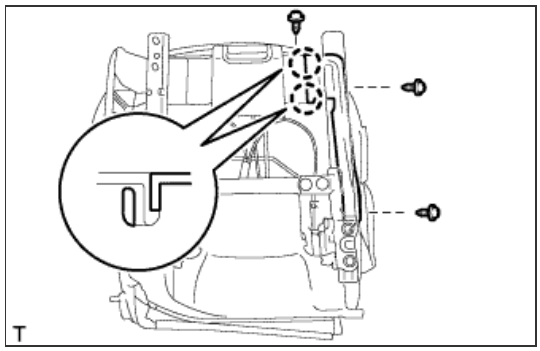
b. Install the 5 screws.



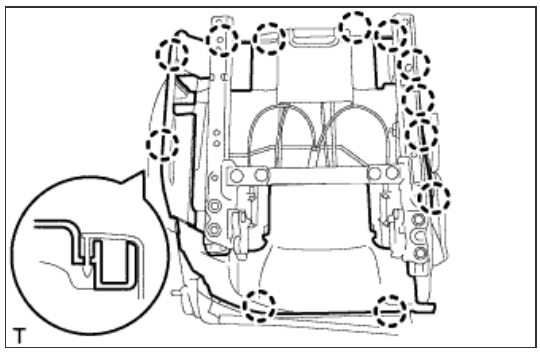
6. INSTALL REAR SEAT COVER

a. Attach the 2 claws to install the cover.

b. Install the 3 screws.



c. Attach the 12 claws.



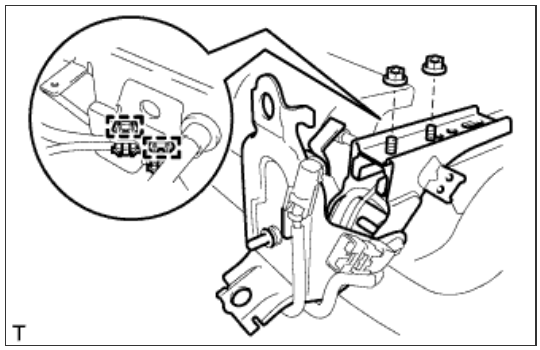
7. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

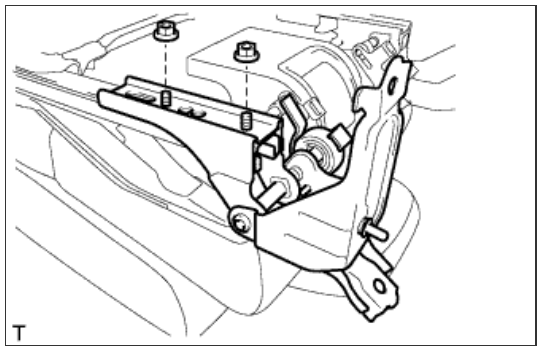
c. w/ Seat Heater System:
Attach the wire harness clamp.



8. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

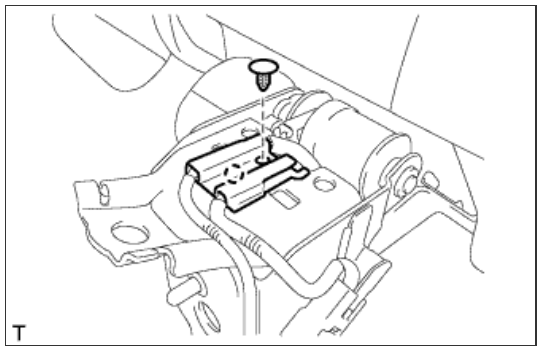


9. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

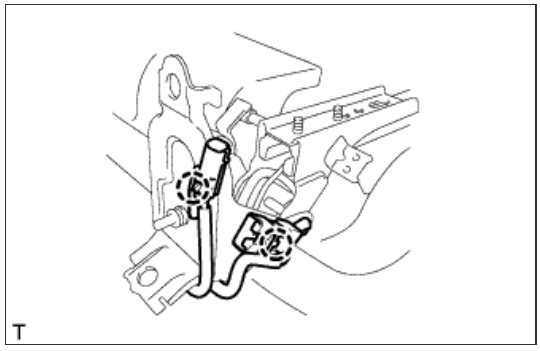
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



d. Attach the claw to install the wire harness connector.

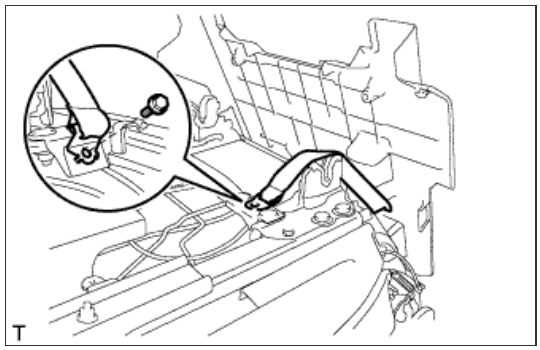
e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



10. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

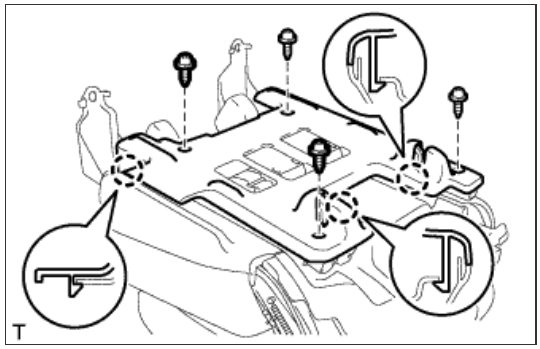
a. Pass the fold seat stopper band through the seat leg side cover and attach it to

the seat cushion frame with the bolt.



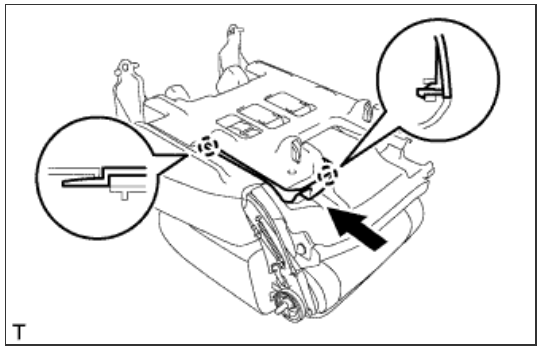
b. Attach the 3 claws to install the seat leg side cover.

c. Install the 4 screws.



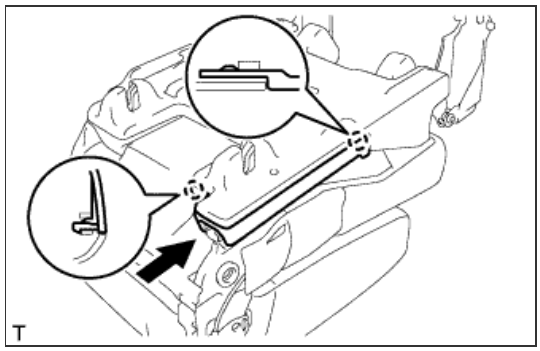
11. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



12. INSTALL UPPER SEAT TRACK RAIL COVER LH

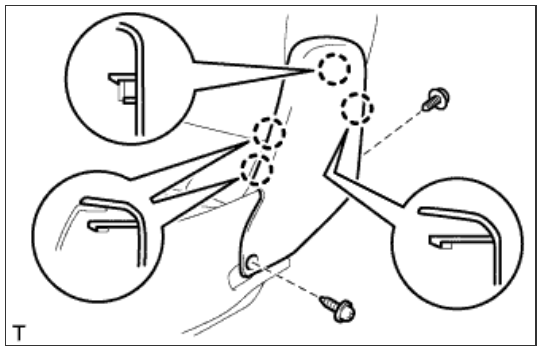
a. Attach the 2 claws to install the cover.



13. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

a. Attach the 4 claws to install the cover.

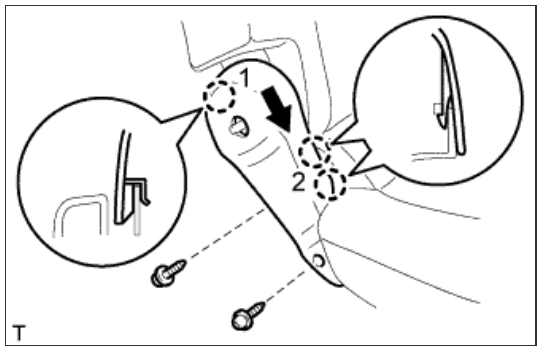
b. Install the 2 screws.



14. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

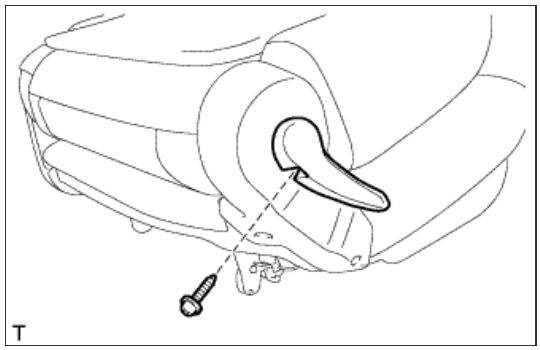
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



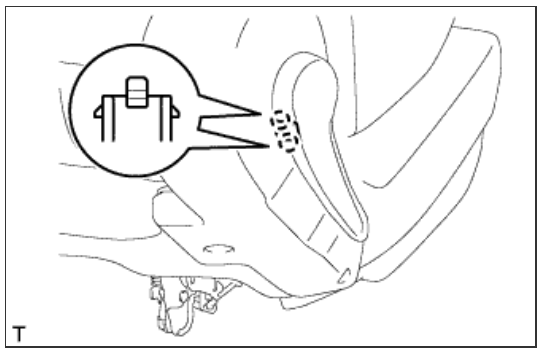
15. INSTALL RECLINING ADJUSTER RELEASE HANDLE RH

a. Install the release handle with the screw.



16. INSTALL SEAT ADJUSTER BOLT COVER

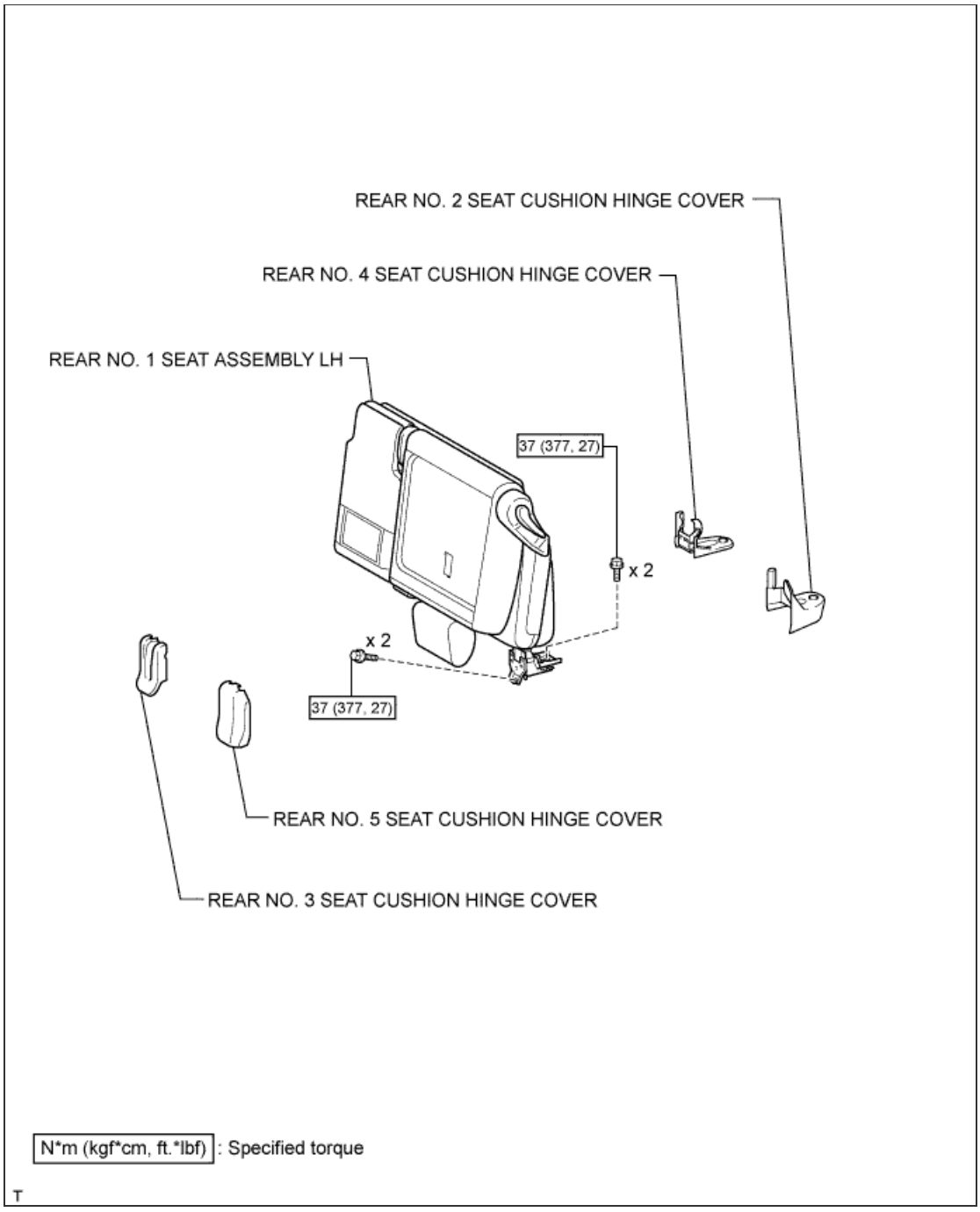
a. Attach the 2 claws to install the cover.

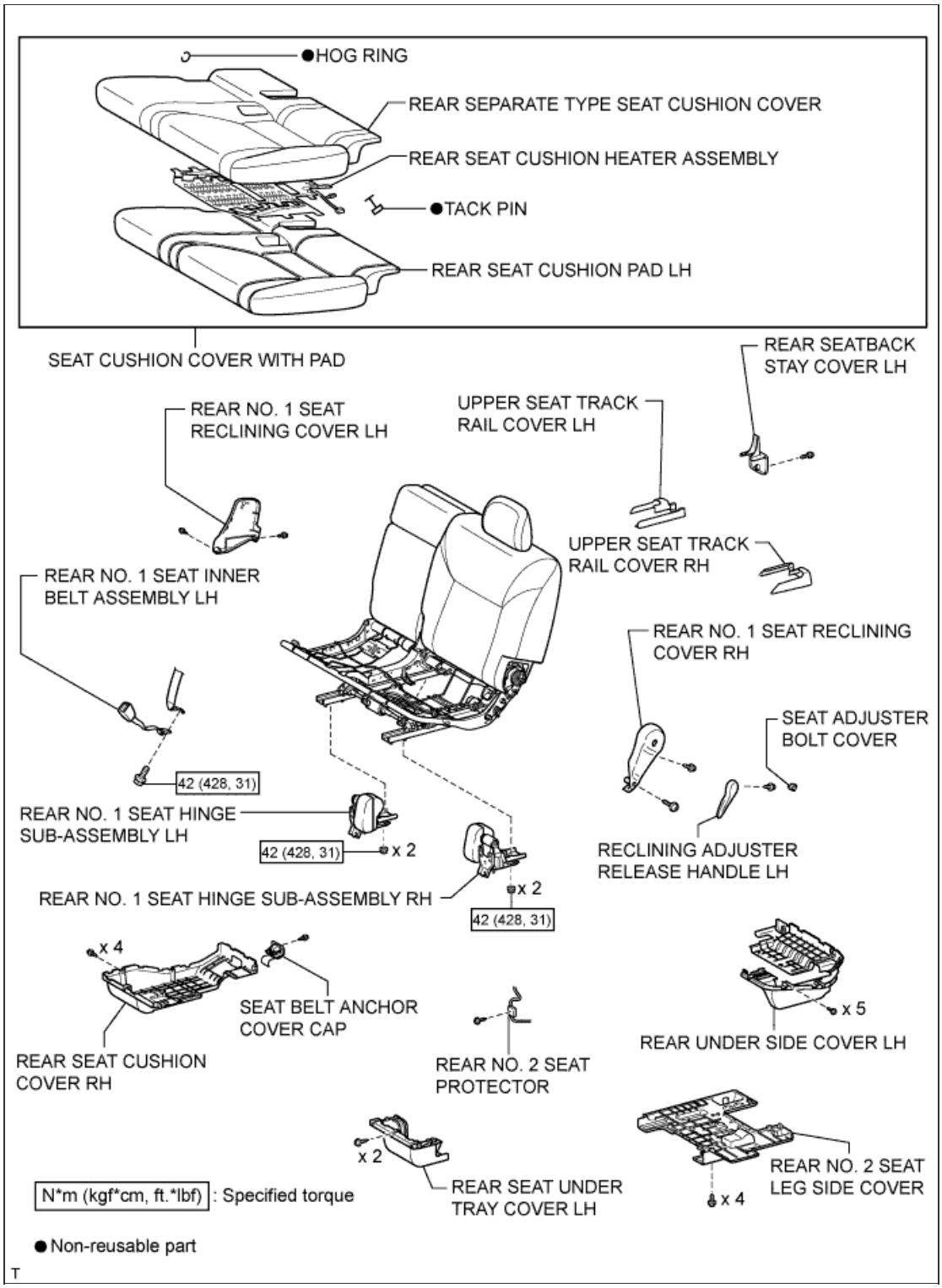


17. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here




●HOG RING
REAR SEPARATE TYPE SEAT CUSHION COVER
REAR SEAT CUSHION HEATER ASSEMBLY
●TACK PIN
REAR SEAT CUSHION PAD LH
SEAT CUSHION COVER WITH PAD
REAR SEATBACK STAY COVER LH
REAR NO. 1 SEAT RECLINING COVER LH
UPPER SEAT TRACK RAIL COVER LH
UPPER SEAT TRACK RAIL COVER RH
REAR NO. 1 SEAT INNER BELT ASSEMBLY LH
REAR NO. 1 SEAT RECLINING COVER RH
SEAT ADJUSTER BOLT COVER
42 (428, 31)
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH
42 (428, 31)
x 2
RECLINING ADJUSTER RELEASE HANDLE LH
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH
x 2
42 (428, 31)
x 4
SEAT BELT ANCHOR COVER CAP
x 5
REAR UNDER SIDE COVER LH
REAR SEAT CUSHION COVER RH
REAR NO. 2 SEAT PROTECTOR
x 2
REAR SEAT UNDER TRAY COVER LH
REAR NO. 2 SEAT LEG SIDE COVER
x 4
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
T

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY

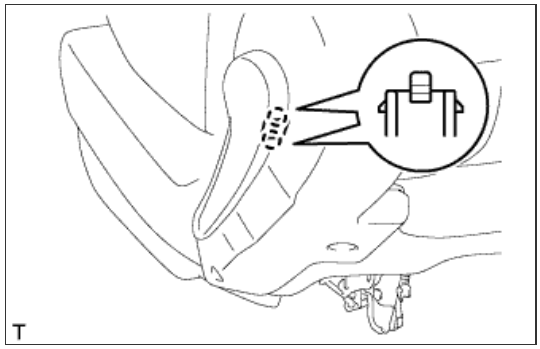
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

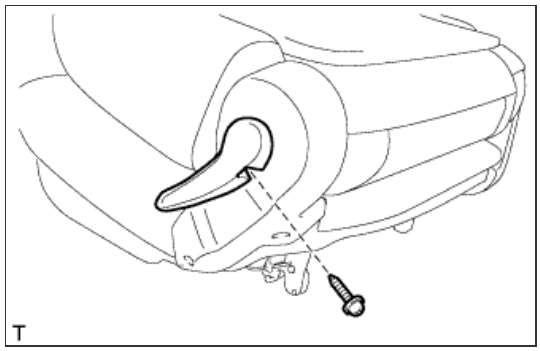
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE LH

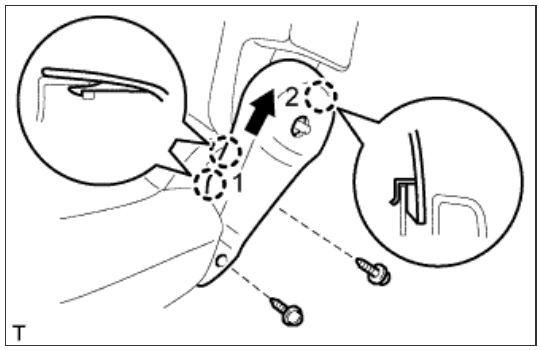
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

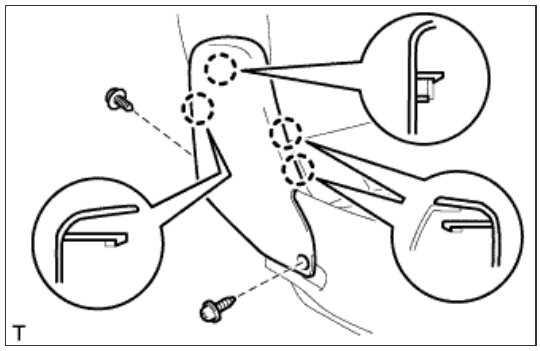
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

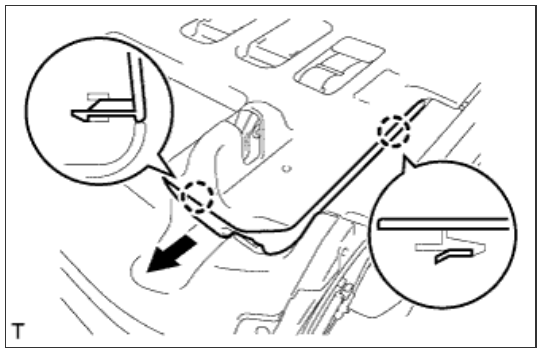


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

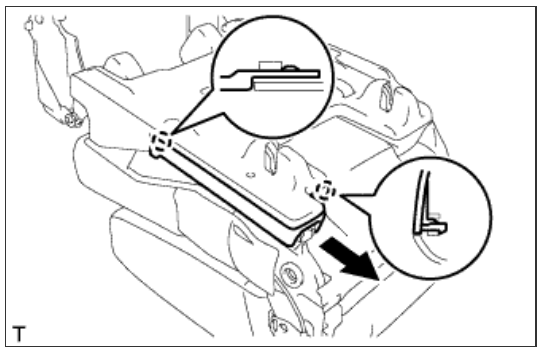


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

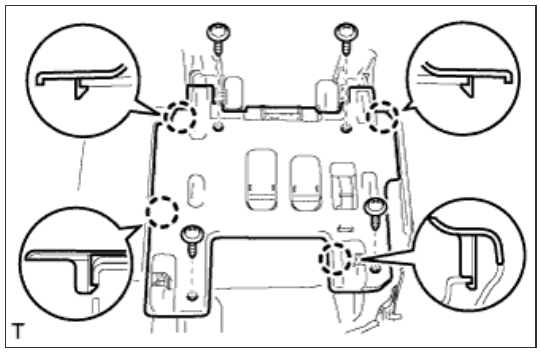
HINT:

Tape the screwdriver tip before use.

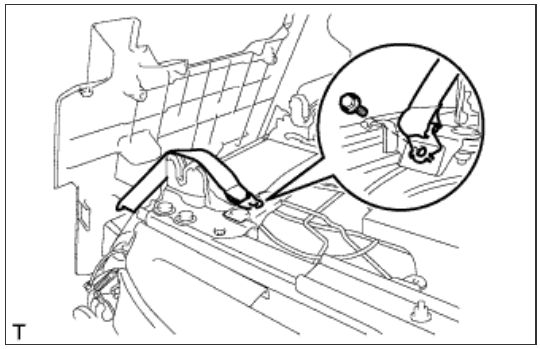


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 4 claws.



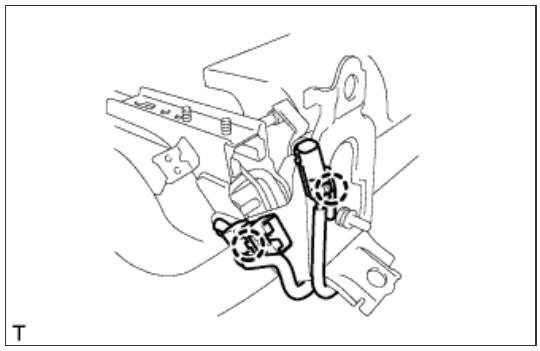
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

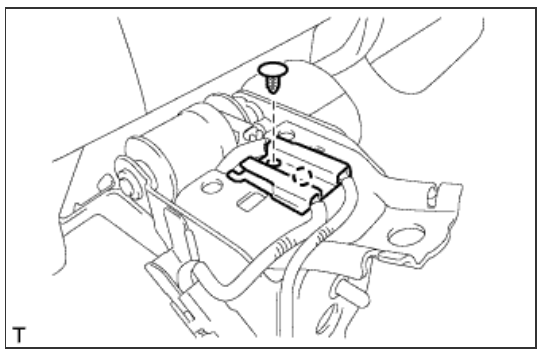
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.

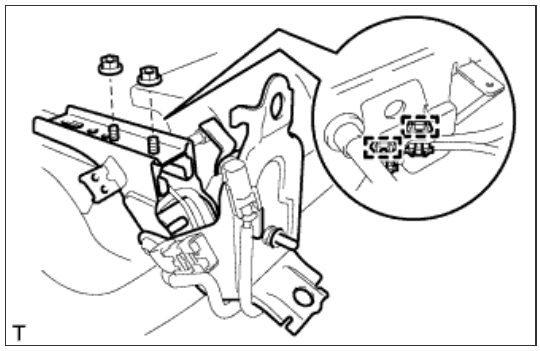


10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Detach the wire harness clamp.

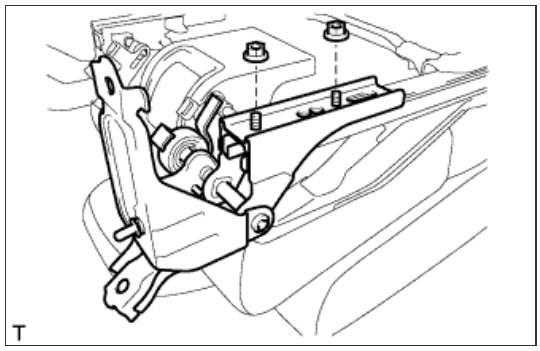
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



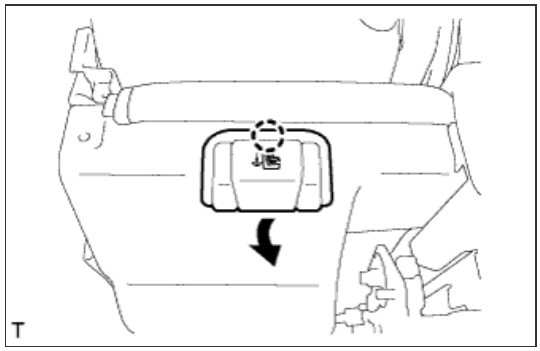
11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Remove the 2 nuts and hinge.

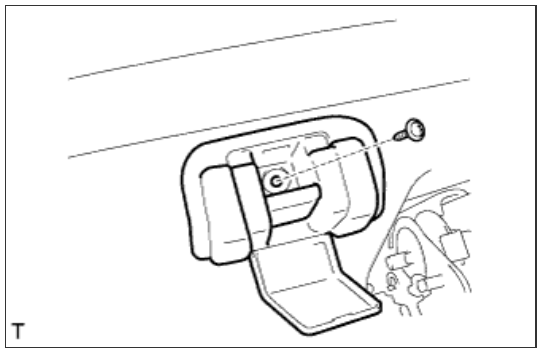


12. REMOVE SEAT BELT ANCHOR COVER CAP

a. Detach the claw and open the cap.



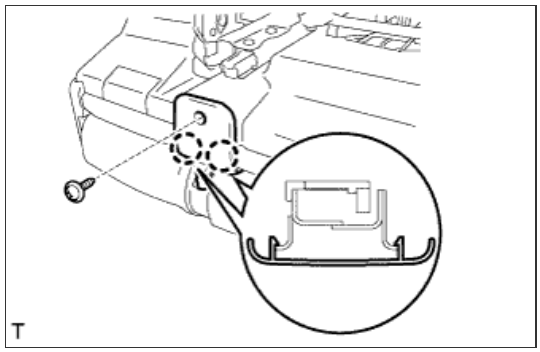
b. Remove the screw and anchor cover cap.



13. REMOVE REAR SEATBACK STAY COVER LH

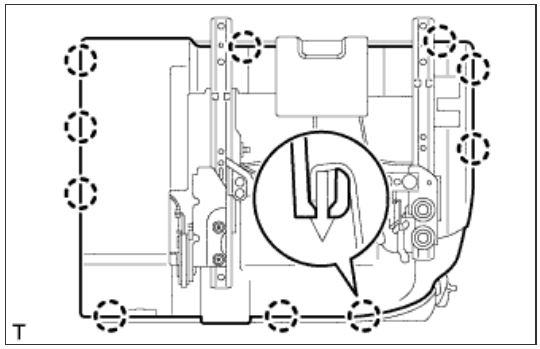
a. Remove the screw.

b. Detach the 2 claws and remove the cover.



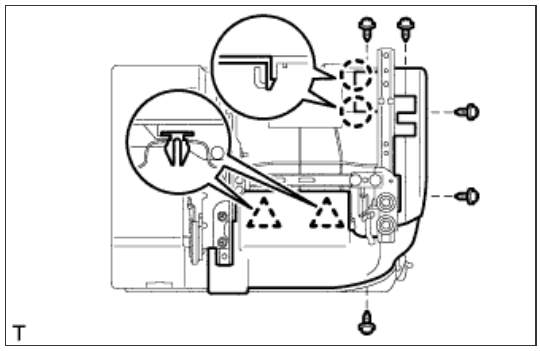
14. REMOVE REAR UNDER SIDE COVER LH

a. Detach the 10 claws.



b. Remove the 5 screws.

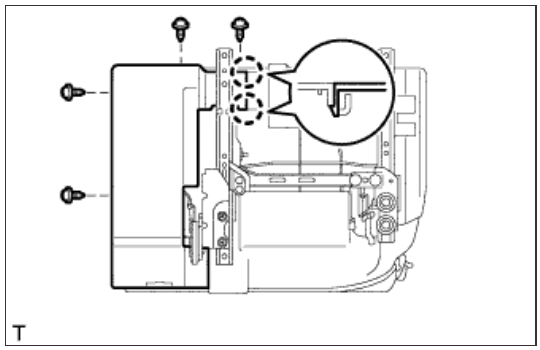
c. Detach the 2 clips and 2 claws, and remove the cover.



15. REMOVE REAR SEAT CUSHION COVER RH

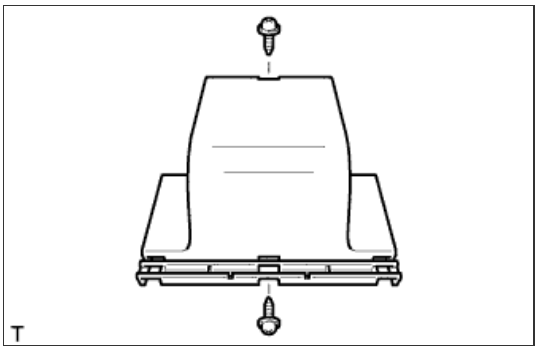
a. Remove the 4 screws.

b. Detach the 2 claws and remove the cover.



16. REMOVE REAR SEAT UNDER TRAY COVER LH

a. Remove the 2 screws and cover.

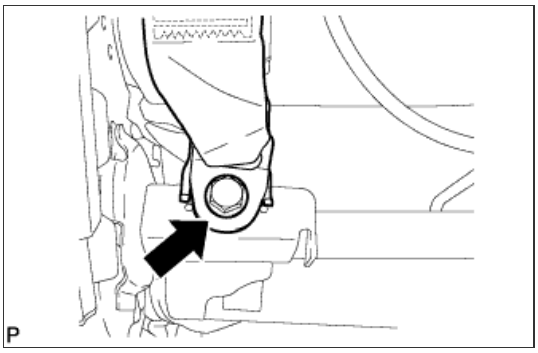


17. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Remove the bolt and belt.

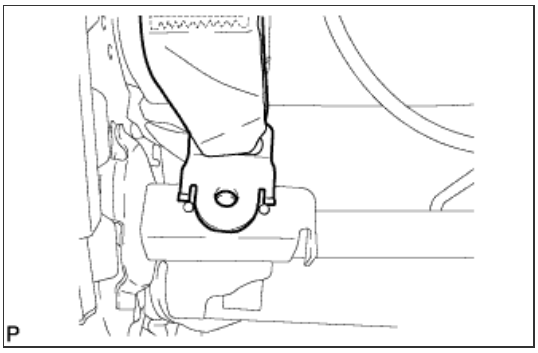
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, it becomes disconnected when the bolt is removed.



18. DISCONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Disconnect the belt anchor.



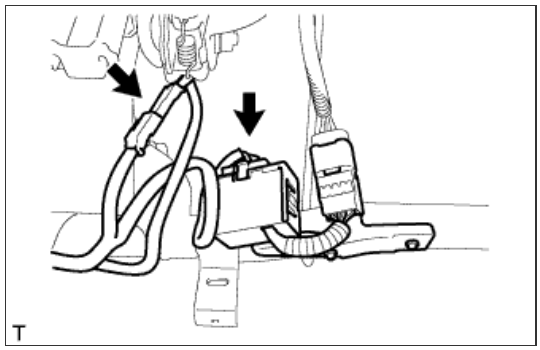
19. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

b. Remove the side airbag wire harness through the hole in the seat cushion.

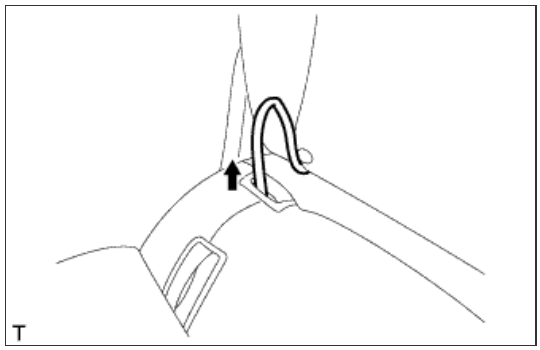
c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.

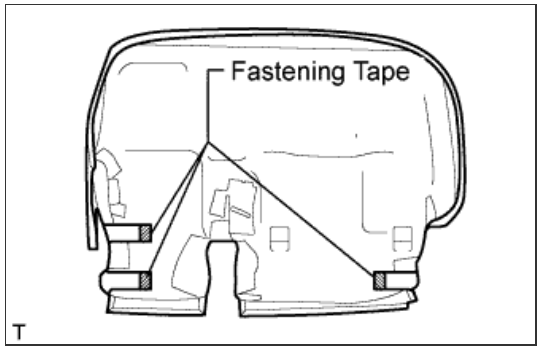
d. Remove the seat cushion cover with pad.



20. REMOVE REAR SEPARATE TYPE SEAT CUSHION COVER

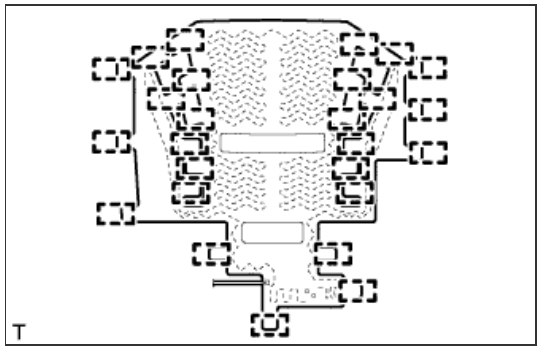
a. Detach the 3 pieces of fastening tape.

b. Remove the hog rings and cover.



21. REMOVE REAR SEAT CUSHION HEATER ASSEMBLY

a. Cut off the tack pins which fasten the seat heater to the seat cushion cover, and then remove the seat cushion heater from the seat cushion cover.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY

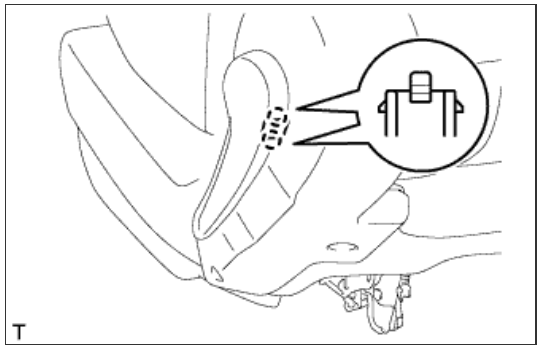
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

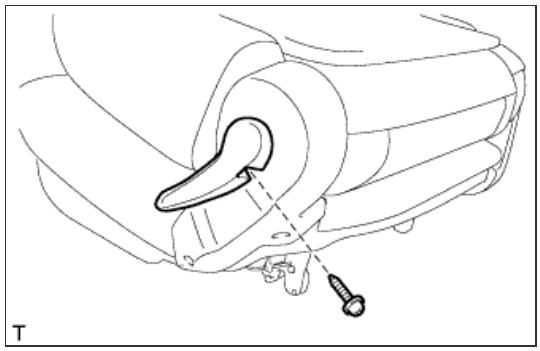
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE LH

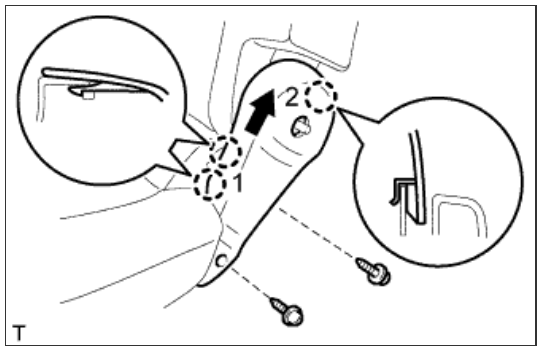
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

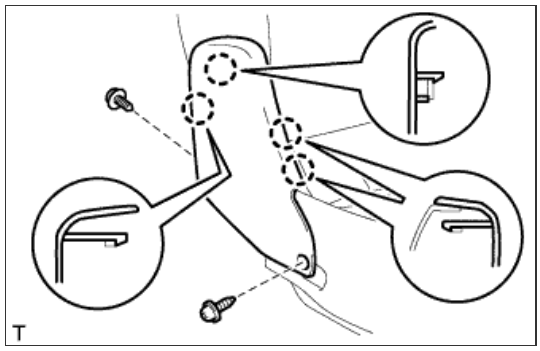
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

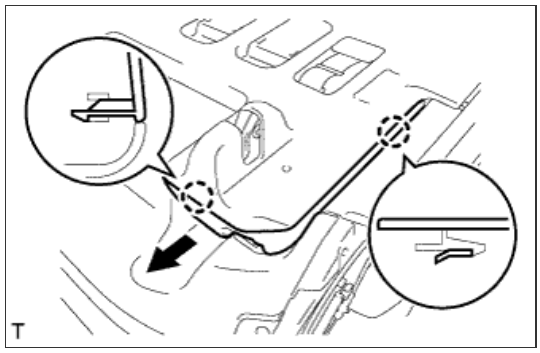


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

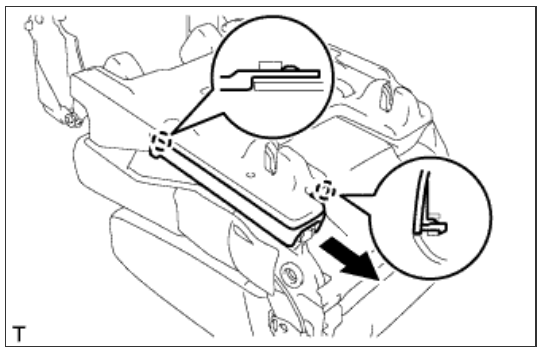


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

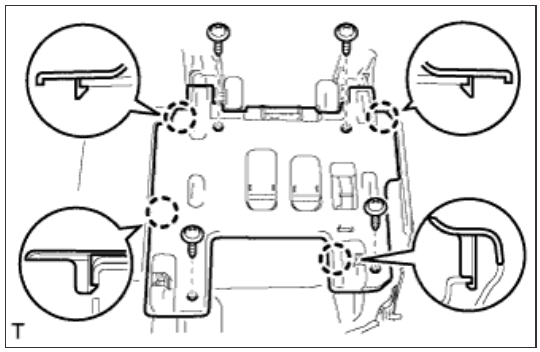
HINT:

Tape the screwdriver tip before use.

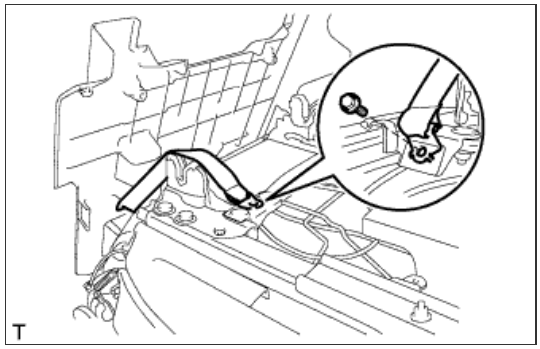


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 4 claws.



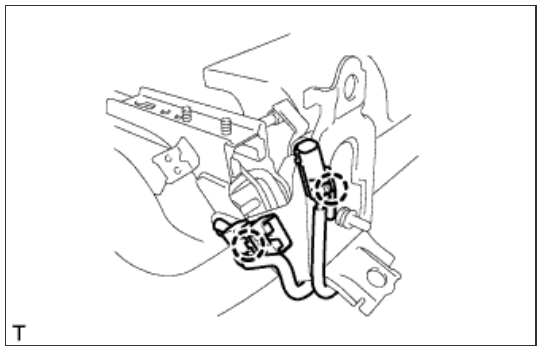
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

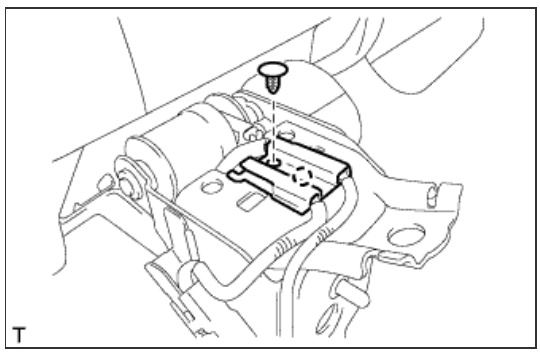
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.

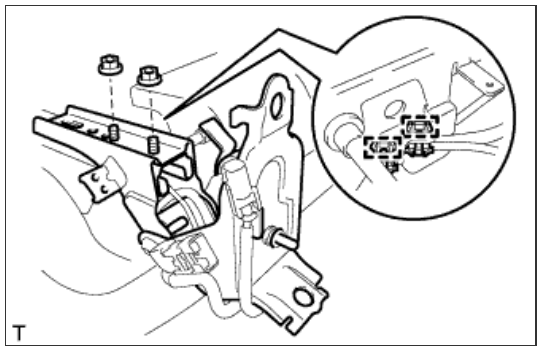


10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Detach the wire harness clamp.

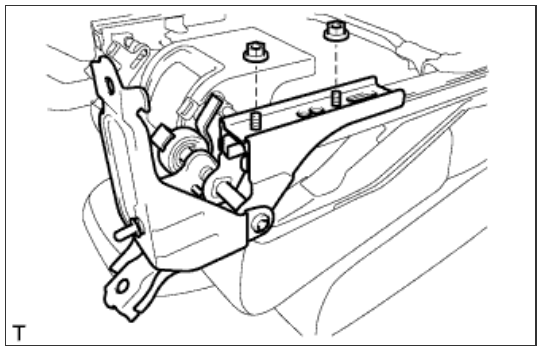
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



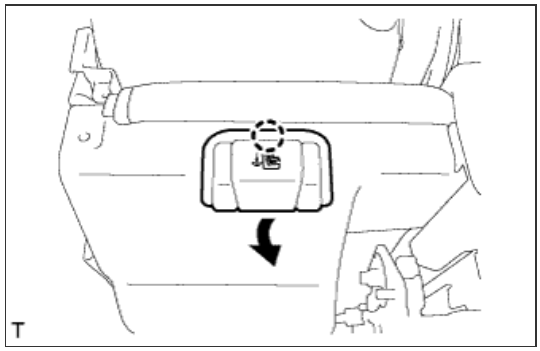
11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Remove the 2 nuts and hinge.

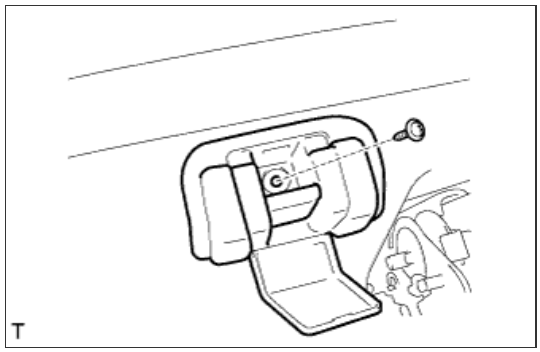


12. REMOVE SEAT BELT ANCHOR COVER CAP

a. Detach the claw and open the cap.



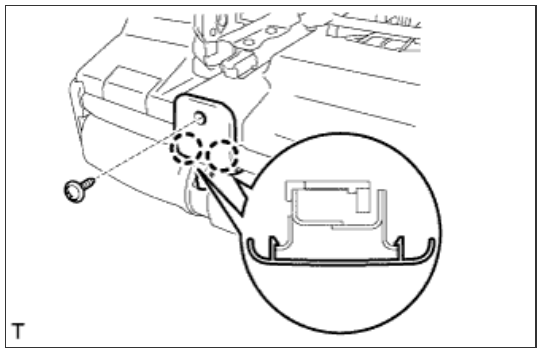
b. Remove the screw and anchor cover cap.



13. REMOVE REAR SEATBACK STAY COVER LH

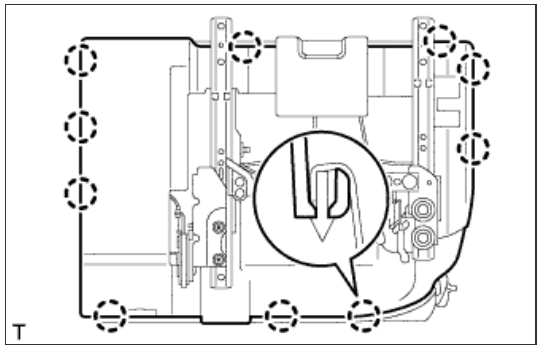
a. Remove the screw.

b. Detach the 2 claws and remove the cover.



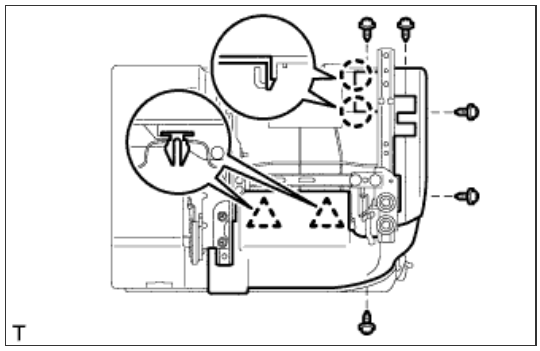
14. REMOVE REAR UNDER SIDE COVER LH

a. Detach the 10 claws.



b. Remove the 5 screws.

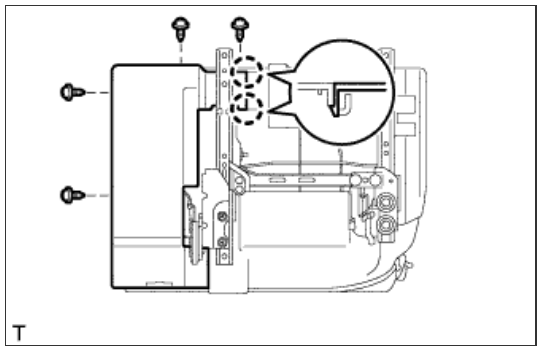
c. Detach the 2 clips and 2 claws, and remove the cover.



15. REMOVE REAR SEAT CUSHION COVER RH

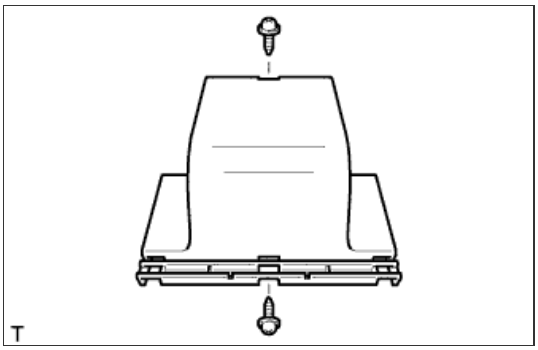
a. Remove the 4 screws.

b. Detach the 2 claws and remove the cover.



16. REMOVE REAR SEAT UNDER TRAY COVER LH

a. Remove the 2 screws and cover.

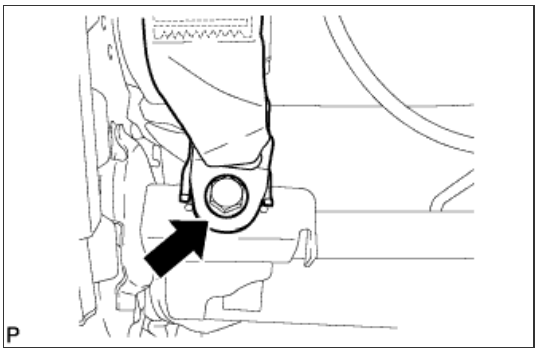


17. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Remove the bolt and belt.

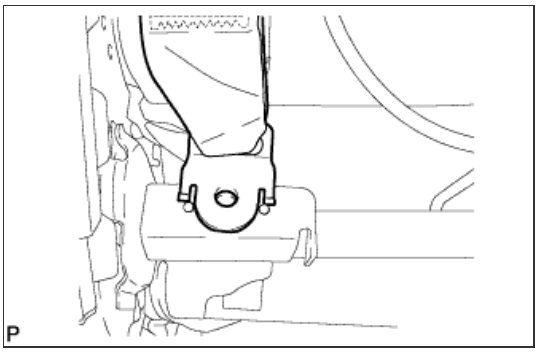
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, it becomes disconnected when the bolt is removed.



18. DISCONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Disconnect the belt anchor.



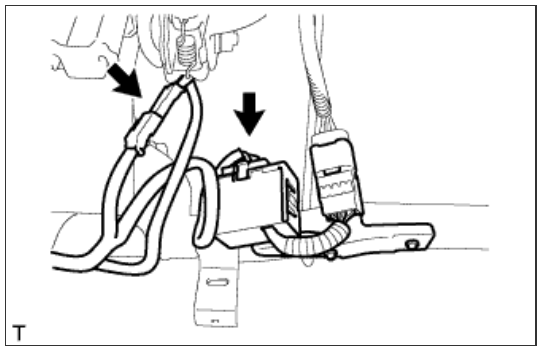
19. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

b. Remove the side airbag wire harness through the hole in the seat cushion.

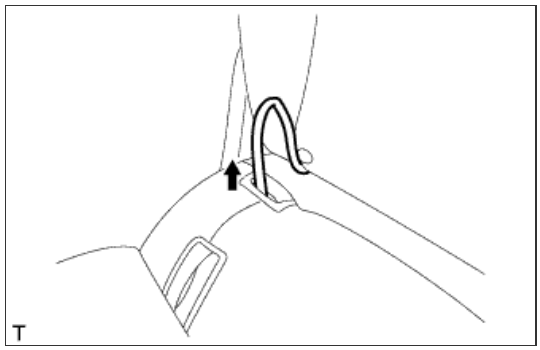
c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.

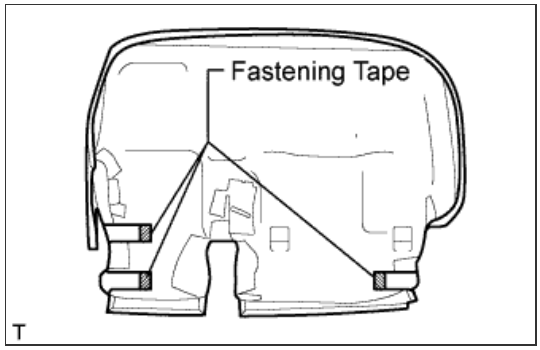
d. Remove the seat cushion cover with pad.



20. REMOVE REAR SEPARATE TYPE SEAT CUSHION COVER

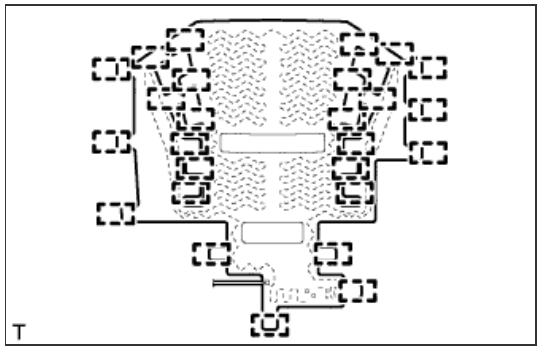
a. Detach the 3 pieces of fastening tape.

b. Remove the hog rings and cover.



21. REMOVE REAR SEAT CUSHION HEATER ASSEMBLY

a. Cut off the tack pins which fasten the seat heater to the seat cushion cover, and then remove the seat cushion heater from the seat cushion cover.



for Preparation Click here

1. INSPECT REAR SEAT CUSHION HEATER ASSEMBLY LH

a. Heat the thermostat with a light.

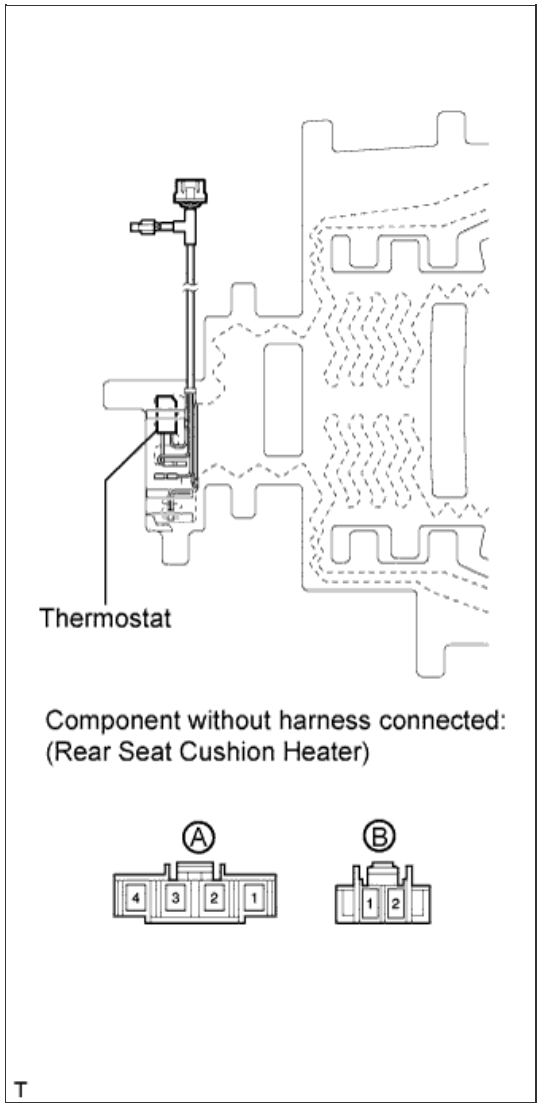
b. Check the seat cushion heater.

i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A-1 - B-1	Seat cushion heater temperature 25°C (77°F)	3.05 to 3.65 Ω
A-4 - B-2		
A-1 - A-4		
A-2 - A-3		8 to 12 kΩ

If the result is not as specified, replace the seat cushion heater assembly.



for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

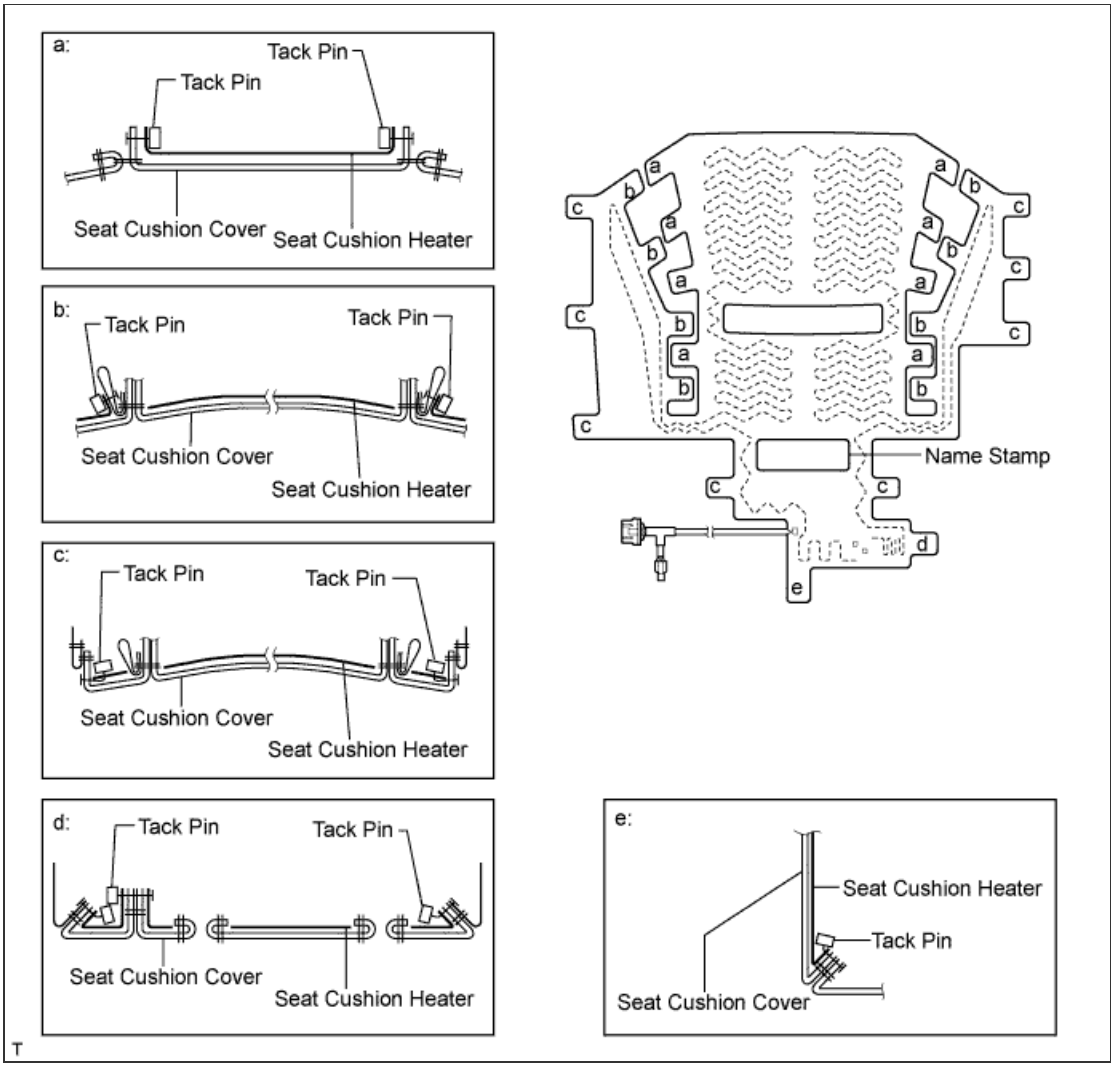
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEAT CUSHION HEATER ASSEMBLY

a. Set the seat cushion heater with the name stamp side facing the seat cushion cover.

b. Install the seat cushion heater with new tack pins.

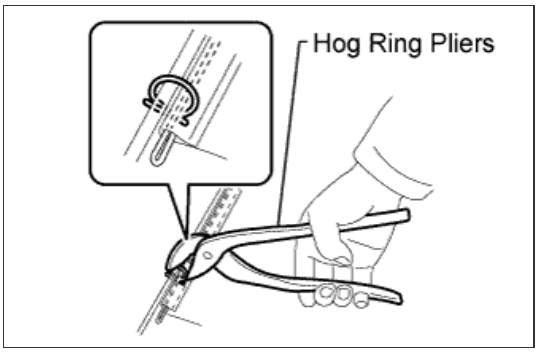


2. INSTALL REAR SEPARATE TYPE SEAT CUSHION COVER

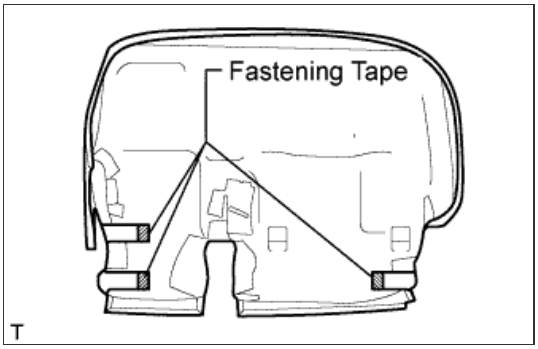
a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Attach the 3 pieces of fastening tape.



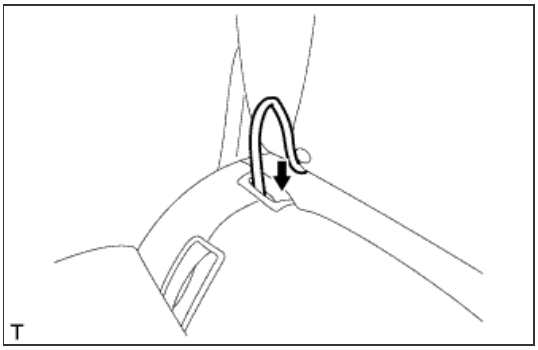
3. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

b. Pass the side airbag wire harness through the hole in the seat cushion.

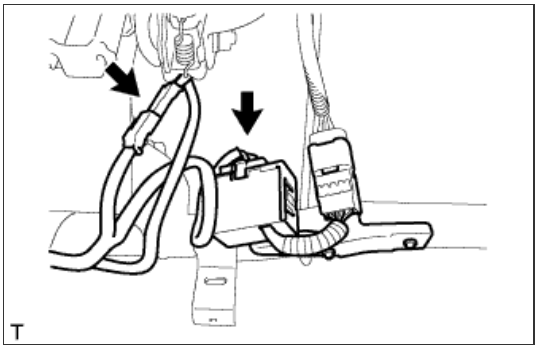
c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.

d. Attach the side airbag wire harness clamps.

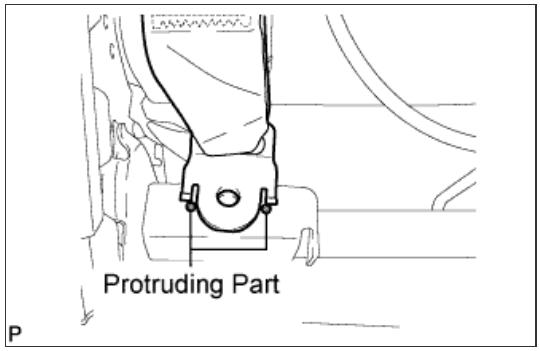


4. CONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Connect the belt anchor.

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.



5. INSTALL REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Install the belt with the bolt.

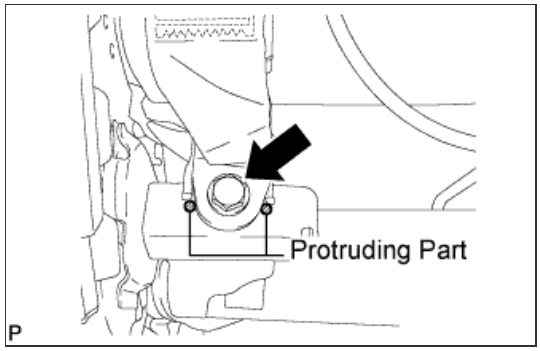
Torque:
42 N*m{ 4287 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

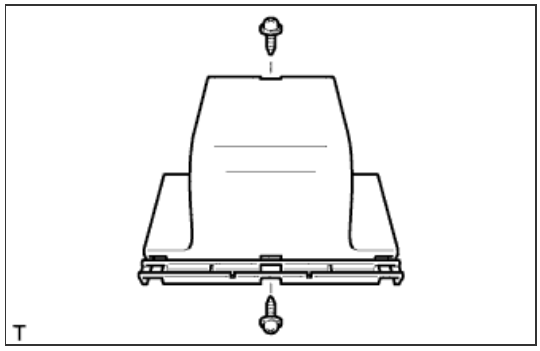
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, connect it when installing the rear No. 1 seat inner belt LH.



6. INSTALL REAR SEAT UNDER TRAY COVER LH

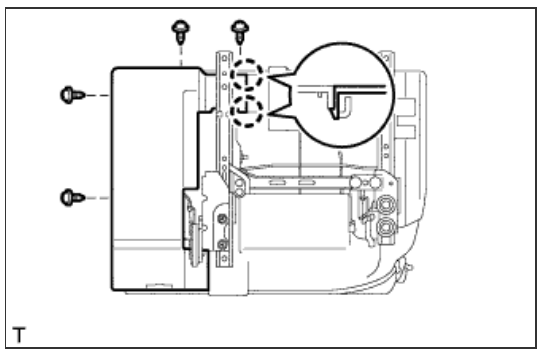
a. Install the cover with the 2 screws.



7. INSTALL REAR SEAT CUSHION COVER RH

a. Attach the 2 claws to install the cover.

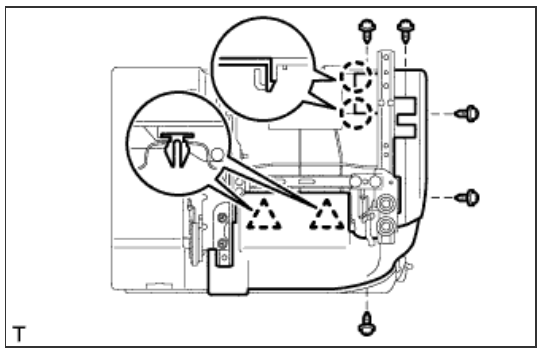
b. Install the 4 screws.



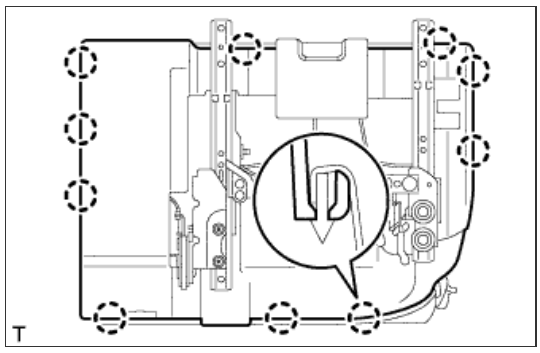
8. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and 2 clips to install the cover.

b. Install the 5 screws.



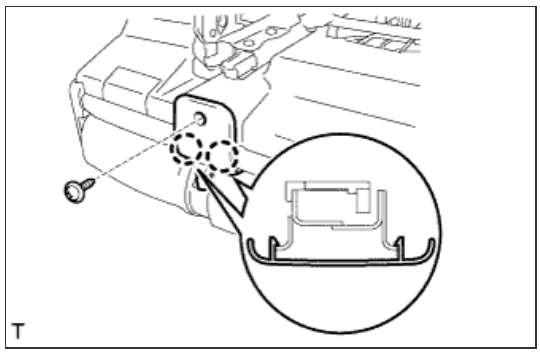
c. Attach the 10 claws.



9. INSTALL REAR SEATBACK STAY COVER LH

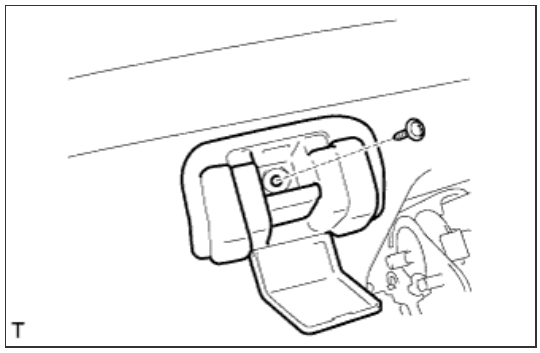
a. Attach the 2 claws to install the cover.

b. Install the screw.

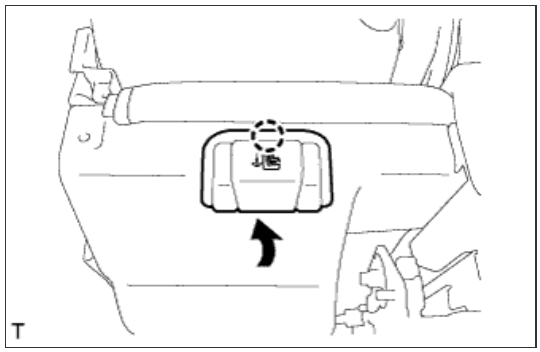


10. INSTALL SEAT BELT ANCHOR COVER CAP

a. Install the anchor cover cap with the screw.



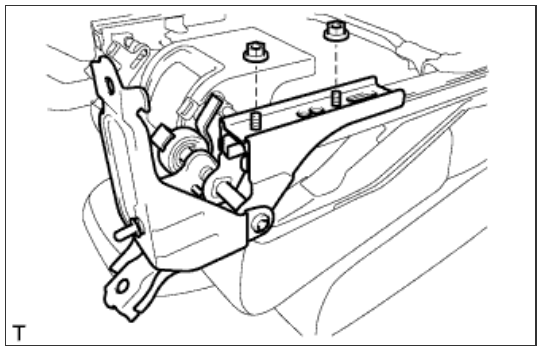
b. Attach the claw to close the cap.



11. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



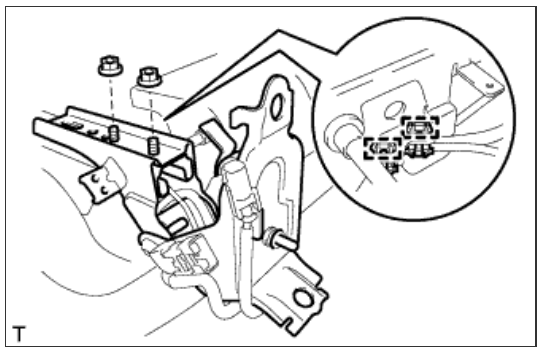
12. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

c. w/ Seat Heater System:
Attach the wire harness clamp.

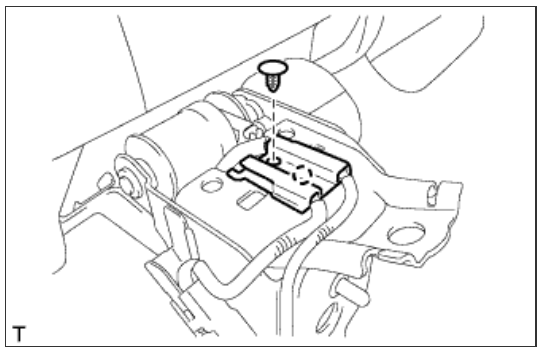


13. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

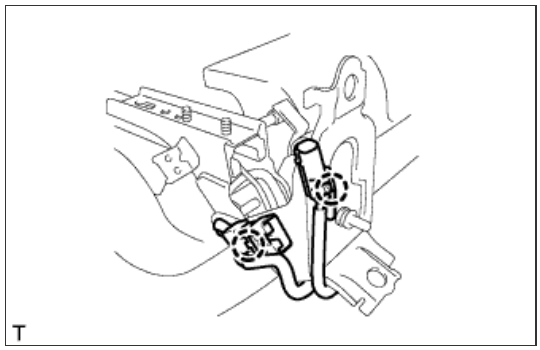
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



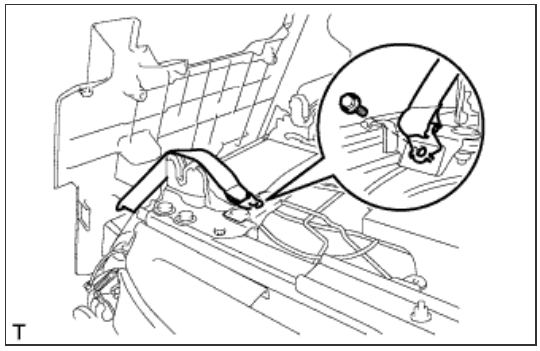
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



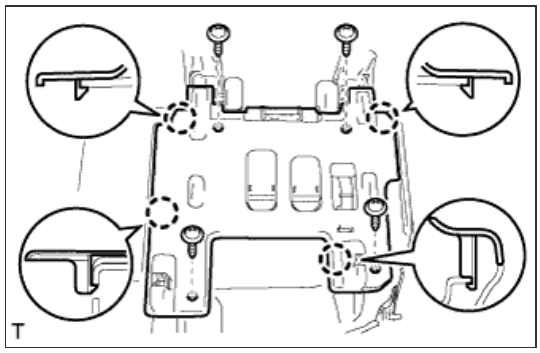
14. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



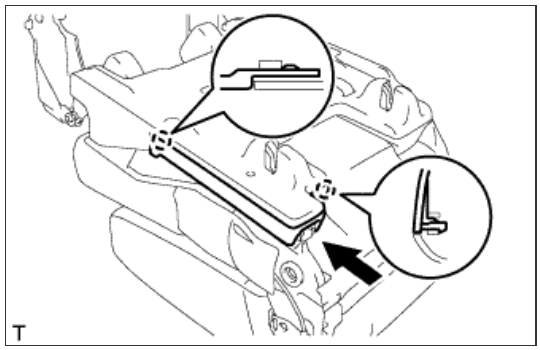
b. Attach the 4 claws to install the seat leg side cover.

c. Install the 4 screws.



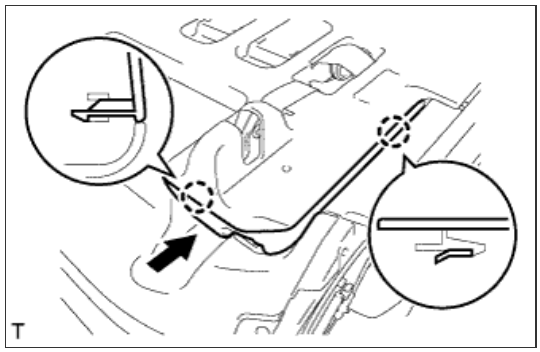
15. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



16. INSTALL UPPER SEAT TRACK RAIL COVER LH

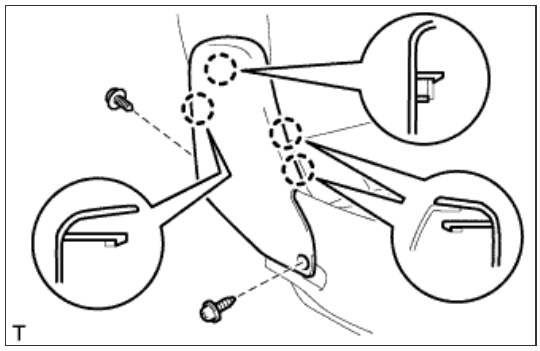
a. Attach the 2 claws to install the cover.



17. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 4 claws to install the cover.

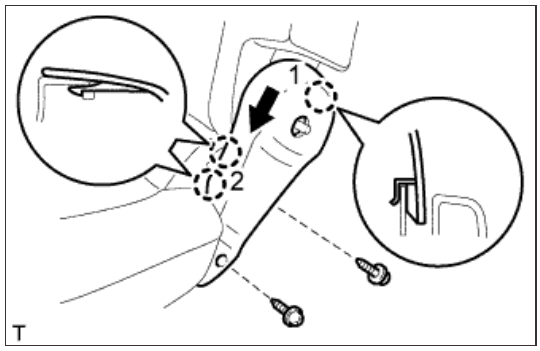
b. Install the 2 screws.



18. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

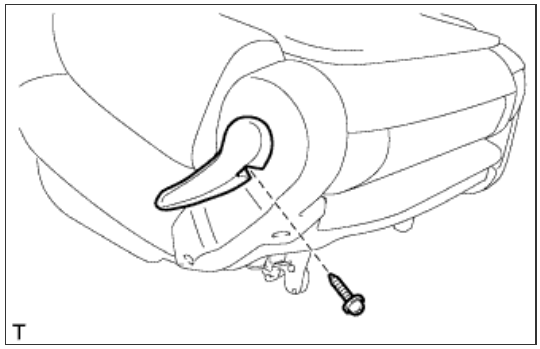
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



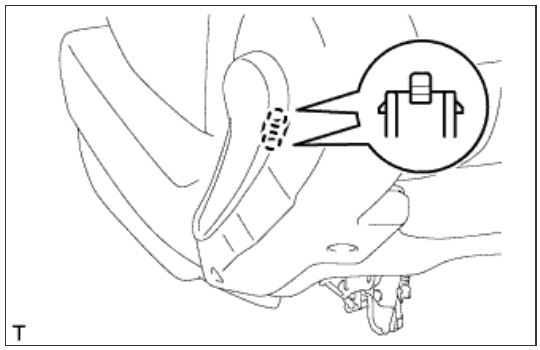
19. INSTALL RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



20. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



21. INSTALL REAR NO. 1 SEAT ASSEMBLY

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here

CAUTION:

Wear protective gloves. Sharp areas on the parts may injure your hands.

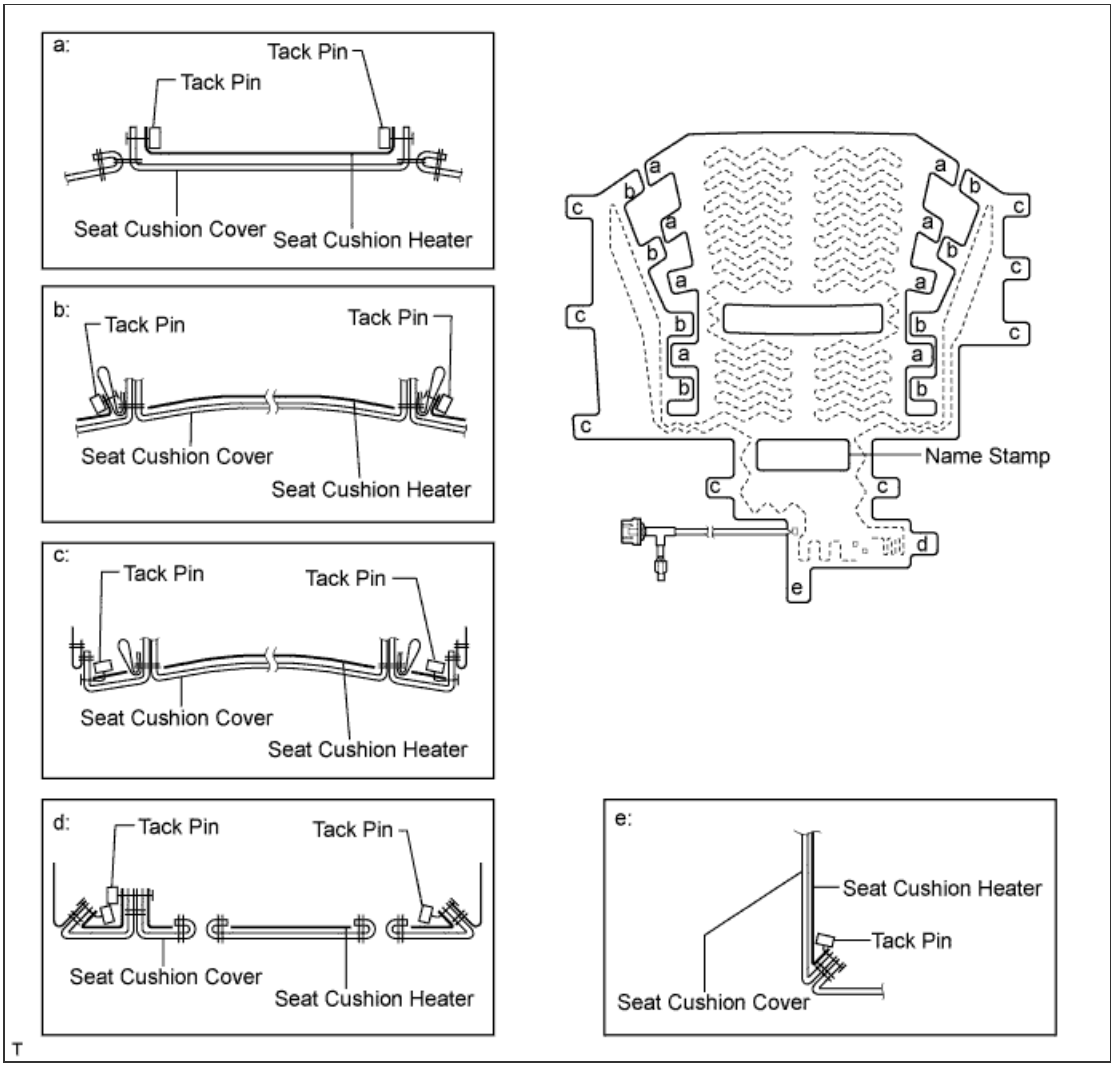
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL REAR SEAT CUSHION HEATER ASSEMBLY

a. Set the seat cushion heater with the name stamp side facing the seat cushion cover.

b. Install the seat cushion heater with new tack pins.

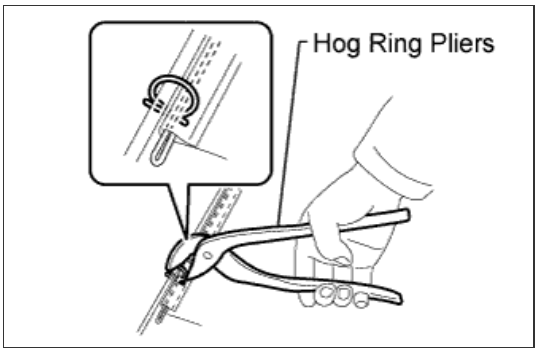


2. INSTALL REAR SEPARATE TYPE SEAT CUSHION COVER

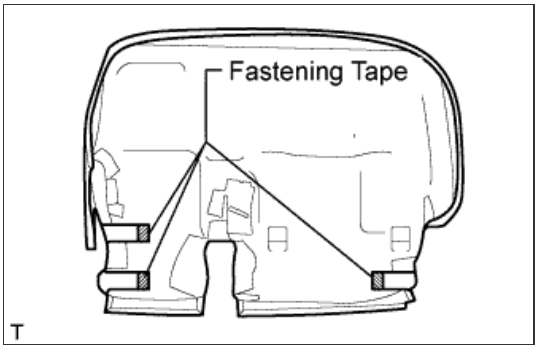
a. Using hog ring pliers, install the seat cushion cover to the seat cushion pad with new hog rings.

NOTICE:

- **Be careful not to damage the cover.**
- **When installing the hog rings, avoid wrinkling the cover.**



b. Attach the 3 pieces of fastening tape.



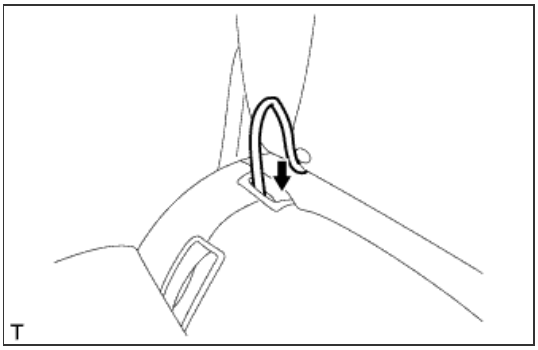
3. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

b. Pass the side airbag wire harness through the hole in the seat cushion.

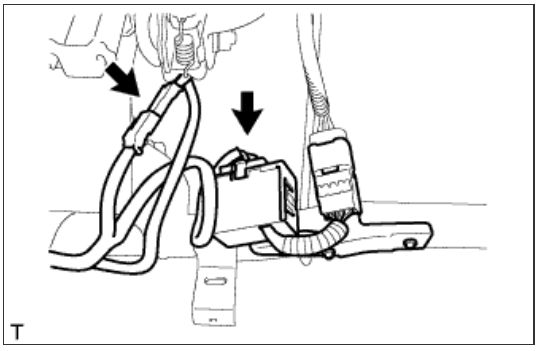
c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.

d. Attach the side airbag wire harness clamps.

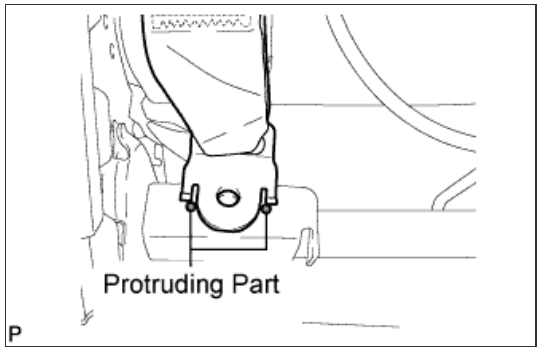


4. CONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Connect the belt anchor.

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.



5. INSTALL REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Install the belt with the bolt.

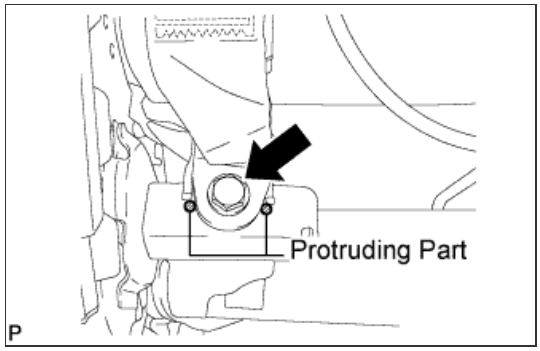
Torque:
42 N*m{ 4287 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

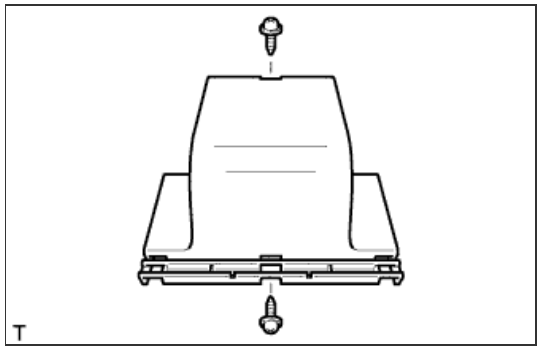
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, connect it when installing the rear No. 1 seat inner belt LH.



6. INSTALL REAR SEAT UNDER TRAY COVER LH

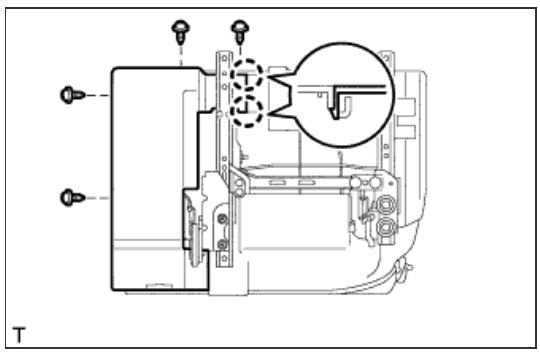
a. Install the cover with the 2 screws.



7. INSTALL REAR SEAT CUSHION COVER RH

a. Attach the 2 claws to install the cover.

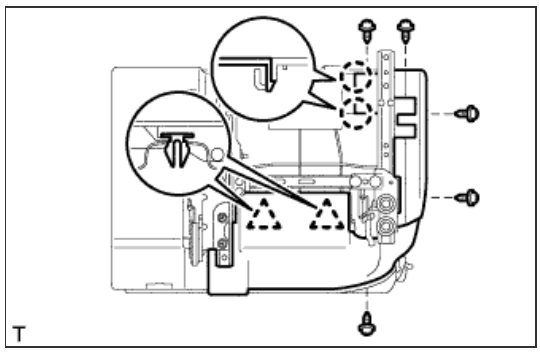
b. Install the 4 screws.



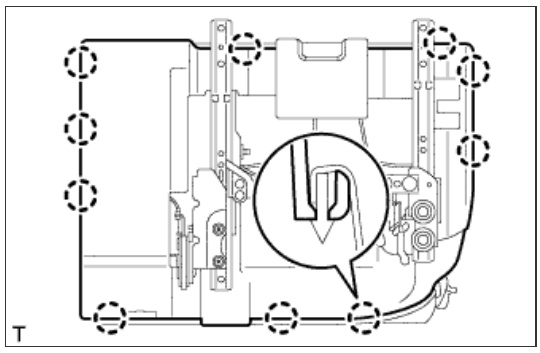
8. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and 2 clips to install the cover.

b. Install the 5 screws.



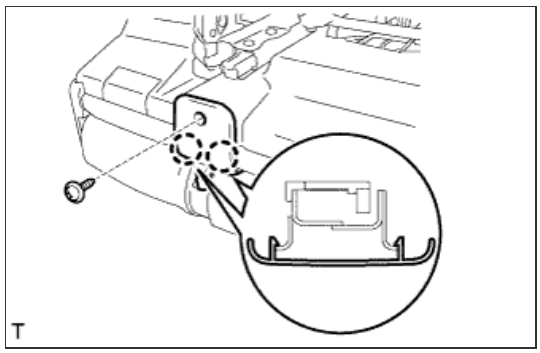
c. Attach the 10 claws.



9. INSTALL REAR SEATBACK STAY COVER LH

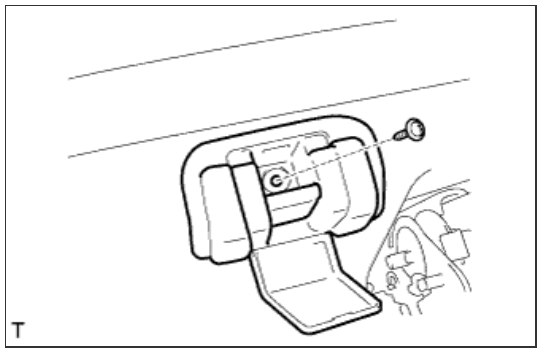
a. Attach the 2 claws to install the cover.

b. Install the screw.

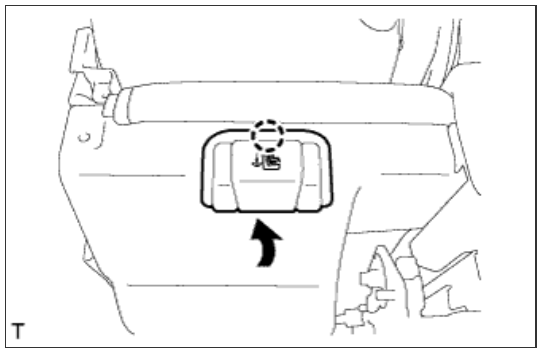


10. INSTALL SEAT BELT ANCHOR COVER CAP

a. Install the anchor cover cap with the screw.



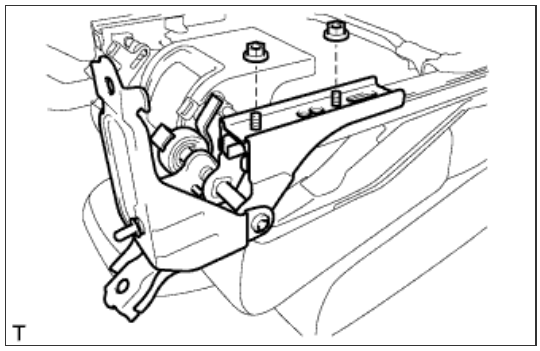
b. Attach the claw to close the cap.



11. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



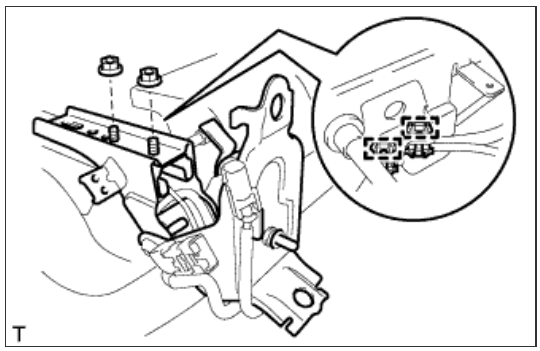
12. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

c. w/ Seat Heater System:
Attach the wire harness clamp.

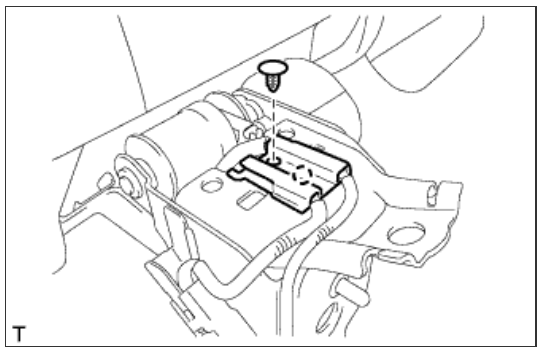


13. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

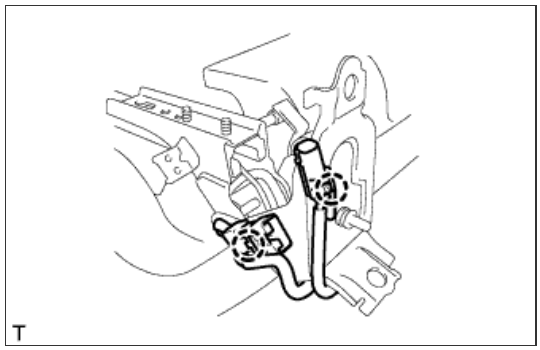
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



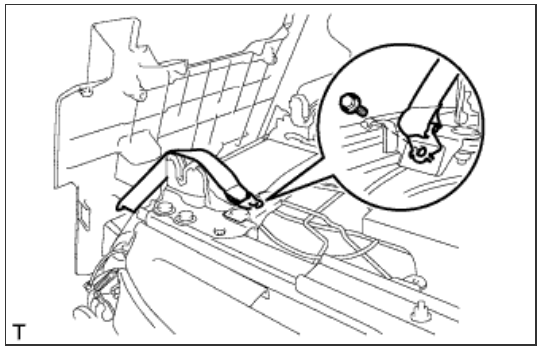
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



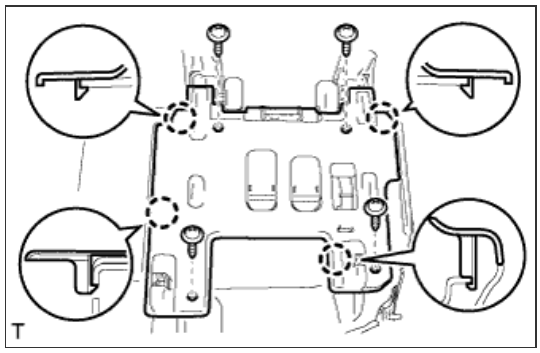
14. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



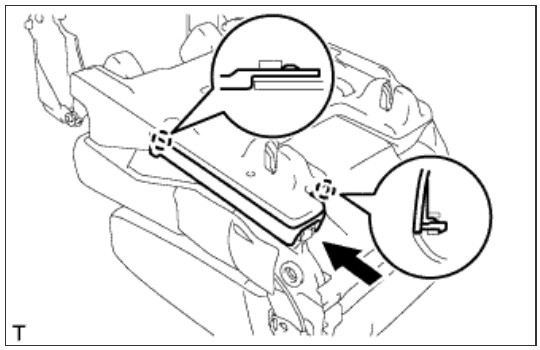
b. Attach the 4 claws to install the seat leg side cover.

c. Install the 4 screws.



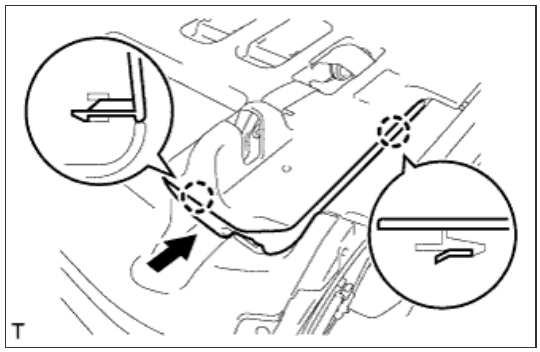
15. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



16. INSTALL UPPER SEAT TRACK RAIL COVER LH

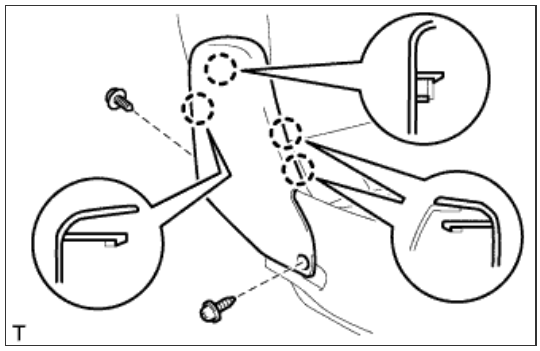
a. Attach the 2 claws to install the cover.



17. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 4 claws to install the cover.

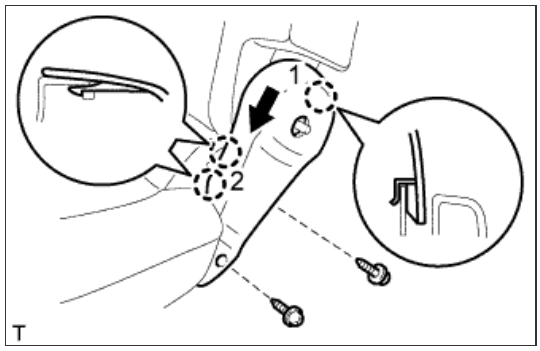
b. Install the 2 screws.



18. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

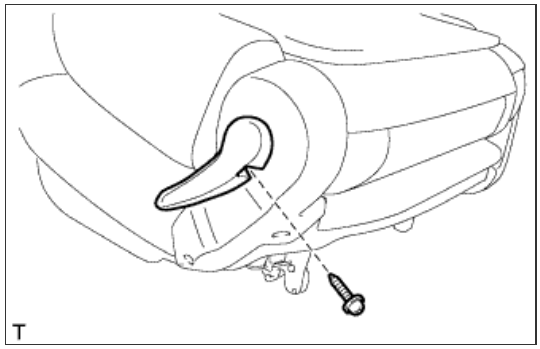
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



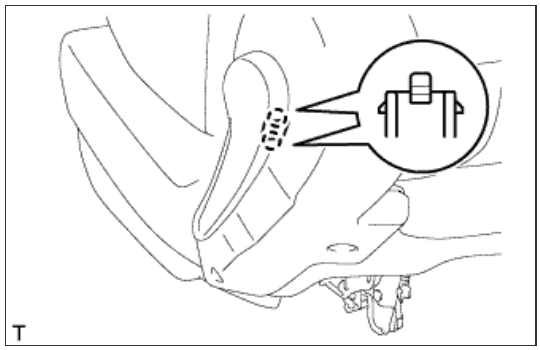
19. INSTALL RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



20. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.

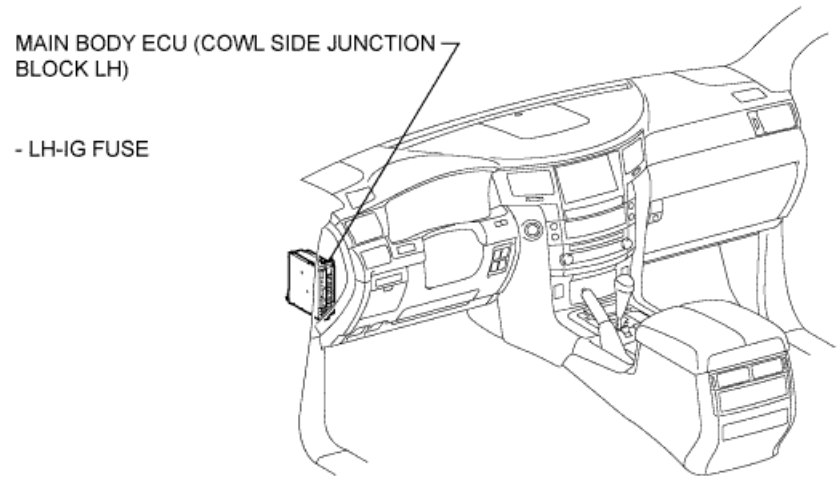


21. INSTALL REAR NO. 1 SEAT ASSEMBLY

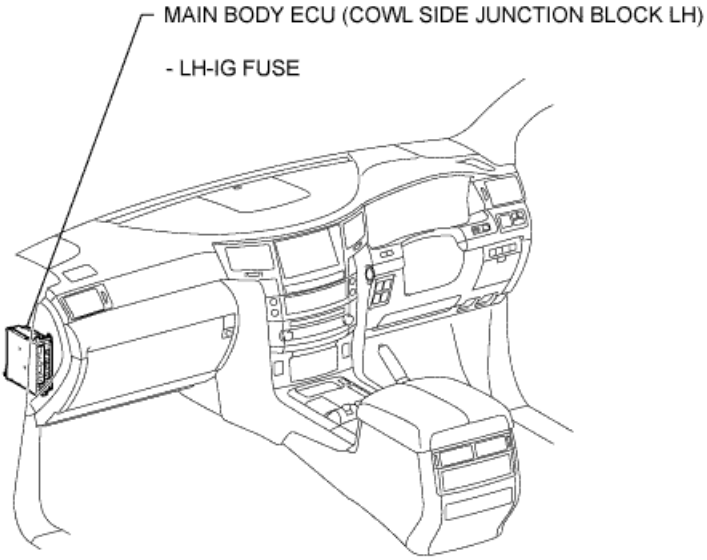
a. Install the rear No. 1 seat assembly (Click here).

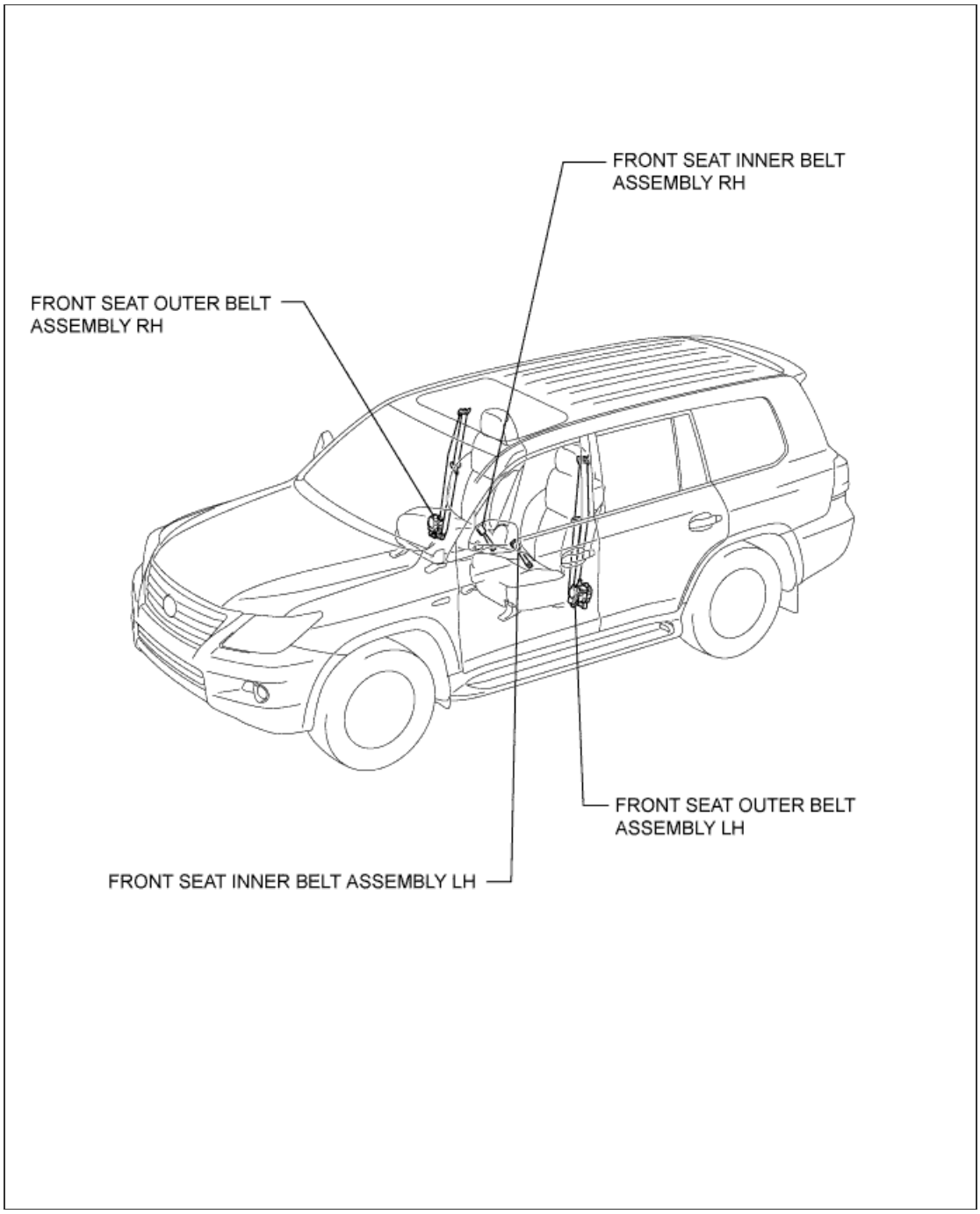
for Preparation Click here

for LHD:

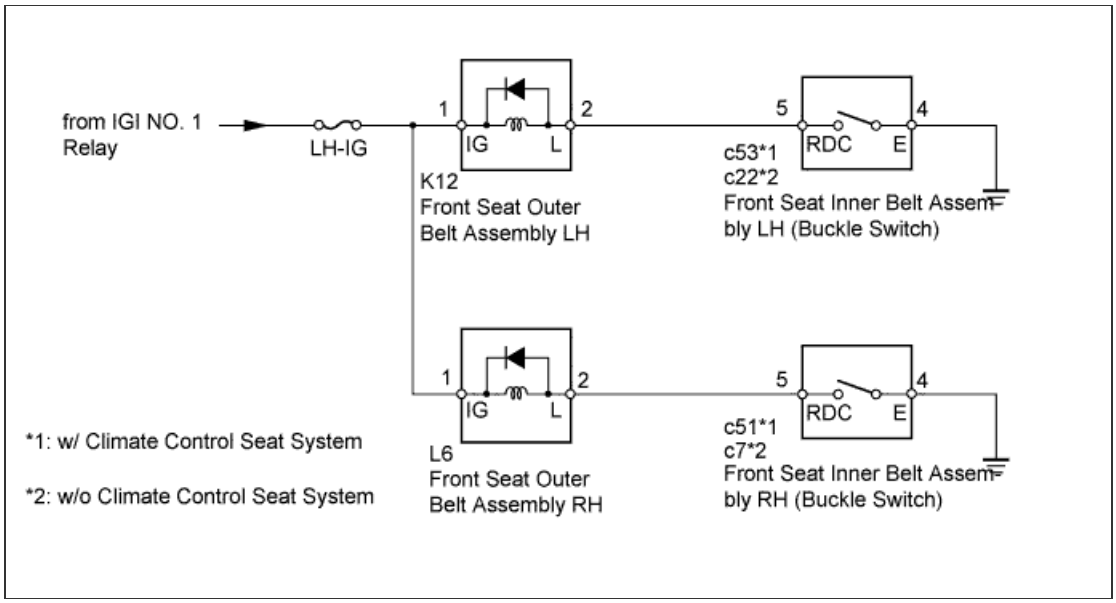


for RHD:




FRONT SEAT INNER BELT ASSEMBLY RH
FRONT SEAT OUTER BELT ASSEMBLY RH
FRONT SEAT OUTER BELT ASSEMBLY LH
FRONT SEAT INNER BELT ASSEMBLY LH

for Preparation Click here



for Preparation Click here

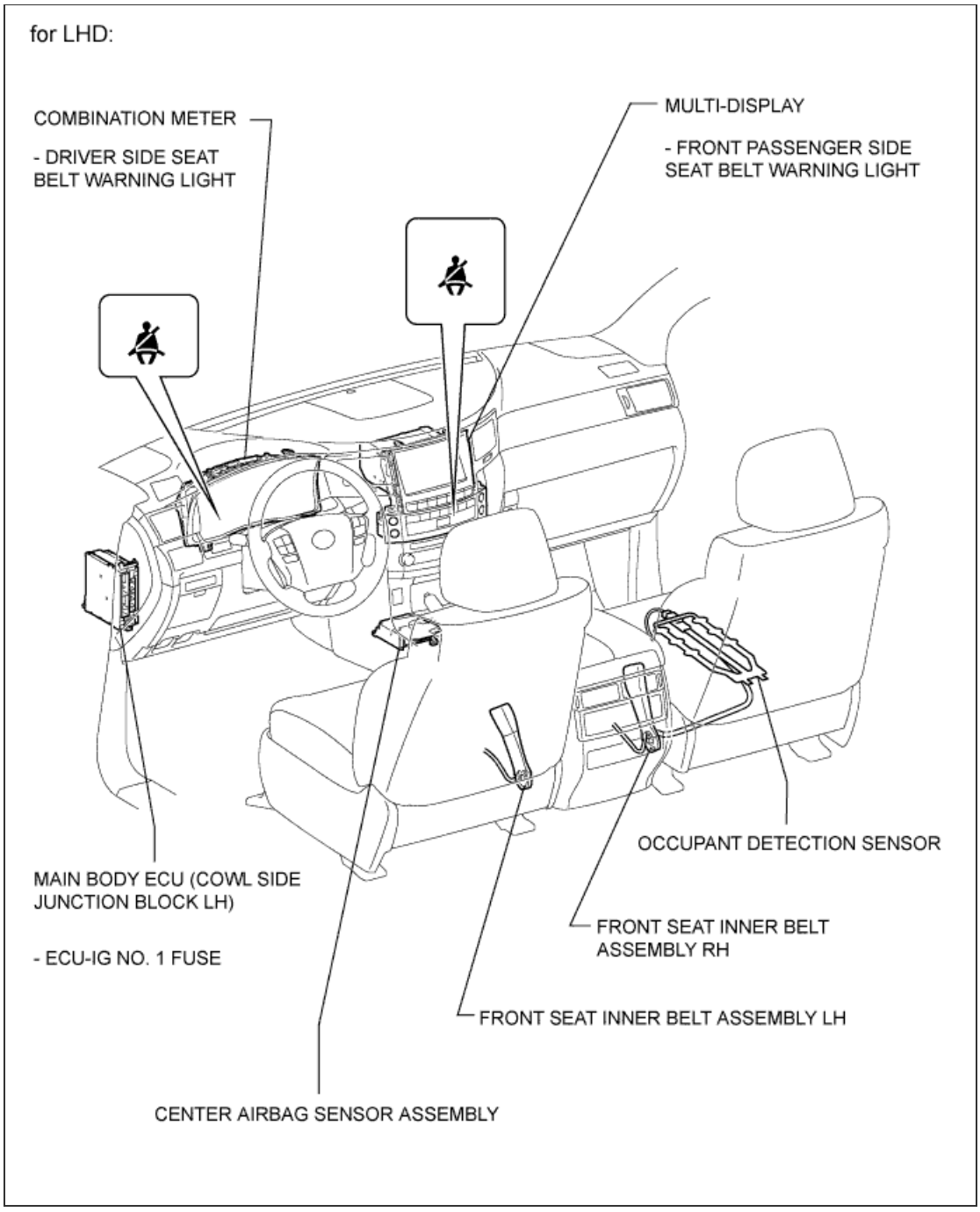
HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

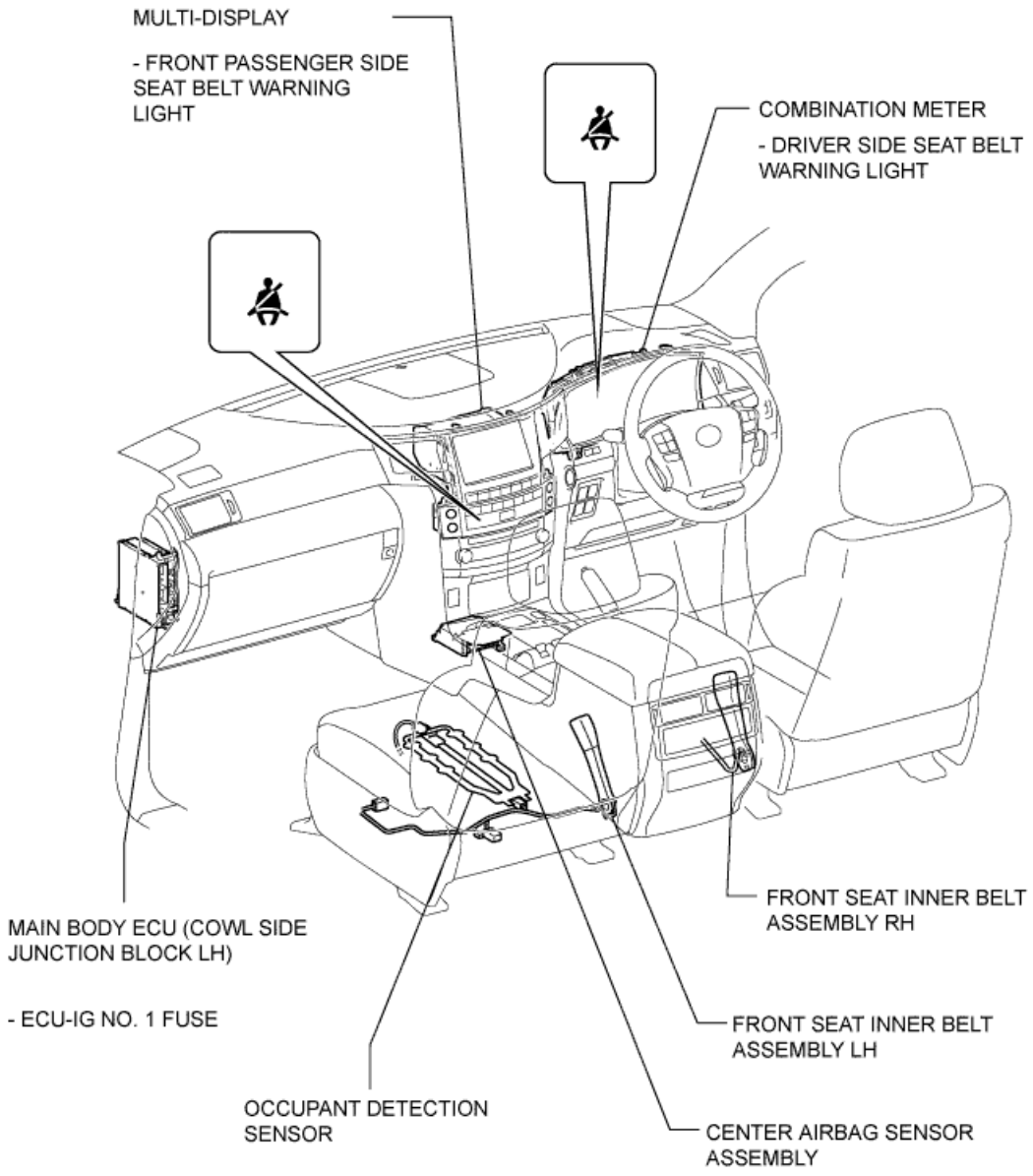
Seat Belt Tension Reducer System

Symptom	Suspected Area	See page
Front LH side: Tension reducer system does not operate	LH-IG fuse	Click here
	Front seat inner belt assembly LH	Click here
	Front seat outer belt assembly LH	Click here
	Wire harness	Click here
Front RH side: Tension reducer system does not operate	LH-IG fuse	Click here
	Front seat inner belt assembly RH	Click here
	Front seat outer belt assembly RH	Click here
	Wire harness	Click here

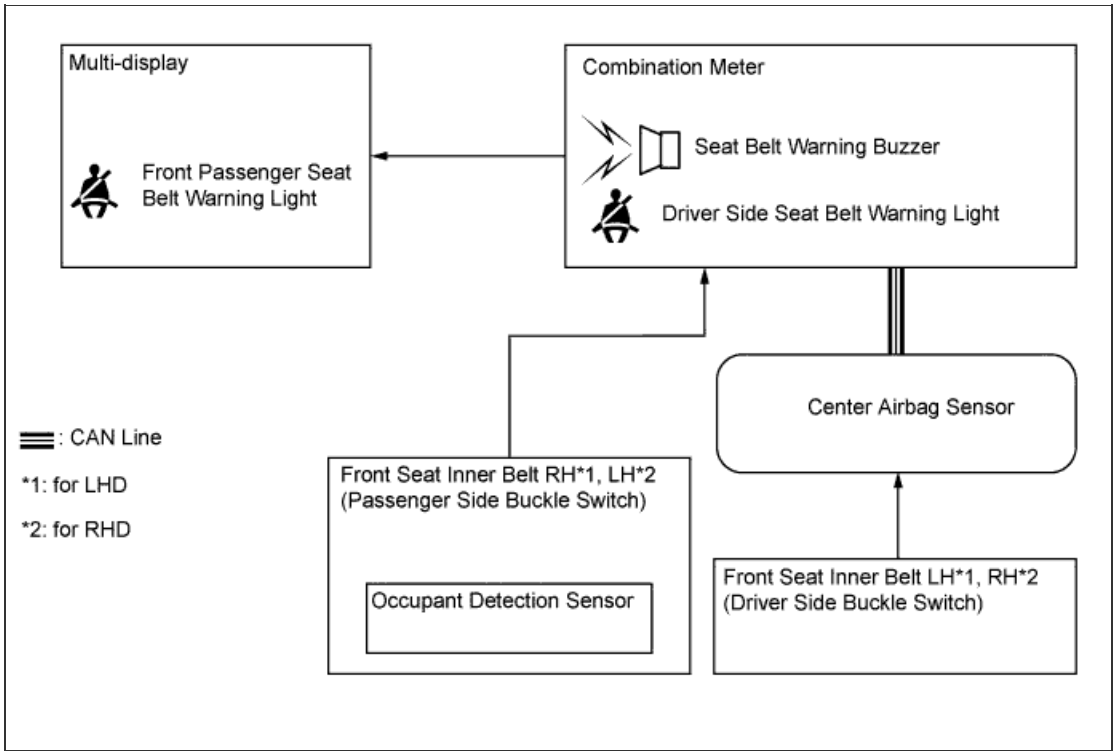
for Preparation Click here



for RHD:


MULTI-DISPLAY
- FRONT PASSENGER SIDE SEAT BELT WARNING LIGHT
COMBINATION METER
- DRIVER SIDE SEAT BELT WARNING LIGHT
MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)
- ECU-IG NO. 1 FUSE
OCCUPANT DETECTION SENSOR
FRONT SEAT INNER BELT ASSEMBLY RH
FRONT SEAT INNER BELT ASSEMBLY LH
CENTER AIRBAG SENSOR ASSEMBLY

for Preparation Click here



Communication Table

Sender	Receiver	Signal	Line
Center Airbag Sensor	Combination Meter	Front seat inner belt switch signal (for driver side)	CAN

for Preparation Click here

SEAT BELT WARNING SYSTEM DESCRIPTION

If a seat belt is not fastened, this system flashes the seat belt warning light or sounds the seat belt warning buzzer as a reminder.

a. Driver side seat belt warning light:
When the driver seat belt is not fastened with the engine switch on (IG), the driver side seat belt warning light on the combination meter comes on to inform the driver. The center airbag sensor detects the driver seat belt status and sends signals to the combination meter.

b. Front passenger side seat belt warning light:
When the passenger seat belt is not fastened with the engine switch on (IG) and the passenger seat occupied, the passenger side seat belt warning light on the multi-display blinks. The multi-display displays the passenger seat belt status and whether the passenger seat is occupied.

c. Seat belt warning buzzer:
When the vehicle is driven at approximately 20 km/h (12.5 mph) or more while the driver or front passenger seat belt is not being fastened, the seat belt warning buzzer in the combination meter sounds at an interval of 1.2 seconds for 30 seconds.

FUNCTION OF MAIN COMPONENT

The following functions are available.
*1: for LHD
*2: for RHD

Components	Function
Front seat inner belt LH*1,RH*2 (driver side buckle switch)	Informs center airbag sensor of driver seat belt condition (fastened or unfastened)
Front seat inner belt RH*1, LH*2 (passenger side buckle switch)	Informs center airbag sensor of front passenger seat belt condition (fastened or unfastened)
Occupant detection sensor	Informs combination meter of front passenger seat condition (occupied or unoccupied)
Driver side seat belt warning light	If driver seat belt is unfastened and engine switch is on (IG), combination meter flashes seat belt warning light of combination meter as reminder
Front passenger side seat belt warning light	When front passenger seat is occupied and engine switch is on (IG), if passenger seat belt is unfastened, combination meter flashes seat belt warning light of multi-display as reminder
Seat belt warning buzzer	If driver or passenger seat belt is unfastened and engine switch is on (IG), combination meter sounds buzzer as reminder

SYSTEM OPERATION

a. Driver side seat belt warning light

i. When the driver seat belt is not fastened with the engine switch on (IG), the driver side seat belt warning light on the combination meter comes on to inform the driver. The center airbag sensor detects the driver seat belt status and sends signals to the combination meter using CAN.

b. Front passenger side seat belt warning light

i. When the passenger seat belt is not fastened with the engine switch on (IG) and the passenger seat occupied, check that the front passenger side seat belt warning light on the multi-display blinks. The combination meter displays the passenger seat belt status and whether the passenger seat is occupied.

for Preparation Click here

HINT:

- **Use the following procedures to troubleshoot the seat belt warning system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding to the next step.

NEXT

3.CHECK FOR DTC*

a. Check for DTCs and make a note of any codes that are output.

b. Clear the DTCs.

c. Based on the DTCs output above, try to cause the output of the same CAN communication system DTC or airbag system DTC by simulating the symptoms indicated by the DTC. Then recheck for DTCs.

Result

Result	Proceed to
DTC is not output	A
CAN communication system DTC is output (for LHD)	B
CAN communication system DTC is output (for RHD)	C
Airbag system DTC is output	D

B. → Go to CAN COMMUNICATION SYSTEM (Click here)

C. → Go to CAN COMMUNICATION SYSTEM (Click here)

D. → Go to AIRBAG SYSTEM (Click here)

A

4.PROBLEM SYMPTOMS TABLE

a. Refer to the problem symptoms table (Click here).

NEXT

5.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Operation check (Click here)

b. Data List / Active Test (Click here)

c. Terminals of ECU (Click here)

NEXT

6.REPAIR OR REPLACE

NEXT

7.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use the following procedures to troubleshoot the seat belt warning system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding to the next step.

NEXT

3.CHECK FOR DTC*

a. Check for DTCs and make a note of any codes that are output.

b. Clear the DTCs.

c. Based on the DTCs output above, try to cause the output of the same CAN communication system DTC or airbag system DTC by simulating the symptoms indicated by the DTC. Then recheck for DTCs.

Result

Result	Proceed to
DTC is not output	A
CAN communication system DTC is output (for LHD)	B
CAN communication system DTC is output (for RHD)	C
Airbag system DTC is output	D

B. → Go to CAN COMMUNICATION SYSTEM (Click here)

C. → Go to CAN COMMUNICATION SYSTEM (Click here)

D. → Go to AIRBAG SYSTEM (Click here)

A

4.PROBLEM SYMPTOMS TABLE

a. Refer to the problem symptoms table (Click here).

NEXT

5.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Operation check (Click here)

b. Data List / Active Test (Click here)

c. Terminals of ECU (Click here)

NEXT

6.REPAIR OR REPLACE

NEXT

7.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use the following procedures to troubleshoot the seat belt warning system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding to the next step.

NEXT

3.CHECK FOR DTC*

a. Check for DTCs and make a note of any codes that are output.

b. Clear the DTCs.

c. Based on the DTCs output above, try to cause the output of the same CAN communication system DTC or airbag system DTC by simulating the symptoms indicated by the DTC. Then recheck for DTCs.

Result

Result	Proceed to
DTC is not output	A
CAN communication system DTC is output (for LHD)	B
CAN communication system DTC is output (for RHD)	C
Airbag system DTC is output	D

B. → Go to CAN COMMUNICATION SYSTEM (Click here)

C. → Go to CAN COMMUNICATION SYSTEM (Click here)

D. → Go to AIRBAG SYSTEM (Click here)

A

4.PROBLEM SYMPTOMS TABLE

a. Refer to the problem symptoms table (Click here).

NEXT

5.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Operation check (Click here)

b. Data List / Active Test (Click here)

c. Terminals of ECU (Click here)

NEXT

6.REPAIR OR REPLACE

NEXT

7.CONFIRMATION TEST

NEXT

END

for Preparation Click here

INSPECT DRIVER SIDE SEAT BELT WARNING LIGHT

a. Turn the engine switch on (IG).

b. When the driver seat belt is not fastened, check that the driver side seat belt warning light on the combination meter blinks.

c. When the driver seat belt is fastened, check that the driver side seat belt warning light on the combination meter is off.

INSPECT FRONT PASSENGER SIDE SEAT BELT WARNING LIGHT

a. Turn the engine switch on (IG).

b. When the front passenger side seat belt is not fastened with the passenger seat occupied, check that the front passenger side seat belt warning light on the multi-display blinks.

c. When the front passenger seat belt is fastened with the passenger seat occupied, check that the front passenger side seat belt warning light on the multi-display is off.

INSPECT SEAT BELT WARNING BUZZER

HINT:

If the buzzer does not sound, the buzzer cancel setting may be set to ON (Click here).

a. Lift up the vehicle using a swing arm type lift (Click here).

b. Turn the engine switch on (IG).

c. Place a weight of 20 kg (44.0 lb) on the front passenger seat.

d. **NOTICE:**

- **Do not allow the weight to come into contact with the seatback when placing it on the seat cushion.**
- **Place the weight on the seat cushion.**

When the vehicle is driven at approximately 20 km/h (12.5 mph) or more while the driver or front passenger seat belt is not fastened, check that the buzzer in the combination meter sounds at an interval of 1.2 seconds for 30 seconds.

e. Check that the buzzer sounds at an interval of 0.4 seconds for 90 seconds.

f. Check that the buzzer stops 2 minutes after the buzzer starts sounding.

g. After the buzzer has stopped, turn the engine switch off and then start the engine again. Drive the vehicle at approximately 20 km/h (12.5 mph) or more while the driver or front passenger seat belt is not being fastened, and then check that the buzzer sounds again.

h. After the buzzer has stopped, fasten the driver and front passenger seat belts. Drive the vehicle at approximately 20 km/h (12.5 mph) or more and unfasten the driver or front passenger seat belt, and then check that the buzzer sounds again.

i. After the buzzer has stopped, move the shift lever to R, and then move it to D. Drive the vehicle at approximately 20 km/h (12.5 mph) or more, and then check that the buzzer sounds again.

for Preparation Click here

CUSTOMIZING FUNCTION WITH INTELLIGENT TESTER (REFERENCE)

NOTICE:

- **When the customer requests a change in a function, first make sure that the function can be customized.**
- **Be sure to make a note of the current settings before customizing.**
- **When troubleshooting a function, first make sure that the function is set to the default setting.**

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Customize Setting.

e. Select the setting by referring to the table below.

Seat Belt Warning

Display	Default	Contents	Setting
D-Seatbelt Warning Buzzer	ON	If driver side seat belt is unfastened and the vehicle is driven at approximately 20 km/h (12.5 mph) or more, this system sound the seat belt warning buzzer	ON/OFF
P-Seatbelt Warning Buzzer	ON	If front passenger side seat belt is unfastened and the vehicle is driven at approximately 20 km/h (12.5 mph) or more, this system sound the seat belt warning buzzer	ON/OFF

for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Seat Belt Warning System

Symptom	Suspected Area	See page
Driver side seat belt warning light does not operate	Proceed to "Driver side seat belt warning light does not operate"	Click here
Front passenger side seat belt warning light does not operate	Proceed to "Front passenger side seat belt warning light does not operate"	Click here

for Preparation Click here

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Seat Belt Warning System

Symptom	Suspected Area	See page
Driver side seat belt warning light does not operate	Proceed to "Driver side seat belt warning light does not operate"	Click here
Front passenger side seat belt warning light does not operate	Proceed to "Front passenger side seat belt warning light does not operate"	Click here

for Preparation Click here

HINT:

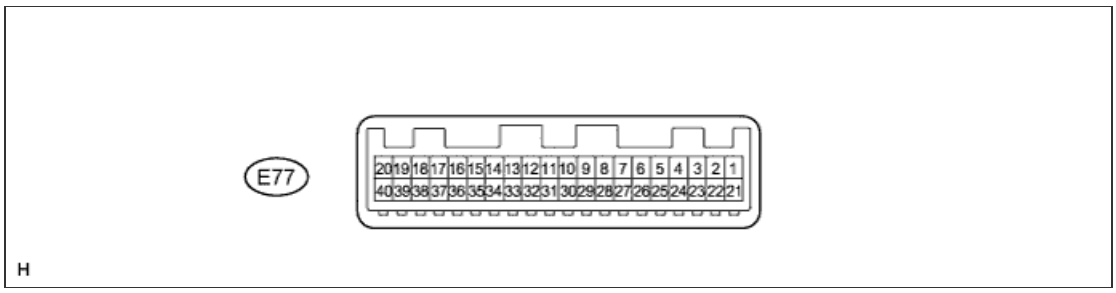
Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Seat Belt Warning System

Symptom	Suspected Area	See page
Driver side seat belt warning light does not operate	Proceed to "Driver side seat belt warning light does not operate"	Click here
Front passenger side seat belt warning light does not operate	Proceed to "Front passenger side seat belt warning light does not operate"	Click here

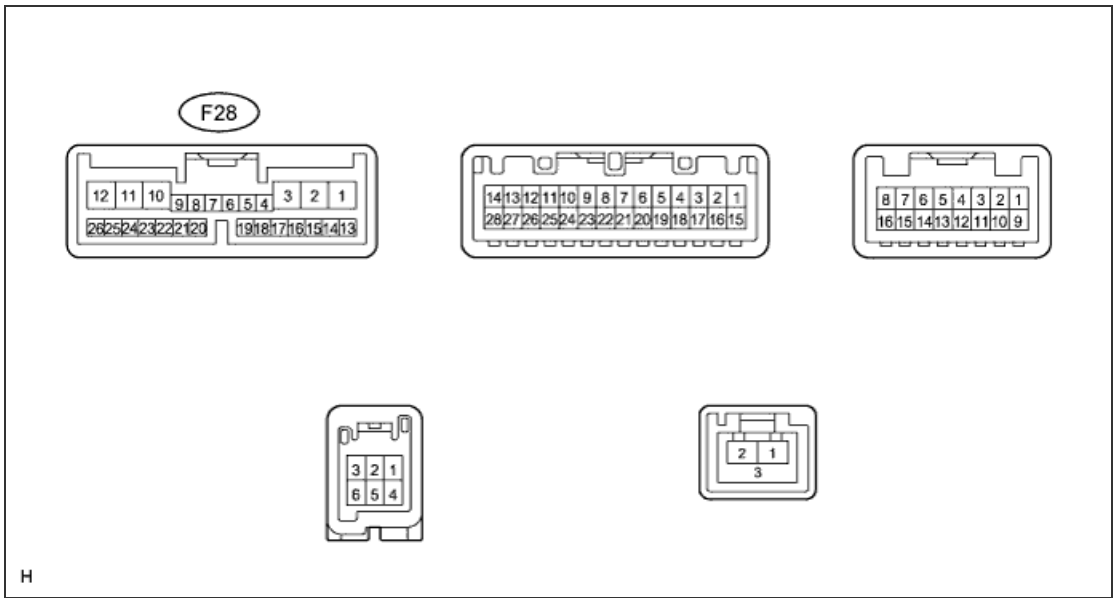
for Preparation Click here

CHECK COMBINATION METER



Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E77-21 (B) - Body ground	R - Body ground	Combination meter +B line	Always	11 to 14 V
E77-30 (IG+) - Body ground	B - Body ground	Combination meter IG line	Engine switch on (IG)	11 to 14 V
E77-26 (ET) - Body ground	BR - Body ground	Ground	Always	Below 1 Ω
E77-39 (WRNP) - Body ground	Y - Body ground	Passenger seat belt signal	Passenger seat is occupied, seat belt is fastened	Below 1 V
			Passenger seat is occupied, seat belt is unfastened	11 to 14 V

CHECK MULTI-DISPLAY

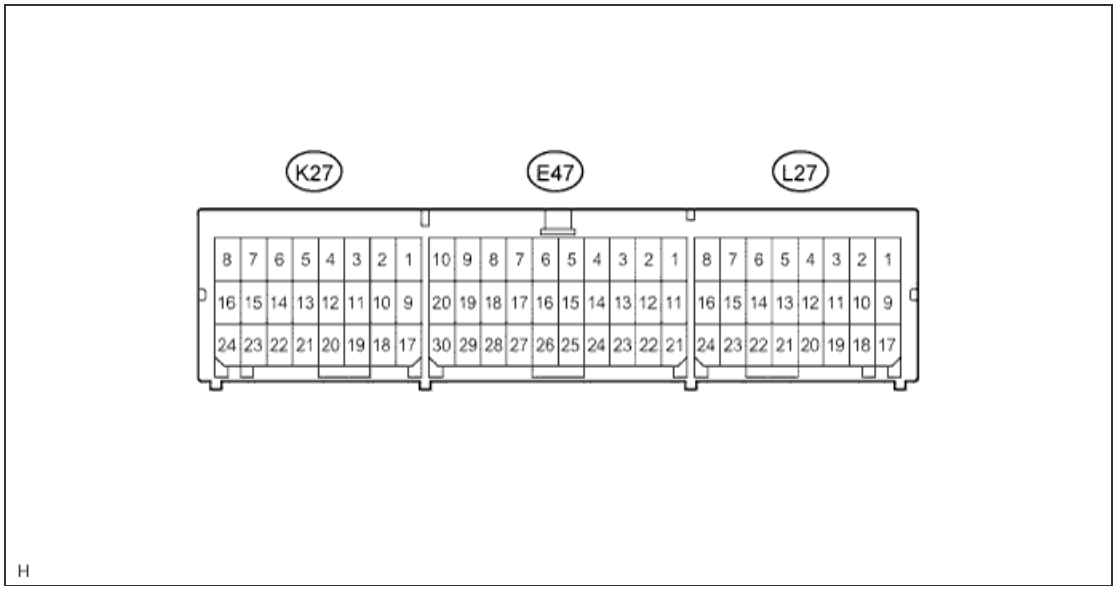


Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
F28-10 (GND1) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
F28-1 (+B1) - Body ground	R - Body ground	Multi-display +B line	Always	11 to 14 V
F28-2 (ACC) - Body ground	GR - Body ground	Multi-display ACC line	Engine switch on (ACC)	11 to 14 V
F28-3 (IG) - Body ground	G - Body ground	Multi-display IG line	Engine switch on (IG)	11 to 14 V
F28-21 (PBEW) - Body ground	Y - Body ground	Passenger seat belt warning signal	Passenger seat is occupied, seat belt is fastened	Below 1 V
			Passenger seat is occupied, seat belt is unfastened	11 to 14 V

CHECK CENTER AIRBAG SENSOR

*1: for LHD

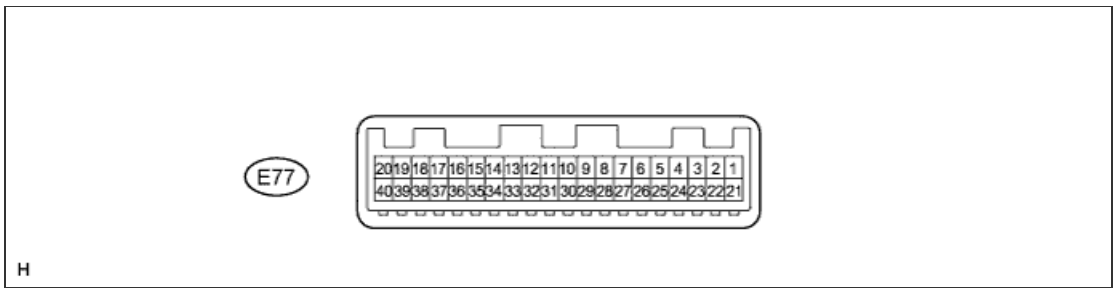
*2: for RHD



Terminal No.	Symbol	Destination
K27-10*1	LBE+	Front seat inner belt LH (Seat belt buckle switch LH)
L27-15*2	RBE+	Front seat inner belt RH (Seat belt buckle switch RH)

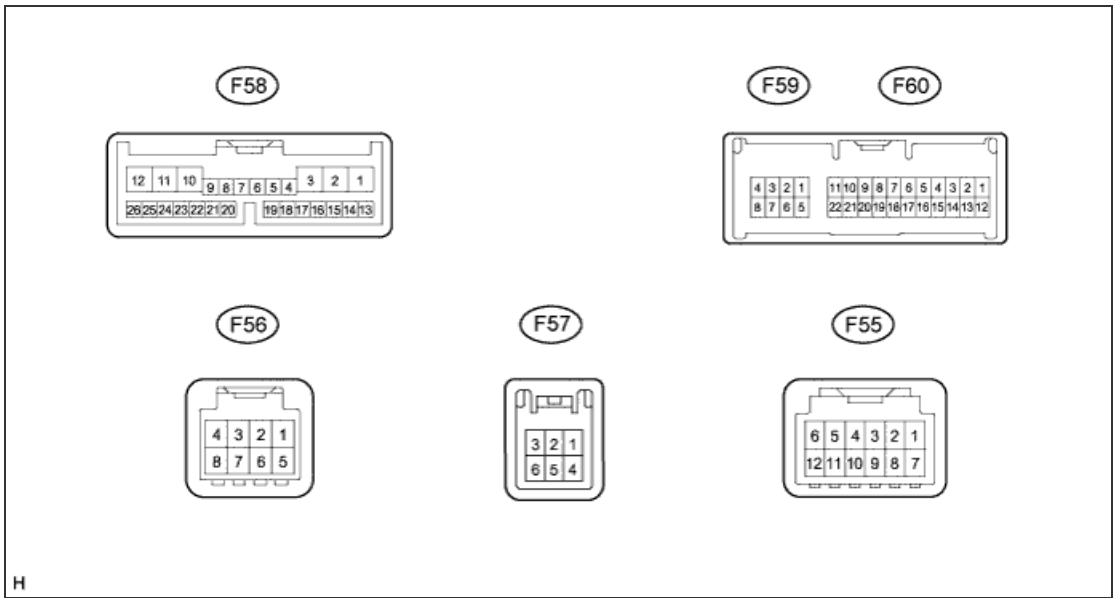
for Preparation Click here

CHECK COMBINATION METER



Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E77-21 (B) - Body ground	R - Body ground	Combination meter +B line	Always	11 to 14 V
E77-30 (IG+) - Body ground	B - Body ground	Combination meter IG line	Engine switch on (IG)	11 to 14 V
E77-26 (ET) - Body ground	BR - Body ground	Ground	Always	Below 1 Ω
E77-39 (WRNP) - Body ground	Y - Body ground	Passenger seat belt signal	Passenger seat is occupied, seat belt is fastened	Below 1 V
			Passenger seat is occupied, seat belt is unfastened	11 to 14 V

CHECK MULTI-DISPLAY

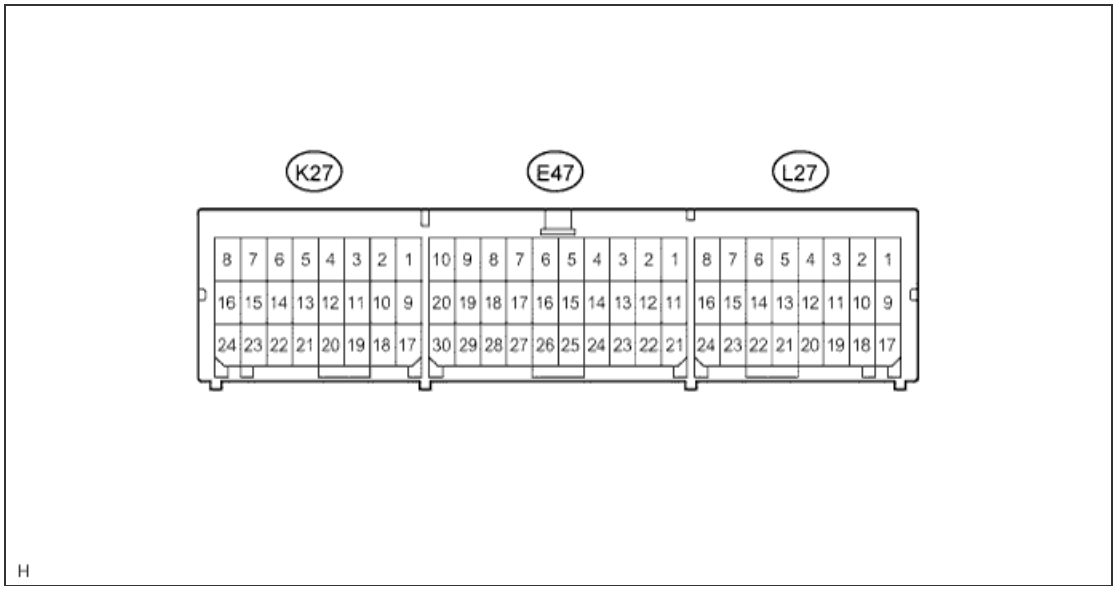


Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
F58-10 (GND1) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
F58-1 (+B1) - Body ground	R - Body ground	Multi-display +B line	Always	11 to 14 V
F58-2 (ACC) - Body ground	GR - Body ground	Multi-display ACC line	Engine switch on (ACC)	11 to 14 V
F58-3 (IG) - Body ground	G - Body ground	Multi-display IG line	Engine switch on (IG)	11 to 14 V
F57-5 (PBEW) - Body ground	Y - Body ground	Passenger seat belt warning signal	Passenger seat is occupied, seat belt is fastened	Below 1 V
			Passenger seat is occupied, seat belt is unfastened	11 to 14 V

CHECK CENTER AIRBAG SENSOR

*1: for LHD

*2: for RHD



Terminal No.	Symbol	Destination
K27-10*1	LBE+	Front seat inner belt LH (Seat belt buckle switch LH)
L27-15*2	RBE+	Front seat inner belt RH (Seat belt buckle switch RH)

for Preparation Click here

READ DATA LIST

HINT:

Using the intelligent tester to read the Data List allows values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Data List.

e. According to the display on the intelligent tester, read the "Data List".

Combination Meter

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
P-Seatbelt Buckle SW	Front passenger side seat belt buckle signal / ON or OFF	ON: Front passenger side seat belt is fastened OFF: Front passenger side seat belt is unfastened	-
D - Side Seatbelt Warning Buzzer	Driver side seat belt warning signal / ON or OFF	Current customize setting displayed ON: Active OFF: Not active	-
P - Seatbelt Warning Buzzer	Front passenger side seat belt warning signal / ON or OFF	Current customize setting displayed ON: Active OFF: Not active	-

SRS Airbag

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Driver side Buckle SW	Driver side seat belt / set or unset	Set: Driver side seat belt is fastened Unset: Driver side seat belt is unfastened	-
Passenger side Buckle SW	Front passenger side seat belt / set or unset	Set: Front passenger side seat belt is fastened Unset: Front passenger side seat belt is unfastened	-

PERFORM ACTIVE TEST

HINT:

Using the intelligent tester to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Combination Meter / Active Test.

e. According to display on the intelligent tester, perform the "Active Test".

Combination Meter

Tester Display	Test Part	Control	Diagnostic Note

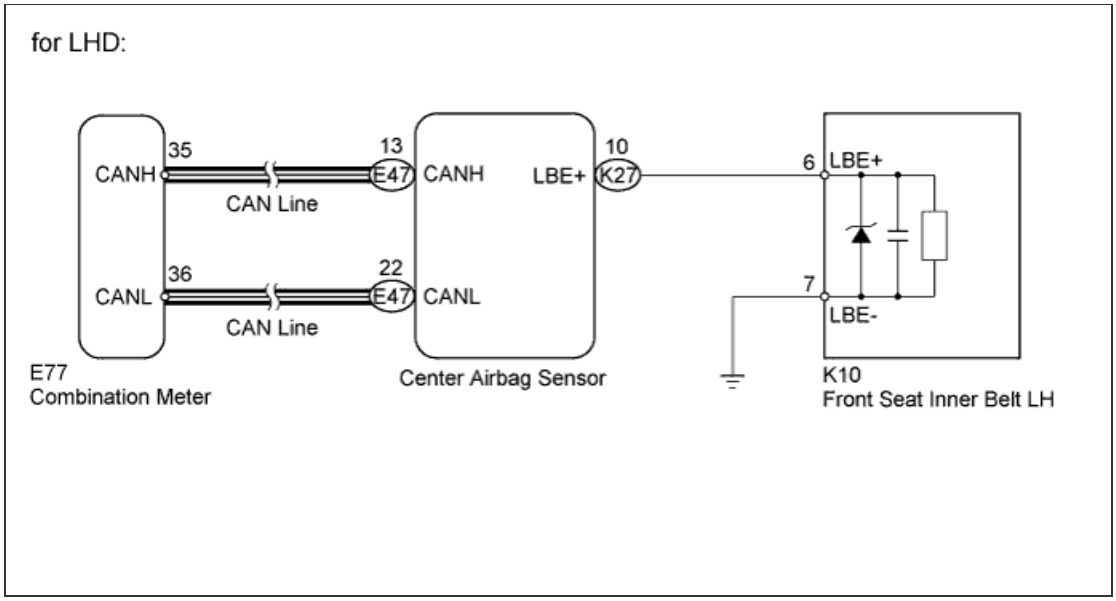
		Range	
Indicat. Lamp D-Seat Belt	Driver side seat belt warning light	ON or OFF	Confirm that the Vehicle is Stopped and Engine Idling
Indicat. Lamp P-Side Seat Belt	Front passenger side seat belt warning light	ON or OFF	Confirm that the Vehicle is Stopped and Engine Idling

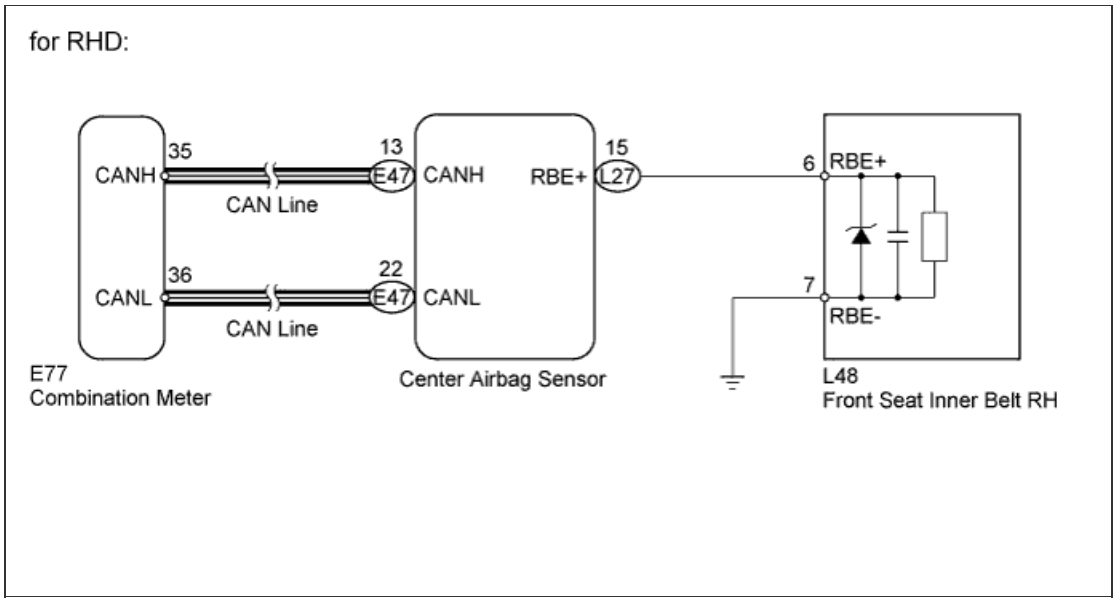
for Preparation Click here

DESCRIPTION

When the engine switch is on (IG), the center airbag sensor transmits front seat inner belt state signals to the combination meter through the CAN. If the driver seat belt is not fastened, the combination meter blinks the driver side seat belt warning light. If the seat belt is fastened, the warning light goes off.

WIRING DIAGRAM





INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs.

Result

Result	Proceed to
DTC is not output	A
CAN system DTC is output (for LHD)	B
CAN system DTC is output (for RHD)	C
Airbag system DTC is output	D

B → Go to CAN COMMUNICATION SYSTEM (Click here)

C → Go to CAN COMMUNICATION SYSTEM (Click here)

D → Go to AIRBAG SYSTEM (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (DRIVER SIDE SEAT BELT WARNING LIGHT)

a. Operate the intelligent tester according to the steps on the display and select "Active Test".

Combination Meter

Item	Test Part	Control Range	Diagnostic Note
Indicat. Lamp D-Seat Belt	Driver side seat belt warning light	ON or OFF	Confirm that the Vehicle is Stopped and Engine Idling

OK:

Driver side seat belt warning light condition can be switched by "Active Test".

NG → REPLACE COMBINATION METER (Click here)

OK

3.REPLACE CENTER AIRBAG SENSOR ASSEMBLY

a. Temporarily replace the center airbag sensor with a new one (Click here).

NEXT

4.CHECK DRIVER SIDE SEAT BELT WARNING LIGHT

a. Check the driver side seat belt warning light function (Click here).

OK:

Driver side seat belt warning light operates normally.

NG → REPLACE COMBINATION METER (Click here)

OK

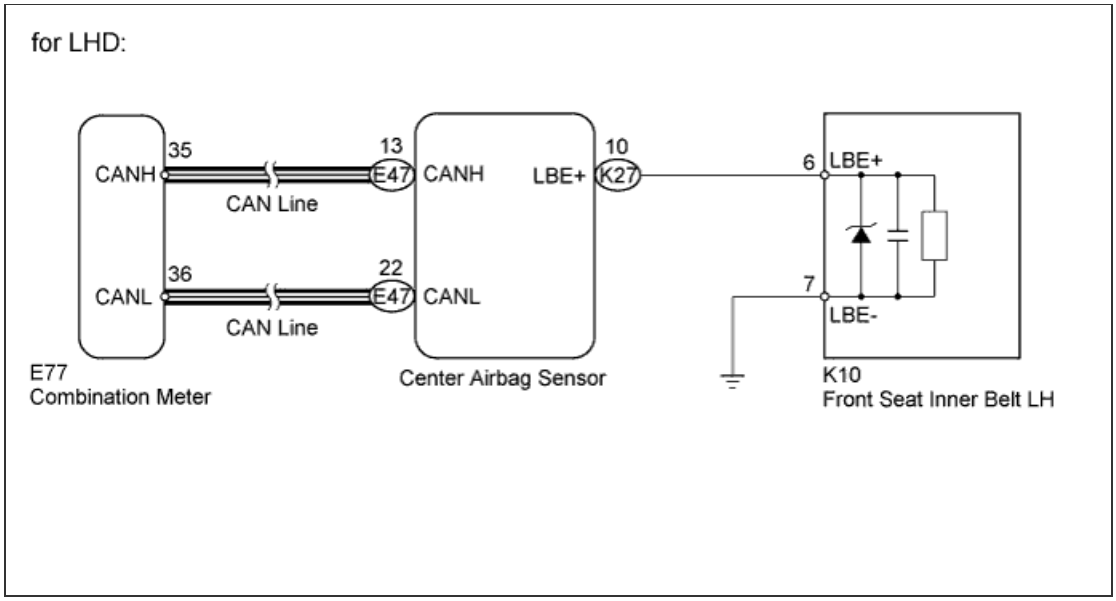
END (CENTER AIRBAG SENSOR IS DEFECTIVE)

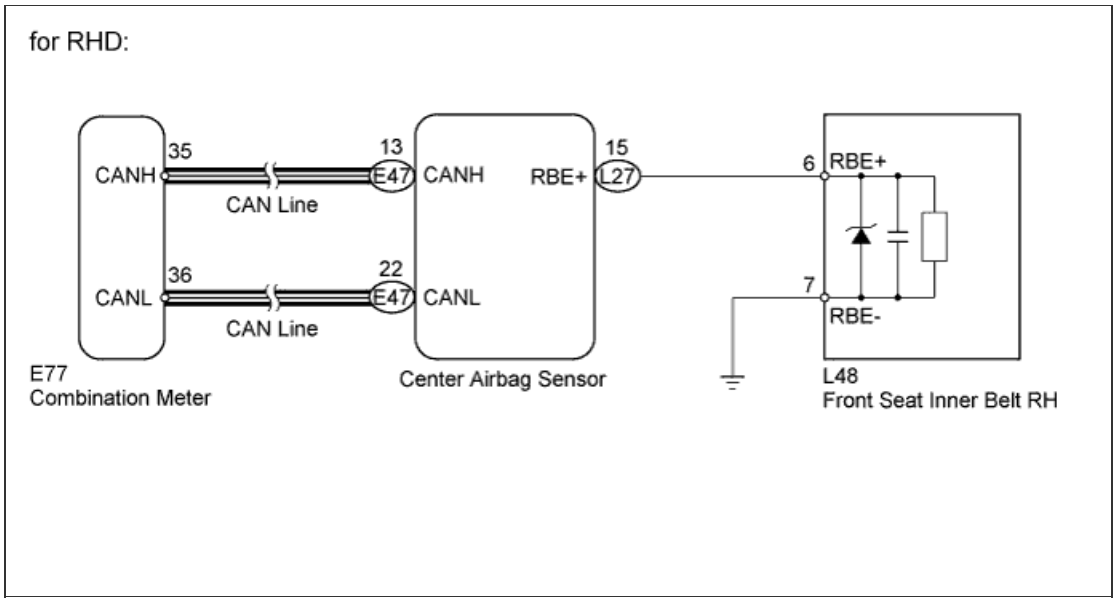
for Preparation Click here

DESCRIPTION

When the engine switch is on (IG), the center airbag sensor transmits front seat inner belt state signals to the combination meter through the CAN. If the driver seat belt is not fastened, the combination meter blinks the driver side seat belt warning light. If the seat belt is fastened, the warning light goes off.

WIRING DIAGRAM





INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs.

Result

Result	Proceed to
DTC is not output	A
CAN system DTC is output (for LHD)	B
CAN system DTC is output (for RHD)	C
Airbag system DTC is output	D

B → Go to CAN COMMUNICATION SYSTEM (Click here)

C → Go to CAN COMMUNICATION SYSTEM (Click here)

D → Go to AIRBAG SYSTEM (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (DRIVER SIDE SEAT BELT WARNING LIGHT)

a. Operate the intelligent tester according to the steps on the display and select "Active Test".

Combination Meter

Item	Test Part	Control Range	Diagnostic Note
Indicat. Lamp D-Seat Belt	Driver side seat belt warning light	ON or OFF	Confirm that the Vehicle is Stopped and Engine Idling

OK:

Driver side seat belt warning light condition can be switched by "Active Test".

NG → REPLACE COMBINATION METER (Click here)

OK

3.REPLACE CENTER AIRBAG SENSOR ASSEMBLY

a. Temporarily replace the center airbag sensor with a new one (Click here).

NEXT

4.CHECK DRIVER SIDE SEAT BELT WARNING LIGHT

a. Check the driver side seat belt warning light function (Click here).

OK:

Driver side seat belt warning light operates normally.

NG → REPLACE COMBINATION METER (Click here)

OK

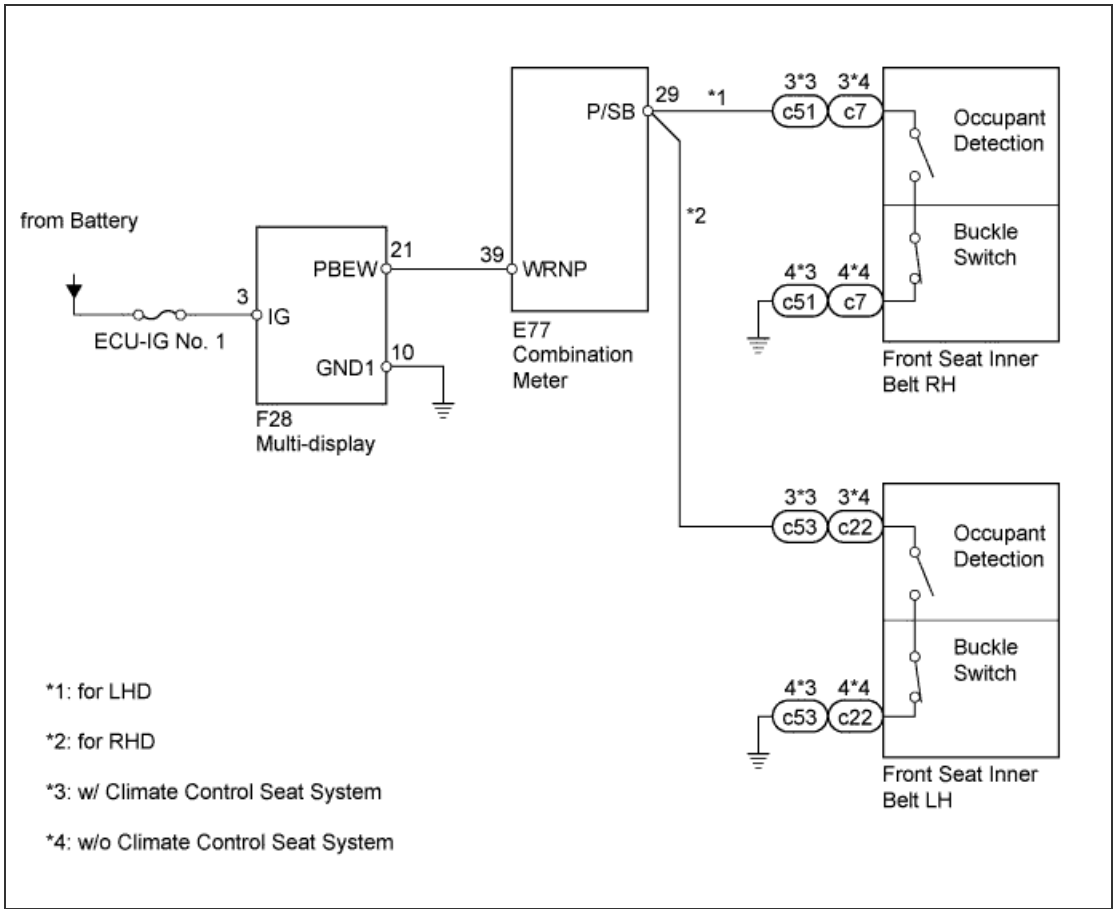
END (CENTER AIRBAG SENSOR IS DEFECTIVE)

for Preparation Click here

DESCRIPTION

The combination meter detects the state of the front seat inner belt RH*1(or LH*2) when the front passenger seat is occupied with the engine switch on (IG). If the front passenger seat belt is not fastened, the front passenger side seat belt warning light on the multi-display blinks. If the seat belt is fastened, the warning light goes off.
*1: for LHD
*2: for RHD

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Check for DTCs.

Result

Result	Proceed to
DTC is not output	A
CAN communication system DTC is output (for LHD)	B
CAN communication system DTC is output (for RHD)	C
Airbag system DTC is output	D

B	Go to CAN COMMUNICATION SYSTEM (Click here)
C	Go to CAN COMMUNICATION SYSTEM (Click here)
D	Go to AIRBAG SYSTEM (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (FRONT PASSENGER SIDE SEAT BELT WARNING LIGHT)

a. Operate the intelligent tester according to the steps on the display and select "Active Test".

Combination Meter

Item	Test Part	Control Range	Diagnostic Note
Indicat. Lamp P-Seat Belt	Front passenger side seat belt warning light	ON or OFF	Confirm that the Vehicle is Stopped and Engine Idling

Result

Result	Proceed to
Front passenger side seat belt warning light condition cannot be switched by "Active Test"	A
Front passenger side seat belt warning light condition can be switched by "Active Test"	B

B → Go to step 6

A

3.INSPECT FUSE (ECU-IG NO. 1)

a. Disconnect the ECU-IG No. 1 fuse from the cowl side junction block LH.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
ECU-IG No. 1 fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

4.CHECK HARNESS AND CONNECTOR (MULTI-DISPLAY - COMBINATION METER, BATTERY AND BODY GROUND)

a. Disconnect the F28 display connector.

b. Disconnect the E77 ECU connector.

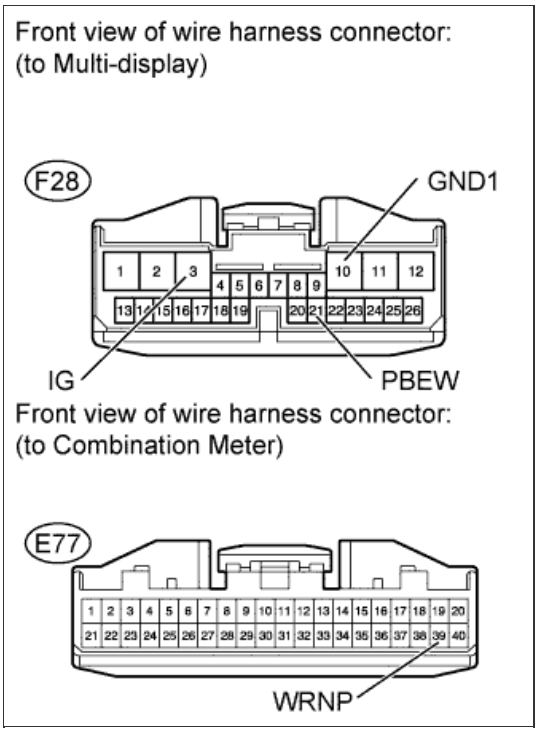
c. Measure the resistance and voltage according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
F28-21 (PBEW) - E77-39 (WRNP)	Always	Below 1 Ω
F28-10 (GND1) - Body ground		
F28-21 (PBEW) - Body ground	Always	10 kΩ or higher

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
F28-3 (IG) - Body ground	Engine switch on (IG)	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

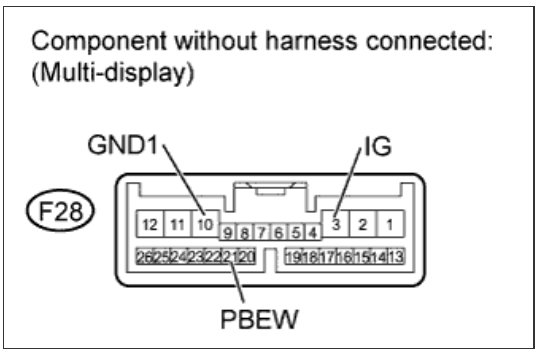
OK

5.CHECK DISPLAY AND NAVIGATION ASSEMBLY (MULTI-DISPLAY)

a. Disconnect the F28 display connector.

b. Connect the positive (+) battery lead to terminal 3 (IG), and the negative battery lead to terminals 21 (PBEW) and 10 (GND1).

c. Check that the front passenger side seat belt warning light comes on.



OK:

Measurement Connection	Specified Condition
Battery positive (+) → F28-3 (IG) Battery negative (-) → F28-21 (PBEW) Battery negative (-) → F28-10 (GND1)	Front passenger side seat belt warning light on

NG → REPLACE DISPLAY AND NAVIGATION ASSEMBLY (Click here)

OK

REPLACE COMBINATION METER (Click here)

6.REPLACE FRONT SEAT INNER BELT ASSEMBLY

a. Temporarily replace the front seat inner belt RH*1 or LH*2 with a new one (Click here).
*1: for LHD
*2: for RHD

NEXT

7.CHECK FRONT PASSENGER SIDE SEAT BELT WARNING LIGHT

a. Check the front passenger side seat belt warning light function (Click here).

OK:

Front passenger side seat belt warning light operates normally.

NG	→	REPLACE COMBINATION METER (Click here)

OK ↓

END (FRONT SEAT INNER BELT IS DEFECTIVE)

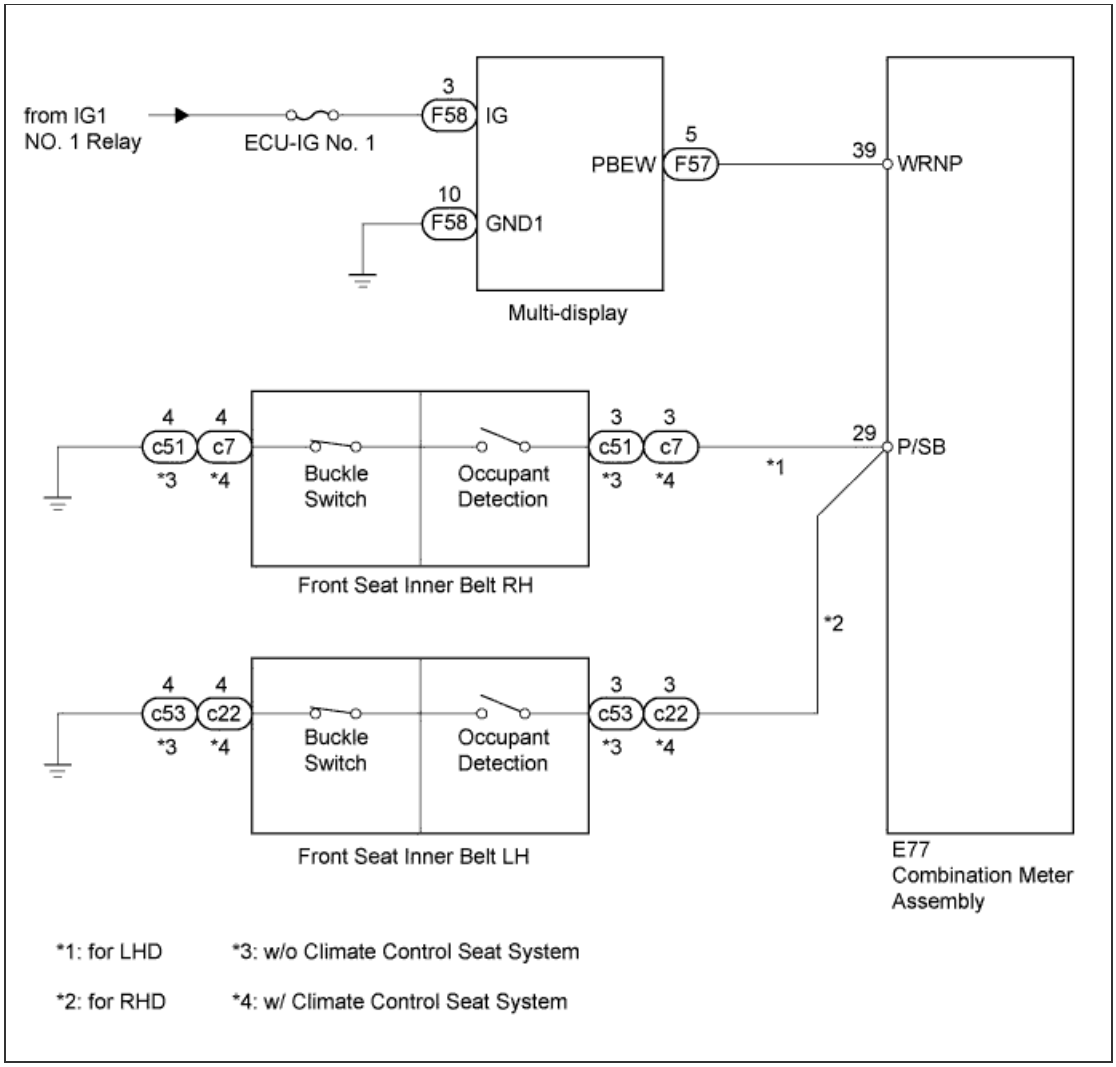
for Preparation Click here

DESCRIPTION

The combination meter detects the state of the front seat inner belt RH*1(or LH*2) when the front passenger seat is occupied with the engine switch on (IG). If the front passenger seat belt is not fastened, the front passenger side seat belt warning light on the multi-display blinks. If the seat belt is fastened, the warning light goes off.

*1: for LHD
*2: for RHD

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

Inspect the fuses for circuits related to this system before performing the following inspection procedure.

1.CHECK FOR DTC

a. Check for DTCs.

Result

Result	Proceed to
DTC is not output	A
CAN communication system DTC is output (for LHD)	B
CAN communication system DTC is output (for	

RHD)	C
Airbag system DTC is output	D

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

D → GO TO AIRBAG SYSTEM (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (FRONT PASSENGER SIDE SEAT BELT WARNING LIGHT)

a. Operate the intelligent tester according to the steps on the display and select "Active Test".

Combination Meter

Item	Test Part	Control Range	Diagnostic Note
Indicat. Lamp P-Seat Belt	Front passenger side seat belt warning light	ON or OFF	Confirm that the Vehicle is Stopped and Engine Idling

Result

Result	Proceed to
Front passenger side seat belt warning light condition cannot be switched by "Active Test"	A
Front passenger side seat belt warning light condition can be switched by "Active Test"	B

B → Go to step 5

A

3.CHECK HARNESS AND CONNECTOR (MULTI-DISPLAY - COMBINATION METER, BATTERY AND BODY GROUND)

a. Disconnect the F57 and F58 multi-display connectors.

b. Disconnect the E77 combination meter assembly connector.

c. Measure the resistance and voltage according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
F57-5 (PBEW) - E77-39 (WRNP)	Always	Below 1 Ω
F58-10 (GND1) - Body ground	Always	Below 1 Ω
F57-5 (PBEW) - Body ground	Always	10 kΩ or higher

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
F58-3 (IG) - Body ground	Engine switch on (IG)	11 to 14 V

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK DISPLAY AND NAVIGATION MODULE DISPLAY (MULTI-DISPLAY)

a. Disconnect the F57 and F58 multi-display connectors.

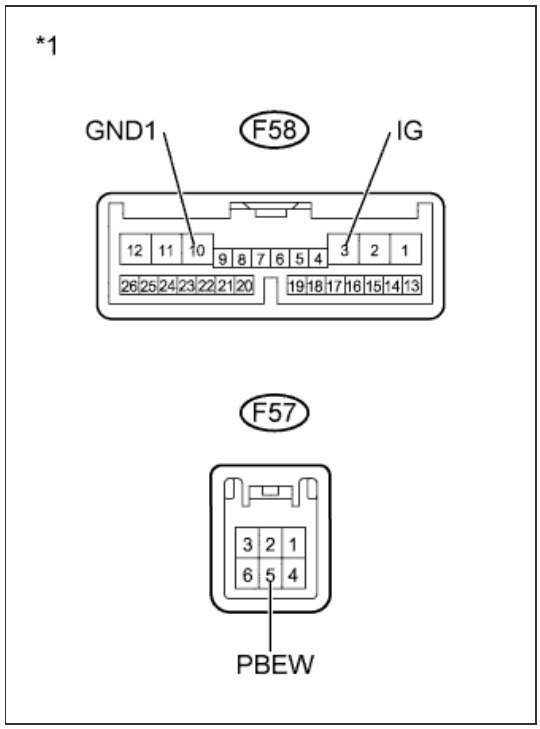
b. Apply battery voltage to the terminals and check that the front passenger seat belt warning light illuminates.

OK:

Measurement Connection	Specified Condition
Positive battery → F58-3 (IG) Negative battery → F57-5 (PBEW) Negative battery → F58-10 (GND1)	Front passenger seat belt warning light Illuminates

Text in Illustration

*1	Component without harness connected (Multi-display)



NG → REPLACE DISPLAY AND NAVIGATION MODULE DISPLAY (MULTI-DISPLAY) (**Click here**)

OK → REPLACE COMBINATION METER ASSEMBLY (**Click here**)

5.REPLACE FRONT SEAT INNER BELT ASSEMBLY

a. Temporarily replace the front seat inner belt RH*1 or LH*2 with a new one (Click here).

*1: for LHD
*2: for RHD

NEXT

6.CHECK FRONT PASSENGER SIDE SEAT BELT WARNING LIGHT

a. Check the front passenger side seat belt warning light function (Click here).

OK:
Front passenger side seat belt warning light operates normally.

NG → REPLACE COMBINATION METER ASSEMBLY (**Click here**)

OK → END (FRONT SEAT INNER BELT IS DEFECTIVE)

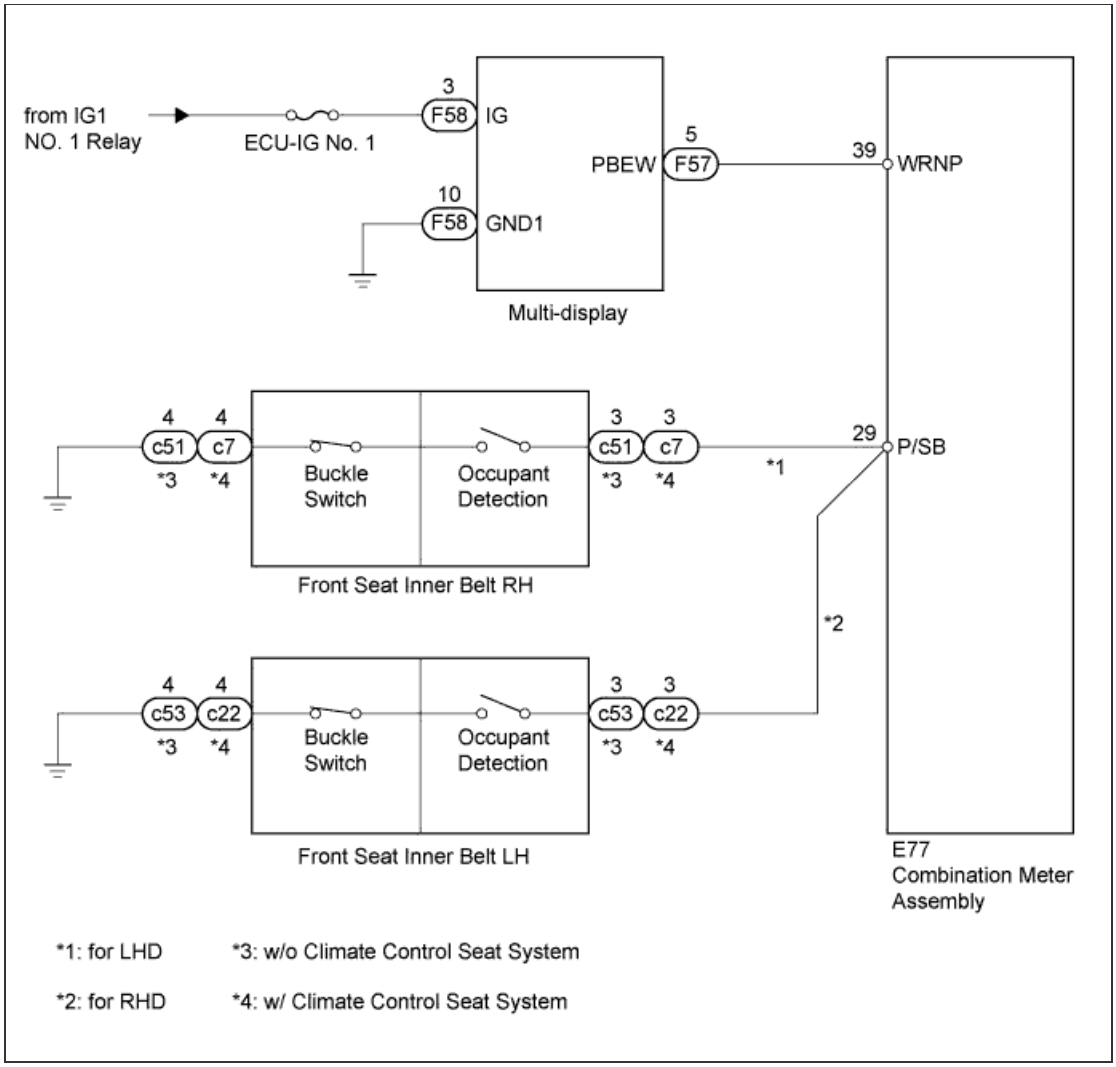
for Preparation Click here

DESCRIPTION

The combination meter detects the state of the front seat inner belt RH*1(or LH*2) when the front passenger seat is occupied with the engine switch on (IG). If the front passenger seat belt is not fastened, the front passenger side seat belt warning light on the multi-display blinks. If the seat belt is fastened, the warning light goes off.

*1: for LHD
*2: for RHD

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

Inspect the fuses for circuits related to this system before performing the following inspection procedure.

1.CHECK FOR DTC

a. Check for DTCs.

Result

Result	Proceed to
DTC is not output	A
CAN communication system DTC is output (for LHD)	B
CAN communication system DTC is output (for	

RHD)	C
Airbag system DTC is output	D

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

D → GO TO AIRBAG SYSTEM (Click here)

A

2.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (FRONT PASSENGER SIDE SEAT BELT WARNING LIGHT)

a. Operate the intelligent tester according to the steps on the display and select "Active Test".

Combination Meter

Item	Test Part	Control Range	Diagnostic Note
Indicat. Lamp P-Seat Belt	Front passenger side seat belt warning light	ON or OFF	Confirm that the Vehicle is Stopped and Engine Idling

Result

Result	Proceed to
Front passenger side seat belt warning light condition cannot be switched by "Active Test"	A
Front passenger side seat belt warning light condition can be switched by "Active Test"	B

B → Go to step 5

A

3.CHECK HARNESS AND CONNECTOR (MULTI-DISPLAY - COMBINATION METER, BATTERY AND BODY GROUND)

a. Disconnect the F57 and F58 multi-display connectors.

b. Disconnect the E77 combination meter assembly connector.

c. Measure the resistance and voltage according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
F57-5 (PBEW) - E77-39 (WRNP)	Always	Below 1 Ω
F58-10 (GND1) - Body ground	Always	Below 1 Ω
F57-5 (PBEW) - Body ground	Always	10 kΩ or higher

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
F58-3 (IG) - Body ground	Engine switch on (IG)	11 to 14 V

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK DISPLAY AND NAVIGATION MODULE DISPLAY (MULTI-DISPLAY)

a. Disconnect the F57 and F58 multi-display connectors.

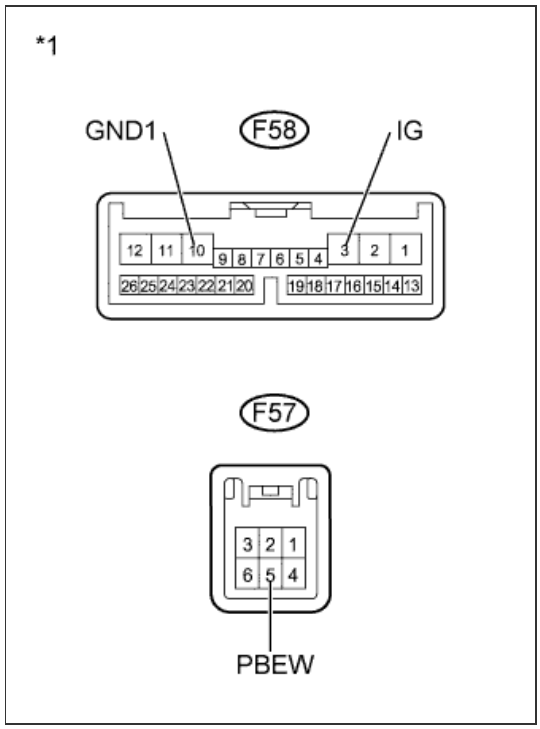
b. Apply battery voltage to the terminals and check that the front passenger seat belt warning light illuminates.

OK:

Measurement Connection	Specified Condition
Positive battery → F58-3 (IG) Negative battery → F57-5 (PBEW) Negative battery → F58-10 (GND1)	Front passenger seat belt warning light Illuminates

Text in Illustration

*1	Component without harness connected (Multi-display)



NG → REPLACE DISPLAY AND NAVIGATION MODULE DISPLAY (MULTI-DISPLAY) (**Click here**)

OK → REPLACE COMBINATION METER ASSEMBLY (**Click here**)

5.REPLACE FRONT SEAT INNER BELT ASSEMBLY

a. Temporarily replace the front seat inner belt RH*1 or LH*2 with a new one (Click here).

*1: for LHD
*2: for RHD

NEXT

6.CHECK FRONT PASSENGER SIDE SEAT BELT WARNING LIGHT

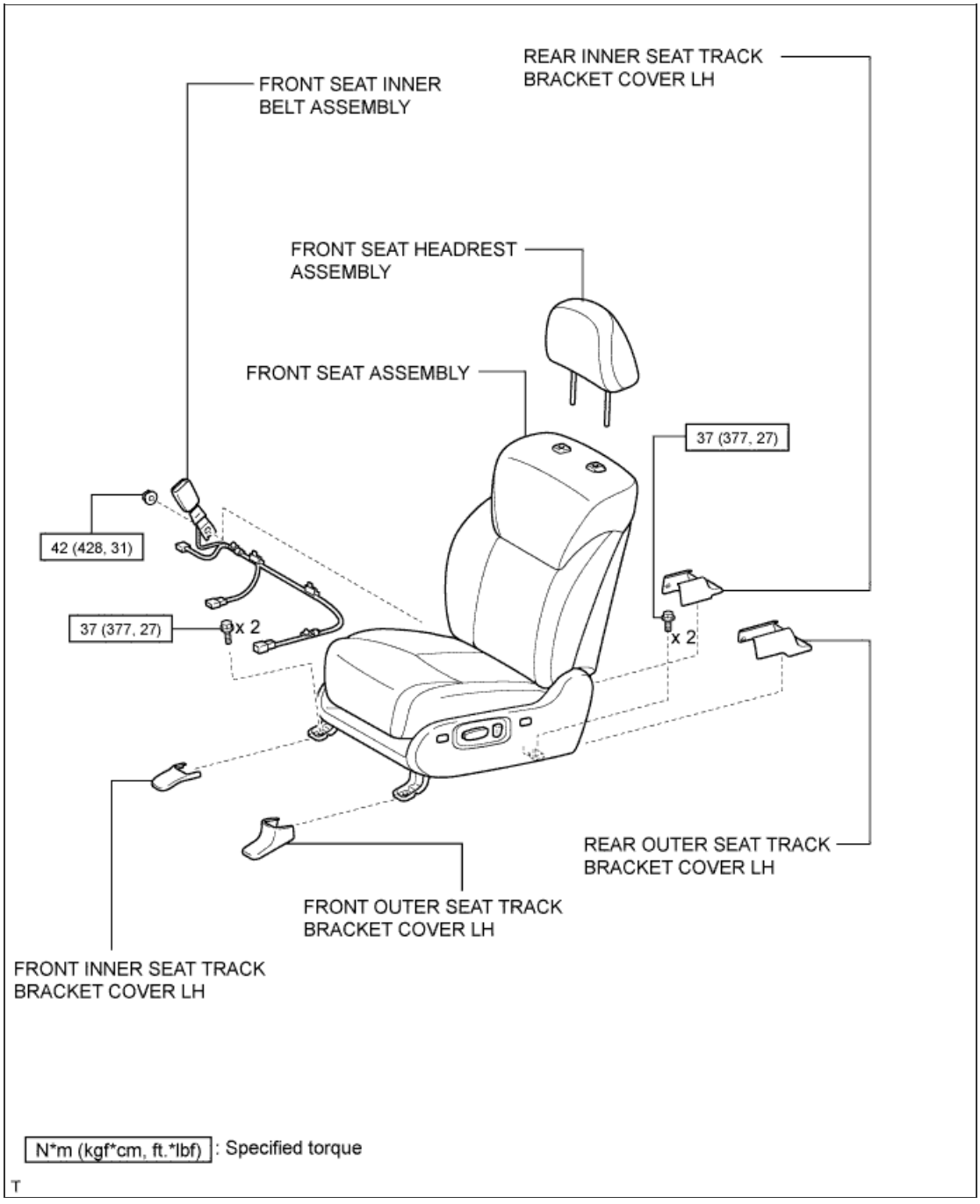
a. Check the front passenger side seat belt warning light function (Click here).

OK:
Front passenger side seat belt warning light operates normally.

NG → REPLACE COMBINATION METER ASSEMBLY (**Click here**)

OK → END (FRONT SEAT INNER BELT IS DEFECTIVE)

for Preparation Click here



for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

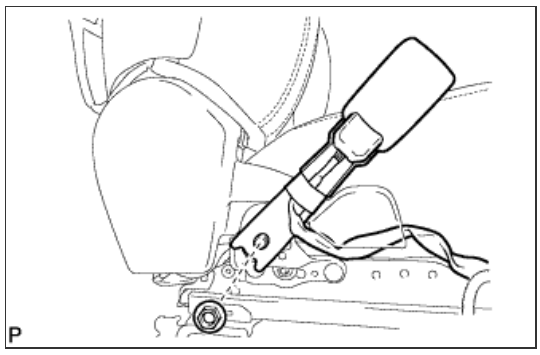
2. REMOVE FRONT SEAT ASSEMBLY

a. Remove the front seat assembly (Click here).

3. REMOVE FRONT SEAT INNER BELT ASSEMBLY

a. Disconnect the 3 connectors and detach the clamps.

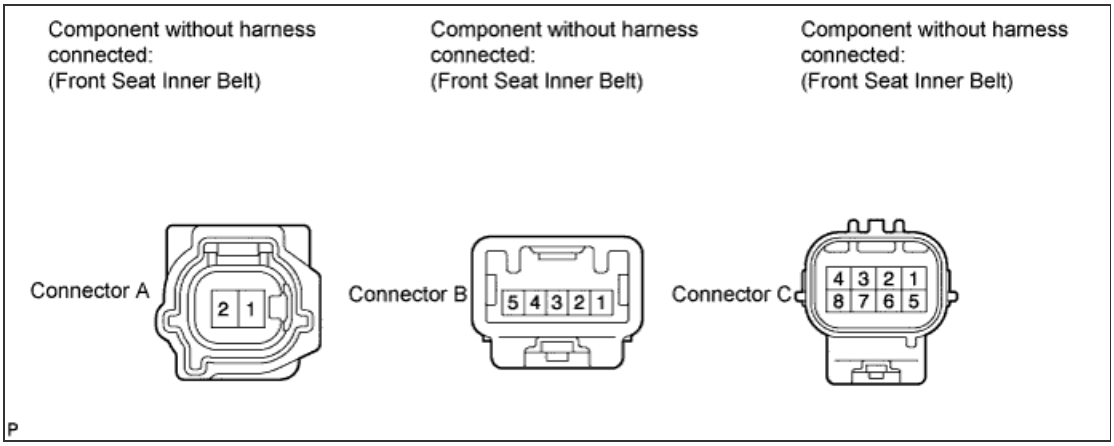
b. Remove the nut and front seat inner belt assembly.



for Preparation Click here

1. INSPECT FRONT SEAT INNER BELT ASSEMBLY (for Driver Side)

a. Check the buckle switch.



i. Measure the resistance according to the value(s) in the table below.

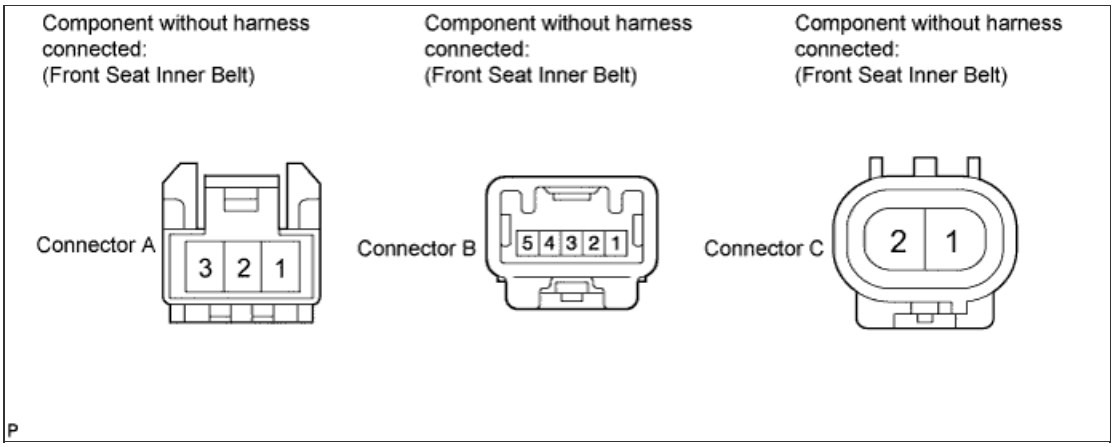
Standard Resistance:

Tester Connection	Condition	Specified Condition
B-4 - B-5	Seat belt fastened (Buckle switch on)	Below 1 Ω
	Seat belt unfastened (Buckle switch off)	1 MΩ or higher
A-1 - C-4	Always	Below 1 Ω
A-2 - C-8	Always	Below 1 Ω

If the result is not as specified, replace the inner belt assembly.

2. INSPECT FRONT SEAT INNER BELT ASSEMBLY (for Front Passenger Side)

a. Check the buckle switch.



i. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
B-4 - B-5	Seat belt fastened (Buckle switch on)	Below 1 Ω
	Seat belt unfastened (Buckle switch off)	1 MΩ or higher
A-1 - B-4	Seat belt fastened (Buckle switch on)	1 MΩ or higher
	Seat belt unfastened (Buckle switch off)	Below 1 Ω
A-1 - B-4	Always	Below 1 Ω
A-3 - B-3	Always	Below 1 Ω

If the result is not as specified, replace the inner belt assembly.

for Preparation Click here

1. INSTALL FRONT SEAT INNER BELT ASSEMBLY

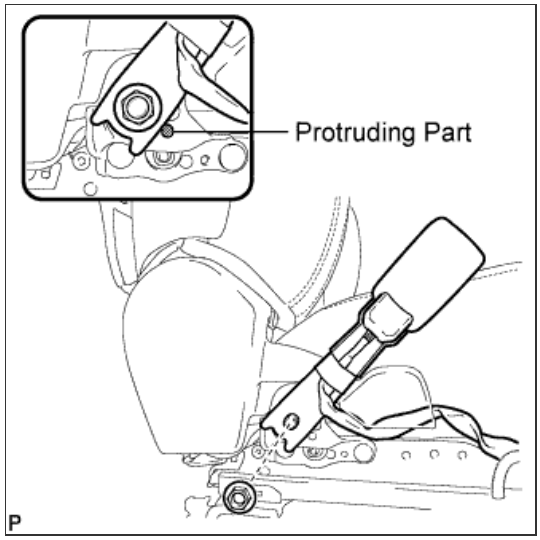
a. Install the front seat inner belt assembly with the nut.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not allow the anchor part of the front seat inner belt assembly to overlap the protruding part of the front seat adjuster.

b. Connect the 3 connectors and attach the clamps.



2. INSTALL FRONT SEAT ASSEMBLY

a. Install the front seat assembly (Click here).

3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

4. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

5. INSPECT FRONT SEAT ASSEMBLY

a. Check the power seat operation (Click here).

b. w/ Seat Heater System:
Check the seat heater operation.

i. Turn the engine switch on (IG).

ii. Turn the seat heater switch on.

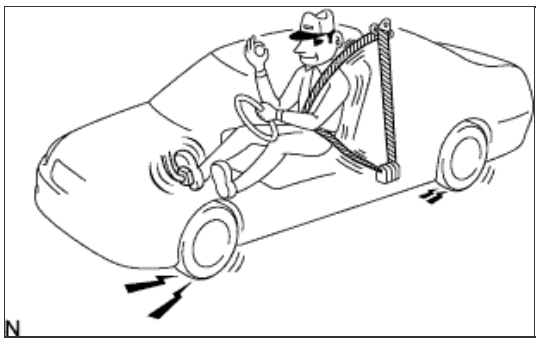
iii. Wait 5 minutes or more and confirm that the seat surface becomes warm.

c. w/ Climate Control Seat System:
Check the climate seat operation (Click here).

for Preparation Click here

CAUTION:

Replace the faulty parts of the seat belt systems (outer belt, inner belt, bolts, nuts, adjustable shoulder anchor, tether anchor hardware and other related parts). When inspecting a vehicle that was in a collision, be sure to check all of the seat belt systems regardless of whether or not the system was activated in the collision. Replace any damaged or malfunctioning systems.



1.RUNNING TEST (IN SAFE AREA)

CAUTION:

Conduct this test in a safe area.

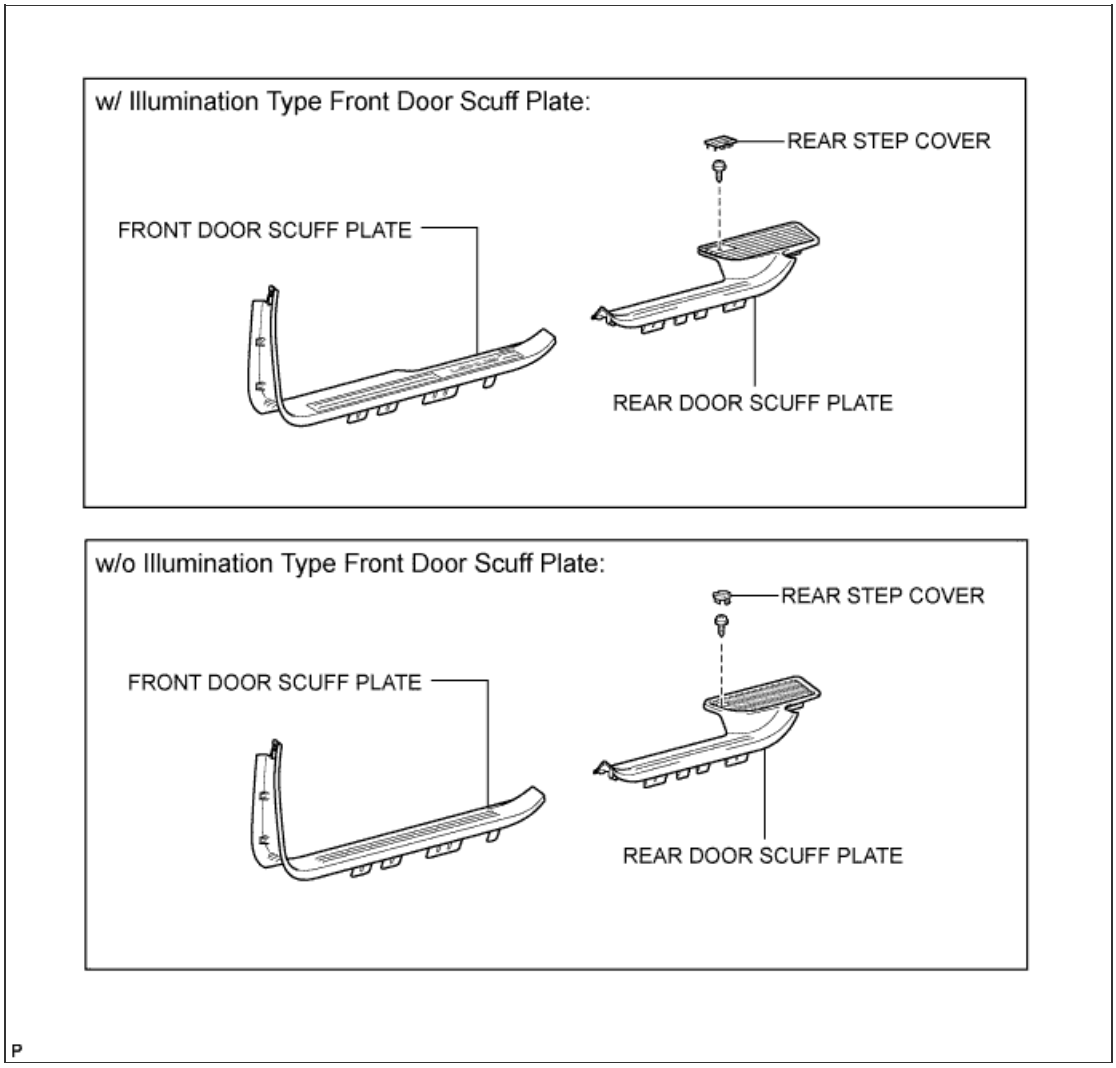
a. Fasten the front seat belt.

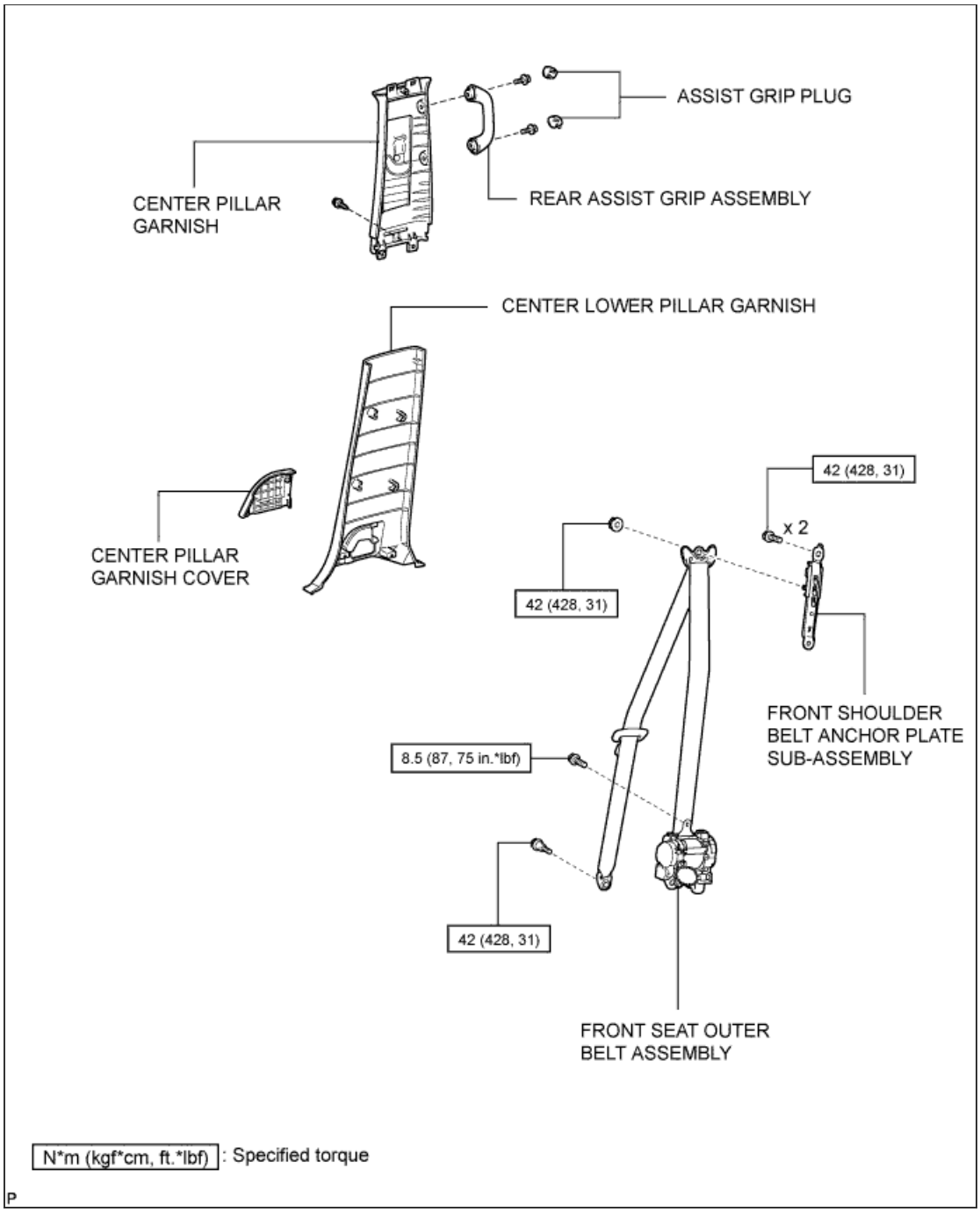
b. Drive the vehicle at 16 km/h (10 mph) and firmly depress the brakes. Check that the belts lock and cannot be extended at this time. If a belt does not lock, replace the seat belt assembly (Click here).

HINT:

Inspect a seat belt assembly before installing it (Click here).

for Preparation Click here




ASSIST GRIP PLUG
CENTER PILLAR GARNISH
REAR ASSIST GRIP ASSEMBLY
CENTER LOWER PILLAR GARNISH
CENTER PILLAR GARNISH COVER
42 (428, 31)
x 2
42 (428, 31)
FRONT SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY
8.5 (87, 75 in.*lbf)
42 (428, 31)
FRONT SEAT OUTER BELT ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
P

for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

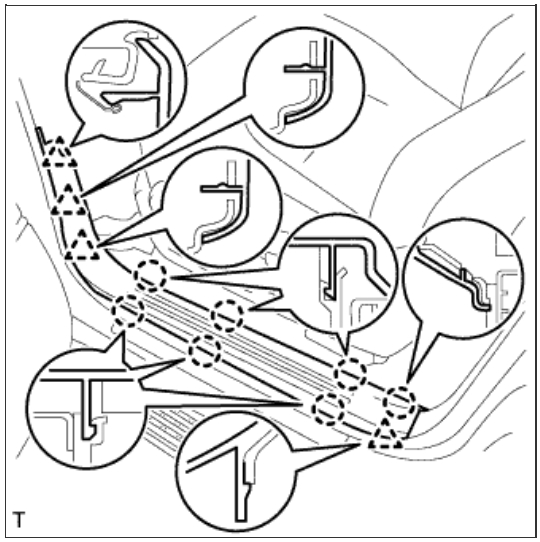
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

2. REMOVE FRONT DOOR SCUFF PLATE

a. w/o Illumination:

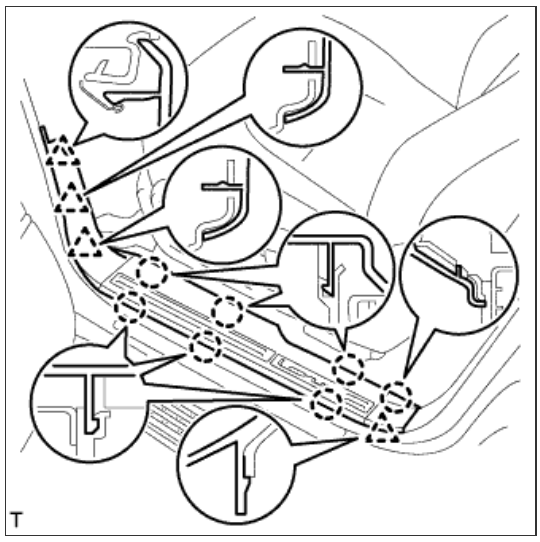
i. Detach the 7 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination:

i. Detach the 7 claws and 4 clips.

ii. Disconnect the connector and remove the scuff plate.

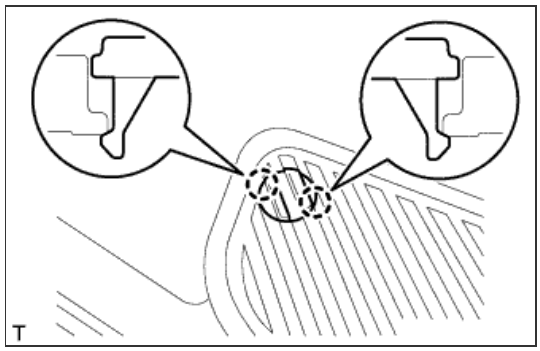


3. REMOVE REAR STEP COVER

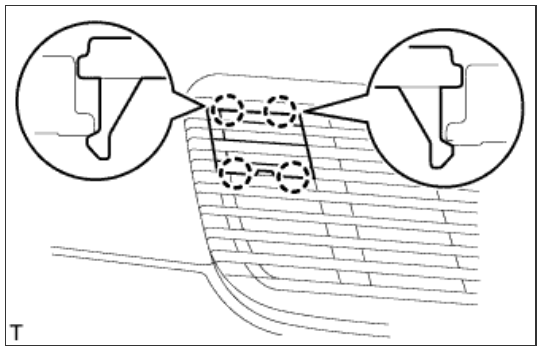
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

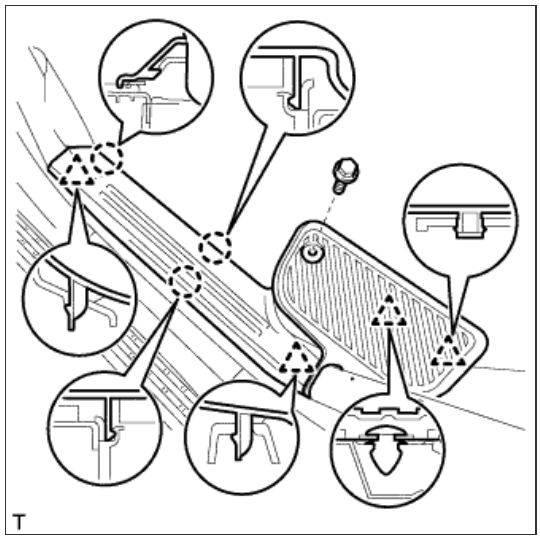


4. REMOVE REAR DOOR SCUFF PLATE

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

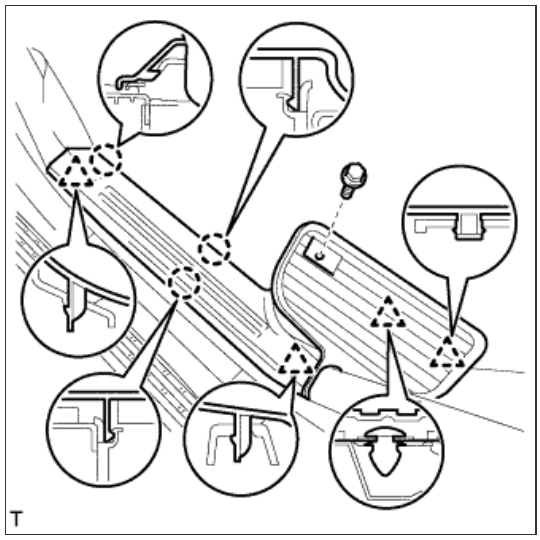
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.

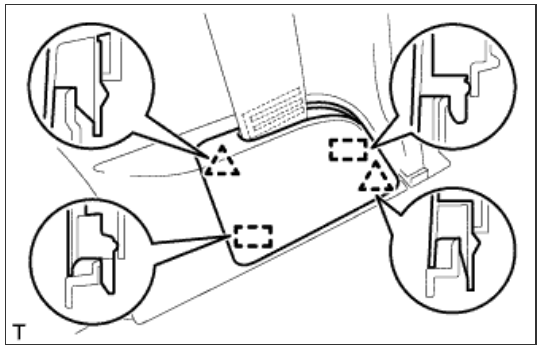


5. REMOVE CENTER PILLAR GARNISH COVER

HINT:

- **When removing the center pillar garnish cover, connect the cable to the negative (-) battery terminal and operate the power seat switch to move the front seat and seatback to the foremost upright position.**
- **After moving the front seat, disconnect the cable from the negative (-) battery terminal.**

a. Detach the 2 clips and 2 guides, and remove the cover.

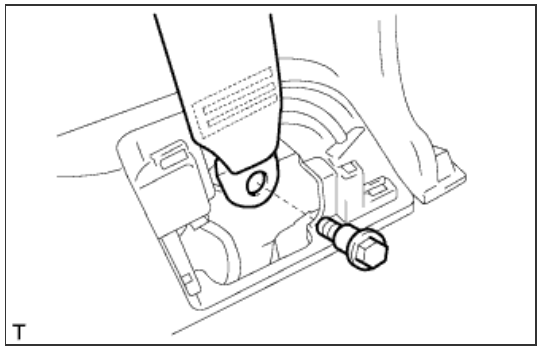


6. REMOVE CENTER LOWER PILLAR GARNISH

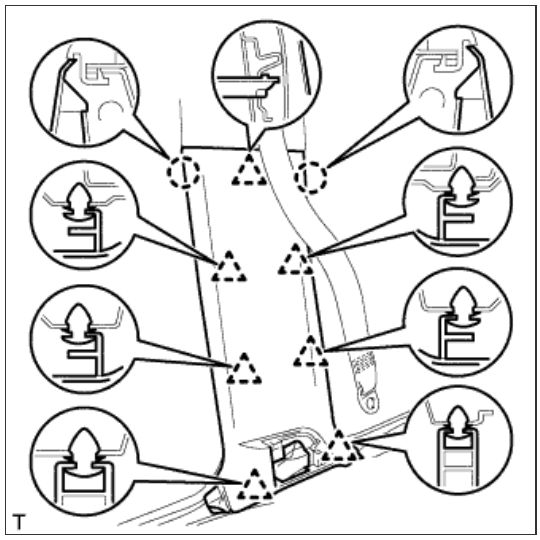
HINT:

- **When removing the center pillar garnish cover, connect the cable to the negative (-) battery terminal and operate the power seat switch to move the front seat and seatback to the foremost upright position.**
- **After moving the front seat, disconnect the cable from the negative (-) battery terminal.**

a. Remove the bolt and seat belt anchor.



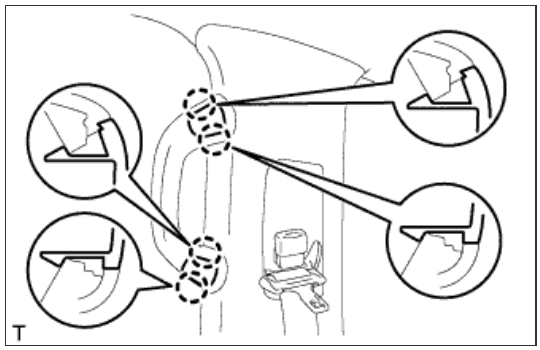
b. Detach the 2 claws and 7 clips, and remove the center lower pillar garnish.



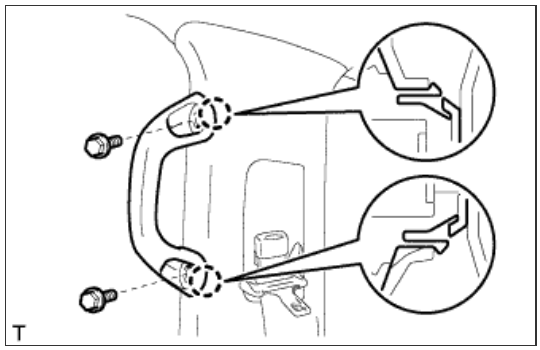
7. REMOVE REAR ASSIST GRIP ASSEMBLY

HINT:

Use the same procedure to remove the rear assist grip on the other side.



a. Detach the 4 claws and remove the 2 assist grip plugs.



b. Remove the 2 bolts.

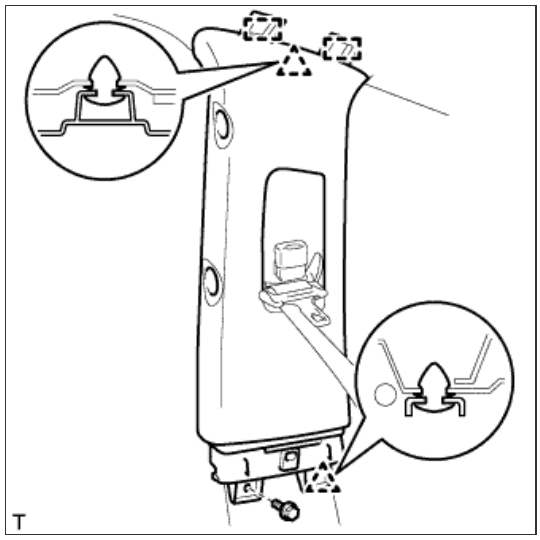
c. Detach the 2 claws and remove the rear assist grip.

8. REMOVE CENTER PILLAR GARNISH

a. Remove the bolt.

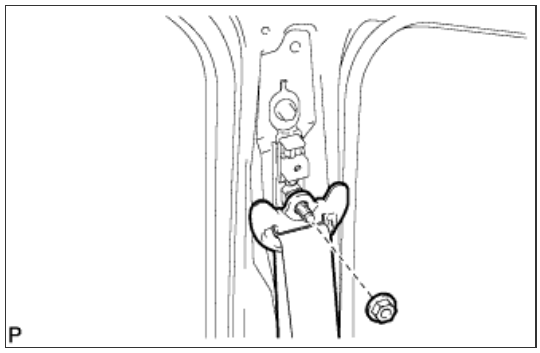
b. Detach the 2 clips and 2 guides.

c. Pass the seat belt anchor through the center pillar garnish, and remove the center pillar garnish.



9. REMOVE FRONT SEAT OUTER BELT ASSEMBLY

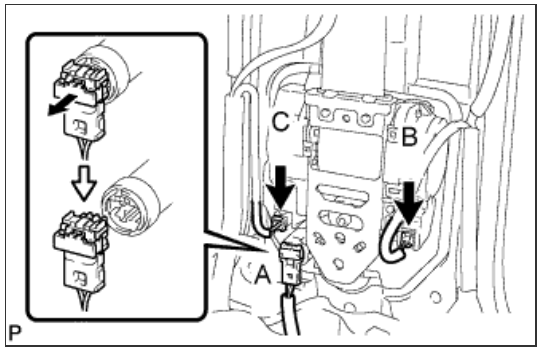
a. Remove the nut and shoulder anchor.



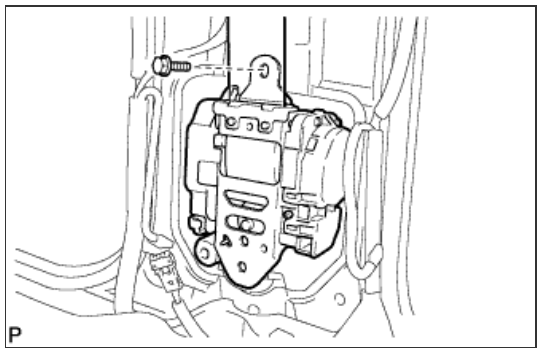
b. Disconnect the pretensioner connector labeled A as shown in the illustration.

c. Disconnect the tension reducer connector labeled B.

d. w/ Pre-Crash Safety System:
Disconnect the pre-crash safety system connector labeled C.

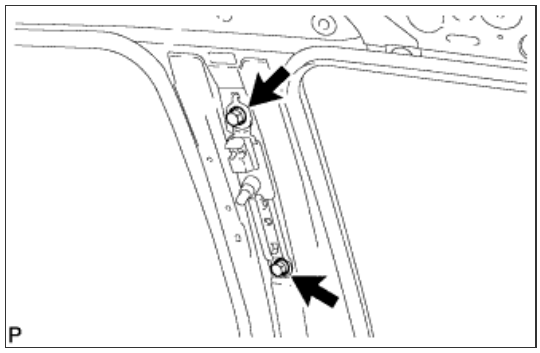


e. Remove the bolt and seat belt.



10. REMOVE FRONT SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY

a. Remove the 2 bolts and anchor plate.


P

for Preparation Click here

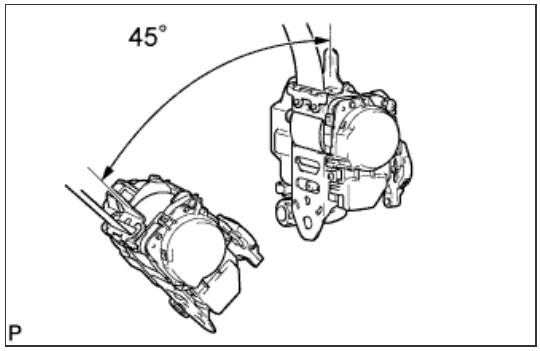
1. INSPECT FRONT SEAT OUTER BELT ASSEMBLY

CAUTION:

Do not disassemble the retractor.

a. Before installing the seat belt, check the ELR.

i. When the inclination of the retractor is 15° or less, check that the belt can be pulled from the retractor. When the inclination of the retractor is over 45°, check that the belt locks. If the operation is not as specified, replace the seat belt assembly.



b. Check the tension reducer operation.

CAUTION:

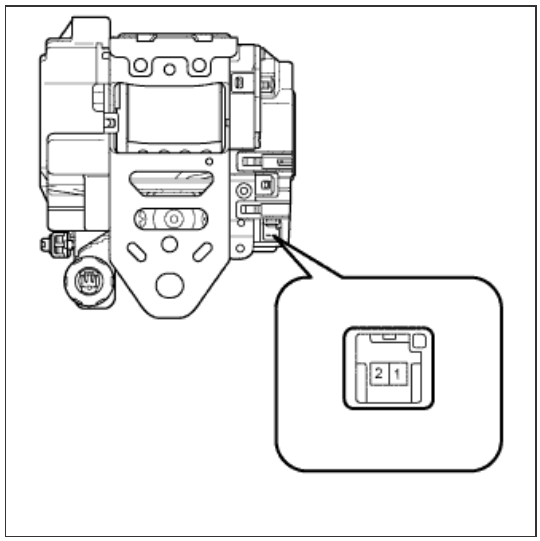
Do not apply battery voltage to the pretensioner connector.

i. Connect the battery positive (+) lead to terminal 1 (IG) and the negative (-) lead to terminal 2 (L) of the tension reducer connector.

ii. Check that an operating sound is heard when the magnetized solenoid is attracting the plunger.

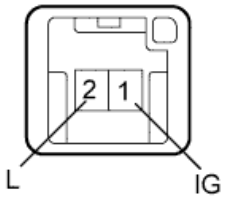
iii. Pull out the seat belt and let it retract. Listen to the operating sound.

iv. Pull out the seat belt again, disconnect the battery negative (-) lead and let it retract. Listen to the operating sound again and check that the operating sound volume has increased.
If the result is not as specified, replace the outer belt assembly.



Component without harness connected:
(Front Seat Outer Belt)

Tension Reducer Connector



Pretensioner Connector*



*: Do not apply battery voltage

o

for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**
- **A bolt without a torque specification is shown in the standard bolt chart (Click here).**

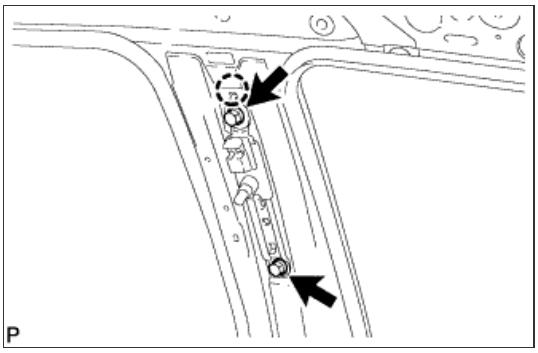
1. INSTALL FRONT SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY

a. Align the anchor plate positioning hole with the claw, and install the anchor plate with the 2 bolts.

HINT:

First install the lower bolt, and then install the upper bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



2. INSTALL FRONT SEAT OUTER BELT ASSEMBLY

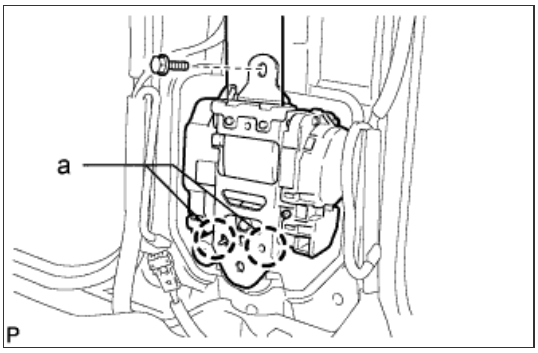
NOTICE:

When installing the retractor, make sure the claws of the vehicle (labeled "a" in the illustration) only contact the installation areas of the retractor.

a. Align the claws of the vehicle with the seat belt retractor positioning holes.

b. Install the seat belt with the bolt.

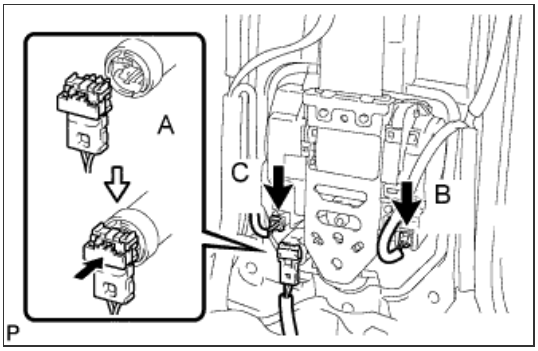
Torque:
8.5 N*m{ 87 kgf*cm , 75 in.*lbf }



c. Connect the pretensioner connector labeled A as shown in the illustration.

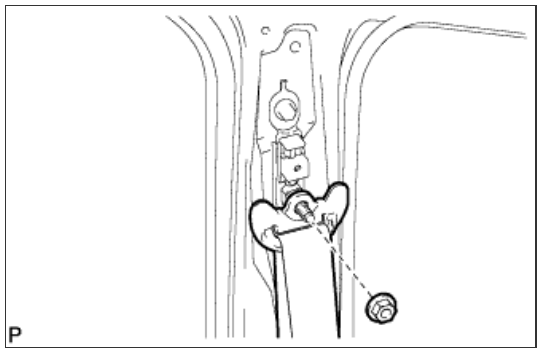
d. Connect the tension reducer connector labeled B.

e. w/ Pre-Crash Safety System:
Connect the pre-crash safety system connector labeled C.



f. Install the shoulder anchor to the shoulder belt anchor adjuster with the nut.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

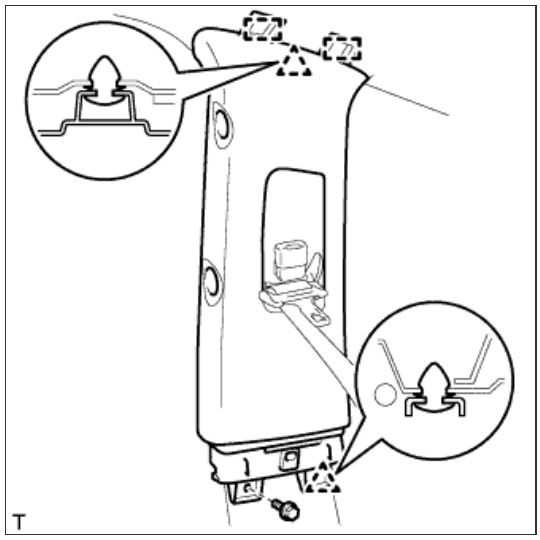


3. INSTALL CENTER PILLAR GARNISH

a. Pass the seat belt anchor through the center pillar garnish.

b. Attach the 2 clips and 2 guides to install the center pillar garnish.

c. Install the bolt.



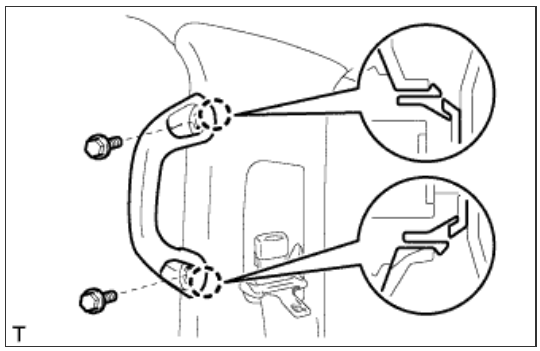
4. INSTALL REAR ASSIST GRIP ASSEMBLY

HINT:

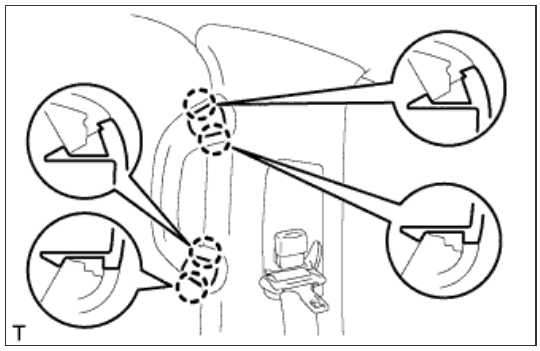
Use the same procedure to install the rear assist grip on the other side.

a. Attach the 2 claws to install the rear assist grip.

b. Install the 2 bolts.



c. Attach the 4 claws to install the 2 assist grip plugs.

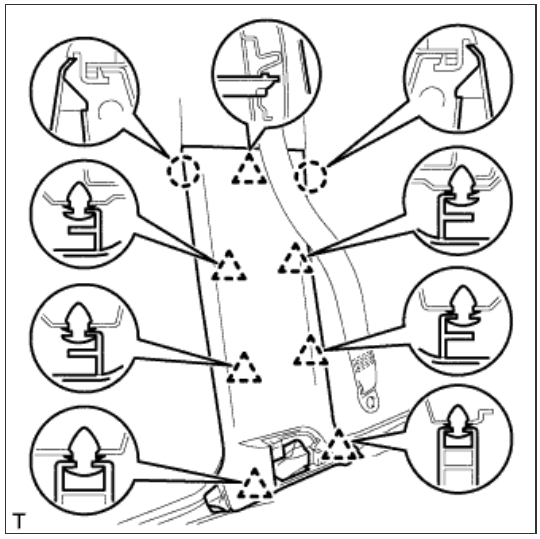


5. INSTALL CENTER LOWER PILLAR GARNISH

HINT:

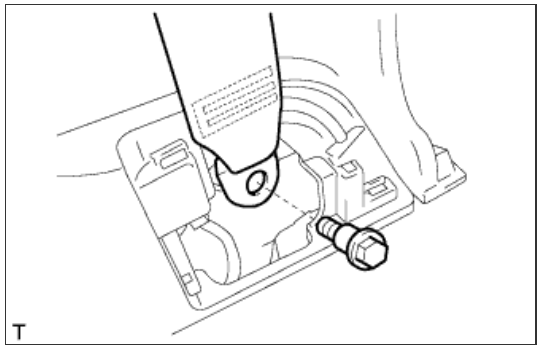
- **When installing the center lower pillar garnish, connect the cable to the negative (-) battery terminal and operate the power seat switch to move the front seat and seatback to the foremost upright position.**
- **After moving the front seat, disconnect the cable from the negative (-) battery terminal.**

a. Attach the 2 claws and 7 clips to install the center lower pillar garnish.



b. Install the seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

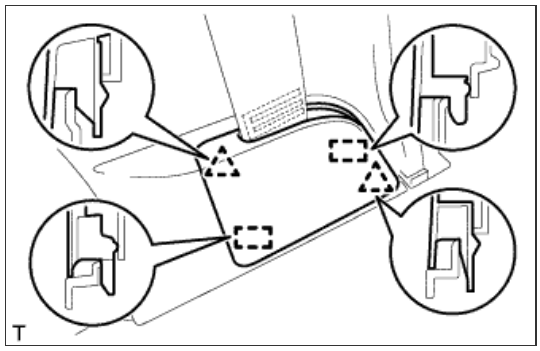


6. INSTALL CENTER PILLAR GARNISH COVER

HINT:

- **When installing the center pillar garnish cover, connect the cable to the negative (-) battery terminal and operate the power seat switch to move the front seat and seatback to the foremost upright position.**
- **After moving the front seat, disconnect the cable from the negative (-) battery terminal.**

a. Attach the 2 clips and 2 guides to install the cover.

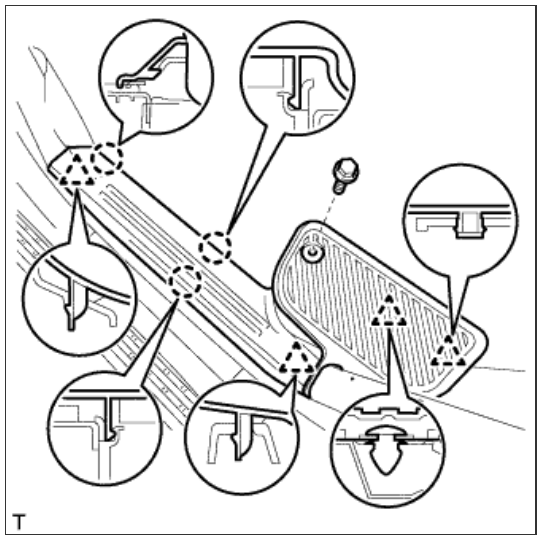


7. INSTALL REAR DOOR SCUFF PLATE

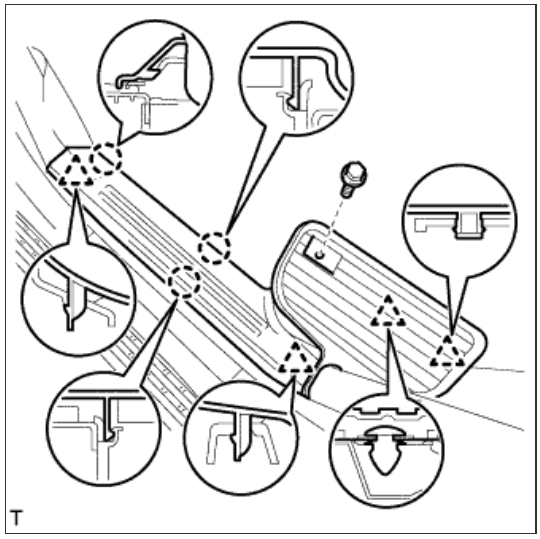
a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:



i. Attach the 3 claws and 4 clips to install the scuff plate.

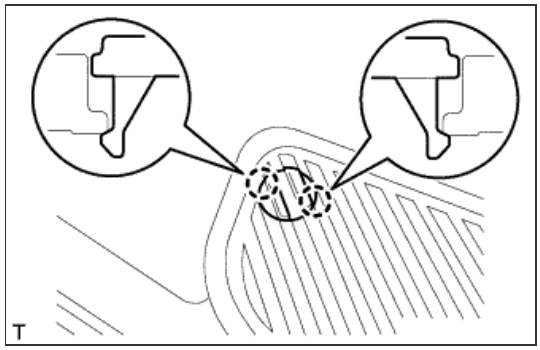
ii. Install the screw.

8. INSTALL REAR STEP COVER

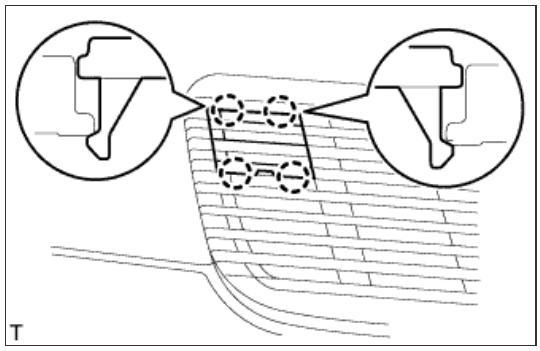
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.



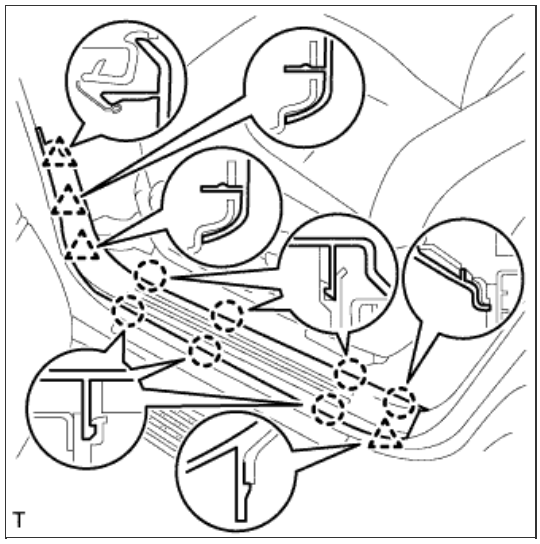
b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



9. INSTALL FRONT DOOR SCUFF PLATE

a. w/o Illumination:

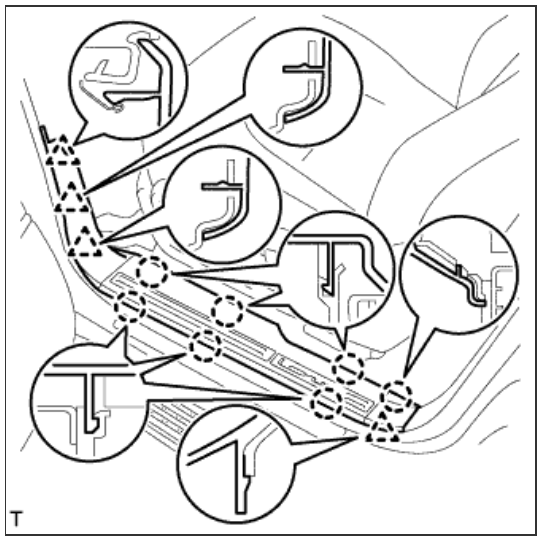
i. Attach the 7 claws and 4 clips to install the scuff plate.



b. w/ Illumination:

i. Connect the connector.

ii. Attach the 7 claws and 4 clips to install the scuff plate.



10. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

11. CHECK SRS WARNING LIGHT

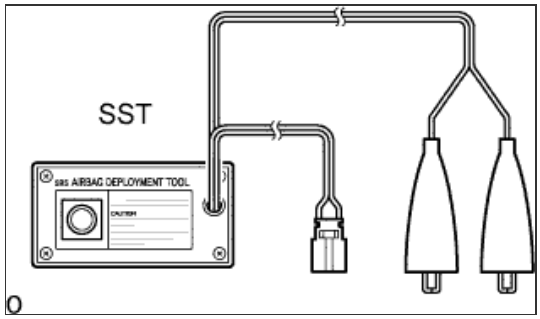
a. Check the SRS warning light (Click here).

for Preparation Click here

HINT:

When scrapping vehicles equipped with a seat belt pretensioner or disposing of a front seat outer belt (with seat belt pretensioner), always activate the seat belt pretensioner first in accordance with the procedures described below. If any abnormality occurs during activation of the seat belt pretensioner, contact the SERVICE DEPARTMENT of the DISTRIBUTOR.

CAUTION:



- **Before deploying any SRS components for disposal, carefully review and follow all applicable environmental and hazardous material regulations. Depending on the area, deployment of SRS components before disposal may be considered treatment of hazardous materials, which may require special training, certification or licensing.**
- **Never dispose of a front seat outer belt that has an un-activated pretensioner.**
- **The seat belt pretensioner produces a loud, exploding sound when it activates. Perform the operation where it will not be a nuisance to nearby people.**
- **When activating a front seat outer belt (with seat belt pretensioner), stand at least 10 m (32.8 ft.) away from the front seat outer belt.**
- **Use gloves and safety glasses when handling a front seat outer belt with an activated pretensioner.**
- **Always wash your hands with water after completing the disposal.**
- **Do not apply water to a front seat outer belt that has an activated pretensioner.**
- **Perform procedures in a place away from electrical interference.**
- **When activating the seat belt pretensioner, always use the specified SST (SRS airbag deployment tool).**

1. DISPOSE OF FRONT SEAT OUTER BELT ASSEMBLY (WHEN INSTALLED IN VEHICLE)

HINT:

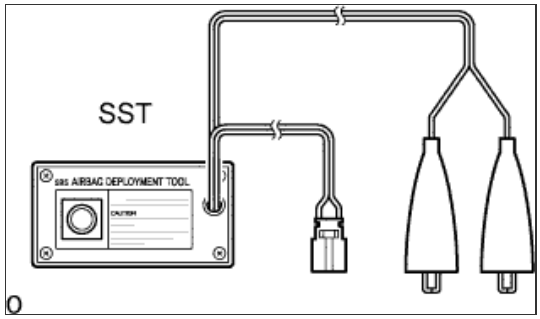
Prepare a battery to activate the seat belt pretensioner.

a. Check if SST is functioning properly.

SST
09082-00700

CAUTION:

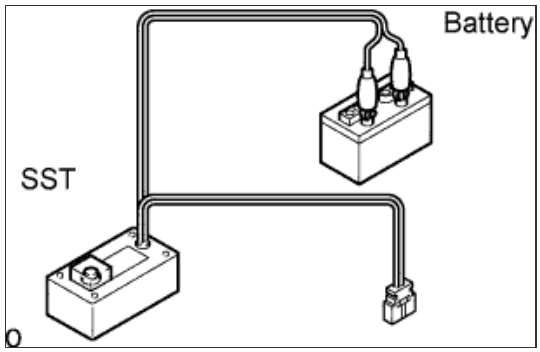
When activating the seat belt pretensioner, always use the specified SST.



i. Connect the red clip of SST to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.

HINT:

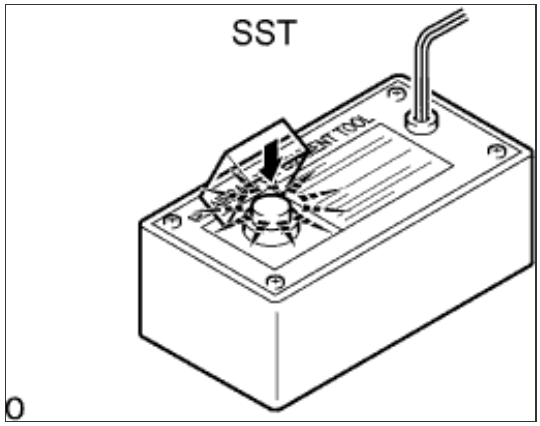
Do not connect the yellow connector. The yellow connector is used to connect to the seat belt pretensioner.



ii. Press SST activation switch and check that the LED of SST activation switch illuminates.

CAUTION:

If the LED illuminates when the activation switch is not being pressed, SST may be malfunctioning. Replace SST with a new one.



b. Disconnect SST from the battery.

c. Disconnect the pretensioner connector.

i. Disconnect the cable from the negative (-) battery terminal.

ii. Remove the front door scuff plate (Click here).

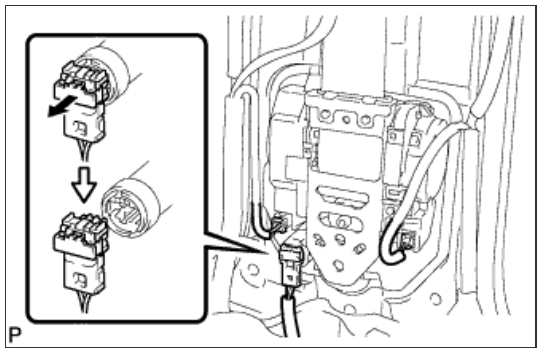
iii. Remove the rear step cover (Click here).

iv. Remove the rear door scuff plate (Click here).

v. Remove the center pillar garnish cover (Click here).

vi. Remove the center lower pillar garnish (Click here).

vii. Disconnect the pretensioner connector as shown in the illustration.



d. Prepare SST for activation of the seat belt pretensioner.

i. Install the floor anchor of the seat belt.

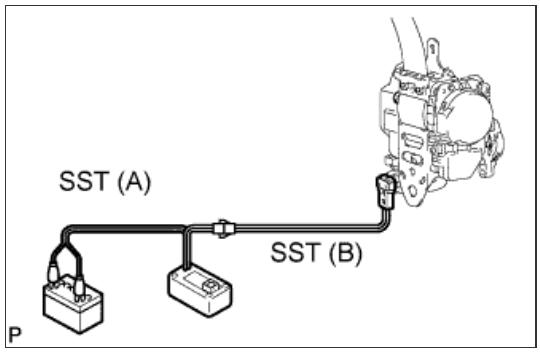
ii. Connect SST (A) to SST (B). Then connect the connector of SST (B) to the seat belt pretensioner.

SST

09082-00700
09082-00770

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock.



iii. Move SST at least 10 m (32.8 ft.) away from the front of the vehicle.

iv. Close all the doors and windows of the vehicle.

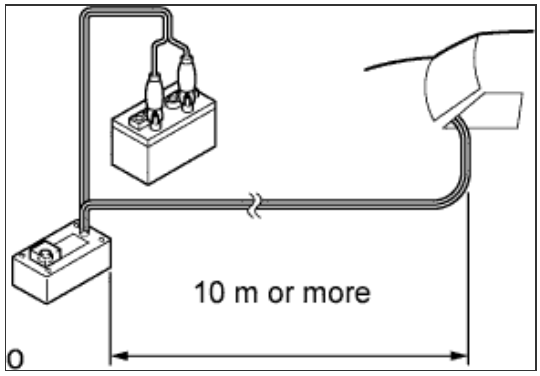
HINT:

Leave a gap in one of the windows for inserting SST wire harness.

NOTICE:

Take care not to damage SST wire harness.

v. Connect the red clip of SST to the battery positive (+) terminal and the black clip to the negative (-) terminal.



e. Activate the seat belt pretensioner.

i. Confirm that no one is inside the vehicle or within 10 m (32.8 ft.) of the vehicle.

ii. Press SST activation switch to activate the seat belt pretensioner.

HINT:

The seat belt pretensioner operates at the same time SST activation switch LED illuminates.

f. Dispose of the front seat outer belt (with the seat belt pretensioner).

CAUTION:

- **Do not touch the front seat outer belt for at least 30 minutes after the seat belt pretensioner has been activated. It is very hot.**
- **Use gloves and safety glasses when handling a front seat outer belt whose pretensioner has been activated.**
- **Always wash your hands with water after completing the disposal.**
- **Do not apply water to a front seat outer belt that has an activated pretensioner.**

HINT:

When scrapping a vehicle, activate the seat belt pretensioner, and then scrap the vehicle with the activated front seat outer belt installed.

2. DISPOSE OF FRONT SEAT OUTER BELT ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)

NOTICE:

Be sure to follow the procedures listed below when activating the seat belt pretensioner.

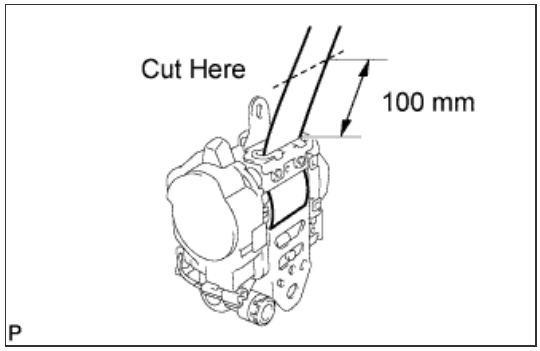
a. Remove the front seat outer belt.

i. Wind the seat belt with the retractor.

ii. When the seat belt is sufficiently wound, cut the seat belt approximately 100 mm (0.393 in.) from the retractor as shown in the illustration.

HINT:

The seat belt is designed so that winding the seat belt before pretensioner activation will decrease the pulling power of the seat belt during pretensioner activation.

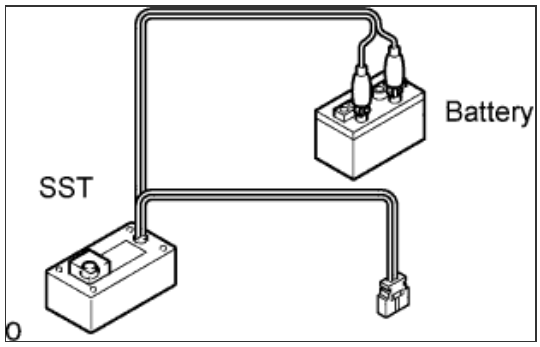


b. Check if SST is functioning properly.

SST
09082-00700
09082-00770

CAUTION:

When activating a seat belt pretensioner, always use the specified SST.

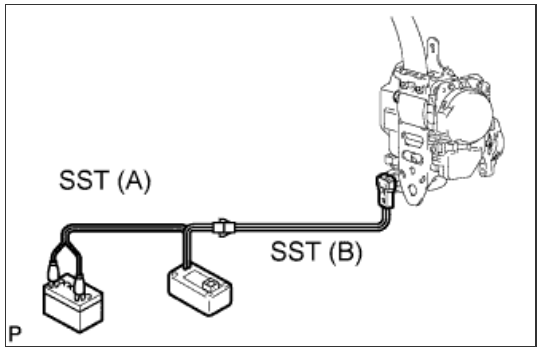


c. Prepare SST for activation of the seat belt pretensioner.

i. Connect SST (A) to SST (B). Then connect the connector of SST (B) to the seat belt pretensioner.

NOTICE:

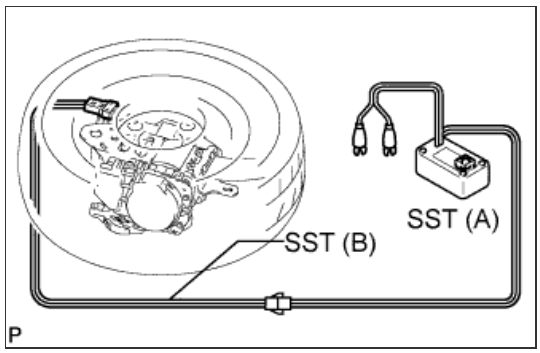
To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock.



ii. Place the front seat outer belt on the ground and cover it with a tire (with wheel).

NOTICE:

Set up the front seat outer belt as shown in the illustration.



iii. Move SST at least 10 m (32.8 ft.) away from the wheel.

NOTICE:

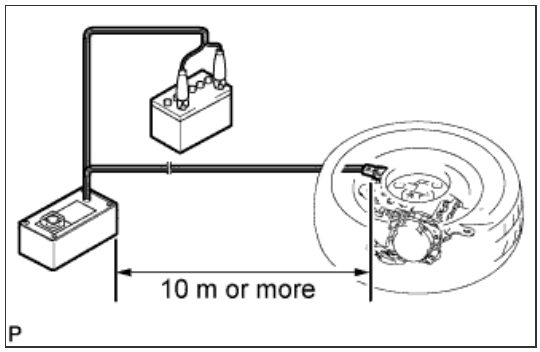
Take care not to damage SST wire harness.

d. Activate the seat belt pretensioner.

i. Connect the red clip of SST to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.

ii. Check that no one is within 10 m (32.8 ft.) of the wheel.

iii. Press SST activation switch to activate the seat belt pretensioner.



HINT:

The seat belt pretensioner operates at the same time SST activation switch LED illuminates.

e. Dispose of the front seat outer belt (with the seat belt pretensioner).

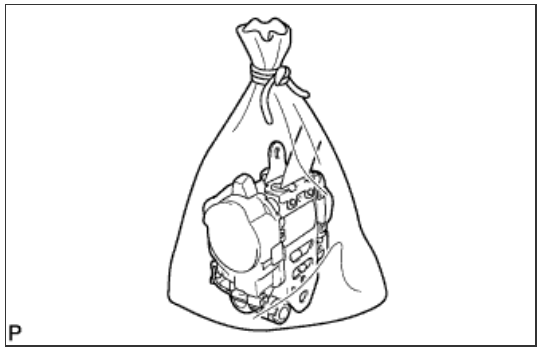
CAUTION:

- **Do not touch the front seat outer belt for at least 30 minutes after the seat belt pretensioner has been activated. It is very hot.**
- **Use gloves and safety glasses when handling a front seat outer belt whose pretensioner has been activated.**
- **Always wash your hands with water after completing the disposal.**

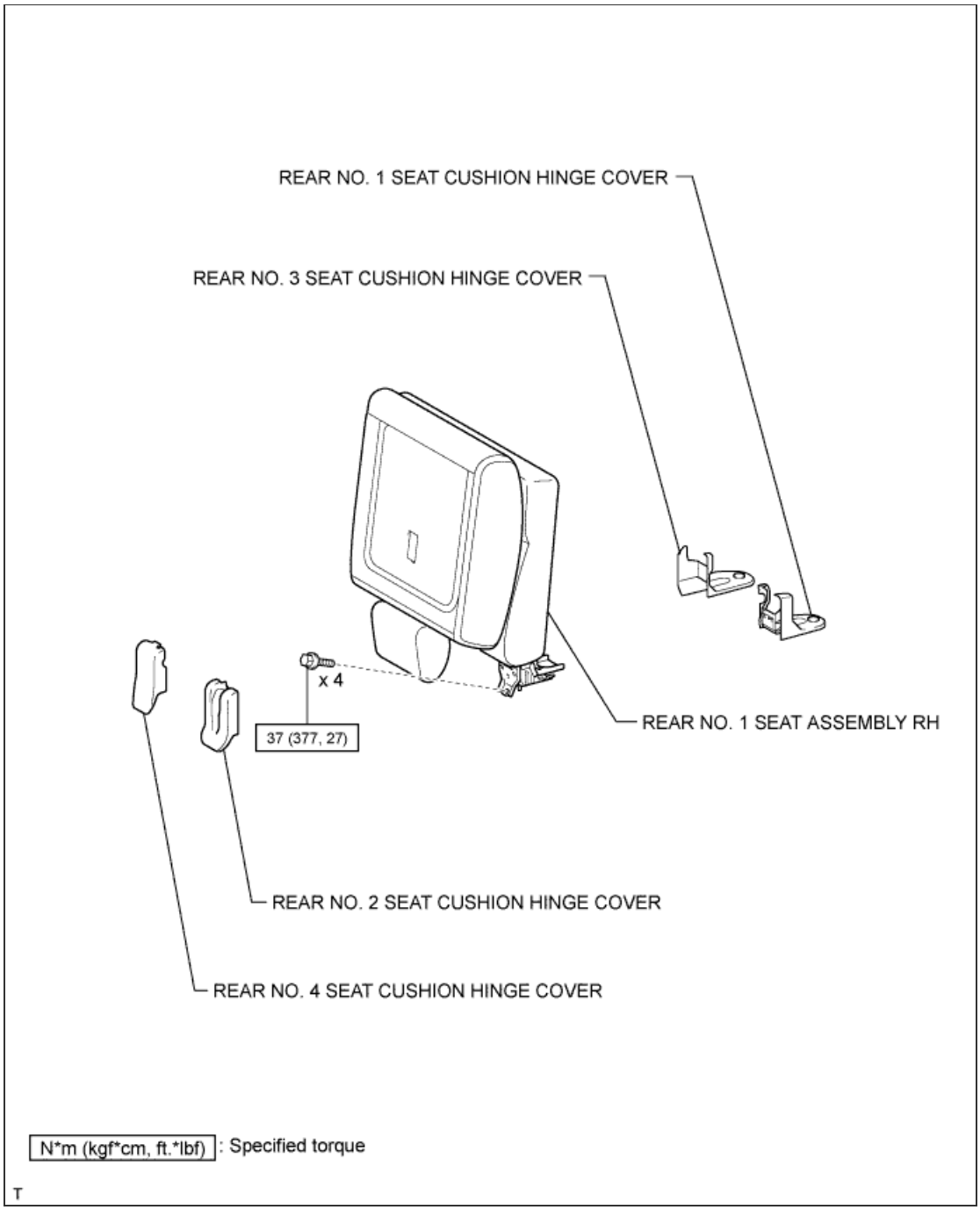
- **Do not apply water to a front seat outer belt that has an activated pretensioner.**

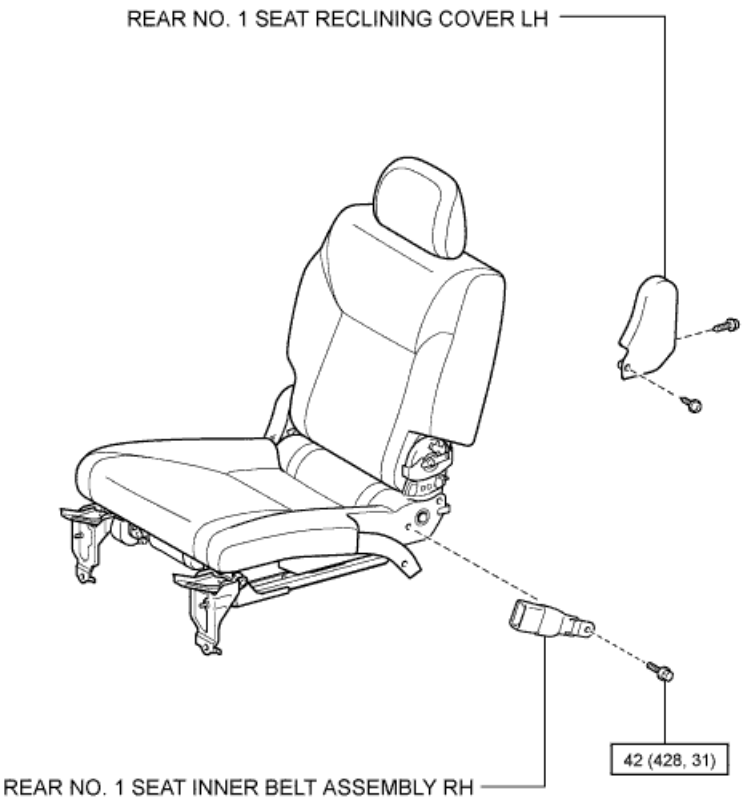
i. Remove the tire (with wheel) and SST.

ii. Place the front seat outer belt in a plastic bag, tie the end tightly and dispose of it in the same way as other general parts.



for Preparation Click here





N*m (kgf*cm, ft.*lbf) : Specified torque

T

REAR NO. 1 SEAT INNER BELT ASSEMBLY (for 60/40 Split Seat Type 40 Side) > REMOVAL

for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

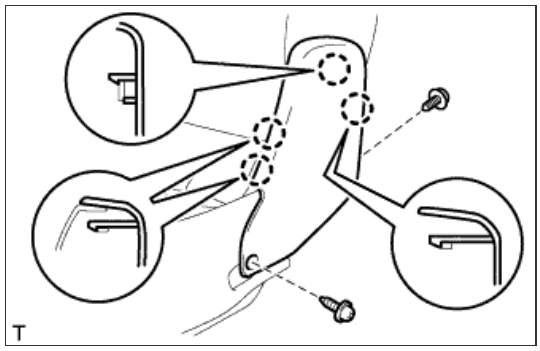
2. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

a. Remove the rear No. 1 seat assembly (Click here).

3. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

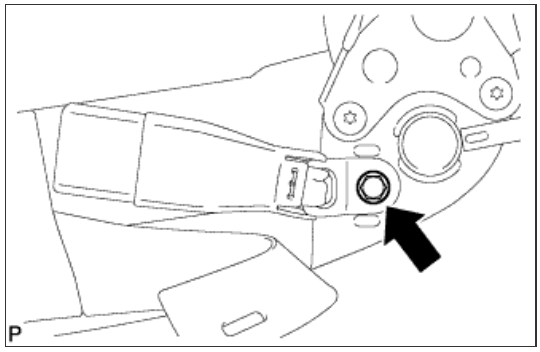
a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



4. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY RH

a. Remove the bolt and belt.



REAR NO. 1 SEAT INNER BELT ASSEMBLY (for 60/40 Split Seat Type 40 Side) > REMOVAL

for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

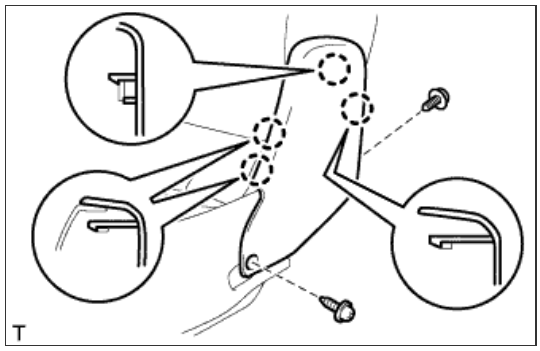
2. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

a. Remove the rear No. 1 seat assembly (Click here).

3. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

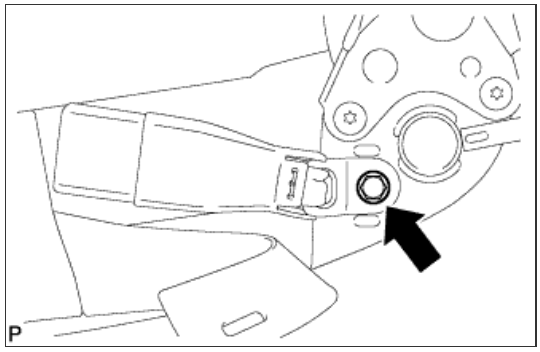
a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



4. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY RH

a. Remove the bolt and belt.



for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**
- **A bolt without a torque specification is shown in the standard bolt chart (Click here).**

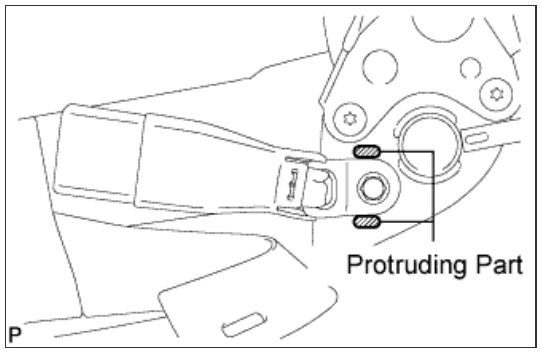
1. INSTALL REAR NO. 1 SEAT INNER BELT ASSEMBLY RH

a. Install the belt with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

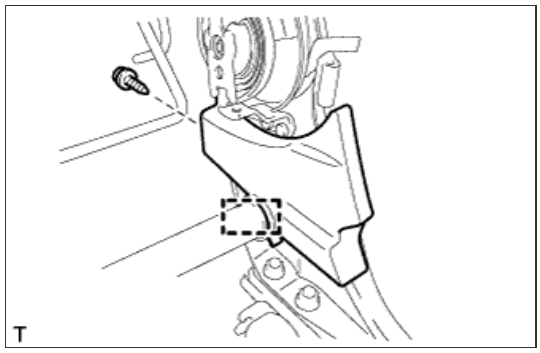
Do not overlap the anchor part of the seat belt and protruding parts of the seat.



2. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

a. Attach the clamp to install the cover.

b. Install the screw.



3. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

a. Install the rear No. 1 seat assembly (Click here).

4. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**
- **A bolt without a torque specification is shown in the standard bolt chart (Click here).**

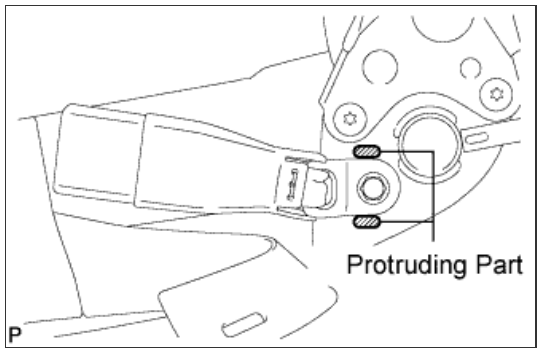
1. INSTALL REAR NO. 1 SEAT INNER BELT ASSEMBLY RH

a. Install the belt with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

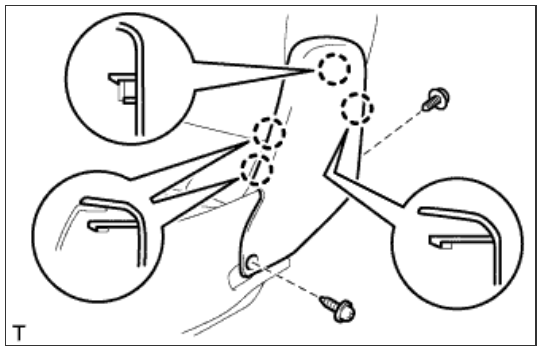
Do not overlap the anchor part of the seat belt and protruding parts of the seat.



2. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

a. Attach the 4 claws to install the cover.

b. Install the 2 screws.



3. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

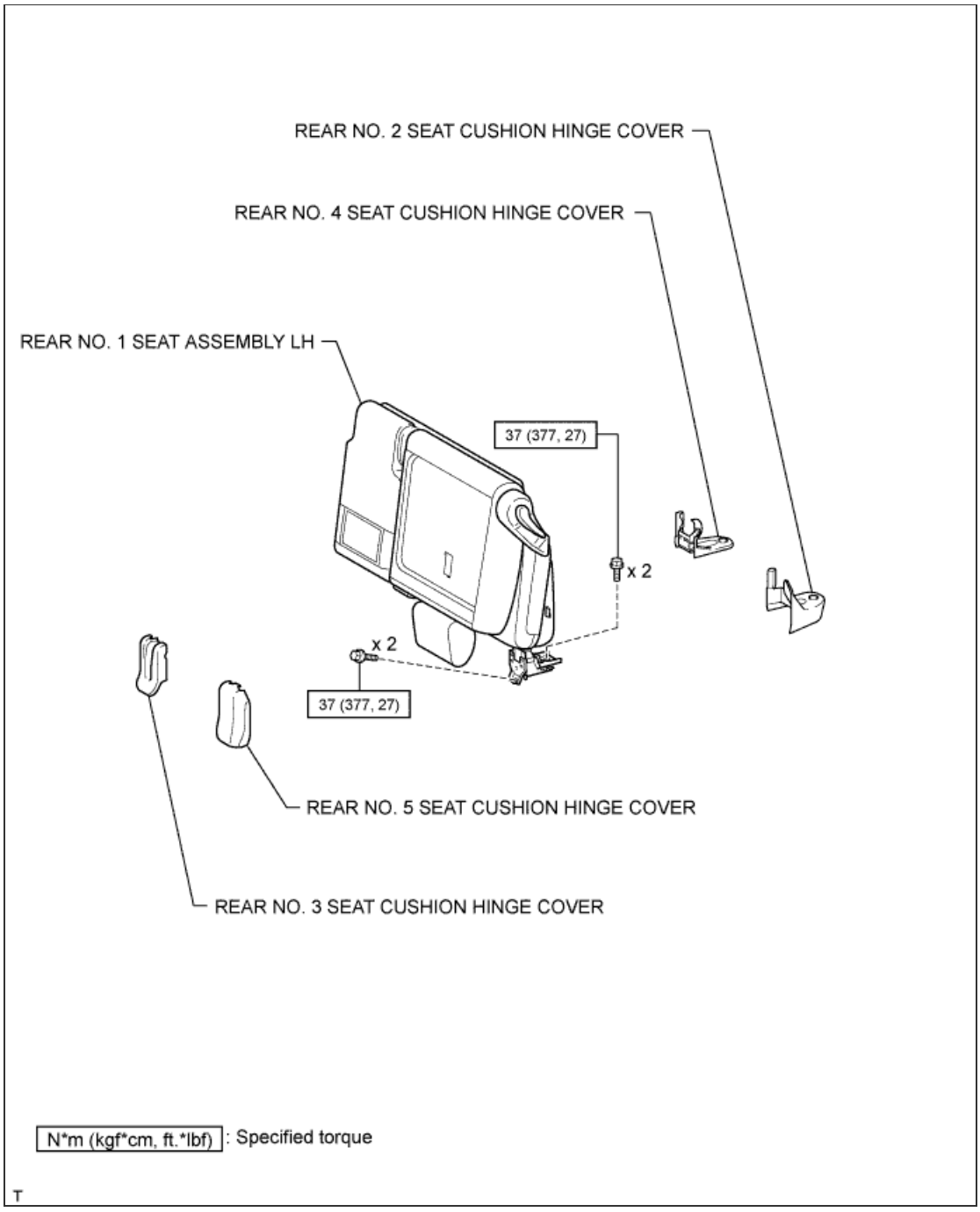
a. Install the rear No. 1 seat assembly (Click here).

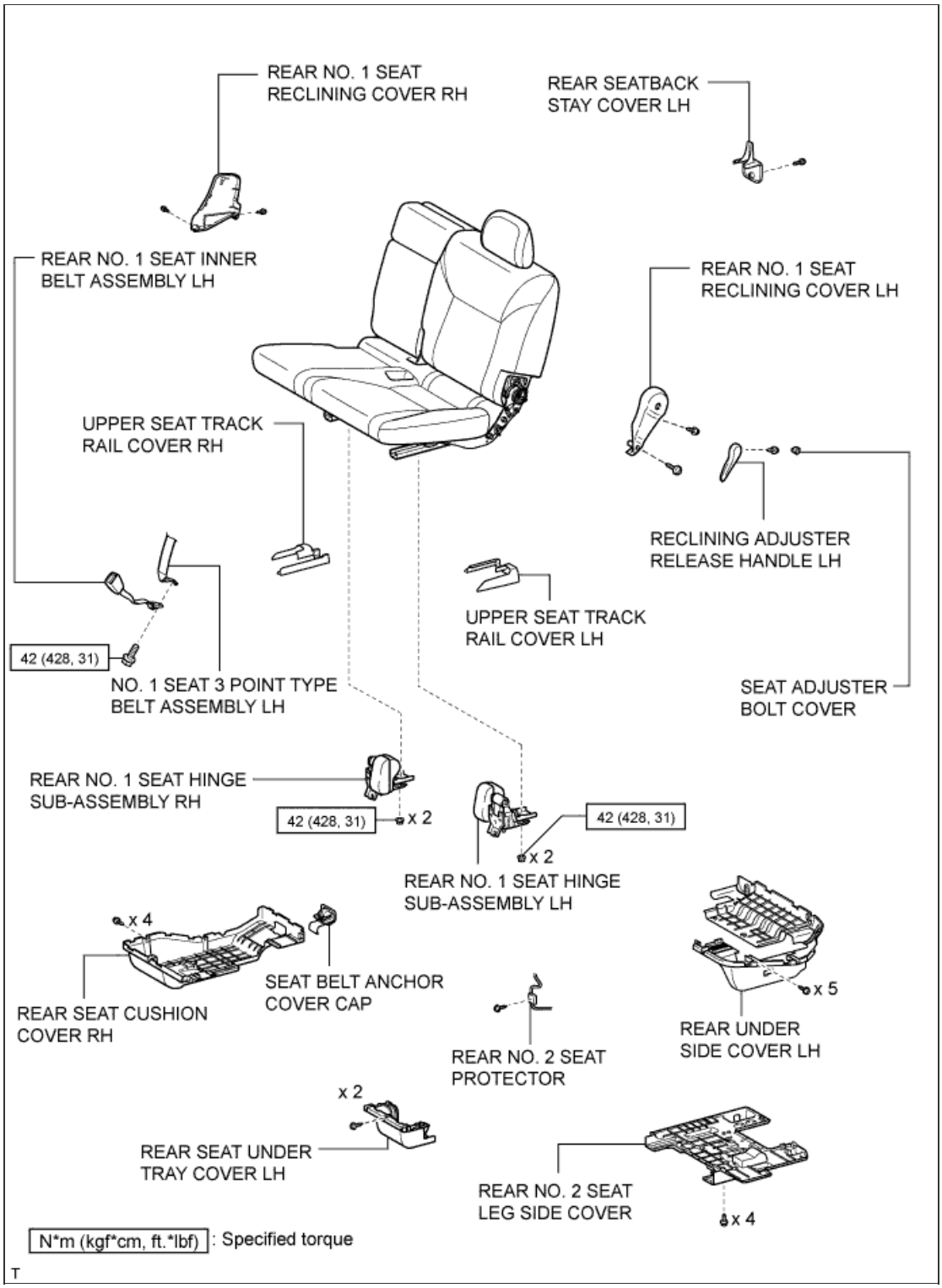
4. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

for Preparation Click here




REAR NO. 1 SEAT RECLINING COVER RH
REAR SEATBACK STAY COVER LH
REAR NO. 1 SEAT INNER BELT ASSEMBLY LH
REAR NO. 1 SEAT RECLINING COVER LH
UPPER SEAT TRACK RAIL COVER RH
RECLINING ADJUSTER RELEASE HANDLE LH
UPPER SEAT TRACK RAIL COVER LH
42 (428, 31)
NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH
SEAT ADJUSTER BOLT COVER
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH
42 (428, 31) x 2
42 (428, 31)
x 2
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH
x 4
SEAT BELT ANCHOR COVER CAP
x 5
REAR SEAT CUSHION COVER RH
REAR NO. 2 SEAT PROTECTOR
REAR UNDER SIDE COVER LH
x 2
REAR SEAT UNDER TRAY COVER LH
REAR NO. 2 SEAT LEG SIDE COVER
x 4
N*m (kgf*cm, ft.*lbf) : Specified torque
T

for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

2. REMOVE REAR NO. 1 SEAT ASSEMBLY LH

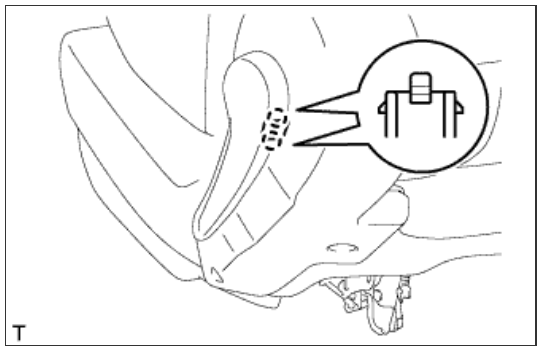
a. Remove the rear No. 1 seat assembly (Click here).

3. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

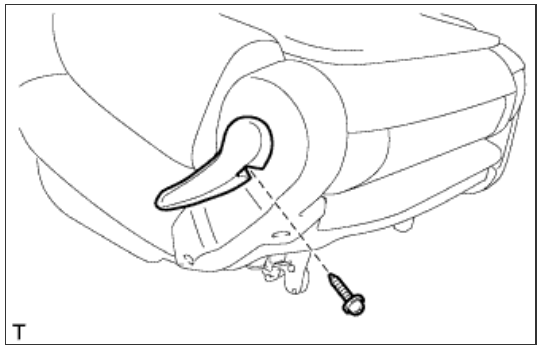
HINT:

Tape the screwdriver tip before use.



4. REMOVE RECLINING ADJUSTER RELEASE HANDLE LH

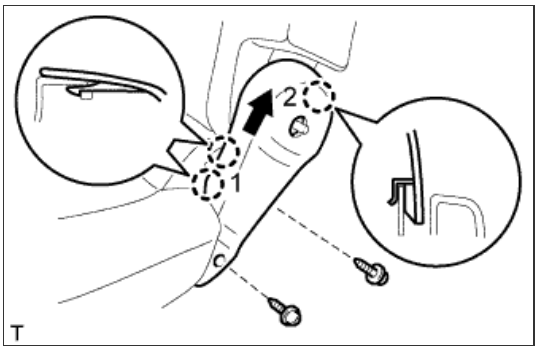
a. Remove the screw and release handle.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

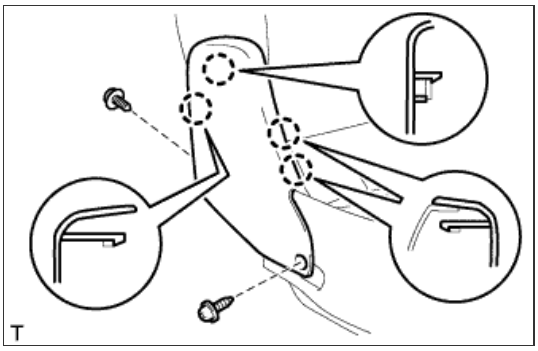
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



6. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

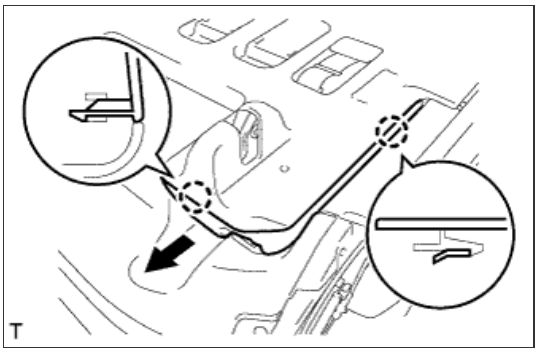


7. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

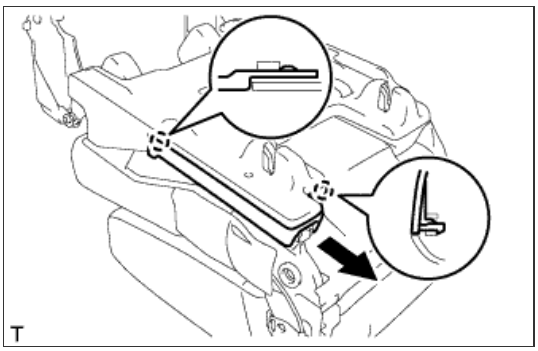


8. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

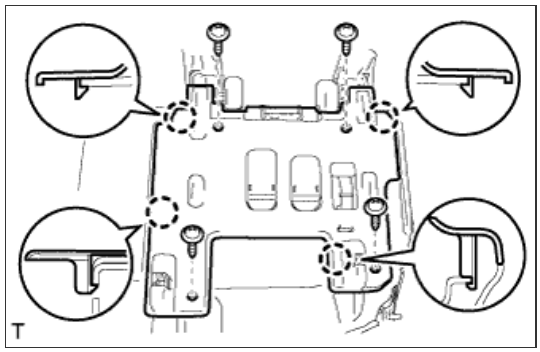
HINT:

Tape the screwdriver tip before use.

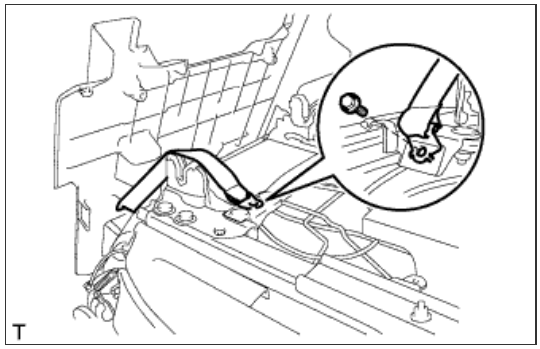


9. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 4 claws.



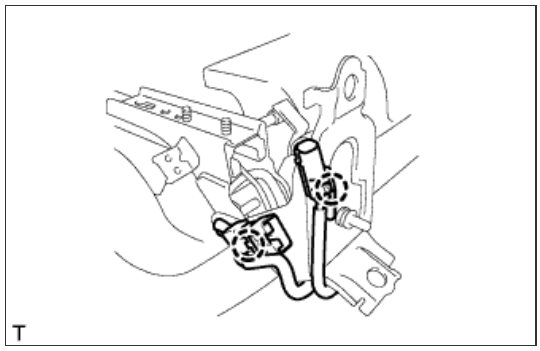
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



10. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

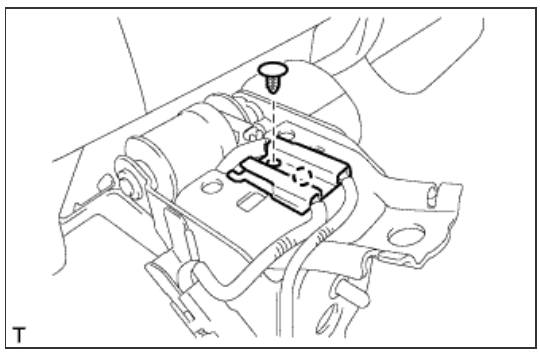
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.

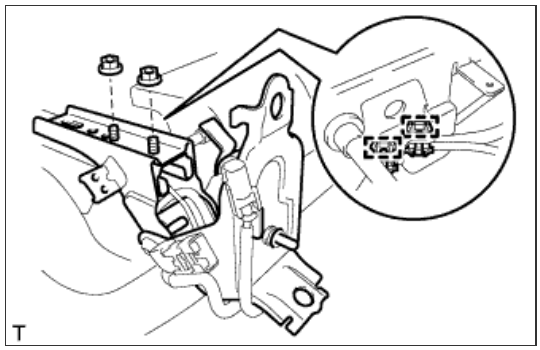


11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Detach the wire harness clamp.

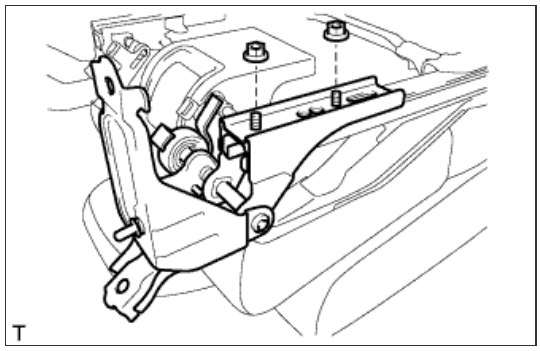
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



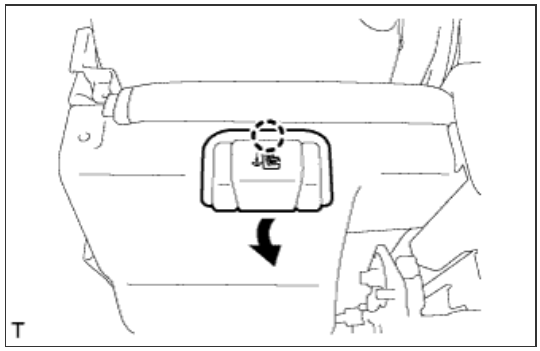
12. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Remove the 2 nuts and hinge.

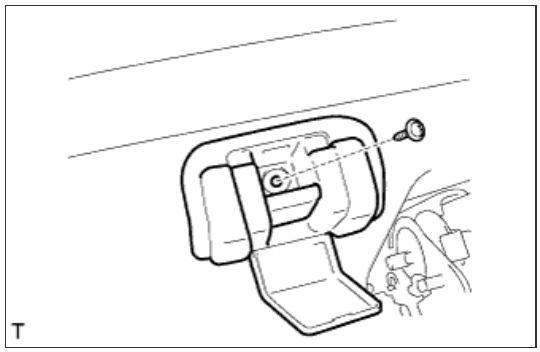


13. REMOVE SEAT BELT ANCHOR COVER CAP

a. Detach the claw and open the cap.



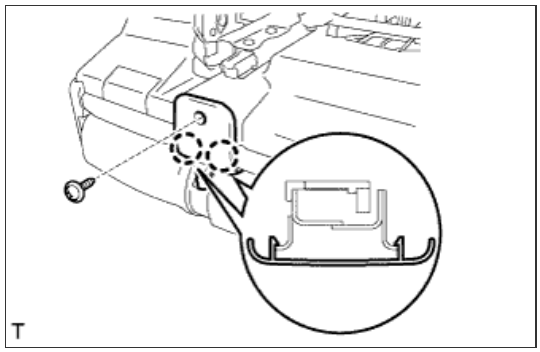
b. Remove the screw and anchor cover cap.



14. REMOVE REAR SEATBACK STAY COVER LH

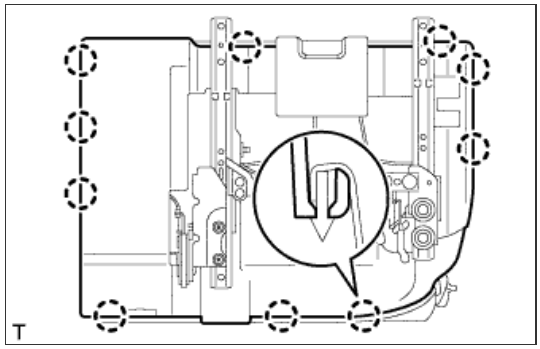
a. Remove the screw.

b. Detach the 2 claws and remove the cover.



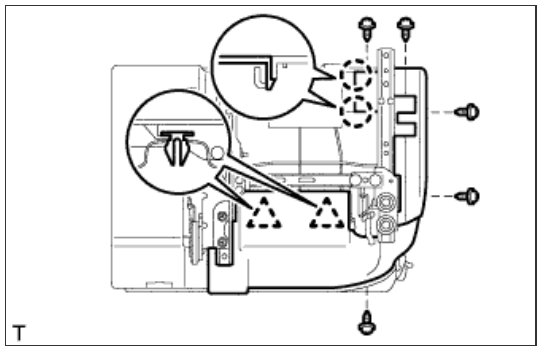
15. REMOVE REAR UNDER SIDE COVER LH

a. Detach the 10 claws.



b. Remove the 5 screws.

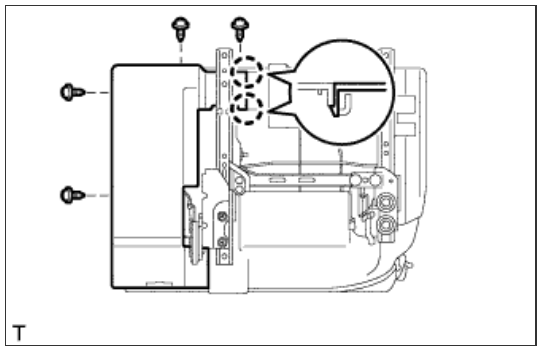
c. Detach the 2 clips and 2 claws, and remove the cover.



16. REMOVE REAR SEAT CUSHION COVER RH

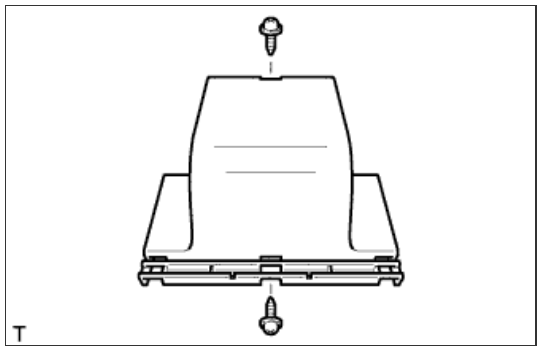
a. Remove the 4 screws.

b. Detach the 2 claws and remove the cover.



17. REMOVE REAR SEAT UNDER TRAY COVER LH

a. Remove the 2 screws and cover.

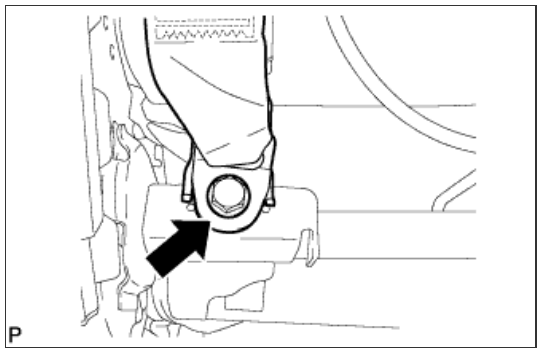


18. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Remove the bolt and belt.

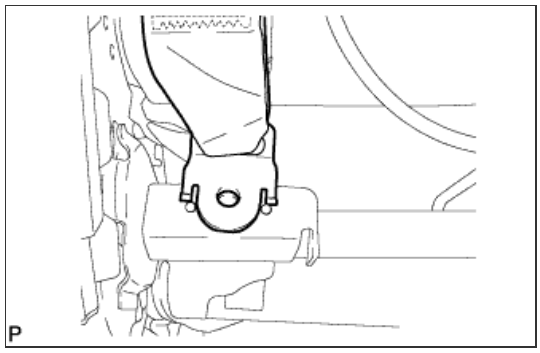
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, it becomes disconnected when the bolt is removed.



19. DISCONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Disconnect the belt anchor.



for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

2. REMOVE REAR NO. 1 SEAT ASSEMBLY LH

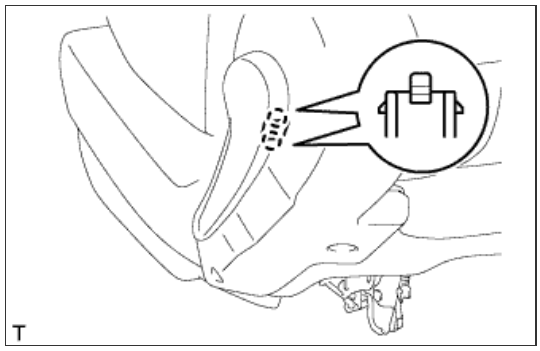
a. Remove the rear No. 1 seat assembly (Click here).

3. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

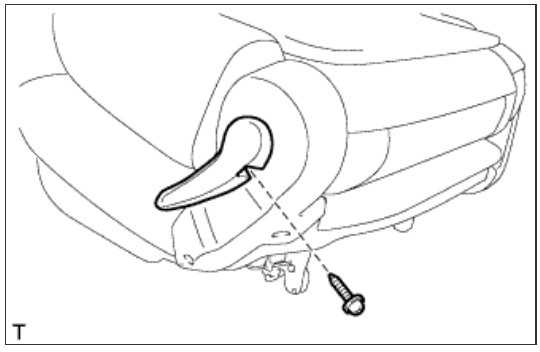
HINT:

Tape the screwdriver tip before use.



4. REMOVE RECLINING ADJUSTER RELEASE HANDLE LH

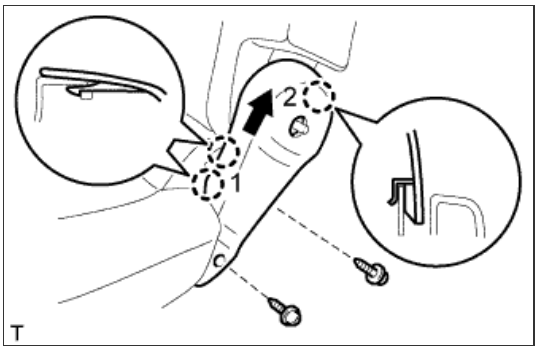
a. Remove the screw and release handle.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

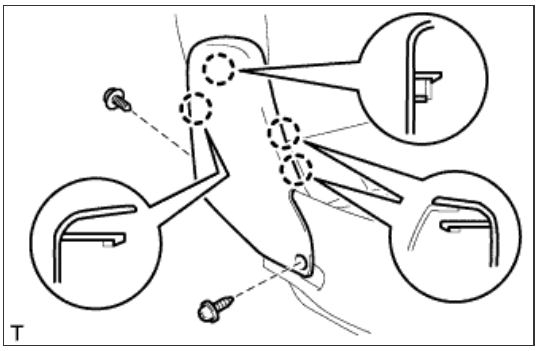
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



6. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

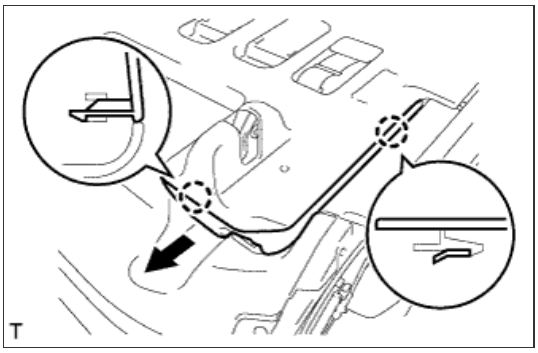


7. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

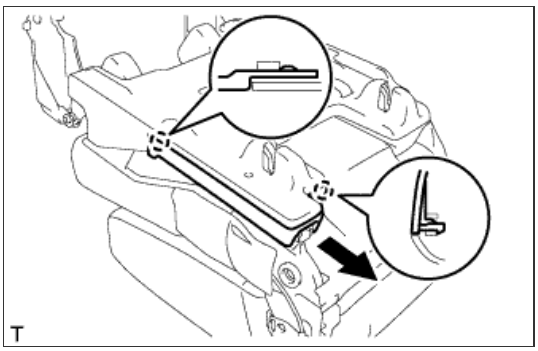


8. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

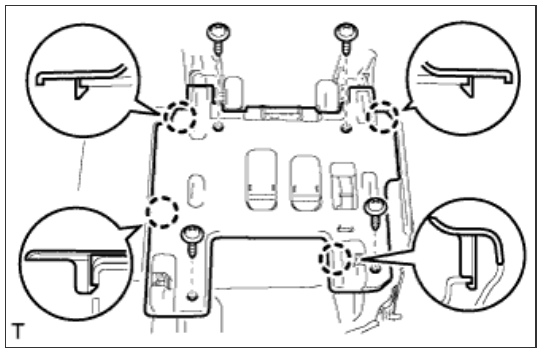
HINT:

Tape the screwdriver tip before use.

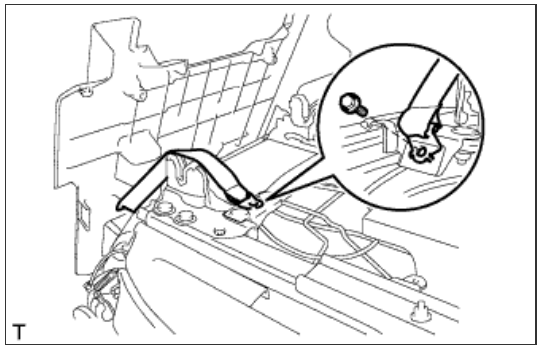


9. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 4 claws.



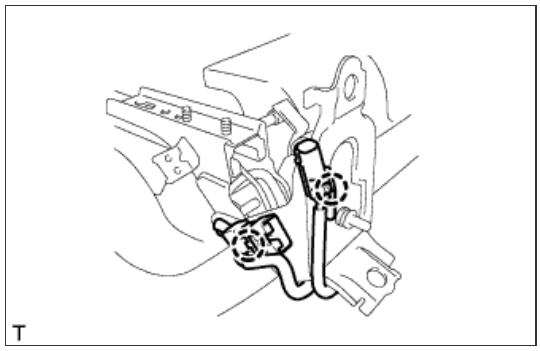
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



10. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

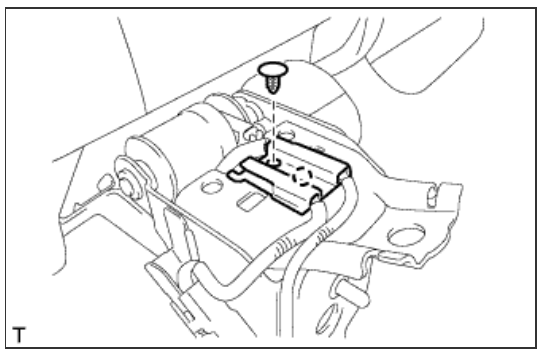
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.

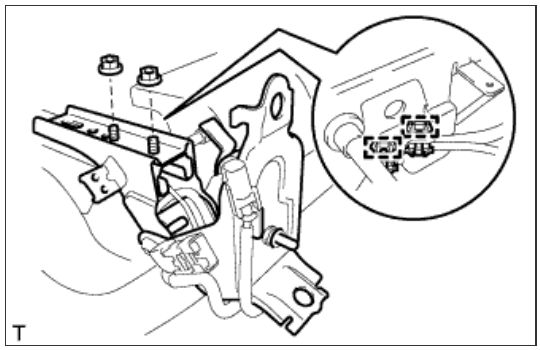


11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Detach the wire harness clamp.

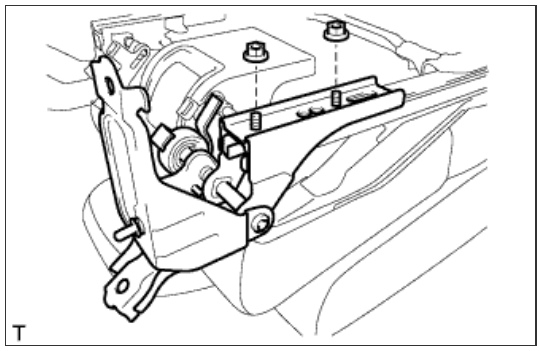
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



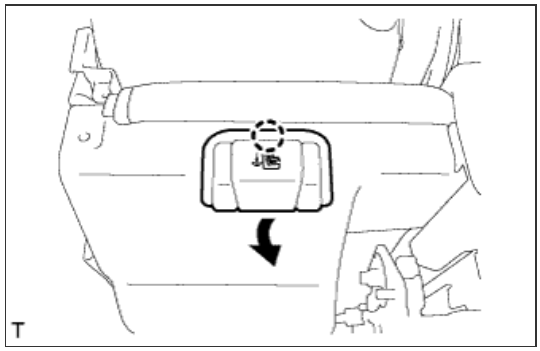
12. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Remove the 2 nuts and hinge.

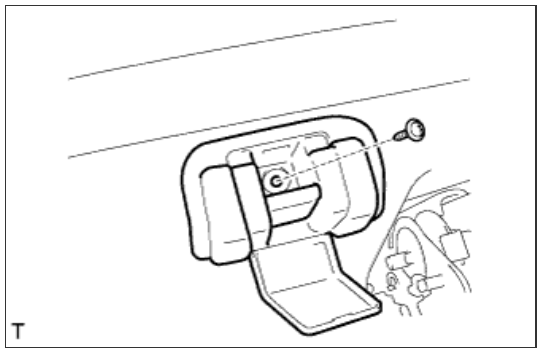


13. REMOVE SEAT BELT ANCHOR COVER CAP

a. Detach the claw and open the cap.



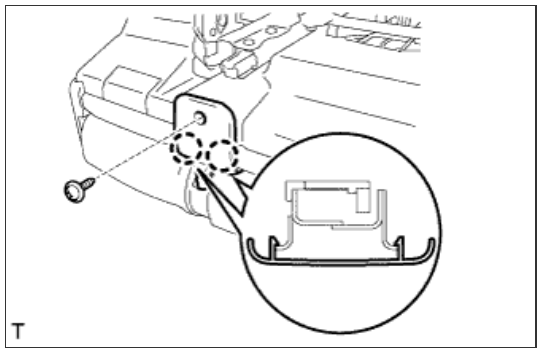
b. Remove the screw and anchor cover cap.



14. REMOVE REAR SEATBACK STAY COVER LH

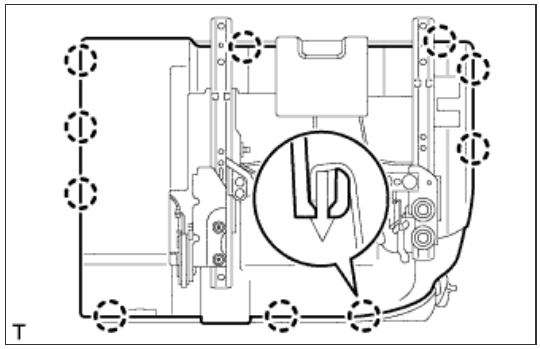
a. Remove the screw.

b. Detach the 2 claws and remove the cover.



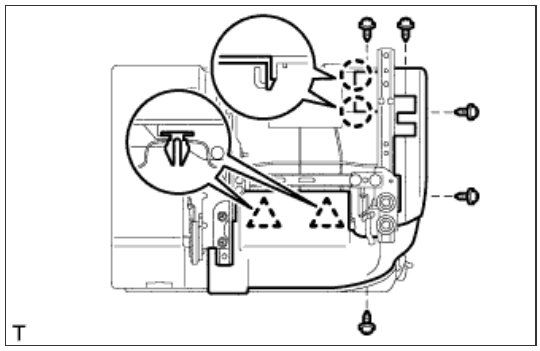
15. REMOVE REAR UNDER SIDE COVER LH

a. Detach the 10 claws.



b. Remove the 5 screws.

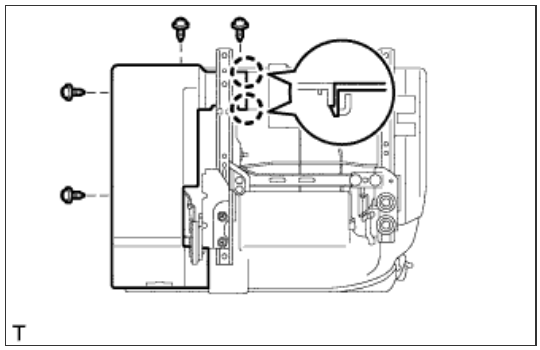
c. Detach the 2 clips and 2 claws, and remove the cover.



16. REMOVE REAR SEAT CUSHION COVER RH

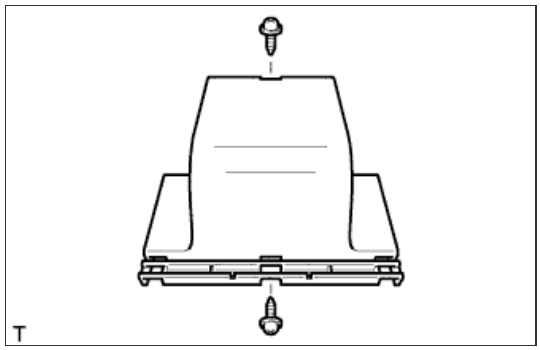
a. Remove the 4 screws.

b. Detach the 2 claws and remove the cover.



17. REMOVE REAR SEAT UNDER TRAY COVER LH

a. Remove the 2 screws and cover.

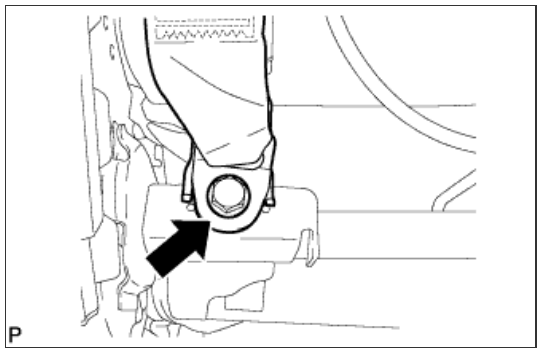


18. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Remove the bolt and belt.

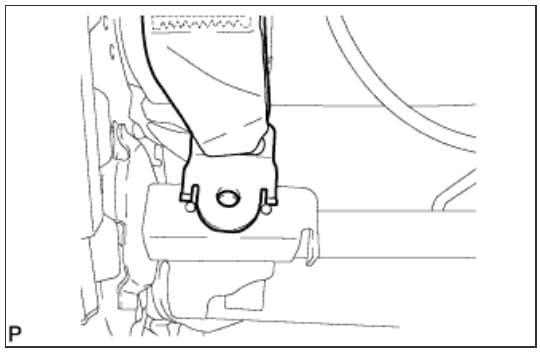
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, it becomes disconnected when the bolt is removed.



19. DISCONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Disconnect the belt anchor.



for Preparation Click here

HINT:

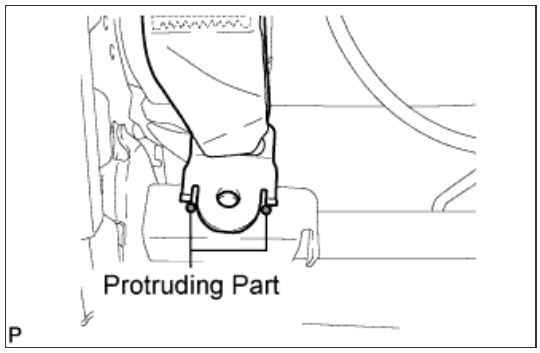
- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**
- **A bolt without a torque specification is shown in the standard bolt chart (Click here).**

1. CONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Connect the belt anchor.

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.



2. INSTALL REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Install the belt with the bolt.

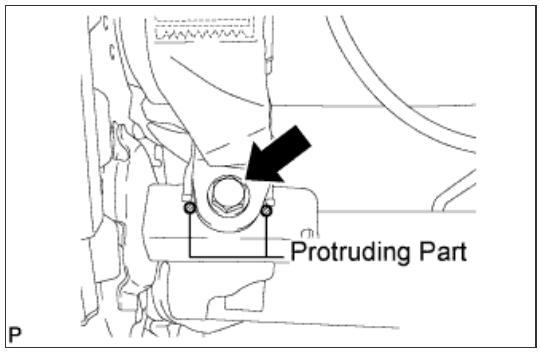
Torque:
42 N*m{ 4287 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

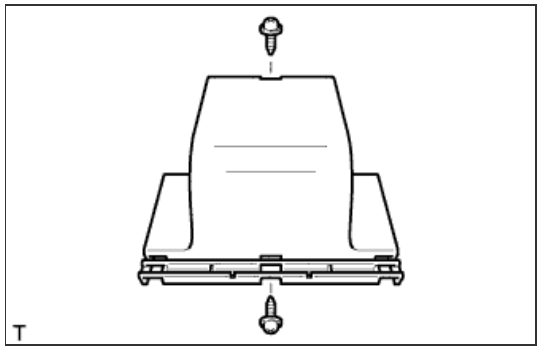
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, connect it when installing the rear No. 1 seat inner belt LH.



3. INSTALL REAR SEAT UNDER TRAY COVER LH

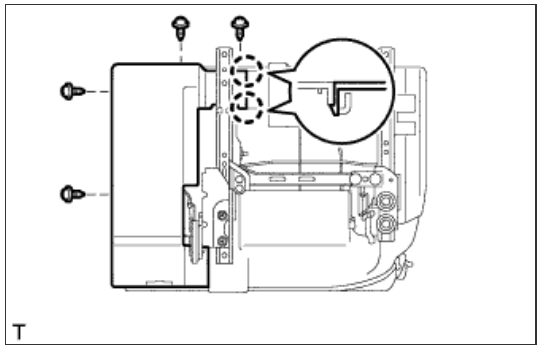
a. Install the cover with the 2 screws.



4. INSTALL REAR SEAT CUSHION COVER RH

a. Attach the 2 claws to install the cover.

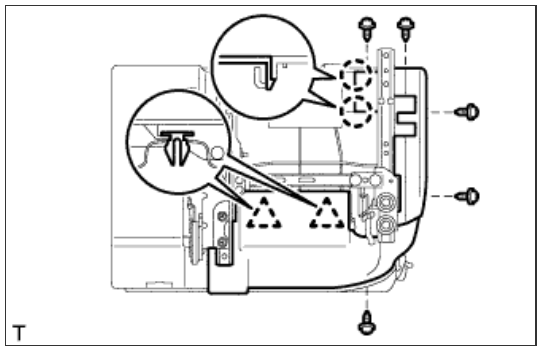
b. Install the 4 screws.



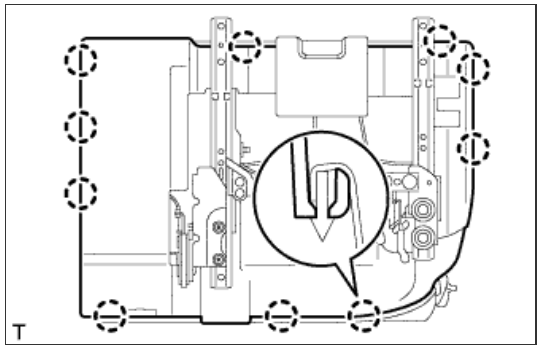
5. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and 2 clips to install the cover.

b. Install the 5 screws.



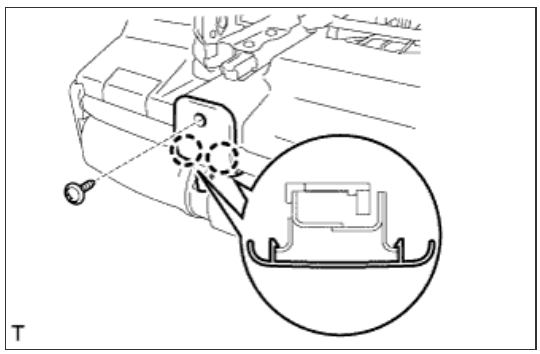
c. Attach the 10 claws.



6. INSTALL REAR SEATBACK STAY COVER LH

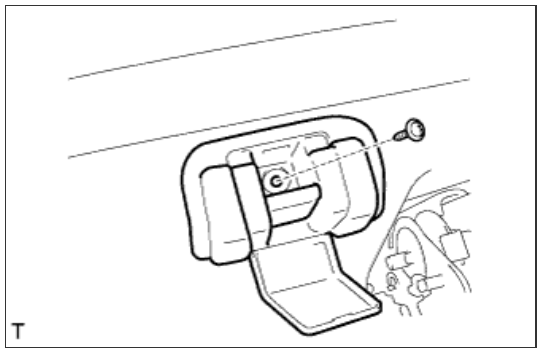
a. Attach the 2 claws to install the cover.

b. Install the screw.

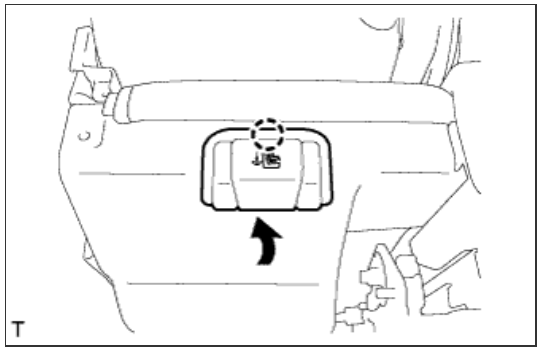


7. INSTALL SEAT BELT ANCHOR COVER CAP

a. Install the anchor cover cap with the screw.



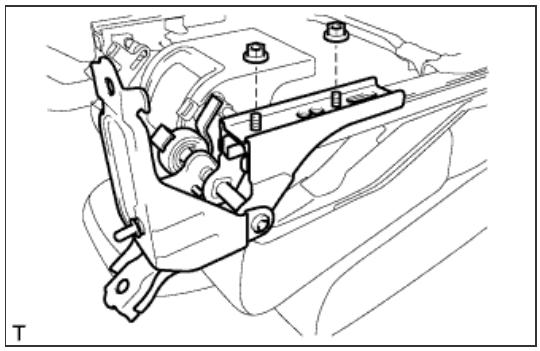
b. Attach the claw to close the cap.



8. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



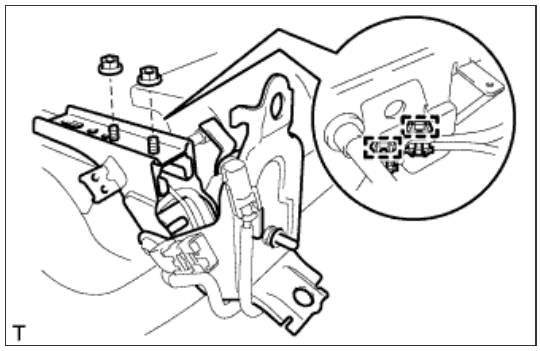
9. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

c. w/ Seat Heater System:
Attach the wire harness clamp.

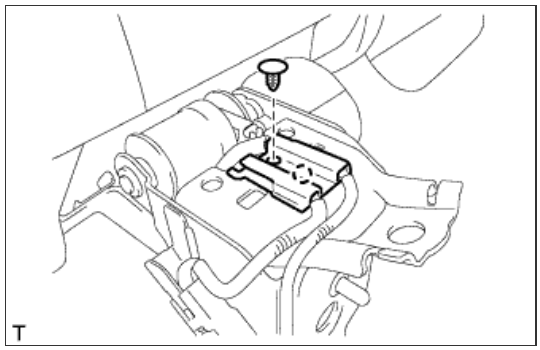


10. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

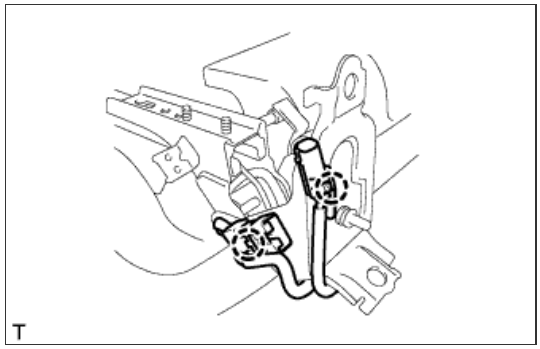
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



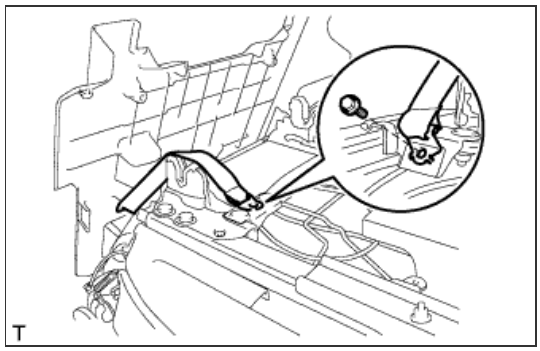
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



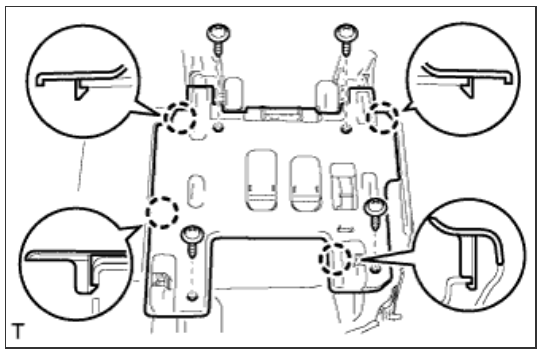
11. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



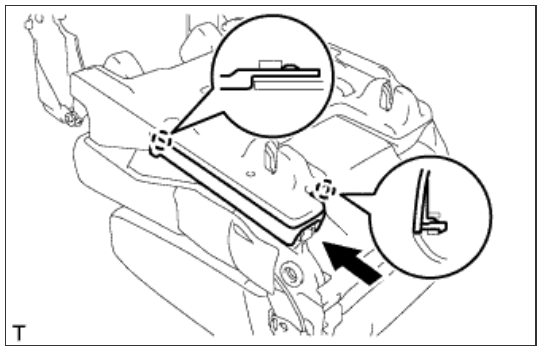
b. Attach the 4 claws to install the seat leg side cover.

c. Install the 4 screws.



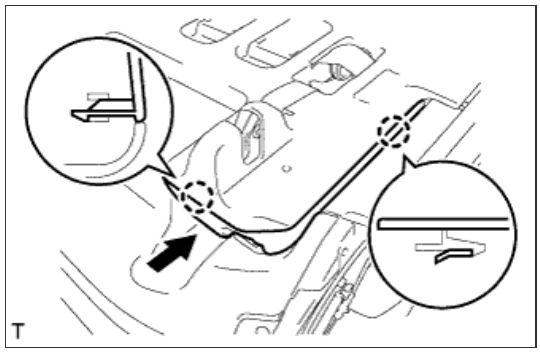
12. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



13. INSTALL UPPER SEAT TRACK RAIL COVER LH

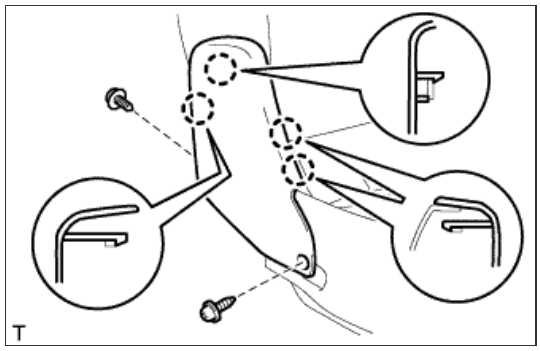
a. Attach the 2 claws to install the cover.



14. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 4 claws to install the cover.

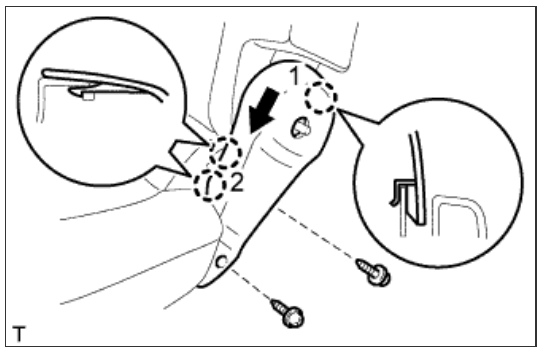
b. Install the 2 screws.



15. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

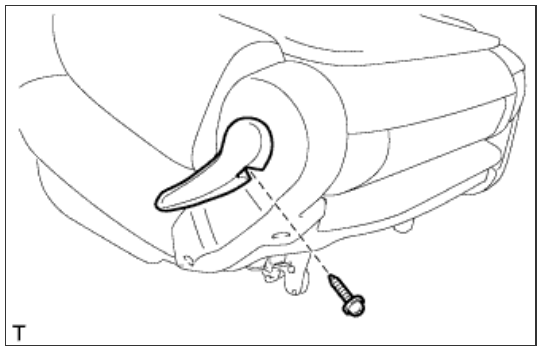
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



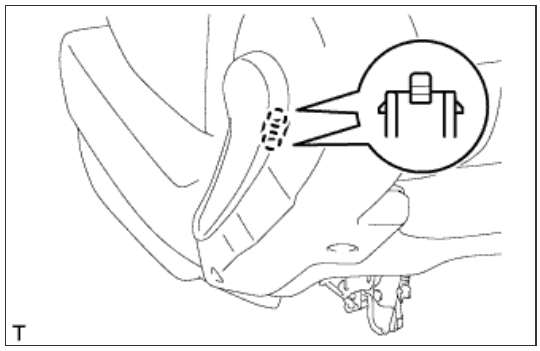
16. INSTALL RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



17. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



18. INSTALL REAR NO. 1 SEAT ASSEMBLY LH

a. Install the rear No. 1 seat assembly (Click here).

19. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

for Preparation Click here

HINT:

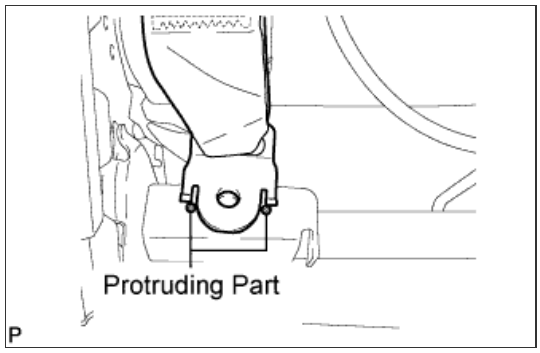
- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**
- **A bolt without a torque specification is shown in the standard bolt chart (Click here).**

1. CONNECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Connect the belt anchor.

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.



2. INSTALL REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Install the belt with the bolt.

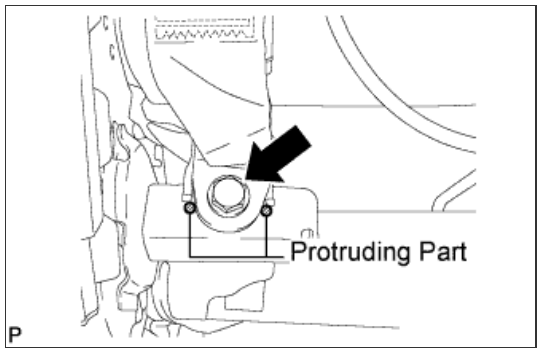
Torque:
42 N*m{ 4287 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

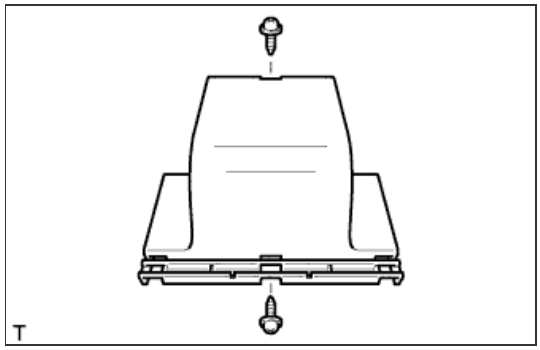
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, connect it when installing the rear No. 1 seat inner belt LH.



3. INSTALL REAR SEAT UNDER TRAY COVER LH

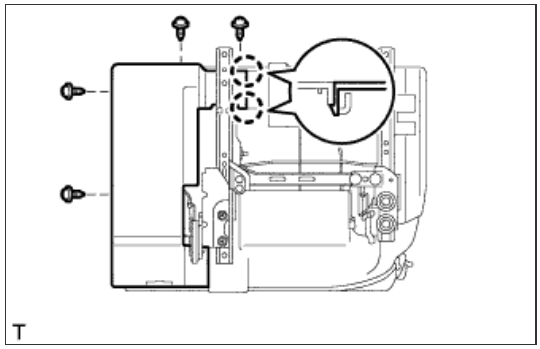
a. Install the cover with the 2 screws.



4. INSTALL REAR SEAT CUSHION COVER RH

a. Attach the 2 claws to install the cover.

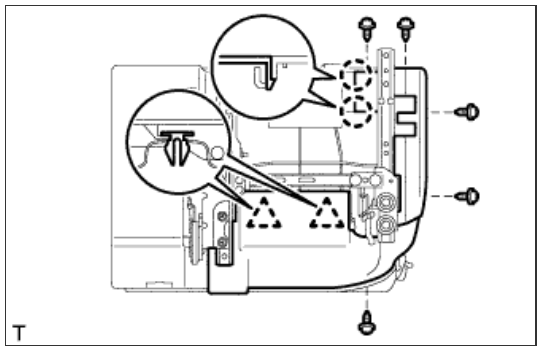
b. Install the 4 screws.



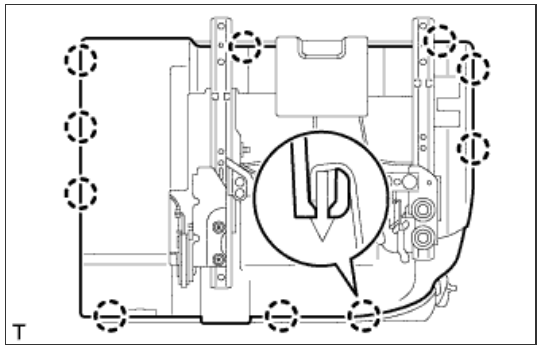
5. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and 2 clips to install the cover.

b. Install the 5 screws.



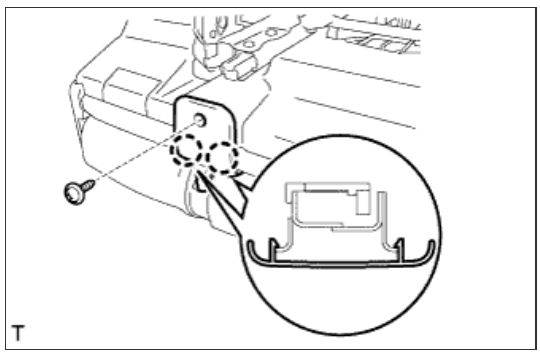
c. Attach the 10 claws.



6. INSTALL REAR SEATBACK STAY COVER LH

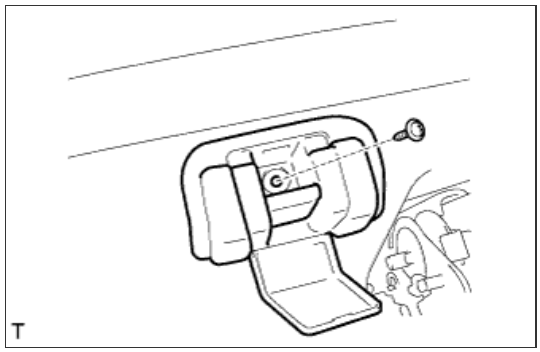
a. Attach the 2 claws to install the cover.

b. Install the screw.

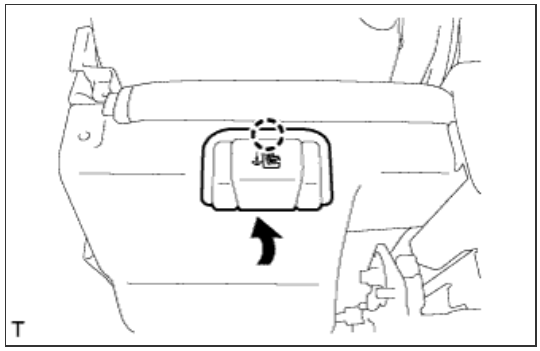


7. INSTALL SEAT BELT ANCHOR COVER CAP

a. Install the anchor cover cap with the screw.



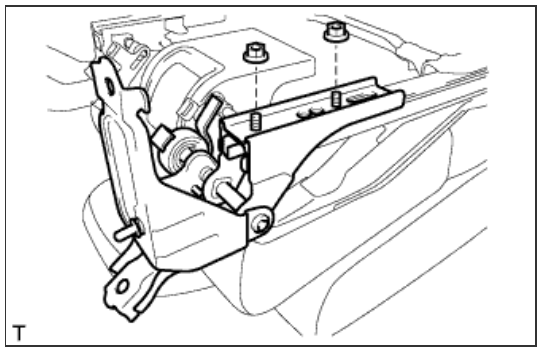
b. Attach the claw to close the cap.



8. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



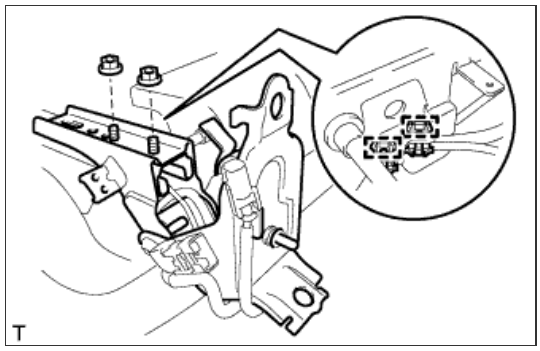
9. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

c. w/ Seat Heater System:
Attach the wire harness clamp.

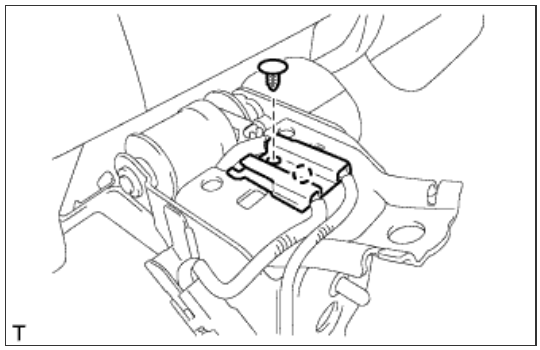


10. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

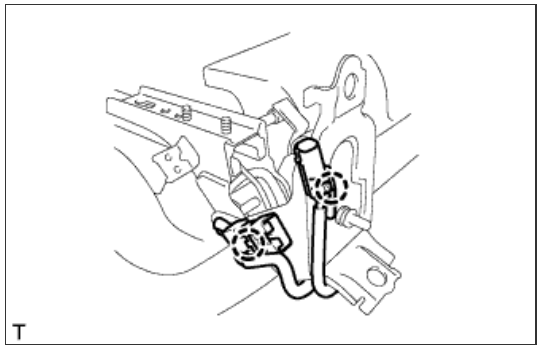
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



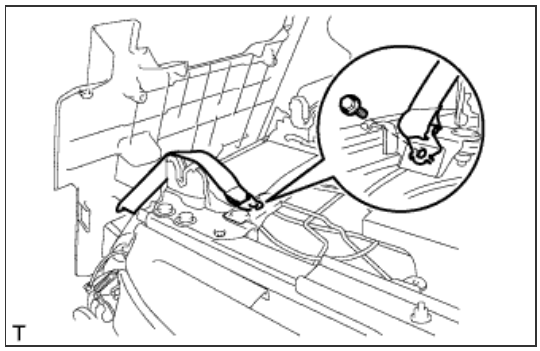
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



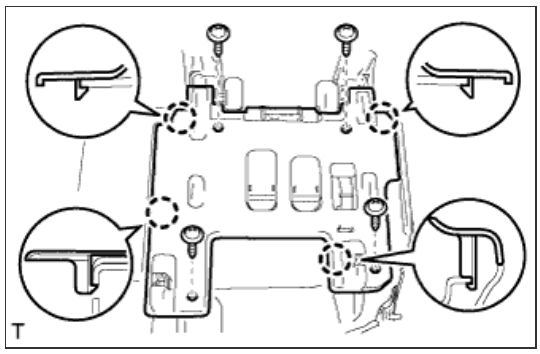
11. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



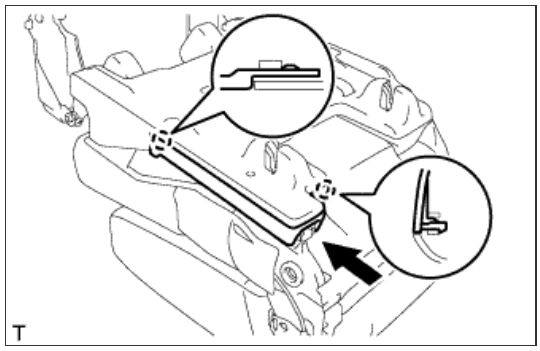
b. Attach the 4 claws to install the seat leg side cover.

c. Install the 4 screws.



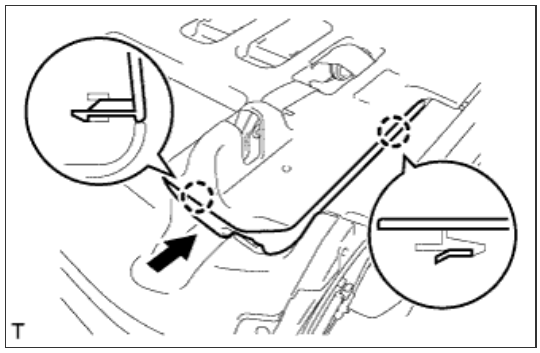
12. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



13. INSTALL UPPER SEAT TRACK RAIL COVER LH

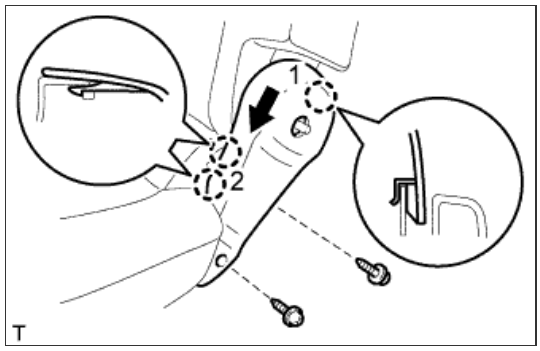
a. Attach the 2 claws to install the cover.



14. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 3 claws in the order shown in the illustration to install the cover.

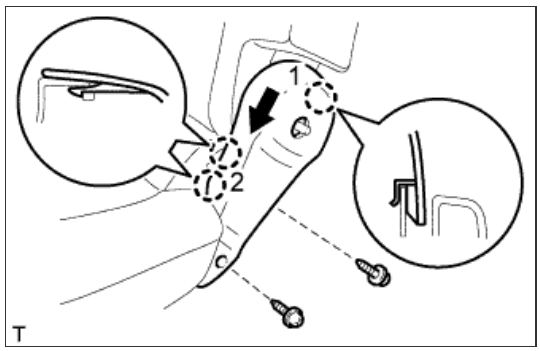
b. Install the 2 screws.



15. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

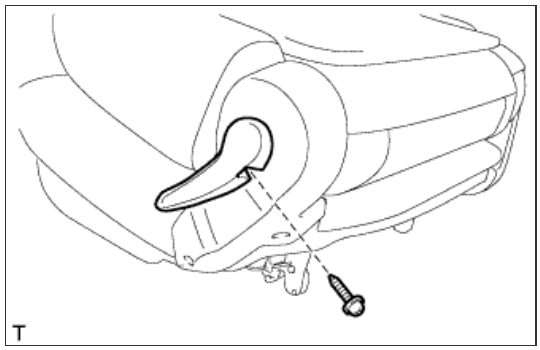
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



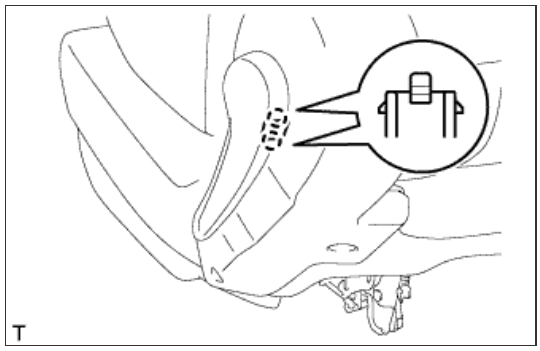
16. INSTALL RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



17. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



18. INSTALL REAR NO. 1 SEAT ASSEMBLY LH

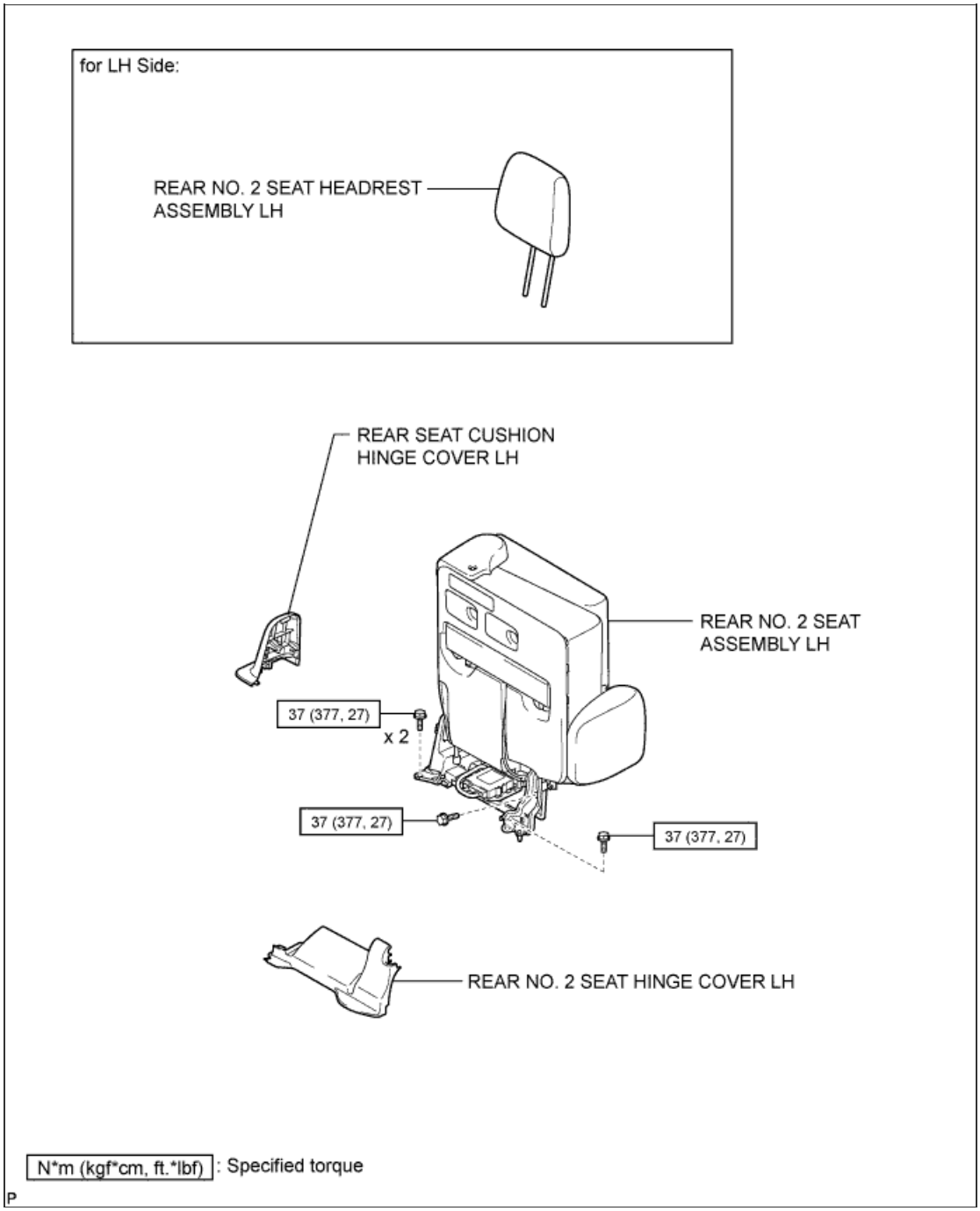
a. Install the rear No. 1 seat assembly (Click here).

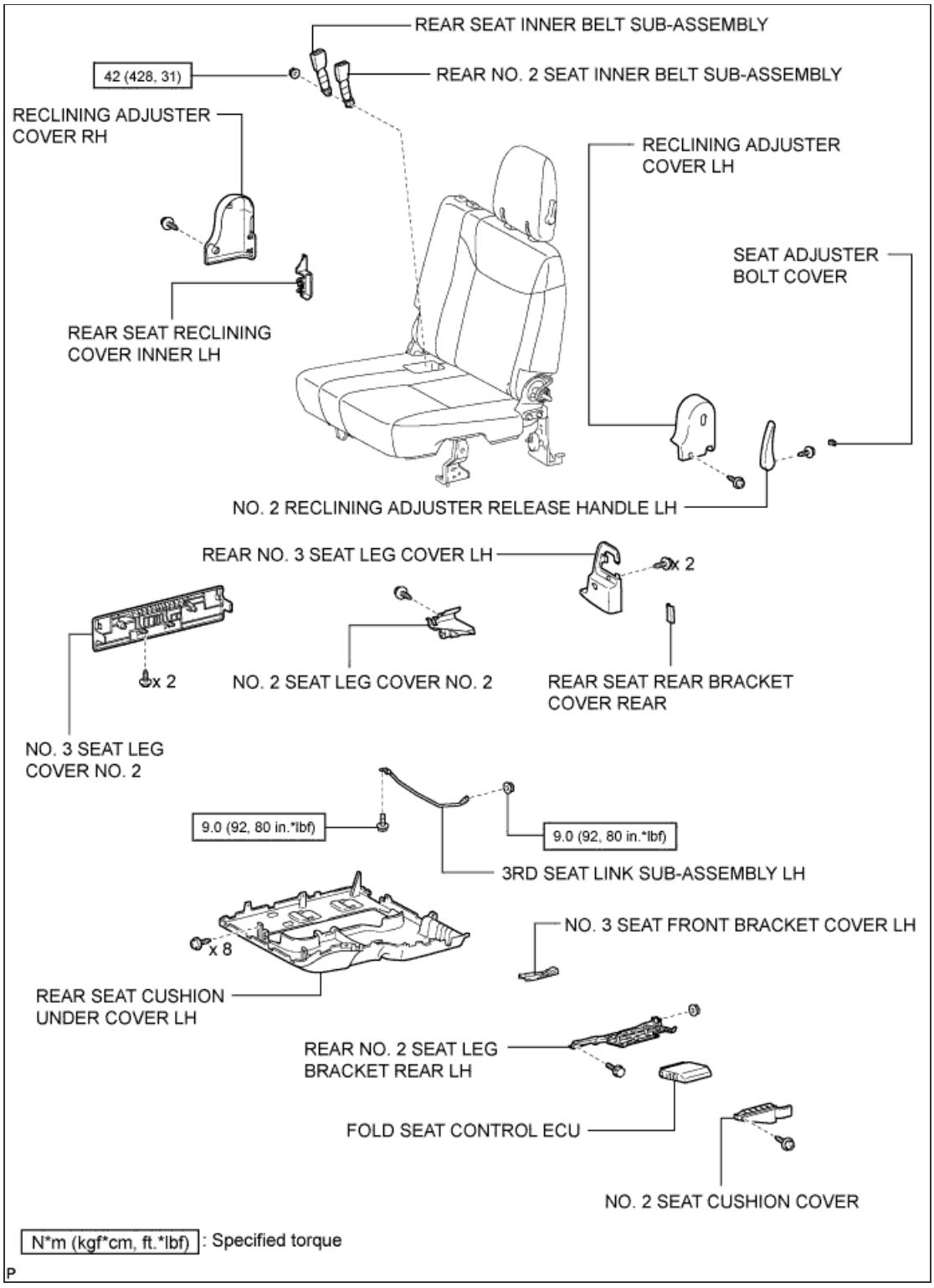
19. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

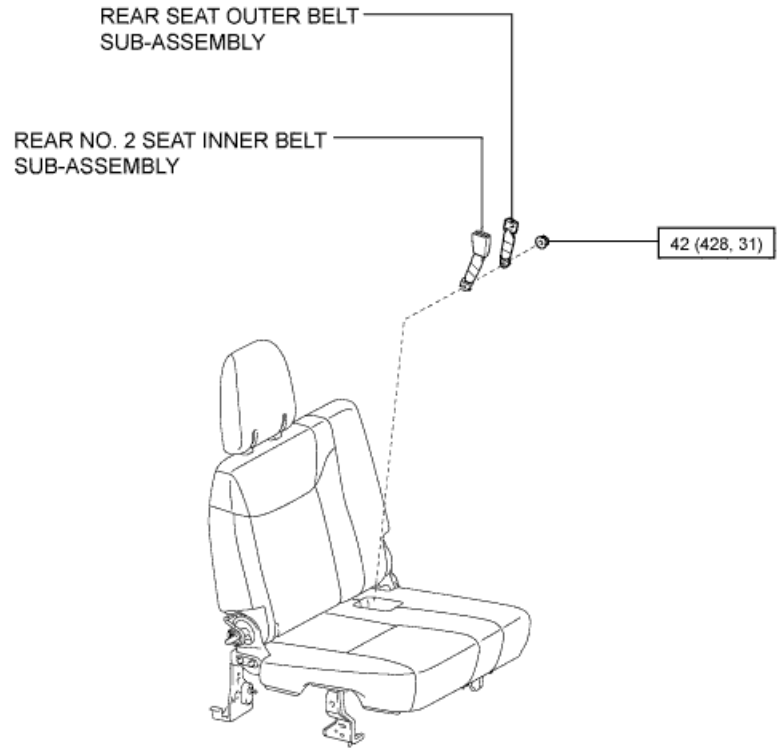
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

for Preparation Click here




REAR SEAT INNER BELT SUB-ASSEMBLY
42 (428, 31)
REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY
RECLINING ADJUSTER COVER RH
RECLINING ADJUSTER COVER LH
SEAT ADJUSTER BOLT COVER
REAR SEAT RECLINING COVER INNER LH
NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH
REAR NO. 3 SEAT LEG COVER LH
x 2
x 2
NO. 2 SEAT LEG COVER NO. 2
REAR SEAT REAR BRACKET COVER REAR
NO. 3 SEAT LEG COVER NO. 2
9.0 (92, 80 in.*lbf)
9.0 (92, 80 in.*lbf)
3RD SEAT LINK SUB-ASSEMBLY LH
x 8
NO. 3 SEAT FRONT BRACKET COVER LH
REAR SEAT CUSHION UNDER COVER LH
REAR NO. 2 SEAT LEG BRACKET REAR LH
FOLD SEAT CONTROL ECU
NO. 2 SEAT CUSHION COVER
N*m (kgf*cm, ft.*lbf) : Specified torque
P

for RH Side:



N*m (kgf*cm, ft.*lbf) : Specified torque

P

for Preparation Click here

HINT:

- **Use the same procedures for the RH side and LH side.**
- **The procedures listed below are for the LH side.**

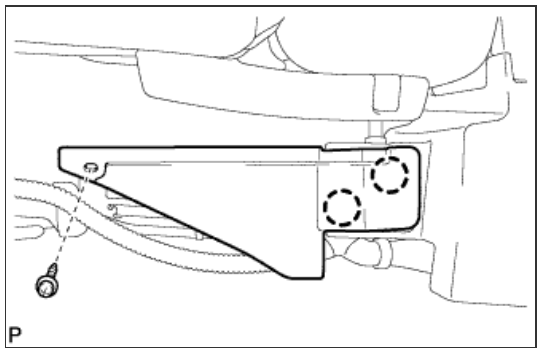
1. REMOVE REAR NO. 2 SEAT ASSEMBLY LH

a. w/ Automatic Folding-up Function:
Remove the rear No. 2 seat assembly LH (Click here).

b. w/ Manual Folding-up Function:
Remove the rear No. 2 seat assembly LH (Click here).

2. REMOVE NO. 2 SEAT CUSHION COVER

a. Remove the screw and detach the 2 claws to remove the cover.



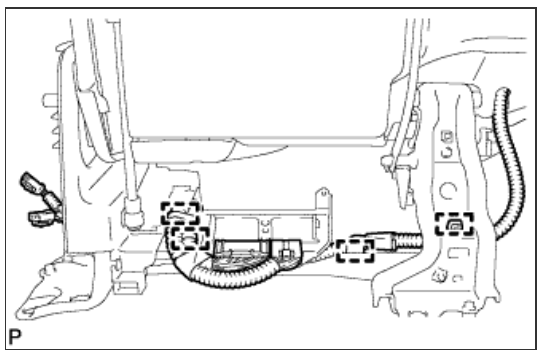
3. REMOVE FOLD SEAT CONTROL ECU

a. w/ Automatic Folding-up Function:
Remove the fold seat control ECU (Click here).

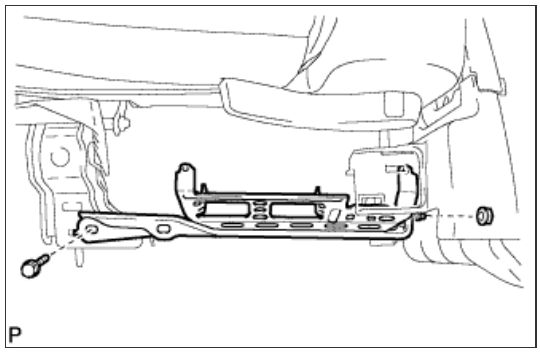
b. w/ Manual Folding-up Function:
Remove the fold seat control ECU (Click here).

4. REMOVE REAR NO. 2 SEAT LEG BRACKET REAR LH

a. Detach the 4 clamps.



b. Remove the bolt, nut and bracket.

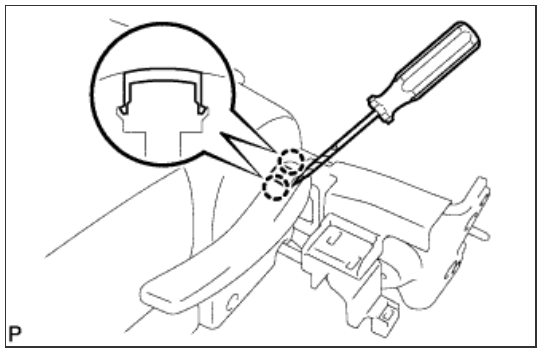


5. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

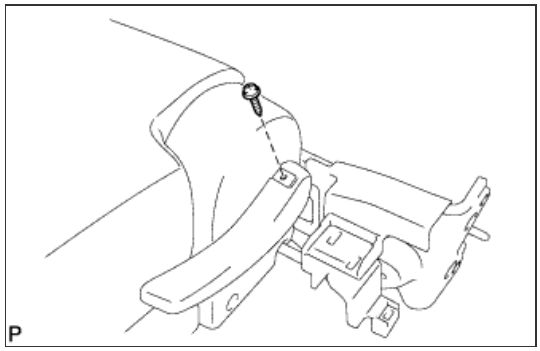
HINT:

Tape the screwdriver tip before use.



6. REMOVE NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH

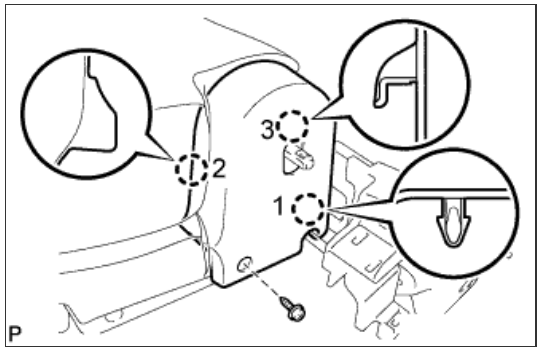
a. Remove the screw and release handle.



7. REMOVE RECLINING ADJUSTER COVER LH

a. Remove the screw.

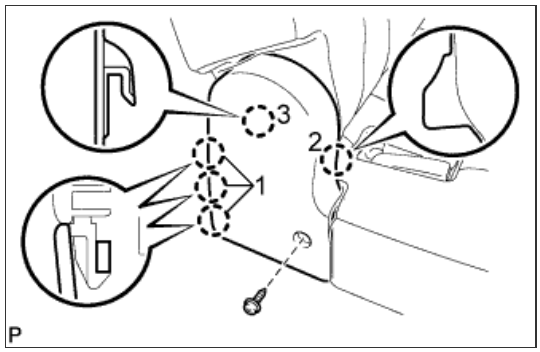
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



8. REMOVE RECLINING ADJUSTER COVER RH

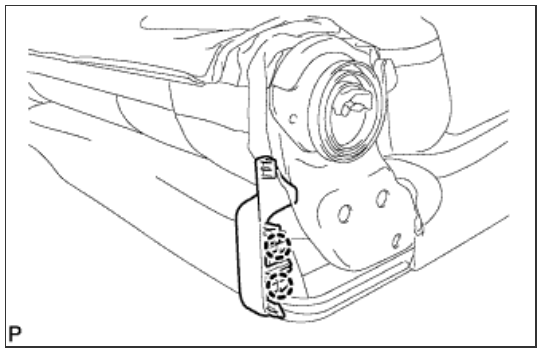
a. Remove the screw.

b. Detach the 5 claws in the order shown in the illustration, and then remove the cover.



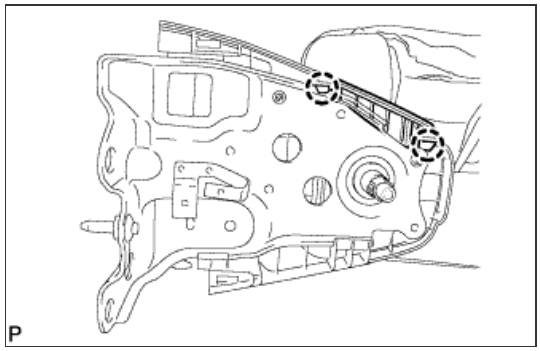
9. REMOVE REAR SEAT INNER RECLINING COVER LH

a. Detach the 2 claws and remove the cover.



10. REMOVE REAR SEAT REAR BRACKET COVER REAR

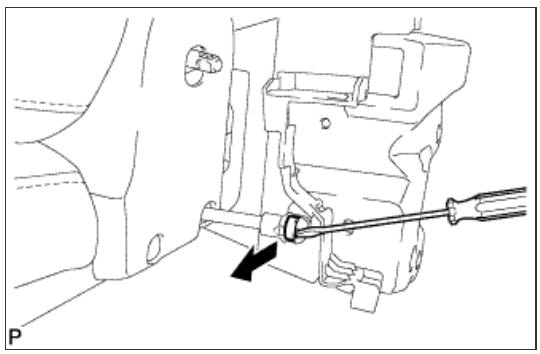
a. Detach the 2 claws and remove the cover.



11. REMOVE REAR NO. 3 SEAT LEG COVER LH

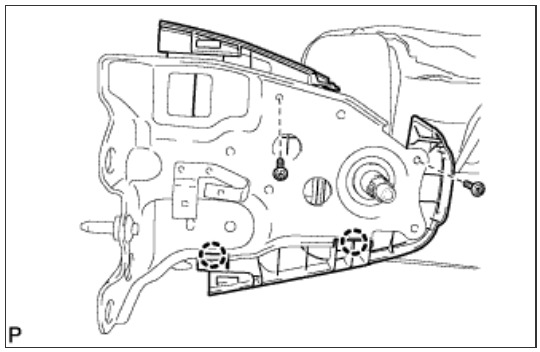
a. Using a screwdriver, remove the spring of the seat stay ball joint.

b. Disconnect the seat stay.



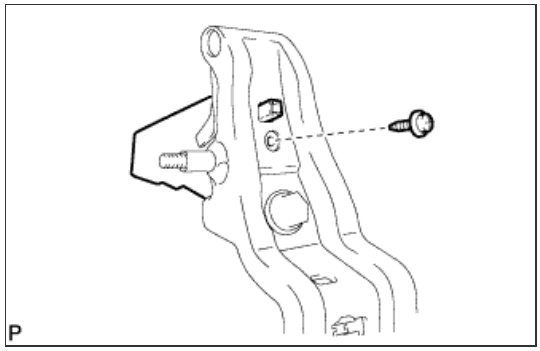
c. Remove the 2 screws.

d. Detach the 2 claws and remove the seat leg cover.



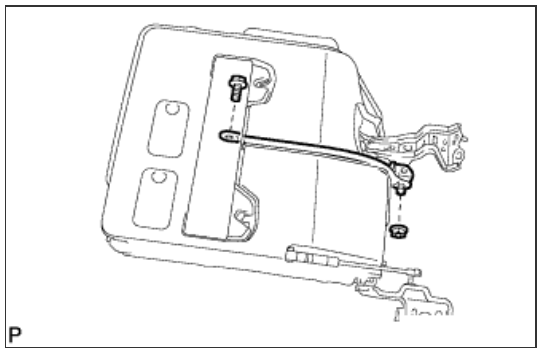
12. REMOVE NO. 2 SEAT LEG COVER NO. 2

a. Remove the screw and cover.



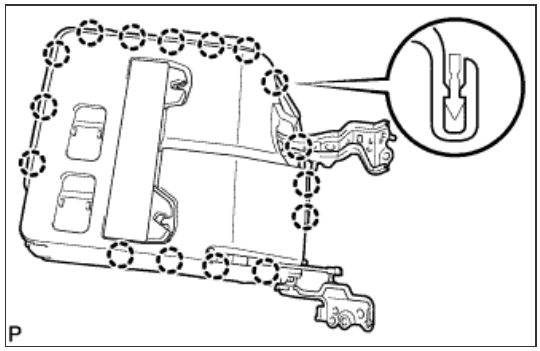
13. REMOVE 3RD SEAT LINK SUB-ASSEMBLY LH

a. Remove the bolt, nut and seat link.

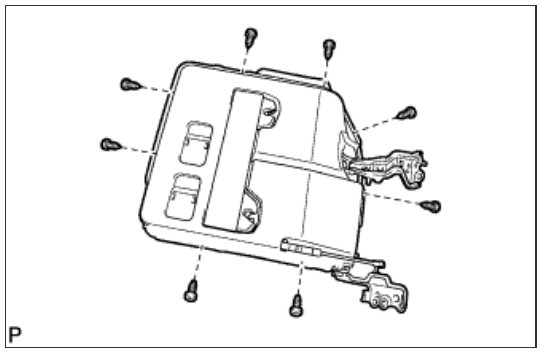


14. REMOVE REAR SEAT CUSHION UNDER COVER LH

a. Detach the 16 claws.

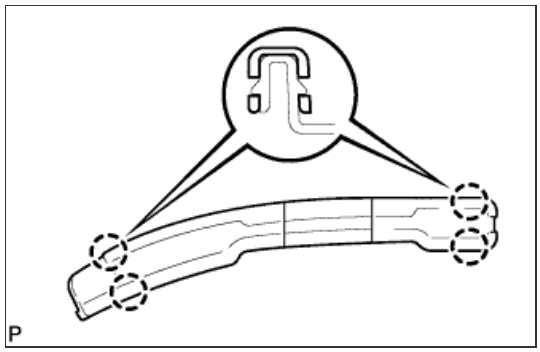


b. Remove the 8 screws and cover.



15. REMOVE NO. 3 SEAT FRONT BRACKET COVER LH

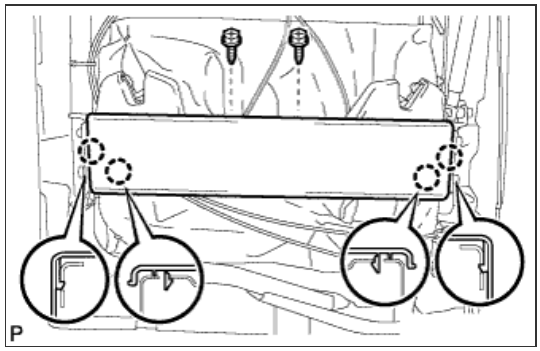
a. Detach the 4 claws and remove the cover.



16. REMOVE NO. 3 SEAT LEG COVER NO. 2

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

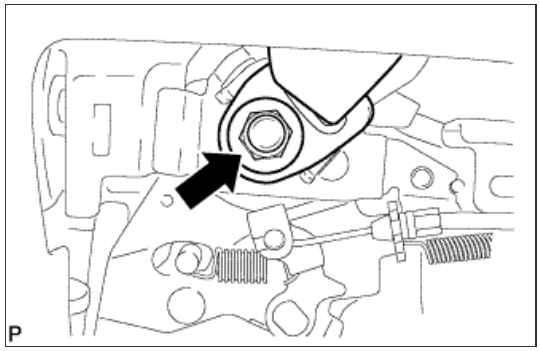


17. REMOVE REAR SEAT INNER BELT SUB-ASSEMBLY (for LH Side)

a. Remove the nut and belt.

HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat inner belt. Therefore, it becomes disconnected when the nut is removed.

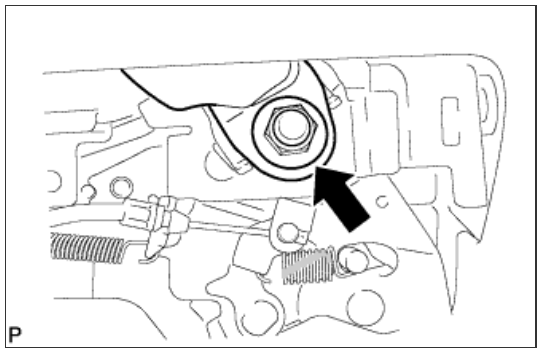


18. REMOVE REAR SEAT OUTER BELT SUB-ASSEMBLY (for RH Side)

a. Remove the nut and belt.

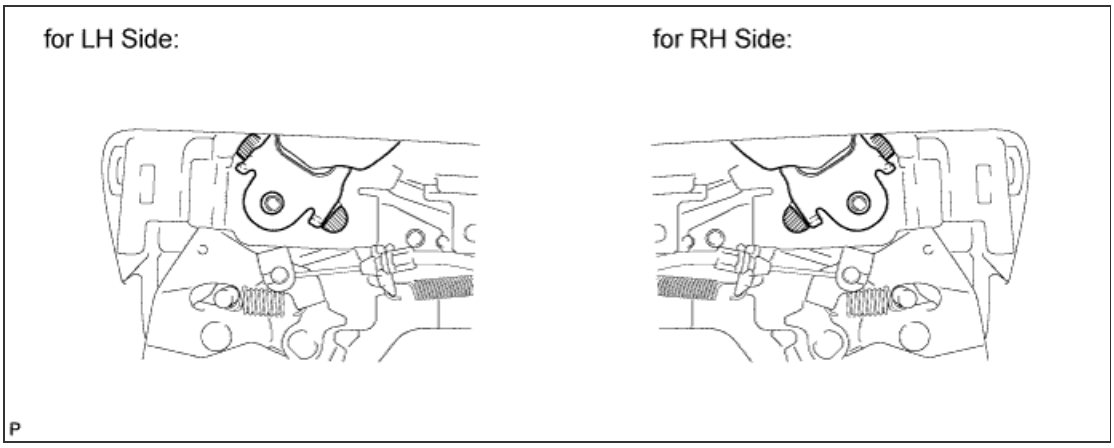
HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat outer belt. Therefore, it becomes disconnected when the nut is removed.



19. REMOVE REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY

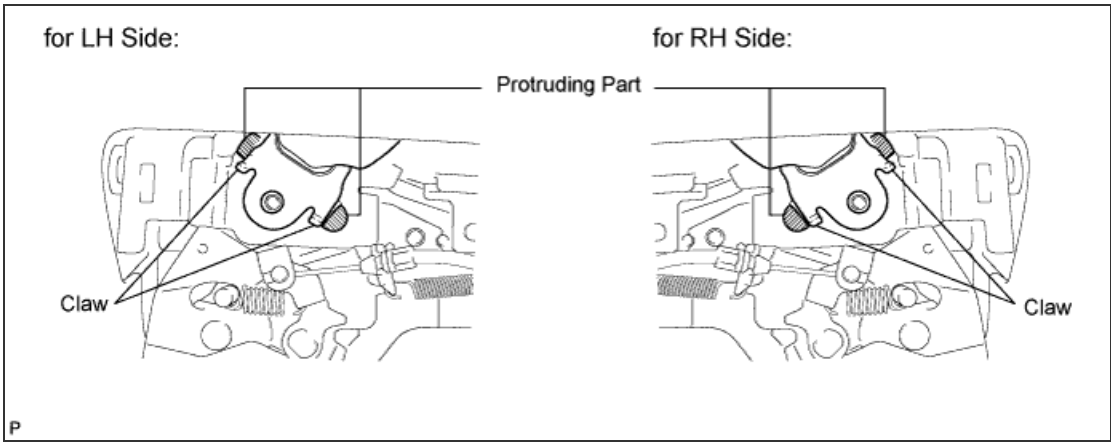
a. Remove the 2 belts.



for Preparation Click here

1. INSTALL REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY

a. Install the 2 belts.



NOTICE:

- **Make sure the claws are facing away from the seat.**
- **Do not overlap the anchor part of the seat belt and protruding parts of the seat.**

2. INSTALL REAR SEAT INNER BELT SUB-ASSEMBLY (for LH Side)

a. Install the belt with the nut.

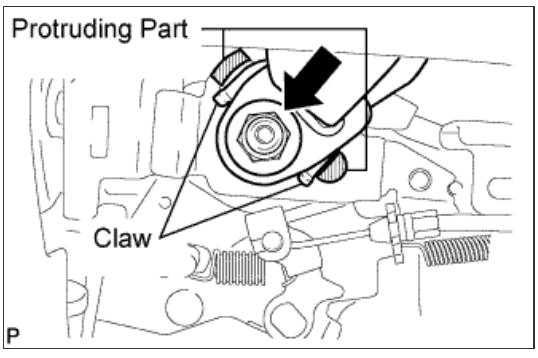
Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the seat.

HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat inner belt. Therefore, connect it when installing the rear seat inner belt.



3. INSTALL REAR SEAT OUTER BELT SUB-ASSEMBLY (for RH Side)

a. Install the belt with the nut.

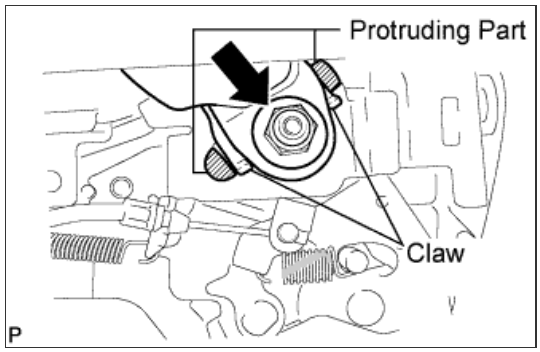
Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the seat.

HINT:

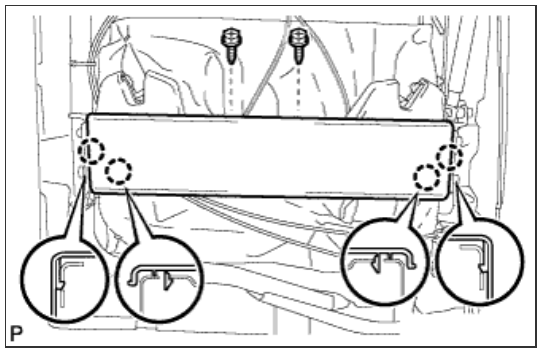
The rear No. 2 seat inner belt is fixed with the same nut as the rear seat outer belt. Therefore, connect it when installing the rear seat outer belt.



4. INSTALL NO. 3 SEAT LEG COVER NO. 2

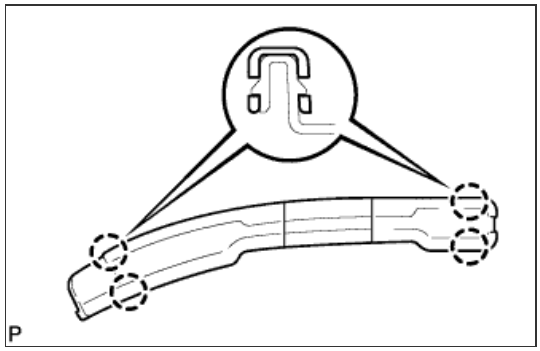
a. Attach the 4 claws to install the cover.

b. Install the 2 screws.



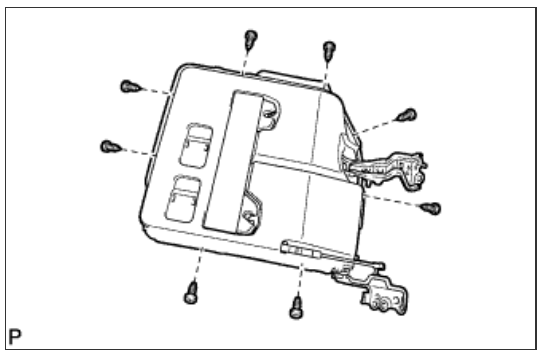
5. INSTALL NO. 3 SEAT FRONT BRACKET COVER LH

a. Attach the 4 claws to install the cover.

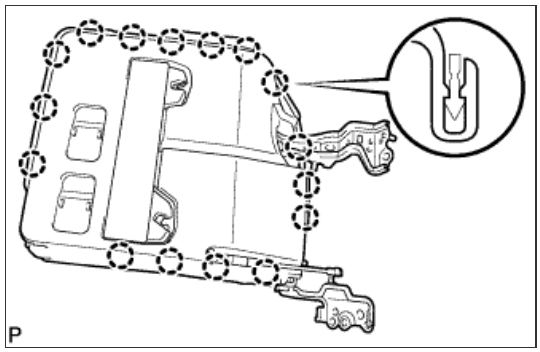


6. INSTALL REAR SEAT CUSHION UNDER COVER LH

a. Install the cover with the 8 screws.



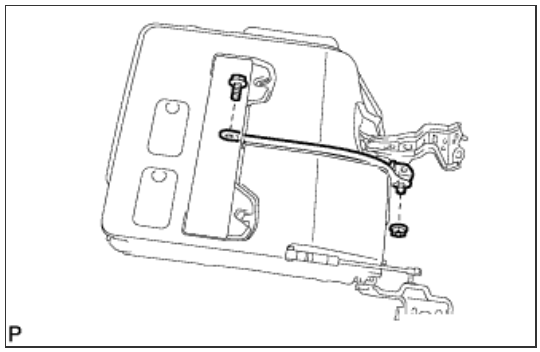
b. Attach the 16 claws.



7. INSTALL 3RD SEAT LINK SUB-ASSEMBLY LH

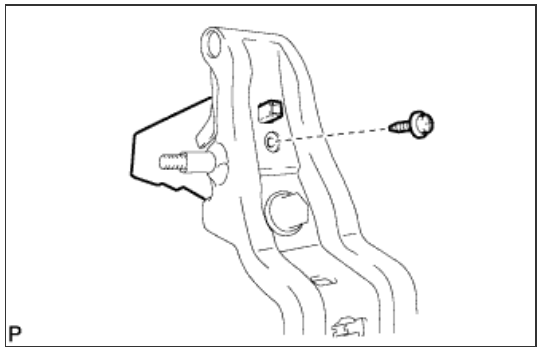
a. Install the seat link with the bolt and nut.

Torque:
8.5 N*m{ 87 kgf*cm , 75 in.*lbf }



8. INSTALL NO. 2 SEAT LEG COVER NO. 2

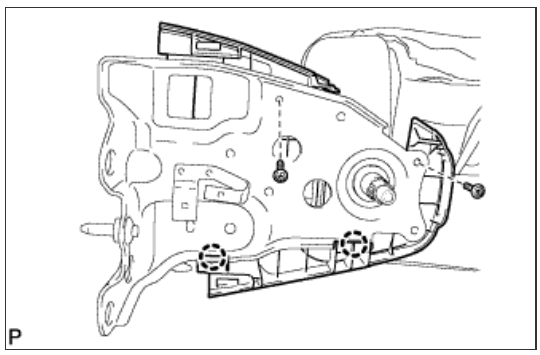
a. Install the seat leg cover with the screw.



9. INSTALL REAR NO. 3 SEAT LEG COVER LH

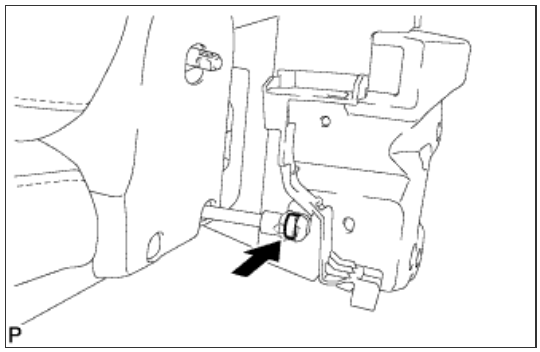
a. Attach the 2 claws to install the seat leg cover.

b. Install the 2 screws.



c. Install the spring of the seat stay ball joint.

d. Connect the seat stay to the seat frame.

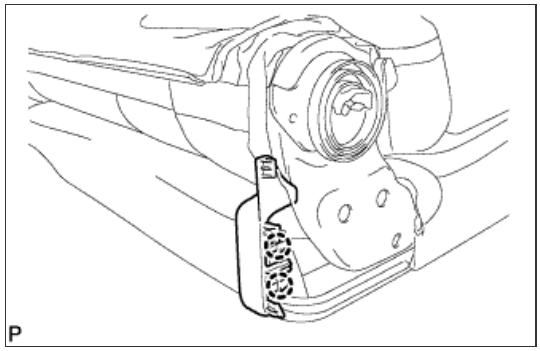


10. INSTALL REAR SEAT REAR BRACKET COVER REAR

a. Attach the 2 claws to install the cover.

11. INSTALL REAR SEAT INNER RECLINING COVER LH

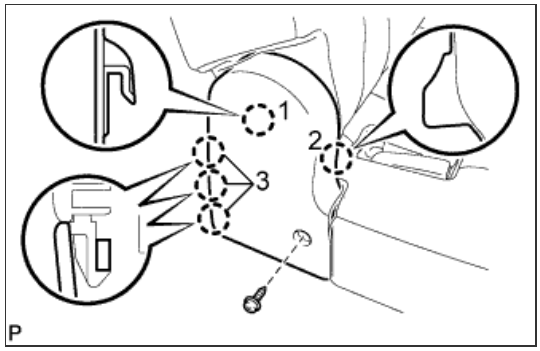
a. Attach the 2 claws to install the cover.



12. INSTALL RECLINING ADJUSTER COVER RH

a. Attach the 5 claws in the order shown in the illustration to install the cover.

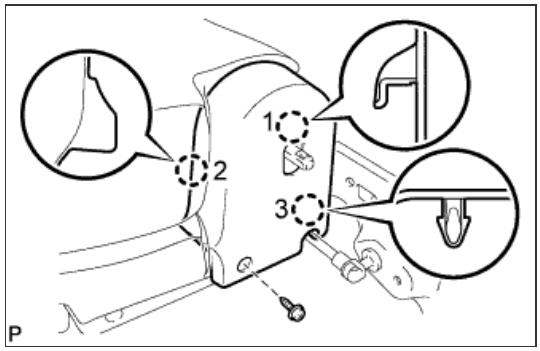
b. Install the screw.



13. INSTALL RECLINING ADJUSTER COVER LH

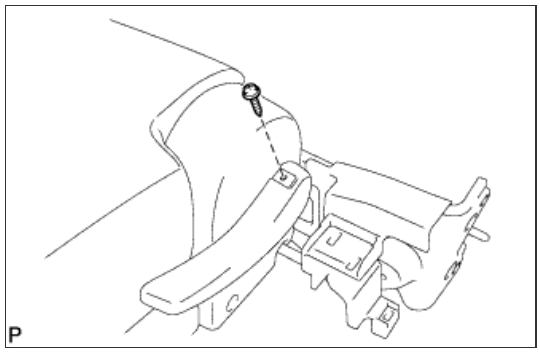
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the screw.



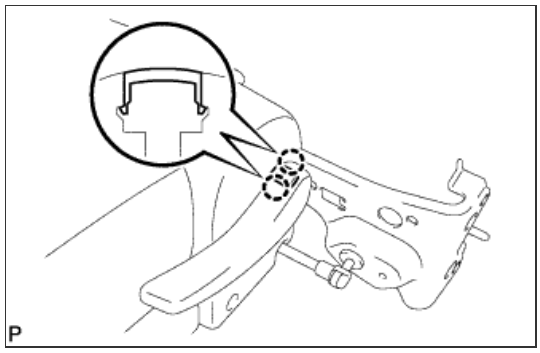
14. INSTALL NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



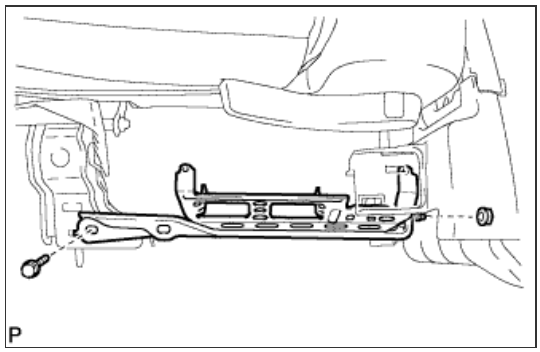
15. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.

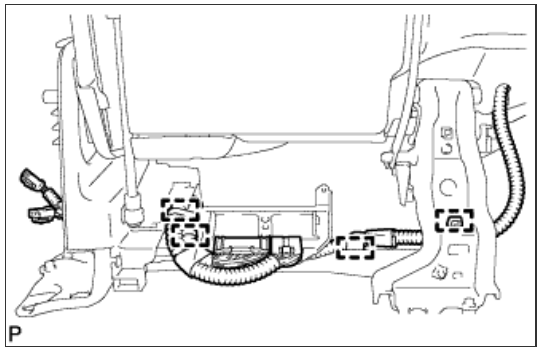


16. INSTALL REAR NO. 2 SEAT LEG BRACKET REAR LH

a. Install the bracket with the bolt and nut.



b. Attach the 4 clamps.



17. INSTALL FOLD SEAT CONTROL ECU

a. w/ Automatic Folding-up Function:

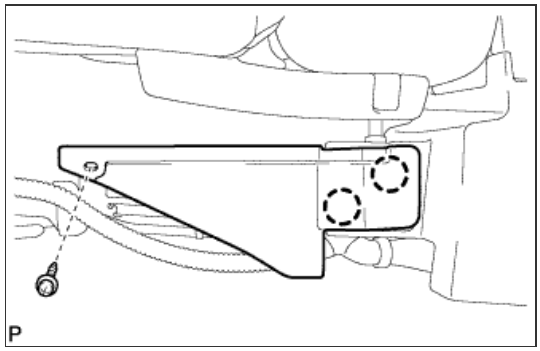
Install the control ECU (Click here).

b. w/ Manual Folding-up Function:
Install the control ECU (Click here).

18. INSTALL NO. 2 SEAT CUSHION COVER

a. Attach the 2 claws to install the cover.

b. Install the screw.

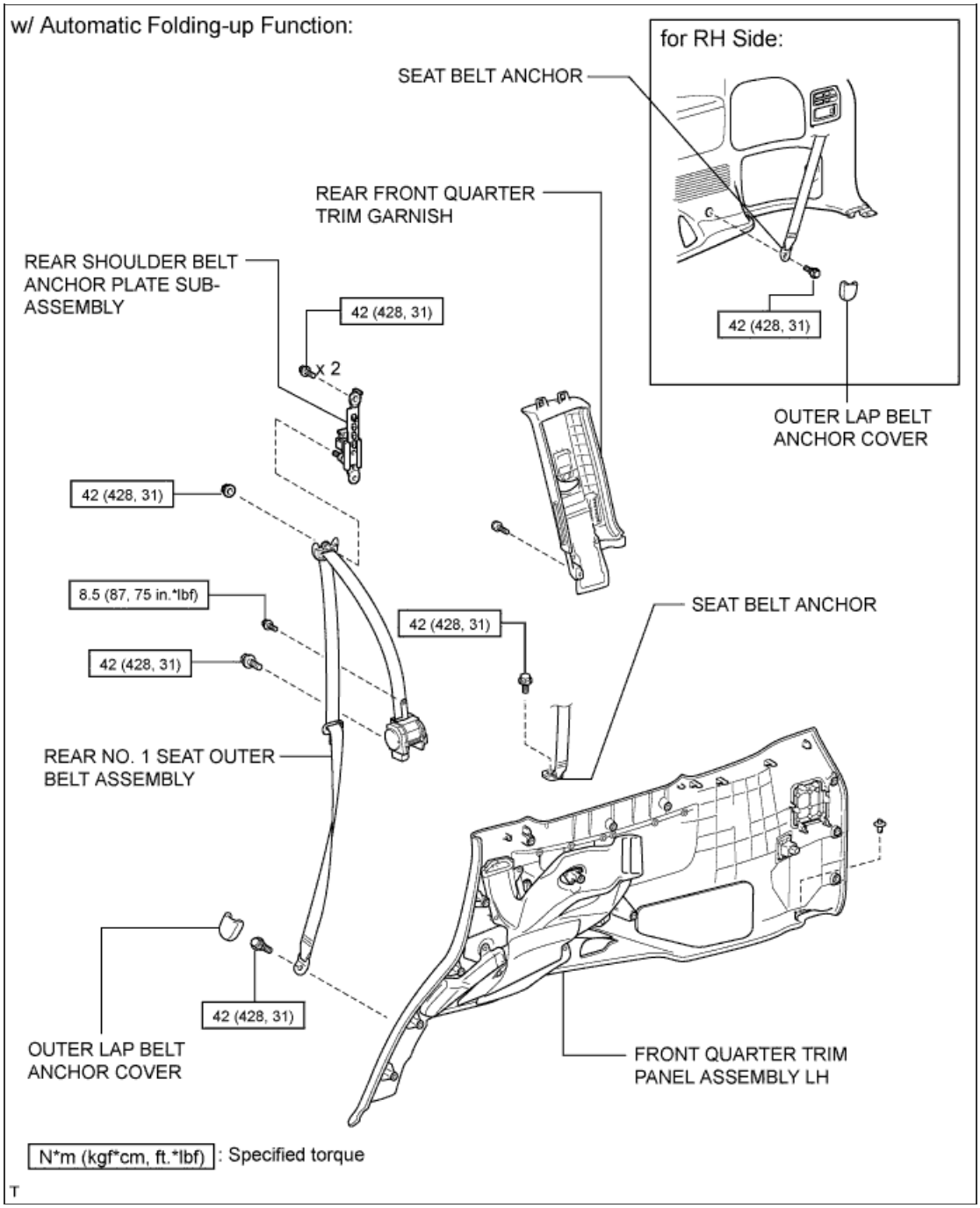


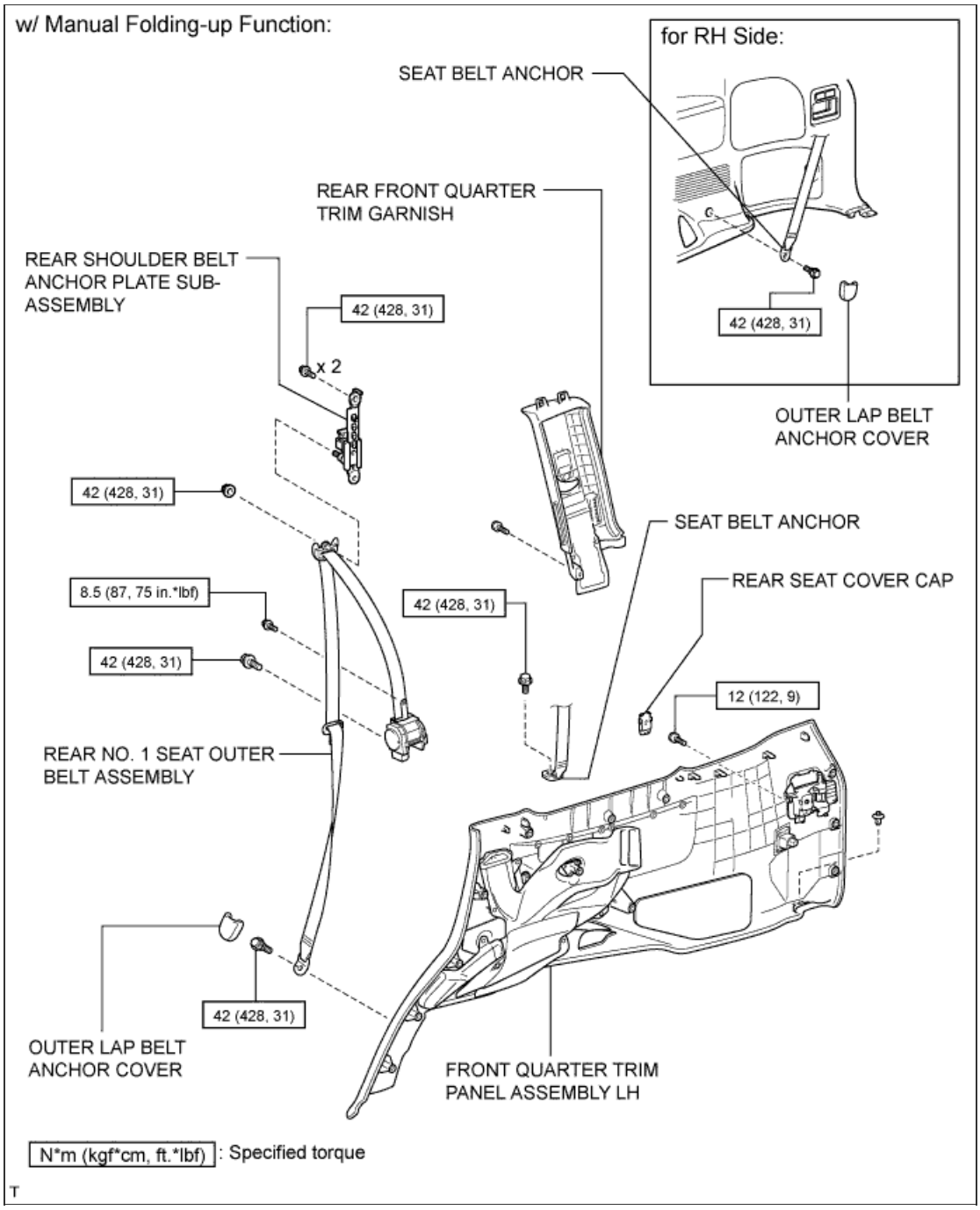
19. INSTALL REAR NO. 2 SEAT ASSEMBLY LH

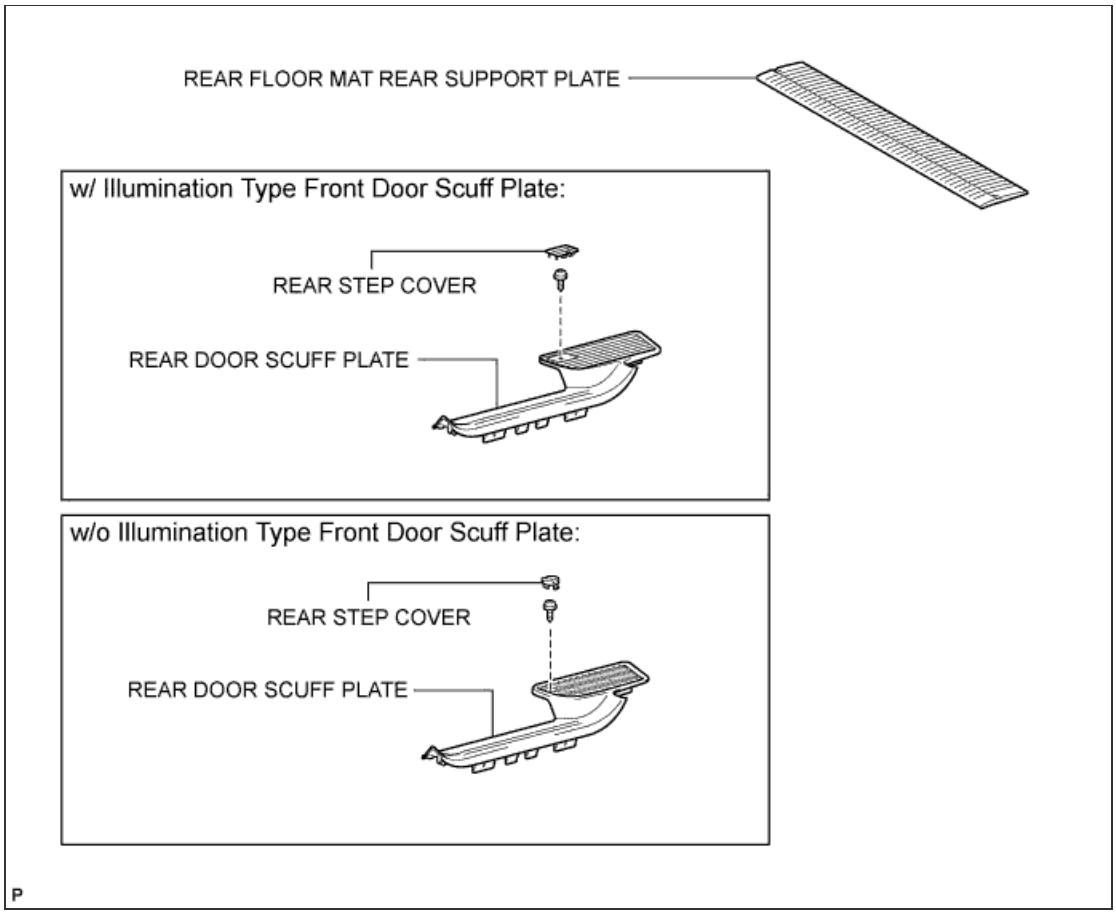
a. w/ Automatic Folding-up Function:
Install the rear No. 2 seat assembly LH (Click here).

b. w/ Manual Folding-up Function:
Install the rear No. 2 seat assembly LH (Click here).

for Preparation Click here




w/ Manual Folding-up Function:
for RH Side:
SEAT BELT ANCHOR
REAR FRONT QUARTER TRIM GARNISH
REAR SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY
42 (428, 31)
x 2
42 (428, 31)
OUTER LAP BELT ANCHOR COVER
42 (428, 31)
SEAT BELT ANCHOR
8.5 (87, 75 in.*lbf)
42 (428, 31)
REAR SEAT COVER CAP
42 (428, 31)
12 (122, 9)
REAR NO. 1 SEAT OUTER BELT ASSEMBLY
42 (428, 31)
OUTER LAP BELT ANCHOR COVER
FRONT QUARTER TRIM PANEL ASSEMBLY LH
N*m (kgf*cm, ft.*lbf) : Specified torque
T


REAR FLOOR MAT REAR SUPPORT PLATE
w/ Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE
w/o Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE
P

for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

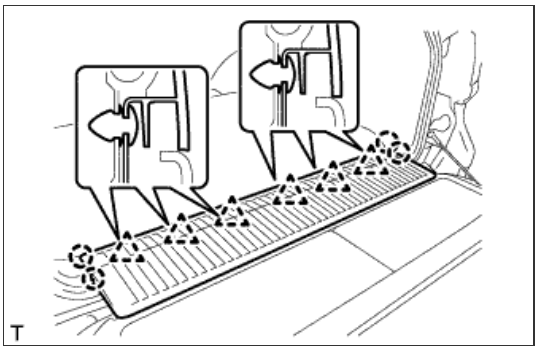
2. REMOVE REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

3. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.

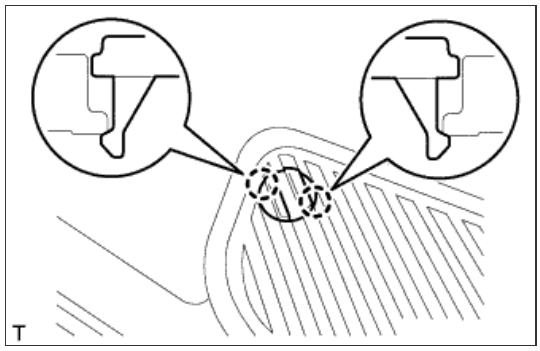


4. REMOVE REAR STEP COVER

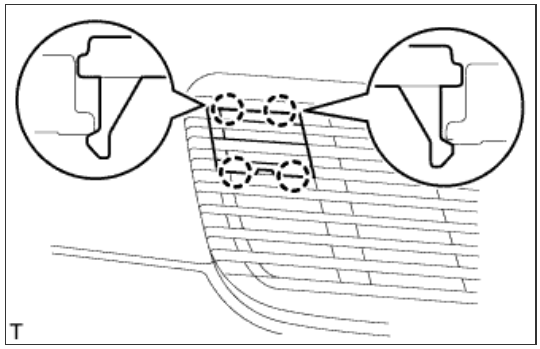
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

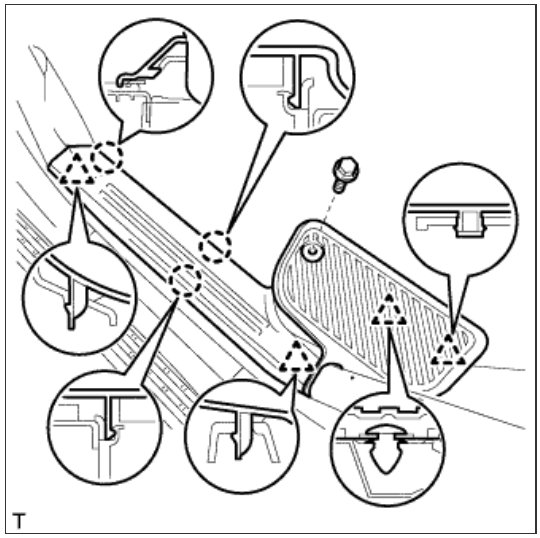


5. REMOVE REAR DOOR SCUFF PLATE

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

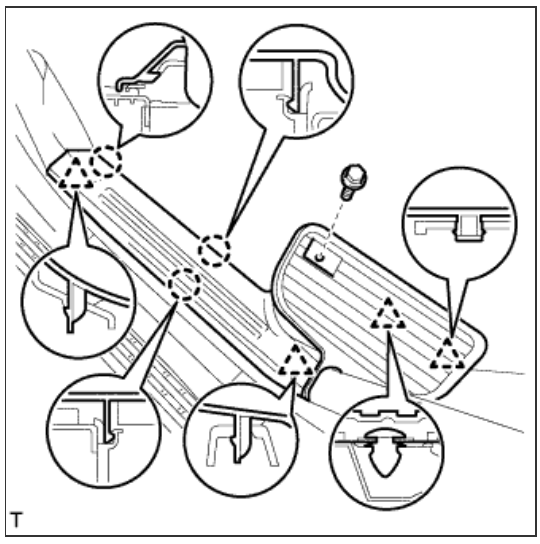
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



6. REMOVE REAR SEAT COVER CAP (w/ Manual Folding-up Function)

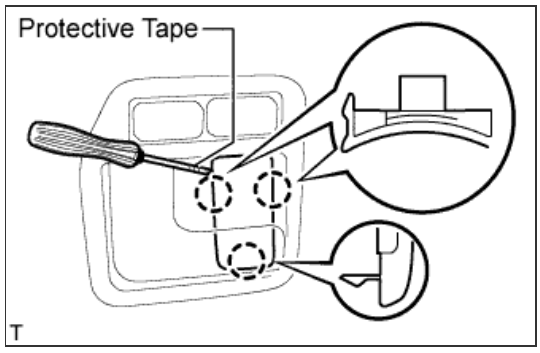
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

Tape the screwdriver tip before use.

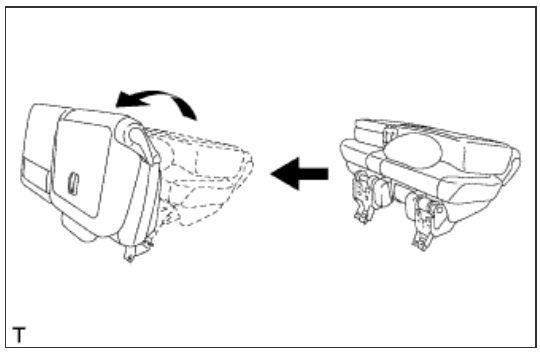


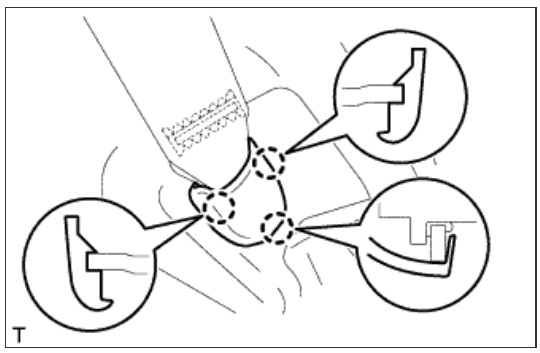
7. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY

HINT:

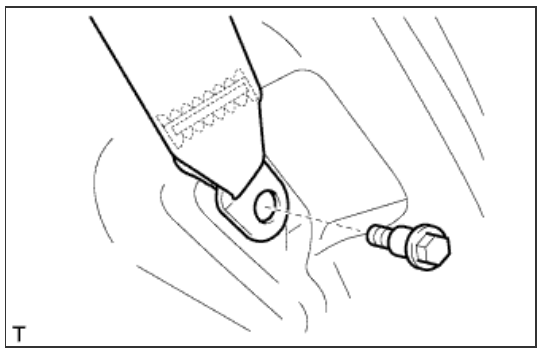
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.

a. Detach the 3 claws and remove the cover.



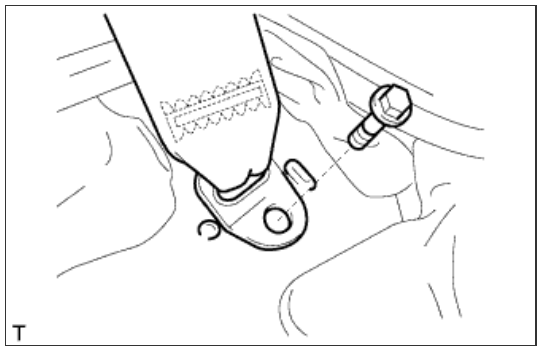


b. Remove the bolt and disconnect the rear seat outer belt floor anchor.



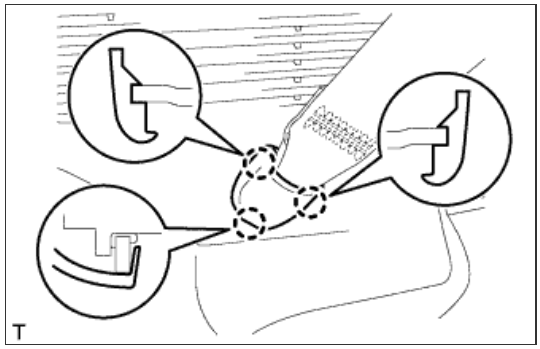
c. for LH side:

i. Remove the bolt and disconnect the rear No. 2 seat outer belt floor anchor LH.

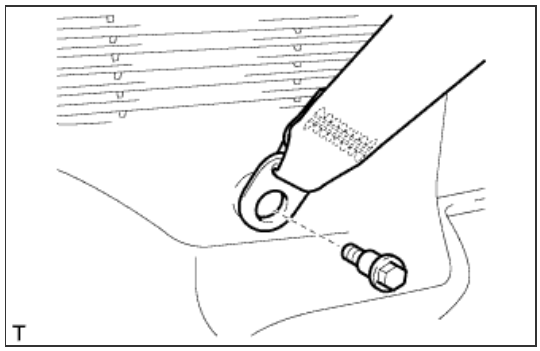


d. for RH side:

i. Detach the 3 claws and remove the cover.



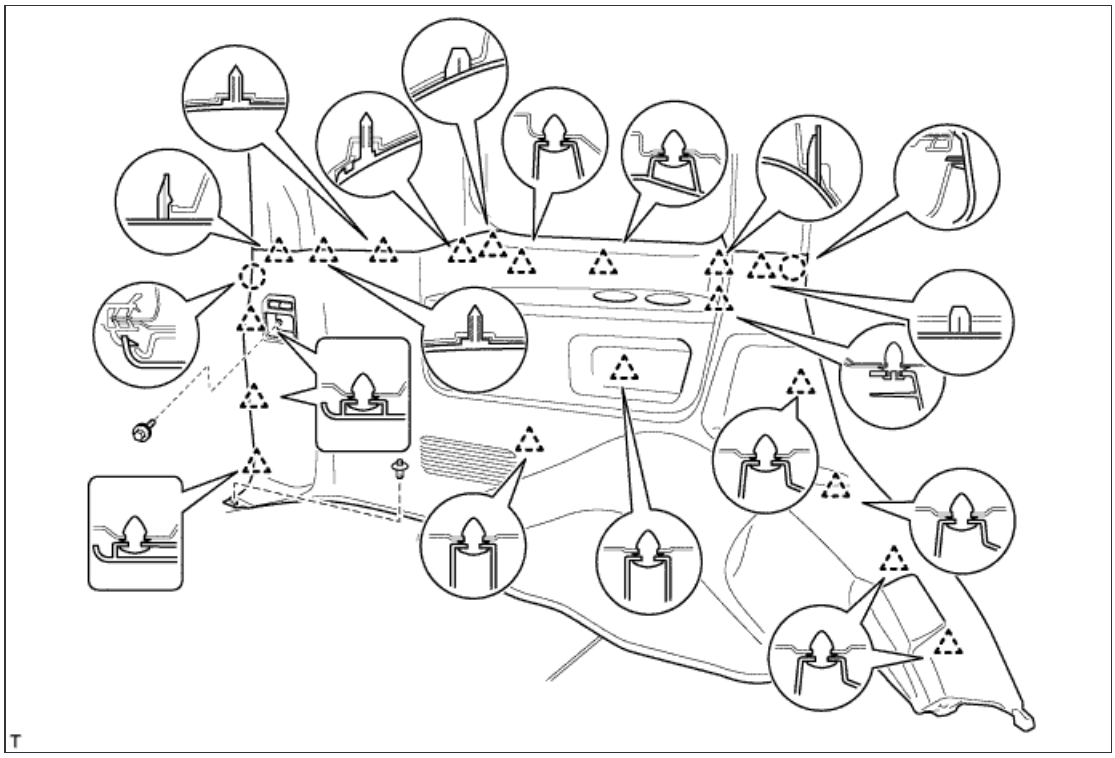
ii. Remove the bolt and disconnect the rear No. 2 seat outer belt floor anchor RH.



e. w/ Manual Folding-up Function:

i. Remove the screw, clip and bolt.

ii. Detach the 19 clips and 2 claws.

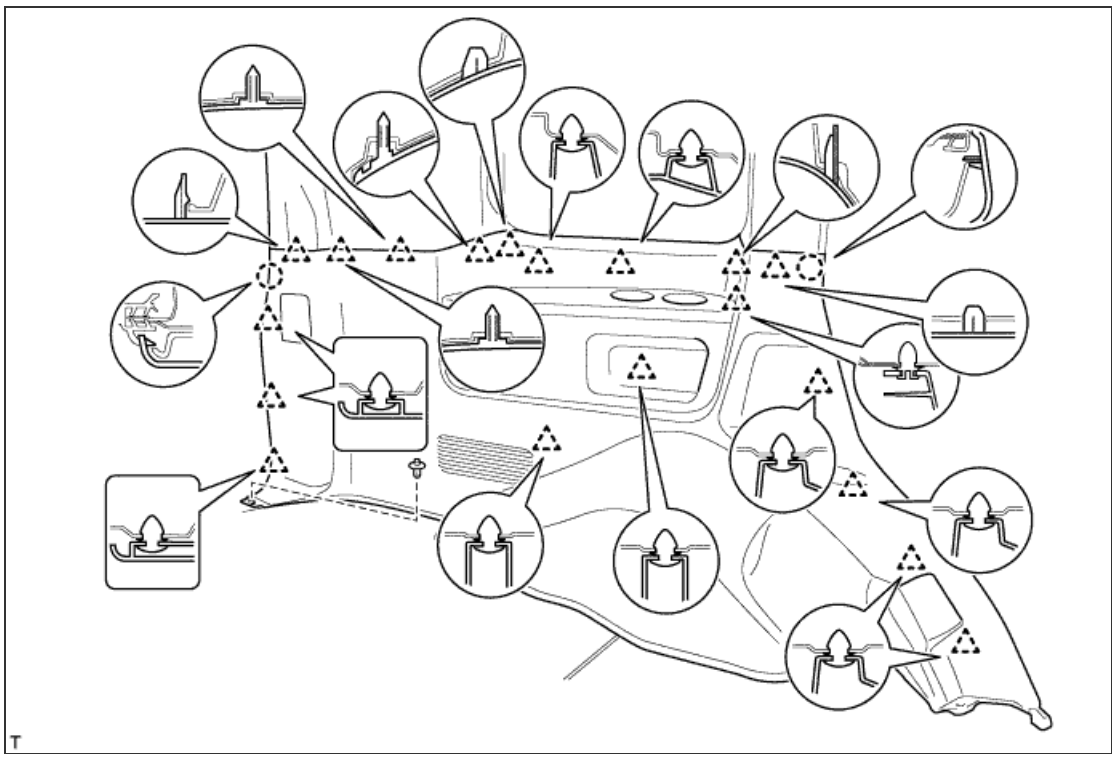


iii. Disconnect the thermistor connector, power outlet socket connector and rear seat lock control lever cable, and then remove the quarter trim panel.

f. w/ Automatic Folding-up Function:

i. Remove the screw and clip.

ii. Detach the 19 clips and 2 claws.



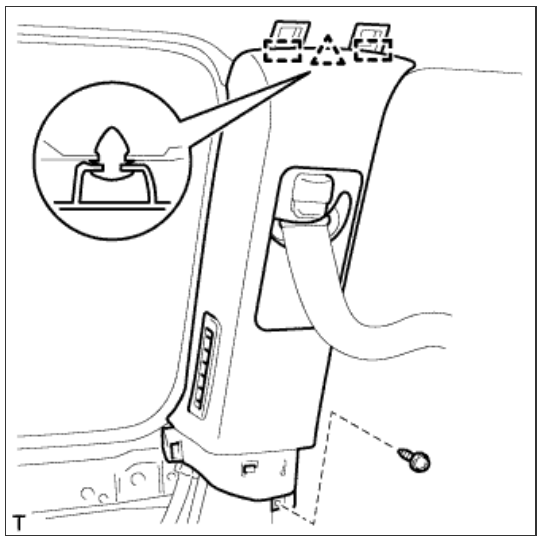
iii. Disconnect the thermistor connector and power outlet socket connector, and then remove the quarter trim panel.

8. REMOVE REAR FRONT QUARTER TRIM GARNISH

a. Remove the screw.

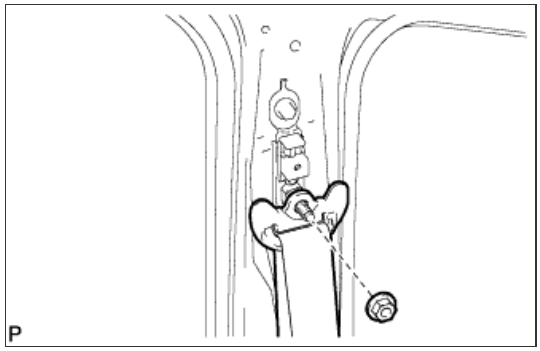
b. Detach the clip and 2 guides.

c. Pass the seat belt anchor through the quarter trim garnish, and remove the quarter trim garnish.

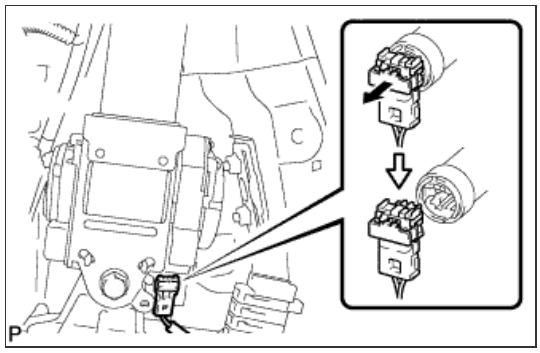


9. REMOVE REAR NO. 1 SEAT OUTER BELT ASSEMBLY

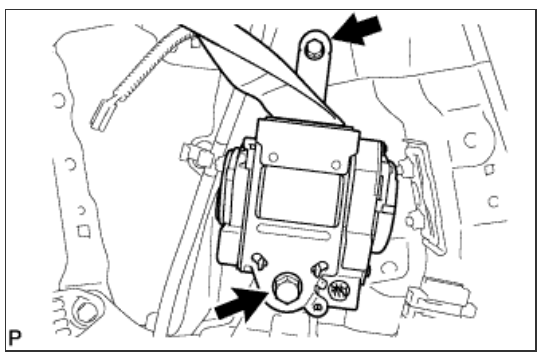
a. Remove the nut and seat belt shoulder anchor.



b. Disconnect the pretensioner connector as shown in the illustration

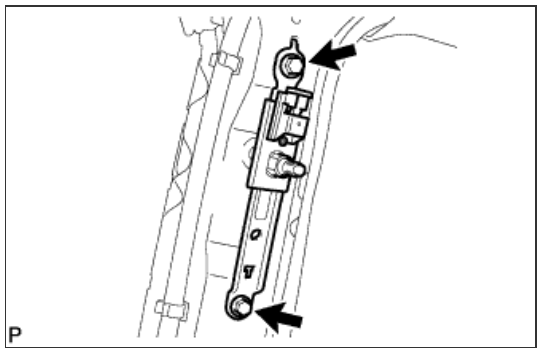


c. Remove the 2 bolts and rear No. 1 seat outer belt.



10. REMOVE REAR SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY

a. Remove the 2 bolts and anchor plate.

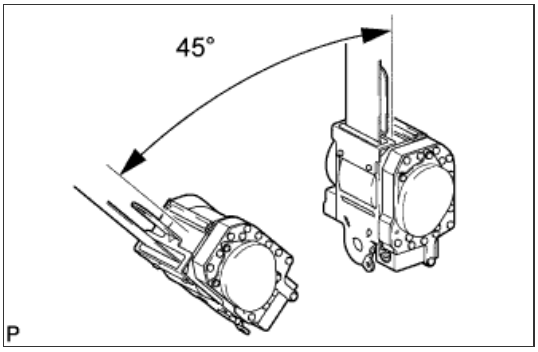


for Preparation Click here

1. INSPECT REAR NO. 1 SEAT OUTER BELT ASSEMBLY

a. Check the ELR.

i. When the inclination of the retractor is 15° or less, check that the belt can be pulled from the retractor. When the inclination of the retractor is over 45°, check that the belt locks.
If the operation is not as specified, replace the seat belt assembly.



b. Check the fastening function of the child restraint system.

NOTICE:

The check should be performed with the outer belt installed.

i. When the belt is pulled out fully, the belt should automatically start to retract.

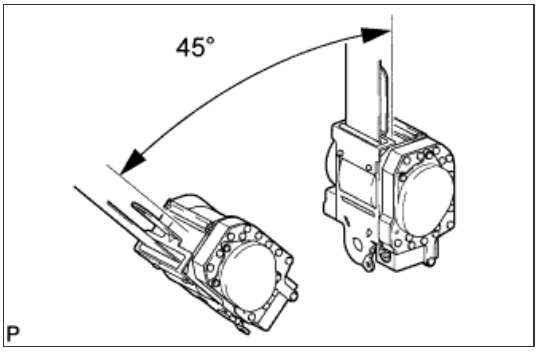
ii. After the belt has fully retracted, the belt should be able to be pulled out and retracted again.
If the operation is not as specified, replace the belt assembly.

for Preparation Click here

1. INSPECT REAR NO. 1 SEAT OUTER BELT ASSEMBLY

a. Check the ELR.

i. When the inclination of the retractor is 15° or less, check that the belt can be pulled from the retractor. When the inclination of the retractor is over 45°, check that the belt locks.
If the operation is not as specified, replace the seat belt assembly.



b. Check the fastening function of the child restraint system.

NOTICE:

The check should be performed with the outer belt installed.

i. When the belt is pulled out fully, the belt should automatically start to retract.

ii. After the belt has fully retracted, the belt should be able to be pulled out and retracted again.
If the operation is not as specified, replace the belt assembly.

for Preparation Click here

HINT:

- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**
- **A bolt without a torque specification is shown in the standard bolt chart (Click here).**

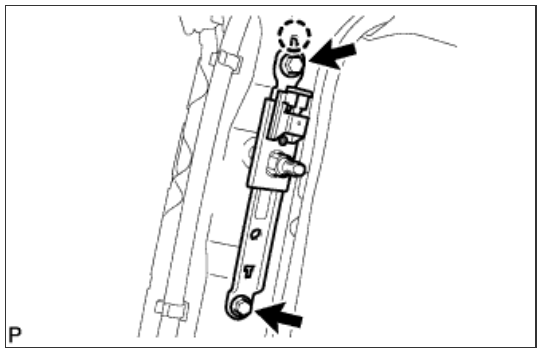
1. INSTALL REAR SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY

a. Align the anchor plate positioning hole with the claw, and install the anchor plate with the 2 bolts.

HINT:

First install the lower bolt, and then install the upper bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



2. INSTALL REAR NO. 1 SEAT OUTER BELT ASSEMBLY

NOTICE:

When installing the retractor, make sure the claws of the vehicle (labeled "a" in the illustration) only contact the installation areas of the retractor.

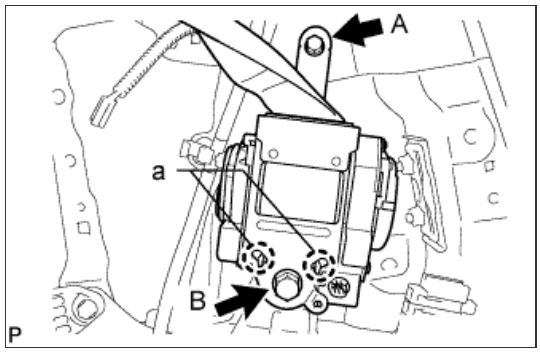
a. Align the claws with the seat belt positioning holes and install the retractor of the seat belt as shown in the illustration.

b. Install the seat belt with the 2 bolts.

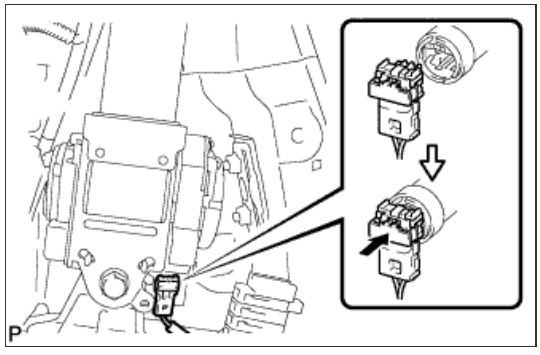
HINT:

First install bolt A, and then install bolt B.

Torque:
for bolt A:
8.5 N*m{ 87 kgf*cm , 75 in.*lbf }
for bolt B:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

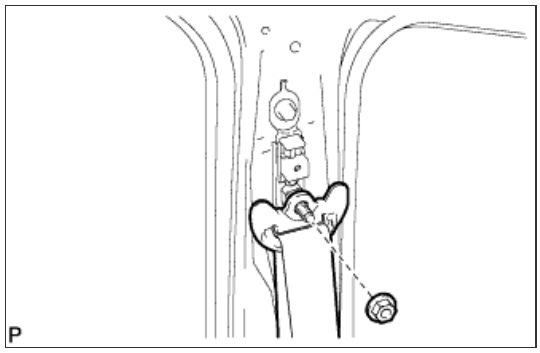


c. Connect the pretensioner connector, as shown in the illustration.



d. Install the seat belt shoulder anchor with the nut.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

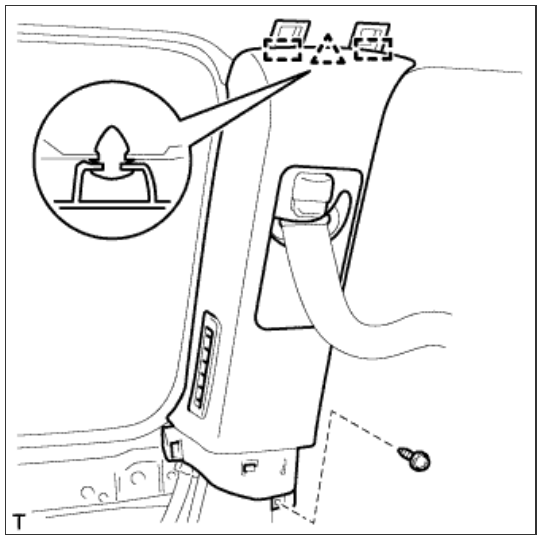


3. INSTALL REAR FRONT QUARTER TRIM GARNISH

a. Pass the seat belt anchor through the quarter trim garnish.

b. Attach the clip and 2 guides to install the quarter trim garnish.

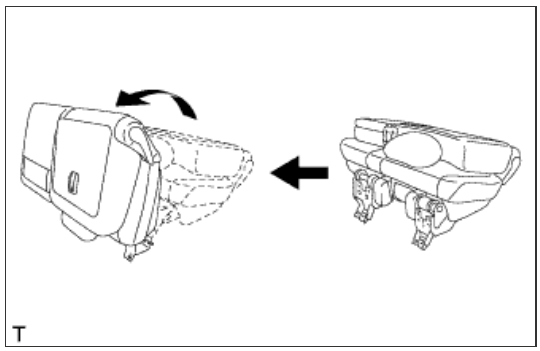
c. Install the screw.



4. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



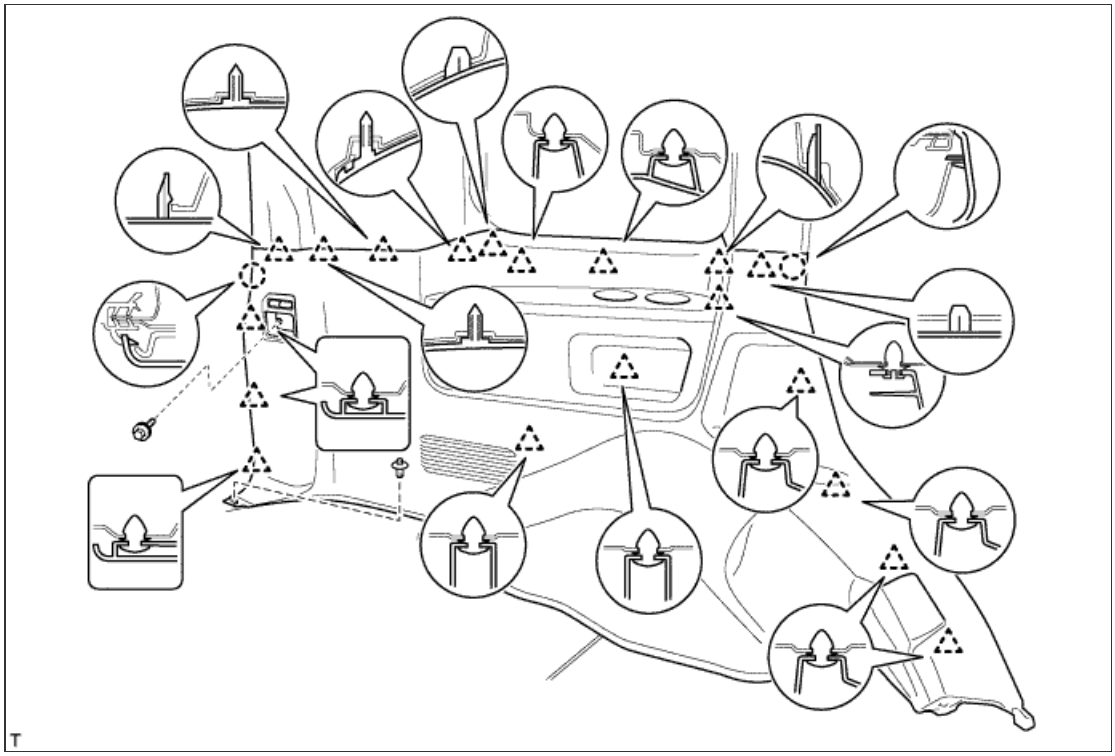
a. w/ Manual Folding-up Function:

i. Connect the thermistor connector, power outlet socket connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the screw, clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

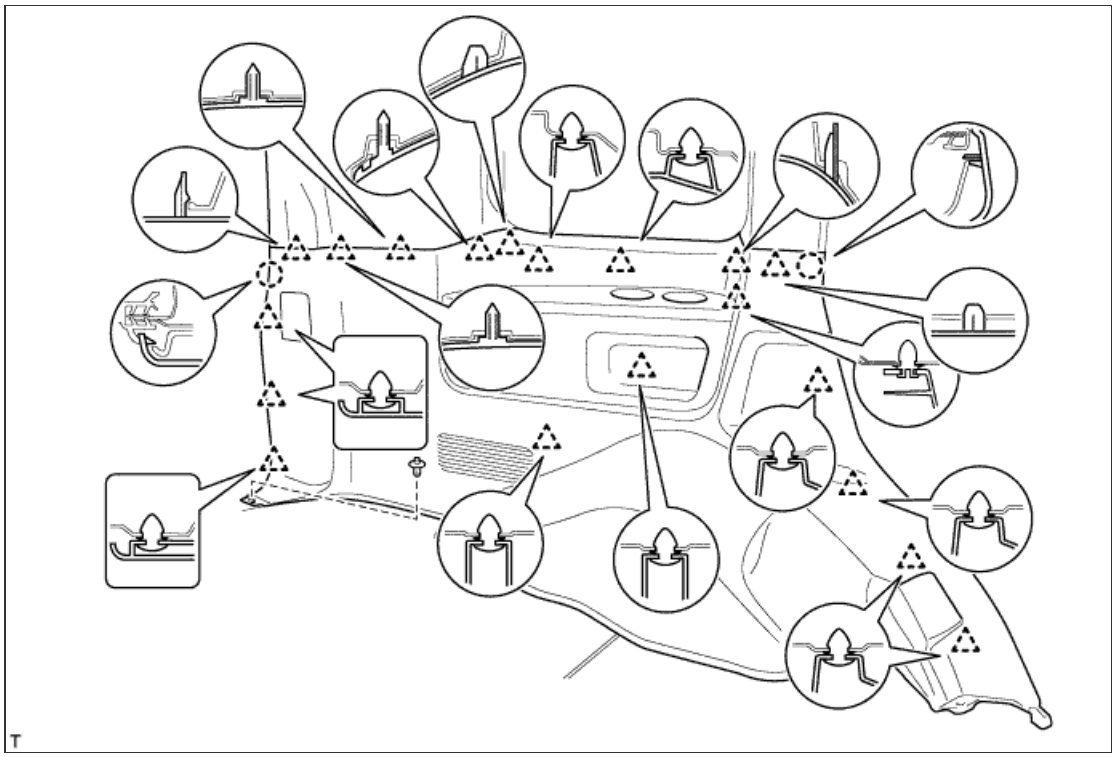


b. w/ Automatic Folding-up Function:

i. Connect the thermistor connector and power outlet socket connector.

ii. Attach the 18 clips and 2 claws to install the quarter trim panel.

iii. Install the screw and clip.



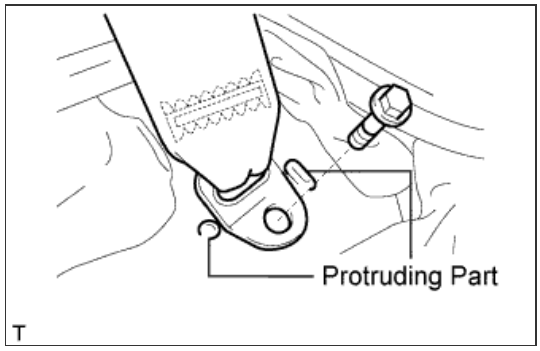
c. for LH side:

i. Install the rear No. 2 seat belt anchor LH with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

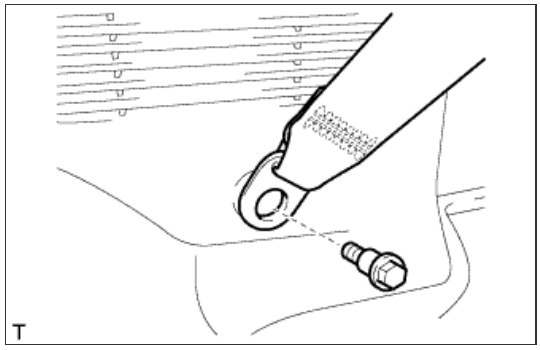
Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.



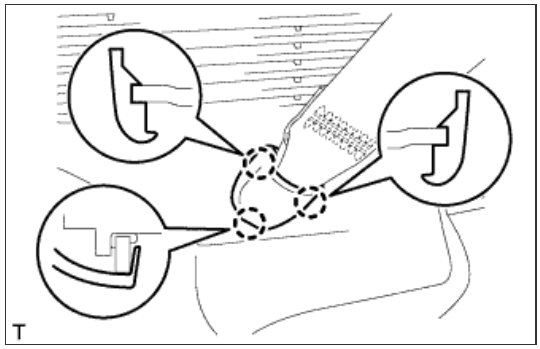
d. for RH side:

i. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

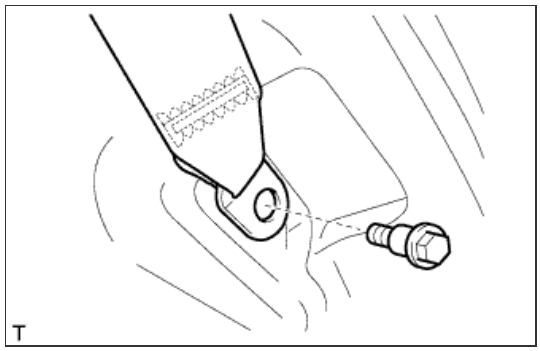


ii. Attach the 3 claws to install the cover.

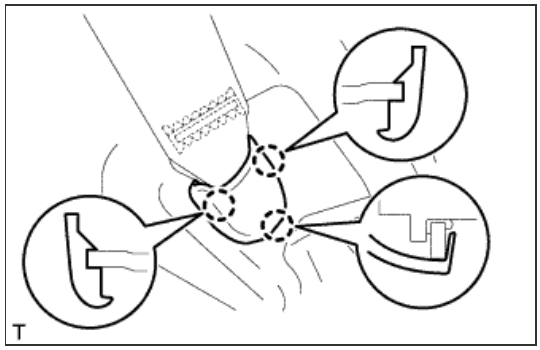


e. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



f. Attach the 3 claws to install the cover.

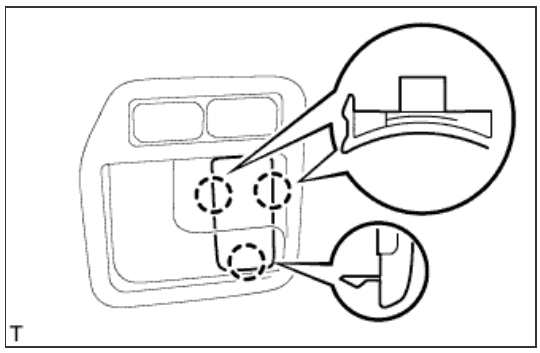


5. INSTALL REAR SEAT COVER CAP (w/ Manual Folding-up Function)

HINT:

Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.

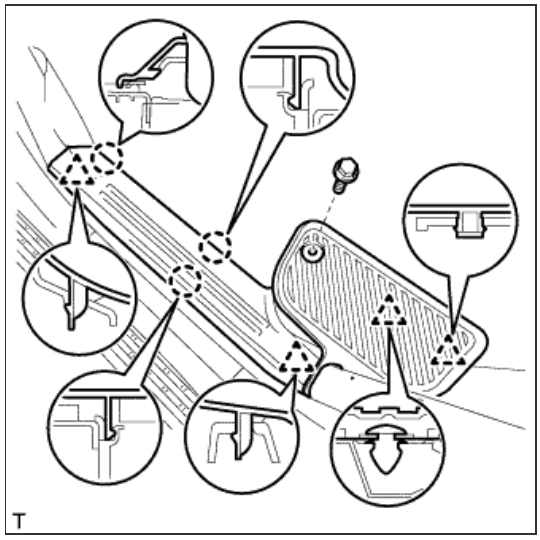


6. INSTALL REAR DOOR SCUFF PLATE

a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

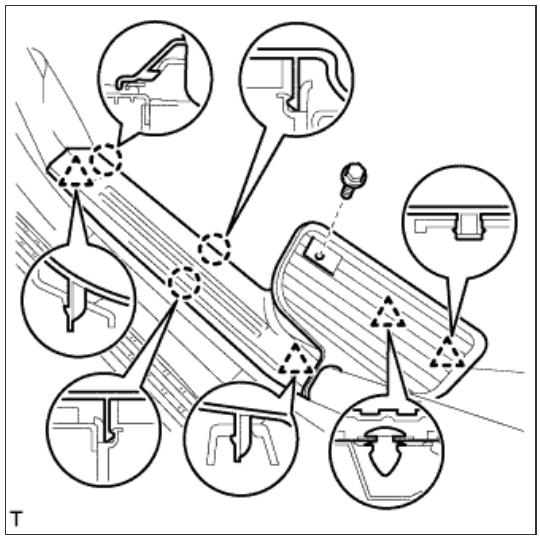
ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.



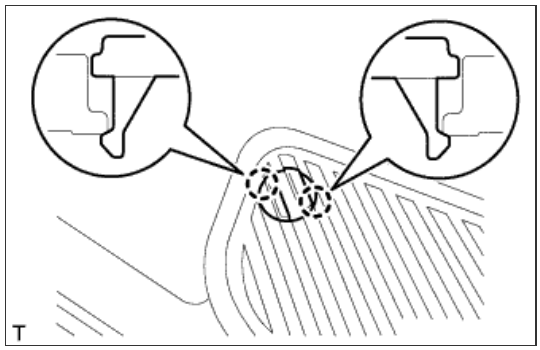
7. INSTALL REAR STEP COVER

HINT:

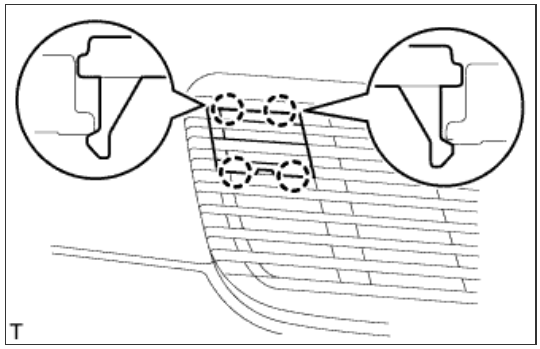
Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:

Attach the 2 claws to install the step cover.

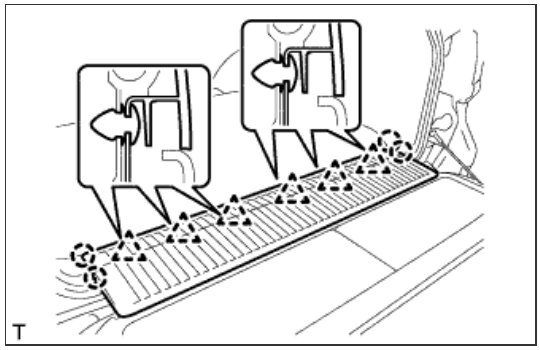


b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



8. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.



9. INSTALL REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding-up Function:
Install the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Install the rear No. 2 seat assembly (Click here).

10. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

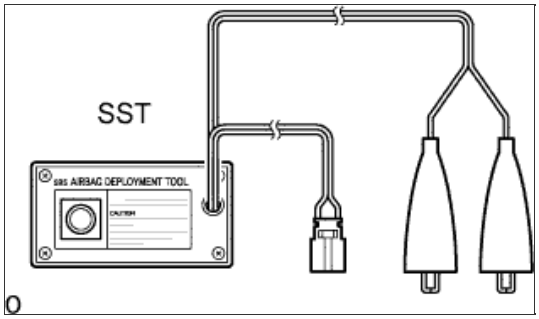
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

11. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here



HINT:

When scrapping vehicles equipped with a seat belt pretensioner or disposing of a front seat outer belt (with seat belt pretensioner), always activate the seat belt pretensioner first in accordance with the procedures described below. If any abnormality occurs during activation of the seat belt pretensioner, contact the SERVICE DEPARTMENT of the DISTRIBUTOR.

CAUTION:

- **Before deploying any SRS components for disposal, carefully review and follow all applicable environmental and hazardous material regulations. Depending on the area, deployment of SRS components before disposal may be considered treatment of hazardous materials, which may require special training, certification or licensing.**
- **Never dispose of a rear seat outer belt that has an un-activated pretensioner.**
- **The seat belt pretensioner produces a loud, exploding sound when it activates. Perform the operation where it will not be a nuisance to nearby people.**
- **When activating a rear seat outer belt (with seat belt pretensioner), stand at least 10 m (32.8 ft.) away from the rear seat outer belt.**
- **Use gloves and safety glasses when handling a rear seat outer belt with an activated pretensioner.**
- **Always wash your hands with water after completing the disposal.**
- **Do not apply water to a rear seat outer belt that has an activated pretensioner.**
- **Perform procedures in a place away from electrical interference.**
- **When activating the seat belt pretensioner, always use the specified SST (SRS airbag deployment tool).**

1. DISPOSE OF REAR NO. 1 SEAT OUTER BELT ASSEMBLY (WHEN INSTALLED IN VEHICLE)

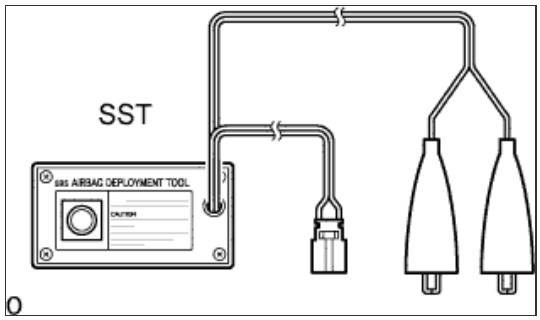
HINT:

Prepare a battery to activate the seat belt pretensioner.

a. Check if SST is functioning properly.

CAUTION:

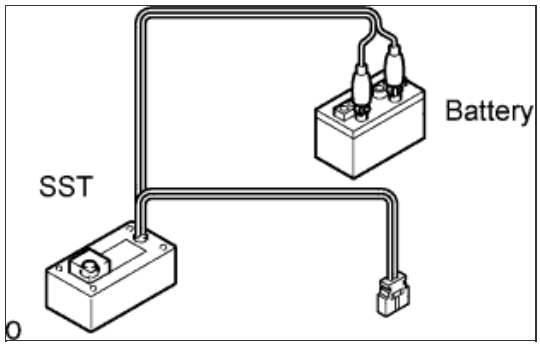
When activating the seat belt pretensioner, always use the specified SST.



i. Connect the red clip of SST to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.

HINT:

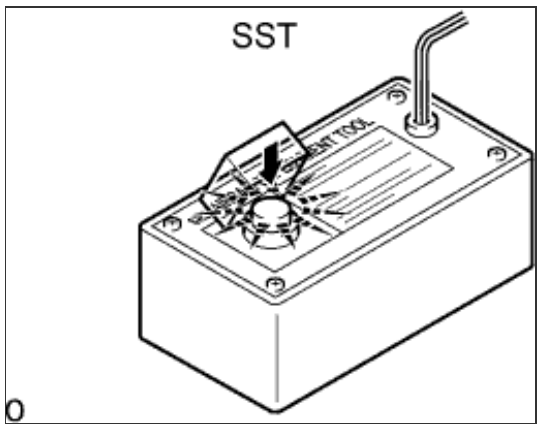
Do not connect the yellow connector. The yellow connector is used to connect to the seat belt pretensioner.



ii. Press SST activation switch and check that the LED of SST activation switch illuminates.

CAUTION:

If the LED illuminates when the activation switch is not being pressed, SST may be malfunctioning. Replace SST with a new one.



b. Disconnect SST from the battery.

c. Disconnect the pretensioner connector.

i. Disconnect the cable from the negative (-) battery terminal.

ii. Remove the rear No. 2 seat (Click here).

iii. Rear floor mat rear support plate (Click here).

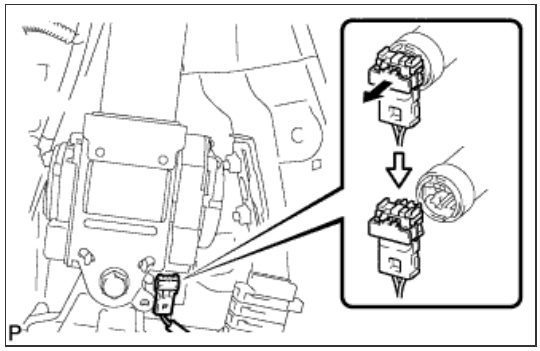
iv. Remove the rear step cover (Click here).

v. Remove the rear door scuff plate (Click here).

vi. Remove the rear seat cover bezel (Click here).

vii. Remove the front quarter trim panel (Click here).

viii. Disconnect the pretensioner connector as shown in the illustration.



d. Prepare SST for activation of the seat belt pretensioner.

i. Install the floor anchor of the seat belt.

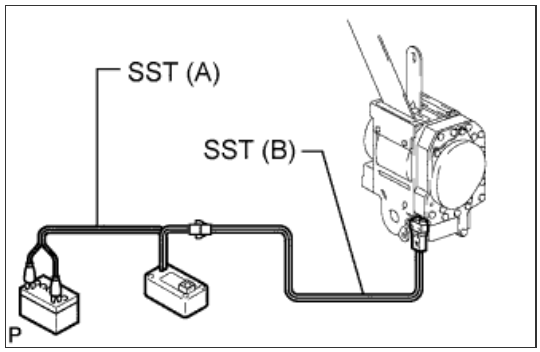
ii. Connect SST (A) to SST (B). Then connect the connector of SST (B) to the seat belt pretensioner.

SST

09082-00700
09082-00770

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock.



iii. Move SST at least 10 m (32.8 ft.) away from the rear of the vehicle.

iv. Close all the doors and windows of the vehicle.

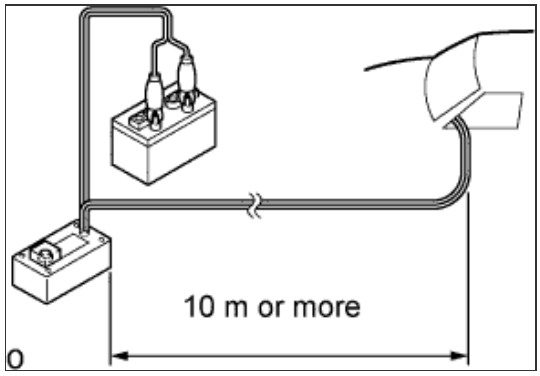
HINT:

Leave a gap in one of the windows for inserting SST wire harness.

NOTICE:

Take care not to damage SST wire harness.

v. Connect the red clip of SST to the battery positive (+) terminal and the black clip to the negative (-) terminal.



e. Activate the seat belt pretensioner.

i. Confirm that no one is inside the vehicle or within 10 m (32.8 ft.) of the vehicle.

ii. Press SST activation switch to activate the seat belt pretensioner.

HINT:

The seat belt pretensioner operates at the same time SST activation switch LED illuminates.

f. Dispose of the rear seat outer belt (with the seat belt pretensioner).

CAUTION:

- **Do not touch the rear seat outer belt for at least 30 minutes after the seat belt pretensioner has been activated. It is very hot.**
- **Use gloves and safety glasses when handling a rear seat outer belt whose pretensioner has been activated.**
- **Always wash your hands with water after completing the disposal.**
- **Do not apply water to a rear seat outer belt that has an activated pretensioner.**

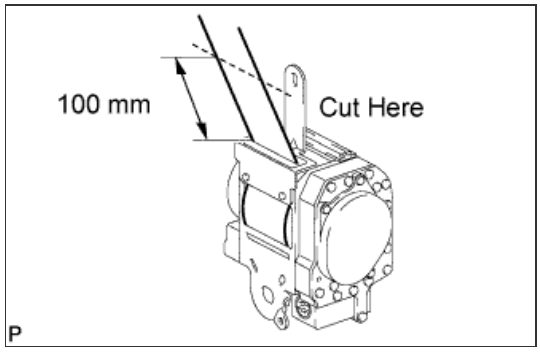
HINT:

When scrapping a vehicle, activate the seat belt pretensioner, and then scrap the vehicle with the activated rear seat outer belt installed.

2. DISPOSE OF REAR NO. 1 SEAT OUTER BELT ASSEMBLY (WHEN NOT INSTALLED IN VEHICLE)

NOTICE:

Be sure to follow the procedures listed below when activating the seat belt pretensioner.



a. Remove the rear No. 1 seat outer belt (Click here).

i. Wind the seat belt with the retractor.

ii. When the seat belt is sufficiently wound, cut the seat belt approximately 100 mm (0.393 in.) from the retractor as shown in the illustration.

HINT:

The seat belt is designed so that winding the seat belt before pretensioner activation will decrease the pulling power of the seat belt during pretensioner activation.

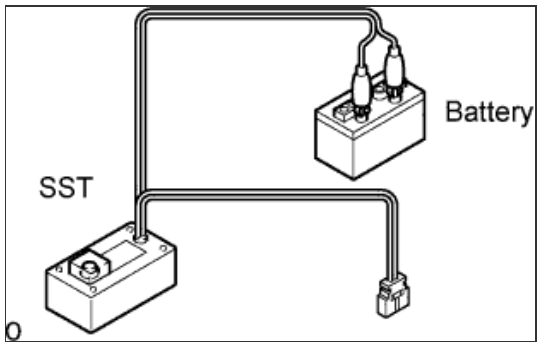
b. Check if SST is functioning properly.

SST

09082-00770 09082-00700

CAUTION:

When activating a seat belt pretensioner, always use the specified SST.

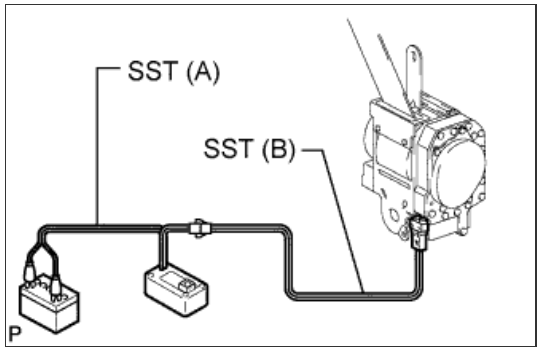


c. Prepare SST for activation of the seat belt pretensioner.

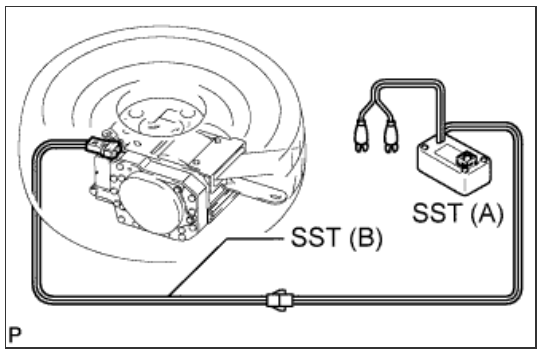
i. Connect SST (A) to SST (B). Then connect the connector of SST (B) to the seat belt pretensioner.

NOTICE:

To avoid damaging SST connector and wire harness, do not lock the secondary lock of the twin lock.



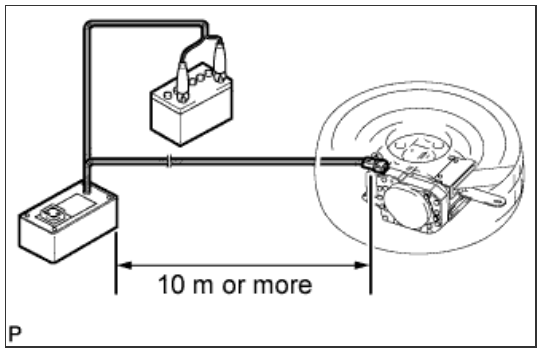
ii. Place the rear seat outer belt on the ground and cover it with a tire (with wheel).



iii. Move SST at least 10 m (32.8 ft.) away from the wheel.

NOTICE:

Take care not to damage SST wire harness.



d. Activate the seat belt pretensioner.

i. Connect the red clip of SST to the battery positive (+) terminal and the black clip to the battery negative (-) terminal.

ii. Check that no one is within 10 m (32.8 ft.) of the wheel.

iii. Press SST activation switch to activate the seat belt pretensioner.

HINT:

The seat belt pretensioner operates at the same time SST activation switch LED illuminates.

e. Dispose of the rear seat outer belt (with the seat belt pretensioner).

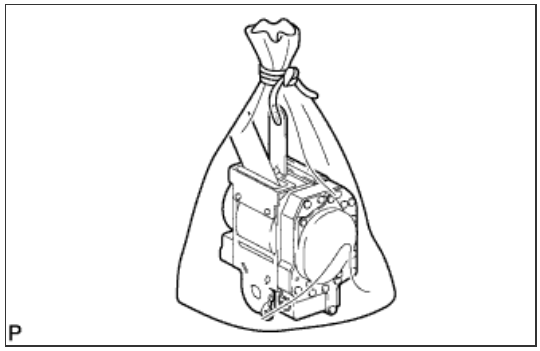
CAUTION:

- **Do not touch the rear seat outer belt for at least 30 minutes after the seat belt pretensioner has been activated. It is very hot.**
- **Use gloves and safety glasses when handling a rear seat outer belt whose pretensioner has been activated.**
- **Always wash your hands with water after completing the disposal.**

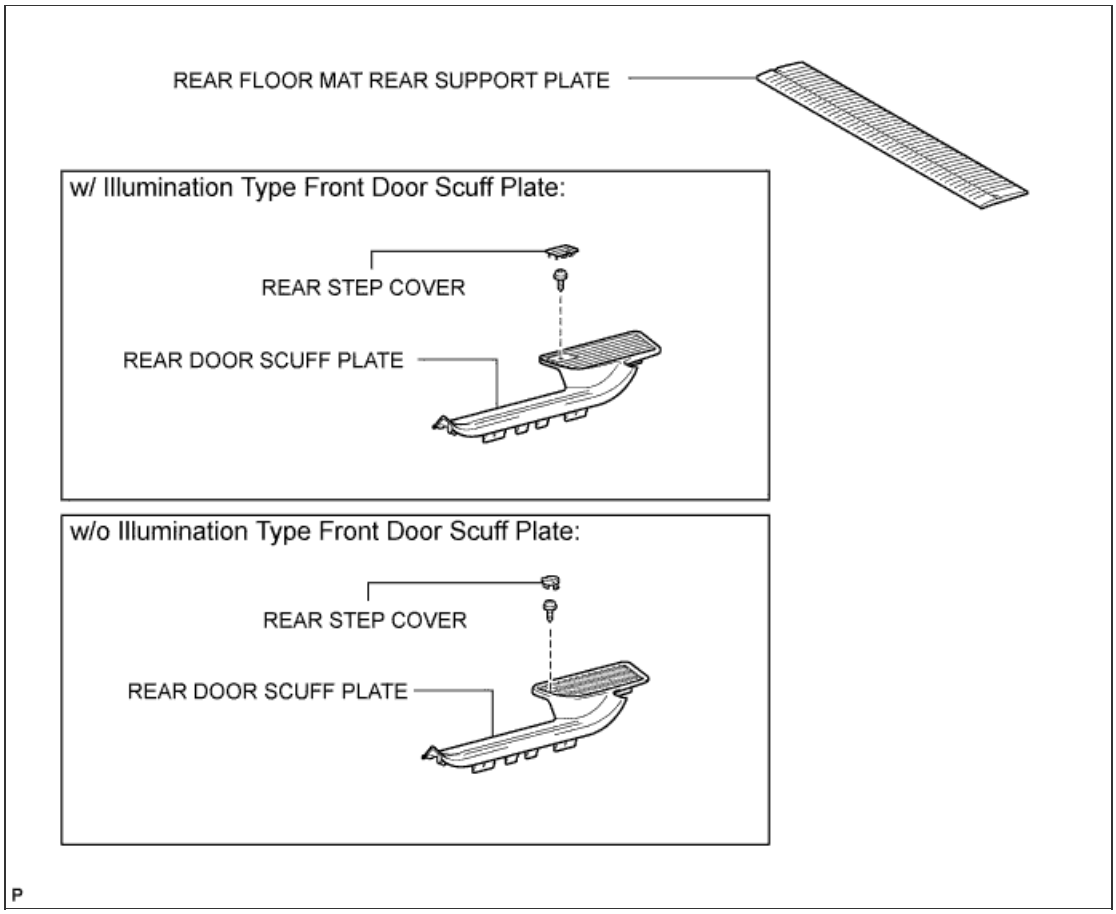
- **Do not apply water to a rear seat outer belt that has an activated pretensioner.**

i. Remove the tire (with wheel) and SST.

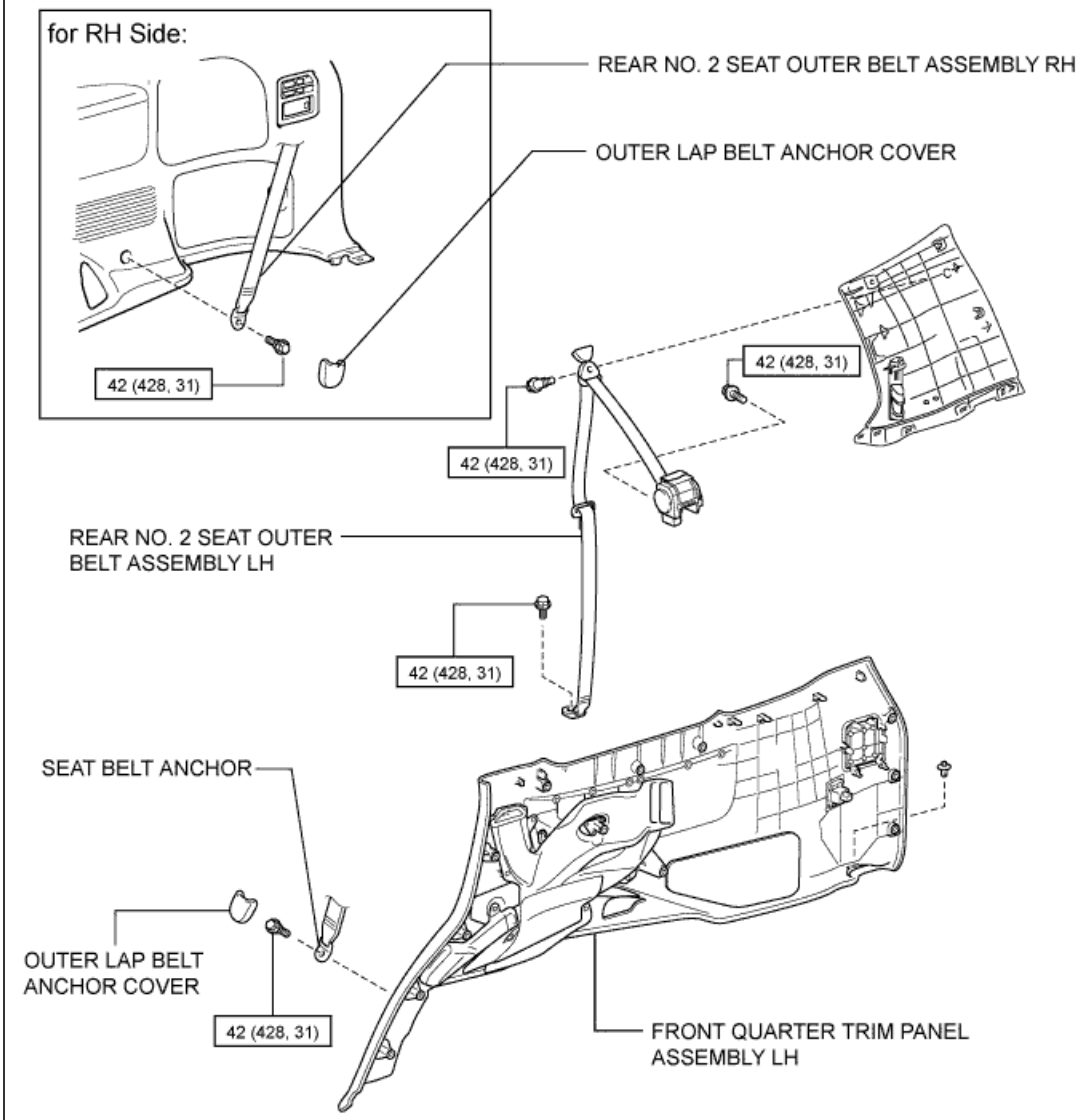
ii. Place the rear seat outer belt in a plastic bag, tie the end tightly and dispose of it in the same way as other general parts.



for Preparation Click here



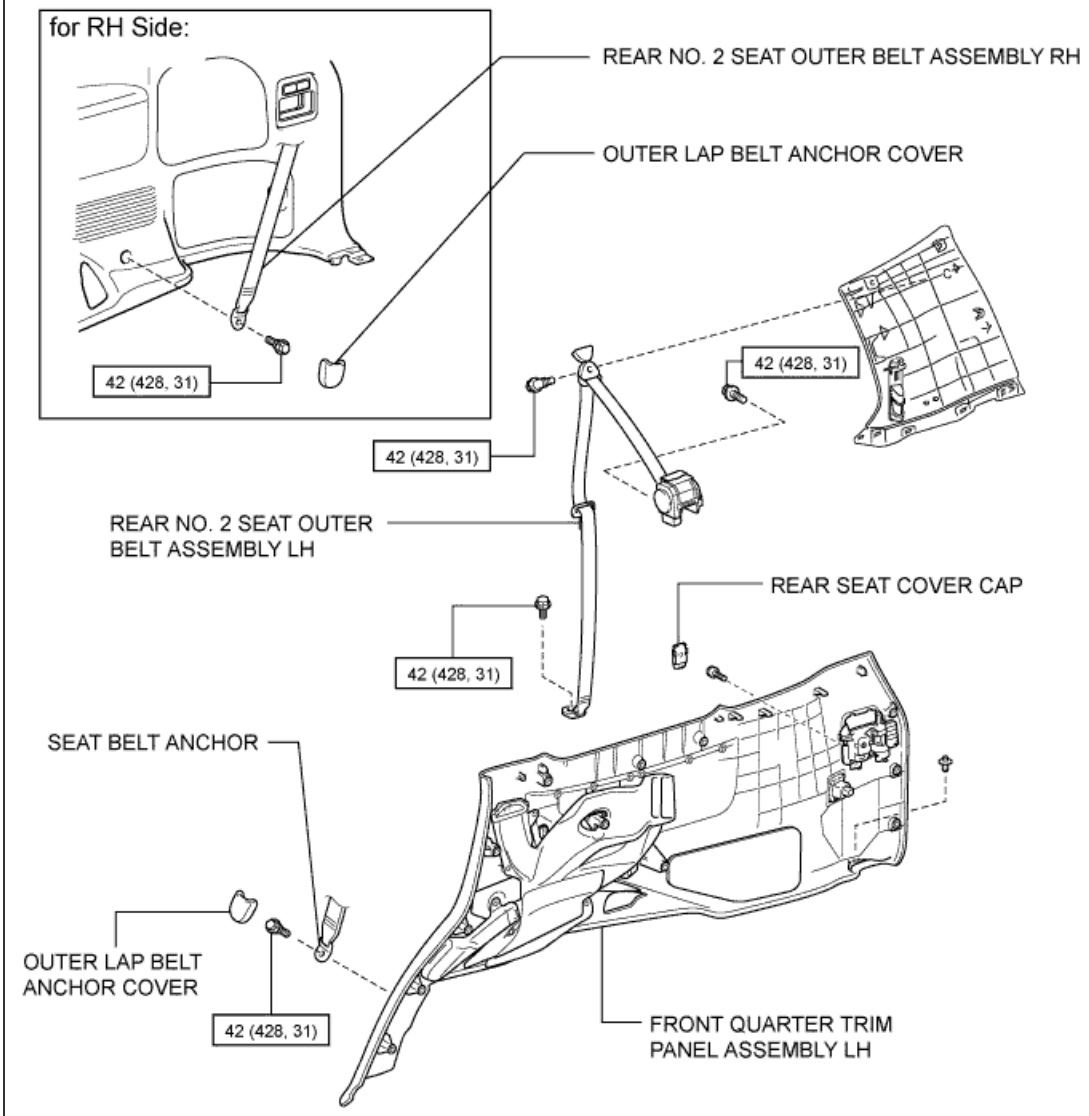
w/ Automatic Folding-up Function:



N*m (kgf*cm, ft.*lbf) : Specified torque

T

w/ Manual Folding-up Function:



N*m (kgf*cm, ft.*lbf) : Specified torque

T

for Preparation Click here

HINT:

- **Use the same procedures for the RH side and LH side.**
- **The procedures listed below are for the LH side.**

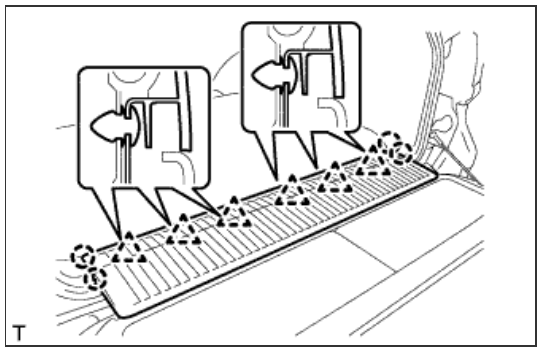
1. REMOVE REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

2. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.

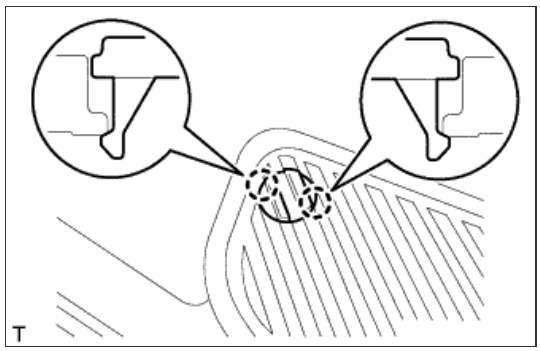


3. REMOVE REAR STEP COVER

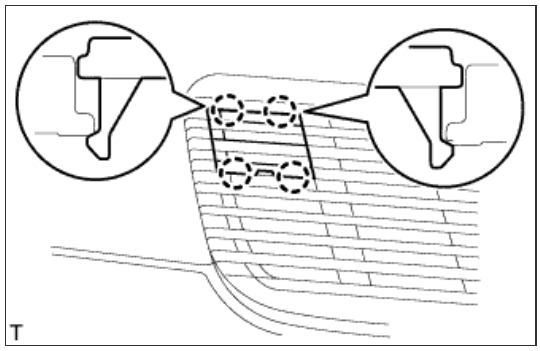
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

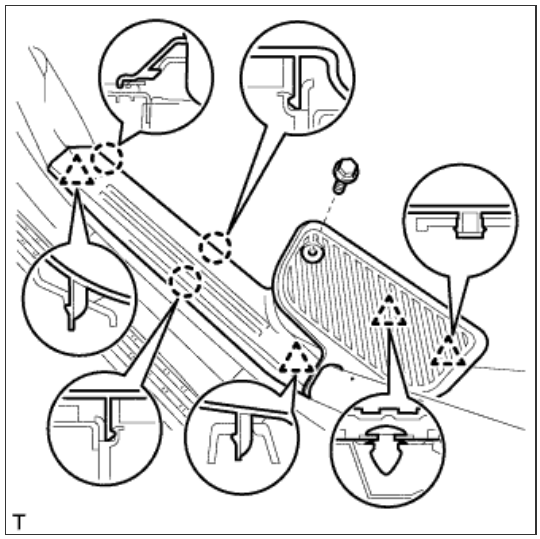


4. REMOVE REAR DOOR SCUFF PLATE

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

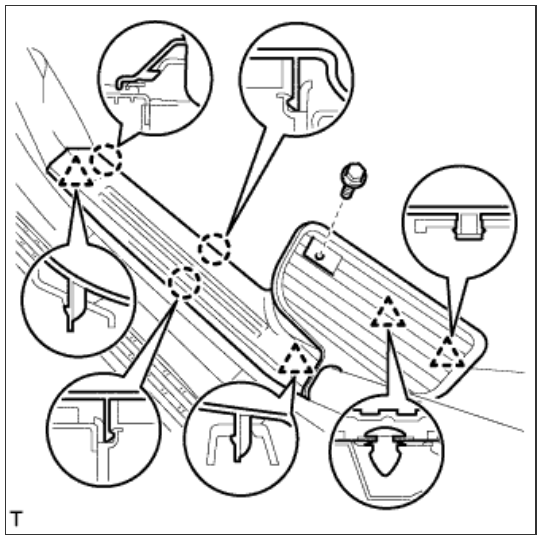
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



5. REMOVE REAR SEAT COVER CAP (w/ Manual Folding-up Function)

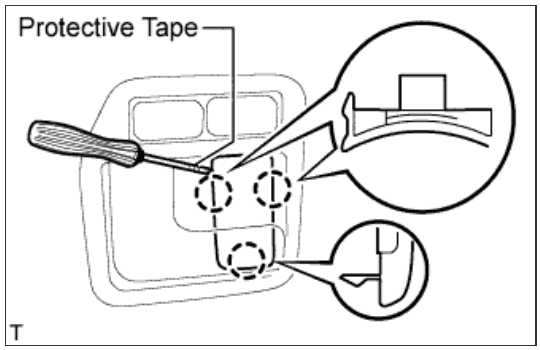
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

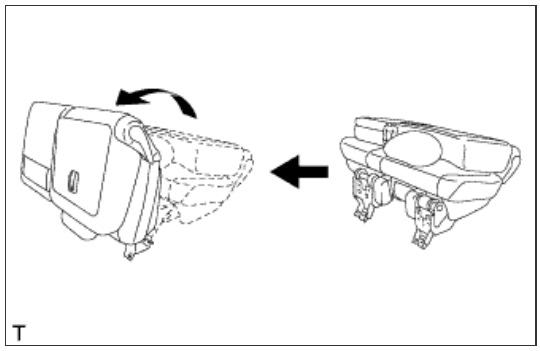
Tape the screwdriver tip before use.



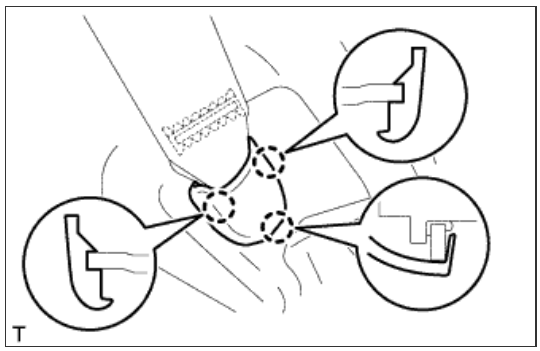
6. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY

HINT:

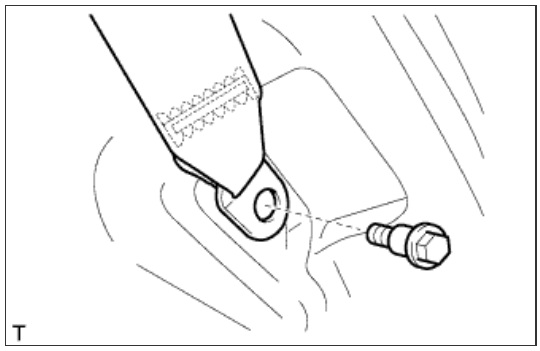
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



a. Detach the 3 claws and remove the cover.

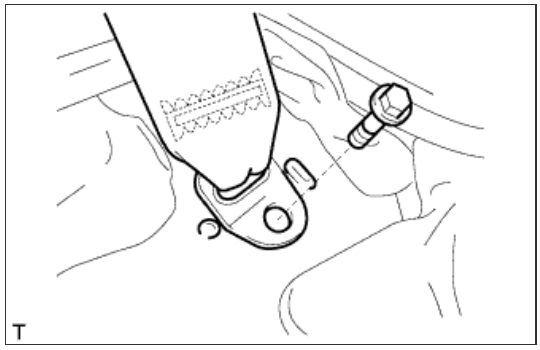


b. Remove the bolt and disconnect the rear seat outer belt floor anchor.



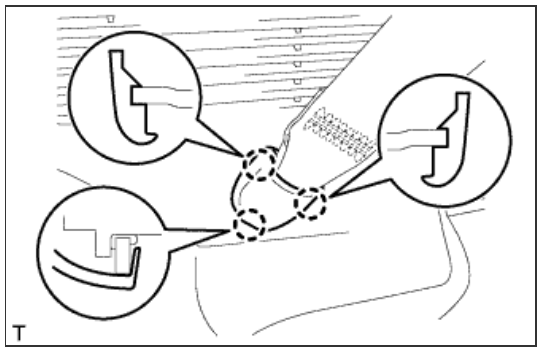
c. for LH Side:

i. Remove the bolt and disconnect the rear No. 2 seat outer belt floor anchor LH.

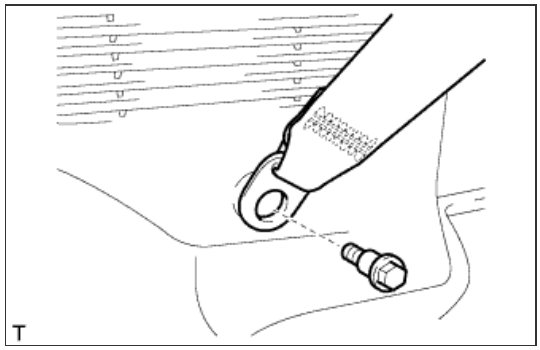


d. for RH Side:

i. Detach the 3 claws and remove the cover.



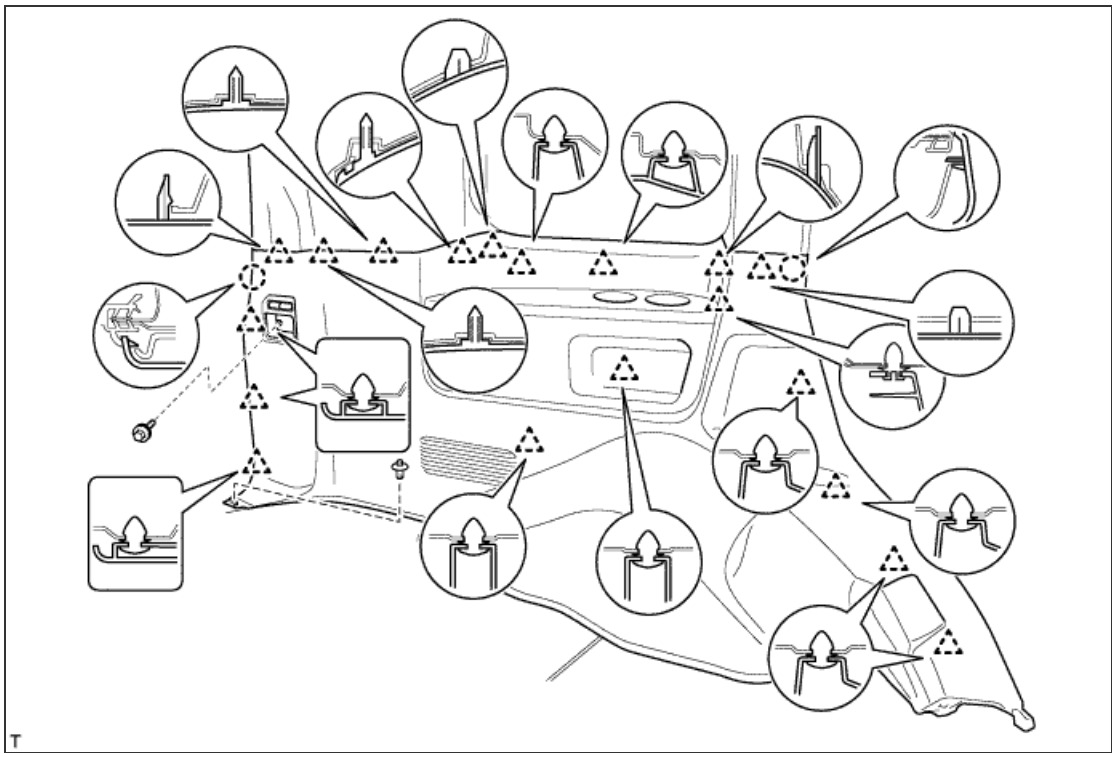
ii. Remove the bolt and disconnect the rear seat outer belt floor anchor RH.



e. w/ Manual Folding-up Function:

i. Remove the screw, clip and bolt.

ii. Detach the 19 clips and 2 claws.

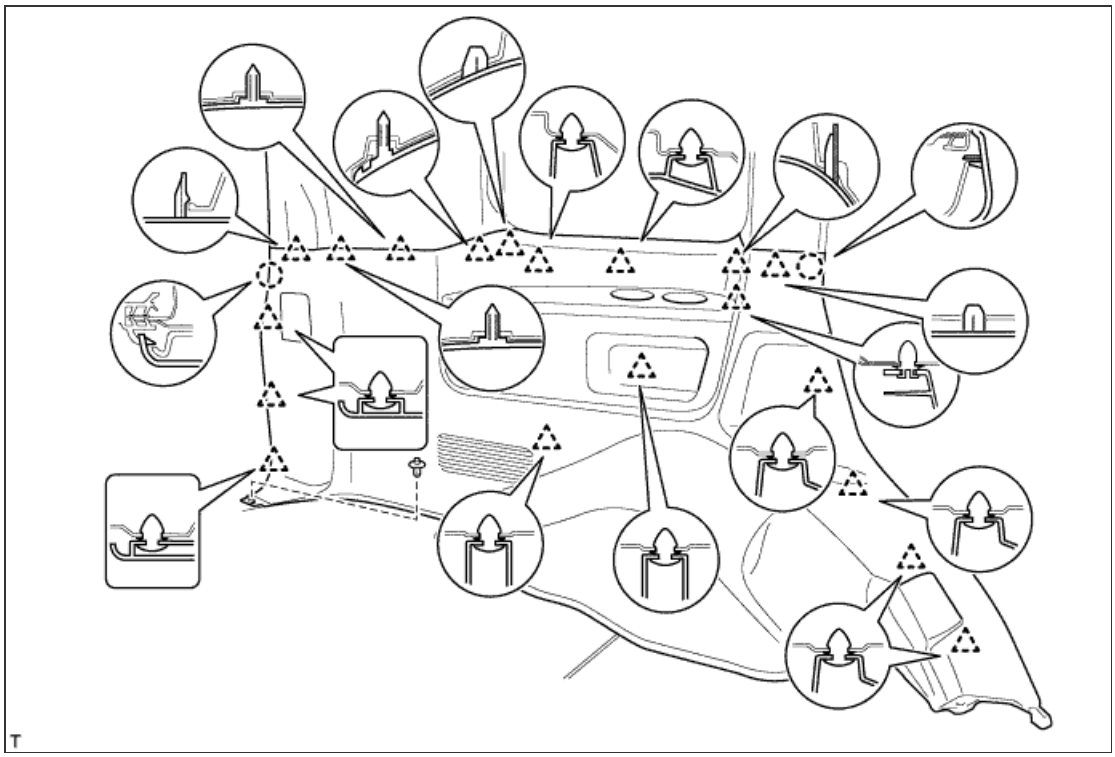


iii. Disconnect the thermistor connector, power outlet socket connector and rear seat lock control lever cable, and then remove the quarter trim panel.

f. w/ Automatic Folding-up Function:

i. Remove the screw and clip.

ii. Detach the 19 clips and 2 claws.



iii. Disconnect the thermistor connector and power outlet socket connector, and then remove the quarter trim panel.

7. REMOVE REAR NO. 2 SEAT OUTER BELT ASSEMBLY

a. Remove the bolt and disconnect the seat belt shoulder anchor.

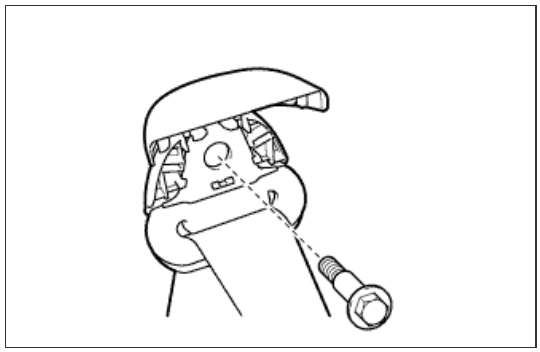
i. Using a screwdriver, detach the 2 claws and open the seat belt anchor cover as shown in the illustration.

HINT:

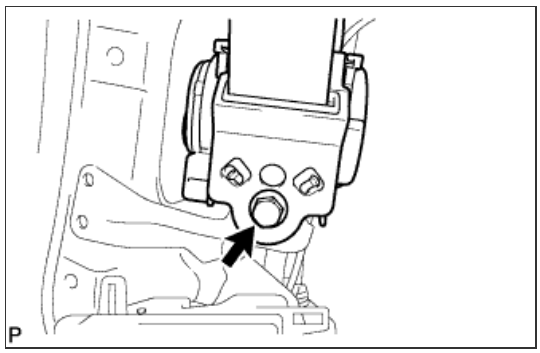
Tape the screwdriver tip before use.



ii. Remove the bolt and seat belt shoulder anchor.



b. Remove the bolt and rear No. 2 seat outer belt.



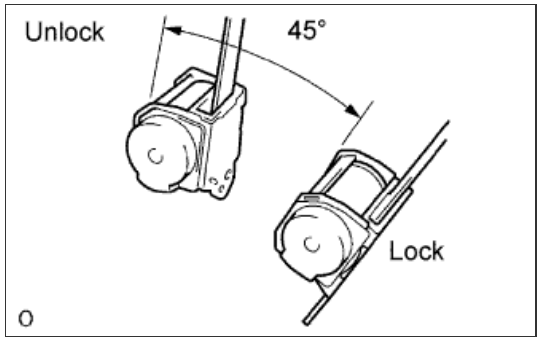
for Preparation Click here

1. INSPECT REAR NO. 2 SEAT OUTER BELT ASSEMBLY

NOTICE:

Do not disassemble the retractor.

a. When the inclination of the retractor is 15° or less, check that the belt can be pulled from the retractor. When the inclination of the retractor is over 45°, check that the belt locks.
If the operation is not as specified, replace the belt.



for Preparation Click here

HINT:

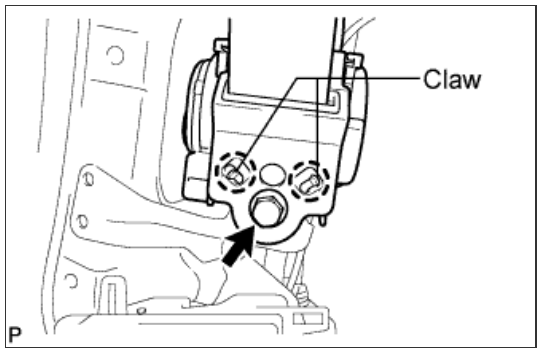
- **Use the same procedures for the LH side and RH side.**
- **The procedures listed below are for the LH side.**
- **A bolt without a torque specification is shown in the standard bolt chart (Click here).**

1. INSTALL REAR NO. 2 SEAT OUTER BELT ASSEMBLY

a. Align the claws with the seat belt positioning holes and install the retractor of the seat belt as shown in the illustration.

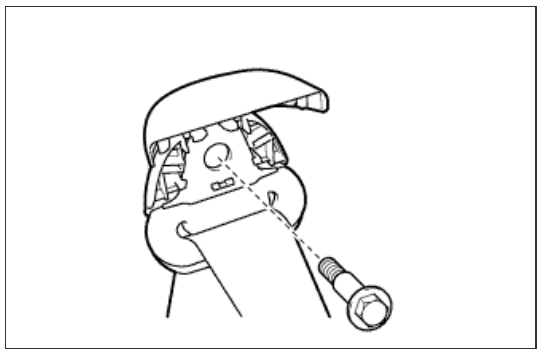
b. Install the seat belt with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

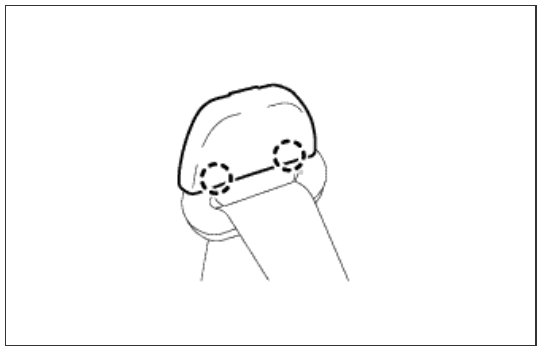


c. Install the seat belt shoulder anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



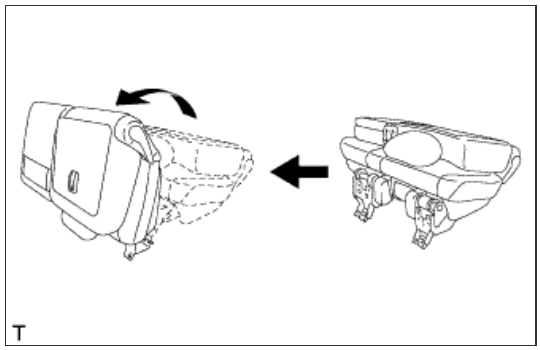
d. Attach the 2 claws to close the seat belt shoulder anchor cover.



2. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY

HINT:

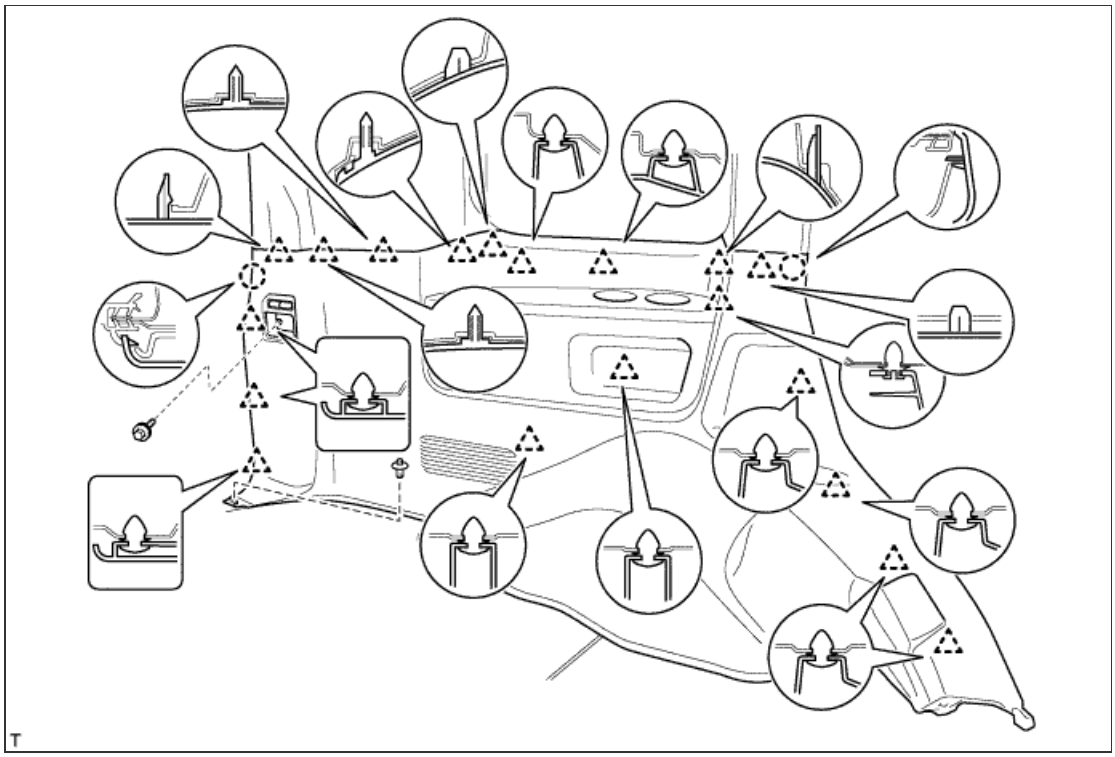
When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



a. w/ Manual Folding-up Function:

i. Connect the thermistor connector, power outlet socket connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.



iii. Install the screw, clip and bolt.

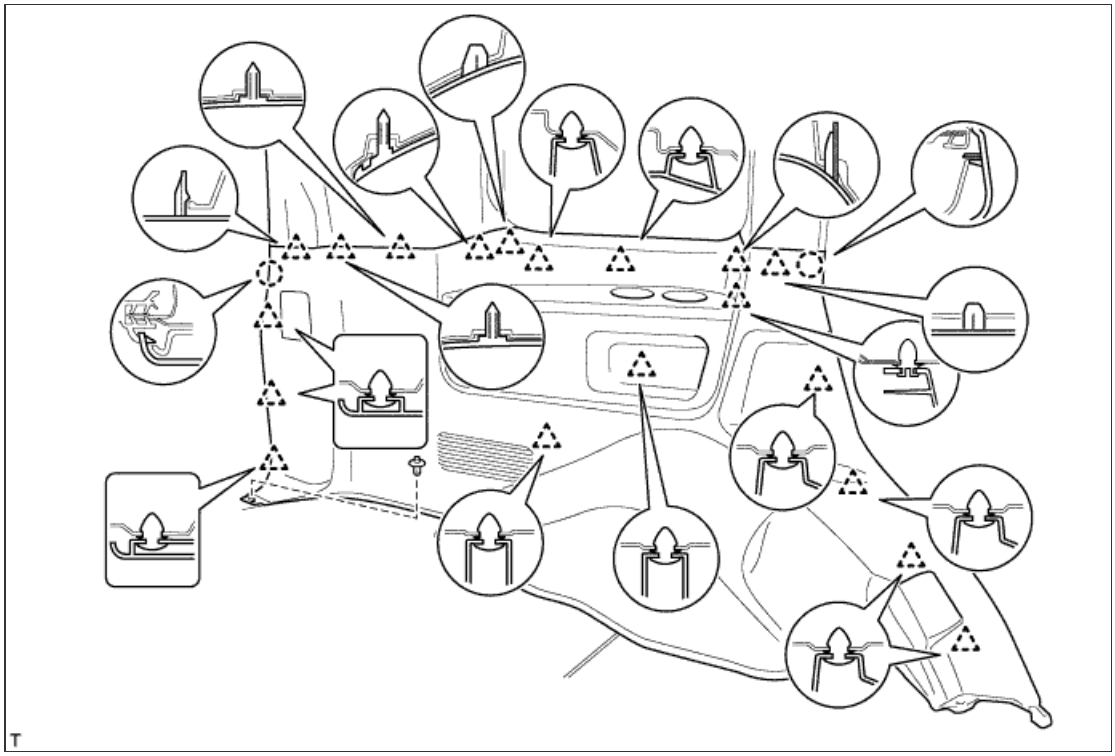
Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

b. w/ Automatic Folding-up Function:

i. Connect the thermistor connector and power outlet socket connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the screw and clip.



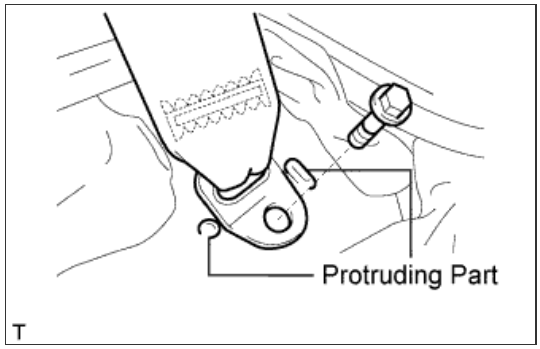
c. for LH Side:

i. Install the rear No. 2 seat belt anchor LH with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

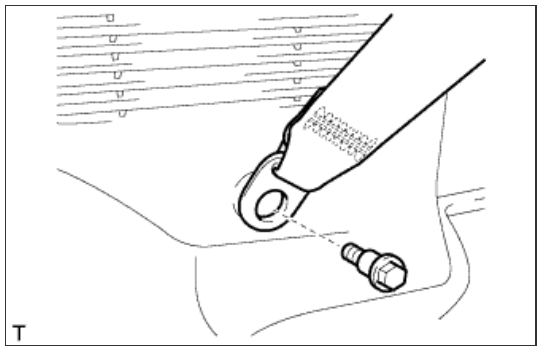
Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.



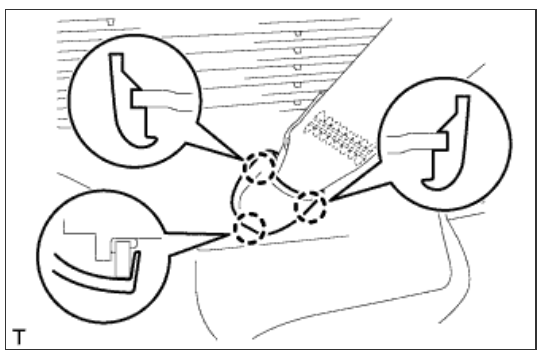
d. for RH Side:

i. Install the rear No. 2 seat belt anchor RH with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

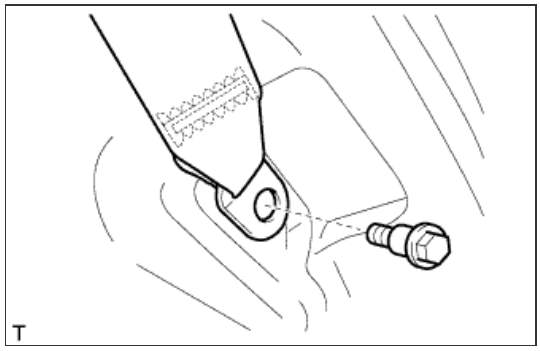


ii. Attach the 3 claws to install the cover.

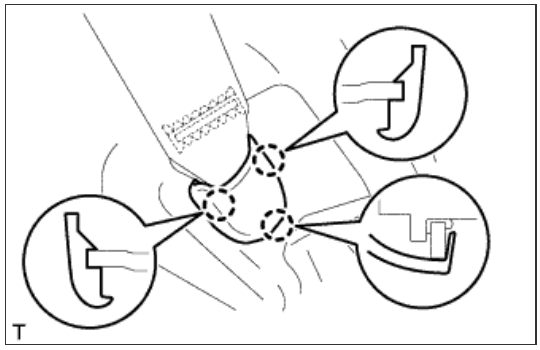


e. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



f. Attach the 3 claws to install the cover.

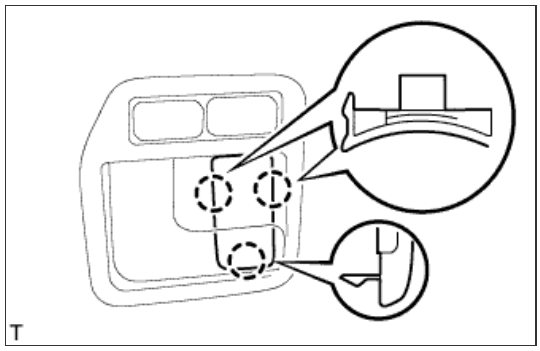


3. INSTALL REAR SEAT COVER CAP (w/ Manual Folding-up Function)

HINT:

Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.

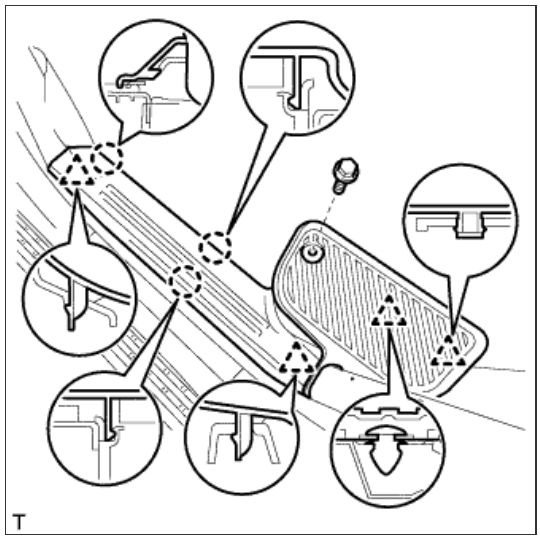


4. INSTALL REAR DOOR SCUFF PLATE

a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

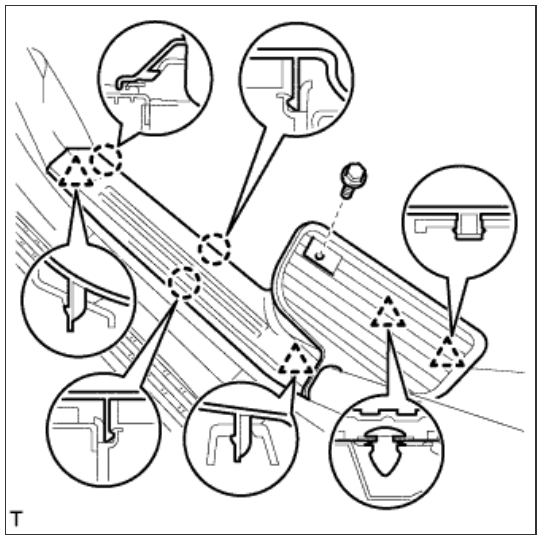
ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.

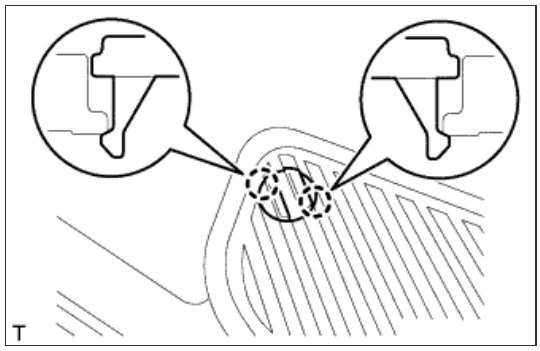


5. INSTALL REAR STEP COVER

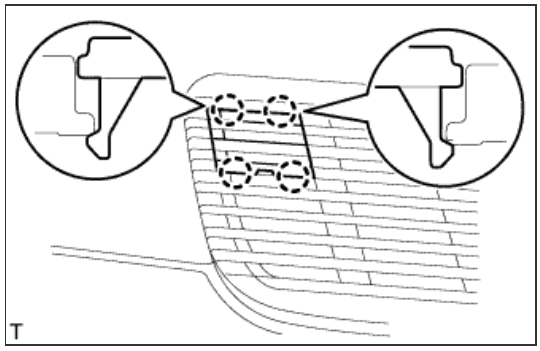
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.

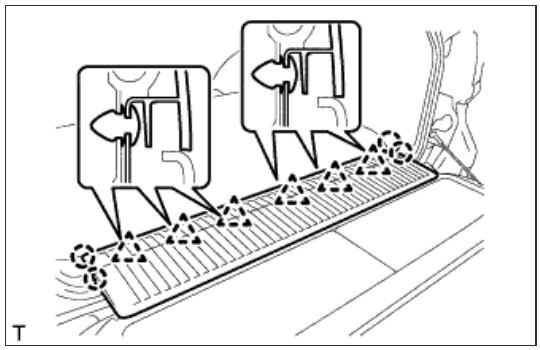


b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



6. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.

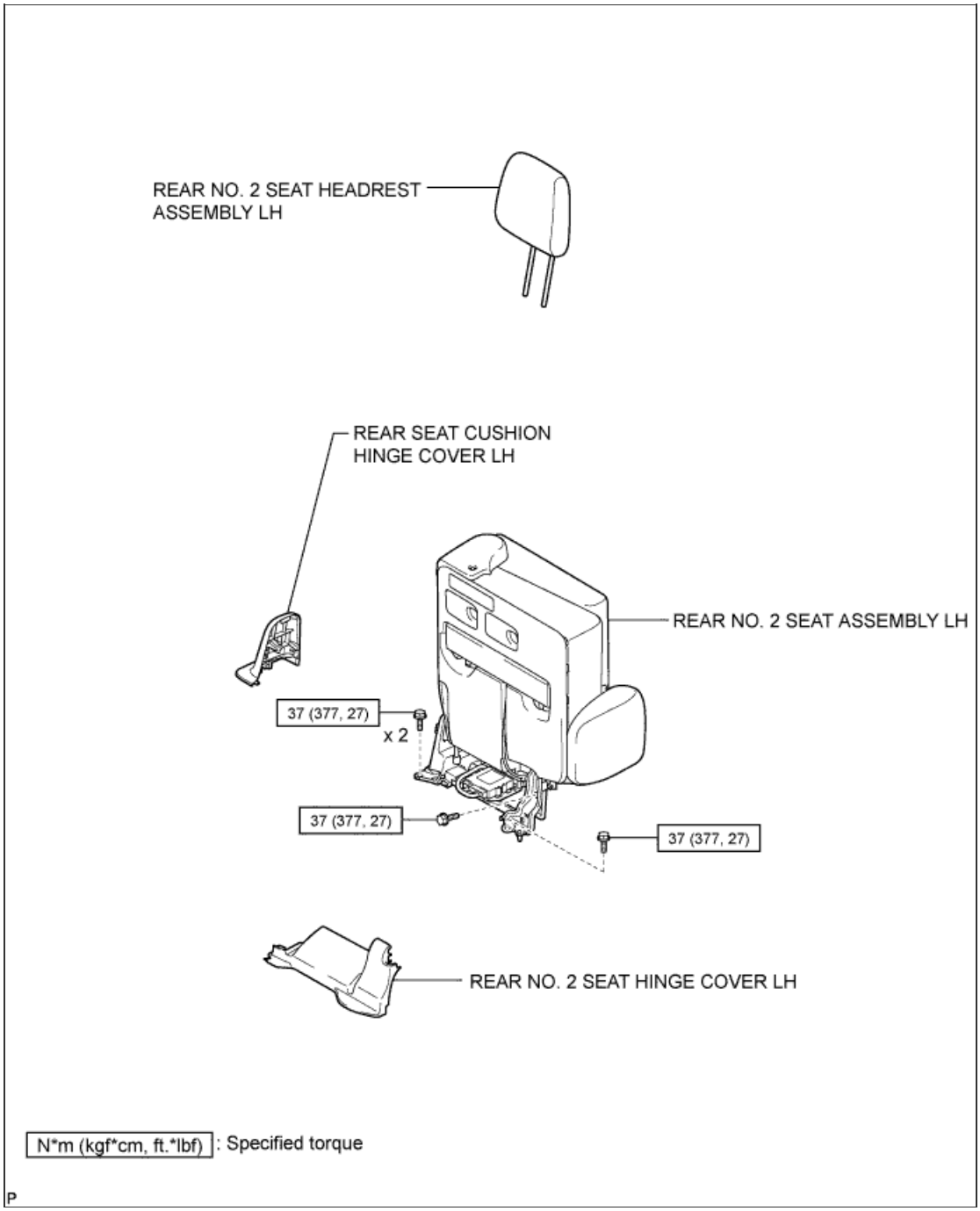


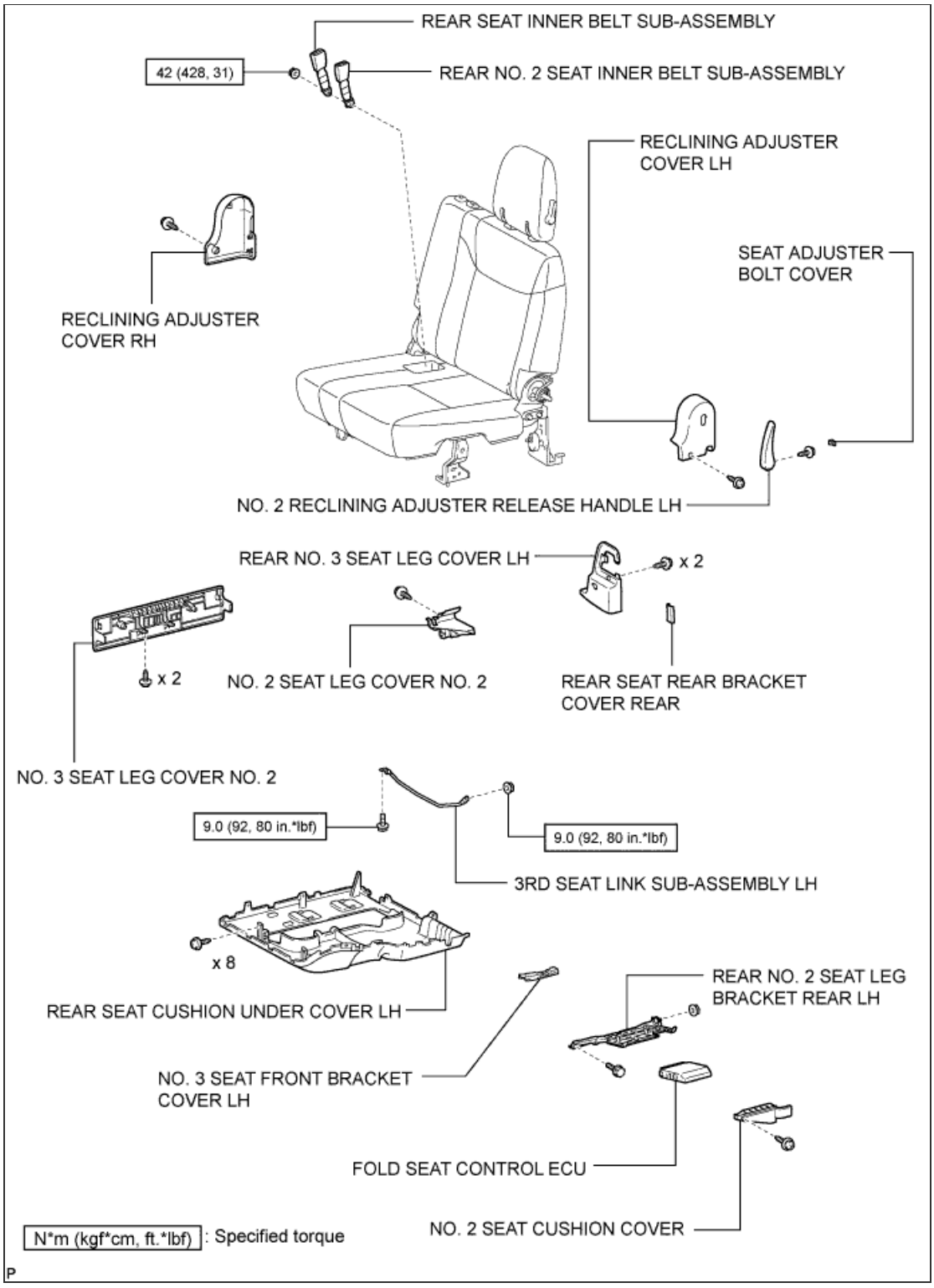
7. INSTALL REAR NO. 2 SEAT ASSEMBLY

a. w/ Automatic Folding-up Function:
Install the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Install the rear No. 2 seat assembly (Click here).

for Preparation Click here




REAR SEAT INNER BELT SUB-ASSEMBLY
42 (428, 31)
REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY
RECLINING ADJUSTER COVER LH
SEAT ADJUSTER BOLT COVER
RECLINING ADJUSTER COVER RH
NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH
REAR NO. 3 SEAT LEG COVER LH
x 2
x 2
NO. 2 SEAT LEG COVER NO. 2
REAR SEAT REAR BRACKET COVER REAR
NO. 3 SEAT LEG COVER NO. 2
9.0 (92, 80 in.*lbf)
9.0 (92, 80 in.*lbf)
3RD SEAT LINK SUB-ASSEMBLY LH
x 8
REAR SEAT CUSHION UNDER COVER LH
REAR NO. 2 SEAT LEG BRACKET REAR LH
NO. 3 SEAT FRONT BRACKET COVER LH
FOLD SEAT CONTROL ECU
NO. 2 SEAT CUSHION COVER
N*m (kgf*cm, ft.*lbf) : Specified torque
P

for Preparation Click here

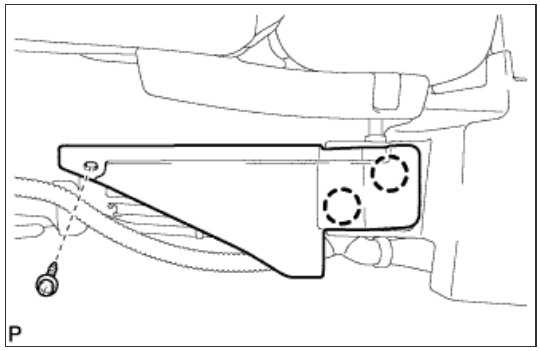
1. REMOVE REAR NO. 2 SEAT ASSEMBLY LH

a. w/ Automatic Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

2. REMOVE NO. 2 SEAT CUSHION COVER

a. Remove the screw and detach the 2 claws to remove the cover.



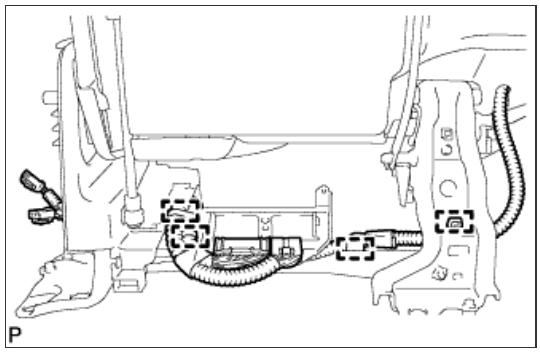
3. REMOVE FOLD SEAT CONTROL ECU

a. w / Automatic Folding-up Function:
Remove the fold seat control ECU (Click here).

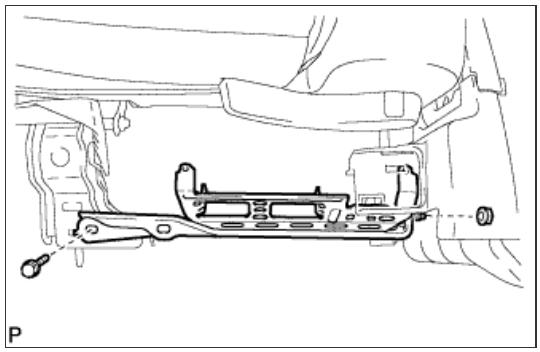
b. w / Manual Folding-up Function:
Remove the fold seat control ECU (Click here).

4. REMOVE REAR NO. 2 SEAT LEG BRACKET REAR LH

a. Detach the 4 clamps.



b. Remove the bolt, nut and bracket.

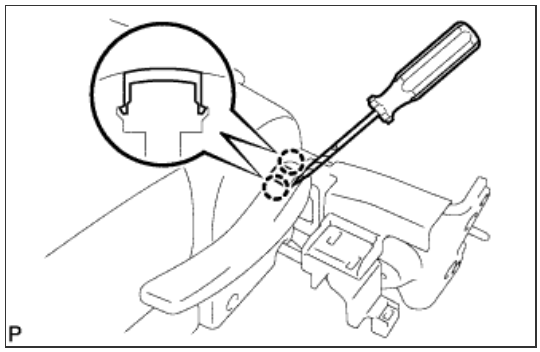


5. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

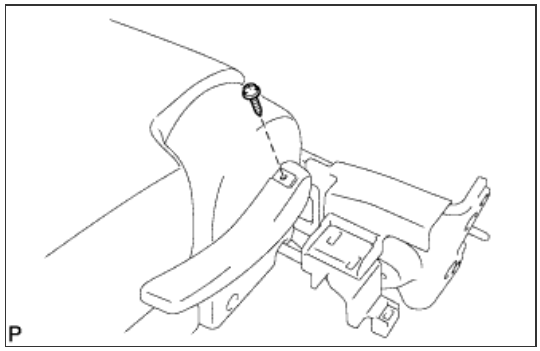
HINT:

Tape the screwdriver tip before use.



6. REMOVE NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH

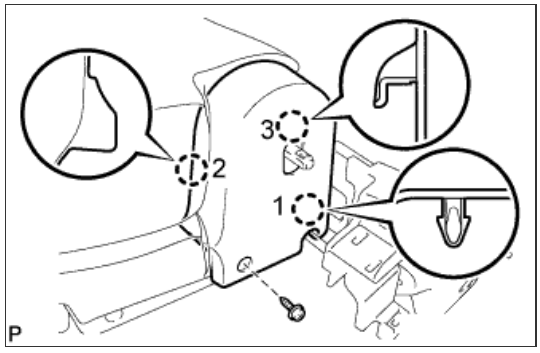
a. Remove the screw and release handle.



7. REMOVE RECLINING ADJUSTER COVER LH

a. Remove the screw.

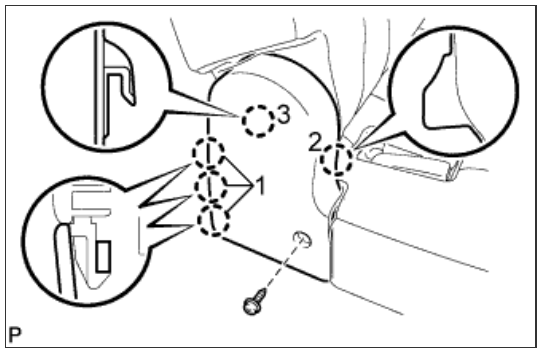
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



8. REMOVE RECLINING ADJUSTER COVER RH

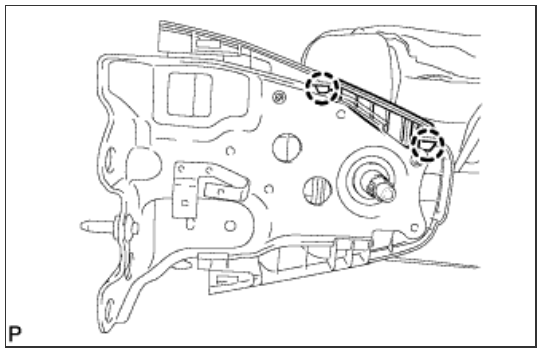
a. Remove the screw.

b. Detach the 5 claws in the order shown in the illustration, and then remove the cover.



9. REMOVE REAR SEAT REAR BRACKET COVER REAR

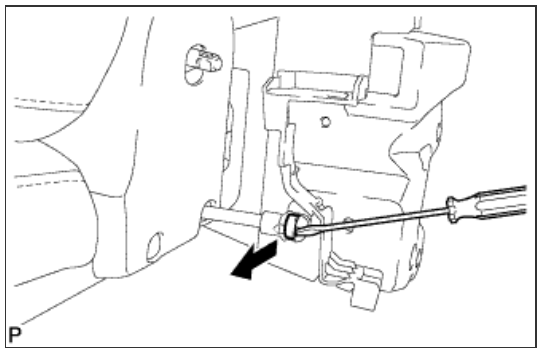
a. Detach the 2 claws and remove the cover.



10. REMOVE REAR NO. 3 SEAT LEG COVER LH

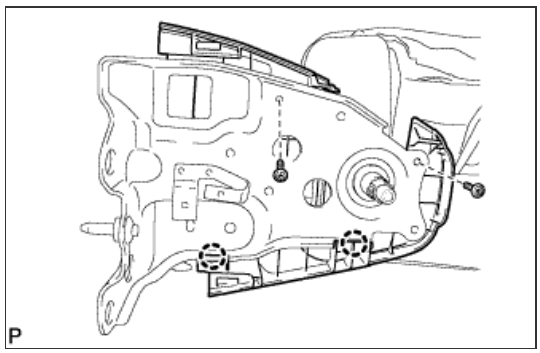
a. Using a screwdriver, remove the spring of the seat stay ball joint.

b. Disconnect the seat stay.



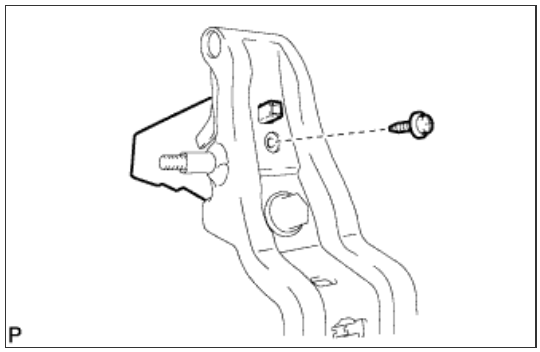
c. Remove the 2 screws.

d. Detach the 2 claws and remove the seat leg cover.



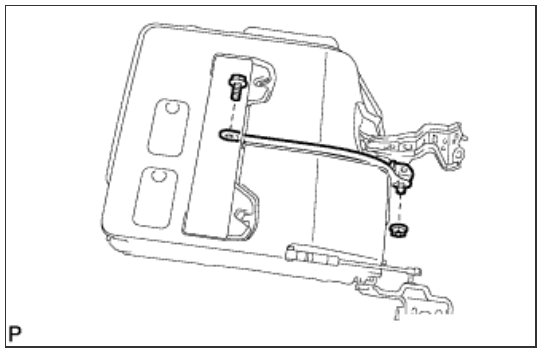
11. REMOVE NO. 2 SEAT LEG COVER NO. 2

a. Remove the screw and cover.



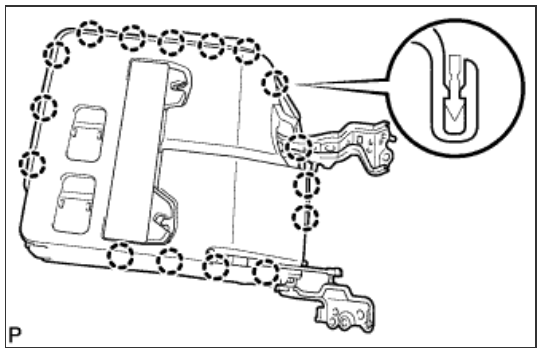
12. REMOVE 3RD SEAT LINK SUB-ASSEMBLY LH

a. Remove the bolt, nut and seat link.

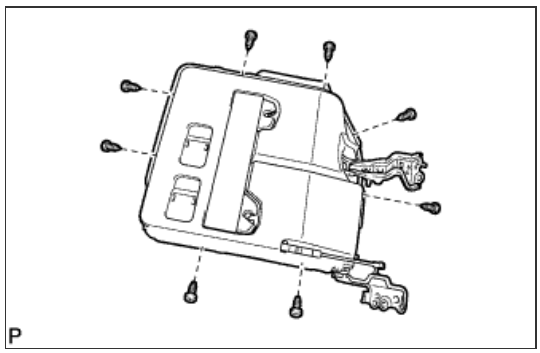


13. REMOVE REAR SEAT CUSHION UNDER COVER LH

a. Detach the 16 claws.

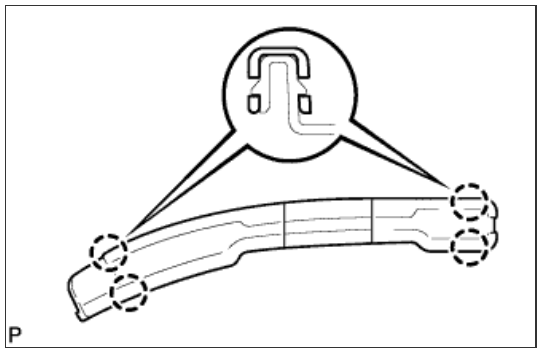


b. Remove the 8 screws and cover.



14. REMOVE NO. 3 SEAT FRONT BRACKET COVER LH

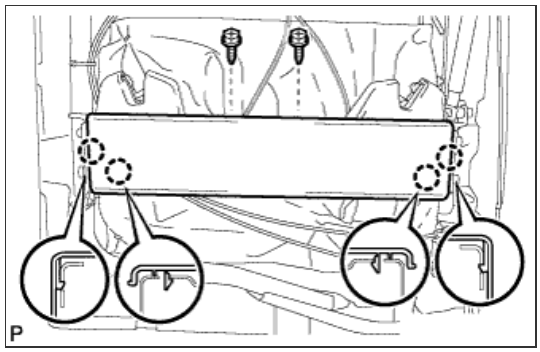
a. Detach the 4 claws and remove the cover.



15. REMOVE NO. 3 SEAT LEG COVER NO. 2

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

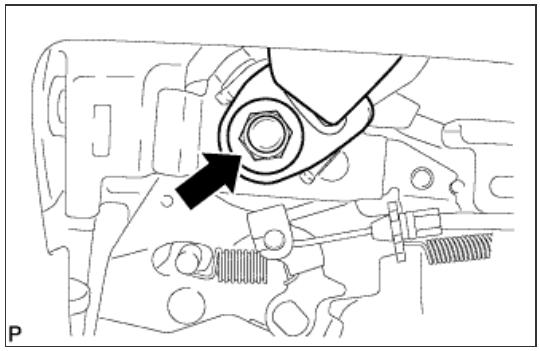


16. REMOVE REAR SEAT INNER BELT SUB-ASSEMBLY

a. Remove the nut and belt.

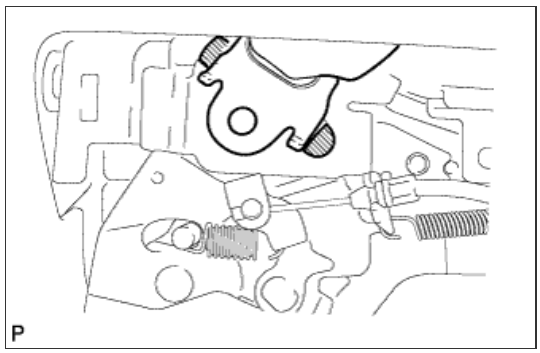
HINT:

The rear No. 2 seat inner belt is fixed with the same nut as the rear seat inner belt. Therefore, it becomes disconnected when the nut is removed.



17. REMOVE REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY

a. Remove the belt.



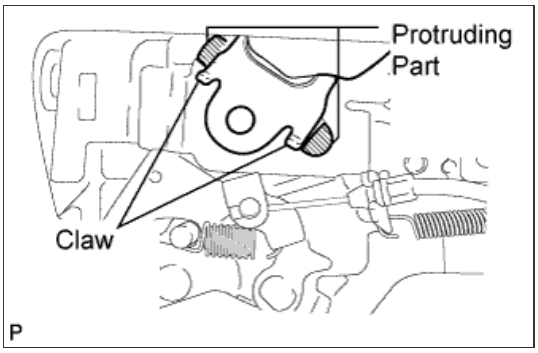
for Preparation Click here

1. INSTALL REAR NO. 2 SEAT INNER BELT SUB-ASSEMBLY

a. Install the belt.

NOTICE:

- **Make sure the claws are facing away from the seat.**
- **Do not overlap the anchor part of the seat belt and protruding parts of the seat.**



2. INSTALL REAR SEAT INNER BELT SUB-ASSEMBLY (for LH Side)

a. Install the belt with the nut.

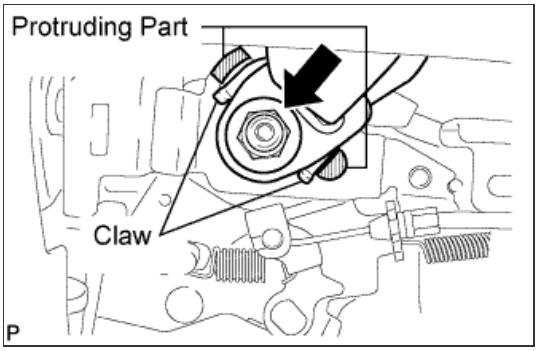
Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the seat.

HINT:

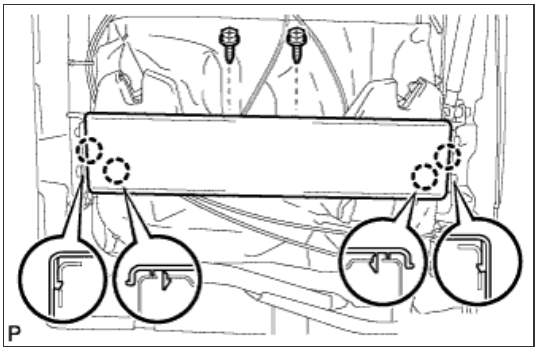
The rear No. 2 seat inner belt is fixed with the same nut as the rear seat inner belt. Therefore, connect it when installing the rear seat inner belt.



3. INSTALL NO. 3 SEAT LEG COVER NO. 2

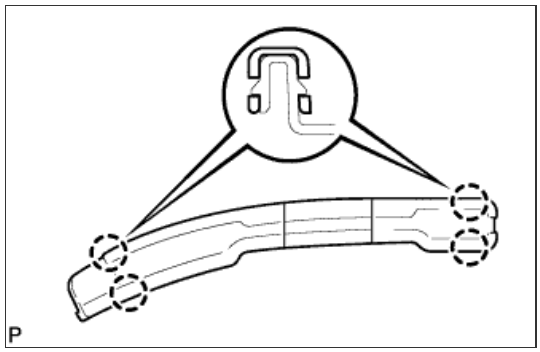
a. Attach the 4 claws to install the cover.

b. Install the 2 screws.



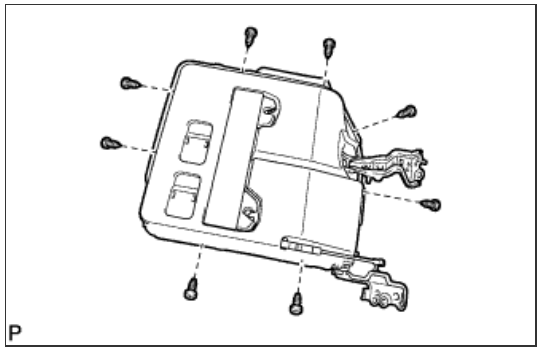
4. INSTALL NO. 3 SEAT FRONT BRACKET COVER LH

a. Attach the 4 claws to install the cover.

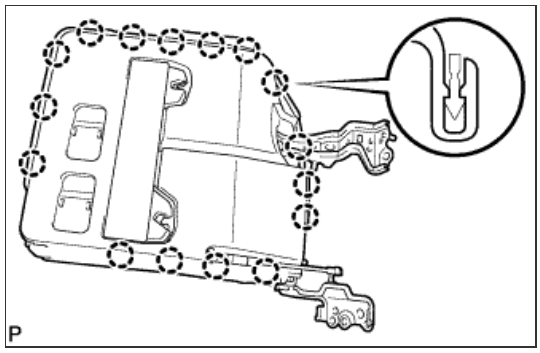


5. INSTALL REAR SEAT CUSHION UNDER COVER LH

a. Install the cover with the 8 screws.



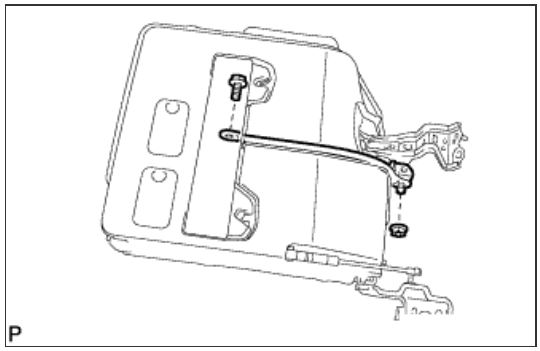
b. Attach the 16 claws.



6. INSTALL 3RD SEAT LINK SUB-ASSEMBLY LH

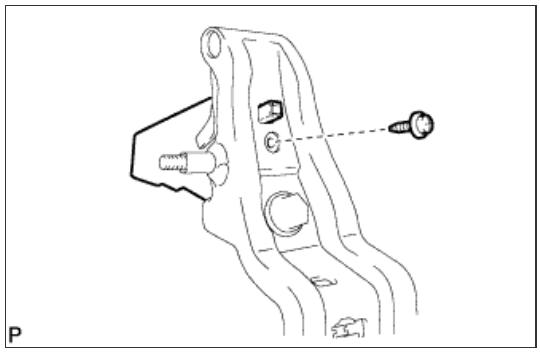
a. Install the seat link with the bolt and nut.

Torque:
8.5 N*m{ 87 kgf*cm , 75 in.*lbf }



7. INSTALL NO. 2 SEAT LEG COVER NO. 2

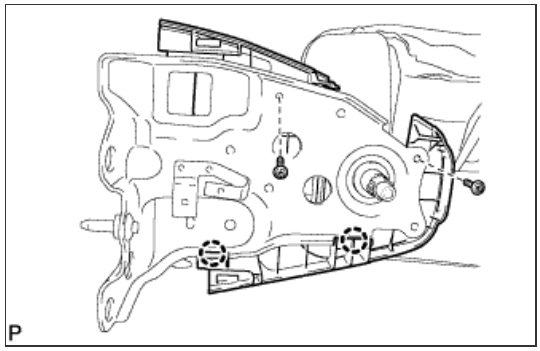
a. Install the seat leg cover with the screw.



8. INSTALL REAR NO. 3 SEAT LEG COVER LH

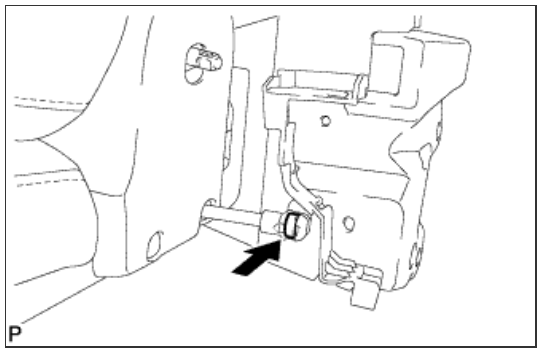
a. Attach the 2 claws to install the seat leg cover.

b. Install the 2 screws.



c. Install the spring of the seat stay ball joint.

d. Connect the seat stay to the seat frame.



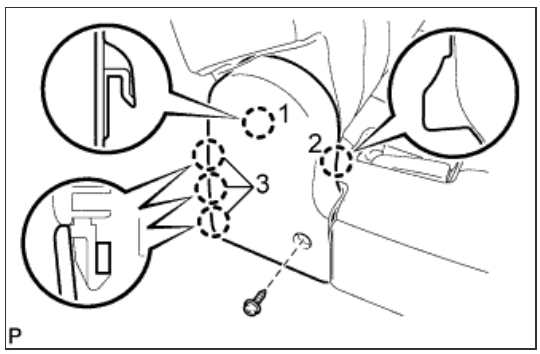
9. INSTALL REAR SEAT REAR BRACKET COVER REAR

a. Attach the 2 claws to install the cover.

10. INSTALL RECLINING ADJUSTER COVER RH

a. Attach the 5 claws in the order shown in the illustration to install the cover.

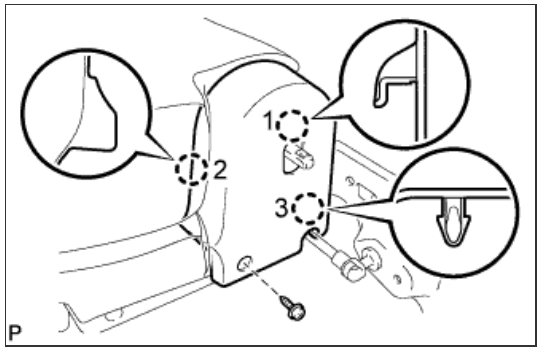
b. Install the screw.



11. INSTALL RECLINING ADJUSTER COVER LH

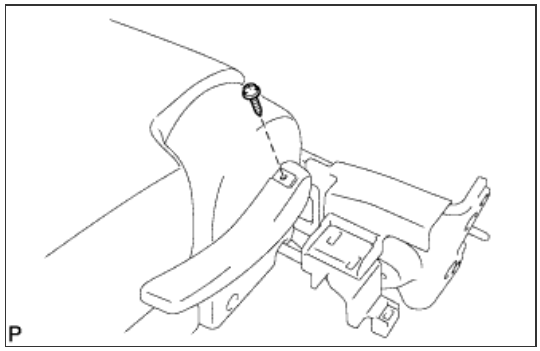
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the screw.



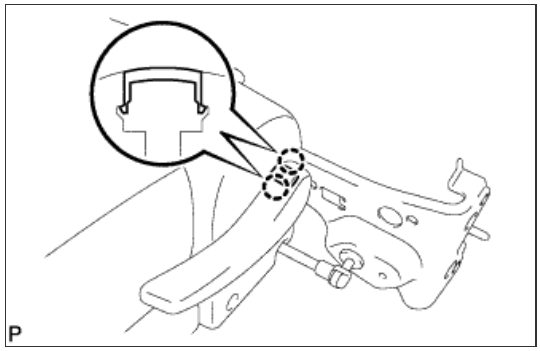
12. INSTALL NO. 2 RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



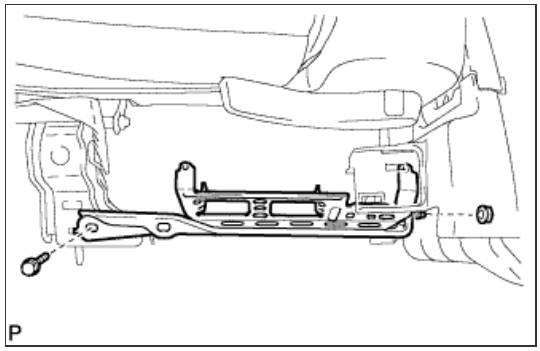
13. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.

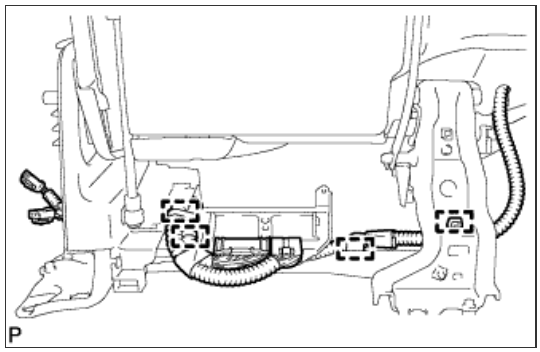


14. INSTALL REAR NO. 2 SEAT LEG BRACKET REAR LH

a. Install the bracket with the bolt and nut.



b. Attach the 4 clamps.



15. INSTALL FOLD SEAT CONTROL ECU

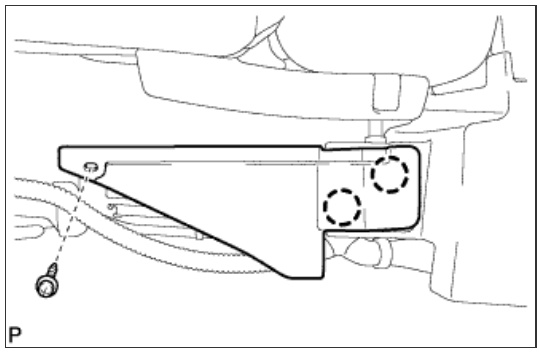
a. w/ Automatic Folding-up Function:
Install the control ECU (Click here).

b. w/ Manual Folding-up Function:
Install the control ECU (Click here).

16. INSTALL NO. 2 SEAT CUSHION COVER

a. Attach the 2 claws to install the cover.

b. Install the screw.

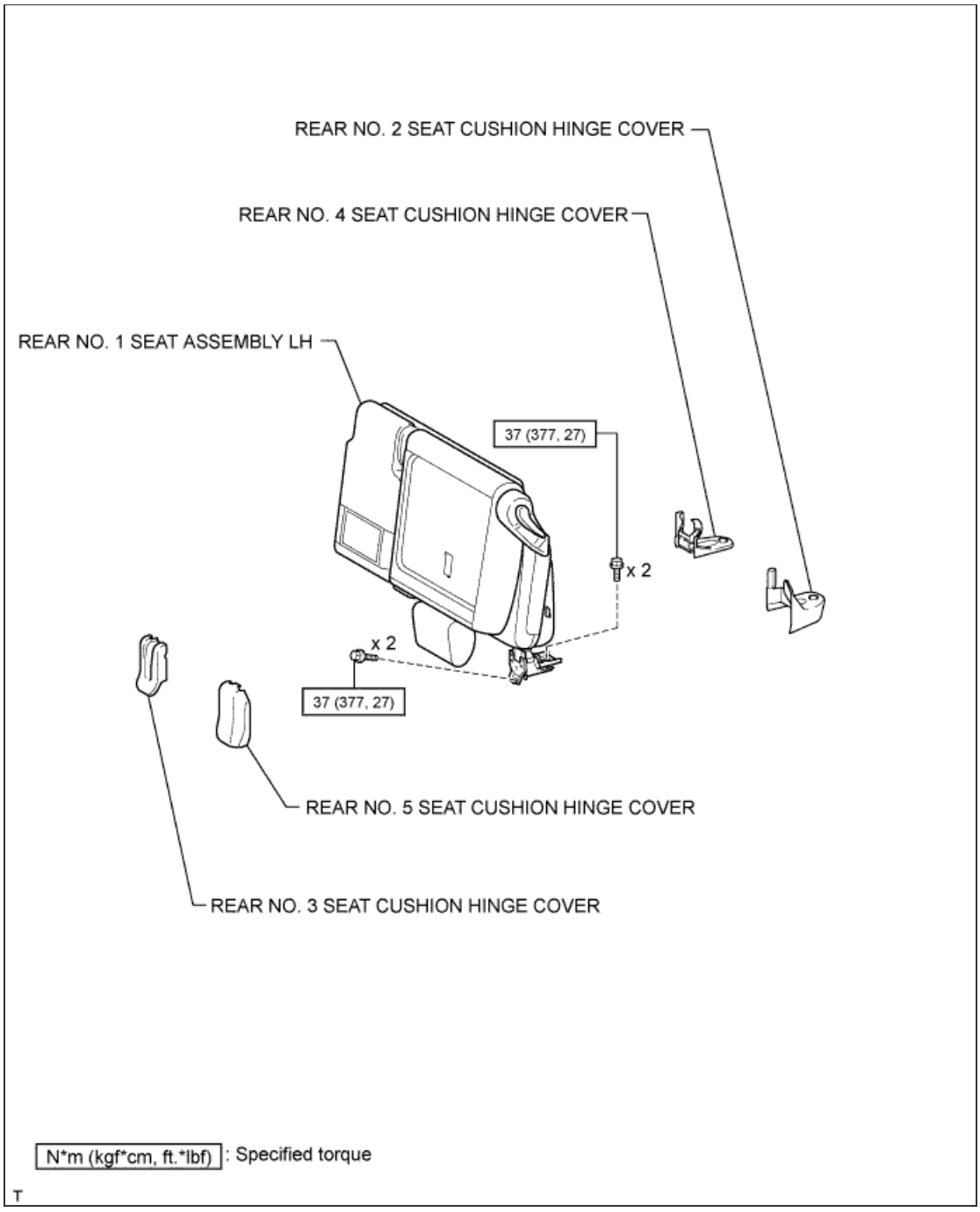


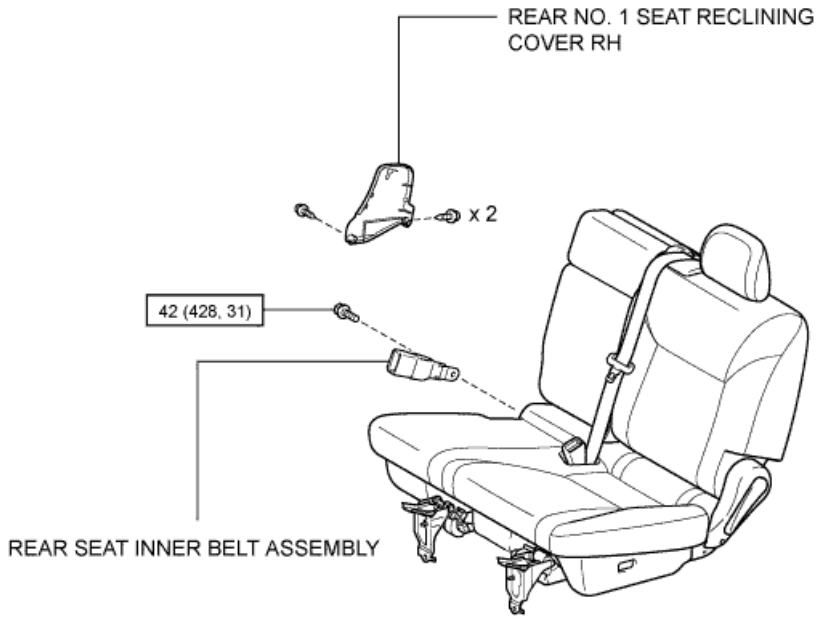
17. INSTALL REAR NO. 2 SEAT ASSEMBLY LH

a. w/ Automatic Folding-up Function:
Install the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Install the rear No. 2 seat assembly (Click here).

for Preparation Click here





N*m (kgf*cm, ft.*lbf) : Specified torque

T

for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

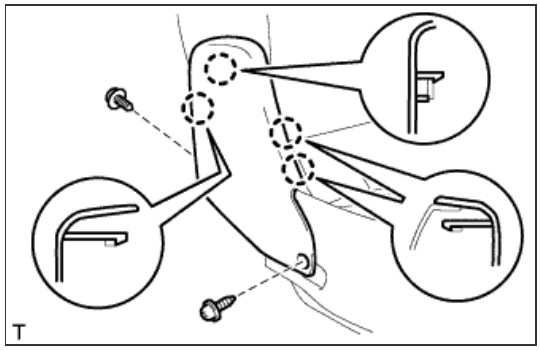
1. REMOVE REAR NO. 1 SEAT ASSEMBLY LH

a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

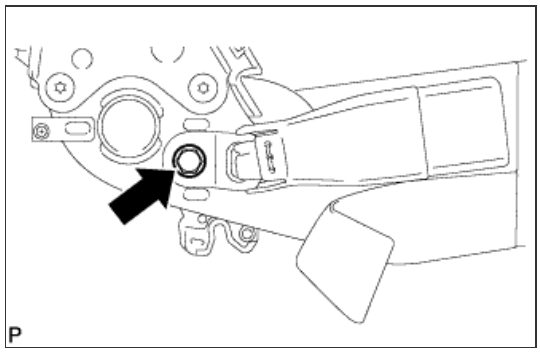
a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



3. REMOVE REAR SEAT INNER BELT ASSEMBLY

a. Remove the bolt and belt.



for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

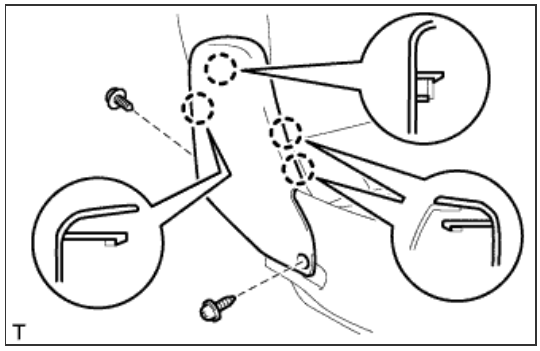
1. REMOVE REAR NO. 1 SEAT ASSEMBLY LH

a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

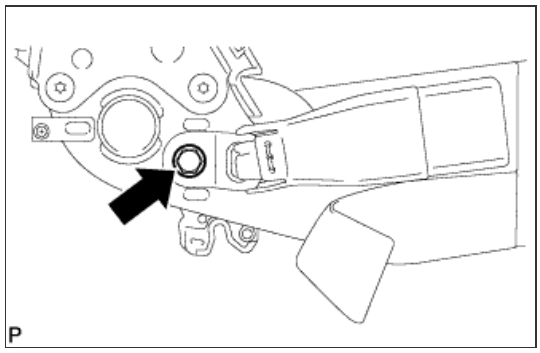
a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



3. REMOVE REAR SEAT INNER BELT ASSEMBLY

a. Remove the bolt and belt.



for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**
- **A bolt without a torque specification is shown in the standard bolt chart (Click here).**

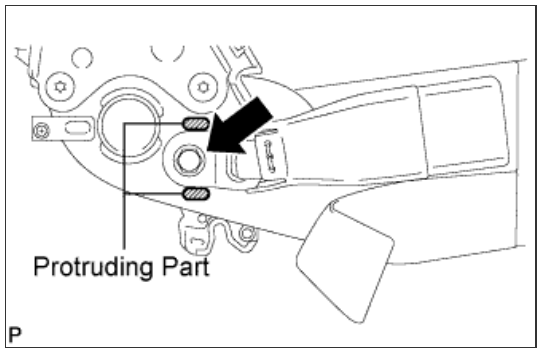
1. INSTALL REAR SEAT INNER BELT ASSEMBLY

a. Install the seat belt with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

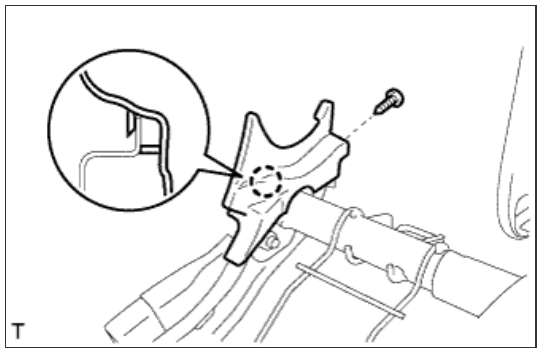
The anchor part of the seat belt must not overlap the protruding part.



2. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the claw to install the cover.

b. Install the screw.



3. INSTALL REAR NO. 1 SEAT ASSEMBLY LH

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**
- **A bolt without a torque specification is shown in the standard bolt chart (Click here).**

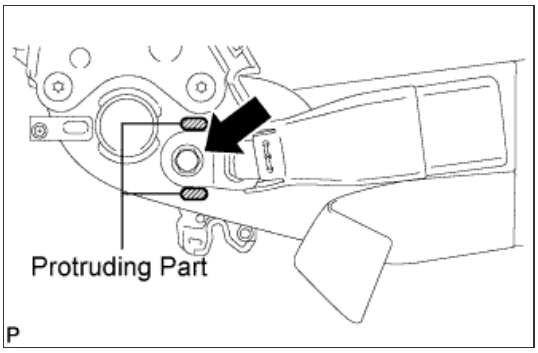
1. INSTALL REAR SEAT INNER BELT ASSEMBLY

a. Install the seat belt with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

NOTICE:

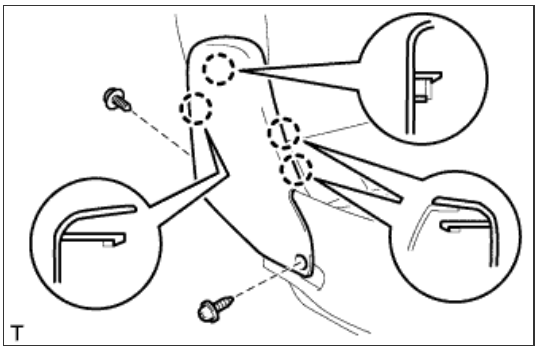
The anchor part of the seat belt must not overlap the protruding part.



2. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 4 claws to install the cover.

b. Install the 2 screws.

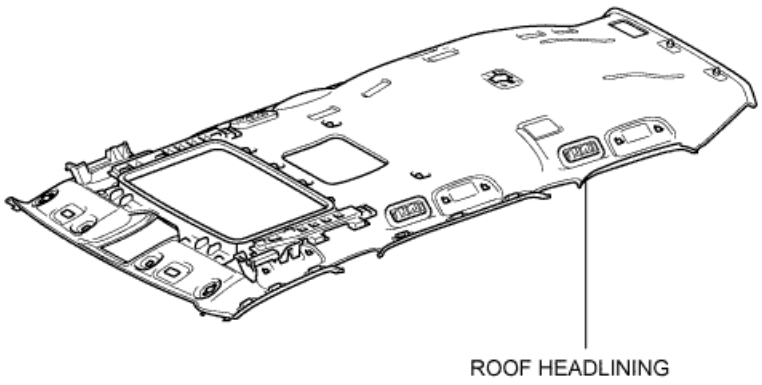


3. INSTALL REAR NO. 1 SEAT ASSEMBLY LH

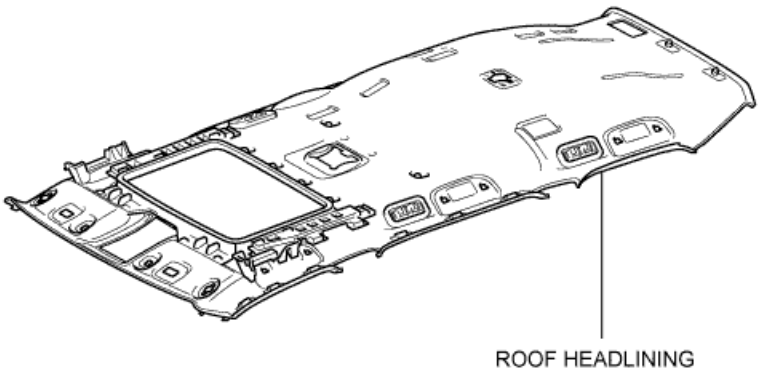
a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here

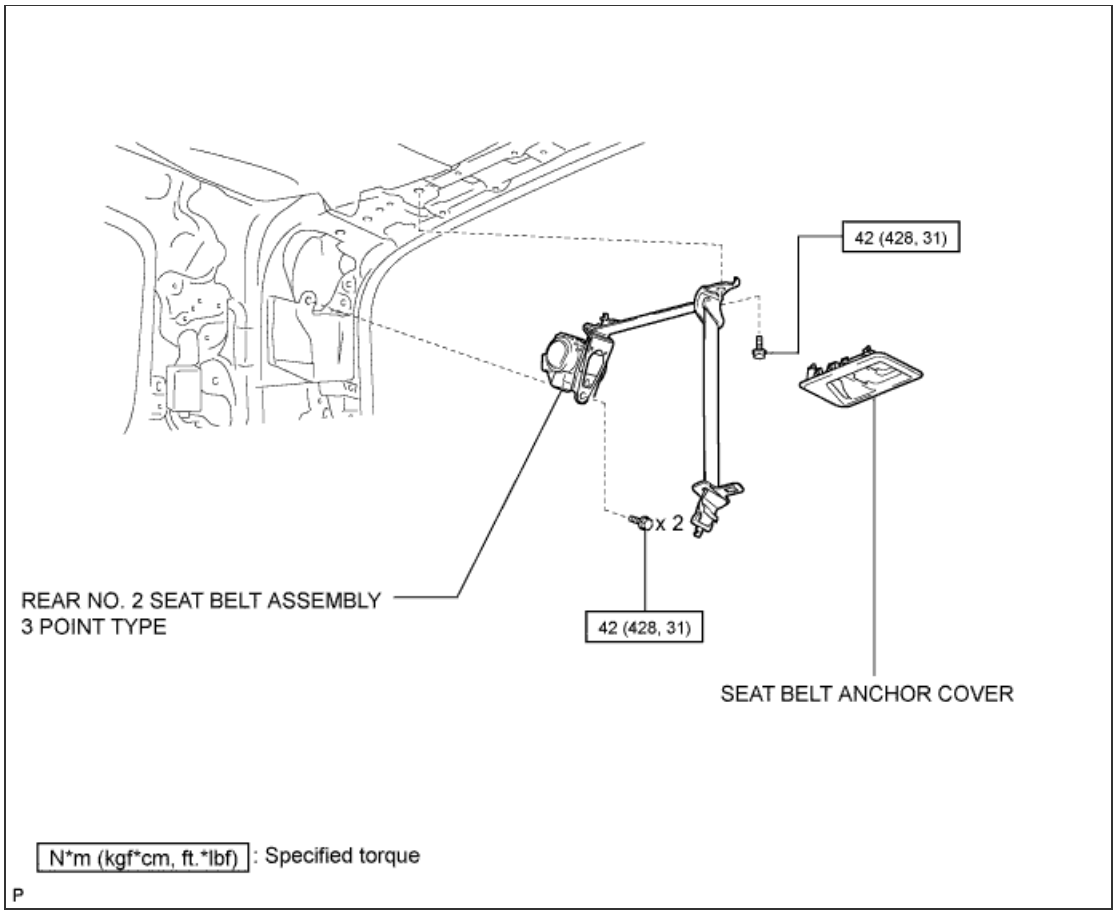
w/ Rear Seat Entertainment System:



w/o Rear Seat Entertainment System:



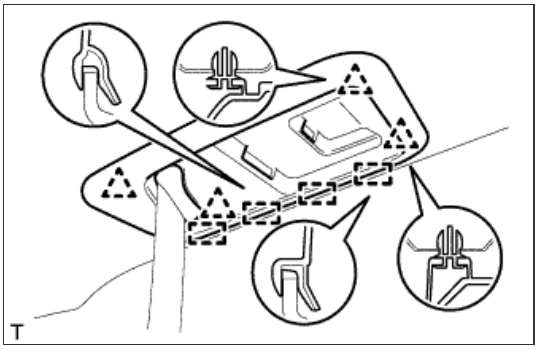
T


42 (428, 31)
x 2
REAR NO. 2 SEAT BELT ASSEMBLY
3 POINT TYPE
42 (428, 31)
SEAT BELT ANCHOR COVER
N*m (kgf*cm, ft.*lbf) : Specified torque
P

for Preparation Click here

1. REMOVE SEAT BELT ANCHOR COVER

a. Detach the 4 clips and 4 guides, and remove the seat belt anchor cover.

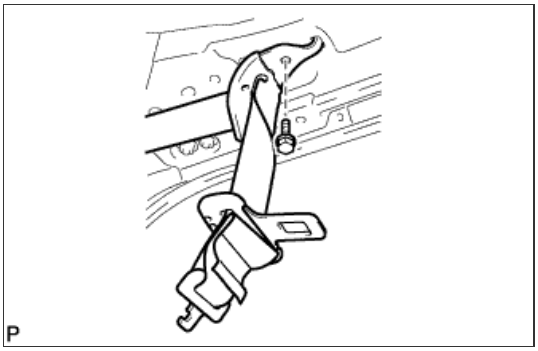


2. REMOVE ROOF HEADLINING

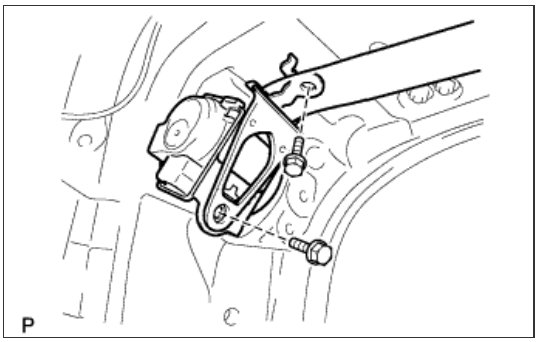
a. Remove the roof headlining (Click here).

3. REMOVE REAR NO. 2 SEAT BELT ASSEMBLY 3 POINT TYPE

a. Remove the bolt and through anchor.



b. Remove the 2 bolts and belt.



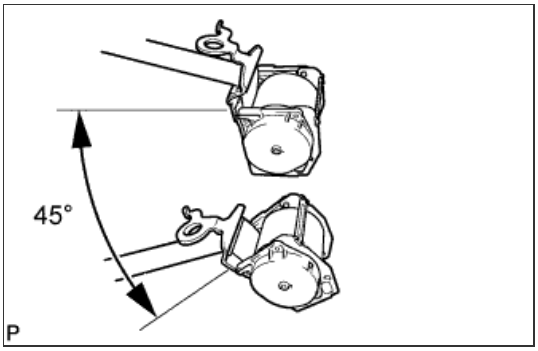
for Preparation Click here

1. INSPECT REAR NO. 2 SEAT BELT ASSEMBLY 3 POINT TYPE

NOTICE:

Do not disassemble the retractor.

a. When the inclination of the retractor is 15° or less, check that the belt can be pulled from the retractor. When the inclination of the retractor is over 45°, check that the belt locks.
If the operation is not as specified, replace the belt.



b. w/ Child Restraint System:
Check the fastening function of the child restraint system.

NOTICE:

The check should be performed with the outer belt installed.

i. When the belt is pulled out fully, the belt should automatically start to retract.

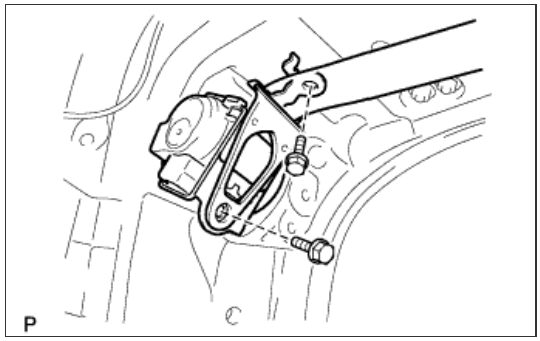
ii. After the belt has fully retracted, the belt should be able to be pulled out and retracted again. If the operation is not as specified, replace the belt assembly.

for Preparation Click here

1. INSTALL REAR NO. 2 SEAT BELT ASSEMBLY 3 POINT TYPE

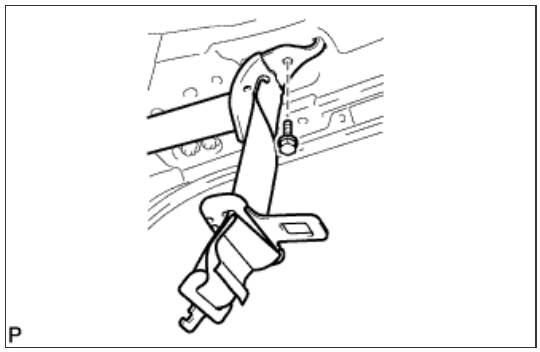
a. Install the belt with the 2 bolts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



b. Install the through anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

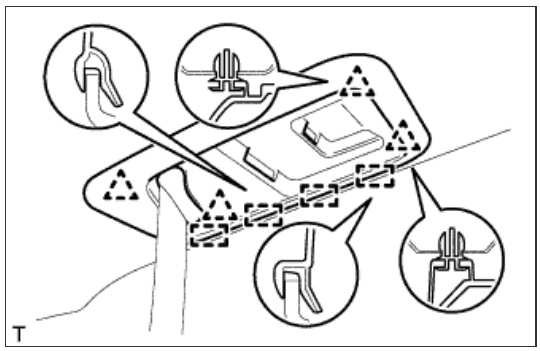


2. INSTALL ROOF HEADLINING

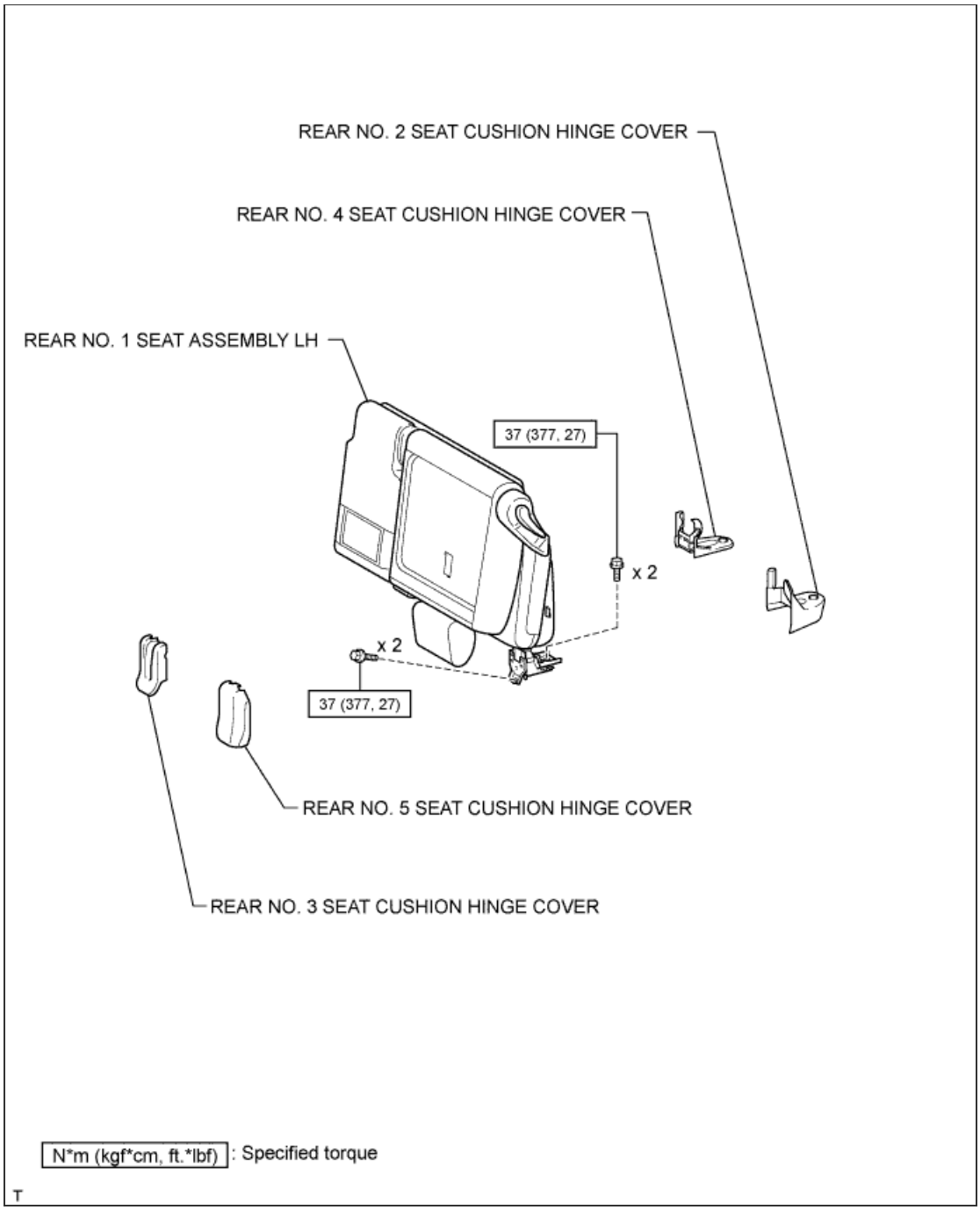
a. Install the roof headlining (Click here).

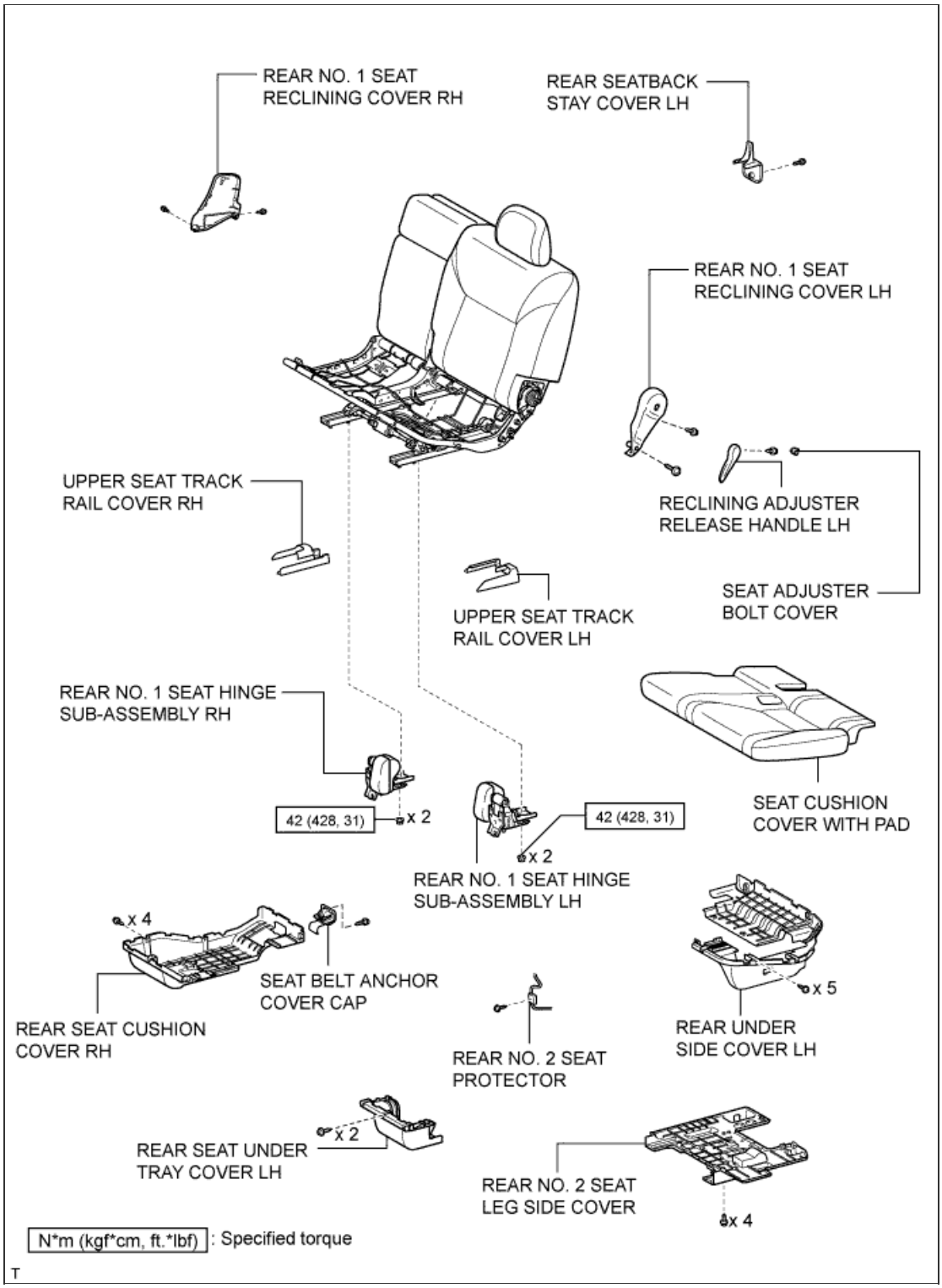
3. INSTALL SEAT BELT ANCHOR COVER

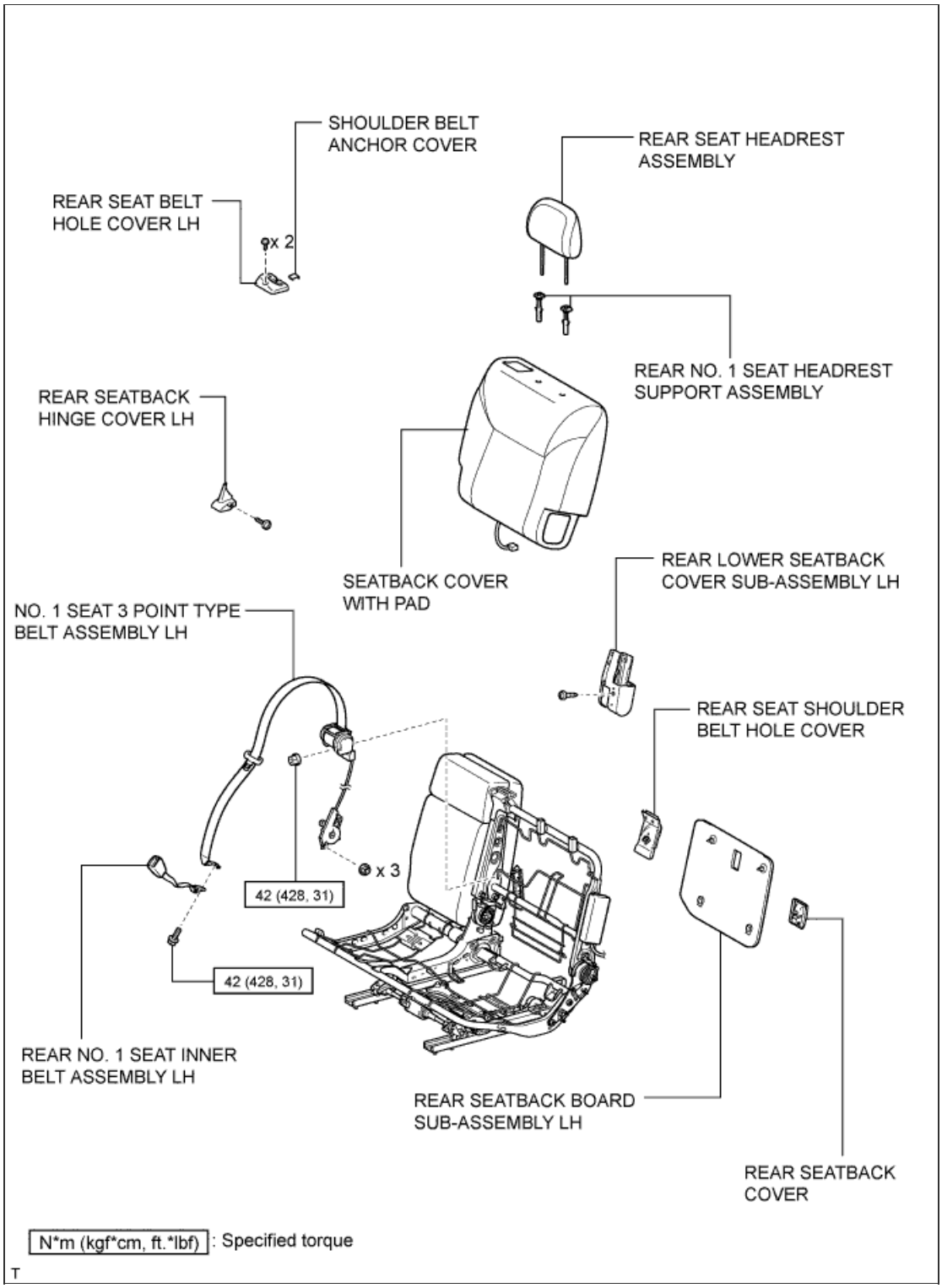
a. Attach the 4 guides and 4 clips to install the seat belt anchor cover.



for Preparation Click here




REAR NO. 1 SEAT RECLINING COVER RH
REAR SEATBACK STAY COVER LH
REAR NO. 1 SEAT RECLINING COVER LH
UPPER SEAT TRACK RAIL COVER RH
RECLINING ADJUSTER RELEASE HANDLE LH
SEAT ADJUSTER BOLT COVER
UPPER SEAT TRACK RAIL COVER LH
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH
SEAT CUSHION COVER WITH PAD
42 (428, 31)
x 2
42 (428, 31)
x 2
REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH
x 4
SEAT BELT ANCHOR COVER CAP
x 5
REAR SEAT CUSHION COVER RH
REAR NO. 2 SEAT PROTECTOR
REAR UNDER SIDE COVER LH
x 2
REAR SEAT UNDER TRAY COVER LH
REAR NO. 2 SEAT LEG SIDE COVER
x 4
N*m (kgf*cm, ft.*lbf) : Specified torque
T


SHOULDER BELT ANCHOR COVER
REAR SEAT HEADREST ASSEMBLY
REAR SEAT BELT HOLE COVER LH
x 2
REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY
REAR SEATBACK HINGE COVER LH
SEATBACK COVER WITH PAD
REAR LOWER SEATBACK COVER SUB-ASSEMBLY LH
NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH
REAR SEAT SHOULDER BELT HOLE COVER
x 3
42 (428, 31)
42 (428, 31)
REAR NO. 1 SEAT INNER BELT ASSEMBLY LH
REAR SEATBACK BOARD SUB-ASSEMBLY LH
REAR SEATBACK COVER
N*m (kgf*cm, ft.*lbf) : Specified torque
T

for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY LH

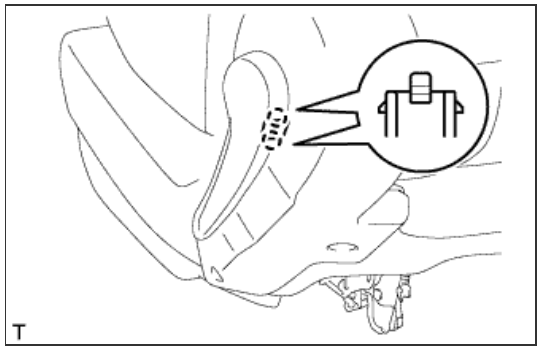
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

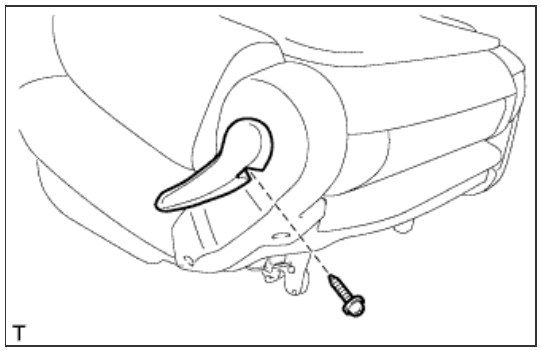
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE LH

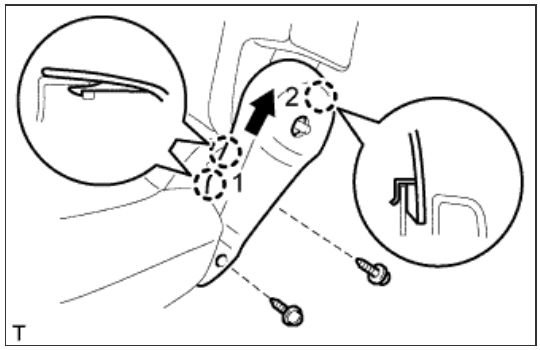
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

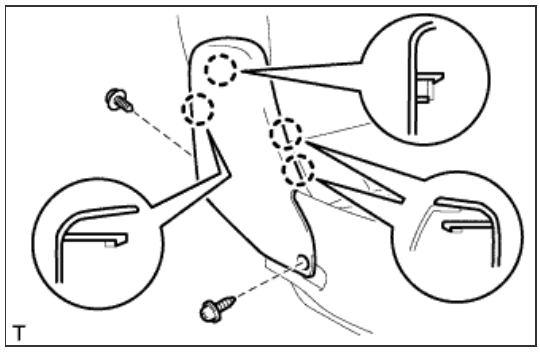
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

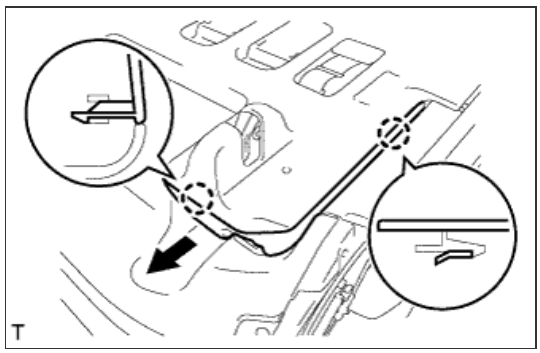


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

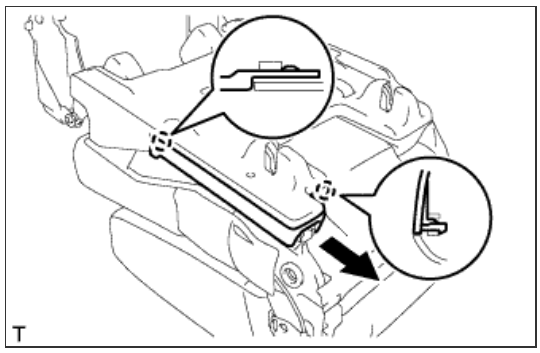


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

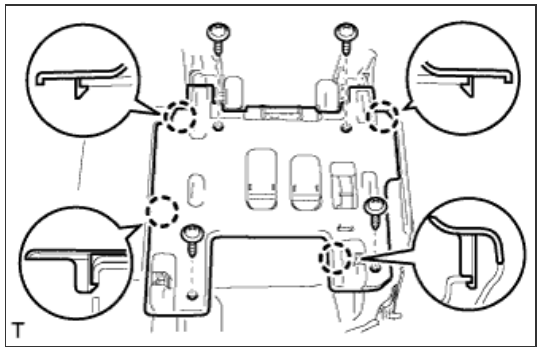
HINT:

Tape the screwdriver tip before use.

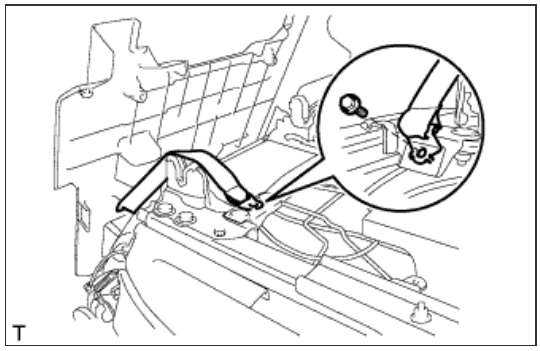


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 4 claws.



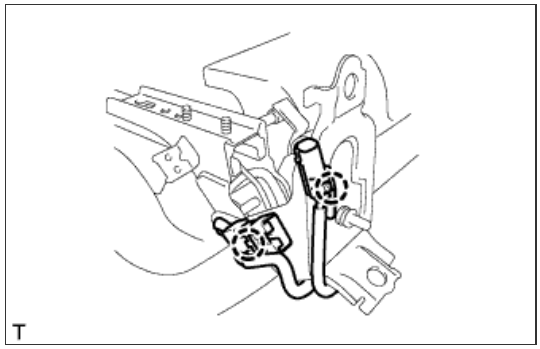
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

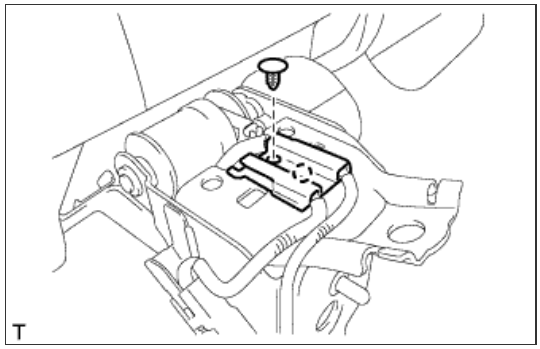
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.

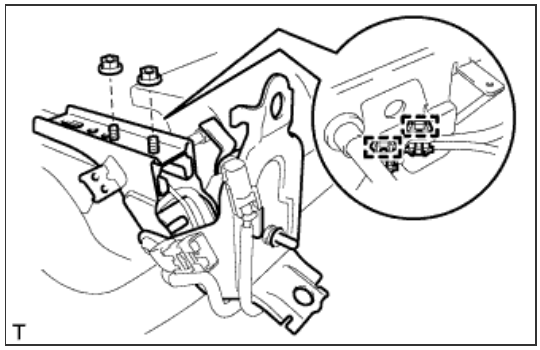


10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Detach the wire harness clamp.

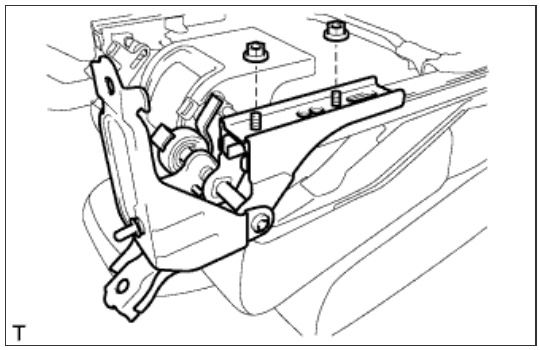
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



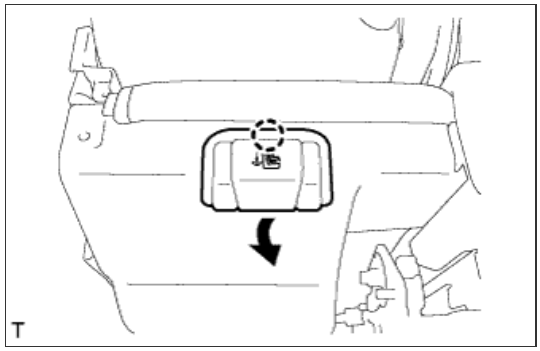
11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Remove the 2 nuts and hinge.

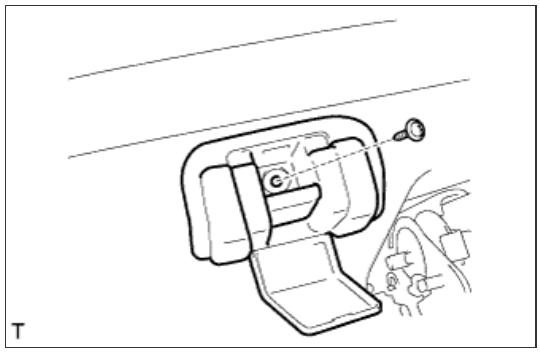


12. REMOVE SEAT BELT ANCHOR COVER CAP

a. Detach the claw and open the cap.



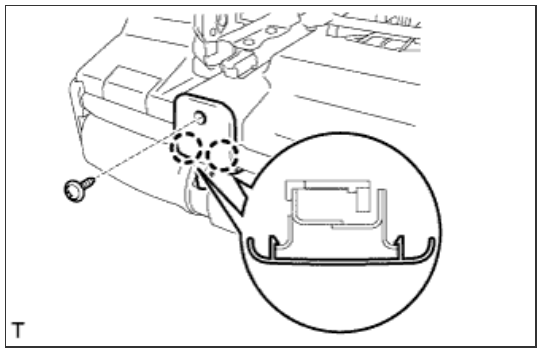
b. Remove the screw and anchor cover cap.



13. REMOVE REAR SEATBACK STAY COVER LH

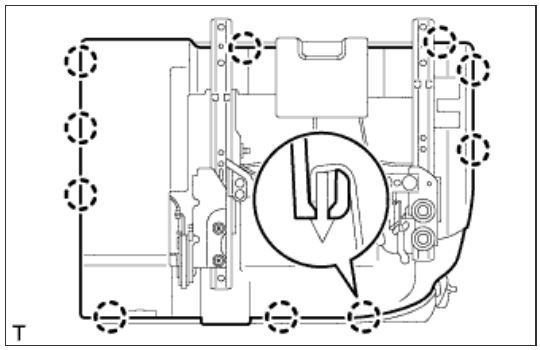
a. Remove the screw.

b. Detach the 2 claws and remove the cover.



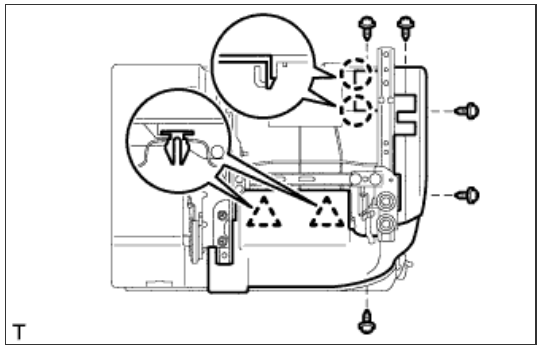
14. REMOVE REAR UNDER SIDE COVER LH

a. Detach the 10 claws.



b. Remove the 5 screws.

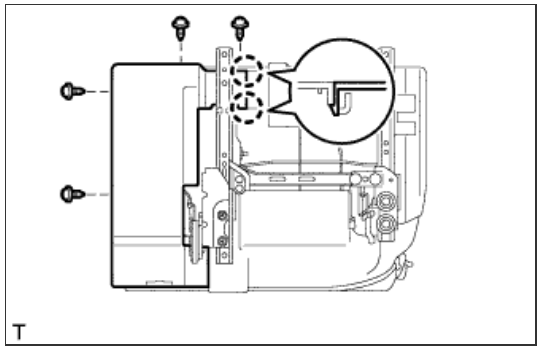
c. Detach the 2 clips and 2 claws, and remove the cover.



15. REMOVE REAR SEAT CUSHION COVER RH

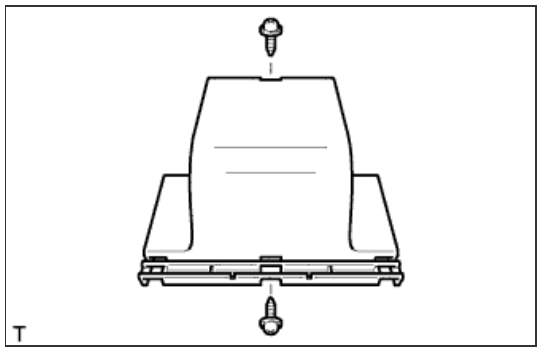
a. Remove the 4 screws.

b. Detach the 2 claws and remove the cover.



16. REMOVE REAR SEAT UNDER TRAY COVER LH

a. Remove the 2 screws and cover.



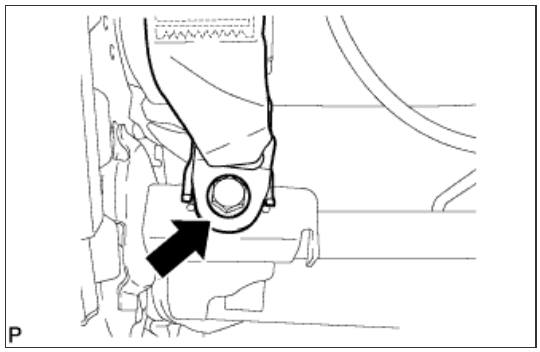
17. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Remove the bolt and belt.

HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear

No. 1 seat inner belt LH. Therefore, it becomes disconnected when the bolt is removed.



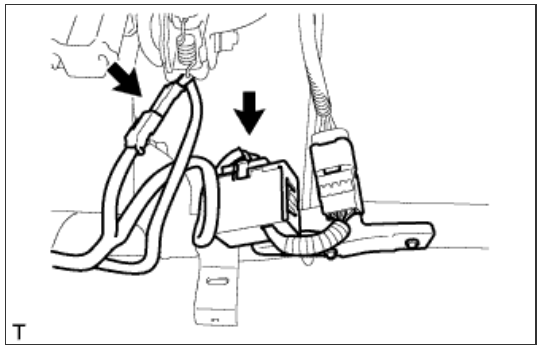
18. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

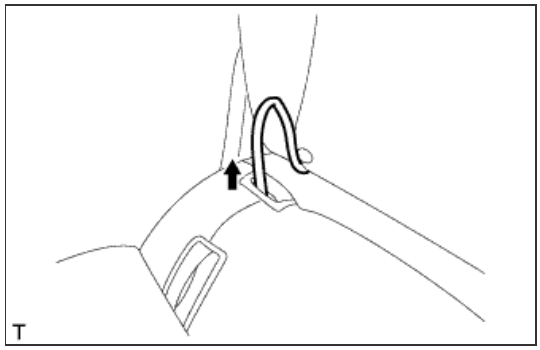
b. Remove the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.



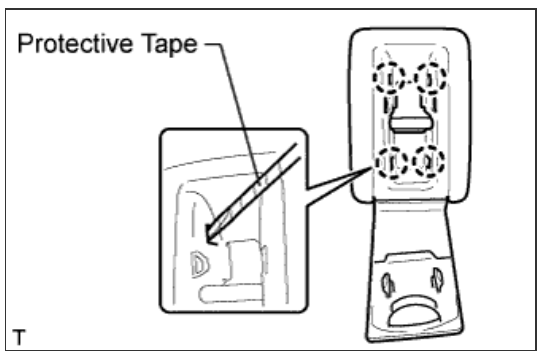
d. Remove the seat cushion cover with pad.

19. REMOVE REAR SEATBACK COVER

a. Using a screwdriver, detach the 4 claws and remove the cover.

HINT:

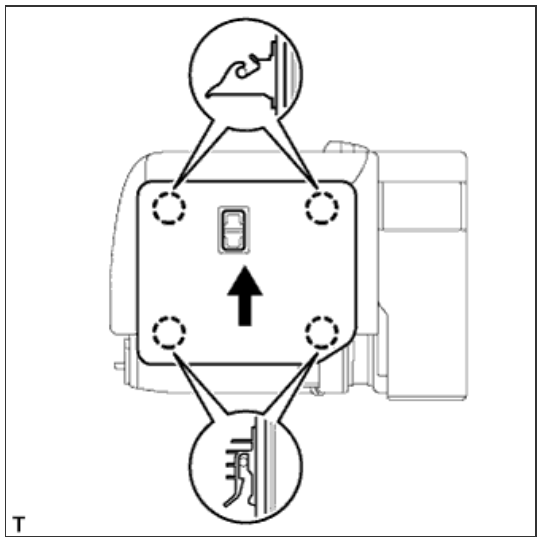
Tape the screwdriver tip before use.



20. REMOVE REAR SEATBACK BOARD SUB-ASSEMBLY LH

a. Detach the 2 claws on the top of the board.

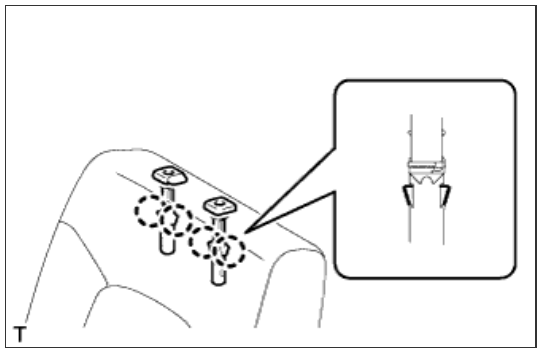
b. Pull up the board to detach the 2 claws on the bottom of the board and remove it.



21. REMOVE REAR SEAT HEADREST ASSEMBLY

22. REMOVE REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

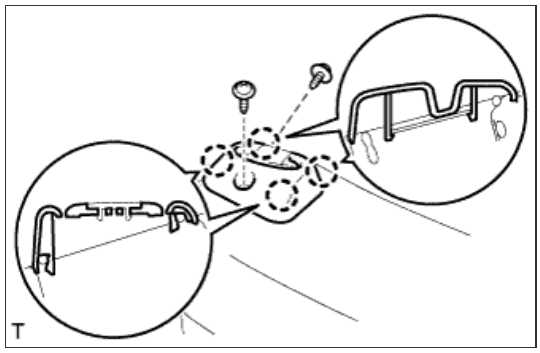
a. Detach the 4 claws and remove the 2 supports.



23. REMOVE SHOULDER BELT ANCHOR COVER

a. Remove the 2 screws.

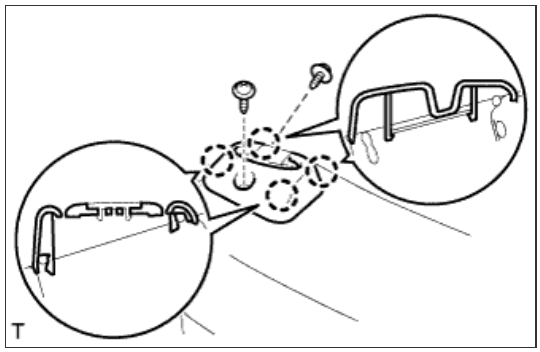
b. Detach the 4 claws and remove the cover.



24. REMOVE REAR SEAT BELT HOLE COVER LH

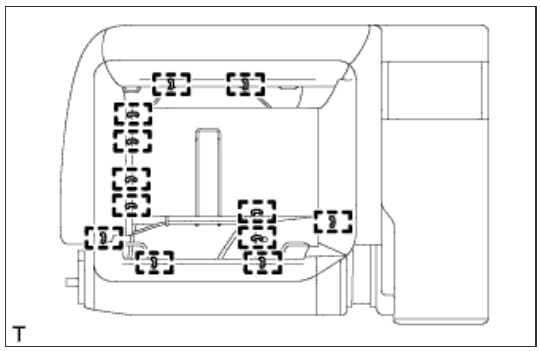
a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



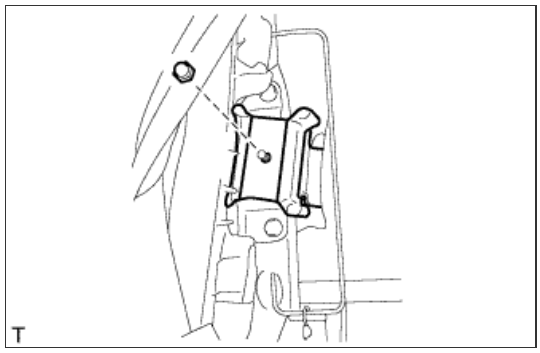
25. REMOVE SEATBACK COVER WITH PAD

a. Remove the hog rings.



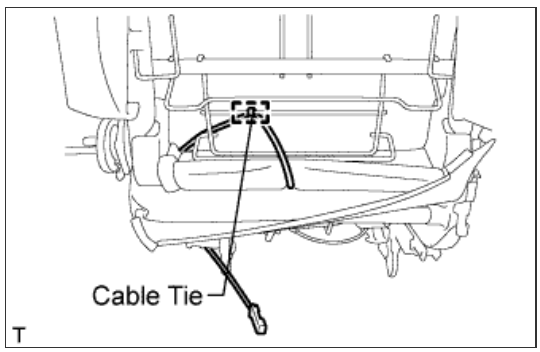
b. Remove the cap nut and seatback cover bracket from the seat frame.

c. Remove the side airbag wire harness through the hole in the seatback.

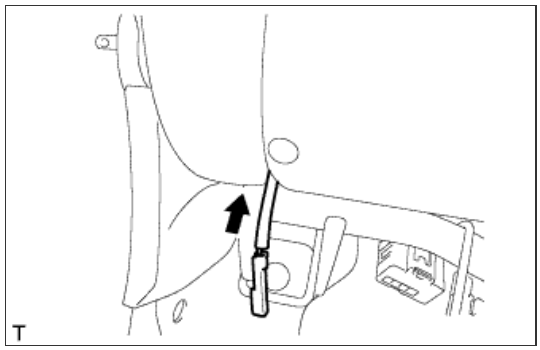


d. w/ Seat Heater System:

i. Cut the cable tie and disconnect the seatback heater wire harness.

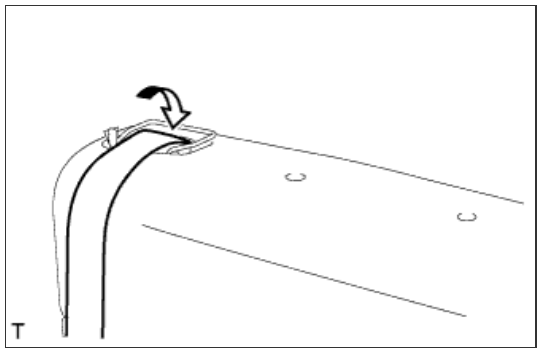


ii. Remove the seatback heater wire harness through the hole in the seatback.



e. Pull the seat belt into the inside of the seat.

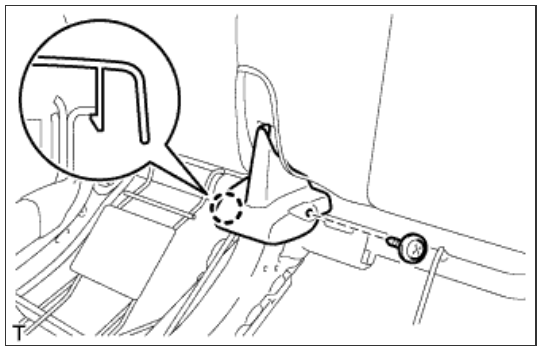
f. Remove the seatback cover with pad.



26. REMOVE REAR SEATBACK HINGE COVER LH

a. Remove the screw.

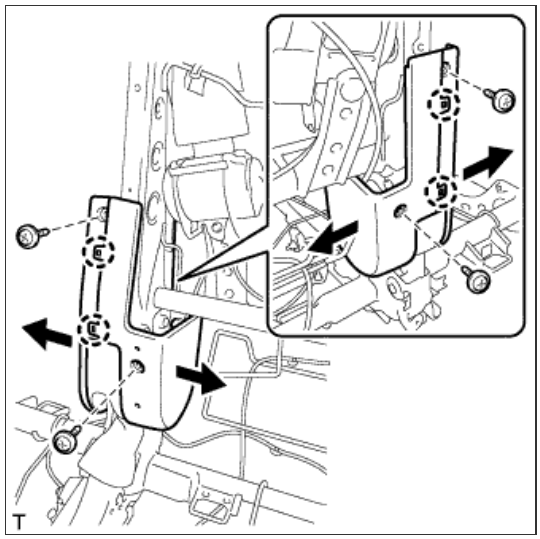
b. Detach the claw and remove the cover.



27. REMOVE REAR LOWER SEATBACK COVER SUB-ASSEMBLY LH

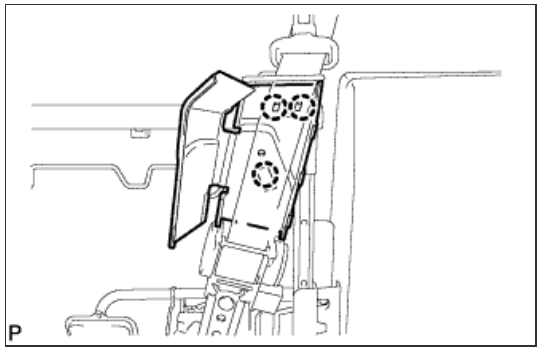
a. Remove the 4 screws.

b. Detach the 4 claws and remove the cover.



28. REMOVE REAR SEAT SHOULDER BELT HOLE COVER

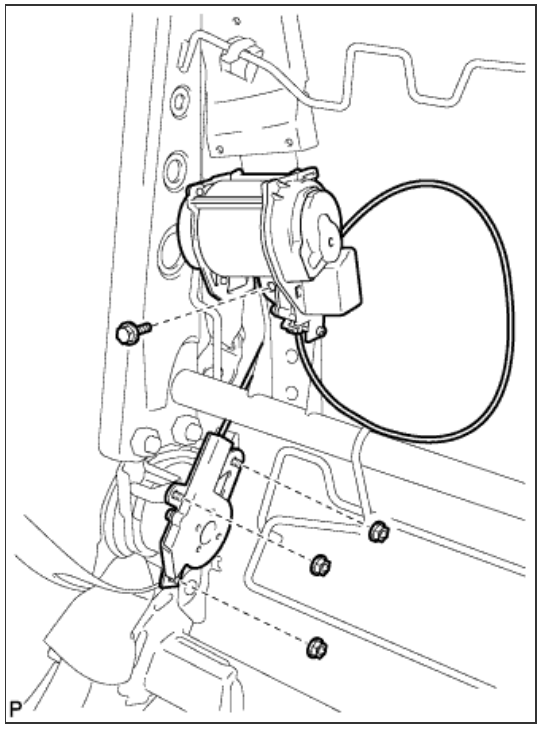
a. Using a screwdriver, detach the 3 claws and remove the shoulder belt hole cover.



29. REMOVE NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Remove the 3 nuts and belt sensor.

b. Remove the nut and outer belt.



for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE REAR NO. 1 SEAT ASSEMBLY LH

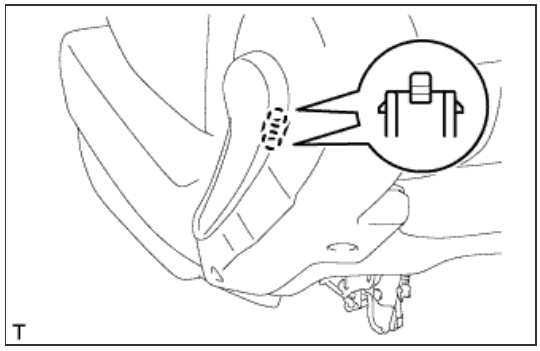
a. Remove the rear No. 1 seat assembly (Click here).

2. REMOVE SEAT ADJUSTER BOLT COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

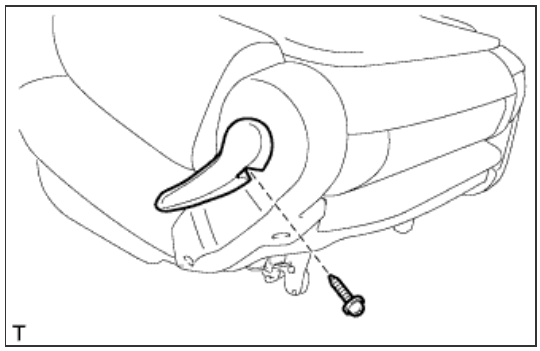
HINT:

Tape the screwdriver tip before use.



3. REMOVE RECLINING ADJUSTER RELEASE HANDLE LH

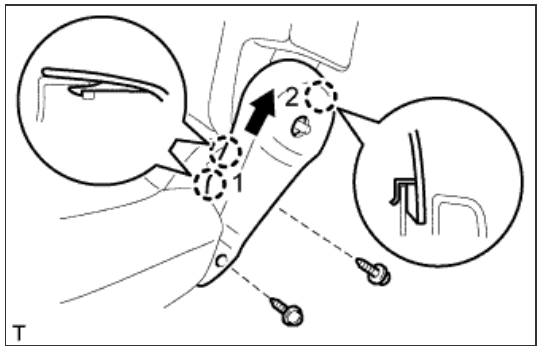
a. Remove the screw and release handle.



4. REMOVE REAR NO. 1 SEAT RECLINING COVER LH

a. Remove the 2 screws.

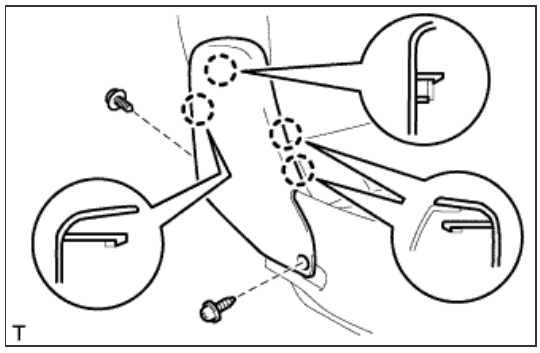
b. Detach the 3 claws in the order shown in the illustration, and then remove the cover.



5. REMOVE REAR NO. 1 SEAT RECLINING COVER RH

a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.

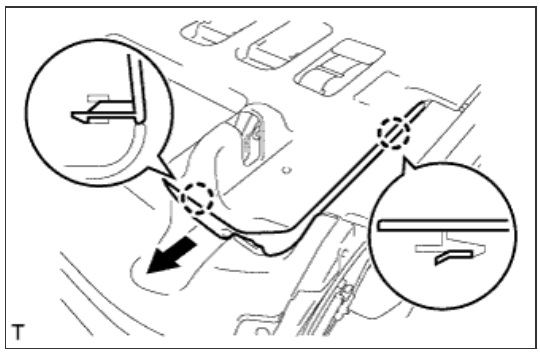


6. REMOVE UPPER SEAT TRACK RAIL COVER LH

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.

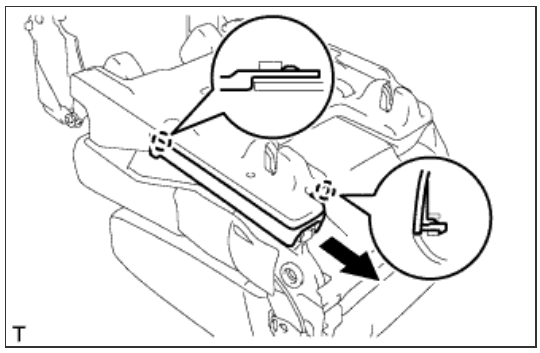


7. REMOVE UPPER SEAT TRACK RAIL COVER RH

a. Using a screwdriver, detach the 2 claws and remove the cover.

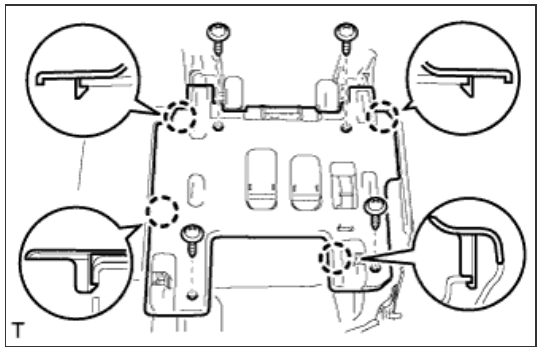
HINT:

Tape the screwdriver tip before use.

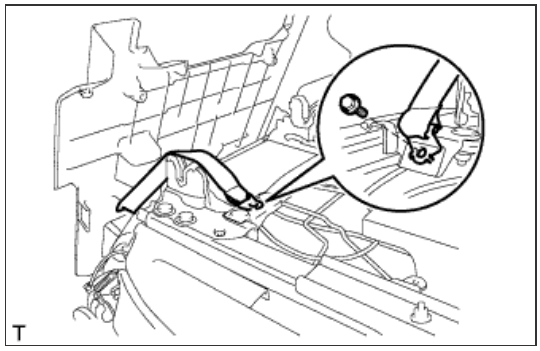


8. REMOVE REAR NO. 2 SEAT LEG SIDE COVER

a. Remove the 4 screws and detach the 4 claws.



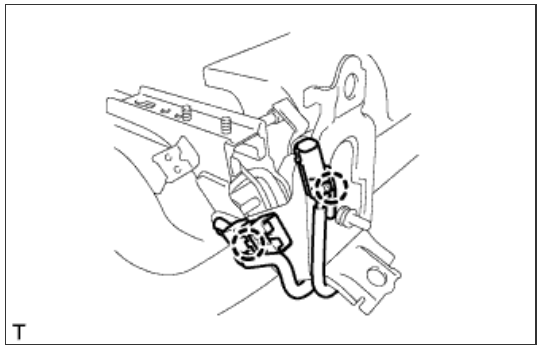
b. Remove the bolt that is securing the fold seat stopper band and remove the seat leg side cover together with the fold seat stopper band.



9. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the claw and remove the wire harness connector.

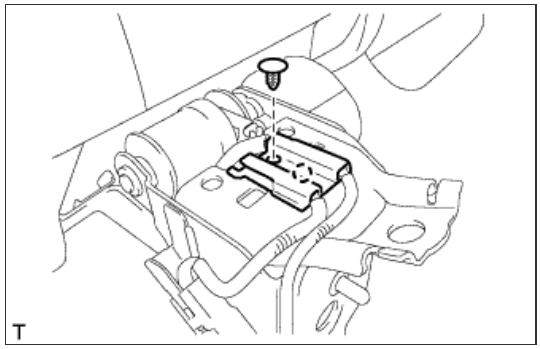
b. w/ Seat Heater System:
Detach the claw and remove the wire harness connector.



c. Using a clip remover, remove the clip.

d. Detach the claw and remove the seat protector from the seat hinge.

e. Detach the 2 claws, open the protector and remove the wire harness.

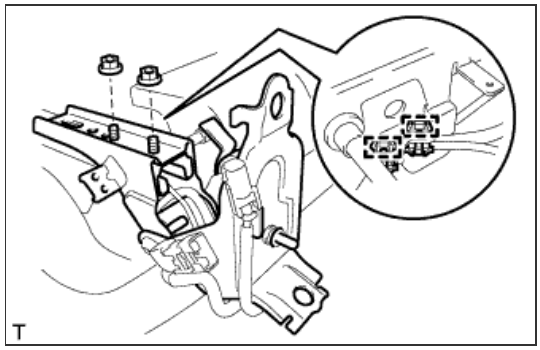


10. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Detach the wire harness clamp.

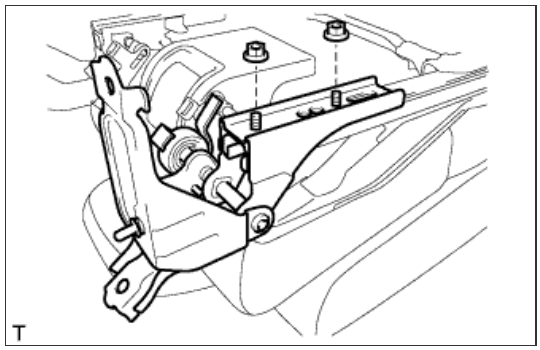
b. w/ Seat Heater System:
Detach the wire harness clamp.

c. Remove the 2 nuts and hinge.



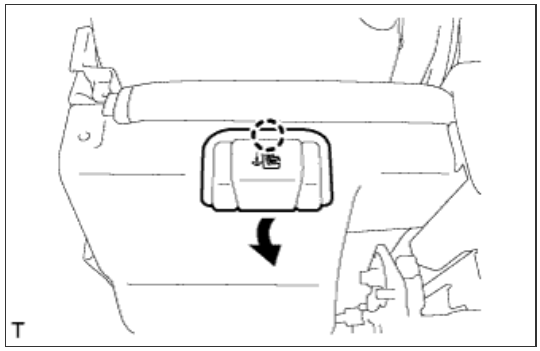
11. REMOVE REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Remove the 2 nuts and hinge.

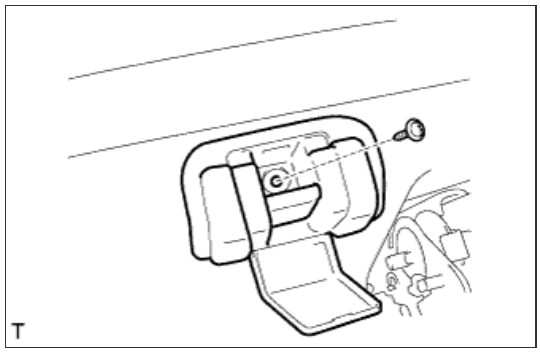


12. REMOVE SEAT BELT ANCHOR COVER CAP

a. Detach the claw and open the cap.



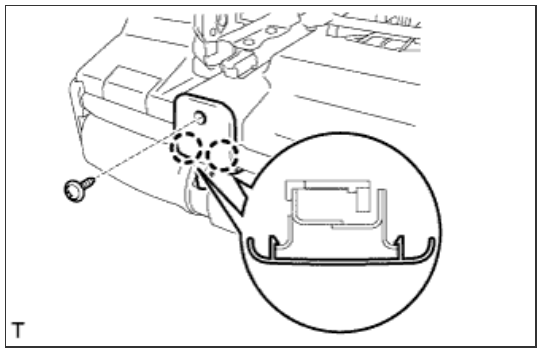
b. Remove the screw and anchor cover cap.



13. REMOVE REAR SEATBACK STAY COVER LH

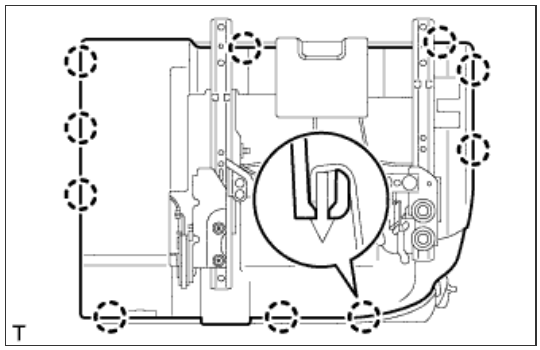
a. Remove the screw.

b. Detach the 2 claws and remove the cover.



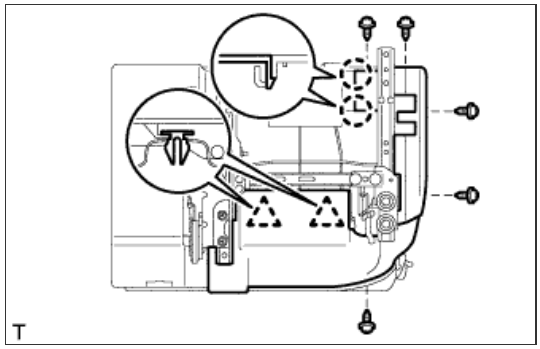
14. REMOVE REAR UNDER SIDE COVER LH

a. Detach the 10 claws.



b. Remove the 5 screws.

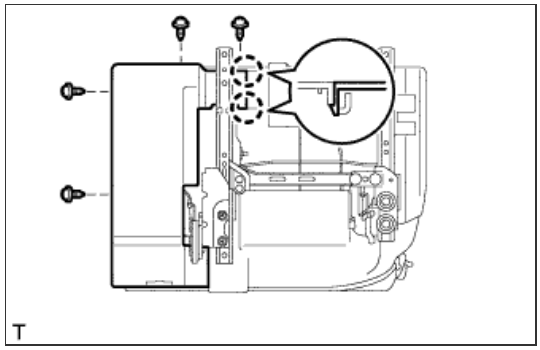
c. Detach the 2 clips and 2 claws, and remove the cover.



15. REMOVE REAR SEAT CUSHION COVER RH

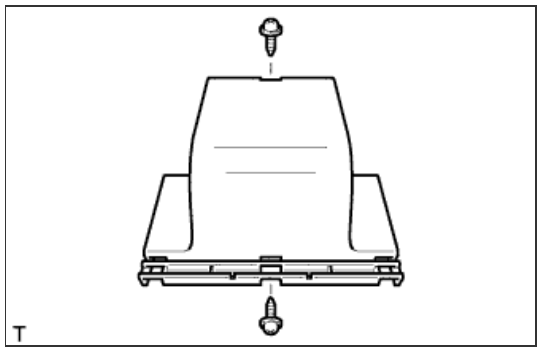
a. Remove the 4 screws.

b. Detach the 2 claws and remove the cover.



16. REMOVE REAR SEAT UNDER TRAY COVER LH

a. Remove the 2 screws and cover.



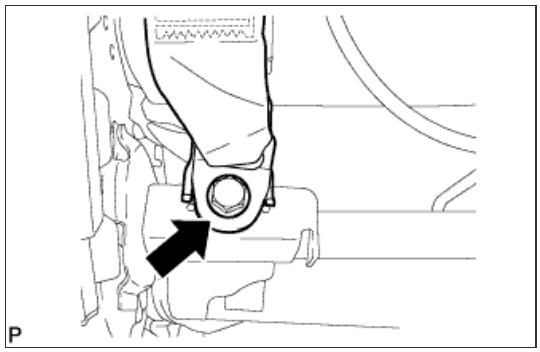
17. REMOVE REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Remove the bolt and belt.

HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear

No. 1 seat inner belt LH. Therefore, it becomes disconnected when the bolt is removed.



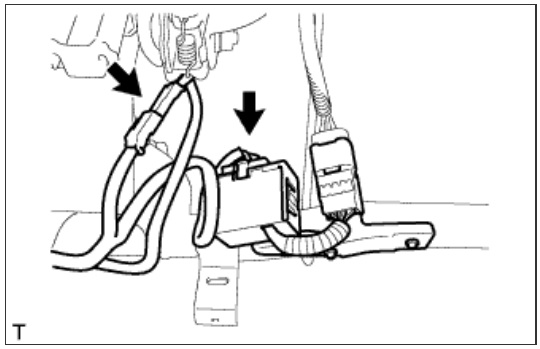
18. REMOVE SEAT CUSHION COVER WITH PAD

a. Detach the side airbag wire harness clamps.

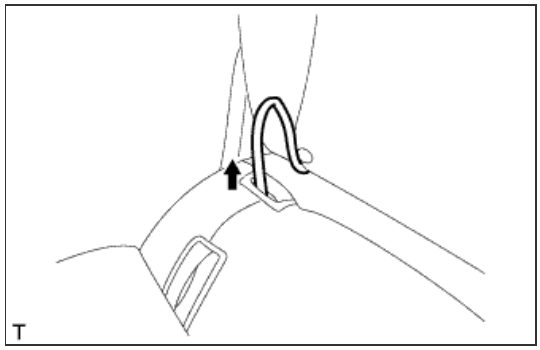
b. Remove the side airbag wire harness through the hole in the seat cushion.

c. w/ Seat Heater System:

i. Disconnect the 2 seat heater connectors.



ii. Remove the seatback heater wire harness through the hole in the seat cushion.



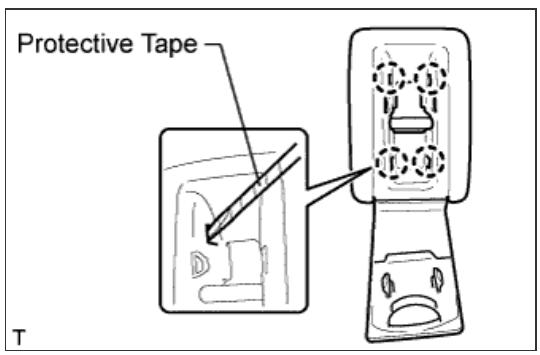
d. Remove the seat cushion cover with pad.

19. REMOVE REAR SEATBACK COVER

a. Using a screwdriver, detach the 4 claws and remove the cover.

HINT:

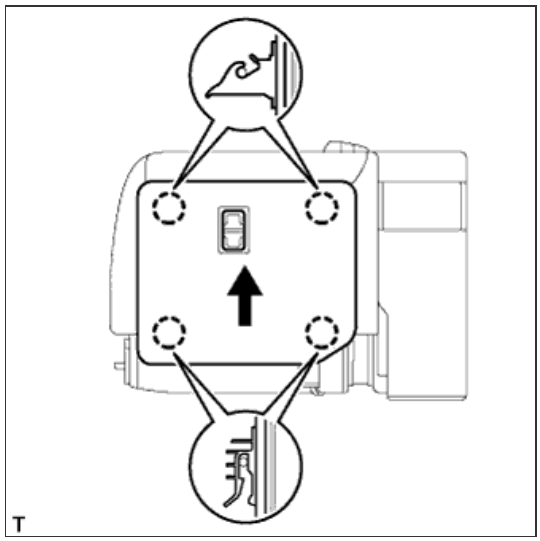
Tape the screwdriver tip before use.



20. REMOVE REAR SEATBACK BOARD SUB-ASSEMBLY LH

a. Detach the 2 claws on the top of the board.

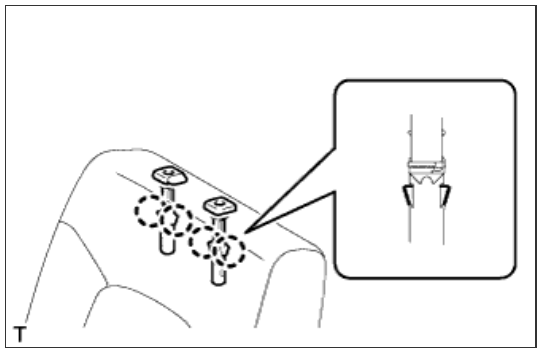
b. Pull up the board to detach the 2 claws on the bottom of the board and remove it.



21. REMOVE REAR SEAT HEADREST ASSEMBLY

22. REMOVE REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Detach the 4 claws and remove the 2 supports.

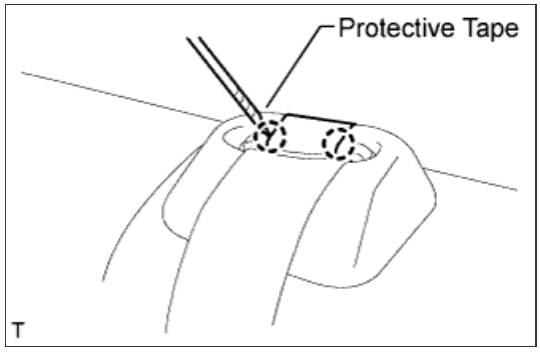


23. REMOVE SHOULDER BELT ANCHOR COVER

a. Using a screwdriver, detach the 2 claws and remove the cover.

HINT:

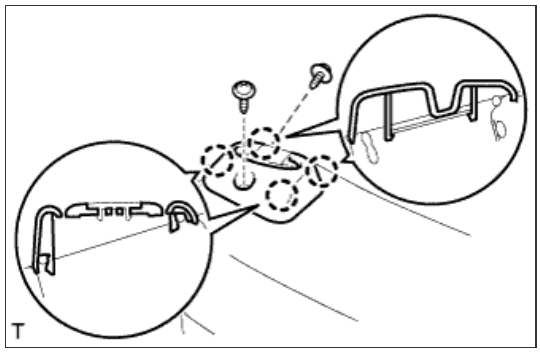
Tape the screwdriver tip before use.



24. REMOVE REAR SEAT BELT HOLE COVER LH

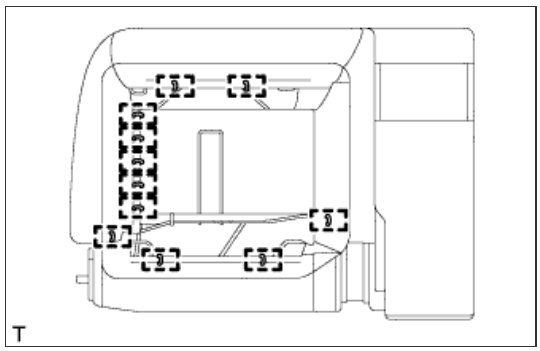
a. Remove the 2 screws.

b. Detach the 4 claws and remove the cover.



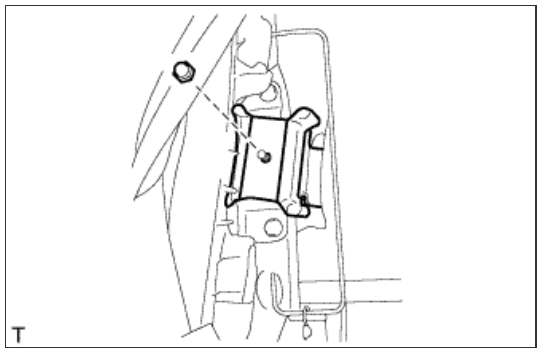
25. REMOVE SEATBACK COVER WITH PAD

a. Remove the hog rings.



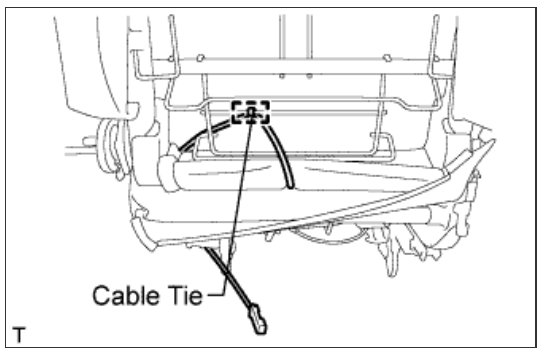
b. Remove the cap nut and seatback cover bracket from the seat frame.

c. Remove the side airbag wire harness through the hole in the seatback.

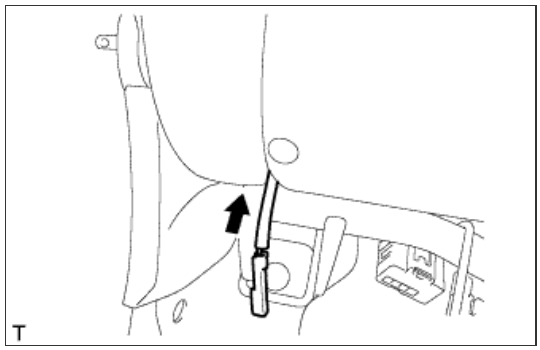


d. w/ Seat Heater System:

i. Cut the cable tie and disconnect the seatback heater wire harness.

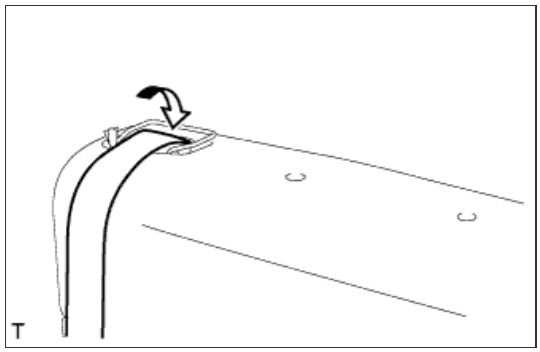


ii. Remove the seatback heater wire harness through the hole in the seatback.



e. Pull the seat belt into the inside of the seat.

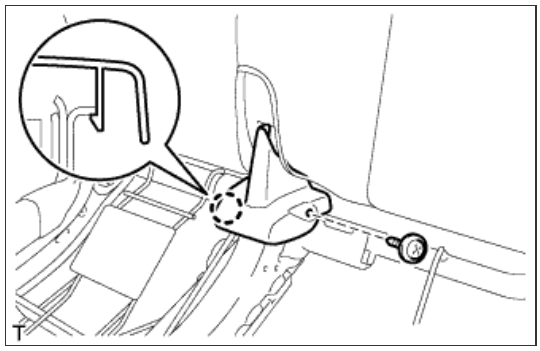
f. Remove the seatback cover with pad.



26. REMOVE REAR SEATBACK HINGE COVER LH

a. Remove the screw.

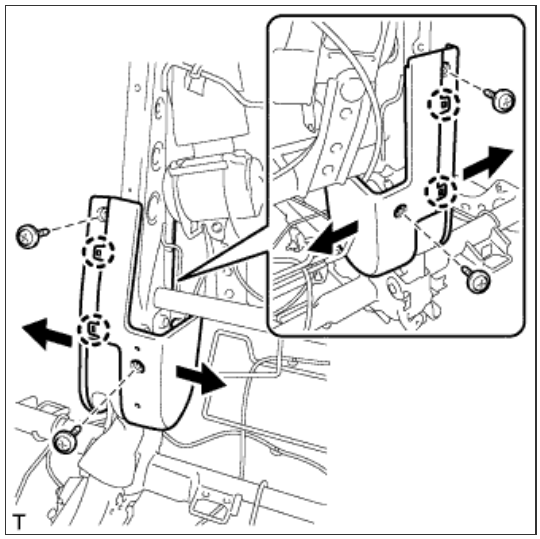
b. Detach the claw and remove the cover.



27. REMOVE REAR LOWER SEATBACK COVER SUB-ASSEMBLY LH

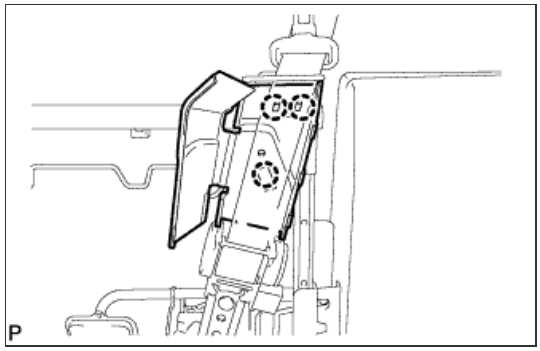
a. Remove the 4 screws.

b. Detach the 4 claws and remove the cover.



28. REMOVE REAR SEAT SHOULDER BELT HOLE COVER

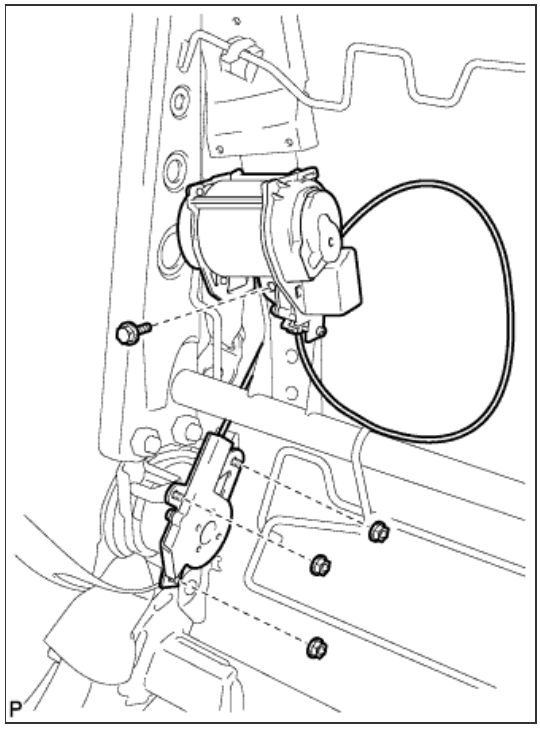
a. Using a screwdriver, detach the 3 claws and remove the shoulder belt hole cover.



29. REMOVE NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Remove the 3 nuts and belt sensor.

b. Remove the nut and outer belt.

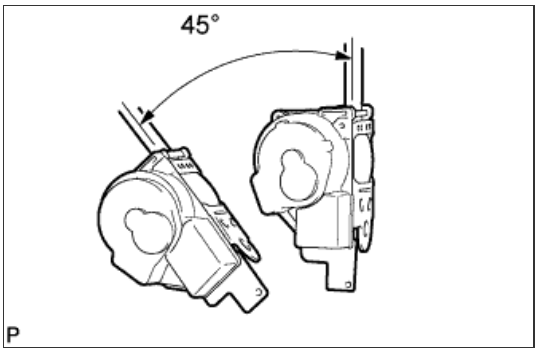


for Preparation Click here

1. INSPECT NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Check the ELR.

i. When the inclination of the retractor is 15° or less, check that the belt can be pulled from the retractor. When the inclination of the retractor is over 45°, check that the belt locks.
If the operation is not as specified, replace the seat belt assembly.



for Preparation Click here

HINT:

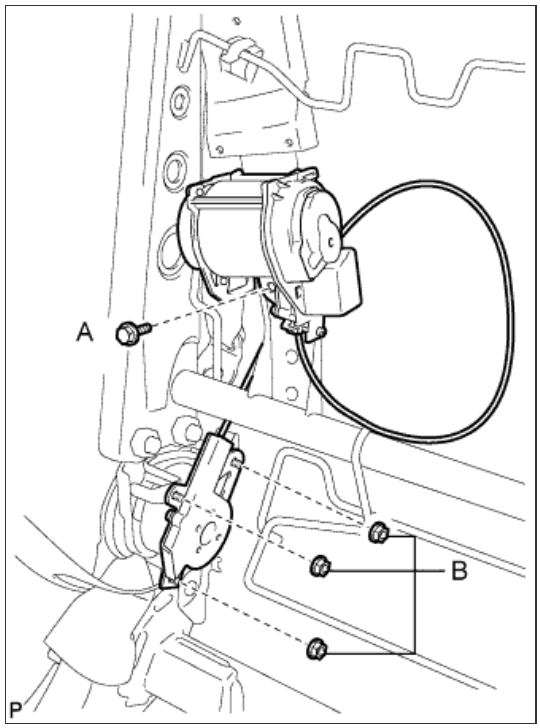
- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**
- **A bolt without a torque specification is shown in the standard bolt chart (Click here).**

1. INSTALL NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Install the belt with the nut labeled A.

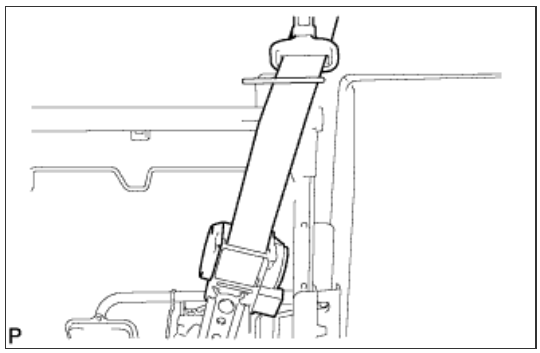
Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Install the belt sensor with the 3 nuts labeled B.

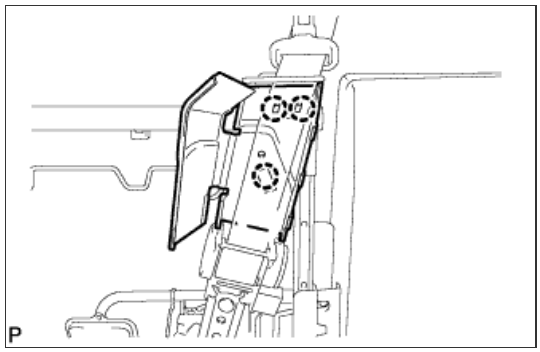


2. INSTALL REAR SEAT SHOULDER BELT HOLE COVER

a. Install the seat belt as shown in the illustration.



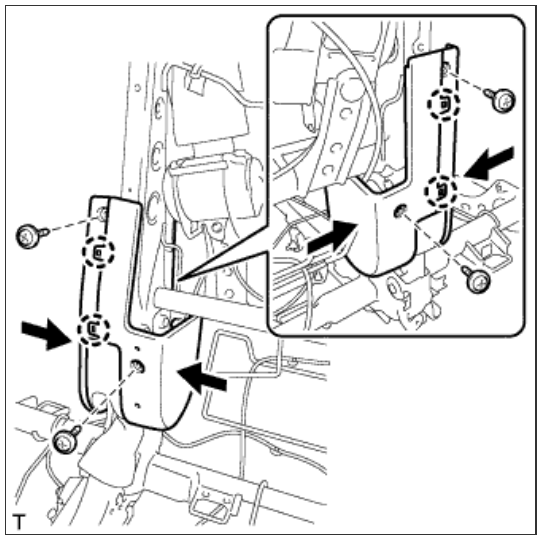
b. Attach the 3 claws to install the shoulder belt hole cover.



3. INSTALL REAR LOWER SEATBACK COVER SUB-ASSEMBLY LH

a. Attach the 4 claws to install the cover.

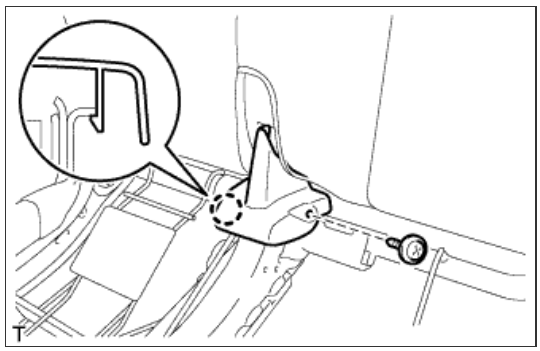
b. Install the 4 screws.



4. INSTALL REAR SEATBACK HINGE COVER LH

a. Attach the claw to install the cover.

b. Install the screw.

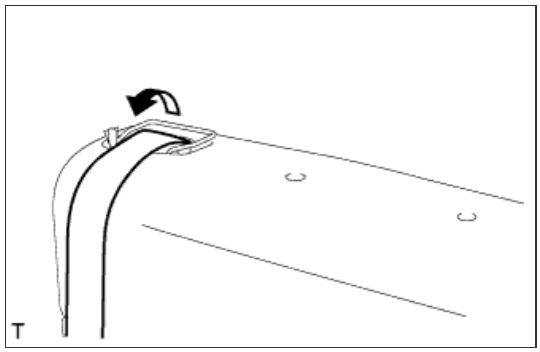


5. INSTALL SEATBACK COVER WITH PAD

a. Install the seatback cover with pad.

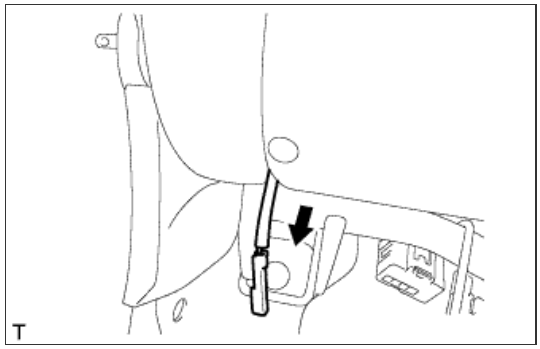
b. Pull out the seat belt.

c. Pass the side airbag wire harness through the hole in the seatback.

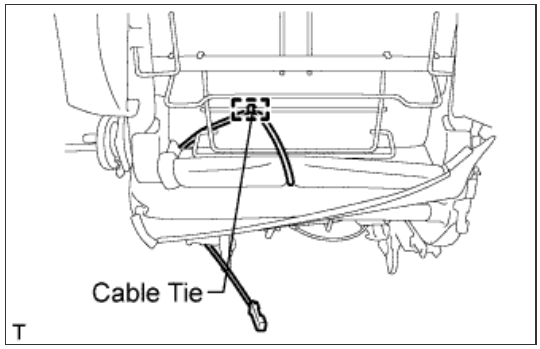


d. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seatback.



ii. Connect the seatback heater wire harness and install a new cable tie.



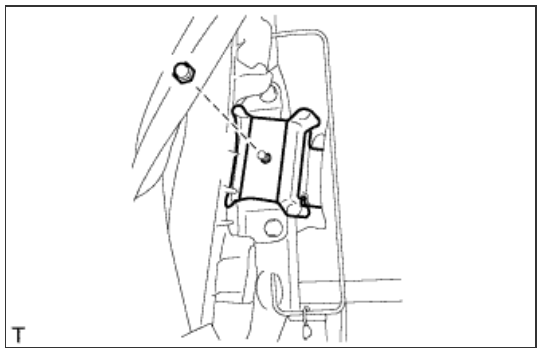
e. Install the seatback cover bracket to the seat frame with the cap nut.

Torque:

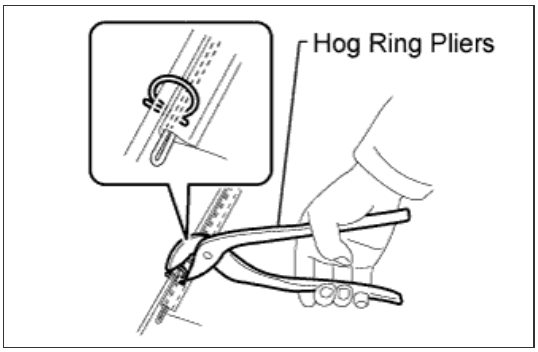
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

NOTICE:

After the seatback trim cover is assembled, make sure the side airbag strap is not twisted.



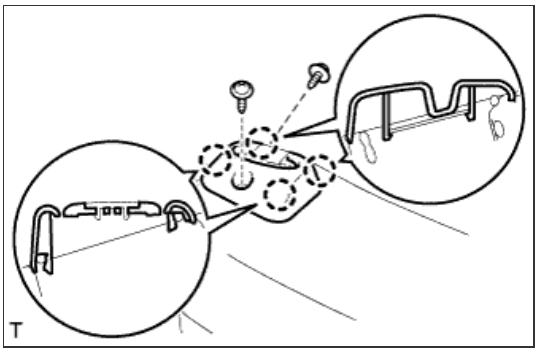
f. Using hog ring pliers, install new hog rings to the seatback frame.



6. INSTALL REAR SEAT BELT HOLE COVER LH

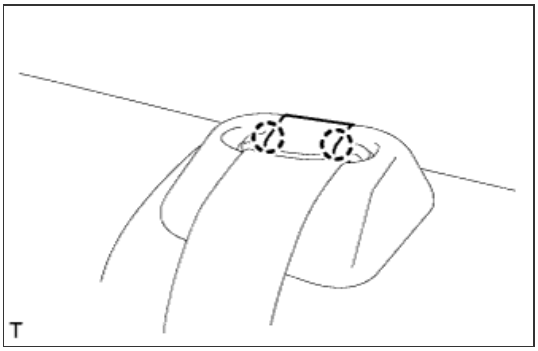
a. Attach the 4 claws to install the cover.

b. Install the 2 screws.



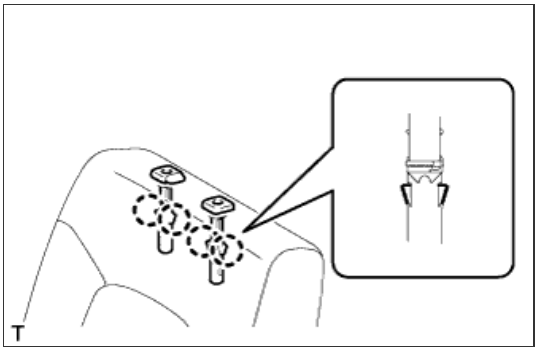
7. INSTALL SHOULDER BELT ANCHOR COVER

a. Attach the 2 claws to install the cover.



8. INSTALL REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Attach the 4 claws to install the 2 supports.

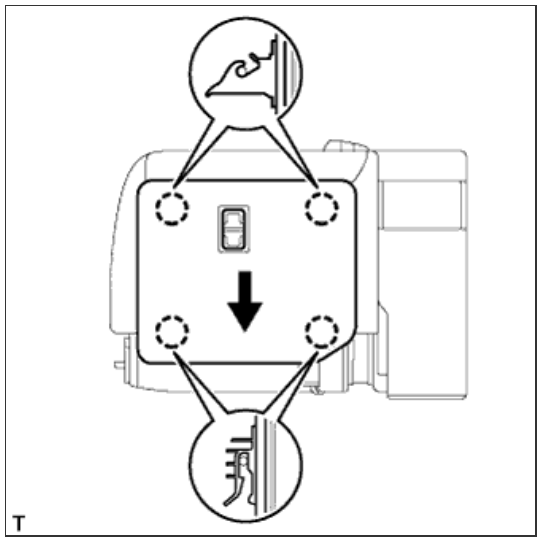


9. INSTALL REAR SEAT HEADREST ASSEMBLY

10. INSTALL REAR SEATBACK BOARD SUB-ASSEMBLY LH

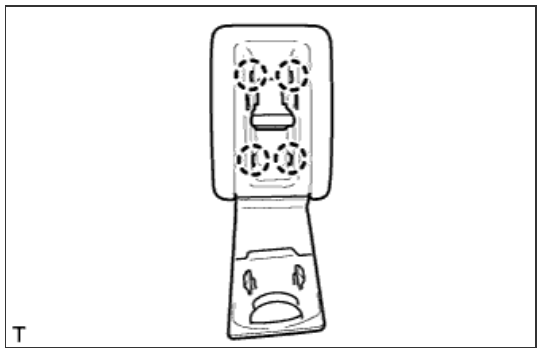
a. Push the board down to attach the 2 claws on the bottom.

b. Attach the 2 claws on the top of the board to install it.



11. INSTALL REAR SEATBACK COVER

a. Attach the 4 claws to install the cover.



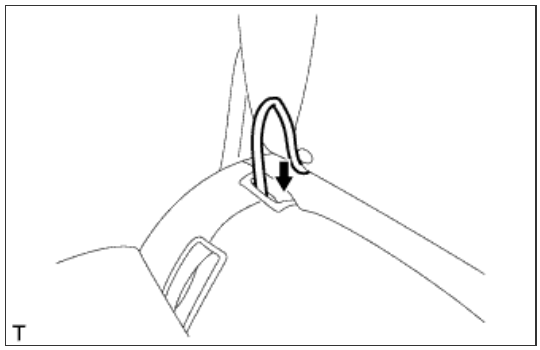
12. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

b. Pass the side airbag wire harness through the hole in the seat cushion.

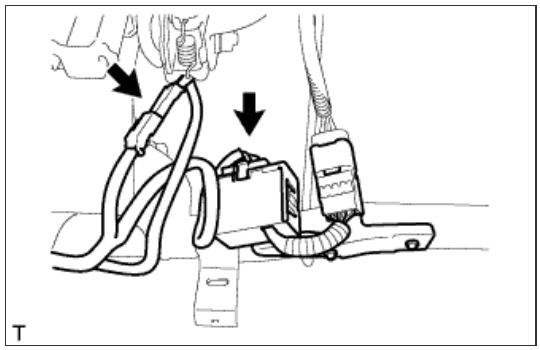
c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.

d. Attach the side airbag wire harness clamps.



13. INSTALL REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Install the belt with the bolt.

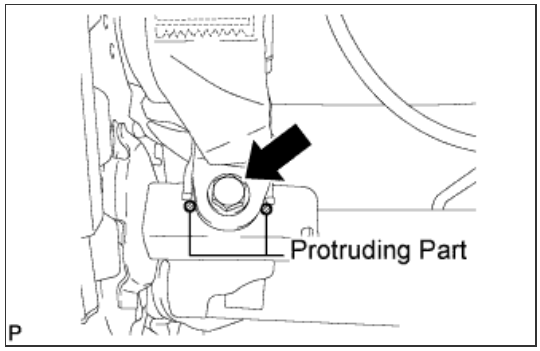
Torque:
42 N*m{ 4287 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

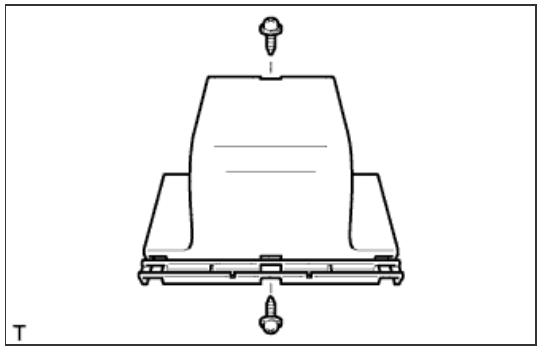
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, connect it when installing the rear No. 1 seat inner belt LH.



14. INSTALL REAR SEAT UNDER TRAY COVER LH

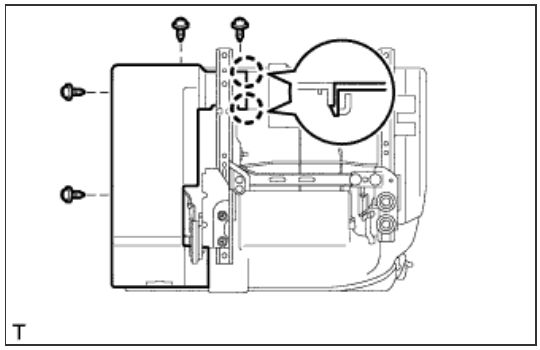
a. Install the cover with the 2 screws.



15. INSTALL REAR SEAT CUSHION COVER RH

a. Attach the 2 claws to install the cover.

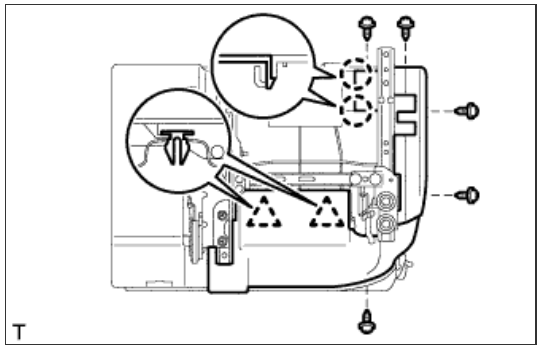
b. Install the 4 screws.



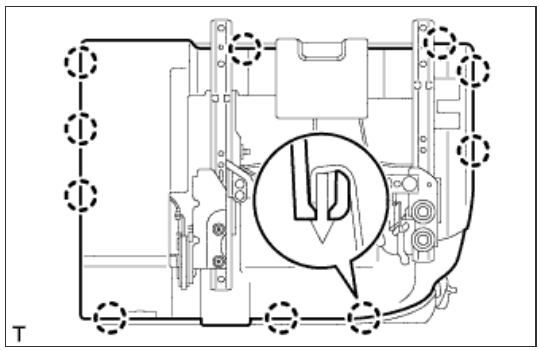
16. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and 2 clips to install the cover.

b. Install the 5 screws.



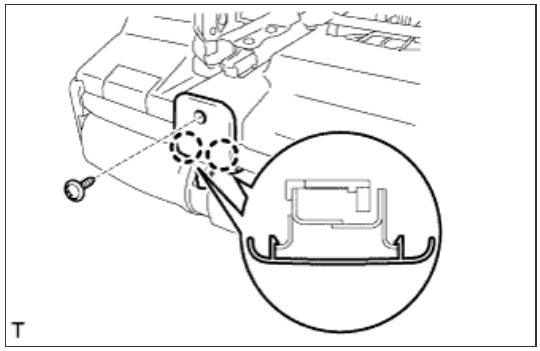
c. Attach the 10 claws.



17. INSTALL REAR SEATBACK STAY COVER LH

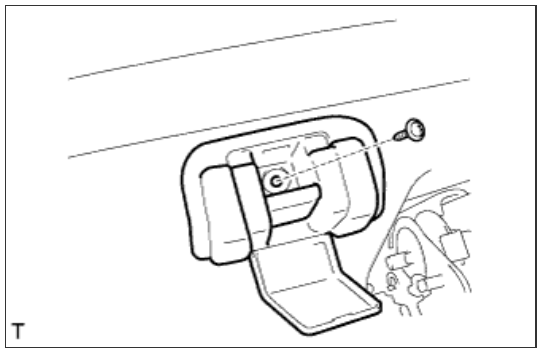
a. Attach the 2 claws to install the cover.

b. Install the screw.

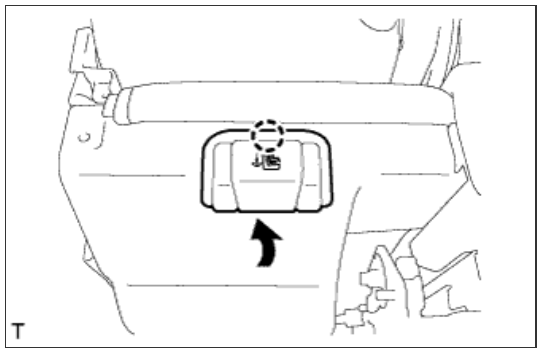


18. INSTALL SEAT BELT ANCHOR COVER CAP

a. Install the anchor cover cap with the screw.



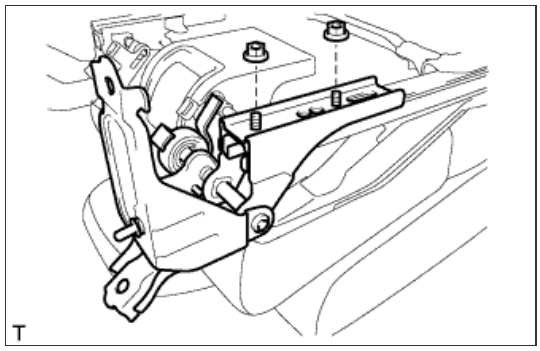
b. Attach the claw to close the cap.



19. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



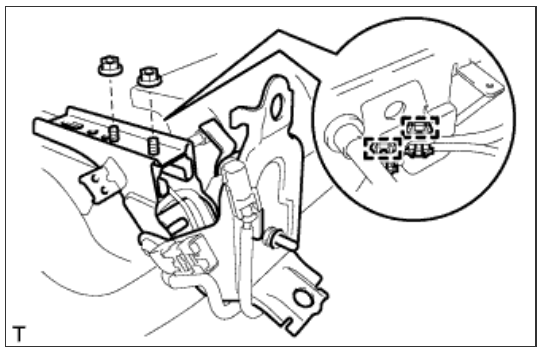
20. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

c. w/ Seat Heater System:
Attach the wire harness clamp.

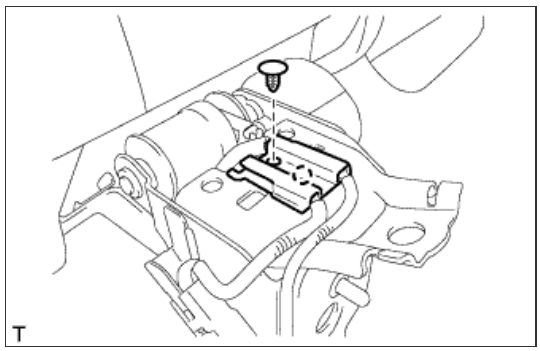


21. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

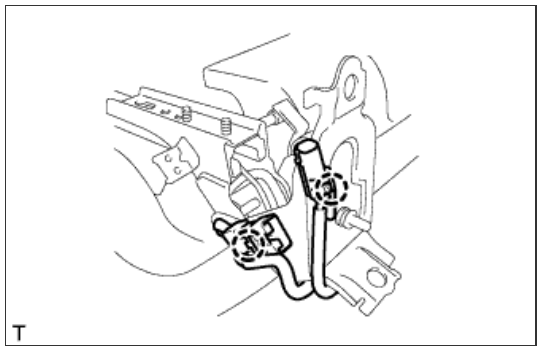
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



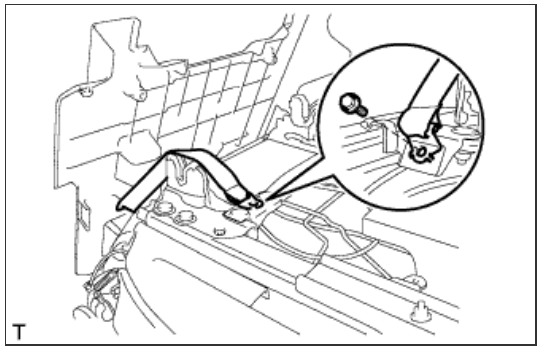
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



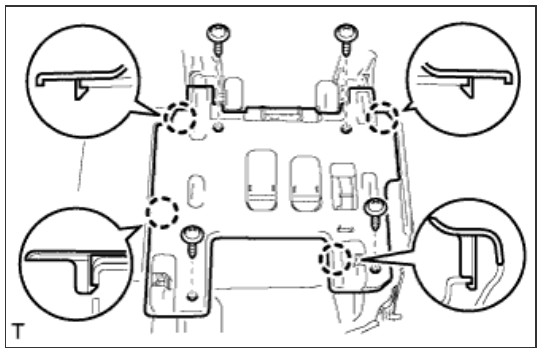
22. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



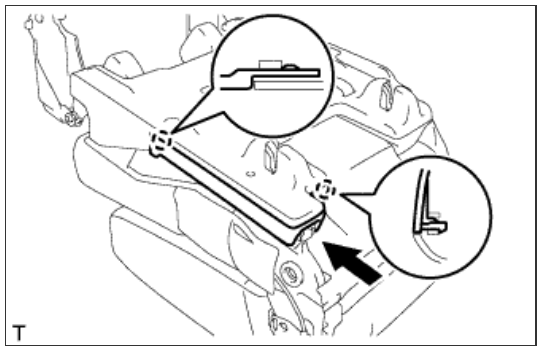
b. Attach the 4 claws to install the seat leg side cover.

c. Install the 4 screws.



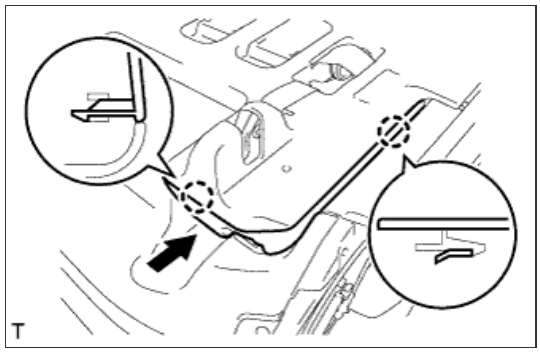
23. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



24. INSTALL UPPER SEAT TRACK RAIL COVER LH

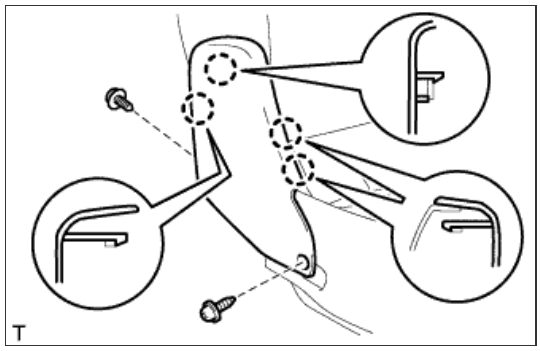
a. Attach the 2 claws to install the cover.



25. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 4 claws to install the cover.

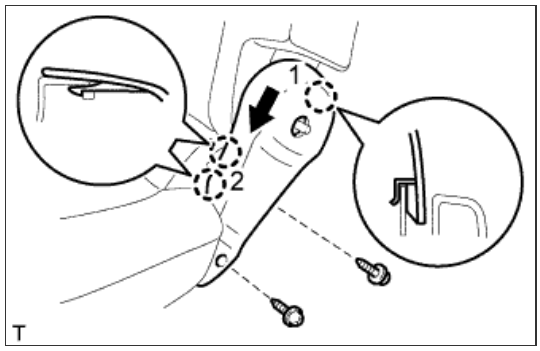
b. Install the 2 screws.



26. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

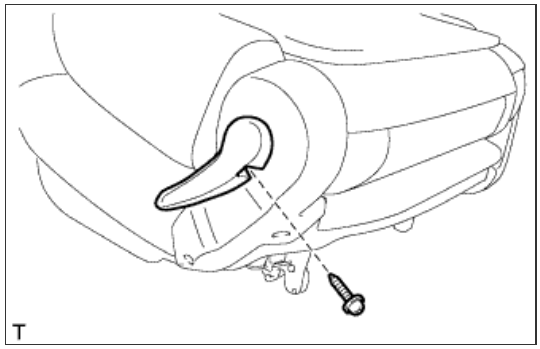
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



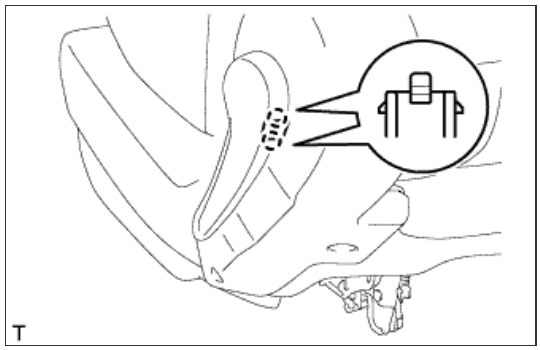
27. INSTALL RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



28. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



29. INSTALL REAR NO. 1 SEAT ASSEMBLY LH

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here

HINT:

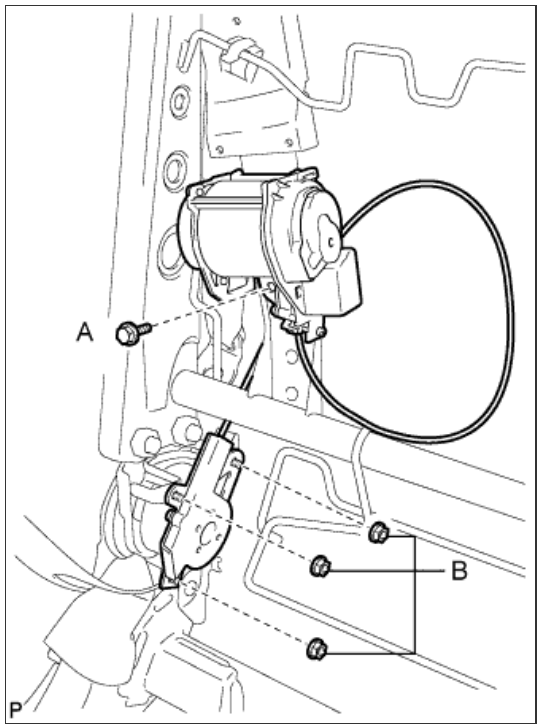
- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**
- **A bolt without a torque specification is shown in the standard bolt chart (Click here).**

1. INSTALL NO. 1 SEAT 3 POINT TYPE BELT ASSEMBLY LH

a. Install the belt with the nut labeled A.

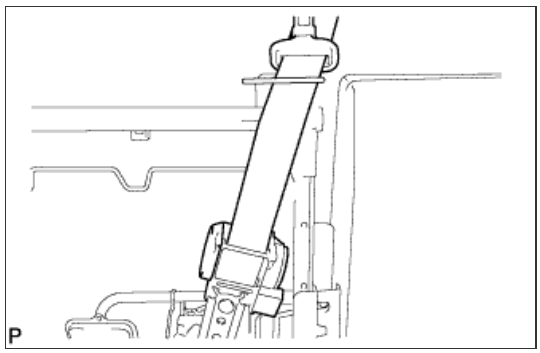
Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Install the belt sensor with the 3 nuts labeled B.

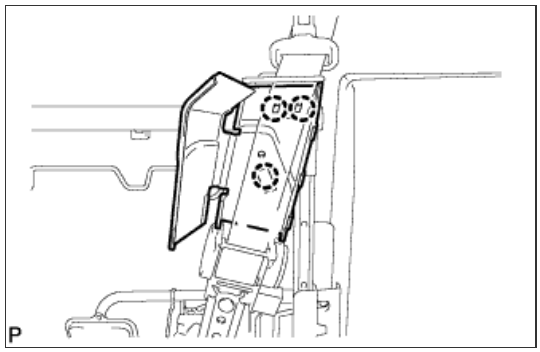


2. INSTALL REAR SEAT SHOULDER BELT HOLE COVER

a. Install the seat belt as shown in the illustration.



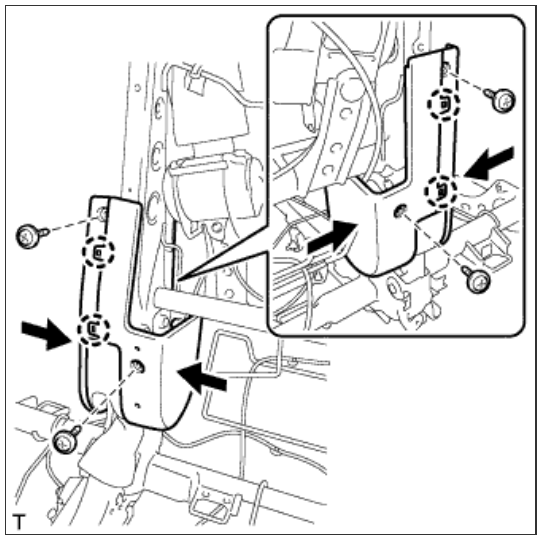
b. Attach the 3 claws to install the shoulder belt hole cover.



3. INSTALL REAR LOWER SEATBACK COVER SUB-ASSEMBLY LH

a. Attach the 4 claws to install the cover.

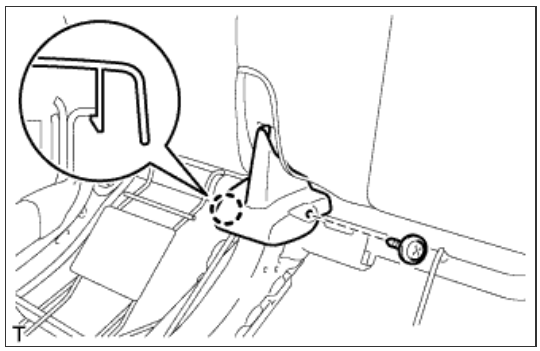
b. Install the 4 screws.



4. INSTALL REAR SEATBACK HINGE COVER LH

a. Attach the claw to install the cover.

b. Install the screw.

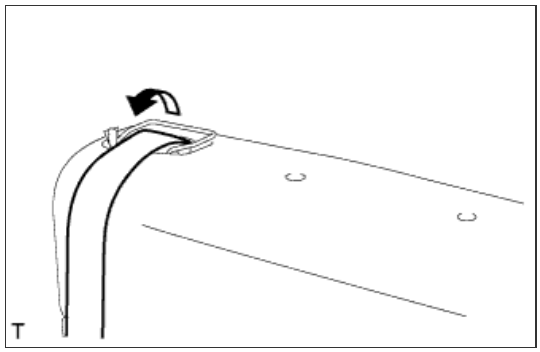


5. INSTALL SEATBACK COVER WITH PAD

a. Install the seatback cover with pad.

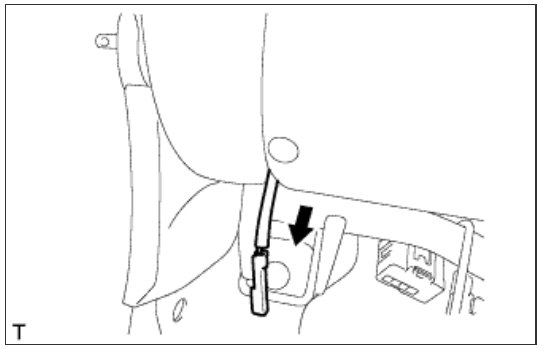
b. Pull out the seat belt.

c. Pass the side airbag wire harness through the hole in the seatback.

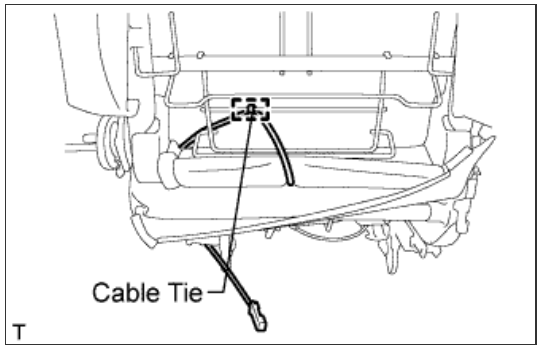


d. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seatback.



ii. Connect the seatback heater wire harness and install a new cable tie.



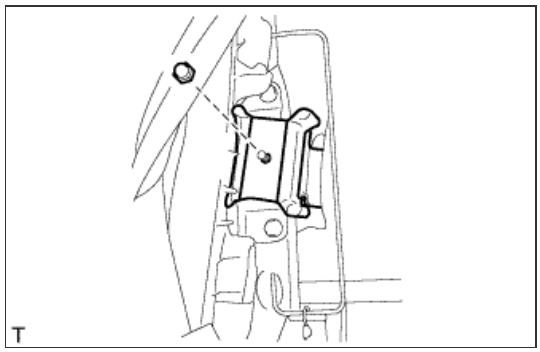
e. Install the seatback cover bracket to the seat frame with the cap nut.

Torque:

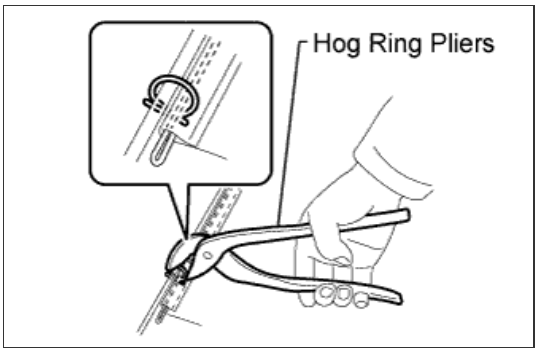
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

NOTICE:

After the seatback trim cover is assembled, make sure the side airbag strap is not twisted.



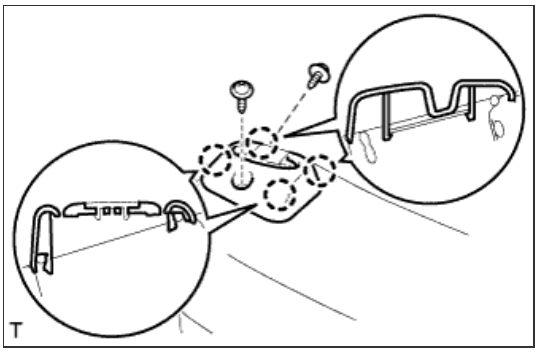
f. Using hog ring pliers, install new hog rings to the seatback frame.



6. INSTALL REAR SEAT BELT HOLE COVER LH

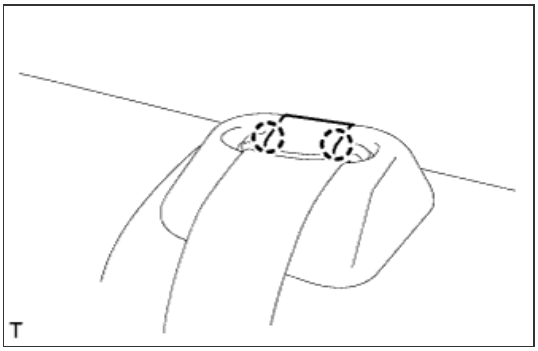
a. Attach the 4 claws to install the cover.

b. Install the 2 screws.



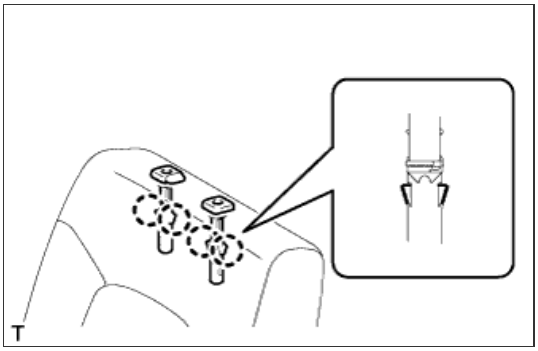
7. INSTALL SHOULDER BELT ANCHOR COVER

a. Attach the 2 claws to install the cover.



8. INSTALL REAR NO. 1 SEAT HEADREST SUPPORT ASSEMBLY

a. Attach the 4 claws to install the 2 supports.

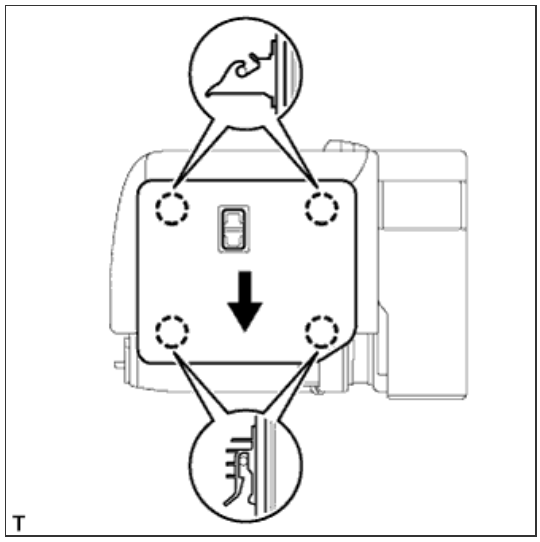


9. INSTALL REAR SEAT HEADREST ASSEMBLY

10. INSTALL REAR SEATBACK BOARD SUB-ASSEMBLY LH

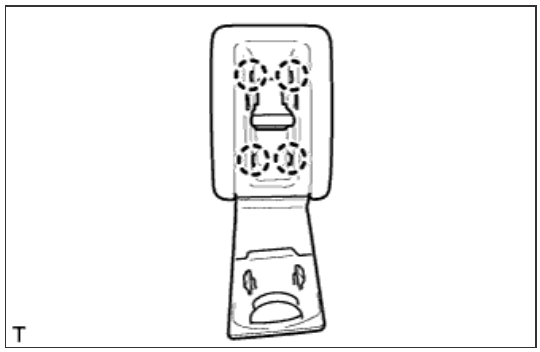
a. Push the board down to attach the 2 claws on the bottom.

b. Attach the 2 claws on the top of the board to install it.



11. INSTALL REAR SEATBACK COVER

a. Attach the 4 claws to install the cover.



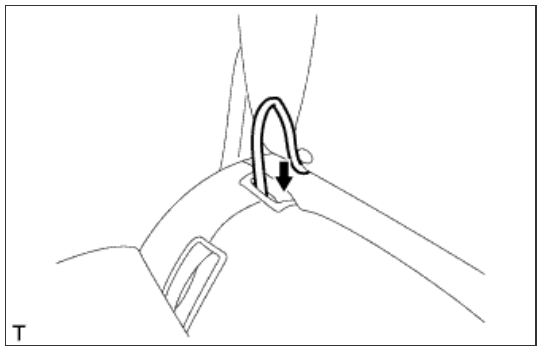
12. INSTALL SEAT CUSHION COVER WITH PAD

a. Install the seat cushion cover with pad.

b. Pass the side airbag wire harness through the hole in the seat cushion.

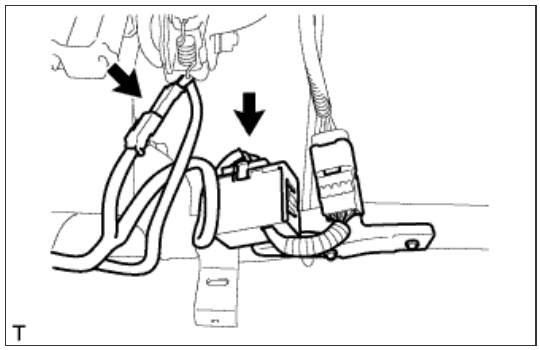
c. w/ Seat Heater System:

i. Pass the seatback heater wire harness through the hole in the seat cushion.



ii. Connect the 2 seat heater connectors.

d. Attach the side airbag wire harness clamps.



13. INSTALL REAR NO. 1 SEAT INNER BELT ASSEMBLY LH

a. Install the belt with the bolt.

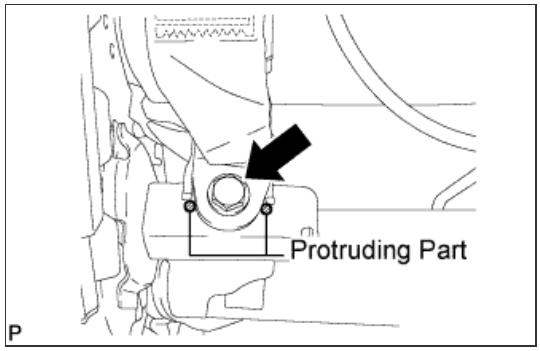
Torque:
42 N*m{ 4287 kgf*cm , 31 ft.*lbf }

NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

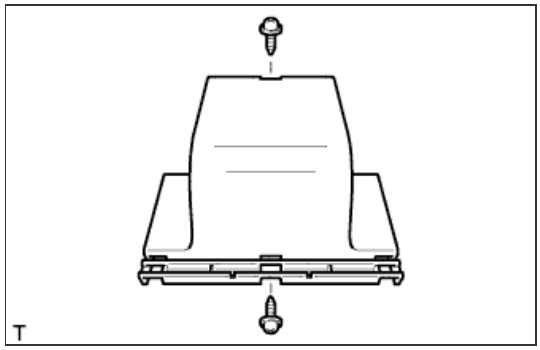
HINT:

The No. 1 seat 3 point type belt anchor is fixed with the same bolt as the rear No. 1 seat inner belt LH. Therefore, connect it when installing the rear No. 1 seat inner belt LH.



14. INSTALL REAR SEAT UNDER TRAY COVER LH

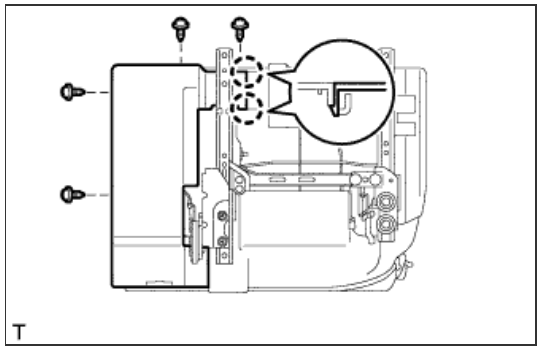
a. Install the cover with the 2 screws.



15. INSTALL REAR SEAT CUSHION COVER RH

a. Attach the 2 claws to install the cover.

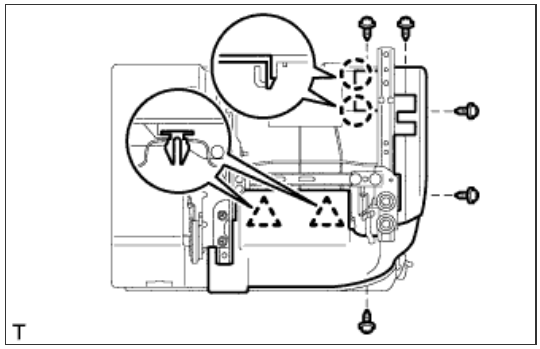
b. Install the 4 screws.



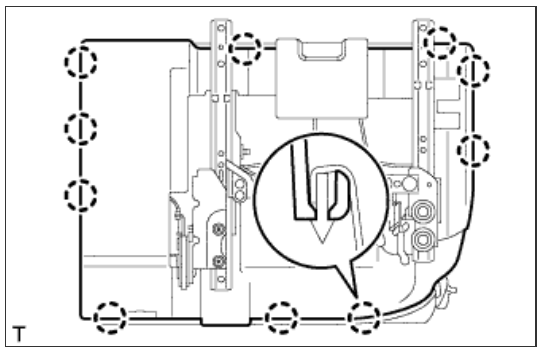
16. INSTALL REAR UNDER SIDE COVER LH

a. Attach the 2 claws and 2 clips to install the cover.

b. Install the 5 screws.



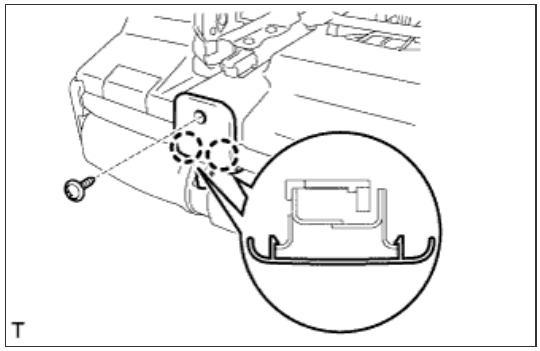
c. Attach the 10 claws.



17. INSTALL REAR SEATBACK STAY COVER LH

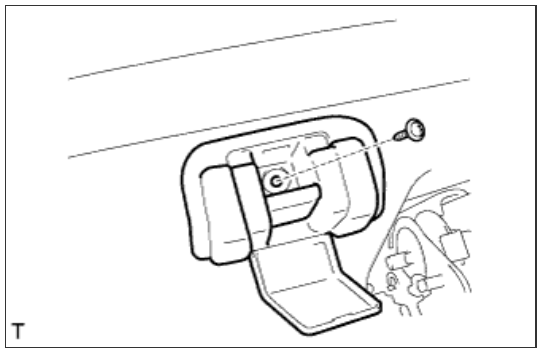
a. Attach the 2 claws to install the cover.

b. Install the screw.

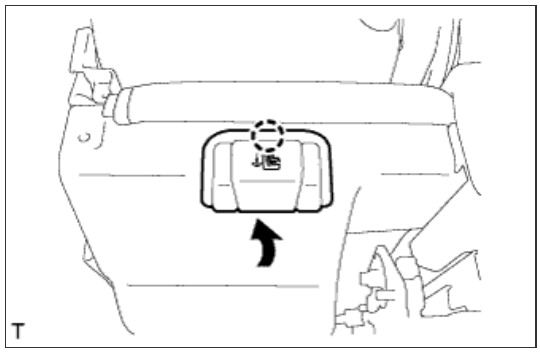


18. INSTALL SEAT BELT ANCHOR COVER CAP

a. Install the anchor cover cap with the screw.



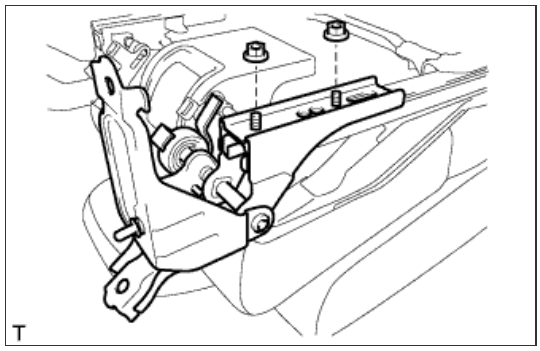
b. Attach the claw to close the cap.



19. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY RH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



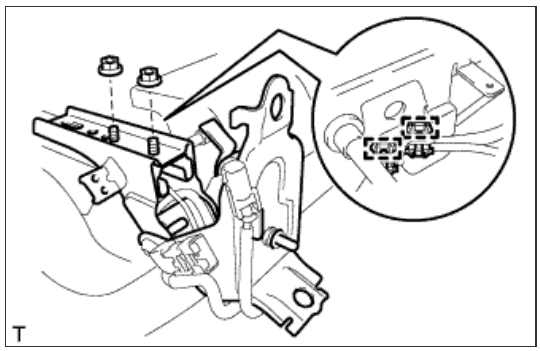
20. INSTALL REAR NO. 1 SEAT HINGE SUB-ASSEMBLY LH

a. Install the hinge with the 2 nuts.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

b. Attach the wire harness clamp.

c. w/ Seat Heater System:
Attach the wire harness clamp.

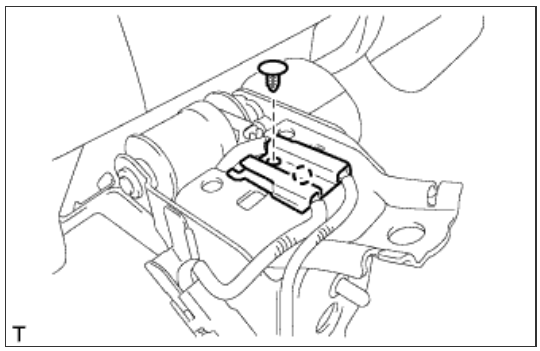


21. INSTALL REAR NO. 2 SEAT PROTECTOR

a. Install the wire harness, and attach the 2 claws to close the protector.

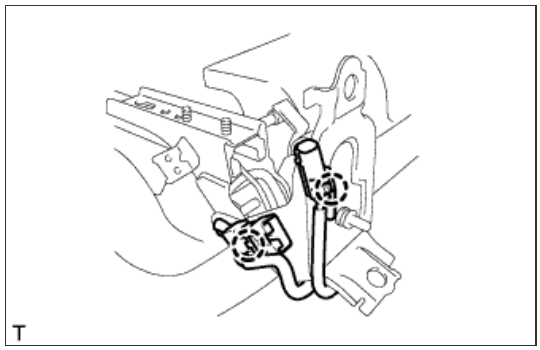
b. Attach the claw to install the protector to the seat hinge.

c. Install the clip.



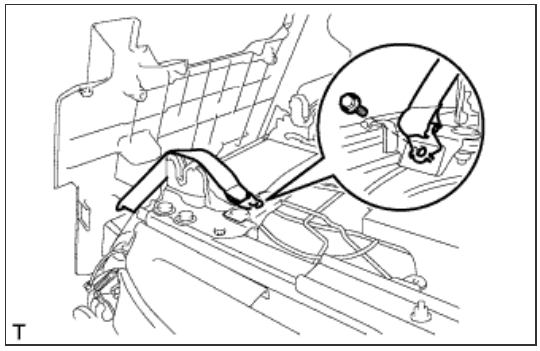
d. Attach the claw to install the wire harness connector.

e. w/ Seat Heater System:
Attach the claw to install the wire harness connector.



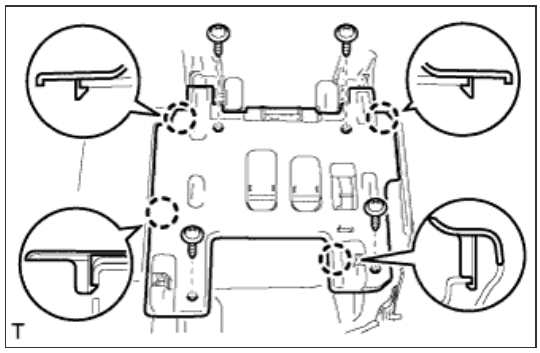
22. INSTALL REAR NO. 2 SEAT LEG SIDE COVER

a. Pass the fold seat stopper band through the seat leg side cover and attach it to the seat cushion frame with the bolt.



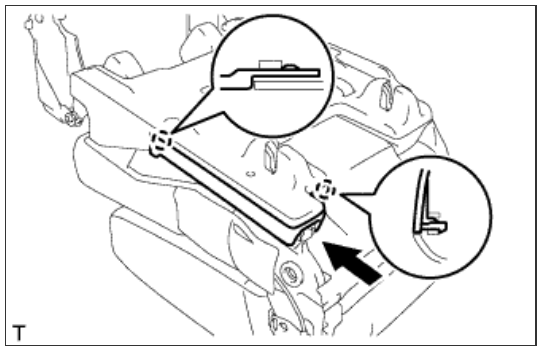
b. Attach the 4 claws to install the seat leg side cover.

c. Install the 4 screws.



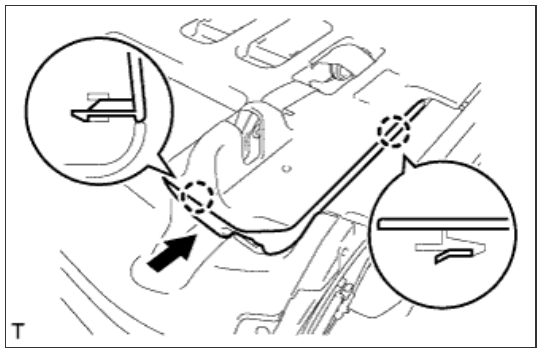
23. INSTALL UPPER SEAT TRACK RAIL COVER RH

a. Attach the 2 claws to install the cover.



24. INSTALL UPPER SEAT TRACK RAIL COVER LH

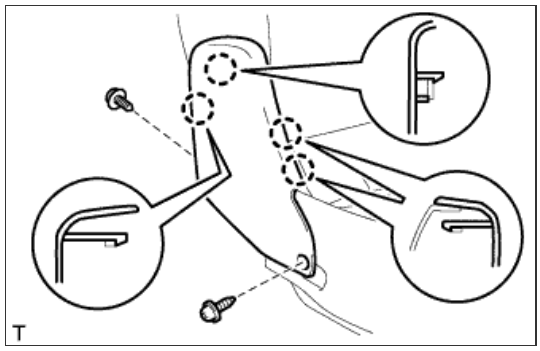
a. Attach the 2 claws to install the cover.



25. INSTALL REAR NO. 1 SEAT RECLINING COVER RH

a. Attach the 4 claws to install the cover.

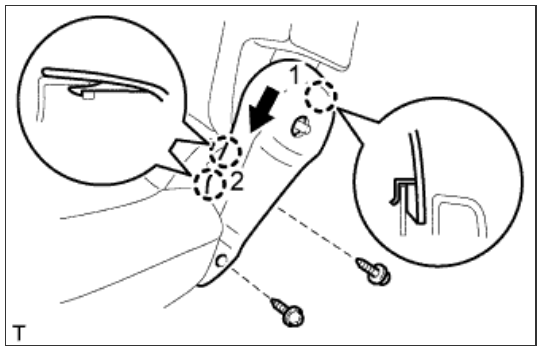
b. Install the 2 screws.



26. INSTALL REAR NO. 1 SEAT RECLINING COVER LH

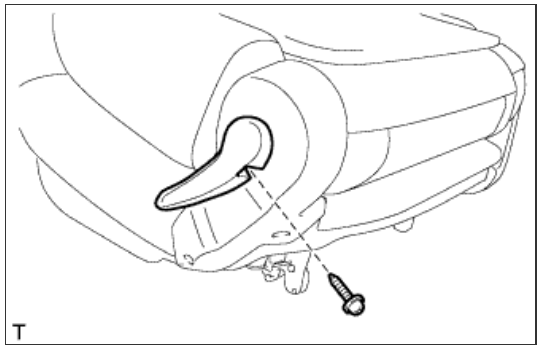
a. Attach the 3 claws in the order shown in the illustration to install the cover.

b. Install the 2 screws.



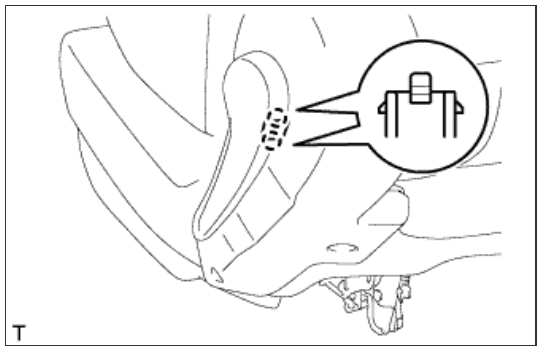
27. INSTALL RECLINING ADJUSTER RELEASE HANDLE LH

a. Install the release handle with the screw.



28. INSTALL SEAT ADJUSTER BOLT COVER

a. Attach the 2 claws to install the cover.



29. INSTALL REAR NO. 1 SEAT ASSEMBLY LH

a. Install the rear No. 1 seat assembly (Click here).

for Preparation Click here

1.PRECAUTIONS WHEN USING INTELLIGENT TESTER

a. When using the intelligent tester to troubleshoot the CAN communication line or LIN communication line:
Connect the intelligent tester to the vehicle, and turn a courtesy light switch on and off at 1.5 second intervals until communication between the intelligent tester and vehicle begins.

b. After all DTCs are cleared, check if the trouble occurs again 6 seconds after the engine switch is turned on (IG).

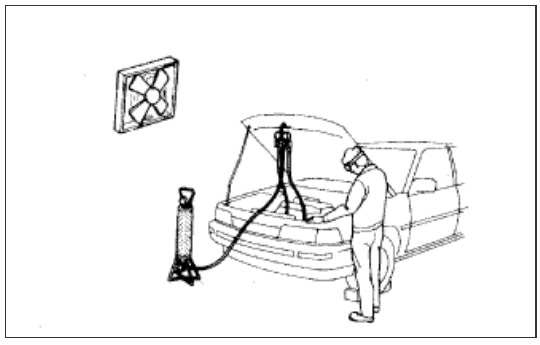
2.IF ANY OF FOLLOWING CONDITIONS ARE MET, KEEP ENGINE IDLING WITH AIR CONDITIONING SWITCH ON (ENGINE SPEED AT LESS THAN 2000 RPM) FOR AT LEAST 2 MINUTES

- Refrigerant gas has been refilled or parts of the air conditioning system have been replaced.
- The engine has not been started for a long time.

NOTICE:

If the engine speed is more than 2,000 rpm, the cooler compressor assembly may be damaged.

3.DO NOT HANDLE REFRIGERANT IN AN ENCLOSED AREA OR NEAR AN OPEN FLAME



4.ALWAYS WEAR EYE PROTECTION

5.BE CAREFUL NOT TO GET LIQUID REFRIGERANT IN YOUR EYES OR ON YOUR SKIN

If liquid refrigerant gets in your eyes or on your skin:

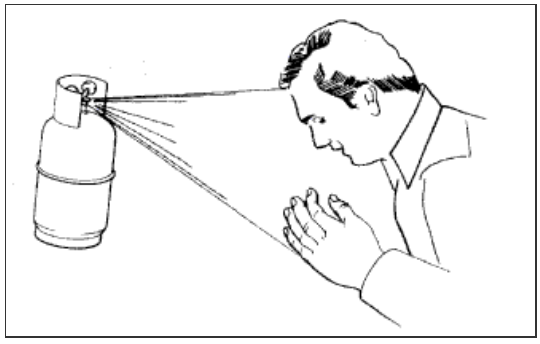
a. Wash the area with lots of cold water.

CAUTION:

Do not rub your eyes or skin.

b. Apply clean petroleum jelly to the skin.

c. Go immediately to a hospital or see a physician for professional treatment.

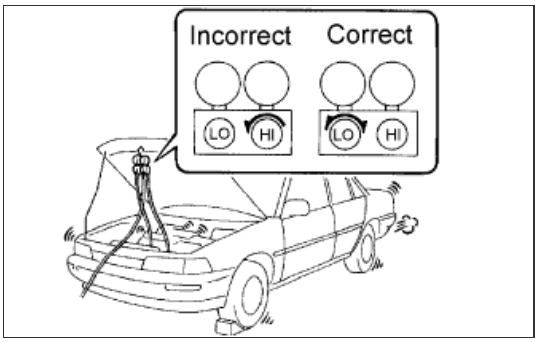


6.NEVER HEAT CONTAINER OR EXPOSE IT TO OPEN FLAME

7.BE CAREFUL NOT TO DROP CONTAINER OR APPLY PHYSICAL SHOCKS TO IT

8.DO NOT OPERATE COMPRESSOR WITH INSUFFICIENT REFRIGERANT IN REFRIGERANT SYSTEM

If there is not enough refrigerant in the refrigerant system, oil lubrication will be insufficient and compressor burnout may occur. Necessary care should be taken to avoid this.



9.DO NOT OPEN HIGH PRESSURE MANIFOLD VALVE WHILE COMPRESSOR IS OPERATING

Open and close only the low pressure valve. Opening and closing the high pressure valve could cause the charging cylinder to rupture.

10.BE CAREFUL NOT TO OVERCHARGE SYSTEM WITH REFRIGERANT

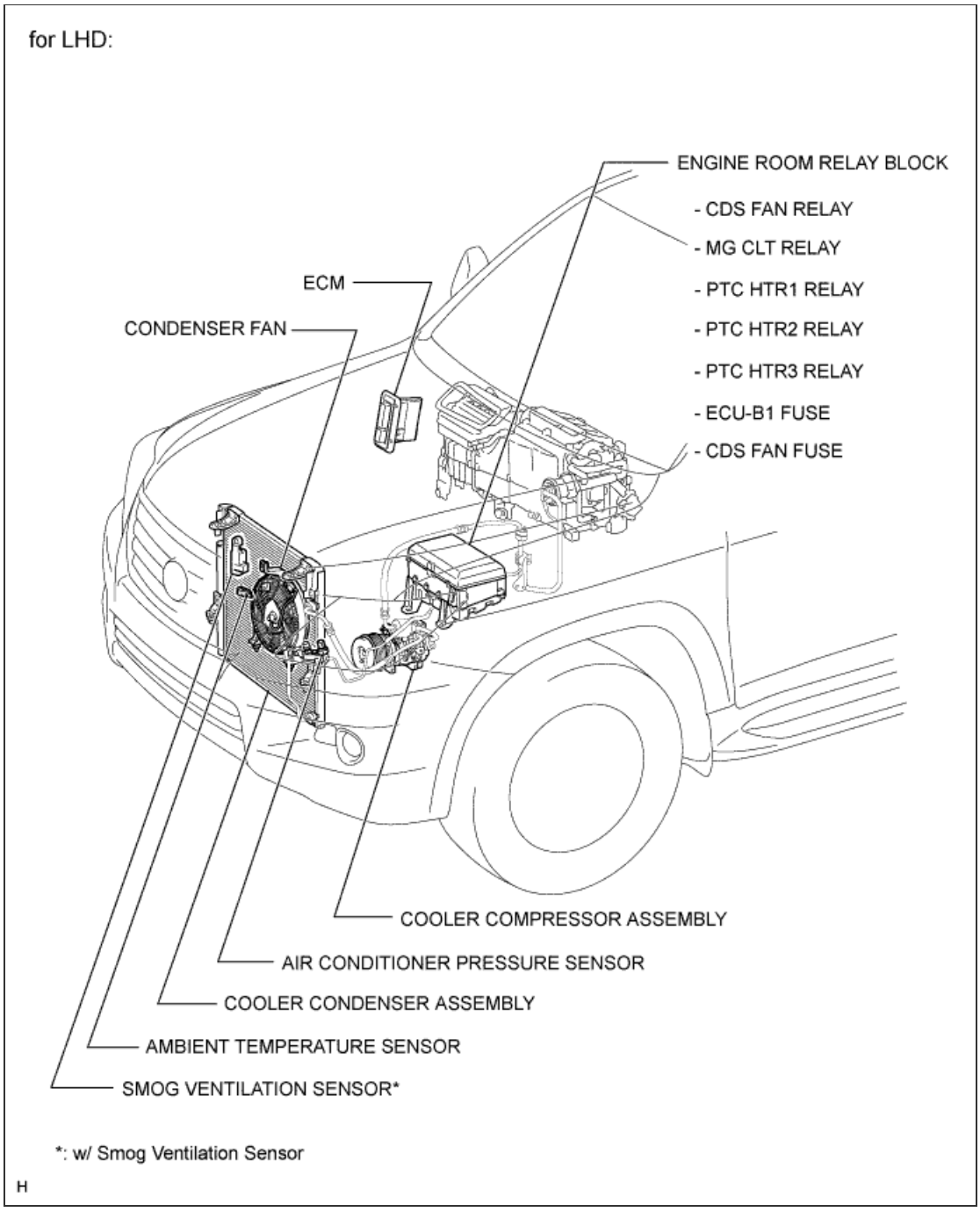
If the refrigerant is overcharged, it causes problems such as insufficient cooling, poor fuel economy and engine overheating.

11.DO NOT OPERATE ENGINE AND COOLER COMPRESSOR ASSEMBLY WITHOUT REFRIGERANT

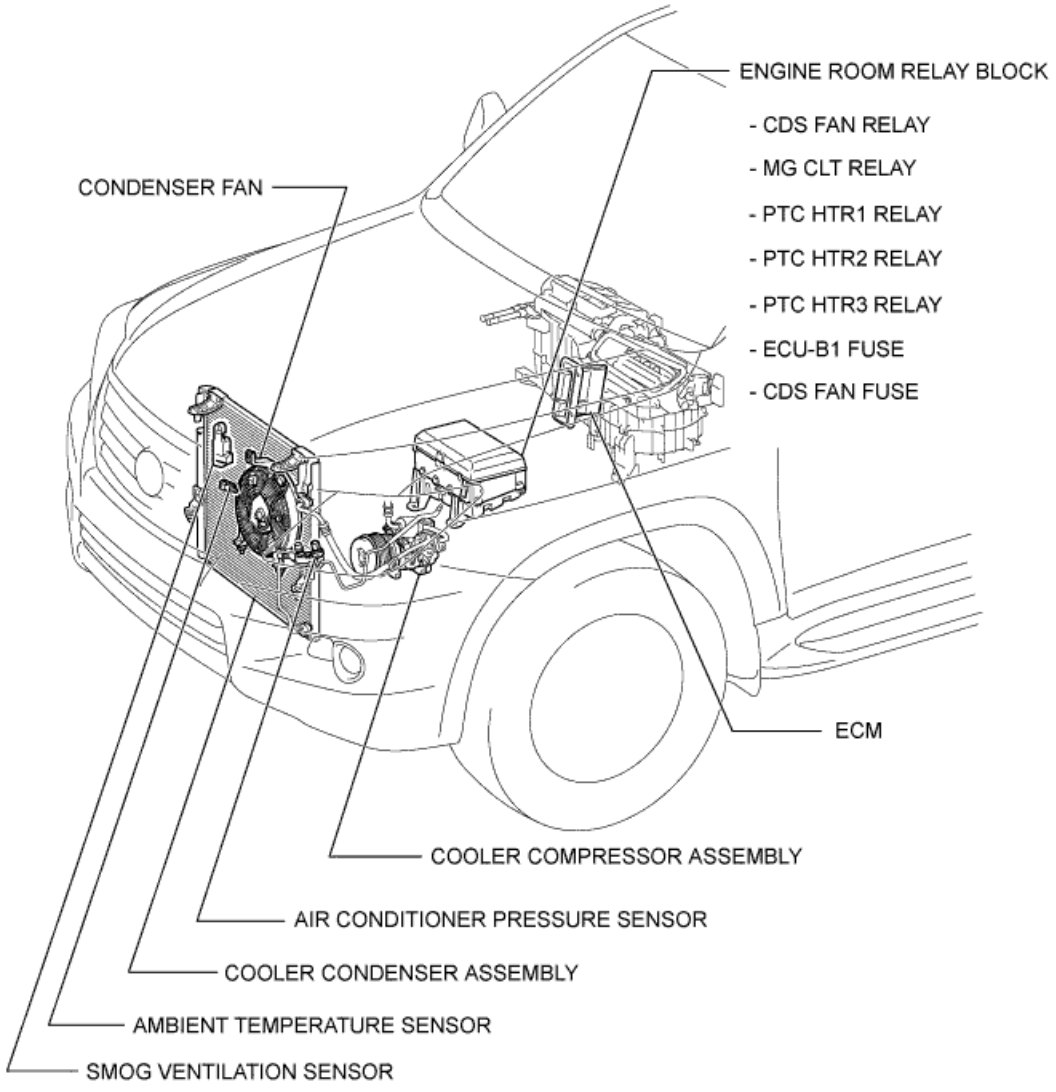
NOTICE:

This may damage the inside of the cooler compressor assembly.

for Preparation Click here

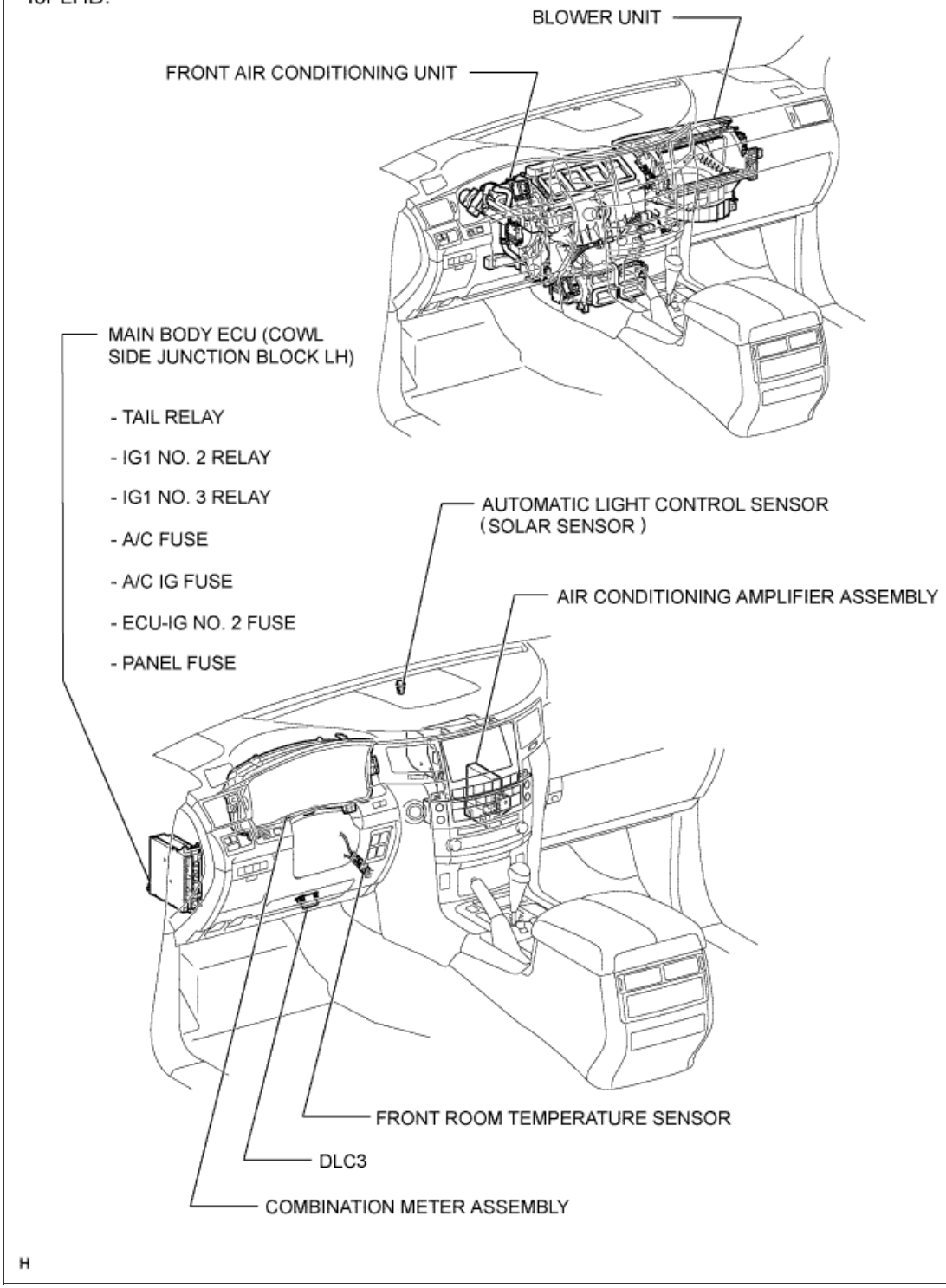


for RHD:


ENGINE ROOM RELAY BLOCK
- CDS FAN RELAY
- MG CLT RELAY
- PTC HTR1 RELAY
- PTC HTR2 RELAY
- PTC HTR3 RELAY
- ECU-B1 FUSE
- CDS FAN FUSE
CONDENSER FAN
ECM
COOLER COMPRESSOR ASSEMBLY
AIR CONDITIONER PRESSURE SENSOR
COOLER CONDENSER ASSEMBLY
AMBIENT TEMPERATURE SENSOR
SMOG VENTILATION SENSOR

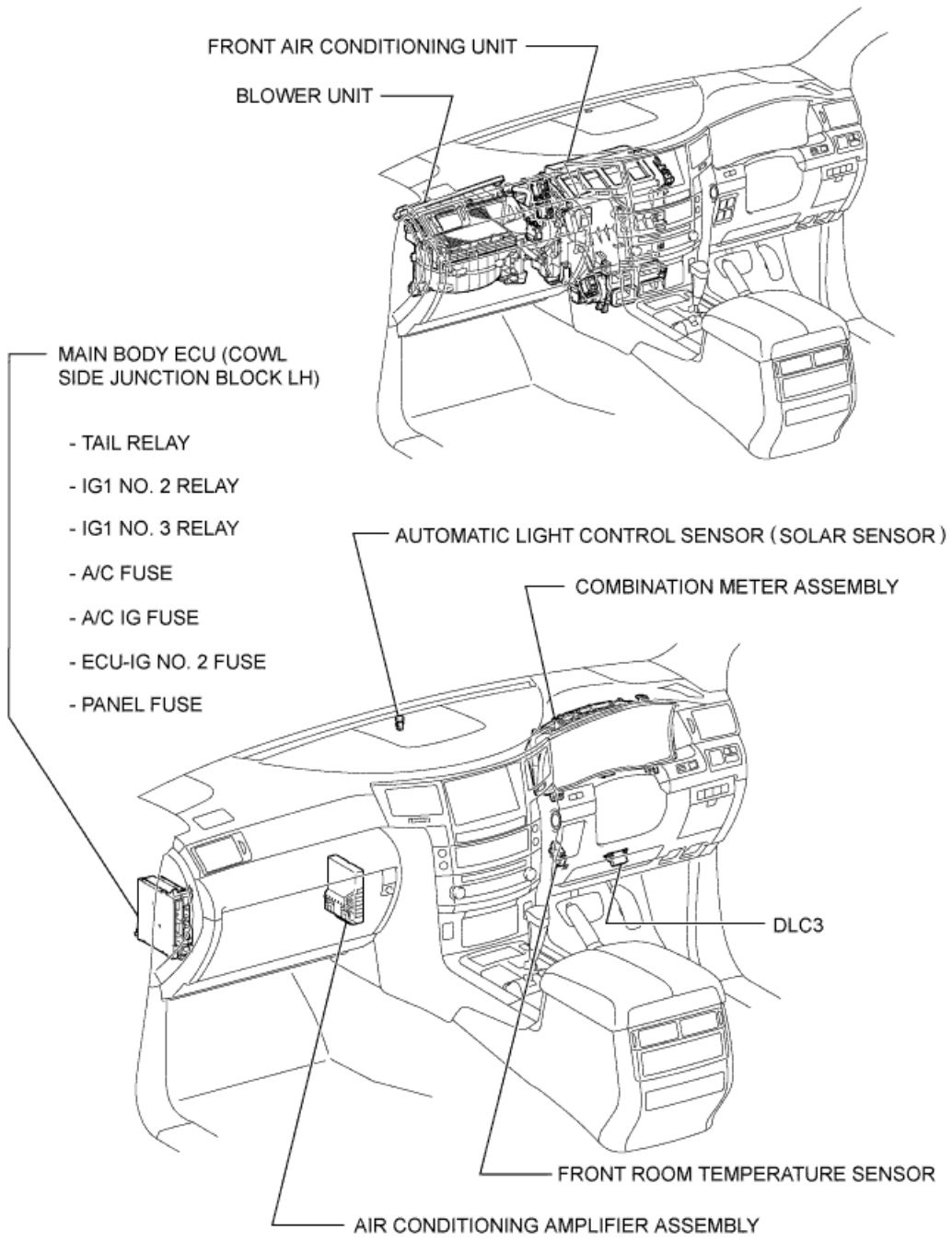
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for LHD:

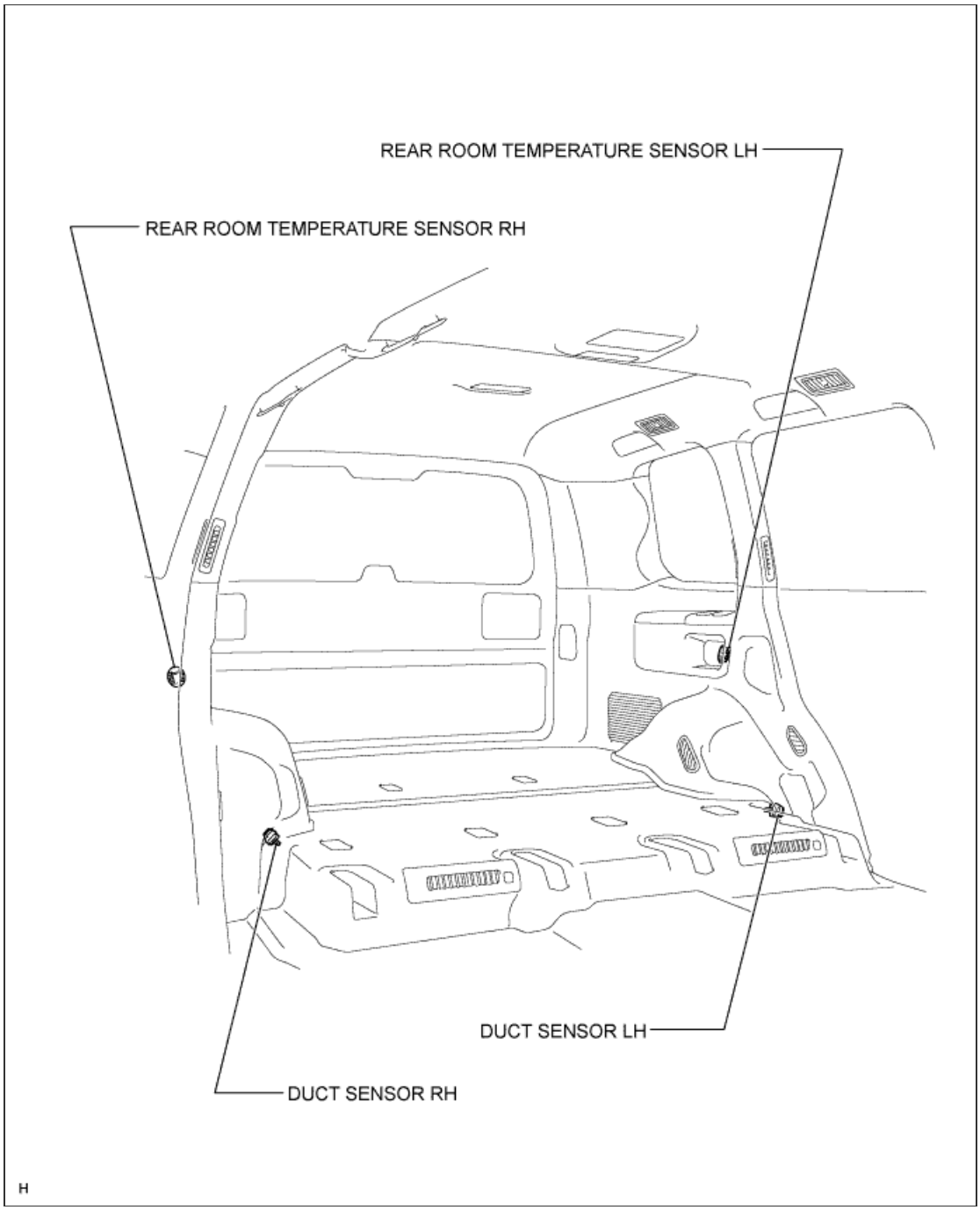

BLOWER UNIT
FRONT AIR CONDITIONING UNIT
MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)
- TAIL RELAY
- IG1 NO. 2 RELAY
- IG1 NO. 3 RELAY
- A/C FUSE
- A/C IG FUSE
- ECU-IG NO. 2 FUSE
- PANEL FUSE
AUTOMATIC LIGHT CONTROL SENSOR (SOLAR SENSOR)
AIR CONDITIONING AMPLIFIER ASSEMBLY
FRONT ROOM TEMPERATURE SENSOR
DLC3
COMBINATION METER ASSEMBLY

H

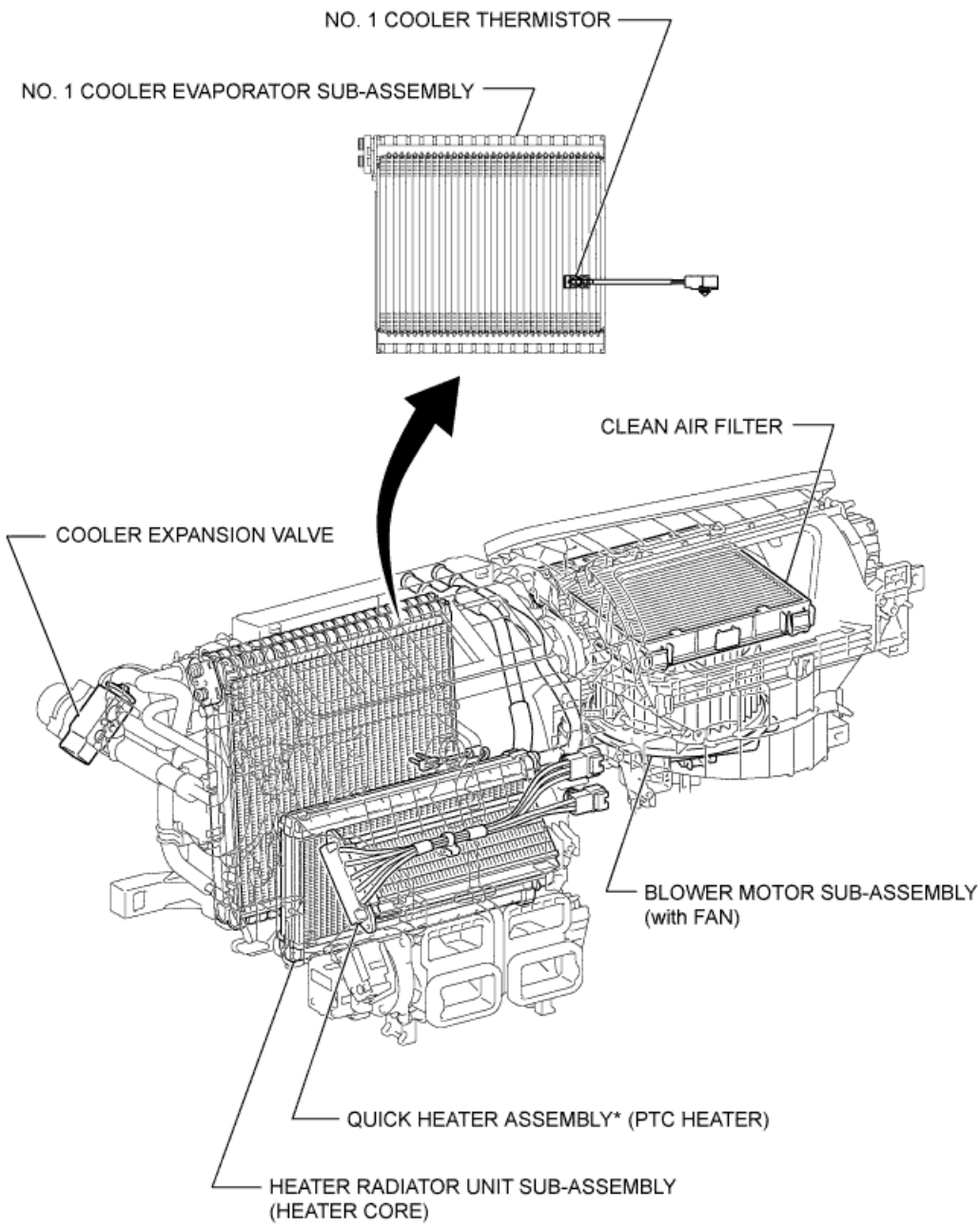
for RHD:


FRONT AIR CONDITIONING UNIT
BLOWER UNIT
MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)
- TAIL RELAY
- IG1 NO. 2 RELAY
- IG1 NO. 3 RELAY
- A/C FUSE
- A/C IG FUSE
- ECU-IG NO. 2 FUSE
- PANEL FUSE
AUTOMATIC LIGHT CONTROL SENSOR (SOLAR SENSOR)
COMBINATION METER ASSEMBLY
DLC3
FRONT ROOM TEMPERATURE SENSOR
AIR CONDITIONING AMPLIFIER ASSEMBLY

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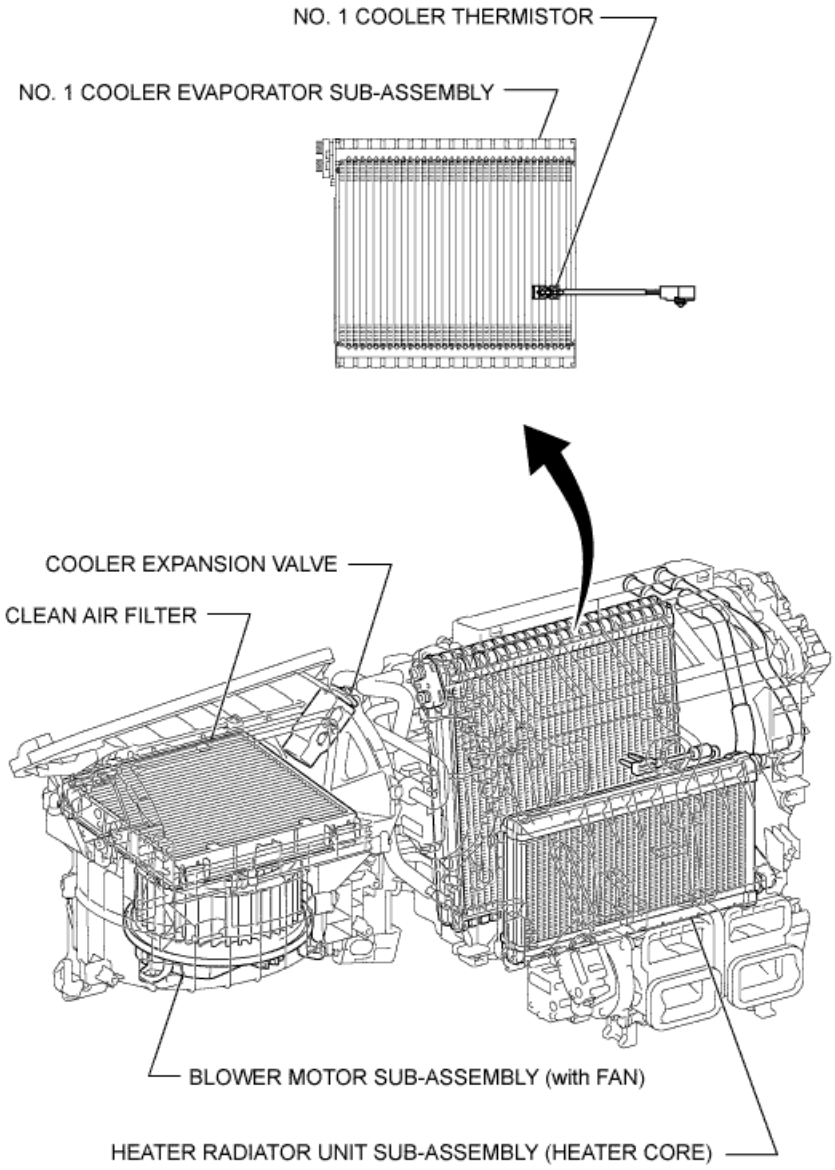

REAR ROOM TEMPERATURE SENSOR LH
REAR ROOM TEMPERATURE SENSOR RH
DUCT SENSOR LH
DUCT SENSOR RH
H

for LHD:



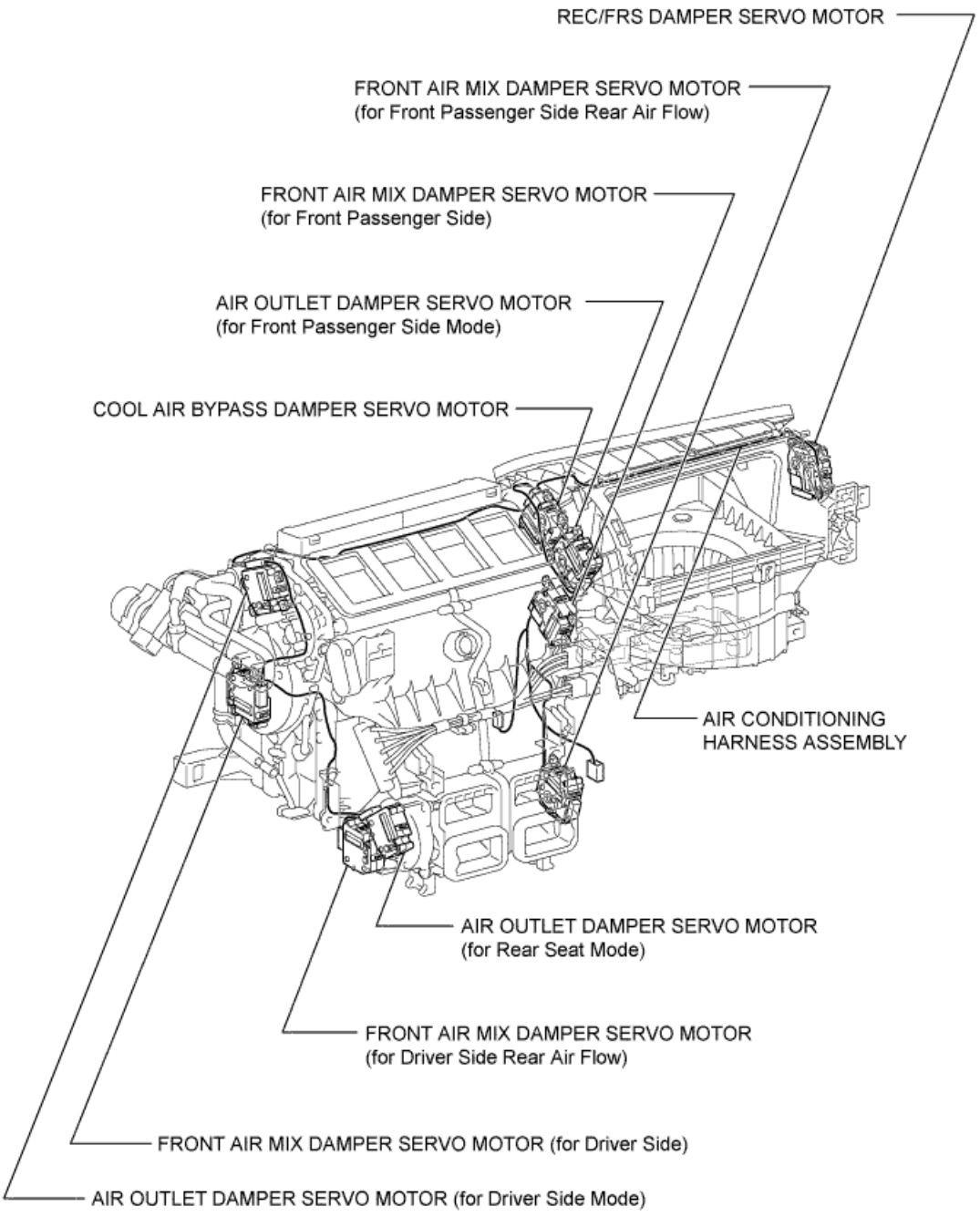
*: w/ PTC Heater

for RHD:

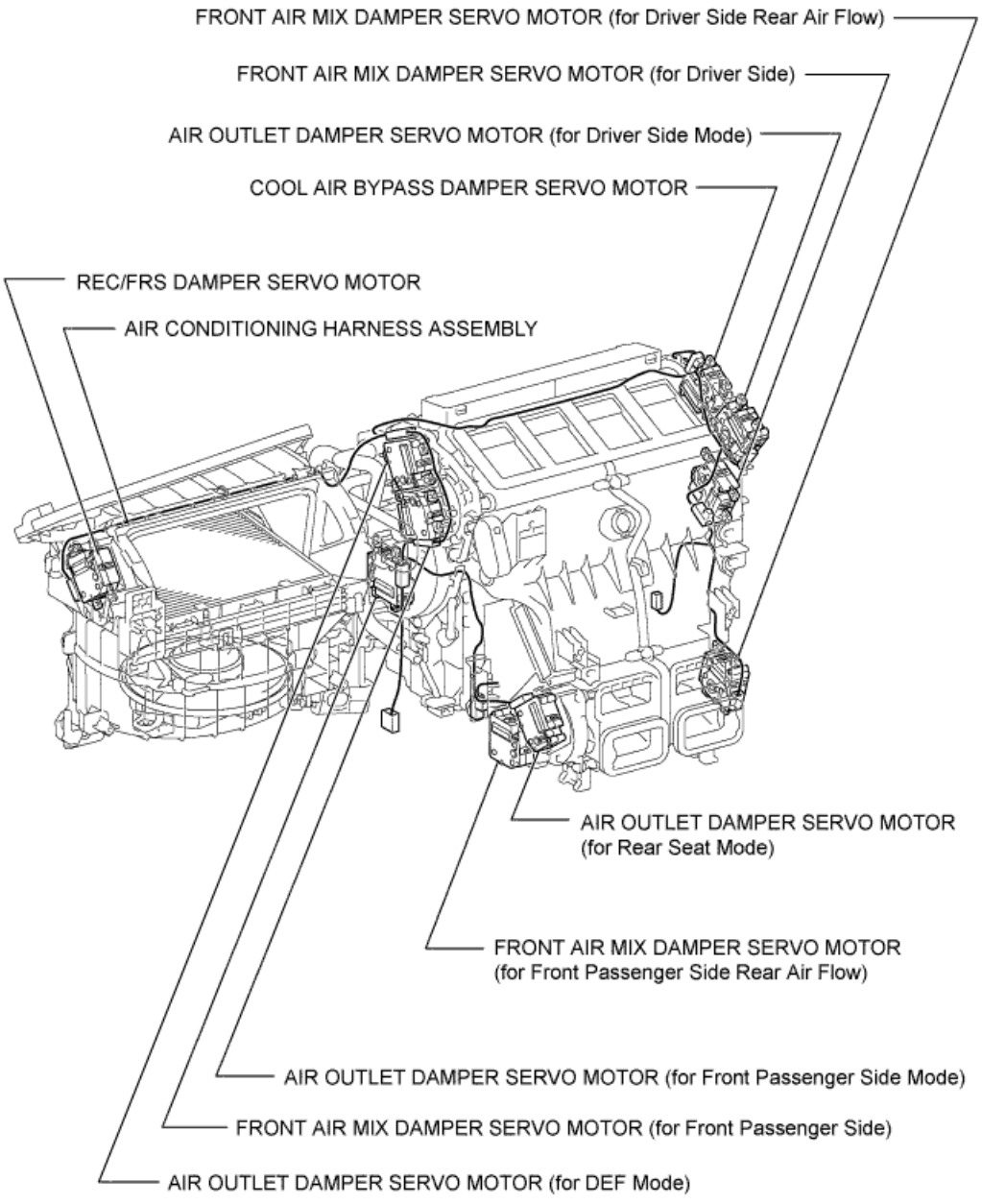

NO. 1 COOLER THERMISTOR
NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY
COOLER EXPANSION VALVE
CLEAN AIR FILTER
BLOWER MOTOR SUB-ASSEMBLY (with FAN)
HEATER RADIATOR UNIT SUB-ASSEMBLY (HEATER CORE)

H

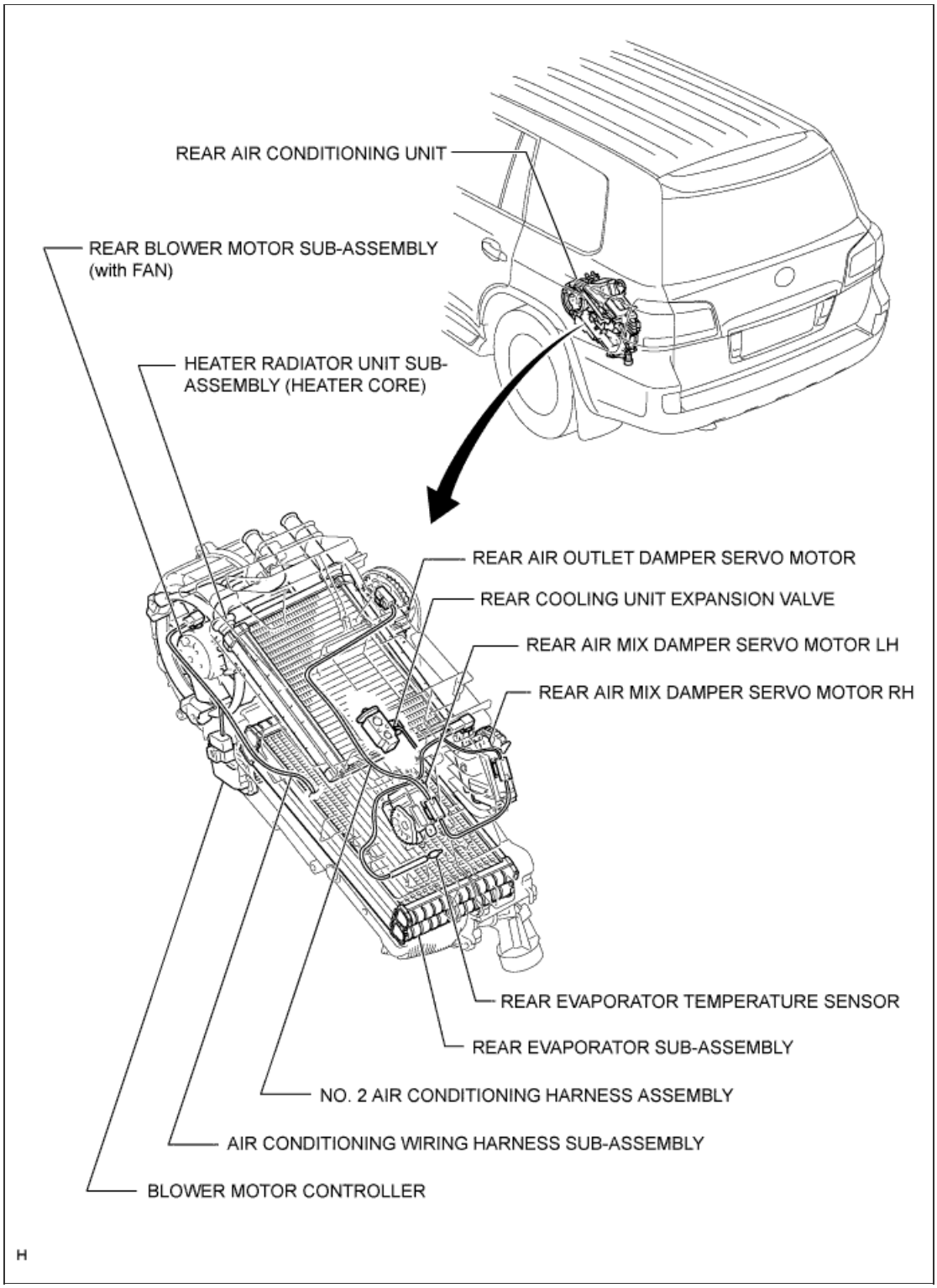
for LHD:


REC/FRS DAMPER SERVO MOTOR
FRONT AIR MIX DAMPER SERVO MOTOR
(for Front Passenger Side Rear Air Flow)
FRONT AIR MIX DAMPER SERVO MOTOR
(for Front Passenger Side)
AIR OUTLET DAMPER SERVO MOTOR
(for Front Passenger Side Mode)
COOL AIR BYPASS DAMPER SERVO MOTOR
AIR CONDITIONING
HARNESS ASSEMBLY
AIR OUTLET DAMPER SERVO MOTOR
(for Rear Seat Mode)
FRONT AIR MIX DAMPER SERVO MOTOR
(for Driver Side Rear Air Flow)
FRONT AIR MIX DAMPER SERVO MOTOR (for Driver Side)
AIR OUTLET DAMPER SERVO MOTOR (for Driver Side Mode)

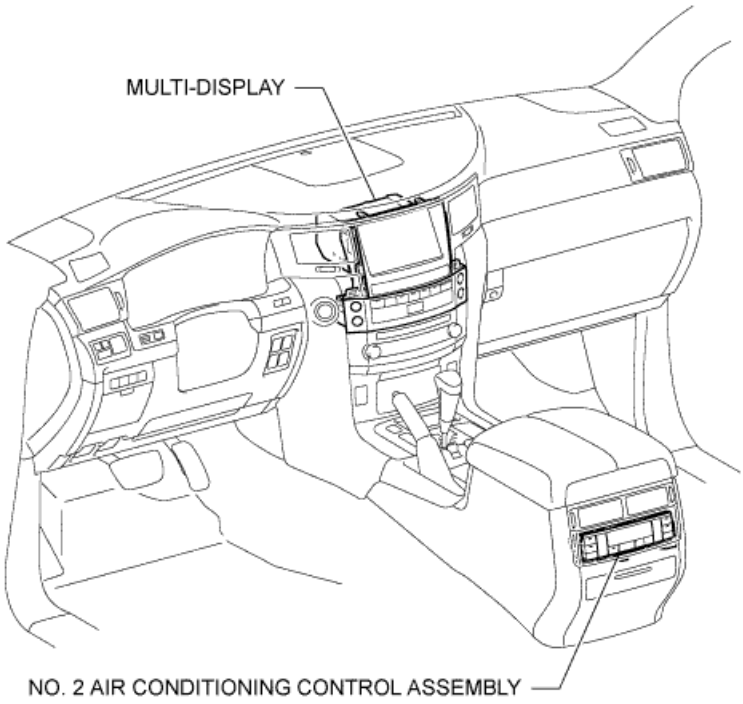
for RHD:


FRONT AIR MIX DAMPER SERVO MOTOR (for Driver Side Rear Air Flow)
FRONT AIR MIX DAMPER SERVO MOTOR (for Driver Side)
AIR OUTLET DAMPER SERVO MOTOR (for Driver Side Mode)
COOL AIR BYPASS DAMPER SERVO MOTOR
REC/FRS DAMPER SERVO MOTOR
AIR CONDITIONING HARNESS ASSEMBLY
AIR OUTLET DAMPER SERVO MOTOR
(for Rear Seat Mode)
FRONT AIR MIX DAMPER SERVO MOTOR
(for Front Passenger Side Rear Air Flow)
AIR OUTLET DAMPER SERVO MOTOR (for Front Passenger Side Mode)
FRONT AIR MIX DAMPER SERVO MOTOR (for Front Passenger Side)
AIR OUTLET DAMPER SERVO MOTOR (for DEF Mode)

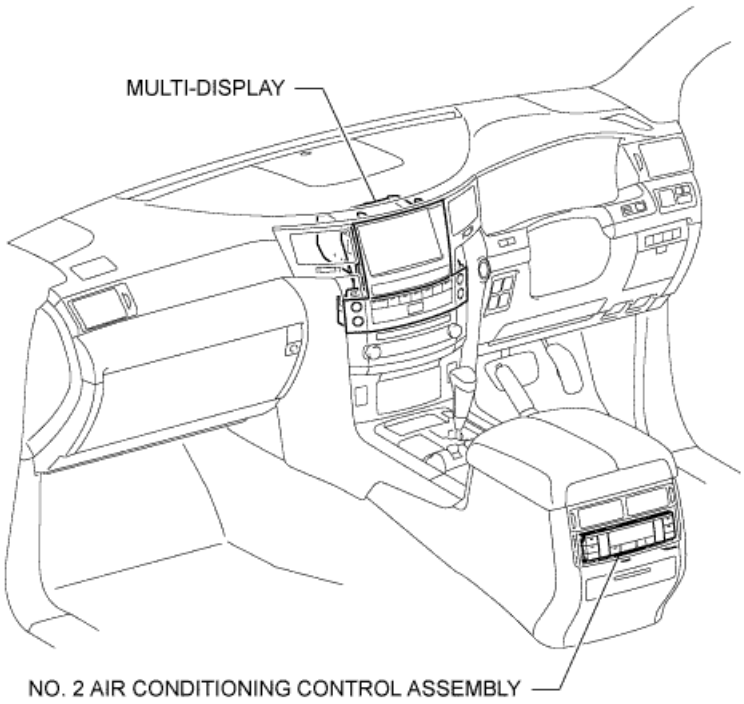
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REAR AIR CONDITIONING UNIT
REAR BLOWER MOTOR SUB-ASSEMBLY (with FAN)
HEATER RADIATOR UNIT SUB-ASSEMBLY (HEATER CORE)
REAR AIR OUTLET DAMPER SERVO MOTOR
REAR COOLING UNIT EXPANSION VALVE
REAR AIR MIX DAMPER SERVO MOTOR LH
REAR AIR MIX DAMPER SERVO MOTOR RH
REAR EVAPORATOR TEMPERATURE SENSOR
REAR EVAPORATOR SUB-ASSEMBLY
NO. 2 AIR CONDITIONING HARNESS ASSEMBLY
AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY
BLOWER MOTOR CONTROLLER
H

for LHD:

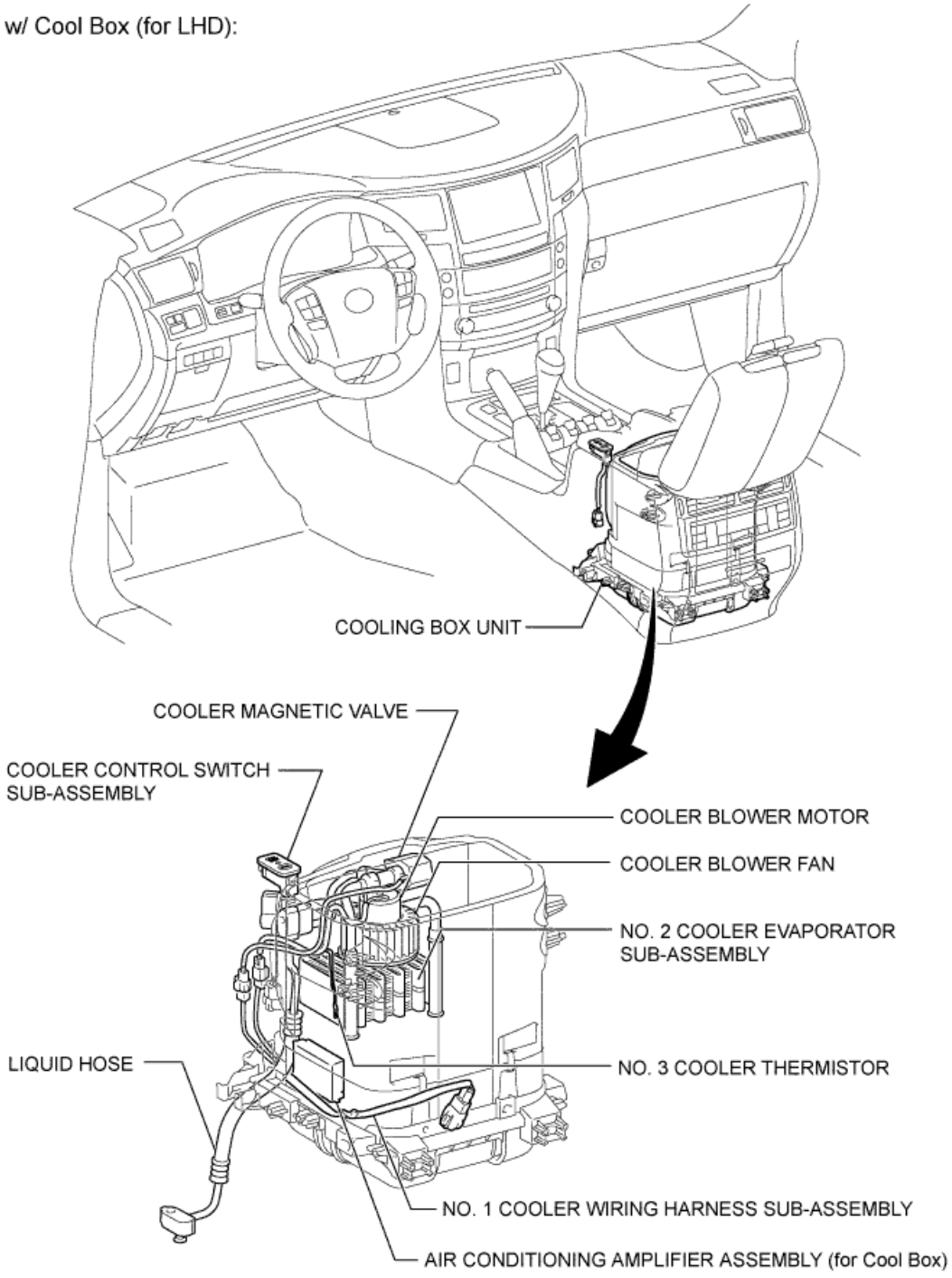


for RHD:



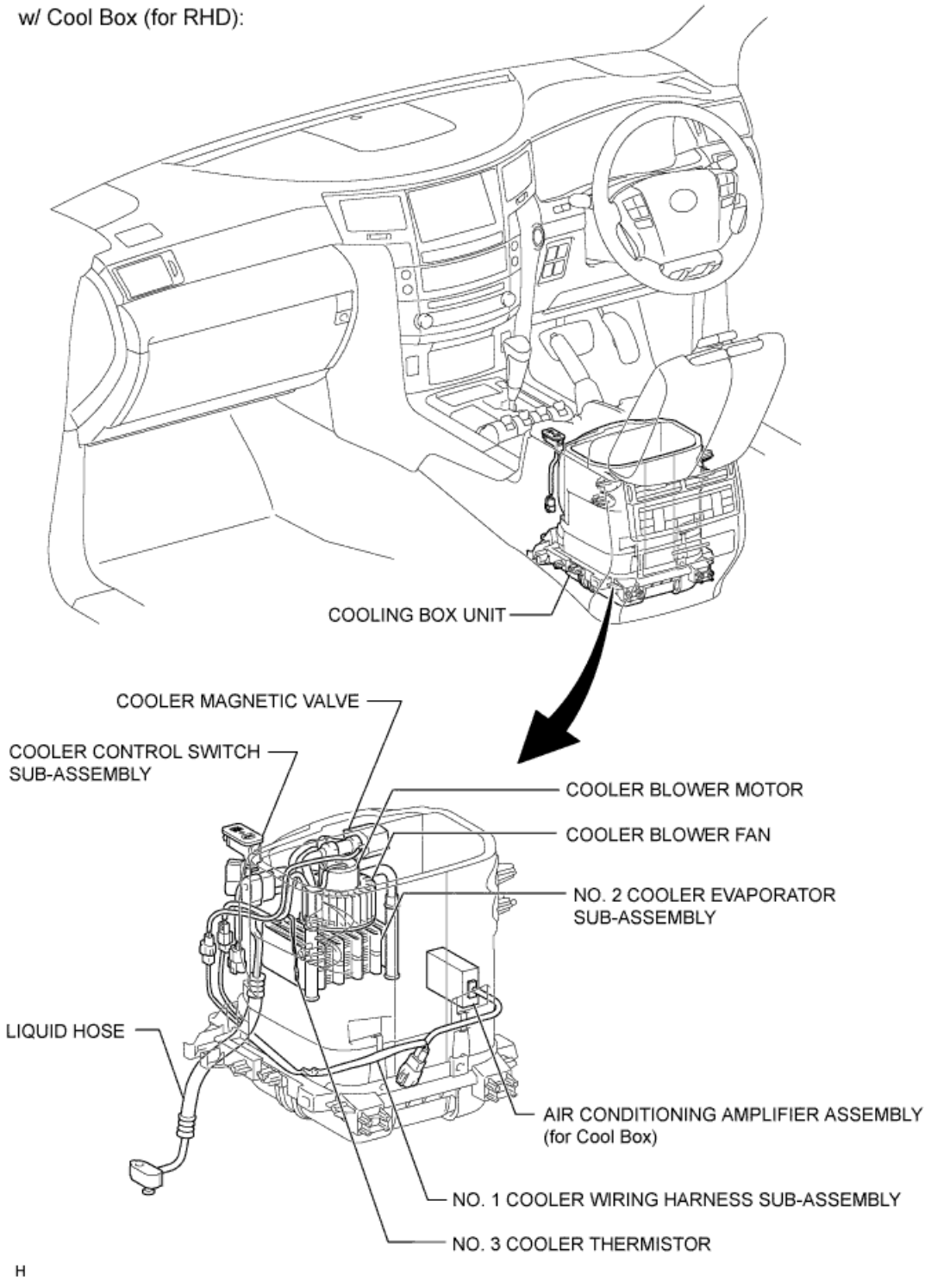
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w/ Cool Box (for LHD):

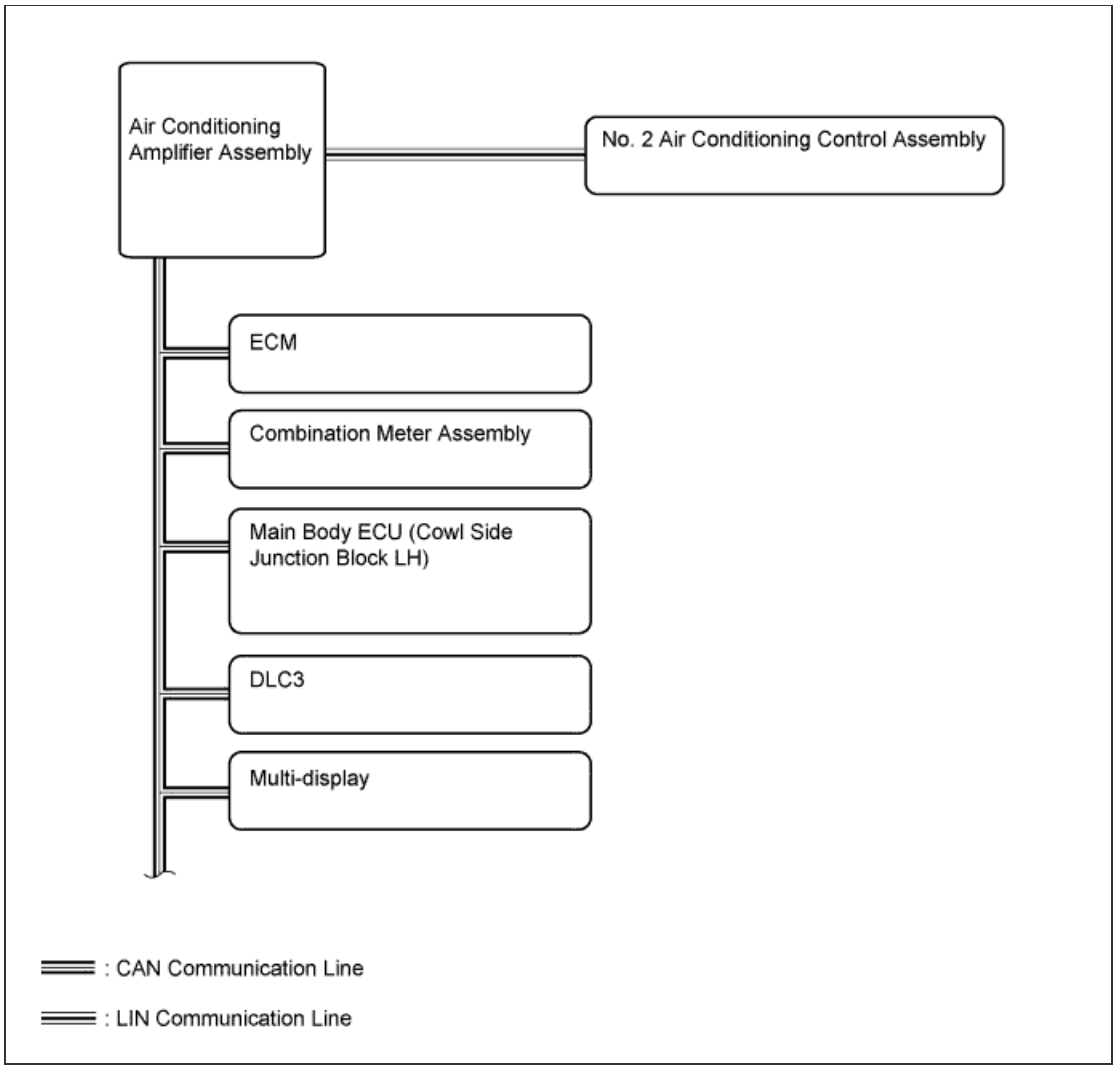


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w/ Cool Box (for RHD):



for Preparation Click here

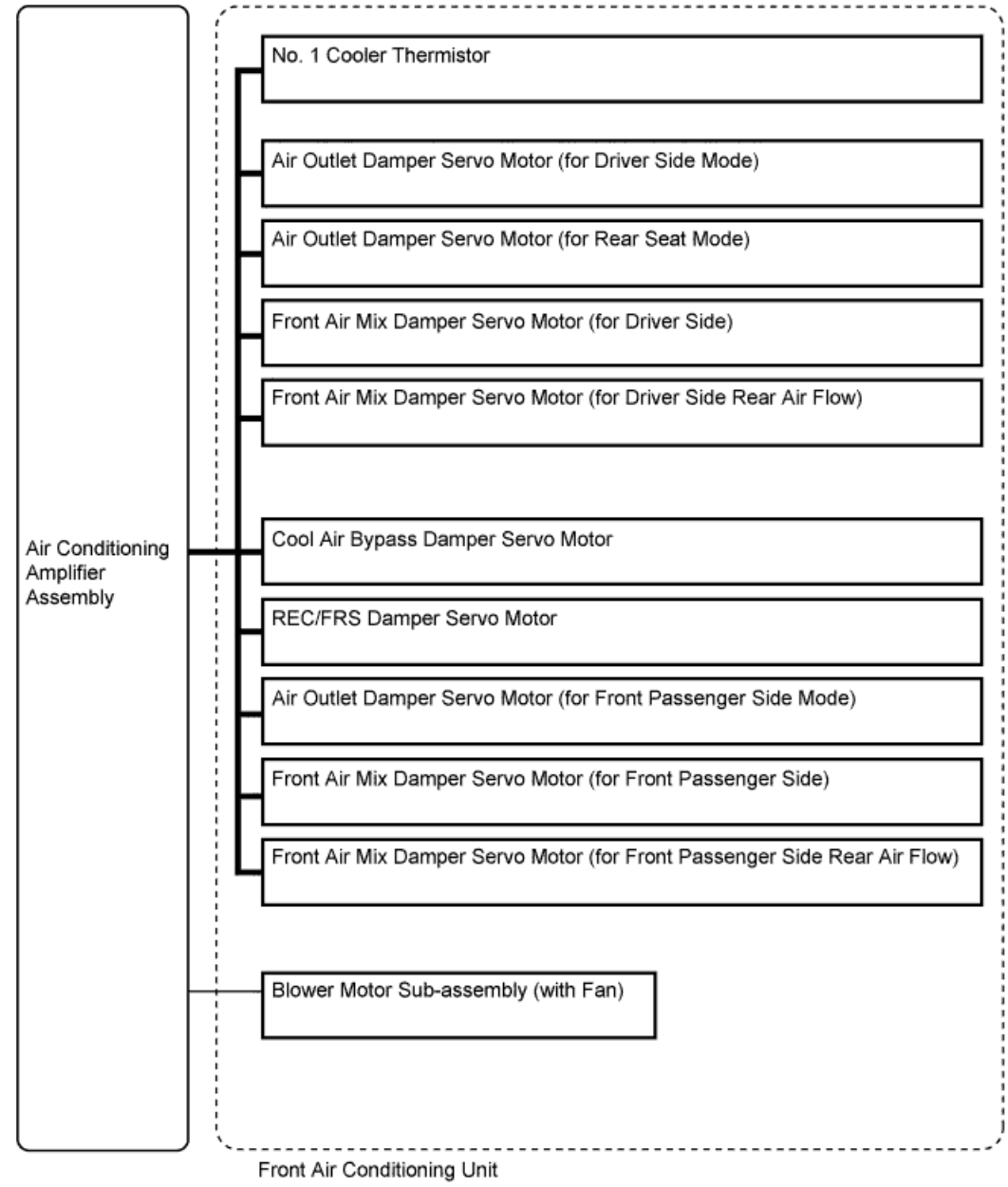


Communication Table

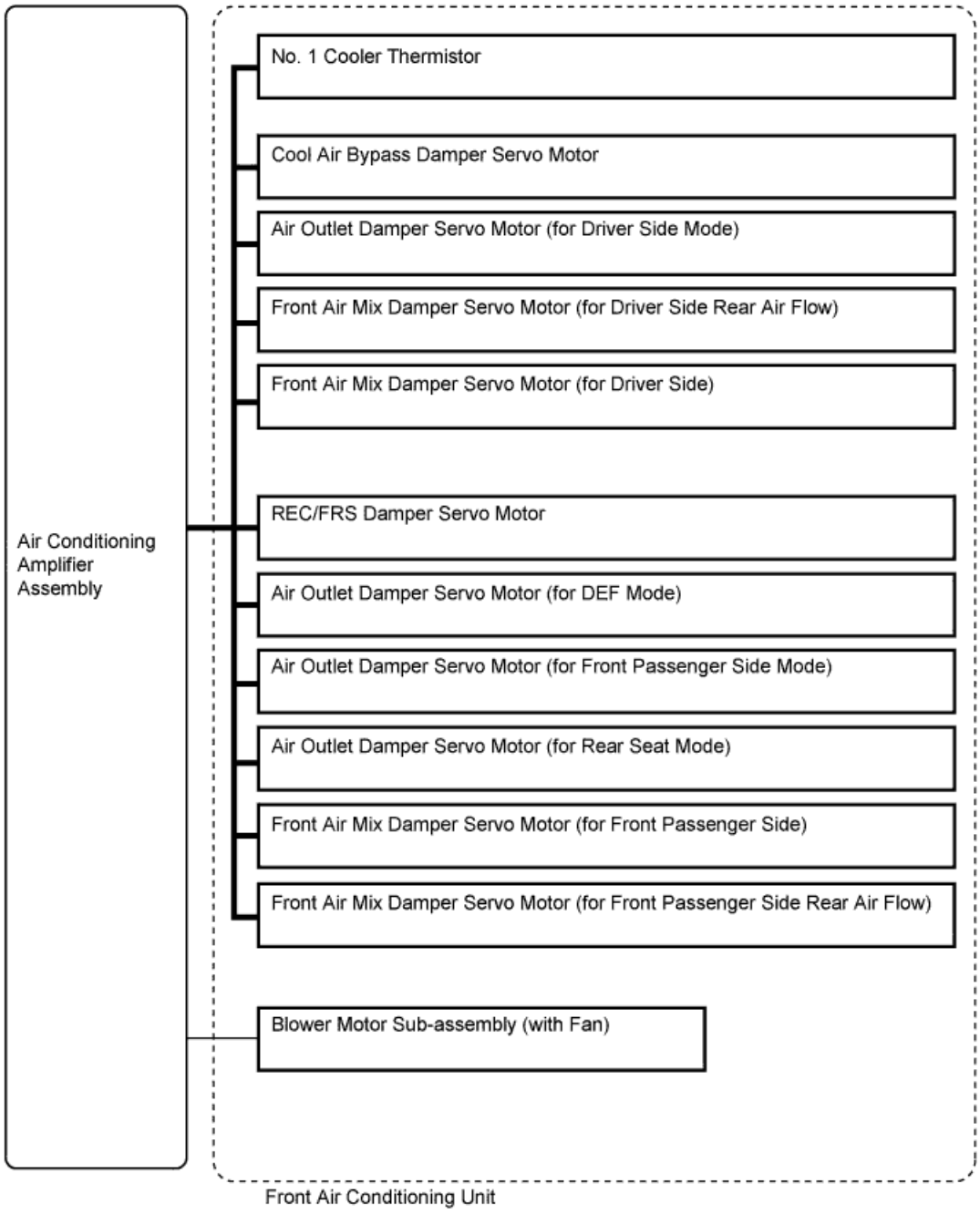
Transmitter	Receiver	Signal	Communication Line
Air conditioning amplifier assembly	ECM	- Heater idle up request signal - A/C idle up request signal - PTC heater driving number request signal - Ambient temperature signal	CAN
Air conditioning amplifier assembly	Multi-display	- Display indication signal - Micro dust and pollen filter switch illumination signal - MODE indication signal - Driver seat temperature indication signal - Front passenger seat temperature indication signal - Rear seat RH side temperature indication signal - Rear seat LH side temperature indication signal - Blower level indication signal - Rear blower level indication signal	
ECM	Air conditioning amplifier assembly	- Engine speed signal - Engine coolant temperature signal	
Main body ECU	Air conditioning amplifier assembly	- Panel illumination switch signal	
Meter ECU	Air conditioning amplifier assembly	- Vehicle speed signal	
		- Front A/C operation signal - Rear A/C operation signal - Micro dust and pollen filter switch operation signal	

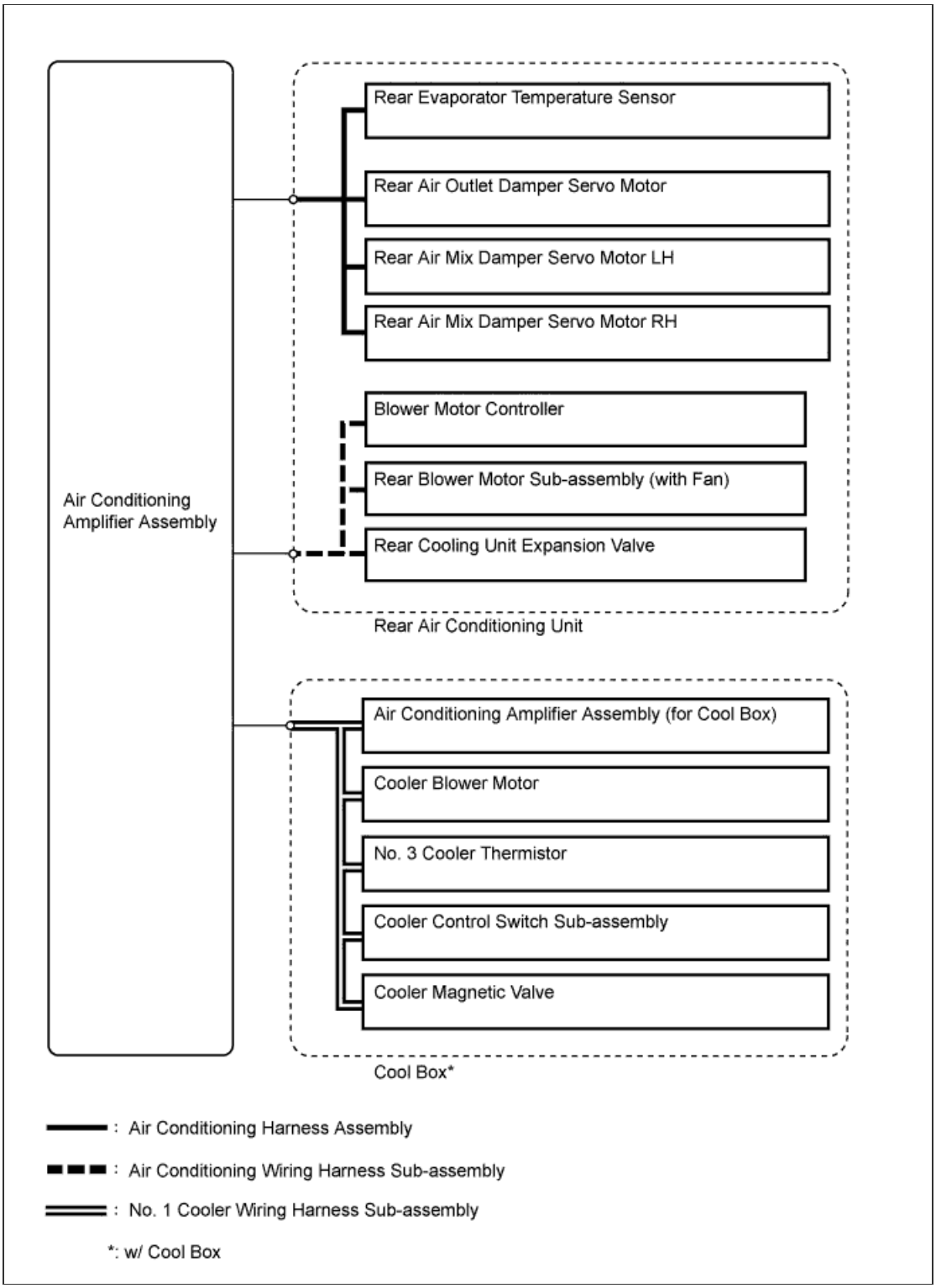
Multi-display	Air conditioning amplifier assembly	- AUTO switch signal - OFF switch signal - Blower switch signal (up, down) - MODE switch signal - Defroster switch signal - 4 ZONE switch signal - Driver seat set temperature switch signal - Front passenger seat set temperature switch signal - Rear seat RH side set temperature indication signal - Rear seat LH side set temperature indication signal	CAN
Air conditioning amplifier assembly	No. 2 air conditioning control assembly	- Rear panel indication signal - AUTO indication signal - MODE indication signal - Blower level indication signal - Rear seat RH side set temperature indication signal - Rear seat LH side set temperature indication signal	LIN
No. 2 air conditioning control assembly	Air conditioning amplifier assembly	- OFF switch signal - AUTO switch signal - MODE switch signal - Blower switch signal (up, down) - Rear seat RH side set temperature switch signal - Rear seat LH side set temperature switch signal	LIN

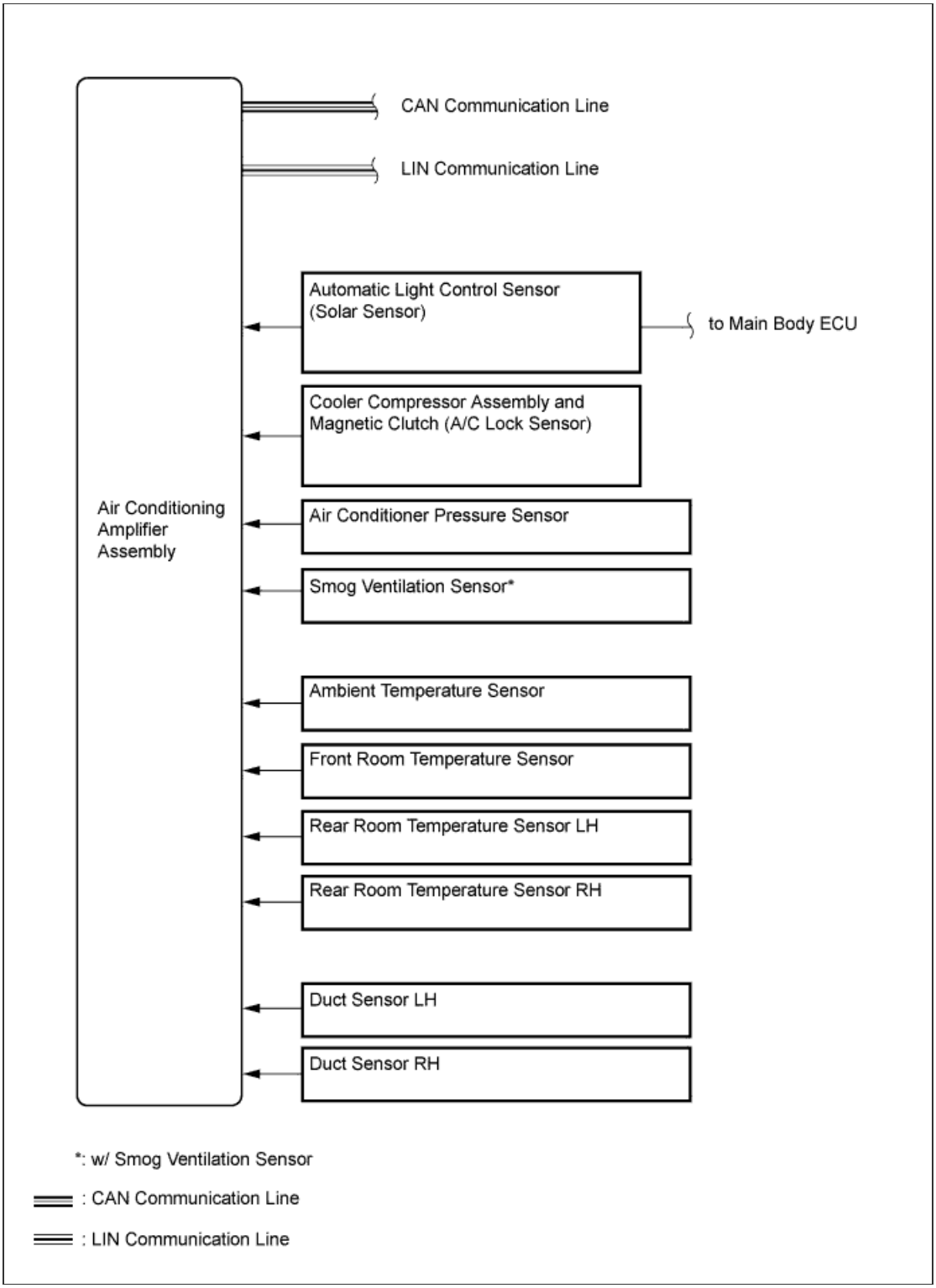
for LHD:

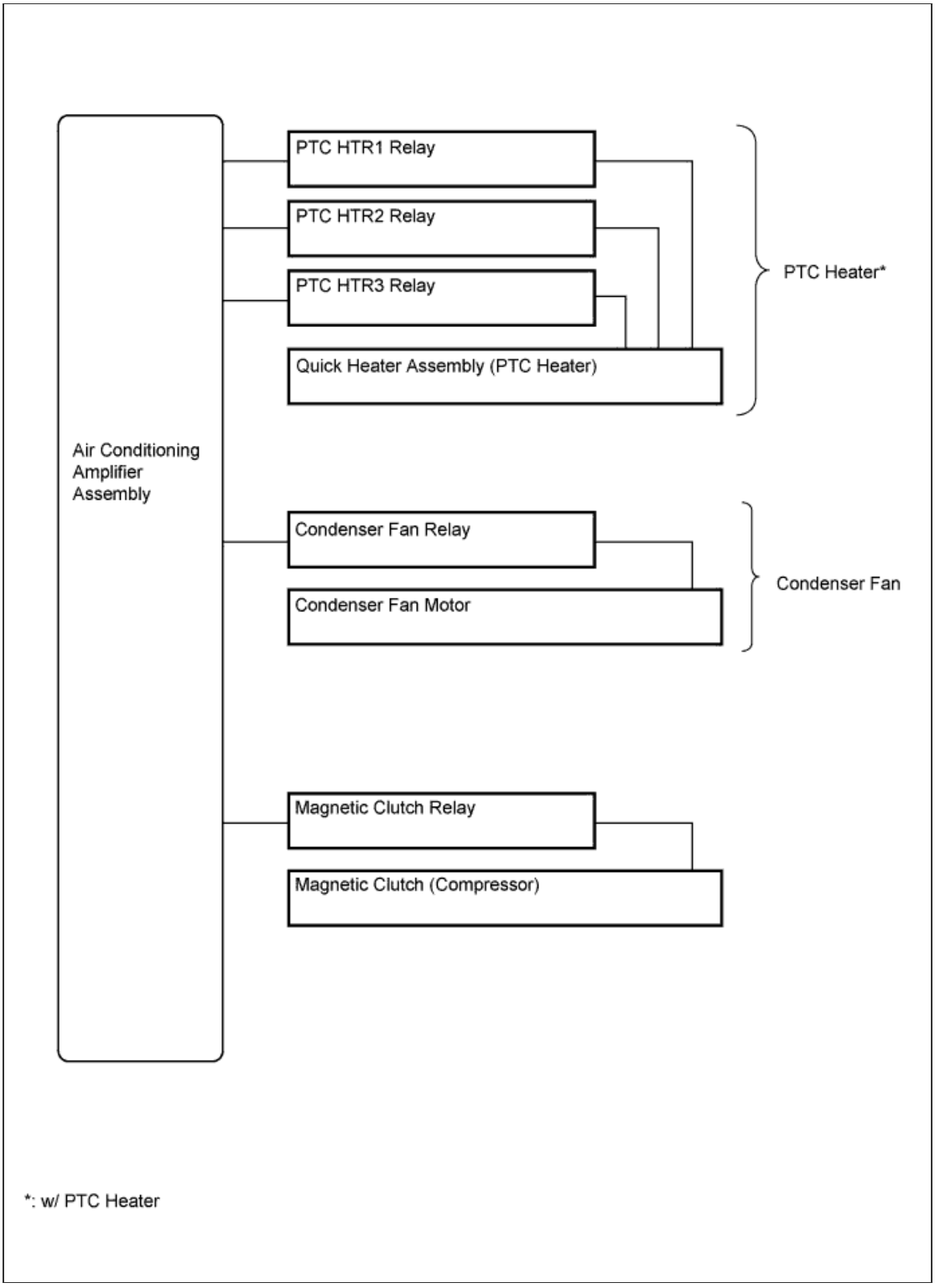

Air Conditioning Amplifier Assembly
No. 1 Cooler Thermistor
Air Outlet Damper Servo Motor (for Driver Side Mode)
Air Outlet Damper Servo Motor (for Rear Seat Mode)
Front Air Mix Damper Servo Motor (for Driver Side)
Front Air Mix Damper Servo Motor (for Driver Side Rear Air Flow)
Cool Air Bypass Damper Servo Motor
REC/FRS Damper Servo Motor
Air Outlet Damper Servo Motor (for Front Passenger Side Mode)
Front Air Mix Damper Servo Motor (for Front Passenger Side)
Front Air Mix Damper Servo Motor (for Front Passenger Side Rear Air Flow)
Blower Motor Sub-assembly (with Fan)
Front Air Conditioning Unit
: Air Conditioning Harness Assembly

for RHD:


Air Conditioning Amplifier Assembly
No. 1 Cooler Thermistor
Cool Air Bypass Damper Servo Motor
Air Outlet Damper Servo Motor (for Driver Side Mode)
Front Air Mix Damper Servo Motor (for Driver Side Rear Air Flow)
Front Air Mix Damper Servo Motor (for Driver Side)
REC/FRS Damper Servo Motor
Air Outlet Damper Servo Motor (for DEF Mode)
Air Outlet Damper Servo Motor (for Front Passenger Side Mode)
Air Outlet Damper Servo Motor (for Rear Seat Mode)
Front Air Mix Damper Servo Motor (for Front Passenger Side)
Front Air Mix Damper Servo Motor (for Front Passenger Side Rear Air Flow)
Blower Motor Sub-assembly (with Fan)
Front Air Conditioning Unit
: Air Conditioning Harness Assembly


Air Conditioning Amplifier Assembly
Rear Evaporator Temperature Sensor
Rear Air Outlet Damper Servo Motor
Rear Air Mix Damper Servo Motor LH
Rear Air Mix Damper Servo Motor RH
Blower Motor Controller
Rear Blower Motor Sub-assembly (with Fan)
Rear Cooling Unit Expansion Valve
Rear Air Conditioning Unit
Air Conditioning Amplifier Assembly (for Cool Box)
Cooler Blower Motor
No. 3 Cooler Thermistor
Cooler Control Switch Sub-assembly
Cooler Magnetic Valve
Cool Box*
: Air Conditioning Harness Assembly
: Air Conditioning Wiring Harness Sub-assembly
: No. 1 Cooler Wiring Harness Sub-assembly
*: w/ Cool Box


CAN Communication Line
LIN Communication Line
Automatic Light Control Sensor
(Solar Sensor)
to Main Body ECU
Cooler Compressor Assembly and
Magnetic Clutch (A/C Lock Sensor)
Air Conditioning
Amplifier
Assembly
Air Conditioner Pressure Sensor
Smog Ventilation Sensor*
Ambient Temperature Sensor
Front Room Temperature Sensor
Rear Room Temperature Sensor LH
Rear Room Temperature Sensor RH
Duct Sensor LH
Duct Sensor RH
*: w/ Smog Ventilation Sensor
: CAN Communication Line
: LIN Communication Line


PTC HTR1 Relay
PTC HTR2 Relay
PTC HTR3 Relay
Quick Heater Assembly (PTC Heater)
PTC Heater*
Air Conditioning Amplifier Assembly
Condenser Fan Relay
Condenser Fan Motor
Condenser Fan
Magnetic Clutch Relay
Magnetic Clutch (Compressor)

*: w/ PTC Heater

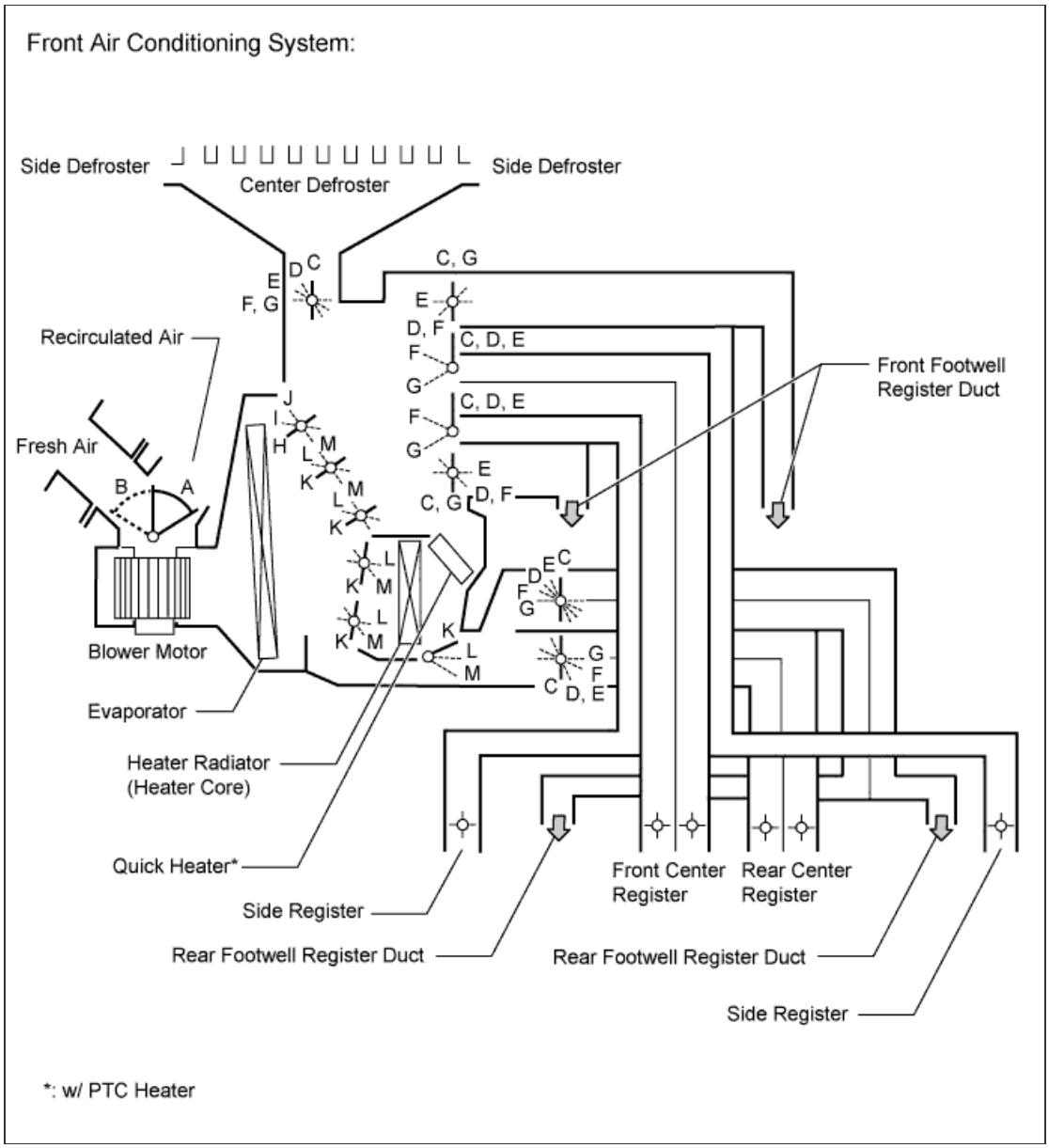
for Preparation Click here

GENERAL

a. The air conditioning system has the following features:

- The 4-ZONE air conditioner system controls the temperature for the front and rear seats independently. In addition, it uses the amount of sunlight and temperature at each seat to adjust the temperature and airflow volume. When the 4-ZONE switch is on, the temperature, airflow mode and airflow volume at each of the 4 seats (driver, front passenger, rear left and rear right) are automatically adjusted.
- In accordance with the temperature set using the temperature control switch, the air conditioning amplifier assembly determines the outlet air temperature based on the input signals from various sensors. In addition, corrections are made in accordance with the signals from the water temperature sensor to control the outlet air temperature.
- Controls the blower motor in accordance with the airflow volume determined by the air conditioning amplifier assembly based on the input signals from various sensors.
- Automatically changes the dampers in accordance with the outlet mode ratio that is determined by the air conditioning amplifier assembly based on the input signals from various sensors.
- Based on the signals from the ambient temperature sensor, this system calculates the outside temperature and indicates it in the multi-information display in the combination meter.
- The Positive Temperature Coefficient (PTC) heater system contains a PTC heater that heats the air that has passed through the heater core to ensure proper heater performance.
- A compact, lightweight, and highly efficient straight flow (full-path flow) aluminum heater core is used.
- The micro dust and pollen filter control is used to remove pollen in the air around the upper areas of the driver and front passenger seats.
- The air conditioning amplifier assembly is equipped with a self diagnosis function. If there is a malfunction in the system, it stores the DTCs (Diagnostic Trouble Codes) in its memory.

MODE POSITION AND DAMPER OPERATION

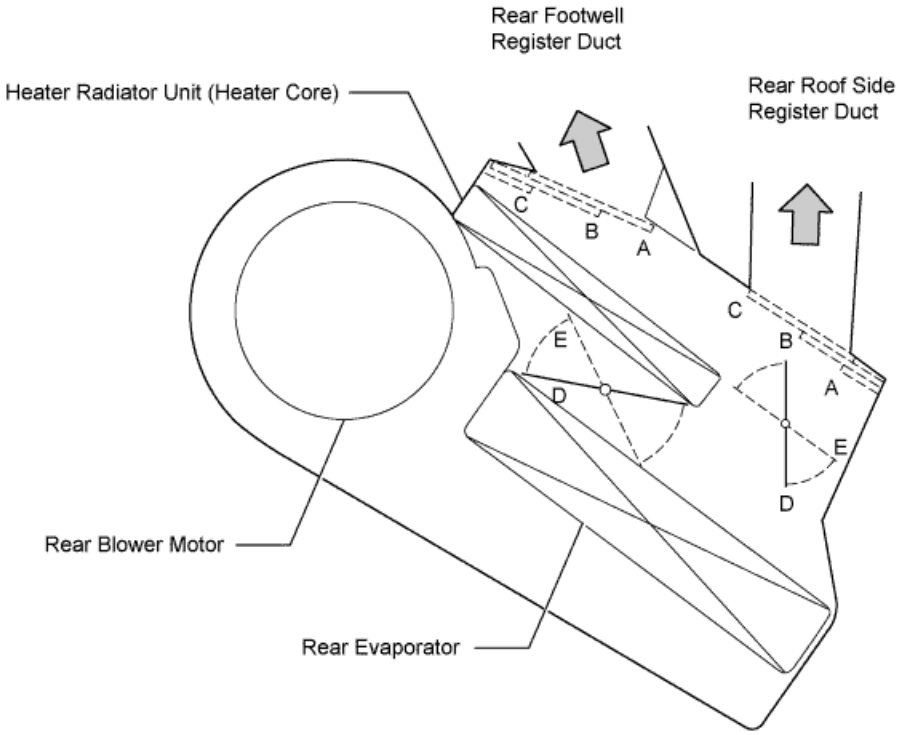


Function of Main Damper

Control Damper	Operation Position	Damper Position	Operation
Air Inlet Control Damper	Fresh	A	Brings in fresh air.
	Recirculation	B	Recirculates internal air.
Air Mix Control Damper	Max Cool to Max Hot	K, L, M	Varies the mixture ratio of cold air and hot air in order to regulate the temperature continuously from hot to cool.
Cool Air Bypass Control Damper	Max Cool to Max Hot	H, I, J	Cool air blows out from the front center register and side registers in order to adjust the temperature around the heads of the occupants during cooling or warming.
Mode Control Damper	Def	C	Defrosts the windshield through the center defroster and side defroster.
	Foot/Def	D	Defrosts the windshield through the center and side defrosters while air is also blown out from the front and rear footwell register ducts. In addition, air blows out slightly from the front and rear center registers and side registers.
	Foot	E	Air blows out of the front and rear footwell register ducts, front and rear center registers and side registers. In addition, air blows out slightly from the center and side defrosters.
	Bi-level	F	Air blows out of the front center registers, side registers, and rear center registers. Air also blows out from the front and rear footwell register ducts.
		G	Air blows out of the front center registers, side registers, and rear center registers.

	Face		

Rear Air Conditioning System:

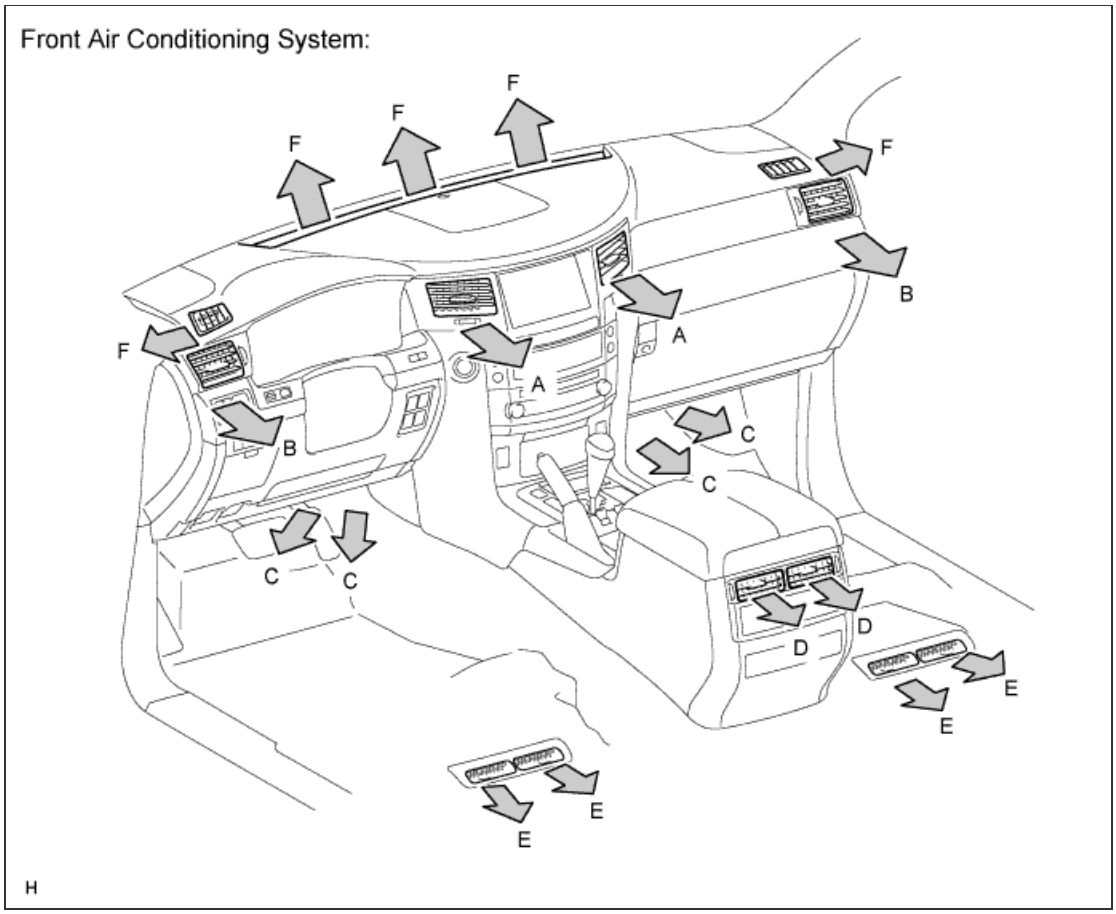


Function of Main Damper

Control Damper	Operation Position	Damper Position	Operation
Mode Control Damper	Face	A	Air blows out of the rear roof side register duct.
	Bi-level	B	Air blows out of the rear roof side register duct and rear footwell register duct.
	Foot	C	Air blows out of the rear footwell register duct.
Air Mix Control Damper	Max Cool to Max Hot	D, E	Varies the mixture ratio of cold air and hot air in order to regulate the temperature continuously from hot to cool.

AIR OUTLETS AND AIRFLOW VOLUME

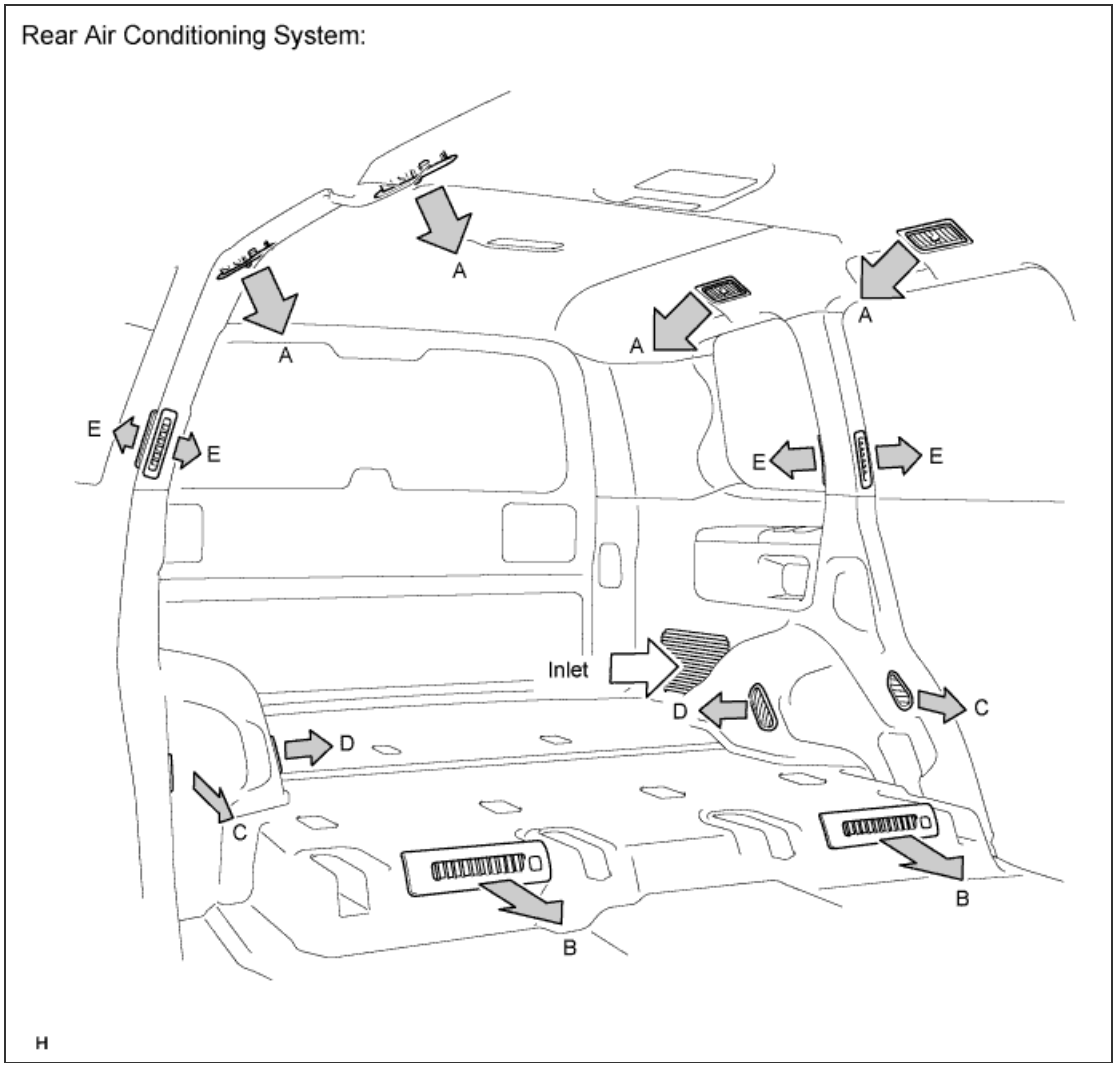
Front Air Conditioning System:



Air Outlet Mode		Selectable Mode		Register (Face)			Register (Foot)		Defroster
		Automatic	Manual	Center	Side	Rear Center	Front	Rear	
				A	B	C	D	E	F
	FACE-U*1	○	○	◯	◯	◯	-	-	-
	FACE-L*2, *6	○	-	◯	◯	◯	○	-	-
	B/L-U*1	○	○	◯	◯	◯	○	○	-
	B/L-L*2	○	-	◯	◯	◯	◯	○	-
	FOOT F*3	○	-	○	○	○	◯	○	○
	FOOT R*4	○	○	○	○	○	◯	◯	○
	FOOT D*5	○	-	○	○	○	◯	○	○
	F/D	○	○	○	○	○	◯	○	◯
	DEF	○	○	-	-	-	-	-	◯

HINT:

- **The size of the circle indicates the proportion of airflow volume.**
- ***1: Greater airflow volume at the upper area.**
- ***2: Greater airflow volume at the lower area.**
- ***3: Greater airflow volume at the front.**
- ***4: Greater airflow volume at the rear foot area.**
- ***5: Greater airflow volume at the defroster.**
- ***6: In contrast to FACE-U, a small amount of air comes out of the front footwell register duct.**



Air Outlet Mode		Register Duct				
		Roof	Rear Foot 1	Rear Side 2	Rear Foot 2	C Pillar
		A	B	C	D	E
	FACE	○	-	-	-	-
	BI-LEVEL	○	○	○	○	○
	FOOT	-	○	○	○	○

HINT:

The size of the circle indicates the proportion of airflow volume.

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the air conditioning system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK COMMUNICATION FUNCTION OF CAN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the CAN communication system is functioning normally.

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B. GO TO CAN COMMUNICATION SYSTEM (Click here)

C. GO TO CAN COMMUNICATION SYSTEM (Click here)

A

4.CHECK COMMUNICATION FUNCTION OF LIN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the LIN communication system is functioning normally.

Result

Result	Proceed to
LIN DTC is not output	A
LIN DTC is output	B

B. GO TO LIN COMMUNICATION SYSTEM (Click here)

A

5.CHECK FOR DTC*

a. Check for DTCs (Click here).

b. Clear the DTCs (Click here).

c. Based on the DTCs output above, try to force output of the air conditioning system DTC by simulating the conditions indicated by the DTC. Then recheck for DTCs.

Result

Result	Proceed to
DTC is not output	A
DTC is output	B

B. → GO TO DTC CHART (**Click here**)

A

6.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. → GO TO STEP 8

A

7.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Terminals of ECU (Click here)

b. Data List / Active Test (Click here)

c. Actuator Check (Click here)

d. On-vehicle Inspection

e. Inspection

NEXT

8.ADJUST, REPAIR OR REPLACE

NEXT

9.CONFIRMATION TEST

NEXT

END

for Preparation Click here

HINT:

- **Use these procedures to troubleshoot the air conditioning system.**
- ***: Use the intelligent tester.**

1.VEHICLE BROUGHT TO WORKSHOP

NEXT

2.INSPECT BATTERY VOLTAGE

Standard voltage:
11 to 14 V

If the voltage is below 11 V, recharge or replace the battery before proceeding.

NEXT

3.CHECK COMMUNICATION FUNCTION OF CAN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the CAN communication system is functioning normally.

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B. GO TO CAN COMMUNICATION SYSTEM (Click here)

C. GO TO CAN COMMUNICATION SYSTEM (Click here)

A

4.CHECK COMMUNICATION FUNCTION OF LIN COMMUNICATION SYSTEM*

a. Use the intelligent tester to check if the LIN communication system is functioning normally.

Result

Result	Proceed to
LIN DTC is not output	A
LIN DTC is output	B

B. GO TO LIN COMMUNICATION SYSTEM (Click here)

A

5.CHECK FOR DTC*

a. Check for DTCs (Click here).

b. Clear the DTCs (Click here).

c. Based on the DTCs output above, try to force output of the air conditioning system DTC by simulating the conditions indicated by the DTC. Then recheck for DTCs.

Result

Result	Proceed to
DTC is not output	A
DTC is output	B

B. → GO TO DTC CHART (**Click here**)

A

6.PROBLEM SYMPTOMS TABLE

a. Refer to the Problem Symptoms Table (Click here).

Result

Result	Proceed to
Fault is not listed in problem symptoms table	A
Fault is listed in problem symptoms table	B

B. → GO TO STEP 8

A

7.OVERALL ANALYSIS AND TROUBLESHOOTING*

a. Terminals of ECU (Click here)

b. Data List / Active Test (Click here)

c. Actuator Check (Click here)

d. On-vehicle Inspection

e. Inspection

NEXT

8.ADJUST, REPAIR OR REPLACE

NEXT

9.CONFIRMATION TEST

NEXT

END

for Preparation Click here

CUSTOMIZING FUNCTION WITH INTELLIGENT TESTER (REFERENCE)

NOTICE:

- **When the customer requests a change in a function, first make sure that the function can be customized.**
- **Be sure to make a note of the current settings before customizing.**
- **When troubleshooting a function, first make sure that the function is set to the default setting.**

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Customize Setting.

e. Select the setting by referring to the table below.

Air Conditioner

Display	Default	Contents	Setting
Set Temperature Shift	Normal	Function to set the temperature shift.	+2 C/+1 C/Normal/-1 C/-2 C
Evaporator Control	Automatic	Function to set the evaporator control to the automatic position (Automatic) to save power, or to the coldest position (Manual) to dehumidify the air and to prevent the windows from fogging up.	Manual/Automatic
Compressor/Air Inlet DEF operation	Link	Function to automatically turn the A/C on when the front defroster button is pressed.	Normal/Link
Compressor Mode	Automatic	Function to turn the A/C on automatically by pressing the AUTO button when the blower is on and the A/C is off.	Manual/Automatic
Air Inlet Mode	Automatic	Function to automatically change to recirculation mode when the A/C is turned on.	Manual/Automatic
Foot/DEF Auto Mode	ON	Function to turn on the airflow from the front and rear footwell register ducts and center and side defrosters automatically when auto mode is on.	ON/OFF
Foot/DEF Automatic Blow Up Function	ON	Function to change the blower level automatically when the defroster is on.	ON/OFF
Ambient Temperature Shift	Normal	Function to control the shifted ambient temperature in relation to the displayed ambient temperature.	+3 C/+2 C/+1 C/Normal/-1 C/-2 C/-3 C
Button Press Buzzer	ON	Function to sound a buzzer when a button is pressed.	ON/OFF
Emission Gas Sensor Shift*	Normal	Function to change the sensitivity of the exhaust gas sensor.	Much More/More/Little More/Normal/Little Less/Less/Much Less

*: w/ Smog Ventilation Sensor

for Preparation Click here

HINT:

- **Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.**
- **Inspect the fuses and relays related to this system before inspecting the suspected areas below.**

Front Air Conditioning Unit

Symptom	Suspected Area	See page
All functions of air conditioning system do not operate	Harness or connector	-
	IG power source circuit	Click here
	Back-up power source circuit	Click here
	Multi-display	Click here
	Air conditioning amplifier assembly	Click here
Air Flow Control: No blower operation	Harness or connector	-
	Blower motor circuit	Click here
	Air conditioning amplifier assembly	Click here
Air Flow Control: Insufficient air flow	Blower motor circuit	Click here
	Air conditioning amplifier assembly	Click here
Temperature Control: No cool air comes out	Volume of refrigerant	Click here
	Refrigerant pressure	Click here
	Cooler compressor assembly	Click here
	Pressure sensor circuit	Click here
	Front air mix damper servo motor (for driver side)	Click here
	Front air mix damper servo motor (for driver side rear air flow)	Click here
	Front air mix damper servo motor (for front passenger side)	Click here
	Front air mix damper servo motor (for front passenger side rear air flow)	Click here
	Room temperature sensor circuit	Click here
	Rear room temperature sensor circuit (for driver side)	Click here
	Rear room temperature sensor circuit (for front passenger side)	Click here
	Solar sensor circuit (for driver side)	Click here
	Solar sensor circuit (for front passenger side)	Click here
	Ambient temperature sensor circuit	Click here
	Evaporator temperature sensor circuit	Click here
		Click

	Air conditioning harness assembly	here
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here
Temperature Control: No warm air comes out	Front air mix damper servo motor (for driver side)	Click here
	Front air mix damper servo motor (for driver side rear air flow)	Click here
	Front air mix damper servo motor (for front passenger side)	Click here
	Front air mix damper servo motor (for front passenger side rear air flow)	Click here
	Room temperature sensor circuit	Click here
	Rear room temperature sensor circuit (for driver side)	Click here
	Rear room temperature sensor circuit (for front passenger side)	Click here
	Solar sensor circuit (for driver side)	Click here
	Solar sensor circuit (for front passenger side)	Click here
	Ambient temperature sensor circuit	Click here
	Air conditioning harness assembly	Click here
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here
Temperature Control: Output air is warmer or cooler than the set temperature or response is slow	Volume of refrigerant	Click here
	Refrigerant pressure	Click here
	Front air mix damper servo motor (for driver side)	Click here
	Front air mix damper servo motor (for driver side rear air flow)	Click here
	Front air mix damper servo motor (for front passenger side)	Click here
	Front air mix damper servo motor (for front passenger side rear air flow)	Click here
	REC/FRS damper servo motor	Click here
	Cool air bypass damper servo motor	Click here
	Room temperature sensor circuit	Click here
	Rear room temperature sensor circuit (for driver side)	Click here
	Rear room temperature sensor circuit (for front passenger side)	Click here
	Solar sensor circuit (for driver side)	Click here
	Solar sensor circuit (for front passenger side)	Click here
	Ambient temperature sensor circuit	Click here
	Cooler compressor assembly	Click here

	Heater radiator	-
	Air conditioning harness assembly	Click here
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here
Temperature Control: No temperature control (only max cool or max hot)	Room temperature sensor circuit	Click here
	Rear room temperature sensor circuit (for driver side)	Click here
	Rear room temperature sensor circuit (for front passenger side)	Click here
	Ambient temperature sensor circuit	Click here
	Cool air bypass damper servo motor	Click here
	Front air mix damper servo motor (for driver side)	Click here
	Front air mix damper servo motor (for driver side rear air flow)	Click here
	Front air mix damper servo motor (for front passenger side)	Click here
	Front air mix damper servo motor (for front passenger side rear air flow)	Click here
	Multi-display	Click here
	Air conditioning harness assembly	Click here
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here
PTC heater does not operate*1	PTC heater circuit	Click here
	Air conditioning amplifier assembly	Click here
No airflow mode control	Air outlet damper servo motor (for driver side mode)	Click here
	Air outlet damper servo motor (for rear seat mode)	Click here
	Air outlet damper servo motor (for DEF mode)*2	Click here
	Air outlet damper servo motor (for front passenger side mode)	Click here
	Air conditioning harness assembly	Click here
	Air conditioning amplifier assembly	Click here
Blinking of air conditioning switch indicator	Multi-display	Click here
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here
Diagnostic trouble codes are not stored. Set mode is cleared when engine switch is turned off.	Back-up power source circuit	Click here
	Air conditioning amplifier assembly	Click here

Rear Air Conditioning Unit

Symptom	Suspected Area	See page
All functions of air conditioning system do not operate	Harness or connector	-
	IG power source circuit	Click here
	Back-up power source circuit	Click here
	No. 2 air conditioning control assembly	Click here
	Air conditioning amplifier assembly	Click here
Air Flow Control: No blower operation	Rear blower motor circuit	Click here
	Air conditioning amplifier assembly	Click here
Air Flow Control: Insufficient air flow	Rear blower motor circuit	Click here
	Air conditioning amplifier assembly	Click here
Temperature Control: No cool air comes out	Volume of refrigerant	Click here
	Refrigerant pressure	Click here
	Cooler compressor assembly	Click here
	Pressure sensor circuit	Click here
	Rear air mix damper servo motor (for driver side)	Click here
	Rear air mix damper servo motor (for front passenger side)	Click here
	Rear room temperature sensor circuit (for driver side)	Click here
	Rear room temperature sensor circuit (for front passenger side)	Click here
	Ambient temperature sensor circuit	Click here
	Evaporator temperature sensor circuit	Click here
	Rear evaporator temperature sensor circuit	Click here
	Rear magnetic valve circuit	Click here
	No. 2 air conditioning harness assembly	-
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here
Temperature Control: No warm air comes out	Rear air mix damper servo motor (for driver side)	Click here
	Rear air mix damper servo motor (for front passenger side)	Click here
	Rear room temperature sensor circuit (for driver side)	Click here
	Rear room temperature sensor circuit (for front passenger side)	Click here
	Ambient temperature sensor circuit	Click here
	No. 2 air conditioning harness assembly	-
	Duct sensor circuit (for driver side)	Click here
	Duct sensor circuit (for front passenger side)	Click here
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here

Cooling Box

Symptom	Suspected Area	See page
Cool box malfunction*3	Cooling box magnetic valve circuit	Click here
	Cooling box blower motor circuit	Click here
	Cooling box control switch circuit	Click here
	Cooling box sensor circuit	Click here
	Air conditioning amplifier assembly (for cool box)	-
	No. 1 cooler wiring harness sub-assembly	-
	Noise filter (built into cooling box unit)	-
	Fuse (built into cooling box unit)	-

*1: w/ PTC Heater
*2: for RHD
*3: w/ Cool Box

for Preparation Click here

HINT:

- **Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.**
- **Inspect the fuses and relays related to this system before inspecting the suspected areas below.**

Front Air Conditioning Unit

Symptom	Suspected Area	See page
All functions of air conditioning system do not operate	Harness or connector	-
	IG power source circuit	Click here
	Back-up power source circuit	Click here
	Display and Navigation Module Display	Click here
	Air conditioning amplifier assembly	Click here
Air Flow Control: No blower operation	Harness or connector	-
	Blower motor circuit	Click here
	Air conditioning amplifier assembly	Click here
Air Flow Control: Insufficient air flow	Blower motor circuit	Click here
	Air conditioning amplifier assembly	Click here
Temperature Control: No cool air comes out	Volume of refrigerant	Click here
	Refrigerant pressure	Click here
	Cooler compressor assembly	Click here
	Pressure sensor circuit	Click here
	Front air mix damper servo motor (for driver side)	Click here
	Front air mix damper servo motor (for driver side rear air flow)	Click here
	Front air mix damper servo motor (for front passenger side)	Click here
	Front air mix damper servo motor (for front passenger side rear air flow)	Click here
	Room temperature sensor circuit	Click here
	Rear room temperature sensor circuit (for driver side)	Click here
	Rear room temperature sensor circuit (for front passenger side)	Click here
	Solar sensor circuit (for driver side)	Click here
	Solar sensor circuit (for front passenger side)	Click here
	Ambient temperature sensor circuit	Click here
	Evaporator temperature sensor circuit	Click here
		Click

	Air conditioning harness assembly	here
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here
Temperature Control: No warm air comes out	Front air mix damper servo motor (for driver side)	Click here
	Front air mix damper servo motor (for driver side rear air flow)	Click here
	Front air mix damper servo motor (for front passenger side)	Click here
	Front air mix damper servo motor (for front passenger side rear air flow)	Click here
	Room temperature sensor circuit	Click here
	Rear room temperature sensor circuit (for driver side)	Click here
	Rear room temperature sensor circuit (for front passenger side)	Click here
	Solar sensor circuit (for driver side)	Click here
	Solar sensor circuit (for front passenger side)	Click here
	Ambient temperature sensor circuit	Click here
	Air conditioning harness assembly	Click here
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here
Temperature Control: Output air is warmer or cooler than the set temperature or response is slow	Volume of refrigerant	Click here
	Refrigerant pressure	Click here
	Front air mix damper servo motor (for driver side)	Click here
	Front air mix damper servo motor (for driver side rear air flow)	Click here
	Front air mix damper servo motor (for front passenger side)	Click here
	Front air mix damper servo motor (for front passenger side rear air flow)	Click here
	REC/FRS damper servo motor	Click here
	Cool air bypass damper servo motor	Click here
	Room temperature sensor circuit	Click here
	Rear room temperature sensor circuit (for driver side)	Click here
	Rear room temperature sensor circuit (for front passenger side)	Click here
	Solar sensor circuit (for driver side)	Click here
	Solar sensor circuit (for front passenger side)	Click here
	Ambient temperature sensor circuit	Click here
	Cooler compressor assembly	Click here

	Heater radiator	-
	Air conditioning harness assembly	Click here
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here
Temperature Control: No temperature control (only max cool or max hot)	Room temperature sensor circuit	Click here
	Rear room temperature sensor circuit (for driver side)	Click here
	Rear room temperature sensor circuit (for front passenger side)	Click here
	Ambient temperature sensor circuit	Click here
	Cool air bypass damper servo motor	Click here
	Front air mix damper servo motor (for driver side)	Click here
	Front air mix damper servo motor (for driver side rear air flow)	Click here
	Front air mix damper servo motor (for front passenger side)	Click here
	Front air mix damper servo motor (for front passenger side rear air flow)	Click here
	Display and Navigation Module Display	Click here
	Air conditioning harness assembly	Click here
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here
PTC heater does not operate*1	PTC heater circuit	Click here
	Air conditioning amplifier assembly	Click here
No airflow mode control	Air outlet damper servo motor (for driver side mode)	Click here
	Air outlet damper servo motor (for rear seat mode)	Click here
	Air outlet damper servo motor (for DEF mode)*2	Click here
	Air outlet damper servo motor (for front passenger side mode)	Click here
	Air conditioning harness assembly	Click here
	Air conditioning amplifier assembly	Click here
Blinking of air conditioning switch indicator	Display and Navigation Module Display	Click here
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here
Diagnostic trouble codes are not stored. Set mode is cleared when engine switch is turned off.	Back-up power source circuit	Click here
	Air conditioning amplifier assembly	Click here

Rear Air Conditioning Unit

Symptom	Suspected Area	See page
All functions of air conditioning system do not operate	Harness or connector	-
	IG power source circuit	Click here
	Back-up power source circuit	Click here
	No. 2 air conditioning control assembly	Click here
	Air conditioning amplifier assembly	Click here
Air Flow Control: No blower operation	Rear blower motor circuit	Click here
	Air conditioning amplifier assembly	Click here
Air Flow Control: Insufficient air flow	Rear blower motor circuit	Click here
	Air conditioning amplifier assembly	Click here
Temperature Control: No cool air comes out	Volume of refrigerant	Click here
	Refrigerant pressure	Click here
	Cooler compressor assembly	Click here
	Pressure sensor circuit	Click here
	Rear air mix damper servo motor (for driver side)	Click here
	Rear air mix damper servo motor (for front passenger side)	Click here
	Rear room temperature sensor circuit (for driver side)	Click here
	Rear room temperature sensor circuit (for front passenger side)	Click here
	Ambient temperature sensor circuit	Click here
	Evaporator temperature sensor circuit	Click here
	Rear evaporator temperature sensor circuit	Click here
	Rear magnetic valve circuit	Click here
	No. 2 air conditioning harness assembly	-
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here
Temperature Control: No warm air comes out	Rear air mix damper servo motor (for driver side)	Click here
	Rear air mix damper servo motor (for front passenger side)	Click here
	Rear room temperature sensor circuit (for driver side)	Click here
	Rear room temperature sensor circuit (for front passenger side)	Click here
	Ambient temperature sensor circuit	Click here
	No. 2 air conditioning harness assembly	-
	Duct sensor circuit (for driver side)	Click here
	Duct sensor circuit (for front passenger side)	Click here
	Air conditioning amplifier assembly	Click here
	CAN communication line (for LHD)	Click here
	CAN communication line (for RHD)	Click here

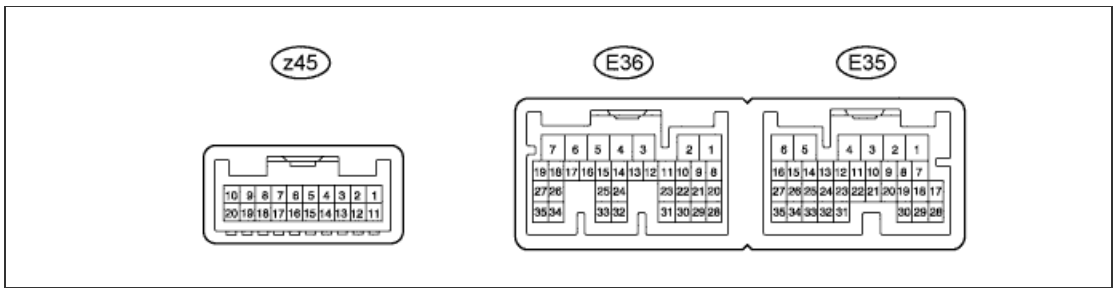
Cooling Box

Symptom	Suspected Area	See page
Cool box malfunction*3	Cooling box magnetic valve circuit	Click here
	Cooling box blower motor circuit	Click here
	Cooling box control switch circuit	Click here
	Cooling box sensor circuit	Click here
	Air conditioning amplifier assembly (for cool box)	-
	No. 1 cooler wiring harness sub-assembly	-
	Noise filter (built into cooling box unit)	-
	Fuse (built into cooling box unit)	-

*1: w/ PTC Heater
*2: for RHD
*3: w/ Cool Box

for Preparation Click here

CHECK AIR CONDITIONING AMPLIFIER ASSEMBLY



a. Disconnect the E35, E36 and z45 air conditioning amplifier connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E36-6 (+B1) - E36-1 (GND)	R - W-B	Battery power source	Always	11 to 14 V
E36-7 (+B2) - E36-1 (GND)	R - W-B	Battery power source	Always	11 to 14 V
z45-3 (B BUS) - z45-1 (BUS G)	-	Power supply for BUS IC (for front)	Always	11 to 14 V
z45-10 (B BUS) - z45-8 (BUS G)	-	Power supply for BUS IC (for front)	Always	11 to 14 V
E36-5 (IG+) - E36-1 (GND)	G - W-B	Ignition power supply	Engine switch on (IG)	11 to 14 V
			Engine switch off	Below 1 V
E36-14 (RBBU) - E36-12 (RBUG)	L - BR	Power supply for BUS IC (for rear)	Always	11 to 14 V
E35-25 (TR3) - Body ground	V - Body ground	Ground	• Engine switch on (IG) • Driver side duct sensor temperature: 25°C (77°F)	5000 +/-150 Ω
E35-26 (TR4) - Body ground	W - Body ground	Ground	• Engine switch on (IG) • Passenger side duct sensor temperature: 25°C (77°F)	5000 +/-150 Ω
E35-16 (SG-2) - Body ground	G - Body ground	Ground for pressure sensor	Always	Below 1 Ω
E35-29 (SG-5) - Body ground	G - Body ground	Ground for compressor signal	Always	Below 1 Ω
E36-2 (E1) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E36-1 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E35-6 (E2) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E35-32 (SG-1) - Body ground	B - Body ground	Ground for room temperature sensor (for front)	Always	Below 1 Ω
z45-6 (SGA) - Body ground	-	Ground for evaporator temperature sensor	Always	Below 1 Ω
z45-1 (BUS G) - Body ground	-	Ground for BUS IC (for front)	Always	Below 1 Ω
z45-8 (BUS G) - Body ground	-	Ground for BUS IC (for front)	Always	Below 1 Ω
E35-34 (SGND) - Body		Ground for duct sensor (for		

ground	BR - Body ground	driver side)	Always	Below 1 Ω
E35-12 (SG-9) - Body ground	L - Body ground	Ground for duct sensor (for passenger side)	Always	Below 1 Ω
E35-2 (SG-6) - Body ground	G - Body ground	Ground for room temperature sensor signal (for rear LH and rear RH)	Always	Below 1 Ω
E36-12 (RBUG) - Body ground	BR - Body ground	Ground for BUS IC (for rear)	Always	Below 1 Ω
E35-1 (SG) - Body ground	P - Body ground	Ground for evaporator temperature sensor signal (for rear)	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the E35, E36 and z45 air conditioning amplifier connectors.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E36-25 (CFN+) - Body ground	R - Body ground	Condenser FAN operation signal	Engine switch on (IG)	11 to 14 V
E36-33 (COOL) - Body ground	W - Body ground	Cool box operation signal	Engine switch on (IG) Cool box switch on	Below 1 V
			Engine switch on (IG) Cool box switch off	11 to 14 V
E36-29 (AC1) - Body ground	L - Body ground	Compressor operation signal	Engine switch on (IG) A/C switch off	11 to 14 V
			Engine switch on (IG) A/C switch on	Below 1 V
E36-22 (ACT) - Body ground	G - Body ground	Compressor operation signal	Engine switch on (IG) ACT signal off	4.5 to 5.5 V
			Engine switch on (IG) ACT signal on	Below 1 V
E35-28 (LOCK) - E35-29 (SG-5)	L - G	Air compressor lock sensor signal	Engine idling A/C switch on Blower switch lo	Pulse generation (see waveform 1)
E35-10 (TAM) - E35-16 (SG-2)	V - G	Ambient temperature sensor signal	Engine switch on (IG) Ambient temperature: 25°C (77°F)	1.4 to 1.6 V
			Engine switch on (IG) Ambient temperature: 50°C (122°F)	0.7 to 0.9 V
E35-27 (S5-1) - E35-16 (SG-2)	LG - G	Power supply for pressure sensor	Engine switch on (IG)	4.5 to 5.5 V
E35-20 (PRE) - E35-16 (SG-2)	R - G	Air conditioning pressure sensor signal	Refrigerant pressure: Normal pressure (less than 3.0732 MPa [31.4 kgf/cm^2, 445 psi] and more than 0.1762 MPa [1.8 kgf/cm^2, 25 psi])	1.0 to 4.8 V
			Refrigerant pressure: Abnormal (less than 0.1762 MPa [1.8 kgf/cm^2, 25 psi])	Below 1 V
			Refrigerant pressure: Abnormal (more than 3.0732 MPa [31.4 kgf/cm^2, 445 psi])	4.8 V or higher
E36-18 (MGC) - E36-1 (GND)	R - W-B	A/C compressor magnetic clutch operation signal	Engine idling Blower switch lo A/C switch on	Below 1 V
E36-3 (BLW) - E36-1 (GND)	R - W-B	Blower motor control signal	Engine switch on (IG) Blower switch lo	Pulse generation (see waveform 2)
E35-30 (SG-4) - E35-23 (DGS)	L - L	Exhaust gas sensor signal (CO, HC)	30 seconds after engine switch on (IG) and sensor exposed to exhaust gas	1.0 to 4.5 V
E35-30 (SG-4) - E35-24 (DGS1)	L - W	Exhaust gas sensor signal (NOx)	30 seconds after engine switch on (IG) and sensor exposed to exhaust gas	1.0 to 4.5 V
		Room temperature sensor	Engine switch on (IG)	

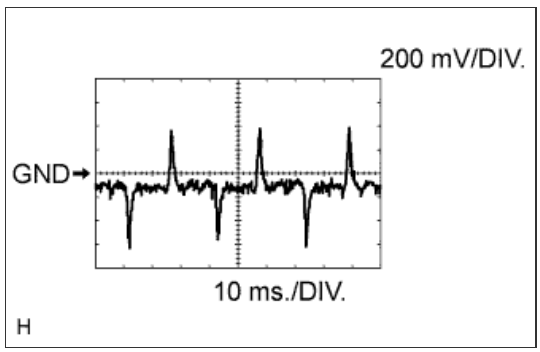
E35-9 (TR) - E35-32 (SG-1)	W - B	signal (for front)	Front side interior temperature: 25°C (77°F)	1.9 to 2.1 V
		Room temperature sensor signal (for front)	Engine switch on (IG) Front side interior temperature: 50°C (122°F)	1.0 to 2.0 V
E35-7 (TSD) - Body ground	LG - Body ground	Driver side solar sensor signal	Engine switch on (IG) Solar sensor subjected to electric light	0.8 to 4.3 V
E35-8 (TSP) - Body ground	GR - Body ground	Passenger side solar sensor signal	Engine switch on (IG) Solar sensor subjected to electric light	0.8 to 4.3 V
z45-7 (TEA) - z45-6 (SGA)	-	Evaporator temperature sensor signal	Engine switch on (IG) Evaporator temperature: 15°C (59°F)	1.0 to 1.2 V
z45-2 (BUS) - z45-1 (BUS G)	-	BUS IC control signal (for front)	Engine switch on (IG)	Pulse generation
z45-9 (BUS) - z45-8 (BUS G)	-	BUS IC control signal (for front)	Engine switch on (IG)	Pulse generation
E35-18 (TR) - E35-2 (SG-6)	R - G	Room temperature sensor signal (for rear LH)	Engine switch on (IG) Vehicle interior temperature: 25°C (77°F)	1.9 to 2.1 V
			Engine switch on (IG) Vehicle interior temperature: 50°C (122°F)	1.0 to 1.2 V
E35-19 (TR7) - E35-2 (SG-6)	R - G	Room temperature sensor signal (for rear RH)	Engine switch on (IG) Vehicle interior temperature: 25°C (77°F)	1.9 to 2.1 V
			Engine switch on (IG) Vehicle interior temperature: 50°C (122°F)	1.0 to 1.2 V
E36-13 (RBUS) - E36-12 (RBUG)	R - BR	BUS IC control signal (for rear)	Engine switch on (IG)	Pulse generation
E35-17 (TEC) - E35-1 (SG)	W - P	Evaporator temperature sensor signal (for rear)	Engine switch on (IG) Evaporator temperature: 15°C (59°F)	1.4 to 1.8 V
E36-31 (ALT) - Body ground	R - Body ground	Generator signal	Engine idling	Pulse generation
E36-27 (PTC1) - Body ground	R - Body ground	PTC1 heater relay operation signal	Engine idling Set temperature: Hi Engine coolant temperature: Below 65°C (149°F) Ambient temperature: Below 10°C (50°F) Blower switch off → lo	Below 1 V → 11 to 14 V
E36-26 (PTC2) - Body ground	R - Body ground	PTC2 heater relay operation signal		
E36-35 (PTC3) - Body ground	R - Body ground	PTC3 heater relay operation signal		
E36-17 (BLWH) - E36-1 (GND)	L - W-B	Blower motor control signal (for rear)	Engine switch on (IG) Blower switch lo	Pulse generation (see waveform 3)
E36-19 (RMGV) - E36-1 (GND)	B - W-B	Rear cooling unit expansion valve signal	Engine switch on (IG)	11 to 14 V

If the result is not as specified, the air conditioning amplifier assembly may have a malfunction.

e. Using an oscilloscope, check waveform 1.

A/C Compressor Lock Sensor Signal

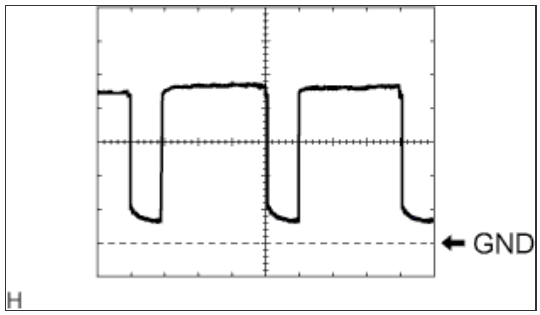
Item	Content
Terminal No. (Symbol)	E35-28 (LOCK) - E35-29 (SG-5)
Tool Setting	200 mV/DIV., 10 ms/DIV.
Condition	Engine is running Blower switch lo A/C switch on



HINT:

When the rear blower level is increased, the duty ratio changes accordingly.

f. Using an oscilloscope, check waveform 2.



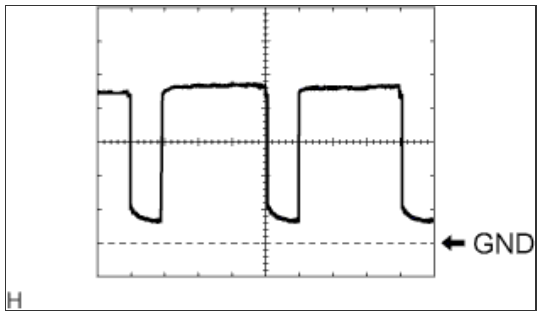
Blower Motor Control Signal

Item	Content
Terminal No. (Symbol)	E36-3 (BLW) - E36-1 (GND)
Tool Setting	1 V/DIV., 500 µs/DIV.
Condition	Engine switch on (IG) Blower switch lo

HINT:

When the blower level is increased, the duty ratio changes accordingly.

g. Using an oscilloscope, check waveform 3.



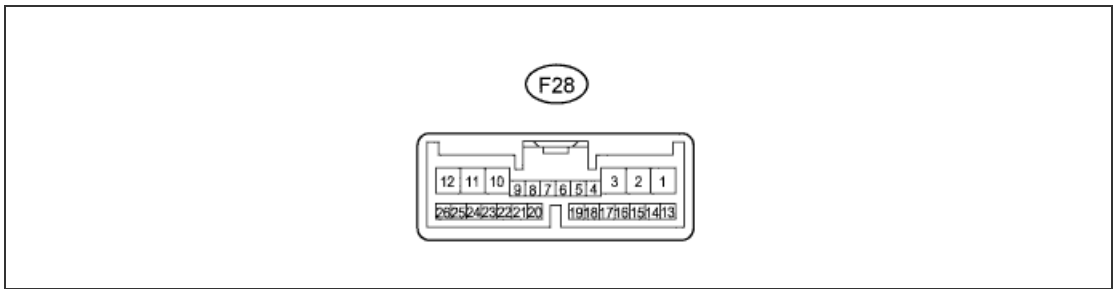
Rear Blower Motor Control Signal

Item	Content
Terminal No. (Symbol)	E36-17 (BLWH) - E36-1 (GND)
Tool Setting	1 V/DIV., 500 µs/DIV.
Condition	Engine switch on (IG) Blower switch lo

HINT:

When the rear blower level is increased, the duty ratio changes accordingly.

CHECK MULTI-DISPLAY



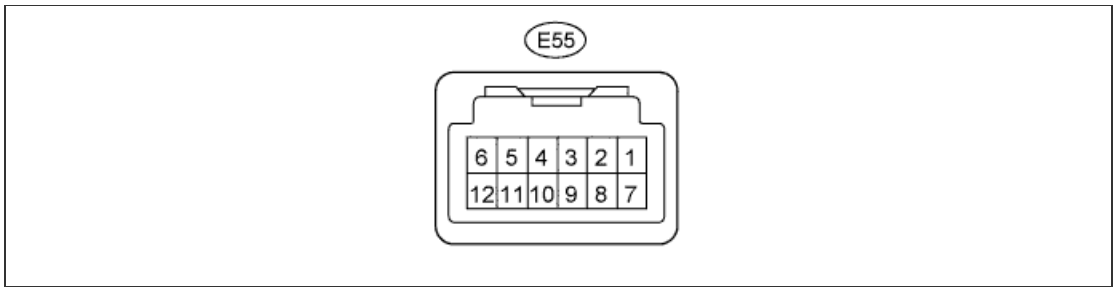
a. Disconnect the F28 display connector.

b. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
F28-1 (+B1) - F28-10 (GND1)	R - W-B	Battery	Always	11 to 14 V
F28-2 (ACC) - F28-10 (GND1)	GR - W-B	Accessory (ON)	Engine switch off	Below 1 V
F28-2 (ACC) - F28-10 (GND1)	GR - W-B	Accessory (ON)	Engine switch on (ACC)	11 to 14 V
F28-3 (IG) - F28-10 (GND1)	G - W-B	Ignition (ON)	Engine switch off	Below 1 V
F28-3 (IG) - F28-10 (GND1)	G - W-B	Ignition (ON)	Engine switch on (IG)	11 to 14 V
F28-10 (GND1) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

CHECK NO. 2 AIR CONDITIONING CONTROL ASSEMBLY



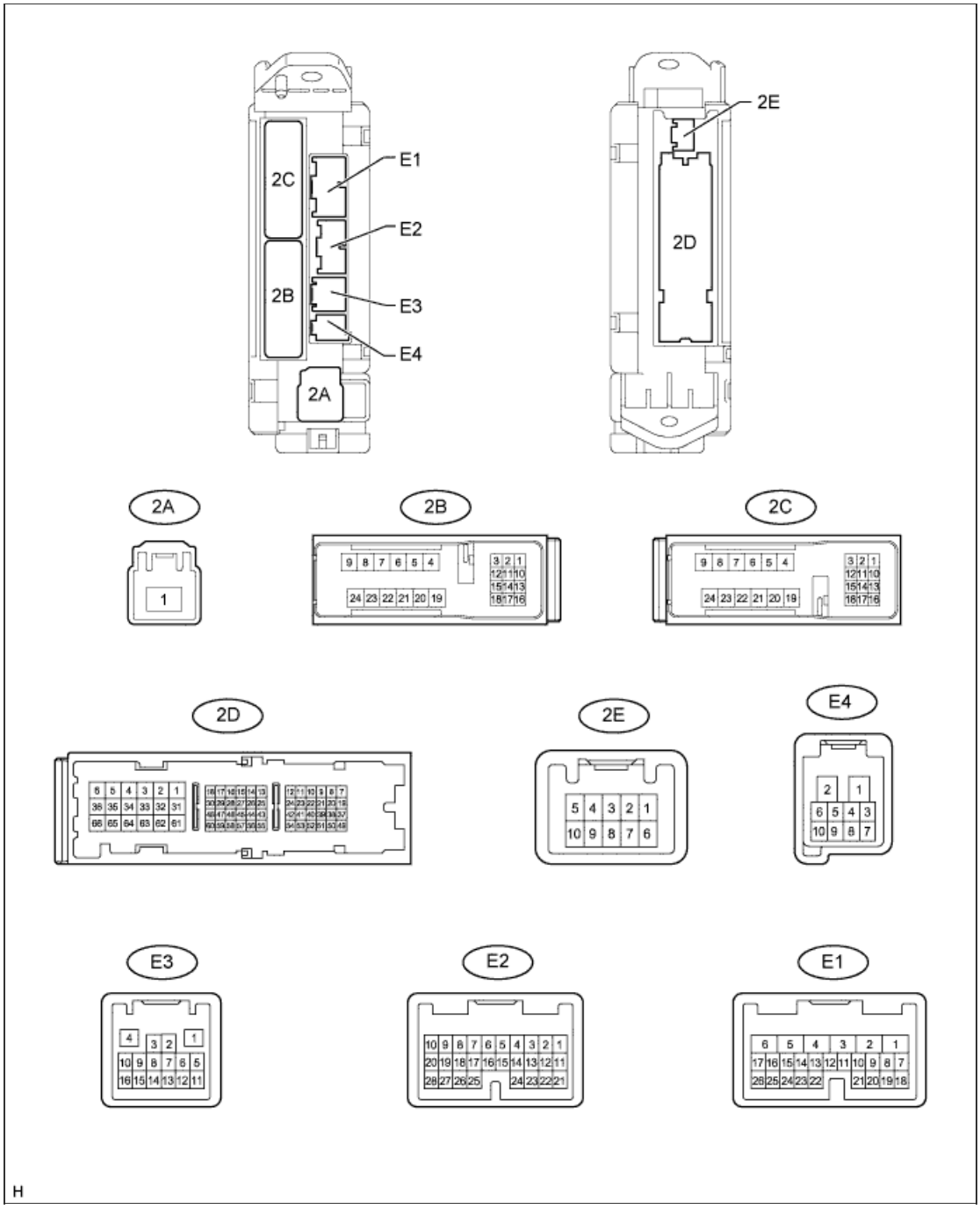
a. Disconnect the E55 switch connector.

b. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E55-6 (IG) - E55-1 (E)	G - W-B	IG power supply	Always	11 to 14 V
E55-1 (E) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

CHECK MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)



a. Disconnect the 2A, 2D, E1, E2 and E3 ECU connectors.

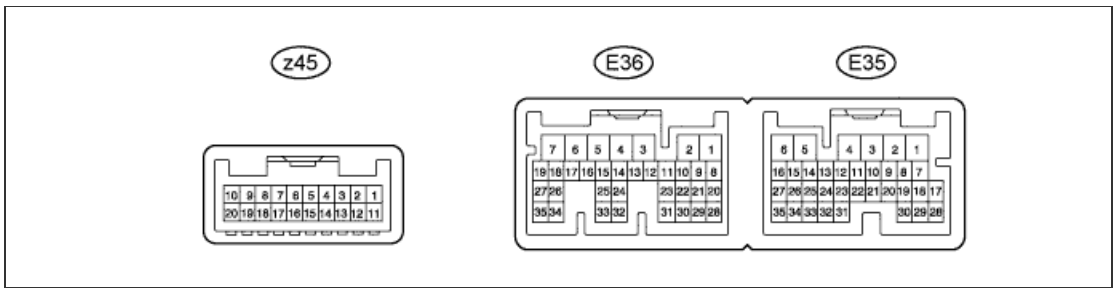
b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
2D-62 (GND2) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E3-1 (GND3) - Body ground	BR - Body ground	Ground	Always	Below 1 Ω
2A-1 (ACC) - 2D-62 (GND2)	B - W-B	ACC power supply	Engine switch off	Below 1 V
			Engine switch on (ACC)	11 to 14 V
E1-6 (AM1) - 2D-62 (GND2)	W - W-B	Battery power supply	Always	11 to 14 V
E2-1 (AM2) - 2D-62 (GND2)	W - W-B	Battery power supply	Always	11 to 14 V
2A-1 (IG) - 2D-62 (GND2)	B - W-B	IG power supply	Engine switch off	Below 1 V
			Engine switch on	11 to 14 V

If the result is not as specified, there may be a malfunction in the wire harness.

for Preparation Click here

CHECK AIR CONDITIONING AMPLIFIER ASSEMBLY



a. Disconnect the E35, E36 and z45 air conditioning amplifier connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E36-6 (+B1) - E36-1 (GND)	R - W-B	Battery power source	Always	11 to 14 V
E36-7 (+B2) - E36-1 (GND)	R - W-B	Battery power source	Always	11 to 14 V
z45-3 (B BUS) - z45-1 (BUS G)	-	Power supply for BUS IC (for front)	Always	11 to 14 V
z45-10 (B BUS) - z45-8 (BUS G)	-	Power supply for BUS IC (for front)	Always	11 to 14 V
E36-5 (IG+) - E36-1 (GND)	G - W-B	Ignition power supply	Engine switch on (IG)	11 to 14 V
			Engine switch off	Below 1 V
E36-14 (RBBU) - E36-12 (RBUG)	L - BR	Power supply for BUS IC (for rear)	Always	11 to 14 V
E35-25 (TR3) - Body ground	V - Body ground	Ground	• Engine switch on (IG) • Driver side duct sensor temperature: 25°C (77°F)	5000 +/-150 Ω
E35-26 (TR4) - Body ground	W - Body ground	Ground	• Engine switch on (IG) • Passenger side duct sensor temperature: 25°C (77°F)	5000 +/-150 Ω
E35-16 (SG-2) - Body ground	G - Body ground	Ground for pressure sensor	Always	Below 1 Ω
E35-29 (SG-5) - Body ground	G - Body ground	Ground for compressor signal	Always	Below 1 Ω
E36-2 (E1) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E36-1 (GND) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E35-6 (E2) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E35-32 (SG-1) - Body ground	B - Body ground	Ground for room temperature sensor (for front)	Always	Below 1 Ω
z45-6 (SGA) - Body ground	-	Ground for evaporator temperature sensor	Always	Below 1 Ω
z45-1 (BUS G) - Body ground	-	Ground for BUS IC (for front)	Always	Below 1 Ω
z45-8 (BUS G) - Body ground	-	Ground for BUS IC (for front)	Always	Below 1 Ω
E35-34 (SGND) - Body		Ground for duct sensor (for		

ground	BR - Body ground	driver side)	Always	Below 1 Ω
E35-12 (SG-9) - Body ground	L - Body ground	Ground for duct sensor (for passenger side)	Always	Below 1 Ω
E35-2 (SG-6) - Body ground	G - Body ground	Ground for room temperature sensor signal (for rear LH and rear RH)	Always	Below 1 Ω
E36-12 (RBUG) - Body ground	BR - Body ground	Ground for BUS IC (for rear)	Always	Below 1 Ω
E35-1 (SG) - Body ground	P - Body ground	Ground for evaporator temperature sensor signal (for rear)	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

c. Reconnect the E35, E36 and z45 air conditioning amplifier connectors.

d. Measure the voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E36-25 (CFN+) - Body ground	R - Body ground	Condenser FAN operation signal	Engine switch on (IG)	11 to 14 V
E36-33 (COOL) - Body ground	W - Body ground	Cool box operation signal	Engine switch on (IG) Cool box switch on	Below 1 V
			Engine switch on (IG) Cool box switch off	11 to 14 V
E36-29 (AC1) - Body ground	L - Body ground	Compressor operation signal	Engine switch on (IG) A/C switch off	11 to 14 V
			Engine switch on (IG) A/C switch on	Below 1 V
E36-22 (ACT) - Body ground	G - Body ground	Compressor operation signal	Engine switch on (IG) ACT signal off	4.5 to 5.5 V
			Engine switch on (IG) ACT signal on	Below 1 V
E35-28 (LOCK) - E35-29 (SG-5)	L - G	Air compressor lock sensor signal	Engine idling A/C switch on Blower switch lo	Pulse generation (see waveform 1)
E35-10 (TAM) - E35-16 (SG-2)	V - G	Ambient temperature sensor signal	Engine switch on (IG) Ambient temperature: 25°C (77°F)	1.4 to 1.6 V
			Engine switch on (IG) Ambient temperature: 50°C (122°F)	0.7 to 0.9 V
E35-27 (S5-1) - E35-16 (SG-2)	LG - G	Power supply for pressure sensor	Engine switch on (IG)	4.5 to 5.5 V
E35-20 (PRE) - E35-16 (SG-2)	R - G	Air conditioning pressure sensor signal	Refrigerant pressure: Normal pressure (less than 3.0732 MPa [31.4 kgf/cm^2, 445 psi] and more than 0.1762 MPa [1.8 kgf/cm^2, 25 psi])	1.0 to 4.8 V
			Refrigerant pressure: Abnormal (less than 0.1762 MPa [1.8 kgf/cm^2, 25 psi])	Below 1 V
			Refrigerant pressure: Abnormal (more than 3.0732 MPa [31.4 kgf/cm^2, 445 psi])	4.8 V or higher
E36-18 (MGC) - E36-1 (GND)	R - W-B	A/C compressor magnetic clutch operation signal	Engine idling Blower switch lo A/C switch on	Below 1 V
E36-3 (BLW) - E36-1 (GND)	R - W-B	Blower motor control signal	Engine switch on (IG) Blower switch lo	Pulse generation (see waveform 2)
E35-30 (SG-4) - E35-23 (DGS)	L - L	Exhaust gas sensor signal (CO, HC)	30 seconds after engine switch on (IG) and sensor exposed to exhaust gas	1.0 to 4.5 V
E35-30 (SG-4) - E35-24 (DGS1)	L - W	Exhaust gas sensor signal (NOx)	30 seconds after engine switch on (IG) and sensor exposed to exhaust gas	1.0 to 4.5 V
		Room temperature sensor	Engine switch on (IG)	

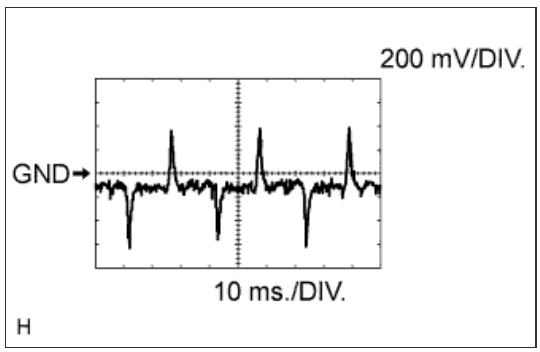
E35-9 (TR) - E35-32 (SG-1)	W - B	signal (for front)	Front side interior temperature: 25°C (77°F)	1.9 to 2.1 V
		Room temperature sensor signal (for front)	Engine switch on (IG) Front side interior temperature: 50°C (122°F)	1.0 to 2.0 V
E35-7 (TSD) - Body ground	LG - Body ground	Driver side solar sensor signal	Engine switch on (IG) Solar sensor subjected to electric light	0.8 to 4.3 V
E35-8 (TSP) - Body ground	GR - Body ground	Passenger side solar sensor signal	Engine switch on (IG) Solar sensor subjected to electric light	0.8 to 4.3 V
z45-7 (TEA) - z45-6 (SGA)	-	Evaporator temperature sensor signal	Engine switch on (IG) Evaporator temperature: 15°C (59°F)	1.0 to 1.2 V
z45-2 (BUS) - z45-1 (BUS G)	-	BUS IC control signal (for front)	Engine switch on (IG)	Pulse generation
z45-9 (BUS) - z45-8 (BUS G)	-	BUS IC control signal (for front)	Engine switch on (IG)	Pulse generation
E35-18 (TR) - E35-2 (SG-6)	R - G	Room temperature sensor signal (for rear LH)	Engine switch on (IG) Vehicle interior temperature: 25°C (77°F)	1.9 to 2.1 V
			Engine switch on (IG) Vehicle interior temperature: 50°C (122°F)	1.0 to 1.2 V
E35-19 (TR7) - E35-2 (SG-6)	R - G	Room temperature sensor signal (for rear RH)	Engine switch on (IG) Vehicle interior temperature: 25°C (77°F)	1.9 to 2.1 V
			Engine switch on (IG) Vehicle interior temperature: 50°C (122°F)	1.0 to 1.2 V
E36-13 (RBUS) - E36-12 (RBUG)	R - BR	BUS IC control signal (for rear)	Engine switch on (IG)	Pulse generation
E35-17 (TEC) - E35-1 (SG)	W - P	Evaporator temperature sensor signal (for rear)	Engine switch on (IG) Evaporator temperature: 15°C (59°F)	1.4 to 1.8 V
E36-31 (ALT) - Body ground	R - Body ground	Generator signal	Engine idling	Pulse generation
E36-27 (PTC1) - Body ground	R - Body ground	PTC1 heater relay operation signal	Engine idling Set temperature: Hi Engine coolant temperature: Below 65°C (149°F) Ambient temperature: Below 10°C (50°F) Blower switch off → lo	Below 1 V → 11 to 14 V
E36-26 (PTC2) - Body ground	R - Body ground	PTC2 heater relay operation signal		
E36-35 (PTC3) - Body ground	R - Body ground	PTC3 heater relay operation signal		
E36-17 (BLWH) - E36-1 (GND)	L - W-B	Blower motor control signal (for rear)	Engine switch on (IG) Blower switch lo	Pulse generation (see waveform 3)
E36-19 (RMGV) - E36-1 (GND)	B - W-B	Rear cooling unit expansion valve signal	Engine switch on (IG)	11 to 14 V

If the result is not as specified, the air conditioning amplifier assembly may have a malfunction.

e. Using an oscilloscope, check waveform 1.

A/C Compressor Lock Sensor Signal

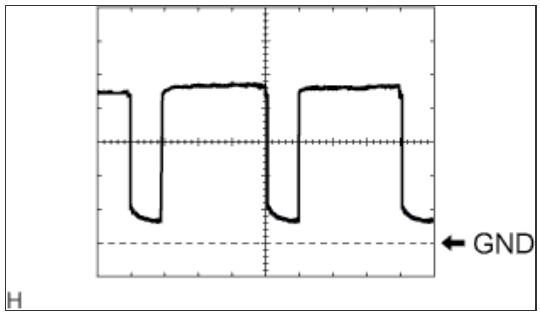
Item	Content
Terminal No. (Symbol)	E35-28 (LOCK) - E35-29 (SG-5)
Tool Setting	200 mV/DIV., 10 ms/DIV.
Condition	Engine is running Blower switch lo A/C switch on



HINT:

When the rear blower level is increased, the duty ratio changes accordingly.

f. Using an oscilloscope, check waveform 2.



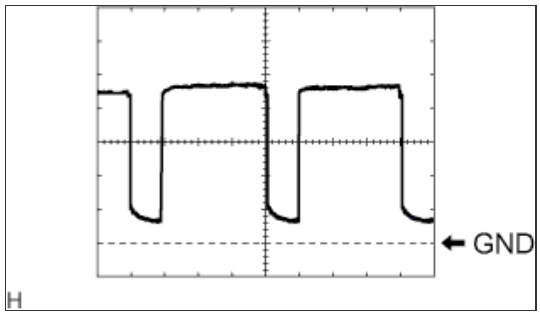
Blower Motor Control Signal

Item	Content
Terminal No. (Symbol)	E36-3 (BLW) - E36-1 (GND)
Tool Setting	1 V/DIV., 500 µs/DIV.
Condition	Engine switch on (IG) Blower switch lo

HINT:

When the blower level is increased, the duty ratio changes accordingly.

g. Using an oscilloscope, check waveform 3.



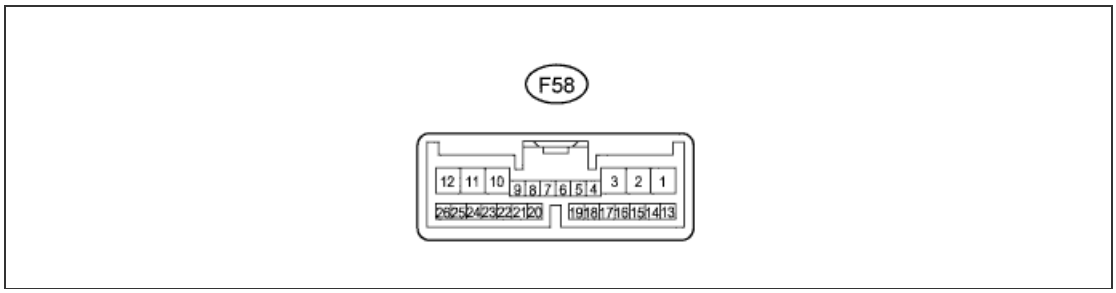
Rear Blower Motor Control Signal

Item	Content
Terminal No. (Symbol)	E36-17 (BLWH) - E36-1 (GND)
Tool Setting	1 V/DIV., 500 µs/DIV.
Condition	Engine switch on (IG) Blower switch lo

HINT:

When the rear blower level is increased, the duty ratio changes accordingly.

CHECK DISPLAY AND NAVIGATION MODULE DISPLAY



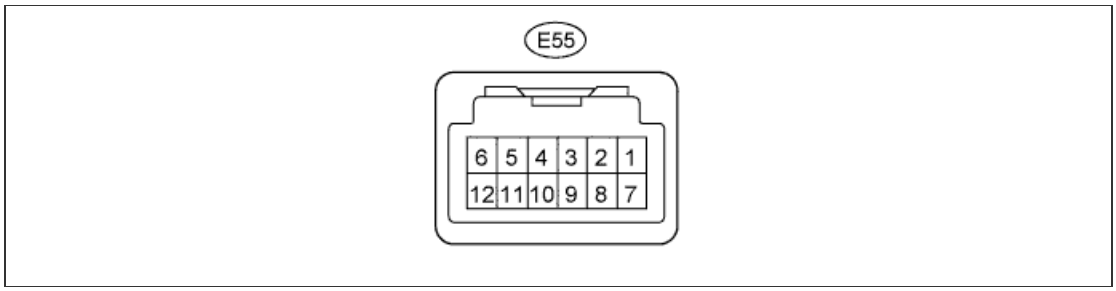
a. Disconnect the F58 display connector.

b. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
F58-1 (+B1) - F58-10 (GND1)	R - W-B	Battery	Always	11 to 14 V
F58-2 (ACC) - F58-10 (GND1)	GR - W-B	Accessory (ON)	Engine switch off	Below 1 V
F58-2 (ACC) - F58-10 (GND1)	GR - W-B	Accessory (ON)	Engine switch on (ACC)	11 to 14 V
F58-3 (IG) - F58-10 (GND1)	G - W-B	Ignition (ON)	Engine switch off	Below 1 V
F58-3 (IG) - F58-10 (GND1)	G - W-B	Ignition (ON)	Engine switch on (IG)	11 to 14 V
F58-10 (GND1) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

CHECK NO. 2 AIR CONDITIONING CONTROL ASSEMBLY



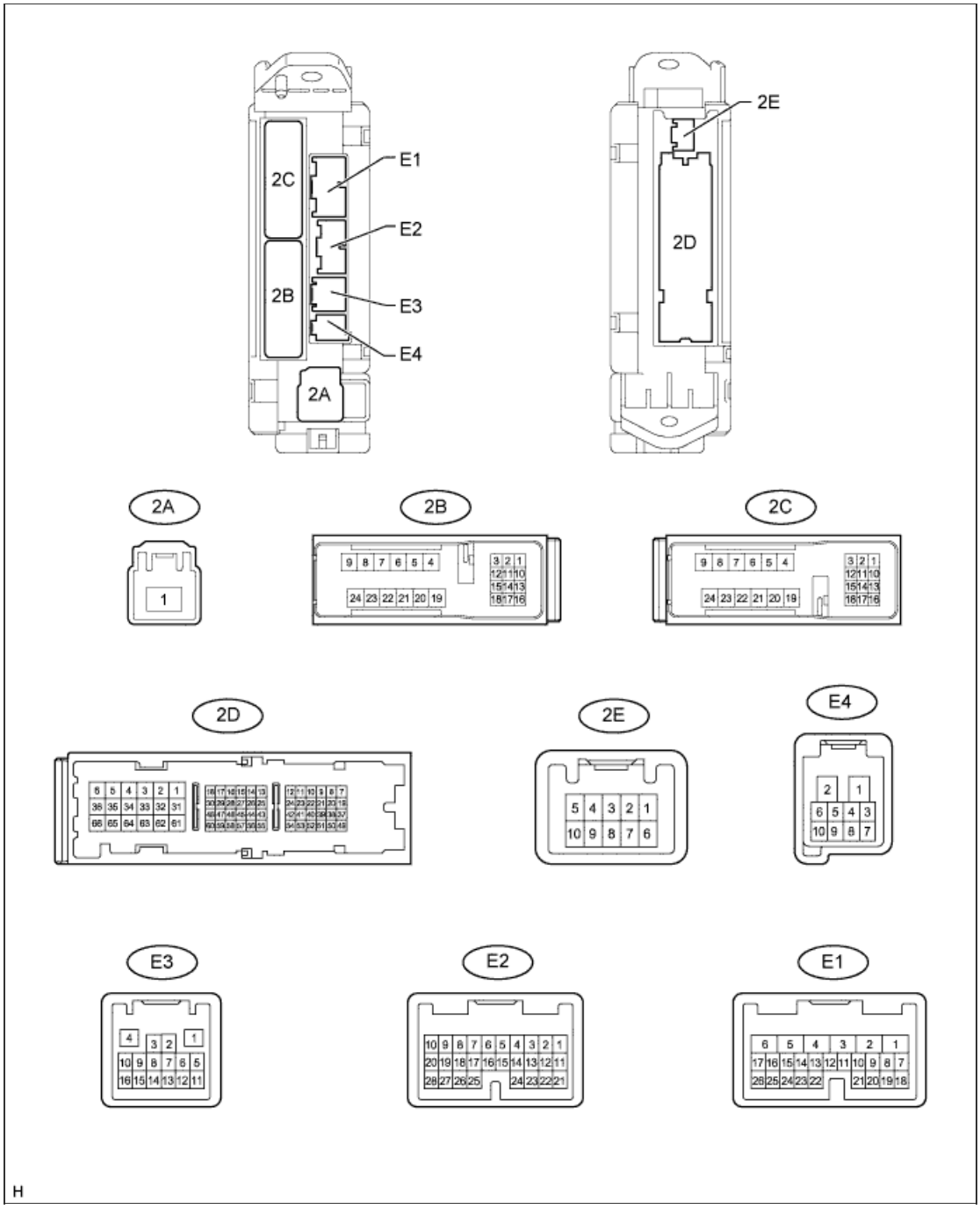
a. Disconnect the E55 switch connector.

b. Measure the resistance and voltage according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
E55-6 (IG) - E55-1 (E)	G - W-B	IG power supply	Always	11 to 14 V
E55-1 (E) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

CHECK MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)



a. Disconnect the 2A, 2D, E1, E2 and E3 ECU connectors.

b. Measure the voltage and resistance according to the value(s) in the table below.

Terminal No. (Symbol)	Wiring Color	Terminal Description	Condition	Specified Condition
2D-62 (GND2) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
E3-1 (GND3) - Body ground	BR - Body ground	Ground	Always	Below 1 Ω
2A-1 (ACC) - 2D-62 (GND2)	B - W-B	ACC power supply	Engine switch off	Below 1 V
			Engine switch on (ACC)	11 to 14 V
E1-6 (AM1) - 2D-62 (GND2)	W - W-B	Battery power supply	Always	11 to 14 V
E2-1 (AM2) - 2D-62 (GND2)	W - W-B	Battery power supply	Always	11 to 14 V
2A-1 (IG) - 2D-62 (GND2)	B - W-B	IG power supply	Engine switch off	Below 1 V
			Engine switch on	11 to 14 V

If the result is not as specified, there may be a malfunction in the wire harness.

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CHECK DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Trouble Codes.

e. Read the DTCs.

CLEAR DTC

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / (desired system) / Trouble Codes.

e. Clear the DTCs.

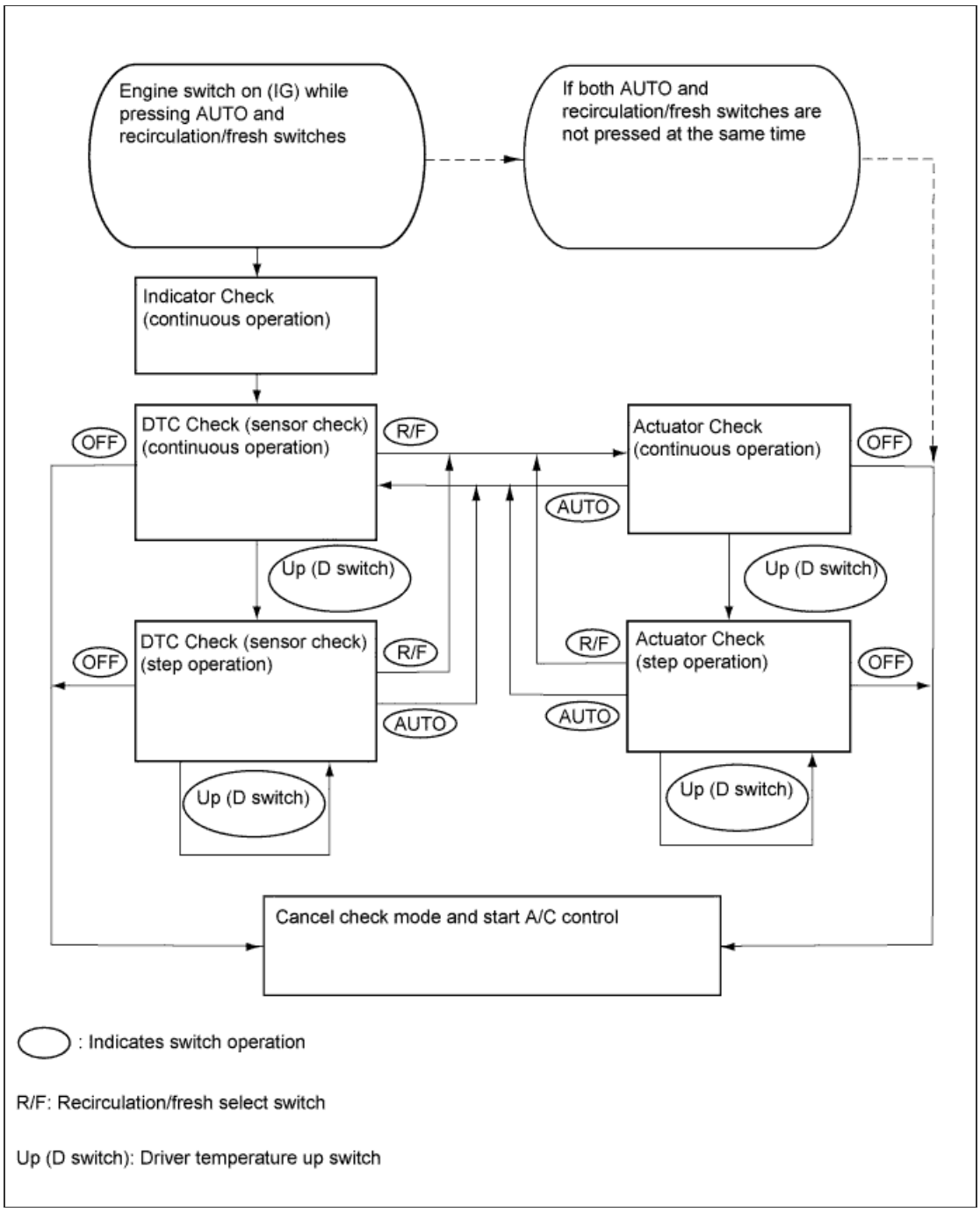
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LIST OF OPERATION METHODS

By operating each of the air conditioning control switches as shown in the diagram below, it is possible to enter the diagnostic check mode.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

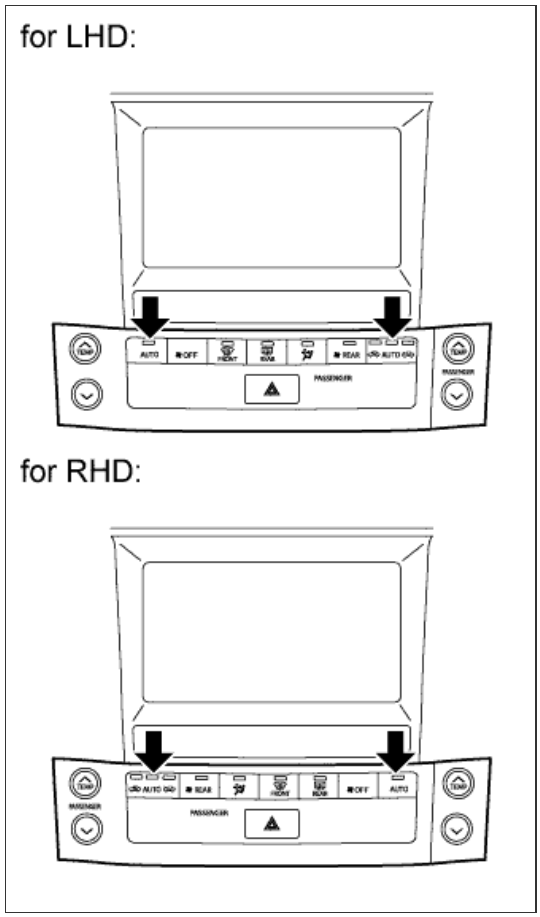


INDICATOR CHECK

a. Press and hold the air conditioning system control AUTO switch and recirculation/fresh switch simultaneously, and turn the engine switch on (IG). Continue holding the 2 switches until the panel diagnosis mode begins.

HINT:

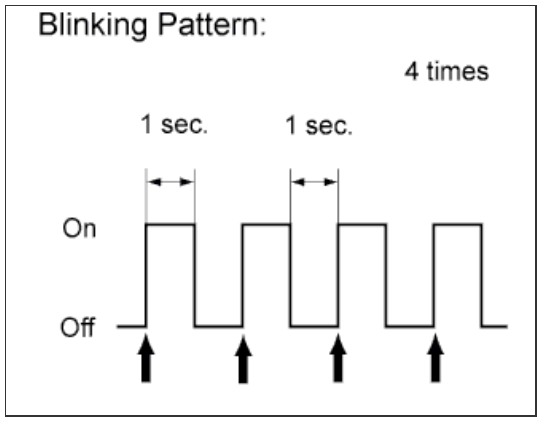
When the above operation is performed, each mode switch indicator light illuminates. For vehicles equipped with a multi-display, each mode switch indicator light illuminates and an operation confirmation buzzer sounds.



b. Check that all indicators turn on and off 4 times in succession at 1 second intervals.

HINT:

- **After the indicator check is completed, the system enters the DTC mode automatically.**
- **Press the OFF switch to cancel the indicator check.**



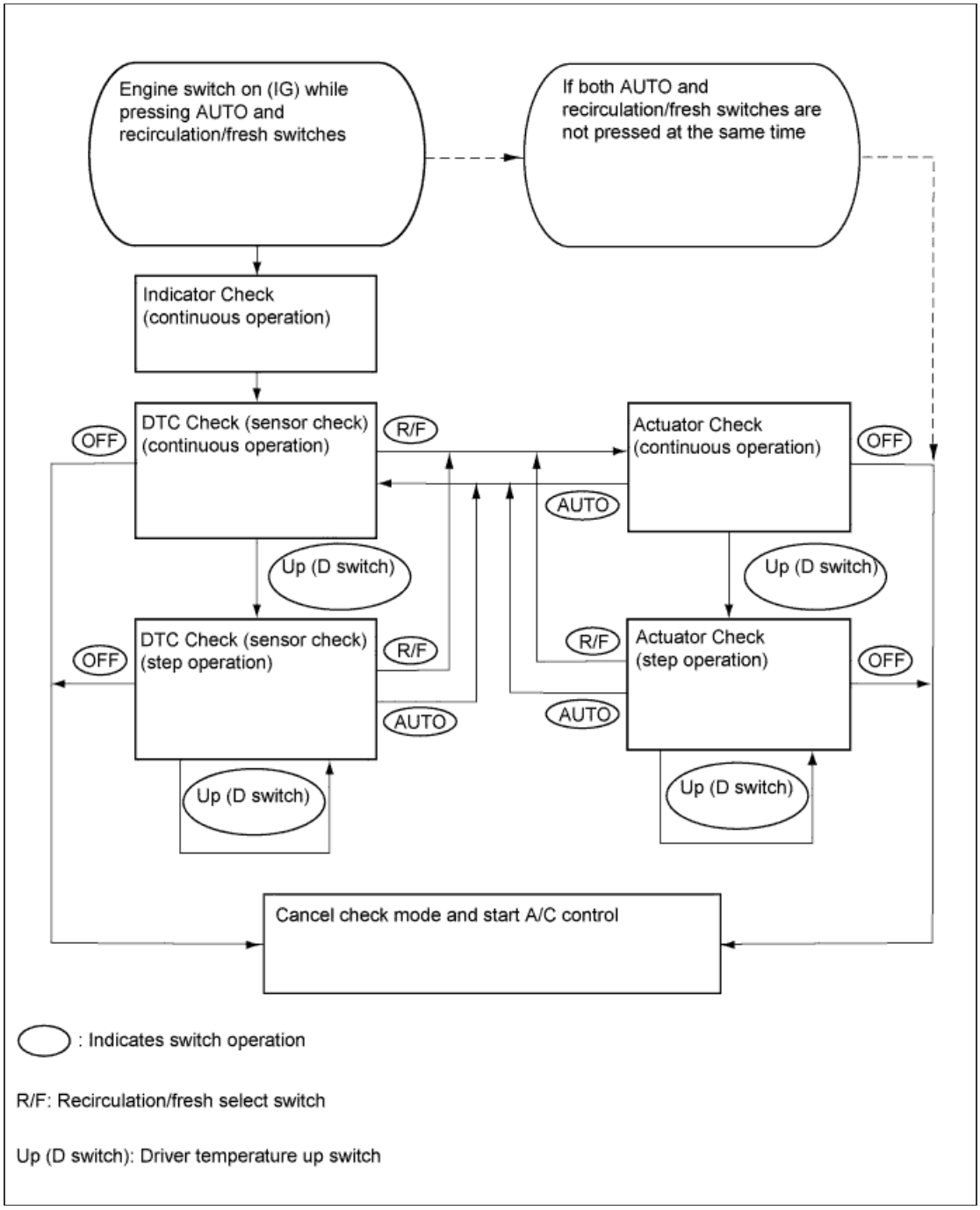
for Preparation Click here

LIST OF OPERATION METHODS

By operating each of the air conditioning control switches as shown in the diagram below, it is possible to enter the diagnostic check mode.

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**



INDICATOR CHECK

a. Turn the engine switch off.

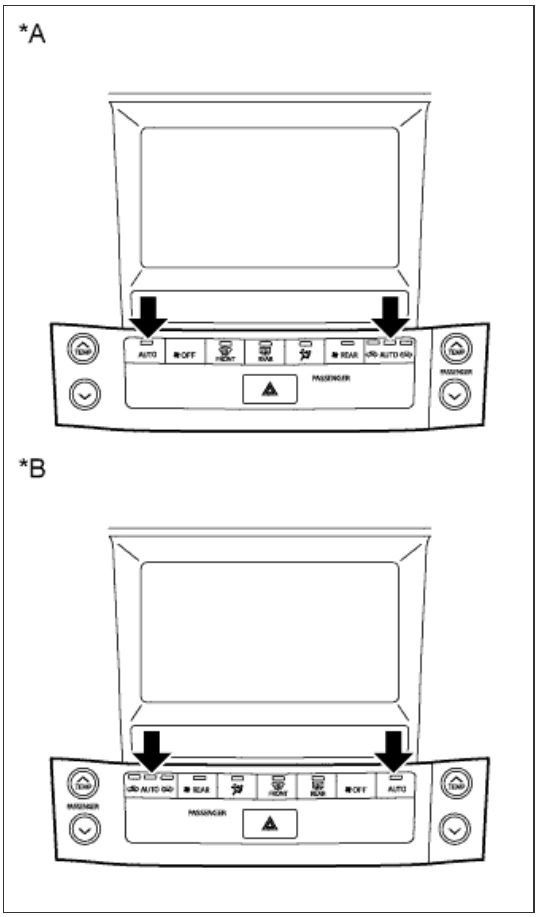
b. Turn the engine switch on (ACC) and wait at least 5 seconds.

c. Turn the engine switch on (IG) while pressing the A/ C control panel "AUTO"

switch and "Recirculation/ Fresh" switch simultaneously.
Hold both switches until the indicator check screen appears.

Text in Illustration

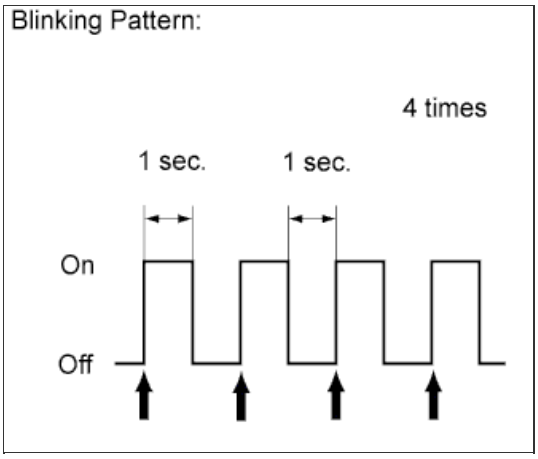
*A	for LHD
*B	for RHD



d. Check that all indicators turn on and off 4 times in succession at 1 second intervals.

HINT:

- **After the indicator check is completed, the system enters the DTC mode automatically.**
- **Press the OFF switch to cancel the indicator check.**



for Preparation Click here

DATA LIST

HINT:

Using the intelligent tester to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

NOTICE:

In the table below, the values listed under "Normal Condition" are reference values. Do not depend solely on these reference values when deciding whether a part is faulty or not.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Air Conditioner / Data List.

e. Enter the following menus: Powertrain / Engine and ECT / Data List.

f. According to the display on the intelligent tester, read the Data List.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Room Temperature Sensor	Front room temperature sensor / Min.: -6.5°C (20.3°F) Max.: 57.25°C (135.05°F)	Actual room temperature for front seat displayed	Open in the circuit: -6.5°C (20.3°F). Short in the circuit: 57.25°C (135.05°F).
Ambient Temp Sensor	Ambient temperature sensor / Min.: -23.3°C (-9.94°F) Max.: 65.95°C (150.71°F)	Actual ambient temperature displayed	Open in the circuit: -23.3°C (-9.94°F). Short in the circuit: 65.95°C (150.71°F).
Adjusted Ambient Temp	Adjusted ambient temperature / Min.: -30.8°C (-23.44°F) Max.: 50.8°C (123.44°F)	Adjusted ambient temperature displayed	-
Evaporator Fin Thermistor	No. 1 cooler thermistor / Min.: -29.7°C (-21.46°F) Max.: 59.55°C (139.19°F)	Actual evaporator temperature displayed	Open in the circuit: -29.7°C (-21.46°F). Short in the circuit: 59.55°C (139.19°F).
Evaporator Target Temp	Target evaporator temperature / Min.: 1.5°C (34.7°F) Max.: 4.0°C (39.2°F)	Target evaporator temperature displayed	-
Solar Sensor (D Side)	Driver side solar sensor / Min.: 0, Max.: 255	Driver side solar sensor voltage increases as brightness increases	Open in the circuit: 0. Short in the circuit: 255.
Solar Sensor (P Side)	Passenger side solar sensor / Min.: 0, Max.: 255	Passenger side solar sensor voltage increases as brightness increases	Open in the circuit: 0. Short in the circuit: 255.
Engine Coolant Temp	Engine coolant temperature / Min.: 1.3°C (34.34°F) Max.: 90.55°C (194.99°F)	Actual engine coolant temperature displayed while engine warmed up	-
Set Temperature (D Side)	Driver side set temperature / for Europe MAX COLD: 15.5°C (59.9°F) MAX HOT: 30.5°C (86.9°F) except Europe MAX COLD: 17.5°C (63.5°F) MAX HOT: 32.5°C (90.5°F)	Driver side actual set temperature displayed	-
	Passenger side set temperature / for Europe MAX COLD: 15.5°C (59.9°F)		

Set Temperature (P Side)	MAX HOT: 30.5°C (86.9°F) except Europe MAX COLD: 17.5°C (63.5°F) MAX HOT: 32.5°C (90.5°F)	Passenger side actual set temperature displayed	-
A/M Servo Targ Pulse (Rear D)	Rear air mix damper servo motor target pulse / Min.: 9, Max.: 54 (for LHD) Min.: 8, Max.: 53 (for RHD)	for LHD • Max cool: 9 (pulse) • Max hot: 54 (pulse) for RHD • Max cool: 53 (pulse) • Max hot: 8 (pulse)	-
A/M Servo Targ Pulse (Rear P)	Rear air mix damper servo motor (for front passenger side) target pulse / Min.: 8, Max.: 53 (for LHD) Min.: 9, Max.: 54 (for RHD)	for LHD • Max cool: 53 (pulse) • Max hot: 8 (pulse) for RHD • Max cool: 9 (pulse) • Max hot: 54 (pulse)	-
Hand Free Telephone	Handsfree telephone / OFF or ON	ON: Handsfree telephone used OFF: Handsfree telephone not used	-
Blower Motor Speed Level	Blower motor speed level / Min.: 0 Max.: 31	Increases in range between 0 and 31 as blower motor speed increases	-
Regulator Pressure Sensor	Refrigerant pressure sensor / Min.: -0.4566 MPa Max.: 3.2943 MPa	Actual refrigerant pressure displayed	-
Emission Gas Nox Sensor	Smog ventilation sensor / Min.: 0, Max.: 255	Increases as gas amount increases	-
Emission Gas Sensor	Smog ventilation sensor / Min.: 0, Max.: 255	Decreases as gas amount increases	-
Room Temp Sensor (Rear)	Rear room temperature sensor for LH*1 or RH*2 / Min.: -6.5°C (20.3°F) Max.: 57.25°C (135.05°F)	Actual rear room temperature for LH*1 or RH*2 displayed	Open in the circuit: -6.5°C (20.3°F). Short in the circuit: 57.25°C (135.05°F).
Ambient Temp Sens (Rear)	Rear evaporator temperature sensor / Min.: -29.7°C (-21.46°F) Max.: 59.55°C (139.19°F)	Actual rear evaporator temperature displayed	Open in the circuit: -29.7°C (-21.46°F). Short in the circuit: 59.55°C (139.19°F).
Blower Motor Level (Rear)	Rear blower motor speed level / Min.: 0, Max.: 31	Increases in range between 0 to 31 as rear blower motor speed increases	-
Air Outlet Servo Pulse (R)	Rear air outlet damper servo motor target pulse / Min.: 7, Max.: 83	FOOT: 7 (pulse) B/L: 42 (pulse) FACE: 83 (pulse)	-
Air Mix Servo Targ Pulse(D)	Air mix damper servo motor (for driver side) target pulse / Min.: 8, Max.: 90 (for LHD) Min.: 8, Max.: 90 (for RHD)	for LHD • Max cool: 90 (pulse) • Max hot: 8 (pulse) for RHD • Max cool: 8 (pulse) • Max hot: 90 (pulse)	-
Air Mix Servo Targ Pulse(P)	Air mix damper servo motor (for front passenger side) target pulse / Min.: 8, Max.: 90 (for LHD) Min.: 8, Max.: 90 (for RHD)	for LHD • Max cool: 8 (pulse) • Max hot: 90 (pulse) for RHD • Max cool: 90 (pulse) • Max hot: 8 (pulse)	-
Air Inlet Damper Targ Pulse	REC/FRS damper servo motor target pulse / Min.: 9, Max.: 37	for LHD Recirculation: 37 (pulse) Fresh: 9 (pulse) for RHD Recirculation: 9 (pulse) Fresh: 37 (pulse)	-
Cool Air Bypass Pulse	Cool air bypass damper servo motor target pulse / Min.: 6, Max.: 57	Shut: 6 (pulse) Open: 57 (pulse)	-
Electric Heater Count	Number of electric heaters operating / Min.: 0, Max.: 3	-	-
Shift Set Temperature	Set temperature shift / +2 C, +1 C, NORMAL, -1 C or -2 C	Customized value displayed	-
Air Inlet Mode	Air inlet mode / AUTO or MANUAL	Customized value displayed	-
Compressor Mode	Compressor mode / AUTO or MANUAL	Customized value displayed	-

Compressor/DEF Mode	Compressor/DEF mode / LINK or NORMAL	Customized value displayed	-
Evaporator Control	Evaporator control / AUTO or MANUAL	Customized value displayed	-
Button Press Buzzer	Button press buzzer / ON or OFF	Customized value displayed	-
Emission Gas Sensor Shift	Emission gas sensor shift / MU MORE, MORE, LI MORE, NORMAL, LI LESS, LESS or MU LESS	Customized value displayed	-
Foot/DEF Auto Mode	Foot/Def auto mode / ON or OFF	Customized value displayed	-
Foot/DEF Auto Blow Up	Foot/Def auto blower level function / ON or OFF	Customized value displayed	-
Ambient Temperature Shift	Ambient temperature shift / +3 C, +2 C, +1 C, NORMAL, -1 C, -2 C or -3 C	Customized value displayed	-
A/O Damper FACE Pos(D)	Air outlet damper servo motor (for driver side mode) target pulse / Min.: 6, Max.: 117	FACE1: 117 (pulse) FACE2: 109 (pulse) B/L1: 93 (pulse) B/L2: 81 (pulse) FOOT-F: 41 (pulse) FOOT-R: 41 (pulse) FOOT-D: 52 (pulse) F/D: 18 (pulse) DEF: 6 (pulse)	-
A/O Damper FACE Pos(P)	Air outlet damper servo motor (for front passenger side mode) target pulse / Min.: 6, Max.: 117 (for LHD) Min.: 9, Max.: 120 (for RHD)	for LHD • FACE1: 117 (pulse) • FACE2: 109 (pulse) • B/L1: 93 (pulse) • B/L2: 81 (pulse) • FOOT-F: 41 (pulse) • FOOT-R: 41 (pulse) • FOOT-D: 52 (pulse) • F/D: 18 (pulse) • DEF: 6 (pulse) for RHD • FACE1: 9 (pulse) • FACE2: 17 (pulse) • B/L1: 33 (pulse) • B/L2: 45 (pulse) • FOOT-F: 85 (pulse) • FOOT-R: 85 (pulse) • FOOT-D: 74 (pulse) • F/D: 108 (pulse) • DEF: 120 (pulse)	-
Air Mix Servo Targ Pls(F&R D)	Front air mix damper servo motor (for driver side rear air flow) target pulse / Min.: 13, Max.: 41 (for LHD) Min.: 5, Max.: 33 (for RHD)	for LHD • Max cool: 13 (pulse) • Max hot: 41 (pulse) for RHD • Max cool: 33 (pulse) • Max hot: 5 (pulse)	-
Air Mix Servo Targ Pls(F&R P)	Front air mix damper servo motor (for front passenger side rear air flow) target pulse / Min.: 5, Max.: 33 (for LHD) Min.: 13, Max.: 41 (for RHD)	for LHD • Max cool: 33 (pulse) • Max hot: 5 (pulse) for RHD • Max cool: 13 (pulse) • Max hot: 41 (pulse)	-
Air Outlet Servo Pls (F&R D)	Air outlet damper servo motor (for rear seat mode) target pulse / Min.: 9, Max.: 79	FACE1: 9 (pulse) B/L: 28 (pulse) FOOT: 41 (pulse) F/D: 67 (pulse) DEF: 79 (pulse)	-
Room Temperature Sensor (RP)	Rear room temperature sensor for RH*1 or LH*2 / Min.: -6.5°C (20.3°F) Max.: 57.25°C (135.05°F)	Actual rear room temperature for RH*1 or LH*2 displayed	Open in the circuit: -6.5°C (20.3°F). Short in the circuit: 57.25°C (135.05°F).
Set Temperature (Rear D side)	Rear driver side set temperature / for Europe MAX COLD: 15.5°C (59.9°F) MAX HOT: 30.5°C (86.9°F) except Europe MAX COLD: 17.5°C (63.5°F)	Rear driver side actual set temperature displayed	-

	MAX HOT: 32.5°C (90.5°F)		
Set Temperature (Rear P side)	Rear passenger side set temperature / for Europe MAX COLD: 15.5°C (59.9°F) MAX HOT: 30.5°C (86.9°F) except Europe MAX COLD: 17.5°C (63.5°F) MAX HOT: 32.5°C (90.5°F)	Rear passenger side actual set temperature displayed	-
Pls Servo Test Sts	Pulse servo motor test status / 00, 01, 02, 03 or 04	Not in effect: 00 During test: 01 Completed without malfunction: 02 Completed with malfunction: 03 Interrupted: 04	-
Foot Duct Sensor(Rear D)	Duct sensor / Min.: -12.7°C (9.14°F) Max.: 76.55°C (169.79°F)	Actual temperature measured by duct sensor (for driver side) displayed	Open in the circuit: -12.7°C (9.14°F). Short in the circuit: 76.55°C (169.79°F).
Foot Duct Sensor(Rear P)	Duct sensor / Min.: -12.7°C (9.14°F) Max.: 76.55°C (169.79°F)	Actual temperature measured by duct sensor (for front passenger side) displayed	Open in the circuit: -12.7°C (9.14°F). Short in the circuit: 76.55°C (169.79°F).
Number of Trouble Codes	Number of trouble codes / Min.: 0, Max.: 255	Number of DTCs displayed	-
A/O Damper FOOT/DEF Pos(P)	Air outlet damper servo motor (for DEF mode) target pulse / Min.: 6, Max.: 117	• FACE1: 117 (pulse) • FACE2: 109 (pulse) • B/L1: 93 (pulse) • B/L2: 81 (pulse) • FOOT-D: 52 (pulse) • FOOT-R: 41 (pulse) • FOOT-F: 41 (pulse) • F/D: 18 (pulse) • DEF: 6 (pulse)	-

*1: for LHD
*2: for RHD

Engine

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
A/C Signal	A/C signal / ON or OFF	ON: A/C switch on OFF: A/C switch off	-

ACTIVE TEST

HINT:

Using the intelligent tester to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

a. Connect the intelligent tester to the DLC3.

b. Turn the engine switch on (IG).

c. Turn the intelligent tester on.

d. Enter the following menus: Body / Air Conditioner / Active Test.

e. According to the display on the intelligent tester, perform the Active Test.

Tester Display	Test Part	Control Range	Diagnostic Note
Blower Motor	Front blower motor	Min.: 0, Max.: 31	-
Magnetic Clutch Relay	Magnetic clutch relay	ON or OFF	-
Electrical Fan	Condenserl fan	ON or OFF	-
Heater Active Level	Heater level	Min.: 0, Max.: 3	-
Air Mix Servo Targ Pulse(D)	Air mix servo motor pulse (Front A/C driver side)	Min.: 8, Max.: 90	-
Air Mix Servo Targ Pulse(P)	Air mix servo motor pulse (Front A/C passenger side)	Min.: 8, Max.: 90	-
Air Inlet Damper Targ Pulse	Air inlet damper target pulse	Min.: 9, Max.: 37	-
Cool Air Bypass Pulse	Cool air bypass pulse	Min.: 6, Max.: 57	-

Rear Blower Motor	Rear blower motor	Min.: 0, Max.: 31	-
Rear Air Mix Servo Targ Pulse	Rear air mix servo motor pulse	Min.: 8, Max.: 54	-
Rear A/C Mag Valve	Rear A/C magnetic valve	ON or OFF	-
Face A/O Servo Pulse(D)	Air outlet servo motor pulse (Driver side)	Min.: 6, Max.: 117	-
Face A/O Servo Pulse(P)	Air outlet servo motor pulse (Passenger side)	for LHD • Min.: 6 • Max.: 117 for RHD • Min.: 9 • Max.: 120	-
DEF A/O Servo Pulse (D)	DEF air outlet servo motor pulse	Min.: 6, Max.: 117	-
A/M Servo Puls(F&R D)	Air mix servo motor pulse (Front A/C rear air flow driver side)	for LHD • Min.: 13 • Max.: 41 for RHD • Min.: 5 • Max.: 33	-
A/M Servo Puls(F&R P)	Air mix servo motor pulse (Front A/C rear air flow passenger side)	for LHD • Min.: 5 • Max.: 33 for RHD • Min.: 13 • Max.: 41	-
A/O Servo Pulse(F&R D)	Air outlet servo motor pulse (Front A/C rear air flow driver side)	Min.: 9, Max.: 79	-
A/O Servo Pulse(Rr D)	Air outlet servo motor pulse (Rear driver side)	Min.: 7, Max.: 83	-

for Preparation Click here

HINT:

If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.

Air Conditioning System

DTC Code	Detection Item	Trouble Area	Memory*	Diagnostic Note	See page
B1411/11	Room Temperature Sensor Circuit	- Front room temperature sensor - Harness or connector between front room temperature sensor and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (8.5 min. or more)	If the front side room temperature is approx. -18.6°C (-1.48°F) or less, DTC B1411/11 may be stored even though the system is normal.	Click here
B1412/12	Ambient Temperature Sensor Circuit	- Ambient temperature sensor - Harness or connector between ambient temperature sensor and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (8.5 min. or more)	If ambient temperature is approx. -52.9°C (-63.22°F) or less, a trouble code may be stored even though the system is normal.	Click here
B1413/13	Evaporator Temperature Sensor Circuit	- No. 1 cooler thermistor - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (8.5 min. or more)	-	Click here
B1417/17	Rear Evaporator Temperature Sensor Circuit	- Harness or connector between No. 2 air conditioning harness assembly and air conditioning amplifier assembly - No. 2 air conditioning harness assembly (rear evaporator temperature sensor) - Air conditioning amplifier assembly	Stored (8.5 min. or more)	-	Click here
B1418/18	Exhaust Gas Sensor Circuit	- Smog ventilation sensor - Harness or connector between smog ventilation sensor and Air conditioning amplifier assembly - Air conditioning amplifier assembly	-	-	Click here
B1419/19	Rear Room Temperature Sensor Circuit	- Rear room temperature sensor - Harness or connector between rear room temperature sensor and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (8.5 min. or more)	If the rear driver side room temperature is approx. -18.6°C (-1.48°F) or less, DTC B1419/19 may be stored even though the system is normal.	Click here
B1421/21	Solar Sensor Circuit (Passenger Side)	- Automatic light control sensor (solar sensor) - Harness or connector between solar sensor and air conditioning amplifier assembly - Harness or connector between solar sensor and main body ECU (cowl side junction block LH) - Main body ECU (cowl side junction block LH) - Air conditioning amplifier assembly	Stored (8.5 min. or more)	If the check is performed in a dark place, DTC B1424/24 (solar sensor circuit (driver side)) may also be stored.	Click here
B1422/22	Compressor Lock Sensor Circuit	- Cooler compressor assembly (A/C lock sensor) - Compressor drive belt - Harness or connector between cooler compressor assembly and air conditioning amplifier assembly - Air conditioning amplifier assembly - CAN communication line	-	-	Click here
B1423/23	Pressure Sensor Circuit	- Air conditioner pressure sensor - Harness or connector - Cooler expansion valve (blocked, stuck) - Cooler condenser assembly (blocked, deterioration of cooling capacity due to dirt) - Cooler dryer (moisture in the refrigerant cycle cannot be absorbed)	-	-	Click here

		- Condenser fan (condenser cannot be cooled down) - Air conditioning system (leaks, blocked) - Refrigerant pipe line - Air conditioning amplifier assembly			
B1424/24	Solar Sensor Circuit (Driver Side)	- Automatic light control sensor (solar sensor) - Harness or connector between solar sensor and air conditioning amplifier assembly - Harness or connector between solar sensor and main body ECU (cowl side junction block LH) - Main body ECU (cowl side junction block LH) - Air conditioning amplifier assembly	Stored (8.5 min. or more)	If the check is performed in a dark place, DTC B1421/21 (solar sensor circuit (passenger side)) may also be stored.	Click here
B1429/29	Rear Air Foot Duct Sensor Circuit on Front Passenger Side	- Duct sensor - Harness or connector (duct sensor) - Air conditioning amplifier assembly	Stored (8.5 min. or more)	-	Click here
B1441/41	Air Mix Damper Control Servo Motor Circuit (Passenger Side)	- Front air mix damper servo motor (for front passenger side) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1442/42	Air Inlet Damper Control Servo Motor Circuit	- REC/FRS damper servo motor - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1443/43	Air Outlet Damper Control Servo Motor Circuit	- Air outlet damper servo motor (for driver side mode) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1445/45	Passenger Side Cool Air Bypass Damper Control	- Cool air bypass damper servo motor - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1446/46	Air Mix Damper Control Servo Motor Circuit (Driver Side)	- Front air mix damper servo motor (for driver side) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1447/47	Rear Air Mix Damper Control Servo Motor Circuit on Driver Side	- Rear air mix damper servo motor - No. 2 air conditioning harness assembly - Harness or connector between No. 2 air conditioning harness assembly and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1448/48	Passenger Side FACE Servo Motor Circuit	- Air outlet damper servo motor (for front passenger side mode) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1449/49	Rear Air Outlet Damper Control Servo Motor Circuit	- Rear air outlet damper servo motor - No. 2 air conditioning harness assembly - Harness or connector between No. 2 air conditioning harness assembly and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1455/55	Driver Side Air Outlet Damper FOOT/DEF Control Servo Motor Circuit	- Air outlet damper servo motor (for DEF mode) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1457/57	Driver Side Air Outlet Damper Control Servo Motor Circuit	- Front air mix damper servo motor (for driver side rear air flow) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1458/58	Passenger Side Air Outlet Damper Control Servo Motor Circuit	- Front air mix damper servo motor (for front passenger side rear air flow) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1461/61	Emission Gas NOx Sensor Circuit	- Smog ventilation sensor - Harness or connector between smog ventilation sensor and air conditioning amplifier assembly	-	-	Click here

		- Air conditioning amplifier assembly			
B1467/67	Rear Air Foot Duct Sensor Circuit on Driver Side	- Duct sensor - Harness or connector (duct sensor) - Air conditioning amplifier assembly	Stored (8.5 min. or more)	-	Click here
B1468/68	Rear Passenger Side Room Temperature Sensor Circuit	- Rear room temperature sensor - Harness or connector between rear room temperature sensor and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (8.5 min. or more)	If the rear passenger side room temperature is approx. -18.6°C (-1.48°F) or less, DTC B1468/68 may be stored even though the system is normal.	Click here
B1486/86	Driver Side Air Outlet Damper Control Servo Motor Circuit	- Air outlet damper servo motor (for rear seat mode) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1488/88	Rear Air Mix Damper Control Servo Motor Circuit on Front Passenger Side	- Rear air mix damper servo motor - No. 2 air conditioning harness assembly - Harness or connector between No. 2 air conditioning harness assembly and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1497/97	BUS IC Communication Malfunction	- Air conditioning harness assembly - Air conditioning amplifier assembly	-	-	Click here
B1499/99	Multiplex Communication Circuit	- Air conditioning amplifier assembly - CAN communication line	-	-	Click here

*: The air conditioning amplifier stores the DTC of the respective malfunction that has occurred for the period of time indicated in the brackets.

for Preparation Click here

HINT:

If a trouble code is output during the DTC check, inspect the trouble areas listed for that code. For details of the code, refer to the "See page" below.

Air Conditioning System

DTC Code	Detection Item	Trouble Area	Memory*	Diagnostic Note	See page
B1411/11	Room Temperature Sensor Circuit	- Front room temperature sensor - Harness or connector between front room temperature sensor and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (8.5 min. or more)	If the front side room temperature is approx. -18.6°C (-1.48°F) or less, DTC B1411/11 may be stored even though the system is normal.	Click here
B1412/12	Ambient Temperature Sensor Circuit	- Ambient temperature sensor - Harness or connector between ambient temperature sensor and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (8.5 min. or more)	If ambient temperature is approx. -52.9°C (-63.22°F) or less, a trouble code may be stored even though the system is normal.	Click here
B1413/13	Evaporator Temperature Sensor Circuit	- No. 1 cooler thermistor - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (8.5 min. or more)	-	Click here
B1417/17	Rear Evaporator Temperature Sensor Circuit	- Harness or connector between No. 2 air conditioning harness assembly and air conditioning amplifier assembly - No. 2 air conditioning harness assembly (rear evaporator temperature sensor) - Air conditioning amplifier assembly	Stored (8.5 min. or more)	-	Click here
B1418/18	Exhaust Gas Sensor Circuit	- Smog ventilation sensor - Harness or connector between smog ventilation sensor and Air conditioning amplifier assembly - Air conditioning amplifier assembly	-	-	Click here
B1419/19	Rear Room Temperature Sensor Circuit	- Rear room temperature sensor - Harness or connector between rear room temperature sensor and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (8.5 min. or more)	If the rear driver side room temperature is approx. -18.6°C (-1.48°F) or less, DTC B1419/19 may be stored even though the system is normal.	Click here
B1421/21	Solar Sensor Circuit (Passenger Side)	- Automatic light control sensor (solar sensor) - Harness or connector between solar sensor and air conditioning amplifier assembly - Harness or connector between solar sensor and main body ECU (cowl side junction block LH) - Main body ECU (cowl side junction block LH) - Air conditioning amplifier assembly	Stored (8.5 min. or more)	If the check is performed in a dark place, DTC B1424/24 (solar sensor circuit (driver side)) may also be stored.	Click here
B1422/22	Compressor Lock Sensor Circuit	- Cooler compressor assembly (A/C lock sensor) - Compressor drive belt - Harness or connector between cooler compressor assembly and air conditioning amplifier assembly - Air conditioning amplifier assembly - CAN communication line	-	-	Click here
B1423/23	Pressure Sensor Circuit	- Air conditioner pressure sensor - Harness or connector - Cooler expansion valve (blocked, stuck) - Cooler condenser assembly (blocked, deterioration of cooling capacity due to dirt) - Cooler dryer (moisture in the refrigerant cycle cannot be absorbed)	-	-	Click here

		- Condenser fan (condenser cannot be cooled down) - Air conditioning system (leaks, blocked) - Refrigerant pipe line - Air conditioning amplifier assembly			
B1424/24	Solar Sensor Circuit (Driver Side)	- Automatic light control sensor (solar sensor) - Harness or connector between solar sensor and air conditioning amplifier assembly - Harness or connector between solar sensor and main body ECU (cowl side junction block LH) - Main body ECU (cowl side junction block LH) - Air conditioning amplifier assembly	Stored (8.5 min. or more)	If the check is performed in a dark place, DTC B1421/21 (solar sensor circuit (passenger side)) may also be stored.	Click here
B1429/29	Rear Air Foot Duct Sensor Circuit on Front Passenger Side	- Duct sensor - Harness or connector (duct sensor) - Air conditioning amplifier assembly	Stored (8.5 min. or more)	-	Click here
B1441/41	Air Mix Damper Control Servo Motor Circuit (Passenger Side)	- Front air mix damper servo motor (for front passenger side) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1442/42	Air Inlet Damper Control Servo Motor Circuit	- REC/FRS damper servo motor - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1443/43	Air Outlet Damper Control Servo Motor Circuit	- Air outlet damper servo motor (for driver side mode) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1445/45	Passenger Side Cool Air Bypass Damper Control	- Cool air bypass damper servo motor - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1446/46	Air Mix Damper Control Servo Motor Circuit (Driver Side)	- Front air mix damper servo motor (for driver side) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1447/47	Rear Air Mix Damper Control Servo Motor Circuit on Driver Side	- Rear air mix damper servo motor - No. 2 air conditioning harness assembly - Harness or connector between No. 2 air conditioning harness assembly and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1448/48	Passenger Side FACE Servo Motor Circuit	- Air outlet damper servo motor (for front passenger side mode) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1449/49	Rear Air Outlet Damper Control Servo Motor Circuit	- Rear air outlet damper servo motor - No. 2 air conditioning harness assembly - Harness or connector between No. 2 air conditioning harness assembly and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1455/55	Driver Side Air Outlet Damper FOOT/DEF Control Servo Motor Circuit	- Air outlet damper servo motor (for DEF mode) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1457/57	Driver Side Air Outlet Damper Control Servo Motor Circuit	- Front air mix damper servo motor (for driver side rear air flow) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1458/58	Passenger Side Air Outlet Damper Control Servo Motor Circuit	- Front air mix damper servo motor (for front passenger side rear air flow) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1461/61	Emission Gas NOx Sensor Circuit	- Smog ventilation sensor - Harness or connector between smog ventilation sensor and air conditioning amplifier assembly	-	-	Click here

		- Air conditioning amplifier assembly			
B1467/67	Rear Air Foot Duct Sensor Circuit on Driver Side	- Duct sensor - Harness or connector (duct sensor) - Air conditioning amplifier assembly	Stored (8.5 min. or more)	-	Click here
B1468/68	Rear Passenger Side Room Temperature Sensor Circuit	- Rear room temperature sensor - Harness or connector between rear room temperature sensor and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (8.5 min. or more)	If the rear passenger side room temperature is approx. -18.6°C (-1.48°F) or less, DTC B1468/68 may be stored even though the system is normal.	Click here
B1486/86	Driver Side Air Outlet Damper Control Servo Motor Circuit	- Air outlet damper servo motor (for rear seat mode) - Air conditioning harness assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1488/88	Rear Air Mix Damper Control Servo Motor Circuit on Front Passenger Side	- Rear air mix damper servo motor - No. 2 air conditioning harness assembly - Harness or connector between No. 2 air conditioning harness assembly and air conditioning amplifier assembly - Air conditioning amplifier assembly	Stored (30 sec.)	-	Click here
B1497/97	BUS IC Communication Malfunction	- Air conditioning harness assembly - Air conditioning amplifier assembly	-	-	Click here
B1499/99	Multiplex Communication Circuit	- Air conditioning amplifier assembly - CAN communication line	-	-	Click here

*: The air conditioning amplifier stores the DTC of the respective malfunction that has occurred for the period of time indicated in the brackets.

DTC B1411/11 Room Temperature Sensor Circuit

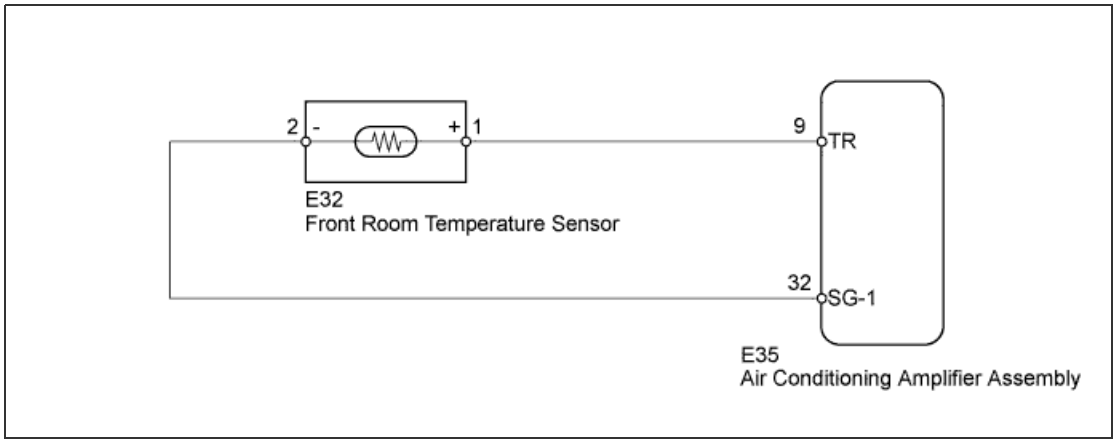
for Preparation Click here

DESCRIPTION

The front room temperature sensor for the front seat is installed in the instrument panel to detect the room temperature and control the heater and air conditioner auto mode. The resistance of the room temperature sensor changes in accordance with the front room temperature. As the temperature decreases, the resistance increases. As the temperature increases, the resistance decreases.
The air conditioning amplifier assembly applies voltage (5 V) to the front room temperature sensor and reads voltage changes as the resistance of the front room temperature sensor changes. This sensor also sends the appropriate signals to the air conditioning amplifier assembly.

DTC Code	DTC Detection Condition	Trouble Area
B1411/11	An open or short in the front room temperature sensor circuit.	• Front room temperature sensor • Harness or connector between front room temperature sensor and air conditioning amplifier assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (FRONT ROOM TEMPERATURE SENSOR)

a. Use the Data List to check if the front room temperature sensor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Room Temperature Sensor	Front room temperature sensor / Min.: -6.5°C (20.3°F) Max.: 57.25°C (135.05°F)	Actual room temperature for front seat displayed	Open in the circuit: -6.5°C (20.3°F). Short in the circuit: 57.25°C (135.05°F).

OK:
The display is as specified in the normal condition.

NG → Go to step 2

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.INSPECT FRONT ROOM TEMPERATURE SENSOR

a. Remove the front room temperature sensor (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

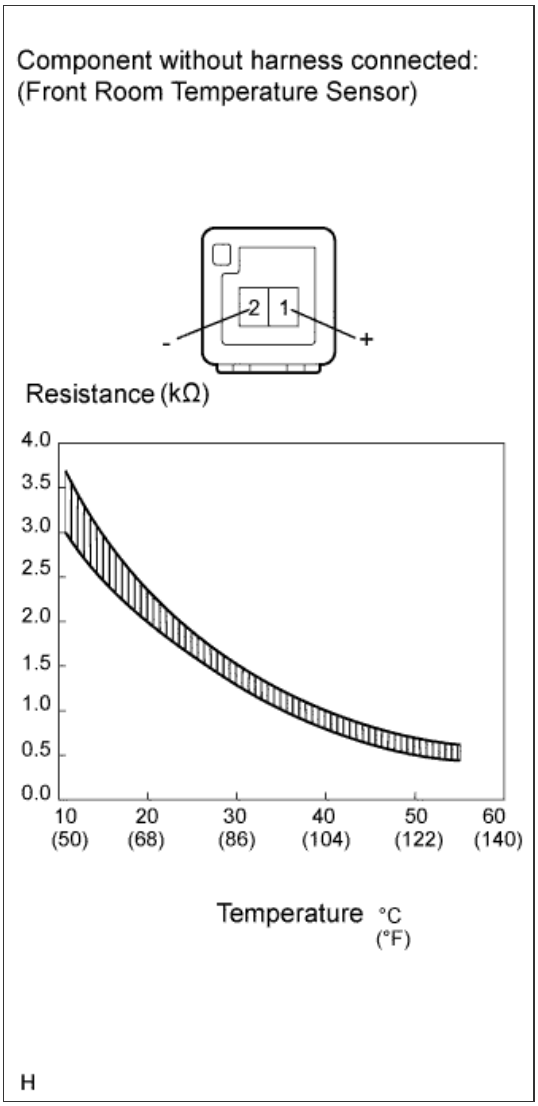
Tester Connection	Condition	Specified Condition
1 (+) - 2 (-)	10°C (50°F)	3.00 to 3.73 kΩ
	15°C (59°F)	2.45 to 2.88 kΩ
	20°C (68°F)	1.95 to 2.30 kΩ
	25°C (77°F)	1.60 to 1.80 kΩ
	30°C (86°F)	1.28 to 1.47 kΩ
	35°C (95°F)	1.00 to 1.22 kΩ
	40°C (104°F)	0.80 to 1.00 kΩ
	45°C (113°F)	0.65 to 0.85 kΩ
	50°C (122°F)	0.50 to 0.70 kΩ
	55°C (131°F)	0.44 to 0.60 kΩ
	60°C (140°F)	0.36 to 0.50 kΩ

NOTICE:

- **Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.**
- **When measuring, the sensor temperature must be the same as the ambient temperature.**

HINT:

As the temperature increases, the resistance decreases (See the graph).



NG → REPLACE FRONT ROOM TEMPERATURE SENSOR (Click here)

OK

3.CHECK HARNESS AND CONNECTOR (ROOM TEMPERATURE SENSOR - AIR CONDITIONING AMPLIFIER)

a. Disconnect the E32 sensor connector.

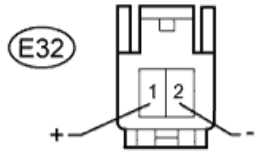
b. Disconnect the E35 amplifier connector.

c. Measure the resistance according to the value(s) in the table below.

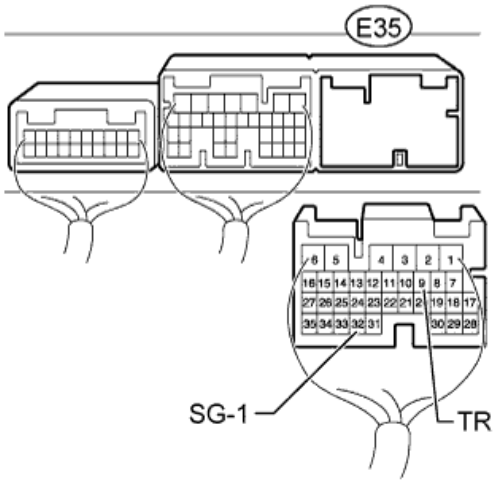
Standard Resistance:

Tester Connection	Condition	Specified Condition
E32-1 (+) - E35-9 (TR)	Always	Below 1 Ω
E32-2 (-) - E35-32 (SG-1)		
E35-9 (TR) - Body ground	Always	10 kΩ or higher
E35-32 (SG-1) - Body ground		

Front view of wire harness connector:
(to Front Room Temperature Sensor)



Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

DTC B1446/46 Air Mix Damper Control Servo Motor Circuit (Driver Side)

for Preparation Click here

DESCRIPTION

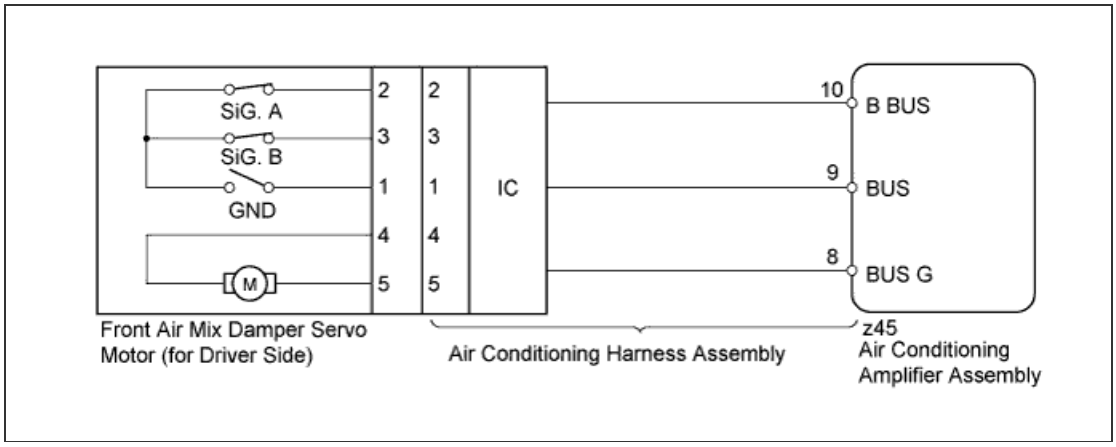
The front air mix damper servo motor (for driver side) sends pulse signals to inform the air conditioning amplifier assembly of the damper position. The air conditioning amplifier assembly activates the motor (normal or reverse) based on the signals to move the air mix damper (for driver side) to any position. As a result, the amount of air that has passed through the evaporator and is passing through the heater core is adjusted, and the temperature of the air blowing toward the driver side is controlled.

HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1446/46	The air mix damper position does not change even if the air conditioning amplifier assembly operates the front air mix damper servo motor.	• Front air mix damper servo motor (for driver side) • Air conditioning harness assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (FRONT AIR MIX DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Air Mix Servo Targ Pulse(D)	Front air mix damper servo motor (for driver side) target pulse / Min.: 8, Max.: 90 (for LHD) Min.: 8, Max.: 90 (for RHD)	for LHD • MAX COOL: 90 (pulse) • MAX HOT: 8 (pulse) for RHD • MAX COOL: 8 (pulse) • MAX HOT: 90 (pulse)	-

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK FRONT AIR MIX DAMPER SERVO MOTOR (OPERATION)

a. for LHD

i. Replace the front air mix damper servo motor (for driver side) (Click here).

b. for RHD

i. Replace the front air mix damper servo motor (for driver side) (Click here)

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

3.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:
DTC B1446 is not output.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG (for LHD)	C
NG (for RHD)	D

B → REPLACE FRONT AIR MIX DAMPER SERVO MOTOR (**Click here**)

C → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (**Click here**)

D → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (**Click here**)

A

REPLACE FRONT AIR MIX DAMPER SERVO MOTOR (**Click here**)

DTC B1412/12 Ambient Temperature Sensor Circuit

for Preparation Click here

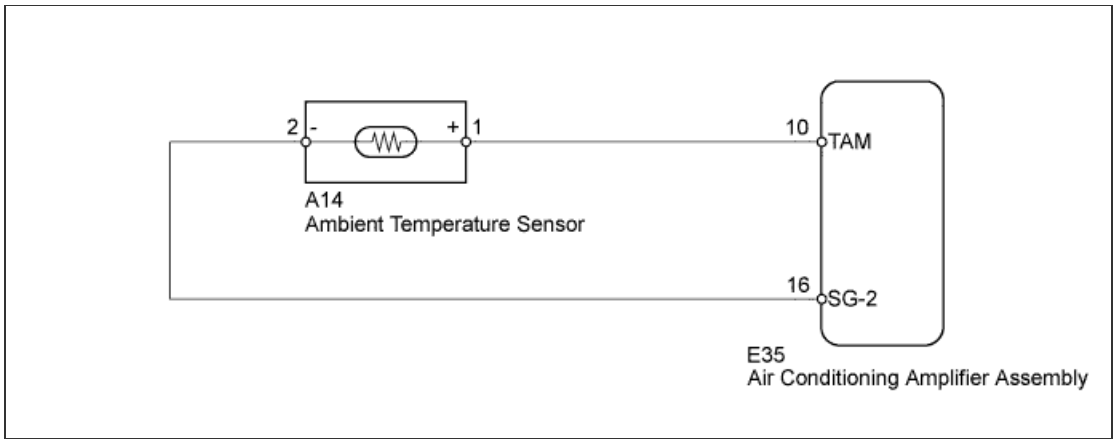
DESCRIPTION

The ambient temperature sensor is installed in the front part of the condenser to detect the ambient temperature and control the air conditioner auto mode. The sensor connected to the air conditioning amplifier assembly detects fluctuations in the ambient temperature. This data is used for controlling the room temperature. The sensor sends a signal to the air conditioning amplifier assembly. The resistance of the ambient temperature sensor changes in accordance with the ambient temperature. As the temperature decreases, the resistance increases. As the temperature increases, the resistance decreases.

The air conditioning amplifier assembly applies voltage (5 V) to the ambient temperature sensor and reads voltage changes as the resistance of the ambient temperature sensor changes.

DTC Code	DTC Detection Condition	Trouble Area
B1412/12	An open or short in the ambient temperature sensor circuit.	• Ambient temperature sensor • Harness or connector between ambient temperature sensor and air conditioning amplifier assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (AMBIENT TEMPERATURE SENSOR)

a. Use the Data List to check if the ambient temperature sensor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Ambient Temp Sensor	Ambient temperature sensor / Min: -23.3°C (-9.94°F) Max: 65.95°C (150.71°F)	Actual ambient temperature displayed	Open in the circuit: -23.3°C (-9.94°F). Short in the circuit: 65.95°C (150.71°F).

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

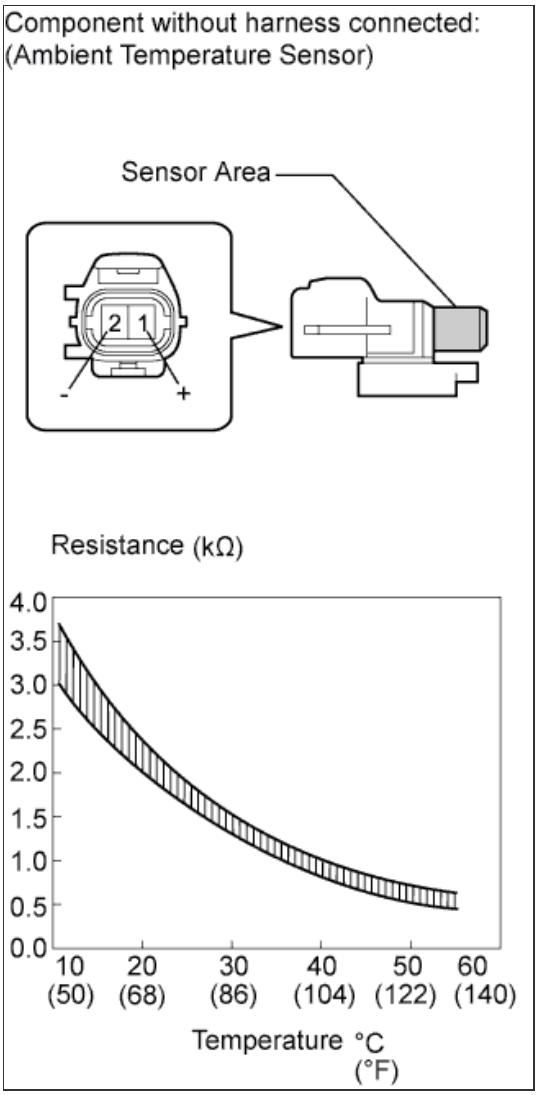
2.INSPECT AMBIENT TEMPERATURE SENSOR

a. Remove the ambient temperature sensor (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 (+) - 2 (-)	10°C (50°F)	3.00 to 3.73 kΩ
	15°C (59°F)	2.45 to 2.88 kΩ
	20°C (68°F)	1.95 to 2.30 kΩ
	25°C (77°F)	1.60 to 1.80 kΩ
	30°C (86°F)	1.28 to 1.47 kΩ
	35°C (95°F)	1.00 to 1.22 kΩ
	40°C (104°F)	0.80 to 1.00 kΩ
	45°C (113°F)	0.65 to 0.85 kΩ
	50°C (122°F)	0.50 to 0.70 kΩ
	55°C (131°F)	0.44 to 0.60 kΩ
	60°C (140°F)	0.36 to 0.50 kΩ



NOTICE:

- **Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.**
- **When measuring, the sensor temperature must be the same as the ambient temperature.**

HINT:

As the temperature increases, the resistance decreases (See the graph).

NG → **REPLACE AMBIENT TEMPERATURE SENSOR (Click here)**

OK

3.CHECK HARNESS AND CONNECTOR (AMBIENT TEMPERATURE SENSOR - AIR CONDITIONING AMPLIFIER)

a. Disconnect the A14 sensor connector.

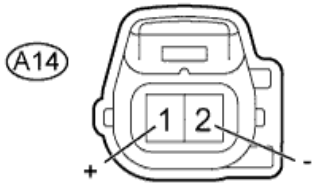
b. Disconnect the E35 amplifier connector.

c. Measure the resistance according to the value(s) in the table below.

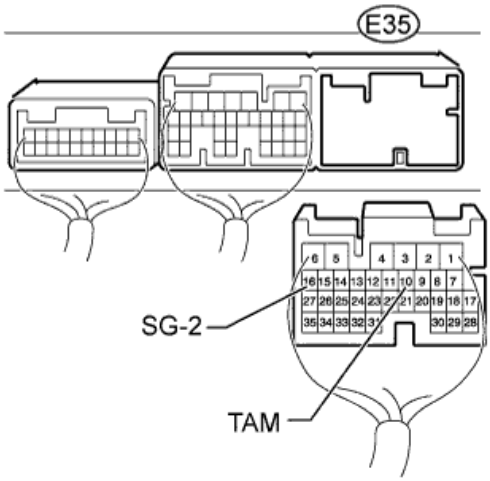
Standard Resistance:

Tester Connection	Condition	Specified Condition
A14-1 (+) - E35-10 (TAM)	Always	Below 1 Ω
A14-2 (-) - E35-16 (SG-2)		
E35-10 (TAM) - Body ground	Always	10 kΩ or higher
E35-16 (SG-2) - Body ground		

Front view of wire harness connector:
(to Ambient Temperature Sensor)



Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

DTC B1447/47 Rear Air Mix Damper Control Servo Motor Circuit on Driver Side

for Preparation Click here

DESCRIPTION

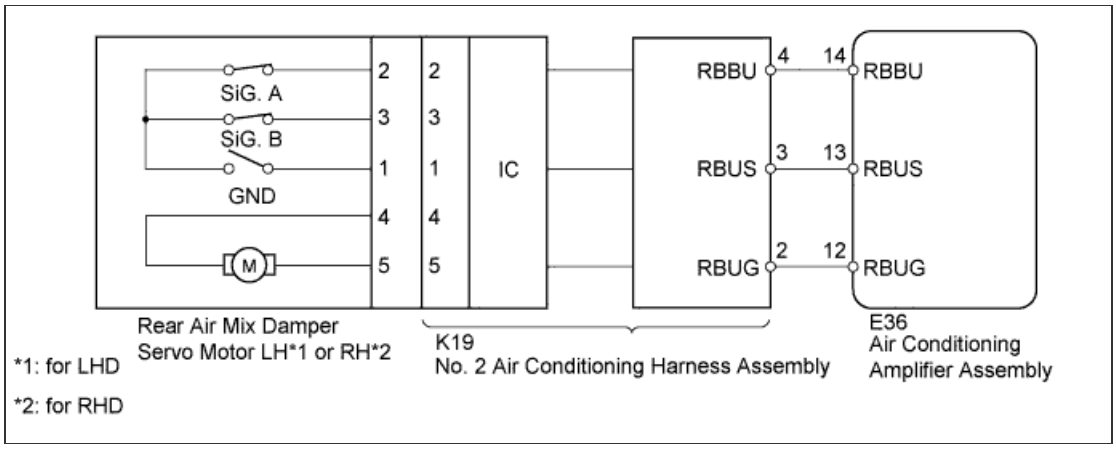
The rear air mix damper servo motor (for driver side) sends pulse signals to indicate the damper position to the air conditioning amplifier assembly. The air conditioning amplifier assembly activates the motor (normal or reverse) based on these signals to move the rear air mix damper to the appropriate position. This adjusts the amount of air passing through the heater core after passing the evaporator and controls the temperature of the blown air.

HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1447/47	The rear air mix damper position does not change even if the air conditioning amplifier assembly operates the rear air mix damper servo motor.	• Rear air mix damper servo motor • No. 2 air conditioning harness assembly • Harness or connector between No. 2 air conditioning harness assembly and air conditioning amplifier assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (REAR AIR MIX DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
A/M Servo Targ Pulse (Rear D)	Rear air mix damper servo motor target pulse / Min.: 9, Max.: 54 (for LHD) Min.: 8, Max.: 53 (for RHD)	for LHD • MAX COOL: 9 (pulse) • MAX HOT: 54 (pulse) for RHD • MAX COOL: 53 (pulse) • MAX HOT: 8 (pulse)	-

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK HARNESS AND CONNECTOR (NO. 2 AIR CONDITIONING HARNESS - AIR CONDITIONING AMPLIFIER)

a. Disconnect the K19 No. 2 air conditioning harness assembly connector.

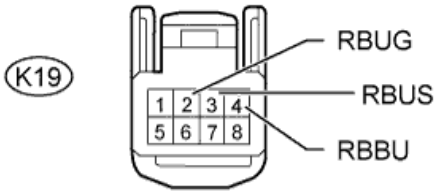
b. Disconnect the E36 amplifier connector.

c. Measure the resistance according to the value(s) in the table below.

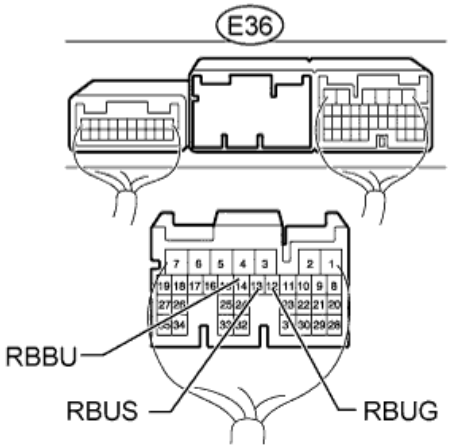
Standard Resistance:

Tester Connection	Condition	Specified Condition
K19-2 (RBUG) - E36-12 (RBUG)	Always	Below 1 Ω
K19-3 (RBUS) - E36-13 (RBUS)		
K19-4 (RBBU) - E36-14 (RBBU)		
E36-12 (RBUG) - Body ground	Always	10 kΩ or higher
E36-13 (RBUS) - Body ground		
E36-14 (RBBU) - Body ground		

Front view of wire harness connector: (to No. 2 Air Conditioning Harness Assembly)



Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK REAR AIR MIX DAMPER SERVO MOTOR (OPERATION)

a. Replace the air mix damper servo motor (Click here).

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

4.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:

DTC B1447 is not output.

NG → REPLACE NO. 2 AIR CONDITIONING HARNESS ASSEMBLY (**Click here**)

OK

REPLACE REAR AIR MIX DAMPER SERVO MOTOR (Click here)

DTC B1413/13 Evaporator Temperature Sensor Circuit

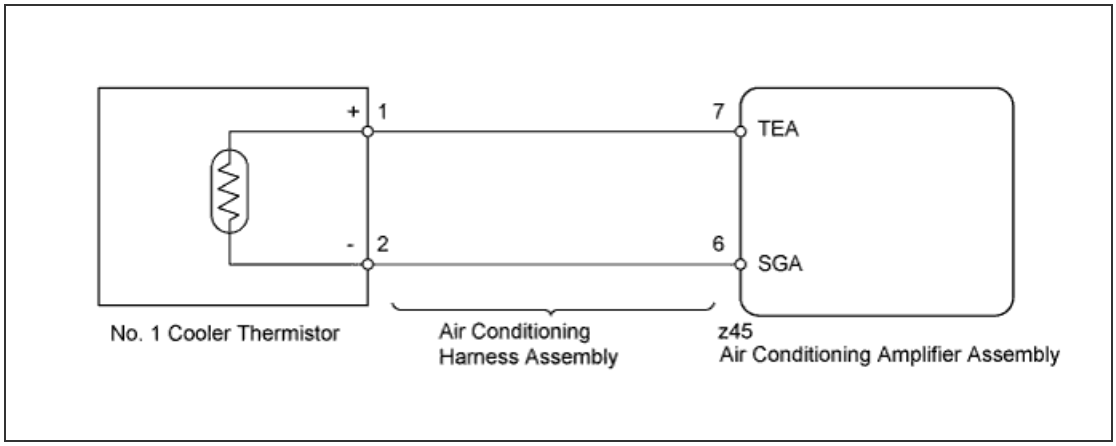
for Preparation Click here

DESCRIPTION

The No. 1 cooler thermistor is installed on the evaporator in the air conditioner unit to detect the cooled air temperature that has passed through the evaporator and control the air conditioning. It sends appropriate signals to the air conditioning amplifier assembly. The resistance of the No. 1 cooler thermistor changes in accordance with the cooled air temperature that has passed through the evaporator. As the temperature decreases, the resistance increases. As the temperature increases, the resistance decreases.
The air conditioning amplifier assembly applies voltage (5 V) to the No. 1 cooler thermistor and reads voltage changes as the resistance of the No. 1 cooler thermistor changes. This sensor is used for frost prevention.

DTC Code	DTC Detection Condition	Trouble Area
B1413/13	An open or short in the No. 1 cooler thermistor circuit.	• No. 1 cooler thermistor • Air conditioning harness assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (NO. 1 COOLER THERMISTOR)

a. Use the Data List to check if the No. 1 cooler thermistor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Evaporator Fin Thermistor	No. 1 cooler thermistor / Min.: -29.7°C (-21.46°F) Max.: 59.55°C (139.19°F)	Actual evaporator temperature displayed	Open in the circuit: -29.7°C (-21.46°F). Short in the circuit: 59.55°C (139.19°F).

OK:
The display is as specified in the normal condition.

NG → Go to step 2

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.INSPECT NO. 1 COOLER THERMISTOR

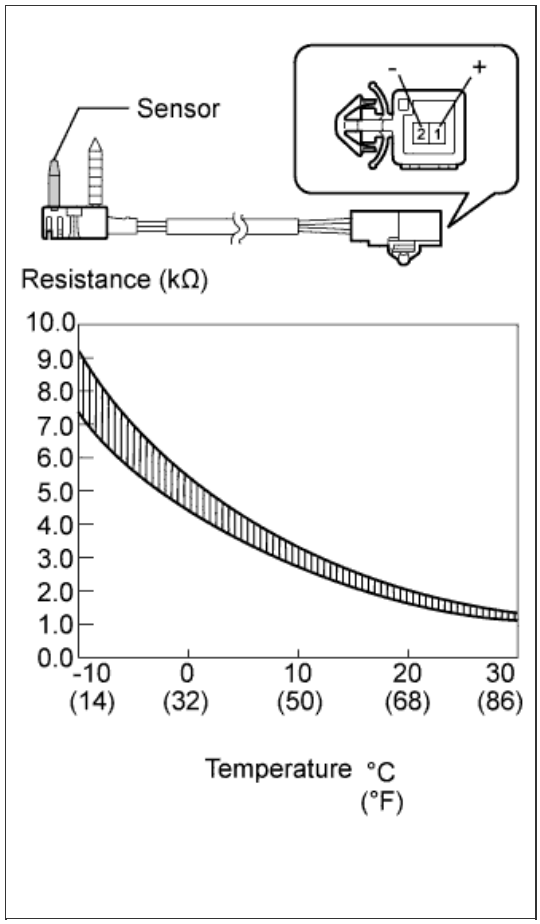
a. Remove the No. 1 cooler thermistor.

- for LHD (Click here)
- for RHD (Click here)

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 (+) - 2 (-)	-10°C (14°F)	7.30 to 9.10 kΩ
	-5°C (23°F)	5.65 to 6.95 kΩ
	0°C (32°F)	4.40 to 5.35 kΩ
	5°C (41°F)	3.40 to 4.15 kΩ
	10°C (50°F)	2.70 to 3.25 kΩ
	15°C (59°F)	2.14 to 2.58 kΩ
	20°C (68°F)	1.71 to 2.05 kΩ
	25°C (77°F)	1.38 to 1.64 kΩ
	30°C (86°F)	1.11 to 1.32 kΩ



NOTICE:

- **Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.**
- **When measuring, the sensor temperature must be the same as the ambient temperature.**

HINT:

As the temperature increases, the resistance decreases (See the graph).

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG (for LHD)	C
NG (for RHD)	D

B → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)

C → REPLACE NO. 1 COOLER THERMISTOR (Click here)

D → REPLACE NO. 1 COOLER THERMISTOR (Click here)

A

REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)

DTC B1448/48 Passenger Side FACE Servo Motor Circuit

for Preparation Click here

DESCRIPTION

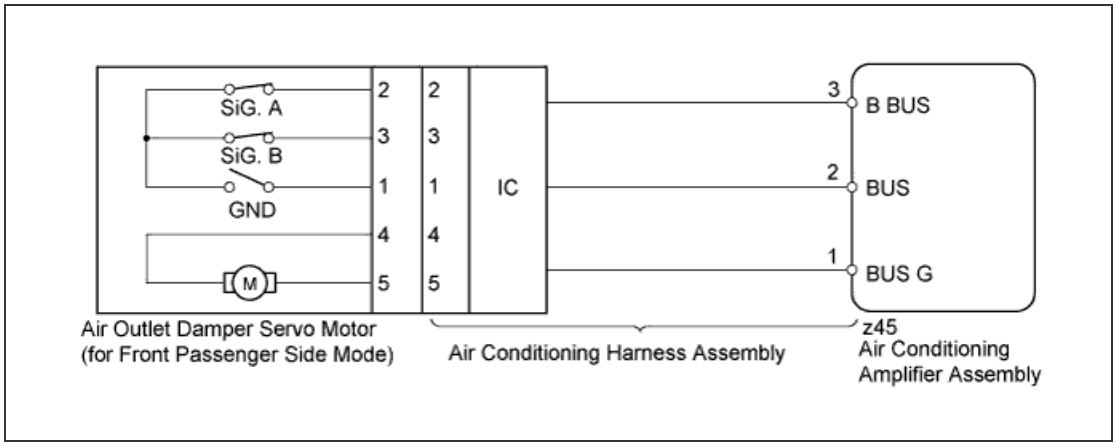
The air outlet damper servo motor (for front passenger side mode) sends pulse signals to inform the air conditioning amplifier assembly of the damper position. The air conditioning amplifier assembly activates the motor (normal or reverse) based on the signals to move the air outlet damper (for front passenger side mode) to any position, which controls the air outlet changes.

HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1448/48	The air outlet damper position does not change even if the air conditioning amplifier assembly operates the air outlet damper servo motor.	• Air outlet damper servo motor (for front passenger side mode) • Air conditioning harness assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (AIR OUTLET DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
A/O Damper FACE Pos(P)	Air outlet damper servo motor (for front passenger side mode) target pulse / Min.: 6, Max.: 117 (for LHD) Min.: 9, Max.: 120 (for RHD)	for LHD • FACE1: 117 (pulse) • FACE2: 109 (pulse) • B/L1: 93 (pulse) • B/L2: 81 (pulse) • FOOT-F: 41 (pulse) • FOOT-R: 41 (pulse) • FOOT-D: 52 (pulse) • F/D: 18 (pulse) • DEF: 6 (pulse) for RHD • FACE1: 9 (pulse) • FACE2: 17 (pulse)	-

		• B/L1: 33 (pulse) • B/L2: 45 (pulse) • FOOT-F: 85 (pulse) • FOOT-R: 85 (pulse) • FOOT-D: 74 (pulse) • F/D: 108 (pulse) • DEF: 120 (pulse)	

OK:
The display is as specified in the normal condition.

NG → Go to step 2

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK AIR OUTLET DAMPER SERVO MOTOR (OPERATION)

a. for LHD:

i. Replace the air outlet damper servo motor (for front passenger side mode) (Click here).

b. for RHD:

i. Replace the air outlet damper servo motor (for front passenger side mode) (Click here)

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

3.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:
DTC B1448 is not output.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG (for LHD)	C
NG (for RHD)	D

B → REPLACE AIR OUTLET DAMPER SERVO MOTOR (Click here)

C → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)

D → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)

A

REPLACE AIR OUTLET DAMPER SERVO MOTOR (Click here)

DTC B1417/17 Rear Evaporator Temperature Sensor Circuit

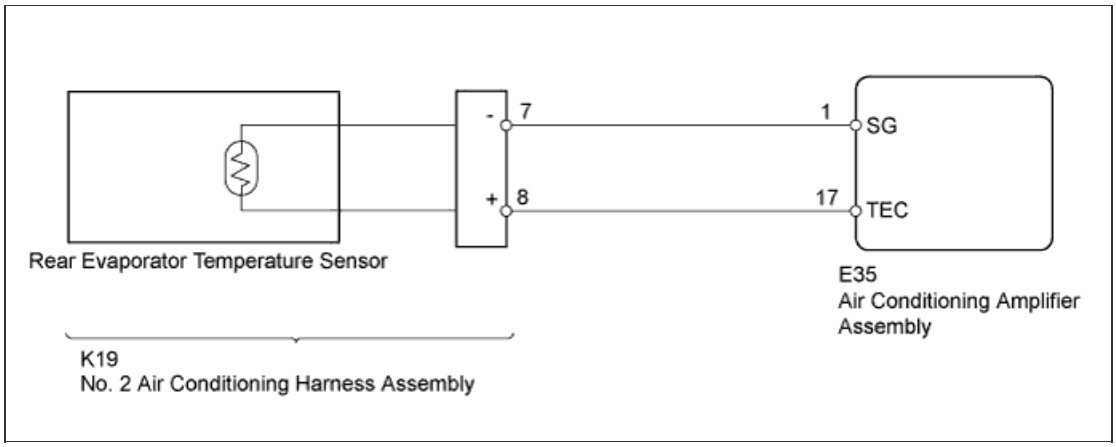
for Preparation Click here

DESCRIPTION

The rear evaporator temperature sensor is installed on the evaporator in the rear air conditioning unit to detect the cooled air temperature that has passed through the evaporator and control the air conditioning. It sends appropriate signals to the air conditioning amplifier assembly. The resistance of the rear evaporator temperature sensor changes in accordance with the cooled air temperature that has passed through the rear evaporator. As the temperature decreases, the resistance increases. As the temperature increases, the resistance decreases.
The air conditioning amplifier assembly applies voltage (5 V) to the rear evaporator temperature sensor and reads voltage changes as the resistance of the rear evaporator temperature sensor changes. This sensor is used for frost prevention.

DTC Code	DTC Detection Condition	Trouble Area
B1417/17	An open or short in the rear evaporator temperature sensor circuit.	• Harness or connector between No. 2 air conditioning harness assembly and air conditioning amplifier assembly • No. 2 air conditioning harness assembly (rear evaporator temperature sensor) • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (REAR EVAPORATOR TEMPERATURE SENSOR)

a. Use the Data List to check if the rear evaporator temperature sensor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Ambient Temp Sens (Rear)	Rear evaporator temperature sensor / Min.: -29.7°C (-21.46°F) Max.: 59.55°C (139.19°F)	Actual rear evaporator temperature displayed	Open in the circuit: -29.7°C (-21.46°F). Short in the circuit: 59.55°C (139.19°F).

OK:
The display is as specified in the normal condition.

NG → Go to step 2

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.INSPECT REAR EVAPORATOR TEMPERATURE SENSOR

a. Remove the No. 2 air conditioning harness assembly (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

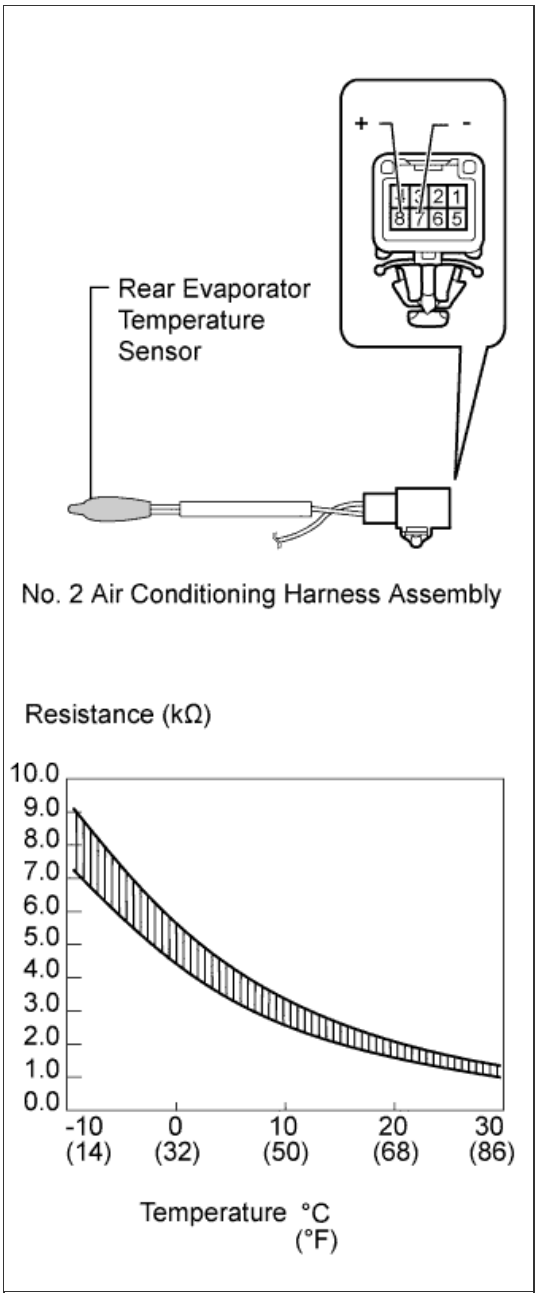
Tester Connection	Condition	Specified Condition
7 (-) - 8 (+)	-10°C (14°F)	7.30 to 9.10 kΩ
	-5°C (23°F)	5.65 to 6.95 kΩ
	0°C (32°F)	4.40 to 5.35 kΩ
	5°C (41°F)	3.40 to 4.15 kΩ
	10°C (50°F)	2.70 to 3.25 kΩ
	15°C (59°F)	2.14 to 2.58 kΩ
	20°C (68°F)	1.71 to 2.05 kΩ
	25°C (77°F)	1.38 to 1.64 kΩ
	30°C (86°F)	1.11 to 1.32 kΩ

NOTICE:

- **Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.**
- **When measuring, the sensor temperature must be the same as the ambient temperature.**

HINT:

As the temperature increases, the resistance decreases (See the graph).



NG → REPLACE NO. 2 AIR CONDITIONING HARNESS ASSEMBLY (Click here)

OK

3.CHECK HARNESS AND CONNECTOR (NO. 2 AIR CONDITIONING HARNESS - AIR CONDITIONING AMPLIFIER)

a. Disconnect the K19 No. 2 air conditioning harness assembly connector.

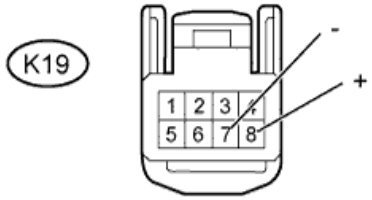
b. Disconnect the E35 amplifier connector.

c. Measure the resistance according to the value(s) in the table below.

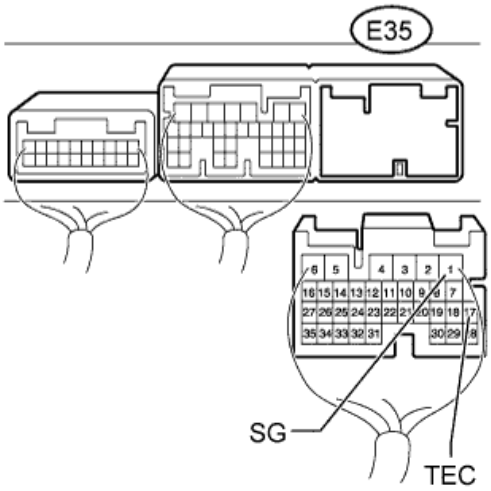
Standard Resistance:

Tester Connection	Condition	Specified Condition
K19-8 (+) - E35-17 (TEC)	Always	Below 1 Ω
K19-7 (-) - E35-1 (SG)	Always	Below 1 Ω
E35-17 (TEC) - Body ground	Always	10 kΩ or higher
E35-1 (SG) - Body ground		

Front view of wire harness connector: (to No. 2 Air Conditioning Harness Assembly)



Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK NO. 2 AIR CONDITIONING HARNESS ASSEMBLY (OPERATION)

a. Replace the No. 2 air conditioning harness assembly with a normal one and check that the condition returns to normal (Click here).

NEXT

5.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:
DTC B1417 is not output.

NG → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (**Click here**)

OK

REPLACE NO. 2 AIR CONDITIONING HARNESS ASSEMBLY (**Click here**)

DTC B1449/49 Rear Air Outlet Damper Control Servo Motor Circuit

for Preparation Click here

DESCRIPTION

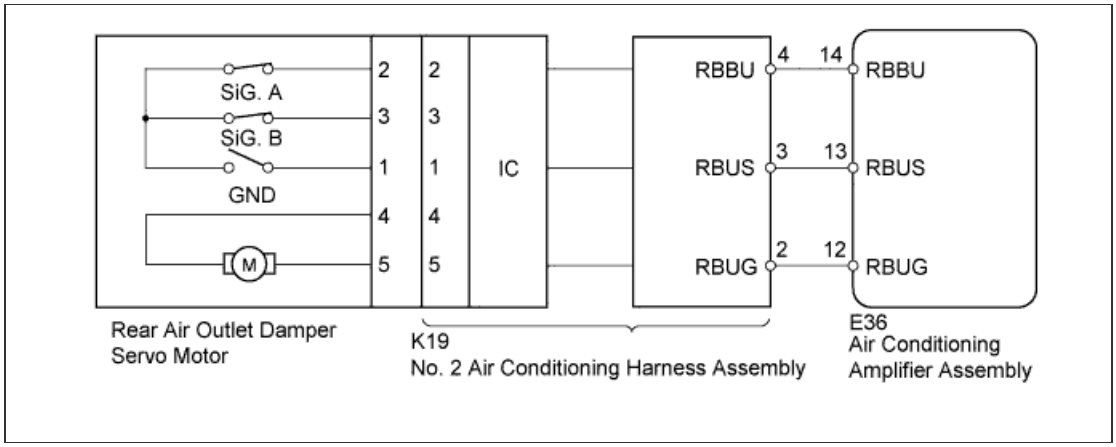
The rear air outlet damper servo motor sends pulse signals to inform the air conditioning amplifier assembly of the damper position. The air conditioning amplifier assembly activates the motor (normal or reverse) based on the signals to move the rear air outlet damper to the appropriate position, which controls the air outlet modes.

HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1449/49	The rear air outlet damper position does not change even if the air conditioning amplifier assembly operates the rear air outlet damper servo motor.	• **Rear air outlet damper servo motor** • **No. 2 air conditioning harness assembly** • **Harness or connector between No. 2 air conditioning harness assembly and air conditioning amplifier assembly** • **Air conditioning amplifier assembly**

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (REAR AIR OUTLET DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Air Outlet Servo Pulse (R)	Rear air outlet damper servo motor target pulse / Min.: 7, Max.: 83	FOOT: 7 (pulse) B/L: 42 (pulse) FACE: 83 (pulse)	-

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK HARNESS AND CONNECTOR (NO. 2 AIR CONDITIONING HARNESS - AIR CONDITIONING AMPLIFIER)

a. Disconnect the K19 No. 2 air conditioning harness assembly connector.

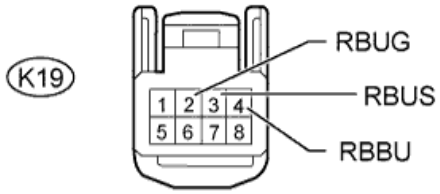
b. Disconnect the E36 amplifier connector.

c. Measure the resistance according to the value(s) in the table below.

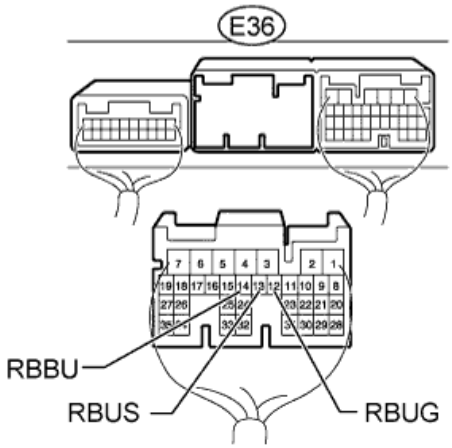
Standard Resistance:

Tester Connection	Condition	Specified Condition
K19-2 (RBUG) - E36-12 (RBUG)	Always	Below 1 Ω
K19-3 (RBUS) - E36-13 (RBUS)		
K19-4 (RBBU) - E36-14 (RBBU)		
E36-12 (RBUG) - Body ground	Always	10 kΩ or higher
E36-13 (RBUS) - Body ground		
E36-14 (RBBU) - Body ground		

Front view of wire harness connector: (to No. 2 Air Conditioning Harness Assembly)



Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK REAR AIR OUTLET DAMPER SERVO MOTOR (OPERATION)

a. Replace the rear air outlet damper servo motor (Click here).

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

4.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:
DTC B1449 is not output.

NG → REPLACE NO. 2 AIR CONDITIONING HARNESS ASSEMBLY (**Click here**)

OK

REPLACE REAR AIR OUTLET DAMPER SERVO MOTOR (Click here)

DTC B1418/18 Exhaust Gas Sensor Circuit

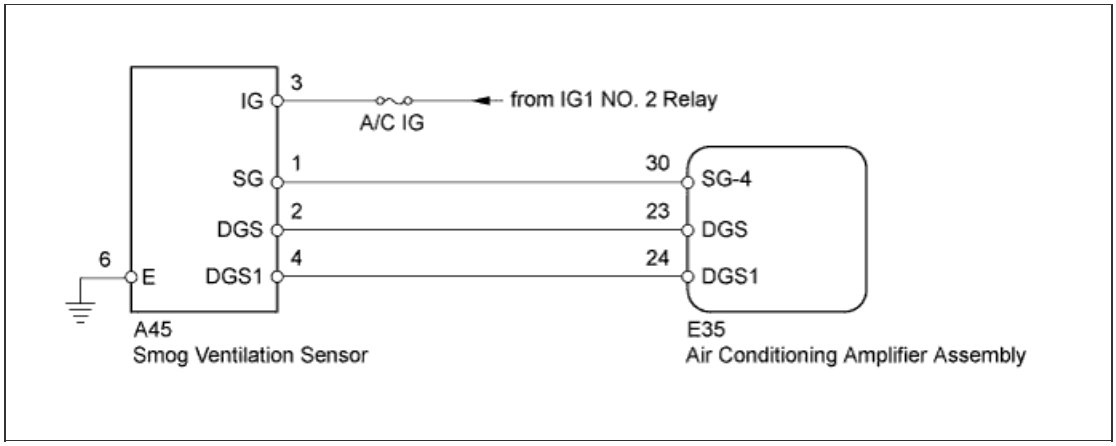
for Preparation Click here

DESCRIPTION

The smog ventilation sensor, which is installed on the front of the cooler condenser assembly, automatically changes to fresh, fresh/recirculation or recirculation mode operation. The smog ventilation sensor detects CO and HC in the emission gas and transmits signals to the air conditioning amplifier assembly.

DTC Code	DTC Detection Condition	Trouble Area
B1418/18	An open or short in the smog ventilation sensor circuit (HC, CO).	• Smog ventilation sensor • Harness or connector between smog ventilation sensor and air conditioning amplifier assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (A/C IG)

a. Remove the A/C IG fuse from the cowl side junction block LH.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A/C IG fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

2.READ VALUE USING INTELLIGENT TESTER (SMOG VENTILATION SENSOR)

a. Use the Data List to check if the smog ventilation sensor is functioning properly.

Air Conditioner

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
Emission Gas Sensor	Smog ventilation sensor / Min.: 0, Max.: 255	Decreases as gas amount increases	-

OK:

The display is as specified in the normal condition.

NG → Go to step 3

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

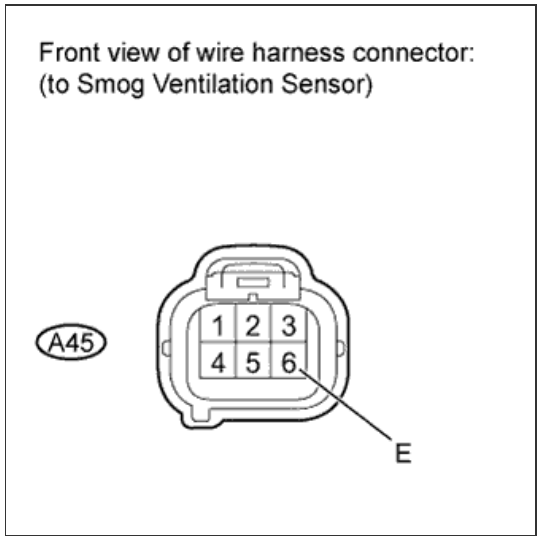
3.CHECK HARNESS AND CONNECTOR (SMOG VENTILATION SENSOR - BODY GROUND)

a. Disconnect the A45 smog ventilation sensor connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A45-6 (E) - Body ground	Always	Below 1 Ω



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

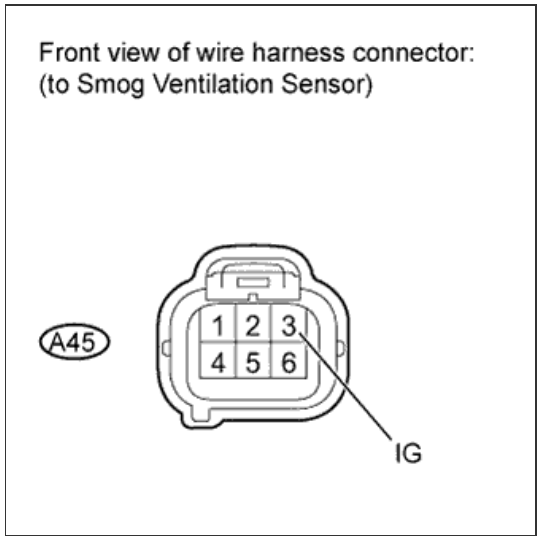
4.CHECK HARNESS AND CONNECTOR (SMOG VENTILATION SENSOR - BATTERY)

a. Disconnect the A45 sensor connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
A45-3 (IG) - Body ground	Engine switch on (IG)	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5.INSPECT SMOG VENTILATION SENSOR

a. Remove the smog ventilation sensor (Click here).

b. After applying battery voltage to terminals 3 (IG) and 6 (E) for more than 30 seconds, measure the resistance according to the value(s) in the table below.

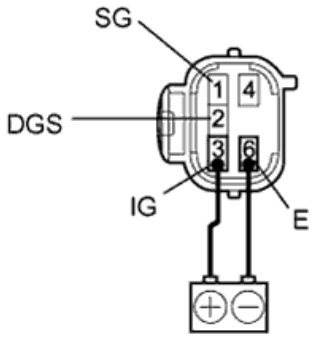
Standard Resistance:

Tester Connection	Condition	Specified Condition
1 (SG) - 2 (DGS)	15 to 25°C (59 to 77°F)	15 to 40 kΩ

HINT:

When the sensor is exposed to the exhaust gas, the resistance decreases.

Component without harness connected:
(Smog Ventilation Sensor)



NG → REPLACE SMOG VENTILATION SENSOR (Click here)

OK →

6.CHECK HARNESS AND CONNECTOR (SMOG VENTILATION SENSOR - AIR CONDITIONING AMPLIFIER)

a. Disconnect the A45 smog ventilation sensor connector.

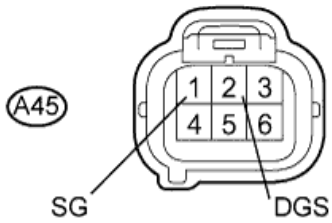
b. Disconnect the E35 amplifier connector.

c. Measure the resistance according to the value(s) in the table below.

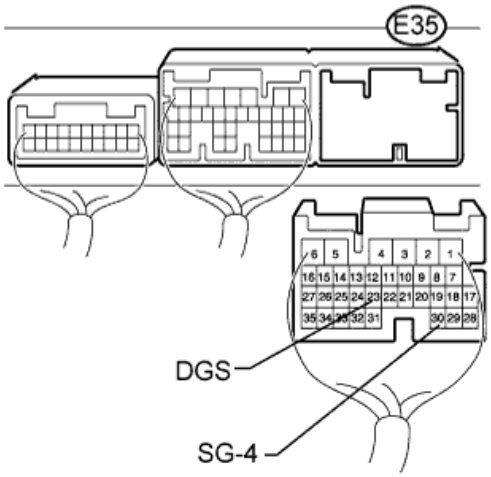
Standard Resistance:

Tester Connection	Condition	Specified Condition
A45-1 (SG) - E35-30 (SG-4)	Always	Below 1 Ω
A45-2 (DGS) - E35-23 (DGS)		
E35-30 (SG-4) - Body ground	Always	10 kΩ or higher
E35-23 (DGS) - Body ground		

Front view of wire harness connector:
(to Smog Ventilation Sensor)



Front view of wire harness connector:
(to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

DTC B1455/55 Driver Side Air Outlet Damper FOOT/DEF Control Servo Motor Circuit

for Preparation Click here

DESCRIPTION

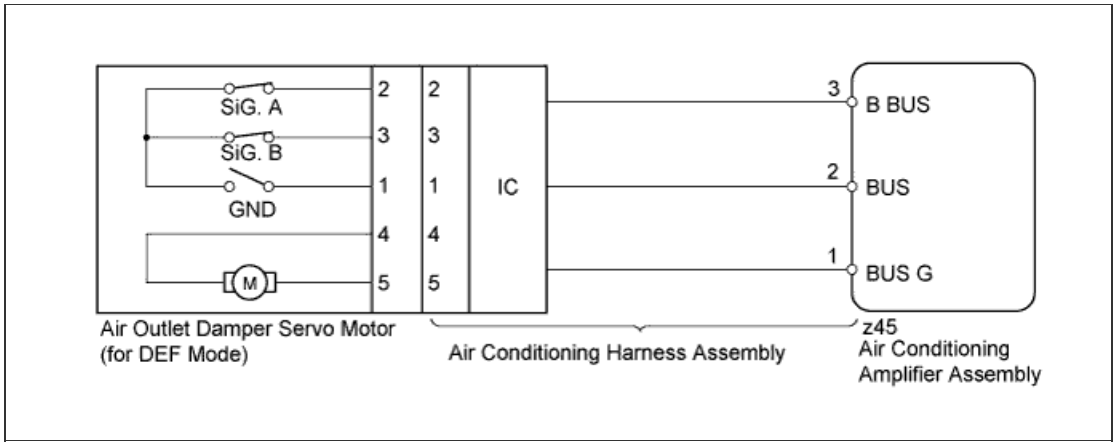
Air outlet damper servo motor (for DEF mode) sends pulse signals to inform the air conditioning amplifier assembly of the damper position. The air conditioning amplifier assembly activates the motor (normal or reverse) based on the signals to move the air outlet damper (for DEF mode) to any position, which controls the air outlet changes.

HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1455/55	The air outlet damper position does not change even if the air conditioning amplifier assembly operates the air outlet damper servo motor (for DEF mode)	• Air outlet damper servo motor (for DEF mode) • Air conditioning harness assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (AIR OUTLET DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
A/O Damper FOOT/DEF Pos(P)	Air outlet damper servo motor (for DEF mode) target pulse / Min.: 6, Max.: 117	• FACE1: 117 (pulse) • FACE2: 109 (pulse) • B/L1: 93 (pulse) • B/L2: 81 (pulse) • FOOT-D: 52 (pulse) • FOOT-R: 41 (pulse) • FOOT-F: 41 (pulse) • F/D: 18 (pulse) • DEF: 6 (pulse)	-

OK:

The display is as specified in the normal condition.

NG	Go to step 2
OK	

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (**Click here**)

2.CHECK AIR OUTLET DAMPER SERVO MOTOR (OPERATION)

a. Replace the air outlet servo motor (for DEF mode) (Click here).

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

3.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:
DTC B1455 is not output.

NG → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (**Click here**)

OK

REPLACE AIR OUTLET DAMPER SERVO MOTOR (for DEF mode) (**Click here**)

DTC B1419/19 Rear Room Temperature Sensor Circuit

for Preparation Click here

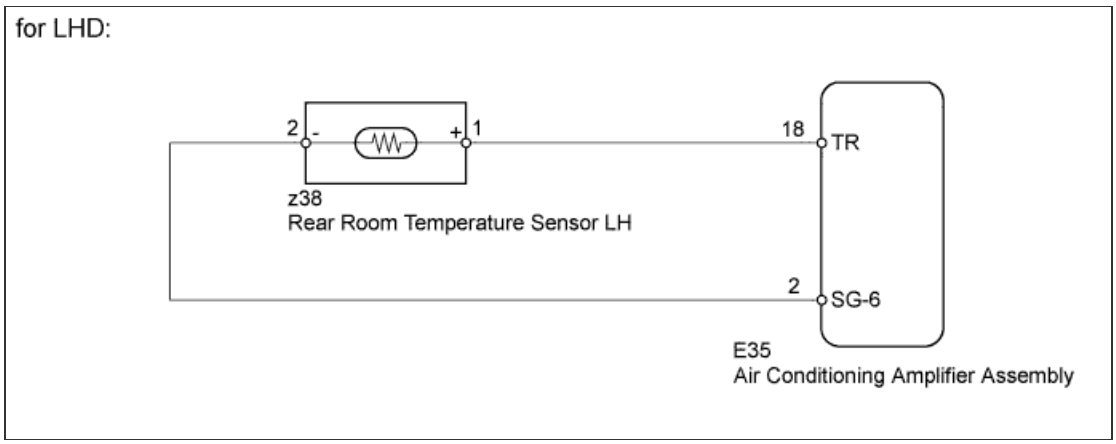
DESCRIPTION

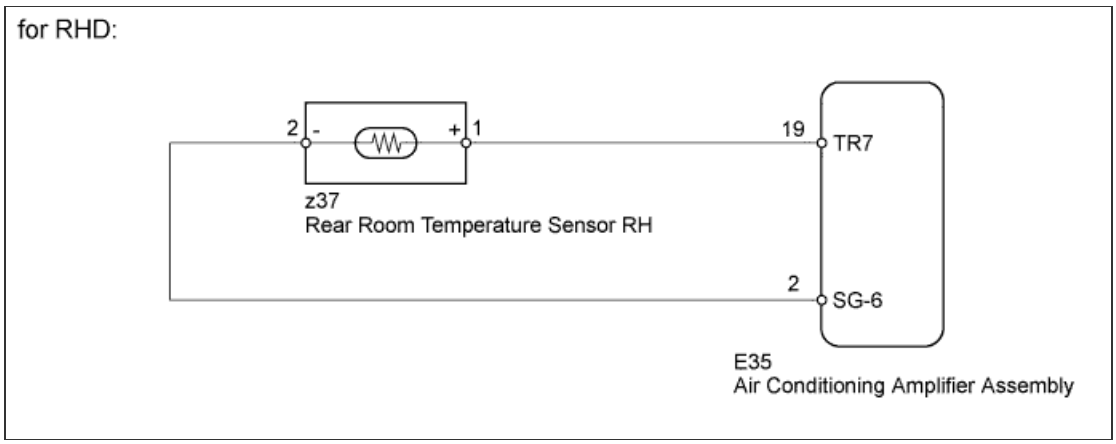
The rear room temperature sensor LH*1 or RH*2 (for driver side) is installed in the rear quarter trim board LH*1 or RH*2 to detect the rear room temperature and control the heater and air conditioner auto mode. The resistance of the rear room temperature sensor LH*1 or RH*2 changes in accordance with the rear room temperature for the LH*1 or RH*2 seat. As the temperature decreases, the resistance increases. As the temperature increases, the resistance decreases.
The air conditioning amplifier assembly applies a voltage (5 V) to the rear room temperature sensor LH*1 or RH*2 and reads voltage changes as changes in the resistance of the rear room temperature sensor LH*1 or RH*2.

DTC Code	DTC Detection Condition	Trouble Area
B1419/19	An open or short in the rear room temperature sensor LH*1 or RH*2 circuit.	• Rear room temperature sensor LH*1 • Rear room temperature sensor RH*2 • Harness or connector between rear room temperature sensor LH and air conditioning amplifier assembly*1 • Harness or connector between rear room temperature sensor RH and air conditioning amplifier assembly*2 • Air conditioning amplifier assembly

*1: for LHD
*2: for RHD

WIRING DIAGRAM





INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (REAR ROOM TEMPERATURE SENSOR)

a. Use the Data List to check if the rear room temperature sensor LH*1 or RH*2 is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Room Temp Sensor (Rear)	Rear room temperature sensor for LH*1 or RH*2 / Min.: -6.5°C (20.3°F) Max.: 57.25°C (135.05°F)	Actual rear room temperature for LH*1 or RH*2 displayed	Open in the circuit: -6.5°C (20.3°F). Short in the circuit: 57.25°C (135.05°F).

*1: for LHD
*2: for RHD

OK:
The display is as specified in the normal condition.

NG → Go to step 2

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.INSPECT REAR ROOM TEMPERATURE SENSOR

a. Remove the rear room temperature sensor (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

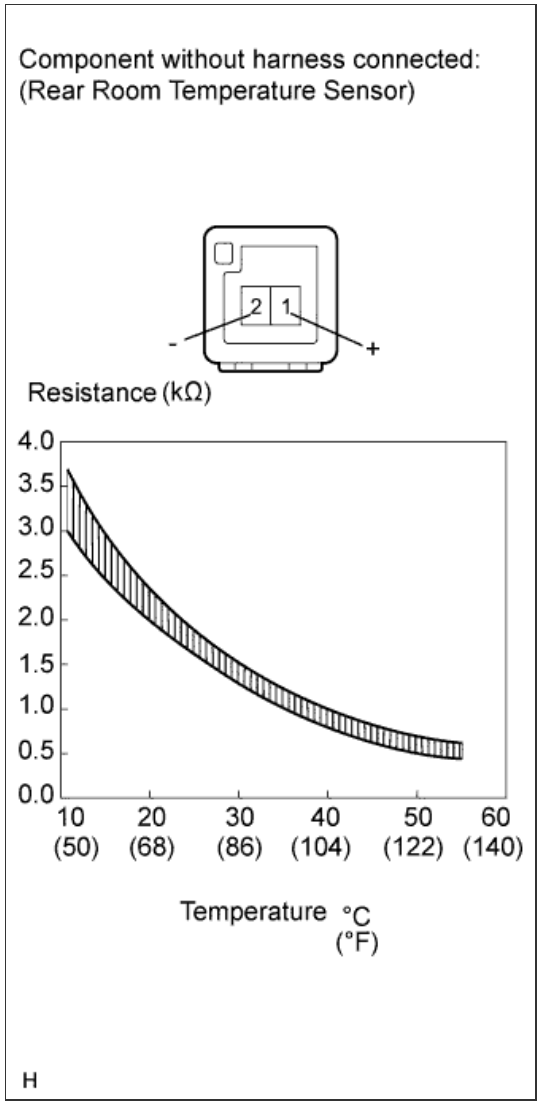
Tester Connection	Condition	Specified Condition
1 (+) - 2 (-)	10°C (50°F)	3.00 to 3.73 kΩ
	15°C (59°F)	2.45 to 2.88 kΩ
	20°C (68°F)	1.95 to 2.30 kΩ
	25°C (77°F)	1.60 to 1.80 kΩ
	30°C (86°F)	1.28 to 1.47 kΩ
	35°C (95°F)	1.00 to 1.22 kΩ
	40°C (104°F)	0.80 to 1.00 kΩ
	45°C (113°F)	0.65 to 0.85 kΩ
	50°C (122°F)	0.50 to 0.70 kΩ
	55°C (131°F)	0.44 to 0.60 kΩ
	60°C (140°F)	0.36 to 0.50 kΩ

NOTICE:

Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.

HINT:

As the temperature increases, the resistance decreases (See the graph).



NG → REPLACE REAR ROOM TEMPERATURE SENSOR (Click here)

OK

3.CHECK HARNESS AND CONNECTOR (REAR ROOM TEMPERATURE SENSOR - AIR CONDITIONING AMPLIFIER)

a. for LHD:

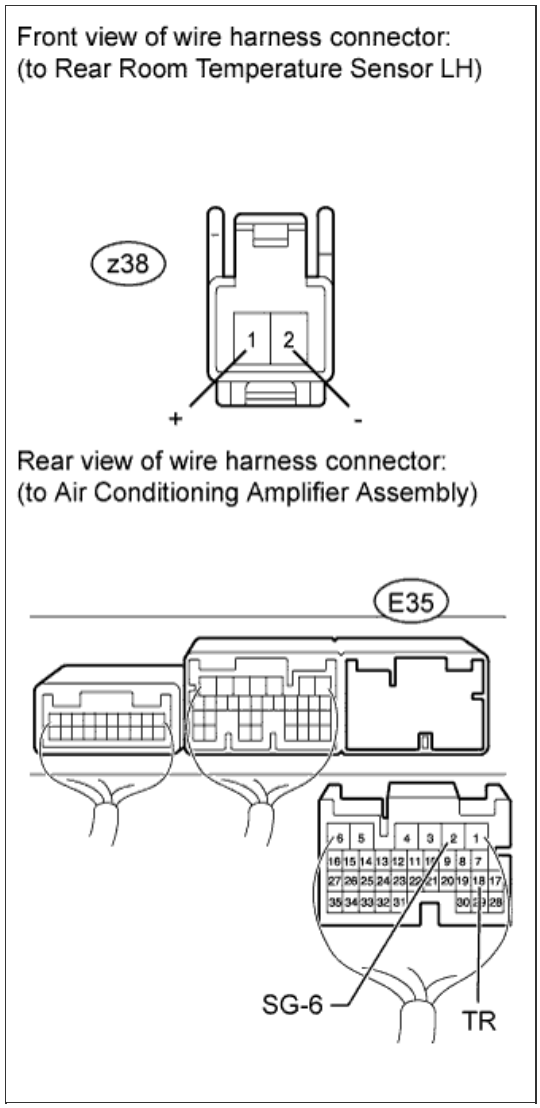
i. Disconnect the z38 sensor connector.

ii. Disconnect the E35 amplifier connector.

iii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z38-1 (+) - E35-18 (TR)	Always	Below 1 Ω
z38-2 (-) - E35-2 (SG-6)		
E35-18 (TR) - Body ground	Always	10 kΩ or higher
E35-2 (SG-6) - Body ground		



b. for RHD:

i. Disconnect the z37 sensor connector.

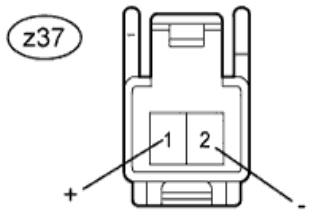
ii. Disconnect the E35 amplifier connector.

iii. Measure the resistance according to the value(s) in the table below.

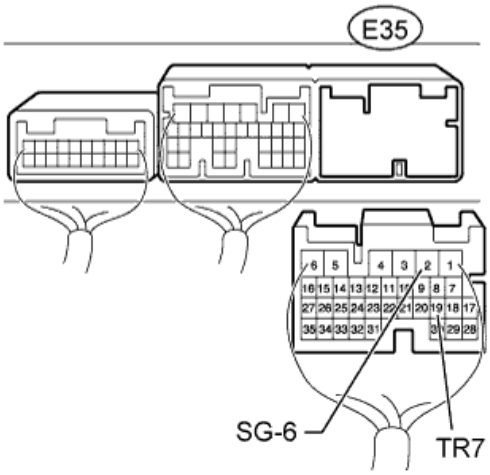
Standard Resistance:

Tester Connection	Condition	Specified Condition
z37-2 (-) - E35-2 (SG-6)	Always	Below 1 Ω
z37-1 (+) - E35-19 (TR7)		
E35-2 (SG-6) - Body ground	Always	10 kΩ or higher
E35-19 (TR7) - Body ground		

Front view of wire harness connector:
(to Rear Room Temperature Sensor RH)



Rear view of wire harness connector:
(to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

DTC B1457/57 Driver Side Air Outlet Damper Control Servo Motor Circuit

for Preparation Click here

DESCRIPTION

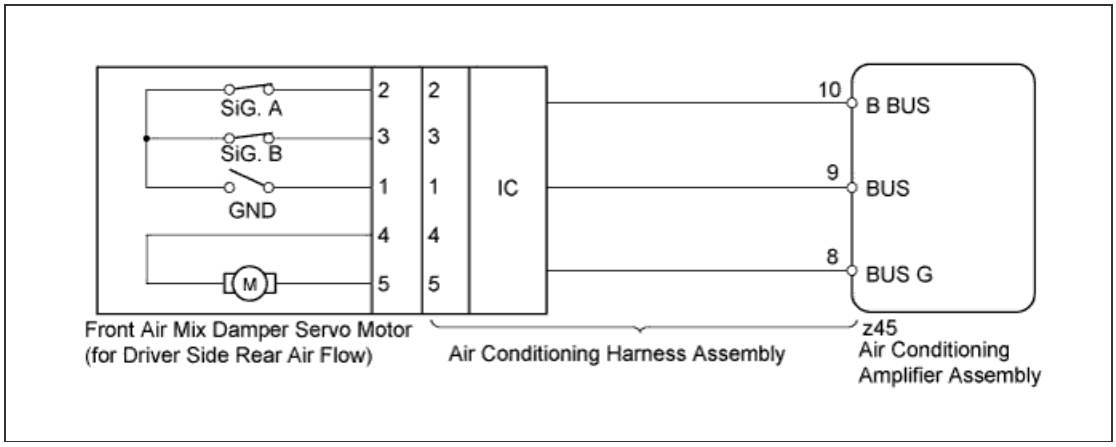
The front air mix damper servo motor (for driver side rear air flow) sends pulse signals to inform the air conditioning amplifier assembly of the damper position. The air conditioning amplifier assembly activates the motor (normal or reverse) based on the signals to move the front air mix damper (for driver side rear air flow) to any position. As a result, the amount of air that has passed through the evaporator and is passing through the heater core is adjusted, and the temperature of the air blowing toward the rear driver side is controlled.

HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1457/57	The air mix damper position does not change even if the air conditioning amplifier assembly operates the front air mix damper servo motor.	• Front air mix damper servo motor (for driver side rear air flow) • Air conditioning harness assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (FRONT AIR MIX DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Air Mix Servo Targ Pls(F&R D)	Front air mix damper servo motor (for driver side rear air flow) target pulse / Min.: 13, Max.: 41 (for LHD) Min.: 5, Max.: 33 (for RHD)	for LHD • MAX COOL: 13 (pulse) • MAX HOT: 41 (pulse) for RHD • MAX COOL: 33 (pulse) • MAX HOT: 5 (pulse)	-

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK FRONT AIR MIX DAMPER SERVO MOTOR (OPERATION)

a. for LHD

i. Replace the front air mix damper servo motor (for driver side rear air flow) (Click here).

b. for RHD

i. Replace the front air mix damper servo motor (for driver side rear air flow) (Click here).

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

3.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:
DTC B1457 is not output.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG (for LHD)	C
NG (for RHD)	D

B → REPLACE FRONT AIR MIX DAMPER SERVO MOTOR (**Click here**)

C → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (**Click here**)

D → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (**Click here**)

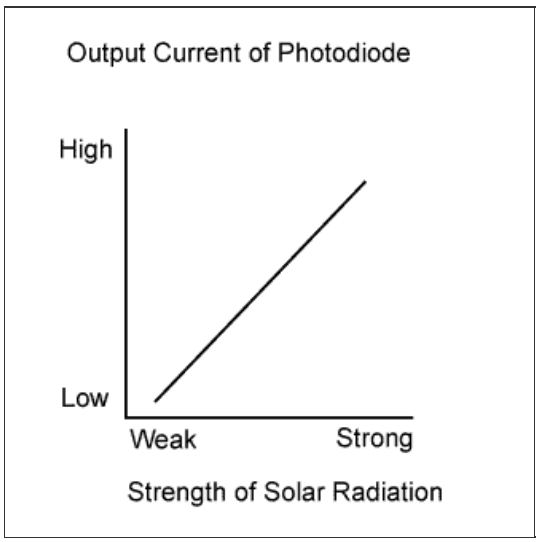
A

REPLACE FRONT AIR MIX DAMPER SERVO MOTOR (**Click here**)

DTC B1421/21 Solar Sensor Circuit (Passenger Side)

for Preparation Click here

DESCRIPTION



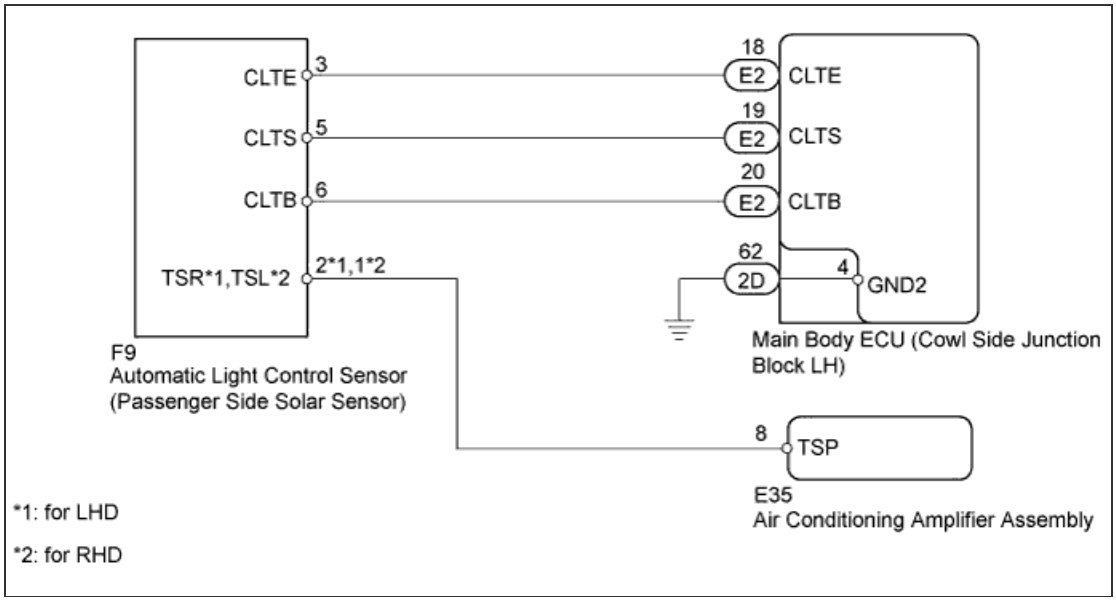
The automatic light control sensor (solar sensor), which is installed on the upper side of the instrument panel, detects sunlight and controls the air conditioning in auto mode. The output current from the solar sensor varies according to the amount of sunlight. When the sunlight increases, the output current increases. As the sunlight decreases, the output current decreases. The air conditioning amplifier assembly detects output current from the solar sensor.

DTC Code	DTC Detection Condition	Trouble Area
B1421/21	An open or short in the passenger side solar sensor circuit.	• Automatic light control sensor (solar sensor) • Harness or connector between solar sensor and air conditioning amplifier assembly • Harness or connector between solar sensor and main body ECU (cowl side junction block LH) • Main body ECU (cowl side junction block LH) • Air conditioning amplifier assembly

HINT:

If DTC B1244 is output at the same time, troubleshoot DTC B1244 first.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (PASSENGER SIDE SOLAR SENSOR)

a. Use the Data List to check if the front passenger side solar sensor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Solar Sensor (P Side)	Passenger side solar sensor / Min.: 0, Max.: 255	Passenger side solar sensor voltage increases as brightness increases	Open in the circuit: 0. Short in the circuit: 255.

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK ↓

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - AUTOMATIC LIGHT CONTROL SENSOR)

a. for LHD:

i. Disconnect the F9 sensor connector.

ii. Disconnect the E35 amplifier connector.

iii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E35-8 (TSP) - F9-2 (TSR)	Always	Below 1 Ω
E35-8 (TSP) - Body ground	Always	10 kΩ or higher

b. for RHD:

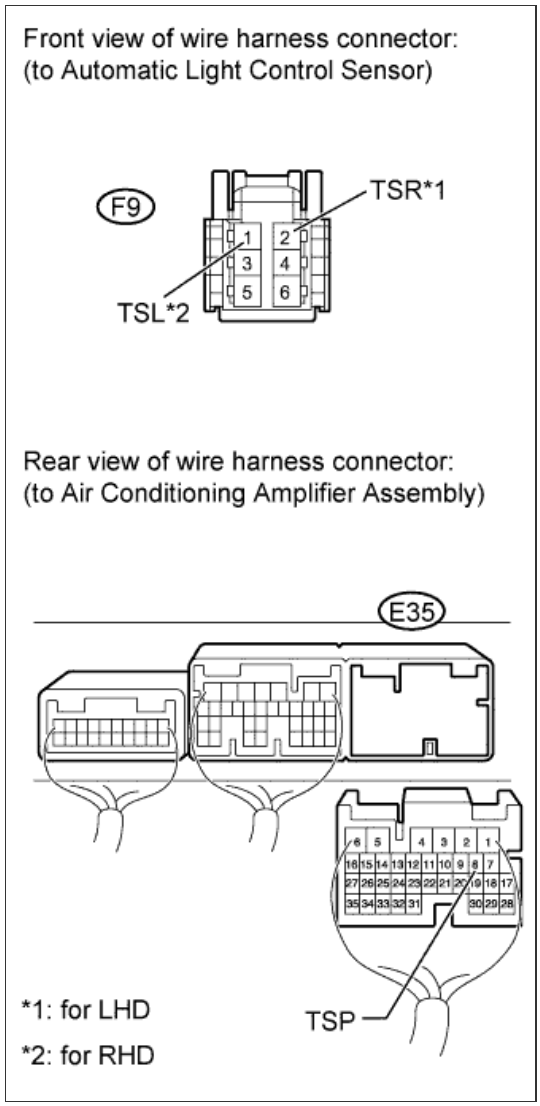
i. Disconnect the F9 sensor connector.

ii. Disconnect the E35 amplifier connector.

iii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E35-8 (TSP) - F9-1 (TSL)	Always	Below 1 Ω
E35-8 (TSP) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

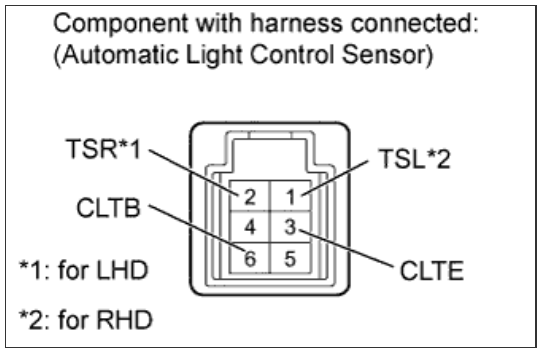
OK ↓

3.INSPECT AUTOMATIC LIGHT CONTROL SENSOR (TSR, TSL - CLTE VOLTAGE)

a. Remove the automatic light control sensor (Click here).

b. Apply battery voltage between terminals 6 (CLTB) and 3 (CLTE) of the solar sensor.

c. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Condition	Specified Condition
2 (TSR) - 3 (CLTE)*1	Sensor exposed to electric light	0.8 to 4.3 V
	Sensor covered with a cloth	Below 0.8 V
1 (TSL) - 3 (CLTE)*2	Sensor exposed to electric light	0.8 to 4.3 V
	Sensor covered with a cloth	Below 0.8 V

*1: for LHD
*2: for RHD

HINT:

- **As the inspection light is moved away from the sensor, the voltage decreases.**
- **Use an incandescent light for inspection. Bring it about 300 mm (11.8 in.) from the solar sensor.**

NG → REPLACE AUTOMATIC LIGHT CONTROL SENSOR (Click here)

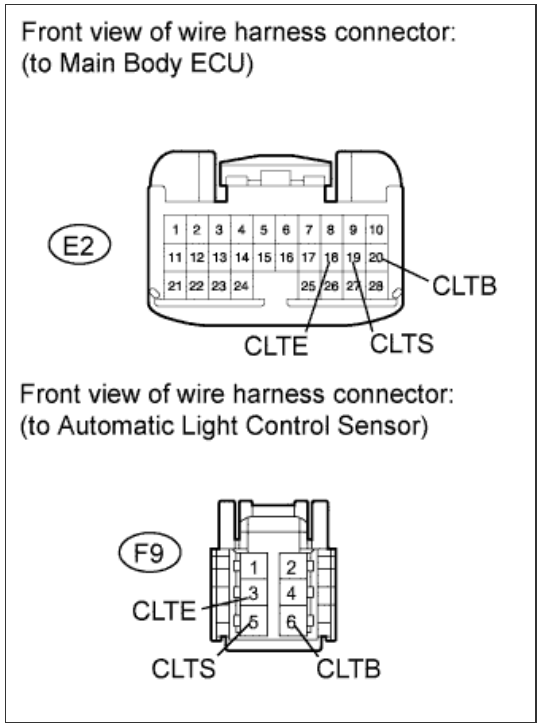
OK

4.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - AUTOMATIC LIGHT CONTROL SENSOR)

a. Disconnect the E2 ECU connector.

b. Disconnect the F9 sensor connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

Tester Connection	Condition	Specified Condition
E2-20 (CLTB) - F9-6 (CLTB)	Always	Below 1 Ω
E2-19 (CLTS) - F9-5 (CLTS)		
E2-18 (CLTE) - F9-3 (CLTE)		
E2-20 (CLTB) - Body ground	Always	10 kΩ or higher
E2-19 (CLTS) - Body ground		
E2-18 (CLTE) - Body ground		

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

DTC B1458/58 Passenger Side Air Outlet Damper Control Servo Motor Circuit

for Preparation Click here

DESCRIPTION

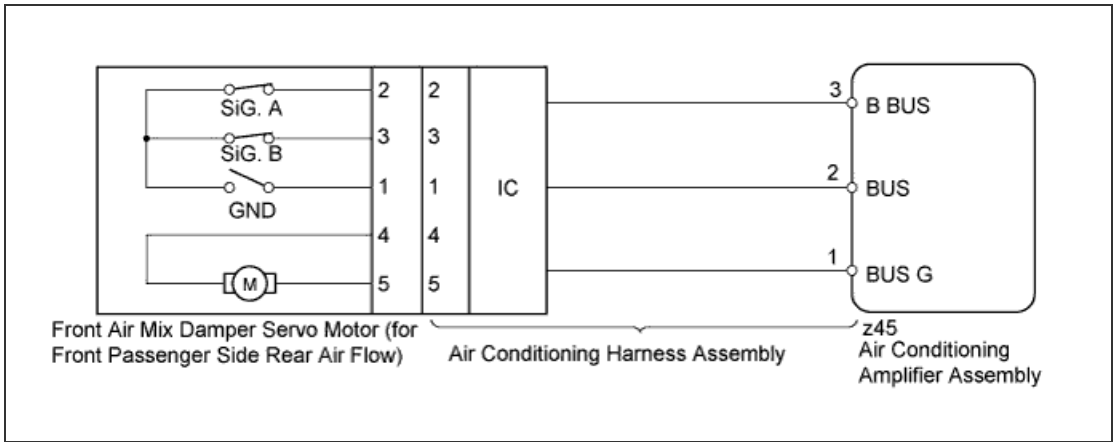
The front air mix damper servo motor (for front passenger side rear air flow) sends pulse signals to inform the air conditioning amplifier assembly of the damper position. The air conditioning amplifier assembly activates the motor (normal or reverse) based on the signals to move the front air mix damper (for front passenger side rear air flow) to any position. As a result, the amount of air that has passed through the evaporator and is passing through the heater core is adjusted, and the temperature of the air blowing toward the rear passenger side is controlled.

HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1458/58	The air mix damper position does not change even if the air conditioning amplifier assembly operates the front air mix damper servo motor.	• Front air mix damper servo motor (for front passenger side rear air flow) • Air conditioning harness assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (FRONT AIR MIX DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Air Mix Servo Targ Pls (F&R P)	Front air mix damper servo motor (for front passenger side rear air flow) target pulse / Min.: 5, Max.: 33 (for LHD) Min.: 13, Max.: 41 (for RHD)	for LHD • MAX COOL: 33 (pulse) • MAX HOT: 5 (pulse) for RHD • MAX COOL: 13 (pulse) • MAX HOT: 41 (pulse)	-

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CONFIRM FRONT AIR MIX DAMPER SERVO MOTOR (OPERATION)

a. for LHD:

i. Replace the front air mix damper servo motor (for front passenger side rear air flow) (Click here).

b. for RHD:

i. Replace the front air mix damper servo motor (for front passenger side rear air flow) (Click here).

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

3.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:
DTC B1458 is not output.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG (for LHD)	C
NG (for RHD)	D

B → REPLACE FRONT AIR MIX DAMPER SERVO MOTOR (**Click here**)

C → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (**Click here**)

D → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (**Click here**)

A

REPLACE FRONT AIR MIX DAMPER SERVO MOTOR (**Click here**)

DTC B1422/22 Compressor Lock Sensor Circuit

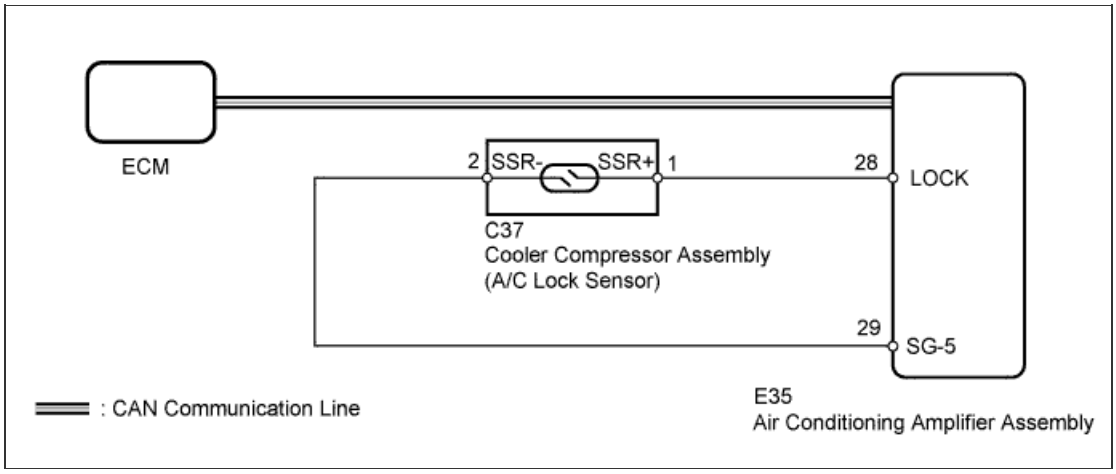
for Preparation Click here

SYSTEM DESCRIPTION

The ECM sends the engine speed signal to the air conditioning amplifier assembly via CAN communication.
The air conditioning amplifier assembly reads the difference between compressor speed and engine speed. When the difference becomes too large, the air conditioning amplifier assembly determines that the compressor is locked, and turns the magnetic clutch off.

DTC Code	DTC Detection Condition	Trouble Area
B1422/22	An open or short in the compressor lock sensor circuit.	• Cooler compressor assembly (A/C lock sensor) • Compressor drive belt • Harness or connector between cooler compressor assembly and air conditioning amplifier assembly • Air conditioning amplifier assembly • CAN communication line

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK CAN COMMUNICATION SYSTEM

a. Use the intelligent tester to check if the CAN communication system is functioning normally.

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

2.INSPECT AIR CONDITIONING AMPLIFIER ASSEMBLY

a. Remove the air conditioning amplifier assembly with its connectors still connected (Click here).

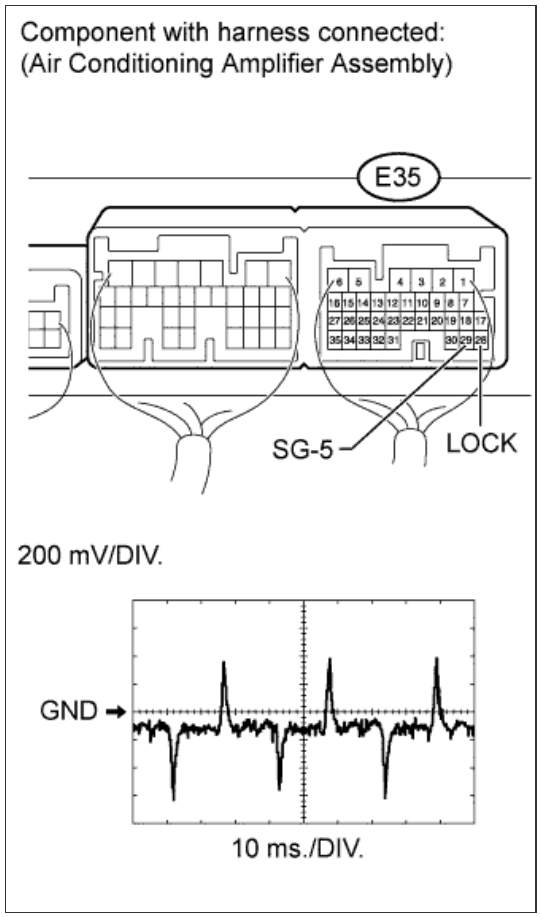
b. Measure the waveform of the connector.

Measurement Condition

Item	Content
Terminal No. (Symbol)	E35-28 (LOCK) - E35-29 (SG-5)
Tool Setting	200 mV/DIV., 10 ms/DIV.
Condition	Engine running A/C switch on Blower switch lo

OK:

Waveform is as shown in the illustration.



NG → Go to step 3

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

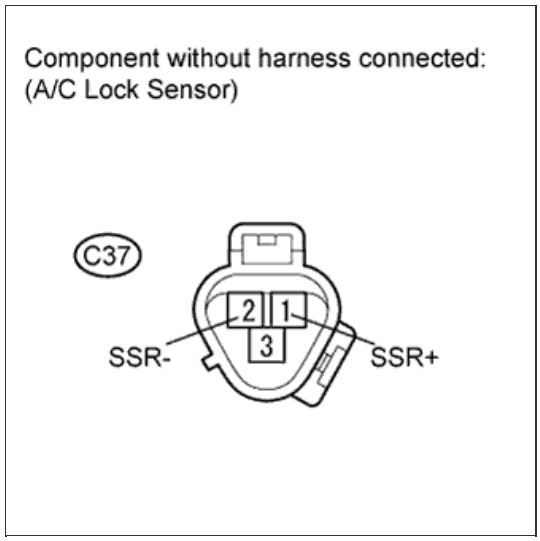
3.INSPECT COOLER COMPRESSOR ASSEMBLY (A/C LOCK SENSOR)

a. Disconnect the C37 connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
C37-1 (SSR+) - C37-2 (SSR-)	20°C (68°F)	65 to 125 Ω



NG → REPLACE COOLER COMPRESSOR ASSEMBLY (A/C LOCK SENSOR) (Click here)

OK →

4.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - COOLER COMPRESSOR)

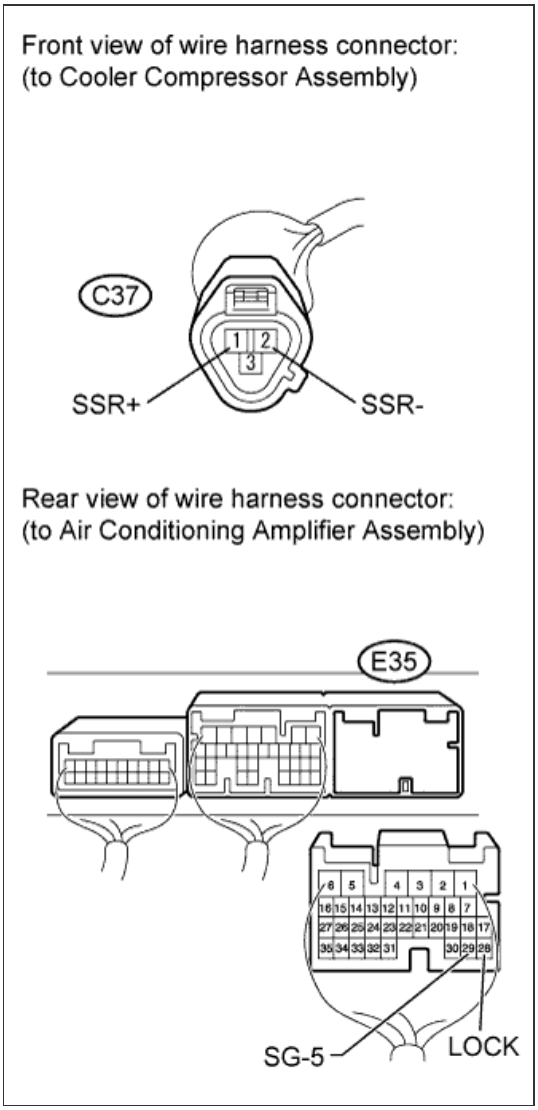
a. Disconnect the E35 amplifier connector.

b. Disconnect the C37 compressor connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E35-28 (LOCK) - C37-1 (SSR+)	Always	Below 1 Ω
E35-29 (SG-5) - C37-2 (SSR-)		
E35-28 (LOCK) - Body ground	Always	10 kΩ or higher
E35-29 (SG-5) - Body ground		



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

DTC B1461/61 Emission Gas NOx Sensor Circuit

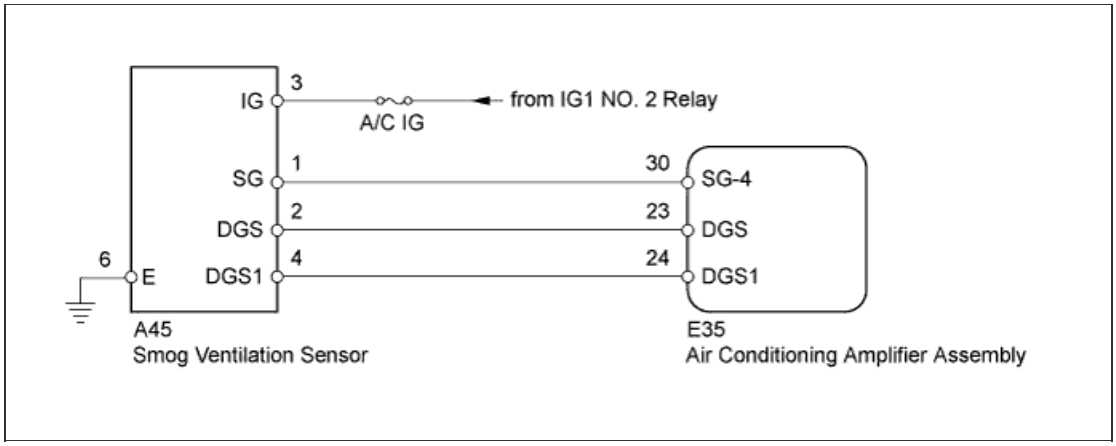
for Preparation Click here

DESCRIPTION

The smog ventilation sensor, which is installed on the front of the cooler condenser assembly, automatically changes to fresh, fresh/recirculation or recirculation mode operation. The smog ventilation sensor detects NOx in the emission gas and transmits signals to the air conditioning amplifier assembly.

DTC Code	DTC Detection Condition	Trouble Area
B1461/61	An open or short in the smog ventilation sensor circuit (NOx).	• Smog ventilation sensor • Harness or connector between smog ventilation sensor and air conditioning amplifier assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (A/C IG)

a. Remove the A/C IG fuse from the cowl side junction block LH.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A/C IG fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

2.READ VALUE USING INTELLIGENT TESTER (SMOG VENTILATION SENSOR)

a. Use the Data List to check if the smog ventilation sensor is functioning properly.

Air Conditioner

Tester Display	Measurement Item / Range	Normal Condition	Diagnostic Note
Emission Gas Nox Sensor	Smog ventilation sensor/ Min.: 0, Max.: 255	Increases as gas amount increases	-

OK:

The display is as specified in the normal condition.

NG → Go to step 3

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

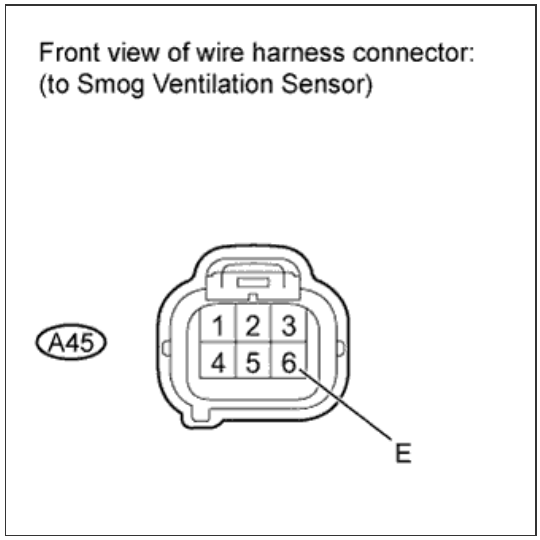
3.CHECK HARNESS AND CONNECTOR (SMOG VENTILATION SENSOR - BODY GROUND)

a. Disconnect the A45 sensor connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A45-6 (E) - Body ground	Always	Below 1 Ω



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

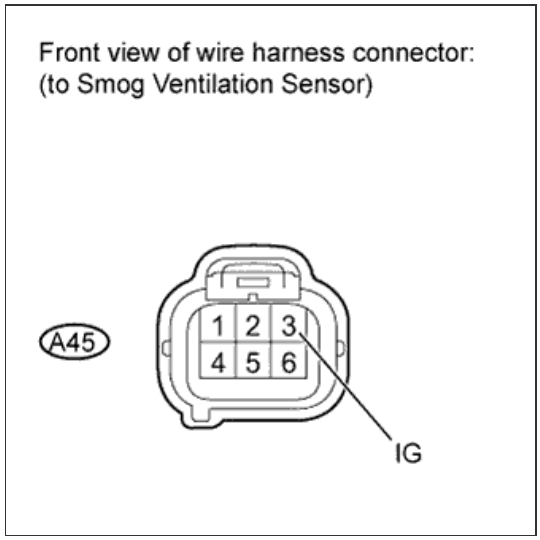
4.CHECK HARNESS AND CONNECTOR (SMOG VENTILATION SENSOR - BATTERY)

a. Disconnect the A45 smog ventilation sensor connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
A45-3 (IG) - Body ground	Engine switch on (IG)	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5.INSPECT SMOG VENTILATION SENSOR

a. Remove the smog ventilation sensor (Click here).

b. After applying battery voltage to terminals 3 (IG) and 6 (E) for more than 30 seconds, measure the resistance according to the value(s) in the table below.

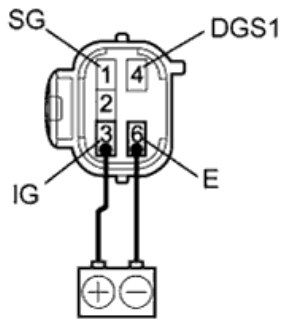
Standard Resistance:

Tester Connection	Condition	Specified Condition
1 (SG) - 4 (DGS1)	15 to 25°C (59 to 77°F)	2.5 to 40 kΩ

HINT:

When the sensor is exposed to the exhaust gas, the resistance increases.

Component without harness connected:
(Smog Ventilation Sensor)



NG → REPLACE SMOG VENTILATION SENSOR (Click here)

OK →

6.CHECK HARNESS AND CONNECTOR (SMOG VENTILATION SENSOR - AIR CONDITIONING AMPLIFIER)

a. Disconnect the A45 smog ventilation sensor connector.

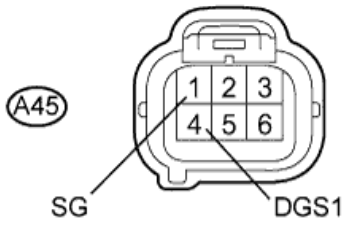
b. Disconnect the E35 amplifier connector.

c. Measure the resistance according to the value(s) in the table below.

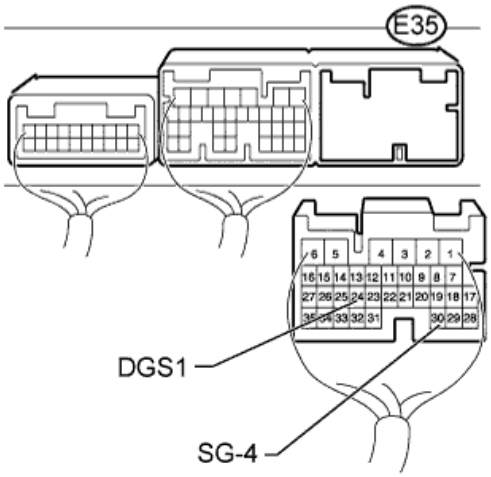
Standard Resistance:

Tester Connection	Condition	Specified Condition
A45-1 (SG) - E35-30 (SG-4)	Always	Below 1 Ω
A45-4 (DGS1) - E35-24 (DGS1)		
E35-30 (SG-4) - Body ground	Always	10 kΩ or higher
E35-24 (DGS1) - Body ground		

Front view of wire harness connector:
(to Smog Ventilation Sensor)



Front view of wire harness connector:
(to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

DTC B1422/22 Compressor Lock Sensor Circuit

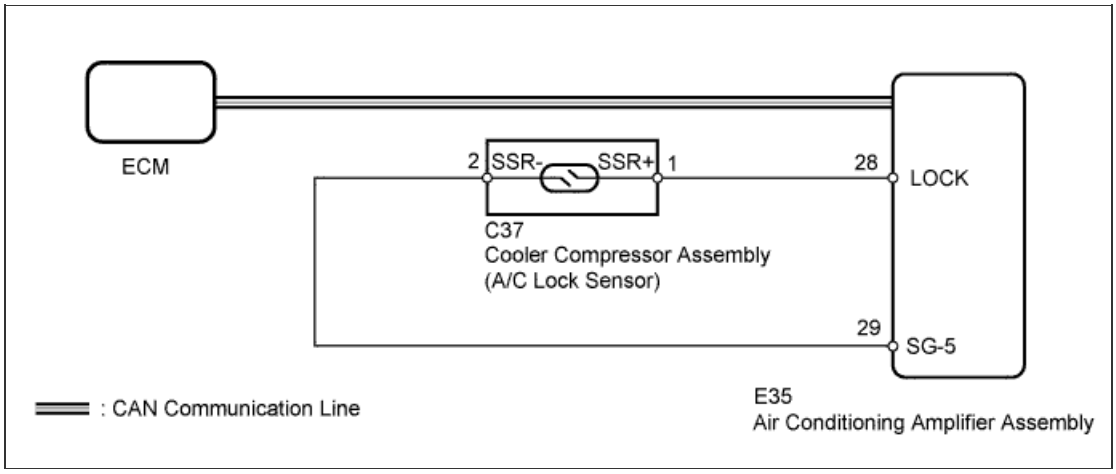
for Preparation Click here

SYSTEM DESCRIPTION

The ECM sends the engine speed signal to the air conditioning amplifier assembly via CAN communication.
The air conditioning amplifier assembly reads the difference between compressor speed and engine speed. When the difference becomes too large, the air conditioning amplifier assembly determines that the compressor is locked, and turns the magnetic clutch off.

DTC Code	DTC Detection Condition	Trouble Area
B1422/22	An open or short in the compressor lock sensor circuit.	• Cooler compressor assembly (A/C lock sensor) • Compressor drive belt • Harness or connector between cooler compressor assembly and air conditioning amplifier assembly • Air conditioning amplifier assembly • CAN communication line

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK CAN COMMUNICATION SYSTEM

a. Use the intelligent tester to check if the CAN communication system is functioning normally.

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

2.INSPECT AIR CONDITIONING AMPLIFIER ASSEMBLY

a. Remove the air conditioning amplifier assembly with its connectors still connected (Click here).

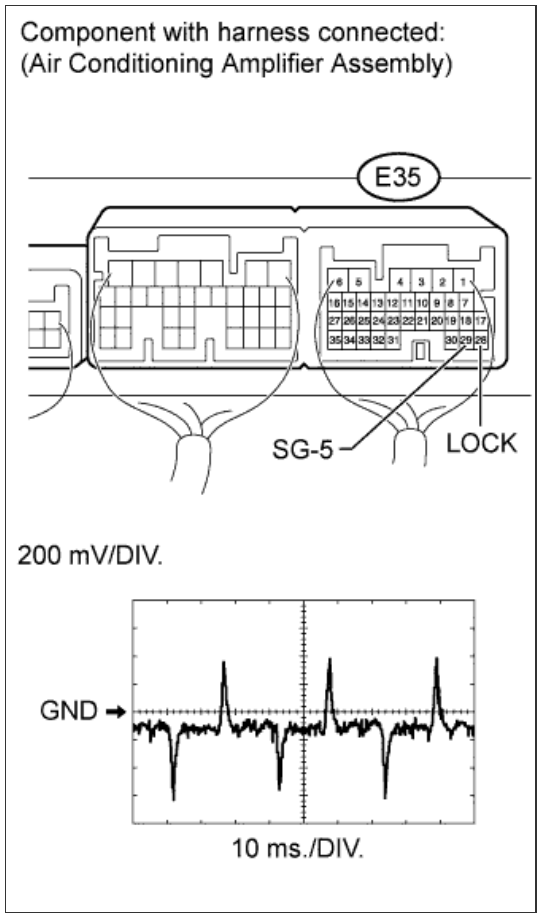
b. Measure the waveform of the connector.

Measurement Condition

Item	Content
Terminal No. (Symbol)	E35-28 (LOCK) - E35-29 (SG-5)
Tool Setting	200 mV/DIV., 10 ms/DIV.
Condition	Engine running A/C switch on Blower switch lo

OK:

Waveform is as shown in the illustration.



NG → Go to step 3

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

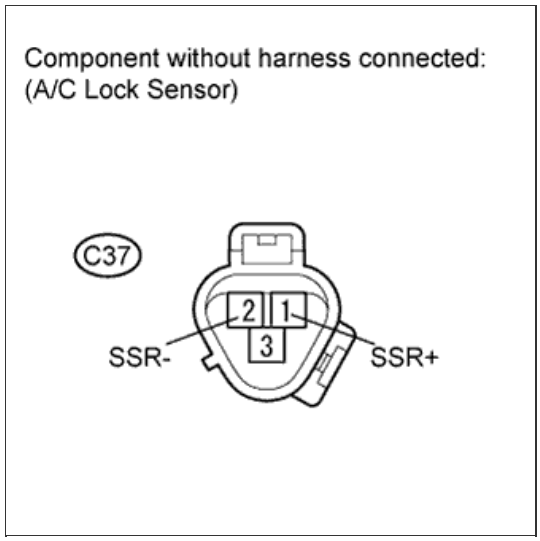
3.INSPECT COOLER COMPRESSOR ASSEMBLY (A/C LOCK SENSOR)

a. Disconnect the C37 connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
C37-1 (SSR+) - C37-2 (SSR-)	20°C (68°F)	65 to 125 Ω



NG → REPLACE COOLER COMPRESSOR ASSEMBLY (A/C LOCK SENSOR) (Click here)

OK →

4.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - COOLER COMPRESSOR)

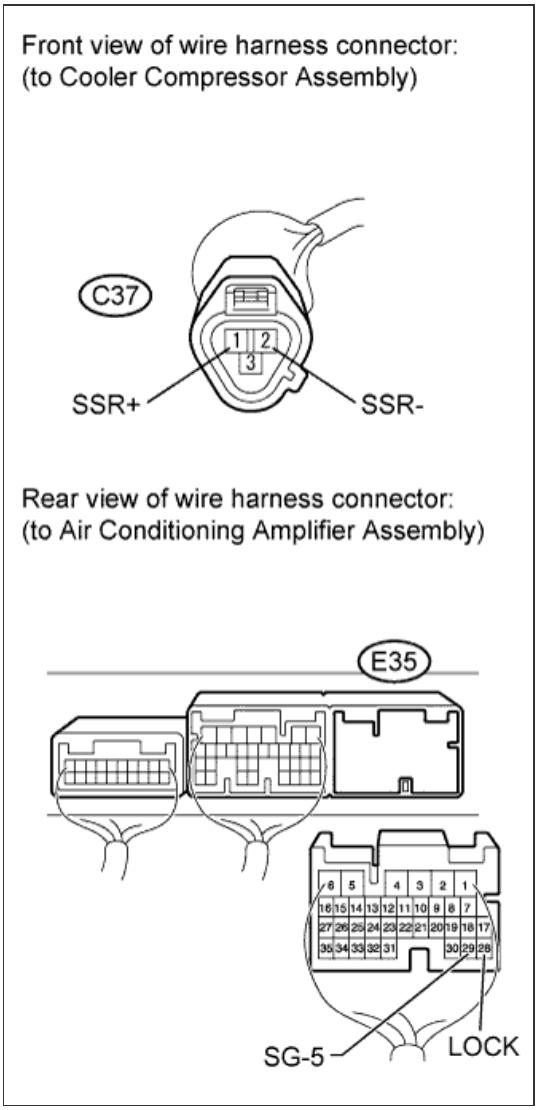
a. Disconnect the E35 amplifier connector.

b. Disconnect the C37 compressor connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E35-28 (LOCK) - C37-1 (SSR+)	Always	Below 1 Ω
E35-29 (SG-5) - C37-2 (SSR-)		
E35-28 (LOCK) - Body ground	Always	10 kΩ or higher
E35-29 (SG-5) - Body ground		



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

DTC B1467/67 Rear Air Foot Duct Sensor Circuit on Driver Side

for Preparation Click here

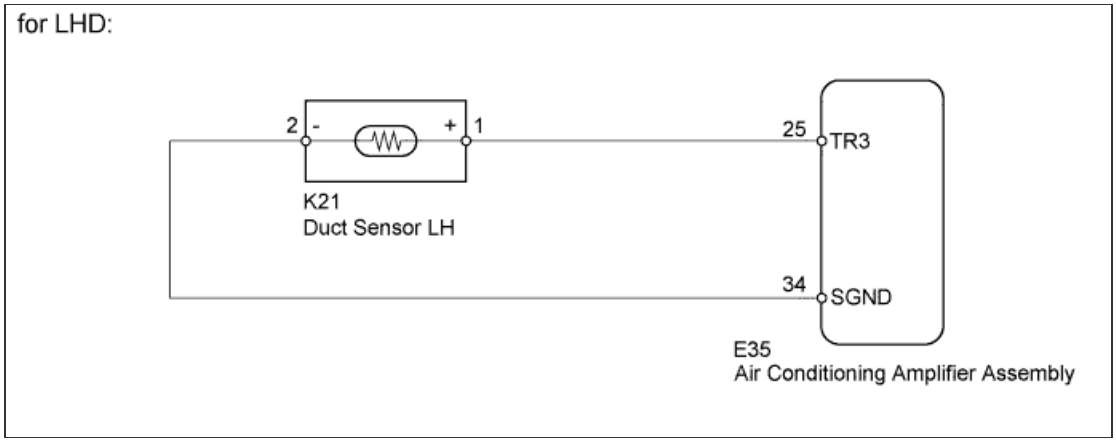
DESCRIPTION

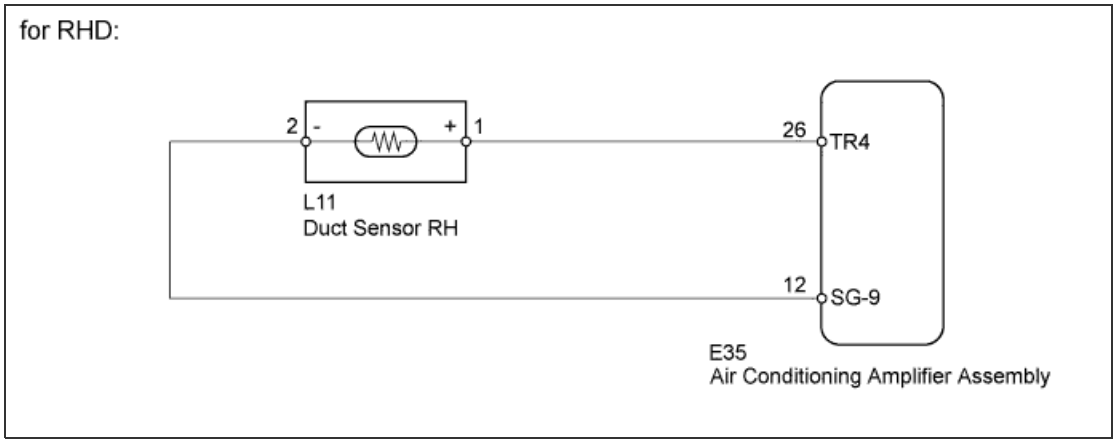
The duct sensor LH*1 or RH*2 (for driver side) detects the duct temperature and sends the appropriate signals to the air conditioning amplifier assembly.

DTC Code	DTC Detection Condition	Trouble Area
B1467/67	An open or short in the duct sensor LH*1 or RH*2 circuit.	• Duct sensor LH*1 • Duct sensor RH*2 • Harness or connector (duct sensor LH)*1 • Harness or connector (duct sensor RH)*2 • Air conditioning amplifier assembly

*1: for LHD
*2: for RHD

WIRING DIAGRAM





INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (DUCT SENSOR)

a. Use the Data List to check if the duct sensor LH*1 or RH*2 (for driver side) is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Foot Duct Sensor (Rear D)	Duct sensor / Min.: -12.7°C (9.14°F) Max.: 76.55°C	Actual temperature measured by duct sensor (for driver side) displayed	Open in the circuit: -12.7°C (9.14°F). Short in the circuit: 76.55°C

	(169.79°F)		(169.79°F).

*1: for LHD
*2: for RHD

OK:
The display is as specified in the normal condition.

NG	Go to step 2

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK DUCT SENSOR

a. for LHD:

i. Remove the duct sensor LH (Click here).

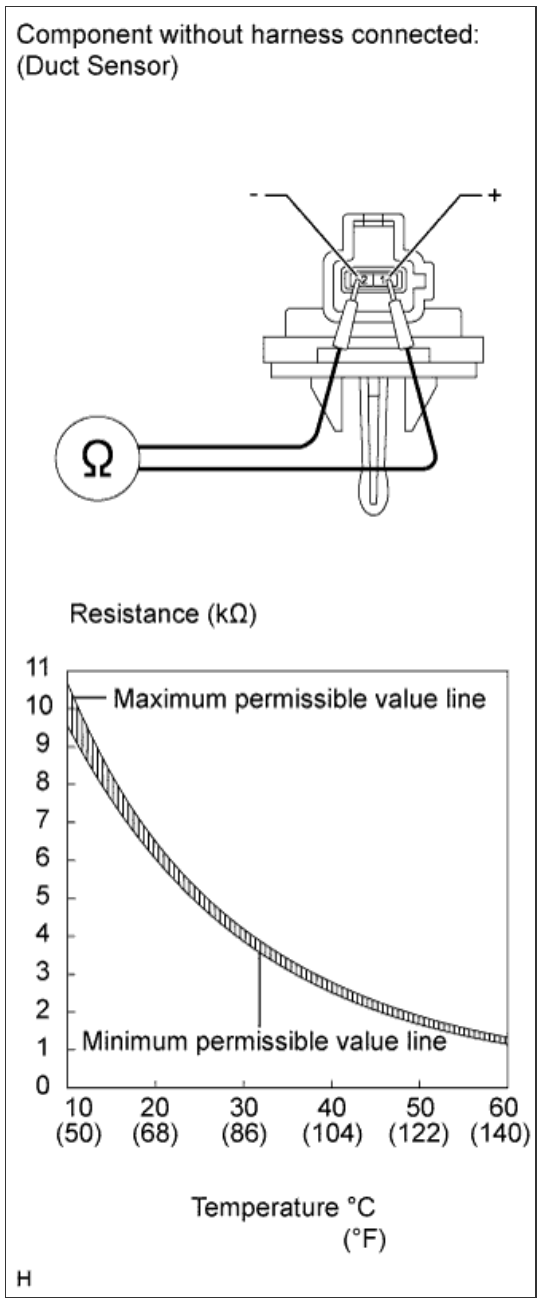
b. for RHD:

i. Remove the duct sensor RH (Click here).

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 (+) - 2 (-)	10°C (50°F)	9.4 to 10.5 kΩ
	15°C (59°F)	7.5 to 8.3 kΩ
	20°C (68°F)	6.0 to 6.5 kΩ
	25°C (77°F)	4.8 to 5.2 kΩ
	30°C (86°F)	3.8 to 4.2 kΩ
	35°C (95°F)	3.1 to 3.4 kΩ
	40°C (104°F)	2.5 to 2.8 kΩ
	45°C (113°F)	2.0 to 2.3 kΩ
	50°C (122°F)	1.6 to 2.0 kΩ
	55°C (131°F)	1.3 to 1.6 kΩ
	60°C (140°F)	1.1 to 1.4 kΩ



NOTICE:

- **Touching the sensor even slightly may change the resistance value. Hold the connector of the sensor.**
- **When measuring the resistance, the sensor temperature must be the same as the ambient temperature.**

HINT:

As the temperature increases, the resistance decreases (See the graph).

If the resistance value is not as specified, replace the sensor.

Result

Result	Proceed to
OK	A
NG (for LHD)	B
NG (for RHD)	C

B	REPLACE DUCT SENSOR LH (Click here)
C	REPLACE DUCT SENSOR RH (Click here)

A

3.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - DUCT SENSOR)

a. for LHD

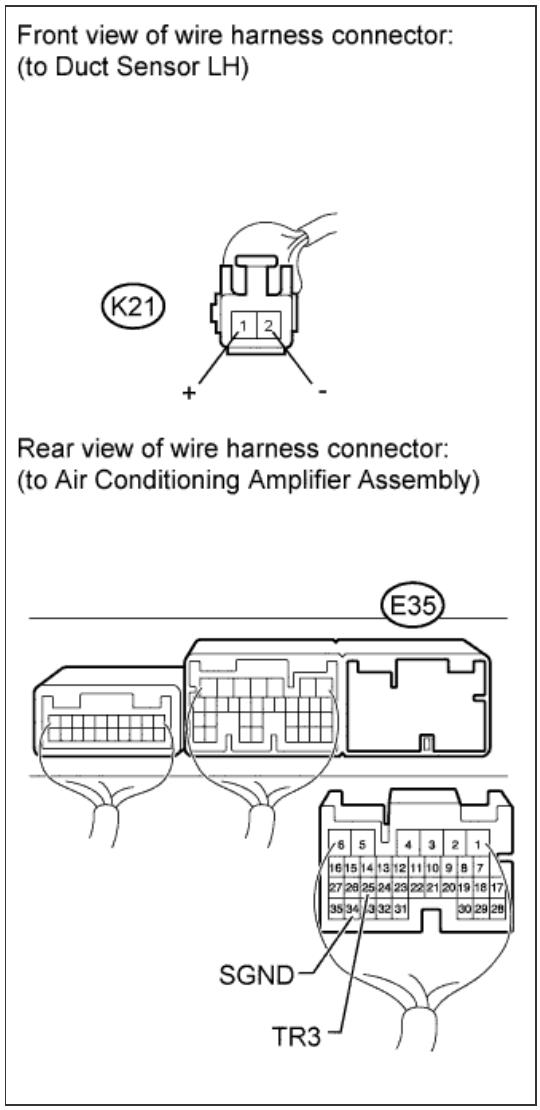
i. Disconnect the K21 sensor connector.

ii. Disconnect the E35 amplifier connector.

iii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E35-25 (TR3) - K21-1 (+)	Always	Below 1 Ω
E35-34 (SGND) - K21-2 (-)		
E35-25 (TR3) - Body ground	Always	10 kΩ or higher
E35-34 (SGND) - Body ground		



b. for RHD

i. Disconnect the L11 sensor connector.

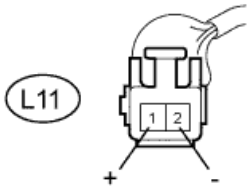
ii. Disconnect the E35 amplifier connector.

iii. Measure the resistance according to the value(s) in the table below.

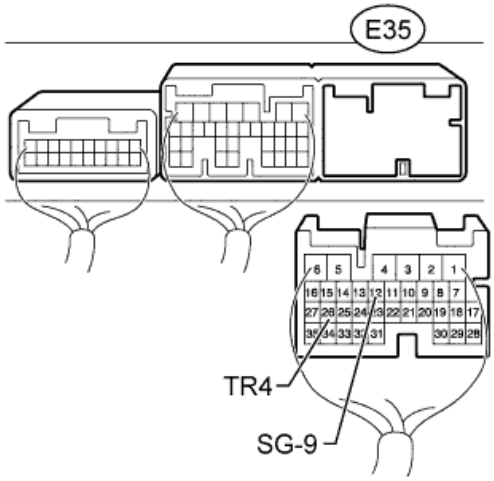
Standard Resistance:

Tester Connection	Condition	Specified Condition
E35-26 (TR4) - L11-1 (+)	Always	Below 1 Ω
E35-12 (SG-9) - L11-2 (-)		
E35-26 (TR4) - Body ground	Always	10 kΩ or higher
E35-12 (SG-9) - Body ground		

Front view of wire harness connector:
(to Duct Sensor RH)



Rear view of wire harness connector:
(to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

for Preparation Click here

DESCRIPTION

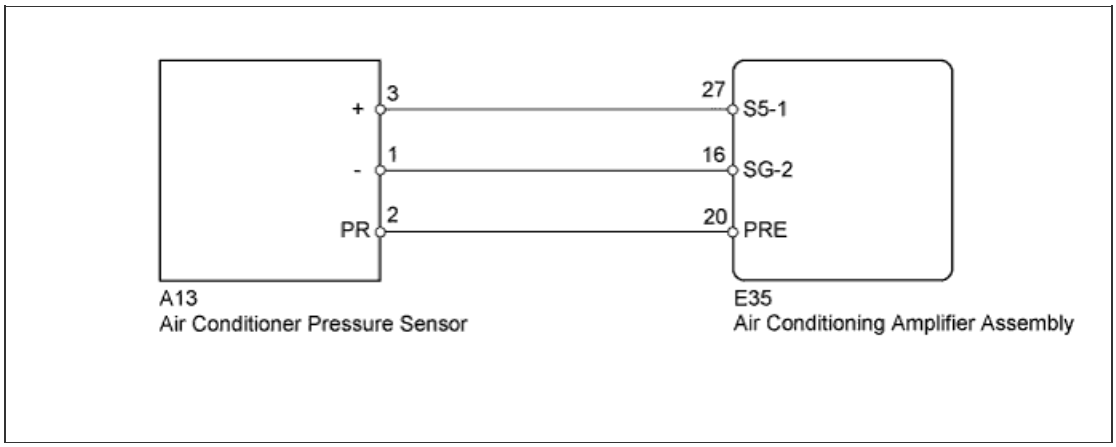
This DTC is stored when refrigerant pressure is extremely low (0.1762 MPa (1.8 kgf/cm ^{2}, 25 psi) or less) or extremely high (3.0732 MPa (31.4 kgf/cm ^{2}, 445 psi) or more). The air conditioner pressure sensor, which is installed on the pipe of the high pressure side to detect refrigerant pressure, outputs the refrigerant pressure signal to the air conditioning amplifier assembly. The air conditioning amplifier assembly converts the signal to pressure according to the sensor characteristics to control the compressor.

HINT:

Be sure to check the refrigerant volume first when this DTC is output because this DTC can also be stored if there is no refrigerant in the cycle.

DTC Code	DTC Detection Condition	Trouble Area
B1423/23	• An open or short in the air conditioner pressure sensor circuit. • Refrigerant pressure on the high pressure side is extremely low or extremely high.	• Air conditioner pressure sensor • Harness or connector • Cooler expansion valve (blocked, stuck) • Cooler condenser assembly (blocked, deterioration of cooling capacity due to dirt) • Cooler dryer (moisture in refrigerant cycle cannot be absorbed) • Condenser fan (condenser cannot be cooled down) • Air conditioning system (leaks, blocked) • Refrigerant pipe line • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

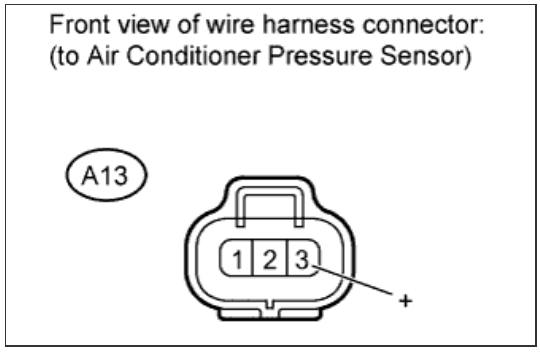
1.CHECK HARNESS AND CONNECTOR (POWER SOURCE CIRCUIT)

a. Disconnect the A13 air conditioner pressure sensor connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
A13-3 (+) - Body ground	Engine switch on (IG)	4.75 to 5.25 V



NG → Go to step 5

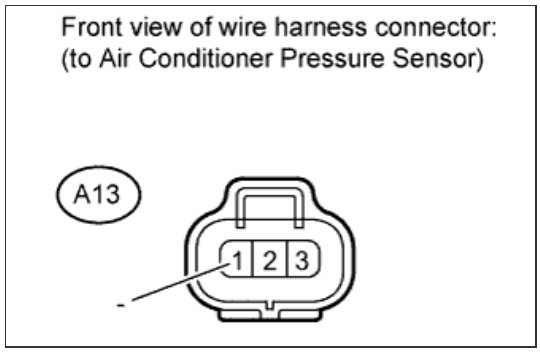
OK

2.CHECK HARNESS AND CONNECTOR (GROUND CIRCUIT)

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A13-1 (-) - Body ground	Always	Below 1 Ω



NG → Go to step 6

OK

3.INSPECT AIR CONDITIONER PRESSURE SENSOR (SENSOR SIGNAL CIRCUIT)

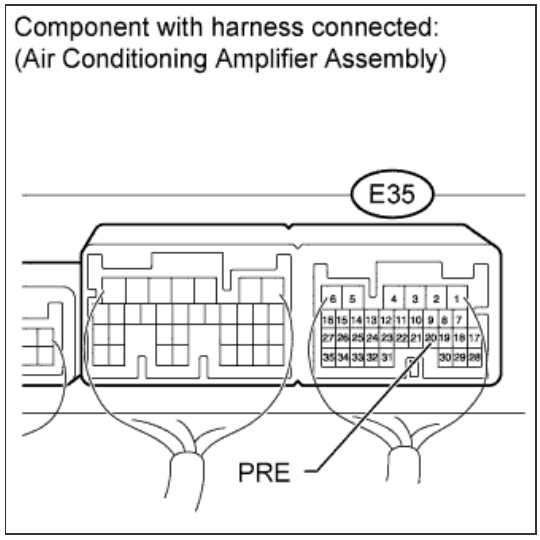
a. Reconnect the A13 air conditioner pressure sensor connector.

b. Remove the air conditioning amplifier assembly with its connectors still connected.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E35-20 (PRE) - Body ground	• Engine switch on (IG) • A/C switch off	0.7 to 4.8 V



HINT:

If the measured voltage is not within the normal range, there may be a malfunction in the air conditioning amplifier assembly, air conditioner pressure sensor, or wire harness. It is also possible that the amount of refrigerant may not be appropriate.

NG → Go to step 7

OK

4.INSPECT AIR CONDITIONER PRESSURE SENSOR (SENSOR SIGNAL CIRCUIT)

a. Measure the voltage when the following conditions are satisfied.

Measurement Condition

Item	Condition
Engine Speed	1500 rpm
Vehicle Doors	Fully open
Temperature Setting	Lo
Blower Speed	Hi
A/C Switch	On
R/F Switch	Recirculation

Interior Temperature	25 to 35°C (77 to 95°F)

NOTICE:

- **If refrigerant pressure on the high pressure side becomes extremely high during the inspection (if the voltage exceeds 4.8 V), the fail-safe function stops compressor operation. Therefore, measure the voltage before the fail-safe operation.**
- **It is necessary to measure the voltage for a certain amount of time (approximately 10 minutes) because the problem symptom may recur after a while.**

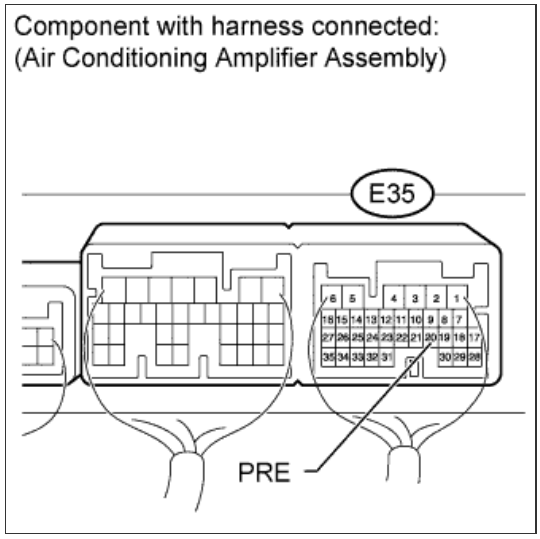
HINT:

When the outside air temperature is low (below -1.5°C (29.3°F)), the compressor stops due to operation of the ambient temperature and the evaporator temperature sensor to prevent the evaporator from freezing. In this case, perform the inspection in a warm indoor environment.

i. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E35-20 (PRE) - Body ground	• Engine switch on (IG) • A/C switch on	0.7 to 4.8 V



NG → Go to step 13

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

5.CHECK HARNESS AND CONNECTOR (PRESSURE SENSOR - AIR CONDITIONING AMPLIFIER)

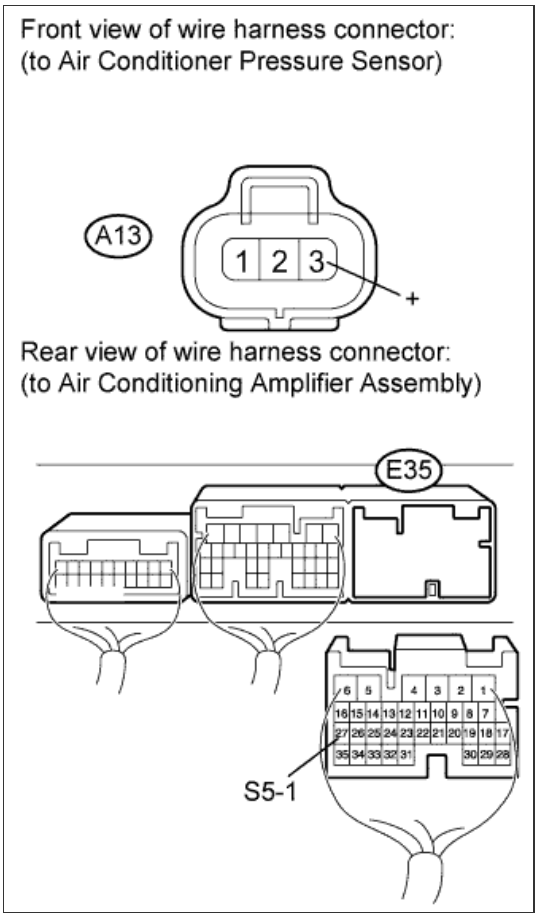
a. Disconnect the E35 air conditioning amplifier assembly connector.

b. Disconnect the A13 air conditioner pressure sensor connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A13-3 (+) - E35-27 (S5-1)	Always	Below 1 Ω
E35-27 (S5-1) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

6.CHECK HARNESS AND CONNECTOR (PRESSURE SENSOR - AIR CONDITIONING AMPLIFIER)

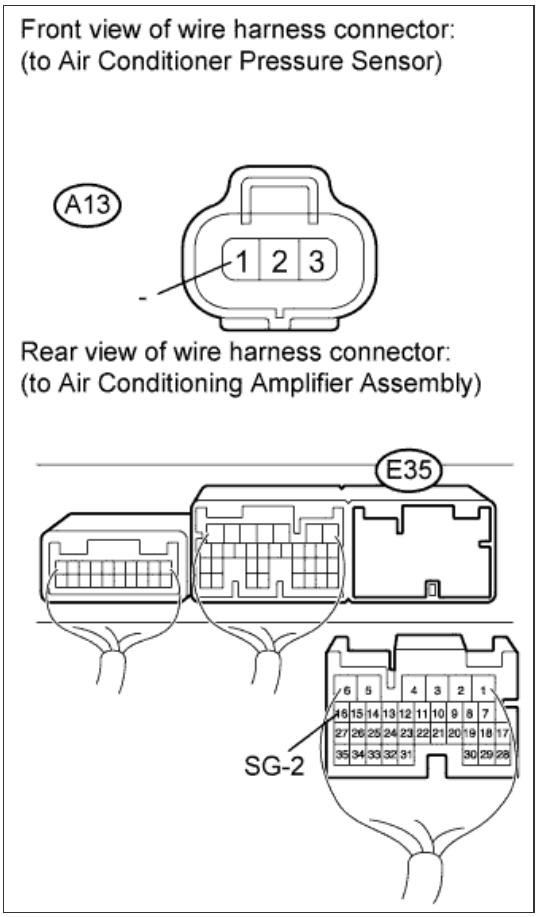
a. Disconnect the E35 air conditioning amplifier assembly connector.

b. Disconnect the A13 air conditioner pressure sensor connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A13-1 (-) - E35-16 (SG-2)	Always	Below 1 Ω
E35-16 (SG-2) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

7.CHECK HARNESS AND CONNECTOR (PRESSURE SENSOR - AIR CONDITIONING AMPLIFIER)

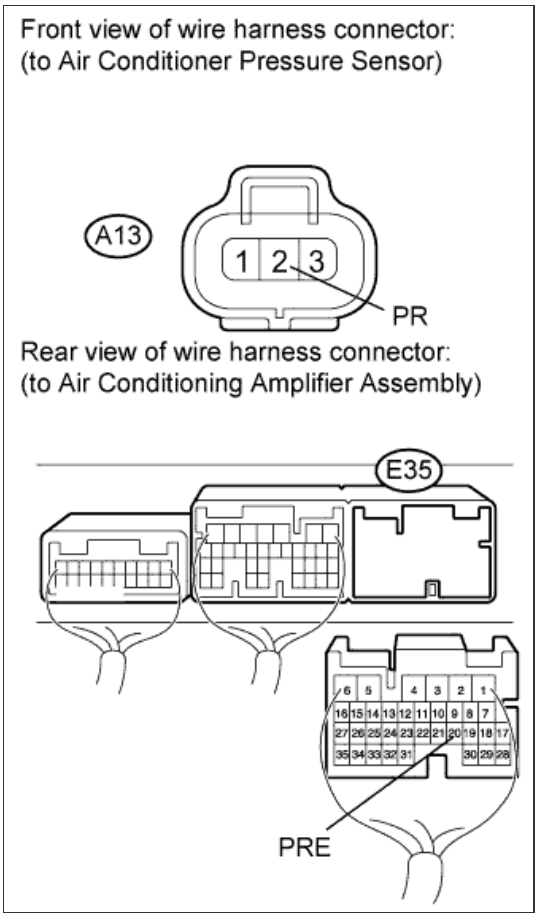
a. Disconnect the E35 air conditioning amplifier assembly connector.

b. Disconnect the A13 air conditioner pressure sensor connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A13-2 (PR) - E35-20 (PRE)	Always	Below 1 Ω
E35-20 (PRE) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

8.INSPECT FOR AIR CONDITIONING SYSTEM LEAK

a. Install the manifold gauge set.

b. Recover the refrigerant from the air conditioning system using a refrigerant recovery unit.

c. Evacuate the air conditioning system and check that vacuum can be maintained in it.

OK:

Vacuum can be maintained in the air conditioning system.

HINT:

If vacuum cannot be maintained in the air conditioning system, refrigerant may be leaking from it. In this case, it is necessary to repair or replace the leaking part of the air conditioning system.

NG → Go to step 12

OK

9.CHARGE REFRIGERANT

a. Add an appropriate amount of refrigerant (Click here).

NEXT

10.RECHECK DTC

a. Recheck for the DTC when the following conditions are satisfied.

Measurement Condition

Item	Condition

Engine Speed	1500 rpm
Vehicle Doors	Fully open
Temperature Setting	Lo
Blower Speed	Hi
A/C Switch	On
R/F Switch	Recirculation
Interior Temperature	25 to 35°C (77 to 95°F)

NOTICE:

If refrigerant pressure on the high pressure side becomes high, the DTC will be stored. Therefore, it is necessary to measure the voltage for a certain amount of time (approximately 10 minutes) because the DTC may be stored after the air conditioning system operates for a while.

HINT:

When the outside air temperature is low (below -1.5°C (29.3°F)), the compressor stops due to operation of the ambient temperature sensor and the evaporator temperature sensor to prevent the evaporator from freezing. In this case, perform the inspection in a warm indoor environment.

OK:

DTC B1423 is not output.

NOTICE:

If the DTC was stored due to an insufficient or excessive amount of refrigerant, the problem may have been solved after performing the previous step. However, the root cause of insufficient refrigerant may be refrigerant leaks. The root cause of excessive refrigerant may be adding refrigerant when the level was insufficient. Therefore, identify and repair the area where refrigerant leaks as necessary.

NG → Go to step 11

OK → END

11.CHECK AIR CONDITIONER PRESSURE SENSOR

a. Install the manifold gauge set.

b. Reconnect the A13 air conditioner pressure sensor connector.

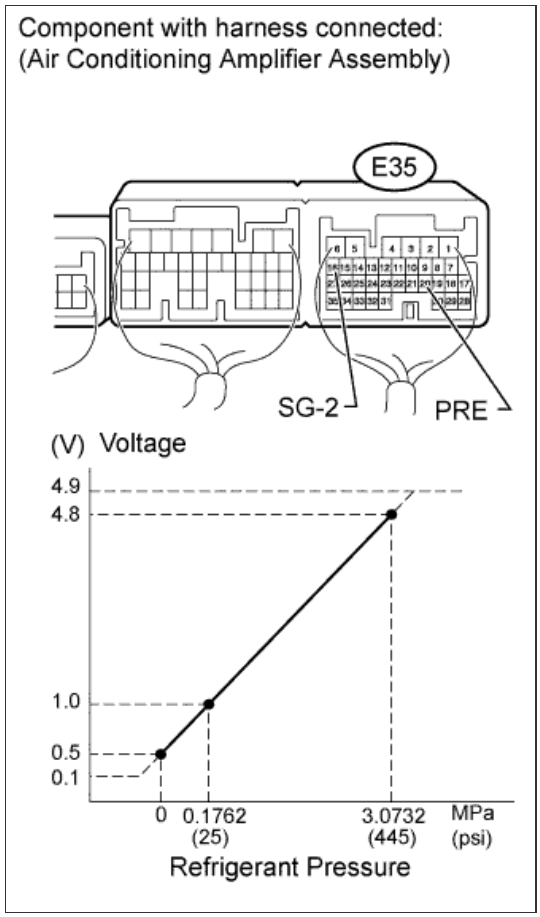
c. Remove the air conditioning amplifier assembly with its connectors still connected (Click here).

d. Turn the engine switch on (IG).

e. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
E35-20 (PRE) - E35-16 (SG-2)	Refrigerant pressure: Normal pressure (less than 3.0732 MPa [31.4 kgf/cm^2, 445 psi] and more than 0.1762 MPa [1.8 kgf/cm^2, 25 psi])	1.0 to 4.8 V
	Refrigerant pressure: Abnormal (less than 0.1762 MPa [1.8 kgf/cm^2, 25 psi])	Below 1 V
	Refrigerant pressure: Abnormal (more than 3.0732 MPa [31.4 kgf/cm^2, 445 psi])	4.8 V or higher



NG → REPLACE AIR CONDITIONER PRESSURE SENSOR (Click here)

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

12.REPAIR AIR CONDITIONING SYSTEM LEAK

a. Identify the area where refrigerant leaks (Click here).

b. Repair the identified area of the air conditioning system.

c. Evacuate the air conditioning system.

NEXT

CHARGE REFRIGERANT (Click here)

13.INSPECT CONDENSER FAN

a. Inspect that the condenser fan operates normally (Click here).

NG → REPLACE CONDENSER FAN (Click here)

OK

14.CHARGE REFRIGERANT

a. Use a refrigerant recovery unit to recover refrigerant.

b. Evacuate the air conditioning system.

c. Add an appropriate amount of refrigerant (Click here).

HINT:

If refrigerant is added and the system has not been properly evacuated (insufficient vacuum time), moisture in the air remaining in the system will freeze in the expansion valve, blocking the flow on the high pressure side. Therefore, in order to confirm the problem, recover the refrigerant and properly evacuate the system. Add an appropriate amount of refrigerant, and check for the DTC.

NEXT

15.RECHECK DTC

a. Recheck for the DTC when the following conditions are satisfied.

Measurement Condition

Item	Condition
Engine Speed	1500 rpm
Vehicle Doors	Fully open
Temperature Setting	Lo
Blower Speed	Hi
A/C Switch	On
R/F Switch	Recirculation
Interior Temperature	25 to 35°C (77 to 95°F)

NOTICE:

If refrigerant pressure on the high pressure side becomes high, the DTC will be stored. Therefore, it is necessary to measure the voltage for a certain amount of time (approximately 10 minutes) because the DTC may be stored after the air conditioning system operates for a while.

HINT:

- **When the outside air temperature is low (below -1.5°C (29.3°F)), the compressor stops due to operation of the ambient temperature sensor and the evaporator temperature sensor to prevent the evaporator from freezing. In this case,**

perform the inspection in a warm indoor environment.

- If refrigerant is added and the system has not been properly evacuated (insufficient vacuum time), moisture in the air remaining in the system will freeze in the expansion valve, blocking the flow on the high pressure side. Therefore, in order to confirm the problem, recover the refrigerant and properly evacuate the system. Add an appropriate amount of refrigerant, and check for the DTC. If the DTC is not output after this procedure, it indicates that the cooler dryer in the cooler condenser assembly is not able to absorb moisture in the refrigerant cycle. In this case, to complete the repair it is necessary to replace the cooler dryer.

OK:
DTC B1423 is not output.

NG → **Go to step 16**

OK

REPLACE COOLER DRYER (Click here)

16.REPLACE COOLER EXPANSION VALVE

a. Replace the cooler expansion valve with a normal one.

HINT:

- **for LHD: (Click here).**
- **for RHD: (Click here).**
- **Replace the cooler expansion valve with a normal one because the cooler expansion valve is either stuck or clogged.**

NEXT

17.CHARGE REFRIGERANT

a. Add an appropriate amount of refrigerant (Click here).

NEXT

18.RECHECK DTC

a. Recheck for the DTC when the following conditions are satisfied.

Measurement Condition

Item	Condition
Engine Speed	1500 rpm
Vehicle Doors	Fully open
Temperature Setting	Lo
Blower Speed	Hi
A/C Switch	On
R/F Switch	Recirculation
Interior Temperature	25 to 35°C (77 to 95°F)

NOTICE:

If refrigerant pressure on the high pressure side becomes high, the DTC will be stored. Therefore, it is necessary to measure the voltage for a certain amount of time (approximately 10 minutes) because the DTC may be stored after the air conditioning system operates for a while.

HINT:

- **When the outside air temperature is low (below -1.5°C (29.3°F)), the compressor stops due to operation of the ambient temperature sensor and the evaporator temperature sensor to prevent the evaporator from freezing. In this case, perform the inspection in a warm indoor environment.**
- **If refrigerant pressure is not normal after replacing the expansion valve with a normal one, the cooler condenser assembly or pipes may be clogged due to dirt, dust or other contaminants. In this case, clean or replace the cooler condenser assembly or pipes.**

OK:
DTC B1423 is not output.

NG → REPLACE COOLER CONDENSER ASSEMBLY (Click here)

OK

END

DTC B1468/68 Rear Passenger Side Room Temperature Sensor Circuit

for Preparation Click here

DESCRIPTION

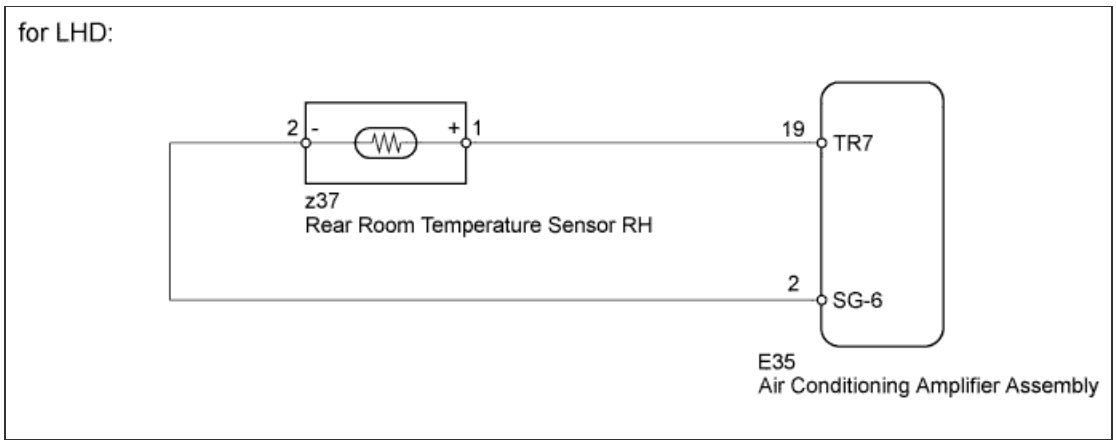
The rear room temperature sensor RH*1 or LH*2 (for front passenger side) is installed in the rear quarter trim board RH*1 or LH*2 to detect the rear room temperature and control the heater and air conditioner auto mode. The resistance of the rear room temperature sensor RH*1 or LH*2 changes in accordance with the rear room temperature for RH*1 or LH*2 seat. As the temperature decreases, the resistance increases. As the temperature increases, the resistance decreases.

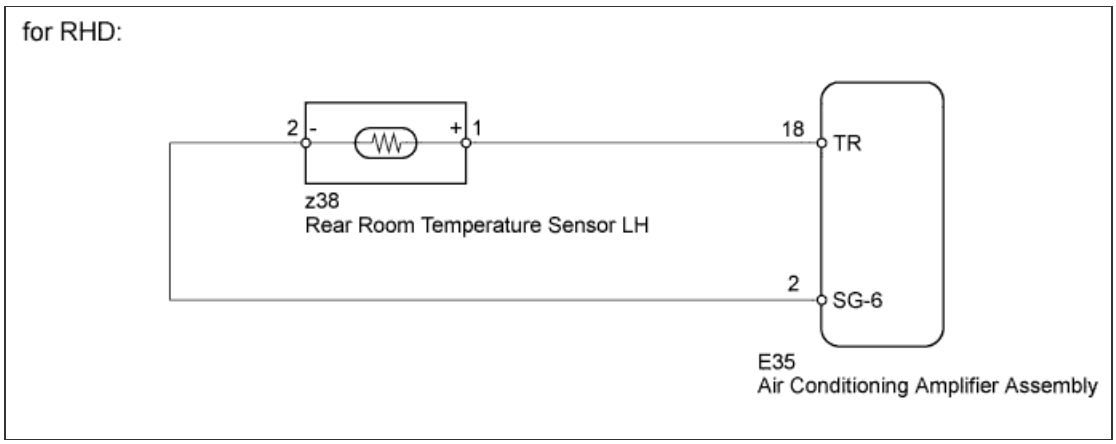
The air conditioning amplifier applies a voltage (5 V) to the rear room temperature sensor RH*1 or LH*2 and reads voltage changes as changes in the resistance of the rear room temperature sensor RH*1 or LH*2.

DTC Code	DTC Detection Condition	Trouble Area
B1468/68	An open or short in the rear room temperature sensor RH*1 or LH*2 circuit.	• Rear room temperature sensor RH*1 • Rear room temperature sensor LH*2 • Harness or connector between rear room temperature sensor RH and air conditioning amplifier assembly*1 • Harness or connector between rear room temperature sensor LH and air conditioning amplifier assembly*2 • Air conditioning amplifier assembly

*1: for LHD
*2: for RHD

WIRING DIAGRAM





INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (AIR CONDITIONER)

a. Use the Data List to check if the rear room temperature sensor RH*1 or LH*2 is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Room Temperature Sensor (RP)	Rear room temperature sensor for RH*1 or LH*2 / Min.: -6.5°C (20.3°F) Max.: 57.25°C (135.05°F)	Actual rear room temperature for RH*1 or LH*2 displayed	Open in the circuit: -6.5°C (20.3°F). Short in the circuit: 57.25°C (135.05°F).

*1: for LHD
*2: for RHD

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.INSPECT REAR ROOM TEMPERATURE SENSOR

a. Remove the rear room temperature sensor (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

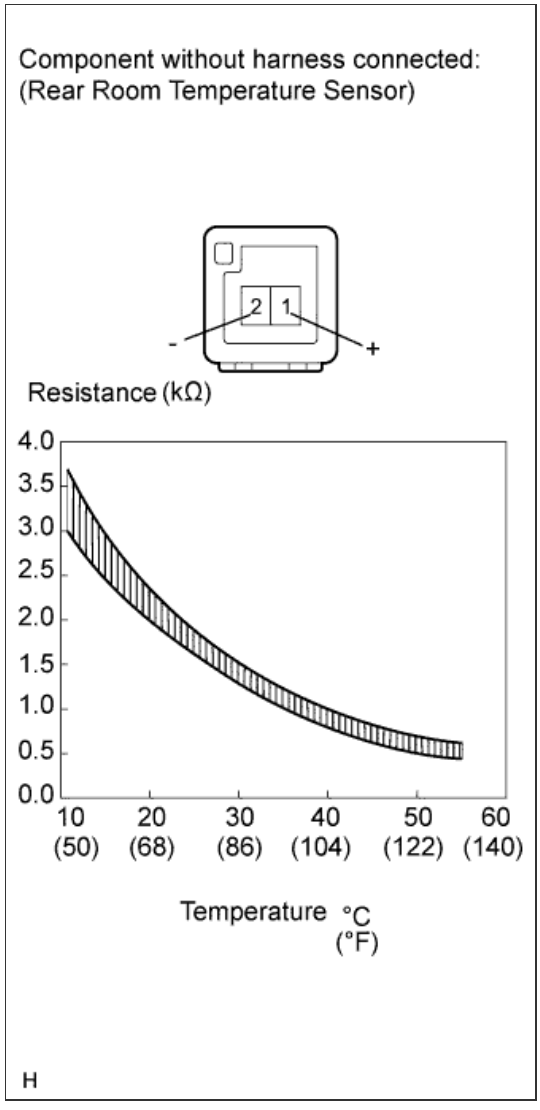
Tester Connection	Condition	Specified Condition
1 (+) - 2 (-)	10°C (50°F)	3.00 to 3.73 kΩ
	15°C (59°F)	2.45 to 2.88 kΩ
	20°C (68°F)	1.95 to 2.30 kΩ
	25°C (77°F)	1.60 to 1.80 kΩ
	30°C (86°F)	1.28 to 1.47 kΩ
	35°C (95°F)	1.00 to 1.22 kΩ
	40°C (104°F)	0.80 to 1.00 kΩ
	45°C (113°F)	0.65 to 0.85 kΩ
	50°C (122°F)	0.50 to 0.70 kΩ
	55°C (131°F)	0.44 to 0.60 kΩ
	60°C (140°F)	0.36 to 0.50 kΩ

NOTICE:

Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.

HINT:

As the temperature increases, the resistance decreases (See the graph).



NG → REPLACE REAR ROOM TEMPERATURE SENSOR (Click here)

OK

3.CHECK HARNESS AND CONNECTOR (REAR ROOM TEMPERATURE SENSOR - AIR CONDITIONING AMPLIFIER)

a. for LHD

i. Disconnect the z37 sensor connector.

ii. Disconnect the E35 amplifier connector.

iii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
z37-2 (-)- E35-2 (SG-6)	Always	Below 1 Ω
z37-1 (+) - E35-19 (TR7)		
E35-2 (SG-6) - Body ground	Always	10 kΩ or higher
E35-19 (TR7) - Body ground		

b. for RHD

i. Disconnect the z38 sensor connector.

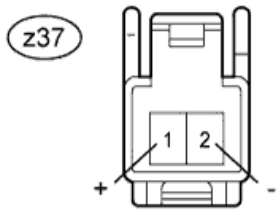
ii. Disconnect the E35 amplifier connector.

iii. Measure the resistance according to the value(s) in the table below.

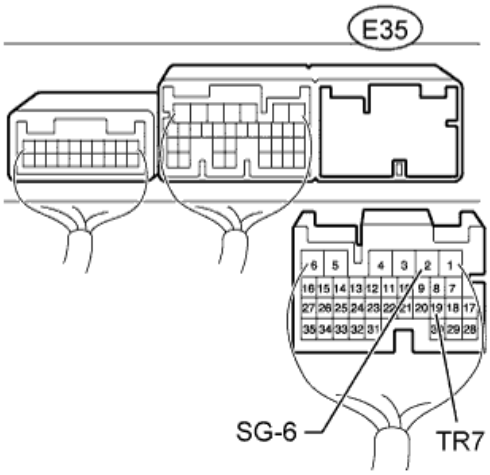
Standard Resistance:

Tester Connection	Condition	Specified Condition
z38-2 (-) - E35-2 (SG-6)	Always	Below 1 Ω
z38-1 (+) - E35-18 (TR)		
E35-2 (SG-6) - Body ground	Always	10 kΩ or higher
E35-18 (TR) - Body ground		

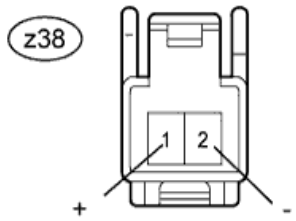
Front view of wire harness connector:
(to Rear Room Temperature Sensor RH)



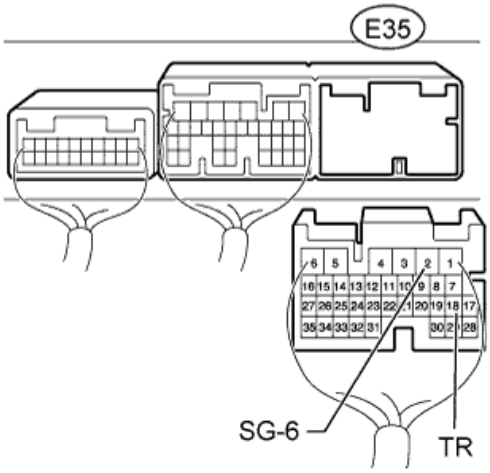
Rear view of wire harness connector:
(to Air Conditioning Amplifier Assembly)



Front view of wire harness connector:
(to Rear Room Temperature Sensor LH)



Rear view of wire harness connector:
(to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

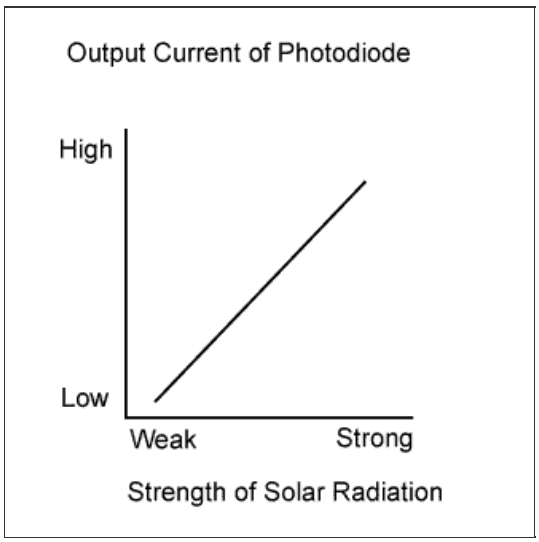
OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

DTC B1424/24 Solar Sensor Circuit (Driver Side)

for Preparation Click here

DESCRIPTION



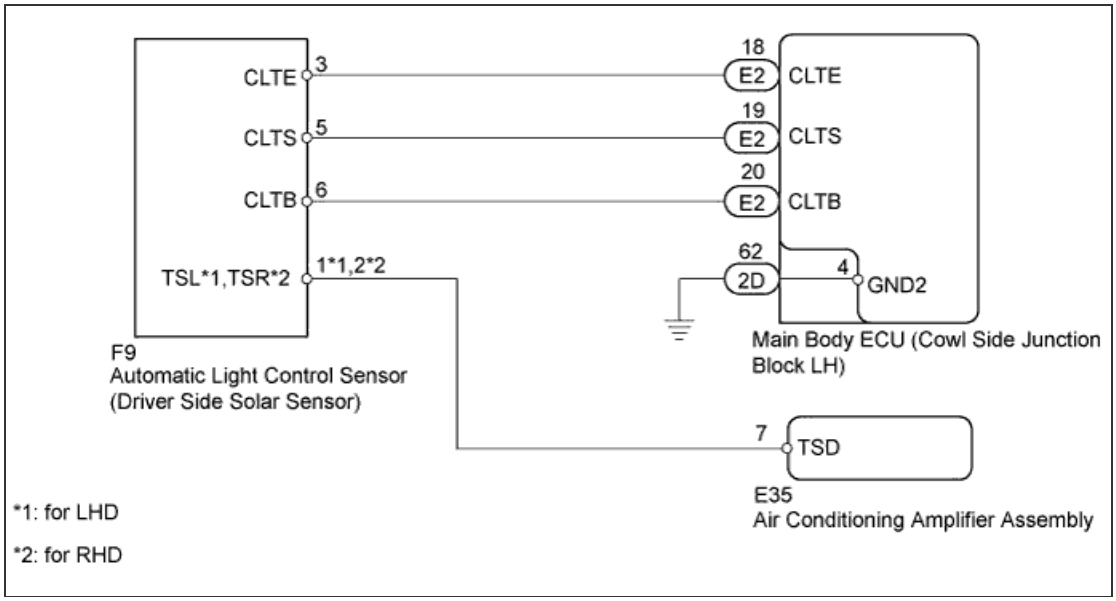
The automatic light control sensor (solar sensor), which is installed on the upper side of the instrument panel, detects sunlight and controls the air conditioning in auto mode. The output current from the solar sensor varies according to the amount of sunlight. When the sunlight increases, the output current increases. As the sunlight decreases, the output current decreases. The air conditioning amplifier assembly detects output current from the solar sensor.

DTC Code	DTC Detection Condition	Trouble Area
B1424/24	An open or short in the driver side solar sensor circuit.	• Automatic light control sensor (solar sensor) • Harness or connector between solar sensor and air conditioning amplifier assembly • Harness or connector between solar sensor and main body ECU (cowl side junction block LH) • Main body ECU (cowl side junction block LH) • Air conditioning amplifier assembly

HINT:

If DTC B1244 is output at the same time, troubleshoot DTC B1244 first.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (DRIVER SIDE SOLAR SENSOR)

a. Use the Data List to check if the driver side solar sensor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Solar Sensor (D Side)	Driver side solar sensor / Min.: 0, Max.: 255	Driver side solar sensor voltage increases as brightness increases	Open in the circuit: 0. Short in the circuit: 255.

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - AUTOMATIC LIGHT CONTROL SENSOR)

a. for LHD:

i. Disconnect the F9 sensor connector.

ii. Disconnect the E35 amplifier connector.

iii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E35-7 (TSD) - F9-1 (TSL)	Always	Below 1 Ω
E35-7 (TSD) - Body ground	Always	10 kΩ or higher

b. for RHD:

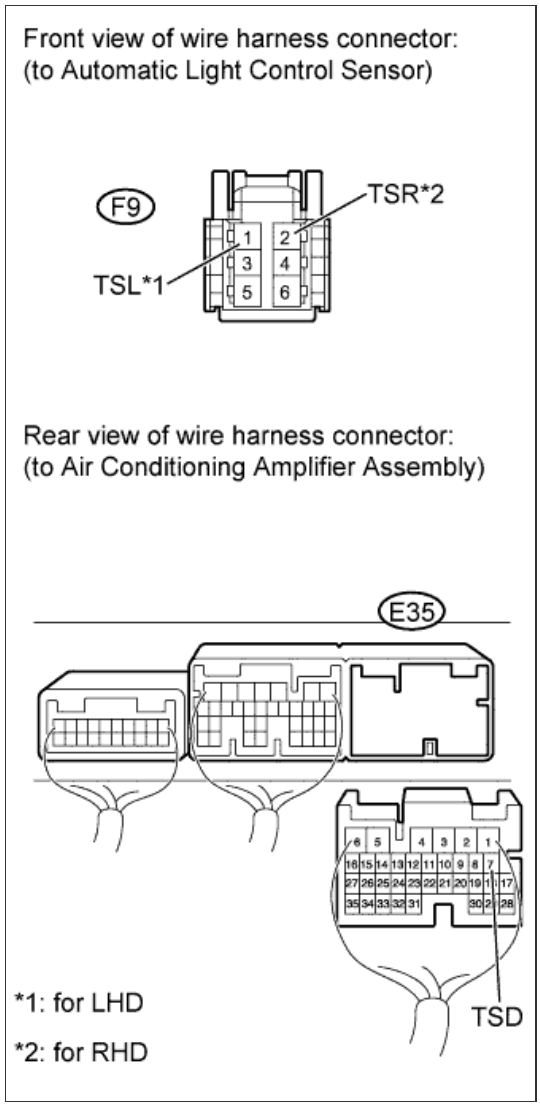
i. Disconnect the F9 sensor connector.

ii. Disconnect the E35 amplifier connector.

iii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E35-7 (TSD) - F9-2 (TSR)	Always	Below 1 Ω
E35-7 (TSD) - Body ground	Always	10 kΩ or higher



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

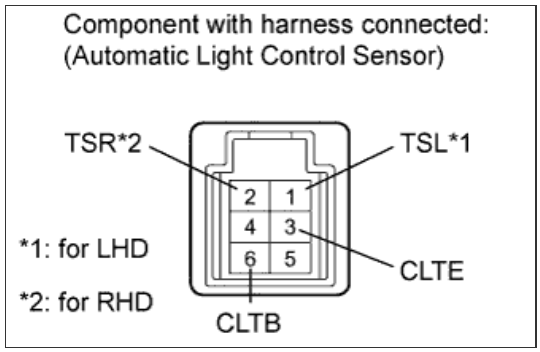
OK →

3.INSPECT AUTOMATIC LIGHT CONTROL SENSOR (TSL, TSR - CLTE VOLTAGE)

a. Remove the automatic light control sensor (Click here).

b. Apply battery voltage to terminals 6 (CLTB) and 3 (CLTE) of the solar sensor.

c. Measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Condition	Specified Condition
1 (TSL) - 3 (CLTE)*1	Sensor exposed to electric light	0.8 to 4.3 V
	Sensor covered with a cloth	Below 0.8 V
2 (TSR) - 3 (CLTE)*2	Sensor exposed to electric light	0.8 to 4.3 V
	Sensor covered with a cloth	Below 0.8 V

*1: for LHD
*2: for RHD

HINT:

- **As the inspection light is moved away from the sensor, the voltage decreases.**
- **Use an incandescent light for inspection. Bring it about 300 mm (11.8 in.) from the solar sensor.**

NG → REPLACE AUTOMATIC LIGHT CONTROL SENSOR (Click here)

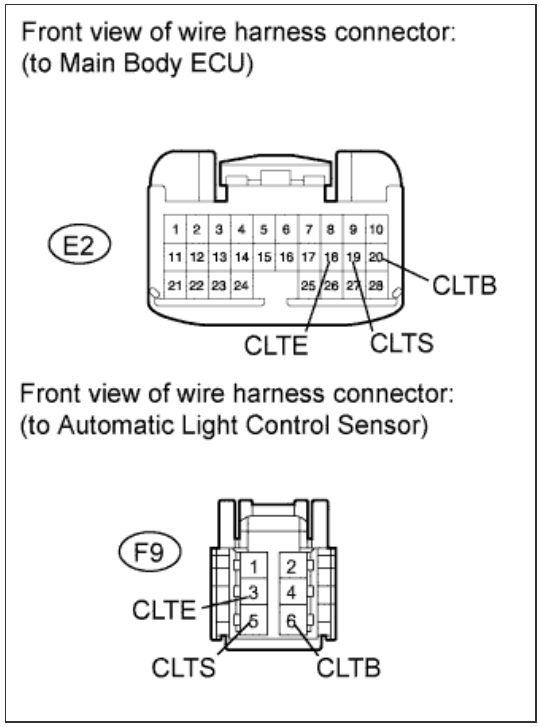
OK

4.CHECK HARNESS AND CONNECTOR (MAIN BODY ECU - AUTOMATIC LIGHT CONTROL SENSOR)

a. Disconnect the E2 ECU connector.

b. Disconnect the F9 sensor connector.

c. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

Tester Connection	Condition	Specified Condition
E2-20 (CLTB) - F9-6 (CLTB)	Always	Below 1 Ω
E2-19 (CLTS) - F9-5 (CLTS)		
E2-18 (CLTE) - F9-3 (CLTE)		
E2-20 (CLTB) - Body ground	Always	10 kΩ or higher
E2-19 (CLTS) - Body ground		
E2-18 (CLTE) - Body ground		

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU (COWL SIDE JUNCTION BLOCK LH)

DTC B1486/86 Driver Side Air Outlet Damper Control Servo Motor Circuit

for Preparation Click here

DESCRIPTION

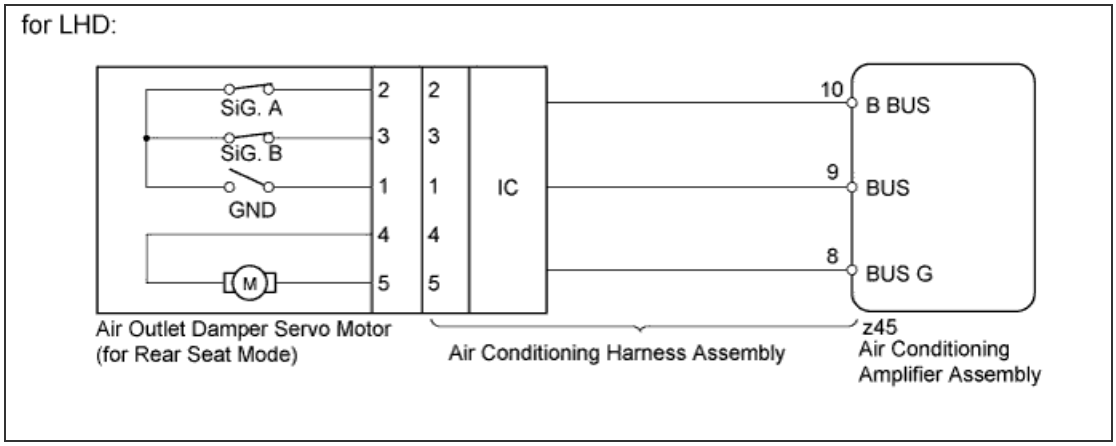
The air outlet damper servo motor (for rear seat mode) sends pulse signals to inform the air conditioning amplifier assembly of the damper position. The air conditioning amplifier assembly activates the motor (normal or reverse) based on the signals to move the air outlet damper to any position, which controls the air outlet changes.

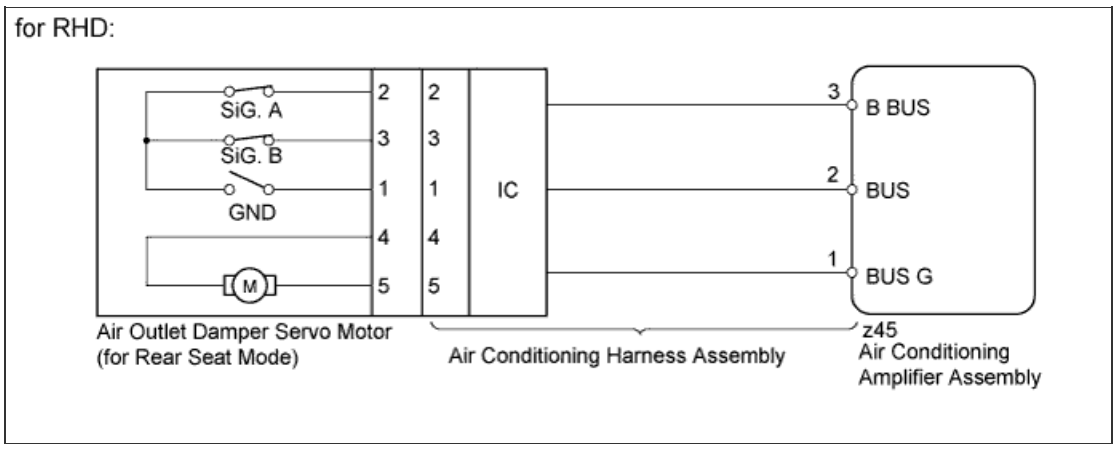
HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1486/86	The air outlet damper position does not change even if the air conditioning amplifier assembly operates the air outlet damper servo motor.	• Air outlet damper servo motor (for rear seat mode) • Air conditioning harness assembly • Air conditioning amplifier assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (AIR OUTLET DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Air Outlet Servo Pls (F&R D)	Air outlet damper servo motor (for rear seat mode) target pulse / Min.: 9, Max.: 79	FACE1: 9 (pulse) B/L: 28 (pulse) FOOT: 41 (pulse) F/D: 67 (pulse) DEF: 79 (pulse)	-

OK:
The display is as specified in the normal condition.

NG → Go to step 2

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK AIR OUTLET DAMPER SERVO MOTOR (OPERATION)

a. for LHD:

i. Replace the air outlet damper servo motor (for rear seat mode) (Click here).

b. for RHD:

i. Replace the air outlet damper servo motor (for rear seat mode) (Click here).

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

3.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:
DTC B1486 is not output.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG (for LHD)	C
NG (for RHD)	D

B → REPLACE AIR OUTLET DAMPER SERVO MOTOR (Click here)

C → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)

D → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)

A

REPLACE AIR OUTLET DAMPER SERVO MOTOR (Click here)

DTC B1429/29 Rear Air Foot Duct Sensor Circuit on Front Passenger Side

for Preparation Click here

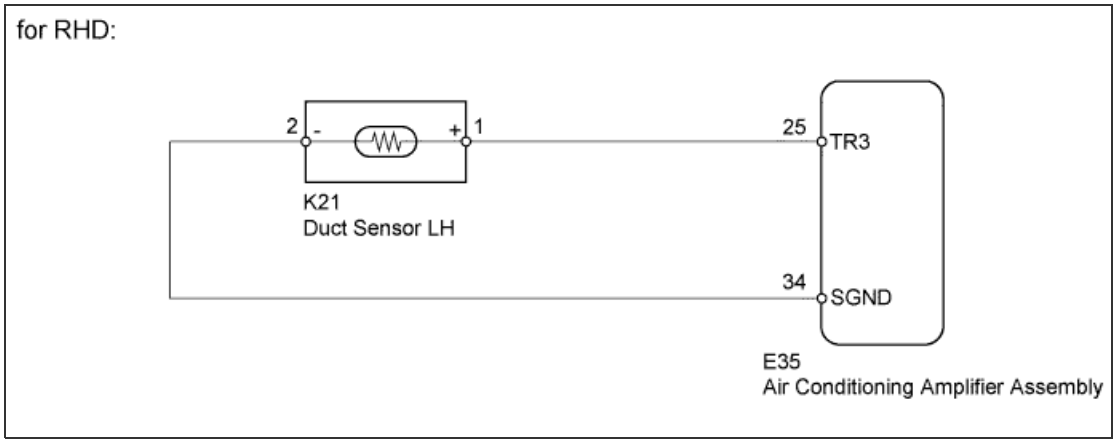
DESCRIPTION

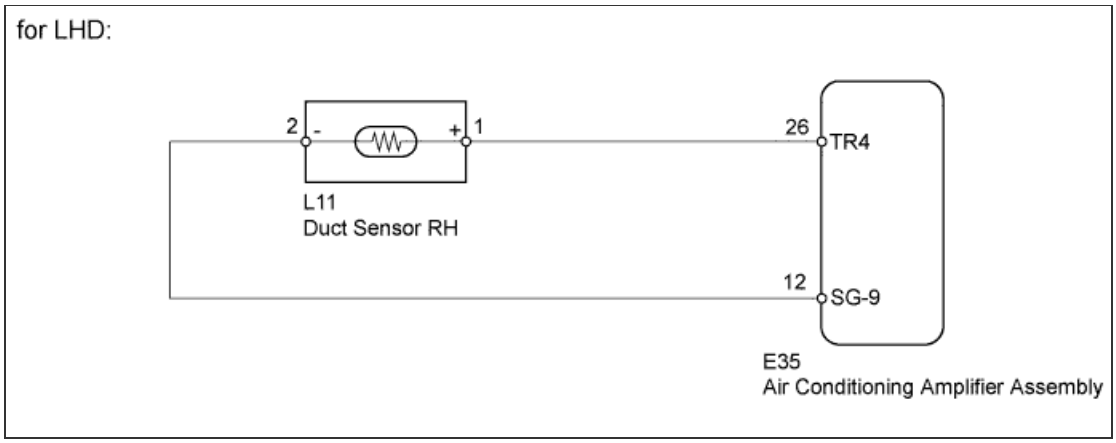
The duct sensor RH*1 or LH*2 (for front passenger side) detects the duct temperature and sends the appropriate signals to the air conditioning amplifier assembly.

DTC Code	DTC Detection Condition	Trouble Area
B1429/29	An open or short in the duct sensor RH*1 or LH*2 circuit.	• Duct sensor RH*1 • Duct sensor LH*2 • Harness or connector (duct sensor RH)*1 • Harness or connector (duct sensor LH)*2 • Air conditioning amplifier assembly

*1: for LHD
*2: for RHD

WIRING DIAGRAM





INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (DUCT SENSOR)

a. Use the Data List to check if the duct sensor RH*1 or LH*2 (for front passenger side) is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Foot Duct Sensor	Duct sensor / Min.: -12.7°C (9.14°F)	Actual temperature measured by duct sensor (for front	Open in the circuit: -12.7°C (9.14°F).

(Rear P)	Max.: 76.55°C (169.79°F)	passenger side) displayed	Short in the circuit: 76.55°C (169.79°F).

*1: for LHD
*2: for RHD

OK:
The display is as specified in the normal condition.

NG → Go to step 2

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK DUCT SENSOR

a. for LHD:

i. Remove the duct sensor RH (Click here).

b. for RHD:

i. Remove the duct sensor LH (Click here).

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 (+) - 2 (-)	10°C (50°F)	9.4 to 10.5 kΩ
	15°C (59°F)	7.5 to 8.3 kΩ
	20°C (68°F)	6.0 to 6.5 kΩ
	25°C (77°F)	4.8 to 5.2 kΩ
	30°C (86°F)	3.8 to 4.2 kΩ
	35°C (95°F)	3.1 to 3.4 kΩ
	40°C (104°F)	2.5 to 2.8 kΩ
	45°C (113°F)	2.0 to 2.3 kΩ
	50°C (122°F)	1.6 to 2.0 kΩ
	55°C (131°F)	1.3 to 1.6 kΩ
	60°C (140°F)	1.1 to 1.4 kΩ

NOTICE:

- **Touching the sensor even slightly may change the resistance value. Hold the connector of the sensor.**
- **When measuring the resistance, the sensor temperature must be the same as the ambient temperature.**

HINT:

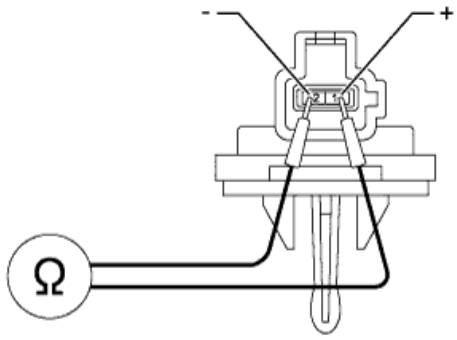
As the temperature increases, the resistance decreases (See the graph).

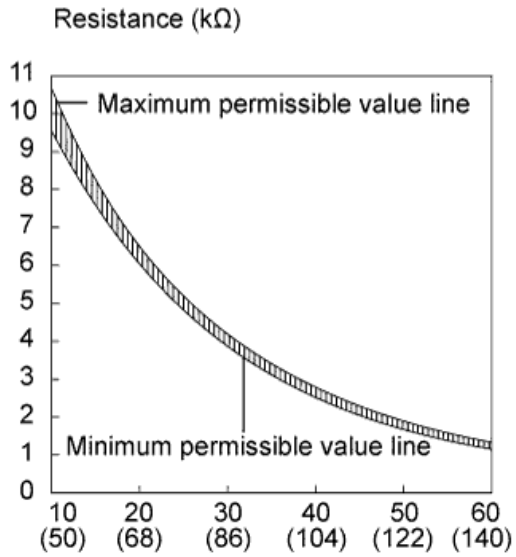
If the resistance value is not as specified, replace the sensor.

Result

Result	Proceed to
OK	A
NG (for LHD)	B
NG (for RHD)	C

Component without harness connected:
(Duct Sensor)





H

B → REPLACE DUCT SENSOR RH (Click here)

C → REPLACE DUCT SENSOR LH (Click here)

A

3.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - DUCT SENSOR)

a. for LHD:

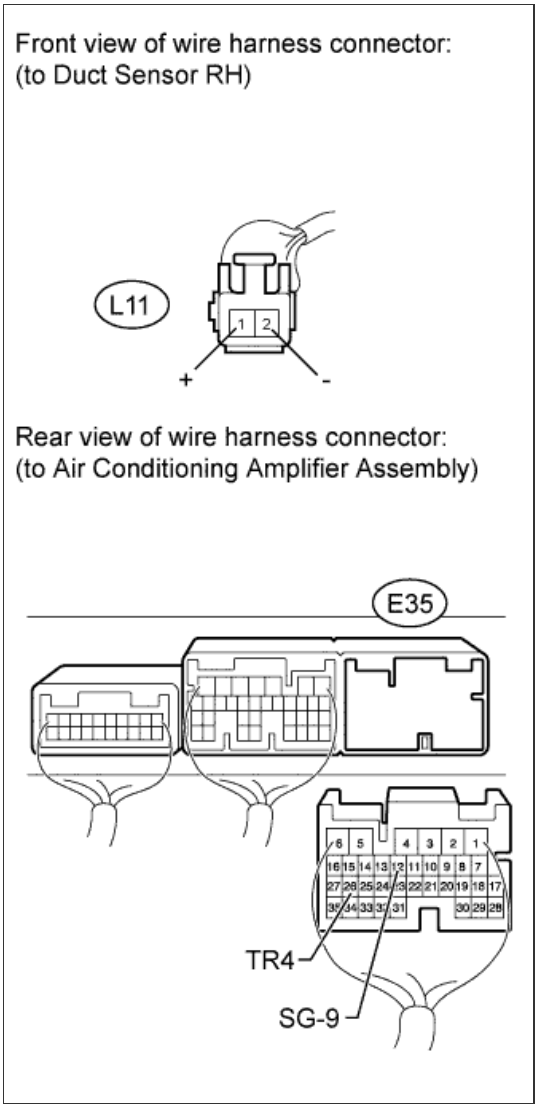
i. Disconnect the L11 sensor connector.

ii. Disconnect the E35 amplifier connector.

iii. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E35-26 (TR4) - L11-1 (+)	Always	Below 1 Ω
E35-12 (SG-9) - L11-2 (-)		
E35-26 (TR4) - Body ground	Always	10 kΩ or higher
E35-12 (SG-9) - Body ground		



b. for RHD:

i. Disconnect the K21 sensor connector.

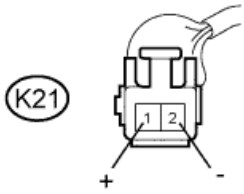
ii. Disconnect the E35 amplifier connector.

iii. Measure the resistance according to the value(s) in the table below.

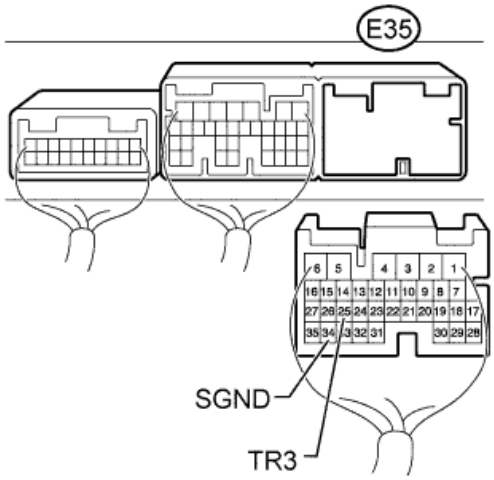
Standard Resistance:

Tester Connection	Condition	Specified Condition
E35-25 (TR3) - K21-1 (+)	Always	Below 1 Ω
E35-34 (SGND) - K21-2 (-)		
E35-25 (TR3) - Body ground	Always	10 kΩ or higher
E35-34 (SGND) - Body ground		

Front view of wire harness connector:
(to Duct Sensor LH)



Rear view of wire harness connector:
(to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

DTC B1488/88 Rear Air Mix Damper Control Servo Motor Circuit on Front Passenger Side

for Preparation Click here

DESCRIPTION

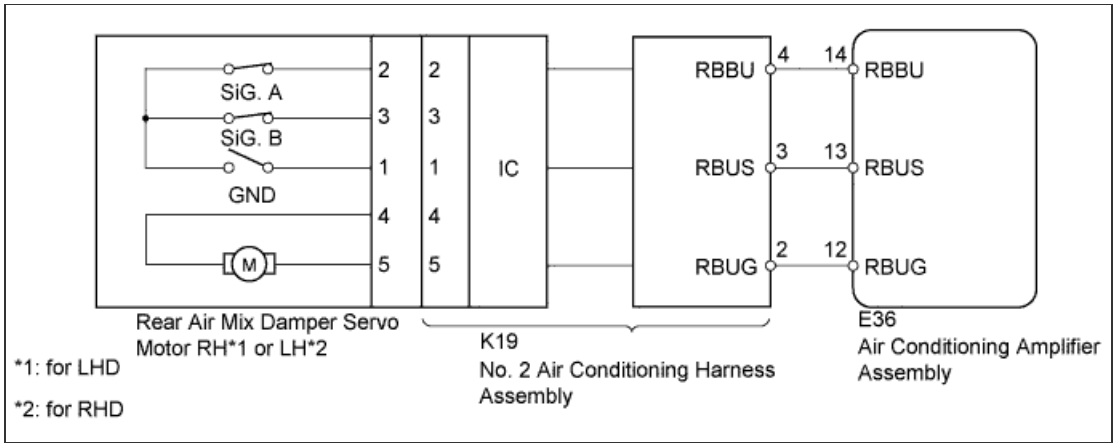
The rear air mix damper servo motor (for front passenger side) sends pulse signals to indicate the damper position to the air conditioning amplifier assembly. The air conditioning amplifier assembly activates the motor (normal or reverse) based on these signals to move the rear air mix damper to the appropriate position. This adjusts the amount of air passing through the heater core after passing the evaporator and controls the temperature of the blown air.

HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1488/88	The rear air mix damper position does not change even if the air conditioning amplifier assembly operates the air mix damper servo motor.	• **Rear air mix damper servo motor** • **No. 2 air conditioning harness assembly** • **Harness or connector between No. 2 air conditioning harness assembly and air conditioning amplifier assembly** • **Air conditioning amplifier assembly**

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (REAR AIR MIX DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
A/M Servo Targ Pulse (Rear P)	Rear air mix damper servo motor (for front passenger side) target pulse / Min.: 8, Max.: 53 (for LHD) Min.: 9, Max.: 54 (for RHD)	for LHD • MAX COOL: 53 (pulse) • MAX HOT: 8 (pulse) for RHD • MAX COOL: 9 (pulse) • MAX HOT: 54 (pulse)	-

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK HARNESS AND CONNECTOR (NO. 2 AIR CONDITIONING HARNESS - AIR CONDITIONING AMPLIFIER)

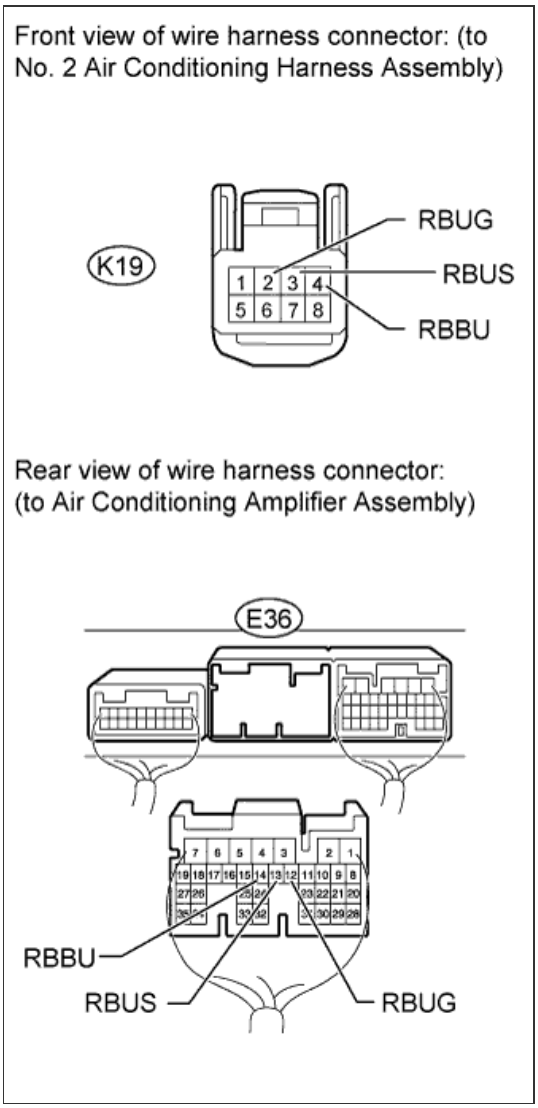
a. Disconnect the K19 No. 2 air conditioning harness assembly connector.

b. Disconnect the E36 amplifier connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
K19-2 (RBUG) - E36-12 (RBUG)	Always	Below 1 Ω
K19-3 (RBUS) - E36-13 (RBUS)		
K19-4 (RBBU) - E36-14 (RBBU)		
E36-12 (RBUG) - Body ground	Always	10 kΩ or higher
E36-13 (RBUS) - Body ground		
E36-14 (RBBU) - Body ground		



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK REAR AIR MIX DAMPER SERVO MOTOR (OPERATION)

a. Replace the rear air mix damper servo motor (Click here).

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

4.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:

DTC B1488 is not output.

NG → REPLACE NO. 2 AIR CONDITIONING HARNESS ASSEMBLY (Click here)

OK

REPLACE REAR AIR MIX DAMPER SERVO MOTOR (Click here)

DTC B1441/41 Air Mix Damper Control Servo Motor Circuit (Passenger Side)

for Preparation Click here

DESCRIPTION

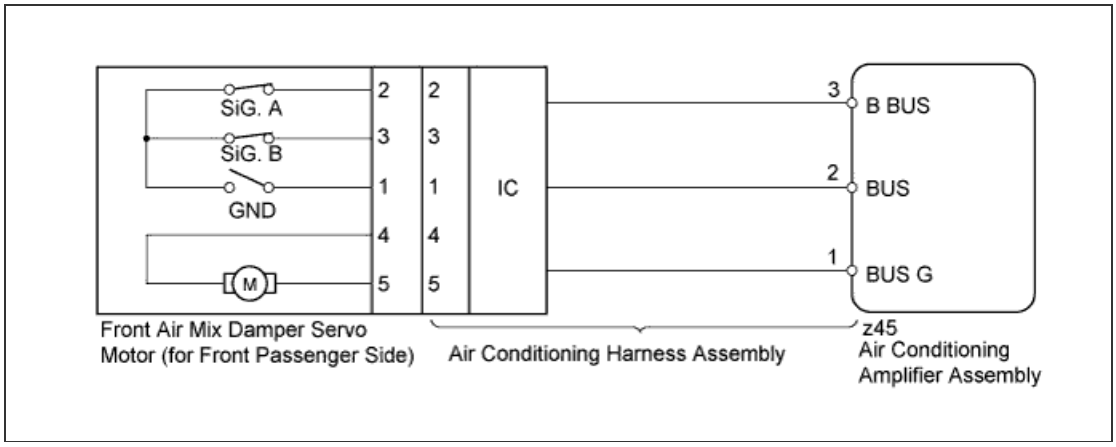
The front air mix damper servo motor (for front passenger side) sends pulse signals to inform the air conditioning amplifier assembly of the damper position. The air conditioning amplifier assembly activates the motor (normal or reverse) based on the signals to move the front air mix damper (for front passenger side) to any position. As a result, the amount of air that has passed through the evaporator and is passing through the heater core is adjusted, and the temperature of the air blowing toward the front passenger side is controlled.

HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1441/41	The air mix damper position does not change even if the air conditioning amplifier assembly operates the front air mix damper servo motor.	• Front air mix damper servo motor (for front passenger side) • Air conditioning harness assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (FRONT AIR MIX DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Air Mix Servo Targ Pulse (P)	Front air mix damper servo motor (for front passenger side) target pulse / Min.: 8, Max.: 90 (for LHD) Min.: 8, Max.: 90 (for RHD)	for LHD • MAX COOL: 8 (pulse) • MAX HOT: 90 (pulse) for RHD • MAX COOL: 90 (pulse) • MAX HOT: 8 (pulse)	-

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK FRONT AIR MIX DAMPER SERVO MOTOR (OPERATION)

a. for LHD

i. Replace the front air mix damper servo motor (for front passenger side) (Click here).

b. for RHD

i. Replace the front air mix damper servo motor (for front passenger side) (Click here).

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

3.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:
DTC B1441 is not output.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG (for LHD)	C
NG (for RHD)	D

B → REPLACE FRONT AIR MIX DAMPER SERVO MOTOR (**Click here**)

C → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (**Click here**)

D → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (**Click here**)

A

REPLACE FRONT AIR MIX DAMPER SERVO MOTOR (**Click here**)

DTC B1497/97 BUS IC Communication Malfunction

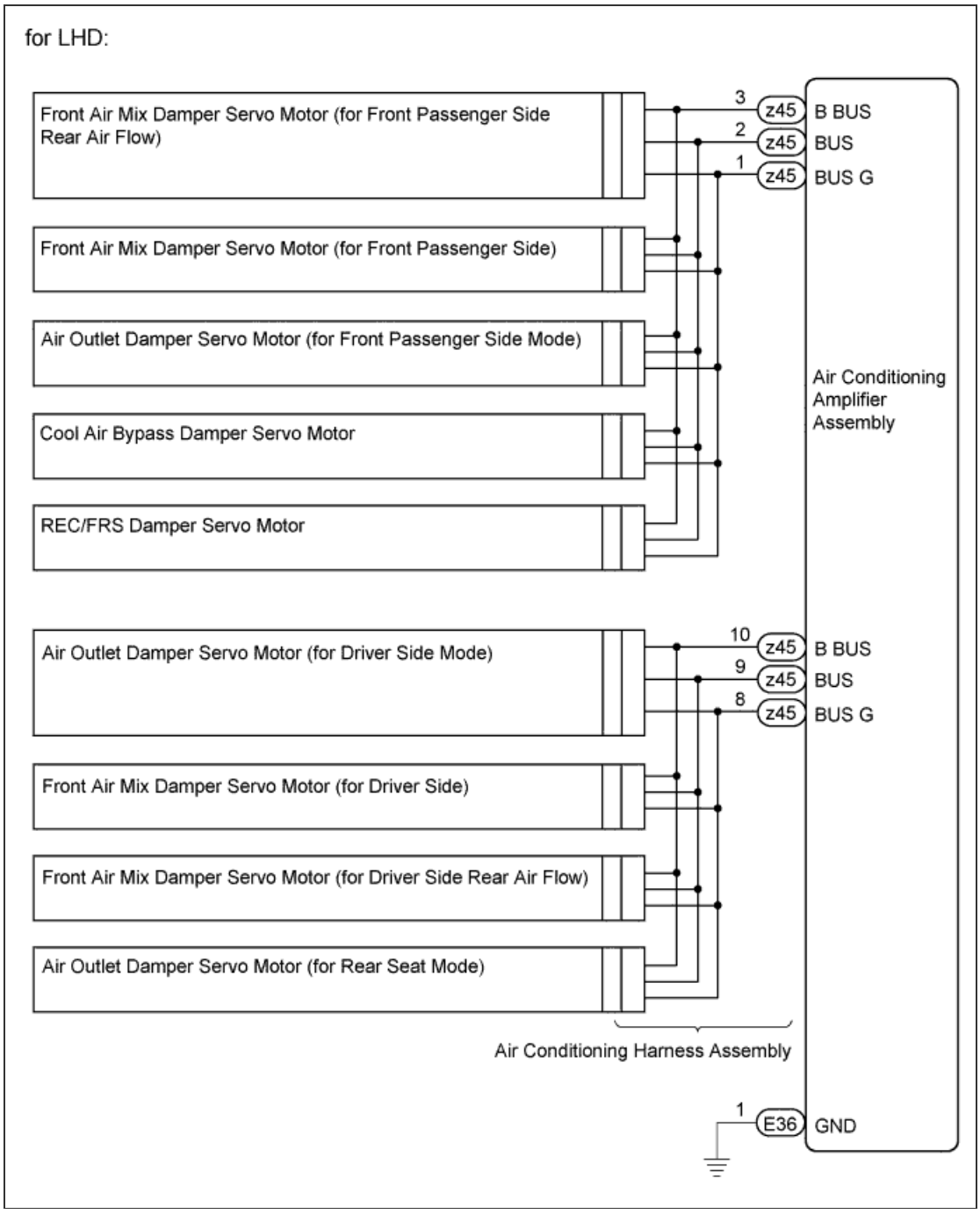
for Preparation Click here

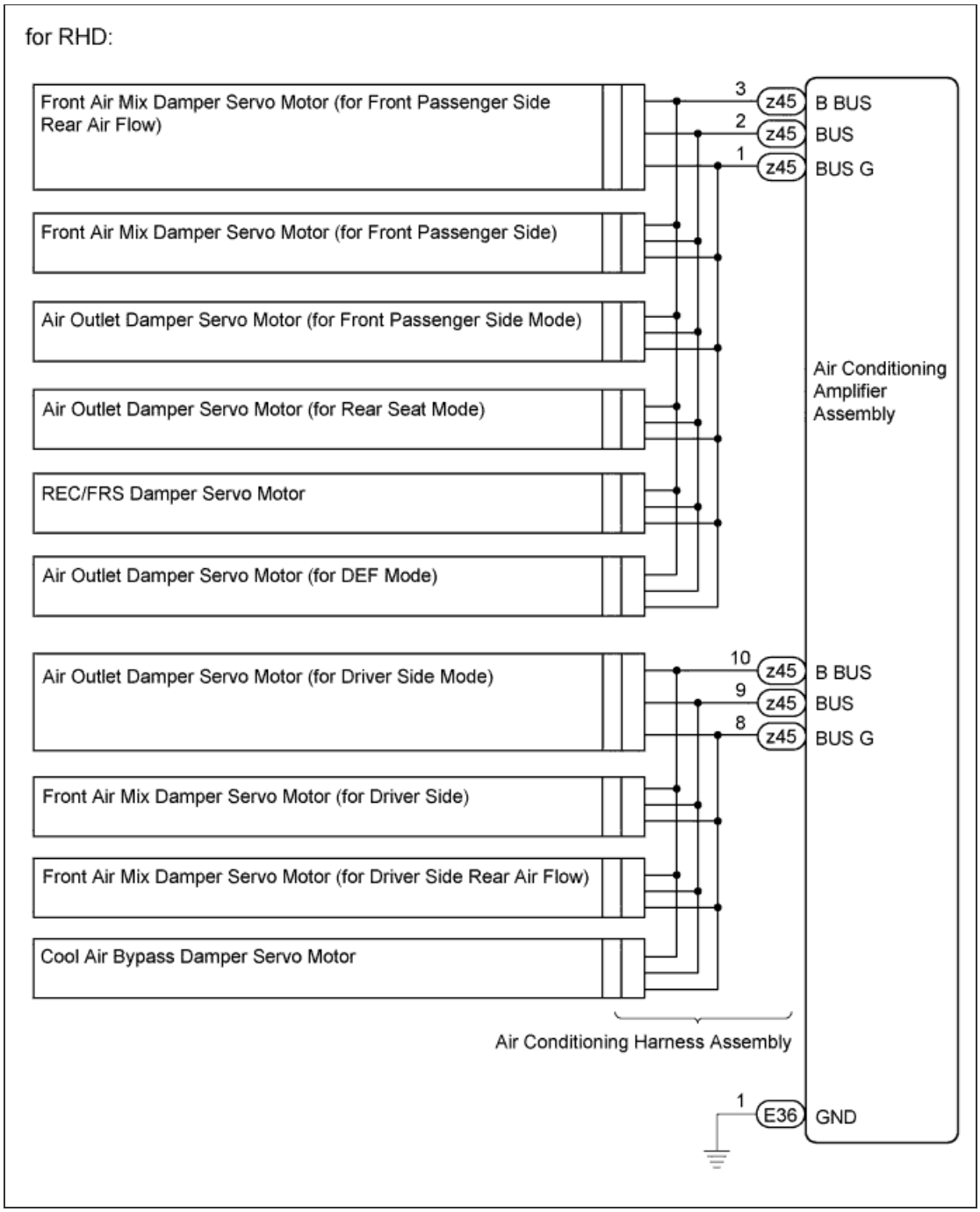
DESCRIPTION

The air conditioning harness assembly connects the air conditioning amplifier assembly and each servo motor. The air conditioning amplifier assembly supplies power and sends operation instructions to each servo motor through the air conditioning harness assembly. Each servo motor sends the damper position information to the air conditioning amplifier assembly.

DTC Code	DTC Detection Condition	Trouble Area
B1497/97	An open or error in the communication line.	• Air conditioning harness assembly • Air conditioning amplifier assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

1.CHECK AIR CONDITIONING AMPLIFIER ASSEMBLY

a. Remove the air conditioning amplifier assembly with its connectors still connected (Click here).

b. Measure the resistance according to the value(s) in the table below.

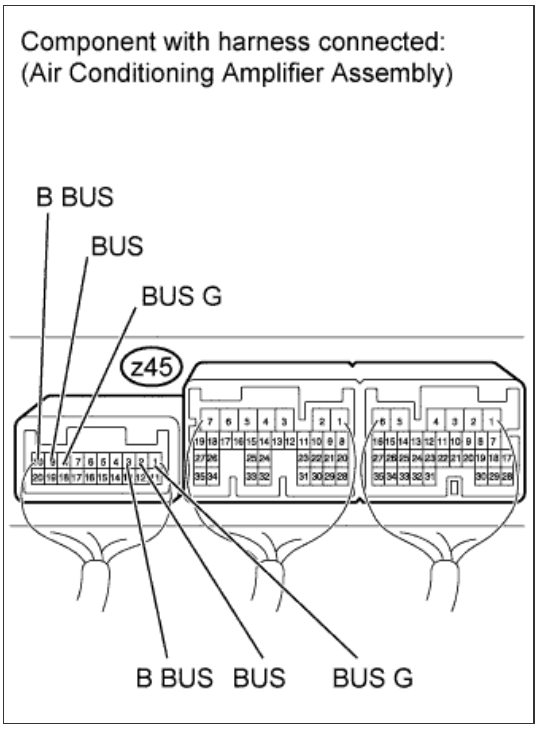
Standard Resistance:

Tester Connection	Condition	Specified Condition
E36-1 (GND) - z45-1 (BUS G)	Always	Below 1 Ω
E36-1 (GND) - z45-8 (BUS G)		
z45-1 (BUS G) - Body ground		
z45-8 (BUS G) - Body ground		

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
z45-1 (BUS G) - z45-3 (B BUS)	Always	11 to 14 V
z45-8 (BUS G) - z45-10 (B BUS)	Always	11 to 14 V
z45-1 (BUS G) - z45-2 (BUS)	Engine switch on (IG)	Pulse generation
z45-8 (BUS G) - z45-9 (BUS)		



Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG	C

B

REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)

C

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

A

REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)

DTC B1442/42 Air Inlet Damper Control Servo Motor Circuit

for Preparation Click here

DESCRIPTION

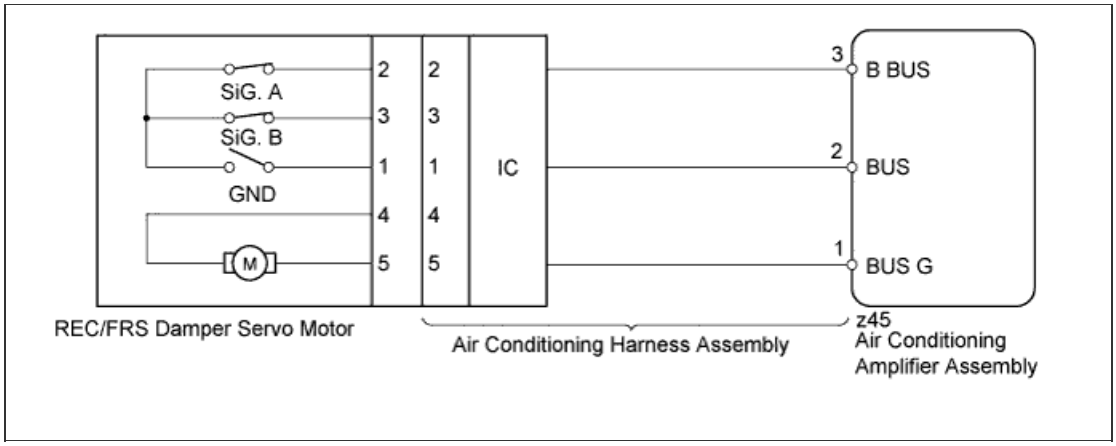
The REC/FRS damper servo motor sends pulse signals to inform the air conditioning amplifier assembly of the damper position. The air conditioning amplifier assembly activates the motor (normal or reverse) based on the signals to move the air inlet damper to any position, which controls the intake air settings (fresh, fresh/recirculation and recirculation).

HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1442/42	The air inlet damper position does not change even if the air conditioning amplifier assembly operates the REC/FRS damper servo motor.	• REC/FRS damper servo motor • Air conditioning harness assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (REC/FRS DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Air Inlet Damper Targ Pulse	REC/FRS damper servo motor target pulse / Min.: 9, Max.: 37	for LHD • Recirculation: 37 (pulse) • Fresh: 9 (pulse) for RHD • Recirculation: 9 (pulse) • Fresh: 37 (pulse)	-

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK REC/FRS DAMPER SERVO MOTOR (OPERATION)

a. Replace the REC/FRS damper servo motor (Click here).

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

3.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:
DTC B1442 is not output.

Result

Result	Proceed to
OK	A
NG (for LHD)	B
NG (for RHD)	C

B → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)

C → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)

A

REPLACE REC/FRS DAMPER SERVO MOTOR (Click here)

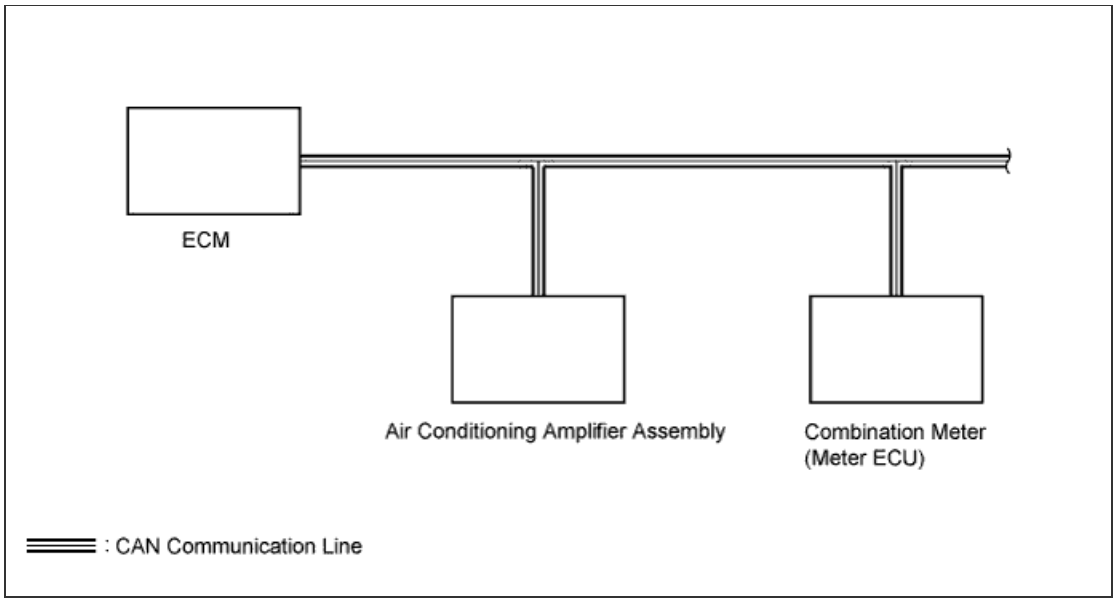
for Preparation Click here

DESCRIPTION

The air conditioning amplifier assembly communicates with the ECM and meter ECU through the CAN communication system.

DTC Code	DTC Detection Condition	Trouble Area
B1499/99	An open in CAN communication line.	• Air conditioning amplifier assembly • CAN communication line

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1499 is not output	A
DTC B1499 is output (for LHD)	B
DTC B1499 is output (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1443/43 Air Outlet Damper Control Servo Motor Circuit

for Preparation Click here

DESCRIPTION

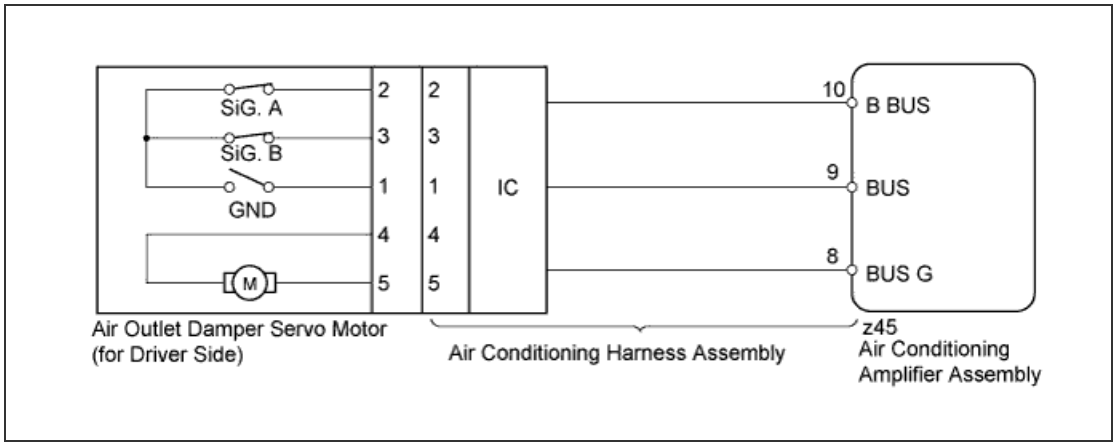
The air outlet damper servo motor (for driver side mode) sends pulse signals to inform the air conditioning amplifier assembly of the damper position. The air conditioning amplifier assembly activates the motor (normal or reverse) based on the signals to move the air outlet damper (for driver side mode) to any position, which controls the air outlet changes.

HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1443/43	The air outlet damper position does not change even if the air conditioning amplifier assembly operates the air outlet damper servo motor.	• Air outlet damper servo motor (for driver side mode) • Air conditioning harness assembly • Air conditioning amplifier assembly

WIRING DIAGRAM



INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (AIR OUTLET DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
A/O Damper FACE Pos(D)	Air outlet damper servo motor (for driver side mode) target pulse / Min.: 6, Max.: 117	FACE1: 117 (pulse) FACE2: 109 (pulse) B/L1: 93 (pulse) B/L2: 81 (pulse) FOOT-F: 41 (pulse) FOOT-R: 41 (pulse) FOOT-D: 52 (pulse) F/D: 18 (pulse) DEF: 6 (pulse)	-

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK AIR OUTLET DAMPER SERVO MOTOR (OPERATION)

a. for LHD

i. Replace the air outlet damper servo motor (for driver side mode) (Click here).

b. for RHD

i. Replace the air outlet damper servo motor (for driver side mode) (Click here).

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

3.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:
DTC B1443 is not output.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG (for LHD)	C
NG (for RHD)	D

B → **REPLACE AIR OUTLET DAMPER SERVO MOTOR (Click here)**

C → **REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)**

D → **REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)**

A

REPLACE AIR OUTLET DAMPER SERVO MOTOR (Click here)

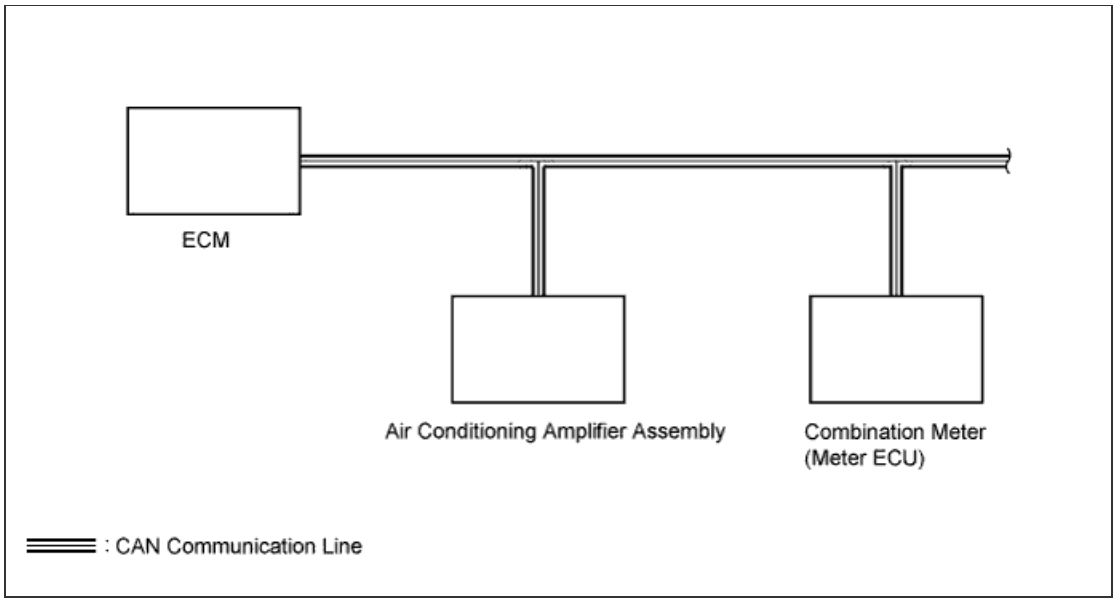
for Preparation Click here

DESCRIPTION

The air conditioning amplifier assembly communicates with the ECM and meter ECU through the CAN communication system.

DTC Code	DTC Detection Condition	Trouble Area
B1499/99	An open in CAN communication line.	• Air conditioning amplifier assembly • CAN communication line

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

Result

Result	Proceed to
DTC B1499 is not output	A
DTC B1499 is output (for LHD)	B
DTC B1499 is output (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

USE SIMULATION METHOD TO CHECK (Click here)

DTC B1445/45 Passenger Side Cool Air Bypass Damper Control

for Preparation Click here

DESCRIPTION

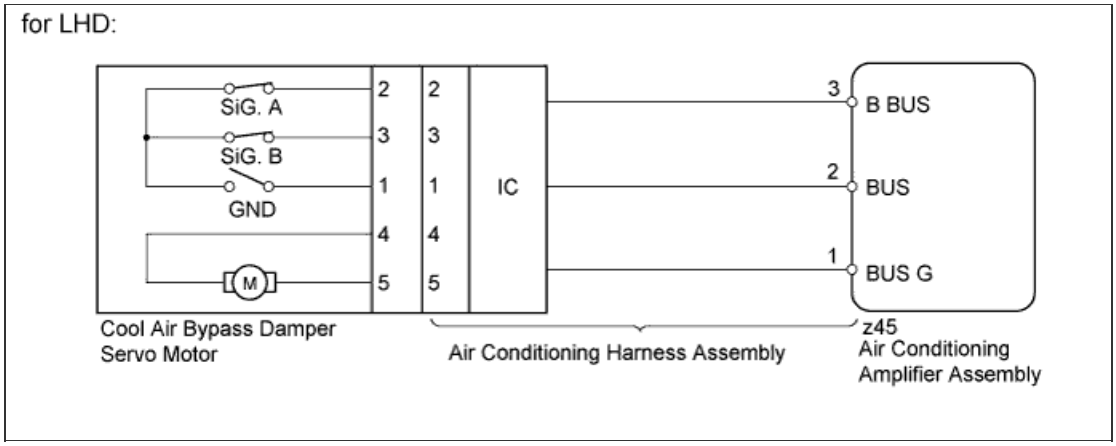
The cool air bypass damper servo motor sends pulse signals to inform the air conditioning amplifier assembly of the damper position. The air conditioning amplifier assembly activates the motor (normal or reverse) based on the signals to move the cool air bypass damper to any position. As a result, when the air conditioner is operating, the temperature of the air blowing toward the head area is controlled.

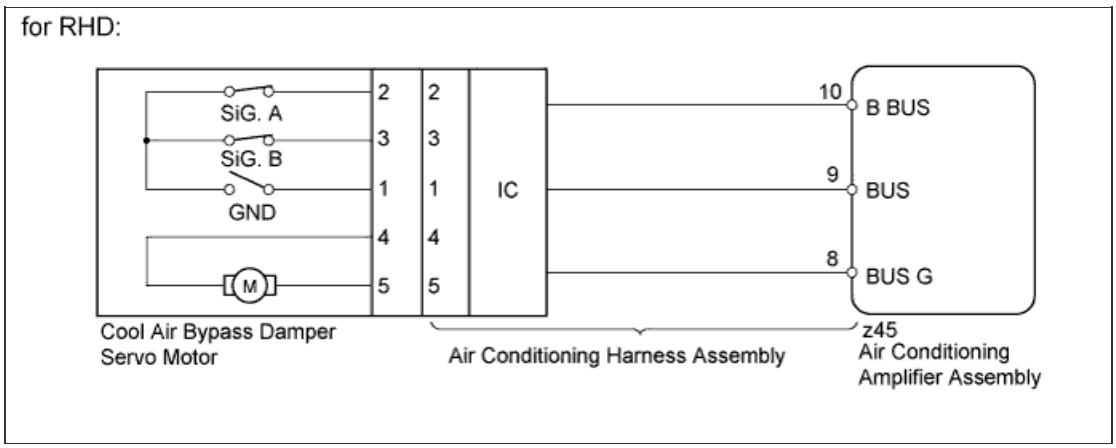
HINT:

Confirm that no mechanical problem is present because this trouble code can be stored when either a damper link or damper is mechanically locked.

DTC Code	DTC Detection Condition	Trouble Area
B1445/45	The cool air bypass damper position does not change even if the air conditioning amplifier assembly operates the cool air bypass damper servo motor.	• Cool air bypass damper servo motor • Air conditioning harness assembly • Air conditioning amplifier assembly

WIRING DIAGRAM





INSPECTION PROCEDURE

1.READ VALUE USING INTELLIGENT TESTER (COOL AIR BYPASS DAMPER SERVO MOTOR)

a. Use the Data List to check if the servo motor is functioning properly.

Air Conditioner

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
Cool Air Bypass Pulse	Cool air bypass damper servo motor target pulse / Min.: 6, Max.: 57	Shut: 6 (pulse) Open: 57 (pulse)	-

OK:

The display is as specified in the normal condition.

NG → Go to step 2

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.CHECK COOL AIR BYPASS DAMPER SERVO MOTOR (OPERATION)

a. for LHD:

i. Replace the cool air bypass damper servo motor (Click here).

b. for RHD:

i. Replace the cool air bypass damper servo motor (Click here).

HINT:

Since the servo motor cannot be inspected while it is removed from the vehicle, replace the servo motor with a normal one.

NEXT

3.CHECK FOR DTC

a. Clear the DTCs (Click here).

b. Check for DTCs (Click here).

OK:
DTC B1445 is not output.

Result

Result	Proceed to
OK (for LHD)	A
OK (for RHD)	B
NG (for LHD)	C
NG (for RHD)	D

B → REPLACE COOL AIR BYPASS DAMPER SERVO MOTOR (Click here)

C → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)

D → REPLACE AIR CONDITIONING HARNESS ASSEMBLY (Click here)

A

REPLACE COOL AIR BYPASS DAMPER SERVO MOTOR (Click here)

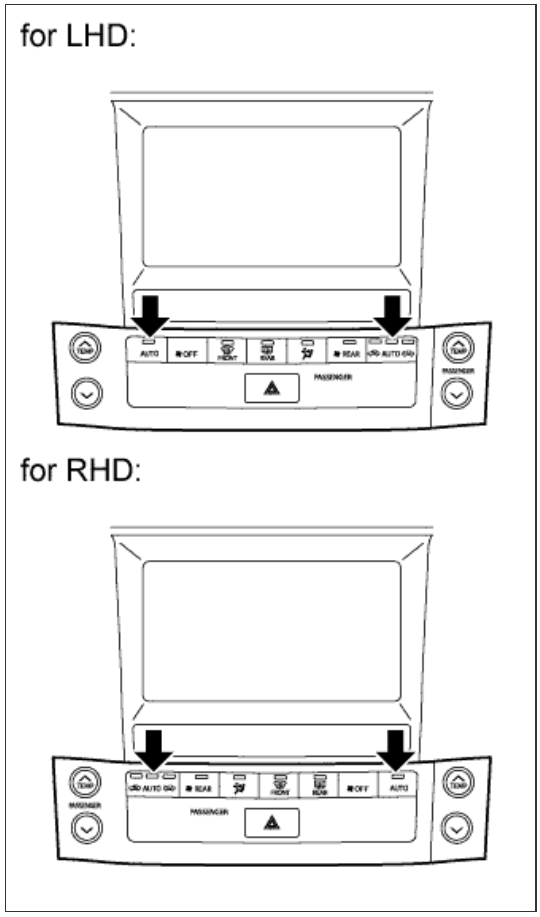
for Preparation Click here

ACTUATOR CHECK

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

a. Turn the engine switch on (IG) while pressing the A/C control AUTO switch and recirculation/fresh switch simultaneously.



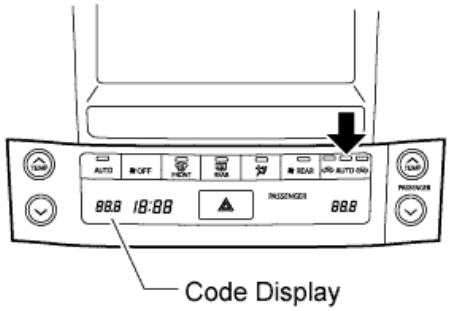
b. Press the recirculation/fresh switch.

c. By performing the actuator check, each damper, motor, and relay are automatically operated at 1 second intervals in a continuous cycle from step No. 1 to No. 10. During this operation, check the temperature and airflow indicated on the display as well as by hand.

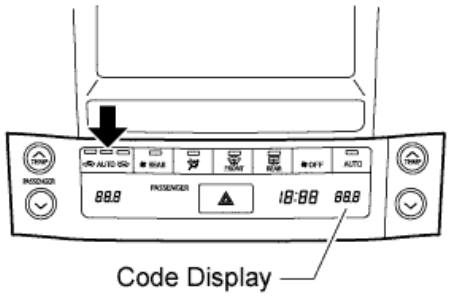
HINT:

- **If a slower display is desired, press the driver temperature up switch to stop the automatic display. The display changes to step operation display mode which allows the display to be changed 1 step for each press of the switch.**
- **The buzzer sounds when the display code changes.**
- **Codes are displayed from smaller to larger numbers in order.**
- **To cancel the check mode, press the OFF switch.**

for LHD:



for RHD:



Front Air Conditioning Unit

Step No.	Display Code	Conditions							
		Blower Level	Air Mix Damper Dr. Pa.	Air Mix Damper FrRr Dr. Pa.	Airflow Vent Dr. Pa. DEF Mode	Airflow Vent FrRr	Air Inlet	Cool Air Bypass Damper	Compressor
1	0	0	0%	0%	FACE	FACE	FRESH	-14%	OFF
2	1	1							
3	2	17					RECIRCULATION/FRESH		ON
4	3	17					RECIRCULATION	113.0%	
5	4	17	50%	50%	B/L	B/L			
6	5	17							
7	6	17			FOOT	FOOT	FRESH		
8	7	17	100%	100%	FOOT				
9	8	17			F/D				
10	9	31			DEF			113.5%	

Rear Air Conditioning Unit

Step No.	Display Code	Conditions			
		Rear Blower Level	Rear Air Mix Damper Dr. Pa.	Rear Airflow Vent Dr. Pa.	Rear Magnetic Valve
1	0	0	0%	FACE	OFF
2	1	3			
3	2	17			ON
4	3	17			
5	4	17	50%	B/L	OFF
6	5	17			
7	6	17		FOOT	
8	7	17	100%		
9	8	17			
10	9	31			

for Preparation Click here

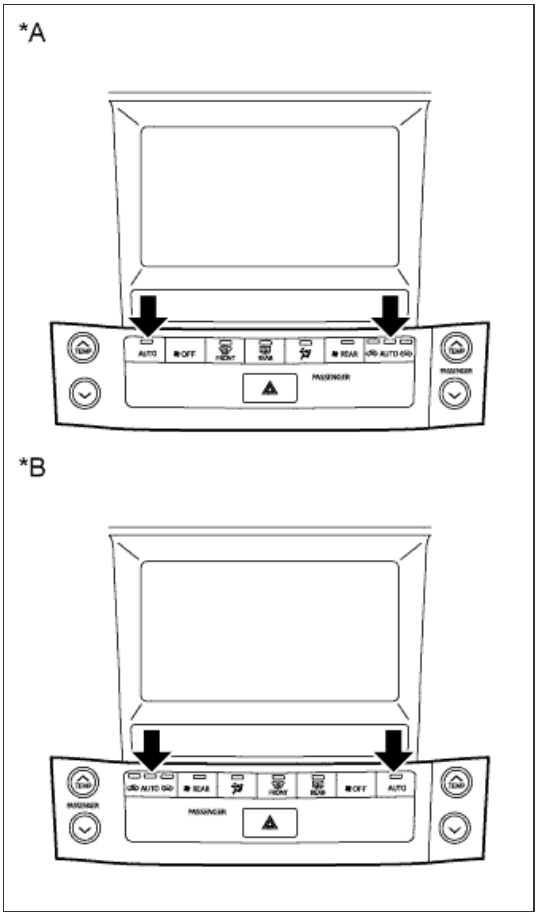
ACTUATOR CHECK

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

a. Start the engine and warm it up.

b. Perform the indicator check (Click here).



Text in Illustration

*A	for LHD
*B	for RHD

c. Press the "Recirculation/Fresh" switch.

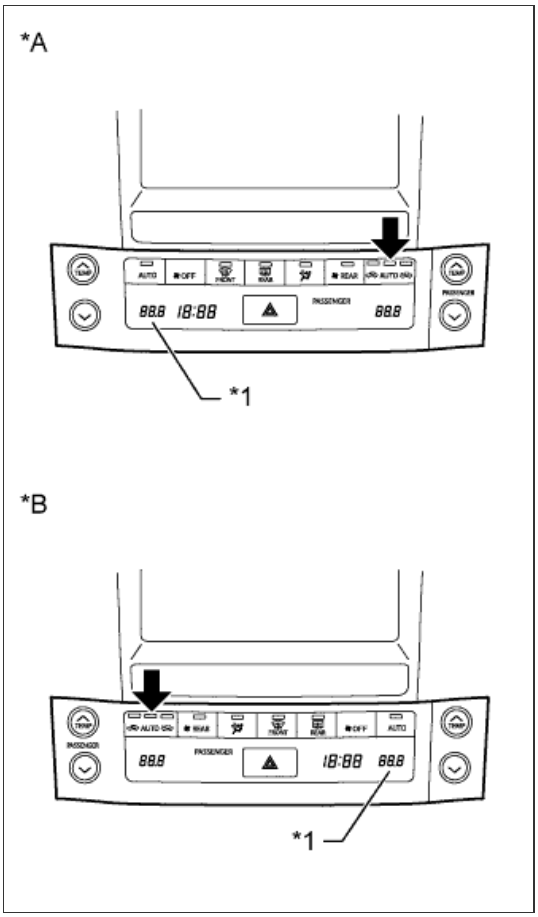
d. By performing the actuator check, each damper, motor, and relay are automatically operated at 1 second intervals in a continuous cycle from step No. 1 to No. 10. During this operation, check the temperature and airflow indicated on the display as well as by hand.

HINT:

- **If a slower display is desired, press the driver temperature up switch to stop the automatic display. The display changes to step operation display mode which allows the display to be changed 1 step for each press of the switch.**
- **The buzzer sounds when the display code changes.**
- **Codes are displayed from smaller to larger numbers in order.**
- **To cancel the check mode, press the OFF switch.**

Text in Illustration

*A	for LHD
*B	for RHD
*1	Code Display



Front Air Conditioning Unit

Step No.	Display Code	Conditions							
		Blower Level	Air Mix Damper Dr. Pa.	Air Mix Damper FrRr Dr. Pa.	Airflow Vent Dr. Pa. DEF Mode	Airflow Vent FrRr	Air Inlet	Cool Air Bypass Damper	Compressor
1	0	0	0%	0%	FACE	FACE	FRESH	-14%	OFF
2	1	1							
3	2	17					RECIRCULATION/FRESH		ON
4	3	17					RECIRCULATION	113.0%	
5	4	17	50%	50%	B/L	B/L			
6	5	17							
7	6	17			FOOT	FOOT	FRESH		
8	7	17	100%	100%	FOOT				
9	8	17			F/D				
10	9	31			DEF			113.5%	

Rear Air Conditioning Unit

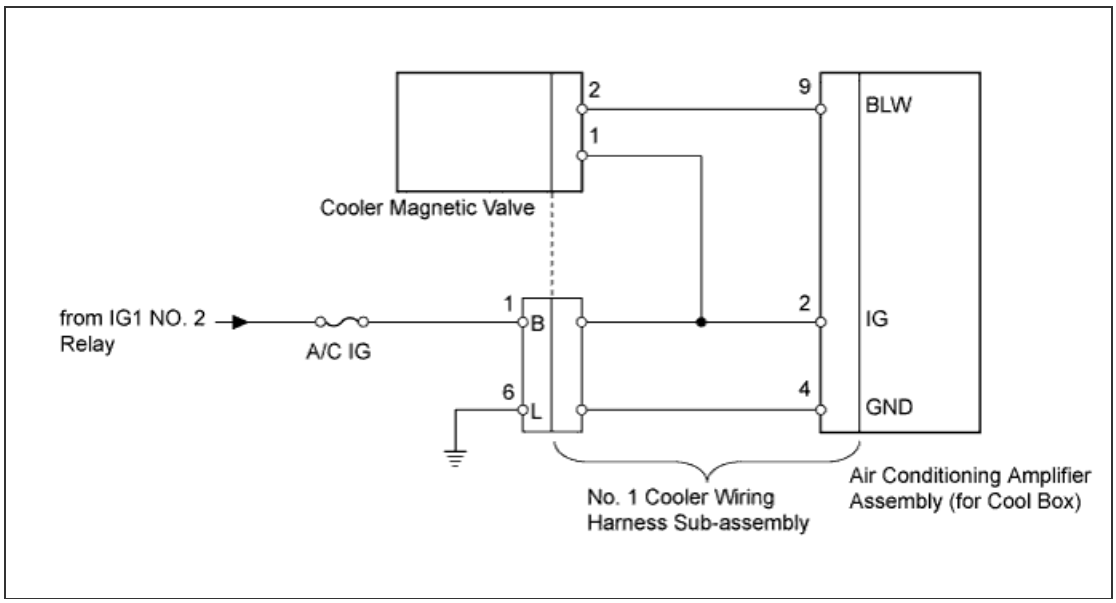
Step No.	Display Code	Conditions			
		Rear Blower Level	Rear Air Mix Damper Dr. Pa.	Rear Airflow Vent Dr. Pa.	Rear Magnetic Valve
1	0	0	0%	FACE	OFF
2	1	3			
3	2	17			ON
4	3	17			
5	4	17	50%	B/L	OFF
6	5	17			
7	6	17		FOOT	
8	7	17	100%		
9	8	17			
10	9	31			

for Preparation Click here

DESCRIPTION

The cooler expansion valve (cooler magnetic valve) is controlled by the air conditioning amplifier assembly (for cool box).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (A/C IG)

a. Remove the A/C IG fuse from the cowl side junction block LH.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A/C IG fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

2.CHECK HARNESS AND CONNECTOR (NO. 1 COOLER WIRING HARNESS - BATTERY)

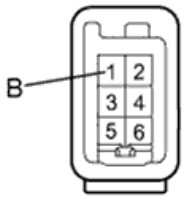
a. Disconnect the No. 1 cooler wiring harness sub-assembly connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
1 (B) - Body ground	Engine switch off	Below 1 V
	Engine switch on (IG)	11 to 14 V

Front view of wire harness connector:
(to No. 1 Cooler Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK HARNESS AND CONNECTOR (NO. 1 COOLER WIRING HARNESS - BODY GROUND)

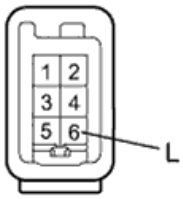
a. Disconnect the No. 1 cooler wiring harness sub-assembly connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
6 (L) - Body ground	Always	Below 1 Ω

Front view of wire harness connector:
(to No. 1 Cooler Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK NO. 1 COOLER WIRING HARNESS SUB-ASSEMBLY (OPERATION)

a. Replace the No. 1 cooler wiring harness sub-assembly with a normal one and check that the condition returns to normal.

OK:
Same problem does not occur.

NG → Go to step 5

OK

REPLACE NO. 1 COOLER WIRING HARNESS SUB-ASSEMBLY

5.CHECK COOLER MAGNETIC VALVE (OPERATION)

a. Replace the cooler magnetic valve (Click here).

HINT:

Since the cooler magnetic valve cannot be inspected while it is removed from the vehicle, replace the cooler magnetic valve with a normal one and check that the condition returns to normal.

OK:

Same problem does not occur.

NG → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (for Cool Box) (Click here)

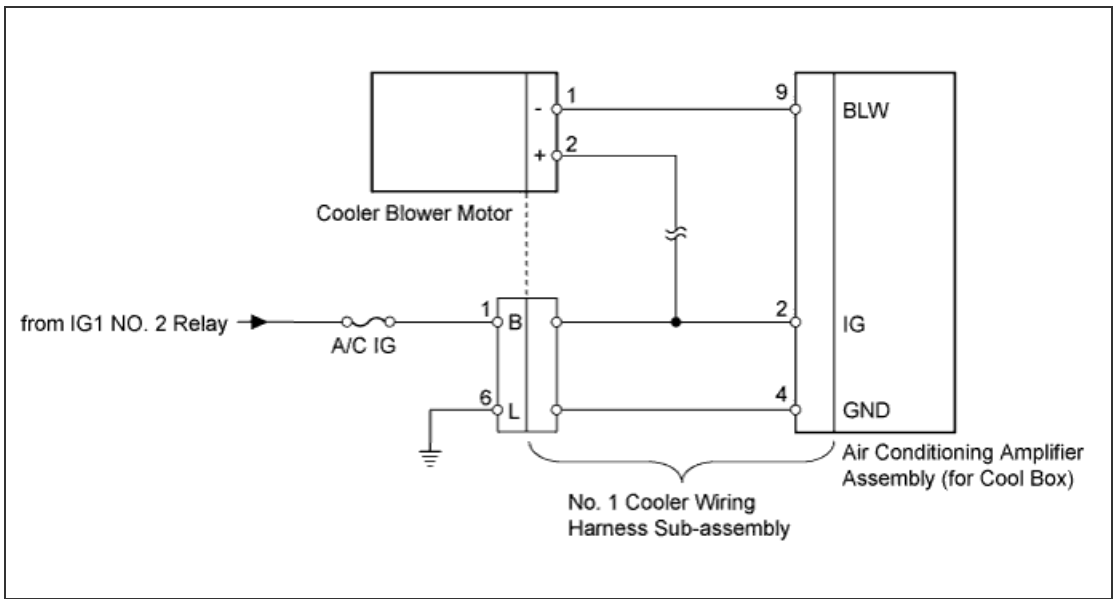
OK → REPLACE COOLER MAGNETIC VALVE (Click here)

for Preparation Click here

DESCRIPTION

The cooler blower motor is operated by signals from the air conditioning amplifier assembly (for cool box).

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (A/C IG)

a. Remove the A/C IG fuse from the cowl side junction block LH.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A/C IG fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

2.CHECK HARNESS AND CONNECTOR (NO. 1 COOLER WIRING HARNESS - BATTERY)

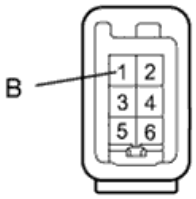
a. Disconnect the No. 1 cooler wiring harness sub-assembly connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
1 (B) - Body ground	Engine switch off	Below 1 V
	Engine switch on (IG)	11 to 14 V

Front view of wire harness connector:
(to No. 1 Cooler Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK HARNESS AND CONNECTOR (NO. 1 COOLER WIRING HARNESS - BODY GROUND)

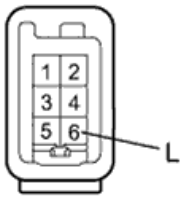
a. Disconnect the No. 1 cooler wiring harness sub-assembly connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
6 (L) - Body ground	Always	Below 1 Ω

Front view of wire harness connector:
(to No. 1 Cooler Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK NO. 1 COOLER WIRING HARNESS SUB-ASSEMBLY (OPERATION)

a. Replace the No. 1 cooler wiring harness sub-assembly with a normal one and check that the condition returns to normal.

OK:
Same problem does not occur.

NG → Go to step 5

OK

REPLACE NO. 1 COOLER WIRING HARNESS SUB-ASSEMBLY

5.INSPECT COOLER BLOWER MOTOR

a. Remove the cooler blower motor (Click here).

b. Connect the positive (+) lead from the battery to terminal 2 and negative (-) lead to terminal 1, then check that the motor operates smoothly.

OK:

Cooler blower motor operates smoothly.

Component with harness connected:
(Cooler Blower Motor)



NG → REPLACE COOLER BLOWER MOTOR (Click here)

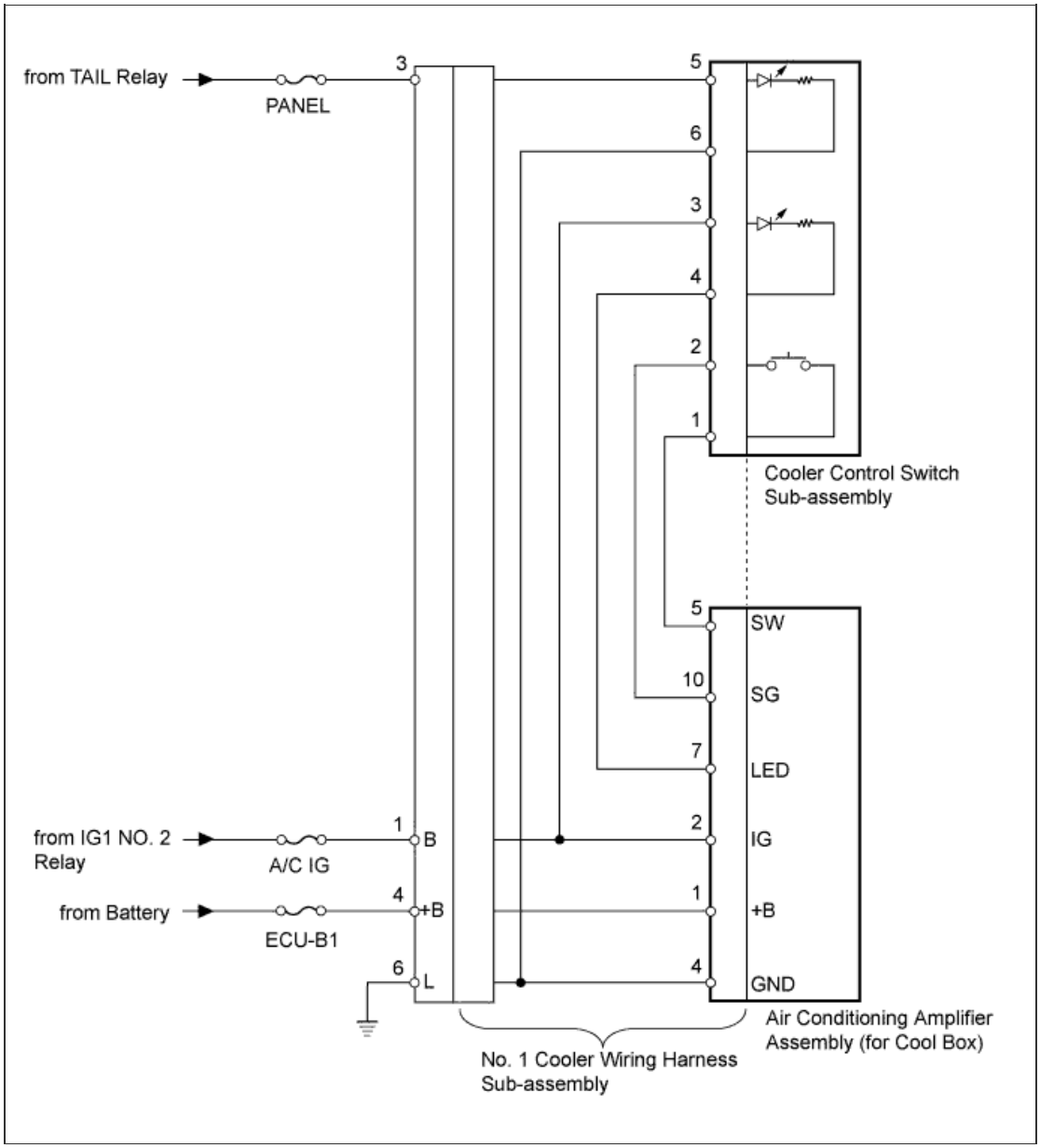
OK → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (for Cool Box) (Click here)

for Preparation Click here

DESCRIPTION

The cooler control switch sub-assembly is the activation switch for the cool box. If the cool box does not activate when the cooler control switch sub-assembly is pushed, there may be a malfunction in the circuit shown below.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (PANEL, A/C IG, ECU-B1)

a. Remove the PANEL and A/C IG fuses from the cowl side junction block LH.

b. Remove the ECU-B1 fuse from the engine room relay block.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
PANEL fuse	Always	Below 1 Ω
ECU-B1 fuse	Always	Below 1 Ω
A/C IG fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

2.CHECK HARNESS AND CONNECTOR (NO. 1 COOLER WIRING HARNESS - BATTERY)

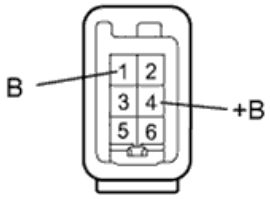
a. Disconnect the No. 1 cooler wiring harness sub-assembly connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
4 (+B) - Body ground	Always	11 to 14 V
3 - Body ground	Always	11 to 14 V
1 (B) - Body ground	Engine switch off	Below 1 V
	Engine switch on (IG)	11 to 14 V

Front view of wire harness connector:
(to No. 1 Cooler Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK HARNESS AND CONNECTOR (NO. 1 COOLER WIRING HARNESS - BODY GROUND)

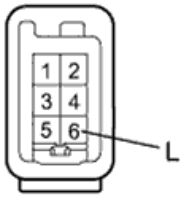
a. Disconnect the No. 1 cooler wiring harness sub-assembly connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
6 (L) - Body ground	Always	Below 1 Ω

Front view of wire harness connector:
(to No. 1 Cooler Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK NO. 1 COOLER WIRING HARNESS SUB-ASSEMBLY (OPERATION)

a. Replace the No. 1 cooler wiring harness sub-assembly with a normal one and check that the condition returns to normal.

OK:

Same problem does not occur.

NG → Go to step 5

OK

REPLACE NO. 1 COOLER WIRING HARNESS SUB-ASSEMBLY

5.INSPECT COOLER CONTROL SWITCH SUB-ASSEMBLY

a. Remove the cooler control switch sub-assembly (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

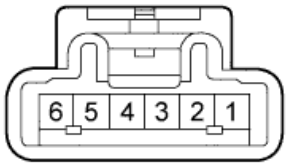
Tester Connection	Switch Condition	Specified Condition
1 - 2	On	Below 1 Ω
1 - 2	Off	10 kΩ or higher

c. Apply battery voltage to the cooler control switch connector and check that the cooler control switch illuminates.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 3 Battery negative (-) → Terminal 4	LED illuminates
Battery positive (+) → Terminal 5 Battery negative (-) → Terminal 6	LED illuminates

Component with harness connected:
(Cooler Control Switch Sub-assembly)



NG → REPLACE COOLER CONTROL SWITCH SUB-ASSEMBLY (Click here)

OK

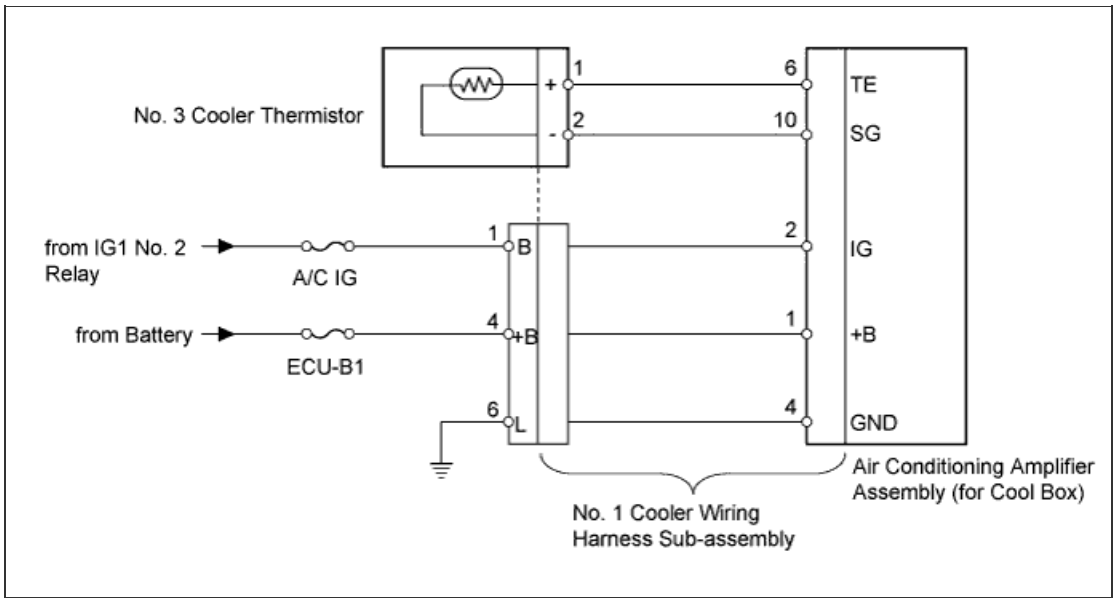
REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (for Cool Box) (Click here)

for Preparation Click here

DESCRIPTION

The No. 3 cooler thermistor is installed on the evaporator in the cooling box unit to detect the cooled air temperature that has passed through the evaporator and control the cool box. It sends appropriate signals to the air conditioning amplifier assembly (for cool box). The resistance of the No. 3 cooler thermistor changes in accordance with the cooled air temperature that has passed through the evaporator. As the temperature decreases, the resistance increases. As the temperature increases, the resistance decreases.
The air conditioning amplifier assembly (for cool box) applies voltage (12 V) to the No. 3 cooler thermistor and reads voltage changes as the resistance of the No. 3 cooler thermistor changes.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (A/C IG, ECU-B1)

a. Remove the A/C IG fuse from the cowl side junction block LH.

b. Remove the ECU-B1 fuse from the engine room relay block.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
ECU-B1 fuse	Always	Below 1 Ω
A/C IG fuse		

NG → REPLACE FUSE

OK

2.CHECK HARNESS AND CONNECTOR (NO. 1 COOLER WIRING HARNESS - BATTERY)

a. Disconnect the No. 1 cooler wiring harness sub-assembly connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition

4 (+B) - Body ground	Always	11 to 14 V
1 (B) - Body ground	Engine switch off	Below 1 V
	Engine switch on (IG)	11 to 14 V

Front view of wire harness connector:
(to No. 1 Cooler Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK HARNESS AND CONNECTOR (NO. 1 COOLER WIRING HARNESS - BODY GROUND)

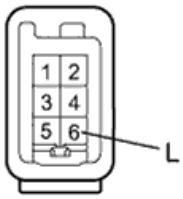
a. Disconnect the No. 1 cooler wiring harness sub-assembly connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
6 (L) - Body ground	Always	Below 1 Ω

Front view of wire harness connector:
(to No. 1 Cooler Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK NO. 1 COOLER WIRING HARNESS SUB-ASSEMBLY (OPERATION)

a. Replace the No. 1 cooler wiring harness sub-assembly with a normal one and check that the condition returns to normal.

OK:
Same problem does not occur.

NG → Go to step 5

OK

REPLACE NO. 1 COOLER WIRING HARNESS SUB-ASSEMBLY

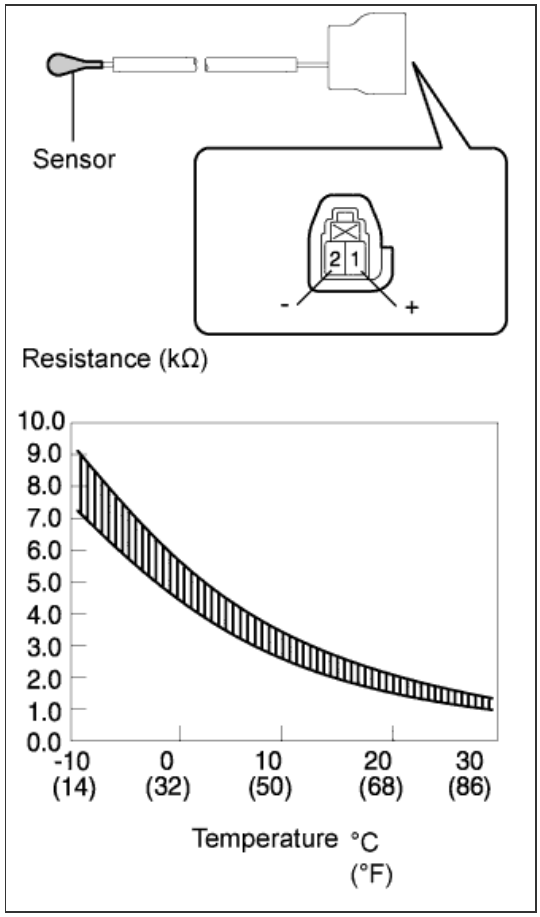
5.CHECK NO. 3 COOLER THERMISTOR

a. Remove the No. 3 cooler thermistor (Click here).

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 (+) - 2 (-)	-10°C (14°F)	7.30 to 9.10 kΩ
	-5°C (23°F)	5.65 to 6.95 kΩ
	0°C (32°F)	4.40 to 5.35 kΩ
	5°C (41°F)	3.40 to 4.15 kΩ
	10°C (50°F)	2.70 to 3.25 kΩ
	15°C (59°F)	2.14 to 2.58 kΩ
	20°C (68°F)	1.71 to 2.05 kΩ
	25°C (77°F)	1.38 to 1.64 kΩ
	30°C (86°F)	1.11 to 1.32 kΩ



NOTICE:

- **Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.**
- **When measuring, the sensor temperature must be the same as the ambient temperature.**

HINT:

As the temperature increases, the resistance decreases (See the graph).

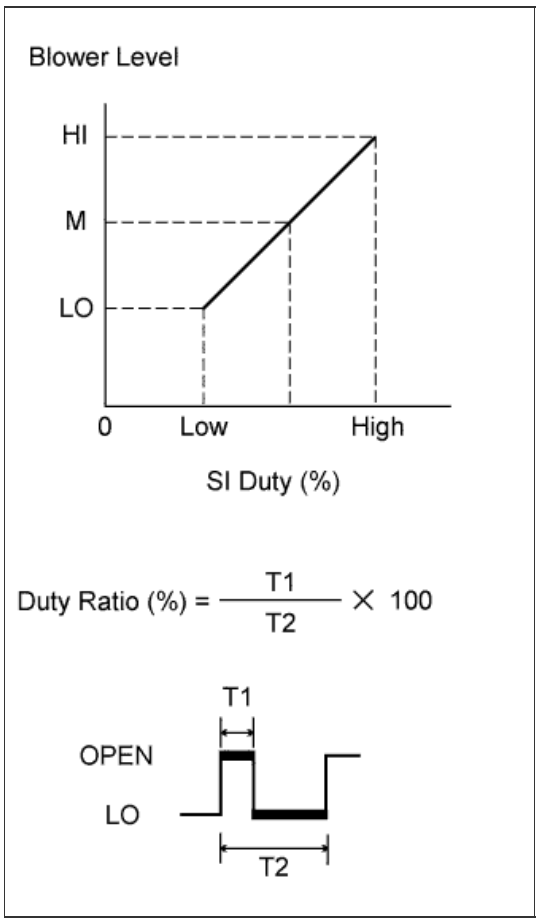
NG → REPLACE NO. 3 COOLER THERMISTOR (Click here)

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (for Cool Box) (Click here)

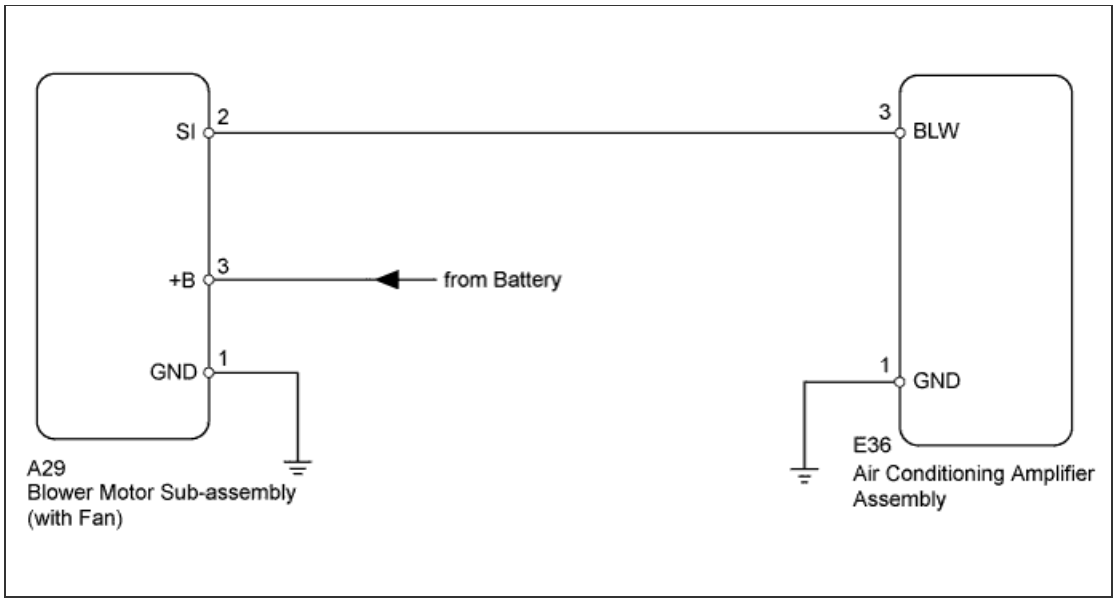
for Preparation Click here

DESCRIPTION



The blower motor sub-assembly (with fan) is operated by signals from the air conditioning amplifier assembly. The blower motor sub-assembly (with fan) speed signals are transmitted by changes in the duty ratio.
Duty Ratio:
The duty ratio is the ratio of the blower motor sub-assembly (with fan) OPEN time (T1) to the total of the blower motor sub-assembly (with fan) OPEN and LO time (T2).
The air conditioning amplifier assembly controls the blower motor sub-assembly (with fan) speed.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (BLOWER MOTOR SUB-ASSEMBLY)

a. Select the Active Test, use the intelligent tester to generate a control command, and then check that the blower motor operates.

Air Conditioner

Tester Display	Test Part	Control Range	Diagnostic Note
Blower Motor	Blower motor sub-assembly (with fan)	Min.: 0, Max.: 31	-

Result

Result	Proceed to
Blower motor operates normally	A
Blower motor does not operate	B
Blower motor operates but does not change speed	C

B → Go to step 2

C → Go to step 6

A

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (Click here)

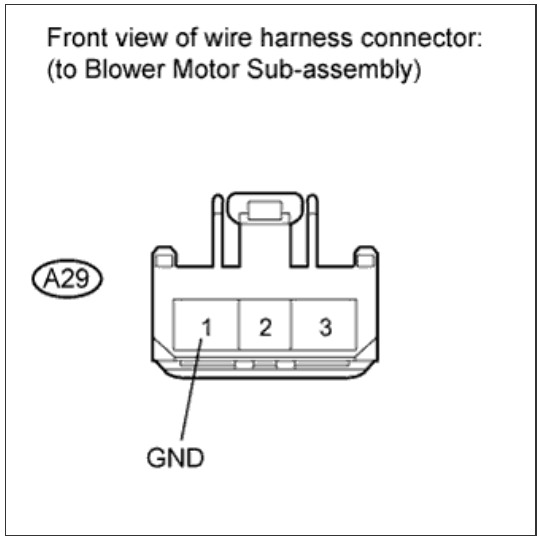
2.CHECK HARNESS AND CONNECTOR (BLOWER MOTOR - BODY GROUND)

a. Disconnect the A29 motor connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A29-1 (GND) - Body ground	Always	Below 1 Ω



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

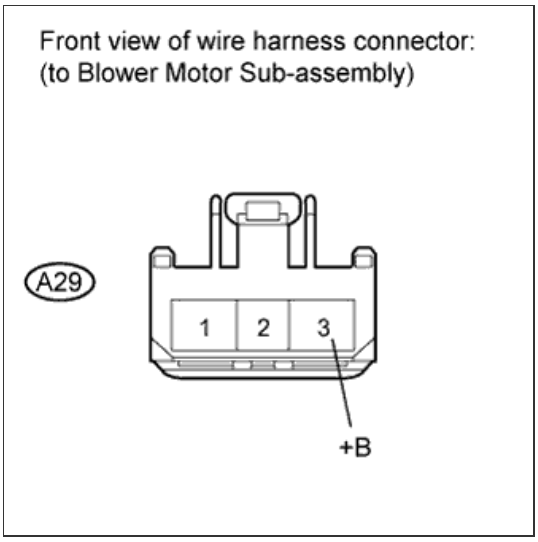
3.CHECK HARNESS AND CONNECTOR (BLOWER MOTOR - BATTERY)

a. Disconnect the A29 motor connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
A29-3 (+B) - Body ground	Always	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK BLOWER MOTOR SUB-ASSEMBLY (SI VOLTAGE)

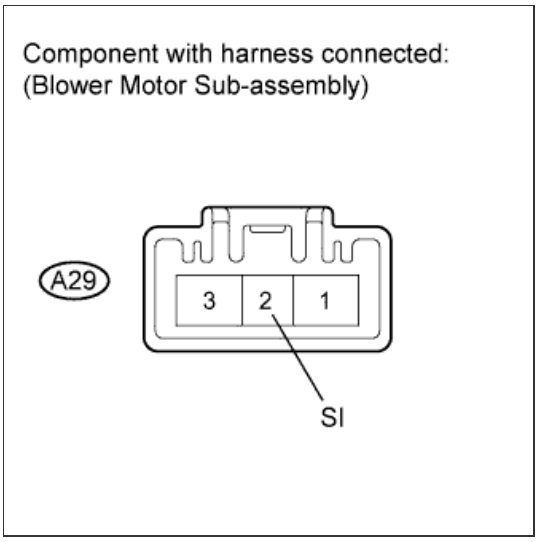
a. Disconnect the E36 amplifier connector.

b. Reconnect the A29 motor connector.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
A29-2 (SI) - Body ground	Engine switch on (IG)	4.5 to 5.5 V



NG → REPLACE BLOWER MOTOR SUB-ASSEMBLY (Click here)

OK

5.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - BLOWER MOTOR)

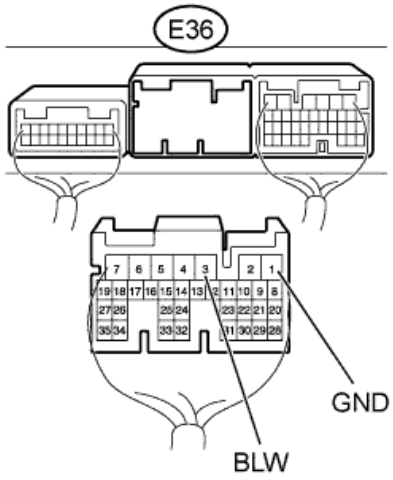
a. Disconnect the E36 amplifier connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E36-3 (BLW) - E36-1 (GND)	Engine switch on (IG) Blower switch off	4.5 to 5.5 V

Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

6.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - BLOWER MOTOR)

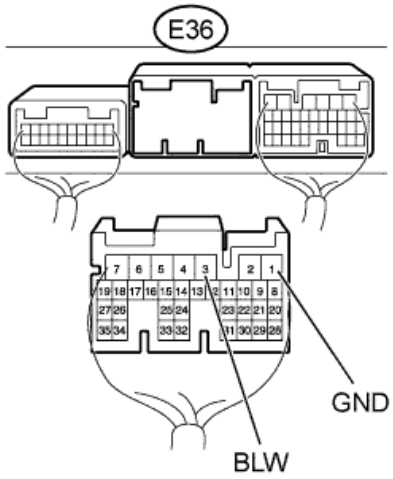
a. Disconnect the E36 amplifier connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E36-3 (BLW) - E36-1 (GND)	Engine switch on (IG) Blower switch off	4.5 to 5.5 V

Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK →

7.CHECK AIR CONDITIONING AMPLIFIER ASSEMBLY (BLW SIGNAL)

a. Remove the air conditioning amplifier assembly with its connectors still connected (Click here).

b. Using an oscilloscope, check the waveform.

Measurement Condition

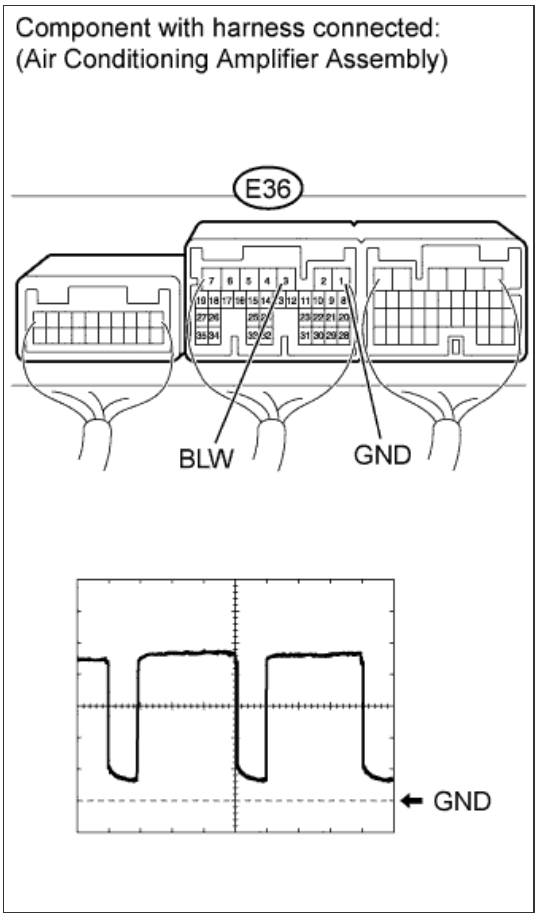
Item	Content
Terminal No. (Symbol)	E36-3 (BLW) - E36-1 (GND)
Tool Setting	1 V/DIV., 500 µs/DIV.
Condition	Engine switch on (IG) Blower switch off → on

OK:

Waveform is as shown in the illustration.

HINT:

Waveform varies with the blower level.

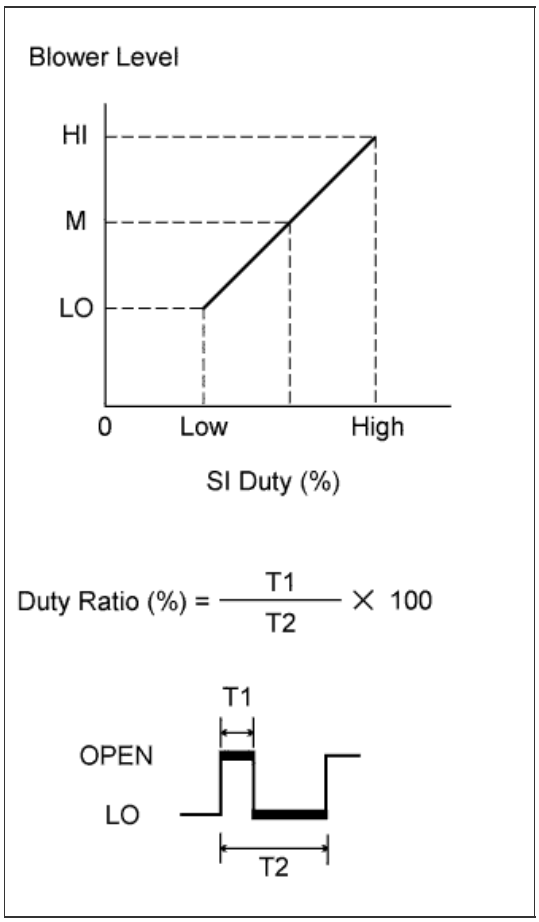


NG → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

OK → REPLACE BLOWER MOTOR SUB-ASSEMBLY (Click here)

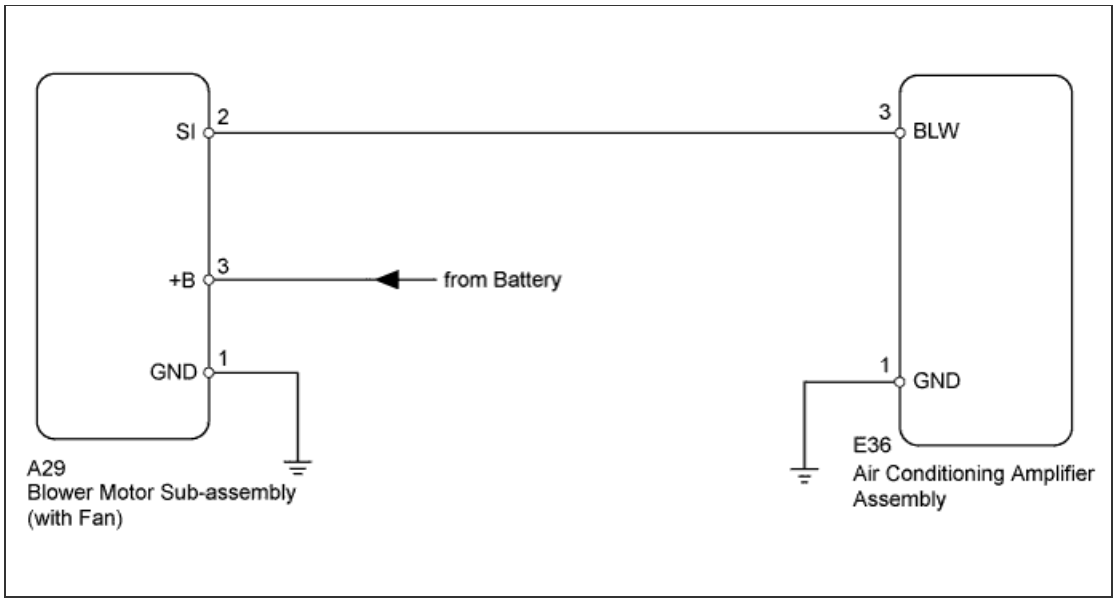
for Preparation Click here

DESCRIPTION



The blower motor sub-assembly (with fan) is operated by signals from the air conditioning amplifier assembly. The blower motor sub-assembly (with fan) speed signals are transmitted by changes in the duty ratio.
Duty Ratio:
The duty ratio is the ratio of the blower motor sub-assembly (with fan) OPEN time (T1) to the total of the blower motor sub-assembly (with fan) OPEN and LO time (T2).
The air conditioning amplifier assembly controls the blower motor sub-assembly (with fan) speed.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (BLOWER MOTOR SUB-ASSEMBLY)

a. Select the Active Test, use the intelligent tester to generate a control command, and then check that the blower motor operates.

Air Conditioner

Tester Display	Test Part	Control Range	Diagnostic Note
Blower Motor	Blower motor sub-assembly (with fan)	Min.: 0, Max.: 31	-

Result

Result	Proceed to
Blower motor operates normally	A
Blower motor does not operate	B
Blower motor operates but does not change speed	C

B → Go to step 2

C → Go to step 6

A

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (Click here)

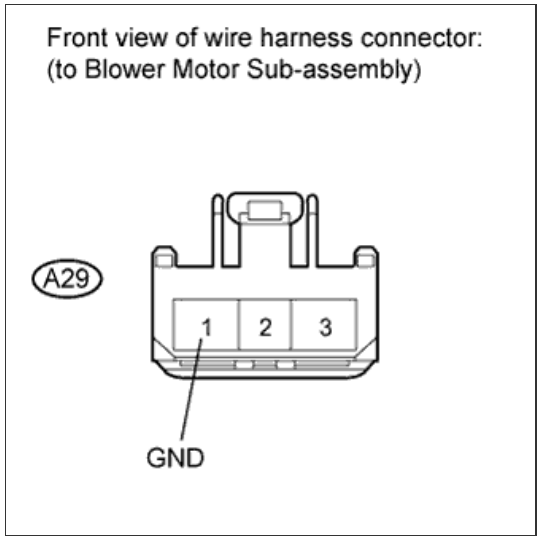
2.CHECK HARNESS AND CONNECTOR (BLOWER MOTOR - BODY GROUND)

a. Disconnect the A29 motor connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A29-1 (GND) - Body ground	Always	Below 1 Ω



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

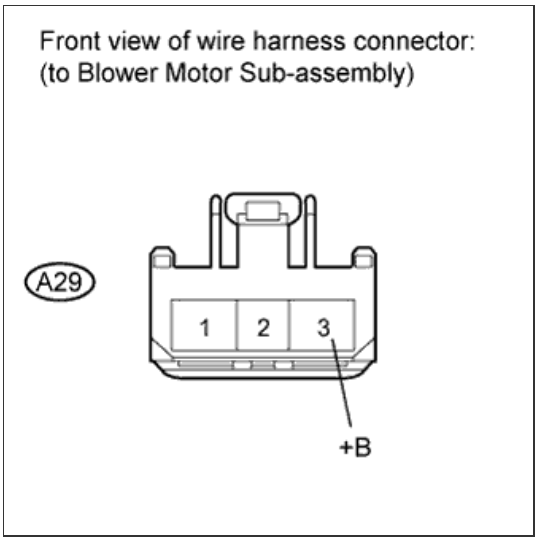
3.CHECK HARNESS AND CONNECTOR (BLOWER MOTOR - BATTERY)

a. Disconnect the A29 motor connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
A29-3 (+B) - Body ground	Always	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK BLOWER MOTOR SUB-ASSEMBLY (SI VOLTAGE)

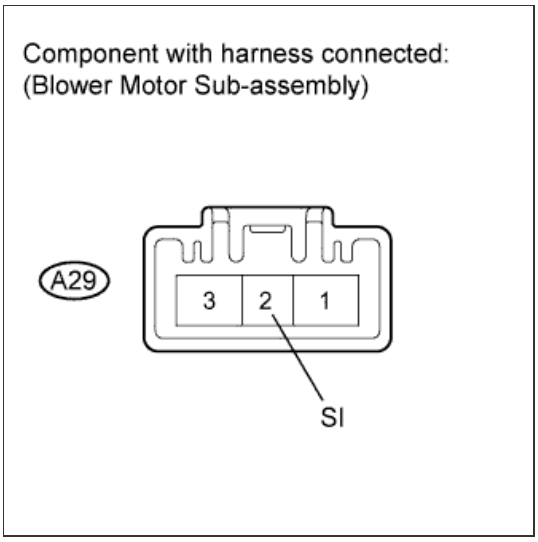
a. Disconnect the E36 amplifier connector.

b. Reconnect the A29 motor connector.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
A29-2 (SI) - Body ground	Engine switch on (IG)	4.5 to 5.5 V



NG → REPLACE BLOWER MOTOR SUB-ASSEMBLY (Click here)

OK

5.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - BLOWER MOTOR)

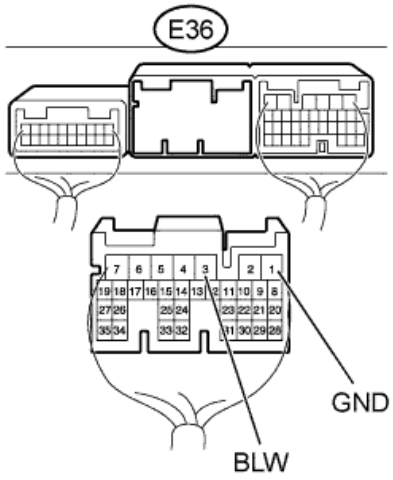
a. Disconnect the E36 amplifier connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E36-3 (BLW) - E36-1 (GND)	Engine switch on (IG) Blower switch off	4.5 to 5.5 V

Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK →

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

6.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - BLOWER MOTOR)

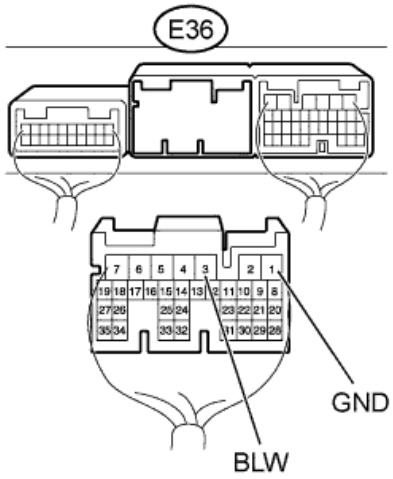
a. Disconnect the E36 amplifier connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E36-3 (BLW) - E36-1 (GND)	Engine switch on (IG) Blower switch off	4.5 to 5.5 V

Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK →

7.CHECK AIR CONDITIONING AMPLIFIER ASSEMBLY (BLW SIGNAL)

a. Remove the air conditioning amplifier assembly with its connectors still connected (Click here).

b. Using an oscilloscope, check the waveform.

Measurement Condition

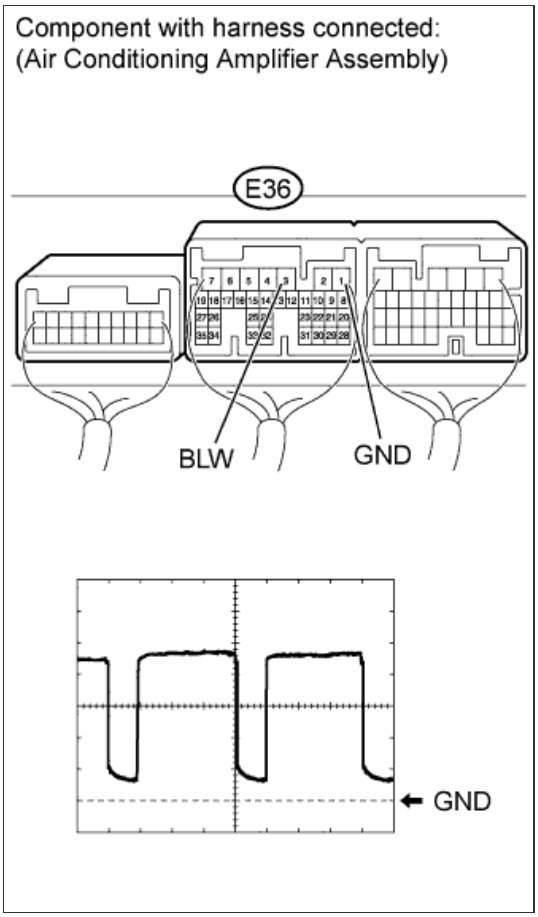
Item	Content
Terminal No. (Symbol)	E36-3 (BLW) - E36-1 (GND)
Tool Setting	1 V/DIV., 500 µs/DIV.
Condition	Engine switch on (IG) Blower switch off → on

OK:

Waveform is as shown in the illustration.

HINT:

Waveform varies with the blower level.



NG → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

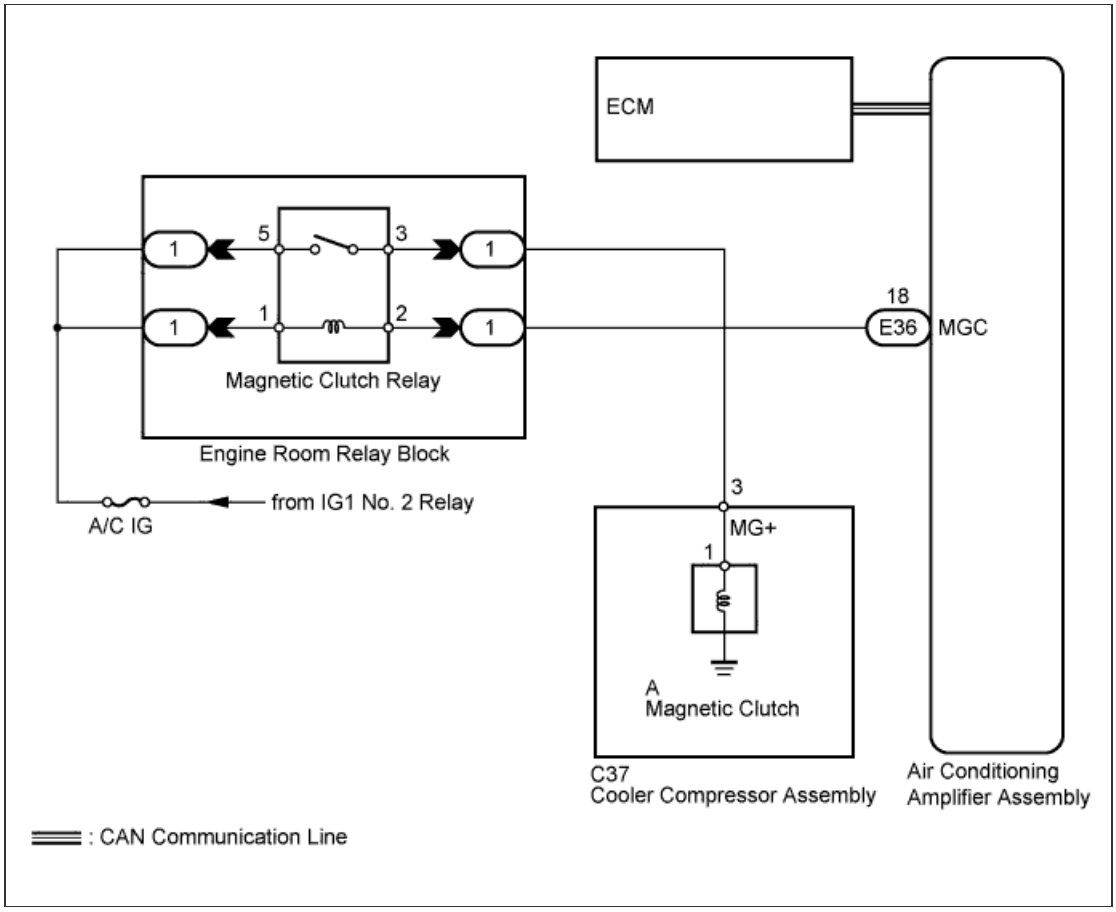
OK → REPLACE BLOWER MOTOR SUB-ASSEMBLY (Click here)

for Preparation Click here

DESCRIPTION

When the air conditioning amplifier assembly is turned on, a magnetic clutch on signal is sent from the MGC terminal of the air conditioning amplifier assembly. Then, the magnetic clutch relay turns on to operate the magnetic clutch.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK CAN COMMUNICATION SYSTEM

a. Check for CAN communication system DTCs related to the air conditioning system.

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

2.READ VALUE USING INTELLIGENT TESTER (A/C SIGNAL)

a. Use the Data List to check if the A/C switch is functioning properly.

Engine

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
A/C Signal	A/C switch signal / ON or OFF	ON: A/C switch on OFF: A/C switch off	-

OK:

The display is as specified in the normal condition.

NG → Go to step 3

OK ↓

REPLACE ECM (Click here)

3.INSPECT FUSE (A/C IG)

a. Remove the A/C IG fuse from the cowl side junction block LH.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A/C IG fuse	Always	Below 1 Ω

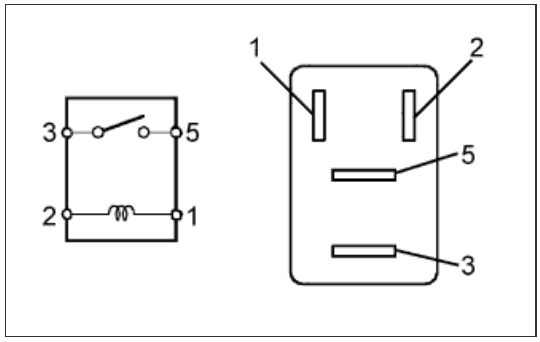
NG → REPLACE FUSE

OK ↓

4.INSPECT MAGNETIC CLUTCH RELAY

a. Remove the magnetic clutch relay from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

Tester Connection	Condition	Specified Condition
3 - 5	Battery voltage not applied to terminals 1 and 2	10 kΩ or higher
3 - 5	Battery voltage applied to terminals 1 and 2	Below 1 Ω

NG → REPLACE MAGNETIC CLUTCH RELAY

OK ↓

5.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - BATTERY)

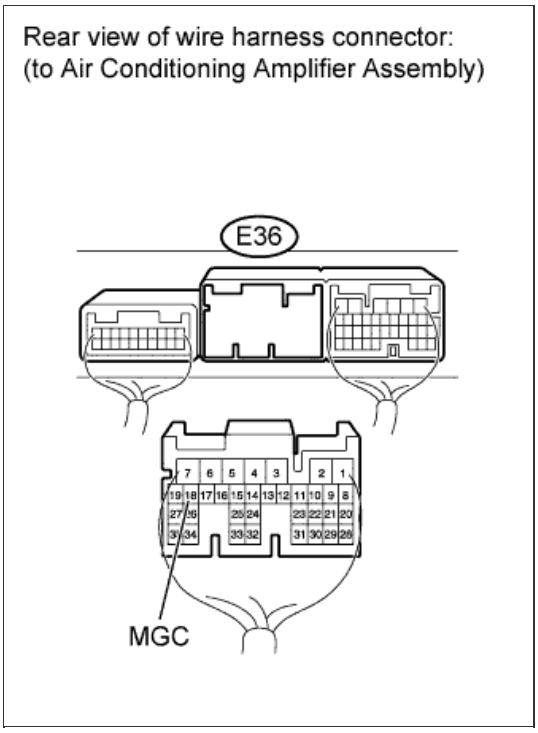
a. Disconnect the E36 amplifier connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E36-18 (MGC) - Body ground	Engine switch off	Below 1 V
E36-18 (MGC) -	Engine switch on	

Body ground	(IG)	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

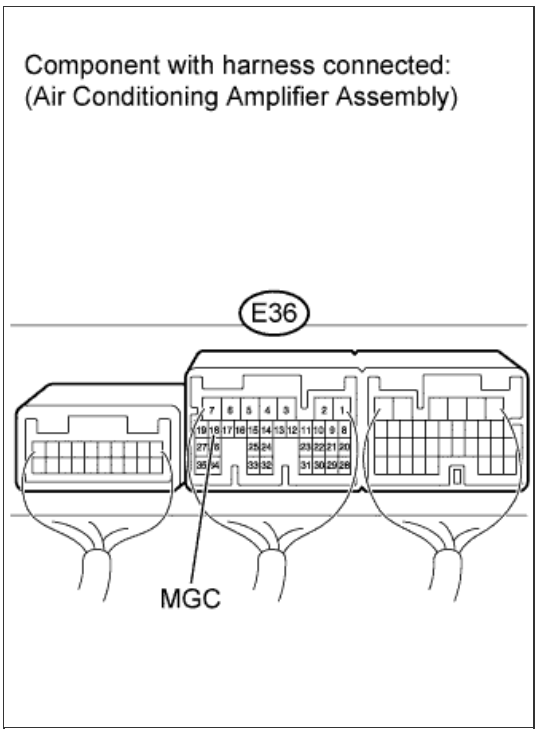
6.INSPECT AIR CONDITIONING AMPLIFIER ASSEMBLY

a. Reconnect the E36 amplifier connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E36-18 (MGC) - Body ground	Engine switch on (IG) A/C switch off	11 to 14 V
E36-18 (MGC) - Body ground	Engine switch on (IG) A/C switch on	Below 1 V



NG → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

OK

7.INSPECT COOLER COMPRESSOR ASSEMBLY

a. Disconnect the C37 compressor connector.

b. Disconnect the A magnetic clutch connector.

c. Measure the resistance according to the value(s) in the table below.

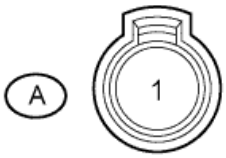
Standard Resistance:

Tester Connection	Condition	Specified Condition
C37-3 (MG+) - A-1	Always	Below 1 Ω
C37-3 (MG+) - Body ground	Always	10 kΩ or higher

Component without harness connected:
(Cooler Compressor Assembly)



Front view of wire harness connector:
(to Magnetic Clutch)



NG → REPLACE COOLER COMPRESSOR ASSEMBLY (Click here)

OK

8.INSPECT MAGNETIC CLUTCH

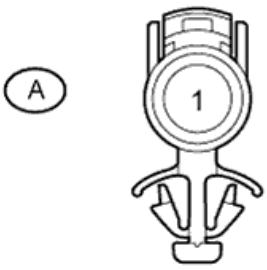
a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A-1 - Body ground	20°C (68°F)	3.4 to 3.8 Ω

b. When connector terminal A-1 is connected to the positive (+) battery terminal, check that the following occurs: 1) the operating sound of the magnetic clutch can be heard, and 2) the hub and rotor of the magnetic clutch lock.

Component without harness connected:
(Magnetic Clutch)



NG → REPLACE MAGNETIC CLUTCH

OK

9.CHECK HARNESS AND CONNECTOR (ENGINE ROOM RELAY BLOCK - BATTERY)

a. Remove the magnetic clutch relay from the engine room relay block.

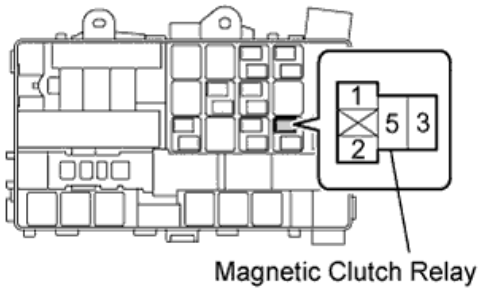
b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition

Relay block magnetic clutch relay terminal 5 - Body ground	Engine switch on (IG)	11 to 14 V
Relay block magnetic clutch relay terminal 1 - Body ground	Engine switch on (IG)	11 to 14 V

Engine Room Relay Block:



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR (ENGINE ROOM RELAY BLOCK - BATTERY)

OK

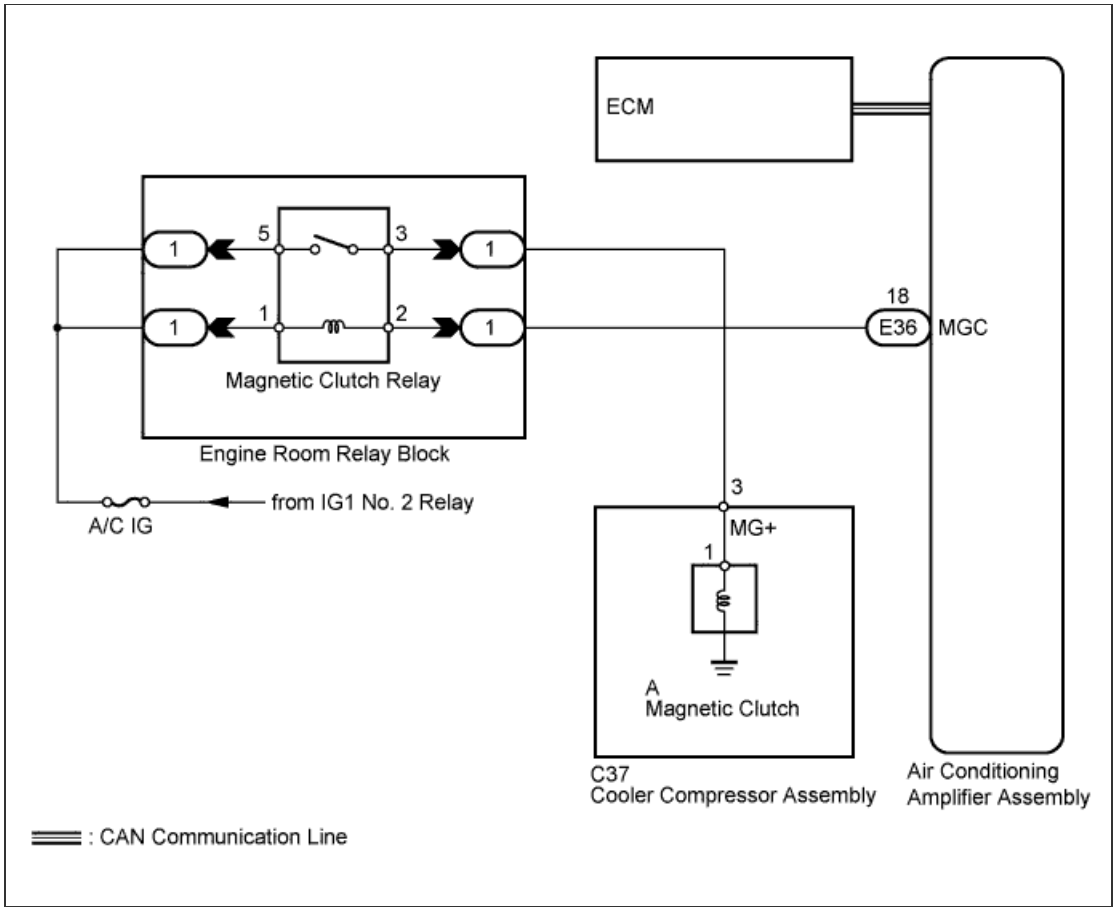
REPAIR OR REPLACE HARNESS OR CONNECTOR (ENGINE ROOM RELAY BLOCK - COOLER COMPRESSOR ASSEMBLY)

for Preparation Click here

DESCRIPTION

When the air conditioning amplifier assembly is turned on, a magnetic clutch on signal is sent from the MGC terminal of the air conditioning amplifier assembly. Then, the magnetic clutch relay turns on to operate the magnetic clutch.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.CHECK CAN COMMUNICATION SYSTEM

a. Check for CAN communication system DTCs related to the air conditioning system.

Result

Result	Proceed to
CAN DTC is not output	A
CAN DTC is output (for LHD)	B
CAN DTC is output (for RHD)	C

B → GO TO CAN COMMUNICATION SYSTEM (Click here)

C → GO TO CAN COMMUNICATION SYSTEM (Click here)

A

2.READ VALUE USING INTELLIGENT TESTER (A/C SIGNAL)

a. Use the Data List to check if the A/C switch is functioning properly.

Engine

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
A/C Signal	A/C switch signal / ON or OFF	ON: A/C switch on OFF: A/C switch off	-

OK:

The display is as specified in the normal condition.

NG → Go to step 3

OK ↓

REPLACE ECM (Click here)

3.INSPECT FUSE (A/C IG)

a. Remove the A/C IG fuse from the cowl side junction block LH.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A/C IG fuse	Always	Below 1 Ω

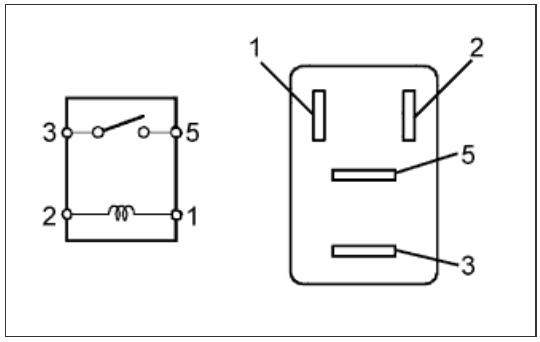
NG → REPLACE FUSE

OK ↓

4.INSPECT MAGNETIC CLUTCH RELAY

a. Remove the magnetic clutch relay from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.



Standard Resistance:

Tester Connection	Condition	Specified Condition
3 - 5	Battery voltage not applied to terminals 1 and 2	10 kΩ or higher
3 - 5	Battery voltage applied to terminals 1 and 2	Below 1 Ω

NG → REPLACE MAGNETIC CLUTCH RELAY

OK ↓

5.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - BATTERY)

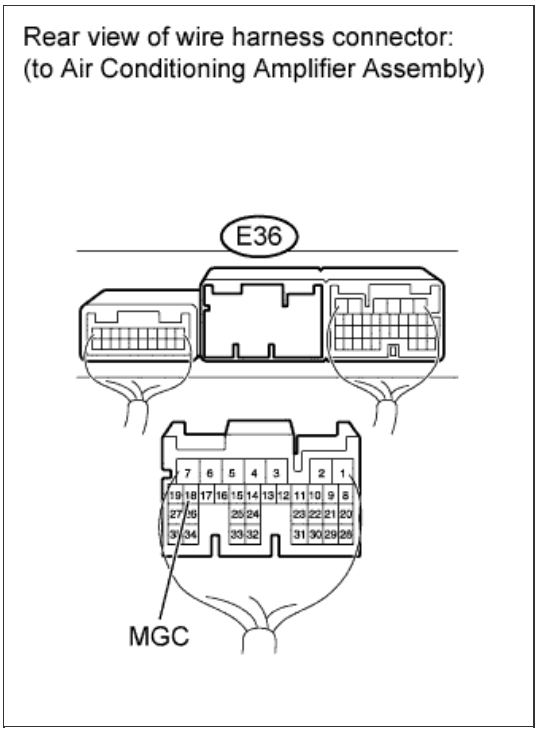
a. Disconnect the E36 amplifier connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E36-18 (MGC) - Body ground	Engine switch off	Below 1 V
E36-18 (MGC) -	Engine switch on	

Body ground	(IG)	11 to 14 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

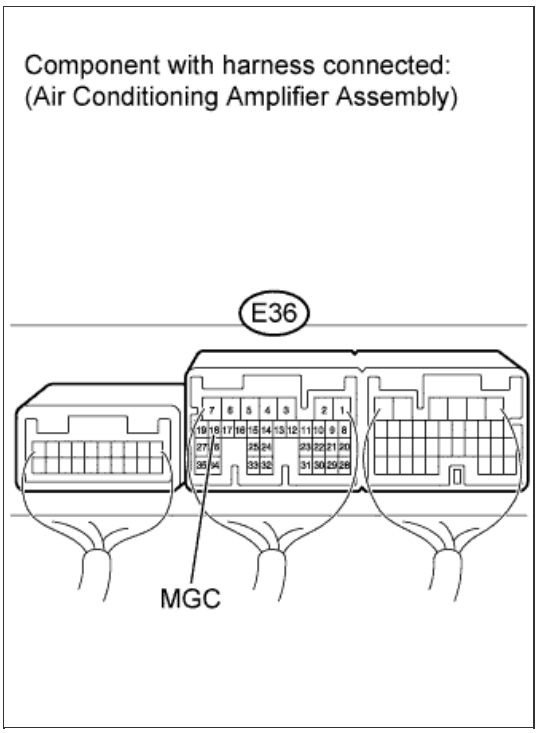
6.INSPECT AIR CONDITIONING AMPLIFIER ASSEMBLY

a. Reconnect the E36 amplifier connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E36-18 (MGC) - Body ground	Engine switch on (IG) A/C switch off	11 to 14 V
E36-18 (MGC) - Body ground	Engine switch on (IG) A/C switch on	Below 1 V



NG → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

OK

7.INSPECT COOLER COMPRESSOR ASSEMBLY

a. Disconnect the C37 compressor connector.

b. Disconnect the A magnetic clutch connector.

c. Measure the resistance according to the value(s) in the table below.

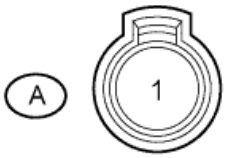
Standard Resistance:

Tester Connection	Condition	Specified Condition
C37-3 (MG+) - A-1	Always	Below 1 Ω
C37-3 (MG+) - Body ground	Always	10 kΩ or higher

Component without harness connected:
(Cooler Compressor Assembly)



Front view of wire harness connector:
(to Magnetic Clutch)



NG → REPLACE COOLER COMPRESSOR ASSEMBLY (Click here)

OK

8.INSPECT MAGNETIC CLUTCH

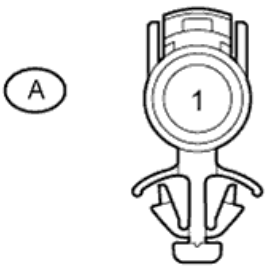
a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A-1 - Body ground	20°C (68°F)	3.4 to 3.8 Ω

b. When connector terminal A-1 is connected to the positive (+) battery terminal, check that the following occurs: 1) the operating sound of the magnetic clutch can be heard, and 2) the hub and rotor of the magnetic clutch lock.

Component without harness connected:
(Magnetic Clutch)



NG → REPLACE MAGNETIC CLUTCH

OK

9.CHECK HARNESS AND CONNECTOR (ENGINE ROOM RELAY BLOCK - BATTERY)

a. Remove the magnetic clutch relay from the engine room relay block.

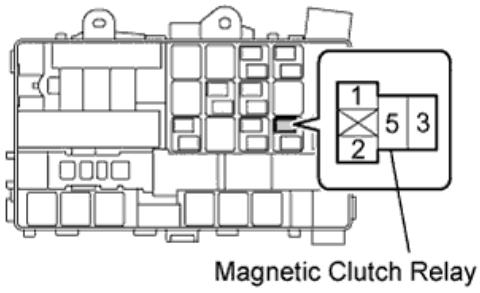
b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition

Relay block magnetic clutch relay terminal 5 - Body ground	Engine switch on (IG)	11 to 14 V
Relay block magnetic clutch relay terminal 1 - Body ground	Engine switch on (IG)	11 to 14 V

Engine Room Relay Block:



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR (ENGINE ROOM RELAY BLOCK - BATTERY)

OK

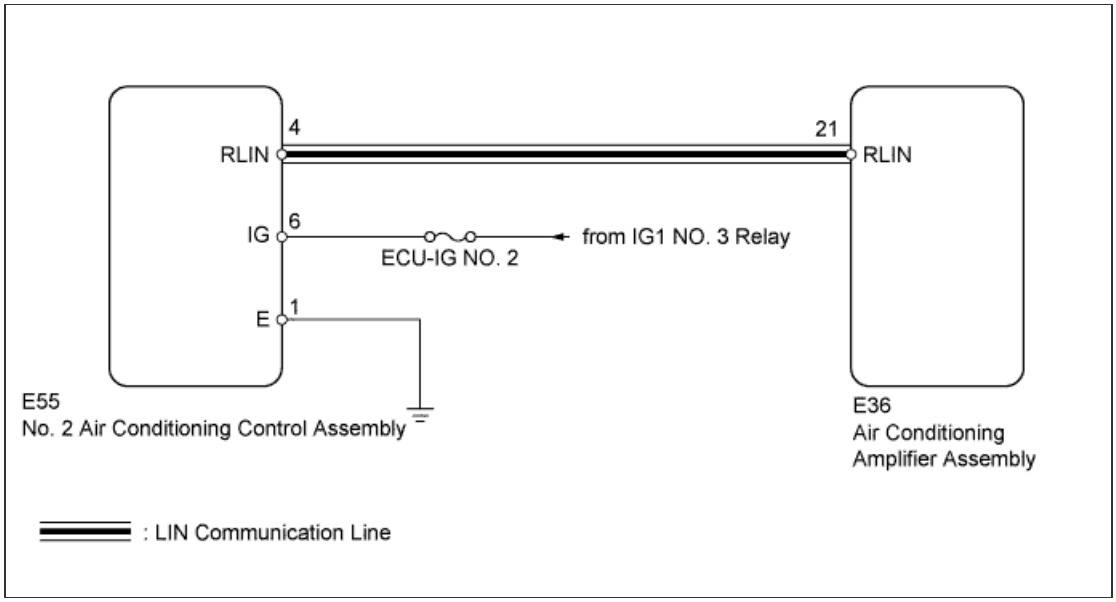
REPAIR OR REPLACE HARNESS OR CONNECTOR (ENGINE ROOM RELAY BLOCK - COOLER COMPRESSOR ASSEMBLY)

for Preparation Click here

DESCRIPTION

This circuit consists of the No. 2 air conditioning control assembly and the air conditioning amplifier assembly. When the No. 2 air conditioning control assembly is operated, signals are transmitted to the air conditioning amplifier assembly through the LIN communication system.
If the LIN communication system malfunctions, the air conditioning amplifier assembly does not operate even if the No. 2 air conditioning control assembly is operated.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (ECU-IG NO. 2)

a. Remove the ECU-IG NO. 2 fuse from the cowl side junction block LH.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
ECU-IG NO. 2 fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

2.CHECK HARNESS AND CONNECTOR (NO. 2 AIR CONDITIONING CONTROL - BODY GROUND AND BATTERY)

a. Disconnect the E55 No. 2 air conditioning control assembly connector.

b. Measure the resistance and voltage according to the value(s) in the table below.

Standard Resistance:

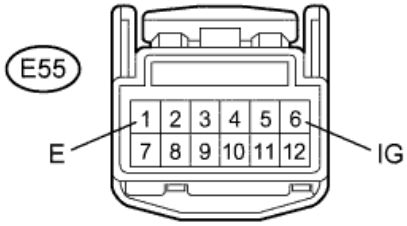
Tester Connection	Condition	Specified Condition
E55-1 (E) - Body ground	Always	Below 1 Ω

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition

E55-6 (IG) - Body ground	Engine switch on (IG)	11 to 14 V

Front view of wire harness connector: (to No. 2 Air Conditioning Control Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - NO. 2 AIR CONDITIONING CONTROL)

a. Disconnect the E55 No. 2 air conditioning control assembly connector.

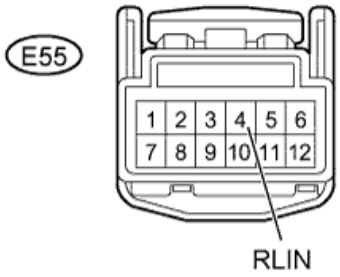
b. Disconnect the E36 amplifier connector.

c. Measure the resistance according to the value(s) in the table below.

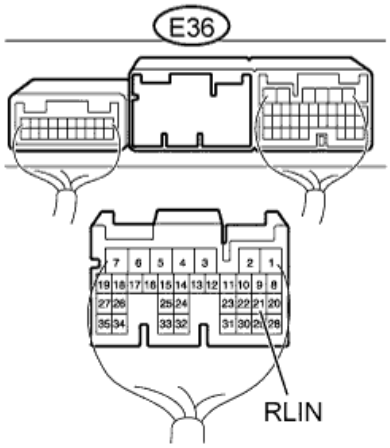
Standard Resistance:

Tester Connection	Condition	Specified Condition
E36-21 (RLIN) - E55-4 (RLIN)	Always	Below 1 Ω
E55-4 (RLIN) - Body ground	Always	10 kΩ or higher
E36-21 (RLIN) - Body ground		

Front view of wire harness connector: (to No. 2 Air Conditioning Control Assembly)



Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK NO. 2 AIR CONDITIONING CONTROL ASSEMBLY (OPERATION)

a. Replace the No. 2 air conditioning control assembly with a new or properly functioning one (Click here).

b. Operate the No. 2 air conditioning control assembly to check that it functions properly.

OK:

No. 2 air conditioning control assembly function operates normally.

NG → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

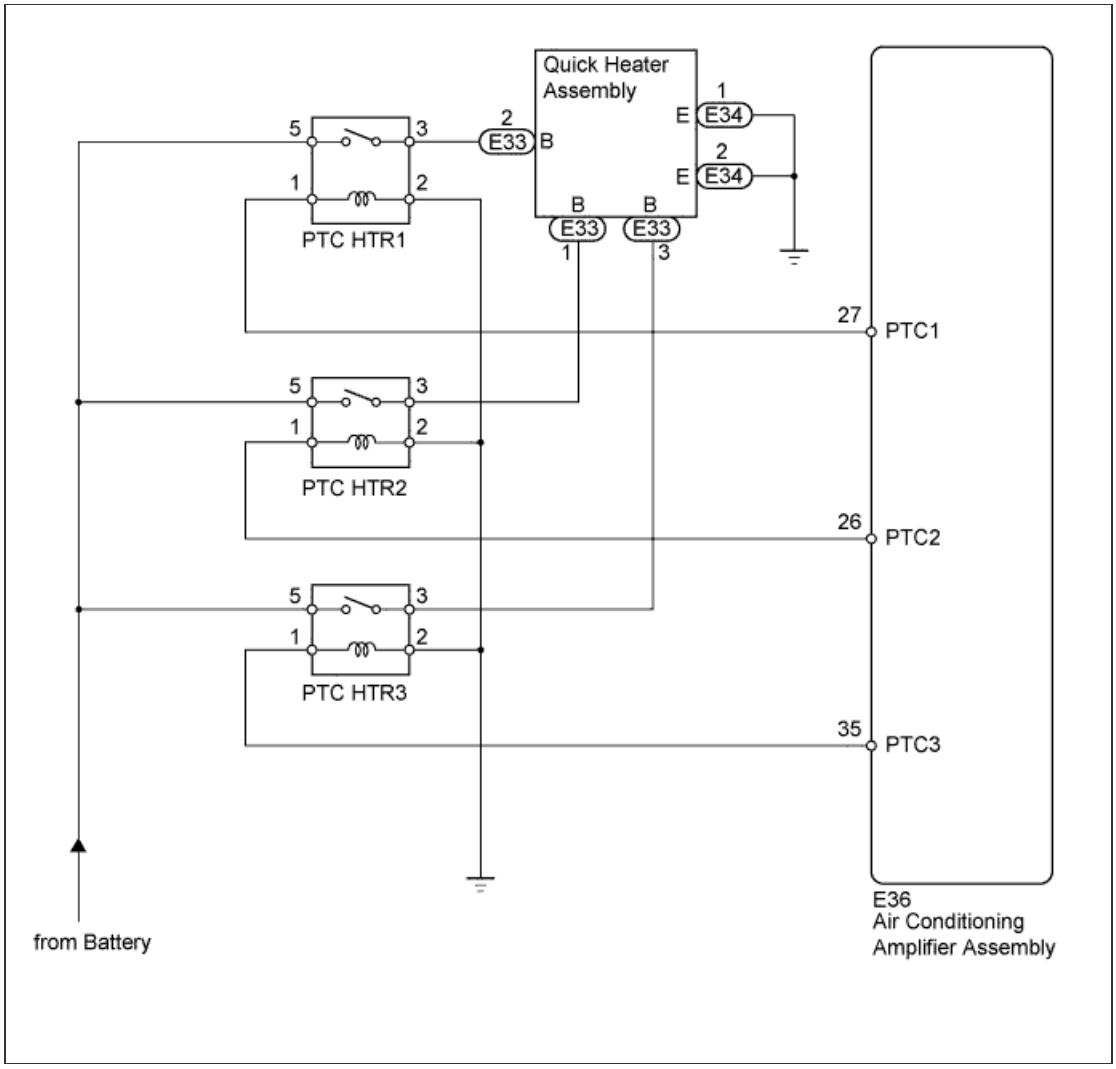
OK → REPLACE NO. 2 AIR CONDITIONING CONTROL ASSEMBLY (Click here)

for Preparation Click here

DESCRIPTION

PTC heater relays are closed in accordance with signals from the air conditioning amplifier assembly and power is supplied to the quick heater assembly installed on the radiator heater unit.

WIRING DIAGRAM



INSPECTION PROCEDURE

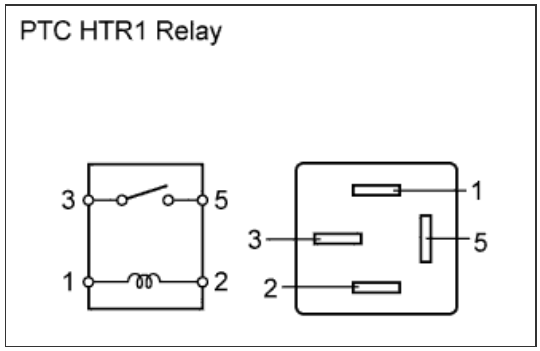
1.INSPECT PTC HEATER RELAY (PTC HTR1)

a. Remove the PTC HTR1 relay from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
3 - 5	Battery voltage is not applied between terminals 1 and 2	10 kΩ or higher
	Battery voltage is applied to terminals 1 and 2	Below 1 Ω



NG → REPLACE PTC HEATER RELAY

OK

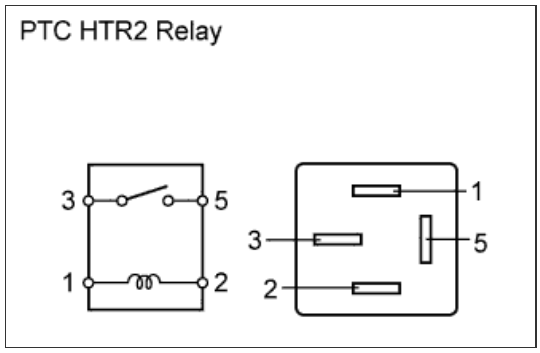
2.INSPECT PTC HEATER RELAY (PTC HTR2)

a. Remove the PTC HTR2 relay from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
3 - 5	Battery voltage is not applied between terminals 1 and 2	10 kΩ or higher
	Battery voltage is applied to terminals 1 and 2	Below 1 Ω



NG → REPLACE PTC HEATER RELAY

OK

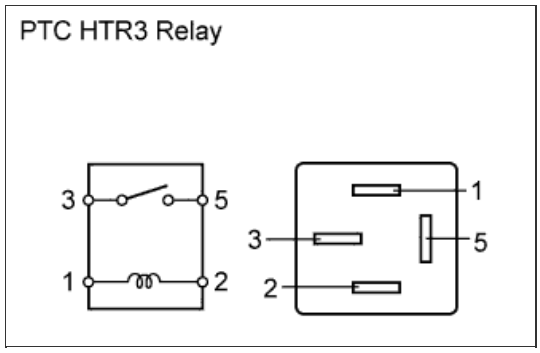
3.INSPECT PTC HEATER RELAY (PTC HTR3)

a. Remove the PTC HTR3 relay from the engine room relay block.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
3 - 5	Battery voltage is not applied between terminals 1 and 2	10 kΩ or higher
	Battery voltage is applied to terminals 1 and 2	Below 1 Ω



NG → REPLACE PTC HEATER RELAY

OK

4.CHECK AIR CONDITIONING AMPLIFIER ASSEMBLY

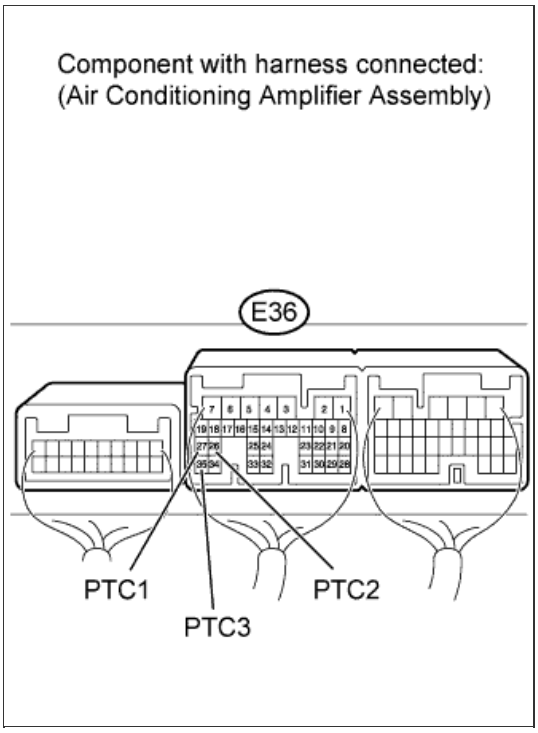
a. Remove the air conditioning amplifier assembly with its connectors still connected (Click here).

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
E36-27 (PTC1) - Body ground	• Engine switch on (IG) • Temperature setting: Hi • Outside temperature: 10°C (50°F) or less • Engine coolant temperature:	11 to 14 V
E36-26 (PTC2) - Body ground		
E36-35 (PTC3) - Body ground		

	73°C (163.4°F) or less • Blower switch on	



NG → Go to step 8

OK

5.CHECK HARNESS AND CONNECTOR (PTC HEATER RELAY - QUICK HEATER)

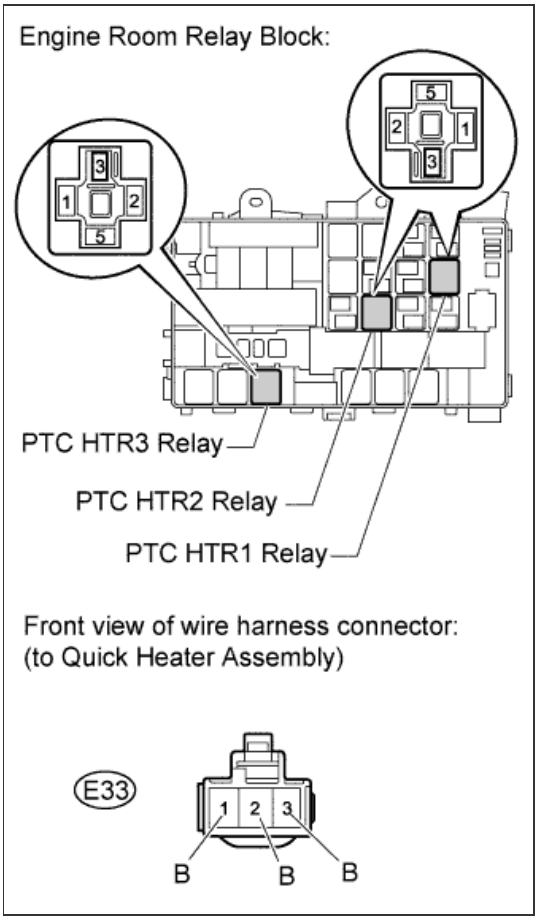
a. Remove the PTC heater relays from the engine room relay block.

b. Disconnect the E33 quick heater assembly connector.

c. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
PTC HTR2 terminal 3 - E33-1 (B)	Always	Below 1 Ω
PTC HTR1 terminal 3 - E33-2 (B)		
PTC HTR3 terminal 3 - E33-3 (B)		
PTC HTR2 terminal 3 - Body ground	Always	10 kΩ or higher
PTC HTR1 terminal 3 - Body ground		
PTC HTR3 terminal 3 - Body ground		



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

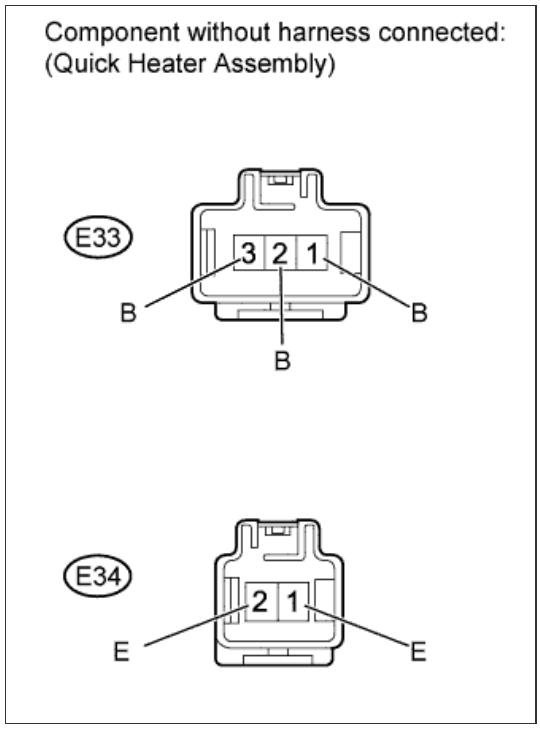
6.INSPECT QUICK HEATER ASSEMBLY

a. Disconnect the E33 and E34 quick heater assembly connectors.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E33-1 (B) - E34-1 (E)	Always	Below 1 kΩ
E33-2 (B) - E34-1 (E)		
E33-3 (B) - E34-2 (E)		



NG → REPLACE QUICK HEATER ASSEMBLY (Click here)

OK

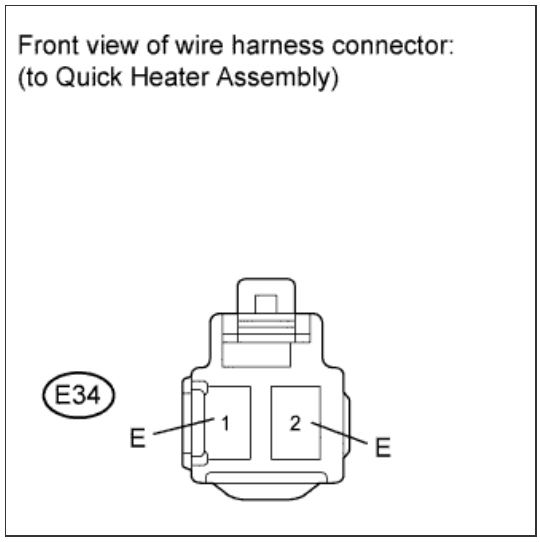
7.CHECK HARNESS AND CONNECTOR (QUICK HEATER - BODY GROUND)

a. Disconnect the E34 quick heater assembly connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E34-1 (E) - Body ground	Always	Below 1 Ω
E34-2 (E) - Body ground		



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

8.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - BODY GROUND)

a. Disconnect the E36 amplifier connector.

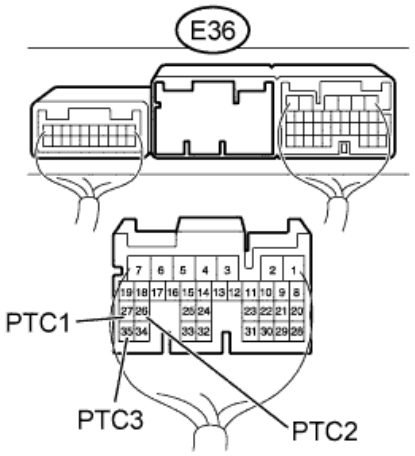
b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E36-27 (PTC1) - Body ground		
E36-26 (PTC2) -		

Body ground	Always	Below 200 Ω
E36-35 (PTC3) - Body ground		

Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



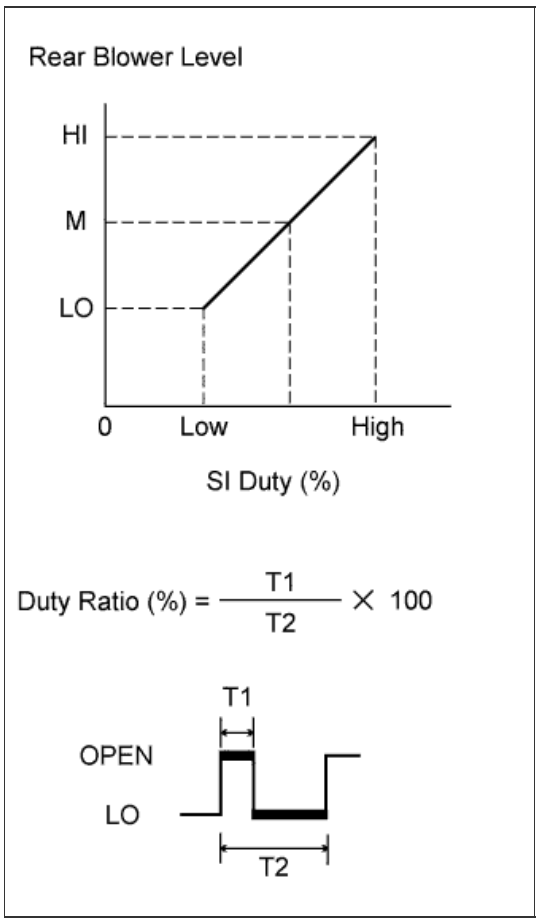
NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

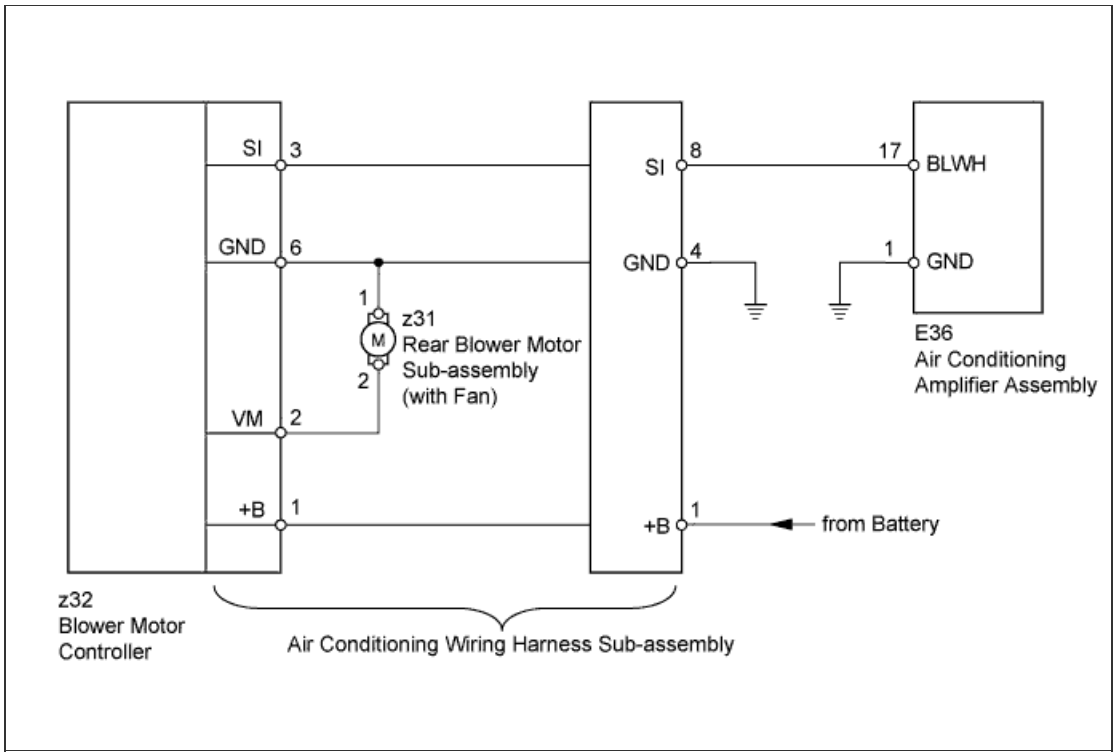
for Preparation Click here

DESCRIPTION



The rear blower motor sub-assembly (with fan) is operated by signals from the air conditioning amplifier assembly. The rear blower motor sub-assembly (with fan) speed signals are transmitted by changes in the duty ratio.
Duty Ratio:
The duty ratio is the ratio of the rear blower motor sub-assembly (with fan) OPEN time (T1) to the total of the rear blower motor sub-assembly (with fan) OPEN and LO time (T2).
The blower motor controller controls the rear blower motor sub-assembly (with fan) speed.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (REAR BLOWER MOTOR SUB-ASSEMBLY)

a. Select the Active Test, use the intelligent tester to generate a control command, and then check that the rear blower motor operates.

Air Conditioner

Tester Display	Test Part	Control Range	Diagnostic Note
Rear Blower Motor	Rear blower motor sub-assembly (with fan)	Min.: 0, Max.: 31	-

Result

Result	Proceed to
Rear blower motor operates normally	A
Rear blower motor does not operate	B
Rear blower motor operates but does not change speed	C

B	Go to step 2
C	Go to step 5

A

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (Click here)

2.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING WIRING HARNESS - BODY GROUND)

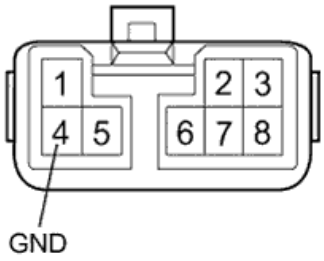
a. Disconnect the air conditioning wiring harness sub-assembly connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
4 (GND) - Body ground	Always	Below 1 Ω

Front view of wire harness connector: (to Air Conditioning Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING WIRING HARNESS - BATTERY)

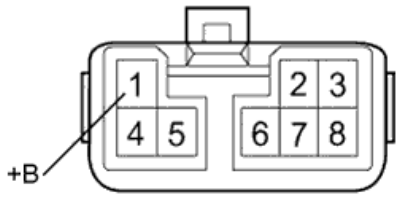
a. Disconnect the air conditioning wiring harness sub-assembly connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
1 (+B) - Body ground	Always	11 to 14 V

Front view of wire harness connector: (to Air Conditioning Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY (SI VOLTAGE)

a. Disconnect the E36 amplifier connector.

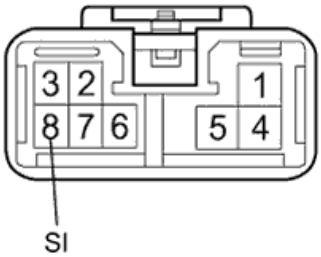
b. Reconnect the air conditioning wiring harness sub-assembly connector.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
8 (SI) - Body ground	Engine switch on (IG)	4.5 to 5.5 V

Component with harness connected: (Air Conditioning Wiring Harness Sub-assembly)



NG → Go to step 7

OK

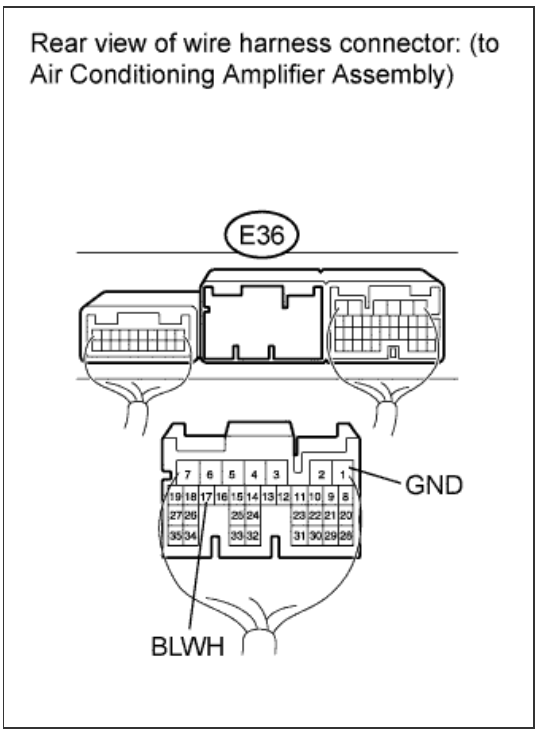
5.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - AIR CONDITIONING WIRING HARNESS)

a. Disconnect the E36 amplifier connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E36-17 (BLWH) - E36-1 (GND)	Engine switch on (IG) Blower switch off	4.5 to 5.5 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6.CHECK AIR CONDITIONING AMPLIFIER ASSEMBLY (BLWH SIGNAL)

a. Remove the air conditioning amplifier assembly with its connectors still connected (Click here).

b. Using an oscilloscope, check the waveform.

Measurement Condition

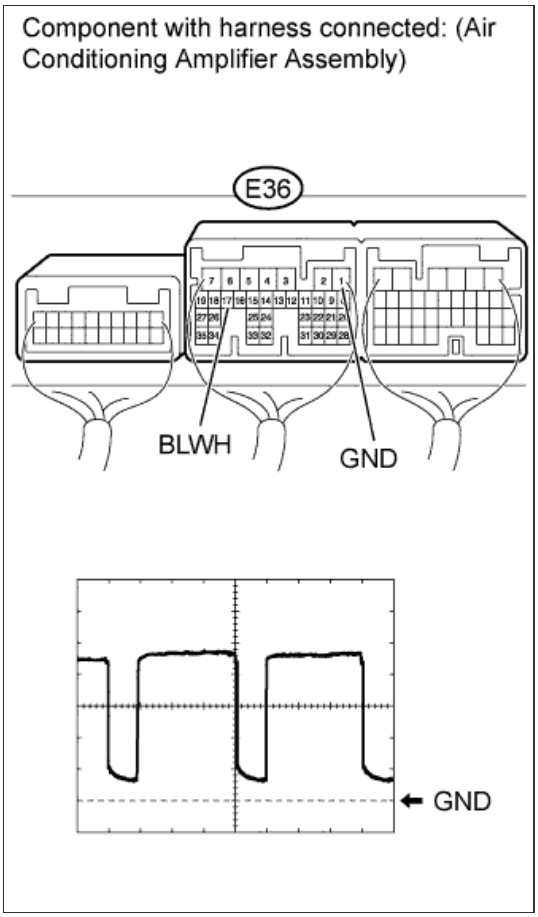
Item	Content
Terminal No. (Symbol)	E36-17 (BLWH) - E36-1 (GND)
Tool Setting	1 V/DIV., 500 µs/DIV.
Condition	Engine switch on (IG) Blower switch off → on

OK:

Waveform is as shown in the illustration.

HINT:

Waveform varies with the blower level.



NG → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

OK ↓

7.CHECK AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY (OPERATION)

a. Replace the air conditioning wiring harness sub-assembly with a normal one and check that the condition returns to normal.

OK:
Same problem does not occur.

NG → Go to step 8

OK ↓

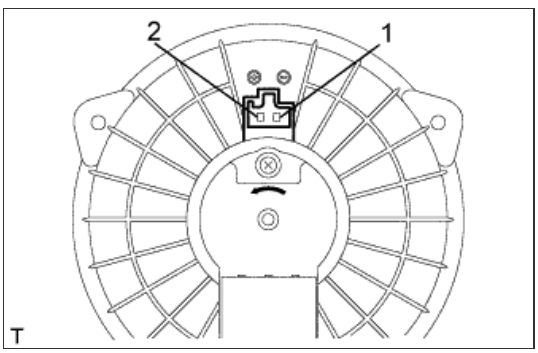
REPLACE AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY

8.INSPECT REAR BLOWER MOTOR SUB-ASSEMBLY (WITH FAN)

a. Disconnect the z31 motor connector.

b. Connect the positive (+) lead of the battery to terminal 2 and the negative (-) lead to terminal 1, then check that the rear blower motor operates smoothly.

OK:
The rear blower motor operates smoothly.



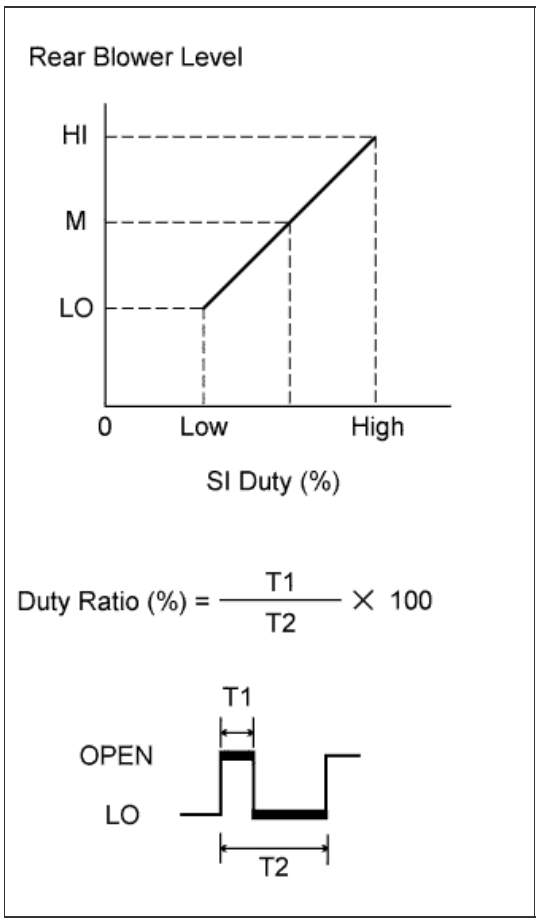
NG → REPLACE REAR BLOWER MOTOR SUB-ASSEMBLY (WITH FAN) (Click here)

OK

REPLACE BLOWER MOTOR CONTROLLER (Click here)

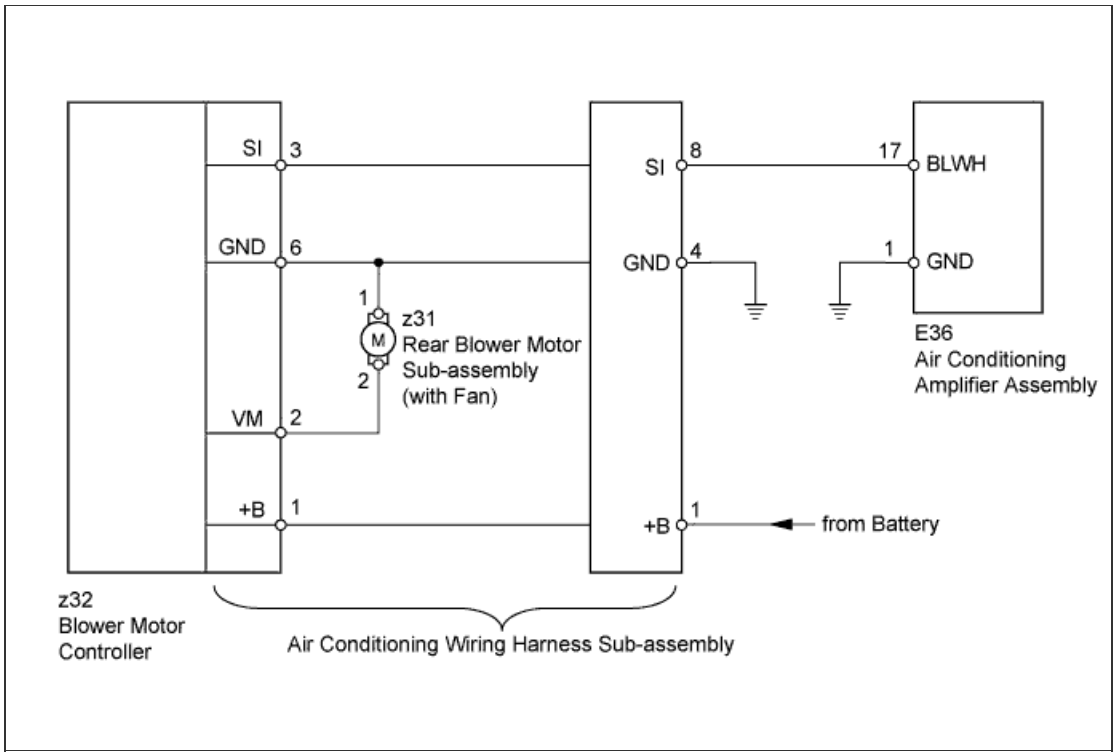
for Preparation Click here

DESCRIPTION



The rear blower motor sub-assembly (with fan) is operated by signals from the air conditioning amplifier assembly. The rear blower motor sub-assembly (with fan) speed signals are transmitted by changes in the duty ratio.
Duty Ratio:
The duty ratio is the ratio of the rear blower motor sub-assembly (with fan) OPEN time (T1) to the total of the rear blower motor sub-assembly (with fan) OPEN and LO time (T2).
The blower motor controller controls the rear blower motor sub-assembly (with fan) speed.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (REAR BLOWER MOTOR SUB-ASSEMBLY)

a. Select the Active Test, use the intelligent tester to generate a control command, and then check that the rear blower motor operates.

Air Conditioner

Tester Display	Test Part	Control Range	Diagnostic Note
Rear Blower Motor	Rear blower motor sub-assembly (with fan)	Min.: 0, Max.: 31	-

Result

Result	Proceed to
Rear blower motor operates normally	A
Rear blower motor does not operate	B
Rear blower motor operates but does not change speed	C

B	Go to step 2
C	Go to step 5

A

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (Click here)

2.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING WIRING HARNESS - BODY GROUND)

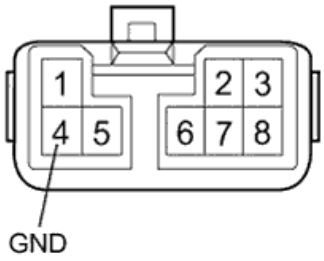
a. Disconnect the air conditioning wiring harness sub-assembly connector.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
4 (GND) - Body ground	Always	Below 1 Ω

Front view of wire harness connector: (to Air Conditioning Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING WIRING HARNESS - BATTERY)

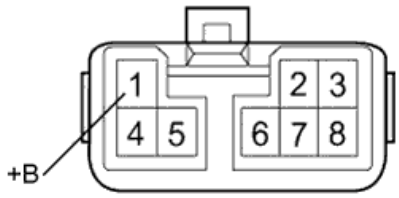
a. Disconnect the air conditioning wiring harness sub-assembly connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
1 (+B) - Body ground	Always	11 to 14 V

Front view of wire harness connector: (to Air Conditioning Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY (SI VOLTAGE)

a. Disconnect the E36 amplifier connector.

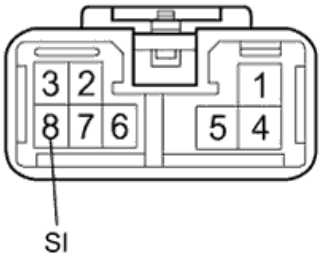
b. Reconnect the air conditioning wiring harness sub-assembly connector.

c. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
8 (SI) - Body ground	Engine switch on (IG)	4.5 to 5.5 V

Component with harness connected: (Air Conditioning Wiring Harness Sub-assembly)



NG → Go to step 7

OK

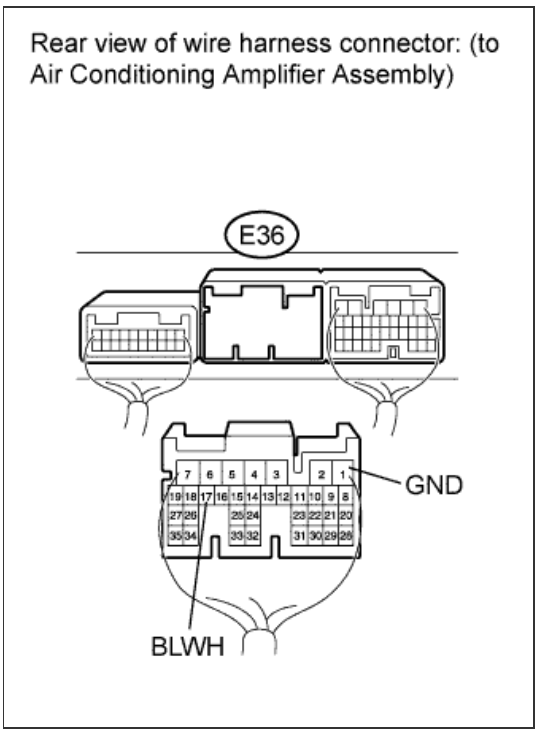
5.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - AIR CONDITIONING WIRING HARNESS)

a. Disconnect the E36 amplifier connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E36-17 (BLWH) - E36-1 (GND)	Engine switch on (IG) Blower switch off	4.5 to 5.5 V



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6.CHECK AIR CONDITIONING AMPLIFIER ASSEMBLY (BLWH SIGNAL)

a. Remove the air conditioning amplifier assembly with its connectors still connected (Click here).

b. Using an oscilloscope, check the waveform.

Measurement Condition

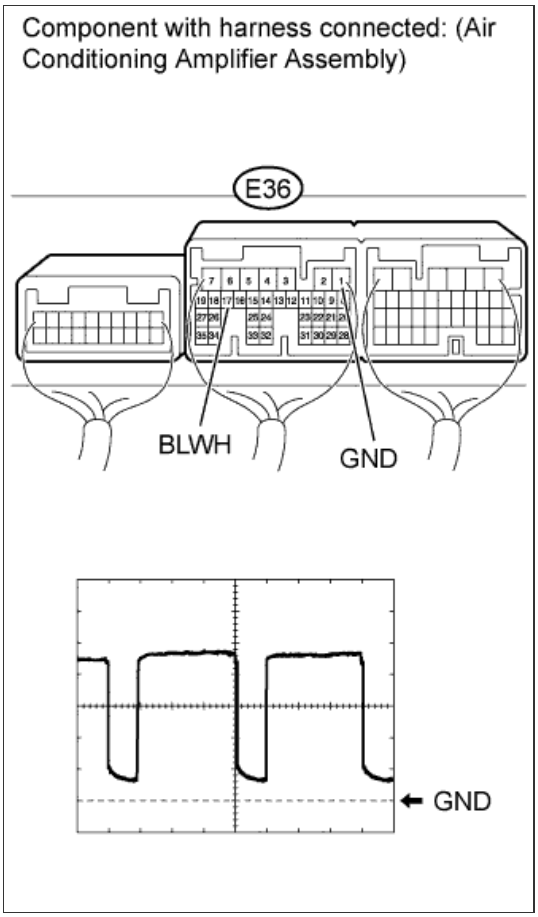
Item	Content
Terminal No. (Symbol)	E36-17 (BLWH) - E36-1 (GND)
Tool Setting	1 V/DIV., 500 µs/DIV.
Condition	Engine switch on (IG) Blower switch off → on

OK:

Waveform is as shown in the illustration.

HINT:

Waveform varies with the blower level.



NG → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

OK ↓

7.CHECK AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY (OPERATION)

a. Replace the air conditioning wiring harness sub-assembly with a normal one and check that the condition returns to normal.

OK:
Same problem does not occur.

NG → Go to step 8

OK ↓

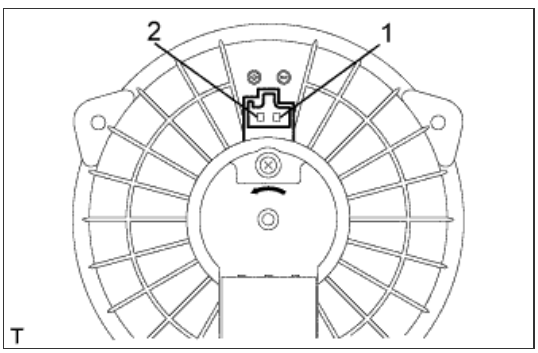
REPLACE AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY

8.INSPECT REAR BLOWER MOTOR SUB-ASSEMBLY (WITH FAN)

a. Disconnect the z31 motor connector.

b. Connect the positive (+) lead of the battery to terminal 2 and the negative (-) lead to terminal 1, then check that the rear blower motor operates smoothly.

OK:
The rear blower motor operates smoothly.



NG → REPLACE REAR BLOWER MOTOR SUB-ASSEMBLY (WITH FAN) (Click here)

OK

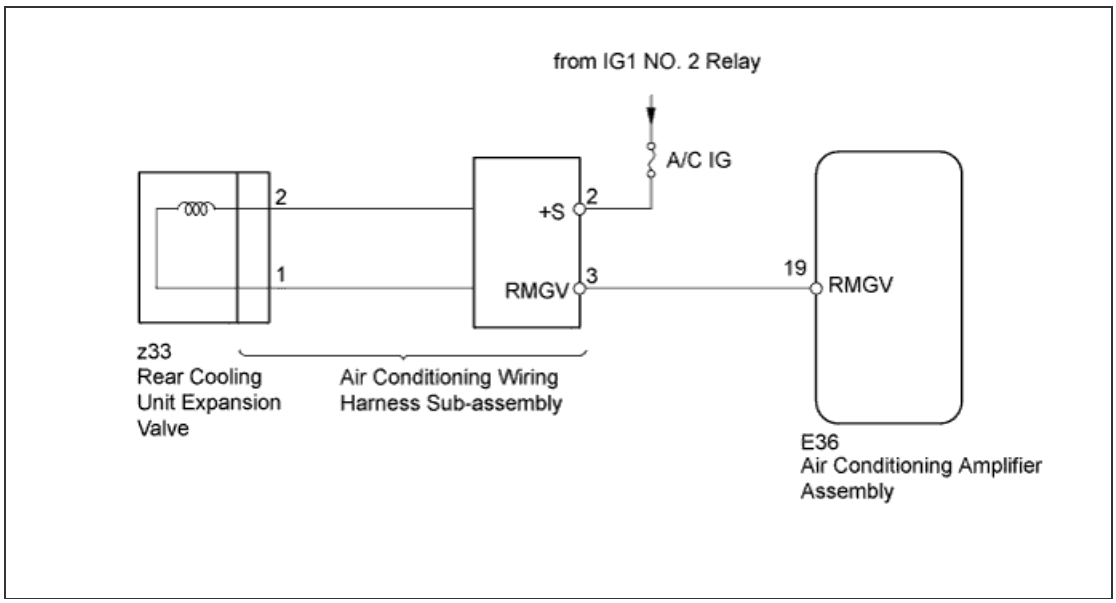
REPLACE BLOWER MOTOR CONTROLLER (Click here)

for Preparation Click here

DESCRIPTION

The rear cooling unit expansion valve is controlled by the air conditioning amplifier assembly.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.PERFORM ACTIVE TEST USING INTELLIGENT TESTER (REAR COOLING UNIT EXPANSION VALVE)

a. Select the Active Test, use the intelligent tester to generate a control command, and then check that the rear cooling unit expansion valve operates.

OK:
Rear magnetic valve operates normally.

Air Conditioner

Tester Display	Test Part	Control Range	Diagnostic Note
Rear A/C Mag Valve	Rear Cooling Unit Expansion Valve	ON or OFF	-

NG → Go to step 2

OK

REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

2.INSPECT FUSE (A/C IG)

a. Remove the A/C IG fuse from the cowl side junction block LH.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A/C IG fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

3.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING WIRING HARNESS - BATTERY)

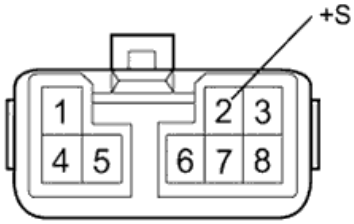
a. Disconnect the air conditioning wiring harness sub-assembly connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
2 (+S) - Body ground	Engine switch off	Below 1 V
	Engine switch on (IG)	11 to 14 V

Front view of wire harness connector: (to Air Conditioning Wiring Harness Sub-assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING WIRING HARNESS - AIR CONDITIONING AMPLIFIER)

a. Disconnect the air conditioning wiring harness sub-assembly connector.

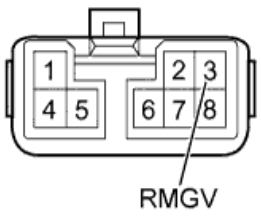
b. Disconnect the E36 amplifier connector.

c. Measure the resistance according to the value(s) in the table below.

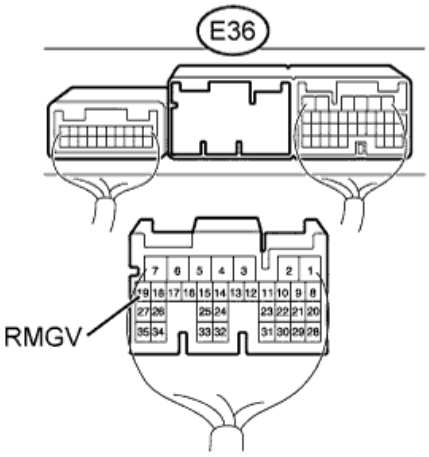
Standard Resistance:

Tester Connection	Condition	Specified Condition
3 (RMGV) - E36-19 (RMGV)	Always	Below 1 Ω
3 (RMGV) - Body ground	Always	10 kΩ or higher
E36-19 (RMGV) - Body ground		

Front view of wire harness connector: (to Air Conditioning Wiring Harness Sub-assembly)



Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

5.CHECK REAR COOLING UNIT EXPANSION VALVE (OPERATION)

a. Replace the rear cooling unit expansion valve (Click here).

HINT:

Since the rear cooling unit expansion valve cannot be inspected while it is removed from the vehicle, replace the rear cooling unit expansion valve with a normal one and check that the condition returns to normal.

OK:

Same problem does not occur.

NG → Go to step 6

OK

REPLACE REAR COOLING UNIT EXPANSION VALVE (Click here)

6.CHECK AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY (OPERATION)

a. Replace the air conditioning wiring harness sub-assembly with a normal one and check that the condition returns to normal.

OK:

Same problem does not occur.

NG → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

OK

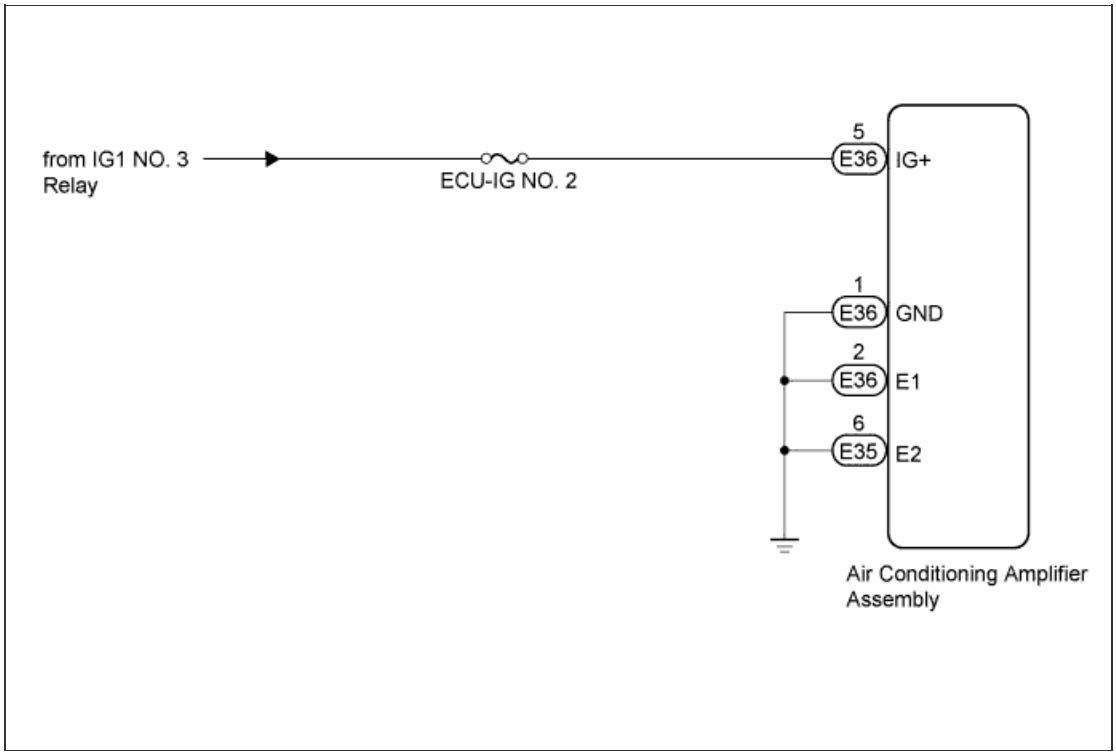
REPLACE AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY

for Preparation Click here

DESCRIPTION

The main power source is supplied to the air conditioning amplifier assembly when the engine switch is on (IG). The power source is used for operating the air conditioning amplifier assembly and servo motor, etc.

WIRING DIAGRAM



INSPECTION PROCEDURE

HINT:

Start the engine before inspection. Check the relay or battery if the entry and start system does not start.

1.INSPECT FUSE (ECU-IG NO. 2)

a. Remove the ECU-IG NO. 2 fuse from the cowl side junction block LH.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
ECU-IG NO. 2 fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

2.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - BATTERY AND BODY GROUND)

a. Disconnect the E35 amplifier connector.

b. Disconnect the E36 amplifier connector.

c. Measure the voltage according to the value(s) in the table below.

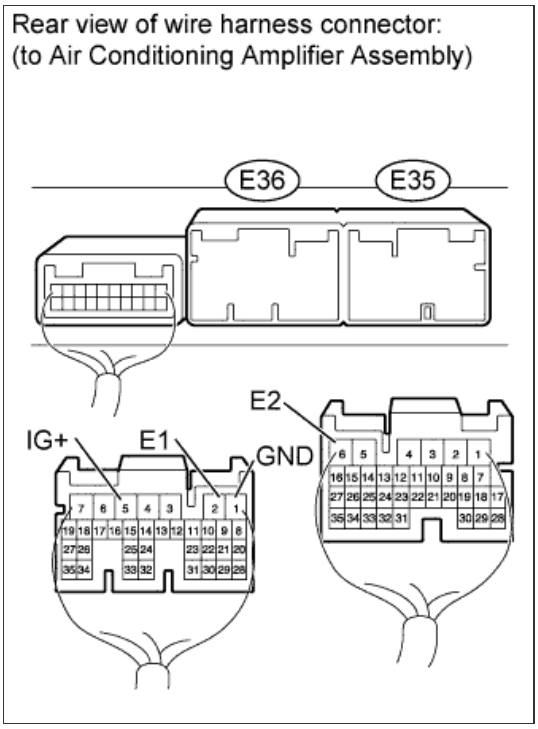
Standard Voltage:

Tester Connection	Switch Condition	Specified Condition
E36-5 (IG+) - Body ground	Engine switch off	Below 1 V
	Engine switch on (IG)	11 to 14 V

d. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
E36-1 (GND) - Body ground	Always	Below 1 Ω
E36-2 (E1) - Body ground		
E35-6 (E2) - Body ground		



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

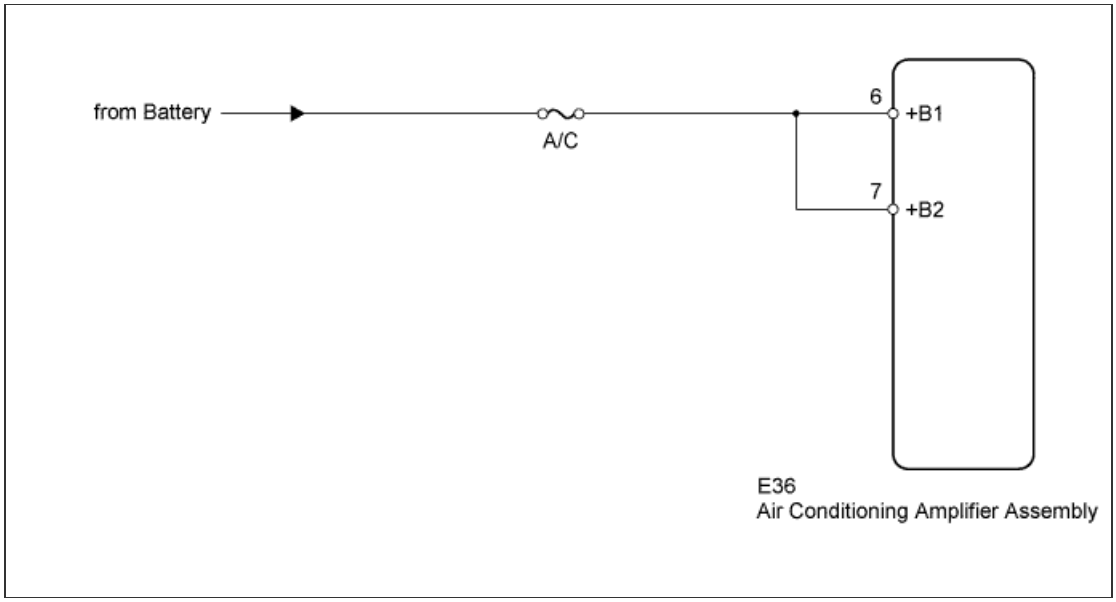
REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

for Preparation Click here

DESCRIPTION

The back-up power source circuit for the air conditioning amplifier assembly is shown below. Power is supplied even when turning the engine switch off and is used for diagnostic trouble code memory, etc.

WIRING DIAGRAM



INSPECTION PROCEDURE

1.INSPECT FUSE (A/C)

a. Remove the A/C fuse from the cowl side junction block LH.

b. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A/C fuse	Always	Below 1 Ω

NG → REPLACE FUSE

OK

2.CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - BATTERY)

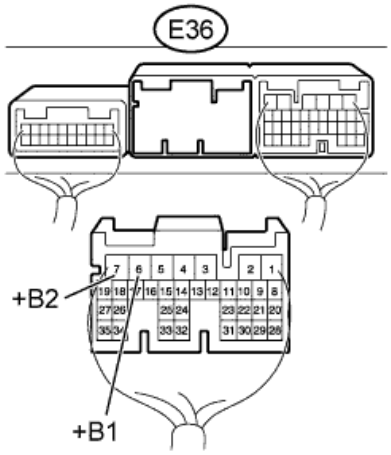
a. Disconnect the E36 amplifier connector.

b. Measure the voltage according to the value(s) in the table below.

Standard Voltage:

Tester Connection	Condition	Specified Condition
E36-6 (+B1) - Body ground	Always	11 to 14 V
E36-7 (+B2) - Body ground		

Rear view of wire harness connector: (to Air Conditioning Amplifier Assembly)



NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

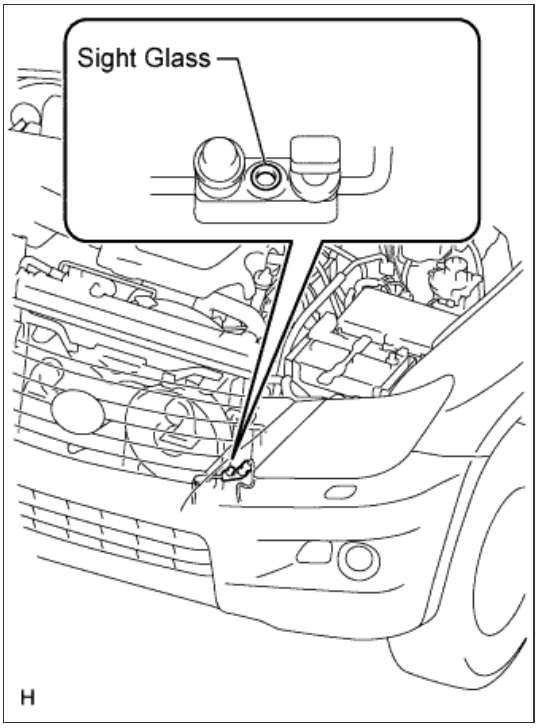
OK → REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY (Click here)

for Preparation Click here

1. INSPECT REFRIGERANT VOLUME

a. Check the sight glass on the liquid pipe A.
Test conditions:

- Temperature at the air inlet is 30 to 35°C (86 to 95°F).
- Engine is running at 1500 rpm.
- Blower speed control switch is at HI.
- A/C switch is on.
- Temperature control switch is at the MAX. COOL position.
- Doors are fully open.



Item	Symptom	Amount of Refrigerant	Corrective Procedures
1	Bubbles visible	Insufficient*	(1) Check for gas leakage and repair if necessary (2) Add refrigerant until bubbles disappear
2	No bubbles visible	Empty, insufficient or too much	Refer to items 3 and 4
3	No temperature difference between compressor inlet and outlet	Empty or nearly empty	(1) Check for gas leakage with halogen leak detector and repair if necessary (2) Add refrigerant until bubbles disappear
4	Considerable temperature difference between compressor inlet and outlet	Correct or too much	Refer to items 5 and 6
5	Immediately after A/C is turned off, refrigerant becomes clear	Too much	(1) Drain or discharge refrigerant (2) Bleed air and supply proper amount of purified refrigerant
6	Immediately after A/C is turned off, refrigerant foams and then becomes clear	Correct	-

HINT:

*: If the ambient temperature is higher than usual but cooling is sufficient, bubbles in the sight glass are permissible.

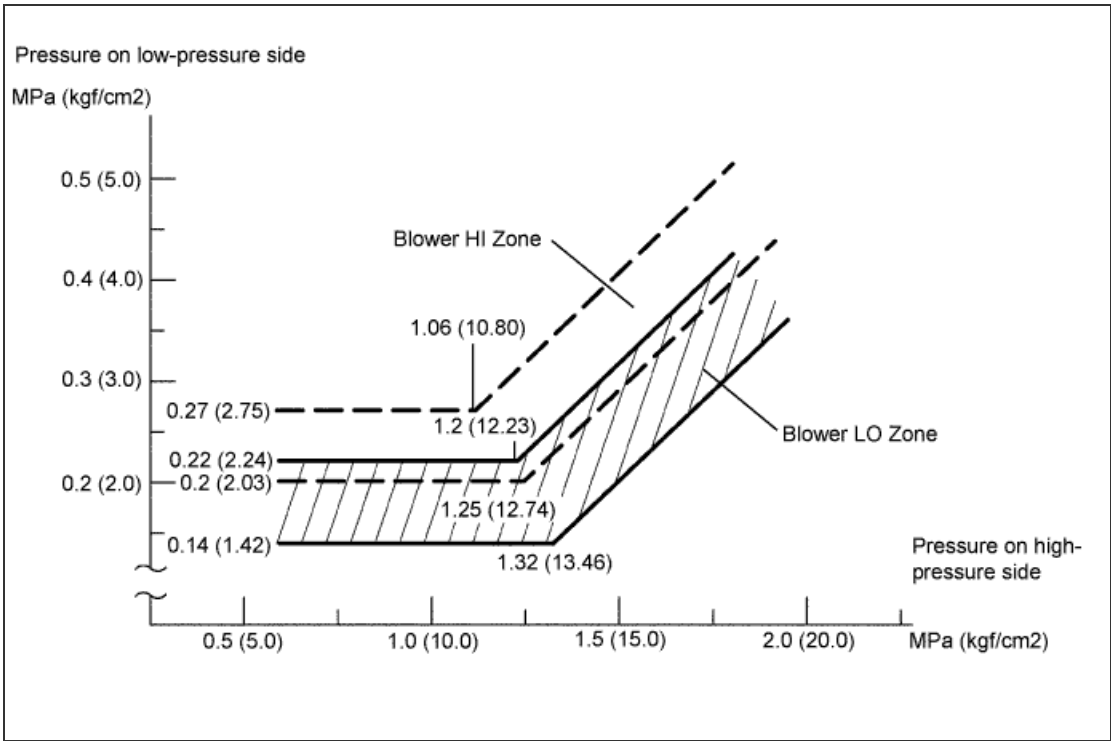
2. INSPECT REFRIGERANT PRESSURE WITH MANIFOLD GAUGE SET

a. This method uses a manifold gauge set to locate problem areas. Read the manifold gauge pressure when these conditions are established.

Test conditions:

- Temperature at the air inlet with the switch set at RECIRC is 30 to 35°C (86 to 95°F).
- Engine is running at 1500 rpm.
- All doors are fully open.
- Blower speed control switch is at HI.
- A/C switch is on.

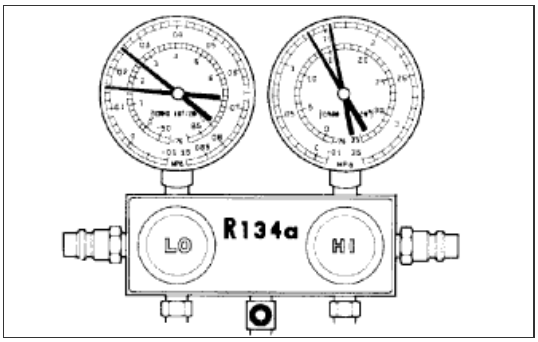
Gauge readings (Reference).



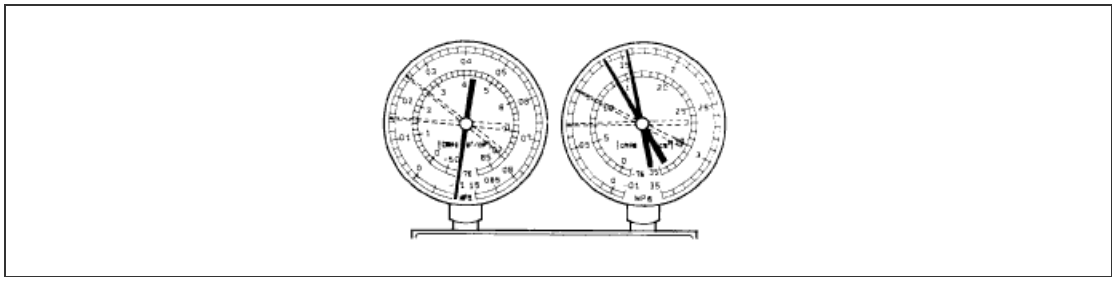
i. Normally functioning refrigeration system

Gauge Reading:

Pressure Side	Refrigerant Volume
Low	0.15 to 0.25 MPa (1.5 to 2.5 kgf/cm^2)
High	1.37 to 1.57 MPa (14 to 16 kgf/cm^2)



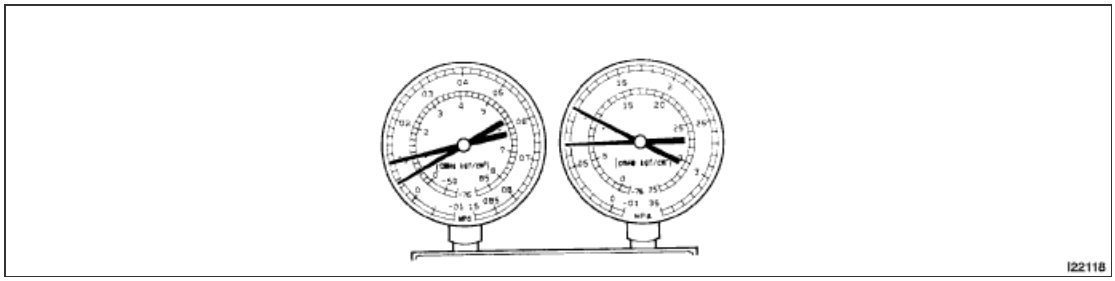
ii. The A/C system periodically changes between normal and improper function due to moisture in the refrigerant system.



Symptoms	Probable Cause	Diagnosis	Corrective Actions
During operation, pressure	Moisture in refrigeration system freezes at expansion valve orifice,	- Dryer is overly saturated - Moisture in refrigeration	1. Replace cooler dryer 2. Remove moisture from

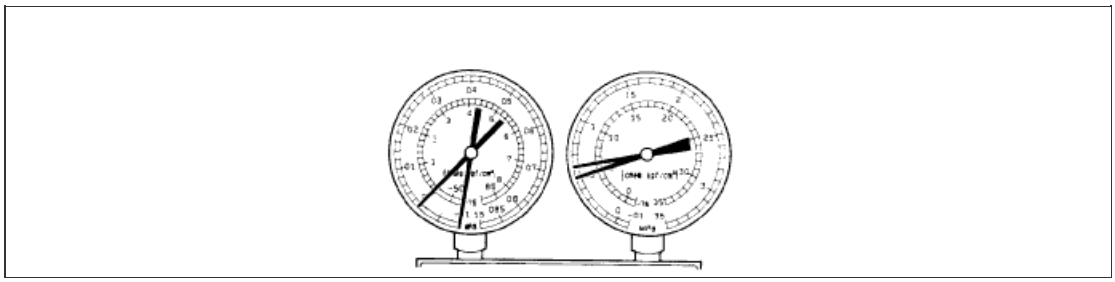
on low pressure side cycles between normal and vacuum	causing temporary stop of cycle. However, when melted, normal state is restored.	system freezes at expansion valve orifice and blocks refrigerant circulation	cycle by repeatedly evacuating air 3. Supply appropriate volume of new refrigerant

iii. The A/C system does not function effectively due to insufficient refrigerant.



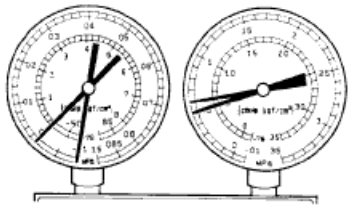
Symptoms	Probable Cause	Diagnosis	Corrective Actions
- Pressure low on both low and high pressure sides - Cooling performance insufficient	Gas leakage from refrigeration system	- Insufficient refrigerant - Refrigerant leakage	1. Check for gas leakage and repair if necessary 2. Supply appropriate volume of new refrigerant 3. If indicated pressure value close to 0 when connected to gauge, create vacuum after inspecting and repairing the location of leakage

iv. The A/C system does not function effectively due to poor circulation of the refrigerant.



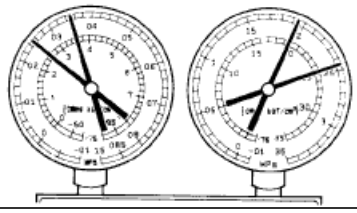
Symptoms	Probable Cause	Diagnosis	Corrective Actions
- Pressure low on both low and high pressure sides - Frost exists on piping from condenser to A/C unit	Refrigerant flow obstructed by dirt in condenser	Condenser clogged	Replace condenser

v. The A/C system does not function or functions intermittently because the refrigerant does not circulate.



Symptoms	Probable Cause	Diagnosis	Corrective Actions
- Vacuum indicated on low pressure side, and extremely low pressure indicated on high pressure side - Frost or condensation seen on piping on both sides of condenser or expansion valve	- Refrigerant flow obstructed by moisture or dirt in refrigeration system - Refrigerant flow obstructed by gas leakage from expansion valve	Refrigerant does not circulate	1. Check expansion valve refrigerant 2. Clean expansion valve by blowing air 3. Replace condenser 4. Evacuate air and charge appropriate volume of new refrigerant 5. For gas leakage from expansion valve, replace expansion valve

vi. The A/C system does not function effectively due to overcharged refrigerant or insufficient cooling of the condenser.

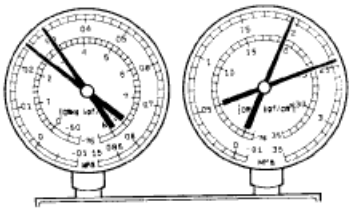


Symptoms	Probable Cause	Diagnosis	Corrective Actions
Pressure extremely high on both low and high-pressure sides	- Excessive refrigerant - Cooling performance of condenser insufficient	- Condenser is dirty - Condenser fan motor is malfunctioning - Excessive refrigerant	1. Clean condenser 2. Check condenser fan motor operation 3. If 1 and 2 normal, check the amount of refrigerant and supply appropriate volume of refrigerant

vii. The A/C system does not function due to air in the refrigeration system.

CAUTION:

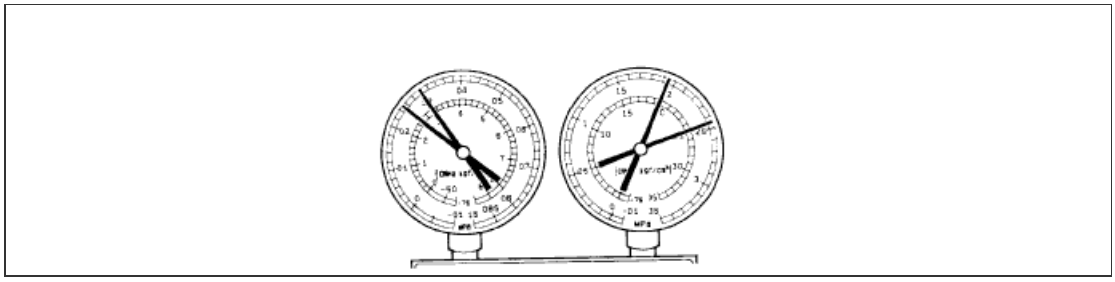
The low-pressure piping may be very hot and cause serious burns.



HINT: These gauge indications occur when the refrigeration system opens and the refrigerant is charged without vacuum purging

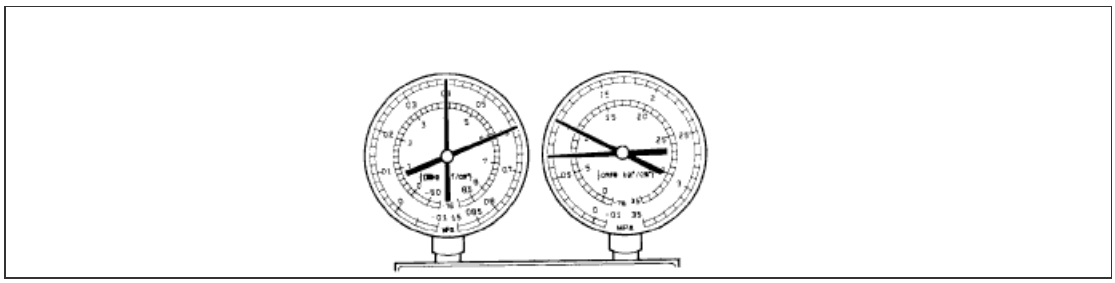
Symptoms	Probable Cause	Diagnosis	Corrective Actions
- Pressure extremely high on both low and high-pressure sides - Low-pressure piping is too hot to touch	Air in refrigeration system	- Air in refrigeration system - Vacuum purging insufficient	1. Check if compressor oil is dirty or insufficient 2. Evacuate air and charge new refrigerant

viii. The A/C system does not function effectively due to an expansion valve malfunction.



Symptoms	Probable Cause	Diagnosis	Corrective Actions
- Pressure extremely high on both low and high-pressure sides - Frost or condensation on piping on low-pressure side	Problem with expansion valve	- Excessive refrigerant in low pressure piping - Expansion valve too wide open	Replace expansion valve

ix. The A/C system does not function due to a defective compressor.



Symptoms	Probable Cause	Diagnosis	Corrective Actions
- Pressure extremely high on low-pressure sides - Pressure extremely low on high pressure side	Internal leakage in compressor	- Compression failure - Leakage from damaged valve or broken sliding parts	Repair or replace compressor

for Preparation Click here

1. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM

a. Start the engine.

b. Turn the A/C switch on.

c. Operate the cooler compressor while the engine speed is approximately 1000 rpm for 5 to 6 minutes to circulate the refrigerant and collect the compressor oil remaining in each component into the cooler compressor.

d. Stop the engine.

e. Recover the refrigerant from the A/C system using a refrigerant recovery unit.

2. CHARGE REFRIGERANT

SST

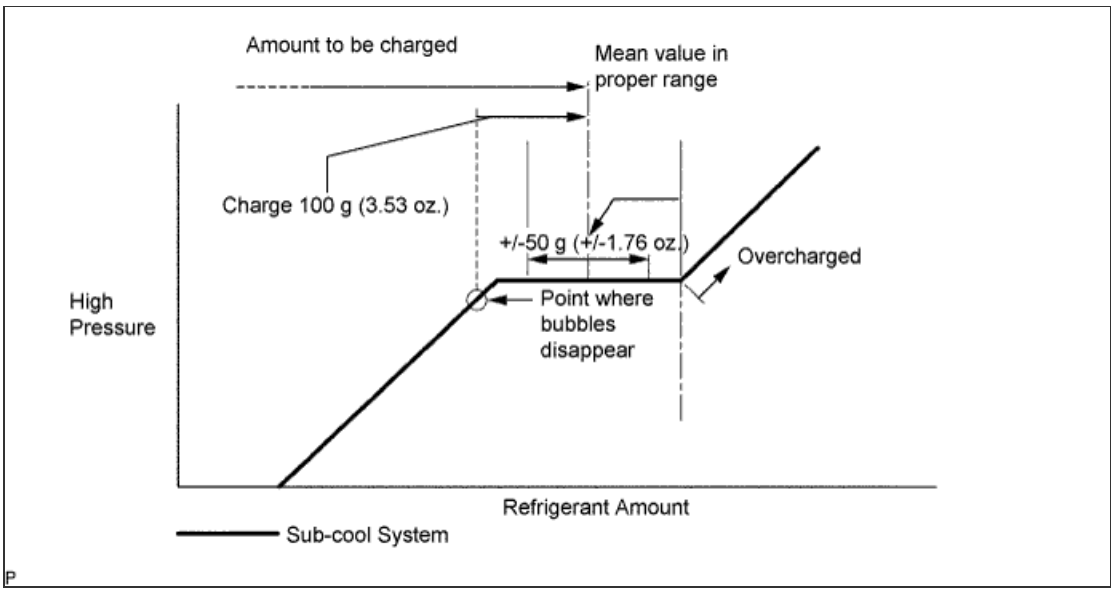
09985-20010 (09985-02130, 09985-02150, 09985-02090, 09985-02110, 09985-02010, 09985-02050, 09985-02060, 09985-02070)

a. Perform vacuum purging using a vacuum pump.

b. Charge refrigerant HFC-134a (R134a).

Standard:

Condenser Core Thickness	Cool Box	Refrigerant Charging Amount
22 mm (0.866 in.)	w/ Cool Box	1010 +/-30 g (35.6 +/-1.1 oz.)
	w/o Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
16 mm (0.630 in.)	w/ Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
	w/o Cool Box	920 +/-30 g (32.5 +/-1.1 oz.)



NOTICE:

- **Do not operate the cooler compressor before charging refrigerant as the cooler compressor will not work properly without any refrigerant, and will overheat.**
- **Approximately 100 g (3.53 oz.) of refrigerant may need to be charged after bubbles disappear. The refrigerant amount should be checked by measuring its quantity, and not with the sight glass.**

3. WARM UP ENGINE

a. Warm up the engine at less than 1850 rpm for 2 minutes or more after charging the refrigerant.

NOTICE:

Be sure to warm up the compressor when turning the A/C switch on after removing and installing the cooler refrigerant lines (including the compressor), to prevent damage to the compressor.

4. CHECK FOR REFRIGERANT GAS LEAK

a. After recharging the refrigerant gas, check for refrigerant gas leakage using a halogen leak detector.

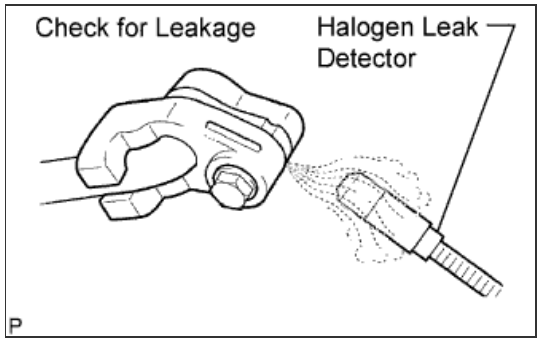
b. Perform the operation under these conditions:

- Stop the engine.
- Secure good ventilation (the halogen leak detector may react to volatile gases other than refrigerant, such as evaporated gasoline or exhaust gas).
- Repeat the test 2 or 3 times.
- Make sure that some refrigerant remains in the refrigeration system. When compressor is off: approximately 392 to 588 kPa (4.0 to 6.0 kgf/cm^2, 57 to 85 psi).

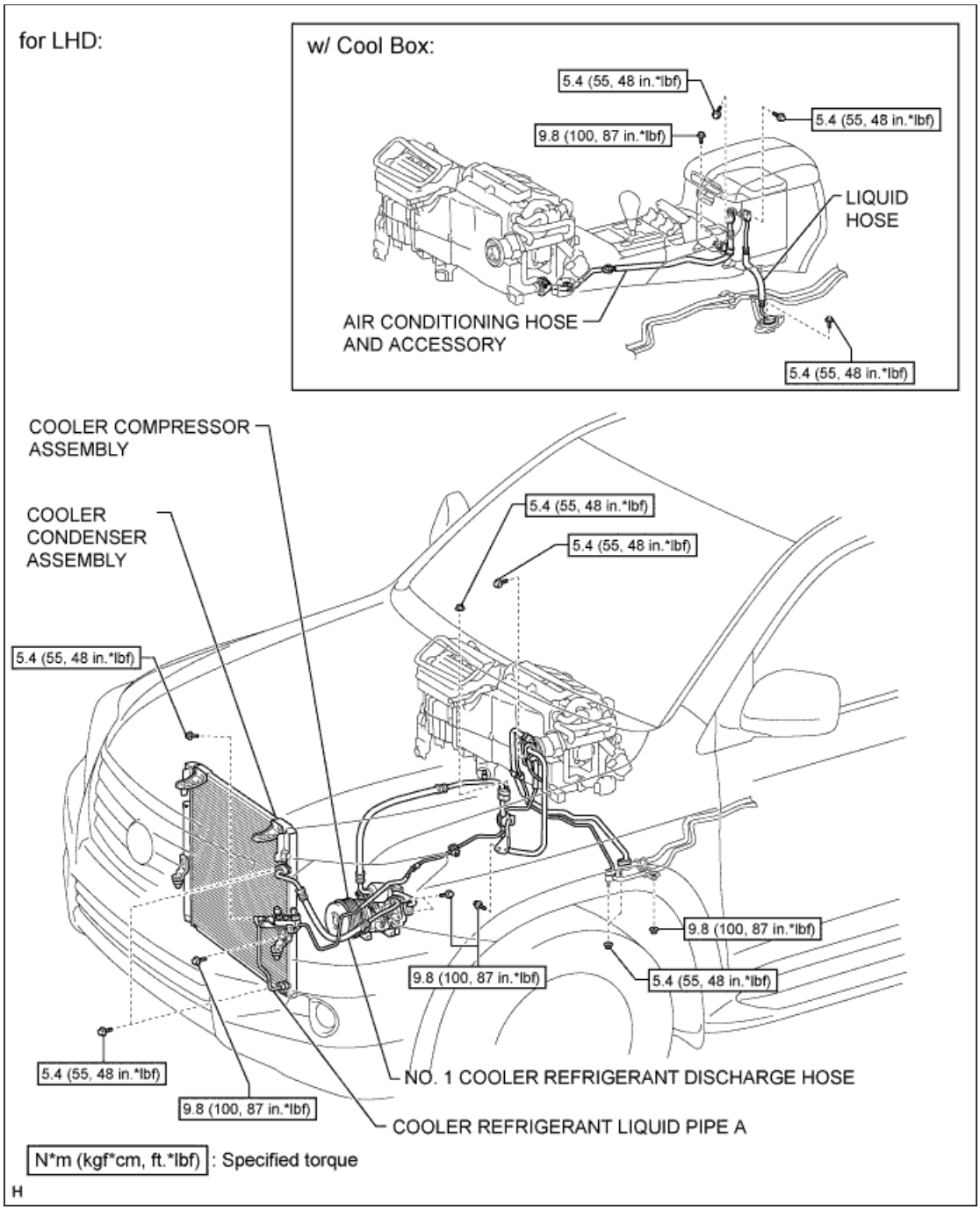
c. Using a halogen leak detector, check the refrigerant line for leakage.

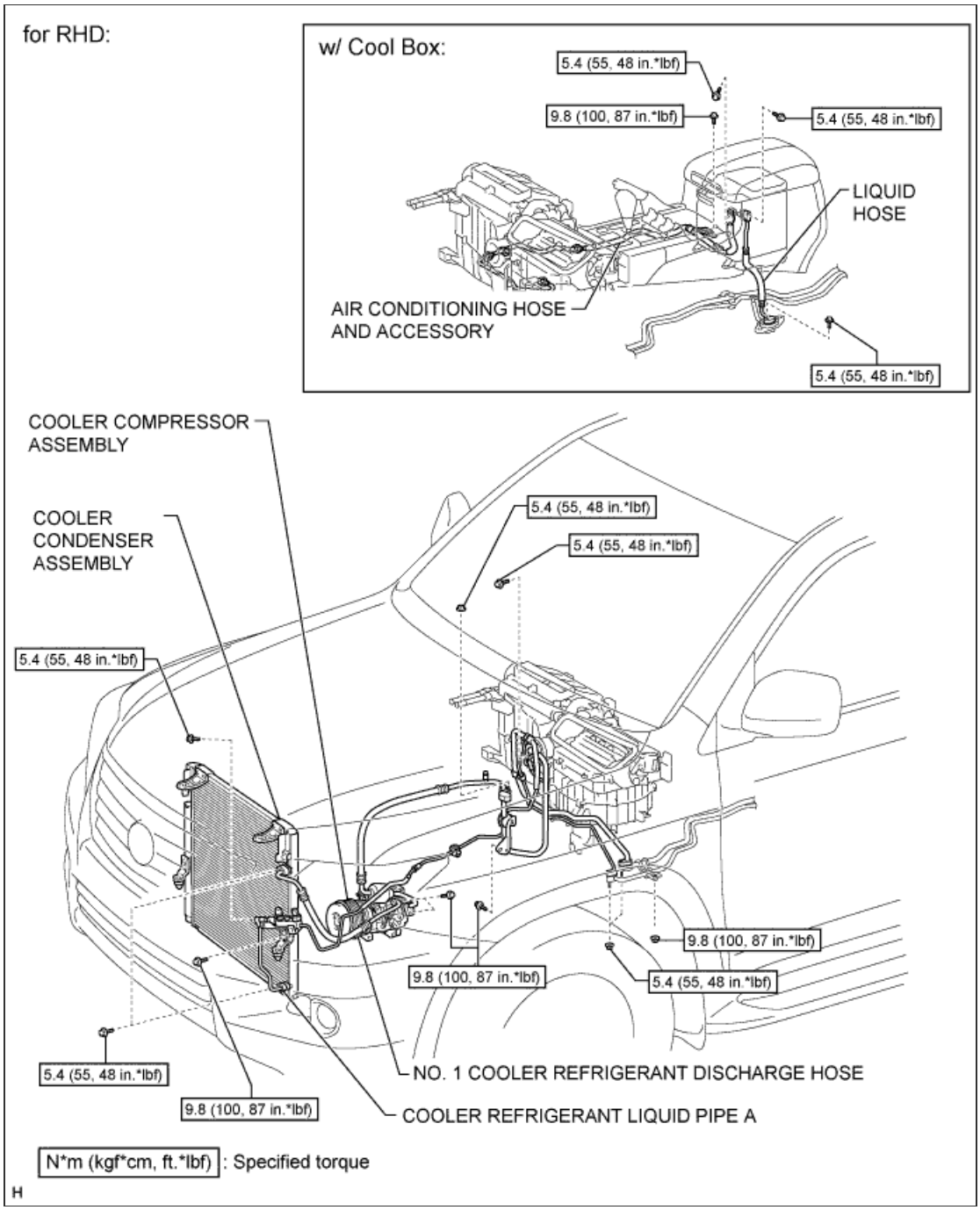
d. If a gas leak is not detected on the drain hose, remove the blower motor control (blower resistor) from the cooling unit. Insert the halogen leak detector sensor into the unit and perform the test.

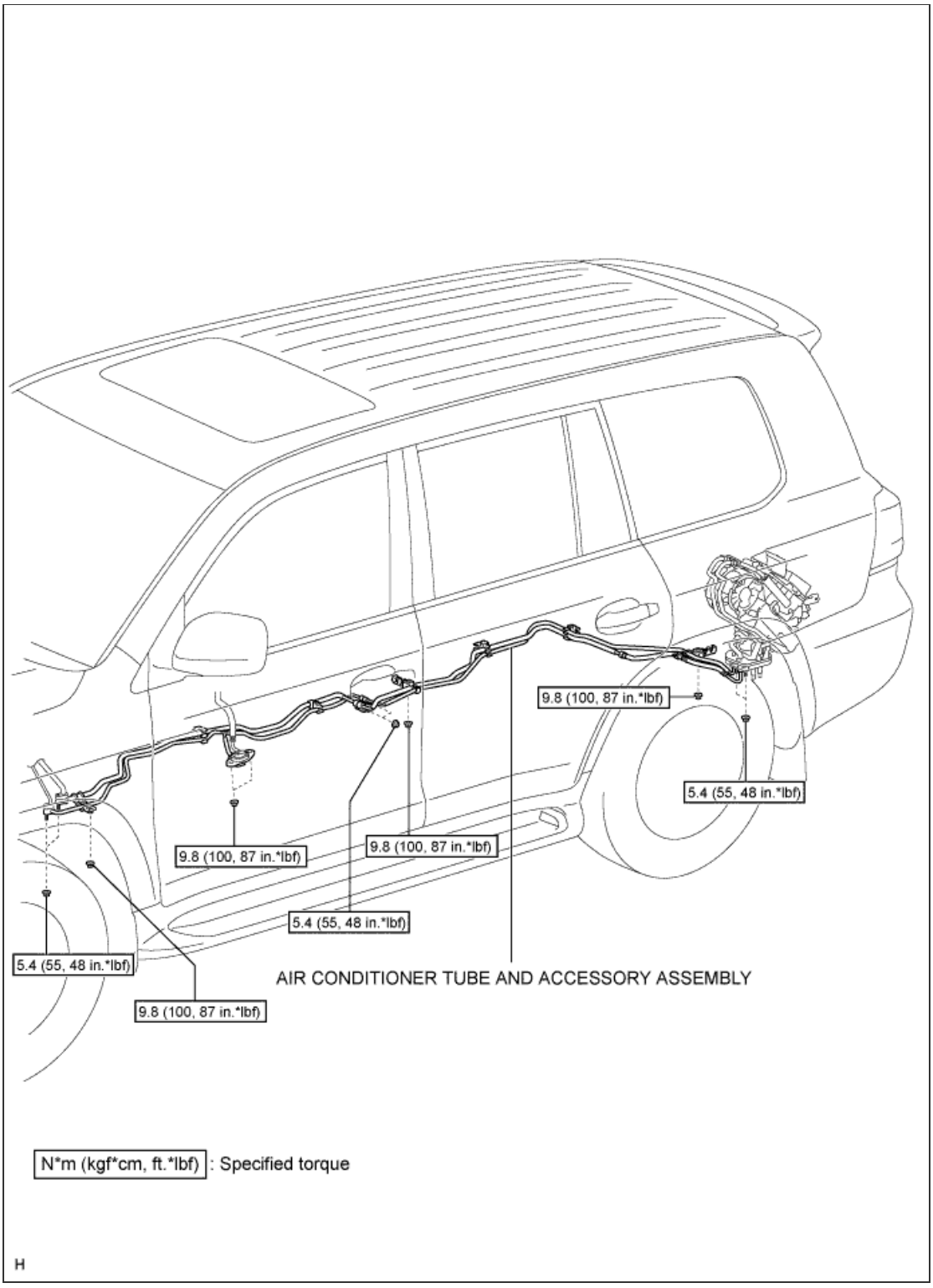
e. Disconnect the connector and wait for approximately 20 minutes. Bring the halogen leak detector close to the pressure switch and perform the test.



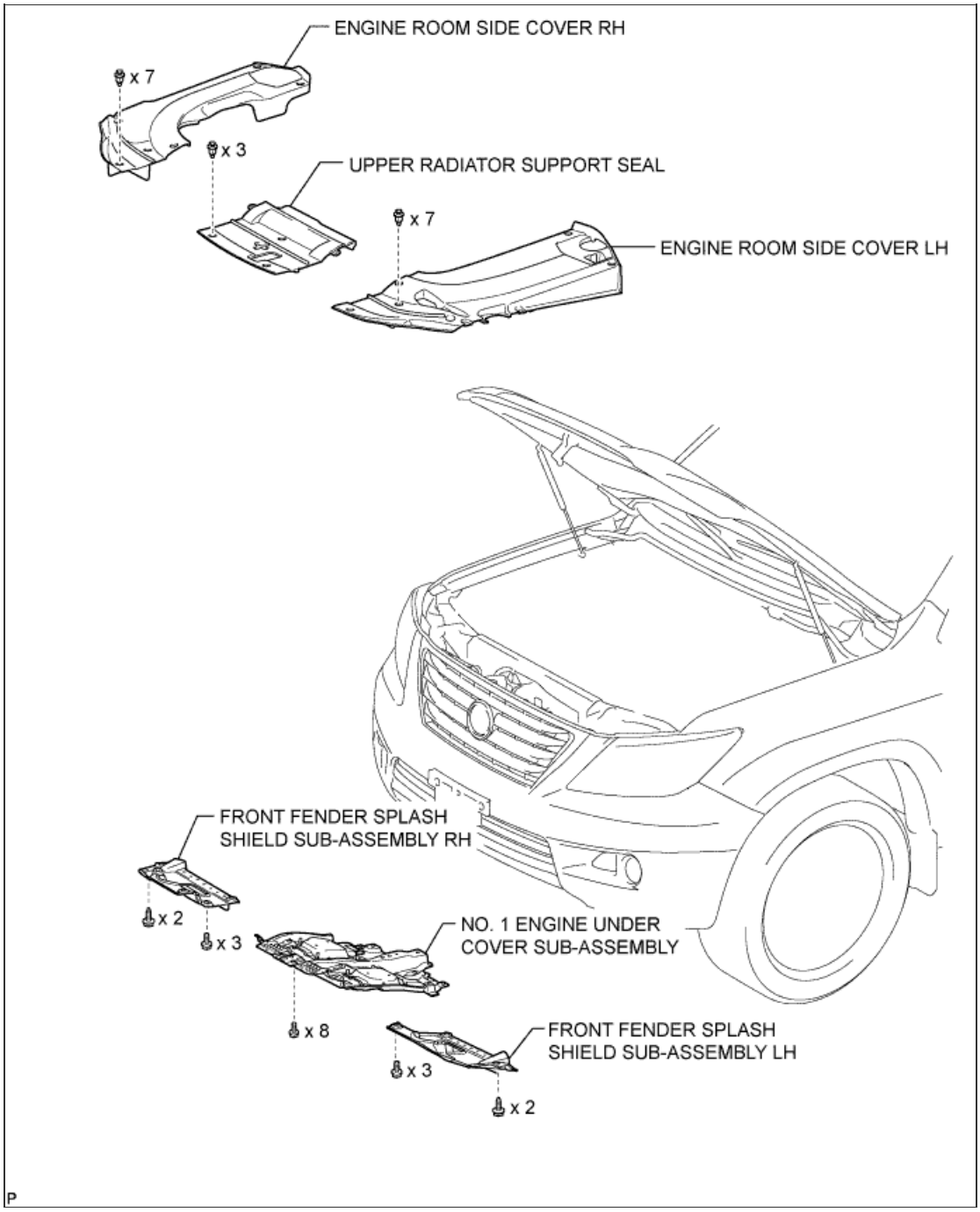
for Preparation Click here

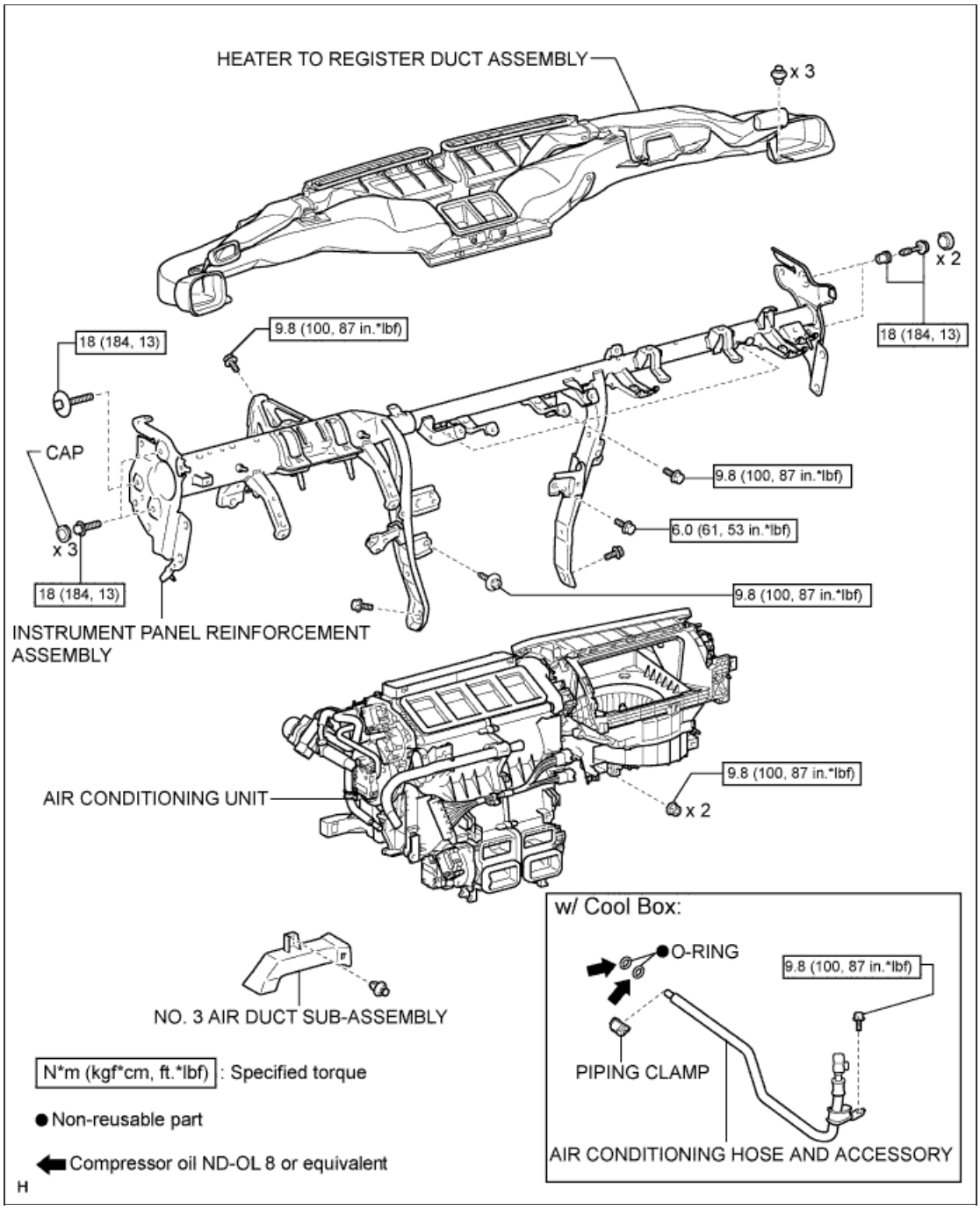


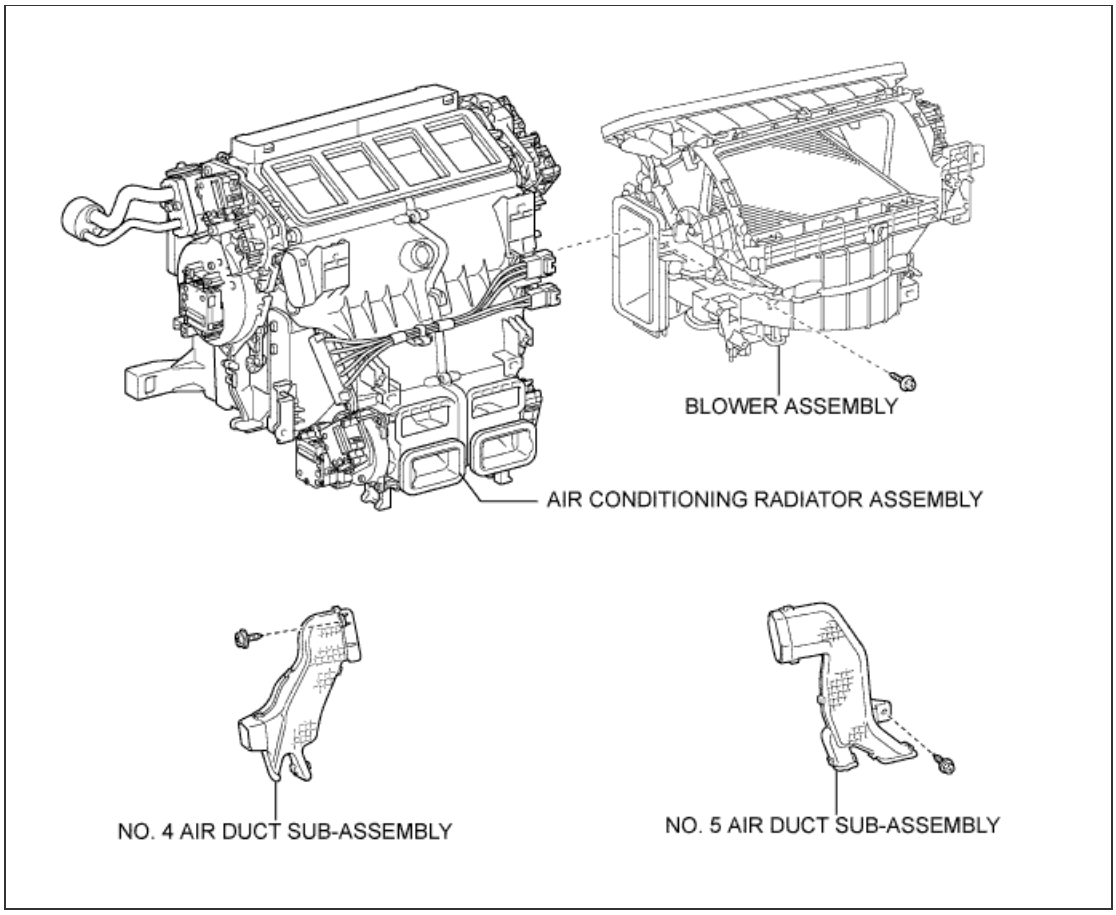

for RHD:
w/ Cool Box:
5.4 (55, 48 in.*lbf)
9.8 (100, 87 in.*lbf)
5.4 (55, 48 in.*lbf)
LIQUID HOSE
AIR CONDITIONING HOSE AND ACCESSORY
5.4 (55, 48 in.*lbf)
COOLER COMPRESSOR ASSEMBLY
COOLER CONDENSER ASSEMBLY
5.4 (55, 48 in.*lbf)
5.4 (55, 48 in.*lbf)
5.4 (55, 48 in.*lbf)
9.8 (100, 87 in.*lbf)
9.8 (100, 87 in.*lbf)
5.4 (55, 48 in.*lbf)
5.4 (55, 48 in.*lbf)
9.8 (100, 87 in.*lbf)
NO. 1 COOLER REFRIGERANT DISCHARGE HOSE
COOLER REFRIGERANT LIQUID PIPE A
N*m (kgf*cm, ft.*lbf) : Specified torque
H

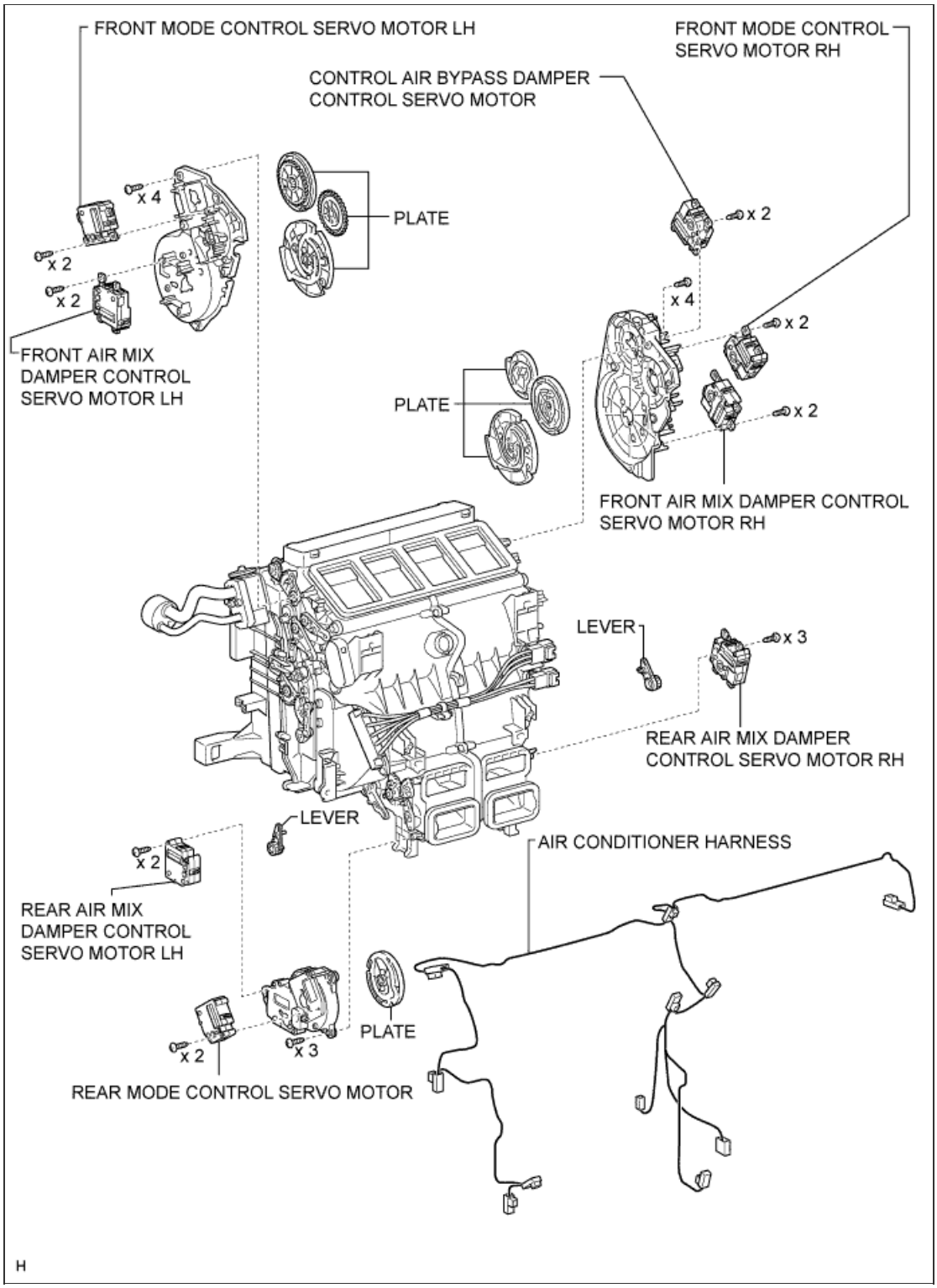

9.8 (100, 87 in.*lbf)
5.4 (55, 48 in.*lbf)
9.8 (100, 87 in.*lbf)
9.8 (100, 87 in.*lbf)
5.4 (55, 48 in.*lbf)
5.4 (55, 48 in.*lbf)
9.8 (100, 87 in.*lbf)
AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
H

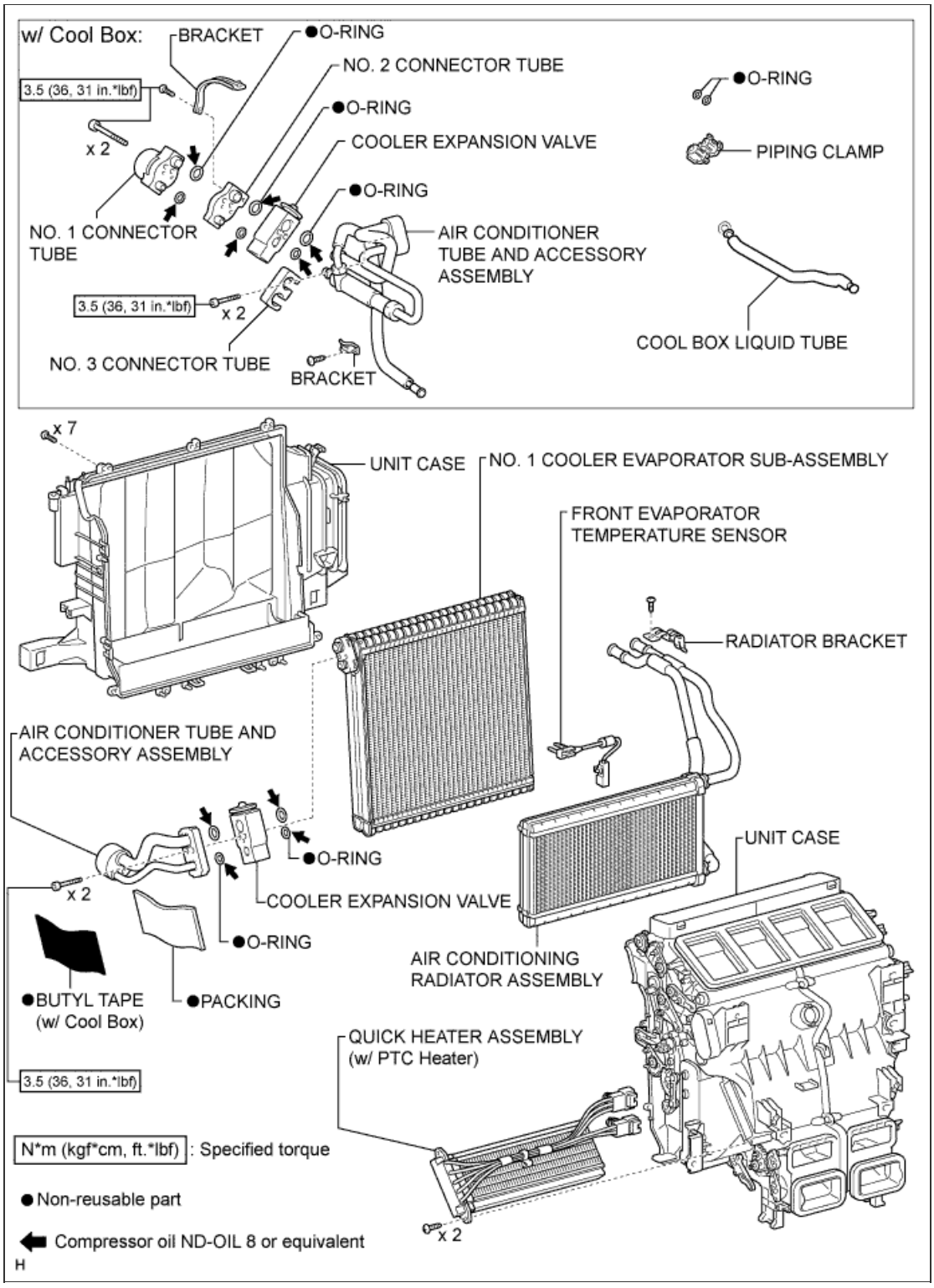
for Preparation [Click here]




HEATER TO REGISTER DUCT ASSEMBLY
x 3
x 2
18 (184, 13)
9.8 (100, 87 in.*lbf)
18 (184, 13)
CAP
x 3
9.8 (100, 87 in.*lbf)
6.0 (61, 53 in.*lbf)
9.8 (100, 87 in.*lbf)
18 (184, 13)
INSTRUMENT PANEL REINFORCEMENT ASSEMBLY
AIR CONDITIONING UNIT
9.8 (100, 87 in.*lbf)
x 2
NO. 3 AIR DUCT SUB-ASSEMBLY
w/ Cool Box:
O-RING
9.8 (100, 87 in.*lbf)
PIPING CLAMP
AIR CONDITIONING HOSE AND ACCESSORY
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
Compressor oil ND-OL 8 or equivalent
H


BLOWER ASSEMBLY
AIR CONDITIONING RADIATOR ASSEMBLY
NO. 4 AIR DUCT SUB-ASSEMBLY
NO. 5 AIR DUCT SUB-ASSEMBLY


FRONT MODE CONTROL SERVO MOTOR LH
FRONT MODE CONTROL SERVO MOTOR RH
CONTROL AIR BYPASS DAMPER CONTROL SERVO MOTOR
PLATE
x 4
x 2
x 2
x 2
x 4
x 2
x 2
FRONT AIR MIX DAMPER CONTROL SERVO MOTOR LH
PLATE
FRONT AIR MIX DAMPER CONTROL SERVO MOTOR RH
LEVER
x 3
REAR AIR MIX DAMPER CONTROL SERVO MOTOR RH
LEVER
AIR CONDITIONER HARNESS
x 2
REAR AIR MIX DAMPER CONTROL SERVO MOTOR LH
PLATE
x 2
x 3
REAR MODE CONTROL SERVO MOTOR
H

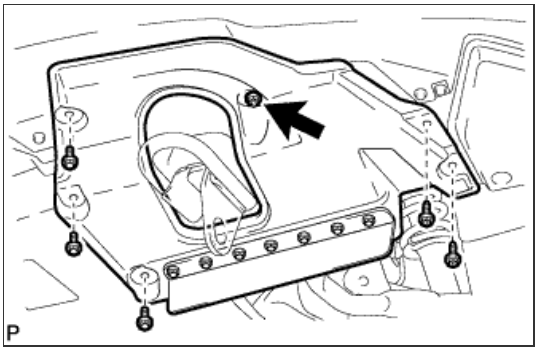

w/ Cool Box:
BRACKET
●O-RING
NO. 2 CONNECTOR TUBE
●O-RING
COOLER EXPANSION VALVE
●O-RING
3.5 (36, 31 in.*lbf)
x 2
NO. 1 CONNECTOR TUBE
AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY
3.5 (36, 31 in.*lbf)
x 2
NO. 3 CONNECTOR TUBE
BRACKET
●O-RING
PIPING CLAMP
COOL BOX LIQUID TUBE
x 7
UNIT CASE
NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY
FRONT EVAPORATOR TEMPERATURE SENSOR
RADIATOR BRACKET
AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY
●O-RING
x 2
COOLER EXPANSION VALVE
●O-RING
●BUTYL TAPE (w/ Cool Box)
●PACKING
3.5 (36, 31 in.*lbf)
UNIT CASE
AIR CONDITIONING RADIATOR ASSEMBLY
QUICK HEATER ASSEMBLY (w/ PTC Heater)
x 2
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
Compressor oil ND-OIL 8 or equivalent
H

for Preparation Click here

1. REMOVE FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY LH

a. Remove the 3 bolts and 2 screws.

b. Turn the clip indicated by the arrow in the illustration to remove the fender splash shield.



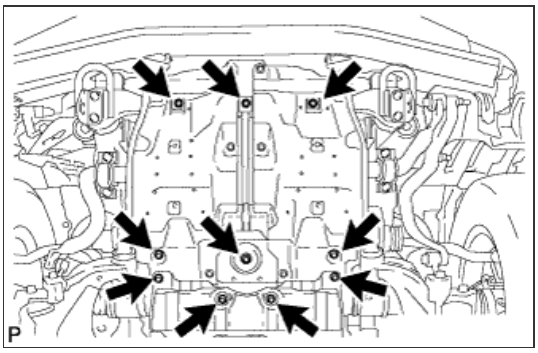
2. REMOVE FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

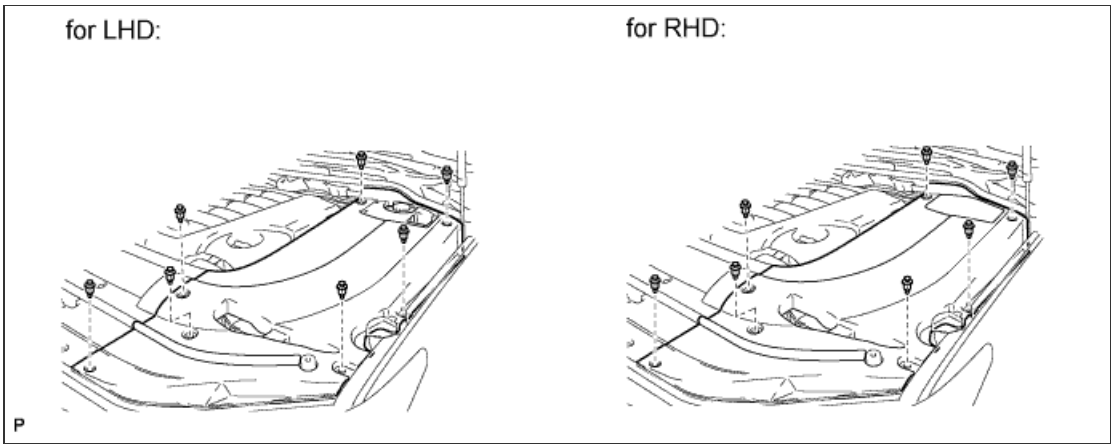
3. REMOVE NO. 1 ENGINE UNDER COVER SUB-ASSEMBLY

a. Remove the 10 bolts and No. 1 engine under cover.



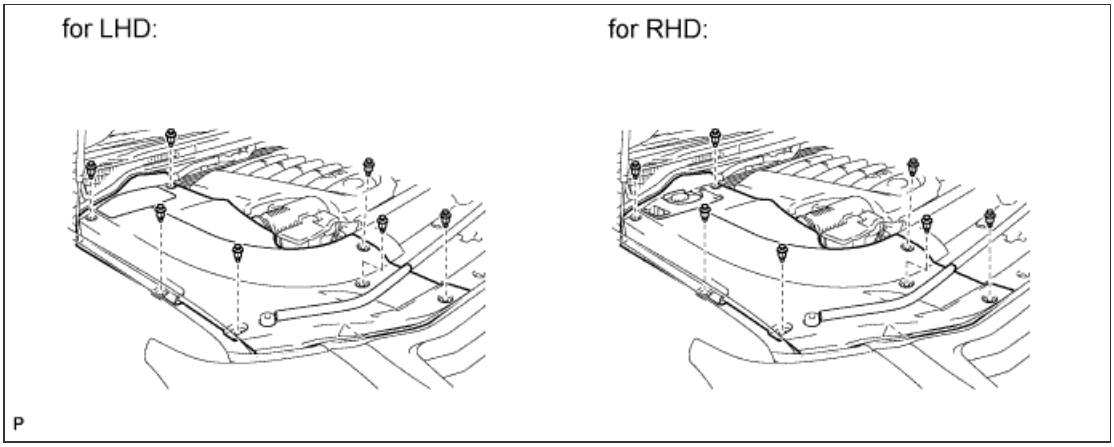
4. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



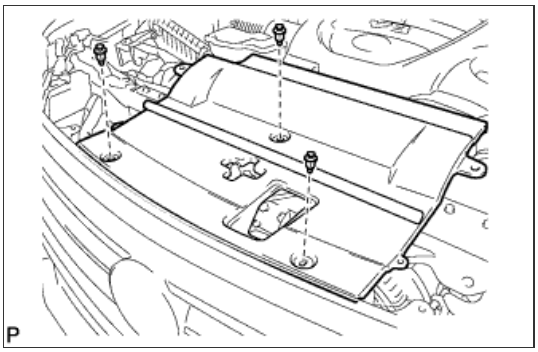
5. REMOVE ENGINE ROOM SIDE COVER RH

a. Remove the 7 clips and engine room side cover.



6. REMOVE UPPER RADIATOR SUPPORT SEAL

a. Remove the 3 clips and upper radiator support seal.



7. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM

a. Start the engine.

b. Turn the A/C switch on.

c. Operate the cooler compressor while the engine speed is approximately 1000 rpm for 5 to 6 minutes to circulate the refrigerant and collect the compressor oil remaining in each component into the cooler compressor.

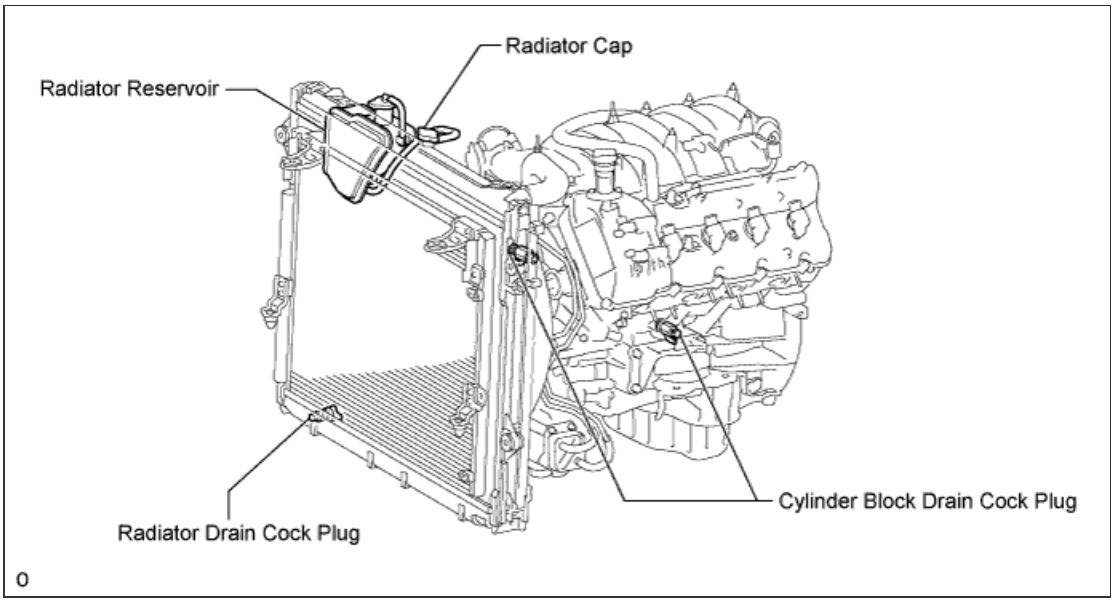
d. Stop the engine.

e. Recover the refrigerant from the A/C system using a refrigerant recovery unit.

8. DRAIN ENGINE COOLANT

CAUTION:

Do not remove the radiator cap while the engine and radiator are still hot. Pressurized, hot engine coolant and steam may be released and cause serious burns.



a. Loosen the radiator drain cock plug.

HINT:

Collect the coolant in a container and dispose of it according to the regulations in your area.

b. Remove the radiator cap. Then drain the coolant from the radiator.

c. Loosen the 2 cylinder block drain cock plugs. Then drain the coolant from the engine.

d. Tighten the 2 cylinder block drain cock plugs.

Torque:
13 N*m{ 130 kgf*cm , 10 ft.*lbf }

e. Tighten the radiator drain cock plug by hand.

9. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

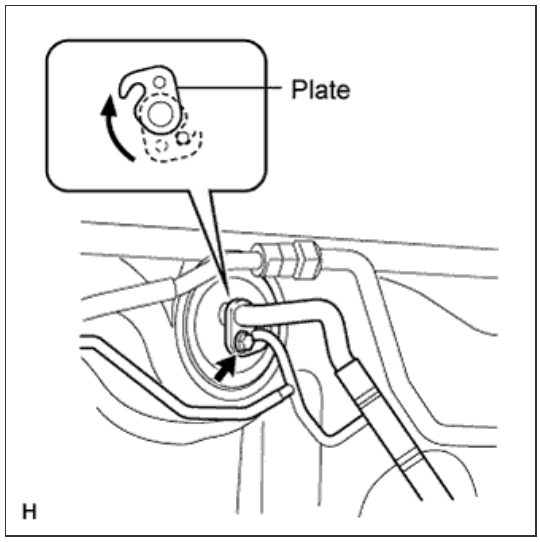
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

10. DISCONNECT AIR CONDITIONING TUBE ASSEMBLY

a. Remove the bolt.

b. Detach the plate as shown in the illustration.

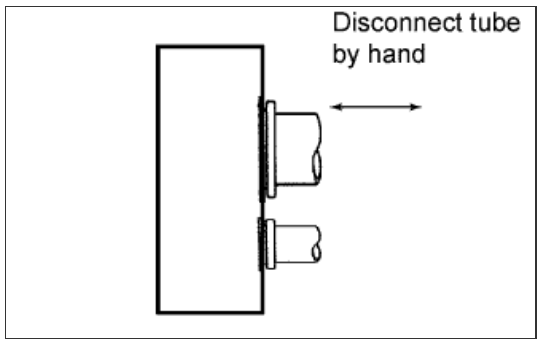


c. Disconnect the air conditioning tube assembly.

NOTICE:

- **Do not use a screwdriver or similar tool to disconnect the tube.**
- **Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.**

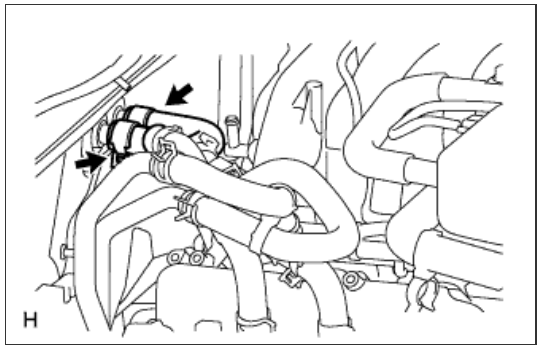
d. Remove the 2 O-rings from the air conditioning tube assembly.



11. DISCONNECT HEATER WATER INLET HOSE AND HEATER WATER OUTLET HOSE

a. Using pliers, grip the claws of the clips and slide the 2 clips.

b. Disconnect the 2 heater water hoses.



12. REMOVE FRONT WIPER MOTOR AND BRACKET

a. Remove the front wiper motor and bracket (Click here).

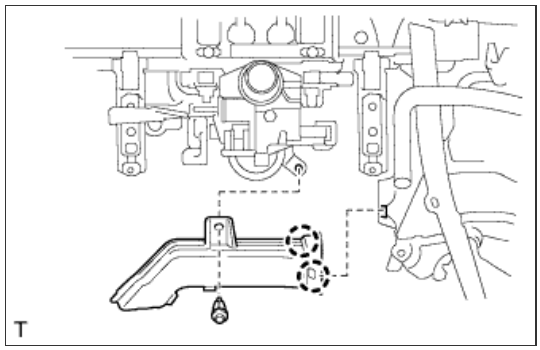
13. REMOVE INSTRUMENT PANEL SUB-ASSEMBLY

a. Remove the instrument panel (Click here).

14. REMOVE NO. 3 AIR DUCT SUB-ASSEMBLY

a. Remove the clip.

b. Detach the 2 claws and remove the duct.



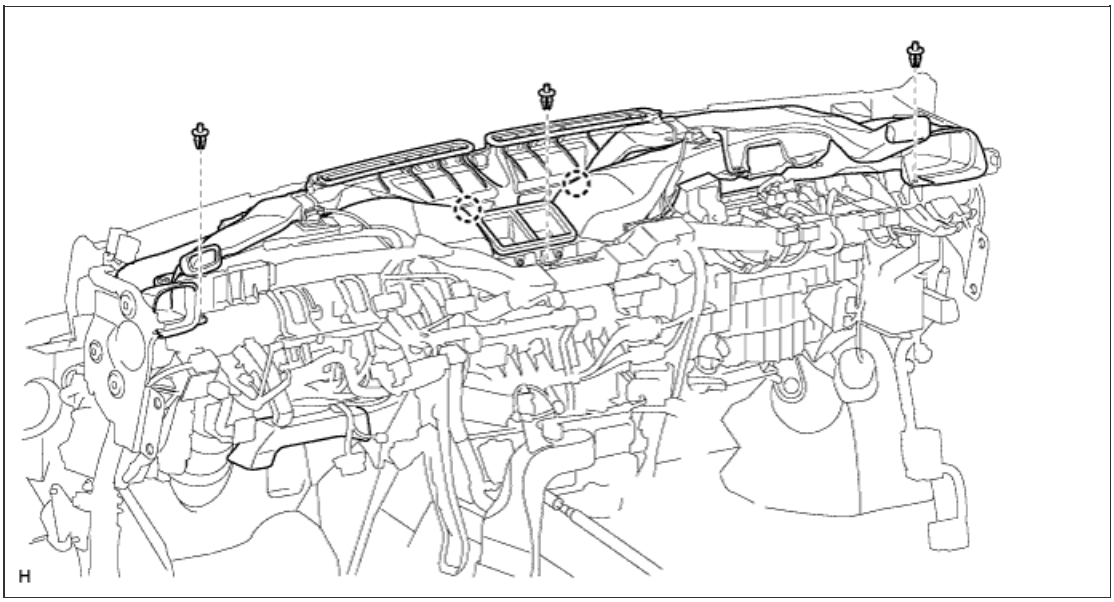
15. REMOVE STEERING COLUMN ASSEMBLY

a. Remove the steering column (Click here).

16. REMOVE HEATER TO REGISTER DUCT ASSEMBLY

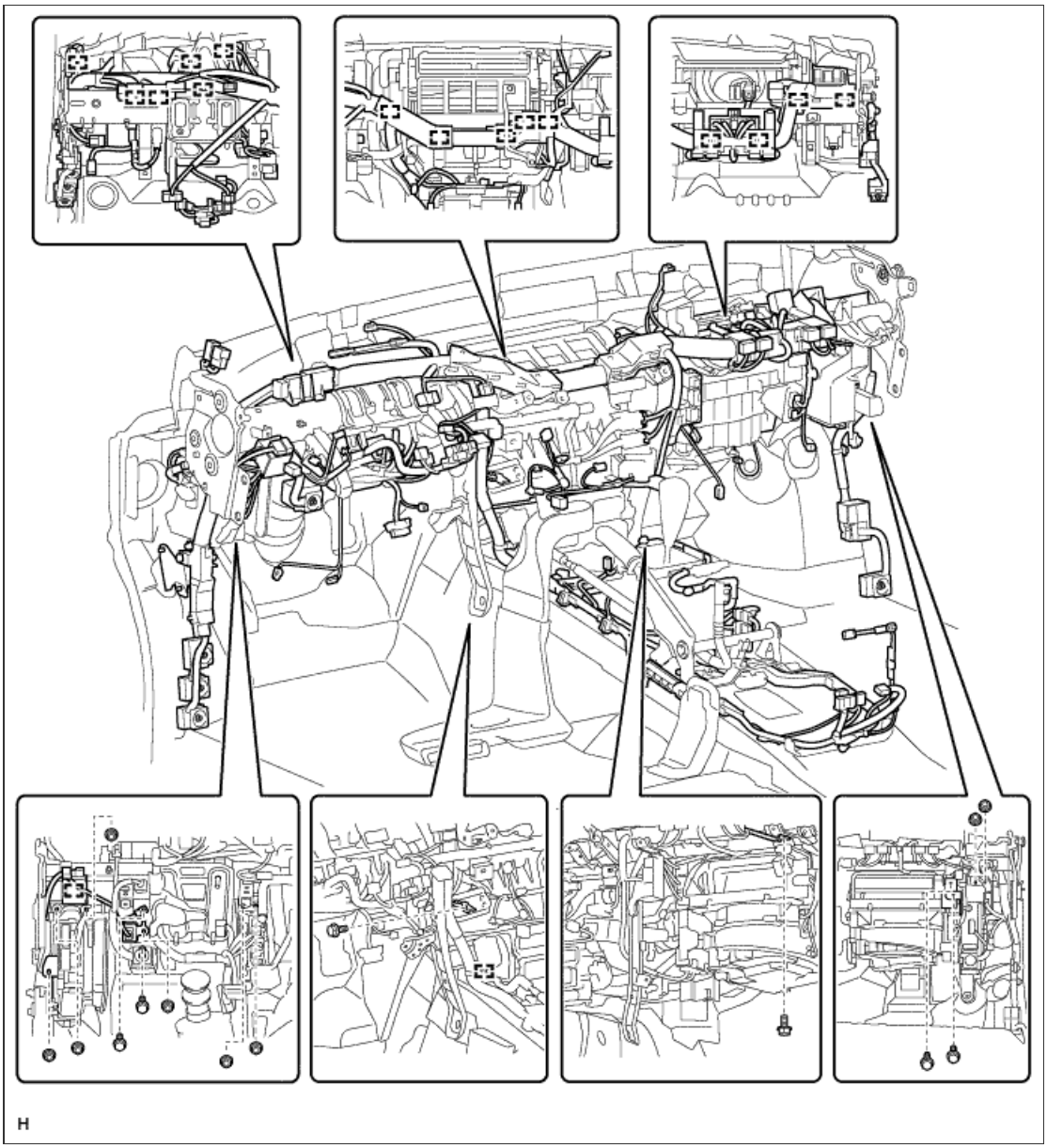
a. Remove the 3 clips.

b. Detach the 2 claws and remove the duct.



17. REMOVE INSTRUMENT PANEL REINFORCEMENT ASSEMBLY

a. Disconnect the clamps, connectors and wire harness.



b. Remove the instrument panel reinforcement.

i. for Driver Side:
Remove the 3 caps and 3 bolts.

ii. for Passenger Side:
Remove the 2 caps.

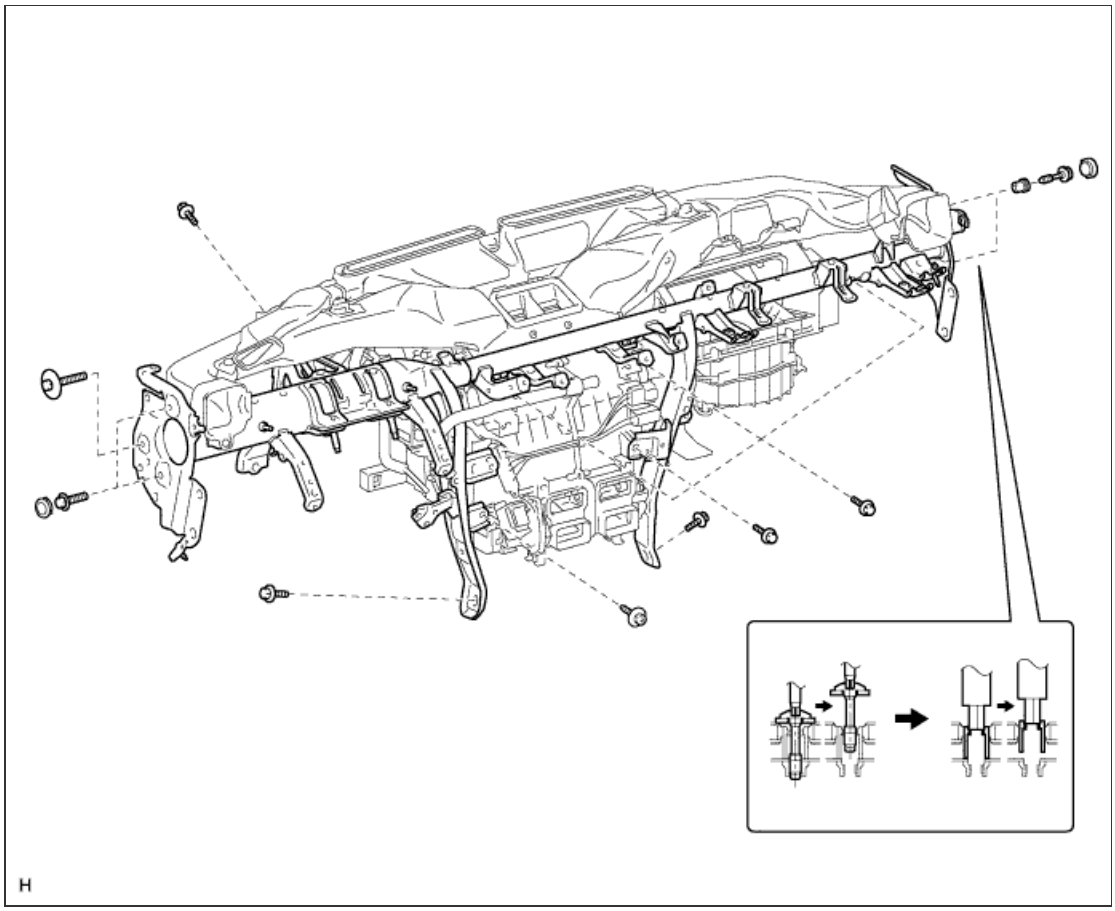
iii. for Passenger Side:
Using a T40 "TORX" socket, remove the 2 "TORX" bolts.

HINT:

When removing the bolts, the collars may come off with the bolts.

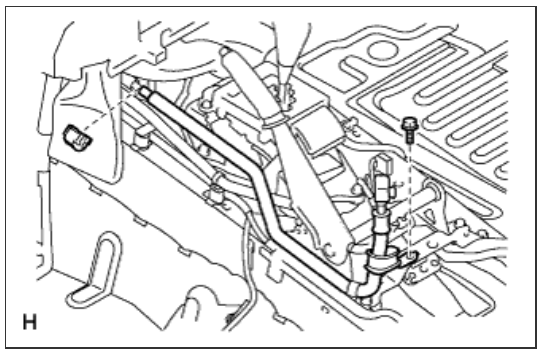
iv. for Passenger Side:
Using a 12 mm hexagon wrench, remove the 2 collars.

v. Remove the 7 bolts, screw and instrument panel reinforcement.



18. REMOVE AIR CONDITIONING HOSE AND ACCESSORY (w/ Cool Box)

a. Remove the bolt.



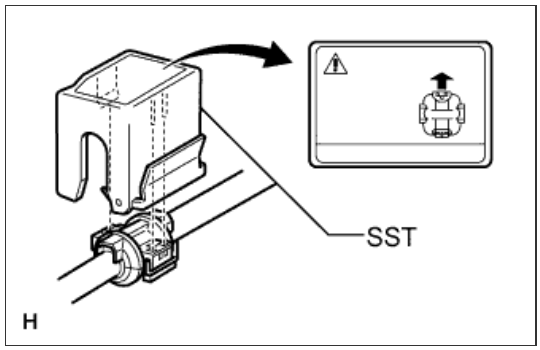
b. Using SST, remove the piping clamp.

SST
09870-00025

i. Attach SST to the piping clamp.

HINT:

Confirm the direction of the piping clamp claw and SST by referring to the illustration on the caution label.



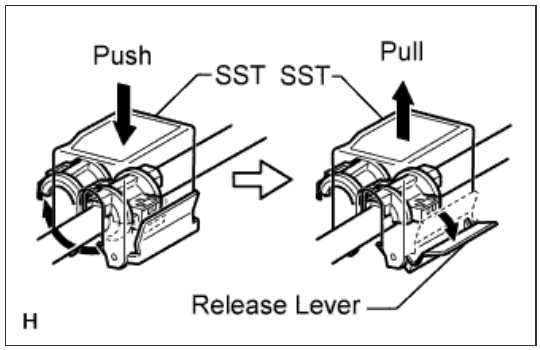
ii. Push down SST and release the clamp lock.

NOTICE:

Be careful not to deform the tubes when pushing SST.

iii. Pull SST slightly and push the release lever, then remove the piping clamp with SST.

iv. Remove the piping clamp from SST.



c. Remove the hose and accessory from the liquid tube.

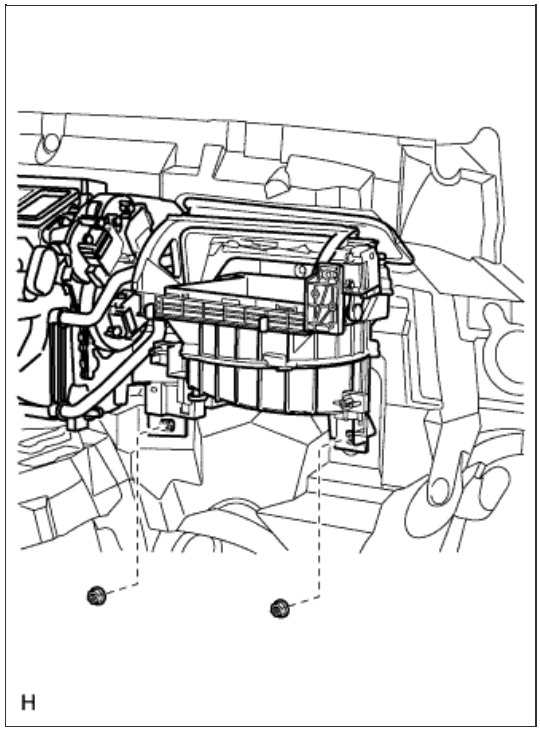
NOTICE:

Cap the open fittings immediately to keep moisture or dirt out of the system.

d. Remove the 2 O-rings from the air conditioning hose and accessory.

19. REMOVE AIR CONDITIONING UNIT

a. Remove the 2 nuts and air conditioning unit.



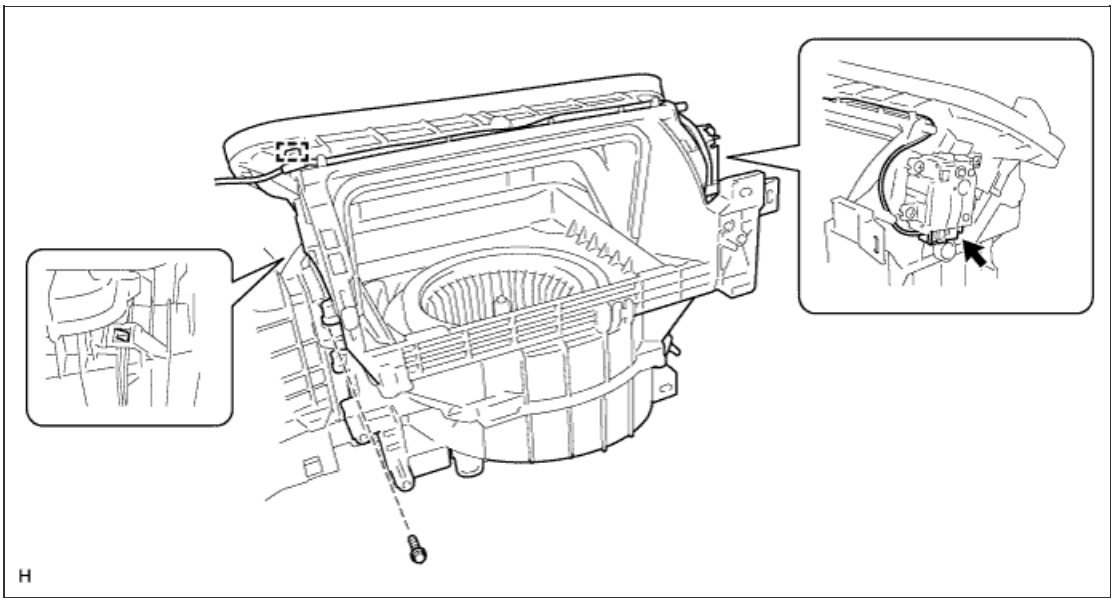
for Preparation Click here

1. REMOVE BLOWER ASSEMBLY

a. Remove the screw.

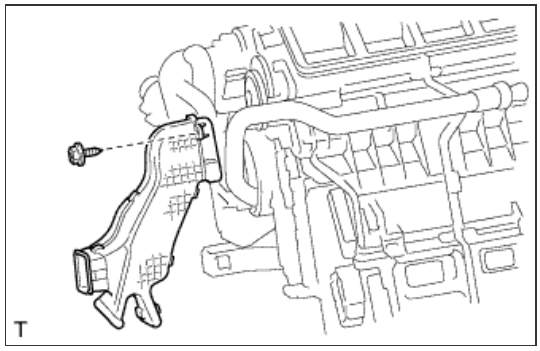
b. Disconnect the connector and clamp.

c. Detach the claw and remove the blower unit.



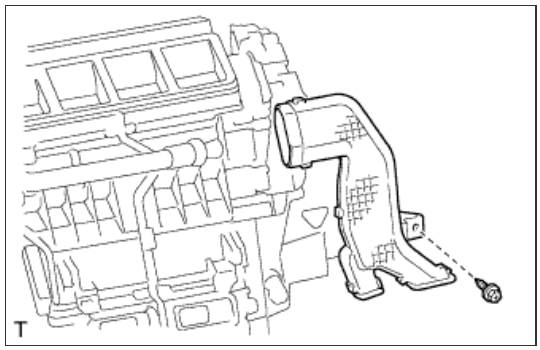
2. REMOVE NO. 4 AIR DUCT SUB-ASSEMBLY

a. Remove the screw and duct.



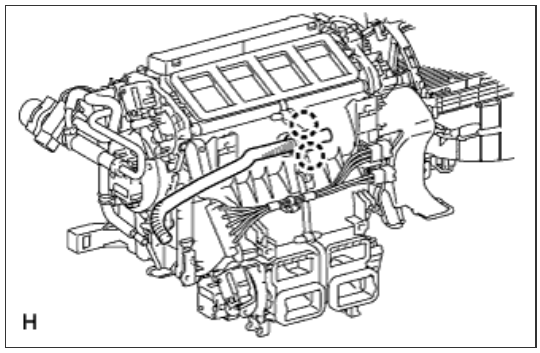
3. REMOVE NO. 5 AIR DUCT SUB-ASSEMBLY

a. Remove the screw and duct.



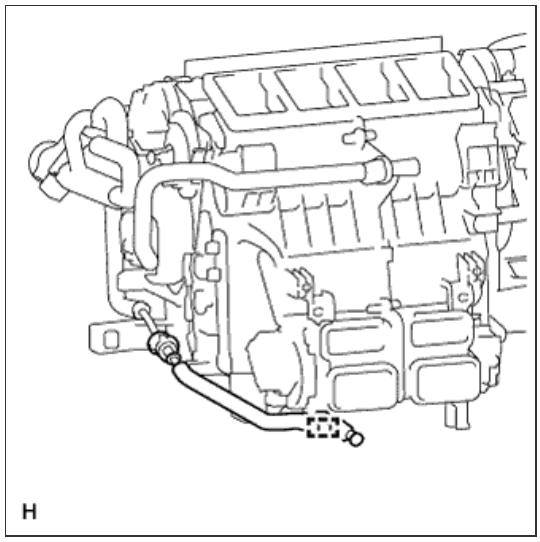
4. REMOVE ASPIRATOR

a. Detach the 2 claws and remove the aspirator.



5. REMOVE COOL BOX LIQUID TUBE (w/ Cool Box)

a. Detach the clamp.



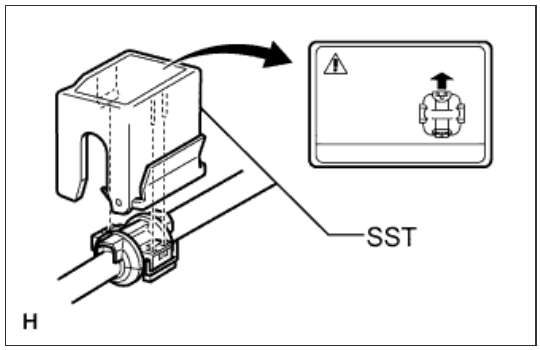
b. Using SST, remove the piping clamp.

SST
09870-00025

i. Attach SST to the piping clamp.

HINT:

Confirm the direction of the piping clamp claw and SST by referring to the illustration on the caution label.



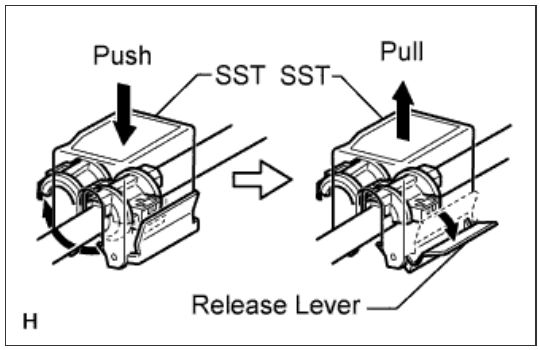
ii. Push down SST and release the clamp lock.

NOTICE:

Be careful not to deform the tubes when pushing SST.

iii. Pull SST slightly and push the release lever, then remove the piping clamp with SST.

iv. Remove the piping clamp from SST.



c. Disconnect the tube.

NOTICE:

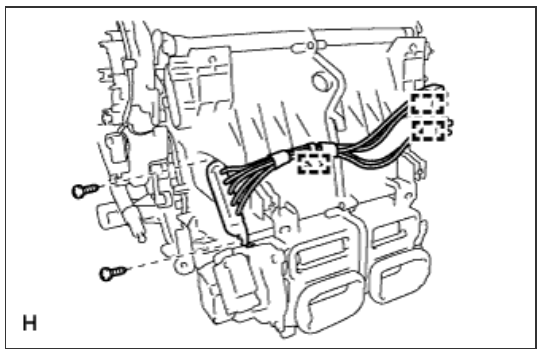
Cap the open fittings immediately to keep moisture or dirt out of the system.

d. Remove the 2 O-rings from the tube.

6. REMOVE QUICK HEATER ASSEMBLY (w/ PTC Heater)

a. Detach the 3 clamps.

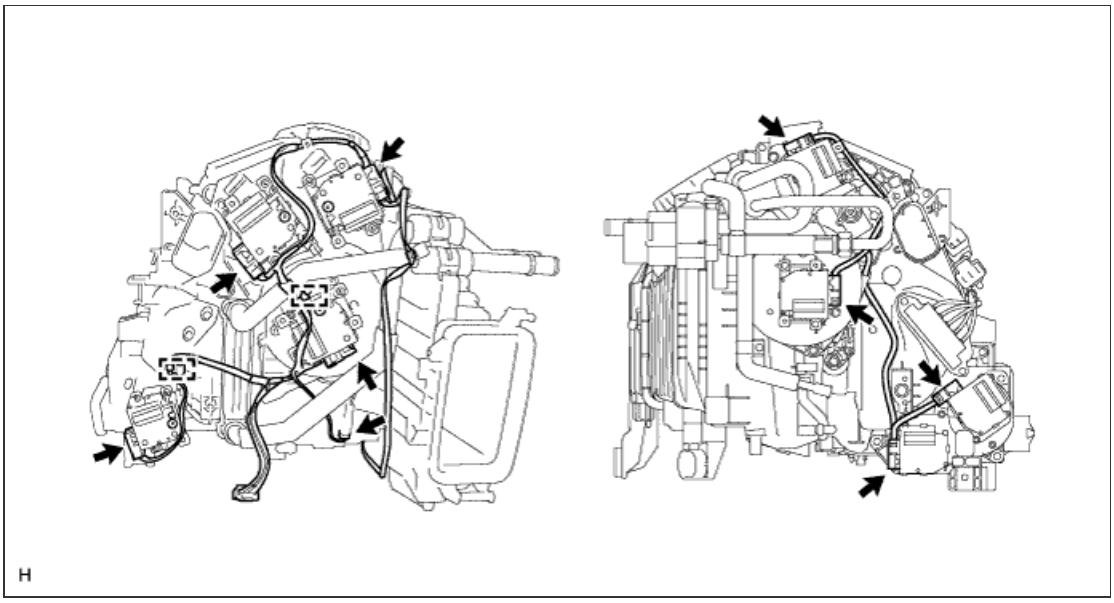
b. Remove the 2 screws and quick heater.



7. REMOVE AIR CONDITIONER HARNESS

a. Disconnect the connectors.

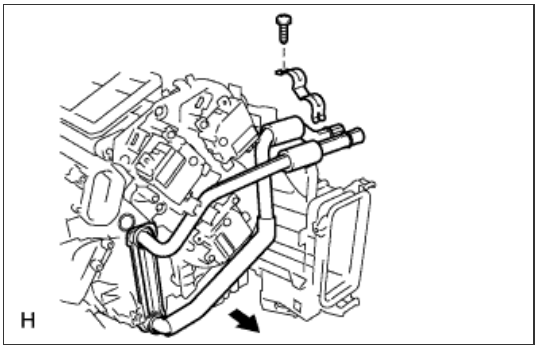
b. Detach the clamps and remove the harness.



8. REMOVE AIR CONDITIONING RADIATOR ASSEMBLY

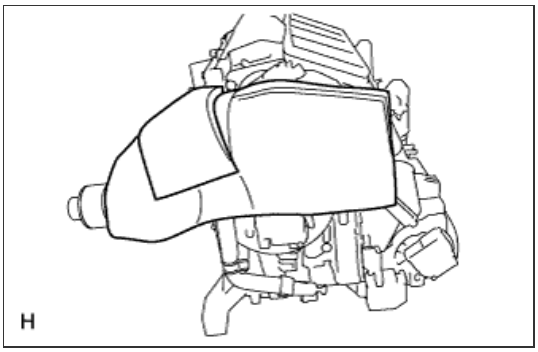
a. Remove the screw and radiator bracket.

b. Remove the radiator.

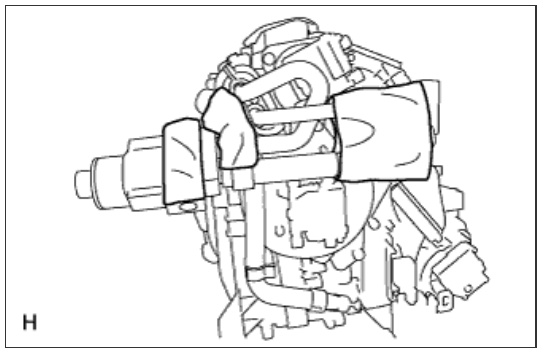


9. REMOVE COOLER EXPANSION VALVE (w/ Cool Box)

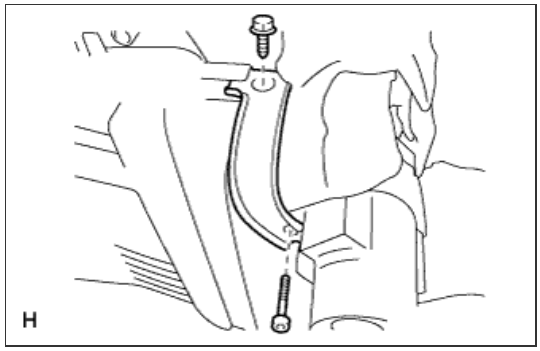
a. Remove the packing.



b. Remove the butyl tape.

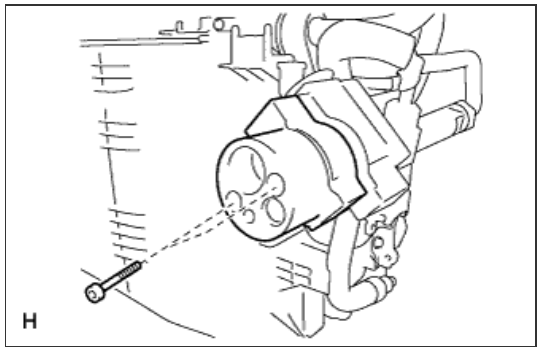


c. Using a 4 mm hexagon wrench, remove the hexagon bolt, screw and bracket.



d. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts and No. 1 connector tube.

e. Remove the 2 O-rings from the No. 1 connector tube.



f. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts, No. 2 connector tube, expansion valve and No. 3 connector tube.

g. Remove the 2 O-rings from the No. 2 connector tube.

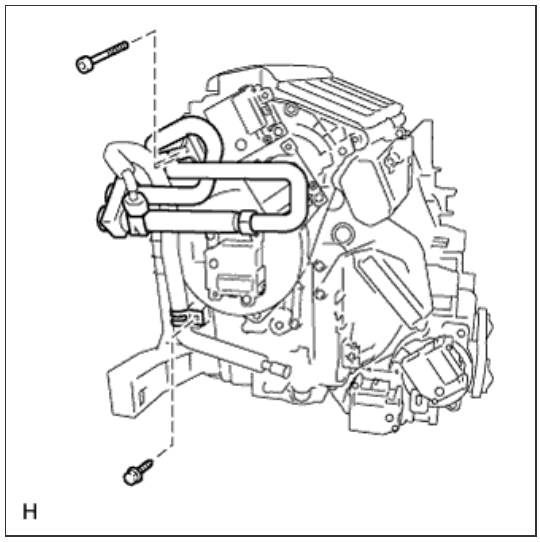


10. REMOVE AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY (w/ Cool Box)

a. Remove the screw and bracket.

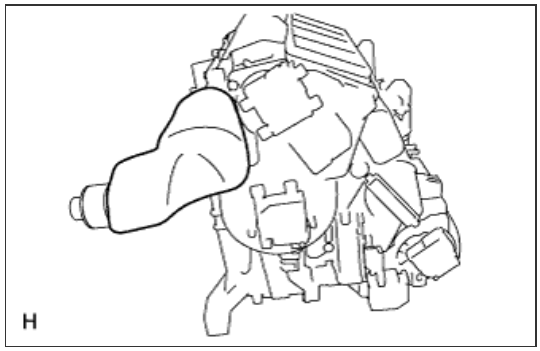
b. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts and air conditioner tube and accessory assembly.

c. Remove the 2 O-rings from the air conditioner tube and accessory assembly.



11. REMOVE COOLER EXPANSION VALVE (w/o Cool Box)

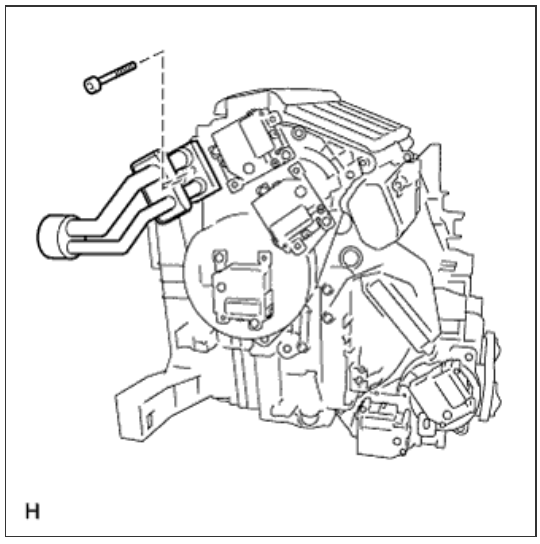
a. Remove the packing.



b. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts, air conditioner tube and accessory assembly and expansion valve.

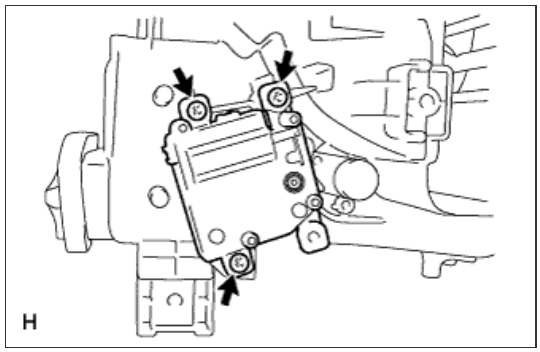
c. Remove the 2 O-rings from the air conditioner tube and accessory assembly.

d. Remove the 2 O-rings from the expansion valve.



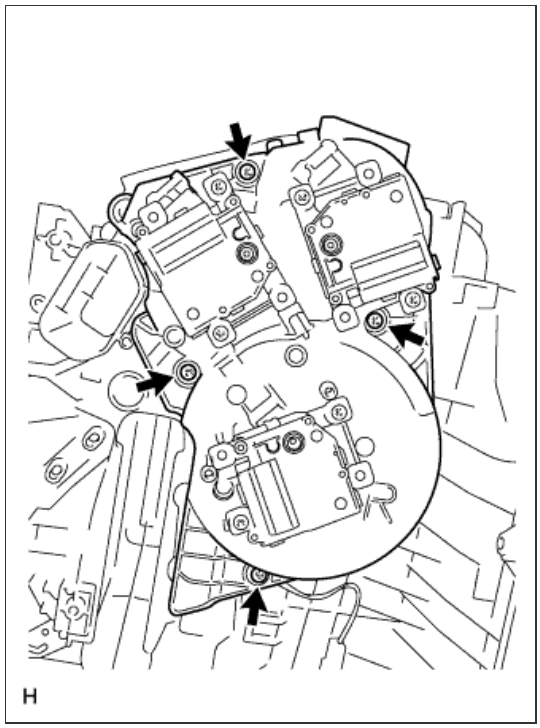
12. REMOVE REAR AIR MIX DAMPER CONTROL SERVO MOTOR RH

a. Remove the 3 screws and servo motor.



13. REMOVE SERVO MOTOR

a. Remove the 4 screws and servo motor unit.



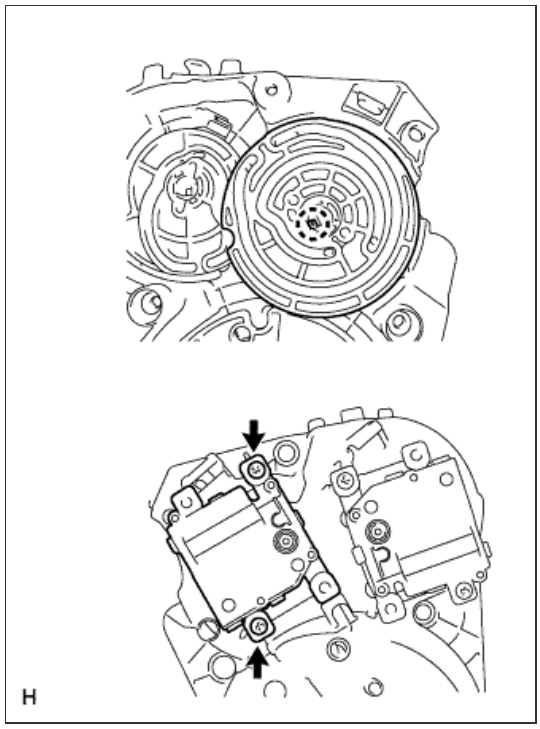
b. Remove the front mode control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.



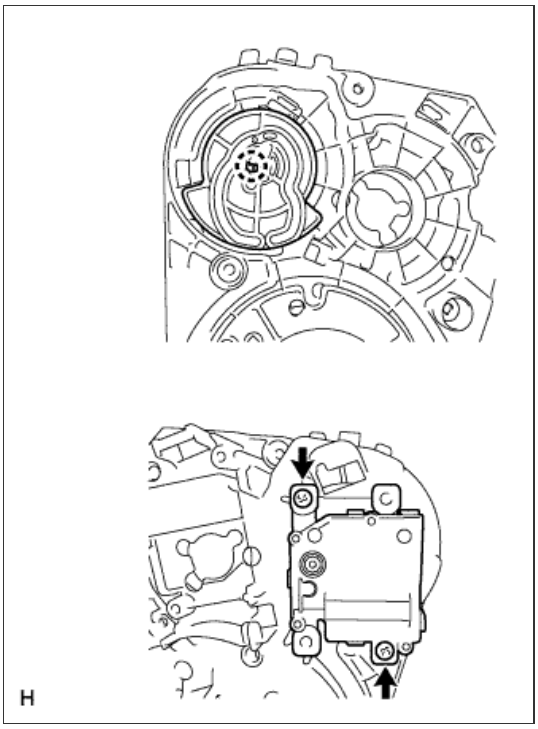
c. Remove the control bypass damper control servo motor.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.



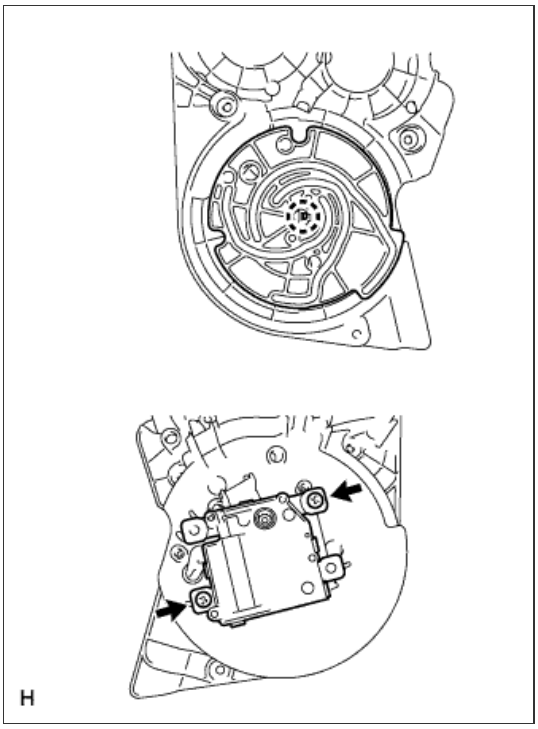
d. Remove the front air mix damper control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

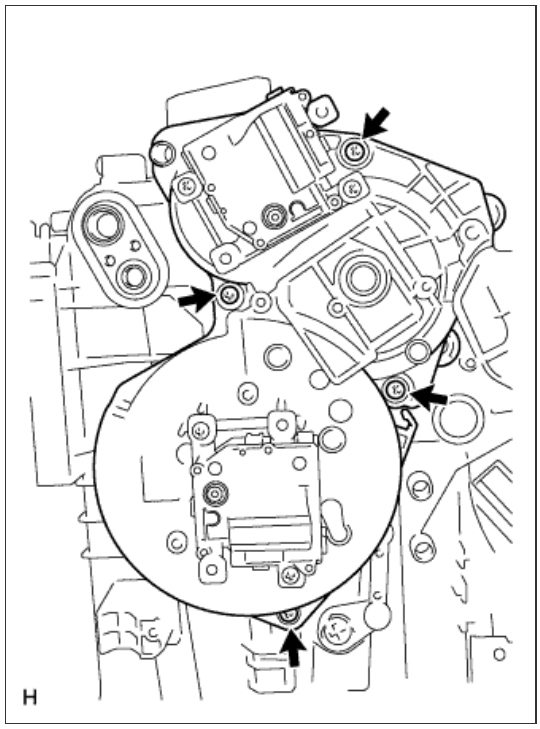
NOTICE:

Be careful not to damage the claw of the plate.



14. REMOVE SERVO MOTOR

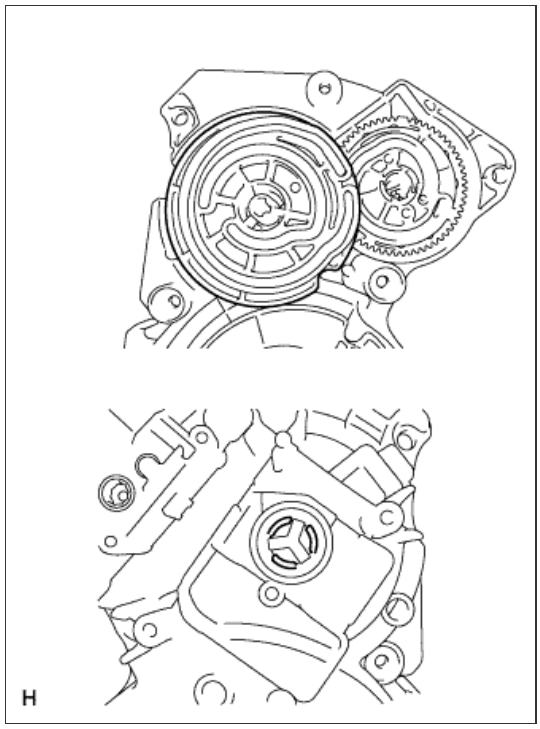
a. Remove the 4 screws and servo motor unit.



b. Detach the 3 claws and remove the plate.

NOTICE:

Be careful not to damage the claw of the plate.



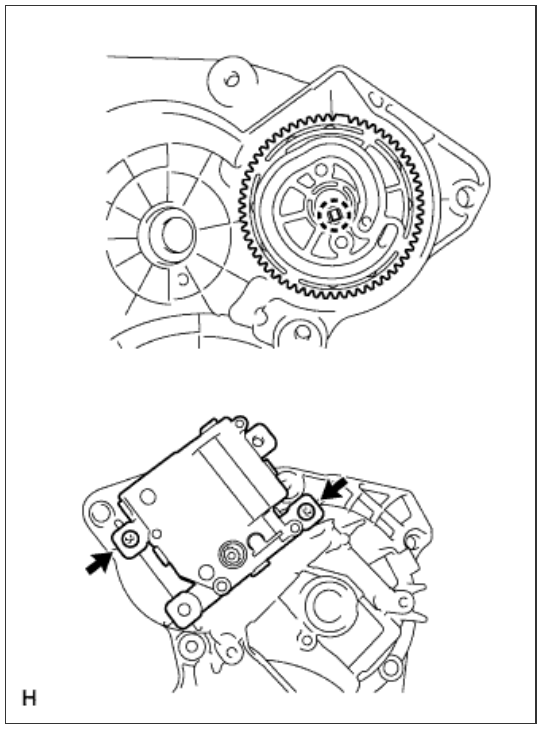
c. Remove the front mode control servo motor LH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.



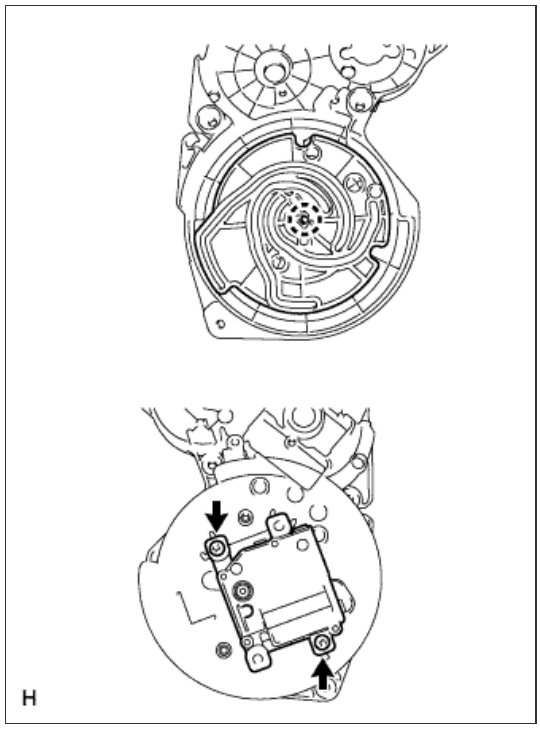
d. Remove the front air mix damper control servo motor LH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

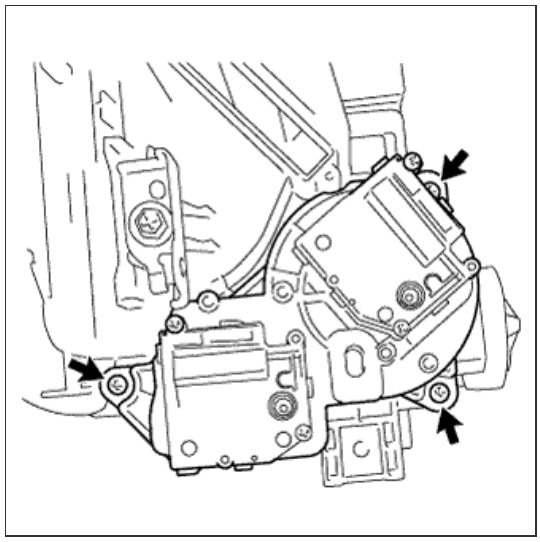
NOTICE:

Be careful not to damage the claw of the plate.

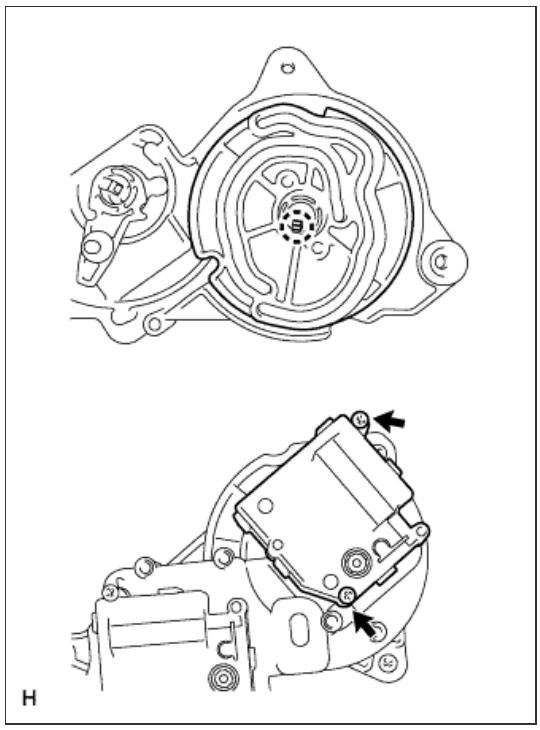


15. REMOVE SERVO MOTOR

a. Remove the 3 screws and servo motor unit.



b. Remove the rear mode control servo motor.



i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.

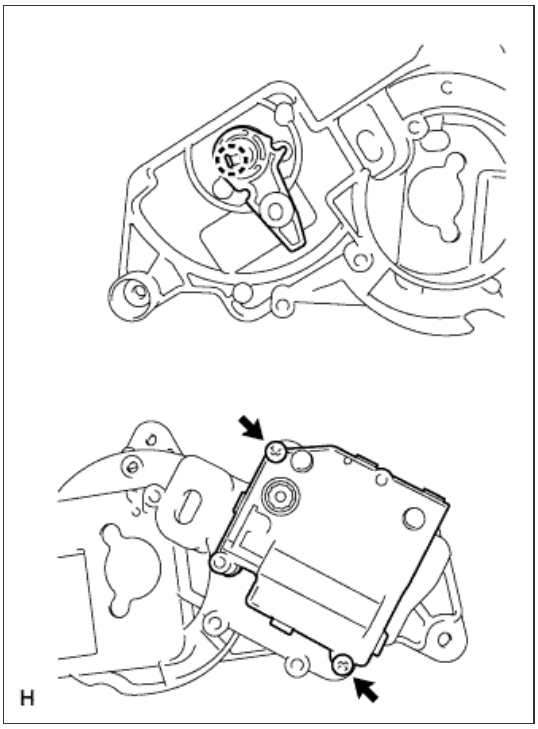
c. Remove the rear air mix damper control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the lever and servo motor.

NOTICE:

Be careful not to damage the claw of the lever.

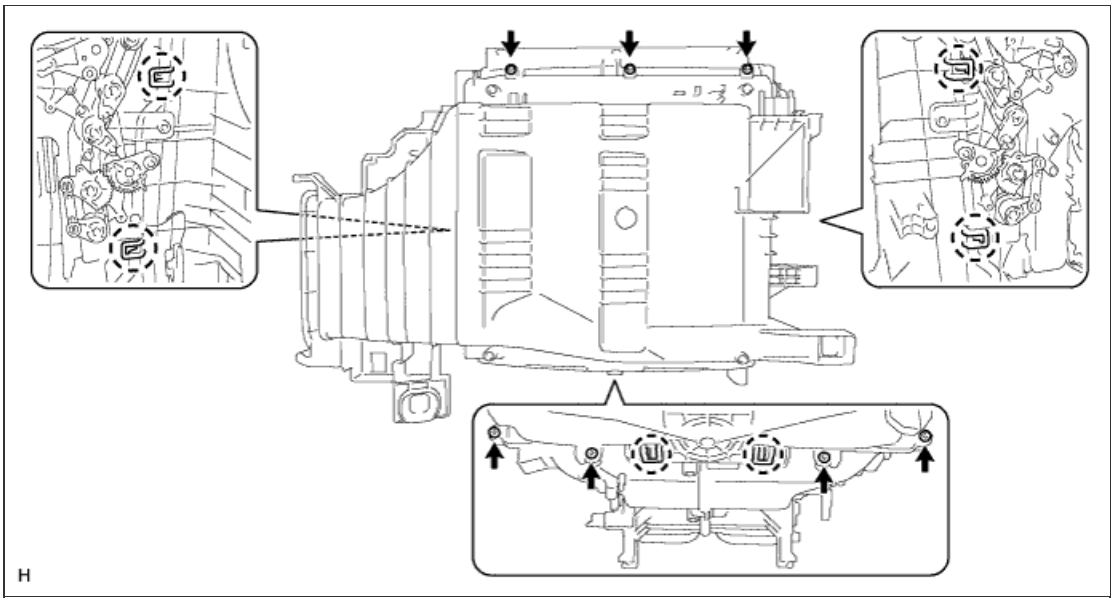


16. REMOVE NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY

a. Remove the 7 screws.

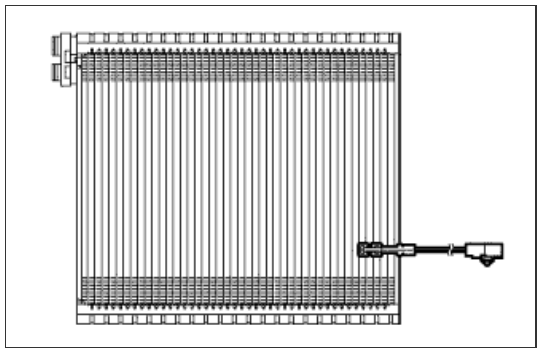
b. Detach the 6 claws and remove the unit case.

c. Remove the evaporator.



17. REMOVE FRONT EVAPORATOR TEMPERATURE SENSOR

a. Remove the sensor from the evaporator.



for Preparation Click here

1. INSTALL FRONT EVAPORATOR TEMPERATURE SENSOR

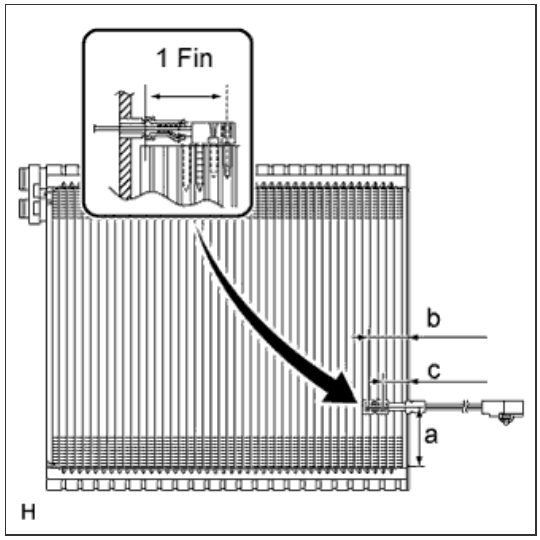
NOTICE:

If reusing the evaporator, do not insert the sensor at a location where the sensor was previously inserted.

a. Insert the sensor at a location that is 1 fin to the right or left of its previous location.

Standard Dimension:

Area	Specified Condition
a	50 mm (1.97 in.)
b	34.3 mm (1.35 in.)
c	20.9 mm (0.822 in.)

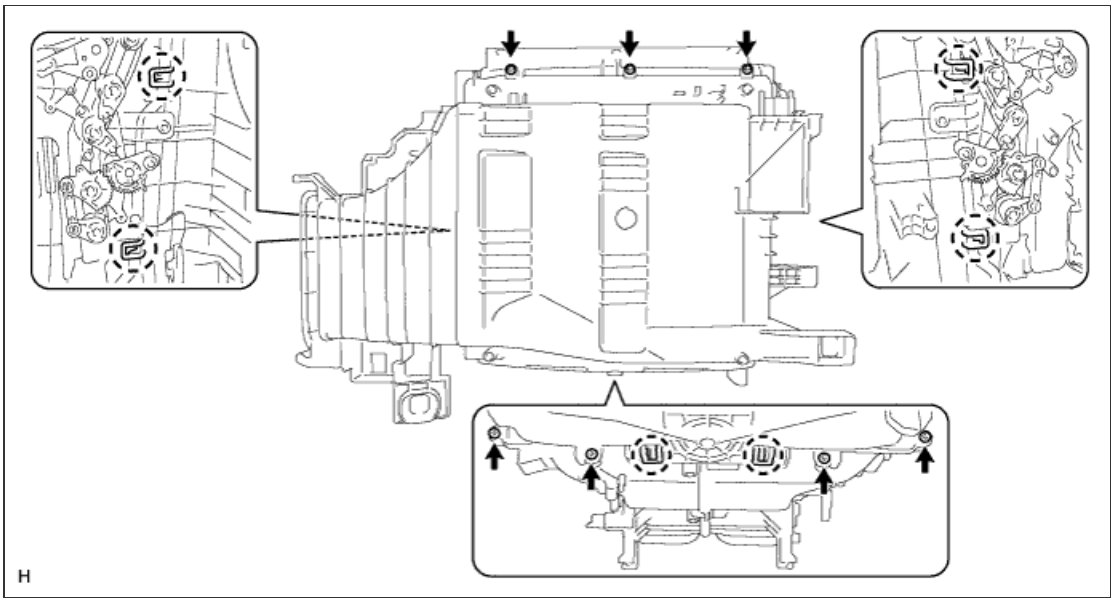


2. INSTALL NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY

a. Install the evaporator.

b. Attach the 6 claws to install the unit case.

c. Install the 7 screws.

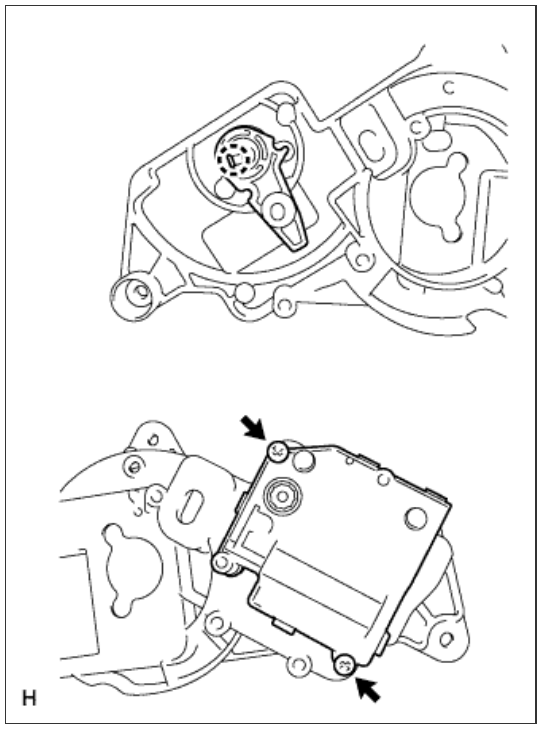


3. INSTALL SERVO MOTOR

a. Install the rear air mix damper control servo motor RH.

i. Attach the claw to install the lever and servo motor.

ii. Install the 2 screws.

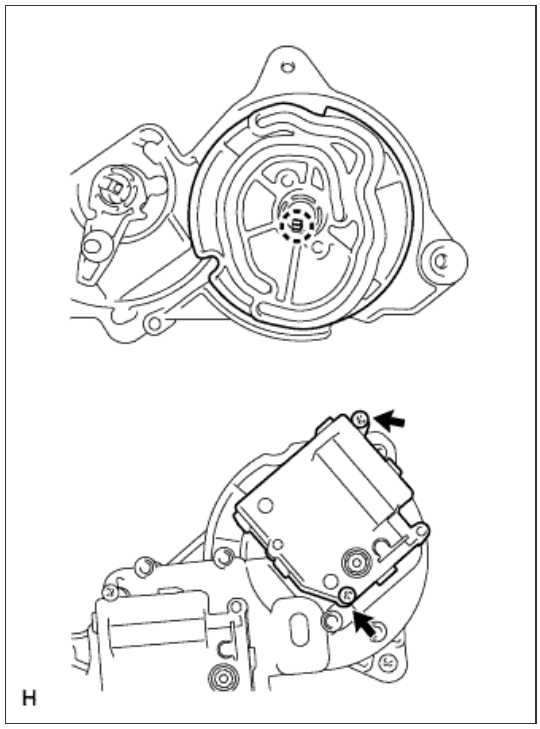


b. Install the rear mode control servo motor.

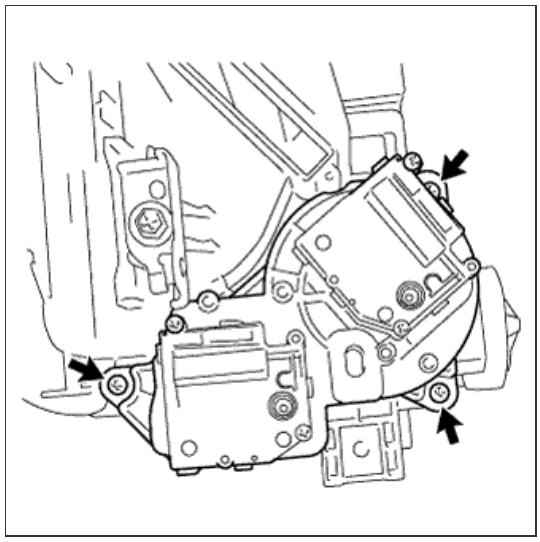
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

c. Set the damper servo so that the cutout part engages with the tooth of the gear, and attach the claw to install the servo motor unit.



d. Install the 3 screws.

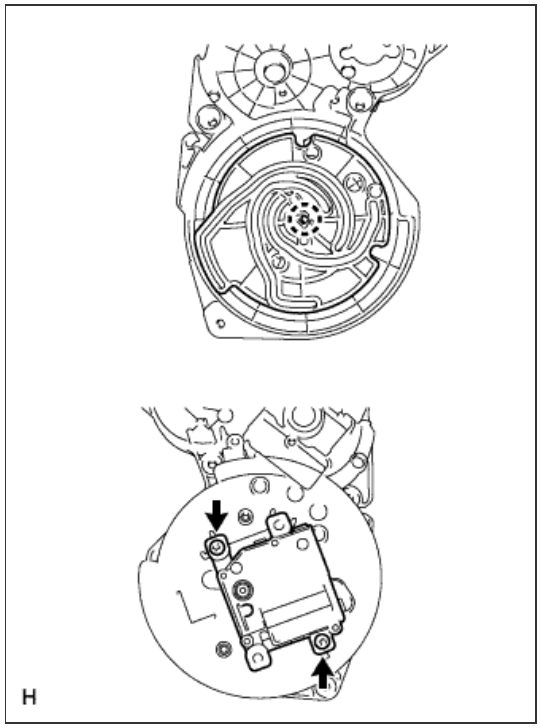


4. INSTALL SERVO MOTOR

a. Install the front air mix damper control servo motor LH.

i. Attach the claw to install the plate and servo motor.

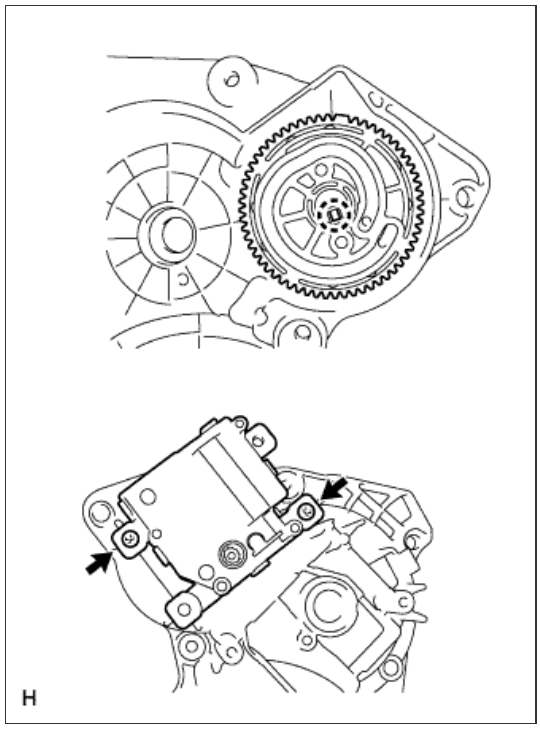
ii. Install the 2 screws.



b. Install the front mode control servo motor LH.

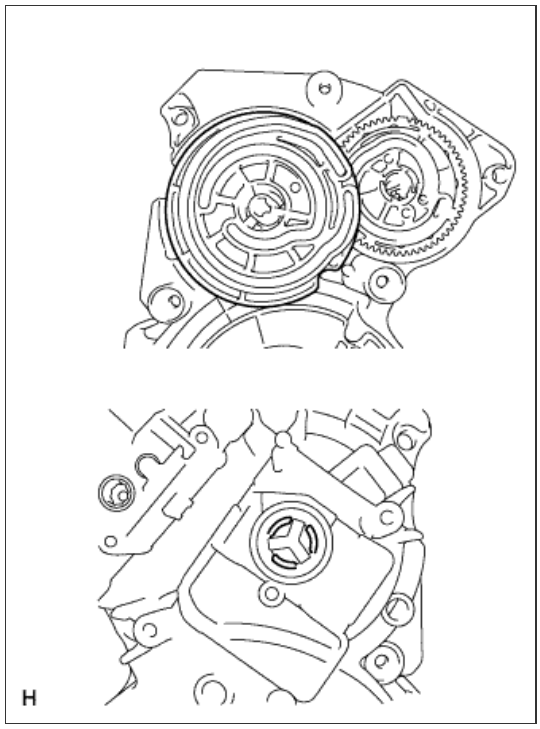
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

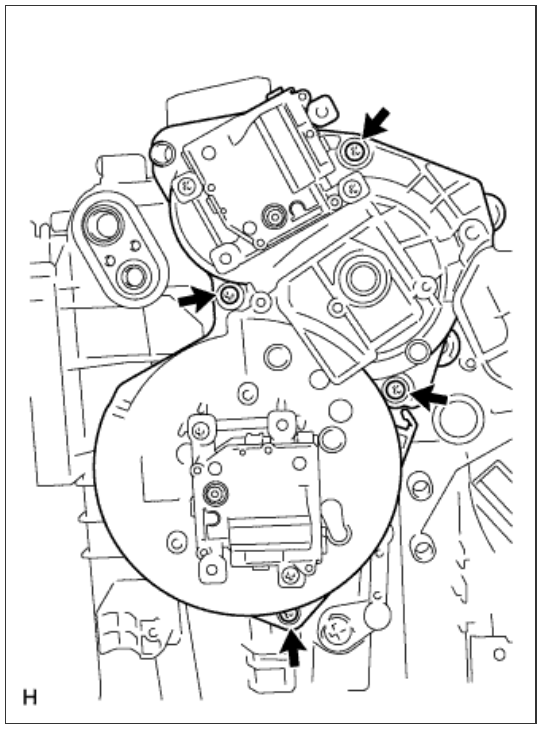


c. Attach the 3 claws to install the plate.

d. Set the damper servo so that the cutout part engages with the tooth of the gear, and attach the claw to install the servo motor unit.

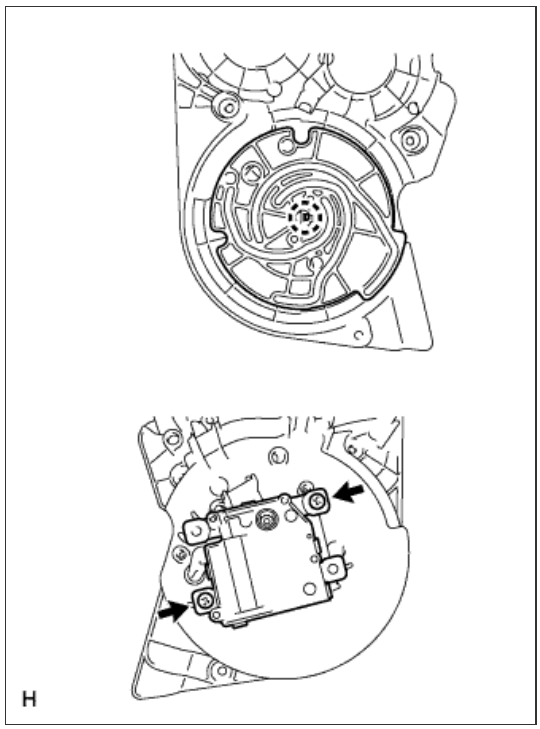


e. Install the 4 screws.



5. INSTALL SERVO MOTOR

a. Install the front air mix damper control servo motor RH.



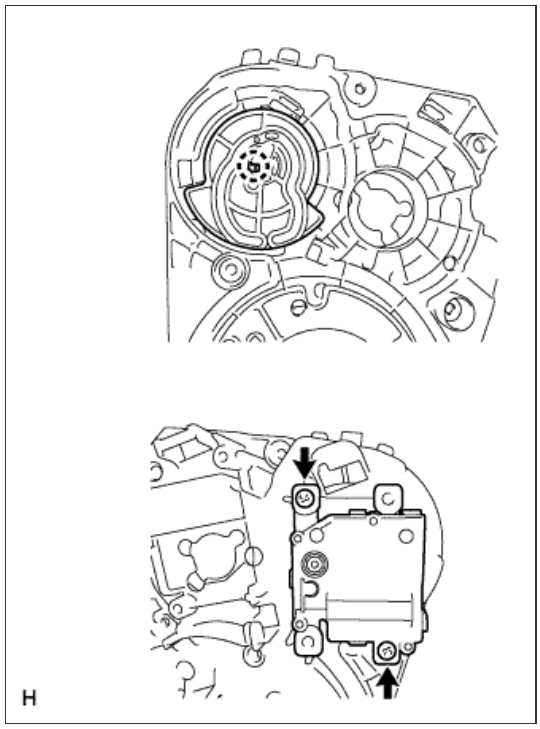
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

b. Install the control air bypass damper control servo motor.

i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

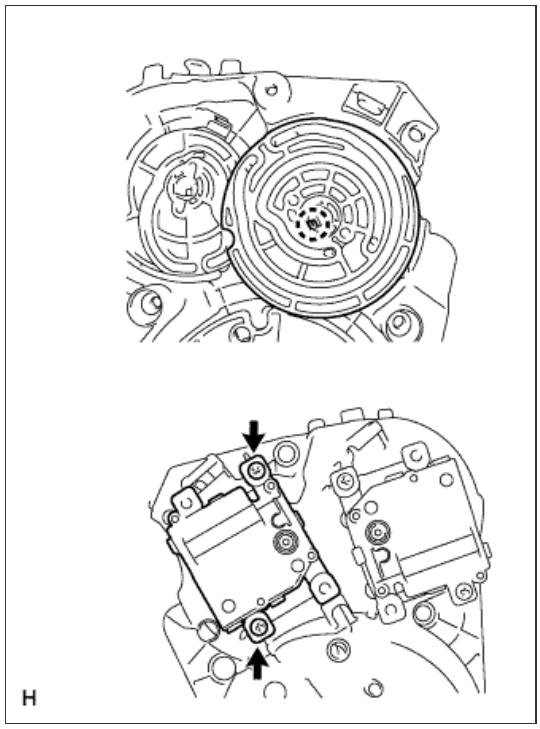


c. Install the front mode control servo motor RH.

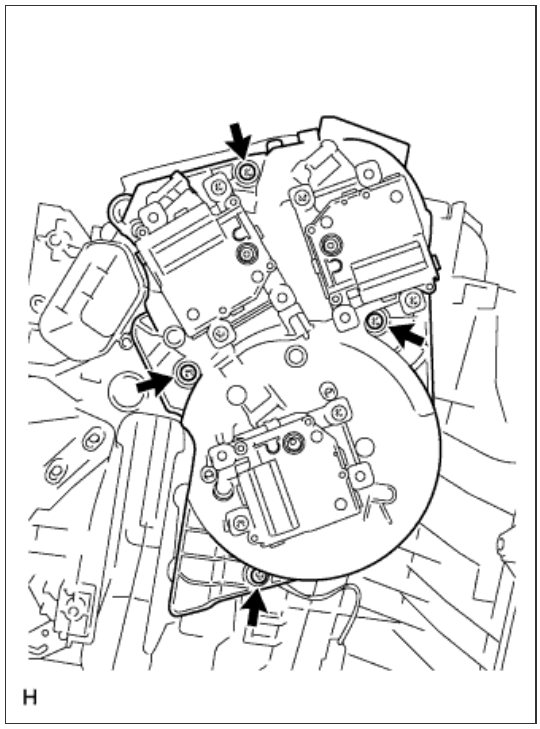
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

d. Set the damper servo so that the cutout part engages with the tooth of the gear, and attach the claw to install the servo motor unit.

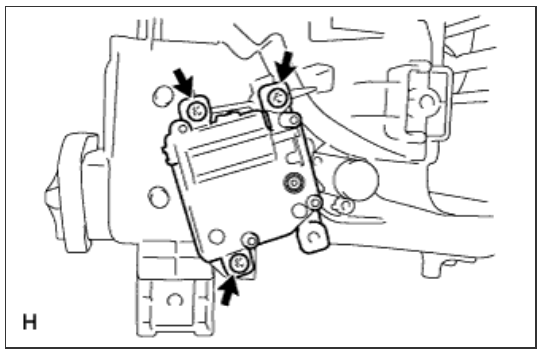


e. Install the 4 screws.



6. INSTALL REAR AIR MIX DAMPER CONTROL SERVO MOTOR RH

a. Install the servo motor with the 3 screws.



7. INSTALL COOLER EXPANSION VALVE (w/o Cool Box)

a. Sufficiently apply compressor oil to 4 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

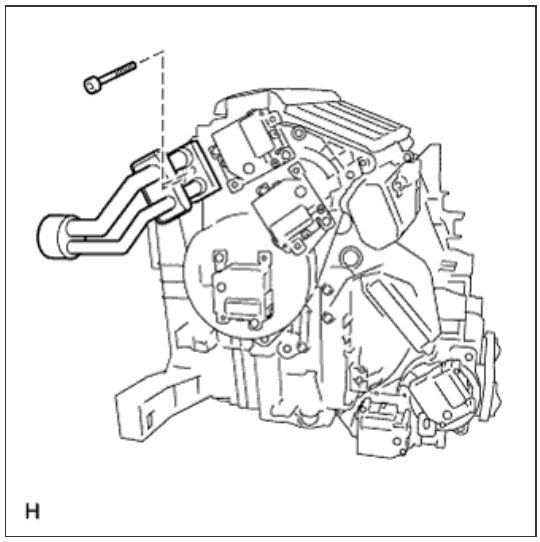
b. Install 2 O-rings to the cooler evaporator.

c. Install 2 O-rings to the air conditioner tube and accessory assembly.

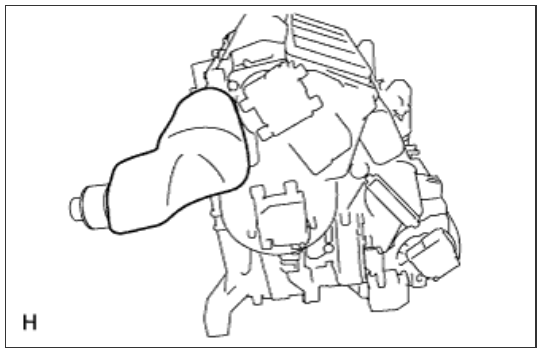
d. Install the cooler expansion valve and air conditioner tube and accessory assembly to the evaporator.

e. Using a 4 mm hexagon wrench, install the 2 bolts.

Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }



f. Install new packing.



8. INSTALL AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY (w/ Cool Box)

a. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

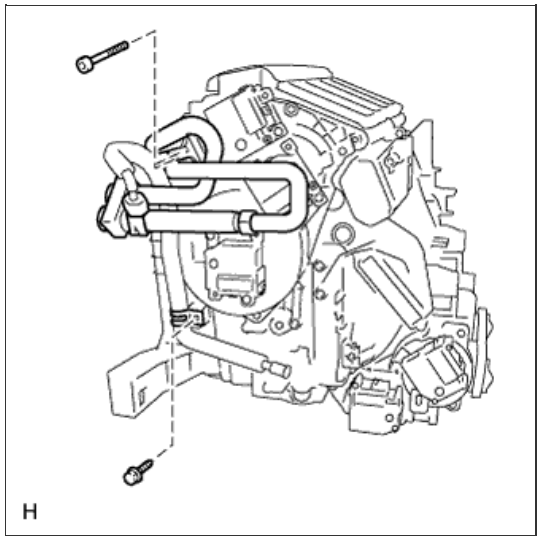
b. Install the 2 O-rings to the air conditioner tube and accessory assembly.

c. Install the air conditioner tube and accessory assembly to the evaporator.

d. Using a 4 mm hexagon wrench, install the 2 hexagon bolts.

Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }

e. Install the bracket with the screw.



9. INSTALL COOLER EXPANSION VALVE (w/ Cool Box)

a. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

b. Install the 2 O-rings to the No. 2 connector tube.

c. Install the No. 2 connector tube, expansion valve and No. 3 connector tube.

d. Using a 4 mm hexagon wrench, install the 2 hexagon bolts.

Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }



e. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

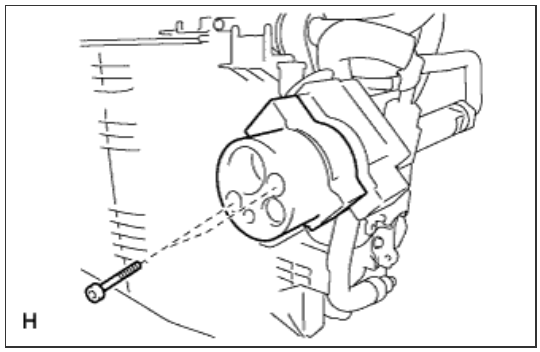
Compressor oil:
ND-OIL 8 or equivalent

f. Install the 2 O-rings to the No. 1 connector tube.

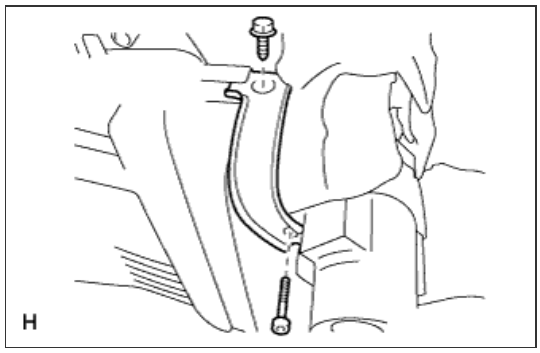
g. Install the No. 1 connector tube.

h. Using a 4 mm hexagon wrench, install the 2 hexagon bolts.

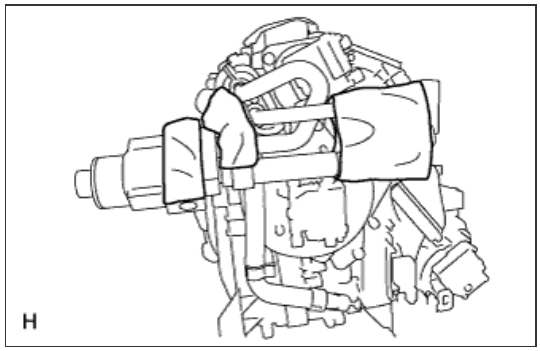
Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }



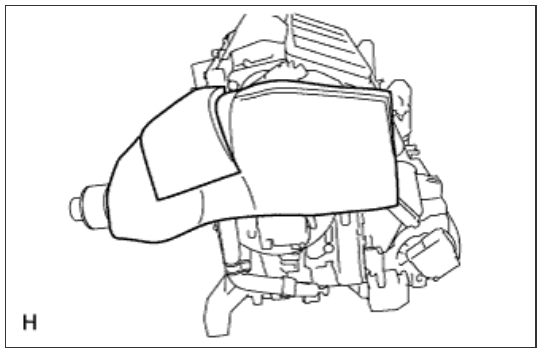
i. Using a 4 mm hexagon wrench, install the bracket with the hexagon bolt and screw.



j. Install new butyl tape.



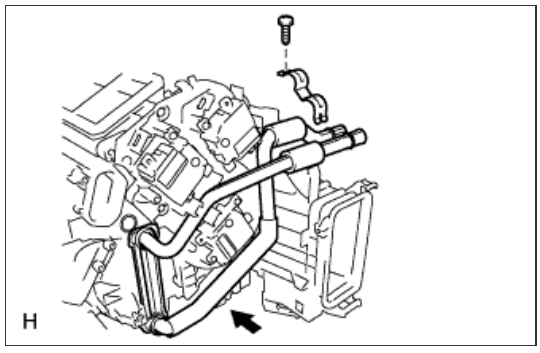
k. Install new packing.



10. INSTALL AIR CONDITIONING RADIATOR ASSEMBLY

a. Install the radiator.

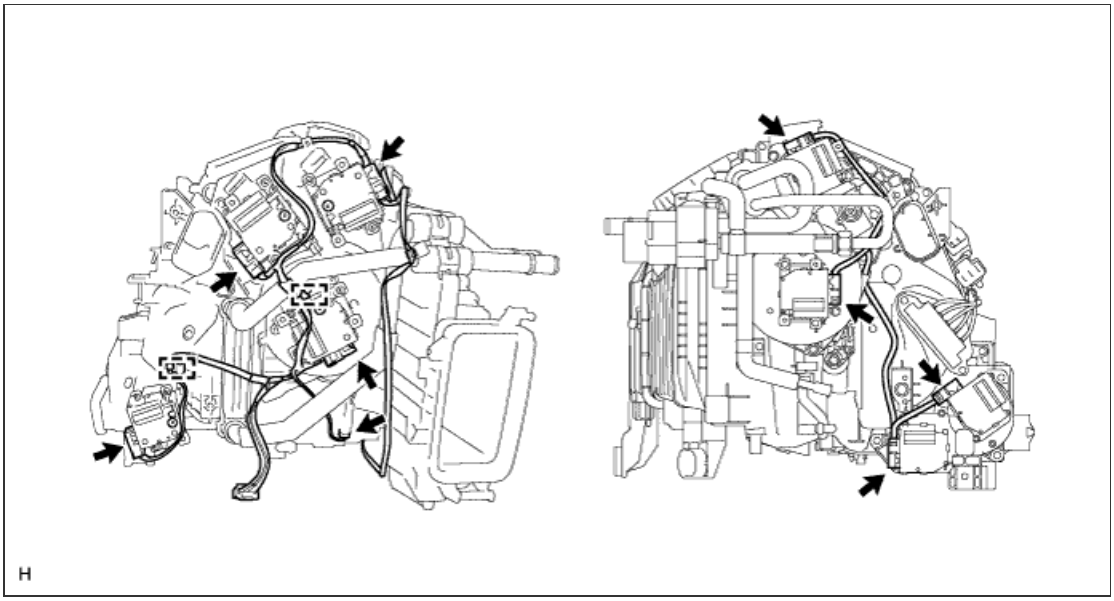
b. Install the bracket with the screw.



11. INSTALL AIR CONDITIONER HARNESS

a. Attach the clamps to install the harness.

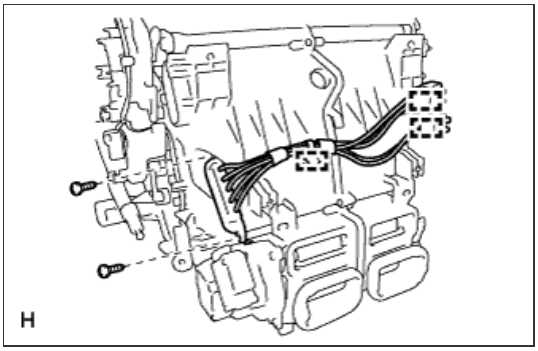
b. Connect the connectors.



12. INSTALL QUICK HEATER ASSEMBLY (w/ PTC Heater)

a. Install the quick heater with the 2 screws.

b. Attach the 3 clamps.



13. INSTALL COOL BOX LIQUID TUBE (w/ Cool Box)

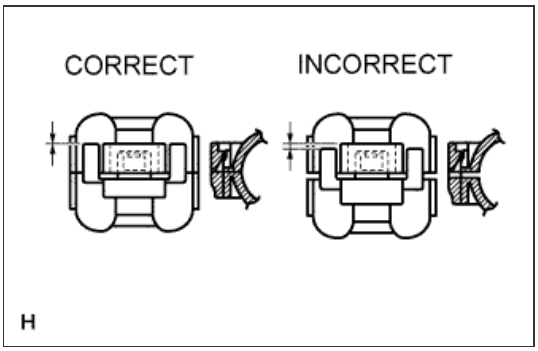
a. Lubricate 2 new O-rings with compressor oil and install them to the tube.

Compressor oil:
ND-OIL 8 or equivalent

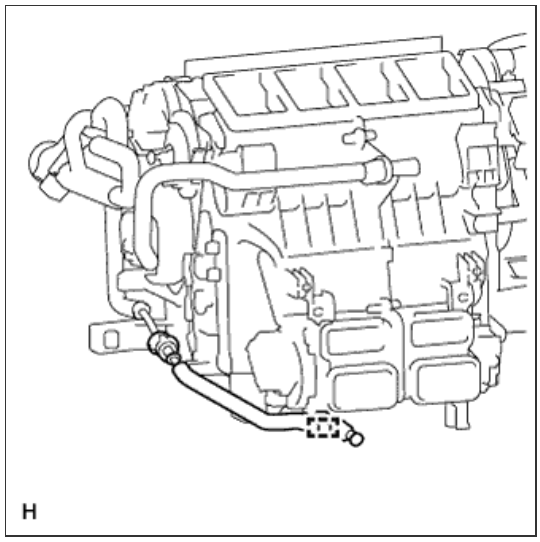
b. Connect the liquid tube with the piping clamp.

NOTICE:

After connection, check the claw engagement of the piping clamp.

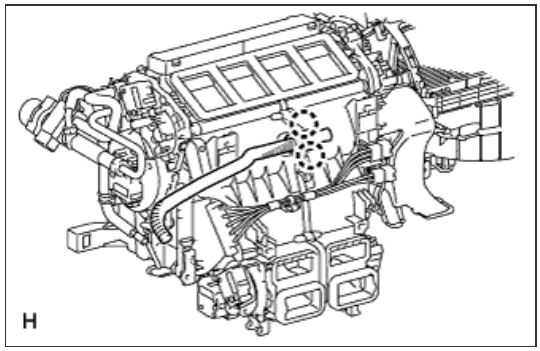


c. Attach the clamp.



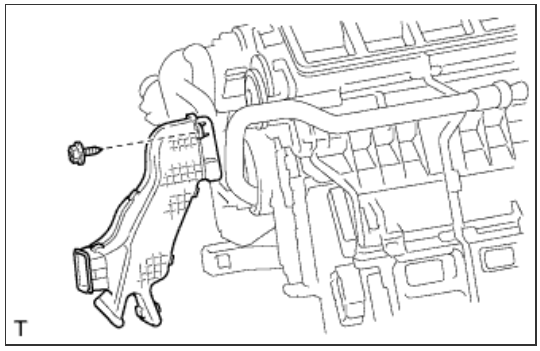
14. INSTALL ASPIRATOR

a. Attach the 2 claws to install the aspirator.



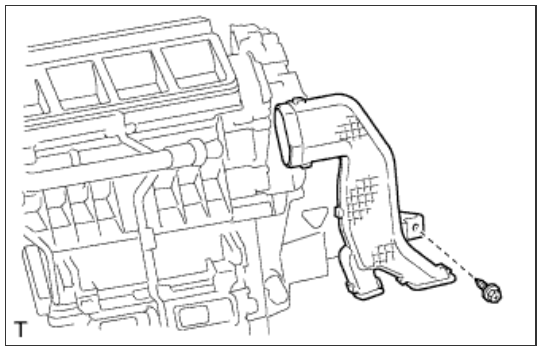
15. INSTALL NO. 4 AIR DUCT SUB-ASSEMBLY

a. Install the duct with the screw.



16. INSTALL NO. 5 AIR DUCT SUB-ASSEMBLY

a. Install the duct with the screw.

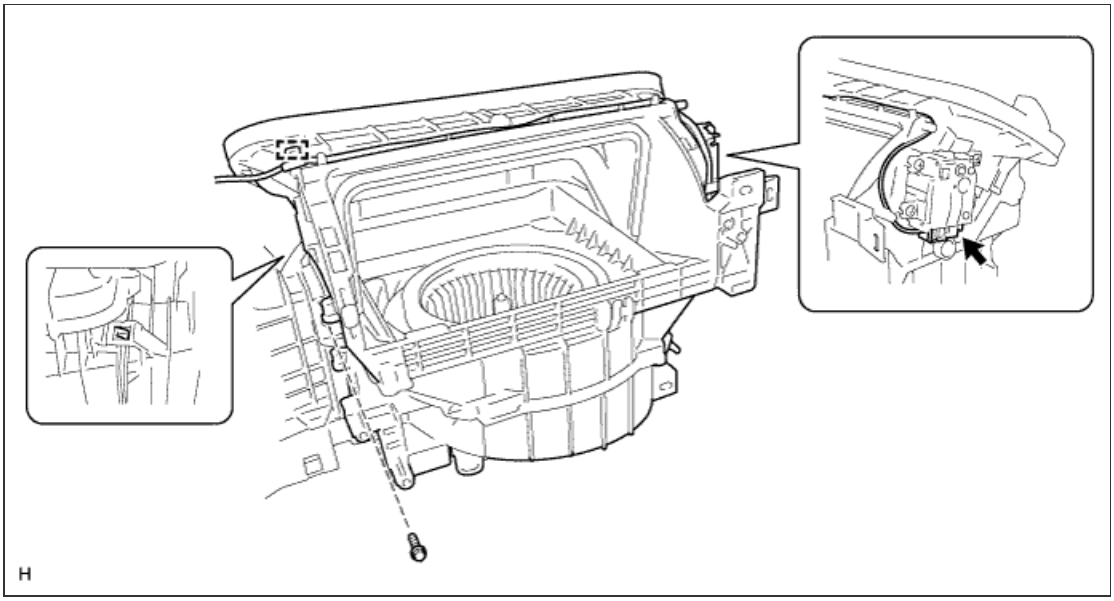


17. INSTALL BLOWER ASSEMBLY

a. Attach the claw to install the blower unit.

b. Connect the connector and clamp.

c. Install the screw.

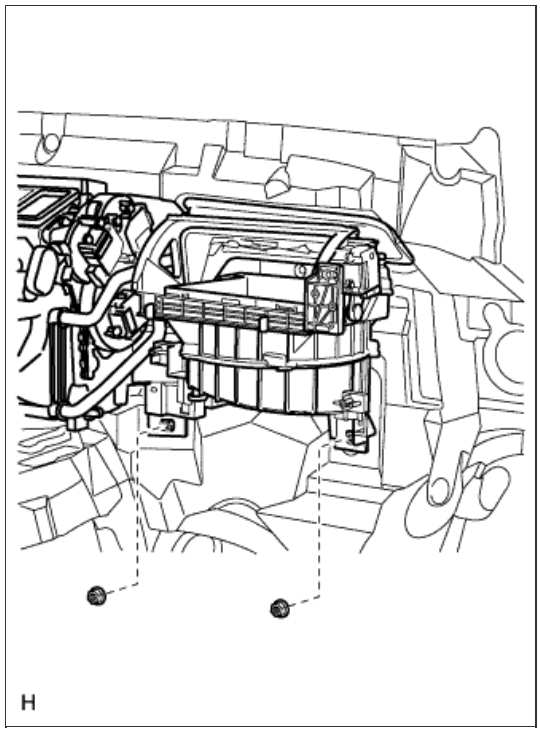


for Preparation Click here

1. INSTALL AIR CONDITIONING UNIT ASSEMBLY

a. Install the air conditioning unit with the 2 nuts.

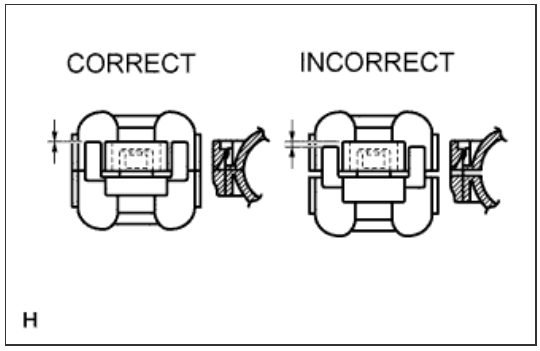
Torque:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }



2. INSTALL AIR CONDITIONING HOSE AND ACCESSORY (w/ Cool Box)

a. Lubricate 2 new O-rings with compressor oil and install them to the air conditioning hose and accessory.

Compressor oil:
ND-OIL 8 or equivalent



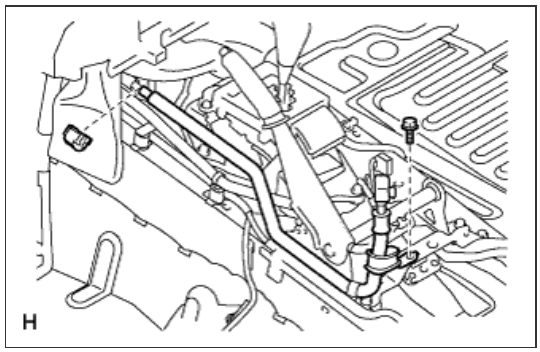
b. Install the air conditioning hose and accessory with the piping clamp.

NOTICE:

After connection, check the claw engagement of the piping clamp.

c. Install the bolt.

Torque:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }



3. INSTALL INSTRUMENT PANEL REINFORCEMENT ASSEMBLY

a. Install the instrument panel reinforcement.

i. Install the instrument panel reinforcement with the 7 bolts and screw.

Torque:
for bolt:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }
for screw:
6.0 N*m{ 61 kgf*cm , 53 in.*lbf }

ii. for Passenger Side:
Using a 12 mm hexagon wrench, install the 2 collars.

Torque:
18 N*m{ 184 kgf*cm , 13 ft.*lbf }

iii. for Passenger Side:
Using a T40 "TORX" socket, install the 2 "TORX" bolts.

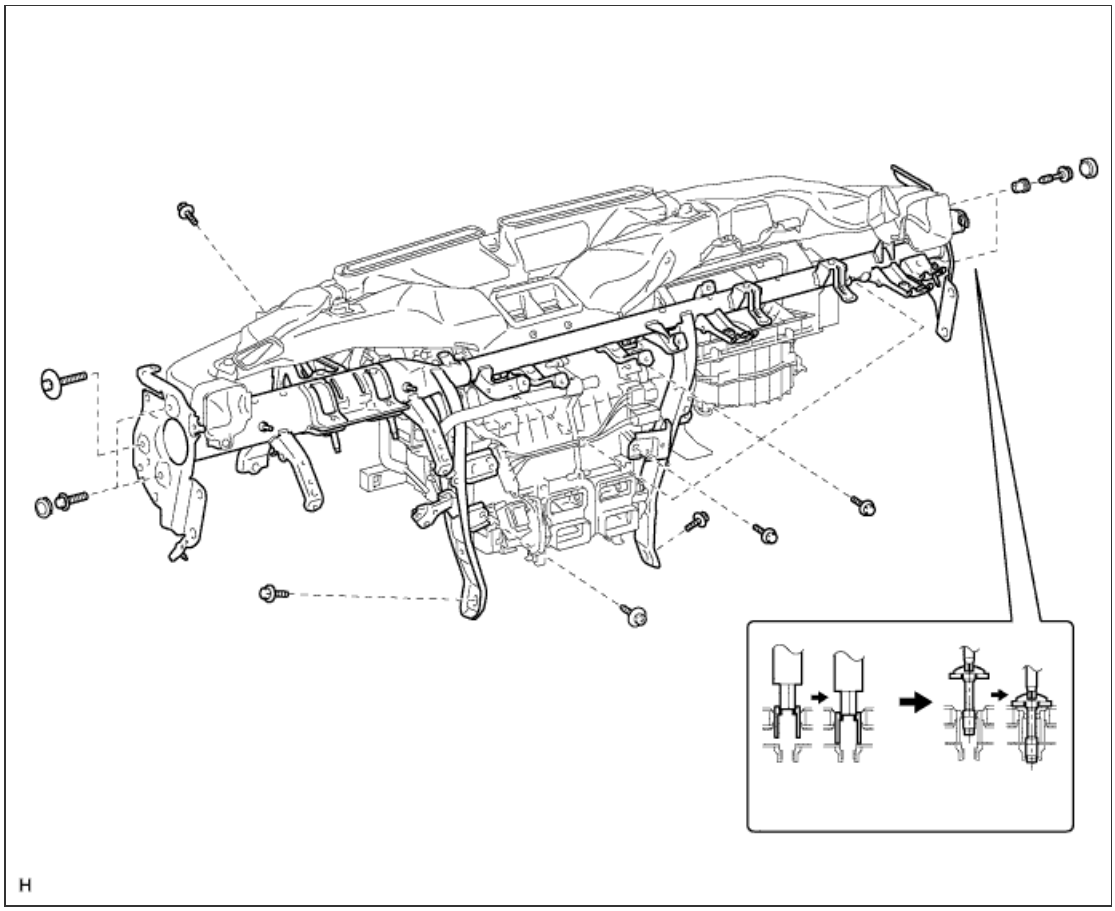
Torque:
18 N*m{ 184 kgf*cm , 13 ft.*lbf }

iv. for Passenger Side:
Install the 2 caps.

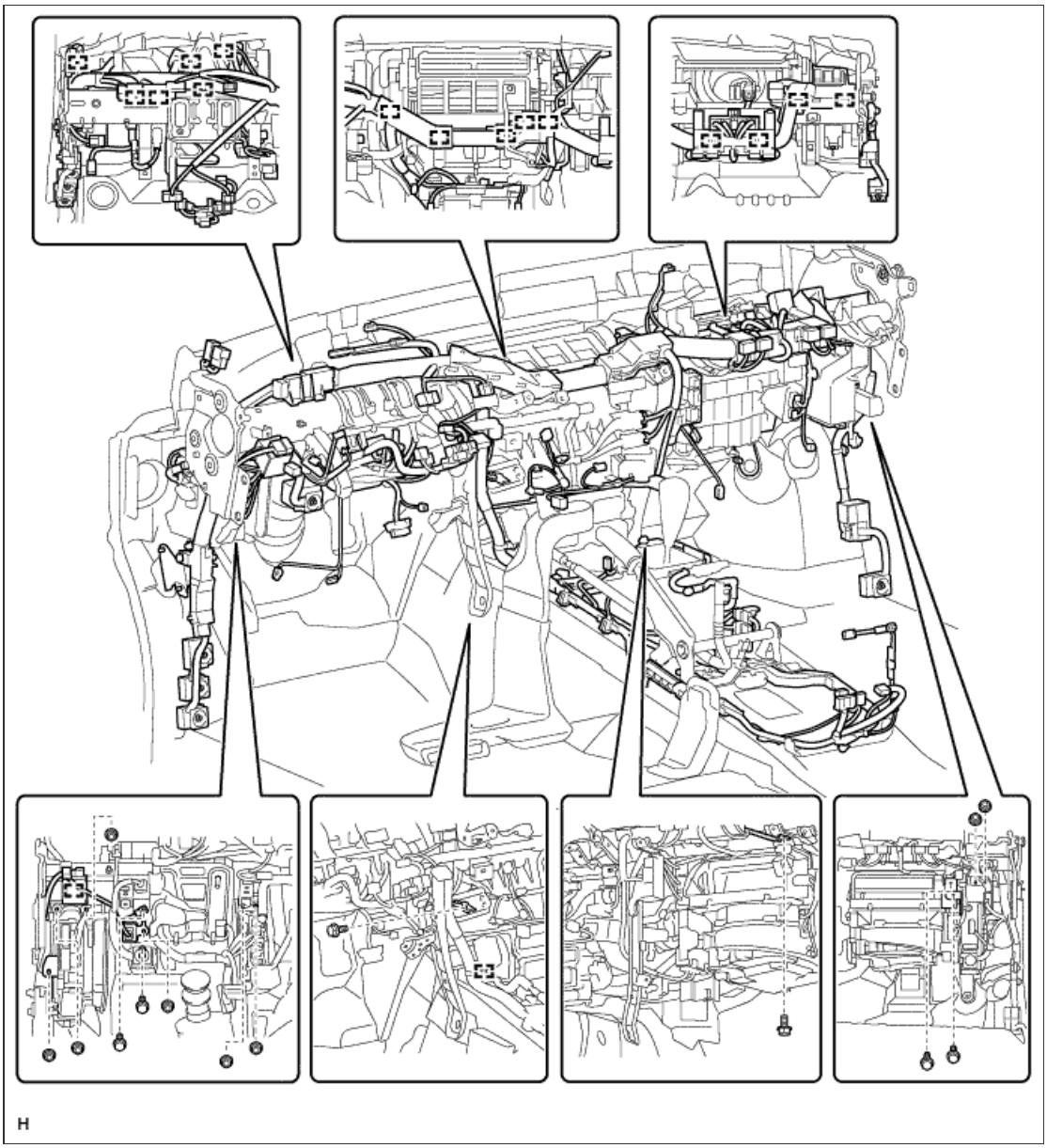
v. for Driver Side:
Install the 3 bolts.

Torque:
18 N*m{ 184 kgf*cm , 13 ft.*lbf }

vi. for Driver Side:
Install the 3 caps.



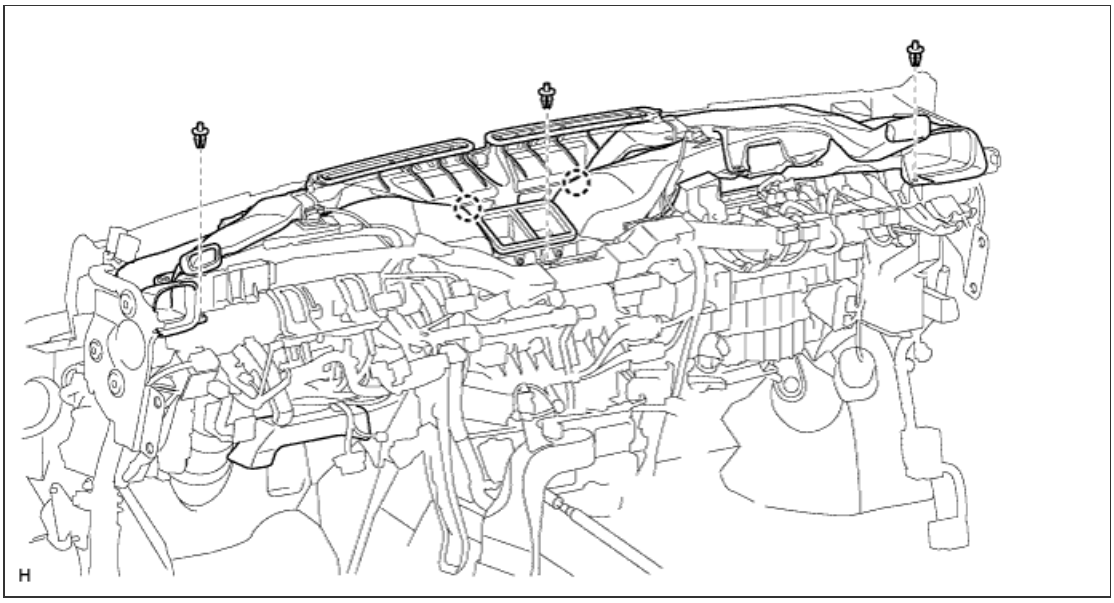
b. Attach the clamps to the wire harness and connect the connectors.



4. INSTALL HEATER TO REGISTER DUCT ASSEMBLY

a. Attach the 2 claws to install the duct.

b. Install the 3 clips.



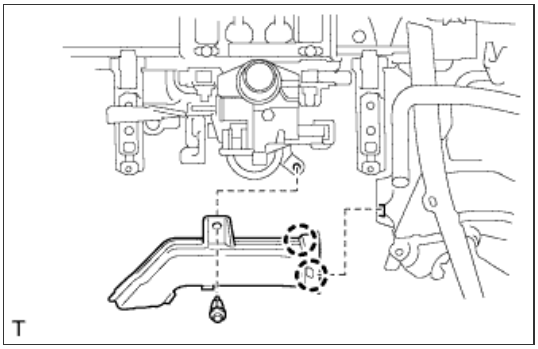
5. INSTALL STEERING COLUMN ASSEMBLY

a. Install the steering column (Click here).

6. INSTALL NO. 3 AIR DUCT SUB-ASSEMBLY

a. Attach the 2 claws to install the duct.

b. Install the clip.



7. INSTALL INSTRUMENT PANEL SUB-ASSEMBLY

a. Install the instrument panel (Click here).

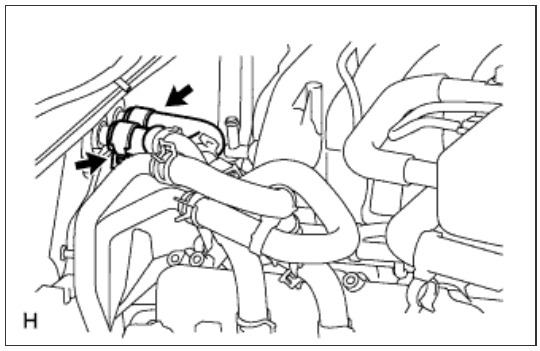
8. INSTALL FRONT WIPER MOTOR AND BRACKET

a. Install the front wiper motor and bracket (Click here).

9. CONNECT HEATER WATER INLET HOSE AND HEATER WATER OUTLET HOSE

a. Connect the 2 heater water hoses.

b. Using pliers, grip the claws of the clips and slide the 2 clips.



10. CONNECT AIR CONDITIONING TUBE ASSEMBLY

a. Remove the attached vinyl tape from the tubes.

b. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the air conditioning tube assembly.

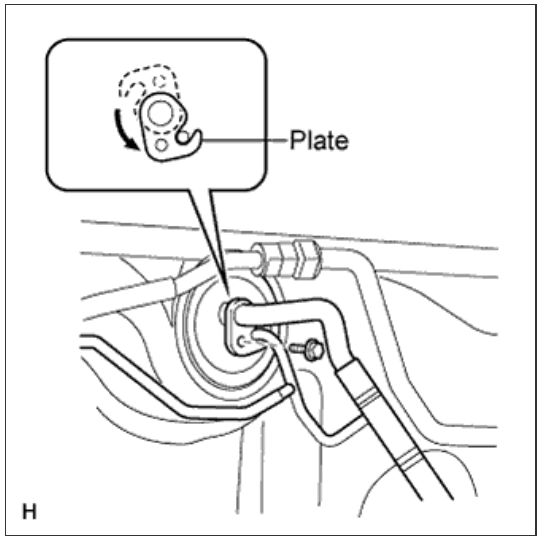
Compressor oil:
ND-OIL 8 or equivalent

c. Install the 2 O-rings to the air conditioning tube assembly.

d. Connect the air conditioning tube assembly.

e. Attach the plate as shown in the illustration and install the bolt.

Torque:
5.4 N*m{ 55 kgf*cm , 47 in.*lbf }



11. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

12. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

13. ADD ENGINE COOLANT

a. Add engine coolant.

Standard Capacity:

Item	Specified Condition
with transmission oil cooler	16.7 liters (17.6 US qts, 14.7 Imp. qts)
without transmission oil cooler	16.2 liters (17.1 US qts, 14.3 Imp. qts)

NOTICE:

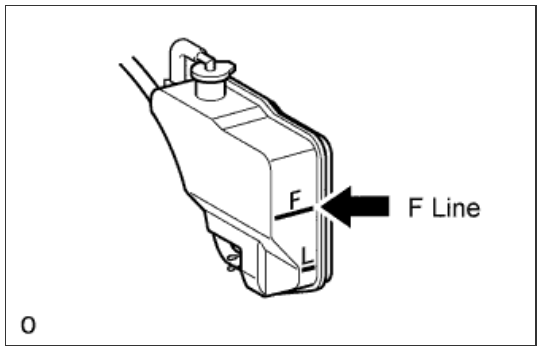
Do not substitute plain water for engine coolant.

HINT:

TOYOTA vehicles are filled with TOYOTA SLLC at the factory. In order to avoid damage to the engine cooling system and other technical problems, only use TOYOTA SLLC or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, non-borate coolant with long-life hybrid organic acid technology (coolant with long-life hybrid organic acid technology consists of a combination of low

phosphates and organic acids).

b. Slowly pour coolant into the radiator reservoir until it reaches the F line.



c. Install the reservoir cap.

d. Press the No. 1 and No. 2 radiator hoses several times by hand, and then check the coolant level. If the coolant level is low, add coolant.

e. Install the radiator cap.

f. Start the engine and warm it up until the thermostat opens.

NOTICE:

Switch off the A/C.

g. Maintain the engine speed at 2000 to 2500 rpm.

NOTICE:

- **Make sure that the radiator reservoir still has some coolant in it.**
- **Pay attention to the needle of the water temperature meter. Make sure that the needle does not show an abnormally high temperature.**
- **If there is not enough coolant, the engine may burn out or overheat.**
- **Immediately after starting the engine, if the radiator reservoir does not have any coolant, perform the following: 1) stop the engine, 2) wait until the coolant has cooled down, and 3) add coolant until the coolant is filled to the F line.**
- **Run the engine at 2000 rpm until the coolant level has stabilized.**

h. Press the No. 1 and No. 2 radiator hoses several times by hand to bleed air.

CAUTION:

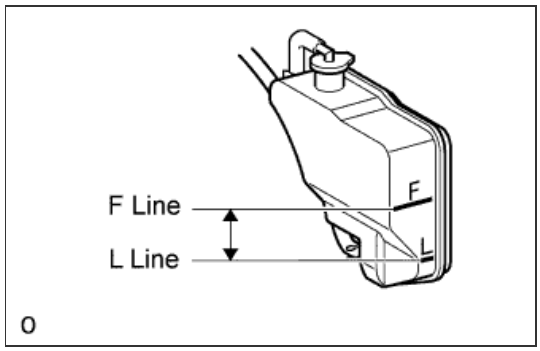
- **Wear protective gloves.**
- **Be careful as the radiator hoses are hot.**
- **Keep your hands away from the fan.**

i. Stop the engine, and wait until the engine coolant cools down to ambient temperature.

CAUTION:

Do not remove the radiator cap while the engine and radiator are still hot. Pressurized, hot engine coolant and steam may be released and cause serious burns.

j. Check that the coolant level is between the F and L lines.
If the coolant level is below the L line, repeat all of the procedures above.
If the coolant level is above the F line, drain coolant so that the coolant level is between the F and L lines.



14. CHARGE REFRIGERANT

SST

09985-20010 (09985-02130, 09985-02150, 09985-02090, 09985-02110, 09985-02010, 09985-02050, 09985-02060, 09985-02070)

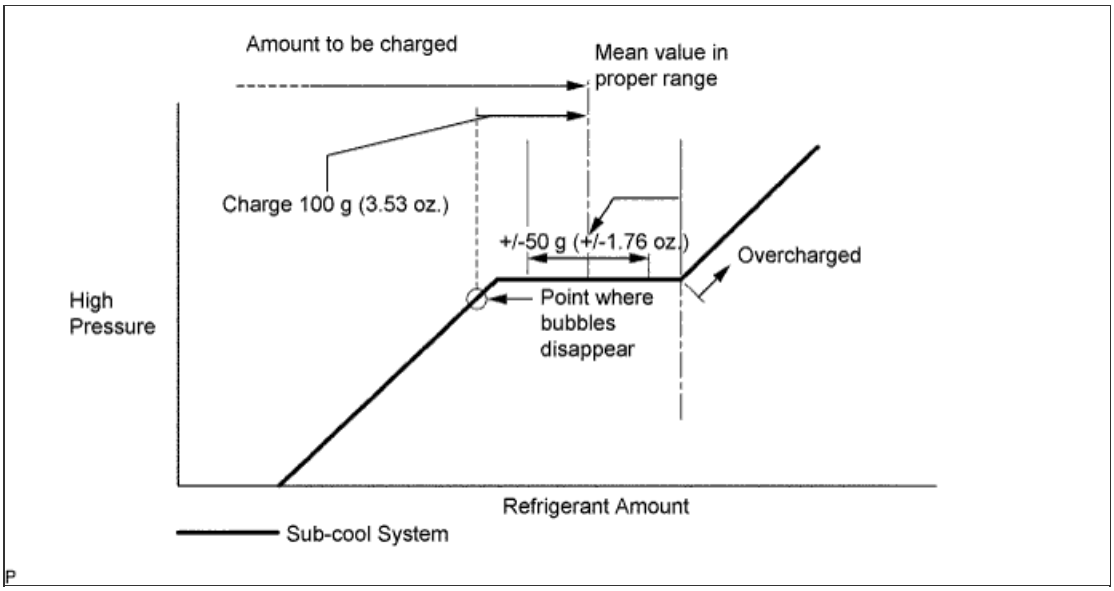
a. Perform vacuum purging using a vacuum pump.

b. Charge refrigerant HFC-134a (R134a).

Standard:

Condenser Core Thickness	Cool Box	Refrigerant Charging Amount

22 mm (0.866 in.)	w/ Cool Box	1010 +/-30 g (35.6 +/-1.1 oz.)
	w/o Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
16 mm (0.630 in.)	w/ Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
	w/o Cool Box	920 +/-30 g (32.5 +/-1.1 oz.)



NOTICE:

- **Do not operate the cooler compressor before charging refrigerant as the cooler compressor will not work properly without any refrigerant, and will overheat.**
- **Approximately 100 g (3.53 oz.) of refrigerant may need to be charged after bubbles disappear. The refrigerant amount should be checked by measuring its quantity, and not with the sight glass.**

15. WARM UP ENGINE

a. Warm up the engine at less than 1850 rpm for 2 minutes or more after charging the refrigerant.

NOTICE:

Be sure to warm up the compressor when turning the A/C switch on after removing and installing the cooler refrigerant lines (including the compressor), to prevent damage to the compressor.

16. CHECK FOR ENGINE COOLANT LEAK

17. CHECK FOR REFRIGERANT GAS LEAK

a. After recharging the refrigerant gas, check for refrigerant gas leakage using a halogen leak detector.

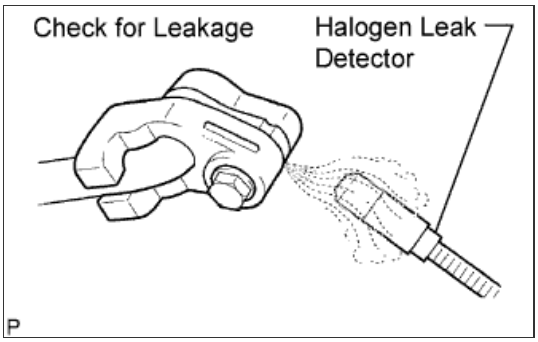
b. Perform the operation under these conditions:

- Stop the engine.
- Secure good ventilation (the halogen leak detector may react to volatile gases other than refrigerant, such as evaporated gasoline or exhaust gas).
- Repeat the test 2 or 3 times.
- Make sure that some refrigerant remains in the refrigeration system. When compressor is off: approximately 392 to 588 kPa (4.0 to 6.0 kgf/cm^2, 57 to 85 psi).

c. Using a halogen leak detector, check the refrigerant line for leakage.

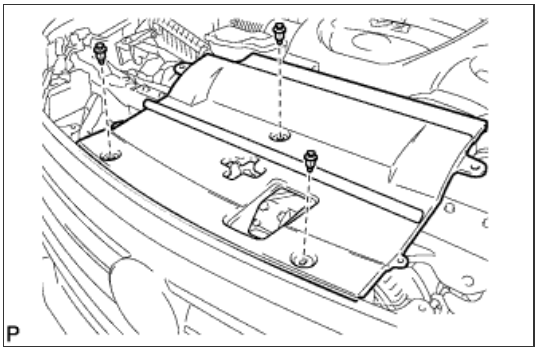
d. If a gas leak is not detected on the drain hose, remove the blower motor control (blower resistor) from the cooling unit. Insert the halogen leak detector sensor into the unit and perform the test.

e. Disconnect the connector and wait for approximately 20 minutes. Bring the halogen leak detector close to the pressure switch and perform the test.



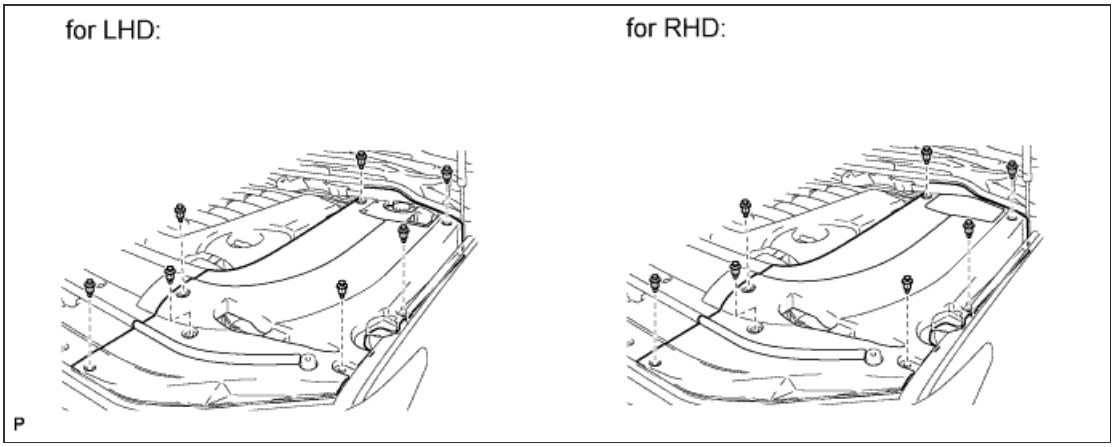
18. INSTALL UPPER RADIATOR SUPPORT SEAL

a. Install the upper radiator support seal with the 3 clips.



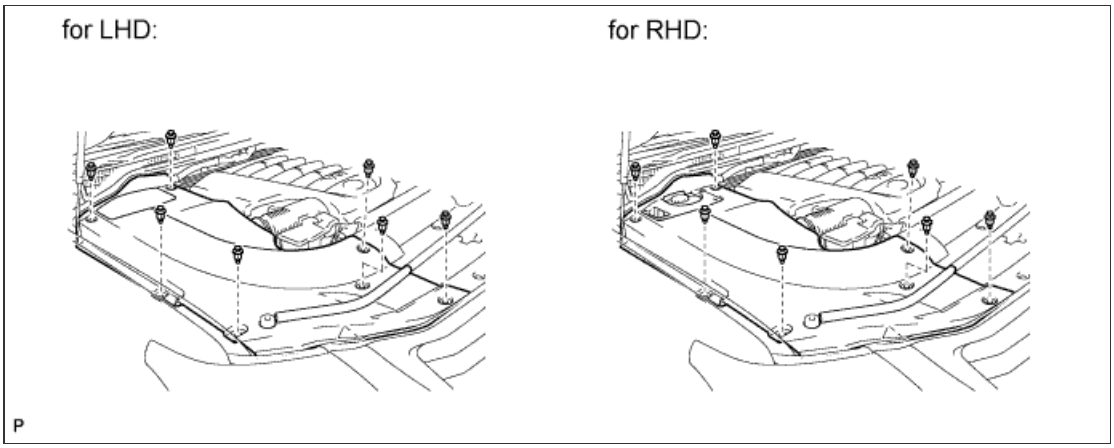
19. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



20. INSTALL ENGINE ROOM SIDE COVER RH

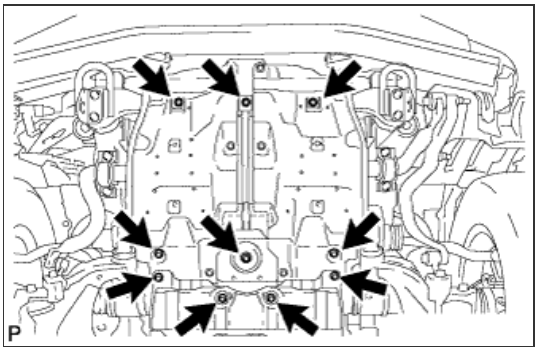
a. Install the engine room side cover with the 7 clips.



21. INSTALL NO. 1 ENGINE UNDER COVER SUB-ASSEMBLY

a. Install the No. 1 engine under cover with the 10 bolts.

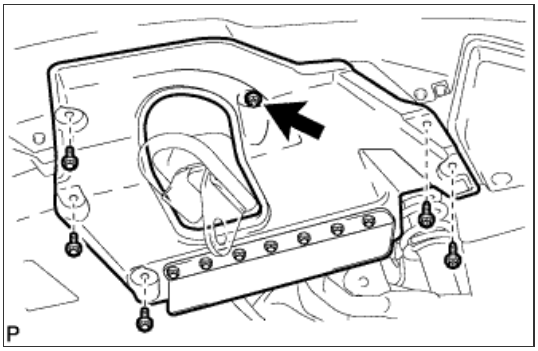
Torque:
29 N*m{ 296 kgf*cm , 21 ft.*lbf }



22. INSTALL FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY LH

a. Push in the clip indicated by the arrow in the illustration to install the fender splash shield.

b. Install the 3 bolts and 2 screws.

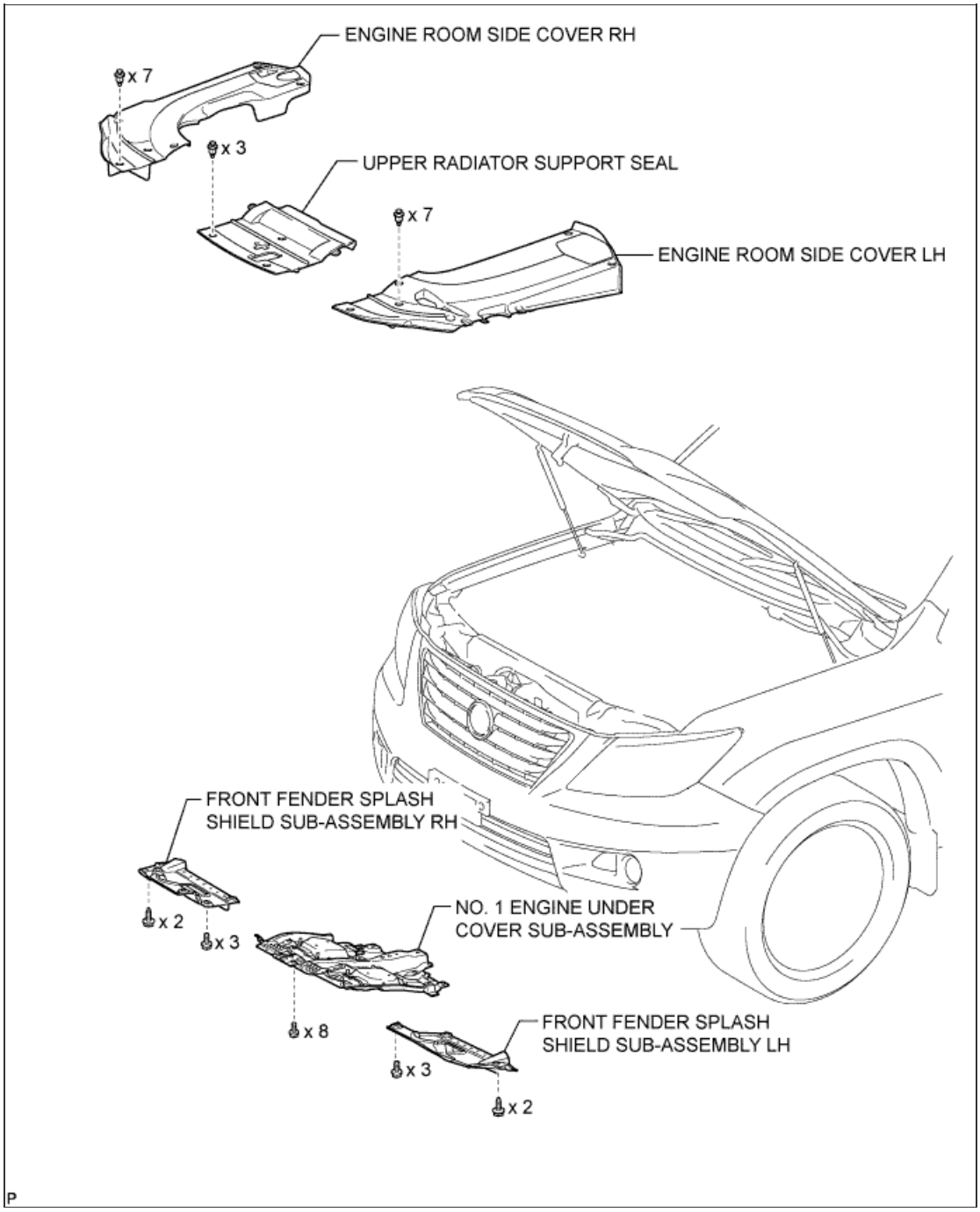


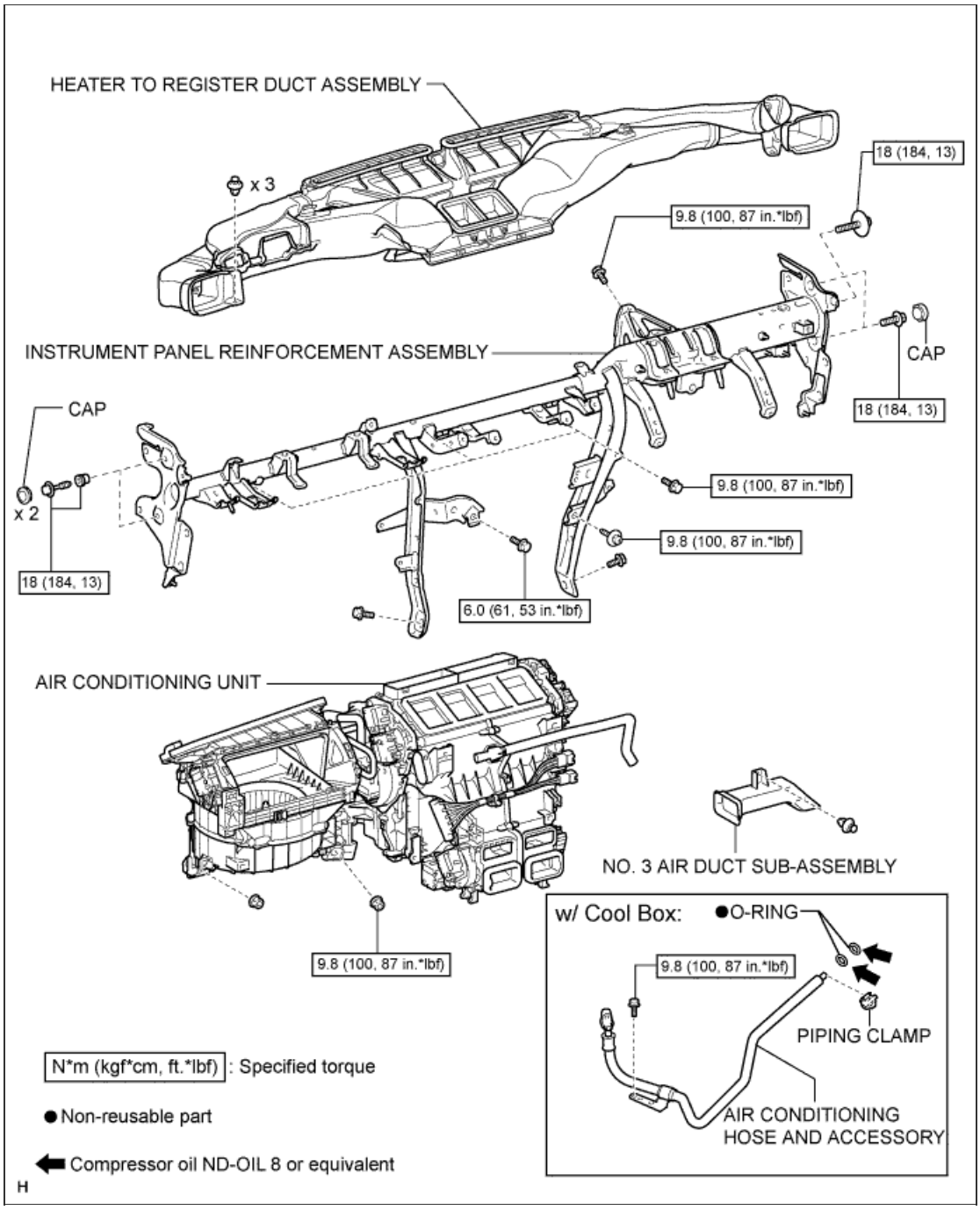
23. INSTALL FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY RH

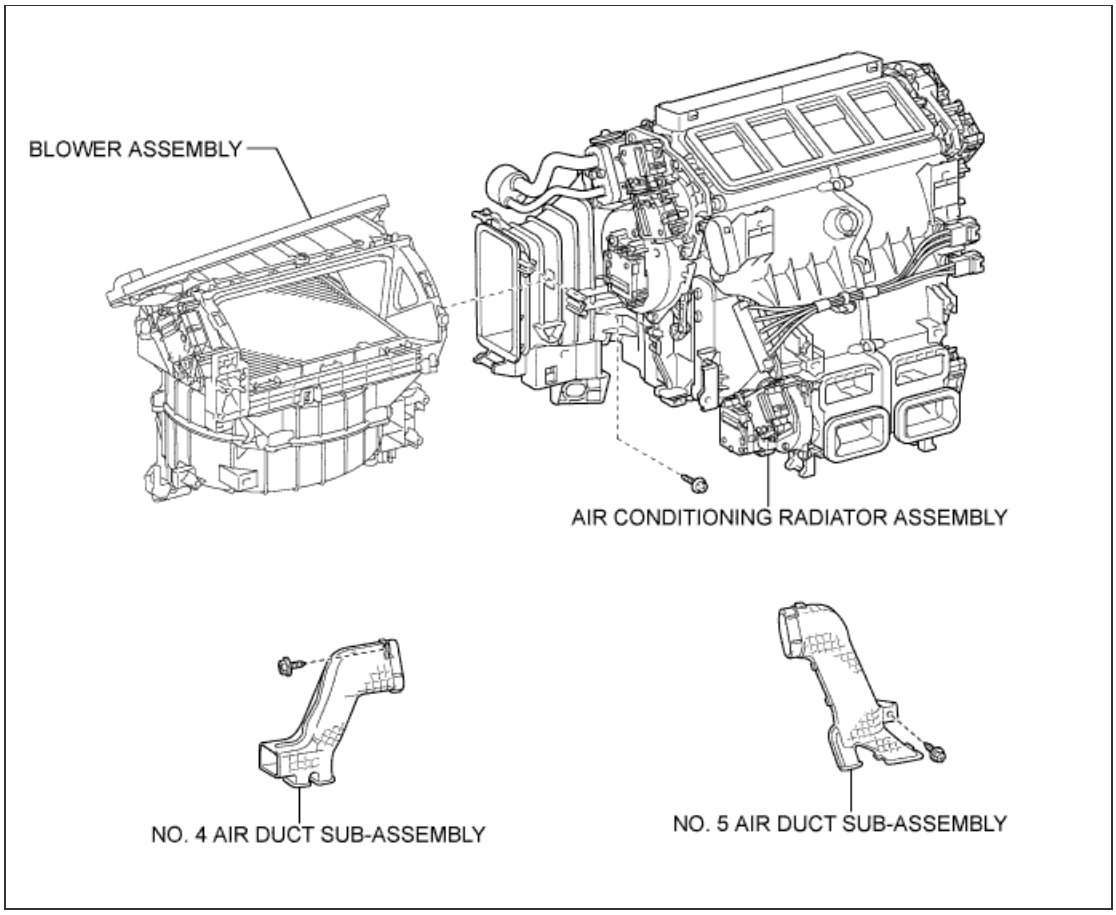
HINT:

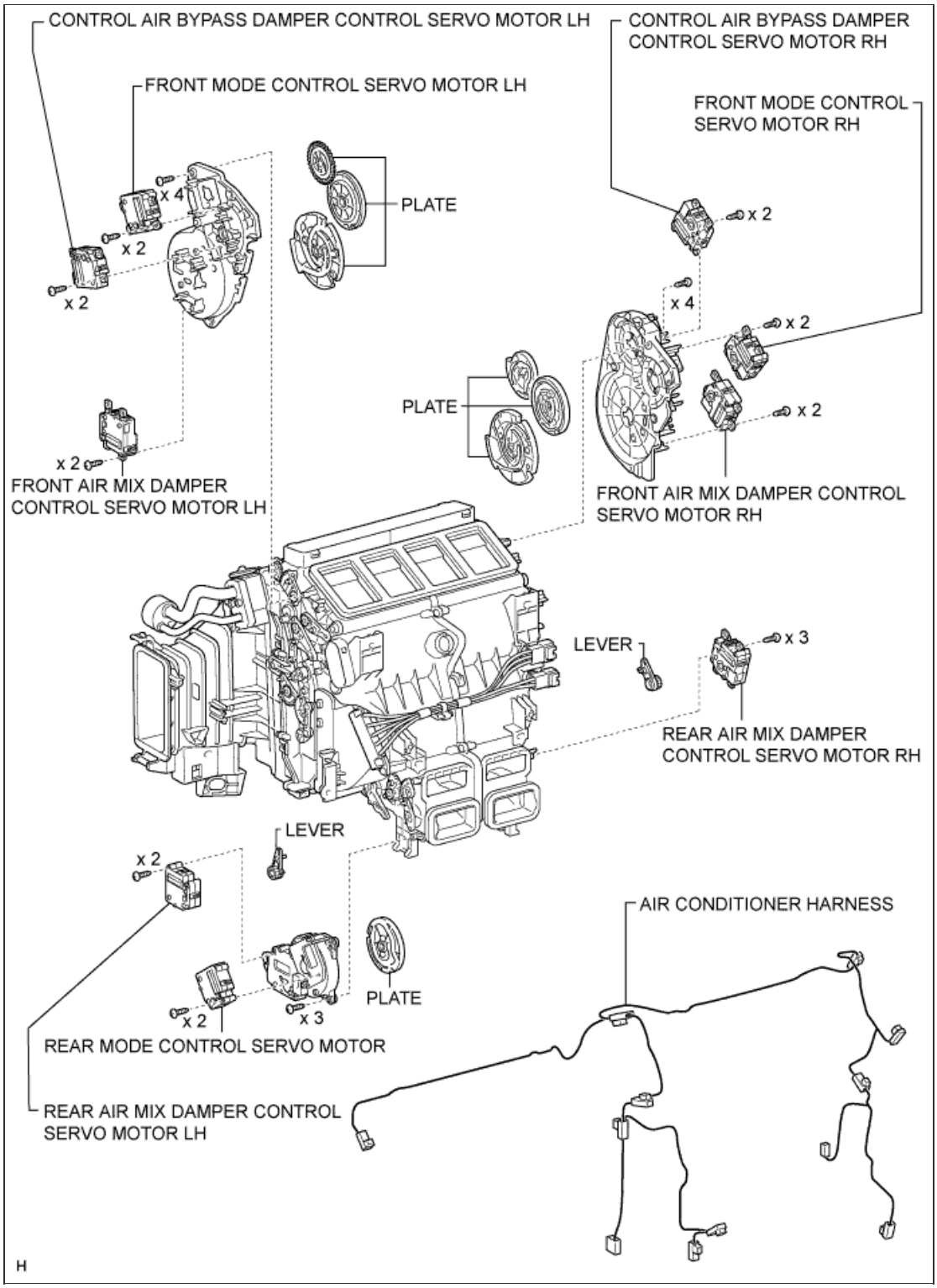
Use the same procedures described for the LH side.

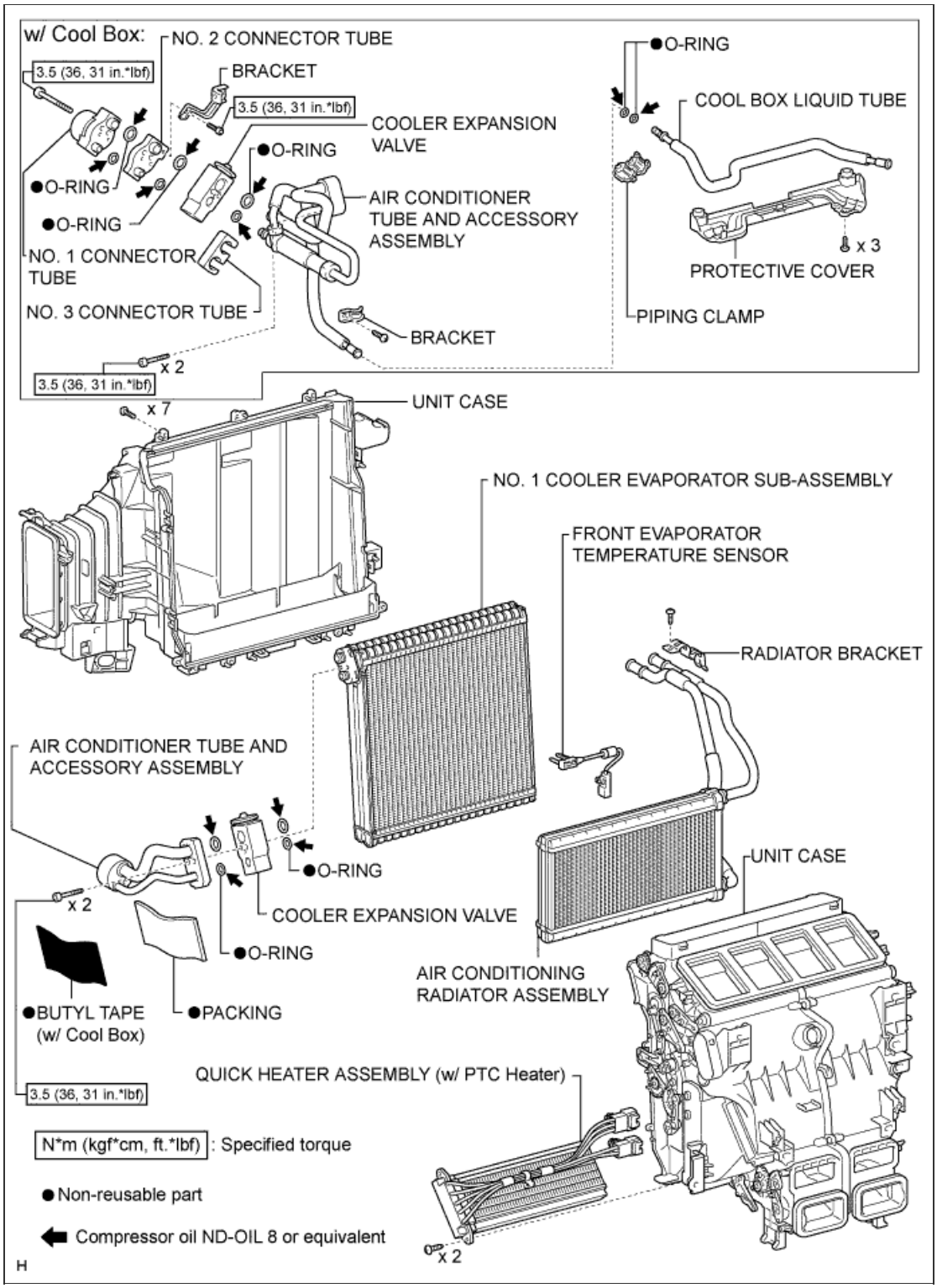
for Preparation Click here




HEATER TO REGISTER DUCT ASSEMBLY
x 3
18 (184, 13)
9.8 (100, 87 in.*lbf)
INSTRUMENT PANEL REINFORCEMENT ASSEMBLY
CAP
18 (184, 13)
CAP
x 2
18 (184, 13)
9.8 (100, 87 in.*lbf)
9.8 (100, 87 in.*lbf)
6.0 (61, 53 in.*lbf)
AIR CONDITIONING UNIT
NO. 3 AIR DUCT SUB-ASSEMBLY
9.8 (100, 87 in.*lbf)
w/ Cool Box:
O-RING
9.8 (100, 87 in.*lbf)
PIPING CLAMP
AIR CONDITIONING
HOSE AND ACCESSORY
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
Compressor oil ND-OIL 8 or equivalent
H


BLOWER ASSEMBLY
AIR CONDITIONING RADIATOR ASSEMBLY
NO. 4 AIR DUCT SUB-ASSEMBLY
NO. 5 AIR DUCT SUB-ASSEMBLY


CONTROL AIR BYPASS DAMPER CONTROL SERVO MOTOR LH
CONTROL AIR BYPASS DAMPER CONTROL SERVO MOTOR RH
FRONT MODE CONTROL SERVO MOTOR LH
FRONT MODE CONTROL SERVO MOTOR RH
x 4
x 2
x 2
PLATE
x 2
x 4
x 2
PLATE
x 2
x 2
FRONT AIR MIX DAMPER CONTROL SERVO MOTOR LH
FRONT AIR MIX DAMPER CONTROL SERVO MOTOR RH
LEVER
x 3
REAR AIR MIX DAMPER CONTROL SERVO MOTOR RH
LEVER
x 2
AIR CONDITIONER HARNESS
PLATE
x 2
x 3
REAR MODE CONTROL SERVO MOTOR
REAR AIR MIX DAMPER CONTROL SERVO MOTOR LH
H

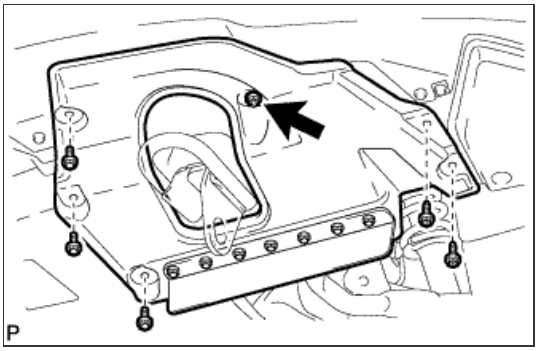

w/ Cool Box:
NO. 2 CONNECTOR TUBE
3.5 (36, 31 in.*lbf)
BRACKET
3.5 (36, 31 in.*lbf)
COOLER EXPANSION VALVE
●O-RING
●O-RING
●O-RING
AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY
NO. 1 CONNECTOR TUBE
NO. 3 CONNECTOR TUBE
BRACKET
x 2
3.5 (36, 31 in.*lbf)
●O-RING
COOL BOX LIQUID TUBE
x 3
PROTECTIVE COVER
PIPING CLAMP
x 7
UNIT CASE
NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY
FRONT EVAPORATOR TEMPERATURE SENSOR
RADIATOR BRACKET
AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY
●O-RING
x 2
COOLER EXPANSION VALVE
●O-RING
●BUTYL TAPE (w/ Cool Box)
●PACKING
3.5 (36, 31 in.*lbf)
UNIT CASE
AIR CONDITIONING RADIATOR ASSEMBLY
QUICK HEATER ASSEMBLY (w/ PTC Heater)
x 2
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
Compressor oil ND-OIL 8 or equivalent
H

for Preparation Click here

1. REMOVE FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY LH

a. Remove the 3 bolts and 2 screws.

b. Turn the clip indicated by the arrow in the illustration to remove the fender splash shield.



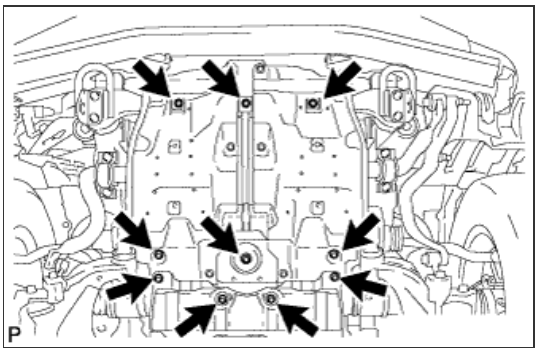
2. REMOVE FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

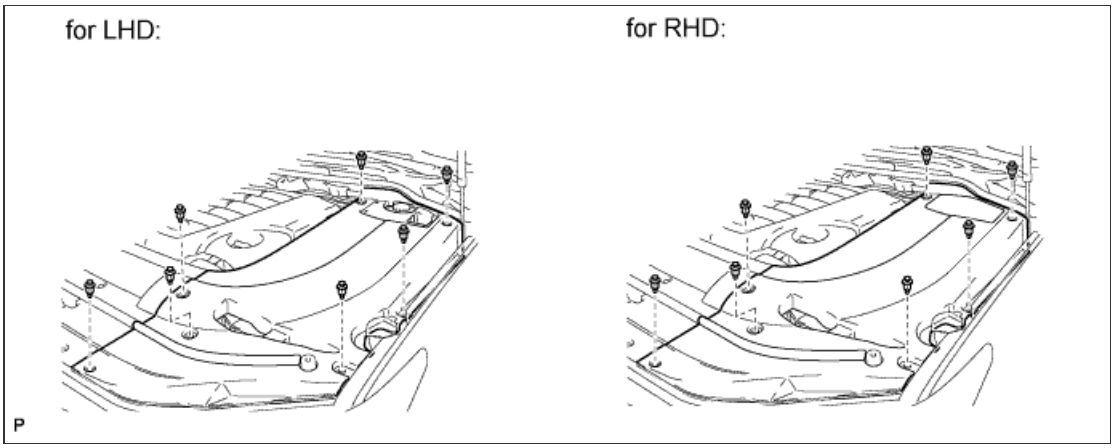
3. REMOVE NO. 1 ENGINE UNDER COVER SUB-ASSEMBLY

a. Remove the 10 bolts and No. 1 engine under cover.



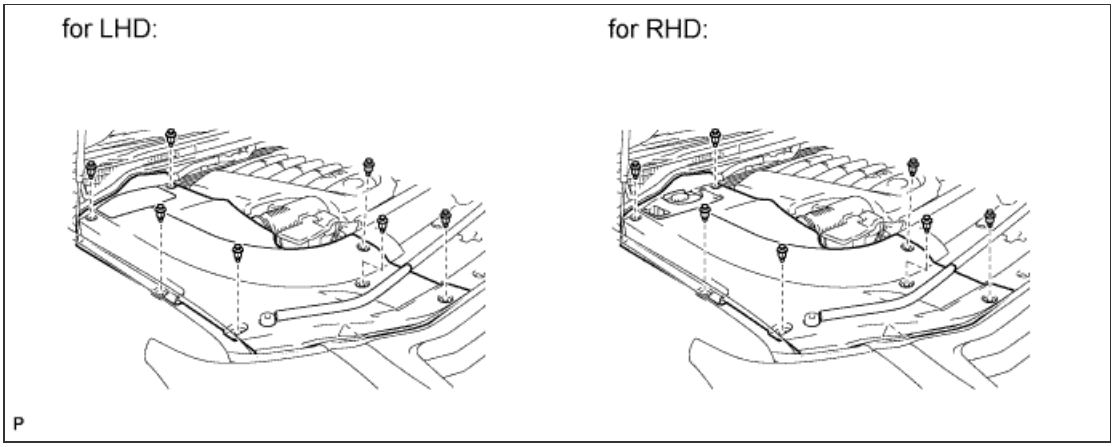
4. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



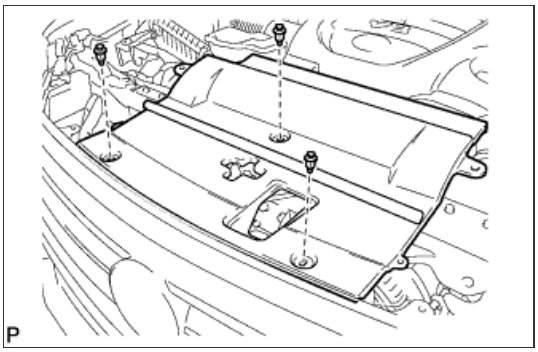
5. REMOVE ENGINE ROOM SIDE COVER RH

a. Remove the 7 clips and engine room side cover.



6. REMOVE UPPER RADIATOR SUPPORT SEAL

a. Remove the 3 clips and upper radiator support seal.



7. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM

a. Start the engine.

b. Turn the A/C switch on.

c. Operate the cooler compressor while the engine speed is approximately 1000 rpm for 5 to 6 minutes to circulate the refrigerant and collect the compressor oil remaining in each component into the cooler compressor.

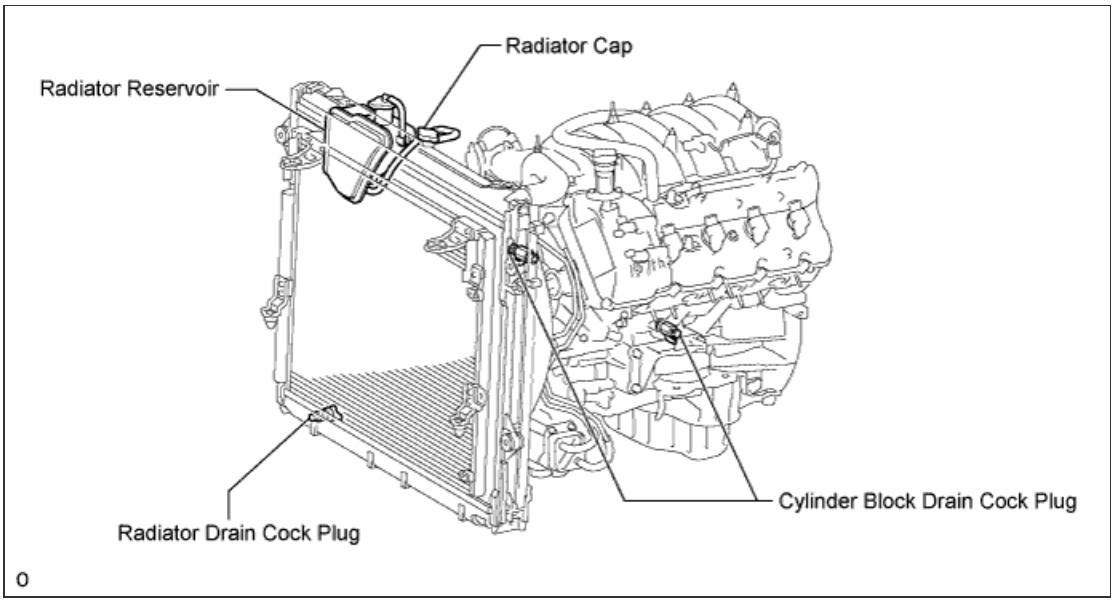
d. Stop the engine.

e. Recover the refrigerant from the A/C system using a refrigerant recovery unit.

8. DRAIN ENGINE COOLANT

CAUTION:

Do not remove the radiator cap while the engine and radiator are still hot. Pressurized, hot engine coolant and steam may be released and cause serious burns.



a. Loosen the radiator drain cock plug.

HINT:

Collect the coolant in a container and dispose of it according to the regulations in your area.

b. Remove the radiator cap. Then drain the coolant from the radiator.

c. Loosen the 2 cylinder block drain cock plugs. Then drain the coolant from the engine.

d. Tighten the 2 cylinder block drain cock plugs.

Torque:
13 N*m{ 130 kgf*cm , 10 ft.*lbf }

e. Tighten the radiator drain cock plug by hand.

9. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

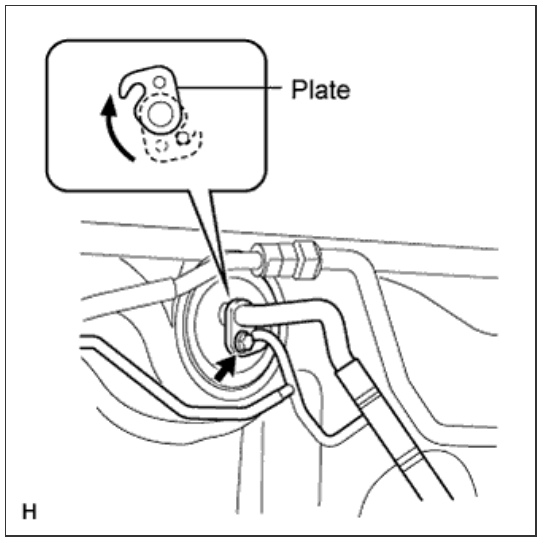
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

10. DISCONNECT AIR CONDITIONING TUBE ASSEMBLY

a. Remove the bolt.

b. Detach the plate as shown in the illustration.

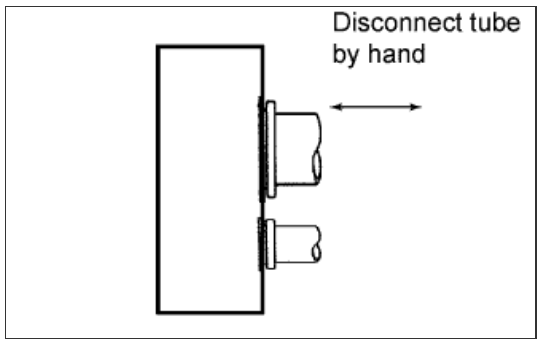


c. Disconnect the air conditioning tube assembly.

NOTICE:

- **Do not use a screwdriver or similar tool to disconnect the tube.**
- **Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.**

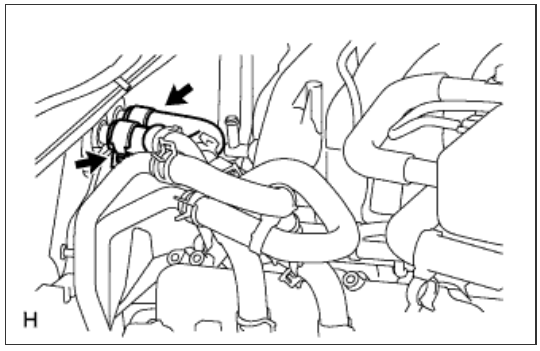
d. Remove the 2 O-rings from the air conditioning tube assembly.



11. DISCONNECT HEATER WATER INLET HOSE AND HEATER WATER OUTLET HOSE

a. Using pliers, grip the claws of the clips and slide the 2 clips.

b. Disconnect the 2 heater water hoses.



12. REMOVE FRONT WIPER MOTOR AND BRACKET

a. Remove the front wiper motor and bracket (Click here).

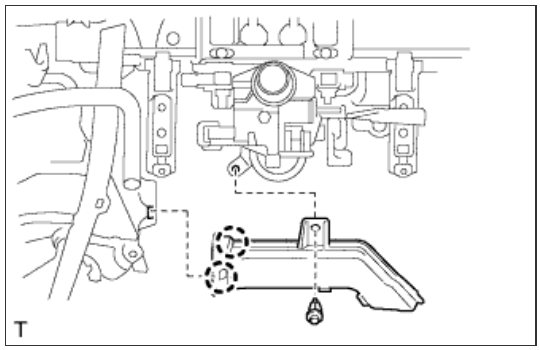
13. REMOVE INSTRUMENT PANEL SUB-ASSEMBLY

a. Remove the instrument panel (Click here).

14. REMOVE NO. 3 AIR DUCT SUB-ASSEMBLY

a. Remove the clip.

b. Detach the 2 claws and remove the duct.



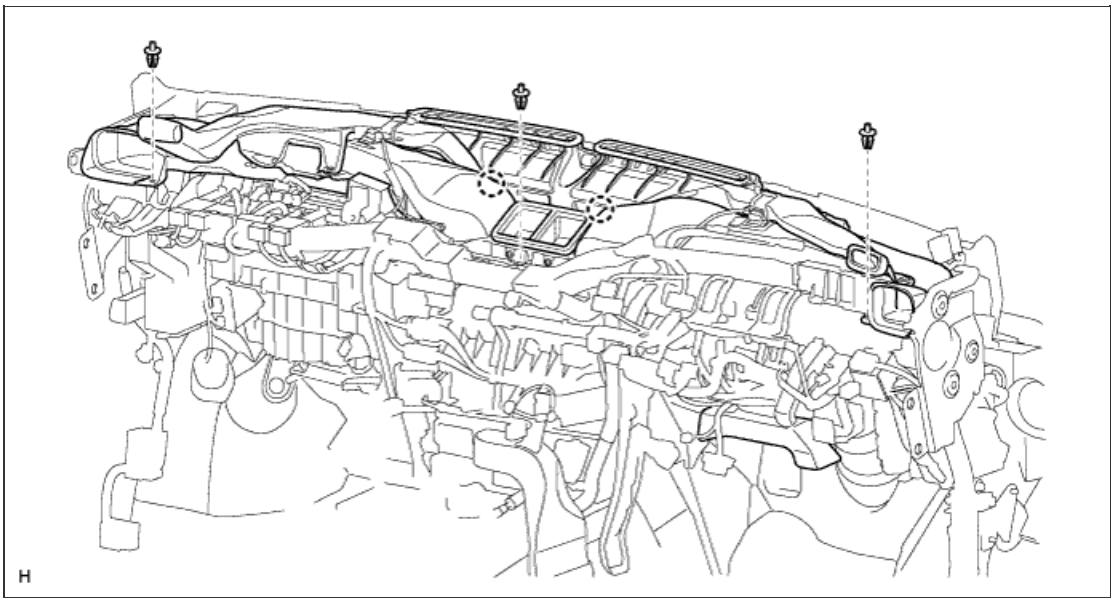
15. REMOVE STEERING COLUMN ASSEMBLY

a. Remove the steering column (Click here).

16. REMOVE HEATER TO REGISTER DUCT ASSEMBLY

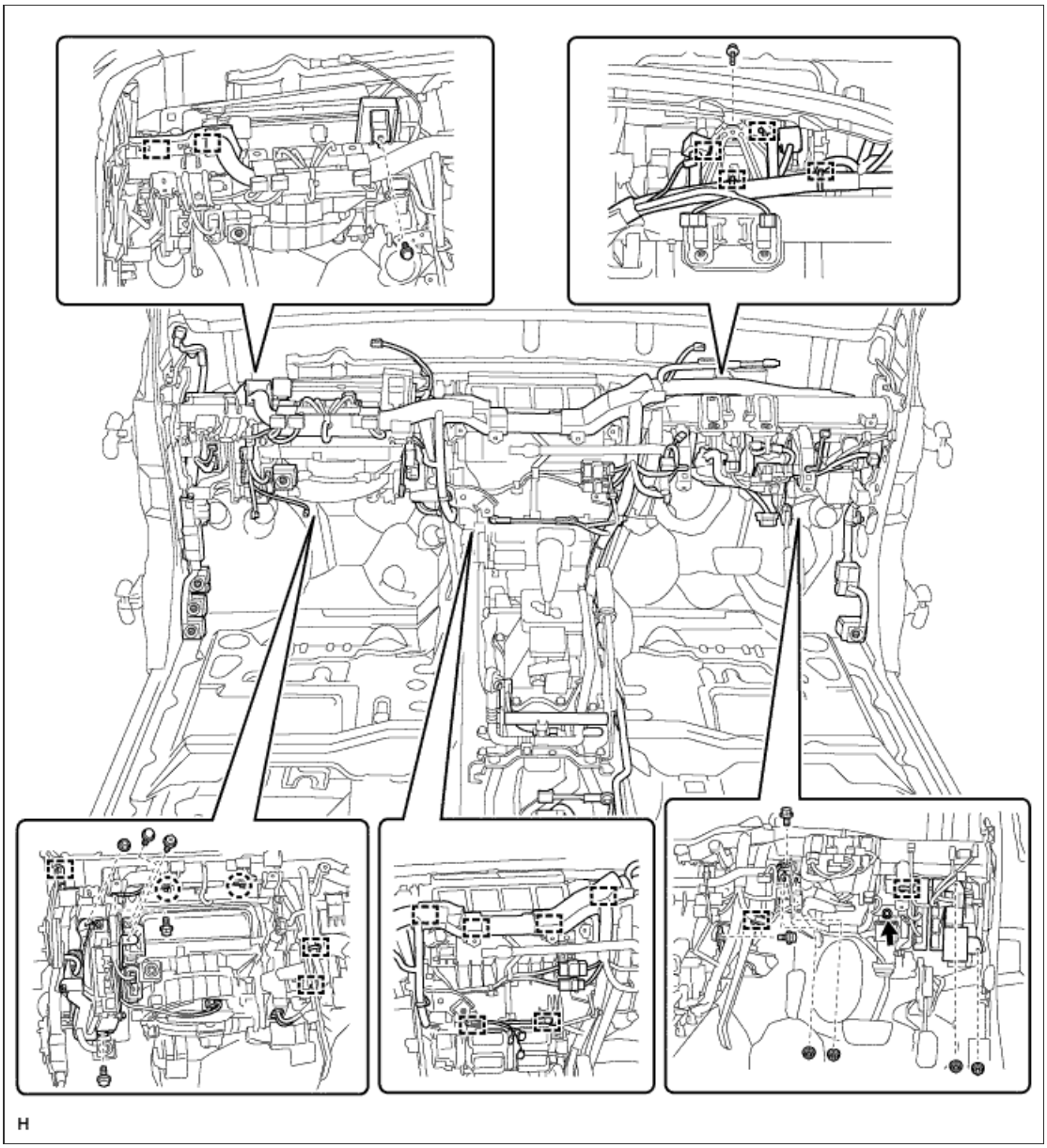
a. Remove the 3 clips.

b. Detach the 2 claws and remove the duct.



17. REMOVE INSTRUMENT PANEL REINFORCEMENT ASSEMBLY

a. Disconnect the clamps, connectors and wire harness.



H

b. Remove the instrument panel reinforcement.

i. for Driver Side:
Remove the 3 caps and 3 bolts.

ii. for Passenger Side:
Remove the 2 caps.

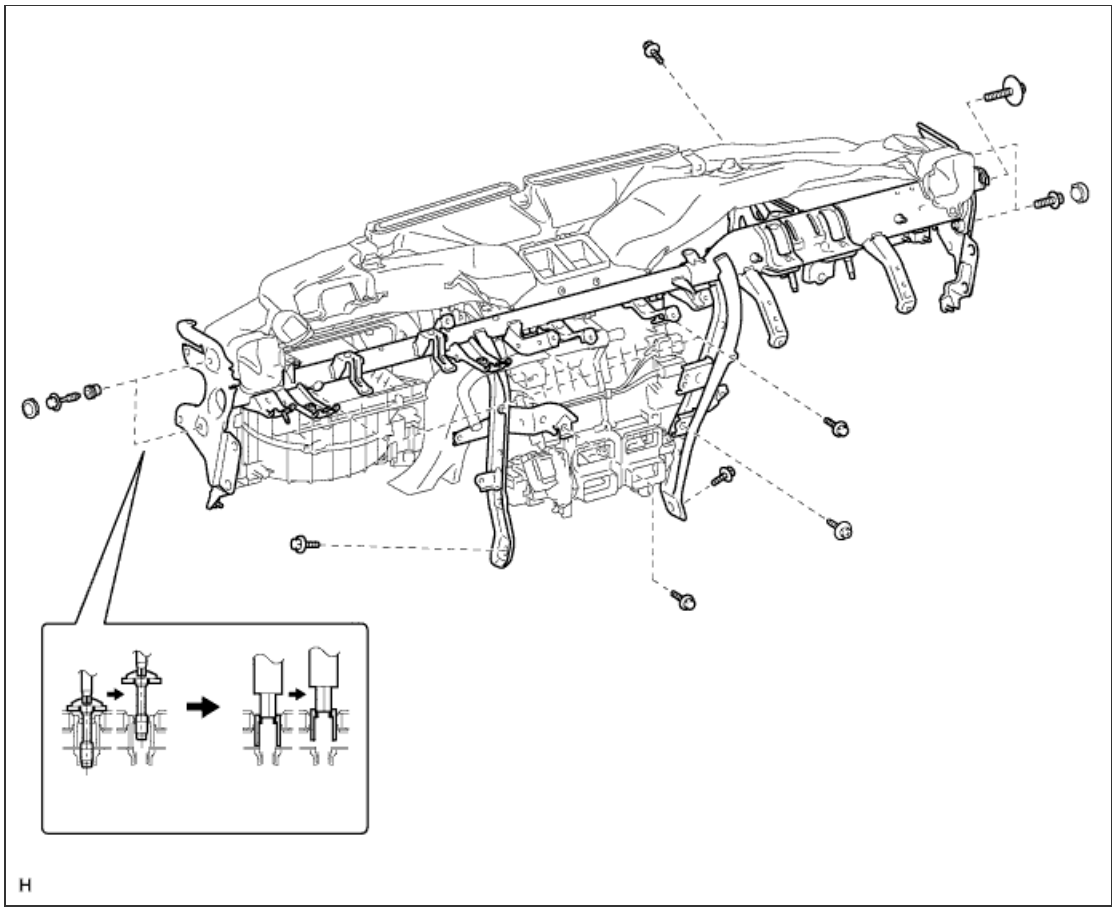
iii. for Passenger Side:
Using a T40 "TORX" socket, remove the 2 "TORX" bolts.

HINT:

When removing the bolts, the collars may come off with the bolts.

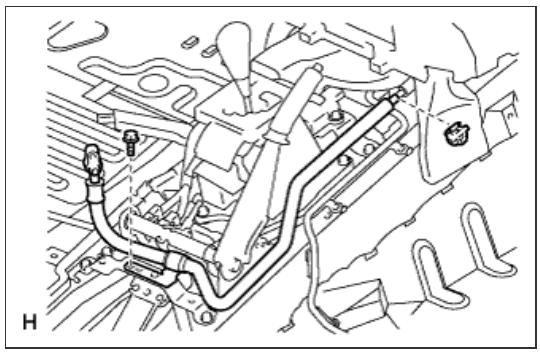
iv. for Passenger Side:
Using a 12 mm hexagon wrench, remove the 2 collars.

v. Remove the 7 bolts, screw and instrument panel reinforcement.



18. REMOVE AIR CONDITIONING HOSE AND ACCESSORY (w/ Cool Box)

a. Remove the bolt.



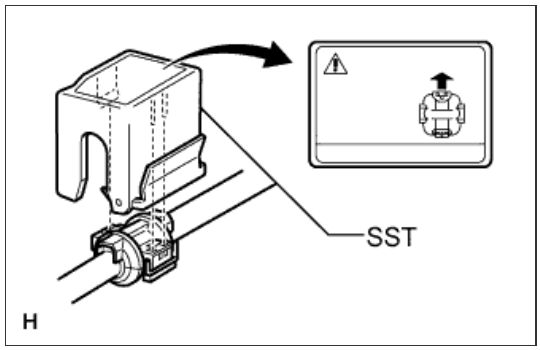
b. Using SST, remove the piping clamp.

SST
09870-00025

i. Attach SST to the piping clamp.

HINT:

Confirm the direction of the piping clamp claw and SST by referring to the illustration on the caution label.



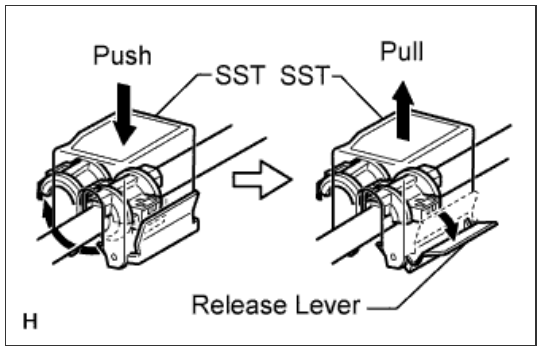
ii. Push down SST and release the clamp lock.

NOTICE:

Be careful not to deform the tubes when pushing SST.

iii. Pull SST slightly and push the release lever, then remove the piping clamp with SST.

iv. Remove the piping clamp from SST.



c. Remove the hose and accessory from the liquid tube.

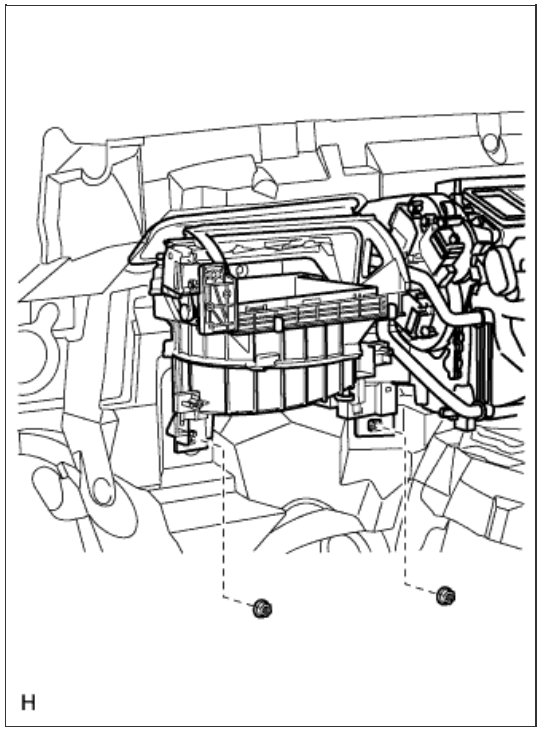
NOTICE:

Cap the open fittings immediately to keep moisture or dirt out of the system.

d. Remove the 2 O-rings from the air conditioning hose and accessory.

19. REMOVE AIR CONDITIONING UNIT

a. Remove the 2 nuts and air conditioning unit.



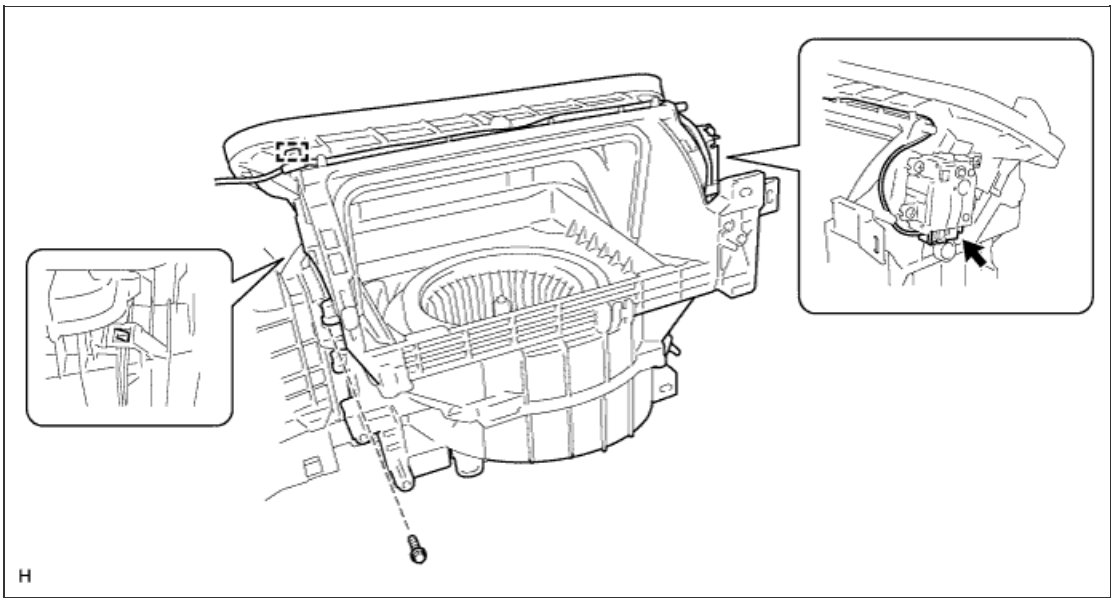
for Preparation Click here

1. REMOVE BLOWER ASSEMBLY

a. Remove the screw.

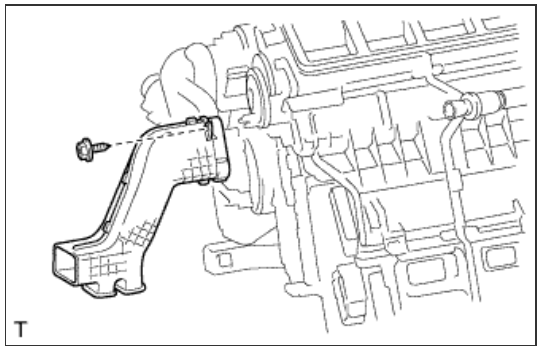
b. Disconnect the connector and clamp.

c. Detach the claw and remove the blower unit.



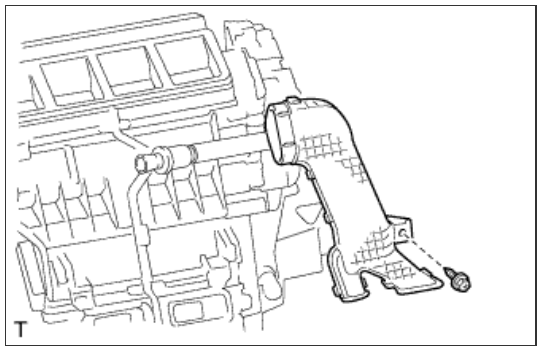
2. REMOVE NO. 4 AIR DUCT SUB-ASSEMBLY

a. Remove the screw and duct.



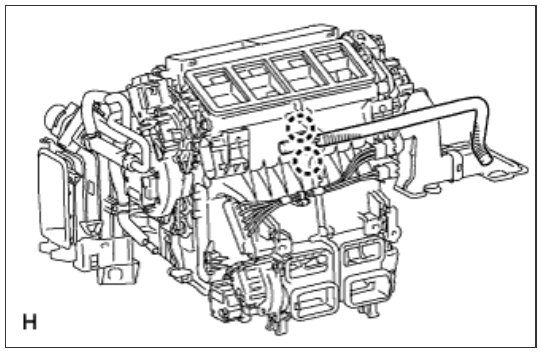
3. REMOVE NO. 5 AIR DUCT SUB-ASSEMBLY

a. Remove the screw and duct.



4. REMOVE ASPIRATOR

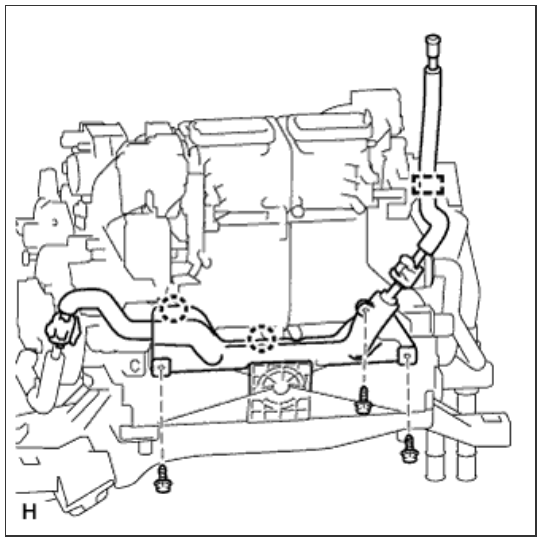
a. Detach the 2 claws and remove the aspirator.



5. REMOVE COOL BOX LIQUID TUBE (w/ Cool Box)

a. Remove the 3 screws.

b. Detach the 2 claws and remove the protective cover.



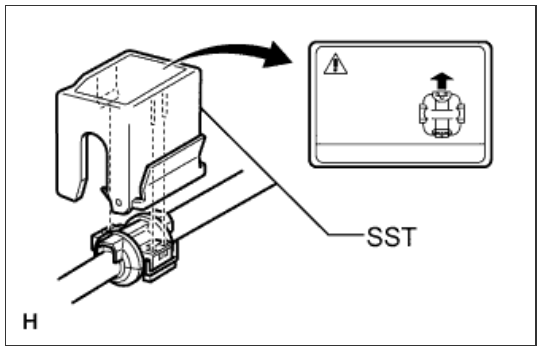
c. Using SST, remove the piping clamp.

SST
09870-00025

i. Attach SST to the piping clamp.

HINT:

Confirm the direction of the piping clamp claw and SST by referring to the illustration on the caution label.



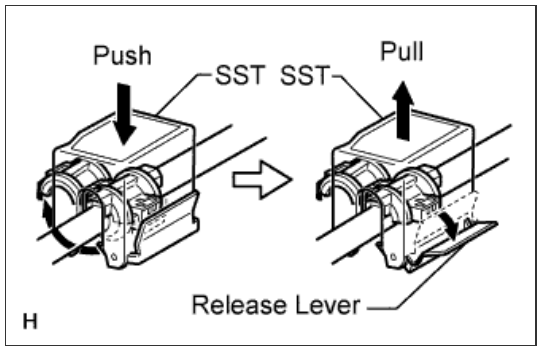
ii. Push down SST and release the clamp lock.

NOTICE:

Be careful not to deform the tubes when pushing SST.

iii. Pull SST slightly and push the release lever, then remove the piping clamp with SST.

iv. Remove the piping clamp from SST.



d. Disconnect the tube.

NOTICE:

Cap the open fittings immediately to keep moisture or dirt out of the system.

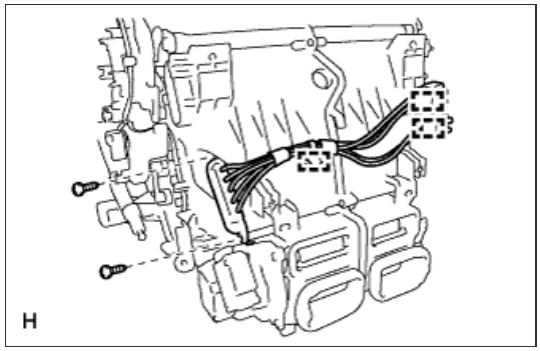
e. Detach the clamp and remove the liquid tube.

f. Remove the 2 O-rings from the liquid tube.

6. REMOVE QUICK HEATER ASSEMBLY (w/ PTC Heater)

a. Detach the 3 clamps.

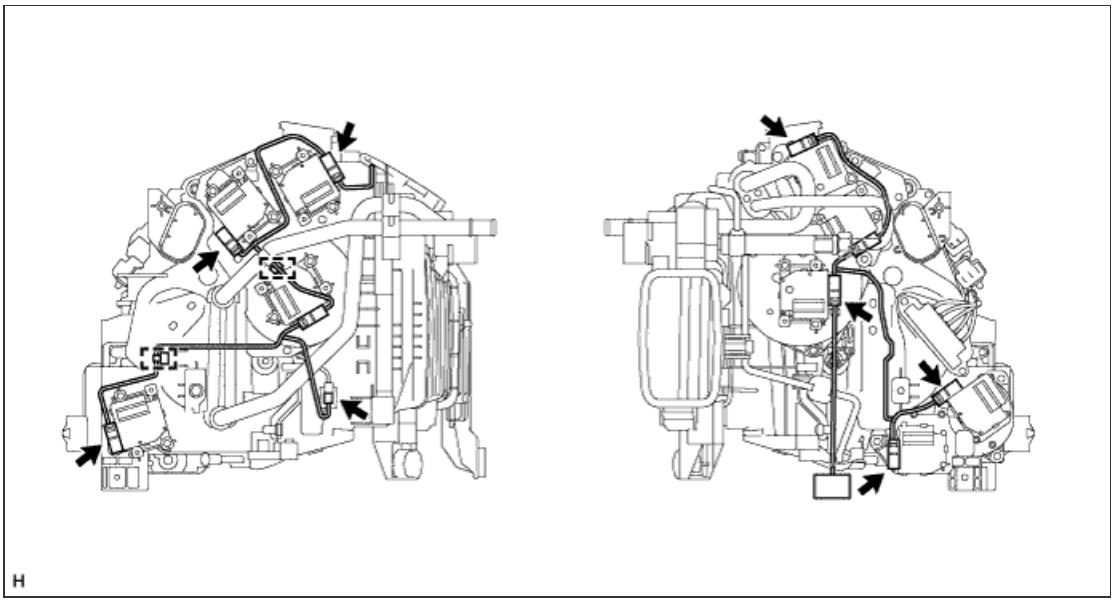
b. Remove the 2 screws and quick heater.



7. REMOVE AIR CONDITIONER HARNESS

a. Disconnect the connectors.

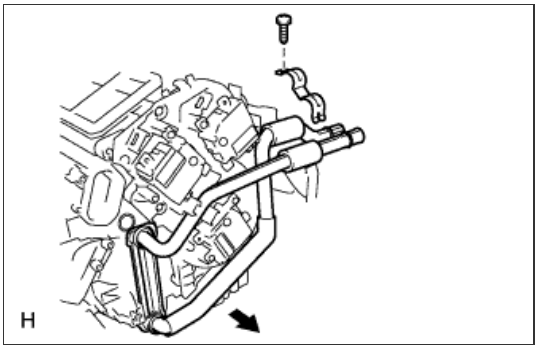
b. Detach the clamps and remove the harness.



8. REMOVE AIR CONDITIONING RADIATOR ASSEMBLY

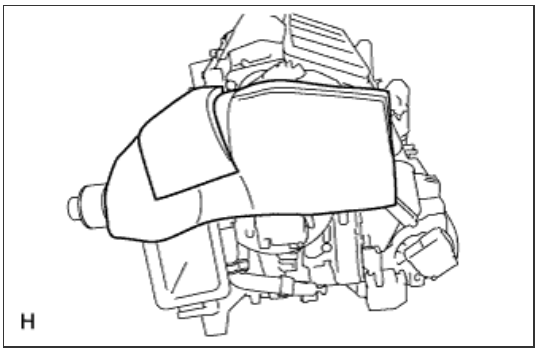
a. Remove the screw and radiator bracket.

b. Remove the radiator.

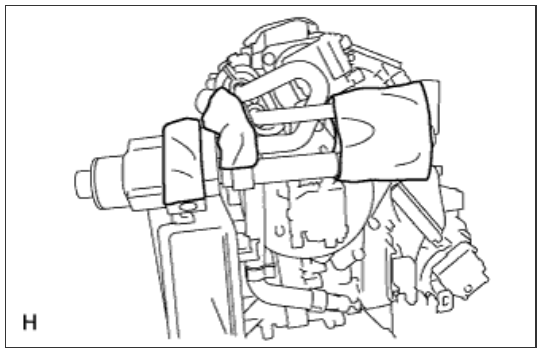


9. REMOVE COOLER EXPANSION VALVE (w/ Cool Box)

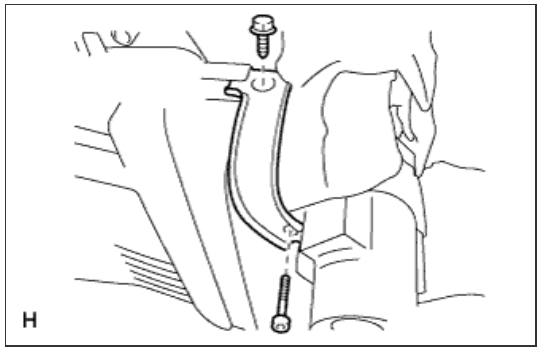
a. Remove the packing.



b. Remove the butyl tape.

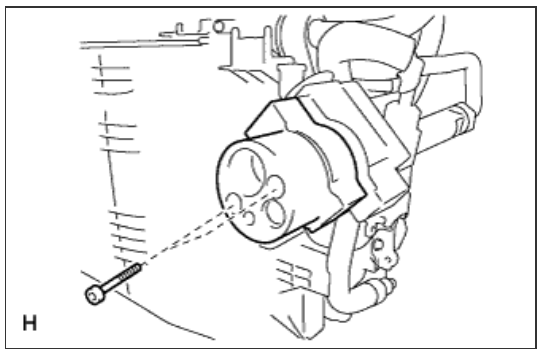


c. Using a 4 mm hexagon wrench, remove the hexagon bolt, screw and bracket.



d. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts and No. 1 connector tube.

e. Remove the 2 O-rings from the No. 1 connector tube.



f. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts, No. 2 connector tube, expansion valve and No. 3 connector tube.

g. Remove the 2 O-rings from the No. 2 connector tube.

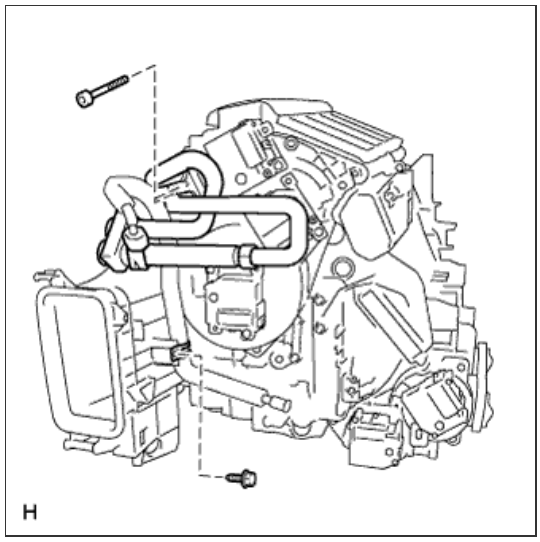


10. REMOVE AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY (w/ Cool Box)

a. Remove the screw and bracket.

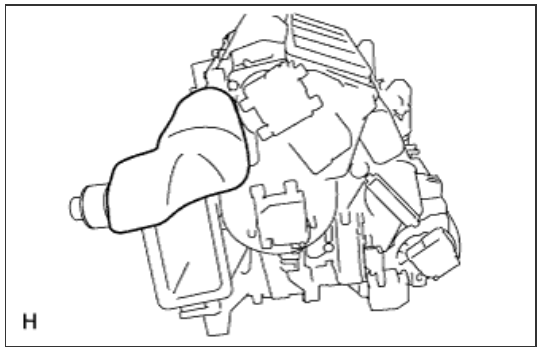
b. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts and air conditioner tube and accessory assembly.

c. Remove the 2 O-rings from the air conditioner tube and accessory assembly.



11. REMOVE COOLER EXPANSION VALVE (w/o Cool Box)

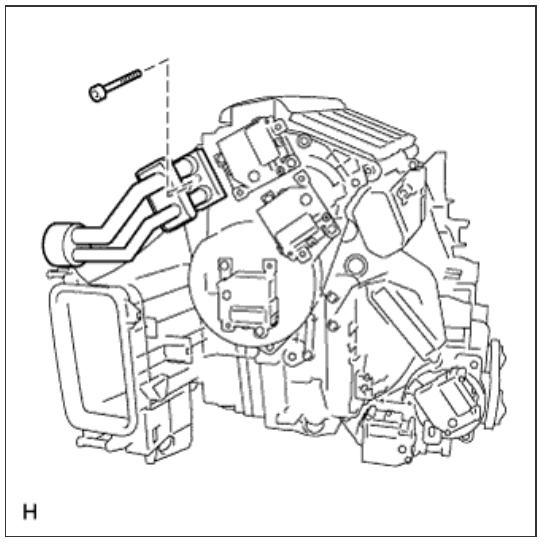
a. Remove the packing.



b. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts, air conditioner tube and accessory assembly and expansion valve.

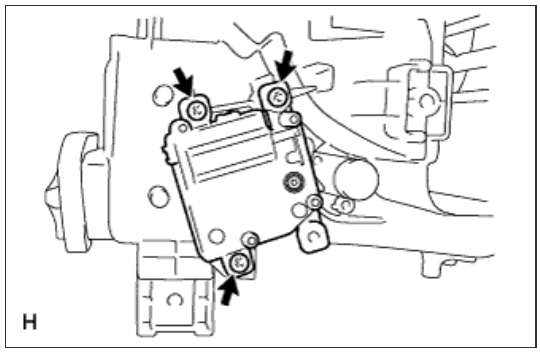
c. Remove the 2 O-rings from the air conditioner tube and accessory assembly.

d. Remove the 2 O-rings from the expansion valve.



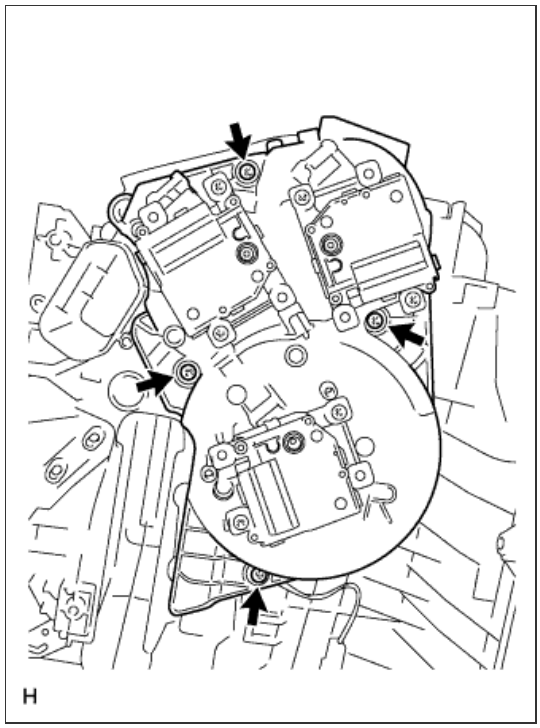
12. REMOVE REAR AIR MIX DAMPER CONTROL SERVO MOTOR RH

a. Remove the 3 screws and servo motor.



13. REMOVE SERVO MOTOR

a. Remove the 4 screws and servo motor unit.



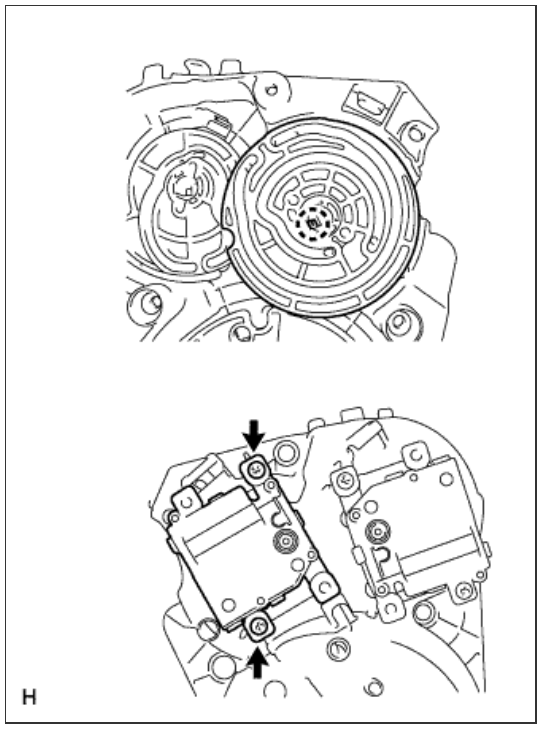
b. Remove the front mode control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.



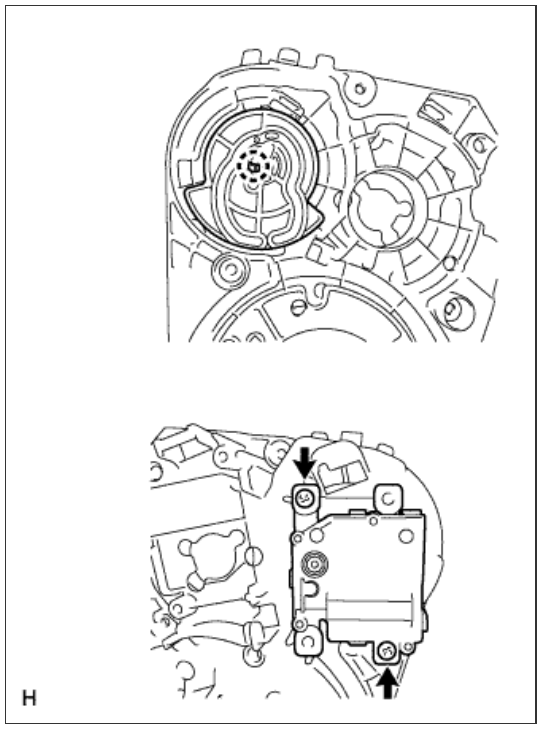
c. Remove the control air bypass damper control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.



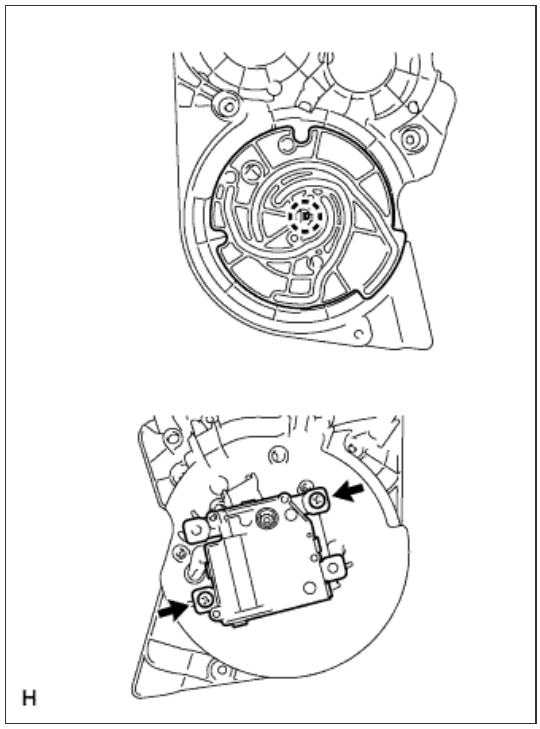
d. Remove the front air mix damper control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

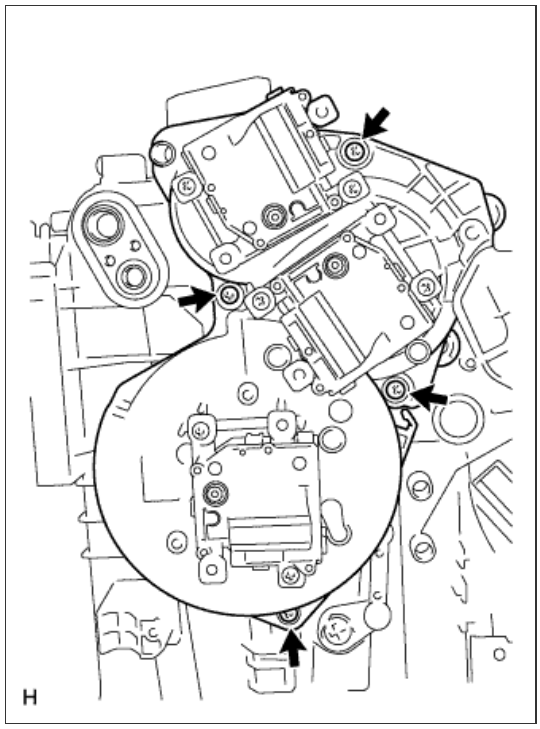
NOTICE:

Be careful not to damage the claw of the plate.

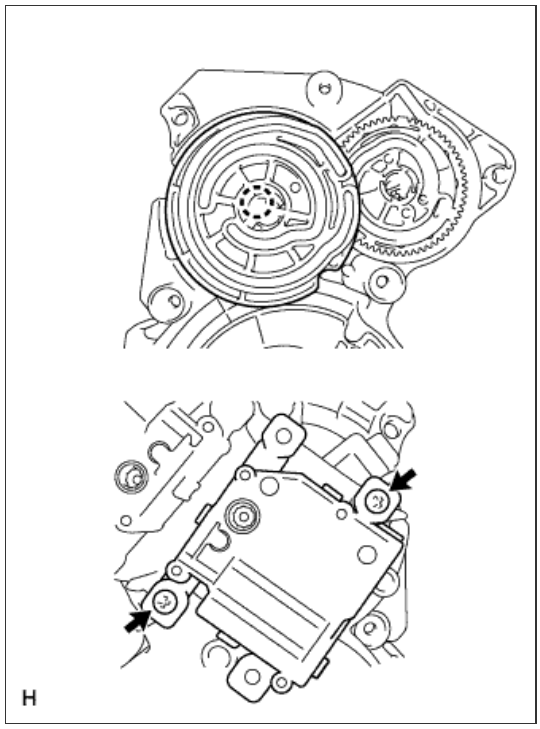


14. REMOVE SERVO MOTOR

a. Remove the 4 screws and servo motor unit.



b. Remove the control air bypass damper control servo motor LH.



i. Remove the 2 screws.

ii. Detach the claw and remove the plate.

NOTICE:

Be careful not to damage the claw of the plate.

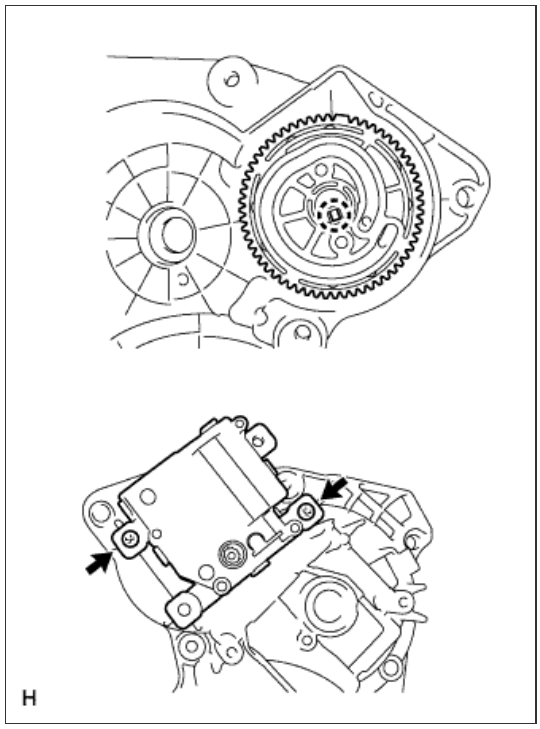
c. Remove the front mode control servo motor LH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.



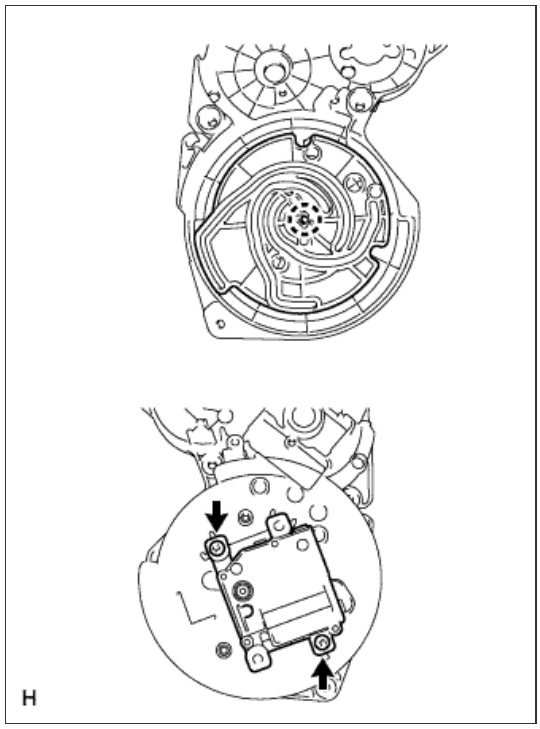
d. Remove the front air mix damper control servo motor LH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

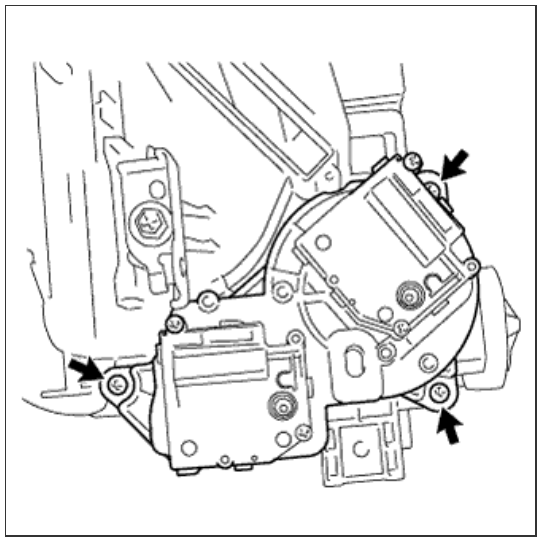
NOTICE:

Be careful not to damage the claw of the plate.

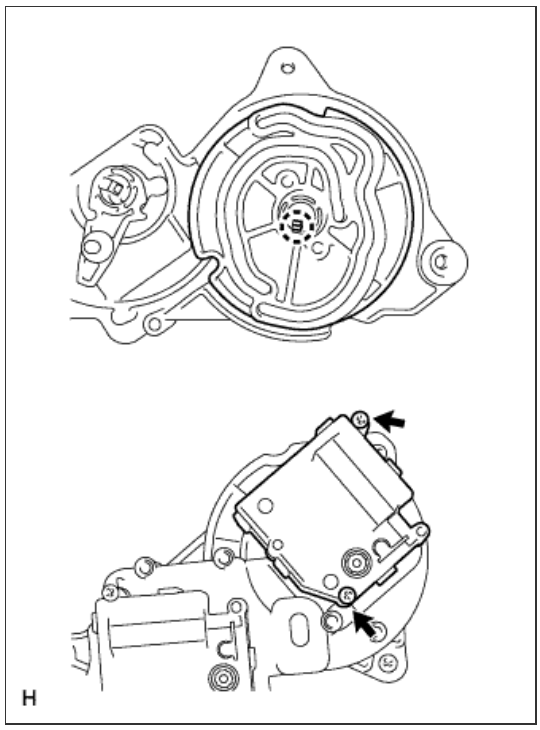


15. REMOVE SERVO MOTOR

a. Remove the 3 screws and servo motor unit.



b. Remove the rear mode control servo motor.



i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.

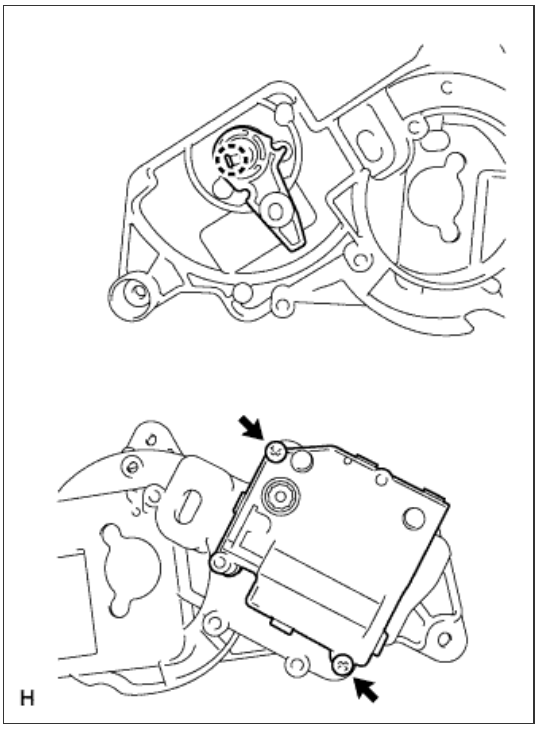
c. Remove the rear air mix damper control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the lever and servo motor.

NOTICE:

Be careful not to damage the claw of the lever.

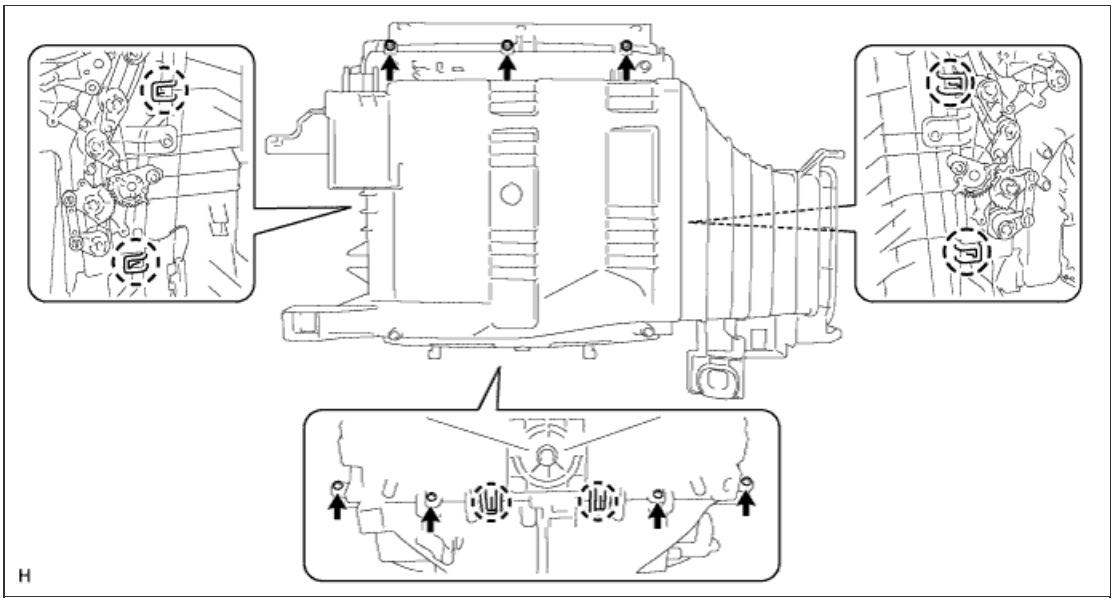


16. REMOVE NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY

a. Remove the 7 screws.

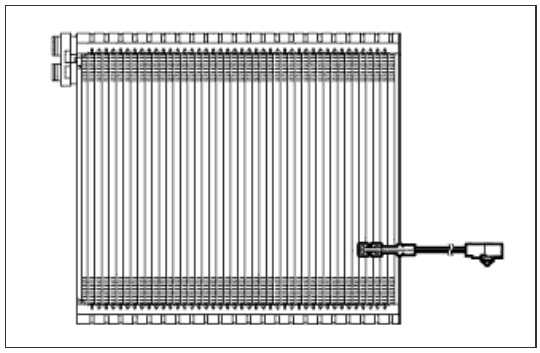
b. Detach the 6 claws and remove the unit case.

c. Remove the evaporator.



17. REMOVE FRONT EVAPORATOR TEMPERATURE SENSOR

a. Remove the sensor from the evaporator.



for Preparation Click here

1. INSTALL FRONT EVAPORATOR TEMPERATURE SENSOR

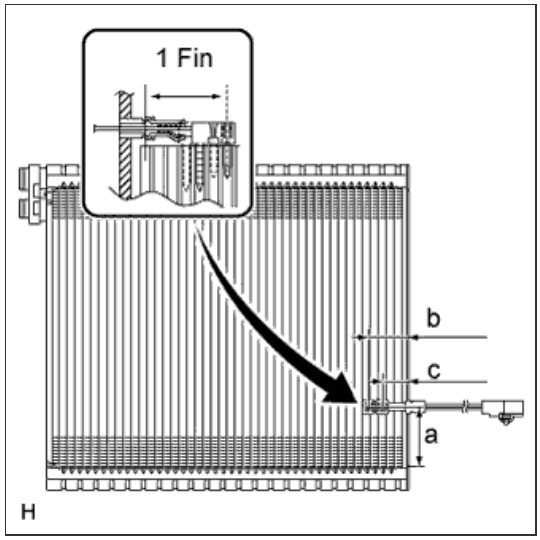
NOTICE:

If reusing the evaporator, do not insert the sensor at a location where the sensor was previously inserted.

a. Insert the sensor at a location that is 1 fin to the right or left of its previous location.

Standard Dimension:

Area	Specified Condition
a	50 mm (1.97 in.)
b	34.3 mm (1.35 in.)
c	20.9 mm (0.822 in.)

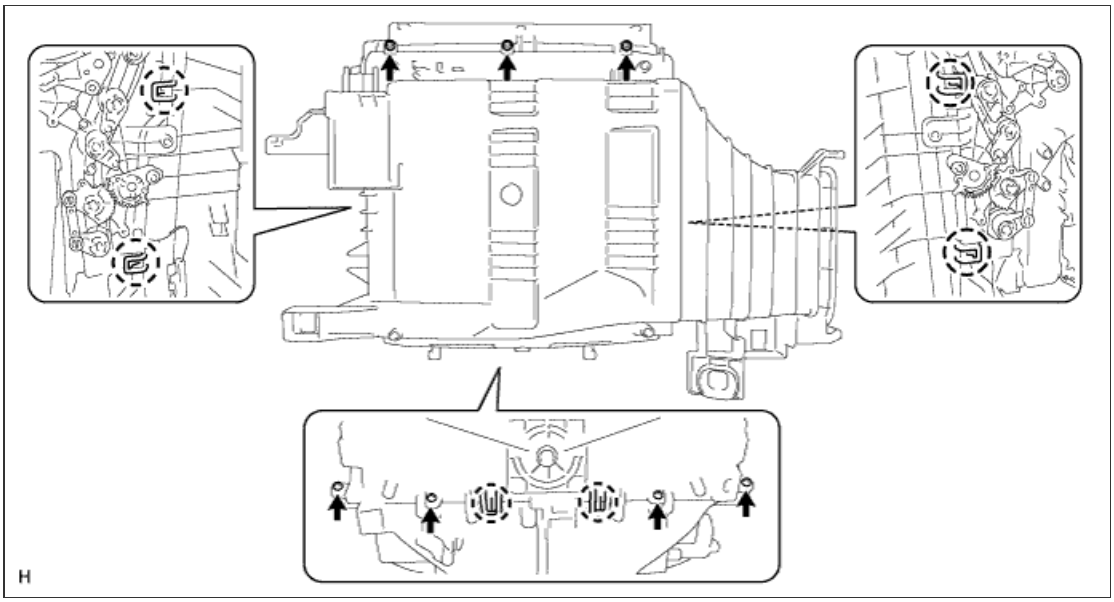


2. INSTALL NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY

a. Install the evaporator.

b. Attach the 6 claws to install the unit case.

c. Install the 7 screws.

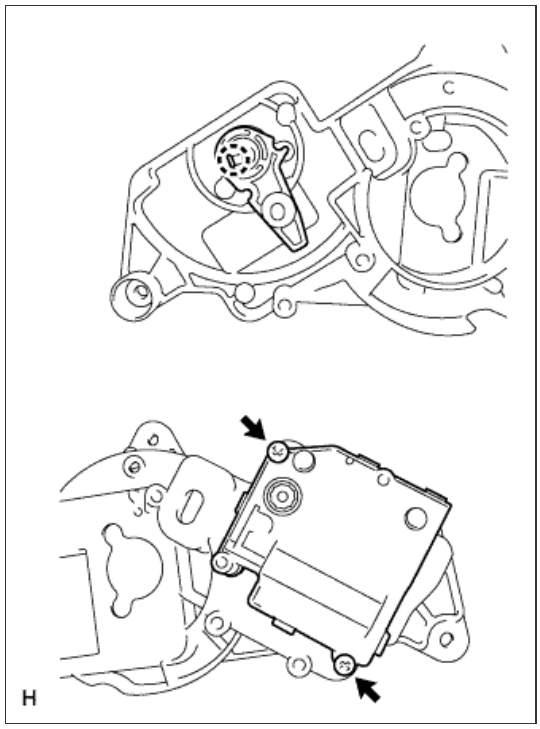


3. INSTALL SERVO MOTOR

a. Install the rear air mix damper control servo motor RH.

i. Attach the claw to install the lever and servo motor.

ii. Install the 2 screws.

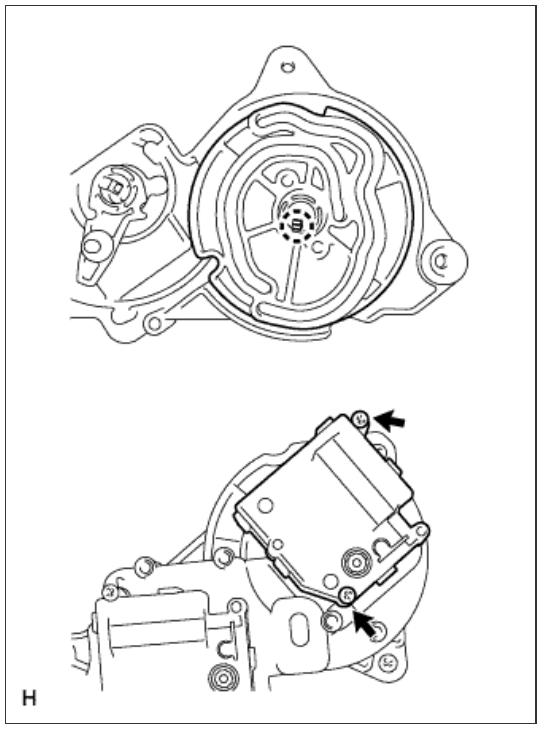


b. Install the rear mode control servo motor.

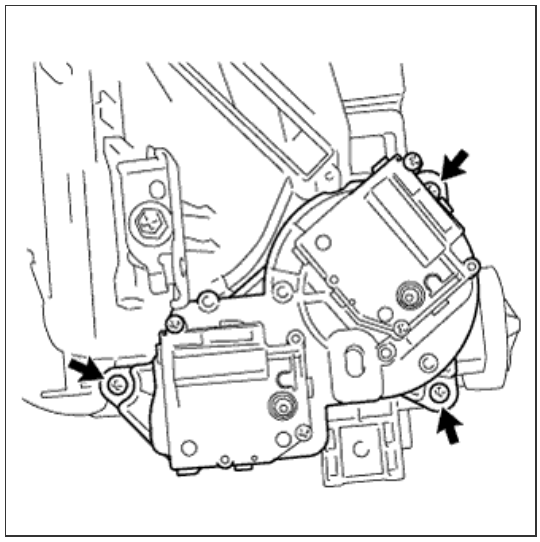
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

c. Set the damper servo so that the cutout part engages with the tooth of the gear, and attach the claw to install the servo motor unit.



d. Install the 3 screws.

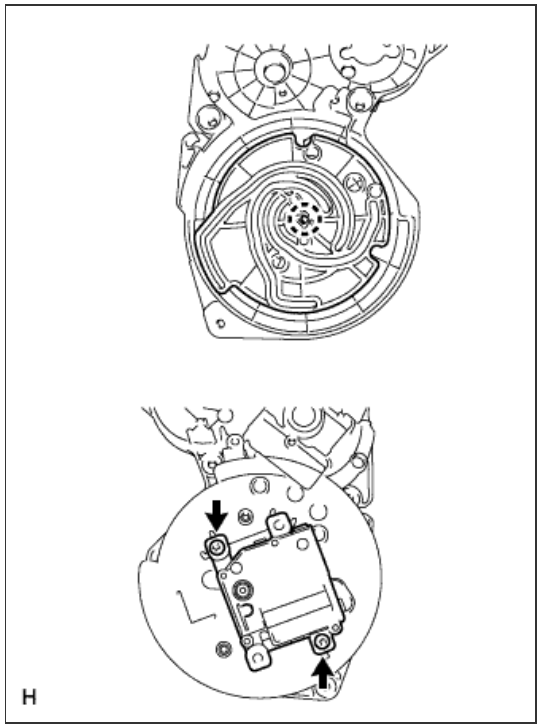


4. INSTALL SERVO MOTOR

a. Install the front air mix damper control servo motor LH.

i. Attach the claw to install the plate and servo motor.

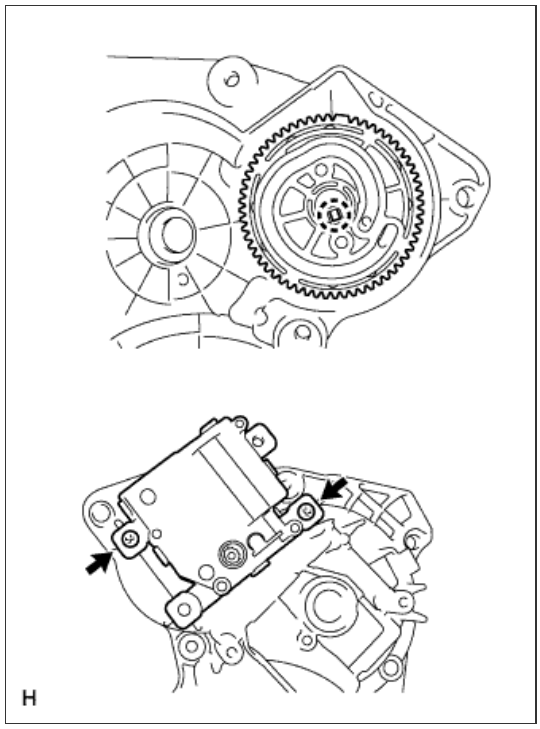
ii. Install the 2 screws.



b. Install the front mode control servo motor LH.

i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

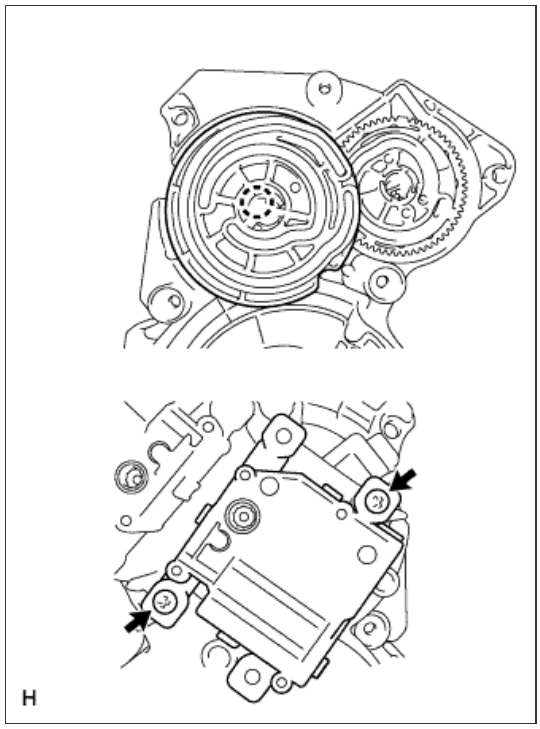


c. Install the control air bypass damper control servo motor LH.

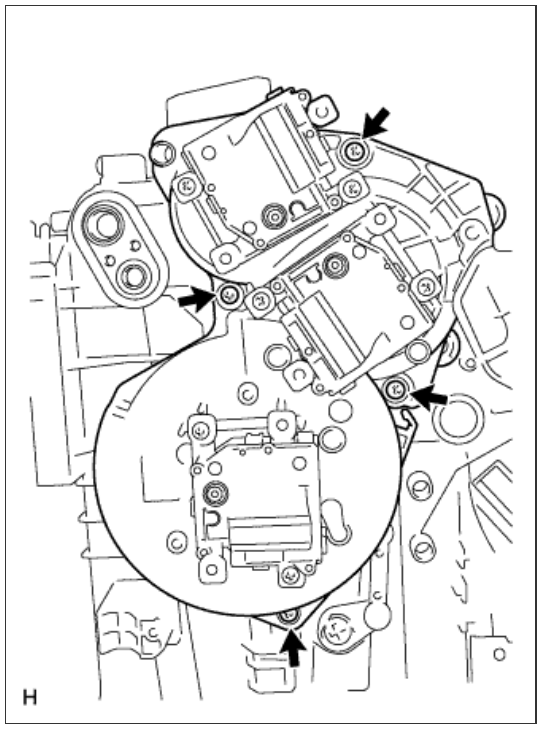
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

d. Set the damper servo so that the cutout part engages with the tooth of the gear, and attach the claw to install the servo motor unit.

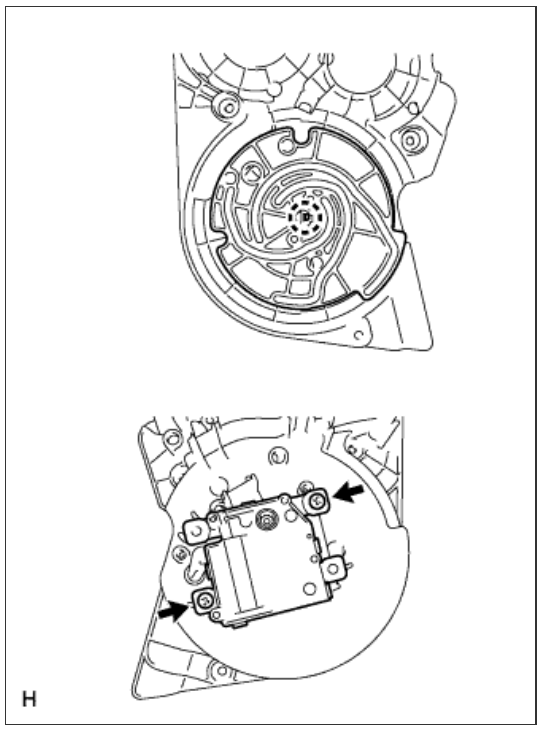


e. Install the 4 screws.



5. INSTALL SERVO MOTOR

a. Install the front air mix damper control servo motor RH.



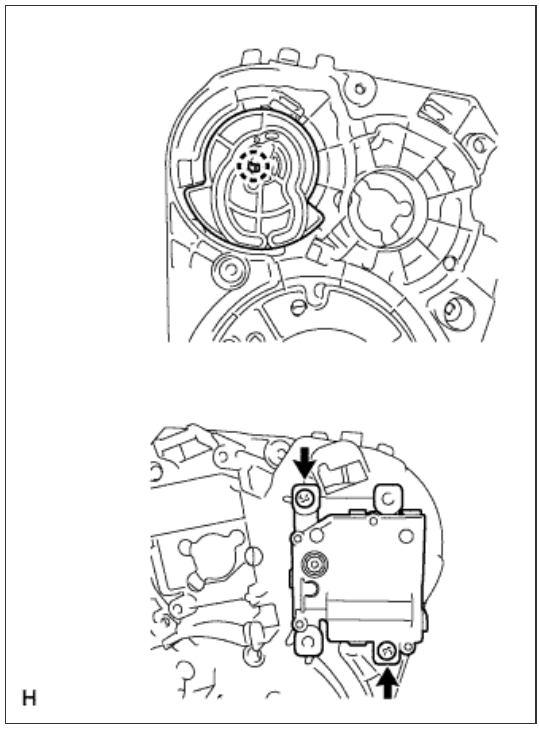
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

b. Install the control air bypass damper control servo motor RH.

i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

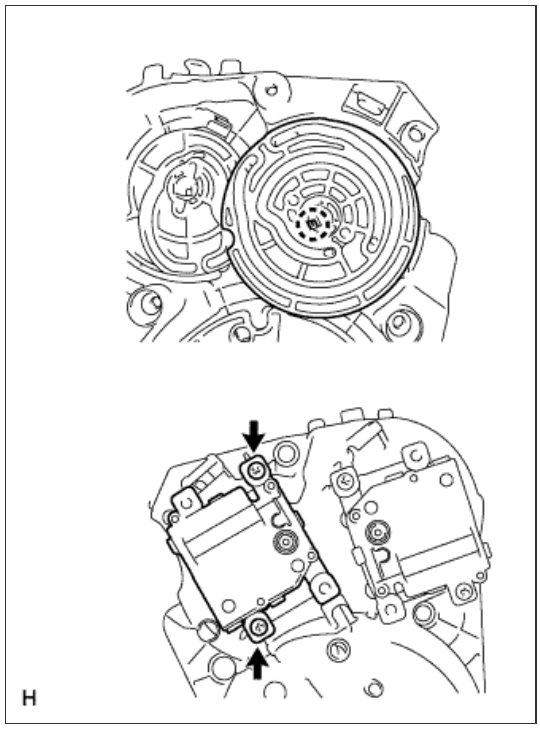


c. Install the front mode control servo motor RH.

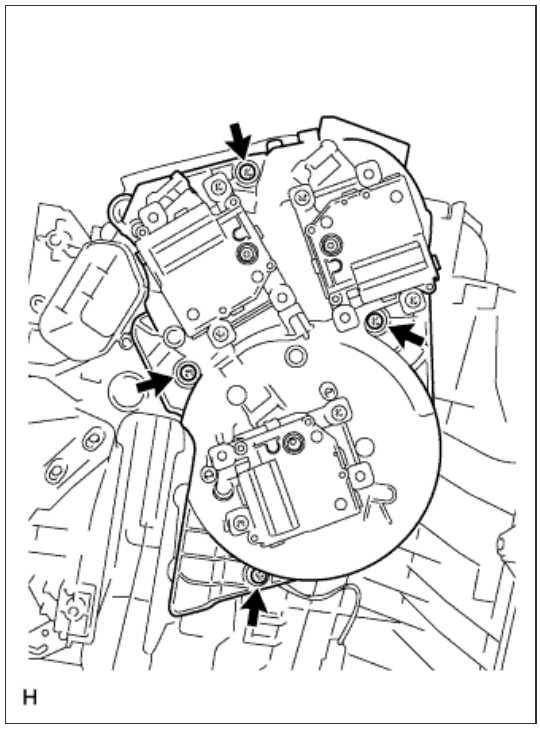
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

d. Set the damper servo so that the cutout part engages with the tooth of the gear, and attach the claw to install the servo motor unit.

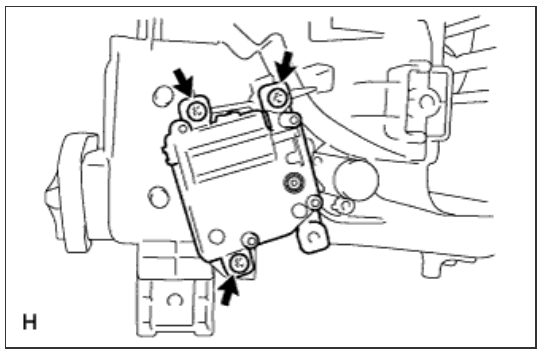


e. Install the 4 screws.



6. INSTALL REAR AIR MIX DAMPER CONTROL SERVO MOTOR RH

a. Install the servo motor with the 3 screws.



7. INSTALL COOLER EXPANSION VALVE (w/o Cool Box)

a. Sufficiently apply compressor oil to 4 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

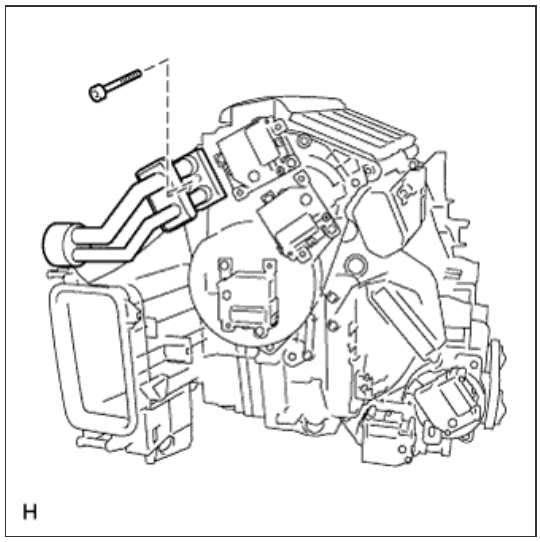
b. Install 2 O-rings to the cooler evaporator.

c. Install 2 O-rings to the air conditioner tube and accessory assembly.

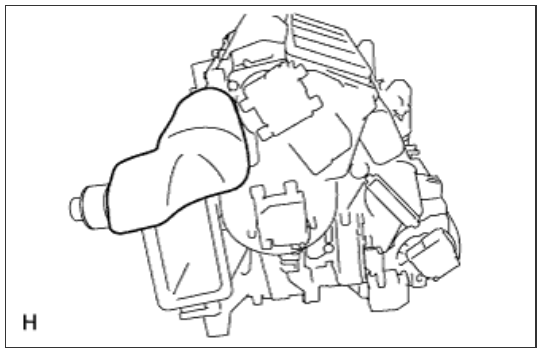
d. Install the cooler expansion valve and air conditioner tube and accessory assembly to the evaporator.

e. Using a 4 mm hexagon wrench, install the 2 bolts.

Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }



f. Install new packing.



8. INSTALL AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY (w/ Cool Box)

a. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

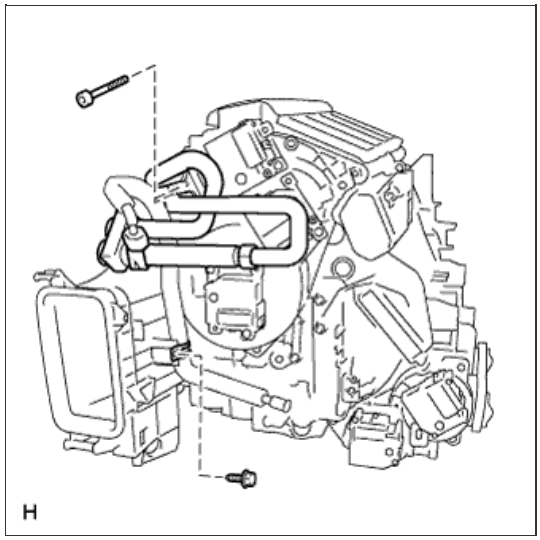
b. Install the 2 O-rings to the air conditioner tube and accessory assembly.

c. Install the air conditioner tube and accessory assembly to the evaporator.

d. Using a 4 mm hexagon wrench, install the 2 hexagon bolts.

Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }

e. Install the bracket with the screw.



9. INSTALL COOLER EXPANSION VALVE (w/ Cool Box)

a. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

b. Install the 2 O-rings to the No. 2 connector tube.

c. Install the No. 2 connector tube, expansion valve and No. 3 connector tube.

d. Using a 4 mm hexagon wrench, install the 2 hexagon bolts.

Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }



e. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

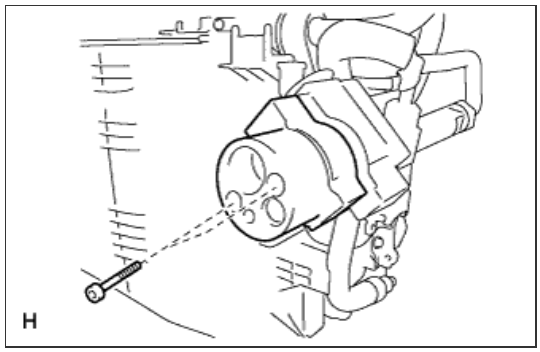
Compressor oil:
ND-OIL 8 or equivalent

f. Install the 2 O-rings to the No. 1 connector tube.

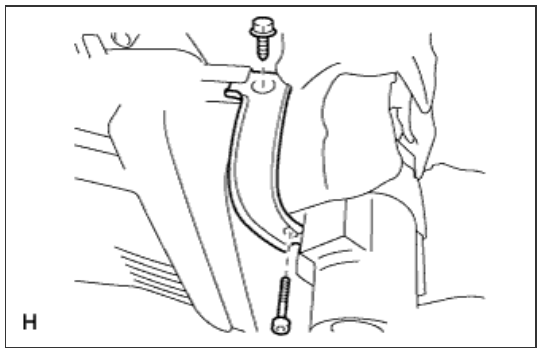
g. Install the No. 1 connector tube.

h. Using a 4 mm hexagon wrench, install the 2 hexagon bolts.

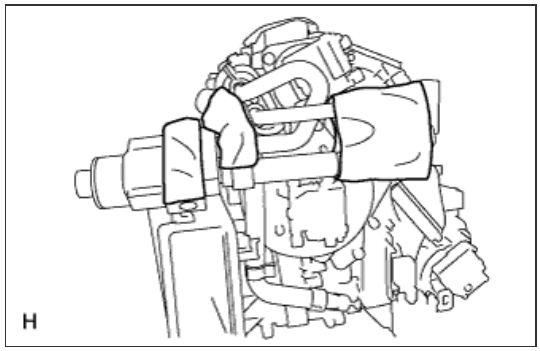
Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }



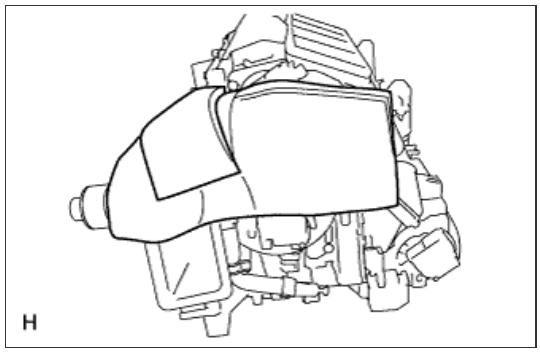
i. Using a 4 mm hexagon wrench, install the bracket with the hexagon bolt and screw.



j. Install new butyl tape.



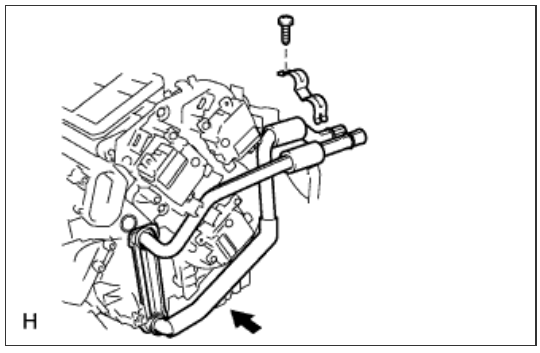
k. Install new packing.



10. INSTALL AIR CONDITIONING RADIATOR ASSEMBLY

a. Install the radiator.

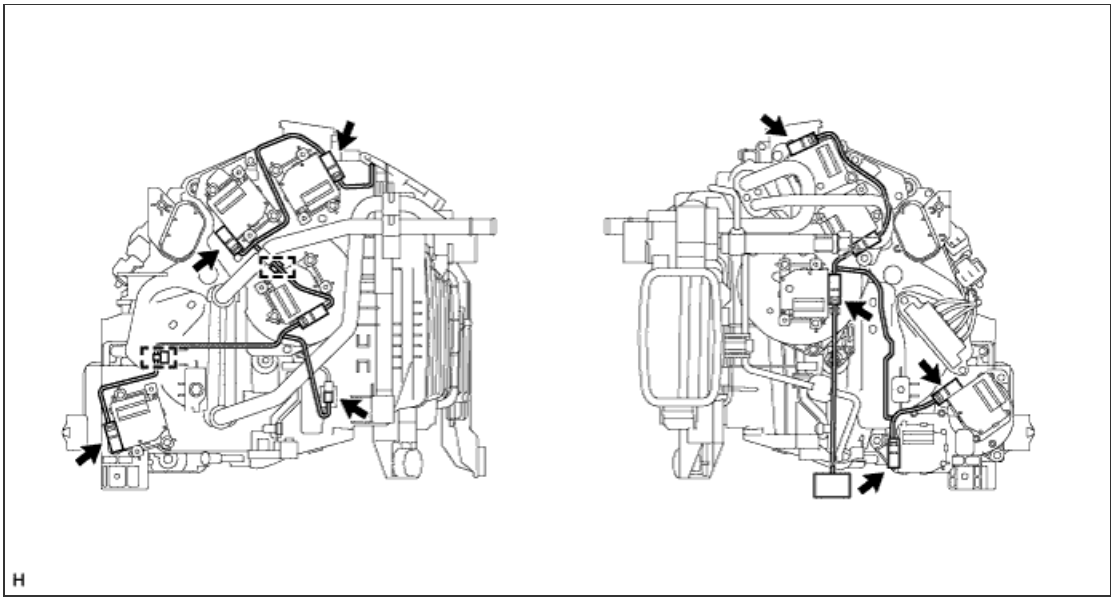
b. Install the bracket with the screw.



11. INSTALL AIR CONDITIONER HARNESS

a. Attach the clamps to install the harness.

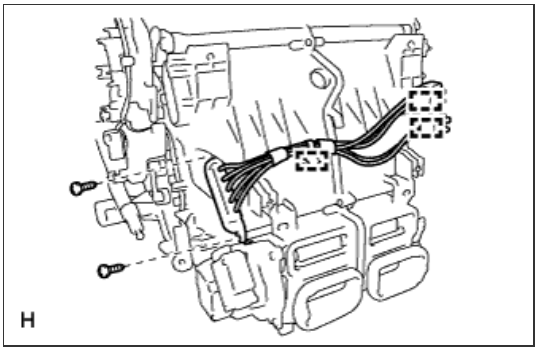
b. Connect the connectors.



12. INSTALL QUICK HEATER ASSEMBLY (w/ PTC Heater)

a. Install the quick heater with the 2 screws.

b. Attach the 3 clamps.



13. INSTALL COOL BOX LIQUID TUBE (w/ Cool Box)

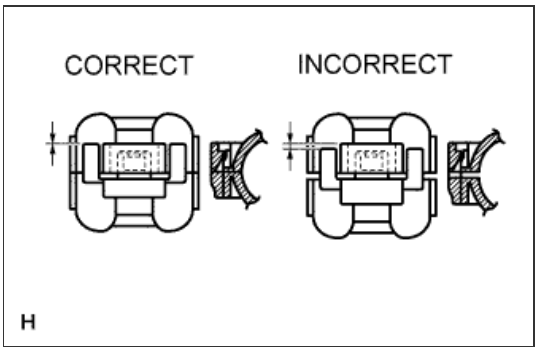
a. Lubricate 2 new O-rings with compressor oil and install them to the liquid tube.

Compressor oil:
ND-OIL 8 or equivalent

b. Connect the liquid tube with the piping clamp.

NOTICE:

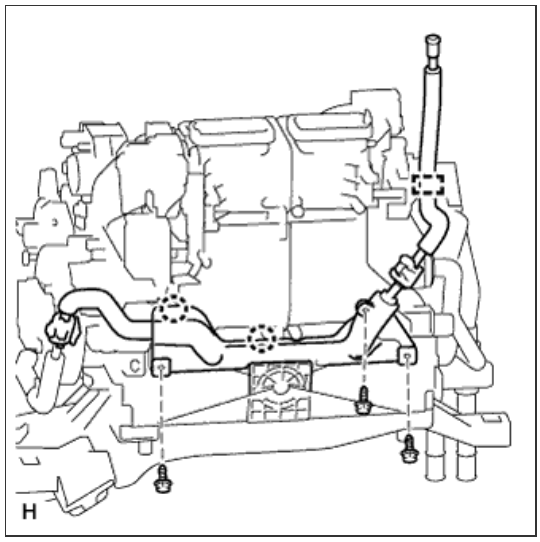
After connection, check the claw engagement of the piping clamp.



c. Attach the clamp.

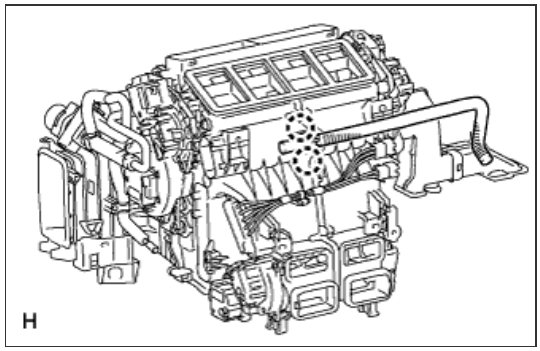
d. Attach the 2 claws to install the protective cover.

e. Install the 3 screws.



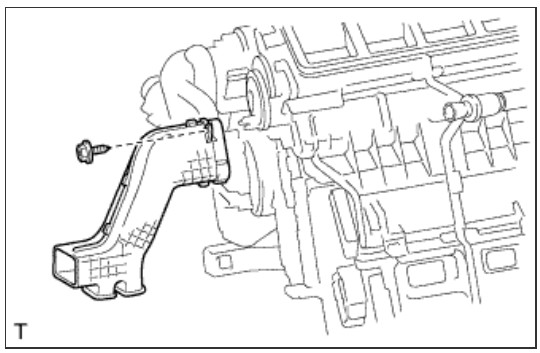
14. INSTALL ASPIRATOR

a. Attach the 2 claws to install the aspirator.



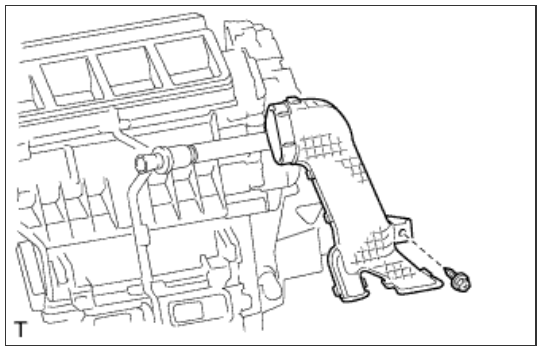
15. INSTALL NO. 4 AIR DUCT SUB-ASSEMBLY

a. Install the duct with the screw.



16. INSTALL NO. 5 AIR DUCT SUB-ASSEMBLY

a. Install the duct with the screw.

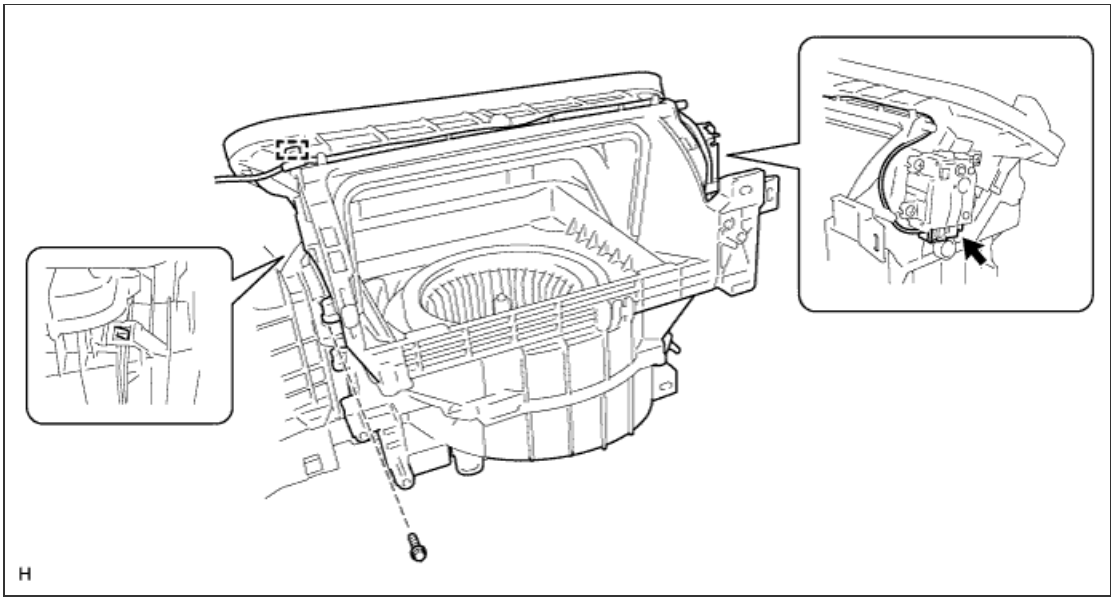


17. INSTALL BLOWER ASSEMBLY

a. Attach the claw to install the blower unit.

b. Connect the connector and clamp.

c. Install the screw.

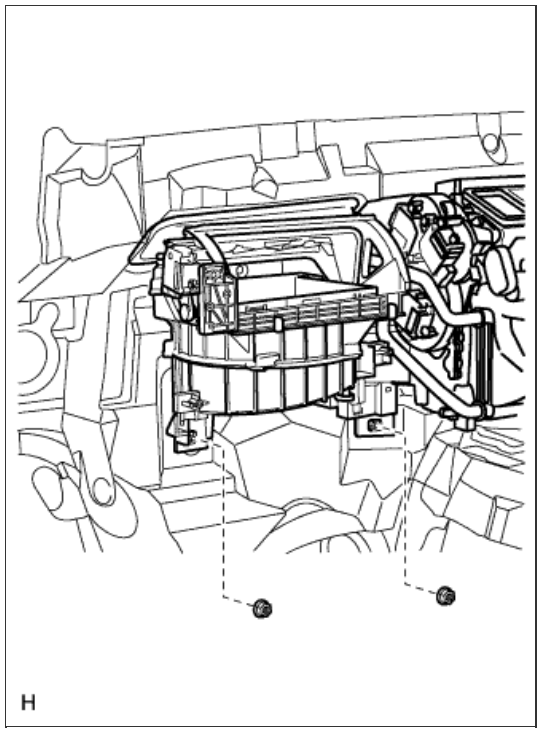


for Preparation Click here

1. INSTALL AIR CONDITIONING UNIT ASSEMBLY

a. Install the air conditioning unit with the 2 nuts.

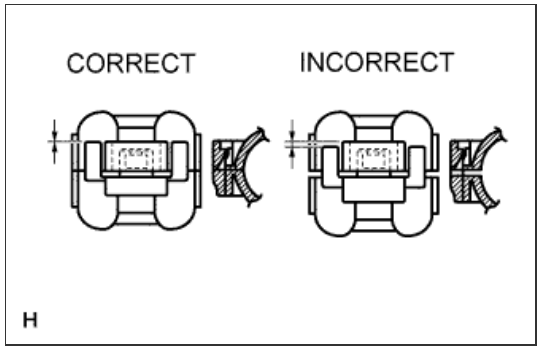
Torque:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }



2. INSTALL AIR CONDITIONING HOSE AND ACCESSORY (w/ Cool Box)

a. Lubricate 2 new O-rings with compressor oil and install them to the air conditioning hose and accessory.

Compressor oil:
ND-OIL 8 or equivalent



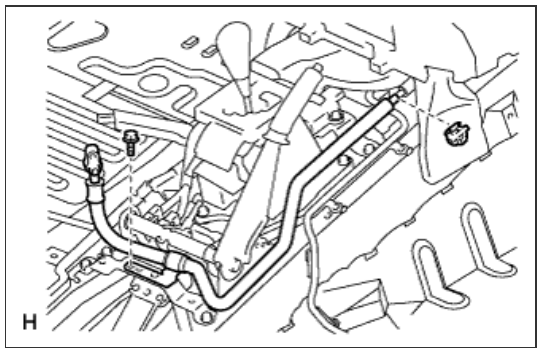
b. Install the air conditioning hose and accessory with the piping clamp.

NOTICE:

After connection, check the claw engagement of the piping clamp.

c. Install the bolt.

Torque:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }



3. INSTALL INSTRUMENT PANEL REINFORCEMENT ASSEMBLY

a. Install the instrument panel reinforcement.

i. Install the instrument panel reinforcement with the 7 bolts and screw.

Torque:
for bolt:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }
for screw:
6.0 N*m{ 61 kgf*cm , 53 in.*lbf }

ii. for Passenger Side:
Using a 12 mm hexagon wrench, install the 2 collars.

Torque:
18 N*m{ 184 kgf*cm , 13 ft.*lbf }

iii. for Passenger Side:
Using a T40 "TORX" socket, install the 2 "TORX" bolts.

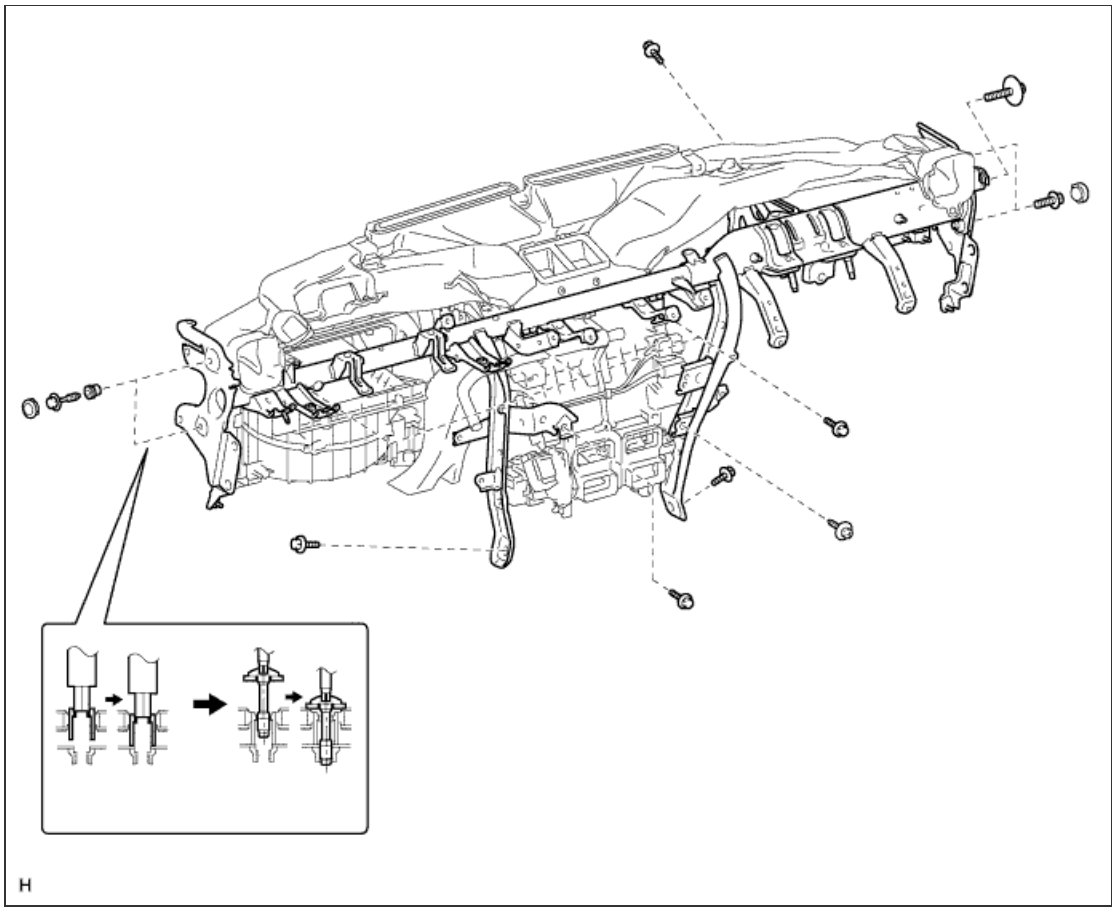
Torque:
18 N*m{ 184 kgf*cm , 13 ft.*lbf }

iv. for Passenger Side:
Install the 2 caps.

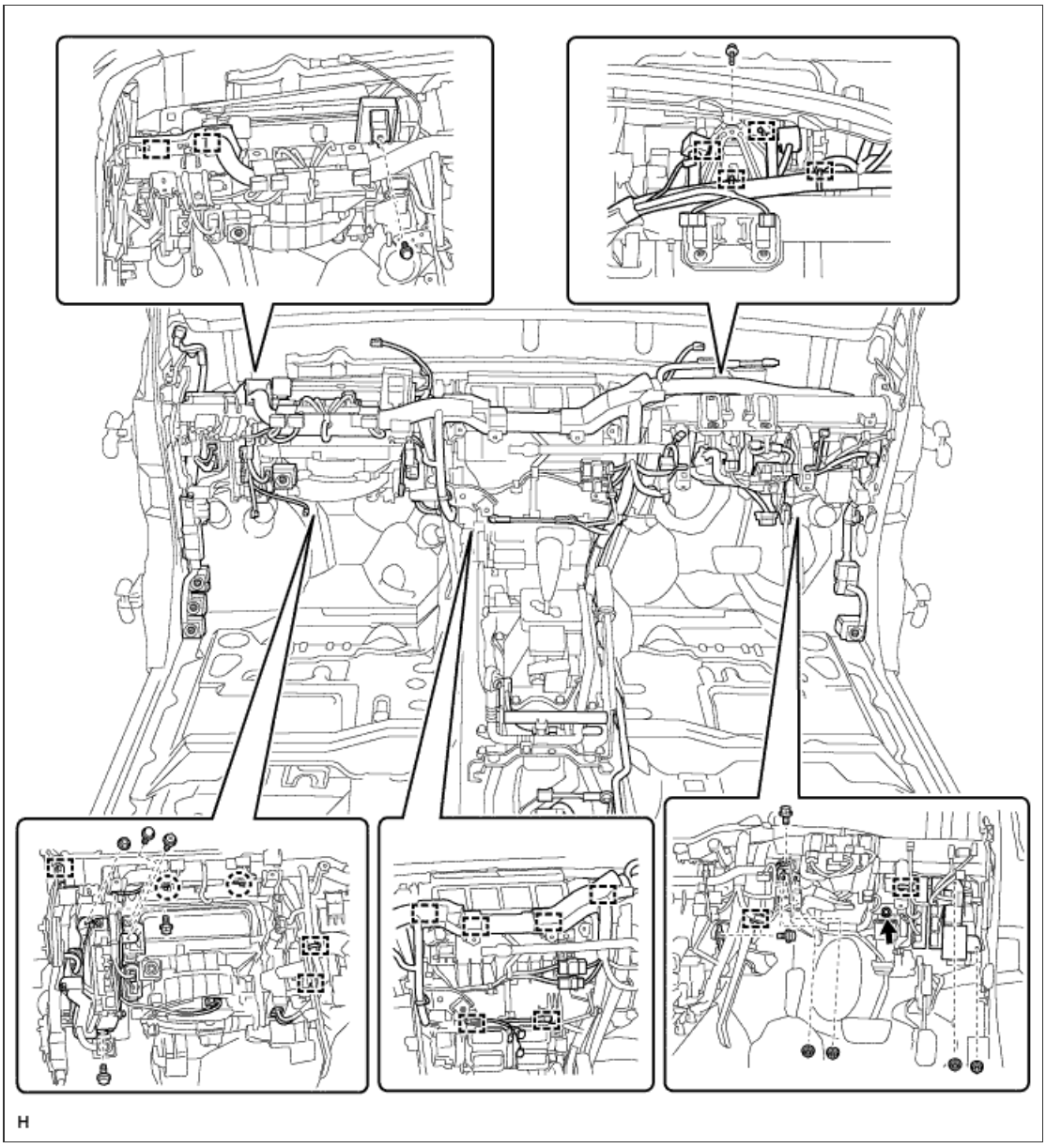
v. for Driver Side:
Install the 3 bolts.

Torque:
18 N*m{ 184 kgf*cm , 13 ft.*lbf }

vi. for Driver Side:
Install the 3 caps.



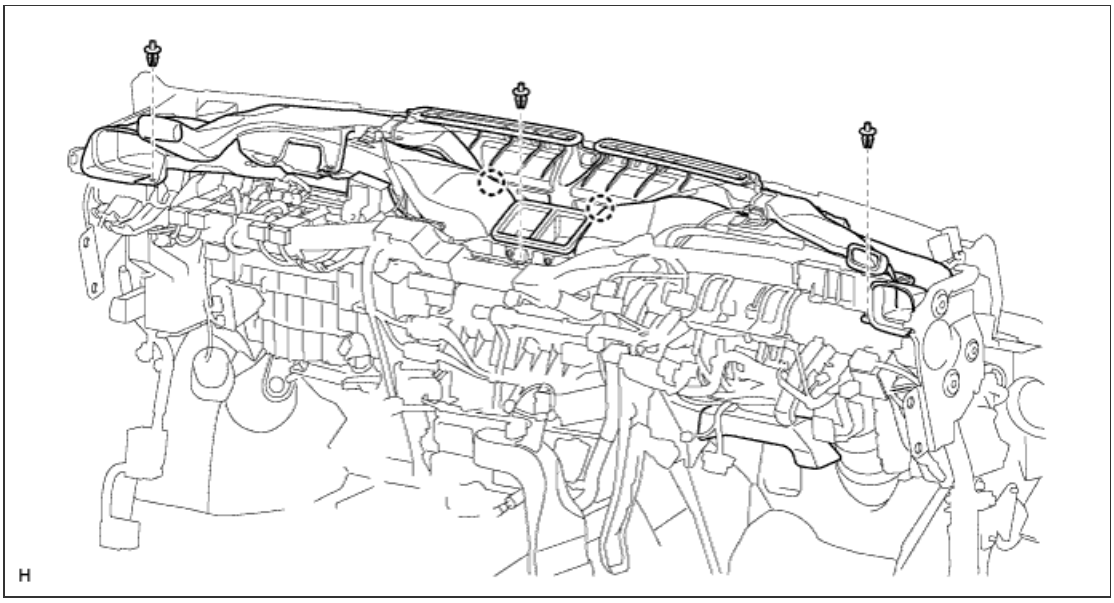
b. Attach the clamps to the wire harness and connect the connectors.



4. INSTALL HEATER TO REGISTER DUCT ASSEMBLY

a. Attach the 2 claws to install the duct.

b. Install the 3 clips.



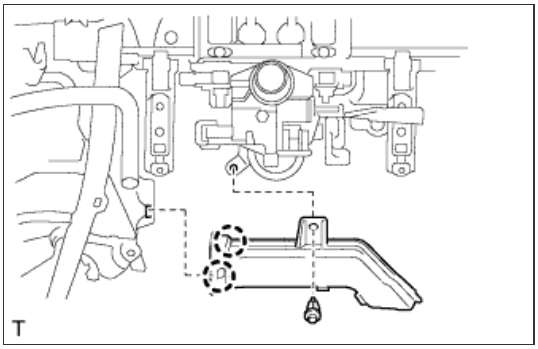
5. INSTALL STEERING COLUMN ASSEMBLY

a. Install the steering column (Click here).

6. INSTALL NO. 3 AIR DUCT SUB-ASSEMBLY

a. Attach the 2 claws to install the duct.

b. Install the clip.



7. INSTALL INSTRUMENT PANEL SUB-ASSEMBLY

a. Install the instrument panel (Click here).

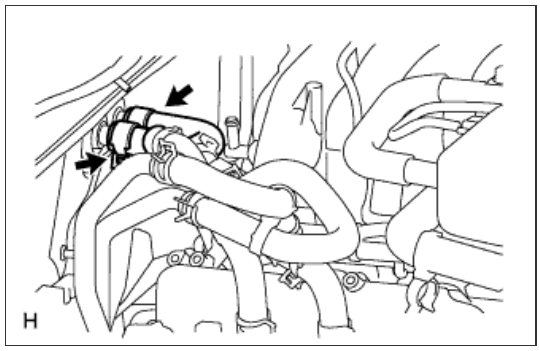
8. INSTALL FRONT WIPER MOTOR AND BRACKET

a. Install the front wiper motor and bracket (Click here).

9. CONNECT HEATER WATER INLET HOSE AND HEATER WATER OUTLET HOSE

a. Connect the 2 heater water hoses.

b. Using pliers, grip the claws of the clips and slide the 2 clips.



10. CONNECT AIR CONDITIONING TUBE ASSEMBLY

a. Remove the attached vinyl tape from the tubes.

b. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the air conditioning tube assembly.

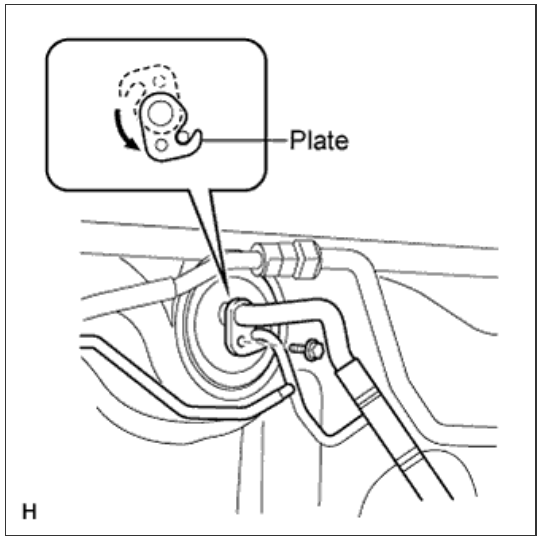
Compressor oil:
ND-OIL 8 or equivalent

c. Install the 2 O-rings to the air conditioning tube assembly.

d. Connect the air conditioning tube assembly.

e. Attach the plate as shown in the illustration and install the bolt.

Torque:
5.4 N*m{ 55 kgf*cm , 47 in.*lbf }



11. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

12. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

13. ADD ENGINE COOLANT

a. Add engine coolant.

Standard Capacity:

Item	Specified Condition
with transmission oil cooler	16.7 liters (17.6 US qts, 14.7 Imp. qts)
without transmission oil cooler	16.2 liters (17.1 US qts, 14.3 Imp. qts)

NOTICE:

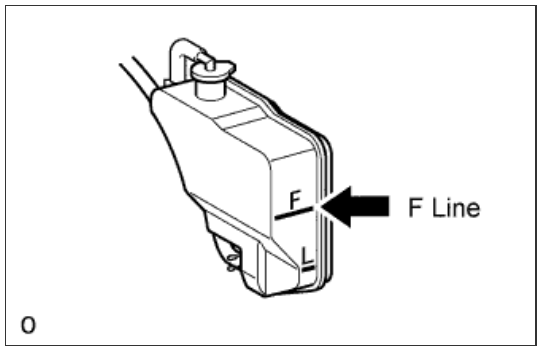
Do not substitute plain water for engine coolant.

HINT:

TOYOTA vehicles are filled with TOYOTA SLLC at the factory. In order to avoid damage to the engine cooling system and other technical problems, only use TOYOTA SLLC or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, non-borate coolant with long-life hybrid organic acid technology (coolant with long-life hybrid organic acid technology consists of a combination of low

phosphates and organic acids).

b. Slowly pour coolant into the radiator reservoir until it reaches the F line.



c. Install the reservoir cap.

d. Press the No. 1 and No. 2 radiator hoses several times by hand, and then check the coolant level. If the coolant level is low, add coolant.

e. Install the radiator cap.

f. Start the engine and warm it up until the thermostat opens.

NOTICE:

Switch off the A/C.

g. Maintain the engine speed at 2000 to 2500 rpm.

NOTICE:

- **Make sure that the radiator reservoir still has some coolant in it.**
- **Pay attention to the needle of the water temperature meter. Make sure that the needle does not show an abnormally high temperature.**
- **If there is not enough coolant, the engine may burn out or overheat.**
- **Immediately after starting the engine, if the radiator reservoir does not have any coolant, perform the following: 1) stop the engine, 2) wait until the coolant has cooled down, and 3) add coolant until the coolant is filled to the F line.**
- **Run the engine at 2000 rpm until the coolant level has stabilized.**

h. Press the No. 1 and No. 2 radiator hoses several times by hand to bleed air.

CAUTION:

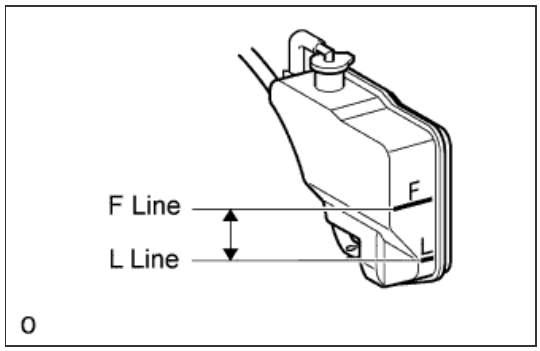
- **Wear protective gloves.**
- **Be careful as the radiator hoses are hot.**
- **Keep your hands away from the fan.**

i. Stop the engine, and wait until the engine coolant cools down to ambient temperature.

CAUTION:

Do not remove the radiator cap while the engine and radiator are still hot. Pressurized, hot engine coolant and steam may be released and cause serious burns.

j. Check that the coolant level is between the F and L lines.
If the coolant level is below the L line, repeat all of the procedures above.
If the coolant level is above the F line, drain coolant so that the coolant level is between the F and L lines.



14. CHARGE REFRIGERANT

SST

09985-20010 (09985-02130, 09985-02150, 09985-02090, 09985-02110, 09985-02010, 09985-02050, 09985-02060, 09985-02070)

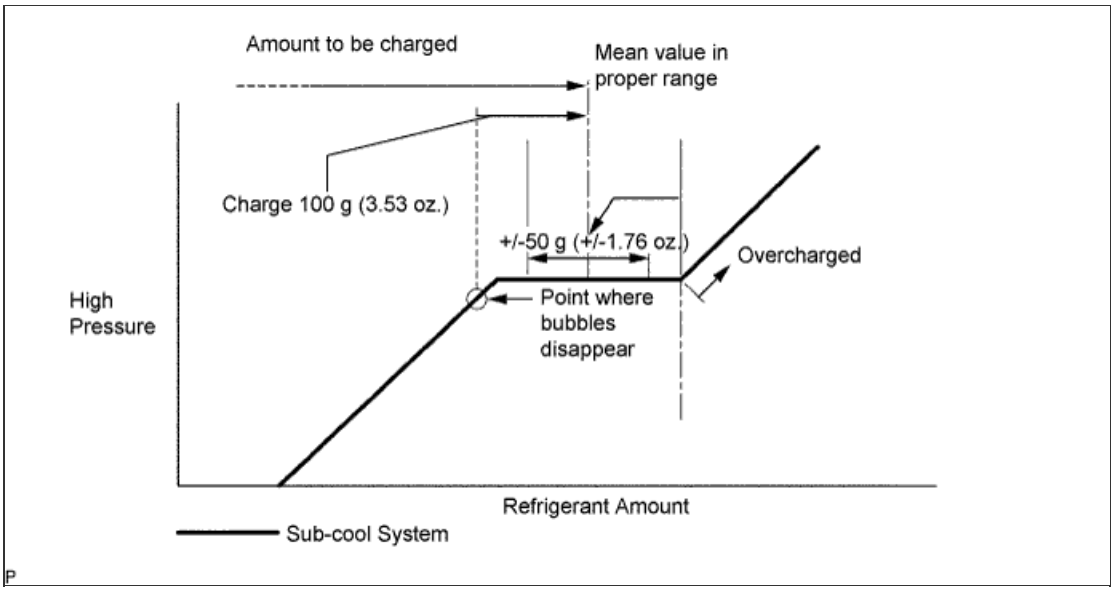
a. Perform vacuum purging using a vacuum pump.

b. Charge refrigerant HFC-134a (R134a).

Standard:

Condenser Core Thickness	Cool Box	Refrigerant Charging Amount

22 mm (0.866 in.)	w/ Cool Box	1010 +/-30 g (35.6 +/-1.1 oz.)
	w/o Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
16 mm (0.630 in.)	w/ Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
	w/o Cool Box	920 +/-30 g (32.5 +/-1.1 oz.)



NOTICE:

- **Do not operate the cooler compressor before charging refrigerant as the cooler compressor will not work properly without any refrigerant, and will overheat.**
- **Approximately 100 g (3.53 oz.) of refrigerant may need to be charged after bubbles disappear. The refrigerant amount should be checked by measuring its quantity, and not with the sight glass.**

15. WARM UP ENGINE

a. Warm up the engine at less than 1850 rpm for 2 minutes or more after charging the refrigerant.

NOTICE:

Be sure to warm up the compressor when turning the A/C switch on after removing and installing the cooler refrigerant lines (including the compressor), to prevent damage to the compressor.

16. CHECK FOR ENGINE COOLANT LEAK

17. CHECK FOR REFRIGERANT GAS LEAK

a. After recharging the refrigerant gas, check for refrigerant gas leakage using a halogen leak detector.

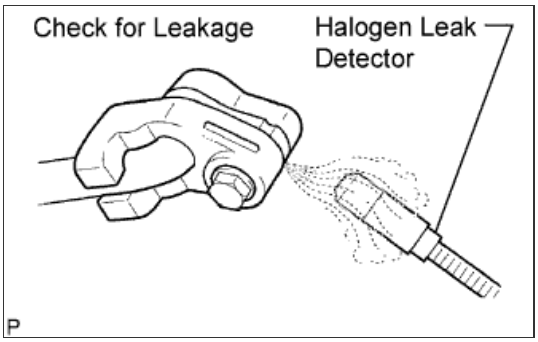
b. Perform the operation under these conditions:

- Stop the engine.
- Secure good ventilation (the halogen leak detector may react to volatile gases other than refrigerant, such as evaporated gasoline or exhaust gas).
- Repeat the test 2 or 3 times.
- Make sure that some refrigerant remains in the refrigeration system. When compressor is off: approximately 392 to 588 kPa (4.0 to 6.0 kgf/cm^2, 57 to 85 psi).

c. Using a halogen leak detector, check the refrigerant line for leakage.

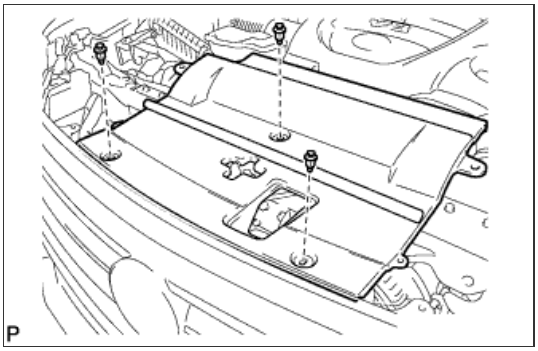
d. If a gas leak is not detected on the drain hose, remove the blower motor control (blower resistor) from the cooling unit. Insert the halogen leak detector sensor into the unit and perform the test.

e. Disconnect the connector and wait for approximately 20 minutes. Bring the halogen leak detector close to the pressure switch and perform the test.



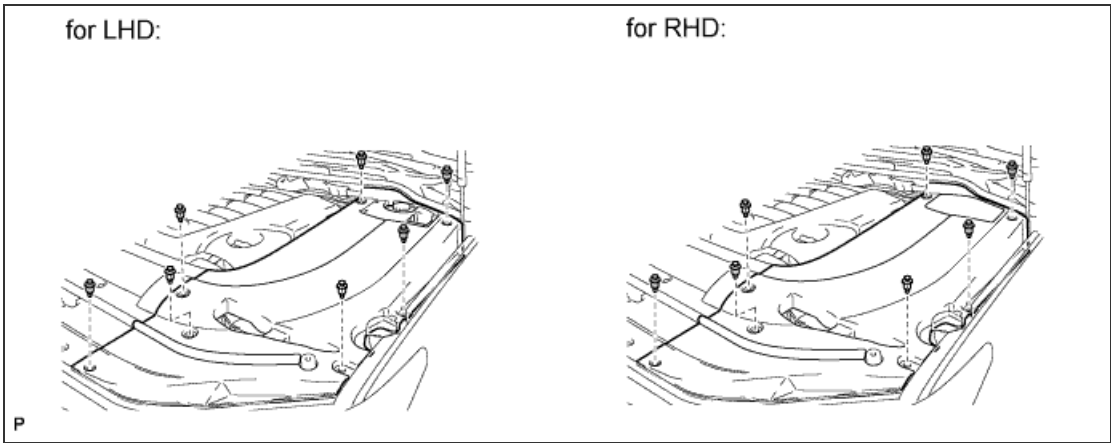
18. INSTALL UPPER RADIATOR SUPPORT SEAL

a. Install the upper radiator support seal with the 3 clips.



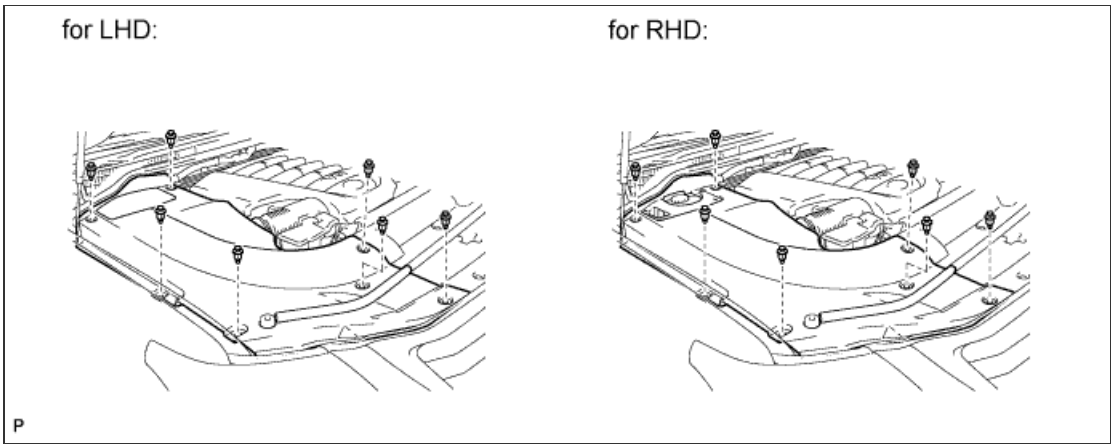
19. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



20. INSTALL ENGINE ROOM SIDE COVER RH

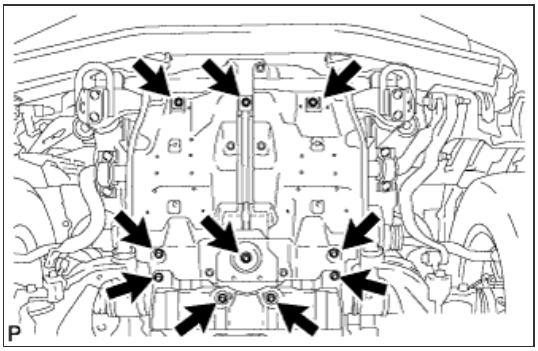
a. Install the engine room side cover with the 7 clips.



21. INSTALL NO. 1 ENGINE UNDER COVER SUB-ASSEMBLY

a. Install the No. 1 engine under cover with the 10 bolts.

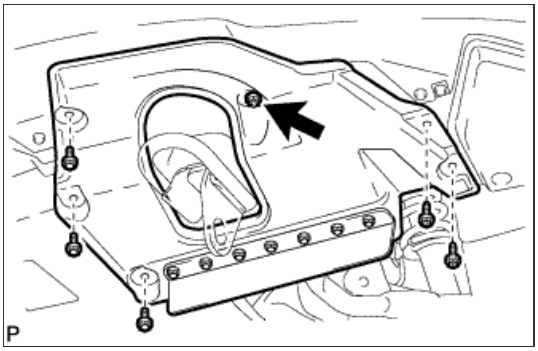
Torque:
29 N*m{ 296 kgf*cm , 21 ft.*lbf }



22. INSTALL FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY LH

a. Push in the clip indicated by the arrow in the illustration to install the fender splash shield.

b. Install the 3 bolts and 2 screws.

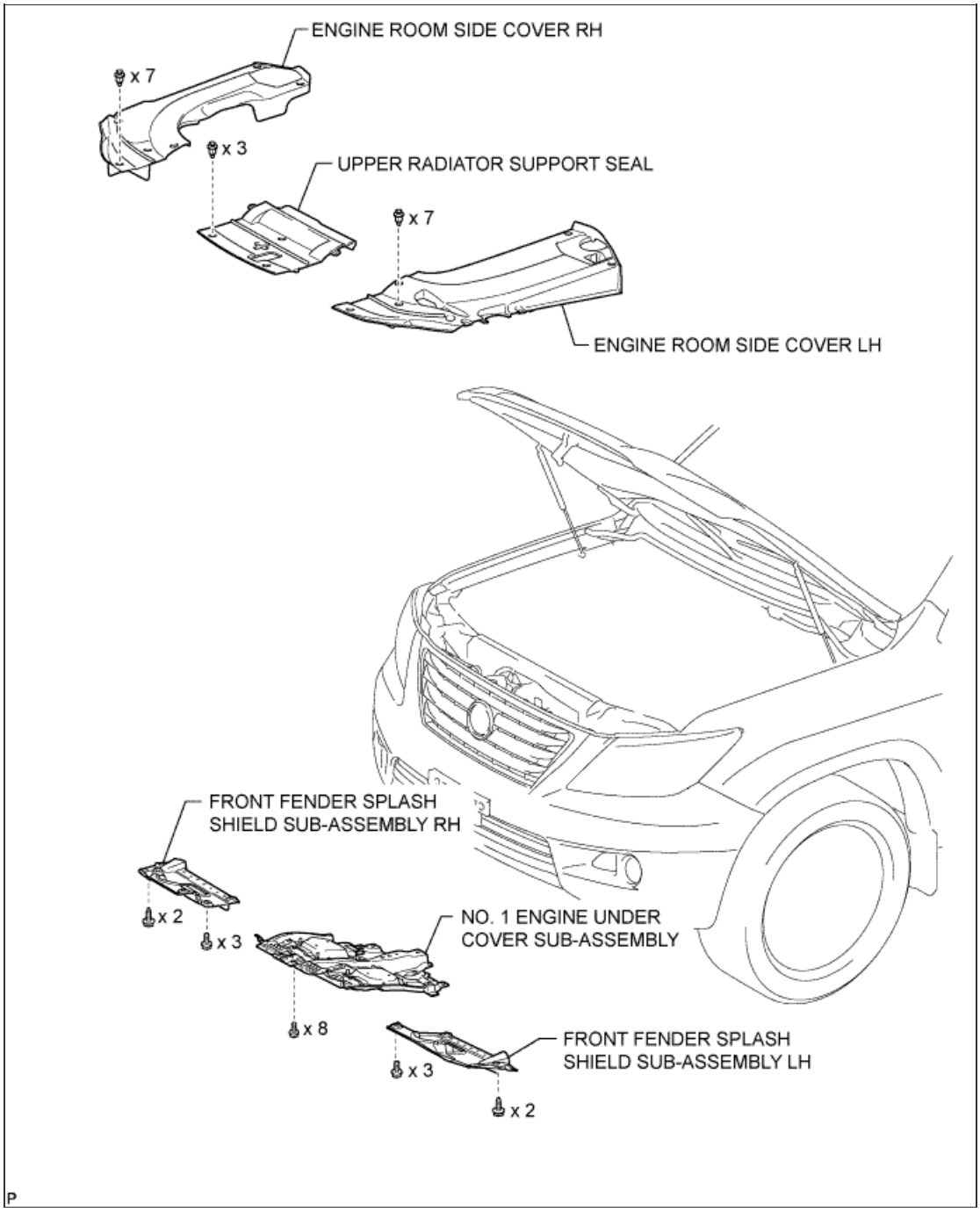


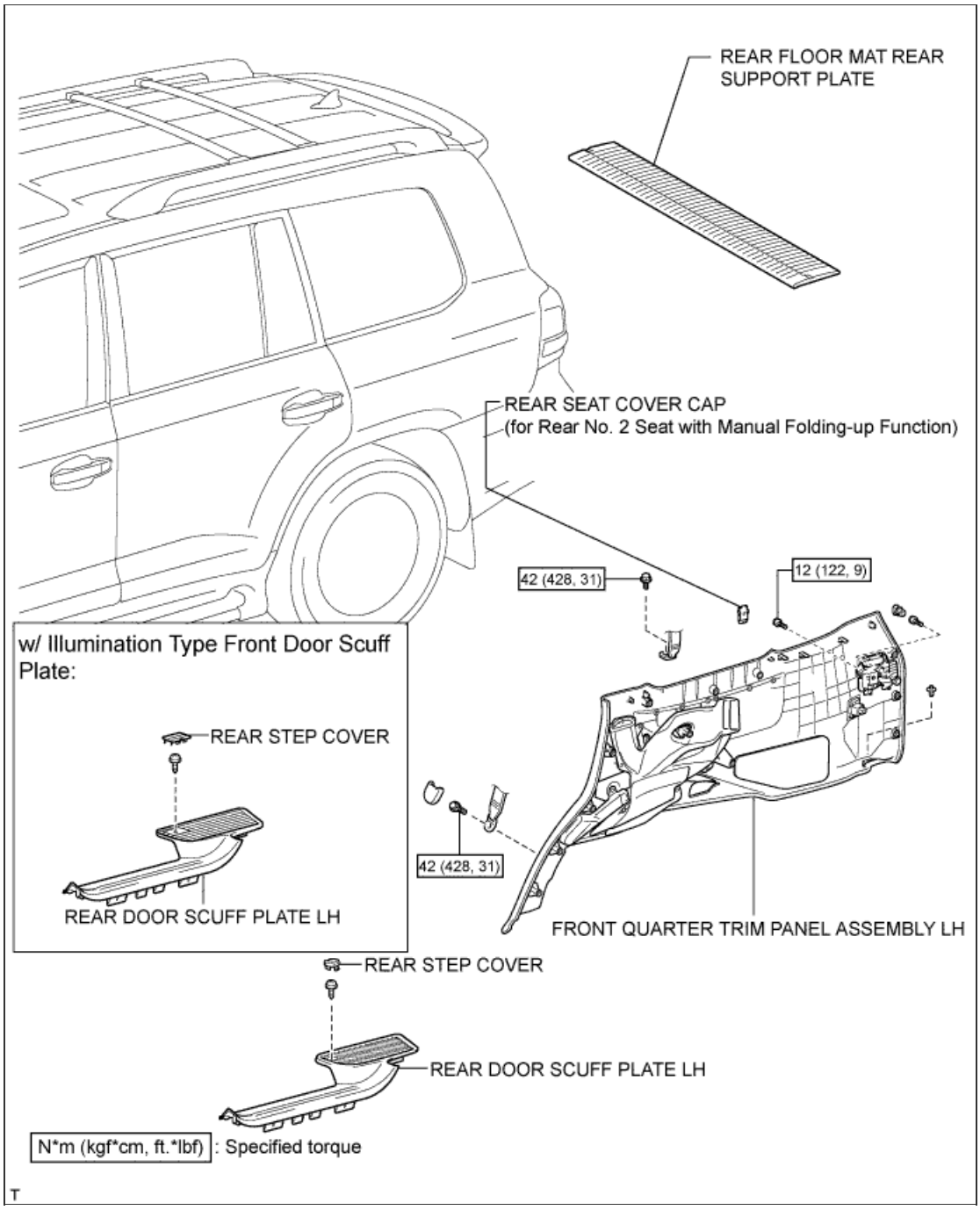
23. INSTALL FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY RH

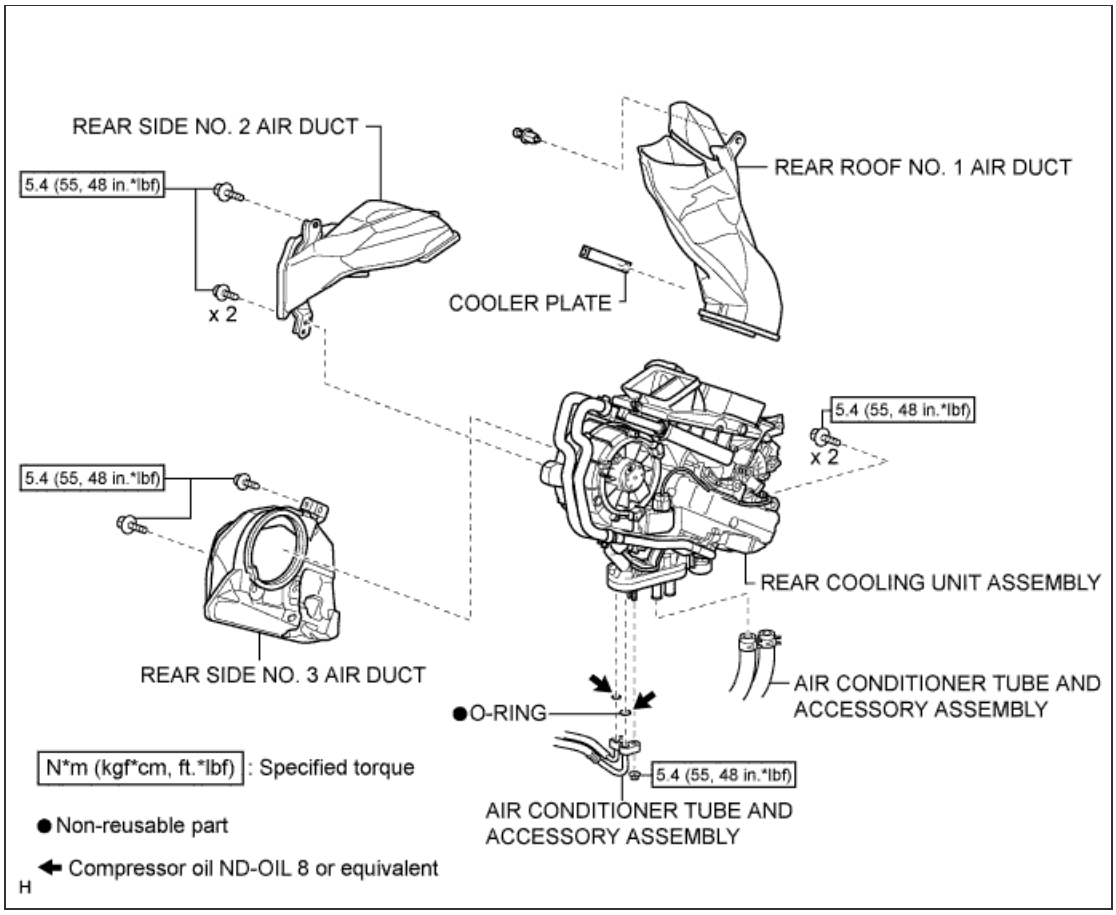
HINT:

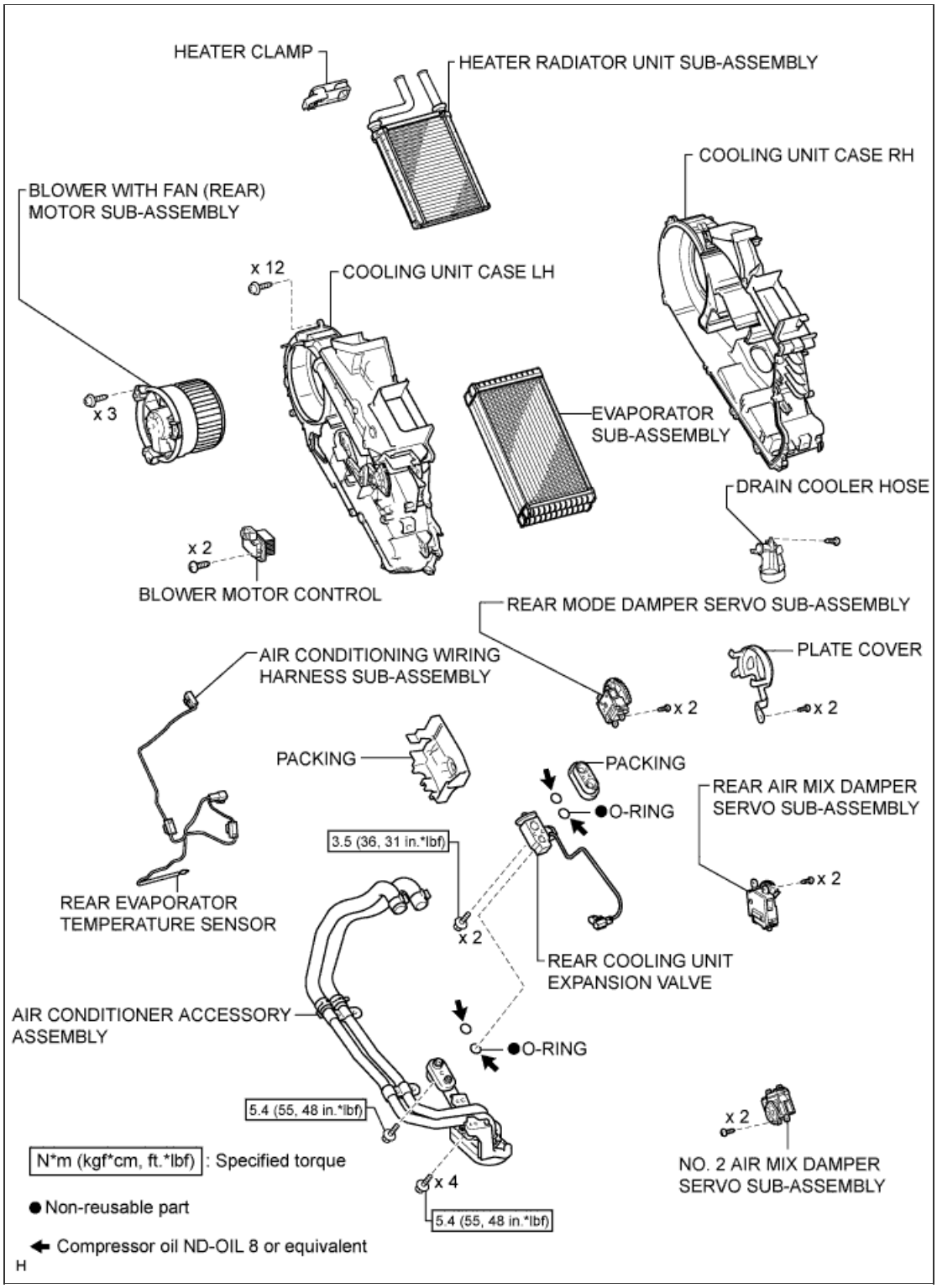
Use the same procedures described for the LH side.

for Preparation Click here




REAR FLOOR MAT REAR SUPPORT PLATE
REAR SEAT COVER CAP
(for Rear No. 2 Seat with Manual Folding-up Function)
42 (428, 31)
12 (122, 9)
w/ Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
42 (428, 31)
FRONT QUARTER TRIM PANEL ASSEMBLY LH
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
N*m (kgf*cm, ft.*lbf) : Specified torque
T


REAR SIDE NO. 2 AIR DUCT
5.4 (55, 48 in.*lbf)
x 2
REAR ROOF NO. 1 AIR DUCT
COOLER PLATE
5.4 (55, 48 in.*lbf)
x 2
5.4 (55, 48 in.*lbf)
REAR COOLING UNIT ASSEMBLY
REAR SIDE NO. 3 AIR DUCT
AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY
●O-RING
5.4 (55, 48 in.*lbf)
AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
Compressor oil ND-OIL 8 or equivalent
H

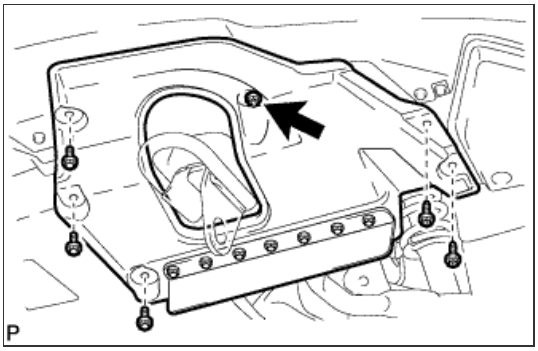

HEATER CLAMP
HEATER RADIATOR UNIT SUB-ASSEMBLY
COOLING UNIT CASE RH
BLOWER WITH FAN (REAR) MOTOR SUB-ASSEMBLY
x 12
COOLING UNIT CASE LH
x 3
EVAPORATOR SUB-ASSEMBLY
DRAIN COOLER HOSE
x 2
BLOWER MOTOR CONTROL
REAR MODE DAMPER SERVO SUB-ASSEMBLY
PLATE COVER
AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY
x 2
x 2
PACKING
PACKING
O-RING
REAR AIR MIX DAMPER SERVO SUB-ASSEMBLY
3.5 (36, 31 in.*lbf)
x 2
REAR EVAPORATOR TEMPERATURE SENSOR
REAR COOLING UNIT EXPANSION VALVE
AIR CONDITIONER ACCESSORY ASSEMBLY
O-RING
5.4 (55, 48 in.*lbf)
x 2
NO. 2 AIR MIX DAMPER SERVO SUB-ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
x 4
Non-reusable part
5.4 (55, 48 in.*lbf)
Compressor oil ND-OIL 8 or equivalent
H

for Preparation Click here

1. REMOVE FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY LH

a. Remove the 3 bolts and 2 screws.

b. Turn the clip indicated by the arrow in the illustration to remove the fender splash shield.



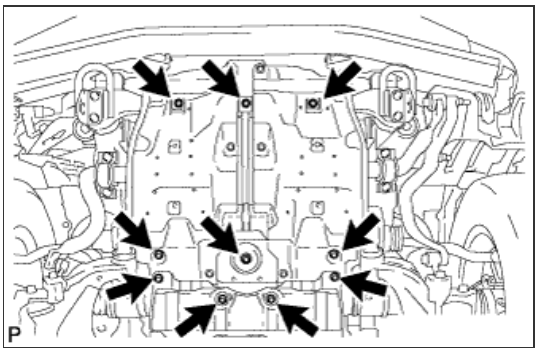
2. REMOVE FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

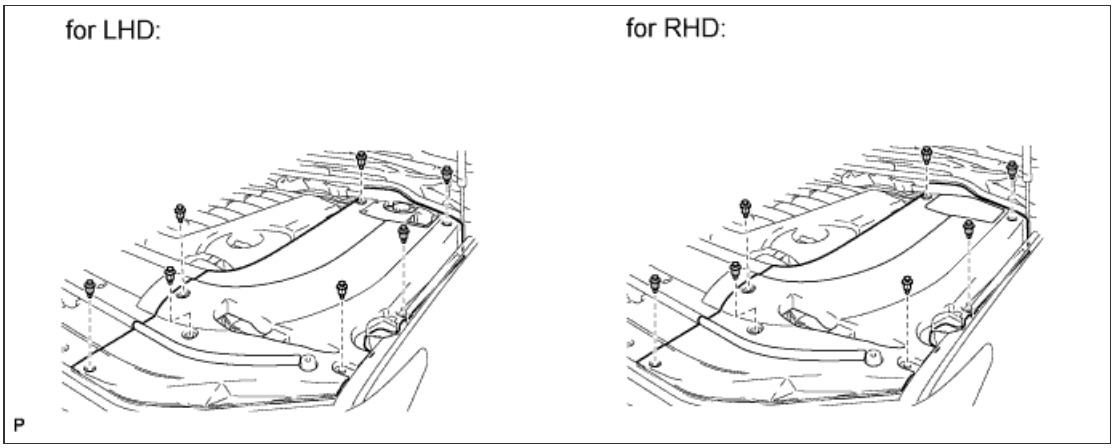
3. REMOVE NO. 1 ENGINE UNDER COVER SUB-ASSEMBLY

a. Remove the 10 bolts and No. 1 engine under cover.



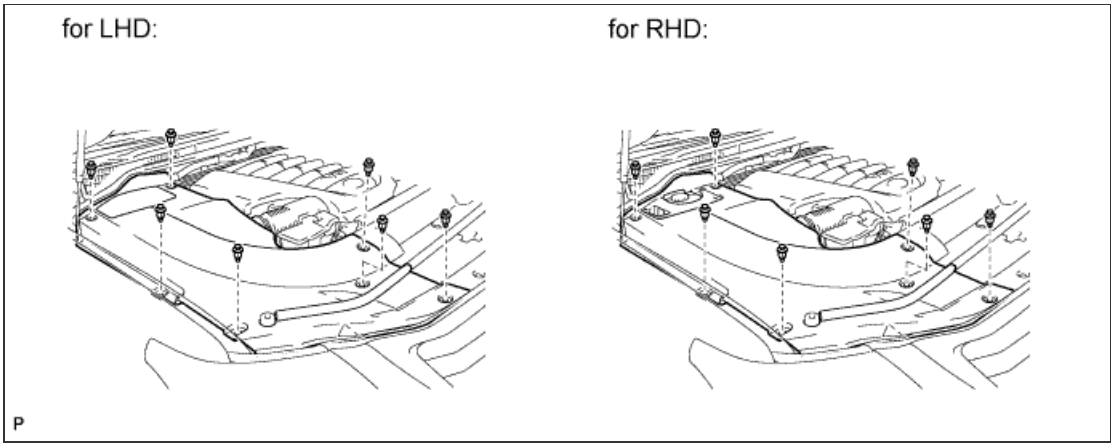
4. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



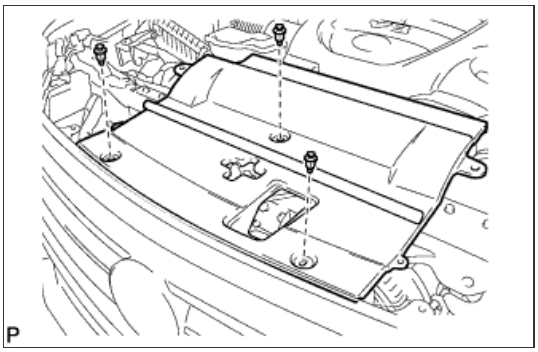
5. REMOVE ENGINE ROOM SIDE COVER RH

a. Remove the 7 clips and engine room side cover.



6. REMOVE UPPER RADIATOR SUPPORT SEAL

a. Remove the 3 clips and upper radiator support seal.



7. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM

a. Start the engine.

b. Turn the A/C switch on.

c. Operate the cooler compressor while the engine speed is approximately 1000 rpm for 5 to 6 minutes to circulate the refrigerant and collect the compressor oil remaining in each component into the cooler compressor.

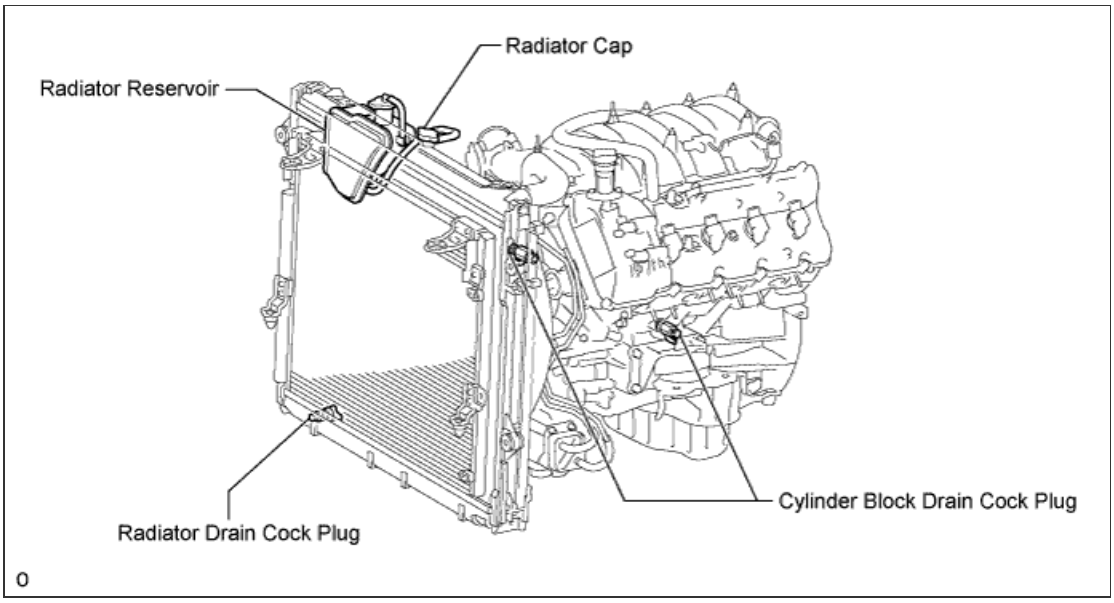
d. Stop the engine.

e. Recover the refrigerant from the A/C system using a refrigerant recovery unit.

8. DRAIN ENGINE COOLANT

CAUTION:

Do not remove the radiator cap while the engine and radiator are still hot. Pressurized, hot engine coolant and steam may be released and cause serious burns.



a. Loosen the radiator drain cock plug.

HINT:

Collect the coolant in a container and dispose of it according to the regulations in your area.

b. Remove the radiator cap. Then drain the coolant from the radiator.

c. Loosen the 2 cylinder block drain cock plugs. Then drain the coolant from the engine.

d. Tighten the 2 cylinder block drain cock plugs.

Torque:
13 N*m{ 130 kgf*cm , 10 ft.*lbf }

e. Tighten the radiator drain cock plug by hand.

9. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

10. REMOVE REAR NO. 2 SEAT ASSEMBLY LH

a. w/ Automatic Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

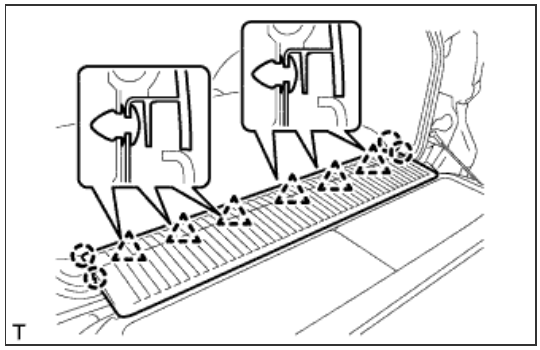
11. REMOVE REAR NO. 2 SEAT ASSEMBLY RH

a. w/ Automatic Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function:
Remove the rear No. 2 seat assembly (Click here).

12. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.

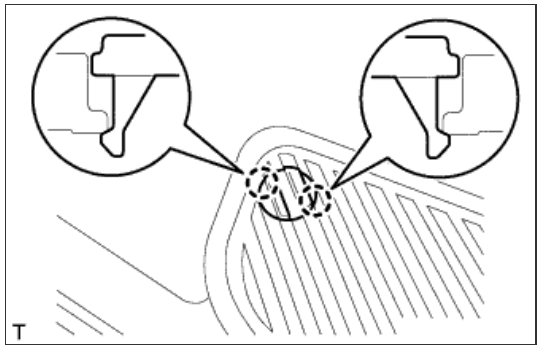


13. REMOVE REAR STEP COVER

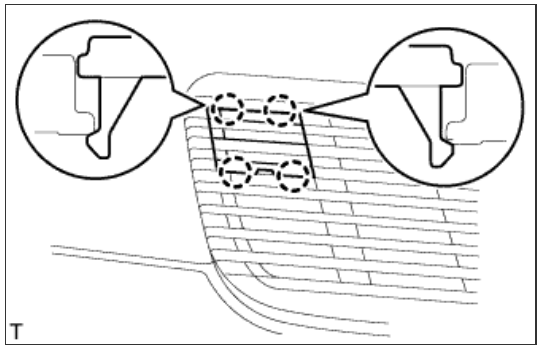
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.



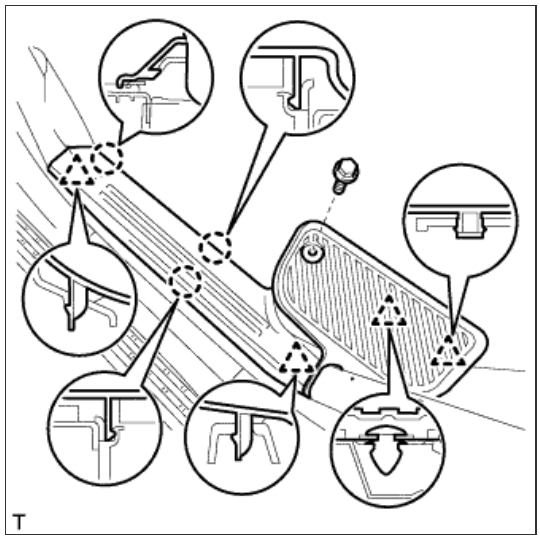
14. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:

Remove the rear door scuff plate.

i. Remove the screw.

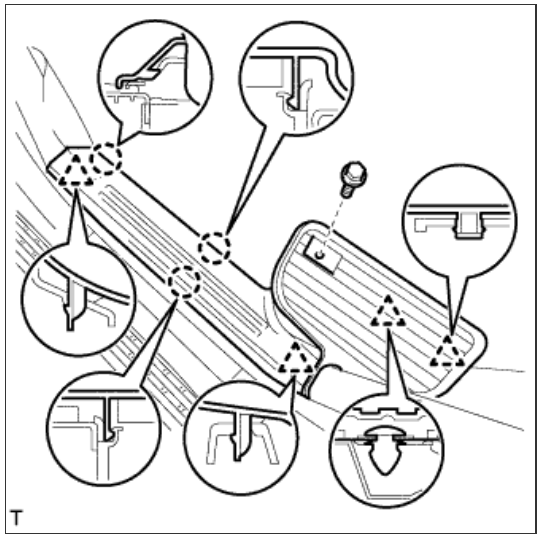
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



15. REMOVE REAR SEAT COVER CAP (for Rear No. 2 Seat with Manual Folding-up Function)

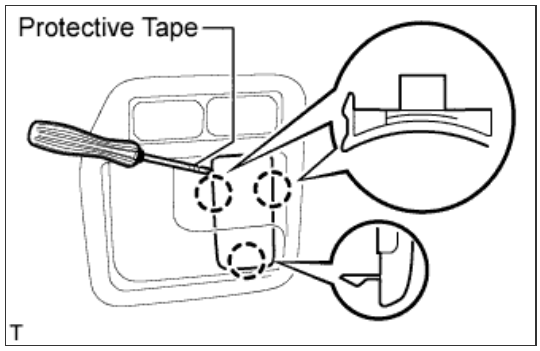
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

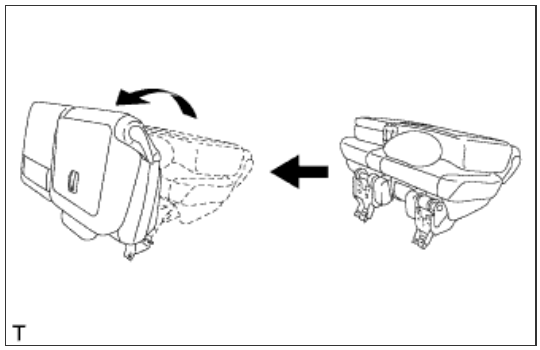
Tape the screwdriver tip before use.



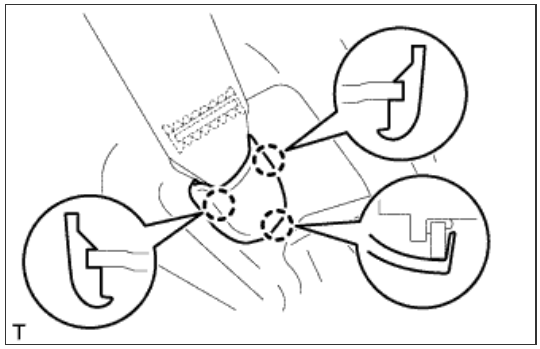
16. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

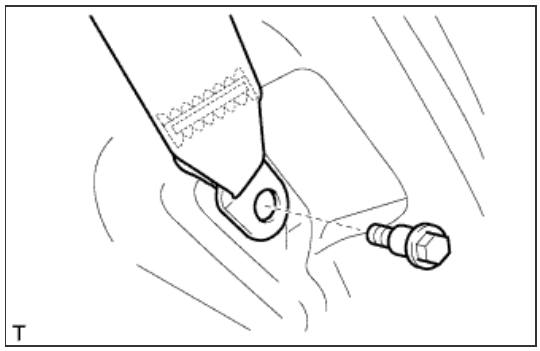
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



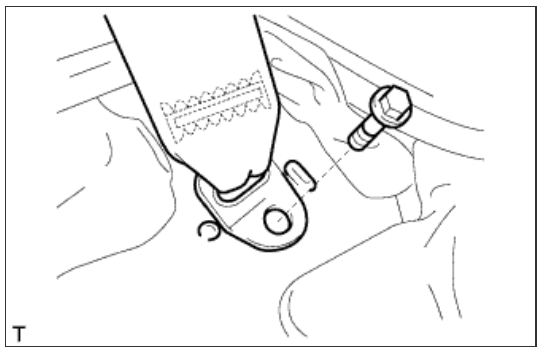
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

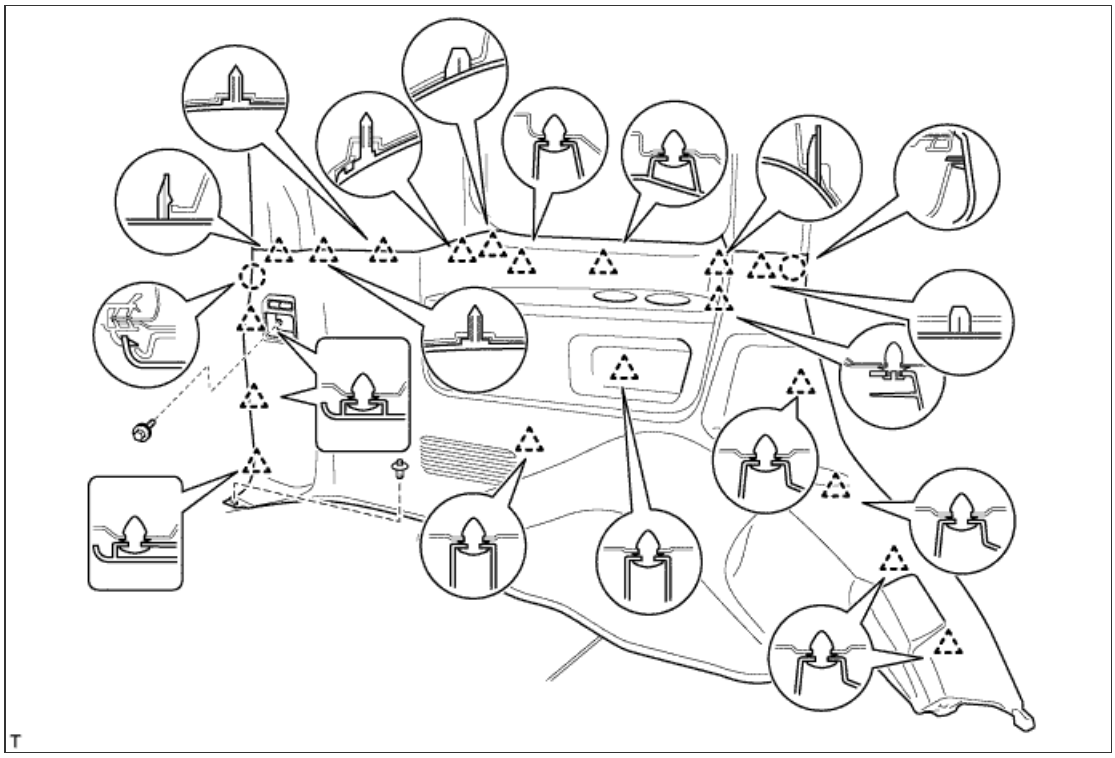


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

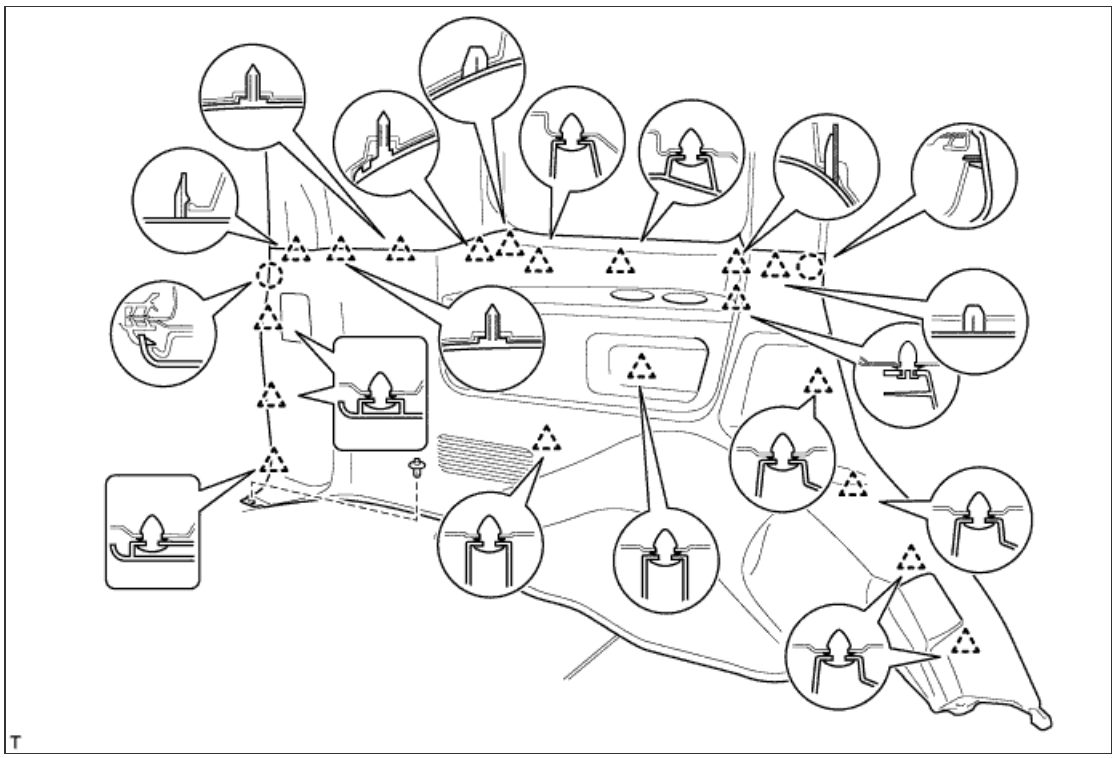


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.



17. DISCONNECT AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY

a. Using pliers, grip the claws of the clips and slide the 2 clips.

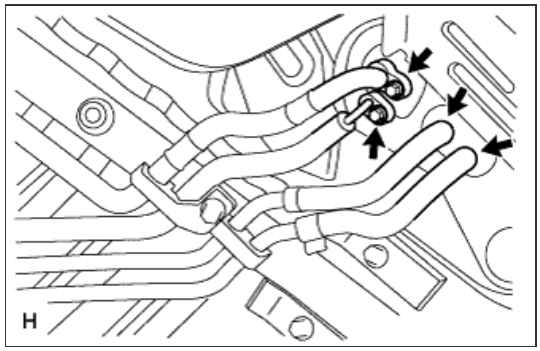
b. Disconnect the heater water inlet hose and heater water outlet hose.

c. Remove the 2 nuts.

d. Disconnect the air conditioner tube and accessory assembly.

NOTICE:

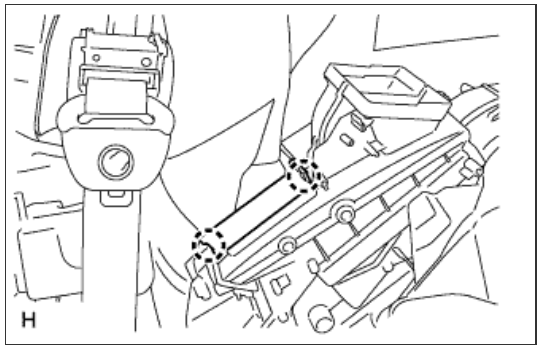
- **Do not use a screwdriver or similar tool to disconnect the tube.**
- **Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.**



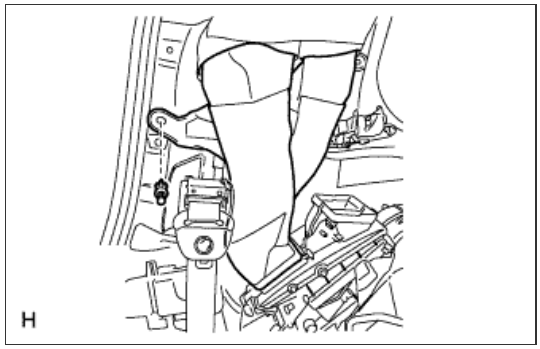
e. Remove the 2 O-rings from the air conditioner tube and accessory assembly.

18. REMOVE REAR ROOF NO. 1 AIR DUCT

a. Detach the 2 claws and remove the cooler plate.



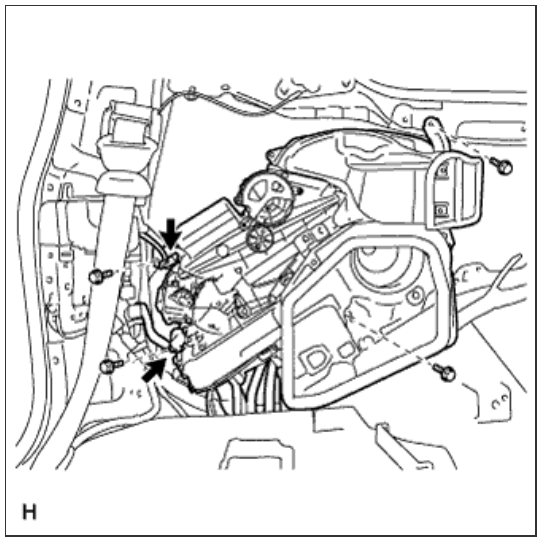
b. Remove the clip and duct.



19. REMOVE REAR COOLING UNIT ASSEMBLY

a. Disconnect the 2 connectors.

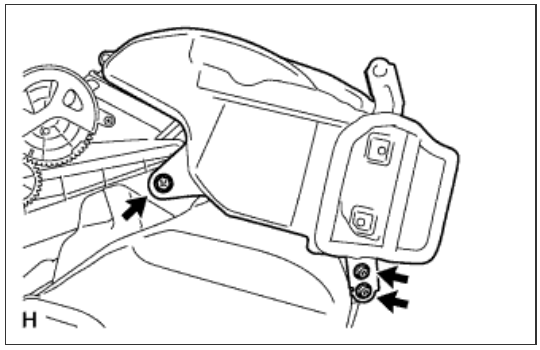
b. Remove the 4 bolts and rear cooling unit.


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for Preparation Click here

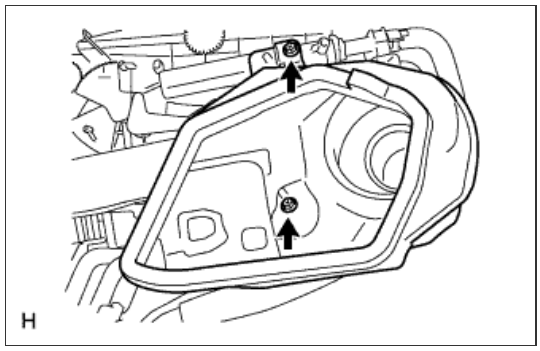
1. REMOVE REAR SIDE NO. 2 AIR DUCT

a. Remove the 3 screws and duct.



2. REMOVE REAR SIDE NO. 3 AIR DUCT

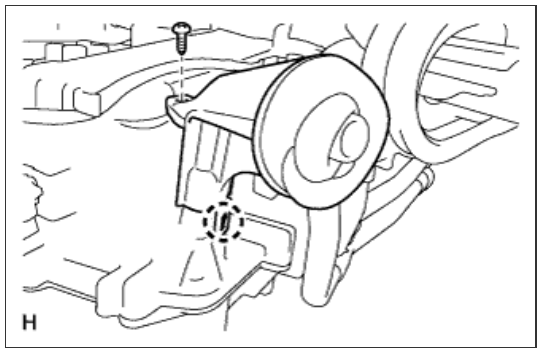
a. Remove the 2 screws and duct.



3. REMOVE DRAIN COOLER HOSE

a. Remove the screw.

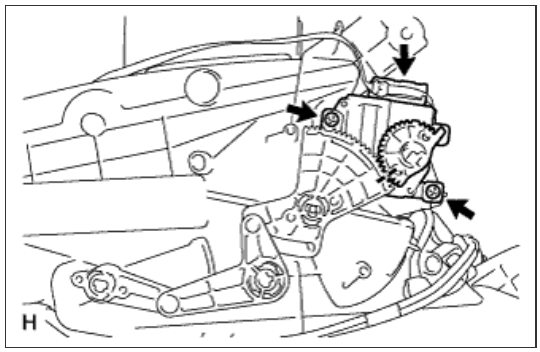
b. Detach the claw and remove the drain hose.



4. REMOVE REAR AIR MIX DAMPER SERVO SUB-ASSEMBLY

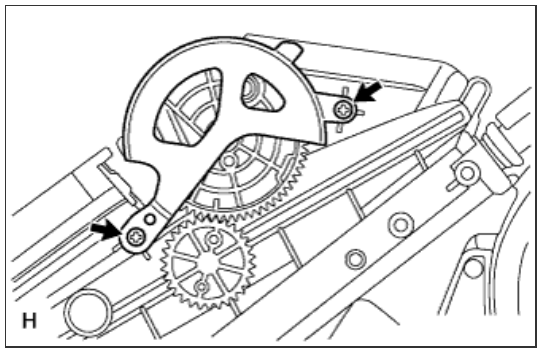
a. Disconnect the connector.

b. Remove the 2 screws and damper servo.



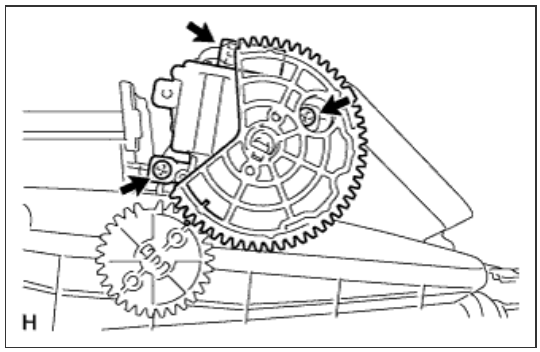
5. REMOVE REAR MODE DAMPER SERVO SUB-ASSEMBLY

a. Remove the 2 screws and plate cover.



b. Disconnect the connector.

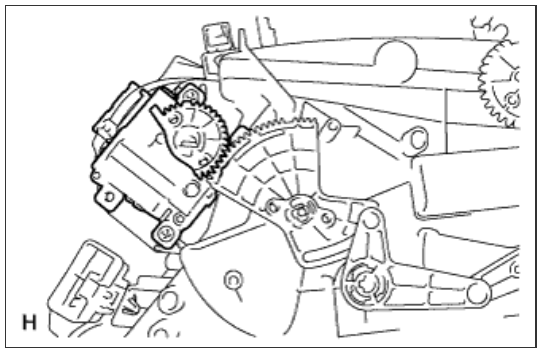
c. Remove the 2 screws and damper servo.



6. REMOVE NO. 2 AIR MIX DAMPER SERVO SUB-ASSEMBLY

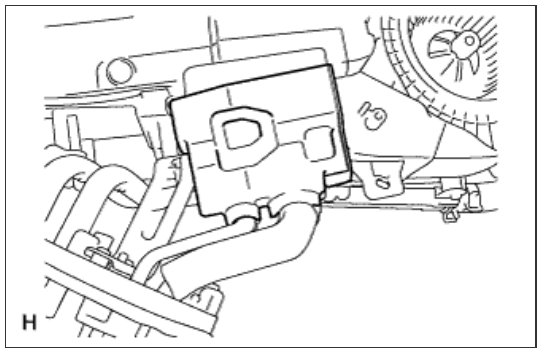
a. Disconnect the connector.

b. Remove the 2 screws and damper servo.



7. REMOVE AIR CONDITIONER ACCESSORY ASSEMBLY

a. Remove the packing.

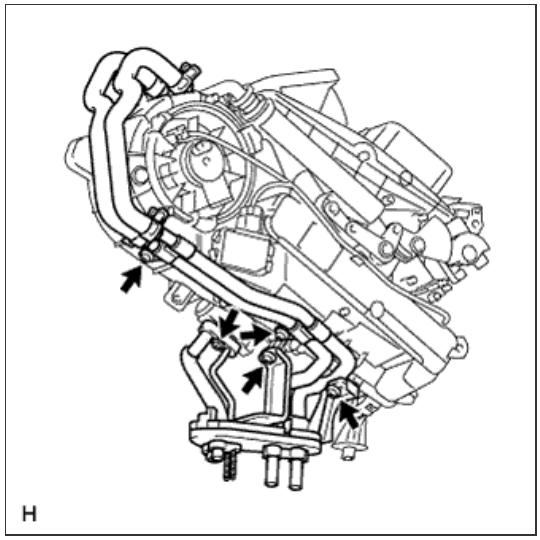


b. Remove the bolt and 4 screws.

c. Using pliers, grip the claws of the clips and slide the 2 clips.

d. Remove the air conditioner accessory assembly.

e. Remove the 2 O-rings from the air conditioner accessory assembly.

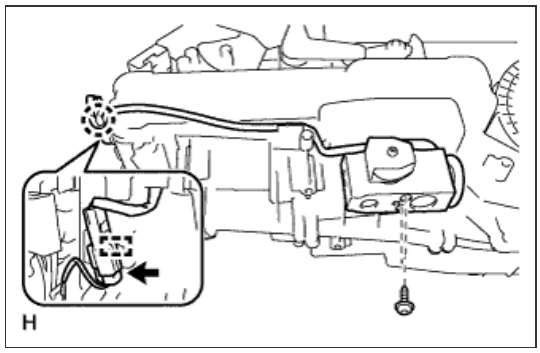


8. REMOVE REAR COOLING UNIT EXPANSION VALVE

a. Disconnect the connector.

b. Detach the clamp.

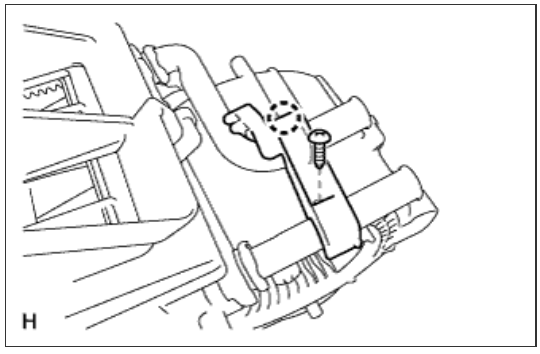
c. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts and expansion valve.



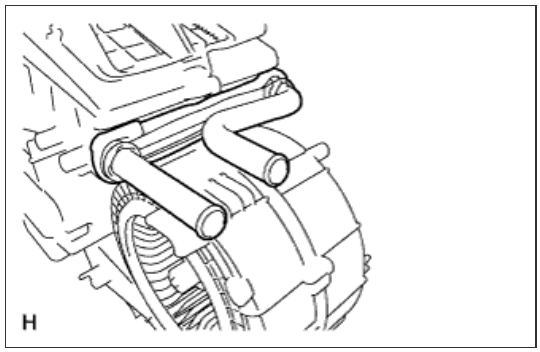
9. REMOVE HEATER RADIATOR UNIT SUB-ASSEMBLY

a. Remove the screw and detach the claw.

b. Remove the heater clamp.



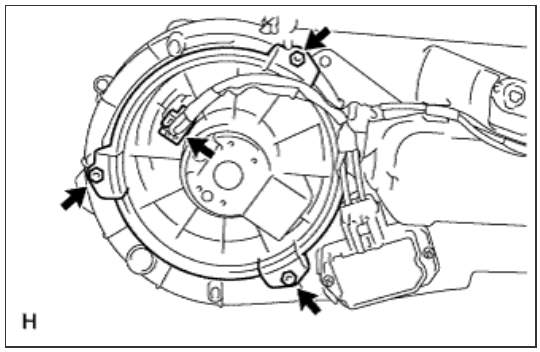
c. Remove the heater radiator unit.



10. REMOVE BLOWER WITH FAN (REAR) MOTOR SUB-ASSEMBLY

a. Disconnect the connector.

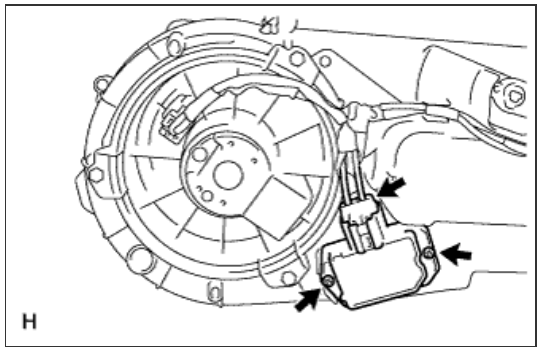
b. Remove the 3 screws and blower motor.



11. REMOVE BLOWER MOTOR CONTROL

a. Disconnect the connector.

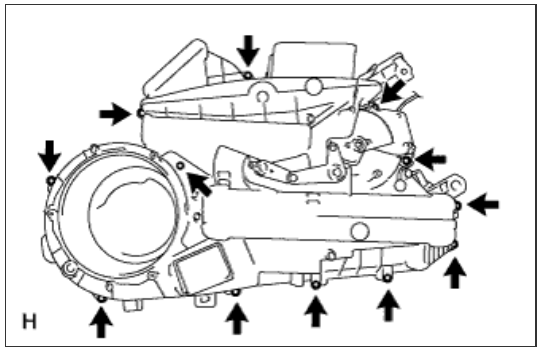
b. Remove the 2 screws and blower motor control.



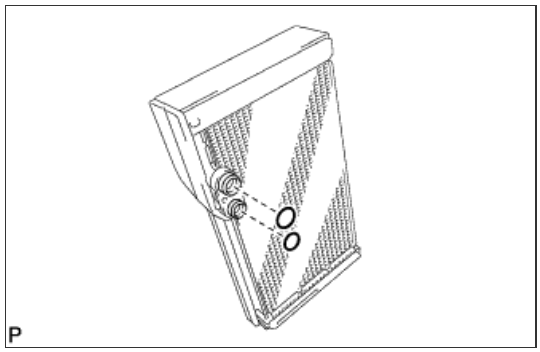
12. REMOVE EVAPORATOR SUB-ASSEMBLY

a. Remove the 12 screws and rear cooling unit case LH.

b. Remove the evaporator.

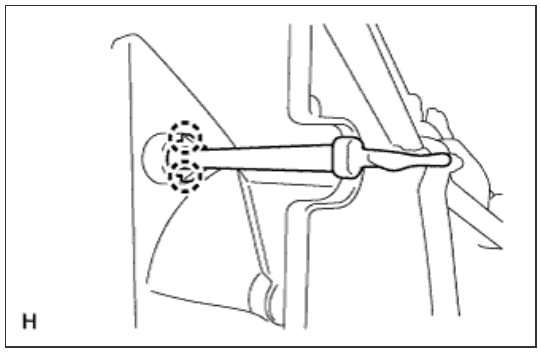


c. Remove the 2 O-rings from the evaporator.



13. REMOVE REAR EVAPORATOR TEMPERATURE SENSOR

a. Detach the 2 claws and remove the sensor.



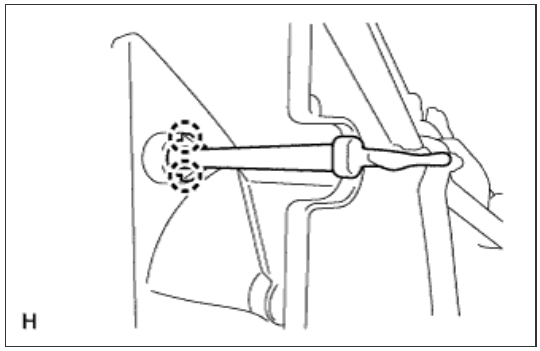
14. REMOVE AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY

for Preparation Click here

1. INSTALL AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY

2. INSTALL REAR EVAPORATOR TEMPERATURE SENSOR

a. Attach the 2 claws to install the sensor.



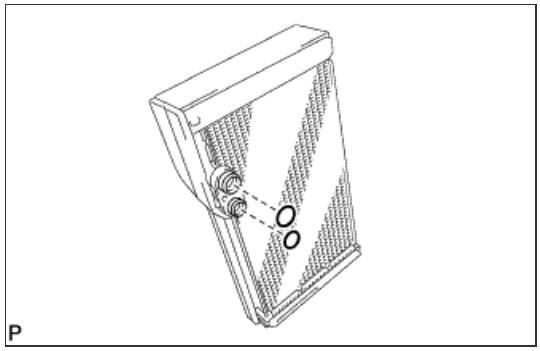
3. INSTALL EVAPORATOR SUB-ASSEMBLY

a. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

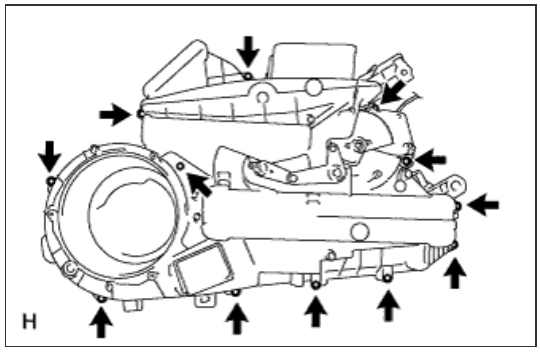
Compressor oil:
ND-OIL 8 or equivalent

b. Install the 2 O-rings to the evaporator.

c. Install the evaporator.



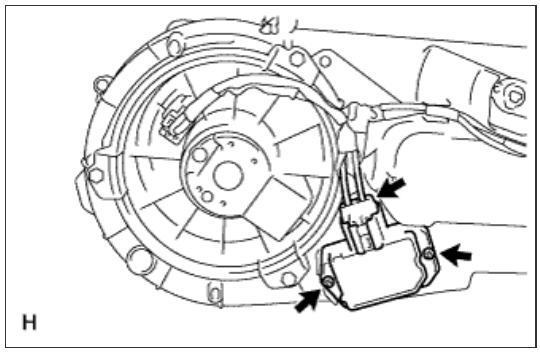
d. Install the rear cooling unit case LH with the 12 screws.



4. INSTALL BLOWER MOTOR CONTROL

a. Install the blower motor control with the 2 screws.

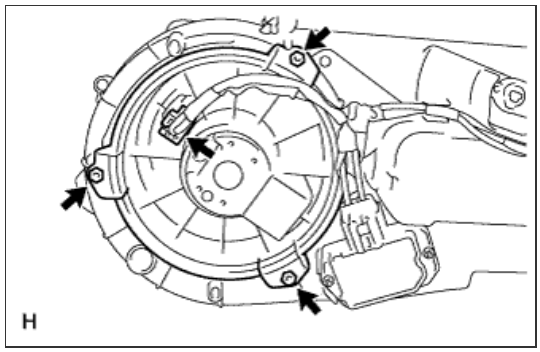
b. Connect the connector.



5. INSTALL BLOWER WITH FAN (REAR) MOTOR SUB-ASSEMBLY

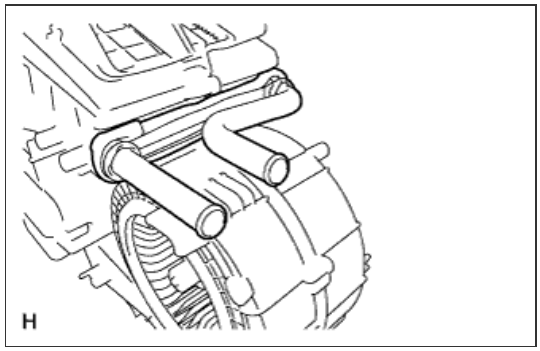
a. Install the blower motor with the 3 screws.

b. Connect the connector.

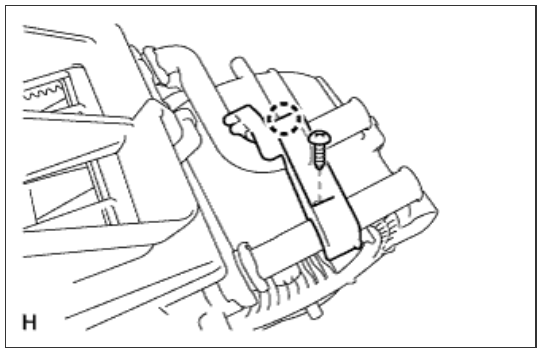


6. INSTALL HEATER RADIATOR UNIT SUB-ASSEMBLY

a. Install the heater radiator unit to the rear cooling unit.



b. Install the heater clamp with the screw and attach the claw.



7. INSTALL REAR COOLING UNIT EXPANSION VALVE

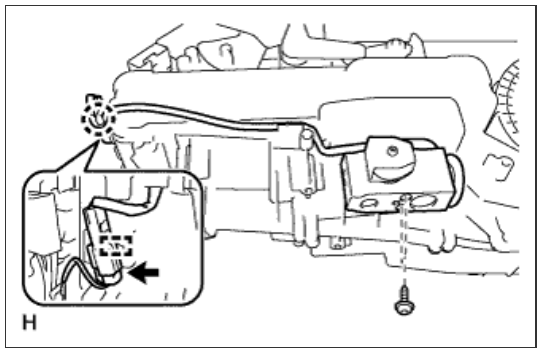
a. Using a 4 mm hexagon wrench, install the expansion valve with the 2 hexagon bolts.

Torque:

3.5 N*m{ 36 kgf*cm , 31 in.*lbf }

b. Attach the clamp.

c. Connect the connector.



8. INSTALL AIR CONDITIONER ACCESSORY ASSEMBLY

a. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

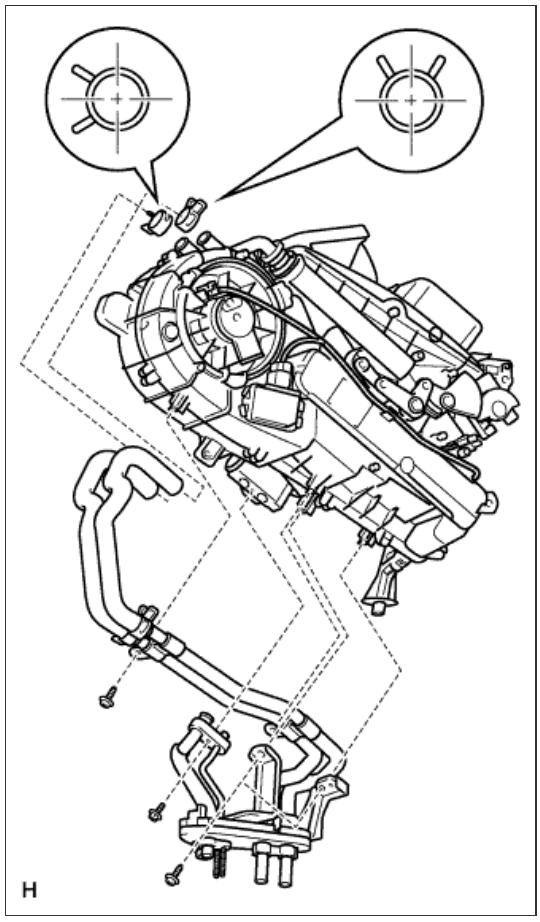
b. Install the 2 O-rings to the air conditioner accessory assembly.

c. Install the air conditioner accessory assembly.

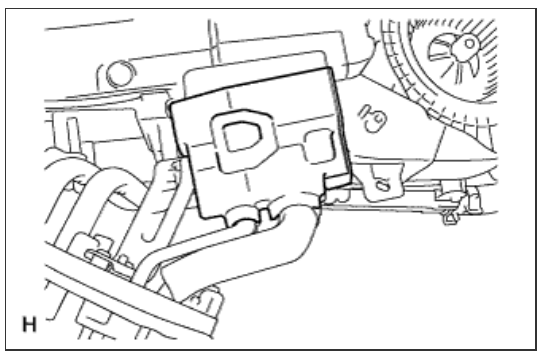
d. Using pliers, grip the claws of the clips and slide the 2 clips.

Torque:
5.4 N*m{ 55 kgf*cm , 48 in.*lbf }

e. Install the bolt and 4 screws.



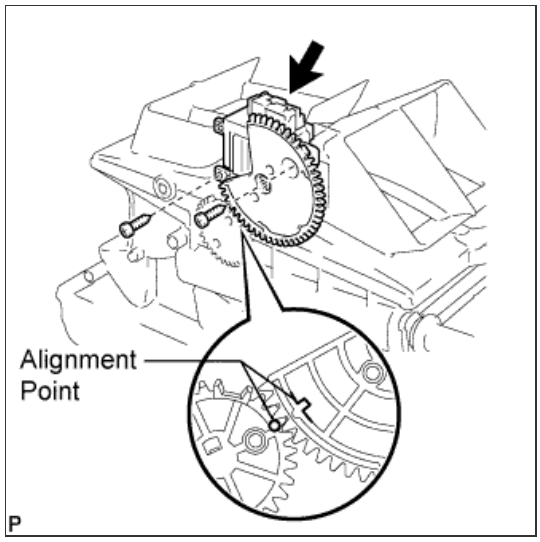
f. Install packing as shown in the illustration.



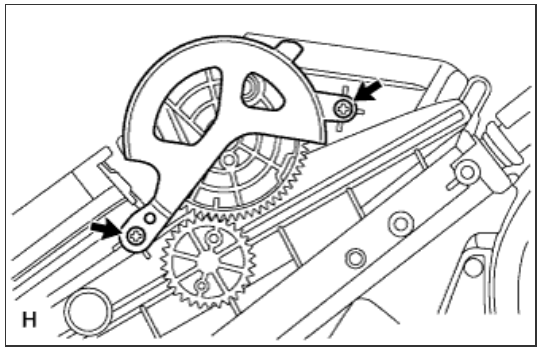
9. INSTALL REAR MODE DAMPER SERVO SUB-ASSEMBLY

a. Align the damper servo as shown in the illustration, and install it with the 2 screws.

b. Connect the connector.



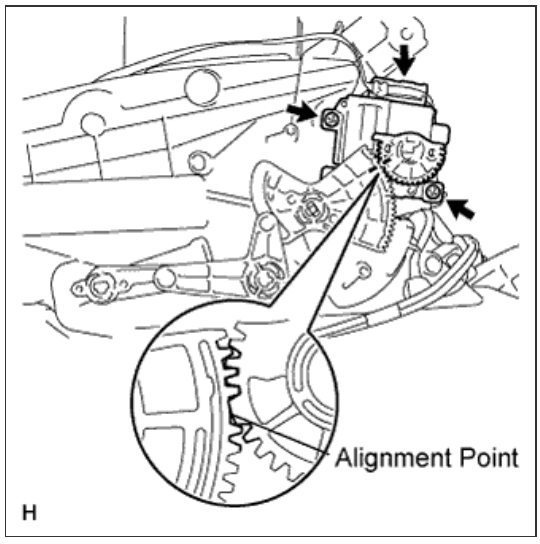
c. Install the plate cover with the 2 screws.



10. INSTALL NO. 2 AIR MIX DAMPER SERVO SUB-ASSEMBLY

a. Align the damper servo as shown in the illustration, and install it with the 2 screws.

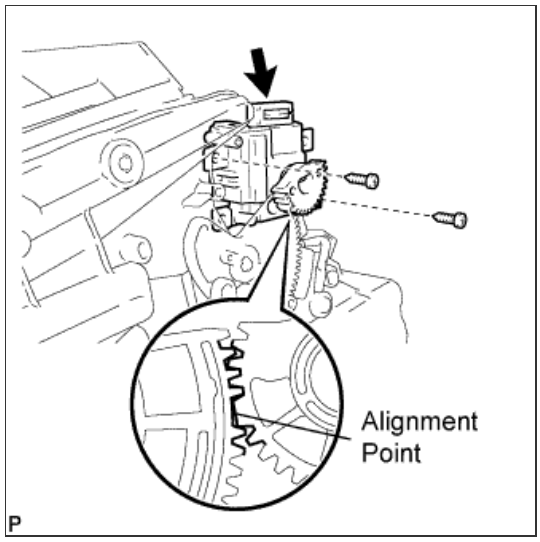
b. Connect the connector.



11. INSTALL REAR AIR MIX DAMPER SERVO SUB-ASSEMBLY

a. Align the damper servo as shown in the illustration, and install it with the 2 screws.

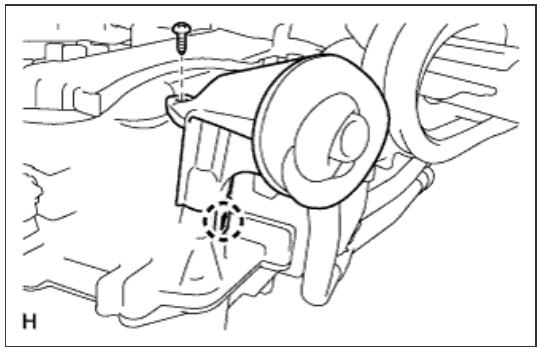
b. Connect the connector.



12. INSTALL DRAIN COOLER HOSE

a. Attach the claw to install the drain hose.

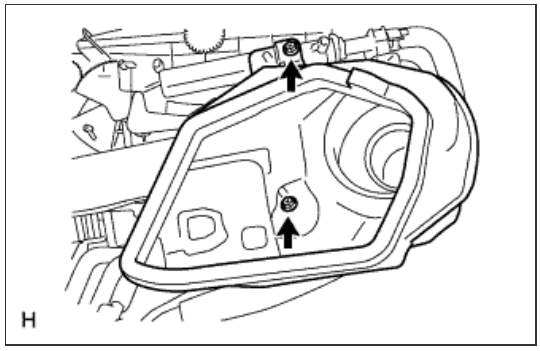
b. Install the screw.



13. INSTALL REAR SIDE NO. 3 AIR DUCT

a. Install the duct with the 2 screws.

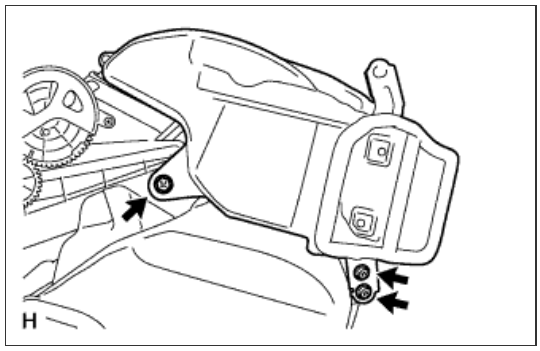
Torque:
5.4 N*m{ 55 kgf*cm , 48 in.*lbf }



14. INSTALL REAR SIDE NO. 2 AIR DUCT

a. Install the duct with the 3 screws.

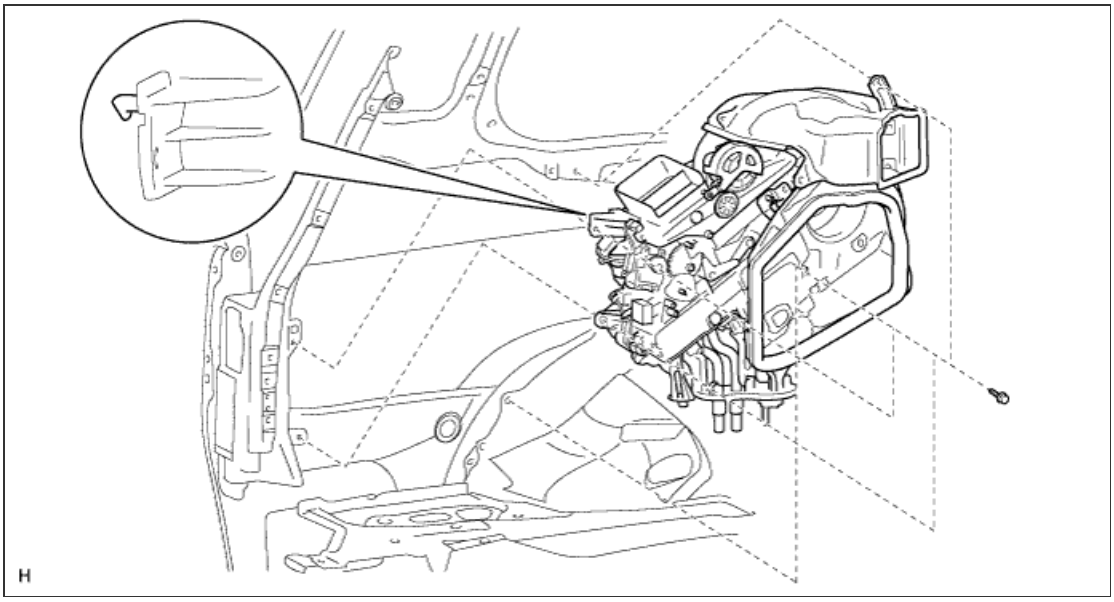
Torque:
5.4 N*m{ 55 kgf*cm , 48 in.*lbf }


H

for Preparation Click here

1. INSTALL REAR COOLING UNIT ASSEMBLY

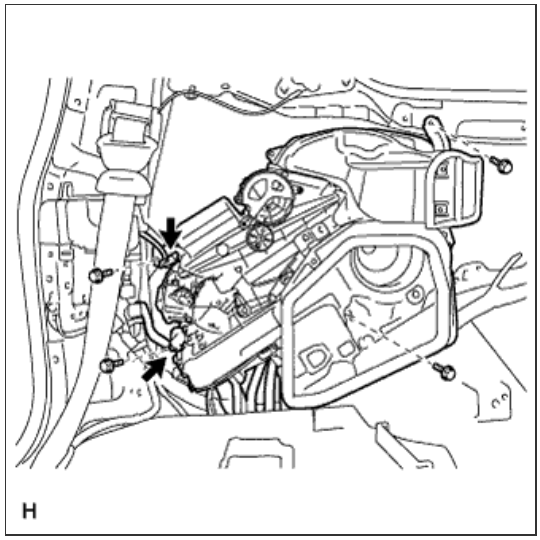
a. Install the rear cooling unit as shown in the illustration.



b. Install the 4 bolts.

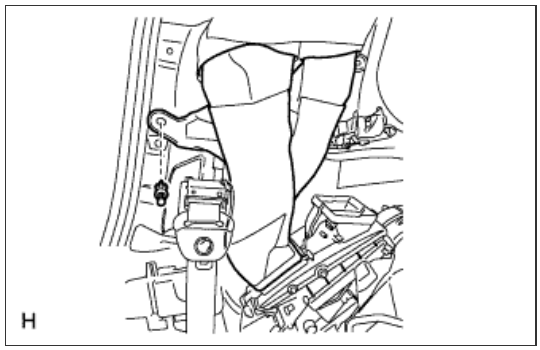
Torque:
5.4 N*m{ 55 kgf*cm , 48 in.*lbf }

c. Connect the 2 connectors.

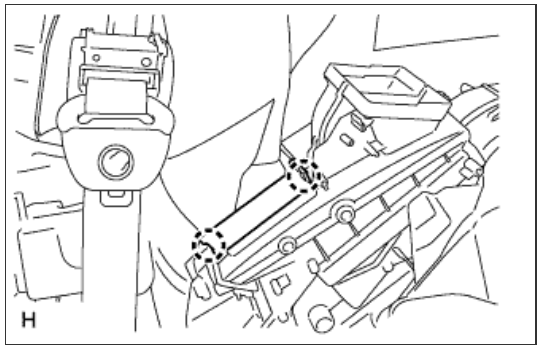


2. INSTALL REAR ROOF NO. 1 AIR DUCT

a. Install the duct with the clip.



b. Attach the 2 claws to install the cooler plate.



3. CONNECT AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY

a. Remove the attached vinyl tape from the pipe.

b. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the air conditioner tube and accessory assembly.

c. Install the 2 O-rings to the air conditioner tube and accessory assembly.

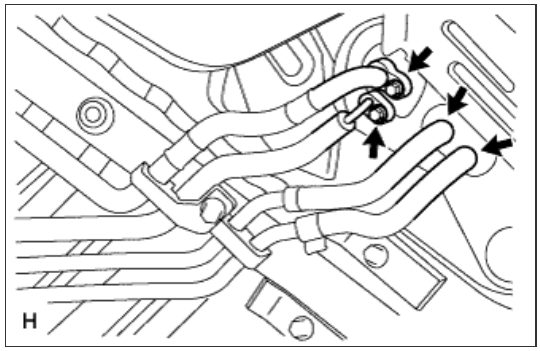
d. Connect the air conditioner tube and accessory assembly.

e. Install the 2 nuts.

Torque:
5.4 N*m{ 55 kgf*cm , 48 in.*lbf }

f. Connect the heater water inlet hose and heater water outlet hose.

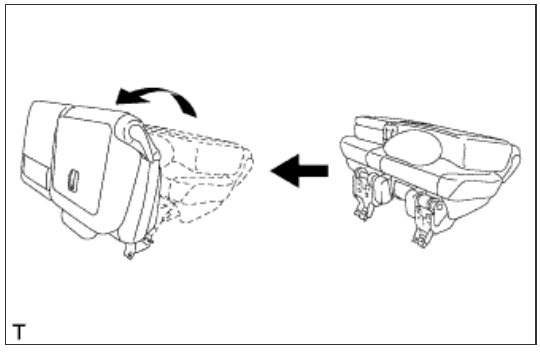
g. Using pliers, grip the claws of the clips and slide the 2 clips.



4. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



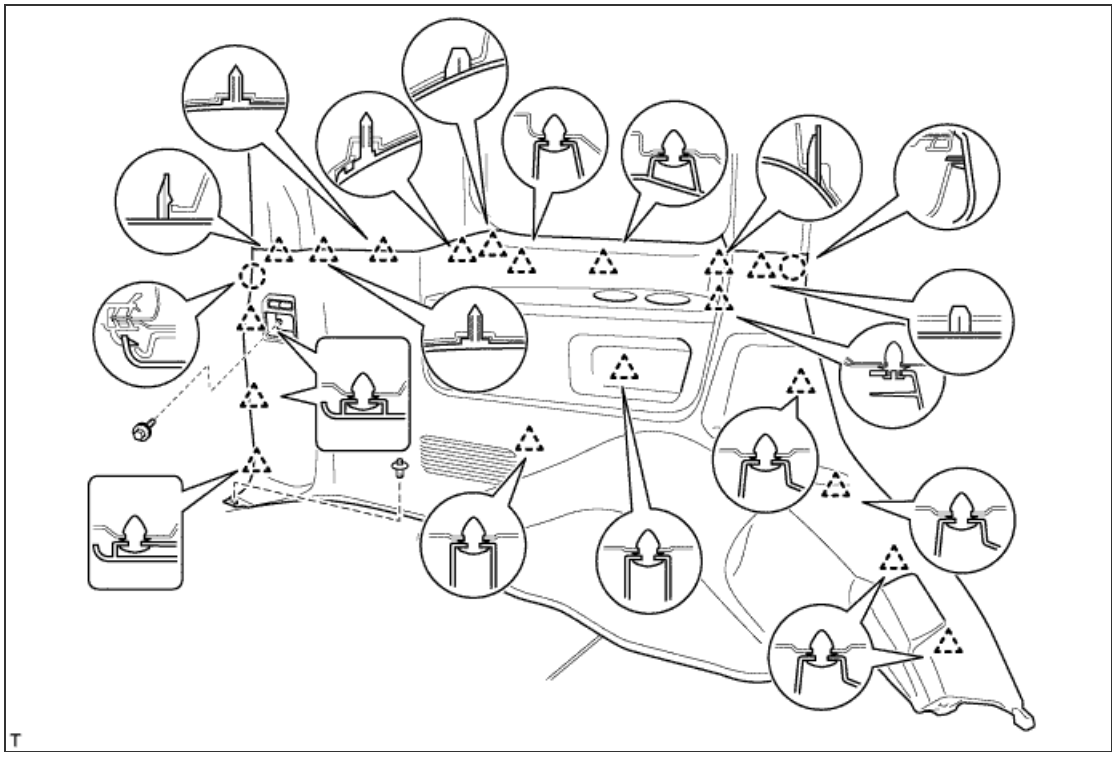
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

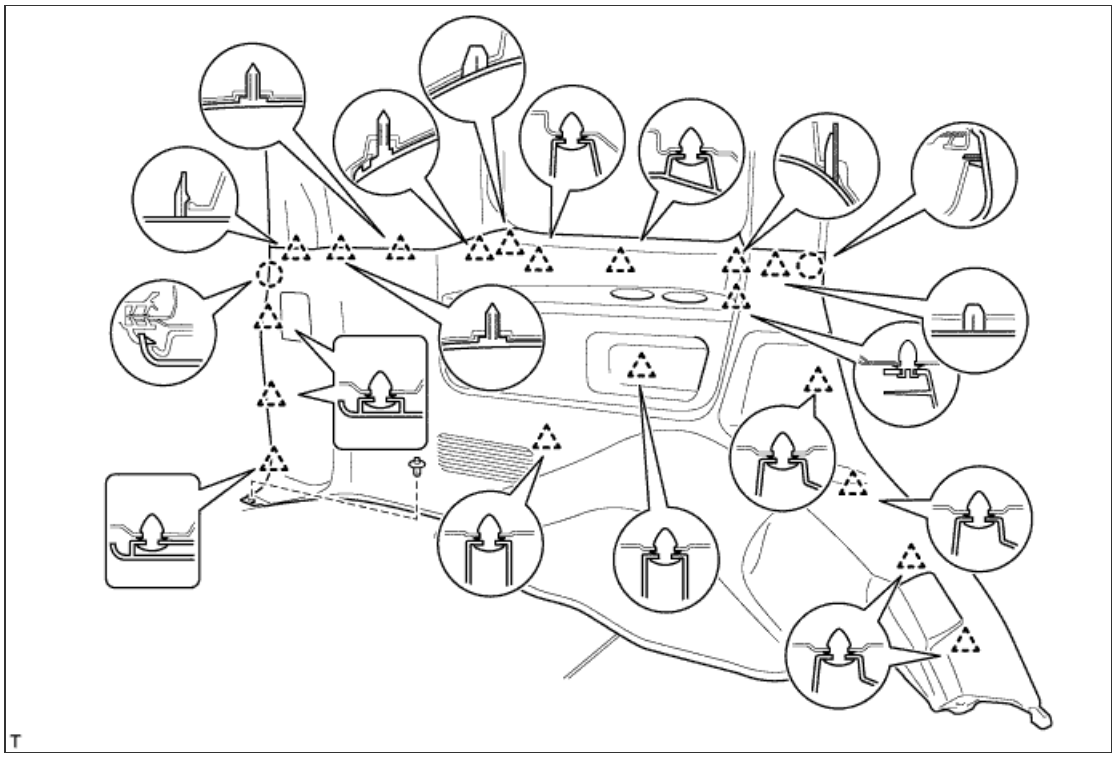


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

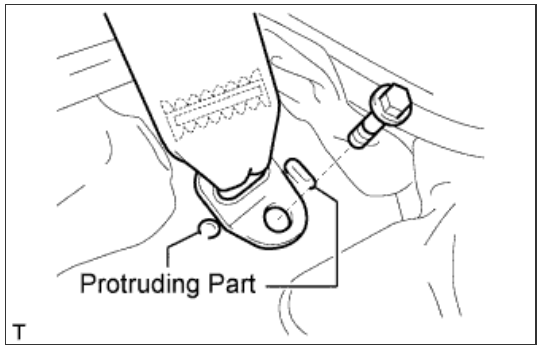


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

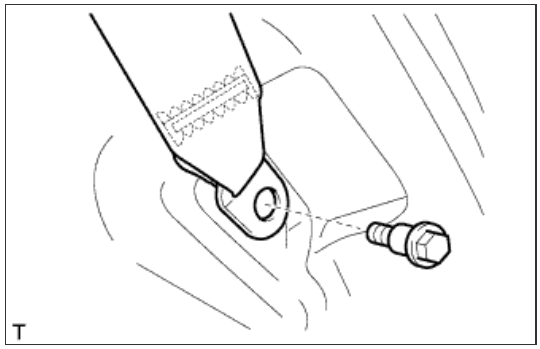
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

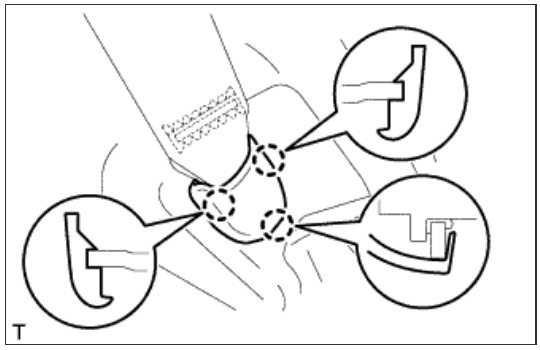


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



e. Attach the 3 claws to install the cover.

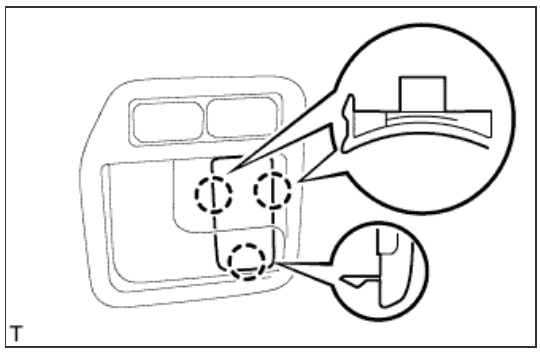


5. INSTALL REAR SEAT COVER CAP (for Rear No. 2 Seat with Manual Folding-up Function)

HINT:

Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.

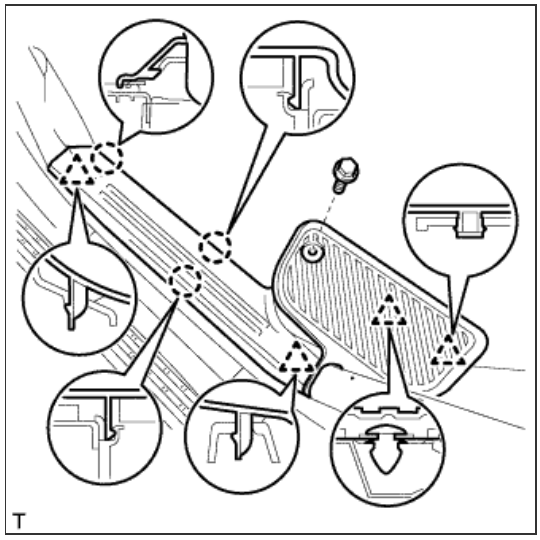


6. INSTALL REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

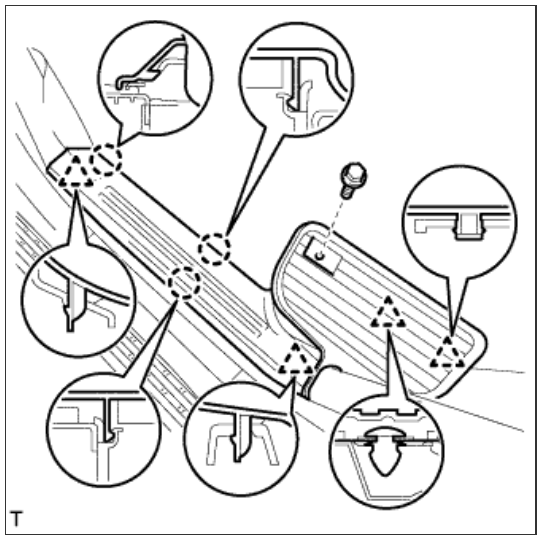
ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.



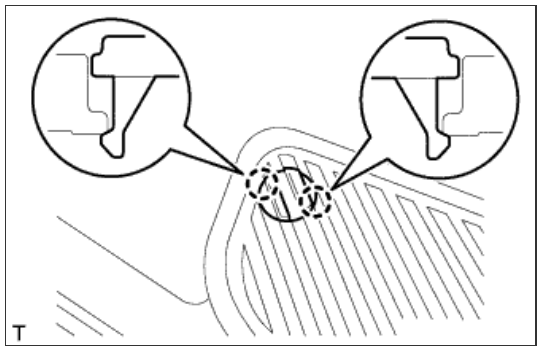
7. INSTALL REAR STEP COVER

HINT:

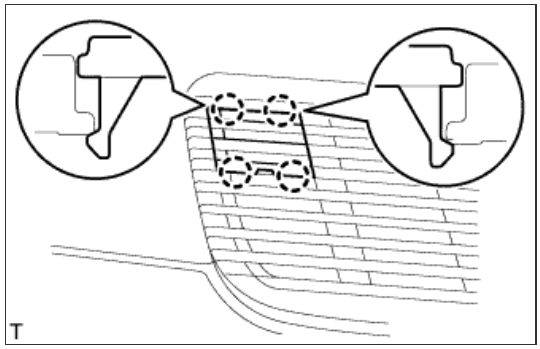
Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:

Attach the 2 claws to install the step cover.

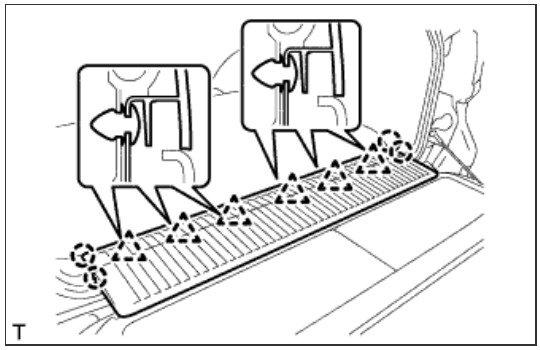


b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



8. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.



9. INSTALL REAR NO. 2 SEAT ASSEMBLY LH

a. w/ Automatic Folding-up Function.
Install the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function.
Install the rear No. 2 seat assembly (Click here).

10. INSTALL REAR NO. 2 SEAT ASSEMBLY RH

a. w/ Automatic Folding-up Function.
Install the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding-up Function.
Install the rear No. 2 seat assembly (Click here).

11. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

12. ADD ENGINE COOLANT

a. Add engine coolant.

Standard Capacity:

Item	Specified Condition
with transmission oil cooler	16.7 liters (17.6 US qts, 14.7 Imp. qts)
without transmission oil cooler	16.2 liters (17.1 US qts, 14.3 Imp. qts)

NOTICE:

Do not substitute plain water for engine coolant.

HINT:

TOYOTA vehicles are filled with TOYOTA SLLC at the factory. In order to avoid damage to the engine cooling system and other technical problems, only use TOYOTA SLLC or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, non-borate coolant with long-life hybrid organic acid technology (coolant with long-life hybrid organic acid technology consists of a combination of low phosphates and organic acids).

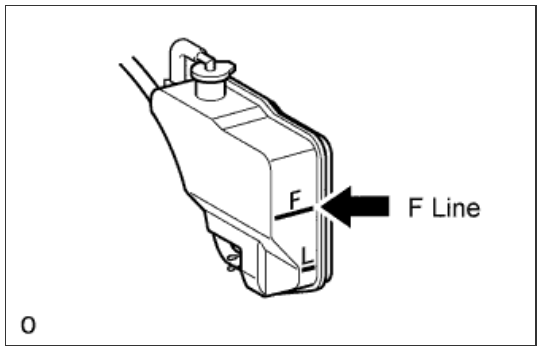
b. Slowly pour coolant into the radiator reservoir until it reaches the F line.

c. Install the reservoir cap.

d. Press the No. 1 and No. 2 radiator hoses several times by hand, and then check the coolant level. If the coolant level is low, add coolant.

e. Install the radiator cap.

f. Start the engine and warm it up until the thermostat opens.



NOTICE:

Switch off the A/C.

g. Maintain the engine speed at 2000 to 2500 rpm.

NOTICE:

- **Make sure that the radiator reservoir still has some coolant in it.**
- **Pay attention to the needle of the water temperature meter. Make sure that the needle does not show an abnormally high temperature.**
- **If there is not enough coolant, the engine may burn out or overheat.**
- **Immediately after starting the engine, if the radiator reservoir does not have any coolant, perform the following: 1) stop the engine, 2) wait until the coolant has cooled down, and 3) add coolant until the coolant is filled to the F line.**
- **Run the engine at 2000 rpm until the coolant level has stabilized.**

h. Press the No. 1 and No. 2 radiator hoses several times by hand to bleed air.

CAUTION:

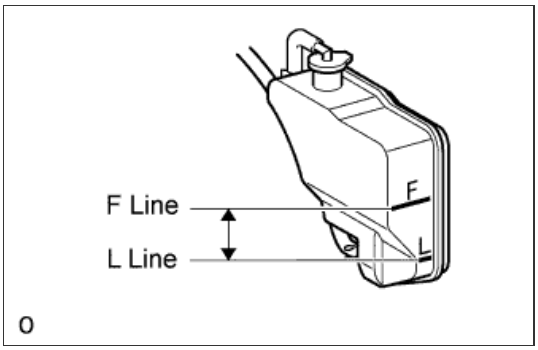
- **Wear protective gloves.**
- **Be careful as the radiator hoses are hot.**
- **Keep your hands away from the fan.**

i. Stop the engine, and wait until the engine coolant cools down to ambient temperature.

CAUTION:

Do not remove the radiator cap while the engine and radiator are still hot. Pressurized, hot engine coolant and steam may be released and cause serious burns.

j. Check that the coolant level is between the F and L lines.
If the coolant level is below the L line, repeat all of the procedures above.
If the coolant level is above the F line, drain coolant so that the coolant level is between the F and L lines.



13. CHARGE REFRIGERANT

SST

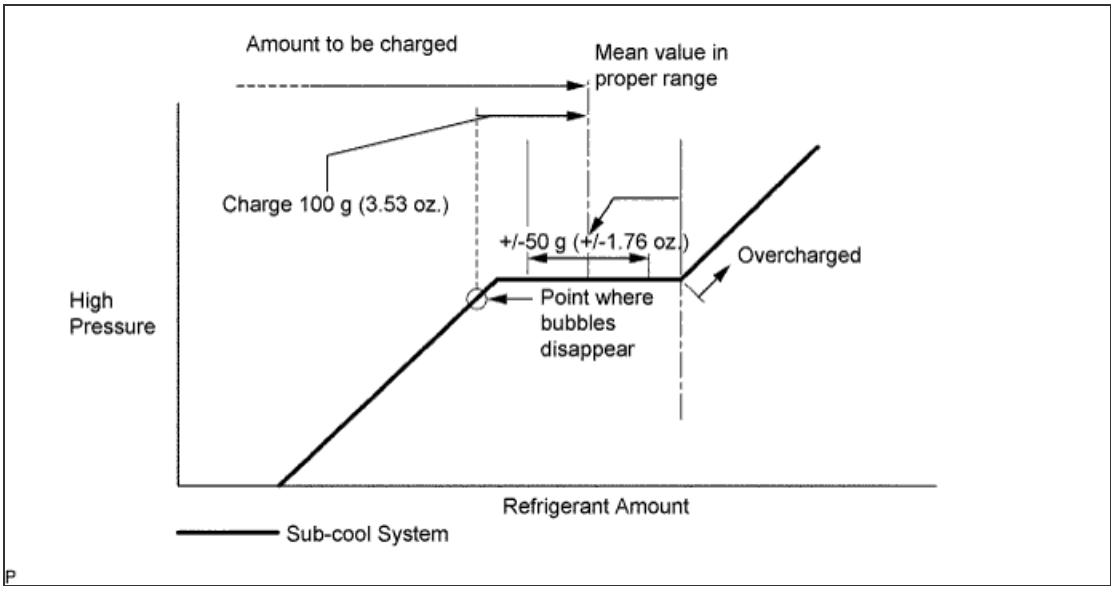
09985-20010 (09985-02130, 09985-02150, 09985-02090, 09985-02110, 09985-02010, 09985-02050, 09985-02060, 09985-02070)

a. Perform vacuum purging using a vacuum pump.

b. Charge refrigerant HFC-134a (R134a).

Standard:

Condenser Core Thickness	Cool Box	Refrigerant Charging Amount
22 mm (0.866 in.)	w/ Cool Box	1010 +/-30 g (35.6 +/-1.1 oz.)
	w/o Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
16 mm (0.630 in.)	w/ Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
	w/o Cool Box	920 +/-30 g (32.5 +/-1.1 oz.)



NOTICE:

- **Do not operate the cooler compressor before charging refrigerant as the cooler compressor will not work properly without any refrigerant, and will overheat.**
- **Approximately 100 g (3.53 oz.) of refrigerant may need to be charged after bubbles disappear. The refrigerant amount should be checked by measuring its quantity, and not with the sight glass.**

14. WARM UP ENGINE

a. Warm up the engine at less than 1850 rpm for 2 minutes or more after charging the refrigerant.

NOTICE:

Be sure to warm up the compressor when turning the A/C switch on after removing and installing the cooler refrigerant lines (including the

compressor), to prevent damage to the compressor.

15. CHECK FOR ENGINE COOLANT LEAKS

16. CHECK FOR REFRIGERANT GAS LEAK

a. After recharging the refrigerant gas, check for refrigerant gas leakage using a halogen leak detector.

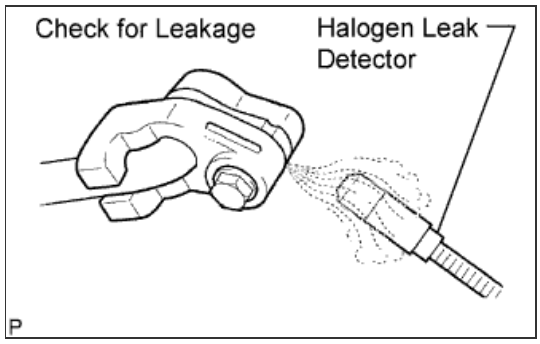
b. Perform the operation under these conditions:

- Stop the engine.
- Secure good ventilation (the halogen leak detector may react to volatile gases other than refrigerant, such as evaporated gasoline or exhaust gas).
- Repeat the test 2 or 3 times.
- Make sure that some refrigerant remains in the refrigeration system. When compressor is off: approximately 392 to 588 kPa (4.0 to 6.0 kgf/cm^2, 57 to 85 psi).

c. Using a halogen leak detector, check the refrigerant line for leakage.

d. If a gas leak is not detected on the drain hose, remove the blower motor control (blower resistor) from the cooling unit. Insert the halogen leak detector sensor into the unit and perform the test.

e. Disconnect the connector and wait for approximately 20 minutes. Bring the halogen leak detector close to the pressure switch and perform the test.

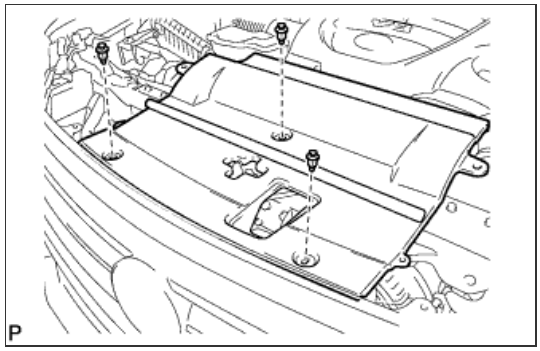


17. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

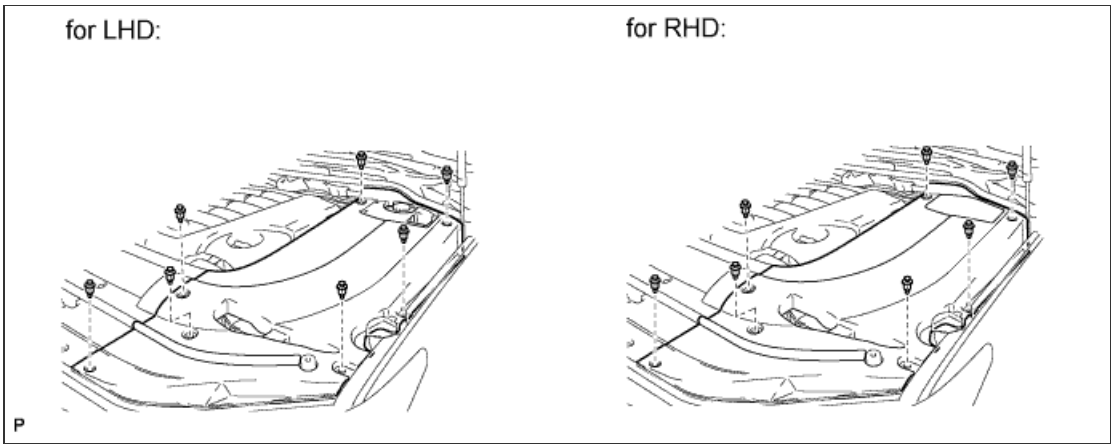
18. INSTALL UPPER RADIATOR SUPPORT SEAL

a. Install the upper radiator support seal with the 3 clips.



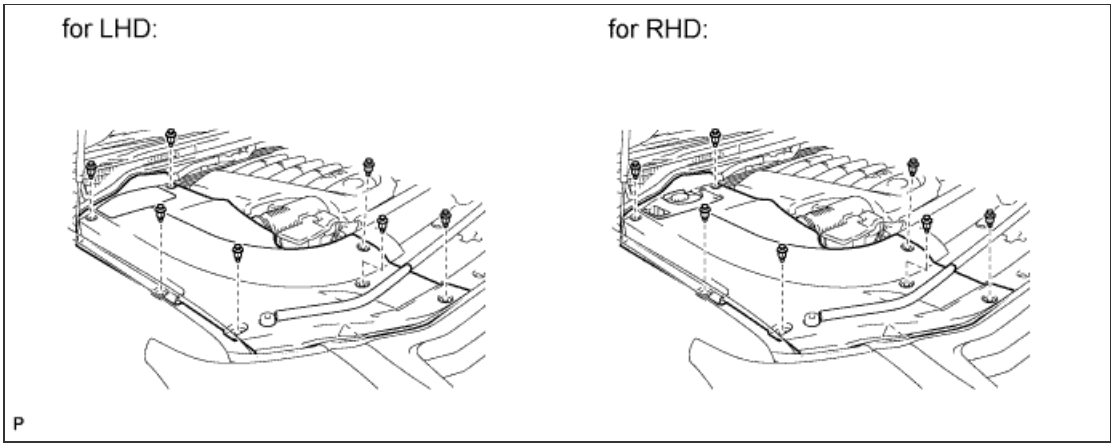
19. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



20. INSTALL ENGINE ROOM SIDE COVER RH

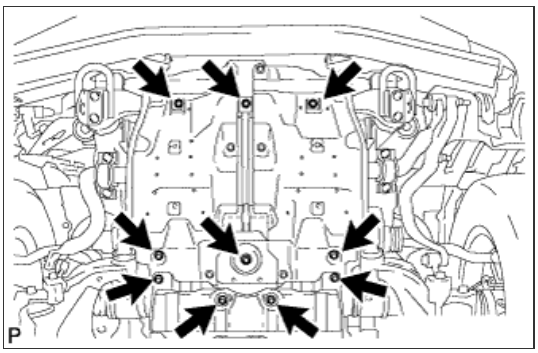
a. Install the engine room side cover with the 7 clips.



21. INSTALL NO. 1 ENGINE UNDER COVER SUB-ASSEMBLY

a. Install the No. 1 engine under cover with the 10 bolts.

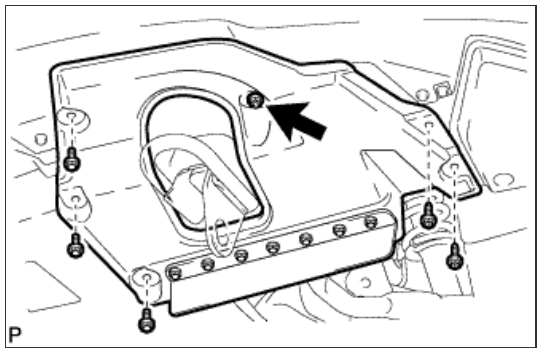
Torque:
29 N*m{ 296 kgf*cm , 21 ft.*lbf }



22. INSTALL FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY LH

a. Push in the clip indicated by the arrow in the illustration to install the fender splash shield.

b. Install the 3 bolts and 2 screws.

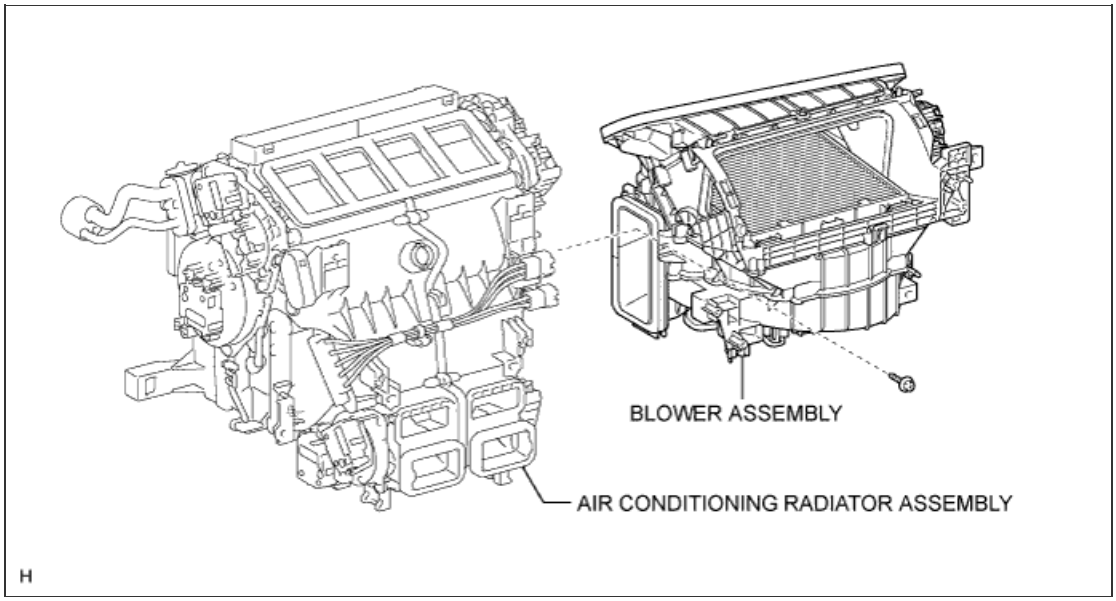


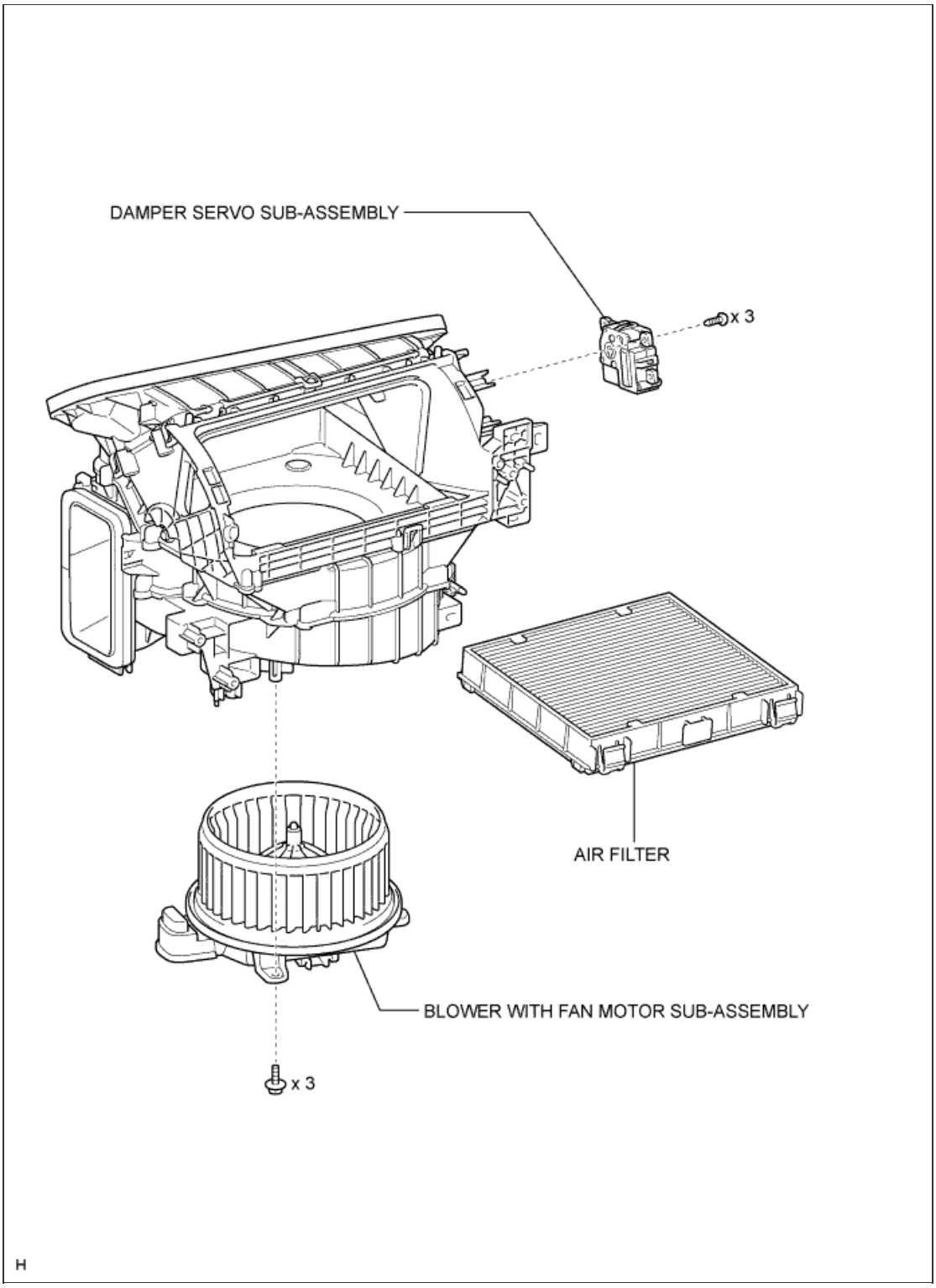
23. INSTALL FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

for Preparation [Click here]




DAMPER SERVO SUB-ASSEMBLY
x 3
AIR FILTER
BLOWER WITH FAN MOTOR SUB-ASSEMBLY
x 3
H

for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE AIR CONDITIONING UNIT

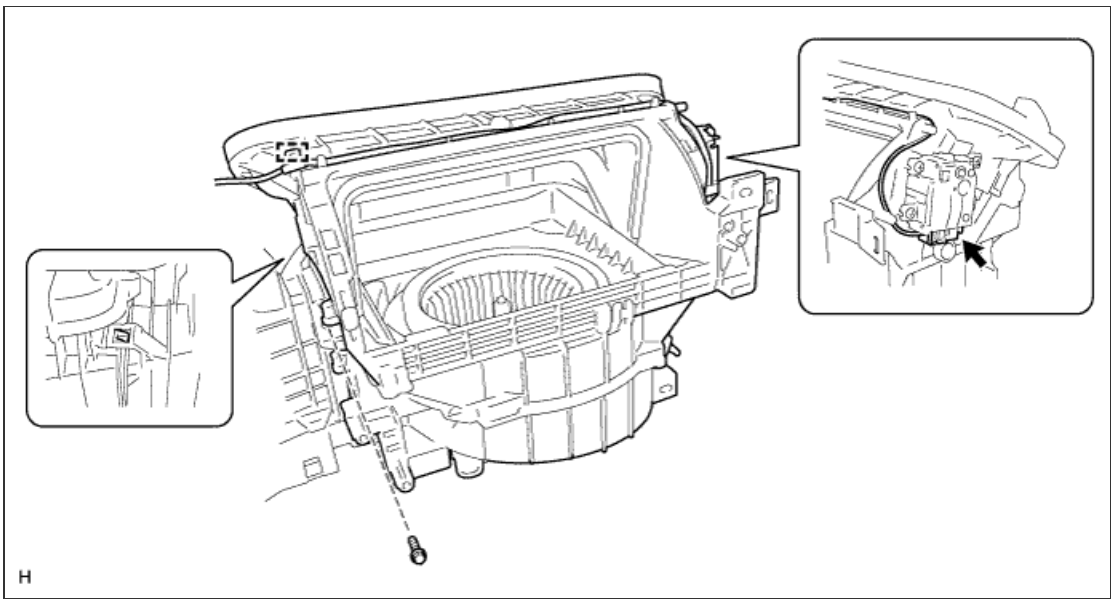
a. Remove the air conditioning unit (Click here).

2. REMOVE BLOWER ASSEMBLY

a. Remove the screw.

b. Disconnect the connector and clamp.

c. Detach the claw and remove the blower unit.



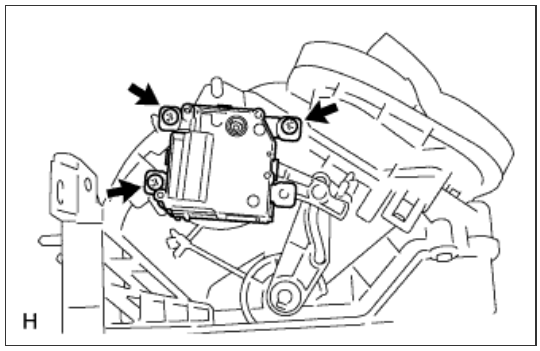
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

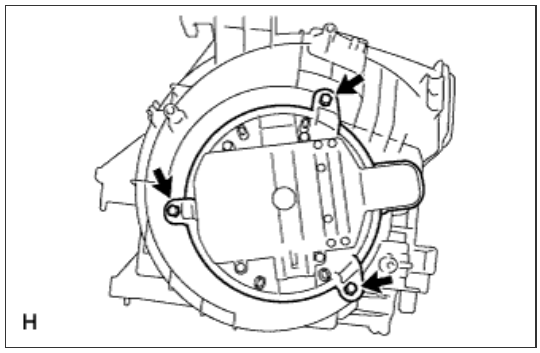
1. REMOVE DAMPER SERVO SUB-ASSEMBLY

a. Remove the 3 screws and damper servo.



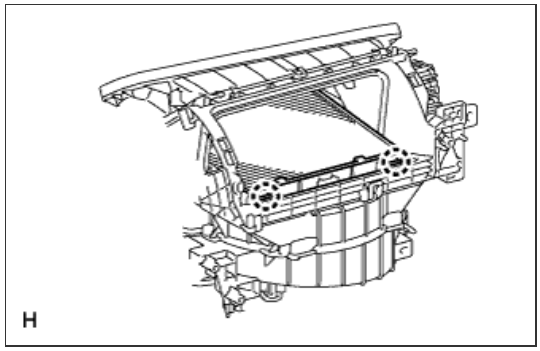
2. REMOVE BLOWER WITH FAN MOTOR SUB-ASSEMBLY

a. Remove the 3 screws and motor.



3. REMOVE AIR FILTER

a. Detach the 2 claws and remove the filter.



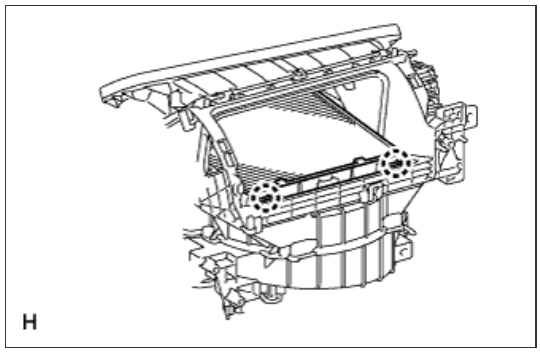
for Preparation [Click here]

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

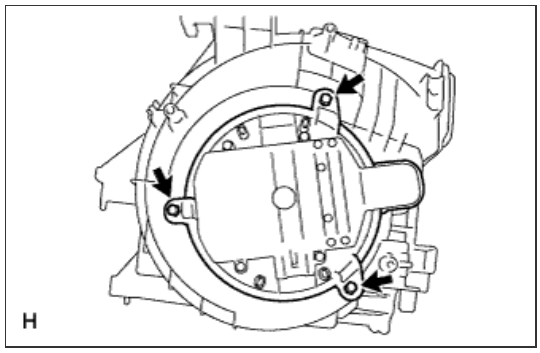
1. INSTALL AIR FILTER

a. Attach the 2 claws to install the filter.



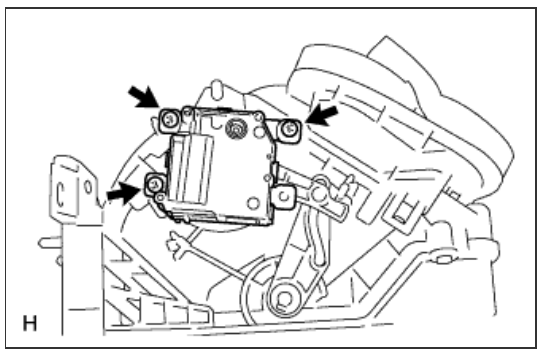
2. INSTALL BLOWER WITH FAN MOTOR SUB-ASSEMBLY

a. Install the motor with the 3 screws.



3. INSTALL DAMPER SERVO SUB-ASSEMBLY

a. Install the damper servo with the 3 screws.



for Preparation Click here

HINT:

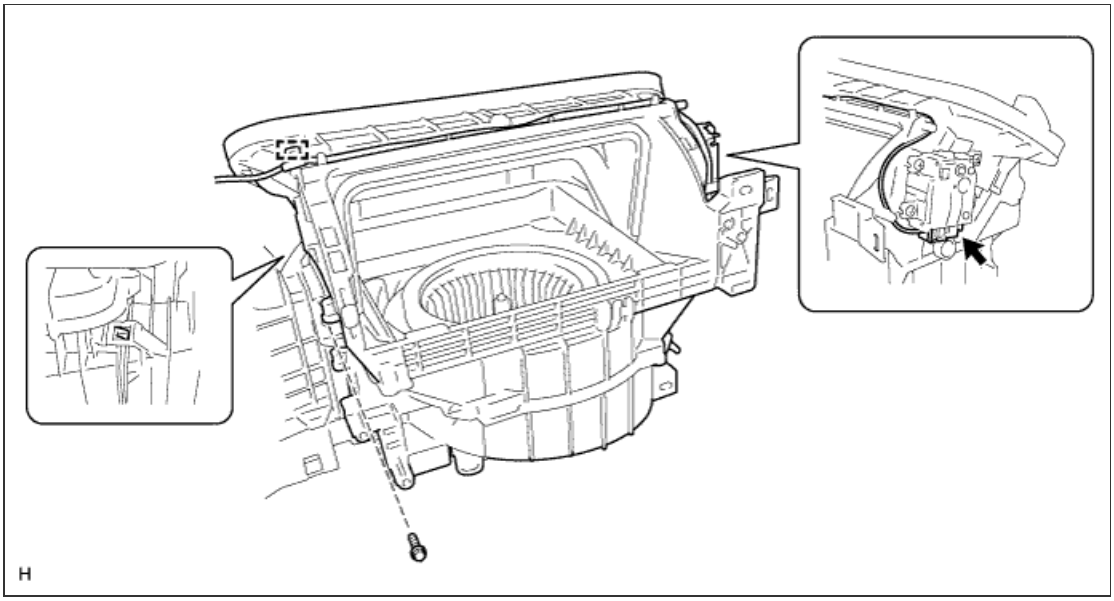
- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL BLOWER ASSEMBLY

a. Attach the claw to install the blower unit.

b. Connect the connector and clamp.

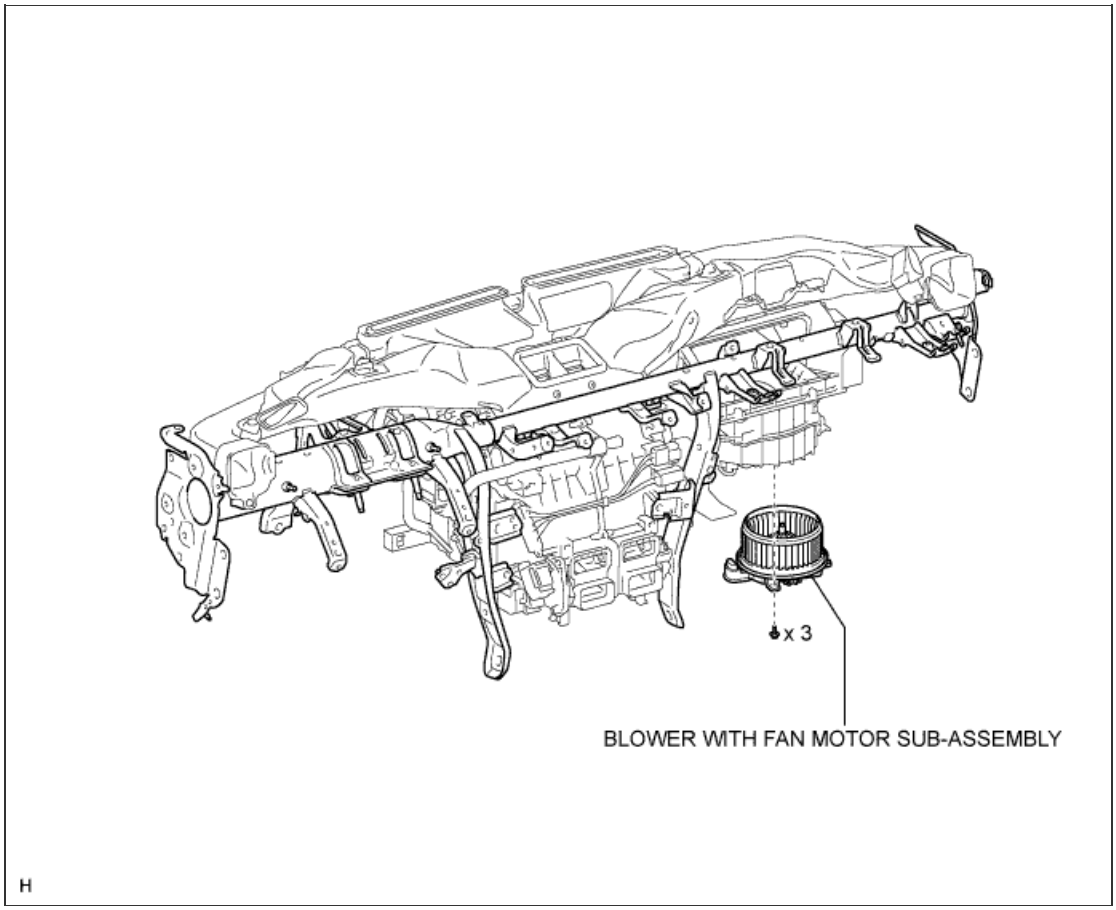
c. Install the screw.



2. INSTALL AIR CONDITIONING UNIT

a. Install the air conditioning unit (Click here).

for Preparation Click here



for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

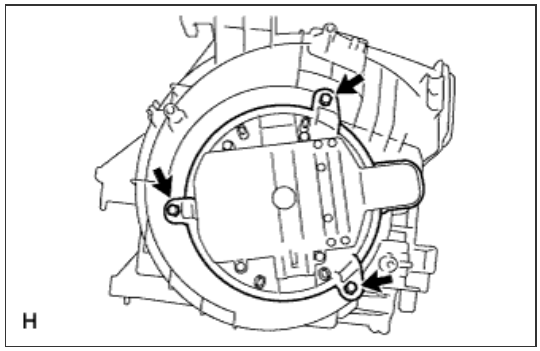
1. REMOVE INSTRUMENT PANEL SAFETY PAD ASSEMBLY

a. Remove the instrument panel safety pad assembly (Click here).

2. REMOVE BLOWER WITH FAN MOTOR SUB-ASSEMBLY

a. Disconnect the connector.

b. Remove the 3 screws and motor.



for Preparation Click here

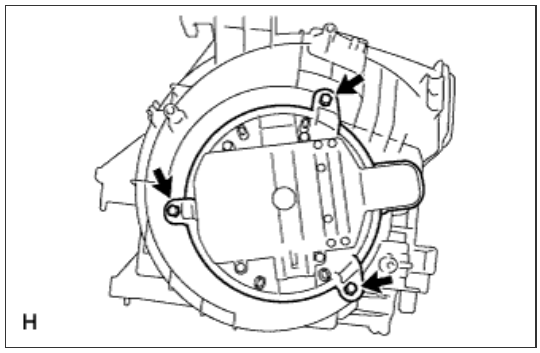
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL BLOWER WITH FAN MOTOR SUB-ASSEMBLY

a. Install the motor with the 3 screws.

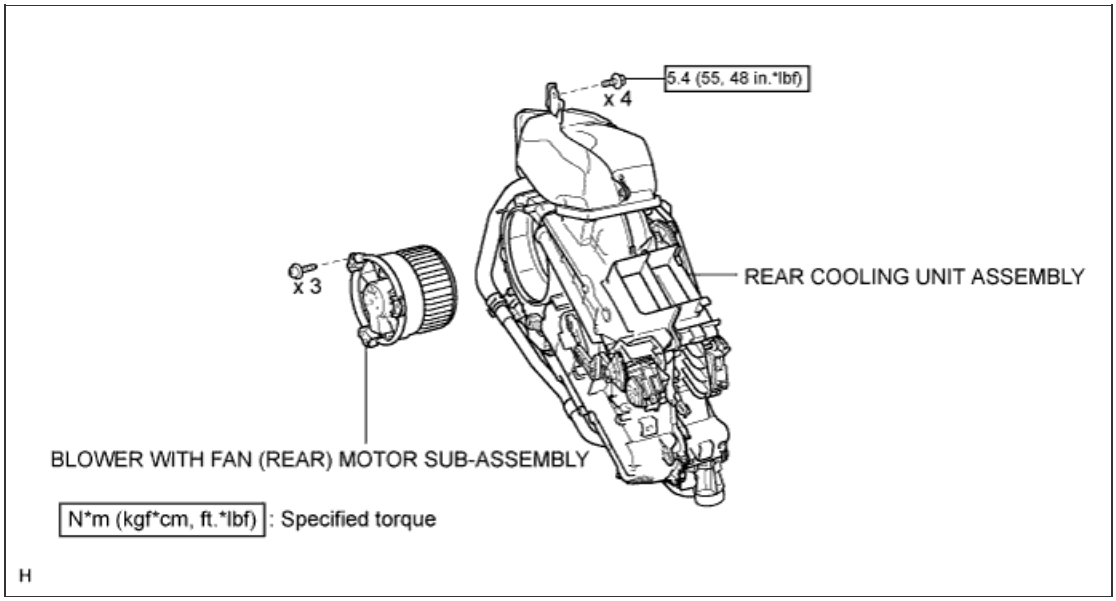
b. Connect the connector.



2. INSTALL INSTRUMENT PANEL SAFETY PAD ASSEMBLY

a. Install the instrument panel safety pad assembly (Click here).

for Preparation [Click here]



for Preparation Click here

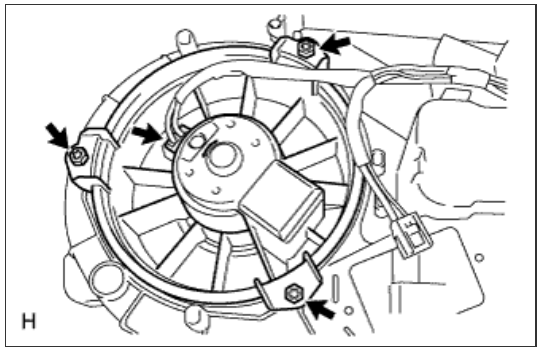
1. REMOVE REAR COOLING UNIT ASSEMBLY

a. Remove the rear cooling unit assembly (Click here).

2. REMOVE BLOWER WITH FAN (REAR) MOTOR SUB-ASSEMBLY

a. Disconnect the connector.

b. Remove the 3 screws and motor.



for Preparation Click here

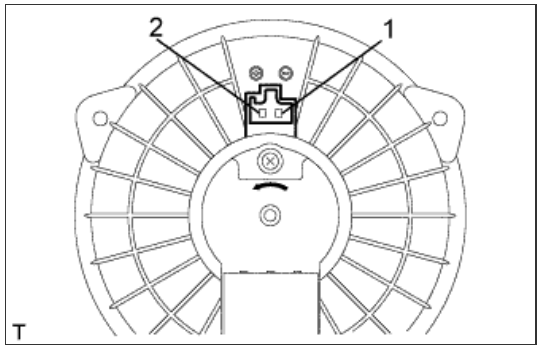
1. INSPECT BLOWER WITH FAN (REAR) MOTOR SUB-ASSEMBLY

a. Apply battery voltage and check the operation of the motor, as shown in the table.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 Battery negative (-) → Terminal 1	Motor operates smoothly

If the result is not as specified, replace the blower with fan (rear) motor sub-assembly.

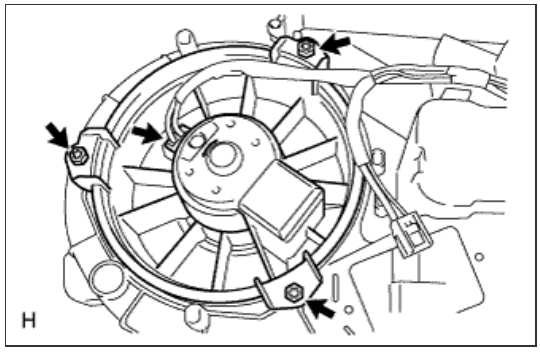


for Preparation Click here

1. INSTALL BLOWER WITH FAN (REAR) MOTOR SUB-ASSEMBLY

a. Install the motor with the 3 screws.

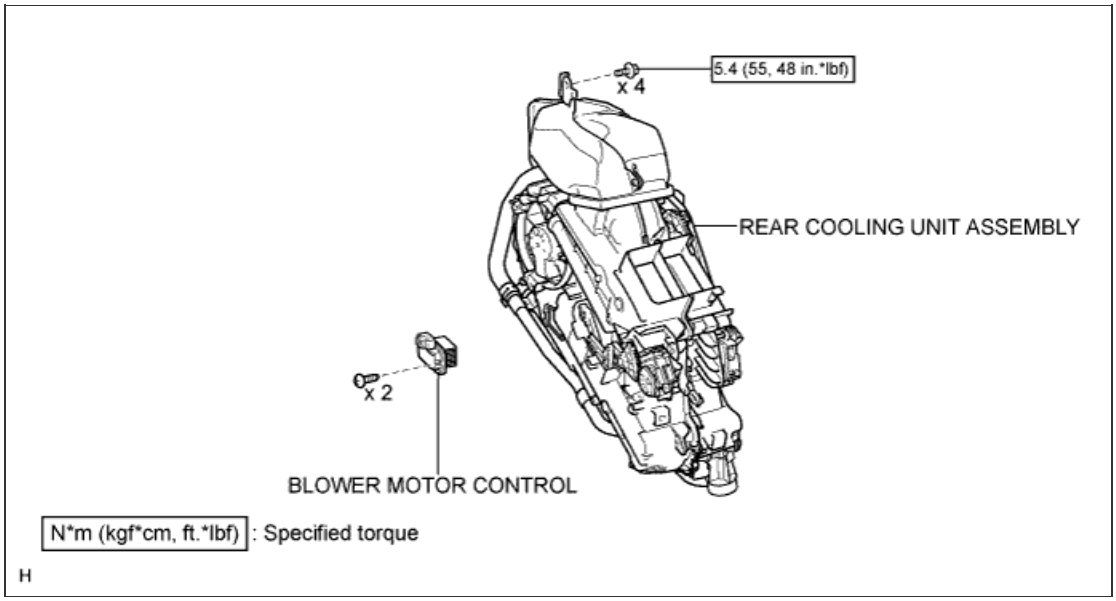
b. Connect the connector.



2. INSTALL REAR COOLING UNIT ASSEMBLY

a. Install the rear cooling unit assembly (Click here).

for Preparation [Click here]



for Preparation Click here

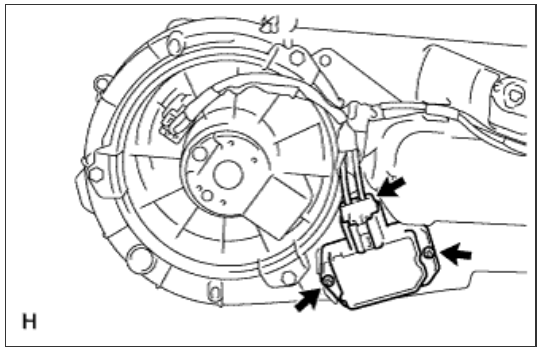
1. REMOVE REAR COOLING UNIT ASSEMBLY

a. Remove the rear cooling unit assembly (Click here).

2. REMOVE BLOWER MOTOR CONTROL

a. Disconnect the connector.

b. Remove the 2 screws and blower motor control.

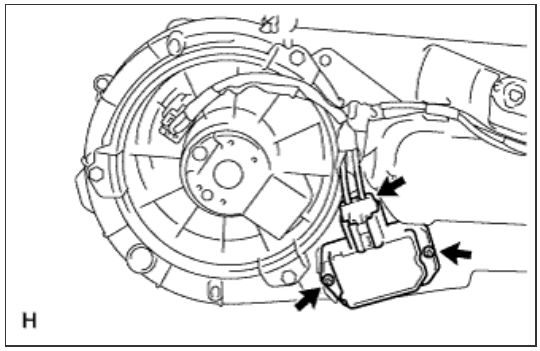


for Preparation Click here

1. INSTALL BLOWER MOTOR CONTROL

a. Install the blower motor control with the 2 screws.

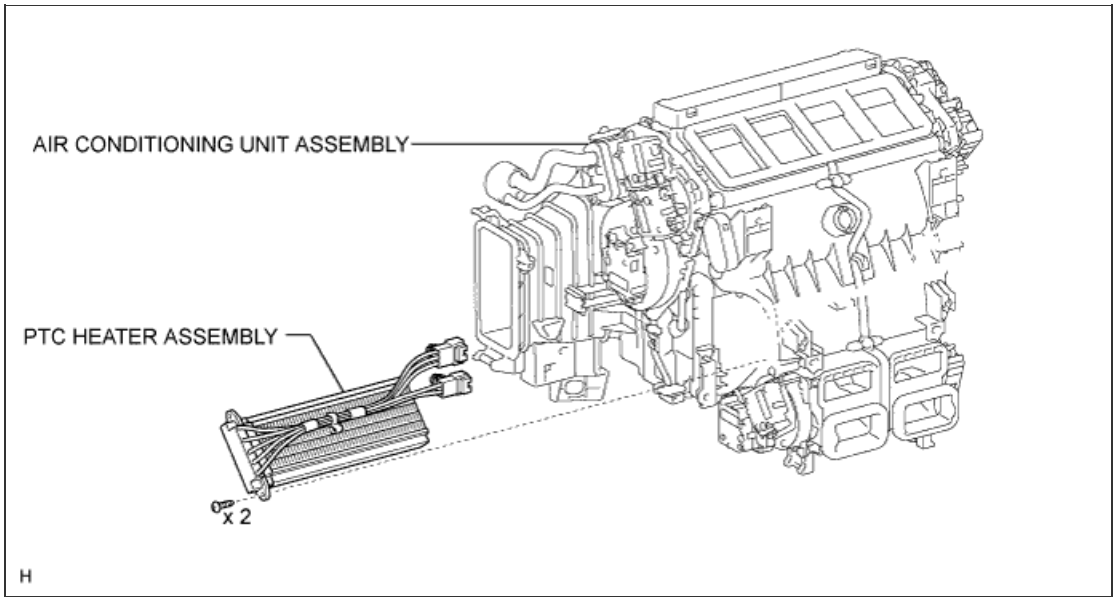
b. Connect the connector.



2. INSTALL REAR COOLING UNIT ASSEMBLY

a. Install the rear cooling unit assembly (Click here).

for Preparation Click here



for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

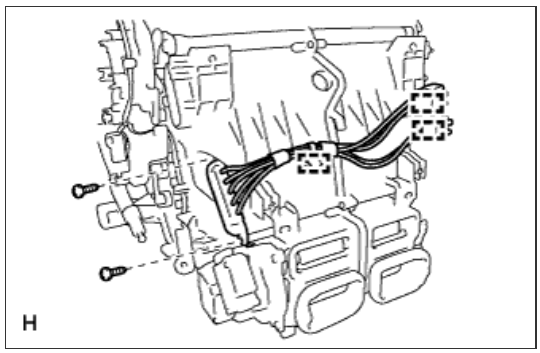
1. REMOVE AIR CONDITIONING UNIT ASSEMBLY

a. Remove the air conditioning unit (Click here).

2. REMOVE PTC HEATER ASSEMBLY

a. Remove the 2 screws.

b. Detach the 3 clamps and remove the PTC heater.



for Preparation Click here

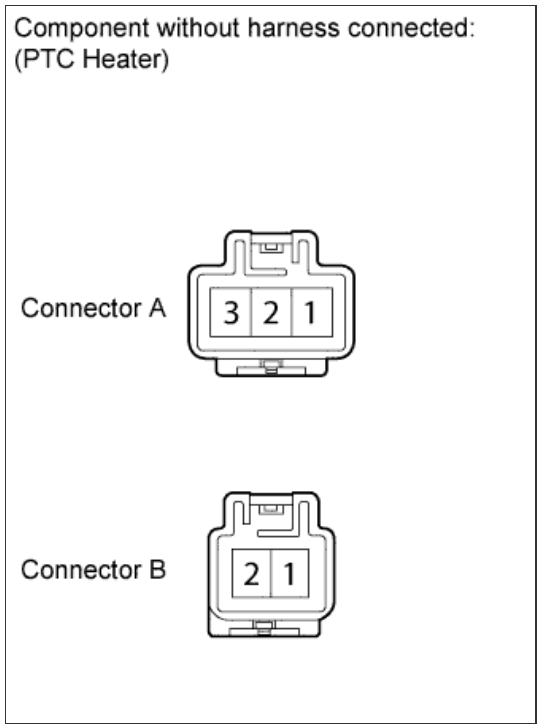
1. INSPECT PTC HEATER ASSEMBLY

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
A-1 - B-1	23 to 25°C (73 to 77°F)	0.5 to 2.5 Ω
A-2 - B-1	23 to 25°C (73 to 77°F)	0.5 to 2.5 Ω
A-2 - B-2	23 to 25°C (73 to 77°F)	0.5 to 2.5 Ω
A-3 - B-2	23 to 25°C (73 to 77°F)	0.5 to 2.5 Ω

If the result is not as specified, replace the PTC heater assembly.



for Preparation Click here

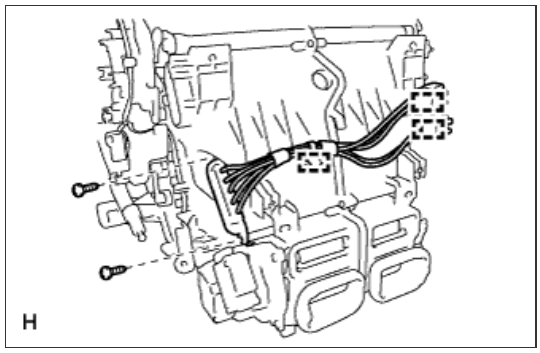
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL PTC HEATER ASSEMBLY

a. Attach the 3 clamps to install the PTC heater.

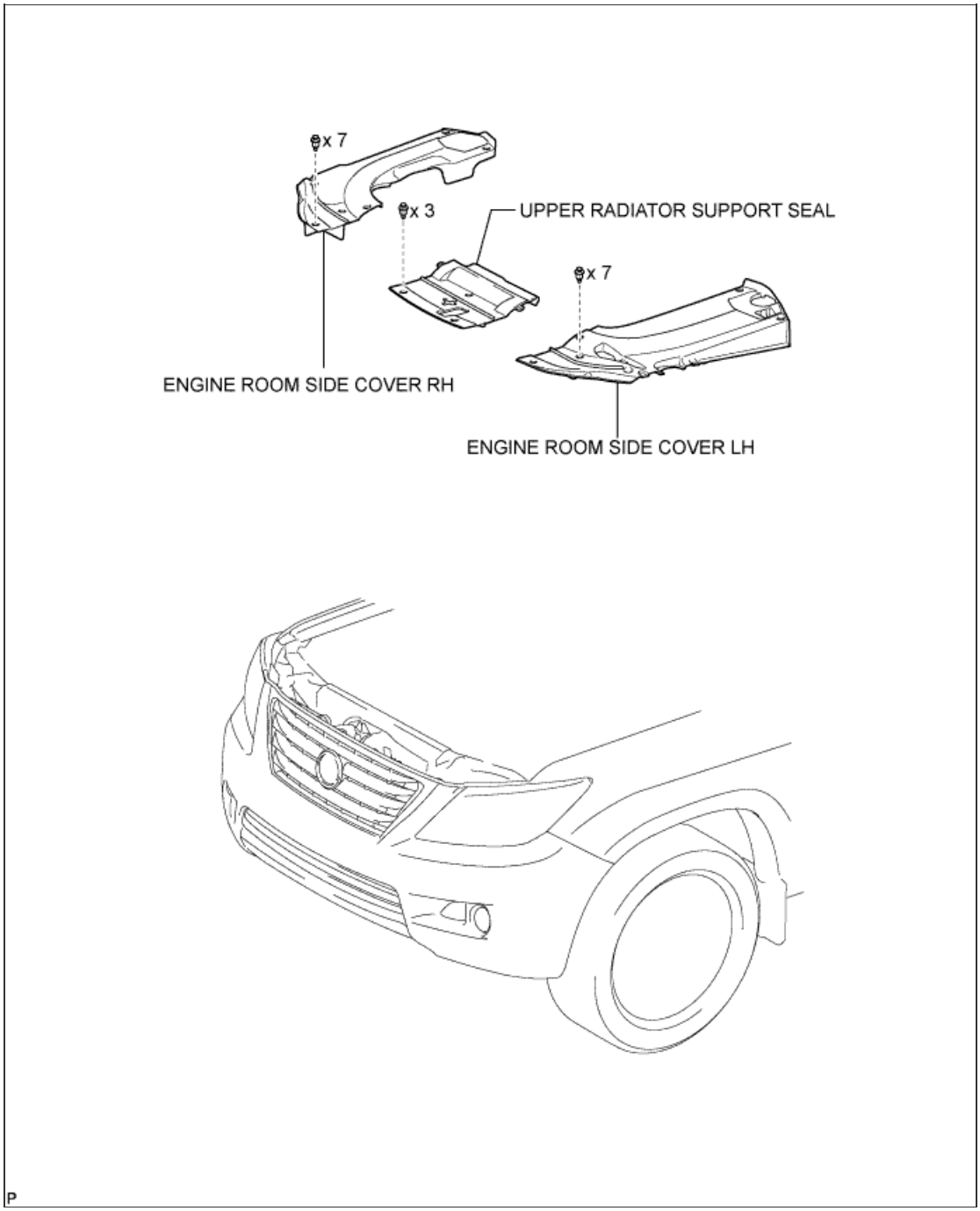
b. Install the 2 screws.

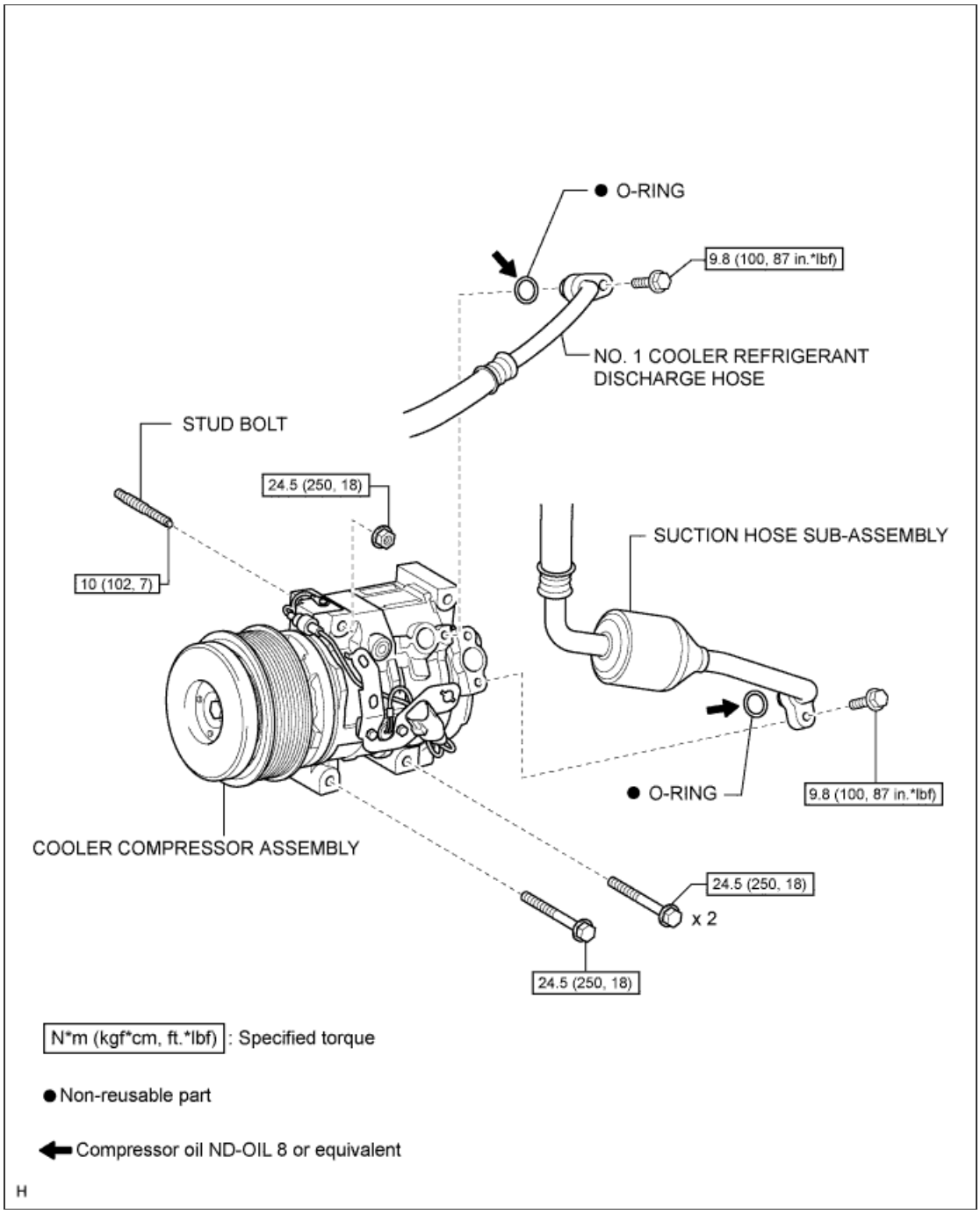


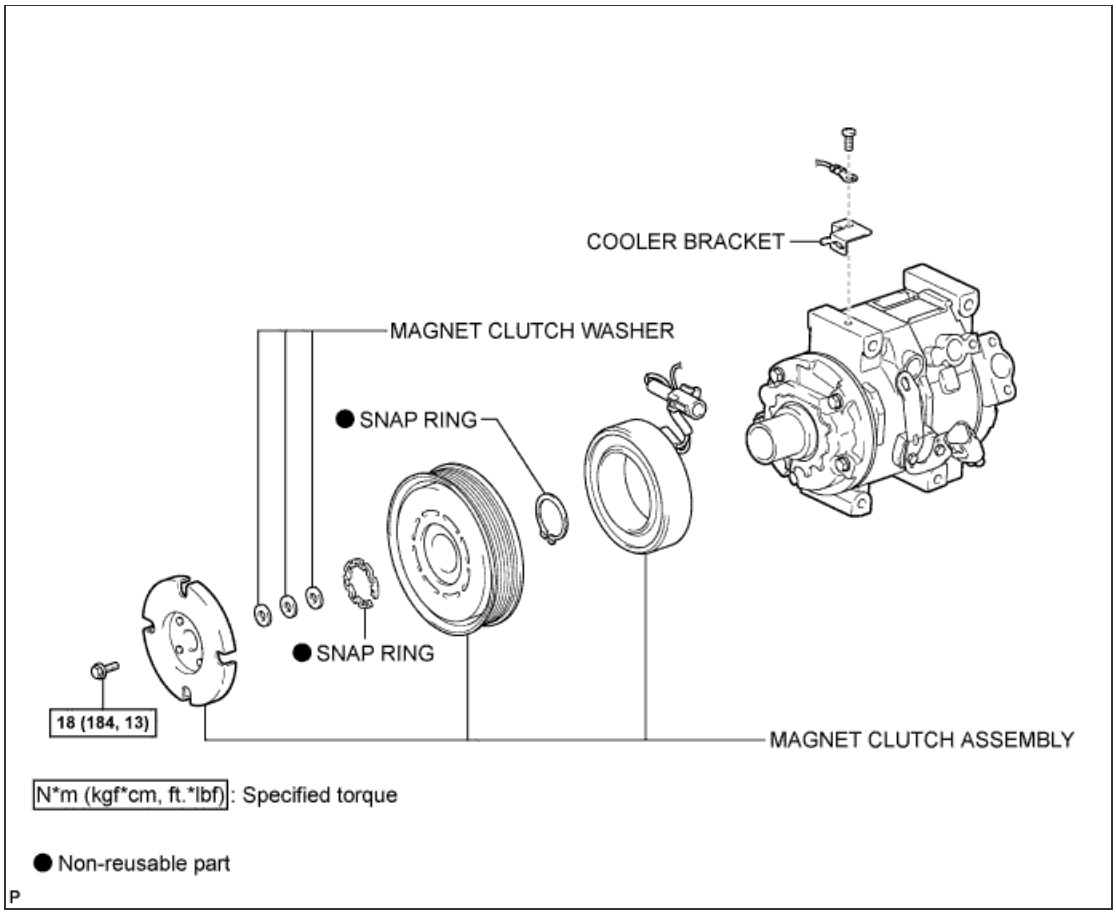
2. INSTALL AIR CONDITIONING UNIT ASSEMBLY

a. Install the air conditioning unit (Click here).

for Preparation [Click here]



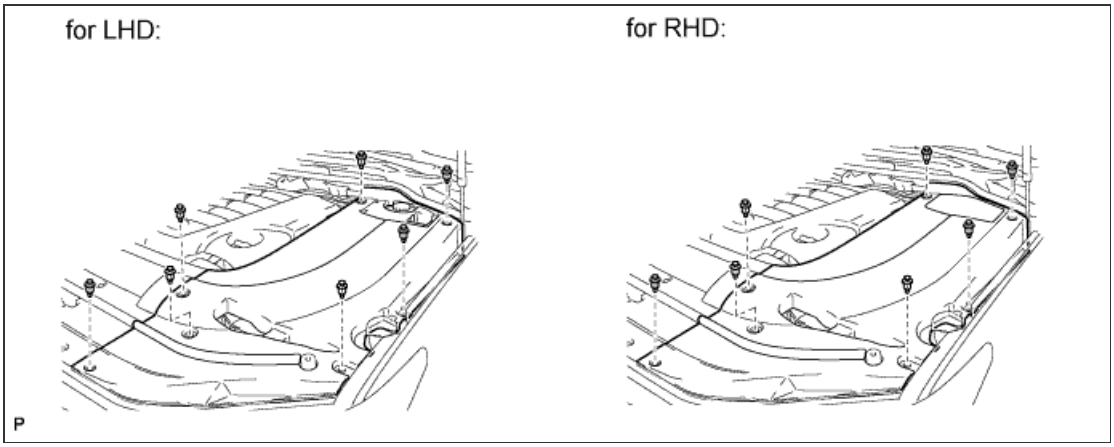

● O-RING
9.8 (100, 87 in.*lbf)
NO. 1 COOLER REFRIGERANT DISCHARGE HOSE
STUD BOLT
24.5 (250, 18)
10 (102, 7)
SUCTION HOSE SUB-ASSEMBLY
● O-RING
9.8 (100, 87 in.*lbf)
COOLER COMPRESSOR ASSEMBLY
24.5 (250, 18)
x 2
24.5 (250, 18)
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
Compressor oil ND-OIL 8 or equivalent
H


COOLER BRACKET
MAGNET CLUTCH WASHER
● SNAP RING
● SNAP RING
18 (184, 13)
MAGNET CLUTCH ASSEMBLY
N*m (kgf*cm, ft.*lbf): Specified torque
● Non-reusable part
P

for Preparation Click here

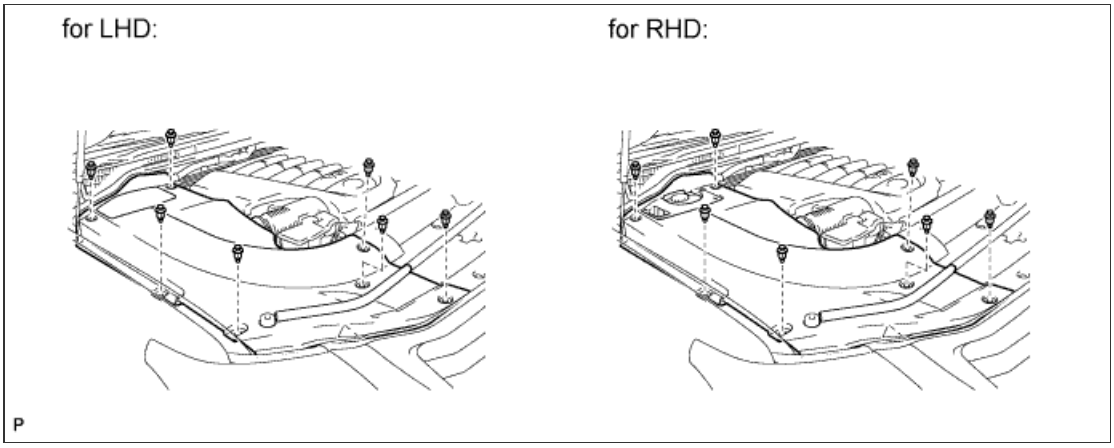
1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



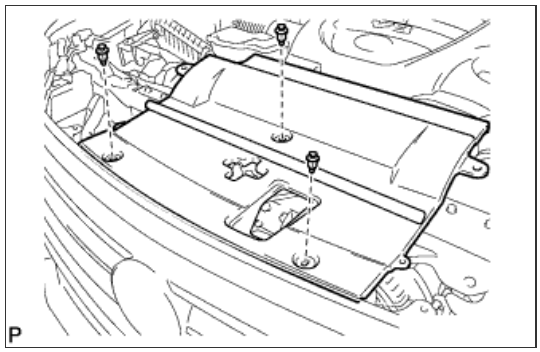
2. REMOVE ENGINE ROOM SIDE COVER RH

a. Remove the 7 clips and engine room side cover.



3. REMOVE UPPER RADIATOR SUPPORT SEAL

a. Remove the 3 clips and upper radiator support seal.



4. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM

a. Start the engine.

b. Turn the A/C switch on.

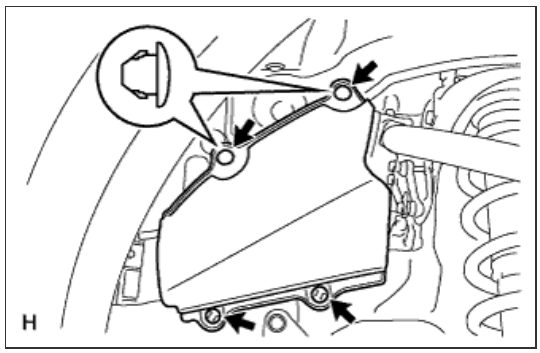
c. Operate the cooler compressor while the engine speed is approximately 1000 rpm for 5 to 6 minutes to circulate the refrigerant and collect the compressor oil remaining in each component into the cooler compressor.

d. Stop the engine.

e. Recover the refrigerant from the A/C system using a refrigerant recovery unit.

5. REMOVE FRONT FENDER APRON SEAL LH

a. Remove the 4 clips and seal.



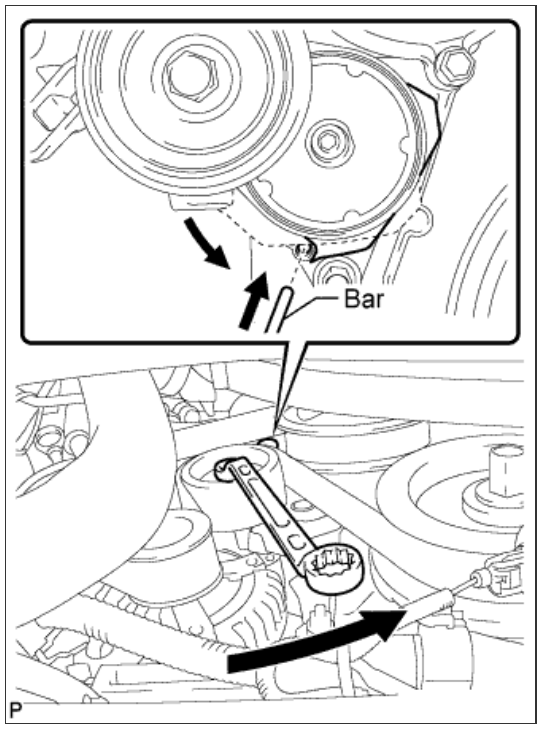
6. REMOVE FAN & GENERATOR V BELT

a. While turning the belt tensioner counterclockwise, align the service hole for the belt tensioner and the belt tensioner fixing position, and then insert a bar of φ5 mm (0.197 in.) into the service hole to fix the belt tensioner in place.

HINT:

The pulley bolt for the belt tensioner has a left-hand thread.

b. Remove the V belt.



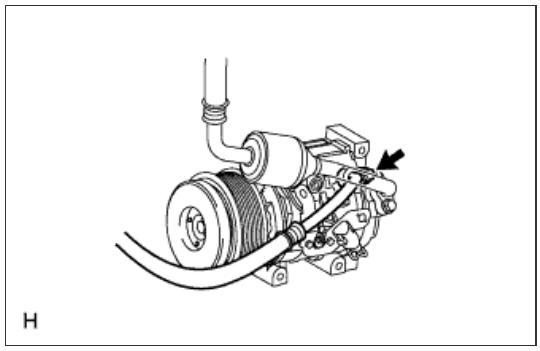
7. DISCONNECT NO. 1 COOLER REFRIGERANT DISCHARGE HOSE

a. Remove the bolt and disconnect the discharge hose from the cooler compressor.

b. Remove the O-ring from the discharge hose.

NOTICE:

Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.



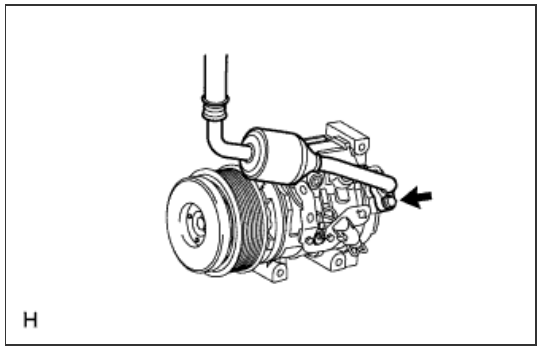
8. DISCONNECT SUCTION HOSE SUB-ASSEMBLY

a. Remove the bolt and disconnect the suction hose from the cooler compressor.

b. Remove the O-ring from the suction hose.

NOTICE:

Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.

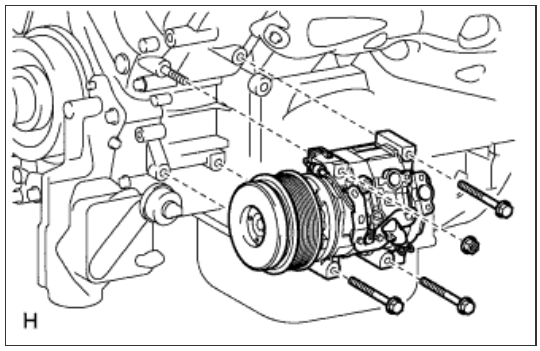


9. REMOVE COOLER COMPRESSOR ASSEMBLY

a. Disconnect the connector.

b. Remove the 3 bolts and nut.

c. Remove the stud bolt and cooler compressor.

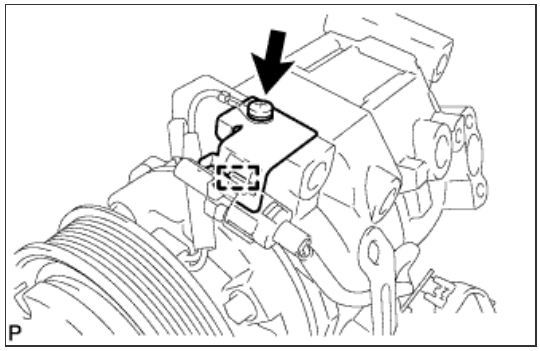


for Preparation Click here

1. REMOVE COOLER BRACKET

a. Disengage the clamp.

b. Remove the screw and the cooler bracket.



2. REMOVE MAGNET CLUTCH ASSEMBLY

a. Clamp the cooler compressor in a vise.

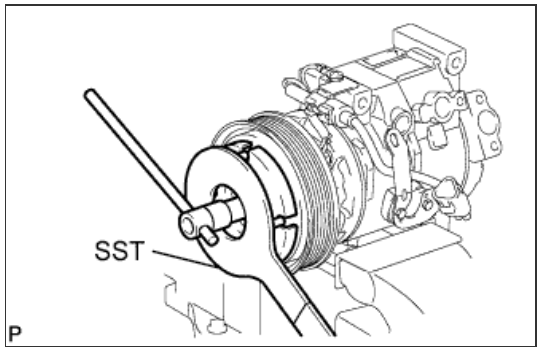
b. Using SST, hold the magnet clutch hub.

SST
09985-00270

c. Remove the bolt, magnet clutch hub and magnet clutch washer(s).

HINT:

There is no set number of magnet clutch washers since they are used for adjusting.

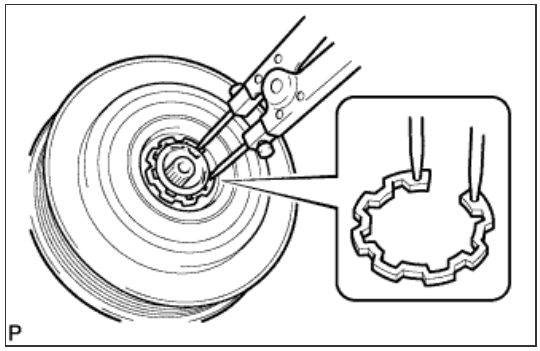


d. Using a snap ring expander, remove the snap ring and the magnet clutch rotor.

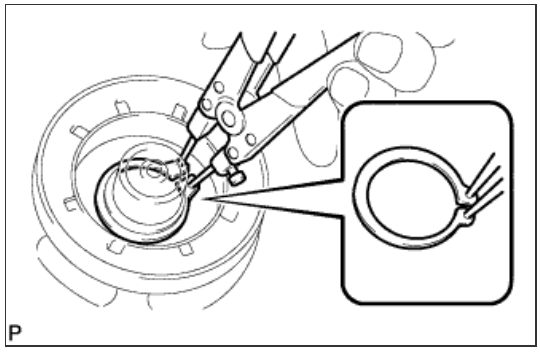
NOTICE:

Do not damage the seal cover of the bearing when removing the snap ring.

e. Disconnect the connector.



f. Using a snap ring expander, remove the snap ring and magnet clutch stator.



for Preparation Click here

1. INSPECT MAGNET CLUTCH ASSEMBLY

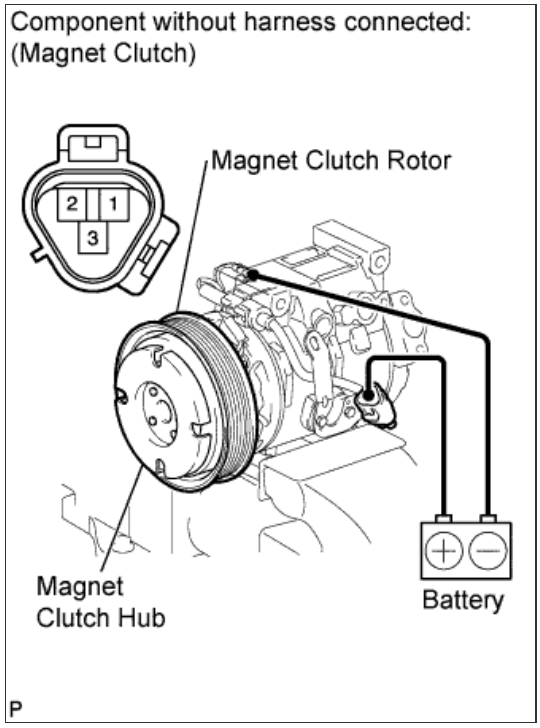
a. Check the magnet clutch operation.

i. Confirm that the magnet clutch hub and magnet clutch rotor lock when the battery positive lead is connected to terminal 3 of the magnet clutch, and the negative lead is connected to the ground wire.
If the operation is not as specified, replace the magnet clutch assembly.

b. Measure the resistance.

c. Measure the resistance between terminals 1 and 2.

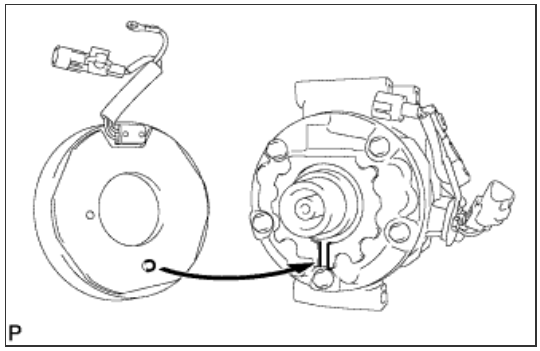
Standard resistance:
65 to 125 Ω at 20°C (68°F)
If the resistance is not as specified, replace the cooler compressor assembly.



for Preparation Click here

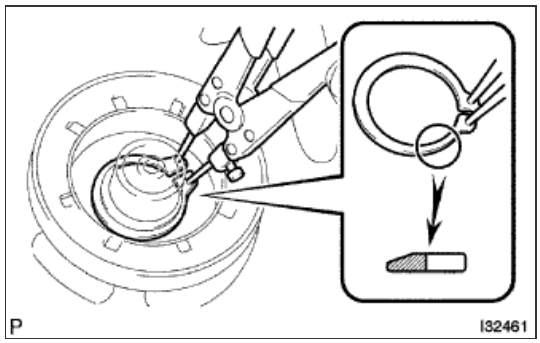
1. INSTALL MAGNET CLUTCH ASSEMBLY

a. Install the magnet clutch stator with the parts shown in the illustration matched.



b. Using a snap ring expander, install a new snap ring with the chamfered side facing up.

c. Connect the connector.



d. Using a snap ring expander, install the magnet clutch rotor and a new snap ring with the chamfered side facing up.

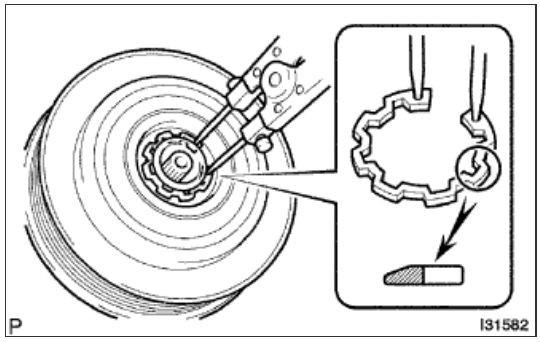
NOTICE:

Do not damage the seal cover of the bearing when installing the snap ring.

e. Install the compressor washer(s) and magnet clutch hub.

NOTICE:

Do not change the combination of the compressor washer(s) used before disassembly.



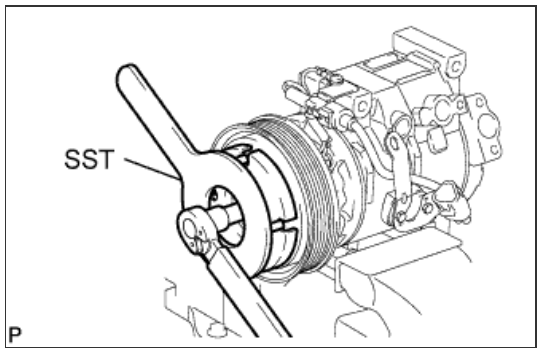
f. Using SST, hold the magnet clutch hub and install the bolt.

SST
09985-00270

Torque:
18 N*m{ 184 kgf*cm , 13 ft.*lbf }

NOTICE:

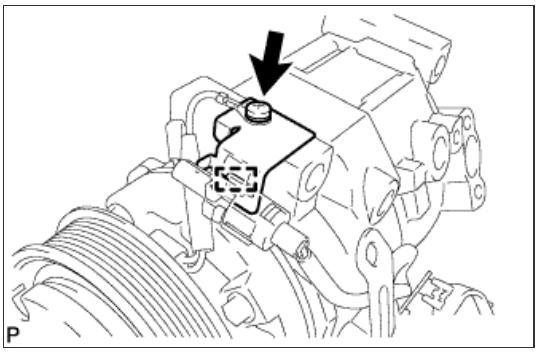
Make sure that there is no foreign matter or oil on the compressor shaft, bolt, and clutch hub.



2. INSTALL COOLER BRACKET

a. Install the cooler bracket with the screw.

b. Engage the clamp.



3. INSPECT MAGNET CLUTCH CLEARANCE

a. Clamp the cooler compressor in a vise.

b. Set the dial indicator to the magnet clutch hub.

c. Connect the battery positive lead to terminal 3 of the magnet clutch connector and the negative lead to the ground wire. Turn the magnet clutch on and off and measure the clearance.

Standard clearance:
0.35 to 0.60 mm (0.014 to 0.024 in.)

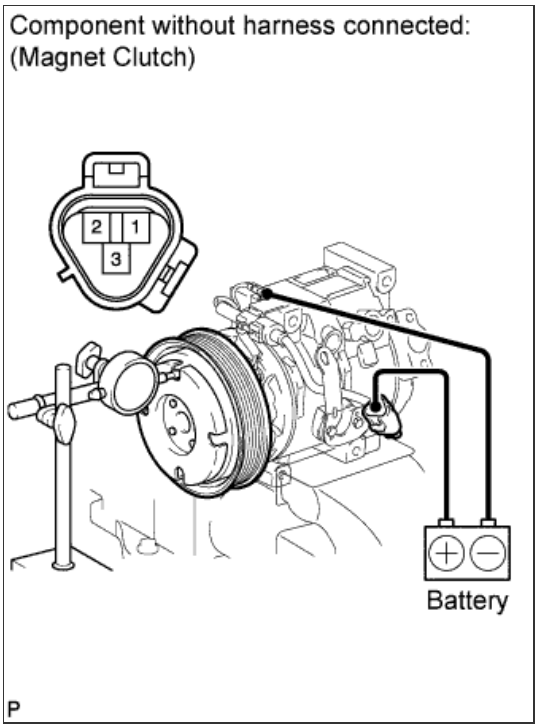
If the measured value is not within the standard clearance, remove the magnet clutch hub and adjust the clearance using compressor washers to obtain the standard clearance.

Compressor washer thickness:
0.1 mm (0.004 in.)
0.3 mm (0.012 in.)
0.5 mm (0.020 in.)

NOTICE:

Adjustment should be performed with 3 or fewer magnet clutch washers.

d. Remove the cooler compressor from the vise.



for Preparation Click here

1. ADJUST COMPRESSOR OIL

a. When replacing the compressor and magnetic clutch with a new one, gradually discharge the refrigerant gas from the service valve, and drain the following amount of oil from the new compressor and magnetic clutch before installation.

Standard:
URJ201L-GNTGKV:
(Oil capacity inside the new compressor and magnetic clutch: 140 + 15 cc (4.7 + 0.51 fl.oz.)) - (Remaining oil amount in the removed compressor and magnetic clutch) = (Oil amount to be removed from the new compressor when replacing)
Except URJ201L-GNTGKV:
(Oil capacity inside the new compressor and magnetic clutch: 135 + 15 cc (4.6 + 0.51 fl.oz.)) - (Remaining oil amount in the removed compressor and magnetic clutch) = (Oil amount to be removed from the new compressor when replacing)

NOTICE:

- **When checking the compressor oil level, follow the A/C system precautions.**
- **If a new compressor and magnetic clutch is installed without removing some oil remaining in the pipes of the vehicle, the oil amount will be too large. This prevents heat exchange in the refrigerant cycle and causes refrigerant failure.**
- **If the volume of oil remaining in the removed compressor and magnetic clutch is too small, check for oil leakage.**
- **Be sure to use ND-OIL 8 or equivalent for compressor oil.**

2. INSTALL COOLER COMPRESSOR ASSEMBLY

a. Install the cooler compressor and stud bolt.

Torque:
10 N*m{ 102 kgf*cm , 7 ft.*lbf }

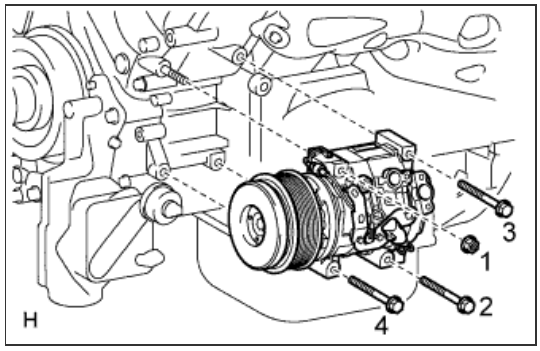
b. Install the 3 bolts and nut.

Torque:
24.5 N*m{ 250 kgf*cm , 18 ft.*lbf }

HINT:

Tighten the bolts and nut in the order shown in the illustration.

c. Connect the connector.



3. CONNECT SUCTION HOSE SUB-ASSEMBLY

a. Remove the attached vinyl tape from the suction hose.

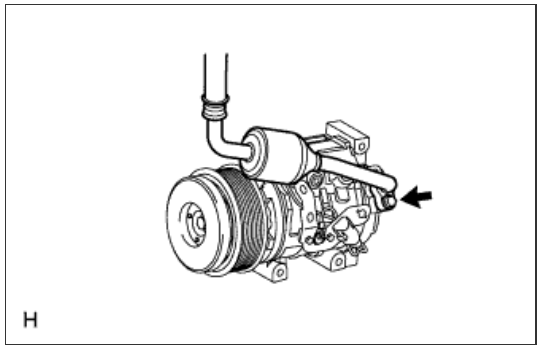
b. Sufficiently apply compressor oil to a new O-ring and the fitting surface of the cooler compressor.

Compressor oil:
ND-OIL 8 or equivalent

c. Install the O-ring to the suction hose.

d. Connect the suction hose to the cooler compressor with the bolt.

Torque:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }



4. CONNECT NO. 1 COOLER REFRIGERANT DISCHARGE HOSE

a. Remove the attached vinyl tape from the cooler refrigerant discharge hose.

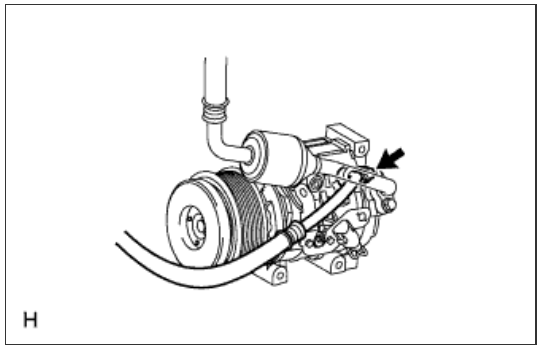
b. Sufficiently apply compressor oil to a new O-ring and the fitting surface of the cooler compressor.

Compressor oil:
ND-OIL 8 or equivalent

c. Install the O-ring to the discharge hose.

d. Connect the discharge hose to the cooler compressor with the bolt.

Torque:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }



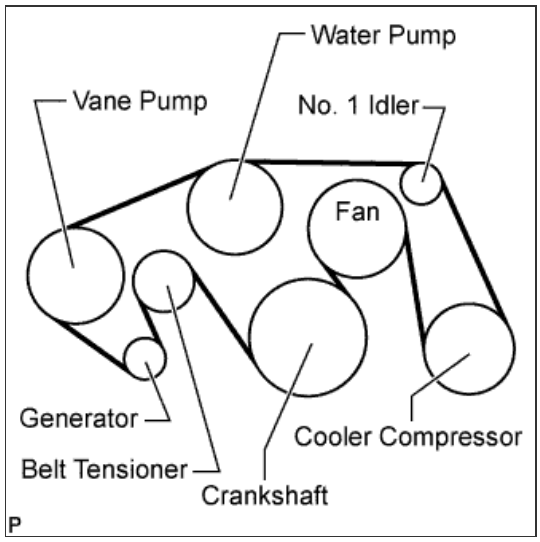
5. INSTALL FAN & GENERATOR V BELT

a. Set the V belt onto every part.

b. While turning the belt tensioner counterclockwise, remove the bar.

NOTICE:

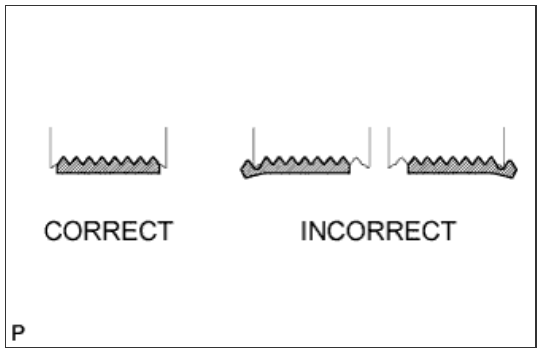
Make sure that the V belt is properly set to each pulley.



c. After installing the belt, check that it fits properly in the ribbed grooves.

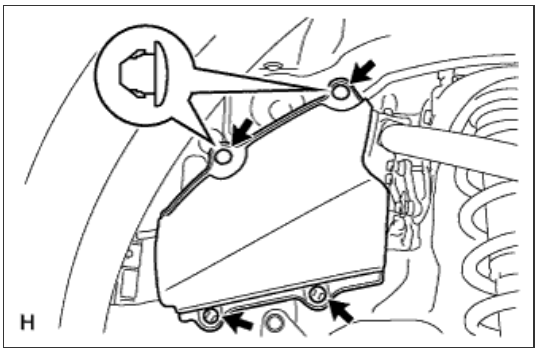
HINT:

Make sure to check by hand that the belt has not slipped out of the grooves on the bottom of the pulley.



6. INSTALL FRONT FENDER APRON SEAL LH

a. Install the seal with the 4 clips.



7. CHARGE REFRIGERANT

SST

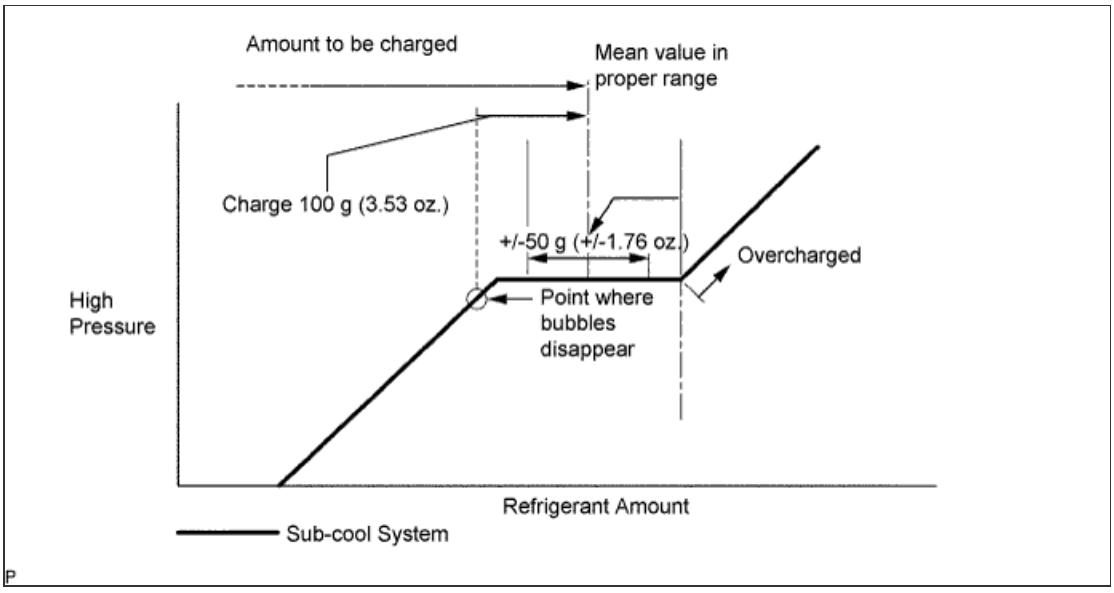
09985-20010 (09985-02130, 09985-02150, 09985-02090, 09985-02110, 09985-02010, 09985-02050, 09985-02060, 09985-02070)

a. Perform vacuum purging using a vacuum pump.

b. Charge refrigerant HFC-134a (R134a).

Standard:

Condenser Core Thickness	Cool Box	Refrigerant Charging Amount
22 mm (0.866 in.)	w/ Cool Box	1010 +/-30 g (35.6 +/-1.1 oz.)
	w/o Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
16 mm (0.630 in.)	w/ Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
	w/o Cool Box	920 +/-30 g (32.5 +/-1.1 oz.)



NOTICE:

- **Do not operate the cooler compressor before charging refrigerant as the cooler compressor will not work properly without any refrigerant, and will overheat.**
- **Approximately 100 g (3.53 oz.) of refrigerant may need to be charged after bubbles disappear. The refrigerant amount should be checked by measuring its quantity, and not with the sight glass.**

8. WARM UP ENGINE

a. Warm up the engine at less than 1850 rpm for 2 minutes or more after charging the refrigerant.

NOTICE:

Be sure to warm up the compressor when turning the A/C switch on after removing and installing the cooler refrigerant lines (including the

compressor), to prevent damage to the compressor.

9. CHECK FOR REFRIGERANT GAS LEAK

a. After recharging the refrigerant gas, check for refrigerant gas leakage using a halogen leak detector.

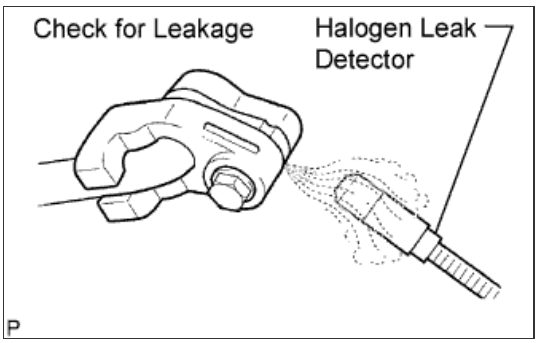
b. Perform the operation under these conditions:

- Stop the engine.
- Secure good ventilation (the halogen leak detector may react to volatile gases other than refrigerant, such as evaporated gasoline or exhaust gas).
- Repeat the test 2 or 3 times.
- Make sure that some refrigerant remains in the refrigeration system. When compressor is off: approximately 392 to 588 kPa (4.0 to 6.0 kgf/cm^2, 57 to 85 psi).

c. Using a halogen leak detector, check the refrigerant line for leakage.

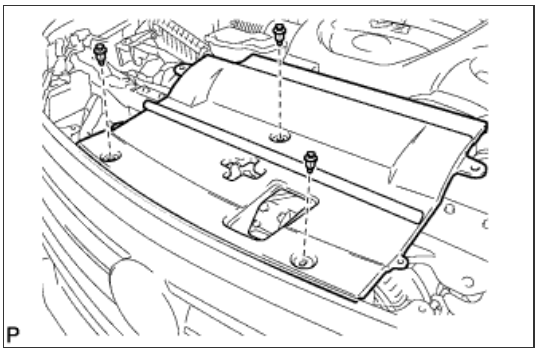
d. If a gas leak is not detected on the drain hose, remove the blower motor control (blower resistor) from the cooling unit. Insert the halogen leak detector sensor into the unit and perform the test.

e. Disconnect the connector and wait for approximately 20 minutes. Bring the halogen leak detector close to the pressure switch and perform the test.



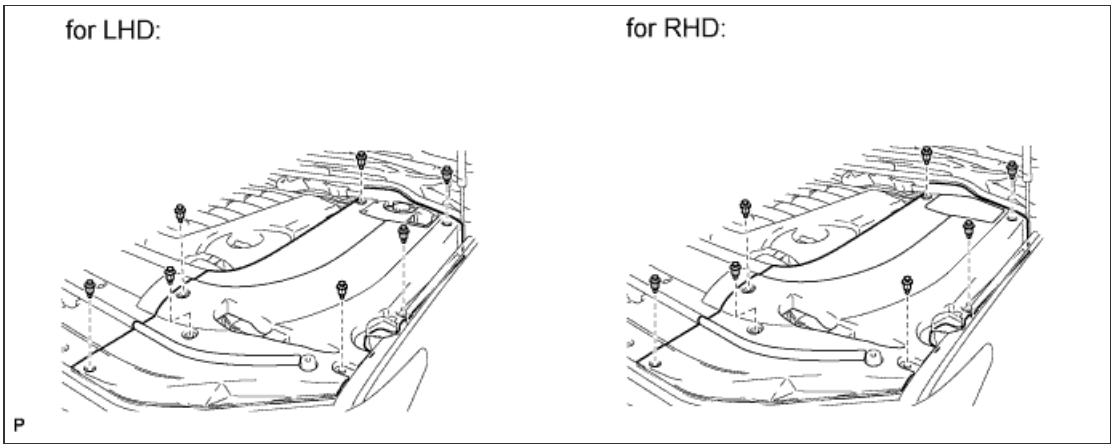
10. INSTALL UPPER RADIATOR SUPPORT SEAL

a. Install the upper radiator support seal with the 3 clips.



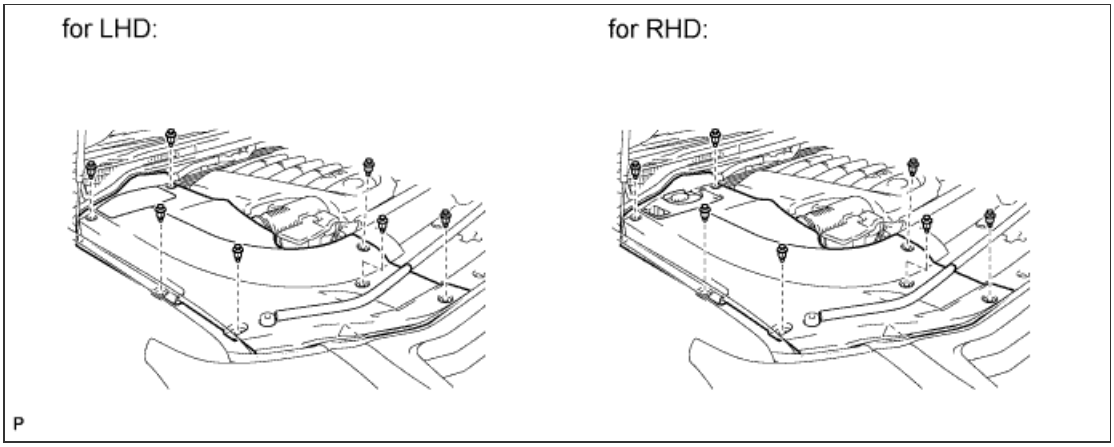
11. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.

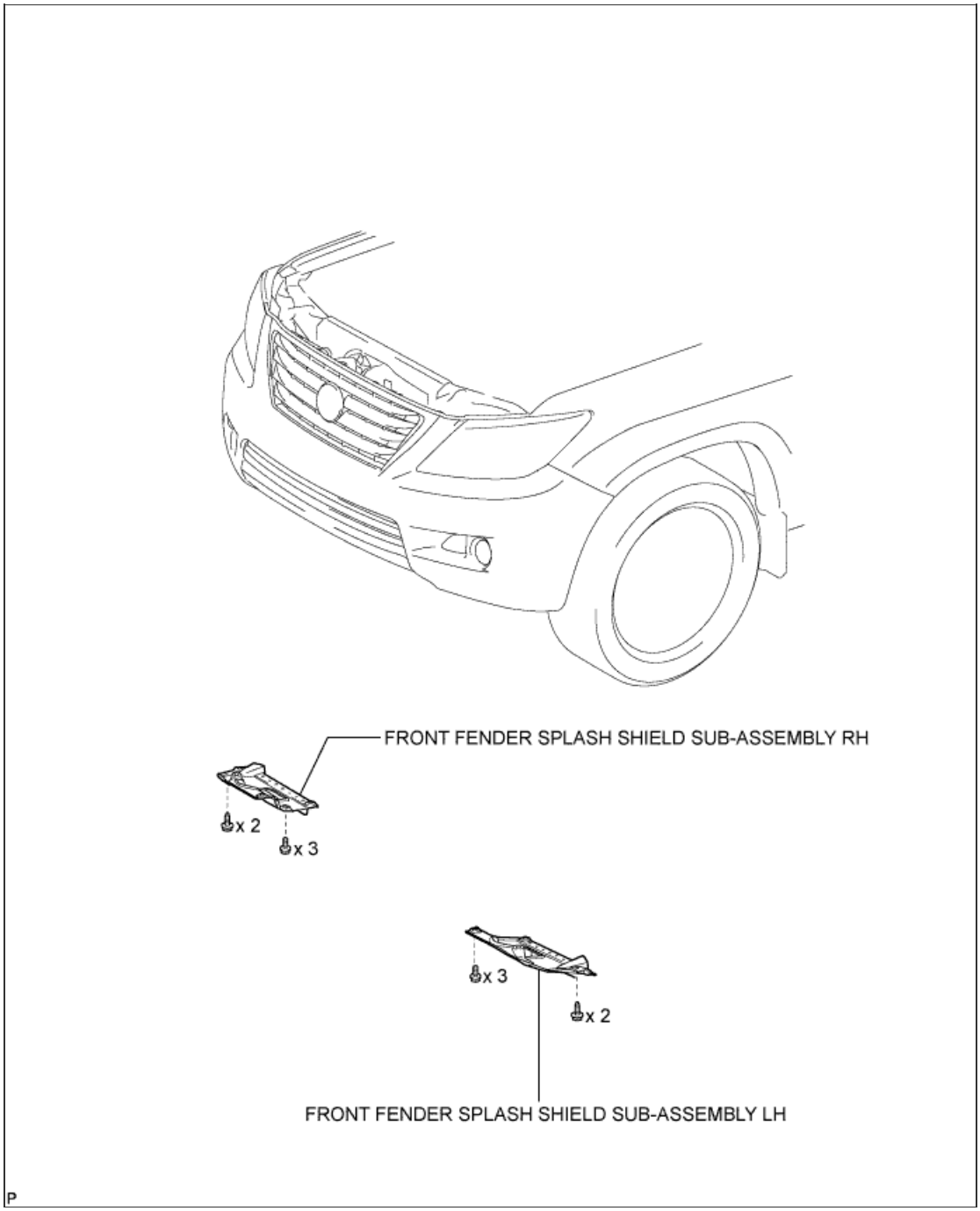


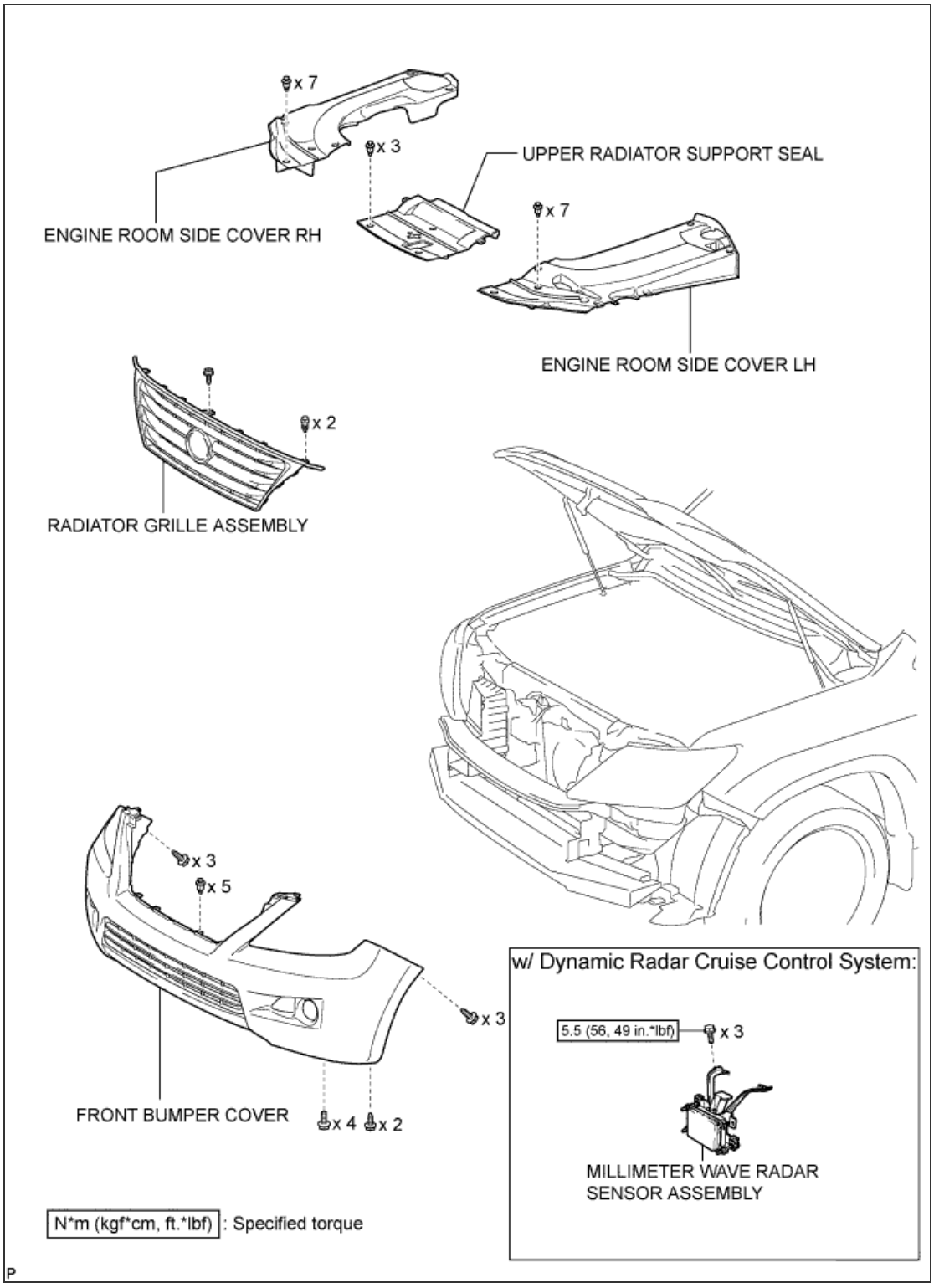
12. INSTALL ENGINE ROOM SIDE COVER RH

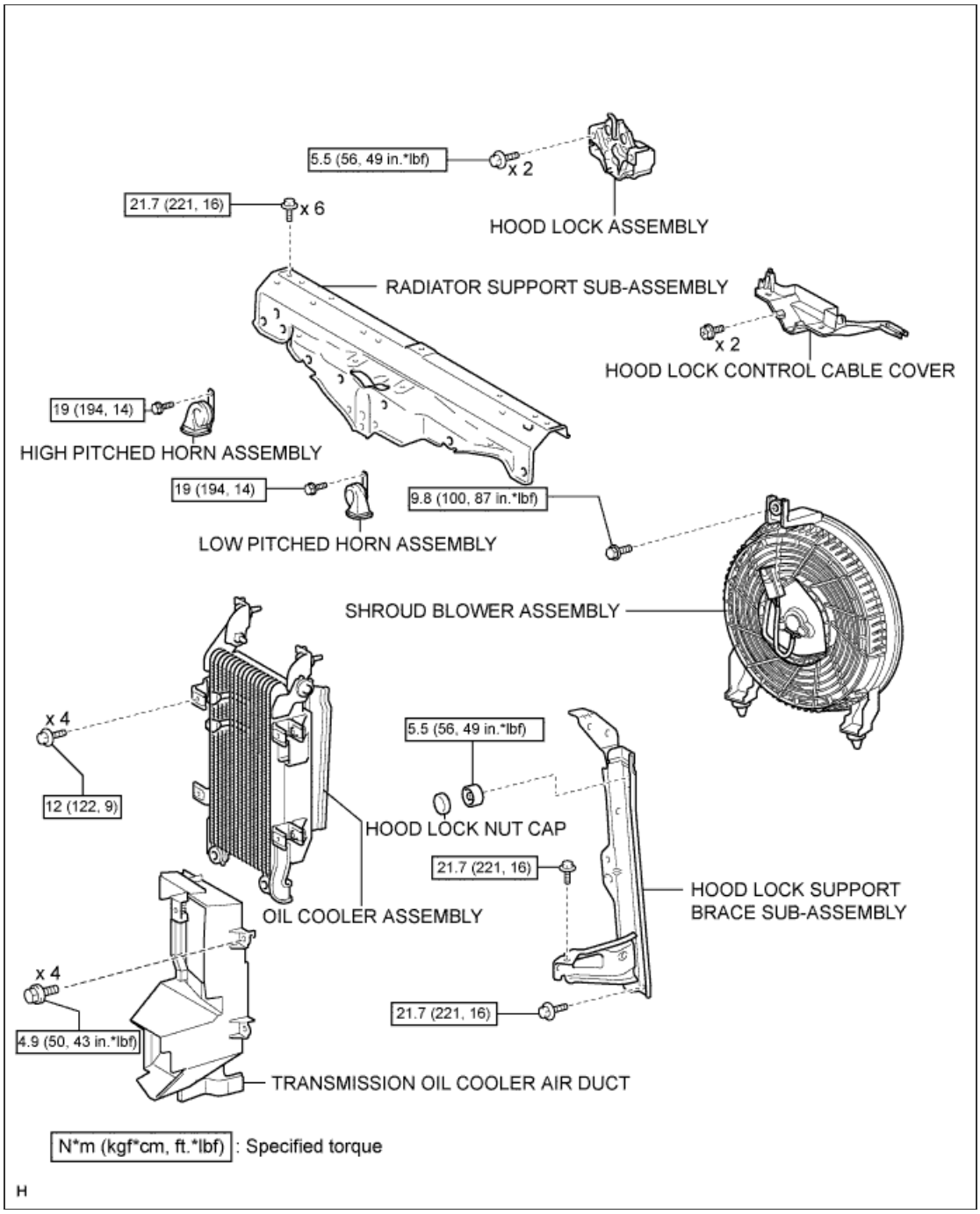
a. Install the engine room side cover with the 7 clips.

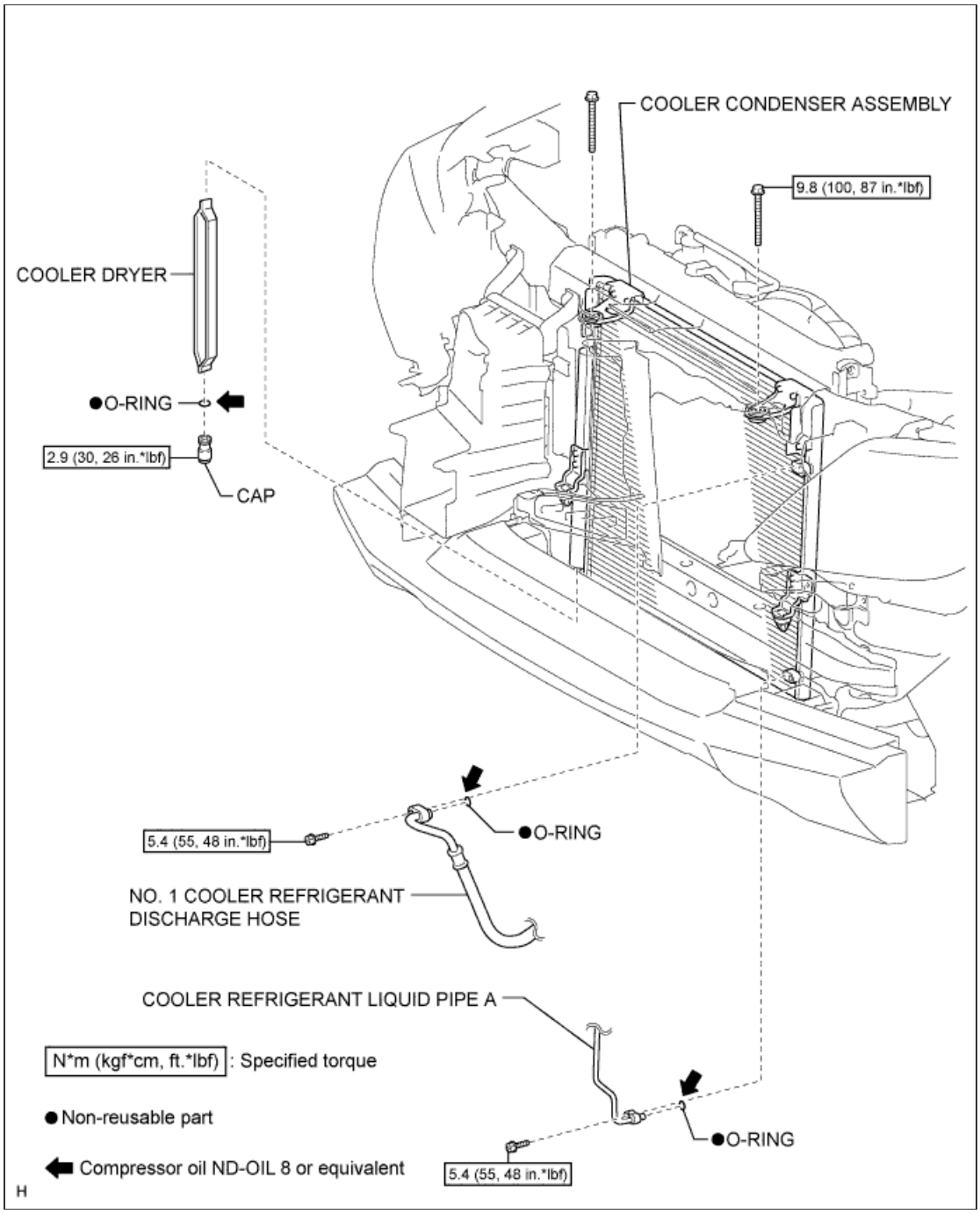


for Preparation [Click here]




x 7
x 3
UPPER RADIATOR SUPPORT SEAL
ENGINE ROOM SIDE COVER RH
x 7
ENGINE ROOM SIDE COVER LH
x 2
RADIATOR GRILLE ASSEMBLY
x 3
x 5
x 3
FRONT BUMPER COVER
x 4
x 2
w/ Dynamic Radar Cruise Control System:
5.5 (56, 49 in.*lbf)
x 3
MILLIMETER WAVE RADAR SENSOR ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
P


5.5 (56, 49 in.*lbf)
x 2
HOOD LOCK ASSEMBLY
21.7 (221, 16)
x 6
RADIATOR SUPPORT SUB-ASSEMBLY
x 2
HOOD LOCK CONTROL CABLE COVER
19 (194, 14)
HIGH PITCHED HORN ASSEMBLY
19 (194, 14)
9.8 (100, 87 in.*lbf)
LOW PITCHED HORN ASSEMBLY
SHROUD BLOWER ASSEMBLY
x 4
12 (122, 9)
5.5 (56, 49 in.*lbf)
HOOD LOCK NUT CAP
21.7 (221, 16)
HOOD LOCK SUPPORT BRACE SUB-ASSEMBLY
OIL COOLER ASSEMBLY
x 4
4.9 (50, 43 in.*lbf)
21.7 (221, 16)
TRANSMISSION OIL COOLER AIR DUCT
N*m (kgf*cm, ft.*lbf) : Specified torque
H


COOLER CONDENSER ASSEMBLY
9.8 (100, 87 in.*lbf)
COOLER DRYER
●O-RING
2.9 (30, 26 in.*lbf)
CAP
5.4 (55, 48 in.*lbf)
●O-RING
NO. 1 COOLER REFRIGERANT DISCHARGE HOSE
COOLER REFRIGERANT LIQUID PIPE A
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
Compressor oil ND-OIL 8 or equivalent
5.4 (55, 48 in.*lbf)
●O-RING
H

for Preparation Click here

1. INSPECT COOLER CONDENSER ASSEMBLY

a. If the fins of the cooler condenser are dirty, clean them with water. Dry the fins with compressed air.

NOTICE:

Do not damage the fins of the condenser.

b. If a fin of the cooler condenser is bent, straighten it using a screwdriver or pliers.

2. CHECK CONDENSER FOR LEAKAGE OF REFRIGERANT

a. Using a halogen leak detector, check the pipe joints for gas leakage.
If gas leakage is detected in a joint, check the torque of the joint.

for Preparation Click here

1. REMOVE FRONT BUMPER COVER

a. Remove the front bumper cover (Click here).

2. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM

a. Start the engine.

b. Turn the A/C switch on.

c. Operate the cooler compressor while the engine speed is approximately 1000 rpm for 5 to 6 minutes to circulate the refrigerant and collect the compressor oil remaining in each component into the cooler compressor.

d. Stop the engine.

e. Recover the refrigerant from the A/C system using a refrigerant recovery unit.

3. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

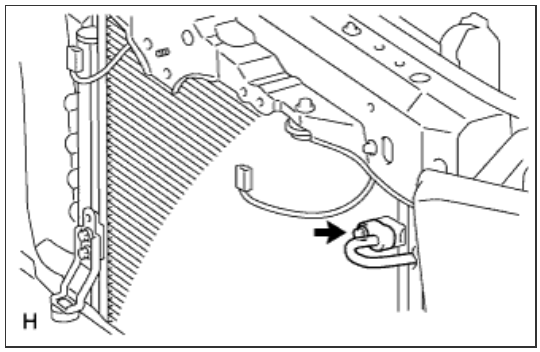
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

4. DISCONNECT NO. 1 COOLER REFRIGERANT DISCHARGE HOSE

a. Remove the bolt and disconnect the discharge hose from the cooler condenser.

NOTICE:

- **When removing the bolt, do not allow any tools to contact the pipe.**
- **When removing the bolt, hold a part of the pipe near the connector.**



b. Remove the O-ring from the discharge hose.

NOTICE:

Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.

5. DISCONNECT COOLER REFRIGERANT LIQUID PIPE A

a. Remove the 2 bolts and disconnect the liquid pipe A from the cooler condenser.

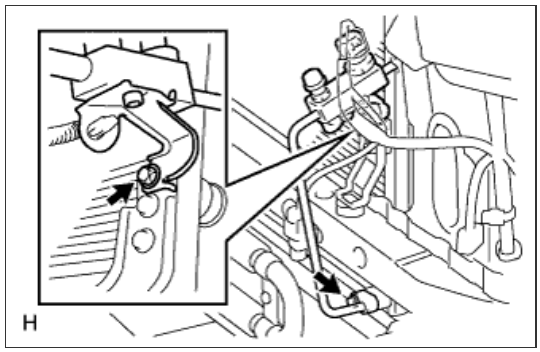
NOTICE:

- **When removing the bolts, do not allow any tools to contact the pipe.**
- **When removing the bolts, hold a part of the pipe near the connector.**

b. Remove the O-ring from the liquid pipe A.

NOTICE:

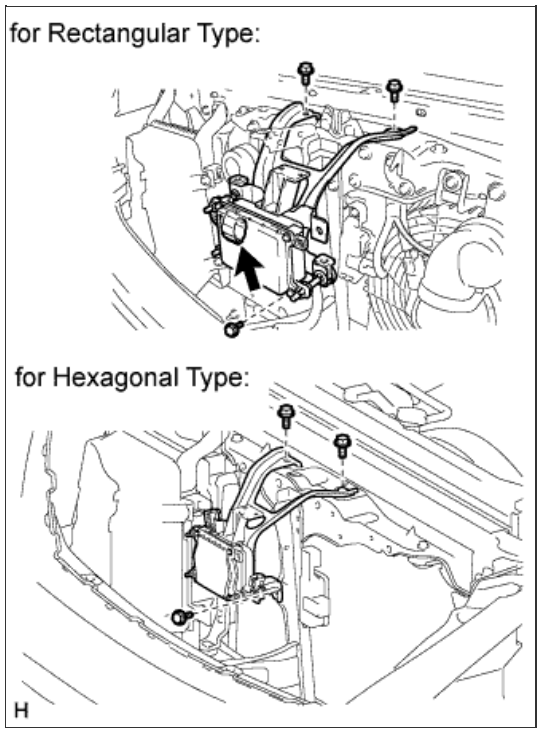
Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.



6. REMOVE MILLIMETER WAVE RADAR SENSOR ASSEMBLY (w/ Dynamic Radar Cruise Control System)

a. Disconnect the sensor connector.

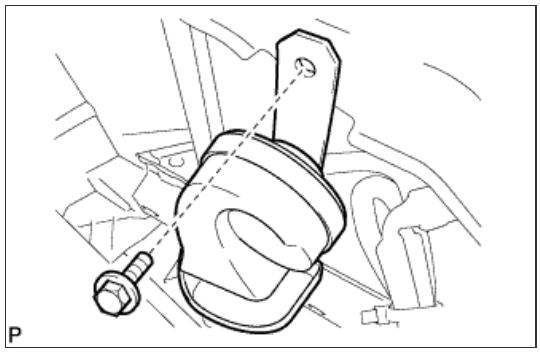
b. Remove the 3 bolts and sensor.



7. REMOVE HIGH PITCHED HORN ASSEMBLY

a. Remove the bolt and horn.

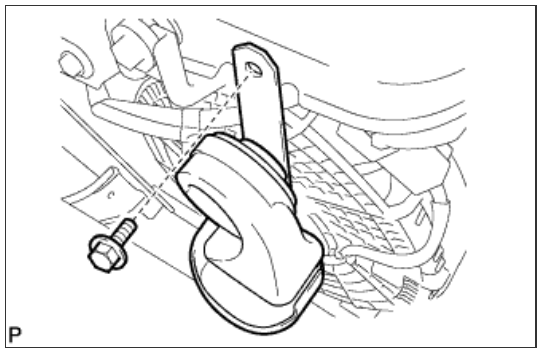
b. Disconnect the horn connector.



8. REMOVE LOW PITCHED HORN ASSEMBLY

a. Remove the bolt and horn.

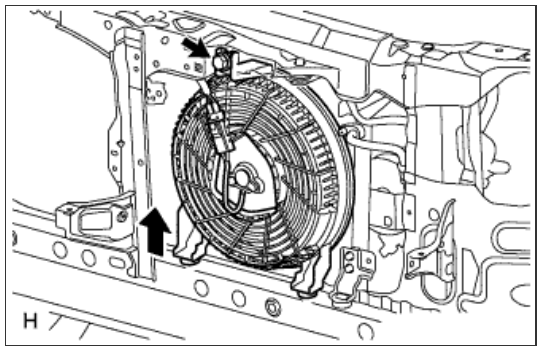
b. Disconnect the horn connector.



9. REMOVE SHROUD BLOWER ASSEMBLY

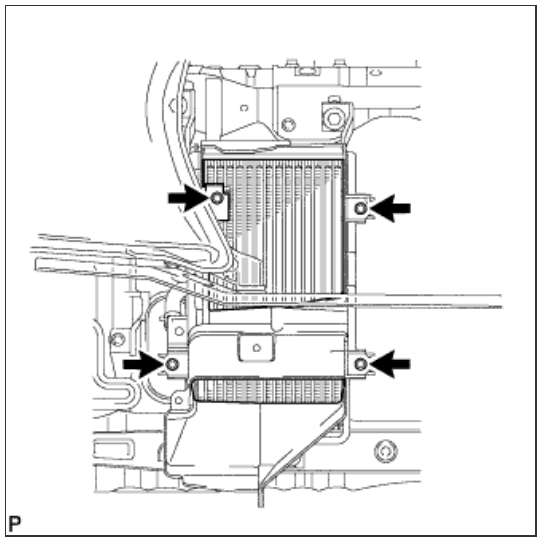
a. Disconnect the connector.

b. Remove the bolt and shroud blower as shown in the illustration.



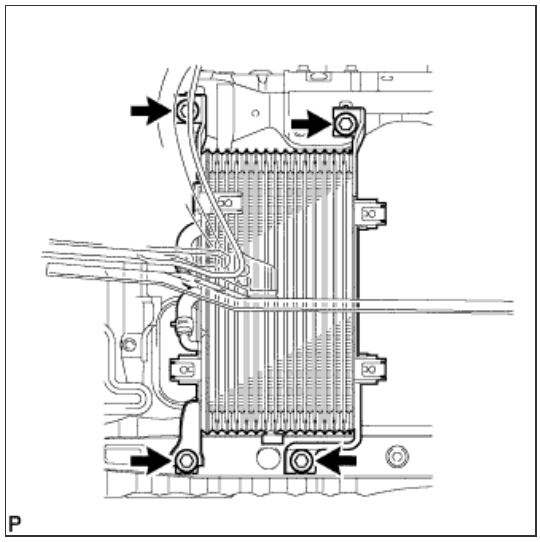
10. REMOVE TRANSMISSION OIL COOLER AIR DUCT

a. Remove the 4 bolts and transmission oil cooler air duct.



11. REMOVE OIL COOLER ASSEMBLY

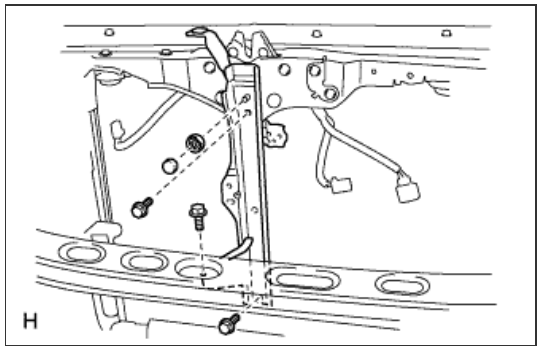
a. Remove the 4 bolts and oil cooler.



12. REMOVE HOOD LOCK SUPPORT BRACE SUB-ASSEMBLY

a. Remove the hood lock nut cap.

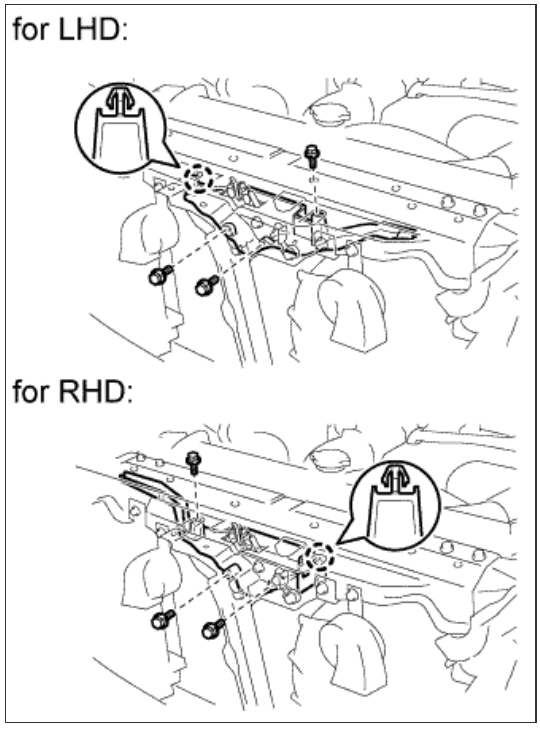
b. Remove the 3 bolts, nut and brace.



13. REMOVE HOOD LOCK CONTROL CABLE COVER

a. Remove the 3 screws.

b. Detach the claw and remove the cable cover.

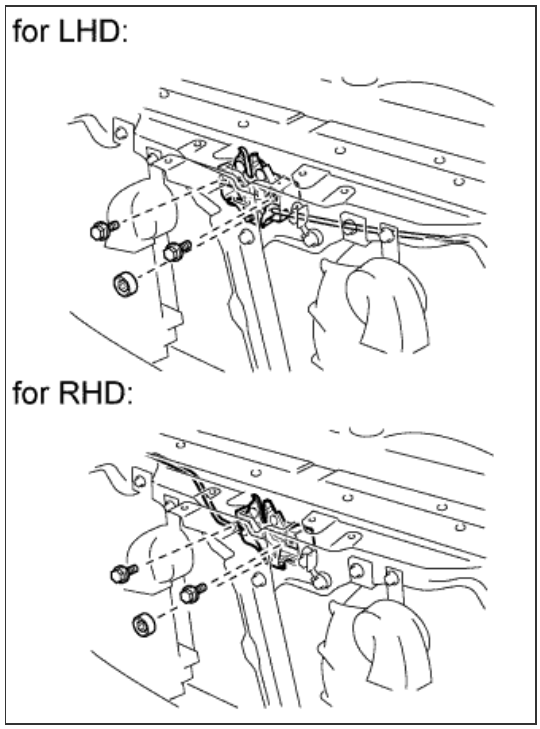


14. REMOVE HOOD LOCK ASSEMBLY

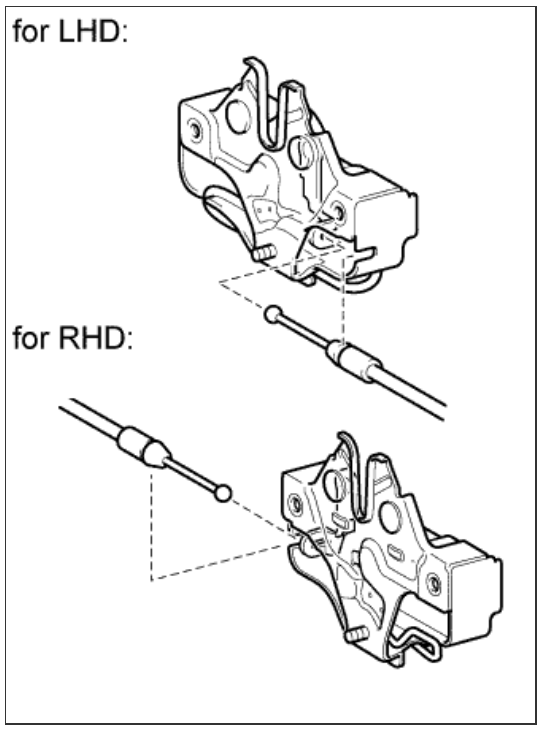
a. Remove the 2 bolts and nut.

b. Remove the hood lock.

c. Disconnect the connector.

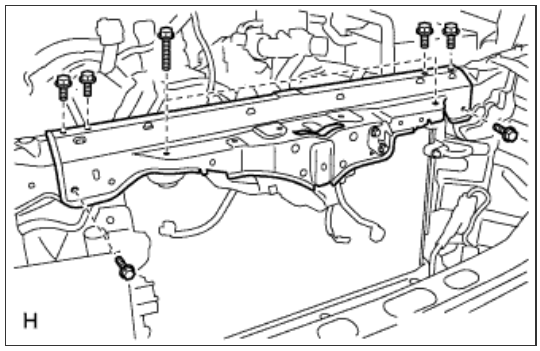


d. Disconnect the hood lock control cable.



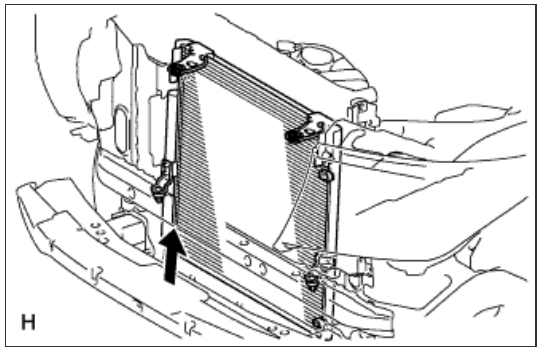
15. REMOVE RADIATOR SUPPORT SUB-ASSEMBLY

a. Remove the 8 bolts and radiator support.



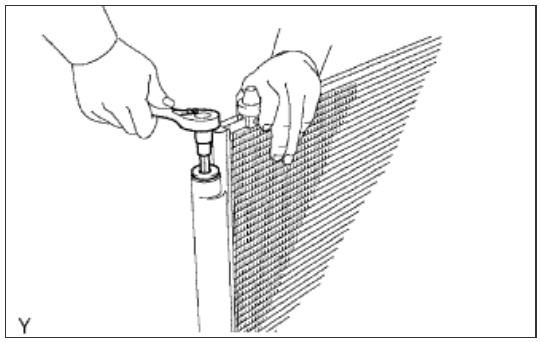
16. REMOVE COOLER CONDENSER ASSEMBLY

a. Remove the cooler condenser by pulling it up in the direction shown in the illustration.

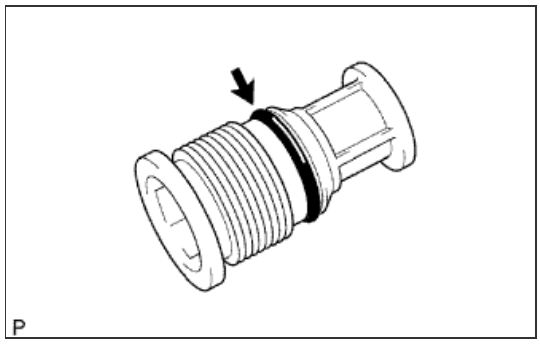


17. REMOVE COOLER DRYER

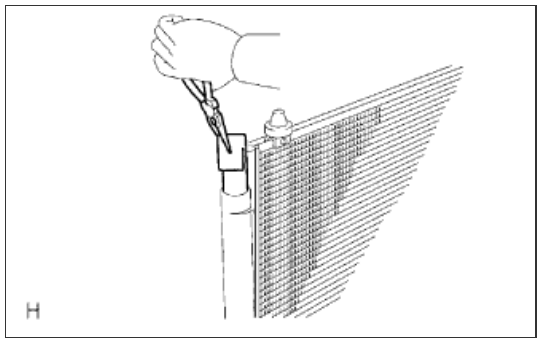
a. Using a 14 mm socket hexagon wrench, remove the cap from the modulator.



b. Remove the O-ring from the cap.



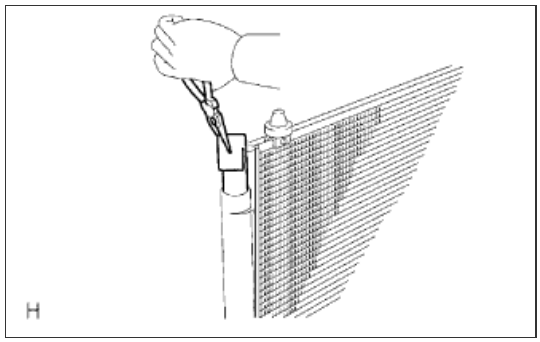
c. Using pliers, remove the cooler dryer.



for Preparation Click here

1. INSTALL COOLER DRYER

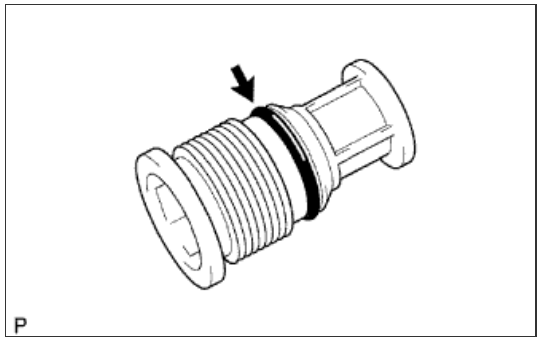
a. Using pliers, install the cooler dryer.



b. Apply a sufficient amount of compressor oil to the contact surfaces of a new O-ring and the cap.

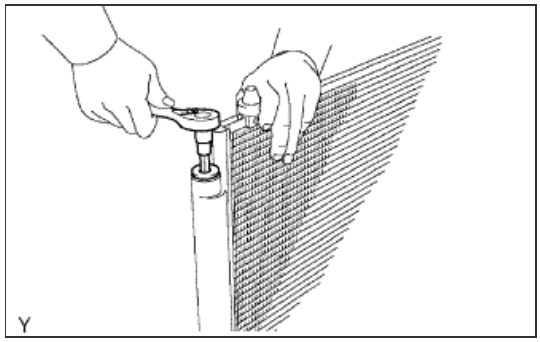
Compressor oil:
ND-OIL 8 or equivalent

c. Install the O-ring to the cap.



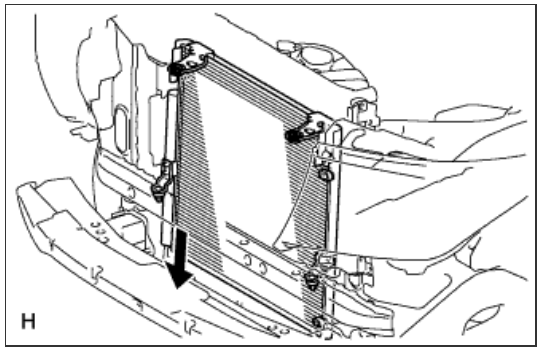
d. Using a 14 mm socket hexagon wrench, install the cap to the modulator.

Torque:
2.9 N*m{ 30 kgf*cm , 26 in.*lbf }



2. INSTALL COOLER CONDENSER ASSEMBLY

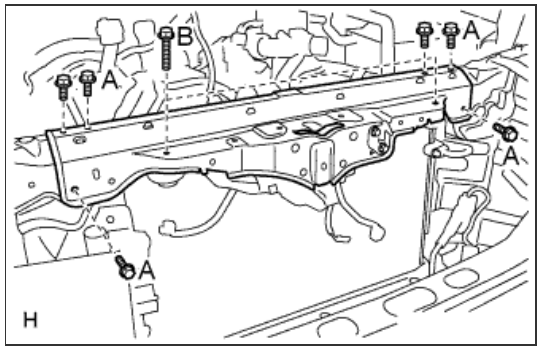
a. Install the cooler condenser as shown in the illustration.



3. INSTALL RADIATOR SUPPORT SUB-ASSEMBLY

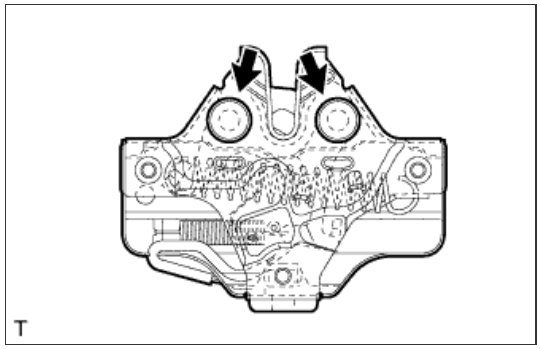
a. Install the radiator support with the 8 bolts.

Torque:
21.7 N*m{ 221 kgf*cm , 16 ft.*lbf } for bolt A
9.8 N*m{ 100 kgf*cm , 87 in.*lbf } for bolt B



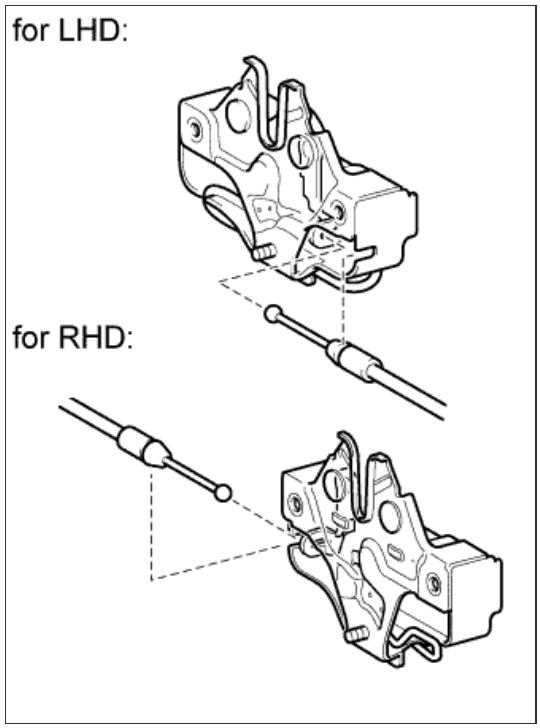
4. INSTALL HOOD LOCK ASSEMBLY

a. Apply MP grease to the sliding areas of the lock.



b. Connect the hood lock control cable.

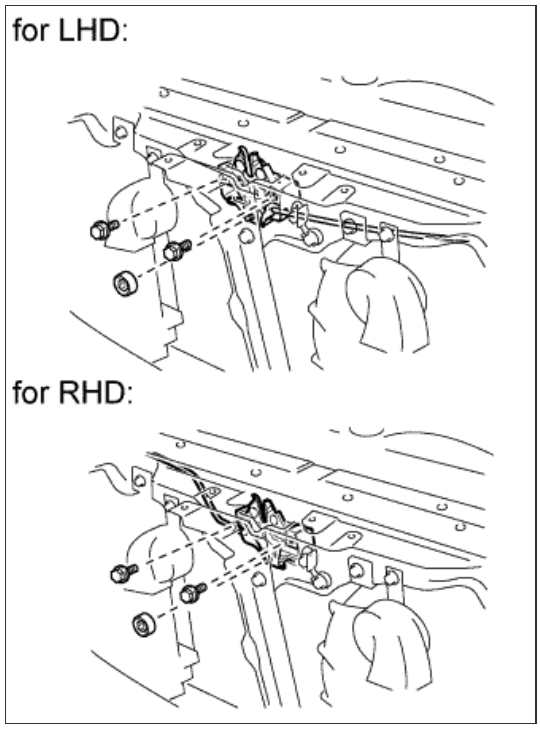
c. Install the hood lock.



d. Install the 2 bolts and nut.

Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

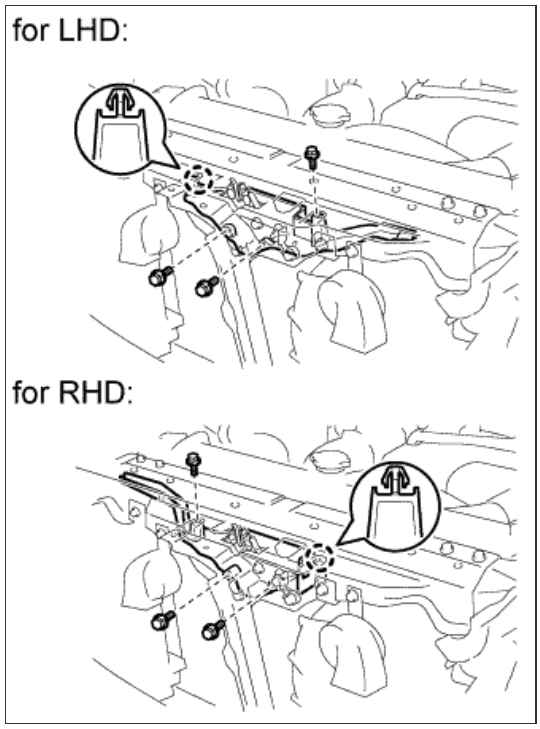
e. Connect the connector.



5. INSTALL HOOD LOCK CONTROL CABLE COVER

a. Attach the claw to install the cable cover.

b. Install the 3 screws.

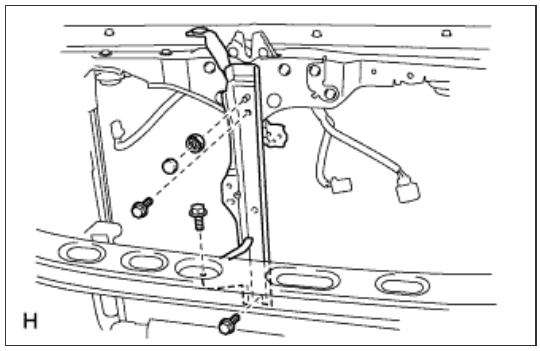


6. INSTALL HOOD LOCK SUPPORT BRACE SUB-ASSEMBLY

a. Install the brace with the 3 bolts and nut.

Torque:
21.7 N*m{ 221 kgf*cm , 16 ft.*lbf } for bolt
5.5 N*m{ 56 kgf*cm , 49 in.*lbf } for nut

b. Install the hood lock nut cap.



7. INSTALL OIL COOLER ASSEMBLY

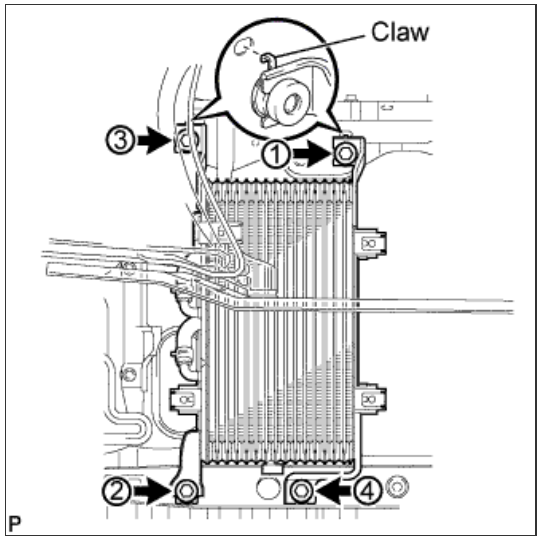
a. Temporarily install the oil cooler to the radiator support.

NOTICE:

Securely attach the 2 claws of the oil cooler into the hole of the radiator support.

b. Install the 4 bolts in the sequence shown in the illustration.

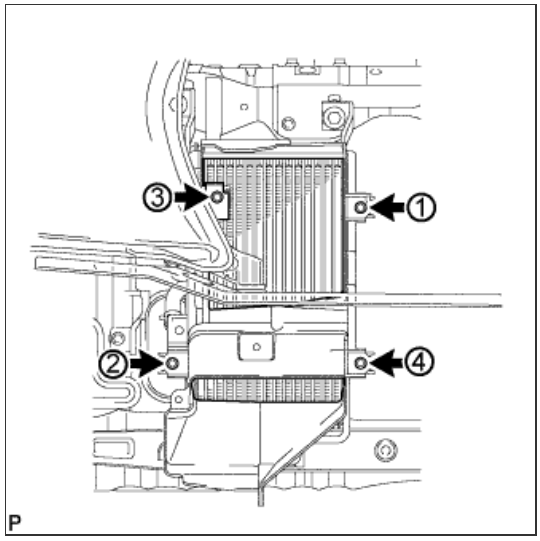
Torque:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }



8. INSTALL TRANSMISSION OIL COOLER AIR DUCT

a. Install the oil cooler air duct with the 4 bolts in the sequence shown in the illustration.

Torque:
4.9 N*m{ 50 kgf*cm , 43 in.*lbf }

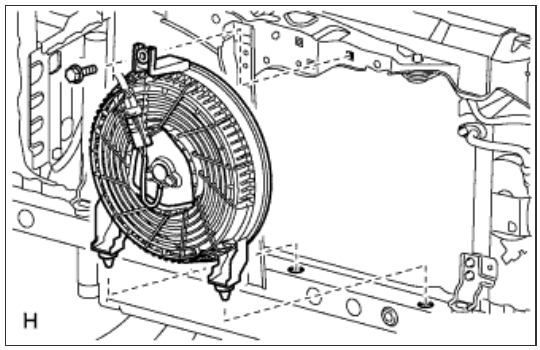


9. INSTALL SHROUD BLOWER ASSEMBLY

a. Install the shroud blower with the bolt.

Torque:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }

b. Connect the connector.

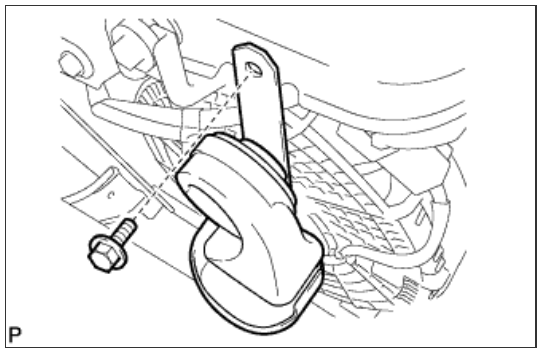


10. INSTALL LOW PITCHED HORN ASSEMBLY

a. Connect the horn connector.

b. Install the horn with the bolt.

Torque:
19 N*m{ 194 kgf*cm , 14 ft.*lbf }

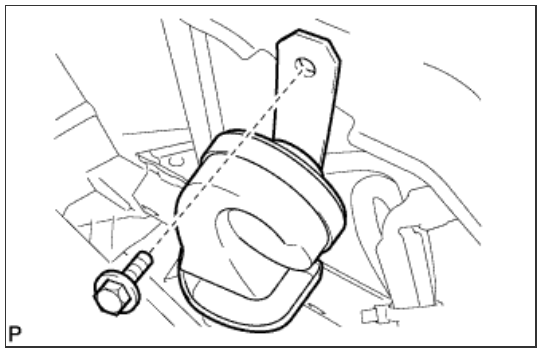


11. INSTALL HIGH PITCHED HORN ASSEMBLY

a. Connect the horn connector.

b. Install the horn with the bolt.

Torque:
19 N*m{ 194 kgf*cm , 14 ft.*lbf }



12. INSTALL MILLIMETER WAVE RADAR SENSOR ASSEMBLY (w/ Dynamic Radar Cruise Control System)

a. Temporarily install the millimeter wave radar sensor assembly with the 3 bolts.

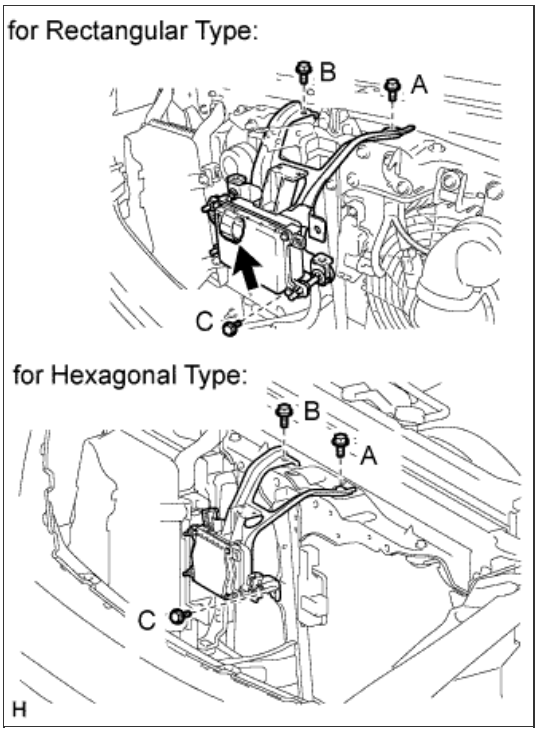
b. Tighten the 3 bolts in alphabetical order.

Torque:
5.5 N*m{ 56 kgf*cm , 49 in.*lbf }

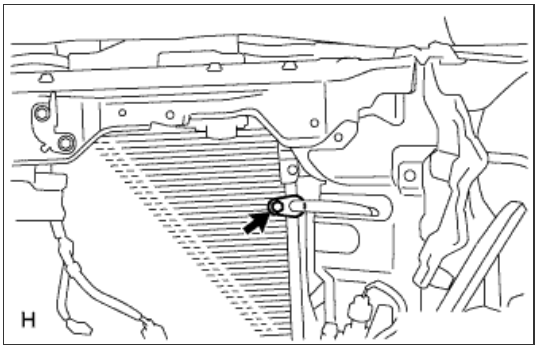
c. Connect the sensor connector.

NOTICE:

Do not use a sensor which has been dropped or subjected to any strong shocks.



13. CONNECT NO. 1 COOLER REFRIGERANT DISCHARGE HOSE



a. Remove the attached vinyl tape from the hose and the connecting part of the cooler condenser.

b. Sufficiently apply compressor oil to a new O-ring and the fitting surface of the discharge hose joint.

Compressor oil:
ND-OIL 8 or equivalent

c. Install the O-ring to the discharge hose.

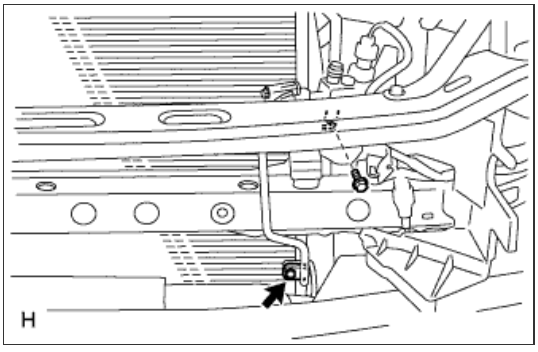
d. Connect the discharge hose to the cooler condenser with the bolt.

Torque:
5.4 N*m{ 55 kgf*cm , 48 in.*lbf }

NOTICE:

- **When tightening the bolt, do not allow any tools to contact the pipe.**
- **When tightening the bolt, hold a part of the pipe near the connector.**

14. CONNECT COOLER REFRIGERANT LIQUID PIPE A



a. Remove the attached vinyl tape from the pipe and the connecting part of the cooler condenser.

b. Sufficiently apply compressor oil to a new O-ring and the fitting surface of the liquid pipe A joint.

Compressor oil:
ND-OIL 8 or equivalent

c. Install the O-ring to the liquid pipe A.

d. Connect the liquid pipe A to the cooler condenser with the 2 bolts.

Torque:
5.4 N*m{ 55 kgf*cm , 48 in.*lbf }

NOTICE:

- **When tightening the bolts, do not allow any tools to contact the pipe.**
- **When tightening the bolts, hold a part of the pipe near the connector.**

15. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

16. CHARGE REFRIGERANT

SST

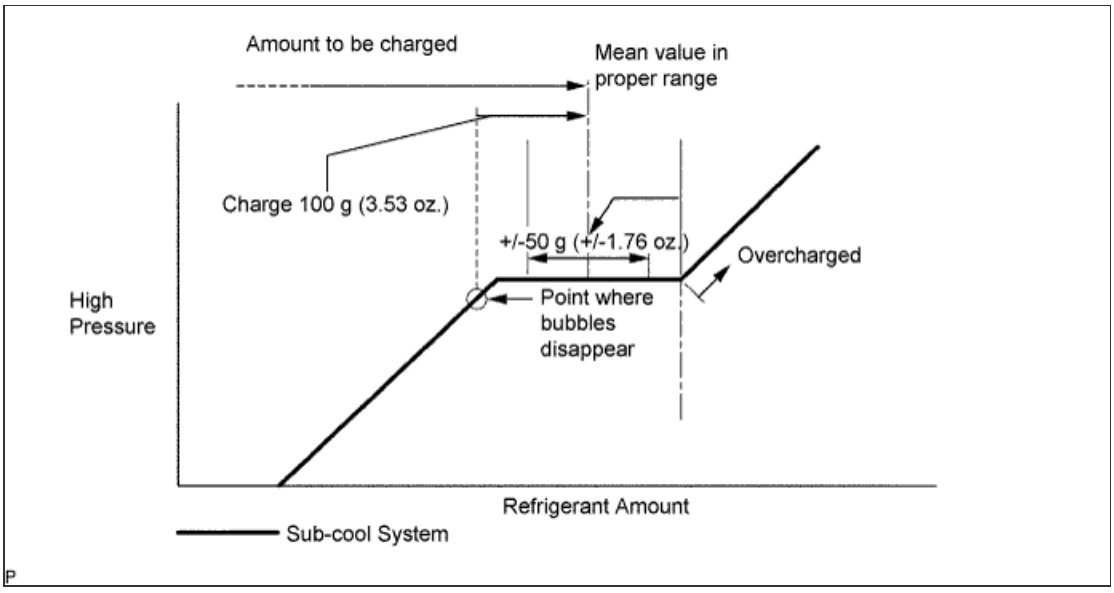
09985-20010 (09985-02130, 09985-02150, 09985-02090, 09985-02110, 09985-02010, 09985-02050, 09985-02060, 09985-02070)

a. Perform vacuum purging using a vacuum pump.

b. Charge refrigerant HFC-134a (R134a).

Standard:

Condenser Core Thickness	Cool Box	Refrigerant Charging Amount
22 mm (0.866 in.)	w/ Cool Box	1010 +/-30 g (35.6 +/-1.1 oz.)
	w/o Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
16 mm (0.630 in.)	w/ Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
	w/o Cool Box	920 +/-30 g (32.5 +/-1.1 oz.)



NOTICE:

- **Do not operate the cooler compressor before charging refrigerant as the cooler compressor will not work properly without any refrigerant, and will overheat.**
- **Approximately 100 g (3.53 oz.) of refrigerant may need to be charged after bubbles disappear. The refrigerant amount should be checked by measuring its quantity, and not with the sight glass.**

17. INSTALL FRONT BUMPER COVER

a. Install the front bumper cover (Click here).

18. WARM UP ENGINE

a. Warm up the engine at less than 1850 rpm for 2 minutes or more after charging the refrigerant.

NOTICE:

Be sure to warm up the compressor when turning the A/C switch on after removing and installing the cooler refrigerant lines (including the compressor), to prevent damage to the compressor.

19. CHECK FOR REFRIGERANT GAS LEAK

a. After recharging the refrigerant gas, check for refrigerant gas leakage using a halogen leak detector.

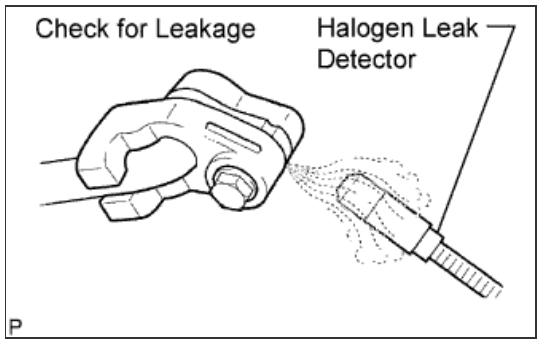
b. Perform the operation under these conditions:

- Stop the engine.
- Secure good ventilation (the halogen leak detector may react to volatile gases other than refrigerant, such as evaporated gasoline or exhaust gas).
- Repeat the test 2 or 3 times.
- Make sure that some refrigerant remains in the refrigeration system. When compressor is off: approximately 392 to 588 kPa (4.0 to 6.0 kgf/cm^2, 57 to 85 psi).

c. Using a halogen leak detector, check the refrigerant line for leakage.

d. If a gas leak is not detected on the drain hose, remove the blower motor control (blower resistor) from the cooling unit. Insert the halogen leak detector sensor into the unit and perform the test.

e. Disconnect the connector and wait for approximately 20 minutes. Bring the halogen leak detector close to the pressure switch and perform the test.



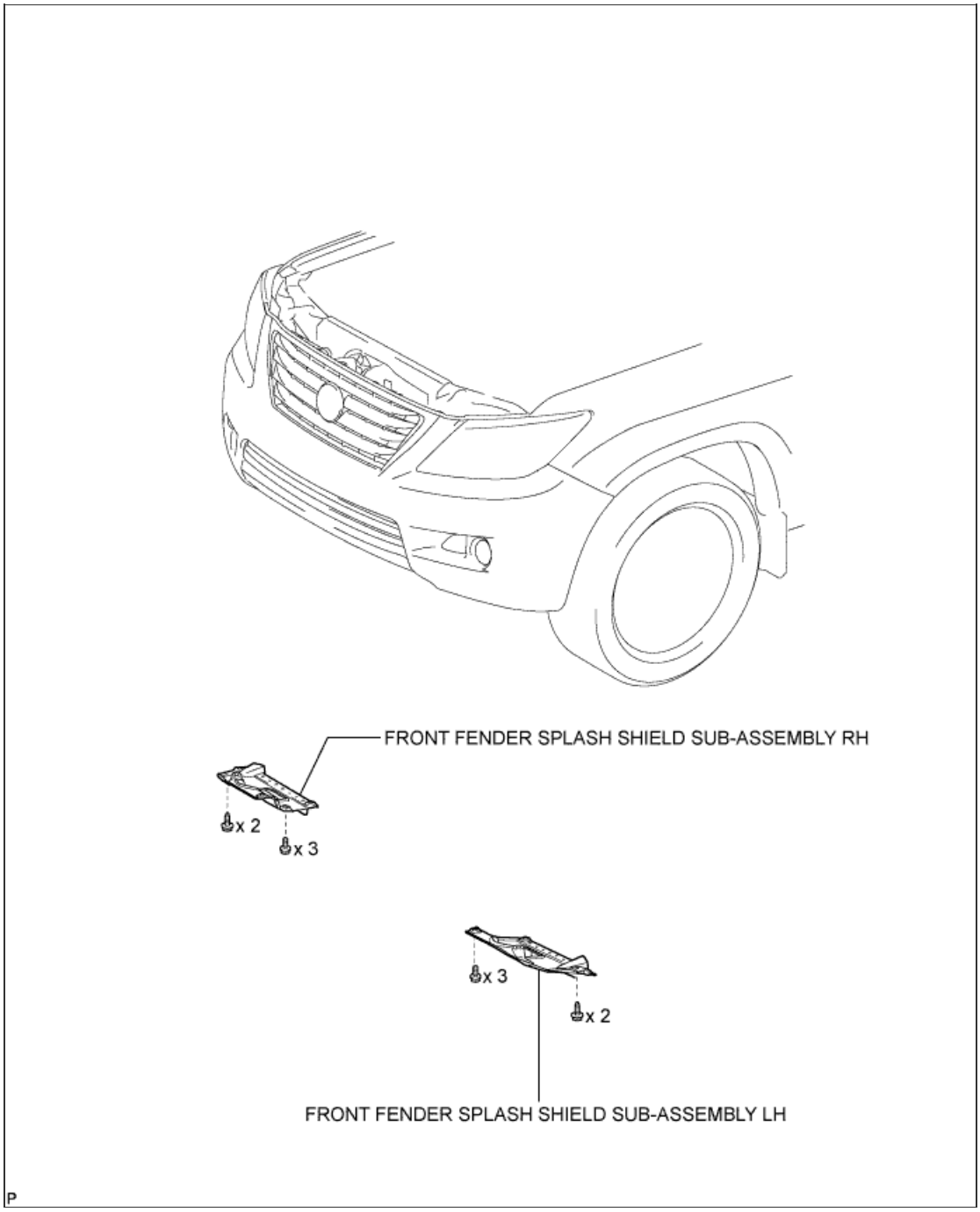
20. CHECK SRS WARNING LIGHT

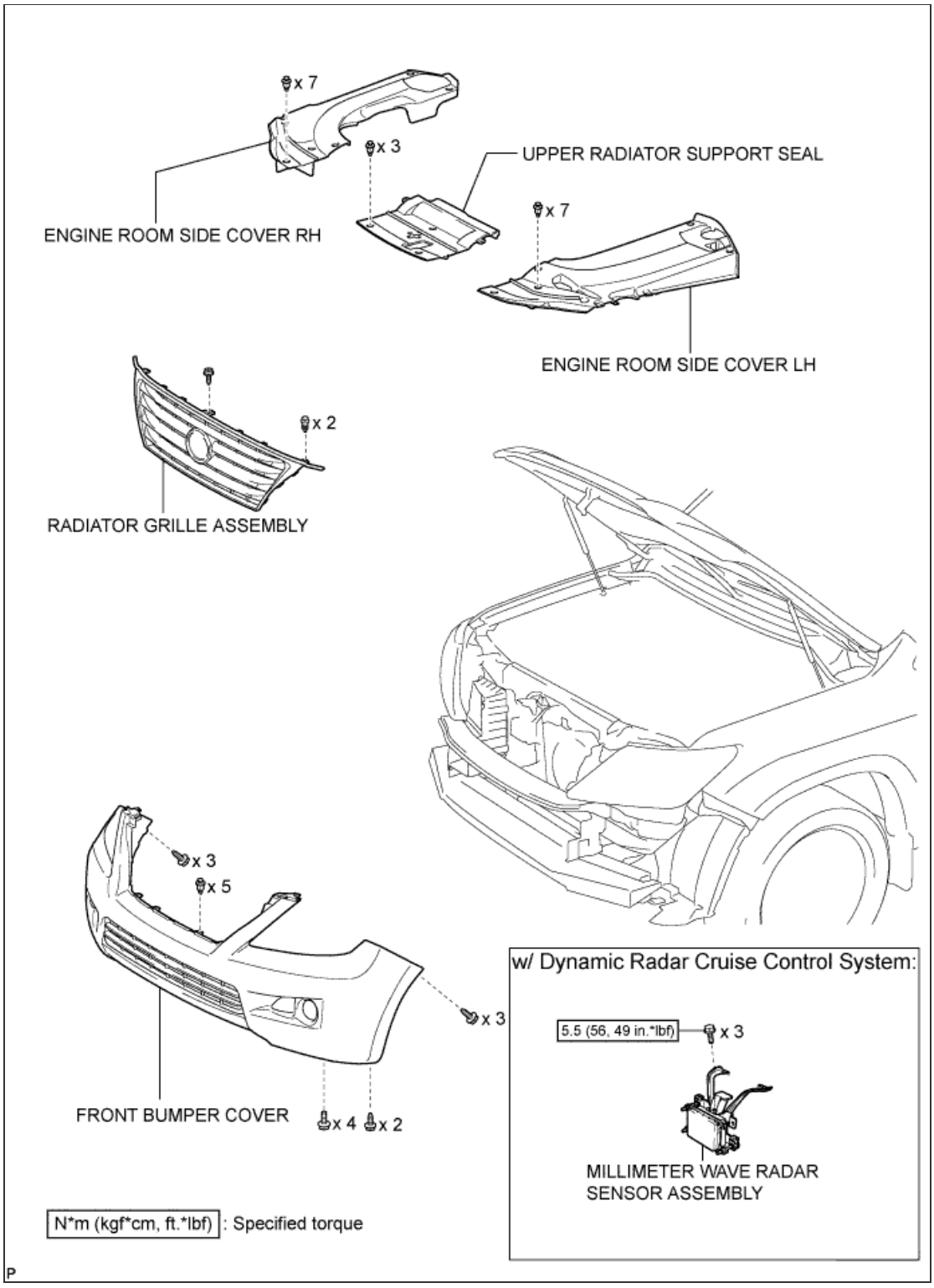
a. Check the SRS warning light (Click here).

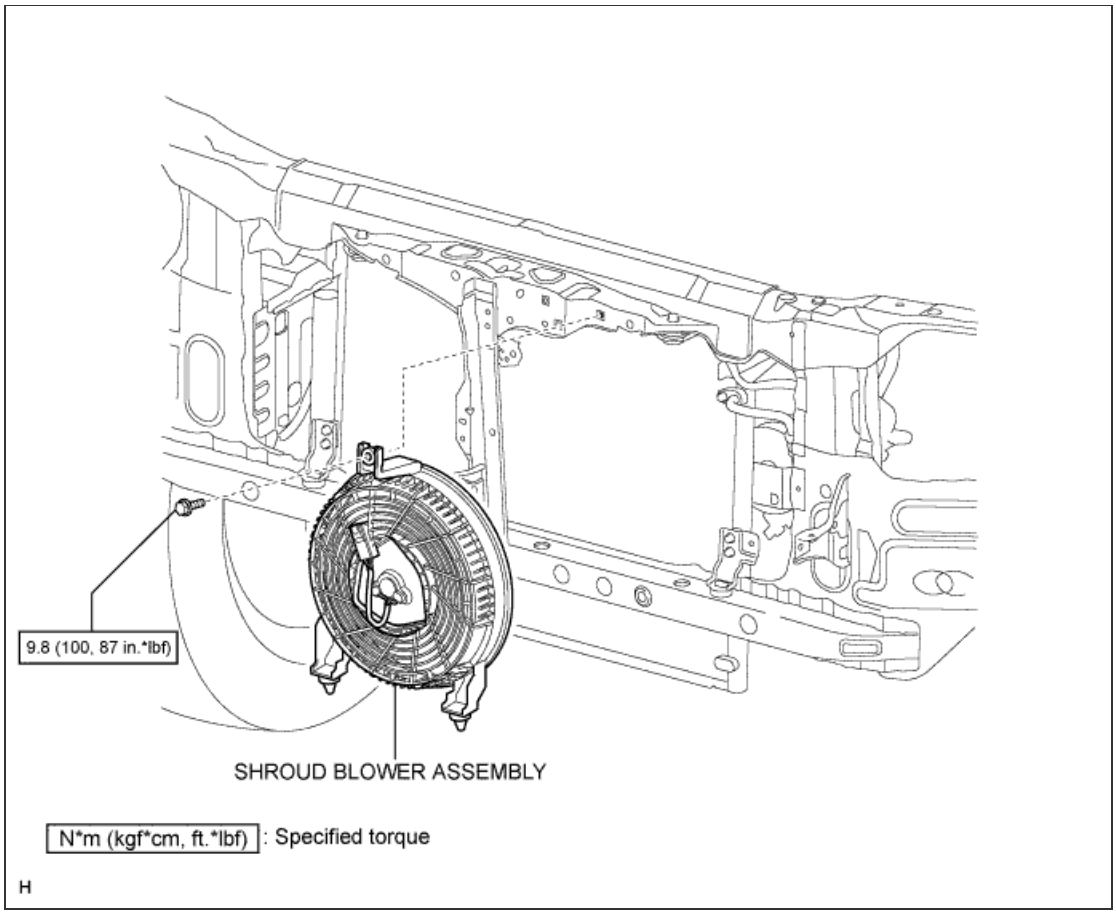
21. ADJUST MILLIMETER WAVE RADAR SENSOR ASSEMBLY (w/ Dynamic Radar Cruise Control System)

a. Adjust the millimeter wave radar sensor assembly (Click here).

for Preparation [Click here]




x 7
x 3
UPPER RADIATOR SUPPORT SEAL
ENGINE ROOM SIDE COVER RH
x 7
ENGINE ROOM SIDE COVER LH
x 2
RADIATOR GRILLE ASSEMBLY
x 3
x 5
x 3
FRONT BUMPER COVER
x 4
x 2
w/ Dynamic Radar Cruise Control System:
5.5 (56, 49 in.*lbf)
x 3
MILLIMETER WAVE RADAR SENSOR ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
P



N*m (kgf*cm, ft.*lbf) : Specified torque

H

CONDENSER FAN > REMOVAL

for Preparation Click here

1. REMOVE FRONT BUMPER COVER

a. Remove the front bumper cover (Click here).

2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

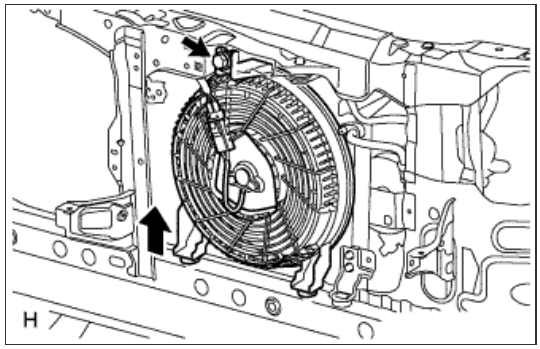
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE SHROUD BLOWER ASSEMBLY

a. Disconnect the connector.

b. Remove the bolt and shroud blower as shown in the illustration.



for Preparation Click here

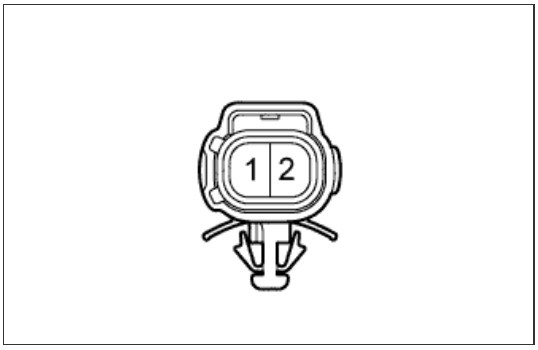
1. INSPECT SHROUD BLOWER ASSEMBLY

a. Apply battery voltage and check the operation of the motor, as shown in the table.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 2	Motor operates smoothly

If the result is not as specified, replace the shroud blower assembly.



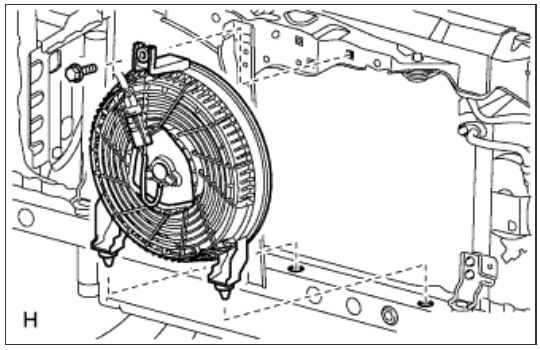
for Preparation Click here

1. INSTALL SHROUD BLOWER ASSEMBLY

a. Install the shroud blower with the bolt.

Torque:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }

b. Connect the connector.



2. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

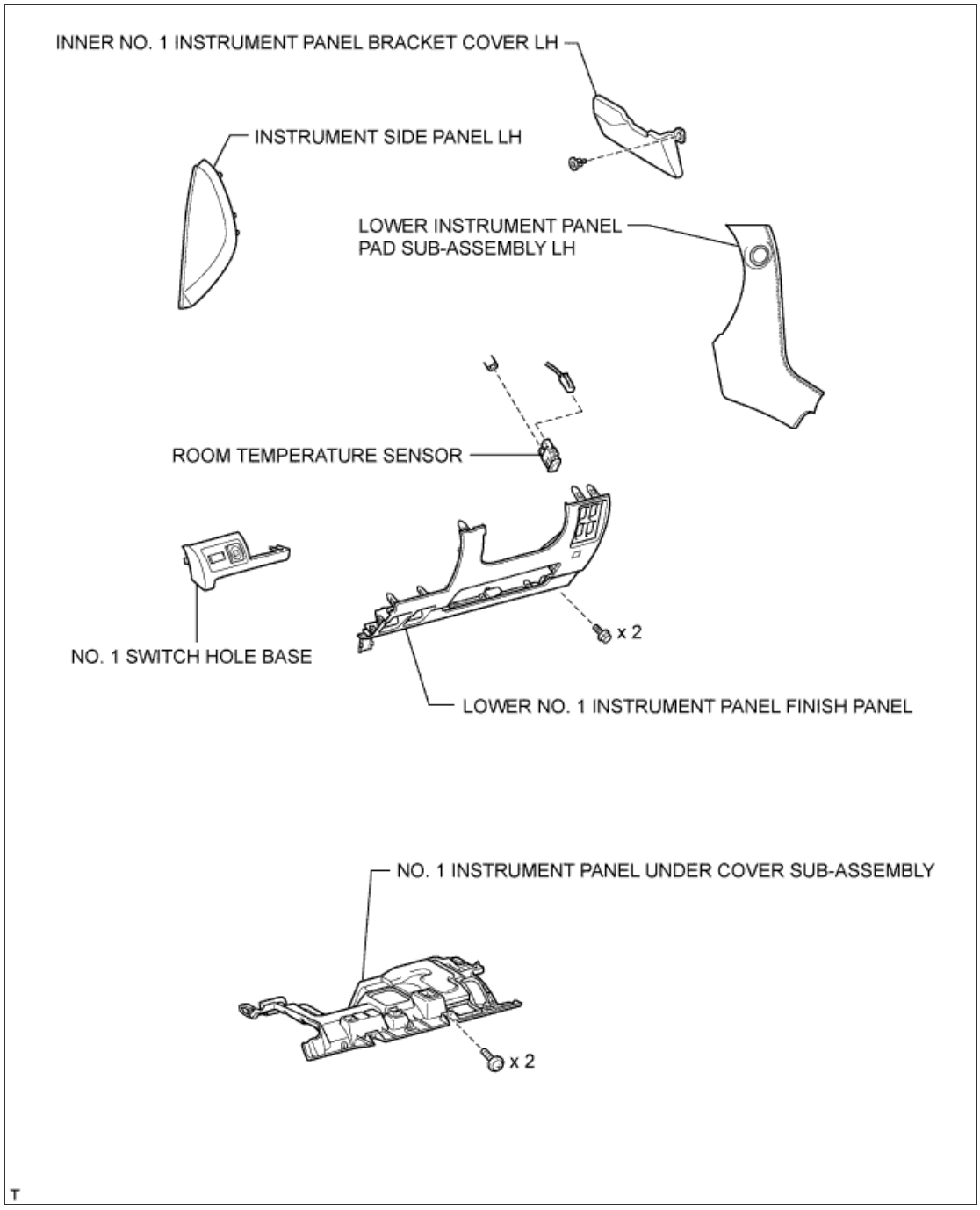
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. INSTALL FRONT BUMPER COVER

a. Install the front bumper cover (Click here).

for Preparation Click here



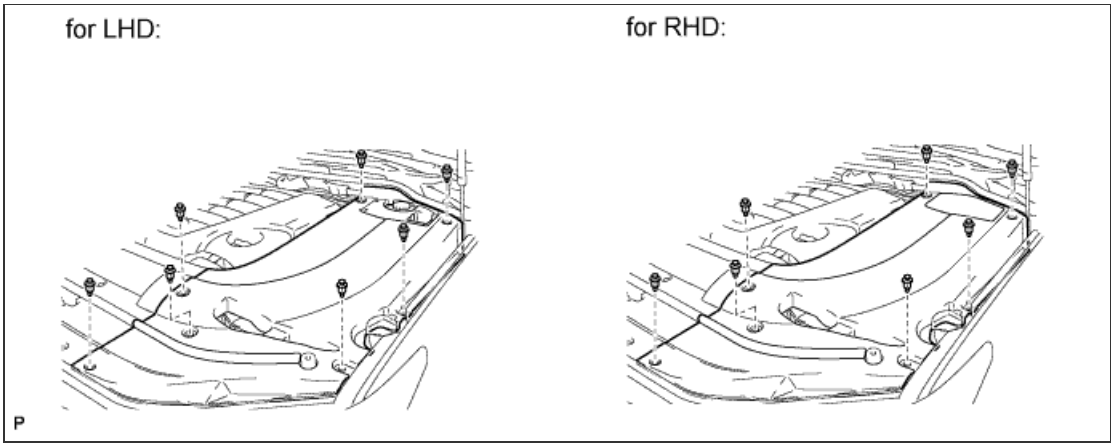
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

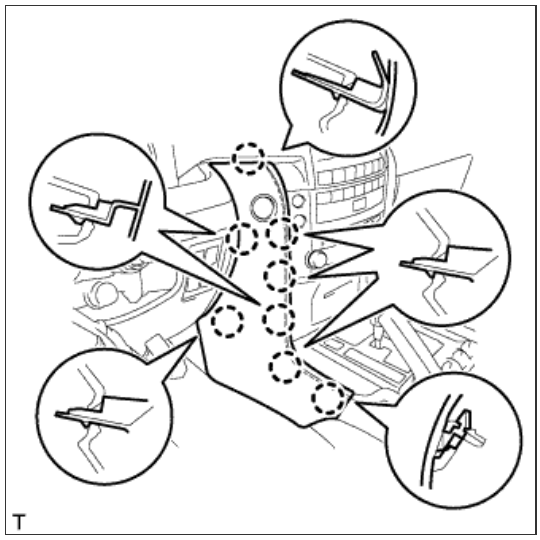
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Detach the 8 claws.

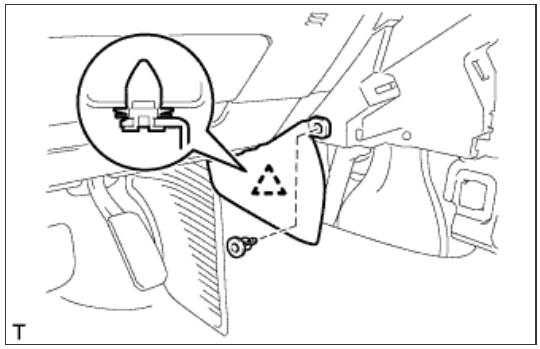
b. Disconnect the connector and remove the panel pad.



4. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Remove the clip.

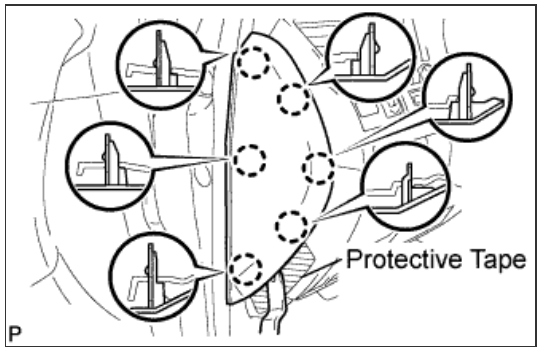
b. Detach the clip and remove the cover.



5. REMOVE INSTRUMENT SIDE PANEL LH

a. Place protective tape as shown in the illustration.

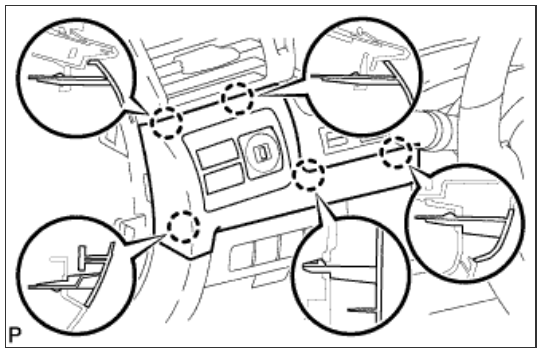
b. Using a moulding remover, detach the 6 claws and remove the side panel.



6. REMOVE NO. 1 SWITCH HOLE BASE

a. Detach the 5 claws.

b. Disconnect the connectors and remove the switch hole base.

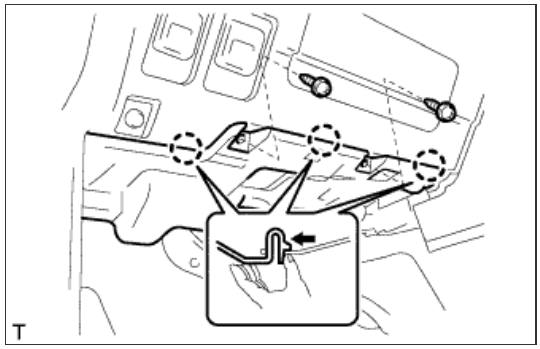


7. REMOVE NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Remove the 2 screws.

b. Detach the 3 claws.

c. Remove the under cover and disconnect the connectors.

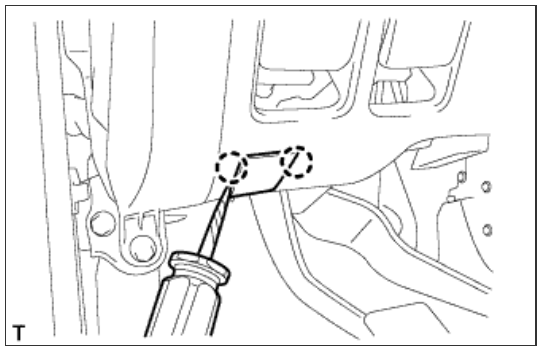


8. REMOVE LOWER NO. 1 INSTRUMENT PANEL FINISH PANEL

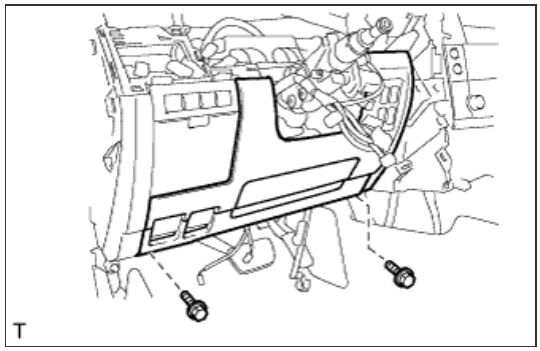
a. Using a screwdriver, detach the 2 claws and open the hole cover.

HINT:

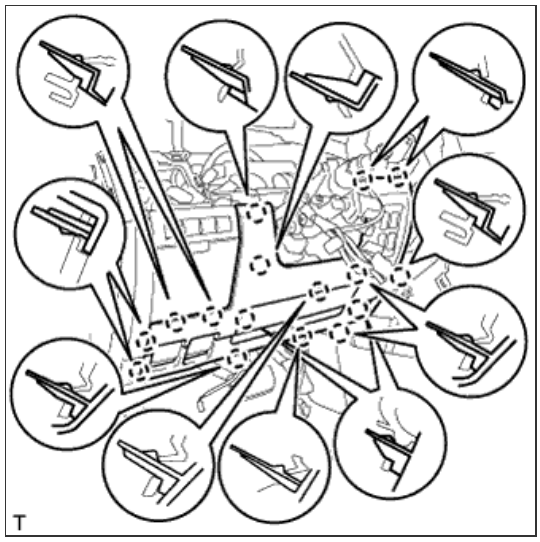
Tape the screwdriver tip before use.



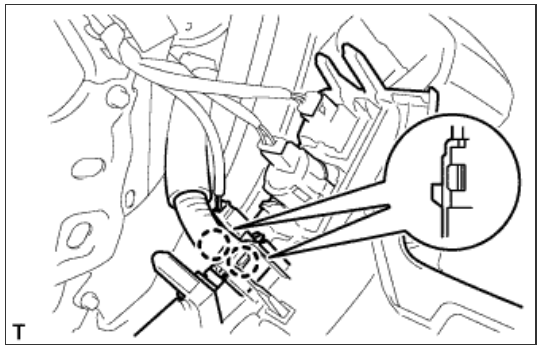
b. Remove the 2 bolts.



c. Detach the 16 claws.

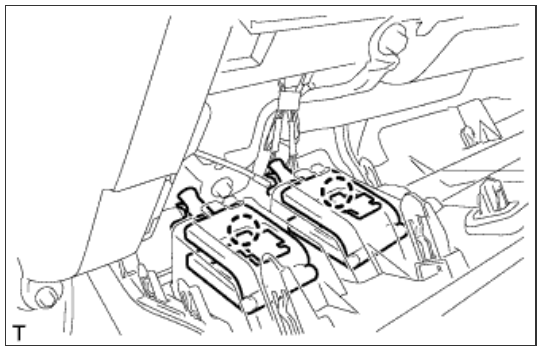


d. Detach the 2 claws and remove the sensor.



e. Detach the 2 claws and disconnect the 2 control cables.

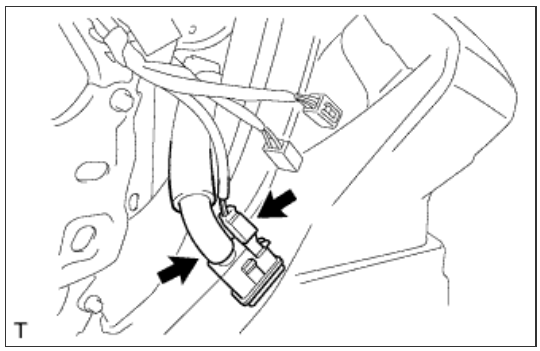
f. Remove the finish panel and then disconnect the connectors.



9. REMOVE ROOM TEMPERATURE SENSOR

a. Disconnect the connector.

b. Disconnect the hose and remove the sensor.



for Preparation Click here

1. INSPECT ROOM TEMPERATURE SENSOR

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	10°C (50°F)	3.00 to 3.73 kΩ
	15°C (59°F)	2.45 to 2.88 kΩ
	20°C (68°F)	1.95 to 2.30 kΩ
	25°C (77°F)	1.60 to 1.80 kΩ
	30°C (86°F)	1.28 to 1.47 kΩ
	35°C (95°F)	1.00 to 1.22 kΩ
	40°C (104°F)	0.80 to 1.00 kΩ
	45°C (113°F)	0.65 to 0.85 kΩ
	50°C (122°F)	0.50 to 0.70 kΩ
	55°C (131°F)	0.44 to 0.60 kΩ
	60°C (140°F)	0.36 to 0.50 kΩ

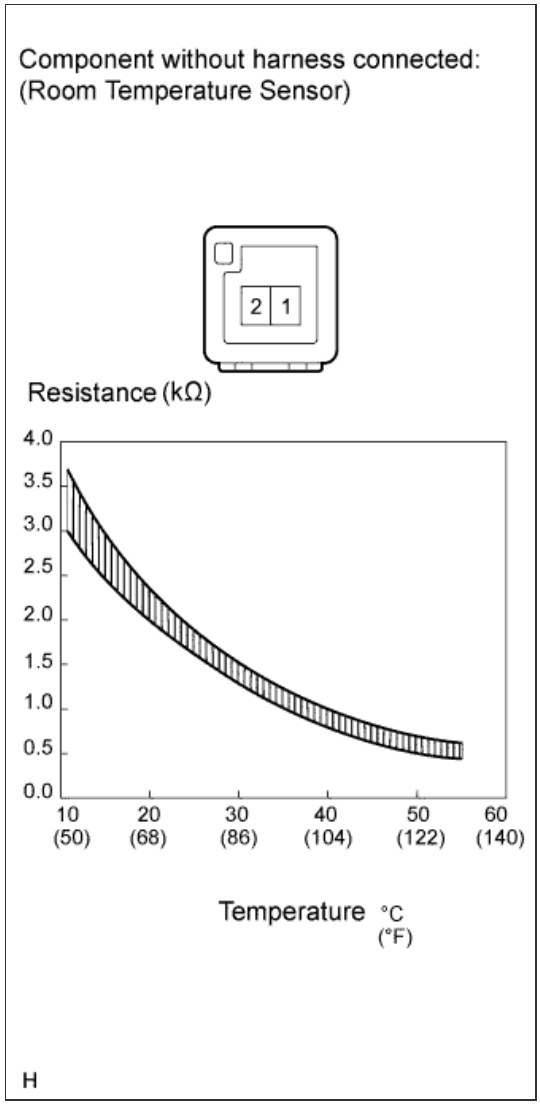
If the result is not as specified, replace the room temperature sensor.

NOTICE:

- **Touching the sensor even slightly may change the resistance value. Hold the connector of the sensor.**
- **When measuring the resistance, the sensor temperature must be the same as the ambient temperature.**

HINT:

As the temperature increases, the resistance decreases (see the graph).



for Preparation Click here

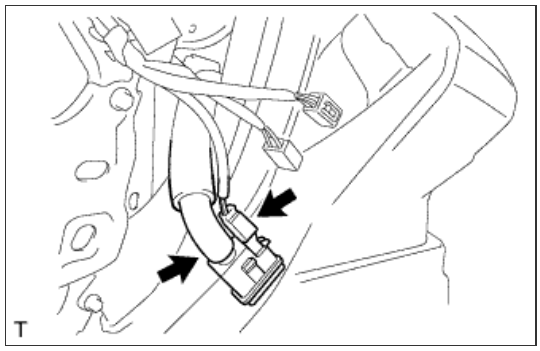
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL ROOM TEMPERATURE SENSOR

a. Install the sensor and connect the hose.

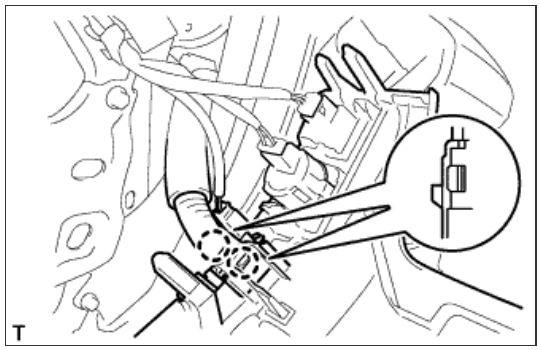
b. Connect the connector.



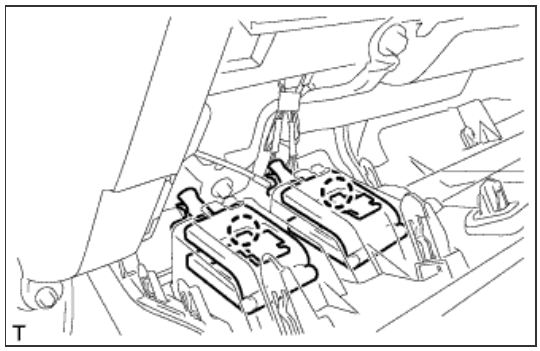
2. INSTALL LOWER NO. 1 INSTRUMENT PANEL FINISH PANEL

a. Connect the connectors.

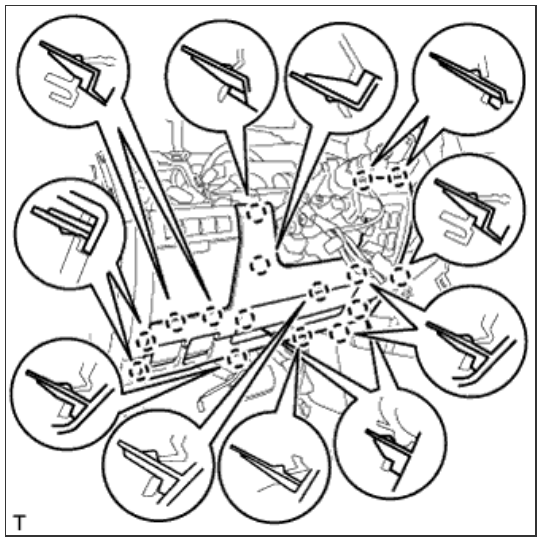
b. Attach the 2 claws to install the sensor.



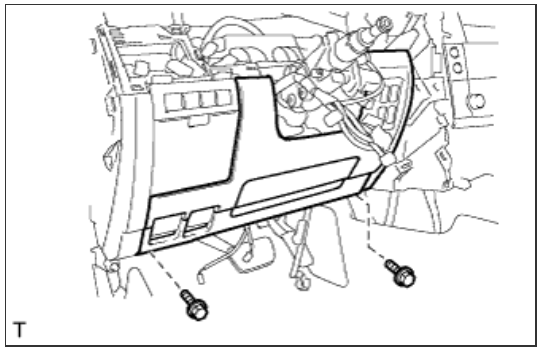
c. Attach the 2 claws to connect the 2 control cables.



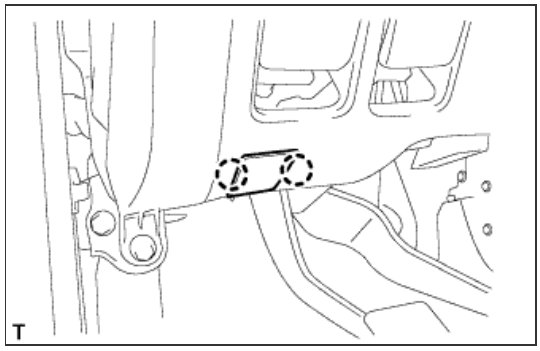
d. Attach the 16 claws to install the finish panel.



e. Install the 2 bolts.



f. Attach the 2 claws to close the hole cover.

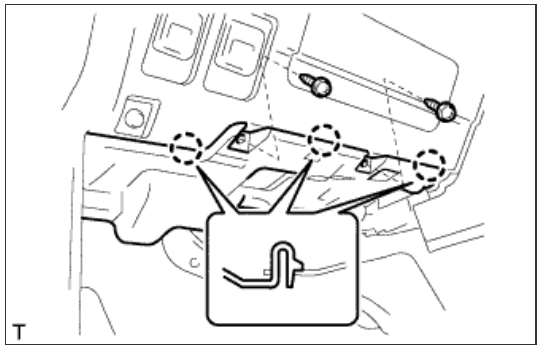


3. INSTALL NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Connect the connectors.

b. Attach the 3 claws to install the under cover.

c. Install the 2 screws.

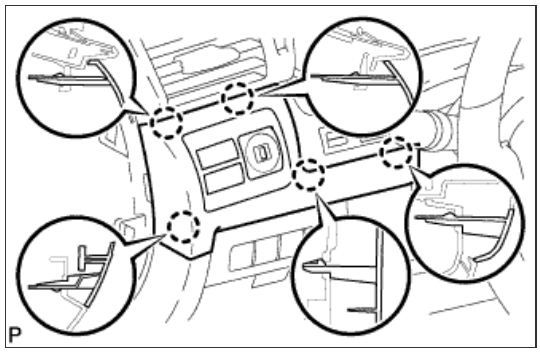


4. INSTALL NO. 1 SWITCH HOLE BASE

a. Connect the connectors.

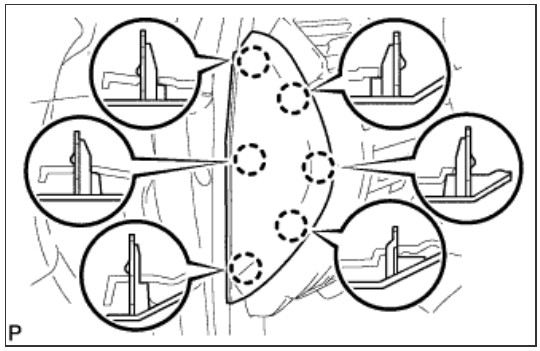
a. Connect the connectors.

b. Attach the 5 claws to install the switch hole base.



5. INSTALL INSTRUMENT SIDE PANEL LH

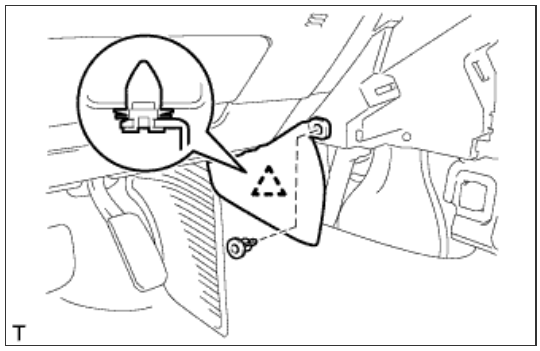
a. Attach the 6 claws to install the side panel.



6. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Attach the clip to install the cover.

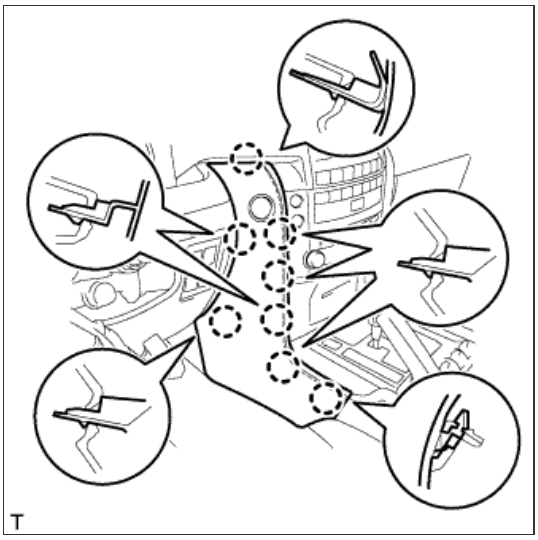
b. Install the clip.



7. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Connect the connector.

b. Attach the 8 claws to install the panel pad.



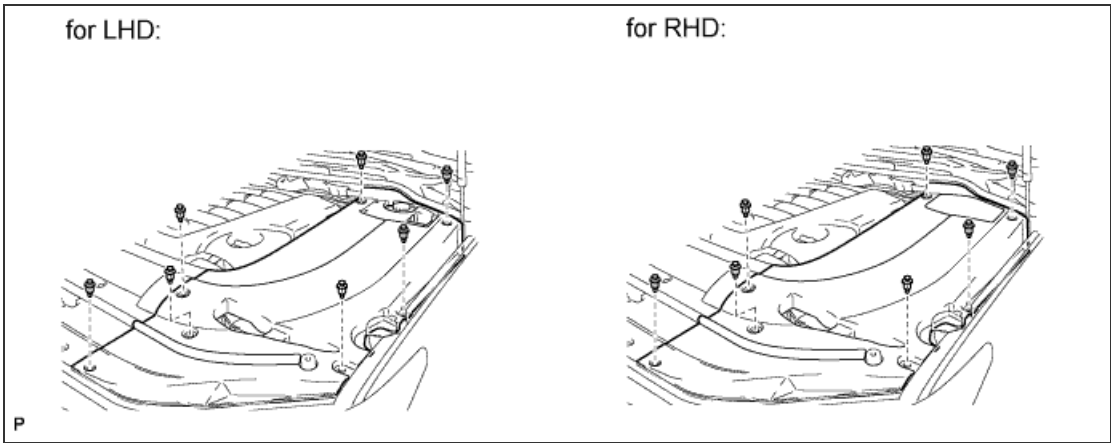
8. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

9. INSTALL ENGINE ROOM SIDE COVER LH

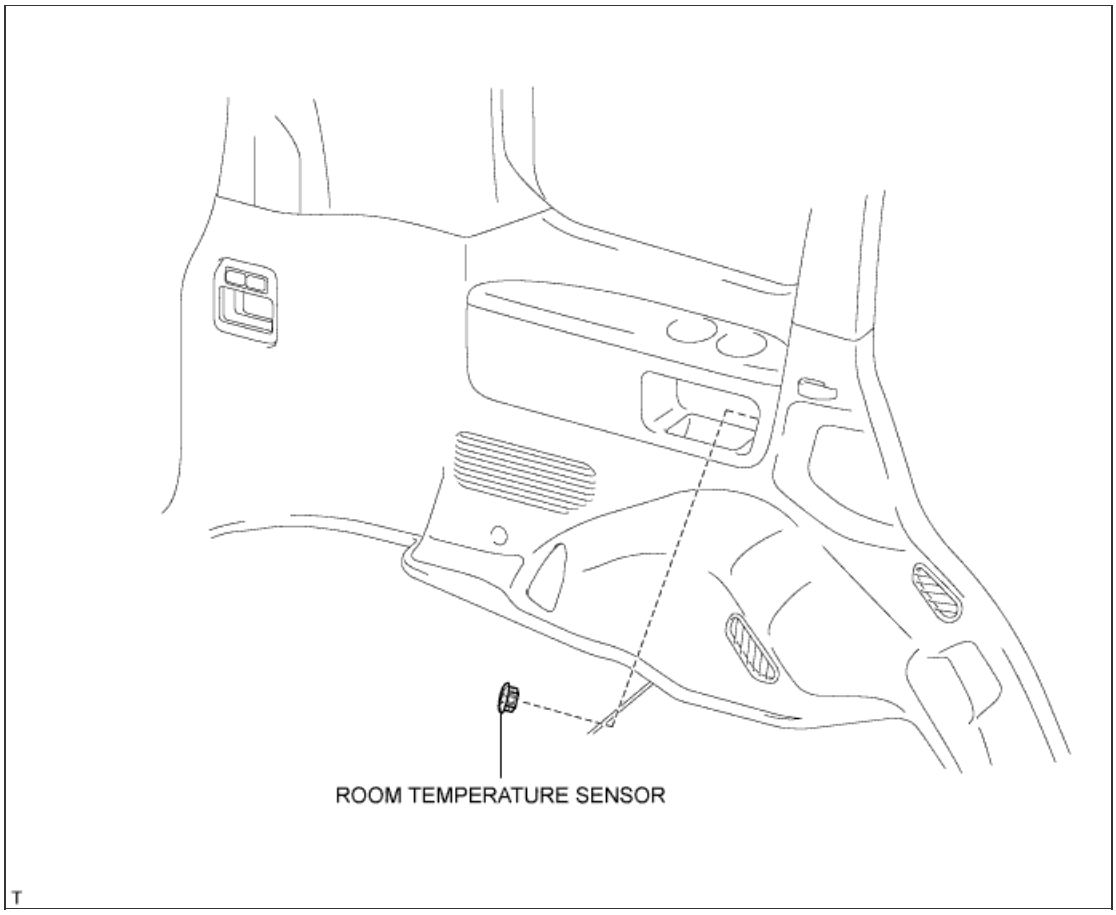
a. Install the engine room side cover with the 7 clips.



10. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

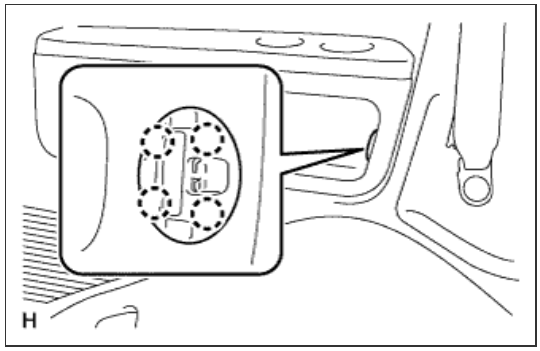
for Preparation Click here



for Preparation Click here

1. REMOVE ROOM TEMPERATURE SENSOR

a. Using a screwdriver, detach the 4 claws and remove the sensor, and then disconnect the connector.



for Preparation Click here

1. INSPECT ROOM TEMPERATURE SENSOR

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	10°C (50°F)	3.00 to 3.73 kΩ
	15°C (59°F)	2.45 to 2.88 kΩ
	20°C (68°F)	1.95 to 2.30 kΩ
	25°C (77°F)	1.60 to 1.80 kΩ
	30°C (86°F)	1.28 to 1.47 kΩ
	35°C (95°F)	1.00 to 1.22 kΩ
	40°C (104°F)	0.80 to 1.00 kΩ
	45°C (113°F)	0.65 to 0.85 kΩ
	50°C (122°F)	0.50 to 0.70 kΩ
	55°C (131°F)	0.44 to 0.60 kΩ
	60°C (140°F)	0.36 to 0.50 kΩ

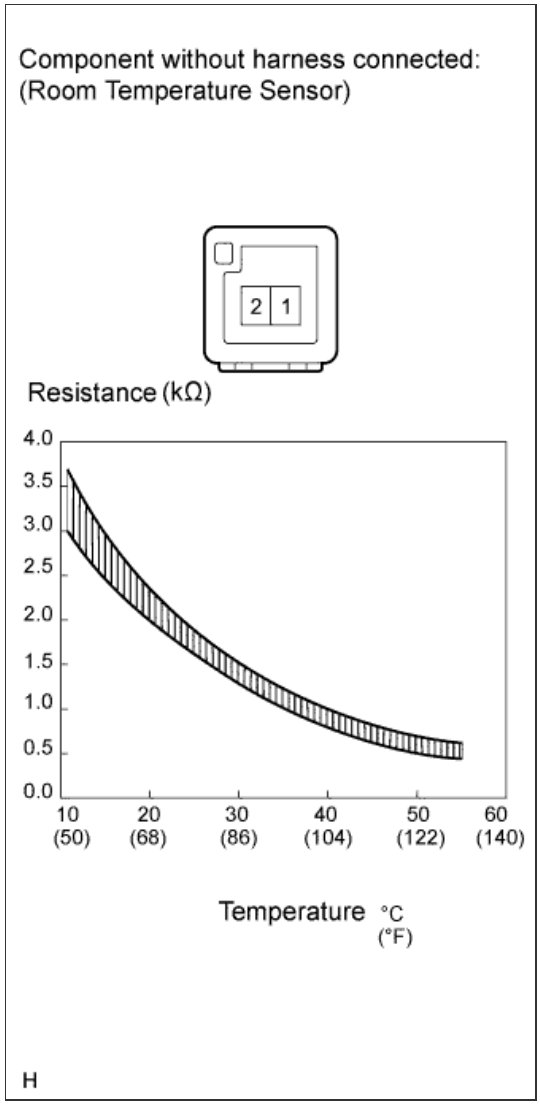
If the result is not as specified, replace the room temperature sensor.

NOTICE:

- **Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.**
- **When measuring, the sensor temperature must be the same as the ambient temperature.**

HINT:

As the temperature increases, the resistance decreases (see the graph).

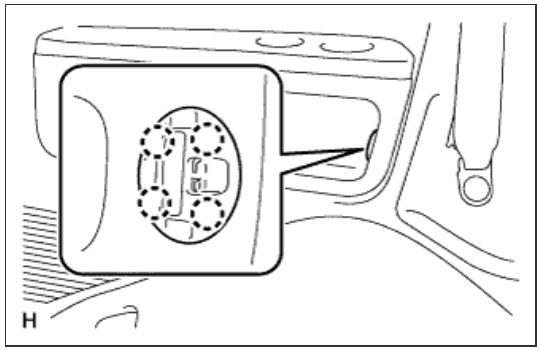


for Preparation Click here

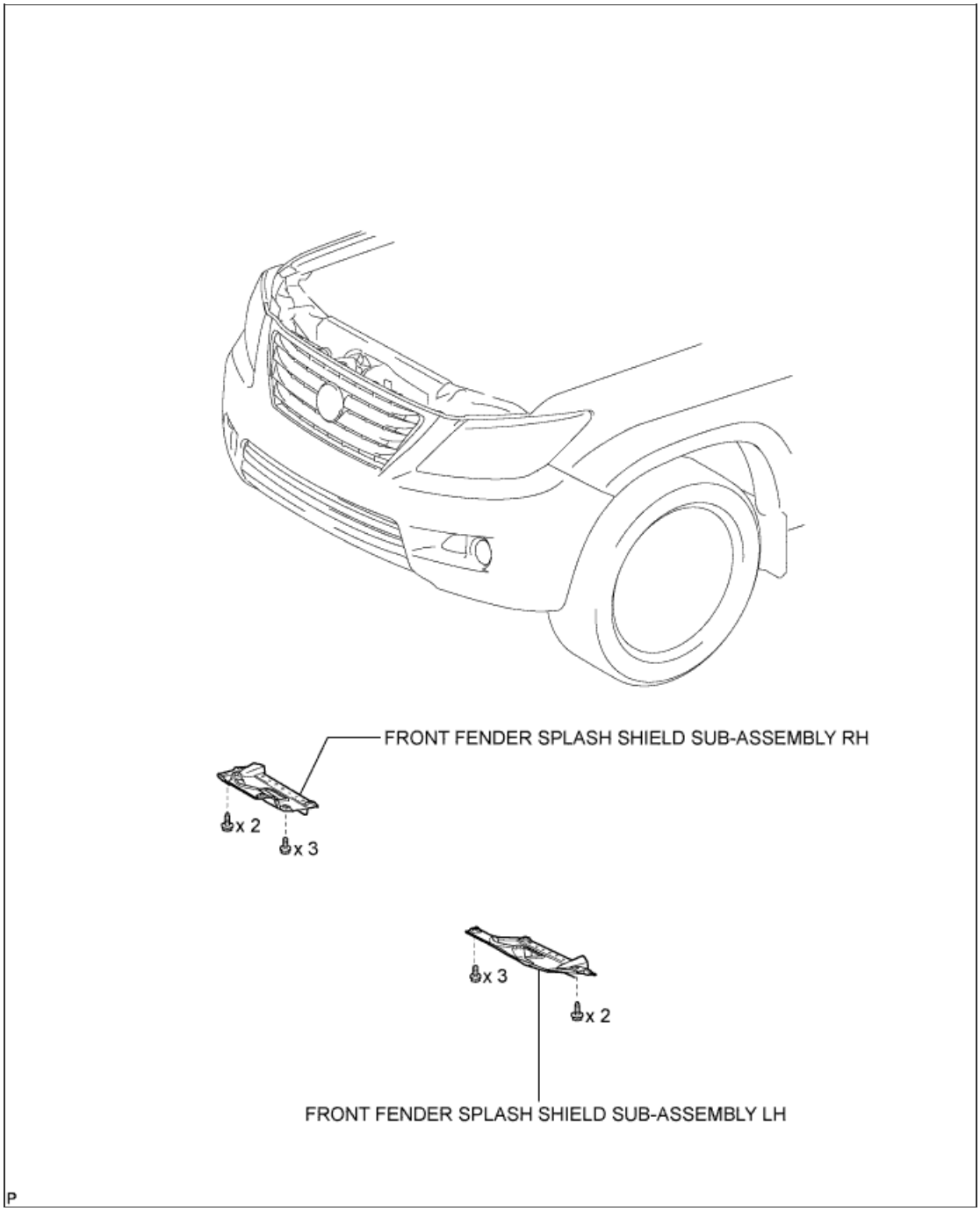
1. INSTALL ROOM TEMPERATURE SENSOR

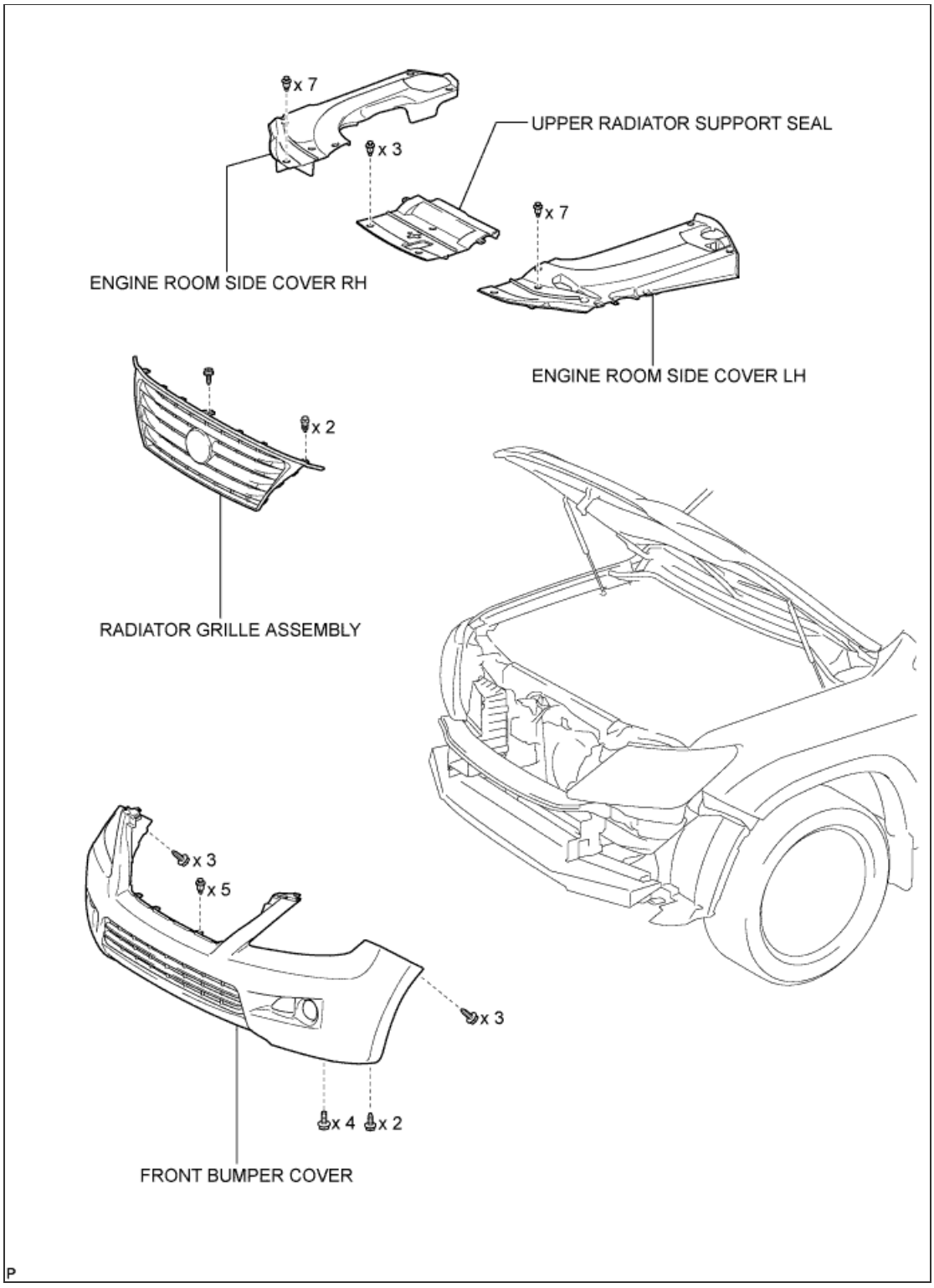
a. Connect the connector.

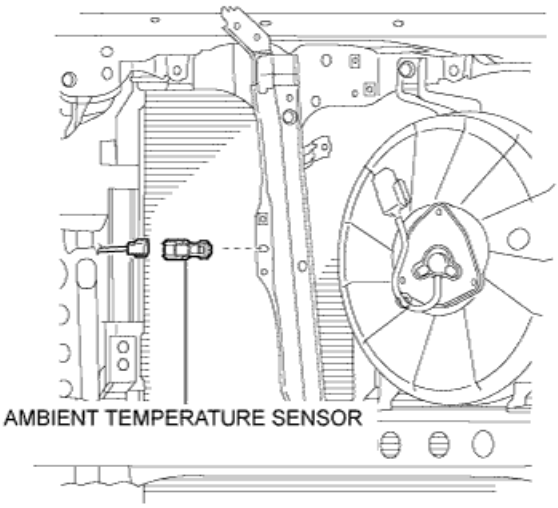
b. Attach the 4 claws to install the sensor.



for Preparation [Click here]




x 7
x 3
UPPER RADIATOR SUPPORT SEAL
ENGINE ROOM SIDE COVER RH
x 7
ENGINE ROOM SIDE COVER LH
x 2
RADIATOR GRILLE ASSEMBLY
x 3
x 5
x 3
x 4
x 2
FRONT BUMPER COVER
P



H

for Preparation Click here

1. REMOVE FRONT BUMPER COVER

a. Remove the front bumper cover (Click here).

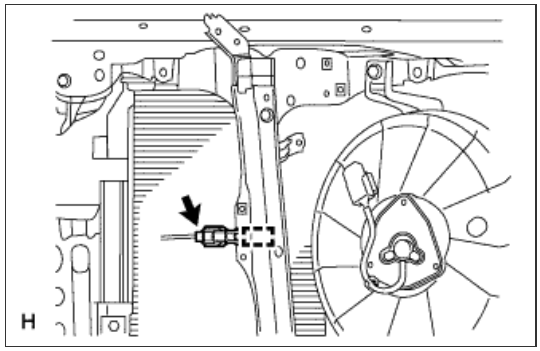
2. REMOVE AMBIENT TEMPERATURE SENSOR

a. Disconnect the connector.

b. Using a screwdriver, detach the clamp and remove the sensor.

HINT:

Tape the screwdriver tip before use.



for Preparation Click here

1. INSPECT AMBIENT TEMPERATURE SENSOR

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	10°C (50°F)	3.00 to 3.73 kΩ
	15°C (59°F)	2.45 to 2.88 kΩ
	20°C (68°F)	1.95 to 2.30 kΩ
	25°C (77°F)	1.60 to 1.80 kΩ
	30°C (86°F)	1.28 to 1.47 kΩ
	35°C (95°F)	1.00 to 1.22 kΩ
	40°C (104°F)	0.80 to 1.00 kΩ
	45°C (113°F)	0.65 to 0.85 kΩ
	50°C (122°F)	0.50 to 0.70 kΩ
	55°C (131°F)	0.44 to 0.60 kΩ
	60°C (140°F)	0.36 to 0.50 kΩ

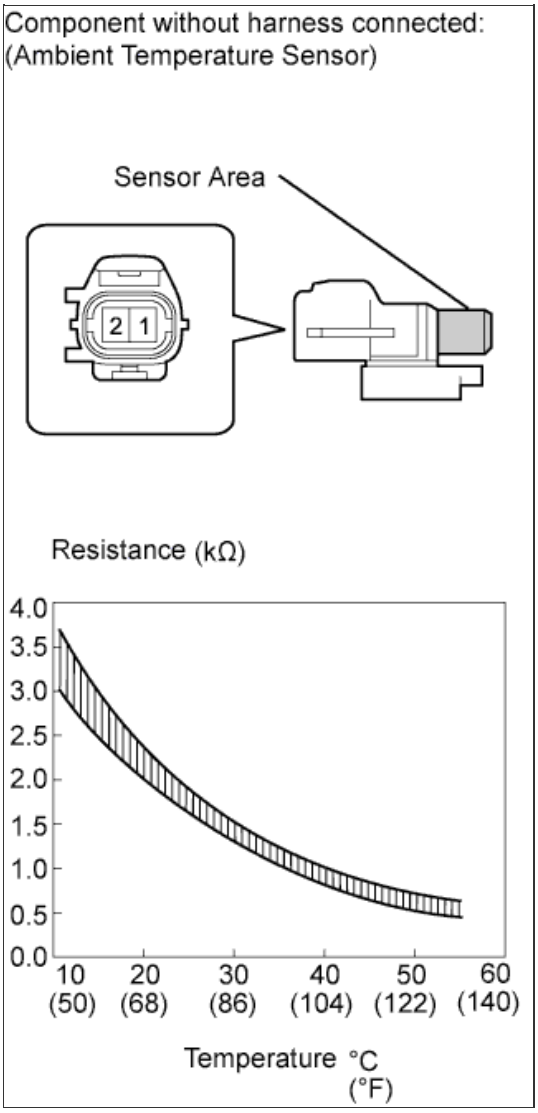
If the result is not as specified, replace the ambient temperature sensor.

NOTICE:

- **Touching the sensor even slightly may change the resistance value. Hold the connector of the sensor.**
- **When measuring the resistance, the sensor temperature must be the same as the ambient temperature.**

HINT:

As the temperature increases, the resistance decreases (see the graph).

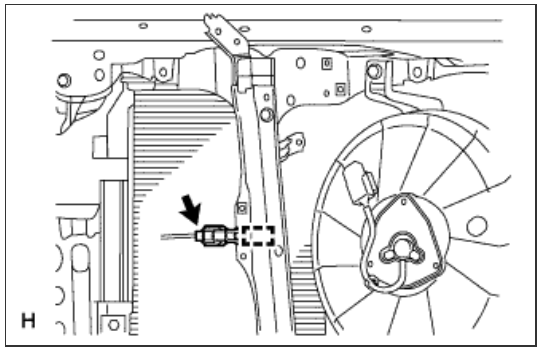


for Preparation Click here

1. INSTALL AMBIENT TEMPERATURE SENSOR

a. Attach the clamp to install the sensor.

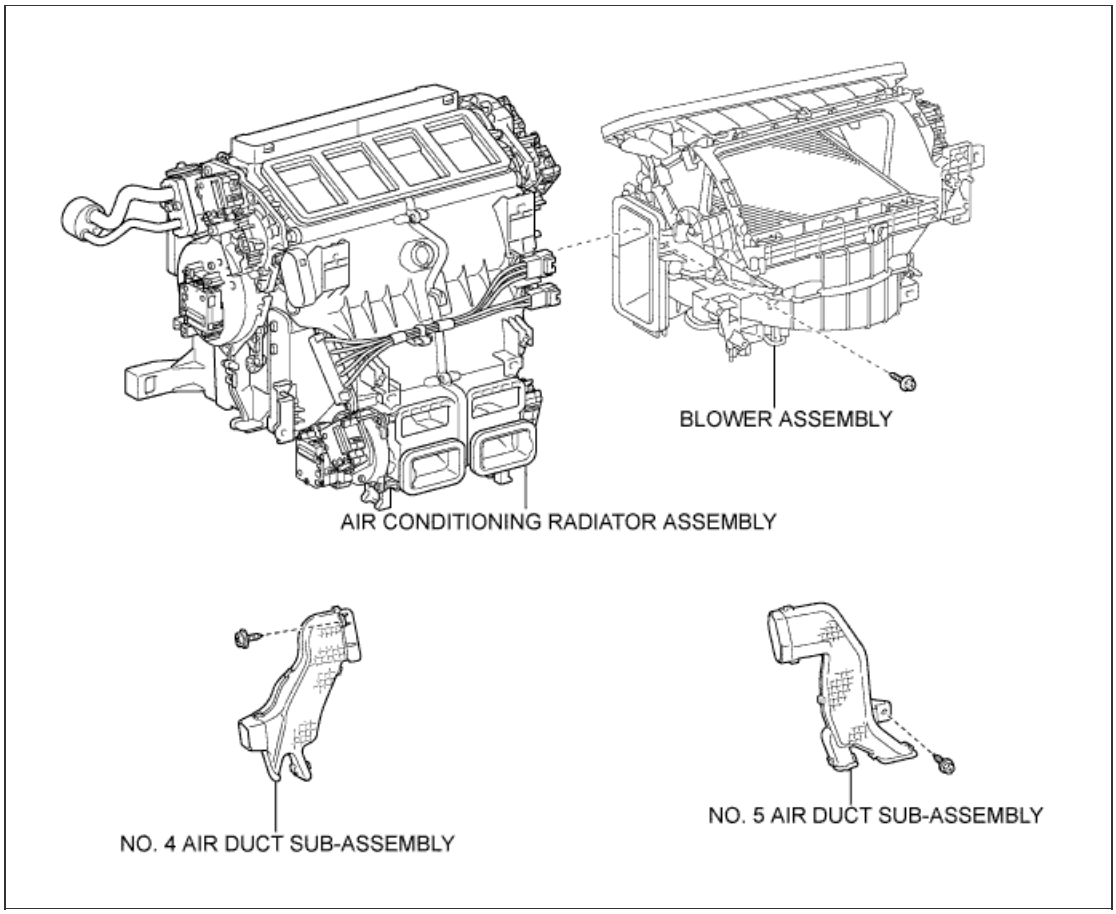
b. Connect the connector.

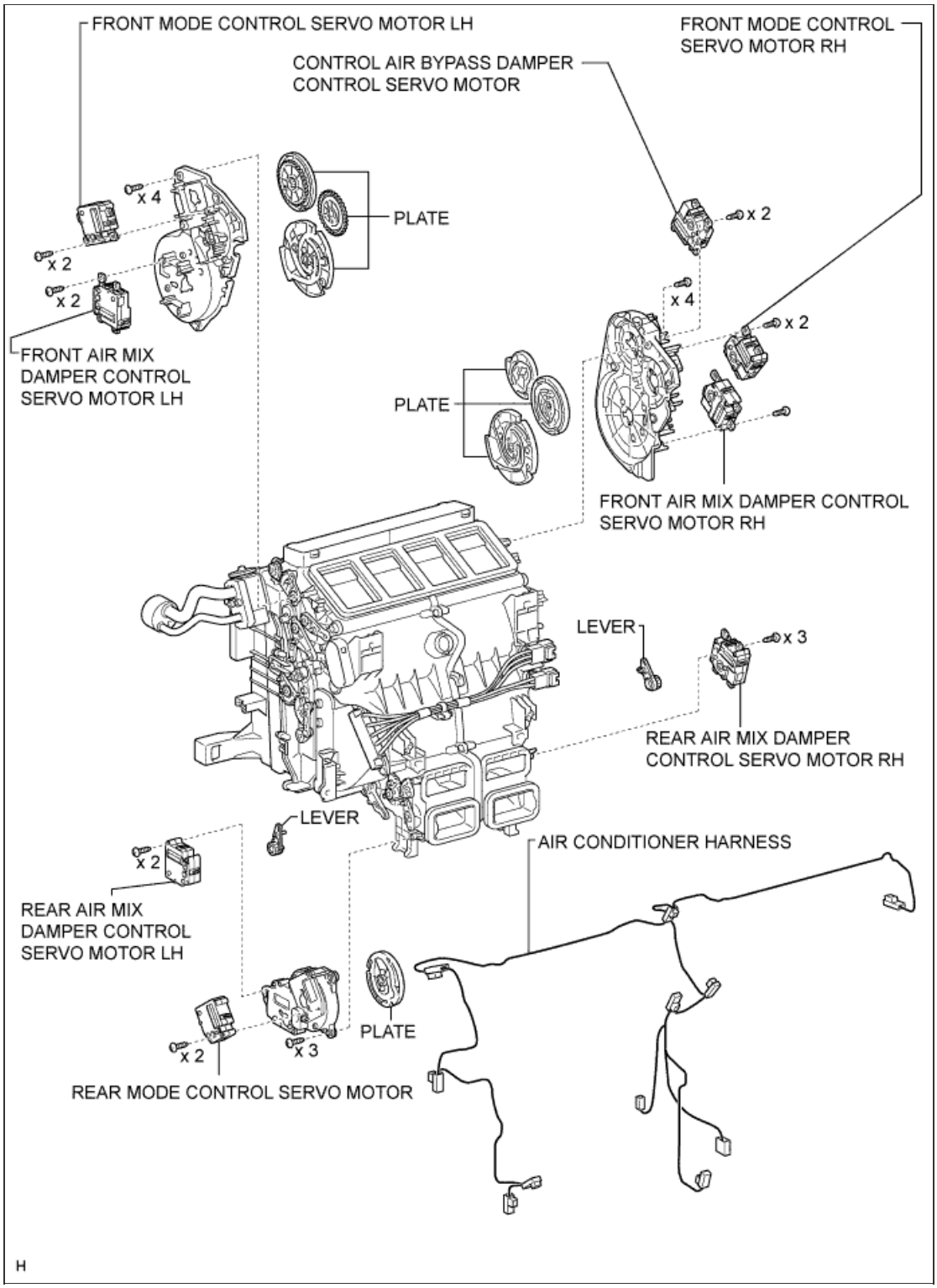


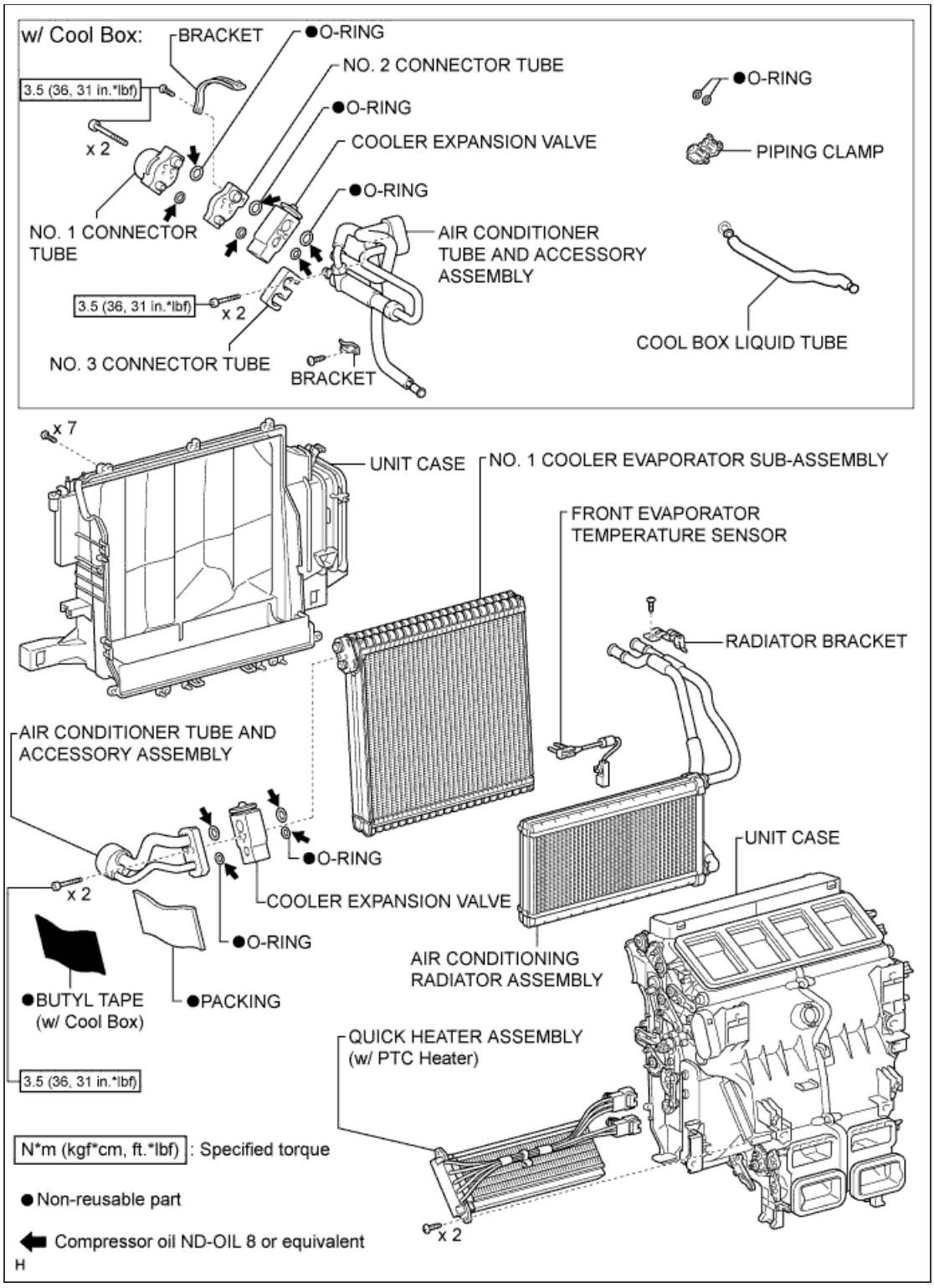
2. INSTALL FRONT BUMPER COVER

a. Install the front bumper cover (Click here).

for Preparation Click here




FRONT MODE CONTROL SERVO MOTOR LH
FRONT MODE CONTROL SERVO MOTOR RH
CONTROL AIR BYPASS DAMPER CONTROL SERVO MOTOR
PLATE
x 4
x 2
x 2
x 2
x 4
x 2
FRONT AIR MIX DAMPER CONTROL SERVO MOTOR LH
PLATE
FRONT AIR MIX DAMPER CONTROL SERVO MOTOR RH
LEVER
x 3
REAR AIR MIX DAMPER CONTROL SERVO MOTOR RH
LEVER
AIR CONDITIONER HARNESS
x 2
REAR AIR MIX DAMPER CONTROL SERVO MOTOR LH
PLATE
x 2
x 3
REAR MODE CONTROL SERVO MOTOR
H


w/ Cool Box:
BRACKET
O-RING
NO. 2 CONNECTOR TUBE
O-RING
COOLER EXPANSION VALVE
O-RING
3.5 (36, 31 in.*lbf)
x 2
NO. 1 CONNECTOR TUBE
AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY
3.5 (36, 31 in.*lbf)
x 2
NO. 3 CONNECTOR TUBE
BRACKET
O-RING
PIPING CLAMP
COOL BOX LIQUID TUBE
x 7
UNIT CASE
NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY
FRONT EVAPORATOR TEMPERATURE SENSOR
RADIATOR BRACKET
AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY
O-RING
x 2
COOLER EXPANSION VALVE
O-RING
BUTYL TAPE (w/ Cool Box)
PACKING
3.5 (36, 31 in.*lbf)
UNIT CASE
AIR CONDITIONING RADIATOR ASSEMBLY
QUICK HEATER ASSEMBLY (w/ PTC Heater)
x 2
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
Compressor oil ND-OIL 8 or equivalent
H

FRONT EVAPORATOR TEMPERATURE SENSOR (for LHD) > REMOVAL

for Preparation Click here

1. REMOVE AIR CONDITIONING UNIT ASSEMBLY

a. Remove the air conditioning unit assembly (Click here).

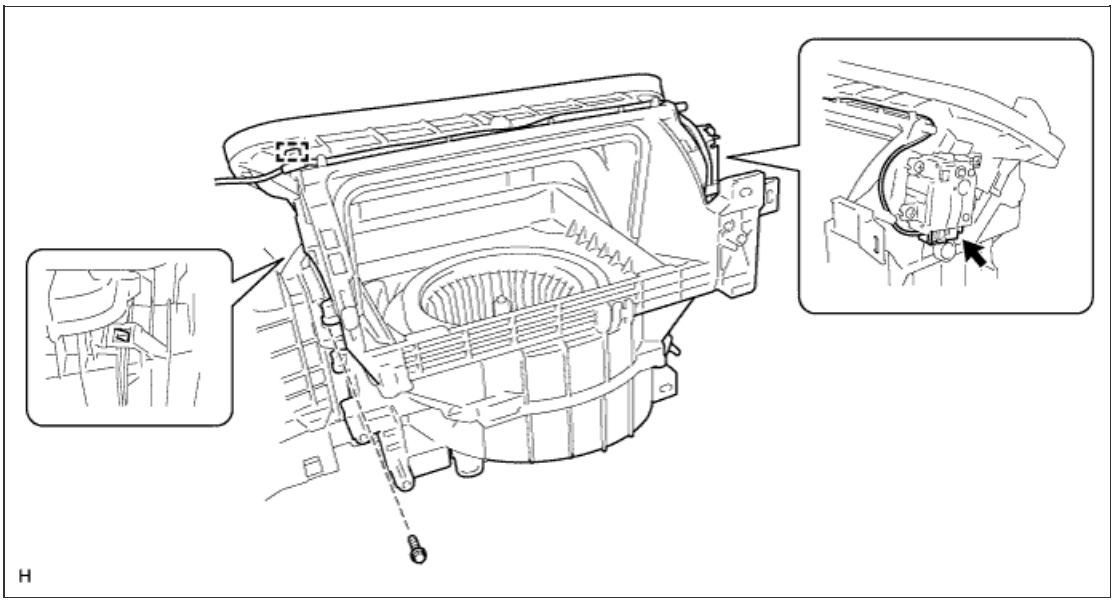
for Preparation Click here

1. REMOVE BLOWER ASSEMBLY

a. Remove the screw.

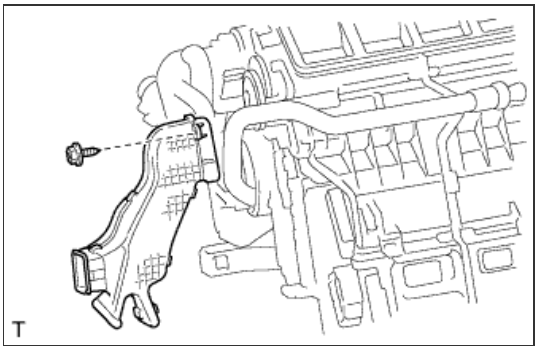
b. Disconnect the connector and clamp.

c. Detach the claw and remove the blower unit.



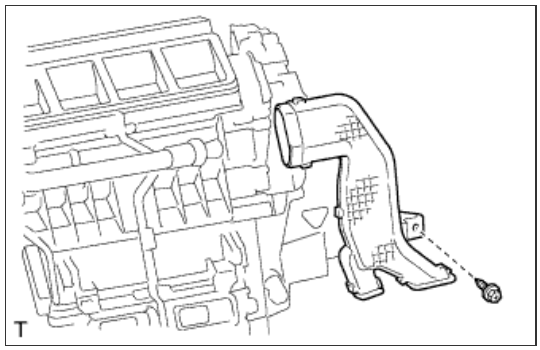
2. REMOVE NO. 4 AIR DUCT SUB-ASSEMBLY

a. Remove the screw and duct.



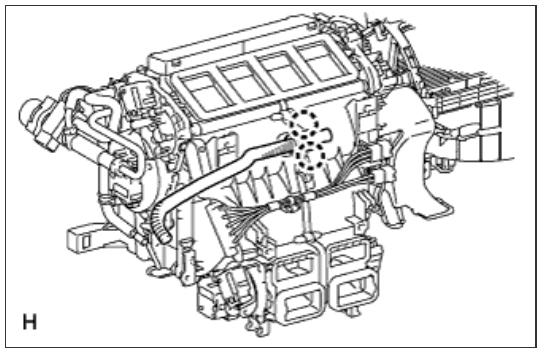
3. REMOVE NO. 5 AIR DUCT SUB-ASSEMBLY

a. Remove the screw and duct.



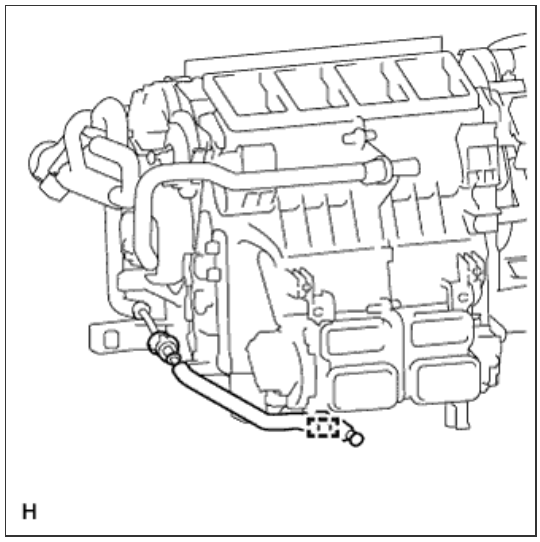
4. REMOVE ASPIRATOR

a. Detach the 2 claws and remove the aspirator.



5. REMOVE COOL BOX LIQUID TUBE (w/ Cool Box)

a. Detach the clamp.



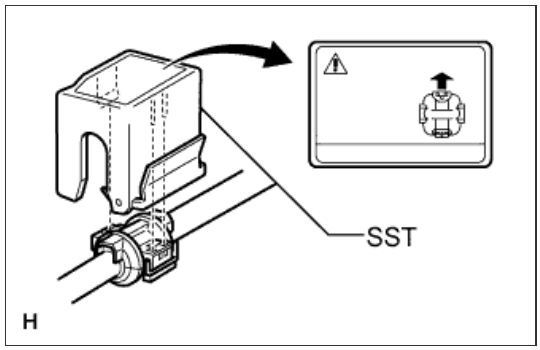
b. Using SST, remove the piping clamp.

SST
09870-00025

i. Attach SST to the piping clamp.

HINT:

Confirm the direction of the piping clamp claw and SST by referring to the illustration on the caution label.



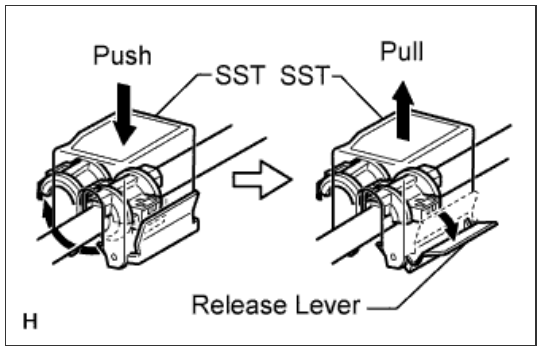
ii. Push down SST and release the clamp lock.

NOTICE:

Be careful not to deform the tubes when pushing SST.

iii. Pull SST slightly and push the release lever, then remove the piping clamp with SST.

iv. Remove the piping clamp from SST.



c. Disconnect the tube.

NOTICE:

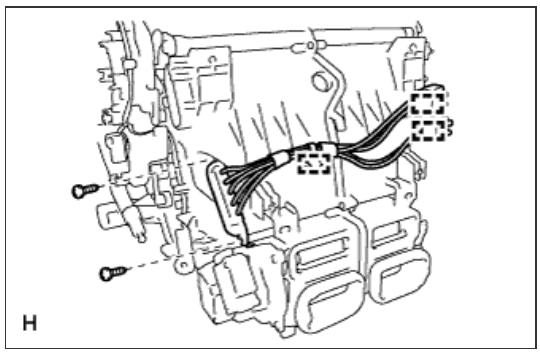
Cap the open fittings immediately to keep moisture or dirt out of the system.

d. Remove the 2 O-rings from the tube.

6. REMOVE QUICK HEATER ASSEMBLY (w/ PTC Heater)

a. Detach the 3 clamps.

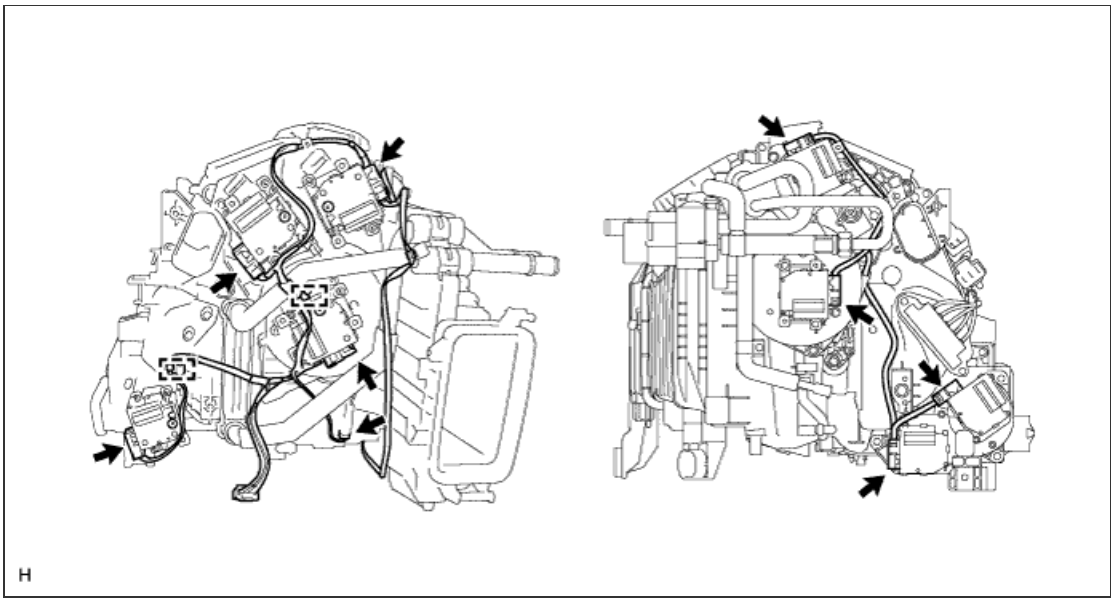
b. Remove the 2 screws and quick heater.



7. REMOVE AIR CONDITIONER HARNESS

a. Disconnect the connectors.

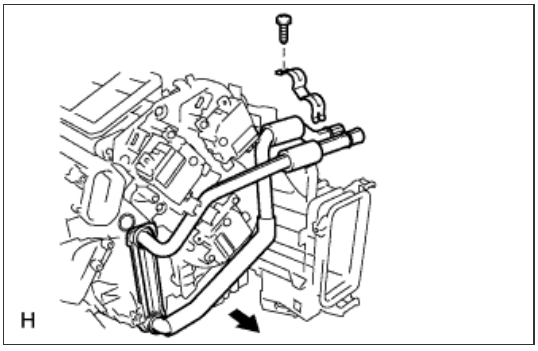
b. Detach the clamps and remove the harness.



8. REMOVE AIR CONDITIONING RADIATOR ASSEMBLY

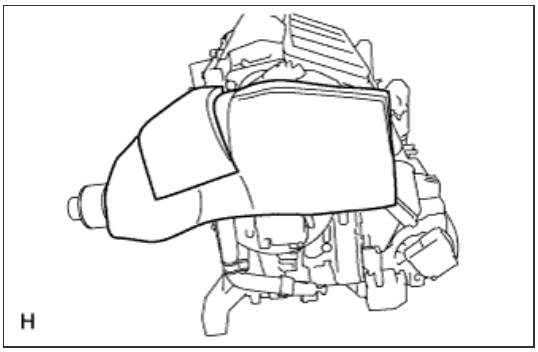
a. Remove the screw and radiator bracket.

b. Remove the radiator.

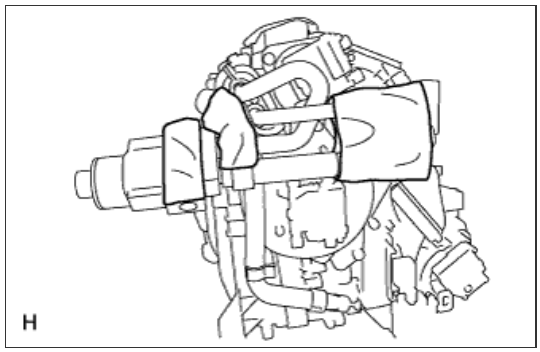


9. REMOVE COOLER EXPANSION VALVE (w/ Cool Box)

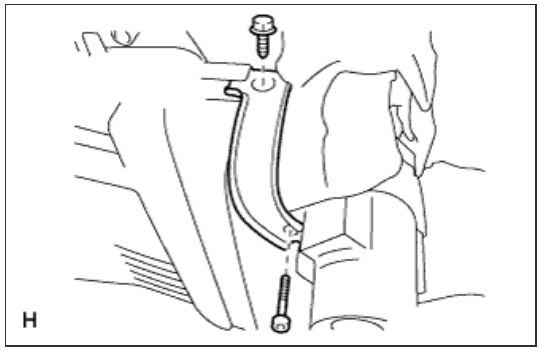
a. Remove the packing.



b. Remove the butyl tape.

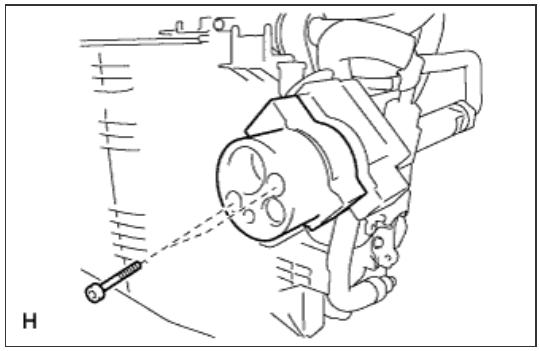


c. Using a 4 mm hexagon wrench, remove the hexagon bolt, screw and bracket.



d. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts and No. 1 connector tube.

e. Remove the 2 O-rings from the No. 1 connector tube.



f. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts, No. 2 connector tube, expansion valve and No. 3 connector tube.

g. Remove the 2 O-rings from the No. 2 connector tube.

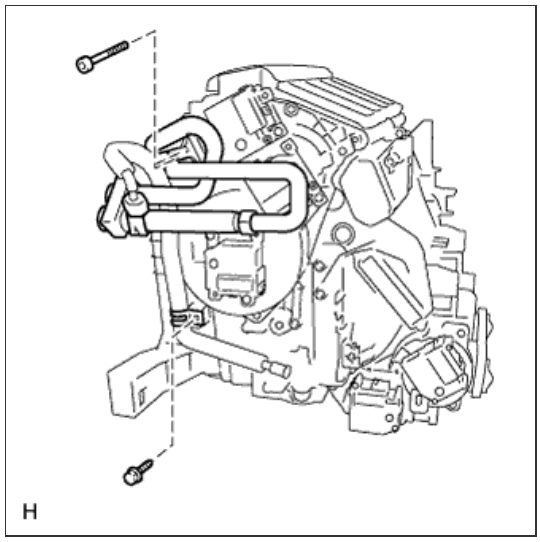


10. REMOVE AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY (w/ Cool Box)

a. Remove the screw and bracket.

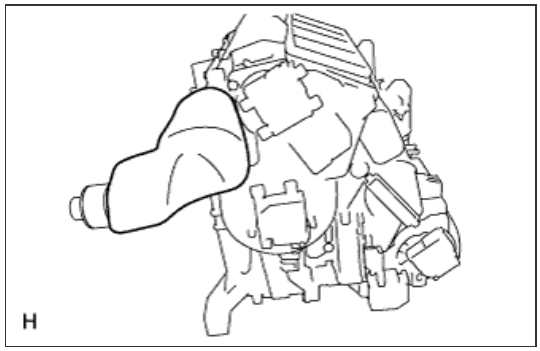
b. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts and air conditioner tube and accessory assembly.

c. Remove the 2 O-rings from the air conditioner tube and accessory assembly.



11. REMOVE COOLER EXPANSION VALVE (w/o Cool Box)

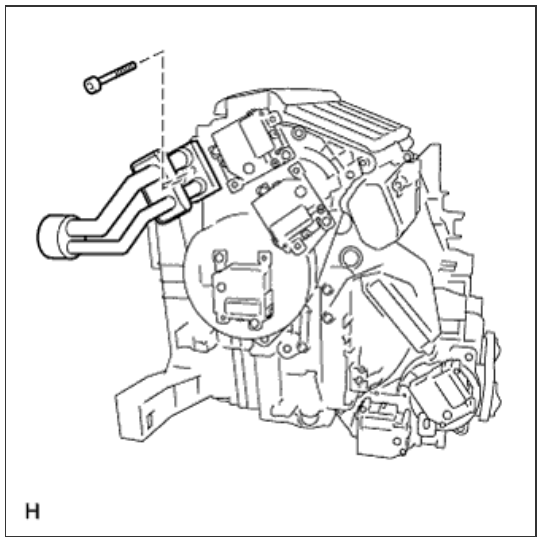
a. Remove the packing.



b. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts, air conditioner tube and accessory assembly and expansion valve.

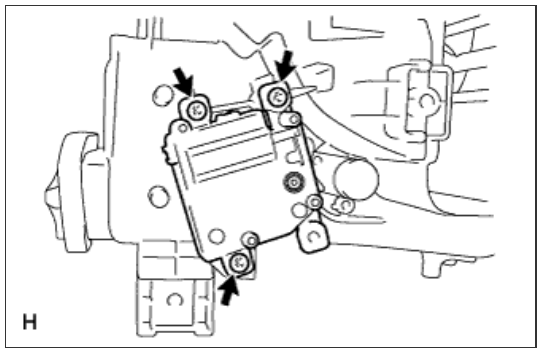
c. Remove the 2 O-rings from the air conditioner tube and accessory assembly.

d. Remove the 2 O-rings from the expansion valve.



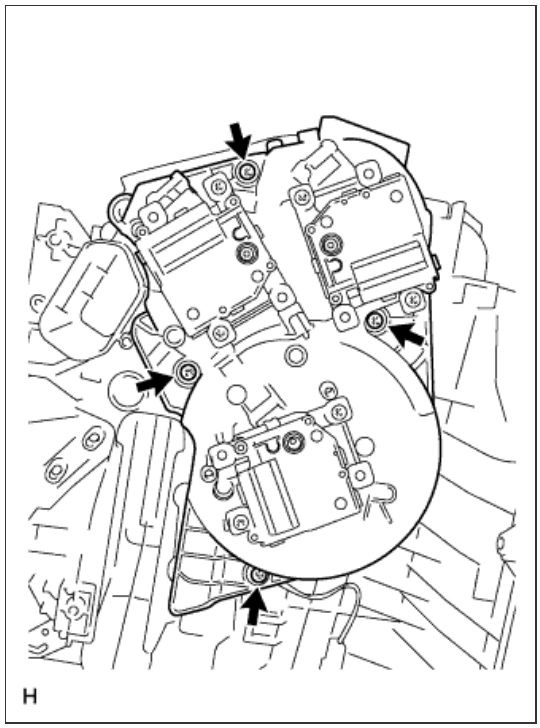
12. REMOVE REAR AIR MIX DAMPER CONTROL SERVO MOTOR RH

a. Remove the 3 screws and servo motor.



13. REMOVE SERVO MOTOR

a. Remove the 4 screws and servo motor unit.



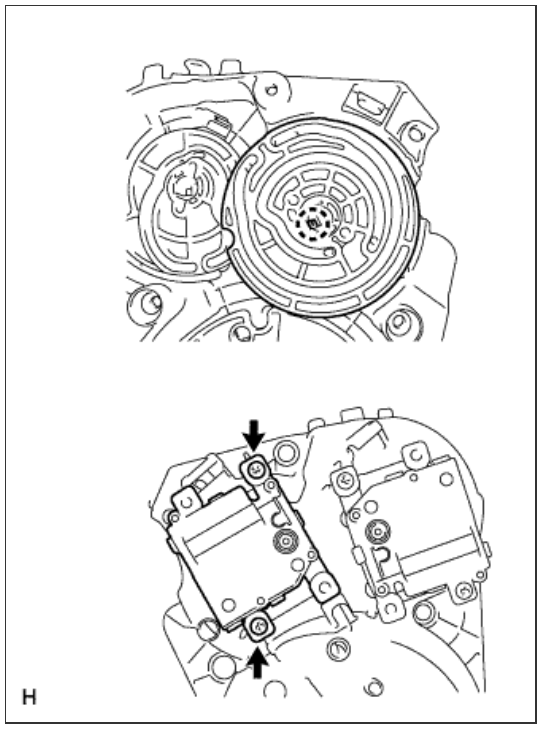
b. Remove the front mode control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.



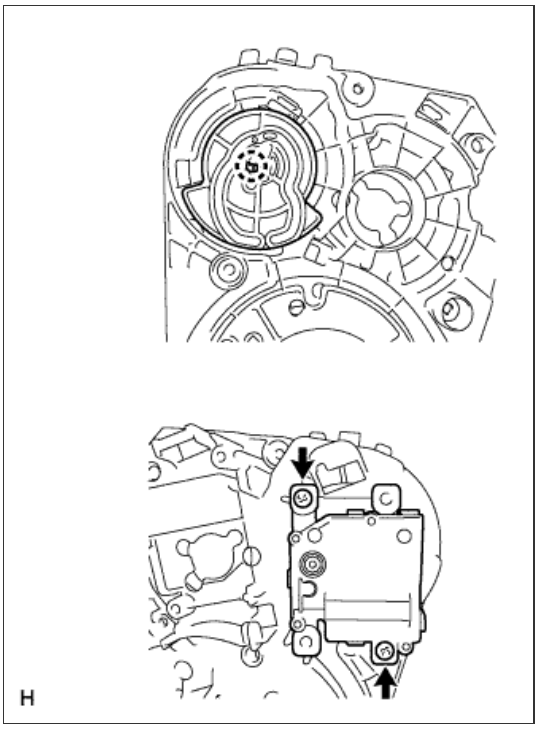
c. Remove the control bypass damper control servo motor.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.



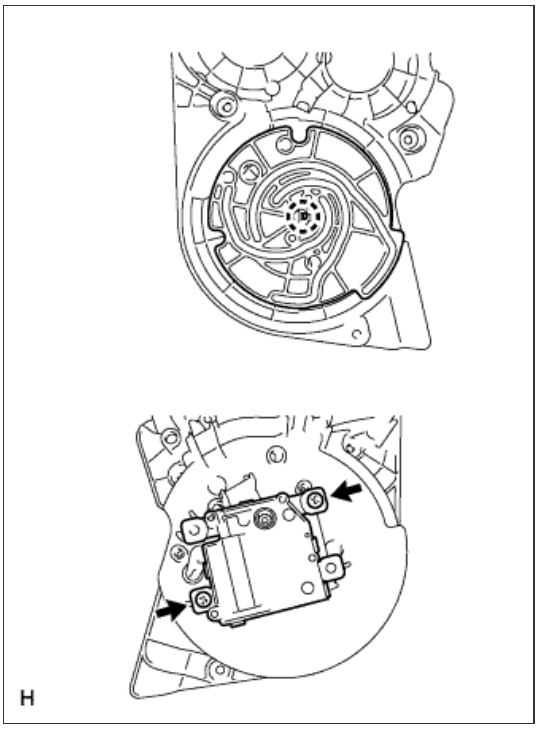
d. Remove the front air mix damper control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

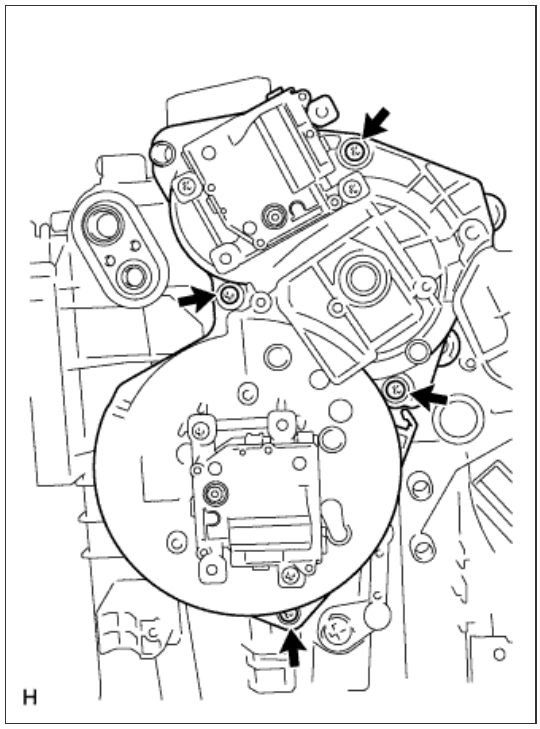
NOTICE:

Be careful not to damage the claw of the plate.



14. REMOVE SERVO MOTOR

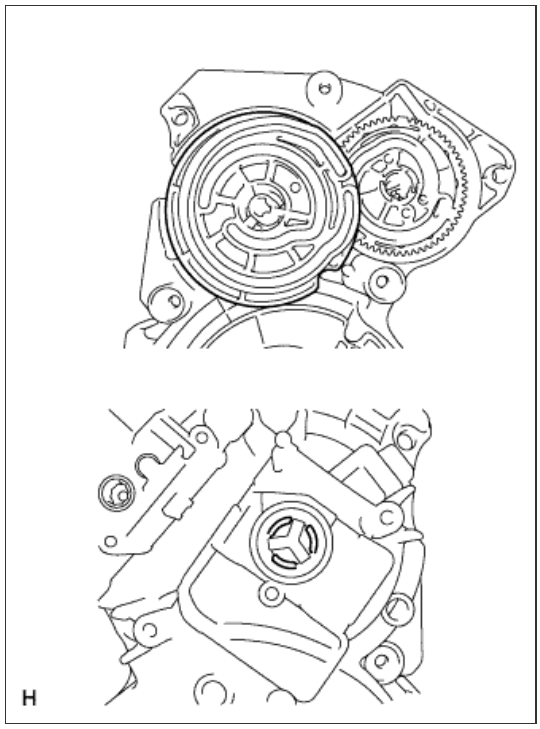
a. Remove the 4 screws and servo motor unit.



b. Detach the 3 claws and remove the plate.

NOTICE:

Be careful not to damage the claw of the plate.



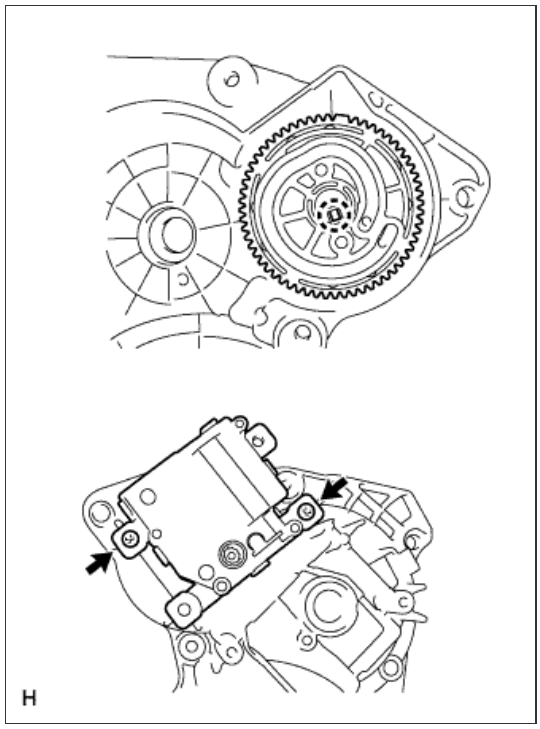
c. Remove the front mode control servo motor LH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.



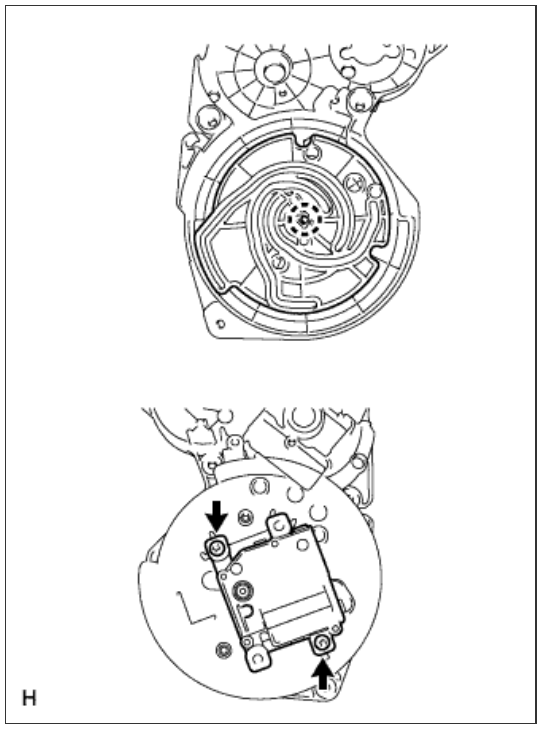
d. Remove the front air mix damper control servo motor LH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

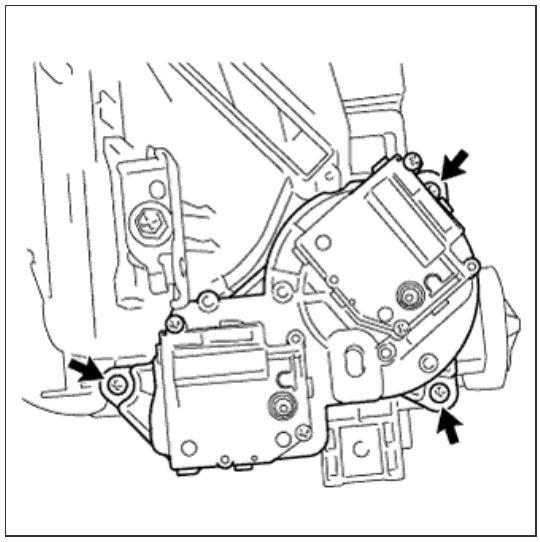
NOTICE:

Be careful not to damage the claw of the plate.

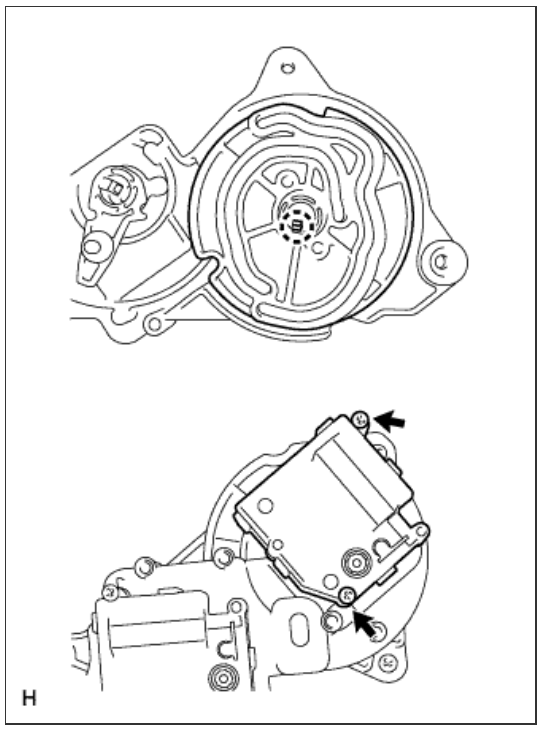


15. REMOVE SERVO MOTOR

a. Remove the 3 screws and servo motor unit.



b. Remove the rear mode control servo motor.



i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.

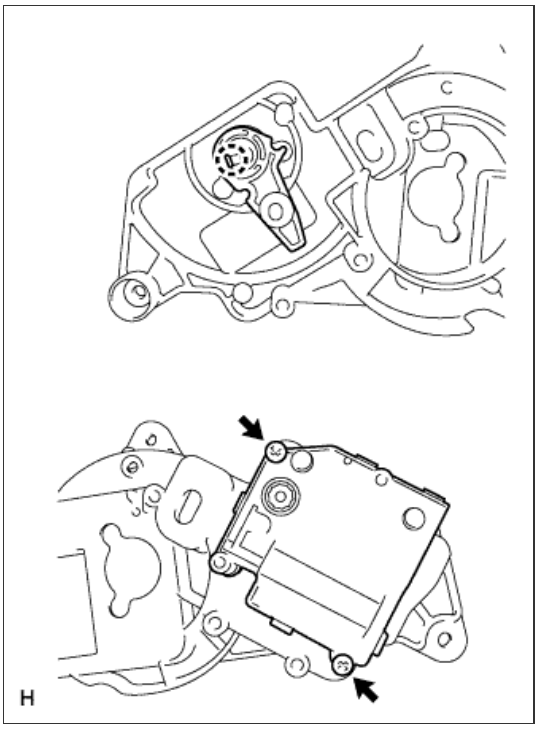
c. Remove the rear air mix damper control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the lever and servo motor.

NOTICE:

Be careful not to damage the claw of the lever.

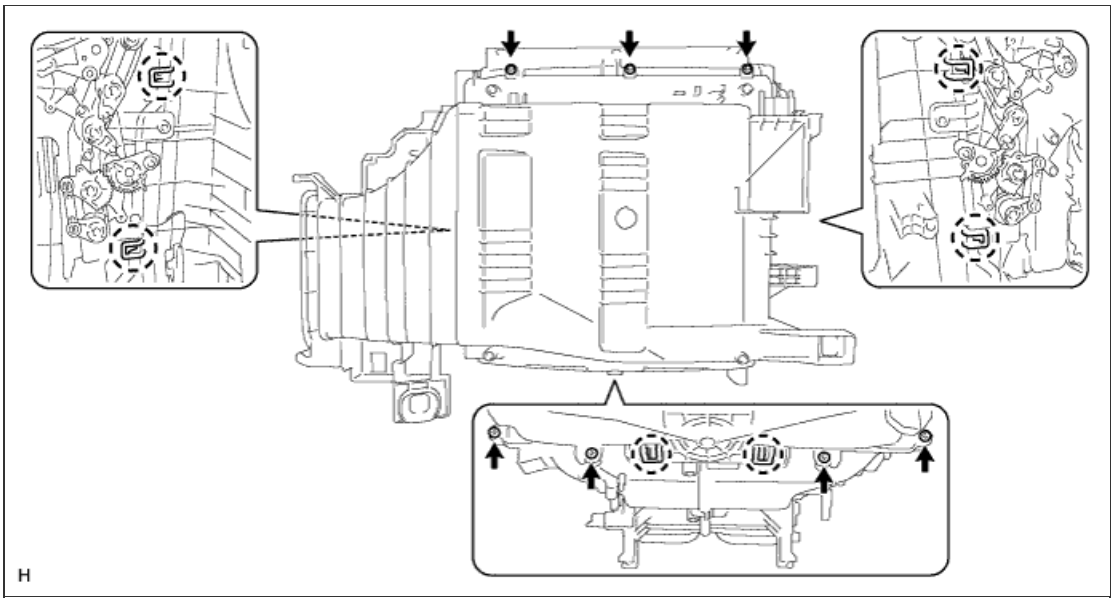


16. REMOVE NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY

a. Remove the 7 screws.

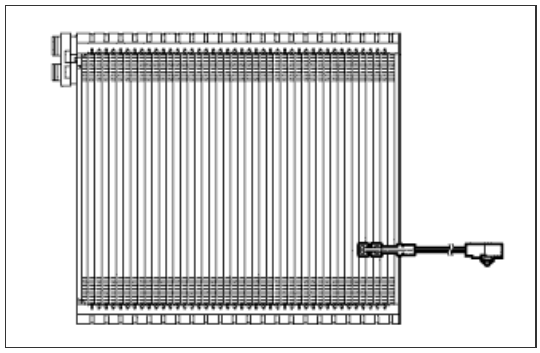
b. Detach the 6 claws and remove the unit case.

c. Remove the evaporator.



17. REMOVE FRONT EVAPORATOR TEMPERATURE SENSOR

a. Remove the sensor from the evaporator.



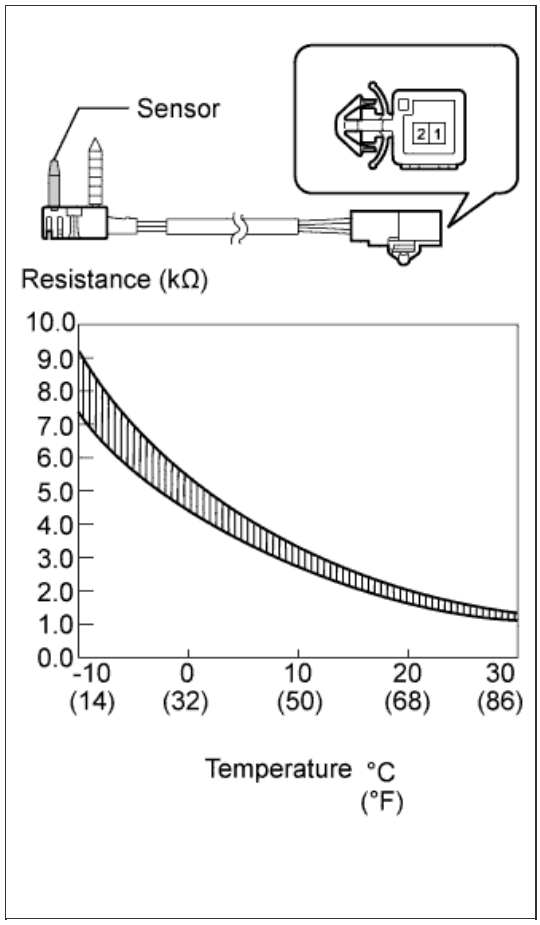
for Preparation Click here

1. INSPECT FRONT EVAPORATOR TEMPERATURE SENSOR

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	-10°C (14°F)	7.30 to 9.10 kΩ
	-5°C (23°F)	5.65 to 6.95 kΩ
	0°C (32°F)	4.40 to 5.35 kΩ
	5°C (41°F)	3.40 to 4.15 kΩ
	10°C (50°F)	2.70 to 3.25 kΩ
	15°C (59°F)	2.14 to 2.58 kΩ
	20°C (68°F)	1.71 to 2.05 kΩ
	25°C (77°F)	1.38 to 1.64 kΩ
	30°C (86°F)	1.11 to 1.32 kΩ



If the result is not as specified, replace the front evaporator temperature sensor.

NOTICE:

- **Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.**
- **When measuring, the sensor temperature must be almost the same as the ambient temperature.**

HINT:

As the temperature increases, the resistance decreases (see the graph).

for Preparation Click here

1. INSTALL FRONT EVAPORATOR TEMPERATURE SENSOR

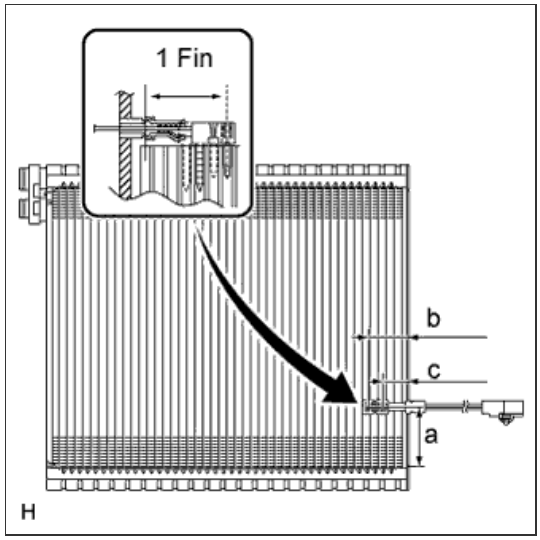
NOTICE:

If reusing the evaporator, do not insert the sensor at a location where the sensor was previously inserted.

a. Insert the sensor at a location that is 1 fin to the right or left of its previous location.

Standard Dimension:

Area	Specified Condition
a	50 mm (1.97 in.)
b	34.3 mm (1.35 in.)
c	20.9 mm (0.822 in.)

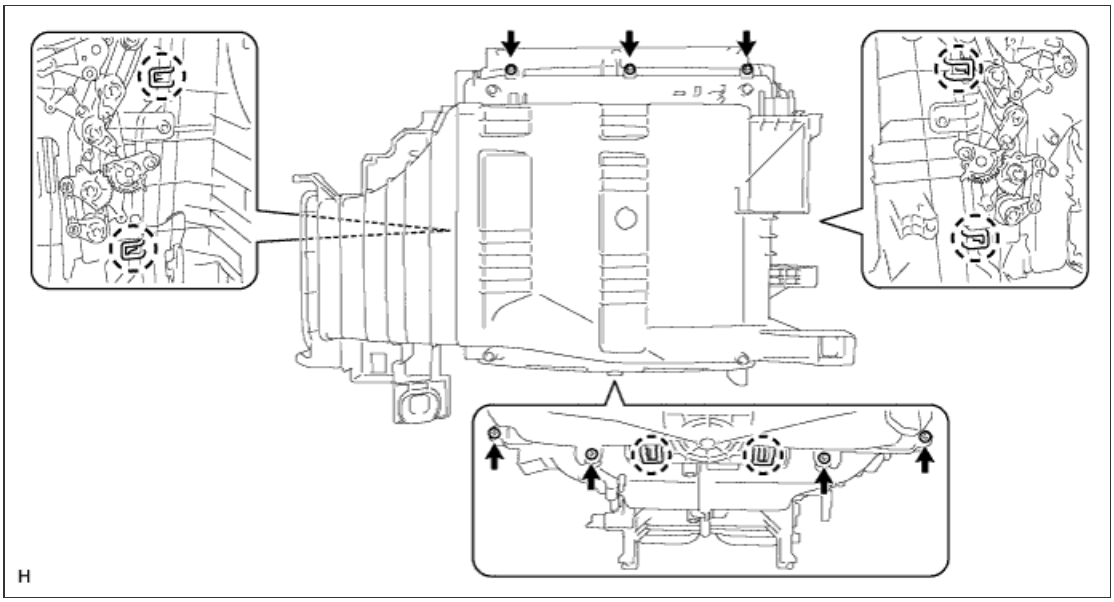


2. INSTALL NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY

a. Install the evaporator.

b. Attach the 6 claws to install the unit case.

c. Install the 7 screws.

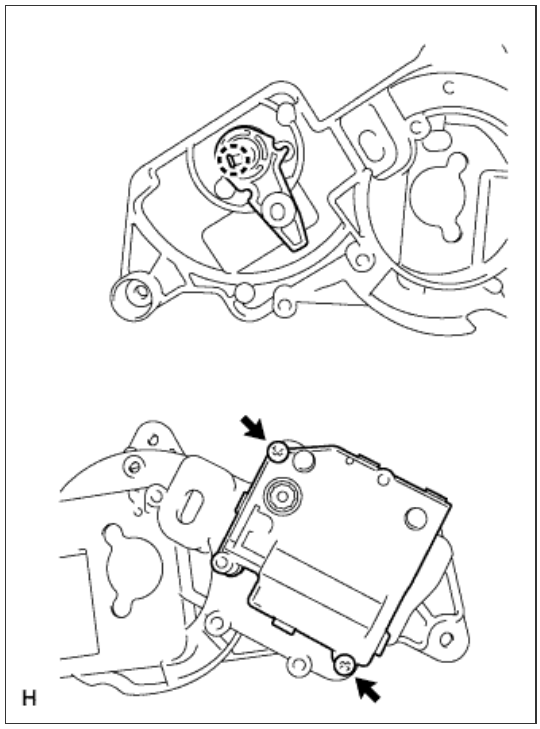


3. INSTALL SERVO MOTOR

a. Install the rear air mix damper control servo motor RH.

i. Attach the claw to install the lever and servo motor.

ii. Install the 2 screws.

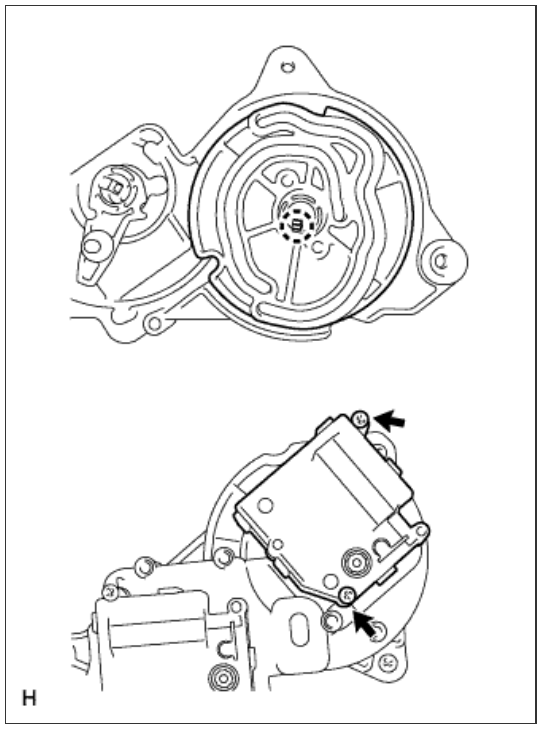


b. Install the rear mode control servo motor.

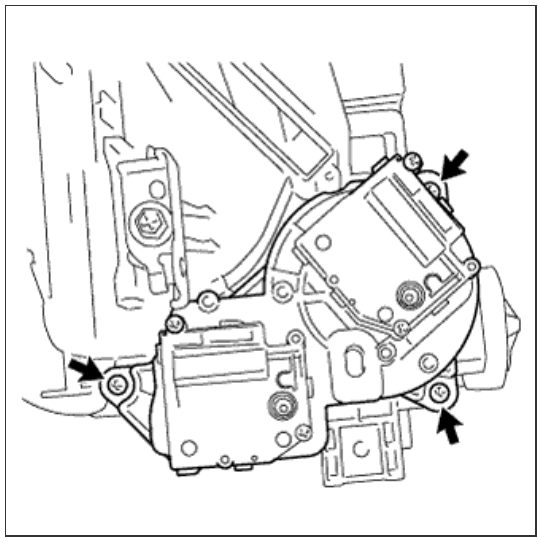
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

c. Set the damper servo so that the cutout part engages with the tooth of the gear, and attach the claw to install the servo motor unit.



d. Install the 3 screws.

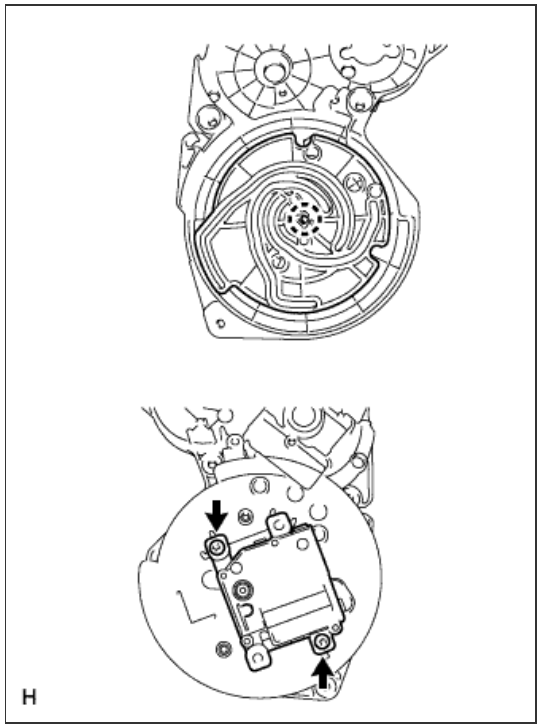


4. INSTALL SERVO MOTOR

a. Install the front air mix damper control servo motor LH.

i. Attach the claw to install the plate and servo motor.

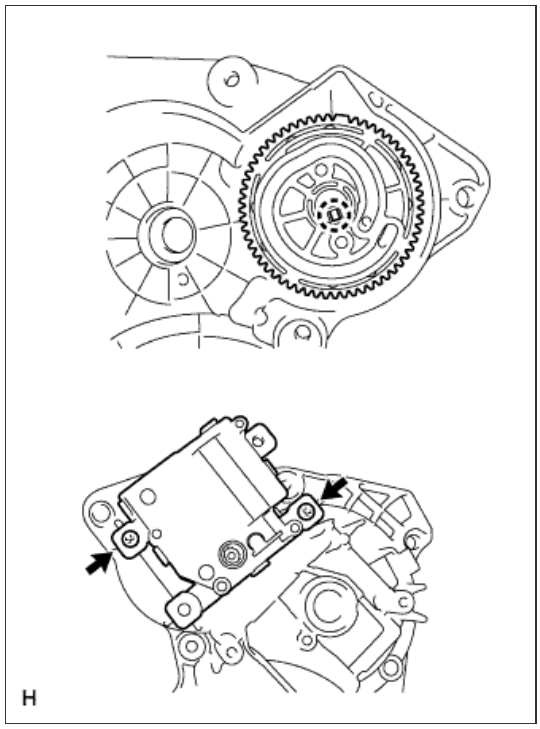
ii. Install the 2 screws.



b. Install the front mode control servo motor LH.

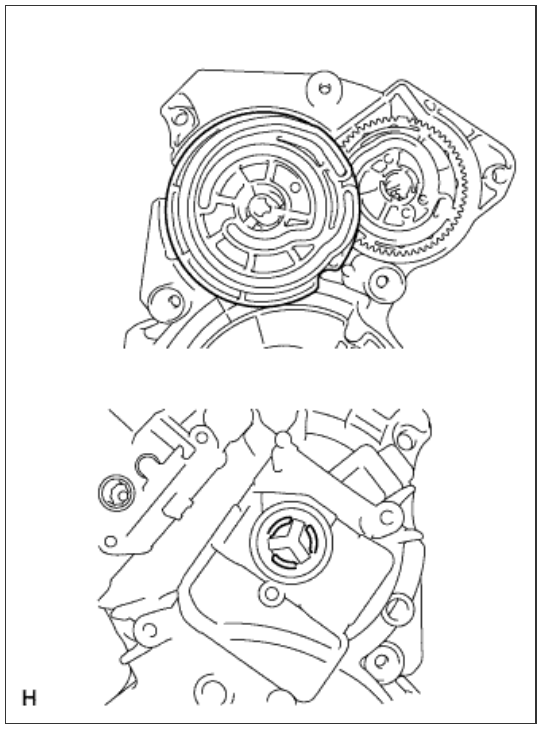
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

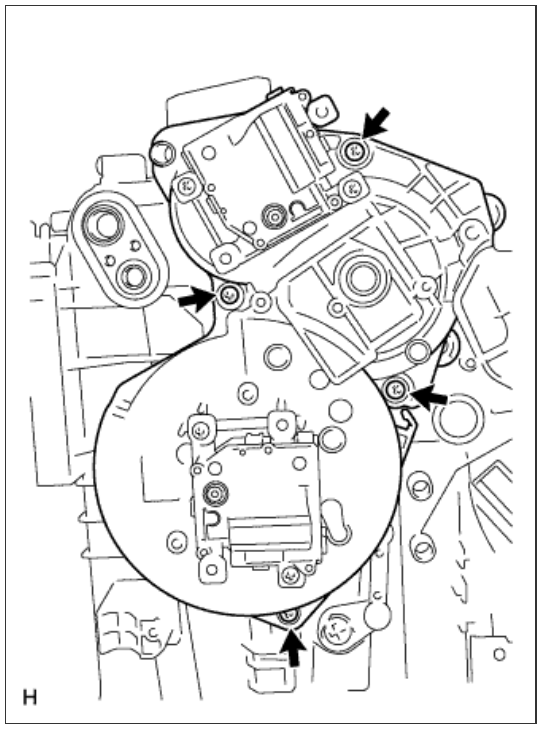


c. Attach the 3 claws to install the plate.

d. Set the damper servo so that the cutout part engages with the tooth of the gear, and attach the claw to install the servo motor unit.

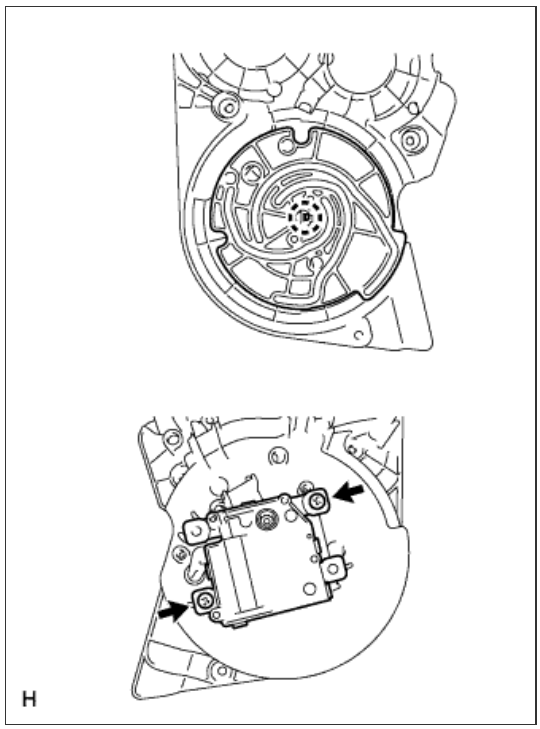


e. Install the 4 screws.



5. INSTALL SERVO MOTOR

a. Install the front air mix damper control servo motor RH.



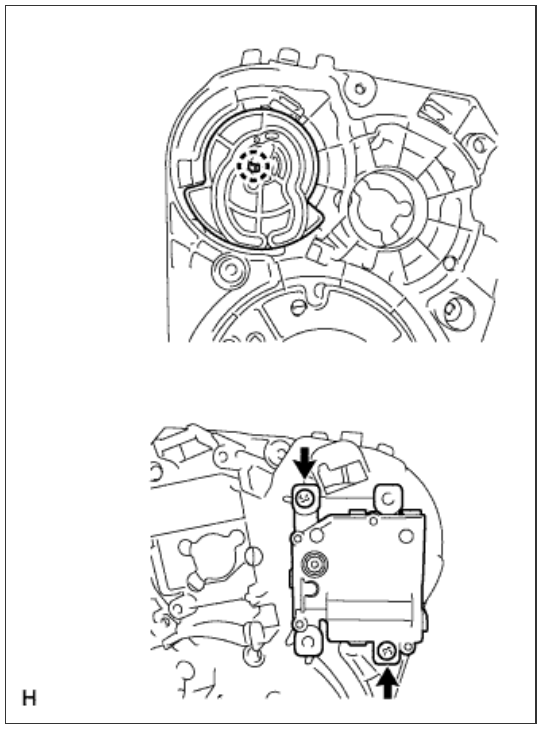
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

b. Install the control air bypass damper control servo motor.

i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

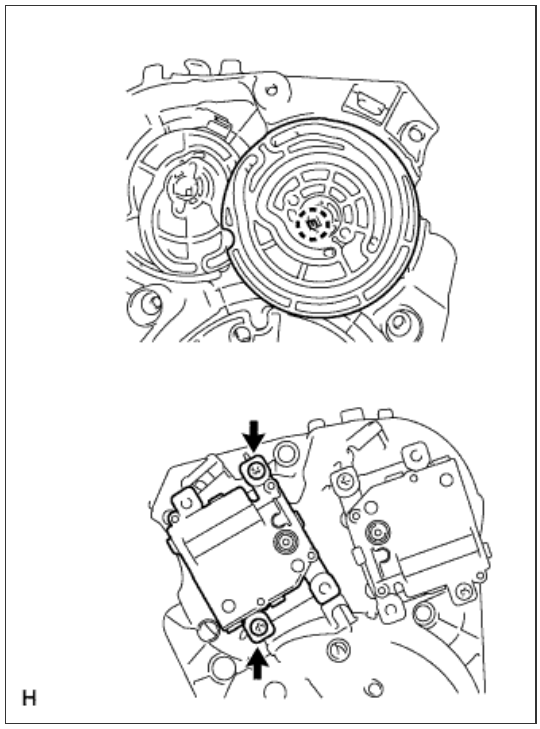


c. Install the front mode control servo motor RH.

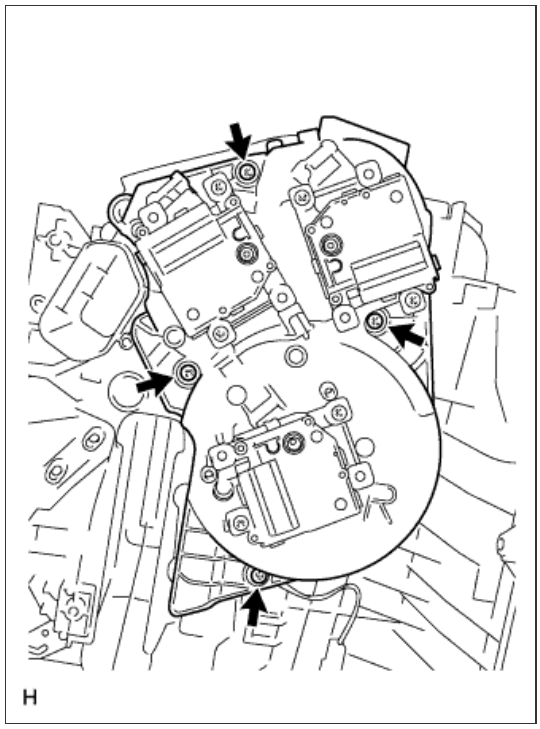
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

d. Set the damper servo so that the cutout part engages with the tooth of the gear, and attach the claw to install the servo motor unit.

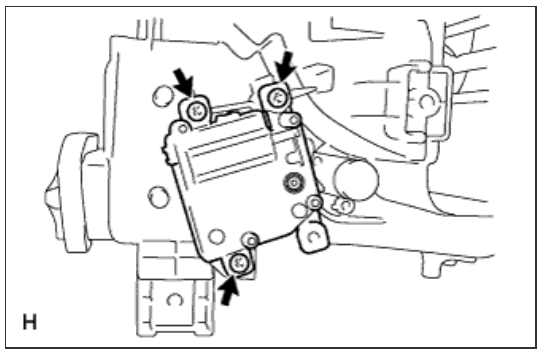


e. Install the 4 screws.



6. INSTALL REAR AIR MIX DAMPER CONTROL SERVO MOTOR RH

a. Install the servo motor with the 3 screws.



7. INSTALL COOLER EXPANSION VALVE (w/o Cool Box)

a. Sufficiently apply compressor oil to 4 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

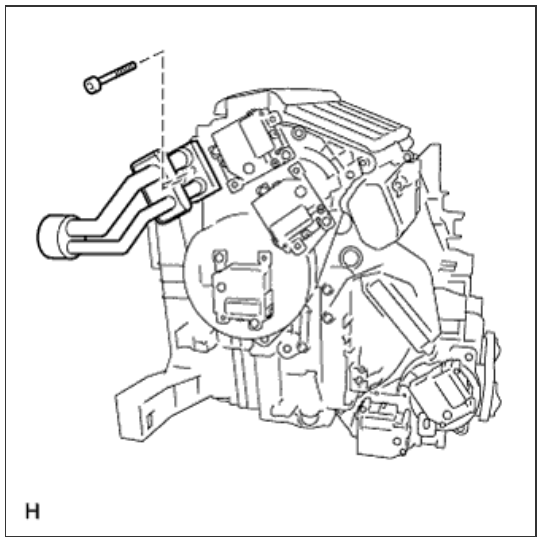
b. Install 2 O-rings to the cooler evaporator.

c. Install 2 O-rings to the air conditioner tube and accessory assembly.

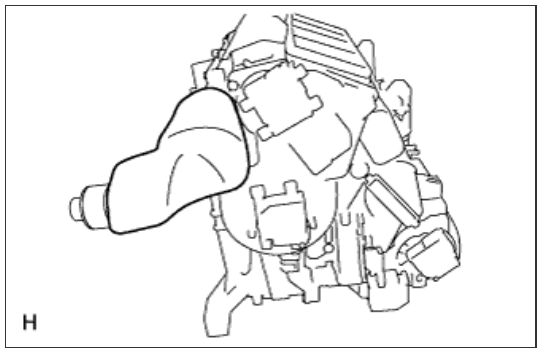
d. Install the cooler expansion valve and air conditioner tube and accessory assembly to the evaporator.

e. Using a 4 mm hexagon wrench, install the 2 bolts.

Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }



f. Install new packing.



8. INSTALL AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY (w/ Cool Box)

a. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

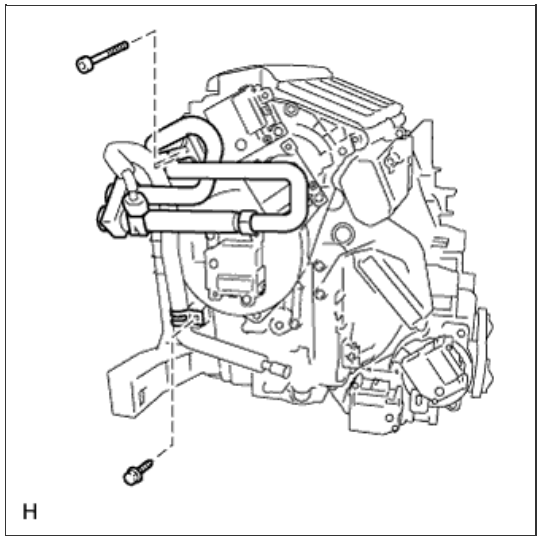
b. Install the 2 O-rings to the air conditioner tube and accessory assembly.

c. Install the air conditioner tube and accessory assembly to the evaporator.

d. Using a 4 mm hexagon wrench, install the 2 hexagon bolts.

Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }

e. Install the bracket with the screw.



9. INSTALL COOLER EXPANSION VALVE (w/ Cool Box)

a. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

b. Install the 2 O-rings to the No. 2 connector tube.

c. Install the No. 2 connector tube, expansion valve and No. 3 connector tube.

d. Using a 4 mm hexagon wrench, install the 2 hexagon bolts.

Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }



e. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

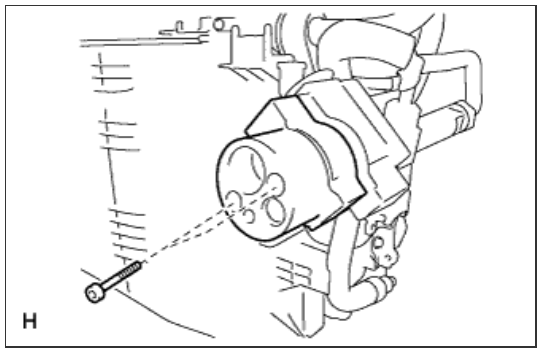
Compressor oil:
ND-OIL 8 or equivalent

f. Install the 2 O-rings to the No. 1 connector tube.

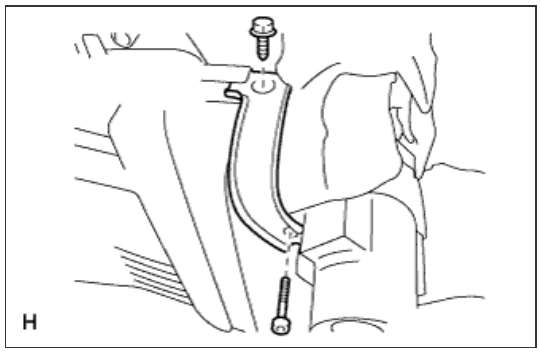
g. Install the No. 1 connector tube.

h. Using a 4 mm hexagon wrench, install the 2 hexagon bolts.

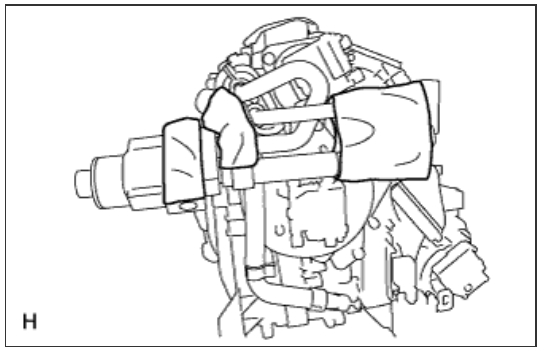
Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }



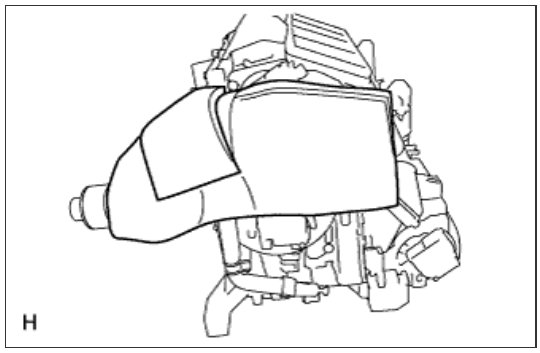
i. Using a 4 mm hexagon wrench, install the bracket with the hexagon bolt and screw.



j. Install new butyl tape.



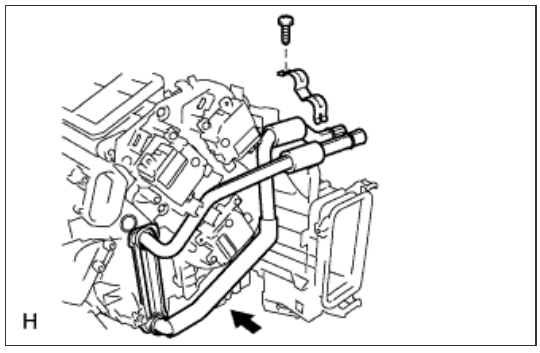
k. Install new packing.



10. INSTALL AIR CONDITIONING RADIATOR ASSEMBLY

a. Install the radiator.

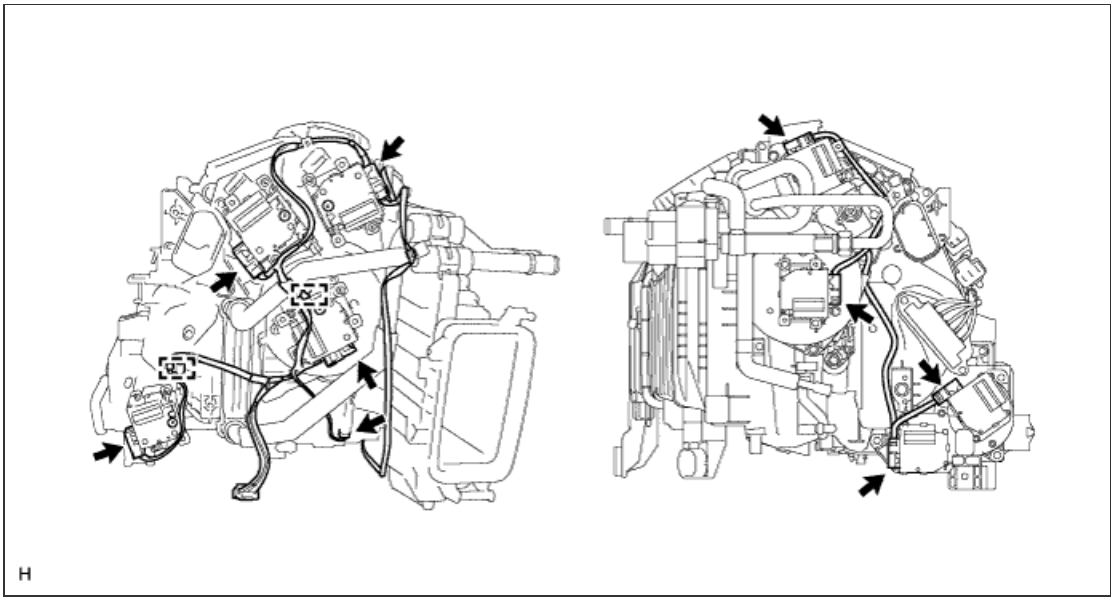
b. Install the bracket with the screw.



11. INSTALL AIR CONDITIONER HARNESS

a. Attach the clamps to install the harness.

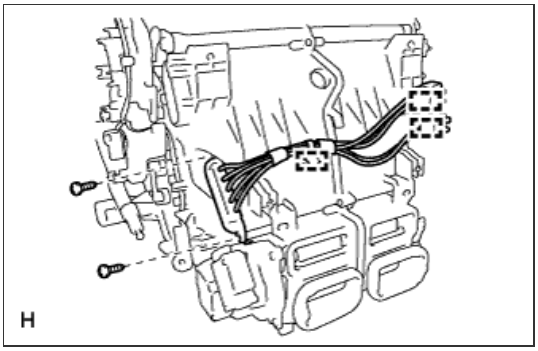
b. Connect the connectors.



12. INSTALL QUICK HEATER ASSEMBLY (w/ PTC Heater)

a. Install the quick heater with the 2 screws.

b. Attach the 3 clamps.



13. INSTALL COOL BOX LIQUID TUBE (w/ Cool Box)

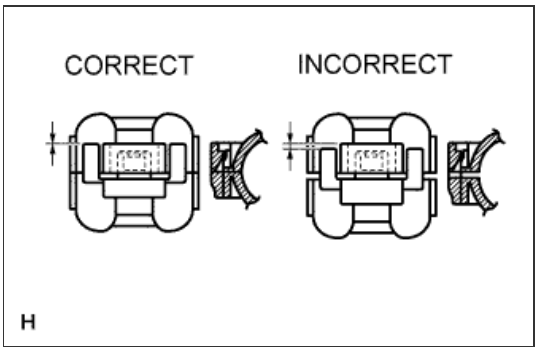
a. Lubricate 2 new O-rings with compressor oil and install them to the tube.

Compressor oil:
ND-OIL 8 or equivalent

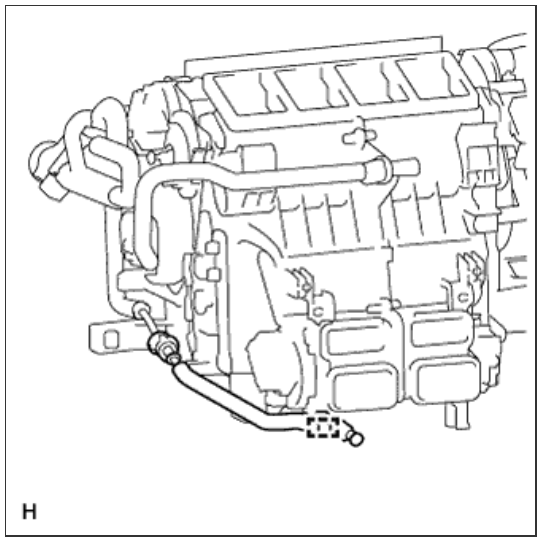
b. Connect the liquid tube with the piping clamp.

NOTICE:

After connection, check the claw engagement of the piping clamp.

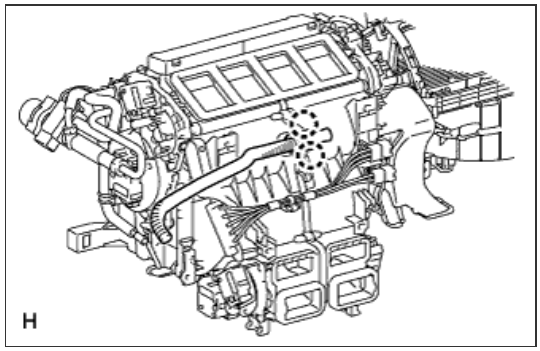


c. Attach the clamp.



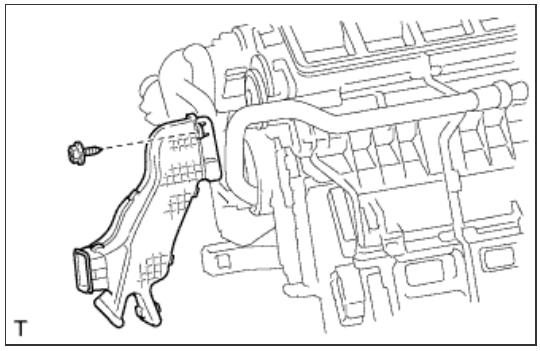
14. INSTALL ASPIRATOR

a. Attach the 2 claws to install the aspirator.



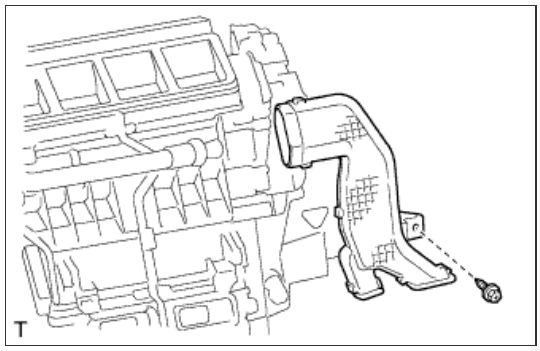
15. INSTALL NO. 4 AIR DUCT SUB-ASSEMBLY

a. Install the duct with the screw.



16. INSTALL NO. 5 AIR DUCT SUB-ASSEMBLY

a. Install the duct with the screw.

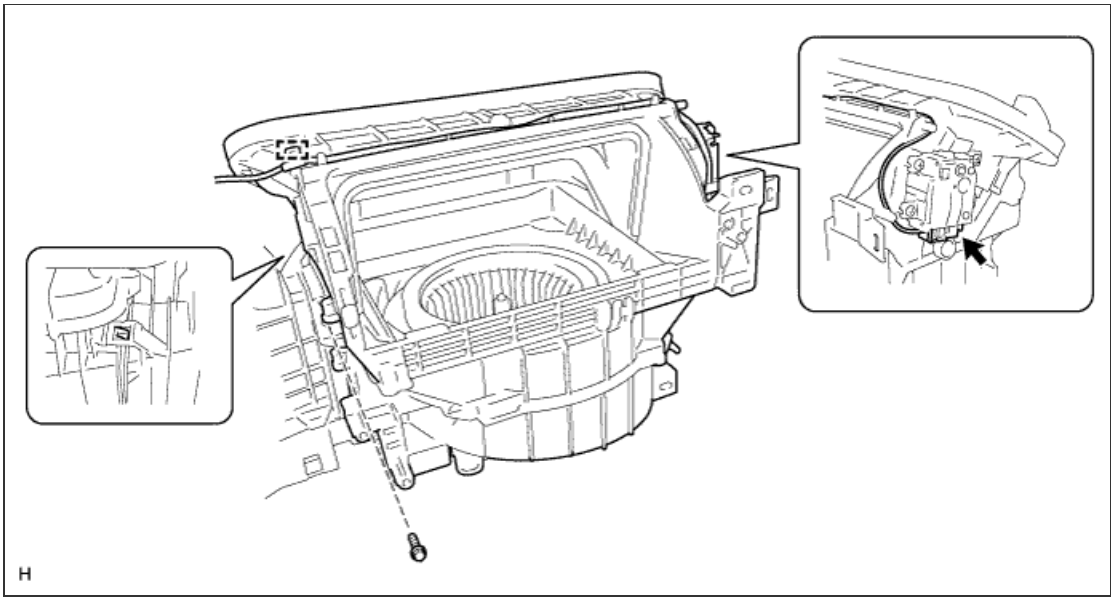


17. INSTALL BLOWER ASSEMBLY

a. Attach the claw to install the blower unit.

b. Connect the connector and clamp.

c. Install the screw.

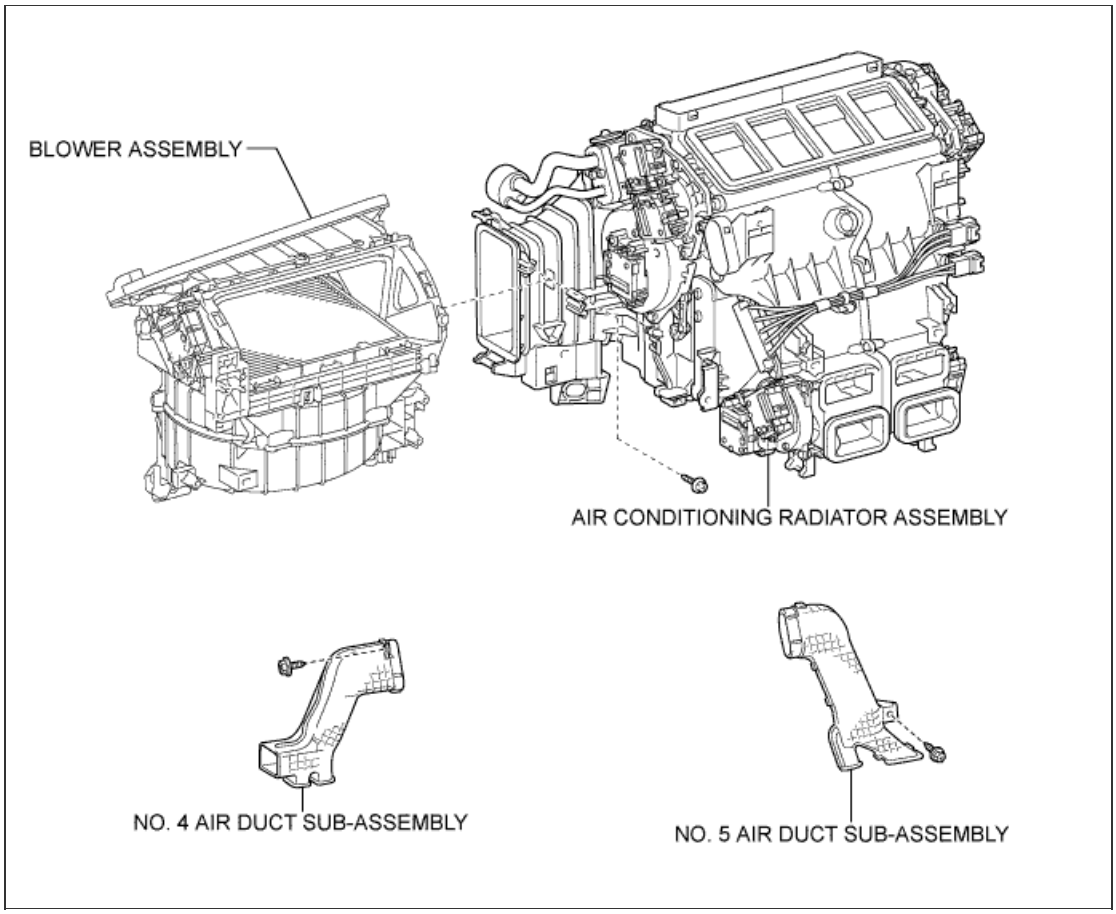


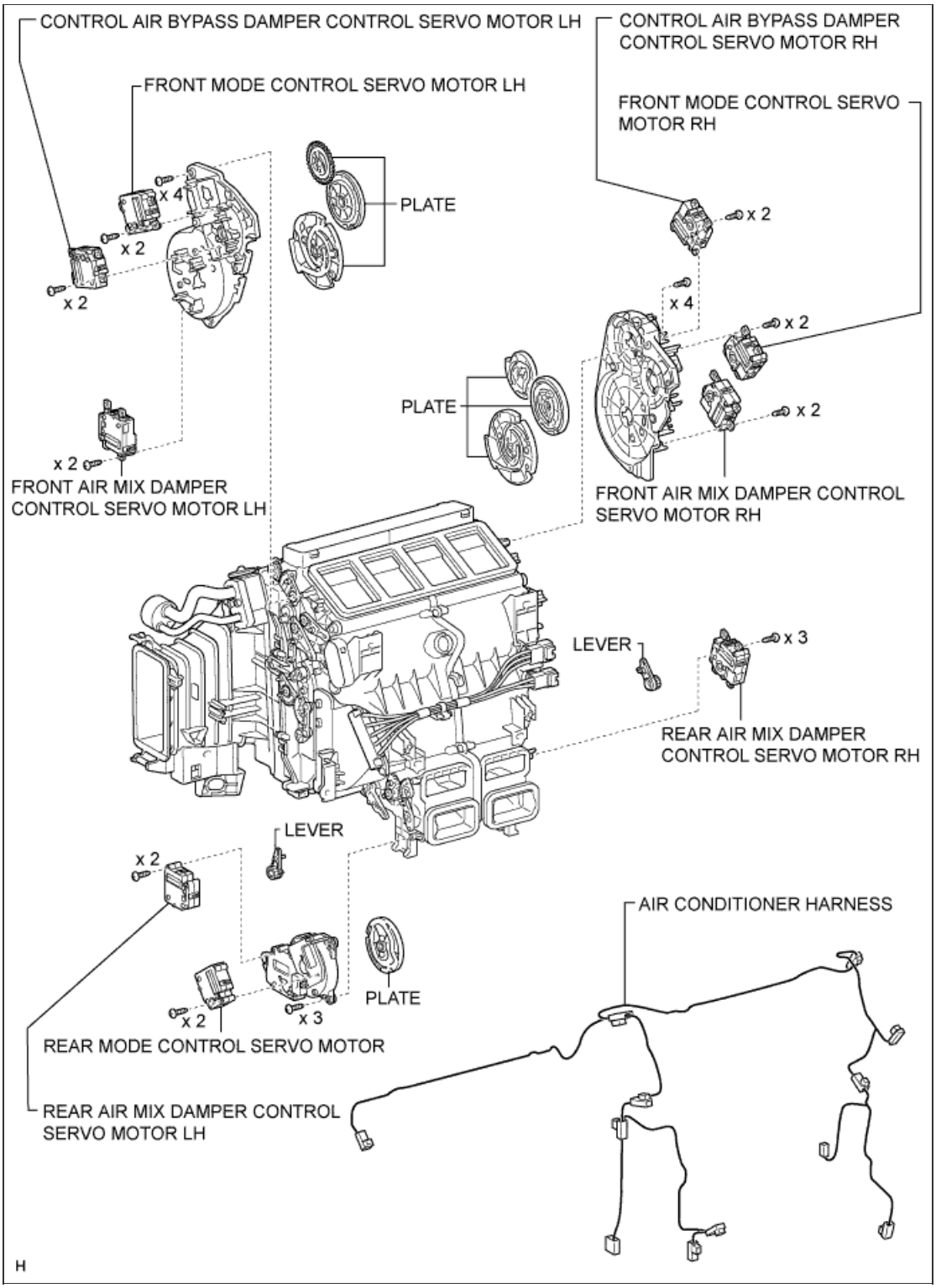
for Preparation Click here

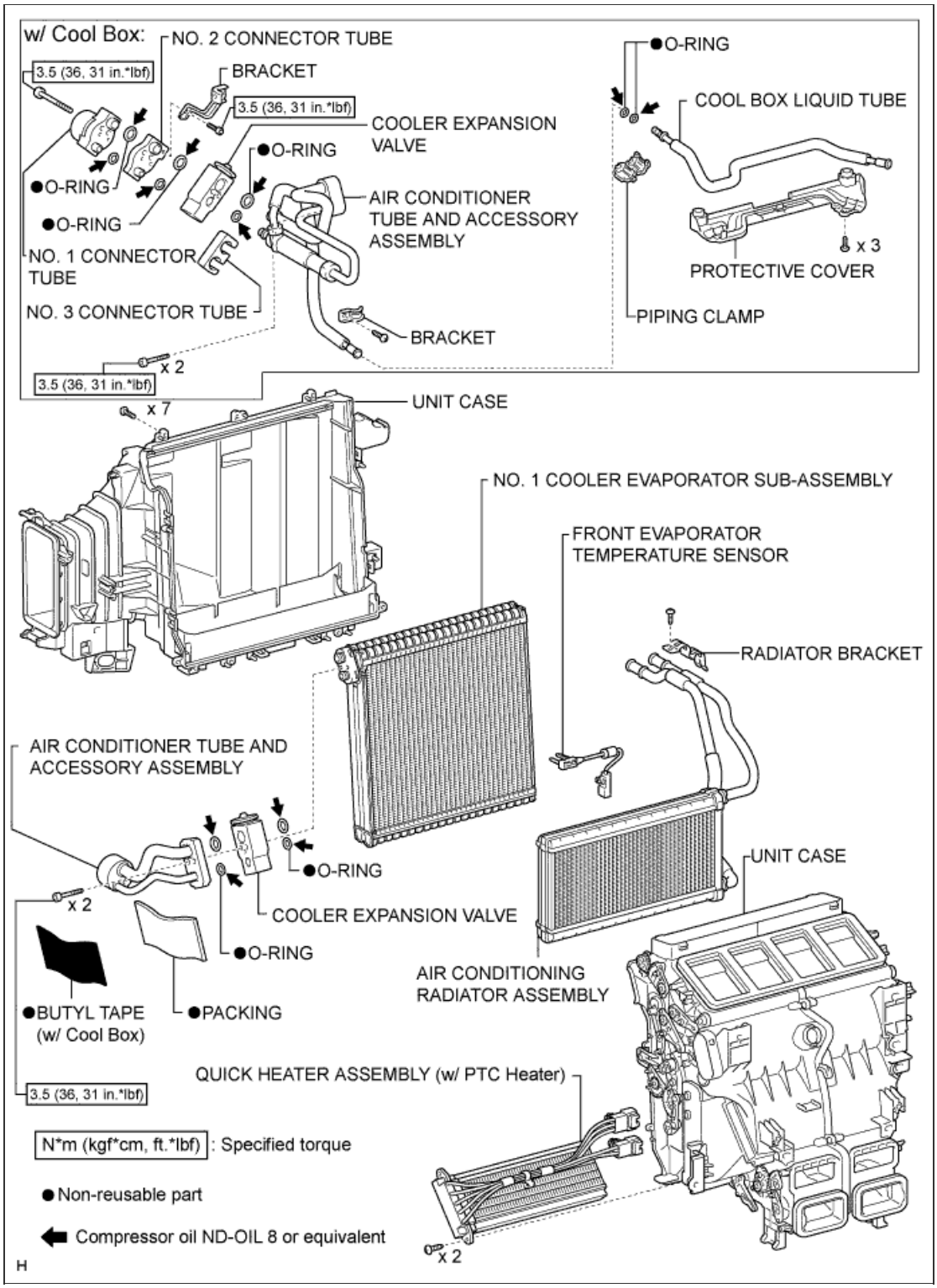
1. INSTALL AIR CONDITIONING UNIT ASSEMBLY

a. Install the air conditioning unit assembly (Click here).

for Preparation Click here




CONTROL AIR BYPASS DAMPER CONTROL SERVO MOTOR LH
CONTROL AIR BYPASS DAMPER CONTROL SERVO MOTOR RH
FRONT MODE CONTROL SERVO MOTOR LH
FRONT MODE CONTROL SERVO MOTOR RH
PLATE
x 4
x 2
x 2
x 2
x 4
x 2
x 2
PLATE
x 2
FRONT AIR MIX DAMPER CONTROL SERVO MOTOR LH
FRONT AIR MIX DAMPER CONTROL SERVO MOTOR RH
LEVER
x 3
REAR AIR MIX DAMPER CONTROL SERVO MOTOR RH
LEVER
x 2
AIR CONDITIONER HARNESS
PLATE
x 2
x 3
REAR MODE CONTROL SERVO MOTOR
REAR AIR MIX DAMPER CONTROL SERVO MOTOR LH
H


w/ Cool Box:
NO. 2 CONNECTOR TUBE
3.5 (36, 31 in.*lbf)
BRACKET
3.5 (36, 31 in.*lbf)
COOLER EXPANSION VALVE
●O-RING
●O-RING
●O-RING
AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY
NO. 1 CONNECTOR TUBE
NO. 3 CONNECTOR TUBE
BRACKET
x 2
3.5 (36, 31 in.*lbf)
●O-RING
COOL BOX LIQUID TUBE
x 3
PROTECTIVE COVER
PIPING CLAMP
x 7
UNIT CASE
NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY
FRONT EVAPORATOR TEMPERATURE SENSOR
RADIATOR BRACKET
AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY
●O-RING
x 2
COOLER EXPANSION VALVE
●O-RING
●BUTYL TAPE (w/ Cool Box)
●PACKING
3.5 (36, 31 in.*lbf)
UNIT CASE
AIR CONDITIONING RADIATOR ASSEMBLY
QUICK HEATER ASSEMBLY (w/ PTC Heater)
x 2
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
Compressor oil ND-OIL 8 or equivalent
H

FRONT EVAPORATOR TEMPERATURE SENSOR (for RHD) > REMOVAL

for Preparation Click here

1. REMOVE AIR CONDITIONING UNIT

a. Remove the air conditioning unit assembly (Click here).

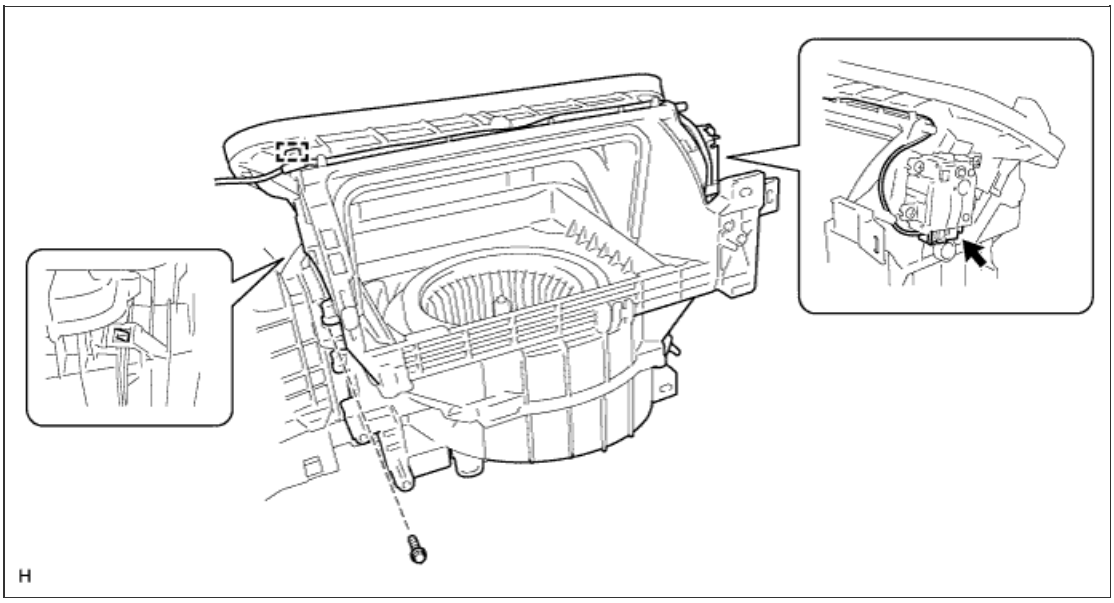
for Preparation Click here

1. REMOVE BLOWER ASSEMBLY

a. Remove the screw.

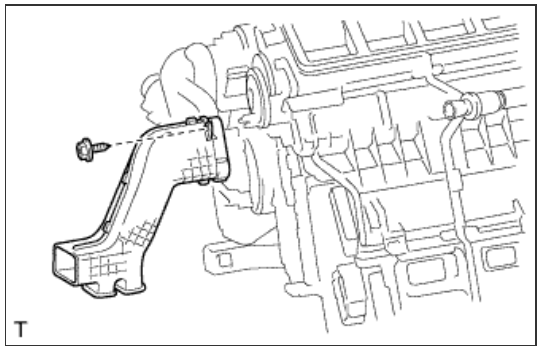
b. Disconnect the connector and clamp.

c. Detach the claw and remove the blower unit.



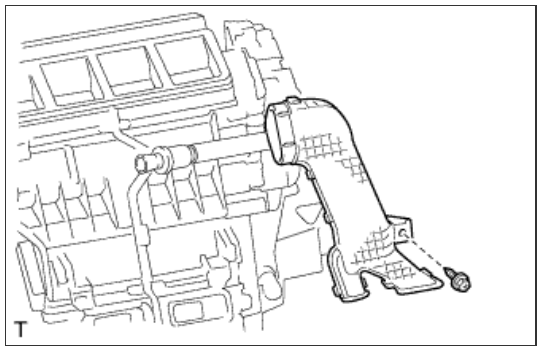
2. REMOVE NO. 4 AIR DUCT SUB-ASSEMBLY

a. Remove the screw and duct.



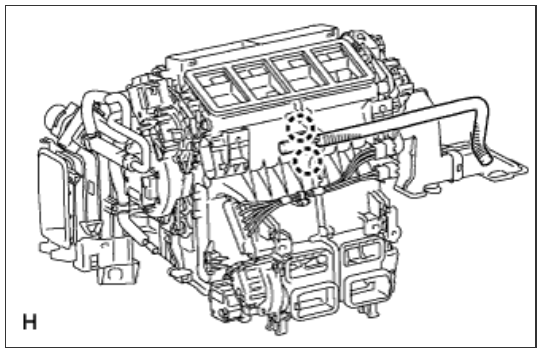
3. REMOVE NO. 5 AIR DUCT SUB-ASSEMBLY

a. Remove the screw and duct.



4. REMOVE ASPIRATOR

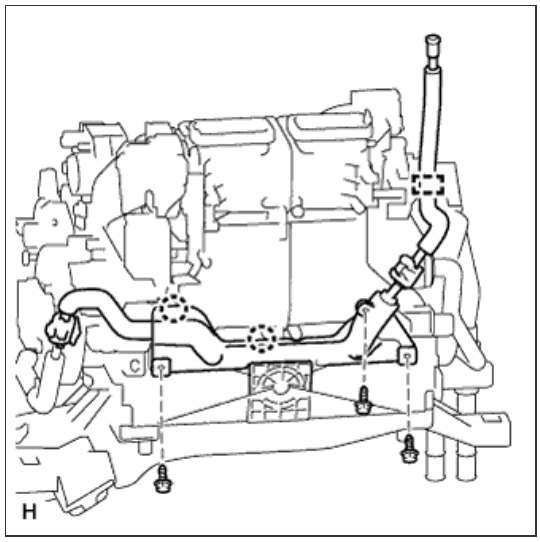
a. Detach the 2 claws and remove the aspirator.



5. REMOVE COOL BOX LIQUID TUBE (w/ Cool Box)

a. Remove the 3 screws.

b. Detach the 2 claws and remove the protective cover.



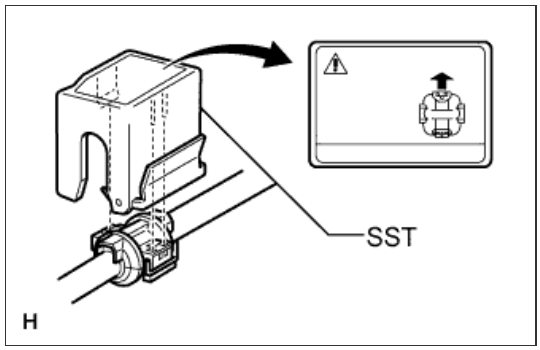
c. Using SST, remove the piping clamp.

SST
09870-00025

i. Attach SST to the piping clamp.

HINT:

Confirm the direction of the piping clamp claw and SST by referring to the illustration on the caution label.



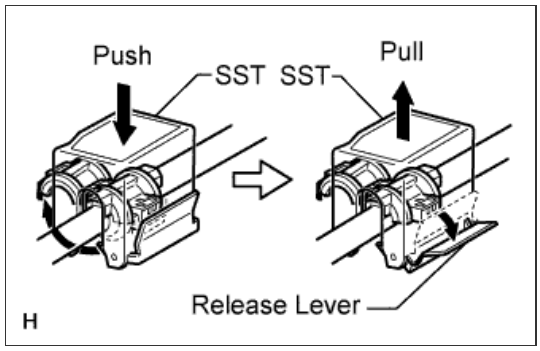
ii. Push down SST and release the clamp lock.

NOTICE:

Be careful not to deform the tubes when pushing SST.

iii. Pull SST slightly and push the release lever, then remove the piping clamp with SST.

iv. Remove the piping clamp from SST.



d. Disconnect the tube.

NOTICE:

Cap the open fittings immediately to keep moisture or dirt out of the system.

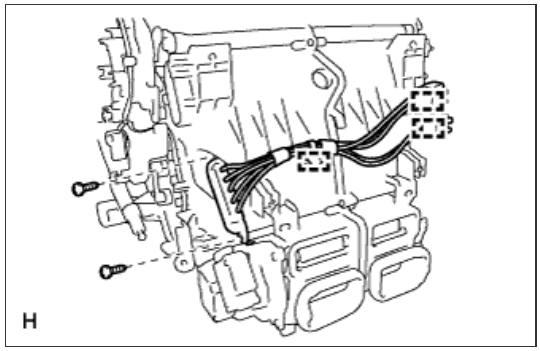
e. Detach the clamp and remove the liquid tube.

f. Remove the 2 O-rings from the liquid tube.

6. REMOVE QUICK HEATER ASSEMBLY (w/ PTC Heater)

a. Detach the 3 clamps.

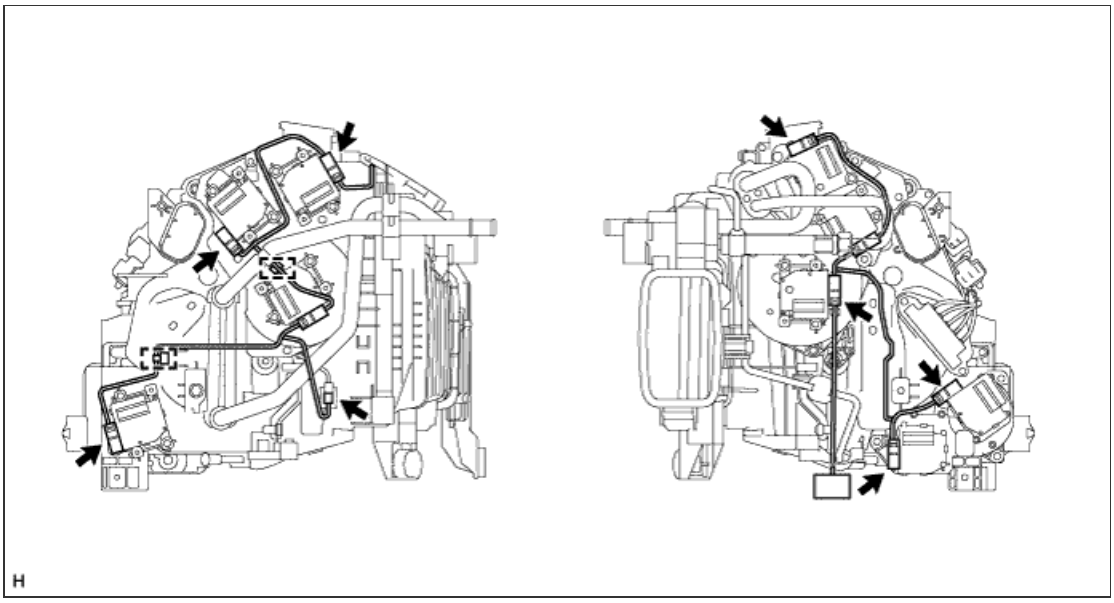
b. Remove the 2 screws and quick heater.



7. REMOVE AIR CONDITIONER HARNESS

a. Disconnect the connectors.

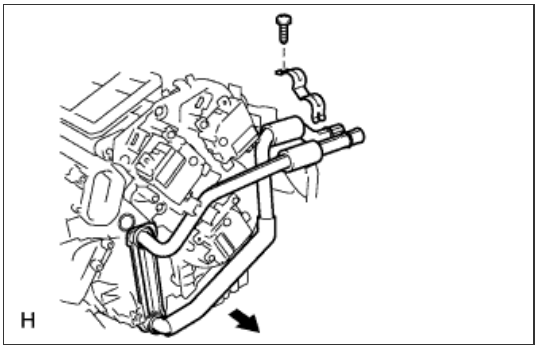
b. Detach the clamps and remove the harness.



8. REMOVE AIR CONDITIONING RADIATOR ASSEMBLY

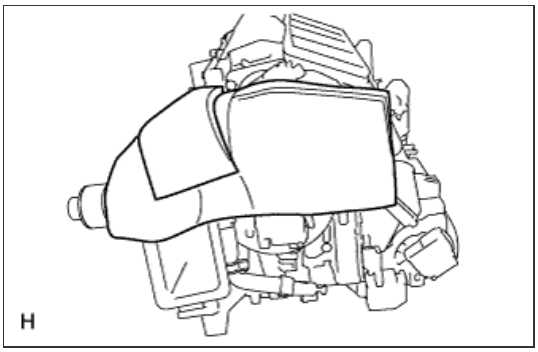
a. Remove the screw and radiator bracket.

b. Remove the radiator.

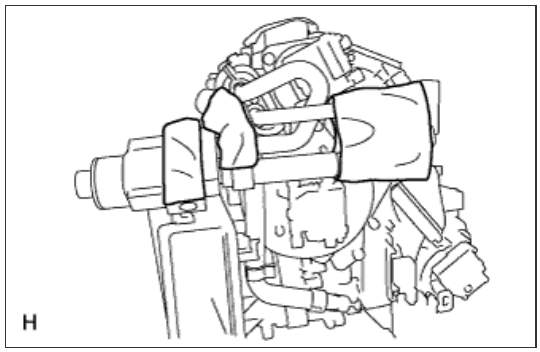


9. REMOVE COOLER EXPANSION VALVE (w/ Cool Box)

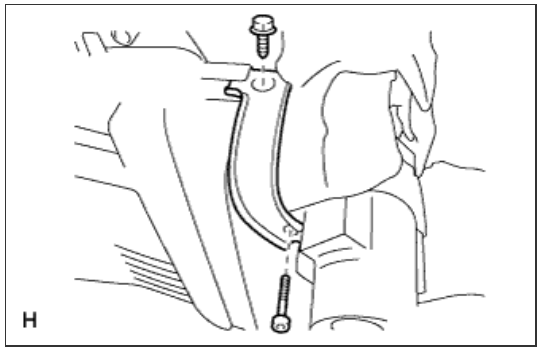
a. Remove the packing.



b. Remove the butyl tape.

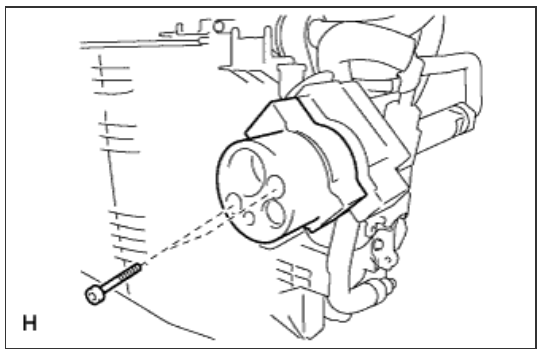


c. Using a 4 mm hexagon wrench, remove the hexagon bolt, screw and bracket.



d. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts and No. 1 connector tube.

e. Remove the 2 O-rings from the No. 1 connector tube.



f. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts, No. 2 connector tube, expansion valve and No. 3 connector tube.

g. Remove the 2 O-rings from the No. 2 connector tube.

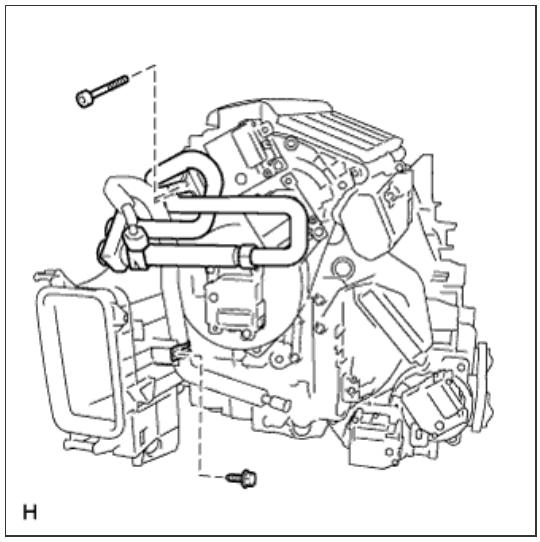


10. REMOVE AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY (w/ Cool Box)

a. Remove the screw and bracket.

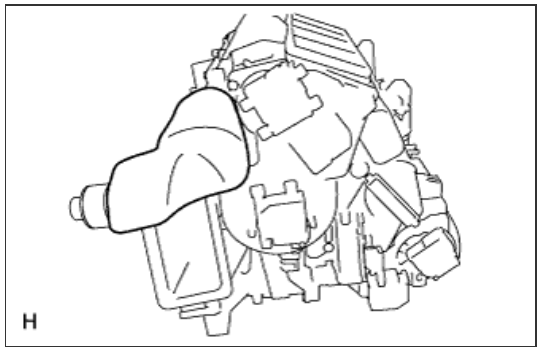
b. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts and air conditioner tube and accessory assembly.

c. Remove the 2 O-rings from the air conditioner tube and accessory assembly.



11. REMOVE COOLER EXPANSION VALVE (w/o Cool Box)

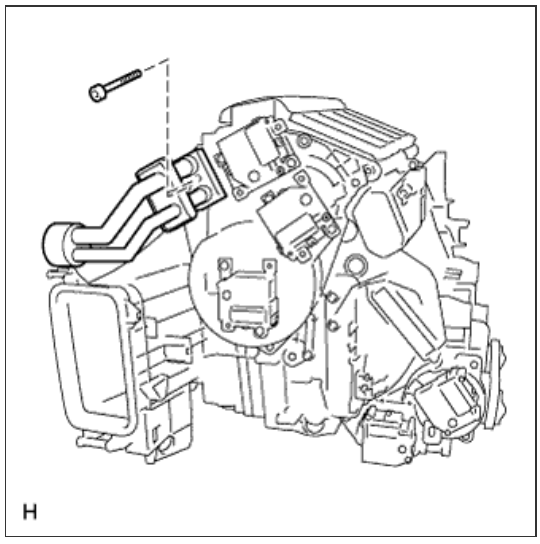
a. Remove the packing.



b. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts, air conditioner tube and accessory assembly and expansion valve.

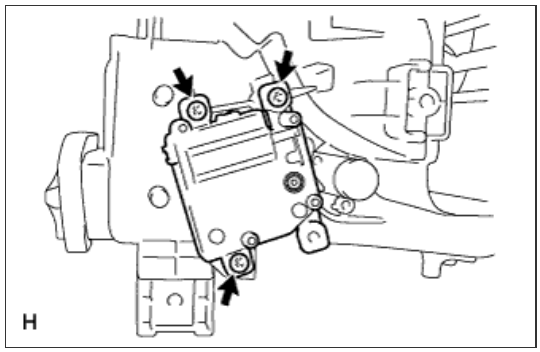
c. Remove the 2 O-rings from the air conditioner tube and accessory assembly.

d. Remove the 2 O-rings from the expansion valve.



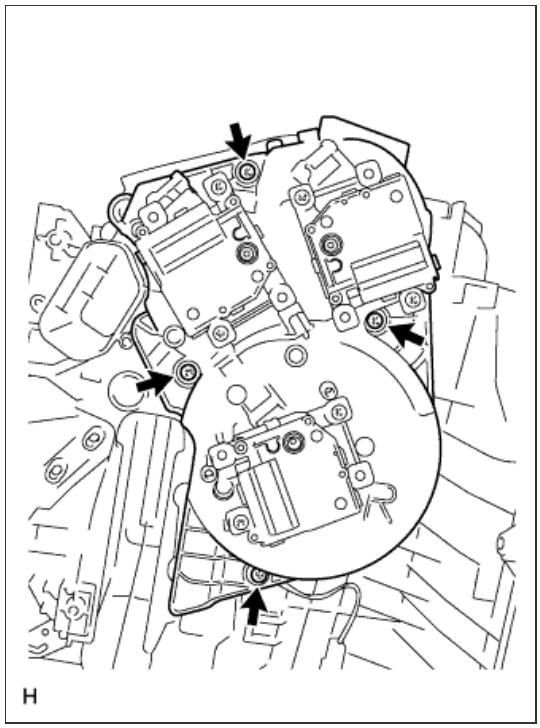
12. REMOVE REAR AIR MIX DAMPER CONTROL SERVO MOTOR RH

a. Remove the 3 screws and servo motor.



13. REMOVE SERVO MOTOR

a. Remove the 4 screws and servo motor unit.



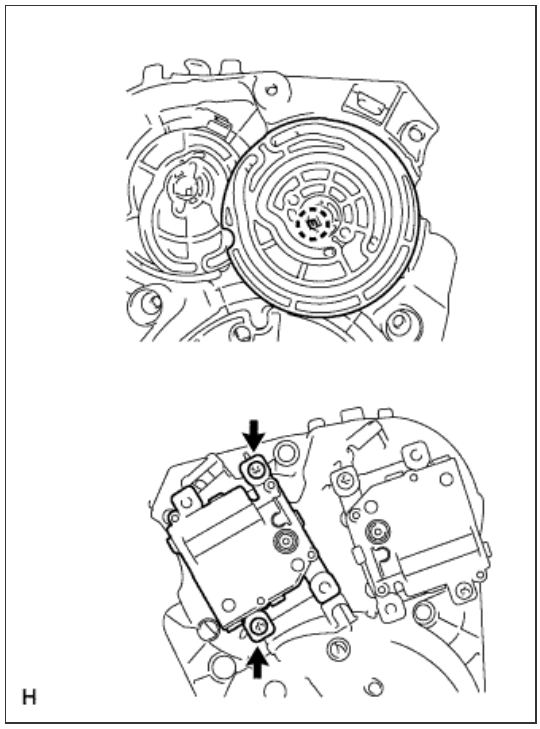
b. Remove the front mode control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.



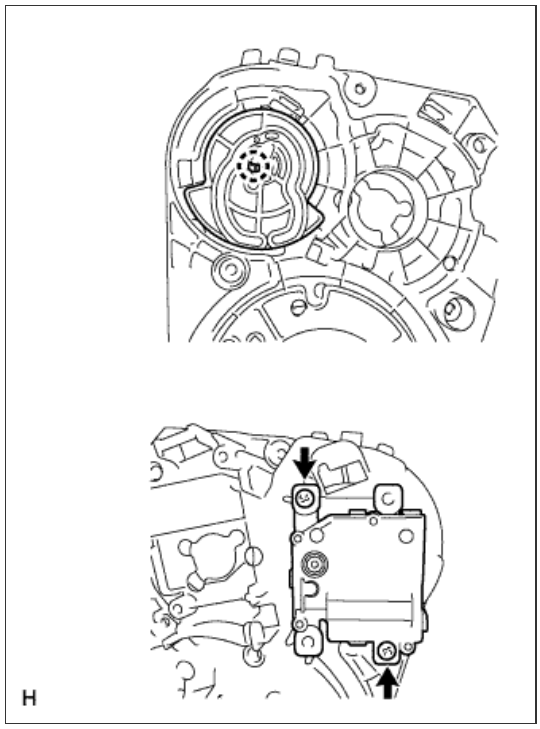
c. Remove the control air bypass damper control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.



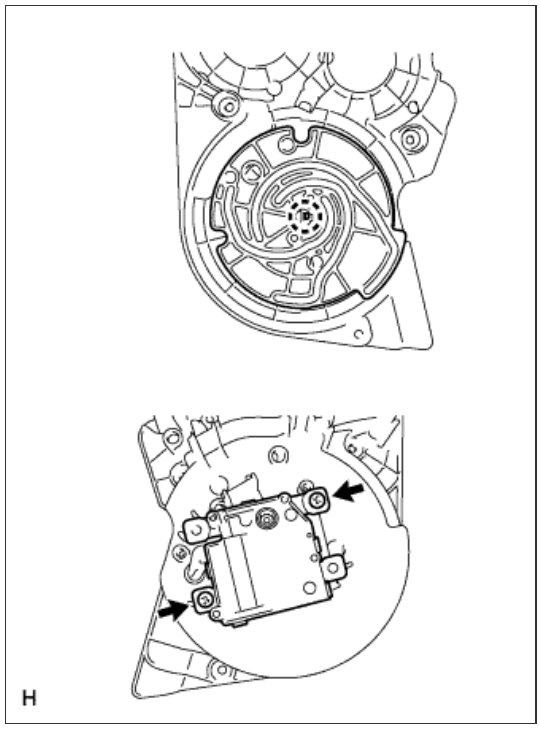
d. Remove the front air mix damper control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

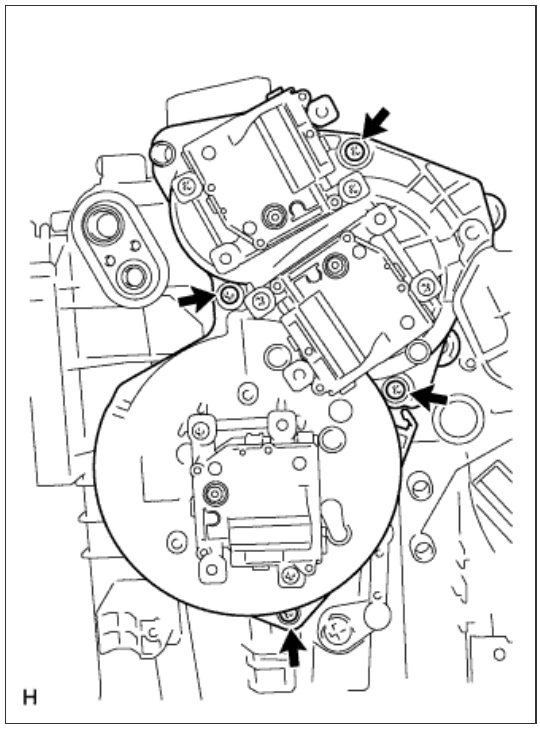
NOTICE:

Be careful not to damage the claw of the plate.

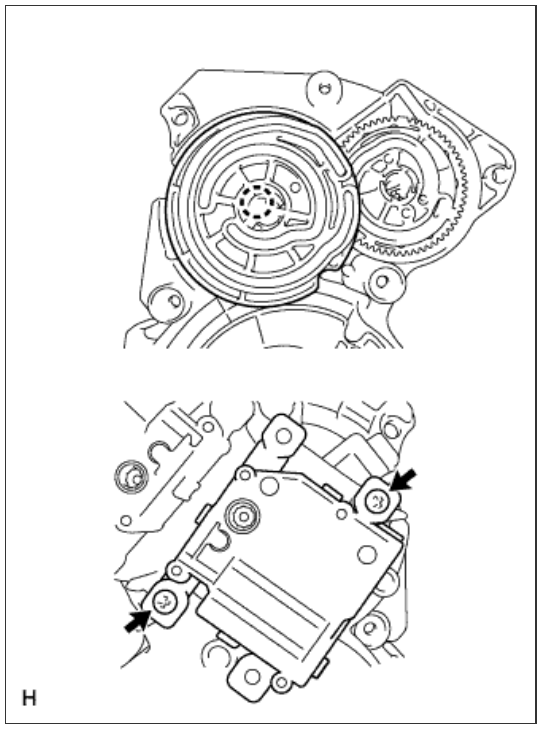


14. REMOVE SERVO MOTOR

a. Remove the 4 screws and servo motor unit.



b. Remove the control air bypass damper control servo motor LH.



i. Remove the 2 screws.

ii. Detach the claw and remove the plate.

NOTICE:

Be careful not to damage the claw of the plate.

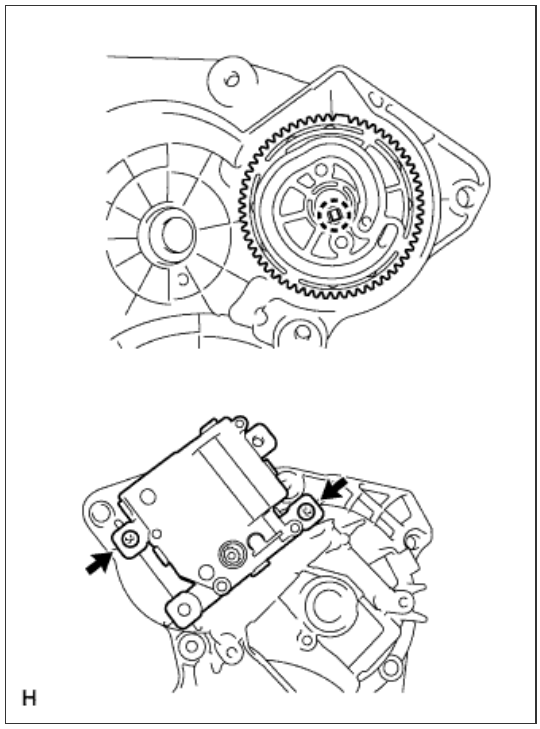
c. Remove the front mode control servo motor LH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.



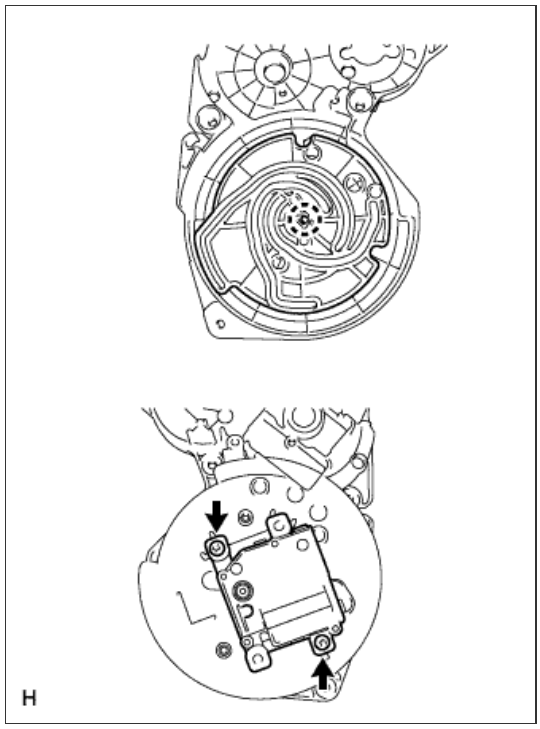
d. Remove the front air mix damper control servo motor LH.

i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

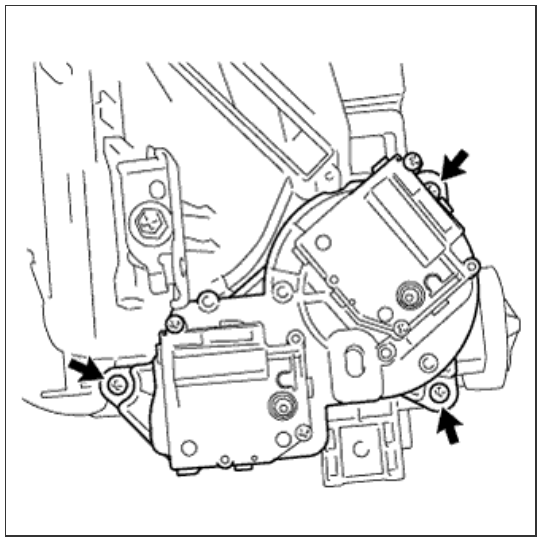
NOTICE:

Be careful not to damage the claw of the plate.

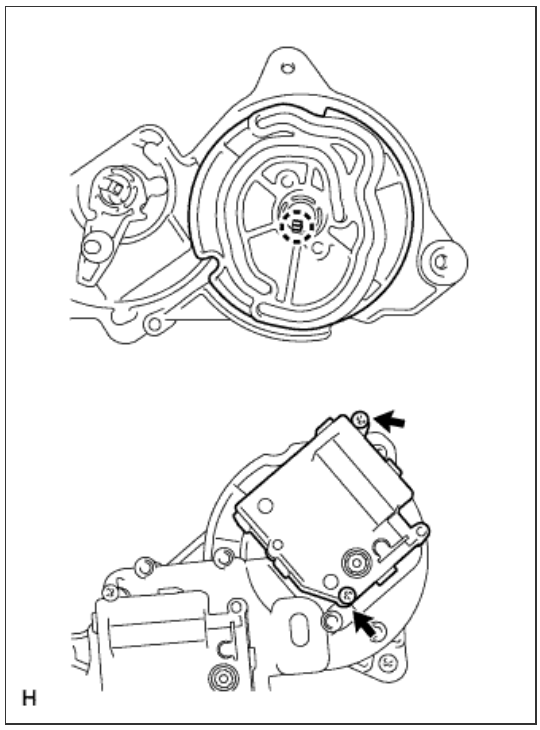


15. REMOVE SERVO MOTOR

a. Remove the 3 screws and servo motor unit.



b. Remove the rear mode control servo motor.



i. Remove the 2 screws.

ii. Detach the claw and remove the plate and servo motor.

NOTICE:

Be careful not to damage the claw of the plate.

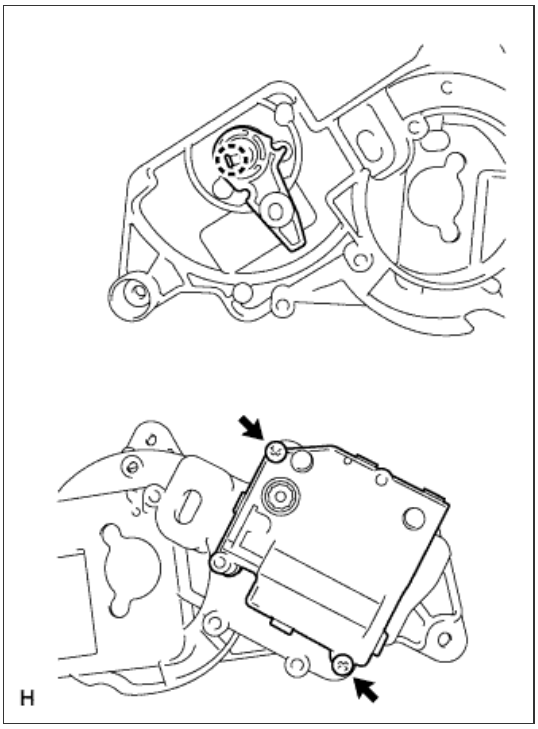
c. Remove the rear air mix damper control servo motor RH.

i. Remove the 2 screws.

ii. Detach the claw and remove the lever and servo motor.

NOTICE:

Be careful not to damage the claw of the lever.

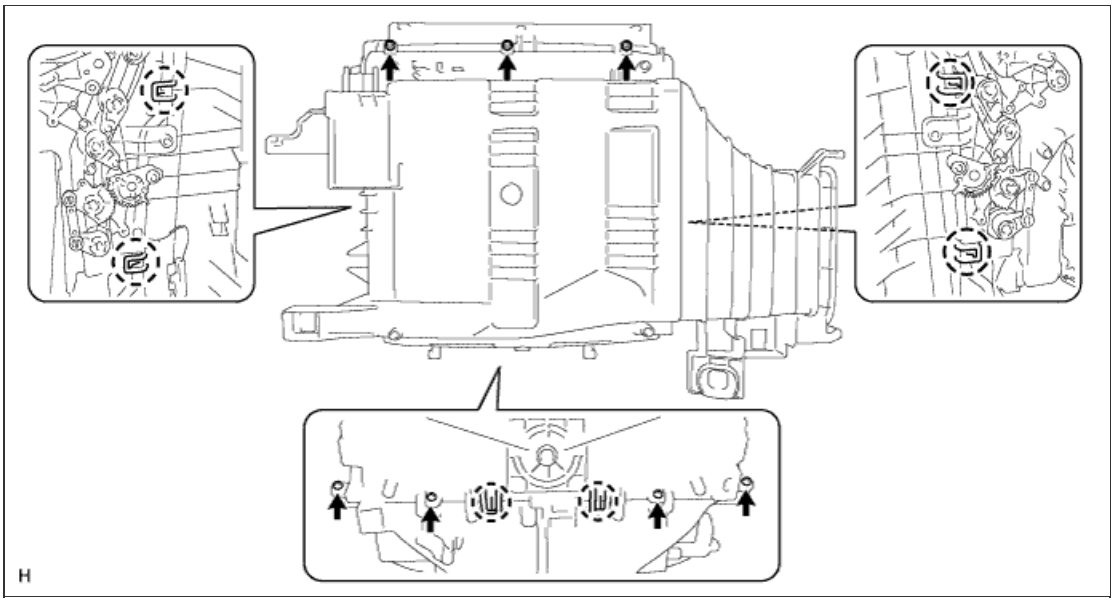


16. REMOVE NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY

a. Remove the 7 screws.

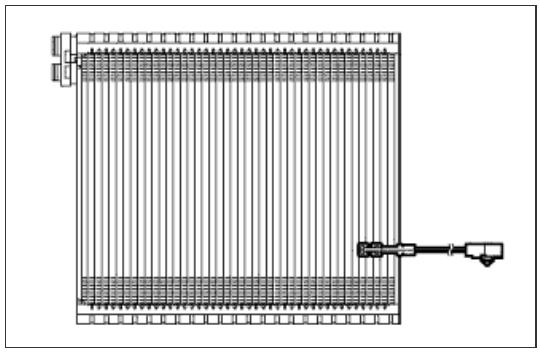
b. Detach the 6 claws and remove the unit case.

c. Remove the evaporator.



17. REMOVE FRONT EVAPORATOR TEMPERATURE SENSOR

a. Remove the sensor from the evaporator.



for Preparation Click here

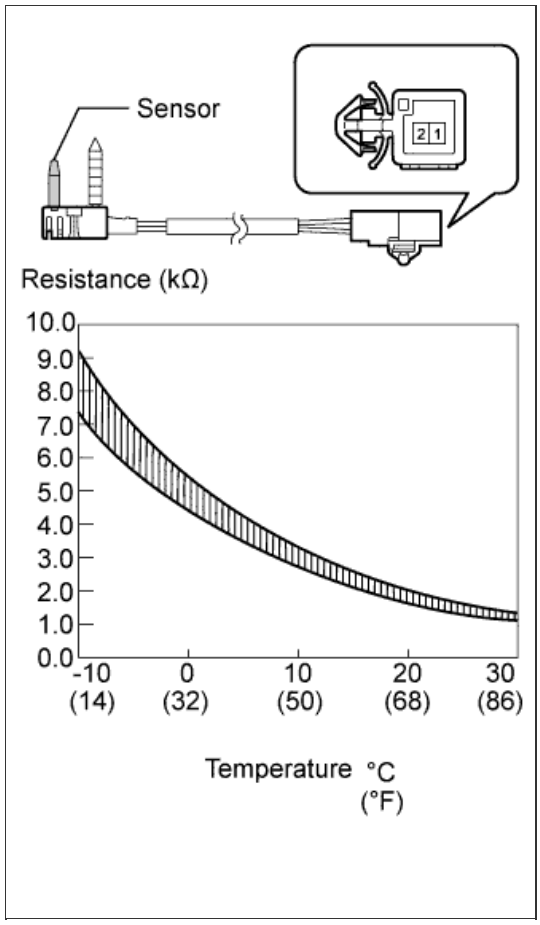
1. INSPECT FRONT EVAPORATOR TEMPERATURE SENSOR

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	-10°C (14°F)	7.30 to 9.10 kΩ
	-5°C (23°F)	5.65 to 6.95 kΩ
	0°C (32°F)	4.40 to 5.35 kΩ
	5°C (41°F)	3.40 to 4.15 kΩ
	10°C (50°F)	2.70 to 3.25 kΩ
	15°C (59°F)	2.14 to 2.58 kΩ
	20°C (68°F)	1.71 to 2.05 kΩ
	25°C (77°F)	1.38 to 1.64 kΩ
	30°C (86°F)	1.11 to 1.32 kΩ

If the result is not as specified, replace the front evaporator temperature sensor.



NOTICE:

- **Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.**
- **When measuring, the sensor temperature must be almost the same as the ambient temperature.**

HINT:

As the temperature increases, the resistance decreases (see the graph).

for Preparation Click here

1. INSTALL FRONT EVAPORATOR TEMPERATURE SENSOR

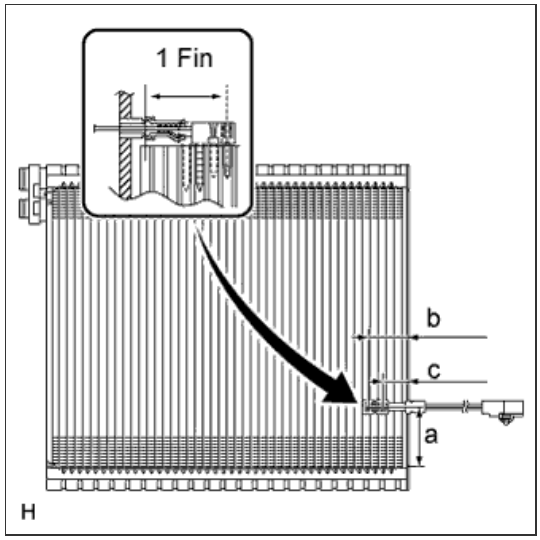
NOTICE:

If reusing the evaporator, do not insert the sensor at a location where the sensor was previously inserted.

a. Insert the sensor at a location that is 1 fin to the right or left of its previous location.

Standard Dimension:

Area	Specified Condition
a	50 mm (1.97 in.)
b	34.3 mm (1.35 in.)
c	20.9 mm (0.822 in.)

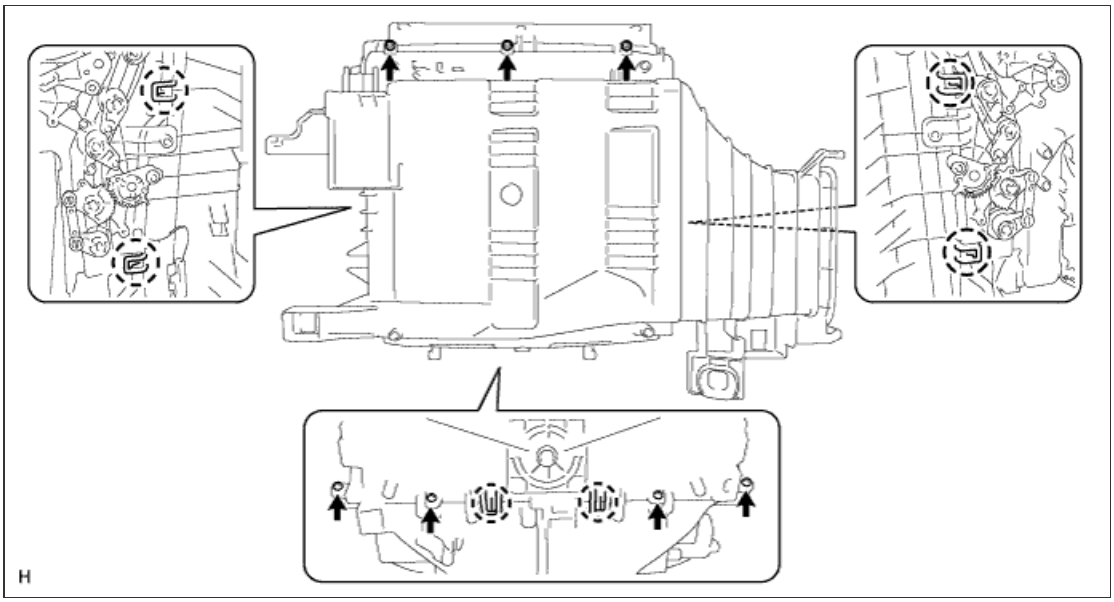


2. INSTALL NO. 1 COOLER EVAPORATOR SUB-ASSEMBLY

a. Install the evaporator.

b. Attach the 6 claws to install the unit case.

c. Install the 7 screws.

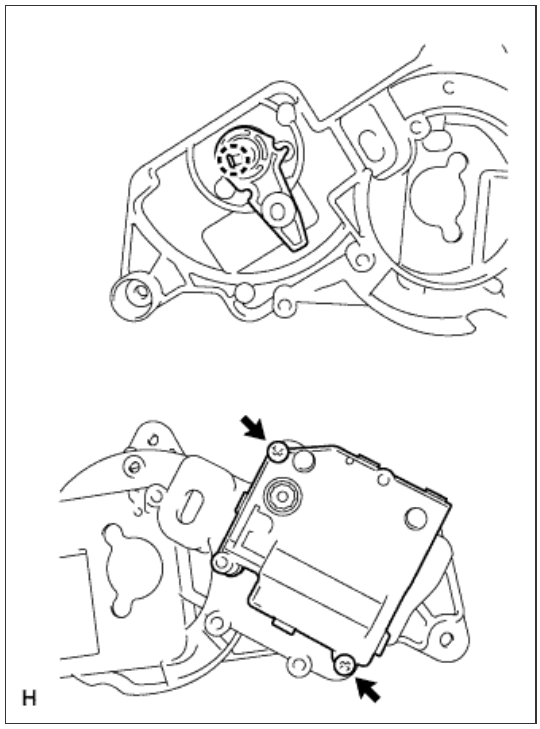


3. INSTALL SERVO MOTOR

a. Install the rear air mix damper control servo motor RH.

i. Attach the claw to install the lever and servo motor.

ii. Install the 2 screws.

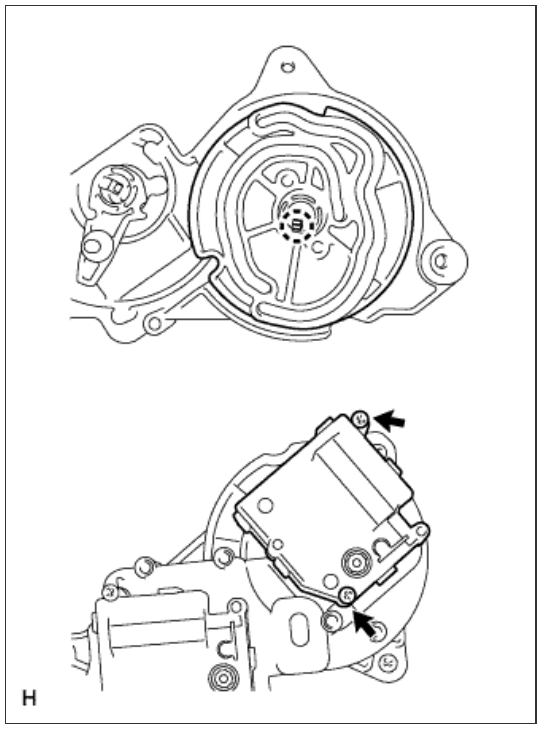


b. Install the rear mode control servo motor.

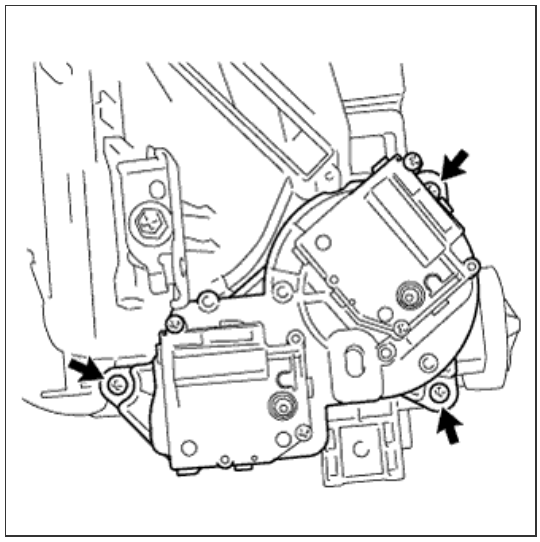
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

c. Set the damper servo so that the cutout part engages with the tooth of the gear, and attach the claw to install the servo motor unit.



d. Install the 3 screws.

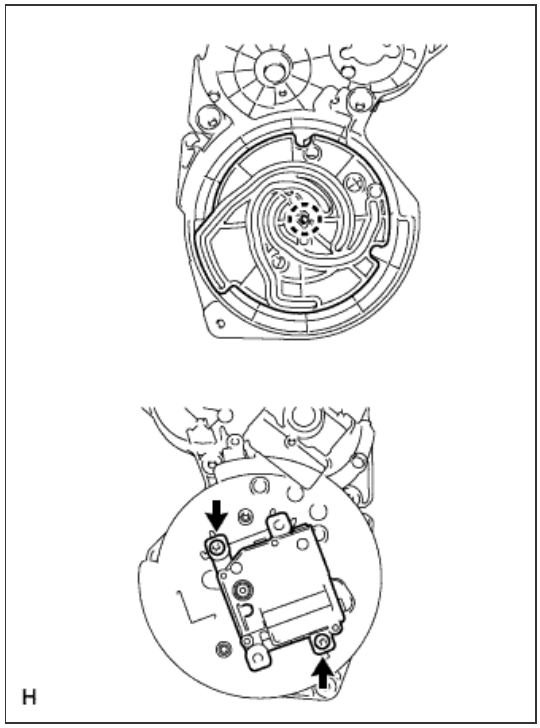


4. INSTALL SERVO MOTOR

a. Install the front air mix damper control servo motor LH.

i. Attach the claw to install the plate and servo motor.

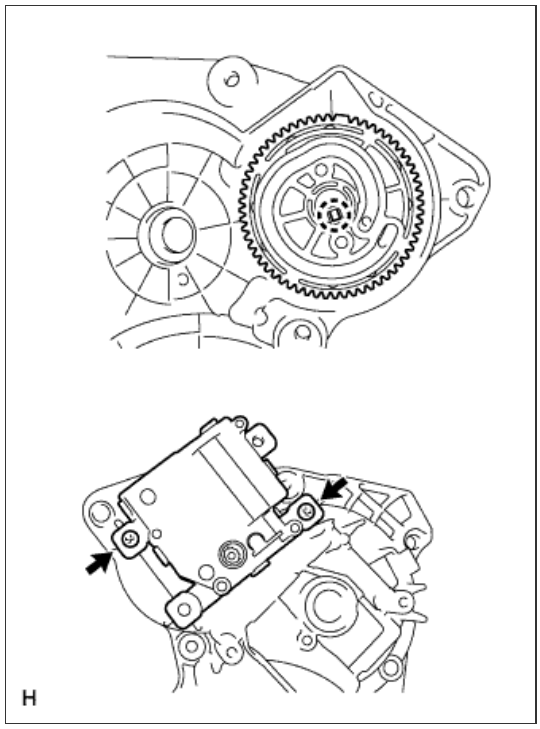
ii. Install the 2 screws.



b. Install the front mode control servo motor LH.

i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

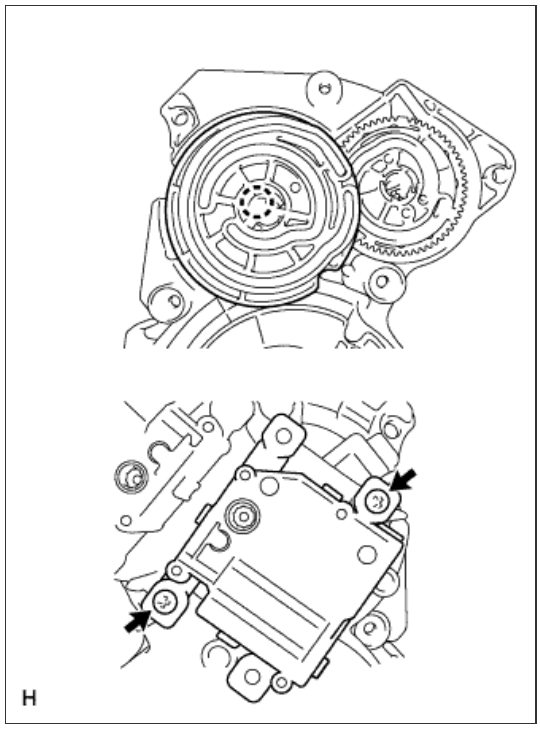


c. Install the control air bypass damper control servo motor LH.

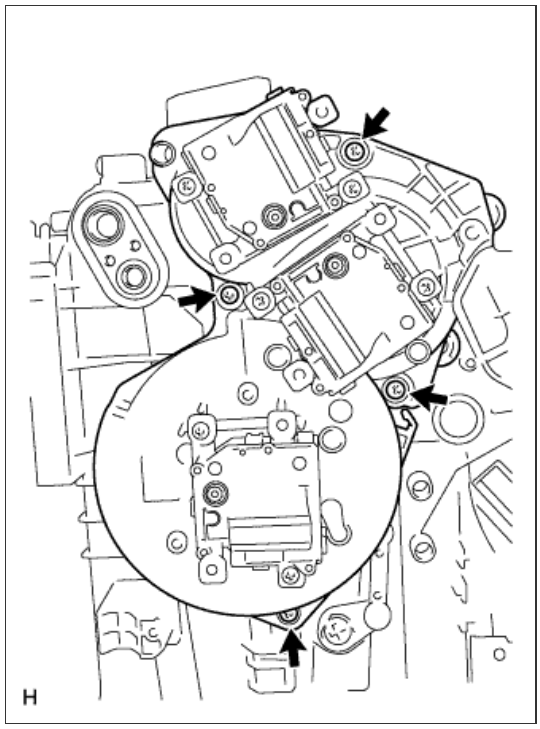
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

d. Set the damper servo so that the cutout part engages with the tooth of the gear, and attach the claw to install the servo motor unit.

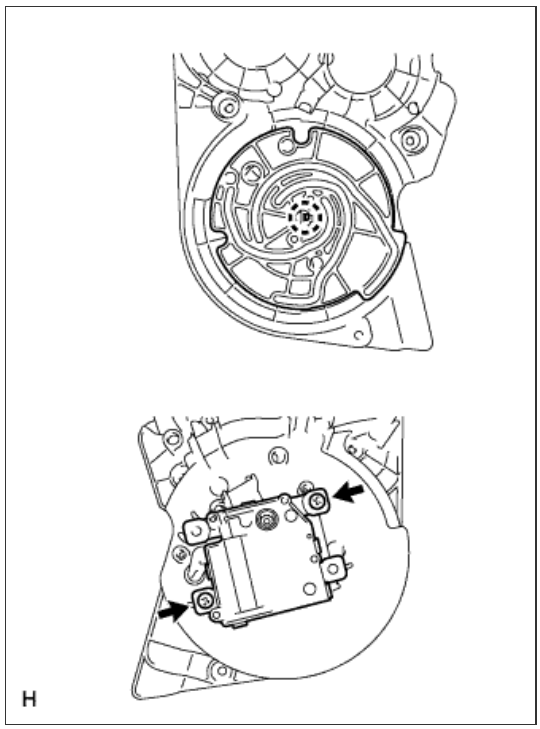


e. Install the 4 screws.



5. INSTALL SERVO MOTOR

a. Install the front air mix damper control servo motor RH.



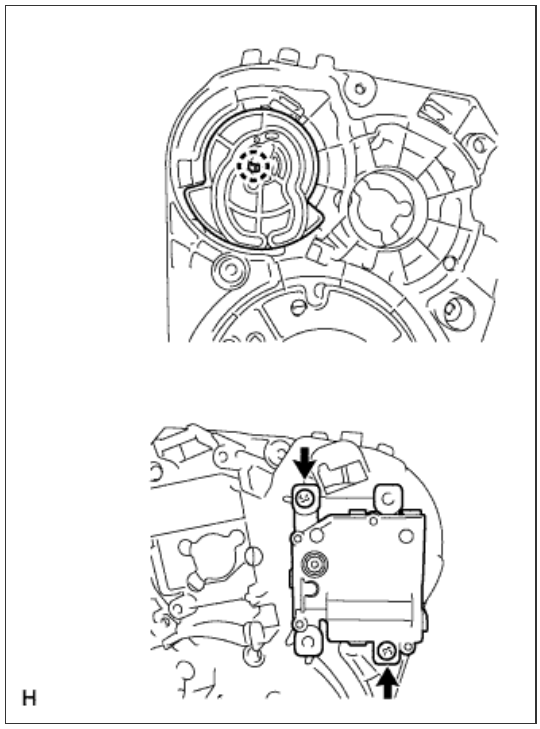
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

b. Install the control air bypass damper control servo motor RH.

i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

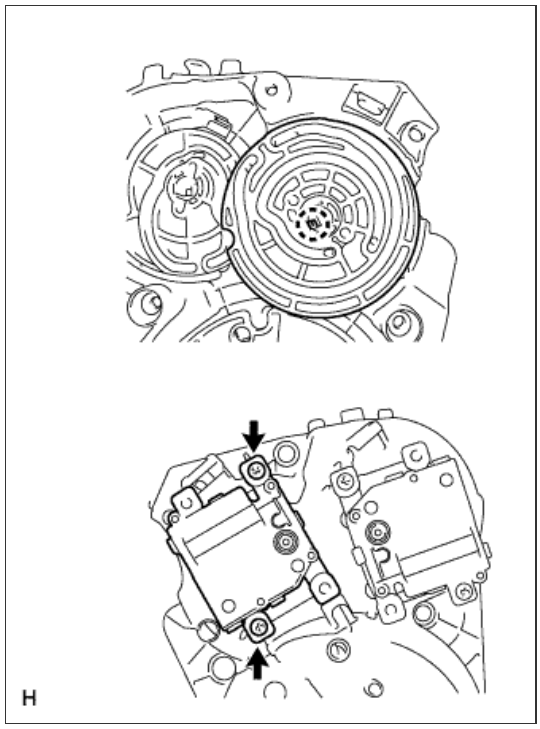


c. Install the front mode control servo motor RH.

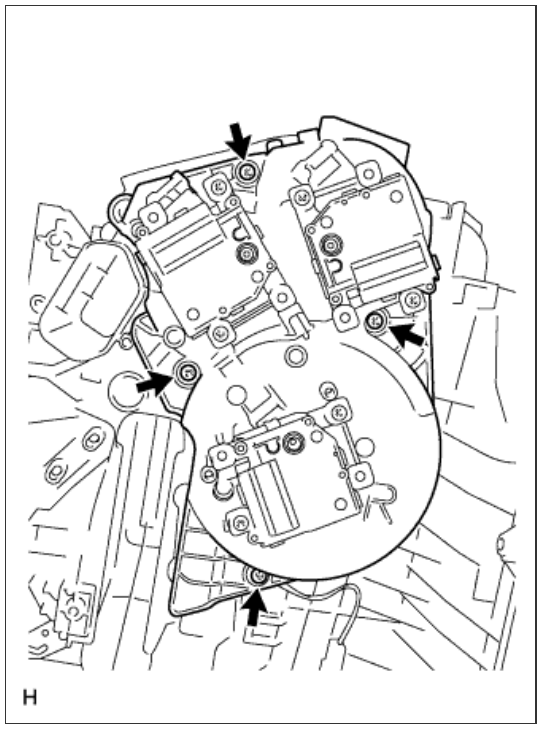
i. Attach the claw to install the plate and servo motor.

ii. Install the 2 screws.

d. Set the damper servo so that the cutout part engages with the tooth of the gear, and attach the claw to install the servo motor unit.

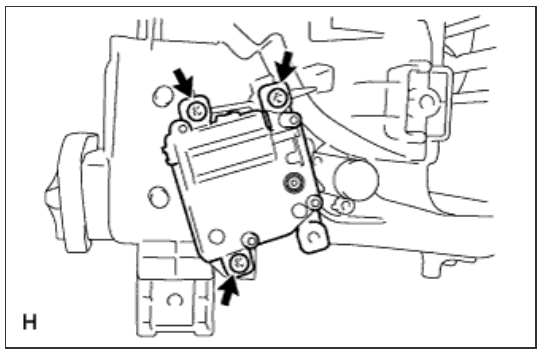


e. Install the 4 screws.



6. INSTALL REAR AIR MIX DAMPER CONTROL SERVO MOTOR RH

a. Install the servo motor with the 3 screws.



7. INSTALL COOLER EXPANSION VALVE (w/o Cool Box)

a. Sufficiently apply compressor oil to 4 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

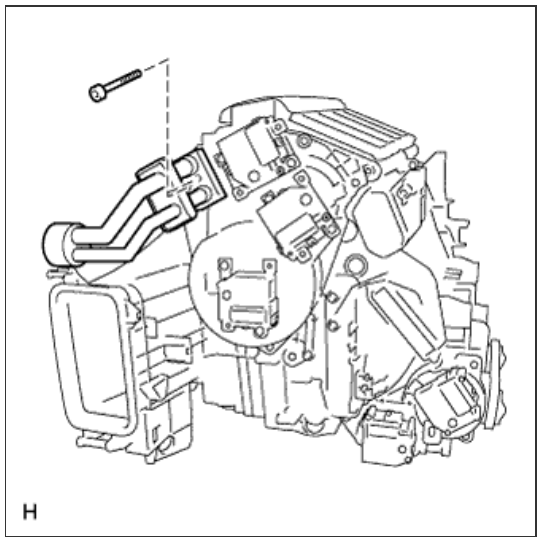
b. Install 2 O-rings to the cooler evaporator.

c. Install 2 O-rings to the air conditioner tube and accessory assembly.

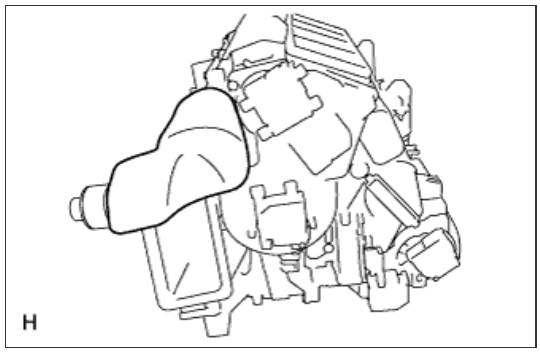
d. Install the cooler expansion valve and air conditioner tube and accessory assembly to the evaporator.

e. Using a 4 mm hexagon wrench, install the 2 bolts.

Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }



f. Install new packing.



8. INSTALL AIR CONDITIONER TUBE AND ACCESSORY ASSEMBLY (w/ Cool Box)

a. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

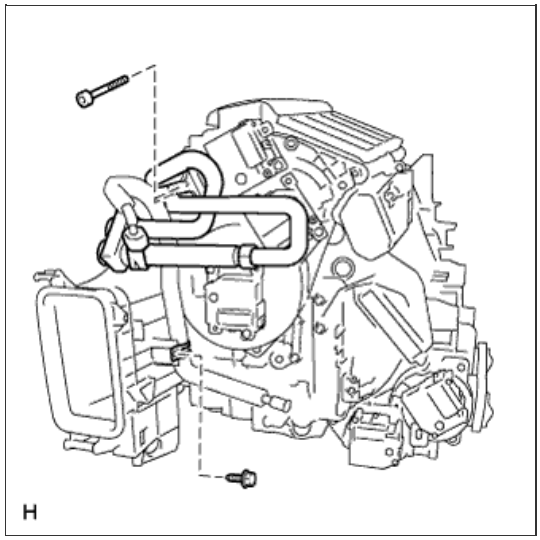
b. Install the 2 O-rings to the air conditioner tube and accessory assembly.

c. Install the air conditioner tube and accessory assembly to the evaporator.

d. Using a 4 mm hexagon wrench, install the 2 hexagon bolts.

Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }

e. Install the bracket with the screw.



9. INSTALL COOLER EXPANSION VALVE (w/ Cool Box)

a. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

b. Install the 2 O-rings to the No. 2 connector tube.

c. Install the No. 2 connector tube, expansion valve and No. 3 connector tube.

d. Using a 4 mm hexagon wrench, install the 2 hexagon bolts.

Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }



e. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

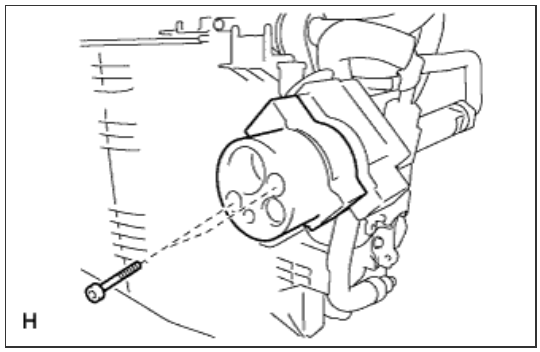
Compressor oil:
ND-OIL 8 or equivalent

f. Install the 2 O-rings to the No. 1 connector tube.

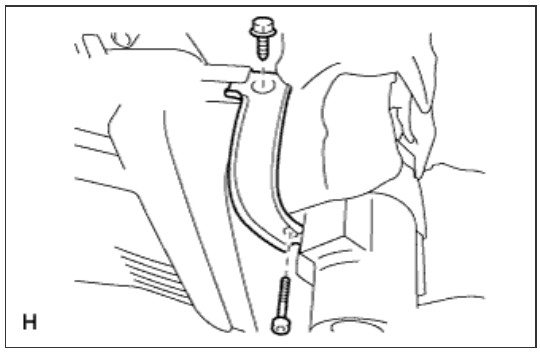
g. Install the No. 1 connector tube.

h. Using a 4 mm hexagon wrench, install the 2 hexagon bolts.

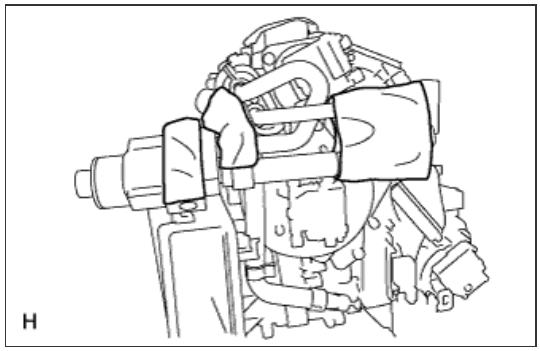
Torque:
3.5 N*m{ 36 kgf*cm , 31 in.*lbf }



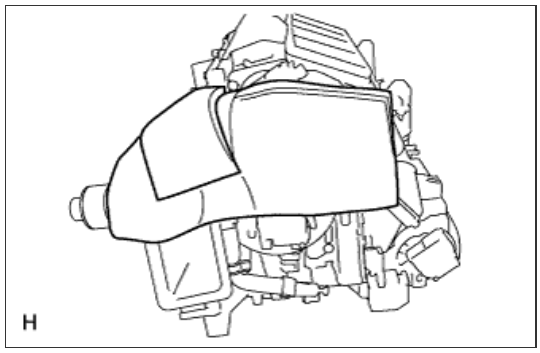
i. Using a 4 mm hexagon wrench, install the bracket with the hexagon bolt and screw.



j. Install new butyl tape.



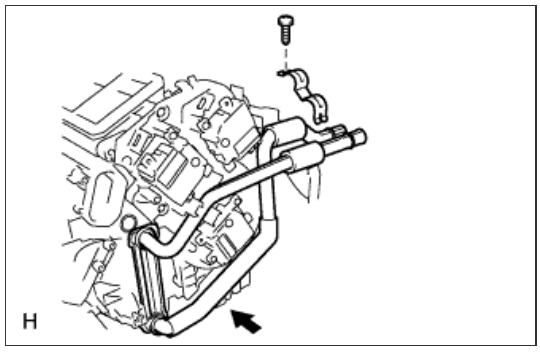
k. Install new packing.



10. INSTALL AIR CONDITIONING RADIATOR ASSEMBLY

a. Install the radiator.

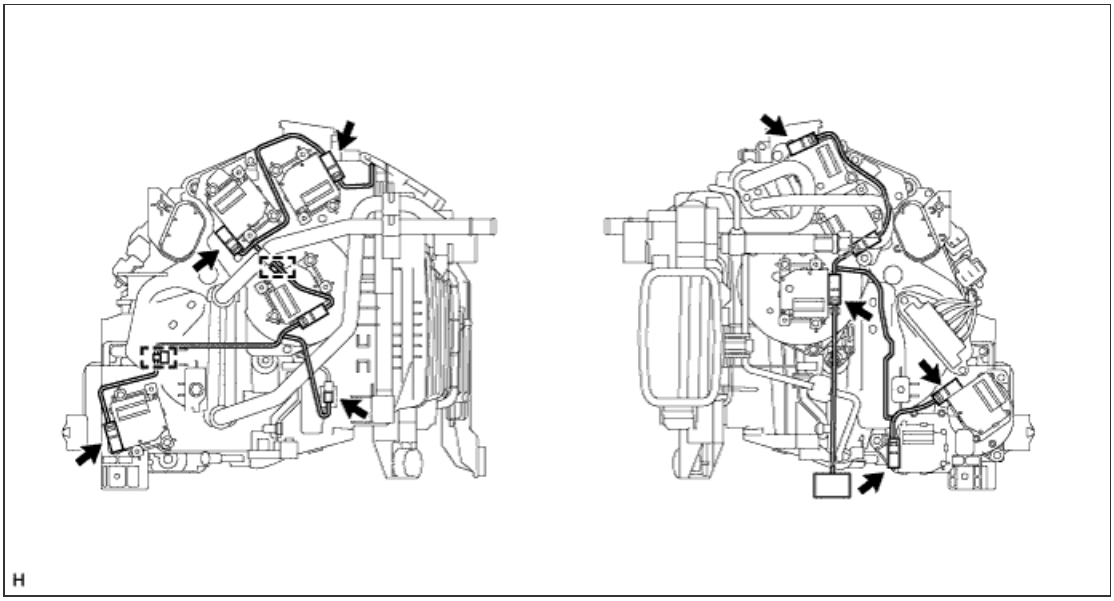
b. Install the bracket with the screw.



11. INSTALL AIR CONDITIONER HARNESS

a. Attach the clamps to install the harness.

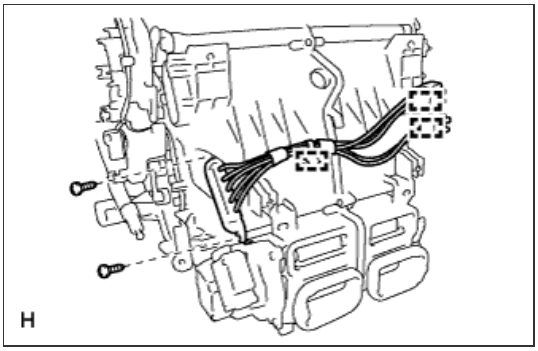
b. Connect the connectors.



12. INSTALL QUICK HEATER ASSEMBLY (w/ PTC Heater)

a. Install the quick heater with the 2 screws.

b. Attach the 3 clamps.



13. INSTALL COOL BOX LIQUID TUBE (w/ Cool Box)

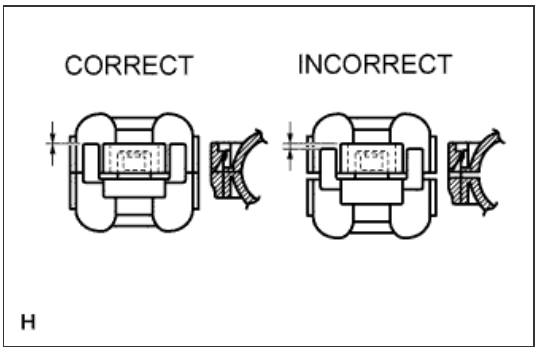
a. Lubricate 2 new O-rings with compressor oil and install them to the liquid tube.

Compressor oil:
ND-OIL 8 or equivalent

b. Connect the liquid tube with the piping clamp.

NOTICE:

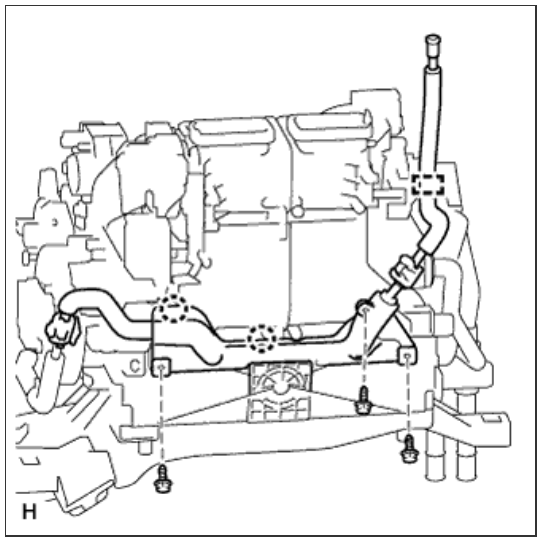
After connection, check the claw engagement of the piping clamp.



c. Attach the clamp.

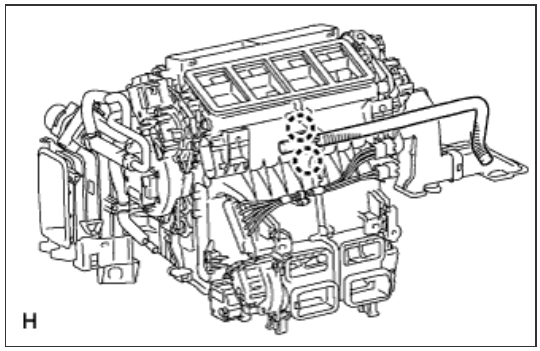
d. Attach the 2 claws to install the protective cover.

e. Install the 3 screws.



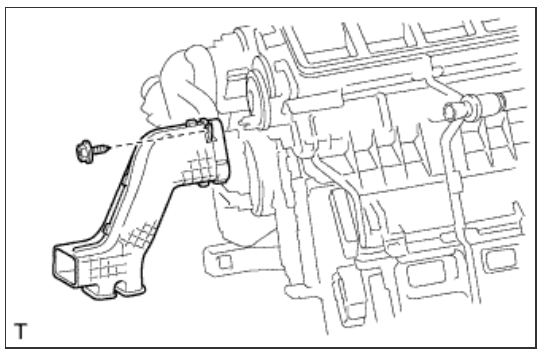
14. INSTALL ASPIRATOR

a. Attach the 2 claws to install the aspirator.



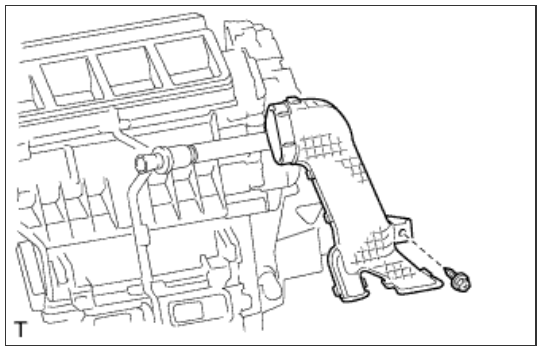
15. INSTALL NO. 4 AIR DUCT SUB-ASSEMBLY

a. Install the duct with the screw.



16. INSTALL NO. 5 AIR DUCT SUB-ASSEMBLY

a. Install the duct with the screw.

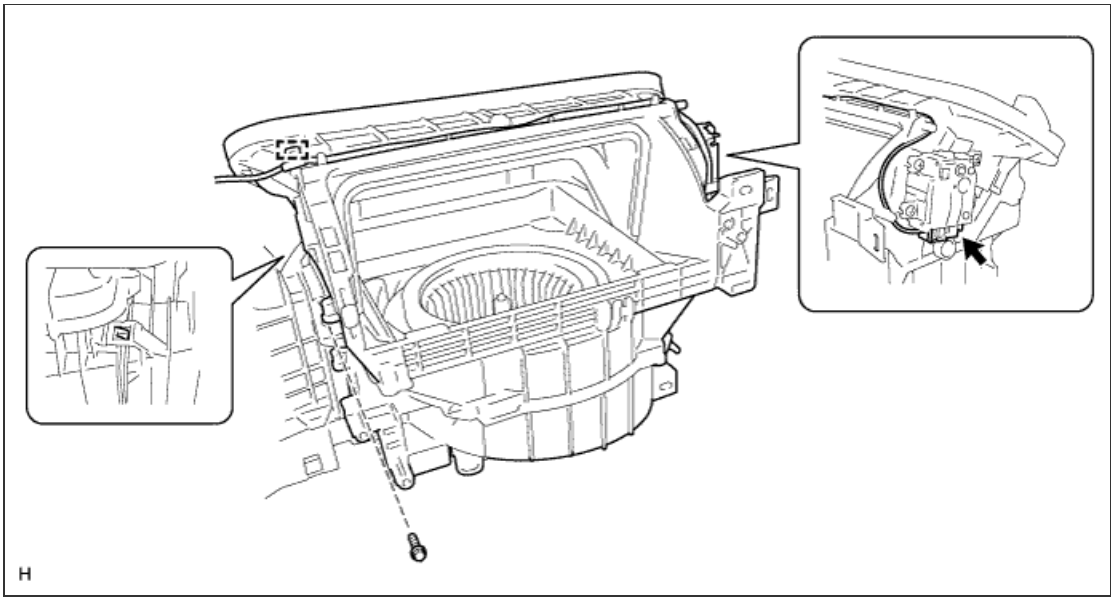


17. INSTALL BLOWER ASSEMBLY

a. Attach the claw to install the blower unit.

b. Connect the connector and clamp.

c. Install the screw.

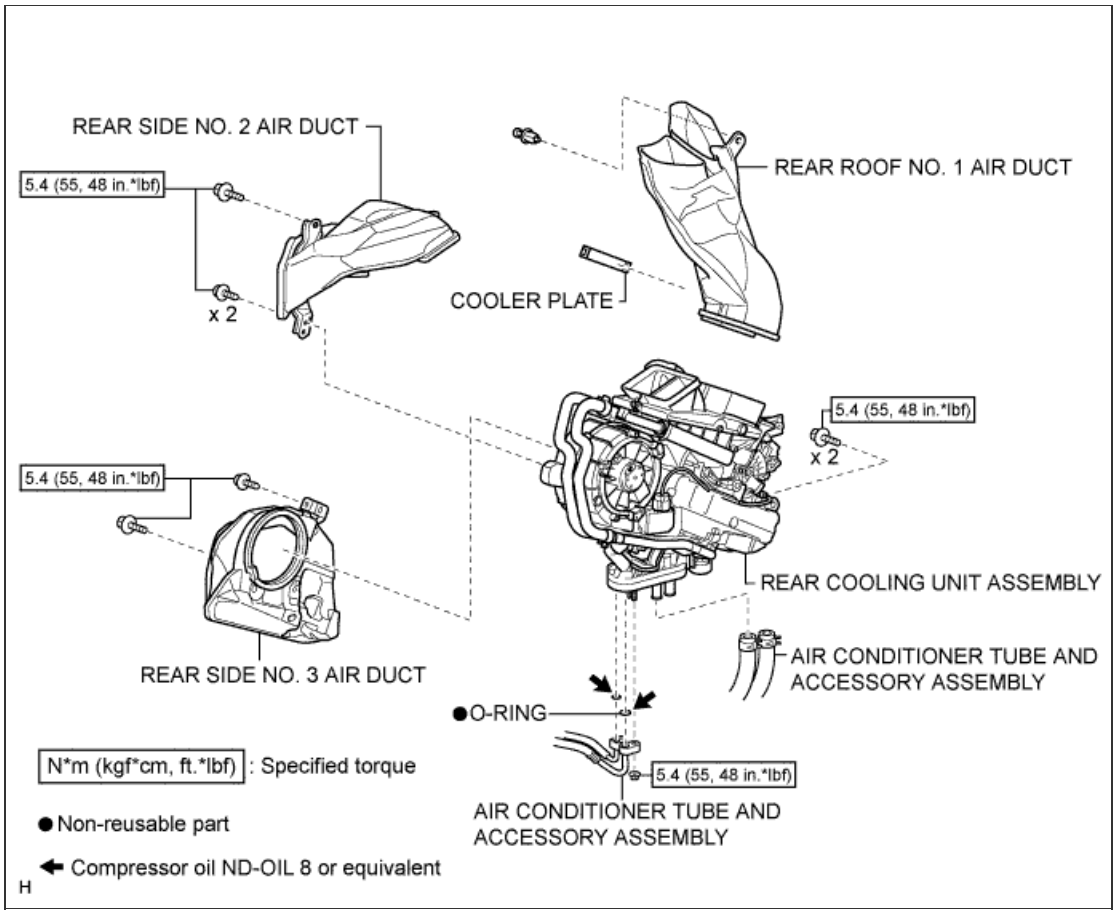


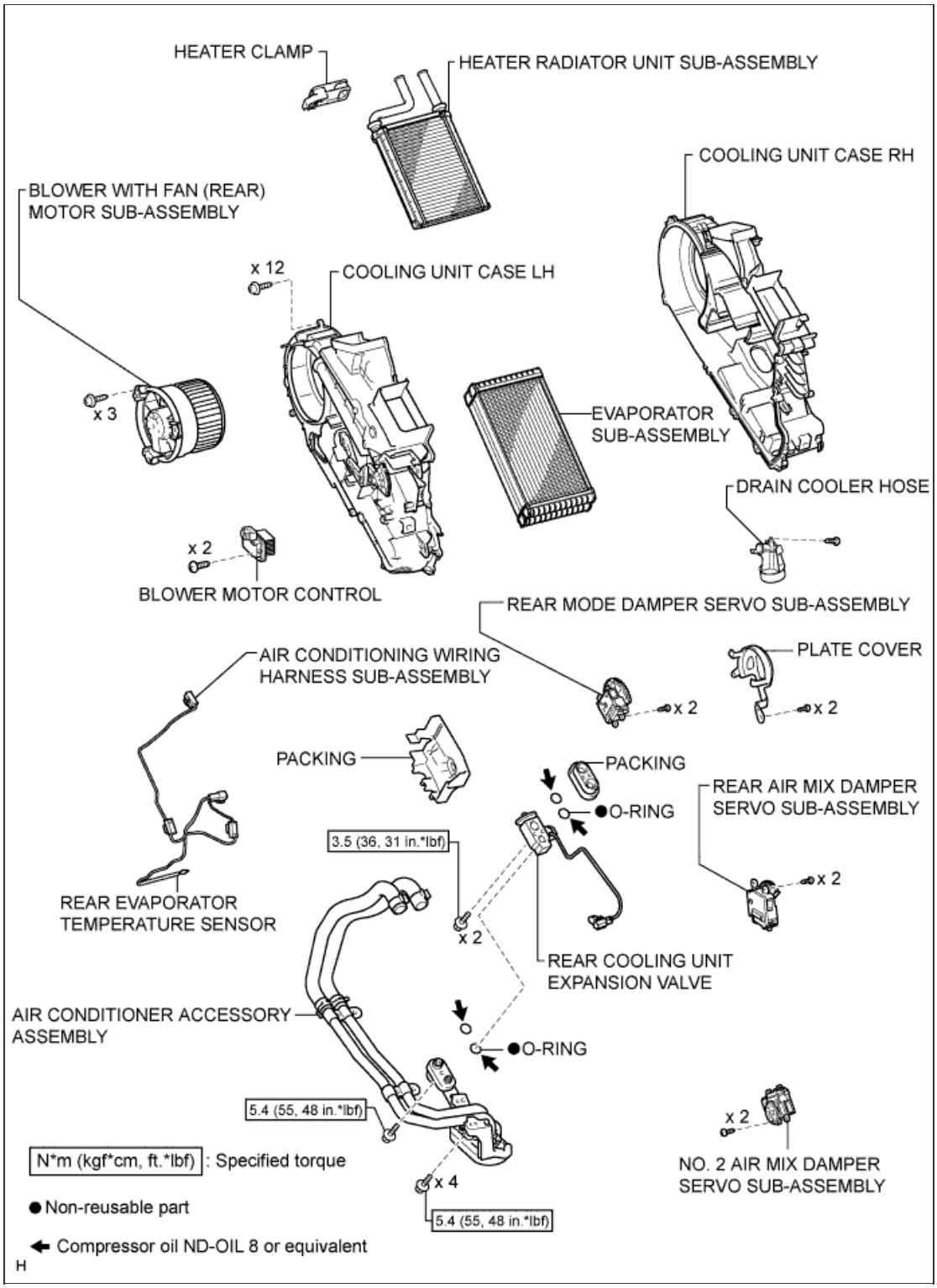
for Preparation Click here

1. INSTALL AIR CONDITIONING UNIT ASSEMBLY

a. Install the air conditioning unit assembly (Click here).

for Preparation Click here




HEATER CLAMP
HEATER RADIATOR UNIT SUB-ASSEMBLY
COOLING UNIT CASE RH
BLOWER WITH FAN (REAR) MOTOR SUB-ASSEMBLY
x 12
COOLING UNIT CASE LH
x 3
EVAPORATOR SUB-ASSEMBLY
DRAIN COOLER HOSE
x 2
BLOWER MOTOR CONTROL
REAR MODE DAMPER SERVO SUB-ASSEMBLY
PLATE COVER
AIR CONDITIONING WIRING HARNESS SUB-ASSEMBLY
x 2
x 2
PACKING
PACKING
O-RING
REAR AIR MIX DAMPER SERVO SUB-ASSEMBLY
3.5 (36, 31 in.*lbf)
x 2
REAR EVAPORATOR TEMPERATURE SENSOR
REAR COOLING UNIT EXPANSION VALVE
AIR CONDITIONER ACCESSORY ASSEMBLY
O-RING
5.4 (55, 48 in.*lbf)
x 2
NO. 2 AIR MIX DAMPER SERVO SUB-ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
x 4
Non-reusable part
5.4 (55, 48 in.*lbf)
Compressor oil ND-OIL 8 or equivalent
H

for Preparation Click here

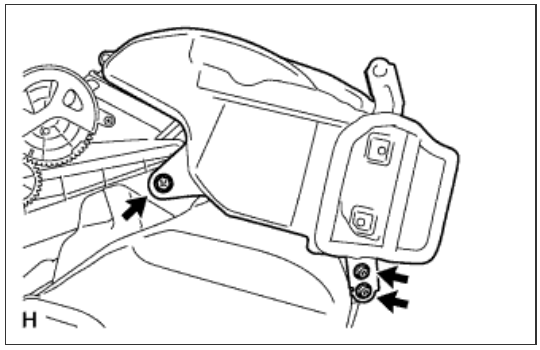
1. REMOVE REAR COOLING UNIT ASSEMBLY

a. Remove the rear cooling unit assembly (Click here).

for Preparation Click here

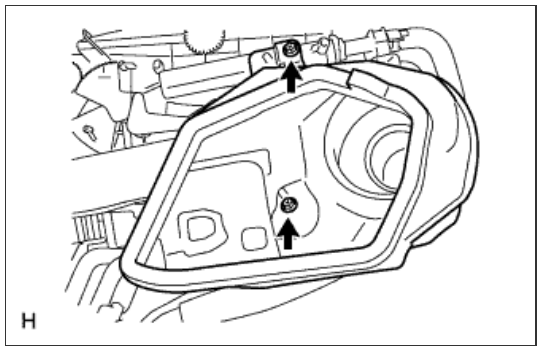
1. REMOVE REAR SIDE NO. 2 AIR DUCT

a. Remove the 3 screws and duct.



2. REMOVE REAR SIDE NO. 3 AIR DUCT

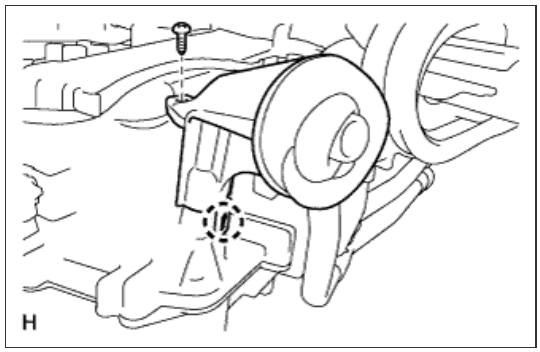
a. Remove the 2 screws and duct.



3. REMOVE DRAIN COOLER HOSE

a. Remove the screw.

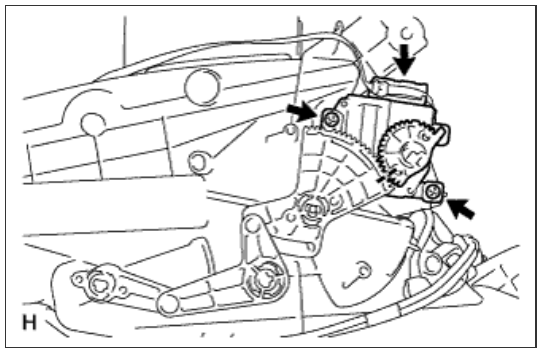
b. Detach the claw and remove the drain hose.



4. REMOVE REAR AIR MIX DAMPER SERVO SUB-ASSEMBLY

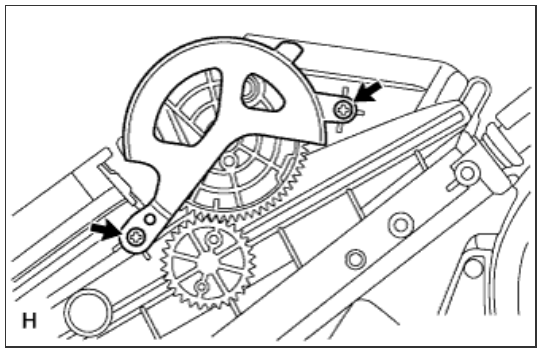
a. Disconnect the connector.

b. Remove the 2 screws and damper servo.



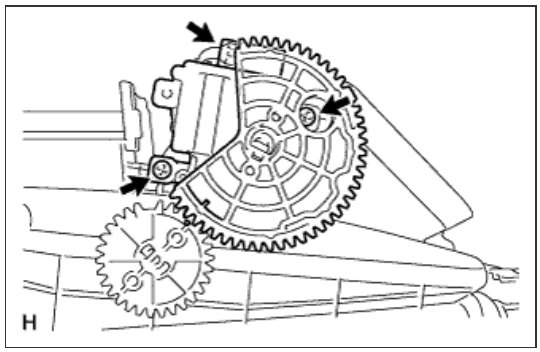
5. REMOVE REAR MODE DAMPER SERVO SUB-ASSEMBLY

a. Remove the 2 screws and plate cover.



b. Disconnect the connector.

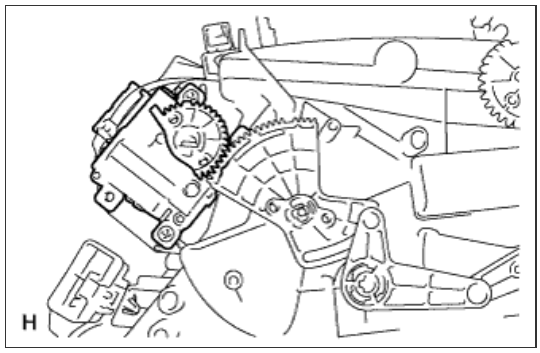
c. Remove the 2 screws and damper servo.



6. REMOVE NO. 2 AIR MIX DAMPER SERVO SUB-ASSEMBLY

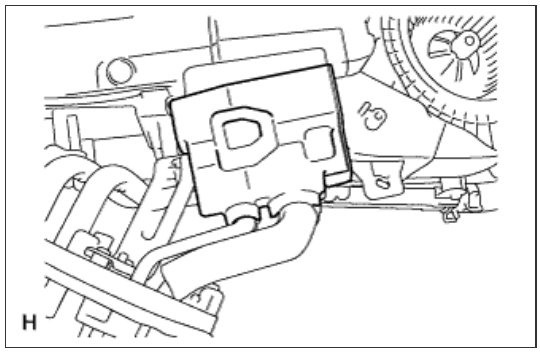
a. Disconnect the connector.

b. Remove the 2 screws and damper servo.



7. REMOVE AIR CONDITIONER ACCESSORY ASSEMBLY

a. Remove the packing.

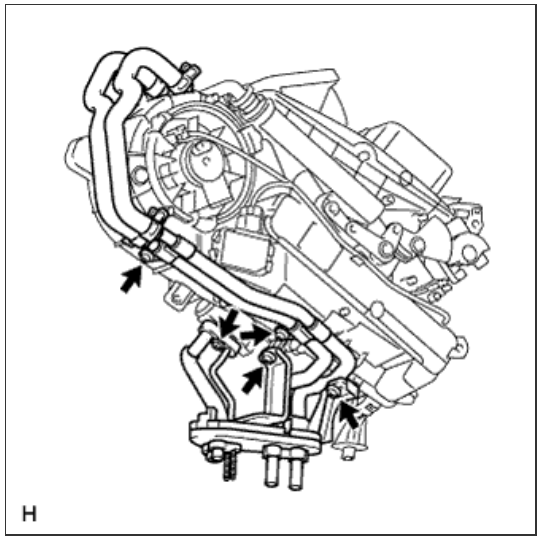


b. Remove the bolt and 4 screws.

c. Using pliers, grip the claws of the clips and slide the 2 clips.

d. Remove the air conditioner accessory assembly.

e. Remove the 2 O-rings from the air conditioner accessory assembly.

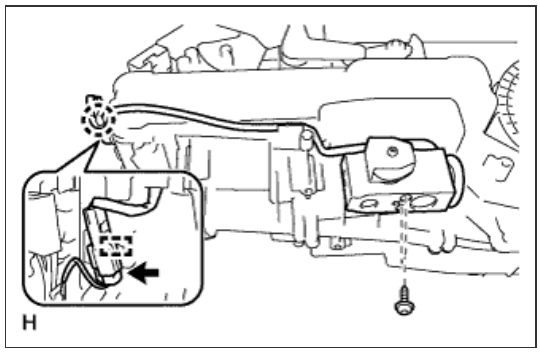


8. REMOVE REAR COOLING UNIT EXPANSION VALVE

a. Disconnect the connector.

b. Detach the clamp.

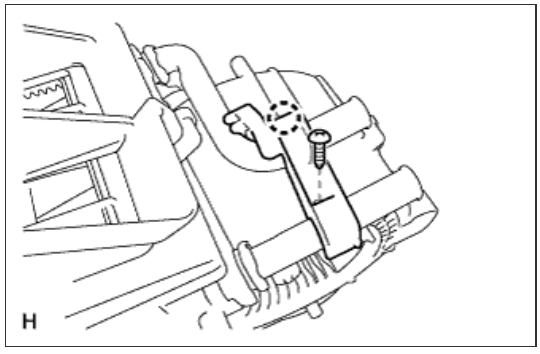
c. Using a 4 mm hexagon wrench, remove the 2 hexagon bolts and expansion valve.



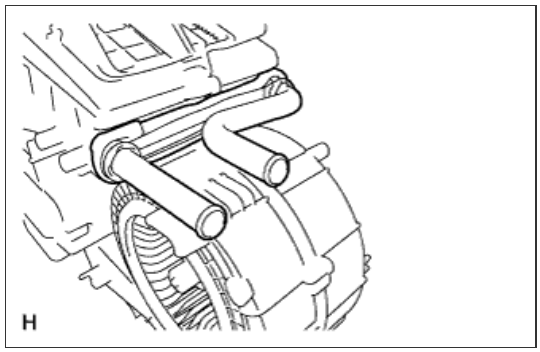
9. REMOVE HEATER RADIATOR UNIT SUB-ASSEMBLY

a. Remove the screw and detach the claw.

b. Remove the heater clamp.



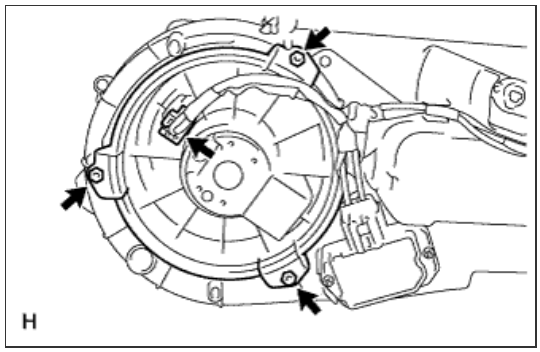
c. Remove the heater radiator unit.



10. REMOVE BLOWER WITH FAN (REAR) MOTOR SUB-ASSEMBLY

a. Disconnect the connector.

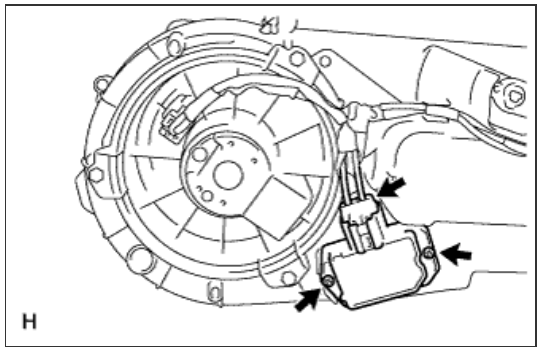
b. Remove the 3 screws and blower motor.



11. REMOVE BLOWER MOTOR CONTROL

a. Disconnect the connector.

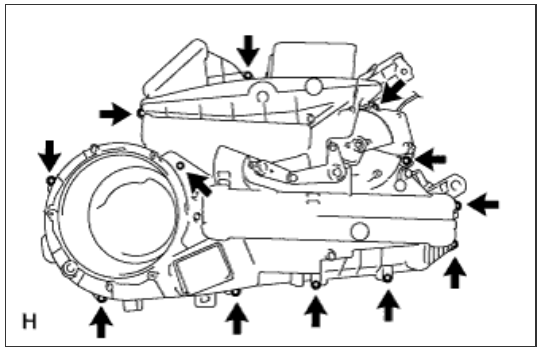
b. Remove the 2 screws and blower motor control.



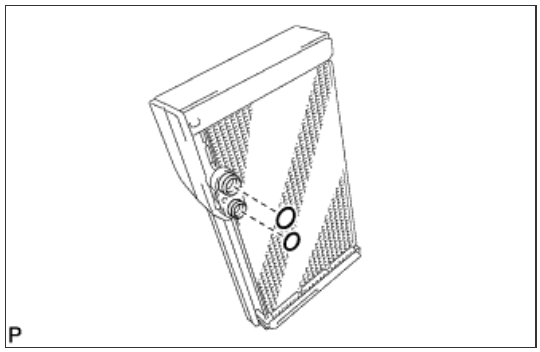
12. REMOVE EVAPORATOR SUB-ASSEMBLY

a. Remove the 12 screws and rear cooling unit case LH.

b. Remove the evaporator.

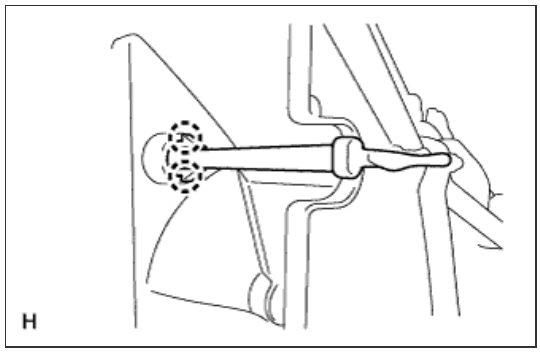


c. Remove the 2 O-rings from the evaporator.



13. REMOVE REAR EVAPORATOR TEMPERATURE SENSOR

a. Detach the 2 claws and remove the sensor.



for Preparation Click here

1. INSPECT REAR EVAPORATOR TEMPERATURE SENSOR

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
8 - 7	-10°C (14°F)	7.30 to 9.10 kΩ
	-5°C (23°F)	5.65 to 6.95 kΩ
	0°C (32°F)	4.40 to 5.35 kΩ
	5°C (41°F)	3.40 to 4.15 kΩ
	10°C (50°F)	2.70 to 3.25 kΩ
	15°C (59°F)	2.14 to 2.58 kΩ
	20°C (68°F)	1.71 to 2.05 kΩ
	25°C (77°F)	1.38 to 1.64 kΩ
	30°C (86°F)	1.11 to 1.32 kΩ

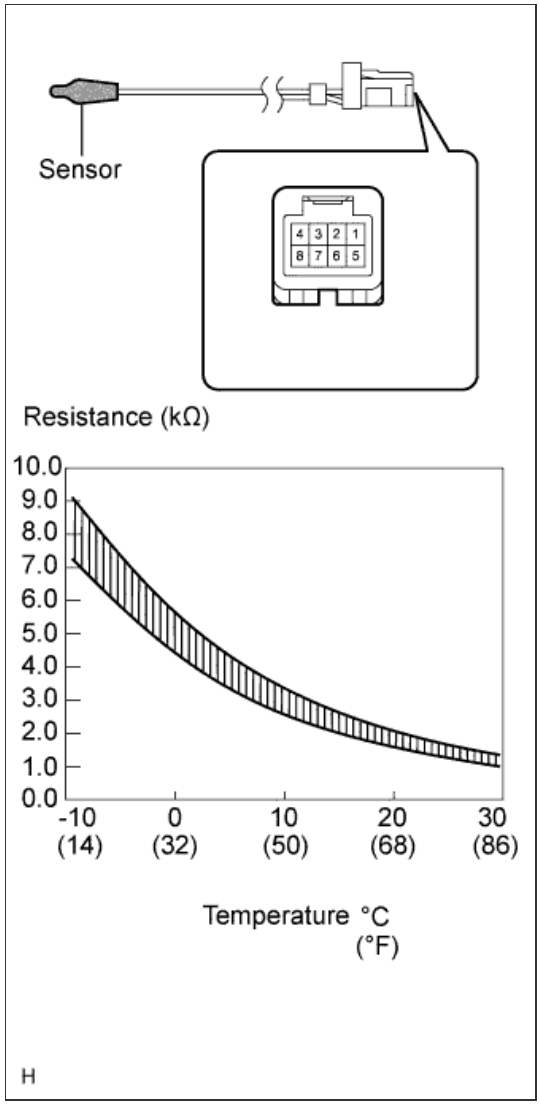
If the result is not as specified, replace the rear evaporator temperature sensor.

NOTICE:

- **Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.**
- **When measuring the sensor temperature must be the same as the ambient temperature.**

HINT:

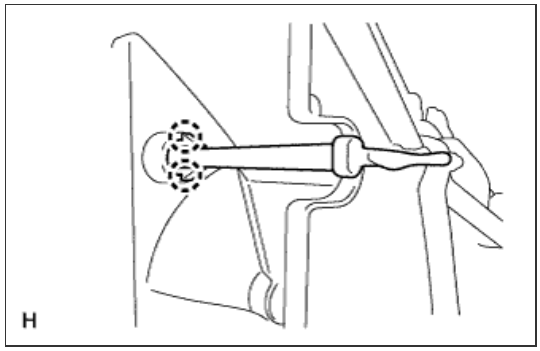
As the temperature increases, the resistance decreases (see the graph).



for Preparation Click here

1. INSTALL REAR EVAPORATOR TEMPERATURE SENSOR

a. Attach the 2 claws to install the sensor.



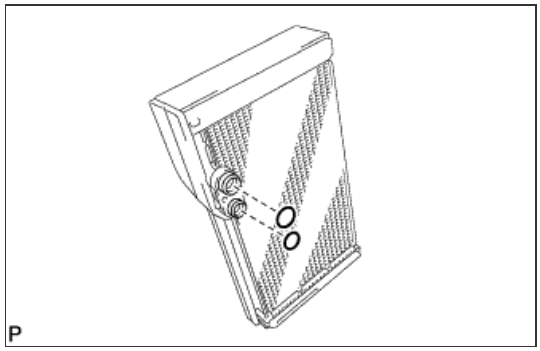
2. INSTALL EVAPORATOR SUB-ASSEMBLY

a. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

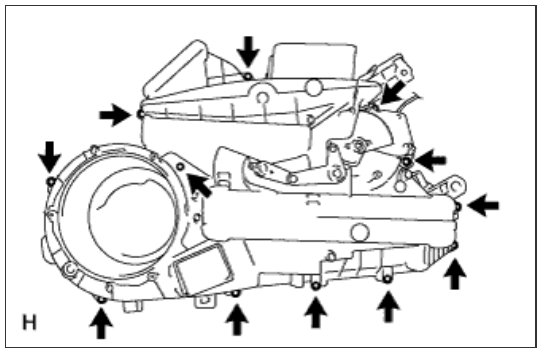
Compressor oil:
ND-OIL 8 or equivalent

b. Install the 2 O-rings to the evaporator.

c. Install the evaporator.



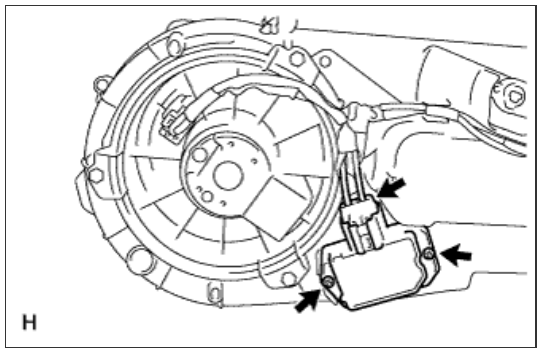
d. Install the rear cooling unit case LH with the 12 screws.



3. INSTALL BLOWER MOTOR CONTROL

a. Install the blower motor control with the 2 screws.

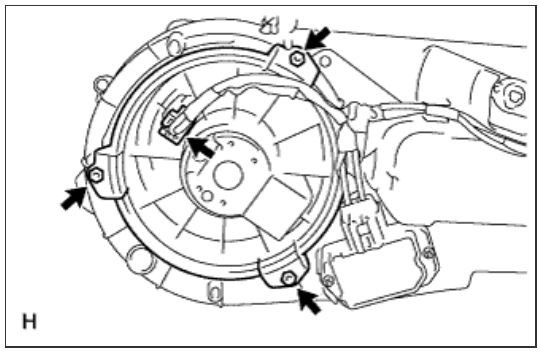
b. Connect the connector.



4. INSTALL BLOWER WITH FAN (REAR) MOTOR SUB-ASSEMBLY

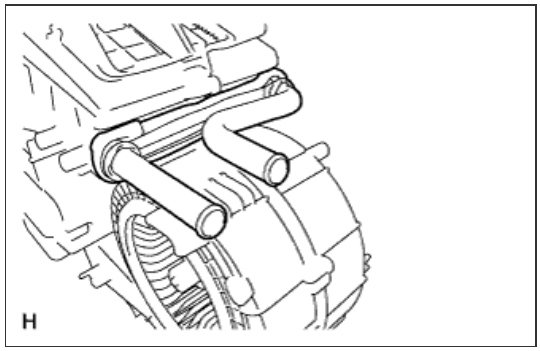
a. Install the blower motor with the 3 screws.

b. Connect the connector.

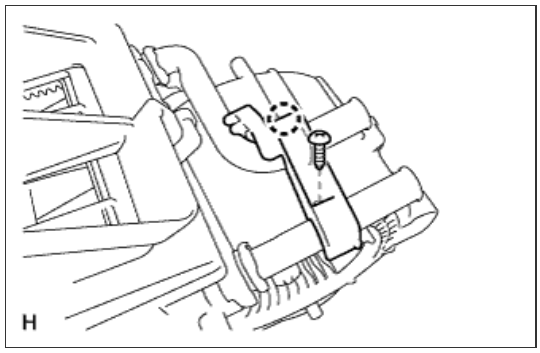


5. INSTALL HEATER RADIATOR UNIT SUB-ASSEMBLY

a. Install the heater radiator unit to the rear cooling unit.



b. Install the heater clamp with the screw and attach the claw.



6. INSTALL REAR COOLING UNIT EXPANSION VALVE

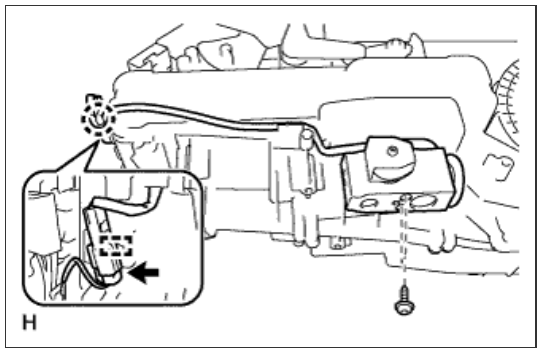
a. Using a 4 mm hexagon wrench, install the expansion valve with the 2 hexagon bolts.

Torque:

3.5 N*m{ 36 kgf*cm , 31 in.*lbf }

b. Attach the clamp.

c. Connect the connector.



7. INSTALL AIR CONDITIONER ACCESSORY ASSEMBLY

a. Sufficiently apply compressor oil to 2 new O-rings and the fitting surface of the hose joint.

Compressor oil:
ND-OIL 8 or equivalent

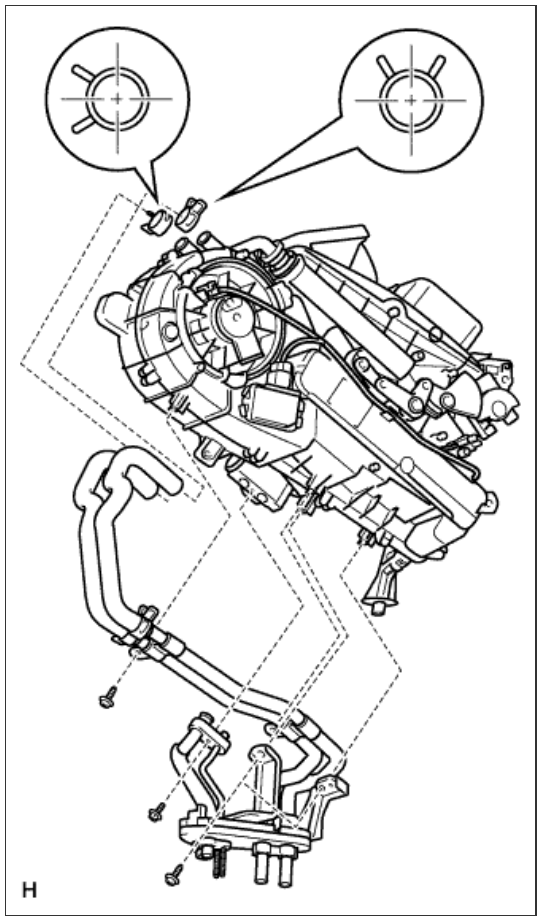
b. Install the 2 O-rings to the air conditioner accessory assembly.

c. Install the air conditioner accessory assembly.

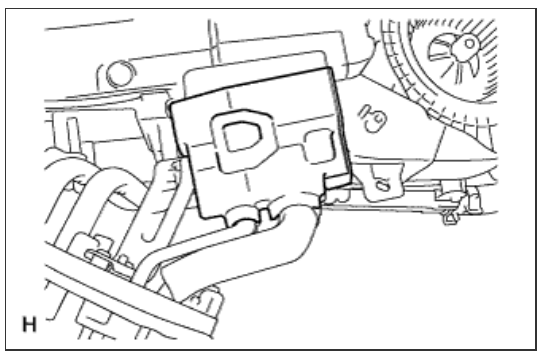
d. Using pliers, grip the claws of the clips and slide the 2 clips.

Torque:
5.4 N*m{ 55 kgf*cm , 48 in.*lbf }

e. Install the bolt and 4 screws.



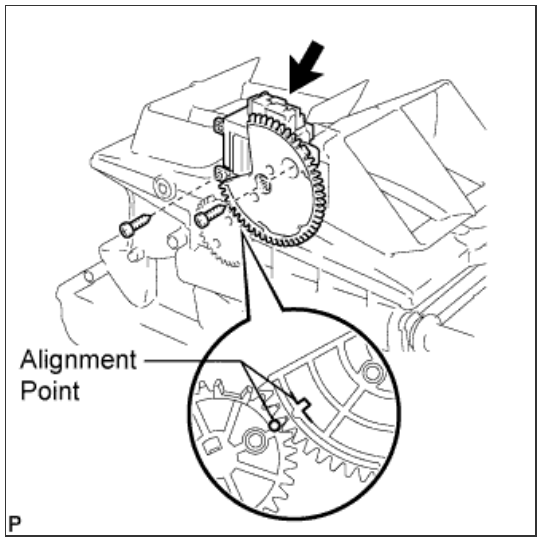
f. Install packing as shown in the illustration.



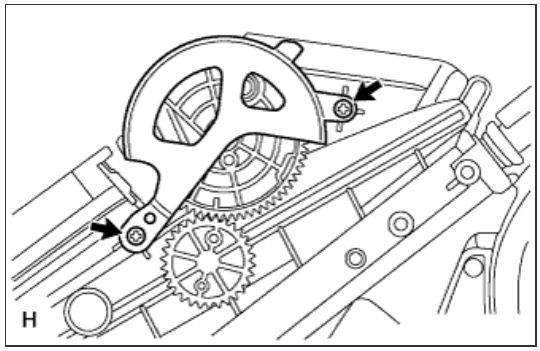
8. INSTALL REAR MODE DAMPER SERVO SUB-ASSEMBLY

a. Align the damper servo as shown in the illustration, and install it with the 2 screws.

b. Connect the connector.



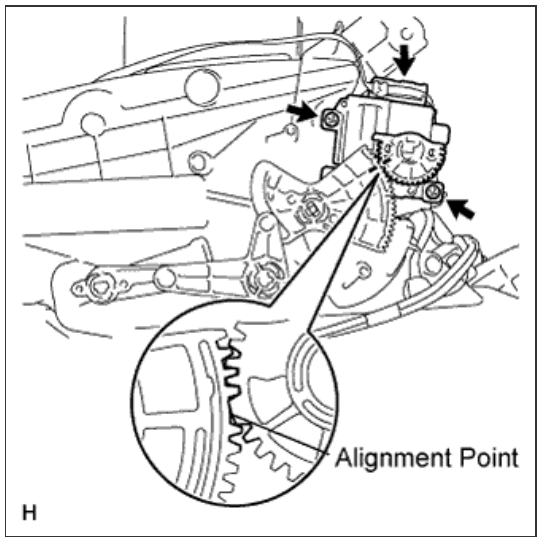
c. Install the plate cover with the 2 screws.



9. INSTALL NO. 2 AIR MIX DAMPER SERVO SUB-ASSEMBLY

a. Align the damper servo as shown in the illustration, and install it with the 2 screws.

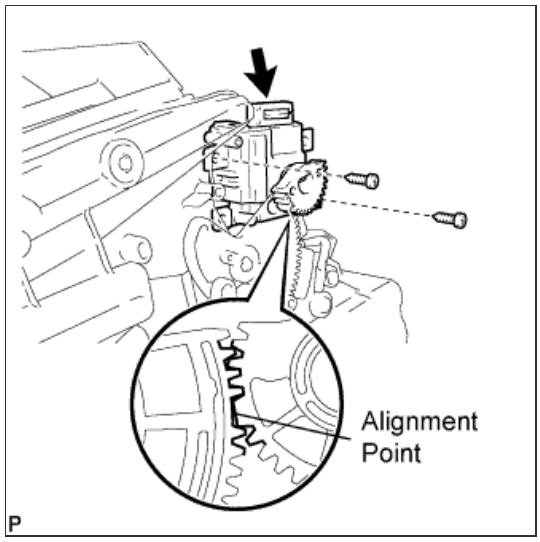
b. Connect the connector.



10. INSTALL REAR AIR MIX DAMPER SERVO SUB-ASSEMBLY

a. Align the damper servo as shown in the illustration, and install it with the 2 screws.

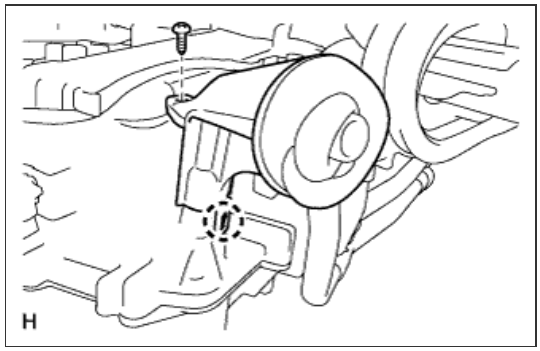
b. Connect the connector.



11. INSTALL DRAIN COOLER HOSE

a. Attach the claw to install the drain hose.

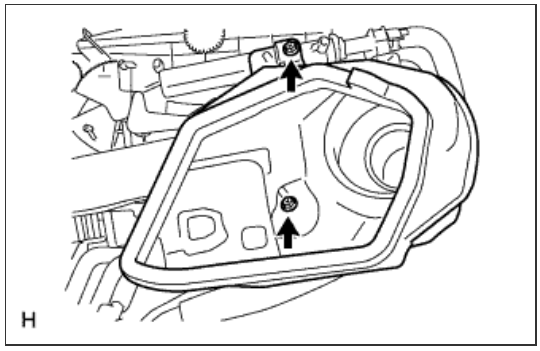
b. Install the screw.



12. INSTALL REAR SIDE NO. 3 AIR DUCT

a. Install the duct with the 2 screws.

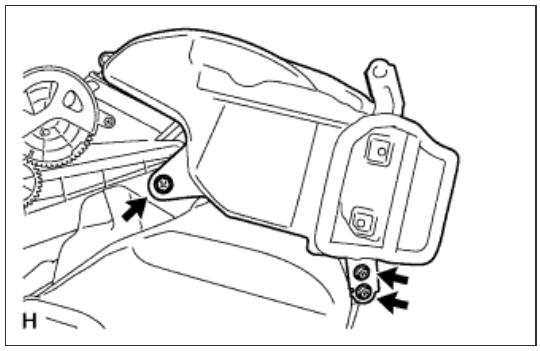
Torque:
5.4 N*m{ 55 kgf*cm , 48 in.*lbf }



13. INSTALL REAR SIDE NO. 2 AIR DUCT

a. Install the duct with the 3 screws.

Torque:
5.4 N*m{ 55 kgf*cm , 48 in.*lbf }

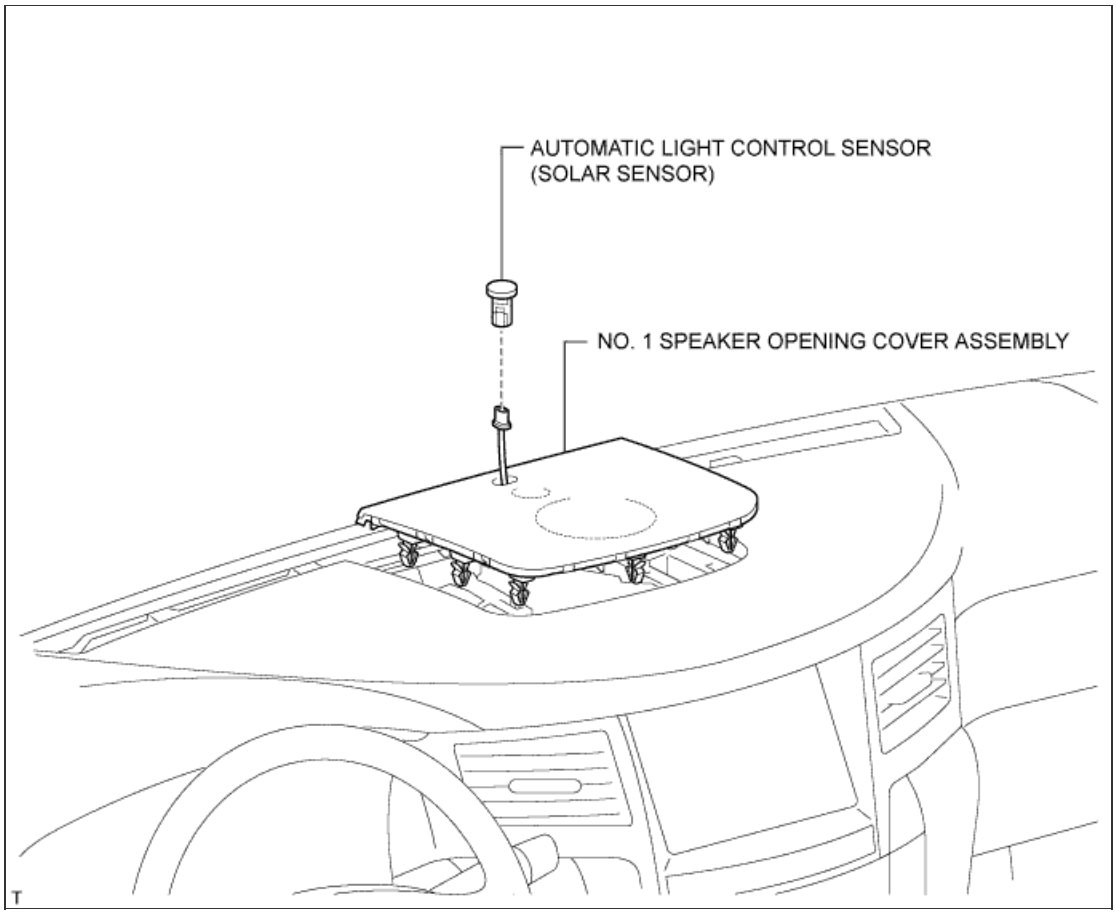

H

for Preparation Click here

1. INSTALL REAR COOLING UNIT ASSEMBLY

a. Install the rear cooling unit assembly (Click here).

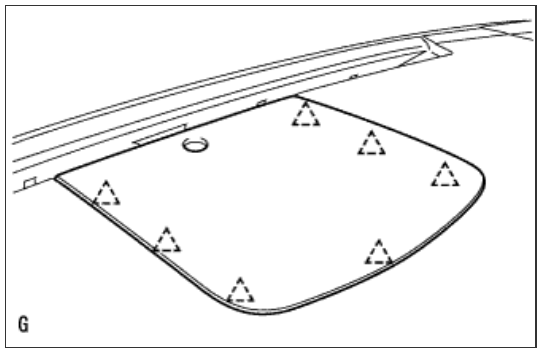
for Preparation Click here



for Preparation Click here

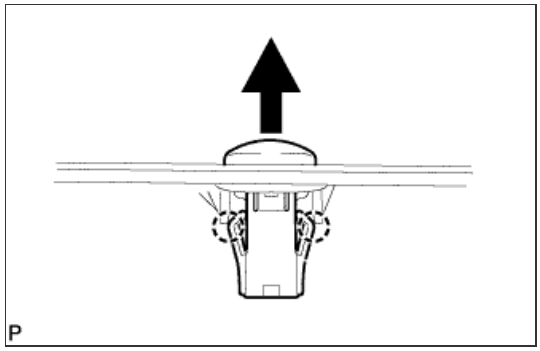
1. REMOVE NO. 1 SPEAKER OPENING COVER ASSEMBLY

a. Detach the 7 clips and remove the opening cover.



2. REMOVE AUTOMATIC LIGHT CONTROL SENSOR (SOLAR SENSOR)

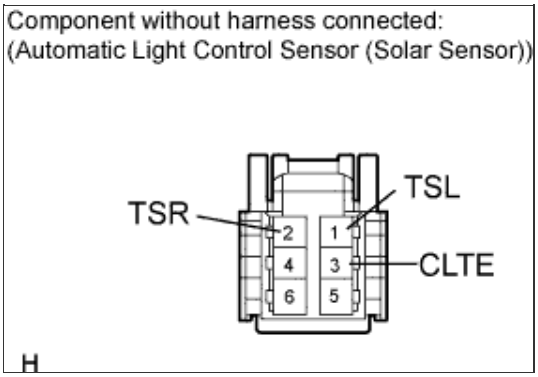
a. Detach the 2 claws and remove the sensor.



for Preparation Click here

1. INSPECT AUTOMATIC LIGHT CONTROL SENSOR (SOLAR SENSOR)

a. Connect the battery positive (+) lead to terminal 6 and the negative (-) lead to terminal 3, then measure the voltage according to the value(s) in the table below.



Standard Voltage:

Tester Connection	Condition	Specified Condition
1 (TSL) - 3 (CLTE)	Sensor subject to electric light	0.5 to 3.0 V
1 (TSL) - 3 (CLTE)	Sensor covered with a cloth	0.5 V or less
2 (TSR) - 3 (CLTE)	Sensor subject to electric light	0.5 to 3.0 V
2 (TSR) - 3 (CLTE)	Sensor covered with a cloth	0.8 V or less

If the result is not as specified, replace the automatic light control sensor.

NOTICE:

The connection procedure for using a digital tester such as a TOYOTA electrical tester is shown above.

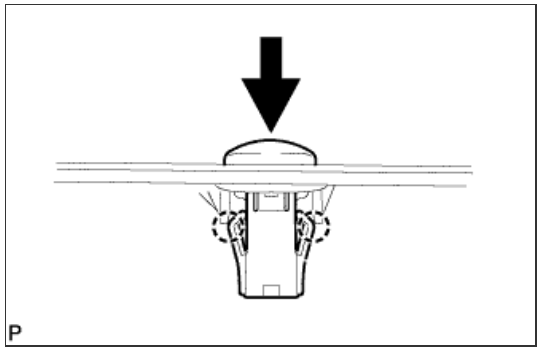
HINT:

- **As the inspection light is moved away from the sensor, the voltage increases.**
- **Use an incandescent lamp for inspection. Bring it within 30 cm (11.8 in.) of the A/C solar sensor.**

for Preparation Click here

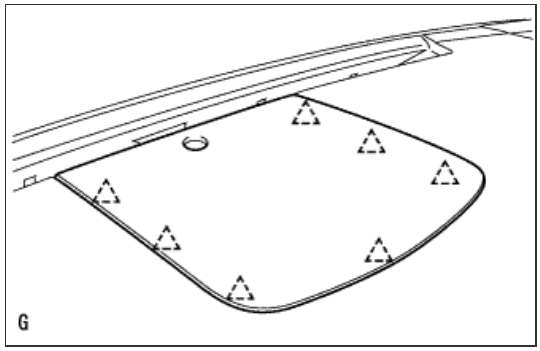
1. INSTALL AUTOMATIC LIGHT CONTROL SENSOR (SOLAR SENSOR)

a. Attach the 2 claws to install the sensor.

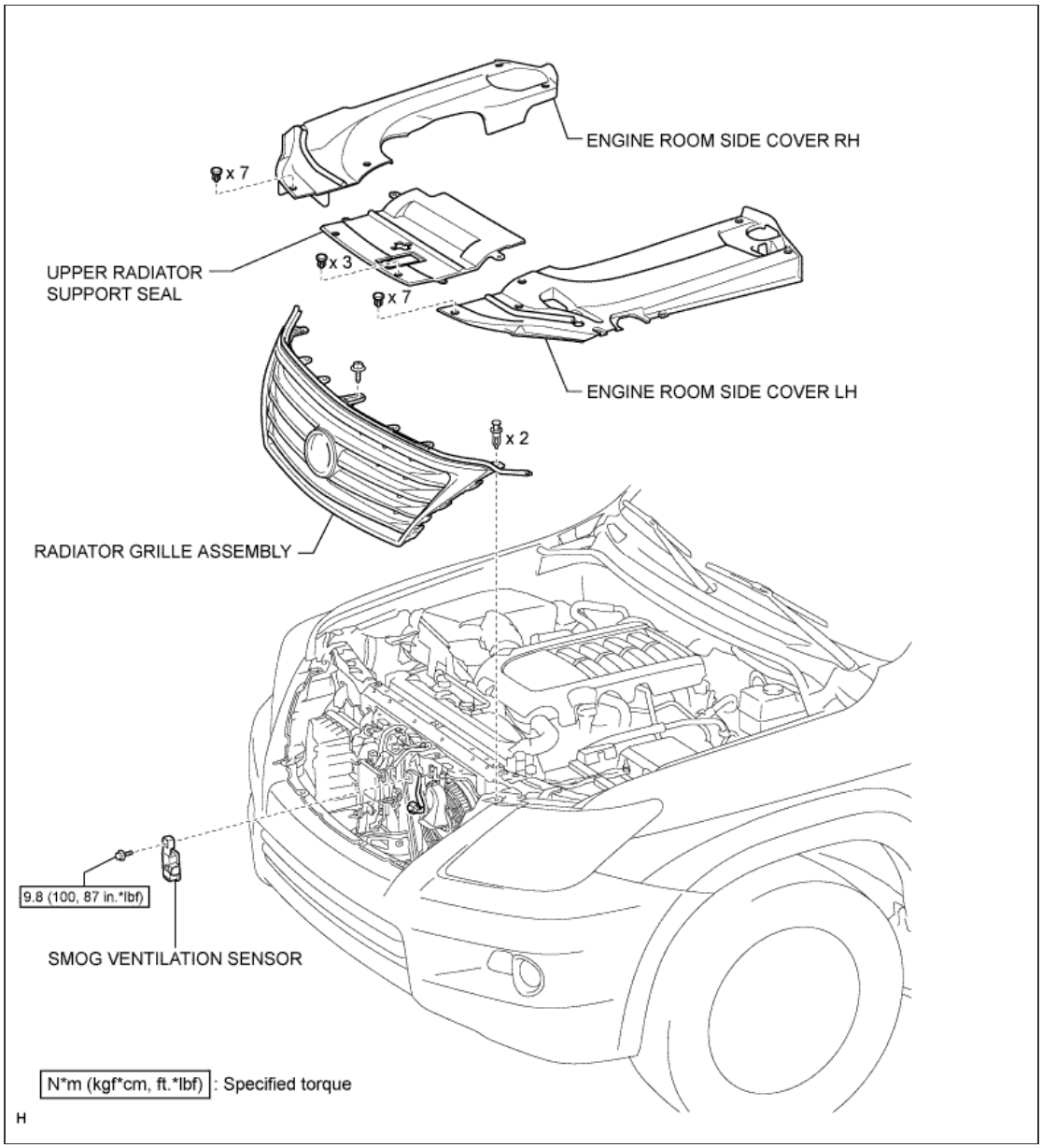


2. INSTALL NO. 1 SPEAKER OPENING COVER ASSEMBLY

a. Attach the 7 clips to install the opening cover.



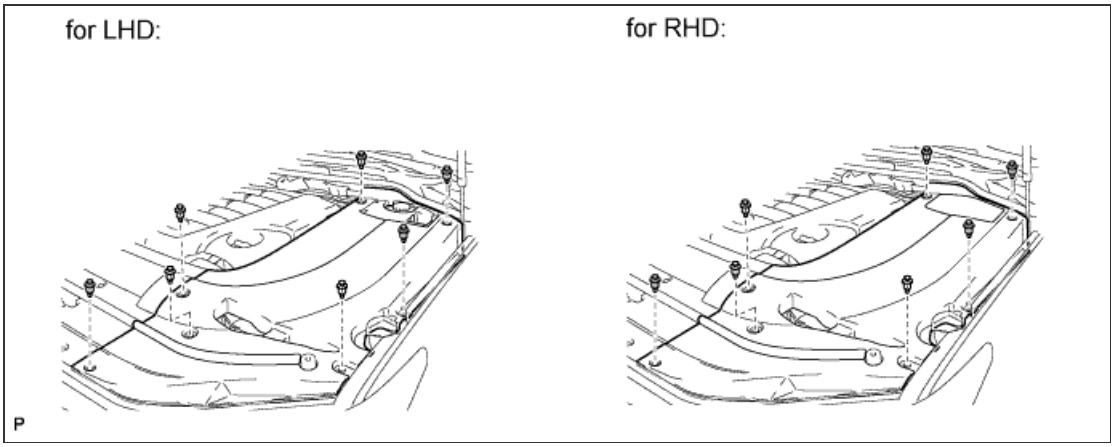
for Preparation Click here



for Preparation Click here

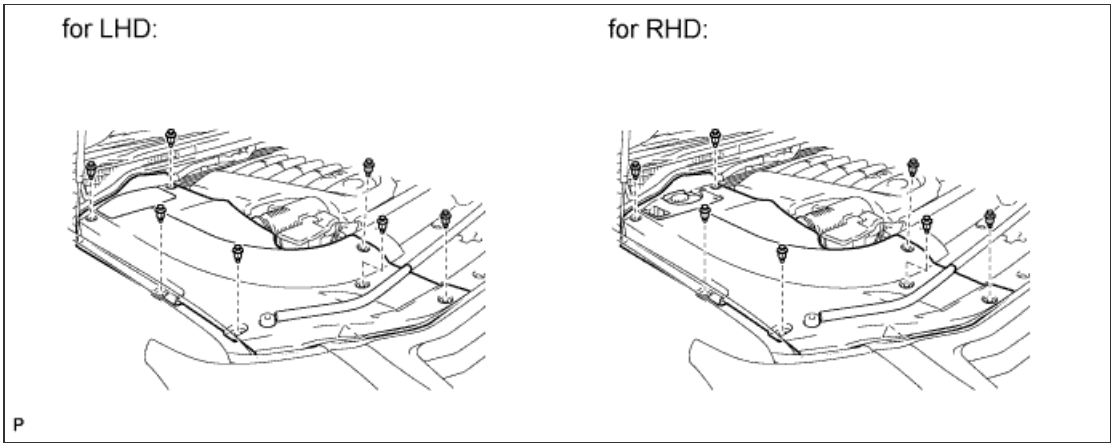
1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



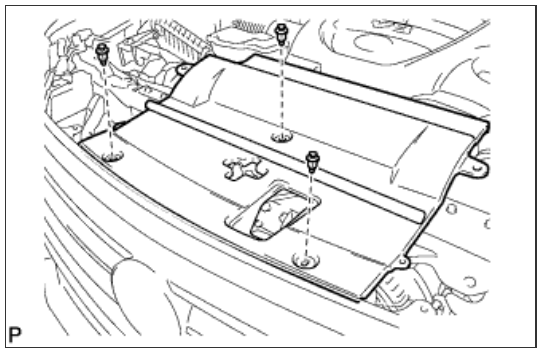
2. REMOVE ENGINE ROOM SIDE COVER RH

a. Remove the 7 clips and engine room side cover.



3. REMOVE UPPER RADIATOR SUPPORT SEAL

a. Remove the 3 clips and upper radiator support seal.



4. REMOVE RADIATOR GRILLE ASSEMBLY

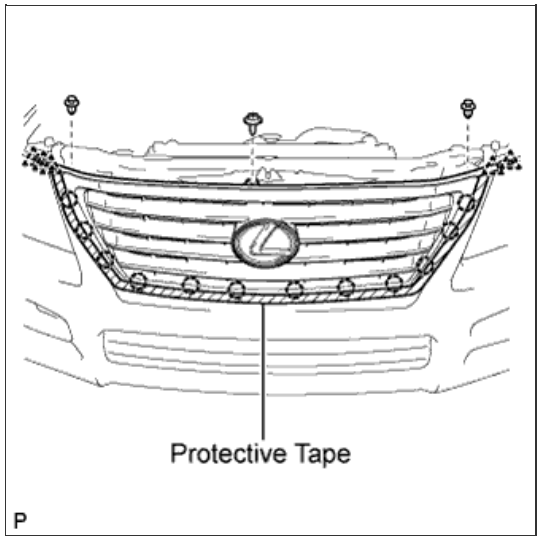
a. Put protective tape around the radiator grille.

b. Remove the screw and 2 clips.

c. Detach the 5 clips and partially remove the upper radiator seal.

d. w/o Wide View Front Monitor System:
Detach the 12 claws and remove the radiator grille.

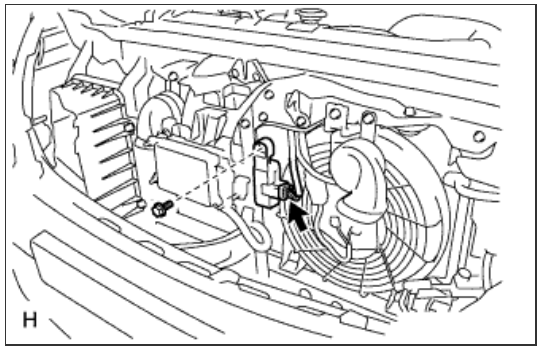
e. w/ Wide View Front Monitor System:
Detach the 12 claws, disconnect the connector and remove the radiator grille.



5. REMOVE SMOG VENTILATION SENSOR

a. Disconnect the connector.

b. Remove the bolt and sensor.



for Preparation Click here

1. INSPECT SMOG VENTILATION SENSOR

a. HC, CO

i. Apply battery voltage to terminals 3 (IG) and 6 (E).

ii. Allow exhaust gas (HC, CO) to travel to the sensing portion of the smog ventilation sensor, and measure the resistance between terminals 1 (SG) and 2 (DGS).

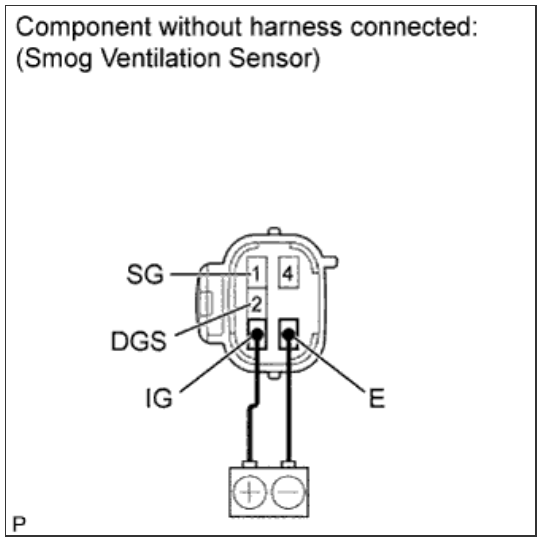
OK:

When the sensor is exposed to the exhaust gas, the resistance decreases.

HINT:

The resistance before blowing exhaust gas is 15 to 40 kΩ.

If the resistance is not as specified, replace the smog ventilation sensor.



b. NOx

i. Apply battery voltage to terminals 3 (IG) and 6 (E).

ii. Allow exhaust gas (NOx) to travel to the sensing portion of the smog ventilation sensor, and measure the resistance between terminals 1 (SG) and 4 (DGS1).

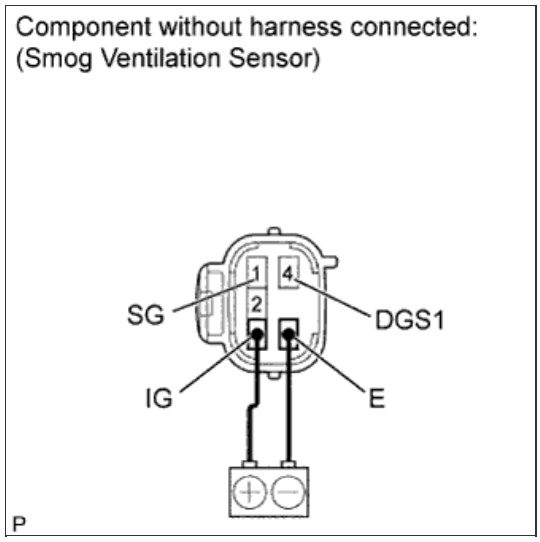
OK:

When the sensor is exposed to the exhaust gas, the resistance increases.

HINT:

The resistance before blowing exhaust gas is 2.5 to 40 kΩ.

If the resistance is not as specified, replace the smog ventilation sensor.



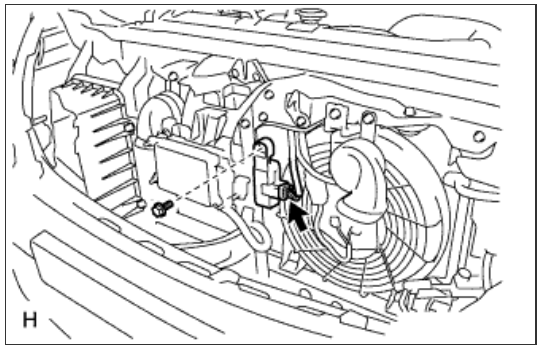
for Preparation Click here

1. INSTALL SMOG VENTILATION SENSOR

a. Install the sensor with the bolt.

Torque:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }

b. Connect the connector.



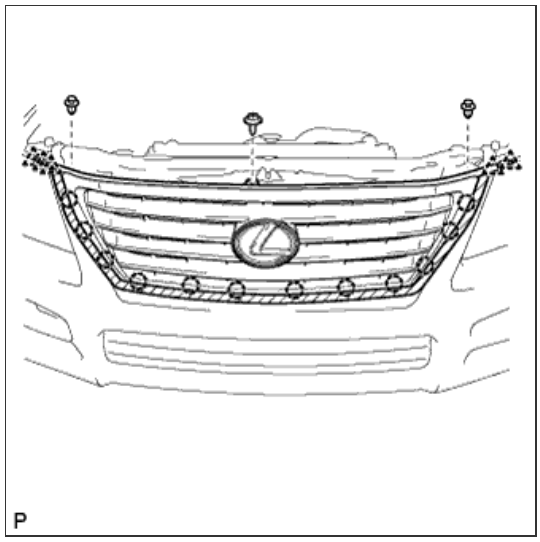
2. INSTALL RADIATOR GRILLE ASSEMBLY

a. w/ Wide View Front Monitor System:
Connect the connector.

b. Attach the 12 claws to install the radiator grille.

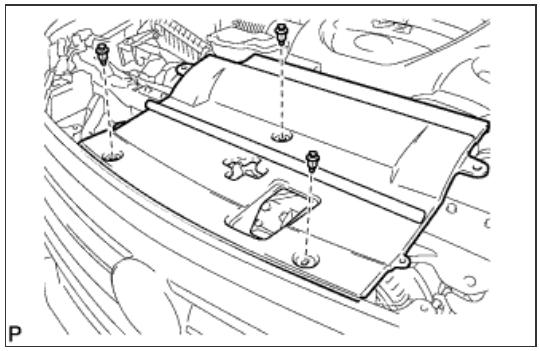
c. Attach the 5 clips to install the detached part of the upper radiator seal.

d. Install the screw and 2 clips.



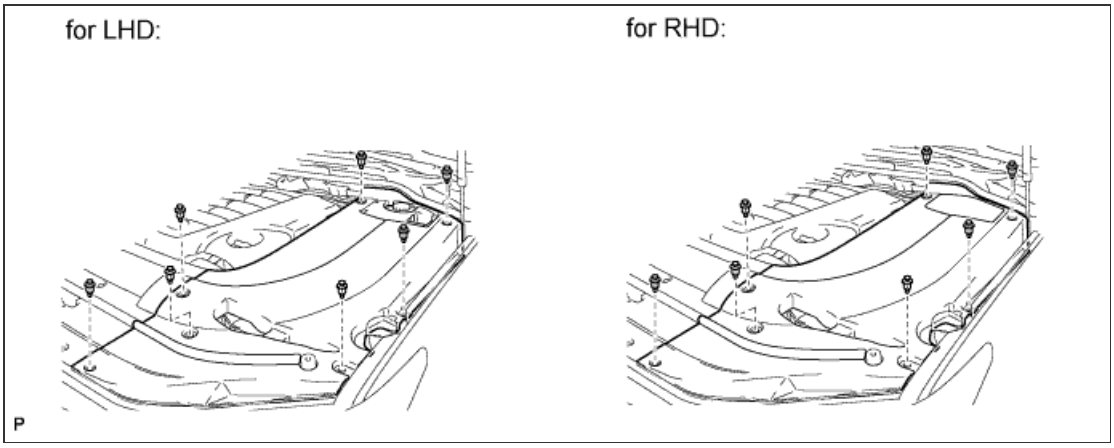
3. INSTALL UPPER RADIATOR SUPPORT SEAL

a. Install the upper radiator support seal with the 3 clips.



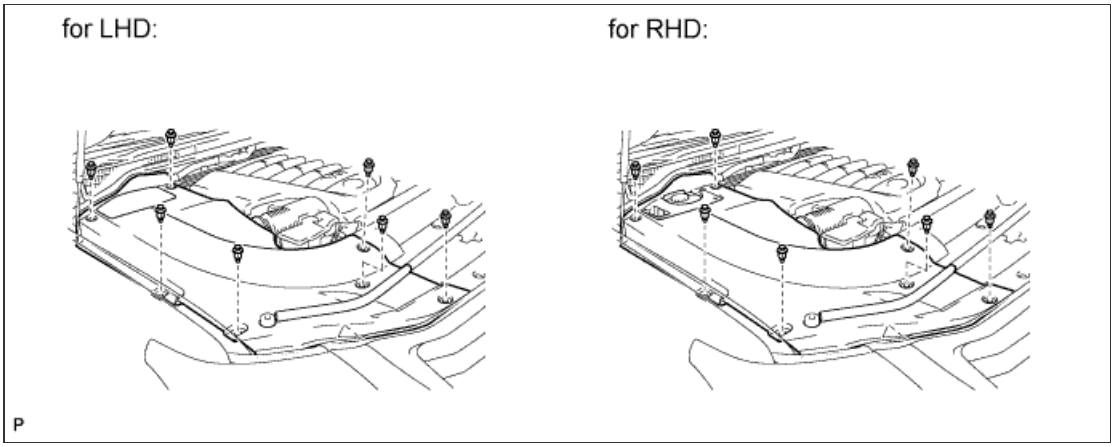
4. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.

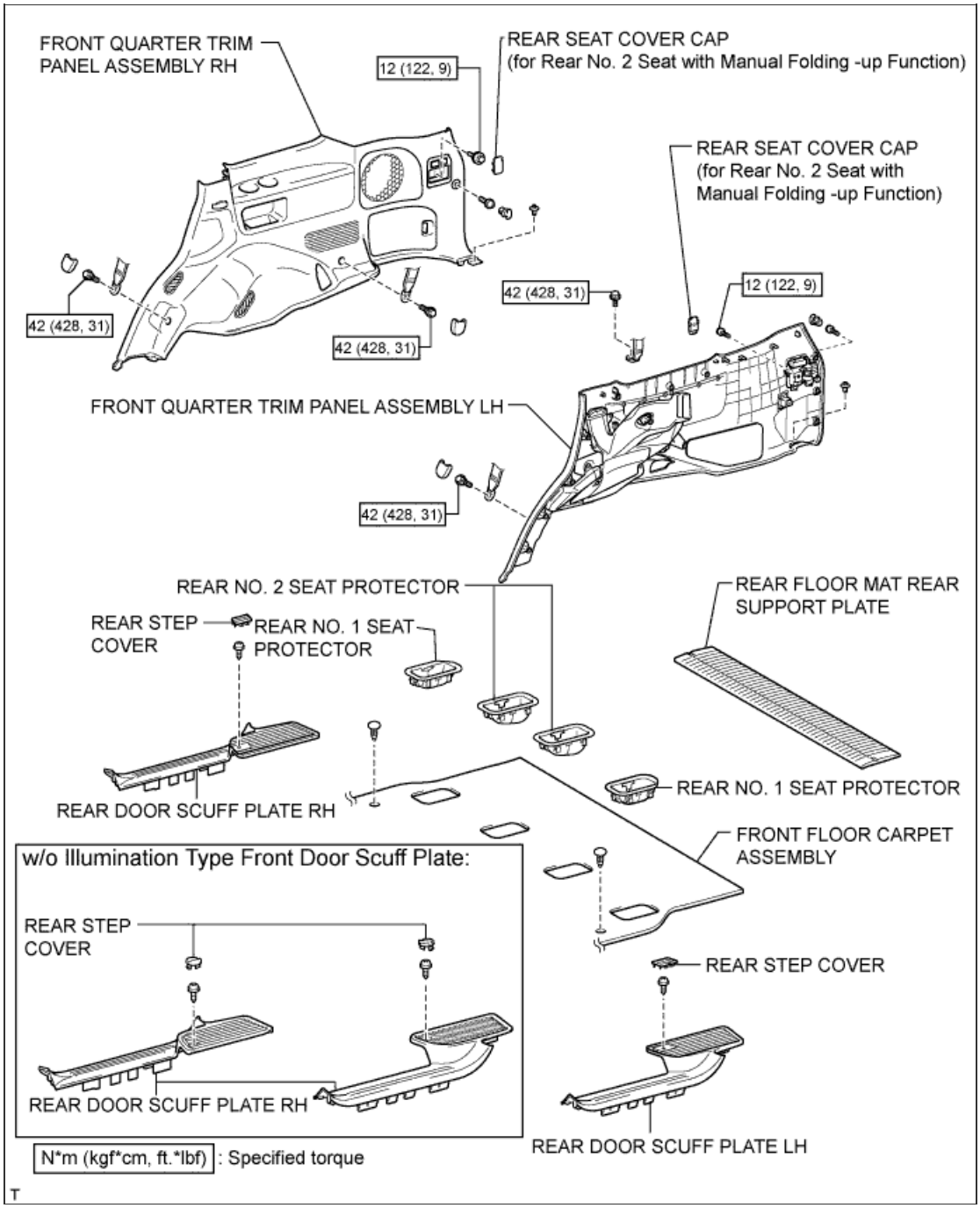


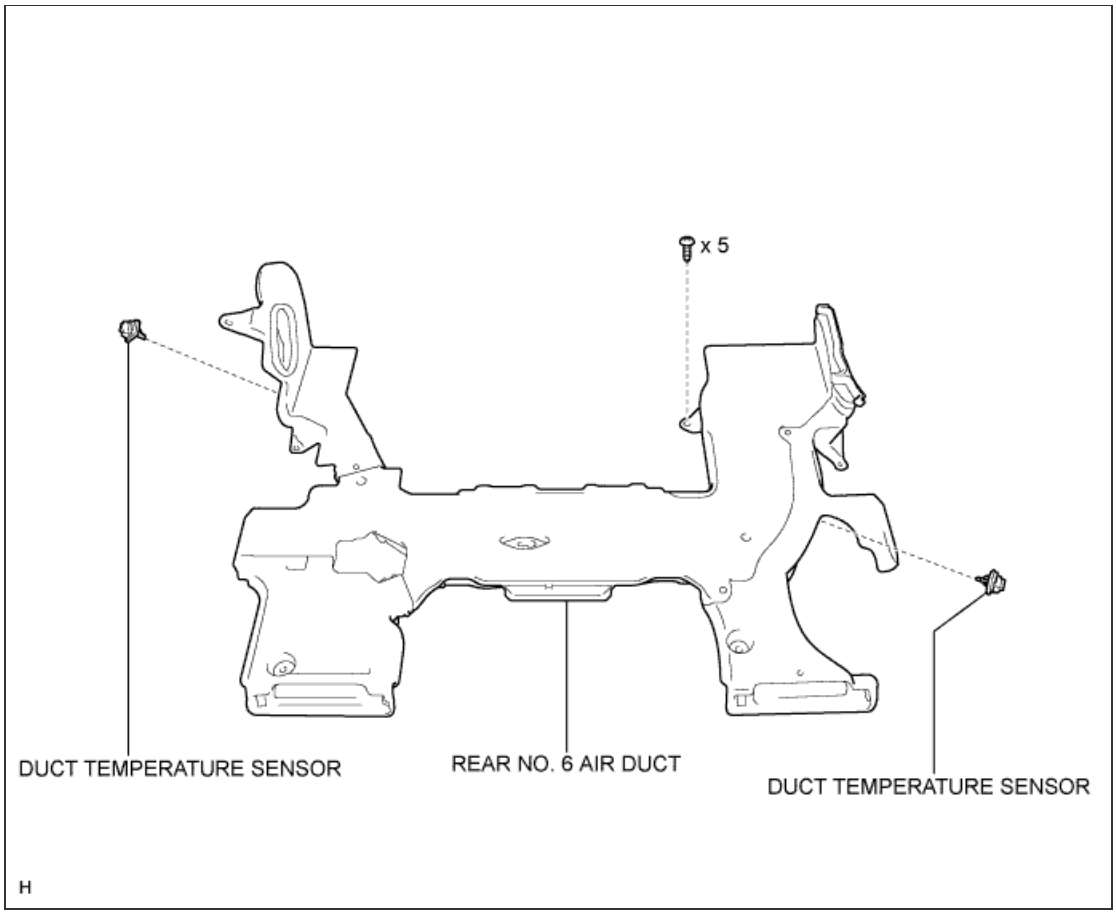
5. INSTALL ENGINE ROOM SIDE COVER RH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here




x 5
DUCT TEMPERATURE SENSOR
REAR NO. 6 AIR DUCT
DUCT TEMPERATURE SENSOR
H

DUCT TEMPERATURE SENSOR > REMOVAL

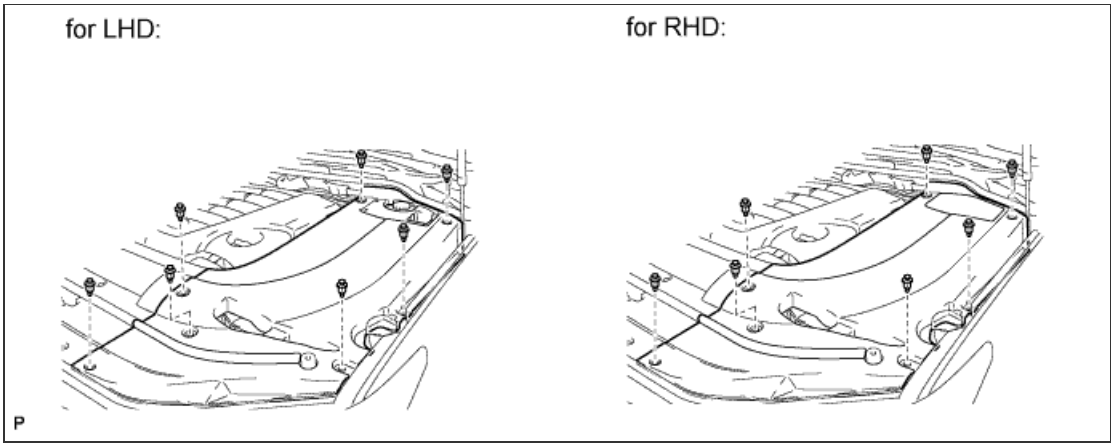
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE REAR NO. 1 SEAT ASSEMBLY LH

a. Remove the rear No. 1 seat assembly (Click here).

4. REMOVE REAR NO. 1 SEAT ASSEMBLY RH

a. Remove the rear No. 1 seat assembly (Click here).

5. REMOVE REAR NO. 2 SEAT ASSEMBLY LH

a. w/ Automatic Folding -up Function:
Remove the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding -up Function:
Remove the rear No. 2 seat assembly (Click here).

6. REMOVE REAR NO. 2 SEAT ASSEMBLY RH

a. w/ Automatic Folding -up Function:
Remove the rear No. 2 seat assembly (Click here).

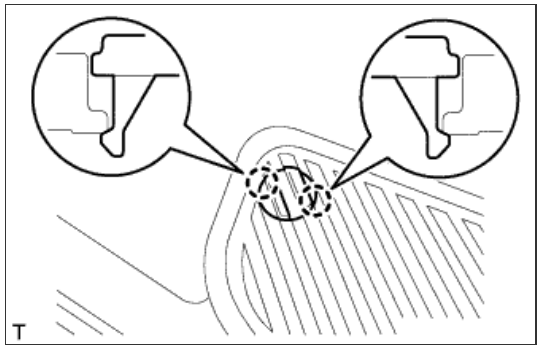
b. w/ Manual Folding -up Function:
Remove the rear No. 2 seat assembly (Click here).

7. REMOVE REAR STEP COVER

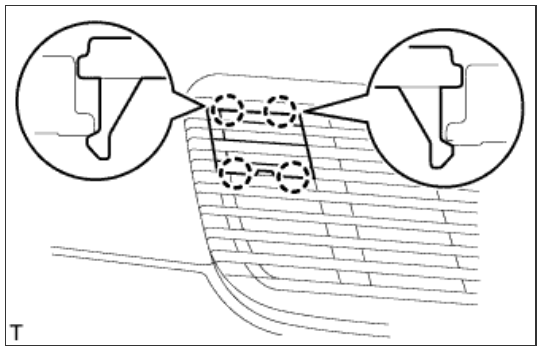
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

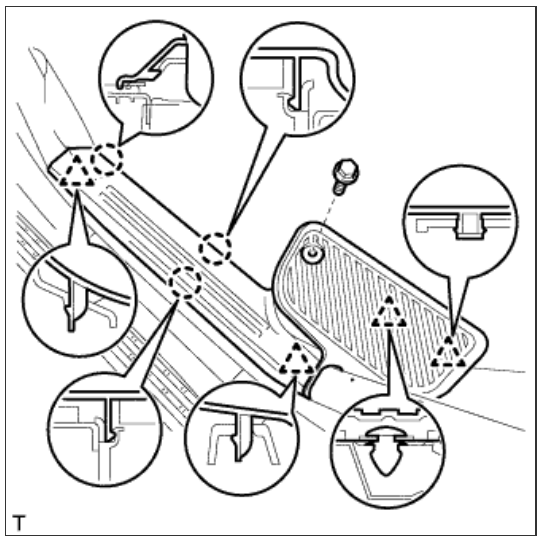


8. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

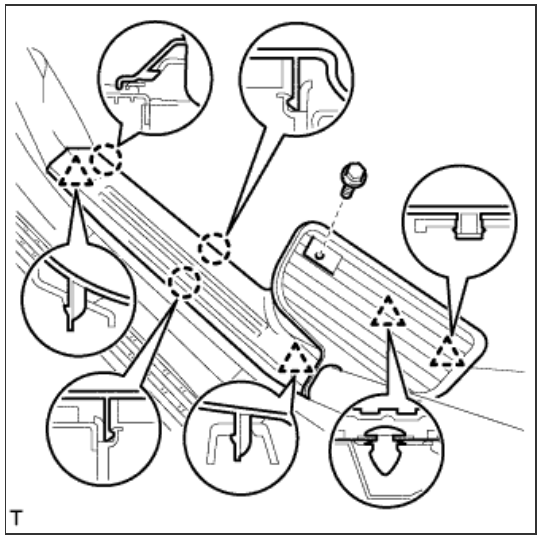
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



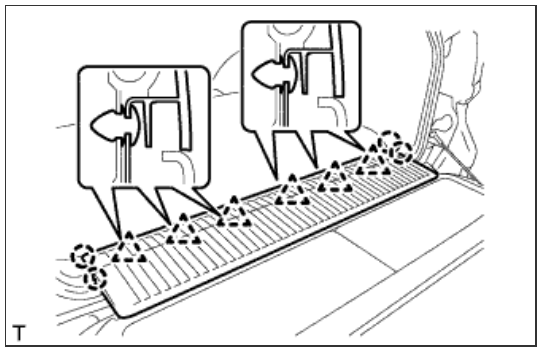
9. REMOVE REAR DOOR SCUFF PLATE RH

HINT:

Use the same procedures described for the LH side.

10. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.



11. REMOVE REAR SEAT COVER CAP (for Rear No. 2 Seat with Manual Folding-up Function)

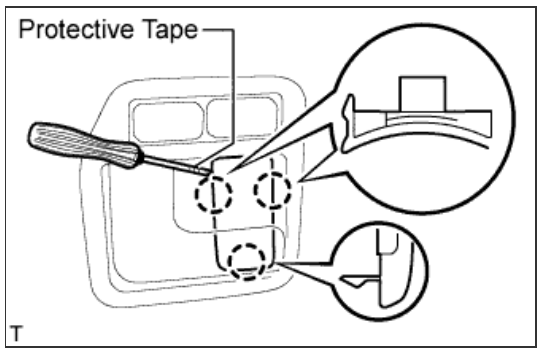
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

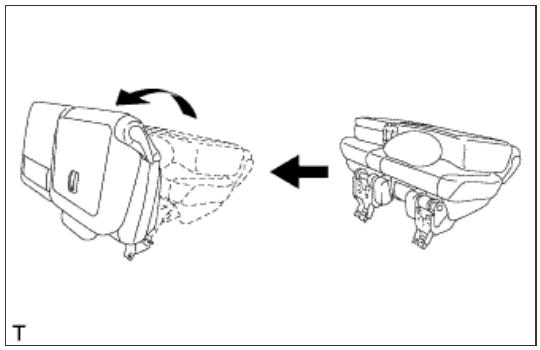
Tape the screwdriver tip before use.



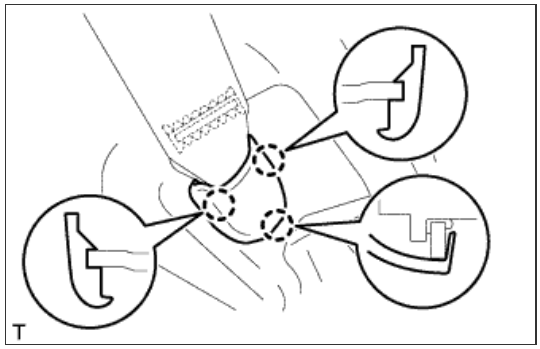
12. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

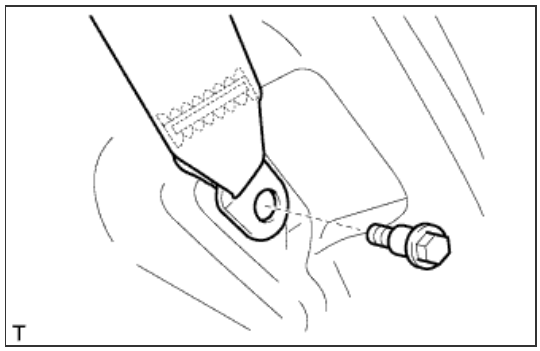
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



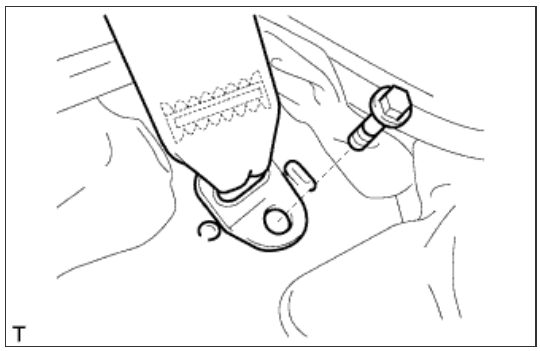
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

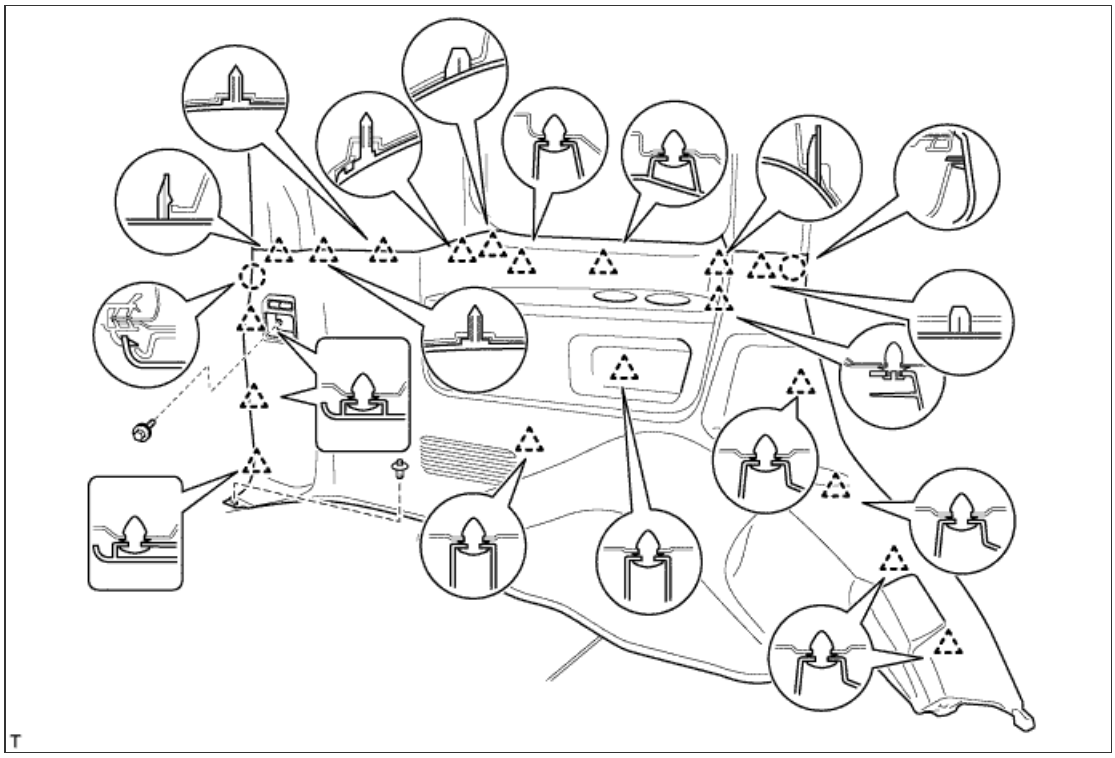


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

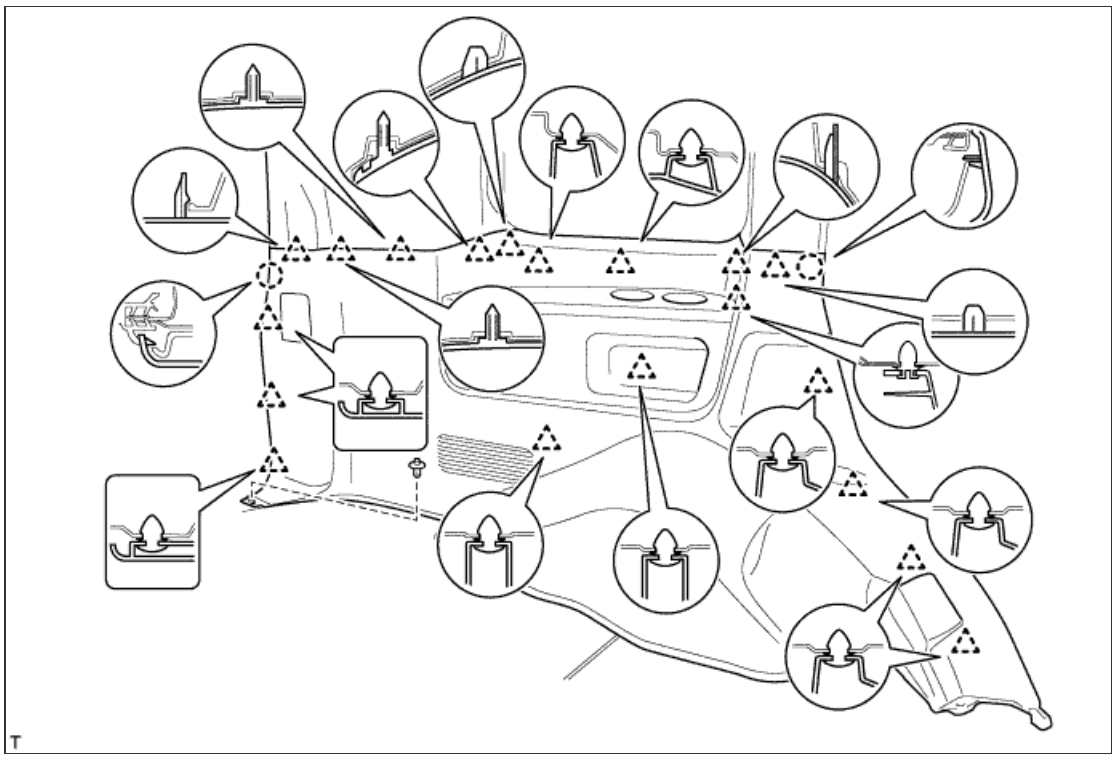


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.



13. REMOVE REAR SEAT COVER CAP (for Rear No. 2 Seat with Manual Folding-up Function)

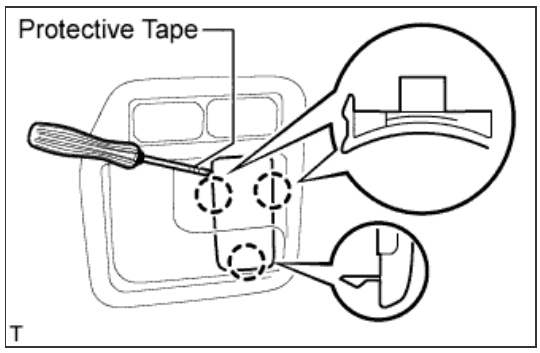
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

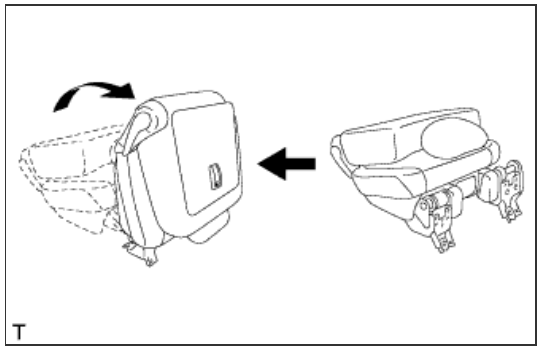
Tape the screwdriver tip before use.



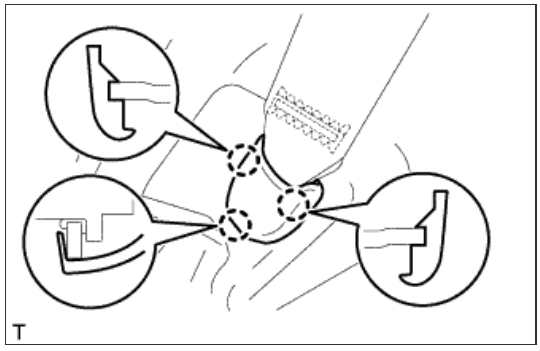
14. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

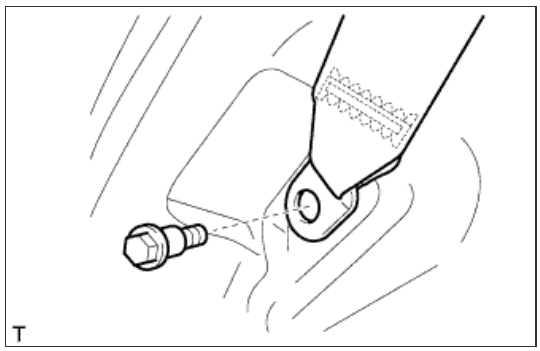
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



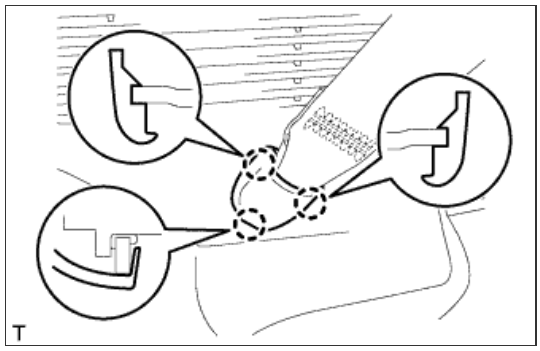
a. Detach the 3 claws and remove the cover.



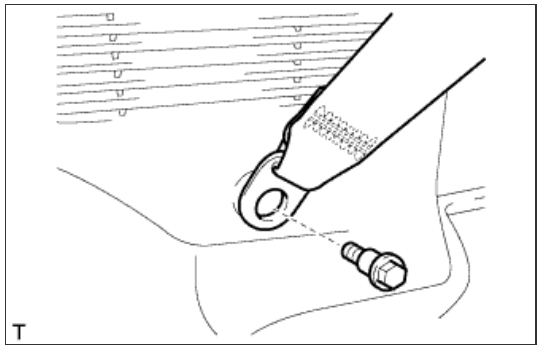
b. Remove the bolt and rear No. 1 seat belt anchor.



c. Detach the 3 claws and remove the cover.



d. Remove the bolt and rear No. 2 seat belt anchor.

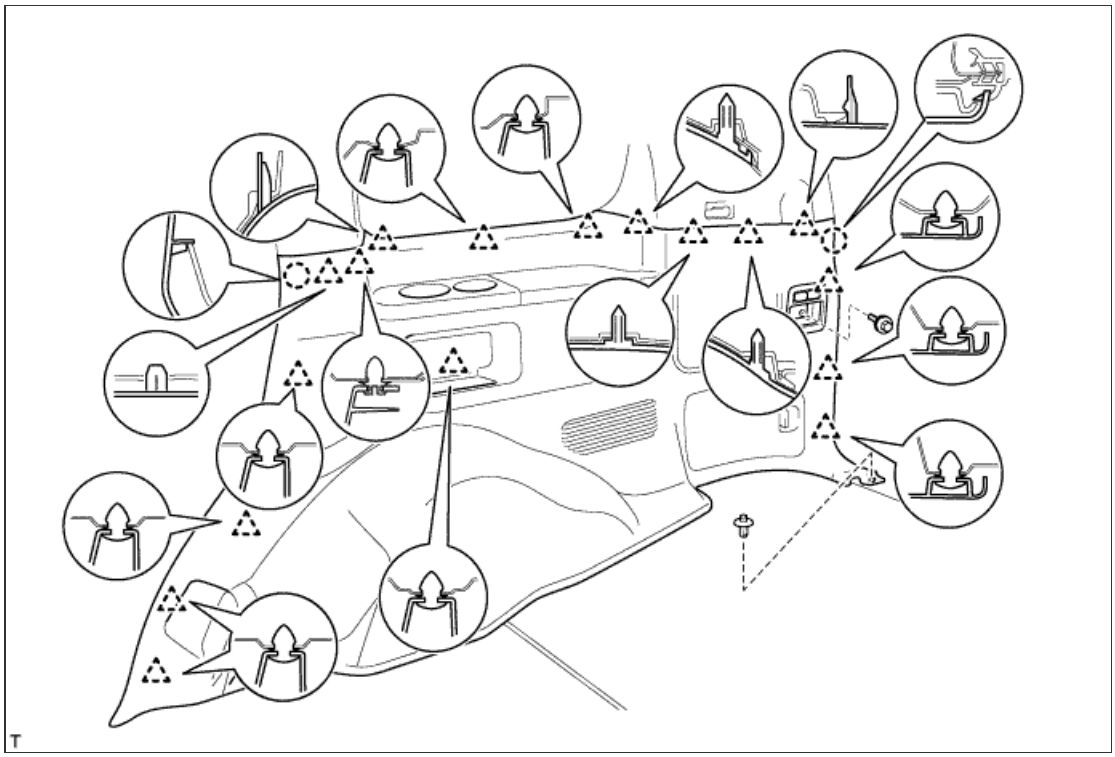


e. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

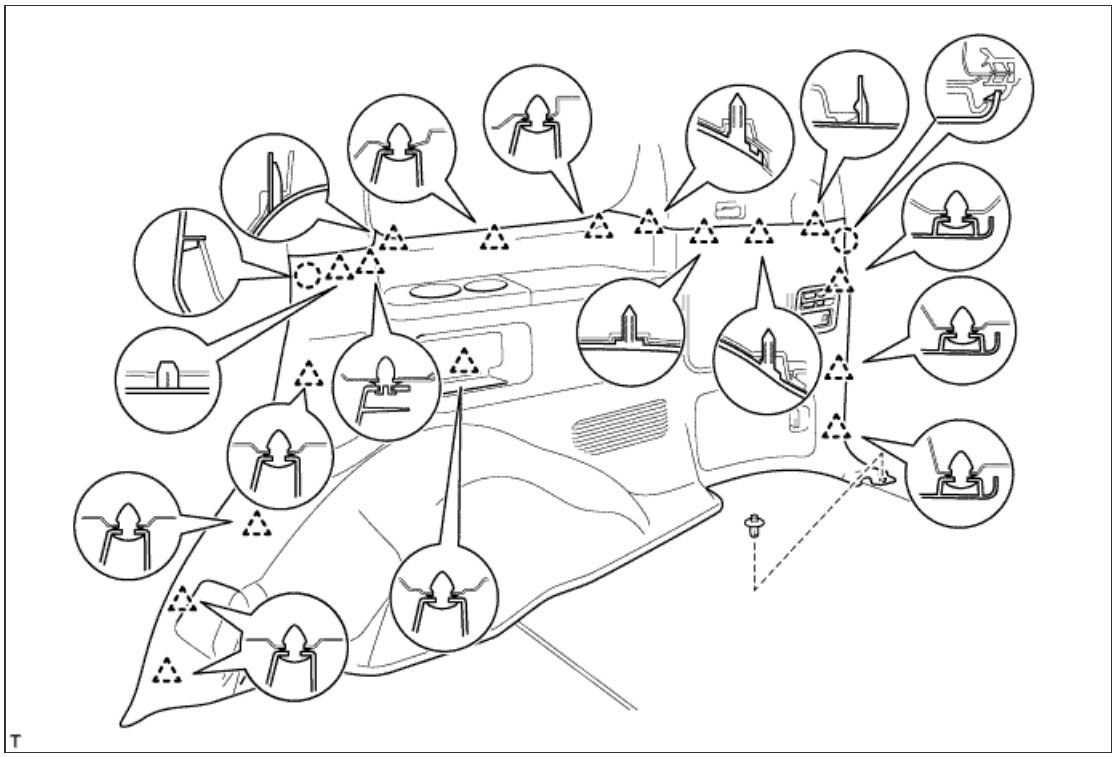


f. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

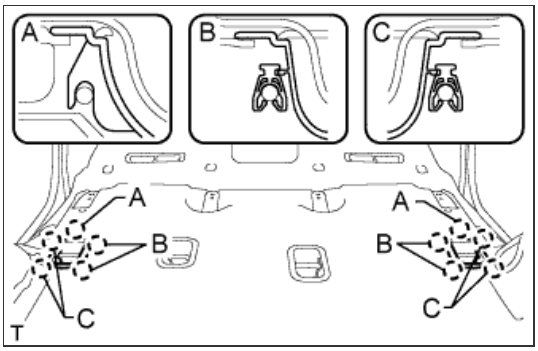
ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.



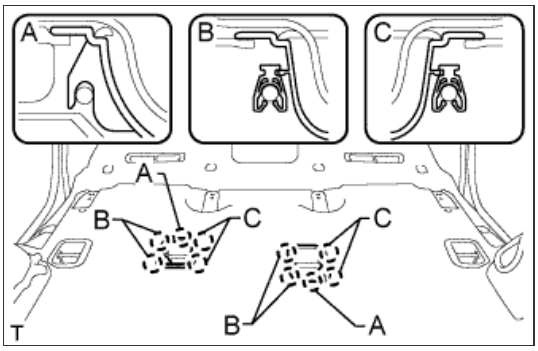
15. REMOVE REAR NO. 1 SEAT PROTECTOR

a. Detach the 10 claws and remove the 2 seat protectors.



16. REMOVE REAR NO. 2 SEAT PROTECTOR

a. Detach the 10 claws and remove the 2 seat protectors.



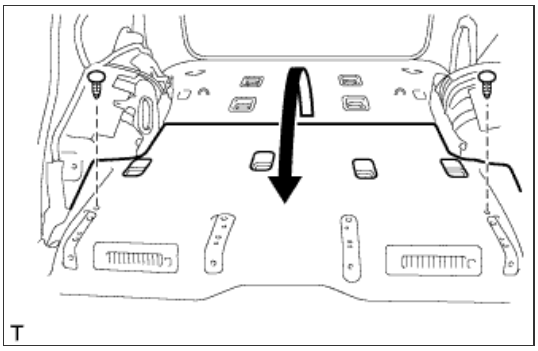
17. REMOVE FRONT FLOOR CARPET ASSEMBLY

a. Remove the 2 clips.

b. Fold back the floor carpet.

HINT:

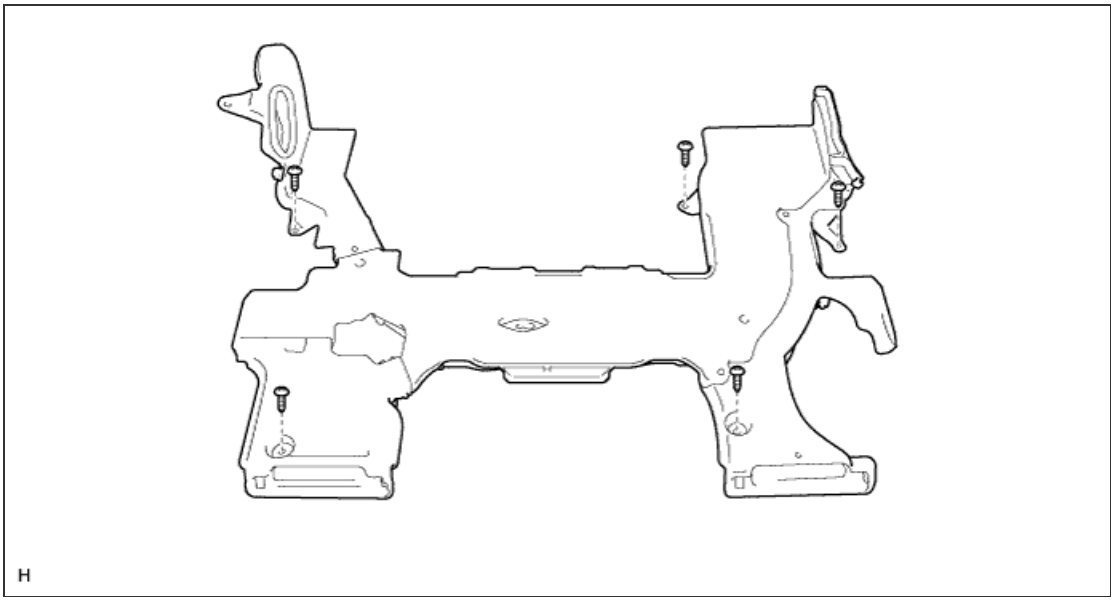
Fold back the carpet until it is possible to remove the rear No. 6 air duct.



18. REMOVE REAR NO. 6 AIR DUCT

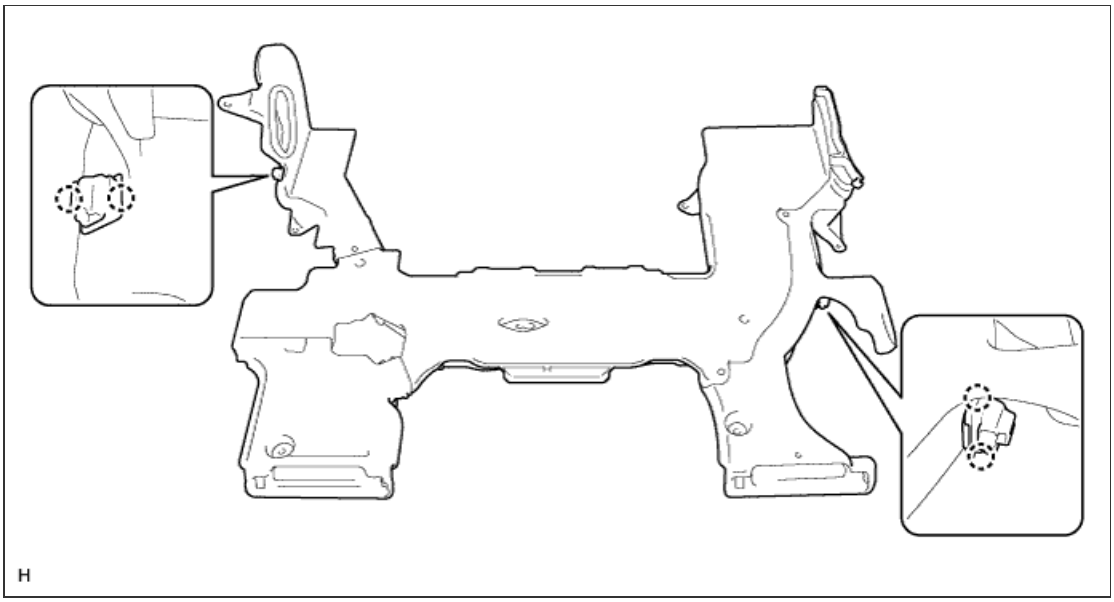
a. Disconnect the 2 connectors.

b. Remove the 5 screws and duct.



19. REMOVE DUCT TEMPERATURE SENSOR

a. Detach the 4 claws and remove the 2 sensors.



H

for Preparation Click here

1. INSPECT DUCT TEMPERATURE SENSOR

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	at 10°C (50°F)	9.4 to 10.5 kΩ
	at 15°C (59°F)	7.5 to 8.3 kΩ
	at 20°C (68°F)	6.0 to 6.5 kΩ
	at 25°C (77°F)	4.8 to 5.2 kΩ
	at 30°C (86°F)	3.8 to 4.2 kΩ
	at 35°C (95°F)	3.1 to 3.4 kΩ
	at 40°C (104°F)	2.5 to 2.8 kΩ
	at 45°C (113°F)	2.0 to 2.3 kΩ
	at 50°C (122°F)	1.6 to 2.0 kΩ
	at 55°C (131°F)	1.3 to 1.6 kΩ
	at 60°C (140°F)	1.1 to 1.4 kΩ

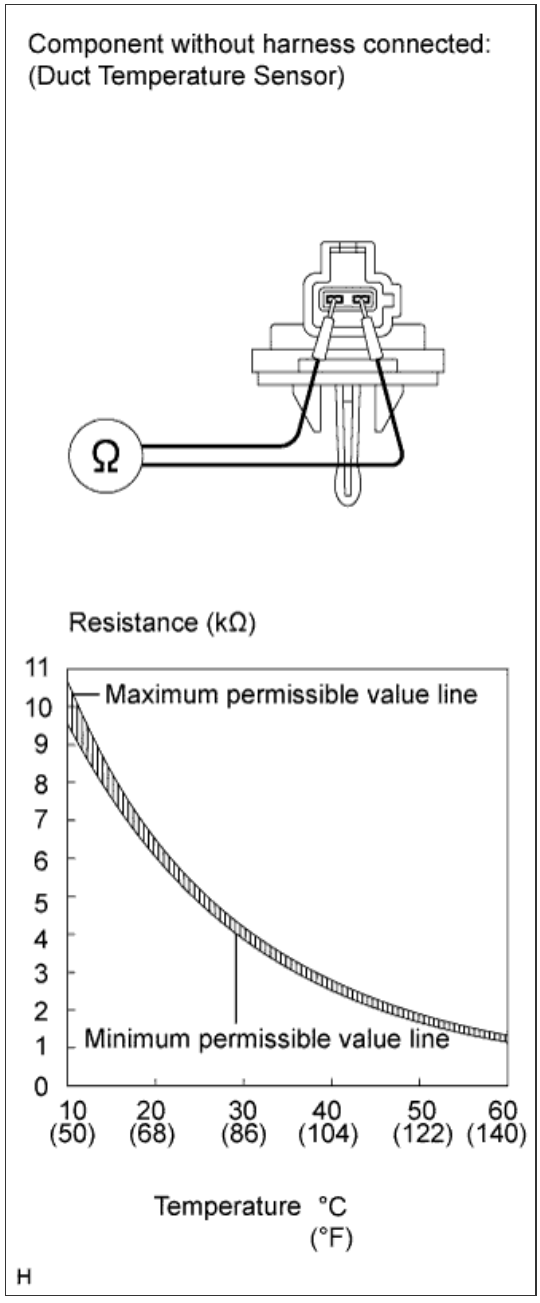
If the result is not as specified, replace the duct temperature sensor.

NOTICE:

- **Touching the sensor even slightly may change the resistance value. Hold the connector of the sensor.**
- **When measuring the resistance, the sensor temperature must be the same as the ambient temperature.**

HINT:

As the temperature increases, the resistance decreases (see the graph).



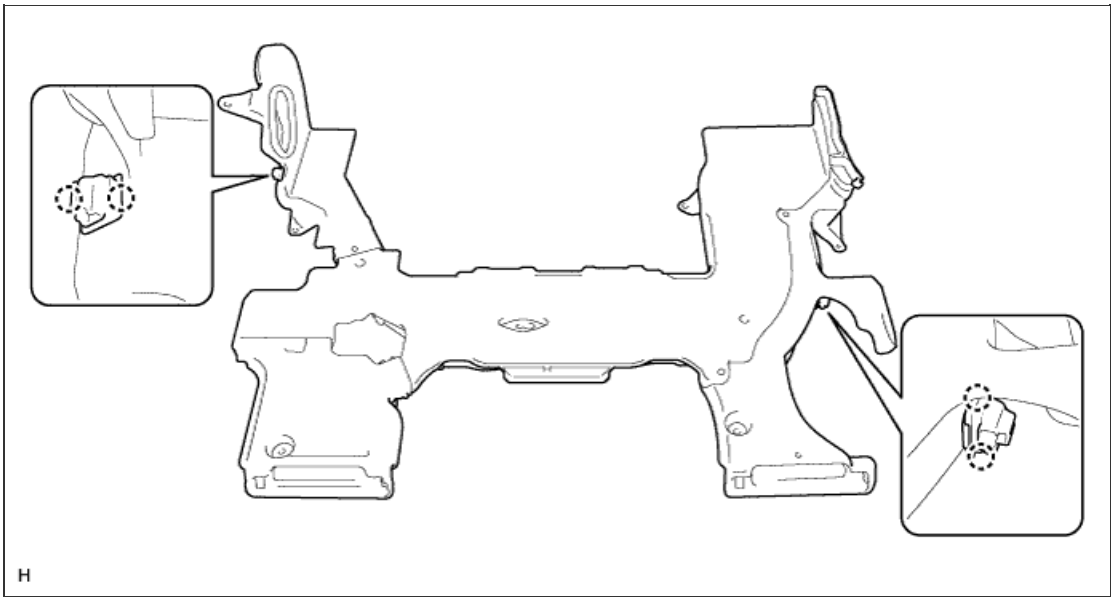
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL COOLER THERMISTOR

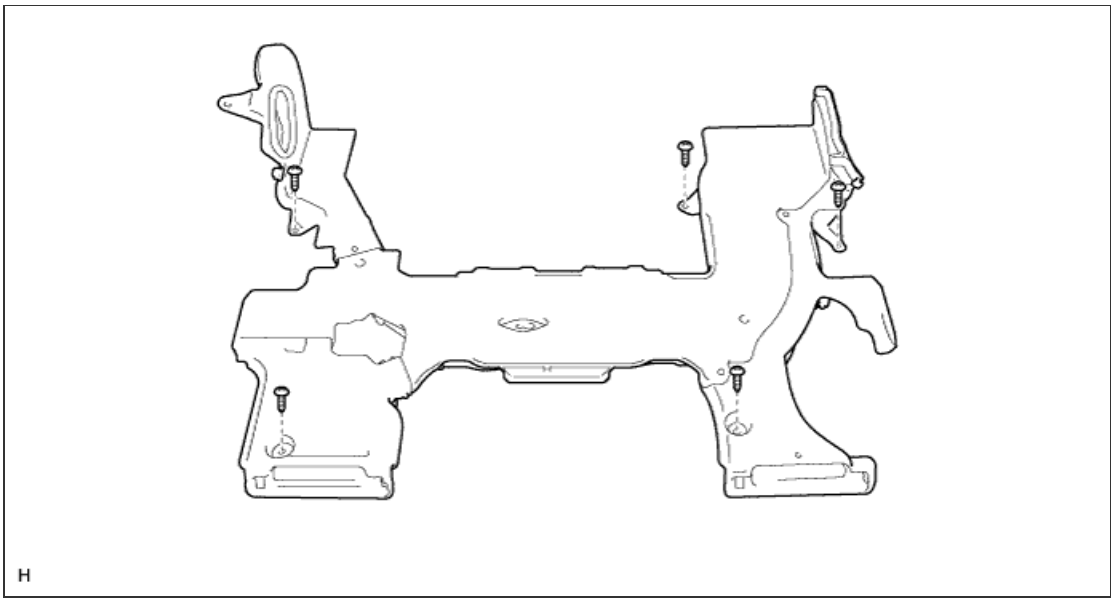
a. Attach the 4 claws to install the 2 sensors.



2. INSTALL REAR NO. 6 AIR DUCT

a. Install the duct with the 5 screws.

b. Connect the 2 connectors.



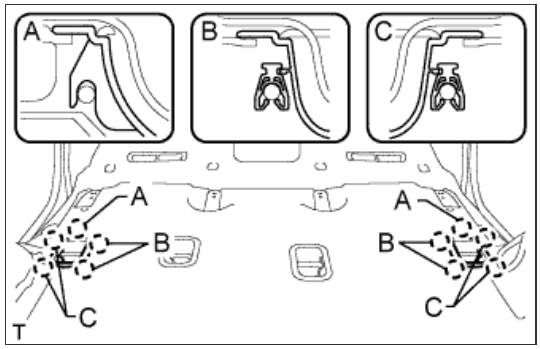
3. INSTALL FRONT FLOOR CARPET ASSEMBLY

a. Install the floor carpet.

b. Install the 2 clips.

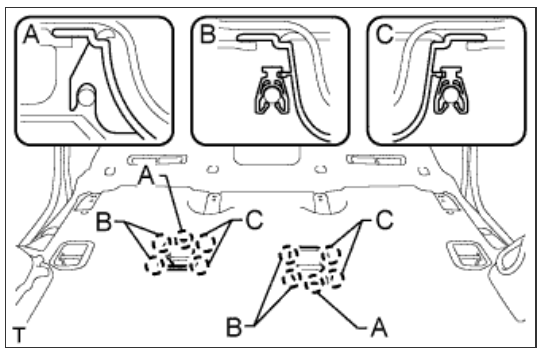
4. INSTALL REAR NO. 1 SEAT PROTECTOR

a. Attach the 10 claws to install the 2 seat protectors.



5. INSTALL REAR NO. 2 SEAT PROTECTOR

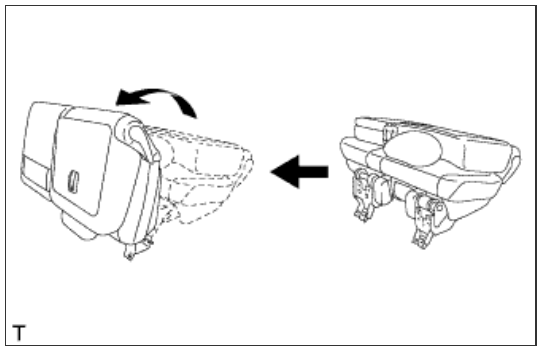
a. Attach the 10 claws to install the 2 seat protectors.



6. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



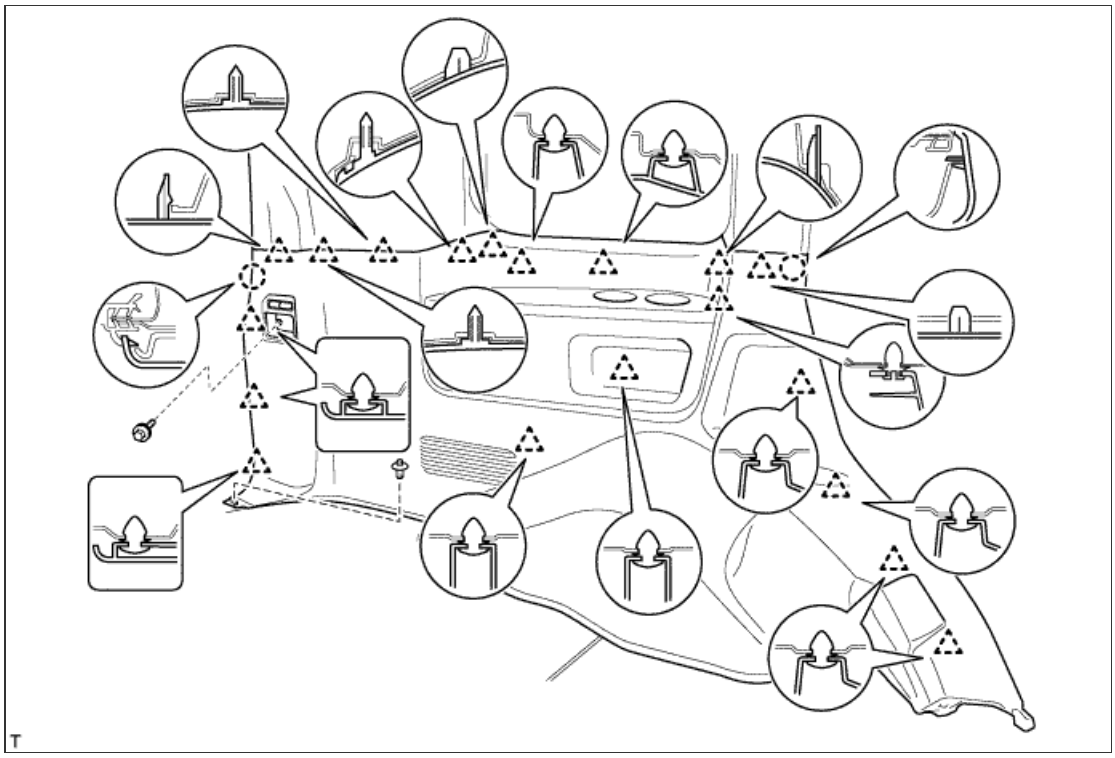
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

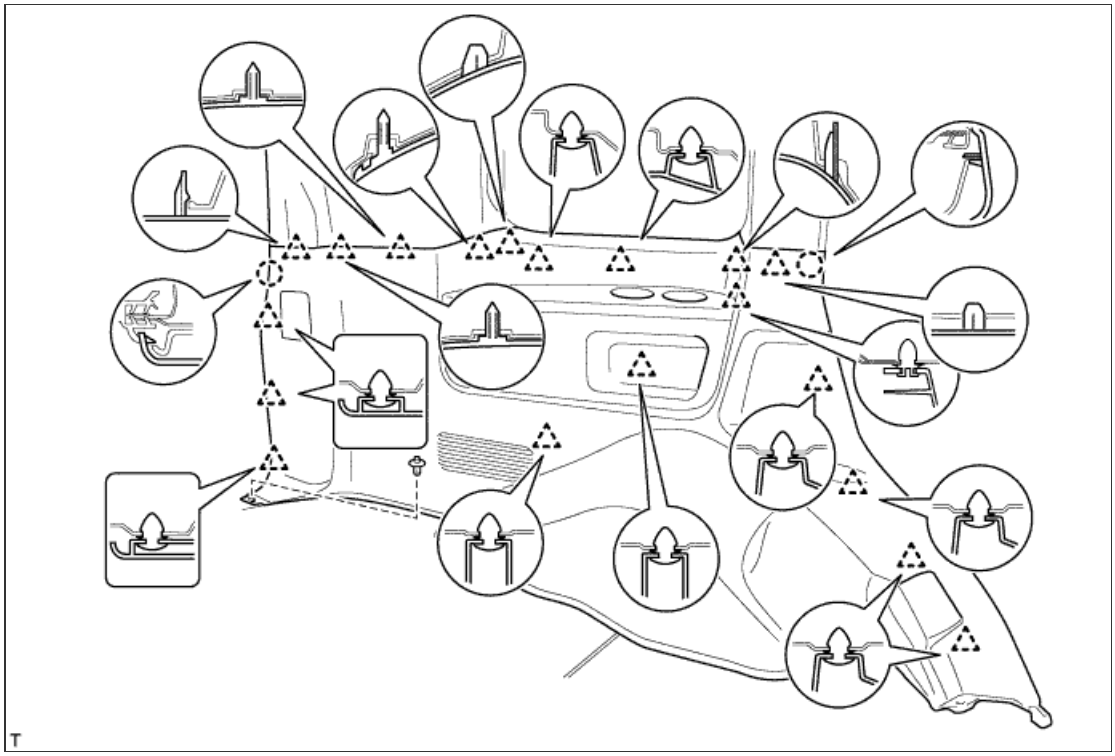


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

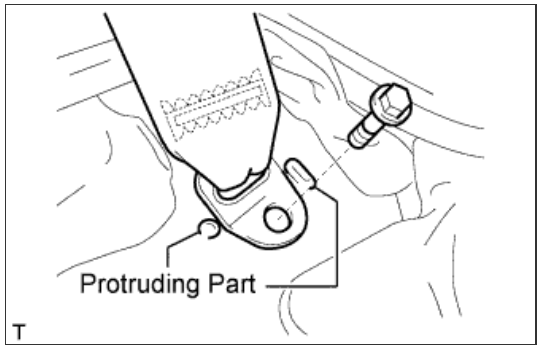


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

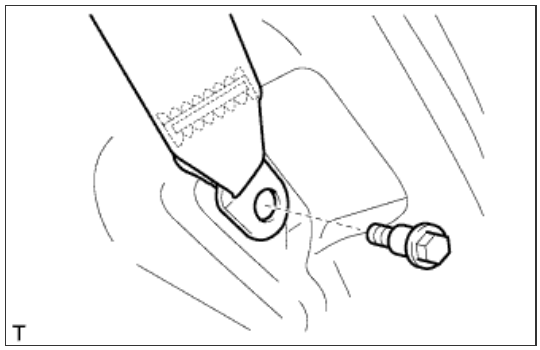
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

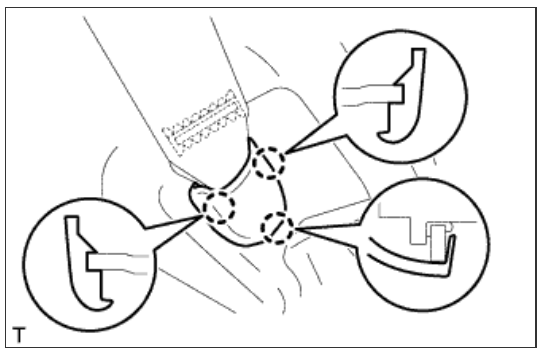


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



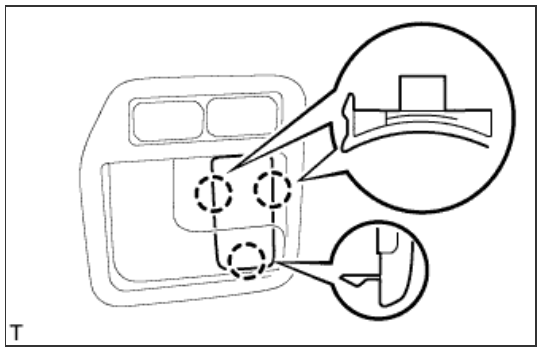
e. Attach the 3 claws to install the cover.



7. INSTALL REAR SEAT COVER CAP (for Rear No. 2 Seat with Manual Folding-up Function)

HINT:

Use the same procedures to install the rear seat cover cap on the other side.

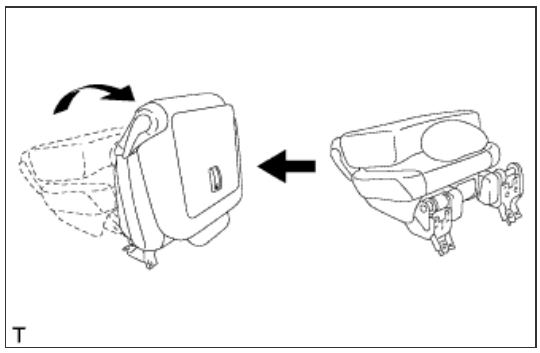


a. Attach the 3 claws to install the rear seat cover cap.

8. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



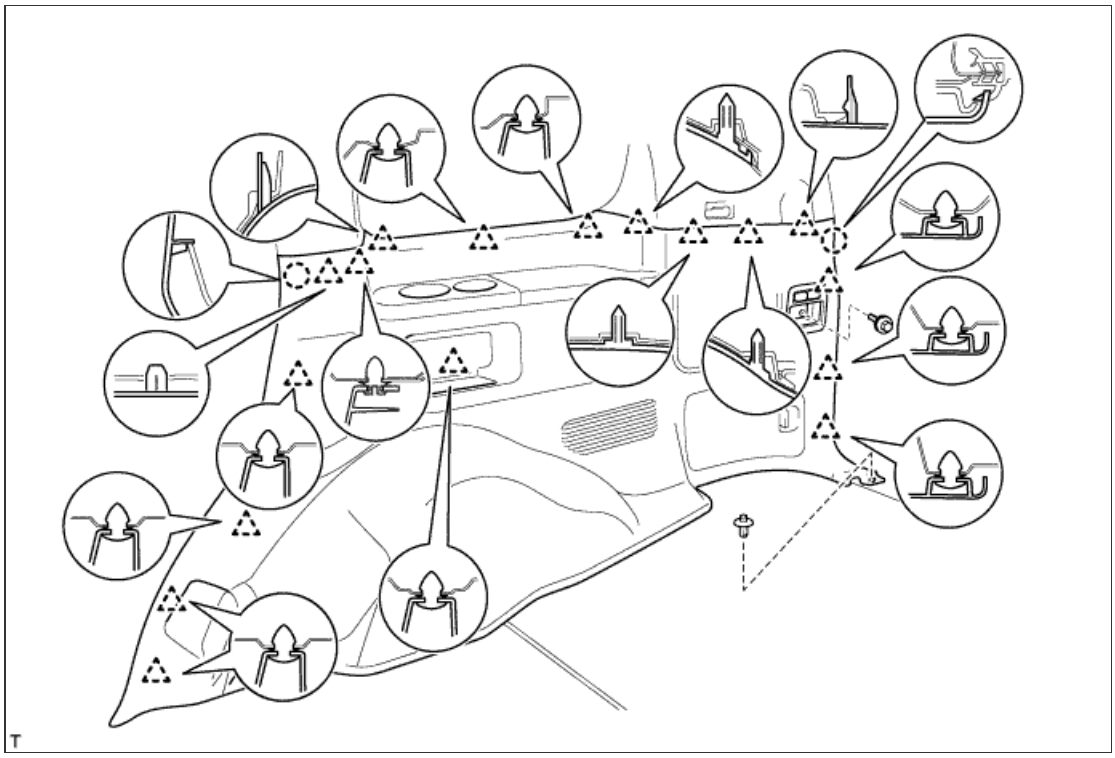
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

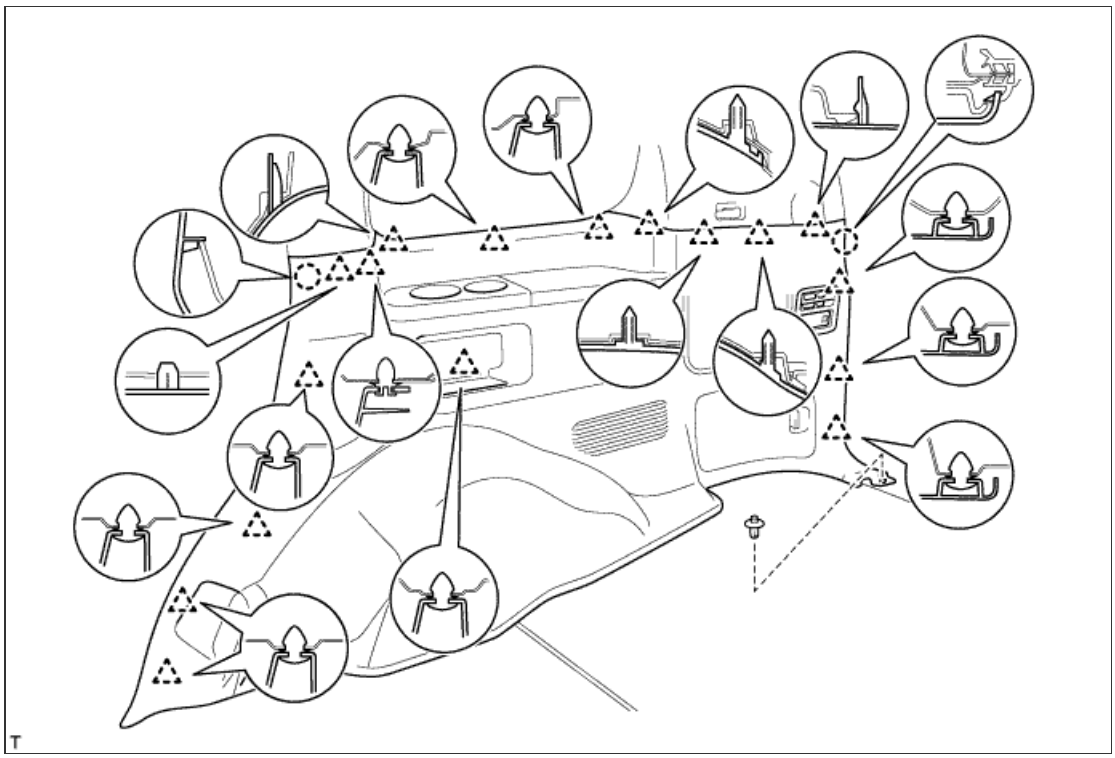


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

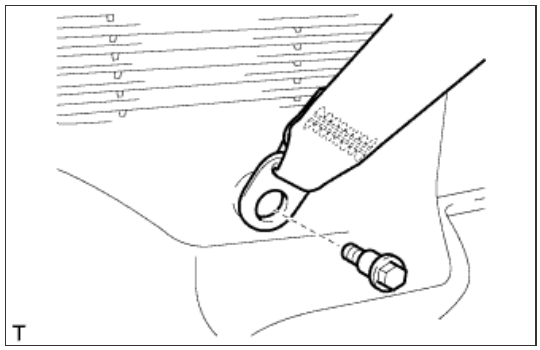
ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

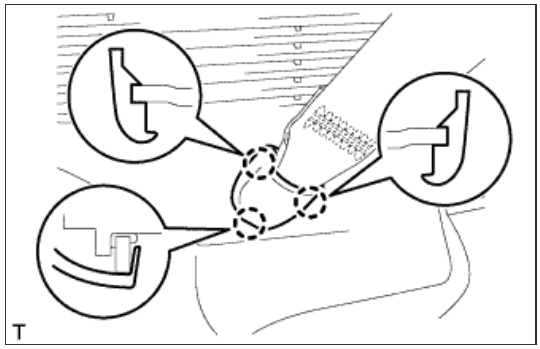


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

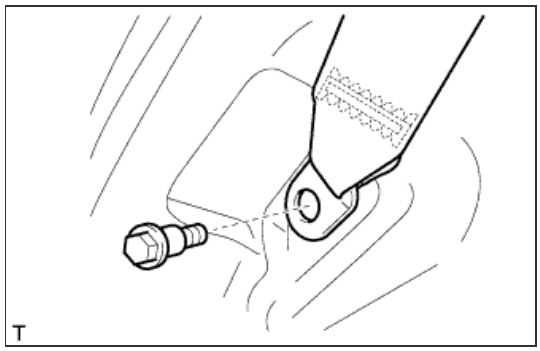


d. Attach the 3 claws to install the cover.

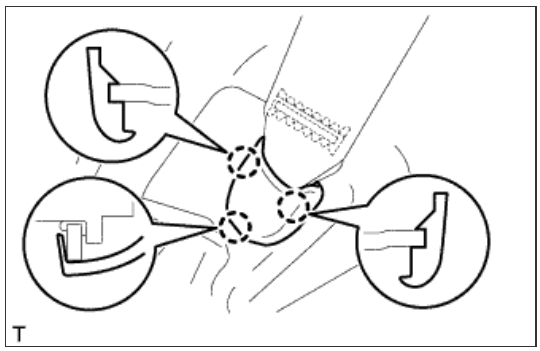


e. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



f. Attach the 3 claws to install the cover.

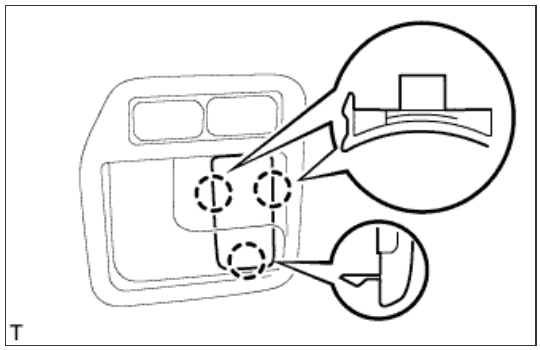


9. INSTALL REAR SEAT COVER CAP (for Rear No. 2 Seat with Manual Folding-up Function)

HINT:

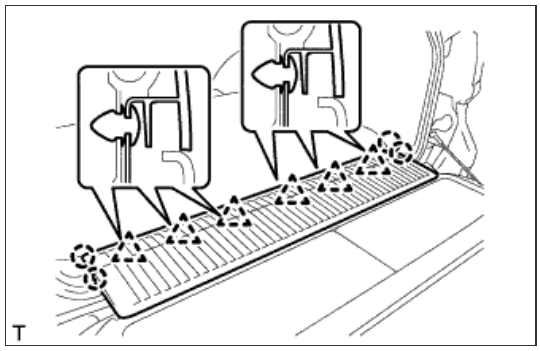
Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.



10. INSTALL REAR FLOOR MAT SUPPORT PLATE REAR

a. Attach the 6 clips and 4 claws to install the support plate.

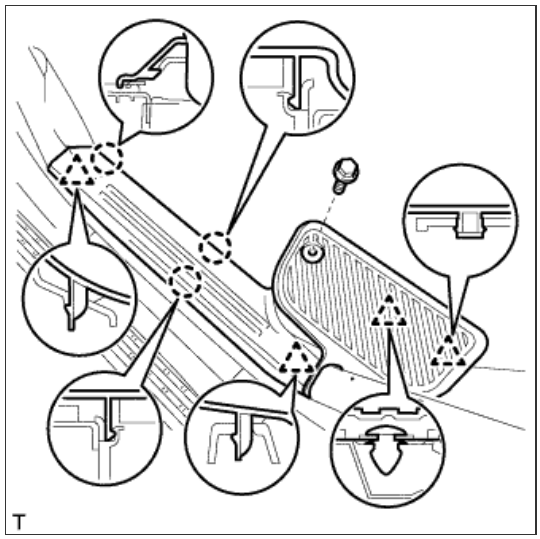


11. INSTALL REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

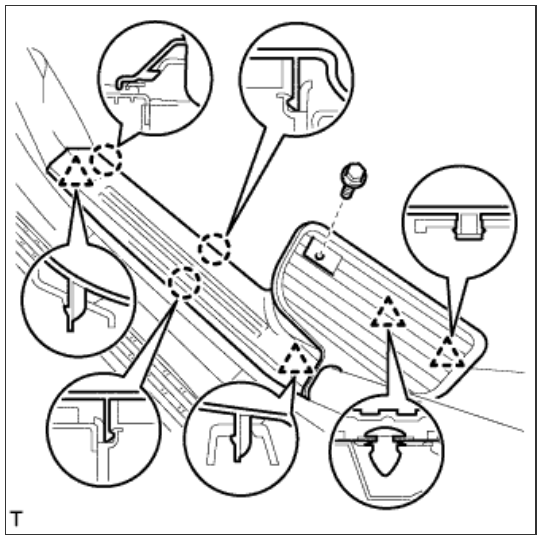
ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.



12. INSTALL REAR DOOR SCUFF PLATE RH

HINT:

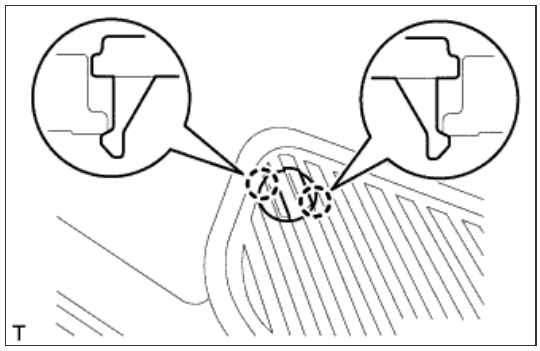
Use the same procedures described for the LH side.

13. INSTALL REAR STEP COVER

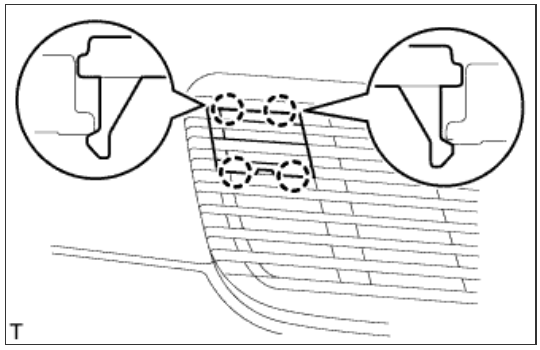
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



14. INSTALL REAR NO. 2 SEAT ASSEMBLY LH

a. w/ Automatic Folding -up Function.
Install the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding -up Function.
Install the rear No. 2 seat assembly (Click here).

15. INSTALL REAR NO. 2 SEAT ASSEMBLY RH

a. w/ Automatic Folding -up Function.
Install the rear No. 2 seat assembly (Click here).

b. w/ Manual Folding -up Function.
Install the rear No. 2 seat assembly (Click here).

16. INSTALL REAR NO. 1 SEAT ASSEMBLY LH

a. Install the rear No. 1 seat assembly (Click here).

17. INSTALL REAR NO. 1 SEAT ASSEMBLY RH

a. Install the rear No. 1 seat assembly (Click here).

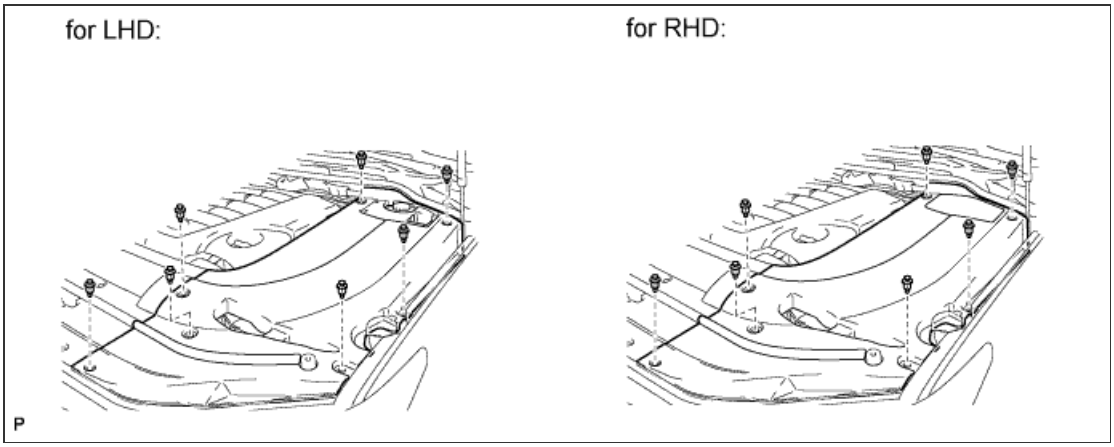
18. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

19. INSTALL ENGINE ROOM SIDE COVER LH

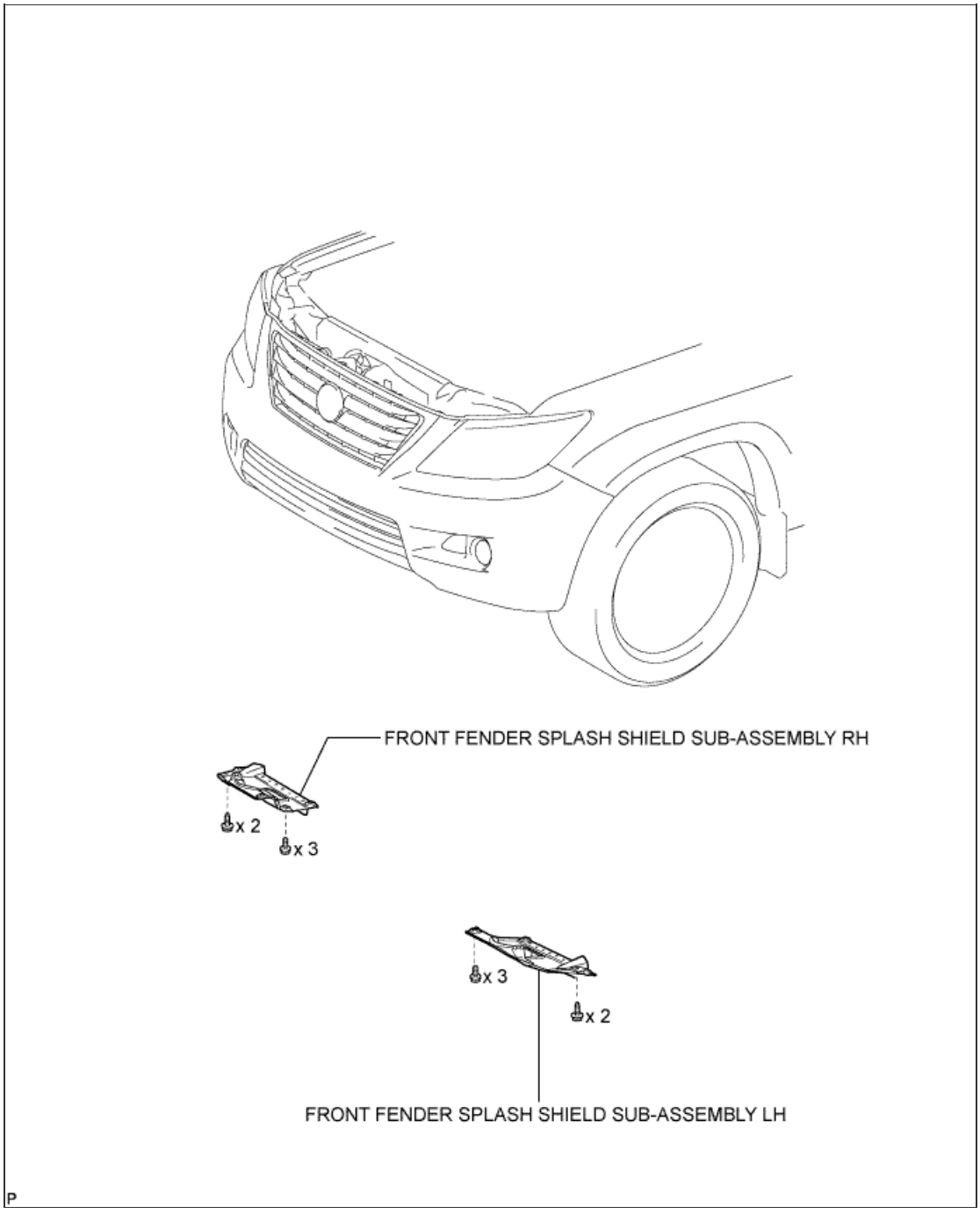
a. Install the engine room side cover with the 7 clips.

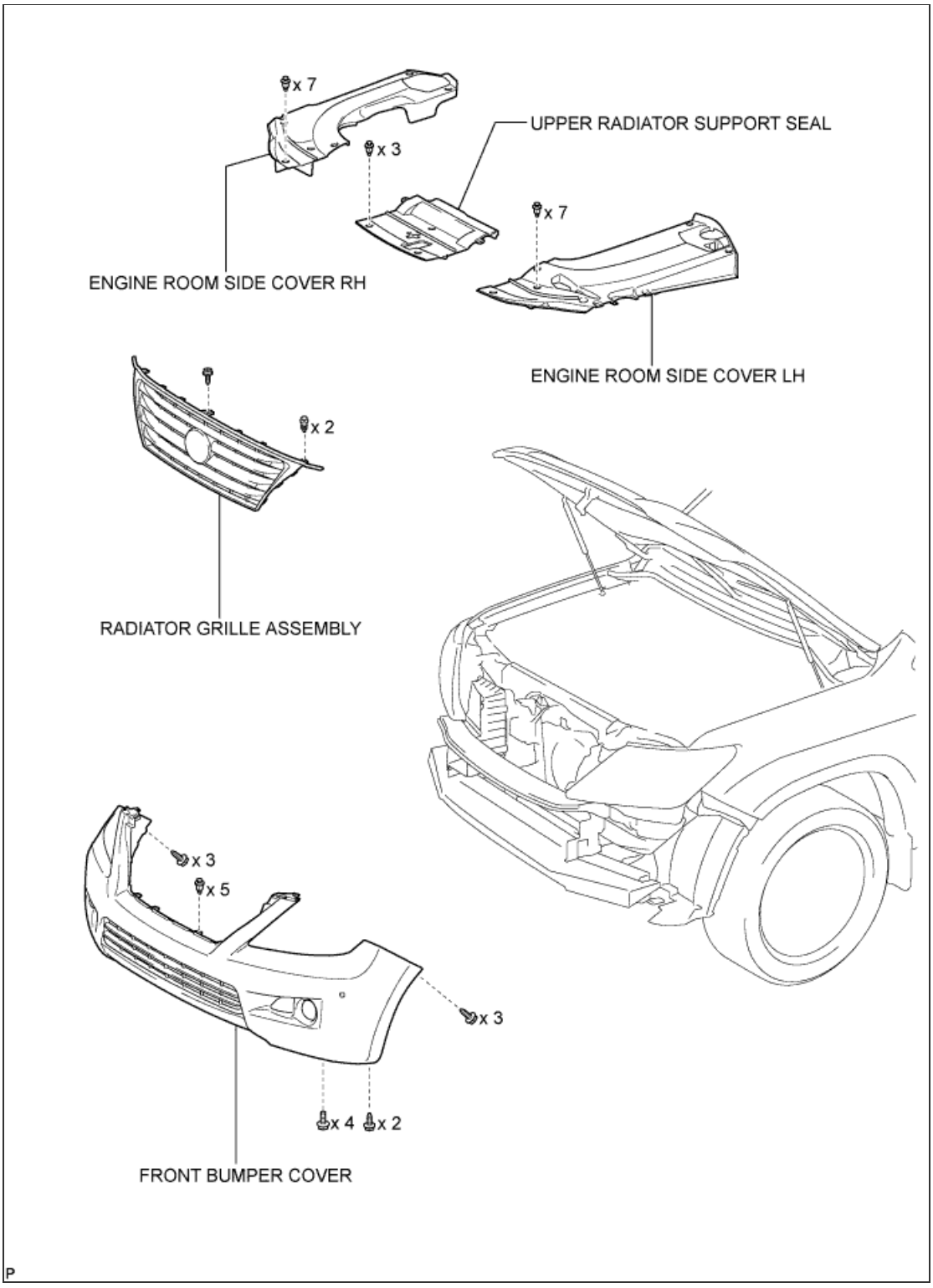


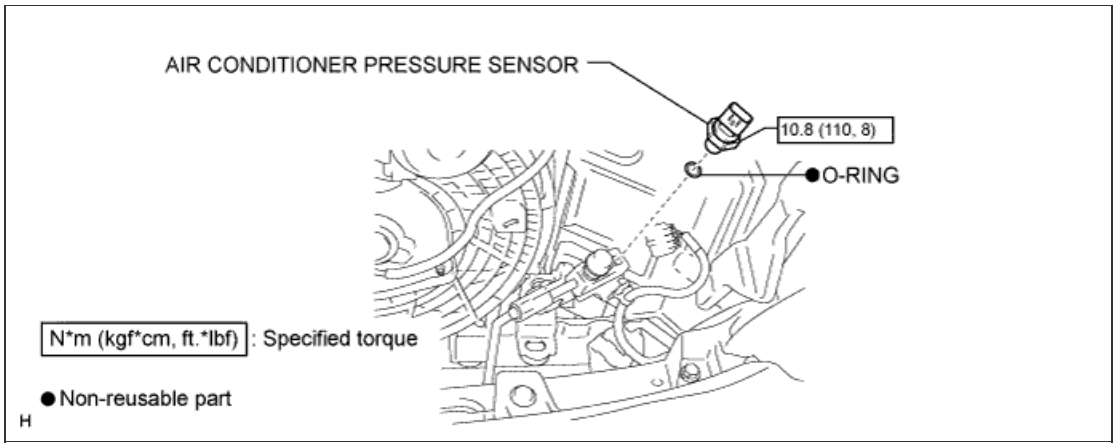
20. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here




x 7
x 3
UPPER RADIATOR SUPPORT SEAL
ENGINE ROOM SIDE COVER RH
x 7
ENGINE ROOM SIDE COVER LH
x 2
RADIATOR GRILLE ASSEMBLY
x 3
x 5
x 3
x 4
x 2
FRONT BUMPER COVER
P


AIR CONDITIONER PRESSURE SENSOR
10.8 (110, 8)
●O-RING
N*m (kgf*cm, ft.*lbf) : Specified torque
● Non-reusable part
H

for Preparation Click here

1. REMOVE FRONT BUMPER COVER

a. Remove the front bumper cover (Click here).

2. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM

a. Start the engine.

b. Turn the A/C switch on.

c. Operate the cooler compressor while the engine speed is approximately 1000 rpm for 5 to 6 minutes to circulate the refrigerant and collect the compressor oil remaining in each component into the cooler compressor.

d. Stop the engine.

e. Recover the refrigerant from the A/C system using a refrigerant recovery unit.

3. REMOVE AIR CONDITIONER PRESSURE SENSOR

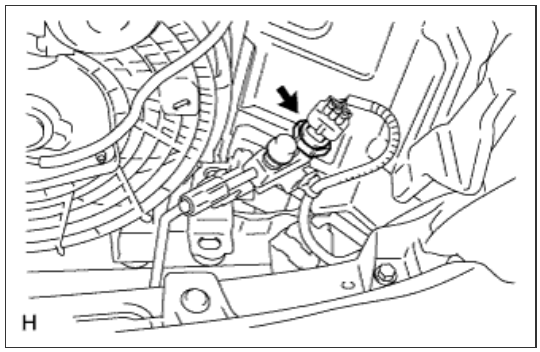
a. Disconnect the connector.

b. Remove the pressure sensor.

c. Remove the O-ring from the pressure sensor.

NOTICE:

Seal the openings of the disconnected parts using vinyl tape to prevent moisture and foreign matter from entering them.



for Preparation Click here

1. INSTALL AIR CONDITIONER PRESSURE SENSOR

a. Sufficiently apply compressor oil to a new O-ring and the fitting surface of the pressure sensor.

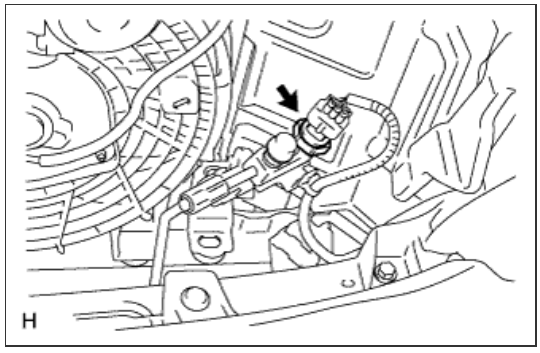
Compressor oil:
ND-OIL 8 or equivalent

b. Install the O-ring to the pressure sensor.

c. Install the pressure sensor.

Torque:
10.8 N*m{ 110 kgf*cm , 8 ft.*lbf }

d. Connect the connector.



2. CHARGE REFRIGERANT

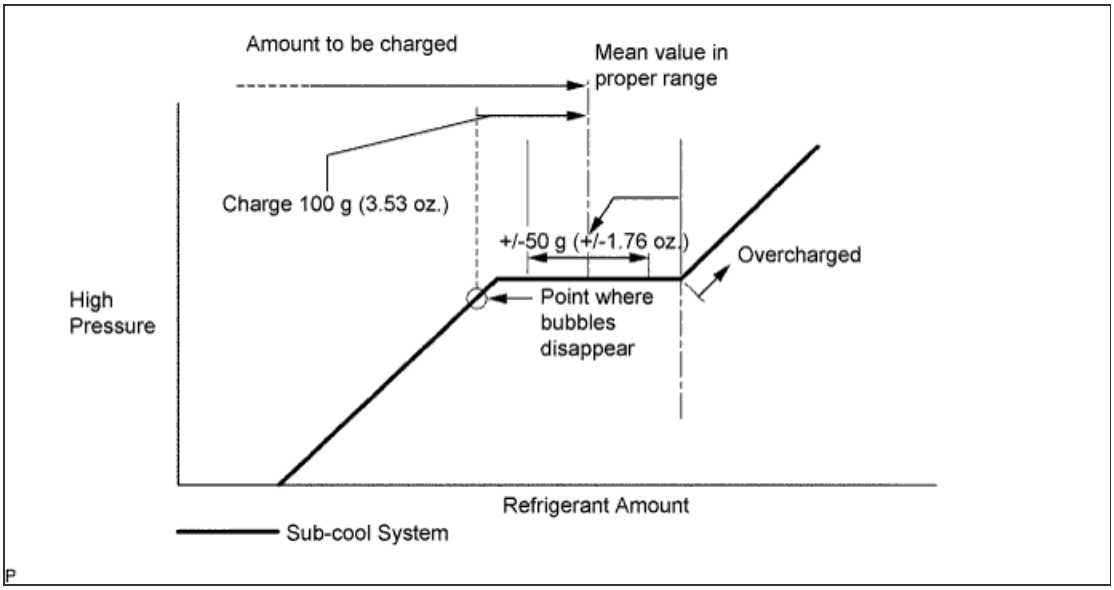
SST
09985-20010 (09985-02130, 09985-02150, 09985-02090, 09985-02110, 09985-02010, 09985-02050, 09985-02060, 09985-02070)

a. Perform vacuum purging using a vacuum pump.

b. Charge refrigerant HFC-134a (R134a).

Standard:

Condenser Core Thickness	Cool Box	Refrigerant Charging Amount
22 mm (0.866 in.)	w/ Cool Box	1010 +/-30 g (35.6 +/-1.1 oz.)
	w/o Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
16 mm (0.630 in.)	w/ Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
	w/o Cool Box	920 +/-30 g (32.5 +/-1.1 oz.)



NOTICE:

- **Do not operate the cooler compressor before charging refrigerant as the cooler compressor will not work properly without any refrigerant, and will overheat.**
- **Approximately 100 g (3.53 oz.) of refrigerant may need to be charged after bubbles disappear. The refrigerant amount should be checked by measuring its quantity, and not with the sight glass.**

3. WARM UP ENGINE

a. Warm up the engine at less than 1850 rpm for 2 minutes or more after charging the refrigerant.

NOTICE:

Be sure to warm up the compressor when turning the A/C switch on after removing and installing the cooler refrigerant lines (including the compressor), to prevent damage to the compressor.

4. CHECK FOR REFRIGERANT GAS LEAK

a. After recharging the refrigerant gas, check for refrigerant gas leakage using a halogen leak detector.

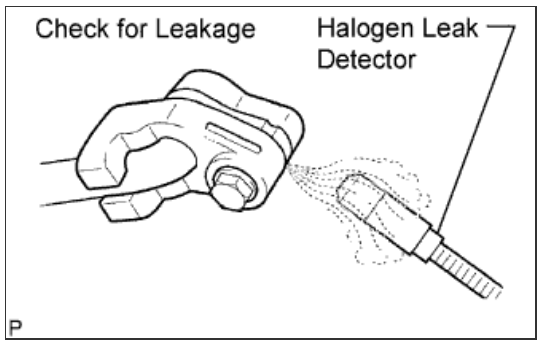
b. Perform the operation under these conditions:

- Stop the engine.
- Secure good ventilation (the halogen leak detector may react to volatile gases other than refrigerant, such as evaporated gasoline or exhaust gas).
- Repeat the test 2 or 3 times.
- Make sure that some refrigerant remains in the refrigeration system. When compressor is off: approximately 392 to 588 kPa (4.0 to 6.0 kgf/cm^2, 57 to 85 psi).

c. Using a halogen leak detector, check the refrigerant line for leakage.

d. If a gas leak is not detected on the drain hose, remove the blower motor control (blower resistor) from the cooling unit. Insert the halogen leak detector sensor into the unit and perform the test.

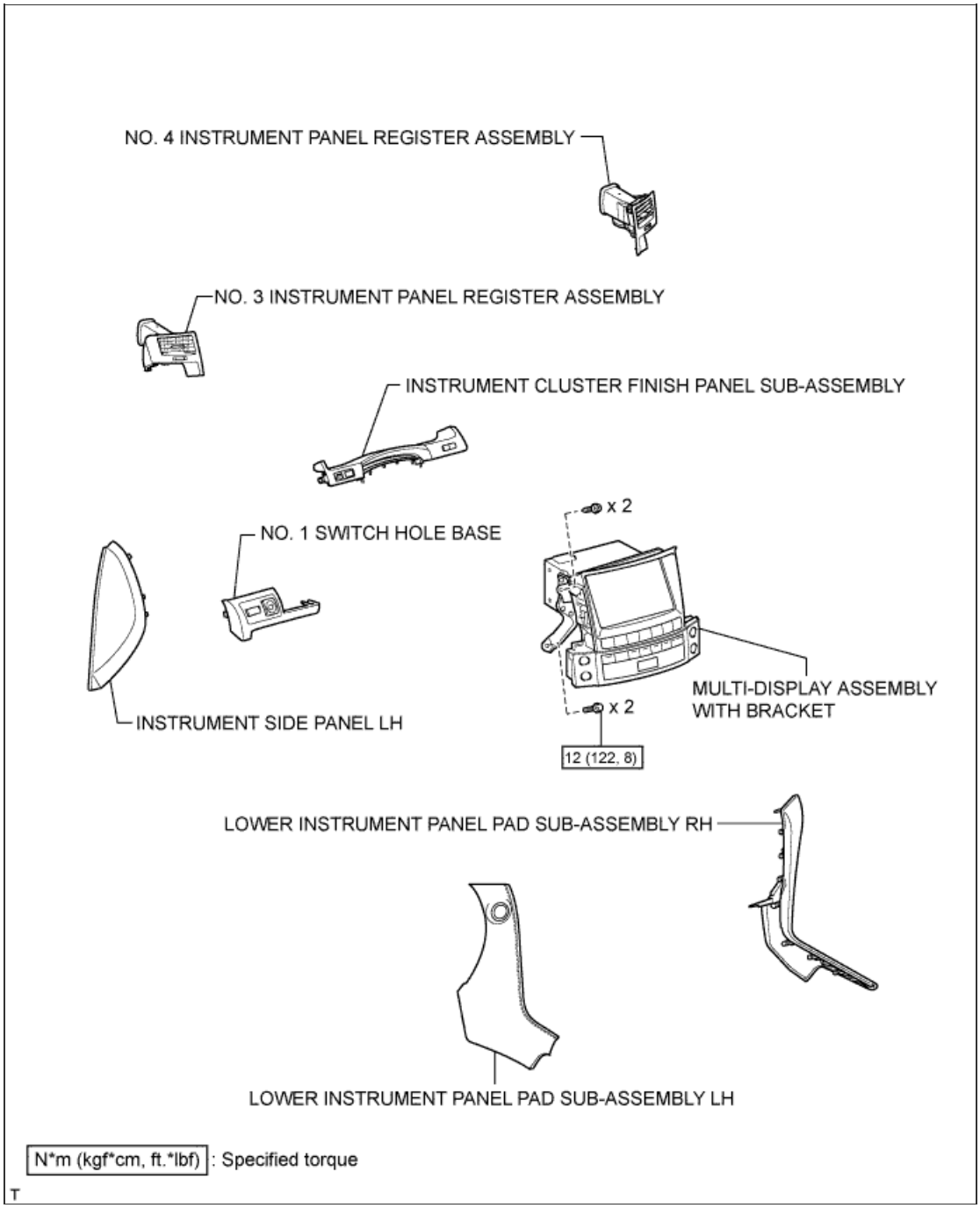
e. Disconnect the connector and wait for approximately 20 minutes. Bring the halogen leak detector close to the pressure switch and perform the test.



5. INSTALL FRONT BUMPER COVER

a. Install the front bumper cover (Click here).

for Preparation Click here



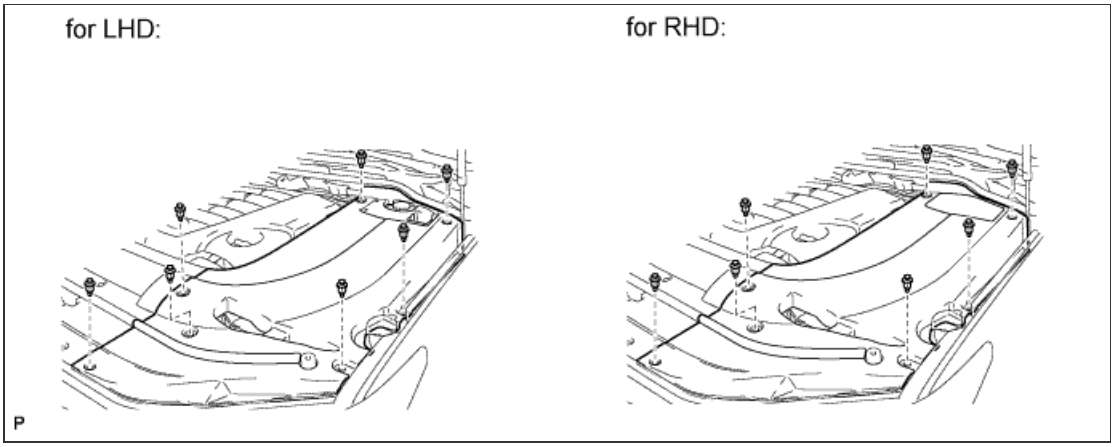
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

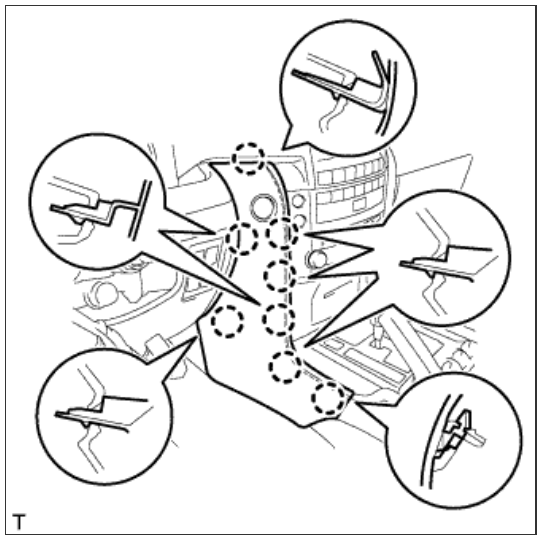
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

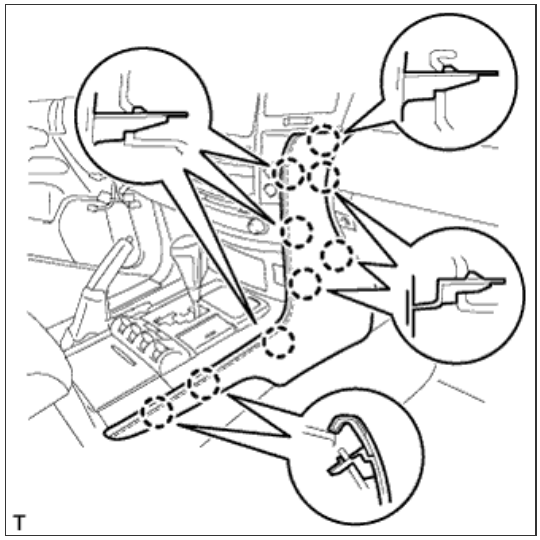
a. Detach the 8 claws.

b. Disconnect the connector and remove the panel pad.



4. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

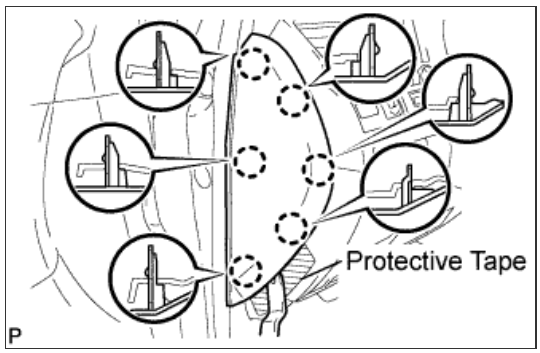
a. Detach the 9 claws and remove the panel pad.



5. REMOVE INSTRUMENT SIDE PANEL LH

a. Place protective tape as shown in the illustration.

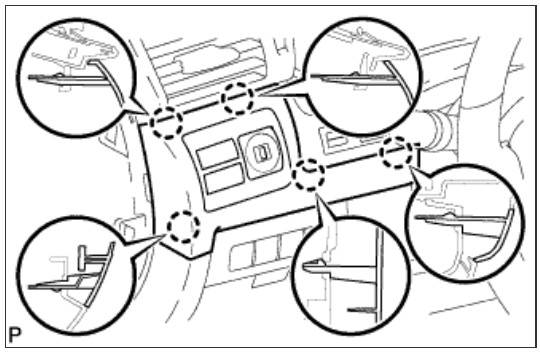
b. Using a moulding remover, detach the 6 claws and remove the side panel.



6. REMOVE NO. 1 SWITCH HOLE BASE

a. Detach the 5 claws.

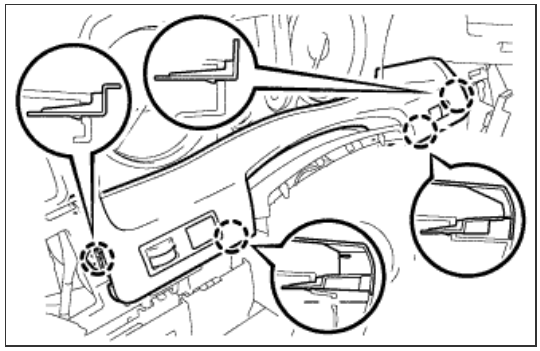
b. Disconnect the connectors and remove the switch hole base.



7. REMOVE INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

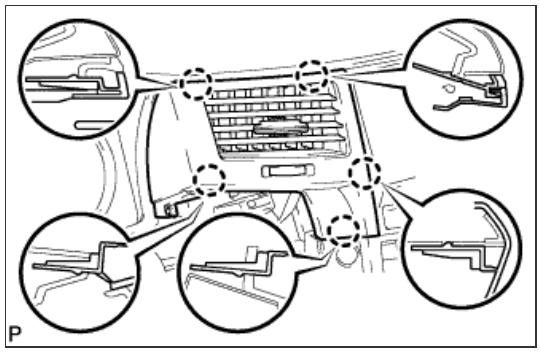
a. Detach the 4 claws.

b. Disconnect the connectors and remove the finish panel.



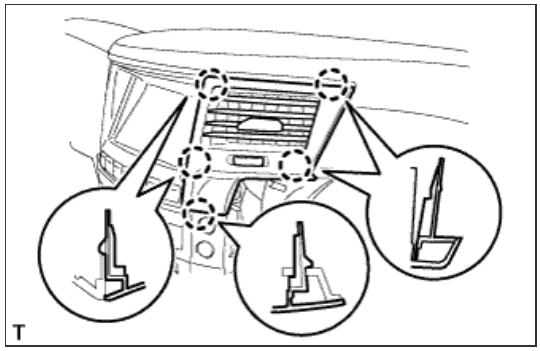
8. REMOVE NO. 3 INSTRUMENT PANEL REGISTER ASSEMBLY

a. Detach the 5 claws and remove the register.



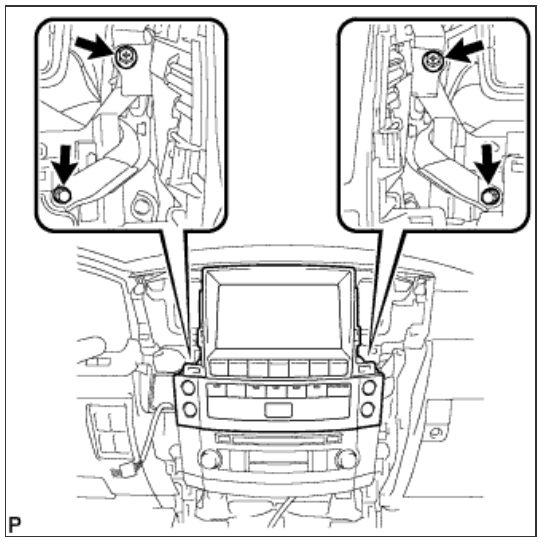
9. REMOVE NO. 4 INSTRUMENT PANEL REGISTER ASSEMBLY

a. Detach the 5 claws and remove the register.



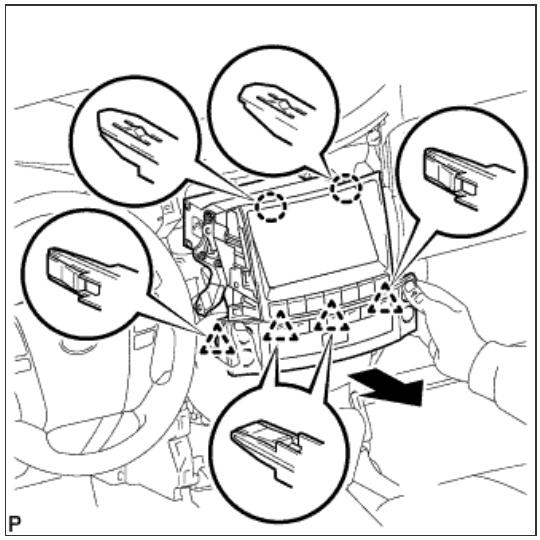
10. REMOVE MULTI-DISPLAY ASSEMBLY WITH BRACKET

a. Remove the 2 screws and 2 bolts.



b. Pull the radio receiver to detach the 4 clips on the backside of the display.

c. Disconnect the connectors and remove the display.



for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

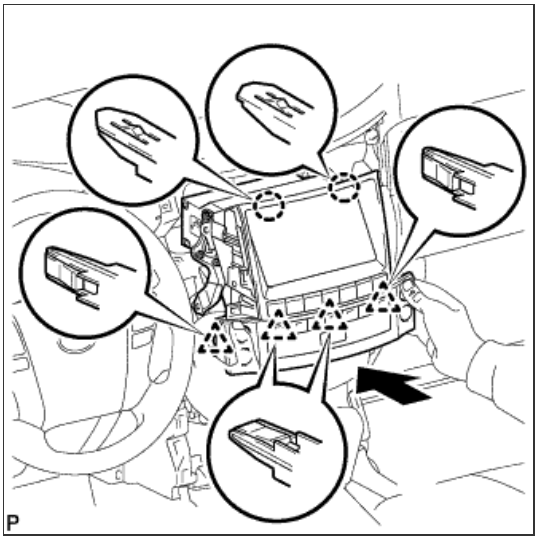
1. INSTALL MULTI-DISPLAY ASSEMBLY WITH BRACKET

a. Connect the connectors.

b. Insert the display and attach the 4 clips on its backside.

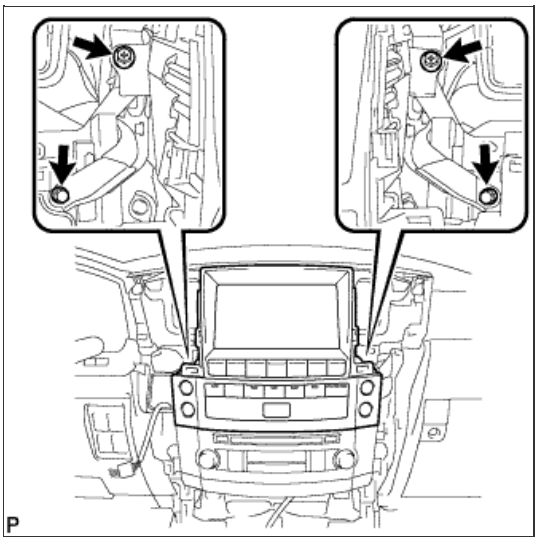
NOTICE:

When inserting the display, do not press the knobs on it.



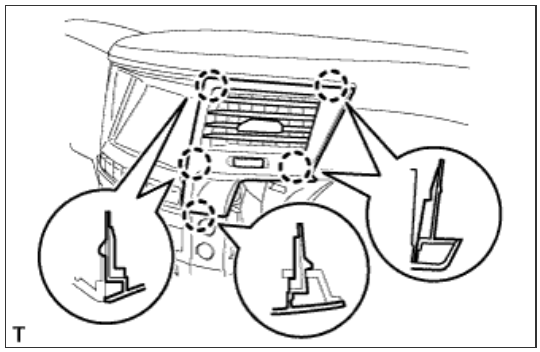
c. Install the display with the 2 screws and 2 bolts.

Torque:
12 N*m{ 122 kgf*cm , 8 ft.*lbf }



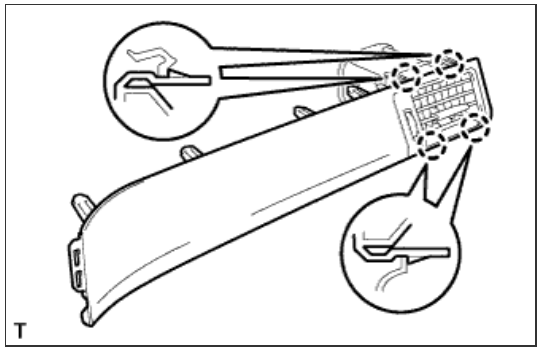
2. INSTALL NO. 4 INSTRUMENT PANEL REGISTER ASSEMBLY

a. Attach the 5 claws to install the register.

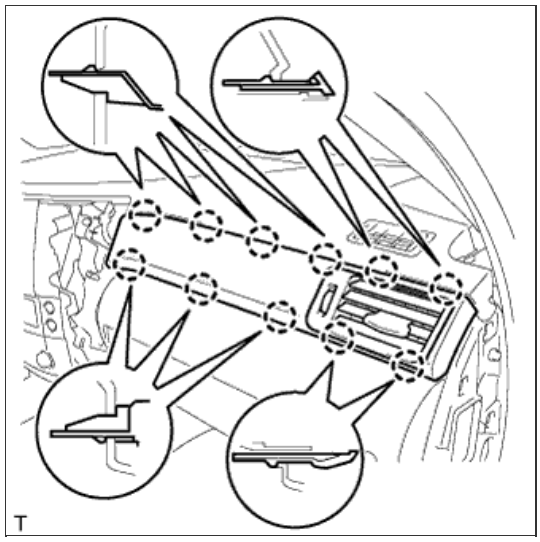


3. INSTALL NO. 3 INSTRUMENT PANEL REGISTER ASSEMBLY

a. Attach the 4 claws to install the panel garnish.



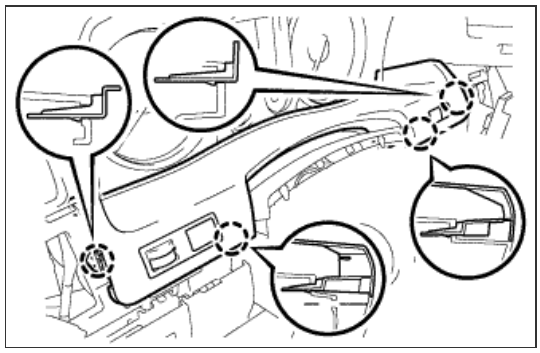
b. Attach the 11 claws to install the register assembly.



4. INSTALL INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

a. Connect the connectors.

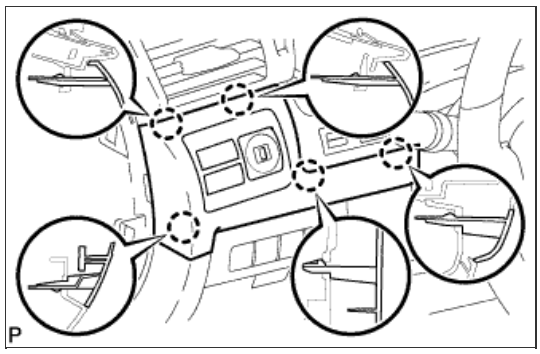
b. Attach the 4 claws to install the finish panel.



5. INSTALL NO. 1 SWITCH HOLE BASE

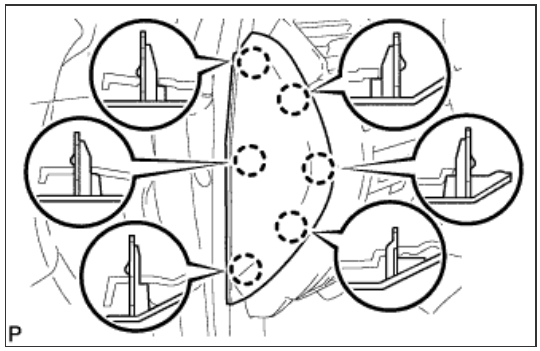
a. Connect the connectors.

b. Attach the 5 claws to install the switch hole base.



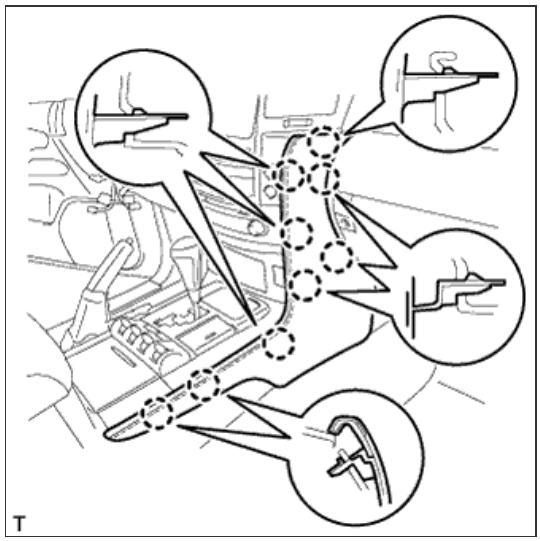
6. INSTALL INSTRUMENT SIDE PANEL LH

a. Attach the 6 claws to install the side panel.



7. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

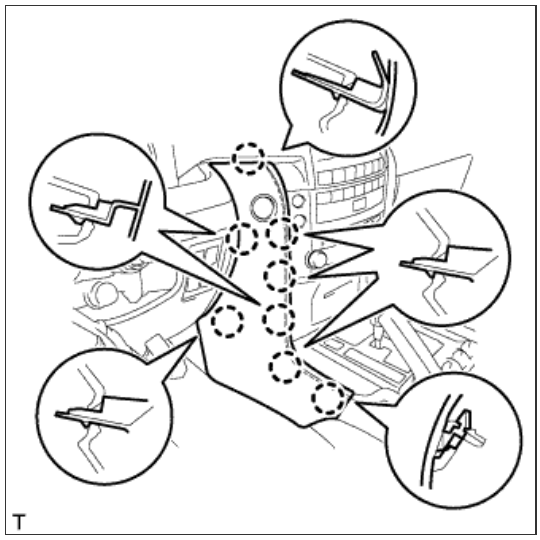
a. Attach the 9 claws to install the panel pad.



8. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Connect the connector.

b. Attach the 8 claws to install the panel pad.



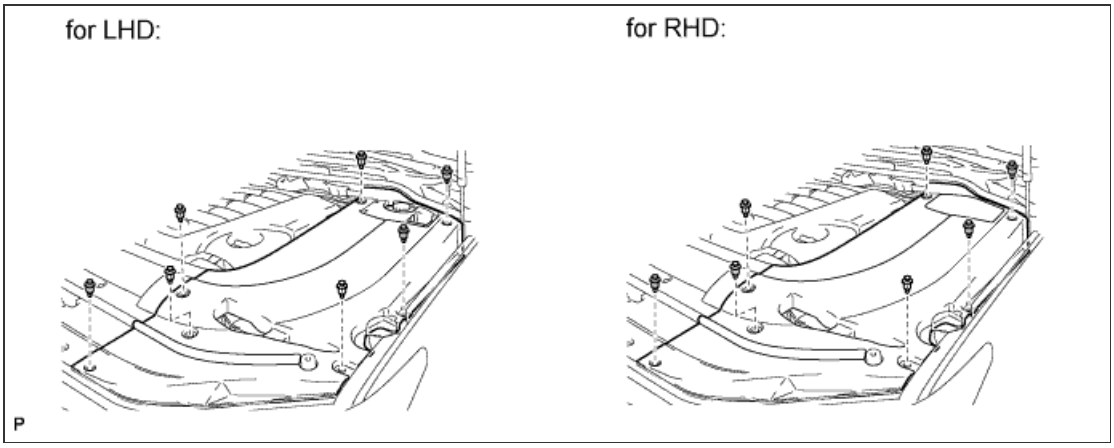
9. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

10. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here

1.PRECAUTIONS FOR REPLACEMENT

NOTICE:

When replacing electronic parts, if there is a possibility that your body may contact a circuit board, etc., observe all precautions to prevent damage to the system by electrostatic discharge (ESD).

a. Procedures where static electricity countermeasures are necessary:

   i. Lower heater control base and center cluster module circuit replacement.

   ii. Internal wiring connection/disconnection, inspection and replacement.

b. General precautions:

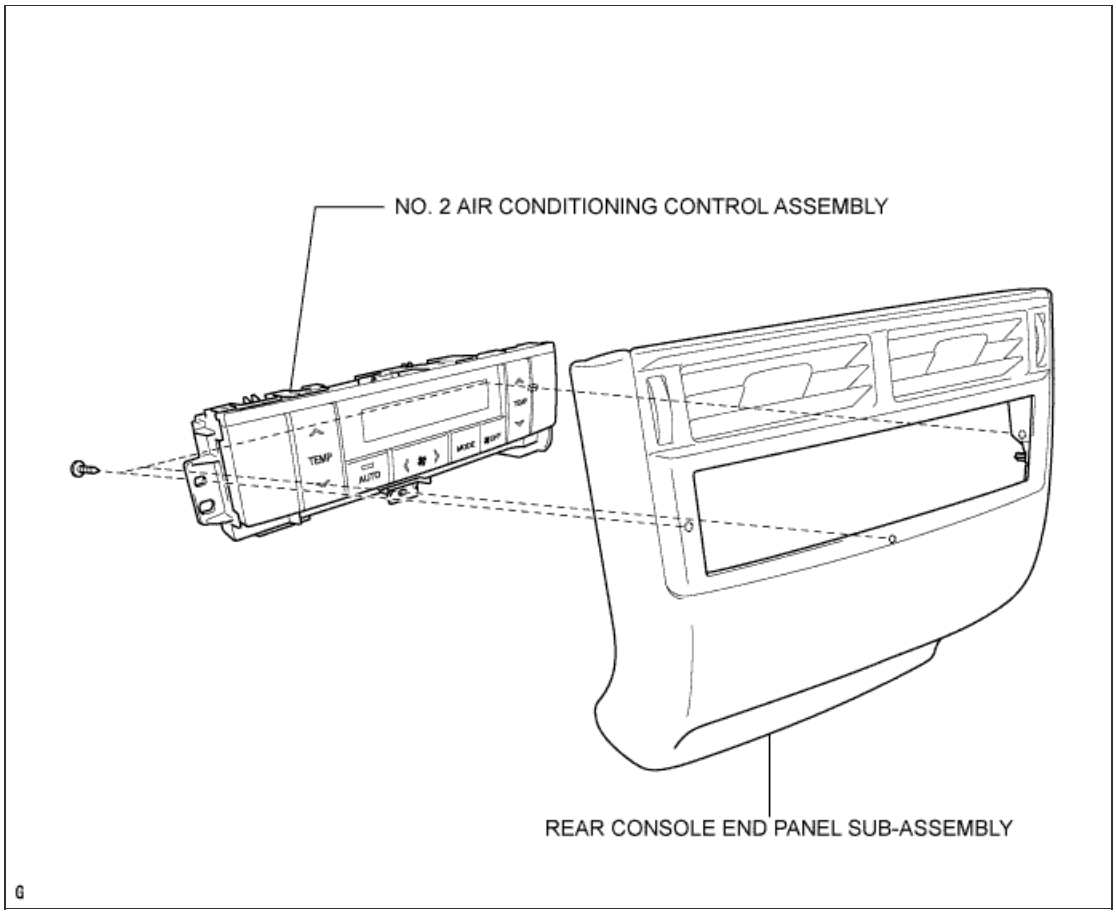
   i. Before performing any procedures, touch an unpainted metal part or ground bolt of the vehicle to discharge any static electricity.

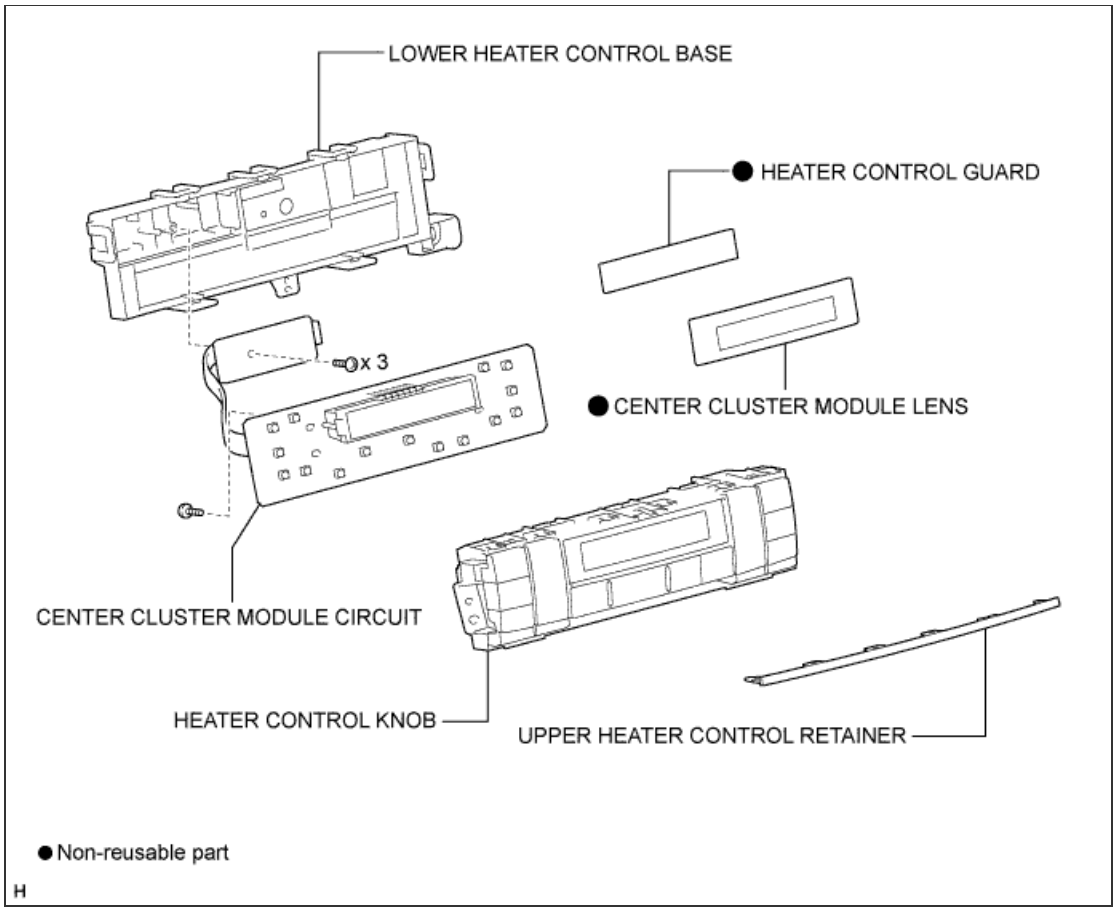
   ii. To prevent damage to electrical equipment, disconnect the battery power supply before removing or installing electrical equipment.

   iii. Never touch the electronic parts of a circuit board or the pins of an integrated circuit.

   iv. When performing procedures, do not allow clothing to come near or contact parts.

for Preparation Click here




LOWER HEATER CONTROL BASE
HEATER CONTROL GUARD
x 3
CENTER CLUSTER MODULE LENS
CENTER CLUSTER MODULE CIRCUIT
HEATER CONTROL KNOB
UPPER HEATER CONTROL RETAINER
● Non-reusable part
H

for Preparation Click here

1. REMOVE REAR CONSOLE END PANEL SUB-ASSEMBLY

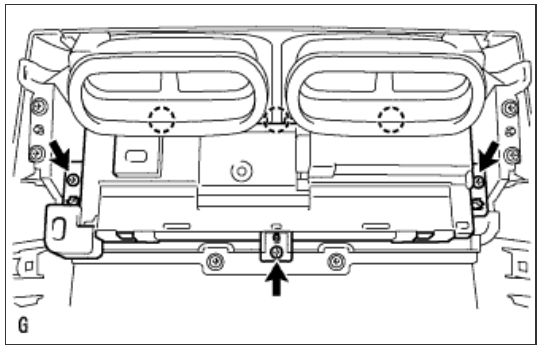
a. w/ Cool Box:
Remove the rear console end panel (Click here).

b. w/o Cool Box:
Remove the rear console end panel (Click here).

2. REMOVE NO. 2 AIR CONDITIONING CONTROL ASSEMBLY

a. Remove the 3 screws.

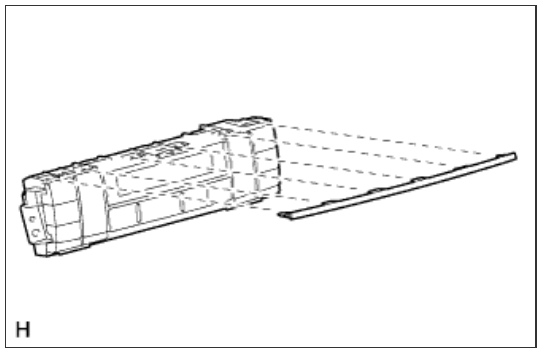
b. Detach the 3 claws and remove the air conditioning control.



for Preparation Click here

1. REMOVE UPPER HEATER CONTROL RETAINER

a. Remove the upper heater control retainer.

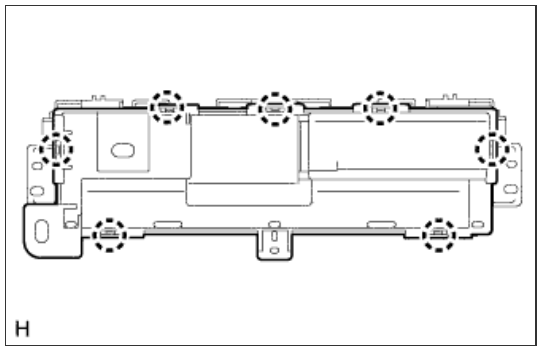


2. REMOVE LOWER HEATER CONTROL BASE

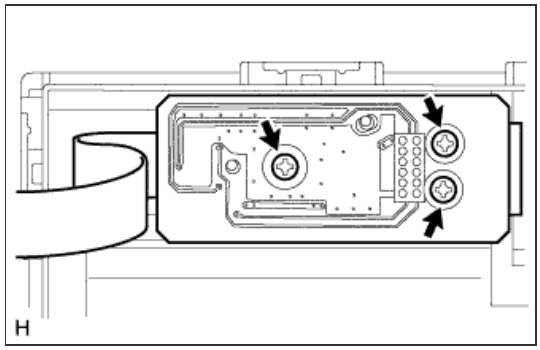
NOTICE:

As the electronic parts of the circuit board may be damaged by static electricity, do not touch the electronic parts of the circuit board or the soldered areas with bare hands.

a. Detach the 7 claws.



b. Remove the 3 screws and lower heater control base.

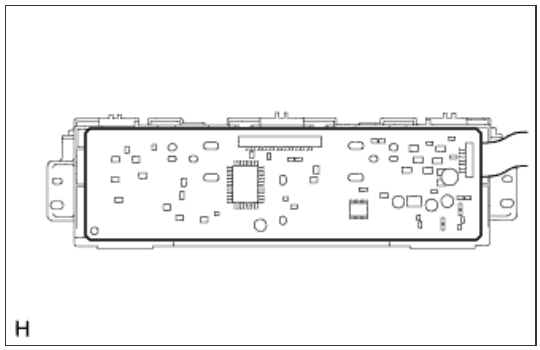


3. REMOVE CENTER CLUSTER MODULE CIRCUIT

NOTICE:

As the electronic parts of the circuit board may be damaged by static electricity, do not touch the electronic parts of the circuit board or the soldered areas with bare hands.

a. Remove the center cluster module circuit.

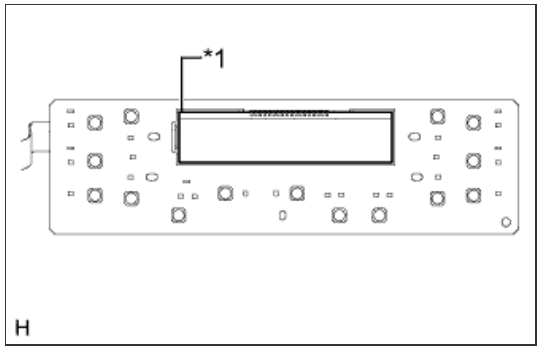


4. REMOVE HEATER CONTROL GUARD

a. Remove the heater control guard.

Text in Illustration

*1	Heater Control Guard

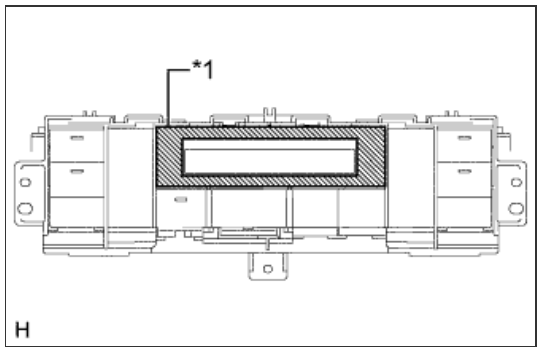


5. REMOVE CENTER CLUSTER MODULE LENS

a. Remove the double-sided tape and center cluster module lens.

Text in Illustration

*1	Double-sided Tape



for Preparation Click here

1. INSTALL CENTER CLUSTER MODULE LENS

a. Remove the double-sided tape from the heater control knob.

b. Wipe off any tape adhesive residue with cleaner.

c. Remove the peeling paper from the a new center cluster module lens.

NOTICE:

After removing the peeling paper, keep the exposed adhesive free from foreign matter.

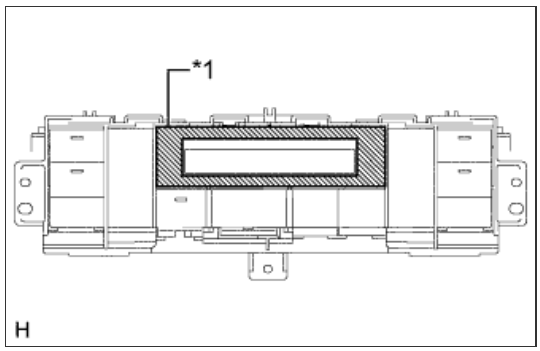
d. Install the center cluster module lens.

Text in Illustration

*1	Double-sided Tape

NOTICE:

Do not reuse the center cluster module lens after removing it.

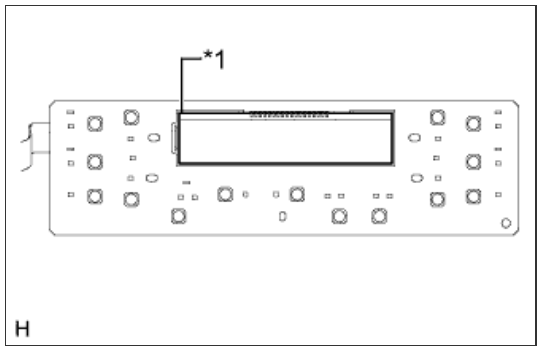


2. INSTALL HEATER CONTROL GUARD

a. Install new heater control guard.

Text in Illustration

*1	Heater Control Guard

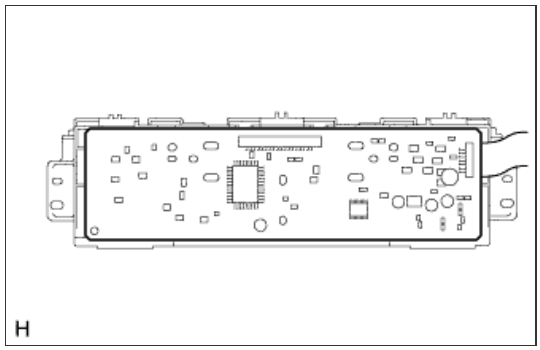


3. INSTALL CENTER CLUSTER MODULE CIRCUIT

NOTICE:

As the electronic parts of the circuit board may be damaged by static electricity, do not touch the electronic parts of the circuit board or the soldered areas with bare hands.

a. Install the center cluster module circuit.

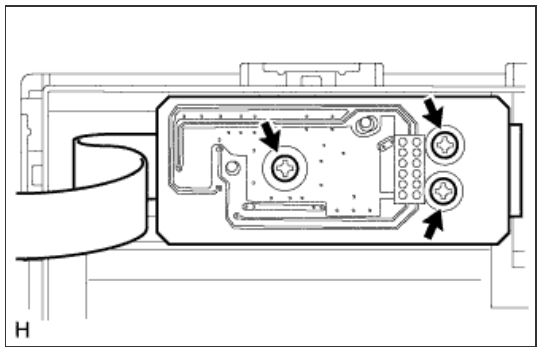


4. INSTALL LOWER HEATER CONTROL BASE

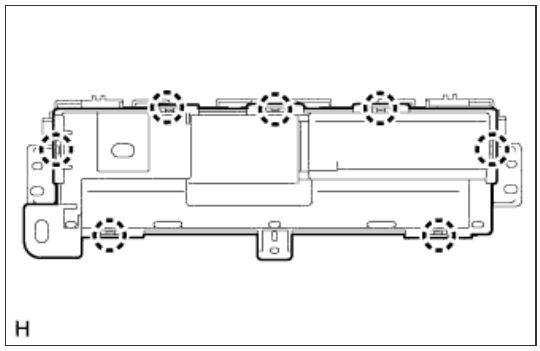
NOTICE:

As the electronic parts of the circuit board may be damaged by static electricity, do not touch the electronic parts of the circuit board or the soldered areas with bare hands.

a. Install the 3 screws and lower heater control base.

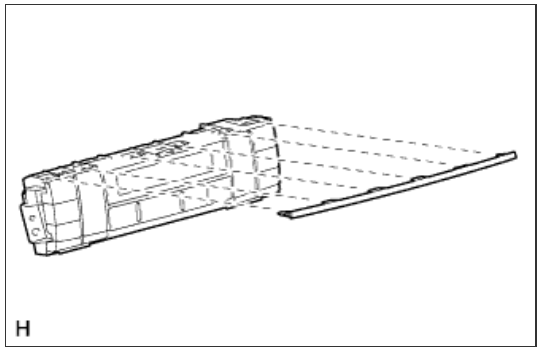


b. Attach the 6 claws to install the lower heater control base.



5. INSTALL UPPER HEATER CONTROL RETAINER

a. Install the upper heater control retainer.

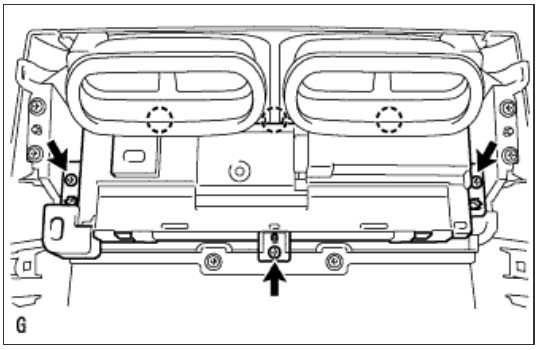


for Preparation Click here

1. INSTALL NO. 2 AIR CONDITIONING CONTROL ASSEMBLY

a. Attach the 3 claws to install the air conditioning control.

b. Install the 3 screws.

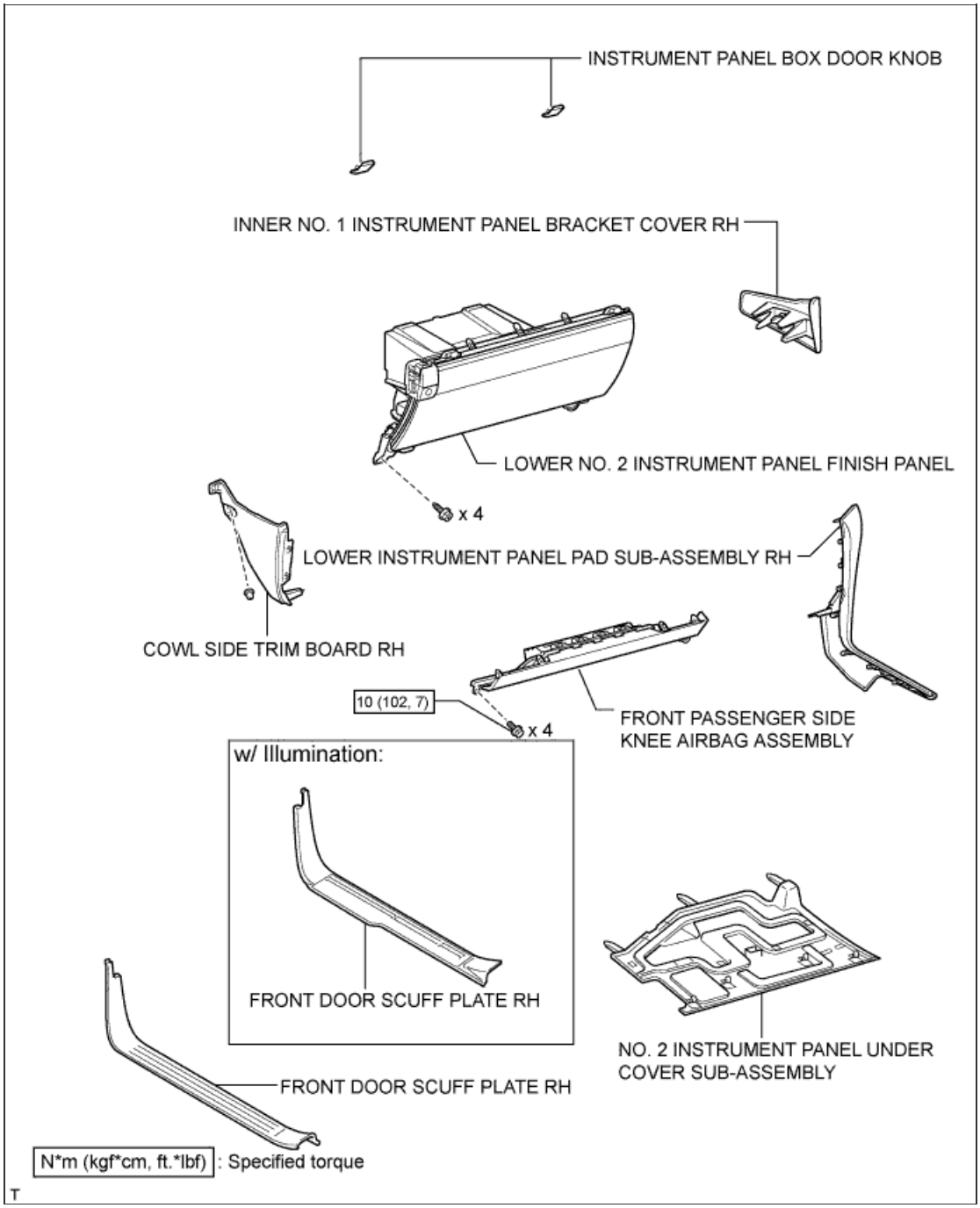


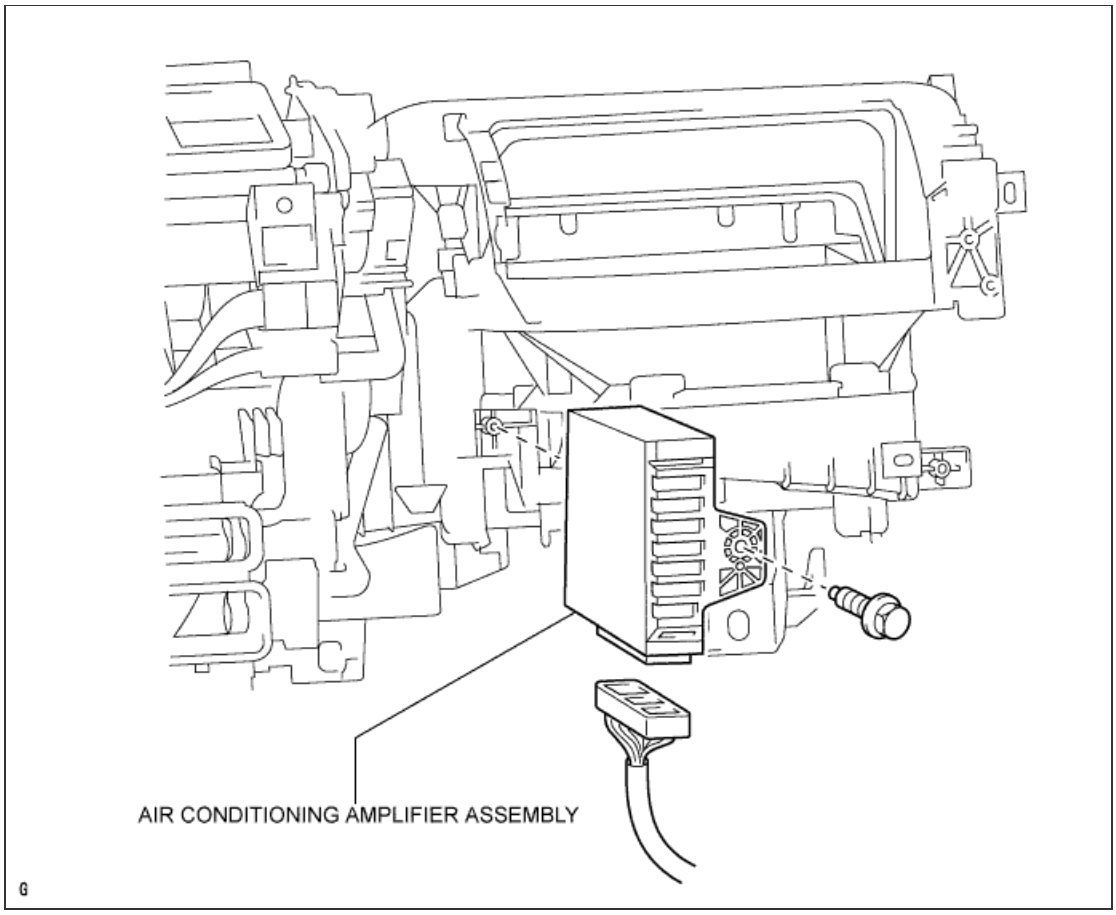
2. INSTALL REAR CONSOLE END PANEL SUB-ASSEMBLY

a. w/ Cool Box:
Install the rear console end panel (Click here).

b. w/o Cool Box:
Install the rear console end panel (Click here).

for Preparation Click here




AIR CONDITIONING AMPLIFIER ASSEMBLY
G

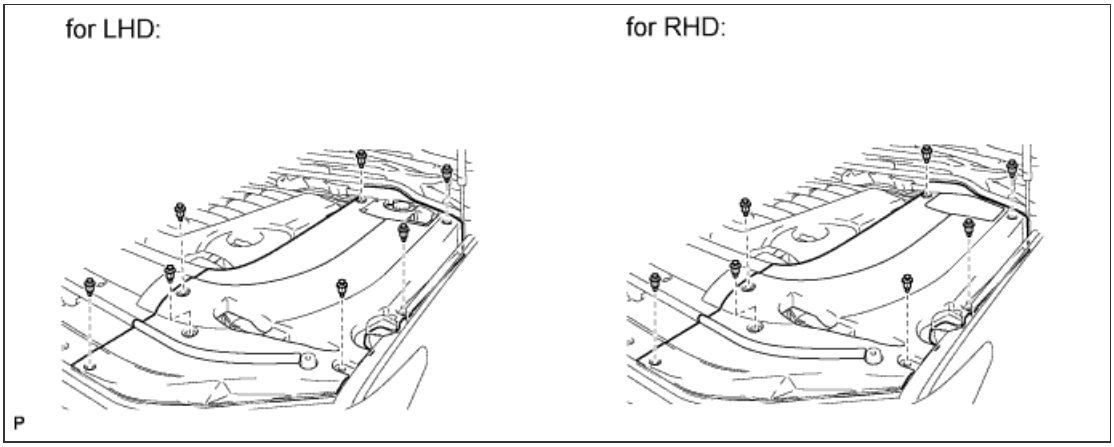
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

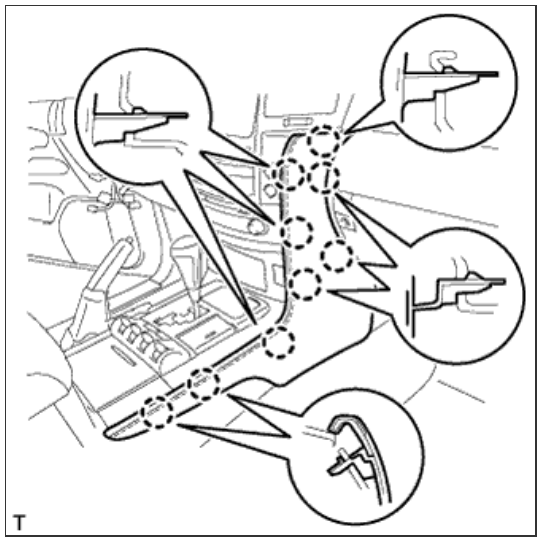
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

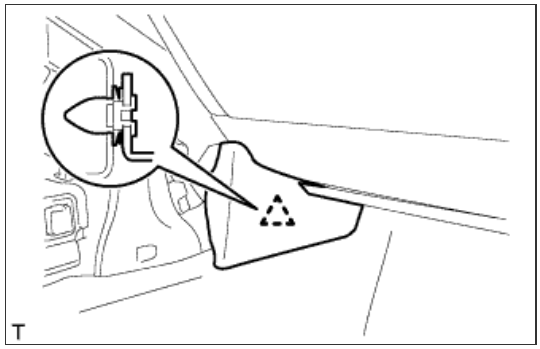
3. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

a. Detach the 9 claws and remove the panel pad.



4. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER RH

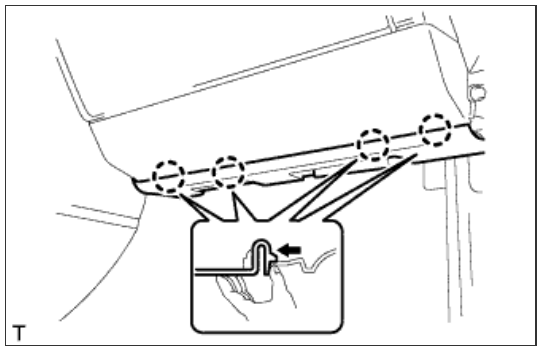
a. Detach the clip and remove the cover.



5. REMOVE NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Detach the 4 claws.

b. Remove the under cover and disconnect the connector.



6. REMOVE FRONT DOOR SCUFF PLATE RH

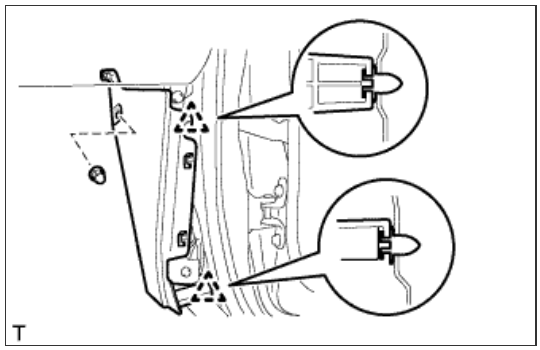
HINT:

Use the same procedures described for the LH side.

7. REMOVE COWL SIDE TRIM BOARD RH

a. Remove the cap nut.

b. Detach the 2 clips and remove the trim board.



8. REMOVE FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY

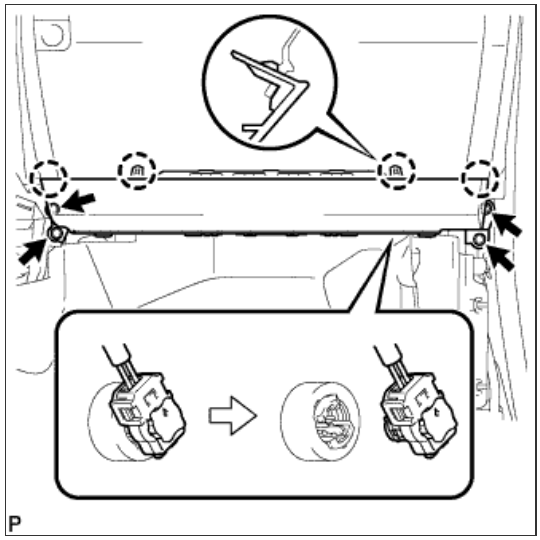
a. Remove the 4 bolts.

b. Detach the 4 claws and remove the front passenger side knee airbag.

c. Disconnect the connector.

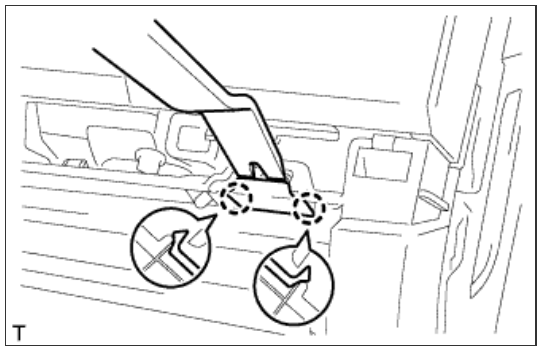
NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



9. REMOVE INSTRUMENT PANEL BOX DOOR KNOB

a. Using a moulding remover, detach the 2 claws and remove the knob.

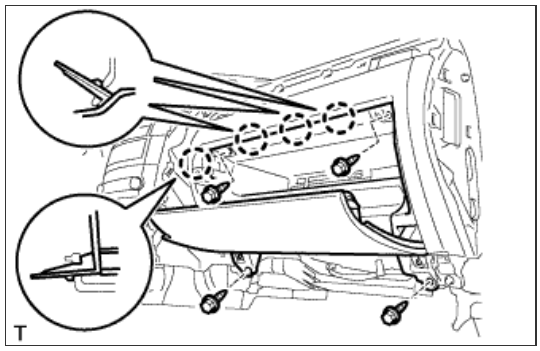


10. REMOVE LOWER NO. 2 INSTRUMENT PANEL FINISH PANEL

a. Remove the 4 bolts.

b. Detach the 4 claws.

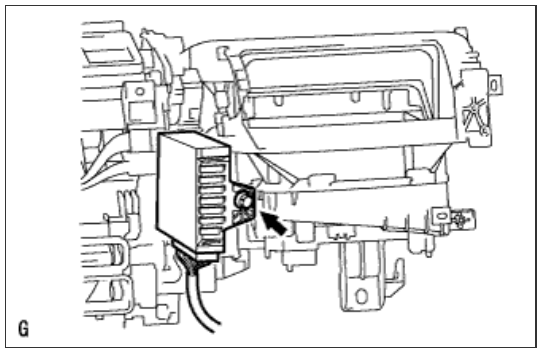
c. Remove the finish panel and then disconnect the connector.



11. REMOVE AIR CONDITIONING AMPLIFIER ASSEMBLY

a. Disconnect the connector.

b. Remove the screw and amplifier.



for Preparation Click here

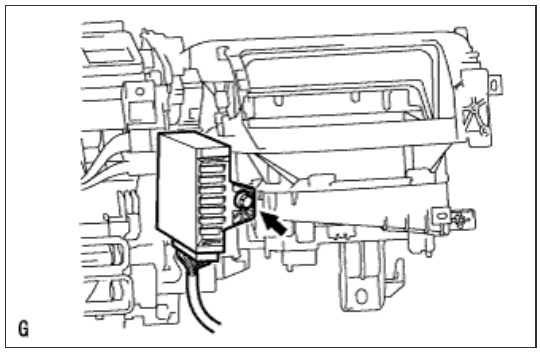
HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

1. INSTALL AIR CONDITIONING AMPLIFIER ASSEMBLY

a. Install the amplifier with the screw.

b. Connect the connector.

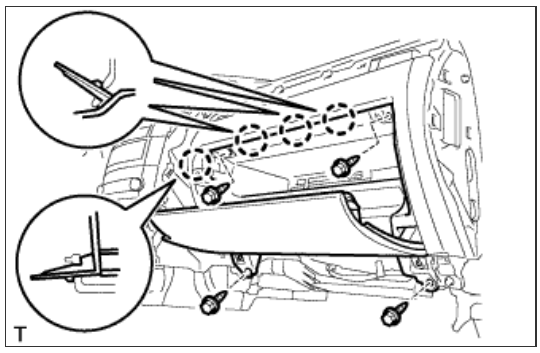


2. INSTALL LOWER NO. 2 INSTRUMENT PANEL FINISH PANEL

a. Connect the connector.

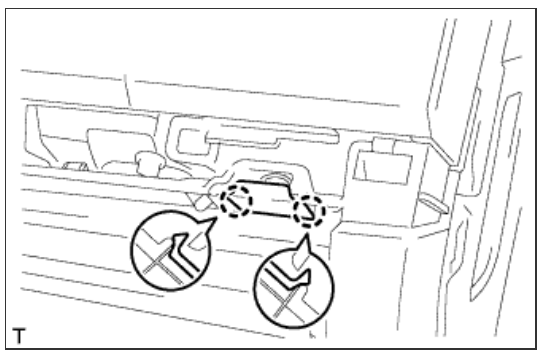
b. Attach the 4 claws to install the finish panel.

c. Install the 4 bolts.



3. INSTALL INSTRUMENT PANEL BOX DOOR KNOB

a. Attach the 2 claws to install the knob.



4. INSTALL FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY

a. Connect the connector.

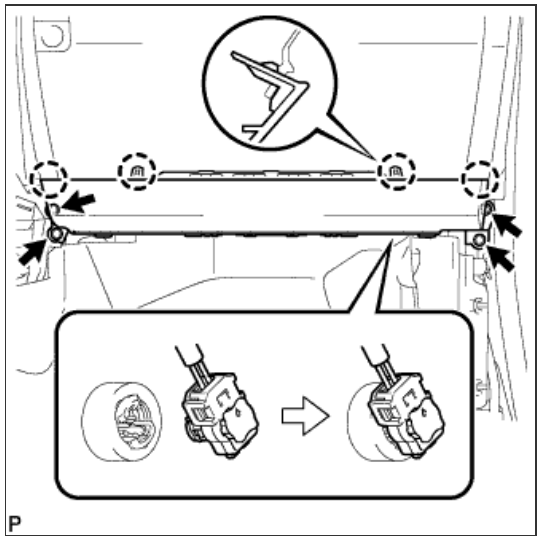
NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

b. Attach the 4 claws to install the front passenger side knee airbag.

c. Install the 4 bolts.

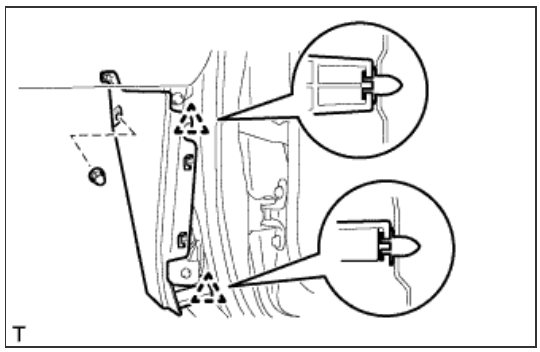
Torque:
10 N*m{ 102 kgf*cm , 7 ft.*lbf }



5. INSTALL COWL SIDE TRIM BOARD RH

a. Attach the 2 clips to install the trim board.

b. Install the cap nut.



6. INSTALL FRONT DOOR SCUFF PLATE RH

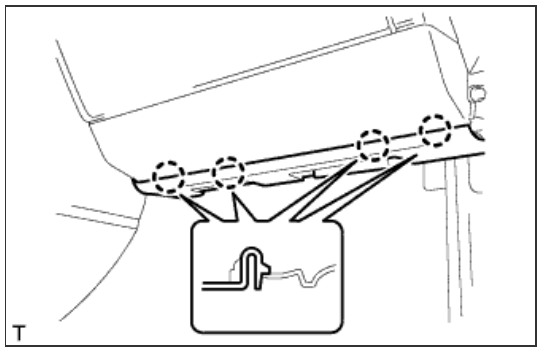
HINT:

Use the same procedures described for the LH side.

7. INSTALL NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Connect the connector.

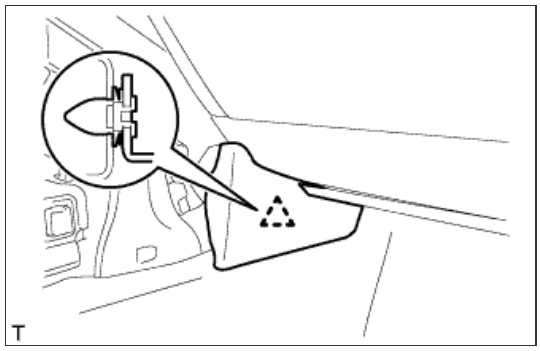
b. Attach the 4 claws to install the under cover.



8. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER RH

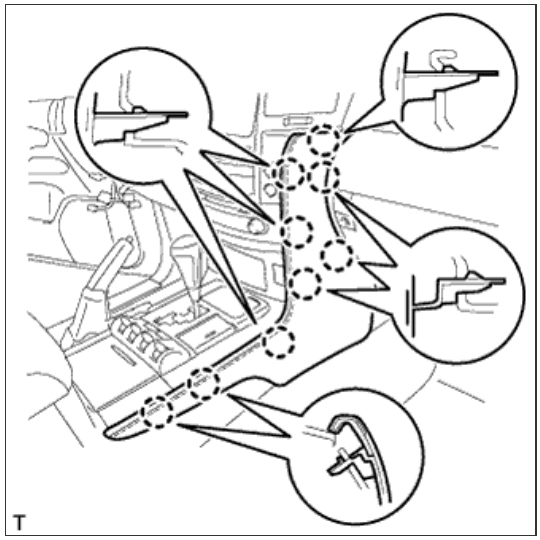
Attach the clips to install the

a. Attach the clip to install the cover.



9. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

a. Attach the 9 claws to install the panel pad.



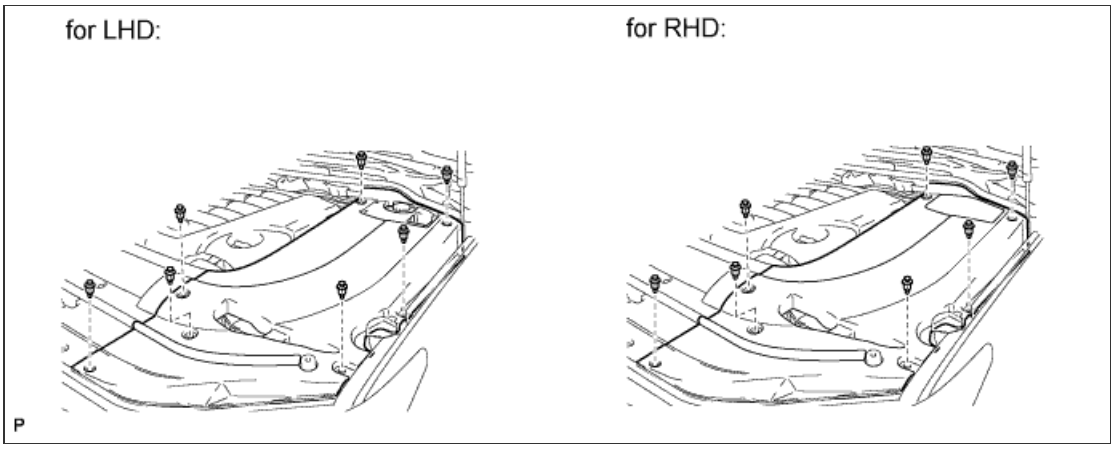
10. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

11. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



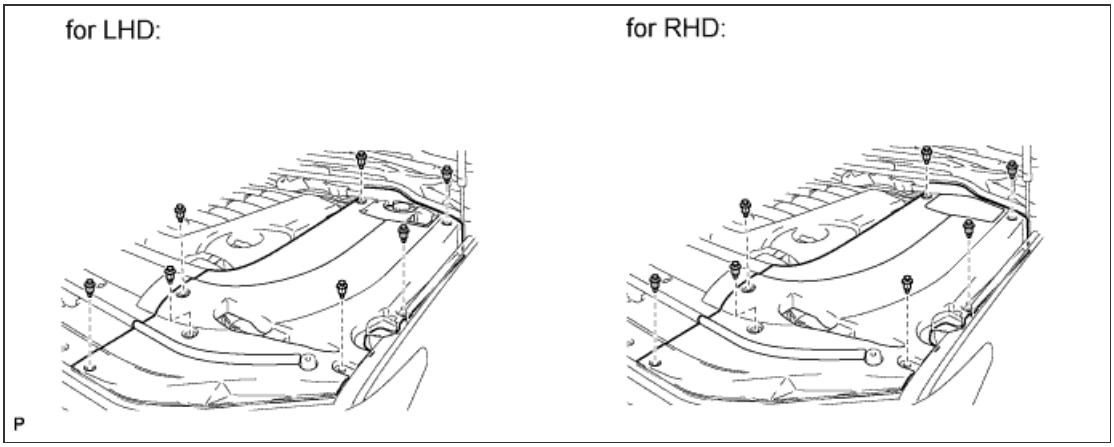
12. CHECK SRS WARNING LIGHT

a. Check the SRS warning light (Click here).

for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

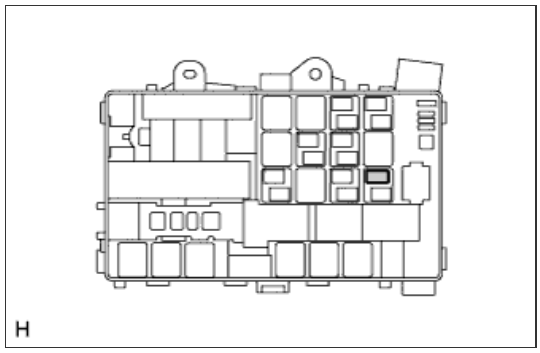
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE MAGNET CLUTCH RELAY

a. Remove the magnet clutch relay from the engine room relay block.



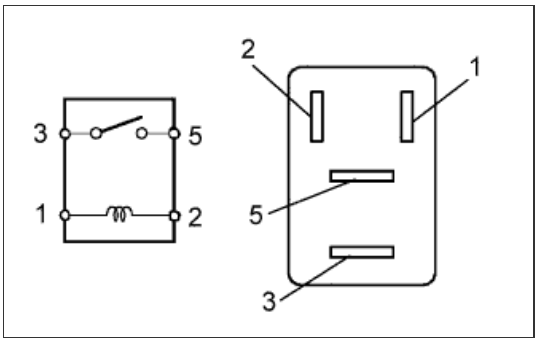
4. INSPECT MAGNET CLUTCH RELAY

a. Measure the resistance of the magnet clutch relay.

Standard Resistance:

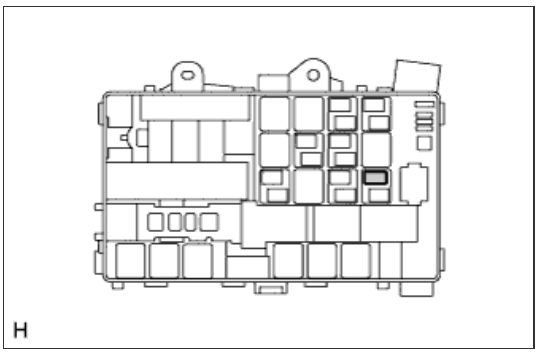
Tester Connection	Condition	Specified Condition
3 - 5	Battery voltage not applied to terminals 1 and 2	10 kΩ or higher
	Battery voltage applied to terminals 1 and 2	Below 1 Ω

If the result is not as specified, replace the relay.



5. INSTALL MAGNET CLUTCH RELAY

a. Install the magnet clutch relay to the engine room relay block.



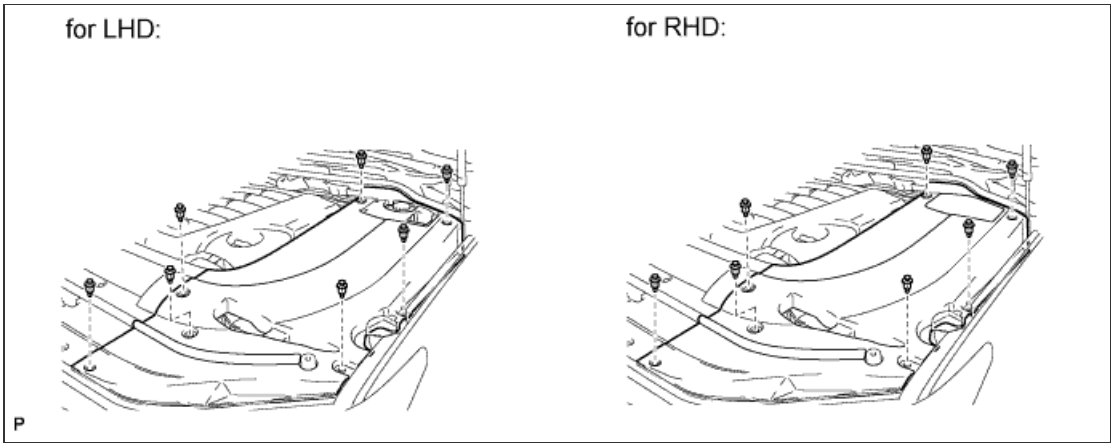
6. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

7. INSTALL ENGINE ROOM SIDE COVER LH

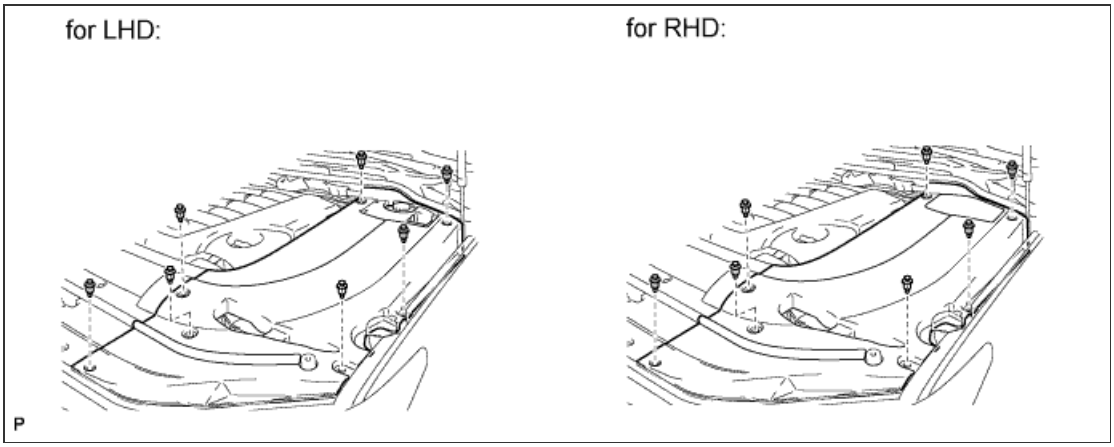
a. Install the engine room side cover with the 7 clips.



for Preparation Click here

1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

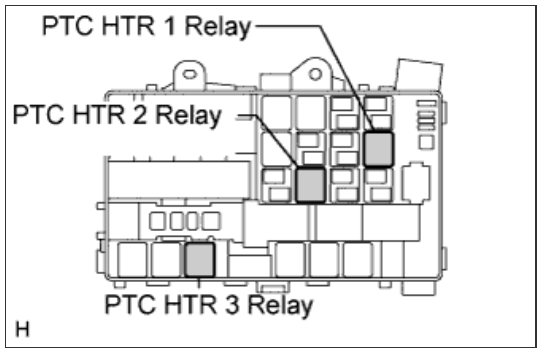
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

3. REMOVE PTC HEATER RELAY (PTC HTR 1, PTC HTR 2, PTC HTR 3)

a. Remove the 3 PTC heater relays from the engine room relay block.



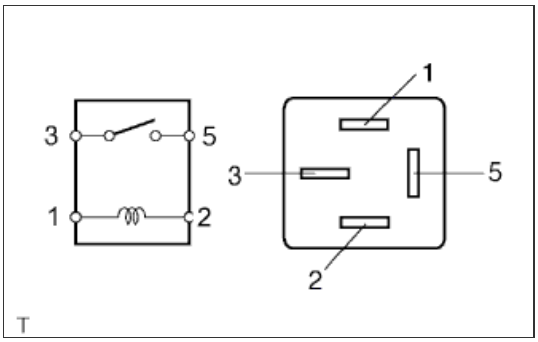
4. INSPECT PTC HEATER RELAY (PTC HTR 1, PTC HTR 2, PTC HTR 3)

a. Measure the resistance of the relay.

Standard Resistance:

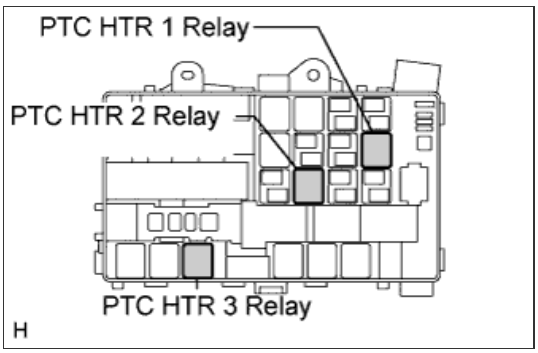
Tester Connection	Condition	Specified Condition
3 - 5	Battery voltage not applied to terminals 1 and 2	10 kΩ or higher
	Battery voltage applied to terminals 1 and 2	Below 1 Ω

If the result is not as specified, replace the relay.



5. INSTALL PTC HEATER RELAY (PTC HTR 1, PTC HTR 2, PTC HTR 3)

a. Install the 3 PTC heater relays to the engine room relay block.



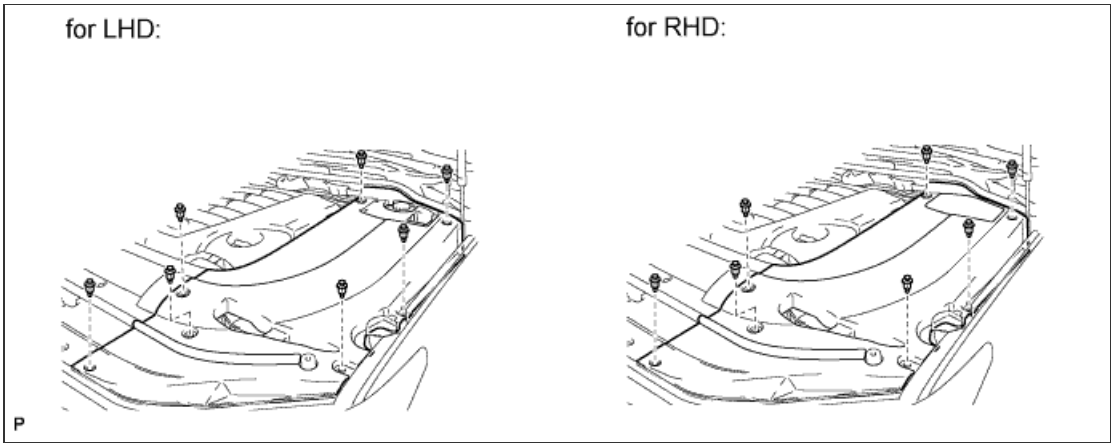
6. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

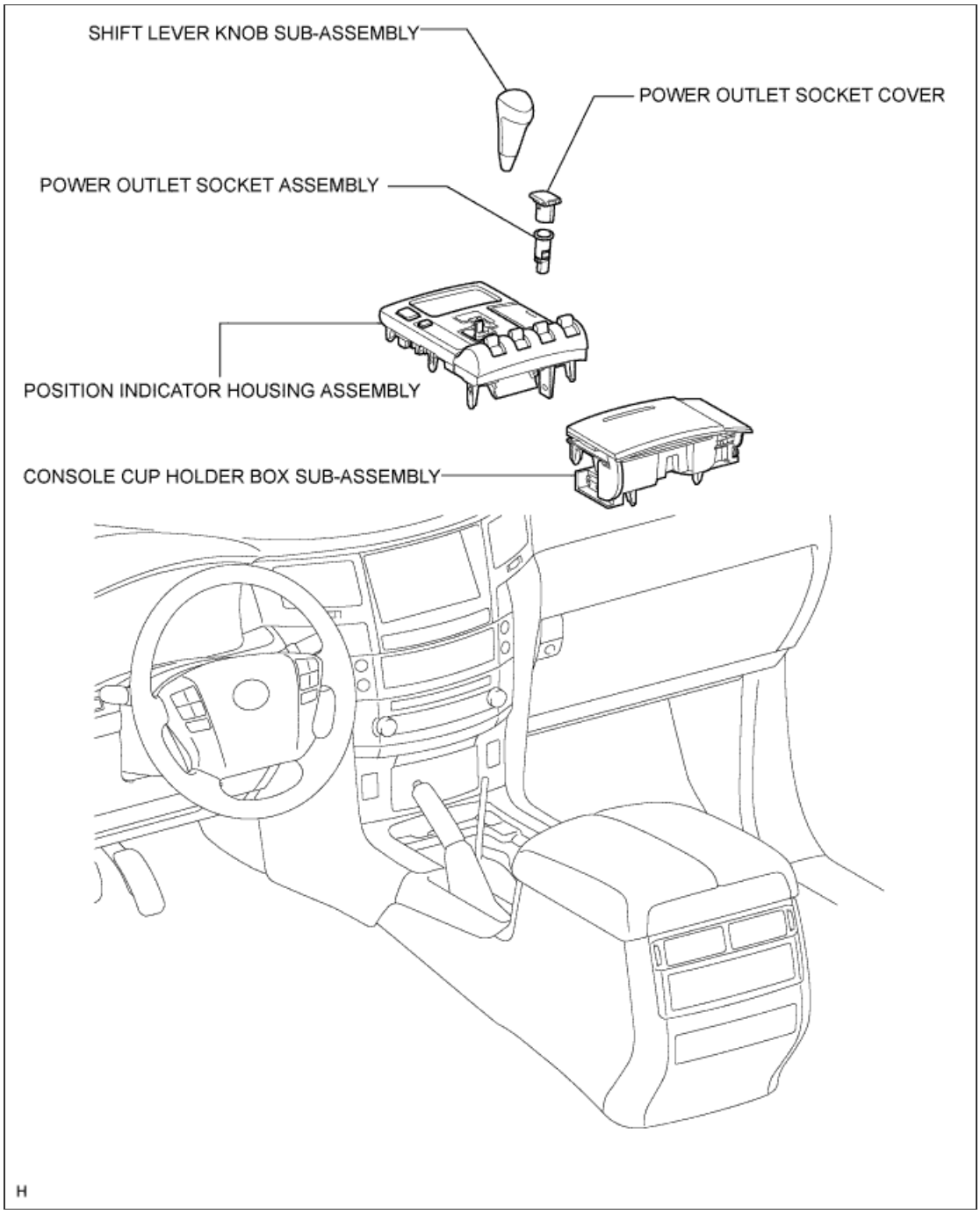
When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

7. INSTALL ENGINE ROOM SIDE COVER LH

a. Install the engine room side cover with the 7 clips.



for Preparation Click here



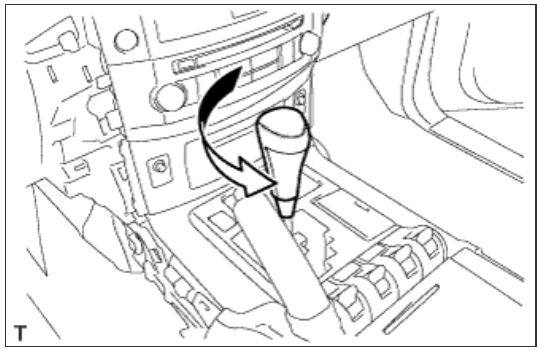
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

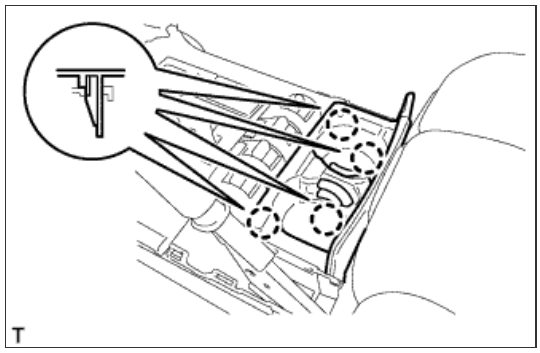
1. REMOVE SHIFT LEVER KNOB SUB-ASSEMBLY

a. Twist the shift lever knob in the direction indicated by the arrow and remove it.



2. REMOVE CONSOLE CUP HOLDER BOX SUB-ASSEMBLY

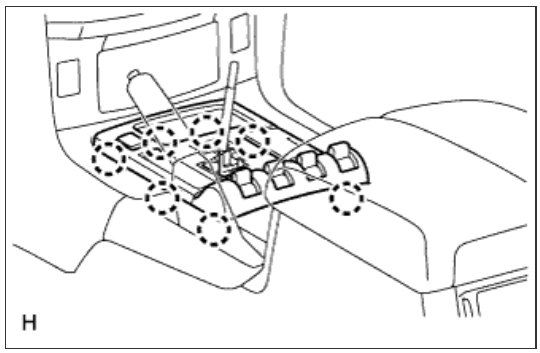
a. Detach the 4 claws and remove the box.



3. REMOVE POSITION INDICATOR HOUSING ASSEMBLY

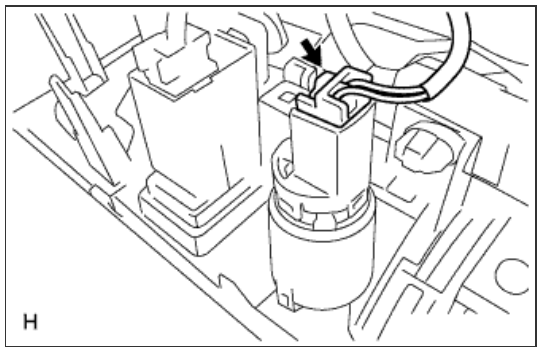
a. Detach the 7 claws.

b. Disconnect the connectors and remove the position indicator housing.

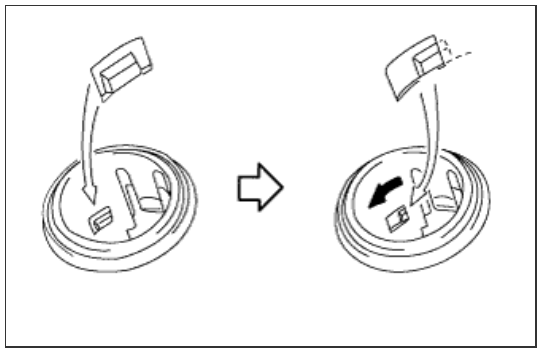


4. REMOVE POWER OUTLET SOCKET ASSEMBLY

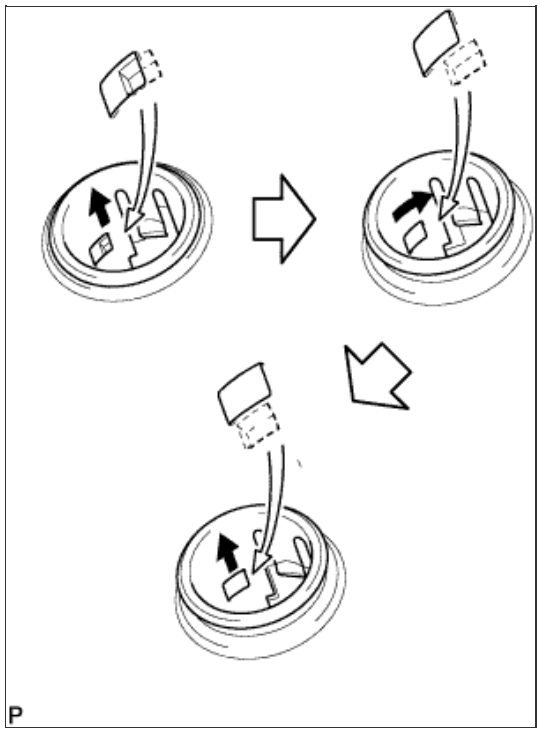
a. Disconnect the connector.



b. Rotate the socket to disengage the protrusion.

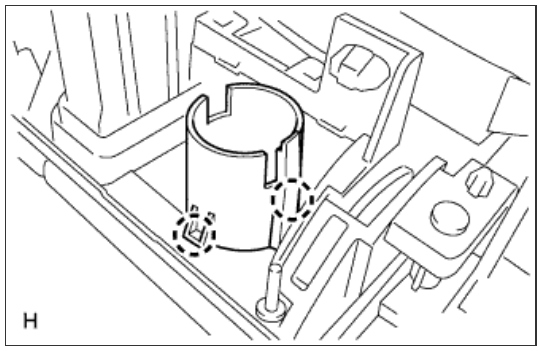


c. Pull out the socket halfway and rotate the socket until the protrusion is aligned with the hole of the socket. Then remove the power outlet socket.



5. REMOVE POWER OUTLET SOCKET COVER

a. Detach the 2 claws and remove the cover.


H

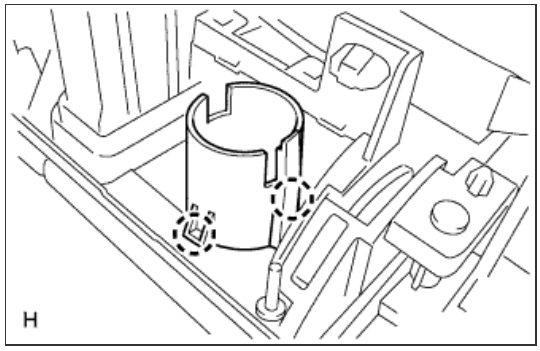
for Preparation Click here

HINT:

- **Use the same procedures for LHD and RHD vehicles.**
- **The procedures listed below are for LHD vehicles.**

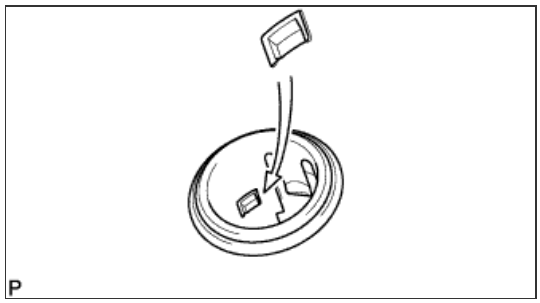
1. INSTALL POWER OUTLET SOCKET COVER

a. Attach the 2 claws to install the socket cover.

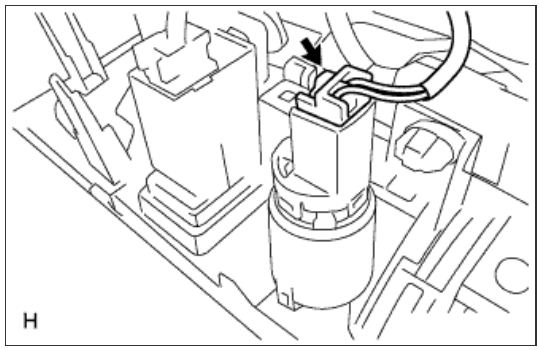


2. INSTALL POWER OUTLET SOCKET ASSEMBLY

a. Align the protrusion on the inside of the cover with the hole of the socket. Then push the socket into the cover.



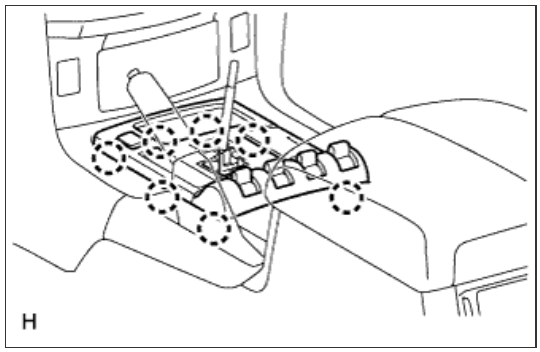
b. Connect the connector.



3. INSTALL POSITION INDICATOR HOUSING ASSEMBLY

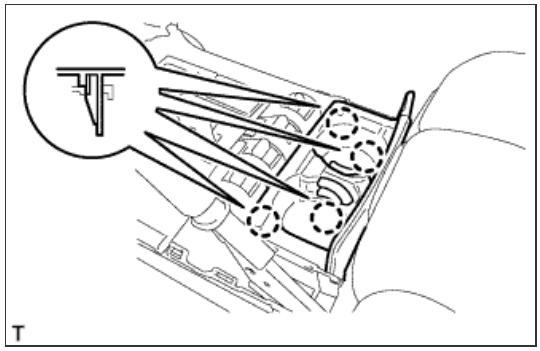
a. Connect the connectors.

b. Attach the 7 claws to install the position indicator housing.



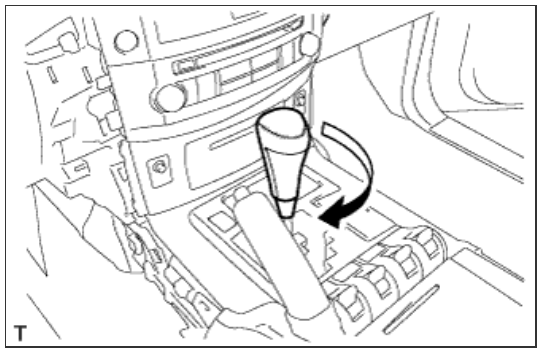
4. INSTALL CONSOLE CUP HOLDER BOX SUB-ASSEMBLY

a. Attach the 4 claws to install the box.

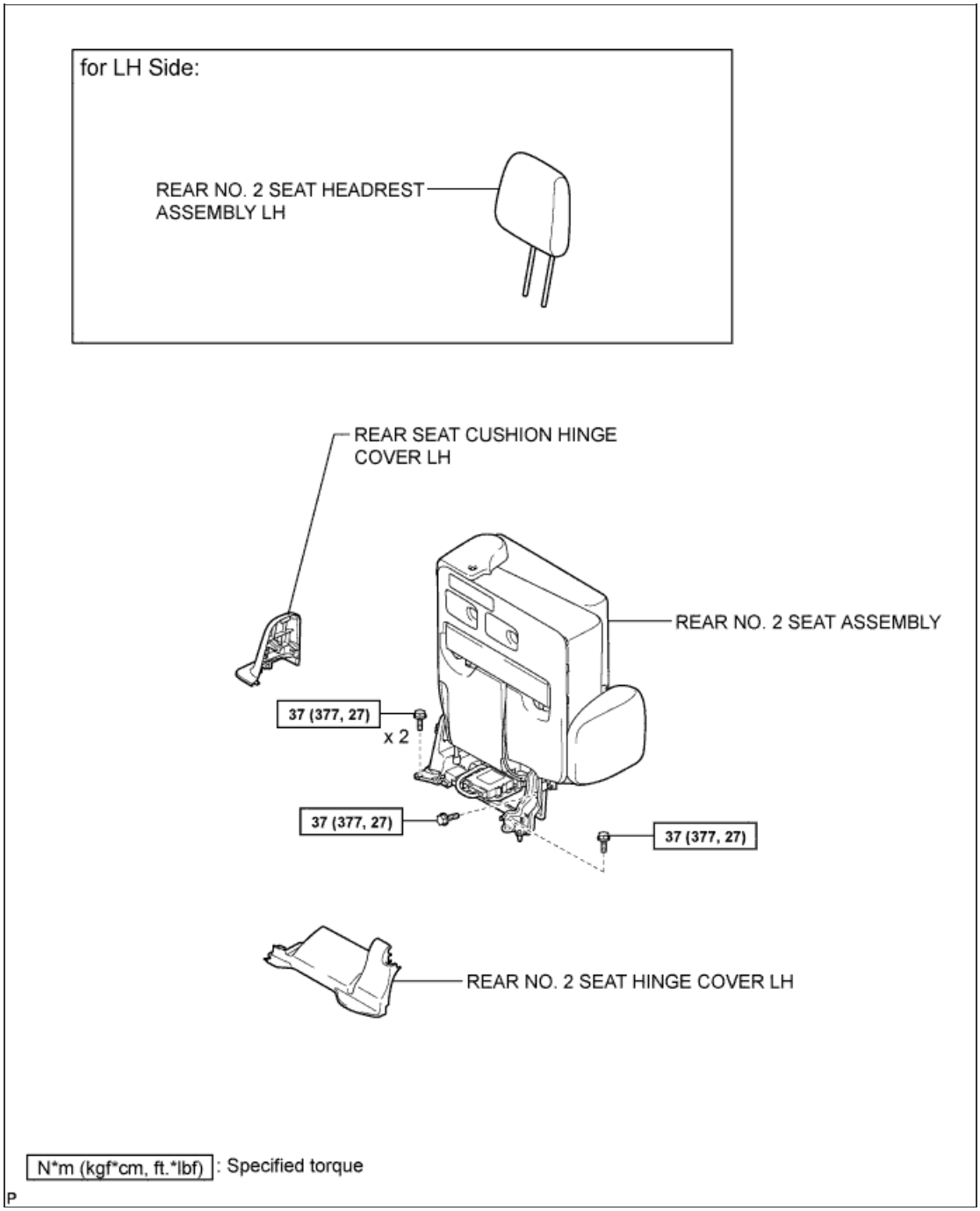


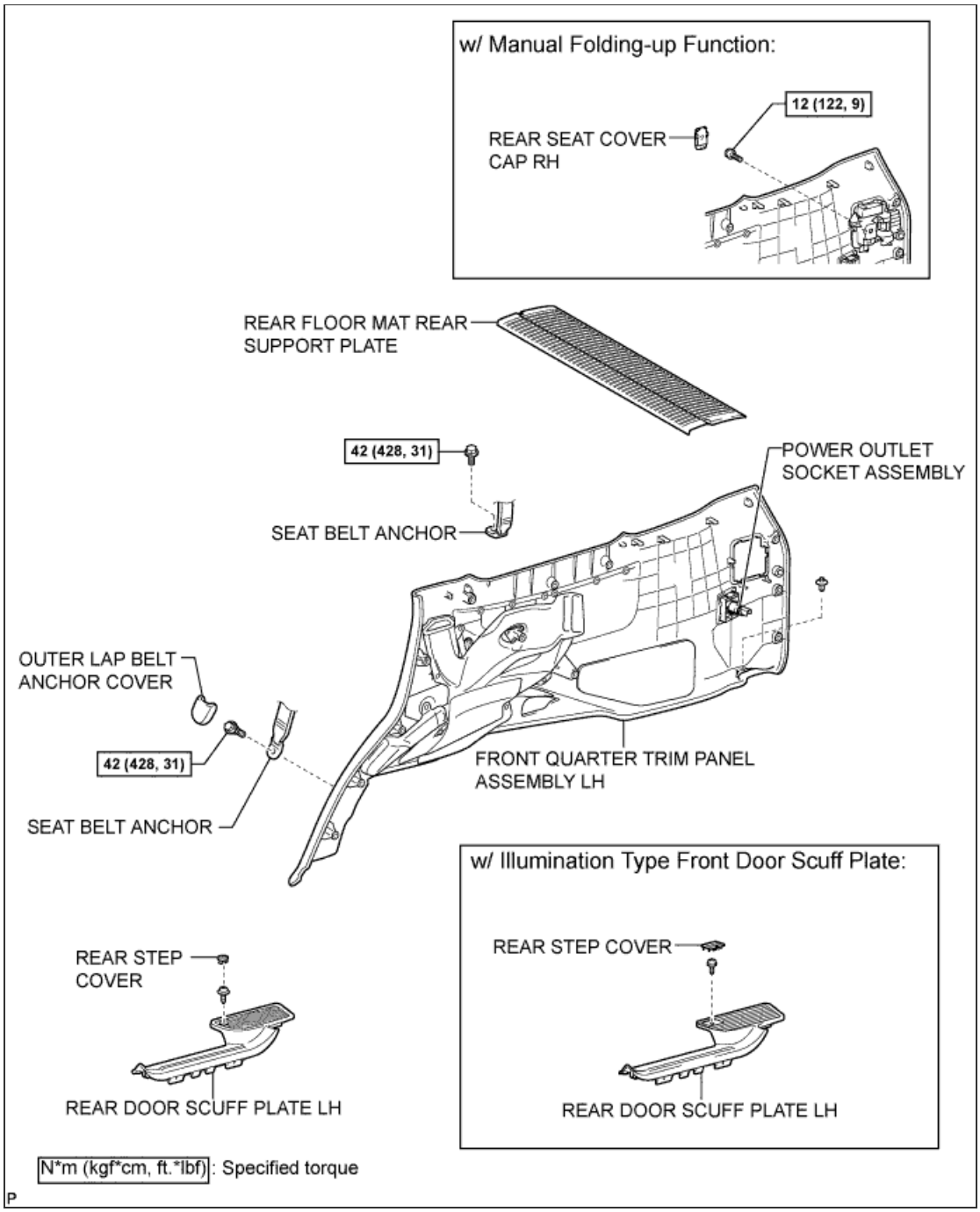
5. INSTALL SHIFT LEVER KNOB SUB-ASSEMBLY

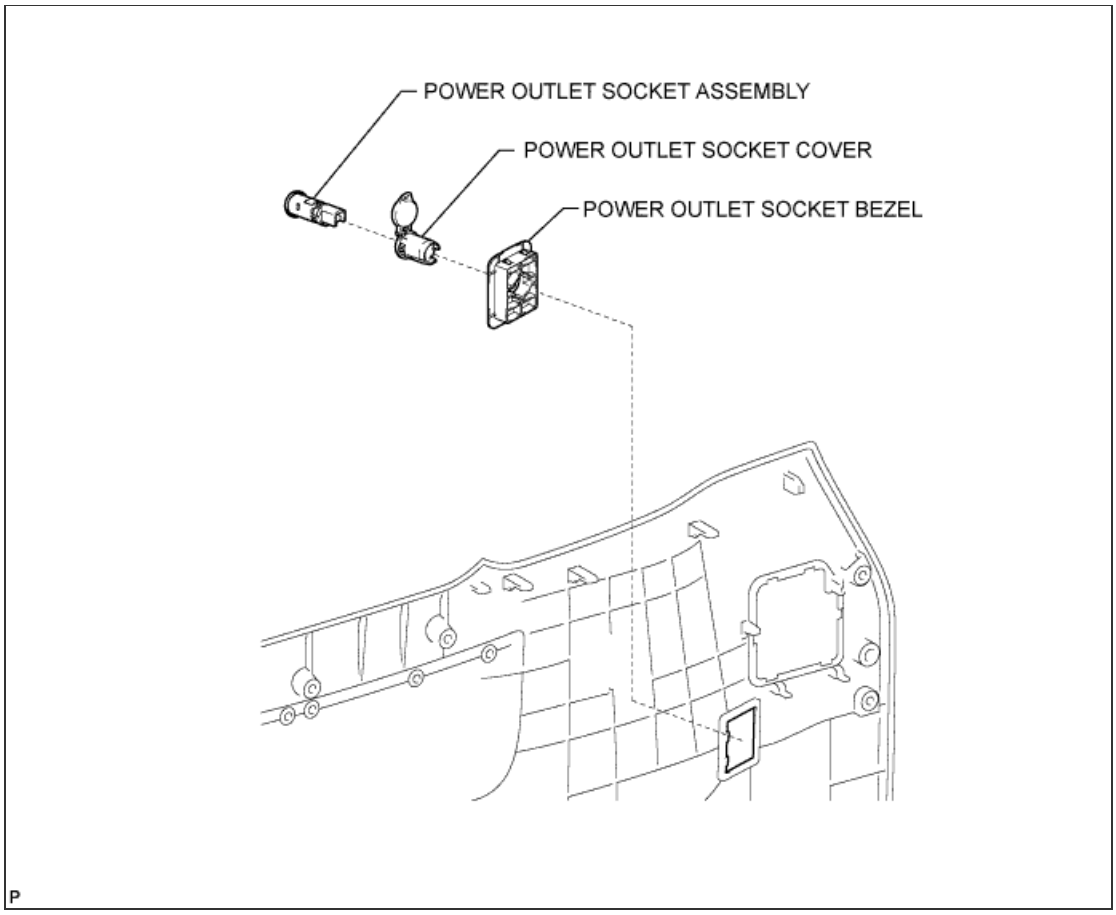
a. Install the shift lever knob and twist it in the direction indicated by the arrow.



for Preparation Click here




w/ Manual Folding-up Function:
12 (122, 9)
REAR SEAT COVER CAP RH
REAR FLOOR MAT REAR SUPPORT PLATE
42 (428, 31)
POWER OUTLET SOCKET ASSEMBLY
SEAT BELT ANCHOR
OUTER LAP BELT ANCHOR COVER
42 (428, 31)
SEAT BELT ANCHOR
FRONT QUARTER TRIM PANEL ASSEMBLY LH
w/ Illumination Type Front Door Scuff Plate:
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
REAR STEP COVER
REAR DOOR SCUFF PLATE LH
N*m (kgf*cm, ft.*lbf): Specified torque
P


POWER OUTLET SOCKET ASSEMBLY
POWER OUTLET SOCKET COVER
POWER OUTLET SOCKET BEZEL
P

for Preparation Click here

1. REMOVE REAR NO. 2 SEAT HEADREST ASSEMBLY LH (for LH Side)

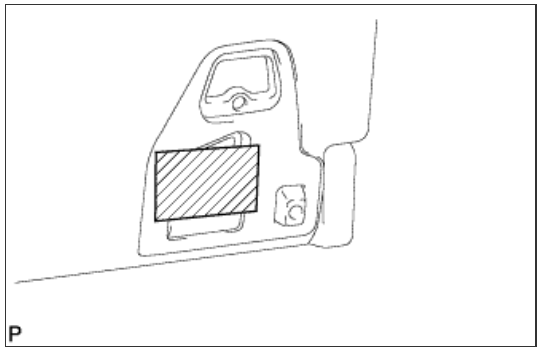
2. REMOVE REAR SEAT CUSHION HINGE COVER LH (w/ Automatic Folding-up Function)

a. Apply protective tape to the rear seatback lock striker as shown in the illustration to prevent the seat from locking.

b. Operate the power seat switch and move the seat to the storage position.

HINT:

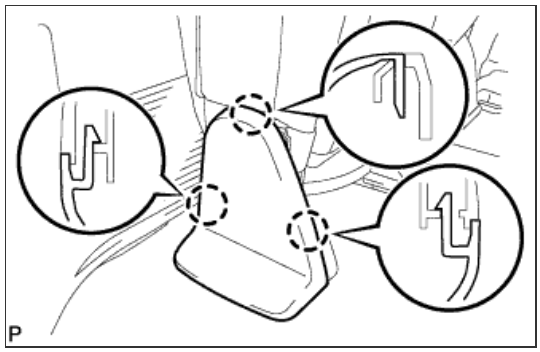
Make sure that the lock and striker are not engaged.



c. Using a screwdriver, detach the 3 claws and remove the cover.

HINT:

Tape the screwdriver tip before use.



3. REMOVE REAR SEAT CUSHION HINGE COVER LH (w/ Manual Folding-up Function)

a. Operate the power seat switch and move the seat to the storage position.

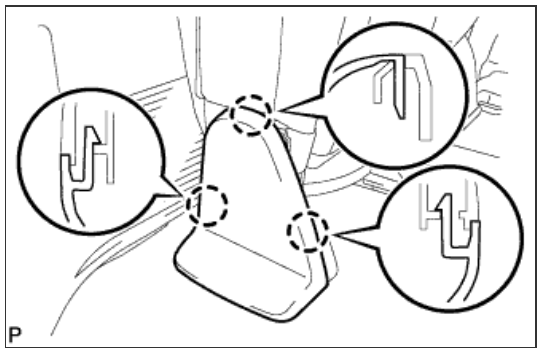
HINT:

In order to remove the seat, do not engage the striker.

b. Using a screwdriver, detach the 3 claws and remove the cover.

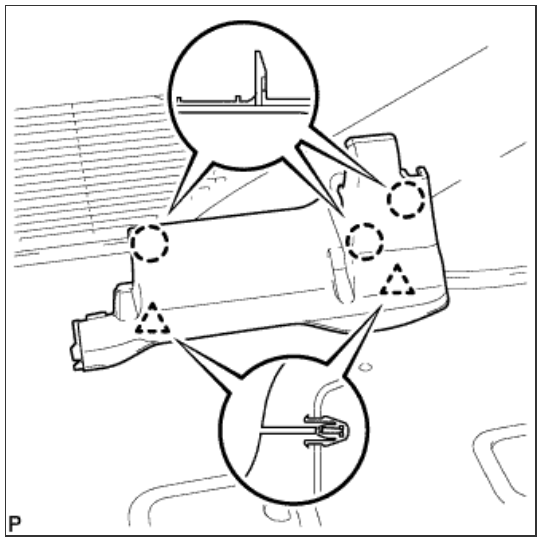
HINT:

Tape the screwdriver tip before use.



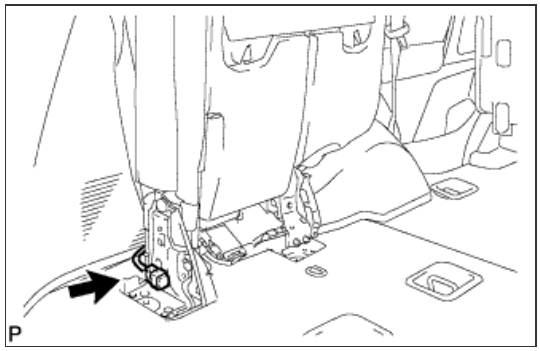
4. REMOVE REAR NO. 2 SEAT HINGE COVER LH

a. Detach the 3 claws and 2 clips, and remove the cover.



5. REMOVE REAR NO. 2 SEAT ASSEMBLY

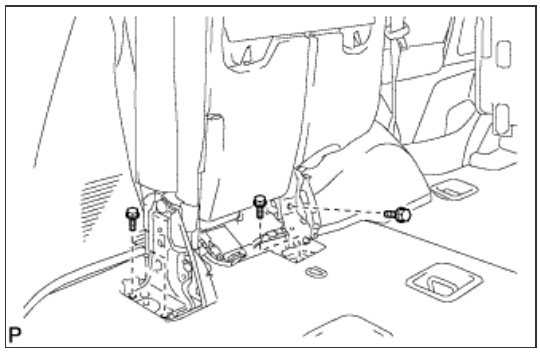
a. Disconnect the connector.



b. Remove the 4 bolts and seat assembly.

NOTICE:

Be careful not to damage the vehicle body.

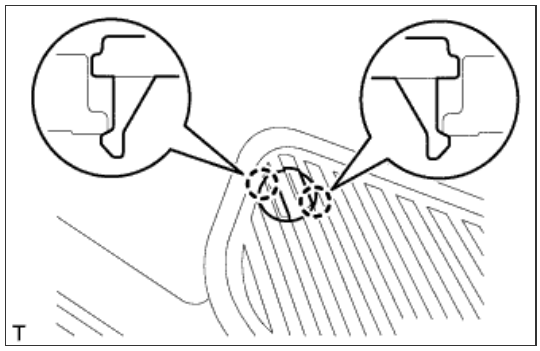


6. REMOVE REAR STEP COVER

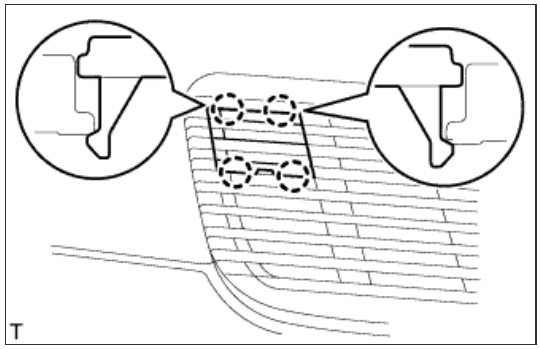
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

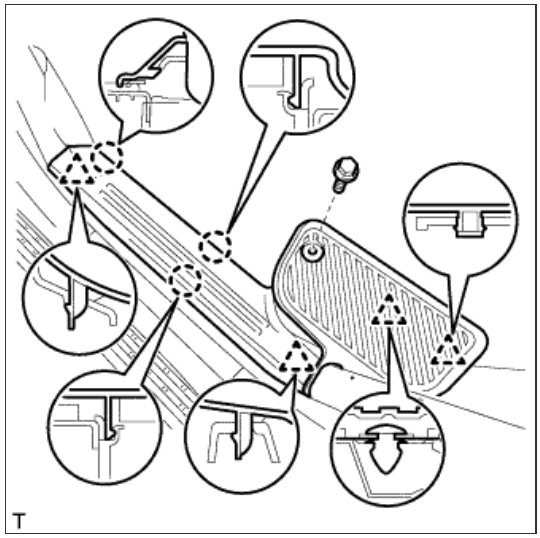


7. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

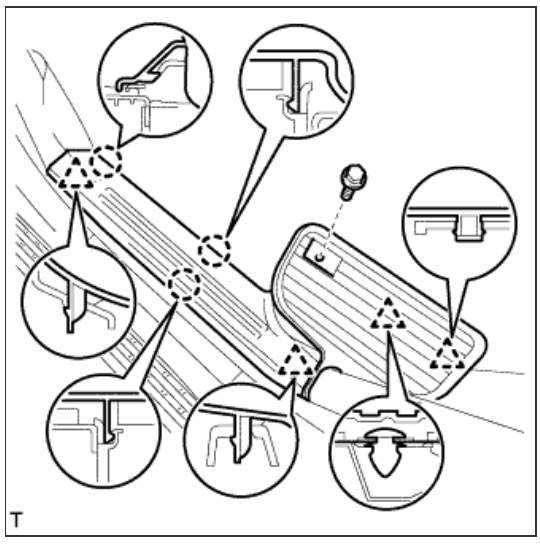
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

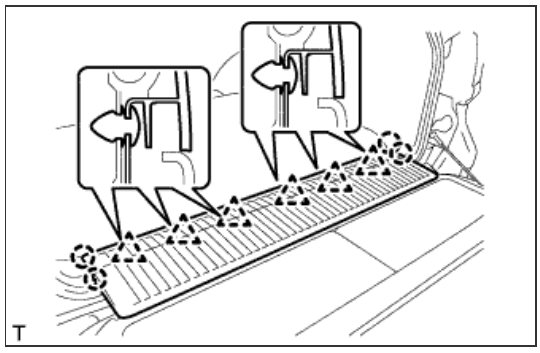
i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



8. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.



9. REMOVE REAR SEAT COVER CAP RH (w/ Manual Folding-up Function)

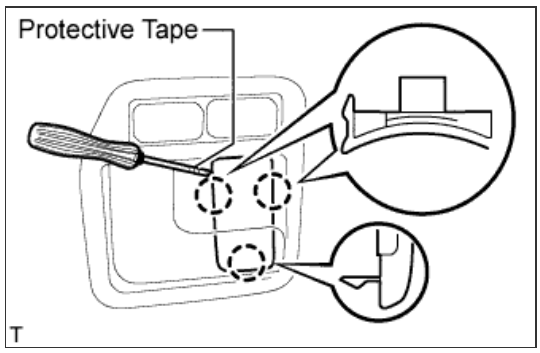
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

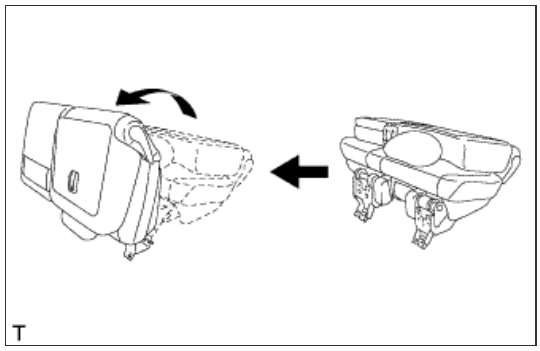
Tape the screwdriver tip before use.



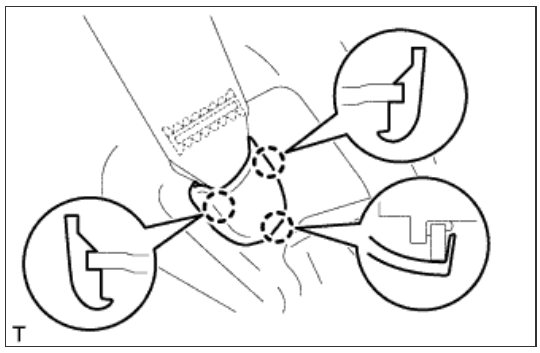
10. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

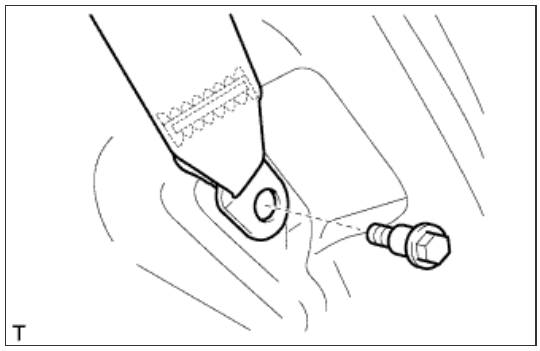
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



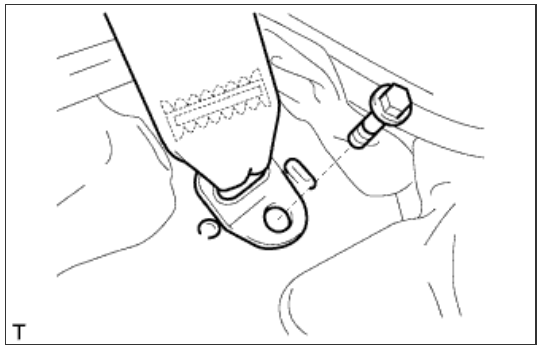
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

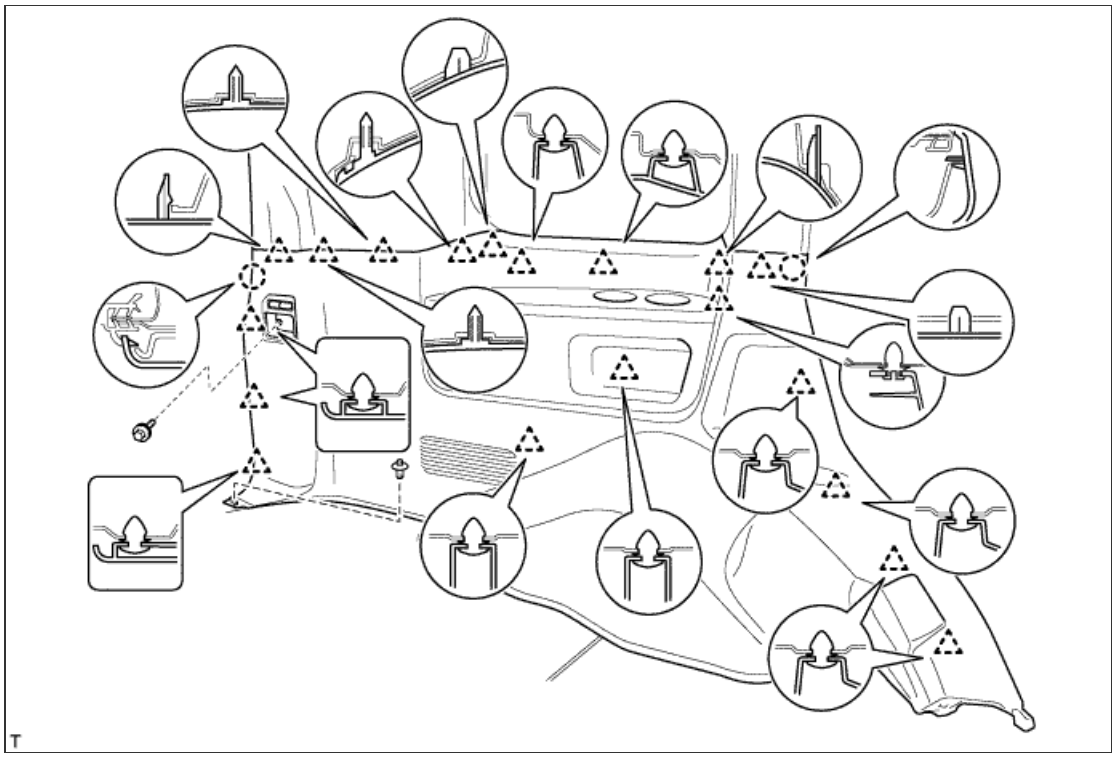


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

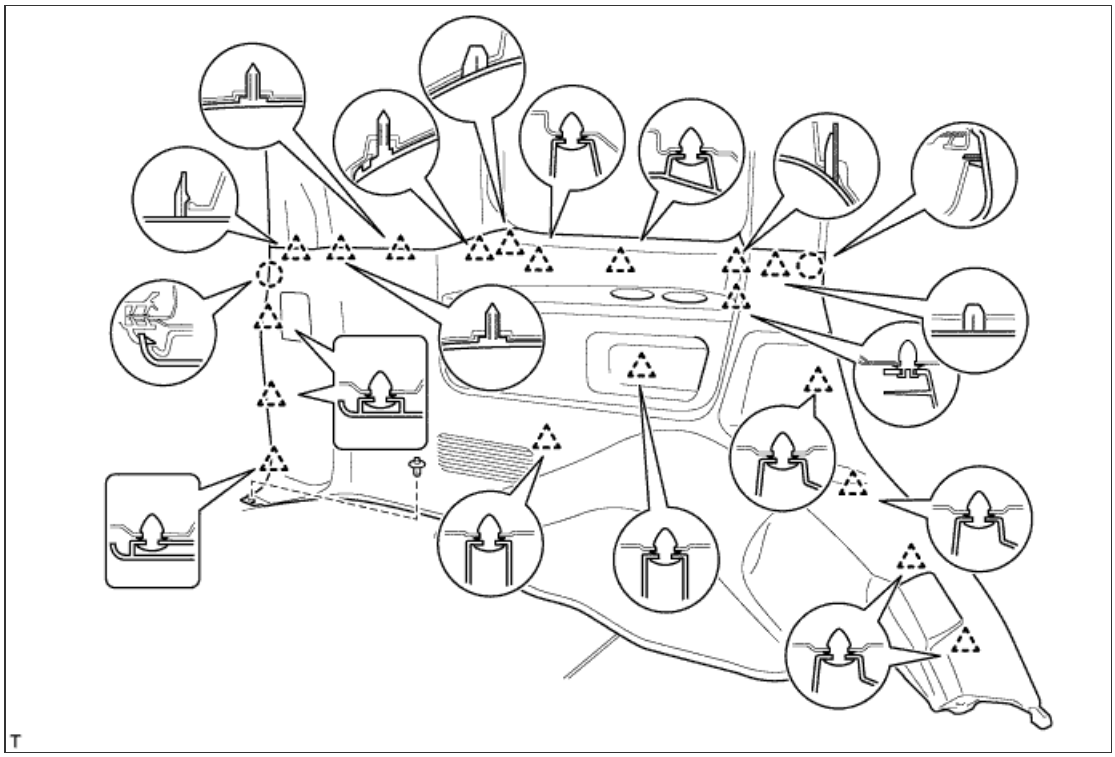


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

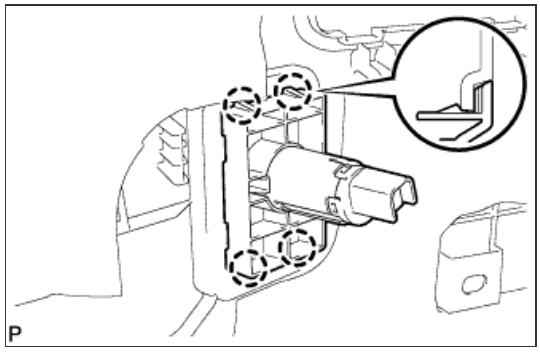
ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.



11. REMOVE POWER OUTLET SOCKET ASSEMBLY

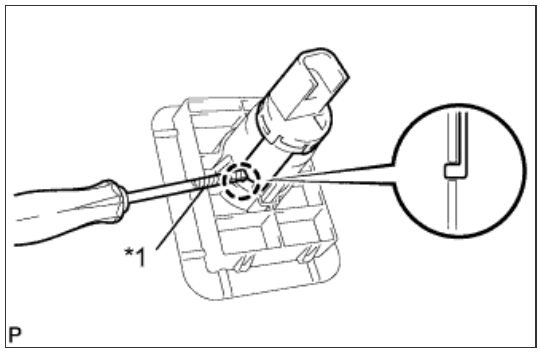
a. Disengage the 4 claws and remove the power outlet socket bezel.



b. Using a screwdriver with its tip wrapped in protective tape, disengage the claw and remove the power outlet socket assembly.

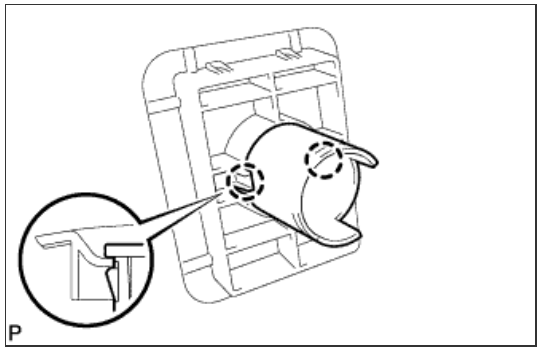
Text in Illustration

*1	Protective Tape



12. REMOVE POWER OUTLET SOCKET COVER

a. Disengage the 2 claws and remove the power outlet socket cover.



for Preparation Click here

1. INSTALL POWER OUTLET SOCKET COVER

a. Engage the 2 claws and install the power outlet socket cover.

2. INSTALL POWER OUTLET SOCKET ASSEMBLY

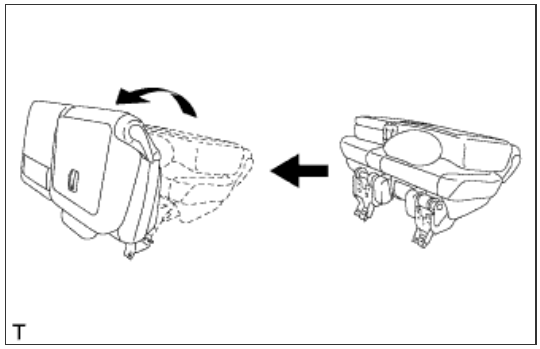
a. Engage the claw and install the power outlet socket assembly.

b. Engage the 4 claws and install the power outlet socket bezel.

3. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



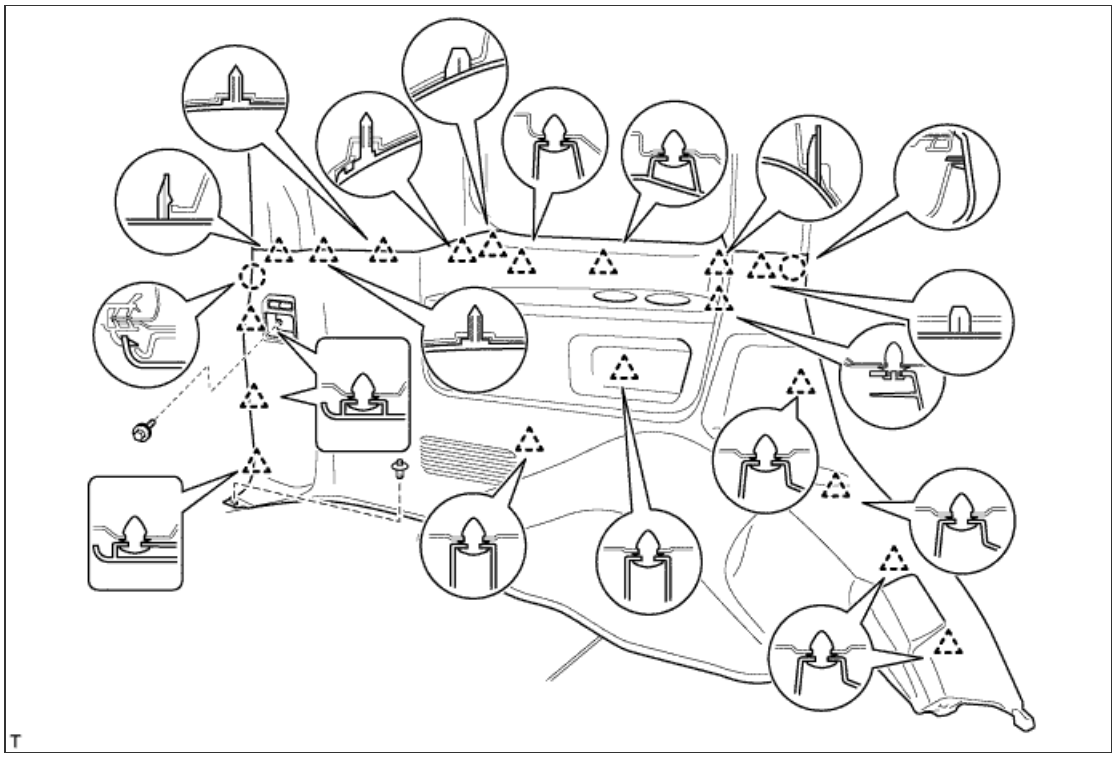
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

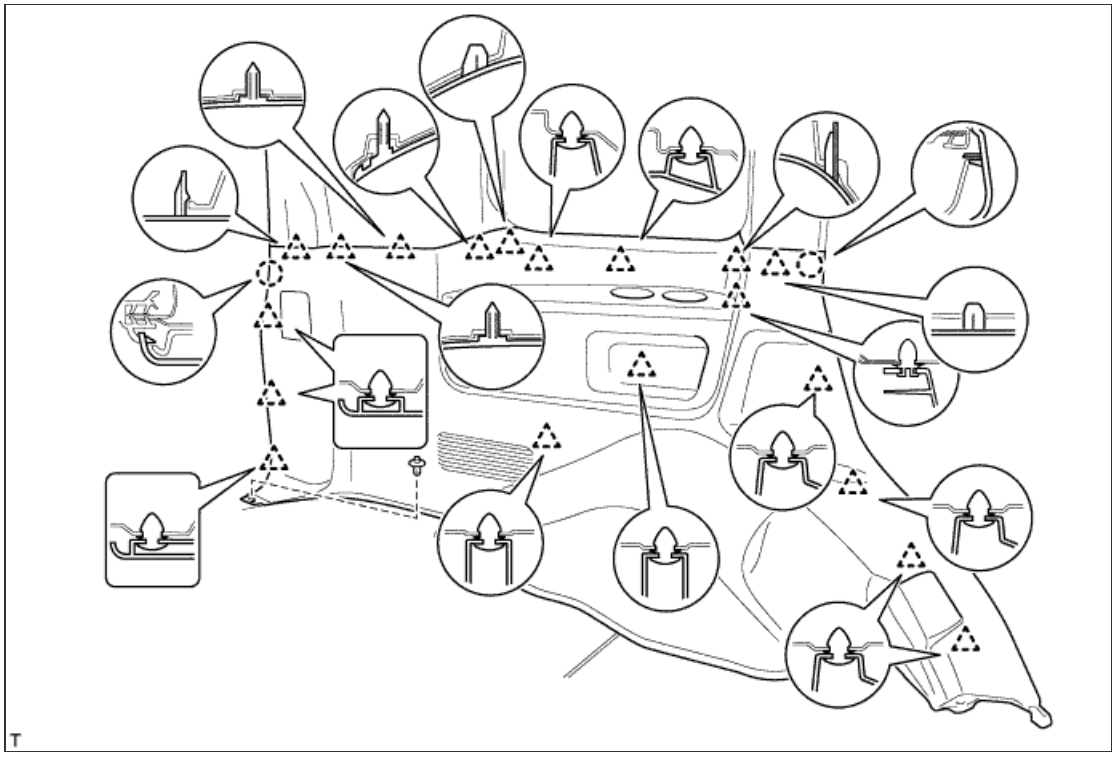


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

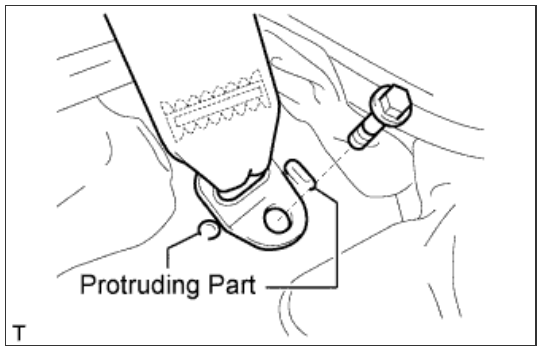


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

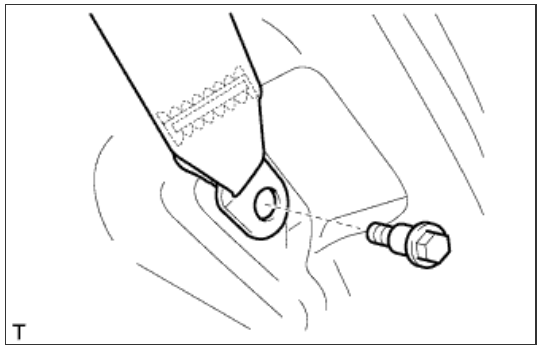
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

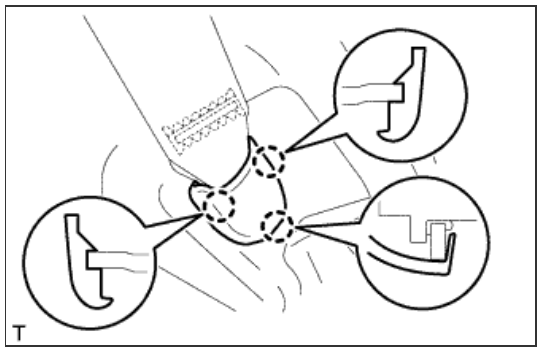


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



e. Attach the 3 claws to install the cover.

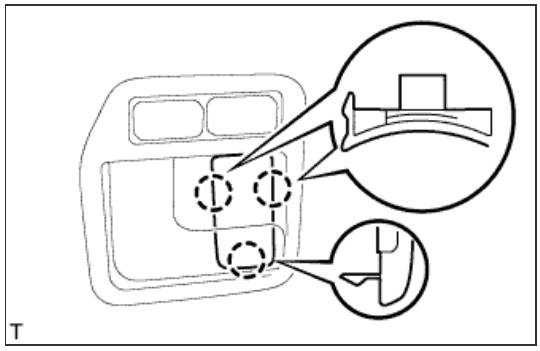


4. INSTALL REAR SEAT COVER CAP RH (w/ Manual Folding-up Function)

HINT:

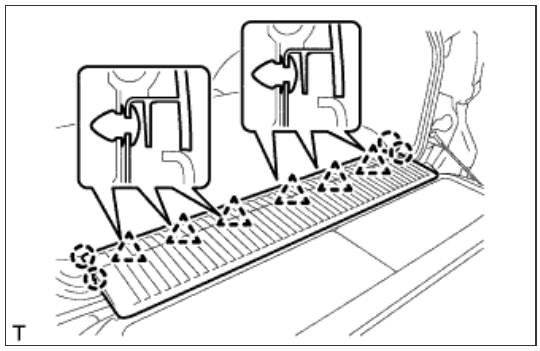
Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.



5. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.

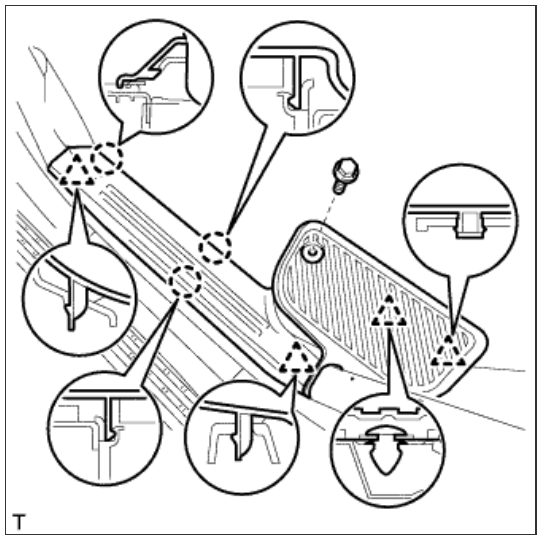


6. INSTALL REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

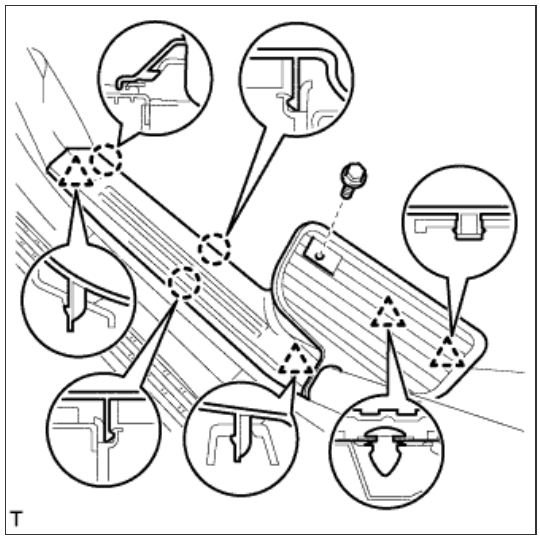
ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.

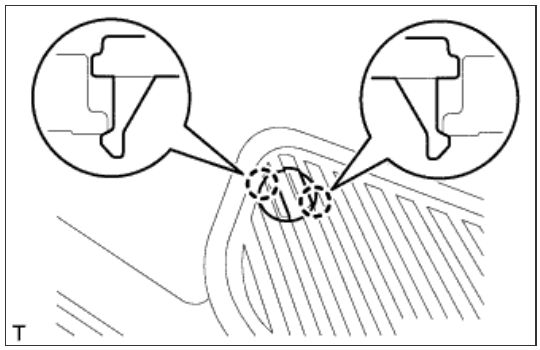


7. INSTALL REAR STEP COVER

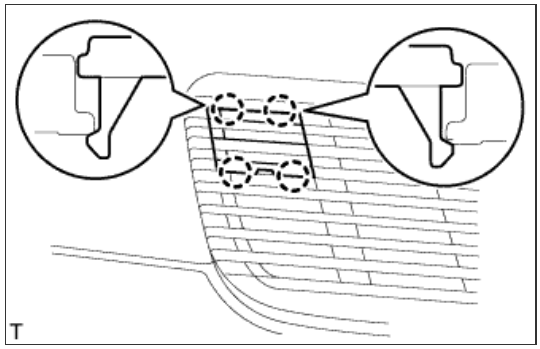
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



8. INSTALL REAR NO. 2 SEAT ASSEMBLY

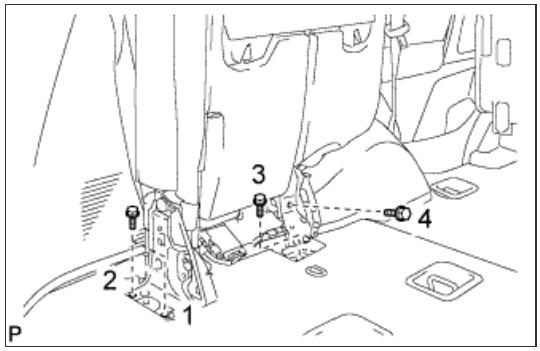
a. Temporarily install the seat assembly with the 4 bolts.

NOTICE:

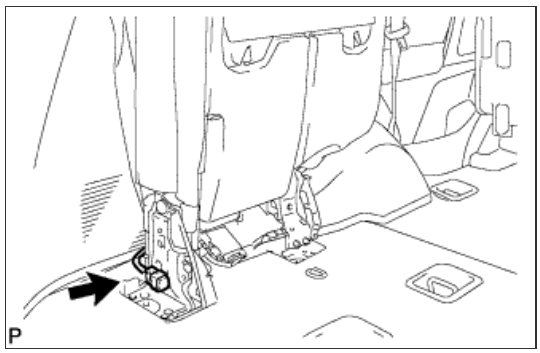
Be careful not to damage the vehicle body.

b. Tighten the bolts in the order shown in the illustration.

Torque:
37 N*m{ 377 kgf*cm , 27 ft.*lbf }

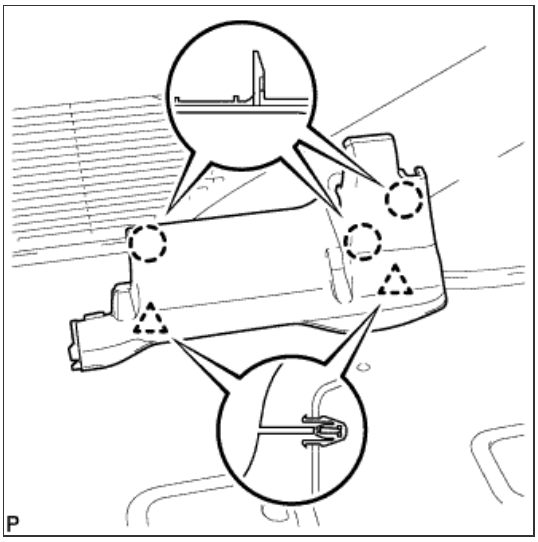


c. Connect the connector.



9. INSTALL REAR NO. 2 SEAT HINGE COVER LH

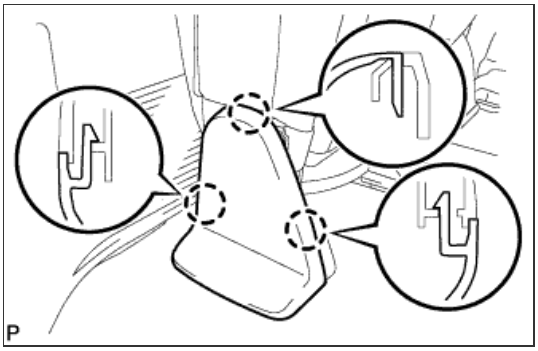
a. Attach the 3 claws and 2 clips to install the cover.



10. INSTALL REAR SEAT CUSHION HINGE COVER LH

a. Attach the 3 claws to install the cover.

b. Return the seat to the upright position.



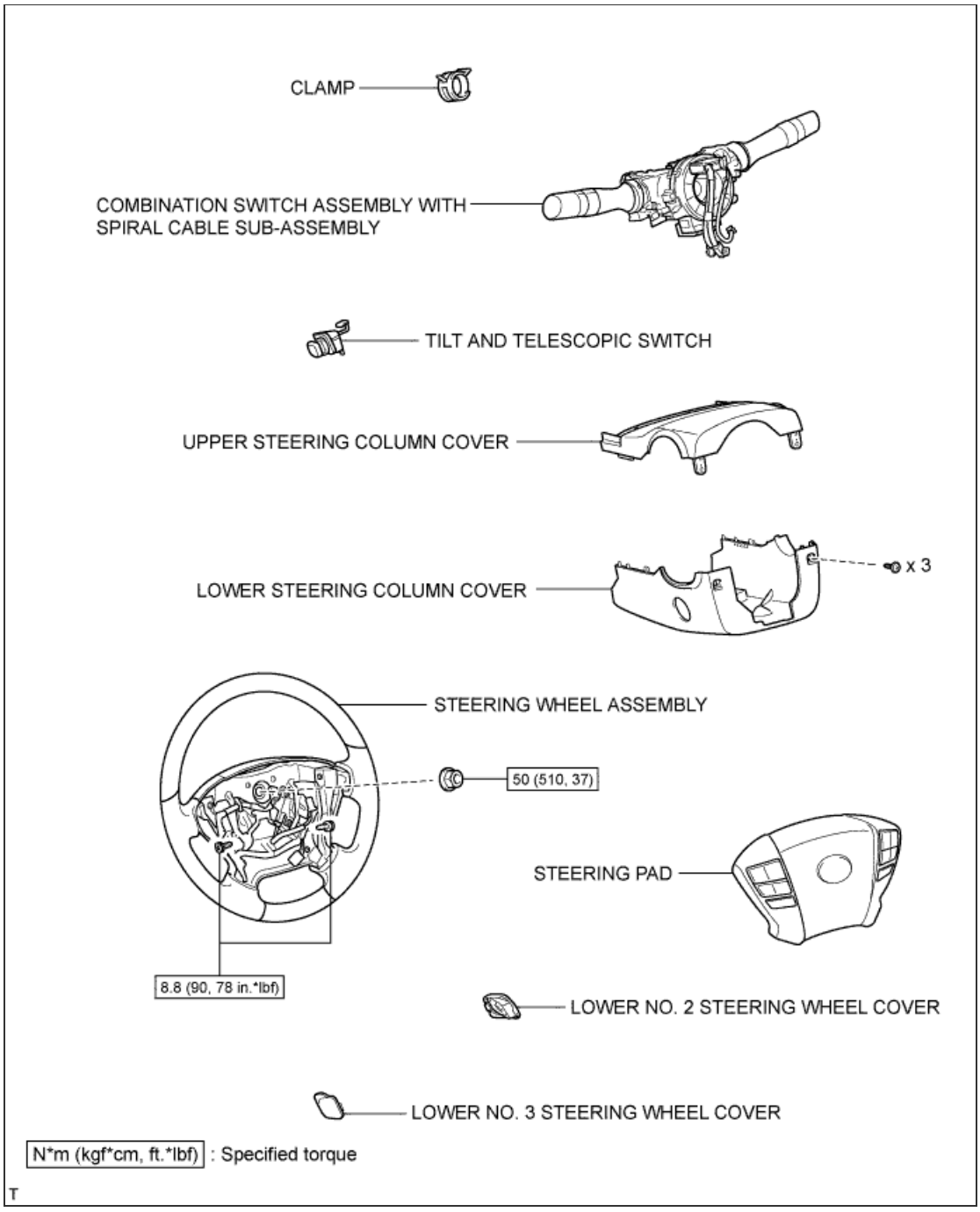
11. INSTALL REAR NO. 2 SEAT HEADREST ASSEMBLY LH (for LH Side)

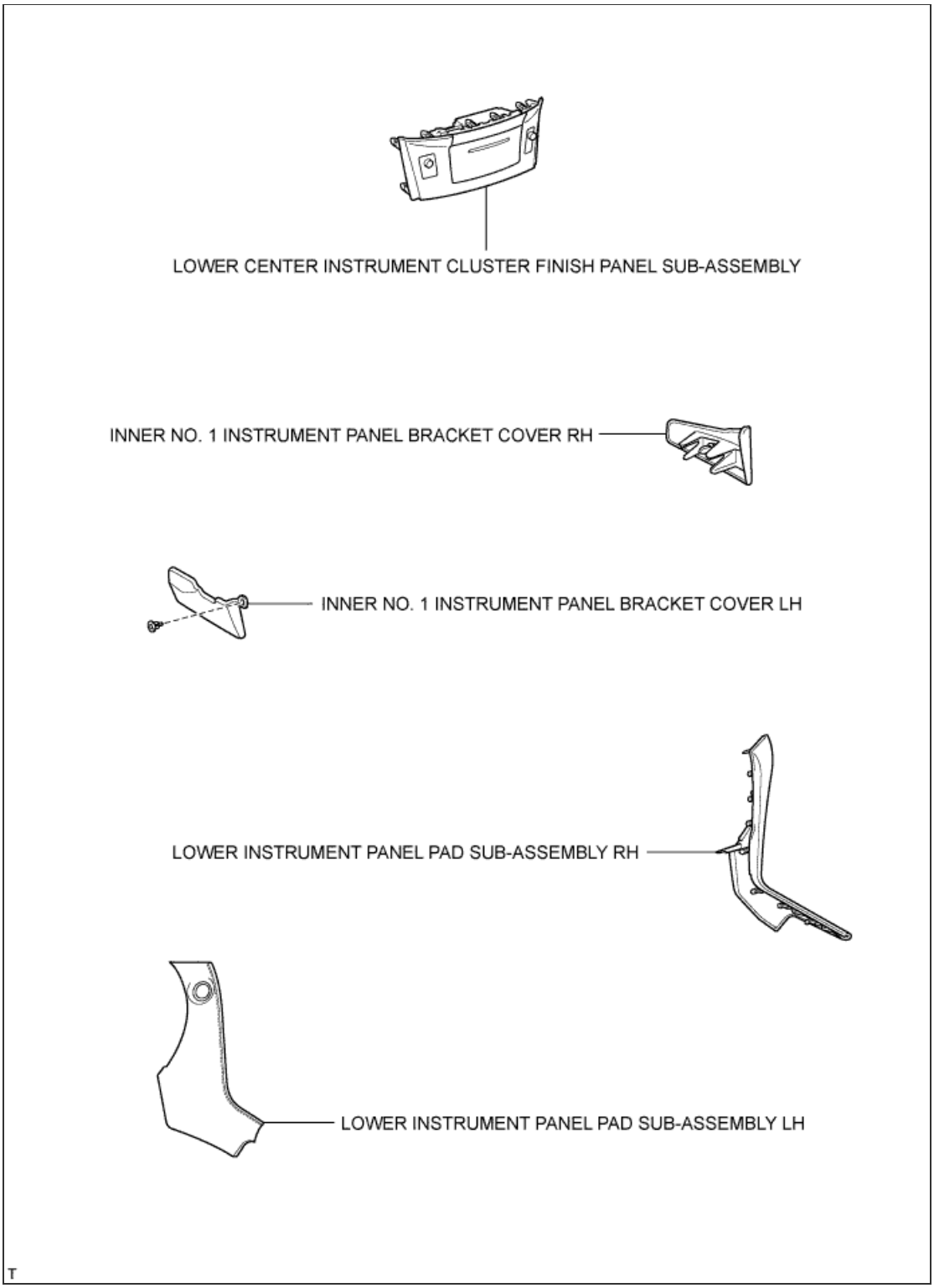
for Preparation Click here

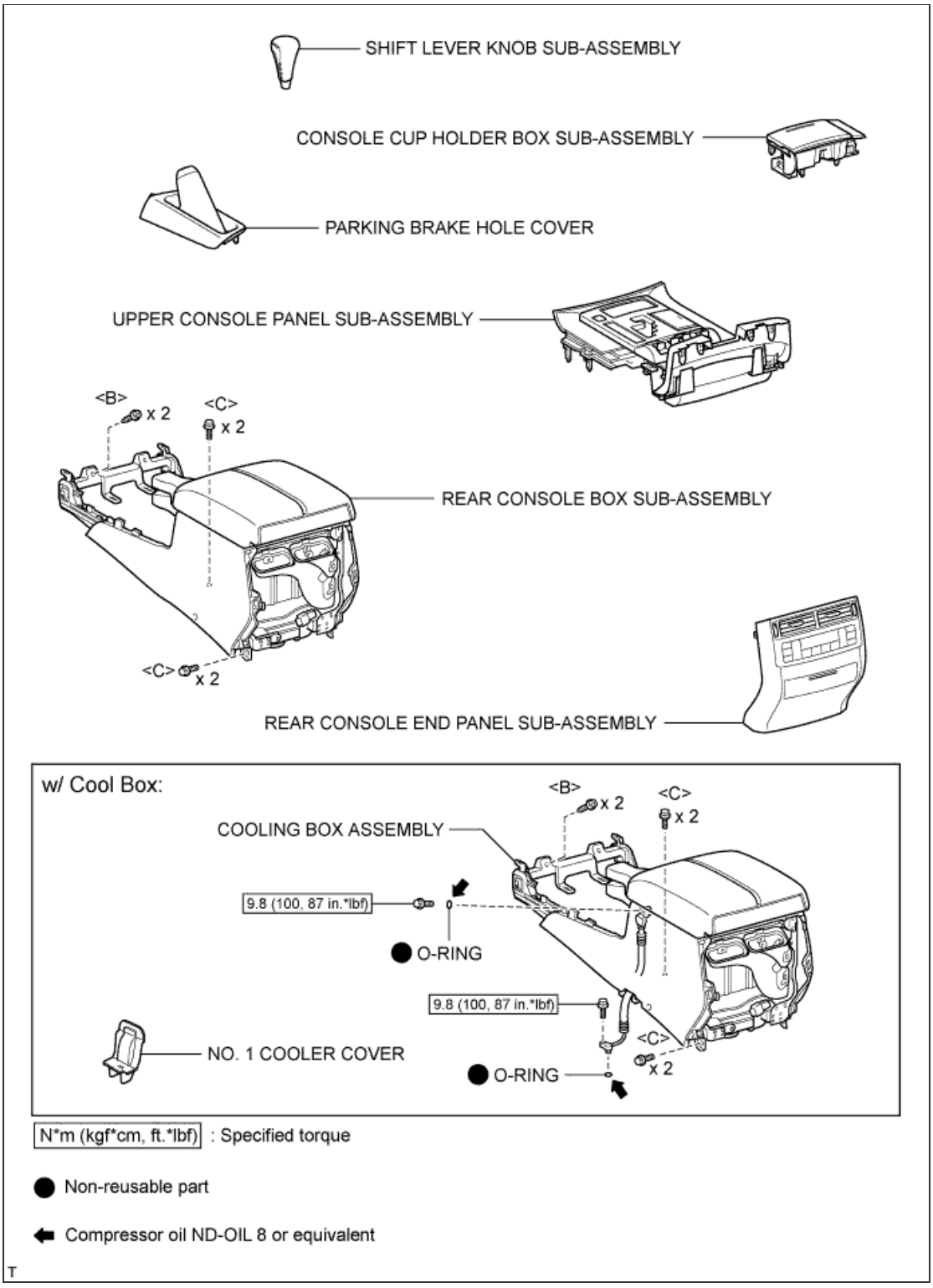
1.PRECAUTION FOR VEHICLE WITH SRS AIRBAG AND SEAT BELT PRETENSIONER

a. Some operations in this section may affect the SRS airbags. Prior to performing the corresponding operations, read the SRS airbag Precaution (Click here).

for Preparation Click here




LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY
INNER NO. 1 INSTRUMENT PANEL BRACKET COVER RH
INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH
LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH
LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH
T

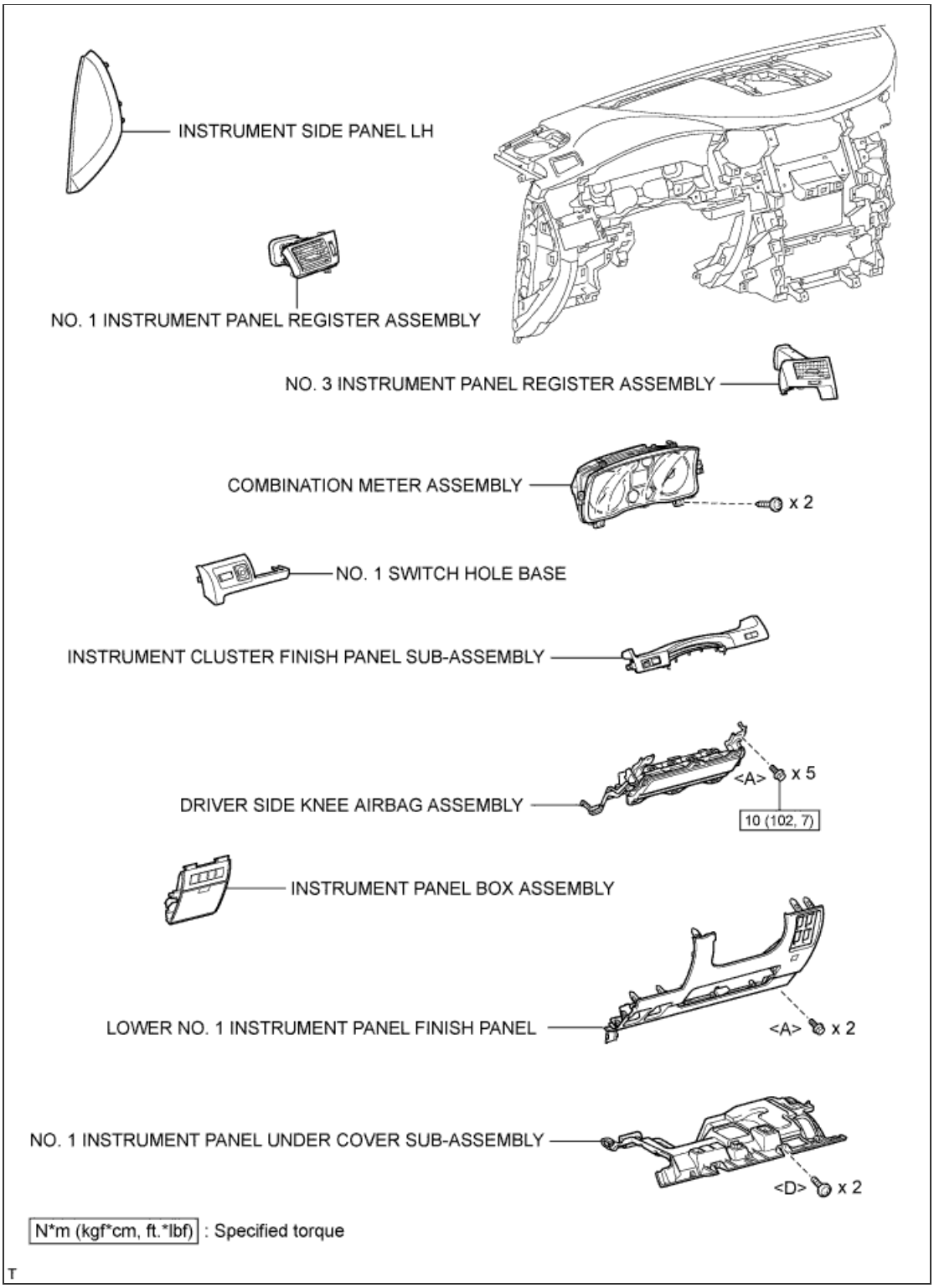


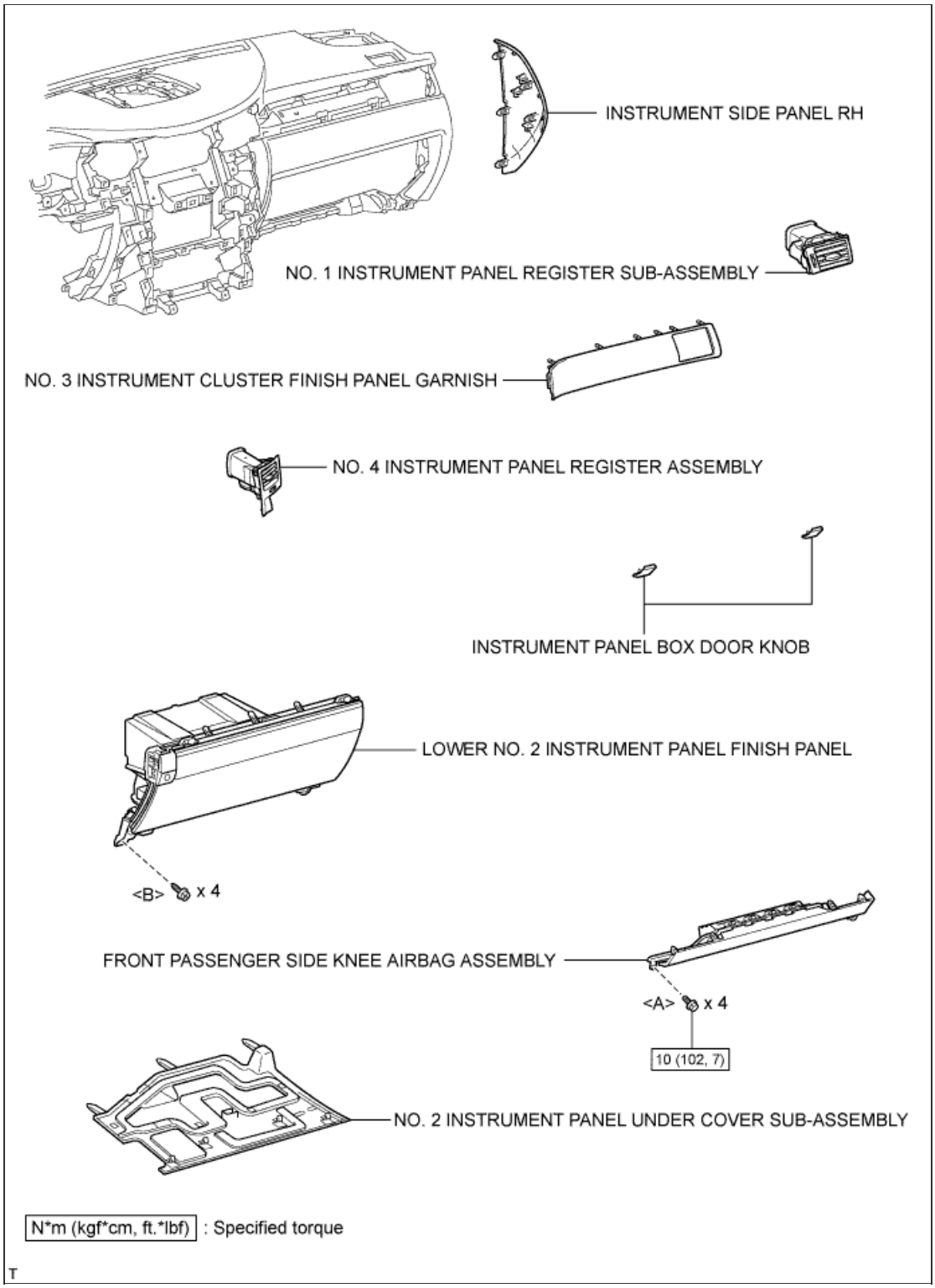
N*m (kgf*cm, ft.*lbf) : Specified torque

● Non-reusable part

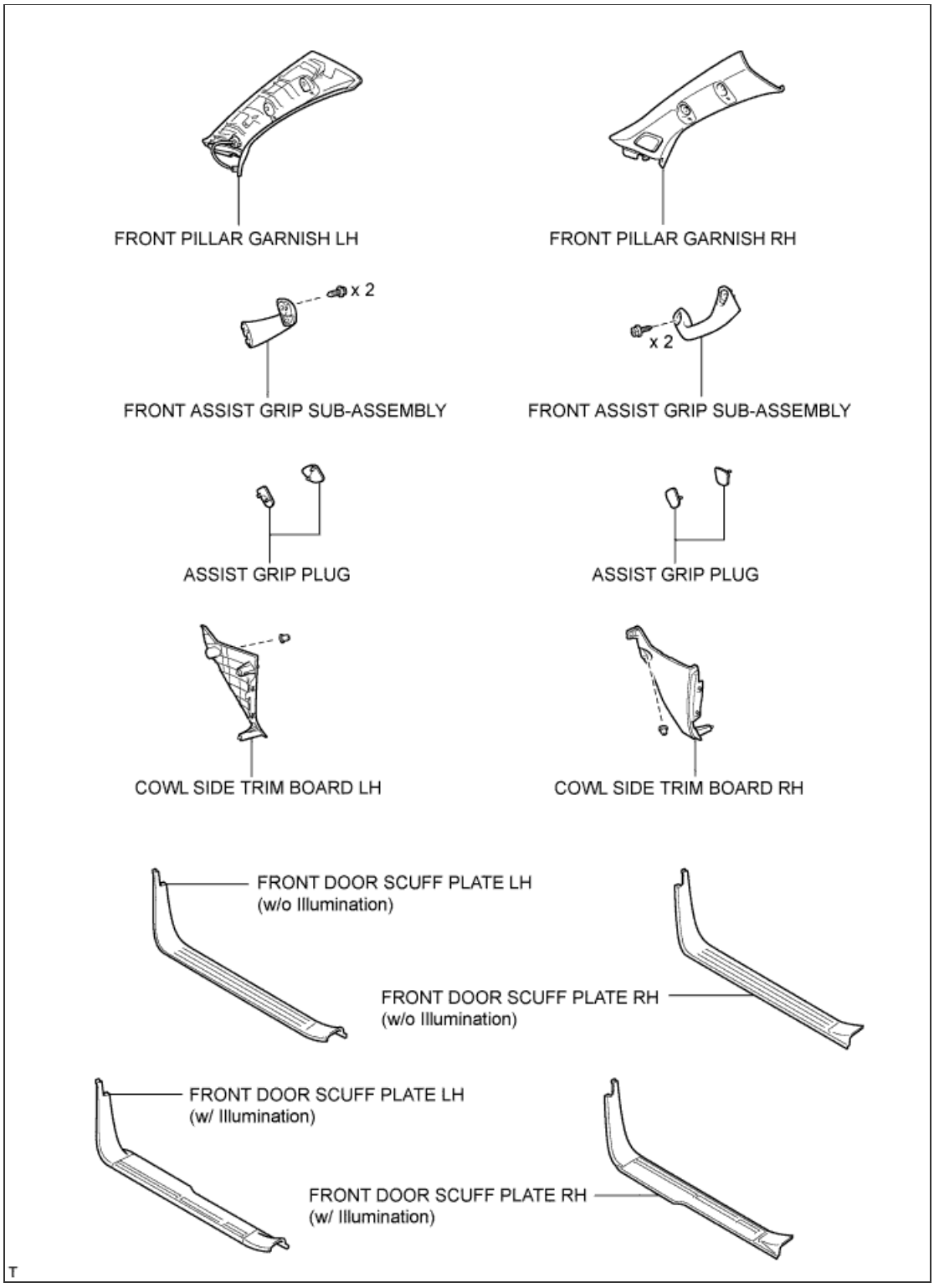
⬅ Compressor oil ND-OIL 8 or equivalent

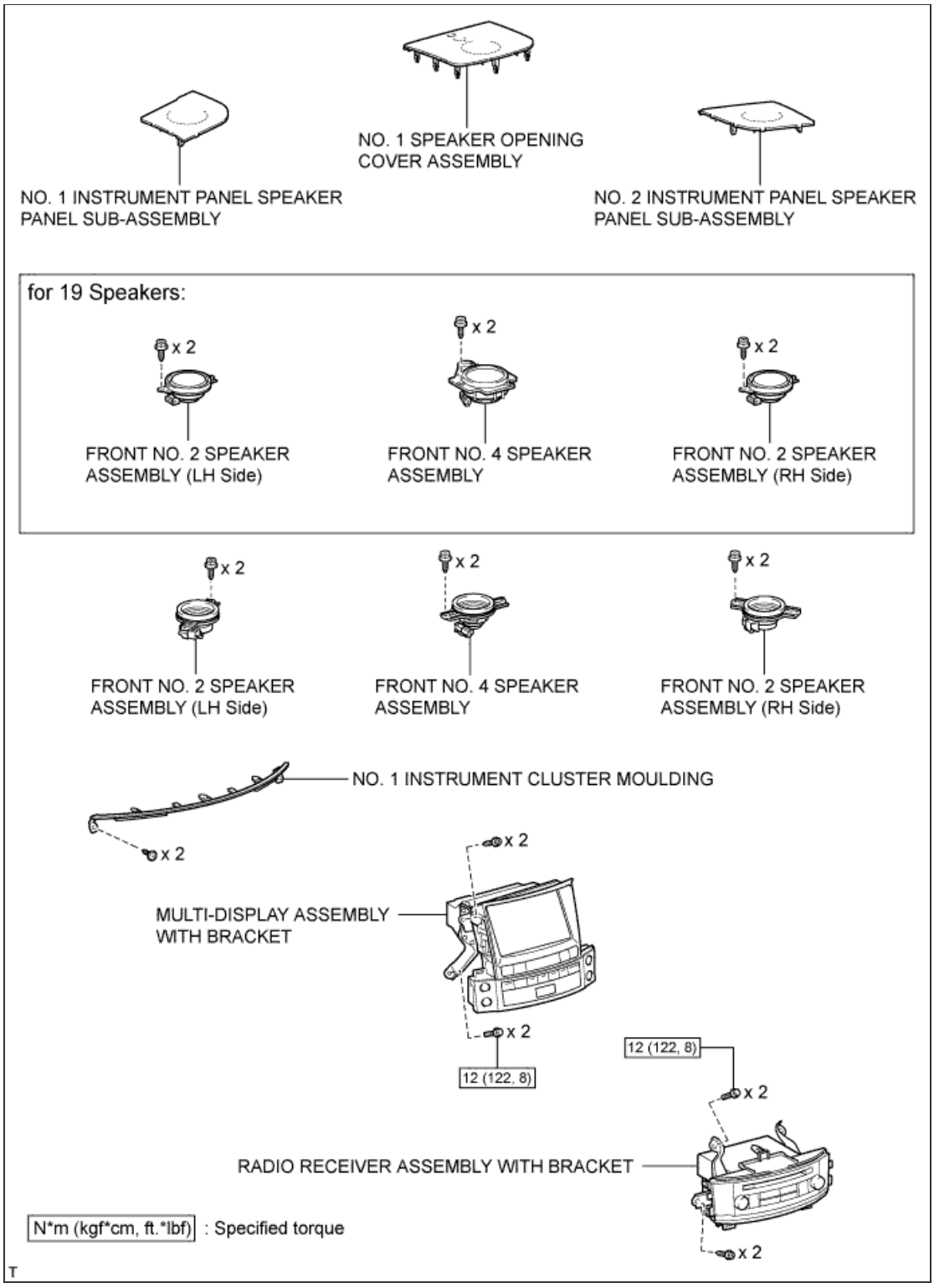
T

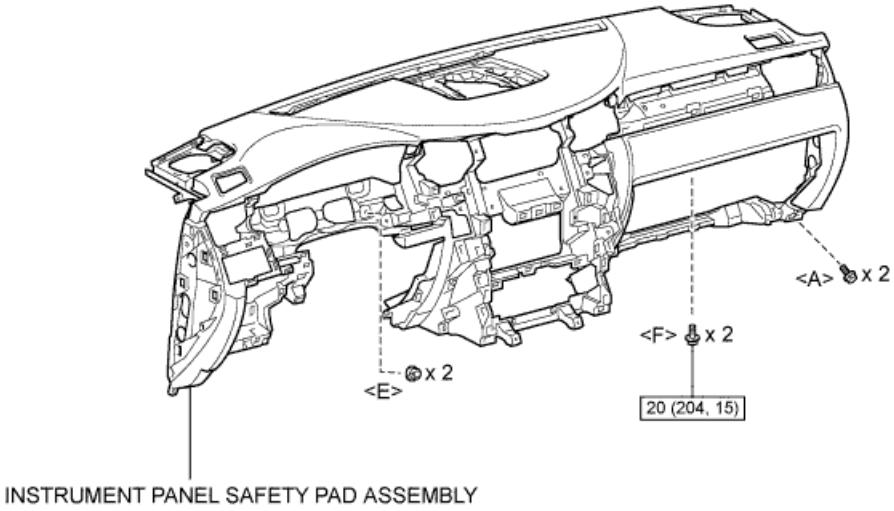

INSTRUMENT SIDE PANEL LH
NO. 1 INSTRUMENT PANEL REGISTER ASSEMBLY
NO. 3 INSTRUMENT PANEL REGISTER ASSEMBLY
COMBINATION METER ASSEMBLY
x 2
NO. 1 SWITCH HOLE BASE
INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY
DRIVER SIDE KNEE AIRBAG ASSEMBLY
<A>
x 5
10 (102, 7)
INSTRUMENT PANEL BOX ASSEMBLY
LOWER NO. 1 INSTRUMENT PANEL FINISH PANEL
<A>
x 2
NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY
<D>
x 2
N*m (kgf*cm, ft.*lbf) : Specified torque
T

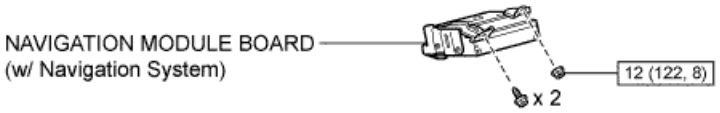

INSTRUMENT SIDE PANEL RH
NO. 1 INSTRUMENT PANEL REGISTER SUB-ASSEMBLY
NO. 3 INSTRUMENT CLUSTER FINISH PANEL GARNISH
NO. 4 INSTRUMENT PANEL REGISTER ASSEMBLY
INSTRUMENT PANEL BOX DOOR KNOB
LOWER NO. 2 INSTRUMENT PANEL FINISH PANEL
<B> x 4
FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY
<A> x 4
10 (102, 7)
NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque

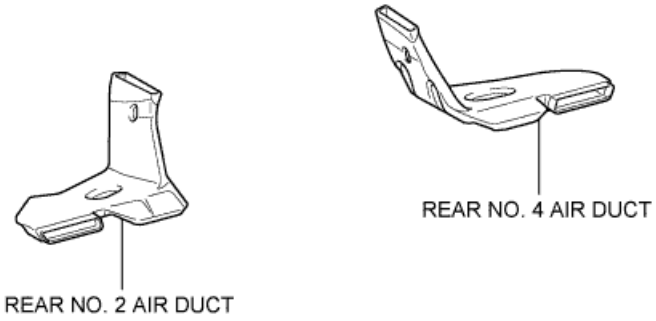
T


FRONT PILLAR GARNISH LH
FRONT PILLAR GARNISH RH
x 2
FRONT ASSIST GRIP SUB-ASSEMBLY
x 2
FRONT ASSIST GRIP SUB-ASSEMBLY
ASSIST GRIP PLUG
ASSIST GRIP PLUG
COWL SIDE TRIM BOARD LH
COWL SIDE TRIM BOARD RH
FRONT DOOR SCUFF PLATE LH
(w/o Illumination)
FRONT DOOR SCUFF PLATE RH
(w/o Illumination)
FRONT DOOR SCUFF PLATE LH
(w/ Illumination)
FRONT DOOR SCUFF PLATE RH
(w/ Illumination)
T


NO. 1 INSTRUMENT PANEL SPEAKER PANEL SUB-ASSEMBLY
NO. 1 SPEAKER OPENING COVER ASSEMBLY
NO. 2 INSTRUMENT PANEL SPEAKER PANEL SUB-ASSEMBLY
for 19 Speakers:
x 2
FRONT NO. 2 SPEAKER ASSEMBLY (LH Side)
x 2
FRONT NO. 4 SPEAKER ASSEMBLY
x 2
FRONT NO. 2 SPEAKER ASSEMBLY (RH Side)
x 2
FRONT NO. 2 SPEAKER ASSEMBLY (LH Side)
x 2
FRONT NO. 4 SPEAKER ASSEMBLY
x 2
FRONT NO. 2 SPEAKER ASSEMBLY (RH Side)
NO. 1 INSTRUMENT CLUSTER MOULDING
x 2
x 2
MULTI-DISPLAY ASSEMBLY WITH BRACKET
x 2
12 (122, 8)
12 (122, 8)
x 2
RADIO RECEIVER ASSEMBLY WITH BRACKET
x 2
N*m (kgf*cm, ft.*lbf) : Specified torque
T

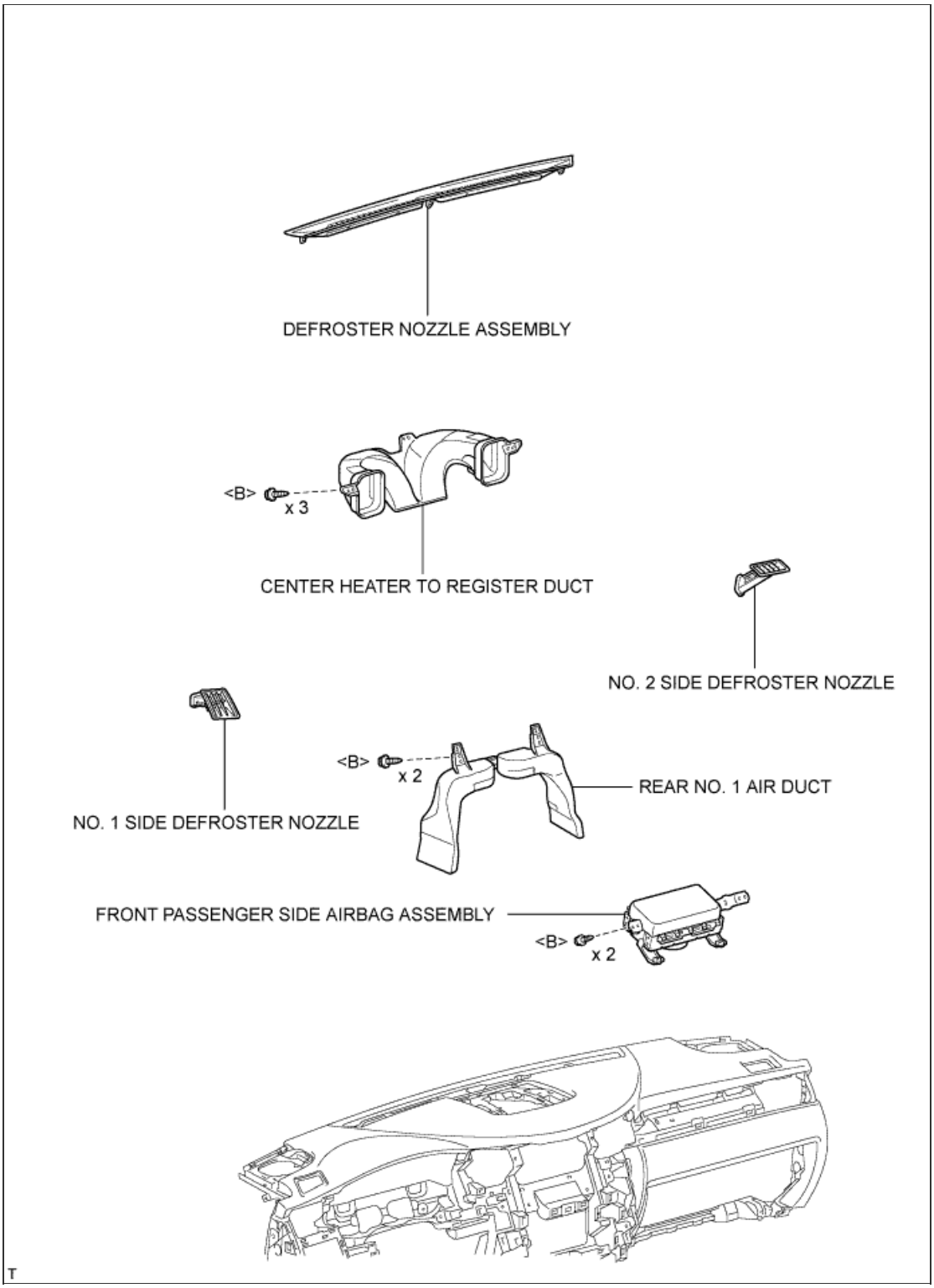




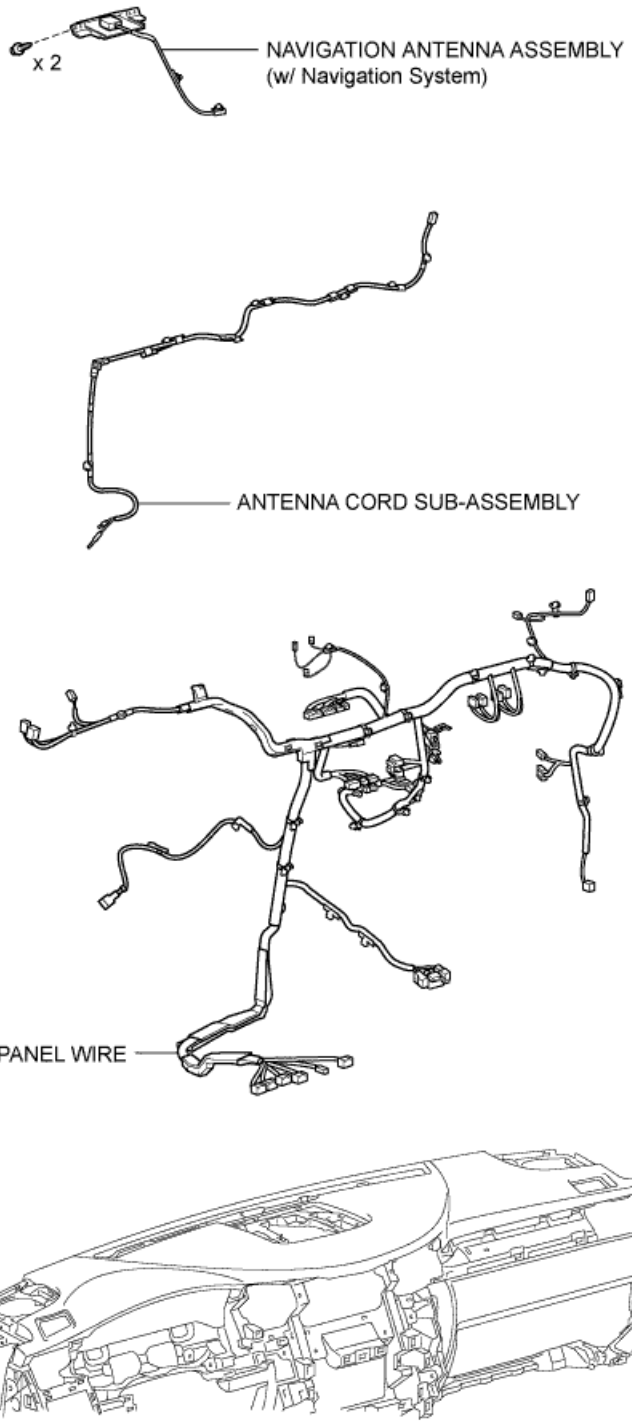


N*m (kgf*cm, ft.*lbf) : Specified torque

T

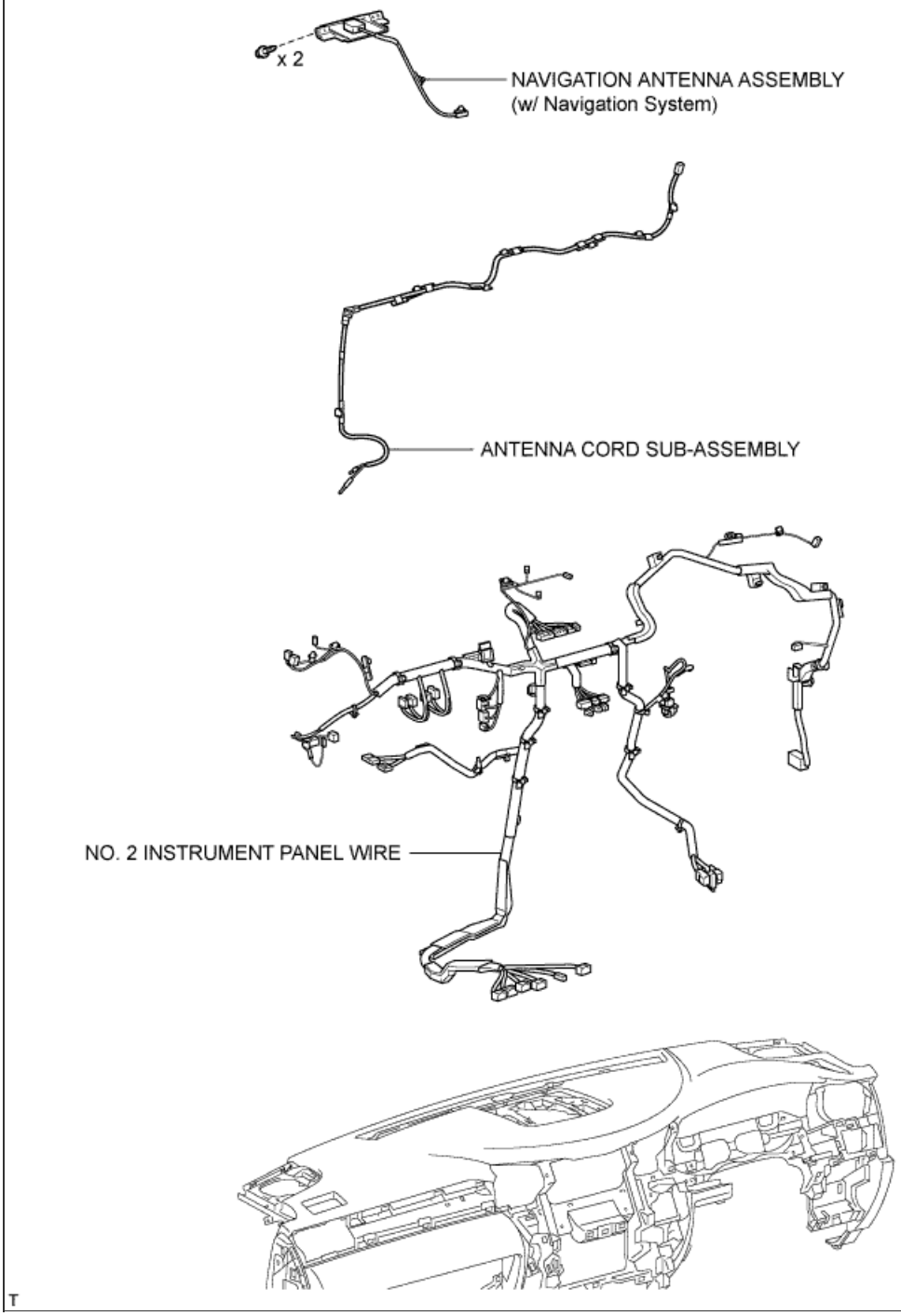

DEFROSTER NOZZLE ASSEMBLY
<B>
x 3
CENTER HEATER TO REGISTER DUCT
NO. 2 SIDE DEFROSTER NOZZLE
NO. 1 SIDE DEFROSTER NOZZLE
<B>
x 2
REAR NO. 1 AIR DUCT
FRONT PASSENGER SIDE AIRBAG ASSEMBLY
<B>
x 2
T

for LHD:


x 2
NAVIGATION ANTENNA ASSEMBLY
(w/ Navigation System)
ANTENNA CORD SUB-ASSEMBLY
NO. 2 INSTRUMENT PANEL WIRE

T

for RHD:


x 2
NAVIGATION ANTENNA ASSEMBLY
(w/ Navigation System)
ANTENNA CORD SUB-ASSEMBLY
NO. 2 INSTRUMENT PANEL WIRE

T

for Preparation Click here

1. TABLE OF BOLT, SCREW AND NUT

HINT:

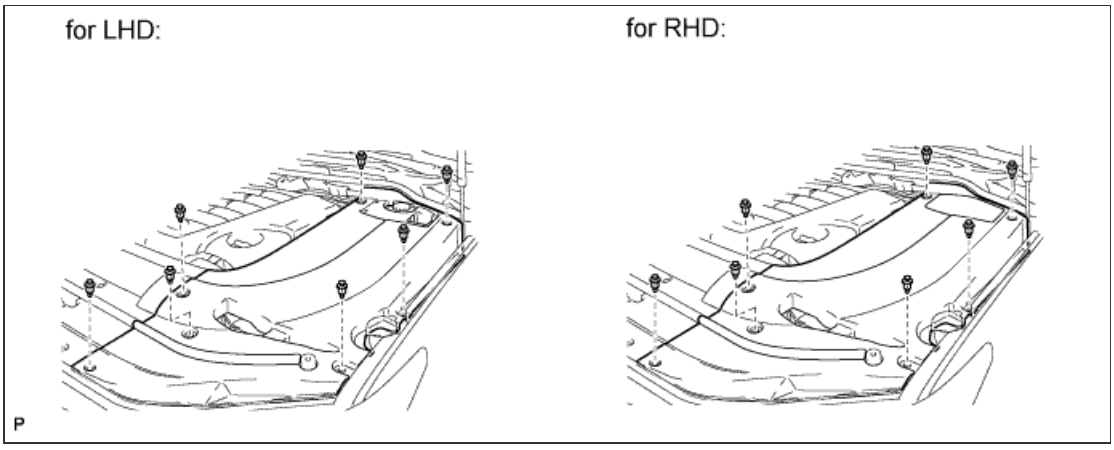
All bolts, screws and nuts relevant to installing and removing the instrument panel are shown along with their alphabet code in the table below.

mm (in.) (L = Length)

Code	Shape	Code	Shape	Code	Shape
<A>	φ 6 (0.236) L=16 (0.630)	<B>	φ 5 (0.197) L=18 (0.709)	<C>	φ 6 (0.236) L=22 (0.866)
<D>	φ 5 (0.197) L=15 (0.59)	<E>	φ 6 (0.236)	<F>	φ 8 (0.315) L=20 (0.787)

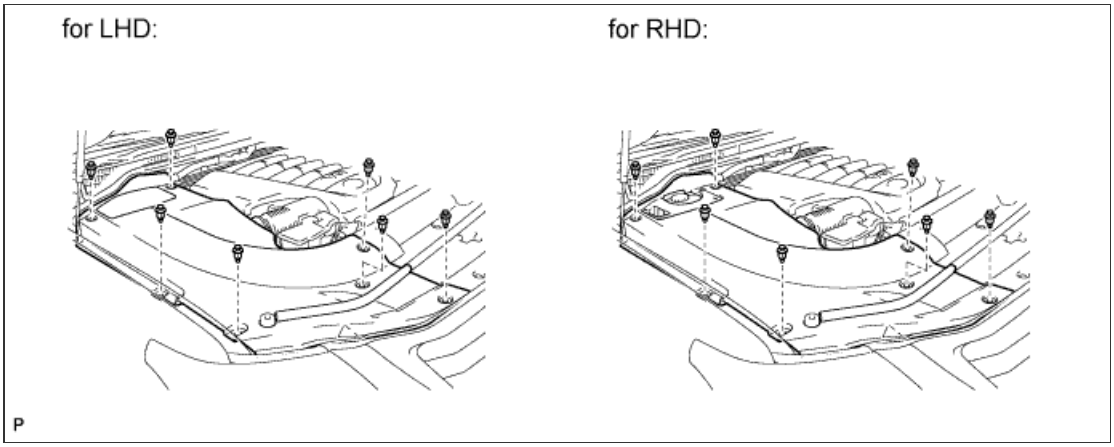
2. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



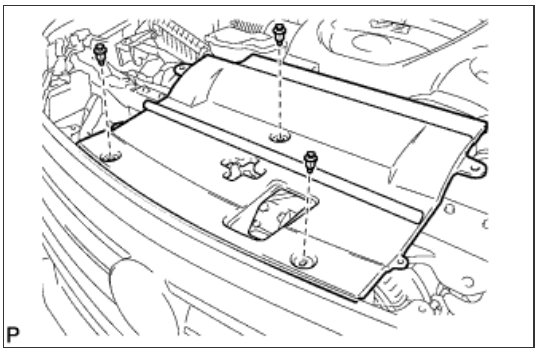
3. REMOVE ENGINE ROOM SIDE COVER RH

a. Remove the 7 clips and engine room side cover.



4. REMOVE UPPER RADIATOR SUPPORT SEAL

a. Remove the 3 clips and upper radiator support seal.



5. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM (w/ Cool Box)

a. Start the engine.

b. Turn the A/C switch on.

c. Operate the cooler compressor while the engine speed is approximately 1000 rpm for 5 to 6 minutes to circulate the refrigerant and collect the compressor oil remaining in each component into the cooler compressor.

d. Stop the engine.

e. Recover the refrigerant from the A/C system using a refrigerant recovery unit.

6. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

a. Disable the Autoaway/Return function by changing the customize parameter (Click here).

NOTICE:

Record the current customize parameter setting (whether the Autoaway/Return function is enabled or disabled) in order to restore the current setting after finishing the operation.

HINT:

Performing the above operation causes the Autoaway/Return function to be disabled when the engine switch is turned off.

b. Turn the engine switch on (IG). Operate the tilt and telescopic switch to fully extend and lower the steering column.

c. Turn the engine switch off and disconnect the cable from the negative (-) battery terminal.

CAUTION:

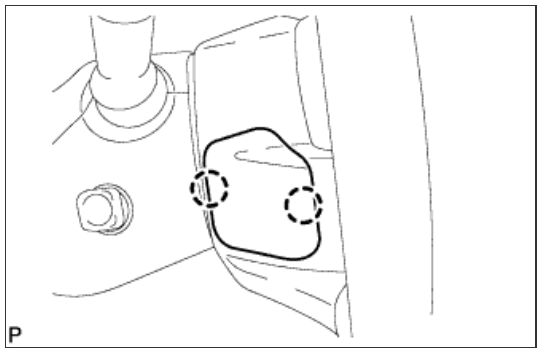
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

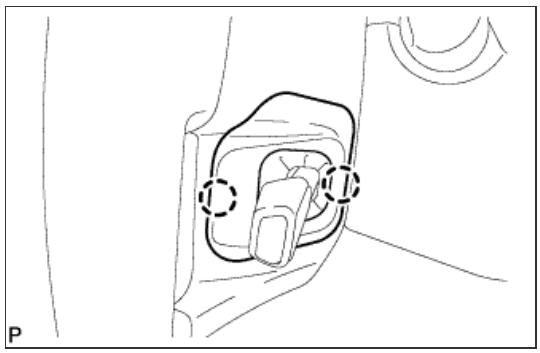
7. REMOVE LOWER NO. 3 STEERING WHEEL COVER

a. Detach the 2 claws and remove the steering wheel cover.



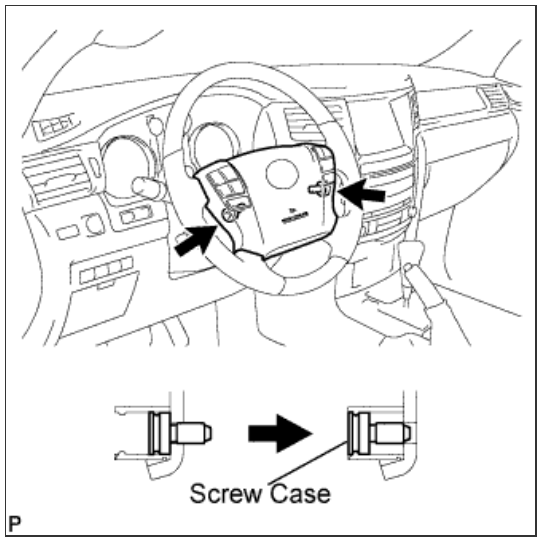
8. REMOVE LOWER NO. 2 STEERING WHEEL COVER

a. Detach the 2 claws and remove the steering wheel cover.



9. REMOVE STEERING PAD

a. Using a T30 "TORX" socket wrench, loosen the 2 screws until the groove along the screw circumference catches on the screw case.



b. Pull out the steering pad from the steering wheel, as shown in the illustration. Then support the steering pad with one hand.

NOTICE:

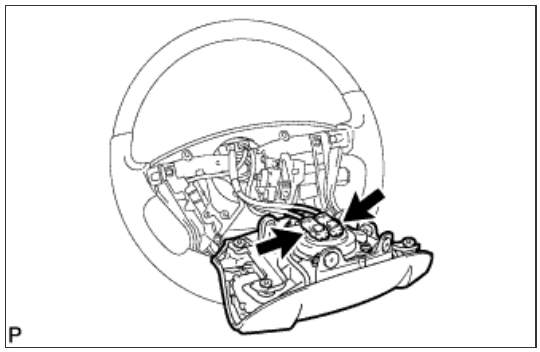
When removing the steering pad, do not pull the airbag wire harness.

c. Disconnect the horn connector.

d. Disconnect the 2 connectors and remove the steering pad.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



10. REMOVE STEERING WHEEL ASSEMBLY

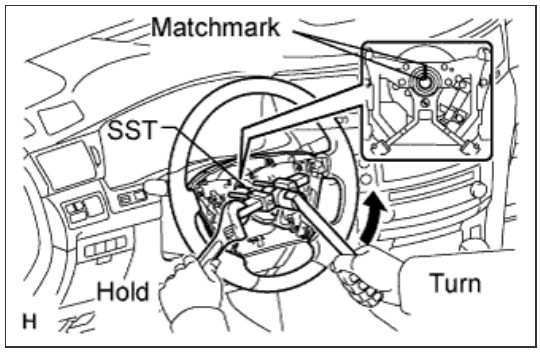
a. Remove the steering wheel set nut.

b. Put matchmarks on the steering wheel and main shaft.

c. Using SST, remove the steering wheel assembly.

SST

09950-50013 (09951-05010, 09952-05010, 09953-05020, 09954-05011)



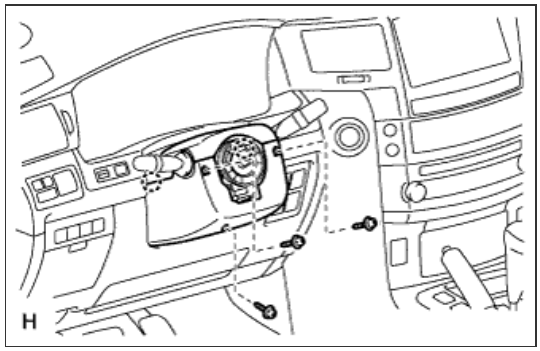
11. REMOVE LOWER STEERING COLUMN COVER

a. Remove the 3 screws.

b. Detach the 2 claws to remove the lower steering column cover.

NOTICE:

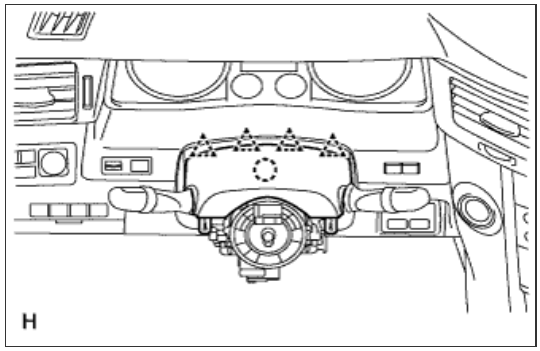
Do not damage the tilt and telescopic switch.



12. REMOVE UPPER STEERING COLUMN COVER

a. Detach the 4 clips.

b. Detach the claw to remove the upper steering column cover.



13. REMOVE TILT AND TELESCOPIC SWITCH

a. Disconnect the switch connector.

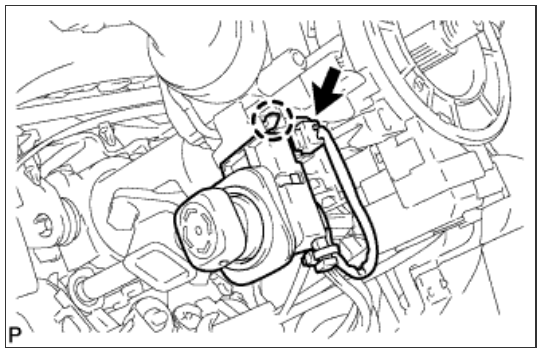
b. Using a screwdriver, detach the claw and pull out the switch.

HINT:

Tape the screwdriver tip before use.

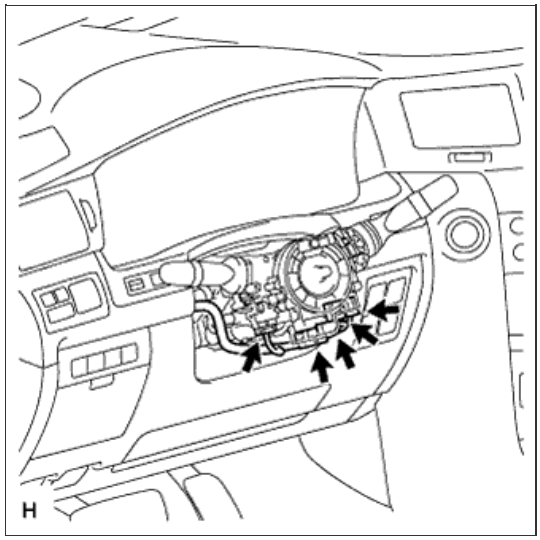
NOTICE:

Pushing on the claw too hard will break the claw.

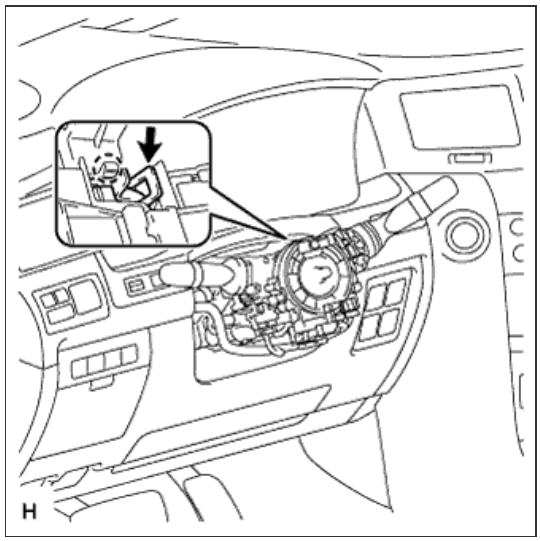


14. REMOVE COMBINATION SWITCH ASSEMBLY WITH SPIRAL CABLE SUB-ASSEMBLY

a. Disconnect the 5 connectors from the turn signal switch with spiral cable.



b. Using pliers, grip the claws of the clamp and remove the turn signal switch with spiral cable from the steering column.



15. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly LH (Click here).

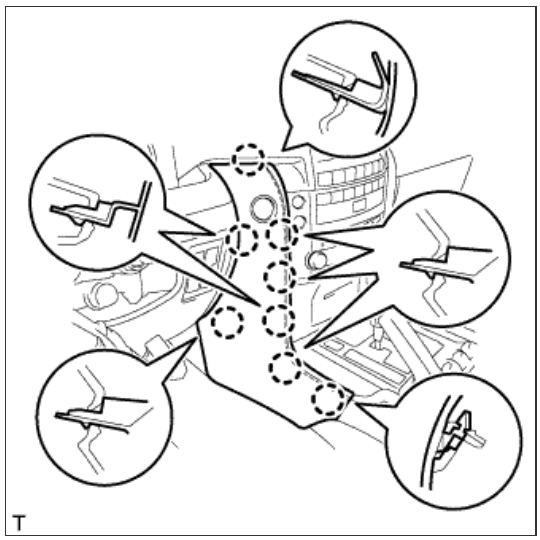
16. REMOVE FRONT SEAT ASSEMBLY RH

a. Remove the front seat assembly RH (Click here).

17. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Detach the 8 claws.

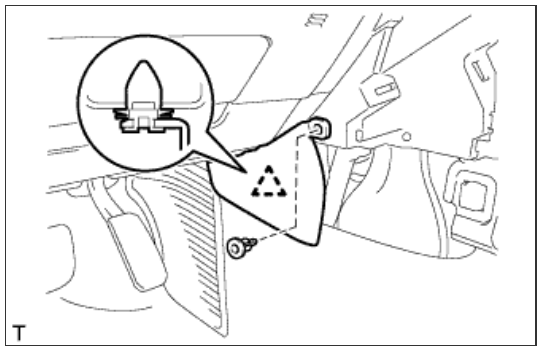
b. Disconnect the connector and remove the panel pad.



18. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

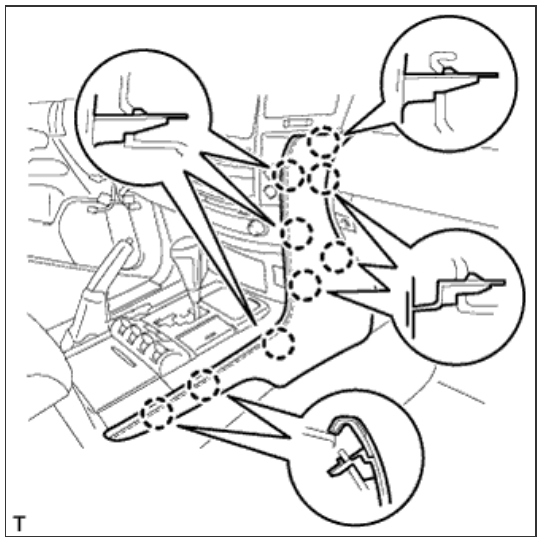
a. Remove the clip.

b. Detach the clip and remove the cover.



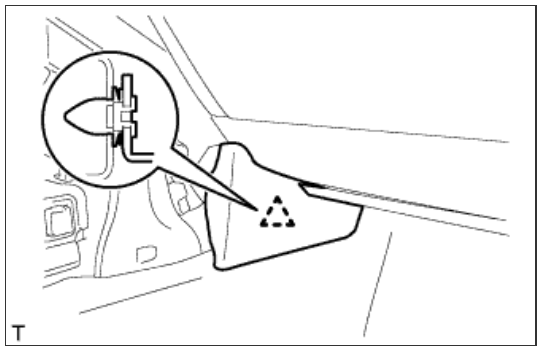
19. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

a. Detach the 9 claws and remove the panel pad.



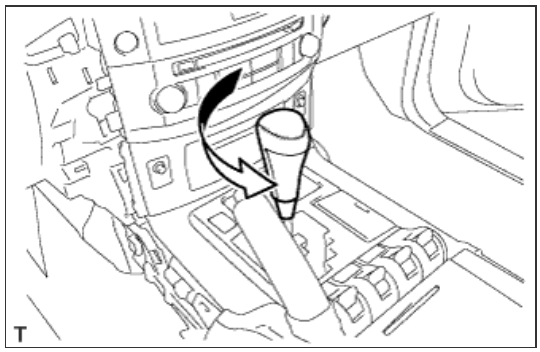
20. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER RH

a. Detach the clip and remove the cover.



21. REMOVE SHIFT LEVER KNOB SUB-ASSEMBLY

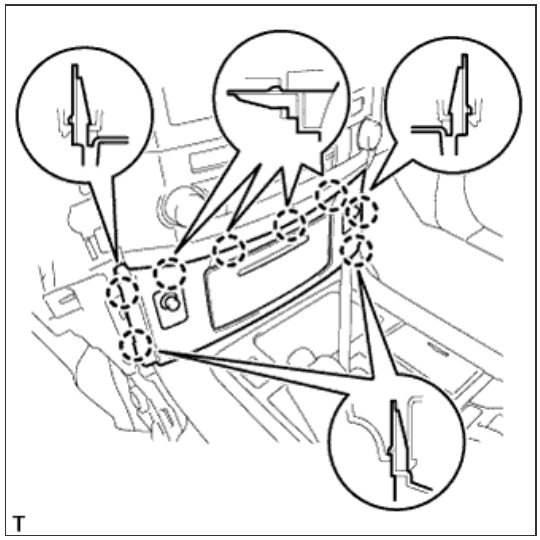
a. Twist the shift lever knob in the direction indicated by the arrow and remove it.



22. REMOVE LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

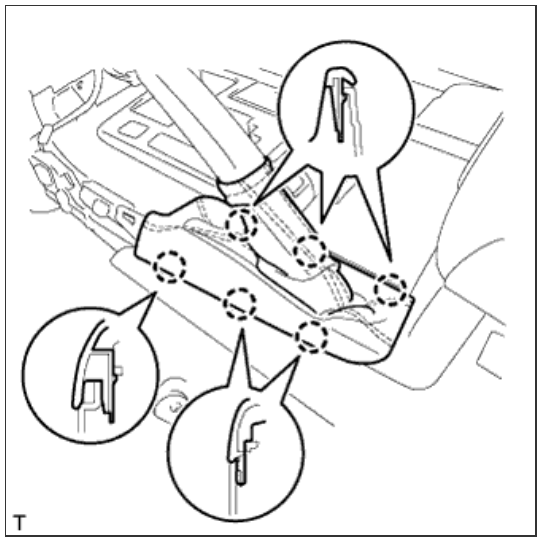
a. Detach the 8 claws.

b. Disconnect the connectors and remove the panel.



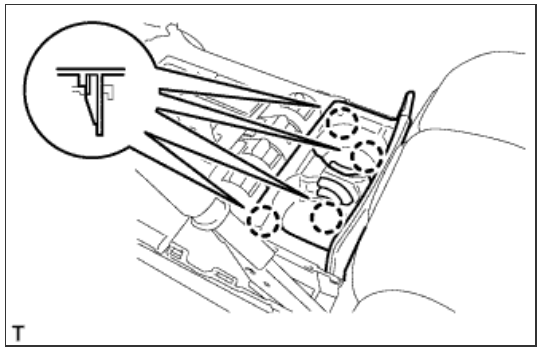
23. REMOVE PARKING BRAKE HOLE COVER

a. Detach the 6 claws and remove the cover.



24. REMOVE CONSOLE CUP HOLDER BOX SUB-ASSEMBLY

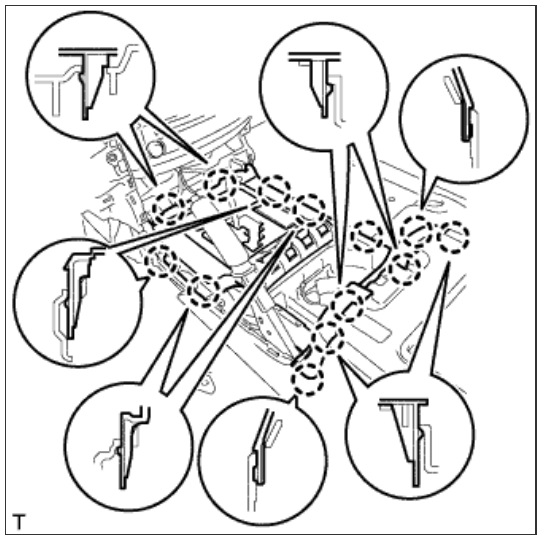
a. Detach the 4 claws and remove the box.



25. REMOVE UPPER CONSOLE PANEL SUB-ASSEMBLY

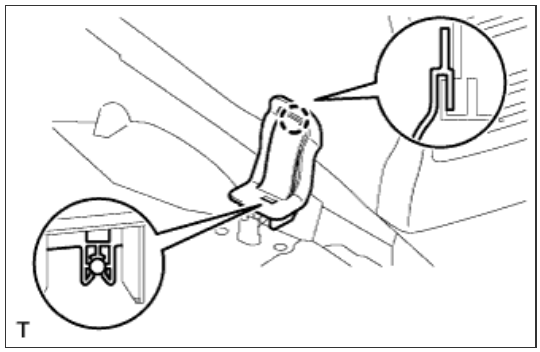
a. Detach the 13 claws.

b. Disconnect the connectors and remove the console panel.



26. REMOVE NO. 1 COOLER COVER (w/ Cool Box)

a. Detach the clamp on the lower part of the cooler cover, and then pull the cooler cover upward to remove it.

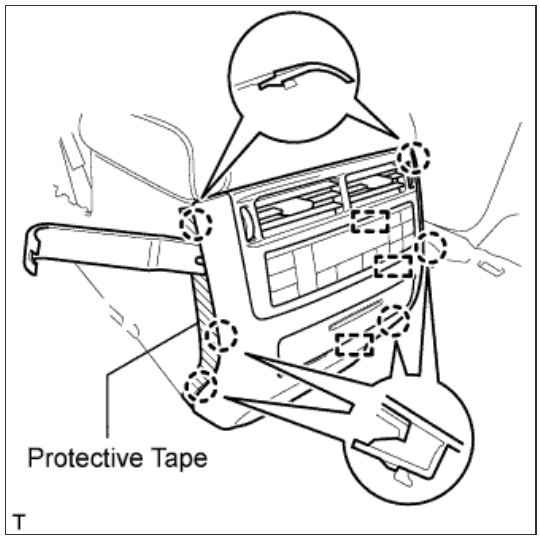


27. REMOVE REAR CONSOLE END PANEL SUB-ASSEMBLY

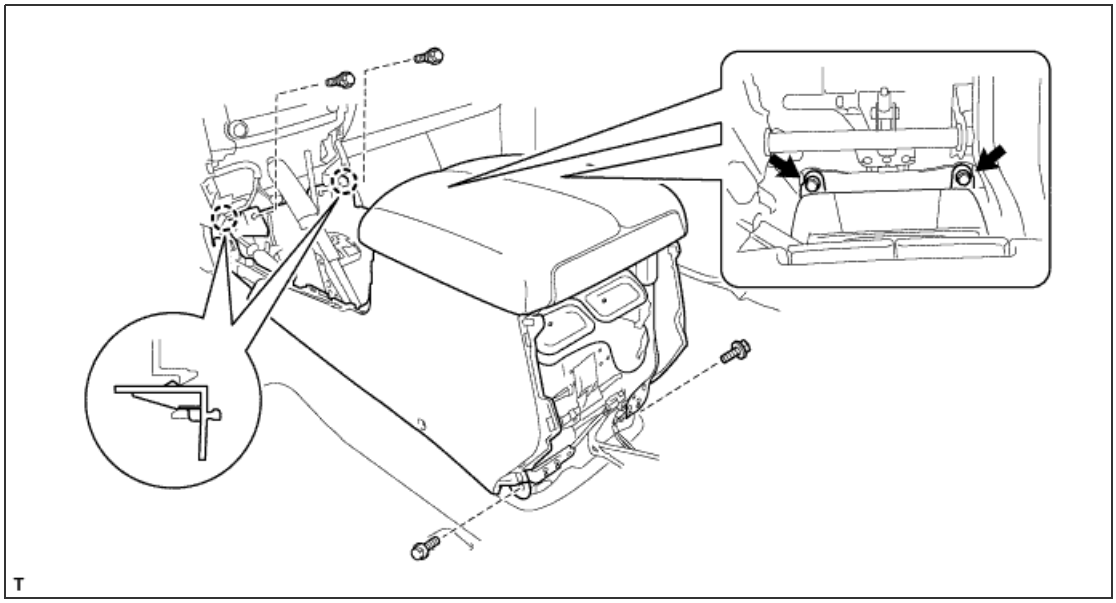
a. Place protective tape as shown in the illustration.

b. Using a moulding remover, detach the 6 claws.

c. Remove the end panel and disconnect the connectors and 3 clamps.



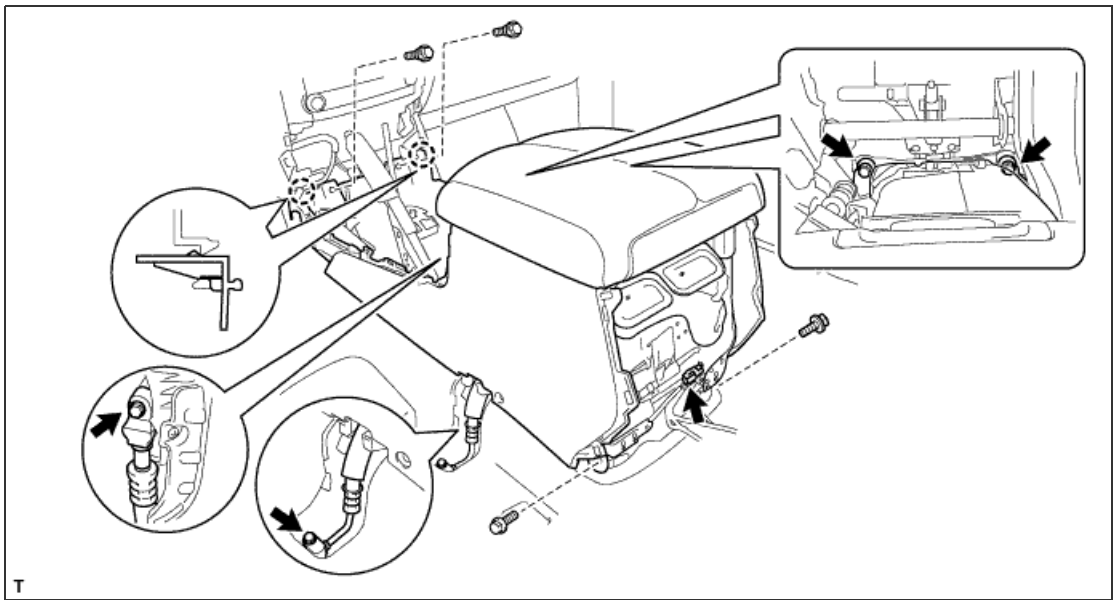
28. REMOVE REAR CONSOLE BOX SUB-ASSEMBLY (w/o Cool Box)



a. Remove the 4 bolts and 2 screws.

b. Detach the 2 claws and remove the console box.

29. REMOVE COOLING BOX ASSEMBLY (w/ Cool Box)



a. Remove the 4 bolts and 2 screws.

b. Remove the 2 bolts and disconnect the 2 cooler pipes.

c. Remove the 2 O-rings from the cooler pipes.

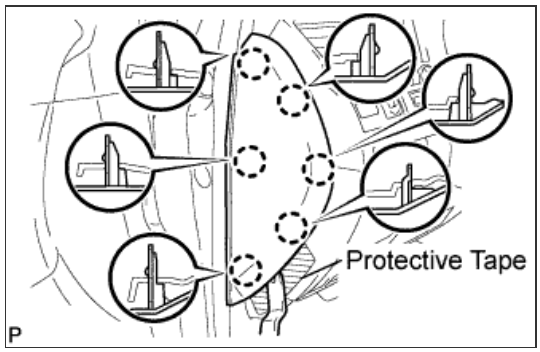
d. Disconnect the connector.

e. Detach the 2 claws and remove the cooling box.

30. REMOVE INSTRUMENT SIDE PANEL LH

a. Place protective tape as shown in the illustration.

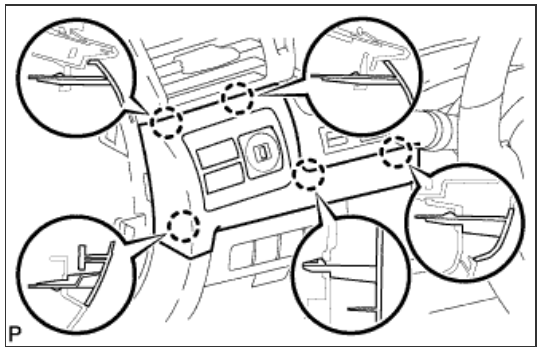
b. Using a moulding remover, detach the 6 claws and remove the side panel.



31. REMOVE NO. 1 SWITCH HOLE BASE

a. Detach the 5 claws.

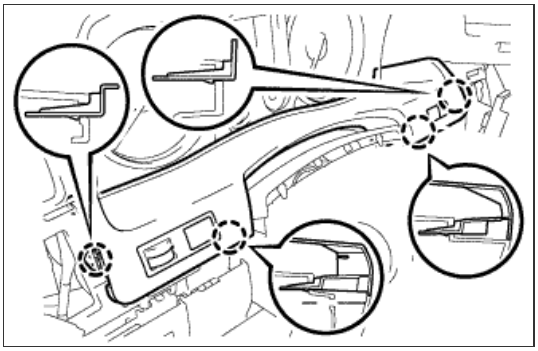
b. Disconnect the connectors and remove the switch hole base.



32. REMOVE INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

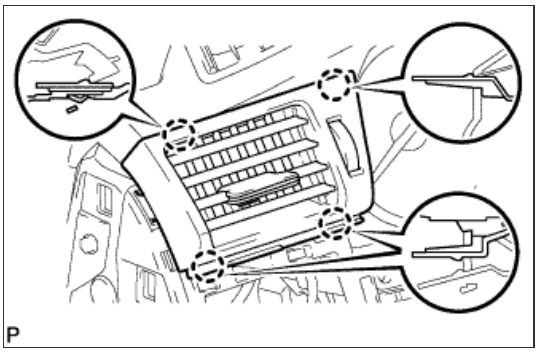
a. Detach the 4 claws.

b. Disconnect the connectors and remove the finish panel.



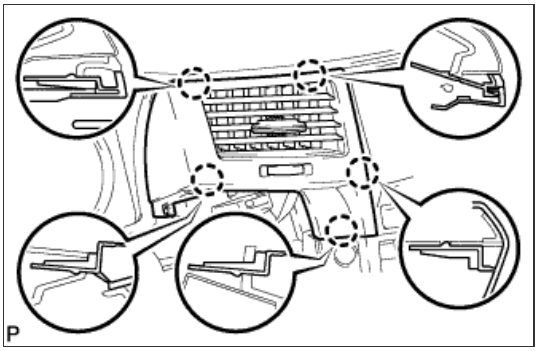
33. REMOVE NO. 1 INSTRUMENT PANEL REGISTER ASSEMBLY

a. Detach the 4 claws and remove the register.



34. REMOVE NO. 3 INSTRUMENT PANEL REGISTER ASSEMBLY

a. Detach the 5 claws and remove the register.

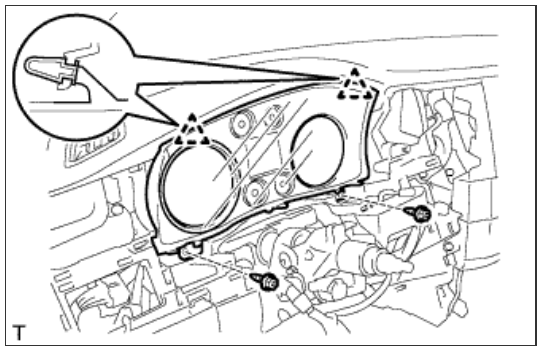


35. REMOVE COMBINATION METER ASSEMBLY

a. Remove the 2 screws.

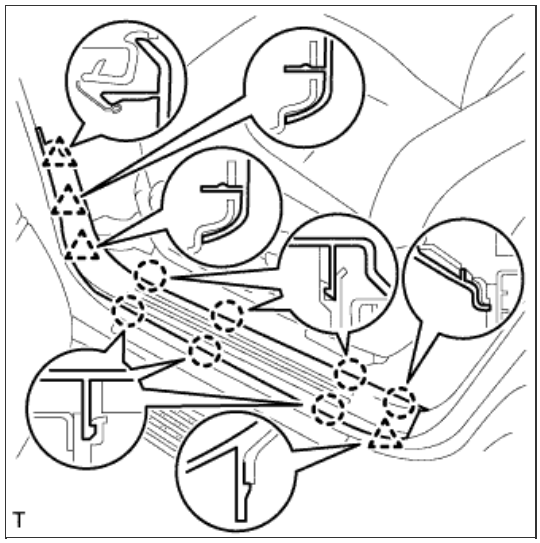
b. Detach the 2 clips.

c. Disconnect the connector and remove the combination meter.



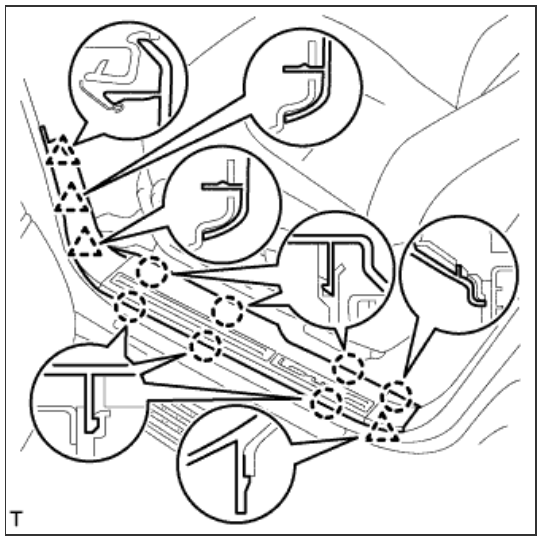
36. REMOVE FRONT DOOR SCUFF PLATE LH

a. w/o Illumination:



i. Detach the 7 claws and 4 clips, and remove the scuff plate.

b. w/ Illumination:



i. Detach the 7 claws and 4 clips.

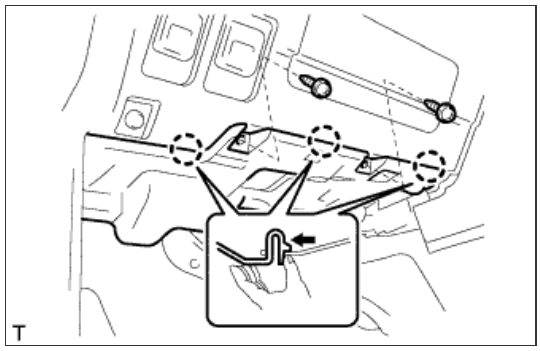
ii. Disconnect the connector and remove the scuff plate.

37. REMOVE NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Remove the 2 screws.

b. Detach the 3 claws.

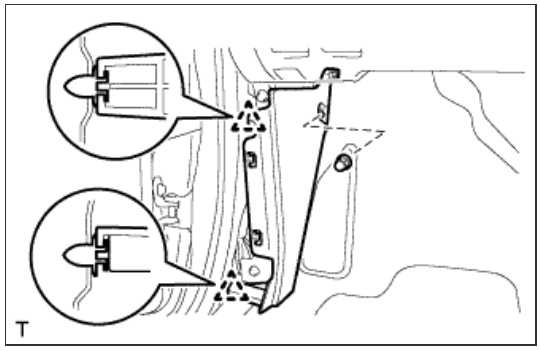
c. Remove the under cover and disconnect the connectors.



38. REMOVE COWL SIDE TRIM BOARD LH

a. Remove the cap nut.

b. Detach the 2 clips and remove the trim board.

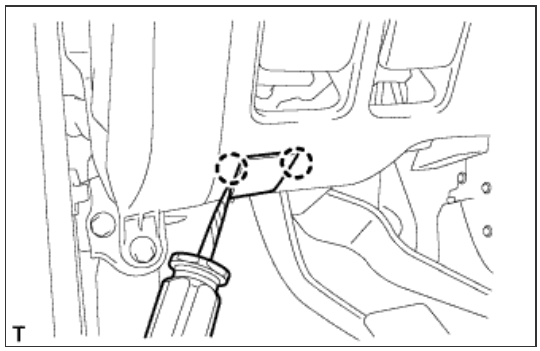


39. REMOVE LOWER NO. 1 INSTRUMENT PANEL FINISH PANEL

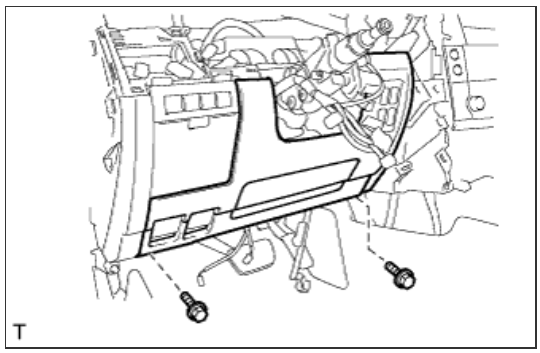
a. Using a screwdriver, detach the 2 claws and open the hole cover.

HINT:

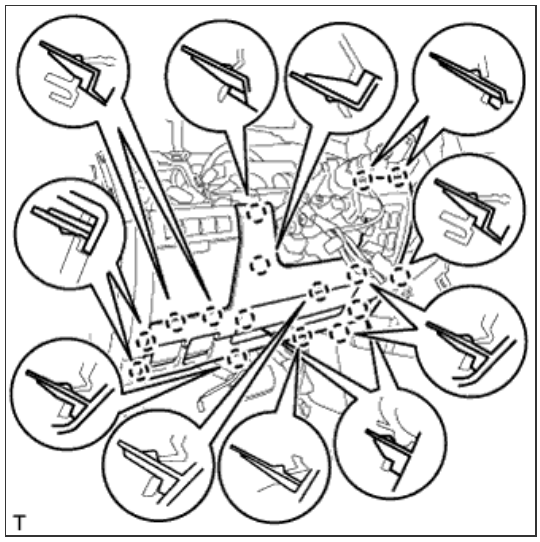
Tape the screwdriver tip before use.



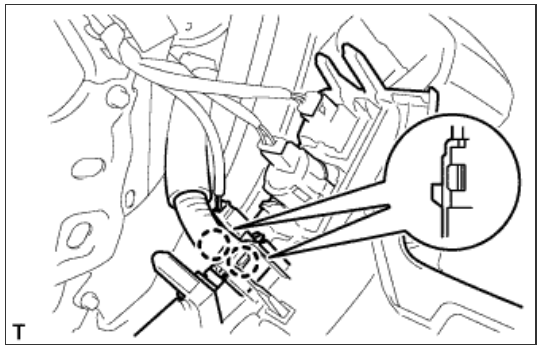
b. Remove the 2 bolts.



c. Detach the 16 claws.

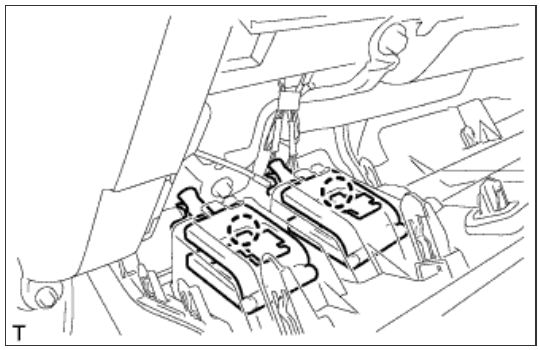


d. Detach the 2 claws and remove the sensor.



e. Detach the 2 claws and disconnect the 2 control cables.

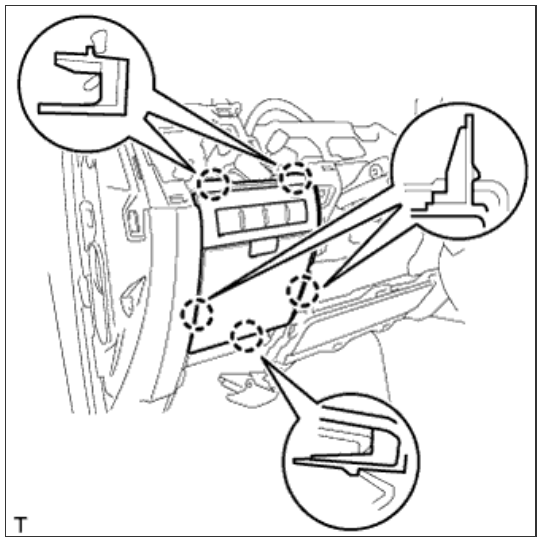
f. Remove the finish panel and then disconnect the connectors.



40. REMOVE INSTRUMENT PANEL BOX ASSEMBLY

a. Detach the 5 claws.

b. Remove the box and then disconnect the connectors.



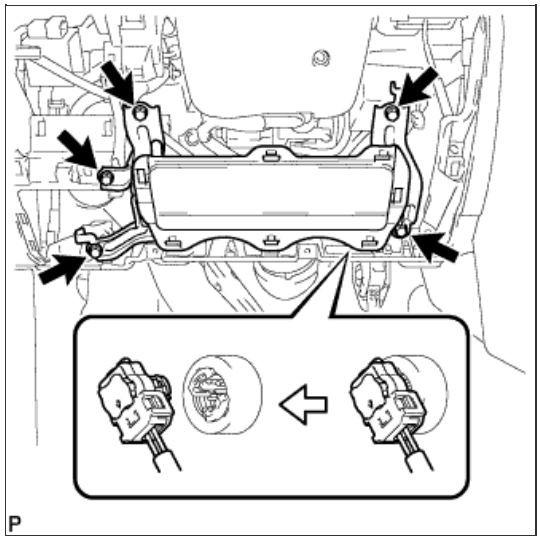
41. REMOVE DRIVER SIDE KNEE AIRBAG ASSEMBLY

a. Remove the 5 bolts and driver side knee airbag.

b. Disconnect the connector.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



42. REMOVE INSTRUMENT SIDE PANEL RH

a. w/o Airbag Cut Off Switch:

i. Place protective tape as shown in the illustration.

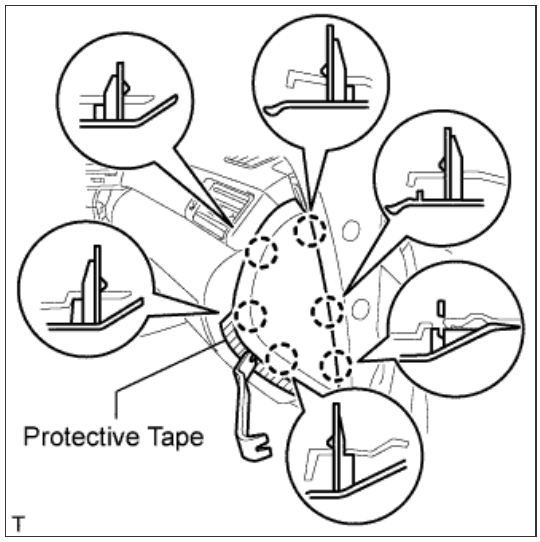
ii. Using a moulding remover, detach the 6 claws and remove the side panel.

b. w/ Airbag Cut Off Switch:

i. Place protective tape as shown in the illustration.

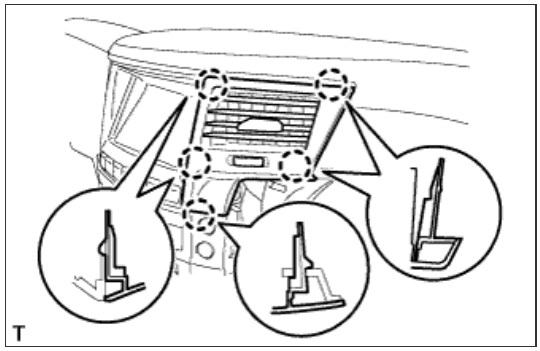
ii. Using a moulding remover, detach the 6 claws.

iii. Remove the side panel and disconnect the connector.



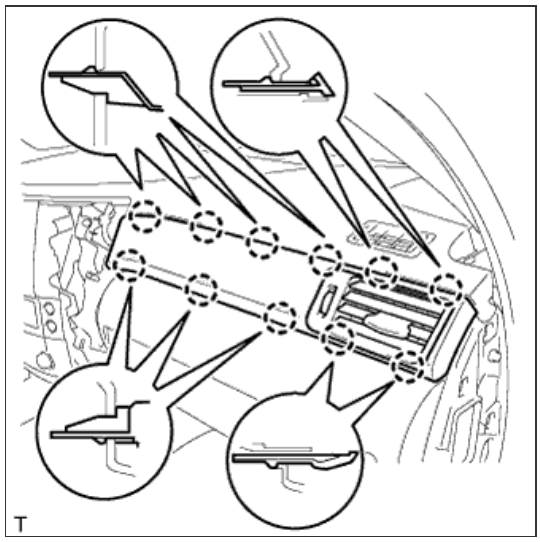
43. REMOVE NO. 4 INSTRUMENT PANEL REGISTER ASSEMBLY

a. Detach the 5 claws and remove the register.

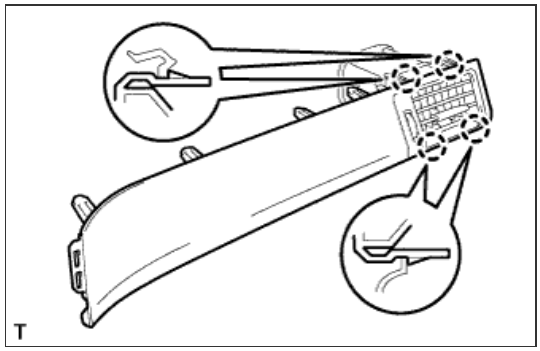


44. REMOVE NO. 3 INSTRUMENT CLUSTER FINISH PANEL GARNISH

a. Detach the 11 claws and remove the register assembly.



b. Detach the 4 claws and remove the panel garnish.



45. REMOVE FRONT DOOR SCUFF PLATE RH

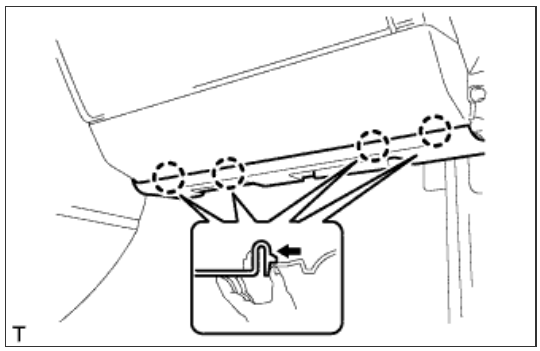
HINT:

Use the same procedures described for the LH side.

46. REMOVE NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Detach the 4 claws.

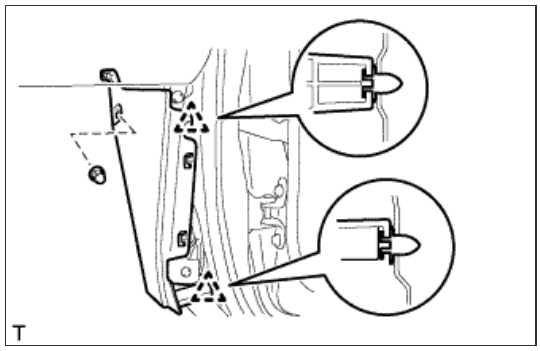
b. Remove the under cover and disconnect the connector.



47. REMOVE COWL SIDE TRIM BOARD RH

a. Remove the cap nut.

b. Detach the 2 clips and remove the trim board.



48. REMOVE FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY

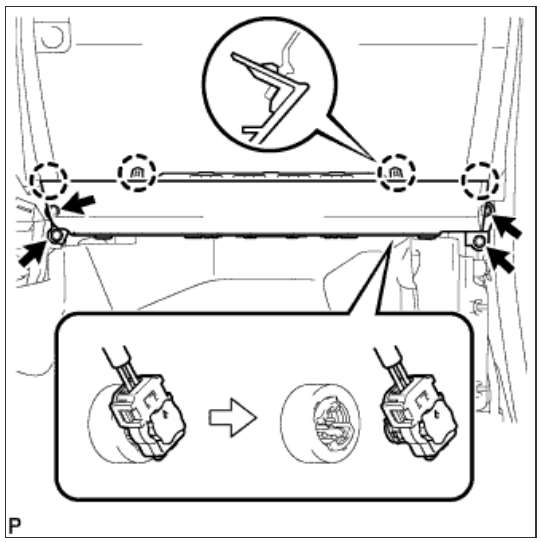
a. Remove the 4 bolts.

b. Detach the 4 claws and remove the front passenger side knee airbag.

c. Disconnect the connector.

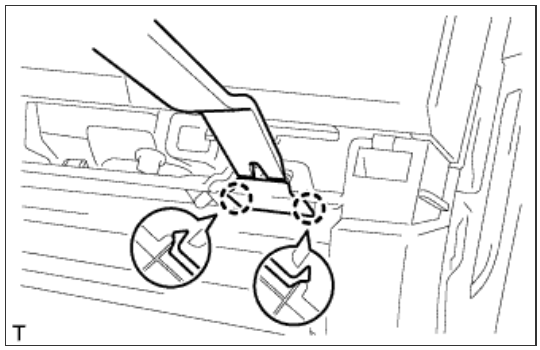
NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.



49. REMOVE INSTRUMENT PANEL BOX DOOR KNOB

a. Using a moulding remover, detach the 2 claws and remove the knob.

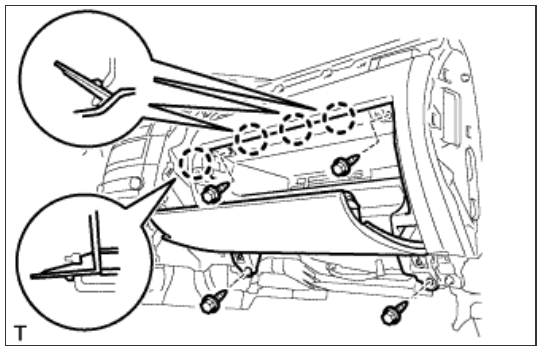


50. REMOVE LOWER NO. 2 INSTRUMENT PANEL FINISH PANEL

a. Remove the 4 bolts.

b. Detach the 4 claws.

c. Remove the finish panel and then disconnect the connector.



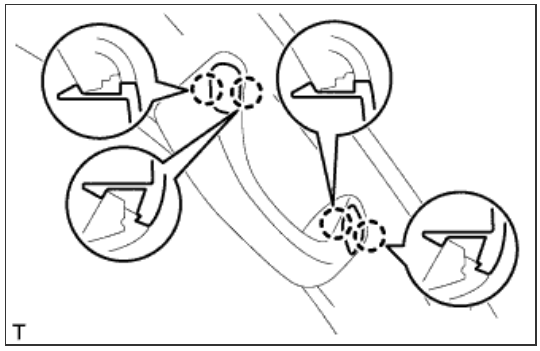
51. REMOVE NAVIGATION MODULE BOARD (w/ Navigation System)

52. REMOVE FRONT ASSIST GRIP SUB-ASSEMBLY

HINT:

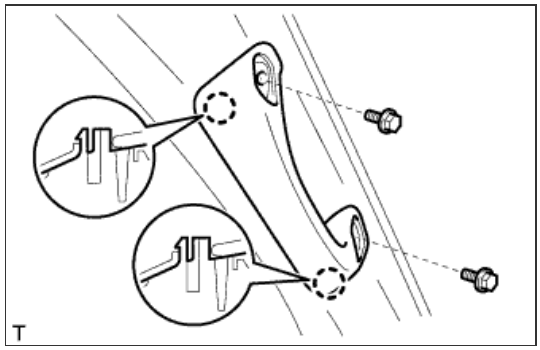
Use the same procedure to remove the front assist grip on the other side.

a. Detach the 4 claws and remove the 2 assist grip plugs.



b. Remove the 2 bolts.

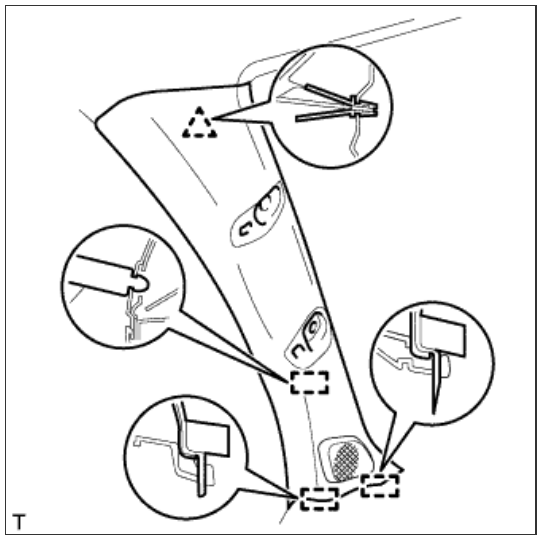
c. Detach the 2 claws and remove the front assist grip.



53. REMOVE FRONT PILLAR GARNISH LH

a. Detach the clip and 3 guides.

b. Disconnect the speaker connector and then remove the front pillar garnish.

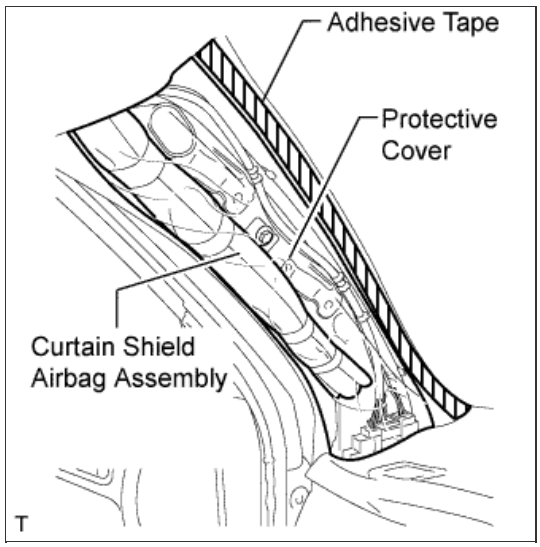


c. Protect the curtain shield airbag.

i. Thoroughly cover the airbag with a cloth or nylon sheet and fix the ends of the cover with adhesive tape, as shown in the illustration.

NOTICE:

Cover the curtain shield airbag with a protective cover as soon as the front pillar garnish is removed.



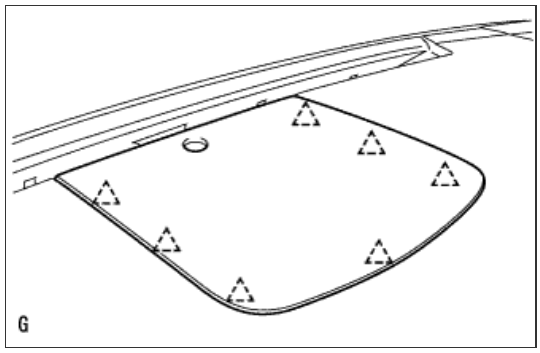
54. REMOVE FRONT PILLAR GARNISH RH

HINT:

Use the same procedures described for the LH side.

55. REMOVE NO. 1 SPEAKER OPENING COVER ASSEMBLY

a. Detach the 7 clips and remove the opening cover.



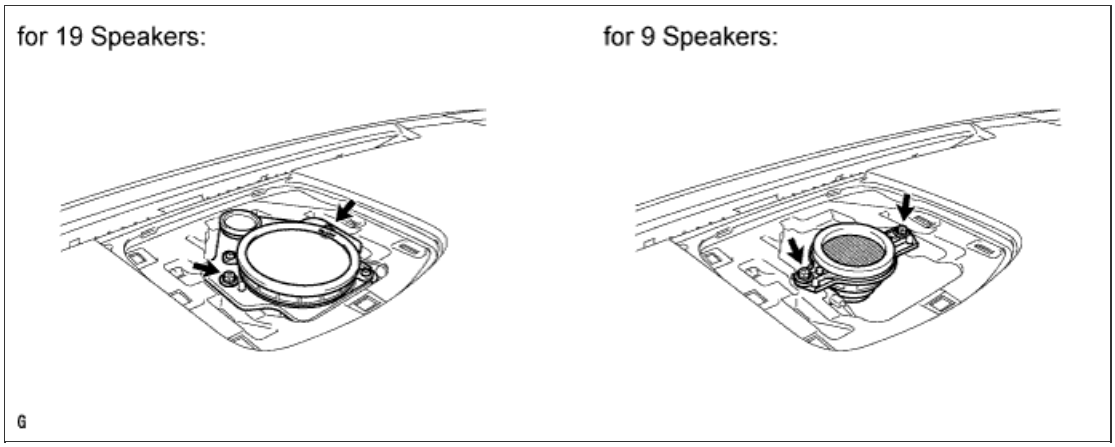
56. REMOVE FRONT NO. 4 SPEAKER ASSEMBLY

a. Remove the 2 bolts.

b. Remove the speaker and disconnect the speaker connector.

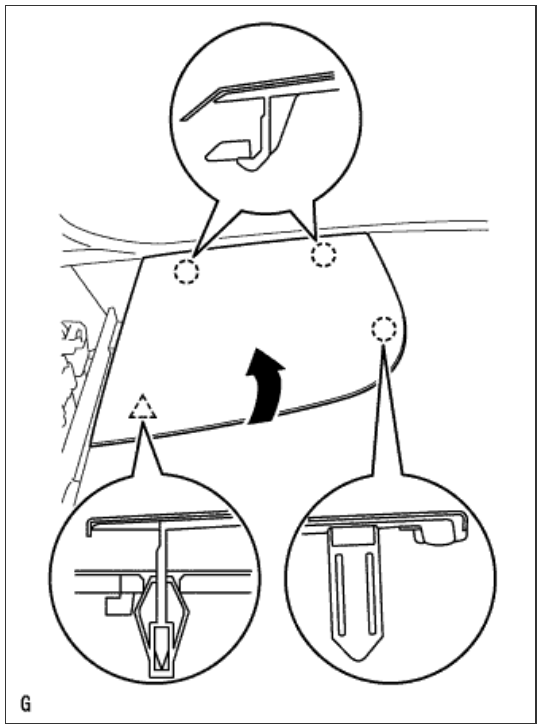
NOTICE:

Do not touch the cone part of the speaker.



57. REMOVE NO. 1 INSTRUMENT PANEL SPEAKER PANEL SUB-ASSEMBLY

a. Detach the claw and clip on the near side. Then, raise the panel towards the front of the vehicle in the direction of the arrow and detach the 2 claws to remove the panel.



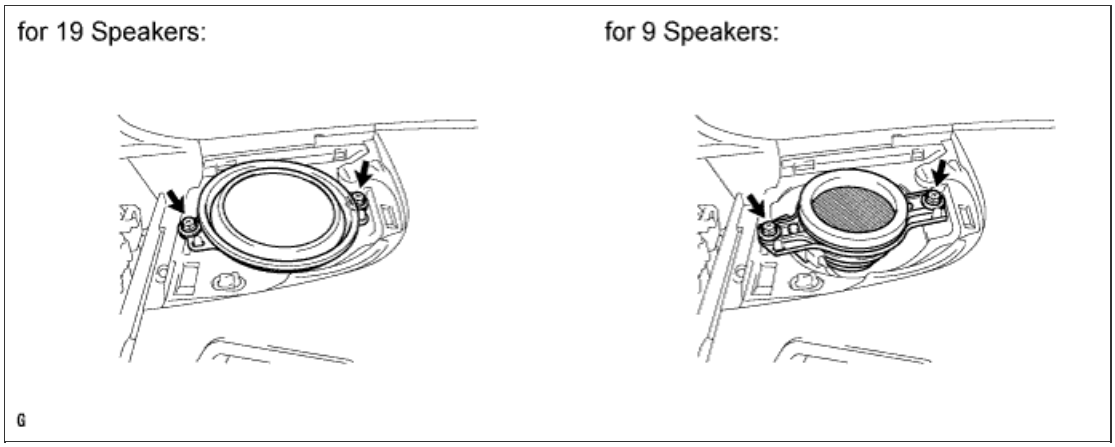
58. REMOVE FRONT NO. 2 SPEAKER ASSEMBLY (LH Side)

a. Remove the 2 bolts.

b. Remove the speaker and disconnect the speaker connector.

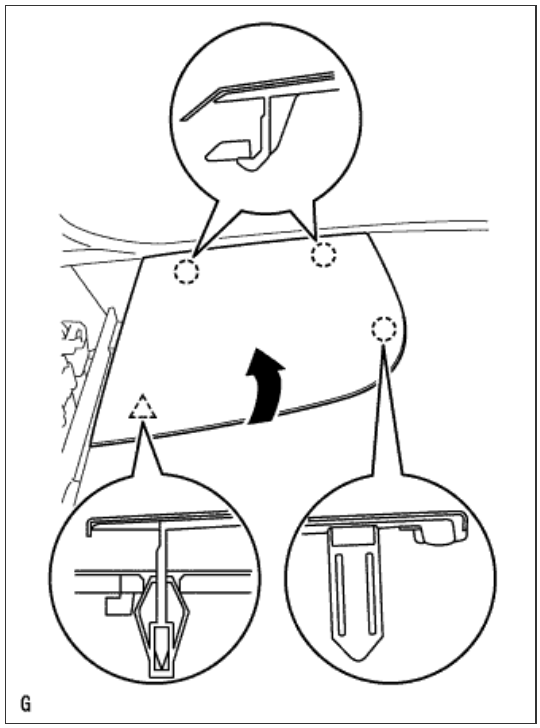
NOTICE:

Do not touch the cone part of the speaker.



59. REMOVE NO. 2 INSTRUMENT PANEL SPEAKER PANEL SUB-ASSEMBLY

a. Detach the claw and clip on the near side. Then, raise the panel towards the front of the vehicle in the direction of the arrow and detach the 2 claws to remove the panel.



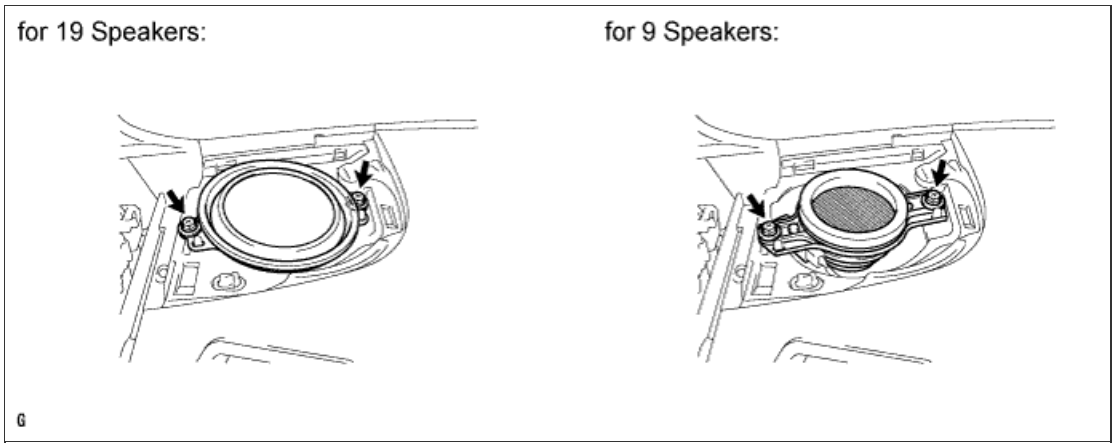
60. REMOVE FRONT NO. 2 SPEAKER ASSEMBLY (RH Side)

a. Remove the 2 bolts.

b. Remove the speaker and disconnect the speaker connector.

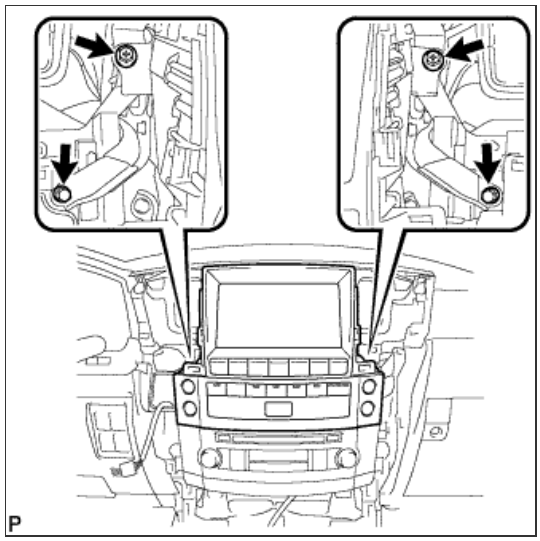
NOTICE:

Do not touch the cone part of the speaker.



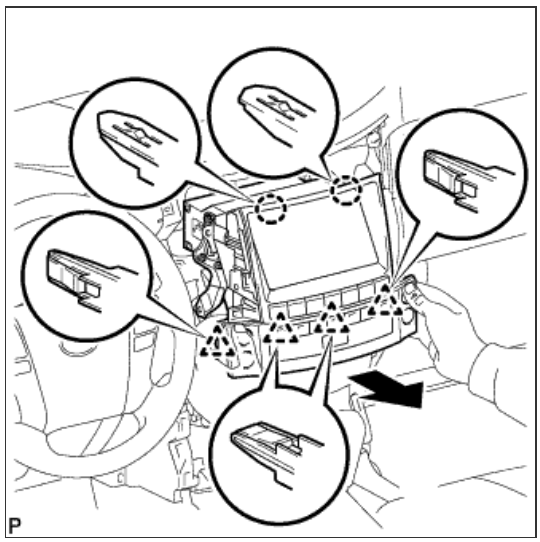
61. REMOVE MULTI-DISPLAY ASSEMBLY WITH BRACKET (w/ Navigation System)

a. Remove the 2 screws and 2 bolts.



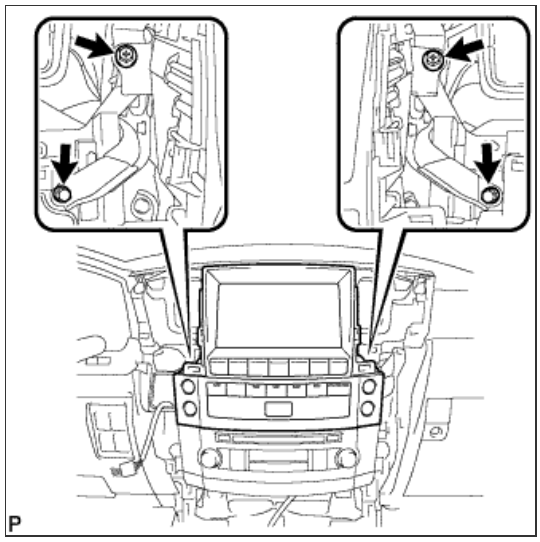
b. Pull the radio receiver to detach the 2 claws and 4 clips on the backside of the display.

c. Disconnect the connectors and remove the display.



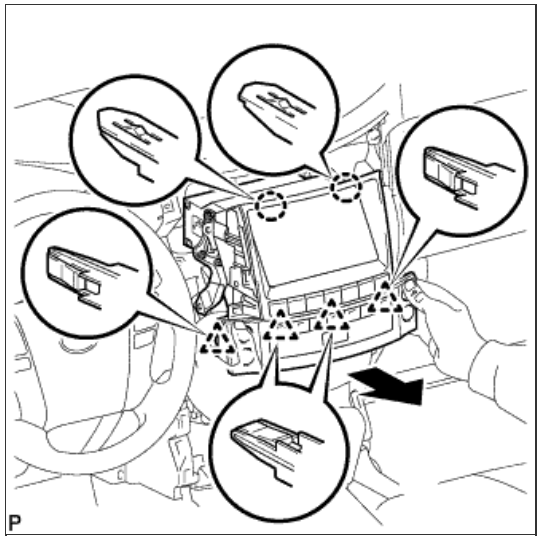
62. REMOVE MULTI-DISPLAY ASSEMBLY WITH BRACKET (w/o Navigation System)

a. Remove the 2 screws and 2 bolts.



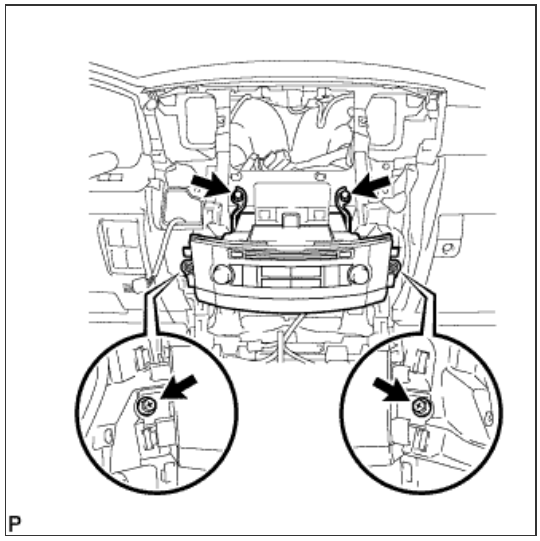
b. Pull the display to detach the 2 claws and 4 clips on the backside of the display.

c. Disconnect the connectors and remove the display.



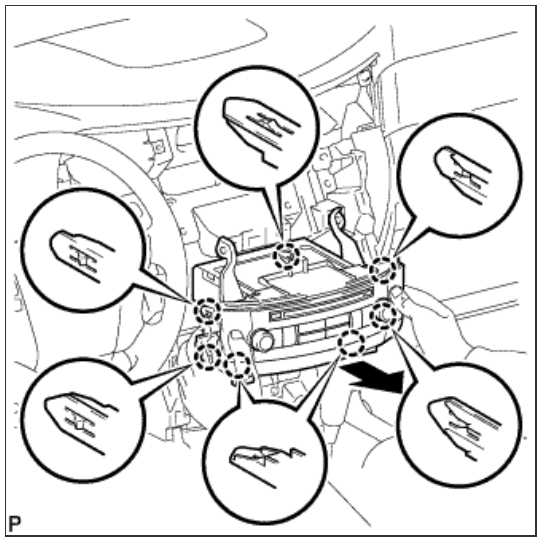
63. REMOVE RADIO RECEIVER ASSEMBLY WITH BRACKET

a. Remove the 2 screws and 2 bolts.



b. Pull the radio receiver to detach the 7 claws on the backside of the radio receiver.

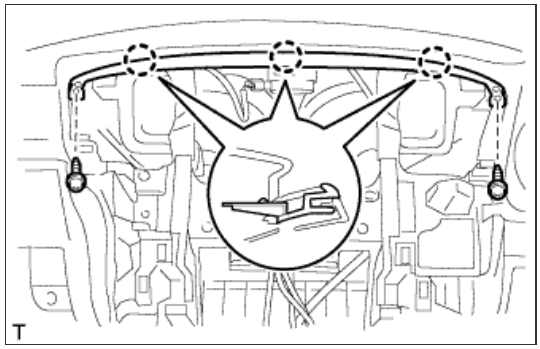
c. Disconnect the connectors and remove the radio receiver.



64. REMOVE NO. 1 INSTRUMENT CLUSTER MOULDING

a. Remove the 2 screws.

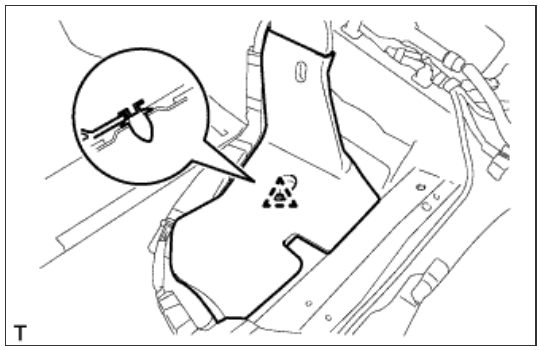
b. Detach the 3 claws and remove the moulding.



65. REMOVE REAR NO. 2 AIR DUCT

a. Fold back the front floor carpet.

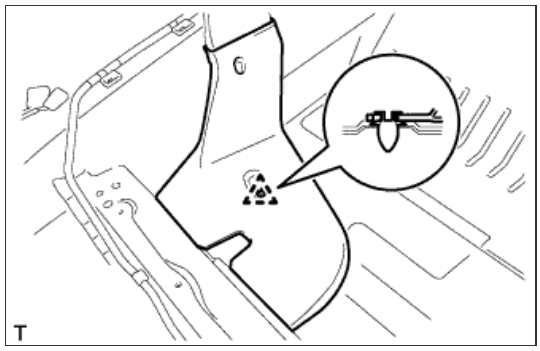
b. Detach the clip and remove the air duct.



66. REMOVE REAR NO. 4 AIR DUCT

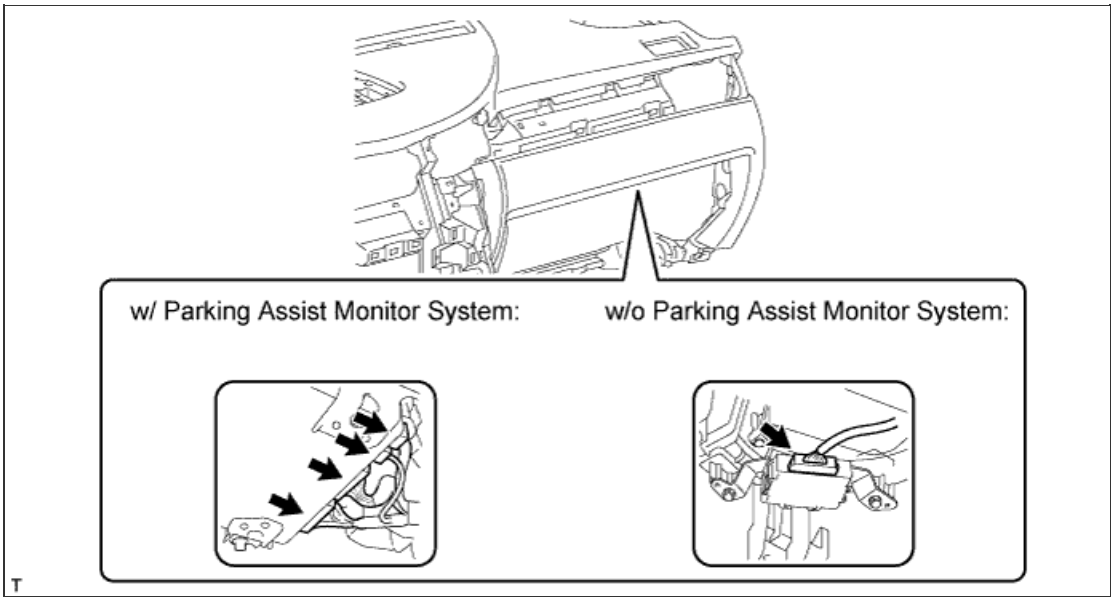
a. Fold back the front floor carpet.

b. Detach the clip and remove the air duct.

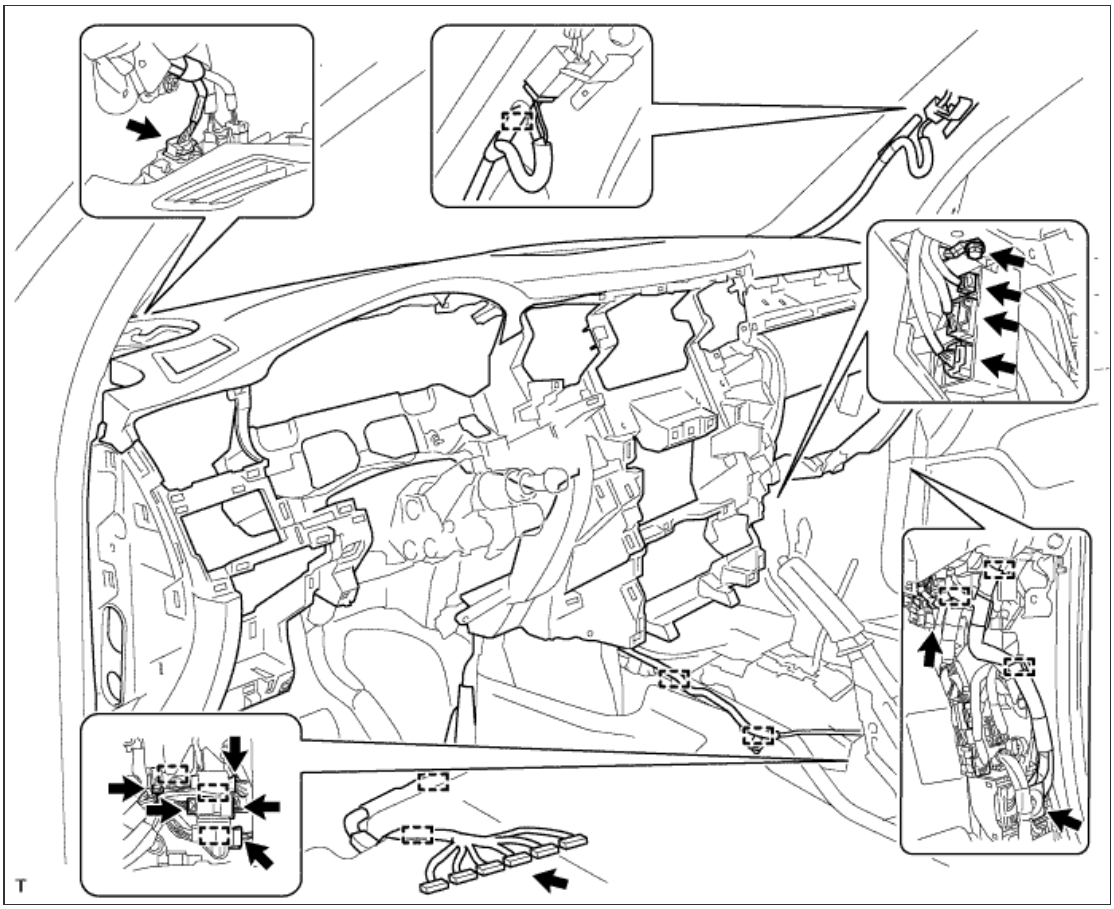


67. REMOVE INSTRUMENT PANEL SAFETY PAD ASSEMBLY (for LHD)

a. Disconnect the connectors.

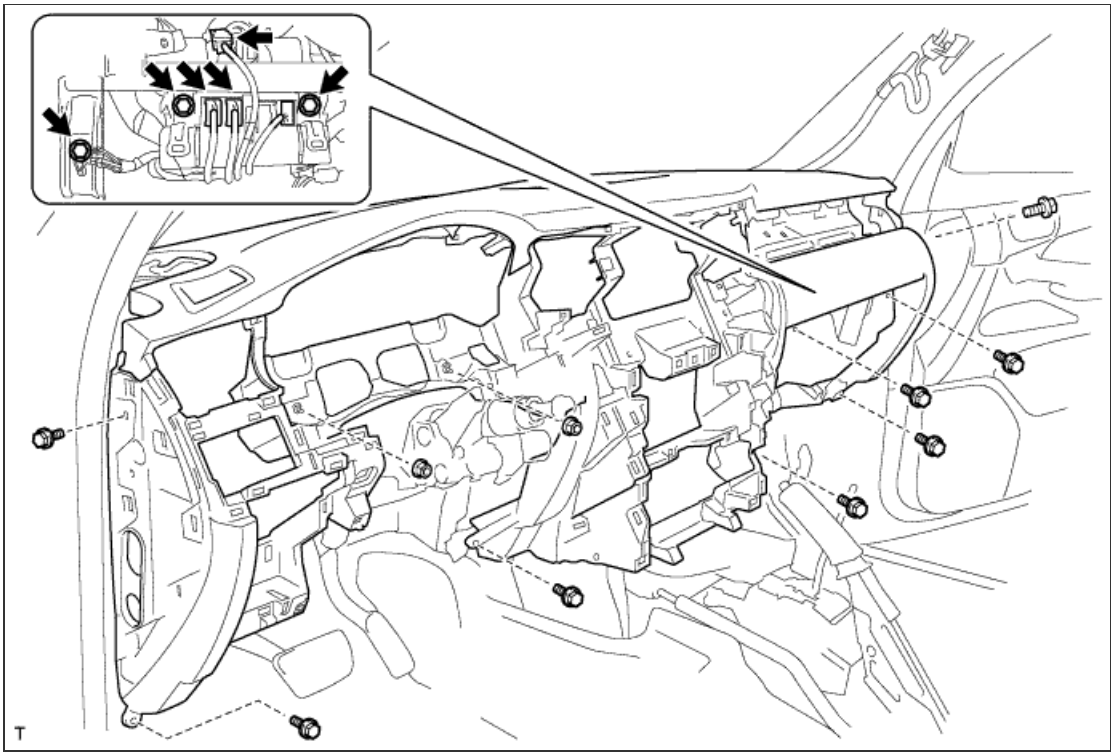


b. Disconnect the connectors and clamps.



c. Remove the bolt and disconnect the wire harness.

d. Remove the 2 passenger airbag bolts.



e. Remove the bolt.

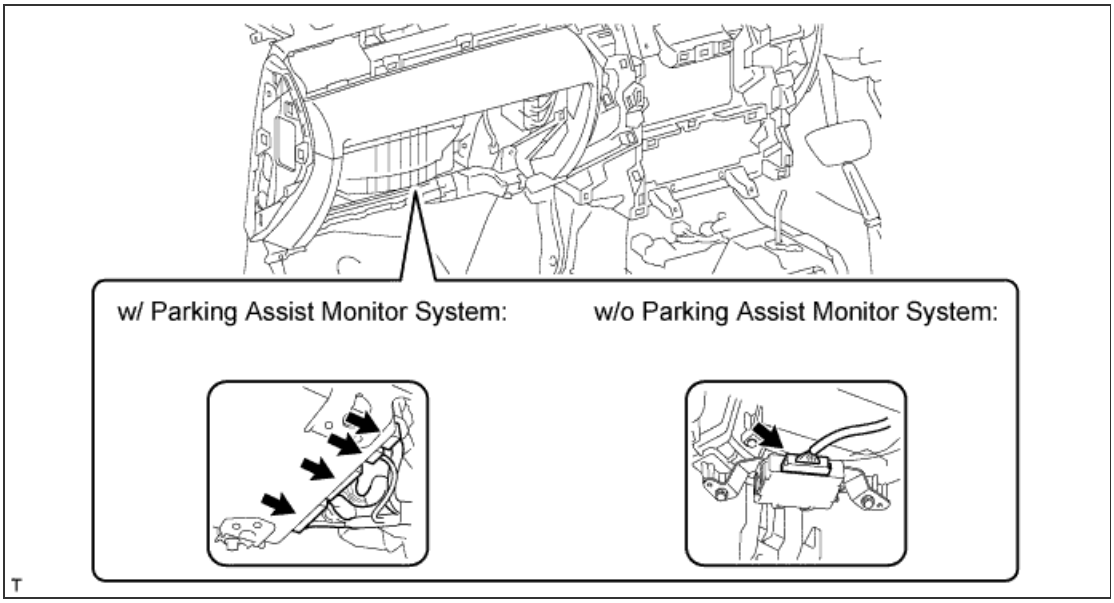
f. Disconnect the connectors.

g. Remove the 8 bolts.

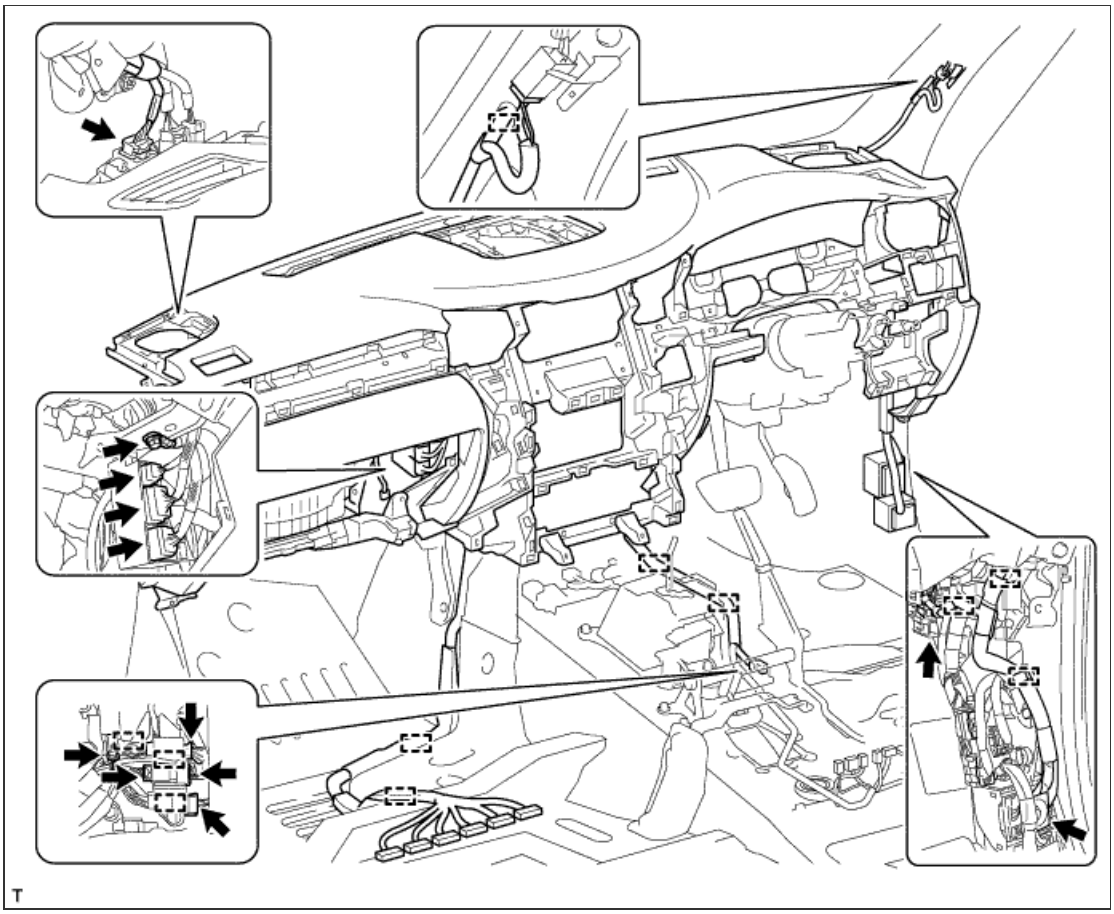
h. Remove the 2 nuts and safety pad.

68. REMOVE INSTRUMENT PANEL SAFETY PAD ASSEMBLY (for RHD)

a. Disconnect the connectors.

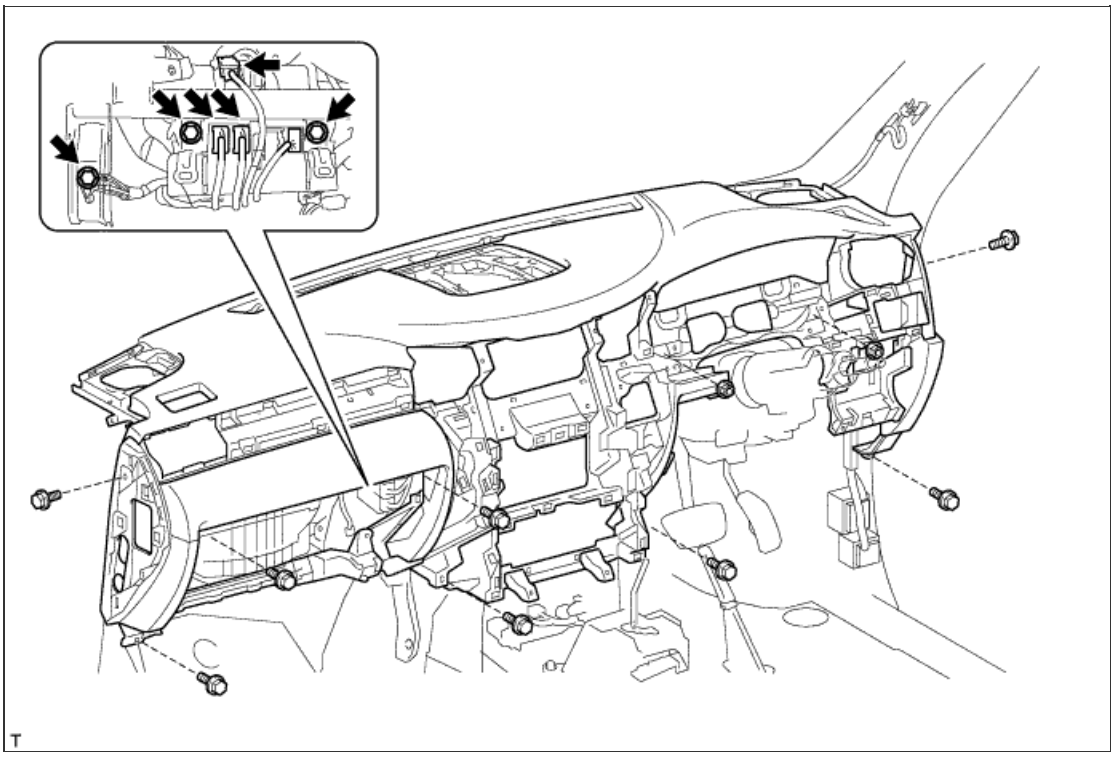


b. Disconnect the connectors and clamps.



c. Remove the bolt and disconnect the wire harness.

d. Remove the 2 passenger airbag bolts.



e. Remove the bolt.

f. Disconnect the connectors.

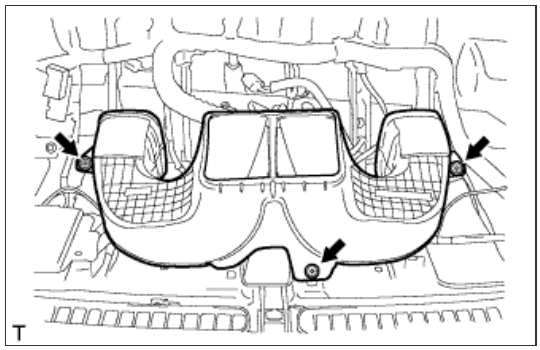
g. Remove the 8 bolts.

h. Remove the 2 nuts and safety pad.

for Preparation Click here

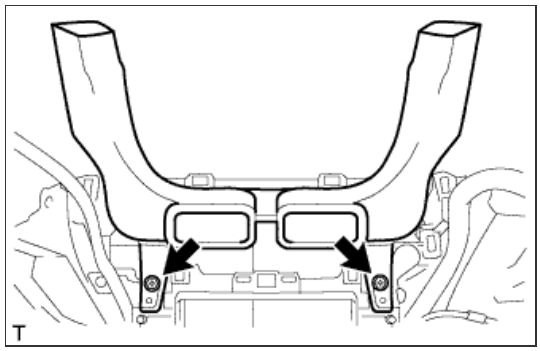
1. REMOVE CENTER HEATER TO REGISTER DUCT

a. Remove the 3 screws and duct.



2. REMOVE REAR NO. 1 AIR DUCT

a. Remove the 2 screws and duct.



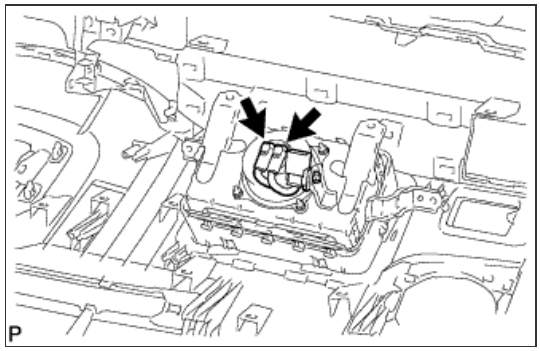
3. REMOVE FRONT PASSENGER SIDE AIRBAG ASSEMBLY

a. Detach the claw and remove the wire.

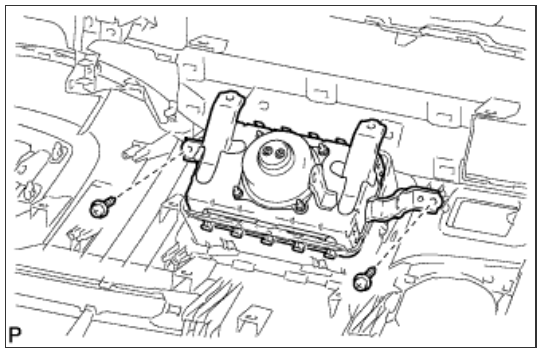
b. Disconnect the 2 connectors and remove the instrument panel wire from the front passenger airbag.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

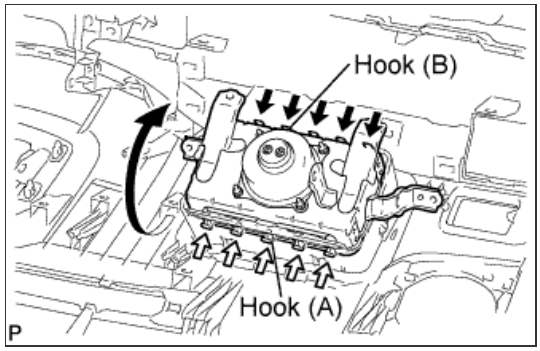


c. Remove the 2 screws.



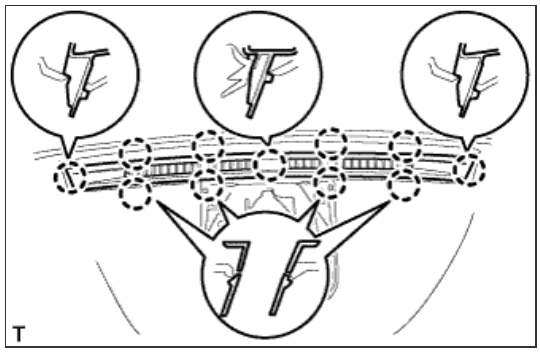
d. Detach the 5 hooks (A).

e. Detach the 5 hooks (B) and remove the front passenger airbag from the instrument panel.



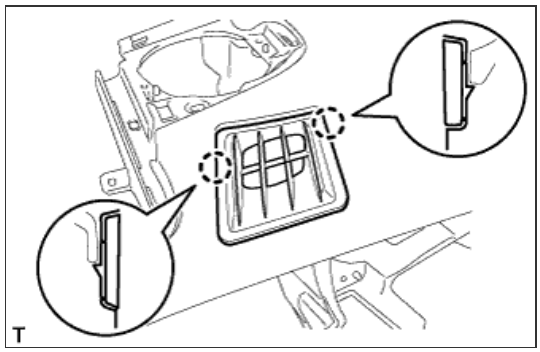
4. REMOVE DEFROSTER NOZZLE ASSEMBLY

a. Detach the 11 claws and remove the nozzle.



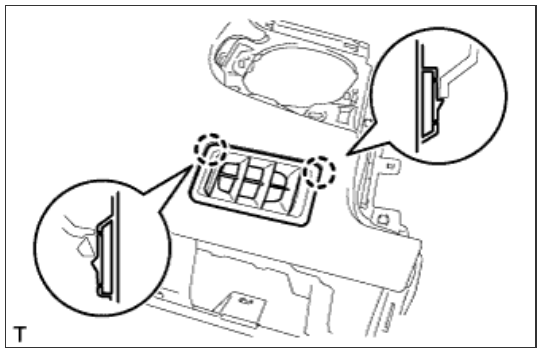
5. REMOVE NO. 1 SIDE DEFROSTER NOZZLE

a. Detach the 2 claws and remove the nozzle.



6. REMOVE NO. 2 SIDE DEFROSTER NOZZLE

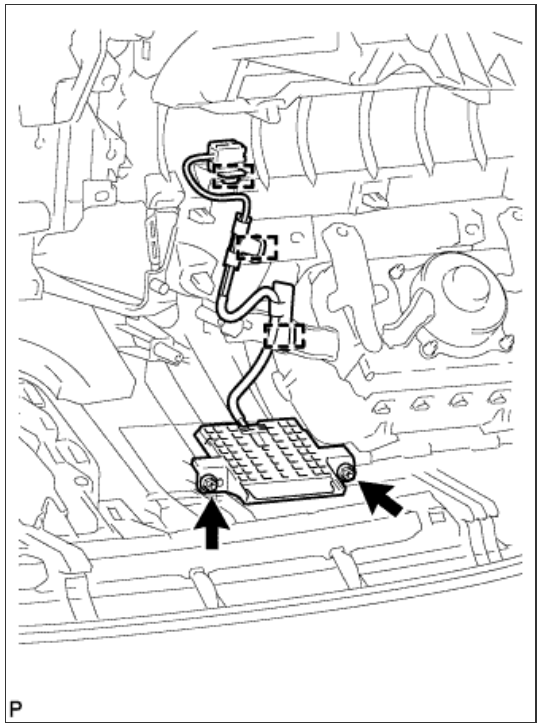
a. Detach the 2 claws and remove the nozzle.



7. REMOVE NAVIGATION ANTENNA ASSEMBLY (w/ Navigation System)

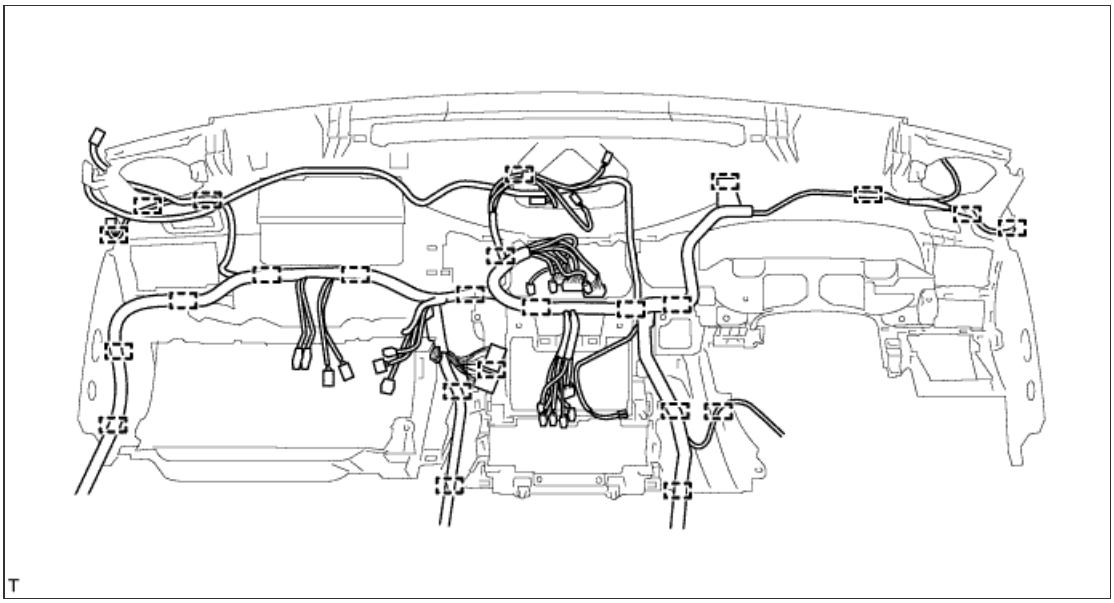
a. Detach the 3 clamps.

b. Remove the 2 screws and antenna.



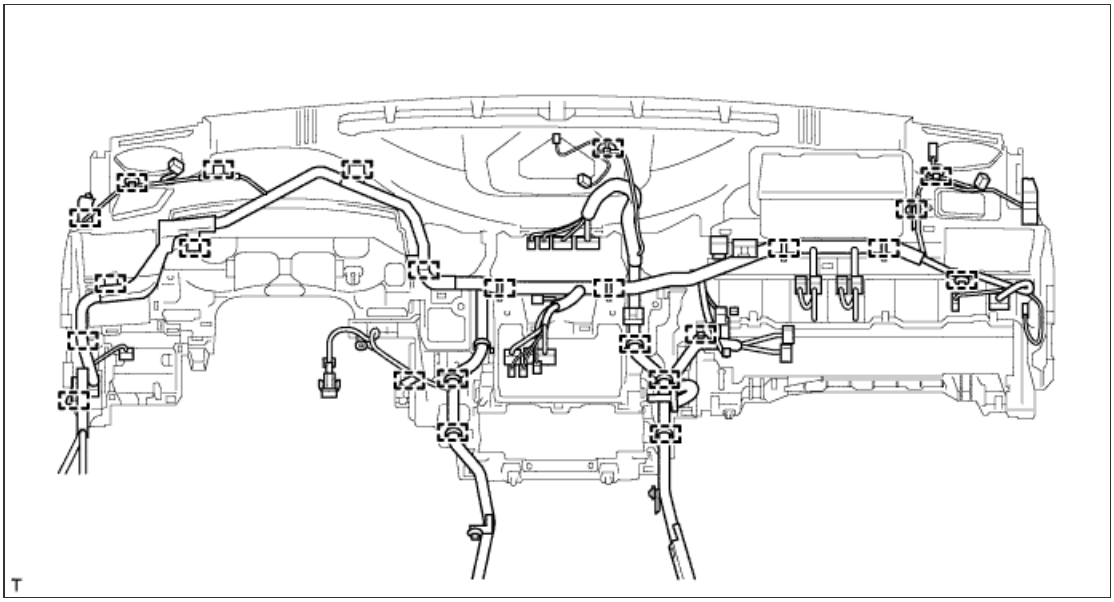
8. REMOVE NO. 2 INSTRUMENT PANEL WIRE (for LHD)

a. Detach the wire from the clamps and remove the wire from the instrument panel.



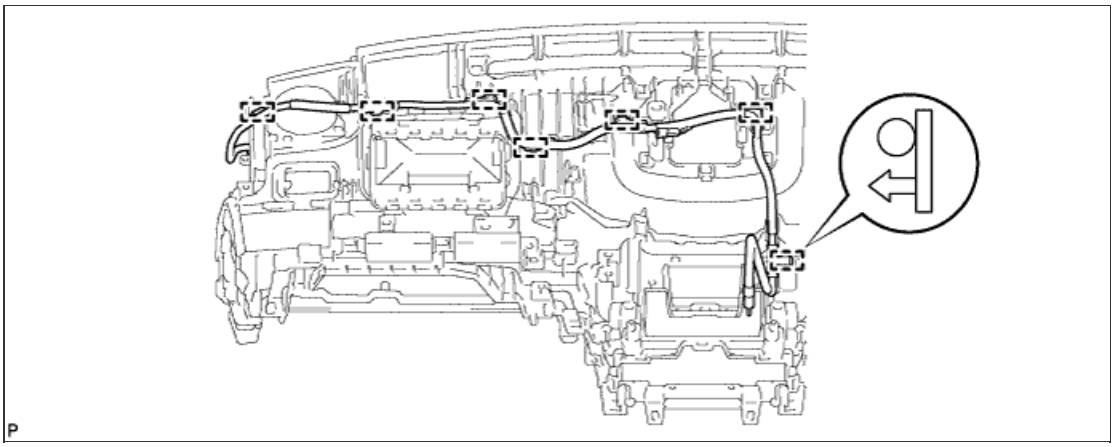
9. REMOVE NO. 2 INSTRUMENT PANEL WIRE (for RHD)

a. Detach the wire from the clamps and remove the wire from the instrument panel.



10. REMOVE ANTENNA CORD SUB-ASSEMBLY

a. Detach the 7 clamps and remove the antenna cord.



P

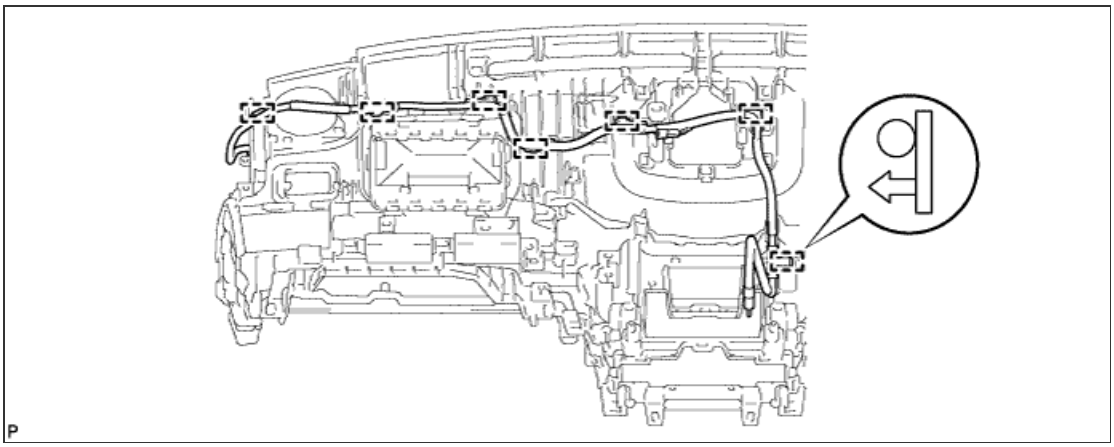
for Preparation Click here

HINT:

A bolt without a torque specification is shown in the standard bolt chart (Click here).

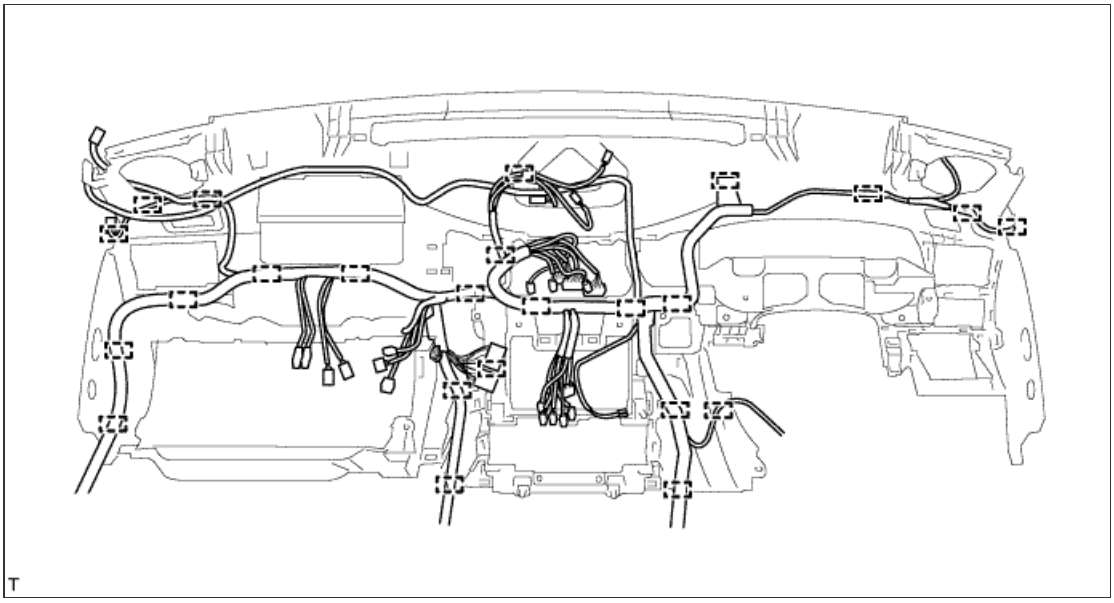
1. INSTALL ANTENNA CORD SUB-ASSEMBLY

a. Attach the 7 clamps to install the antenna cord.



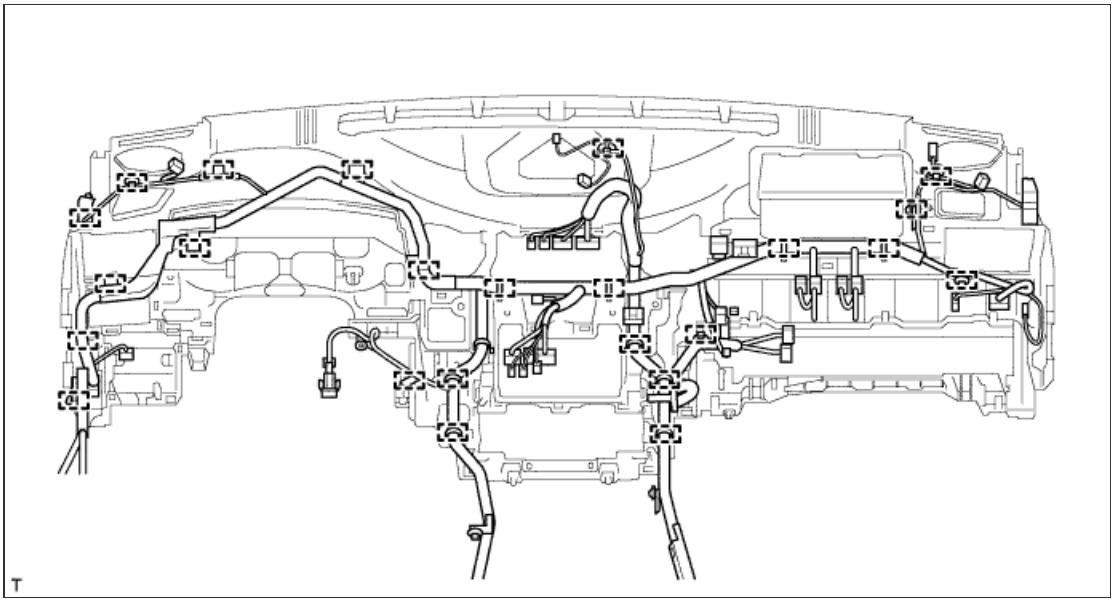
2. INSTALL NO. 2 INSTRUMENT PANEL WIRE (for LHD)

a. Attach the wire to the clamps to install the wire to the instrument panel.



3. INSTALL NO. 2 INSTRUMENT PANEL WIRE (for RHD)

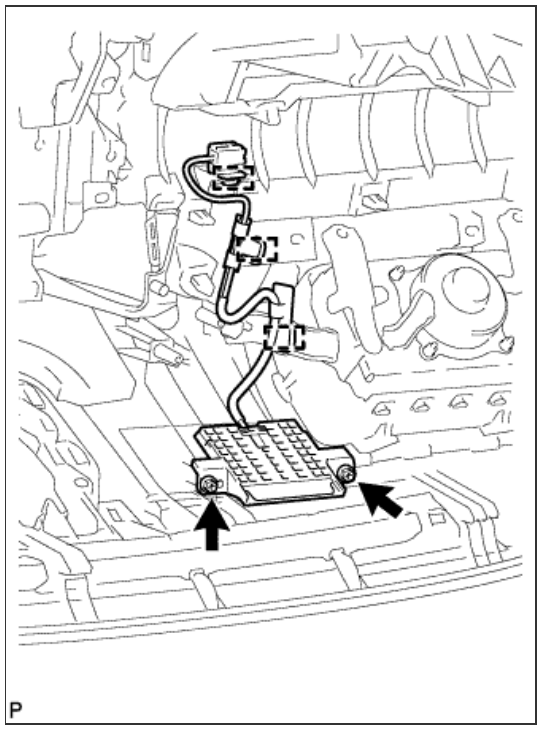
a. Attach the wire to the clamps to install the wire to the instrument panel.



4. INSTALL NAVIGATION ANTENNA ASSEMBLY (w/ Navigation System)

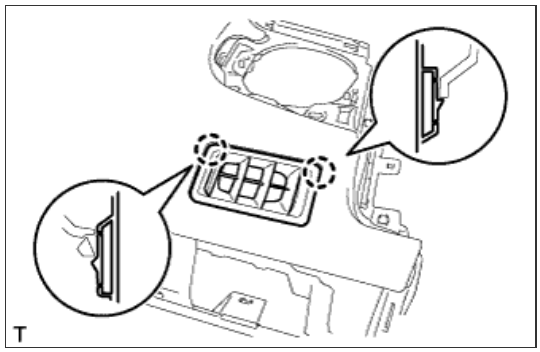
a. Install the antenna with the 2 screws.

b. Attach the 3 clamps.



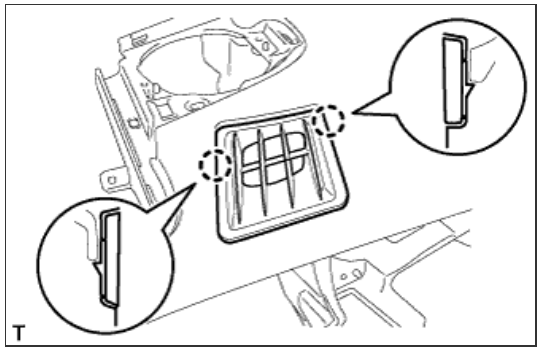
5. INSTALL NO. 2 SIDE DEFROSTER NOZZLE

a. Attach the 2 claws to install the nozzle.



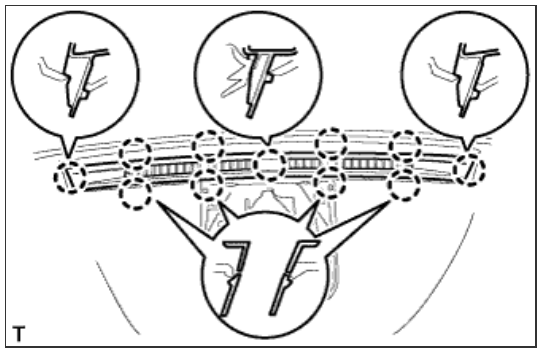
6. INSTALL NO. 1 SIDE DEFROSTER NOZZLE

a. Attach the 2 claws to install the nozzle.



7. INSTALL DEFROSTER NOZZLE ASSEMBLY

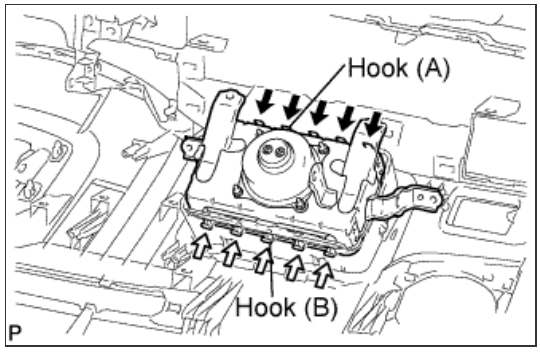
a. Attach the 11 claws to install the nozzle.



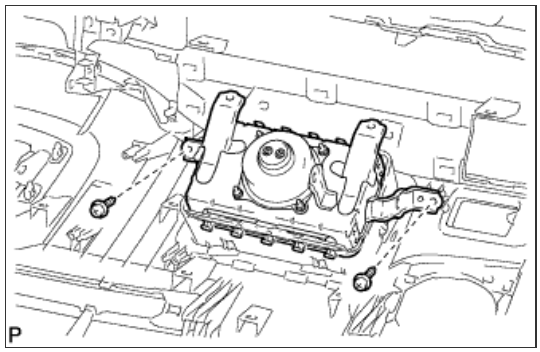
8. INSTALL FRONT PASSENGER SIDE AIRBAG ASSEMBLY

a. Attach the 5 hooks (A).

b. Attach the 5 hooks (B) to install the front passenger airbag on the instrument panel.



c. Install the 2 screws.

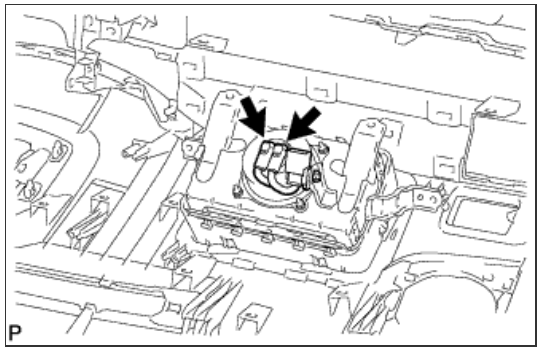


d. Connect the 2 connectors and install the instrument panel wire assembly to the front passenger airbag.

NOTICE:

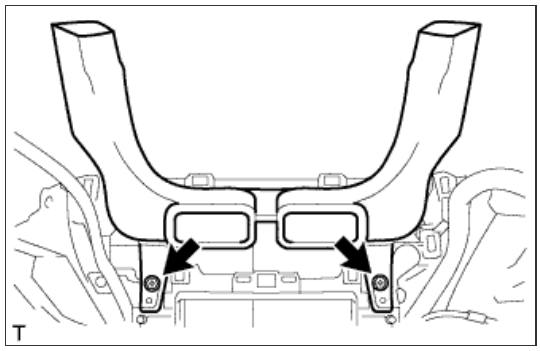
When handling the airbag connector, take care not to damage the airbag wire harness.

e. Attach the claw and install the wire.



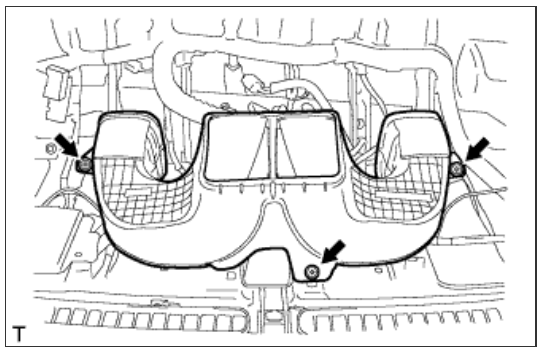
9. INSTALL REAR NO. 1 AIR DUCT

a. Install the duct with the 2 screws.



10. INSTALL CENTER HEATER TO REGISTER DUCT

a. Install the duct with the 3 screws.



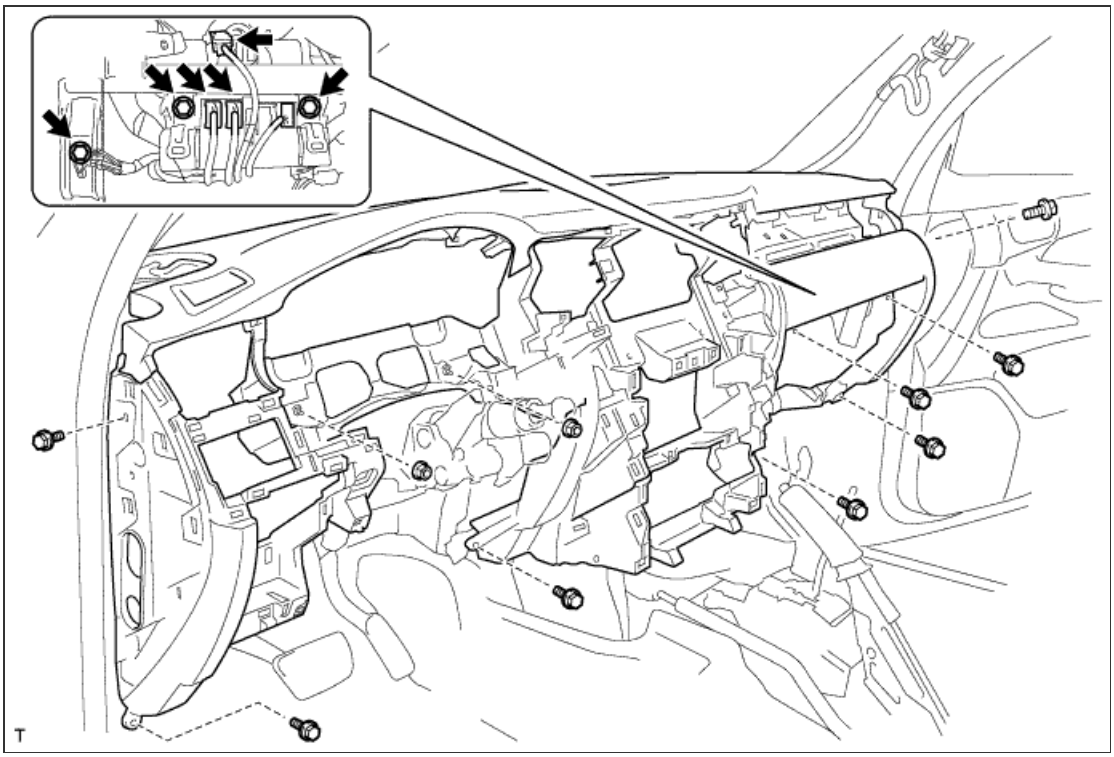
for Preparation Click here

HINT:

A bolt without a torque specification is shown in the standard bolt chart (Click here).

1. INSTALL INSTRUMENT PANEL SAFETY PAD ASSEMBLY (for LHD)

a. Install the safety pad with the 8 bolts and 2 nuts.



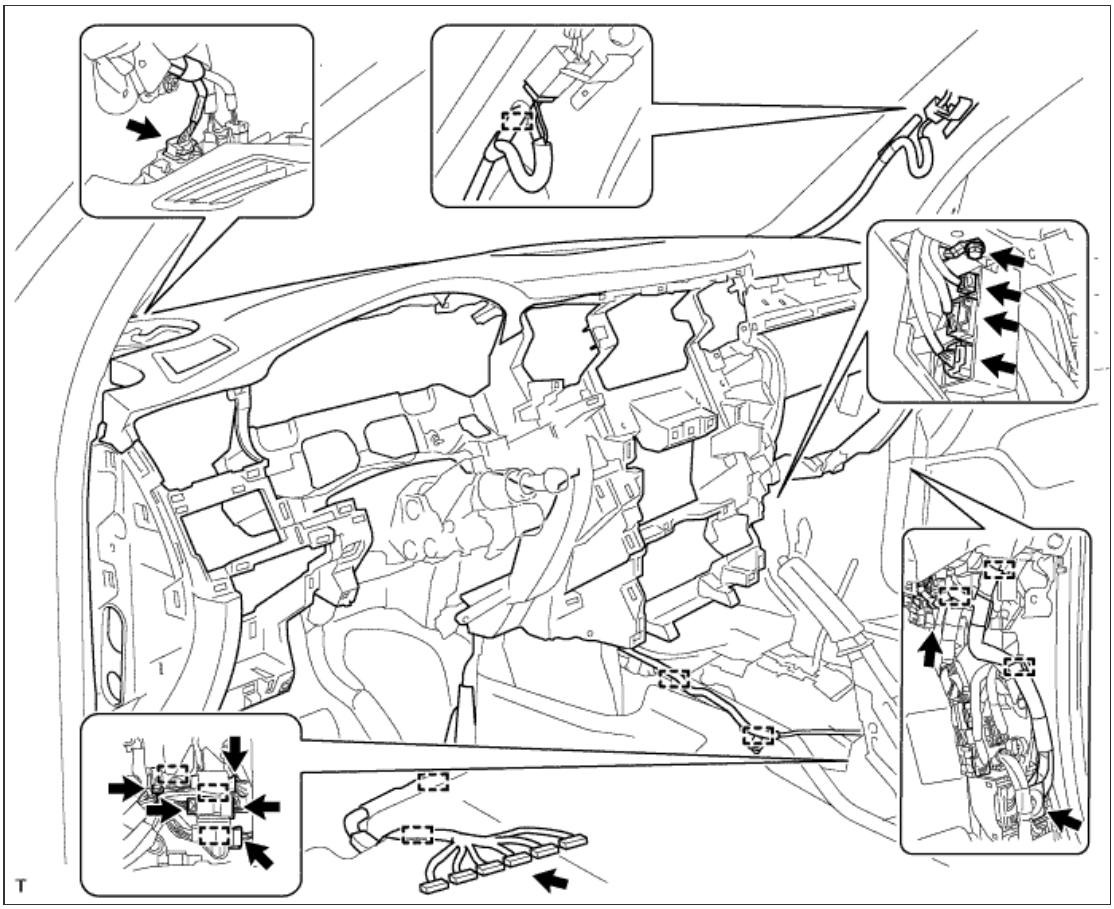
b. Connect the connectors.

c. Install the bolt.

d. Install the 2 passenger airbag bolts.

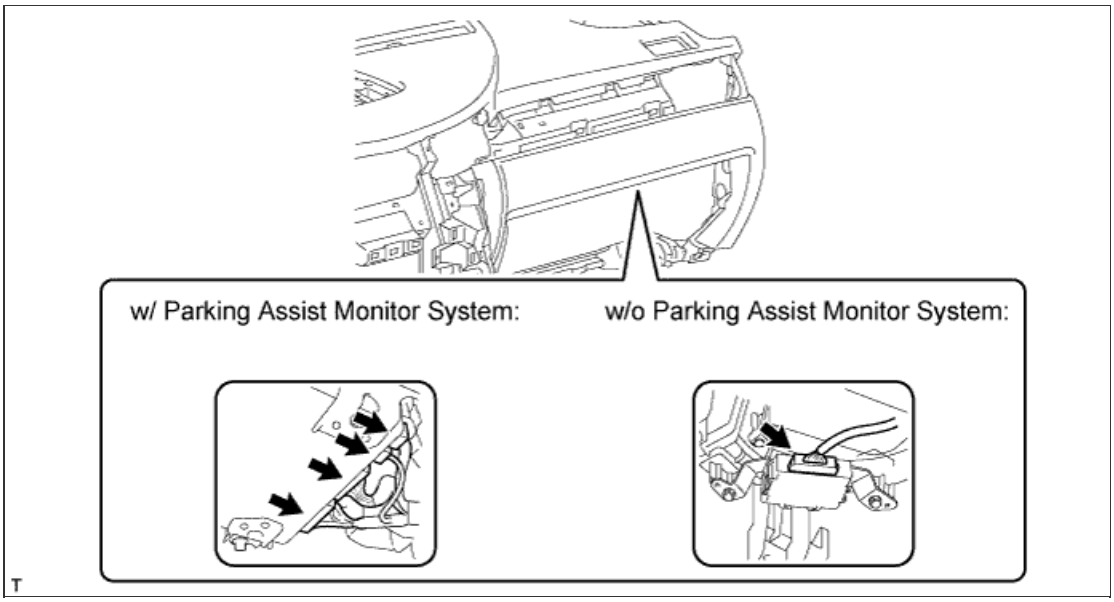
Torque:
20 N*m{ 204 kgf*cm , 15 ft.*lbf }

e. Connect the wire harness with the bolt.



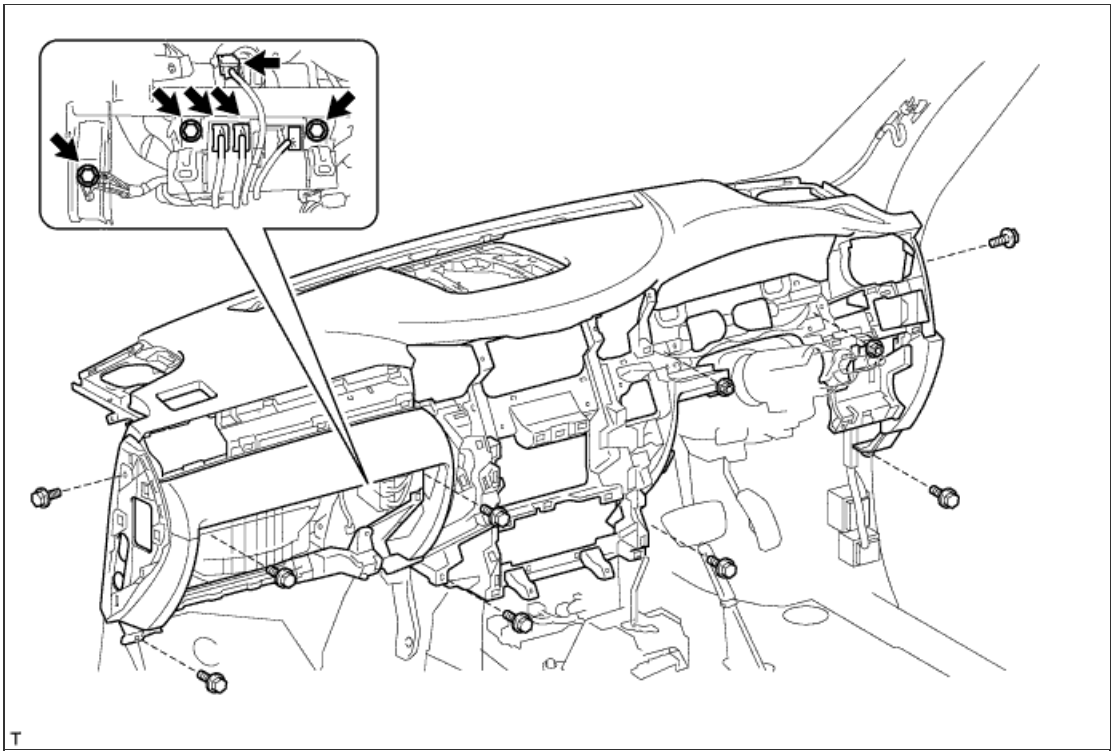
f. Connect the connectors and clamps.

g. Connect the connectors.



2. INSTALL INSTRUMENT PANEL SAFETY PAD ASSEMBLY (for RHD)

a. Install the safety pad with the 8 bolts and 2 nuts.



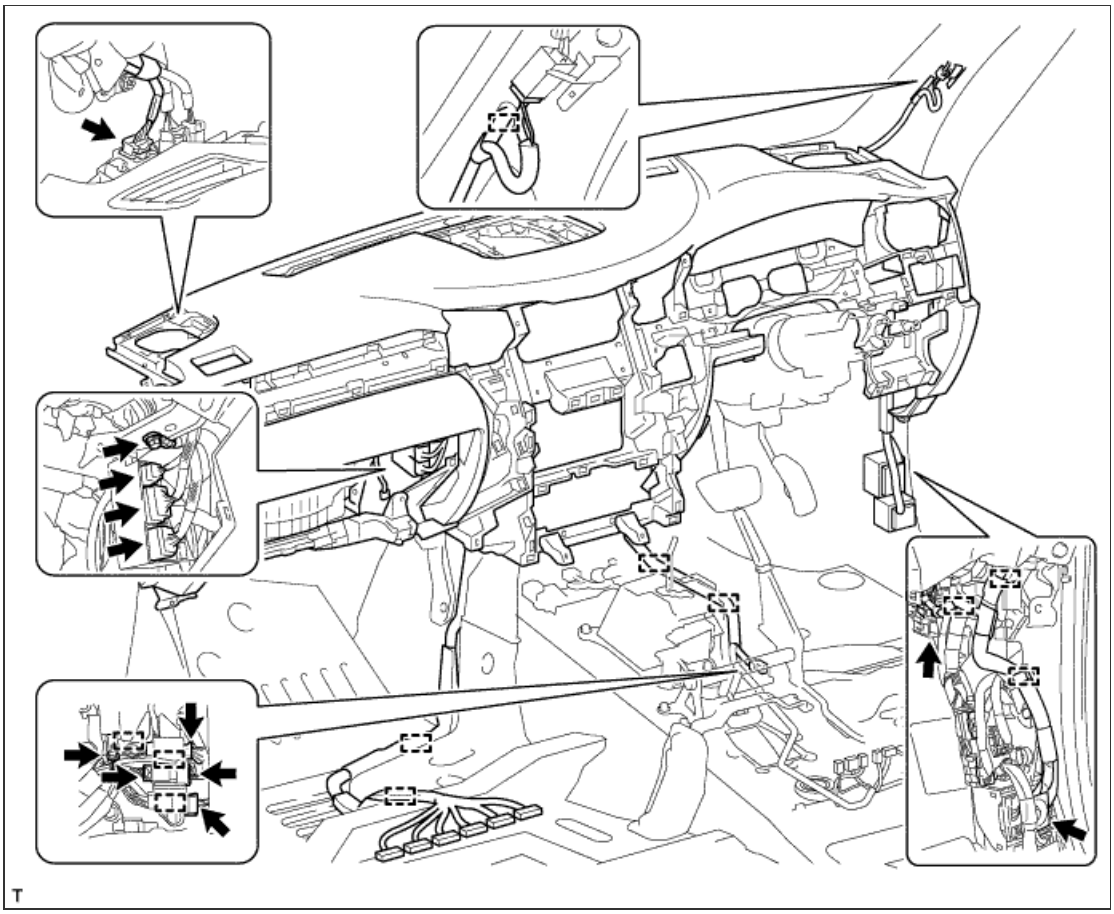
b. Connect the connectors.

c. Install the bolt.

d. Install the 2 passenger airbag bolts.

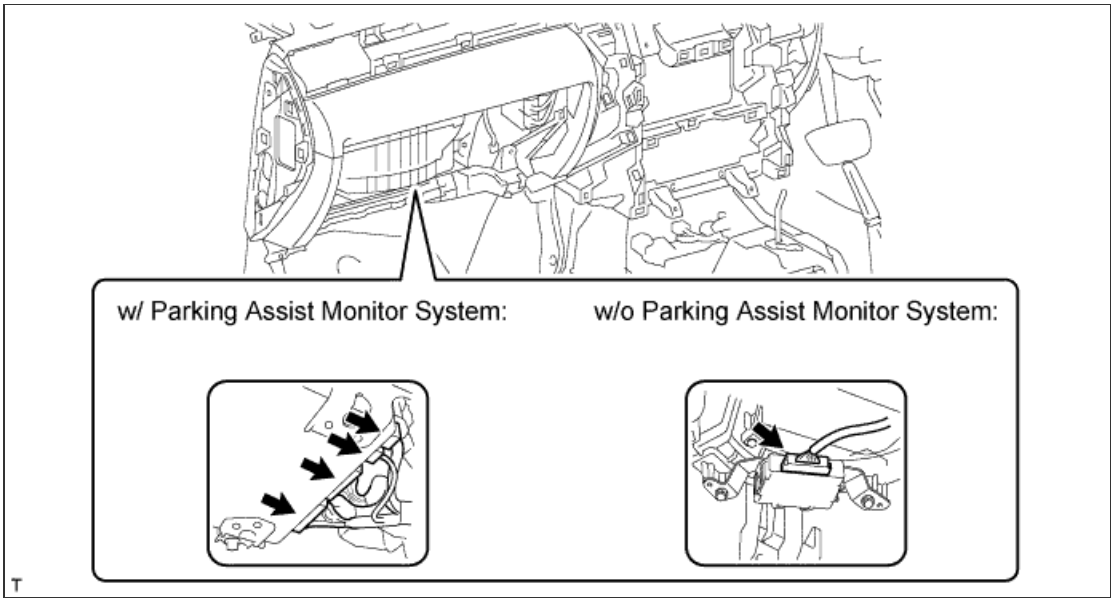
Torque:
20 N*m{ 204 kgf*cm , 15 ft.*lbf }

e. Connect the wire harness with the bolt.



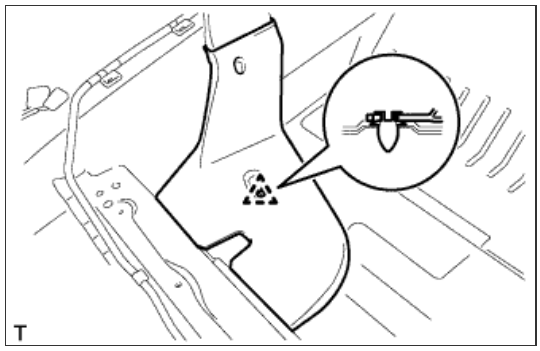
f. Connect the connectors and clamps.

g. Connect the connectors.



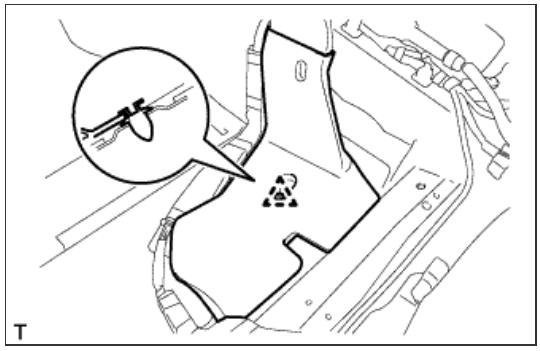
3. INSTALL REAR NO. 4 AIR DUCT

a. Attach the clip to install the air duct.



4. INSTALL REAR NO. 2 AIR DUCT

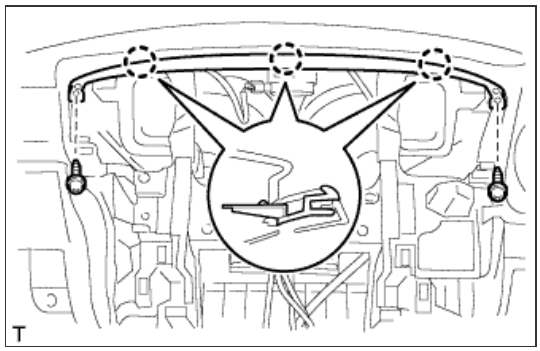
a. Attach the clip to install the air duct.



5. INSTALL NO. 1 INSTRUMENT CLUSTER MOULDING

a. Attach the 3 claws to install the moulding.

b. Install the 2 screws.



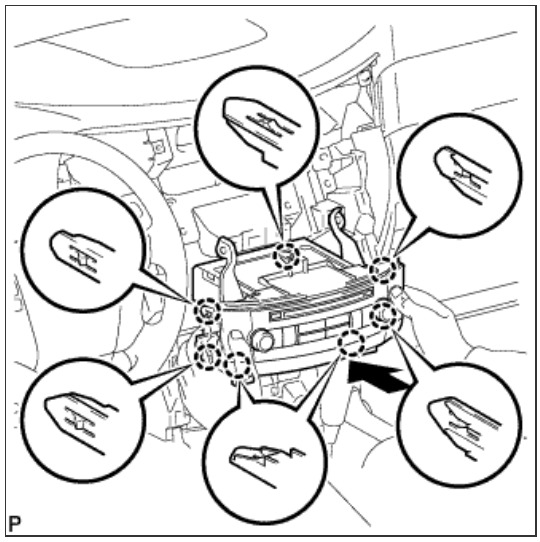
6. INSTALL RADIO RECEIVER ASSEMBLY WITH BRACKET

a. Connect the connectors.

b. Insert the radio receiver to attach the 7 claws on its backside.

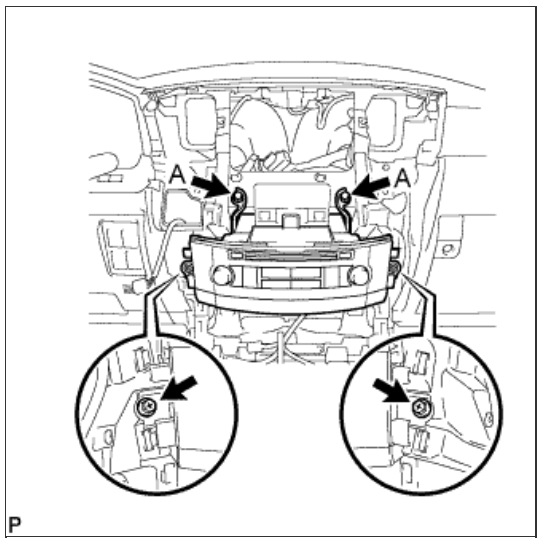
NOTICE:

When inserting the radio receiver, do not press the knobs on it.



c. Install the radio receiver with the 2 screws and 2 bolts.

Torque:
for bolts labeled A:
12 N*m{ 122 kgf*cm , 8 ft.*lbf }



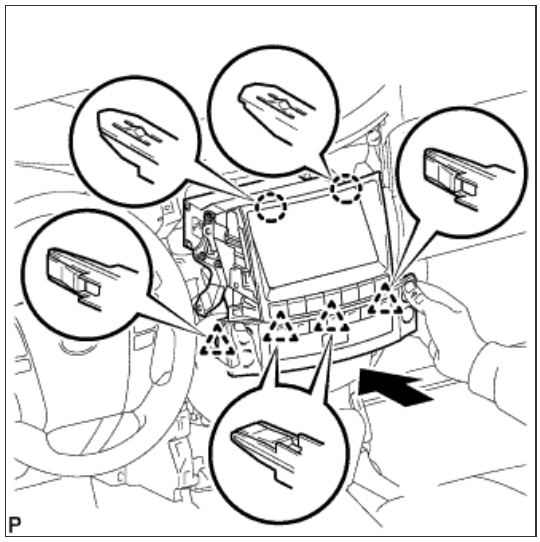
7. INSTALL MULTI-DISPLAY ASSEMBLY WITH BRACKET (w/o Navigation System)

a. Connect the connectors.

b. Insert the display to attach the 2 claws and 4 clips on its backside.

NOTICE:

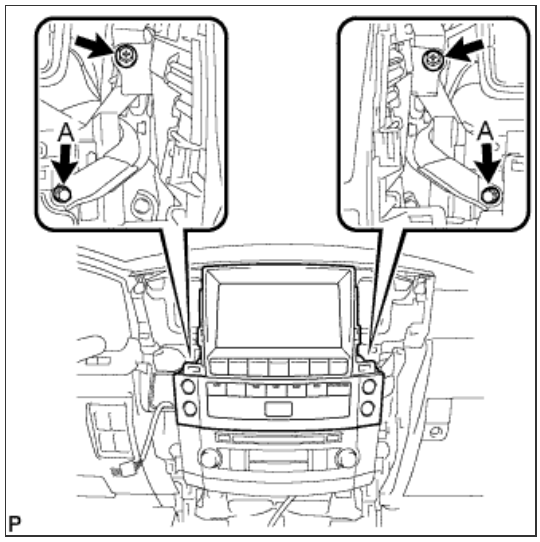
When inserting the display, do not press the knobs on it.



c. Install the display with the 2 screws and 2 bolts.

Torque:
for bolts labeled A:

12 N*m{ 122 kgf*cm , 8 ft.*lbf }



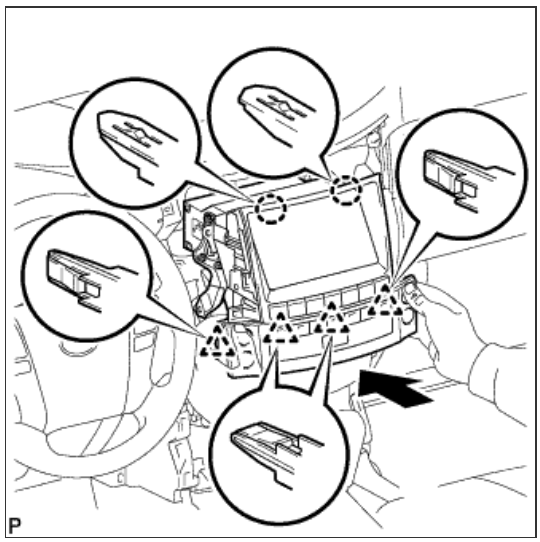
8. INSTALL MULTI-DISPLAY ASSEMBLY WITH BRACKET (w/ Navigation System)

a. Connect the connectors.

b. Insert the display and attach the 2 claws and 4 clips on its backside.

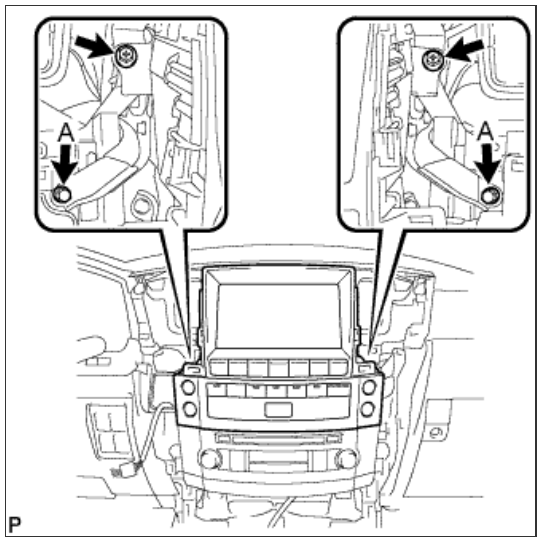
NOTICE:

When inserting the display, do not press the knobs on it.



c. Install the display with the 2 screws and 2 bolts.

Torque:
for bolts labeled A:
12 N*m{ 122 kgf*cm , 8 ft.*lbf }



9. INSTALL FRONT NO. 2 SPEAKER ASSEMBLY (RH Side)

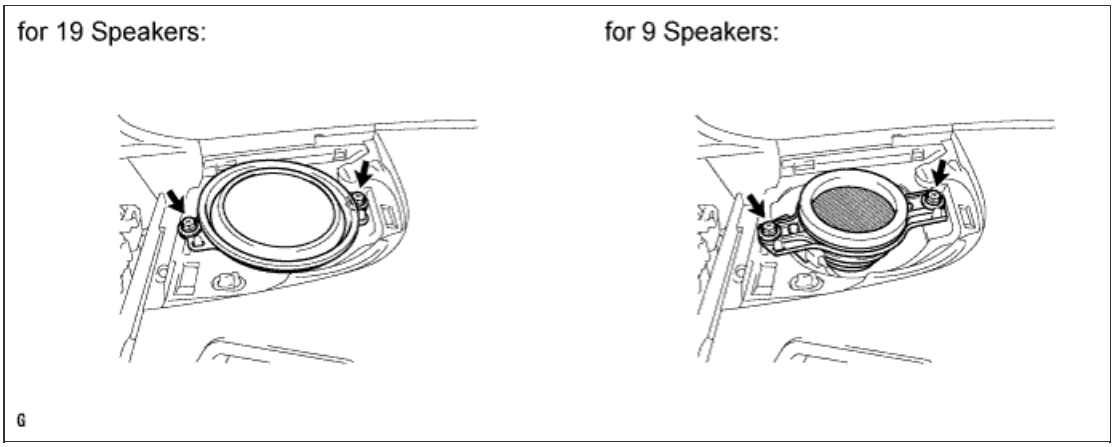
a. Connect the connector.

b. Temporarily install the speaker by aligning speaker with the positioning pins of the instrument panel.

c. Install the speaker with the 2 bolts.

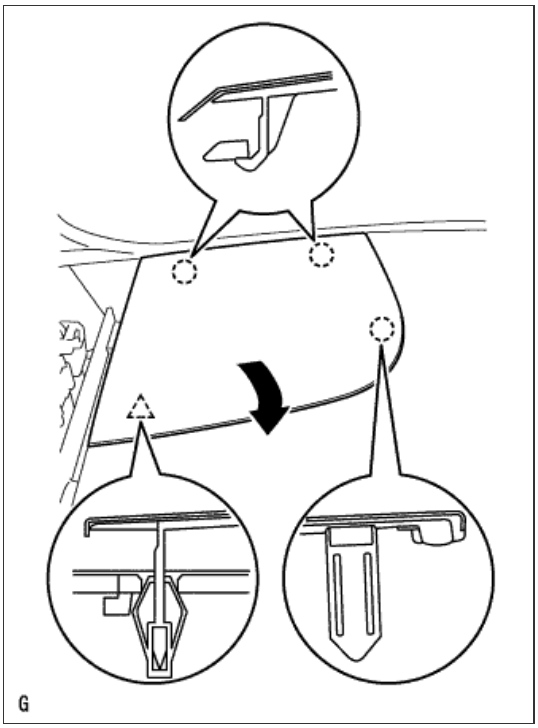
NOTICE:

- **Do not touch the cone part of the speaker.**
- **When installing the speaker to the instrument panel, be careful that the wires do not get caught between parts.**



10. INSTALL NO. 2 INSTRUMENT PANEL SPEAKER PANEL SUB-ASSEMBLY

a. Hook the 2 claws on the far side to the instrument panel to attach them. Then, lower the panel towards the rear of the vehicle in the direction of the arrow, and attach the claw and clip on the front side to install the panel.



11. INSTALL FRONT NO. 2 SPEAKER ASSEMBLY (LH Side)

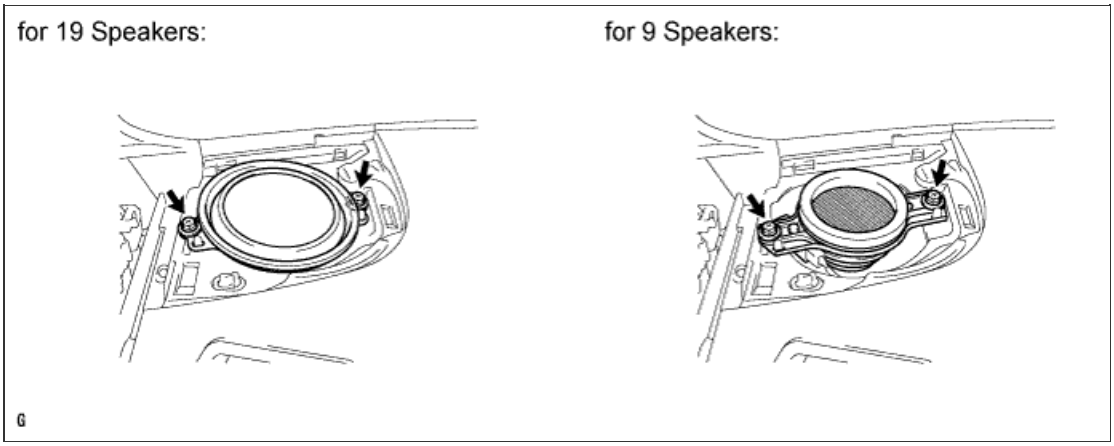
a. Connect the connector.

b. Temporarily install the speaker by aligning speaker with the positioning pins of the instrument panel.

c. Install the speaker with the 2 bolts.

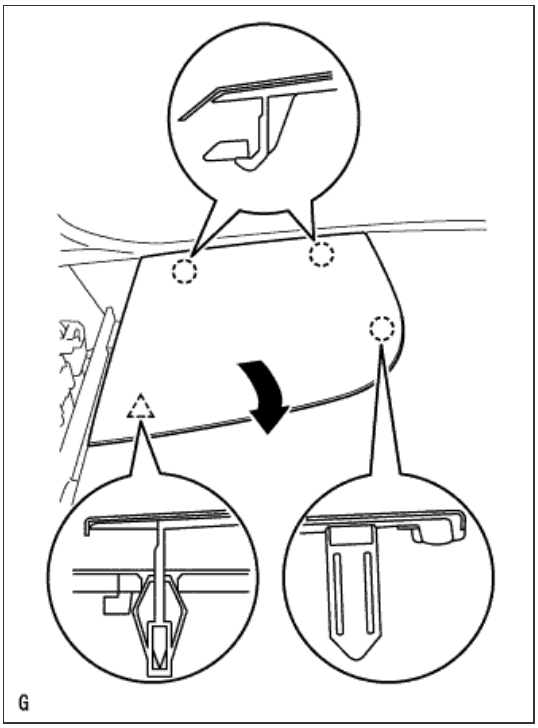
NOTICE:

- **Do not touch the cone part of the speaker.**
- **When installing the speaker to the instrument panel, be careful that the wires do not get caught between parts.**



12. INSTALL NO. 1 INSTRUMENT PANEL SPEAKER PANEL SUB-ASSEMBLY

a. Hook the 2 claws on the far side to the instrument panel to attach them. Then, lower the panel towards the rear of the vehicle in the direction of the arrow, and attach the claw and clip on the front side to install the panel.



13. INSTALL FRONT NO. 4 SPEAKER ASSEMBLY

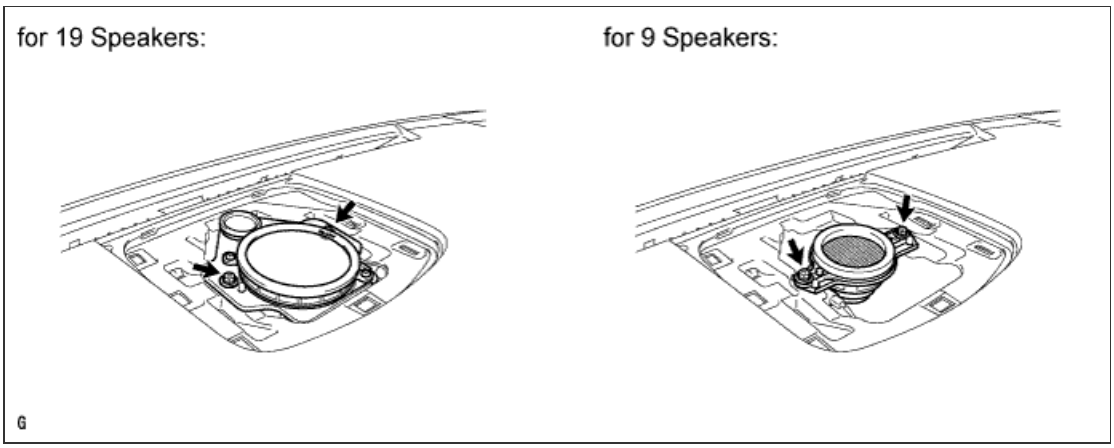
a. Connect the speaker connector.

b. Temporarily install the speaker by aligning speaker with the positioning pins of the instrument panel.

c. Install the speaker with the 2 bolts.

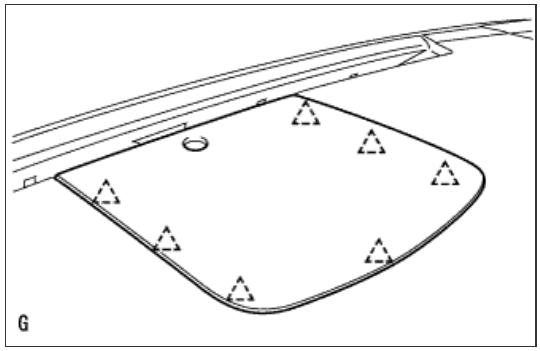
NOTICE:

- **Do not touch the cone part of the speaker.**
- **When installing the speaker to the instrument panel, be careful that the wires do not get caught between parts.**



14. INSTALL NO. 1 SPEAKER OPENING COVER ASSEMBLY

a. Attach the 7 clips to install the opening cover.



15. INSTALL FRONT PILLAR GARNISH RH

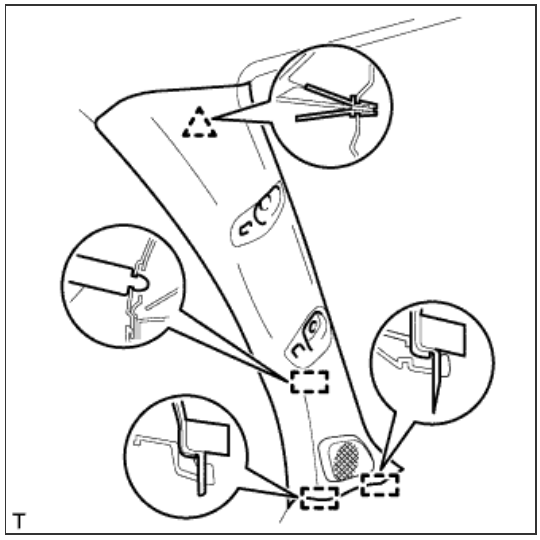
HINT:

Use the same procedures described for the LH side.

16. INSTALL FRONT PILLAR GARNISH LH

a. Connect the speaker connector.

b. Attach the clip and 3 guides to install the front pillar garnish.



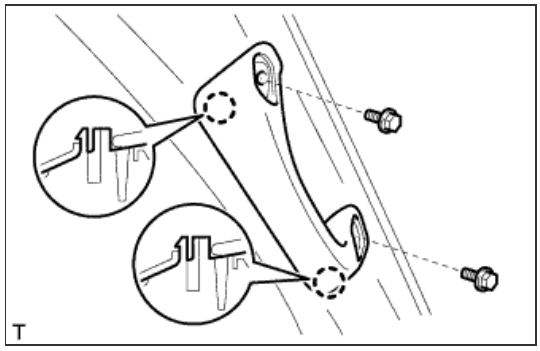
17. INSTALL FRONT ASSIST GRIP SUB-ASSEMBLY

HINT:

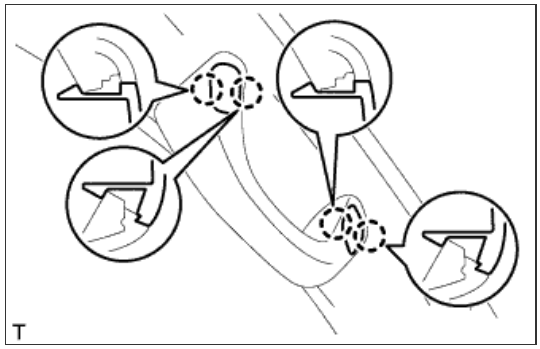
Use the same procedure to install the front assist grip on the other side.

a. Attach the 2 claws to install the front assist grip.

b. Install the 2 bolts.



c. Attach the 4 claws to install the 2 assist grip plugs.



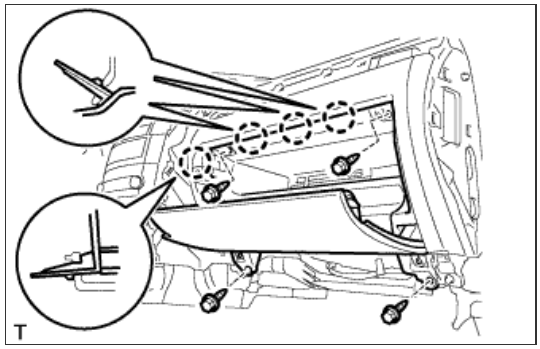
18. INSTALL NAVIGATION MODULE BOARD (w/ Navigation System)

19. INSTALL LOWER NO. 2 INSTRUMENT PANEL FINISH PANEL

a. Connect the connector.

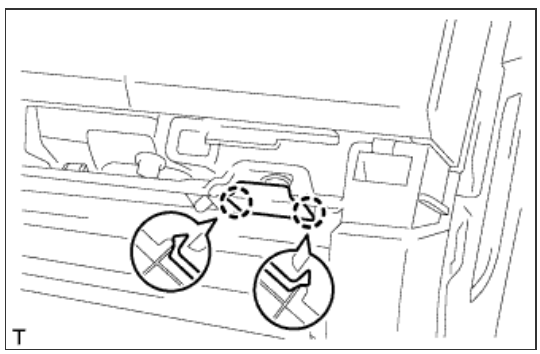
b. Attach the 4 claws to install the finish panel.

c. Install the 4 bolts.



20. INSTALL INSTRUMENT PANEL BOX DOOR KNOB

a. Attach the 2 claws to install the knob.



21. INSTALL FRONT PASSENGER SIDE KNEE AIRBAG ASSEMBLY

a. Connect the connector.

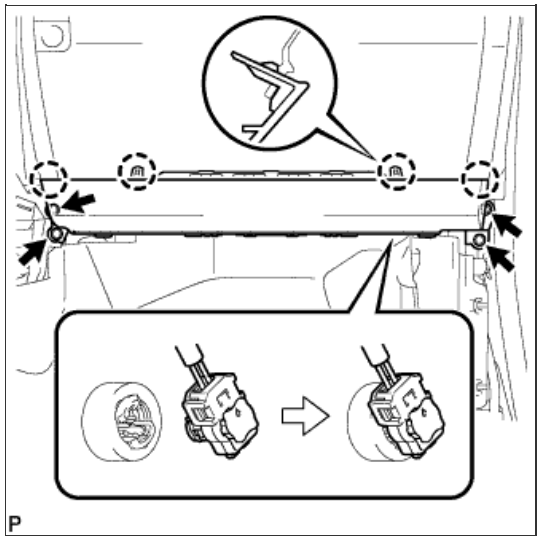
NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

b. Attach the 4 claws to install the front passenger side knee airbag.

c. Install the 4 bolts.

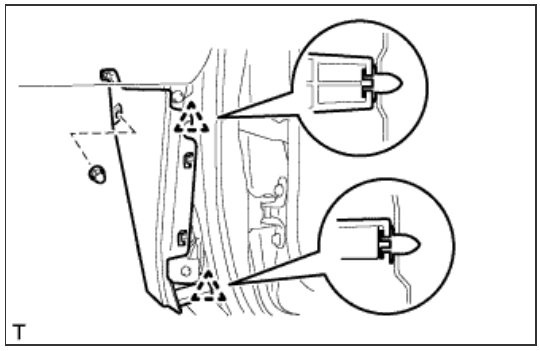
Torque:
10 N*m{ 102 kgf*cm , 7 ft.*lbf }



22. INSTALL COWL SIDE TRIM BOARD RH

a. Attach the 2 clips to install the trim board.

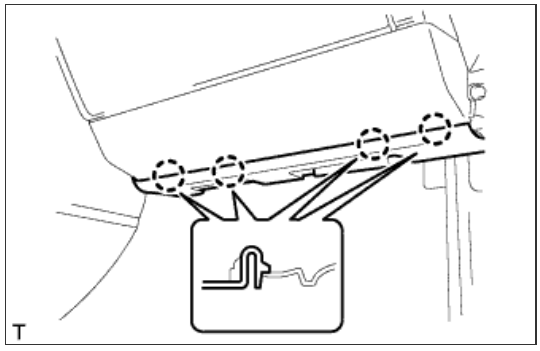
b. Install the cap nut.



23. INSTALL NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Connect the connector.

b. Attach the 4 claws to install the under cover.



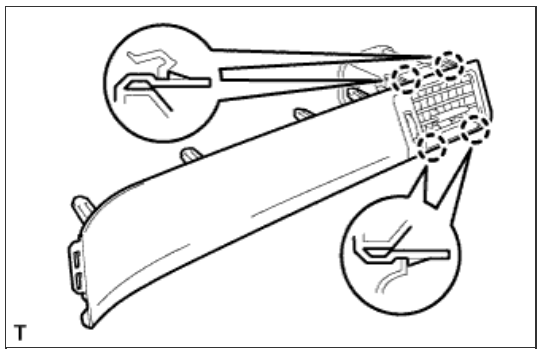
24. INSTALL FRONT DOOR SCUFF PLATE RH

HINT:

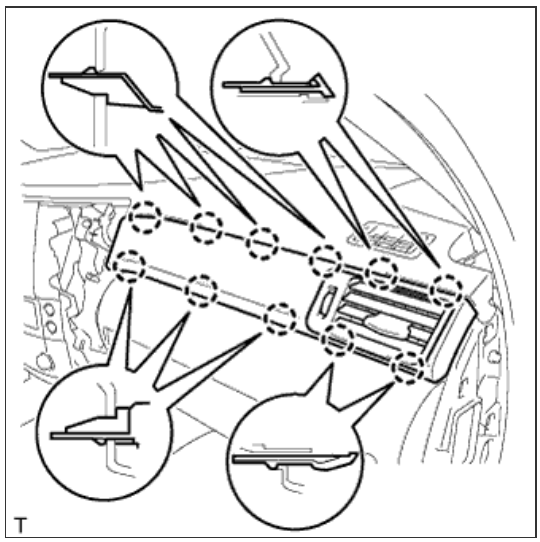
Use the same procedures described for the LH side.

25. INSTALL NO. 3 INSTRUMENT CLUSTER FINISH PANEL GARNISH

a. Attach the 4 claws to install the panel garnish.

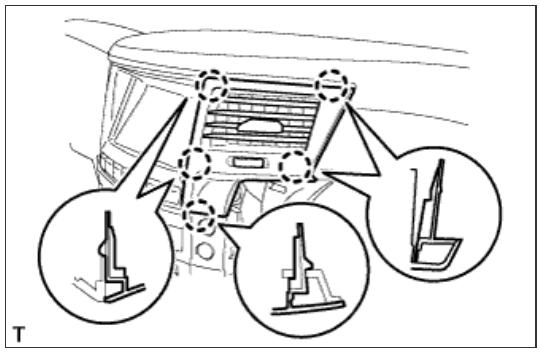


b. Attach the 11 claws to install the register assembly.



26. INSTALL NO. 4 INSTRUMENT PANEL REGISTER ASSEMBLY

a. Attach the 5 claws to install the register.



27. INSTALL INSTRUMENT SIDE PANEL RH

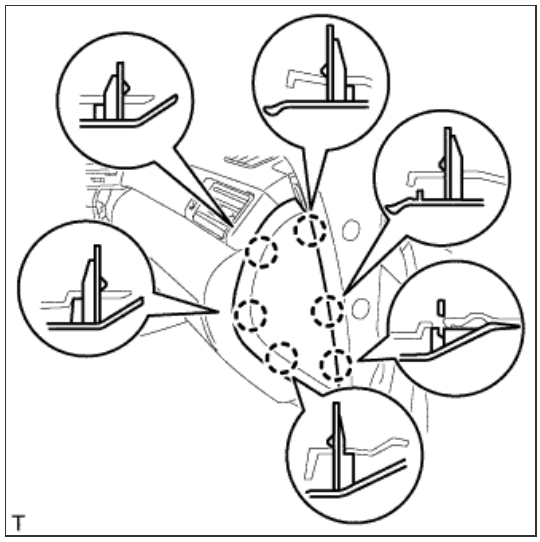
a. w/o Airbag Cut Off Switch:

i. Attach the 6 claws to install the side panel.

b. w/ Airbag Cut Off Switch:

i. Connect the connector.

ii. Attach the 6 claws to install the side panel.



28. INSTALL DRIVER SIDE KNEE AIRBAG ASSEMBLY

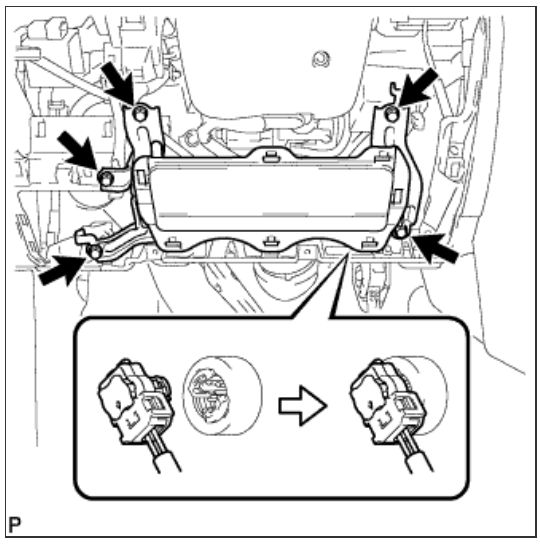
a. Connect the connector.

NOTICE:

When handling the airbag connector, take care not to damage the airbag wire harness.

b. Install the driver side knee airbag with the 5 bolts.

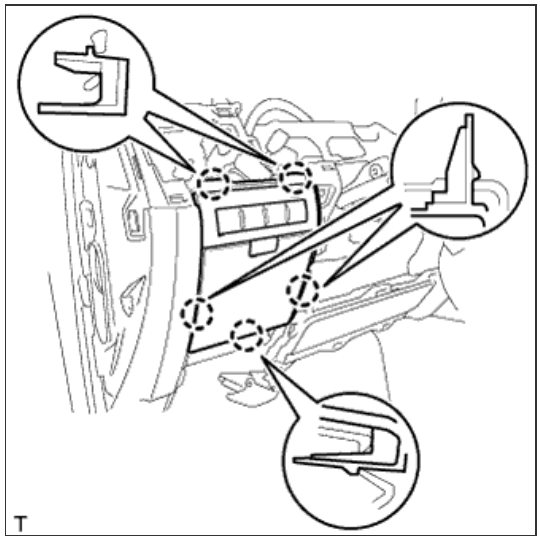
Torque:
10 N*m{ 102 kgf*cm , 7 ft.*lbf }



29. INSTALL INSTRUMENT PANEL BOX ASSEMBLY

a. Connect the connectors.

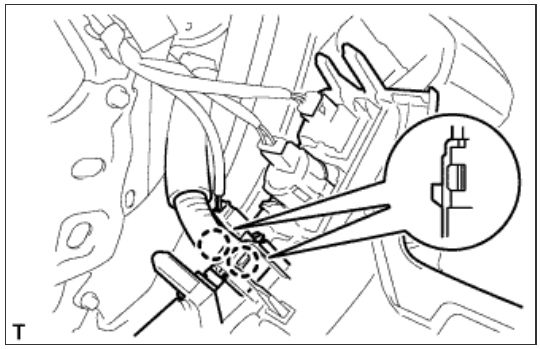
b. Attach the 5 claws to install the box.



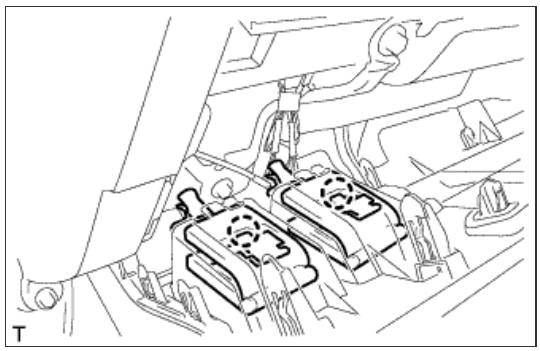
30. INSTALL LOWER NO. 1 INSTRUMENT PANEL FINISH PANEL

a. Connect the connectors.

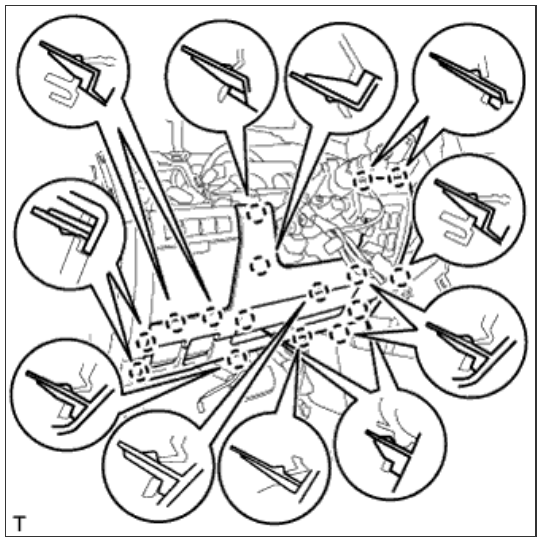
b. Attach the 2 claws to install the sensor.



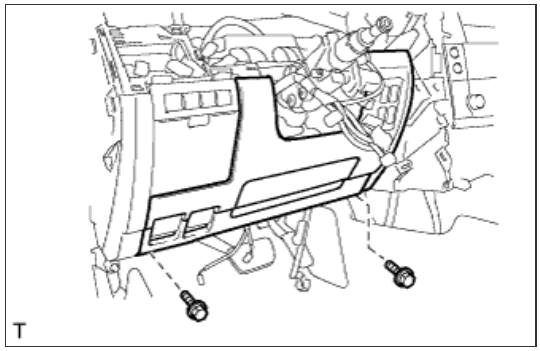
c. Attach the 2 claws to connect the 2 control cables.



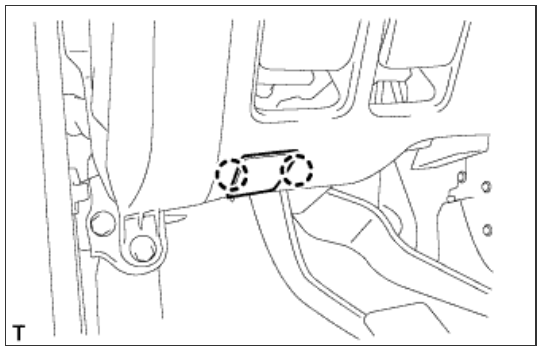
d. Attach the 16 claws to install the finish panel.



e. Install the 2 bolts.



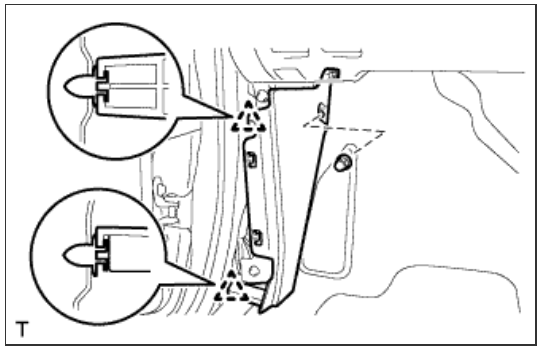
f. Attach the 2 claws to close the hole cover.



31. INSTALL COWL SIDE TRIM BOARD LH

a. Attach the 2 clips to install the trim board.

b. Install the cap nut.

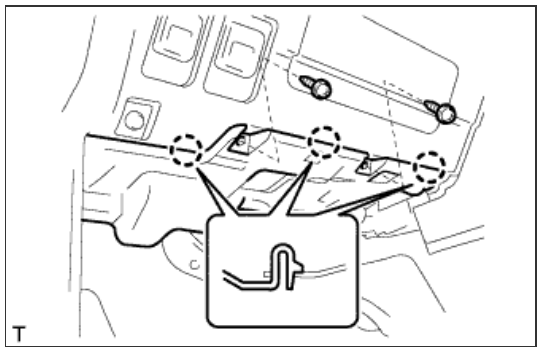


32. INSTALL NO. 1 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

a. Connect the connectors.

b. Attach the 3 claws to install the under cover.

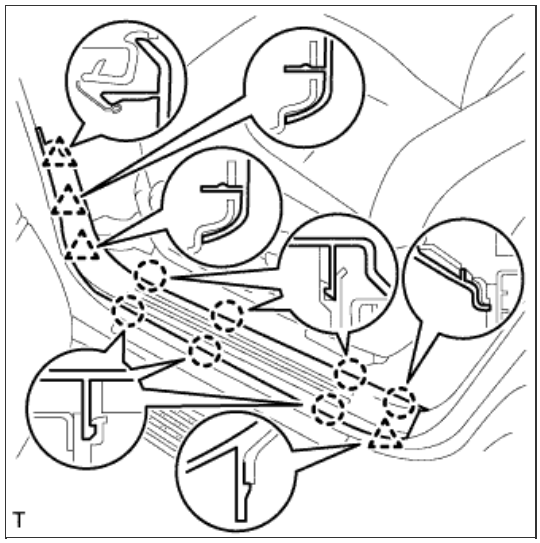
c. Install the 2 screws.



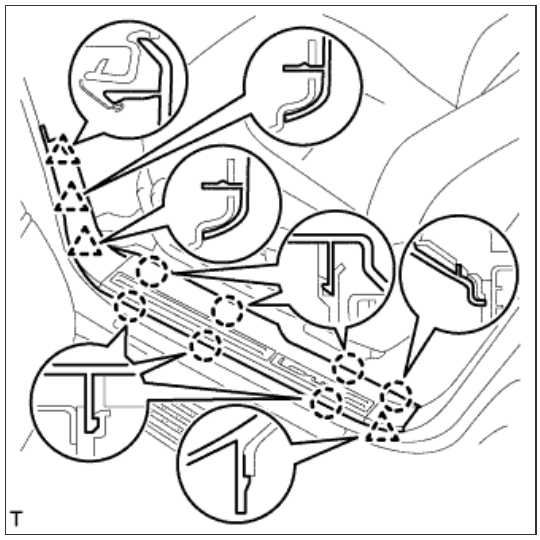
33. INSTALL FRONT DOOR SCUFF PLATE LH

a. w/o Illumination:

i. Attach the 7 claws and 4 clips to install the scuff plate.



b. w/ Illumination:



i. Connect the connector.

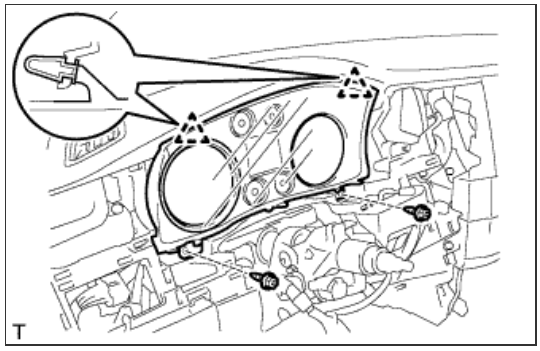
ii. Attach the 7 claws and 4 clips to install the scuff plate.

34. INSTALL COMBINATION METER ASSEMBLY

a. Connect the connector.

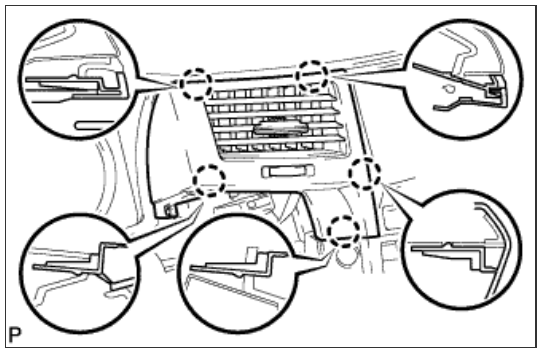
b. Attach the 2 clips to install the combination meter.

c. Install the 2 screws.



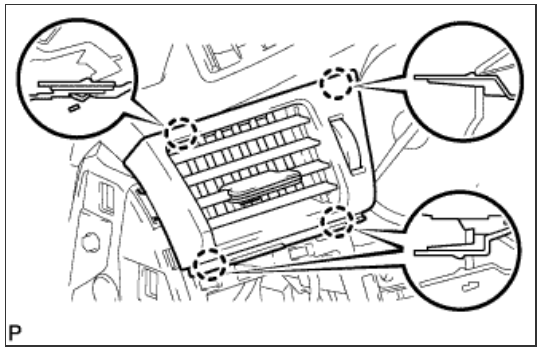
35. INSTALL NO. 3 INSTRUMENT PANEL REGISTER ASSEMBLY

a. Attach the 5 claws to install the register.



36. INSTALL NO. 1 INSTRUMENT PANEL REGISTER ASSEMBLY

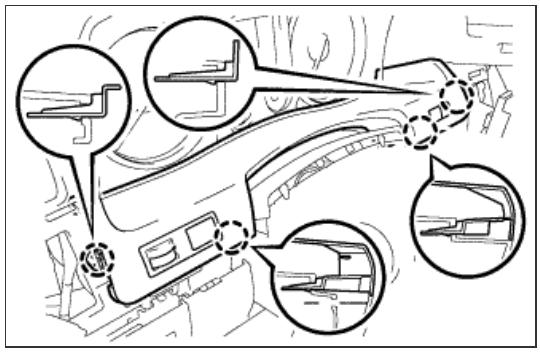
a. Attach the 4 claws to install the register.



37. INSTALL INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

a. Connect the connectors.

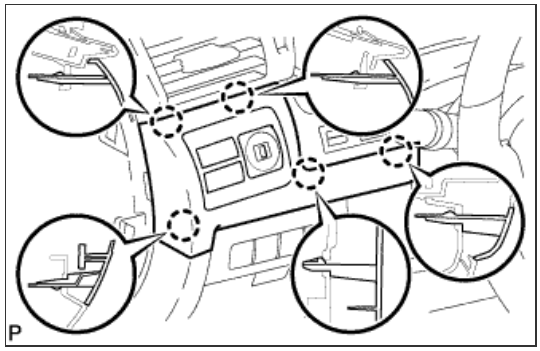
b. Attach the 4 claws to install the finish panel.



38. INSTALL NO. 1 SWITCH HOLE BASE

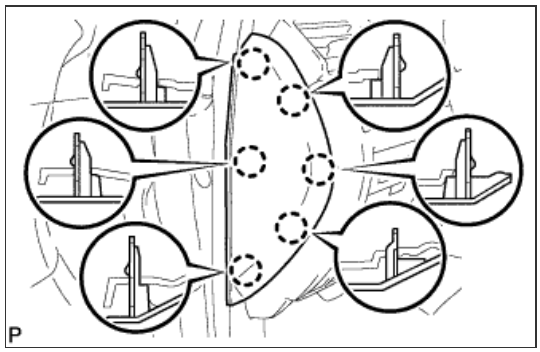
a. Connect the connectors.

b. Attach the 5 claws to install the switch hole base.

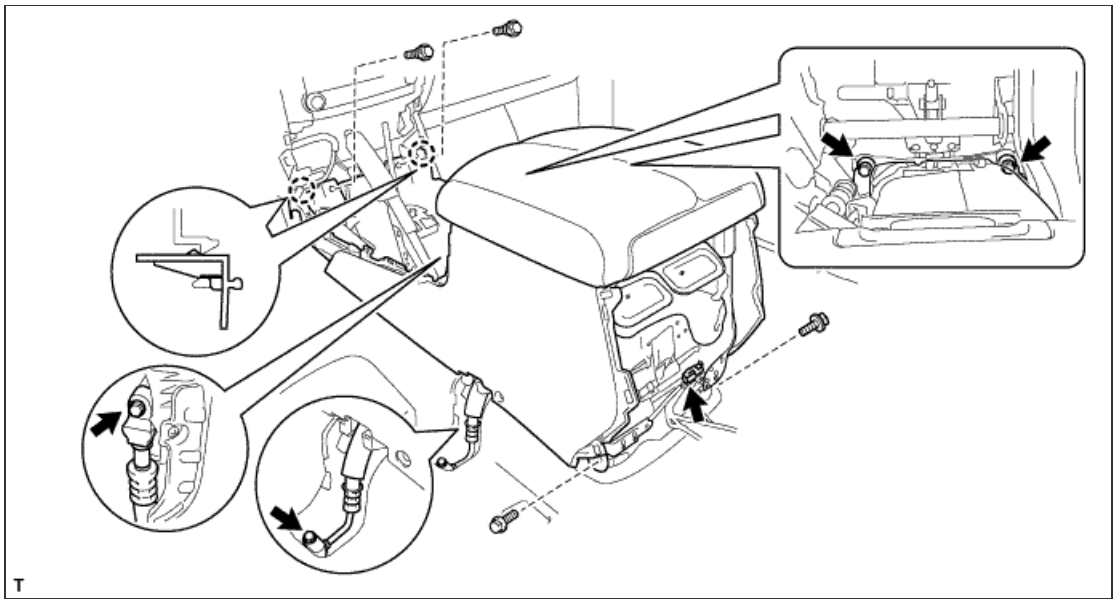


39. INSTALL INSTRUMENT SIDE PANEL LH

a. Attach the 6 claws to install the side panel.



40. INSTALL COOLING BOX ASSEMBLY (w/ Cool Box)



a. Attach the 2 claws.

b. Connect the connector.

c. Sufficiently apply compressor oil to 2 new O-rings.

Compressor oil:
ND-OIL 8 or equivalent

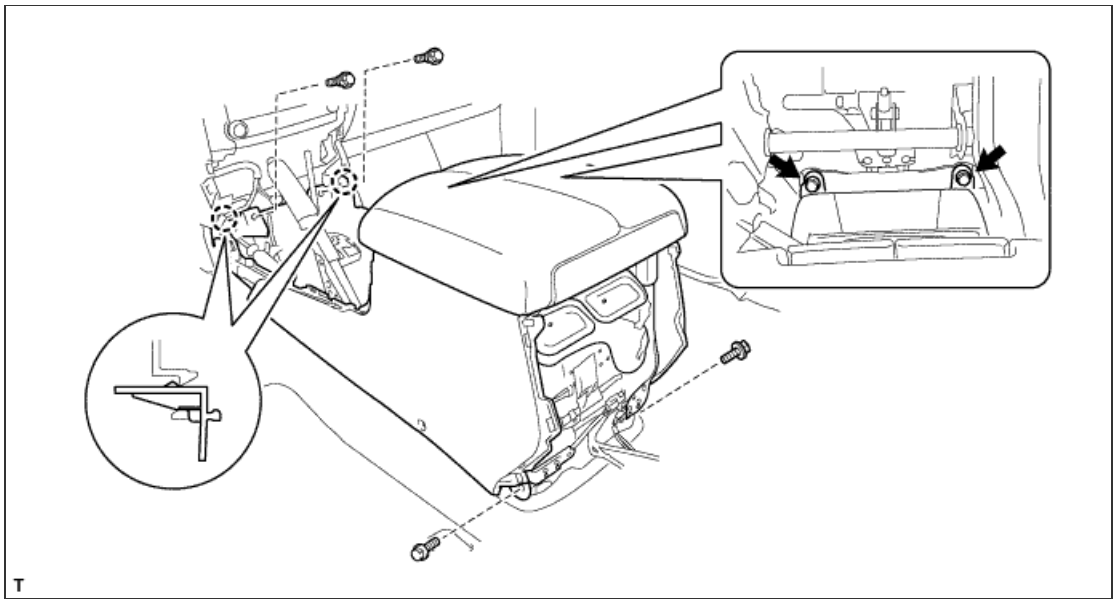
d. Install the 2 O-rings to the 2 cooler pipes.

e. Connect the 2 cooler pipes with the 2 bolts.

Torque:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }

f. Install the cooling box with the 4 bolts and 2 screws.

41. INSTALL REAR CONSOLE BOX SUB-ASSEMBLY (w/o Cool Box)



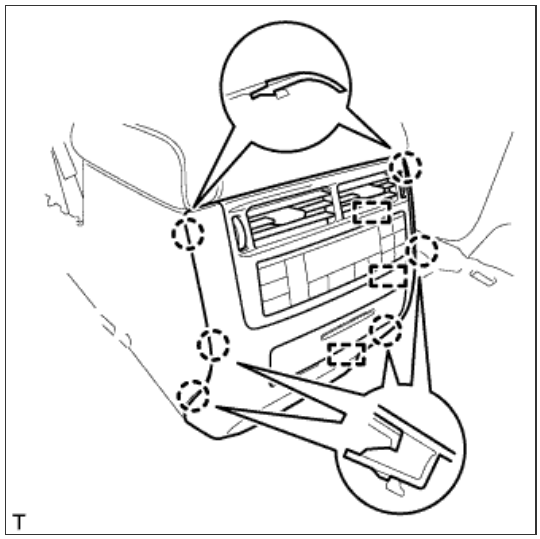
a. Attach the 2 claws.

b. Install the console box with the 4 bolts and 2 screws.

42. INSTALL REAR CONSOLE END PANEL SUB-ASSEMBLY

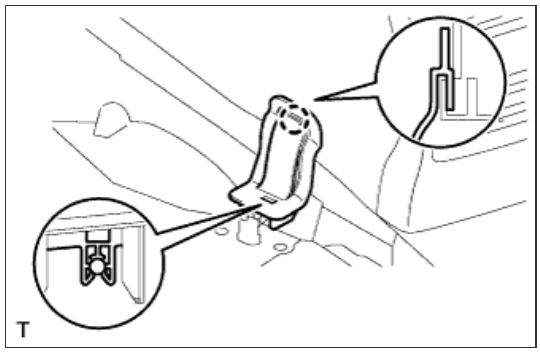
a. Connect the connectors and 3 clamps.

b. Attach the 6 claws to install the end panel.



43. INSTALL NO. 1 COOLER COVER (w/ Cool Box)

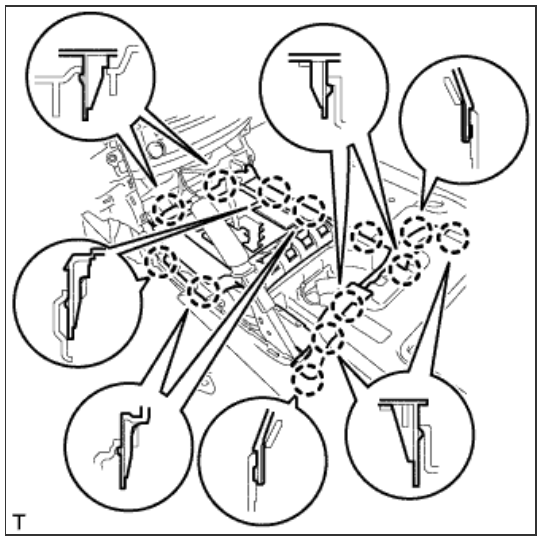
a. Attach the claw on the upper part of the cooler cover, and then attach the clamp on the lower part of the cooler cover to install it.



44. INSTALL UPPER CONSOLE PANEL SUB-ASSEMBLY

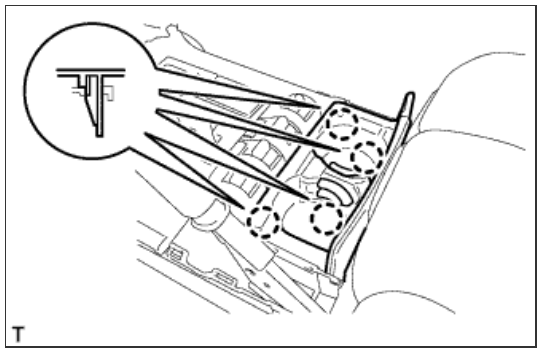
a. Connect the connectors.

b. Attach the 13 claws to install the console panel.



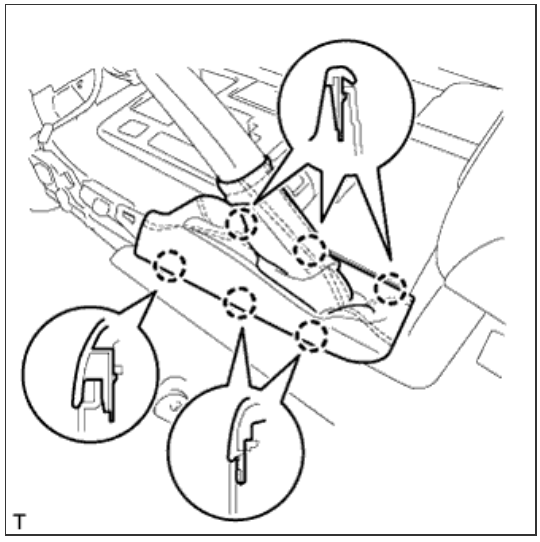
45. INSTALL CONSOLE CUP HOLDER BOX SUB-ASSEMBLY

a. Attach the 4 claws to install the box.



46. INSTALL PARKING BRAKE HOLE COVER

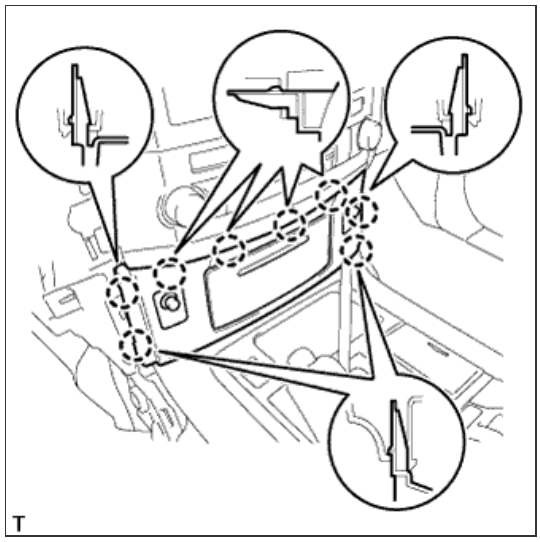
a. Attach the 6 claws to install the cover.



47. INSTALL LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

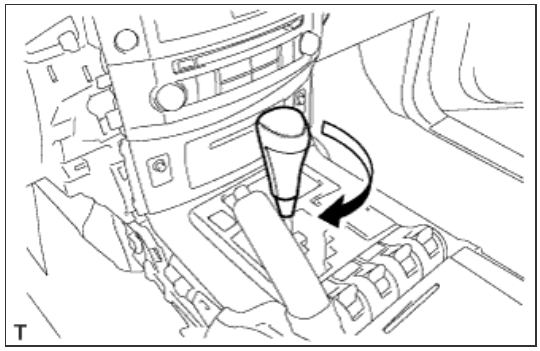
a. Connect the connectors.

b. Attach the 8 claws to install the panel.



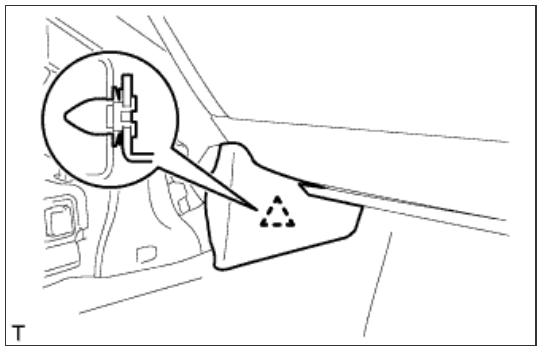
48. INSTALL SHIFT LEVER KNOB SUB-ASSEMBLY

a. Install the shift lever knob and twist it in the direction indicated by the arrow.



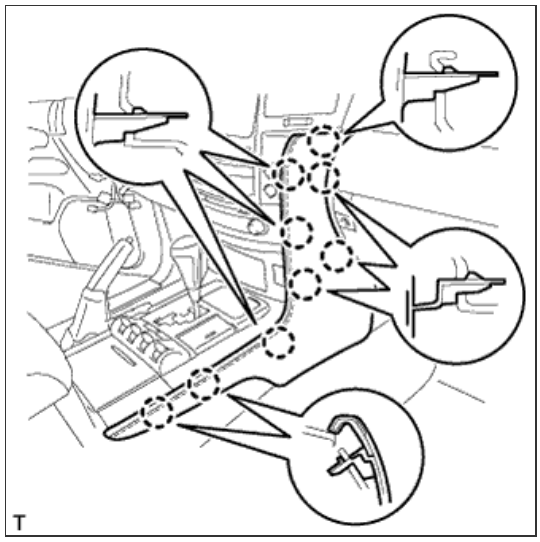
49. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER RH

a. Attach the clip to install the cover.



50. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

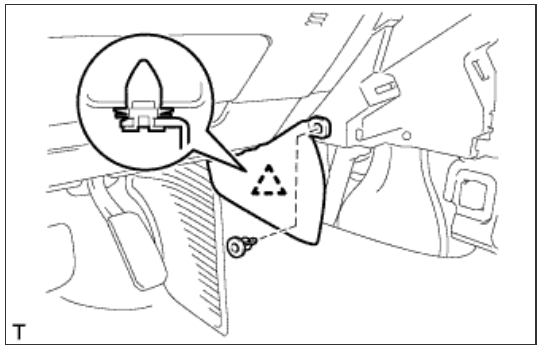
a. Attach the 9 claws to install the panel pad.



51. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Attach the clip to install the cover.

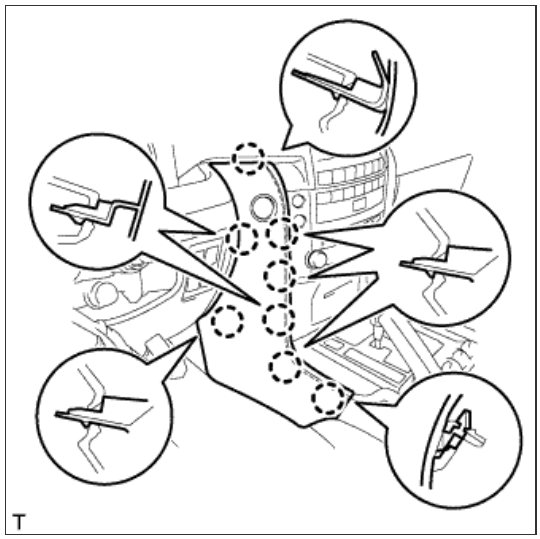
b. Install the clip.



52. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Connect the connector.

b. Attach the 8 claws to install the panel pad.



53. INSTALL FRONT SEAT ASSEMBLY RH

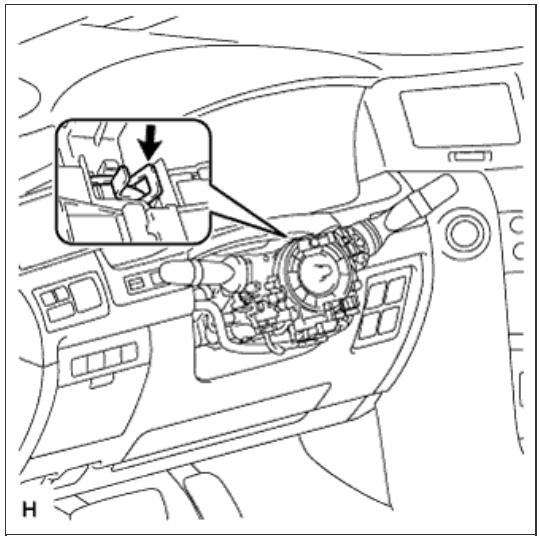
a. Install the front seat assembly RH (Click here).

54. INSTALL FRONT SEAT ASSEMBLY LH

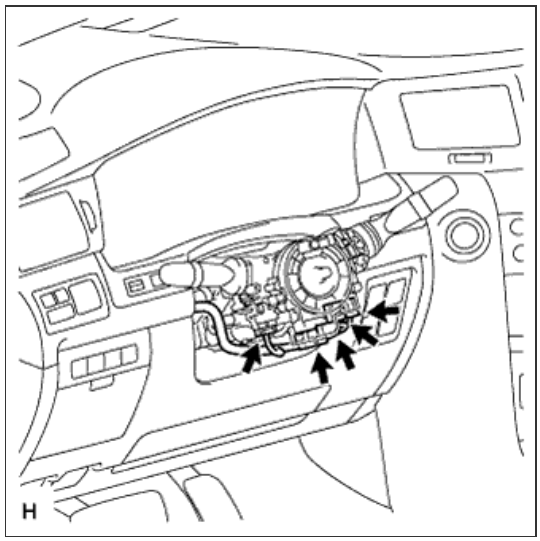
a. Install the front seat assembly LH (Click here).

55. INSTALL COMBINATION SWITCH ASSEMBLY WITH SPIRAL CABLE SUB-ASSEMBLY

a. Using pliers, grip the claws of the clamp and install the turn signal switch assembly with spiral cable sub-assembly to the steering column assembly with the clamp.



b. Connect the 5 connectors to the turn signal switch with spiral cable.



56. INSTALL TILT AND TELESCOPIC SWITCH

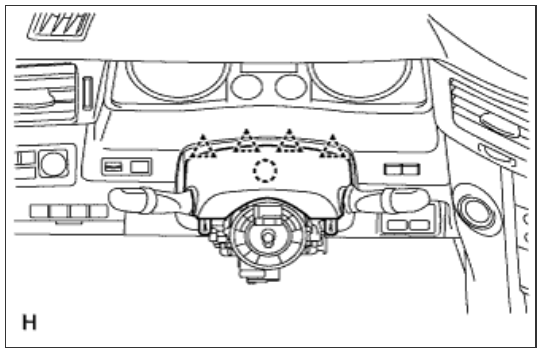
a. Attach the claw to install the switch.

b. Connect the switch connector.

57. INSTALL UPPER STEERING COLUMN COVER

a. Attach the claw to install the upper steering column cover.

b. Attach the 4 clips to install the upper steering column cover onto the instrument cluster finish panel.



58. INSTALL LOWER STEERING COLUMN COVER

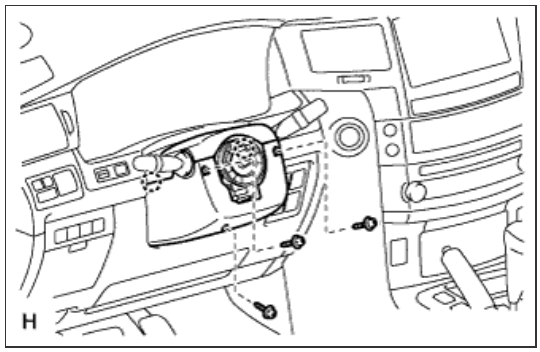
a. Attach the 2 claws to install the lower steering column cover.

NOTICE:

Do not damage the tilt and telescopic switch.

b. Install the 3 screws.

Torque:
1.5 N*m{ 15 kgf*cm , 13 in.*lbf }

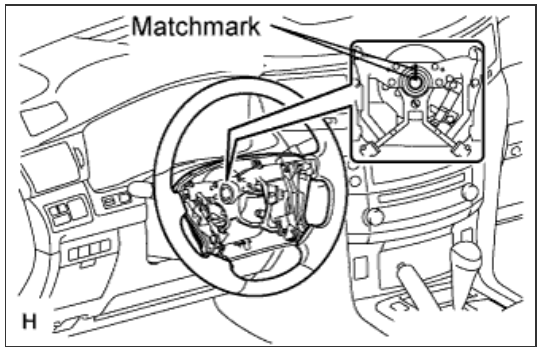


59. INSTALL STEERING WHEEL ASSEMBLY

a. Align the matchmarks on the steering wheel assembly and steering main shaft assembly.

b. Install the steering wheel assembly set nut.

Torque:
50 N*m{ 510 kgf*cm , 37 ft.*lbf }



60. INSTALL STEERING PAD

a. Support the steering pad with one hand.

b. Connect the 2 connectors to the steering pad.

NOTICE:

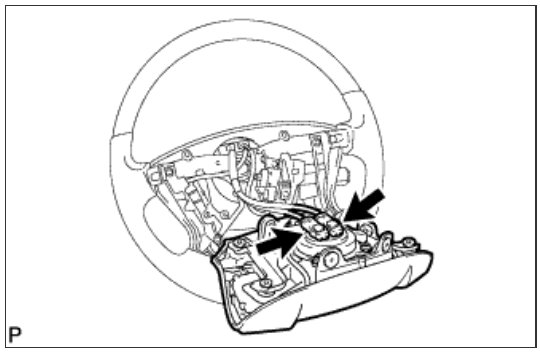
When handling the airbag connector, take care not to damage the airbag wire harness.

c. Connect the horn connector.

d. Confirm that the circumference groove of the "TORX" screw fits in the screw case, and place the steering pad onto the steering wheel.

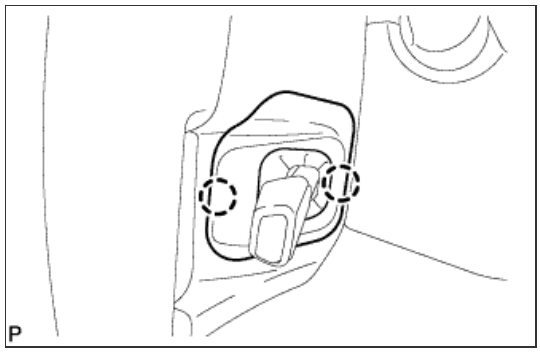
e. Using a T30 "TORX" socket wrench, tighten the 2 screws.

Torque:
8.8 N*m{ 90 kgf*cm , 78 in.*lbf }



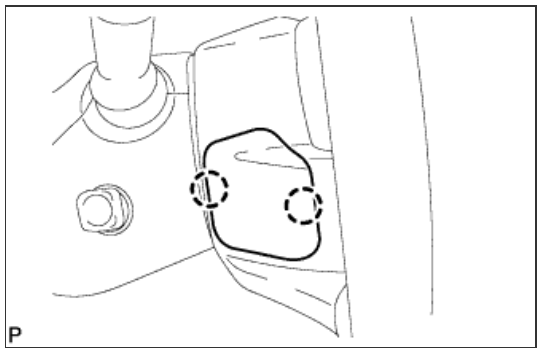
61. INSTALL LOWER NO. 2 STEERING WHEEL COVER

a. Attach the 2 claws to install the cover.



62. INSTALL LOWER NO. 3 STEERING WHEEL COVER

a. Attach the 2 claws to install the cover.



63. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

- **Reset the Autoaway/Return function setting to the previous condition by changing the customize parameter (Click here).**
- **When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).**

64. CHARGE REFRIGERANT (w/ Cool Box)

SST

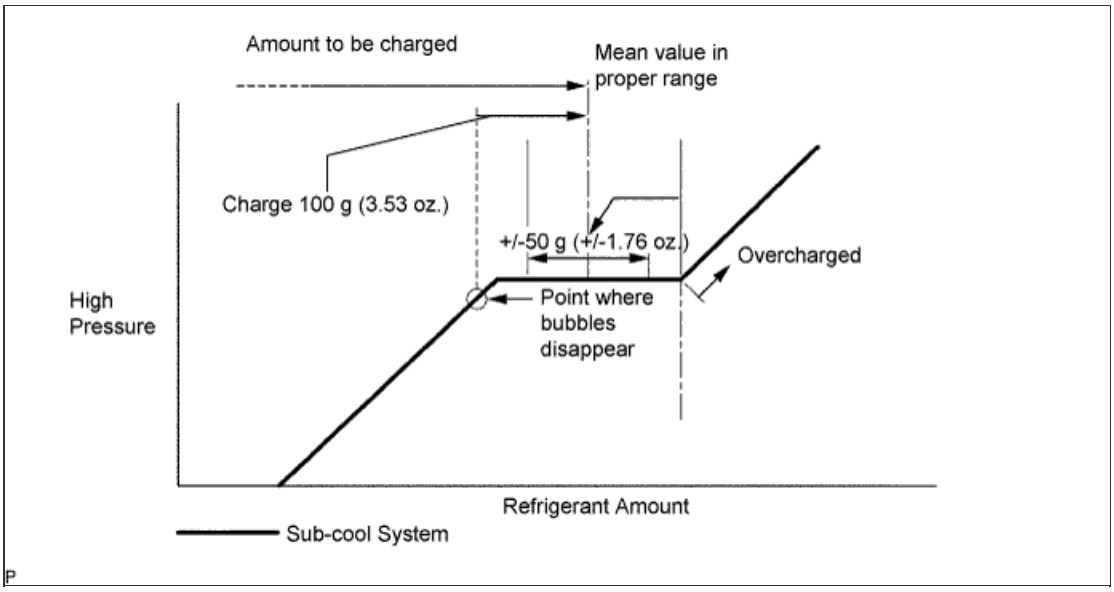
09985-20010 (09985-02130, 09985-02150, 09985-02090, 09985-02110, 09985-02010, 09985-02050, 09985-02060, 09985-02070)

a. Perform vacuum purging using a vacuum pump.

b. Charge refrigerant HFC-134a (R134a).

Standard:

Condenser Core Thickness	Cool Box	Refrigerant Charging Amount
22 mm (0.866 in.)	w/ Cool Box	1010 +/-30 g (35.6 +/-1.1 oz.)
	w/o Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
16 mm (0.630 in.)	w/ Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
	w/o Cool Box	920 +/-30 g (32.5 +/-1.1 oz.)



NOTICE:

- **Do not operate the cooler compressor before charging refrigerant as the cooler compressor will not work properly without any refrigerant, and will overheat.**
- **Approximately 100 g (3.53 oz.) of refrigerant may need to be charged after bubbles disappear. The refrigerant amount should be checked by measuring its quantity, and not with the sight glass.**

65. WARM UP ENGINE (w/ Cool Box)

a. Warm up the engine at less than 1850 rpm for 2 minutes or more after charging the refrigerant.

NOTICE:

Be sure to warm up the compressor when turning the A/C switch on after removing and installing the cooler refrigerant lines (including the compressor), to prevent damage to the compressor.

66. CHECK FOR REFRIGERANT GAS LEAK

a. After recharging the refrigerant gas, check for refrigerant gas leakage using a halogen leak detector.

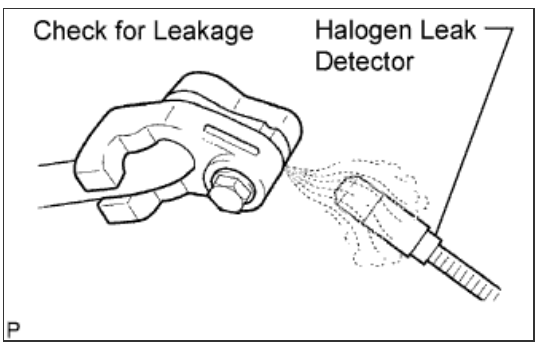
b. Perform the operation under these conditions:

- Stop the engine.
- Secure good ventilation (the halogen leak detector may react to volatile gases other than refrigerant, such as evaporated gasoline or exhaust gas).
- Repeat the test 2 or 3 times.
- Make sure that some refrigerant remains in the refrigeration system. When compressor is off: approximately 392 to 588 kPa (4.0 to 6.0 kgf/cm^2, 57 to 85 psi).

c. Using a halogen leak detector, check the refrigerant line for leakage.

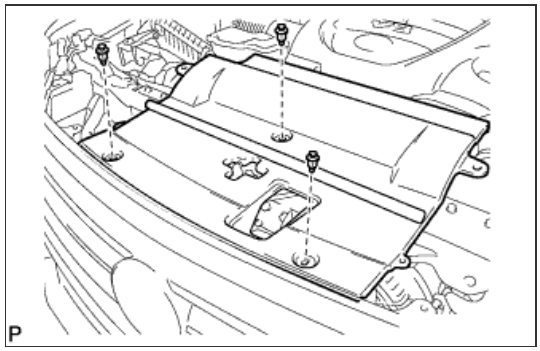
d. If a gas leak is not detected on the drain hose, remove the blower motor control (blower resistor) from the cooling unit. Insert the halogen leak detector sensor into the unit and perform the test.

e. Disconnect the connector and wait for approximately 20 minutes. Bring the halogen leak detector close to the pressure switch and perform the test.



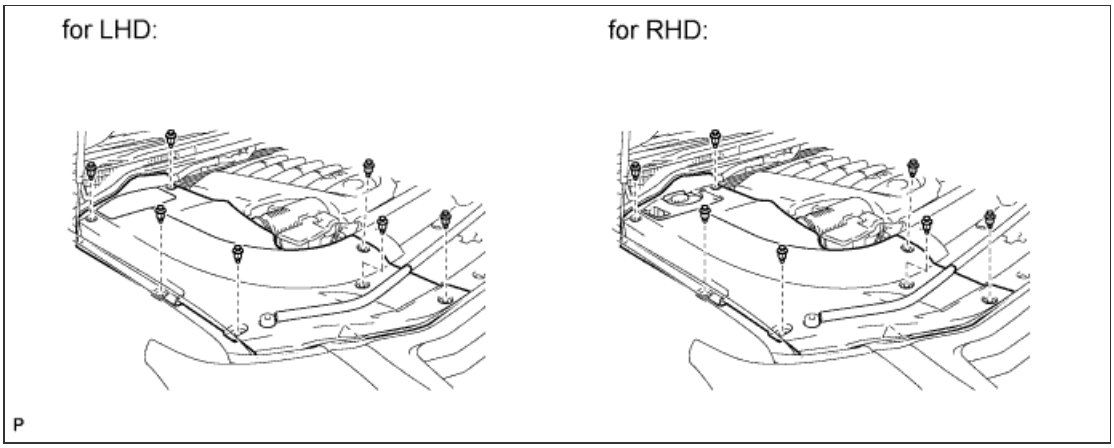
67. INSTALL UPPER RADIATOR SUPPORT SEAL

a. Install the upper radiator support seal with the 3 clips.



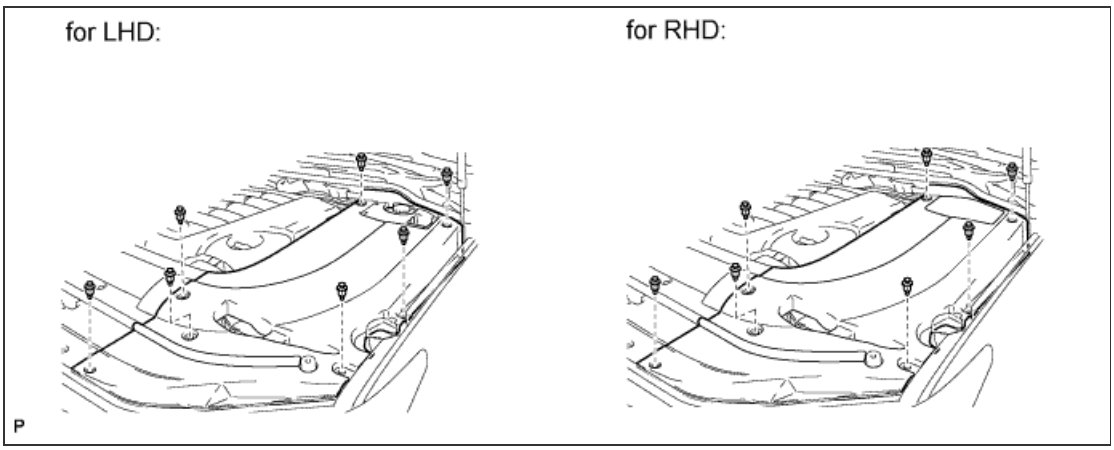
68. INSTALL ENGINE ROOM SIDE COVER RH

a. Install the engine room side cover with the 7 clips.



69. INSTALL ENGINE ROOM SIDE COVER LH

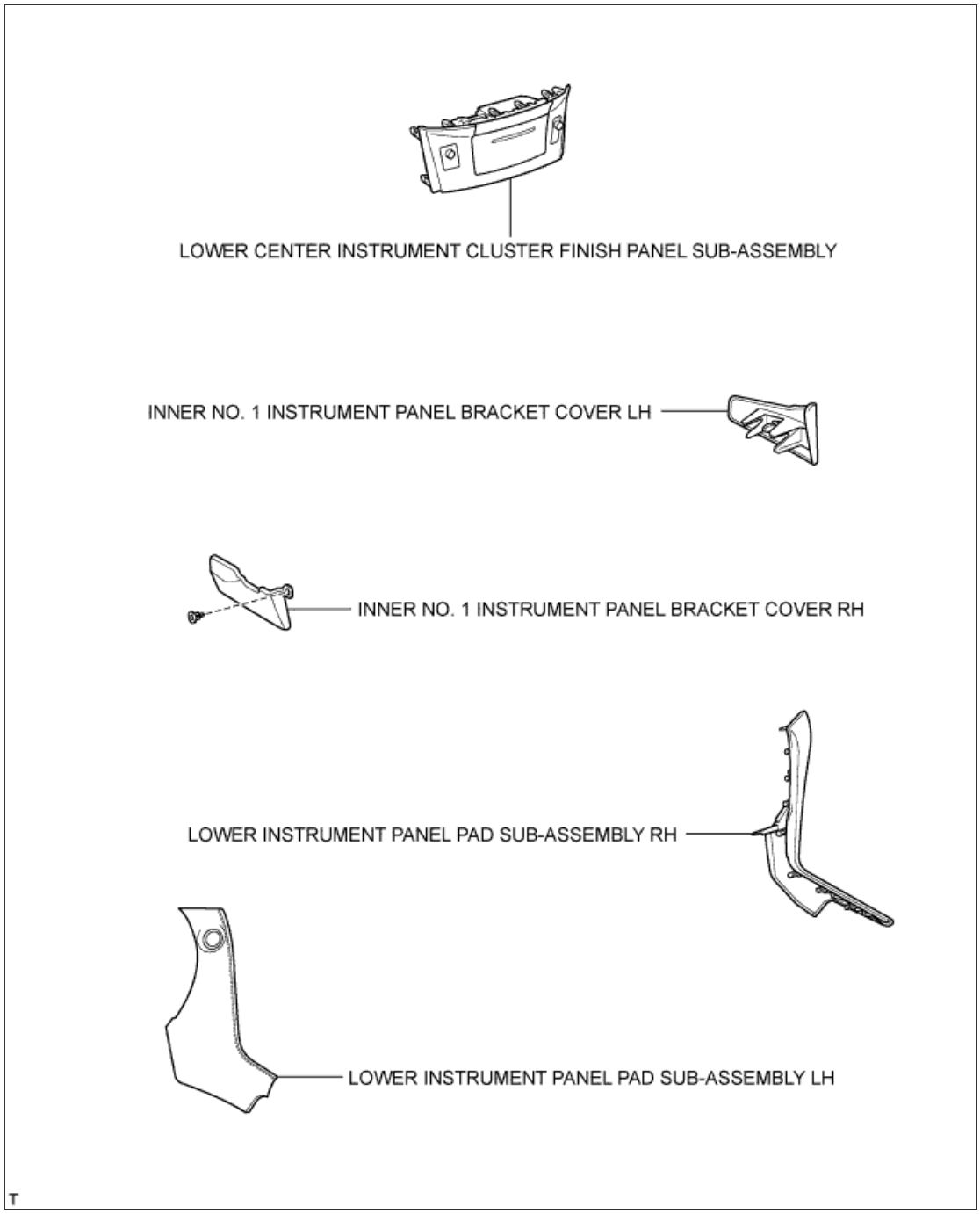
a. Install the engine room side cover with the 7 clips.

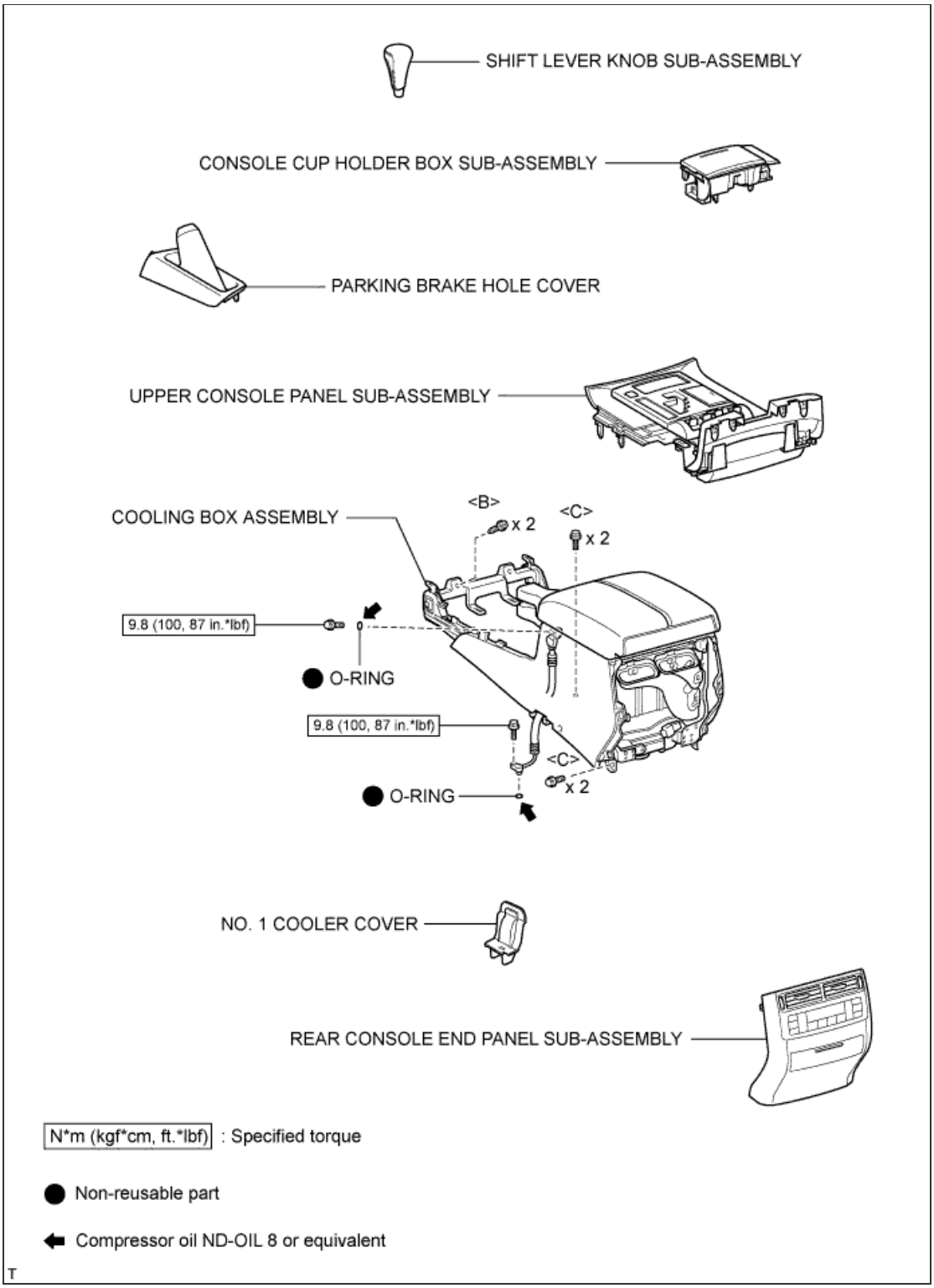


70. CHECK SRS WARNING LIGHT

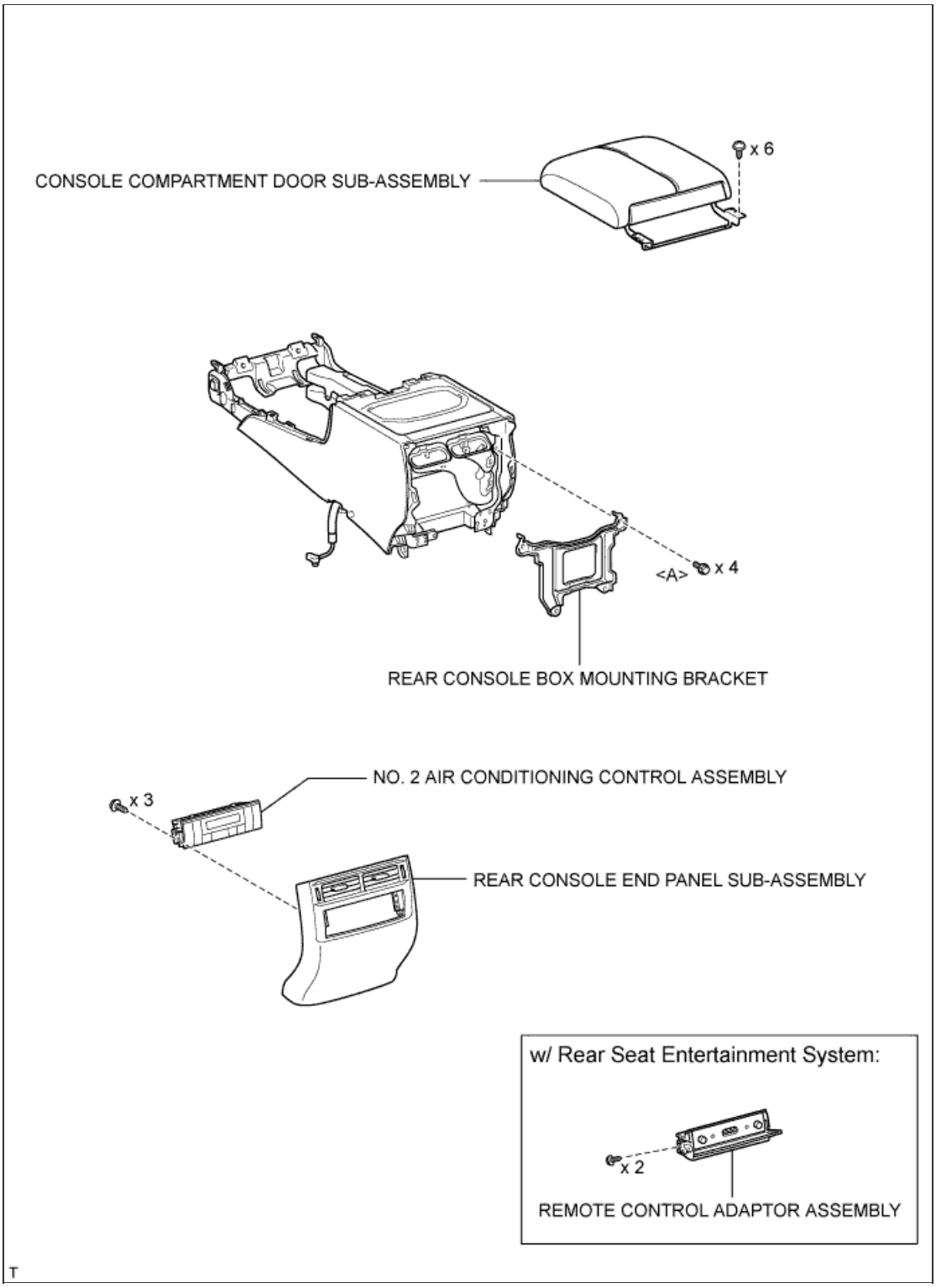
a. Check the SRS warning light (Click here).

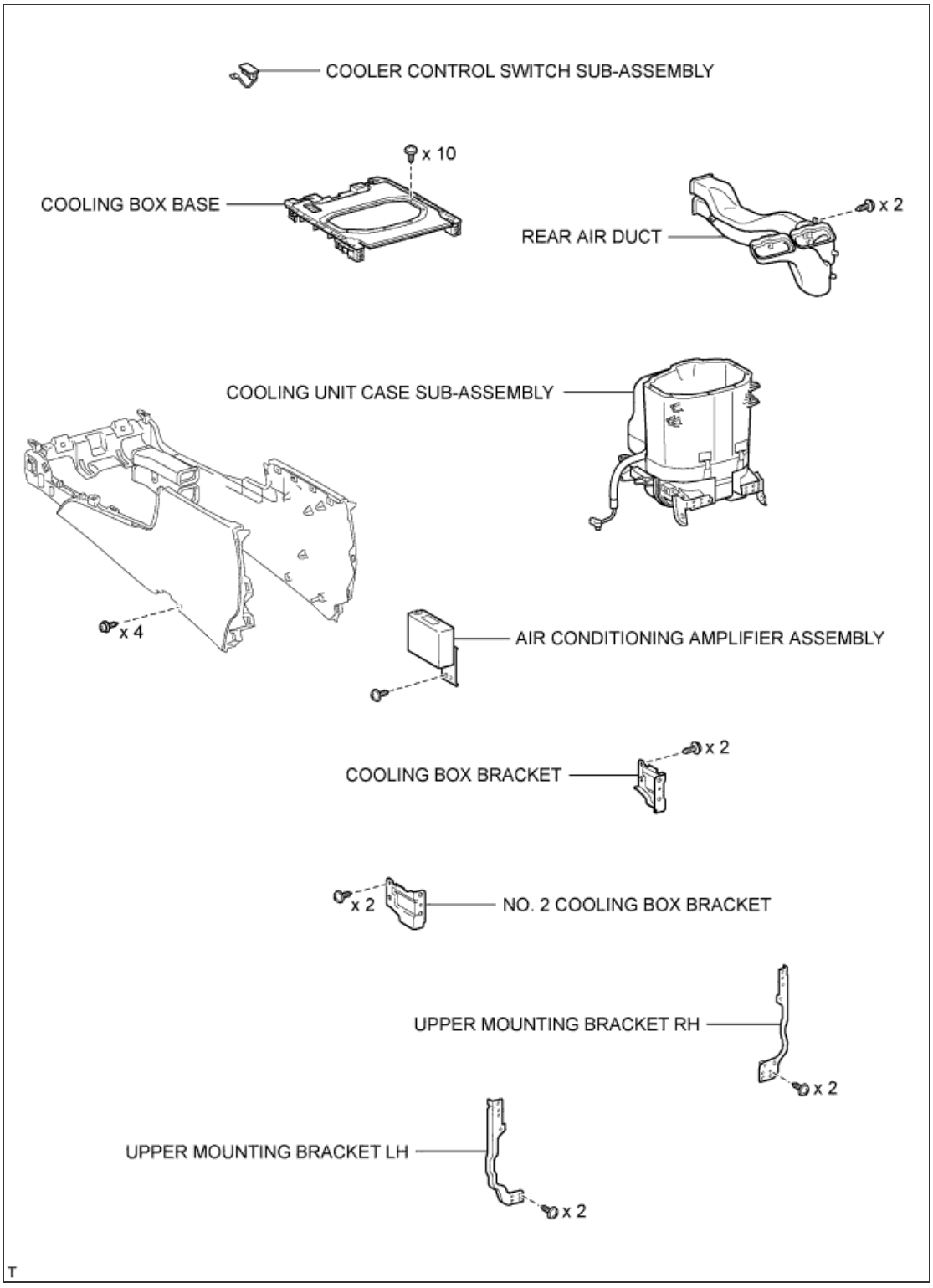
for Preparation Click here

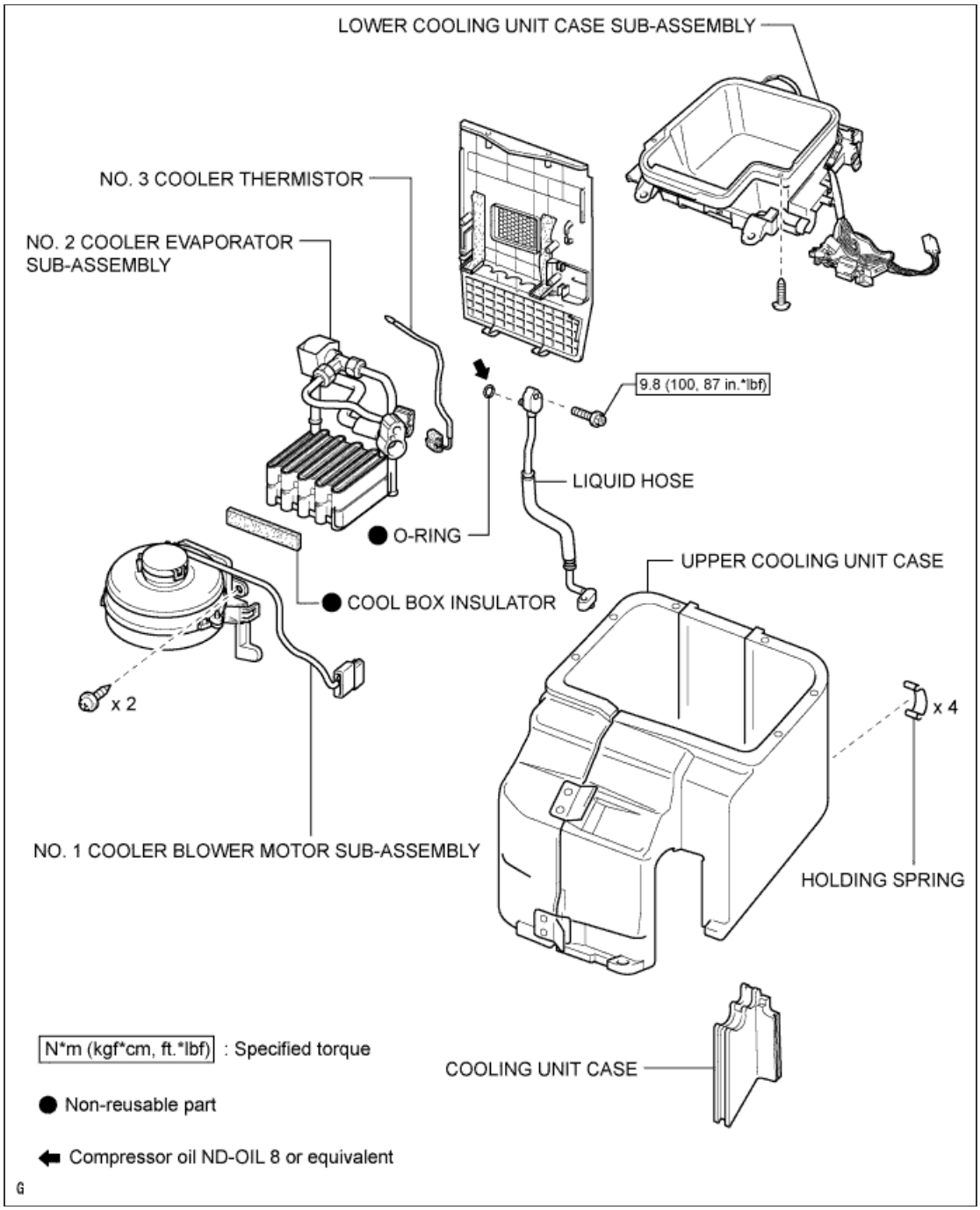



SHIFT LEVER KNOB SUB-ASSEMBLY
CONSOLE CUP HOLDER BOX SUB-ASSEMBLY
PARKING BRAKE HOLE COVER
UPPER CONSOLE PANEL SUB-ASSEMBLY
COOLING BOX ASSEMBLY
<B>
x 2
<C>
x 2
9.8 (100, 87 in.*lbf)
O-RING
9.8 (100, 87 in.*lbf)
<C>
x 2
O-RING
NO. 1 COOLER COVER
REAR CONSOLE END PANEL SUB-ASSEMBLY
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
Compressor oil ND-OIL 8 or equivalent

T


CONSOLE COMPARTMENT DOOR SUB-ASSEMBLY
x 6
<A>
x 4
REAR CONSOLE BOX MOUNTING BRACKET
NO. 2 AIR CONDITIONING CONTROL ASSEMBLY
x 3
REAR CONSOLE END PANEL SUB-ASSEMBLY
w/ Rear Seat Entertainment System:
x 2
REMOTE CONTROL ADAPTOR ASSEMBLY
T

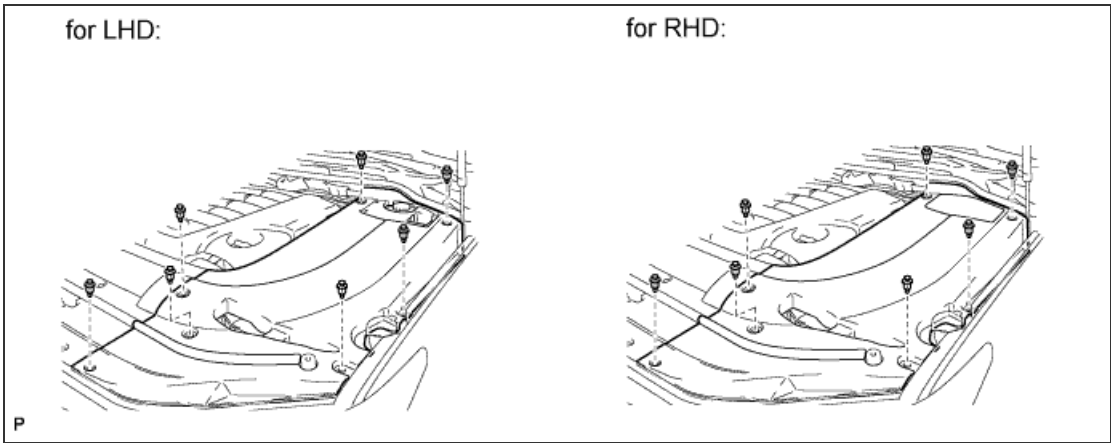

COOLER CONTROL SWITCH SUB-ASSEMBLY
x 10
COOLING BOX BASE
REAR AIR DUCT
x 2
COOLING UNIT CASE SUB-ASSEMBLY
x 4
AIR CONDITIONING AMPLIFIER ASSEMBLY
COOLING BOX BRACKET
x 2
x 2
NO. 2 COOLING BOX BRACKET
UPPER MOUNTING BRACKET RH
x 2
UPPER MOUNTING BRACKET LH
x 2
T


LOWER COOLING UNIT CASE SUB-ASSEMBLY
NO. 3 COOLER THERMISTOR
NO. 2 COOLER EVAPORATOR SUB-ASSEMBLY
9.8 (100, 87 in.*lbf)
LIQUID HOSE
O-RING
UPPER COOLING UNIT CASE
COOL BOX INSULATOR
x 2
x 4
NO. 1 COOLER BLOWER MOTOR SUB-ASSEMBLY
HOLDING SPRING
COOLING UNIT CASE
N*m (kgf*cm, ft.*lbf) : Specified torque
Non-reusable part
Compressor oil ND-OIL 8 or equivalent
G

for Preparation Click here

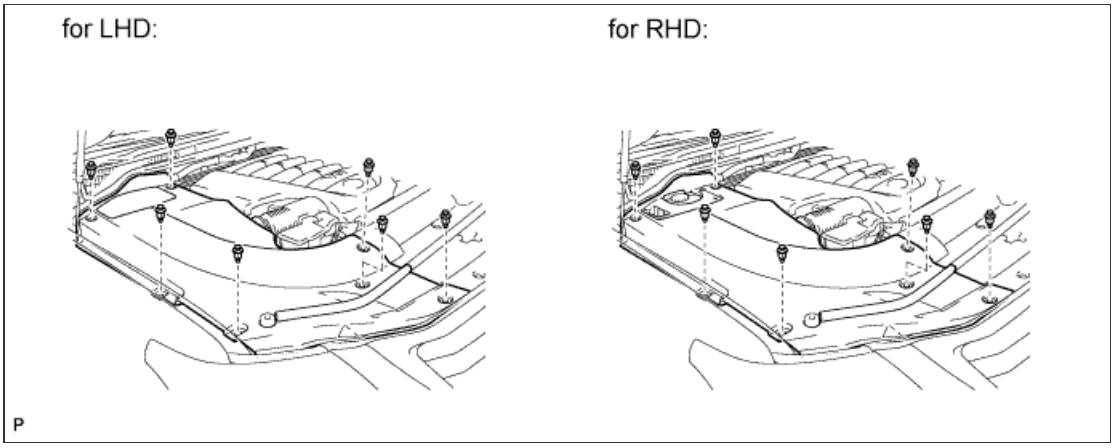
1. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



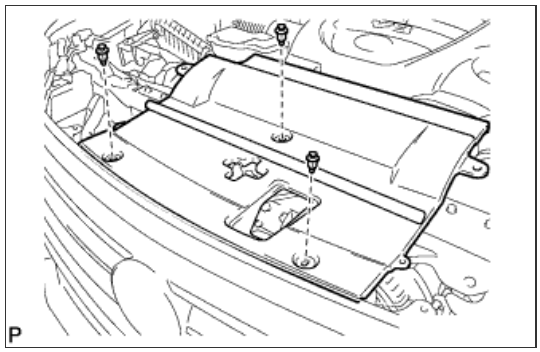
2. REMOVE ENGINE ROOM SIDE COVER RH

a. Remove the 7 clips and engine room side cover.



3. REMOVE UPPER RADIATOR SUPPORT SEAL

a. Remove the 3 clips and upper radiator support seal.



4. RECOVER REFRIGERANT FROM REFRIGERATION SYSTEM

a. Start the engine.

b. Turn the A/C switch on.

c. Operate the cooler compressor while the engine speed is approximately 1000 rpm for 5 to 6 minutes to circulate the refrigerant and collect the compressor oil remaining in each component into the cooler compressor.

d. Stop the engine.

e. Recover the refrigerant from the A/C system using a refrigerant recovery unit.

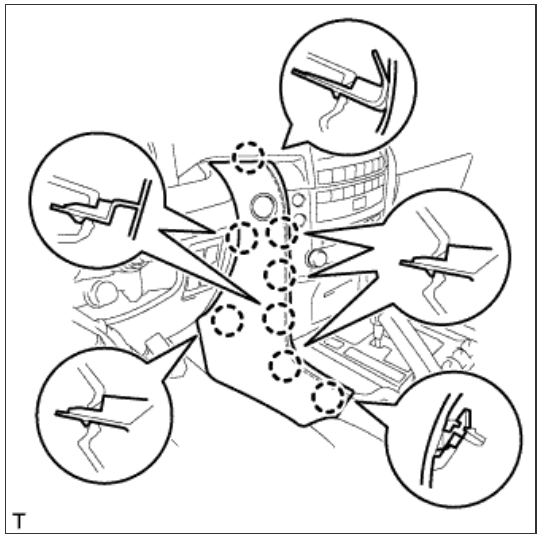
5. REMOVE FRONT SEAT ASSEMBLY LH

a. Remove the front seat assembly LH (Click here).

6. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Detach the 8 claws.

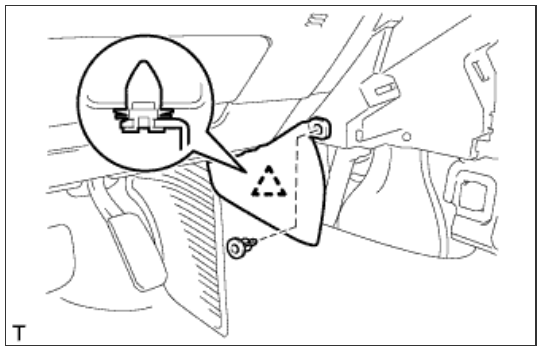
b. Disconnect the connector and remove the panel pad.



7. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

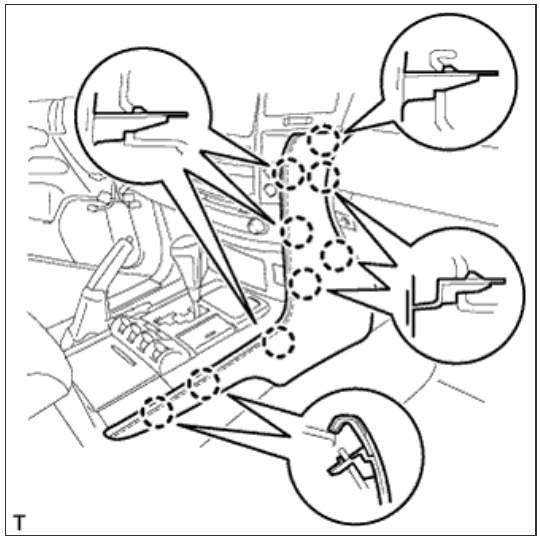
a. Remove the clip.

b. Detach the clip and remove the cover.



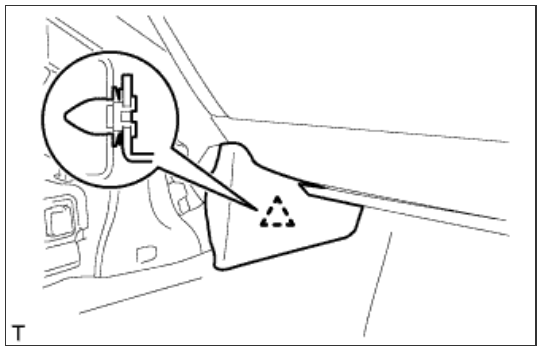
8. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

a. Detach the 9 claws and remove the panel pad.



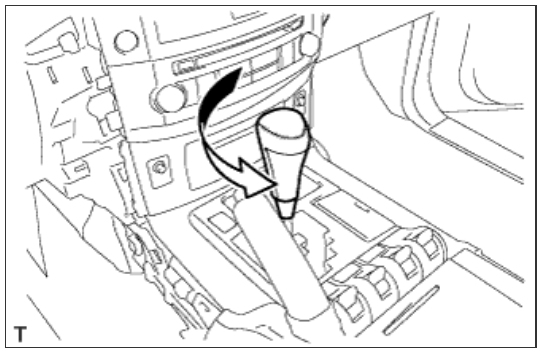
9. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER RH

a. Detach the clip and remove the cover.



10. REMOVE SHIFT LEVER KNOB SUB-ASSEMBLY

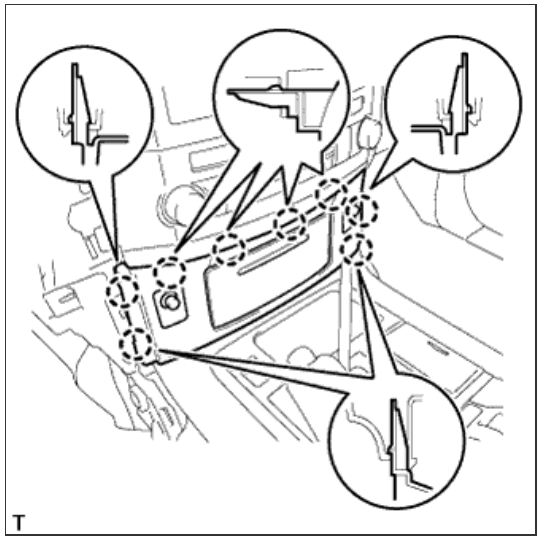
a. Twist the shift lever knob in the direction indicated by the arrow and remove it.



11. REMOVE LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

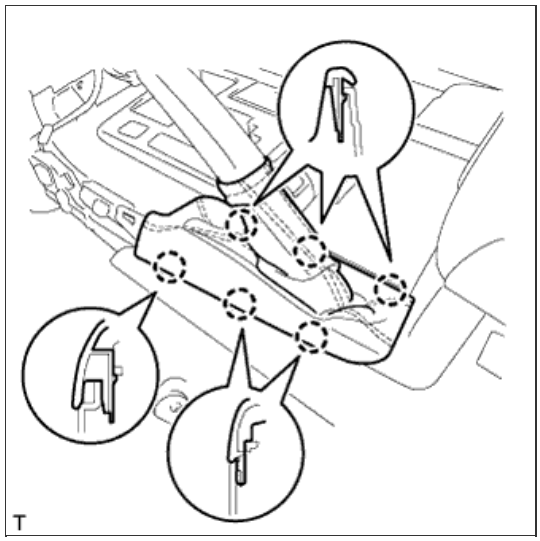
a. Detach the 8 claws.

b. Disconnect the connectors and remove the panel.



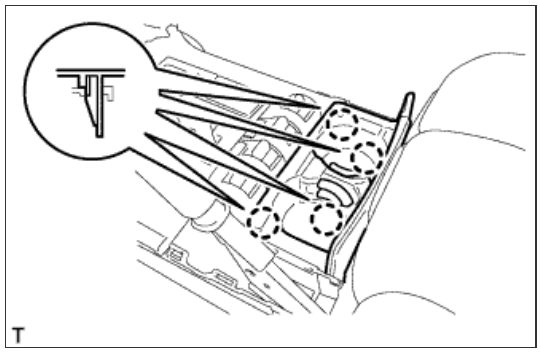
12. REMOVE PARKING BRAKE HOLE COVER

a. Detach the 6 claws and remove the cover.



13. REMOVE CONSOLE CUP HOLDER BOX SUB-ASSEMBLY

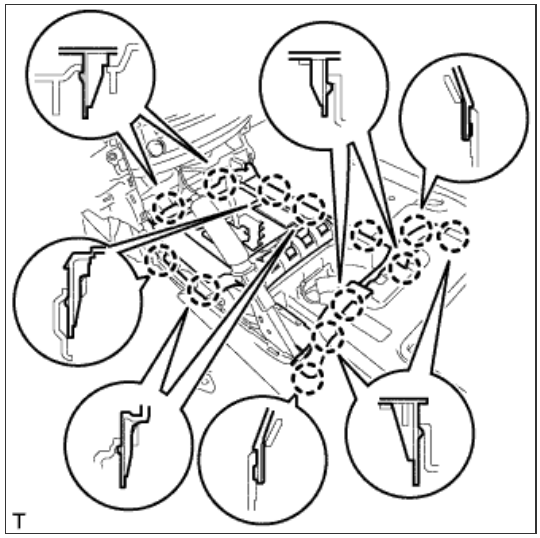
a. Detach the 4 claws and remove the box.



14. REMOVE UPPER CONSOLE PANEL SUB-ASSEMBLY

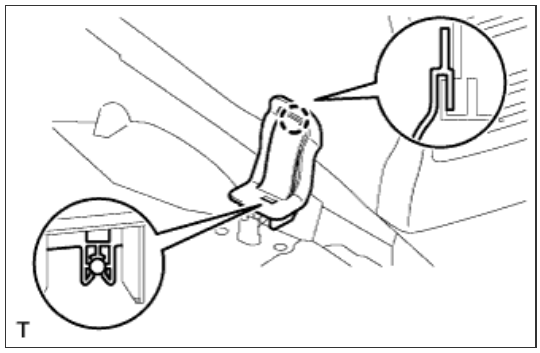
a. Detach the 13 claws.

b. Disconnect the connectors and remove the console panel.



15. REMOVE NO. 1 COOLER COVER

a. Detach the clamp on the lower part of the cooler cover, and then pull the cooler cover upward to remove it.

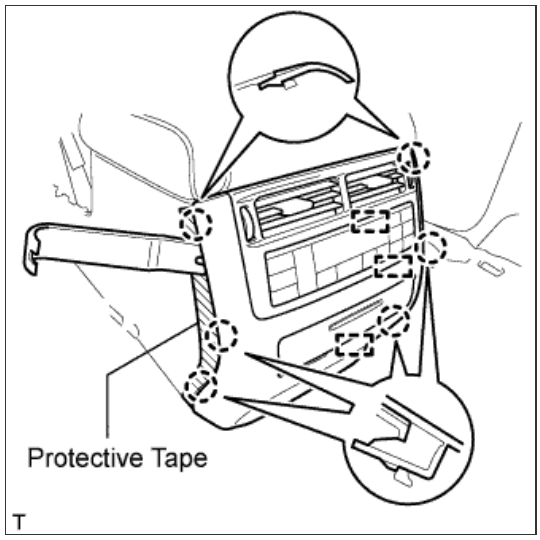


16. REMOVE REAR CONSOLE END PANEL SUB-ASSEMBLY

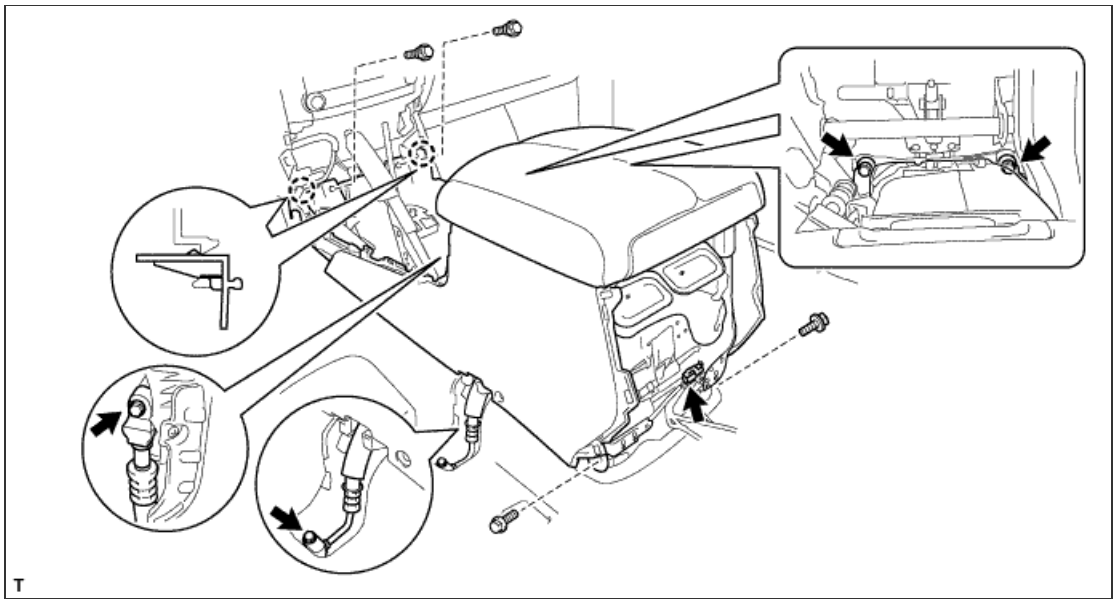
a. Place protective tape as shown in the illustration.

b. Using a moulding remover, detach the 6 claws.

c. Remove the end panel and disconnect the connectors and 3 clamps.



17. REMOVE COOLING BOX ASSEMBLY



a. Remove the 4 bolts and 2 screws.

b. Remove the 2 bolts and disconnect the 2 cooler pipes.

c. Remove the 2 O-rings from the cooler pipes.

d. Disconnect the connector.

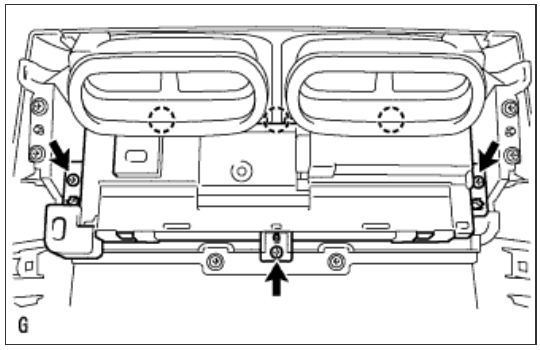
e. Detach the 2 claws and remove the cooling box.

for Preparation Click here

1. REMOVE NO. 2 AIR CONDITIONING CONTROL ASSEMBLY

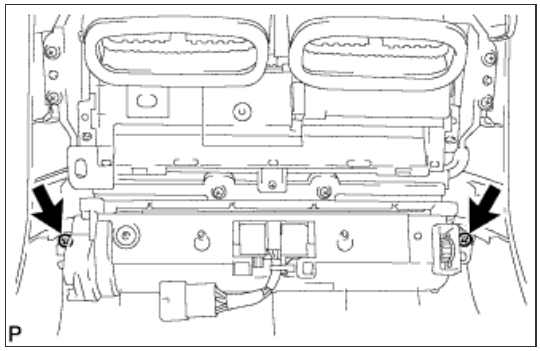
a. Remove the 3 screws.

b. Detach the 3 claws and remove the air conditioning control.



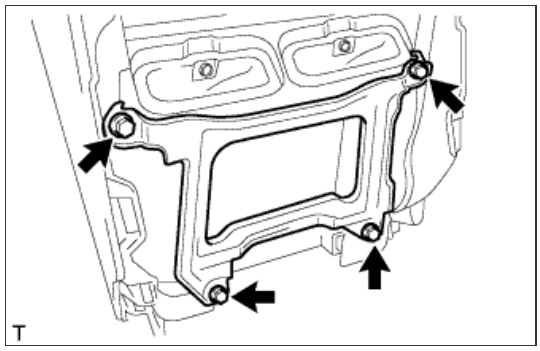
2. REMOVE REMOTE CONTROL ADAPTOR ASSEMBLY (w/ Rear Seat Entertainment System)

a. Remove the 2 screws and adapter.



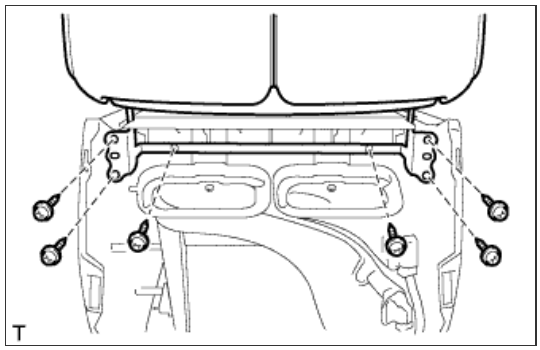
3. REMOVE REAR CONSOLE BOX MOUNTING BRACKET

a. Remove the 4 bolts and bracket.



4. REMOVE CONSOLE COMPARTMENT DOOR SUB-ASSEMBLY

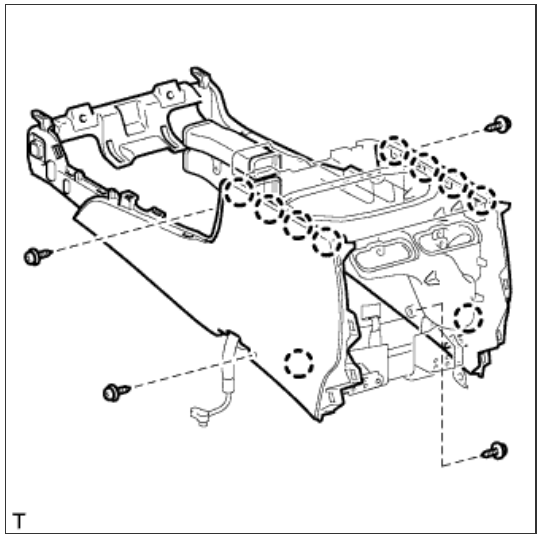
a. Remove the 6 screws and door.



5. REMOVE COOLING BOX ASSEMBLY

a. Remove the 4 screws.

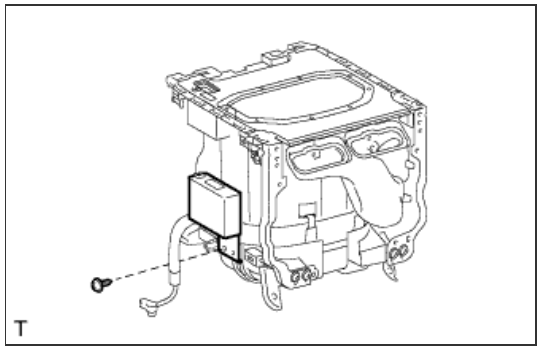
b. Detach the 10 claws and remove the cooling box.



6. REMOVE AIR CONDITIONING AMPLIFIER ASSEMBLY

a. Disconnect the connector.

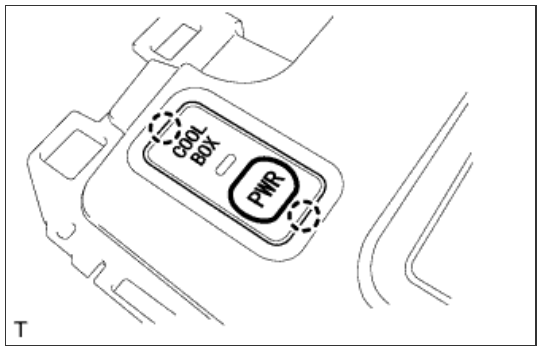
b. Remove the screw and amplifier.



7. REMOVE COOLER CONTROL SWITCH SUB-ASSEMBLY

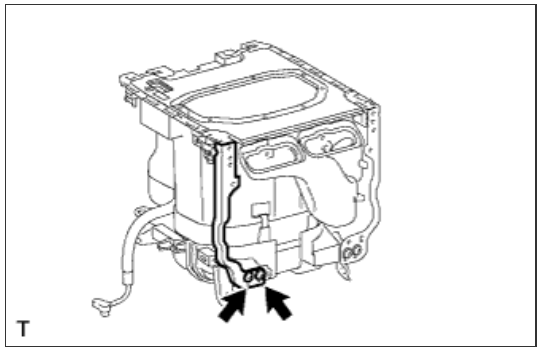
a. Detach the 2 claws.

b. Disconnect the connector and remove the switch.

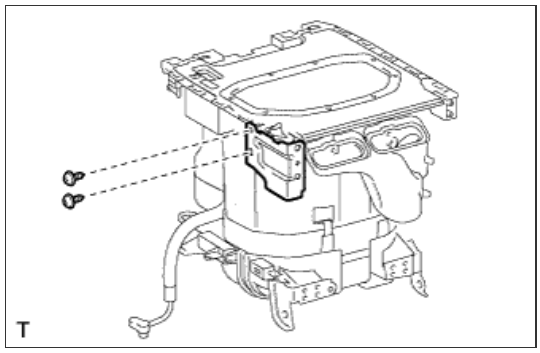


8. REMOVE NO. 2 COOLING BOX BRACKET

a. Remove the 2 screws and mounting bracket.

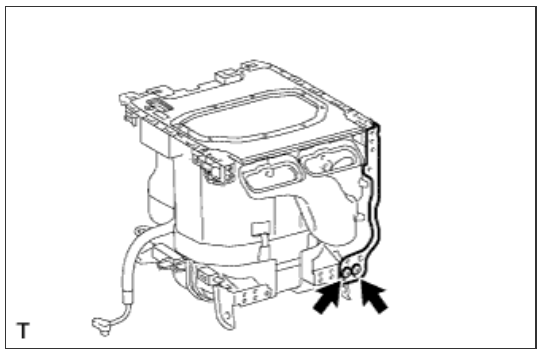


b. Remove the 2 screws and bracket.

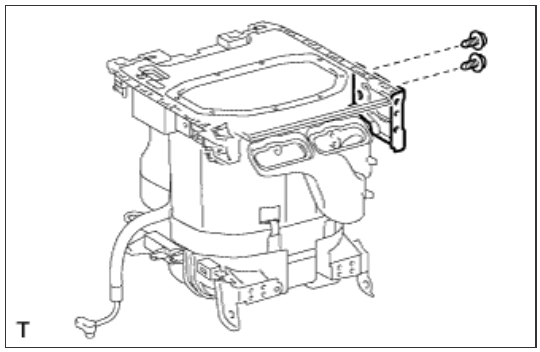


9. REMOVE COOLING BOX BRACKET

a. Remove the 2 screws and mounting bracket.

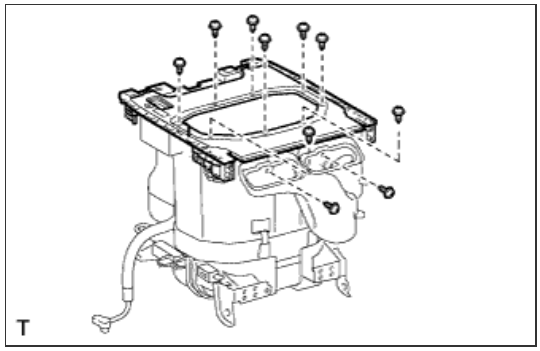


b. Remove the 2 screws and bracket.



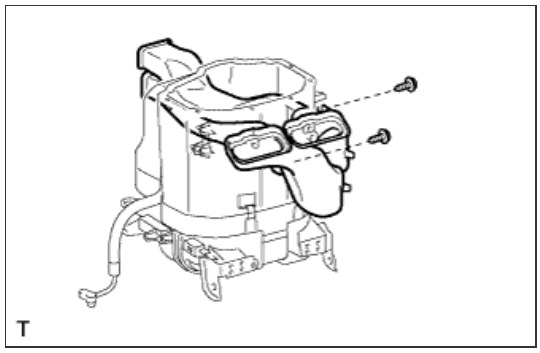
10. REMOVE COOLING BOX BASE

a. Remove the 10 screws and cooling box base.



11. REMOVE COOLING UNIT CASE SUB-ASSEMBLY

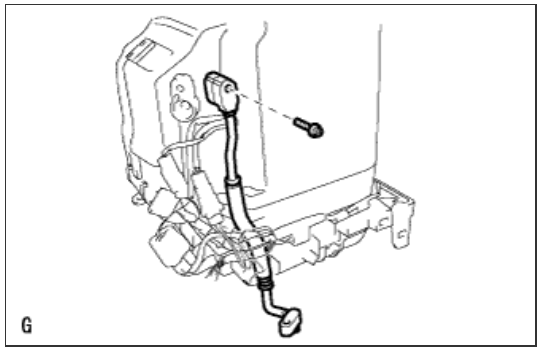
a. Remove the 2 screws and air duct from the case.



12. REMOVE LIQUID HOSE

a. Remove the bolt and liquid hose.

b. Remove the O-ring from the liquid hose.

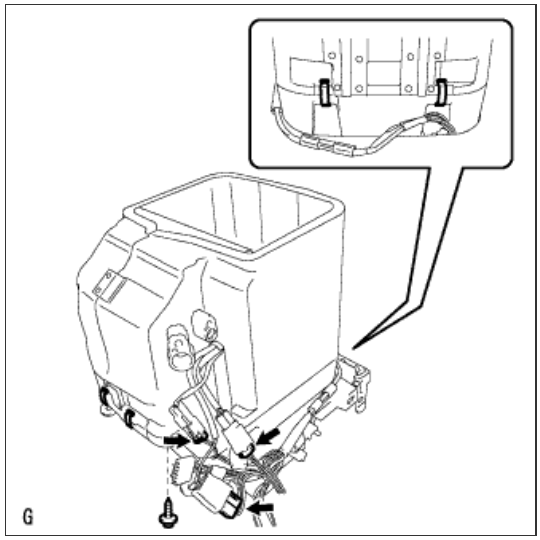


13. REMOVE LOWER COOLING UNIT CASE SUB-ASSEMBLY

a. Remove the screw.

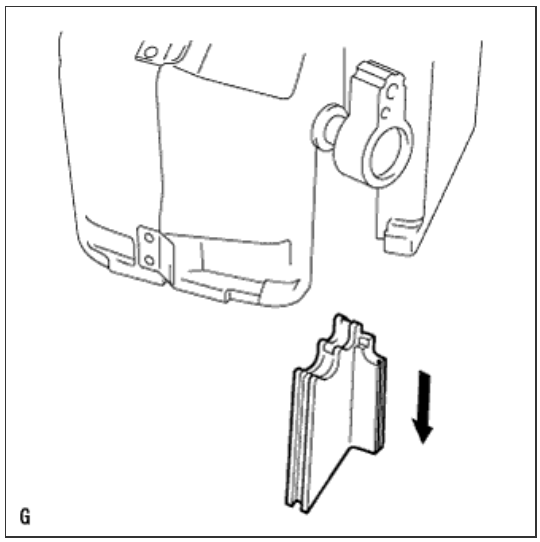
b. Disconnect the 3 connectors.

c. Remove the 4 holding springs and lower cooling unit case.



14. REMOVE UPPER COOLING UNIT CASE

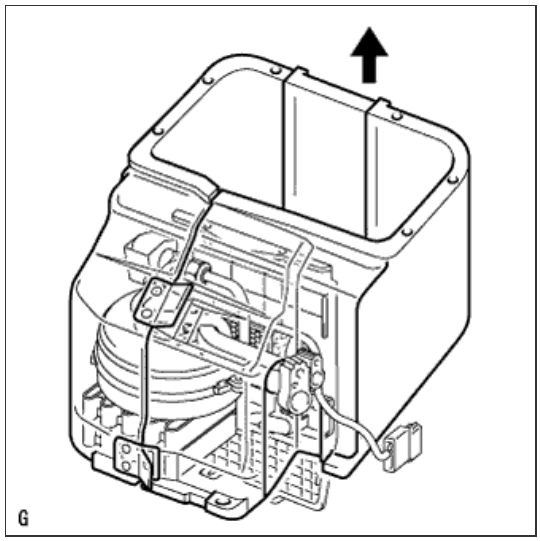
a. Remove the cooling unit case.



b. Slide the case upwards and remove it.

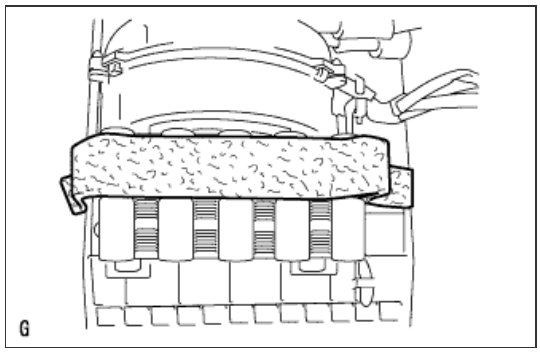
NOTICE:

Do not detach the hooks and open the case.

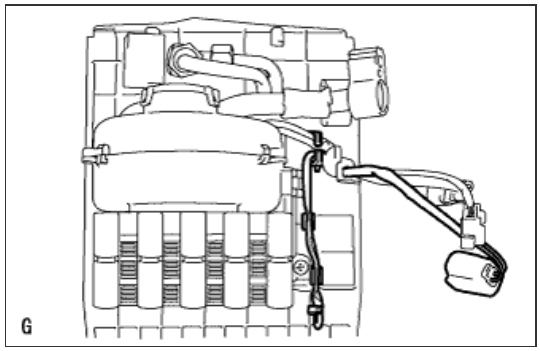


15. REMOVE NO. 3 COOLER THERMISTOR

a. Remove the cool box insulator.



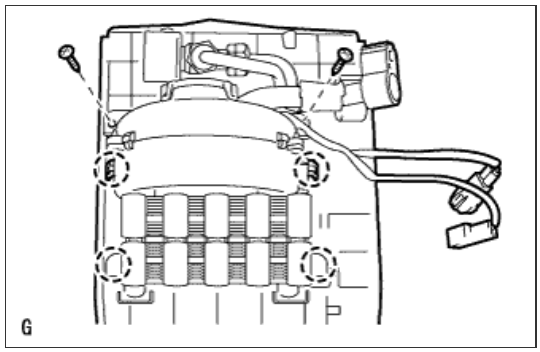
b. Remove the thermistor.



16. REMOVE NO. 1 COOLER BLOWER MOTOR SUB-ASSEMBLY

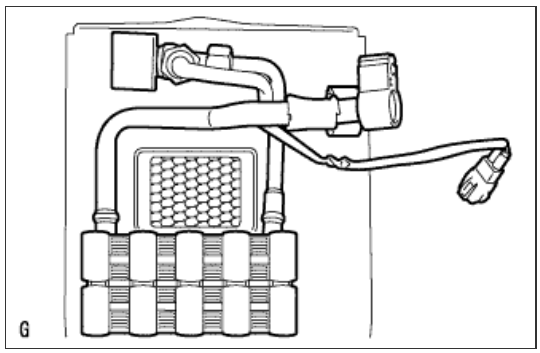
a. Remove the 2 screws.

b. Detach the 4 claws and remove the blower motor.



17. REMOVE NO. 2 COOLER EVAPORATOR SUB-ASSEMBLY

a. Remove the evaporator.



for Preparation Click here

1. INSPECT COOLER CONTROL SWITCH SUB-ASSEMBLY

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Switch Condition	Specified Condition
1 - 2	On	Below 1 Ω
1 - 2	Off	10 kΩ or higher

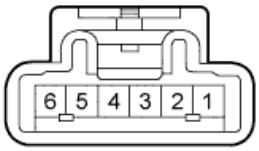
b. Apply battery voltage to the cooler control switch connector and check that the indicator illuminates.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 3 Battery negative (-) → Terminal 4	Indicator illuminates

If the result is not as specified, replace the cooler control switch sub-assembly.

Component without harness connected:
(Cooler Control Switch)



2. INSPECT NO. 1 COOLER BLOWER MOTOR SUB-ASSEMBLY

a. Apply battery voltage to the blower motor connector and check the operation of the blower motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 2	Motor operates smoothly

If the result is not as specified, replace the blower motor sub-assembly.

Component without harness connected:
(No. 1 Cooler Blower Motor)



3. INSPECT NO. 3 COOLER THERMISTOR

a. Measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	-10°C (14°F)	7.40 to 9.20 kΩ
1 - 2	-5°C (23°F)	5.65 to 7.00 kΩ
1 - 2	0°C (32°F)	4.35 to 5.40 kΩ
1 - 2	5°C (41°F)	3.40 to 4.20 kΩ
1 - 2	10°C (50°F)	2.68 to 3.30 kΩ
1 - 2	15°C (59°F)	2.10 to 2.60 kΩ
1 - 2	20°C (68°F)	1.66 to 2.10 kΩ

1 - 2	25°C (77°F)	1.32 to 1.66 kΩ
1 - 2	30°C (86°F)	1.05 to 1.35 kΩ

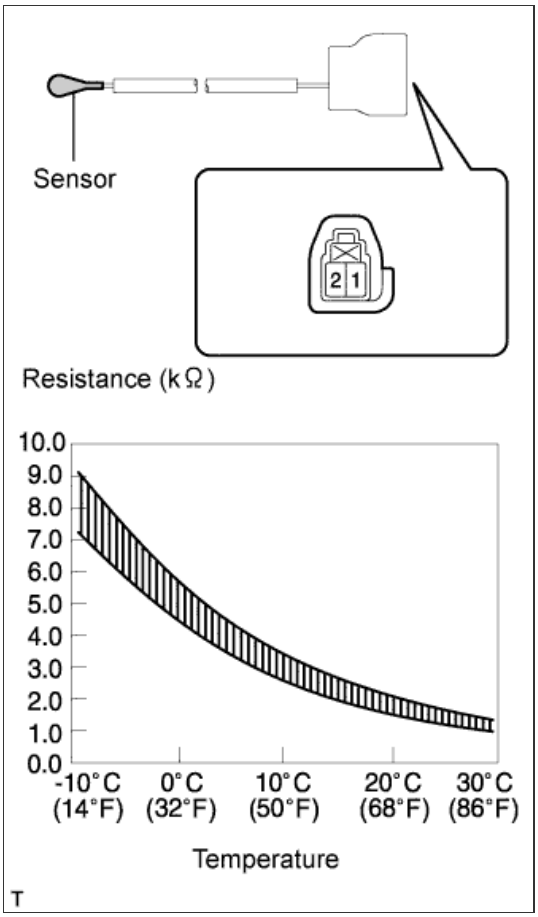
If the result is not as specified, replace the cooler thermistor.

NOTICE:

- **Even slightly touching the sensor may change the resistance value. Be sure to hold the connector of the sensor.**
- **When measuring, the sensor temperature must be the same as the ambient temperature.**

HINT:

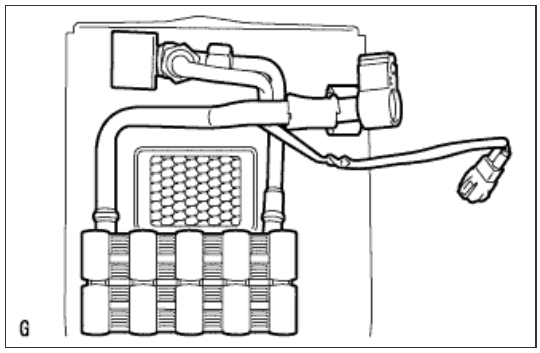
As the temperature increases, the resistance decreases (See the graph).



for Preparation Click here

1. INSTALL NO. 2 COOLER EVAPORATOR SUB-ASSEMBLY

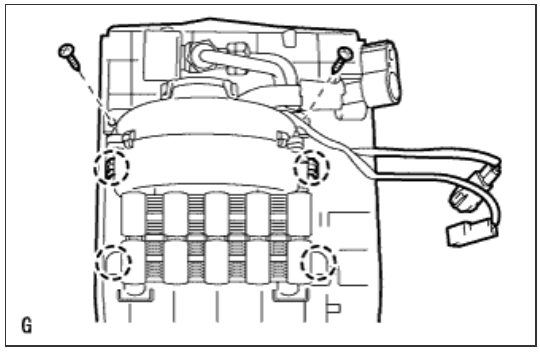
a. Install the evaporator.



2. INSTALL NO. 1 COOLER BLOWER MOTOR SUB-ASSEMBLY

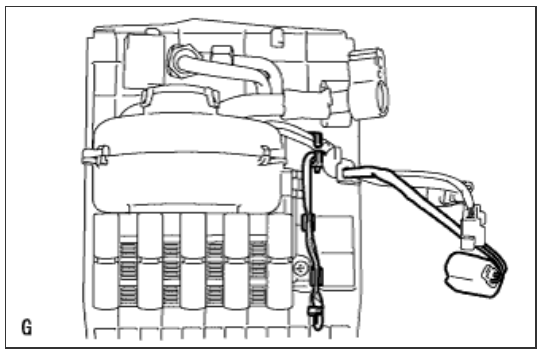
a. Attach the 4 claws to install the blower motor.

b. Install the 2 screws.

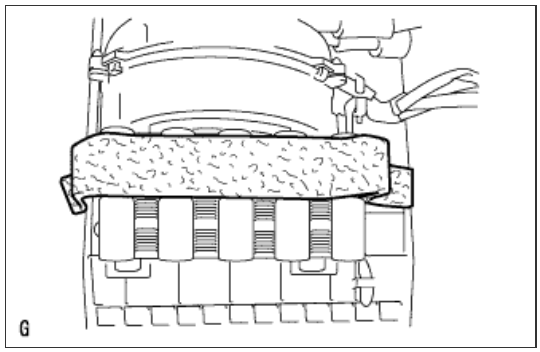


3. INSTALL NO. 3 COOLER THERMISTOR

a. Install the thermistor.

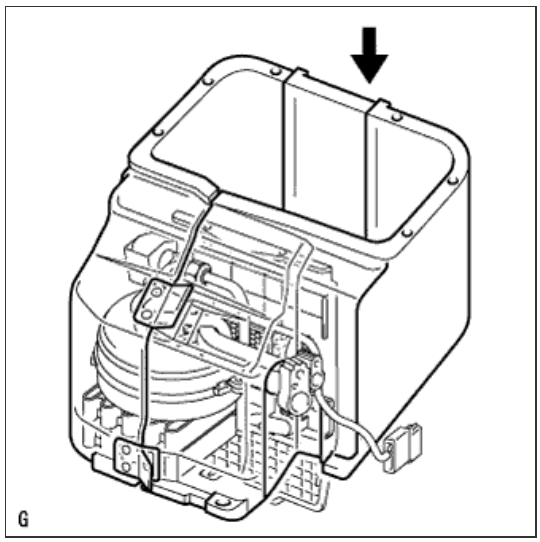


b. Install a new cool box insulator, as shown in the illustration.

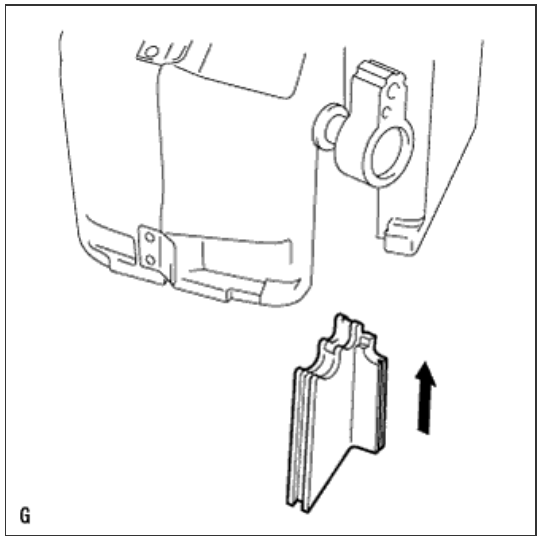


4. INSTALL UPPER COOLING UNIT CASE

a. Align the case with the grooves and slide the case to install it.



b. Install the cooling unit case.

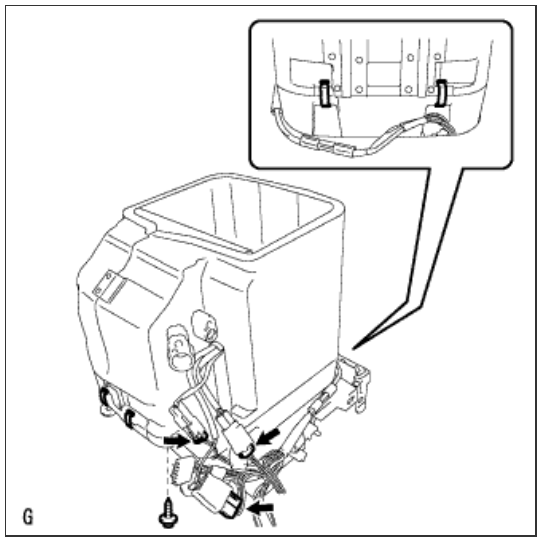


5. INSTALL LOWER COOLING UNIT CASE SUB-ASSEMBLY

a. Install the lower cooling unit case with the 4 holding springs.

b. Connect the 3 connectors.

c. Install the screw.



6. INSTALL LIQUID HOSE

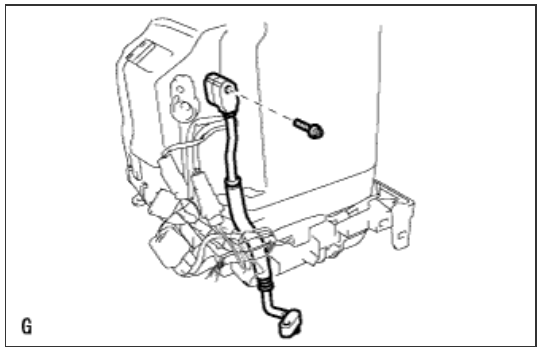
a. Sufficiently apply compressor oil to a new O-ring and the fitting surface of the cooler evaporator.

Compressor oil:
ND-OIL 8 or equivalent

b. Install the O-ring to the liquid hose.

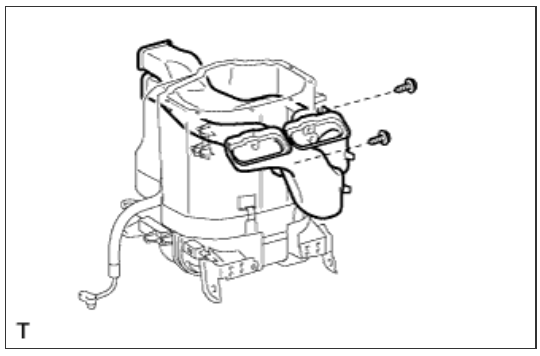
c. Install the liquid hose to the evaporator with the bolt.

Torque:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }



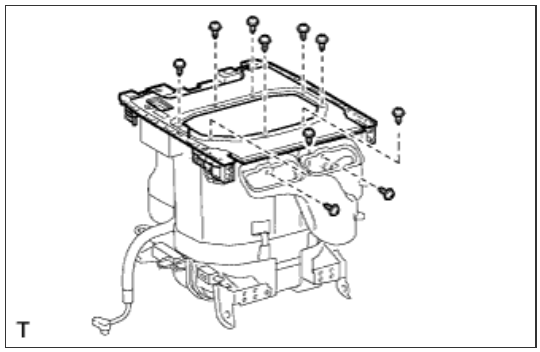
7. INSTALL COOLING UNIT CASE SUB-ASSEMBLY

a. Install the air duct to the case with the 2 screws.



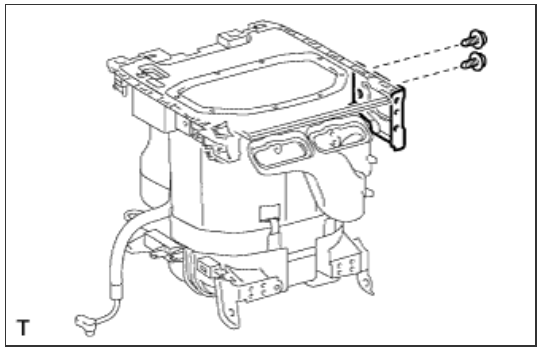
8. INSTALL COOLING BOX BASE

a. Install the cooling box base with the 10 screws.

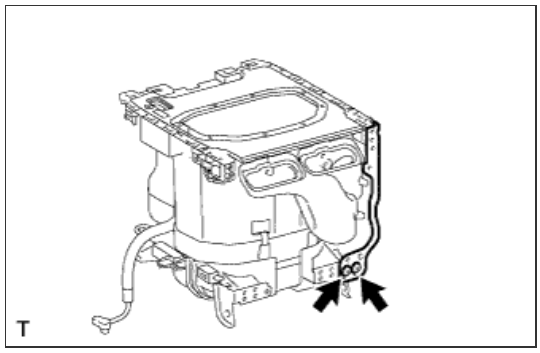


9. INSTALL COOLING BOX BRACKET

a. Install the bracket with the 2 screws.

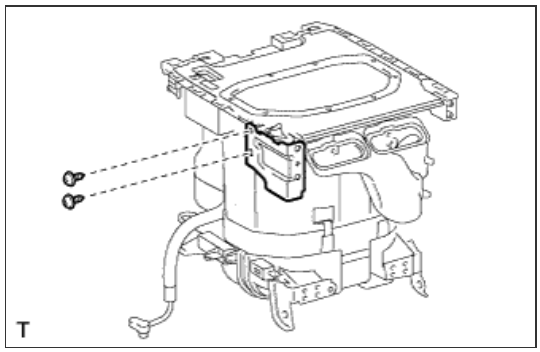


b. Install the mounting bracket with the 2 screws.

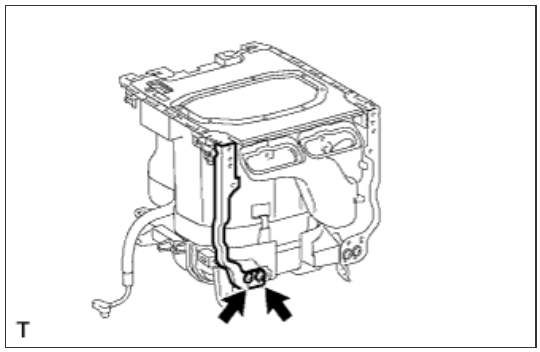


10. INSTALL NO. 2 COOLING BOX BRACKET

a. Install the bracket with the 2 screws.



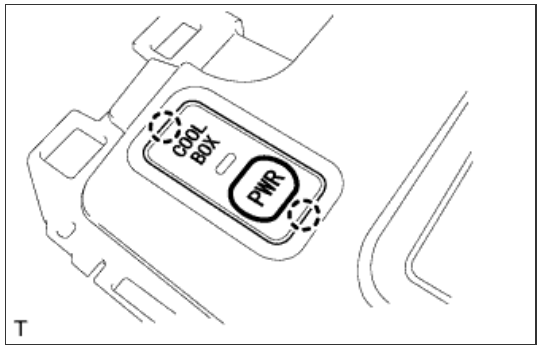
b. Install the mounting bracket with the 2 screws.



11. INSTALL COOLER CONTROL SWITCH SUB-ASSEMBLY

a. Connect the connector.

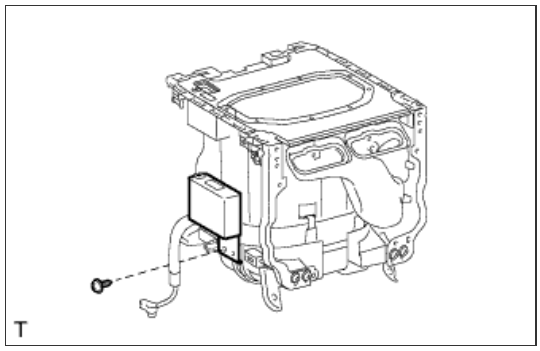
b. Attach the 2 claws to install the switch.



12. INSTALL AIR CONDITIONING AMPLIFIER ASSEMBLY

a. Install the amplifier with the screw.

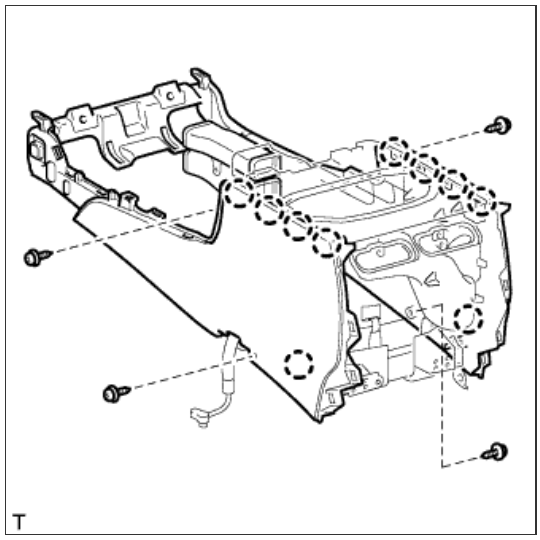
b. Connect the connector.



13. INSTALL COOLING BOX ASSEMBLY

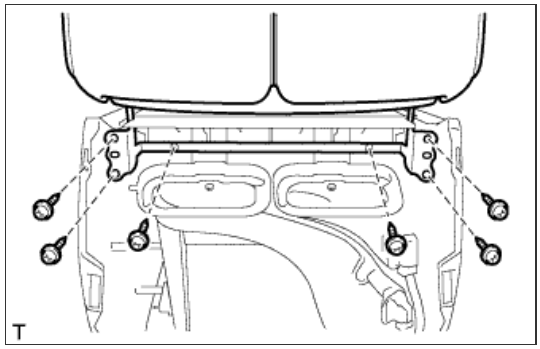
a. Attach the 10 claws to install the cooling box.

b. Install the 4 screws.



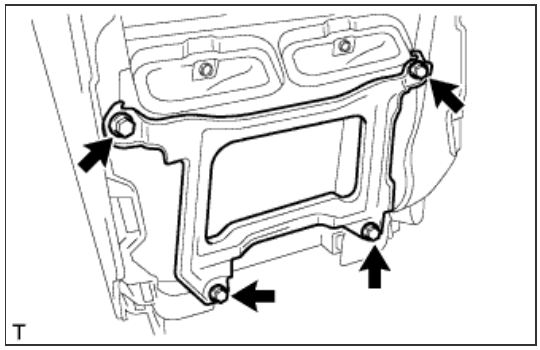
14. INSTALL CONSOLE COMPARTMENT DOOR SUB-ASSEMBLY

a. Install the door with the 6 screws.



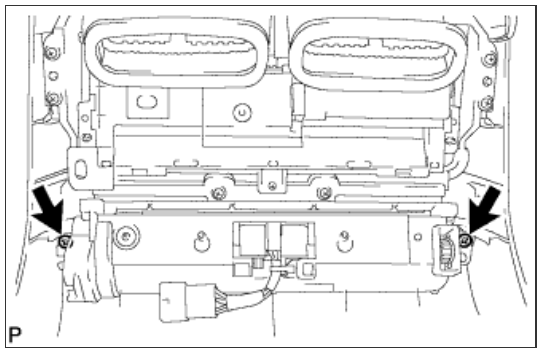
15. INSTALL REAR CONSOLE BOX MOUNTING BRACKET

a. Install the bracket with the 4 bolts.



16. INSTALL REMOTE CONTROL ADAPTOR ASSEMBLY (w/ Rear Seat Entertainment System)

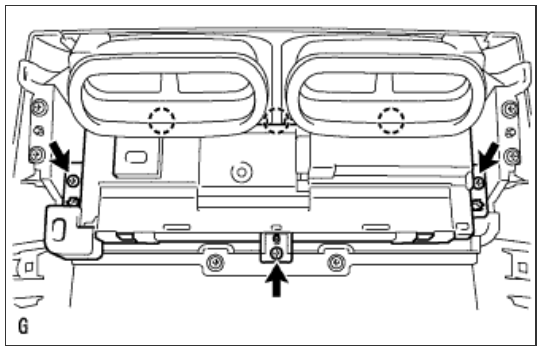
a. Install the adapter with the 2 screws.



17. INSTALL NO. 2 AIR CONDITIONING CONTROL ASSEMBLY

a. Attach the 3 claws to install the air conditioning control.

b. Install the 3 screws.

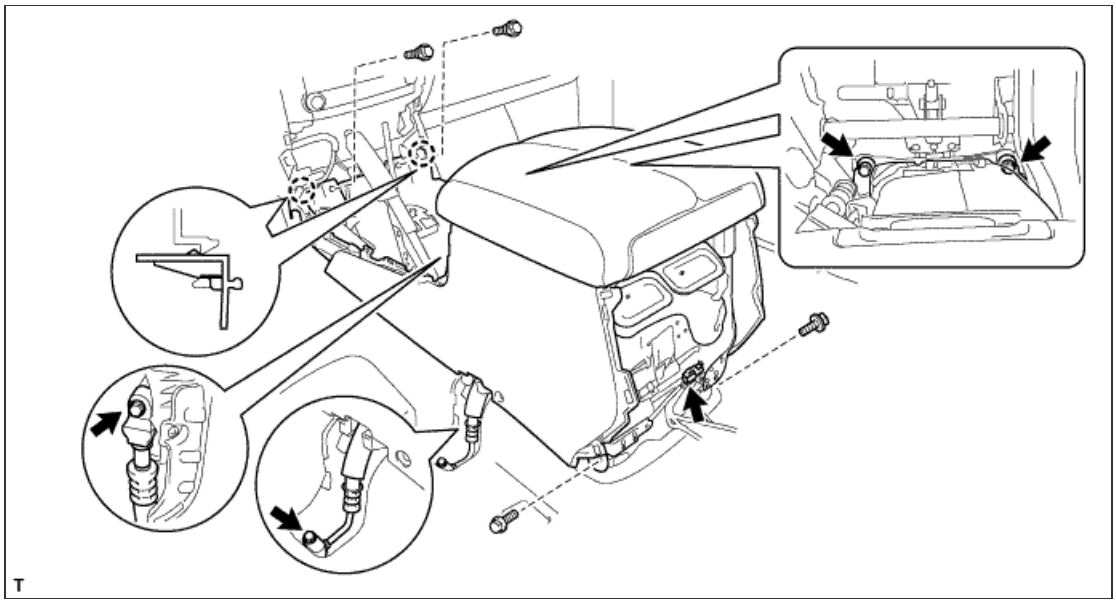


for Preparation Click here

HINT:

A bolt without a torque specification is shown in the standard bolt chart (Click here).

1. INSTALL COOLING BOX ASSEMBLY



a. Attach the 2 claws.

b. Connect the connector.

c. Sufficiently apply compressor oil to 2 new O-rings.

Compressor oil:
ND-OIL 8 or equivalent

d. Install the 2 O-rings to the 2 cooler pipes.

e. Connect the 2 cooler pipes with the 2 bolts.

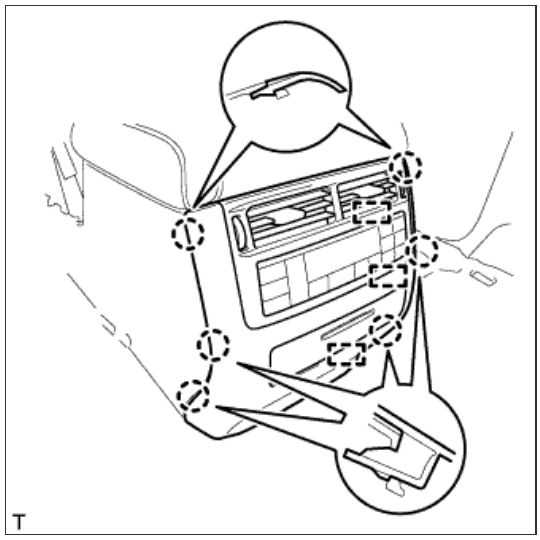
Torque:
9.8 N*m{ 100 kgf*cm , 87 in.*lbf }

f. Install the cooling box with the 4 bolts and 2 screws.

2. INSTALL REAR CONSOLE END PANEL SUB-ASSEMBLY

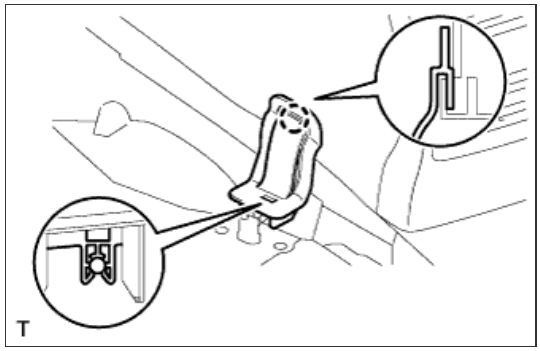
a. Connect the connectors and 3 clamps.

b. Attach the 6 claws to install the end panel.



3. INSTALL NO. 1 COOLER COVER

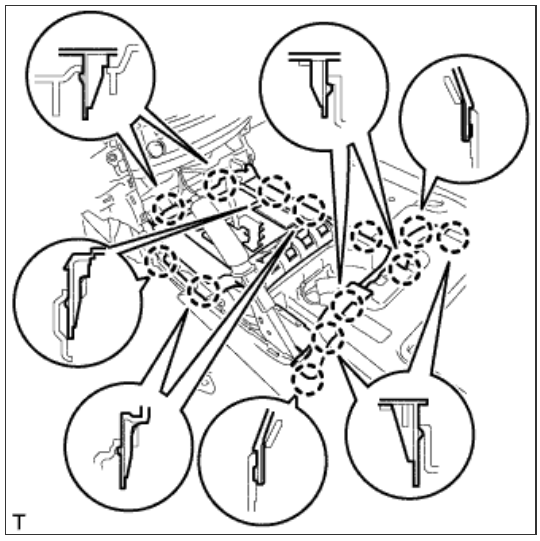
a. Attach the claw on the upper part of the cooler cover, and then attach the clamp on the lower part of the cooler cover to install it.



4. INSTALL UPPER CONSOLE PANEL SUB-ASSEMBLY

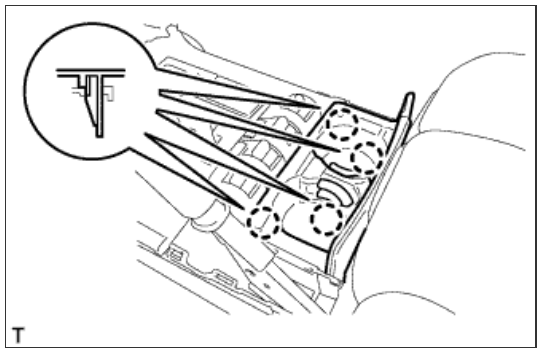
a. Connect the connectors.

b. Attach the 13 claws to install the console panel.



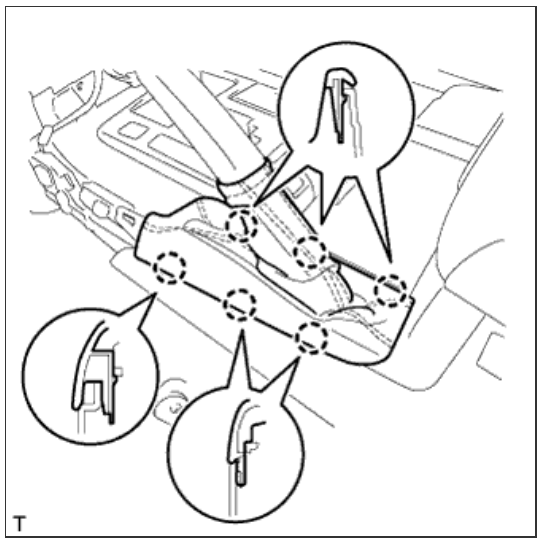
5. INSTALL CONSOLE CUP HOLDER BOX SUB-ASSEMBLY

a. Attach the 4 claws to install the box.



6. INSTALL PARKING BRAKE HOLE COVER

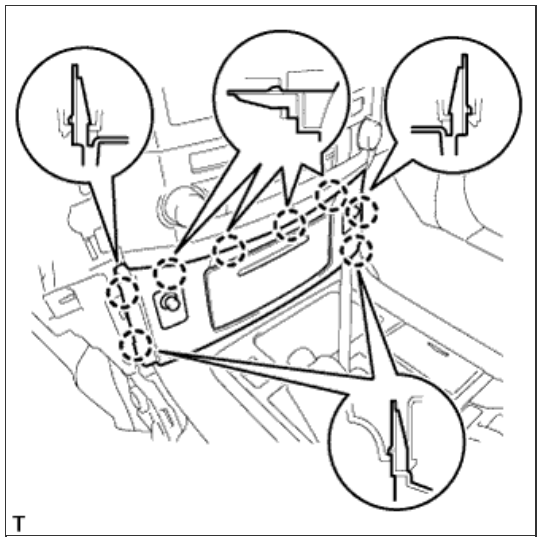
a. Attach the 6 claws to install the cover.



7. INSTALL LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

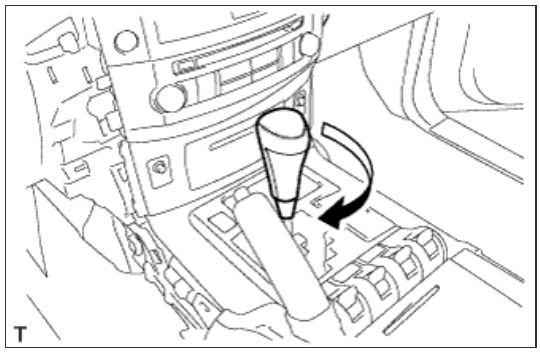
a. Connect the connectors.

b. Attach the 8 claws to install the panel.



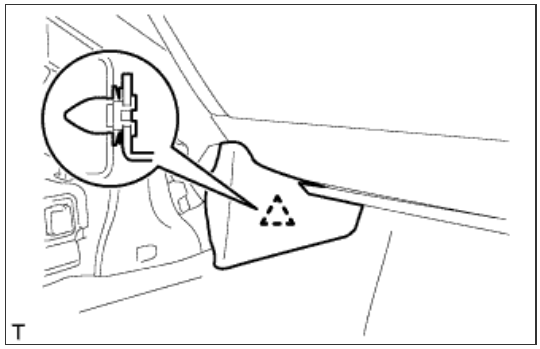
8. INSTALL SHIFT LEVER KNOB SUB-ASSEMBLY

a. Install the shift lever knob and twist it in the direction indicated by the arrow.



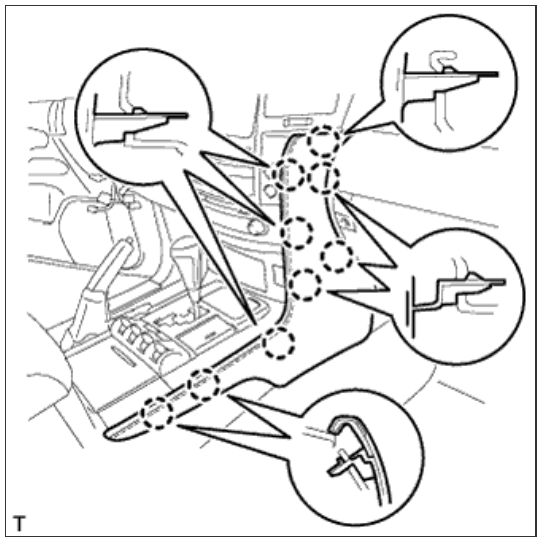
9. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER RH

a. Attach the clip to install the cover.



10. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

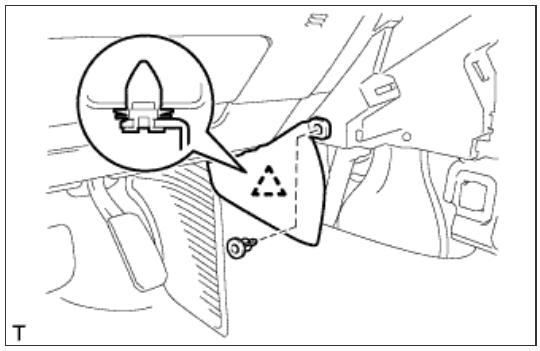
a. Attach the 9 claws to install the panel pad.



11. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Attach the clip to install the cover.

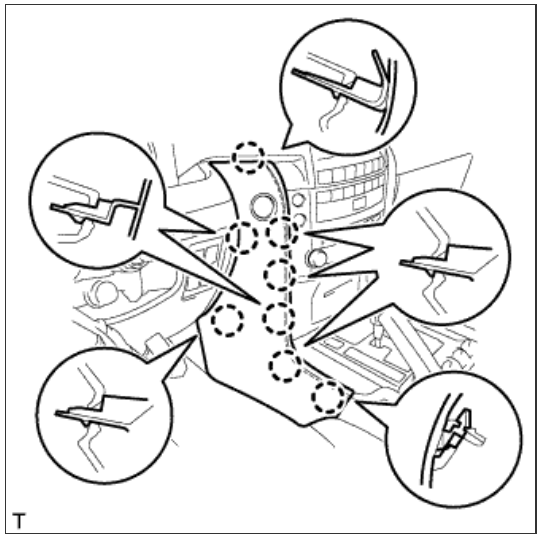
b. Install the clip.



12. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Connect the connector.

b. Attach the 8 claws to install the panel pad.



13. INSTALL FRONT SEAT ASSEMBLY LH

a. Install the front seat assembly LH (Click here).

14. CHARGE REFRIGERANT

SST

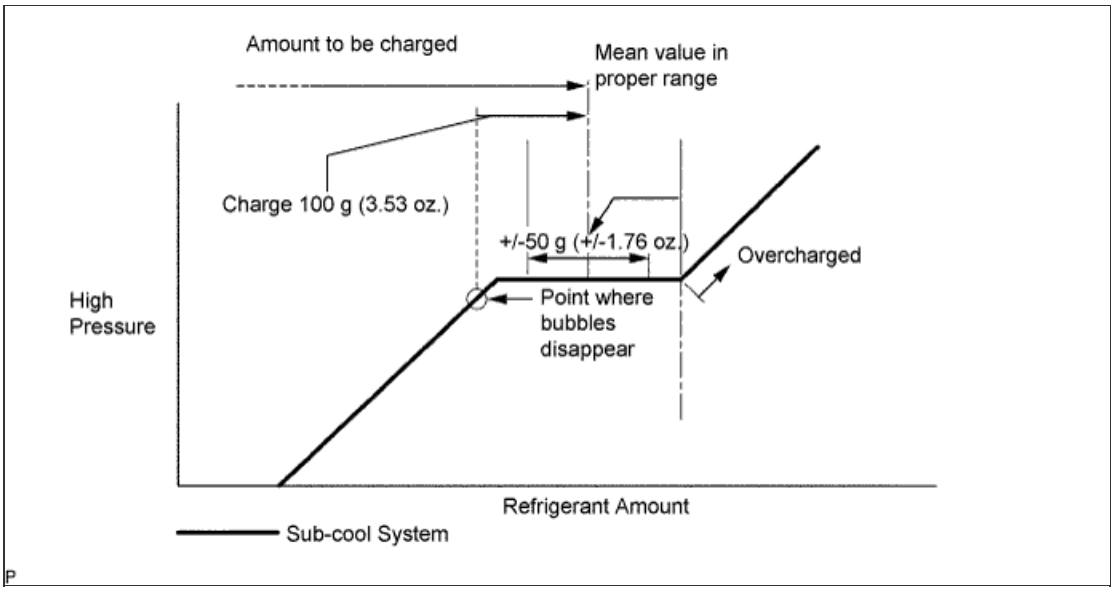
09985-20010 (09985-02130, 09985-02150, 09985-02090, 09985-02110, 09985-02010, 09985-02050, 09985-02060, 09985-02070)

a. Perform vacuum purging using a vacuum pump.

b. Charge refrigerant HFC-134a (R134a).

Standard:

Condenser Core Thickness	Cool Box	Refrigerant Charging Amount
22 mm (0.866 in.)	w/ Cool Box	1010 +/-30 g (35.6 +/-1.1 oz.)
	w/o Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
16 mm (0.630 in.)	w/ Cool Box	970 +/-30 g (34.2 +/-1.1 oz.)
	w/o Cool Box	920 +/-30 g (32.5 +/-1.1 oz.)



NOTICE:

- **Do not operate the cooler compressor before charging refrigerant as the cooler compressor will not work properly without any refrigerant, and will overheat.**
- **Approximately 100 g (3.53 oz.) of refrigerant may need to be charged after bubbles disappear. The refrigerant amount should be checked by measuring its quantity, and not with the sight glass.**

15. WARM UP ENGINE

a. Warm up the engine at less than 1850 rpm for 2 minutes or more after charging the refrigerant.

NOTICE:

Be sure to warm up the compressor when turning the A/C switch on after removing and installing the cooler refrigerant lines (including the compressor), to prevent damage to the compressor.

16. CHECK FOR REFRIGERANT GAS LEAK

a. After recharging the refrigerant gas, check for refrigerant gas leakage using a halogen leak detector.

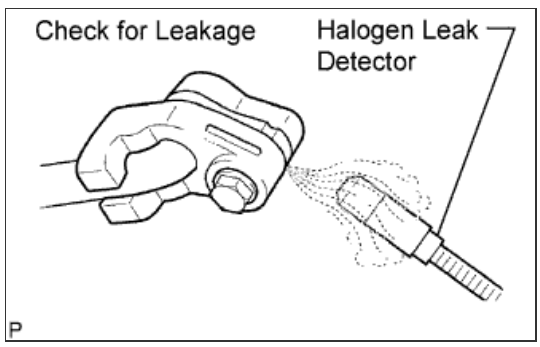
b. Perform the operation under these conditions:

- Stop the engine.
- Secure good ventilation (the halogen leak detector may react to volatile gases other than refrigerant, such as evaporated gasoline or exhaust gas).
- Repeat the test 2 or 3 times.
- Make sure that some refrigerant remains in the refrigeration system. When compressor is off: approximately 392 to 588 kPa (4.0 to 6.0 kgf/cm^2, 57 to 85 psi).

c. Using a halogen leak detector, check the refrigerant line for leakage.

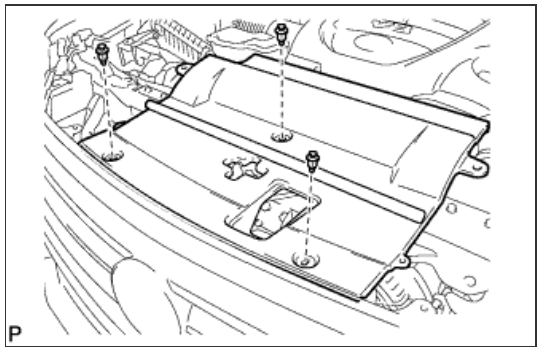
d. If a gas leak is not detected on the drain hose, remove the blower motor control (blower resistor) from the cooling unit. Insert the halogen leak detector sensor into the unit and perform the test.

e. Disconnect the connector and wait for approximately 20 minutes. Bring the halogen leak detector close to the pressure switch and perform the test.



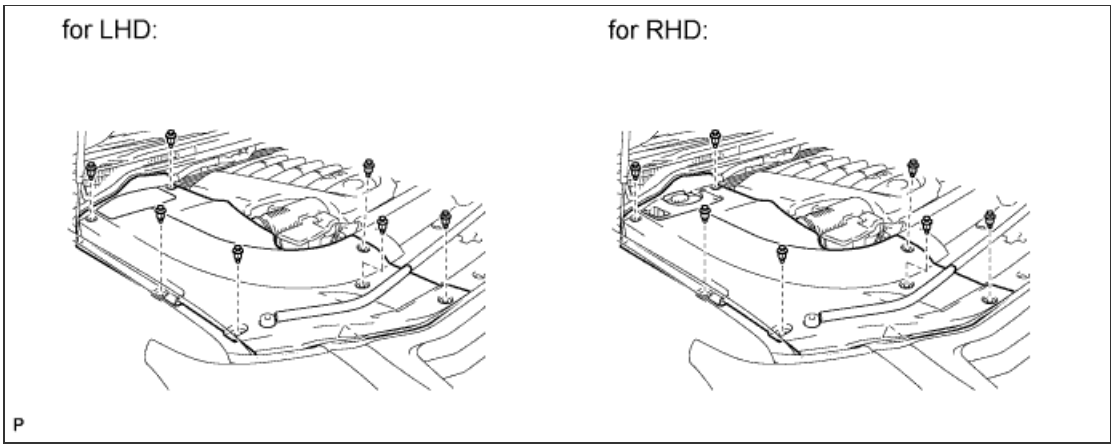
17. INSTALL UPPER RADIATOR SUPPORT SEAL

a. Install the upper radiator support seal with the 3 clips.



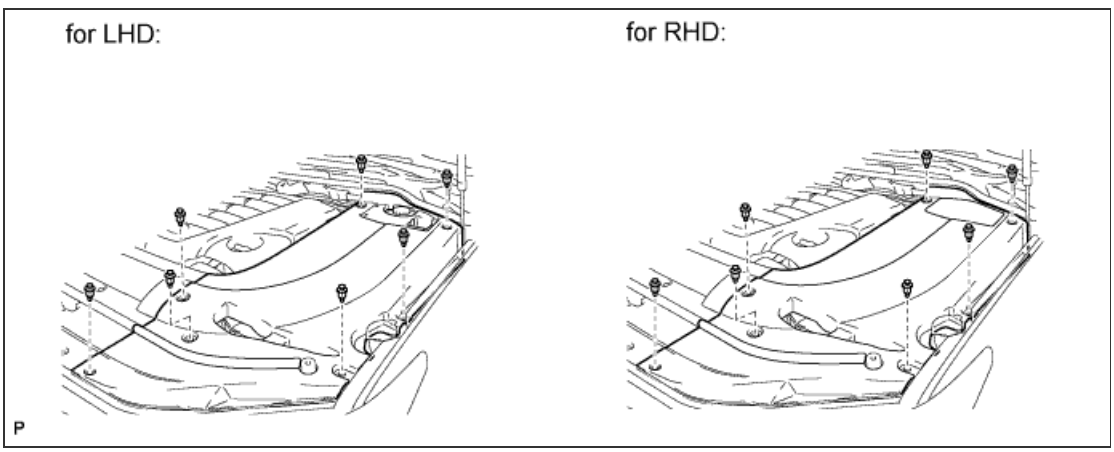
18. INSTALL ENGINE ROOM SIDE COVER RH

a. Install the engine room side cover with the 7 clips.

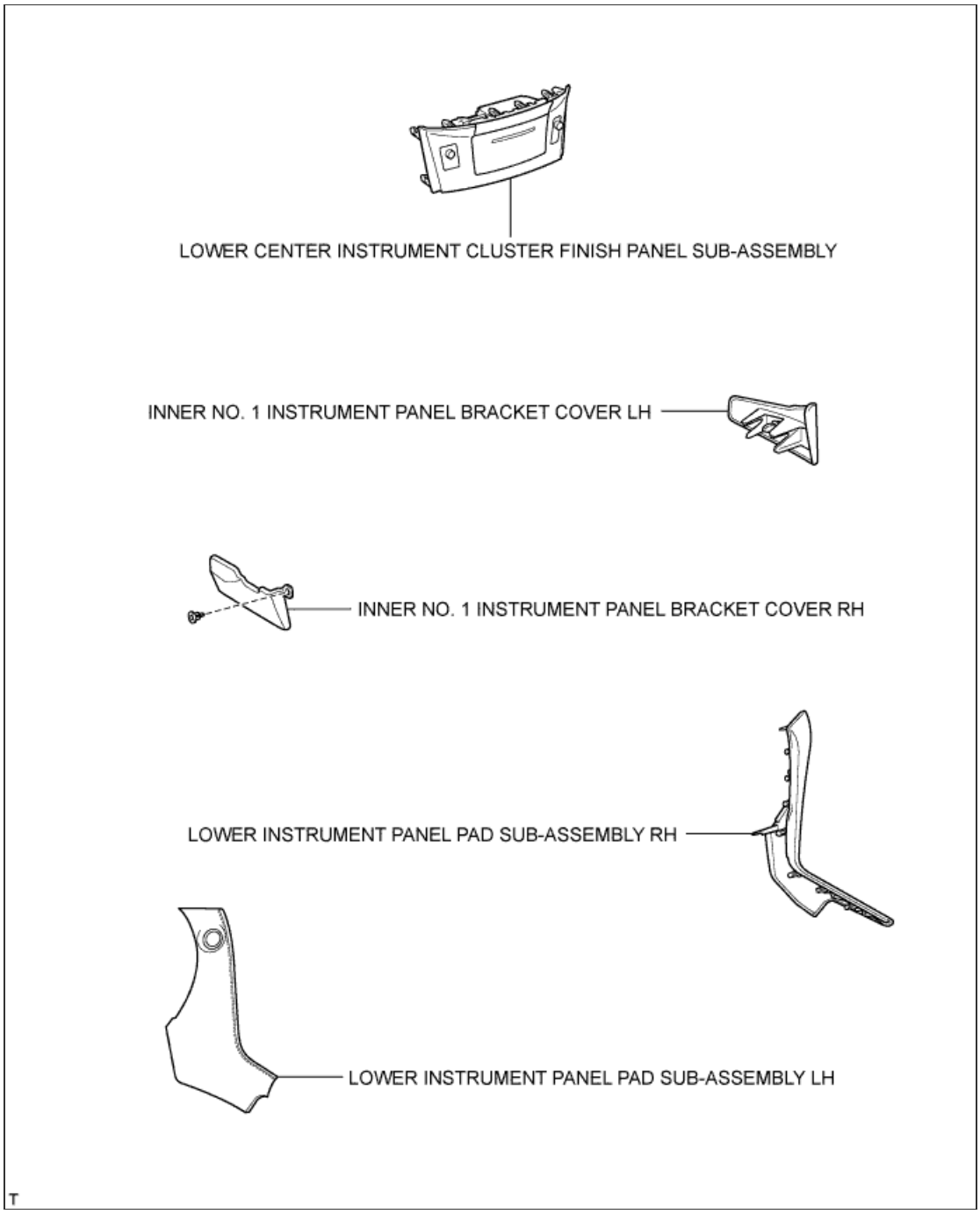


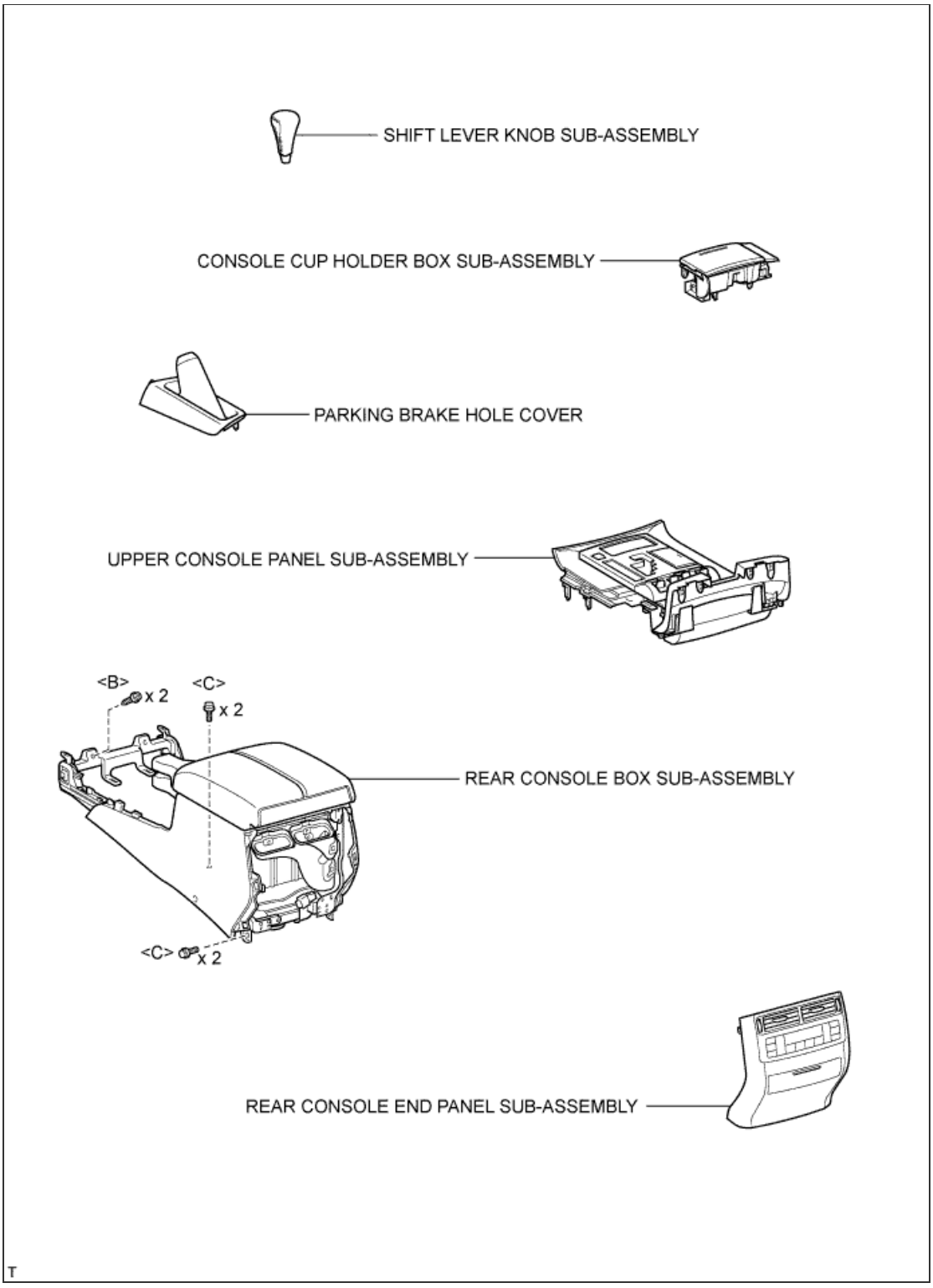
19. INSTALL ENGINE ROOM SIDE COVER LH

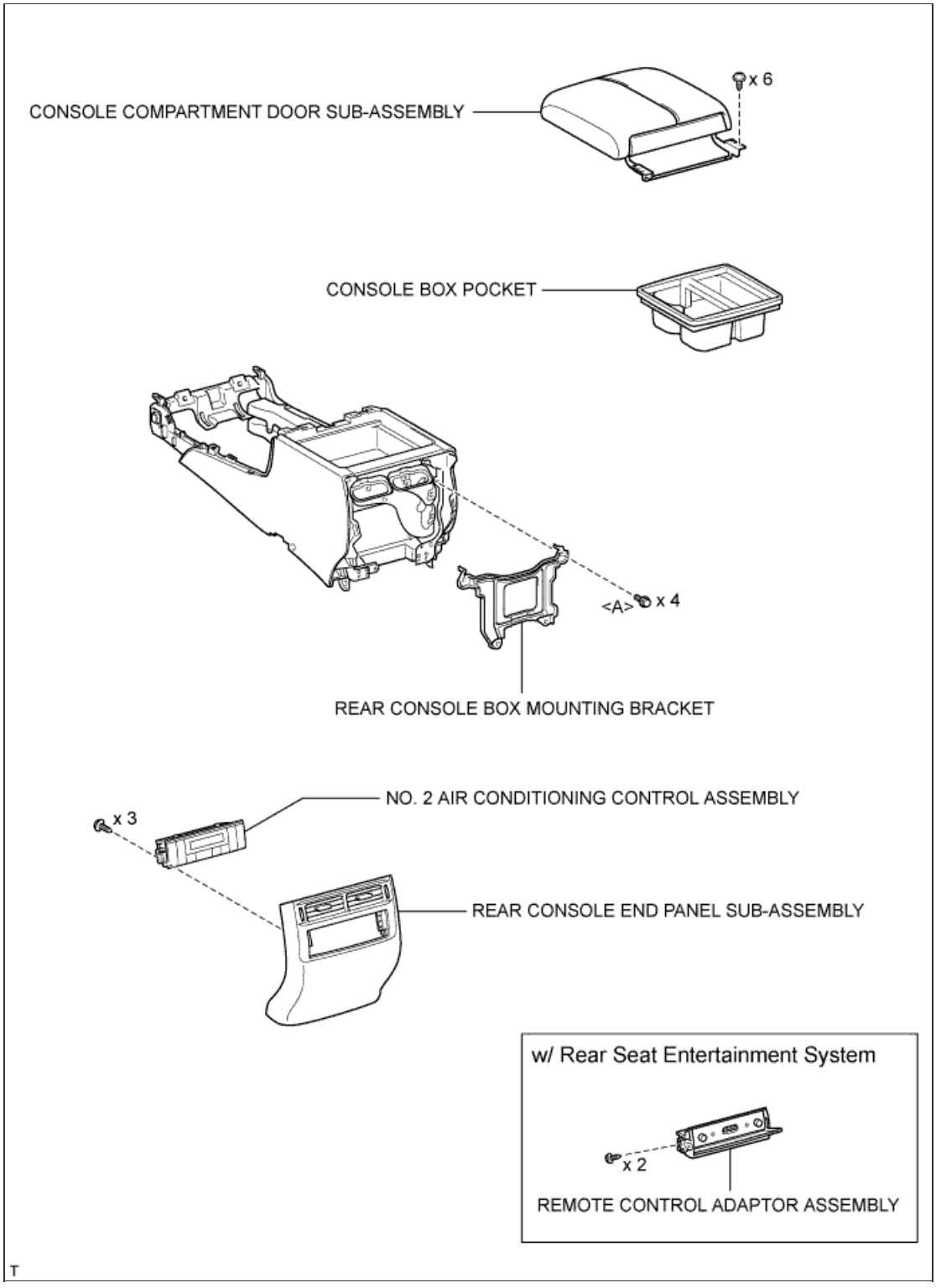
a. Install the engine room side cover with the 7 clips.



for Preparation Click here




SHIFT LEVER KNOB SUB-ASSEMBLY
CONSOLE CUP HOLDER BOX SUB-ASSEMBLY
PARKING BRAKE HOLE COVER
UPPER CONSOLE PANEL SUB-ASSEMBLY
<B>
x 2
<C>
x 2
REAR CONSOLE BOX SUB-ASSEMBLY
<C>
x 2
REAR CONSOLE END PANEL SUB-ASSEMBLY
T

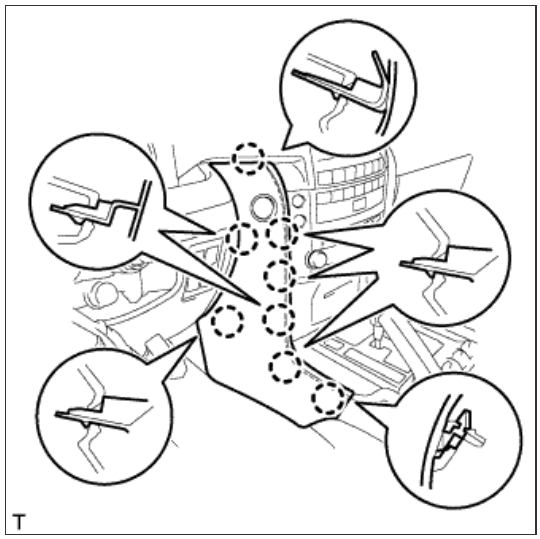

CONSOLE COMPARTMENT DOOR SUB-ASSEMBLY
x 6
CONSOLE BOX POCKET
<A>
x 4
REAR CONSOLE BOX MOUNTING BRACKET
x 3
NO. 2 AIR CONDITIONING CONTROL ASSEMBLY
REAR CONSOLE END PANEL SUB-ASSEMBLY
w/ Rear Seat Entertainment System
x 2
REMOTE CONTROL ADAPTOR ASSEMBLY
T

for Preparation Click here

1. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Detach the 8 claws.

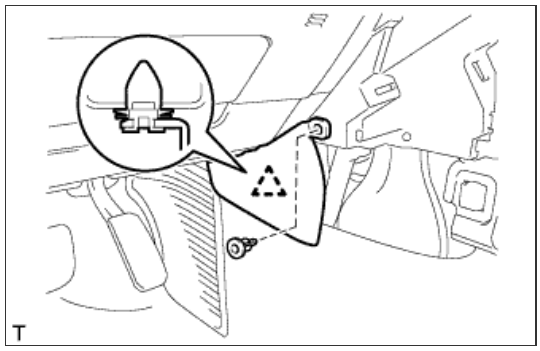
b. Disconnect the connector and remove the panel pad.



2. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

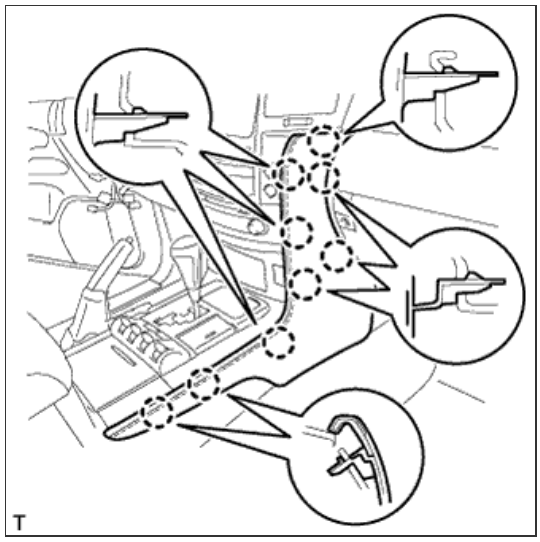
a. Remove the clip.

b. Detach the clip and remove the cover.



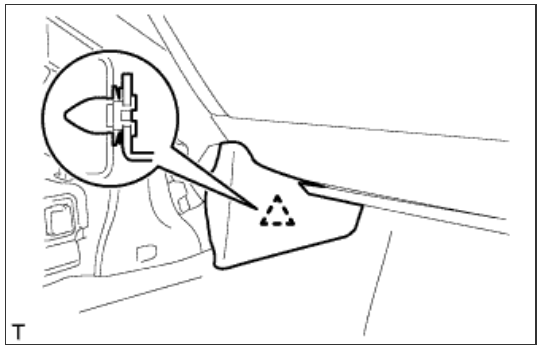
3. REMOVE LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

a. Detach the 9 claws and remove the panel pad.



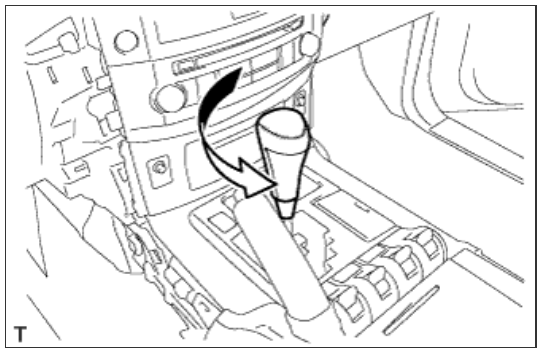
4. REMOVE INNER NO. 1 INSTRUMENT PANEL BRACKET COVER RH

a. Detach the clip and remove the cover.



5. REMOVE SHIFT LEVER KNOB SUB-ASSEMBLY

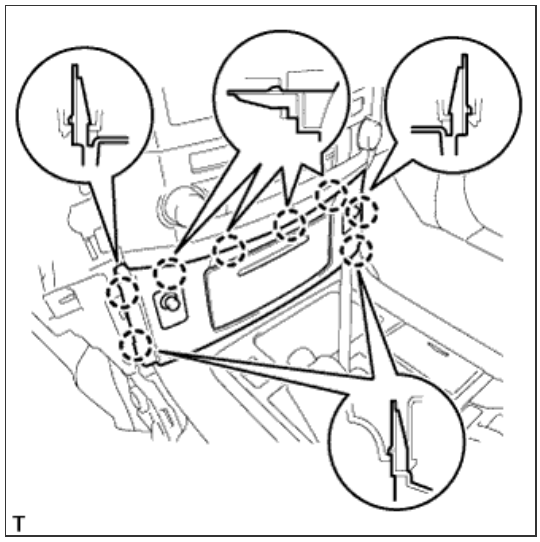
a. Twist the shift lever knob in the direction indicated by the arrow and remove it.



6. REMOVE LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

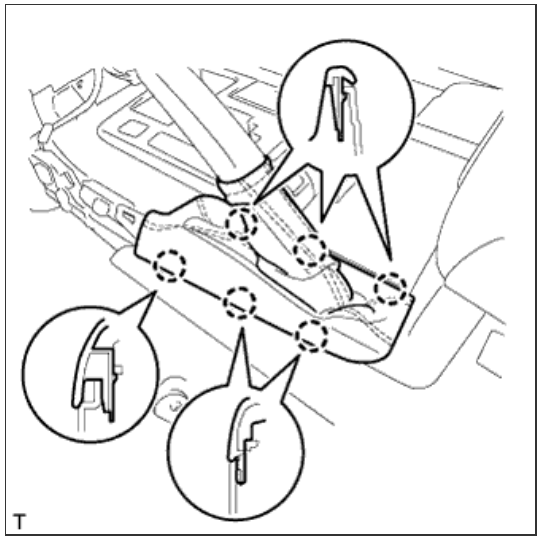
a. Detach the 8 claws.

b. Disconnect the connectors and remove the panel.



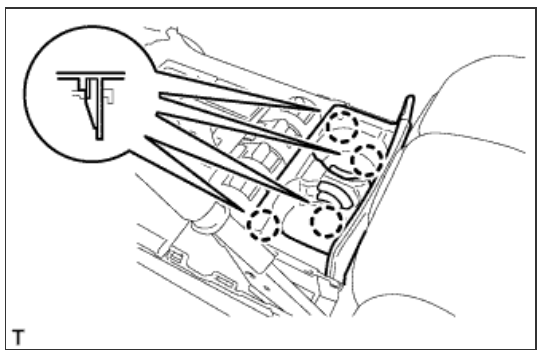
7. REMOVE PARKING BRAKE HOLE COVER

a. Detach the 6 claws and remove the cover.



8. REMOVE CONSOLE CUP HOLDER BOX SUB-ASSEMBLY

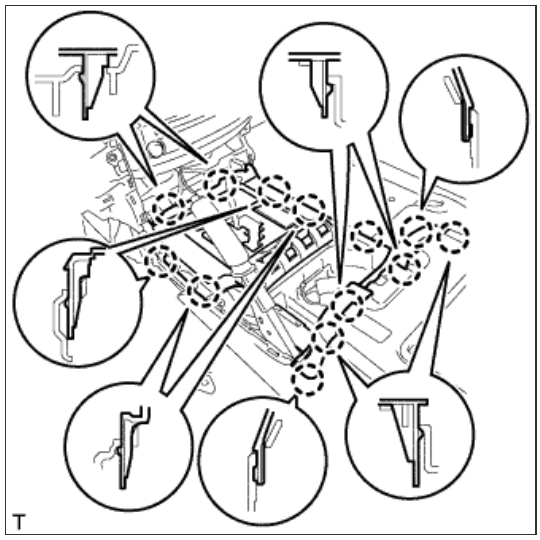
a. Detach the 4 claws and remove the box.



9. REMOVE UPPER CONSOLE PANEL SUB-ASSEMBLY

a. Detach the 13 claws.

b. Disconnect the connectors and remove the console panel.

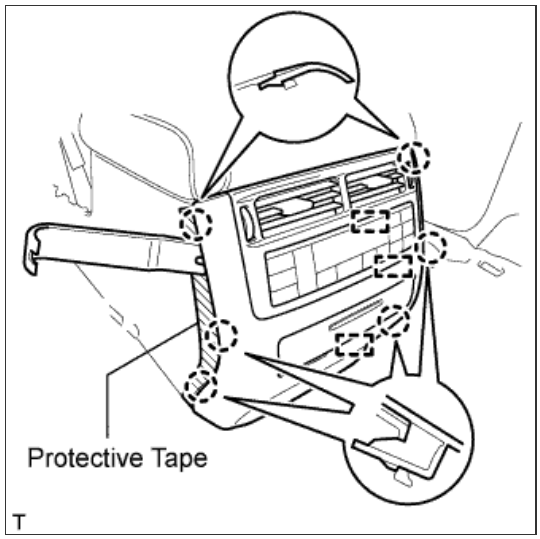


10. REMOVE REAR CONSOLE END PANEL SUB-ASSEMBLY

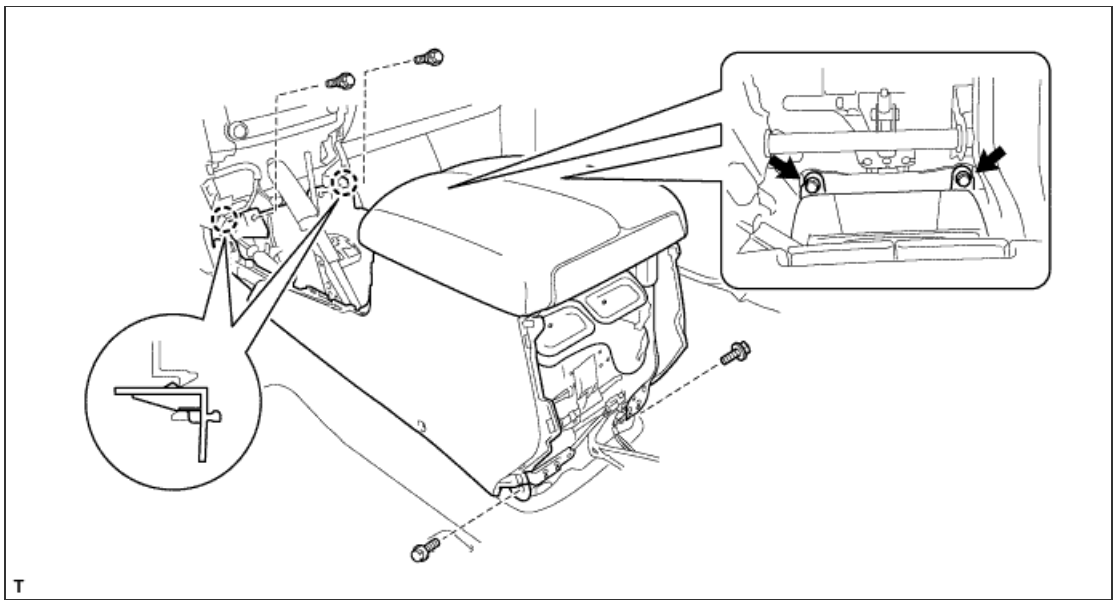
a. Place protective tape as shown in the illustration.

b. Using a moulding remover, detach the 6 claws.

c. Remove the end panel and disconnect the connectors and 3 clamps.



11. REMOVE REAR CONSOLE BOX SUB-ASSEMBLY



a. Remove the 4 bolts and 2 screws.

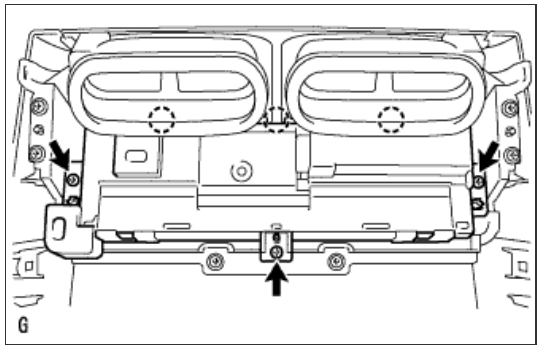
b. Detach the 2 claws and remove the console box.

for Preparation Click here

1. REMOVE NO. 2 AIR CONDITIONING CONTROL ASSEMBLY

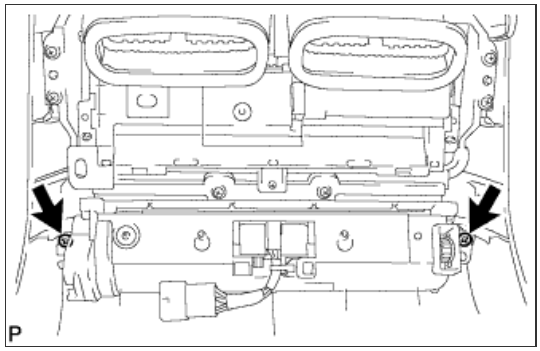
a. Remove the 3 screws.

b. Detach the 3 claws and remove the air conditioning control.



2. REMOVE REMOTE CONTROL ADAPTOR ASSEMBLY (w/ Rear Seat Entertainment System)

a. Remove the 2 screws and adapter.

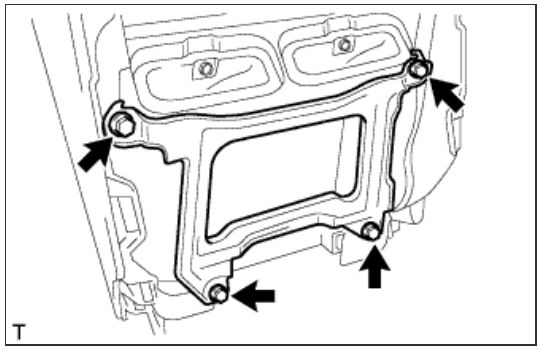


3. REMOVE CONSOLE BOX POCKET

a. Remove the box pocket.

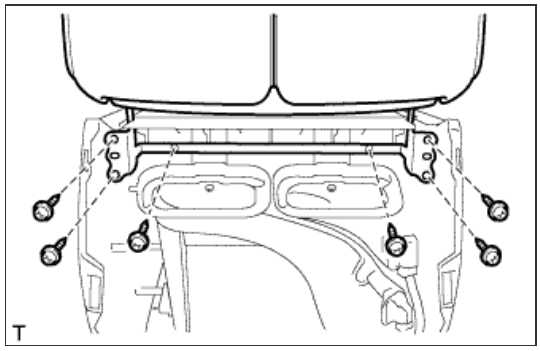
4. REMOVE REAR CONSOLE BOX MOUNTING BRACKET

a. Remove the 4 bolts and bracket.



5. REMOVE CONSOLE COMPARTMENT DOOR SUB-ASSEMBLY

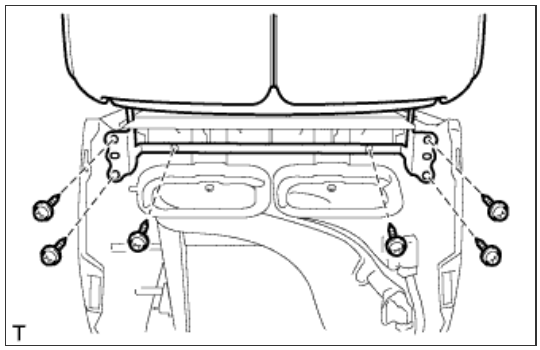
a. Remove the 6 screws and door.



for Preparation Click here

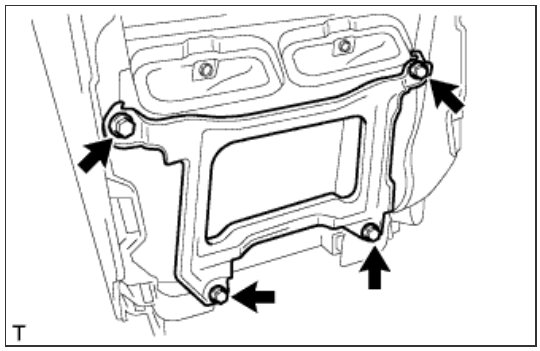
1. INSTALL CONSOLE COMPARTMENT DOOR SUB-ASSEMBLY

a. Install the door with the 6 screws.



2. INSTALL REAR CONSOLE BOX MOUNTING BRACKET

a. Install the bracket with the 4 bolts.

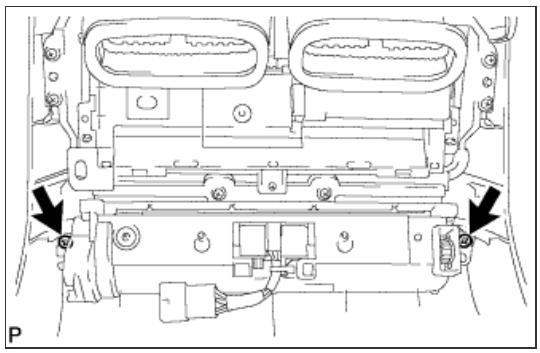


3. INSTALL CONSOLE BOX POCKET

a. Install the box pocket.

4. INSTALL REMOTE CONTROL ADAPTOR ASSEMBLY (w/ Rear Seat Entertainment System)

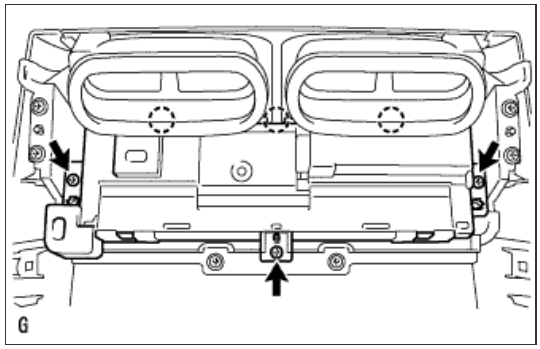
a. Install the adapter with the 2 screws.



5. INSTALL NO. 2 AIR CONDITIONING CONTROL ASSEMBLY

a. Attach the 3 claws to install the air conditioning control.

b. Install the 3 screws.

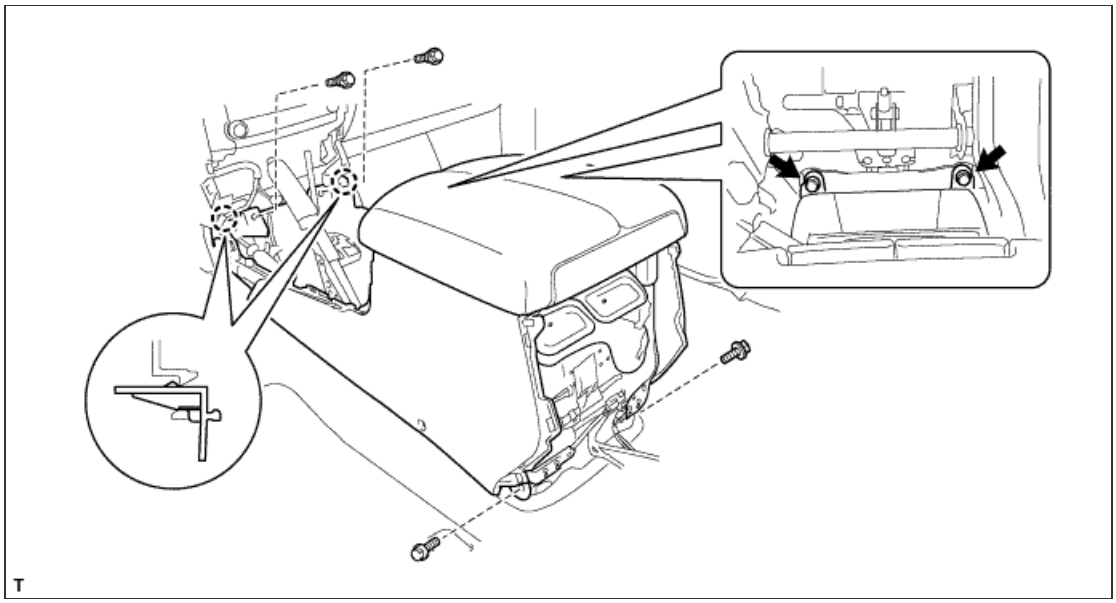


for Preparation Click here

HINT:

A bolt without a torque specification is shown in the standard bolt chart (Click here).

1. INSTALL REAR CONSOLE BOX SUB-ASSEMBLY



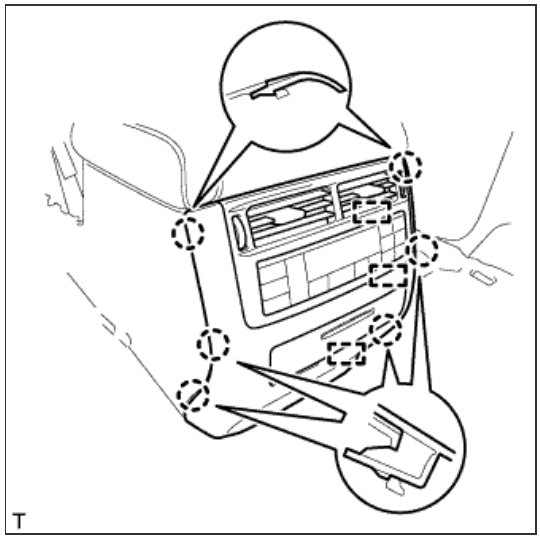
a. Attach the 2 claws.

b. Install the console box with the 4 bolts and 2 screws.

2. INSTALL REAR CONSOLE END PANEL SUB-ASSEMBLY

a. Connect the connectors and 3 clamps.

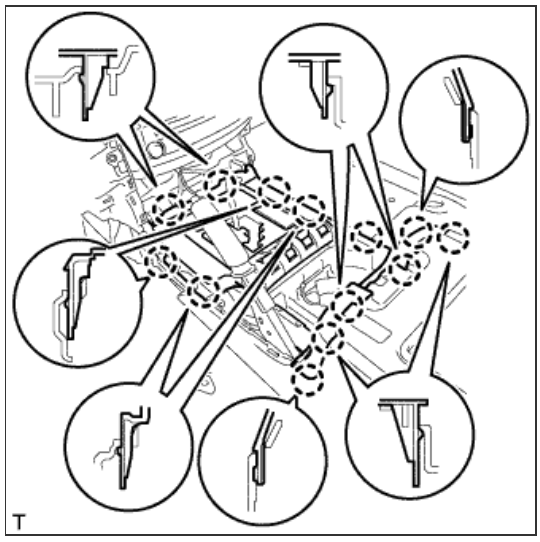
b. Attach the 6 claws to install the end panel.



3. INSTALL UPPER CONSOLE PANEL SUB-ASSEMBLY

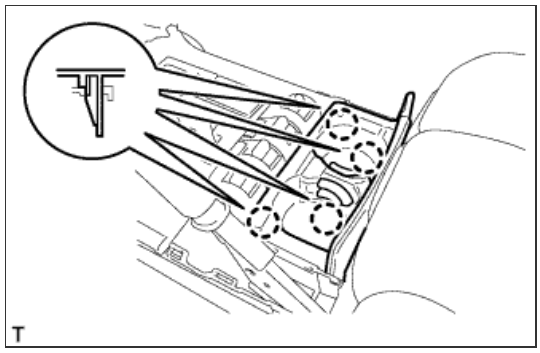
a. Connect the connectors.

b. Attach the 13 claws to install the console panel.



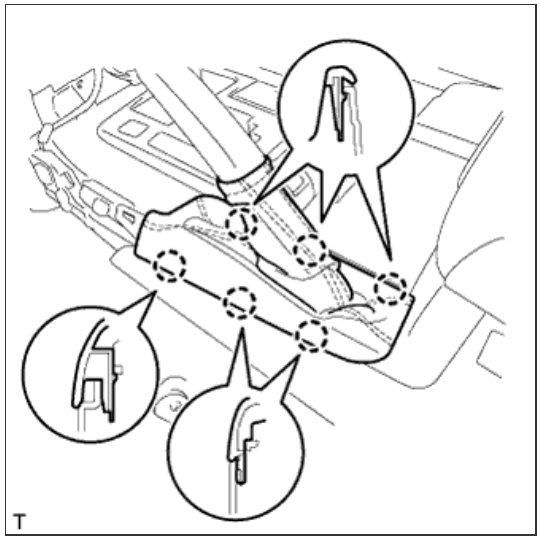
4. INSTALL CONSOLE CUP HOLDER BOX SUB-ASSEMBLY

a. Attach the 4 claws to install the box.



5. INSTALL PARKING BRAKE HOLE COVER

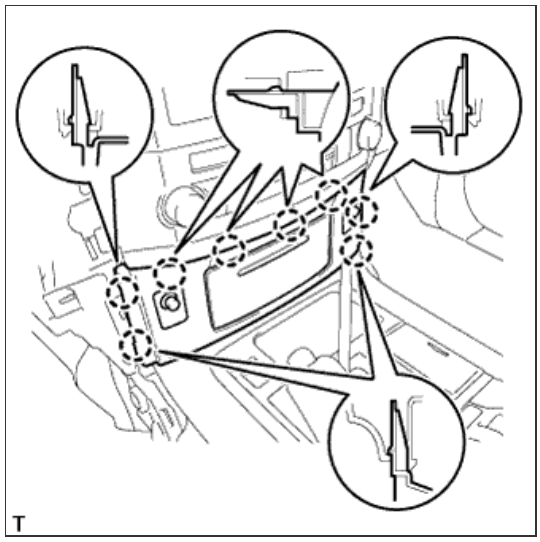
a. Attach the 6 claws to install the cover.



6. INSTALL LOWER CENTER INSTRUMENT CLUSTER FINISH PANEL SUB-ASSEMBLY

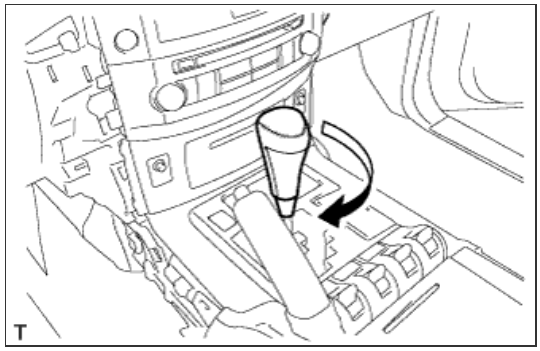
a. Connect the connectors.

b. Attach the 8 claws to install the panel.



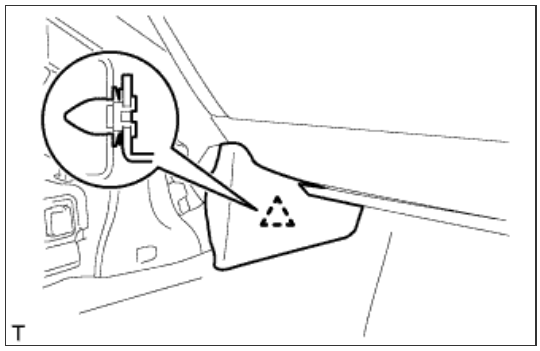
7. INSTALL SHIFT LEVER KNOB SUB-ASSEMBLY

a. Install the shift lever knob and twist it in the direction indicated by the arrow.



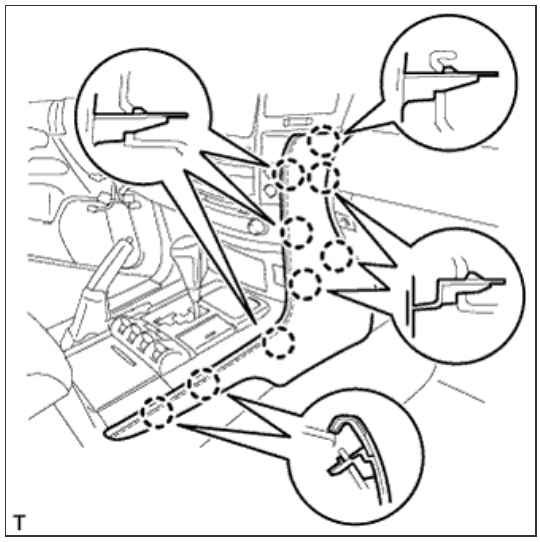
8. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER RH

a. Attach the clip to install the cover.



9. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY RH

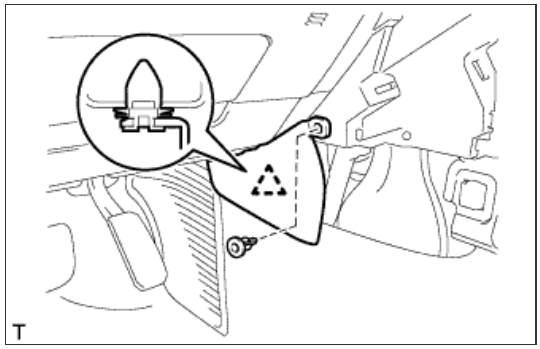
a. Attach the 9 claws to install the panel pad.



10. INSTALL INNER NO. 1 INSTRUMENT PANEL BRACKET COVER LH

a. Attach the clip to install the cover.

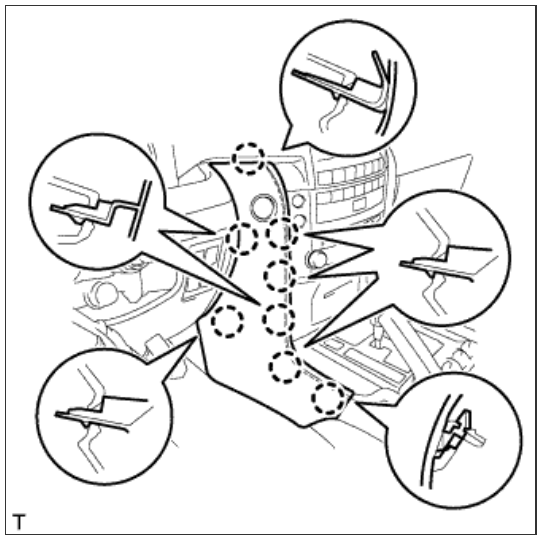
b. Install the clip.



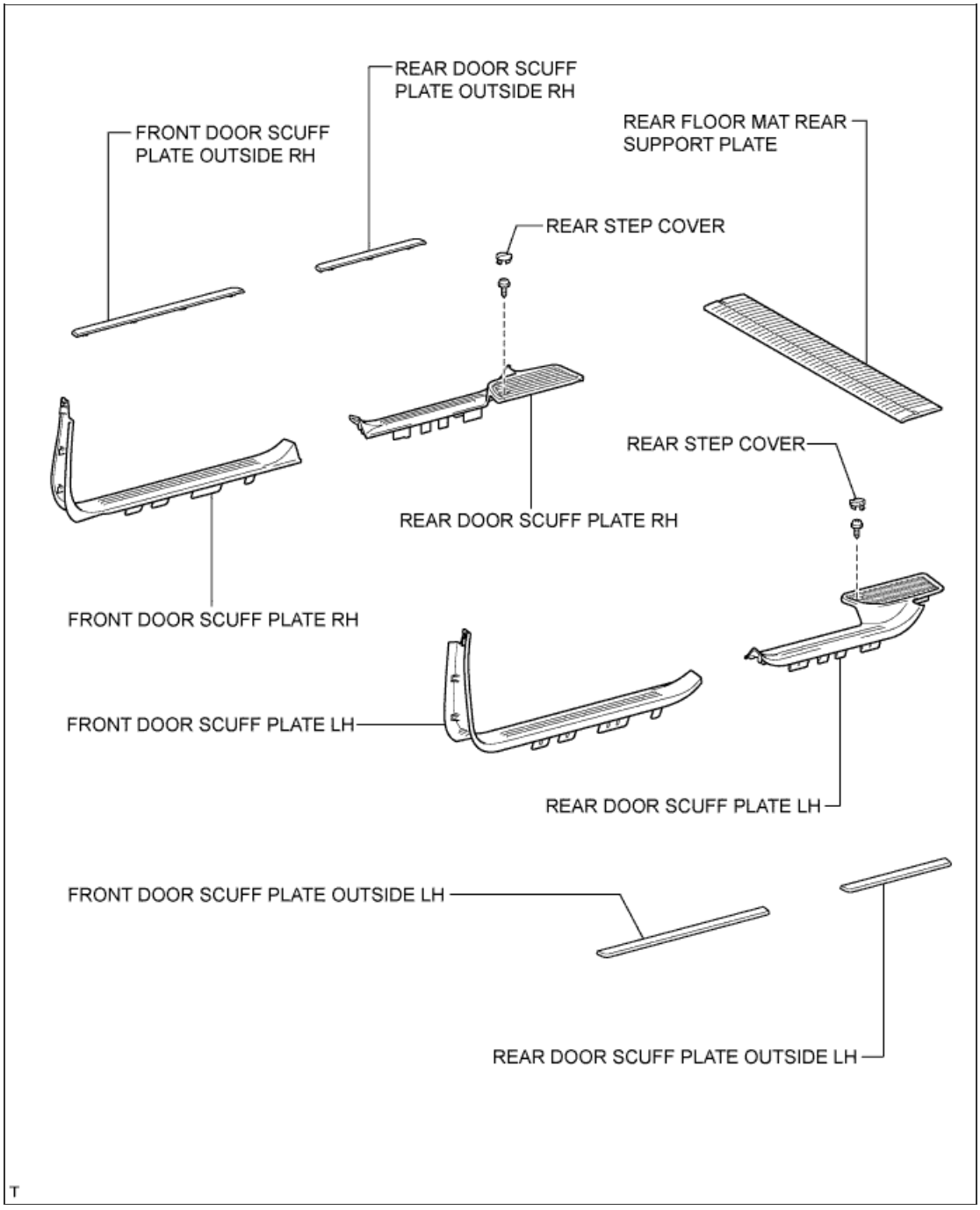
11. INSTALL LOWER INSTRUMENT PANEL PAD SUB-ASSEMBLY LH

a. Connect the connector.

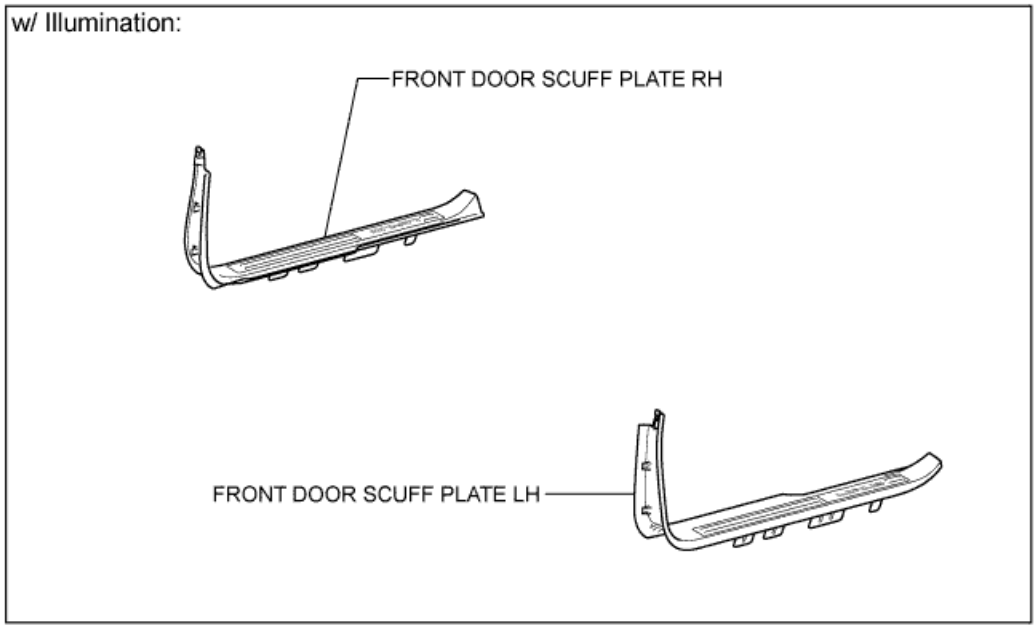
b. Attach the 8 claws to install the panel pad.



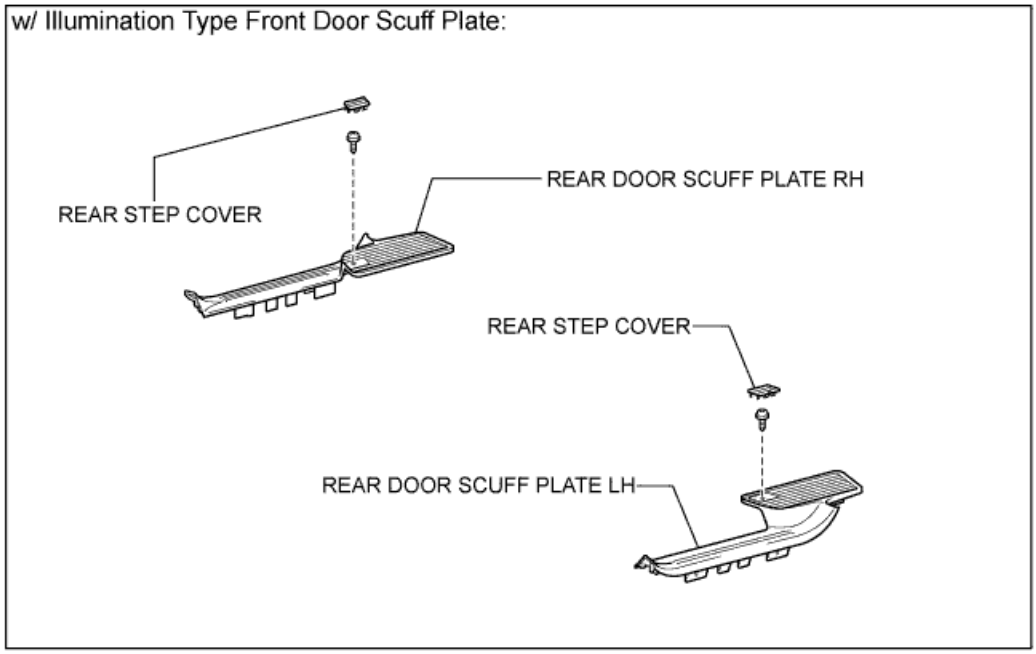
for Preparation Click here



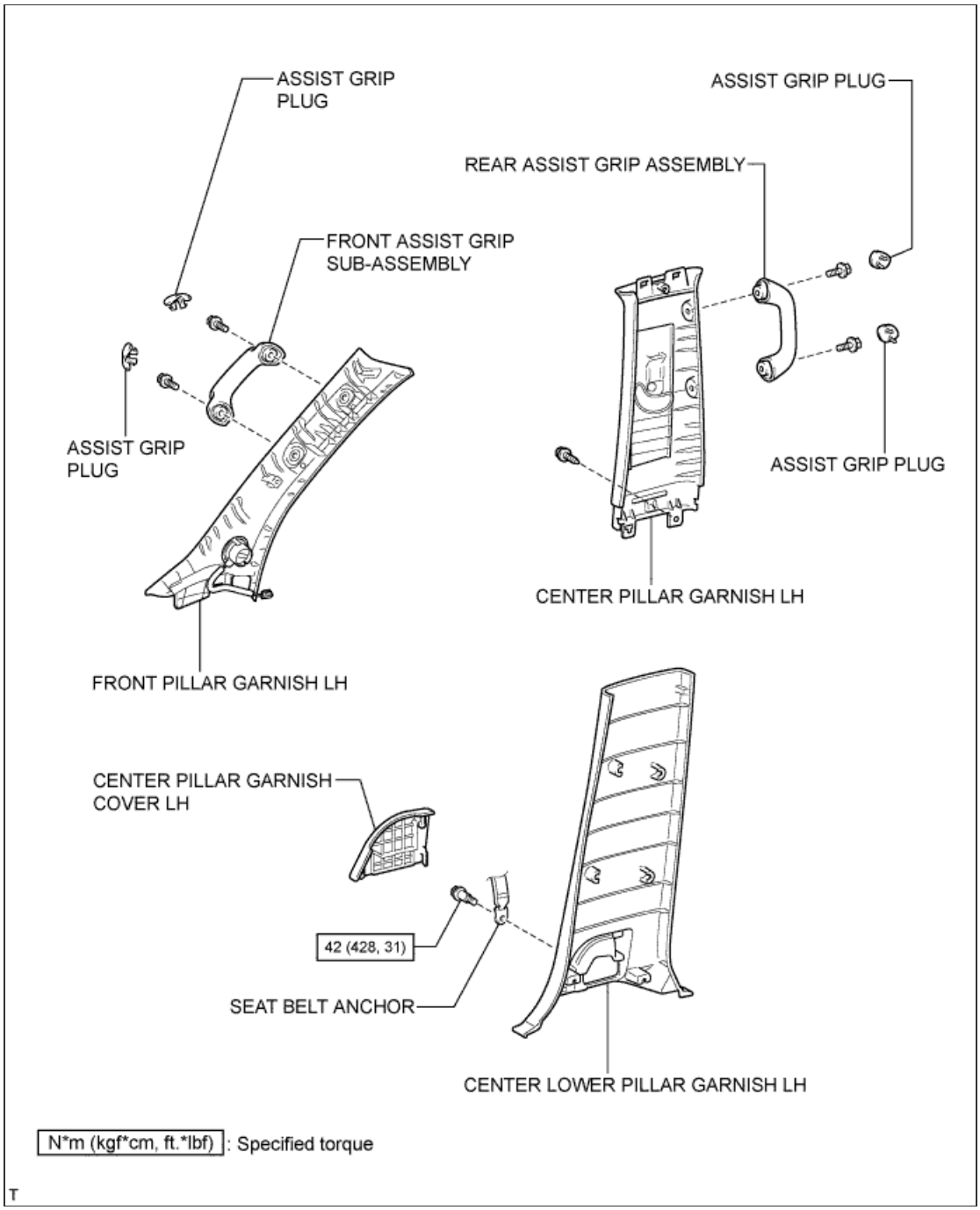
w/ Illumination:

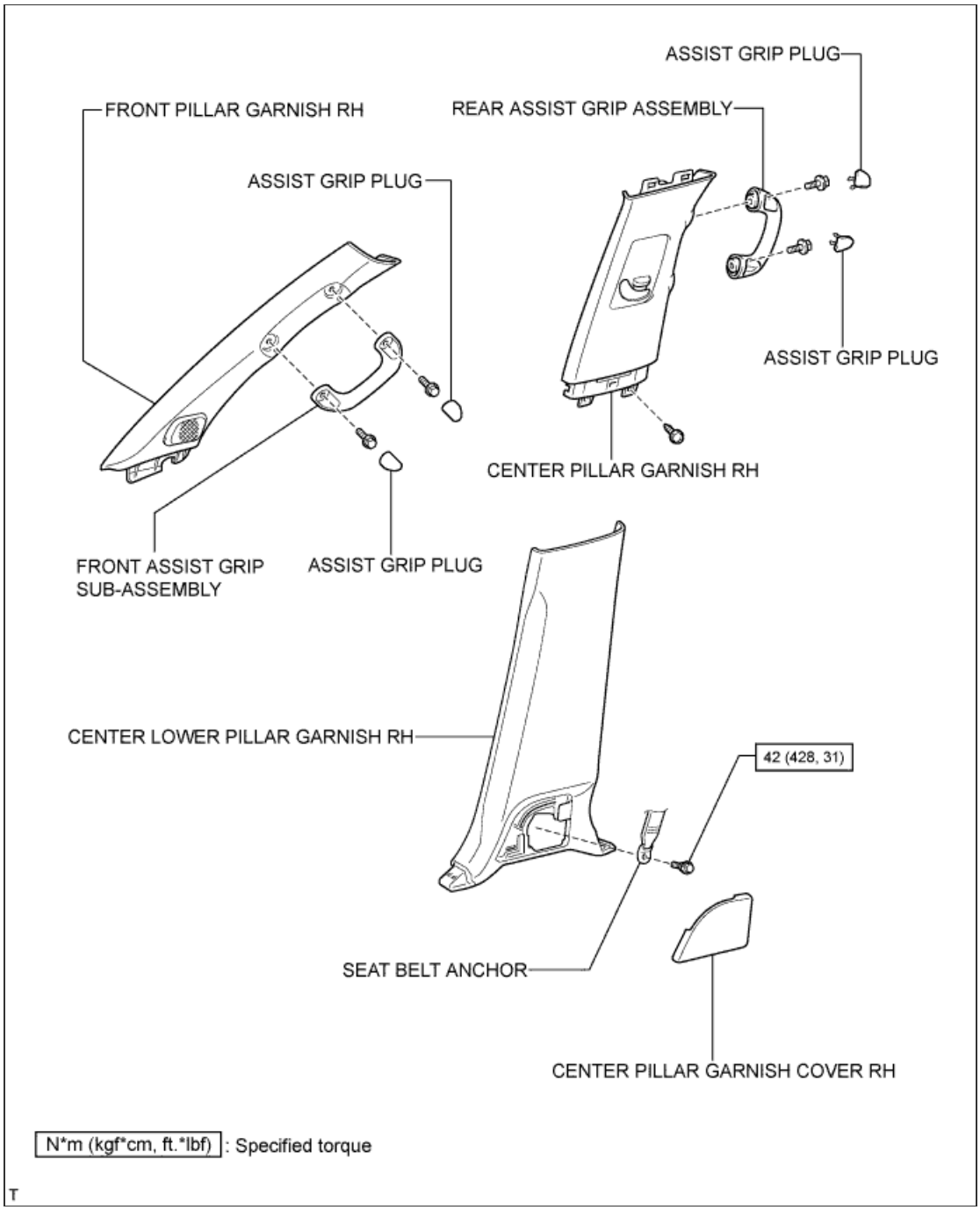


w/ Illumination Type Front Door Scuff Plate:

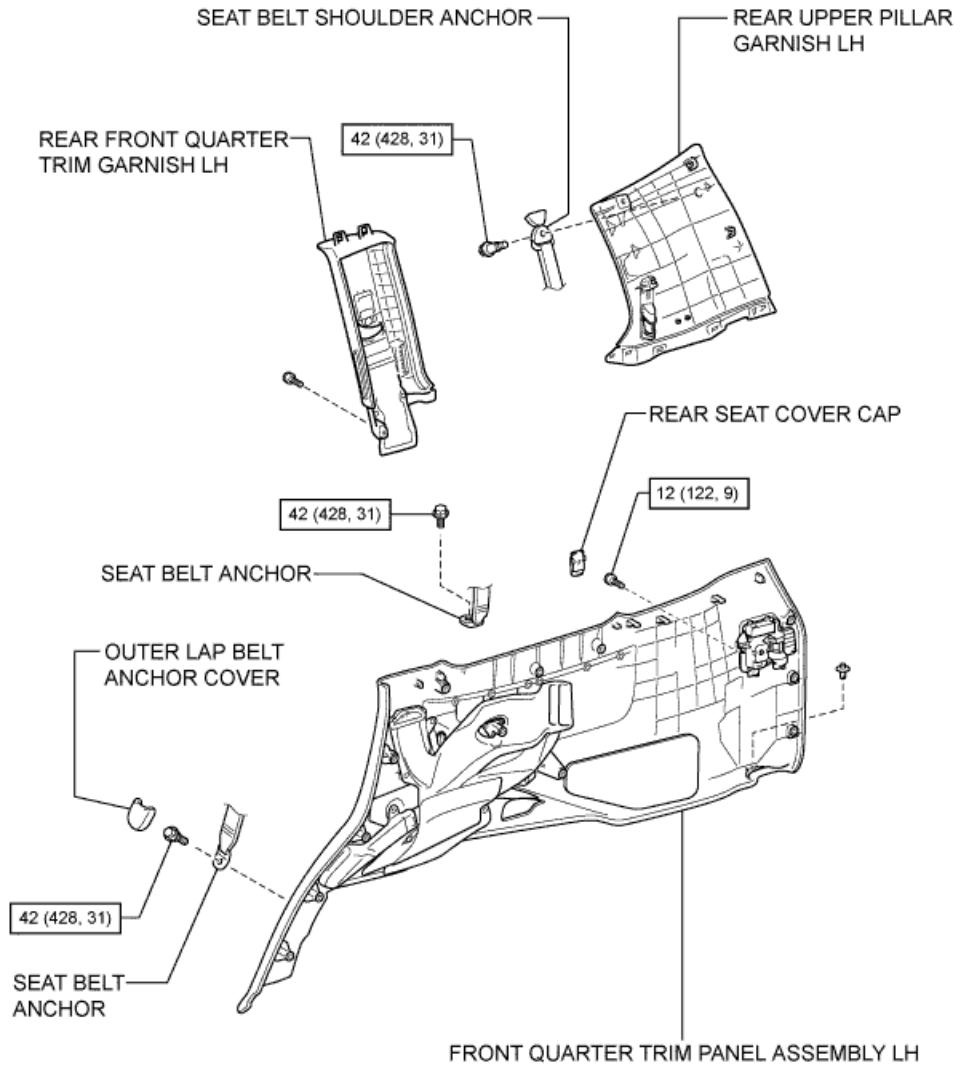


T


ASSIST GRIP PLUG
ASSIST GRIP PLUG
REAR ASSIST GRIP ASSEMBLY
FRONT ASSIST GRIP SUB-ASSEMBLY
ASSIST GRIP PLUG
ASSIST GRIP PLUG
CENTER PILLAR GARNISH LH
FRONT PILLAR GARNISH LH
CENTER PILLAR GARNISH COVER LH
42 (428, 31)
SEAT BELT ANCHOR
CENTER LOWER PILLAR GARNISH LH
N*m (kgf*cm, ft.*lbf) : Specified torque
T


ASSIST GRIP PLUG
FRONT PILLAR GARNISH RH
REAR ASSIST GRIP ASSEMBLY
ASSIST GRIP PLUG
ASSIST GRIP PLUG
CENTER PILLAR GARNISH RH
FRONT ASSIST GRIP SUB-ASSEMBLY
ASSIST GRIP PLUG
CENTER LOWER PILLAR GARNISH RH
42 (428, 31)
SEAT BELT ANCHOR
CENTER PILLAR GARNISH COVER RH
N*m (kgf*cm, ft.*lbf) : Specified torque
T

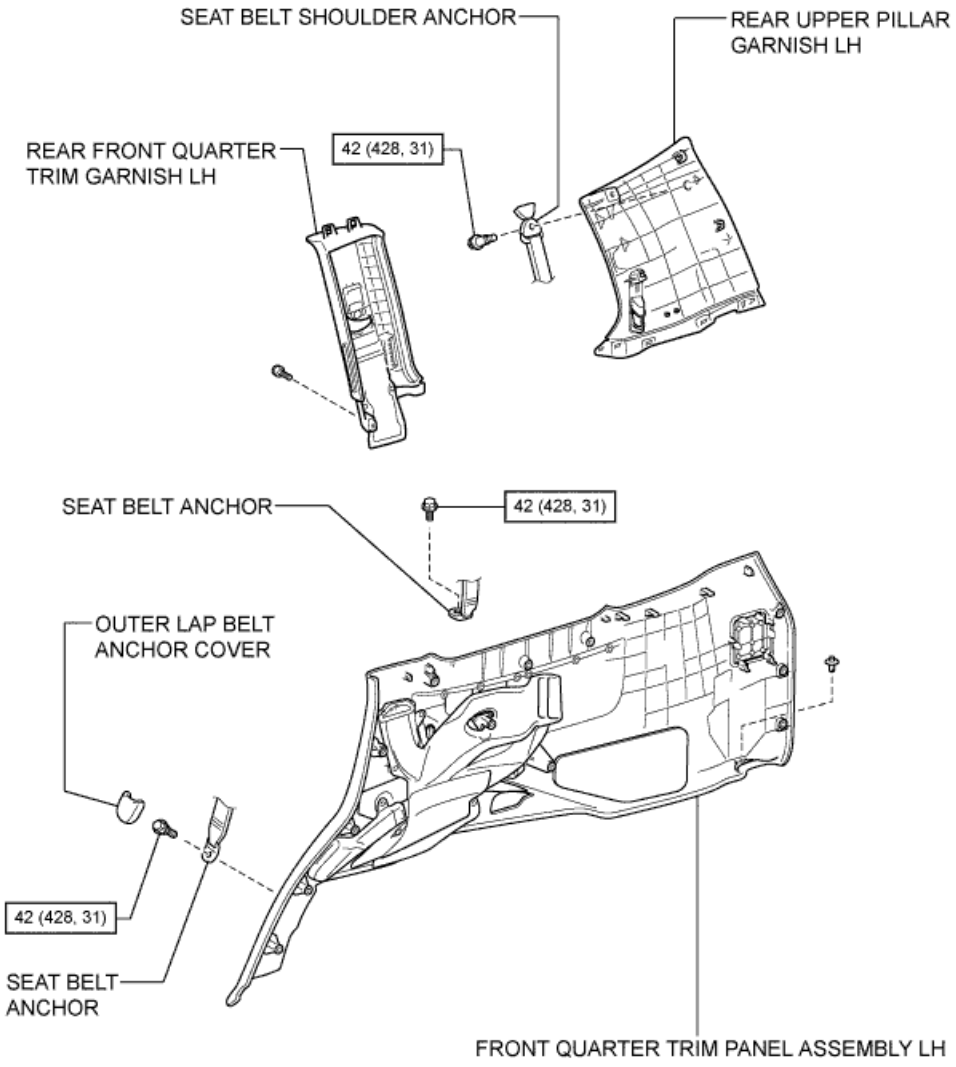
for Rear No. 2 Seat with Manual Folding-up Function:



N*m (kgf*cm, ft.*lbf) : Specified torque

T

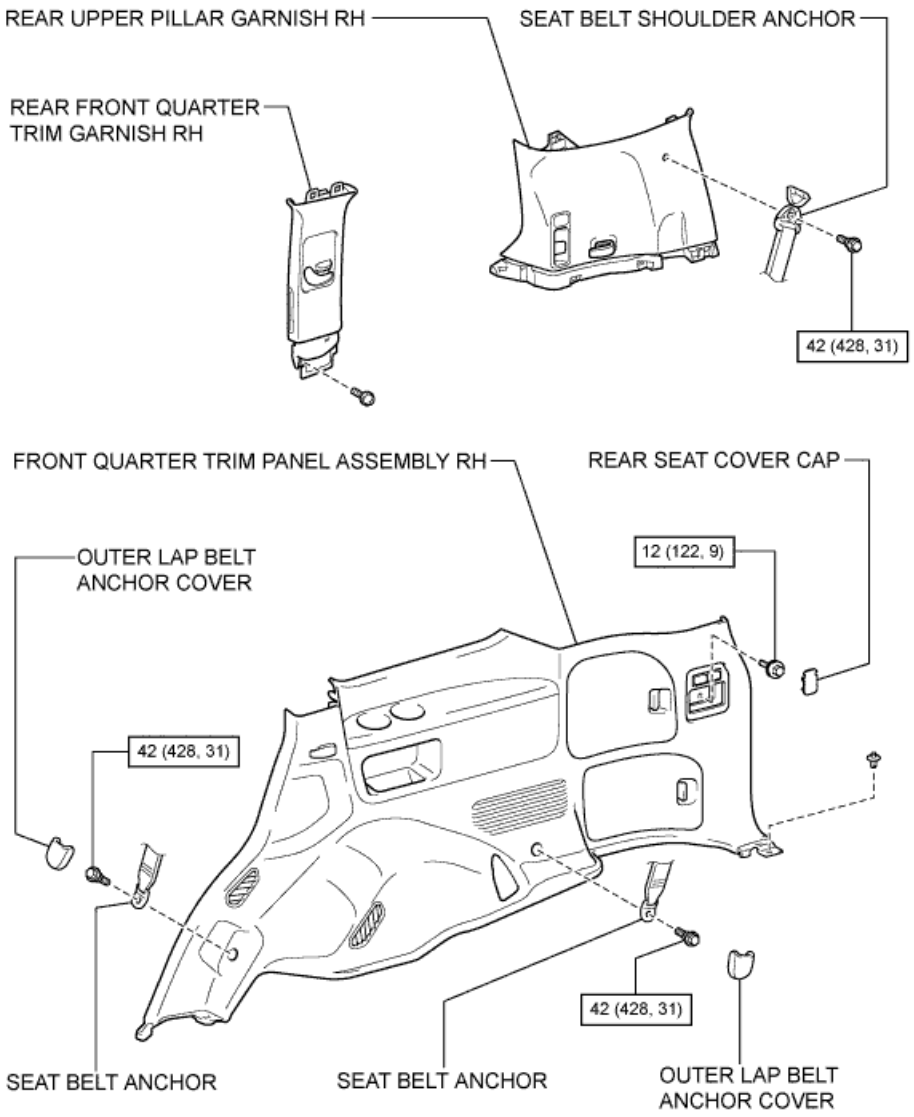
for Rear No. 2 Seat with Automatic Folding-up Function:



42 (428, 31) : Specified torque

T

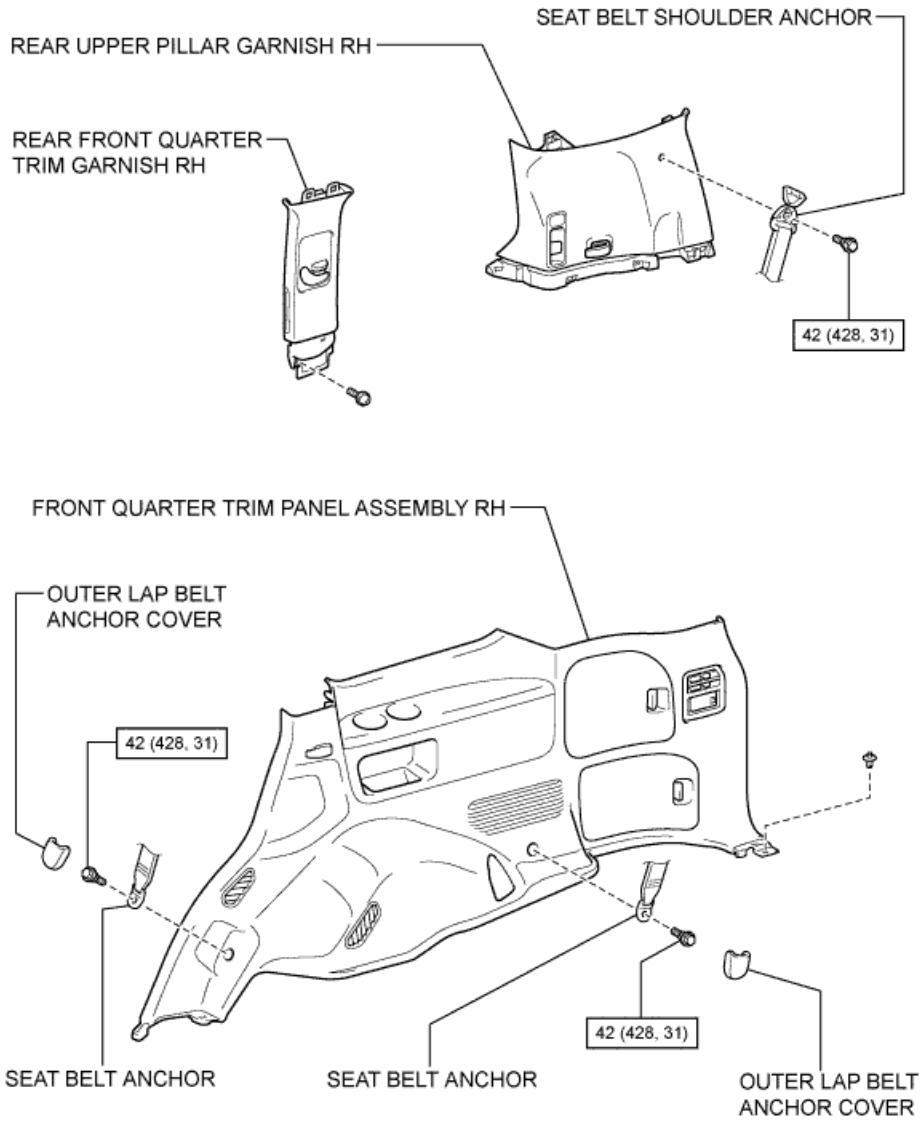
for Rear No. 2 Seat with Manual Folding-up Function:



N*m (kgf*cm, ft.*lbf) : Specified torque

T

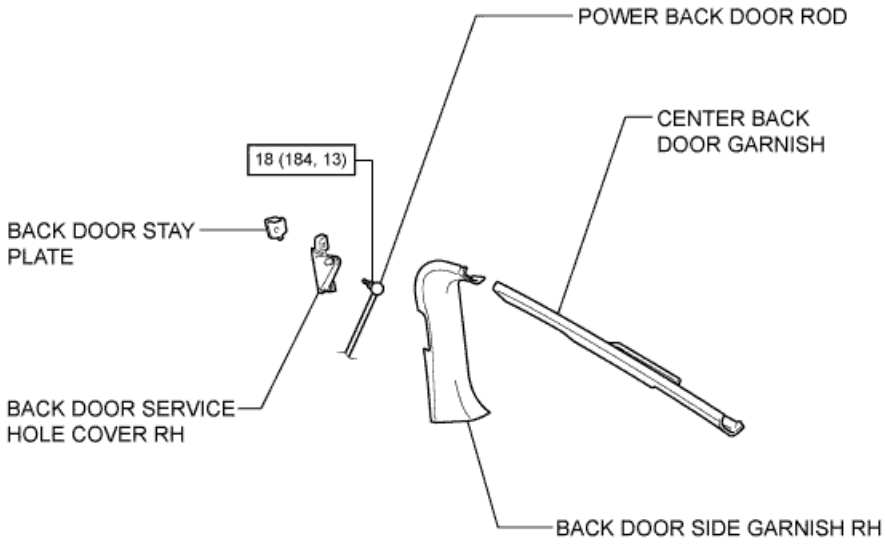
for Rear No. 2 Seat with Automatic Folding-up Function:

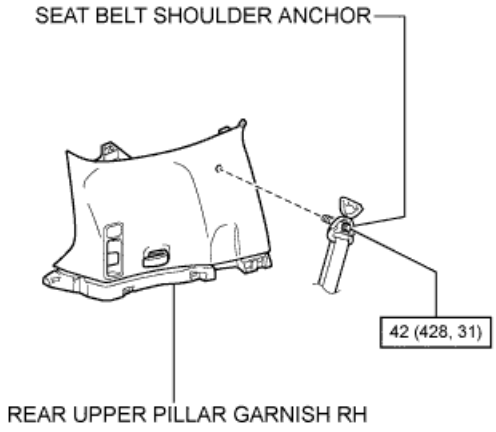


N*m (kgf*cm, ft.*lbf) : Specified torque

T

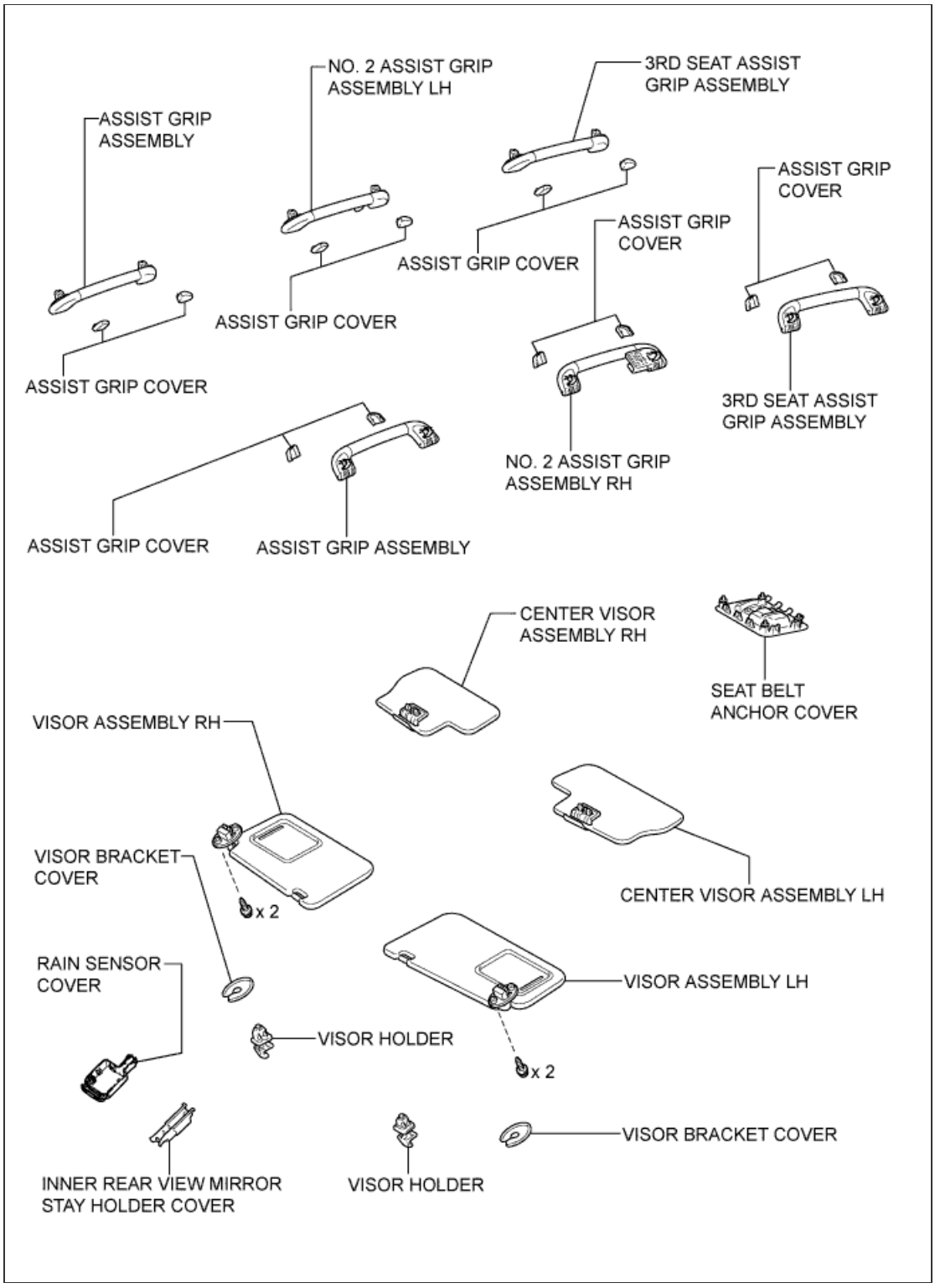
w/ Power Back Door:



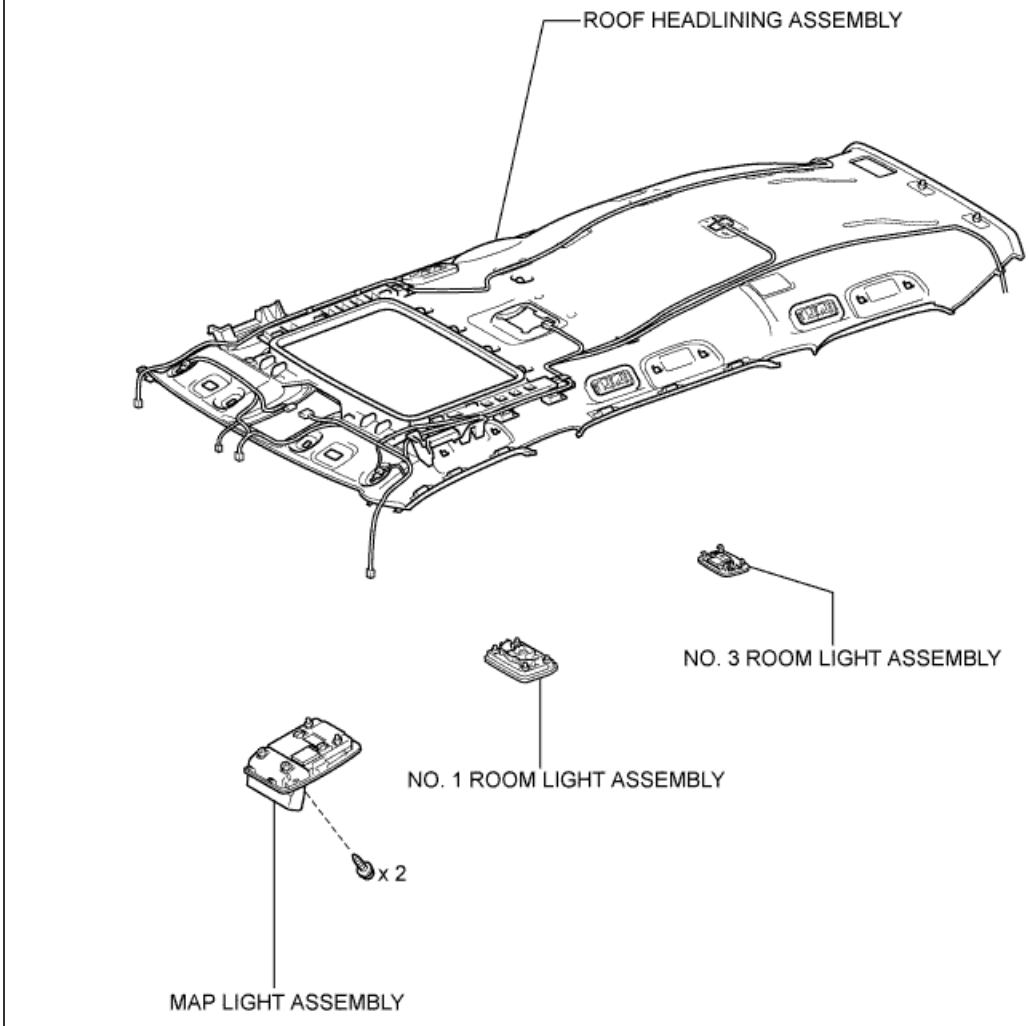


N*m (kgf*cm, ft.*lbf) : Specified torque

T

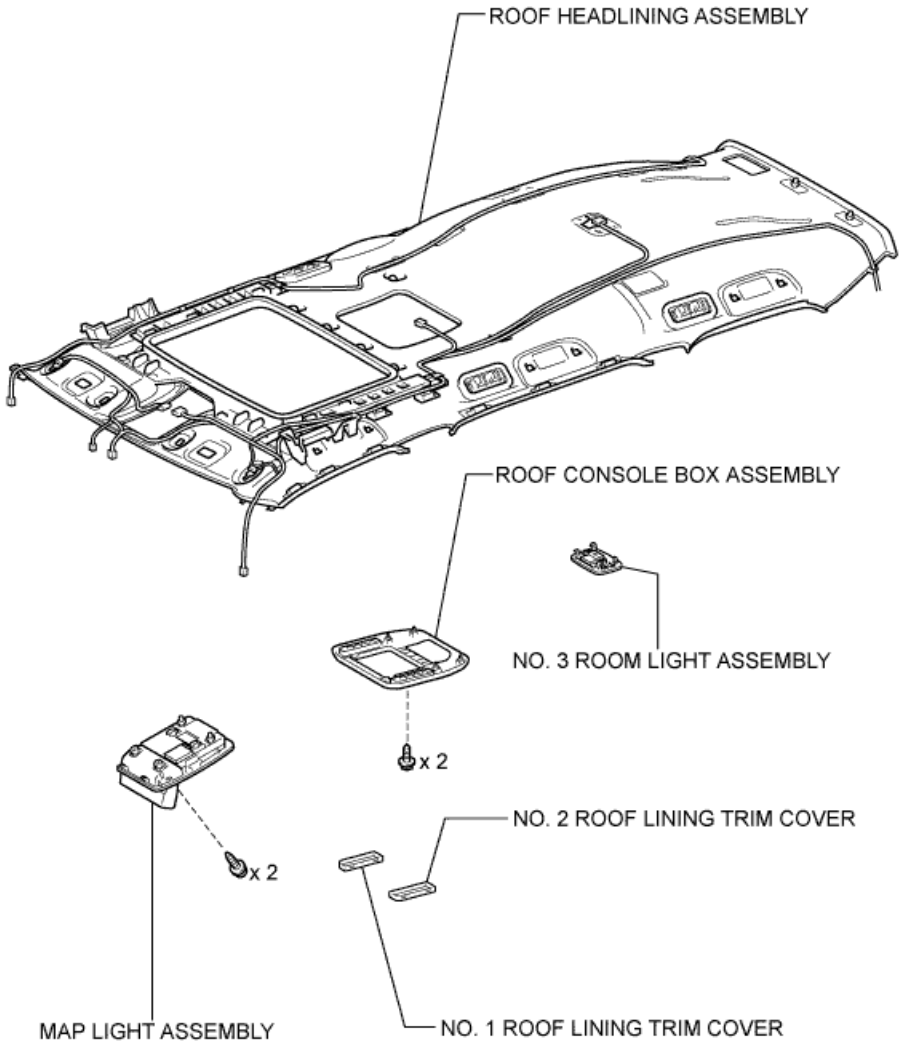

NO. 2 ASSIST GRIP ASSEMBLY LH
3RD SEAT ASSIST GRIP ASSEMBLY
ASSIST GRIP ASSEMBLY
ASSIST GRIP COVER
ASSIST GRIP COVER
ASSIST GRIP COVER
ASSIST GRIP COVER
ASSIST GRIP COVER
3RD SEAT ASSIST GRIP ASSEMBLY
NO. 2 ASSIST GRIP ASSEMBLY RH
ASSIST GRIP COVER
ASSIST GRIP ASSEMBLY
CENTER VISOR ASSEMBLY RH
SEAT BELT ANCHOR COVER
VISOR ASSEMBLY RH
VISOR BRACKET COVER
x 2
CENTER VISOR ASSEMBLY LH
RAIN SENSOR COVER
VISOR ASSEMBLY LH
VISOR HOLDER
x 2
VISOR BRACKET COVER
INNER REAR VIEW MIRROR STAY HOLDER COVER
VISOR HOLDER

w/o Rear Seat Entertainment System:

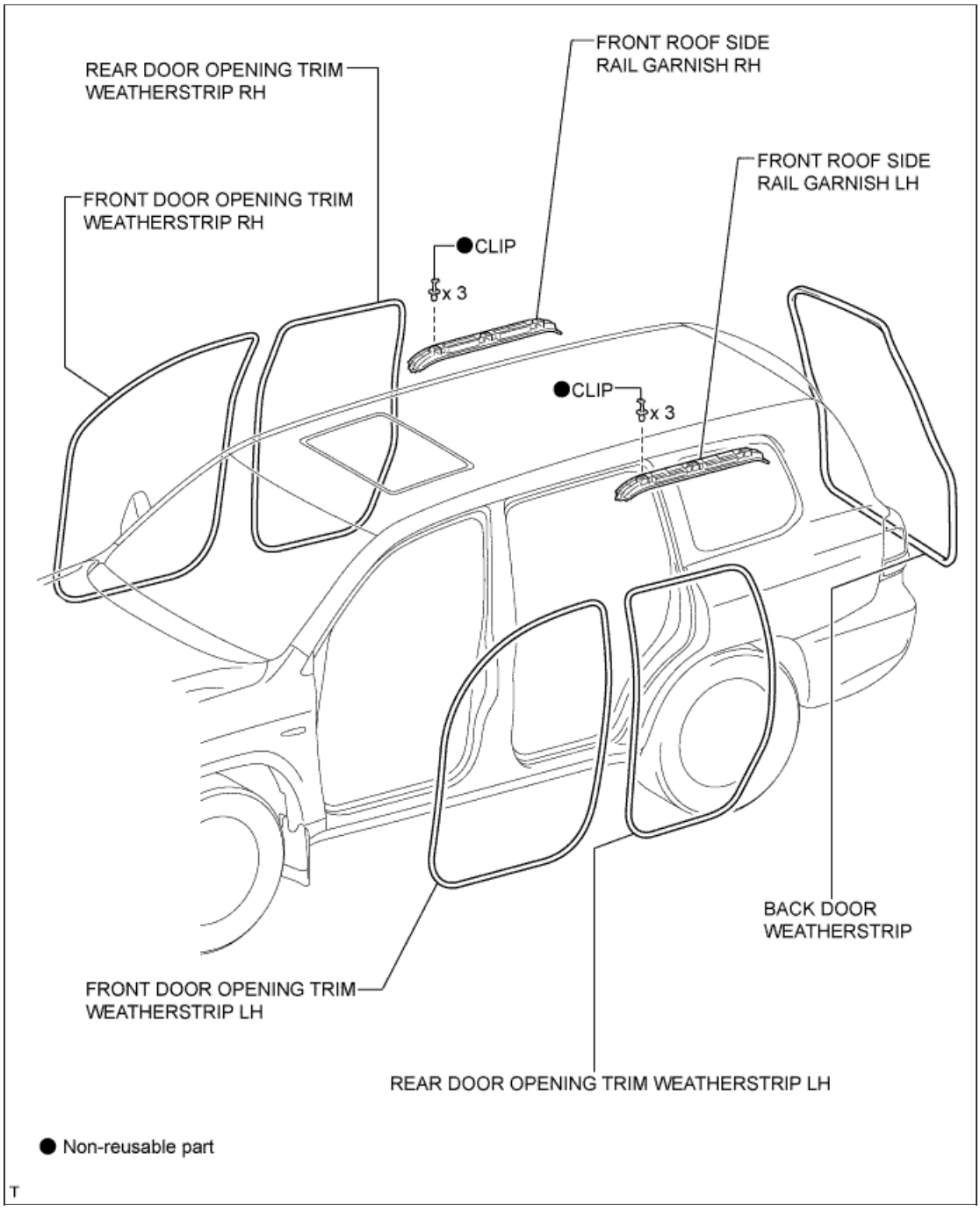


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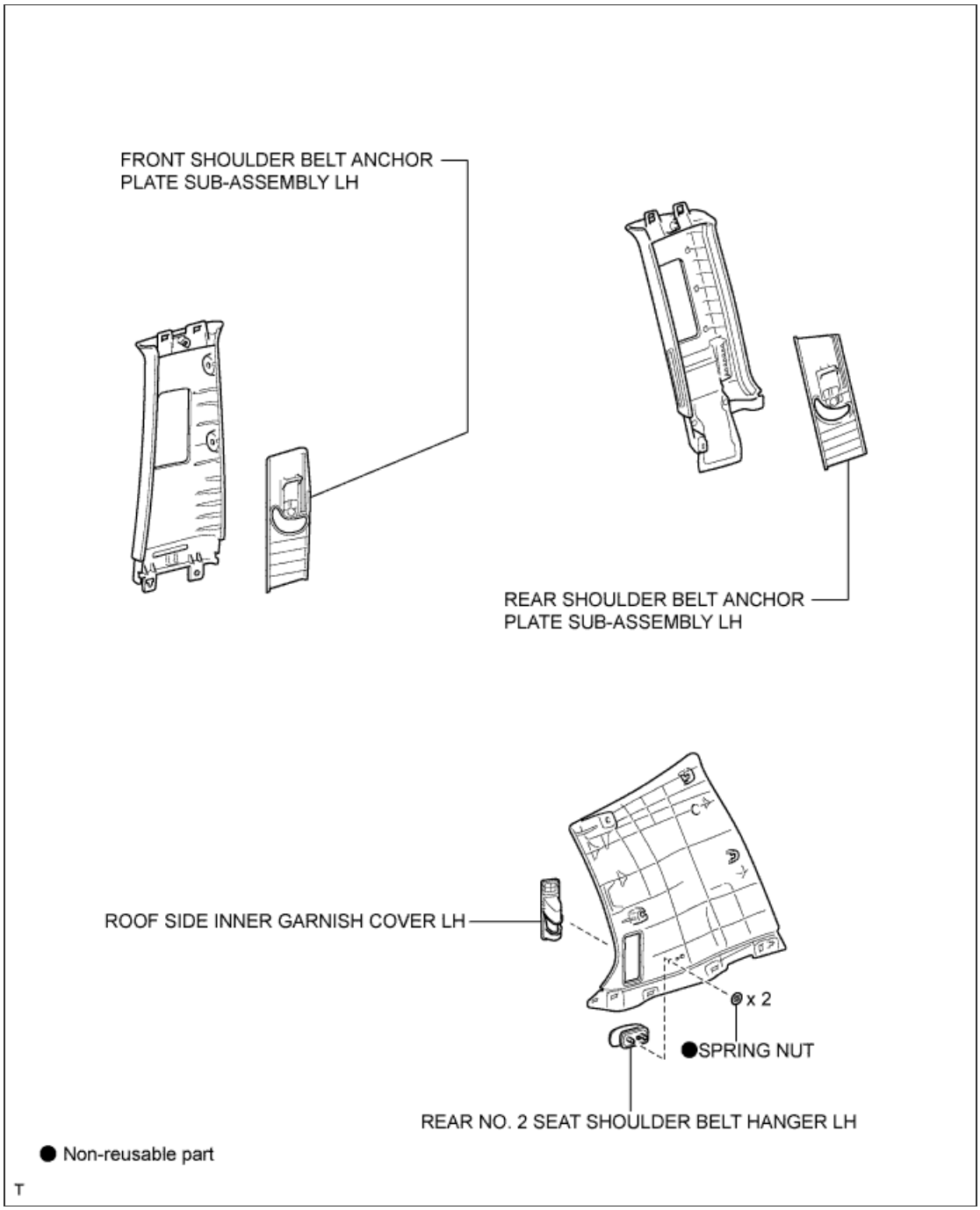
w/ Rear Seat Entertainment System:



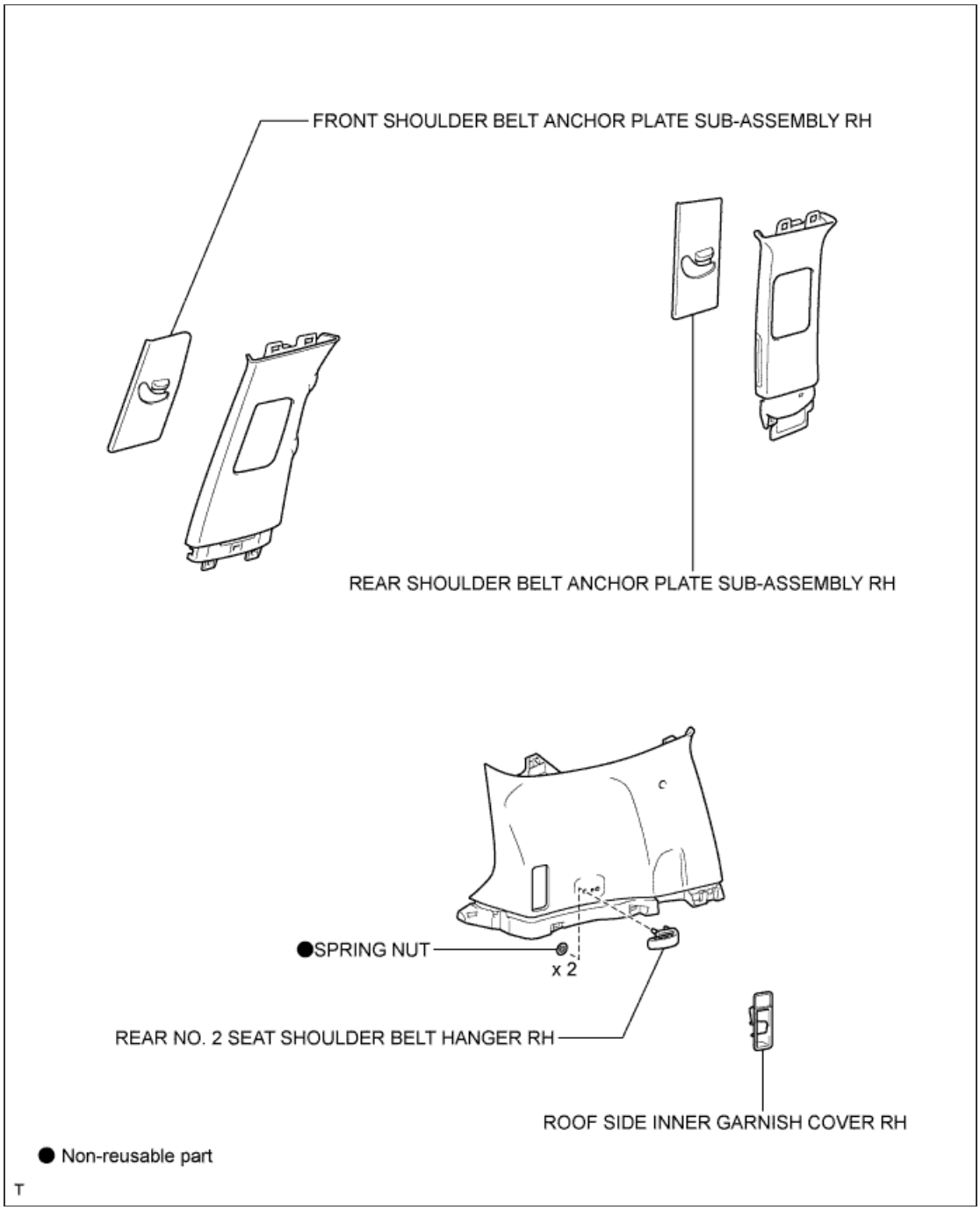
T


REAR DOOR OPENING TRIM WEATHERSTRIP RH
FRONT ROOF SIDE RAIL GARNISH RH
FRONT ROOF SIDE RAIL GARNISH LH
FRONT DOOR OPENING TRIM WEATHERSTRIP RH
CLIP
x 3
CLIP
x 3
BACK DOOR WEATHERSTRIP
FRONT DOOR OPENING TRIM WEATHERSTRIP LH
REAR DOOR OPENING TRIM WEATHERSTRIP LH
Non-reusable part

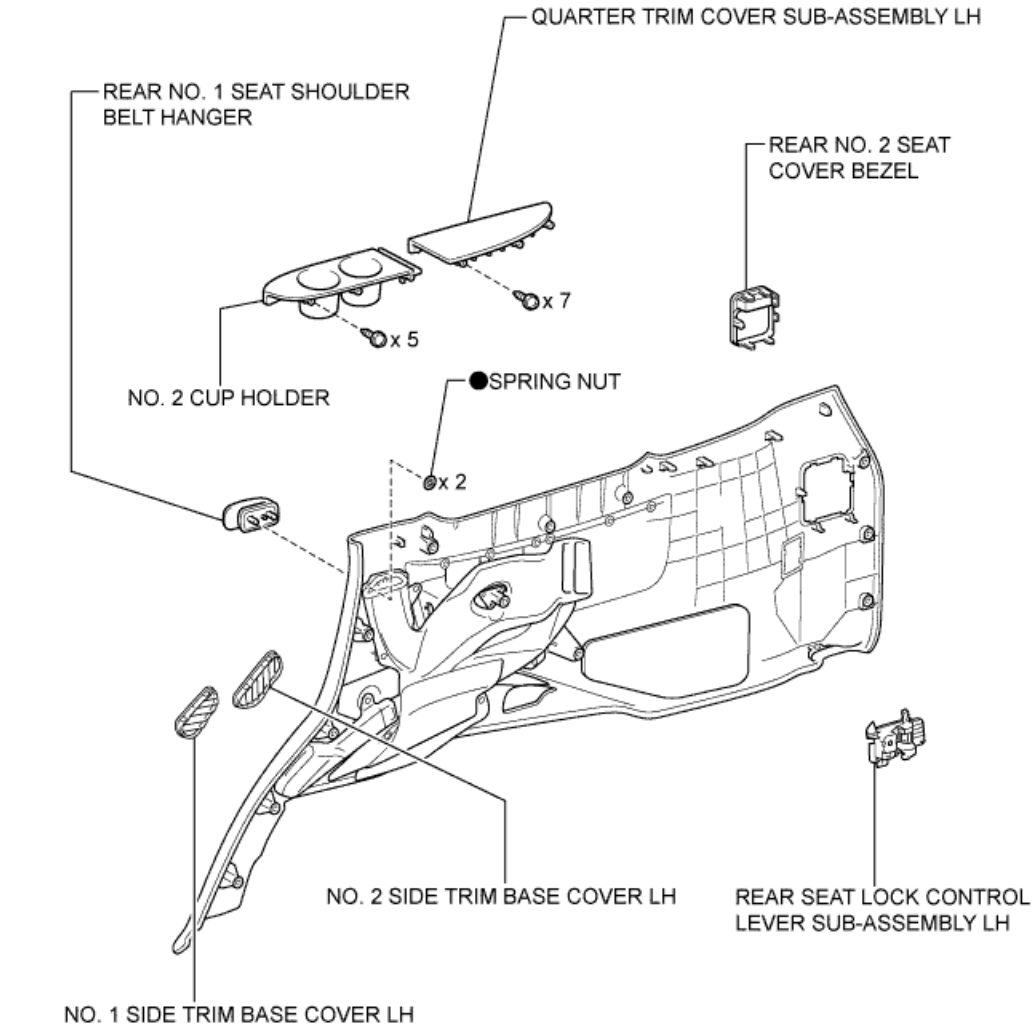
T


FRONT SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY LH
REAR SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY LH
ROOF SIDE INNER GARNISH COVER LH
x 2
●SPRING NUT
REAR NO. 2 SEAT SHOULDER BELT HANGER LH
● Non-reusable part

T


FRONT SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY RH
REAR SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY RH
●SPRING NUT
x 2
REAR NO. 2 SEAT SHOULDER BELT HANGER RH
ROOF SIDE INNER GARNISH COVER RH
● Non-reusable part
T

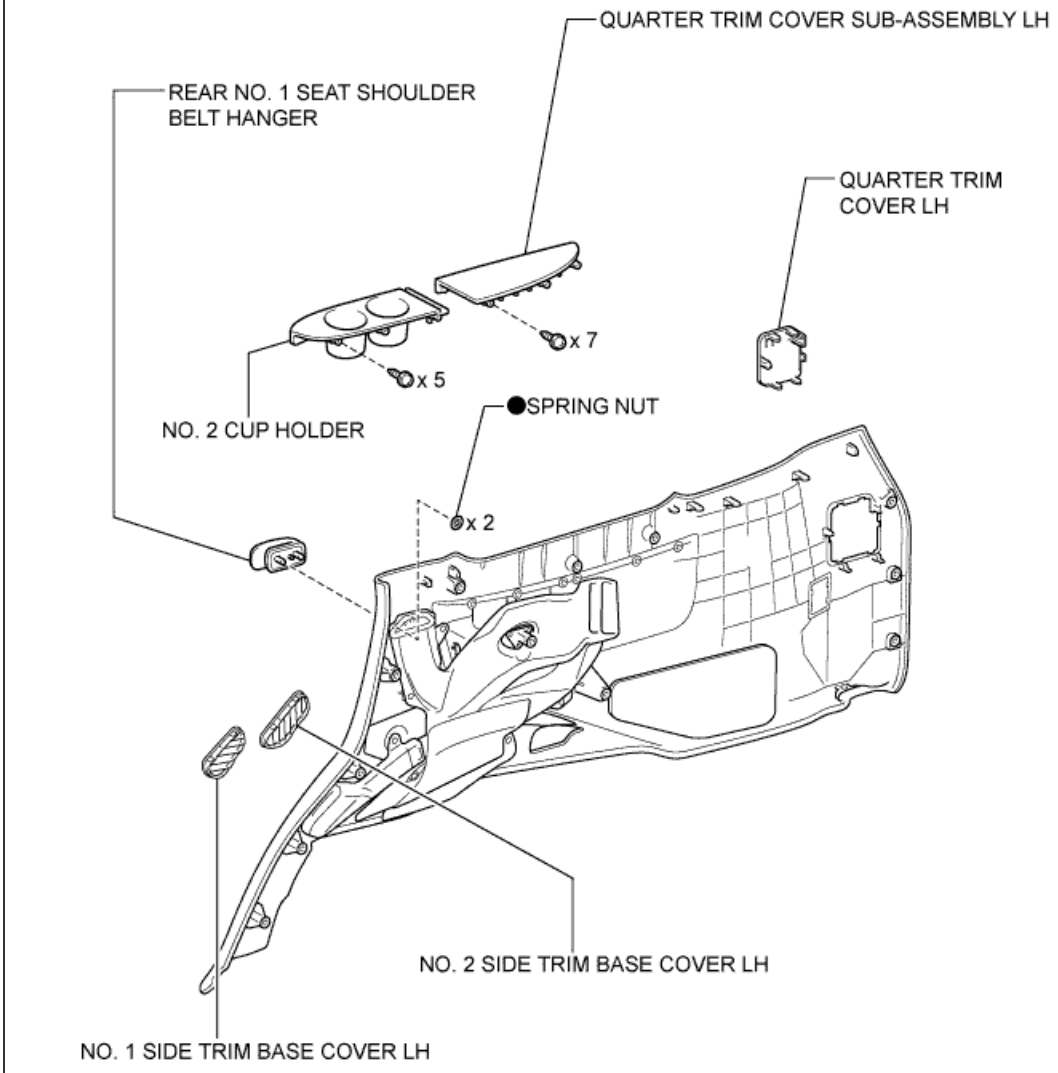
for Rear No. 2 Seat with Manual Folding-up Function:



● Non-reusable part

T

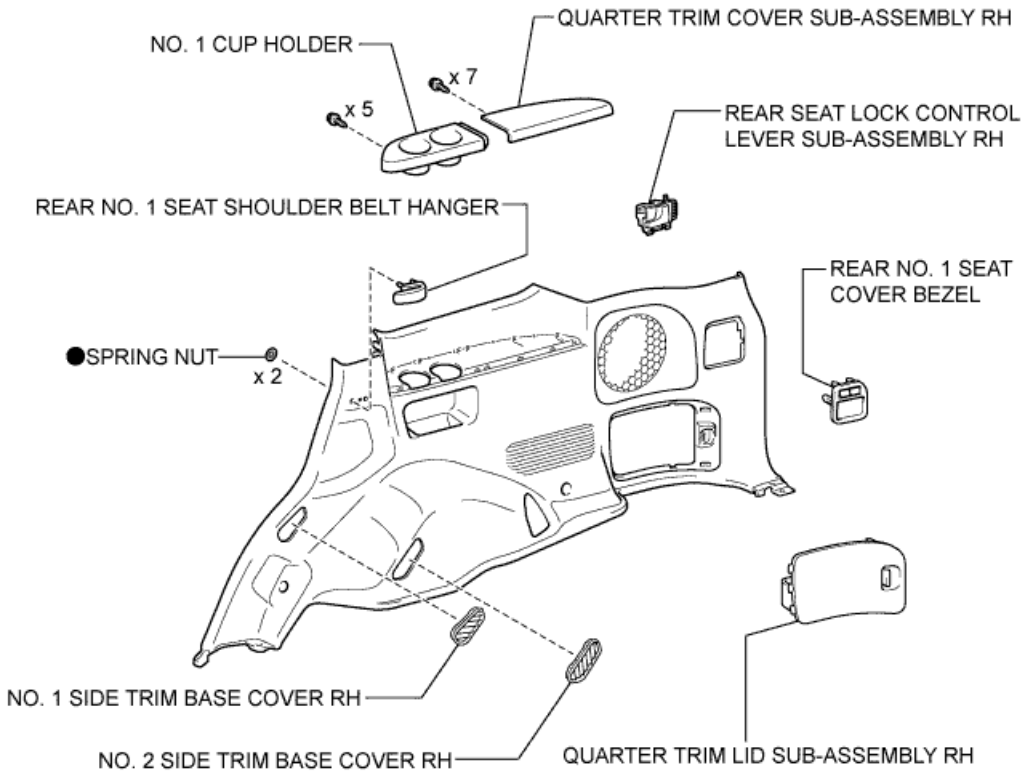
for Rear No. 2 Seat with Automatic Folding-up Function:



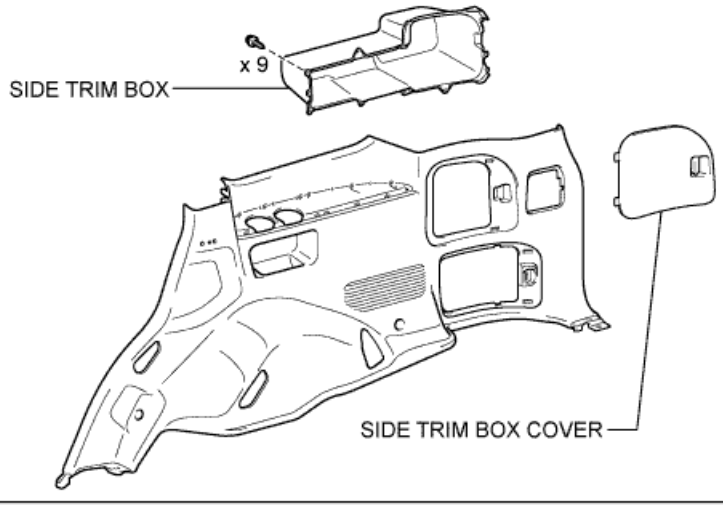
● Non-reusable part

T

for Rear No. 2 Seat with Manual Folding-up Function:



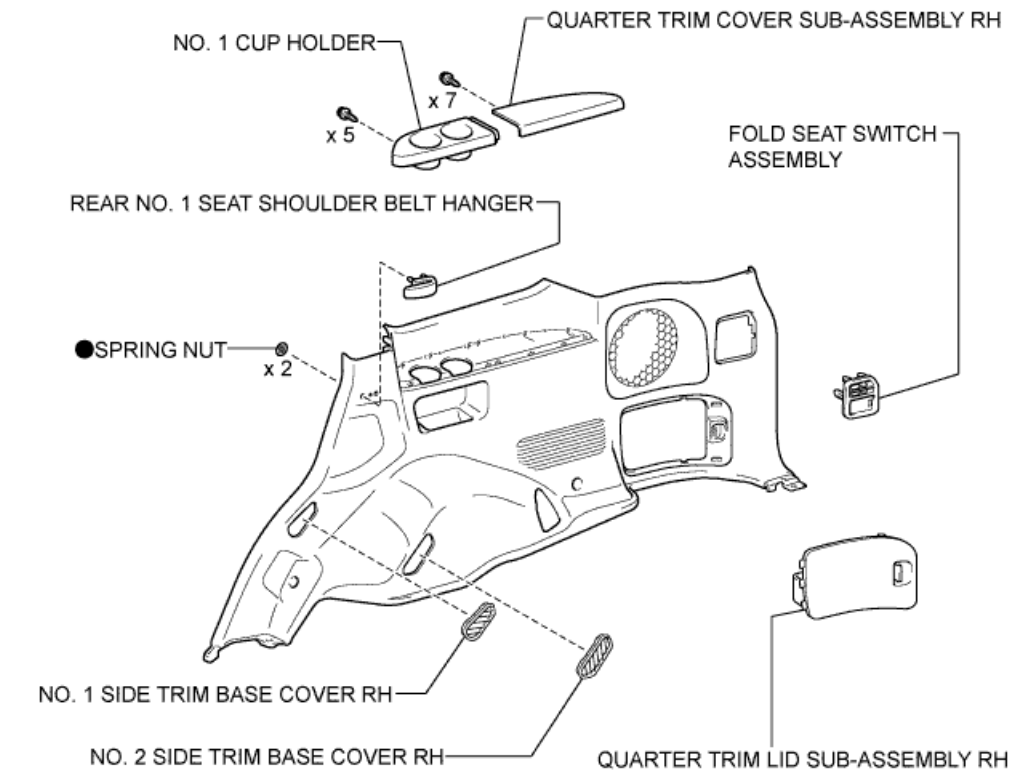
w/o Woofer:



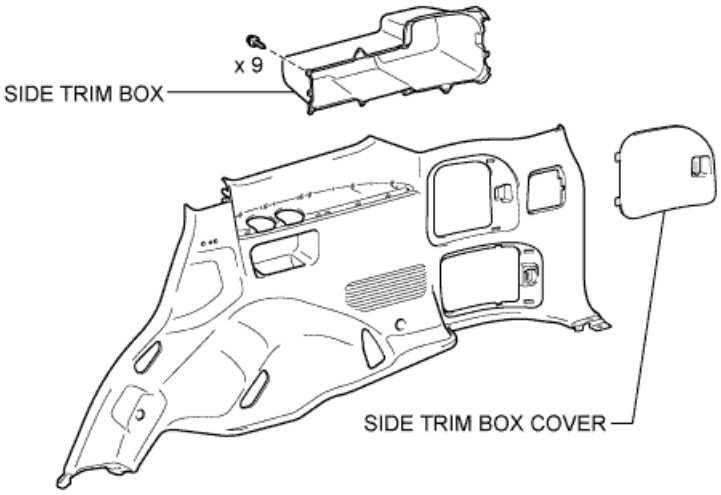
● Non-reusable part

T

for Rear No. 2 Seat with Automatic Folding-up Function:

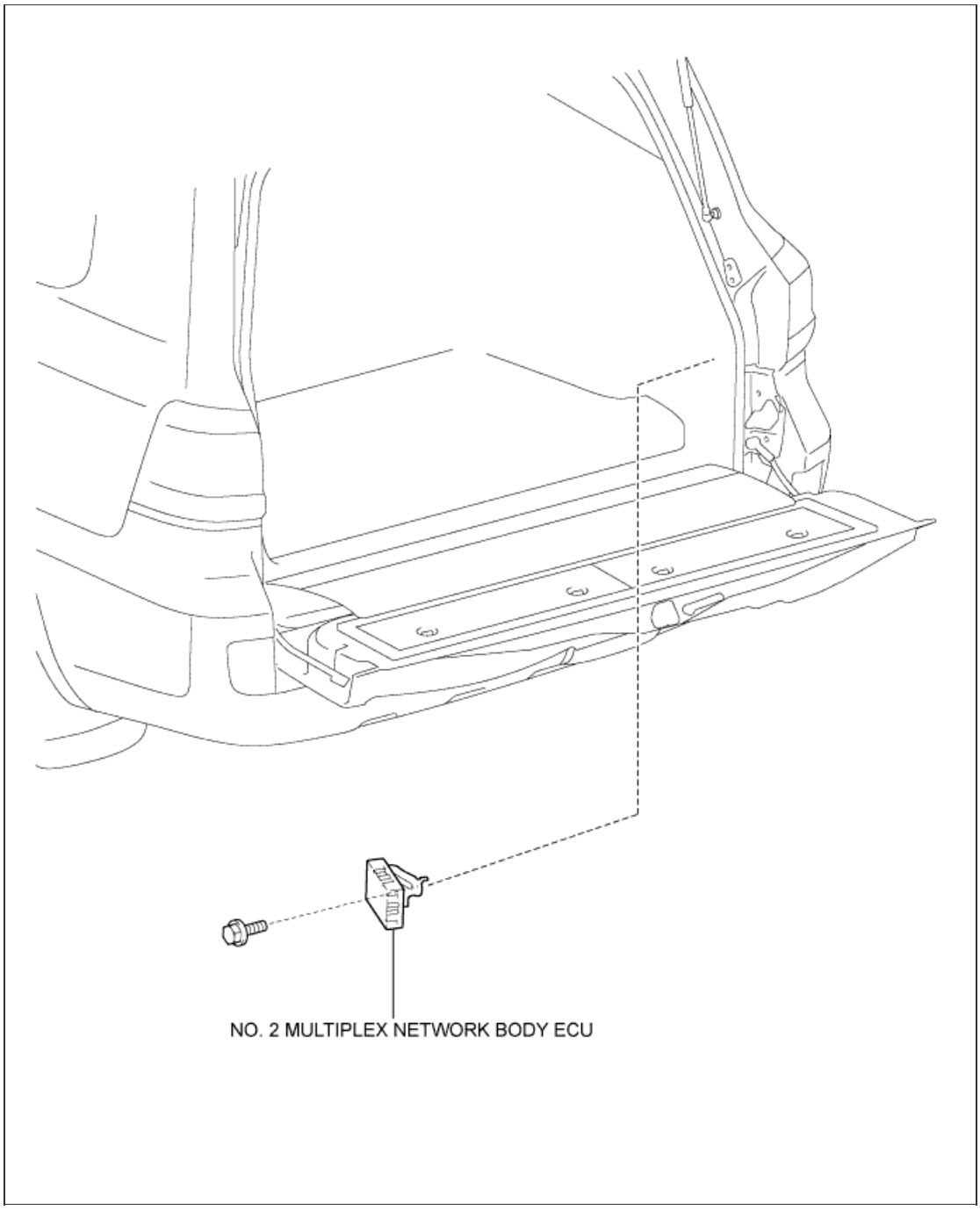


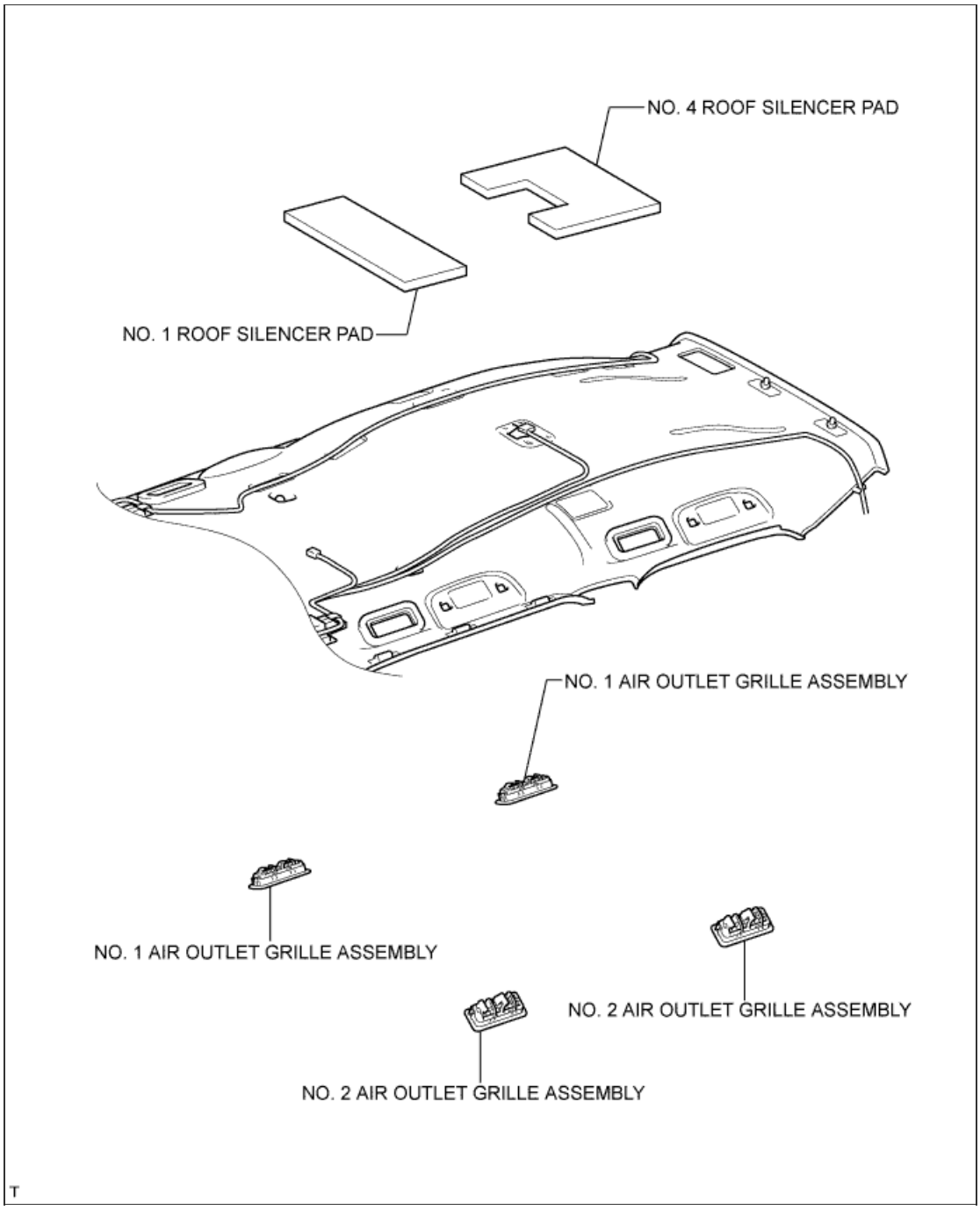
w/o Woofer:



● Non-reusable part

T


NO. 2 MULTIPLEX NETWORK BODY ECU


NO. 4 ROOF SILENCER PAD
NO. 1 ROOF SILENCER PAD
NO. 1 AIR OUTLET GRILLE ASSEMBLY
NO. 1 AIR OUTLET GRILLE ASSEMBLY
NO. 2 AIR OUTLET GRILLE ASSEMBLY
NO. 2 AIR OUTLET GRILLE ASSEMBLY
T

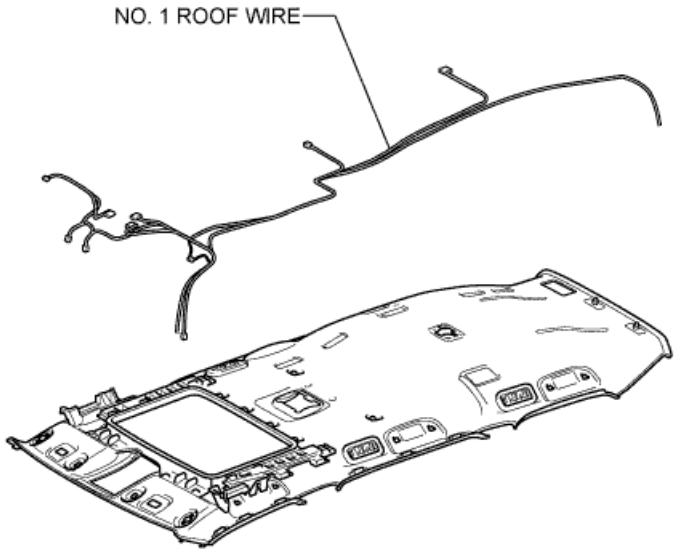
w/o Rear Seat Entertainment System:

for LHD:



for RHD:





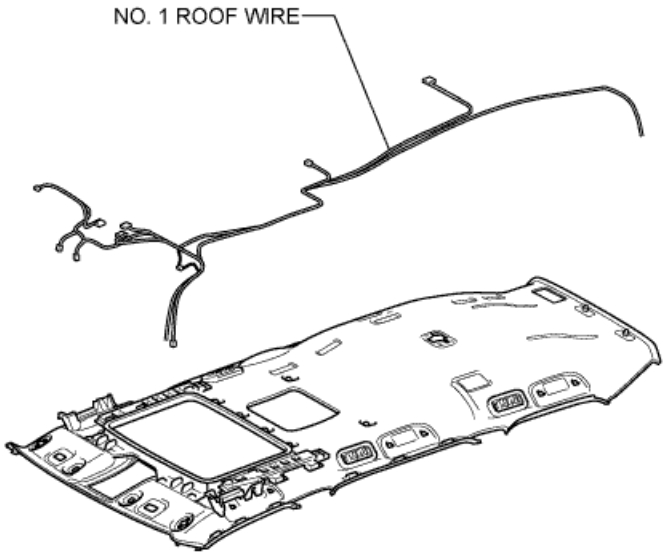
w/ Rear Seat Entertainment System:

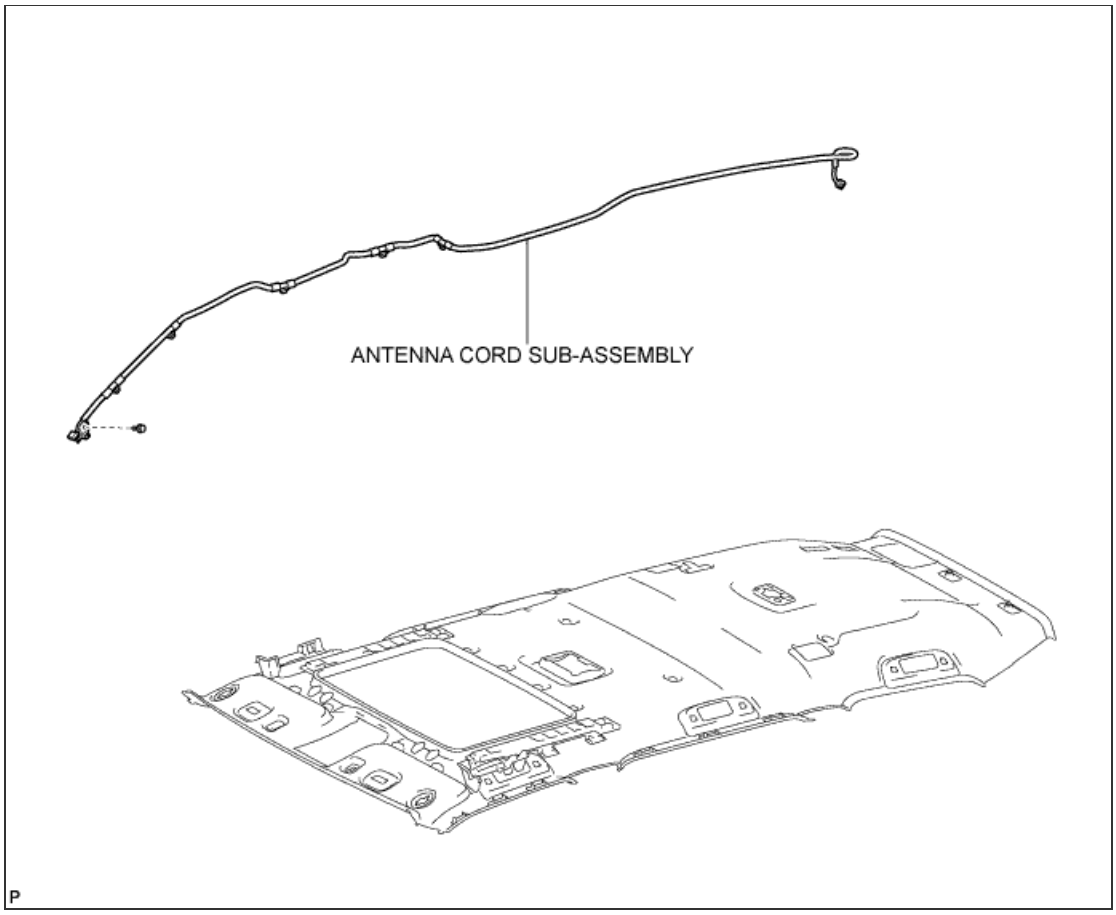
for LHD:



for RHD:






ANTENNA CORD SUB-ASSEMBLY
P

for Preparation Click here

1. OPEN BACK DOOR

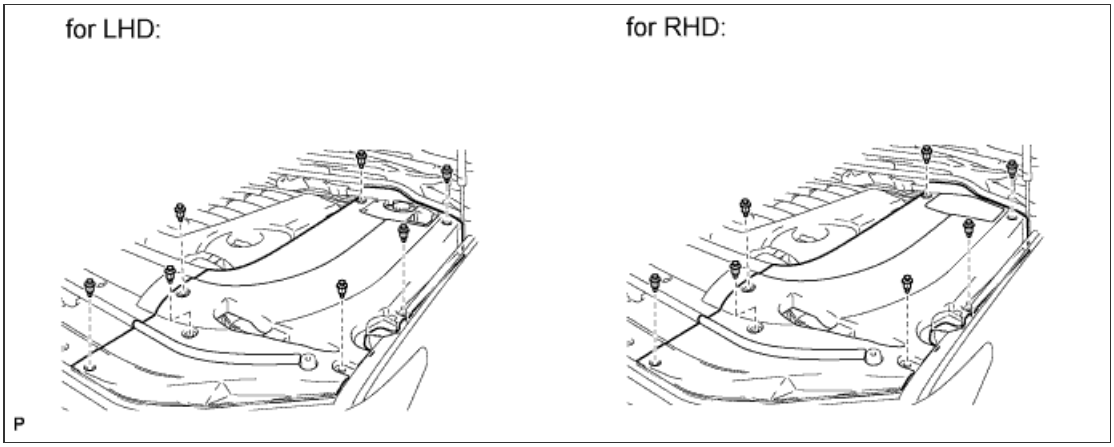
a. Open the back door before disconnecting the cable from the negative (-) battery terminal, as some procedures are performed with the back door open.

NOTICE:

The back door cannot be opened after the cable is disconnected from the negative (-) battery terminal.

2. REMOVE ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.



3. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

4. REMOVE REAR NO. 2 SEAT ASSEMBLY LH

a. w/ Manual Folding-up Function:
Remove the rear No. 2 seat assembly LH (Click here).

b. w/ Automatic Folding-up Function:
Remove the rear No. 2 seat assembly LH (Click here).

5. REMOVE REAR NO. 2 SEAT ASSEMBLY RH

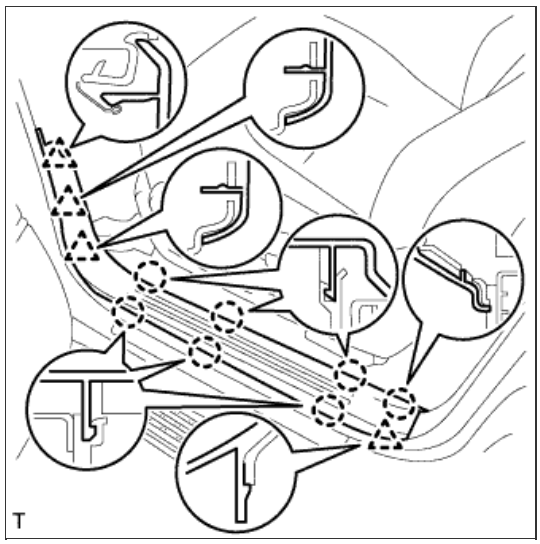
HINT:

Use the same procedures described for the LH side.

6. REMOVE FRONT DOOR SCUFF PLATE LH

a. w/o Illumination:

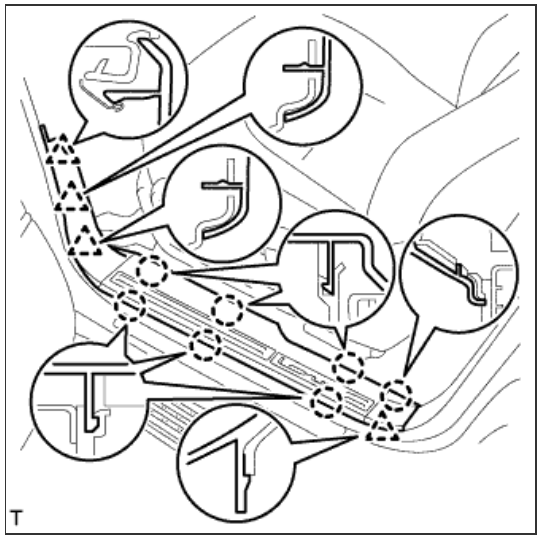
i. Detach the 7 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination:

i. Detach the 7 claws and 4 clips.

ii. Disconnect the connector and remove the scuff plate.



7. REMOVE FRONT DOOR SCUFF PLATE RH

HINT:

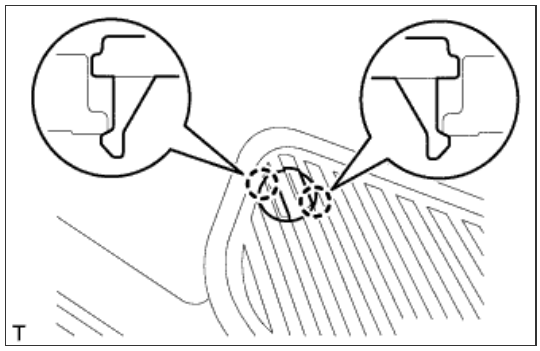
Use the same procedures described for the LH side.

8. REMOVE REAR STEP COVER

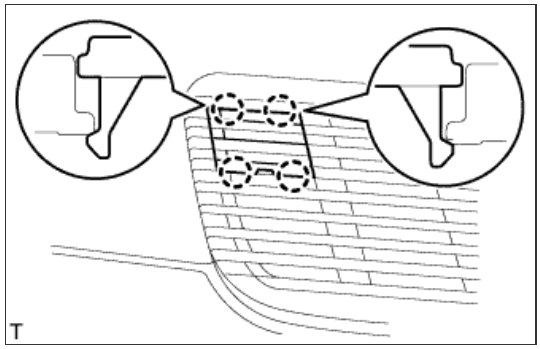
HINT:

Use the same procedure to remove the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Detach the 2 claws and remove the step cover.



b. w/ Illumination Type Front Door Scuff Plate:
Detach the 4 claws and remove the step cover.

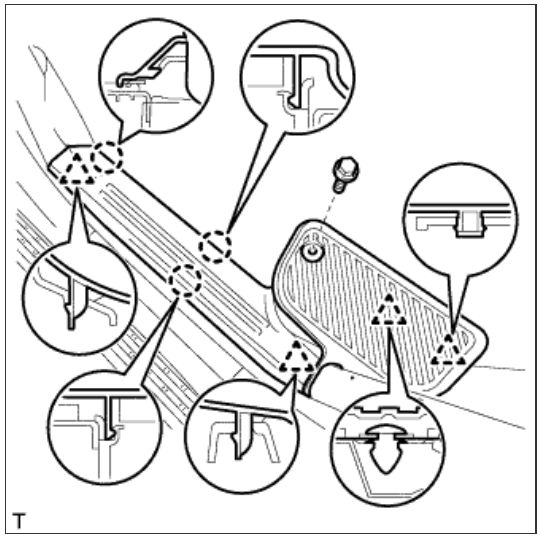


9. REMOVE REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

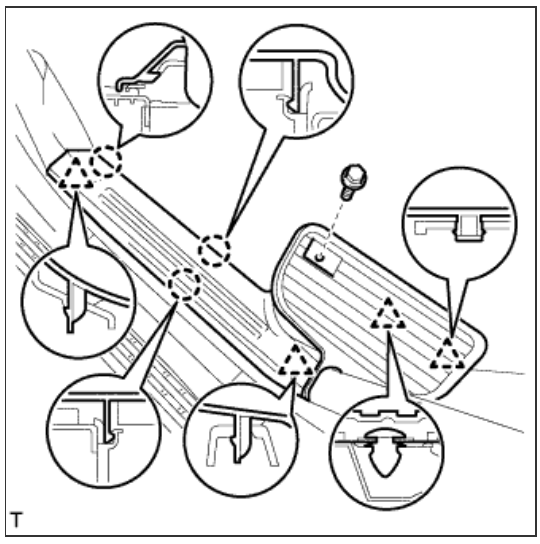
ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



b. w/ Illumination Type Front Door Scuff Plate:
Remove the rear door scuff plate.

i. Remove the screw.

ii. Detach the 3 claws and 4 clips, and remove the scuff plate.



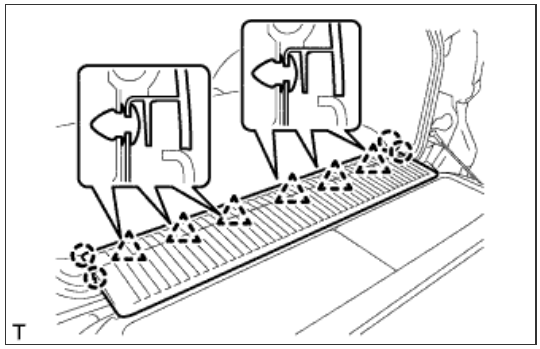
10. REMOVE REAR DOOR SCUFF PLATE RH

HINT:

Use the same procedures described for the LH side.

11. REMOVE REAR FLOOR MAT REAR SUPPORT PLATE

a. Detach the 6 clips and 4 claws, and remove the support plate.

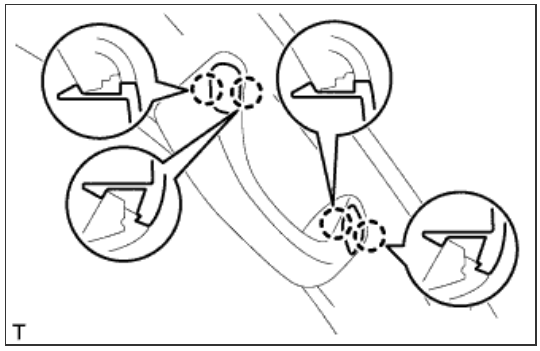


12. REMOVE FRONT ASSIST GRIP SUB-ASSEMBLY

HINT:

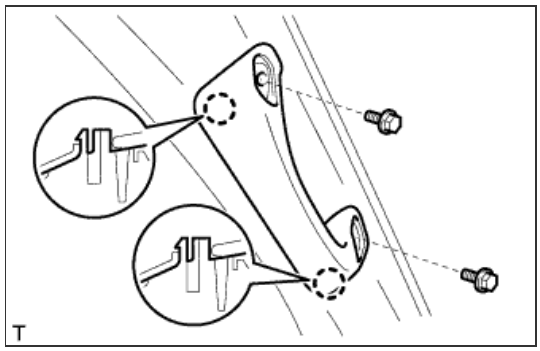
Use the same procedure to remove the front assist grip on the other side.

a. Detach the 4 claws and remove the 2 assist grip plugs.



b. Remove the 2 bolts.

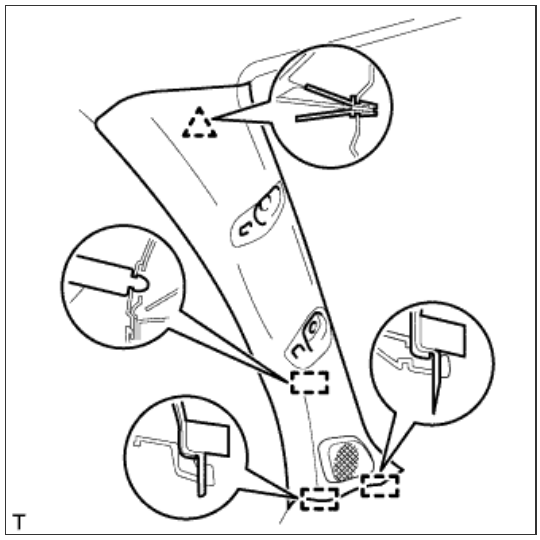
c. Detach the 2 claws and remove the front assist grip.



13. REMOVE FRONT PILLAR GARNISH LH

a. Detach the clip and 3 guides.

b. Disconnect the speaker connector and then remove the front pillar garnish.

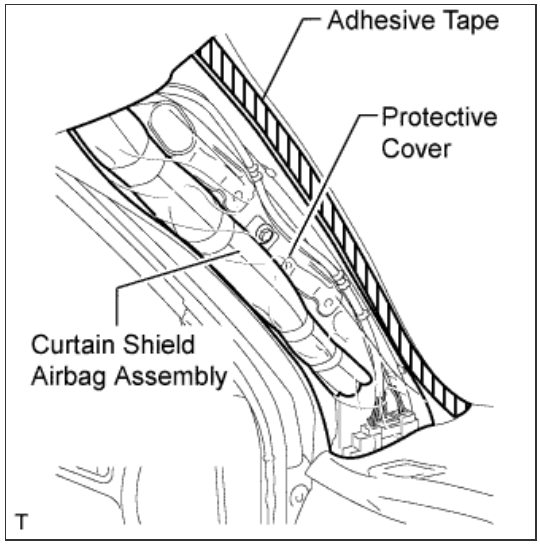


c. Protect the curtain shield airbag.

i. Thoroughly cover the airbag with a cloth or nylon sheet and fix the ends of the cover with adhesive tape, as shown in the illustration.

NOTICE:

Cover the curtain shield airbag with a protective cover as soon as the front pillar garnish is removed.



14. REMOVE FRONT PILLAR GARNISH RH

HINT:

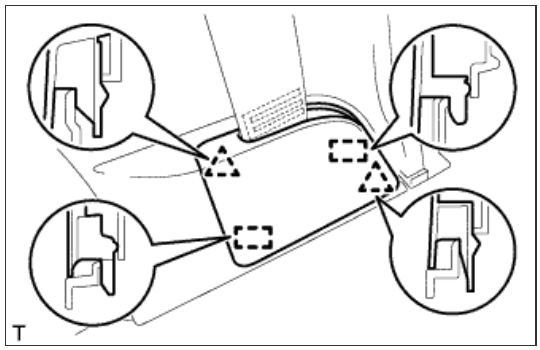
Use the same procedures described for the LH side.

15. REMOVE CENTER PILLAR GARNISH COVER LH

HINT:

- **When removing the center pillar garnish cover, connect the cable to the negative (-) battery terminal and operate the power seat switch to move the front seat and seatback to the foremost upright position.**
- **After moving the front seat, disconnect the cable from the negative (-) battery terminal.**

a. Detach the 2 clips and 2 guides, and remove the cover.



16. REMOVE CENTER PILLAR GARNISH COVER RH

HINT:

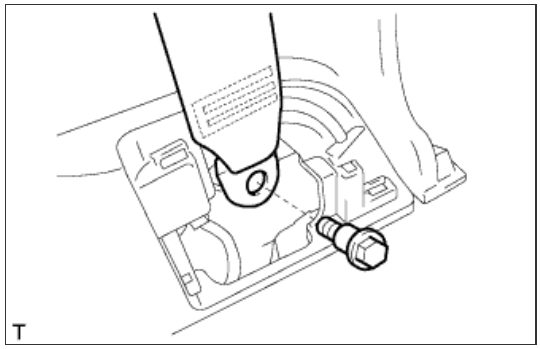
Use the same procedures described for the LH side.

17. REMOVE CENTER LOWER PILLAR GARNISH LH

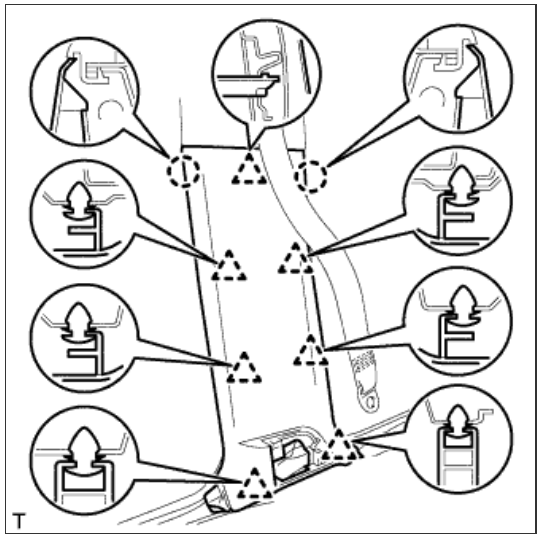
HINT:

- **When removing the center lower pillar garnish, connect the cable to the negative (-) battery terminal and operate the power seat switch to move the front seat and seatback to the foremost upright position.**
- **After moving the front seat, disconnect the cable from the negative (-) battery terminal.**

a. Remove the bolt and seat belt anchor.



b. Detach the 2 claws and 7 clips, and remove the center lower pillar garnish.



18. REMOVE CENTER LOWER PILLAR GARNISH RH

HINT:

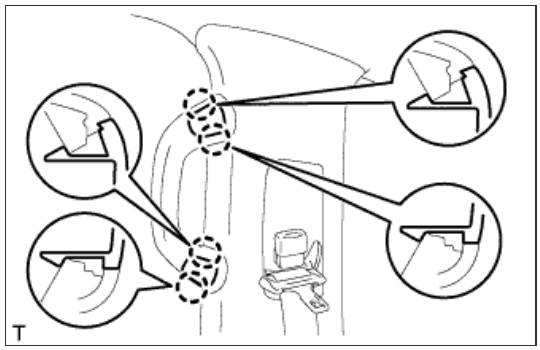
Use the same procedures described for the LH side.

19. REMOVE REAR ASSIST GRIP ASSEMBLY

HINT:

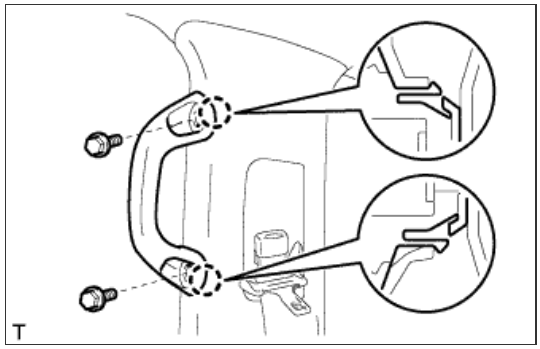
Use the same procedure to remove the rear assist grip on the other side.

a. Detach the 4 claws and remove the 2 assist grip plugs.



b. Remove the 2 bolts.

c. Detach the 2 claws and remove the rear assist grip.

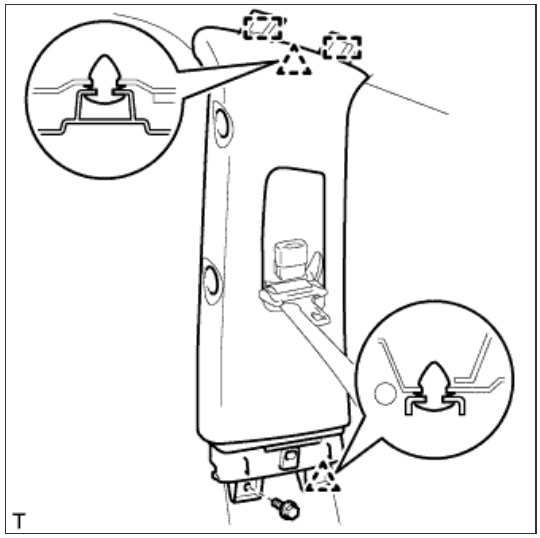


20. REMOVE CENTER PILLAR GARNISH LH

a. Remove the bolt.

b. Detach the 2 clips and 2 guides.

c. Pass the seat belt anchor through the center pillar garnish, and remove the center pillar garnish.



21. REMOVE CENTER PILLAR GARNISH RH

HINT:

Use the same procedures described for the LH side.

22. REMOVE REAR SEAT COVER CAP (for Rear No. 2 Seat with Manual Folding-up Function)

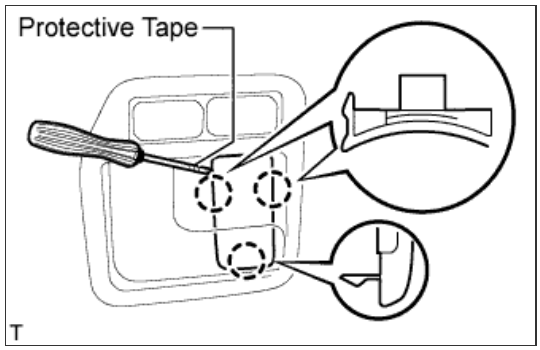
HINT:

Use the same procedure to remove the rear seat cover cap on the other side.

a. Using a screwdriver, detach the 3 claws and remove the rear seat cover cap.

HINT:

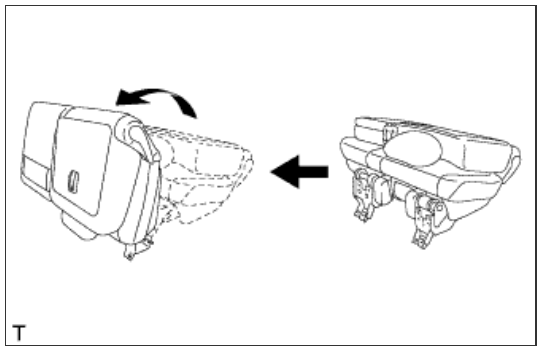
Tape the screwdriver tip before use.



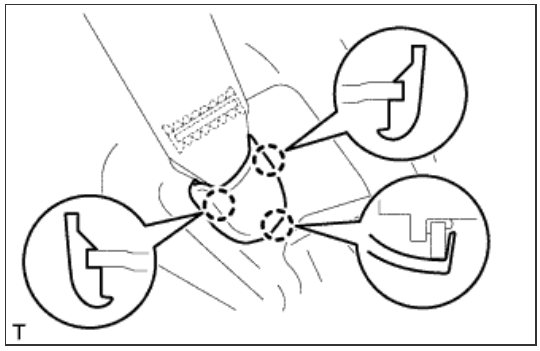
23. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

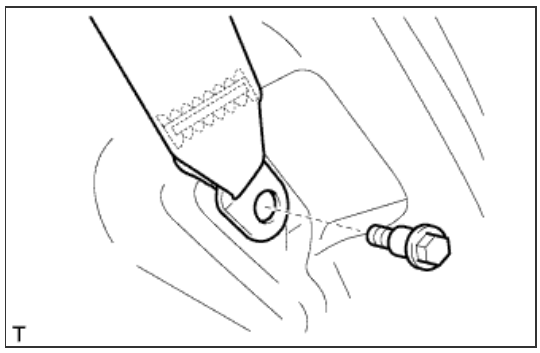
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



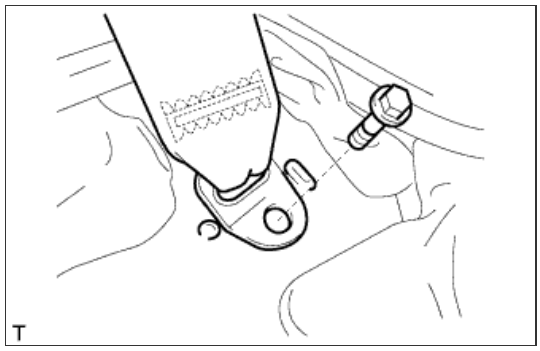
a. Detach the 3 claws and remove the cover.



b. Remove the bolt and rear No. 1 seat belt anchor.



c. Remove the bolt and rear No. 2 seat belt anchor.

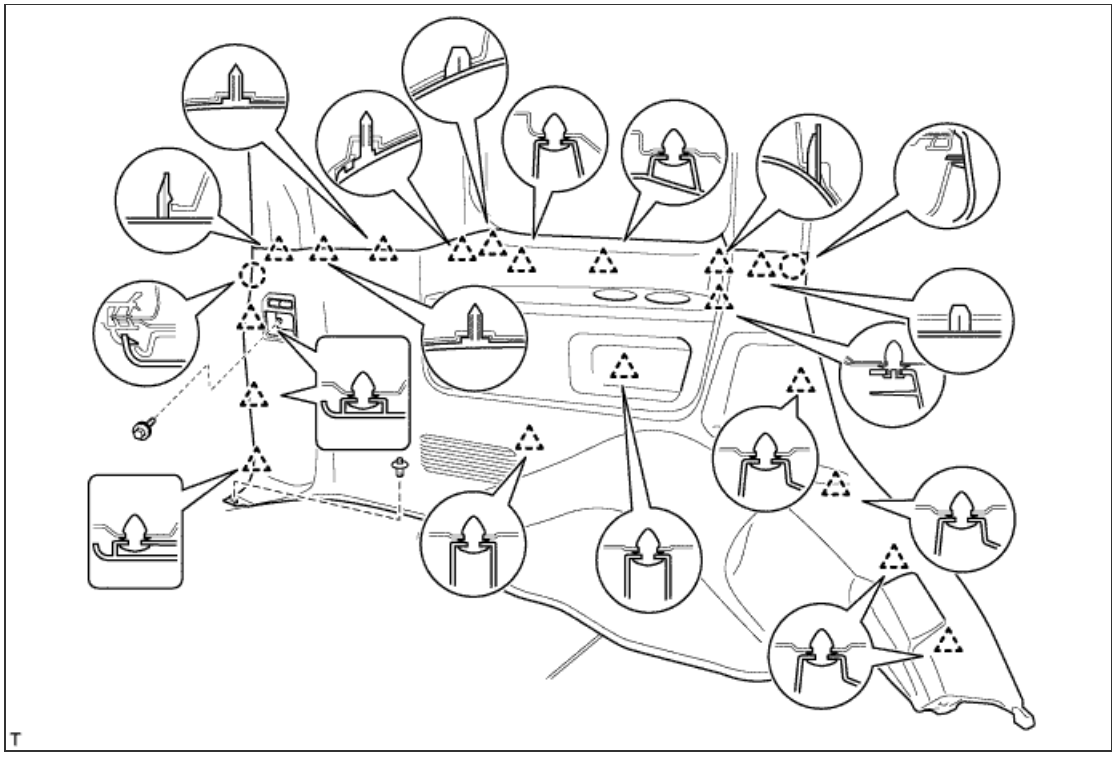


d. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 19 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

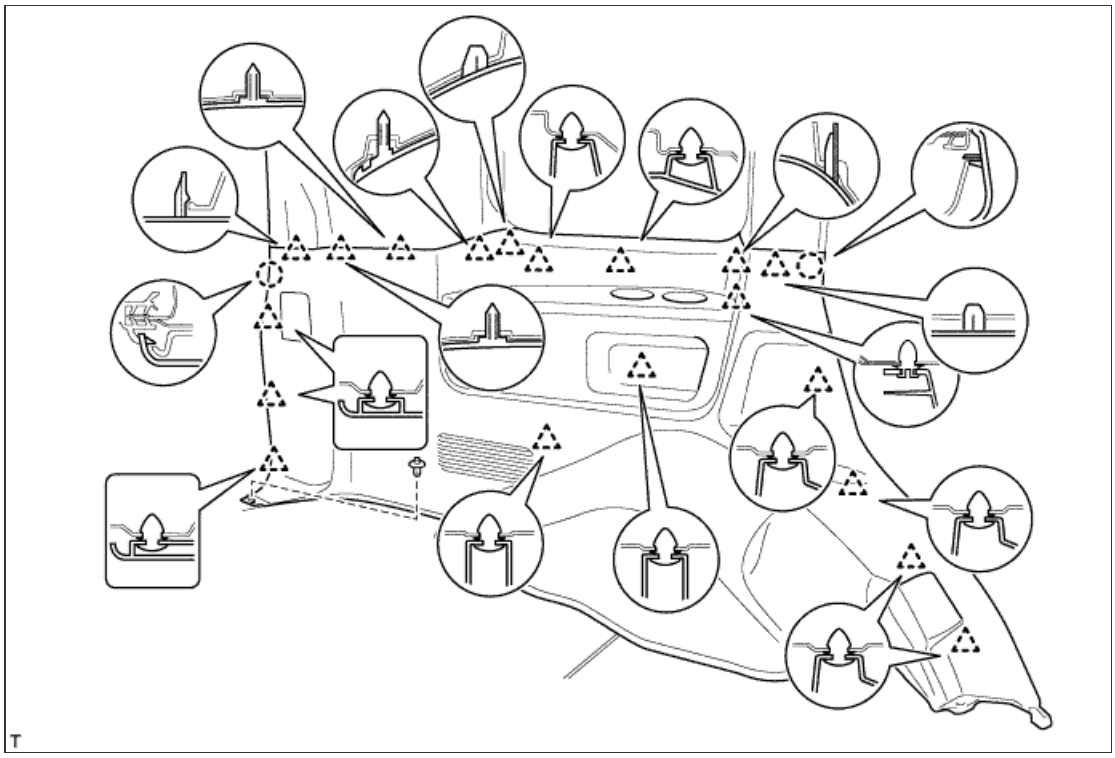


e. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 19 clips and 2 claws.

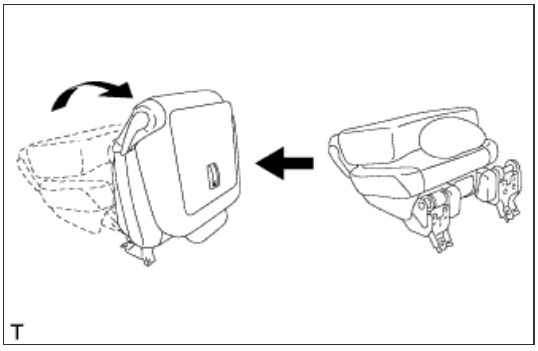
iii. Disconnect the thermistor connector and then remove the quarter trim panel.



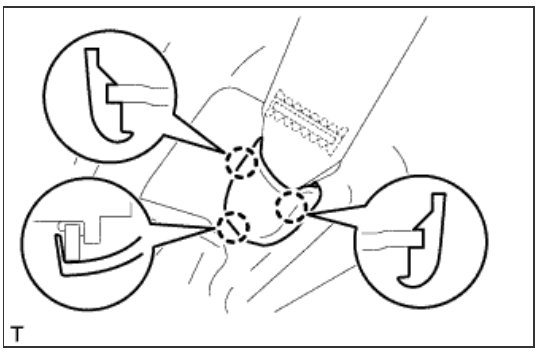
24. REMOVE FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

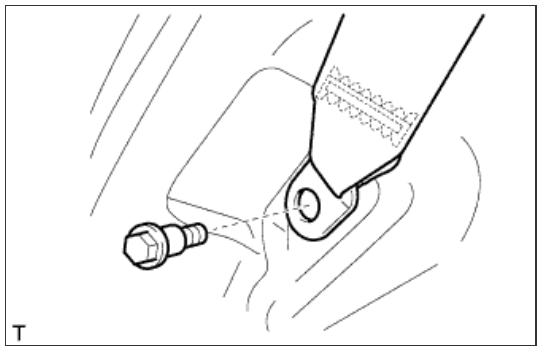
When removing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



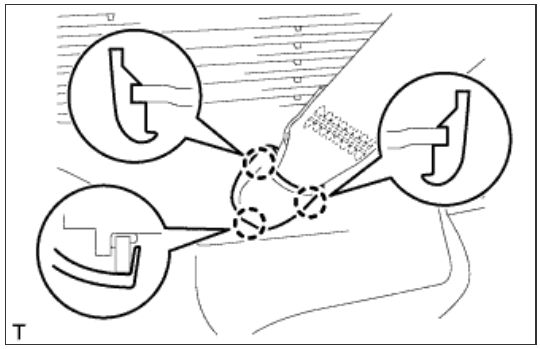
a. Detach the 3 claws and remove the cover.



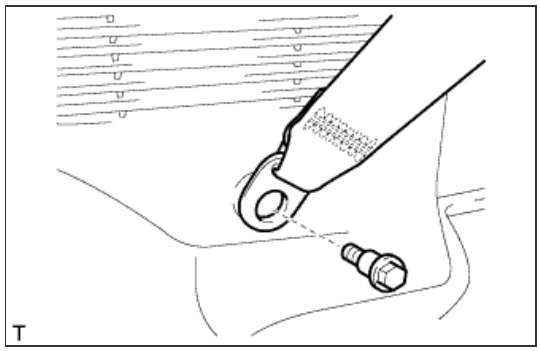
b. Remove the bolt and rear No. 1 seat belt anchor.



c. Detach the 3 claws and remove the cover.



d. Remove the bolt and rear No. 2 seat belt anchor.

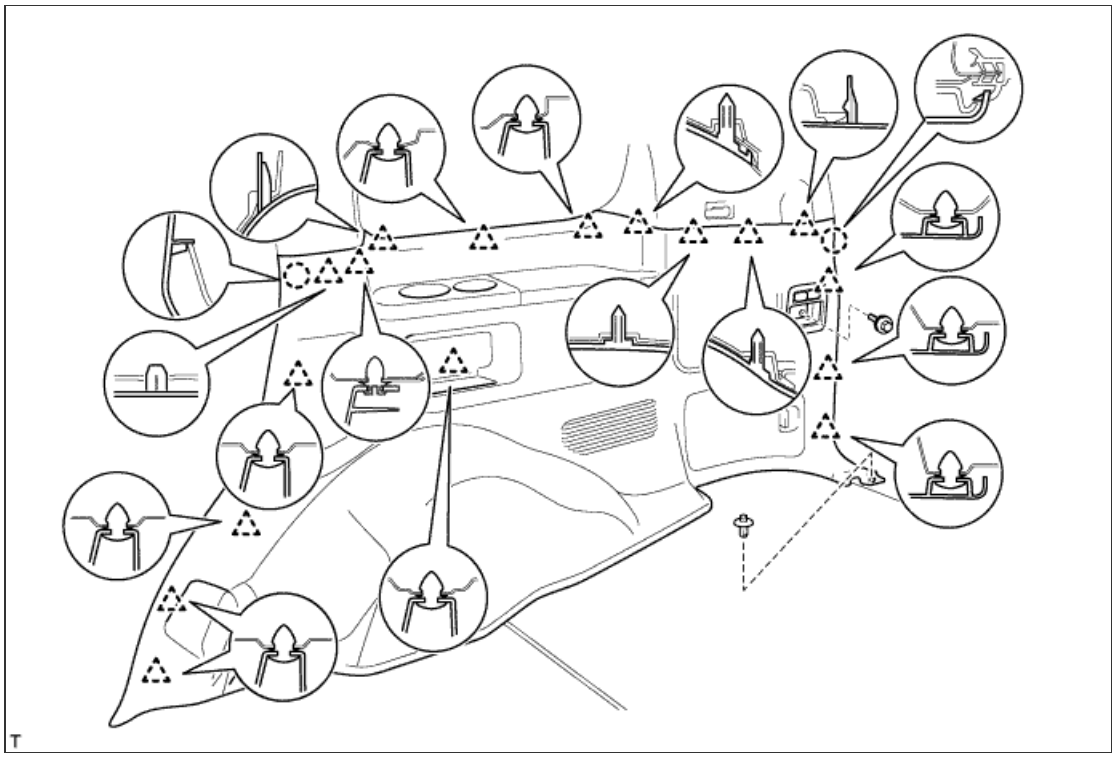


e. for Rear No. 2 Seat with Manual Folding-up Function:

i. Remove the clip and bolt.

ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and rear seat lock control lever cable, and then remove the quarter trim panel.

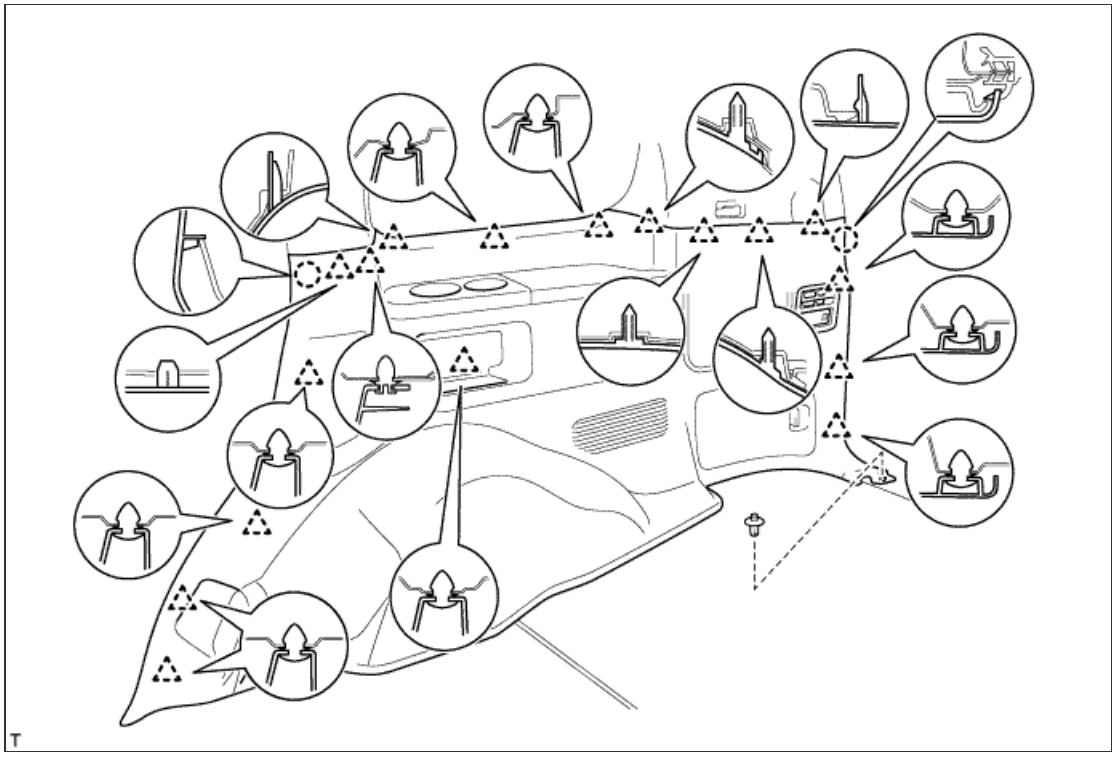


f. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Remove the clip.

ii. Detach the 17 clips and 2 claws.

iii. Disconnect the thermistor connector and then remove the quarter trim panel.

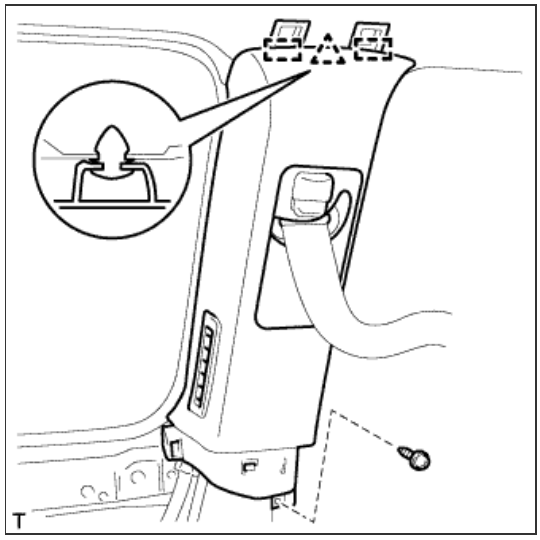


25. REMOVE REAR FRONT QUARTER TRIM GARNISH LH

a. Remove the screw.

b. Detach the clip and 2 guides.

c. Pass the seat belt anchor through the quarter trim garnish, and remove the quarter trim garnish.



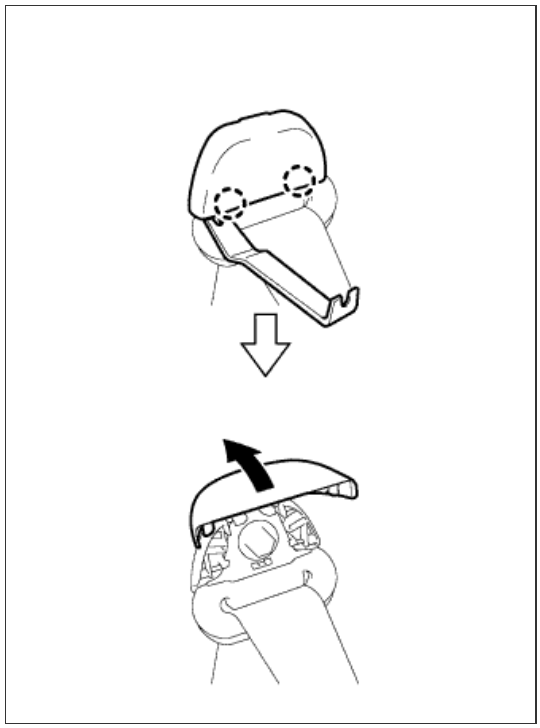
26. REMOVE REAR FRONT QUARTER TRIM GARNISH RH

HINT:

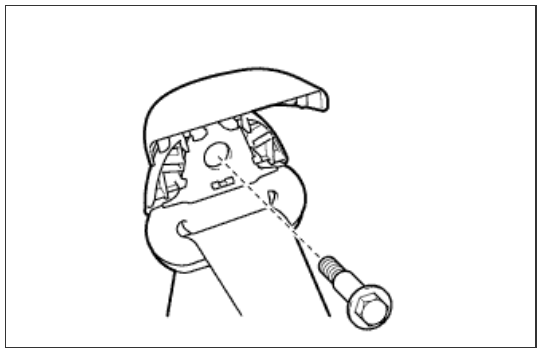
Use the same procedures described for the LH side.

27. REMOVE REAR UPPER PILLAR GARNISH LH

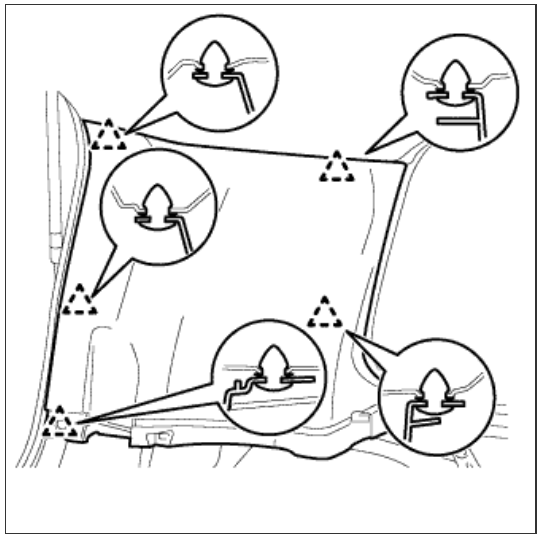
a. Using a moulding remover, detach the 2 claws and open the seat belt shoulder anchor cover.



b. Remove the bolt and seat belt shoulder anchor.

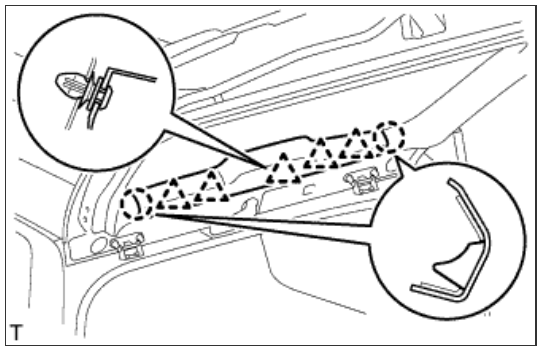


c. Detach the 5 clips and remove the rear upper pillar garnish.



28. REMOVE CENTER BACK DOOR GARNISH (w/ Power Back Door)

a. Detach the 5 clips and 2 claws, and remove the back door garnish.



29. REMOVE BACK DOOR SIDE GARNISH RH (w/ Power Back Door)

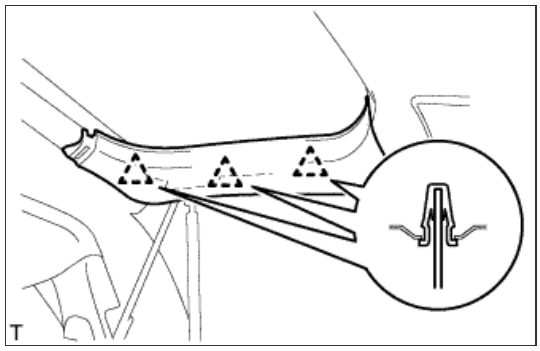
a. w/o Power Back Door:

HINT:

Use the same procedures described for the LH side.

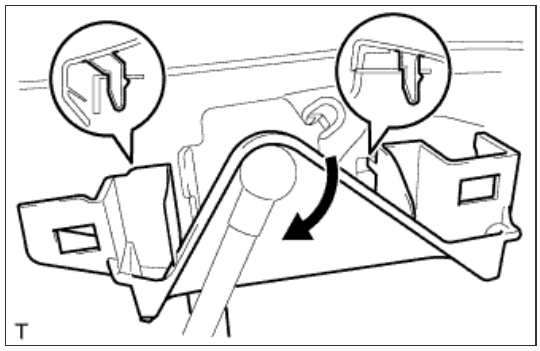
b. w/ Power Back Door:

i. Detach the 3 clips and remove the back door side garnish.



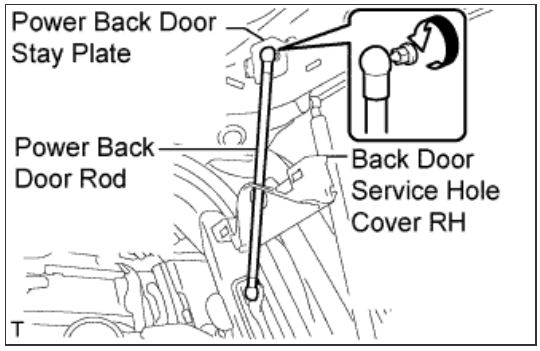
30. REMOVE BACK DOOR SERVICE HOLE COVER RH (w/ Power Back Door)

a. Detach the 2 clips and move the service hole cover so that the rod and back door stay plate can be removed.



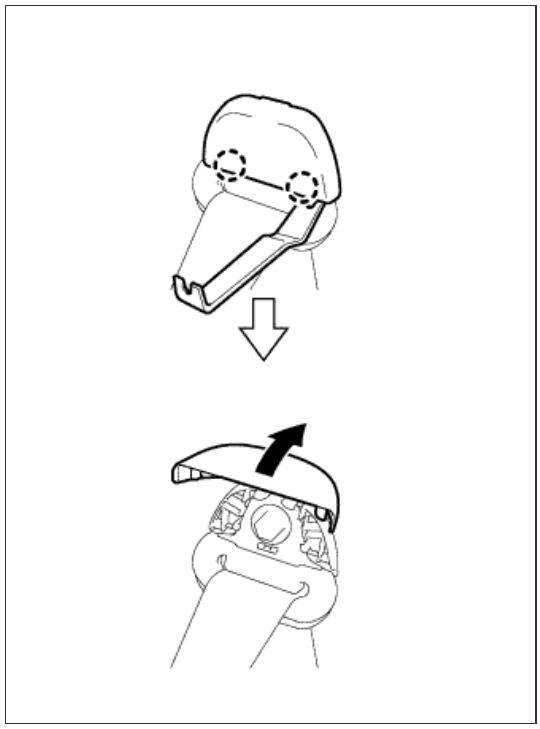
b. Remove the ball joint bolt, power back door rod and back door stay plate.

c. Remove the service hole cover from the power back door rod.

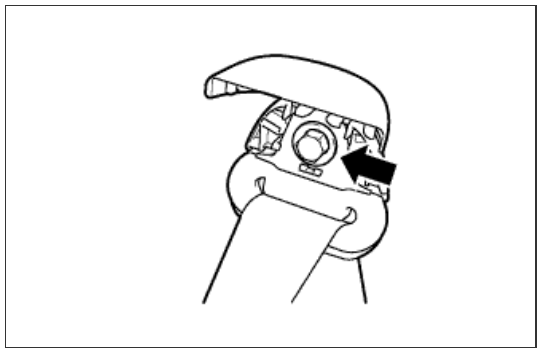


31. REMOVE REAR UPPER PILLAR GARNISH RH

a. Using a moulding remover, detach the 2 claws and open the seat belt shoulder anchor cover.

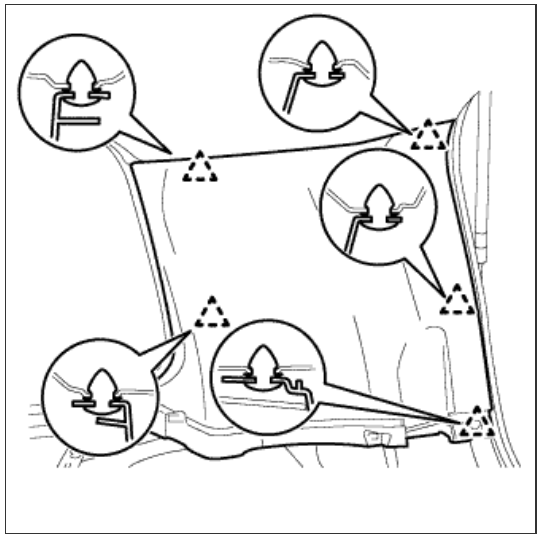


b. Remove the bolt and seat belt shoulder anchor.



c. w/o Power Back Door:

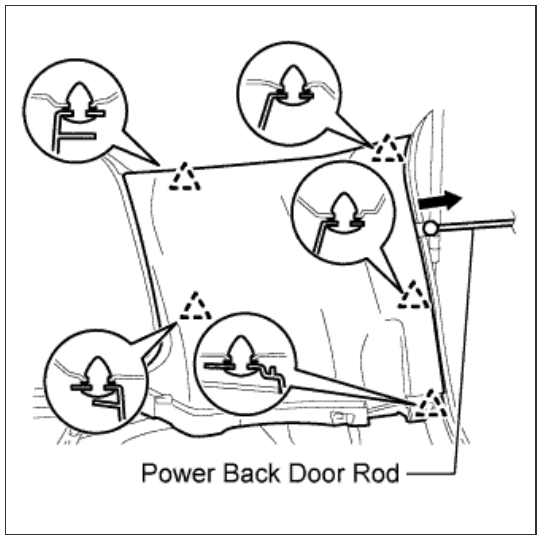
i. Detach the 5 clips and remove the rear upper pillar garnish.



d. w/ Power Back Door:

i. Detach the 5 clips.

ii. Pass the power back door rod through the rear upper pillar garnish, and remove the rear upper pillar garnish.



32. REMOVE MAP LIGHT ASSEMBLY

a. Using a screwdriver, detach the 2 claws and open the 2 covers.

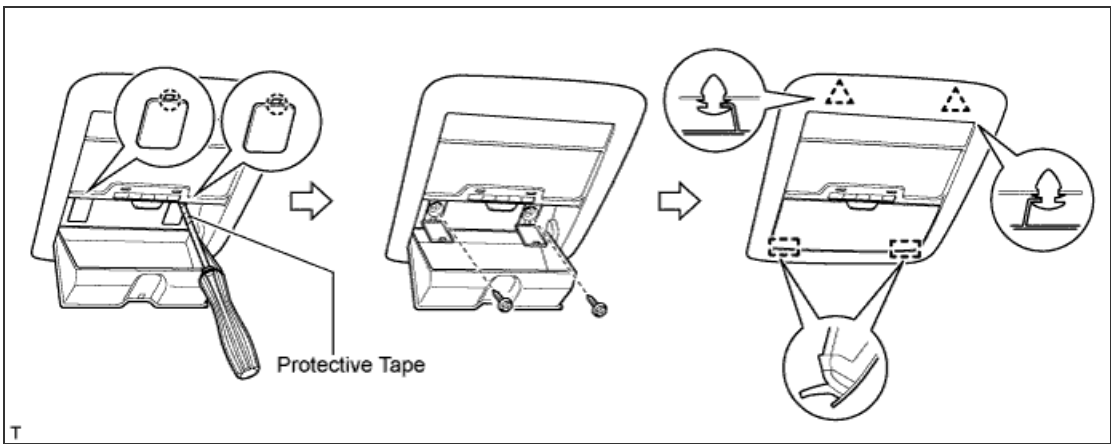
HINT:

Tape the screwdriver tip before use.

b. Remove the 2 screws.

c. Detach the 2 clips and 2 guides.

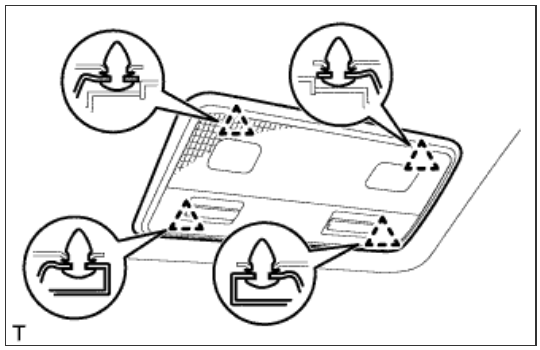
d. Disconnect the 2 connectors and then remove the map light.



33. REMOVE NO. 1 ROOM LIGHT ASSEMBLY (w/o Rear Seat Entertainment System)

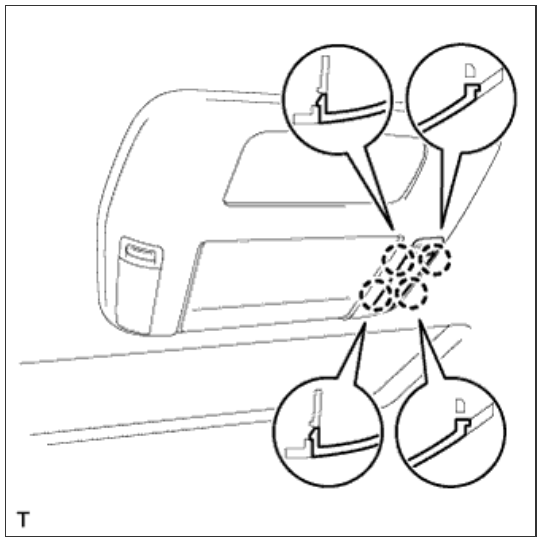
a. Detach the 4 clips.

b. Disconnect the connector and then remove the room light.



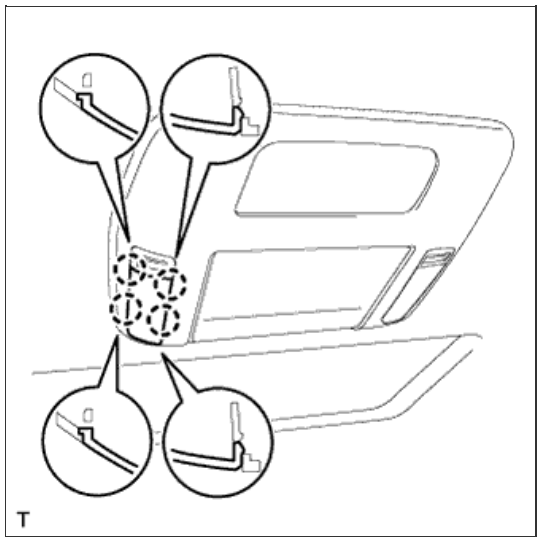
34. REMOVE NO. 1 ROOF LINING TRIM COVER (w/ Rear Seat Entertainment System)

a. Detach the 4 claws and remove the cover.



35. REMOVE NO. 2 ROOF LINING TRIM COVER (w/ Rear Seat Entertainment System)

a. Detach the 4 claws and remove the cover.

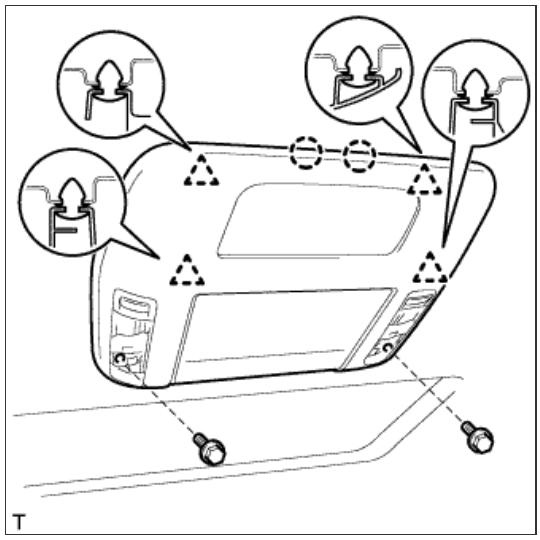


36. REMOVE ROOF CONSOLE BOX ASSEMBLY (w/ Rear Seat Entertainment System)

a. Remove the 2 bolts.

b. Detach the 4 clips and 2 claws.

c. Disconnect the connector and then remove the roof console box.

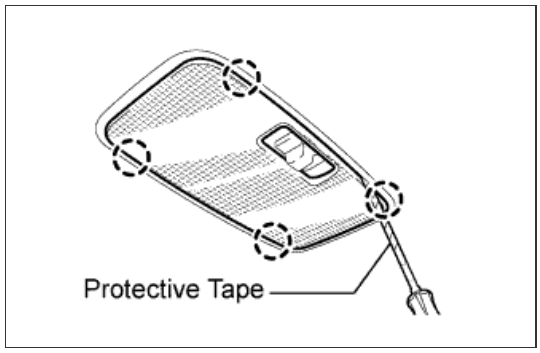


37. REMOVE NO. 3 ROOM LIGHT ASSEMBLY

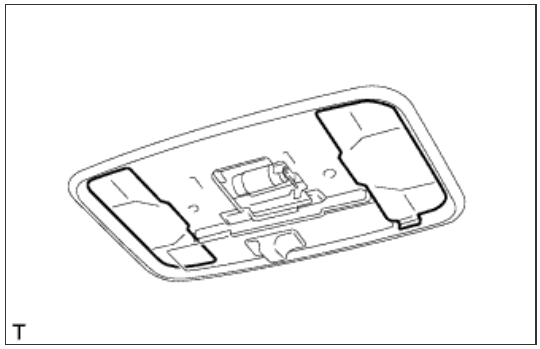
a. Using a screwdriver, detach the 4 claws and remove the room light lens.

HINT:

Tape the screwdriver tip before use.

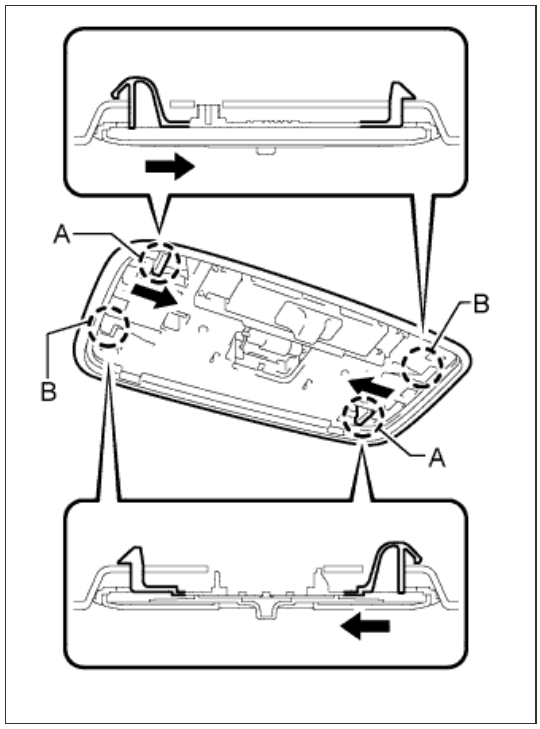


b. Remove the 2 covers.

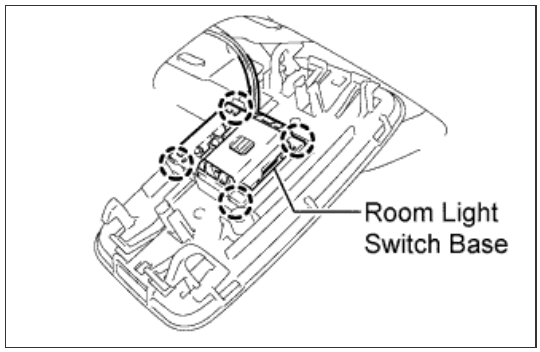


c. Using a screwdriver, push the 2 levers in the direction of the arrows in the illustration, and detach the 2 claws labeled A.

d. Detach the 2 claws labeled B.



e. Detach the 4 claws and remove the room light from the room light switch base.

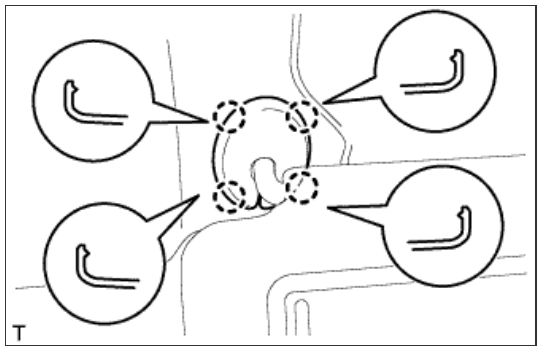


38. REMOVE VISOR BRACKET COVER

HINT:

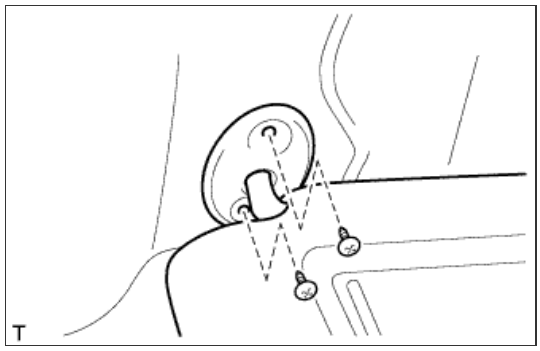
Use the same procedure to remove the visor bracket cover on the other side.

a. Detach the 4 claws and remove the visor bracket cover.



39. REMOVE VISOR ASSEMBLY LH

a. Remove the 2 screws and visor.



40. REMOVE VISOR ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

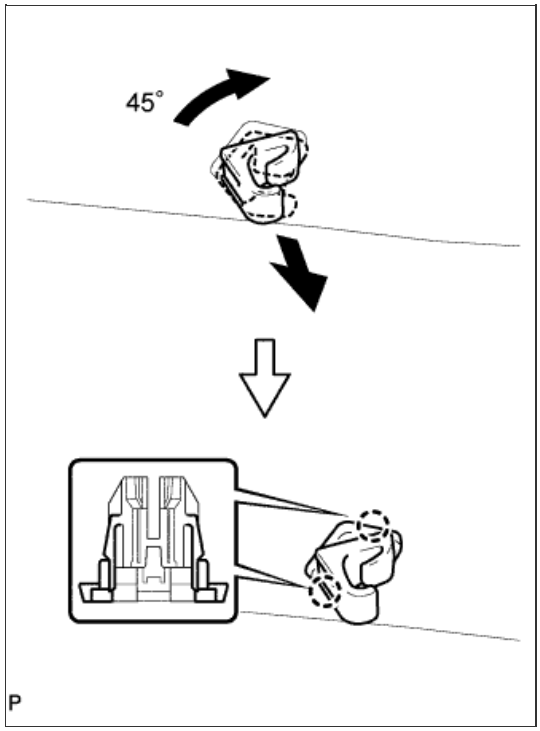
41. REMOVE VISOR HOLDER

HINT:

Use the same procedure to remove the visor holder on the other side.

a. Turn the visor holder approximately 45° and pull it out as shown in the illustration.

b. Detach the 2 claws and remove the visor holder.

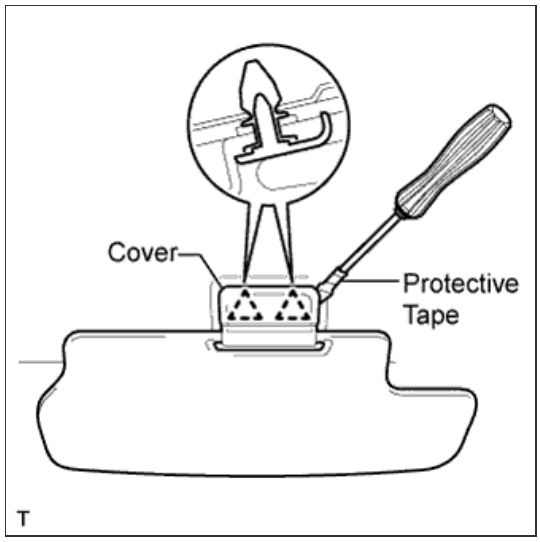


42. REMOVE CENTER VISOR ASSEMBLY LH

a. Using a screwdriver, pry off the cover to detach the 2 clips and remove the center visor.

HINT:

Tape the screwdriver tip before use.



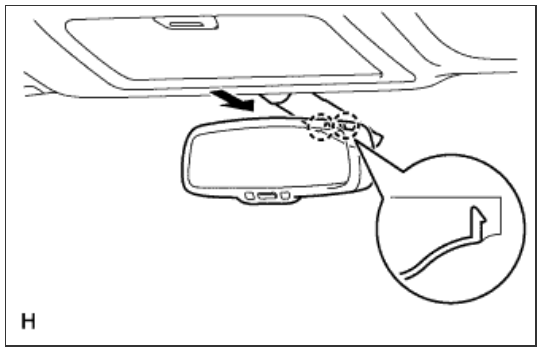
43. REMOVE CENTER VISOR ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

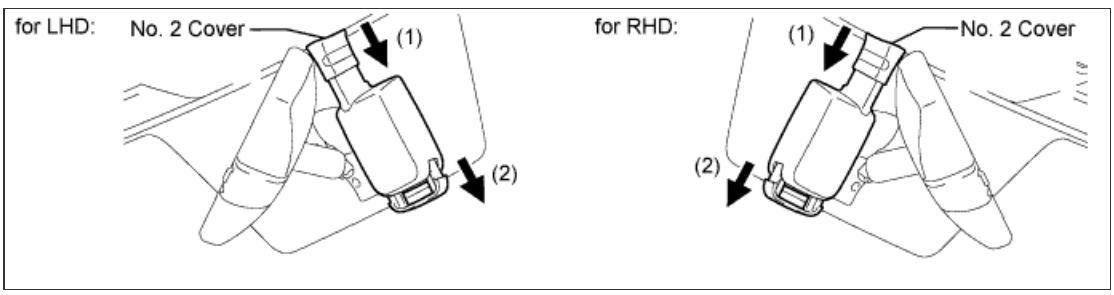
44. REMOVE INNER REAR VIEW MIRROR STAY HOLDER COVER

a. Detach the 2 claws and remove the cover as shown in the illustration.



45. REMOVE RAIN SENSOR COVER

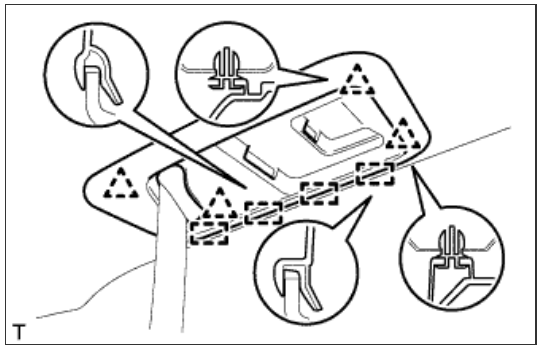
a. Slide the No. 2 cover in the direction of the arrow labeled (1).



b. Pull the stopper in the direction of the arrow labeled (2) to remove the rain sensor cover.

46. REMOVE SEAT BELT ANCHOR COVER

a. Detach the 4 clips and 4 guides, and remove the seat belt anchor cover.



47. REMOVE ASSIST GRIP ASSEMBLY

HINT:

Use the same procedure to remove the assist grip on the other side.

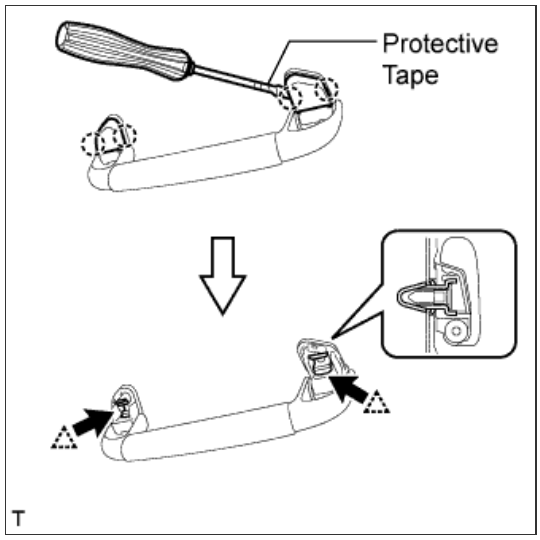
a. Using a screwdriver, detach the 4 claws and remove the 2 assist grip covers.

HINT:

Tape the screwdriver tip before use.

b. Detach the 2 clips and remove the assist grip.

c. Remove the 2 clips from the vehicle body.



48. REMOVE NO. 2 ASSIST GRIP ASSEMBLY LH

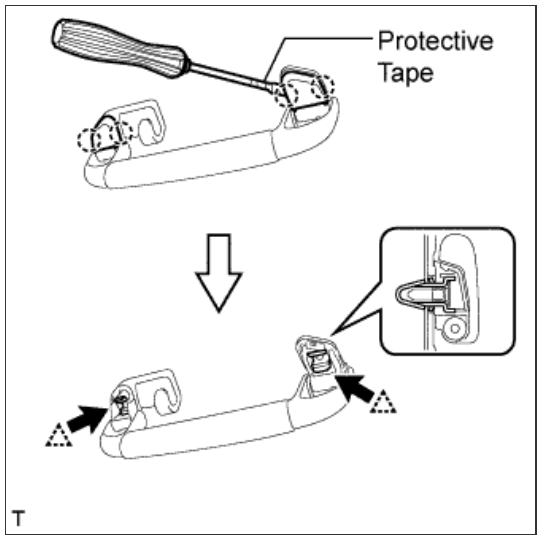
a. Using a screwdriver, detach the 4 claws and remove the 2 assist grip covers.

HINT:

Tape the screwdriver tip before use.

b. Detach the 2 clips and remove the assist grip.

c. Remove the 2 clips from the vehicle body.



49. REMOVE NO. 2 ASSIST GRIP ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

50. REMOVE 3RD SEAT ASSIST GRIP ASSEMBLY

HINT:

Use the same procedure to remove the 3rd seat assist grip on the other side.

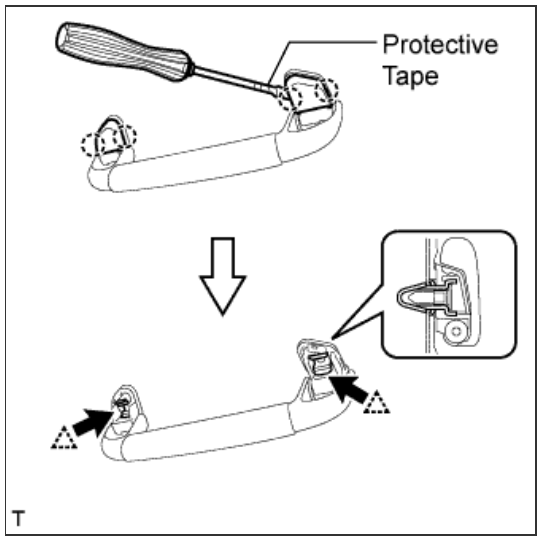
a. Using a screwdriver, detach the 4 claws and remove the 2 assist grip covers.

HINT:

Tape the screwdriver tip before use.

b. Detach the 2 clips and remove the assist grip.

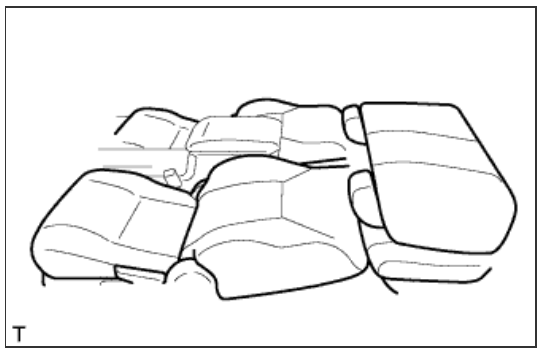
c. Remove the 2 clips from the vehicle body.



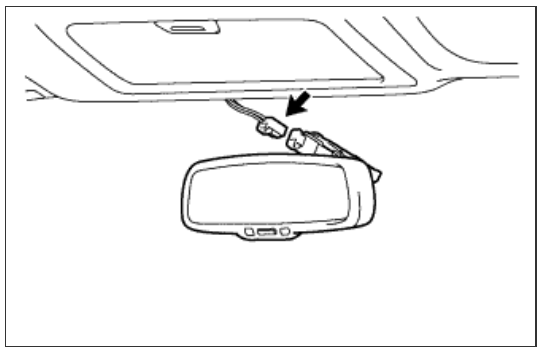
51. REMOVE ROOF HEADLINING ASSEMBLY

HINT:

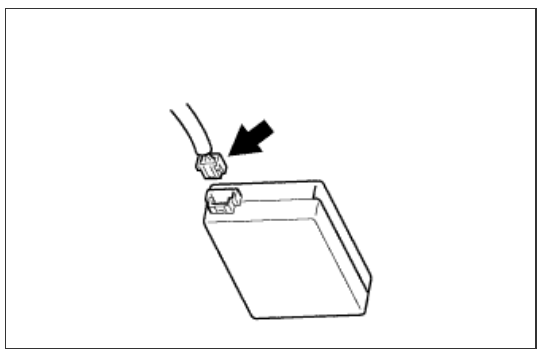
- **When removing the roof headlining, connect the cable to the negative (-) battery terminal and move the front seats and No. 1 rear seat to the position shown in the illustration.**
- **After moving the seats, disconnect the cable from the negative (-) battery terminal.**



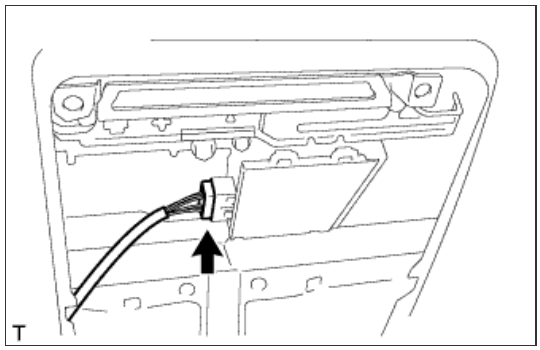
a. Disconnect the inner mirror connector.



b. Disconnect the rain sensor connector.

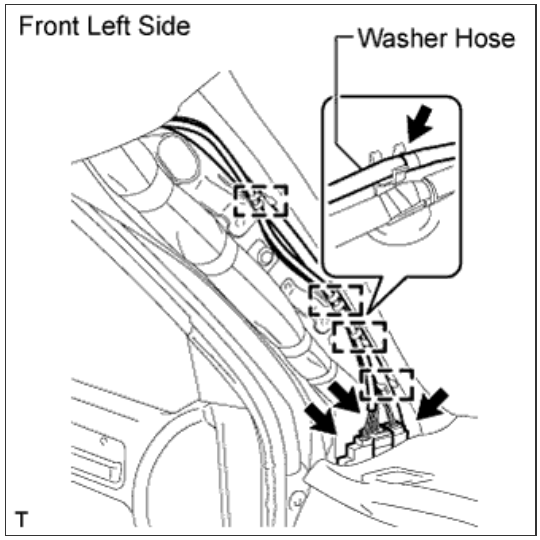


c. Disconnect the drive gear connector.



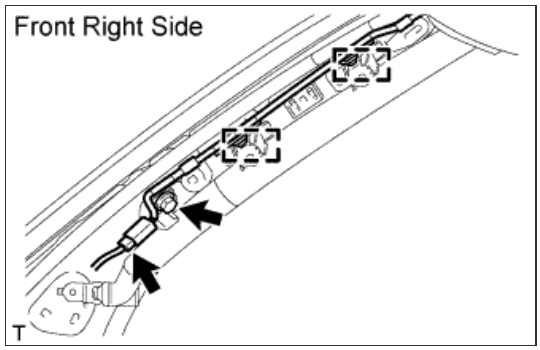
d. Disconnect the 3 roof wire connectors and washer hose.

e. Detach the 4 clamps.

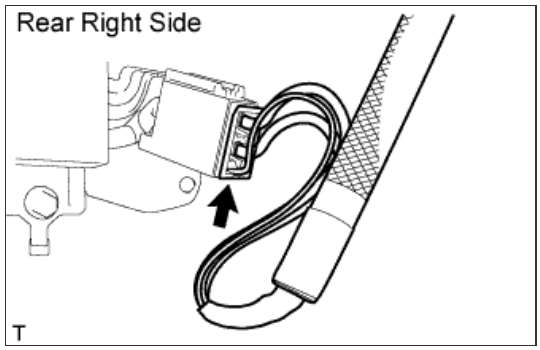


f. Remove the bolt.

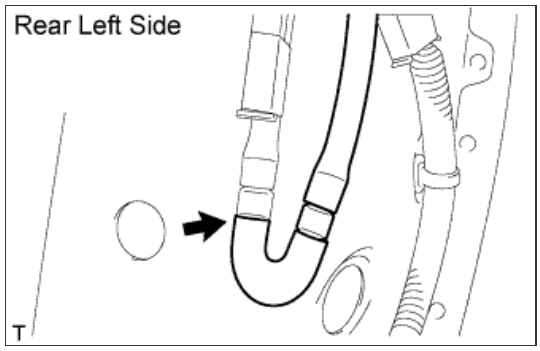
g. Disconnect the antenna cord connector and detach the 2 clamps.



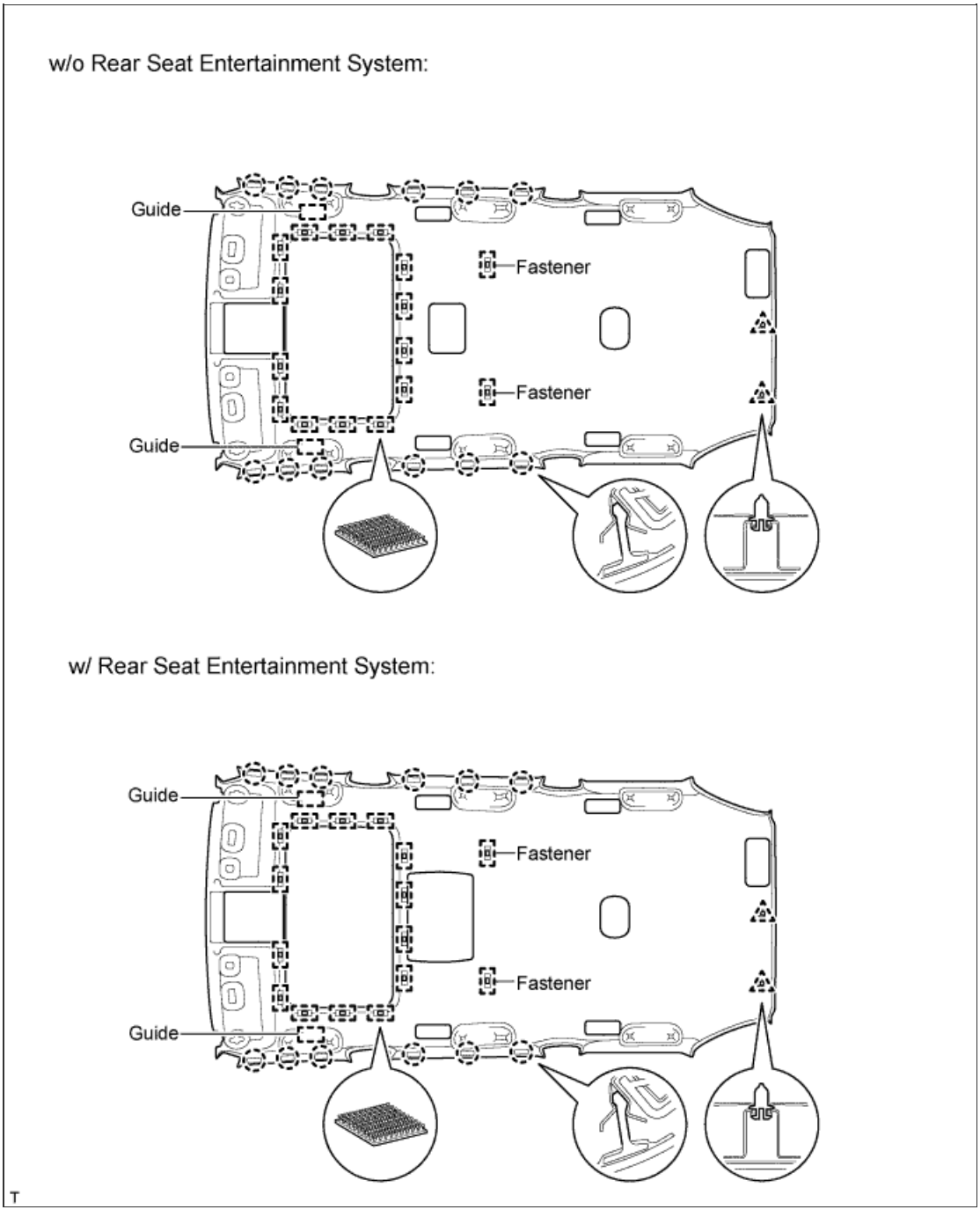
h. Disconnect the antenna cord connector.



i. Disconnect the washer hose.



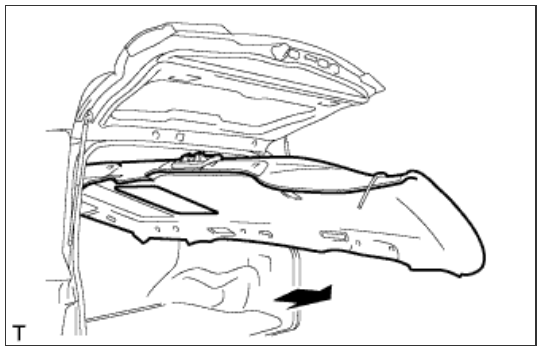
j. Detach the 12 claws, 2 clips, 2 guides and 16 fasteners.



k. Remove the headlining from the rear of the vehicle as shown in the illustration.

NOTICE:

Be careful not to damage the roof headlining when taking it out.

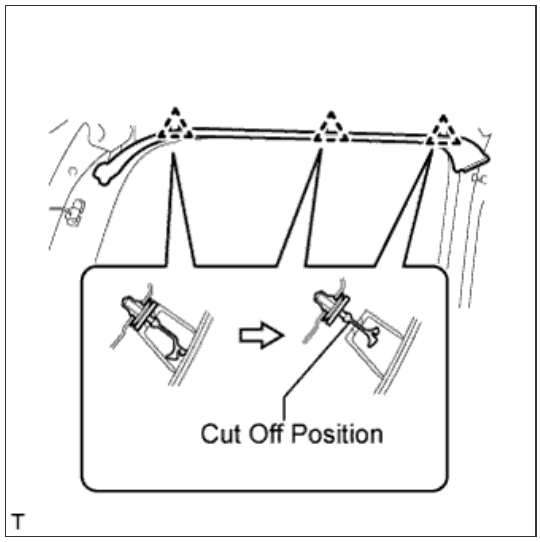


52. REMOVE FRONT ROOF SIDE RAIL GARNISH LH

a. Detach the 3 clips.

b. Cut off the 3 clips and remove the roof side rail garnish.

c. Remove the 3 clips from the vehicle body.



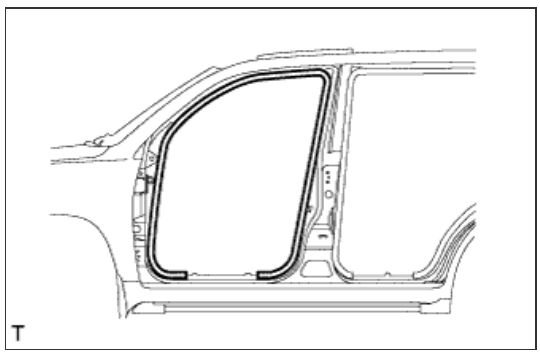
53. REMOVE FRONT ROOF SIDE RAIL GARNISH RH

HINT:

Use the same procedures described for the LH side.

54. REMOVE FRONT DOOR OPENING TRIM WEATHERSTRIP LH

a. Remove the front door opening trim weatherstrip.



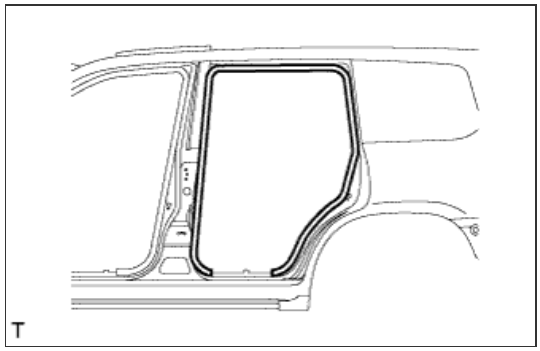
55. REMOVE FRONT DOOR OPENING TRIM WEATHERSTRIP RH

HINT:

Use the same procedures described for the LH side.

56. REMOVE REAR DOOR OPENING TRIM WEATHERSTRIP LH

a. Remove the rear door opening trim weatherstrip.



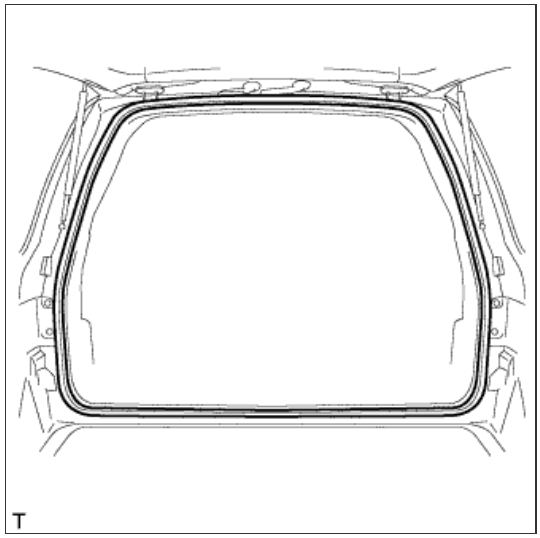
57. REMOVE REAR DOOR OPENING TRIM WEATHERSTRIP RH

HINT:

Use the same procedures described for the LH side.

58. REMOVE BACK DOOR WEATHERSTRIP

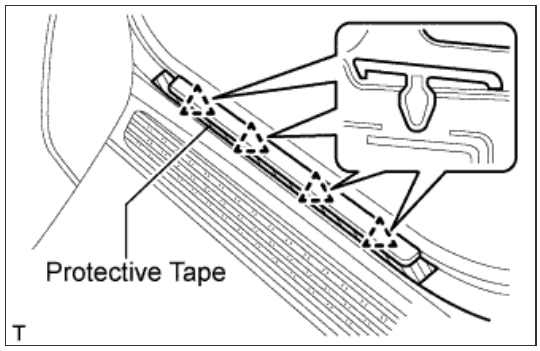
a. Remove the back door weatherstrip.



59. REMOVE FRONT DOOR SCUFF PLATE OUTSIDE LH

a. Put protective tape around the front door scuff plate outside.

b. Detach the 4 clips and remove the front door scuff plate outside.



60. REMOVE FRONT DOOR SCUFF PLATE RH

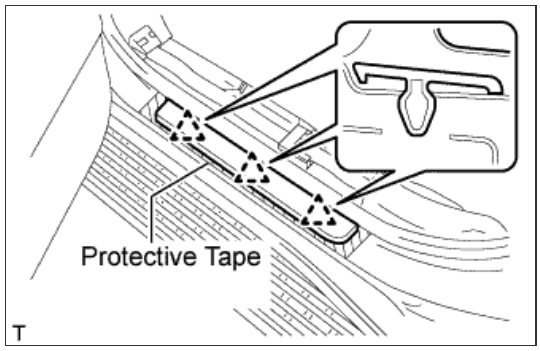
HINT:

Use the same procedures described for the LH side.

61. REMOVE REAR DOOR SCUFF PLATE OUTSIDE LH

a. Put protective tape around the rear door scuff plate outside.

b. Detach the 3 clips and remove the rear door scuff plate outside.



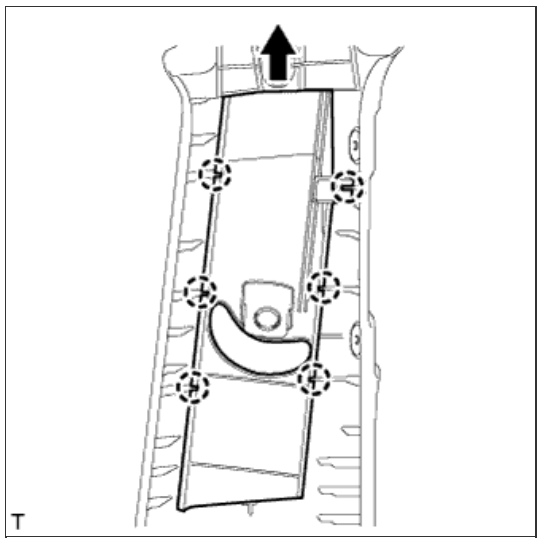
62. REMOVE REAR DOOR SCUFF PLATE OUTSIDE RH

HINT:

Use the same procedures described for the LH side.

63. REMOVE FRONT SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY LH

a. Detach the 6 claws of the plate, and slide the plate in the direction of the arrow to remove it.



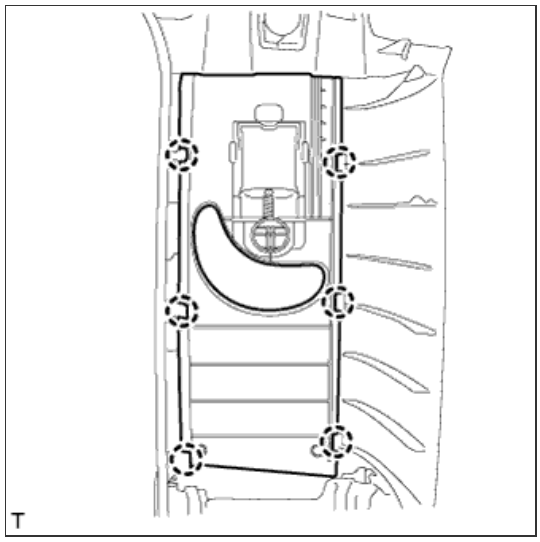
64. REMOVE FRONT SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

65. REMOVE REAR SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY LH

a. Detach the 6 claws and remove the plate.



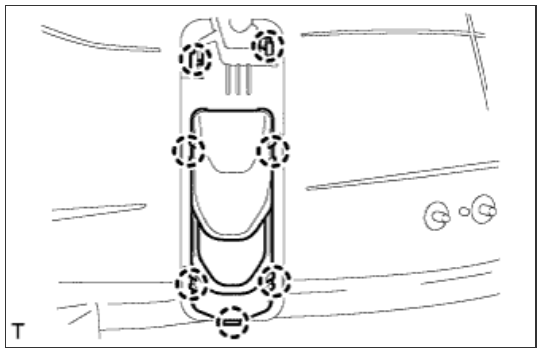
66. REMOVE REAR SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

67. REMOVE ROOF SIDE INNER GARNISH COVER LH

a. Detach the 7 claws and remove the cover.



68. REMOVE ROOF SIDE INNER GARNISH COVER RH

HINT:

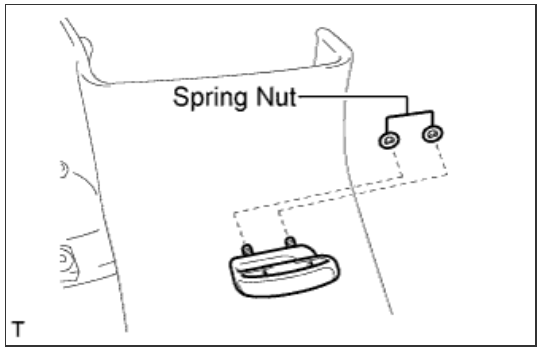
Use the same procedures described for the LH side.

69. REMOVE REAR NO. 1 SEAT SHOULDER BELT HANGER

HINT:

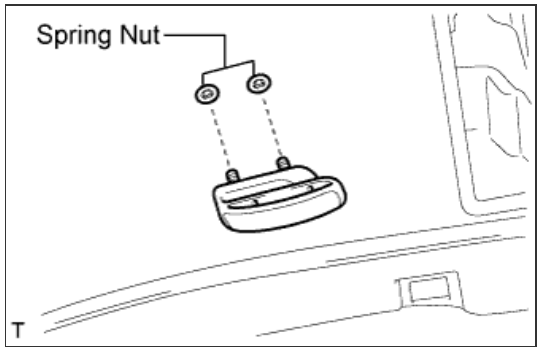
Use the same procedure to remove the hanger on the other side.

a. Remove the 2 spring nuts and hanger.



70. REMOVE REAR NO. 2 SEAT SHOULDER BELT HANGER LH

a. Remove the 2 spring nuts and hanger.



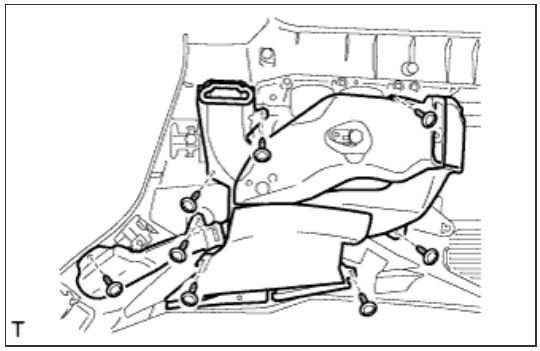
71. REMOVE REAR NO. 2 SEAT SHOULDER BELT HANGER RH

HINT:

Use the same procedures described for the LH side.

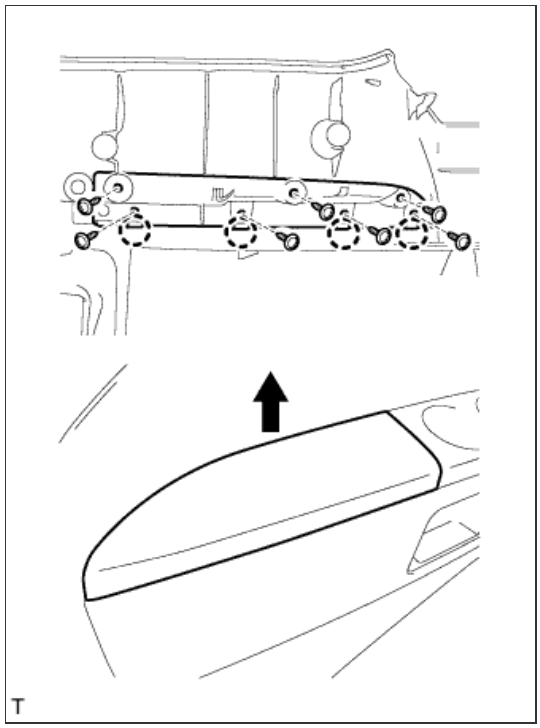
72. REMOVE QUARTER TRIM COVER SUB-ASSEMBLY LH

a. Remove the 8 screws and duct.



b. Remove the 7 screws.

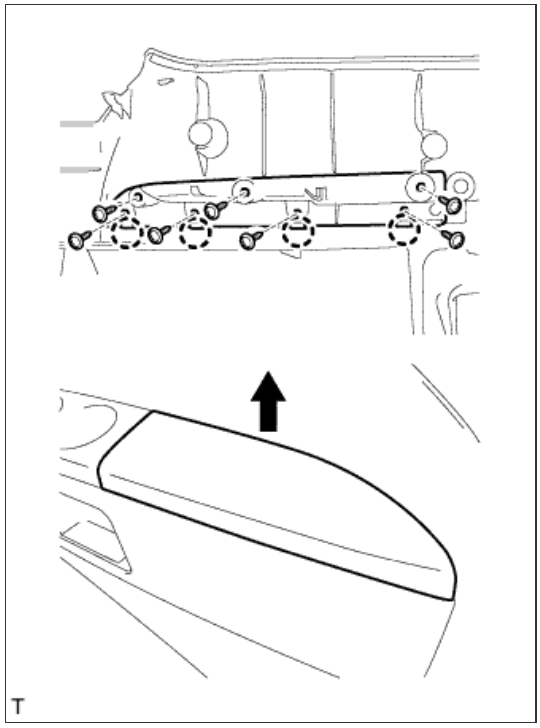
c. Detach the 4 claws and remove the quarter trim cover.



73. REMOVE QUARTER TRIM COVER SUB-ASSEMBLY RH

a. Remove the 7 screws.

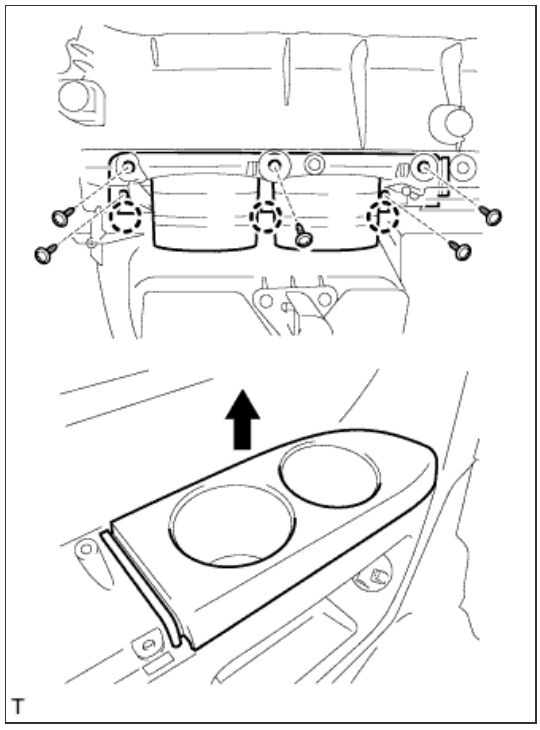
b. Detach the 4 claws and remove the quarter trim cover.



74. REMOVE NO. 2 CUP HOLDER

a. Remove the 5 screws.

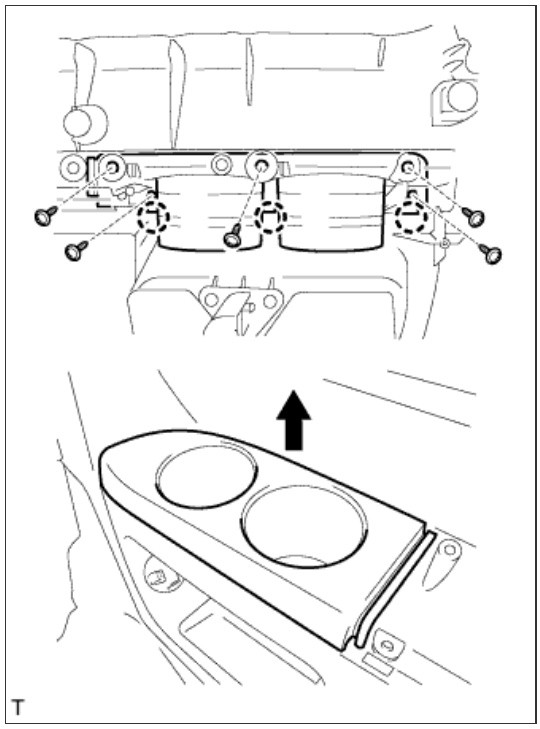
b. Detach the 3 claws and remove the cup holder.



75. REMOVE NO. 1 CUP HOLDER

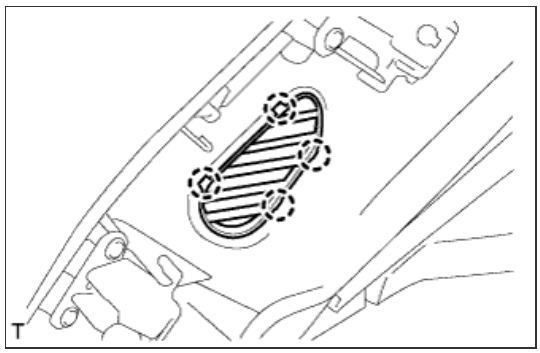
a. Remove the 5 screws.

b. Detach the 3 claws and remove the cup holder.



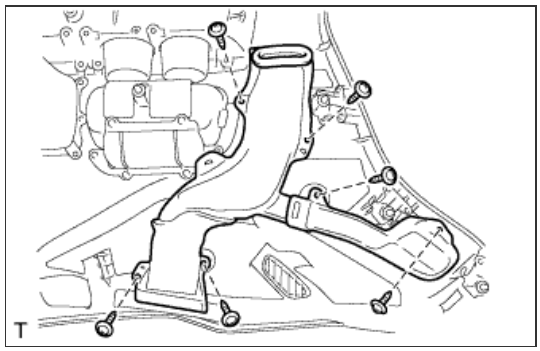
76. REMOVE NO. 1 SIDE TRIM BASE COVER LH

a. Detach the 4 claws and remove the cover.

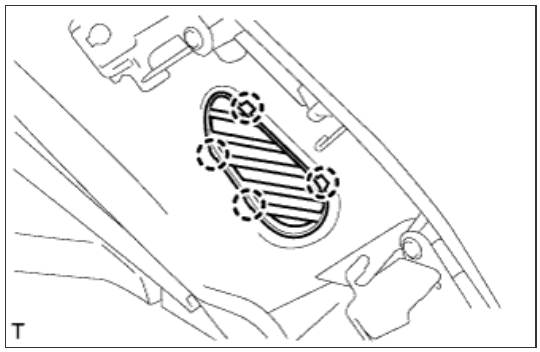


77. REMOVE NO. 1 SIDE TRIM BASE COVER RH

a. Remove the 6 screws and duct.

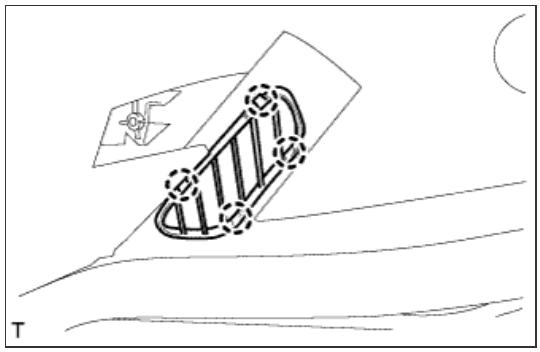


b. Detach the 4 claws and remove the cover.



78. REMOVE NO. 2 SIDE TRIM BASE COVER LH

a. Detach the 4 claws and remove the cover.



79. REMOVE NO. 2 SIDE TRIM BASE COVER RH

HINT:

Use the same procedures described for the LH side.

80. REMOVE REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH (for Rear No. 2 Seat with Manual Folding-up Function)

a. Detach the 4 claws and remove the seat lock control lever.

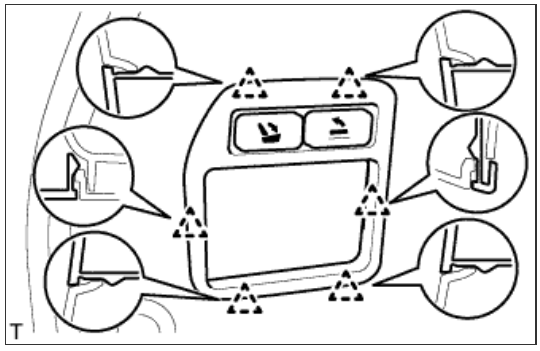
81. REMOVE REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY RH (for Rear No. 2 Seat with Manual Folding-up Function)

HINT:

Use the same procedures described for the LH side.

82. REMOVE REAR NO. 2 SEAT COVER BEZEL (for Rear No. 2 Seat with Manual Folding-up Function)

a. Detach the 6 clips and remove the rear No. 2 seat cover bezel.



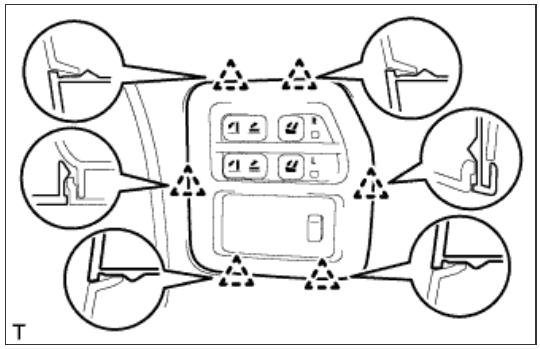
83. REMOVE REAR NO. 1 SEAT COVER BEZEL (for Rear No. 2 Seat with Manual Folding-up Function)

HINT:

Use the same procedures described for the LH side.

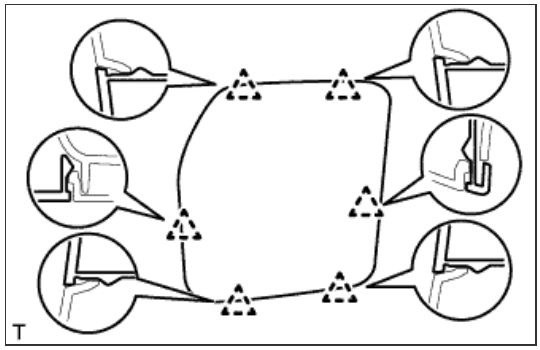
84. REMOVE FOLD SEAT SWITCH ASSEMBLY (for Rear No. 2 Seat with Automatic Folding-up Function)

a. Detach the 6 clips and remove the fold seat switch.



85. REMOVE QUARTER TRIM COVER LH (for Rear No. 2 Seat with Automatic Folding-up Function)

a. Detach the 6 clips and remove the quarter trim cover.



86. REMOVE QUARTER TRIM LID SUB-ASSEMBLY RH

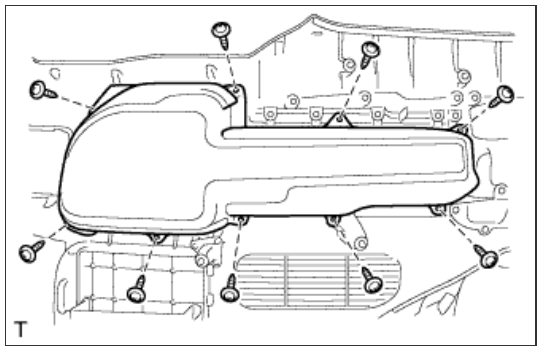
a. Remove the quarter trim lid.

87. REMOVE SIDE TRIM BOX COVER (w/o Woofer)

a. Remove the side trim box cover.

88. REMOVE SIDE TRIM BOX (w/o Woofer)

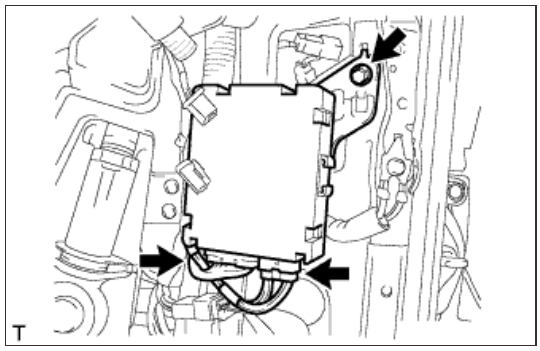
a. Remove the 9 screws and side trim box.



89. REMOVE NO. 2 MULTIPLEX NETWORK BODY ECU

a. Disconnect the 2 connectors.

b. Remove the bolt and multiplex network body ECU.



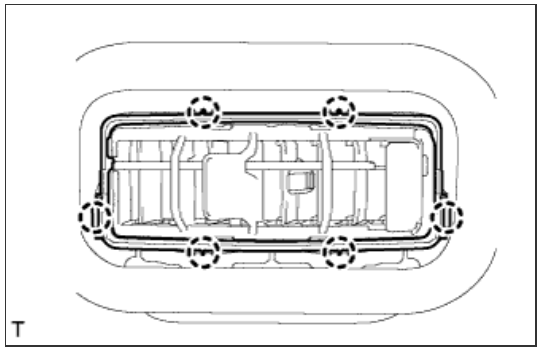
for Preparation Click here

1. REMOVE NO. 2 AIR OUTLET GRILLE ASSEMBLY

HINT:

Use the same procedures to remove the air outlet grille on the other side.

a. Detach 6 claws and remove the air outlet grille.



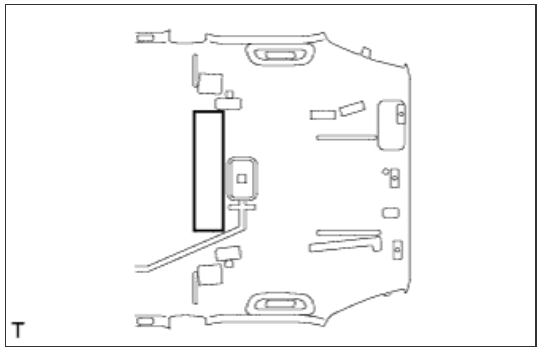
2. REMOVE NO. 1 AIR OUTLET GRILLE ASSEMBLY

HINT:

Use the same procedures described for the No. 2 air outlet grille.

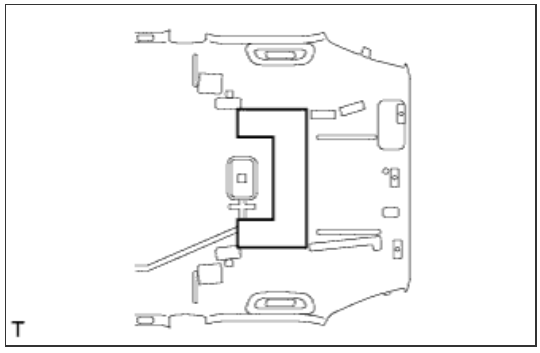
3. REMOVE NO. 1 ROOF SILENCER PAD

a. Remove the roof silencer pad.



4. REMOVE NO. 4 ROOF SILENCER PAD

a. Remove the roof silencer pad.



5. REMOVE NO. 1 ROOF WIRE

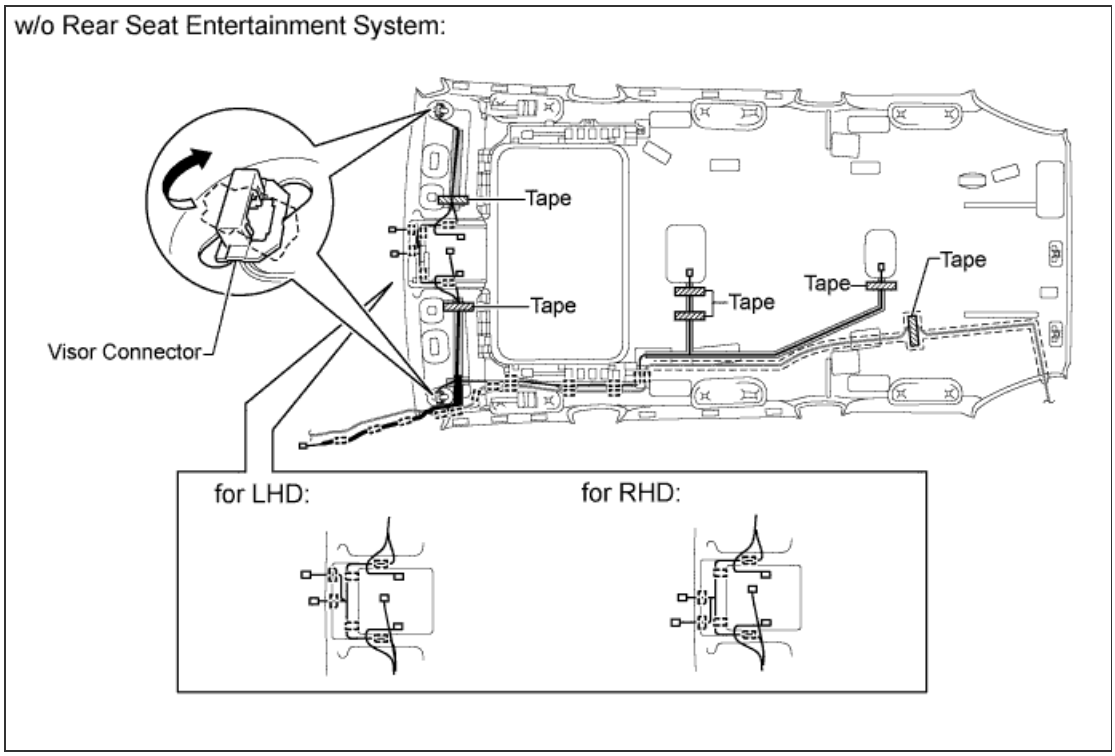
a. w/o Rear Seat Entertainment System:
Remove the No. 1 roof wire.

i. Turn the visor connectors approximately 90° clockwise and remove them from the roof headlining.

ii. Remove the 6 pieces of tape from the roof headlining.

iii. Detach each clamp, and remove the roof wire and washer hose.

iv. Remove the double-sided tape remaining on the headlining.



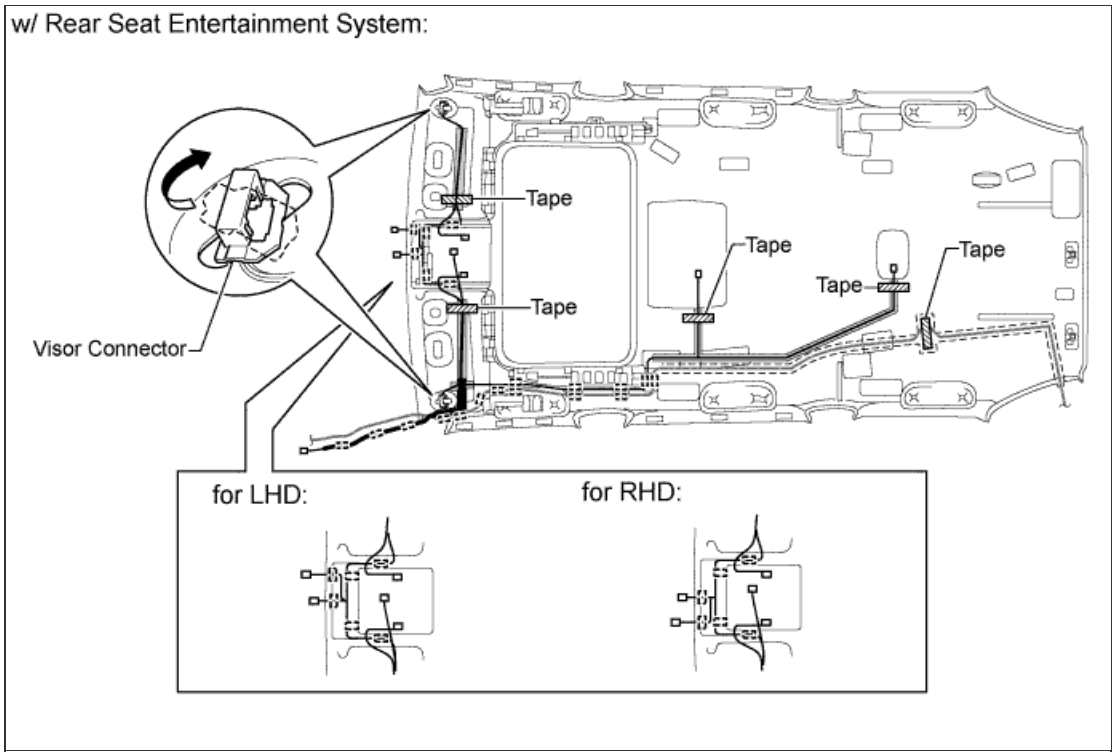
b. w/ Rear Seat Entertainment System:
Remove the No. 1 roof wire.

i. Turn the visor connectors approximately 90° clockwise and remove them from the roof headlining.

ii. Remove the 5 pieces of tape from the roof headlining.

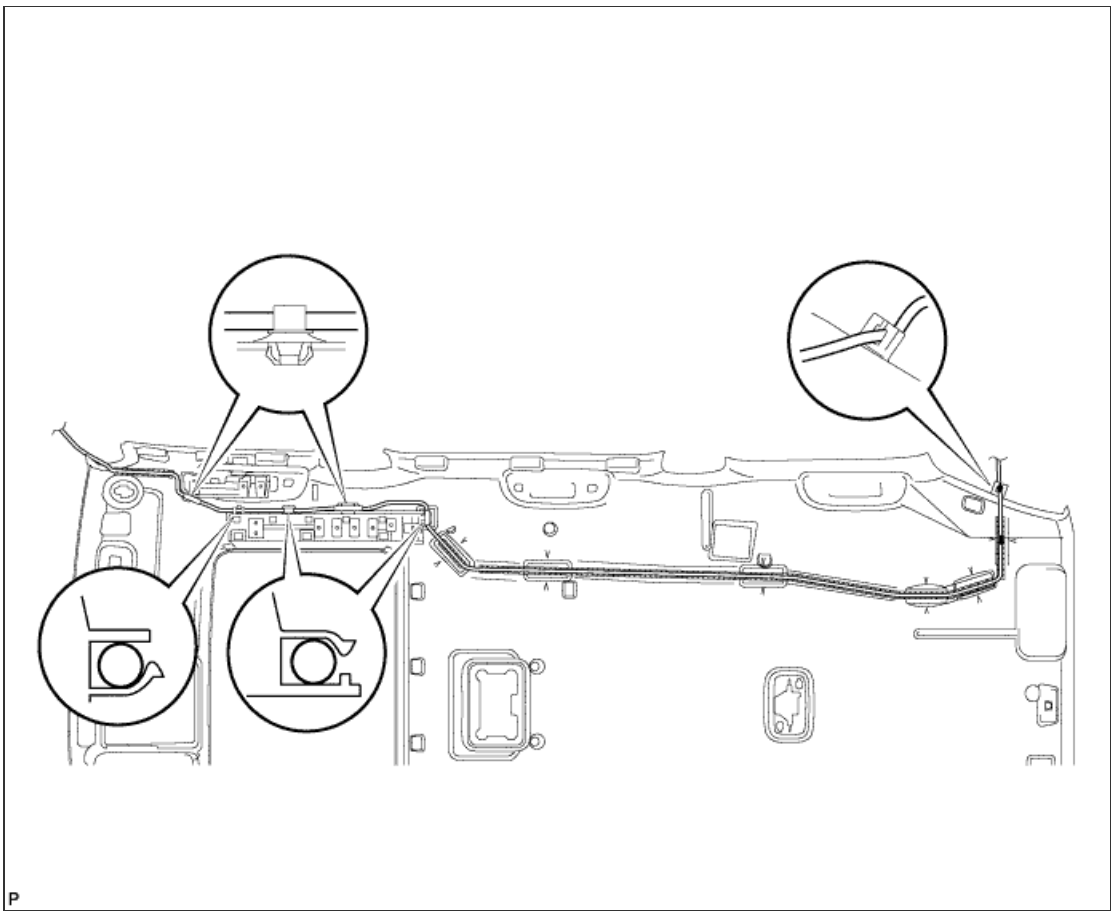
iii. Detach each clamp, and remove the roof wire and washer hose.

iv. Remove the double-sided tape remaining on the headlining.



6. REMOVE ANTENNA CORD SUB-ASSEMBLY

a. Detach the 2 clamps and remove the antenna from the 3 ribs and notch on the rear of the roof headlining.



b. Remove the antenna cord from the roof headlining.

c. Remove the double-sided tape from the roof headlining.

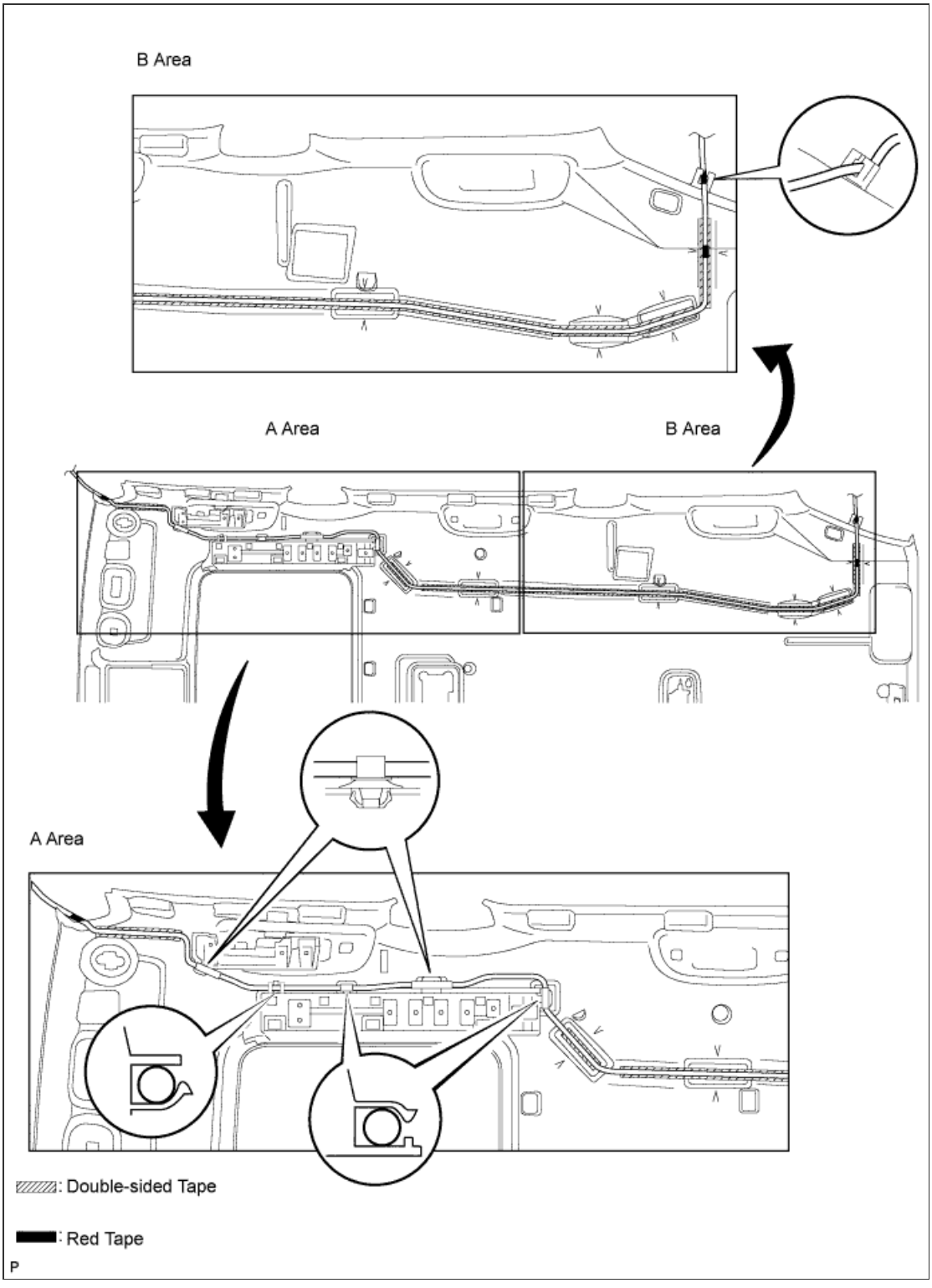
for Preparation Click here

1. INSTALL ANTENNA CORD SUB-ASSEMBLY

a. Apply new double-sided tape as shown in the illustration.

HINT:

Attach double-sided tape to the hatched areas shown in the illustration below.



b. Align the red tape wound around the antenna cord with the V markings on the roof headlining and the notch at the rear of the headlining, and attach the antenna cord to the double-sided tape.

c. Attach the 2 clamps and fit the antenna into the 3 ribs and the notch.

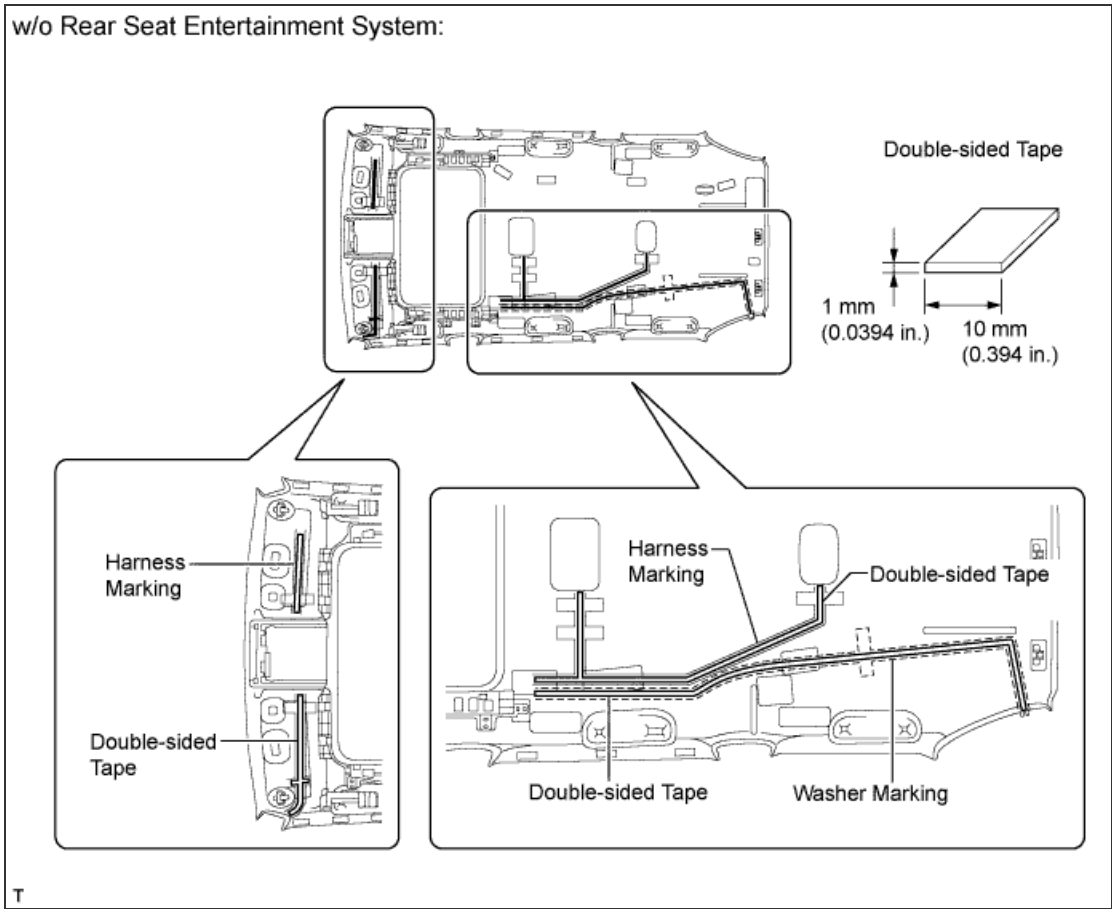
2. INSTALL NO. 1 ROOF WIRE

a. w/o Rear Seat Entertainment System:
Install the No. 1 roof wire.

i. Place double-sided tape along the center of the harness marking and washer marking.

HINT:

Make sure that the double-sided tape is not peeling off or misaligned.



ii. Remove the peeling paper from the double-sided tape while not touching the adhesive side.

iii. Align the triangle mark of the roof wire protector with the V mark of the headlining as shown in the illustration, and then attach the roof wire protector.

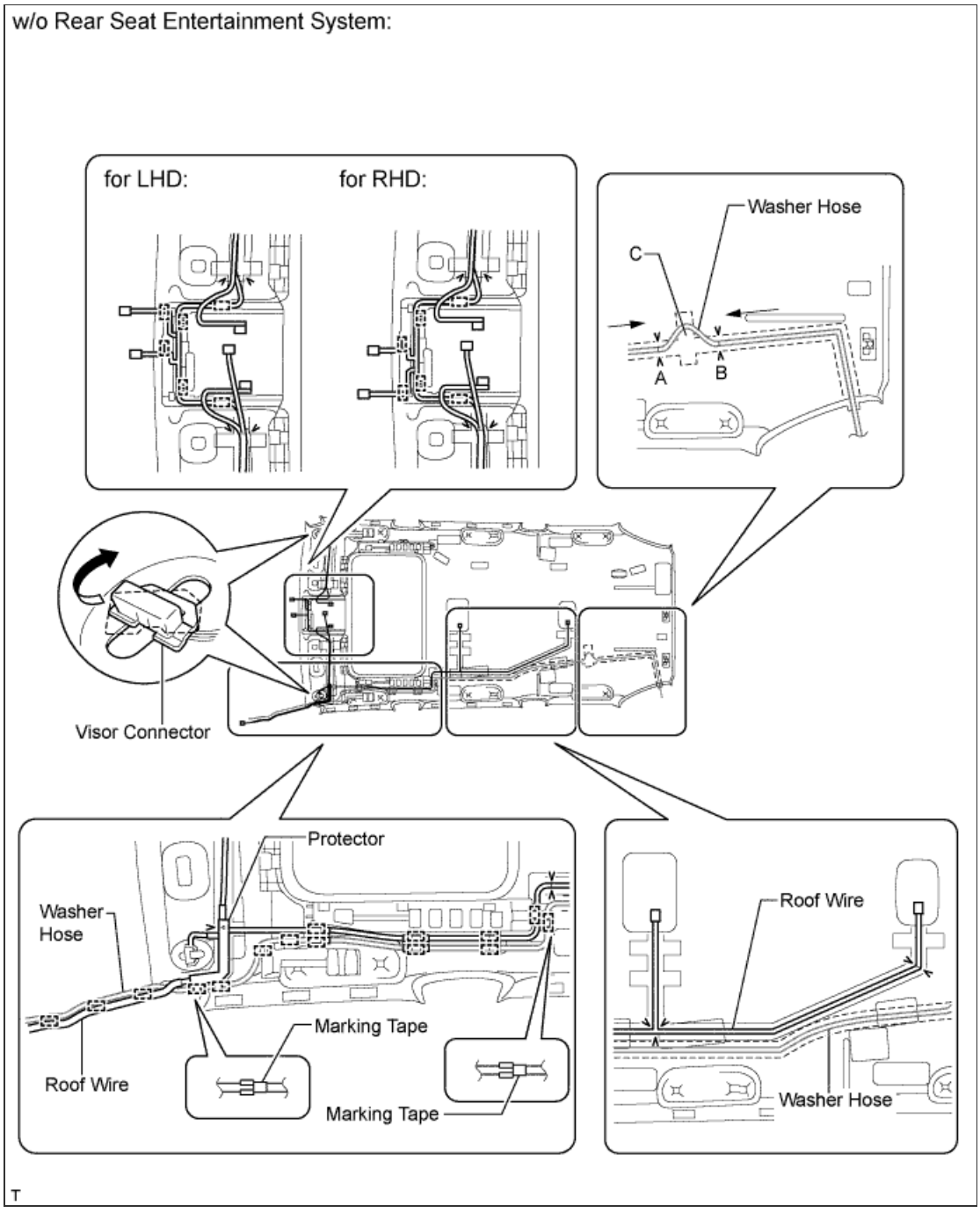
iv. Attach each clamp as shown in the illustration.

v. Align the roof wire and washer hose with the V marks of the headlining as shown in the illustration, and attach them to the headlining.

HINT:

- **Attach the washer hose from the front to the point labeled A, and attach the washer hose from the rear to the point labeled B as shown in the illustration.**
- **Attach the extra length of the washer hose to the part labeled C in the illustration.**

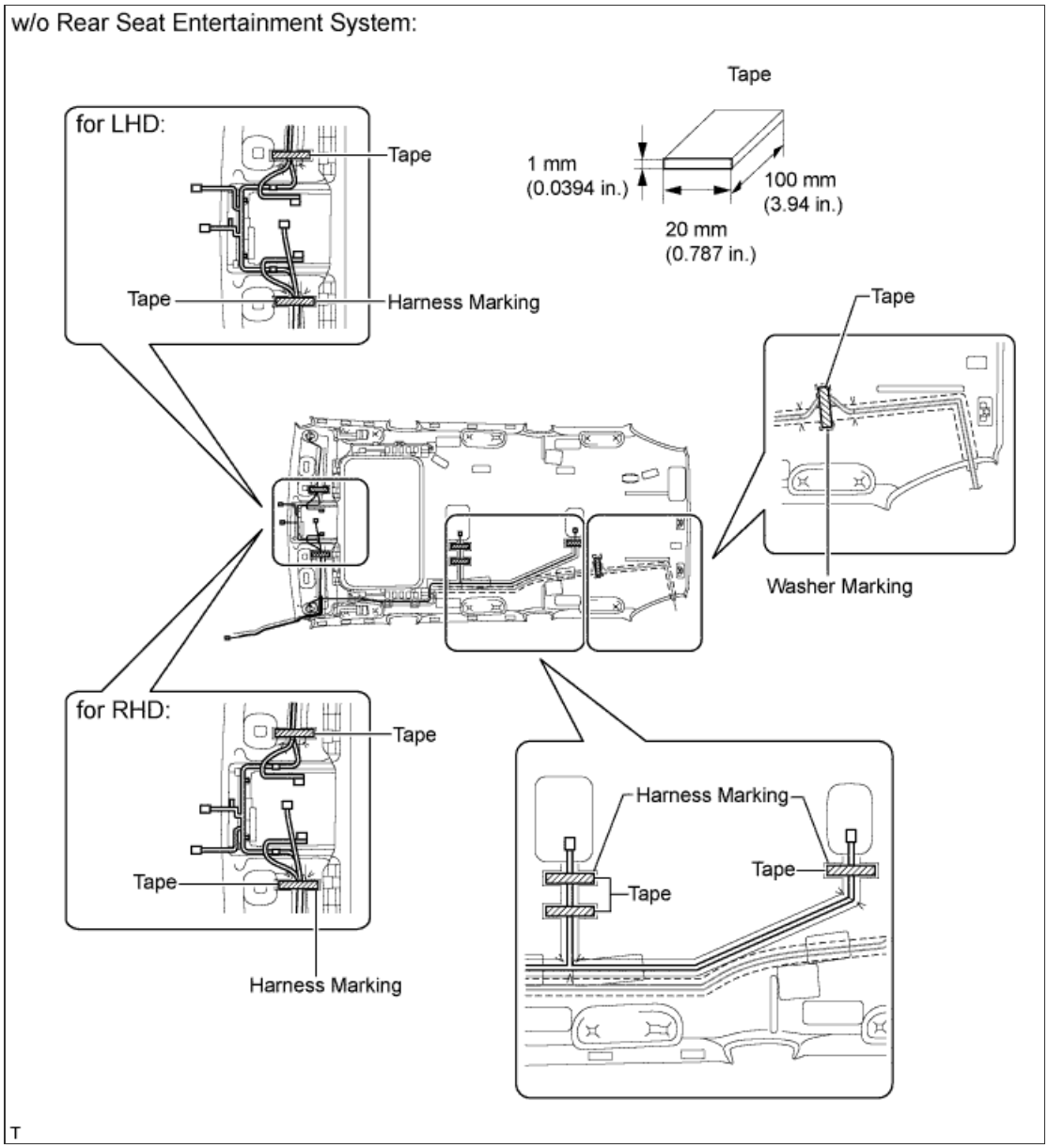
vi. Turn the visor connectors approximately 90° clockwise to install them to the roof headlining.



vii. Place tape at the wire harness marking and washer marking locations as shown in the illustration to fix the roof wire and washer hose in place.

HINT:

Apply sufficient pressure when placing tape.

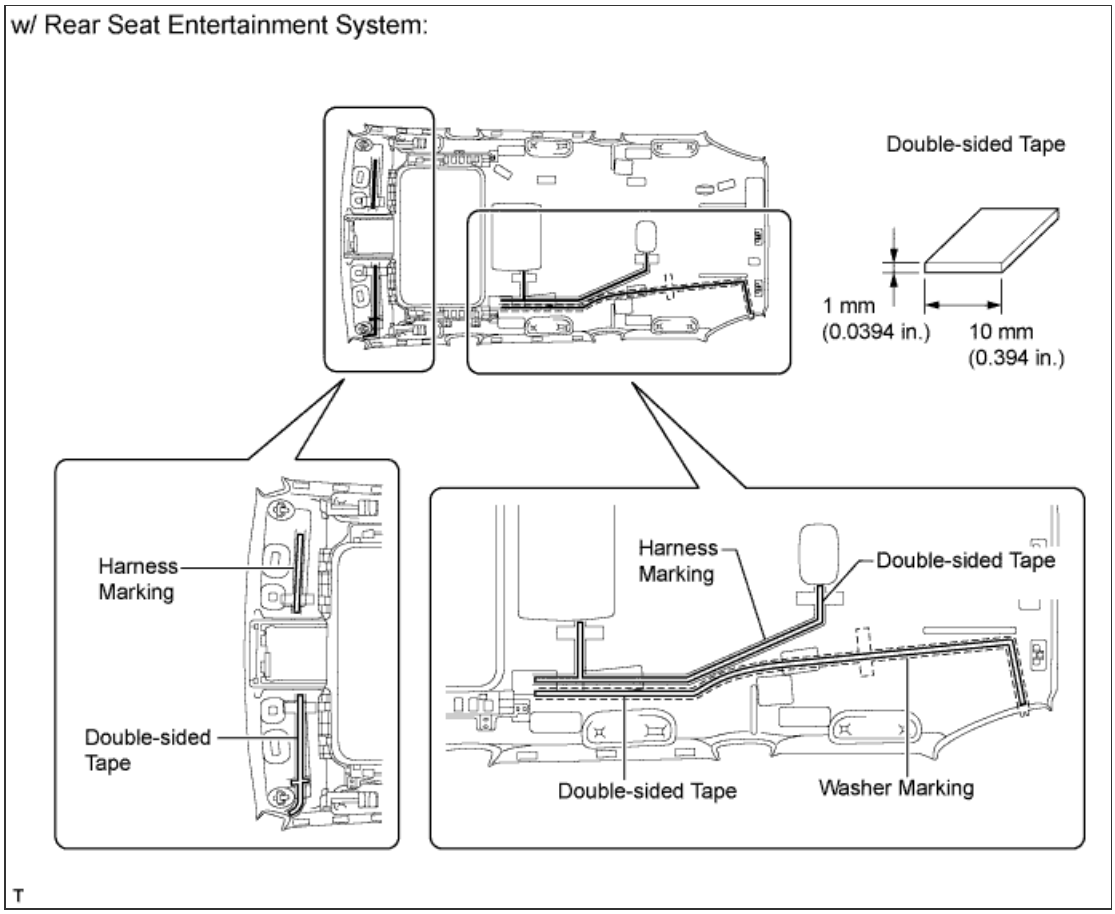


b. w/ Rear Seat Entertainment System:
Install the No. 1 roof wire.

i. Place double-sided tape along the center of the harness marking and washer marking.

HINT:

Make sure that the double-sided tape is not peeling off or misaligned.



ii. Remove the peeling paper from the double-sided tape while not touching the adhesive side.

iii. Align the triangle mark of the roof wire protector with the V mark of the headlining as shown in the illustration, and then attach the roof wire protector.

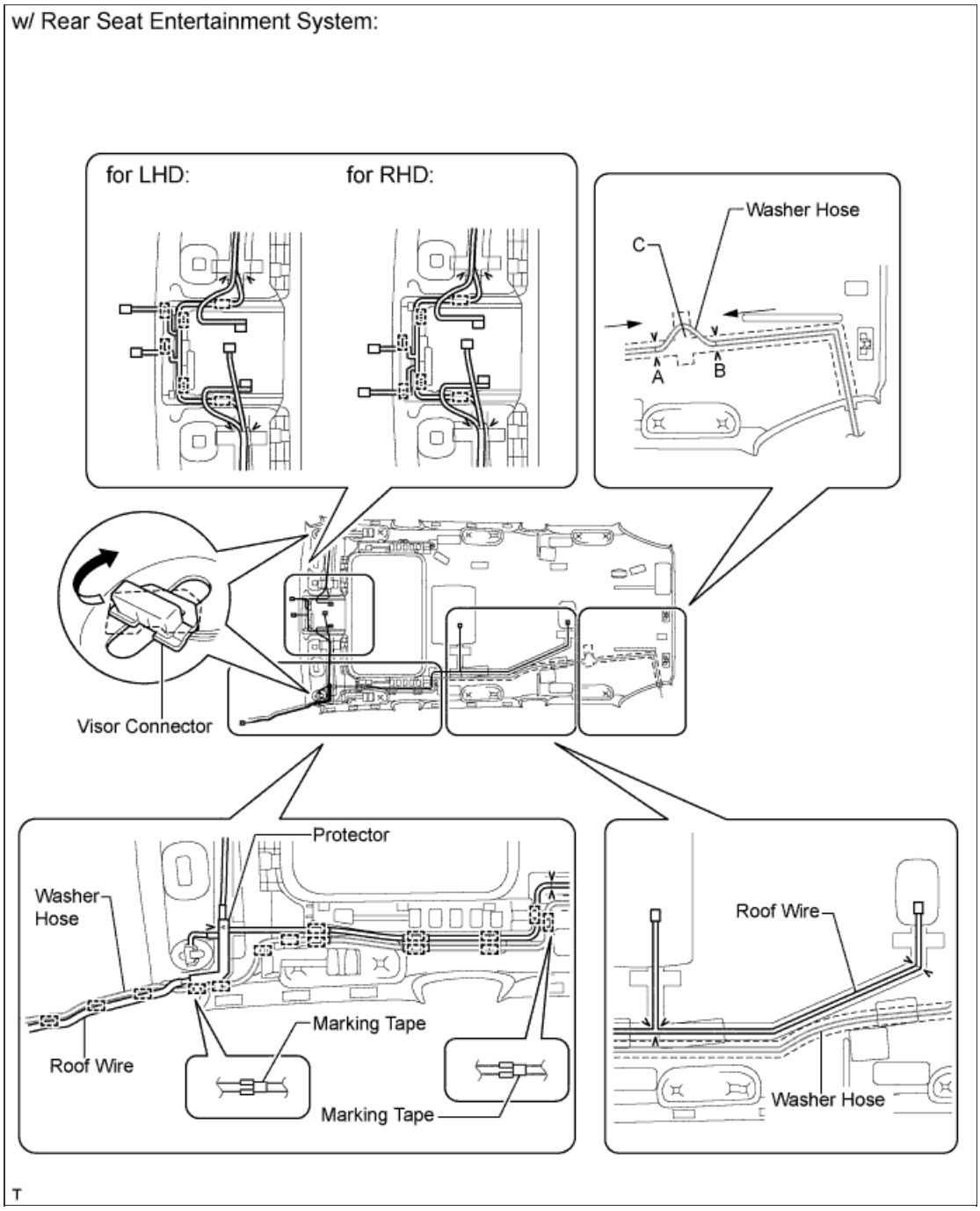
iv. Attach each clamp as shown in the illustration.

v. Align the roof wire and washer hose with the V marks of the headlining as shown in the illustration, and attach them to the headlining.

HINT:

- **Attach the washer hose from the front to the point labeled A, and attach the washer hose from the rear to the point labeled B as shown in the illustration.**
- **Attach the extra length of the washer hose to the part labeled C in the illustration.**

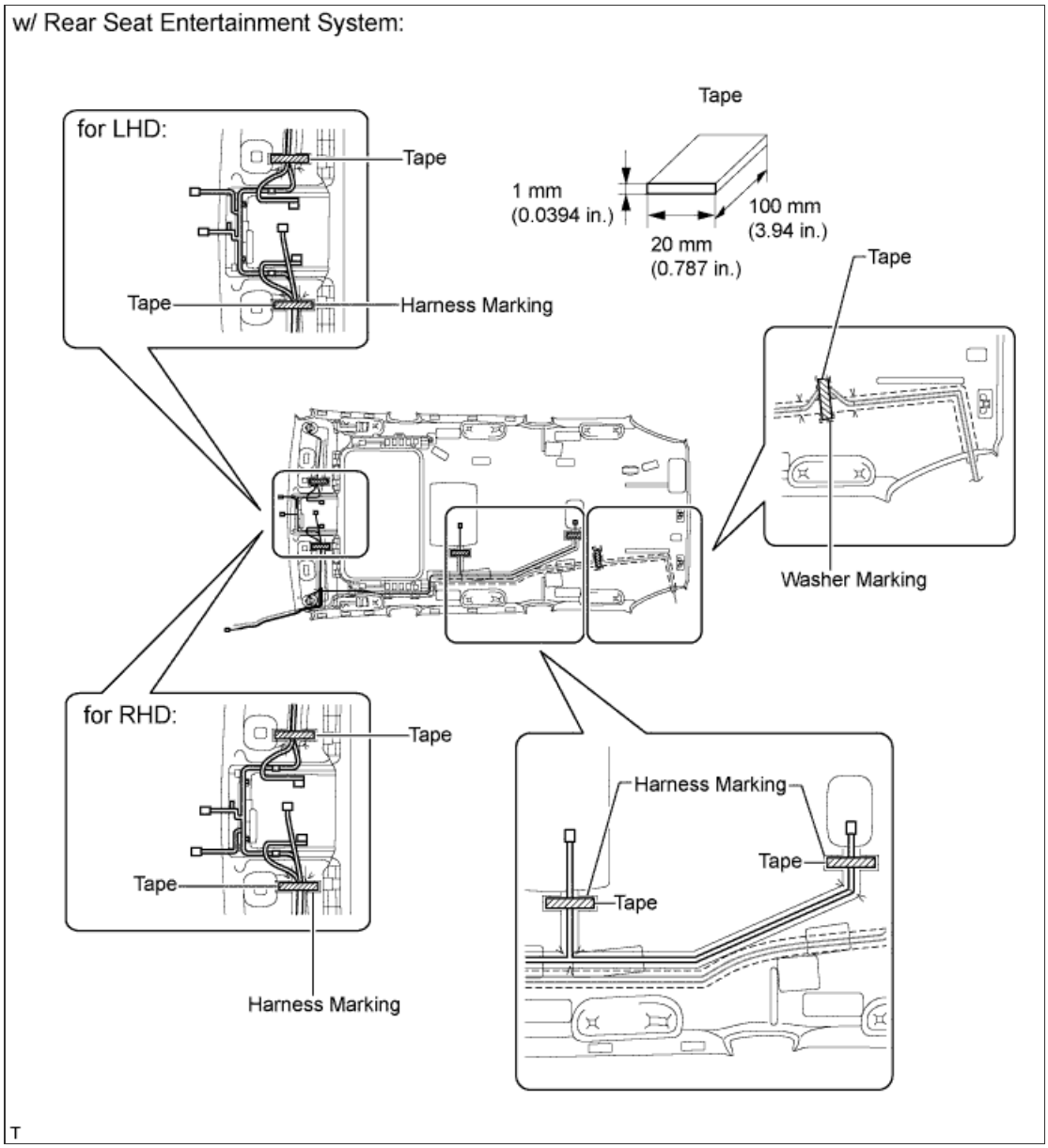
vi. Turn the visor connectors approximately 90° clockwise to install them to the roof headlining.



vii. Place tape at the wire harness marking and washer marking locations as shown in the illustration to fix the roof wire and washer hose in place.

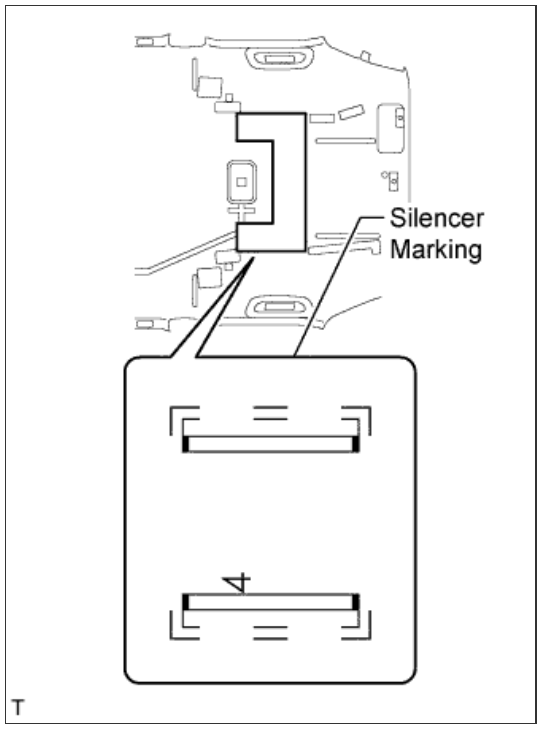
HINT:

Apply sufficient pressure when placing tape.



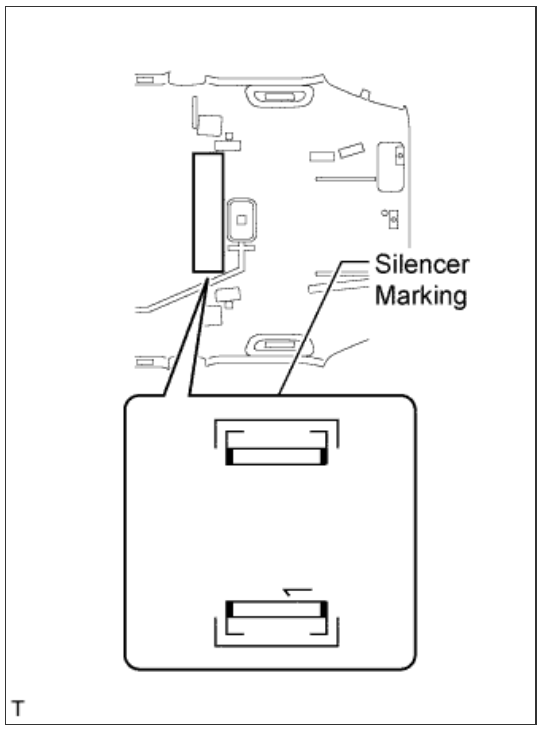
3. INSTALL NO. 4 ROOF SILENCER PAD

a. Align the silencer marking on the roof headlining with the roof silencer pad and install the pad using double-sided tape as shown in the illustration.



4. INSTALL NO. 1 ROOF SILENCER PAD

a. Align the silencer marking on the roof headlining with the roof silencer pad and install the pad using double-sided tape as shown in the illustration.

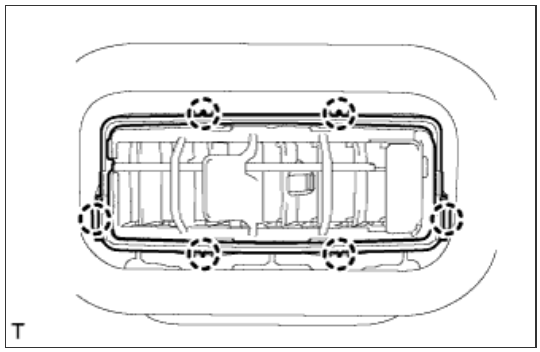


5. INSTALL NO. 2 AIR OUTLET GRILLE ASSEMBLY

HINT:

Use the same procedures to install the air outlet grille on the other side.

a. Attach the 6 claws to install the air outlet grille.



6. INSTALL NO. 1 AIR OUTLET GRILLE ASSEMBLY

HINT:

Use the same procedures described for the No. 2 air outlet grille.

for Preparation Click here

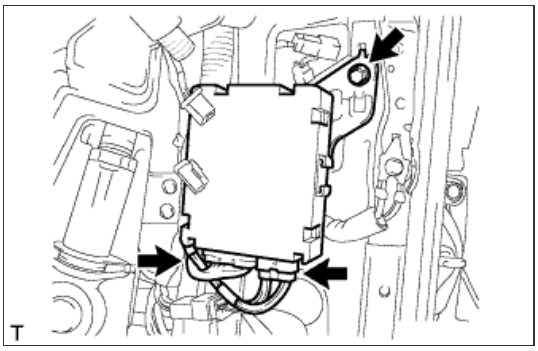
HINT:

A bolt without a torque specification is shown in the standard bolt chart (Click here).

1. INSTALL NO. 2 MULTIPLEX NETWORK BODY ECU

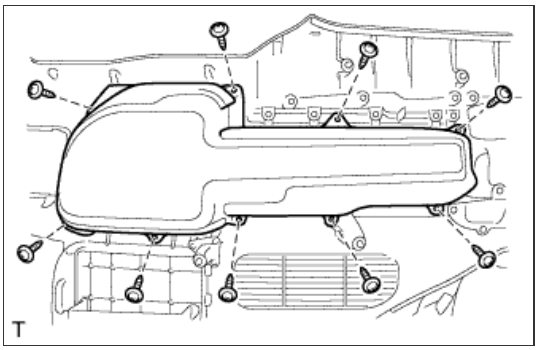
a. Install the multiplex network body ECU with the bolt.

b. Connect the 2 connectors.



2. INSTALL SIDE TRIM BOX (w/o Woofer)

a. Install the side trim box with the 9 screws.



3. INSTALL SIDE TRIM BOX COVER (w/o Woofer)

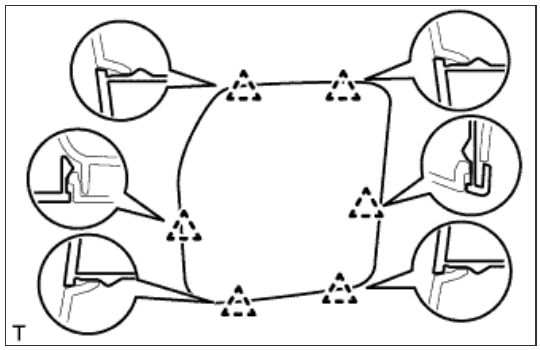
a. Install the side trim box cover.

4. INSTALL QUARTER TRIM LID SUB-ASSEMBLY RH

a. Install the quarter trim lid.

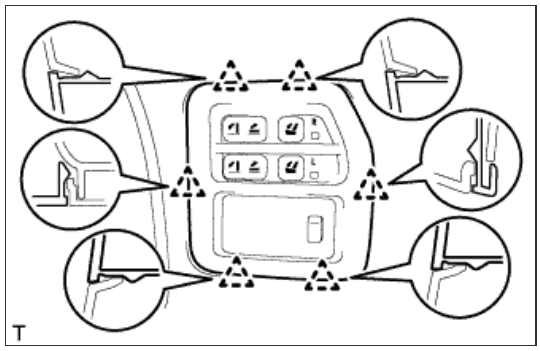
5. INSTALL QUARTER TRIM COVER LH (for Rear No. 2 Seat with Automatic Folding-up Function)

a. Attach the 6 clips to install the quarter trim cover.



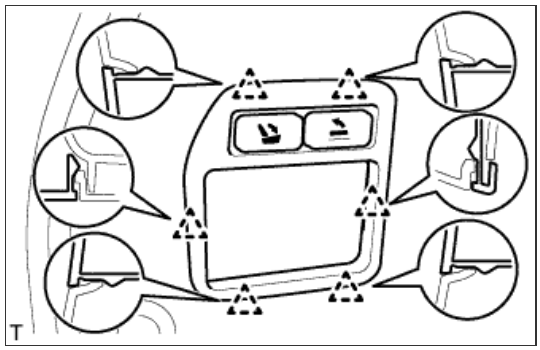
6. INSTALL FOLD SEAT SWITCH ASSEMBLY (for Rear No. 2 Seat with Automatic Folding-up Function)

a. Attach the 6 clips to install the fold seat switch.



7. INSTALL REAR NO. 2 SEAT COVER BEZEL (for Rear No. 2 Seat with Manual Folding-up Function)

a. Attach the 6 clips to install the No. 2 seat cover bezel.



8. INSTALL REAR NO. 1 SEAT COVER BEZEL (for Rear No. 2 Seat with Manual Folding-up Function)

HINT:

Use the same procedures described for the LH side.

9. INSTALL REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY LH (for Rear No. 2 Seat with Manual Folding-up Function)

a. Attach the 4 claws to install the seat lock control lever.

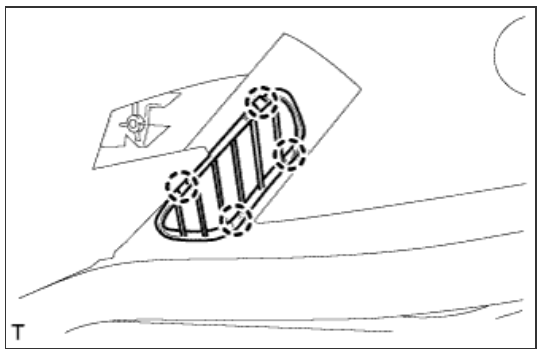
10. INSTALL REAR SEAT LOCK CONTROL LEVER SUB-ASSEMBLY RH (for Rear No. 2 Seat with Manual Folding-up Function)

HINT:

Use the same procedures described for the LH side.

11. INSTALL NO. 2 SIDE TRIM BASE COVER LH

a. Attach the 4 claws to install the cover.



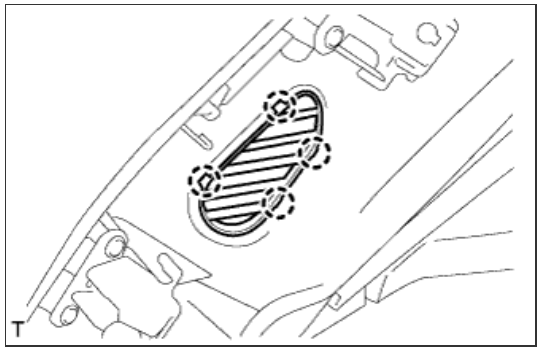
12. INSTALL NO. 2 SIDE TRIM BASE COVER RH

HINT:

Use the same procedures described for the LH side.

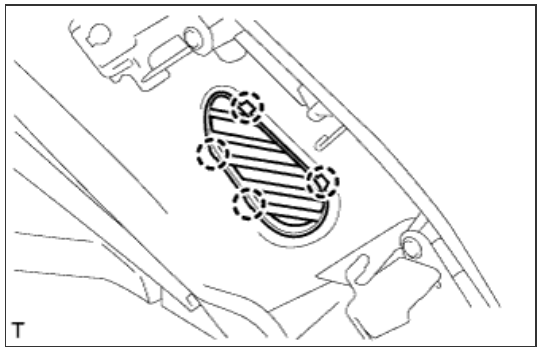
13. INSTALL NO. 1 SIDE TRIM BASE COVER LH

a. Attach the 4 claws to install the cover.

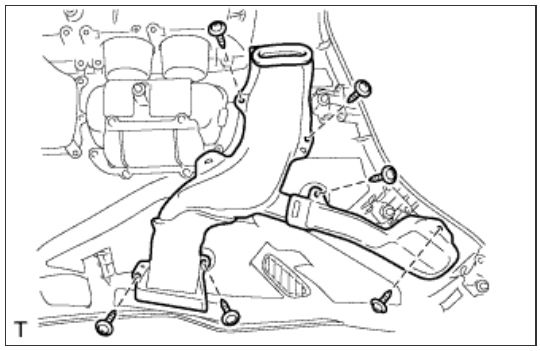


14. INSTALL NO. 1 SIDE TRIM BASE COVER RH

a. Attach the 4 claws to install the cover.



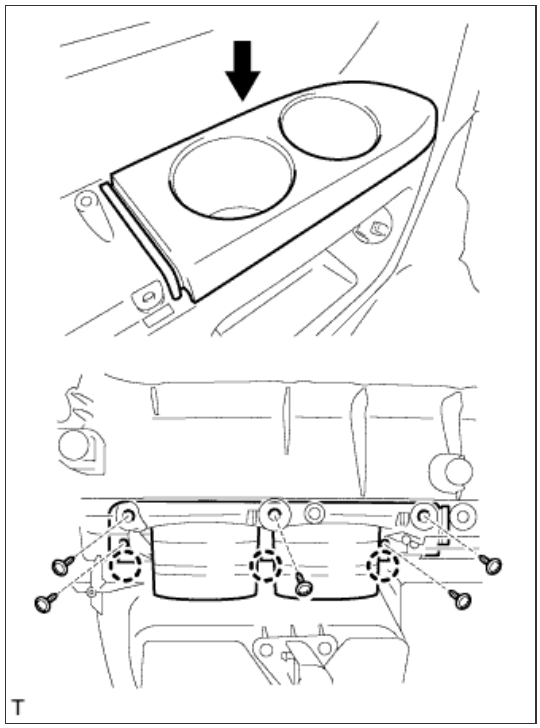
b. Install the duct with the 6 screws.



15. INSTALL NO. 2 CUP HOLDER

a. Attach the 3 claws to install the cup holder.

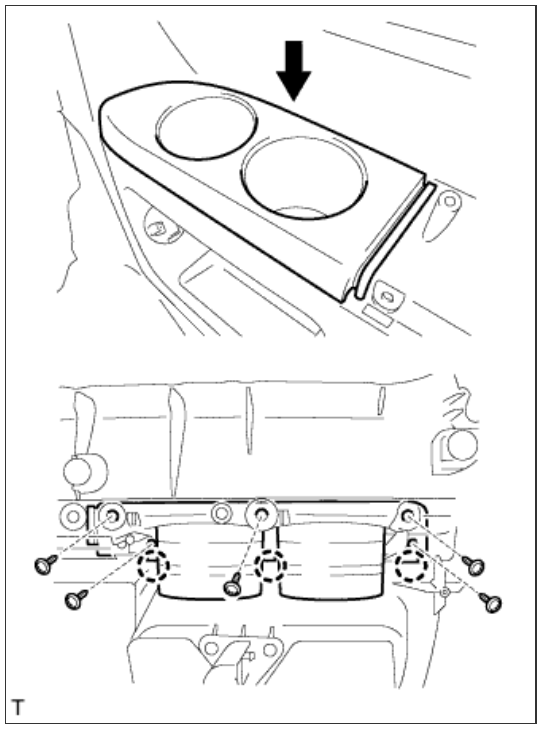
b. Install the 5 screws.



16. INSTALL NO. 1 CUP HOLDER

a. Attach the 3 claws to install the cup holder.

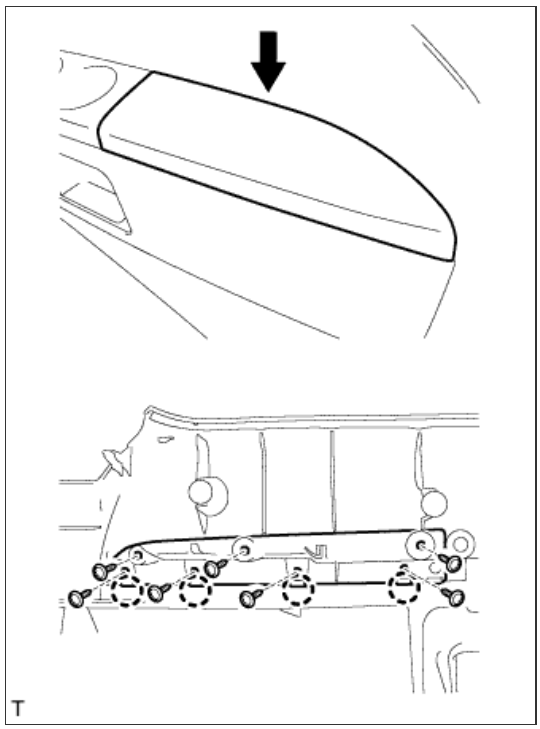
b. Install the 5 screws.



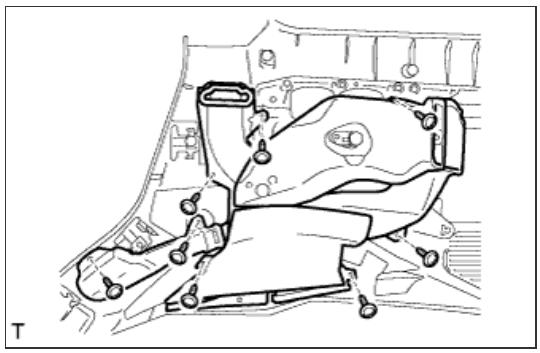
17. INSTALL QUARTER TRIM COVER SUB-ASSEMBLY LH

a. Attach the 4 claws to install the quarter trim cover.

b. Install the 7 screws.



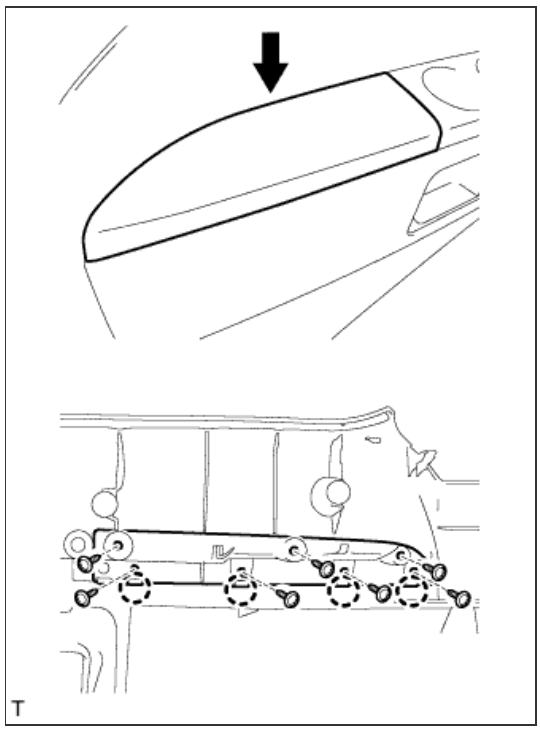
c. Install the duct with the 8 screws.



18. INSTALL QUARTER TRIM COVER SUB-ASSEMBLY RH

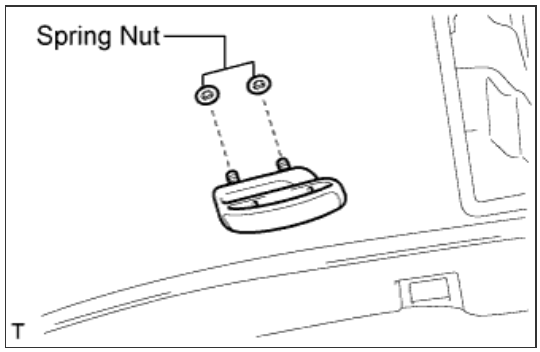
a. Attach the 4 claws to install the quarter trim cover.

b. Install the 7 screws.



19. INSTALL REAR NO. 2 SEAT SHOULDER BELT HANGER LH

a. Install the hanger with new 2 spring nuts.



20. INSTALL REAR NO. 2 SEAT SHOULDER BELT HANGER RH

HINT:

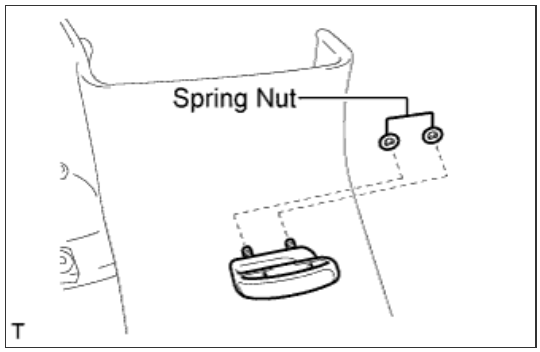
Use the same procedures described for the LH side.

21. INSTALL REAR NO. 1 SEAT SHOULDER BELT HANGER

HINT:

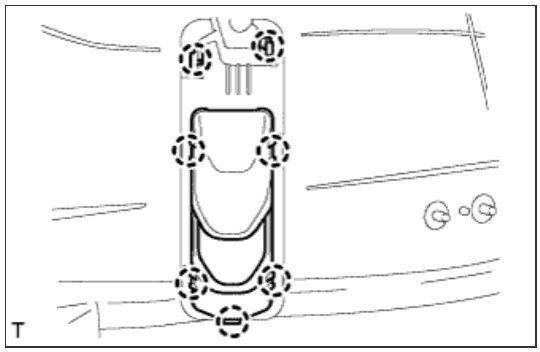
Use the same procedure to install the hanger on the other side.

a. Install the hanger with new 2 spring nuts.



22. INSTALL ROOF SIDE INNER GARNISH COVER LH

a. Attach the 7 claws to install the cover.



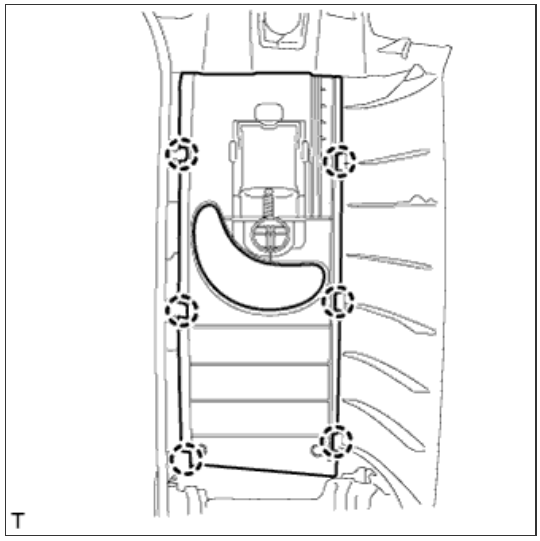
23. INSTALL ROOF SIDE INNER GARNISH COVER RH

HINT:

Use the same procedures described for the LH side.

24. INSTALL REAR SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY LH

a. Attach the 6 claws to install the plate.



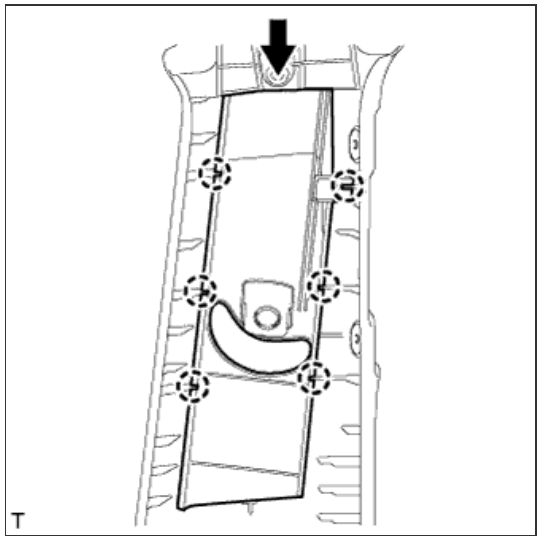
25. INSTALL REAR SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

26. INSTALL FRONT SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY LH

a. Slide the plate in the direction shown in the illustration and attach the 6 claws to install the plate.



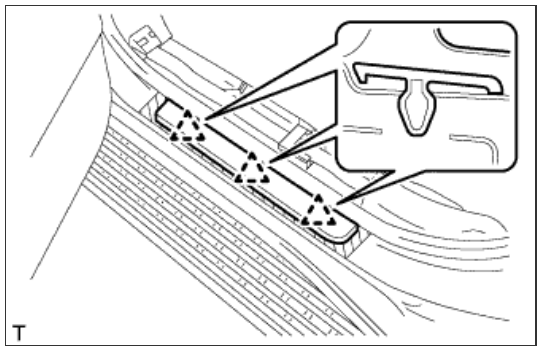
27. INSTALL FRONT SHOULDER BELT ANCHOR PLATE SUB-ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

28. INSTALL REAR DOOR SCUFF PLATE OUTSIDE LH

a. Attach the 3 clips to install the rear door scuff plate outside.



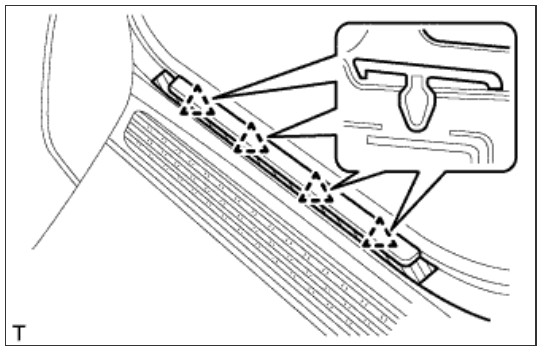
29. INSTALL REAR DOOR SCUFF PLATE OUTSIDE RH

HINT:

Use the same procedures described for the LH side.

30. INSTALL FRONT DOOR SCUFF PLATE OUTSIDE LH

a. Attach the 4 clips to install the front door scuff plate outside.



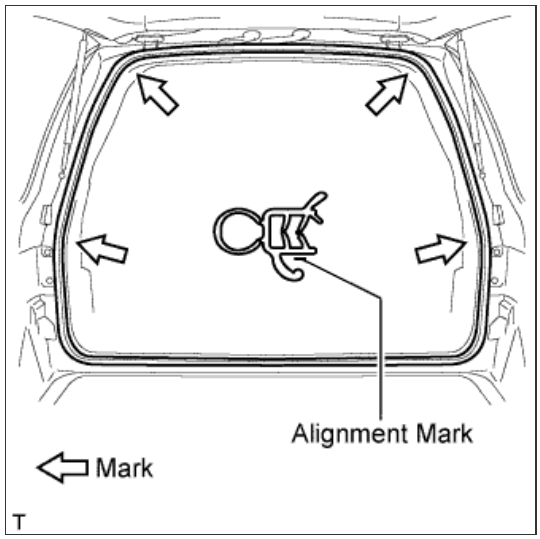
31. INSTALL FRONT DOOR SCUFF PLATE RH

HINT:

Use the same procedures described for the LH side.

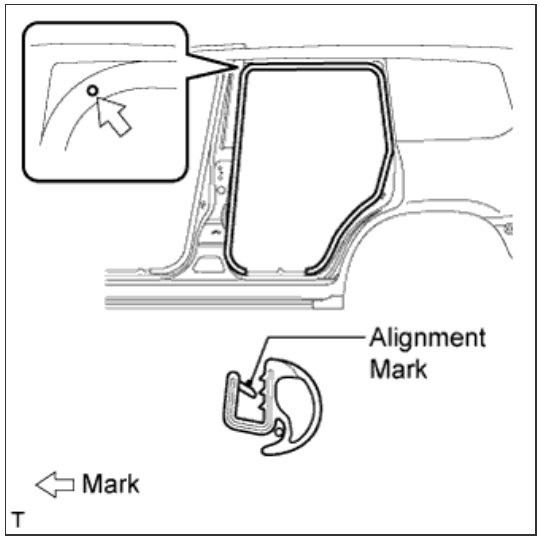
32. INSTALL BACK DOOR WEATHERSTRIP

a. Install the back door weatherstrip as shown in the illustration.



33. INSTALL REAR DOOR OPENING TRIM WEATHERSTRIP LH

a. Install the rear door opening trim weatherstrip as shown in the illustration.



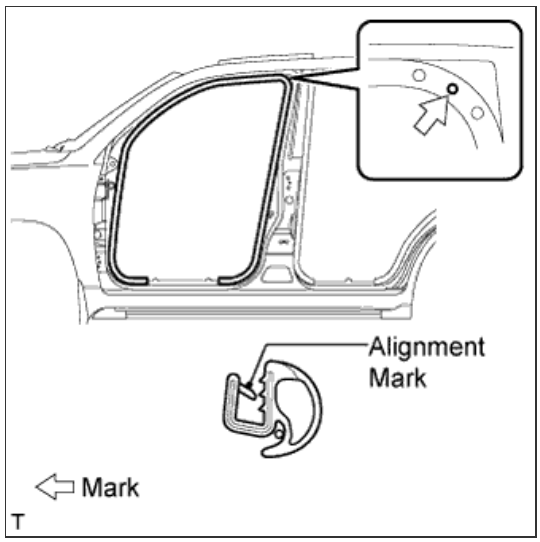
34. INSTALL REAR DOOR OPENING TRIM WEATHERSTRIP RH

HINT:

Use the same procedures described for the LH side.

35. INSTALL FRONT DOOR OPENING TRIM WEATHERSTRIP LH

a. Install the front door opening trim weatherstrip as shown in the illustration.



36. INSTALL FRONT DOOR OPENING TRIM WEATHERSTRIP RH

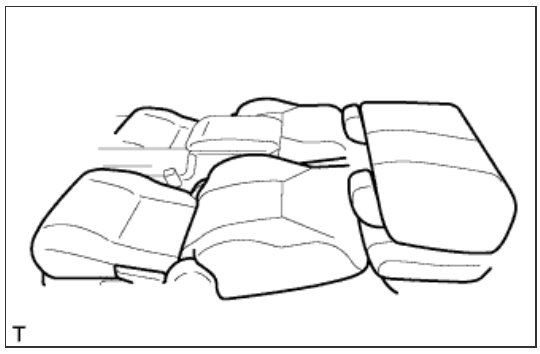
HINT:

Use the same procedures described for the LH side.

37. INSTALL ROOF HEADLINING ASSEMBLY

HINT:

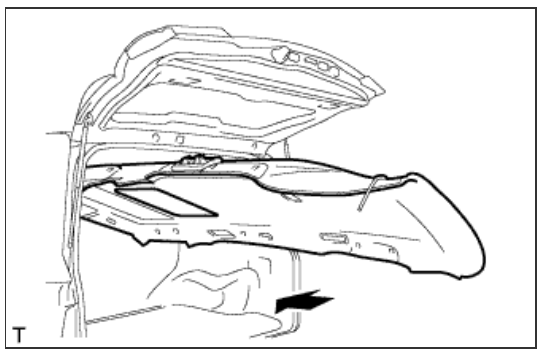
- **When installing the roof headlining, connect the cable to the negative (-) battery terminal and move the front seats and No. 1 rear seat to the position shown in the illustration.**
- **After moving the seats, disconnect the cable from the negative (-) battery terminal.**



a. Place the headlining in the cabin from the rear of the vehicle as shown in the illustration.

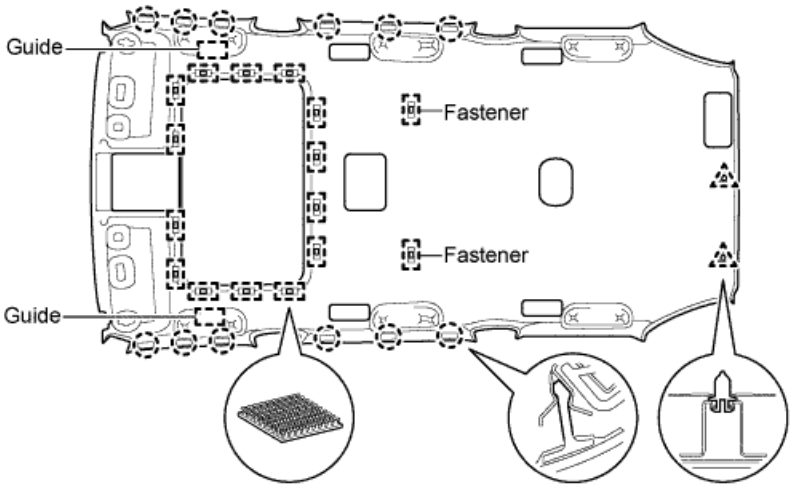
NOTICE:

Be careful not to damage the roof headlining when placing it in the cabin.

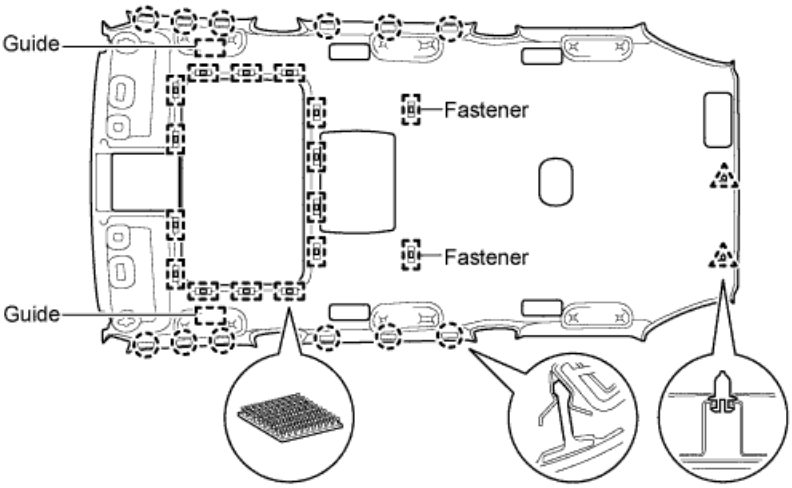


b. Attach the 2 guides, 12 claws, 2 clips and 16 fasteners to install the headlining.

w/o Rear Seat Entertainment System:

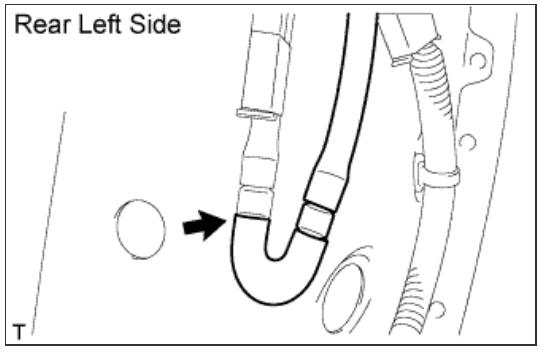


w/ Rear Seat Entertainment System:

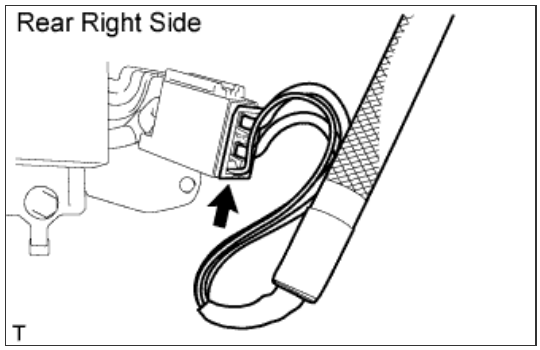


T

c. Connect the washer hose.

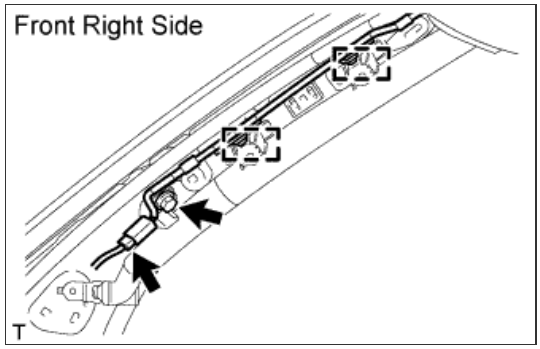


d. Connect the antenna cord connector.



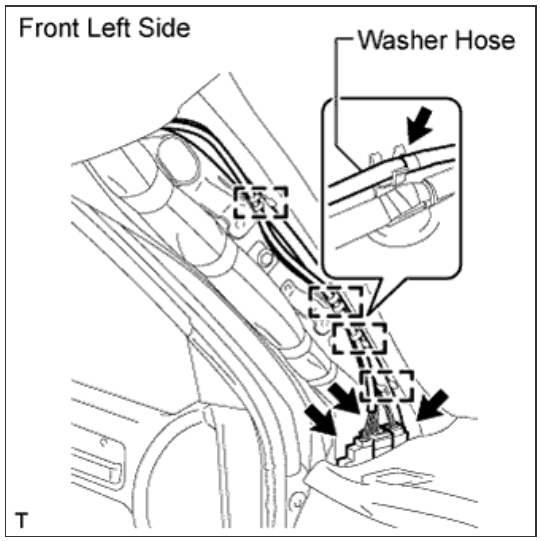
e. Connect the antenna cord connector and attach the 2 clamps.

f. Install the bolt.

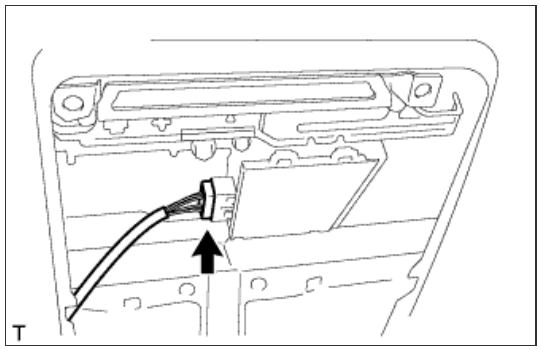


g. Connect the 3 roof wire connectors and washer hose.

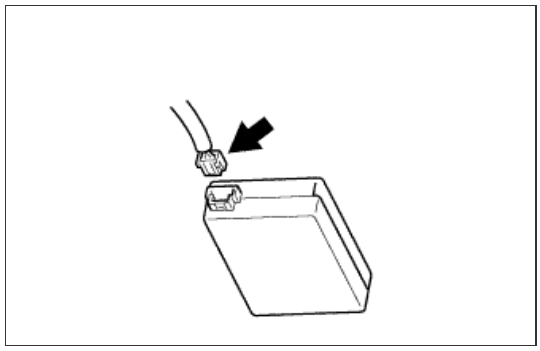
h. Attach the 4 clamps.



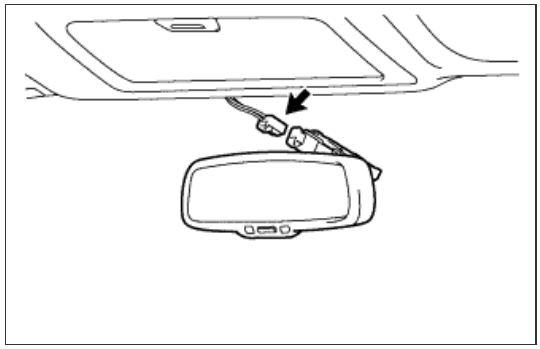
i. Connect the drive gear connector.



j. Connect the rain sensor connector.



k. Connect the inner mirror connector.



38. INSTALL FRONT ROOF SIDE RAIL GARNISH LH

a. Install 3 new clips to the roof side rail garnish.

b. Attach the 3 clips to install the roof side rail garnish.



39. INSTALL FRONT ROOF SIDE RAIL GARNISH RH

HINT:

Use the same procedures described for the LH side.

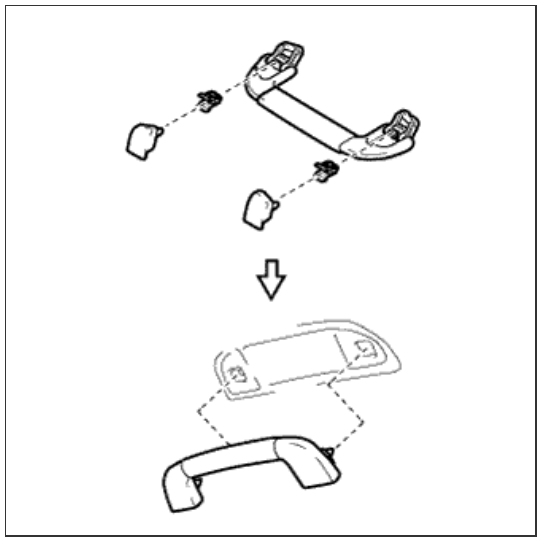
40. INSTALL 3RD SEAT ASSIST GRIP ASSEMBLY

HINT:

Use the same procedure to install the 3rd seat assist grip on the other side.

a. Assemble the assist grip, 2 clips and 2 covers as shown in the illustration.

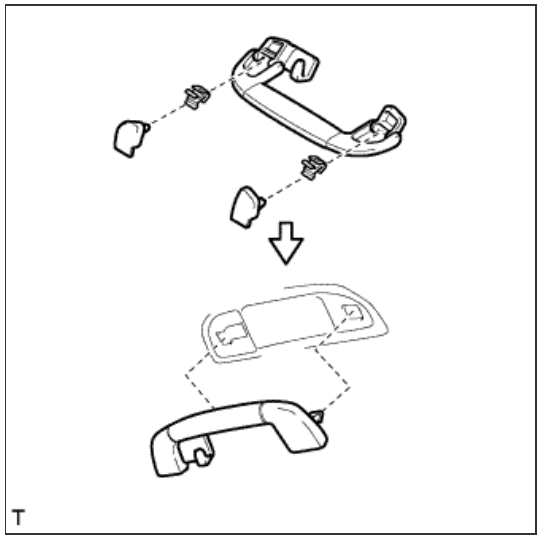
b. Install the assist grip.



41. INSTALL NO. 2 ASSIST GRIP ASSEMBLY LH

a. Assemble the assist grip, 2 clips and 2 covers as shown in the illustration.

b. Install the assist grip.



42. INSTALL NO. 2 ASSIST GRIP ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

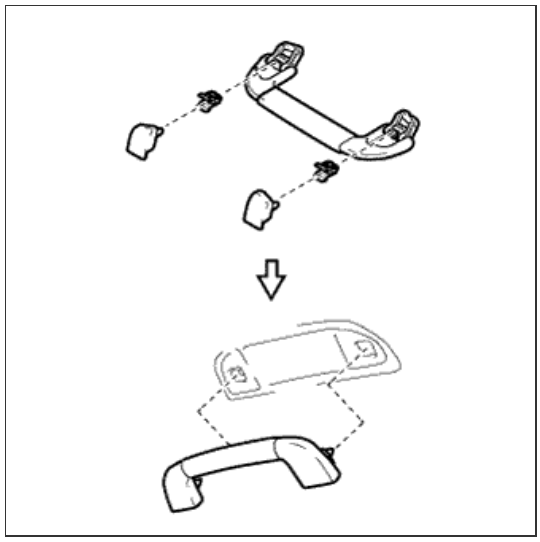
43. INSTALL ASSIST GRIP ASSEMBLY

HINT:

Use the same procedure to install the assist grip on the other side.

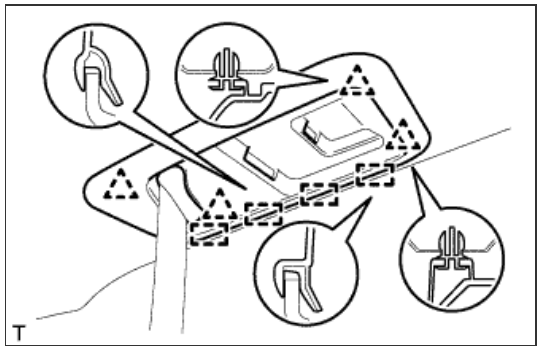
a. Assemble the assist grip, 2 clips and 2 covers as shown in the illustration.

b. Install the assist grip.



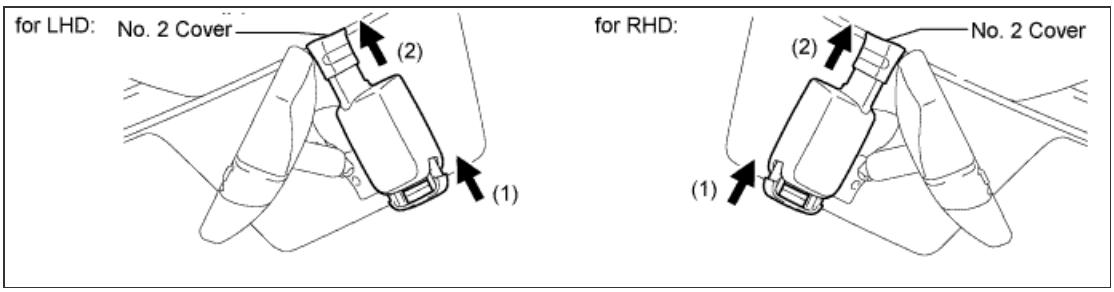
44. INSTALL SEAT BELT ANCHOR COVER

a. Attach the 4 guides and 4 clips to install the seat belt anchor cover.



45. INSTALL RAIN SENSOR COVER

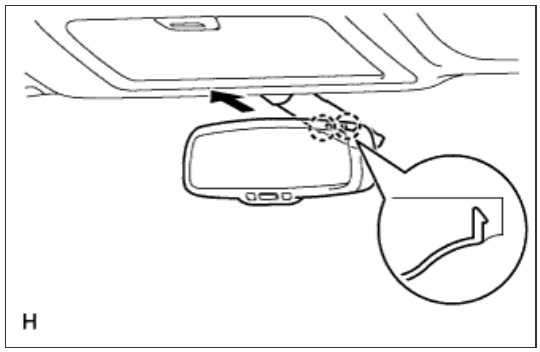
a. Push in the stopper in the direction of the arrow labeled (1) to install the rain sensor cover.



b. Slide the No. 2 cover in the direction of the arrow labeled (2) to fix it in place.

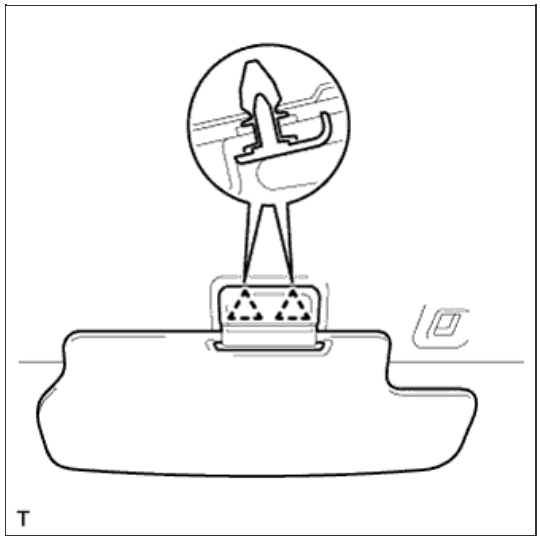
46. INSTALL INNER REAR VIEW MIRROR STAY HOLDER COVER

a. Attach the 2 claws to install the cover as shown in the illustration.



47. INSTALL CENTER VISOR ASSEMBLY LH

a. Attach the 2 clips to install the center visor.



48. INSTALL CENTER VISOR ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

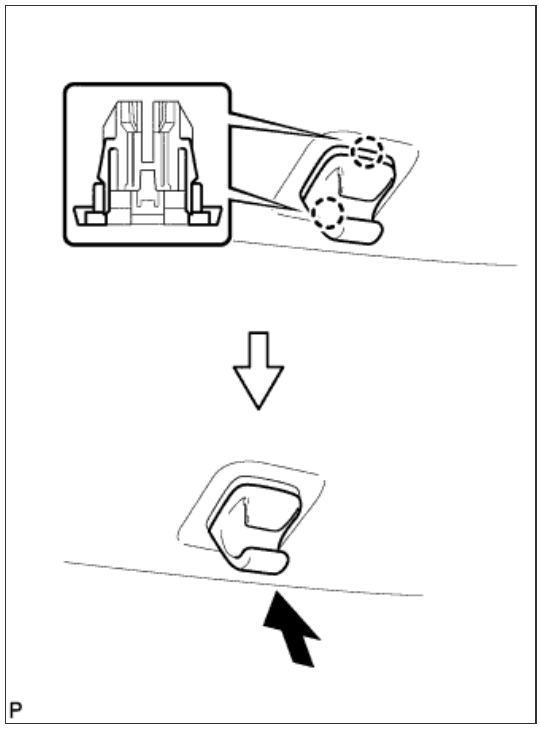
49. INSTALL VISOR HOLDER

HINT:

Use the same procedures to install the visor holder on the other side.

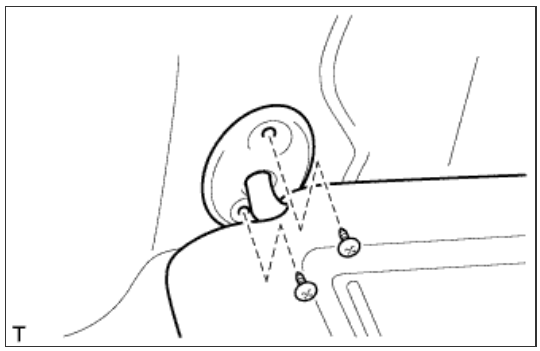
a. Attach the 2 claws.

b. Push in the visor holder to install it.



50. INSTALL VISOR ASSEMBLY LH

a. Install the visor with the 2 screws.



51. INSTALL VISOR ASSEMBLY RH

HINT:

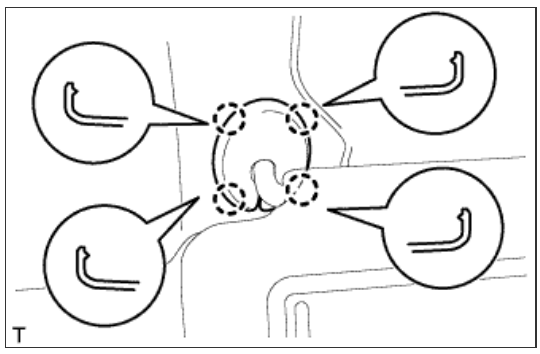
Use the same procedures described for the LH side.

52. INSTALL VISOR BRACKET COVER

HINT:

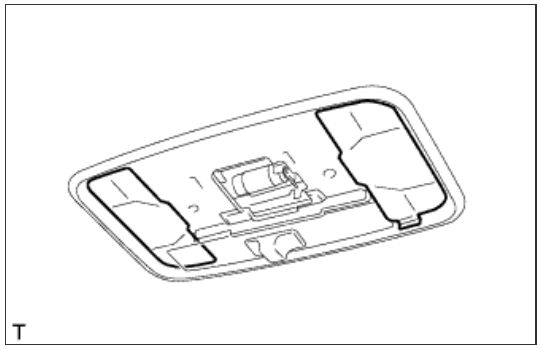
Use the same procedure to install the visor bracket cover on the other side.

a. Attach the 4 claws to install the visor bracket cover.

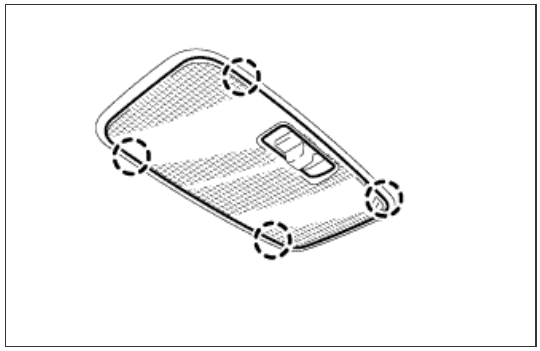


53. INSTALL NO. 3 ROOM LIGHT ASSEMBLY

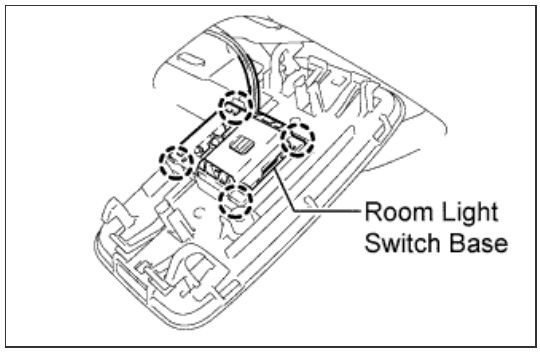
a. Install the 2 covers.



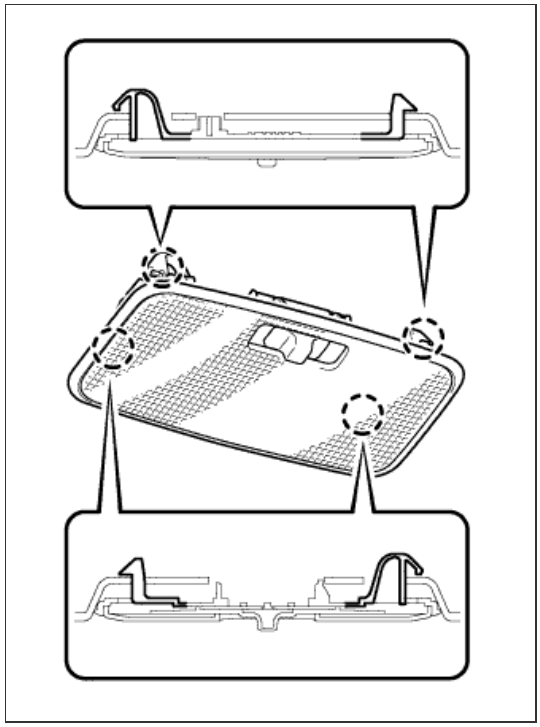
b. Attach the 4 claws to install the room light lens.



c. Attach the 4 claws to install the room light to the room light switch base.



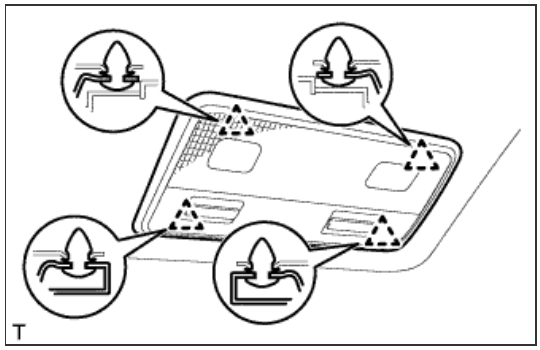
d. Attach the 4 claws to install the room light.



54. INSTALL NO. 1 ROOM LIGHT ASSEMBLY (w/o Rear Seat Entertainment System)

a. Connect the connector.

b. Attach the 4 clips to install the room light.

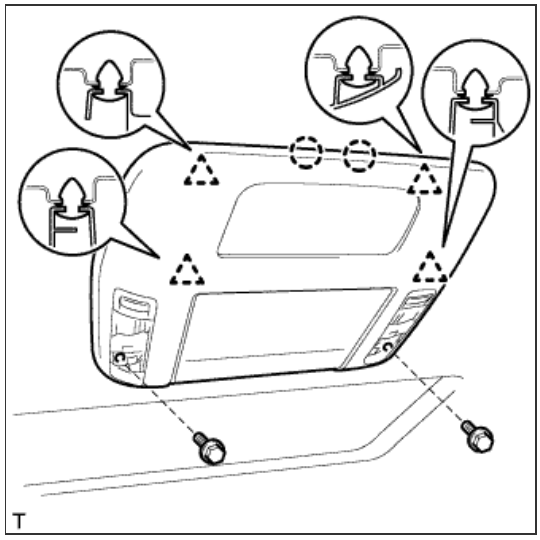


55. INSTALL ROOF CONSOLE BOX ASSEMBLY (w/ Rear Seat Entertainment System)

a. Connect the connector.

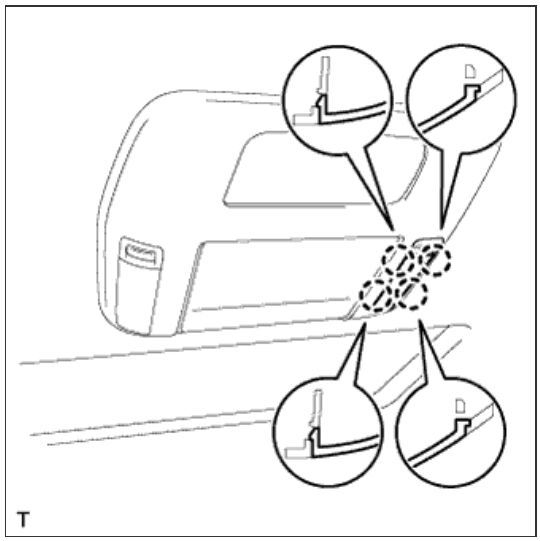
b. Attach the 4 clips and 2 claws to install the roof console box.

c. Install the 2 bolts.



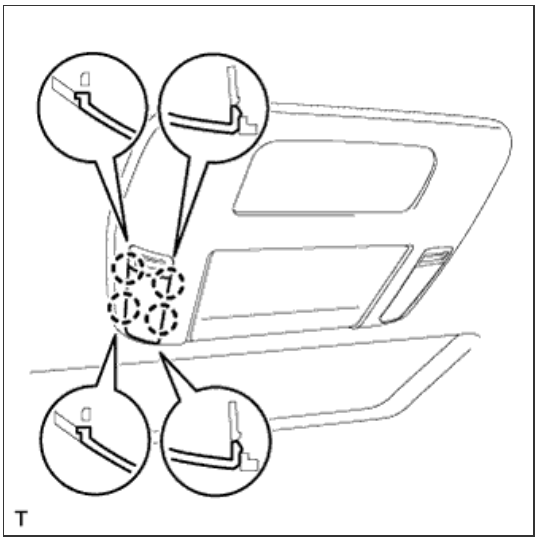
56. INSTALL NO. 1 ROOF LINING TRIM COVER (w/ Rear Seat Entertainment System)

a. Attach the 4 claws to install the cover.



57. INSTALL NO. 2 ROOF LINING TRIM COVER (w/ Rear Seat Entertainment System)

a. Attach the 4 claws to install the cover.



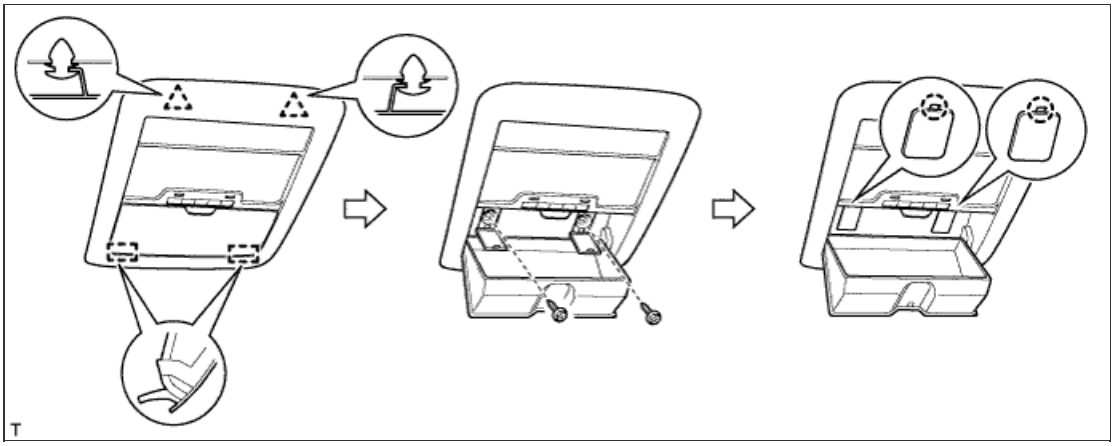
58. INSTALL MAP LIGHT ASSEMBLY

a. Connect the 2 connectors.

b. Attach the 2 clips and 2 guides to install the map light.

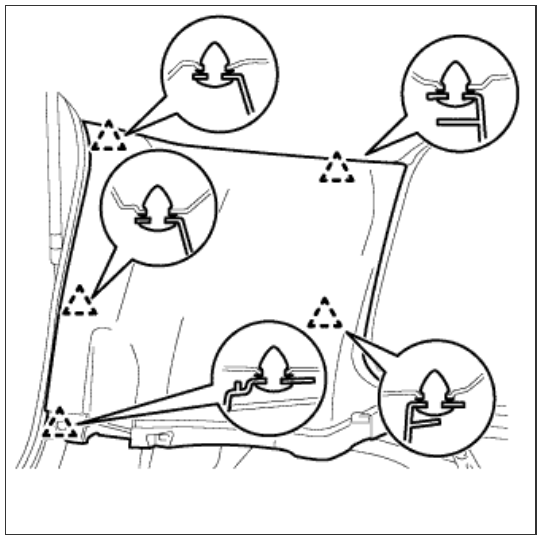
c. Install the 2 screws.

d. Attach the 2 claws to close the 2 covers.



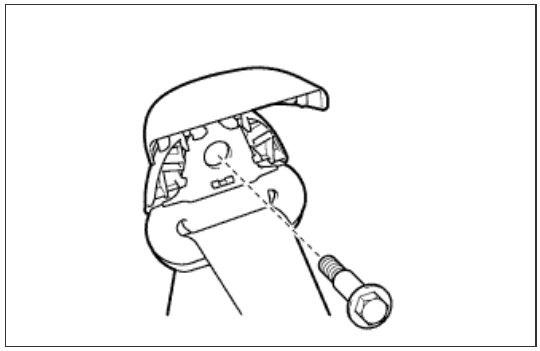
59. INSTALL REAR UPPER PILLAR GARNISH LH

a. Attach the 5 clips to install the rear upper pillar garnish.

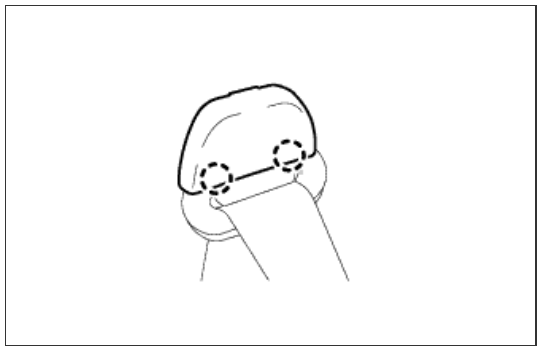


b. Install the seat belt shoulder anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



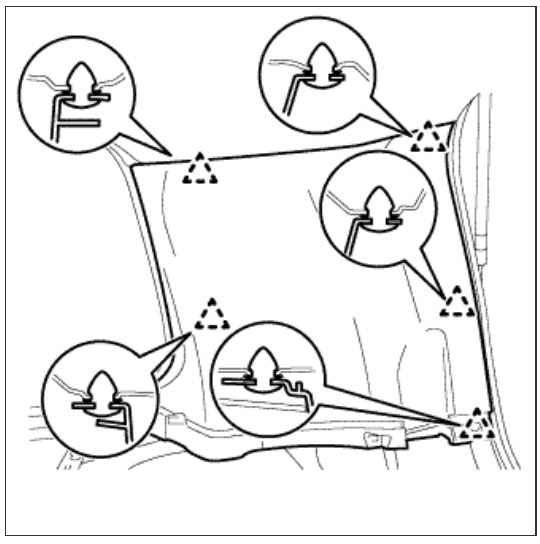
c. Attach the 2 claws to close the seat belt shoulder anchor cover.



60. INSTALL REAR UPPER PILLAR GARNISH RH

a. w/o Power Back Door:

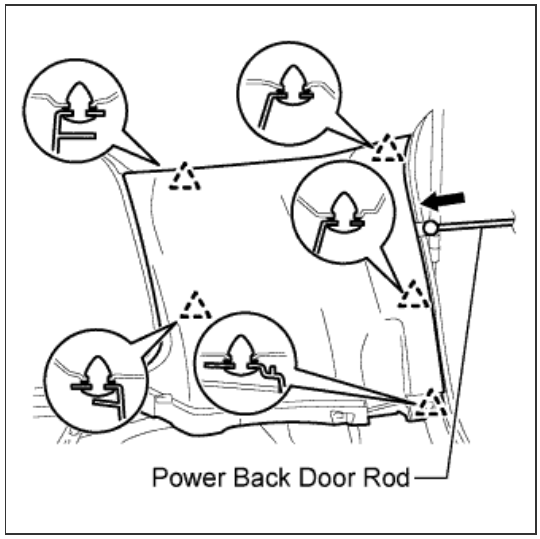
i. Attach the 5 clips to install the rear upper pillar garnish.



b. w/ Power Back Door:

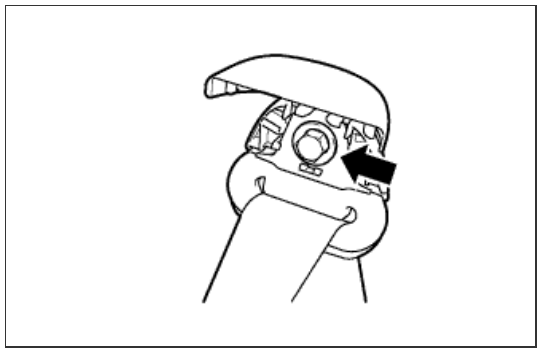
i. Pass the power back door rod through the rear upper pillar garnish.

ii. Attach the 5 clips to install the rear upper pillar garnish.

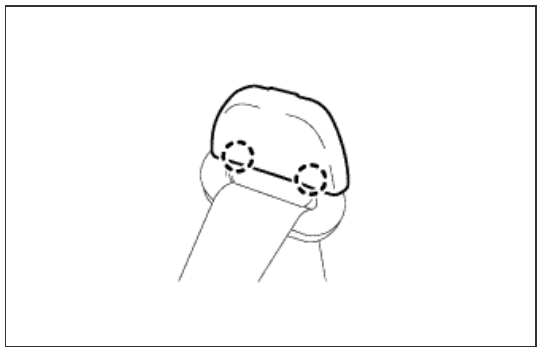


c. Install the seat belt shoulder anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



d. Attach the 2 claws to close the seat belt shoulder anchor cover.



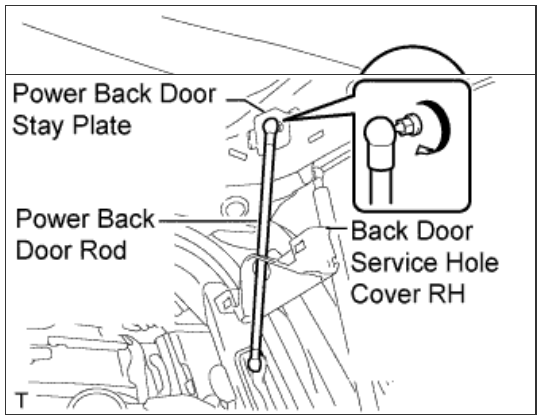
61. INSTALL BACK DOOR SERVICE HOLE COVER RH (w/ Power Back Door)

a. When reusing the power back door rod:

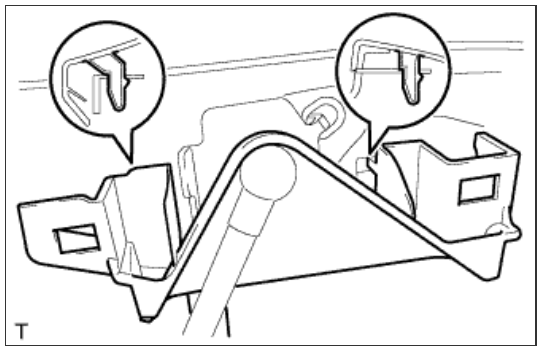
i. Install the back door stay plate.

ii. Pass the power back door rod through the hole of the back door service hole cover and install the rod with the bolt.

Torque:
18 N*m{ 184 kgf*cm , 13 ft.*lbf }

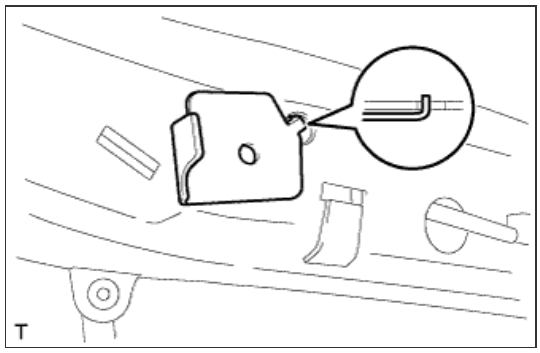


iii. Move the service hole cover and attach the 2 clips.



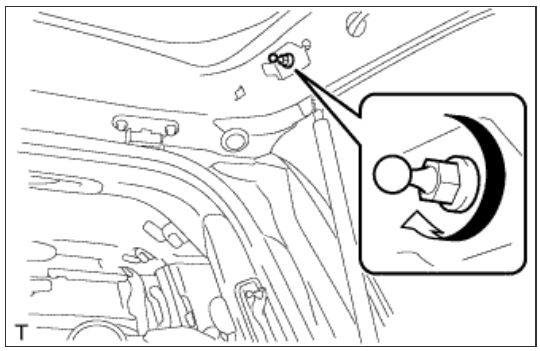
b. When installing a new power back door rod:

i. Install the back door stay plate.

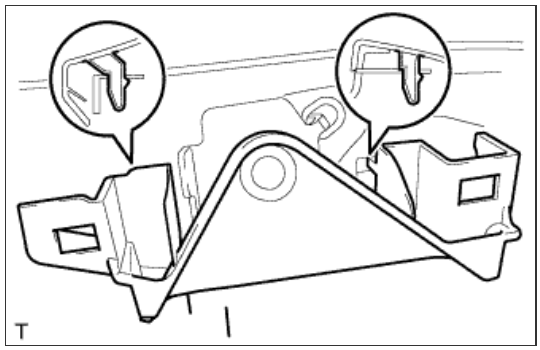


ii. Install the back door stay bolt.

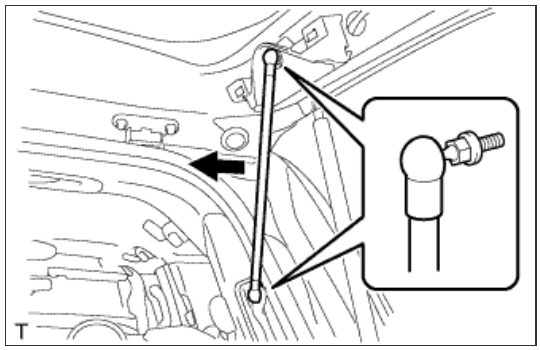
Torque:
18 N*m{ 184 kgf*cm , 13 ft.*lbf }



iii. Attach the 2 clips to install the service hole cover.



iv. Attach the ball joints to install the power back door rod.



62. INSTALL BACK DOOR SIDE GARNISH RH (w/ Power Back Door)

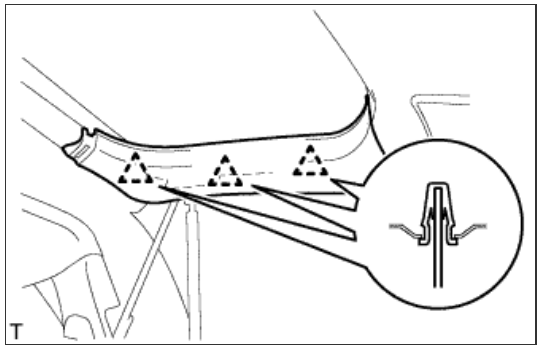
a. w/o Power Back Door:

HINT:

Use the same procedures described for the LH side.

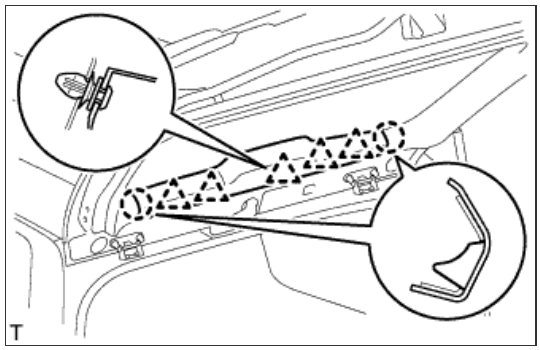
b. w/ Power Back Door:

i. Attach the 3 clips to install the back door side garnish.



63. INSTALL CENTER BACK DOOR GARNISH (w/ Power Back Door)

a. Attach the 5 clips and 2 claws to install the back door garnish.

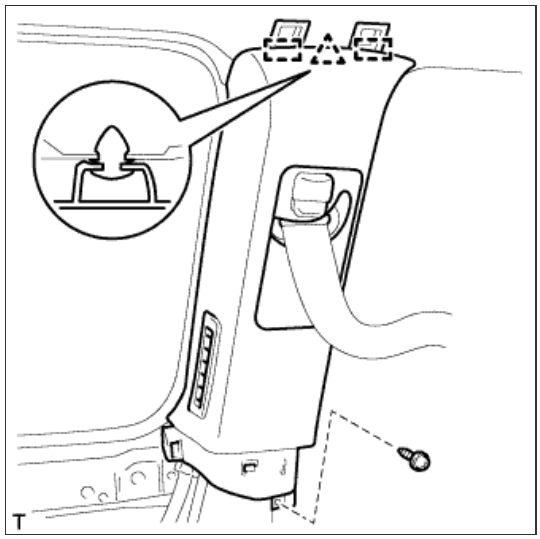


64. INSTALL REAR FRONT QUARTER TRIM GARNISH LH

a. Pass the seat belt anchor through the quarter trim garnish.

b. Attach the clip and 2 guides to install the quarter trim garnish.

c. Install the screw.



65. INSTALL REAR FRONT QUARTER TRIM GARNISH RH

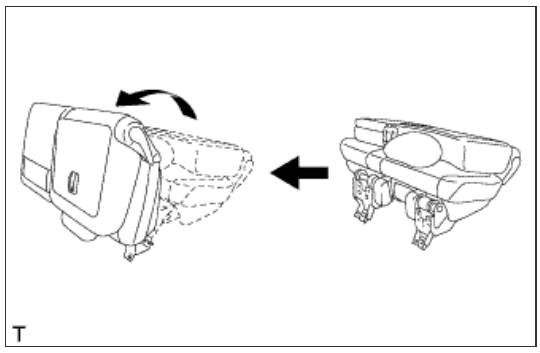
HINT:

Use the same procedures described for the LH side.

66. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY LH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



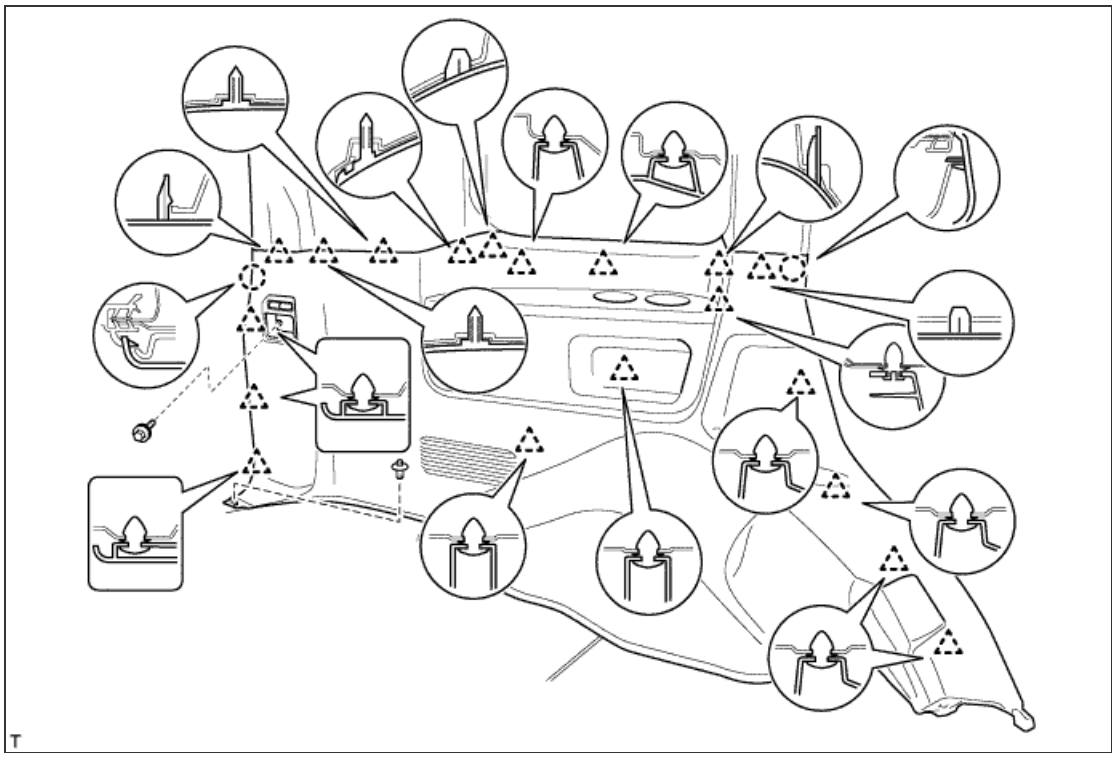
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

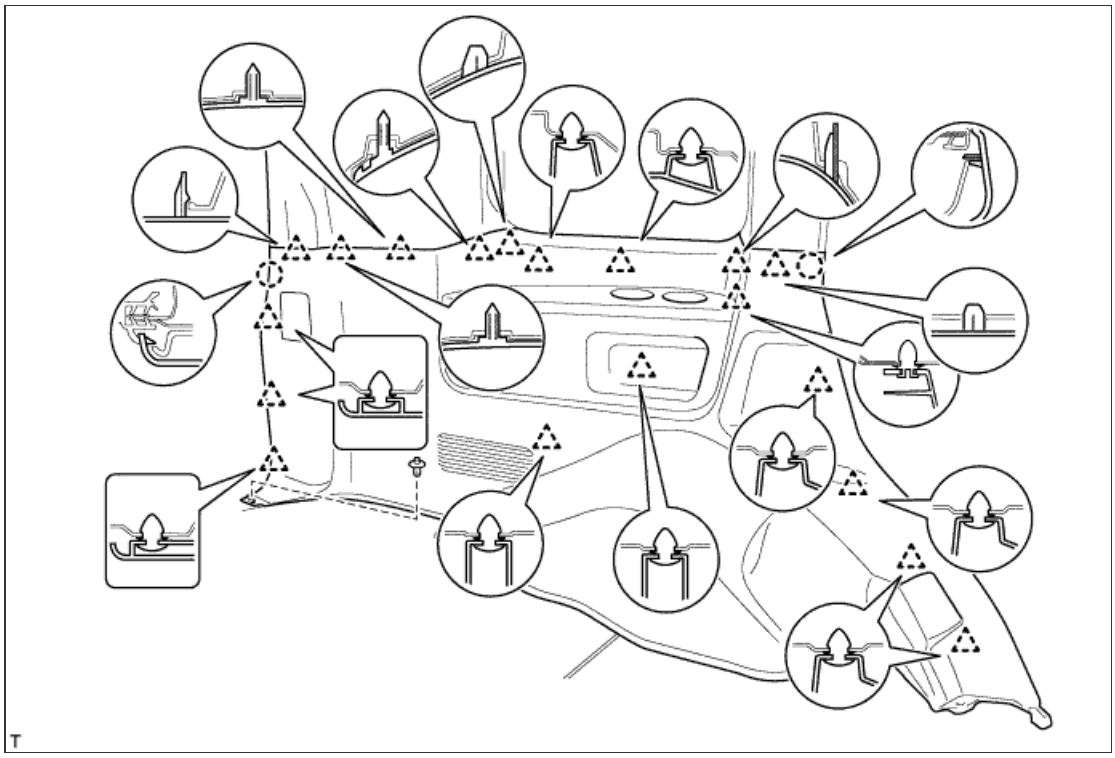


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

ii. Attach the 19 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

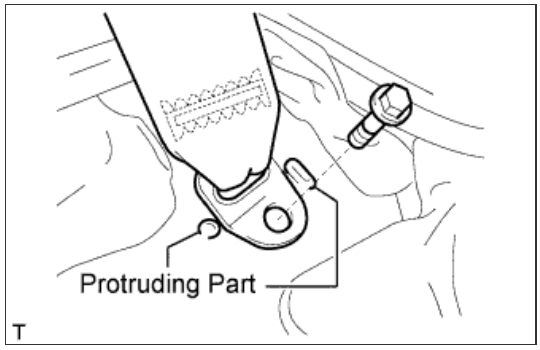


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

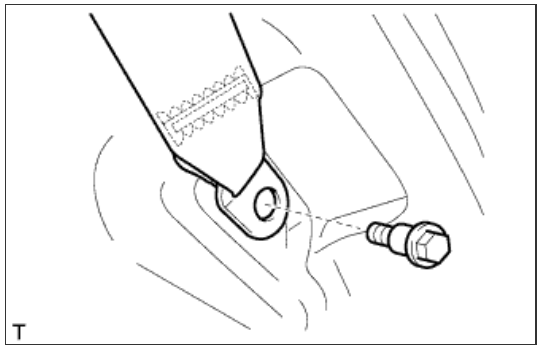
NOTICE:

Do not overlap the anchor part of the seat belt and protruding parts of the vehicle body.

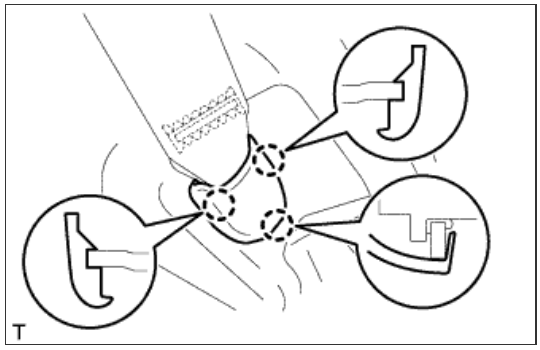


d. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



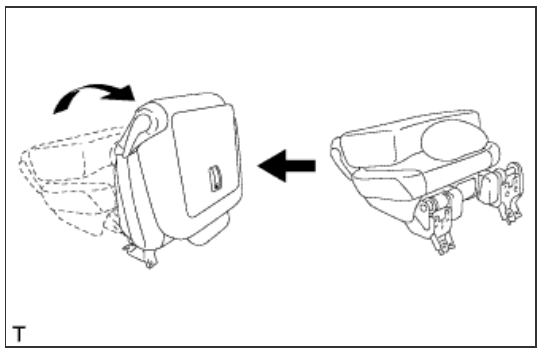
e. Attach the 3 claws to install the cover.



67. INSTALL FRONT QUARTER TRIM PANEL ASSEMBLY RH

HINT:

When installing the front quarter trim panel, operate the reclining adjuster release handle and move the No. 1 rear seat to the position shown in the illustration.



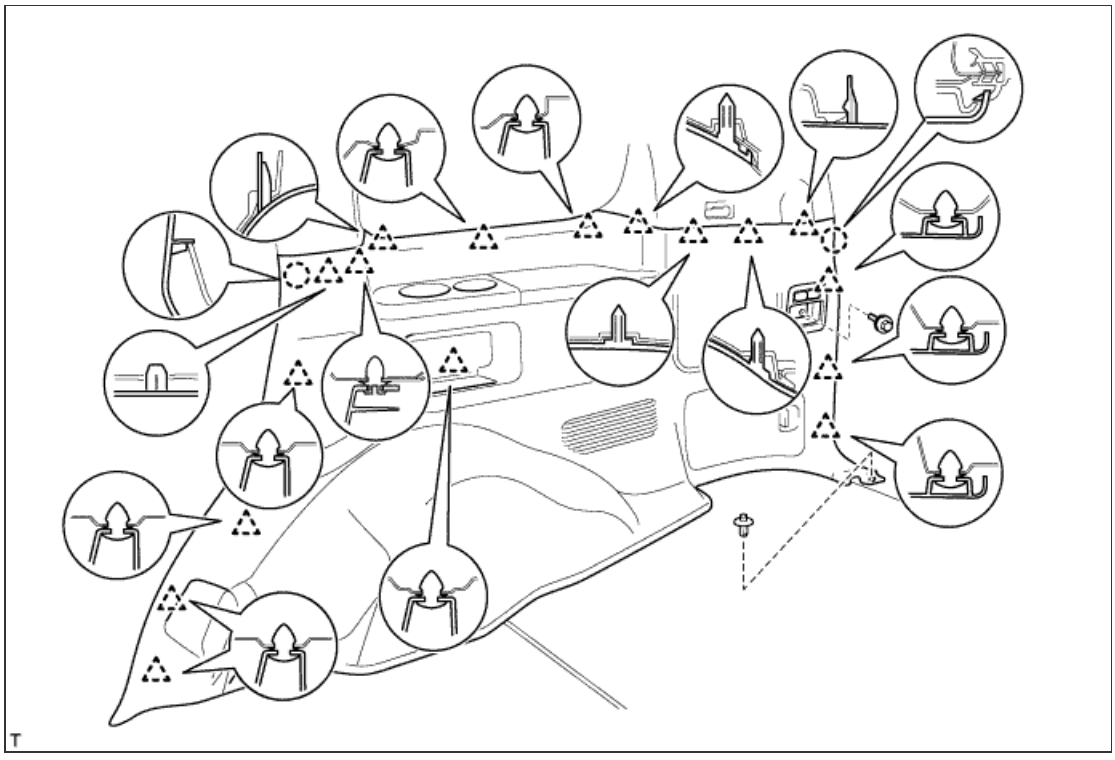
a. for Rear No. 2 Seat with Manual Folding-up Function:

i. Connect the thermistor connector and rear seat lock control lever cable.

ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip and bolt.

Torque:
for bolt:
12 N*m{ 122 kgf*cm , 9 ft.*lbf }

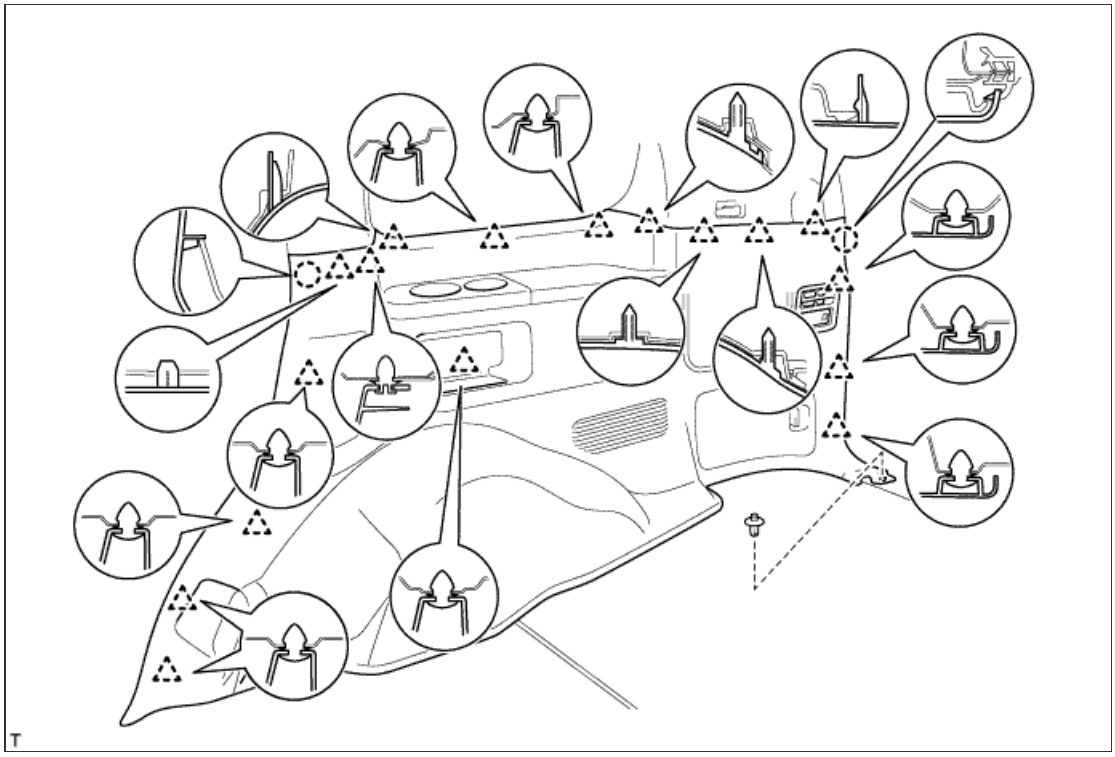


b. for Rear No. 2 Seat with Automatic Folding-up Function:

i. Connect the thermistor connector.

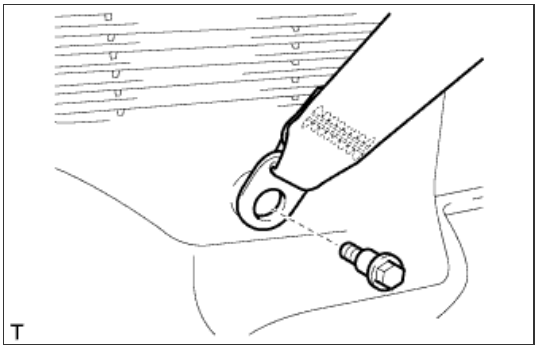
ii. Attach the 17 clips and 2 claws to install the quarter trim panel.

iii. Install the clip.

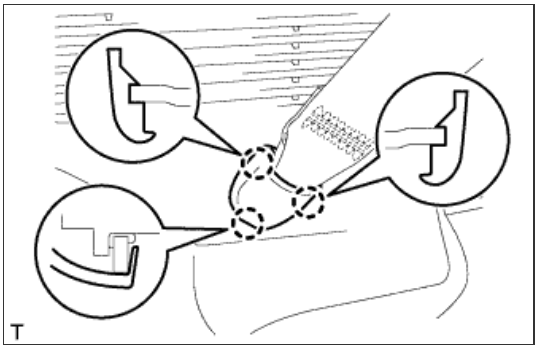


c. Install the rear No. 2 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }

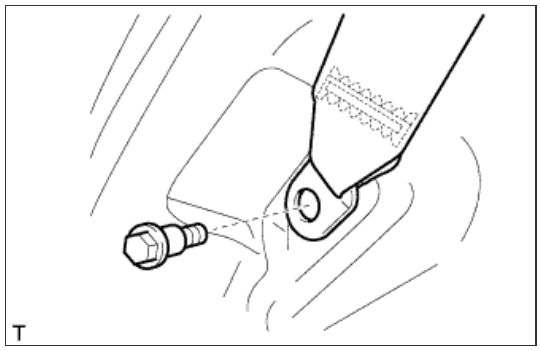


d. Attach the 3 claws to install the cover.

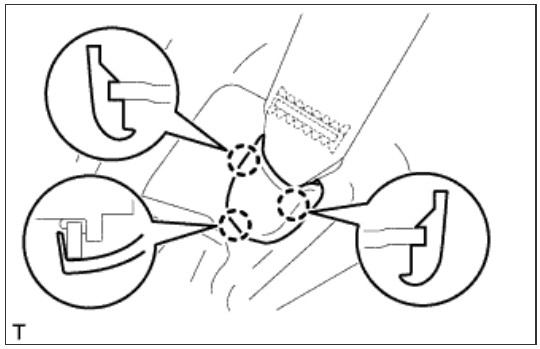


e. Install the rear No. 1 seat belt anchor with the bolt.

Torque:
42 N*m{ 428 kgf*cm , 31 ft.*lbf }



f. Attach the 3 claws to install the cover.

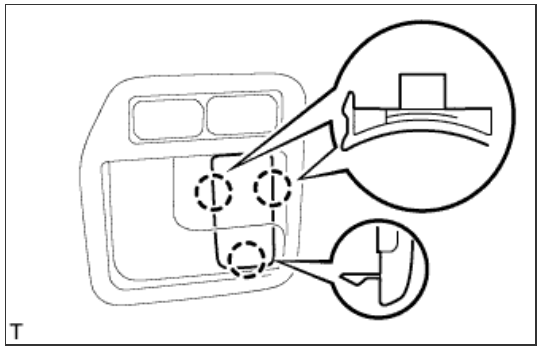


68. INSTALL REAR SEAT COVER CAP (for Rear No. 2 Seat with Manual Folding-up Function)

HINT:

Use the same procedures to install the rear seat cover cap on the other side.

a. Attach the 3 claws to install the rear seat cover cap.

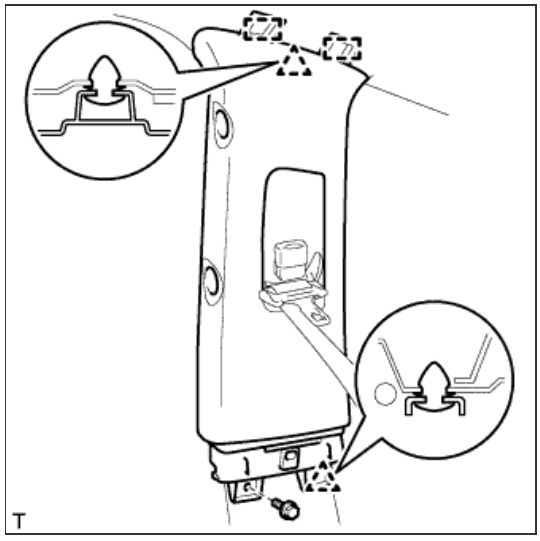


69. INSTALL CENTER PILLAR GARNISH LH

a. Pass the seat belt anchor through the center pillar garnish.

b. Attach the 2 clips and 2 guides to install the center pillar garnish.

c. Install the bolt.



70. INSTALL CENTER PILLAR GARNISH RH

HINT:

Use the same procedures described for the LH side.

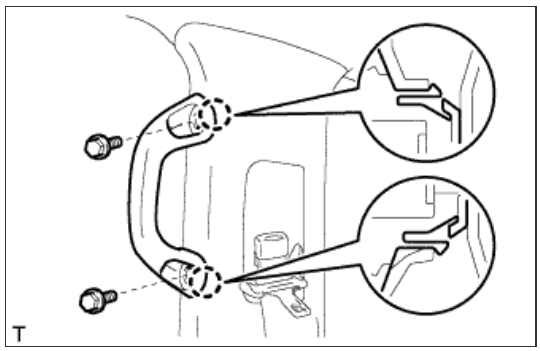
71. INSTALL REAR ASSIST GRIP ASSEMBLY

HINT:

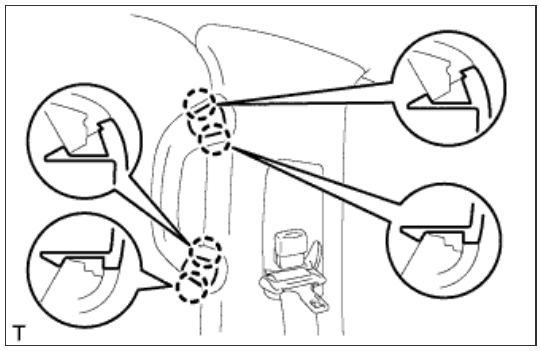
Use the same procedure to install the rear assist grip on the other side.

a. Attach the 2 claws to install the rear assist grip.

b. Install the 2 bolts.



c. Attach the 4 claws to install the 2 assist grip plugs.

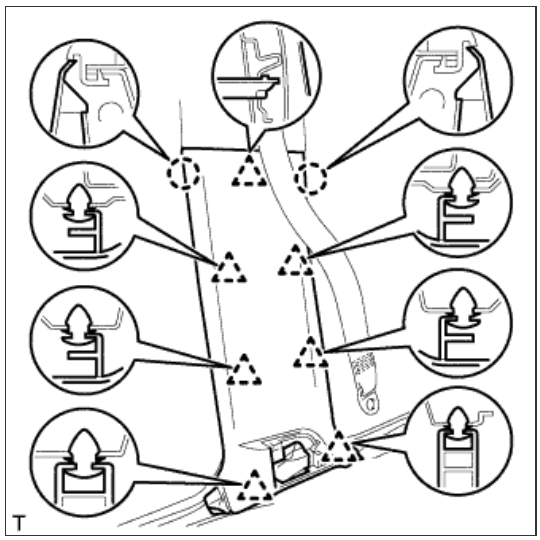


72. INSTALL CENTER LOWER PILLAR GARNISH LH

HINT:

- **When installing the center lower pillar garnish, connect the cable to the negative (-) battery terminal and operate the power seat switch to move the front seat and seatback to the foremost upright position.**
- **After moving the front seat, disconnect the cable from the negative (-) battery terminal.**

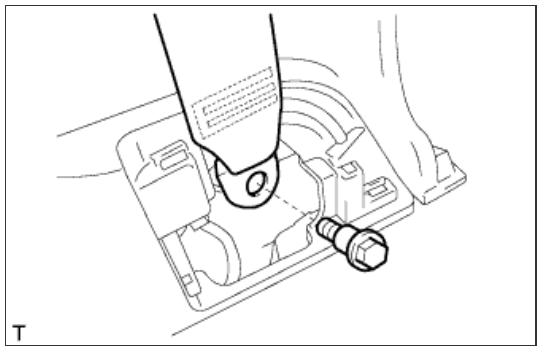
a. Attach the 2 claws and 7 clips to install the center lower pillar garnish.



b. Install the seat belt anchor with the bolt.

Torque:

42 N*m{ 428 kgf*cm , 31 ft.*lbf }



73. INSTALL CENTER LOWER PILLAR GARNISH RH

HINT:

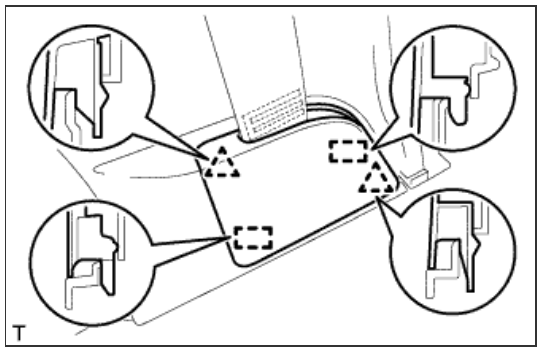
Use the same procedures described for the LH side.

74. INSTALL CENTER PILLAR GARNISH COVER LH

HINT:

- **When installing the center pillar garnish cover, connect the cable to the negative (-) battery terminal and operate the power seat switch to move the front seat and seatback to the foremost upright position.**
- **After moving the front seat, disconnect the cable from the negative (-) battery terminal.**

a. Attach the 2 clips and 2 guides to install the cover.



75. INSTALL CENTER PILLAR GARNISH COVER RH

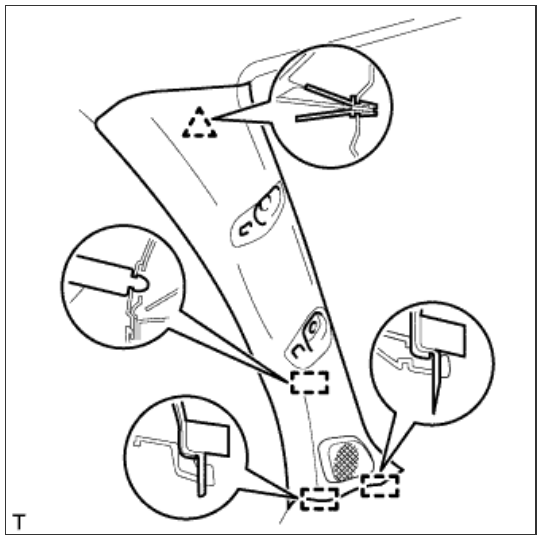
HINT:

Use the same procedures described for the LH side.

76. INSTALL FRONT PILLAR GARNISH LH

a. Connect the speaker connector.

b. Attach the clip and 3 guides to install the front pillar garnish.



77. INSTALL FRONT PILLAR GARNISH RH

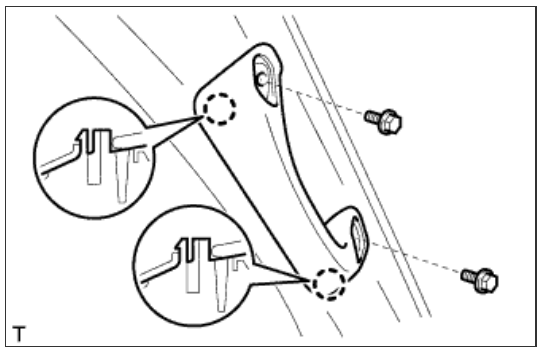
HINT:

Use the same procedures described for the LH side.

78. INSTALL FRONT ASSIST GRIP SUB-ASSEMBLY

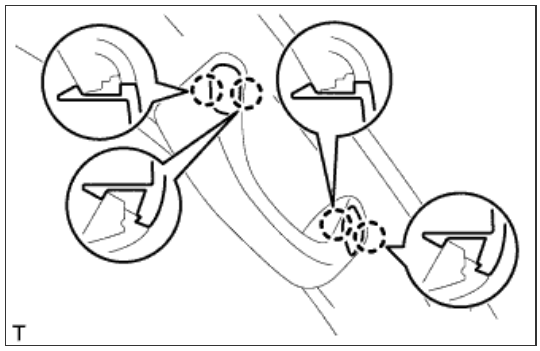
HINT:

Use the same procedure to install the front assist grip on the other side.



a. Attach the 2 claws to install the front assist grip.

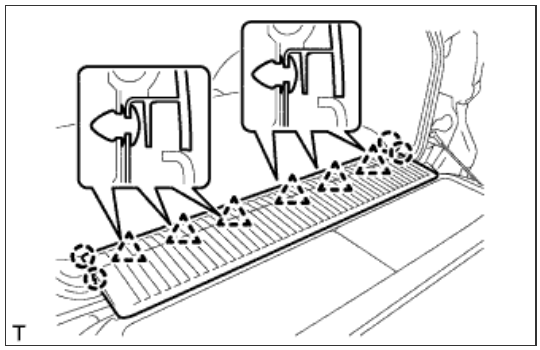
b. Install the 2 bolts.



c. Attach the 4 claws to install the 2 assist grip plugs.

79. INSTALL REAR FLOOR MAT REAR SUPPORT PLATE

a. Attach the 6 clips and 4 claws to install the support plate.

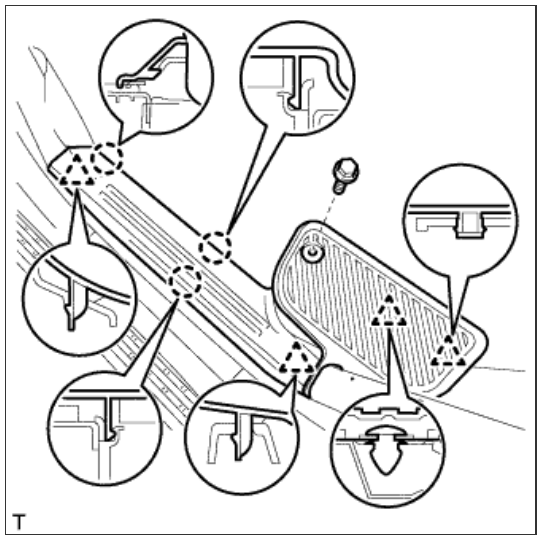


80. INSTALL REAR DOOR SCUFF PLATE LH

a. w/o Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

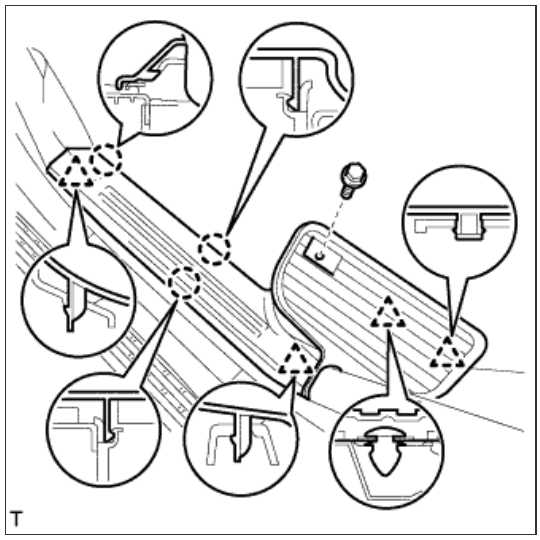
ii. Install the screw.



b. w/ Illumination Type Front Door Scuff Plate:

i. Attach the 3 claws and 4 clips to install the scuff plate.

ii. Install the screw.



81. INSTALL REAR DOOR SCUFF PLATE RH

HINT:

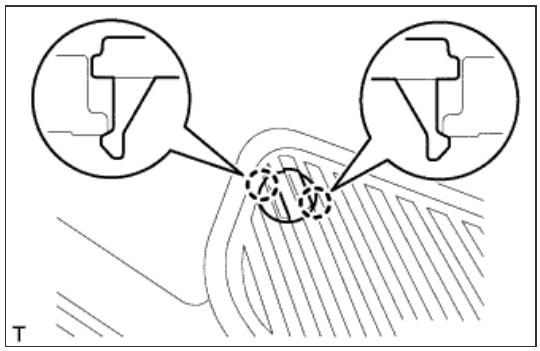
Use the same procedures described for the LH side.

82. INSTALL REAR STEP COVER

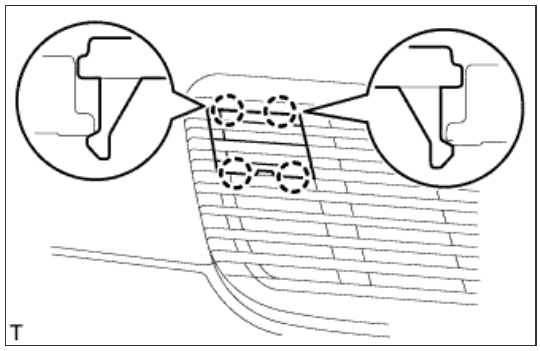
HINT:

Use the same procedure to install the step cover on the other side.

a. w/o Illumination Type Front Door Scuff Plate:
Attach the 2 claws to install the step cover.



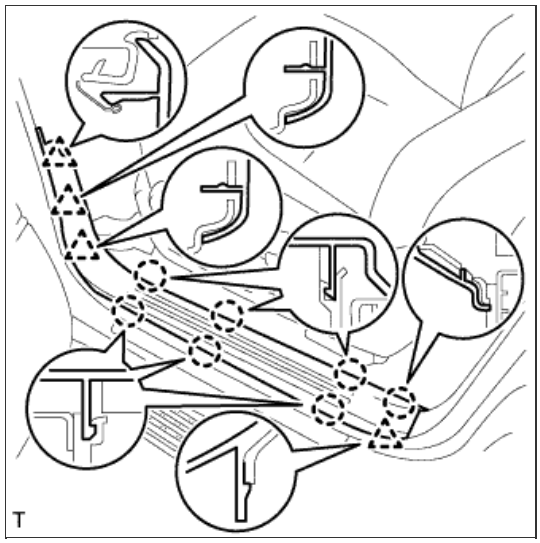
b. w/ Illumination Type Front Door Scuff Plate:
Attach the 4 claws to install the step cover.



83. INSTALL FRONT DOOR SCUFF PLATE LH

a. w/o Illumination:

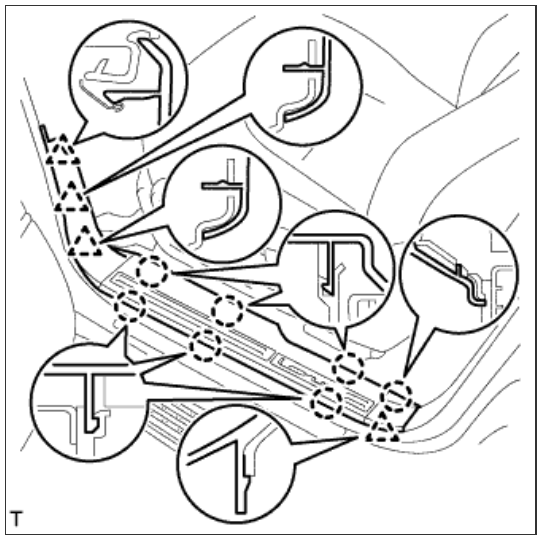
i. Attach the 7 claws and 4 clips to install the scuff plate.



b. w/ Illumination:

i. Connect the connector.

ii. Attach the 7 claws and 4 clips to install the scuff plate.



84. INSTALL FRONT DOOR SCUFF PLATE RH

HINT:

Use the same procedures described for the LH side.

85. INSTALL REAR NO. 2 SEAT ASSEMBLY LH

a. w/ Manual Folding-up Function:
Install the rear No. 2 seat assembly LH (Click here).

b. w/ Automatic Folding-up Function:
Install the rear No. 2 seat assembly LH (Click here).

86. INSTALL REAR NO. 2 SEAT ASSEMBLY RH

HINT:

Use the same procedures described for the LH side.

87. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

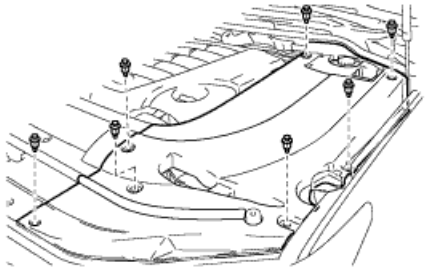
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected (Click here).

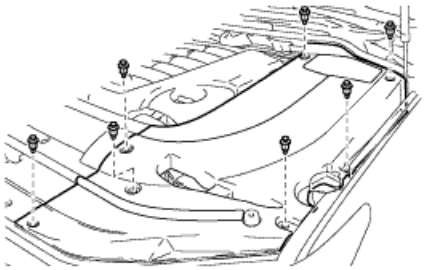
88. INSTALL ENGINE ROOM SIDE COVER LH

a. Remove the 7 clips and engine room side cover.

for LHD:



for RHD:



P