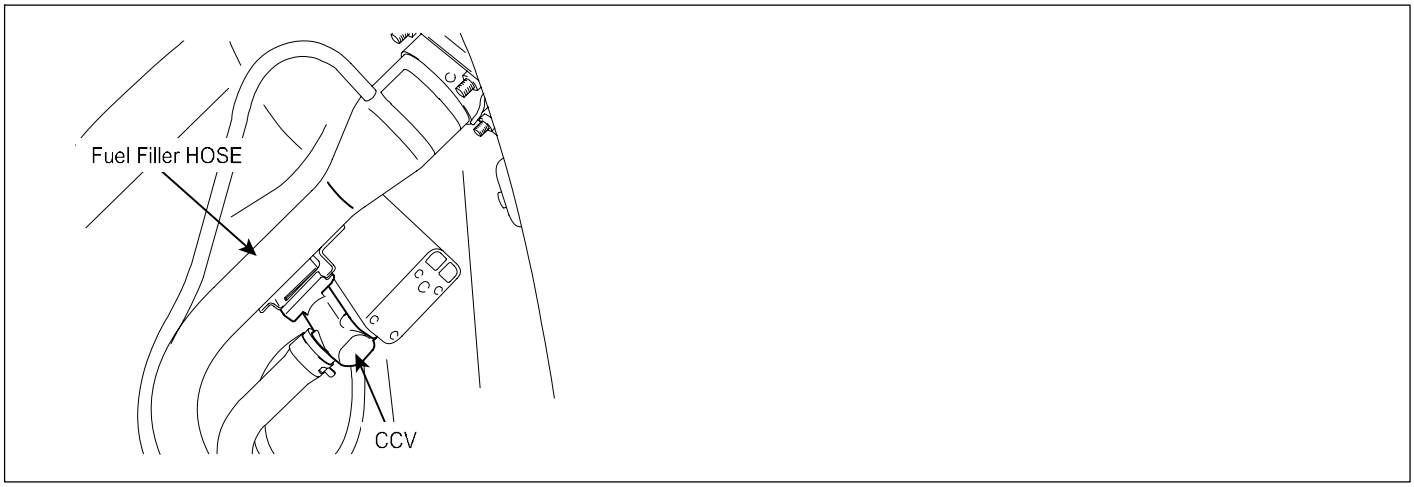
DTC P2422 EVAP. EMISSION SYSTEM-CANISTER CLOGGING

COMPONENT LOCATION E6D79DE4



EGRF990L

GENERAL DESCRIPTION E82FCBDF

The vent valve is a device that is designed to close off the fresh air inlet to the canister. Current vent valve designs are powered closed. An electrically operated vent valve solenoid is requiredfor OBD II compliant evaporative systems. Normally the vent valve is in the open (unpowered)state, but to control the vacuum levels in the fuel tank the EVPD will command the vent valvesolenoid to the closed position. This controlled vacuum level will allow the EVPD to determine the integrity of the evaporative system.

The vent valve orifice is much larger than the purge valve orifice or purge lines so that when thevent valve is open, the purge flow is not restricted. The fresh air inlet in the vent valve solenoid is normally filtered with a serviceable dust filter that helps to prevent contaminants from being drawn into the evaporative system (e.g. water, salt, silica, etc.).

DTC DESCRIPTION E5FA949B

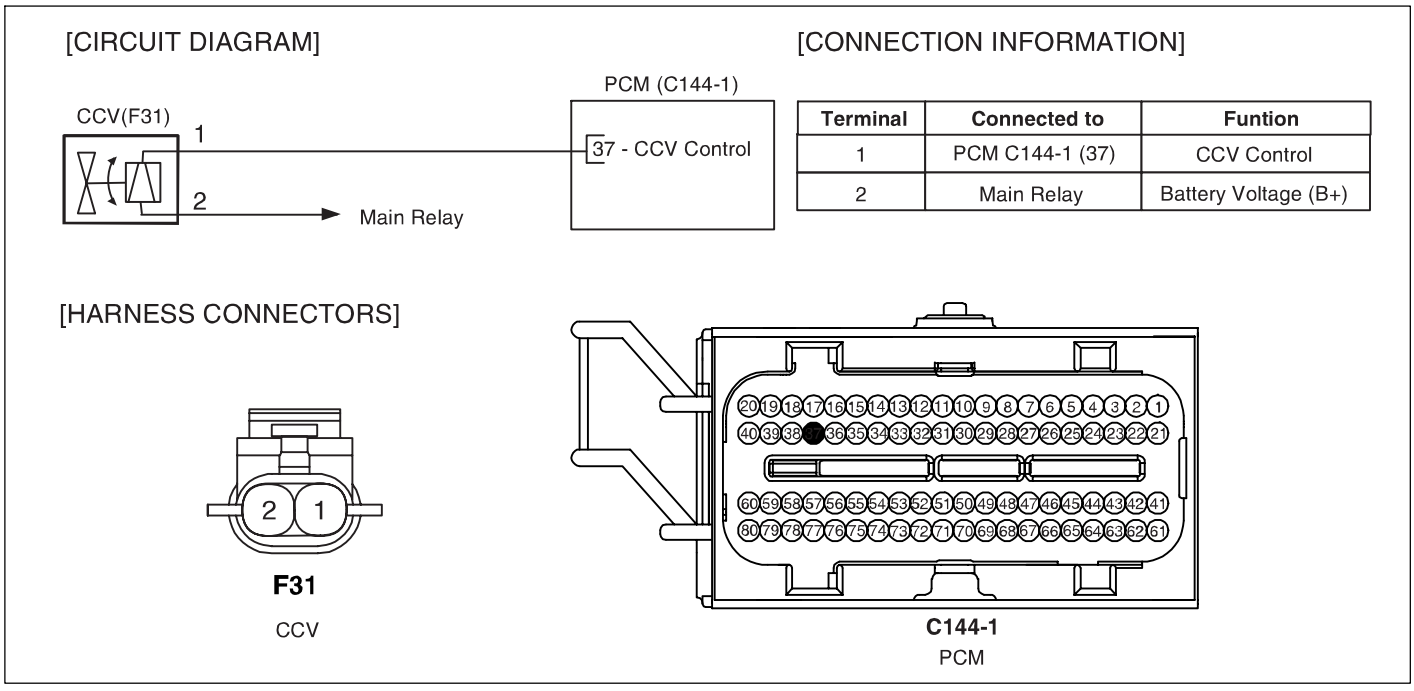
This test will detect blockage by commanding the vent solenoid to its normally open state and commanding the purge system to maintain a calibratable constant amount of purge flow. The fuel tank vacuum is monitored using the fuel tank pressure sensor for a calibration-specified amount of time. Anormally functioning evaporative system will maintain a relatively low vacuum level. Whereas, a failing evaporative system will experience an increasing vacuum level until a " fail" threshold is reached, at which time the test reports a " fail" condition.

Checking output signals from FTPS under detecting condition, if FTPS signal is detected higher than 14in H2O for more than 5sec. when purging at 0.15 g/s. PCM sets P2422.

DTC DETECTING CONDITION E99CF5B9

Item	Detecting Condition	Possible cause
DTC Strategy	• Test is failed if tank vacuum exceeds a prescribed threshold for a prescribed time when purging at a prescribed rate.	• Faulty Canister Close Valve • Clogging of canister air filter • Open in ground harness of FTPS • Faulty PCM
EnableConditions	• 10 〈 Ignition Volt 〈 15.9907 • Barometric pressure 〉 72 kPa • Engine off time 〉 720min or Startup IAT-Startup ECT 〈 12℃(53.6 °F) • Startup ECT -Startup IAT 〈 12℃(53.6 °F) • 0℃(32 °F) 〈 Startup ECT 〈 40℃(104 °F) • 0℃(32 °F) 〈 Startup IAT 〈 40℃(104 °F) • Start-up IAT-IAT 〈 1℃(33.8 °F) • Engine Run Time 〉 1sec • Purge enable time 〈 Threshold • Cold Start Time 〈 300sec. • 15 % 〈 Fuel Level 〈 85% • Restricted path test time 〈 120sec.	
Threshold value	• Tank vacuum ≥ 14 inH2O • Fail time 〉 5s • Purge rate 0.15 g/s	
DiagnosisTime	• -	
MIL On Condition	• 1 driving cycle	

SCHEMATIC DIAGRAM EECEECF4



EGRF264A

MONITOR SCANTOOL DATA E209E7CB

1. Warm-up engine to normal operating temperature.

NOTE

Evaporative Emissions Systems (EVAP) Leak Tests can be run by the Scan Tool.The tests are automated and provide either a pass-fail result or directions to check for DTCs.

2. Install scan tool and clear DTC

3. Perform "EVAP. LEAKAGE TEST" mode referring to enable conditions as below

4. Monitoring for (pending) DTC by performing " DIAGNOSTIC TROUBLE CODES"or "MONITORING TEST RESULTS". Is the same DTC set ?

YES

▶ Go to "System Inspection" procedure.

NO

▶ Fault is intermittent caused by poor contact in sensor' s and/or PCM' s connector or was repaired and PCM memory was not cleared. Thoroughly check connectors for looseness, poor connection, bending, corrosion, contamination, deterioration, or damage. Repair or replace as necessary and go to "Verification of vehicle Repair" procedure

SYSTEM INSPECTION E14DFCE7

1. Check Canister air filter and CCV

   1) Visually inspect air filter is clogged.

   2) Visually inspect duck between air filter and CCV is clogged.

   3) Check that Canister is deformed or clogged by foreign materials.

   4) Has a problem been found ?

   YES

   ▶ Repair or replace as necessary and then, go to "Verification of Vehicle Repair" procedure.

   NO

   ▶ Open in ground harness of FTPS(Fuel tank pressure sensor) can cause this DTC. so check it for open.(Refer to DTC P0454) If the problem is not corrected, substitute with a known-good PCM and check for proper operation.If the problem is corrected, replace PCM and then go to "Verification of Vehicle Repair" procedure.

NOTE

There is a memory reset function on scantool that can erase optional parts automaticallydetected and memorized by PCM.

VERIFICATION OF VEHICLE REPAIR EA2AEA3F

After a repair, it is essential to verify that the fault has been corrected.

1. Monitor and record the Freeze Frame Data for the Diagnostic Trouble Code(DTC) which has been diagnosed.

2. Using a Scantool, Clear the DTCs

3. Operate the vehicle within conditions noted in the freeze frame data or enable conditions

4. Monitor that all rediness test have been verified as " Complete "
5. Are any DTCs present ?

YES

▶ Go to the applicable troubleshoooting procedure.

NO

▶ System is performing to specification at this time.