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INFINITI®
G37 Sedan
MODEL V36 SERIES

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QUICK REFERENCE INDEX

A	GENERAL INFORMATION	GI General Information
B	ENGINE	EM Engine Mechanical
		LU Engine Lubrication System
		CO Engine Cooling System
		EC Engine Control System
		FL Fuel System
		EX Exhaust System
		STR Starting System
		ACC Accelerator Control System
C	HYBRID	
D	TRANSMISSION & DRIVELINE	CL Clutch
		TM Transaxle & Transmission
		DLN Driveline
		FAX Front Axle
		RAX Rear Axle
E	SUSPENSION	FSU Front Suspension
		RSU Rear Suspension
		WT Road Wheels & Tires
F	BRAKES	BR Brake System
		PB Parking Brake System
		BRC Brake Control System
G	STEERING	ST Steering System
		STC Steering Control System
H	RESTRAINTS	SB Seat Belt
		SBC Seat Belt Control System
		SR SRS Airbag
		SRC SRS Airbag Control System
I	VENTILATION, HEATER & AIR CONDITIONER	VTL Ventilation System
		HA Heater & Air Conditioning System
		HAC Heater & Air Conditioning Control System
J	BODY INTERIOR	INT Interior
		IP Instrument Panel
		SE Seat
		ADP Automatic Drive Positioner
K	BODY EXTERIOR, DOORS, ROOF & VEHICLE SECURITY	DLK Door & Lock
		SEC Security Control System
		GW Glass & Window System
		PWC Power Window Control System
		RF Roof
		EXT Exterior
		BRM Body Repair
L	DRIVER CONTROLS	MIR Mirrors
		EXL Exterior Lighting System

		INL	Interior Lighting System
		WW	Wiper & Washer
		DEF	Defogger
		HRN	Horn
M	ELECTRICAL & POWER CONTROL	PWO	Power Outlet
		BCS	Body Control System
		LAN	LAN System
		PCS	Power Control System
		CHG	Charging System
		PG	Power Supply, Ground & Circuit Elements
N	DRIVER INFORMATION & MULTIMEDIA	MWI	Meter, Warning Lamp & Indicator
		WCS	Warning Chime System
		SN	Sonar System
		AV	Audio, Visual & Navigation System
O	CRUISE CONTROL	CCS	Cruise Control System
P	MAINTENANCE	MA	Maintenance

FOREWORD

This manual contains maintenance and repair procedure for the 2010 INFINITI G37 Sedan.

In order to assure your safety and the efficient functioning of the vehicle, this manual should be read thoroughly. It is especially important that the PRECAUTIONS in the GI section be completely understood before starting any repair task.

All information in this manual is based on the latest product information at the time of publication. The right is reserved to make changes in specifications and methods at any time without notice.

IMPORTANT SAFETY NOTICE

The proper performance of service is essential for both the safety of the technician and the efficient functioning of the vehicle. The service methods in this Service Manual are described in such a manner that the service may be performed safely and accurately. Service varies with the procedures used, the skills of the technician and the tools and parts available. Accordingly, anyone using service procedures, tools or parts which are not specifically

recommended by NISSAN must first be completely satisfied that neither personal safety nor the vehicle's safety will be jeopardized by the service method selected.

INFINITI®

2010

PFP:00000

QUICK REFERENCE CHART G37 SEDAN

ENGINE TUNE-UP DATA (VQ37VHR)

ELS0003W

Engine model			VQ37VHR
Firing order			1-2-3-4-5-6
Idle speed A/T (In "P or N" position) M/T (In Neutral position)		rpm	650 ± 50
Ignition timing (BTDC at idle speed)			10° ± 5°
CO% at idle			0.7 - 9.9 % and engine runs smoothly
Tensions of drive belt			Auto adjustment by auto tensioner
Radiater cap relief pressure		kPa (kg/cm^2 , psi)	
	Standard		122.3 - 151.7 (1.2 - 1.5, 18 - 22)
	Limit		107 (1.1, 16)
Cooling system leakage testing pressure		kPa (kg/cm^2 , psi)	157 (1.6, 23)
Compression pressure		kPa (kg/cm^2 , psi)/rpm	
	Standard		1,667 - 2,354 (17 - 24, 242 - 341)/200
	Minimum		1,226 (12.5, 178)/200
		between cylinders	98 (1.0, 14)/200
Spark plug (Iridium-tipped type)	Make		DENSO
	Standard type		FXE24HR11
	Gap (Nominal)	mm (in)	1.1 (0.043)

QUICK REFERENCE CHART G37 SEDAN

2010 FRONT WHEEL ALIGNMENT

ELS0003X

2WD

Applied model			Except for sports models	For sports models
Camber Degree minute (Decimal degree)		Minimum	–1° 05′ (–1.08°)	
		Nominal	–0° 20′ (–0.33°)	
		Maximum	0° 25′ (0.42°)	
		Left and right difference	0° 33′ (0.55°) or less	
Caster Degree minute (Decimal degree)		Minimum	3° 50′ (3.83°)	3° 55′ (3.92°)
		Nominal	4° 35′ (4.58°)	4° 40′ (4.67°)
		Maximum	5° 20′ (5.33°)	5° 25′ (5.42°)
		Left and right difference	0° 39′ (0.65°) or less	
Kingpin inclination Degree minute (Decimal degree)		Minimum	6° 35′ (6.58°)	
		Nominal	7° 20′ (7.33°)	
		Maximum	8° 05′ (8.08°)	
Total toe-in	Distance	Minimum	0 mm (0 in)	
		Nominal	In 1 mm (0.04 in)	
		Maximum	In 2 mm (0.08 in)	
	Angle (Left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0° 00′ (0.00°)	
		Nominal	In 0° 02′ 30″ (0.04°)	
		Maximum	In 0° 05′ (0.08°)	

Measure value under unladen* conditions.

*: Fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

AWD

Wheel size		17 inch	18 inch
Camber Degree minute (Decimal degree)	Minimum	–1° 10′ (–1.16°)	
	Nominal	–0° 25′ (–0.42°)	
	Maximum	0° 20′ (0.33°)	
	Left and right difference	0° 33′ (0.55°) or less	
Caster Degree minute (Decimal degree)	Minimum	3° 20′ (3.34°)	3° 25′ (3.42°)
	Nominal	4° 05′ (4.08°)	4° 10′ (4.17°)
	Maximum	4° 50′ (4.83°)	4° 55′ (4.91°)
	Left and right difference	0° 39′ (0.65°) or less	
Kingpin inclination Degree minute (Decimal degree)	Minimum	6° 40′ (6.67°)	
	Nominal	7° 25′ (7.42°)	

		Maximum	8° 10′ (8.16°)
Total toe-in	Distance	Minimum	0 mm (0 in)
		Nominal	In 1 mm (0.04 in)
		Maximum	In 2 mm (0.08 in)
	Angle (Left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0° 00′ (0.00°)
		Nominal	In 0° 02′ 30″ (0.04°)
		Maximum	In 0° 05′ (0.08°)

Measure value under unladen* conditions.
*: Fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

2010 REAR WHEEL ALIGNMENT ELS0003Y

Applied model			2WD		AWD
			Except for sports models	For sports models	
Camber Degree minute (Decimal degree)		Minimum	–1° 20′ (–1.33°)	–1° 25′ (–1.42°)	
		Nominal	–0° 50′ (–0.83°)	–0° 55′ (–0.92°)	
		Maximum	–0° 20′ (–0.33°)	–0° 25′ (–0.42°)	
Total toe-in	Distance	Minimum	0 mm (0 in)		
		Nominal	In 2.8 mm (0.110 in)		
		Maximum	In 5.6 mm (0.220 in)		
	Angle (Left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0° 00′ (0.00°)		
		Nominal	In 0° 07′ (0.12°)		
		Maximum	In 0° 14′ (0.23°)		

Measure value under unladen* conditions.
*: Fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

BRAKE PEDAL

Unit : mm (in)

Depressed brake pedal height (H_1)	171.5 - 181.5 (6.75 - 7.15)
Brake pedal reserve height (H_2) [Depressing 490 N (50 kg, 110 lb) while turning the engine ON]	124.0 (4.88) or more

FRONT DISK BRAKE

2 Piston Type

Unit : mm (in)

Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	26.0 (1.024)

4 Piston Type

Unit : mm (in)

Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	30.0 (1.181)

REAR DISK BRAKE

1 Piston Type

Unit : mm (in)

Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	14.0 (0.551)

2 Piston Type

Unit : mm (in)

Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	18.0 (0.709)

2010 REFILL CAPACITIES

ELS00040

UNIT		Liter	US measure
Fuel tank		75.6	20 gal
Engine Coolant (With reservoir tank) at MAX level	A/T models	8.5	9 qt
	M/T models	8.6	9-1/8 pt
Engine oil	Drain and refill With oil filter change	4.9	5-1/8 qt
	Without oil filter change	4.6	4-7/8 qt
	Dry engine (Overhaul)	5.7	6 qt
Transmission	A/T	9.2	9-3/4 qt
	M/T	2.83	6 pt
Transfer		1.0	2-1/8 pt
Final drive	Front	0.65	1-3/8 pt
	Rear	1.4	3 pt
Power steering system		1.0	1-1/8 qt
Air conditioning system	Compressor oil	0.15	5.07 fl oz
	Refrigerant	0.55 kg	1.21 lb