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**QUICK REFERENCE INDEX**

<b>A GENERAL INFORMATION</b>	<b>GI General Information</b>
<b>B ENGINE</b>	<b>EM Engine Mechanical</b>
	<b>LU Engine Lubrication System</b>
	<b>CO Engine Cooling System</b>
	<b>EC Engine Control System</b>
	<b>FL Fuel System</b>
	<b>EX Exhaust System</b>
	<b>STR Starting System</b>
<b>ACC Accelerator Control System</b>	
<b>C HYBRID</b>	
<b>D TRANSMISSION &amp; DRIVE-LINE</b>	<b>CL Clutch</b>
	<b>TM Transaxle &amp; Transmission</b>
	<b>DLN Driveline</b>
	<b>FAX Front Axle</b>
	<b>RAX Rear Axle</b>
<b>E SUSPENSION</b>	<b>FSU Front Suspension</b>
	<b>RSU Rear Suspension</b>
	<b>WT Road Wheels &amp; Tires</b>
<b>F BRAKES</b>	<b>BR Brake System</b>
	<b>PB Parking Brake System</b>
	<b>BRC Brake Control System</b>
	<b>ST Steering System</b>
<b>G STEERING</b>	<b>STC Steering Control System</b>
	<b>SB Seat Belt</b>
	<b>SBC Seat Belt Control System</b>
<b>H RESTRAINTS</b>	<b>SR SRS Airbag</b>
	<b>SRC SRS Airbag Control System</b>
	<b>VTL Ventilation System</b>
	<b>HA Heater &amp; Air Conditioning System</b>
<b>I VENTILATION, HEATER &amp; AIR CONDITIONER</b>	<b>HAC Heater &amp; Air Conditioning Control System</b>
	<b>INT Interior</b>
<b>J BODY INTERIOR</b>	<b>IP Instrument Panel</b>
	<b>SE Seat</b>
	<b>ADP Automatic Drive Positioner</b>
<b>K BODY EXTERIOR, DOORS, ROOF &amp; VEHICLE SECURITY</b>	<b>DLK Door &amp; Lock</b>
	<b>SEC Security Control System</b>
	<b>GW Glass &amp; Window System</b>
	<b>PWC Power Window Control System</b>
	<b>RF Roof</b>
	<b>EXT Exterior</b>
	<b>BRM Body Repair</b>
	<b>MIR Mirrors</b>
<b>L DRIVER CONTROLS</b>	<b>EXL Exterior Lighting System</b>
	<b>INL Interior Lighting System</b>
	<b>WW Wiper &amp; Washer</b>
	<b>DEF Defogger</b>
	<b>HRN Horn</b>
	<b>PWO Power Outlet</b>
<b>M ELECTRICAL &amp; POWER CONTROL</b>	<b>BCS Body Control System</b>
	<b>LAN LAN System</b>
	<b>PCS Power Control System</b>
	<b>CHG Charging System</b>
	<b>PG Power Supply, Ground &amp; Circuit Elements</b>
	<b>MWI Meter, Warning Lamp &amp; Indicator</b>
<b>N DRIVER INFORMATION &amp; MULTIMEDIA</b>	<b>WCS Warning Chime System</b>
	<b>AV Audio, Visual &amp; Navigation System</b>
	<b>CCS Cruise Control System</b>
<b>O CRUISE CONTROL</b>	<b>MA Maintenance</b>
<b>P MAINTENANCE</b>	

**A**  
**B**  
**D**  
**E**  
**F**  
**G**  
**H**  
**I**  
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# FOREWORD

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This manual contains maintenance and repair procedure for the 2009 INFINITI G37 Coupe.

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

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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®

QUICK REFERENCE CHART G37 COUPE

PFP:00000

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		Belt tension is not necessary, as it is automatically adjusted by drive belt auto-tensioner.
Radiator cap relief pressure	kPa (kg/cm <sup>2</sup> , 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 <sup>2</sup> , psi)	157 (1.6, 23)
Compression pressure	kPa (kg/cm <sup>2</sup> , psi)/200 rpm	
Standard		1,667 - 2,354 (17 - 24, 242 - 341)
Minimum		1,226 (12.5, 178)
Differential limit between cylinders		98 (1.0, 14)
Spark plug (Iridium-tipped type)		
Make		DENSO
Standard type		FXE24HR11
Gap (Nominal)	mm (in)	1.1 (0.043)

**FRONT WHEEL ALIGNMENT**

ELS0003X

Applied model		2WD	AWD	
Camber Degree minute (Decimal degree)	Minimum	-1° 10' (-1.17°)		
	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	4° 05' (4.08°)	3° 30' (3.50°)	
	Nominal	4° 50' (4.83°)	4° 15' (4.25°)	
	Maximum	5° 35' (5.58°)	5° 00' (5.00°)	
	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.

**REAR WHEEL ALIGNMENT**

ELS0003Y

Camber Degree minute (Decimal degree)	Minimum	-1° 45' (-1.75°)		
	Nominal	-1° 15' (-1.25°)		
	Maximum	-0° 45' (-0.75°)		
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)

Brake pedal height (H1)	171.5 - 181.5 (6.75 - 7.15)
Depressed brake pedal height (H2) [Depressing 490 N (50 kg, 110 lb) while turning the engine ON]	124.0 (4.88) or more

**FRONT DISK BRAKE**

**1 Piston Type**

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc rotor	Wear thickness	30.0 (1.181)
	Thickness variation (measured at 8 positions)	0.015 (0.0006)
	Runout (with it attached to the vehicle)	0.035 (0.0014)

**2 Piston Type**

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc rotor	Wear thickness	26.0 (1.024)
	Thickness variation (measured at 8 positions)	0.015 (0.0006)
	Runout (with it attached to the vehicle)	0.035 (0.0014)

**4 Piston Type**

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc rotor	Wear thickness	30.0 (1.181)
	Thickness variation (measured at 8 positions)	0.015 (0.0006)
	Runout (with it attached to the vehicle)	0.035 (0.0014)

**REAR DISK BRAKE**

**1 Piston (Front 1 Piston) Type**

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc rotor	Wear thickness	15.0 (0.591)
	Thickness variation (measured at 8 positions)	0.015 (0.0006)
	Runout (with it attached to the vehicle)	0.055 (0.0022)

**1 Piston (Front 2 Piston) Type**

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc rotor	Wear thickness	14.0 (0.551)
	Thickness variation (measured at 8 positions)	0.015 (0.0006)
	Runout (with it attached to the vehicle)	0.055 (0.0022)

**2 Piston Type**

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc rotor	Wear thickness	18.0 (0.709)
	Thickness variation (measured at 8 positions)	0.015 (0.0006)
	Runout (with it attached to the vehicle)	0.055 (0.0022)

# QUICK REFERENCE CHART G37 COUPE

2009

## 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 qt
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		
	VIN: UP to JNKCV64E09M605016	2.93	6-1/4 pt
VIN: From JNKCV64E09M605017		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