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**QUICK REFERENCE INDEX**

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

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# FOREWORD

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This manual contains maintenance and repair procedure for the 2012 INFINITI G 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®



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**SERVICE MANUAL: Model:** \_\_\_\_\_ **Year:** \_\_\_\_\_

**PUBLICATION NO. (Refer to Quick Reference Index):** \_\_\_\_\_

Please describe any Service Manual issues or problems in detail:

Page number(s) \_\_\_\_\_ *Note: Please include a copy of each page, marked with your comments.*

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**Are the trouble diagnosis procedures logical and easy to use? (circle your answer) YES NO**

If no, what page number(s)? \_\_\_\_\_ *Note: Please include a copy of each page, marked with your comments.*

Please describe the issue or problem in detail: \_\_\_\_\_

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**Is the organization of the manual clear and easy to follow? (circle your answer) YES NO**

Please comment: \_\_\_\_\_

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**What information should be included in INFINITI Service Manuals to better support you in servicing or repairing customer vehicles?**

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DATE: \_\_\_\_\_ YOUR NAME: \_\_\_\_\_ POSITION: \_\_\_\_\_

DEALER: \_\_\_\_\_ DEALER NO.: \_\_\_\_\_ ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE/PROV./COUNTRY: \_\_\_\_\_ ZIP/POSTAL CODE: \_\_\_\_\_

QUICK REFERENCE CHART G 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°
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' (-1.16°)		
	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	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°)		
Toe-in	Total toe-in Distance	Minimum	Out 1 mm (Out 0.03 in)	
		Nominal	In 1 mm (In 0.04 in)	
		Maximum	In 3 mm (In 0.11 in)	
	Toe-angle Degree minute (Decimal degree)	Minimum	Out 0° 04' 48" (Out 0.08°)	
		Nominal	In 0° 04' 48" (In 0.08°)	
		Maximum	In 0° 15' 00" (In 0.25°)	

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°)	
Toe-in	Total toe-in Distance	Minimum	0 mm (0 in)
		Nominal	In 2.8 mm (In 0.110 in)
		Maximum	In 5.6 mm (In 0.220 in)
	Toe-angle Degree minute (Decimal degree)	Minimum	0° 00' (0.00°)
		Nominal	In 0° 13' 48" (In 0.23°)
		Maximum	In 0° 28' 12" (In 0.47°)

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

**FRONT DISC 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)

**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 DISC BRAKE**

**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)

**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 G COUPE

2012

## REFILL CAPACITIES

EL500040

UNIT		Liter	US measure
Fuel tank		75.6	20 gal
Engine coolant capacity [with reservoir tank ("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	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