Edition: March 2012	QUICK REFERENCE INDEX		
Revision: July 2012	A GENERAL INFORMATION	GI	General Information
Publication No. SM3E-1C36U1	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
	C ELECTRIC POWER TRAIN	ACC	Accelerator Control System
	C ELECTRIC FOWER TRAIN		
	D TRANSMISSION & DRIVELINE	CL	Clutch
		TM	Transaxle & Transmission
		DLN FAX	Driveline Front Axle
	}	RAX	Rear Axle
	E SUSPENSION	FSU	Front Suspension
V		RSU	Rear Suspension
INFINITI®		WT	Road Wheels & Tires
	F BRAKES	BR	Brake System
G Coupe		PB	Parking Brake System
MODEL V36 SERIES		BRC	Brake Control System
	G STEERING	ST	Steering System
	H RESTRAINTS	STC SB	Steering Control System Seat Belt
	n RESTRAINTS	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 OF	Instrument Panel
		SE ADP	Seat
	K BODY EXTERIOR, DOORS,	DLK	Automatic Drive Positioner  Door & Lock
	ROOF & VEHICLE SECURITY	SEC	Security Control System
		GW	Glass & Window System
		PWC	Power Window Control System
		RF	Roof
		EXT	Exterior
	I DDIVED CONTROL C	BRM	Body Repair
	L DRIVER CONTROLS	MIR	Mirrors Exterior Lighting System
	1	EXL INL	Exterior Lighting System Interior Lighting System
		WW	Wiper & Washer
		DEF	Defogger
		HRN	Horn
	M ELECTRICAL & POWER CON- TROL	PWO	Power Outlet
	IROL	BCS	Body Control System
All Rights Reserved. No part		LAN PCS	LAN System
of this Service Manual may	i	CHG	Power Control System Charging System
be reproduced or stored in a		PG	Power Supply, Ground & Circuit Elements
retrieval system, or transmit-	N DRIVER INFORMATION &	MWI	Meter, Warning Lamp & Indicator
-	MULTIMEDIA	WCS	Warning Chime System
ted in any form, or by any		SN	Sonar System
means, electronic, mechani-		ΑV	Audio, Visual & Navigation System
cal, recording or otherwise,	O CRUISE CONTROL &	CCS	Cruise Control System
without the prior written per-	DRIVER ASSISTANCE		
mission of NISSAN MOTOR	P MAINTENANCE	MA	Maintenance
CO., LTD.	I MAIN I LIMINGE	WA	Maintellance

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# **FOREWORD**

This manual contains maintenance and repair procedure for the 2013 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

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.





#### PLEASE HELP MAKE THIS SERVICE MANUAL BETTER!

Your comments are important to INFINITI and will help us to improve our Service Manuals. Use this form to report any issues or comments you may have regarding our Service Manuals. Please print this form and type or write your comments below. Mail or fax to:

Nissan North America, Inc. Technical Service Information 39001 Sunrise Drive, P.O. Box 9200 Farmington Hills, MI USA 48331 FAX: (248) 488-3880

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. 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: Is the organization of the manual clear and easy to follow? (circle your answer)

YES NO Please comment: What information should be included in INFINITI Service Manuals to better support you in servicing or repairing customer vehicles? DATE: \_\_\_\_\_ YOUR NAME: \_\_\_\_\_ \_\_\_\_\_ POSITION: \_\_\_\_\_ DEALER: \_\_\_\_\_ DEALER NO.: \_\_\_\_ ADDRESS: \_\_\_ \_\_\_\_\_ STATE/PROV./COUNTRY: \_\_\_\_\_ ZIP/POSTAL CODE: \_\_\_\_

ELS0003W

# QUICK REFERENCE CHART G COUPE

# QUICK REFERENCE CHART G COUPE ENGINE TUNE-UP DATA (VQ37VHR)

PFP:00000

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.
Radiater cap relief pressu	re	kPa (kg/cm², psi)	
	Standard		122.3 - 151.7 (1.2 - 1.5, 18 - 22)
	Limit		107 (1.1, 16)
Cooling system leakage to	esting pressure	kPa (kg/cm², psi)	157 (1.6, 23)
Compression pressure	kl	Pa (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 be	tween cylinders	98 (1.0, 14)
	Make		DENSO
Spark plug (Iridium-tipped type)	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	
		Minimum	6° 40′ (6.67°)	
Kingpin inc	lination nute (Decimal degree)	Nominal	7° 25′ (7.42°)	
Dog.co	iato (Bosimai degres)	Maximum	8° 10′ (8.16°)	
		Minimum	Out 1 mm (Out 0.03 in)	
	Total toe-in Distance	Nominal	In 1 mm (In 0.04 in)	
Toe-in _	Distance	Maximum	In 3 mm (In 0.11 in)	
		Minimum	Out 0° 04′ 48″ (Out 0.08°)	
	Total toe-angle  Degree minute (Decimal degree)	Nominal	In 0° 04′ 48″ (In 0.08°)	
		Maximum	In 0° 15′ 00″ (In 0.25°)	

Measure value under unladen\* conditions.

#### **REAR WHEEL ALIGNMENT**

ELS0003Y

Item		Standard	
Camber Degree minute (Decimal degree)		Minimum	-1° 45′ (-1.75°)
		Nominal	-1° 15′ (-1.25°)
		Maximum	-0° 45′ (-0.75°)
		Minimum	0 mm (0 in)
Toe-in	Total toe-in Distance	Nominal	In 2.8 mm (In 0.110 in)
		Maximum	In 5.6 mm (In 0.220 in)
	Total toe-angle Degree minute (Decimal degree)	Minimum	0° 00′ (0.00°)
		Nominal	In 0° 14′ 24″ (In 0.24°)
		Maximum	In 0° 28′ 12″ (In 0.47°)

Measure value under unladen\* conditions.

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

<sup>\*:</sup> 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 DISC BRAKE

#### 1 Piston Type

Unit: mm (in)

Item		Limit	
Brake pad	Wear thickness	2.0 (0.079)	
	Wear thickness	30.0 (1.181)	
Disc rotor	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)	
	Wear thickness	30.0 (1.181)	
Disc rotor	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)	
	Wear thickness	15.0 (0.591)	
Disc rotor	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)	
	Wear thickness	18.0 (0.709)	
Disc rotor	Thickness variation (measured at 8 positions)	0.015 (0.0006)	
	Runout (with it attached to the vehicle)	0.055 (0.0022)	

# **REFILL CAPACITIES**

ELS00040

UNIT		Liter	US measure
Fuel tank		75.6	20 gal
Engine coolant capacity	A/T models	8.5	9 qt
[with reservoir tank ("MAX" level)]	M/T models	8.6	9-1/8 qt
	Drain and refill		
Engine all	With oil filter change	4.9	5-1/8 qt
Engine oil	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
Final drive	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