Edition: November 2009
Publication No. SM0E-1C36U0

INFINITI®

G37 Coupe

MODEL V36 SERIES

QUICK REFERENCE INDEX

FOREWORD

This manual contains maintenance and repair procedure for the 2010 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

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 rpm A/T (In “P or N” position) M/T (In Neutral position)		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.
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)/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 (H_1)	171.5 - 181.5 (6.75 - 7.15)
Depressed brake pedal height (H_2) [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)

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		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