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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
C HYBRID	ACC Accelerator Control System
D TRANSMISSION & DRIVE-LINE	CL Clutch
	TM Transaxle & Transmission
	DLN Driveline
	FAX Front Axle
	RAX Rear Axle
E SUSPENSION	FSU Front Suspension
	RSU Rear Suspension
F BRAKES	WT Road Wheels & Tires
	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
	VTL Ventilation System
I VENTILATION, HEATER & AIR CONDITIONER	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
	DLK Door & Lock
K BODY EXTERIOR, DOORS, ROOF & VEHICLE SECURITY	SEC Security Control System
	GW Glass & Window System
	PWC Power Window Control System
	RF Roof
	EXT Exterior
	BRM Body Repair
	MIR Mirrors
	EXL Exterior Lighting System
L DRIVER CONTROLS	INL Interior Lighting System
	WW Wiper & Washer
	DEF Defogger
	HRN Horn
	PWO Power Outlet
	BCS Body Control System
	LAN LAN System
M ELECTRICAL & POWER CONTROL	PCS Power Control System
	CHG Charging System
	PG Power Supply, Ground & Circuit Elements
	MWI Meter, Warning Lamp & Indicator
	WCS Warning Chime System
N DRIVER INFORMATION & MULTIMEDIA	
	AV Audio, Visual & Navigation System
O CRUISE CONTROL	CCS Cruise Control System
P MAINTENANCE	MA Maintenance

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FOREWORD

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

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 CONVERTIBLE

PFP:00000

ENGINE TUNE-UP DATA (VQ37VHR)

ELS0003W

Engine model			VQ37VHR	
Firing order			1-2-3-4-5-6	
Idle speed		rpm	650 ± 50	
A/T (In "P or N" position)				
M/T (In Neutral position)				
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	
Radiator cap relief pressure		kPa (kg/cm ² , psi)	122.3 - 151.7 (1.2 - 1.5, 18 - 22)	
Standard				
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	1,667 - 2,354 (17 - 24, 242 - 341)	
Standard				
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	Standard	1.1 mm (0.043 in)
			Limit	1.4 mm (0.055 in)

FRONT WHEEL ALIGNMENT

ELS0003X

Wheel size		225/50R18	225/45R19
Camber Degree minute (Decimal degree)	Minimum	-1° 10' (-1.16°)	
	Nominal	-0° 25' (-0.41°)	
	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°)	4° 10' (4.17°)
	Nominal	4° 50' (4.83°)	4° 55' (4.92°)
	Maximum	5° 35' (5.58°)	5° 40' (5.66°)
	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	0 mm (0.00 in)
		Nominal	In 1 mm (0.04 in)
		Maximum	In 2 mm (0.08 in)
	Toe-angle (left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0° 00' (0.00°)
		Nominal	In 0° 03' (0.05°)
		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°)
Toe-in	Total toe-in Distance	Minimum	0 mm (0.00 in)
		Nominal	In 2.8 mm (0.110 in)
		Maximum	In 5.6 mm (0.220 in)
	Toe 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)
	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 DISK 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 (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
Final drive		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