Edition: September 2010	QUICK REFERENCE INDEX		
Revision: November 2011	A GENERAL INFORMATION	GI	General Information
Publication No. SM1E-1V36U1	B ENGINE	EM	Engine Mechanical
		LU	Engine Lubrication System
		СО	Engine Cooling System
		EC	Engine Control System
		FL	Fuel System
		EX	Exhaust System Starting System
		STR	Accelerator Control System
	C ELECTRIC POWER TRAIN	700	Accelerator Control Cystem
	D TRANSMISSION & DRIVELINE	CL	Clutch
	D TRANSMISSION & DRIVELINE	TM	Transaxle & Transmission
		DLN	Driveline
		FAX	Front Axle
		RAX	Rear Axle
	E SUSPENSION	FSU	Front Suspension
		RSU	Rear Suspension
INCINITI			
INFINITI _®		WT	Road Wheels & Tires
G Sedan	F BRAKES	BR	Brake System
0. 0 0 0.0		PB	Parking Brake System
MODEL V36 SERIES	G STEERING	BRC	Brake Control System Steering System
	G STEERING	ST	Steering System Steering Control System
	H RESTRAINTS	SB	Seat Belt
	TI RESTRAINTS	SBC	Seat Belt Control System
		SR	SRS Airbag
		SRC	SRS Airbag Control System
	I VENTILATION, HEATER & AIR		Ventilation System
	CONDITIONER	HA	Heater & Air Conditioning System
		HAC	Heater & Air Conditioning Control System
	J BODY INTERIOR	INT	Interior
		IP	Instrument Panel
		SE	Seat Automotic Drive Resitioner
	K BODY EXTERIOR, DOORS,	ADP 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
	L DDIVED CONTROL C	BRM	Body Repair
	L DRIVER CONTROLS	MIR EXL	Mirrors Exterior Lighting System
		INL	Exterior Lighting System Interior Lighting System
		WW	Wiper & Washer
		DEF	Defogger
		HRN	Horn
	M ELECTRICAL & POWER CON-	PWO	Power Outlet
	TROL	BCS	Body Control System
All Rights Reserved. No part		LAN	LAN System
of this Service Manual may		PCS	Power Control System
be reproduced or stored in a		CHG PG	Charging System Power Supply, Ground & Circuit Elements
-	N DRIVER INFORMATION &	MWI	Meter, Warning Lamp & Indicator
retrieval system, or transmit- ted in any form, or by any	MULTIMEDIA	wcs	Warning Chime System
		SN	Sonar System
means, electronic, mechani-		AV	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	D. MAINTENANCE		Maintanana
CO., LTD.	P MAINTENANCE	MA	Maintenance

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FOREWORD

This manual contains maintenance and repair procedure for the 2011 INFINITI G Sedan.

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

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: ____

QUICK REFERENCE CHART G SEDAN

QUICK REFERENCE CHART G SEDAN 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		Auto adjustment by auto tensioner
Radiater cap relief pressur	e kPa (kg/cm², psi)	
	Standard	122.3 - 151.7 (1.2 - 1.5, 18 - 22)
	Limit	107 (1.1, 16)
Cooling system leakage to	sting pressure kPa (kg/cm², psi)	157 (1.6, 23)
Compression pressure	kPa (kg/cm² , psi).	/rpm
	Standard	1,667 - 2,354 (17 - 24, 242 - 341)/200
	Minimum	1,226 (12.5, 178)/200
	Differential limit between cylinders	98 (1.0, 14)/200
	Make	DENSO
Spark plug (Iridium-tipped type)	Standard type	FXE24HR11
(Gap (Nominal) mm (in) 1.1 (0.043)

ENGINE TUNE-UP DATA (VQ25HR)

ELS0003W

Engine model		VQ25HR
Firing order		1-2-3-4-5-6
Idle speed A/T (In "P or N" position)	rpm	650 ± 50
Ignition timing (BTDC at idle speed)		14° ± 2°
Tensions of drive belt		Auto adjustment by auto tensioner
Radiater cap relief pressu	ure kPa (kg/cm² , psi)	
	Standard	122.3 - 151.7 (1.2 - 1.5, 18 - 22)
	Limit	107 (1.1, 16)
Cooling system leakage t	esting pressure kPa (kg/cm², psi)	157 (1.6, 23)
Compression pressure	kPa (kg/cm ² , psi)/rpm	
	Standard	1320 (13.5, 191)/300
	Minimum	1030 (10.5, 149)/300
	Differential limit between cylinders	100 (1.0, 14.5)/300
	Make	DENSO
Spark plug (Iridium-tipped type)	Standard type	FXE22HR11
(maiam appout typo)	Gap (Nominal) mm (in)	1.1 (0.043)

FRONT WHEEL ALIGNMENT

ELS0003X

Applied model		Except for sports models	For sports models	
Camber Degree minute (Decimal degree)		Minimum	-1° 05′ (–1.08°)
		Nominal	-0° 20′ (-0.33°)	
		Maximum	0° 25′ (0.42°)
		Left and right difference	0° 33′ (0.55°) or less	
		Minimum	3° 50′ (3.83°)	3° 55′ (3.92°)
Caster		Nominal	4° 35′ (4.58°)	4° 40′ (4.67°)
Degree minu	ute (Decimal degree)	Maximum	5° 20′ (5.33°)	5° 25′ (5.42°)
		Left and right difference	0° 39′ (0.65°) or less	
		Minimum	6° 35′ (6.58°)	
Kingpin incli	nation ute (Decimal degree)	Nominal	7° 20′ (7.33°)	
Degree minute (Decimal degree)		Maximum	8° 05′ (8.08°)	
		Minimum	0 mm (0 in)	
	Total toe-in Distance	Nominal	In 1 mm (0.04 in)	
		Maximum	In 2 mm (0.08 in)	
Toe-in		Minimum	0° 00′ (0.00°)	
	Toe angle (Left wheel or right wheel) Degree minute (Decimal degree)	Nominal	In 0° 02′ 30″ (0.04°)	
	(Maximum	In 0° 05′ (0.08°)	

Measure value under unladen* conditions.

AWD

Wheel size		17 inch	18 inch	
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	
		Minimum	3° 20′ (3.34°)	3° 25′ (3.42°)
Caster		Nominal	4° 05′ (4.08°)	4° 10′ (4.17°)
Degree minute (Decimal degree)		Maximum	4° 50′ (4.83°)	4° 55′ (4.91°)
		Left and right difference	0° 39′ (0.65°) or less	
		Minimum	6° 40′ (6.67°)	
Kingpin incl Degree min	ination ute (Decimal degree)	Nominal	7° 25′ (7.42°)	
9	(= ,	Maximum	8° 10′ (8.16°)	
		Minimum	0 mm	(0 in)
	Total toe-in Distance	Nominal	In 1 mm (0.04 in)	
Toe-in		Maximum	In 2 mm (0.08 in)	
106-111		Minimum	0° 00′ (0.00°)	
	Toe angle (Left wheel or right wheel) Degree minute (Decimal degree)	Nominal	In 0° 02′ 30″ (0.04°)	
	5 111 (11 11 19 19 19 19 19 19 19 19 19 19 19	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.

^{*:} Fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

REAR WHEEL ALIGNMENT

ELS0003Y

Applied model		2WD		AWD	
		Except for sports models	For sports models	AVVD	
Camber Degree minute (Decimal degree) Minimum Nominal Maximum		-1° 20′ (-1.33°)		(-1.42°)	
		Nominal	-0° 50′ (-0.83°)	-0° 55′ (-0.92°)	
		Maximum	-0° 20′ (-0.33°)		(-0.42°)
			0 mm (0 in)		
	Total toe-in Distance	Nominal	In 2.8 mm (0.110 in)		
Toe-in			In 5.6 mm (0.220 in)		
ioe-in			0° 00′ (0.00°)		
	Toe angle (Left wheel or right wheel Degree minute (Decimal degree)	Nominal	In 0° 07′ (0.12°)		
	Degree minute (Decimal degree)		In 0° 14′ (0.23°)		

Measure value under unladen* conditions.

BRAKE PEDAL

Unit: mm (in)

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

FRONT DISC BRAKE

2 Piston Type

Unit: mm (in)

Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	26.0 (1.024)

4 Piston Type

Unit: mm (in)

		<u> </u>
Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	30.0 (1.181)

REAR DISC BRAKE

1 Piston Type

Unit: mm (in)

Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	14.0 (0.551)

2 Piston Type

Unit: mm (in)

Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	18.0 (0.709)

^{*:} Fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

REFILL CAPACITIES

ELS00040

UNIT			Liter	US measure
Fuel tank			75.6	20 gal
Engine coolant (With reservoir tank) at MAX level	VQ25HR	2WD models	8.3	8-6/8 qt
		4WD models	8.8	9-2/8 qt
	VQ37VHR	A/T models	8.5	9 qt
		M/T models	8.6	9-1/8 qt
Engine oil	VQ25HR	Drain and refill		
		With oil filter change	4.7	5 qt
		Without oil filter change	4.4	4-5/8 qt
		Dry engine (Overhaul)	5.4	5-6/8 qt
	VQ37VHR	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	6.5 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