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G35

MODEL V36 SERIES



INFINITI®

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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	
	ACC Accelerator Control System	
	C HYBRID	HBC Hybrid Control System
		HBB Hybrid Battery System
HBR Hybrid Brake 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	
	SCS Suspension Control System	
	WT Road Wheels & Tires	
F BRAKES	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	
	SRS 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 Instrument Panel	
	SE Seat	
	ADP Automatic Drive Positioner	
	DLK Door & Lock	
	SEC Security Control System	
K BODY EXTERIOR, DOORS, ROOF & VEHICLE SECURITY	GW Glass & Window System	
	PWC Power Window Control System	
	RF Roof	
	EXT Exterior	
	BRM Body Repair	
	MIR Mirrors	
	EXL Exterior Lighting System	
	INL Interior Lighting System	
L DRIVER CONTROLS	WW Wiper & Washer	
	DEF Defogger	
	HRN Horn	
	PWO Power Outlet	
	BCS Body Control System	
	LAN LAN System	
	PCS Power Control System	
	CHG Charging System	
M ELECTRICAL & POWER CONTROL	PG Power Supply, Ground & Circuit Elements	
	MWI Meter, Warning Lamp & Indicator	
	WCS Warning Chime System	
	SN Sonar System	
	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 2007 INFINITI G35.

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.



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QUICK REFERENCE CHART G35
ENGINE TUNE-UP DATA (VQ35HR)

PF0:00000

ELS0003W

Engine model		VQ35HR
Firing order		1-2-3-4-5-6
Idle speed A/T (In "N" position) M/T	rpm	650 ± 50
Ignition timing (BTDC at idle speed)		15° ± 5° (without 4WAS) 11° ± 5° (with 4WAS)
CO% at idle		0.7 - 9.9 % and engine runs smoothly
Tensions of drive belts		Auto adjustment by auto tensioner
Radiator 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)/rpm	
	Standard	1,275 (13.0, 185)/300
	Minimum	981 (10.0, 142)/300
	Differential limit between cylinders	98 (1.0, 14)/300
Spark plug (Iridium-tipped type)	Make	DENSO
	Standard type	FXE22HR11
	Gap (Nominal)	1.1 (0.043)

FRONT WHEEL ALIGNMENT
2WD

ELS0003X

Tire size		225/55R17	225/50R18	
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		
Caster Degree minute (Decimal degree)	Minimum	3° 50' (3.83°)	3° 55' (3.92°)	
	Nominal	4° 35' (4.58°)	4° 40' (4.67°)	
	Maximum	5° 20' (5.33°)	5° 25' (5.42°)	
	Left and right difference	0° 39' (0.65°) or less		
Kingpin inclination Degree minute (Decimal degree)	Minimum	6° 35' (6.58°)		
	Nominal	7° 20' (7.33°)		
	Maximum	8° 05' (8.08°)		
Total toe-in	Distance	Minimum	0 mm (0 in)	
		Nominal	1 mm (0.04 in)	
		Maximum	2 mm (0.08 in)	
	Angle (Left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0° 00' (0.00°)	
		Nominal	0° 02' 30" (0.04°)	
		Maximum	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.

AWD

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		
Caster Degree minute (Decimal degree)	Minimum	3° 15' (3.25°)		
	Nominal	4° 00' (4.00°)		
	Maximum	4° 45' (4.75°)		
	Left and right difference	0° 39' (0.65°) or less		
Kingpin inclination Degree minute (Decimal degree)	Minimum	6° 35' (6.58°)		
	Nominal	7° 20' (7.33°)		
	Maximum	8° 05' (8.08°)		
Total toe-in	Distance	Minimum	0 mm (0 in)	
		Nominal	1 mm (0.04 in)	
		Maximum	2 mm (0.08 in)	
	Angle (Left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0° 00' (0.00°)	
		Nominal	0° 02' 30" (0.04°)	
		Maximum	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

Applied model		2WD		AWD
		Without 4WAS	With 4WAS	
Camber Degree minute (Decimal degree)	Minimum	-1° 20' (-1.33°)	-1° 25' (-1.42°)	-0° 45' (-0.75°)
	Nominal	-0° 50' (-0.83°)	-0° 55' (-0.92°)	-0° 15' (-0.25°)
	Maximum	-0° 20' (-0.33°)	-0° 25' (-0.42°)	0° 15' (0.25°)
Total toe-in	Distance	Minimum	0 mm (0 in)	
		Nominal	2.8 mm (0.110 in)	
		Maximum	5.6 mm (0.220 in)	
	Angle (Left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0° 00' (0.00°)	
		Nominal	0° 07' (0.12°)	
		Maximum	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.)

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 DISK BRAKE

Front Caliper 1 Piston Type

Unit : mm (in.)

Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	30.0 (1.181)

Front Caliper 2 Piston Type

Unit : mm (in.)

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

REAR DISK BRAKE

Front Caliper 1 Piston Type

Unit : mm (in.)

Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	15.0 (0.591)

Front Caliper 2 Piston Type

Unit : mm (in.)

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

QUICK REFERENCE CHART G35

REFILL CAPACITIES

ELS00040

UNIT	Liter	US measure	
Fuel tank	76	20 gal	
Engine Coolant (With reservoir tank) at MAX level	9.0	9-1/2 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
Transmission	Dry engine (Overhaul)	5.5	5-3/4 qt
	A/T	10.3	10-7/8 qt
Transfer	M/T	2.93	6-1/4 pt
		1.25	2-5/8 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	5.03 fl oz
	Refrigerant	0.55 kg	1.21 lb