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G35

MODEL V35 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
	ACC Accelerator Control System
C TRANSMISSION/ TRANSAXLE	CL Clutch
	MT Manual Transmission
	AT Automatic Transmission
D DRIVELINE/AXLE	TF Transfer
	PR Propeller Shaft
	FFD Front Final Drive
	RFD Rear Final Drive
	FAX Front Axle
	RAX Rear Axle
E SUSPENSION	FSU Front Suspension
	RSU Rear Suspension
	WT Road Wheels & Tires
F BRAKES	BR Brake System
	PB Parking Brake System
	BRC Brake Control System
G STEERING	PS Power Steering System
H RESTRAINTS	SB Seat Belts
	SRS Supplemental Restraint System (SRS)
I BODY	BL Body, Lock & Security System
	GW Glasses, Window System & Mirrors
	RF Roof
	EI Exterior & Interior
	IP Instrument Panel
	SE Seat
J AIR CONDITIONER	ATC Automatic Air Conditioner
K ELECTRICAL	SC Starting & Charging System
	LT Lighting System
	DI Driver Information System
	WW Wiper, Washer & Horn
	BCS Body Control System
	LAN LAN System
	AV Audio Visual, Navigation & Telephone System
	ACS Auto Cruise Control System
	PG Power Supply, Ground & Circuit Elements
L MAINTENANCE	MA Maintenance
M INDEX	IDX Alphabetical Index

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FOREWORD

This manual contains maintenance and repair procedure for the 2006 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 (VQ35DE)

PFP:00000

ELS0003W

Engine model			VQ35DE			
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°			
CO% at idle			0.7 - 9.9 % and engine runs smoothly			
Drive Belt	Deflection adjustment		Unit: mm (in)	Tension adjustment		
	Used belt		New belt	Used belt		New belt
	Limit	After adjustment		Limit	After adjustment	
Alternator and power steering oil pump belt	7 (0.28)	4 - 5 (0.16 - 0.20)	3.5 - 4.5 (0.138 - 0.177)	294 (30, 66)	730 - 818 (74.5 - 83.5, 164 - 184)	838 - 926 (85.5 - 94.5, 188 - 208)
A/C compressor belt	12 (0.47)	9 - 10 (0.35 - 0.39)	8 - 9 (0.31 - 0.35)	196 (20, 44)	348 - 436 (35.5 - 44.5, 78 - 98)	470 - 559 (48 - 57, 106 - 126)
Applied pushing force	98 N (10 kg, 22 lb)			—		
Radiator cap relief pressure			kPa (kg/cm ² , psi)	78 - 98 (0.8 - 1.0, 11 - 14)		
Standard						
Limit				59 (0.6, 9)		
Cooling system leakage testing pressure			kPa (kg/cm ² , psi)	157 (1.6, 23)		
Compression pressure			kPa (kg/cm ² , psi)/ rpm	1,270 (13.0, 184)/300		
Standard						
Minimum				980 (10.0, 142)/300		
Differential limit between cylinders				100 (1.0, 15)/300		
Make				NGK		
Standard type				PLFR5A-11		
Hot type				PLFR4A-11		
Cold type				PLFR6A-11		
Gap (Nominal)			mm(in)	1.1 (0.043)		

FRONT WHEEL ALIGNMENT (Unladen*)

ELS0003X

AXLE		2WD		AWD
Camber Degree minute (Decimal degree)	Minimum	-0°50' (-0.83°)		-1°00' (-1.00°)
	Nominal	-0°05' (-0.08°)		-0°15' (-0.25°)
	Maximum	0°40' (0.67°)		0°30' (0.50°)
	Left and right difference	45' (0.75°)		45' (0.75°)
Caster Degree minute (Decimal degree)	Minimum	7°00' (7.00°)		5°55' (5.92°)
	Nominal	7°45' (7.75°)		6°40' (6.67°)
	Maximum	8°30' (8.50°)		7°25' (7.42°)
	Left and right difference	45' (0.75°)		45' (0.75°)
Kingpin inclination Degree minute (Decimal degree)	Minimum	3°45' (3.75°)		5°15' (5.25°)
	Nominal	4°30' (4.50°)		6°00' (6.00°)
	Maximum	5°15' (5.25°)		6°45' (6.75°)
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°)	

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

AXLE			2WD		AWD
Tire			18 inch	Except 18 inch	
Wheel turning angle (Full turn)	Inner Degree minute (Decimal degree)	Minimum	35° 35' (35.6°)	37° 30' (37.5°)	38° 00' (38.0°)
		Nominal	38° 35' (38.6°)	40° 30' (40.5°)	41° 00' (41.0°)
		Maximum	39° 35' (39.6°)	41° 30' (41.5°)	42° 00' (42.0°)
	Outer Degree minute (Decimal degree)	Nominal	31° 00' (31.0°)	32° 30' (32.5°)	31° 40' (31.7°)

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

REAR WHEEL ALIGNMENT (Unladen*)

ELS0003Y

Camber Degree minute (Decimal degree)	Minimum	-1°05' (-1.08°)	
	Nominal	-0°35' (-0.58°)	
	Maximum	-0°05' (-0.08°)	
	Left and right difference	45' (0.75°)	
Total toe-in	Distance	Minimum	0.1 mm (0.004 in)
		Nominal	2.8 mm (0.110 in)
		Maximum	5.5 mm (0.217 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°)

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

QUICK REFERENCE CHART G35

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BRAKE

ELS0003Z

Unit : mm (in)

AXLE		2WD	AWD
Front brake	Pad repair limit thickness	2.0 (0.079)	
	Rotor repair limit thickness	26.0 (1.024)	
Rear brake	Pad repair limit thickness	2.0 (0.079)	
	Rotor repair limit thickness	14.0 (0.551)	
Brake pedal free height		M/T model	153.2 - 163.2 (6.03 - 6.43)
		A/T model	161.5 - 171.5 (6.36 - 6.75)
Brake pedal depressed height*		M/T model	More than 90 (3.54)
		A/T model	More than 95 (3.74)

* : Under a force of 490 N(50 kg, 110 lb) with the engine running.

REFILL CAPACITIES

ELS00040

UNIT		Liter	US measure
Fuel tank		76	20 gal
Engine Coolant (With reservoir tank) at MAX level		8.7	9-1/4 qt
Engine oil	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	5-3/4 qt
Transmission	A/T	10.3	10-7/8 qt
	M/T	2.9	3-1/8 qt
Transfer		1.25	2-5/8 pt
Differential carrier	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	0.18	6.0 fl oz
	Refrigerant	0.55 kg	1.21 lb