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**QUICK REFERENCE INDEX**

<b>A GENERAL INFORMATION</b>	GI General Information	
<b>B ENGINE</b>	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	
	<b>C TRANSMISSION/ TRANSAXLE</b>	CL Clutch
		MT Manual Transmission
		AT Automatic Transmission
<b>D DRIVELINE/AXLE</b>		TF Transfer
	PR Propeller Shaft	
	FFD Front Final Drive	
	RFD Rear Final Drive	
	FAX Front Axle	
	RAX Rear Axle	
	<b>E SUSPENSION</b>	FSU Front Suspension
		RSU Rear Suspension
		WT Road Wheels & Tires
	<b>F BRAKES</b>	BR Brake System
PB Parking Brake System		
BRC Brake Control System		
<b>G STEERING</b>	PS Power Steering System	
<b>H RESTRAINTS</b>	SB Seat Belts	
	SRS Supplemental Restraint System (SRS)	
	<b>I BODY</b>	BL Body, Lock & Security System
GW Glasses, Window System & Mirrors		
RF Roof		
EI Exterior & Interior		
IP Instrument Panel		
SE Seat		
<b>J AIR CONDITIONER</b>		ATC Automatic Air Conditioner
<b>K ELECTRICAL</b>		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	
	<b>L MAINTENANCE</b>	MA Maintenance
	<b>M INDEX</b>	IDX Alphabetical Index



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# FOREWORD

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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

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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.



NISSAN MOTOR CO., LTD.

**QUICK REFERENCE CHART G35  
ENGINE TUNE-UP DATA (VQ35DE)**

PF0:00000

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		Unit: N (kg, lb)
	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 <sup>2</sup> , psi)		78 - 98 (0.8 - 1.0, 11 - 14)		
Standard						
Limit				59 (0.6, 9)		
Cooling system leakage testing pressure		kPa (kg/cm <sup>2</sup> , psi)		157 (1.6, 23)		
Compression pressure		kPa (kg/cm <sup>2</sup> , 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°)	38° 00' (38.0°)
		Nominal	38° 35' (38.6°)	41° 00' (41.0°)
		Maximum	39° 35' (39.6°)	42° 00' (42.0°)
	Outer Degree minute (Decimal degree)	Nominal	31° 00' (31.0°)	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

**2006**

## **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 rrepair 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)		
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