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**QUICK REFERENCE INDEX**

**NISSAN  
 QUEST**  
 MODEL V42 SERIES

<b>A GENERAL INFORMATION</b>	<b>GI General Information</b>
<b>B ENGINE</b>	<b>EM Engine Mechanical</b>
	<b>LU Engine Lubrication System</b>
	<b>CO Engine Cooling System</b>
	<b>EC Engine Control System</b>
	<b>FL Fuel System</b>
	<b>EX Exhaust System</b>
	<b>ACC Accelerator Control System</b>
<b>C TRANSMISSION/    TRANSAXLE</b>	<b>AT Automatic Transaxle</b>
<b>D DRIVELINE/AXLE</b>	<b>FAX Front Axle</b>
	<b>RAX Rear Axle</b>
<b>E SUSPENSION</b>	<b>FSU Front Suspension</b>
	<b>RSU Rear Suspension</b>
	<b>WT Road Wheels &amp; Tires</b>
<b>F BRAKES</b>	<b>BR Brake System</b>
	<b>PB Parking Brake System</b>
	<b>BRC Brake Control System</b>
<b>G STEERING</b>	<b>PS Power Steering System</b>
<b>H RESTRAINTS</b>	<b>SB Seat Belts</b>
	<b>SRS Supplemental Restraint System (SRS)</b>
<b>I BODY</b>	<b>BL Body, Lock &amp; Security System</b>
	<b>GW Glasses, Window System &amp; Mirrors</b>
	<b>RF Roof</b>
	<b>EI Exterior &amp; Interior</b>
	<b>IP Instrument Panel</b>
	<b>SE Seat</b>
	<b>AP Adjustable Pedal</b>
<b>J AIR CONDITIONER</b>	<b>ATC Automatic Air Conditioner</b>
	<b>MTC Manual Air Conditioner</b>
<b>K ELECTRICAL</b>	<b>SC Starting &amp; Charging System</b>
	<b>LT Lighting System</b>
	<b>DI Driver Information System</b>
	<b>WW Wiper, Washer &amp; Horn</b>
	<b>BCS Body Control System</b>
	<b>LAN LAN System</b>
	<b>AV Audio Visual, Navigation &amp; Telephone System</b>
	<b>ACS Auto Cruise Control System</b>
	<b>PG Power Supply, Ground &amp; Circuit Elements</b>
<b>L MAINTENANCE</b>	<b>MA Maintenance</b>
<b>M INDEX</b>	<b>IDX Alphabetical Index</b>

**A**  
**B**  
**C**  
**D**  
**E**  
**F**  
**G**  
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**L**  
**M**

# FOREWORD

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This manual contains maintenance and repair procedures for the 2006 NISSAN QUEST.

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.

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## 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.



NISSAN NORTH AMERICA, INC.  
Technical Publications Department



## PLEASE HELP MAKE THIS SERVICE MANUAL BETTER!

Your comments are important to NISSAN 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) 488-3910

**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.*

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**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: \_\_\_\_\_

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**Is the organization of the manual clear and easy to follow? (circle your answer) YES NO**  
Please comment: \_\_\_\_\_

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**What information should be included in NISSAN Service Manuals to better support you in servicing or repairing customer vehicles?**

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DATE: \_\_\_\_\_ YOUR NAME: \_\_\_\_\_ POSITION: \_\_\_\_\_

DEALER: \_\_\_\_\_ DEALER NO.: \_\_\_\_\_ ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE/PROV./COUNTRY: \_\_\_\_\_ ZIP/POSTAL CODE: \_\_\_\_\_

QUICK REFERENCE CHART: QUEST

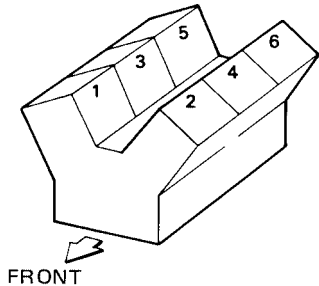
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Engine Tune-Up Data

ELS001P9

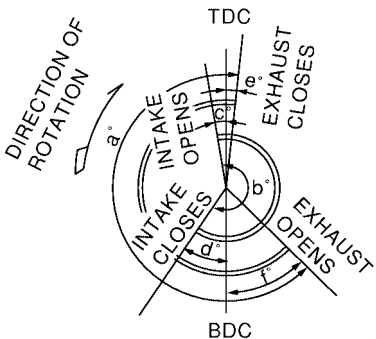
Cylinder arrangement		V-6
Displacement		3,498 cm <sup>3</sup> (213.45 in <sup>3</sup> )
Bore and stroke		95.5 x 81.4 mm (3.760 x 3.205 in)
Valve arrangement		DOHC
Firing order		1-2-3-4-5-6
Number of piston rings	Compression	2
	Oil	1
Number of main bearings		4
Compression ratio		10.0:1
Compression pressure	Standard	1,275 kPa (13.0 kg/cm <sup>2</sup> , 185 psi) / 300 rpm
	Minimum	981 kPa (10.0 kg/cm <sup>2</sup> , 142 psi) / 300 rpm
	Differential limit between cylinders	98 kPa (1.0 kg/cm <sup>2</sup> , 14 psi) / 300 rpm

Cylinder number



SEM713A

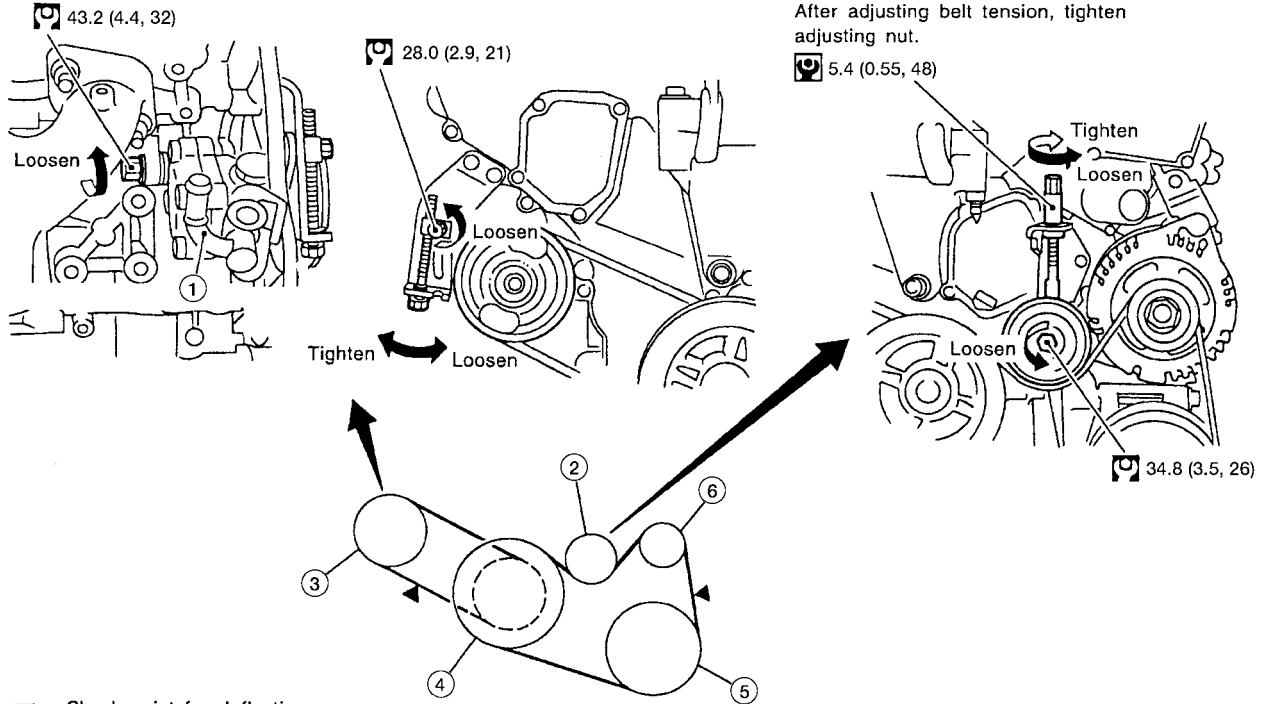
Valve timing (IVTC - OFF)



PBIC0187E

Unit: degree					
a	b	c	d	e	f
240°	238°	- 6°	64°	8°	52°

Drive Belt Deflection and Tension



- ▼ : Check point for deflection
- ⊕ : N•m (kg-m, ft-lb)
- ⊗ : N•m (kg-m, in-lb)

WBIA0385E

- 1. Power steering oil pump
- 2. Idler pulley
- 3. Power steering oil pump
- 4. Crankshaft pulley
- 5. Air conditioner compressor
- 6. Generator

	Deflection adjustment		Unit: mm (in)	Tension adjustment*		Unit: N (kg-f, lb-f)
	Used belt		New belt	Used belt		New belt
	Limit	After adjustment		Limit	After adjustment	
Generator and air conditioner compressor	7 (0.28)	4.2 - 4.6 (0.17 - 0.18)	3.7 - 4.1 (0.15 - 0.16)	294 (30, 66)	730 - 818 (74.5 - 83.5, 164 - 184)	838 - 926 (85.5 - 94.5, 188 - 208)
Power steering oil pump	11 (0.43)	7.3 - 8.0 (0.29 - 0.30)	6.5 - 7.2 (0.26 - 0.28)	196 (20, 44)	495 - 583 (50.5 - 59.5, 111 - 131)	603 - 691 (61.5 - 70.5, 135.6 - 155.4)
Applied pushing force	98 N (10 kg-f, 22 lb-f)			—		

\*: If belt tension gauge cannot be installed at check points shown, check drive belt tension at different location on the belt.

Spark Plugs (Double Platinum Tipped)

Make	NGK
Standard type	PLFR5A-11
Hot type	PLFR4A-11
Cold type	PLFR6A-11
Gap (nominal)	1.1 mm (0.043 in)

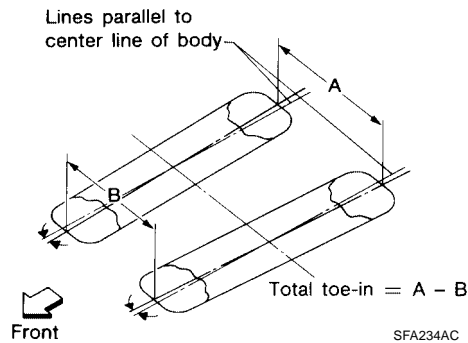
# QUICK REFERENCE CHART: QUEST

2006

## Front Wheel Alignment (Unladen\*1)

ELS001PA

Market		United States and Canada	Mexico
Camber degree minute (decimal degree)	Minimum	-1°15' (-1.25°)	-0°4' (-0.07°)
	Nominal	-0°30' (-0.50°)	-0°4' (-0.07°)
	Maximum	0°15' (0.25°)	0°41' (0.68°)
	Left and right difference	0°45' (0.75°) or less	0°45' (0.75°) or less
Caster degree minute (decimal degree)	Minimum	1°57' (1.95°)	2°27' (2.45°)
	Nominal	2°42' (2.70°)	2°27' (2.45°)
	Maximum	3°27' (3.45°)	3°12' (3.20°)
	Left and right difference	0°45' (0.75°) or less	0°45' (0.75°) or less
Kingpin inclination degree minute (decimal degree)	Minimum	13°39' (13.65°)	13°42' (13.70°)
	Nominal	14°24' (14.40°)	13°42' (13.70°)
	Maximum	15°09' (15.15°)	14°27' (14.45°)



Total toe-in	Distance (A - B) mm (in)	Minimum	-0.75 (-0.0295)	-0.75 (-0.0295)
		Nominal	0.25 (0.0098)	0.25 (0.0098)
		Maximum	1.25 (0.0492)	1.25 (0.0492)
	Angle (left plus right) degree minute (decimal degree)	Minimum	0° 3' 30" (0.06°)	0° 3' 30" (0.06°)
		Nominal	0° 6' (0.10°)	0° 6' (0.10°)
		Maximum	0° 8' 30" (0.14°)	0° 8' 30" (0.14°)
Wheel turning angle full turn*2	Inside degree minute (decimal degree)	Minimum	35°15' (35.25°)	35°15' (35.25°)
		Nominal	38°45' (38.75°)	38°45' (38.75°)
		Maximum	39°45' (39.75°)	39°45' (39.75°)
	Outside degree minute (decimal degree)	Nominal	32°30' (32.5°)	32°30' (32.5°)

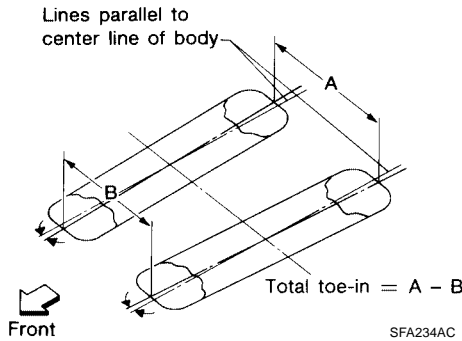
\*1: Fuel, engine coolant and engine oil full. Spare tire, jack, hand tools and mats in designated positions.

\*2: On power steering models, wheel turning force (at circumference of steering wheel) of 98 to 147 N (10 to 15 kg-f, 22 to 33 lb-f) with engine idle.

Rear Wheel Alignment (Unladen\*)

ELS001PB

Market		United States and Canada	Mexico
Camber Degree minute (Decimal degree)	Minimum	-1° 3' (-1.05°)	0° 3' (0.05°)
	Nominal	-0° 33' (-0.55°)	0° 33' (0.55°)
	Maximum	-0° 3' (-0.05°)	1° 3' (1.05°)



Total toe-in	Distance ("A" - "B") mm (in)	Difference between LH, RH	Minimum	1.6 (0.063)	1.6 (0.063)
			Nominal	3.2 (0.126)	3.2 (0.126)
			Maximum	4.8 (0.189)	4.8 (0.189)
	Angle (left plus right) Degree minute (Decimal degree)		Minimum	0° 3' 35" (0.06°)	0° 3' 35" (0.06°)
			Nominal	0° 7' 48" (0.13°)	0° 7' 48" (0.13°)
			Maximum	0° 12' 0" (0.20°)	0° 12' 0" (0.20°)

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

Brake

ELS001PC

Unit: mm (in)

Front brake	Brake model		AD35VB disc brake
	Cylinder bore diameter		47.62 (1.87)
	Pad Length × width × thickness		132.0 × 53.5 × 10.0 (5.20 × 2.11 × 0.39)
	Rotor outer diameter × thickness		290 × 28 (11.42 × 1.10)
Rear brake	Brake model		AD14VE disc brake
	Cylinder bore diameter		42.86 (1.69)
	Pad Length × width × thickness		83.0 × 33.0 × 8.5 (3.27 × 1.30 × 0.33)
	Rotor outer diameter × thickness		308 × 16 (12.13 × 0.63)
Master cylinder	Cylinder bore diameter		25.4 (1.00)
Brake booster	Booster model		M245T
	Diaphragm diameter	Primary	252 (9.92)
		Secondary	230 (9.06)
Recommended brake fluid			Genuine NISSAN Super Heavy Duty Brake Fluid or equivalent, DOT 3 (US FMVSS No. 116)

Disc Brake - Repair Limits

Unit: mm (in)

Brake model		AD35VB (Front)	AD14VE (Rear)
Pad wear limit	Minimum thickness	2.0 (0.079)	2.0 (0.079)

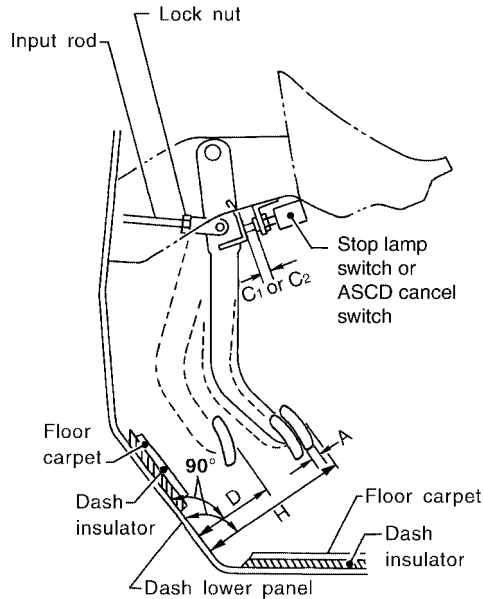
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Brake model		AD35VB (Front)	AD14VE (Rear)
Rotor repair limit	Maximum runout	0.04 (0.0016)	0.05 (0.0020)
	Minimum thickness	26.0 (1.02)	14.0 (0.55)
	Maximum thickness variation (measured at 8 positions)	0.015 (0.0006) or less	

## Brake Pedal

Unit: mm (in)



WFIA0160E

Free height "H" *	156.3 - 166.3 (6.15 - 6.55)
Depressed pedal height "D" [under a force of 490 N (50 kg-f, 110 lb-f) with engine running *	more than 90.3 (3.55)
Clearance "C <sup>1</sup> " or "C <sup>2</sup> " between pedal stopper and threaded end of stop lamp switch or ASCD switch	0.74 - 1.96 (0.029 - 0.077)
Pedal play "A"	3 - 11 (0.12 - 0.43)

\*: Measured from surface of dash reinforcement panel to surface of pedal pad

## Refill Capacities

ELS001PD

Description	Capacity (approximate)			
	Metric	US measure	Imp measure	
Fuel	75.6 ℓ	20 gal	16 5/8 gal	
Engine oil Drain and refill	With oil filter change	4.0 ℓ	4 1/4 qt	3 1/2 qt
	Without oil filter change	3.7 ℓ	3 7/8 qt	3 1/4 qt
Dry engine (engine overhaul)	5.0 ℓ	5 1/4 qt	4 3/8 qt	
Cooling system	With reservoir at "MAX" level	10.5 ℓ	2 3/4 gal	2 3/8 gal
Automatic transaxle fluid (ATF)	4 A/T	8.9 ℓ	9 3/8 qt	7 7/8 qt
	5 A/T	7.4 ℓ	7 7/8 qt	6 1/2 qt
Power steering fluid (PSF)	1.0 ℓ	2 1/8 pt	1 3/4 pt	
Windshield washer fluid	4.5 ℓ	1 1/4 gal	1 gal	



# QUICK REFERENCE CHART: QUEST

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Description	Capacity (approximate)		
	Metric	US measure	Imp measure
Air conditioning system refrigerant	900 ± 50 g	1.98 ± 0.11 lb	1.98 ± 0.11 lb
Air conditioning system oil	220 mℓ	7.44 fl oz	7.7 fl oz