

NISSAN QUEST

MODEL V41 SERIES

QUICK REFERENCE INDEX

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FOREWORD

This manual contains maintenance and repair procedures for the 1999 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.

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 Service Information Department
Torrance, California



PLEASE HELP MAKE THIS SERVICE MANUAL BETTER!

Your comments are important to NISSAN and will help us to improve our Service Manuals.
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SERVICE MANUAL: Model: _____ Year: _____

PUBLICATION NO. (Please photocopy back cover): _____

VEHICLE INFORMATION VIN: _____ **Production Date:** _____

Please describe any 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.*

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Is the organization of the manual clear and easy to follow? (circle your answer) YES NO

Please comment: _____

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

DATE: _____ **YOUR NAME:** _____ **POSITION:** _____

DEALER: _____ **DEALER NO.:** _____ **ADDRESS:** _____

CITY: _____ **STATE/PROV./COUNTRY:** _____ **ZIP/POSTAL CODE:** _____

QUICK REFERENCE CHART: QUEST 1999

ENGINE TUNE-UP DATA

Engine model	VG33E		
Firing order	1-2-3-4-5-6		
Idle speed	rpm	700 ± 50	
A/T (in "N" position)			
Ignition timing	(degree B.T.D.C. at idle speed)	15° ± 2°	
CO% at idle	Idle mixture screw is preset and sealed at factory.		
Drive belt deflection (Cold)	mm (in)	Used belt	
		Limit	Deflection after adjustment
Generator		12 (0.47)	7.5 - 8.5 (0.295 - 0.335)
Air conditioner compressor		10 (0.39)	5 - 7 (0.20 - 0.28)
Power steering oil pump		16 (0.63)	10 - 12 (0.39 - 0.47)
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)	
Cooling system leakage testing pressure	kPa (kg/cm ² , psi)	157 (1.6, 23)	
Compression pressure	Standard	1,196 (12.2, 173)/300	
kPa (kg/cm ² , psi)/rpm	Minimum	883 (9.0, 128)/300	
High tension cable resistance	kΩ	Less than 30	
Spark plug	Standard	PFR5G-11	
Type	Cold	PFR6G-11	
	Hot	PFR4G-11	
Gap	mm (in)	1.0 - 1.1 (0.039 - 0.043)	
Tightening torque		N-m	kg-m
Spark plug		20 - 29	2 - 3
Oil pan drain plug		29 - 39	3 - 4
			ft-lb
			14 - 22
			22 - 29

REAR WHEEL ALIGNMENT (Unladen*)

Camber	Minimum	-15° (-0.25°)
	Nominal	0° (0°)
	Maximum	15° (0.25°)
Total toe-in	Minimum	-4 (-0.16)
Distance (A - B)	Nominal	0 (0)
	Maximum	4 (0.16)
Angle (left plus right)	Minimum	-22° (-0.36°)
	Nominal	0° (0°)
	Maximum	22° (0.37°)

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

BRAKE

Disc brake	Unit: mm (in)
Pad minimum thickness	2.0 (0.079)
Rotor repair limit	
Minimum thickness	24.0 (0.945)
Drum brake	
Lining minimum thickness	2.0 (0.079)
Drum repair limit	
Maximum inner diameter	251.5 (9.90)
Pedal free height	195 - 205 (7.68 - 8.07)
Pedal depressed height*1	115 - 130 (4.53 - 5.12)
Parking brake	
Number of notches*2	5 - 6

*1 Under force of 490N (50kg, 110lb) with engine running.
*2 Under force of 196N (20kg, 44lb).

FRONT WHEEL ALIGNMENT (Unladen*1)

Camber	Minimum	-27° (-0.45°)
	Nominal	18° (0.3°)
	Maximum	1°3' (1.05°)
Degree minute (Decimal degree)	Left and right difference	45° (0.75°)
Caster	Minimum	3° (0.05°)
	Nominal	48° (0.8°)
	Maximum	1°33' (1.55°)
Degree minute (Decimal degree)	Left and right difference	45° (0.75°)
Kingpin inclination	Minimum	12°50' (12.83°)
	Nominal	13°35' (13.58°)
	Maximum	14°20' (14.33°)
Degree minute (Decimal degree)		
Total toe-in	Minimum	2 (0.08)
Distance (A - B)	Nominal	3 (0.12)
	Maximum	4 (0.16)
mm (in)		
Angle (left plus right)	Minimum	11.0° (0.18°)
	Nominal	16.5° (0.26°)
	Maximum	22.0° (0.37°)
Degree minute (Decimal degree)		
Wheel turning angle	Minimum	36° (36.00°)
Inside	Nominal	38° (38.00°)
	Maximum	40° (40.00°)
Degree minute (Decimal degree)		
Full turn*2	Minimum	28° (28.00°)
Outside	Nominal	30° (30.00°)
	Maximum	32° (32.00°)
Degree minute (Decimal degree)		

*1 Fuel, radiator 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, 22 to 33 lb) with engine idle.

REFILL CAPACITIES

Unit	Liter	US measure
Fuel tank	75.7	20 gal
Coolant (with reservoir)	10.6	11-1/4 qt
Engine		
With oil filter	3.8	4 qt
Without oil filter	3.6	3-7/8 qt
Dry engine (engine overhaul)	4.3	4-1/2 qt
Transaxle (with torque converter) *1	9.4	10 qt
Power steering system *2	1.1	1-1/8 qt
Air conditioning system		
With rear A/C		
Lubricant *3	325 ml	11.0 oz
Refrigerant *4	1.567 kg	3.5 lb
Front A/C only		
Lubricant *3	207 ml	7.0 oz
Refrigerant *4	0.907 kg	2.0 lb

*1 Nissan Matic 'D' (Continental U.S. and Alaska) or Genuine Nissan Automatic Transmission Fluid (Canada).

*2 Type F Automatic Transmission Fluid.

*3 Nissan A/C System Lubricant PAG Type F or equivalent.

*4 R-134a.

TEST VALUE AND TEST LIMIT (GST ONLY — NOT APPLICABLE TO CONSULT-II)

The following is the information specified in Mode 6 of SAE J1979.

The test value is a parameter used to determine whether a system/circuit diagnostic test is “OK” or “NG” while being monitored by the ECM during self-diagnosis. The test limit is a reference value which is specified as the maximum or minimum value and is compared with the test value being monitored.

Items for which these data (test value and test limit) are displayed are the same as SRT code items.

These data (test value and test limit) are specified by Test ID (TID) and Component ID (CID) and can be displayed on the GST screen.

SRT item	Self-diagnostic test item	DTC	Test value (GST display)		Test limit	Conversion
			TID	CID		
CATALYST	Three way catalyst function	P0420	01H	01H	Max.	1/128
EVAP SYSTEM	EVAP control system (Small leak)	P0440	05H	03H	Max.	1/128mm ²
		P1440	05H	03H	Max.	1/128mm ²
	EVAP control system purge flow monitoring	P1447	06H	83H	Min.	20mV
HO2S	Heated oxygen sensor 1	P0133	09H	04H	Max.	16ms
		P0131	0AH	84H	Min.	10mV
		P0130	0BH	04H	Max.	10mV
		P0132	0CH	04H	Max.	10mV
		P0134	0DH	04H	Max.	1s
	Heated oxygen sensor 2	P0139	19H	86H	Min.	10mV/500ms
		P0137	1AH	86H	Min.	10mV
		P0140	1BH	06H	Max.	10mV
		P0138	1CH	06H	Max.	10mV
HO2S HTR	Heated oxygen sensor 1 heater	P0135	29H	08H	Max.	20mV
		P0135	2AH	88H	Min.	20mV
	Heated oxygen sensor 2 heater	P0141	2DH	0AH	Max.	20mV
		P0141	2EH	8AH	Min.	20mV
EGR SYSTEM	EGR function	P0400	31H	8CH	Min.	1°C
		P0400	32H	8CH	Min.	1°C
		P0400	33H	8CH	Min.	1°C
		P0400	34H	8CH	Min.	1°C
		P1402	35H	0CH	Max.	1°C
	EGRC-BPT valve function	P0402	36H	0CH	Max.	1count
		P0402	37H	8CH	Min.	1count