NISSAN MAXIMA

MODEL A32 SERIES

QUICK REFERENCE INDEX

FOREWORD

This manual contains maintenance and repair procedures for the 1997 Nissan MAXIMA.

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 MOTOR CO., LTD.
Overseas Service Department
Tokyo, Japan

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 photocopy this form and type or print 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: (810) 488-3910

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.*

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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: MAXIMA [ ] 1997

ENGINE TUNE-UP DATA

Engine model		VQ30DE	
Firing order		1-2-3-4-5-6	
Idle speed rpm	M/T	625±50	
	A/T (in "N" position)	700±50	
Ignition timing (degree BTDC at idle speed)		M/T: 15°±2° A/T: 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 / Deflection of new belt
Alternator			
With air conditioner compressor		7 (0.28)	4.2 - 4.6 (0.165 - 0.181) / 3.8 - 4.1 (0.150 - 0.161)
Without air conditioner compressor		10 (0.39)	6.3 - 6.9 (0.248 - 0.272) / 5.8 - 6.2 (0.228 - 0.244)
Power steering oil pump		11 (0.43)	7.3 - 8 (0.287 - 0.315) / 6.5 - 7 (0.256 - 0.276)
Applied pressed force N (kg, lb)		98 (10, 22)	
Radiator cap relief pressure kPa (kg/cm², psi)		78 - 98 (0.8 - 1.0, 11 - 14)	
Cooling system leakage testing pressure kPa (kg/cm², psi)		157 (1.6, 23)	
Compression pressure kPa (kg/cm², psi)/rpm	Standard	1,275 (13.0, 185)/300	
	Minimum	981 (10.0, 142)/300	
Spark plug	Type	PFR5G-11	
	Gap mm (in)	1.0 - 1.1 (0.039 - 0.043)	

CLUTCH PEDAL

Unit: mm (in)

Pedal height	168 - 175 (6.61 - 6.89)
Pedal free play	9 - 16 (0.35 - 0.63)

FRONT WHEEL ALIGNMENT (Unladen*)

Camber	Minimum	-1°00′ (-1.00°)
	Nominal	-0°15′ (-0.25°)
	Maximum	0°30′ (0.50°)
Degree minute (Decimal degree)	Left and right difference	45′ (0.75°) or less
Caster	Minimum	2°00′ (2.00°)
	Nominal	2°45′ (2.75°)
	Maximum	3°30′ (3.50°)
Degree minute (Decimal degree)	Left and right difference	45′ (0.75°) or less
Total toe-in	Minimum	1 (0.04)
Distance (A - B) mm (in)	Nominal	2 (0.08)
	Maximum	3 (0.12)
Angle (left plus right)	Minimum	5.5′ (0.09°)
	Nominal	11′ (0.18°)
Degree minute (Decimal degree)	Maximum	16′ (0.27°)
Wheel turning angle (Full turn)	Minimum	36°00′ (36.00°)
Inside	Nominal	39°30′ (39.50°)
Degree minute (Decimal degree)	Maximum	40°30′ (40.50°)
Outside Degree minute (Decimal degree)	Nominal	32°00′ (32.00°)

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

REAR WHEEL ALIGNMENT (Unladen*)

Camber	Minimum	-1°45′ (-1.75°)
	Nominal	-1°00′ (-1.00°)
Degree minute (Decimal degree)	Maximum	-0°15′ (-0.25°)
Total toe-in	Minimum	-3 (-0.12)
Distance (A - B) mm (in)	Nominal	1 (0.04)
	Maximum	5 (0.20)
Angle (left plus right)	Minimum	-16′ (-0.26°)
	Nominal	5.5′ (0.09°)
Degree minute (Decimal degree)	Maximum	26′ (0.43°)

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

BRAKE

Unit: mm (in)

Front brake	
Pad wear limit	2.0 (0.079)
Rotor repair limit	20.0 (0.787)
Rear brake	
Pad wear limit	1.5 (0.059)
Rotor repair limit	8.0 (0.315)
Pedal free height	M/T: 158 - 165 (6.22 - 6.50) A/T: 167 - 174 (6.57 - 6.85)
Pedal depressed height*1	M/T: 70 (2.76) A/T: 75 (2.95)
Parking brake	
Number of notches*2	10 - 11

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

REFILL CAPACITIES

Unit			Liter	US measure
Fuel tank			70	18-1/2 gal
Coolant with reservoir			8.5	9 qt
Engine	With oil filter		4.0	4-1/4 qt
	Without oil filter		3.7	3-7/8 qt
Transaxle	M/T	RS5F50V	4.3 - 4.5	9-1/8 - 9-1/2 pt
		RS5F50A	4.5 - 4.8	9-1/2 - 10-1/8 pt
	A/T	RE4F04A/V	9.4	10 qt
Power steering system			1.1	1-1/8 qt
Air conditioning system		Refrigerant	0.80 - 0.70 kg	1.32 - 1.54 lb
		Compressor oil	0.2	6.8 fl oz

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.

: Applicable ·: Not applicable

SRT item	Self-diagnostic test item	DTC	Test value (GST display)		Te s t limit	Application	Unit
			TID	CID			
CATALYST	Three way catalyst function	P0420	01H	01H	Max.	X	−
		P0420	02H	81H	Min.	X	−
EVAP SYSTEM	EVAP control system (Small leak)	P0440	05H	03H	Max.	X	−
	EVAP control system purge flow monitoring	P1447	06H	83H	Min.	X	mV
HO2S	Heated oxygen sensor 1(Bank 1)	P0130	09H	04H	Max.	X	ms
		P0130	0AH	84H	Min.	X	mV
		P0130	0BH	04H	Max.	X	mV
		P0130	0CH	04H	Max.	X	mV
		P0130	0DH	04H	Max.	X	s
	Heated oxygen sensor 1(Bank 2)	P0150	11H	05H	Max.	X	ms
		P0150	12H	85H	Min.	X	mV
		P0150	13H	05H	Max.	X	mV
		P0150	14H	05H	Max.	X	mV
		P0150	15H	05H	Max.	X	s
	Heated oxygen sensor 2	P0136	19H	86H	Min.	X	mV/500ms
		P0136	1AH	86H	Min.	X	mV
		P0136	1BH	06H	Max.	X	mV
		P0136	1CH	06H	Max.	X	mV
HO2S HTR	Heated oxygen sensor 1 heater(Bank 1)	P0135	29H	08H	Max.	X	mV
		P0135	2AH	88H	Min.	X	mV
	Heated oxygen sensor 2 heater(Bank 2)	P0155	2BH	09H	Max.	X	mV
		P0155	2CH	89H	Min.	X	mV
	Heated oxygen sensor 2 heater	P0141	2DH	0AH	Max.	X	mV
		P0141	2EH	8AH	Min.	X	mV
EGR SYSTEM	EGR function	P0400	31H	8CH	Min.	X	℃
		P0400	32H	8CH	Min.	X	℃
		P0400	33H	8CH	Min.	X	℃
		P0400	34H	8CH	Min.	X	℃
		P0400	35H	0CH	Max.	X	℃
	EGRC-BPT valve function	P0402	36H	0CH	Max.	X	−
		P0402	37H	8CH	Min.	X	−