

Edition: July 2007
Revision: July 2007
Publication No. SM8E-1A34U0

NISSAN MAXIMA

MODEL A34 SERIES

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	CVT CVT
D DRIVELINE/AXLE	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
L MAINTENANCE	PG Power Supply, Ground & Circuit Elements
	MA Maintenance

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M

FOREWORD

This manual contains maintenance and repair procedures for the 2008 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 NORTH AMERICA, INC.
Technical Publications Department
• Gardena, California



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Nissan North America, Inc.
Technical Service Information
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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.*

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: _____

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

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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: _____

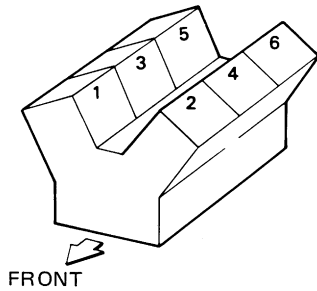
QUICK REFERENCE CHART: MAXIMA

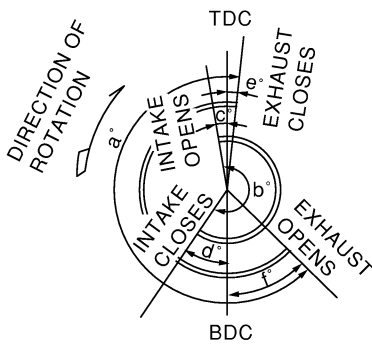
Engine Tune-up Data

INFOID:000000003289043

GENERAL SPECIFICATIONS

Cylinder arrangement		V-6
Displacement cm^3 (in ³)		3,498 (213.45)
Bore and stroke mm (in)		95.5 x 81.4 (3.76 x 3.205)
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		10.3:1
Compression pressure (kg/cm^2 , psi)/300 rpm	Standard	1,275 (13.0, 185)
	Minimum	981 (10.0, 142)
	Differential limit between cylinders	98 (1.0, 14)

Cylinder number	 SEM713A
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Valve timing (IVTC - OFF)	 PBIC0187E
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Unit: degree

a	b	c	d	e	f
240°	238°	- 6°	64°	8°	52°

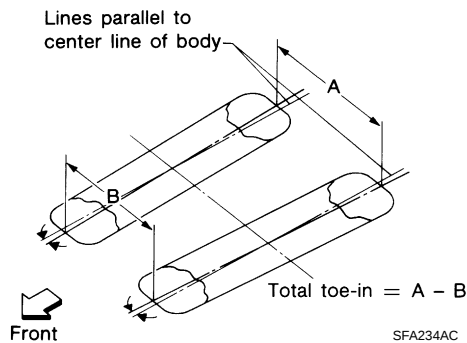
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2008

Front Wheel Alignment (Unladen*1)

INFOID:000000003289046

Market		United States and Canada		Mexico
Tire size		225/55R17	245/45R18	All
Camber degree minute (decimal degree)	Minimum	-1°00' (-1.00°)		-0°50' (-0.83°)
	Nominal	-0°15' (-0.25°)		-0°05' (-0.08°)
	Maximum	0°30' (0.50°)		0°40' (0.67°)
	Left and right difference	45' (0.75°) or less		45' (0.75°) or less
Caster degree minute (decimal degree)	Minimum	2°05' (2.08°)		1°55' (1.92°)
	Nominal	2°50' (2.83°)		2°40' (2.67°)
	Maximum	3°35' (3.58°)		3°25' (3.42°)
	Left and right difference	45' (0.75°) or less		45' (0.75°) or less
Kingpin inclination degree minute (decimal degree)	Minimum	13°50' (13.83°)		13°10' (13.17°)
	Nominal	14°35' (14.58°)		13°55' (13.92°)
	Maximum	15°20' (15.33°)		14°40' (14.67°)



Total toe-in	Distance (A - B) mm (in)	Minimum	-0.5 (-0.020)		0.0 (0.000)
		Nominal	0.5 (0.020)		1.0 (0.040)
		Maximum	1.5 (0.059)		2.0 (0.080)
	Angle (left plus right) degree minute (decimal degree)	Minimum	—		—
		Nominal	0°2' (0.03°)		0°3' (0.05°)
		Maximum	—		—
Wheel turning angle full turn*2	Inside degree minute (decimal degree)	Minimum	32°00' (32.0°)	31°00' (31.0°)	—
		Nominal	35°30' (35.5°)	34°30' (34.5°)	—
		Maximum	36°30' (36.5°)	35°30' (35.5°)	—
	Outside degree minute (decimal degree)	Nominal	29°00' (29.0°)	28°30' (28.5°)	—

*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.

Rear Wheel Alignment (Unladen*)

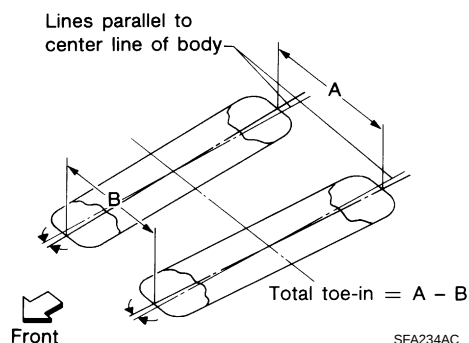
INFOID:000000003289048

Market	United States and Canada	Mexico
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2008

Camber Degree minute (Decimal degree)	Minimum	-0° 08' (-0.13°)	-0° 30' (-0.5°)
	Nominal	-0° 38' (-0.63°)	0° 0' (0°)
	Maximum	-0° 68' (-1.13°)	0° 30' (0.5°)



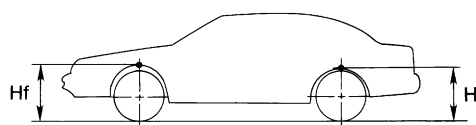
Total toe-in	Distance (A - B) mm (in)	Minimum	2.3 (0.091)	1.3 (0.051)
		Nominal	3.8 (0.150)	2.8 (0.110)
		Maximum	5.3 (0.209)	4.3 (0.169)
	Distance difference between RH and LH side mm (in)	Minimum	-2.0 (-0.079)	
		Nominal	0 (0)	
		Maximum	2.0 (0.079)	
	Angle (left plus right) Degree minute (Decimal degree)	Minimum	0° 6' (0.10°)	0° 3' (0.05°)
		Nominal	0° 10' (0.17°)	0° 7' (0.12°)
		Maximum	0° 14' (0.23°)	0° 11' (0.18°)

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

Wheelarch Height (Unladen*)

INFOID:000000003289047

Unit: mm (in)



SFA818A

Market	United States and Canada		Mexico	
Tire	225/55R17	245/45R18	225/55R17	245/45R18
Front (Hf)	738 (29.06)	737 (29.02)	787 (30.98)	761 (29.96)
Rear (Hr)	705 (27.76)	705 (27.76)	743 (29.25)	726 (28.58)

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

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Brake Specification

INFOID:000000003289049

Unit: mm (in)

Front brake	Brake model		CLZ25VE disc brake
	Cylinder bore diameter		57.2 (2.25)
	Pad Length × width × thickness		111.0 × 62.5 × 9.5 (4.37 × 2.46 × 0.37)
	Rotor outer diameter × thickness		320 × 28 (12.60 × 1.10)
Rear brake	Brake model		Kiriu
	Cylinder bore diameter		34.93 (1.375)
	Pad Length × width × thickness		83.0 × 31.9 × 8.5 (3.268 × 1.256 × 0.335)
	Rotor outer diameter × thickness		292 × 9 (11.50 × 0.35)
Master cylinder	Cylinder bore diameter		23.81 (15/16)
Control valve	Screw in type		30 × 0.4 (1.18 × 0.02)
Brake booster	Booster model		M215T
	Diaphragm diameter	Primary	230 (9.06)
		Secondary	205 (8.07)

Disc Brake

INFOID:000000003289050

Unit: mm (in)

Brake model		CLZ25VE	Kiriu
Pad wear limit	Minimum thickness	2.0 (0.079)	1.0 (0.039)
	Maximum runout	0.07 (0.0028)	0.05 (0.0020)
Rotor repair limit	Minimum thickness	26.0 (1.02)	8.0 (0.31)
	Maximum uneven wear (measured at 8 positions)	0.015 (0.0006) or less	

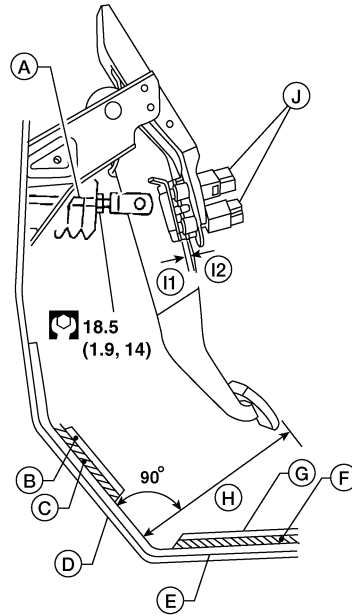
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Brake Pedal

INFOID:000000003289051

Unit: mm (in)



WFIA0423E

Free height "H"*	M/T	164.1 - 174.1 (6.46 - 6.85)
	A/T	173.1 - 183.1 (6.81 - 7.21)
Pedal height (with engine running, brake pedal force 490 N {50 kg-f, 110 lb-f} "H")	M/T	More than 84 (3.31)
	A/T	More than 90.3 (3.55)
Clearance "I1 or I2" between pedal stopper and threaded end of stop lamp switch or ASCD switch		0.74 - 1.96 (0.0291 - 0.0772)
Pedal play		3 - 11 (0.12 - 0.43)

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

A: Input rod

B: Floor carpet

C: Dash Insulator

D: Floor Panel

E: Dash reinforcement panel

F: Dash insulator

G: Floor carpet

I1, I2: Gap

J: Stop lamp switch and ASCD switch

Fluids and Lubricants

INFOID:000000003289052

Description		Capacity (approximate)		
		Liter	US measure	Imp measure
Fuel		75.6	20 gal	16 5/8 gal
Engine oil Drain and refill	With oil filter change	4.2	4 1/2 qt	3 3/4 qt
	Without oil filter change	4.0	4 1/4 qt	3 1/2 qt
Dry engine (engine overhaul)		4.6	4 7/8 qt	4 qt

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Description		Capacity (approximate)		
		Liter	US measure	Imp measure
Cooling system	With reservoir at MAX level	8.5	2 1/4 gal	1 7/8 gal
CVT Fluid		10	10 5/8 qt	8 3/4 qt
Power steering fluid (PSF)		1.0	2 1/8 pt	1 3/4 pt
Brake fluid		—	—	—
Brake grease		—	—	—
Brake pad plate grease		—	—	—
Multi-purpose grease		—	—	—
Windshield washer fluid		—	—	—
Air conditioning system refrigerant		0.55 ± 0.025 kg	1.21 ± 0.055 lb	1.21 ± 0.055 lb
Air conditioning system oil		150 m ℓ	5.03 fl oz	5.3 fl oz