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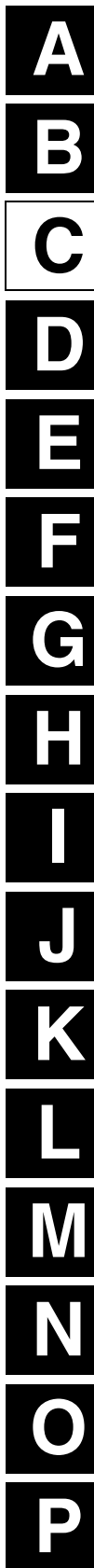
**QUICK REFERENCE INDEX**

# NISSAN MAXIMA

## MODEL A35 SERIES

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<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>STR Starting System</b>	
	<b>ACC Accelerator Control System</b>	
	<b>C HYBRID</b>	<b>HBC Hybrid Control System</b>
		<b>HBB Hybrid Battery System</b>
<b>HBR Hybrid Brake System</b>		
<b>D TRANSMISSION &amp; DRIVE-LINE</b>	<b>CL Clutch System</b>	
	<b>TM Transaxle &amp; Transmission</b>	
	<b>DLN Driveline</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>SCS Suspension Control System</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>ST Steering System</b>	
	<b>STC Steering Control System</b>	
<b>H RESTRAINTS</b>	<b>SB Seat Belt</b>	
	<b>SBC Seat Belt Control System</b>	
	<b>SR SRS Airbag</b>	
	<b>SRC SRS Airbag Control System</b>	
	<b>I VENTILATION, HEATER &amp; AIR CONDITIONER</b>	<b>VTL Ventilation System</b>
<b>HA Heater &amp; Air Conditioning System</b>		
<b>HAC Heater &amp; Air Conditioning Control System</b>		
<b>J BODY INTERIOR</b>	<b>INT Interior</b>	
	<b>IP Instrument Panel</b>	
	<b>SE Seat</b>	
	<b>ADP Automatic Drive Positioner</b>	
	<b>K BODY EXTERIOR, DOORS, ROOF &amp; VEHICLE SECURITY</b>	<b>DLK Door &amp; Lock</b>
		<b>SEC Security Control System</b>
<b>GW Glass &amp; Window System</b>		
<b>PWC Power Window Control System</b>		
<b>RF Roof</b>		
<b>EXT Exterior</b>		
<b>L DRIVER CONTROLS</b>	<b>BRM Body Repair Manual</b>	
	<b>MIR Mirrors</b>	
	<b>EXL Exterior Lighting System</b>	
	<b>INL Interior Lighting System</b>	
	<b>WW Wiper &amp; Washer</b>	
	<b>DEF Defogger</b>	
	<b>HRN Horn</b>	
	<b>M ELECTRICAL &amp; POWER CONTROL</b>	<b>PWO Power Outlet</b>
		<b>BCS Body Control System</b>
		<b>LAN LAN System</b>
		<b>PCS Power Control System</b>
<b>CHG Charging System</b>		
<b>PG Power Supply, Ground &amp; Circuit Elements</b>		
<b>N DRIVER INFORMATION &amp; MULTIMEDIA</b>	<b>MWI Meter, Warning Lamp &amp; Indicator</b>	
	<b>WCS Warning Chime System</b>	
	<b>SN Sonar System</b>	
	<b>AV Audio, Visual &amp; Navigation System</b>	
<b>O CRUISE CONTROL</b>	<b>CCS Cruise Control System</b>	
<b>P MAINTENANCE</b>	<b>MA Maintenance</b>	



# FOREWORD

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This manual contains maintenance and repair procedure for the 2010 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.

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## 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 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: MAXIMA

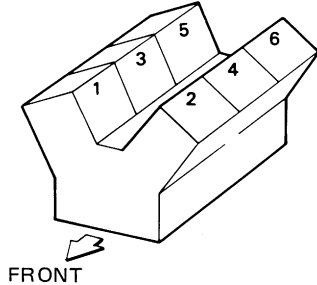
Engine Tune-up Data

INFOID:000000005683106

GENERAL SPECIFICATIONS

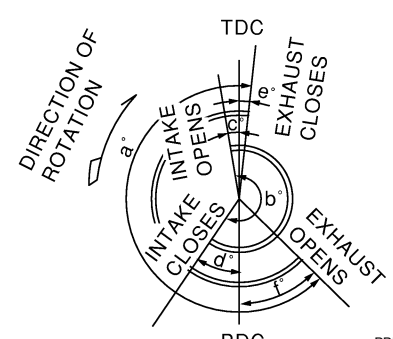
Cylinder arrangement		V-6
Displacement cm <sup>3</sup> (cu in)		3,498 (213.45)
Bore and stroke mm (in)		95.5 x 81.4 (3.760 x 3.205)
Valve arrangement		DOHC
Firing order		1-2-3-4-5-6
Number of piston rings	Compression	2
	Oil	1
Number of main bearings		4
Compression ratio		10.6:1
Compression pressure kPa (kg/cm <sup>2</sup> , 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

Valve timing  
(Valve timing control - "OFF")



PBIC0187E

Unit: degree

a	b	c	d	e	f
240	240	-10	70	10	50

Drive Belt

INFOID:000000005683107

DRIVE BELT

Tension of drive belt	Belt tension is not necessary, as it is automatically adjusted by drive belt auto-tensioner.
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2010

## Spark Plug

INFOID:000000005683108

## SPARK PLUG

Unit: mm (in)

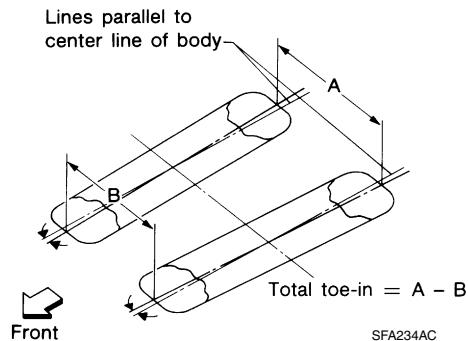
Make	DENSO		
Standard type*	FXE22HR11		
Gap	Standard	1.1 (0.043)	
	Limit	1.4 (0.055)	

\*: Always check with the Parts Department for the latest parts information

## Front Wheel Alignment (Unladen\*)

INFOID:000000005683079

Market			USA/Canada		Mexico	
Tire size			245/45R18	245/40R19	245/45R18	245/40R19
Camber Degree minute (Decimal degree)	LH	Minimum	-1°05' (-1.10°)	-1°10' (-1.15°)	-0°55' (-0.95°)	
		Nominal	-0°20' (-0.35°)	-0°25' (-0.40°)	-0°10' (-0.20°)	
		Maximum	0°25' (0.40°)	0°20' (0.35°)	0°35' (0.55°)	
	RH	Minimum	-1°20' (-1.35°)	-1°25' (-1.40°)	-1°10' (-1.20°)	
		Nominal	-0°35' (-0.60°)	-0°40' (-0.65°)	-0°25' (-0.45°)	
		Maximum	0°10' (0.15°)	0°05' (0.10°)	0°20' (0.30°)	
	RH with respect to LH		0°15' ± 0°33' (0.25± 0.55°)			
Caster Degree minute (Decimal degree) Against ground surface	Minimum	4°10' (4.20°)	4°15' (4.25°)	3°45' (3.75°)		
	Nominal	4°55' (4.95°)	5°00' (5.00°)	4°30' (4.50°)		
	Maximum	5°40' (5.70°)	5°45' (5.75°)	5°15' (5.25°)		
	Maximum left and right difference	0°33' (0.55°)				
Kingpin offset Degree minute (Decimal degree)	Minimum	—		—		
	Nominal	—		—		
	Maximum	—		—		



Total toe-in	Distance (A - B)	Minimum	0 mm
		Nominal	1 mm
		Maximum	2 mm
	Angle (left or right, each side) Degree minute (Degree)	Minimum	0°00' (0.00°)
		Nominal	0°02' (0.03°)
		Maximum	0°04' (0.07°)

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

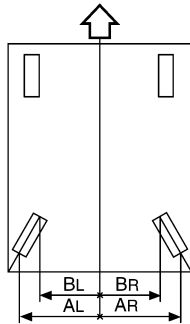
# QUICK REFERENCE CHART: MAXIMA

2010

## Rear Wheel Alignment (Unladen\*)

INFOID:000000005683077

Market		USA*1	USA*2	Canada*1	Canada*2	Mexico
Camber Degree minute (Decimal degree)	Minimum	-0° 55' (-0.92°)	-1° 02' (-1.03°)	-0° 52' (-0.87°)	-1° 02' (-1.03°)	-0° 10' (-0.2°)
	Nominal	-0° 25' (-0.42°)	-0° 32' (-0.53°)	-0° 22' (-0.37°)	-0° 32' (-0.53°)	0° 20' (0.3°)
	Maximum	0° 05' (0.08°)	-0° 02' (-0.03°)	0° 8' (0.13°)	-0° 02' (-0.03°)	0° 50' (0.8°)



ALEIA0059ZZ

Total toe-in	Distance (left or right) AL - BL or AR - BR mm (in) ↶ Front	Minimum	0 (0)	0.4 (0.02)	0 (0)	0.4 (0.02)	0 (0)
		Nominal	1.6 (0.06)	2.0 (0.08)	1.6 (0.06)	2.0 (0.08)	1.6 (0.06)
		Maximum	3.2 (0.13)	3.6 (0.14)	3.2 (0.13)	3.6 (0.14)	3.2 (0.13)
	Distance difference between RH and LH side (AL - BL) - (AR - BR) mm (in) ↶ Front	Minimum	-2 (-0.08)				
		Nominal	0 (0)				
		Maximum	2 (0.08)				
	Angle (left or right) Degree minute (decimal degree)	Minimum	0° 0' (0.00°)	0° 1' (0.01°)	0° 0' (0.00°)	0° 1' (0.01°)	0° 0' (0.00°)
		Nominal	0° 4' (0.07°)	0° 5' (0.08°)	0° 4' (0.07°)	0° 5' (0.08°)	0° 4' (0.07°)
		Maximum	0° 8' (0.14°)	0° 9' (0.15°)	0° 8' (0.14°)	0° 9' (0.15°)	0° 8' (0.14°)

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

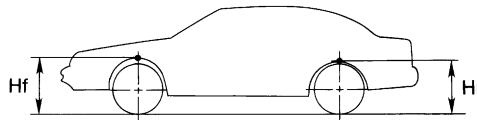
\*1: 18" tire.

\*2: 19" tire.

## Wheelarch Height (Unladen\*1)

INFOID:000000005683078

Unit: mm (in)



SFA818A

Market	USA/Canada			Canada			Mexico	
	Tire size	P245/ 45R18*2	P245/ 45R18*3	P245/ 40R19*2	P245/ 45R18*2	P245/ 45R18*3	P245/ 40R19*2	P245/ 45R18*2

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Front (Hf)	719 (28.31)	719 (28.31)	723 (28.46)	720 (28.35)	719 (28.31)	723 (28.46)	729 (28.70)	732 (28.82)
Rear (Hr)	728 (28.66)	727 (28.62)	730 (28.74)	728 (28.66)	727 (28.62)	730 (28.74)	747 (29.41)	750 (29.53)

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

\*2: Without top load sunroof

\*3: With top load sunroof

## Brake Specifications

INFOID:000000005683075

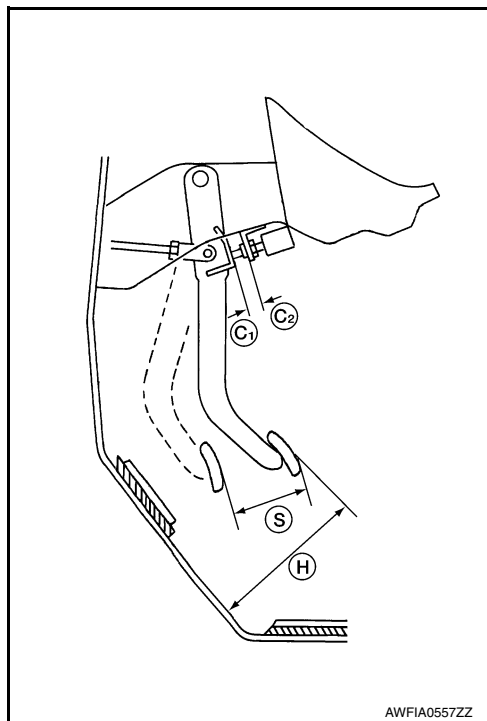
Unit: mm (in)

Brake model		Kiriu	
Wheel size		457 (18)	483 (19)
Front brake	Cylinder bore diameter	57.15 (2.250)	
	Pad length × width × thickness	123.6 × 47.5 × 11 (4.866 × 1.870 × 0.433)	
	Rotor outer diameter × thickness	320 × 28 (12.598 × 1.102)	TBD
Rear brake	Brake model	Kiriu	
	Cylinder bore diameter	34.93 (1.375)	
	Pad length × width × thickness	83.0 × 33.0 × 8.5 (3.268 × 1.299 × 0.335)	
	Rotor outer diameter × thickness	308 × 16 (12.126 × 0.630)	
Master cylinder	Cylinder bore diameter	23.81 (0.937)	
Control valve	Valve model	Electric brake force distribution	
Brake booster	Booster model	Bosch	
Recommended brake fluid		DOT 3	

## Brake Pedal

INFOID:000000005683076

Unit: mm (in)



Brake pedal free height (H)	190.7 - 202.7 (7.51 - 7.98)
Brake pedal full stroke (S)	130.0 (5.12)
Clearance between brake pedal bracket and threaded end of stop lamp switch and ASCD cancel switch (C1) or (C2)	0.74 - 1.96 (0.0291 - 0.0772)

# QUICK REFERENCE CHART: MAXIMA

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## Front Disc Brake

INFOID:000000005683073

Unit: mm (in)

Brake model		Kiriu	
Wheel size		457 (18)	483 (19)
Brake pad	Standard thickness (new)	11.0 (0.433)	
	Repair limit thickness	2.0 (0.079)	
Disc rotor	Standard thickness (new)	28.0 (1.102)	
	Repair limit thickness	26.0 (1.024)	
	Thickness variation (measured at 8 positions)	0.015 (0.0006)	
	Maximum runout (with it attached to the vehicle)	0.035 (0.0014)	

## Rear Disc Brake

INFOID:000000005683074

Unit: mm (in)

Brake model		Kiriu	
Wheel size		457 (18)	483 (19)
Brake pad	Standard thickness (new)	8.5 (0.335)	
	Repair limit thickness	1.0 (0.039)	
Disc rotor	Standard thickness (new)	16.0 (0.630)	
	Repair limit thickness	14.0 (0.551)	
	Thickness variation (measured at 8 positions)	0.015 (0.0006)	
	Maximum runout (with it attached to the vehicle)	0.05 (0.002)	

## Fluids and Lubricants: North America

INFOID:000000005683065

Description		Capacity (Approximate)		
		US measure	Imp measure	Liter
Fuel		20 gal	16-5/8 gal	75.6
Engine oil Drain and refill	With oil filter change	4-7/8 qt	4 qt	4.6
	Without oil filter change	4-1/2 qt	3-3/4 qt	4.3
	Dry engine (Overhaul)	5-1/4 qt	4-3/8 qt	5.0
Cooling system with reservoir at MAX level		2-1/8 gal	1-3/4 gal	8.2
CVT fluid		10-3/4 qt	9 qt	10.2
Power steering fluid (PSF)		1-1/8 qt	7/8 qt	1.0
Brake fluid		—	—	—
Multi-purpose grease		—	—	—
Air conditioning system refrigerant		1.21 ± 0.055 lb	1.21 ± 0.055 lb	0.55 ± 0.025 kg
Air conditioning system oil		5.03 fl oz	5.3 fl oz	150 m ℓ
Windshield washer fluid		4 1/2 qt	3 3/4 qt	4.3



# QUICK REFERENCE CHART: MAXIMA

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## Fluids and Lubricants: Mexico

INFOID:000000005683064

Description		Capacity (Approximate)	
		Liter	Imp measure
Fuel		75.6	16-5/8 gal
Engine oil Drain and refill	With oil filter change	4.6	4 qt
	Without oil filter change	4.3	3 3/4 qt
	Dry engine (engine overhaul)	5.0	4 3/8 qt
Cooling system (with reservoir at MAX level)		8.2	1 3/4 gal
CVT fluid		10.2	9 qt
Power steering fluid		1.0	7/8 qt
Brake fluid		—	—
Multi-purpose grease		—	—
Air conditioning system refrigerant		0.55 ± 0.025 kg	1.21 ± 0.055 lb
Air conditioning system oil		150 m ℓ	5.3 fl oz
Windshield washer fluid		4.3	3 3/4 qt