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NISSAN MAXIMA

MODEL A35 SERIES

QUICK REFERENCE INDEX

FOREWORD

This manual contains maintenance and repair procedure for the 2011 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

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?

_____

_____

_____

_____

DATE: _____ YOUR NAME: _____ POSITION: _____

DEALER: _____ DEALER NO.: _____ ADDRESS: _____

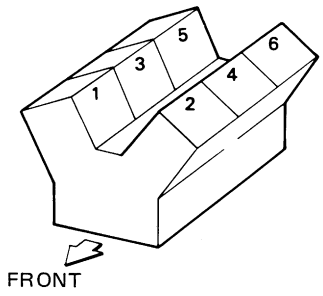
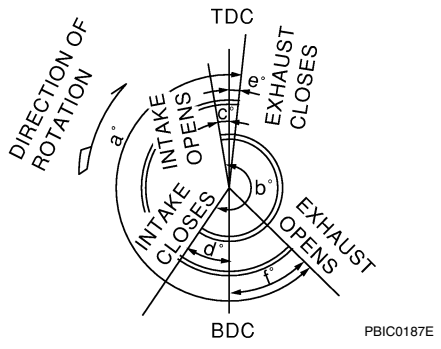
CITY:_____ STATE/PROV./COUNTRY: _____ ZIP/POSTAL CODE: _____

QUICK REFERENCE CHART

Engine Tune-up Data

INFOID:0000000006832743

GENERAL SPECIFICATIONS

Cylinder arrangement		V-6
Displacement cm^3 (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^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	
Valve timing (Valve timing control - “OFF”)	 PBIC0187E	

Unit: degree

a	b	c	d	e	f
240	240	−10	70	10	50

Drive Belt

INFOID:0000000006832744

DRIVE BELT

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

Spark Plug

INFOID:0000000006832745

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:0000000006832742

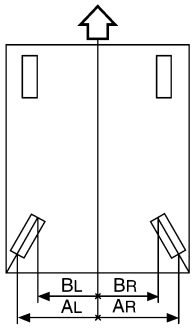
Market			United States/Canada		Mexico	
Tire size			245/45R18	245/40R19	245/45R18	245/40R19
Camber Degree minute (Decimal degree)	LH	Minimum	-1°05’ (-1.10°)	-1°10’ (-1.15°)	-0°55’ (-0.95°)	
		Nominal	-0°20’ (-0.35°)	-0°25’ (-0.40°)	-0°10’ (-0.20°)	
		Maximum	0°25’ (0.40°)	0°20’ (0.35°)	0°35’ (0.55°)	
	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)			14°25’ (14.42°)		14°05’ (14.10°)	
Total toe-in	Distance (A - B)	Minimum	0 mm (0.0 in)			
		Nominal	1 mm (0.039 in)			
		Maximum	2 mm (0.079 in)			
	Angle (left or right, each side) Degree minute (Degree)	Minimum	0°00′(0.00°)			
		Nominal	0°02′(0.03°)			
		Maximum	0°00′(0.00°)			

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

Rear Wheel Alignment (Unladen*)

INFOID:0000000006832740

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°)



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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' (014°)	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.

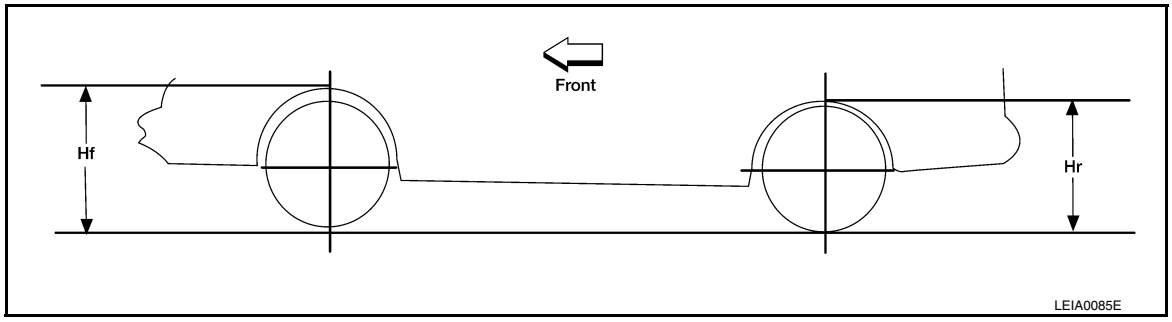
*1: 18" tire.

*2: 19" tire.

Wheelarch Height (Unladen*1)

INFOID:0000000006832741

Unit: mm (in)



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Market	United States			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	P245/ 40R19*2
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:0000000006832738

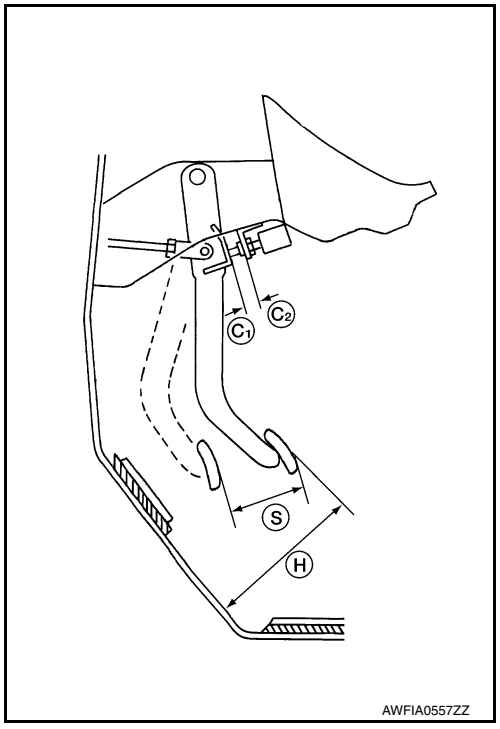
Unit: mm (in)

Brake model		Kiriu
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)
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:0000000006832739

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 (C_1) and ASCD cancel switch (C_2)	0.74 - 1.96 (0.0291 - 0.0772)

Front Disc Brake

INFOID:0000000006832736

Unit: mm (in)

Brake model		Kiriu
Brake pad	Standard thickness (new)	11.0 (0.433)
	Repair limit thickness	2.0 (0.079)

Brake model		Kiriu
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:0000000006832737

Unit: mm (in)

Brake model		Kiriu
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: for NORTH AMERICA

INFOID:0000000006832730

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	4.8	5-1/8 qt	4-1/2 qt
	Without oil filter change	4.5	4-3/4 qt	4 qt
	Dry engine (Overhaul)	5.3	5-5/8 qt	4-5/8 qt
Cooling system with reservoir at MAX level		9.0	9-1/2 qt	7-7/8 qt
CVT fluid		10.2	10-3/4 qt	9 qt
Power steering fluid (PSF)		1.0	1-1/8 qt	7/8 qt
Brake fluid		—	—	—
Multi-purpose grease		—	—	—
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	5.03 fl oz
Windshield washer fluid		4.3	4 1/2 qt	3 3/4 qt

Fluids and Lubricants: for MEXICO

INFOID:0000000006832733

Description		Capacity (Approximate)	
		Liter	Imp measure
Fuel		75.6	16-5/8 gal
Engine oil Drain and refill	With oil filter change	4.8	4 1/2 qt
	Without oil filter change	4.5	4 qt
	Dry engine (engine overhaul)	5.3	4 5/8 qt
Cooling system (with reservoir at MAX level)		9.0	7-7/8 qt

QUICK REFERENCE CHART

Description	Capacity (Approximate)	
	Liter	Imp measure
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	5.03 fl oz
Windshield washer fluid	4.3	3 3/4 qt