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# NISSAN MAXIMA

MODEL A36 SERIES

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## QUICK REFERENCE INDEX

<b>A GENERAL INFORMATION</b>	<b>GI</b> General Information
<b>B ENGINE</b>	<b>EM</b> Engine Mechanical
	<b>LU</b> Engine Lubrication System
	<b>CO</b> Engine Cooling System
	<b>EC</b> Engine Control System
	<b>FL</b> Fuel System
	<b>EX</b> Exhaust System
	<b>STR</b> Starting System
	<b>ACC</b> Accelerator Control System
<b>C HYBRID</b>	
<b>D TRANSMISSION &amp; DRIVE-LINE</b>	<b>TM</b> Transaxle & Transmission
	<b>FAX</b> Front Axle
	<b>RAX</b> Rear Axle
<b>E SUSPENSION</b>	<b>FSU</b> Front Suspension
	<b>RSU</b> Rear Suspension
	<b>WT</b> Road Wheels & Tires
<b>F BRAKES</b>	<b>BR</b> Brake System
	<b>PB</b> Parking Brake System
	<b>BRC</b> Brake Control System
<b>G STEERING</b>	<b>ST</b> Steering System
	<b>STC</b> Steering Control System
<b>H RESTRAINTS</b>	<b>SB</b> Seat Belt
	<b>SR</b> SRS Airbag
	<b>SRC</b> SRS Airbag Control System
<b>I VENTILATION, HEATER &amp; AIR CONDITIONER</b>	<b>VTL</b> Ventilation System
	<b>HA</b> Heater & Air Conditioning System
	<b>HAC</b> Heater & Air Conditioning Control System
<b>J BODY INTERIOR</b>	<b>INT</b> Interior
	<b>IP</b> Instrument Panel
	<b>SE</b> Seat
	<b>ADP</b> Automatic Drive Positioner
	<b>DLK</b> Door & Lock
<b>K BODY EXTERIOR, DOORS, ROOF &amp; VEHICLE SECURITY</b>	<b>SEC</b> Security Control System
	<b>GW</b> Glass & Window System
	<b>PWC</b> Power Window Control System
	<b>RF</b> Roof
	<b>EXT</b> Exterior
	<b>BRM</b> Body Repair Manual
	<b>MIR</b> Mirrors
<b>L DRIVER CONTROLS</b>	<b>EXL</b> Exterior Lighting System
	<b>INL</b> Interior Lighting System
	<b>WW</b> Wiper & Washer
	<b>DEF</b> Defogger
	<b>HRN</b> Horn
	<b>PWO</b> Power Outlet
	<b>BCS</b> Body Control System
<b>M ELECTRICAL &amp; POWER CONTROL</b>	<b>LAN</b> LAN System
	<b>PCS</b> Power Control System
	<b>CHG</b> Charging System
	<b>PG</b> Power Supply, Ground & Circuit Elements
	<b>MWI</b> Meter, Warning Lamp & Indicator
	<b>WCS</b> Warning Chime System
<b>N DRIVER INFORMATION &amp; MULTIMEDIA</b>	<b>SN</b> Sonar System
	<b>AV</b> Audio, Visual & Navigation System
	<b>CCS</b> Cruise Control System
	<b>DAS</b> Driver Assistance System
<b>O CRUISE CONTROL</b>	<b>DMS</b> Drive Mode System
	<b>MA</b> Maintenance
<b>Q INDEX</b>	<b>IDX</b> Alphabetical Index

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# FOREWORD

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This manual contains maintenance and repair procedures for the 2016 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

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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.



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Technical Publications Department



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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) 488-3880

**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

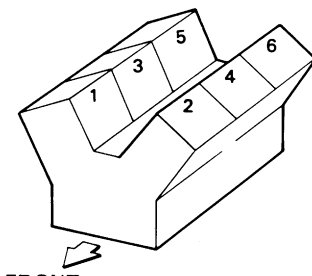
Engine Tune-up Data

INFOID:0000000012544550

GENERAL SPECIFICATIONS

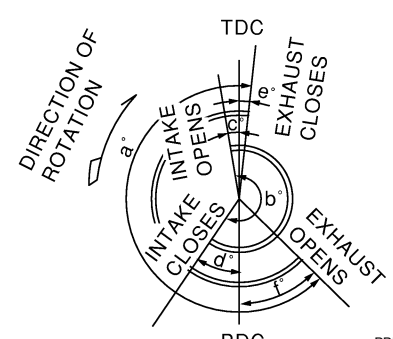
Cylinder arrangement		V-6
Displacement cm <sup>3</sup> (cu in)		3,498 (213.45)
Bore and stroke mm (in)		95.5 x 81.4 (3.760 x 3.205)
Valve arrangement		DOHC
Firing order		1-2-3-4-5-6
Number of piston rings	Compression	2
	Oil	1
Number of main bearings		4
Compression ratio		10.6:1
Compression pressure kPa (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
256	240	-10	70	8	68

INFOID:0000000012544551

DRIVE BELT

Tension of drive belt	Drive belt tension is not necessary, as it is automatically adjusted by drive belt auto-tensioner.
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# QUICK REFERENCE CHART: MAXIMA

2016

INFOID:000000012544552

## SPARK PLUG

Unit: mm (in)

Make	DENSO	
Standard type*	FXE22HR11	
Gap	Standard	1.1 (0.043)
	Limit	1.35 (0.53) (for USA and Canada) 1.25 (0.49) (for Mexico)

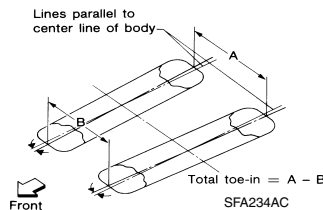
\*: Always check with the Parts Department for the latest parts information.

## Front Wheel Alignment (Unladen\*)

INFOID:000000012544547

### UNITED STATES & CANADA

Tire size		P245/45R18	P245/40R19
Camber Degree minute (Decimal degree)	Minimum	-1° 08' (-1.14°)	
	Nominal	-0° 23' (-0.39°)	
	Maximum	0° 22' (0.36°)	
	(LH) and (RH) difference	0° 00' ± 0° 33' (0.00°± 0.55°)	
Caster Degree minute (Decimal degree)	Minimum	4° 05' (4.08°)	4° 10' (4.16°)
	Nominal	4° 50' (4.83°)	4° 55' (4.91°)
	Maximum	5° 35' (5.58°)	5° 40' (5.66°)
	(LH) and (RH) difference	0° 00' ± 0° 30' (0.00°± 0.50°)	
Kingpin inclination Degree minute (Decimal degree)		14° 25' (14.42°)	



Total toe-in	Distance (A - B)	Minimum	Out 1.2 mm (Out 0.047 in)
		Nominal	In 0.8 mm (In 0.031 in)
		Maximum	In 2.8 mm (In 0.110 in)
	Angle (LH and RH) Degree minute (Decimal degree)	Minimum	Out 0° 07' (Out 0.11°)
		Nominal	In 0° 04' (In 0.07°)
		Maximum	In 0° 15' (In 0.25°)

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

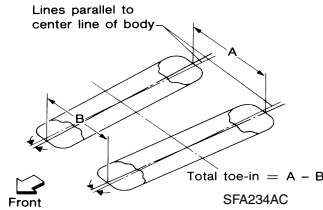
### MEXICO

Camber Degree minute (Decimal degree)	Minimum	-1° 01' (-1.01°)
	Nominal	-0° 16' (-0.26°)
	Maximum	0° 29' (0.49°)
	(LH) and (RH) difference	0°00' ± 0°33' (0.00°± 0.55°)

# QUICK REFERENCE CHART: MAXIMA

2016

Caster Degree minute (Decimal degree)	Minimum	3° 45' (3.75°)
	Nominal	4° 30' (4.50°)
	Maximum	5° 15' (5.25°)
	(LH) and (RH) difference	0° 00' ± 0° 30' (0.00°± 0.50°)
Kingpin inclination Degree minute (Decimal degree)		14° 10' (14.17°)



Total toe-in	Distance (A - B)	Minimum	Out 0.9 mm (Out 0.035 in)
		Nominal	In 1.1 mm (In 0.043 in)
		Maximum	In 3.1 mm (In 0.122 in)
	Angle (LH and RH) Degree minute (Decimal degree)	Minimum	Out 0° 05' (Out 0.09°)
		Nominal	In 0° 05' (In 0.09°)
		Maximum	In 0° 16' (In 0.27°)

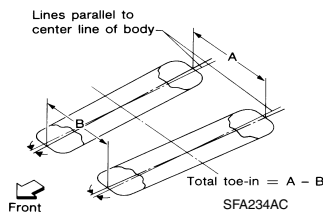
\*: Fuel, engine coolant, and lubricants are full. Spare tire, jack, hand tools, and mats are in designated positions.

## Rear Wheel Alignment (Unladen\*<sup>1</sup>)

INFOID:000000012544553

### UNITED STATES & CANADA

Tire size		P245/45R18	P245/40R19
Camber Degree minute (Decimal degree)	Minimum	-1° 08' (-1.13°)	-1° 16' (-1.27°)
	Nominal	-0° 23' (-0.38°)	-0° 31' (-0.52°)
	Maximum	0° 22' (0.37°)	0° 14' (0.23°)

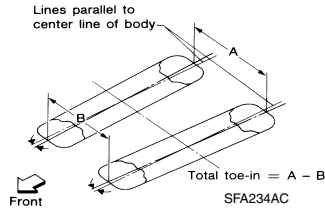


Total toe-in	Distance (A - B)	Minimum	In 0.1 mm (In 0.01 in)	In 0.6 mm (In 0.02 in)
		Nominal	In 2.6 mm (In 0.10 in)	In 3.1 mm (In 0.12 in)
		Maximum	In 5.1 mm (In 0.20 in)	In 5.6 mm (In 0.22 in)
	Angle (LH and RH) Degree minute (Decimal degree)	Minimum	In 0° 01' (In 0.02°)	In 0° 04' (In 0.06°)
		Nominal	In 0° 13' (In 0.22°)	In 0° 16' (In 0.26°)
		Maximum	In 0° 25' (In 0.42°)	In 0° 28' (In 0.46°)

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

### MEXICO

Tire size		P245/45R18	P245/40R19
Camber Degree minute (Decimal degree)	Minimum	-0° 17' (-0.29°)	
	Nominal	0° 27' (0.46°)	
	Maximum	1° 12' (1.21°)	



Total toe-in	Distance (A - B)	Minimum	Out 2.0 mm (Out 0.08 in)
		Nominal	In 0.5 mm (In 0.02 in)
		Maximum	In 3.0 mm (In 0.12 in)
	Angle (LH and RH) Degree minute (Decimal degree)	Minimum	Out 0° 09' (Out 0.15°)
		Nominal	In 0° 03' (In 0.05°)
		Maximum	In 0° 15' (In 0.25°)

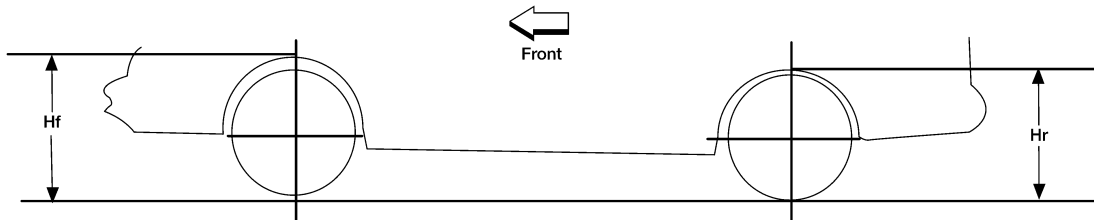
\*: Fuel, engine coolant, and lubricants are full. Spare tire, jack, hand tools, and mats are in designated positions.

Wheelarch Height (Unladen\*<sup>1</sup>)

INFOID:0000000012544549

UNITED STATES & CANADA

Unit: mm (in)



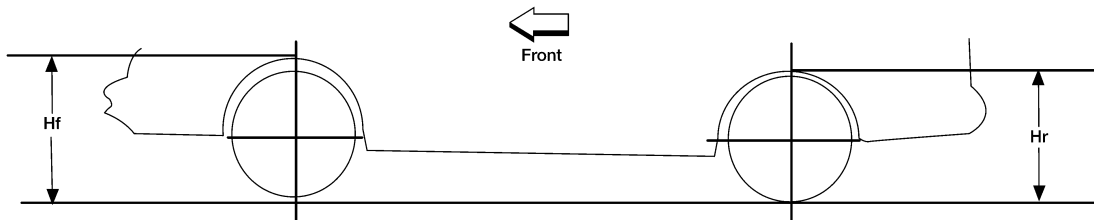
LEIA0085E

Tire size	P245/45R18	P245/40R19
Front (Hf)	708 (27.87)	704 (27.72)
Rear (Hr)	719 (28.31)	712 (28.03)

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

MEXICO

Unit: mm (in)



LEIA0085E

Tire size	P245/45R18	P245/40R19
Front (Hf)	717 (28.23)	715 (28.15)
Rear (Hr)	739 (29.09)	736 (28.98)

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

# QUICK REFERENCE CHART: MAXIMA

2016

## Brake Specifications

INFOID:000000012544540

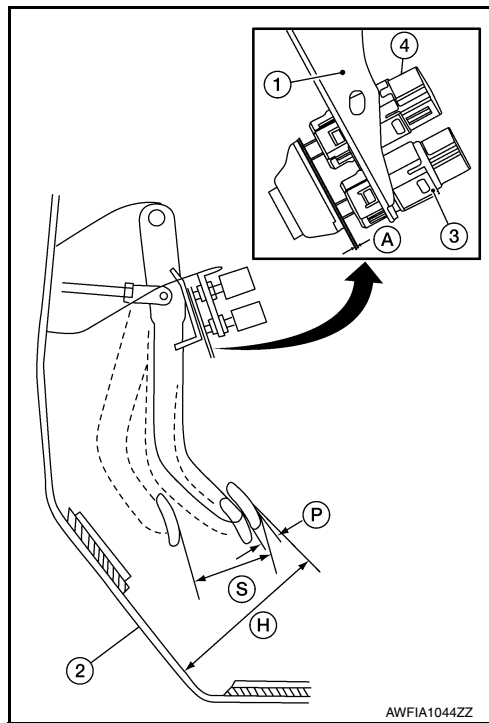
Unit: mm (in)

Front brake	Cylinder bore diameter	57.15 (2.250)
	Pad length × width × thickness	123.6 × 53.5 × 11.0 (4.866 × 2.106 × 0.433)
	Rotor outer diameter × thickness	320 × 28 (12.598 × 1.102)
Rear brake	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	25.4 (1.000)
Control valve	Valve type	Electric brake force distribution

## Brake Pedal

INFOID:000000012544541

Unit: mm (in)



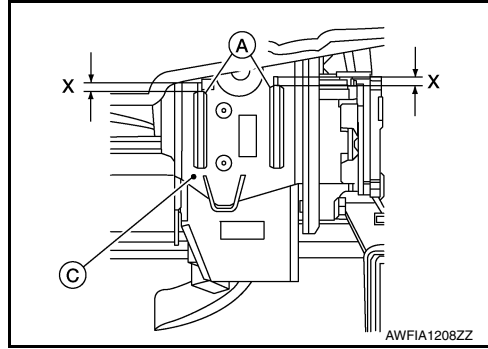
Item	Standard
Brake pedal height (H) from lower dash (2)	181.4 – 191.4 (7.14 – 7.54)
Clearance (A) between brake pedal bracket, stop lamp switch (3) and brake pedal position switch (4) contact ends	0.74 – 1.96 (0.0291 – 0.0772)
Brake pedal full stroke (S)	135.3 (5.33)
Brake pedal play (P)	—



# QUICK REFERENCE CHART: MAXIMA

2016

Unit: mm (in)



Overlap distance (X) between sub-bracket (A) and slide plate (C)	5.5 ± 0.5 (0.22 ± 0.02)
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## Front Disc Brake

INFOID:000000012544544

Unit: mm (in)

Item		Limit
Brake pad	Standard thickness (new)	11.0 (0.433)
	Minimum thickness	2.0 (0.079)
Disc rotor	Standard thickness (new)	28.0 (1.102)
	Minimum thickness	26.0 (1.024)
	Thickness variation (measured at 8 positions)*	0.015 (0.0006)
	Maximum runout (with it attached to the vehicle)	0.040 (0.0016)

\* To check if rotor imbalance, rotor runout or rotor deformation exists.

## Rear Disc Brake

INFOID:000000012544545

Unit: mm (in)

Item		Limit
Brake pad	Standard thickness (new)	8.5 (0.335)
	Minimum thickness	1.0 (0.039)
Disc rotor	Standard thickness (new)	16.0 (0.630)
	Minimum 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 (0.0020)

\* To check if rotor imbalance, rotor runout or rotor deformation exists.

## FOR USA AND CANADA : Fluids and Lubricants

INFOID:000000013352070

The following are approximate capacities, The actual refill capacities may be slightly different. When refilling, follow the procedures described elsewhere in this manual.

Description	Capacity (Approximate)			
	Metric	US measure	Imp measure	
Fuel	68 ℓ	18 gal	15 gal	
Engine oil Drain and refill	With oil filter change	4.8 ℓ	5-1/8 qt	4-1/4 qt
	Without oil filter change	4.5 ℓ	4-3/4 qt	4 qt
	Dry engine (Overhaul)	5.2 ℓ	5-1/2 qt	4-5/8 qt

# QUICK REFERENCE CHART: MAXIMA

2016

Description	Capacity (Approximate)		
	Metric	US measure	Imp measure
Cooling system (with reservoir at MAX level)	9.2 ℓ	9-3/4 qt	8-1/8 qt
CVT fluid	8.2 ℓ	8-5/8 qt	7-1/4 qt
Power steering fluid (PSF)	1.1 ℓ	1-1/8 qt	1 qt
Brake fluid	—	—	—
Multi-purpose grease	—	—	—
Windshield washer fluid	4.2 ℓ	4-1/2 qt	3-3/4 qt
Air conditioning system refrigerant	0.55 ± 0.025 kg	1.21 ± 0.055 lb	1.21 ± 0.055 lb
Air conditioning system oil	100 m ℓ	3.4 fl oz	3.5 fl oz

## FOR MEXICO : Fluids and Lubricants

INFOID:000000013352073

The following are approximate capacities, The actual refill capacities may be slightly different. When refilling, follow the procedures described elsewhere in this manual.

Description		Capacity (Approximate)		
		Metric	US measure	Imp measure
Fuel		68 ℓ	18 gal	15 gal
Engine oil Drain and refill	With oil filter change	4.8 ℓ	5-1/8 qt	4-1/4 qt
	Without oil filter change	4.5 ℓ	4-3/4 qt	4 qt
	Dry engine (engine overhaul)	5.2 ℓ	5-1/2 qt	4-5/8 qt
Cooling system (with reservoir at MAX level)		9.2 ℓ	9-3/4 qt	8-1/8 qt
CVT fluid		8.2 ℓ	8-5/8 qt	7-1/4 qt
Power steering fluid		1.1 ℓ	1-1/8 qt	1.0 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		100 m ℓ	3.4 fl oz	3.5 fl oz
Windshield washer fluid		4.2 ℓ	4-1/2 qt	3-3/4 qt