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NISSAN NV200

MODEL M20 SERIES

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

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FOREWORD

This manual contains maintenance and repair procedures for the 2016 NISSAN NV200 Compact Cargo.

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 MEXICANA, S.A. DE C.V.
AFTER SALES DEPARTMENT
SERVICE TECHNICAL DEVELOPMENT DIVISION
MEXICO D.F.



PLEASE HELP MAKE THIS SERVICE MANUAL BETTER!

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Use this form to report any issues or comments you may have regarding our Service Manuals.
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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.*

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

Please comment: _____

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: NV200

Engine Tune-up Data

INFOID:0000000013530969

GENERAL SPECIFICATIONS

Engine type		MR20DE
Cylinder arrangement		In-line 4
Displacement	cm ³ (cu in)	1,997 (121.86)
Bore and stroke	mm (in)	84.0×90.1 (3.307×3.547)
Valve arrangement		DOHC
Firing order		1-3-4-2
Number of piston rings	Compression	2
	Oil	1
Compression ratio		9.7
Compression pressure kPa (kg/cm ² , psi) / 200 rpm	Standard	1,510 (15.4, 219)
	Minimum	1,270 (12.95, 184)
	Differential limit between cylinders	100 (1.0, 14.5)

Drive Belt

INFOID:0000000013530968

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

INFOID:0000000013530967

Unit: mm (in)

Make		Denso
Standard type*		FXE20HR-11
Spark plug gap	Standard	1.1 (0.043)

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

Front Wheel Alignment (Unladen*¹)

INFOID:0000000013530966

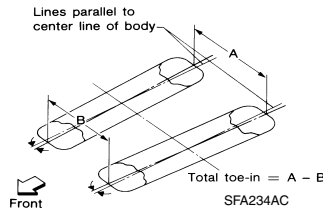
UNITED STATES and CANADA

Camber Degree minute (Decimal degree)	Minimum	-1° 05' (-1.08°)
	Nominal	-0° 20' (-0.33°)
	Maximum	0° 25' (0.42°)
	(LH) and (RH) difference* ²	-0° 45' (-0.75°) - 0° 45' (0.75°)
Caster Degree minute (Decimal degree)	Minimum	3° 25' (3.42°)
	Nominal	4° 10' (4.17°)
	Maximum	4° 55' (4.92°)
	(LH) and (RH) difference* ²	-0° 45' (-0.75°) - 0° 45' (0.75°)

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2016

Kingpin inclination Degree minute (Decimal degree)	Minimum	11° 10' (11.17°)
	Nominal	11° 55' (11.92°)
	Maximum	12° 40' (12.67°)



Total toe-in	Distance (A - B)	Minimum	In 0 mm (In 0 in)
		Nominal	In 1.0 mm (In 0.039 in)
		Maximum	In 2.0 mm (In 0.079 in)
	Angle (LH and RH) Degree minute (Decimal degree)	Minimum	In 0° 01' (In 0.02°)
		Nominal	In 0° 06' (In 0.10°)
		Maximum	In 0° 11' (In 0.18°)

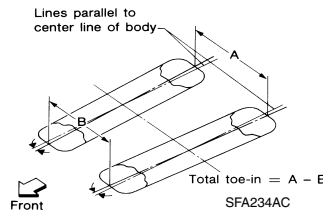
*1: Fuel, engine coolant, and lubricants are full. Spare tire, jack, hand tools, and mats are in designated positions.

*2: The difference when assuming the (LH) side is the standard.

Rear Wheel Alignment (Unladen*)

INFOID:0000000013530965

Camber Degree minute (Decimal degree)	Minimum	-2° 00' (-2.00°)
	Nominal	-1° 30' (-1.50°)
	Maximum	-1° 00' (-1.00°)

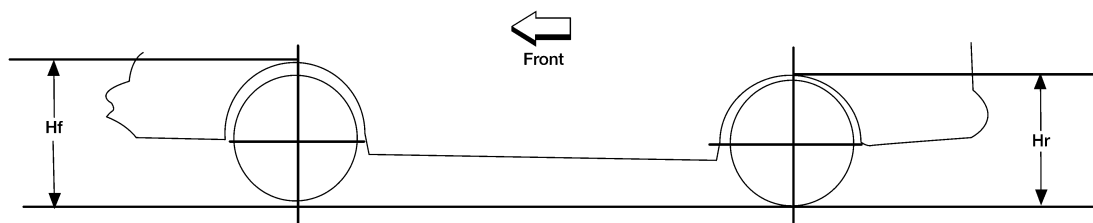


Total toe-in	Distance (A - B)	Minimum	Out 2.0 mm (Out 0.079 in)
		Nominal	In 3.0 mm (In 0.118 in)
		Maximum	In 8.0 mm (In 0.315 in)
	Angle (LH and RH) Degree minute (Decimal degree)	Minimum	Out 0° 14' (Out 0.23°)
		Nominal	In 0° 16' (In 0.27°)
		Maximum	In 0° 46' (In 0.77°)

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

Wheelarch Height (Unladen*)

INFOID:0000000013530964



LEIA0085E

Front (Hf)	700 mm (27.56 in)
Rear (Hr)	737 mm (29.02 in)

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

Brake Specifications

INFOID:0000000013530963

Unit: mm (in)

Front disc brake	Cylinder bore diameter	45.0 (1.772) × 2
	Pad length × width × thickness	140.0 × 48.0 × 9.5 (5.51 × 1.890 × 0.374)
	Rotor outer diameter × thickness	283 × 28.0 (11.14 × 1.102)
Rear drum brake	Cylinder bore diameter	22.22 (0.875)
	Lining length × width × thickness	218.7 × 35 × 4 (8.610 × 1.378 × 0.157)
	Drum inner diameter	228.6 (9.000)
Master cylinder	Cylinder bore diameter	23.8125 (15/16)
Control valve	Valve type	Electric brake force distribution
Brake booster	Diaphragm diameter	257 (10.118)

Brake Pedal

INFOID:0000000013530962

Unit: mm (in)

Item	Standard
Brake pedal height	202.9 (8.0) ± 5 (0.2)
Clearance between the brake pedal lever and the stop lamp switch threaded end	0.74 – 1.96 (0.0291 – 0.0772)
Clearance between the brake pedal lever and the brake pedal position switch threaded end (if equipped)	0.74 – 1.96 (0.0291 – 0.0772)
Brake pedal full stroke	127.0 (5.0)

Front Disc Brake

INFOID:0000000013530961

Unit: mm (in)

Item	Limit
Brake pad	Wear thickness
	2.0 (0.079)
Disc rotor	Wear thickness
	26.0 (1.024)
	Runout (with it attached to the vehicle)
	0.035 (0.0014)
	Thickness variation (measured at 8 positions)*
	0.015 (0.0006)

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

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Rear Drum Brake

INFOID:0000000013530960

Unit: mm (in)

Item		Limit
Brake lining	Wear thickness	1.5 (0.059)
Brake drum	Wear inner diameter	230.0 (9.06)

Fluids and Lubricants

INFOID:0000000013530959

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

Fluid types		Capacity (Approximate)		
		US measure	Imp measure	Liter
Fuel		14-1/2 gal	12-1/8 gal	55 ℓ
Engine oil Drain and refill	With oil filter change	4-5/8 qt	3-7/8 qt	4.4 ℓ
	Without oil filter change	4-1/2 qt	3-3/4 qt	4.2 ℓ
Dry engine (Overhaul)		5-1/2 qt	4-5/8 qt	5.2 ℓ
Engine coolant	With reservoir tank	8 qt	6-3/4 qt	7.6 ℓ
	Reservoir tank	3/4 qt	5/8 qt	0.7 ℓ
CVT fluid		8-1/8 qt	6-3/4 qt	7.7 ℓ
Brake fluid		—	—	—
Multi-purpose grease		—	—	—
Windshield washer fluid		4-3/4 qt	4 qt	4.5 ℓ
Air conditioner system refrigerant		0.88 lb	0.88 lb	0.40 kg
Air conditioner system oil		5.03 fl oz	5.3 fl oz	150 m ℓ