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NISSAN VERSA

MODEL C11 SERIES

QUICK REFERENCE INDEX

FOREWORD

This manual contains maintenance and repair procedures for the 2008 NISSAN VERSA.

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

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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: VERSA

Engine Tune-up Data

INFOID:0000000001903528

GENERAL SPECIFICATIONS

Engine type		MR18DE
Cylinder arrangement		In-line 4
Displacement cm^3 (cu in)		1,797 (109.65)
Bore and stroke mm (in)		84.0 x 81.1 (3.307 x 3.192)
Valve arrangement		DOHC
Firing order		1-3-4-2
Number of piston rings	Compression	2
	Oil	1
Compression ratio		9.9
Compression pressure kPa (bar, kg/cm^2 , psi) / 250 rpm	Standard	1,500 (15.0, 15.3, 217.6)
	Minimum	1,200 (12.0, 12.2, 174)
	Differential limit between cylinders	100 (1.0, 1.0, 15)

SPARK PLUG

Unit: mm (in)

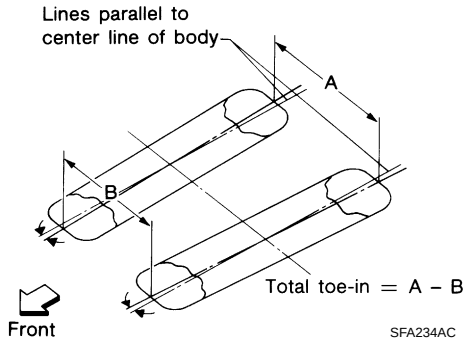
Plug type	Iridium-tipped TYPE
Make	DENSO
Standard type	FXE20HR11
Spark plug gap	Nominal: 1.1 (0.043)

Front Wheel Alignment (Unladen*)

INFOID:0000000001903529

Camber Degree minute (Decimal degree)	RH	Minimum	- 1° 05′ (- 1.08°)
		Nominal	- 0° 20′ (- 0.33°)
		Maximum	0° 25′ (0.42°)
	LH	Minimum	- 0° 55′ (- 0.92°)
		Nominal	- 0° 10′ (- 0.17°)
		Maximum	0° 35′ (0.58°)
	Left and right difference (RH - LH)	Minimum	-0° 45′ (-0.75°) or less
		Nominal	-0° 12′ (-0.20°) or less
		Maximum	0° 21′ (0.35°) or less
Caster Degree minute (Decimal degree)	RH	Minimum	4° 05′ (4.08°)
		Nominal	4° 50′ (4.83°)
		Maximum	5° 35′ (5.58°)
	LH	Minimum	3° 55′ (3.92°)
		Nominal	4° 40′ (4.67°)
		Maximum	5° 25′ (5.42°)
	Left and right difference (RH - LH)	Minimum	-0° 21′ (-0.35°) or less
		Nominal	0° 12′ (0.20°) or less
		Maximum	0° 45′ (0.75°) or less

Kingpin inclination Degree minute (Decimal degree)	Minimum	9° 10′ (9.17°)
	Nominal	9° 55′ (9.92°)
	Maximum	10° 40′ (10.67°)



Total toe-in	Distance (A - B)	Minimum	0 mm (0 in)
		Nominal	1 mm (0.04 in)
		Maximum	2 mm (0.08 in)
	Angle (left or right, each side) Degree minute (Decimal degree)	Minimum	0° 0′ (0°)
		Nominal	0° 3′ (0.05°)
		Maximum	0° 6′ (0.10°)

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

Rear Wheel Alignment (Unladen*)

INFOID:0000000001903531

Camber Degree minute (Decimal degree)		Minimum	– 2° 01′ (– 2.02°)
		Nominal	– 1° 31′ (– 1.52°)
		Maximum	– 1° 01′ (– 1.02°)
Total toe-in	Distance (A - B)	Minimum	1.0 mm (0.039 in)
		Nominal	5.0 mm (0.197 in)
		Maximum	9.0 mm (0.354 in)
	Angle (A - B) Degree minute (Decimal degree)	Minimum	0° 3′ (0.05°)
		Nominal	0° 14′ (0.23°)
		Maximum	0° 24 (0.41°)

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

Wheelarch Height (Unladen*)

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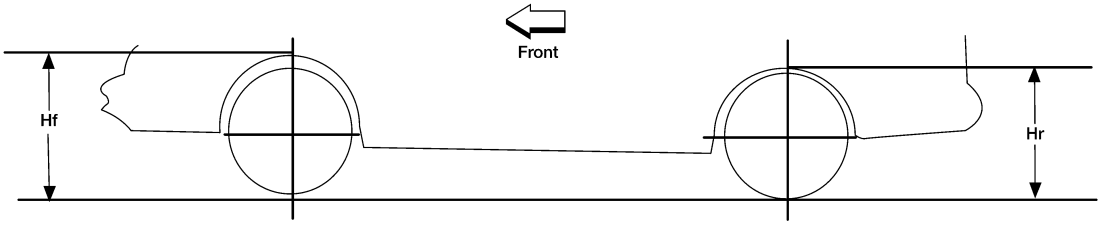

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Tire size	P185/65R15
Front (Hf)	686 mm (27.01 in)
Rear (Hr)	684 mm (26.93 in)

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

General Specification

INFOID:0000000001903532

Front brake	Brake model	CLZ25VA
	Cylinder bore diameter	57.2 mm (2.252 in)
	Pad Length × width × thickness	125.6 mm × 46.0 mm × 9.5 mm (4.945 in × 1.811 in × 0.374 in)
	Rotor outer diameter × thickness	280 mm × 24.0 mm (11.02 in × 0.945 in)
Rear brake	Brake model	LT20D
	Cylinder bore diameter	15.87 mm (0.625 in)
	Lining Length × width × thickness	194.1 mm × 30.0 mm × 4.0 mm (7.642 in × 1.181 in × 0.157 in)
	Drum outer diameter	228.6 mm (9.000 in)
Master cylinder	Cylinder bore diameter	22.22 mm (0.875 in)
Control valve	Valve model	Electric brake force distribution
Brake booster	Booster model	C255
	Diaphragm diameter	255 mm (10.04 in)

Brake Pedal

INFOID:0000000001903533

Unit: mm (in)

Brake pedal free height (from dash panel top surface)	A/T, CVT model	172.4 - 182.4 (6.79 - 7.18)
	M/T model	162.3 - 172.3 (6.39 - 6.78)
Brake pedal depressed height [under a force of 490 N (50 kg-f, 110 lb-f) with the engine running]	A/T, CVT model	98 (3.86) or more
	M/T model	90 (3.54) or more
Clearance between brake pedal lever and the threaded end of stop lamp switch		0.74 - 1.96 (0.0291 - 0.0772)
Pedal play		3 - 11 (0.12 - 0.43)

Front Disc Brake

INFOID:0000000001903534

Unit: mm (in)

Brake model		CLZ25VA
Brake pad	Standard thickness (new)	9.5 (0.374)
	Repair limit thickness	2.0 (0.079)
Disc rotor	Standard thickness (new)	24.0 (0.945)
	Repair limit thickness	22.0 (0.866)
	Runout limit	0.04 (0.0016)
	Maximum uneven wear (measured at 8 positions)	0.02 mm (0.0008 in) or less

Rear Drum Brake

INFOID:0000000001903535

Unit: mm (in)

Brake model		LT20D
Brake lining	Standard thickness (new)	4.0 (0.157)
	Repair limit thickness	1.5 (0.059)
Drum	Standard inner diameter (new)	228.6 (9.000)
	Repair limit inner diameter	230.0 (9.055)

QUICK REFERENCE CHART: VERSA

2008

Fluids and Lubricants

INFOID:0000000001903536

Description		Capacity (Approximate)		
		Liter	US measure	Imp measure
Fuel		52.0	13 3/4 gal	11 1/2 gal
Engine oil Drain and refill	With oil filter change	3.9	4 1/8 qt	3 3/8 qt
	Without oil filter change	3.7	3 7/8 qt	3 1/4 qt
Dry engine (engine overhaul)		4.9	5 1/8 qt	4 3/8 qt
Cooling system (with reservoir at max level)		6.8	7 1/4 qt	6 qt
Manual transaxle fluid (MTF)		2.0	4 1/4 pt	3 1/2 pt
Automatic transaxle fluid (ATF)		7.9	8 3/8 qt	7 qt
CVT fluid		8.3	8 3/4 qt	7 1/4 qt
Brake and clutch fluid		—	—	—
Multi-purpose grease		—	—	—
Windshield washer fluid		4.5	4 3/4 qt	4 qt
Air conditioning system refrigerant		0.45 ± 0.05 kg	0.99 ± 0.11 lb	0.99 ± 0.11 lb
Air conditioning system oil	Type 1	120 m ℓ	4.1 fl oz	4.2 fl oz
	Type 2	100 m ℓ	3.4 fl oz	3.5 fl oz