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NISSAN
LEAF
MODEL ZE0 SERIES

QUICK REFERENCE INDEX

FOREWORD

This manual contains maintenance and repair procedures for the 2013 NISSAN LEAF.

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) 488-3880

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: _____

_____

_____

_____

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: LEAF

Periodical Maintenance Specification

INFOID:0000000009357192

COOLANT CAPACITY (APPROXIMATE)

Unit: ℓ (US qt, Imp qt)

Coolant capacity (With reservoir tank at “MAX” level)	5.3 (5-5/8, 4-5/8)
Reservoir tank coolant capacity (At “MAX” level)	0.5 (4/8, 4/8)

RESERVOIR TANK CAP

Unit: kPa (kg/cm^2, psi)

Cap relief pressure	24 - 36 (0.2 - 0.3, 3.5 - 5.2)

RADIATOR

Unit: kPa (kg/cm^2, psi)

Leakage testing pressure	32 (0.3, 5)

Front Wheel Alignment

INFOID:0000000009357193

Item			Standard
Camber Degree minute (Decimal degree)		Minimum	–1° 10′ (–1.17°)
		Nominal	–0° 25′ (–0.42°)
		Maximum	0° 20′ (0.33°)
		Left and right difference*1	–0° 45′ (–0.75°) - 0° 45′ (0.75°)
Caster Degree minute (Decimal degree)		Minimum	4° 05′ (4.08°)
		Nominal	4° 50′ (4.83°)
		Maximum	5° 35′ (5.58°)
		Left and right difference*1	–0° 45′ (–0.75°) - 0° 45′ (0.75°)
Kingpin inclination Degree minute (Decimal degree)		Minimum	11° 10′ (11.17°)
		Nominal	11° 55′ (11.92°)
		Maximum	12° 40′ (12.67°)
Toe-in	Total toe-in Distance	Minimum	0 mm (0 in)
		Nominal	In 2 mm (In 0.08 in)
		Maximum	In 4 mm (In 0.15 in)
	Total toe-angle Degree minute (Decimal degree)	Minimum	0 ° 00′ (0.00°)
		Nominal	In 0 ° 10′ 48″ (In 0.18°)
		Maximum	In 0 ° 21′ 36″ (In 0.36°)

Measure value under unladen*2 conditions.

*1: A difference when assuming the left side a standard.

*2: Fluids and lubricants are full. Tire repair kit and mats are in designated positions.

Rear Wheel Alignment

INFOID:0000000009357194

Item		Standard
Camber Degree minute (Decimal degree)	Minimum	−1° 59′ (−1.98°)
	Nominal	−1° 29′ (−1.48°)
	Maximum	−0° 59′ (−0.98°)

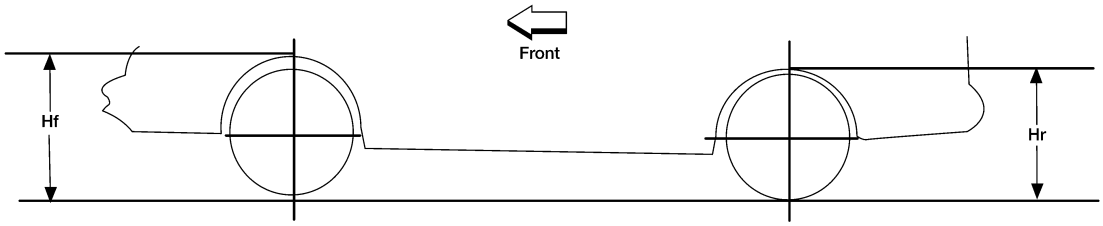
Item			Standard
Toe-in	Total toe-in Distance	Minimum	In 1.5 mm (In 0.06 in)
		Nominal	In 5.0 mm (In 0.20 in)
		Maximum	In 8.5 mm (In 0.33 in)
	Total toe-angle Degree minute (Decimal degree)	Minimum	Out 0° 08′ 24″ (Out 0.14°)
		Nominal	In 0° 19′ 12″ (In 0.32°)
		Maximum	In 0° 46′ 48″ (In 0.78°)

Measure value under unladen* conditions.
*: Fluids and lubricants are full. Tire repair kit and mats are in designated positions.

Wheelarch Height

INFOID:0000000009357195

UNITED STATES



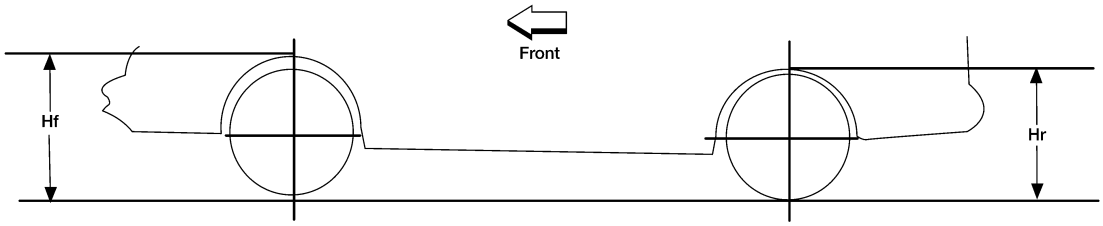
LEIA0085E

Tire size	205/55R16	215/50R17
Front (Hf)	706 mm (27.80 in)	714 mm (28.11 in)
Rear (Hr)	708 mm (27.87 in)	714 mm (28.11 in)

Measure value under unladen* conditions.

*:Fluids and lubricants are full. Tire repair kit and mats are in designated positions.

CANADA



LEIA0085E

Tire size	205/55R16	215/50R17
Front (Hf)	706 mm (27.80 in)	714 mm (28.11 in)
Rear (Hr)	709 mm (27.91 in)	715 mm (28.15 in)

Measure value under unladen* conditions.

*:Fluids and lubricants are full. Tire repair kit and mats are in designated positions.

Brake Specifications

INFOID:0000000009357196

Unit: mm (in)

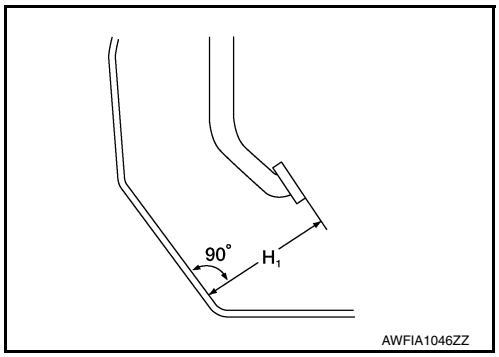
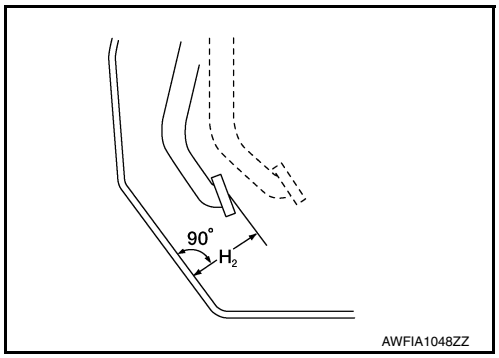
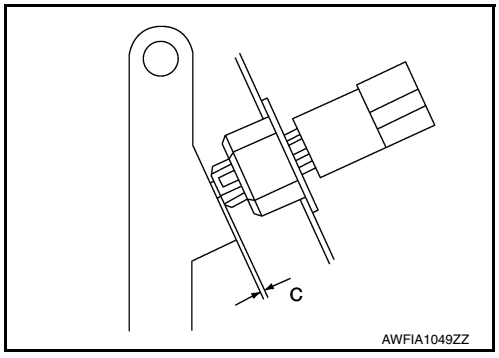
Front brake	Cylinder bore diameter	45.0 (1.772) × 2
	Pad length × width × thickness	140.0 × 48.0 × 9.5 (5.51 × 1.890 × 0.374)
	Rotor outer diameter × thickness	283 × 28.0 (11.14 × 1.102)

Rear brake	Cylinder bore diameter	38.1 (1.500)
	Pad length × width × thickness	83.0 × 31.9 × 8.5 (3.268 × 1.265 × 0.355)
	Rotor outer diameter × thickness	292 × 16.0 (11.50 × 0.630)
Master cylinder	Cylinder bore diameter	25.4 (1)
Control valve	Valve type	Electric brake force distribution

Brake Pedal

INFOID:0000000009357197

Unit: mm (in)

Item	Standard
	
Brake pedal height (H1)	159.9 – 169.9 (6.30 – 6.69)
	
Depressed brake pedal height (H2) Depressing [196 N (20 kg, 44 lb) while set the vehicle to READY]	93.0 (3.661) or more
	
Clearance (C) between stop lamp switch and brake pedal position switch threaded end and the brake pedal lever	0.74 – 1.96 (0.0291 – 0.0772)
Brake pedal play	3 – 11 (0.12 – 0.43)

Front Disc Brake

INFOID:0000000009357198

Unit: mm (in)

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

Rear Disc Brake

INFOID:0000000009357199

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc rotor	Wear thickness	14.0 (0.051)
	Thickness variation (measured at 8 positions)	0.015 (0.0006)
	Runout (with it attached to the vehicle)	0.1 (0.04)

Fluids and Lubricants

INFOID:0000000009357200

		Capacity (Approximate)		
		US measure	Imp measure	Liter
Cooling system	With reservoir tank	5-5/8 qt	4-5/8 qt	5.3
	Reservoir tank	4/8 qt	4/8 qt	0.5
Reduction gear fluid		3 pt	2-1/2 pt	1.41
Brake fluid		—	—	—
Air conditioning system refrigerant		—	—	—
Air conditioning system lubricants	With heat pump system	—	—	—
	Without heat pump system	—	—	—
Multi-purpose grease		—	—	—