Edition: June 2014
Revision: June 2014
Pub. No. SM15EA0ZE0U0

NISSAN
LEAF
MODEL ZE0 SERIES

QUICK REFERENCE INDEX

A	GENERAL INFORMATION	GI	General Information
B	ENGINE		
C	ELECTRIC POWER TRAIN	EVC	EV Control System
		TMS	Traction Motor System
		EVB	EV Battery System
		VC	Vehicle Charging System
		HCO	High Voltage Cooling System
		ACC	Accelerator Control System
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
		BRM	Body Repair Manual
L	DRIVER CONTROLS	MIR	Mirrors
		EXL	Exterior Lighting System
		INL	Interior Lighting System
		WW	Wiper & Washer
		DEF	Defogger
		HRN	Horn
		VSP	Approaching Vehicle Sound for Pedestrians (VSP)
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
		AV	Audio, Visual & Navigation System
O	CRUISE CONTROL & DRIVER ASSISTANCE	CCS	Cruise Control System
P	MAINTENANCE	MA	Maintenance

FOREWORD

This manual contains maintenance and repair procedures for the 2015 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.*

_____

_____

_____

_____

_____

_____

_____

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: LEAF

Periodical Maintenance Specification

INFOID:0000000011184035

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

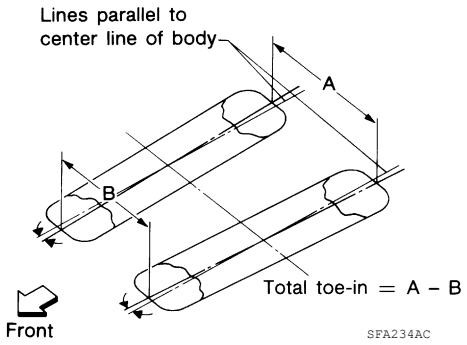
Unit: kPa (kg/cm^2, psi)

Leakage testing pressure	32 (0.3, 5)

Front Wheel Alignment

INFOID:0000000011183710

Item		Standard
Camber Degree minute (Decimal degree)	Minimum	–1° 10′ (–1.17°)
	Nominal	–0° 25′ (–0.42°)
	Maximum	0° 20′ (0.33°)
	LH and RH 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°)
	LH and RH 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°)



Total toe-in	Distance (A - B)	Minimum	0 mm (0 in)
		Nominal	In 2 mm (In 0.08 in)
		Maximum	In 4 mm (In 0.15 in)
	Angle (LH and RH) 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.

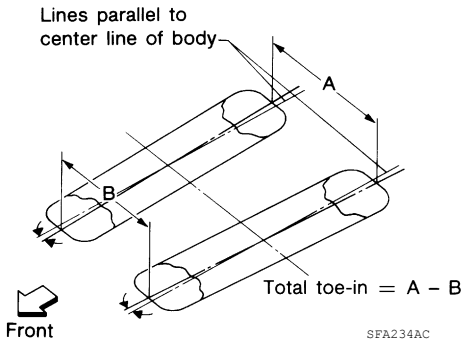
*1: A difference when assuming the LH a standard.

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

Rear Wheel Alignment

INFOID:0000000011183709

Tire size			205/55R16	215/50R17
Camber Degree minute (Decimal degree)		Minimum	0° 59′ (0.98°)	
		Nominal	1° 29′ (1.48°)	
		Maximum	1° 59′ (1.98°)	



Total toe-in	Distance (A - B)	Minimum	Out 1.5 mm (Out 0.059 in)	Out 1.6 mm (Out 0.063 in)
		Nominal	In 3.3 mm (In 0.130 in)	In 3.4 mm (In 0.134 in)
		Maximum	In 8.1 mm (In 0.319 in)	In 8.4 mm (In 0.331 in)
	Angle (LH and RH) Degree minute (Decimal degree)	Minimum	Out 0° 09′ (Out 0.15°)	
		Nominal	In 0° 19′ (In 0.32°)	
		Maximum	In 0° 47′ (In 0.78°)	

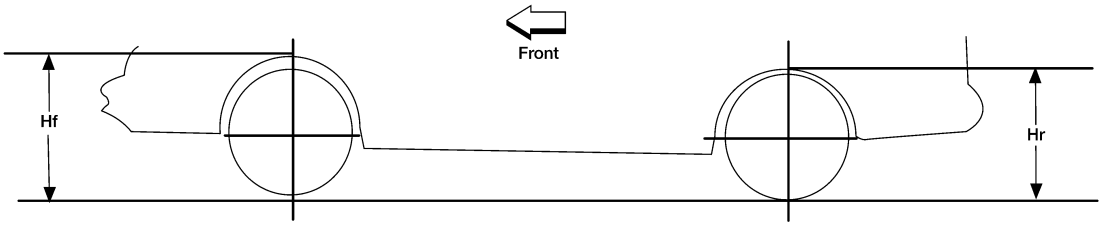
Measure value under unladen* conditions.

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

Wheelarch Height

INFOID:0000000011183708

UNITED STATES

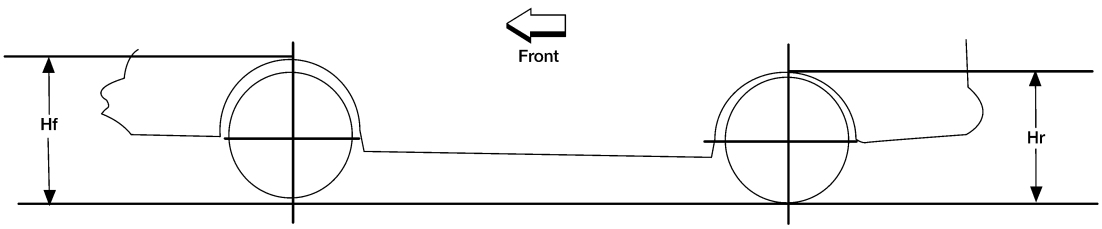


Tire size	205/55R16	215/50R17
Front (Hf)	706 mm (27.80 in)	714 mm (28.11 in)
Rear (Hr)	708 mm (27.87 in)	714 mm (28.11 in)

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:0000000011183707

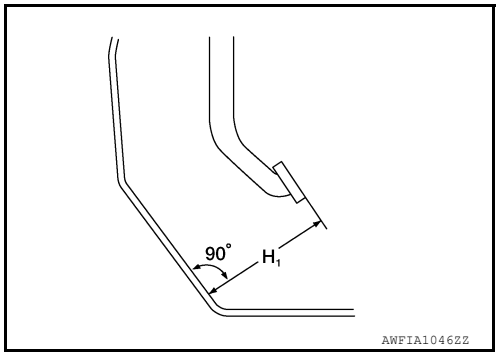
Unit: mm (in)

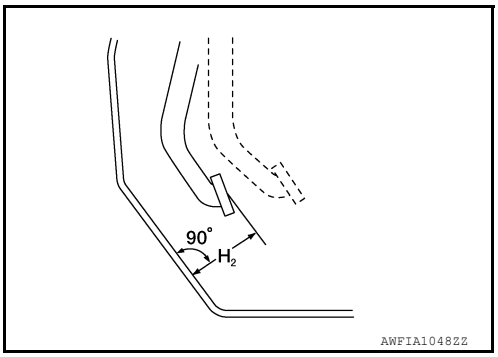
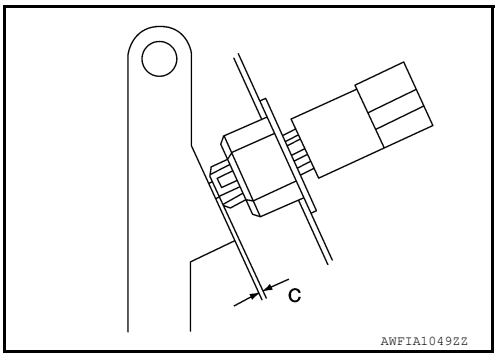
Front brake	Cylinder bore diameter	57.2 (2.252)
	Pad length × width × thickness	140.0 × 48.0 × 10.0 (5.51 × 1.890 × 0.394)
	Rotor outer diameter × thickness	296 × 26.0 (11.65 × 1.024)
Rear brake	Cylinder bore diameter	38.1 (1.500)
	Pad length × width × thickness	83.0 × 31.9 × 8.5 (3.268 × 1.265 × 0.355)
	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:0000000011183706

Unit: mm (in)

Item	Standard
 AWFIA1046ZZ	
Brake pedal height (H_1)	159.9 – 169.9 (6.30 – 6.69)

Item	Standard
	
Depressed brake pedal height (H_2) Depressing [196 N (20 kg, 44 lb) while set the vehicle to READY]	93.0 (3.661) or more
Brake pedal full stroke	132.2 (5.20)
	
Clearance (C) between stop lamp switch and brake pedal position switch (if equipped) 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:0000000011183705

Unit: mm (in)

Item		Limit
Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	24.0 (0.945)
	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:0000000011183704

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 (0.0039)

Fluids and Lubricants

INFOID:0000000011183703

		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		—	—	—
Windshield washer fluid	Canada	4-3/4 qt	4 qt	4.5 ℓ
	USA	2-3/5 qt	2-1/5 qt	2.5 ℓ
Air conditioning system refrigerant	With heat pump system	1.874 lb	1.874 lb	0.850 kg
	Without heat pump system	0.937 lb	0.937 lb	0.425 kg
Air conditioning system lubricants	With heat pump system	4.7 fl oz	4.9 fl oz	140 mℓ
	Without heat pump system	5.1 fl oz	5.3 fl oz	150 mℓ
Multi-purpose grease		—	—	—