

Edition: September 2011
Revision: June 2014
Publication No. SM2E-1ZE0U0

QUICK REFERENCE INDEX

NISSAN LEAF MODEL ZE0 SERIES

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 & DRIVELINE	TM Transaxle & Transmission
	FAX Front Axle
	RAX Rear Axle
E SUSPENSION	FSU Front Suspension
	RSU Rear Suspension
F BRAKES	WT Road Wheels & Tires
	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
L DRIVER CONTROLS	EXT Exterior
	BRM Body Repair
	MIR Mirrors
	EXL Exterior Lighting System
	INL Interior Lighting System
	WW Wiper & Washer
	DEF Defogger
	HRN Horn
	VSP Approaching Vehicle Sound for Pedestrians (VSP)
	PWO Power Outlet
	BCS Body Control System
M ELECTRICAL & POWER CONTROL	LAN LAN System
	PCS Power Control System
	CHG Charging System
	PG Power Supply, Ground & Circuit Elements
	MWI Meter, Warning Lamp & Indicator
	WCS Warning Chime System
N DRIVER INFORMATION & MULTIMEDIA	
	AV Audio, Visual & Navigation System
	CCS Cruise Control System
O CRUISE CONTROL & DRIVER ASSISTANCE	
P MAINTENANCE	MA Maintenance

© 2014 NISSAN MOTOR CO.,LTD.

All Rights Reserved. No part of this Service Manual may be reproduced or stored in a retrieval system, or transmitted in any form, or by any means, electronic, mechanical, recording or otherwise, without the prior written permission of NISSAN MOTOR CO., LTD.

A

C

D

E

F

G

H

I

J

K

L

M

N

O

P

FOREWORD

This manual contains maintenance and repair procedure for the 2012 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 MOTOR CO., LTD.



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

PFP:00000

TUNE-UP DATA (EM61)

ELS0003W

Motor model	EM61
Cooling system leakage testing pressure	kPa (kg/cm ² , psi) 32 (0.3, 5)

FRONT WHEEL ALIGNMENT

ELS0003X

Camber Degree minute (Decimal degree)		Minimum	-1° 10' (-1.16°)
		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' (4.09°)
		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' (12.66°)
Toe-in	Total toe-in Distance	Minimum	In 1 mm (0.04 in)
		Nominal	In 2 mm (0.08 in)
		Maximum	In 3 mm (0.12 in)
	Toe angle (left wheel or right wheel) Degree minute (Decimal degree)	Minimum	In 0° 02' 46'' (0.046°)
		Nominal	In 0° 05' 28'' (0.091°)
		Maximum	In 0° 08' 09'' (0.136°)

Measure value under unladen*² conditions.*¹: A difference when assuming the left side a standard.*²: Fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

REAR WHEEL ALIGNMENT

ELS0003Y

Camber Degree minute (Decimal degree)		Minimum	−1° 59′ (−1.98°)
		Nominal	−1° 29′ (−1.48°)
		Maximum	−0° 59′ (−0.99°)
Toe-in	Total toe-in Distance	Minimum	In 1.5 mm (In 0.06 in)
		Nominal	In 5.5 mm (In 0.22 in)
		Maximum	In 9.5 mm (In 0.37 in)
	Toe angle (left wheel or right wheel) Degree minute (Decimal degree)	Minimum	In 0° 04′ 05″ (In 0.068°)
		Nominal	In 0° 14′ 56″ (In 0.249°)
		Maximum	In 0° 25′ 48″ (In 0.43°)

Measure value under unladen* conditions.

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

BRAKE PEDAL

Unit: mm (in.)

Brake pedal height	159.9 - 169.9 (6.30 - 6.69)
Depressed brake pedal height [Depressing 490 N (50 kg, 110 lb) while set the vehicle to READY]	93.0 (3.661) or more

FRONT DISC BRAKE

Unit: mm (in.)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc rotor	Wear thickness	26.0 (1.024)

REAR DISC BRAKE

Unit: mm (in.)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc rotor	Wear inner diameter	14.0 (0.051)

REFILL CAPACITIES

ELS00040

UNIT		Liter	US measure
Coolant (With reservoir tank at "MAX" level)		6.6	7 qt
Reduction gear oil		1.1	2-3/8 pt
Air conditioning system	Compressor oil	0.15	5.1 fl oz
	Refrigerant	0.425 kg	0.94 lb
	Heater fluid	1,830 cm ³	112.1 cu in