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NISSAN

JUKE

MODEL F15 SERIES

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GI General Information

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

CL Clutch

TM Transaxle & Transmission

DLN Driveline

FAX Front Axle

RAX Rear Axle

FSU Front Suspension

RSU Rear Suspension

WT Road Wheels & Tires

BR Brake System

PB Parking Brake System

BRC Brake Control System

ST Steering System

STC Steering Control System

SB Seat Belt

SR SRS Airbag

SRC SRS Airbag Control System

VTL Ventilation System

HA Heater & Air Conditioning System

HAC Heater & Air Conditioning Control System

INT Interior

IP Instrument Panel

SE Seat

DLK Door & Lock

SEC Security Control System

GW Glass & Window System

PWC Power Window Control System

RF Roof

EXT Exterior

BRM Body Repair

MIR Mirrors

EXL Exterior Lighting System

INL Interior Lighting System

WW Wiper & Washer

DEF Defogger

HRN Horn

PWO Power Outlet

BCS Body Control System

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

AV Audio, Visual & Navigation System

CCS Cruise Control System

DMS Drive Mode System

MA Maintenance

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FOREWORD

This manual contains maintenance and repair procedure for the 2012 NISSAN JUKE.

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:

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39001 Sunrise Drive, P.O. Box 9200
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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 JUKE
ENGINE TUNE-UP DATA (MR16DDT)

PFP:00000

ELS0003W

Engine model	MR16DDT	
Firing order	1 - 3 - 4 - 2	
Idle speed	rpm	
	CVT: No load (in P or N position)	650 ± 50
	M/T: No load (in Neutral position)	600 ± 50
Ignition timing (BTDC at idle speed)		
	CVT: No load (in P or N position)	6° ± 2°
	M/T: No load (in Neutral position)	8° ± 2°
Tensions of drive belt	Auto adjustment by auto tensioner	
Radiator cap relief pressure	kPa (kg/cm ² , psi)	
	Standard	78 - 98 (0.8 - 1.0, 11 - 14)
	Limit	59 (0.6, 9)
Cooling system leakage testing pressure	kPa (kg/cm ² , psi)	98 (1.0, 14)
Compression pressure	kPa (kg/cm ² , psi)/rpm	
	Standard	1,560 (15.9, 226.2)/250
	Minimum	1,190 (12.1, 172.6)/250
	Differential limit between cylinders	100 (1.0, 14.5)/250
Spark plug (Iridium-tipped type)	Make	NTK
	Standard type	DILKAR7C9H
	Gap(Nominal) Standard	0.9 (0.035)
	Limit	1.1 (0.043)

*: Under the following conditions

- A/C switch: OFF
- Electric load: OFF (Lights, heater fan & rear window defogger)
- Steering wheel: Kept in straight-ahead position

FRONT WHEEL ALIGNMENT

ELS0003X

FOR USA MODELS

Item		Standard	
Axle type		2WD	AWD
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	3° 45' (3.75°)	3° 50' (3.84°)
	Nominal	4° 30' (4.50°)	4° 35' (4.58°)
	Maximum	5° 15' (5.25°)	5° 20' (5.33°)
	Left and right difference*1	-0° 45' (-0.75°) - 0° 45' (0.75°)	
Kingpin inclination Degree minute (Decimal degree)	Minimum	10° 40' (10.67°)	
	Nominal	11° 25' (11.42°)	
	Maximum	12° 10' (12.16°)	

QUICK REFERENCE CHART JUKE

2012

Item			Standard	
Axle type			2WD	AWD
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' (0.04°)	
		Nominal	In 0° 05' (0.08°)	
		Maximum	In 0° 08' (0.13°)	

Measure value under unladen*2 conditions.

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

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

FOR CANADA MODELS

Item			Standard	
Axle type			2WD	AWD
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	3° 40' (3.67°)	3° 50' (3.84°)
		Nominal	4° 25' (4.42°)	4° 35' (4.58°)
		Maximum	5° 10' (5.16°)	5° 20' (5.33°)
		Left and right difference*1	-0° 45' (-0.75°) - 0° 45' (0.75°)	
Kingpin inclination Degree minute (Decimal degree)		Minimum	10° 40' (10.67°)	
		Nominal	11° 25' (11.42°)	
		Maximum	12° 10' (12.16°)	
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' (0.04°)	
		Nominal	In 0° 05' (0.08°)	
		Maximum	In 0° 08' (0.13°)	

Measure value under unladen*2 conditions.

*1: A difference when assumed 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

2WD

FOR USA MODELS

Item		Standard	
Camber Degree minute (Decimal degree)		Minimum	-2° 01' (-2.01°)
		Nominal	-1° 31' (-1.52°)
		Maximum	-1° 01' (-1.02°)
Toe-in	Total toe-in Distance	Minimum	In 0.1 mm (In 0.004 in)
		Nominal	In 4.1 mm (In 0.161 in)
		Maximum	In 8.1 mm (In 0.319 in)
	Toe angle (left wheel and right wheel)*1 Degree minute (Decimal degree)	Minimum	In 0° 01' (In 0.02°)
		Nominal	In 0° 21' (In 0.35°)
		Maximum	In 0° 41' (In 0.68°)

Measure value under unladen*2 conditions.

*1: Since adjustment mechanism is not included, the value of the left and right wheels (both wheels) must be used as the standard value.

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

FOR CANADA MODELS

Item		Standard	
Camber Degree minute (Decimal degree)		Minimum	-2° 01' (-2.01°)
		Nominal	-1° 31' (-1.52°)
		Maximum	-1° 01' (-1.02°)
Toe-in	Total toe-in Distance	Minimum	0.0 mm (0.0 in)
		Nominal	In 4.0 mm (In 0.16 in)
		Maximum	In 8.0 mm (In 0.31 in)
	Toe angle (left wheel and right wheel)*1 Degree minute (Decimal degree)	Minimum	In 0° 01' (In 0.02°)
		Nominal	In 0° 21' (In 0.35°)
		Maximum	In 0° 41' (In 0.68°)

Measure value under unladen*2 conditions.

*1: Since adjustment mechanism is not included, the value of the left and right wheels (both wheels) must be used as the standard value.

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

AWD FOR USA MODELS

Item			Standard
Camber Degree minute (Decimal degree)		Minimum	-0° 45' (-0.75°)
		Nominal	0° 00' (0.00°)
		Maximum	0° 45' (0.75°)
Toe-in	Total toe-in Distance	Minimum	In 1.1 mm (0.043 in)
		Nominal	In 3.1 mm (0.122 in)
		Maximum	In 5.1 mm (0.201 in)
	Toe angle (left wheel or right wheel) Degree minute (Decimal degree)	Minimum	In 0° 03' (0.05°)
		Nominal	In 0° 08' (0.13°)
		Maximum	In 0° 13' (0.21°)

Measure value under unladen* conditions.

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

FOR CANADA MODELS

Item			Standard
Camber Degree minute (Decimal degree)		Minimum	-0° 43' (-0.71°)
		Nominal	0° 02' (0.03°)
		Maximum	0° 47' (0.78°)
Toe-in	Total toe-in Distance	Minimum	In 0.9 mm (0.035 in)
		Nominal	In 2.9 mm (0.114 in)
		Maximum	In 4.9 mm (0.193 in)
	Toe angle (left wheel or right wheel) Degree minute (Decimal degree)	Minimum	In 0° 02' (0.04°)
		Nominal	In 0° 07' (0.12°)
		Maximum	In 0° 12' (0.20°)

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	160.4 - 170.4 (6.31 - 6.71)
Depressed brake pedal height [Depressing 490 N (50 kg, 110 lb) while turning the engine ON]	70.0 (2.756) or more

FRONT DISC BRAKE

Unit: mm (in)

Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	24.0 (0.945)

REAR DISC BRAKE

Unit: mm (in)

Brake pad	Wear limit thickness	2.0 (0.079)
Disc rotor	Wear limit thickness	8.0 (0.315)

REFILL CAPACITIES

ELS00040

UNIT			Liter	US measure
Fuel tank		2WD models	50.0	13-1/4 gal
		AWD models	45.0	11-7/8 gal
Engine Coolant (With reservoir tank) at MAX level			8.1	8-4/8 qt
Engine oil	Drain and refill			
	With oil filter change		4.5	4-6/8 qt
	Without oil filter change		4.3	4-4/8 qt
	Dry engine (Overhaul)		5.4	5-6/8 qt
Transaxle	CVT	2WD	8.2	8-5/8 qt
		AWD	8.6	9-1/8 qt
	M/T		2.0	4-1/4 pt
Transfer			0.37	3/4 pt
Final drive			0.4	7/8 pt
Air conditioning system	Compressor oil		0.12	4.1 fl oz
	Refrigerant		0.40 kg	0.9 lb