Edition: September 2011	QUICK REFERENCE INDEX		
Revision: October 2011	A GENERAL INFORMATION	GI	General Information
Publication No. SM2E-1F15U0	B ENGINE	EM	Engine Mechanical
		LU	Engine Lubrication System
		СО	Engine Cooling System
		EC	Engine Control System
		FL EX	Fuel System Exhaust System
		STR	Starting System
		ACC	Accelerator Control System
	C ELECTRIC POWER TRAIN		·
	D TRANSMISSION & DRIVELINE	CL	Clutch
		TM	Transaxle & Transmission
		DLN	Driveline
		FAX	Front Axle
NISSAN	E SUSPENSION	RAX FSU	Rear Axle Front Suspension
	L JUJI LINJIUN	RSU	Rear Suspension
JUKE		1100	Trodi Gaopono.on
MODEL F15 SERIES		WT	Road Wheels & Tires
MODEL I IU SERIES	F BRAKES	BR	Brake System
		PB	Parking Brake System
	O OTTERNIA	BRC	Brake Control System
	G STEERING	STC	Steering System Steering Control System
	H RESTRAINTS	SB	Seat Belt
	TI RESTRAINTS	0.0	ocat bon
		SR	SRS Airbag
		SRC	SRS Airbag Control System
	I VENTILATION, HEATER & AIR CONDITIONER		Ventilation System
	CONDITIONER	HA	Heater & Air Conditioning System
	J BODY INTERIOR	INT	Heater & Air Conditioning Control System Interior
	3 BODI INTERIOR	IP	Instrument Panel
		SE	Seat
	K BODY EXTERIOR, DOORS,	DLK	Door & Lock
	ROOF & VEHICLÉ SECURITY	SEC	Security Control System
		GW	Glass & Window System
		PWC RF	Power Window Control System Roof
		ΚΓ	- NOOI
		EXT	Exterior
		BRM	Body Repair
	L DRIVER CONTROLS	MIR	Mirrors
		EXL	Exterior Lighting System
		INL	Interior Lighting System
		WW	Wiper & Washer
		DEF HRN	Defogger Horn
© 2011 NISSAN MOTOR CO.,LTD.		HIM	No. 1
<u></u>	M ELECTRICAL & POWER CON-	PWO	Power Outlet
	TROL	BCS	Body Control System
All Rights Reserved. No part		LAN	LAN System
of this Service Manual may		PCS	Power Control System
be reproduced or stored in a		CHG	Charging System  Power Supply Ground & Circuit Floments
-	N DRIVER INFORMATION &	PG MWI	Power Supply, Ground & Circuit Elements  Meter, Warning Lamp & Indicator
retrieval system, or transmit-	MULTIMEDIA	WCS	Warning Chime System
ted in any form, or by any		- NCS	Marining Online Oysteni
means, electronic, mechani-		AV	Audio, Visual & Navigation System
cal, recording or otherwise,	O CRUISE CONTROL &	ccs	Cruise Control System
without the prior written per-	DRIVER ASSISTANCE		
mission of NISSAN MOTOR		DMS	Drive Mode System
CO., LTD.	P MAINTENANCE	MA	Maintenance
00., LID.			

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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!

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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 incl	ude a copy of each page, marked with your comments.		
Are the trouble	diagnosis procedures logical and ea	sy to use? (circle your answer) YES NO		
If no, what page r	number(s)?Note: Please in	clude a copy of each page, marked with your comments.		
Please describe	the issue or problem in detail:			
Is the organizati	ion of the manual clear and easy to f	follow? (circle your answer) YES NO		
_	:	, , , ,		
What informatio repairing custor		rvice Manuals to better support you in servicing or		
DATE:	YOUR NAME:	POSITION:		
DEALER:	DEALER NO.:	ADDRESS:		
CITY:	STATE/PROV./COUNT	TRY: ZIP/POSTAL CODE:		

ELS0003W

# QUICK REFERENCE CHART JUKE ENGINE TUNE-UP DATA (MR16DDT)

PFP:00000

Engine model			MR16DDT
Firing order			1 - 3 - 4 - 2
Idle speed		rpm	
	CVT: No load (in	P or N position)	$650\pm50$
	M/T: No load (in	Neutral position)	600 ± 50
Ignition timing (BTDC at i	dle speed)		
	CVT: No load (in	P or N position)	$6^{\circ}\pm2^{\circ}$
	M/T: No load (in	Neutral position)	8° ± 2°
Tensions of drive belt			Auto adjustment by auto tensioner
Radiator cap relief pressure kPa (kg/cm², psi)		kPa (kg/cm² , psi)	
	Standard		78 - 98 (0.8 - 1.0, 11 - 14)
	Limit		59 (0.6, 9)
Cooling system leakage t	esting pressure	kPa (kg/cm² , psi)	98 (1.0, 14)
Compression pressure		kPa (kg/cm² , psi)/rpm	
	Standard		1,560 (15.9, 226.2)/250
	Minimum		1,190 (12.1, 172.6)/250
	Differential limit I	petween cylinders	100 (1.0, 14.5)/250
	Make		NTK
Spark plug (Iridium-tipped type)	Standard type		DILKAR7C9H
	Can(Naminal)	Standard	0.9 (0.035)
	Gap(Nominal)	Limit	1.1 (0.043)

<sup>\*:</sup> 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		Stand	ard
Axle type		2WD	AWD
	Minimum	-1° 10′ (-1.16°)	
Camber	Nominal	–0° 25′ (-	-0.42°)
Degree minute (Decimal degree)	Maximum	0° 20′ (0	).33°)
	Left and right difference*1	-0° 45′ (-0.75°) - 0° 45′ (0.75°)	
	Minimum	3° 45′ (3.75°)	3° 50′ (3.84°)
Caster	Nominal	4° 30′ (4.50°)	4° 35′ (4.58°)
Degree minute (Decimal degree)	Maximum	5° 15′ (5.25°)	5° 20′ (5.33°)
	Left and right difference*1	-0° 45′ (-0.75°) - 0° 45′ (0.75°)	
	Minimum	10° 40′ (10.67°)	
Kingpin inclination  Degree minute (Decimal degree)	Nominal	11° 25′ (1	11.42°)
_ = = = = = = = = = = = = = = = = = = =	Maximum	12° 10′ (1	(2.16°)

Item		Stan	dard	
Axle ty	ре		2WD	AWD
		Minimum	In 1 mm	(0.04 in)
	Total toe-in Distance	Nominal	In 2 mm	(0.08 in)
Too in		Maximum	In 3 mm	(0.12 in)
Toe-in	Toe angle	Minimum	In 0° 02	′ (0.04°)
	(left wheel or right wheel)  Degree minute	Nominal	In 0° 05	′ (0.08°)
	(Decimal degree)	Maximum	In 0° 08	′ (0.13°)

Measure value under unladen\*2 conditions.

#### FOR CANADA MODELS

Item		Standa	rd	
Axle ty	ре		2WD	AWD
Minimum		-1° 10′ (-1.16°)		
Cambe	er	Nominal	-0° 25′ (-0.42°)	
Degree	e minute (Decimal degree)	Maximum	0° 20′ (0.33°)	
		Left and right difference*1	-0° 45′ (-0.75°) -	0° 45′ (0.75°)
		Minimum	3° 40′ (3.67°)	3° 50′ (3.84°)
Caster		Nominal	4° 25′ (4.42°)	4° 35′ (4.58°)
Degree	Degree minute (Decimal degree)	Maximum	5° 10′ (5.16°)	5° 20′ (5.33°)
		Left and right difference*1	-0° 45′ (-0.75°) - 0° 45′ (0.75°)	
		Minimum	10° 40′ (10.67°)	
	n inclination e minute (Decimal degree)	Nominal	11° 25′ (11.42°)	
Dogio	o minute (Boomial dogress)	Maximum	12° 10′ (12	2.16°)
		Minimum	In 1 mm (0	.04 in)
	Total toe-in Distance	Nominal	In 2 mm (0.08 in)	
Toe-in	2.0000	Maximum	In 3 mm (0.12 in)	
106-111	Toe angle	Minimum	In 0° 02′ (0	0.04°)
	(left wheel or right wheel) Degree minute	Nominal	In 0° 05′ (0	).08°)
	(Decimal degree)	Maximum	In 0° 08′ (0	D.13°)

Measure value under unladen\*2 conditions.

<sup>\*1:</sup> A difference when assumed the left side a standard.

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

<sup>\*1:</sup> A difference when assumed the left side a standard

<sup>\*2:</sup> 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°)
209.00	Degree minute (Decimal degree)		-1° 01′ (-1.02°)
		Minimum	In 0.1 mm (In 0.004 in)
	Total toe-in Distance	Nominal	In 4.1 mm (In 0.161 in)
Toe-in	Distance	Maximum	In 8.1 mm (In 0.319 in)
10e-111		Minimum	In 0° 01′ (In 0.02°)
	Toe angle (left wheel and right wheel)*1 Degree minute (Decimal degree)	Nominal	In 0° 21′ (In 0.35°)
	begree minate (beemlar degree)	Maximum	In 0° 41′ (In 0.68°)

Measure value under unladen\*2 conditions.

#### FOR CANADA MODELS

Item		Standard	
Camber Degree minute (Decimal degree)		Minimum	-2° 01′ (-2.01°)
		Nominal	-1° 31′ (-1.52°)
209.00 (20	oa. dog. do,	Maximum	-1° 01′ (-1.02°)
		Minimum	0.0 mm (0.0 in)
	Total toe-in Distance	Nominal	In 4.0 mm (In 0.16 in)
Toe-in		Maximum	In 8.0 mm (In 0.31 in)
10e-II1		Minimum	In 0° 01′ (In 0.02°)
Toe angle (left wheel and right wheel)*1 Degree minute (Decimal degree)		Nominal	In 0° 21′ (In 0.35°)
	Maximum	In 0° 41′ (In 0.68°)	

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

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

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°)
Degree minate (Deam	Degree minute (Decimal degree)		0° 45′ (0.75°)
		Minimum	In 1.1 mm (0.043 in)
	Total toe-in Distance	Nominal	In 3.1 mm (0.122 in)
Toe-in	2 islands	Maximum	In 5.1 mm (0.201 in)
roe-in	Toe-in	Minimum	In 0° 03′ (0.05°)
	Toe angle (left wheel or right wheel)  Degree minute (Decimal degree)	Nominal	In 0° 08′ (0.13°)
	Degree minute (Decimal degree)	Maximum	In 0° 13′ (0.21°)

Measure value under unladen\* conditions.

## FOR CANADA MODELS

Item		Standard	
Camber Degree minute (Decimal degree)		Minimum	-0° 43′ (-0.71°)
		Nominal	0° 02′ (0.03°)
9 (	Degree minute (Decimal degree)		0° 47′ (0.78°)
	Total toe-in Distance	Minimum	In 0.9 mm (0.035 in)
		Nominal	In 2.9 mm (0.114 in)
Toe-in		Maximum	In 4.9 mm (0.193 in)
106-111	Toe angle (left wheel or right wheel)	Minimum	In 0° 02′ (0.04°)
Degree minute (Decimal degree)		Nominal	In 0° 07′ (0.12°)
	13 12 ( 33	Maximum	In 0° 12′ (0.20°)

Measure value under unladen\* conditions.

#### **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)

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

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

## **QUICK REFERENCE CHART JUKE**

## **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	8.1	8-4/8 qt		
	Drain and ref	ill		
Engine oil		With oil filter change	4.5	4-6/8 qt
Engine oil		Without oil filter change	4.3	4-4/8 qt
	Dry engine (Overhaul)		5.4	5-6/8 qt
	CVT	2WD	8.2	8-5/8 qt
Transaxle		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 quaters	Compressor oil		0.12	4.1 fl oz
Air conditioning system	Refrigerant		0.40 kg	0.9 lb