Edition: October 2013		ICK REFERENCE INDEX		
Publication No. SM14E00Z12U0			GI	General Information
	В	ENGINE	EM	Engine Mechanical
			LU	Engine Lubrication System
			CO	Engine Cooling System
			EC	Engine Control System
			FL EX	Fuel System Exhaust System
			STR	Starting System
			ACC	Accelerator Control System
	С	ELECTRIC POWER TRAIN	AUU	Accelerator Control Cystem
	•			
	_	TRANSMISSION & BRIVELING	01	
	D	TRANSMISSION & DRIVELINE		Clutch Transaxle & Transmission
			TM	Transaxie & Transmission
			FAX	Front Axle
			RAX	Rear Axle
NISSAN	Е	SUSPENSION	FSU	Front Suspension
IVIDDAIV			RSU	Rear Suspension
CUBE				
~~-			WT	Road Wheels & Tires
<b>MODEL Z12 SERIES</b>	F	BRAKES	BR	Brake System
			PB	Parking Brake System
			BRC	Brake Control System
	G	STEERING	ST	Steering System
		DECEDAINTO	STC	Steering Control System
	н	RESTRAINTS	SB	Seat Belt Control System
			SBC SR	Seat Belt Control System SRS Airbag
			SRC	SRS Airbag Control System
	$\overline{}$	VENTILATION, HEATER & AIR		Ventilation System
	•	CONDITIONER	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
		NOOT & VEHICLE CLOCKITT	SEC	Security Control System Glass & Window System
			PWC	Power Window Control System
			FWC	Fower William Control System
			EXT	Exterior
			BRM	Body Repair
	L	DRIVER CONTROLS	MIR	Mirrors
			EXL	Exterior Lighting System
			INL	Interior Lighting System
			ww	Wiper & Washer
			DEF	Defogger
			HRN	Horn
© 2013 NISSAN MOTOR CO.,LTD.	R/I	ELECTRICAL & POWER CON-	PWO	Power Outlet
	IVI	TROL	BCS	Body Control System
			LAN	LAN System
All Rights Reserved. No part			PCS	Power Control System
of this Service Manual may			CHG	Charging System
be reproduced or stored in a			PG	Power Supply, Ground & Circuit Elements
retrieval system, or transmit-	N	DRIVER INFORMATION &	MWI	Meter, Warning Lamp & Indicator
ted in any form, or by any		MULTIMEDIA	wcs	Warning Chime System
means, electronic, mechani-				
			ΑV	Audio, Visual & Navigation System
cal, recording or otherwise,	0	CRUISE CONTROL &	CCS	Cruise Control System
without the prior written per-		DRIVER ASSISTANCE		
mission of NISSAN MOTOR	_	MAINITCNIANOC		Maintonana
	Р	MAINTENANCE	MA	Maintenance
CO., LTD.				
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# **FOREWORD**

This manual contains maintenance and repair procedure for the 2014 NISSAN CUBE.

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.

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#### 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) 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) 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: \_\_\_ \_\_\_\_\_ STATE/PROV./COUNTRY: \_\_\_\_\_ ZIP/POSTAL CODE: \_\_\_\_

ELS0003W

## **QUICK REFERENCE CHART CUBE**

# QUICK REFERENCE CHART CUBE ENGINE TUNE-UP DATA (MR18DE)

PFP:00000

Engine model			MR18DE	
Firing order			1-3-4-2	
Idle speed CVT (In "P or N" position) M/T (In Neutral position)		rpm	700 ± 50	
Ignition timing (BTDC at idle speed)			13° ± 5°	
Tensions of drive belt			Belt tension is not necessary, as it is automatically adjusted by drive belt auto-tensioner.	
Radiater cap relief pressure	)	kPa (kg/cm <sup>2</sup> , psi)		
	Standard		78 - 98 (0.8 - 1.0, 11 - 14)	
	Limit		59 (0.6, 9)	
Cooling system leakage tes	sting pressure	kPa (kg/cm², psi)	98 (1.0, 14)	
	kF	Pa (kg/cm <sup>2</sup> , psi)/250 rpm		
Compression pressure	Standard		1,500 (15.3, 217.5)	
Compression pressure	Minimum		1,200 (12.2, 174)	
	Differential limit	between cylinders	100 (1.0, 14.5)	
	Make		DENSO	
Spark plug (Iridium-tipped type)	Standard type		FXE20HR11	
	Gap (Nominal)	mm (in)		
(		Standard	1.1 (0.043)	
		Limit	1.4 (0.055)	

#### **FRONT WHEEL ALIGNMENT**

ELS0003X

Camber Degree minute (Decimal degree)		Minimum	-0° 55′ (-0.92°)	
		Nominal	-0° 10′ (-0.17°)	
		Maximum	0° 35′ (0.58°)	
		Left and right difference	0° 45′ (0.75°)	
Caster		Minimum	3° 55′ (3.92°)	
		Nominal	4° 40′ (4.67°)	
Degree mir	nute (Decimal degree)	Maximum	5° 25′ (5.41°)	
		Left and right difference	0° 45′ (0.75°)	
		Minimum	9° 10′ (9.17°)	
Kingpin inc	lination nute (Decimal degree)	Nominal	9° 55′ (9.92°)	
2 og. 00	iato (Doomiai dog.oo)	Maximum	10° 40′ (10.66°)	
		Minimum	Out 1.0 mm (Out 0.03 in)	
	Total toe-in Distance	Nominal	In 1.0 mm (0.04 in)	
Toe-in	2 John 190	Maximum	In 3.0 mm (0.11 in)	
		Minimum	Out 0° 06' (Out 0.10°)	
	Total toe-angle  Degree minute (Decimal degree)	Nominal	In 0° 06′ (In 0.10°)	
	2 5g. 55 mmate (2 55mmat 45g166)	Maximum	In 0° 17′ (In 0.28°)	

Measure value under unladen\* conditions.

#### **REAR WHEEL ALIGNMENT**

ELS0003Y

0		Minimum	-2° 00′ (-2.01°)
Camber Degree minu	ite (Decimal degree)	Nominal	-1° 31′ (-1.51°)
= -9 · · · · · · · · · · · · · · · · ·		Maximum	-1° 01′ (-1.01°)
		Minimum	Out 1.0 mm (Out 0.039 in)
	Total toe-in Distance	Nominal	In 3.0 mm (In 0.118 in)
Toe-in		Maximum	In 7.0 mm (In 0.275 in)
		Minimum	Out 0° 06' (Out 0.10°)
	Total toe-angle Degree minute (Decimal degree)	Nominal	In 0° 17′ (In 0.28°)
	15 11 ( comment dog. co,	Maximum	In 0° 39′ (In 0.65°)

Measure value under unladen\* conditions.

#### **BRAKE PEDAL**

Unit: mm (in.)

		Office frint (iii.)
Brake pedal height	M/T	162.3 - 172.3 (6.39 - 6.78)
Brake pedar height	CVT	172.4 - 182.4 (6.79 - 7.18)
Depressed brake pedal height	M/T	80 (3.15) or more
[Depressing 490 N (50 kg, 110 lb) while turning the engine ON]	CVT	85 (3.35) or more

<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.

#### FRONT DISC BRAKE

Unit: mm (in.)

Item		Limit	
Brake pad	Wear thickness	2.0 (0.079)	
Disc rotor	Wear thickness	22.0 (0.866)	

#### **REAR DRUM BRAKE**

Unit: mm (in.)

ltem		Limit		
Brake lining Wear thickness		1.5 (0.059)		
Brake drum	Wear inner diameter	230.0 (9.06)		

#### **REFILL CAPACITIES**

ELS00040

UNIT		Liter	US measure
Fuel tank		50.0	13-1/4 gal
Engine coolant capacity (With reservoir tank at "MAX" level)	CVT models	7.1	7-1/2 qt
	M/T models	6.8	7-1/4 qt
Engine oil	Drain and refill		
	With oil filter change	4.1	4-3/8 qt
	Without oil filter change	3.8	4 qt
	Dry engine (Overhaul)	4.9	5-1/8 qt
Transmission	CVT	7.4	7-7/8 qt
	M/T	2	4-1/4 pt
Air conditioning system	Compressor oil	0.12	4.1 fl oz
	Refrigerant	0.45 kg	1.0 lb