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NISSAN
ROGUE
MODEL T32 SERIES

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QUICK REFERENCE INDEX

FOREWORD

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

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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Technical Publications Department

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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.*

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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.*

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Is the organization of the manual clear and easy to follow? (circle your answer) YES NO

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What information should be included in NISSAN Service Manuals to better support you in servicing or repairing customer vehicles?

_____

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DATE: _____ YOUR NAME: _____ POSITION: _____

DEALER: _____ DEALER NO.: _____ ADDRESS: _____

CITY:_____ STATE/PROV./COUNTRY: _____ ZIP/POSTAL CODE: _____

QUICK REFERENCE CHART: ROGUE

Engine Tune-up Data

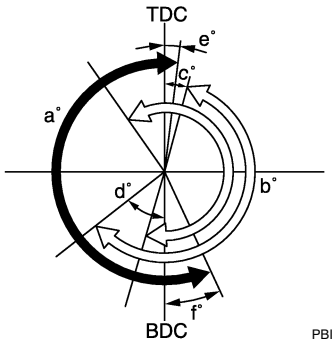
INFOID:0000000010435980

GENERAL SPECIFICATIONS

Cylinder arrangement		In-line 4
Displacement cm^3 (cu in)		2,488 (151.82)
Bore and stroke mm (in)		89.0 x 100.0 (3.504 x 3.940)
Valve arrangement		DOHC
Firing order		1-3-4-2
Number of piston rings	Compression	2
	Oil	1
Compression ratio		9.6
Compression pressure kPa (kg/cm^2, psi)/250 rpm	Standard	1,412 (14.4, 204.7)
	Minimum	1,216 (12.4, 176.3)
	Differential limit between cylinders	100 (1.0, 14.5)

Unit: degree

Valve timing
⇦ : Intake valve
⬅ : Exhaust valve



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	a	b	c	d	e	f
Except for California	220	232	12 (–28) ATDC	64 (24) ABDC	10	30
For California	224	236	8 (–32) ATDC	64 (24) ABDC	8	36

( ): Valve timing control “ON”

Drive belt

INFOID:0000000010435979

DRIVE BELT

Tension of drive belt	Belt tension is not necessary, as it is automatically adjusted by drive belt auto-tensioner.

Spark Plug

INFOID:0000000010435978

SPARK PLUG

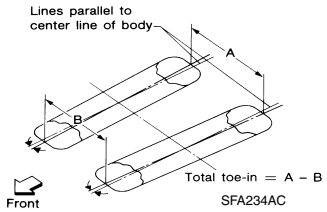
Unit: mm (in)

Make	DENSO
Standard type	FXE20HE11C
Spark plug gap (Nominal)	1.1 (0.043)

Front Wheel Alignment (Unladen*1)

INFOID:0000000010435977

Axle type			FWD		AWD	
Body type			2 ROW	3 ROW	2 ROW	3 ROW
Camber Degree minute (Decimal degree)		Minimum	–1° 04′ (–1.07°)	–1° 20′ (–1.33°)	–1° 05′ (–1.08°)	–1° 15′ (–1.25°)
		Nominal	–0° 25′ (–0.42°)	–0° 35′ (–0.58°)	–0° 20′ (–0.33°)	–0° 30′ (–0.50°)
		Maximum	0° 14′ (0.23°)	–0° 10′ (0.17°)	0° 20′ (0.33°)	0° 15′ (0.25°)
		(LH) and (RH) difference	0° 35′ (0.58°) - –0° 35′ (–0.58°)			
Caster Degree minute (Decimal degree)		Minimum	5° 0′ (5.00°)		4° 50′ (4.83°)	4° 55′ (4.92°)
		Nominal	5° 45′ (5.75°)		5° 35′ (5.58°)	5° 40′ (5.67°)
		Maximum	6° 30′ (6.50°)		6° 20′ (6.33°)	6° 25′ (6.42°)
		(LH) and (RH) difference	0° 35′ (–0.58°) - –0° 35′ (–0.58°)			
Kingpin inclination Degree minute (Decimal degree)		Minimum	11° 05′ (11.08°)		10° 55′ (10.92°)	10° 50′ (10.83°)
		Nominal	11° 50′ (11.83°)		11° 40′ (11.67°)	11° 35′ (11.58°)
		Maximium	12° 35′ (12.58°)		12° 25′ (12.42°)	12° 20′ (12.33°)



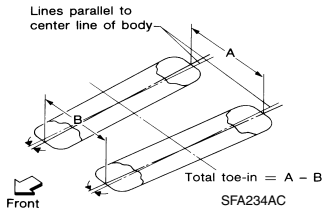
Total toe-in	Distance (A - B)	Minimum	Out 0.9 mm (Out 0.04 in)	Out 0.8 mm (Out 0.01 in)	In 0.4 mm (In 0.02 in)	In 0.5 mm (In 0.02 in)
		Nominal	In 0.1 mm (In 0.00 in)	In 0.2 mm (In 0.01 in)	In 1.4 mm (In 0.06 in)	In 1.5 mm (In 0.06 in)
		Maximum	In 1.1 mm (In 0.04 in)	In 1.2 mm (In 0.05 in)	In 2.4 mm (In 0.09 in)	In 2.5 mm (In 0.10 in)
	Angle (LH and RH) Degree minute (Decimal degree)	Minimum	Out 0° 06′ (Out 0.1°)	Out 0° 06′ (Out 0.10°)	Out 0° 12′ (Out 0.20°)	
		Nominal	In 0° 00′ (In 0.0°)	In 0° 01′ (In 0.01°)	In 0° 06′ (In 0.10°)	
		Maximum	In 0° 06′ (In 0.1°)	In 0° 07′ (In 0.12°)	In 0° 00′ (In 0.00°)	

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

Rear Wheel Alignment (Unladen*1)

INFOID:0000000010435976

Drive Type		FWD	AWD
Camber Degree minute (Decimal degree)	Minimum	–0° 10′ (–0.17°)	0° 10′ (0.17°)
	Nominal	–0° 55′ (–0.92°)	–0° 35′ (–0.58°)
	Maximum	–1°′40’ (–1.67°)	–1° 20′ (–1.33°)



Total toe-in	Distance (A - B)	Minimum	In 2 mm (In 0.08 in)	
		Nominal	In 4 mm (In 0.12 in)	In 2.0 mm (0.08 in)
		Maximum	In 6 mm (In 0.24in)	
	Angle (LH and RH)*2 Degree minute (Decimal degree)	Minimum	In 0° 10′ (In 0.17°)	Out 0° 15′ (Out 0.25°)
		Nominal	In 0° 20′ (In 0.33°)	In 0° 10′ (In 0.17°)
		Maximum	In 0° 30′ (In 0.50°)	In 0° 35′ (In 0.58°)

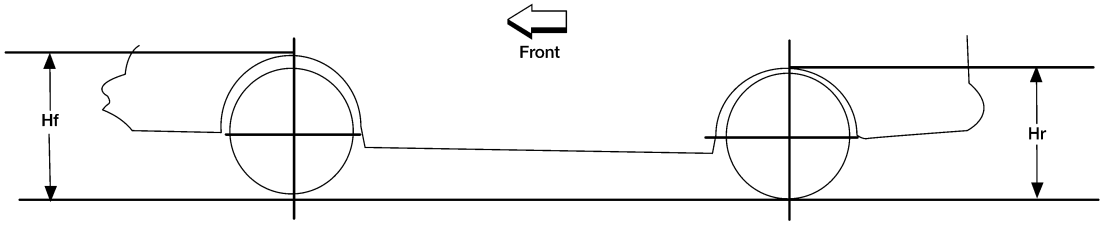
*1: Fuel, engine coolant, and lubricants are full. Spare tire, jack, hand tools, and mats are in designated positions.

*2: Since an adjustment mechanism is not included, the value of the left and right wheels must be used as the standard value.

Wheelarch Height (Unladen*)

INFOID:0000000010435975

Unit: mm (in)



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Axle type	FWD			AWD		
Body type	2 ROW		3 ROW	2 ROW		3 ROW
Tire size	225/65R17	225/60R18	225/65R17 RF	225/65R17	225/60R18	225/65R17 RF
Front (Hf)	788 (31.02)	792 (31.18)	791 (31.14)	798 (31.42)	801 (31.54)	801 (31.54)
Rear (Hr)	787 (30.98)	789 (31.06)	787 (30.98)	796 (31.34)	798 (31.42)	796 (31.34)

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

Brake Specifications

INFOID:0000000010435974

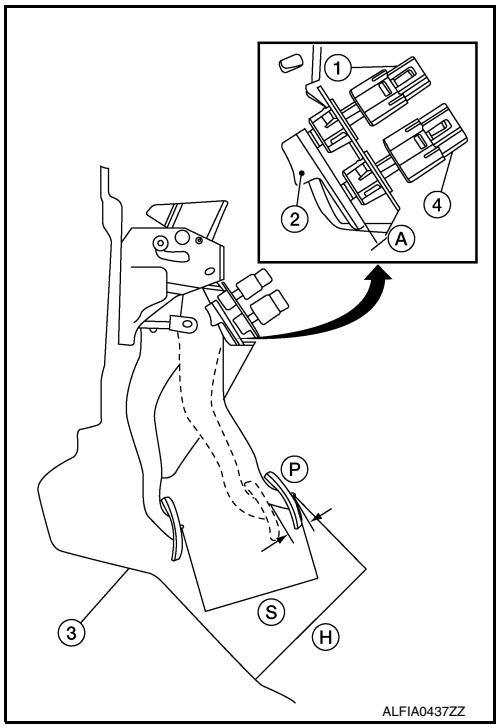
Unit: mm (in)

Front disc brake (One piston caliper)	Cylinder bore diameter	60.33 (2.375)
	Pad length × width × thickness	123.6 × 46.5 × 11.0 (4.87 × 1.870 × 0.433)
	Disc brake rotor outer diameter × thickness	296 × 26.0 (11.65 × 1.024)
Front disc brake (Two piston caliper)	Cylinder bore diameter	60.33 (2.375)
	Pad length × width × thickness	133.6 × 47.5 × 11.0 (5.26 × 1.909 × 0.433)
	Disc brake rotor outer diameter × thickness	320 × 28.0 (12.60 × 1.102)
Rear disc brake	Cylinder bore diameter	38.1 (1.5)
	Pad length × width × thickness	83.0 × 31.9 × 8.5 (3.268 × 1.256 × 0.335)
	Disc brake rotor outer diameter × thickness	292 × 16.0 (11.50 × 0.630)
Master cylinder	Cylinder bore diameter	23.8 (15/16)
Control valve	Valve type	Electric brake force distribution

Brake Pedal

INFOID:0000000010435973

Unit: mm (in)



Item	Standard
Brake pedal height (H)	175.9 – 185.9 (9.63 – 7.32)
Clearance (A) between brake pedal stopper bracket (2), stop lamp switch (4) and brake pedal position switch (1) contact ends	0.20 – 1.96 (0.0079 – 0.0772)
Brake pedal full stroke (S)	135.1 (5.32)
Brake pedal play	—

Front Disc Brake

INFOID:0000000010435972

Unit: mm (in)

Item		Limit
Brake pad	Wear limit thickness	2.0 (0.079)
Disc brake rotor	Wear limit thickness	24.0 (0.945)
	Thickness variation (measured at 8 positions)	0.020 (0.0008)
	Runout limit (with it attached to the vehicle)	0.035 (0.0014)

Rear Disc Brake

INFOID:0000000010435971

Unit: mm (in)

Item		Limit
Brake pad	Wear limit thickness	1.5 (0.059)
Disc brake rotor	Wear limit thickness	14.0 (0.551)
	Thickness variation (measured at 8 positions)	0.020 (0.0008)
	Runout limit (with it attached to the vehicle)	0.070 (0.0028)

Fluids and Lubricants

INFOID:0000000010435970

			Capacity (Approximate)	
		Liter	US measure	Imp measure
Fuel		55 ℓ	14-1/2 gal	12-1/8 gal
Engine oil Drain and refill	With oil filter change	4.6 ℓ	4-7/8 qt	4 qt
	Without oil filter change	4.3 ℓ	4-1/2 qt	3-3/4 qt
Dry engine (Overhaul)		5.3 ℓ	5-5/8 qt	4-5/8 qt
Cooling system	With reservoir tank	7.3 ℓ	7-3/4 qt	6-3/8 qt
	Reservoir tank	0.75 ℓ	3/4 qt	5/8 qt
CVT fluid		7.9 ℓ	8-3/8 qt	7 qt
Differential gear oil		0.55 ℓ	1-1/8 pt	1 pt
Transfer oil		0.31 ℓ	5/8 pt	1/2 qt
Brake fluid		—	—	—
Multi-purpose grease		—	—	—
Windshield washer fluid		5.45 ℓ	5-3/4 qt	4-3/4 qt
Air conditioning system refrigerant		0.50 kg	1.10 lb	1.10 lb
Air conditioning system oil		110 mℓ	3.7 fl oz	3.9 fl oz

Description	Capacity (Approximate)		
	Metric	US measure	Imp measure
Air conditioning system refrigerant	0.83 ± 0.03 kg	1.83 ± 0.07 lb	1.83 ± 0.07 lb
Air conditioning system oil	230 m ℓ	7.8 fl oz	8.1 fl oz

FOR MEXICO : Fluids and Lubricants

INFOID:0000000009914741

		Capacity (Approximate)		
		Metric	US measure	Imp measure
Fuel		74.0 ℓ	19-1/2 gal	16-1/4 gal
Engine oil Drain and refill	With oil filter change	4.8 ℓ	5-1/8 qt	4-1/4 qt
	Without oil filter change	4.5 ℓ	4-3/4 qt	4 qt
	Dry engine (engine overhaul)	5.1 ℓ	5-3/8 qt	4-1/2 qt
Cooling system (with reservoir at MAX line)		9.6 ℓ	10-1/8 qt	8-1/2 qt
CVT fluid		8.8 ℓ	9-1/4 qt	7-3/4 qt
Differential gear oil		0.5 ℓ	1 pt	7/8 pt
Transfer fluid		0.31 ℓ	5/8 pt	1/2 pt
Power steering fluid		1.0 ℓ	2-1/8 qt	1-3/4 qt
Brake fluid		—	—	—
Multi-purpose grease		—	—	—
Windshield washer fluid		4.6 ℓ	4-7/8 qt	4 qt
Air conditioning system refrigerant		0.83 ± 0.03 kg	1.83 ± 0.07 lb	1.83 ± 0.07 lb
Air conditioning system oil		230 m ℓ	7.8 fl oz	8.1 fl oz