| Edition: July 2011 | QUICK REFERENCE INDEX | | |
|--------------------------------|-----------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Revision: February 2013 | A GENERAL INFORMATION | GI | General Information |
| Publication No. SM2E-1S35U1 | B ENGINE | EM | Engine Mechanical |
| | | LU | Engine Lubrication System |
| | | CO | Engine Cooling System |
| | | EC | Engine Control System |
| | | FL | Fuel System Exhaust System |
| | | EX STR | Starting System |
| | | ACC | 3 / |
| | C ELECTRIC POWER TRAIN | AUU | Accelerator Control Cystem |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | D. TRANSMISSION & PRIVELING | | |
| | D TRANSMISSION & DRIVELINE | TM | Transaxle & Transmission |
| | | DLN | Driveline |
| | | FAX | Front Axle |
| | | RAX | Rear Axle |
| NISSAN | E SUSPENSION | FSU | Front Suspension |
| DOOLLE | | RSU | Rear Suspension |
| ROGUE | | | |
| MODEL S35 SERIES | | WT | Road Wheels & Tires |
| MODEL GOO SERIES | F BRAKES | BR | Brake System |
| | | PB | Parking Brake System |
| | O OTTEDING | BRC | Brake Control System |
| | G STEERING | ST | Steering System |
| | H RESTRAINTS | STC | Steering Control System Seat Belt |
| | II KESTKAIRTS | 36 | Jeat Deit |
| | | SR | SRS Airbag |
| | | SRC | SRS Airbag Control System |
| | I VENTILATION, HEATER & AIR | VTL | Ventilation System |
| | CONDITIONER | HA | Heater & Air Conditioning System |
| | | HAC | Heater & Air Conditioning Control System |
| | J BODY INTERIOR | INT | Interior |
| | | IP SE | Instrument Panel |
| | | 3E | Seat |
| | K BODY EXTERIOR, DOORS, | DLK | Door & Lock |
| | ROOF & VEHICLE SECURITY | SEC | Security Control System |
| | | GW | Glass & Window System |
| | | PWC | Power Window Control System |
| | | RF | Roof |
| | | | |
| | | EXT | Exterior |
| | | BRM | Body Repair |
| | L DRIVER CONTROLS | MIR | Mirrors |
| | | EXL | Exterior Lighting System |
| | | INL WW | Interior Lighting System Wiper & Washer |
| | | DEF | Defogger |
| | | HRN | Horn |
| © 2013 NISSAN MOTOR CO.,LTD. | | | |
| © 2010 MODAN MOTOR OO, ETD. | M ELECTRICAL & POWER CON- | PWO | Power Outlet |
| | TROL | BCS | Body Control System |
| All Rights Reserved. No part | | LAN | LAN System |
| - | | PCS | Power Control System |
| of this Service Manual may | | CHG | Charging System |
| be reproduced or stored in a | N DDIVED INFORMATION O | PG | Power Supply, Ground & Circuit Elements |
| retrieval system, or transmit- | N DRIVER INFORMATION & MULTIMEDIA | MWI | Meter, Warning Lamp & Indicator |
| ted in any form, or by any | | WCS SN | Warning Chime System |
| means, electronic, mechani- | | AV | Sonar System Audio, Visual & Navigation System |
| cal, recording or otherwise, | O CRUISE CONTROL & | CCS | Cruise Control System |
| without the prior written per- | DRIVER ASSISTANCE | | - Comment of the comm |
| mission of NISSAN MOTOR | | | |
| | | | |
| CO., LTD. | P MAINTENANCE | MA | Maintenance |

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P

FOREWORD

This manual contains maintenance and repair procedure for the 2012 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.

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) 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: ____

QUICK REFERENCE CHART ROGUE ENGINE TUNE-UP DATA (QR25DE)

| Engine model | | | QR25DE | | |
|-----------------------------------------------------------|----------------------|------------------------|-------------------------------------------------------------------------------------------|--|--|
| Firing order | | | 1 - 3 - 4 - 2 | | |
| Idle speed (In "P" or "N" position) | | rpm | 700 ± 50 | | |
| Ignition timing (BTDC at idl (In "P" or "N" position) | e speed) | | 10° ± 5° | | |
| Tension of drive belt | | | Belt tension is not necessary, as it automatically adjusted by drive belt auto-tensioner. | | |
| Radiator cap relief pressure | е | kPa (kg/cm² , psi) | | | |
| | Standard | | 78.4 - 98.0 (0.8 - 1.0, 11 - 14) | | |
| | Limit | | 59 (0.6, 9) | | |
| Cooling system leakage testing pressure kPa (kg/cm², psi) | | kPa (kg/cm² , psi) | 157 (1.60, 22.8) | | |
| Compression pressure | | kPa (kg/cm² , psi)/rpm | | | |
| | Standard | | 1,412 (14.4, 204.7)/250 | | |
| | Minimum | | 1,216 (12.4, 176.3)/250 | | |
| | Differential limit b | petween cylinders | 100 (1.0, 14.5)/250 | | |
| | Make | | NGK | | |
| Spark plug (Iridium-tipped type) | Standard type | | DILKAR6A-11 | | |
| (a.a.iii appoa ()po) | Gap (Nominal) | mm (in) | 1.1 (0.043) | | |

FRONT WHEEL ALIGNMENT

| Item | | | Standard | | | | | | |
|------------|------------------------------------------------|---------------------------|---------------------------|--------------------------|------------------------|---------|---------|---------|--|
| Axle type | | | 2WD | | AWD | | | | |
| Wheel size | | | 16 inch | 17 inch | 18 inch | 16 inch | 17 inch | 18 inch | |
| | | Minimum | Left side | -1° 00′ (-1.00°) | | | | | |
| | | Wilhimum | Right side | -1° 15′ (-1.25°) | | | | | |
| | | Nominal | Left side | -0° 15′ (-0.25°) | | | | | |
| Cambe | r minute (Decimal degree) | Nominai | Right side | -0° 30′ (-0.50°) | | | | | |
| 209.00 | minute (Boomai dogreo) | Maximum | Left side | | | 0° 30′ | (0.50°) | | |
| | | Maximum | Right side | 0° 15′ (0.25°) | | | | | |
| | | Left and right difference | | 0° 33′ (0.55°) or less | | | | | |
| | | | Minimum | | 4° 00′ (4.00°) | | | | |
| Caster | | Nominal | | 4° 40′ (4.67°) | 4° 45′ (4.75°) | | | | |
| Degree | Degree minute (Decimal degree) | | Maximum | | 5° 30′ (5.50°) | | | | |
| | | | Left and right difference | | 0° 36' (0.60°) or less | | | | |
| | | | Minimum | | 9° 45′ (9.75°) | | | | |
| | inclination minute (Decimal degree) | Nominal | | 10° 30′ (10.50°) | | | | | |
| 9 | | Maximum | | 11° 15′ (11.25°) | | | | | |
| | | Minimum | | 0 mm (0.00 in) | | | | | |
| | Total toe-in Distance | Nominal | | In 2 mm (In 0.08 in) | | | | | |
| | | Maximum | | In 4 mm (In 0.15 in) | | | | | |
| 106-111 | Tarabasasas | Minimum | | 0° 00′ 00″ (0.00°) | | | | | |
| | Total toe-angle Degree minute (Decimal degree) | Nominal | | In 0° 09′ 36″ (In 0.16°) | | | | | |
| | J | Maximum | | In 0° 19′ 48″ (In 0.33°) | | | | | |

Measure value under unladen* conditions.

REAR WHEEL ALIGNMENT

| | Item | | Standard | | |
|-----------------|------------------------------------------------|---------|--------------------------|--|--|
| | | Minimum | -1° 25′ (-1.42°) | | |
| Cambe Degree | r minute (Decimal degree) | Nominal | -0° 55′ (-0.92°) | | |
| | | Maximum | -0° 25′ (-0.42°) | | |
| | | Minimum | 0 mm (0 in) | | |
| | Total toe-in Distance | Nominal | In 2 mm (0.08 in) | | |
| Toe-in | | Maximum | In 4 mm (0.16 in) | | |
| 106-111 | Total toe-angle Degree minute (Decimal degree) | Minimum | 0° 00′ (0.00°) | | |
| | | Nominal | In 0° 09′ 36″ (In 0.16°) | | |
| | | Maximum | In 0° 19′ 48″ (In 0.33°) | | |

Measure value under unladen* conditions.

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

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

BRAKE PEDAL

Unit: mm (in)

| Item | Standard | |
|---------------------------------------------------------------------------------------------|-------------------------------|--|
| Brake pedal height | 183.7 - 193.7 (7.23 - 7.63) | |
| Clearance between stopper rubber and stop lamp switch and ASCD brake switch threaded end | 0.10 - 1.96 (0.0039 - 0.0772) | |
| Brake pedal play | 3.0 - 11.0 (0.118 - 0.433) | |
| Depressed brake pedal height [Depressing 490 N (50 kg, 110 lb) while turning the engine ON] | 65 (2.56) or more | |

FRONT DISC BRAKE

Unit: mm (in)

| | Item | Limit | | |
|--------------------------------|------------------------------------------------|----------------|--|--|
| Brake pad Wear limit thickness | | 2.0 (0.079) | | |
| Disc 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

Unit: mm (in)

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

REFILL CAPACITIES

| UNIT | | | | Liter | US measure |
|-----------------------------------------------------|-----------------------|-------------------|---------------------------|------------|------------|
| Fuel tank | | Except for Mexico | 60 | 15-7/8 gal | |
| | | For Mexico | 65 | 17-1/8 gal | |
| Engine Coolant (With reservoir tank) at MAX level | | | vel | 7.3 | 7-3/4 qt |
| Drain and refill | | | | | |
| Fasing all | | | With oil filter change | 4.8 | 5-1/8 qt |
| Engine oil | | | Without oil filter change | 4.5 | 4-3/4 qt |
| | Dry engine (Overhaul) | | | 5.4 | 5-3/4 qt |
| | | 2WD | Without fluid cooler | 7.3 | 7-3/4 qt |
| Transaxle | CVT | | With fluid cooler | 7.5 | 7-7/8 qt |
| Transaxie | CVI | AWD | Without fluid cooler | 8.3 | 8-3/4 qt |
| | | | With fluid cooler | 8.5 | 9 qt |
| Transfer | | | | 0.36 | 3/4 pt |
| Final drive | | | 0.55 | 1-1/8 pt | |
| Air conditioning system | Compressor oil | | | 0.15 | 5.07 fl oz |
| | Refrigerant | | | 0.50 kg | 1.10 lb |