

Edition: August 2007
Revision: January 2008
Publication No. SM8E-1S35U1

NISSAN

ROGUE

MODEL S35 SERIES

©2008NISSAN MOTOR CO.,LTD.

All rights reserved. No part of this Service Manual may be reproduced or stored in a retrieval system, or transmitted in any form, or by any means, electronic, mechanical, recording or otherwise, without the prior written permission of Nissan Motor Company Ltd., Tokyo, Japan.

QUICK REFERENCE INDEX

A GENERAL INFORMATION	GI General Information
B ENGINE	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
C HYBRID	
D TRANSMISSION & DRIVE-LINE	
	TM Transaxle & Transmission
	DLN Driveline
	FAX Front Axle
	RAX Rear Axle
E SUSPENSION	FSU Front Suspension
	RSU Rear Suspension
F BRAKES	WT Road Wheels & Tires
	BR Brake System
	PB Parking Brake System
	BRC Brake Control System
G STEERING	ST Steering System
	STC Steering Control System
H RESTRAINTS	SB Seat Belt
	SR SRS Airbag
	SRC SRS Airbag Control System
I VENTILATION, HEATER & AIR CONDITIONER	VTL Ventilation System
	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
	SEC Security Control System
	GW Glass & Window System
	PWC Power Window Control System
	RF Roof
	EXT Exterior
	BRM Body Repair
	MIR Mirrors
L DRIVER CONTROLS	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
M ELECTRICAL & POWER CONTROL	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
O CRUISE CONTROL	
P MAINTENANCE	MA Maintenance

A

B

D

E

F

G

H

I

J

K

L

M

N

P

FOREWORD

This manual contains maintenance and repair procedure for the 2008 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.

QUICK REFERENCE CHART S35

PFP:00000

ENGINE TUNE-UP DATA (QR25DE)

ELS0003W

Engine model	QR25DE	
Firing order	1 - 3 - 4 - 2	
Idle speed CVT (In "P" or "N" position)	rpm	700 ± 50
Ignition timing (BTDC at idle speed)	15° ± 5°	
CO% at idle	0.7 - 9.9 % and engine runs smoothly	
Tensions of drive belts	Auto adjustment by auto tensioner	
Radiator cap relief pressure	kPa (kg/cm ² , psi)	
Standard	78.4 - 98.0 (0.8 - 1.0, 11 - 14)	
Limit	59 (0.6, 9)	
Cooling system leakage testing pressure	kPa (kg/cm ² , psi)	157 (1.60, 22.8)
Compression pressure	kPa (kg/cm ² , psi)/rpm	
Standard	1,412 (14.4, 204.7)/250	
Minimum	1,216 (12.4, 176.3)/250	
Differential limit between cylinders	100 (1.0, 14.5)/250	
Spark plug (Iridium-tipped type)	Make	NGK
	Standard type	DILKAR6A-11
	Gap (Nominal) mm (in)	1.1 (0.043)

FRONT WHEEL ALIGNMENT

ELS0003X

Measurement wheel		LH	RH
Camber Degree minute (Decimal degree)	Minimum	-1° 00' (-1.00°)	-1° 15' (-1.25°)
	Nominal	-0° 15' (-0.25°)	-0° 30' (-0.50°)
	Maximum	0° 30' (0.50°)	0° 15' (0.25°)
	Left and right difference	0° 33' (0.55°) or less	
Caster Degree minute (Decimal degree)	Minimum	4° 55' (4.92°)	
	Nominal	5° 40' (5.67°)	
	Maximum	6° 25' (6.42°)	
	Left and right difference	0° 36' (0.60°) or less	
Kingpin inclination Degree minute (Decimal degree)	Minimum	9° 45' (6.75°)	
	Nominal	10° 30' (10.50°)	
	Maximum	11° 15' (11.25°)	
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)
	Angle (Left wheel or right wheel) Degree minute (Decimal degree)	Minimum	In 0° 02' 30" (0.04°)
		Nominal	In 0° 05' (0.08°)
		Maximum	In 0° 07' 30" (0.13°)

Measure value under unladen* conditions.

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

REAR WHEEL ALIGNMENT

ELS0003Y

Camber Degree minute (Decimal degree)		Minimum	-1° 25' (-1.42°)
		Nominal	-0° 55' (-0.92°)
		Maximum	-0° 25' (-0.42°)
Total toe-in	Distance	Minimum	0 mm (0 in)
		Nominal	In 2 mm (0.08 in)
		Maximum	In 4 mm (0.16 in)
	Angle (Left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0° 00' (0.00°)
		Nominal	In 0° 05' (0.08°)
		Maximum	In 0° 10' (0.17°)

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)

Depressed brake pedal height (H1)	183.7 - 193.7 (7.23 - 7.63)
Brake pedal reserve height (H2) [Depressing 490 N (50 kg, 110 lb) while turning the engine ON]	65 (2.56) or more

FRONT DISK BRAKE

Unit: mm (in)

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

REAR DISK BRAKE

Unit: mm (in)

Brake pad	Wear limit thickness	1.5 (0.059)
Disc rotor	Wear limit thickness	14.0 (0.551)

REFILL CAPACITIES

ELS00040

UNIT				Liter	US measure
Fuel tank				60	15-7/8 gal
Engine Coolant (With reservoir tank) at MAX level				7.3	7-3/4 qt
Engine oil	Drain and refill				
	With oil filter change			4.6	4-7/8 qt
	Without oil filter change			4.3	4-1/2 qt
	Dry engine (Overhaul)			5.4	5-3/4 qt
Transaxle	CVT	2WD	Without fluid cooler	8.3	8-3/4 qt
			With fluid cooler	8.5	9 qt
		AWD	Without fluid cooler	9.3	9-7/8 qt
			With fluid cooler	9.5	10 qt
Transfer				0.38	3/4 pt
Final drive	Rear			0.55	5/8 pt
Air conditioning system	Compressor oil			0.15	5.03 fl oz
	Refrigerant			0.50 kg	1.11 lb