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# NISSAN ROGUE MODEL S35 SERIES

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## QUICK REFERENCE INDEX

<b>A GENERAL INFORMATION</b>	GI General Information	
<b>B ENGINE</b>	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	
<b>C HYBRID</b>		
<b>D TRANSMISSION &amp; DRIVE-LINE</b>	TM Transaxle & Transmission	
	DLN Driveline	
	FAX Front Axle	
	RAX Rear Axle	
<b>E SUSPENSION</b>	FSU Front Suspension	
	RSU Rear Suspension	
<b>F BRAKES</b>	WT Road Wheels & Tires	
	BR Brake System	
	PB Parking Brake System	
	BRC Brake Control System	
<b>G STEERING</b>	ST Steering System	
	STC Steering Control System	
<b>H RESTRAINTS</b>	SB Seat Belt	
	SR SRS Airbag	
	SRC SRS Airbag Control System	
<b>I VENTILATION, HEATER &amp; AIR CONDITIONER</b>	VTL Ventilation System	
	HA Heater & Air Conditioning System	
	HAC Heater & Air Conditioning Control System	
<b>J BODY INTERIOR</b>	INT Interior	
	IP Instrument Panel	
	SE Seat	
<b>K BODY EXTERIOR, DOORS, ROOF &amp; VEHICLE SECURITY</b>	DLK Door & Lock	
	SEC Security Control System	
	GW Glass & Window System	
	PWC Power Window Control System	
	RF Roof	
	EXT Exterior	
	BRM Body Repair	
<b>L DRIVER CONTROLS</b>	MIR Mirrors	
	EXL Exterior Lighting System	
	INL Interior Lighting System	
	WW Wiper & Washer	
	DEF Defogger	
	HRN Horn	
	PWO Power Outlet	
<b>M ELECTRICAL &amp; POWER CONTROL</b>	BCS Body Control System	
	LAN LAN System	
	PCS Power Control System	
	CHG Charging System	
	PG Power Supply, Ground & Circuit Elements	
<b>N DRIVER INFORMATION &amp; MULTIMEDIA</b>	MWI Meter, Warning Lamp & Indicator	
	WCS Warning Chime System	
	AV Audio, Visual & Navigation System	
<b>O CRUISE CONTROL</b>		
<b>P MAINTENANCE</b>	MA Maintenance	

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# FOREWORD

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This manual contains maintenance and repair procedure for the 2009 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

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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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**QUICK REFERENCE CHART S35**  
**ENGINE TUNE-UP DATA (QR25DE)**

PF0:00000

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 <sup>2</sup> , 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 <sup>2</sup> , psi)	157 (1.60, 22.8)
Compression pressure	kPa (kg/cm <sup>2</sup> , 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**

Item			Standard			
Axle type			2WD		4WD	
Tire size			215/70R16	225/60R17	215/70R16	225/60R17
Camber Degree minute (Decimal degree)	Minimum	Left side	-1° 00' (-1.00°)			
		Right side	-1° 15' (-1.25°)			
	Nominal	Left side	-0° 15' (-0.25°)			
		Right side	-0° 30' (-0.50°)			
	Maximum	Left side	0° 30' (0.50°)			
		Right side	0° 15' (0.25°)			
Left and right difference		0° 33' (0.55°) or less				
Caster Degree minute (Decimal degree)	Minimum	3° 55' (3.92°)	4° 00' (4.00°)			
	Nominal	4° 40' (4.67°)	4° 45' (4.75°)			
	Maximum	5° 25' (5.41°)	5° 30' (5.50°)			
	Left and right difference	0° 36' (0.60°) or less				
Kingpin inclination Degree minute (Decimal degree)	Minimum	9° 45' (9.75°)				
	Nominal	10° 30' (10.50°)				
	Maximum	11° 15' (11.25°)				

Item			Standard			
Axle type			2WD		4WD	
Tire size			215/70R16	225/60R17	215/70R16	225/60R17
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" (0.05°)			
		Nominal	In 0° 05' (0.08°)			
		Maximum	In 0° 07' 30" (0.12°)			

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)

# QUICK REFERENCE CHART S35

**2009**

## REFILL CAPACITIES

ELS00040

UNIT			Liter	US measure	
Fuel tank	TYPE1		60	15-7/8 gal	
	TYPE2		65	17-1/8 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	7.3	7-3/4 qt
			With fluid cooler	7.5	7-7/8 qt
	AWD	Without fluid cooler	8.4	8-7/8 qt	
		With fluid cooler	8.6	9-1/8 qt	
Transfer			0.38	3/4 pt	
Final drive			0.55	1-1/8 pt	
Air conditioning system	Compressor oil		0.15	5.03 fl oz	
	Refrigerant		0.50 kg	1.11 lb	