

Edition: September 2008
Revision: October 2009
Publication No. SM9E-1Z33U1

NISSAN

350Z

MODEL Z33 SERIES

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
	ACC Accelerator Control System
C TRANSMISSION/ TRANSAXLE	CL Clutch
	MT Manual Transmission
	AT Automatic Transmission
D DRIVELINE/AXLE	PR Propeller Shaft
	RFD Rear Final Drive
	FAX Front Axle
	RAX Rear Axle
E SUSPENSION	FSU Front Suspension
	RSU Rear Suspension
	WT Road Wheels & Tires
F BRAKES	BR Brake System
	PB Parking Brake System
	BRC Brake Control System
G STEERING	PS Power Steering System
	STC Steering Control System
H RESTRAINTS	SB Seat Belts
	SRS Supplemental Restraint System (SRS)
I BODY	BL Body, Lock & Security System
	GW Glasses, Window System & Mirrors
	RF Roof
	EI Exterior & Interior
	IP Instrument Panel
	SE Seat
J AIR CONDITIONER	ATC Automatic Air Conditioner
K ELECTRICAL	SC Starting & Charging System
	LT Lighting System
	DI Driver Information System
	WW Wiper, Washer & Horn
	BCS Body Control System
	LAN LAN System
	AV Audio Visual, Navigation & Telephone System
	ACS Auto Cruise Control System
	PG Power Supply, Ground & Circuit Elements
L MAINTENANCE	MA Maintenance

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FOREWORD

This manual contains maintenance and repair procedure for the 2009 NISSAN 350Z.

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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QUICK REFERENCE CHART 350Z

PFP:00000

ENGINE TUNE-UP DATA (VQ35HR)

ELS0003W

Engine model	VQ35HR
Firing order	1-2-3-4-5-6
Idle speed A/T (In "P" or "N" position) M/T (In "Neutral" position)	rpm 650 ± 50
Ignition timing (BTDC at idle speed) A/T (In "P" or "N" position) M/T (In "Neutral" position)	16° ± 5°
CO% at idle	0.7 - 9.9 % and engine runs smoothly
Tension of drive belts	Auto adjustment by auto tensioner
Radiator cap relief pressure	kPa (kg/cm ² , psi)
Standard	108 - 127 (1.1 - 1.3, 16 - 18)
Limit	88 (0.9, 13)
Cooling system leakage testing pressure	kPa (kg/cm ² , psi) 157 (1.6, 23)
Compression pressure	kPa (kg/cm ² , psi)/rpm
Standard	1,275 (13.0, 185)/300
Minimum	981 (10.0, 142)/300
Differential limit between cylinders	98 (1.0, 14)/300
Spark plug	Standard type FXE22HR11
Gap (Nominal)	mm (in) 1.1 (0.043)

FRONT WHEEL ALIGNMENT (Unladen*)

ELS0003X

Camber Degree minute (Decimal degree)	Minimum	-1°20' (-1.33°)
	Nominal	-0°35' (-0.58°)
	Maximum	0°10' (0.17°)
	Left and right difference	45' (0.75°)
Caster Degree minute (Decimal degree)	Minimum	7°25' (7.42°)
	Nominal	8°10' (8.17°)
	Maximum	8°55' (8.92°)
	Left and right difference	45' (0.75°)
Kingpin inclination Degree minute (Decimal degree)	Minimum	4°20' (4.33°)
	Nominal	5°05' (5.08°)
	Maximum	5°50' (5.83°)
Total toe-in	Distance	Minimum 0 mm (0 in)
		Nominal 1 mm (0.04 in)
		Maximum 2 mm (0.08 in)
	Angle (left wheel or right wheel) Degree minute (Decimal degree)	Minimum 0°00' (0.00°)
		Nominal 0°02'30" (0.04°)
		Maximum 0°05' (0.08°)

Wheel turning angle (Full turn)	Inside Degree minute (Decimal degree)	Minimum	35°55' (35.9°)
		Nominal	38°55' (38.9°)
		Maximum	39°55' (39.9°)
	Outside Degree minute (Decimal degree)	Nominal	30°40' (30.7°)

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

REAR WHEEL ALIGNMENT (Unladen*)

ELS0003Y

Camber Degree minute (Decimal degree)		Minimum	-2°05' (-2.08°)
		Nominal	-1°35' (-1.58°)
		Maximum	-1°05' (-1.08°)
Total toe-in	Distance	Minimum	1.1 mm (0.043 in)
		Nominal	1.9 mm (0.075 in)
		Maximum	2.7 mm (0.106 in)
	Angle (left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0°02'54" (0.05°)
		Nominal	0°04'54" (0.08°)
		Maximum	0°06'54" (0.12°)

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

BRAKE

ELS0003Z

Unit: mm (in)

Front brake	Pad repair limit thickness	2.0 (0.079)
	Rotor repair limit thickness	Other than Brembo: 26.0 (1.024) With Brembo: 28.4 (1.118)
Rear brake	Pad repair limit thickness	2.0 (0.079)
	Rotor repair limit thickness	Other than Brembo: 14.0 (0.551) With Brembo: 20.2 (0.795)
Brake pedal height (from dash lower panel top surface)		M/T: 153.2 - 163.2 (6.03 - 6.43) A/T: 161.5 - 171.5 (6.36 - 6.75)
Depressed pedal height*		M/T: More than 90 (3.54) A/T: More than 95 (3.74)

*: Under a force of 490 N(50 kg, 110 lb) with the engine running.

REFILL CAPACITIES

ELS00040

UNIT			Liter	US measure
Fuel tank			76	20 gal
Engine coolant (With reservoir tank)			9.0	9-1/2 qt
Engine	Drain and refill			
	With oil filter change		4.9	5-1/8 qt
	Without oil filter change		4.6	4-7/8 qt
	Dry engine (Overhaul)		5.7	6 qt
Transmission	A/T		10.3	10-7/8 qt
	M/T	VIN: Up to JN1BZ36A29M550534	2.93	6-1/4 pt
		VIN: From JN1BZ36A29M550535	2.83	6 pt
Differential carrier			1.4	3 pt
Power steering system			1.0	1 1/8 qt

QUICK REFERENCE CHART 350Z

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UNIT		Liter	US measure
Air conditioning system	Compressor oil	0.15	5.3 fl oz
	Refrigerant	0.55 kg	1.21 lb