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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	
	CL Clutch	
C TRANSMISSION/ TRANSAXLE	MT Manual Transmission	
	AT Automatic Transmission	
	PR Propeller Shaft	
D DRIVELINE/AXLE	RFD Rear Final Drive	
	FAX Front Axle	
	RAX Rear Axle	
	FSU Front Suspension	
	RSU Rear Suspension	
E SUSPENSION	WT Road Wheels & Tires	
	BR Brake System	
	PB Parking Brake System	
F BRAKES	BRC Brake Control System	
	PS Power Steering System	
	STC Steering Control System	
G STEERING	SB Seat Belts	
	SRS Supplemental Restraint System (SRS)	
H RESTRAINTS	BL Body, Lock & Security System	
	GW Glasses, Window System & Mirrors	
I BODY	RF Roof	
	EI Exterior & Interior	
	IP Instrument Panel	
	SE Seat	
	ATC Automatic Air Conditioner	
	SC Starting & Charging System	
	LT Lighting System	
J AIR CONDITIONER	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
ENGINE TUNE-UP DATA (VQ35HR)

PF0:00000

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 breombo: 26.0 (1.024) With breombo: 28.4 (1.118)
Rear brake	Pad repair limit thickness	2.0 (0.079)
	Rotor repair limit thickness	Other than breombo: 14.0 (0.551) With breombo: 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	

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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