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## NISSAN SENTRA/2005X MODEL B14 SERIES

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# **FOREWORD**

This manual contains maintenance and repair procedures for the 1998 Nissan SENTRA/200SX.

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 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 photocopy this form and type or print your comments below. Mail or fax to:

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#### **QUICK REFERENCE CHART: SENTRA/200SX** 1998

## ENGINE TUNE-UP DATA

idle speed	rpm					
M/T		675 ± 50, 750 ± 50 (For Canada)				
A/T (in "N" position)	800 ± 50					
Ignition timing ( B.T.D.C. at idle speed)		8° ± 2°				
Valve clearance (Hot)	mm (in)					
Intake		0.21 - 0.49 (0.008 - 0.019)				
Exhaust		0.3	80 - 0.58 (0.012 - 0.0	023)		
Spark plug						
	Standard		BKR5E-11			
Туре	Hot	BKR4E-11				
	Cold	BKR6E-11, BKR7E-11				
Gap	mm (in)	1.0 - 1.1 (0.039 - 0.043)				
Drive belt deflection (Cold)	mm (in)	Used belt				
		Limit	Deflection after adjustment	Deflection of new belt		
Generator With air conditioner compressor		9.5 (0.374)	6 - 6.5 (0.24 - 0.256)	5 - 6 (0.20 - 0.24		
Without air conditioner compressor		11.5 (0.453)	7.5 - 8 (0.296 - 0.316)	6.5 - 7 (0.256 - 0.28		
Water pump With power steering pump		7.5 (0.295)	4 - 6 (0.16 - 0.24)	3 - 5 (0.12 - 0.20		
Without power steering pump		6 (0.24)	3 - 4.5 (0.12 - 0.177)	3 - 4 (0.12 - 0.16		
Applied pushing force	N (kg, lb)	98 (10, 22)				
Compression pressure Standard		1,373 (14.0, 199)/350				
kPa (kg/cm2, psi)/rpm	Minimum	1,177 (12.0, 171)/350				
Tightening torque		N·m	kg·m	ft-lb		
Spark plug		20 - 29	2.0 - 3.0	14 - 22		
Oil pan drain plug		29 - 39	3.0 - 4.0	22 - 29		

## **ENGINE COOLING SYSTEM**

Thermostat valve opening temperature C°(F2)		76.5 (170)
Radiator cap relief pressure	Standard	78 - 98 (0.8 - 1.0, 11 - 14)
kPa (kg/cm², psi)	Limit	59 - 98 (0.6 - 1.0, 9 - 14)
Cooling systam leakage testing pressure kPa (kg/cm², psi)		157 (1.6, 23)

## CLUTCH PEDAL

	Unit: mm			
Pedal height	153 - 163 (6.02 - 6.42)			
Pedal free travel	11.0 - 15.0 (0.433 - 0.591)			
Withdrawal lever play	2.5 - 3.5 (0.098 - 0.138)			

## BRAKE

•	Unit: mm (ir
Disc brake	:
Pad minimum thickness	GL7HB: 1.5 (0.059) GL22VD, GL22VE: 2.0 (0.079)
Rotor minimum thickness	CL7HB: 6.0 (0.236) CL22VD, CL22VE: 16.0 (0.630)
Drum brake	iii
Lining minimum thickness	1.5 (0.059)
Drum maximum inner diameter	181.0 (7.13)
Pedai free height	
M/T models	148 - 158 (5.83 - 6.22)
A/T models	157 - 167 (6.18 - 6.57)
Pedal depressed height (minimum) *1	
M/T models	75 (2.95) or more
A/T models	85 (3.35) or more
Parking brake	
Number of notches*2	Disc: 8 - 9 Drum: 7 - 8

Under force of 490 N (50 kg, 110 lb) with engine running
 At pulling force 196 N (20 kg, 44 lb)

### **REFILL CAPACITIES**

Unit Fuel tank		Liter	US measure	
		50.0		
Coolant	M/T	5.2	5-1/2 qt	
	A/T	5.7	6 qt	
Engine	With oil filter	3.2	3-3/8 qt	
	Without oil filter	2.8	3 qt	
	M/T	2.9-3.2	6-1/8 - 6-3/4 p	
Transaxle	A/T	7.0	7-3/8 qt	
Power steering system		1.0	1-1/8 qt	
Air conditioning system	Lubricant	0.2	6.8 fl oz	
	Refrigerant*	0.60 - 0.70 kg	1.32 - 1.54 lb	

<sup>\*</sup> R-134a

#### TEST VALUE AND TEST LIMIT (GST ONLY — NOT APPLICABLE TO CONSULT-II)

The following is the information specified in Mode 6 of SAE J1979.

The test value is a parameter used to determine whether a system/circuit diagnostic test is "OK" or "NG" while being monitored by the ECM during self-diagnosis. The test limit is a reference value which is specified as the maximum or minimum value and is compared with the test value being monitored.

Items for which these data (test value and test limit) are displayed are the same as SRT code items.

These data (test value and test limit) are specified by Test ID (TID) and Component ID (CID) and can be displayed on the GST screen.

SRT item	Self-diagnostic test item	DTC	Test value (GST display)		Test limit	Conversion
			TID	CID		
CATALYST	Three way catalyst function	P0420	01H	01H	Max.	1/128
		P0420	02H	81H	Min.	1
	EVAP control system (Small leak)	P0440	05H	03H	Max.	1/128mm <sup>2</sup>
EVAP SYSTEM	EVAL control system (ornali leak)	P1440	05H	03H	Max.	1/128mm <sup>2</sup>
	EVAP control system purge flow monitoring	P1447	06H	83H	Min.	20mV
		P0133	09H	04H	Max.	10ms
		P0131	0AH	84H	Min.	10mV
	Heated oxygen sensor 1	P0130	0BH	04H	Max.	10mV
		P0132	0CH	04H	Max.	10mV
HO2S		P0134	0DH	04H	Max.	1s
	Heated oxygen sensor 2	P0139	19H	86H	Min.	10mV/500ms
		P0137	1AH	86H	Min.	10mV
		P0140	1BH	06H	Max.	10mV
		P0138	1CH	06H	Max.	10mV
	Heated oxygen sensor 1 heater	P0135	29H	08H	Max.	20mV
HO2S HTR		P0135	2AH	88H	Min.	20mV
HO23 HTK	Heated oxygen sensor 2 heater	P0141	2DH	0AH	Max.	20mV
		P0141	2EH	8AH	Min.	20mV
	EGR function	P0400	31H	8CH	Min.	1°C
EGR SYSTEM		P0400	32H	8CH	Min.	1°C
		P0400	33H	8CH	Min.	1°C
		P0400	34H	8CH	Min.	1°C
		P1402	35H	0CH	Max.	1°C
	EGRC-BPT valve function	P0402	36H	0CH	Max.	1count
	EGNO-BET VAIVE IUTICITOTI	P0402	37H	8CH	Min.	1count