1996 to 2002 MY Front Heated Oxygen Sensor Slow Response Monitor (P0133, P0153)

To return to monitor description, see page Ho–9.

MONITOR STRATEGY

Required sensors/Components	Main	Front heated oxygen sensor
	Sub	Crankshaft position sensor and Vehicle speed sensor
Frequency of operation	Once per driving cycles	
Duration	Within 60 sec.	
MIL operation	2 driving cycles	
Sequence of operation	None	

TYPICAL ENABLING CONDITIONS

Item	Specification	
	Minimum	Maximum
The monitor will run whenever the following DTCs are not present	See page In–39	
Fuel system status	Closed Loop	
Time after engine start	120 sec.	–
Time after following conditions is met	20 sec.	–
Engine RPM	900 rpm	–
Vehicle speed	40 km/h (25 mph)	–
Idling condition:		
Engine RPM	Idle speed	
Vehicle speed	–	0 km/h (0 mph)
Cruising condition:		
Engine RPM	1,000 rpm	3,500 rpm
Throttle valve	Open (idle OFF)	

TYPICAL MALFUNCTION THRESHOLDS

Detection Criteria	Threshold
Time that output voltage of front heated oxygen sensor increase from 0.4 V to 0.55 V and that they decrease from 0.55 V to 0.4 V	20 sec. or more x 3 times

COMPONENT OPERATING RANGE

When normal, voltages output from the oxygen sensor produce a waveform alternating between 0 V and 1 V.

OBD MONITOR DRIVE PATTERNS

See page In–13