

1996 to 2003 MY Front Heated Oxygen Sensor Monitor (P0130, P0150, P2195, P2196, P2197, P2198)

To return to monitor description, see page [Ho-7](#).

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	18 to 36 sec. x 3	
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	
Engine RPM	Idle speed	
Time after engine start	120 sec.	–
Vehicle speed	–	0 km/h (0 mph)
Time after following conditions is met	20 sec.	–
Engine RPM	900 rpm	–
Vehicle speed	40 km/h (25 mph)	–

TYPICAL MALFUNCTION THRESHOLDS

Detection Criteria	Threshold
Case 1: Front heated oxygen sensor voltage is constant	
Number of "Fail A*" event	3 times or more
Number of "Fail B*" event	2 times or more
Case 2: Front heated oxygen sensor voltage is constant at LEAN side	
Front heated oxygen sensor voltage	Constant 0.55 V or less
Case 3: Front heated oxygen sensor voltage is constant at RICH side	
Front heated oxygen sensor voltage	Constant 0.40 V or more

* "Fail A": Sensor voltage is 0.55 V or less for 18 seconds or more

"Fail B": Sensor voltage is 0.40 V or more for 18 seconds or more

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](#)