

1996 to 2004 MY ECT Sensor Range/Performance Monitor (P0116, P0125)

To return to monitor description, see page [Ce-20](#).

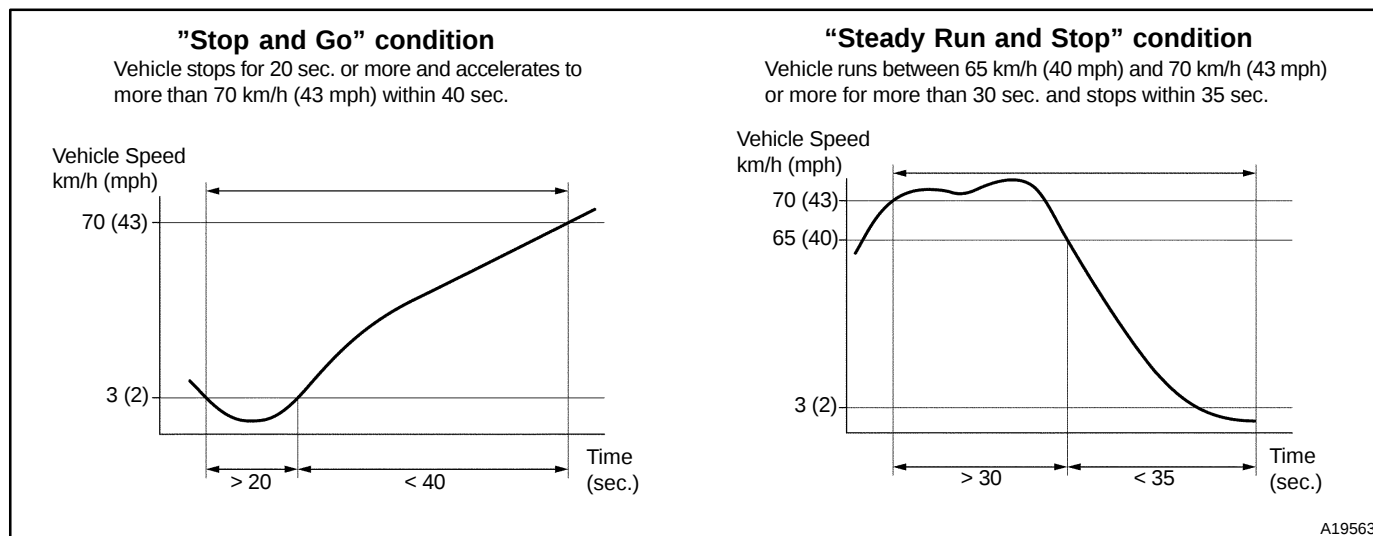
MONITOR STRATEGY

Required sensors/Components	Main	ECT sensor
	Sub	IAT sensor, MAF sensor (or MAP sensor), Radiator fan, Thermostat and Vehicle speed sensor
Frequency of operation	Once per driving cycle	
Duration	250 sec. or more	ECT sensor malfunction
	Within 1,200 sec.	Insufficient ECT for Closed Loop
MIL operation	6 driving cycles	ECT sensor malfunction (ECT is fixed at 60°C/140°F or more)
	2 driving cycles	Others
Sequence of operation	None	

TYPICAL ENABLING CONDITION

Item	Specification	
	Minimum	Maximum
The monitor will run whenever the following DTCs are not present	See page In-39	
Case 1-1: ECT sensor malfunction (ECT is fixed at less than 60° C/140° F)		
ECT at engine start	35° C (95° F)	60° C (140° F)
IAT at engine start	–6.7° C (20° F)	–
Vehicle speed change by 30 km/h (19 mph) or more	10 times	–
Case 1-2: ECT sensor malfunction (ECT is fixed at 60° C/140° F or more)		
ECT at engine start	60° C (140° F)	104.4° C (220° F)
IAT at engine start	–6.7° C (20° F)	–
“Stop and Go”* condition (refer to the following chart)	Once	
“Steady Run and Stop”* condition (refer to the following chart)	Once	
Case 2: Insufficient ECT for Closed Loop		
Throttle valve	Open (idle OFF)	
Intake air amount	0.1 g/sec.	–
Fuel cut	Not operating	

* "Stop and Go" and "Steady Run and Stop" condition:



TYPICAL MALFUNCTION THRESHOLDS

Detection Criteria	Threshold
Case 1-1: ECT sensor malfunction (ECT is fixed at less than 60°C/140°F)	
Change value of ECT	Less than 3°C (5.4°F)
Case 1-2: ECT sensor malfunction (ECT is fixed at 60°C/140°F or more)	
Change value of ECT	1°C (1.8°F) or less
Case 2: Insufficient ECT for Closed Loop	
Time until ECT reaches Closed Loop temperature (ECT at engine start is less than -6.7°C/20°F)	1,200 sec.
Time until ECT reaches Closed Loop temperature (ECT at engine start is between -6.7°C/20°F and 10°C/50°F)	300 sec.
Time until ECT reaches Closed Loop temperature (ECT at engine start is 10°C/50°F or more)	120 sec.

COMPONENT OPERATING RANGE

Refer to Fig. 1 (See page [Ce-20](#)).