



CAT ADCUSUM THRESH = 3000 (internal units) i.e.: 0.366 Volt seconds

8. Monitoring Conditions

Engine speed and engine load must be in the highlighted area of the map:

Speed (RPM x1000)	Load (unitless)							
	0	1	2	3	4	5	6	7
0								
1								
2								
3								
4								
5								
6								
7								

Road speed must be greater than 20 mph.

Steady engine conditions must be true

The catalyst must be deemed to have reached "light off" indicated by the following:

Engine Coolant Temperature is > 70° C AND Average Oxygen Sensor Heater Supply < 90%.

9. Monitoring Time Length / Frequency of Checks

The time taken for catalyst monitoring to complete the test depends on the switching frequency of the feedback control system, which in stage 2 depends on the catalyst's performance. If the switching frequency is taken as an average of 1.5 Hz then the stage 2 catalyst monitoring test will take 7x15x1/1.5 = 70seconds at stable valid conditions.

Stage 1 will take a similar amount of time to complete.

10. Criteria for Storing Diagnostic Trouble Code

Two successive trips where the catalyst monitoring system indicates a failed catalyst.

11. Criteria for Illuminating MIL

Two successive trips where the catalyst monitoring system indicates a failed catalyst.

12. Criteria for Determining Out of Range Input Signals

The oxygen sensors are subject to minimum and maximum voltage limits of 15mV and 4.985V respectively.