



On-board Diagnostic System — Diagnostic Test Mode III

Self-diagnostic Results

The ECM constantly monitors the function of these sensors and actuators, regardless of ignition key position. If a malfunction occurs, the information is stored in the ECM and can be retrieved from the memory by turning on the diagnostic test mode selector, located on the side of the ECM. When activated, the malfunction is indicated by flashing a red and a green LED (Light Emitting Diode), also located on the ECM. Since all the self-diagnostic results are stored in the ECM's memory even intermittent malfunctions can be diagnosed.

A malfunction is indicated by the number of both red and green flashing LEDs. First, the red LED flashes and the green flashes follow. The red LED corresponds to units of ten and the green LED corresponds to units of one. For example, when the red LED flashes once and the green LED flashes twice, this signifies the number "12", showing that the mass air flow sensor signal is malfunctioning. All problems are classified by diagnostic trouble code numbers in this way.

- When the engine fails to start, crank it two or more seconds before beginning on-board diagnostic system.
- Read out self-diagnostic results first and then erase the malfunction records which are stored in ECM memory. If it is erased, the on-board diagnostic system function for intermittent malfunctions will be lost.

DISPLAY DIAGNOSTIC TROUBLE CODE TABLE

Diagnostic trouble code No.	Detected items	
11	Camshaft position sensor circuit	X
12	Mass air flow sensor circuit	X
13	Engine coolant temperature sensor circuit	X
14	Vehicle speed sensor circuit	X
21	Ignition signal missing in primary coil	X
31	Engine control module (ECM)	X
32	EGR function	X
33	Heated oxygen sensor circuit	X
34	Knock sensor circuit	X
35	EGR temperature sensor circuit	X
43	Throttle position sensor circuit	X
45	Injector leak	X
51	Injector circuit	X
55	No malfunction in the above circuit	X

X: Available

HOW TO ERASE SELF-DIAGNOSTIC RESULTS

The diagnostic trouble code is erased from the backup memory of the ECM by the following:

- When the battery terminal is disconnected, the diagnostic trouble code will be lost from the backup memory within 24 hours.
- When Diagnostic Test Mode IV is selected after selecting Diagnostic Test Mode III.