
Misfire Detection

Refer to Service Information Bulletin **S.I. #12 02 97** for details about Misfire Fault Codes.

Testing the Oxygen Sensor should be performed using the DISplus Oscilloscope from the “Preset Measurement” List. The scope pattern should appear as below for a normal operating sensor.

If the signal remains high (rich condition) the following should be checked:

- Fuel Injectors
- Fuel Pressure
- Ignition System
- Input Sensors that influence air/fuel mixture
- Engine Mechanical

If the signal remains low (lean condition) the following should be checked:

- Air/Vacuum leak
- Fuel Pressure
- Input Sensor that influence air/fuel mixture
- Engine Mechanical

NOTE: A MIXTURE RELATED FAULT CODE SHOULD BE INVESTIGATED FIRST AND DOES NOT ALWAYS INDICATE A DEFECTIVE OXYGEN SENSOR!

Check Filler Cap (additional information from page 72)

After refueling and switching the ignition “ON”, the ECM detects a fuel level increase. When the ignition is switched “OFF”, the ECM activates the DM TL for a “brief test” to check the filler cap. If the filler cap was not properly installed; when the vehicle is started and driven at a speed >10 Km/h, the “Check Filler Cap” light will illuminate for 25 seconds (and then go out).

The second time the ignition is cycled “OFF”, the DM TL is activated to test the filler cap. If loose; when the vehicle is started and driven at a speed >10 Km/h, the “Check Filler Cap” light will be illuminated for 25 seconds (and then go out).

If the filler cap is properly secured, the “Malfunction Indicator Light” will *not* be illuminated and a fault code will not be stored in the ECM.

The third time the ignition is cycled “OFF”, the DM TL is activated to test the filler cap. If loose; a “Large Leak” fault code is stored in the ECM. The “Malfunction Indicator Light” will be illuminated the next time the engine is started.