**DESCRIPTION**

The MIL (Malfunction Indicator Lamp) is used to indicate vehicle malfunction detections by the ECM. By turning the ignition switch ON, power is supplied to the MIL circuit, and the ECM provides the circuit ground which illuminates the MIL.

The MIL operation can be checked visually: When the ignition switch is first turned ON, the MIL should be illuminated and should then turn OFF. If the MIL remains illuminated or is not illuminated, conduct the following troubleshooting procedure using an intelligent tester.

**WIRING DIAGRAM**

**INSPECTION PROCEDURE**

1. **CHECK THAT MIL IS ILLUMINATED**

   (a) Perform troubleshooting in accordance with the chart below.

   **Result**

<table>
<thead>
<tr>
<th>MIL Condition</th>
<th>Proceed To</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIL remains ON</td>
<td>A</td>
</tr>
<tr>
<td>MIL does not illuminate</td>
<td>B</td>
</tr>
</tbody>
</table>

   **B** Go to step 4
2 CHECK WHETHER MIL TURNS OFF

(a) Connect an intelligent tester to the DLC3.
(b) Turn the ignition switch ON.
(c) Turn the tester ON.
(d) Check whether any DTCs have been stored (See page ES-38). Note them down if necessary.
(e) Clear DTCs (See page ES-38).
(f) Check if the MIL turns off.

OK: MIL should turn off.

OK → REPAIR CIRCUITS INDICATED BY OUTPUT DTCS (See page ES-57)

NG

3 CHECK HARNESS AND CONNECTOR (CHECK FOR SHORT IN WIRE HARNESS)

(a) Disconnect the E46 ECM connector.
(b) Turn the ignition switch ON.
(c) Check that MIL is not illuminated.

OK: MIL is not illuminated.

(d) Reconnect the ECM connector.

OK → REPLACE ECM (See page ES-446)

NG

CHECK AND REPAIR HARNESS AND CONNECTOR (COMBINATION METER - ECM)

4 CHECK THAT MIL IS ILLUMINATED

(a) Check if the MIL is illuminated when the ignition switch is turns ON.

OK: MIL should be illuminated.

OK → SYSTEM OK

NG

5 CHECK THAT ENGINE STARTS

(a) Turn the ignition switch ON.
(b) Start the engine.
Result

<table>
<thead>
<tr>
<th>Result</th>
<th>Proceed To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine starts</td>
<td>A</td>
</tr>
<tr>
<td>Engine does not start*</td>
<td>B</td>
</tr>
</tbody>
</table>

HINT:
*: An intelligent tester cannot communicate with the ECM.

B  GO TO VC OUTPUT CIRCUIT (See page ES-389)

A

6  INSPECT COMBINATION METER ASSEMBLY (MIL CIRCUIT)

(a) See the combination meter troubleshooting procedure (See page ME-9).

NG  REPAIR OR REPLACE BULB OR COMBINATION METER ASSEMBLY

OK

CHECK AND REPAIR HARNESS AND CONNECTOR (COMBINATION METER - ECM)