

AG : DTC P1340, P1341; LEFT-HAND CAMSHAFT POSITION (CMP) SENSOR CIRCUIT MALFUNCTION

AG1 : CHECK THE CMP SENSOR FOR CORRECT INSTALLATION

1. Check the CMP sensor for correct installation.

•Is the CMP sensor correctly installed?

-> **Yes**

Goto <<AG2>>

-> **No**

INSTALL the CMP sensor correctly. CLEAR the DTCs. TEST the system for normal operation.

AG2 : CHECK THE CMP SENSOR FOR FOREIGN DEBRIS

1. Remove the CMP sensor and inspect for foreign debris.

•Is the CMP sensor free of foreign debris?

-> **Yes**

Goto <<AG3>>

-> **No**

CLEAN the sensor and wheel. INSTALL the sensor. CLEAR the DTCs. TEST the system for normal operation.

AG3 : CHECK THE CMP SENSOR SENSE CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.

2. Disconnect the CMP sensor electrical connector, PI15.

3. Disconnect the ECM electrical connector, EM83.

4. Measure the resistance between EM83, pin 18 (B) and PI15, pin 02 (B).

•Is the resistance greater than 5 ohms?

-> **Yes**

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<AG4>>

AG4 : CHECK THE CMP SENSOR SENSE CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Reconnect the battery negative terminal.

2. Turn the ignition switch to the ON position.

3. Measure the voltage between EM83, pin 18 (B) and GROUND.

•Is the voltage greater than 6 volts?

-> **Yes**

REPAIR the short circuit to high voltage. For additional information, refer to the wiring diagrams. CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<AG5>>

AG5 : CHECK THE CMP SENSOR SENSE CIRCUIT FOR SHORT TO GROUND

1. Turn the ignition switch to the OFF position.
2. Measure the resistance between PI15, pin 02 (B) and GROUND.

•Is the resistance less than 10,000 ohms?

-> Yes

REPAIR the short circuit to GROUND. For additional information, refer to the wiring diagrams. CLEAR the DTC. TEST the system for normal operation.

-> No

INSTALL a new CMP sensor. CLEAR the DTC. TEST the system for normal operation.