

P00A8: INTAKE AIR TEMPERATURE SENSOR 2 CIRCUIT HIGH BANK 2

OVERVIEW

Severity	:	Medium
DIY Difficulty Level	:	Intermediate
Repair Cost	:	\$90-\$1000
Can I Still Drive?	:	Yes (Short-term only)

What Does The P00A8 Code Mean?

The powertrain control module (PCM) monitors the temperature of the air entering the engine. The PCM supplies a 5 volt reference voltage to the Intake Air Temperature (IAT) sensor.

The IAT is a thermistor that varies resistance based on temperature. As the temperature increases, resistance decreases. Low temperature results in a high signal voltage. When the PCM sees a signal voltage higher than 5 volts for the #2 IAT sensor, it sets this P00A8 check engine light code. Bank 2 is the side of the engine that does not contain cylinder #1.

Related Bank 2 IAT sensor 2 trouble codes include:

- [P00A5](#): Intake Air Temperature Sensor 2 Circuit Bank 2
- [P00A6](#): Intake Air Temperature Sensor 2 Circuit Range/Performance Bank 2
- [P00A7](#): Intake Air Temperature Sensor 2 Circuit Low Bank 2
- [P00A9](#): Intake Air Temperature Sensor 2 Circuit Intermittent/Erratic Bank 2

What Are The Symptoms Of The P00A8 Code?

There will likely be no symptoms other than illumination of the Malfunction Indicator Lamp (MIL – Check Engine Light / Service Engine Soon).

What Are The Potential Causes Of The P00A8 Code?

A code P00A8 may mean that one or more of the following has happened:

- Internally failed #2 IAT sensor
- Faulty connection at #2 IAT sensor
- Open in IAT ground circuit or signal circuit
- Short to voltage in IAT signal circuit or reference circuit
- IAT harness and/or wiring routed too close to high-voltage wiring (e.g. alternator, spark plug cables, etc.)
- Faulty PCM (less likely but not impossible)

How Can You Fix The P00A8 Code?

First, if you have access to a scan tool, is there an IAT reading? If the IAT reading is logical then the problem is likely intermittent. If the reading is less than -30 degrees, unplug the connector. Install a jumper wire between the harness connector signal and ground circuits.

The IAT temperature reading on the scan tool should be maxed out at the high end. For example it should be 280 degrees Fahrenheit or higher. If it is, the wiring is okay, and it may have been the connection. If it isn't install the jumper wire between the IAT signal circuit and the chassis ground.

If now the IAT reading on the scan tool is maxed out then check for an open in the IAT ground circuit. If you get no reading at all on the scan tool, it's likely that the sensor signal is open or the 5 volt reference is missing. Check using a DVOM (digital volt ohm meter) for a 5 volt reference.

If it's there, then unplug the connector at the PCM and check for continuity on the IAT signal circuit between the PCM connector and the IAT connector.

Reference Sources

[P00A8: IAT Sensor 2 Circuit High Bank 2](#), OBD-Codes.