P2317: IGNITION COIL F SECONDARY CIRCUIT

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	**$150-$300**
Can I Still Drive?	:	No

What Does The P2317 Code Mean?

If your vehicle has stored a code P2317, accompanied by a malfunction indicator lamp (MIL), it means that the powertrain control module (PCM) has detected an abnormal voltage condition in the secondary control circuit of the ignition coil designated with the letter F. Refer to a manufacturer specific guide to determine which is the “F” circuit for your particular application.

Primary circuits of the ignition coil are the wires which supply battery voltage to the coil. Voltage is delivered through fuses, relays, and various other sources. Secondary coil circuits include the high-energy ignition boot, spark plug boot, or spark plug wires which are responsible for transference of the high energy spark from the coil to the spark plug.

Typically, the ignition coil is supplied with battery voltage and ground. When the ground signal is interrupted (momentarily), the ignition coil emits a high voltage spark which also fires the spark plug. Spark plug operation is a necessary component in the internal combustion engine. If primary voltage to the ignition coil is insufficient, high-energy voltage emission will not occur and the engine cylinder will not produce horsepower.

What Are The Symptoms Of The P2317 Code?

Symptoms of a P2317 trouble code may include:

- Engine misfire
- Diminished engine performance

- Reduced fuel efficiency
- Other related codes
- Fuel injector operation for the affected cylinder may be disabled by the PCM

What Are The Potential Causes Of The P2317 Code?

Causes for this code may include:

- Bad spark plug wire or boot
- Malfunctioning relay or blown fuse (fusible link)
- Open or shorted wiring or wiring connectors (wildlife damage)
- Defective ignition coil
- Faulty camshaft or crankshaft sensor or wiring

How Can You Fix The P2317 Code?

You will need a diagnostic scanner, a digital volt/ohmmeter (DVOM), and a source of reliable vehicle information in order to accurately diagnose a code P2317.

Locate a technical service bulletin (TSB)

You may save yourself time and trouble by searching for technical service bulletins (TSB) that replicate the code stored, vehicle (year, make, model, and engine), and symptoms exhibited. This information may be found in your vehicle information source. If you find the right TSB, it could yield a speedy solution to your diagnosis.

Retrieve all stored codes

After you connect the scanner to the vehicle diagnostic port and retrieve all stored codes and pertinent freeze frame data, write the information down (in case the code proves to be an intermittent one). After that, clear the codes and test drive the vehicle until one of two things happens; the code is restored or the PCM enters readiness mode.

The code may be more difficult to diagnose if the PCM enters readiness mode at this point, because the code is intermittent. The condition which caused the P2317 to be stored may need to worsen before an accurate diagnosis can be made. If the code is restored, continue with the diagnosis.

You may obtain connector face views, connector pinout charts, component locator charts, wiring diagrams, and diagnostic flow charts (pertaining to the code and vehicle in question) using your source of vehicle information.

Visually inspect of related wiring and connectors

Perform a visual inspection of related wiring and connectors. Repair or replace wiring that has been cut, burned, or damaged. Scheduled maintenance includes the replacement of spark plug wires and boots. If the vehicle in question is beyond the recommended maintenance interval for a tune up, suspect bad spark plug wires/boots as the cause of a stored P2317.

Spark plug boots that are torn, burnt, or contaminated by fluid should be considered defective. Gain access to the junction between the ignition coil and the spark plug wire. Check for high energy ignition (HEI) at the spark plug. If none is detected, disconnect the spark plug wire from the coil and see if any HEI is found there. If there is HEI at the spark plug, suspect that the plug is defective or there is a PCM error. If there is no HEI at the spark plug but it is strong at the coil, suspect a bad plug wire or boot. If there is no HEI at the coil, suspect that the coil is defective. HEI should be tested (carefully) with the engine running.

- The P2317 may be repaired by a maintenance tune up but do your diagnostic work to make sure

Severity Description

When a P2317 is stored, the cause should be diagnosed as soon as possible. Symptoms which likely accompany these codes will usually demand immediate attention.

Reference Sources

Diagnostic Trouble Code (DTC) Guide for P2317 - Ominitek Advanced Technologies, pages 208-209.