P0817: STARTER DISABLE CIRCUIT

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	**$50-$150**
Can I Still Drive?	:	No

What Does The P0817 Code Mean?

If your vehicle has stored a code P0817, it means that the powertrain control module (PCM) has detected a malfunction in the starter disable switch circuit. This type of code may be applicable to vehicles with manual or automatic transmissions.

The starter disable switch is usually a single circuit, open/closed switch which interrupts voltage between the ignition switch and the starter solenoid if the clutch is not depressed, the transmission (manual) is not in neutral, or the transmission (automatic) is not in park.

Vehicle applications with an automatic transmission may have the starter disable switch integrated into the neutral safety switch or shift selector switch. The transmission control module (TCM) or the PCM monitor starter disable circuit voltage with the ignition in the ON position. The TCM may be a stand alone module or part of the PCM.

If the PCM detects that starter disable switch circuit voltage is not within allowable parameters, a code P0817 may be stored and a malfunction indicator lamp (MIL) illuminated. Multiple ignition cycles (with a failure) may be required for MIL illumination.

What Are The Symptoms Of The P0817 Code?

Symptoms of a P0817 trouble code may include:

- Engine will not start

- Engine starts with the transmission in gear
- No symptoms may be exhibited

What Are The Potential Causes Of The P0817 Code?

Causes for this code may include:

- Defective starter disable switch
- Shorted or open wiring or connectors in starter disable switch circuit
- Faulty PCM or a programming error

How Can You Fix The P0817 Code?

A diagnostic scanner, a digital volt/ohmmeter (DVOM), and a source of vehicle specific diagnostic information will be required to diagnose a code P0817.

You may use your source of vehicle information to locate a technical service bulletin (TSB) that matches the vehicle year, make, and model; as well as the engine size, code/s stored, and symptoms exhibited. If you find one, it could yield helpful diagnostic information.

Use the scanner (connected to the vehicle diagnostic connector) to retrieve all stored codes and pertinent freeze frame data. It is a good idea to write this information down before clearing the codes then test-drive the vehicle until the PCM either enters readiness mode or the code is reset.

If the PCM enters readiness mode at this time, the code is intermittent and may be much more difficult to diagnose. If this is the case, the conditions which contributed to the code being stored may need to worsen before an accurate diagnosis can be made.

If the code is immediately reset, the next step of your diagnosis will require that you search your vehicle information source for diagnostic flow-charts, connector pin-out charts, connector face views, and component testing procedures/specifications.

Step 1

Use the DVOM to test voltage, ground, and signal output at the appropriate starter disable switch. Typical starter disable switch circuits consist of either battery voltage (when activated) or ground (when deactivated).

Step 2

Use your source of vehicle diagnostic information and the DVOM to test starter disable switches as required. Replace switches that do not test within system parameters.

Step 3

If system switches and circuits are functional, use the DVOM to test starter disable switch circuits to the starter, as well as to the PCM. Disconnect all controllers prior to using the DVOM for testing.

- Starter disable switch circuit codes are most often attributed to switch failure
- Vehicles with manual transmissions often use multiple starter disable switches (one for the clutch and another for neutral)

Severity Description

A stored code P0817 could be accompanied by a no-start condition and also indicates that either an electrical issue or a mechanical failure has occurred. Conditions which contributed to a code of this nature being stored should be rectified as quickly as possible.

Reference Sources

P0817 Starter Disable Circuit, OBD-Codes.