

P0801: REVERSE INHIBIT CONTROL CIRCUIT MALFUNCTION

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	\$150-\$400
Can I Still Drive?	:	Yes (Short-term only)

What Does The P0801 Code Mean?

If your vehicle has stored a code P0801, it means that the powertrain control module (PCM) has detected a malfunction in the reverse inhibit control circuit. A P0801 may pertain to either the transmission or transfer case, depending upon vehicle make and model.

The transmission control module (TCM) or transfer case control module (TSCM) may be a stand alone unit but is most commonly integrated into a single housing with the engine control module (ECM). This is called the PCM.

The PCM utilizes input signals from multiple engine and transmission sensors to calculate automatic transmission shift strategy. The reverse inhibit switch is designed to prevent the transmission from being shifted into reverse while the vehicle is proceeding in a forward direction. Typically, an electronically controlled solenoid is responsible for actuation of a plunger that prevents the reverse shifter pawl from engaging the reverse gear selector when the transmission is already engaged in a forward gear.

If the PCM detects a level of reverse inhibit circuit voltage that exceeds maximum allowable parameters, a code P0801 may be stored and a malfunction indicator lamp (MIL) illuminated.

What Are The Symptoms Of The P0801 Code?

Symptoms of a P0801 trouble code may include:

- The shifter may go into reverse while the vehicle is moving forward
- The shifter may fail to go into reverse
- There may be no symptoms exhibited
- Blown fuses in transmission control related circuits

What Are The Potential Causes Of The P0801 Code?

Causes for this code may include:

- Defective reverse inhibit solenoid
- Bad reverse inhibit sensor
- Open or shorted reverse inhibit control circuit
- Faulty PCM or a programming error

How Can You Fix The P0801 Code?

When diagnosing automatic transmission codes, you should begin by making sure that the transmission fluid is clean and that the transmission is filled to the appropriate level. If the fluid level is low, locate the source of the leak and repair the condition. Refill the transmission with the recommended fluid and proceed.

A diagnostic scanner, a digital volt/ohmmeter (DVOM), and a source of vehicle specific diagnostic information will be required to diagnose a code P0801.

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.

With the transmission filled to the appropriate level with the recommended fluid, proceed with the first step of the diagnosis.

Step 1

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.

Step 2

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 3

Use the DVOM to test voltage and ground circuits at the reverse inhibit solenoid and sensor (if equipped). If voltage and ground are detected, test the reverse inhibit solenoid and the sensor according to manufacturer's specifications. Any components which fail to comply with recommended specifications should be considered defective. If the components are functional test the signal circuit that is input to the PCM.

Step 4

If the reverse inhibit solenoid and sensor are functional, and the signal input is present, use the DVOM to test system circuits. The voltage drop testing method works well for this task. Disconnect all controllers from the circuit prior to testing resistance with the DVOM.

Note: Shifter linkage wear, shifter bushing wear, or shift pawl wear may contribute to reverse inhibit control failure

Severity Description

The presence of a stored code P0801 indicates that the reverse inhibitor may be disabled. Conditions which have contributed to a code of this nature being stored should be rectified as quickly as possible.

Reference Sources

[P0801 Reverse Inhibit Control Circuit Malfunction](#), OBD-Codes.