

## P0811: EXCESSIVE CLUTCH SLIPPAGE

### OVERVIEW

Severity	:	<div><div>High</div></div>
DIY Difficulty Level	:	<div><div>Intermediate</div></div>
Repair Cost	:	\$200-\$350
Can I Still Drive?	:	Yes

### What Does The P0811 Code Mean?

If your vehicle has stored a code P0811, it means that the powertrain control module (PCM) has received a data input signal from the input and output speed sensors which indicates that the clutch is slipping excessively.

The transmission control module (TCM) 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 the maximum allowable degree of transmission (clutch) slippage. Clutch disc and pressure plate wear, as well as mechanical failure, may lead to excessive clutch slippage.

The PCM uses voltage input signals from the transmission input speed sensor and transmission output speed sensor to determine if the clutch is functioning within the parameters for maximum allowable slippage.

As with many other transmission malfunctions, a clutch slippage code may be caused by electrical or mechanical failure. Often when the friction material on the clutch disc is worn down below a certain level, the clutch begins to slip. This condition is usually accompanied by the distinctive odor of burnt friction material.

If the PCM detects a degree of transmission (clutch) slippage that exceeds maximum allowable parameters, a code P0811 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 P0811 Code?

Symptoms of a P0811 trouble code may include:

- Transmission slippage
- Harsh gear engagement
- Clutch engagement occurs near the top
- Strong odor of burnt friction material

## What Are The Potential Causes Of The P0811 Code?

Causes for this code may include:

- Worn clutch disc and/or pressure plate
- Defective input or output speed sensor
- Shorted wiring for input speed/output speed sensors
- Faulty PCM or a programming error

## How Can You Fix The P0811 Code?

Before attempting to diagnose a P0811, make sure that the clutch, pressure plate, and throwout bearing are functioning properly. You will also want to check clutch arms and bushings as well as clutch hydraulics if applicable.

A diagnostic scanner, a digital volt/ohmmeter (DVOM), and a source of vehicle specific diagnostic information will be required to diagnose a code P0811. An oscilloscope may also be helpful when attempting to diagnose input and output speed sensor malfunctions.

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 clutch functioning properly, 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, ground, and signal at the transmission input and output speed sensors (key on and engine off). Input and output speed sensor circuits typically consist of a reference voltage, a signal wire, and a ground.

## Step 4

Use the oscilloscope (connected to the signal circuit and ground) to check for spikes and glitches in the speed sensor signal pattern.

- Most transmission slippage codes are caused by excessively worn clutch components

## Severity Description

A stored code P0811 indicates that either a serious electrical issue or some type of clutch failure has occurred. At any rate, conditions which contributed to a code of this nature being stored should be rectified as quickly as possible.

## Reference Sources

[P0811 Excessive Clutch Slippage](#), OBD-Codes.