CIRCUIT		
		OVERVIEW
Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	\$150-\$200
Can I Still Drive?	:	Yes (Short-term only)

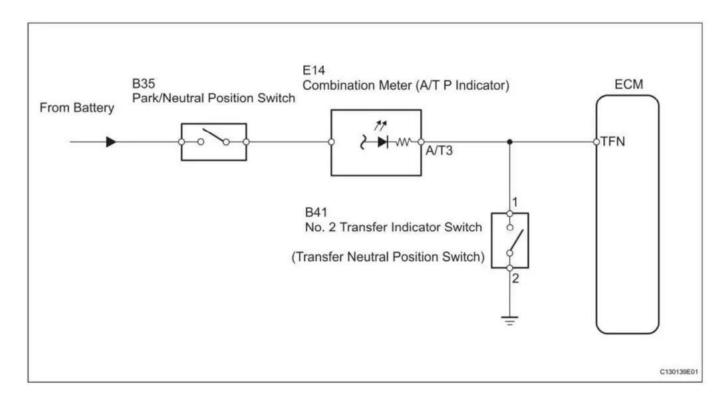
### What Does The P0818 Code Mean?

If your vehicle has stored a code P0818, it means that the powertrain control module (PCM) has detected a malfunction in the transfer case neutral safety switch (also called the shift selector switch) circuit. This type of code is applicable to vehicles with automatic AWD/4WD transmissions only.

The transfer case neutral safety switch input circuit is typically integrated into the neutral safety switch or shift selector switch. When the transfer case is placed in neutral (driveline disconnected), a voltage signal is input to the transmission control module (TCM) or the PCM. The controller also monitors transfer case neutral safety switch circuit voltage whenever the ignition is in the ON position. The TCM may be a stand alone module or part of the PCM.

If the PCM does not detect an appropriate degree of voltage on the transfer case neutral safety switch circuit, with the transfer case apparently in or neutral, a code P0818 may be stored and a malfunction indicator lamp (MIL) illuminated. Multiple ignition cycles (with a failure) may be required for MIL illumination.





P0818 wiring diagram

# What Are The Symptoms Of The P0818 Code?

Symptoms of a P0818 trouble code may include:

- Engine will not start
- Front axle fails to engage or will not disengage
- Engine starts with the transmission in gear
- No symptoms may be exhibited

### What Are The Potential Causes Of The P0818 Code?

Causes for this code may include:

- Defective neutral safety or shift selector switch
- Shorted or open wiring or connectors in transfer case neutral safety switch input circuit
- Faulty PCM or a programming error

#### **How Can You Fix The P0818 Code?**

A diagnostic scanner, a digital volt/ohmmeter (DVOM), and a source of vehicle specific diagnostic information will be required to diagnose a code P0818.

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 transfer case neutral safety switch input voltage with the shifter in various positions. Typical transfer case neutral safety switch input 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 neutral safety/shift selector 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 transfer case neutral safety switch input circuits to the PCM. Disconnect all controllers prior to using the DVOM for testing.

**Note:** Transfer case neutral safety switch input codes are most often attributed to neutral safety switch failure

# **Severity Description**

A stored code P0818 could be accompanied by a no-start condition and also indicates that either an electrical issue or a serious mechanical failure has occurred. Conditions which contributed to a code of this nature being stored should be rectified as quickly as possible.

#### **Reference Sources**

<u>P0818 Driveline Disconnect Switch Input Circuit</u>, OBD-Codes.

