P0806: CLUTCH POSITION SENSOR CIRCUIT RANGE/PERFORMANCE

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	**$200-$350**
Can I Still Drive?	:	**Yes**

What Does The P0806 Code Mean?

OBD-II trouble code P0806 and related codes P0805, P0807, P0808, P0809, and P080A are associated with the clutch position sensor circuit. This circuit is monitored by the Power Control Module (PCM) or the Transmission Control Module (TCM) based on the specific vehicle.

The purpose of the clutch position sensor circuit is to monitor the status of the clutch on a manual transmission. This process is accomplished by reading the output voltage of the clutch position sensor that indicates when the clutch is engaged.

The clutch position sensor is usually a basic on/off switch mounted near the clutch foot pedal on the support bracket in most circumstances. Constant voltage is typically present on one side of the switch and the contacts are closed by engaging the clutch transferring voltage to the starter or starter solenoid. This basic circuit and switch prevents starting the engine prior to engaging the clutch.

When the PCM or TCM detects voltage or resistance within the clutch position sensor circuit that is outside the expected range or another performance problem, code P0806 will be set and the check engine light or the transmission warning lamp will be illuminated.

What Are The Symptoms Of The P0806 Code?

Symptoms of a P0806 trouble code may include:

- Motor will not start
- Motor will start without engaging the clutch
- Transmission warning lamp illuminated
- Check engine light illuminated

What Are The Potential Causes Of The P0806 Code?

Causes for this P0806 code may include:

- Defective clutch position sensor
- Faulty or damaged wiring
- Loose or defective control module ground strap
- Corroded, damaged or loose connector
- Defective fuse or fuse-able link (If applicable)
- Defective PCM or TCM

How Can You Fix The P0806 Code?

The first step in the troubleshooting process for any malfunction is to research the Technical Service Bulletins (TSB's) for the specific vehicle by year, model and power plant. In some circumstances, this can save a lot of time in the long run by pointing you in the right direction.

The second step is to locate the clutch position sensor switch and look for obvious physical damage. Perform a thorough visual inspection to check the associated wiring for obvious defects such as scraping, rubbing, bare wires, or burn spots. Next is to check the connectors and connections for security, corrosion and damaged pins. This process must include all wiring connectors and connections to the clutch position sensor switch, PCM, starter and the starter solenoid. Consult the specific tech data for the vehicle to see if a fuse or fuse-able link is incorporated into the circuit.

Advanced Steps

The advanced steps become very vehicle specific and require the appropriate advanced equipment to perform accurately. These procedures require a digital multi meter and the specific technical references for the vehicle. Specific technical data will include troubleshooting charts and the appropriate sequence to follow assisting you with an accurate diagnosis.

Voltage Checks

When the clutch is disengaged there should be appropriately 12 volts on one side of the sensor. When the clutch is engaged you should have voltage on both sides of the sensor. The starter solenoid or starter should also have power based on the configuration.

If this process identifies the absence of a power source or ground, continuity testing may be required to check the integrity of the wiring, connectors and other components. Continuity tests should always be performed with the power removed from the circuit and the normal readings for wiring and connections should be 0 ohms of resistance. Resistance or no continuity is an indication of faulty wiring that is open or shorted and must be repaired or replaced.

A continuity test from the PCM or TCM control to the frame will confirm the serviceability level of ground straps and ground wires. The presence of resistance is an indication of a loose connection or possible corrosion.

Severity Description

The severity of this code is normally moderate, but P0806 can be severe if the vehicle starts with the clutch disengaged creating a safety issue.

Reference Sources

P0806 Clutch Position Sensor Circuit Range/Performance, OBD-Codes.