

P0831: CLUTCH PEDAL SWITCH A CIRCUIT LOW

OVERVIEW

Severity	:	Medium
DIY Difficulty Level	:	Intermediate
Repair Cost	:	\$200-\$350
Can I Still Drive?	:	Yes (Short-term only)

What Does The P0831 Code Mean?

The P0831 OBD-II trouble code is associated with the Clutch Pedal Switch "A" Circuit. When the Powertrain Control Module (PCM) detects a malfunction within the Clutch Pedal Switch "A" Circuit, also known as the clutch position sensor or clutch start switch circuit a number of different codes can be set.

These codes are [P0830](#), P0831, [P0832](#), [P0833](#), [P0834](#), [P0835](#) and [P083F](#) based on the specific malfunction that alerts the PCM to set the code and illuminate the Check Engine Light.

The purpose of the Clutch Pedal Switch "A" Circuit is for the PCM to monitor the position of the clutch pedal. This process is accomplished by reading the output voltage of the clutch position sensor. The clutch position sensor switch may vary in design from one vehicle to another, it is usually a basic "on/off" switch mounted near the clutch foot pedal on the support bracket. Regardless of the design, constant voltage is typically present on one side of the switch and the contacts are closed by engaging the clutch pedal transferring voltage to the starter or starter solenoid. This basic circuit and switch prevents starting the engine prior to engaging the clutch.

Code P0831 Clutch Pedal Switch A Circuit Low is set by the PCM when the Clutch Pedal Switch "A" Circuit is experiencing a low voltage situation.

What Are The Symptoms Of The P0831 Code?

Symptoms of a P0831 engine code may include:

- The engine will not start
- The engine will start without engaging the clutch
- Check Engine Light illuminated

What Are The Potential Causes Of The P0831 Code?

Causes for this code may include:

- Faulty clutch position sensor switch
- Blown fuse or fuse-able link (if applicable)
- Corroded or damaged connector
- Faulty or damaged wiring
- Faulty PCM

How Can You Fix The P0831 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. Voltage requirements will vary based on the specific year and model of the vehicle.

Voltage Checks

When the clutch is disengaged there should be appropriately 12 volts on one side of the switch. When the clutch is engaged you should have voltage on both sides of the switch. 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 and the clutch position sensor switch.

When the clutch is engaged you should have continuity through the switch and when the clutch is released the meter should indicate no continuity through the switch. 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 unless otherwise specified by the technical data. Resistance or no continuity is an indication of faulty wiring that is open or shorted and must be repaired or replaced.

Severity Description

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

Reference Sources

[P0831 Clutch Pedal Switch A Circuit Low](#), OBD-Codes.