P07B9: TRANSMISSION PARK POSITION SENSOR/SWITCH B CIRCUIT LOW

OVERVIEW

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

What Does The P07B9 Code Mean?

Trouble code P07B9 is one of several possible codes associated to the Transmission Park Position Sensor/Switch “B” Circuit.

This code is an indication that the Powertrain Control Module (PCM) has detected a malfunction that is affecting the operation of the transmission park position sensor/switch “B” circuit.

The codes that are commonly associated to transmission park position sensor/switch “B” circuit malfunctions are P07B8, P07B9, P07BA, P07BB, P07BC and P07BD. The specific situation determines the code activated by the PCM and the check engine light or the service engine soon light will be illuminated.

The purpose of the transmission park position sensor/switch “B” circuit is to monitor the status of the transmission. This circuit sends a signal to the PCM when the transmission is placed into the park position.

Based on the specific vehicle, this circuit is commonly a safety feature to prevent the starter from engaging with the automatic transmission in gear.

Code P07B9 is set by the PCM when the transmission park position sensor/switch “B” circuit is detected as having low output voltage.

What Are The Symptoms Of The P07B9 Code?

Symptoms of a P07B9 trouble code may include:

- Vehicle will not start (starter will not engage)
- Starter will engage with the vehicle in gear
- An illuminated Service Engine Soon Light
- Check Engine Light is illuminated
- Transmission may not shift out of park
- Transmission may not shift into park

What Are The Potential Causes Of The P07B9 Code?

Causes for this P07B9 code may include:

- Defective transmission park position sensor/switch
- Corroded or damaged connector
- Damaged or faulty wiring
- Defective PCM

How Can You Fix The P07B9 Code?

The first step in the troubleshooting process for any malfunction is to research the Technical Service Bulletins for known issues with the specific vehicle.

Locate all of the components associated with the transmission park position sensor/switch “B” circuit. This will include the transmission park position sensor/switch, wiring, connectors and the PCM on a simplex system.

Based on the specific year, make and model of the vehicle this circuit may incorporate more components. After these components are located, a thorough visual inspection should be conducted to check all of the associated wiring and connectors for obvious defects such as scraping, rubbing, bare wires or burn spots. The connectors should also be checked for corrosion build up or damaged pins.

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 of the specific year, make and model of the vehicle.

Circuit Checks

Voltage requirements will vary based on the specific vehicle, the transmission park position sensor/switch circuit configuration and the components incorporated. Technical data should be referenced to obtain the correct voltage range for the transmission park position sensor/switch and the appropriate troubleshooting sequence to follow. The correct voltage input to a sensor/switch with no voltage output is normally an indication of internal failure.

If this process identifies the absence of a power source or ground, continuity testing may be needed to check the condition of the wiring and connectors. Continuity tests are always performed with the power removed from the circuit and the normal readings should be 0 ohms of resistance unless otherwise specified by the technical data.

Resistance or no continuity is an indication of faulty wiring or connectors that are shorted or open and must be repaired or replaced.

Severity Description

The severity of this code varies based on the specific malfunction and the severity level may progress if not corrected in a timely manner. This code could become a safety issue requiring immediate attention if the starter will engage with the vehicle in gear.

Photo of a park/neutral position switch:

Reference Sources

P07B9 Transmission Park Position Sensor/Switch B Circuit Low, OBD-Codes.