P0723: OUTPUT SPEED SENSOR INTERMITTENT

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	**$100-$350**
Can I Still Drive?	:	No

What Does The P0723 Code Mean?

The P0723 OBD-II trouble code is associated with the Transmission Output Speed Sensor.

When the Powertrain Control Module (PCM) detects a malfunction within the Output Speed Sensor Circuit a wide variety of codes can be triggered depending on the specific vehicle and the specific automatic transmission.

Some of the more common code responses associated with Transmission Output Speed Sensor issues are codes P0720, P0721, and P0722 based on the specific malfunction that alerts the PCM to set the code and activate the Check Engine Light.

The purpose of the Transmission Output Speed Sensor is to provide the PCM with signal that indicates the speed of the transmission output shaft rotation. The PCM uses these readings to control the shift solenoids. The solenoids direct fluid between various hydraulic circuits and change the transmission gear ratio at the appropriate time.

Based on the vehicle and the transmission configuration the Output Speed Sensor may also control the speedometer reading. An automatic transmission is controlled by bands and clutches that change gears by having fluid pressure in the right place at the right time. This process starts with the Transmission Output Speed Sensor.

Code P0723 is set by the PCM when it's not seeing a regular, consistent signal from the Output Speed Sensor.

What Are The Symptoms Of The P0723 Code?

Symptoms of a P0723 trouble code may include:

- Poor fuel economy
- Check Engine Light illuminated
- Transmission does not shift
- Transmission Shifts roughly
- Possibly misfire-like symptoms
- PCM puts the engine into limp mode
- Speedometer shows incorrect or erratic reading

What Are The Potential Causes Of The P0723 Code?

Causes for this P0723 transmission code may include:

- Defective Output Speed Sensor
- Dirty or contaminated fluid
- Dirty or clogged transmission filter
- Defective Coolant Temperature Sensor
- Defective Transmission Valve Body
- Restricted hydraulic passages
- Faulty Shift Solenoid
- Corroded or damaged connector
- Faulty or damaged wiring
- Faulty PCM

How Can You Fix The P0723 Code?

Prior to beginning the troubleshooting process for any malfunction you should research the Technical Service Bulletins (TSB's) for the specific vehicle by year, model and transmission. In some situations this can save a lot of time in the long run by pointing you in the right direction.

The first step is to make sure the fluid level is correct and inspect the condition of the fluid for contamination. You should also check the vehicle records to verify the last time that the filter and fluid was changed if possible. A thorough visual inspection to check the associated wiring for obvious defects such as scraping, rubbing, bare wires, or burn spots is next.

Check the connectors and connections for security, corrosion and damaged pins. This should include all wiring and connectors to the output speed sensor, transmission solenoids, transmission pump and the PCM. Depending on the configuration, the transmission linkage should be inspected for security and freedom of movement.

Advanced Steps

The advanced steps become very vehicle specific and require the appropriate advanced equipment to perform correctly. These procedures require a digital multi meter and the specific technical references for the vehicle.

You should follow the specific troubleshooting guidelines and sequence for your vehicle. Voltage requirements may very based on the specific model of the vehicle and the transmission configuration.

Continuity Checks

Continuity checks are always performed with the power removed from the circuit to avoid shorting the circuit and creating more damage. Unless otherwise specified by the technical data, 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.

Severity Description

The severity of this code normally starts as moderate, but it can progress to a more severe level rapidly when not corrected in a timely manner.

Photo of a transmission speed sensor:

Reference Sources

Diagnostic Trouble Code (DTC) Charts and Descriptions for P0723 - Page 103.