

GENERIC · POWERTRAIN

P0792

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0792

Intermediate Shaft Speed Sensor 'A' Circuit Range/Performance

P0792 indicates that the powertrain control module (PCM) has detected an abnormal signal from the intermediate shaft speed sensor 'A' circuit, meaning the sensor's output is out of the expected range or performance criteria. The PCM compares this signal with other speed sensors and sets the code when the correlation or signal pattern does not match the vehicle's operating conditions.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Harsh or delayed transmission shifts, particularly when accelerating or decelerating
- Transmission may enter limp mode, limiting vehicle speed and gear selection
- Inconsistent or erratic speedometer readings if the sensor shares data with the instrument cluster
- Increased engine RPM during highway driving due to improper gear selection
- A stored trouble code may be the only indication if the fault is intermittent

Common causes, most likely first

- 1 Faulty intermediate shaft speed sensor 'A' due to internal failure or contamination
- 2 Damaged or corroded wiring and connectors in the sensor circuit, including open or short circuits
- 3 Metal debris or sludge buildup on the sensor tip, disrupting the magnetic signal
- 4 Transmission fluid level low or fluid contaminated, affecting sensor operation
- 5 Internal transmission mechanical issues, such as a worn tone ring or shaft, causing erratic sensor readings
- 6 PCM software calibration issues or internal PCM fault, though less common



How to diagnose and fix it

- 1 Perform a visual inspection of the sensor and its wiring for obvious damage, corrosion, or loose connections
- 2 Check transmission fluid level and condition; top off or replace fluid if necessary
- 3 Use a scan tool to monitor live data from the intermediate shaft speed sensor and compare with other speed sensors to verify erratic behavior
- 4 Test the sensor circuit with a multimeter for continuity, resistance, and short to ground or power, following the manufacturer's specifications
- 5 Remove and inspect the sensor for metal shavings or debris; clean or replace if contaminated or damaged
- 6 If the sensor and wiring are good, perform a resistance and voltage output test on the sensor itself, replacing if out of spec
- 7 After repairs, clear the code and perform a road test to ensure the code does not return and transmission operates correctly

Common Misdiagnosis Traps for P0792

- A dirty or contaminated sensor tip is a frequent cause that is often overlooked, so cleaning the sensor before replacement can save unnecessary expense.
- The intermediate shaft speed sensor may share a circuit with other sensors, and a fault in a related sensor can trigger P0792, so always check for additional codes.
- Intermittent wiring issues, such as a chafed wire that only shorts when the engine moves, can set this code without a permanent failure, making wiggle tests essential.
- Some transmissions use the intermediate shaft speed sensor for shift scheduling, so a faulty sensor can cause harsh shifts that mimic internal transmission problems.
- After replacing the sensor, the PCM may require a relearn procedure or adaptation reset to restore proper shift quality, which is often missed.

Can I keep driving with P0792?

If the vehicle is in limp mode or shifting harshly, avoid highway driving and seek repair promptly to prevent transmission damage. If only the warning light is on and the vehicle drives normally, you can drive cautiously to a repair shop, but avoid heavy acceleration or towing.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Socket and ratchet set
- Jack and jack stands or ramps
- Transmission fluid funnel and fluid
- Wire brush or contact cleaner



Reading P0792

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 7** Transmission.
- 92** The exact fault within that area.

Often seen with

P0715 Input/Turbine Speed Sensor Circuit Malfunction · **P0720** Output Speed Sensor Circuit Malfunction · **P0721** Output Speed Sensor Range/Performance · **P0791** Intermediate Shaft Speed Sensor 'A' Circuit · **P0793** Intermediate Shaft Speed Sensor 'A' Circuit No Signal

See it working

Watch the animated explainer [How a Starter Motor Works: Pre-Engaged Starter](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0792/>

