

GENERIC · POWERTRAIN

**P0715**

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

**P0715**

## Input/Turbine Speed Sensor Circuit Malfunction

P0715 indicates that the transmission control module has detected an abnormal signal from the input/turbine speed sensor circuit, which measures the rotational speed of the transmission input shaft. The computer compares this signal to other speed sensors and expects a plausible value; when the signal is missing, erratic, or out of range, it sets this code and may default to a limp-home mode.

SYSTEM

**Powertrain**

CODE TYPE

**Generic (all makes)**

SEVERITY

**Medium**

FIX DIFFICULTY

**Intermediate**

AREA

**Transmission**

### Symptoms you may notice

- Illumination of the check engine light or transmission warning light, often with no other noticeable symptoms
- Harsh or delayed shifting, sometimes accompanied by a default to a single gear (limp mode)
- Incorrect or erratic speedometer readings on some vehicles that derive vehicle speed from the input sensor
- Transmission slipping or failure to engage certain gears, especially when cold
- Poor fuel economy or increased engine RPM at cruising speeds due to shift scheduling errors

### Common causes, most likely first

- 1 Faulty input/turbine speed sensor itself, often due to internal failure or contamination
- 2 Damaged or corroded wiring harness or connector at the sensor or transmission control module
- 3 Metal debris or clutch material buildup on the sensor tip, interfering with the magnetic pickup
- 4 Failed or damaged reluctor wheel or tone ring inside the transmission
- 5 Transmission control module software glitch or internal fault, though less common
- 6 Low or degraded transmission fluid causing poor sensor signal or overheating
- 7 Electrical interference from aftermarket accessories or poor grounds affecting the signal circuit



## How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related transmission codes before proceeding
- 2 Inspect the sensor and its connector for physical damage, corrosion, or debris; clean or replace as needed
- 3 Check the sensor's resistance and signal output with a multimeter or oscilloscope according to manufacturer specifications
- 4 Inspect the wiring harness for continuity, shorts to ground, or shorts to power between the sensor and the control module
- 5 Check transmission fluid level and condition; service if contaminated or low
- 6 If the sensor and wiring test good, inspect the reluctor wheel or tone ring for damage or debris through the sensor hole or by removing the pan
- 7 Replace the input/turbine speed sensor if all other checks pass, then clear codes and verify the repair with a test drive

## Before you replace the input speed sensor

- A common misdiagnosis is replacing the sensor when the real problem is a chafed wire or corroded connector hidden under the airbox or near the transmission bell housing.
- Metal shavings on the sensor tip often indicate internal transmission wear, so simply cleaning or replacing the sensor may not solve the underlying issue.
- Some vehicles use the input speed sensor signal for the speedometer, so a faulty sensor can cause erratic dash readings that mislead diagnosis.
- A weak battery or charging system can cause voltage drops that disrupt sensor signals, setting this code without any actual sensor fault.
- Aftermarket transmission tunes or incorrect tire sizes can alter expected speed ratios and trigger P0715 even when hardware is intact.

## Can I keep driving with P0715?

It is generally safe to drive short distances to a repair shop, but avoid heavy acceleration or towing because the transmission may be in limp mode and could suffer further damage. If shifting is severely harsh or the vehicle enters limp mode frequently, stop driving and seek professional diagnosis.

## Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope (for signal analysis)
- Socket set and basic hand tools
- Transmission fluid level checker and funnel
- Wire repair kit (splices, heat shrink, electrical tape)



## Reading P0715

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

## Often seen with

**P0716** Input/Turbine Speed Sensor 'A' Circuit Range/Performance · **P0717** Input/Turbine Speed Sensor 'A' Circuit No Signal · **P0720** Output Speed Sensor Circuit Malfunction · **P0721** Output Speed Sensor Range/Performance · **P0730** Incorrect Gear Ratio

## See it working

Watch the animated explainer [How the EVAP System Works: Fuel Vapour and Leak Test](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0715/>

