

GENERIC · POWERTRAIN

**P0718**

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

**P0718**

## Input/Turbine Speed Sensor 'A' Circuit Intermittent

P0718 means the transmission control module (TCM) sees the input/turbine speed sensor 'A' signal dropping out or glitching intermittently rather than failing completely. The computer compares that erratic signal against expected values from the output speed sensor and engine speed, and flags the code when the interruption is frequent enough to be a real fault.

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 symptoms
- Harsh or delayed shifts, especially when the transmission is cold or under light throttle
- The transmission may slip or flare between gears as the TCM loses the turbine speed reference
- Occasional limp-home mode or default gear strategy, sometimes clearing after a restart
- A momentary stumble or surge during acceleration when the signal drops out
- In some vehicles, no drivability change at all besides the stored code

### Common causes, most likely first

- 1 Damaged, chafed, or corroded wiring and connector pins at the input speed sensor or TCM
- 2 A failing input/turbine speed sensor that works when cold but drops out when hot
- 3 Metallic debris or clutch material buildup on the sensor tip, interrupting the magnetic pickup
- 4 A cracked or improperly seated sensor, allowing vibration to break the signal
- 5 Internal transmission damage, such as a slipping clutch pack or worn tone ring, causing an erratic reluctor signal
- 6 A faulty TCM or poor ground connection causing intermittent signal processing
- 7 Aftermarket electrical accessories or a poor battery ground introducing electrical noise



## How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data for P0718, then clear the code and test-drive to confirm it returns
- 2 Inspect the input speed sensor connector and harness for corrosion, chafing, or loose pins, and repair as needed
- 3 Remove the sensor and check the tip for metallic debris or damage; clean or replace it if contaminated
- 4 Measure sensor resistance and compare to specification, and check the signal with an oscilloscope while wiggling the harness
- 5 Check TCM grounds and power feeds for voltage drops, and verify the TCM software is up to date
- 6 If the signal is clean at the sensor but erratic at the TCM, test the circuit for intermittent opens or shorts
- 7 Only after electrical and sensor checks pass, inspect the transmission internally for clutch or tone-ring damage

## What the turbine speed sensor signal really tells you

- A P0718 can be set by a sensor that tests perfectly on a cold bench but fails only when the transmission reaches operating temperature, so always test hot as well as cold.
- Debris on the sensor tip is a common cause that many technicians miss because they replace the sensor without cleaning the bore or checking for a failing clutch pack shedding material.
- The code does not always mean the sensor is bad; a slipping clutch or damaged tone ring can produce an erratic signal that the TCM interprets as an intermittent sensor fault.
- Intermittent faults often leave no freeze-frame data, so a road test with a scan tool graphing input and output speed simultaneously is the most reliable way to catch the dropout.
- A poor chassis ground or a failing alternator can introduce electrical noise that mimics an intermittent speed sensor signal, so check charging system ripple before condemning the sensor.

## Can I keep driving with P0718?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration, towing, or long highway trips because the transmission may enter limp mode or shift unpredictably. If the vehicle feels like it is slipping or refusing to shift, stop driving and have it towed.

## Tools that help

- OBD-II scan tool with live data and graphing capability
- Digital multimeter
- Oscilloscope for signal waveform analysis
- Basic hand tools and socket set
- Contact cleaner and dielectric grease
- Vehicle-specific service information for sensor resistance specifications



## Reading P0718

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

## Often seen with

**P0715** Input/Turbine Speed Sensor Circuit Malfunction · **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

## See it working

Watch the animated explainer [How a Coolant Temperature Sensor Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0718/>

