

GENERIC · POWERTRAIN

P0989

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0989

Transmission Fluid Pressure Sensor/Switch 'E' Circuit Low

P0989 is a generic OBD-II code that indicates the transmission fluid pressure sensor or switch 'E' circuit is reporting a voltage lower than the manufacturer's expected range. The transmission control module (TCM) monitors this circuit to ensure the pressure sensor is functioning correctly, and it sets this code when the signal voltage stays below the calibrated threshold for a set period.

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 gear shifts as the transmission may default to a limp-home mode
- Transmission may slip or fail to engage certain gears
- Erratic shift points or torque converter clutch operation
- Reduced fuel economy due to improper shift scheduling
- In some cases, the vehicle may enter limp mode and limit speed

Common causes, most likely first

- 1 Faulty transmission fluid pressure sensor or switch 'E'
- 2 Damaged or corroded wiring harness or connector at the sensor
- 3 Open or shorted circuit in the signal or ground wire
- 4 Low transmission fluid level or degraded fluid causing incorrect pressure readings
- 5 Internal transmission mechanical issues affecting pressure
- 6 Faulty transmission control module (TCM) or poor electrical connections
- 7 Contamination or debris blocking the sensor port



How to diagnose and fix it

- 1 Check transmission fluid level and condition; top off or replace fluid if necessary
- 2 Inspect the sensor and its connector for damage, corrosion, or loose pins; clean and secure as needed
- 3 Perform a visual inspection of the wiring harness for chafing, breaks, or shorts
- 4 Use a multimeter to test the sensor's resistance and voltage output according to manufacturer specifications
- 5 Check the sensor's ground circuit for continuity and proper grounding
- 6 If the sensor fails testing, replace it and clear the code
- 7 If the code persists after sensor replacement, diagnose the TCM and internal transmission components

Don't overlook the fluid and wiring

- A low transmission fluid level or degraded fluid can cause the pressure sensor to read out of range, setting P0989 even when the sensor itself is good.
- Corroded or loose pins in the sensor connector are a frequent cause of low voltage codes and are often missed during a quick visual inspection.
- The code may be set by a faulty ground connection rather than a failed sensor, so always verify the ground circuit before replacing parts.
- On some vehicles, a failing transmission control module can mimic a sensor circuit fault, so module diagnostics should be performed if the sensor and wiring test good.
- P0989 can be an intermittent code caused by vibration or heat affecting the wiring, so wiggle-test the harness while monitoring live data.

Can I keep driving with P0989?

If the vehicle is shifting normally and the only symptom is the warning light, you can drive cautiously to a repair shop, but avoid heavy loads or aggressive driving. If the transmission is slipping, shifting harshly, or entering limp mode, stop driving and have the vehicle towed to prevent further damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Transmission fluid level dipstick or scan tool for fluid level check
- Wire repair kit (soldering iron, heat shrink, electrical tape)
- Socket set and wrenches for sensor removal
- Vehicle service manual or online diagnostic resource



Reading P0989

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

Often seen with

P0700 Transmission Control System Malfunction · **P0986** Shift Solenoid 'E' Control Circuit High · **P0987** Transmission Fluid Pressure Sensor/Switch 'E' Circuit · **P0988** Transmission Fluid Pressure Sensor/Switch 'E' Circuit Range/ · **P0990** Transmission Fluid Pressure Sensor/Switch 'E' Circuit High

See it working

Watch the animated explainer [How an Automatic Transmission Works, Gear by Gear](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0989/>

