

GENERIC · POWERTRAIN

P0916

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0916

Gear Shift Position Circuit Low

P0916 indicates that the transmission control module (TCM) or powertrain control module (PCM) has detected an abnormally low voltage on the gear shift position circuit, which is used to determine the current gear or selector lever position. This low signal can prevent the computer from correctly identifying gear selection, leading to erratic shifting or a default 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
- Transmission may shift harshly or fail to shift into certain gears
- Vehicle may enter limp-home mode, limiting speed and gear range
- Gear indicator on the dashboard may be blank or show incorrect position
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Faulty gear shift position sensor or range switch
- 2 Damaged or corroded wiring harness to the sensor
- 3 Poor electrical connection at the sensor or TCM connector
- 4 Internal short to ground in the signal circuit
- 5 Failed transmission control module (TCM) or powertrain control module (PCM)
- 6 Moisture intrusion into the sensor or connector causing low voltage

How to diagnose and fix it

- 1 Scan all modules for stored codes and freeze-frame data to confirm P0916 and check for related codes
- 2 Visually inspect the gear shift position sensor and its wiring for damage, corrosion, or loose connections
- 3 Measure reference voltage and signal voltage at the sensor connector with the key on and compare to manufacturer specifications
- 4 Perform a wiggle test on the harness while monitoring live data to detect intermittent faults
- 5 Check resistance of the signal circuit to ground to rule out a short
- 6 Replace the gear shift position sensor if voltages are outside specification
- 7 Repair or replace damaged wiring or connectors, then clear codes and verify the repair with a test drive



Don't overlook the range switch

- A low voltage code often results from a poor ground connection rather than a failed sensor, so check ground points before replacing parts.
- The gear shift position circuit may share a reference voltage with other sensors; a fault elsewhere can pull the voltage low and set P0916.
- Intermittent faults may only appear when the harness is flexed or when the vehicle is exposed to moisture, so a wiggle test is essential.
- Aftermarket accessories or improper jump-starting can introduce voltage spikes that damage the sensor or TCM, leading to this code.
- Some vehicles use a linear shift assembly where the sensor is integrated and not separately serviceable, requiring replacement of the entire assembly.

Can I keep driving with P0916?

Driving with P0916 is possible but not recommended because the transmission may not shift correctly, which can lead to unsafe driving conditions or further damage. Avoid sustained highway speeds and heavy loads until the fault is repaired.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Basic hand tools (sockets, screwdrivers, pliers)
- Electrical contact cleaner and dielectric grease

Reading P0916

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

Often seen with

P0705 Transmission Range Sensor Circuit Malfunction · **P0706** Transmission Range Sensor Circuit Range/Performance · **P0707** Transmission Range Sensor Circuit Low · **P0915** Gear Shift Position Circuit Range/Performance · **P0917** Gear Shift Position 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/p0916/>

