

GENERIC · POWERTRAIN

P0915

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0915

Gear Shift Position Circuit Range/Performance

P0915 indicates that the transmission control module (TCM) has detected an out-of-range or performance fault in the gear shift position circuit, which typically involves a sensor or switch that reports the current gear selection. The computer compares the expected signal from the gear position sensor against the actual signal and sets this code when the two do not match or when the signal is erratic.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Transmission

Symptoms you may notice

- The malfunction indicator lamp (MIL) illuminates on the dashboard, often with no other noticeable symptoms.
- The transmission may shift harshly or hesitate when selecting a gear.
- The gear indicator on the instrument cluster may display the wrong gear or flash.
- The vehicle may enter limp mode, limiting engine power or preventing certain gear changes.
- In some cases, the transmission may not engage a gear at all or may slip out of gear unexpectedly.

Common causes, most likely first

- 1 A faulty gear shift position sensor or switch, such as the transmission range sensor or neutral safety switch.
- 2 Wiring damage in the gear position circuit, including chafed, corroded, or broken wires.
- 3 A loose or corroded electrical connector at the sensor or transmission control module.
- 4 Internal transmission mechanical issues, such as a worn selector mechanism or linkage misalignment.
- 5 A software glitch or internal fault in the transmission control module (TCM).
- 6 Contamination or debris interfering with the sensor's operation.



How to diagnose and fix it

- 1 Use an OBD-II scanner to retrieve the code and check for any related codes in the transmission control module.
- 2 Inspect the gear shift position sensor and its connector for visible damage, corrosion, or loose pins.
- 3 Check the wiring harness between the sensor and the TCM for continuity, shorts, and chafing.
- 4 Verify the sensor's signal with a multimeter or oscilloscope while moving the gear selector through all positions.
- 5 If the sensor is faulty, replace it and clear the codes to see if the fault returns.
- 6 Check for any technical service bulletins (TSBs) or software updates for the TCM that may address this code.
- 7 If all electrical checks pass, perform a relearn or calibration procedure for the transmission as specified by the manufacturer.

Common Misdiagnosis Traps for P0915

- A misadjusted or loose gear selector cable can cause the sensor to report an incorrect position, mimicking a sensor failure, so always check the mechanical linkage first.
- Corrosion inside a connector that looks fine from the outside often causes intermittent P0915 codes, so wiggle-test the harness while monitoring live data.
- The code can be set by a low battery or charging system issue that causes voltage spikes, so verify battery and charging system health before replacing parts.
- On some vehicles, the gear position sensor is integrated into the transmission's internal wiring harness, making replacement more labor-intensive than expected.
- A faulty brake pedal switch or ignition switch can sometimes interfere with gear selection signals, so check for related codes in other modules.

Can I keep driving with P0915?

It is generally safe to drive with P0915 if the transmission shifts normally and the vehicle does not enter limp mode, but avoid aggressive driving or towing until the fault is repaired. If the transmission exhibits harsh shifting, slipping, or fails to engage gears, stop driving and seek professional diagnosis to prevent further damage.

Tools that help

- OBD-II scanner with live data capability
- Digital multimeter
- Oscilloscope (optional for signal analysis)
- Vehicle-specific service information for wiring diagrams and sensor specifications
- Basic hand tools for connector and sensor access



Reading P0915

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

Often seen with

P0705 Transmission Range Sensor Circuit Malfunction · **P0706** Transmission Range Sensor Circuit Range/Performance · **P0916** Gear Shift Position Circuit Low · **P0917** Gear Shift Position Circuit High · **P0918** Gear Shift Position Circuit Intermittent

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/p0915/>

