

GENERIC · POWERTRAIN

P2E14

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2E14

Gear Selection Actuator Position Sensor Circuit Intermittent/Erratic

P2E14 indicates that the powertrain control module (PCM) has detected an intermittent or erratic signal from the gear selection actuator position sensor, which is responsible for reporting the actual position of the gear selector mechanism. The PCM sets this code when the sensor voltage or signal pattern falls outside expected limits or changes unpredictably, often due to a poor electrical connection or a failing sensor.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Hybrid propulsion

Symptoms you may notice

- Illumination of the check engine light or service engine soon light
- Inconsistent or delayed gear engagement, especially when selecting drive or reverse
- Transmission may slip or hesitate before engaging a gear
- Unexpected downshifts or upshifts while driving
- Failure to start if the vehicle does not recognize the gear selector in Park or Neutral
- Often no symptoms besides the warning light, especially in early stages

Common causes, most likely first

- 1 Worn or damaged gear selection actuator position sensor
- 2 Corroded, loose, or damaged electrical connector at the sensor
- 3 Chafed, broken, or shorted wiring in the sensor circuit
- 4 Poor ground connection for the sensor or PCM
- 5 Internal fault in the transmission control module (TCM) or PCM
- 6 Mechanical binding or wear in the gear selector mechanism affecting sensor movement



How to diagnose and fix it

- 1 Use an OBD-II scanner to retrieve the code and freeze-frame data, then clear the code and test-drive to see if it returns
- 2 Visually inspect the sensor connector and wiring for corrosion, damage, or loose pins, and repair as needed
- 3 Check the sensor's reference voltage and ground circuits with a multimeter to confirm proper power and ground
- 4 Back-probe the sensor signal wire and monitor voltage while moving the gear selector through all positions to check for smooth, consistent changes
- 5 If the signal is erratic, remove the sensor and inspect the actuator mechanism for binding or wear that could cause irregular sensor movement
- 6 Replace the gear selection actuator position sensor if testing confirms it is faulty
- 7 After repair, clear codes and perform a relearn or calibration procedure if required by the manufacturer

Intermittent sensor faults often hide in plain sight

- A common oversight is assuming the sensor itself is defective when the real problem is a corroded connector or a wire that has rubbed through its insulation, causing an intermittent short.
- The code can be set by a mechanical issue in the selector mechanism that prevents the sensor from moving smoothly, so always check for binding or loose components before replacing electrical parts.
- In some vehicles, a weak battery or charging system can cause voltage spikes that mimic sensor faults, so verify battery and charging system health first.
- The PCM may not set this code until the fault occurs multiple times, so a single occurrence might not trigger the light, but the underlying issue can still affect drivability.
- Related codes such as P0705 or P0706 may also be present, indicating a range sensor circuit malfunction, so addressing all codes together prevents misdiagnosis.

Can I keep driving with P2E14?

If the vehicle drives normally and the only symptom is the warning light, you can drive cautiously to a repair shop, but avoid aggressive acceleration or heavy loads. If the transmission slips, fails to engage gears, or the vehicle stalls, stop driving and seek professional assistance immediately.

Tools that help

- OBD-II scanner with live data capability
- Digital multimeter
- Wire probe set
- Electrical contact cleaner
- Basic hand tools (screwdrivers, socket set)
- Manufacturer service information for wiring diagrams and calibration procedures



Reading P2E14

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- E** Hybrid propulsion.
- 14** 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 · **P0708** Transmission Range Sensor Circuit High · **P2E13** Gear Selection Actuator Position Sensor 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/p2e14/>

