

GENERIC · POWERTRAIN

P04C7

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## P04C7

# Fuel Fill Door Lock Position Sensor/Switch Circuit Intermittent/Erratic

P04C7 indicates that the fuel fill door lock position sensor or switch circuit is sending an intermittent or erratic signal to the powertrain control module (PCM). The PCM expects a stable voltage or resistance from the sensor when the fuel door is opened or closed, but it has detected rapid, unpredictable changes that do not match the commanded lock or unlock state.

| SYSTEM     | CODE TYPE           | SEVERITY | FIX DIFFICULTY | AREA                        |
|------------|---------------------|----------|----------------|-----------------------------|
| Powertrain | Generic (all makes) | Low      | Intermediate   | Auxiliary emission controls |

## Symptoms you may notice

- The check engine light (malfunction indicator lamp) illuminates on the dashboard.
- The fuel fill door may not lock or unlock properly with the central locking system.
- A message may appear on the driver information display indicating a fuel door fault.
- The fuel door may appear closed but not be fully latched, causing a rattle or wind noise.
- Often no symptoms besides the warning light, especially if the intermittent fault is not currently active.

## Common causes, most likely first

- A faulty fuel fill door lock position sensor or switch that has worn contacts or internal damage.
- Damaged or corroded wiring in the circuit between the sensor and the PCM, often at the door hinge or connector.
- A loose or corroded electrical connector at the sensor or at the PCM.
- Water intrusion into the sensor or connector, leading to intermittent shorts or high resistance.
- A misadjusted or damaged fuel door latch mechanism that does not consistently actuate the sensor.
- A failing fuel door lock actuator that binds and causes erratic sensor readings.
- Rarely, a PCM internal fault or software glitch that misinterprets the sensor signal.



## How to diagnose and fix it

- 1 Inspect the fuel fill door lock position sensor and its connector for visible damage, corrosion, or water intrusion.
- 2 Check the wiring harness for chafing, breaks, or loose pins, especially around the door hinge and body pass-through.
- 3 Test the sensor with a multimeter to verify it changes state smoothly when the door is opened and closed.
- 4 Manually operate the fuel door latch to ensure it moves freely and fully actuates the sensor.
- 5 Clear the diagnostic trouble code and test-drive the vehicle to see if the code returns, confirming whether the fault is intermittent.
- 6 If the sensor tests faulty, replace it and retest the circuit.
- 7 If wiring and sensor are good, check the fuel door lock actuator for binding and replace if necessary.

## Intermittent faults hide in the hinge wiring

- The most common cause of P04C7 is a broken wire inside the flexible boot at the fuel door hinge, which flexes every time the door is opened and eventually fails internally.  
A fuel door that appears to close properly may still not fully depress the sensor plunger, causing an erratic signal that sets the code without any obvious driver complaint.
  - Technicians often replace the sensor only to find the connector pins are loose or corroded, so always perform a wiggle test on the harness while monitoring sensor data.
  - This code can be set by a low battery or voltage spike that momentarily disrupts the sensor signal, so check for other low-voltage codes before condemning parts.
- On some vehicles, the fuel door lock position sensor is integrated into the latch assembly, making it necessary to replace the entire latch rather than just the sensor.

## Can I keep driving with P04C7?

The vehicle remains safe to drive because the fuel fill door lock is not a safety-critical system, but you should avoid forcing the door or ignoring the warning if the door does not latch securely. Have the fault diagnosed soon to prevent water intrusion or a stuck door.

## Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Trim removal tool
- Torx or Phillips screwdriver set
- Electrical contact cleaner
- Wire probe set



### Reading P04C7

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 4** Auxiliary emission controls.
- C7** The exact fault within that area.

### Often seen with

**P04C5** Fuel Fill Door Lock Position Sensor/Switch Circuit Low · **P04C6** Fuel Fill Door Lock Position Sensor/Switch Circuit High · **P04C8** Fuel Fill Door Open Request Sensor/Switch Circuit · **P04C9** Fuel Fill Door Open Request Sensor/Switch Performance/Stuck

### See it working

Watch the animated explainer [How an EGR Valve Works: Exhaust Gas Recirculation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p04c7/>

