

GENERIC · POWERTRAIN

P04CA

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P04CA

Fuel Fill Door Open Request Sensor/Switch Circuit Low

P04CA indicates that the powertrain control module (PCM) has detected a low-voltage condition on the fuel fill door open request sensor or switch circuit, meaning the signal wire is likely shorted to ground or the switch is stuck closed. The PCM expects to see a voltage change when the fuel fill door is opened, but instead it sees a continuous low voltage, which it interprets as a fault.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light (malfunction indicator lamp) on the dashboard.
- Often no symptoms besides the warning light, as the fuel fill door may still open and close normally.
- The fuel fill door may not open when requested from inside the vehicle if the switch is faulty.
- A message on the driver information center indicating a fuel door issue, if equipped.
- Inability to release the fuel fill door remotely, requiring manual override.
- Possible unintended activation of the fuel door release mechanism while driving, though rare.

Common causes, most likely first

- 1 Fuel fill door open request switch internally shorted to ground, keeping the circuit at low voltage.
- 2 Damaged or chafed wiring harness between the switch and the PCM, causing a short to ground.
- 3 Corroded or loose electrical connector at the switch or PCM, creating high resistance or intermittent short.
- 4 Water intrusion into the switch or connector, leading to corrosion and a short.
- 5 PCM internal fault, though less common, causing incorrect interpretation of the circuit voltage.
- 6 Aftermarket accessories or improper wiring repairs tapping into the circuit and causing a short.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in other modules.
- 2 Inspect the fuel fill door switch and connector for corrosion, damage, or loose pins; clean or replace as needed.
- 3 Disconnect the switch and measure resistance across its terminals; compare to specifications, replace if out of range.
- 4 Check the wiring harness for continuity to ground on the signal wire; repair any short to ground.
- 5 Measure voltage on the signal wire at the PCM with the switch disconnected; expect a high voltage (pull-up) and replace PCM if not present.
- 6 Clear the code and perform a road test to verify the repair; ensure the fuel door operates correctly.
- 7 If the code persists after all checks, consult factory service information for specific pinpoint tests.

Don't overlook the fuel door switch

- A stuck fuel fill door switch is a common cause that many technicians miss because the door may still appear to function normally.
- The code can be set by a simple chafed wire in the door jamb area, so always inspect the harness routing before replacing parts.
- Water intrusion into the switch or connector is a frequent culprit, especially on vehicles driven in wet or snowy conditions.
- This circuit is often shared with other body functions, so check for unrelated symptoms like interior lights staying on.
- Aftermarket remote start or alarm systems can backfeed the circuit and set this code, so check for non-factory wiring.

Can I keep driving with P04CA?

The vehicle is safe to drive with this code because it does not affect engine operation or safety systems, but the fuel fill door may not open remotely. Avoid forcing the door open manually to prevent damage, and have the issue diagnosed when convenient.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Wiring diagram for the specific vehicle
- Trim removal tools
- Electrical contact cleaner



Reading P04CA

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

Often seen with

P0458 Evaporative Emission System Purge Control Valve Circuit Low · **P0459** Evaporative Emission System Purge Control Valve Circuit High · **P04CB** Fuel Fill Door Open Request Sensor/Switch Circuit High · **P04CC** Fuel Fill Door Open Request Sensor/Switch Circuit Intermittent · **P04CD** Fuel Fill Door Open Request Sensor/Switch Stuck On

See it working

Watch the animated explainer [How the PCV System Works: Crankcase Ventilation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p04ca/>

