

GENERIC · POWERTRAIN

P04B6

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P04B6

Fuel Fill Door Stuck Closed

P04B6 indicates that the powertrain control module (PCM) has commanded the fuel fill door actuator to open or close, but the door position sensor has not confirmed the expected movement within the allowed time. The PCM detects a mismatch between the commanded state and the actual door position, typically after a refueling event or a system self-test.

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

Symptoms you may notice

- The fuel fill door remains stuck in the closed position and cannot be opened manually.
- A warning light or message on the dashboard indicating a fuel door fault.
- The fuel fill door may appear partially open or not flush with the body panel.
- Often no symptoms besides the warning light, especially if the door is rarely used.
- Inability to refuel the vehicle if the door cannot be opened.
- A clicking or buzzing sound from the actuator area when attempting to open the door.

Common causes, most likely first

- Failed fuel fill door actuator motor or solenoid.
- Binding or misaligned fuel fill door hinge or latch mechanism.
- Damaged or disconnected wiring harness to the actuator or position sensor.
- Faulty fuel fill door position sensor.
- Corrosion or debris obstructing the actuator or latch.
- PCM software issue or failed calibration.
- Mechanical damage to the fuel fill door from impact or improper use.



How to diagnose and fix it

- 1 Verify the fuel fill door operation using a scan tool to command the actuator open and closed while observing the position sensor data.
- 2 Inspect the fuel fill door, hinge, and latch for physical obstructions, binding, or damage; clean and lubricate as needed.
- 3 Check the wiring harness and connector at the actuator and position sensor for corrosion, loose pins, or broken wires.
- 4 Test the actuator motor with a known-good power source or measure resistance to confirm it is within specification.
- 5 Test the position sensor signal with a multimeter to ensure it changes state correctly when the door is moved manually.
- 6 If the actuator or sensor is faulty, replace the defective component and clear the diagnostic trouble code (DTC).
- 7 If all mechanical and electrical components test good, check for technical service bulletins (TSBs) or PCM software updates related to the fuel fill door system.

Common Misdiagnosis of Fuel Door Codes

- A stuck fuel fill door is often caused by a simple mechanical binding or debris, not a failed actuator, so always inspect the hinge and latch before replacing parts.
- The position sensor can fail intermittently, setting the code only under certain temperature or vibration conditions, making it hard to reproduce.
- Aftermarket fuel caps or improper refueling techniques can sometimes trigger the code if the door is forced or not fully closed.
- The PCM may set this code if the vehicle's battery was recently disconnected or replaced, as the door position calibration can be lost; a relearn procedure may be required.
- Related systems such as the evaporative emission control (EVAP) system can be affected if the fuel fill door is not sealed properly, but P04B6 itself is specific to the door mechanism.

Can I keep driving with P04B6?

You can generally continue driving with this code because it does not affect engine performance or safety, but you may be unable to refuel if the door remains stuck closed. Avoid forcing the door open, as this can cause further damage, and plan to have the fault diagnosed soon.



Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Trim removal tool set
- Test light
- Service information for the specific vehicle

Reading P04B6

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
4	Auxiliary emission controls.
B6	The exact fault within that area.

Often seen with

P0455 EVAP System Leak Detected (Large) · **P0456** Evaporative Emission System Leak Detected (very small leak) · **P04B5** Fuel Fill Door Stuck Open · **P04B7** Fuel Fill Door Position Sensor/Switch Circuit Intermittent/E · **P04B8** Fuel Fill Door Position Sensor/Switch Circuit

See it working

Watch the animated explainer [How the EVAP System Works: Fuel Vapour and Leak Test](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p04b6/>

