



P04BC

Fuel Fill Door Lock Control Range/Performance

P04BC indicates that the powertrain control module (PCM) has detected an out-of-range or performance fault in the fuel fill door lock control circuit, which typically commands a small actuator to secure the fuel filler door. The PCM monitors the circuit for expected voltage or current feedback when the lock is commanded, and this code sets when the signal falls outside the programmed limits or the actuator fails to respond as expected.

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

Symptoms you may notice

- The fuel fill door may not lock or unlock when commanded, leaving it either permanently secured or permanently free.
- A warning light on the dashboard, often accompanied by a message in the driver information center about the fuel door.
- Audible clicking or buzzing from the fuel door area when locking or unlocking the vehicle, indicating the actuator is trying to move.
- The fuel door may appear flush but resist opening, or it may hang loose and not stay closed.
- Often no symptoms besides the warning light, especially if the fault is intermittent or only affects the feedback signal.

Common causes, most likely first

- 1 Failed fuel fill door lock actuator, where the internal motor or mechanism has worn out or seized.
- 2 Damaged or corroded wiring harness at the fuel door hinge area, where flexing and exposure to elements commonly break conductors.
- 3 Poor electrical connection at the actuator connector, often due to water intrusion or loose pins.
- 4 Blown fuse or faulty relay that supplies power to the fuel door lock circuit.
- 5 Faulty fuel door lock switch or button, if equipped, sending incorrect commands to the PCM.
- 6 PCM software issue or internal driver fault, though this is less common than mechanical and wiring problems.



How to diagnose and fix it

- 1 Verify the fault is current by clearing the code and commanding the fuel door lock with a scan tool to see if the code returns immediately.
- 2 Inspect the fuel door lock actuator connector and wiring for corrosion, damage, or loose pins, repairing as needed.
- 3 Check the fuse and relay that supply power to the fuel door lock circuit, replacing any failed components.
- 4 Measure resistance and voltage at the actuator while commanding lock and unlock to confirm whether the actuator is receiving proper signals.
- 5 If the actuator does not move or draws excessive current when commanded, replace the fuel fill door lock actuator.
- 6 After repair, clear the code and cycle the fuel door lock several times to confirm the fix and ensure the code does not return.
- 7 If the code persists after all mechanical and electrical checks, diagnose the PCM and its software, updating or replacing only as a last resort.

Fuel Door Lock Faults You Might Overlook

- A fuel fill door lock actuator that is mechanically jammed can set this code even though the electrical circuit tests perfectly, so always check for physical obstruction or binding before replacing parts.
- Water intrusion into the actuator connector is a frequent cause on vehicles where the fuel door is exposed to road spray, and the corrosion may be hidden inside the connector body.
- The PCM may set P04BC if the fuel door lock feedback signal is missing only during extreme temperatures, which can point to a marginal actuator rather than a completely failed one.
- Some vehicles use a fuel door lock that is integrated with the central locking system, so a fault in the door lock circuit elsewhere can sometimes trigger this code as a secondary effect.
- A scan tool that can command the fuel door lock actuator is essential for diagnosis, as simply reading the code does not tell you whether the fault is electrical, mechanical, or in the PCM.

Can I keep driving with P04BC?

This fault does not affect engine operation or safety, so you can continue driving. However, avoid forcing the fuel door open or closed if the lock is stuck, as this can cause further damage to the actuator or door mechanism.

Tools that help

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



Reading P04BC

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

Often seen with

P04BD Fuel Fill Door Lock Control Circuit Low · **P04BE** Fuel Fill Door Lock Control Circuit High · **P04BF** Fuel Fill Door Unlock Control Circuit/Open

See it working

Watch the animated explainer [How a Turbocharger Works, Step by Step](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p04bc/>

