

GENERIC · POWERTRAIN

P0CD3

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0CD3

Charge Port Door A Unlock Control Circuit Low

P0CD3 indicates that the charge port door unlock control circuit has a low voltage condition, meaning the control module detected a short to ground or an abnormally low signal on the circuit that commands the door to unlock. The computer sets this code when the voltage on the unlock control circuit falls below the expected threshold while the circuit is supposed to be inactive or during a self-test.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Hybrid propulsion

Symptoms you may notice

- The charge port door may not unlock when commanded, preventing access to the charging connector.
- A warning light on the dashboard, often accompanied by a message about the charge port door.
- The door may unlock intermittently or only after multiple attempts.
- No symptoms besides the warning light if the fault is intermittent or only affects a monitoring circuit.
- The door may make a clicking sound but fail to release, indicating the actuator receives a signal but cannot move.
- In some vehicles, charging may be inhibited if the door cannot be opened or detected as closed.

Common causes, most likely first

- A short to ground in the unlock control wire between the control module and the charge port door actuator.
- A faulty charge port door unlock actuator or latch assembly with an internal short.
- Corrosion or water intrusion in the charge port door connector or actuator connector, causing low resistance to ground.
- A damaged control module driver circuit for the unlock output.
- A pinched or chafed wire harness near the charge port door hinge or body pass-through.
- Aftermarket accessories or improper previous repairs tapping into the circuit.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in the charge port door system.
- 2 Inspect the charge port door connector and actuator connector for corrosion, water intrusion, or loose pins.
- 3 Disconnect the actuator and measure resistance from the unlock control circuit to ground to check for a short.
- 4 Check the wire harness along the door hinge and body pass-through for chafing or pinching.
- 5 Test the unlock actuator with a known-good signal or bidirectional scan tool control to confirm operation.
- 6 If the circuit tests good, substitute a known-good actuator to rule out an internal short.
- 7 Repair or replace the shorted wire, connector, or actuator as needed, then clear the code and verify the door unlocks properly.

Charge port door unlock circuit low-voltage traps

- A low-voltage code on an unlock circuit often results from water ingress in the charge port door connector, not a failed actuator, so always inspect for corrosion first.
- The code can be set by a momentary short during a self-test even if the door still unlocks normally, so intermittent faults may not require immediate parts replacement.
- Some vehicles use a shared ground for multiple door functions, and a poor ground elsewhere can cause a low signal on the unlock circuit without any fault in the unlock wire itself.
- Aftermarket phone chargers or accessories plugged into the charge port area can sometimes pinch the harness and create a short to ground that sets this code.
- A failed actuator that is shorted internally may still allow manual unlocking, leading technicians to overlook the electrical fault until the code returns.

Can I keep driving with P0CD3?

You can generally continue driving because the charge port door does not affect vehicle propulsion, but avoid forcing the door open or using the charging system until the fault is repaired. If the door cannot be opened, do not attempt to pry it, as this can cause costly damage to the latch and surrounding panels.

Tools that help

- OBD-II scan tool with bidirectional control capability
- Digital multimeter
- Wire terminal removal tools
- Trim removal tools
- Electrical contact cleaner



Reading P0CD3

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- C** Hybrid propulsion.
- D3** The exact fault within that area.

Often seen with

P0CD0 AC Plug Voltage Sense Circuit · **P0CD1** Charge Port Door A Unlock Control Circuit · **P0CD2** Charge Port Door A Unlock Control Circuit Performance · **P0CD4** Charge Port Door A Unlock Control Circuit High · **P0CD5** Hybrid/EV Battery Pack Coolant Temperature Sensor B Circuit

See it working

Watch the animated explainer [Helicopter Simulator: Take Off, Hover and Land](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0cd3/>

