



P0CCC

Charge Port Door A Position Sensor Circuit

P0CCC indicates that the vehicle's control module has detected a fault in the circuit that monitors the position of the charge port door on an electric or plug-in hybrid vehicle. The sensor, typically a Hall-effect or switch-type device, reports whether the door is fully open, fully closed, or somewhere in between, and the module sets this code when the signal voltage or resistance falls outside the expected range for the current door state.

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

Symptoms you may notice

- Illumination of the service vehicle soon or check engine light on the dashboard.
- A message on the driver information center stating the charge port door is ajar or malfunctioning.
- Inability to start a charging session because the vehicle believes the charge port door is not properly closed.
- The charge port door may not latch or release correctly, or may appear closed when it is actually open.
- Often no symptoms besides the warning light, especially if the door still opens and closes mechanically.
- Remote or scheduled charging features may be disabled as a protective measure.

Common causes, most likely first

- 1 Failed charge port door position sensor or its internal switch contacts.
- 2 Damaged, corroded, or disconnected wiring harness at the charge port door hinge or connector.
- 3 Water intrusion or debris contamination in the sensor connector causing intermittent signals.
- 4 Mechanical binding or misalignment of the charge port door preventing the sensor from reaching its expected position.
- 5 Faulty charge port door actuator or latch assembly that does not trigger the sensor correctly.
- 6 Software glitch or lost calibration in the body control module or charging control module.
- 7 Rarely, an internal failure in the control module that reads the sensor signal.



How to diagnose and fix it

- 1 Perform a visual inspection of the charge port door, sensor, and wiring for obvious damage, corrosion, or debris, and clean or repair as needed.
- 2 Use a scan tool to read live data from the charge port door position sensor while manually opening and closing the door to verify the signal changes smoothly.
- 3 Check the sensor's electrical connector for tightness, water intrusion, and pin tension, and apply dielectric grease if recommended.
- 4 Measure resistance or voltage at the sensor according to the manufacturer's service information to confirm whether the sensor or the circuit is at fault.
- 5 If the sensor signal is missing or erratic, test the wiring continuity between the sensor and the control module to rule out an open or short circuit.
- 6 Replace the charge port door position sensor if it fails electrical testing, then clear the code and verify the live data reads correctly through a full open-close cycle.
- 7 If the sensor and wiring test good, check for technical service bulletins or software updates for the control module before condemning it.

What the charge port door sensor really does

- A charge port door that looks closed may still trigger P0CCC if the sensor magnet or target has shifted, so always verify live data rather than trusting the door's physical appearance.
- Intermittent P0CCC codes often trace to water ingress in the sensor connector after car washes or heavy rain, which can corrode pins without any visible external damage.
- Some vehicles use the charge port door position signal to enable high-voltage charging, so a faulty sensor can prevent charging entirely even though the door opens and closes normally.
- A binding door hinge or a weak detent spring can cause the sensor to miss its expected position window, setting the code without any electrical fault in the sensor itself.
- After replacing the sensor, some modules require a relearn or calibration procedure, and skipping it can leave the code stored even though the repair is correct.

Can I keep driving with P0CCC?

The vehicle remains safe to drive because the fault affects only the charge port door monitoring, but charging may be disabled or unreliable. Avoid forcing the charge port door open or closed and schedule diagnosis soon to prevent being unable to charge.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Trim removal tool set
- Dielectric grease
- Manufacturer service information or wiring diagram

Reading P0CCC

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

Often seen with

P0CCB Charge Port Door A Open Request Switch Circuit Intermittent/ · **P0CCD** Charge Port Door A Position Sensor Circuit Performance · **P0CCE** Charge Port Door A Position Sensor Circuit Low · **P0CCF** Charge Port Door A Position Sensor Circuit High · **P0CD0** AC Plug Voltage Sense Circuit

See it working

Watch the animated explainer [Excavator Simulator: Hydraulics You Can Operate](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0ccc/>

