

GENERIC · POWERTRAIN

P0D09

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D09

Battery Charging System Positive Contactor A Stuck Open

P0D09 indicates that the battery charging system's positive contactor, a high-current relay that connects the battery to the charging circuit, has been detected by the control module as stuck in the open position. The computer commands the contactor to close and expects to see voltage rise on the charging side, but the circuit remains dead, so it flags the contactor as faulty.

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

Symptoms you may notice

- The battery warning light or charging system fault message illuminates on the dashboard.
- The engine may crank slowly or fail to start because the battery is not being recharged.
- Electrical accessories such as lights, radio, and climate control may dim or operate erratically.
- A warning chime or message indicating a charging system fault appears on the driver information display.
- Often no symptoms besides the warning light, especially if the vehicle has a second battery or the fault is intermittent.

Common causes, most likely first

- The positive contactor itself has failed internally, with welded or worn contacts that cannot close.
- A broken or corroded wire in the control circuit between the module and the contactor coil.
- A blown fuse or failed relay that supplies power to the contactor coil circuit.
- Poor ground connection at the contactor or the control module, preventing proper coil operation.
- A faulty control module that is not sending the close command to the contactor.
- Contactor coil open circuit due to heat damage or age-related failure.



How to diagnose and fix it

- 1 Check for any related technical service bulletins or recalls for the charging system contactor on the specific vehicle.
- 2 Inspect the contactor control circuit wiring and connectors for corrosion, damage, or loose pins.
- 3 Test the contactor coil resistance and compare it to the manufacturer's specification.
- 4 Verify that the control module is commanding the contactor to close using a scan tool with bidirectional controls.
- 5 Check all fuses and relays that supply power to the contactor circuit.
- 6 Perform a voltage drop test on the ground circuit for the contactor and control module.
- 7 Replace the positive contactor if it fails electrical testing or does not respond to commands.

Before you replace the positive contactor

- A stuck-open contactor can be caused by a simple blown fuse in the control circuit, so always check fuses before condemning the contactor.
Some vehicles use a second battery or a supercapacitor that can mask charging symptoms, making the warning light the only clue.
 - The control module may set this code if the contactor coil is disconnected, so inspect the connector at the contactor for loose pins.
 - Intermittent faults often occur due to heat or vibration, so wiggle-test the wiring harness while monitoring contactor operation.
- Replacing the contactor without checking the control module's command signal can lead to a repeat failure if the module is at fault.

Can I keep driving with P0D09?

If the warning light is on and the battery is not charging, the vehicle will eventually stall and leave you stranded, so limit driving to short distances and avoid using unnecessary electrical accessories. Do not embark on long trips until the fault is repaired.

Tools that help

- Scan tool with bidirectional control capability
- Digital multimeter
- Test light
- Wire repair kit
- Factory service information for the specific vehicle



Reading P0D09

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

Often seen with

P0560 System Voltage Malfunction · **P0562** System Voltage Low · **P0D0A** Battery Charging System Positive Contactor A Control Circuit · **P0D0B** Battery Charging System Positive Contactor A Control Circuit · **P0D0C** Battery Charging System Positive Contactor A Control Circuit

See it working

Watch the animated explainer [How a Gyroscope Works: Gimbals and Precession](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d09/>

