

GENERIC · POWERTRAIN

P2D62

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2D62

Battery Charging System Negative Contactor C Circuit

P2D62 indicates that the battery charging system's negative contactor circuit has a fault, as detected by the control module monitoring the contactor's electrical path. The computer expects a specific voltage or current signature when the contactor is commanded open or closed, and it has seen a value outside the acceptable range, signaling a problem in the circuit or the contactor itself.

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

Symptoms you may notice

- Illumination of the battery warning light or service vehicle soon message on the dashboard
- Often no symptoms besides the warning light, especially if the fault is intermittent
- Difficulty starting the engine or a slow crank due to a partially engaged contactor
- Battery that repeatedly discharges or fails to hold a charge
- Electrical accessories behaving erratically or dimming lights
- In rare cases, a no-start condition if the contactor fails to close

Common causes, most likely first

- 1 Corroded, loose, or damaged wiring or connectors in the negative contactor circuit
- 2 Failed negative contactor coil or internal contactor mechanism
- 3 Faulty control module driver that commands the contactor
- 4 Blown fuse or fusible link protecting the contactor circuit
- 5 High resistance ground connection for the contactor or control module
- 6 Water intrusion or physical damage to the contactor or its connector
- 7 Aftermarket accessories improperly wired into the charging system circuit



How to diagnose and fix it

- 1 Perform a visual inspection of the negative contactor, its connectors, and associated wiring for corrosion, looseness, or damage
- 2 Check all fuses and fusible links related to the charging system and contactor circuit
- 3 Measure resistance and voltage drop across the negative contactor circuit to identify excessive resistance
- 4 Test the contactor coil for proper resistance and verify it actuates when commanded by the control module
- 5 Inspect and clean ground connections for the contactor and control module
- 6 Use a scan tool to command the contactor on and off while monitoring circuit voltage or current to confirm operation
- 7 If the circuit and contactor test good, diagnose the control module for a faulty driver or internal fault

Don't overlook the negative contactor ground

- A poor ground connection at the contactor or control module is a frequently missed cause of this code, as it can mimic a failed contactor.
The code can set intermittently due to vibration or temperature changes, so a wiggle test of the harness while monitoring live data is often necessary.
- A weak or failing battery can cause voltage spikes that trigger this code, so always load-test the battery before replacing expensive components.
- Aftermarket alarms or audio equipment tapped into the charging system wiring can introduce resistance or feedback that sets this code.
The negative contactor is sometimes part of the battery management system, and a fault here may also set codes in other modules, so check all systems for related faults.

Can I keep driving with P2D62?

If the vehicle starts and runs normally, you can drive it to a repair shop, but avoid long trips and heavy electrical loads. If the battery warning light is on and the battery is not charging, limit driving to short distances to prevent a no-start situation.

Tools that help

- Digital multimeter
- Scan tool with bidirectional control
- Test light
- Wiring diagram
- Battery load tester



Reading P2D62

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

Often seen with

P0560 System Voltage Malfunction · **P0562** System Voltage Low · **P2D60** Battery Charging System Positive Contactor C Control Circuit · **P2D61** Battery Charging System Positive Contactor C Control Circuit · **P2D63** Battery Charging System Negative Contactor C Stuck Closed

See it working

Watch the animated explainer [How a Supercharger Works: Roots Blower in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2d62/>

