

GENERIC · POWERTRAIN

P2D75

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2D75

Battery Charging System Negative Contactor D Control Circuit Low

P2D75 indicates that the battery charging system's negative contactor control circuit has been detected as low by the control module, meaning the circuit is likely shorted to ground or the contactor coil is drawing excessive current. The computer monitors the control wire for the negative contactor and sets this code when the voltage on that circuit falls below the expected threshold.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Hybrid propulsion

Symptoms you may notice

- Illumination of the battery/charging system warning light or service vehicle soon light
- The vehicle may fail to start or experience a no-crank condition if the contactor does not close
- Intermittent charging system operation or a completely dead battery after sitting
- Reduced power or limp mode if the contactor is part of a high-voltage battery pack
- Often no symptoms besides the warning light, especially if the contactor is normally closed and the circuit only affects monitoring

Common causes, most likely first

- 1 A short to ground in the control wire between the control module and the negative contactor
- 2 A failed negative contactor coil with an internal short to its case or ground
- 3 Corroded, loose, or damaged connector pins at the contactor or control module
- 4 A faulty control module driver circuit that is stuck low
- 5 Water intrusion or physical damage to the wiring harness causing a short
- 6 Aftermarket accessories improperly tapped into the control circuit



How to diagnose and fix it

- 1 Inspect the negative contactor and its connector for corrosion, loose pins, or damage, and clean or repair as needed
- 2 Disconnect the control module and the contactor, then measure resistance from the control wire to ground to check for a short
- 3 Test the contactor coil resistance and compare to the manufacturer's specification to rule out an internal short
- 4 Check for voltage on the control wire with the module connected and the key on to verify the driver signal is not stuck low
- 5 Repair any chafed or shorted wiring found during visual inspection and re-test the circuit
- 6 If the circuit tests good, substitute a known-good contactor or control module to isolate the faulty component
- 7 Clear the code and perform a road test to confirm the repair, ensuring the charging system operates correctly

Don't overlook the contactor coil itself

- A contactor coil that has developed an internal short to ground can set this code without any visible wiring damage, so resistance testing of the coil is essential.
- The control module may set this code if the contactor is unplugged or missing, so always verify the contactor is present and fully seated before chasing wiring faults.
- On high-voltage battery systems, the negative contactor is often part of the pack and may require special safety procedures; never assume it is a simple 12-volt component.
- A weak or failing battery can cause the control module to log spurious low-circuit codes, so load-test the 12-volt battery before condemning the contactor circuit.
- Aftermarket alarms or remote starters tapped into the charging system wiring are a common cause of unexplained low-circuit codes on this circuit.

Can I keep driving with P2D75?

If the charging system warning light is on and the vehicle starts and runs normally, you can drive it to a repair shop, but avoid long trips and keep an eye on the battery voltage. If the vehicle fails to start or the charging system is not functioning, do not continue driving because the battery will drain and leave you stranded.

Tools that help

- Digital multimeter
- Wiring diagram for the charging system
- Test light
- Socket set and trim removal tools
- Manufacturer-specific scan tool to clear codes and view live data



Reading P2D75

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

Often seen with

P0562 System Voltage Low · **P0A0D** High Voltage System Interlock Circuit A High · **P0A0E** High Voltage System Interlock Circuit A Intermittent · **P2D74** Battery Charging System Negative Contactor D Control Circuit · **P2D76** Battery Charging System Negative Contactor D Control Circuit

See it working

Watch the animated explainer [How a Starter Motor Works: Pre-Engaged Starter](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2d75/>

