



P0ADB

Hybrid/EV Battery Positive Contactor Control Circuit Low

P0ADB indicates that the hybrid or electric vehicle's battery management system has detected an abnormally low voltage on the control circuit for the positive main contactor, which is the high-voltage relay that connects the traction battery to the rest of the vehicle. The computer expects a specific voltage range on the control coil circuit when commanding the contactor closed or open, and a low reading means the circuit is likely shorted to ground or the contactor coil has failed.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	High	Professional	Hybrid propulsion

Symptoms you may notice

- The hybrid or EV system warning light illuminates, and the vehicle may refuse to start or enter 'Ready' mode.
- A message such as 'High-Voltage System Fault' or 'Service Hybrid System' appears on the dashboard.
- The vehicle may run normally at times but intermittently fail to power up, especially after sitting.
- You may hear no click from the battery pack area when the ignition is turned on, indicating the contactor is not closing.
- In some cases, the only sign is the warning light with no drivability change, particularly if the fault is stored but not currently active.

Common causes, most likely first

- 1 A short to ground in the control circuit wiring between the battery management controller and the positive contactor coil.
- 2 A failed positive contactor coil (open or shorted internally) inside the high-voltage battery pack.
- 3 Corroded, loose, or damaged connector pins at the contactor or the battery management controller.
- 4 A faulty battery management controller or control module driver that cannot supply the correct coil voltage.
- 5 Water intrusion or contamination in the battery pack causing corrosion on the contactor control terminals.
- 6 A pinched or chafed wire harness along the path from the controller to the contactor.



How to diagnose and fix it

- 1 Retrieve all stored and pending codes with a scan tool capable of reading hybrid/EV-specific modules, and record freeze-frame data if available.
- 2 Inspect the low-voltage control circuit wiring and connectors at the battery pack and controller for corrosion, looseness, or damage.
- 3 Measure resistance of the positive contactor coil with a multimeter and compare to the manufacturer's specification; an open or very low resistance indicates a failed coil.
- 4 Check for a short to ground on the control circuit by disconnecting both ends and measuring resistance from the control wire to chassis ground.
- 5 Test the control module output with a multimeter or oscilloscope while commanding the contactor on and off with a capable scan tool.
- 6 If the coil and wiring test good, suspect the battery management controller or the contactor assembly itself, and follow the manufacturer's diagnostic flow for replacement.
- 7 After repair, clear codes and perform a full hybrid system self-test to confirm the contactor closes and opens correctly.

What a low contactor control circuit really means

- A low control circuit code often results from a short to ground in the wiring rather than a failed contactor, so always check the harness before condemning the battery pack.
- The contactor coil is a low-voltage component even though it switches high voltage; testing it does not require high-voltage gloves, but the battery pack itself must be treated as live until properly isolated.
- Intermittent faults can be caused by a loose connector that only loses contact when the vehicle is cold or vibrating, so wiggle-test the harness while monitoring the circuit.
- Some vehicles set this code when the 12-volt auxiliary battery is weak because the control module may not have enough voltage to drive the contactor coil properly.
- A failed positive contactor can sometimes be replaced separately from the entire battery pack, but on many models it is only serviced as part of the pack assembly.

Can I keep driving with P0ADB?

Do not continue driving if the vehicle will not enter Ready mode or if the high-voltage system warning is active, because the battery pack may be isolated and the vehicle could lose power unexpectedly. If the light is on but the car drives normally, have it diagnosed promptly and avoid heavy acceleration or long trips until repaired.



Tools that help

- Hybrid/EV-capable scan tool with bidirectional control
- Digital multimeter with resistance and voltage measurement
- Oscilloscope for capturing control signals
- Insulated hand tools and high-voltage safety gloves
- Wiring diagram and service information for the specific vehicle

Reading P0ADB

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0ADA** Hybrid/EV Battery Positive Contactor Control Circuit Range/P · **P0ADC** Hybrid/EV Battery Positive Contactor Control Circuit High · **P0ADD** Hybrid/EV Battery Negative Contactor Control Circuit/Open · **P0AE0** Hybrid/EV Battery Negative Contactor Control Circuit High

See it working

Watch the animated explainer [How Regenerative Braking Works in Electric Cars](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0adb/>

