



P0DAA

Battery Charging System Isolation Fault

P0DAA indicates that the battery charging system has detected an isolation fault, meaning the high-voltage or charging circuit is not properly isolated from the vehicle chassis ground. The computer monitors for unintended current flow between the charging system and ground, and sets this code when isolation resistance drops below a safe threshold.

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

Symptoms you may notice

- Illumination of the battery/charging system warning light or a dedicated high-voltage fault light
- Often no symptoms besides the warning light, especially in the early stages of an isolation fault
- Intermittent or complete loss of charging, leading to a discharged 12-volt battery and a no-start condition
- Reduced power output or a forced limp-home mode in hybrid and electric vehicles
- Audible clicking or arcing noises from the charging system area in severe cases
- Unexplained battery drain or repeated need for jump-starts

Common causes, most likely first

- 1 Damaged or chafed insulation on high-voltage charging cables, allowing contact with chassis ground
- 2 Moisture or coolant intrusion into the charging system components, such as the onboard charger or DC-DC converter
- 3 Internal insulation failure within the onboard charger or charging port assembly
- 4 Failed isolation monitoring circuit or sensor within the battery management system
- 5 Corroded or loose ground connections that create an unintended current path
- 6 Aftermarket accessories or improper repairs that compromise high-voltage cable routing
- 7 Conductive debris or contamination bridging high-voltage terminals to ground



How to diagnose and fix it

- 1 Perform a visual inspection of all high-voltage charging cables and connectors for chafing, damage, or contamination
- 2 Use a megohmmeter to measure isolation resistance between the high-voltage bus and chassis ground, following manufacturer procedures
- 3 Disconnect and inspect the onboard charger and charging port for moisture, corrosion, or signs of arcing
- 4 Check and clean all ground connections related to the charging system and high-voltage components
- 5 Test the isolation monitoring circuit or sensor according to the service information, replacing if faulty
- 6 If isolation resistance is low, isolate sections of the high-voltage system to pinpoint the faulty component
- 7 Repair or replace the component with compromised insulation, then clear codes and verify isolation resistance returns to normal

Isolation faults hide in plain sight

- A common cause of P0DAA that technicians overlook is moisture ingress after a car wash or heavy rain, which temporarily lowers isolation resistance and sets the code without any visible damage.
- The code does not always mean the high-voltage battery is failing; the fault often lies in the charging port, onboard charger, or even a damaged cable that only shorts when the suspension flexes.
- Aftermarket electrical accessories wired incorrectly can create a ground loop that mimics an isolation fault, so always check for non-factory wiring before condemning high-voltage components.
- Some vehicles set P0DAA as a history code after a low-voltage event or jump-start, and it may not indicate a current fault if the isolation resistance tests normal.
- Isolation faults can be intermittent and temperature-dependent, so a wiggle test of harnesses while monitoring isolation resistance is a valuable diagnostic step.

Can I keep driving with P0DAA?

Do not continue driving with an active P0DAA code, as an isolation fault can lead to electric shock hazards or a sudden loss of charging power. Have the vehicle towed to a qualified service facility for diagnosis and repair.

Tools that help

- Megohmmeter (insulation tester)
- Digital multimeter
- Manufacturer-specific scan tool with high-voltage system capabilities
- Insulated hand tools and personal protective equipment (PPE)
- Service information for high-voltage system isolation procedures



Reading P0DAA

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0AA6** Hybrid/EV Battery Voltage System Isolation Fault
 · **P0DAB** Hybrid/EV Battery Cell Balancing Performance · **U0111** Lost Communication With Battery Energy Control Module 'A'

See it working

Watch the animated explainer [How a Car Thermostat Works: Wax Pellet and Cooling Fan](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0daa/>

