

GENERIC · POWERTRAIN

P0DA8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0DA8

Hybrid/EV Battery Voltage/Drive Motor A Inverter Voltage Correlation

P0DA8 indicates that the hybrid or electric vehicle's control module has detected a mismatch between the high-voltage battery pack voltage and the voltage reported by the drive motor A inverter. The computer compares these two voltage signals and sets the code when they deviate beyond a calibrated threshold, pointing to a communication, sensor, or circuit issue in the high-voltage system.

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

Symptoms you may notice

- Illumination of the hybrid system warning light or service vehicle soon message
- Often no symptoms besides the warning light, especially if the voltage discrepancy is minor
- Reduced power output or limp mode to protect the high-voltage components
- Inability to start the vehicle or engage the hybrid system
- Intermittent stalling or sudden loss of propulsion while driving
- Audible warnings or chimes from the instrument cluster

Common causes, most likely first

- 1 Faulty or degraded high-voltage battery pack causing voltage readings outside expected range
- 2 Damaged or corroded wiring harness between the battery pack and inverter
- 3 Poor electrical connection at the inverter or battery pack terminals
- 4 Failed voltage sensor or current sensor within the battery pack or inverter assembly
- 5 Internal fault in the drive motor A inverter, such as a failed voltage sensing circuit
- 6 Software glitch or outdated calibration in the hybrid control module
- 7 Water intrusion or contamination in high-voltage connectors causing signal interference



How to diagnose and fix it

- 1 Perform a thorough visual inspection of all high-voltage cables and connectors for damage, corrosion, or loose fit
- 2 Use a scan tool to retrieve all stored codes and freeze-frame data, then clear codes and test-drive to see if P0DA8 returns
- 3 Measure the high-voltage battery pack voltage with a multimeter and compare it to the inverter's reported voltage via live data
- 4 Check for technical service bulletins (TSBs) or software updates for the hybrid control module that address voltage correlation issues
- 5 Perform a voltage drop test on the high-voltage wiring between the battery and inverter while under load
- 6 If voltage discrepancy is confirmed, isolate the fault by substituting known-good components or performing pinpoint tests per the manufacturer's service information
- 7 Repair or replace the faulty component, such as the battery pack, inverter, or wiring harness, and verify the repair with a test drive

Voltage Mismatch Isn't Always a Bad Battery

- A loose or corroded ground connection on the inverter can cause a voltage offset that mimics a failing battery pack, so always check grounds before condemning expensive components.
- The code can be set by a weak 12-volt auxiliary battery that causes the hybrid control module to boot improperly and misread voltage signals during startup.
- In some vehicles, a failing cell in the high-voltage battery only shows a voltage discrepancy under load, so static voltage checks may pass while the code still sets during driving.
- After any high-voltage component replacement, the battery pack and inverter may require a calibration or learn procedure; skipping this step can immediately reset P0DA8.
- Intermittent connector issues at the inverter are a common missed cause, especially after collision repairs or service work that disturbs the high-voltage harness.

Can I keep driving with P0DA8?

Do not continue driving with this code, as a voltage mismatch can lead to sudden loss of power or damage to high-voltage components. Have the vehicle towed to a qualified hybrid service facility for diagnosis.

Tools that help

- Hybrid/EV capable scan tool with live data
- Digital multimeter with high-voltage rated probes
- Insulation tester (megohmmeter)
- Manufacturer service information and wiring diagrams
- Personal protective equipment (high-voltage gloves, safety glasses)



Reading P0DA8

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- D** Hybrid propulsion.
- A8** The exact fault within that area.

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0A1F** Battery Energy Control Module A Performance · **P0A94** DC/DC Converter A Performance · **P0AA6** Hybrid/EV Battery Voltage System Isolation Fault · **P0DAA** Battery Charging System Isolation Fault

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/p0da8/>

