

GENERIC · POWERTRAIN

P0DA9

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0DA9

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

P0DA9 indicates that the hybrid or electric vehicle control system has detected a mismatch between the high-voltage battery pack voltage and the voltage reported by the inverter for drive motor B. The computer compares these two voltage signals and sets the code when they deviate beyond a calibrated threshold, signaling a potential issue in the high-voltage circuit, sensor accuracy, or inverter operation.

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
- Reduced power output or limp mode, limiting acceleration and speed
- The vehicle may refuse to start or enter ready mode
- Intermittent stalling or sudden loss of propulsion while driving
- Often no symptoms besides the warning light, especially if the voltage discrepancy is minor

Common causes, most likely first

- 1 Faulty voltage sensor or sensing circuit within the drive motor B inverter
- 2 Degraded or damaged high-voltage cable or connector between the battery and inverter
- 3 Internal failure in the inverter assembly affecting voltage measurement
- 4 Poor chassis ground or reference voltage issue for the inverter electronics
- 5 Software calibration error in the hybrid control module
- 6 High-voltage battery pack imbalance or cell degradation causing voltage fluctuations



How to diagnose and fix it

- 1 Perform a thorough visual inspection of high-voltage cables and connectors for damage, corrosion, or loose fit
- 2 Check and clean all chassis grounds related to the hybrid system, especially those near the inverter
- 3 Use a scan tool to retrieve freeze-frame data and compare battery voltage and inverter-reported voltage under various loads
- 4 Perform a voltage drop test on the high-voltage circuit between the battery and inverter while the system is active
- 5 Inspect the inverter connector pins for fretting corrosion or pushed-out terminals
- 6 If voltage signals match at the inverter but not at the control module, diagnose the signal circuit wiring
- 7 Replace the drive motor B inverter only after confirming all external wiring and sensors are functioning correctly

Before you replace the drive motor inverter

- A loose or corroded high-voltage connector can cause this code without any visible damage, so always perform a wiggle test while monitoring live data.
- The code can be set by a weak 12-volt battery affecting the inverter's reference voltage, so check the low-voltage system first.
- Some vehicles require a software update to the hybrid control module to correct overly sensitive voltage correlation thresholds.
- Voltage discrepancies under heavy load may indicate a failing battery pack rather than an inverter fault, so load-test the battery if possible.
- After repairs, the code may require a specific drive cycle or relearn procedure to clear from memory.

Can I keep driving with P0DA9?

Do not continue driving with this code active, as a voltage mismatch can lead to sudden loss of power or damage to high-voltage components. Have the vehicle inspected by a qualified hybrid technician before further use.

Tools that help

- Hybrid/EV-rated digital multimeter with high-voltage probes
- OBD-II scan tool with hybrid system capabilities
- Insulation tester (megohmmeter) for high-voltage cable checks
- Battery load tester or conductance tester for 12-volt system
- Manufacturer-specific diagnostic software for live data and relearn procedures



Reading P0DA9

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- D** Hybrid propulsion.
- A9** 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 · **P0C00** Drive Motor A Current Low · **P0DA8** Hybrid/EV Battery Voltage/Drive Motor A Inverter Voltage Cor

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/p0da9/>

