

GENERIC · POWERTRAIN

P0B68

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0B68

Hybrid/EV Battery Voltage Sense J Circuit

P0B68 indicates that the hybrid or electric vehicle battery pack control module has detected an abnormal voltage reading on the 'J' voltage sense circuit, which is one of several dedicated wires used to measure individual cell or module voltages. The computer compares this sensed voltage against expected values and flags the circuit as faulty when the signal falls outside a calibrated range or becomes erratic.

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

Symptoms you may notice

- Illumination of the hybrid system warning light or check engine light, often with no other noticeable symptoms
- Reduced electric-only driving range or the vehicle refusing to enter EV mode
- A sudden drop in state of charge or inconsistent battery gauge readings
- Powertrain power limitation or limp mode in some vehicles
- In rare cases, a burning smell or slight swelling of the high-voltage battery pack if a cell is failing

Common causes, most likely first

- 1 Damaged or chafed wiring in the voltage sense harness between the battery pack and the control module
- 2 Corroded or loose connector pins at the battery pack sense connector or the control module
- 3 Internal failure of the battery pack control module voltage sensing circuit
- 4 A failing battery cell or module that produces an out-of-range voltage, causing the sense circuit to read abnormally
- 5 High resistance in the sense circuit due to a poor splice or terminal crimp
- 6 Moisture intrusion into the sense wiring or connector, leading to signal shorts or grounds



How to diagnose and fix it

- 1 Retrieve all stored codes and freeze-frame data with a scan tool capable of reading hybrid/EV battery data, then clear codes and test-drive to see if P0B68 returns.
- 2 Visually inspect the voltage sense wiring and connectors at the battery pack and control module for chafing, corrosion, or loose pins.
- 3 Measure resistance and voltage drop on the 'J' sense circuit from end to end, comparing to the manufacturer's specification.
- 4 Perform a battery pack voltage measurement at the sense connector and compare each cell/module reading to detect an outlier.
- 5 If wiring and connectors are good, substitute a known-good control module or perform a module reprogramming per service information.
- 6 If a faulty cell or module is identified, replace the affected battery module or pack according to the manufacturer's high-voltage safety procedures.
- 7 After repair, clear codes and verify that the voltage sense reading is stable and within range during a road test.

Sense circuit faults often mimic battery failure

- A loose or corroded sense connector can produce the same voltage error as a failing battery cell, so always inspect connectors before condemning the pack.
- The 'J' circuit is one of several voltage sense lines; a fault in a shared reference wire can set multiple sense codes, not just P0B68.
- Some vehicles require a battery pack control module software update to correct overly sensitive voltage sense thresholds that trigger false codes.
- High-voltage battery sense circuits are sensitive to moisture and vibration, so look for signs of water intrusion or harness rubbing near the pack mounting points.
- Clearing the code without repairing the underlying circuit often leads to a repeat failure, especially if the fault is intermittent due to a loose pin.

Can I keep driving with P0B68?

You can usually continue driving short distances to a repair shop, but avoid aggressive acceleration, prolonged high-speed driving, or deep discharging the battery until the fault is repaired. If the vehicle enters limp mode or shows a significant loss of power, stop driving and arrange a tow to prevent further battery damage.

Tools that help

- Hybrid/EV-capable scan tool with battery pack data streaming
- Digital multimeter with high-voltage safety rating
- Insulation resistance tester (megohmmeter)
- Terminal pick and contact cleaner
- Service information for voltage sense circuit specifications



Reading P0B68

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

Often seen with

P0A09 DC/DC Converter Status Circuit Low Input · **P0A0D** High Voltage System Interlock Circuit A High · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0B67** Hybrid/EV Battery Voltage Sense I Circuit Intermittent/Errat · **P0B69** Hybrid/EV Battery Voltage Sense J Circuit Range/Performance

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/p0b68/>

