

GENERIC · POWERTRAIN

P0B88

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0B88

Hybrid/EV Battery Voltage Sense P Circuit Low

P0B88 indicates that the hybrid or electric vehicle battery pack controller has detected an abnormally low voltage on the sensing circuit for the battery module group labeled 'P'. The computer compares the voltage reported by this sense line against expected values and flags the circuit as low when the signal falls below a calibrated threshold, which can be caused by a wiring fault, a failed sense line, or an internal battery pack issue.

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 service vehicle soon message
- Often no symptoms besides the warning light, with the vehicle continuing to drive normally
- Reduced electric-only range or the engine starting more frequently than usual
- A sudden drop in state of charge or the battery gauge behaving erratically
- Entry into limp mode or refusal to start in more severe cases
- Charging system faults or the vehicle failing to accept a charge

Common causes, most likely first

- 1 Damaged, chafed, or corroded wiring in the voltage sense circuit for module group P
- 2 Loose or contaminated connector pins at the battery pack interface or the battery control module
- 3 Failed voltage sense line or sensing harness internal to the battery pack
- 4 Faulty battery pack control module or hybrid vehicle control module misreading the sense signal
- 5 Internal cell imbalance or a weak module within group P pulling the sensed voltage low
- 6 High-resistance ground connection shared by the sense circuit
- 7 Aftermarket accessories or improper prior repairs disturbing the battery pack wiring



How to diagnose and fix it

- 1 Retrieve all stored codes and freeze-frame data with a scan tool capable of hybrid battery diagnostics, then clear and road-test to confirm P0B88 returns
- 2 Inspect the battery pack sense harness and connectors for chafing, corrosion, pushed pins, and loose terminals, repairing as needed
- 3 Measure resistance and voltage drop on the sense circuit from the battery control module to the module group P tap point and compare with service information
- 4 Check the shared ground circuit for the battery control module and sense lines for excessive resistance
- 5 Perform a battery pack module voltage audit with the scan tool to see whether group P reads low under load compared with other groups
- 6 If wiring and connectors pass, substitute a known-good battery control module or reflash the module per manufacturer procedure before condemning the pack
- 7 If the module group itself is confirmed weak or imbalanced, follow the manufacturer's battery pack repair or replacement procedure

Sense line faults mimic battery pack failure

- A low sense reading on group P is frequently caused by a poor connector pin or chafed wire rather than a failing battery module, so always verify the circuit before pricing a pack.
- The code can set intermittently from vibration or moisture ingress at a connector, so a wiggle test and a look at freeze-frame data captured during the fault are more useful than a static meter check.
- Some vehicles set P0B88 when the 12-volt auxiliary battery is weak or the hybrid control module loses a clean ground, so check the low-voltage side before digging into the high-voltage pack.
- A module group that reads low only under load may still pass a static voltage audit, so a loaded test or a capacity check is needed to separate a sense fault from a real cell problem.
- Clearing the code without repairing the circuit often leads to a repeat visit, because the controller re-learns the low sense value and may derate the pack after several drive cycles.

Can I keep driving with P0B88?

The vehicle may remain drivable with only a warning light, but a low sense circuit can mask a real battery module problem and lead to reduced power or a sudden shutdown. Avoid heavy acceleration, long trips, and charging until the circuit has been inspected, and do not continue driving if the hybrid system warning flashes or the vehicle enters limp mode.



Tools that help

- Hybrid-capable scan tool with battery pack data and freeze-frame access
- Digital multimeter with low-ohm and voltage-drop capability
- Manufacturer service information and wiring diagrams for the battery pack sense circuit
- Insulated hand tools and high-voltage personal protective equipment
- Back-probe kit and terminal pick set for connector inspection
- Battery pack module voltage audit or capacity tester

Reading P0B88

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

Often seen with

P0A9C Hybrid/EV Battery Temperature Sensor A Circuit Range/Perform · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0B80** Hybrid/EV Battery Voltage Sense N Circuit Intermittent/Errat · **P0B87** Hybrid/EV Battery Voltage Sense P Circuit Range/Performance · **P0B89** Hybrid/EV Battery Voltage Sense P 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/p0b88/>

