

GENERIC · POWERTRAIN

P0B92

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0B92

Hybrid/EV Battery Voltage Sense R Circuit Low

P0B92 indicates that the hybrid or electric vehicle battery pack monitoring system has detected an abnormally low voltage on the sensing circuit for one specific battery cell group, often called a module or 'R' circuit. The battery energy control module compares this signal against expected values and sets the code when the voltage reading falls below the calibrated threshold, which can be caused by a faulty sense wire, a poor connection, or an internal battery problem.

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
- Reduced electric-only range or the vehicle refusing to enter EV mode
- Inconsistent state-of-charge readings or sudden drops in indicated battery level
- Often no symptoms besides the warning light, especially if the fault is intermittent
- Possible reduced engine power or forced engine running due to battery management strategy
- In rare cases, the vehicle may fail to start or shift into gear if the high-voltage system is disabled

Common causes, most likely first

- 1 Damaged or chafed voltage sense wire between the battery module and the control unit
- 2 Corroded or loose connector terminal at the battery module or control module
- 3 Faulty voltage sensing circuit inside the battery pack, such as a failed sense harness
- 4 Internal battery module degradation causing a cell group to produce lower voltage under load
- 5 Failed battery energy control module or hybrid control module (less common)
- 6 High-resistance joint or poor crimp in the sense wiring harness
- 7 Water intrusion or contamination in the battery pack connector area



How to diagnose and fix it

- 1 Inspect the sense wiring harness and connectors at the affected battery module for damage, corrosion, or looseness
- 2 Measure the actual voltage of the suspect battery module with a high-impedance meter and compare it to the value reported by the scan tool
- 3 Perform a voltage drop test on the sense circuit while wiggling the harness to reveal intermittent faults
- 4 Check service information for any technical service bulletins or known issues related to the sense circuit on this platform
- 5 If wiring and connections are good, test the battery module's internal sense circuit or replace the module as required
- 6 Clear the code and perform a battery pack relearn or calibration drive cycle if the repair involved module replacement
- 7 Verify the repair by monitoring live voltage data for the affected module during a road test

Sense circuit faults often mimic battery failure

- A low voltage sense reading does not automatically mean the battery module is failing; a poor connection at the sense terminal can produce the same code and is far cheaper to fix.
- Intermittent P0B92 codes are frequently caused by a harness that rubs against the battery pack casing, so a wiggle test while watching live data is more revealing than a static meter check.
- Some vehicles set this code after a low-voltage event or battery replacement if the battery energy control module loses its learned calibration, and a relearn procedure may be all that is needed.
- Technicians sometimes replace an entire battery pack when only the sense harness inside the pack is faulty, so always verify the circuit integrity before condemning the pack.
- The 'R' circuit designation refers to a specific cell group in the pack, and misreading the service information can lead to testing the wrong module entirely.

Can I keep driving with P0B92?

You can generally drive the vehicle with this code if it is the only fault and the hybrid system remains operational, but avoid heavy acceleration or long trips until it is diagnosed. If the vehicle enters a reduced-power mode or the high-voltage system disables, stop driving and have it towed to a qualified technician.

Tools that help

- Hybrid/EV-capable scan tool with live battery module voltage data
- Digital multimeter with high-impedance settings
- Insulated hand tools rated for high-voltage work
- Wiring diagram and service information for the specific vehicle
- Battery pack lifting equipment if module replacement is required



Reading P0B92

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

Often seen with

P0A95 High Voltage Fuse A · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0B90** Hybrid/EV Battery Voltage Sense R Circuit · **P0B91** Hybrid/EV Battery Voltage Sense R Circuit Range/Performance · **P0B93** Hybrid/EV Battery Voltage Sense R 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/p0b92/>

