

GENERIC · POWERTRAIN

P0B74

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0B74

Hybrid/EV Battery Voltage Sense L Circuit Low

P0B74 indicates that the hybrid or electric vehicle battery pack control module has detected a low voltage condition on the voltage sense circuit for battery module L. This circuit is used to monitor the voltage of a specific group of cells, and a low signal suggests a wiring fault, a poor connection, or an internal issue within the battery pack.

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 light
- Reduced power output or limited electric-only operation
- The vehicle may enter a fail-safe mode or refuse to start
- Often no symptoms besides the warning light
- In some cases, the battery pack may not accept a charge or may show an incorrect state of charge

Common causes, most likely first

- 1 Damaged or corroded wiring in the voltage sense circuit for module L
- 2 Loose or contaminated connector at the battery module or control module
- 3 Faulty voltage sense harness within the battery pack
- 4 Internal failure of the battery module L (e.g., a weak cell group)
- 5 Malfunctioning battery pack control module
- 6 High resistance in the sense circuit due to a poor splice or terminal
- 7 Moisture intrusion into the battery pack causing corrosion

How to diagnose and fix it

- 1 Inspect the voltage sense wiring and connectors for module L for damage, corrosion, or looseness
- 2 Measure the voltage at the module L sense terminals and compare with the control module's reported value
- 3 Perform a resistance test on the sense circuit to check for excessive resistance
- 4 Check for technical service bulletins (TSBs) or software updates for the battery control module
- 5 If wiring and connections are good, test the battery module L for internal faults
- 6 Replace the faulty voltage sense harness or connector as needed
- 7 If the module itself is defective, replace the battery module or pack according to manufacturer procedures



Voltage Sense Circuit Traps to Avoid

- A low voltage sense reading often results from a poor connection rather than a failed battery module, so always check connectors and terminals first.
- The code can be set by a faulty sense wire that intermittently shorts to ground, which may not be present during static testing.
- Replacing the battery pack without verifying the sense circuit can lead to a repeat failure and unnecessary expense.
- Some vehicles require a battery pack control module software update to correct false low-voltage readings.
- The voltage sense circuit is separate from the main power cables, so a low reading does not necessarily indicate a weak battery pack.

Can I keep driving with P0B74?

It is not advisable to continue driving with this code, as the vehicle may enter a reduced power mode or shut down unexpectedly. Have the vehicle inspected by a qualified technician as soon as possible, and avoid long trips or heavy loads until repaired.

Tools that help

- Digital multimeter
- OBD-II scan tool with hybrid/EV capability
- Wiring diagram and service information
- Insulation resistance tester
- Battery terminal cleaning tools

Reading P0B74

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0AA6** Hybrid/EV Battery Voltage System Isolation Fault · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0B73** Hybrid/EV Battery Voltage Sense L Circuit Range/Performance · **P0B75** Hybrid/EV Battery Voltage Sense L 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/p0b74/>

