

GENERIC · POWERTRAIN

P0EF8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0EF8

Battery Charger A Input Voltage Sensor B Circuit Range/Performance

P0EF8 indicates that the battery charger control module has detected an out-of-range or erratic signal from the input voltage sensor on its 'B' circuit, which monitors the charger's incoming power supply. The computer compares this sensor's voltage reading against expected values and flags the code when the signal falls outside the normal operating window or behaves unpredictably.

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

Symptoms you may notice

- Illumination of the battery charger or hybrid system warning light on the dashboard
- The high-voltage battery may not charge properly or at all when plugged in
- Charging may stop unexpectedly or fail to start
- A message on the driver information display indicating a charging system fault
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Faulty input voltage sensor B or its internal circuitry
- 2 Damaged, corroded, or loose wiring or connector at the sensor or charger module
- 3 Poor ground connection for the sensor or charger module
- 4 Water intrusion or contamination in the sensor or connector
- 5 Failed battery charger control module
- 6 Software glitch or outdated calibration in the charger control module



How to diagnose and fix it

- 1 Use an OBD-II scanner to retrieve all stored codes and freeze-frame data, then clear codes and test-drive to see if P0EF8 returns
- 2 Visually inspect the input voltage sensor B, its connector, and the wiring harness for damage, corrosion, or loose pins
- 3 Measure the sensor's reference voltage and signal voltage with a digital multimeter and compare to manufacturer specifications
- 4 Check the sensor's ground circuit for excessive resistance using a voltage drop test
- 5 If the sensor signal is out of range, replace the input voltage sensor B and retest
- 6 If the sensor and wiring test good, check for technical service bulletins or software updates for the charger control module
- 7 As a last resort, replace the battery charger control module and perform any required programming or initialization

What the charger input sensor code hides

- A weak or failing 12-volt auxiliary battery can cause erratic sensor readings and set this code, so always load-test the battery before condemning the sensor.
- Intermittent faults often stem from a chafed wire that only shorts when the vehicle is in motion or when temperatures change, making a wiggle test essential.
- The code can be set by a momentary voltage spike during charging, so check for a recent jump-start or charger malfunction before replacing parts.
- Some vehicles require a relearn or calibration procedure after sensor replacement, and skipping it will cause the code to return immediately.
- The input voltage sensor B circuit is separate from the main battery voltage monitoring, so a charging system that seems fine otherwise can still trigger this code.

Can I keep driving with P0EF8?

You can usually drive the vehicle, but avoid relying on charging the high-voltage battery until the fault is repaired, as charging may be interrupted or fail. If the vehicle enters a reduced-power mode or the battery charge drops significantly, seek service immediately.

Tools that help

- OBD-II scanner with live data capability
- Digital multimeter
- Wiring diagram for the battery charger circuit
- Basic hand tools for connector and sensor access
- Battery load tester



Reading P0EF8

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- E** Hybrid propulsion.
- F8** The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P0EF7** Battery Charger A Input Voltage Sensor B Circuit · **P0EF9** Battery Charger A Input Voltage Sensor B Circuit Low · **P0EFA** Battery Charger A Input Voltage Sensor B Circuit High · **P0EFB** Battery Charger A Input Voltage Sensor B Circuit Intermitten

See it working

Watch the animated explainer [How the PCV System Works: Crankcase Ventilation](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0ef8/>

