



P0E8C

Battery Charger B Current Sensor Circuit Low

P0E8C indicates that the battery charger's current sensor circuit has reported a voltage or signal below the expected range to the control module. The computer detects this when the sensor output stays lower than the calibrated minimum for the given operating conditions, which prevents accurate monitoring of charger current.

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

Symptoms you may notice

- Illumination of the battery charger system warning light or service vehicle soon message
- Often no symptoms besides the warning light, especially if the charger continues to function
- Charger may fail to activate or may shut down intermittently
- Reduced charging performance or longer charge times
- Battery state of charge may not increase as expected during charging
- Possible related fault codes in the battery charger control module

Common causes, most likely first

- 1 Faulty current sensor internal to the battery charger assembly
- 2 Damaged or corroded wiring between the current sensor and the control module
- 3 Poor electrical connection at the sensor or module connector
- 4 Open circuit or high resistance in the sensor signal circuit
- 5 Short to ground on the sensor signal circuit
- 6 Failed control module not providing correct reference voltage
- 7 Water intrusion or physical damage to the charger housing affecting the sensor



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related faults in the battery charger system
- 2 Inspect the charger wiring harness and connectors for corrosion, damage, or loose pins
- 3 Measure the sensor signal voltage at the control module connector and compare to specifications
- 4 Check the sensor reference voltage and ground circuits for continuity and shorts
- 5 Perform a wiggle test on the harness while monitoring sensor data to reveal intermittent faults
- 6 If wiring and connections are good, test or replace the current sensor or charger assembly as required
- 7 Clear the code and verify the repair by monitoring live data during a charging cycle

Current sensor faults often misdiagnosed

- A low signal code can be set by a simple loose connector pin that only loses contact under vibration, so always perform a thorough wiggle test before condemning the sensor.
- The current sensor is frequently integrated into the battery charger assembly, meaning a sensor fault may require replacing the entire charger rather than a separate component.
- Corrosion inside the charger housing from water intrusion can cause the sensor signal to short low, and this is often overlooked when only the external wiring is inspected.
- This code does not always mean the charger has failed; a faulty control module reference voltage can pull the sensor signal low and mimic a sensor failure.
- Related codes such as P0E8A or P0E8B may also be present and should be diagnosed together to avoid replacing parts unnecessarily.

Can I keep driving with P0E8C?

If the vehicle is a plug-in hybrid or electric model, avoid relying on charging until the fault is repaired, as the charger may not operate correctly. The vehicle can generally be driven in conventional mode, but schedule service soon to prevent battery drain or further electrical issues.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the battery charger circuit
- Back probe pins or breakout box
- Insulated hand tools



Reading P0E8C

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- E** Hybrid propulsion.
- 8C** The exact fault within that area.

Often seen with

P0E8A Battery Charger B Current Sensor Circuit · **P0E8B** Battery Charger B Current Sensor Circuit Range/Performance · **P0E8D** Battery Charger B Current Sensor Circuit High · **P0E8E** Battery Charger B Current Sensor Circuit Intermittent/Errati · **P0E8F** Drive Motor A Inverter Voltage Sensor B Circuit

See it working

Watch the animated explainer [How Misfire Detection Works: Crankshaft Speed](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0e8c/>

