



P0D4E

Battery Charger Hybrid/EV Battery Output Voltage Sensor Circuit Low

P0D4E means the battery charger that supplies the high-voltage hybrid or electric vehicle battery has reported that its output voltage sensor circuit is reading lower than expected. The computer has detected a low signal on the sensor circuit that monitors the charger's output voltage, which can prevent the charger from properly regulating the charge rate.

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

Symptoms you may notice

- Illumination of the check engine light or hybrid system warning light
- The vehicle may fail to start or enter ready mode
- Reduced electric driving range or the battery may not accept a charge
- A message on the dash indicating a charging system fault
- The high-voltage battery may become depleted over time
- Often no symptoms besides the warning light

Common causes, most likely first

- 1 Faulty output voltage sensor integrated into the battery charger assembly
- 2 Damaged or corroded wiring or connector at the charger output voltage sensor
- 3 Open or short circuit in the sensor signal circuit
- 4 Poor ground connection for the sensor circuit
- 5 Internal failure of the battery charger control module
- 6 Software glitch in the charger control module requiring reprogramming

How to diagnose and fix it

- 1 Scan all modules for stored codes and freeze-frame data to confirm P0D4E is current
- 2 Visually inspect the charger output voltage sensor connector and wiring for damage or corrosion
- 3 Measure resistance and voltage on the sensor signal circuit to check for opens or shorts
- 4 Verify the sensor reference voltage and ground at the charger connector
- 5 Compare the sensor reading with a known-good value or use a scan tool to view live data
- 6 If the circuit tests good, replace the battery charger assembly or sensor as applicable
- 7 After repair, clear codes and perform a road test to verify the code does not return



When the charger sensor lies

- A low output voltage sensor reading can be caused by a simple loose connector that mimics a failed charger, so always check connections first.
- The code can set intermittently due to vibration or heat, and may not reappear during a short test drive.
- Some vehicles use the same sensor for multiple functions, so a failure may also affect other charging parameters without setting additional codes.
- Replacing the charger without testing the sensor circuit can be an expensive misdiagnosis if the real issue is a chafed wire.
- After battery charger replacement, some models require a calibration or learn procedure to avoid setting false low-voltage codes.

Can I keep driving with P0D4E?

It is not advisable to continue driving with this code because the hybrid or electric vehicle may not charge properly, leading to a depleted battery and possible stall. Limit driving to moving the vehicle to a safe location or to a repair shop, and avoid relying on electric-only operation.

Tools that help

- OBD-II scan tool with hybrid/EV capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Back probe pins or breakout box
- Insulated gloves for high-voltage safety

Reading P0D4E

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
D	Hybrid propulsion.
4E	The exact fault within that area.

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0A1F** Battery Energy Control Module A Performance · **P0D4C** Battery Charger Hybrid/EV Battery Output Voltage Sensor Circ · **P0D4D** Battery Charger Hybrid/EV Battery Output Voltage Sensor Circ · **P0D4F** Battery Charger Hybrid/EV Battery Output Voltage Sensor Circ



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/p0d4e/>

