

GENERIC · POWERTRAIN

P0EEB

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0EEB

Battery Charger Coupler Temperature Sensor B Circuit High

P0EEB indicates that the powertrain control module has detected an abnormally high voltage on the signal circuit for the battery charger coupler temperature sensor B, which is used on plug-in hybrid and electric vehicles to monitor the temperature of the charging inlet or coupler. The sensor's thermistor resistance drops as temperature rises, so a high-voltage reading typically means the circuit is open, shorted to voltage, or the sensor has failed.

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

Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message, often with no other symptoms
- Charging system may default to a reduced rate or refuse to start a charge session
- Intermittent charging interruptions or a message that the charge coupler is too hot
- In rare cases, the vehicle may not allow the high-voltage battery to accept a charge at all
- No noticeable performance change while driving, since the fault affects the charging system rather than the drivetrain

Common causes, most likely first

- 1 Open circuit or high resistance in the sensor signal wire, often due to a broken wire or corroded connector pin at the charge coupler
- 2 Failed battery charger coupler temperature sensor B (thermistor) reading an open circuit
- 3 Short to voltage on the signal circuit, which can be caused by chafed wiring near the charging inlet
- 4 Poor ground connection for the sensor, leading to a floating high signal voltage
- 5 Water intrusion or contamination in the charge coupler connector causing corrosion and signal distortion
- 6 Faulty powertrain control module or charging control module, though this is less common



How to diagnose and fix it

- 1 Inspect the charge coupler connector and sensor wiring for corrosion, water intrusion, or physical damage, and clean or repair as needed
- 2 Disconnect the sensor and measure its resistance with a multimeter, comparing to the manufacturer's temperature-resistance chart to verify sensor operation
- 3 Check the signal circuit for an open or short to voltage using a wiring diagram and a multimeter, repairing any damaged wire
- 4 Verify the sensor ground circuit has less than 1 ohm resistance to chassis ground, repairing the ground if necessary
- 5 Clear the diagnostic trouble codes and perform a charging system test to confirm the code does not return
- 6 If the sensor and wiring test good, follow the manufacturer's diagnostic flow for the charging control module or PCM, which may require reprogramming or replacement

What the coupler temperature sensor really does

- The battery charger coupler temperature sensor is a safety device that derates charging current when the connector gets hot, so a high-voltage code can cause the vehicle to refuse to charge even though the sensor itself is not the problem.
- A common misdiagnosis is replacing the sensor when the actual fault is a corroded terminal in the charge coupler connector, which is exposed to the elements and often overlooked during a quick visual inspection.
- The code can set intermittently if the wiring harness is routed too close to a heat source or if the connector is only partially seated, so always wiggle-test the harness while monitoring live data.
- On some vehicles, a low 12-volt battery or a recent charging system repair can cause a false P0EEB if the sensor circuit is disturbed, so verify the 12-volt system is healthy before condemning the sensor.
- This code does not always mean the sensor has failed; a short to voltage on the signal circuit from a chafed wire near the charging inlet can produce the same high-voltage reading.

Can I keep driving with P0EEB?

You can generally drive the vehicle, but avoid relying on charging until the fault is repaired because the vehicle may refuse to charge or may charge at a reduced rate. If the vehicle will not start or shows a high-voltage system warning, stop driving and seek professional diagnosis.

Tools that help

- Digital multimeter with resistance and voltage measurement
- Wiring diagram or service information for the specific vehicle
- Scan tool capable of reading live sensor data and clearing codes
- Contact cleaner and dielectric grease for connector repair
- Basic hand tools for trim and connector access



Reading P0EEB

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

Often seen with

P0EE8 Battery Charger Coupler Temperature Sensor B Circuit · **P0EE9** Battery Charger Coupler Temperature Sensor B Circuit Range/P · **P0EEA** Battery Charger Coupler Temperature Sensor B Circuit Low · **P0EEC** Battery Charger Coupler Temperature Sensor B Circuit Intermi · **P0EED** Battery Energy Control Module B

See it working

Watch the animated explainer [Car Relay Test Bench: Test 4-Pin and 5-Pin Relays](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0eeb/>

