



P0EEC

Battery Charger Coupler Temperature Sensor B Circuit Intermittent/Erratic

P0EEC indicates that the powertrain control module has detected an intermittent or erratic signal from the temperature sensor circuit associated with the battery charger coupler, which is the connector assembly used to monitor thermal conditions during high-voltage charging. The computer sets this code when the sensor's voltage readings jump unpredictably or drop out momentarily, rather than remaining within a stable expected range.

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 noticeable symptoms.
- Intermittent failure to initiate or complete a high-voltage charge session, especially in cold or hot ambient conditions.
- A charge session that starts normally but aborts after a short time with a dashboard warning.
- Reduced charging power or a default limp-charge mode triggered by the control module when sensor data is unreliable.
- In rare cases, a burning smell or visible discoloration at the charge coupler if the sensor fault is accompanied by poor electrical contact.

Common causes, most likely first

- 1 Corroded, bent, or backed-out terminals within the battery charger coupler connector, causing an intermittent electrical connection.
- 2 A damaged or chafed wire harness between the coupler temperature sensor and the control module, often from repeated flexing or road debris.
- 3 A failing temperature sensor element inside the charge coupler assembly that produces erratic resistance values as it heats and cools.
- 4 Water intrusion into the coupler housing, leading to intermittent shorts or signal drift across the sensor circuit.
- 5 Loose or improperly seated connector locks that allow the coupler plug to vibrate during driving or charging.
- 6 A control module with an intermittent internal fault on the sensor input circuit, though this is less common than wiring issues.



How to diagnose and fix it

- 1 Inspect the battery charger coupler and its mating connector for corrosion, moisture, bent pins, or loose terminal tension, and clean or repair as needed.
- 2 Perform a wiggle test on the sensor harness while watching live temperature data on a scan tool to reproduce the intermittent signal.
- 3 Measure the sensor resistance at the coupler connector and compare it to the manufacturer's temperature-resistance chart to confirm sensor integrity.
- 4 Check for continuity and short-to-ground on each sensor circuit wire between the coupler and the control module, repairing any damaged sections.
- 5 Replace the coupler temperature sensor or the entire coupler assembly if the sensor is internal and not serviceable separately.
- 6 Clear the diagnostic trouble codes and verify the repair by running a complete charge cycle while monitoring live data for stability.

Intermittent Coupler Sensor Faults Often Misdiagnosed

- A common oversight is replacing the charge coupler assembly when the actual fault is a chafed wire several inches back in the harness, so always flex the loom while watching live data before condemning parts.
- This code can be set by a momentary voltage spike from the vehicle's onboard charger rather than a true sensor failure, so check for related charging system codes before replacing the sensor.
- Technicians sometimes chase the sensor when the real problem is a poor ground connection at the coupler mounting bolt, which introduces erratic reference voltage.
- The intermittent nature means the code may not reset immediately after repair; a full charge cycle and a short road test are needed to confirm the fix.
- On some vehicles, the coupler temperature sensor shares a reference voltage with other sensors, so a fault elsewhere on that circuit can mimic a coupler sensor problem.

Can I keep driving with P0EEC?

You can generally continue driving the vehicle because this fault affects the charging system rather than propulsion, but avoid high-voltage charging sessions until the issue is repaired to prevent charge interruptions or potential overheating at the coupler. If you notice a burning smell or visible damage at the charge port, stop using the charger immediately and seek professional service.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter with resistance and continuity functions
- Wire terminal pick and connector release tools
- Manufacturer-specific temperature-resistance chart for the sensor
- Flashlight and inspection mirror for coupler terminal inspection



Reading P0EEC

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

Often seen with

P0C00 Drive Motor A Current Low · **P0D00** Control Pilot Charging Ventilation Switch Circuit/Open · **P0EEA** Battery Charger Coupler Temperature Sensor B Circuit Low · **P0EEB** Battery Charger Coupler Temperature Sensor B Circuit High · **P0EED** Battery Energy Control Module B

See it working

Watch the animated explainer [How a Jet Engine Works: Two-Spool Turbofan](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0eec/>

