

GENERIC · POWERTRAIN

P2E4C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2E4C

Battery Charger Coupler Temperature Sensor C Circuit Low

This code indicates that the battery charger coupler temperature sensor C circuit has reported a voltage below its expected range to the control module. The module uses this sensor to monitor the temperature of the charging coupler, and a low signal suggests a short to ground, an open circuit, or a sensor fault.

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 no symptoms besides the warning light
- Charging system may default to a reduced rate or stop charging
- Inability to initiate or maintain a high-voltage charge
- Inaccurate temperature readings on the dashboard or charging screen

Common causes, most likely first

- 1 Faulty temperature sensor C
- 2 Damaged or chafed wiring in the sensor circuit
- 3 Corroded or loose electrical connector at the sensor
- 4 Short to ground in the signal circuit
- 5 Open circuit in the sensor ground or signal wire
- 6 Failed control module (rare)

How to diagnose and fix it

- 1 Inspect the sensor connector and wiring for damage or corrosion
- 2 Measure sensor resistance and compare to specifications
- 3 Check for short to ground or open circuit in the signal wire
- 4 Verify reference voltage at the sensor connector
- 5 Replace the temperature sensor if faulty
- 6 Repair or replace damaged wiring or connectors
- 7 Clear the code and verify the repair with a test drive



When the sensor is not the problem

- A low circuit code often results from a short to ground in the wiring harness rather than a failed sensor.
- The control module may set this code if the sensor signal is intermittently lost due to a loose connector.
- Replacing the sensor without checking the circuit can lead to a repeat failure if the wiring is damaged.
- This code can be set by a faulty charging coupler assembly even if the sensor itself tests good.
- Always check for technical service bulletins related to the charging system before replacing parts.

Can I keep driving with P2E4C?

It is generally safe to drive the vehicle, but avoid using the charging system until the fault is repaired to prevent potential charging issues or further damage.

Tools that help

- OBD-II scanner
- Digital multimeter
- Wiring diagram
- Socket set
- Electrical contact cleaner

Reading P2E4C

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

Often seen with

P0A0F Engine Failed to Start · **P0A1F** Battery Energy Control Module A Performance · **P2E4B** Battery Charger Coupler Temperature Sensor C Circuit Range/P · **P2E4D** Battery Charger Coupler Temperature Sensor C Circuit High · **P2E4E** Battery Charger Coupler Temperature C Too High

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/p2e4c/>

