

GENERIC · POWERTRAIN

P2E53

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2E53

Battery Charger Coupler Temperature D Too High

P2E53 indicates that the vehicle's battery charger coupler temperature sensor D has reported an excessively high temperature to the control module. The computer detects this when the sensor signal voltage falls outside the expected range for a safe charging temperature, typically indicating overheating at the coupler or a fault in the sensor circuit.

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

Symptoms you may notice

- Charging system warning light or service vehicle soon message displayed on the dash
- Reduced or disabled battery charging, especially during high-power charging sessions
- Noticeable heat or burning smell near the charge port or coupler area
- Intermittent charging interruptions or failure to initiate a charge
- Often no symptoms besides the warning light, with normal driving unaffected

Common causes, most likely first

- Faulty battery charger coupler temperature sensor D or its internal thermistor
- Damaged or corroded wiring and connectors between the sensor and the control module
- Poor electrical connection at the charge coupler causing excessive resistance and heat
- Overheating due to a blocked or malfunctioning coupler cooling system (if equipped)
- Control module software error or internal fault misinterpreting the sensor signal
- Physical damage to the charge port or coupler assembly from impact or wear

How to diagnose and fix it

- Inspect the charge coupler and port for signs of overheating, melting, or corrosion, and clean or replace damaged components as needed
- Check the sensor wiring and connectors for continuity, shorts, and corrosion, repairing any faults found
- Measure the resistance of the coupler temperature sensor and compare it to the manufacturer's specification to confirm sensor failure
- Verify the control module software is up to date and reprogram if a known issue exists
- Test the sensor signal voltage at the control module connector to rule out a module fault
- Replace the battery charger coupler temperature sensor or the entire coupler assembly if the sensor is faulty
- Clear the diagnostic trouble codes and perform a road test or charging cycle to verify the repair



Don't overlook the charge coupler cooling system

- A common oversight is assuming the sensor itself is faulty when the real problem is a clogged or failed coupler cooling fan or coolant pump, which allows the coupler to overheat and triggers the code.
- The code can set intermittently due to a loose ground connection at the charge port, so always check ground points before replacing expensive components.
- Some vehicles use the same temperature sensor signal for multiple couplers, and a fault in one can affect the reading for another, so verify which coupler D refers to in the service information.
- After replacing a sensor or coupler, the control module may require a calibration or adaptation procedure to relearn the temperature thresholds, which is often missed by DIYers.
- This code does not always mean the coupler is currently overheating; it can be stored by a brief spike during a fast-charging session, so check freeze-frame data to see the conditions when it set.

Can I keep driving with P2E53?

You can generally continue driving the vehicle because this code affects the charging system, not the drivetrain, but avoid high-power fast charging until the fault is repaired to prevent further overheating damage. If you notice a burning smell or smoke near 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
- Infrared thermometer
- Basic hand tools (screwdrivers, socket set)
- Manufacturer service information for wiring diagrams and specifications

Reading P2E53

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0AA6** Hybrid/EV Battery Voltage System Isolation Fault
 · **P2E52** Battery Charger Coupler Temperature Sensor D Circuit High · **P2E54** Exhaust Pressure Sensor C 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/p2e53/>

