

GENERIC · POWERTRAIN

P2E37

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2E37

Battery Charger B Enable Circuit High

P2E37 indicates that the powertrain control module (PCM) has detected a high voltage condition on the enable circuit for the battery charger, which is typically part of the high-voltage charging system in electrified vehicles. The PCM expects this circuit to be pulled low when the charger is commanded on, but it is seeing voltage remain high, indicating an open circuit, short to power, or a faulty charger module.

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 service vehicle soon message
- The high-voltage battery may not charge when plugged in, leading to reduced electric range
- The vehicle may refuse to start or enter ready mode if the battery state of charge is low
- A warning message on the dash indicating a charging system fault
- Often no symptoms besides the warning light, especially if the vehicle still charges normally
- Possible reduced power or limp mode if the fault affects overall charging strategy

Common causes, most likely first

- 1 Open circuit or high resistance in the enable circuit wiring, such as a broken wire or corroded connector
- 2 Short to voltage on the enable circuit, often due to chafed wiring or a faulty component internally shorted
- 3 Faulty battery charger module (internal failure preventing the enable circuit from pulling low)
- 4 Failed powertrain control module (PCM) driver for the enable circuit
- 5 Poor ground connection for the charger module or PCM, causing reference voltage issues
- 6 Aftermarket accessories or improper previous repairs tapping into the circuit



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in other modules (e.g., battery energy control module)
- 2 Inspect the enable circuit wiring and connectors for damage, corrosion, or loose pins, and repair as needed
- 3 Measure voltage on the enable circuit at the charger module connector with the key on and charger commanded on; compare to specifications
- 4 Check the charger module ground circuit for integrity and clean or tighten as necessary
- 5 If wiring and grounds are good, test the charger module by backprobing the enable circuit to see if it pulls low when commanded; replace if faulty
- 6 If the charger module is functioning but the circuit remains high, check the PCM output and wiring to the charger; repair or replace PCM if defective
- 7 Clear codes and perform a road test or charging cycle to verify the repair

Don't overlook the enable circuit ground

- A poor ground at the charger module can cause the enable circuit to read high even though the PCM is commanding it low, mimicking a wiring fault.
- The enable circuit is often a low-current control line; a short to voltage from a nearby power wire can set this code without blowing any fuses.
- Some vehicles will still charge normally with this code stored, leading owners to ignore it until the battery drains completely.
- Aftermarket alarm systems or remote starters tapped into the wrong wire can backfeed voltage onto the enable circuit and trigger P2E37.
- The PCM may set this code if the charger module fails to acknowledge the enable signal, so always check for communication codes in the charger module before replacing the PCM.

Can I keep driving with P2E37?

You can generally drive the vehicle if it still starts and runs, but avoid relying on charging until the fault is repaired. If the high-voltage battery is depleted, the vehicle may become undrivable, so plan to have the charging system inspected soon.

Tools that help

- OBD-II scan tool with manufacturer-specific capabilities
- Digital multimeter (DMM)
- Wiring diagram and service information for the specific vehicle
- Backprobe pins or breakout box
- Insulated hand tools for high-voltage safety



Reading P2E37

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

Often seen with

P0D4E Battery Charger Hybrid/EV Battery Output Voltage Sensor Circ Low · **P2E36** Battery Charger B Enable Circuit
P2E38 Battery Charger B Enable Circuit Range/Performance · **U0111** Lost Communication With Battery Energy Control Module 'A'

See it working

Watch the animated explainer [How a Fuel Injector Works: Pulse Width and Spray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2e37/>

