

GENERIC · POWERTRAIN

P0D37

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D37

Hybrid/EV Battery System Current High

P0D37 means the hybrid or electric vehicle battery system is reporting a current flow that is higher than the manufacturer's safe limit for the conditions, as detected by the battery energy control module. The computer is not necessarily seeing a failed component, but it has flagged that the measured pack current exceeds the expected threshold, which can indicate a short circuit, a faulty current sensor, or a problem in the high-voltage wiring.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Hybrid propulsion

Symptoms you may notice

- Illumination of the hybrid/EV system warning light or a master fault message on the dash
- Reduced power output or a forced limp-home mode that limits vehicle speed
- The vehicle may refuse to start or enter a 'ready' state, especially after a short drive
- Possible audible clicking or humming from the high-voltage battery area if a contactor is chattering
- Often no symptoms besides the warning light, with the vehicle driving normally until the code is cleared
- In rare cases, a burning smell or slight warmth from the battery pack if a short is present

Common causes, most likely first

- 1 A failing or contaminated high-voltage battery current sensor that reports an inflated current value
- 2 A short circuit or chafed high-voltage cable between the battery pack and the inverter or motor
- 3 Internal battery pack fault, such as a cell or module with abnormally low resistance causing excessive current draw
- 4 A stuck or welded high-voltage contactor that keeps the pack connected when it should be open
- 5 Corrosion or loose connections at the battery pack terminals or service disconnect plug
- 6 A software or calibration issue in the battery energy control module that misinterprets normal current spikes
- 7 Aftermarket accessories or improper jump-starting that back-feed the high-voltage system



How to diagnose and fix it

- 1 Use a scan tool to read all hybrid/EV-specific codes and freeze-frame data, then record the reported current values under key-on, idle, and light-load conditions
- 2 Perform a visual inspection of the high-voltage battery pack, service disconnect, and accessible cables for chafing, corrosion, or loose fasteners
- 3 Check the low-voltage 12V battery and charging system, as a weak 12V supply can cause erratic current sensor readings
- 4 Measure the high-voltage battery current with a clamp meter during a controlled load test and compare it to the scan tool's reported value to verify sensor accuracy
- 5 Inspect and test the high-voltage contactors and pre-charge circuit for sticking or welding, following the manufacturer's safe shutdown procedure
- 6 If the current sensor is suspect, replace it only after confirming the wiring and connectors are intact and the sensor's reference voltage is correct
- 7 Clear the code and perform a road test with live data monitoring to confirm the current stays within specification and the code does not return

Before you replace the battery pack

- A dirty or failing current sensor is one of the most common causes of P0D37, yet many technicians replace the entire battery pack before testing the sensor's output against a known-good clamp meter.
- The code can be set by a momentary current spike during aggressive regenerative braking or rapid acceleration, so check freeze-frame data for the exact conditions when the fault triggered.
- A weak 12V auxiliary battery can cause the battery energy control module to misread high-voltage current, so always load-test the 12V battery before condemning high-voltage components.
- Aftermarket high-voltage accessories or improper jump-starting procedures can back-feed the system and set this code, so ask the customer about recent work or roadside assistance.
- P0D37 does not always mean the battery pack is failing; it can be a wiring fault or a software calibration issue that is corrected with a module reflash.

Can I keep driving with P0D37?

Do not continue driving with this code active, because a high-current condition can overheat high-voltage components or cause a sudden loss of power. Have the vehicle towed to a qualified hybrid/EV service facility for diagnosis, and avoid jump-starting or charging the high-voltage system yourself.



Tools that help

- Hybrid/EV-capable scan tool with live data and freeze-frame recording
- High-voltage clamp meter rated for the pack's DC current
- Digital multimeter with CAT III rating for low-voltage and sensor checks
- Insulated hand tools and personal protective equipment for high-voltage work
- Manufacturer service information for high-voltage shutdown and torque specifications
- Battery load tester for the 12V auxiliary battery

Reading P0D37

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
D	Hybrid propulsion.
37	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 · **P0AFA** Hybrid/EV Battery System Voltage Low · **P0D36** Hybrid/EV Battery System Current Low · **P0D38** Battery Charger A Input Current Sensor Circuit

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/p0d37/>

