

GENERIC · POWERTRAIN

P0C04

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0C04

Drive Motor B Current High

P0C04 means the hybrid or electric vehicle's control module has detected that the current flowing through drive motor B exceeds the safe limit defined in its programming. The computer monitors current sensors and compares the actual current to expected values under the current operating conditions, and it sets this code when the measured current is too high for too long.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	High	Professional	Hybrid propulsion

Symptoms you may notice

- Illumination of the hybrid system warning light or service vehicle soon light
- Reduced power or limp-home mode, often limiting vehicle speed
- The vehicle may refuse to start or shift into drive
- Possible overheating smell or hot components near the drive motor
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Faulty current sensor on the drive motor B circuit, sending an inaccurate high-current signal
- 2 Damaged or chafed wiring in the drive motor B three-phase cables or current sensor harness
- 3 Internal short or winding fault inside drive motor B
- 4 Failed inverter or power control unit causing excessive current delivery to motor B
- 5 Poor electrical connection or corrosion at the motor or inverter connectors
- 6 Software error in the hybrid control module requiring a reflash or update



How to diagnose and fix it

- 1 Connect a scan tool and record all stored and pending codes, then clear codes and test-drive to see if P0C04 returns
- 2 Inspect the drive motor B wiring harness and connectors for chafing, corrosion, or loose pins, and repair as needed
- 3 Measure the current sensor output with a multimeter or oscilloscope and compare to manufacturer specifications
- 4 Check the motor windings for resistance and insulation faults using a megohmmeter, following safety procedures
- 5 Verify the inverter and power control unit operation, looking for related codes or abnormal waveforms
- 6 Check for technical service bulletins or software updates for the hybrid control module and reflash if applicable
- 7 If all electrical checks pass, replace the faulty current sensor or motor as diagnosed, then clear codes and verify the repair

What a high current reading really means

- A high current reading does not automatically mean the motor is bad; a skewed current sensor or a poor connection can mimic a motor fault and lead to unnecessary replacement.
- Intermittent P0C04 codes often appear after the vehicle sits unused for long periods, because low auxiliary battery voltage can cause the control module to misread sensor signals.
- The code can be set by a failing inverter even when the motor itself tests good, so always check the inverter's output and fault memory before condemning the motor.
- High current can be a symptom of mechanical binding in the drivetrain, such as a failing bearing or brake drag, which forces the motor to work harder than normal.
- Some vehicles store P0C04 as a history code after a low-voltage event or jump start, and it may not indicate a real fault if it does not return after clearing.

Can I keep driving with P0C04?

Do not continue driving with P0C04 active, because excessive current can overheat the motor, inverter, or cables and lead to a sudden loss of power or fire risk. Have the vehicle towed to a qualified hybrid or electric vehicle technician for diagnosis.

Tools that help

- Hybrid/EV-capable scan tool
- Digital multimeter
- Oscilloscope
- Megohmmeter
- Insulated hand tools
- Safety gloves and high-voltage protective equipment



Reading P0C04

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

Often seen with

P0A78 Drive Motor A Inverter Performance · **P0A7A** Generator Inverter Performance · **P0C00** Drive Motor A Current Low · **P0C01** Drive Motor A Current High · **P0C02** Drive Motor B Current

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/p0c04/>

