

GENERIC · POWERTRAIN

P0C08

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0C08

Drive Motor B Phase U-V-W Circuit/Open

P0C08 indicates that the inverter or motor control module has detected an open circuit in one or more of the three phase windings (U, V, and W) of drive motor B, which is the electric traction motor responsible for propulsion or regeneration. The computer monitors current flow and voltage feedback on each phase and sets this code when the expected electrical path is interrupted, meaning the motor cannot receive or return power correctly on that phase.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Hybrid propulsion

Symptoms you may notice

- Illumination of the hybrid or electric vehicle warning light, often with a reduced power message
- The vehicle may enter a fail-safe mode with limited speed or torque, or refuse to start
- Rough operation, shuddering, or a noticeable loss of power during acceleration
- Inability to engage drive or a sudden shutdown while driving
- Often no symptoms besides the warning light if the open circuit is intermittent or only affects one phase at low load

Common causes, most likely first

- 1 Damaged or disconnected phase cable between the inverter and the motor, often due to chafing, corrosion, or a loose connector
- 2 Failed inverter internal switching device or open circuit in the inverter's phase output stage
- 3 Open winding inside the drive motor B, such as a broken internal conductor or failed weld
- 4 Corroded or backed-out terminal pins in the motor or inverter connectors
- 5 Faulty motor control module or inverter logic that incorrectly reports an open circuit
- 6 Rodent damage or physical impact to the high-voltage wiring harness



How to diagnose and fix it

- 1 Perform a visual inspection of the phase cables and connectors between the inverter and motor B for damage, corrosion, or loose pins
- 2 Use a scan tool to read live data and check for related codes in the inverter and motor control modules
- 3 Measure resistance across each phase winding at the motor terminals with a digital multimeter and compare to specifications
- 4 Check continuity and insulation resistance of the phase cables with the high-voltage system disabled and properly isolated
- 5 Inspect the inverter output terminals and internal connections for signs of overheating or open circuits
- 6 If the motor winding is open, replace or rebuild drive motor B according to manufacturer procedures
- 7 Clear codes and perform a road test to verify the repair, ensuring the high-voltage system is re-enabled safely

Open circuit myths and hidden causes

- A loose connector pin or chafed cable is far more common than a failed motor winding, so always inspect the harness before condemning the motor.
- This code can be set by a faulty inverter even when the motor and cables test good, because the inverter's internal current sensing may falsely detect an open phase.
- Intermittent opens often appear only under vibration or high load, so a static resistance check may pass while the fault is still present.
- Some vehicles set P0C08 alongside overcurrent or phase imbalance codes, which can mislead you into replacing the motor when the real issue is in the inverter.
- After any high-voltage repair, the system may require a manufacturer-specific insulation test or calibration before the code will clear permanently.

Can I keep driving with P0C08?

Do not continue driving with this code active, because an open phase can cause sudden loss of propulsion or further damage to the inverter and motor. Have the vehicle towed to a qualified hybrid or electric vehicle technician for diagnosis.

Tools that help

- Digital multimeter with resistance and continuity modes
- Insulation resistance tester (megohmmeter) rated for high-voltage systems
- OBD-II scan tool with live data and hybrid/EV module access
- High-voltage safety gloves and insulated tools
- Manufacturer service information for phase resistance specifications and connector pinouts



Reading P0C08

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

Often seen with

P0A3F Drive Motor A Position Sensor Circuit · **P0A78** Drive Motor A Inverter Performance · **P0C07** Drive Motor A Phase U-V-W Circuit High · **P0C09** Drive Motor B Phase U-V-W Circuit Low · **P0C0A** Drive Motor B Phase U-V-W Circuit 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/p0c08/>

