

GENERIC · POWERTRAIN

P0C0C

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0C0C

Drive Motor A Inverter Power Supply Circuit Low

P0C0C indicates that the hybrid or electric vehicle control module has detected an abnormally low voltage on the power supply circuit feeding the inverter for drive motor A. The inverter converts high-voltage direct current from the battery into alternating current for the motor, and a low supply condition means the circuit is not receiving the voltage it needs to operate correctly.

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 message
- Reduced power output or limp mode, often limiting vehicle speed
- The vehicle may refuse to start or enter ready mode
- Intermittent stalling or sudden loss of propulsion while driving
- Often no symptoms besides the warning light, especially if the fault is stored but not currently active

Common causes, most likely first

- 1 Corroded, loose, or damaged wiring or connectors in the inverter power supply circuit
- 2 Blown high-voltage fuse or tripped service disconnect in the inverter supply path
- 3 Failed inverter assembly internal power supply component
- 4 Faulty motor control module or hybrid control module not supplying proper voltage
- 5 Poor chassis ground connection for the inverter or motor electronics
- 6 High-voltage cable damage or insulation breakdown causing a short or high resistance



How to diagnose and fix it

- 1 Perform a thorough visual inspection of the inverter power supply wiring, connectors, and fuses, looking for corrosion, loose pins, or obvious damage
- 2 Check all related fuses and the service disconnect for continuity and proper seating
- 3 Measure voltage at the inverter power supply connector with a multimeter and compare to specification
- 4 Perform a voltage drop test on the power and ground circuits to identify excessive resistance
- 5 Inspect and clean all ground connections between the inverter, motor, and chassis
- 6 If voltage is low at the inverter but present at the source, trace the circuit for opens or high resistance and repair as needed
- 7 If all external circuits test good, follow the manufacturer's diagnostic flow to test the inverter and control module, replacing only after confirming internal failure

What technicians overlook on P0C0C

- A low supply voltage code often results from a poor ground connection rather than a failed inverter, so always check grounds before condemning expensive components.
- Intermittent faults can be caused by a connector that is not fully seated or has fretting corrosion on the terminals, which may not show up during a simple voltage check.
- The code can be set by a weak 12-volt auxiliary battery if the hybrid control module does not receive stable power during startup, so test the 12-volt system first.
- Some vehicles require the high-voltage system to be powered down and the service disconnect removed before testing the inverter supply circuit, and skipping this step can lead to misdiagnosis or injury.
- A low voltage code may be stored as a history code after a previous repair or battery replacement, so clear codes and verify whether it returns before starting a deep diagnostic.

Can I keep driving with P0C0C?

Do not continue driving with this code active, as a low inverter supply voltage can cause sudden loss of propulsion and leave you stranded or create a safety hazard. Have the vehicle towed to a qualified repair facility for diagnosis.

Tools that help

- Digital multimeter with high-voltage safety rating
- OBD-II scan tool capable of reading hybrid-specific codes
- Insulated hand tools and personal protective equipment for high-voltage work
- Wiring diagram and service information for the specific vehicle
- Voltage drop tester



Reading P0C0C

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0A1F** Battery Energy Control Module A Performance · **P0C00** Drive Motor A Current Low · **P0C0B** Drive Motor A Inverter Power Supply Circuit/Open · **P0C0D** Drive Motor A Inverter Power Supply 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/p0c0c/>

