



P0C05

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

P0C05 indicates that the inverter or motor control module has detected an open circuit in one or more of the three phase windings (U, V, or W) of drive motor A, which is the main traction motor in a hybrid or electric vehicle. The computer monitors current flow and voltage feedback on each phase and sets this code when the expected electrical path is broken, either intermittently or continuously.

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

Symptoms you may notice

- Illumination of the hybrid or electric vehicle system warning light, often accompanied by a reduced power message
- The vehicle may refuse to start or shift into drive, entering a fail-safe mode
- Intermittent loss of propulsion or a sudden jerk during acceleration
- Reduced power output or limited vehicle speed
- Often no symptoms besides the warning light if the open circuit is intermittent and not currently present

Common causes, most likely first

- 1 Damaged or corroded phase cable connector at the motor or inverter
- 2 Broken or chafed phase cable conductor within the harness
- 3 Failed inverter internal connection or power module
- 4 Open winding inside the drive motor itself
- 5 Loose or improperly torqued terminal fastener at the motor or inverter
- 6 Water intrusion or contamination in the motor connector causing corrosion



How to diagnose and fix it

- 1 Perform a visual inspection of the phase cables and connectors between the inverter and motor for damage, corrosion, or loose terminals
- 2 Use a digital multimeter to check continuity and resistance of each phase cable while disconnected, comparing readings across U, V, and W
- 3 Check for service bulletins and wiring diagrams specific to the vehicle to locate any intermediate connectors or splices in the phase circuit
- 4 Disconnect the motor and measure winding resistance across each phase pair to determine whether the open circuit is in the motor or the cable
- 5 Inspect the inverter terminals and internal connections if the external wiring and motor windings test good
- 6 Repair or replace the faulty cable, connector, motor, or inverter as indicated by the test results
- 7 Clear the code and perform a road test to verify the repair and ensure the code does not return

What the phase circuit test really shows

- A resistance check that passes with the cable disconnected can still miss an intermittent open that only appears under vibration or thermal expansion, so a wiggle test while monitoring live data is often necessary.
- The code can be set by a poor connection at the inverter end rather than the motor end, and technicians who only inspect the motor connector frequently miss a corroded terminal inside the inverter housing.
- Some vehicles set P0C05 when the phase cable shielding or a current sensor circuit is faulty, even though the power conductors themselves are intact, so the current sensor feedback should be verified before replacing expensive hardware.
- After any phase cable or motor replacement, the inverter may require a calibration or learn procedure, and skipping it can cause a repeat code or drivability complaint.
- An open circuit in one phase does not always prevent the vehicle from moving; some control strategies allow limited operation on the remaining phases, which can mask the severity during a short test drive.

Can I keep driving with P0C05?

Do not continue driving with this code active, because an open phase circuit 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 low-ohm resistance capability
- Manufacturer-specific scan tool capable of reading hybrid/EV live data
- Insulation resistance tester (megohmmeter)
- Wiring diagrams and service information for the vehicle
- Torque wrench for terminal fasteners



Reading P0C05

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

Often seen with

P0A3F Drive Motor A Position Sensor Circuit · **P0A78** Drive Motor A Inverter Performance · **P0C00** Drive Motor A Current Low · **P0C06** Drive Motor A Phase U-V-W Circuit Low · **P0C07** Drive Motor A 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/p0c05/>

