

GENERIC · POWERTRAIN

P0C5D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0C5D

Drive Motor A Position Sensor Circuit B Circuit High

P0C5D indicates that the computer monitoring the position sensor circuit for drive motor A has detected an abnormally high voltage on circuit B, which typically means the signal wire is shorted to power or the sensor's internal return path has failed. The hybrid or electric vehicle control module sets this code when the voltage on the sensor's B channel exceeds the expected range for the current operating conditions.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Hybrid propulsion

Symptoms you may notice

- Illumination of the hybrid system warning light or service vehicle soon message
- Reduced power or limp-home mode with limited motor output
- The vehicle may refuse to start or shift into gear
- Intermittent stalling or sudden loss of propulsion while driving
- Often no symptoms besides the warning light if the fault is intermittent

Common causes, most likely first

- 1 Damaged or chafed signal wire shorted to a power source
- 2 Failed position sensor internal to drive motor A
- 3 Corroded or loose electrical connector at the sensor or control module
- 4 Open or high-resistance ground circuit for the sensor
- 5 Faulty hybrid or electric vehicle control module
- 6 Water intrusion or contamination in the sensor connector

How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data for P0C5D
- 2 Visually inspect the sensor connector and harness for damage, corrosion, or loose pins
- 3 Measure reference voltage and ground at the sensor connector with the key on
- 4 Check the signal circuit B for a short to voltage using a multimeter or oscilloscope
- 5 Perform a wiggle test on the harness while monitoring sensor voltage to find intermittent faults
- 6 If wiring and connectors are good, replace the drive motor A position sensor
- 7 Clear codes and perform a road test to verify the repair



What the high-voltage code hides

- A shorted signal wire often causes no drivability symptoms until the fault becomes continuous, so the code may be stored long before the driver notices anything.
- Technicians sometimes replace the drive motor position sensor when the real problem is a chafed harness near a sharp bracket or heat source.
- The code can be set by a poor ground connection at the control module, which raises the sensor's reference voltage and mimics a sensor failure.
- Intermittent P0C5D codes frequently appear after a car wash or heavy rain when water enters a connector, so always check for moisture intrusion.
- A failed sensor on circuit B can also trigger related codes for the same motor, so diagnose the entire circuit before condemning any single component.

Can I keep driving with P0C5D?

Do not continue driving with this code active because the vehicle may enter limp mode or lose propulsion without warning. Have the vehicle towed to a qualified repair facility if it will not start or move.

Tools that help

- OBD-II scan tool with hybrid/EV capability
- Digital multimeter
- Oscilloscope
- Wire piercing probes
- Service information for connector pinouts and voltage specifications

Reading P0C5D

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
C	Hybrid propulsion.
5D	The exact fault within that area.

Often seen with

P0A3F Drive Motor A Position Sensor Circuit · **P0A40** Drive Motor A Position Sensor Circuit Range/Performance · **P0C5C** Drive Motor A Position Sensor Circuit B Circuit Low · **P0C5E** Drive Motor A Position Sensor Circuit B Circuit Intermittent · **P0C5F** Drive Motor B Position Sensor Circuit B 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/p0c5d/>

