



P0C19

Drive Motor A Torque Delivered Performance

P0C19 is a generic powertrain code indicating that the hybrid or electric vehicle's control module has detected a discrepancy between the torque requested from Drive Motor A and the torque actually delivered, as calculated from motor speed and current draw. The computer sets this code when the delivered torque falls outside the expected range for the given operating conditions, signaling a performance fault in the motor or its control circuit.

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

Symptoms you may notice

- Illumination of the check engine light or hybrid system warning lamp, often with no other noticeable symptoms.
- Reduced power or limp mode, where the vehicle limits acceleration to protect the drive motor and inverter.
- Hesitation or shudder during acceleration, especially from a stop or at low speeds.
- Unusual noises such as whining or clunking from the drive motor area during torque application.
- In rare cases, the vehicle may refuse to start or shift into gear if the fault is severe.

Common causes, most likely first

- 1 Faulty or contaminated motor position sensor (resolver) providing incorrect rotor position feedback to the controller.
- 2 Damaged or corroded wiring and connectors between the drive motor and the inverter, including the three-phase cables.
- 3 Internal motor faults such as shorted stator windings or degraded insulation leading to torque delivery errors.
- 4 Inverter or motor control module (MCM) software issues or internal hardware failure causing incorrect torque commands.
- 5 Low or contaminated hybrid drive motor oil (in some designs) leading to mechanical drag or cooling issues.
- 6 A weak or failing 12-volt auxiliary battery causing voltage drops that affect sensor and controller operation.



How to diagnose and fix it

- 1 Perform a thorough visual inspection of all motor and inverter wiring harnesses for chafing, corrosion, or loose connectors.
- 2 Use a scan tool to check for related codes in the hybrid control system and record freeze-frame data to understand the conditions when the fault set.
- 3 Test the 12-volt battery and charging system to rule out low voltage as a cause of erratic sensor signals.
- 4 Measure the resistance of the motor position sensor (resolver) windings and compare to manufacturer specifications.
- 5 Check the motor oil level and condition if the drive motor is oil-cooled, and inspect for leaks or contamination.
- 6 Perform a guided diagnostic routine for the drive motor system using the manufacturer's scan tool to command torque and monitor feedback.
- 7 If diagnostics point to an internal motor or inverter fault, follow the manufacturer's service procedures for component testing or replacement.

Resolver and wiring faults often mimic motor failure

- A dirty or failing resolver is a common cause of P0C19 that is frequently misdiagnosed as a failed drive motor, so always test the resolver signal before condemning the motor.
- Corroded or loose connectors at the inverter can produce intermittent torque delivery errors that do not set the code consistently, making a wiggle test during live data monitoring essential.
- The code can be set by a software calibration issue in the motor control module, so check for and apply any available software updates before replacing hardware.
- Low 12-volt battery voltage can cause the motor control module to misread sensor inputs, leading to a false P0C19, so always verify battery health first.
- On some vehicles, a failing hybrid battery pack can cause voltage sag under load that results in torque delivery errors, so inspect hybrid battery state of health as part of the diagnosis.

Can I keep driving with P0C19?

If the vehicle is in limp mode or has significantly reduced power, avoid highway driving and seek service promptly. If only the warning light is on with no performance change, you may drive cautiously to a repair shop, but do not ignore the code as it can escalate to a no-start condition.

Tools that help

- Hybrid/EV-capable scan tool with live data and bidirectional controls
- Digital multimeter with resistance and voltage measurement
- Oscilloscope for resolver signal analysis
- Insulation tester for motor winding checks
- Manufacturer service information and wiring diagrams



Reading P0C19

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

Often seen with

P0A0F Engine Failed to Start · **P0A3F** Drive Motor A Position Sensor Circuit · **P0C00** Drive Motor A Current Low · **P0C18** Drive Motor B Position Sensor Not Learned · **P0C1A** Drive Motor B Torque Delivered Performance

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/p0c19/>

