



P0A6D

Drive Motor B Phase W Current Low

P0A6D indicates that the hybrid or electric vehicle's control module has detected an abnormally low current in phase W of drive motor B, which is one of the three electrical phases that power the motor. The computer compares commanded current with measured current and sets this code when the phase W circuit cannot deliver the expected current under load.

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-home mode, often limiting vehicle speed
- The engine may fail to start or the vehicle may not move when in gear
- Audible whining or grinding from the motor area under acceleration
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Damaged or corroded wiring or connector terminals in the phase W circuit between the inverter and motor B
- 2 Failed current sensor inside the inverter or motor control module that misreports phase W current
- 3 Open or shorted stator winding in phase W of drive motor B
- 4 Faulty inverter power module that cannot supply current to phase W
- 5 Loose or degraded high-voltage cable connection at the motor or inverter
- 6 Internal failure in the motor control module or hybrid control unit affecting current regulation

How to diagnose and fix it

- 1 Inspect the phase W wiring harness and connectors for chafing, corrosion, or loose pins, and repair as needed
- 2 Measure resistance of the phase W stator winding and compare with phases U and V to check for an open or short
- 3 Use a scan tool to monitor live current data for phase W and compare with commanded values under load
- 4 Perform a voltage drop test on the phase W circuit while the system is active to identify excessive resistance
- 5 Check the inverter power module and current sensor operation according to manufacturer procedures
- 6 If the motor or inverter is faulty, replace the affected component and clear the code, then verify repair with a road test



What most technicians overlook on P0A6D

- A loose or corroded connector pin at the motor often causes this code without any visible damage to the wiring, so wiggle tests and terminal tension checks are essential.
- The code can be set by a failing current sensor inside the inverter even when the motor and wiring are perfectly healthy, leading to unnecessary motor replacement.
- Intermittent phase W current faults may only appear under high load or during regenerative braking, so a gentle test drive may not reproduce the condition.
- Some vehicles set P0A6D as a companion code to other hybrid faults, and repairing the primary issue may resolve this code without any phase W-specific work.
- After any repair, the hybrid control module may require a relearn or calibration procedure before the code will stay cleared.

Can I keep driving with P0A6D?

Do not continue driving with this code because the vehicle may enter a reduced-power mode or lose propulsion unexpectedly, which is unsafe in traffic. Have the vehicle towed to a qualified hybrid repair facility for diagnosis.

Tools that help

- Hybrid-capable scan tool with live data and graphing
- Digital multimeter with high-voltage safety rating
- Insulation resistance tester
- Oscilloscope for current waveform analysis
- Manufacturer service information for wiring diagrams and test procedures

Reading P0A6D

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
A	Hybrid propulsion.
6D	The exact fault within that area.

Often seen with

P0A6C Drive Motor B Phase W Current · **P0A6E** Drive Motor B Phase W Current High · **P0A6F** Generator Phase U Current · **P0A78** Drive Motor A Inverter Performance · **P0A7A** Generator Inverter 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/p0a6d/>

