

GENERIC · POWERTRAIN

P0A6A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0A6A

Drive Motor B Phase V Current Low

P0A6A means the hybrid or electric vehicle controller has detected that the current flowing through phase V of drive motor B is lower than the expected value for the operating conditions. The computer compares commanded torque against measured phase current and flags the circuit or motor when the V-phase current stays below the calibrated threshold.

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

Symptoms you may notice

- Illumination of the hybrid system or check engine light, often with no other symptoms
- Reduced power or limp-home mode that limits vehicle speed
- The vehicle may refuse to start or move in electric mode
- Rough operation, shuddering, or hesitation under acceleration
- A message on the dash indicating a hybrid system fault or service required
- In some cases the engine may run continuously because electric assist is disabled

Common causes, most likely first

- 1 A damaged or loose wire in the motor B phase V circuit, including chafed insulation or a backed-out terminal
- 2 A faulty current sensor inside the inverter or motor controller that misreports phase V current
- 3 A failed inverter or motor control module driver circuit for phase V
- 4 An internal motor fault such as a shorted or open phase V winding or a bad connection at the motor terminal
- 5 Corrosion or water intrusion at the motor or inverter connectors
- 6 A poor ground connection for the motor or inverter assembly
- 7 A software or calibration issue in the controller that sets the current threshold incorrectly



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data for P0A6A and any related codes
- 2 Inspect the motor B phase V wiring and connectors for damage, corrosion, looseness, or water intrusion
- 3 Measure resistance and continuity of the phase V circuit from the controller to the motor, comparing with the other phases
- 4 Check the motor phase V winding resistance and insulation with a meter, looking for an open or short
- 5 Verify the current sensor signal and controller driver output with an oscilloscope or manufacturer-specific diagnostic tool
- 6 Perform any available calibration or software update for the motor controller
- 7 If the circuit and motor test good, substitute a known-good controller or inverter to confirm the fault before replacement

What the phase V current code really means

- A low current reading on one phase often comes from a poor connection or chafed wire rather than a failed motor, so inspect the harness before condemning expensive hardware.
- The current sensor for phase V may be inside the inverter assembly and can fail independently of the motor, causing a false low-current report.
- This code can set intermittently from vibration or heat-related connector issues, so a wiggle test and a road test with live data may be needed to reproduce it.
- Do not assume the motor is bad just because the code names a phase; the controller compares all three phases and a single low reading can come from a shared ground or reference circuit.
- After any repair, clear the codes and perform a full drive cycle because some controllers will not re-enable electric assist until the monitor runs and passes.

Can I keep driving with P0A6A?

Do not continue driving normally because a phase current fault can leave the vehicle without electric propulsion or cause a sudden loss of power. Move the vehicle to a safe location and have it inspected before driving further, especially at highway speeds.

Tools that help

- OBD-II scan tool with hybrid and manufacturer-specific capabilities
- Digital multimeter with resistance and continuity functions
- Oscilloscope for current sensor and driver signal analysis
- Insulation tester for motor winding checks
- Manufacturer service information and wiring diagrams
- Basic hand tools for connector and harness inspection



Reading P0A6A

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

Often seen with

P0A6B Drive Motor B Phase V Current High · **P0A6C** Drive Motor B Phase W Current · **P0A6D** Drive Motor B Phase W Current Low · **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/p0a6a/>

