



P0A6B

Drive Motor B Phase V Current High

P0A6B means the hybrid or electric vehicle controller has detected that the current flowing through phase V of drive motor B is higher than the manufacturer's safe limit for the operating conditions. The computer compares commanded torque against measured phase current and flags this code when the V-phase current exceeds its expected threshold, indicating a short, excessive load, or a faulty current sensor.

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 or limp-home mode with limited acceleration
- The vehicle may refuse to start or shift into drive
- Possible overheating smell or unusual noise from the drive motor area
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Faulty current sensor or sensing circuit for motor B phase V
- 2 Damaged or chafed motor phase cable causing a short to ground or to another phase
- 3 Internal short in the drive motor B stator winding
- 4 Failed inverter or power module component affecting phase current control
- 5 Corroded or loose connector pins at the motor or inverter harness
- 6 Software calibration issue in the hybrid control module (rare)

How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data for P0A6B
- 2 Visually inspect the motor B phase V cable and connectors for damage, corrosion, or loose pins
- 3 Measure resistance of the phase V cable and compare with the other phases to check for opens or shorts
- 4 Use a clamp-on current probe to verify actual phase V current against the scan tool reading
- 5 Check the inverter and motor windings for shorts or insulation breakdown with a megohmmeter
- 6 If the current sensor is suspect, test its signal output and replace if out of specification
- 7 After repair, clear codes and perform a road test to confirm the code does not return



Phase V current faults that fool technicians

- A loose or corroded connector pin at the motor B phase V terminal often mimics a failed current sensor, so always perform a wiggle test while monitoring live data.
- The code can set intermittently from a chafed cable that only shorts when the suspension flexes, so a static inspection may miss the fault.
- A weak 12-volt auxiliary battery can cause erratic hybrid control module behaviour and false current readings, so check battery health before condemning expensive components.
- Some vehicles store P0A6B as a history code after a low-voltage event, and it may not indicate a current hardware failure if the freeze-frame shows an implausible value.
- Replacing the drive motor without first verifying the inverter output can lead to a repeat failure if the inverter is the true source of excessive phase current.

Can I keep driving with P0A6B?

Do not continue driving with this code active because excessive phase current can overheat or damage the motor and inverter, and the vehicle may enter limp mode without warning. Have the vehicle towed to a qualified hybrid technician if it will not start or move, and avoid any further driving if you smell overheating or hear unusual noises.

Tools that help

- Hybrid-capable scan tool with live data and freeze-frame capability
- Digital multimeter with resistance and voltage measurement
- Clamp-on current probe (AC/DC)
- Megohmmeter for insulation testing
- Insulated hand tools and personal protective equipment for high-voltage work

Reading P0A6B

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

Often seen with

P0A6A Drive Motor B Phase V Current Low · **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/p0a6b/>

