

GENERIC · POWERTRAIN

P0A69

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## P0A69

### Drive Motor B Phase V Current

P0A69 indicates that the hybrid or electric vehicle's control module has detected an abnormal current reading in phase V of the drive motor B circuit, which is the three-phase alternating current (AC) motor that provides propulsion. The computer compares the commanded current with the actual current measured by the phase V current sensor and sets this code when the values do not match within a calibrated range.

| 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 light
- Reduced power output or limp mode, limiting vehicle speed
- The vehicle may refuse to start or enter ready mode
- Possible shuddering or rough operation during acceleration
- Often no symptoms besides the warning light, especially if the fault is intermittent

### Common causes, most likely first

- 1 Faulty phase V current sensor inside the drive motor B assembly
- 2 Damaged or chafed wiring in the phase V current sensor circuit
- 3 Corroded or loose electrical connectors at the motor or inverter
- 4 Internal motor winding fault or short in the phase V circuit
- 5 Failed inverter or motor control module
- 6 Software calibration issue in the hybrid control module

### How to diagnose and fix it

- 1 Perform a thorough visual inspection of the motor, inverter, and all related wiring and connectors for damage, corrosion, or loose pins
- 2 Use a scan tool to retrieve all stored codes and freeze-frame data, and check for any related codes that might indicate a different root cause
- 3 Measure the resistance of the phase V current sensor circuit and compare to factory specifications
- 4 Check the sensor signal with an oscilloscope to verify proper waveform and amplitude
- 5 Inspect the motor windings for continuity and shorts using a megohmmeter
- 6 If the sensor or wiring is faulty, repair or replace as necessary, then clear codes and retest
- 7 If the motor or inverter is defective, replace the faulty component and reprogram the control module as required

## Current Sensor Faults Often Misdiagnosed

- A loose or corroded connector at the motor phase V terminal is a frequent cause that is often overlooked during diagnosis.
- The code can be set by a failing inverter rather than the motor itself, so testing the inverter output is essential before replacing the motor.
- Intermittent faults may only appear under specific load or temperature conditions, so a road test with live data monitoring is recommended.
- Some vehicles require a calibration or learn procedure after replacing the current sensor or motor components.
- The phase V current sensor is sometimes integrated into the motor assembly and not serviceable separately, leading to unnecessary motor replacement if not properly diagnosed.

## Can I keep driving with P0A69?

Driving with this code is not recommended because it can lead to reduced power or a sudden loss of propulsion, increasing the risk of an accident. Avoid driving until the fault is diagnosed and repaired, especially at highway speeds or in traffic.

## Tools that help

- OBD-II scan tool with hybrid/EV capability
- Digital multimeter
- Oscilloscope
- Megohmmeter
- Factory service information for the specific vehicle

## Reading P0A69

|           |                                                                      |
|-----------|----------------------------------------------------------------------|
| <b>P</b>  | Powertrain: engine, transmission and emissions.                      |
| <b>0</b>  | Generic (SAE) code: it means the same thing on every OBD-II vehicle. |
| <b>A</b>  | Hybrid propulsion.                                                   |
| <b>69</b> | The exact fault within that area.                                    |

## Often seen with

**P0A68** Drive Motor B Phase U Current High · **P0A6A** Drive Motor B Phase V Current Low · **P0A6B** Drive Motor B Phase V Current High · **P0A6C** Drive Motor B Phase W Current · **P0A6D** Drive Motor B Phase W Current Low



## 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/p0a69/>

