

GENERIC · POWERTRAIN

P2C6E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2C6E

Drive Motor "A" Phase Y Current High

P2C6E indicates that the inverter controller has detected excessive current flowing through phase Y of the three-phase drive motor designated as 'A'. This high current condition is typically caused by a short circuit, a failing inverter component, or a damaged motor winding, and the controller may disable the motor to prevent further damage.

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

Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message
- Reduced power or limp mode, often limiting vehicle speed
- The vehicle may fail to start or move in electric mode
- Audible clicking or popping from the inverter area in severe cases
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Short circuit in the motor phase Y winding or its cabling
- 2 Faulty inverter module (e.g., failed power transistor or gate driver)
- 3 Damaged or chafed wiring harness between the inverter and motor
- 4 Loose or corroded high-voltage connector terminals
- 5 Internal failure in the motor (e.g., insulation breakdown)
- 6 Software or calibration error in the inverter controller (less common)

How to diagnose and fix it

- 1 Perform a visual inspection of the high-voltage wiring and connectors for damage or corrosion
- 2 Use a diagnostic scan tool to check for related codes and freeze-frame data
- 3 Measure the resistance of the motor phase Y winding and compare to specifications
- 4 Check the inverter output for abnormal current waveforms using an oscilloscope
- 5 Inspect the inverter for signs of overheating or burnt components
- 6 Replace the faulty inverter or motor as needed after confirming the root cause
- 7 Clear codes and perform a road test to verify the repair



High-current faults often misdiagnosed

- A phase current high code can be set by a failing inverter even when the motor windings test good, so do not replace the motor prematurely.
- Intermittent high-current faults may only appear under heavy load or during regenerative braking, so a thorough road test with live data is essential.
- Corroded or loose high-voltage connectors can cause resistance imbalances that trigger current faults without any visible damage.
- Some vehicles require a software update to the inverter controller to correct overly sensitive current monitoring thresholds.

Can I keep driving with P2C6E?

Do not continue driving with this code active, as the high current could lead to overheating or further damage to the inverter or motor. Have the vehicle towed to a qualified service center for diagnosis.

Tools that help

- OBD-II scan tool with manufacturer-specific software
- Digital multimeter with high-voltage rating
- Oscilloscope with current probe
- Insulation tester (megohmmeter)
- High-voltage safety gloves and tools

Reading P2C6E

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

Often seen with

P0A3F Drive Motor A Position Sensor Circuit · **P0A78** Drive Motor A Inverter Performance · **P2C6D** Drive Motor "A" Phase Y Current Low · **P2C6F** Drive Motor "A" Phase Z Current

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/p2c6e/>

