

GENERIC · POWERTRAIN

P0EA6

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0EA6

DC/DC Converter Current Sensor C Circuit High

P0EA6 indicates that the powertrain control module has detected an abnormally high current reading on the 'C' circuit of the DC/DC converter current sensor, which monitors current flow through the converter. The computer compares the sensor signal to expected values and sets this code when the signal voltage exceeds the calibrated high threshold, indicating a short to voltage, a faulty sensor, or a wiring problem.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Hybrid propulsion

Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message
- Often no symptoms besides the warning light
- Reduced or fluctuating output from the DC/DC converter, leading to weak 12-volt accessory operation
- Battery warning light or charging system message on the dashboard
- Electrical accessories such as lights or infotainment behaving erratically
- Possible limp mode or reduced power if the fault affects hybrid system operation

Common causes, most likely first

- 1 Faulty DC/DC converter current sensor on circuit C
- 2 Short to voltage in the sensor signal circuit C
- 3 Damaged or corroded wiring or connector at the sensor or converter
- 4 Poor ground connection for the current sensor or converter
- 5 Internal fault in the DC/DC converter causing excessive current draw
- 6 Water intrusion or contamination in the sensor connector
- 7 Aftermarket accessories improperly wired into the converter circuit



How to diagnose and fix it

- 1 Use a scan tool to verify P0EA6 is active and check for related codes in other modules
- 2 Visually inspect the current sensor, its connector, and the converter wiring for damage, corrosion, or loose pins
- 3 Measure reference voltage and ground at the sensor connector with a digital multimeter and compare to manufacturer specifications
- 4 Backprobe the signal circuit C and check for a short to voltage with the sensor disconnected
- 5 Test the current sensor output with a known good sensor or use a lab scope to compare waveform to expected values
- 6 Check the DC/DC converter for proper operation and rule out excessive current draw from the converter itself
- 7 Repair or replace the faulty sensor, wiring, or converter as needed, then clear codes and verify the repair with a test drive

What the current sensor code really means

- A high current sensor code often results from a short to voltage on the signal circuit rather than a failed sensor, so inspect wiring before replacing parts.
- The DC/DC converter current sensor is sometimes integrated into the converter assembly, making replacement more involved than a standalone sensor.
- Intermittent connections at the sensor can set this code without any drivability symptoms, so wiggle-test the harness while monitoring live data.
- Aftermarket electrical accessories tapped into the converter circuit can cause abnormal current readings and trigger this code.
- This code may be accompanied by charging system codes because the DC/DC converter supplies the 12-volt system in hybrid and electric vehicles.

Can I keep driving with P0EA6?

You can usually drive the vehicle with this code, but avoid relying on electrical accessories and have the charging system checked soon. If the battery warning light is on or the vehicle enters limp mode, stop driving and seek professional service.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Lab scope
- Wiring diagram and service information
- Socket and ratchet set
- Terminal pick and electrical contact cleaner



Reading P0EA6

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- E** Hybrid propulsion.
- A6** The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P0A94** DC/DC Converter A Performance · **P0A95** High Voltage Fuse A · **P0EA5** DC/DC Converter Current Sensor C Circuit Low · **P0EA7** DC/DC Converter Current Sensor C Circuit Intermittent/Errati

See it working

Watch the animated explainer [Car Won't Start? Step-by-Step No-Start Diagnosis](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0ea6/>

