

GENERIC · POWERTRAIN

P0EFE

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0EFE

Battery Charger A Input Voltage Sensor C Circuit Low

P0EFE indicates that the powertrain control module has detected an abnormally low voltage on the input voltage sensor circuit for battery charger A, which is typically part of the high-voltage charging system in electrified vehicles. The computer compares the sensor signal against expected values and sets this code when the voltage falls below the calibrated threshold for a set time, indicating a short to ground, open circuit, or sensor fault.

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

Symptoms you may notice

- Illumination of the check engine light or service vehicle soon message
- Often no symptoms besides the warning light, especially if the charger is not in active use
- Reduced or disabled high-voltage charging, leading to longer charge times or inability to charge
- Powertrain power reduction or limp mode if the fault affects overall battery management
- Inconsistent state-of-charge readings or unexpected shutdown of charging session

Common causes, most likely first

- 1 Faulty input voltage sensor C itself, reading low or open internally
- 2 Damaged or corroded wiring harness or connector at the sensor or charger
- 3 Short to ground in the sensor signal circuit
- 4 Open circuit in the sensor reference voltage or ground circuit
- 5 Poor electrical connection at the battery charger A assembly
- 6 Water intrusion or contamination in the sensor or connector
- 7 Rarely, a failed powertrain control module driver for the sensor circuit



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related codes in other modules
- 2 Inspect the sensor and charger connectors for corrosion, damage, or loose pins
- 3 Measure resistance and voltage on the sensor signal circuit to check for shorts or opens
- 4 Test the sensor output with a multimeter or oscilloscope and compare to specifications
- 5 Check reference voltage and ground at the sensor connector with key on
- 6 Repair or replace damaged wiring or connectors as needed
- 7 Replace the input voltage sensor C if testing confirms it is faulty, then clear codes and retest

Don't overlook charger A sensor circuit basics

- A low voltage code often results from a simple loose connector or chafed wire rather than a failed sensor, so always perform a thorough visual inspection first.
- The sensor may only act up under specific conditions such as high temperature or vibration, so intermittent faults require wiggle tests and freeze-frame data review.
- This code can be set by a weak 12-volt battery causing low reference voltage to the sensor, so check the vehicle's low-voltage system before condemning high-voltage components.
- On some vehicles, the input voltage sensor is integrated into the charger assembly and cannot be replaced separately, requiring charger replacement if the sensor fails.
- Clearing the code without repairing the underlying circuit will usually result in the code returning quickly, so root-cause diagnosis is essential.

Can I keep driving with P0EFE?

You can generally drive the vehicle with this code if it is the only one present and the vehicle does not enter a reduced-power mode, but avoid relying on high-voltage charging until the fault is repaired. If the vehicle shows charging failure or power loss, stop using the charger and seek professional diagnosis promptly.

Tools that help

- OBD-II scan tool with manufacturer-specific software
- Digital multimeter
- Oscilloscope for signal analysis
- Wiring diagram and service information
- Terminal test kit and back-probe pins



Reading P0EFE

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

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0A1F** Battery Energy Control Module A Performance · **P0EFD** Battery Charger A Input Voltage Sensor C Circuit Range/Perfo

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/p0efe/>

