



P0E00

Generator Phase U Current Sensor Circuit

P0E00 indicates that the generator control module has detected an abnormal current reading from the phase U current sensor circuit, which monitors the electrical current flowing through one of the generator's three stator phases. The computer sets this code when the sensor signal voltage falls outside the expected range or does not correlate with the other phase current sensors during generator operation.

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

Symptoms you may notice

- Illumination of the battery warning light or check engine light on the dashboard
- The generator may stop charging the battery, leading to a slow crank or dead battery over time
- Reduced electrical output causing dim headlights or accessories to operate poorly
- The vehicle may enter a reduced power mode or disable certain electrical features
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Faulty phase U current sensor internal to the generator
- 2 Damaged or corroded wiring or connector at the generator phase U sensor circuit
- 3 Open or short circuit in the phase U sensor signal or ground circuit
- 4 Failed generator control module (often integrated into the voltage regulator)
- 5 Mechanical damage to the generator causing abnormal phase current readings
- 6 Software calibration issue in the generator control module requiring reprogramming

How to diagnose and fix it

- 1 Perform a visual inspection of the generator wiring and connectors for damage or corrosion
- 2 Use a scan tool to check for related codes and freeze-frame data to confirm the fault conditions
- 3 Measure resistance and voltage on the phase U sensor circuit to verify continuity and correct signals
- 4 Compare phase U current sensor readings with phases V and W using a scan tool to identify inconsistencies
- 5 If wiring and sensors check out, test the generator output and internal components per manufacturer procedures
- 6 Replace the generator assembly or current sensor as required, then clear codes and verify repair
- 7 Check for technical service bulletins or software updates for the generator control module



Before replacing the generator assembly

- A loose or corroded ground connection at the generator can mimic a failed phase U current sensor and is often overlooked during diagnosis.
- The phase U current sensor is frequently integrated into the generator and not available as a separate service part, so verify the fault is truly internal before condemning the unit.
- Intermittent faults may only set the code under specific load or temperature conditions, so a road test with live data monitoring is essential.
- This code can be set by a low or weak battery causing voltage spikes that confuse the generator control module, so always load-test the battery first.
- Related codes such as P0E01, P0E02, or P0562 may accompany P0E00 and should be diagnosed together to avoid misdiagnosis.

Can I keep driving with P0E00?

If the battery warning light is on, the generator may not be charging, and continued driving will drain the battery and could leave you stranded. It is safe to drive a short distance to a repair shop, but avoid long trips and turn off unnecessary electrical accessories to conserve battery power.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the generator circuit
- Battery load tester
- Basic hand tools for connector and component access

Reading P0E00

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

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P0620** Generator Control Circuit Malfunction · **P0E01** Generator Phase U Current Sensor Circuit Range/Performance · **P0E02** Generator Phase U Current Sensor Circuit Low



See it working

Watch the animated explainer [How a Jet Engine Works: Two-Spool Turbofan](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0e00/>

