

GENERIC · POWERTRAIN

# P0E5D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## P0E5D

### DC/DC Converter Enable Circuit Intermittent/Erratic

P0E5D indicates that the powertrain control module (PCM) has detected an intermittent or erratic signal on the enable circuit for the direct current to direct current (DC/DC) converter, which is the component that steps high-voltage battery power down to charge the 12-volt system in hybrid and electric vehicles. The PCM expects a stable command signal when the converter is requested on, but the circuit voltage or current feedback is jumping or dropping out, so the module cannot confirm reliable enable control.

| 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 with no other noticeable symptoms
- Intermittent charging system warning light or a 12-volt battery that slowly discharges
- Accessories such as interior lights, radio, or power windows behaving erratically or dimming
- Reduced power or limp-home mode if the vehicle detects the DC/DC converter is not reliably enabled
- A no-start condition after the 12-volt battery drains from lack of charging
- In some cases, the vehicle may refuse to enter ready mode or may stall at low speed

#### Common causes, most likely first

- 1 Loose, corroded, or damaged electrical connector at the DC/DC converter or PCM
- 2 Chafed or broken wire in the enable circuit between the PCM and the converter
- 3 Failing DC/DC converter internal electronics causing an erratic enable response
- 4 Poor ground connection for the DC/DC converter or the PCM
- 5 Intermittent fault inside the PCM driver circuit for the enable signal
- 6 Water intrusion or heat damage affecting the converter or its wiring harness
- 7 Aftermarket accessories improperly tapped into the enable circuit causing signal interference



## How to diagnose and fix it

- 1 Inspect and clean the DC/DC converter and PCM connectors, looking for corrosion, pushed pins, or loose terminals
- 2 Perform a wiggle test on the enable circuit wiring while monitoring live data to reproduce the intermittent fault
- 3 Check the enable circuit for continuity and short-to-ground or short-to-power conditions with a digital multimeter
- 4 Verify the DC/DC converter ground circuit has low resistance and is securely fastened
- 5 Monitor the enable signal and converter output on a scan tool with graphing capability to catch erratic behavior
- 6 If the circuit tests good, substitute a known-good DC/DC converter to see if the code returns
- 7 If the converter is ruled out, diagnose the PCM enable driver circuit and replace the PCM only as a last resort

## Intermittent Enable Circuit Traps to Avoid

- A common oversight is replacing the DC/DC converter when the real fault is a chafed wire that only loses connection over bumps, so always wiggle-test the harness before condemning the part.  
The code can set from a weak or failing 12-volt battery that causes voltage spikes on the enable circuit, so load-test the battery and charging system first.
- Some vehicles set P0E5D when the converter is working fine but the PCM's internal enable driver is failing intermittently, which only a dealer-level scan tool with bidirectional control can confirm.
- Aftermarket remote starters or alarm systems tapped into the enable circuit often introduce erratic signals that mimic a converter failure, so check for non-factory wiring.  
The enable circuit may share a connector with high-voltage interlock circuits, and a loose connector can set this code without any high-voltage fault, so inspect the whole connector body.

## Can I keep driving with P0E5D?

You can usually drive short distances to a repair shop, but avoid long trips or heavy electrical loads because the 12-volt battery may not be charging reliably. If the charging system warning light is on or the vehicle enters limp mode, stop driving and have it towed to prevent a no-start or safety issue.

## Tools that help

- Scan tool with live data and graphing capability
- Digital multimeter with min/max recording
- Wiggle test tool or jumper wires with back-probe pins
- Battery load tester
- Manufacturer service information for enable circuit pinouts



## Reading P0E5D

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- E** Hybrid propulsion.
- 5D** The exact fault within that area.

## Often seen with

**P0562** System Voltage Low · **P0A94** DC/DC Converter A Performance · **P0E5C** DC/DC Converter Temperature Sensor C Circuit Intermittent/Er · **P0E5E** Battery Charger Control Module A Processor Performance · **U0111** Lost Communication With Battery Energy Control Module 'A'

## See it working

Watch the animated explainer [How an Automatic Transmission Works, Gear by Gear](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0e5d/>

