



P0E4E

Engine Failed to Crank

P0E4E is a generic powertrain code that indicates the engine control module (ECM) commanded the starter to crank the engine but did not receive confirmation that the engine actually turned over. The ECM monitors cranking status through the starter control circuit and engine speed signals, and it sets this code when the expected cranking RPM or starter engagement feedback is absent during a crank request.

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

Symptoms you may notice

- The engine does not crank at all when you turn the key or press the start button, often accompanied by a single click or silence.
- A no-crank condition that may be intermittent, sometimes starting normally and other times failing completely.
- The starter motor may spin but the engine does not turn over, indicating a possible starter drive or flywheel engagement issue.
- A rapid clicking sound from the starter relay or solenoid area when attempting to start.
- The instrument cluster may show a security or immobilizer warning if the anti-theft system is involved.
- Often no symptoms besides the warning light if the fault is stored but the engine still cranks normally under most conditions.

Common causes, most likely first

- 1 Weak or failed battery with insufficient cold cranking amps to turn the engine.
- 2 Corroded, loose, or damaged battery cables and ground connections at the battery, engine block, or starter.
- 3 Faulty starter motor or starter solenoid that fails to engage or turn the engine.
- 4 Defective starter relay or blown fuse in the starter control circuit.
- 5 Open or shorted wire in the starter control circuit between the ignition switch, relay, and starter.
- 6 Failed neutral safety switch or clutch pedal position sensor preventing crank signal.
- 7 Engine control module (ECM) or body control module (BCM) software or hardware fault misinterpreting crank feedback.



How to diagnose and fix it

- 1 Perform a battery load test and check state of charge; recharge or replace the battery if it fails.
- 2 Inspect and clean battery terminals, ground straps, and starter connections for corrosion or looseness.
- 3 Check the starter relay and fuses in the underhood fuse box; swap the relay with a known-good one and test.
- 4 Measure voltage at the starter solenoid control terminal while a helper turns the key to crank; look for battery voltage.
- 5 Perform a voltage drop test on the battery cables and ground circuit while cranking to identify excessive resistance.
- 6 Test the starter motor directly by applying battery voltage to the solenoid terminal; replace the starter if it does not engage.
- 7 Scan the ECM for related codes and check live data for cranking RPM and starter request status to confirm the control circuit is functioning.

Before you replace the starter motor

- A weak battery that still powers lights and accessories can fail under the high current demand of cranking, so always load test the battery before condemning the starter.
- Corroded ground connections on the engine block or chassis are a frequent hidden cause of no-crank codes and are often overlooked during visual inspection.
- The neutral safety switch or clutch pedal position sensor can prevent cranking without setting a separate code, so verify the starting system enable criteria.
- Aftermarket alarm systems or remote starters can interrupt the starter control circuit and cause a no-crank condition that sets this code.
- The ECM may set P0E4E if it does not see the expected cranking RPM signal from the crankshaft position sensor, even when the starter is functioning normally.

Can I keep driving with P0E4E?

Do not continue driving if the engine fails to crank, as the vehicle cannot be started and may leave you stranded. If the engine cranks normally and the light is on, have the fault diagnosed soon to avoid an unexpected no-start condition.

Tools that help

- Digital multimeter
- Battery load tester
- Test light
- Socket and wrench set
- Scan tool with live data capability



Reading P0E4E

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
E	Hybrid propulsion.
4E	The exact fault within that area.

Often seen with

P0335 Crankshaft Position Sensor A Circuit Malfunction · **P0562** System Voltage Low · **P0615** Starter Relay Circuit · **P0616** Starter Relay Circuit Low · **P0617** Starter Relay Circuit High

See it working

Watch the animated explainer [How a Six-Speed Manual Gearbox Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0e4e/>

