

GENERIC · POWERTRAIN

P044E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P044E

EGR Sensor C Circuit Intermittent/Erratic

P044E means the powertrain control module (PCM) has detected an intermittent or erratic signal from the exhaust gas recirculation (EGR) sensor C circuit. The PCM monitors the sensor's voltage or resistance and flags the code when the signal jumps, drops out, or behaves unpredictably instead of following a smooth, expected pattern.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

- Check engine light illuminated, often with no other noticeable symptoms
- Rough idle or stumbling when the EGR valve opens
- Hesitation or surging during light-throttle acceleration
- Poor fuel economy or increased emissions
- Intermittent engine misfire or pinging under load
- Failed emissions test due to incomplete EGR monitor

Common causes, most likely first

- 1 Faulty EGR sensor C (internal wear or heat damage)
- 2 Damaged or corroded wiring in the sensor C circuit (open, short, or high resistance)
- 3 Loose or contaminated electrical connector at the sensor
- 4 Carbon buildup or mechanical binding in the EGR valve affecting sensor feedback
- 5 Failed EGR valve position sensor or integrated sensor assembly
- 6 PCM software glitch or internal driver fault (rare)



How to diagnose and fix it

- 1 Inspect the EGR sensor C connector and wiring for corrosion, looseness, or chafing; clean and secure as needed
- 2 Check sensor C signal voltage with a scan tool or multimeter while wiggling the harness to catch intermittent faults
- 3 Remove and inspect the EGR valve and sensor for carbon deposits or mechanical binding; clean or replace as required
- 4 Perform a resistance or voltage sweep test on sensor C according to the manufacturer's procedure
- 5 Replace the EGR sensor C or EGR valve assembly if testing confirms an erratic signal
- 6 Clear the code and verify the EGR monitor completes without resetting the fault
- 7 If the code persists after sensor and wiring repairs, check for PCM software updates or internal faults

Intermittent EGR sensor faults need wiggle tests

- A common misdiagnosis is replacing the EGR valve when the real fault is a chafed wire that only acts up on bumps or temperature swings.
- Carbon buildup on the EGR valve pintle can cause the sensor to report erratic positions even when the sensor itself is healthy.
- Some vehicles use a shared 5-volt reference or ground for multiple sensors, so a fault elsewhere can mimic an EGR sensor C issue.
- The code can set from a momentary glitch that never returns; always check for stored freeze-frame data before condemning parts.
- After repairs, the EGR monitor may require a specific drive cycle to run, so a pending code may reappear until that cycle completes.

Can I keep driving with P044E?

You can usually drive with P044E, but avoid heavy acceleration and long trips until diagnosed, because erratic EGR operation can cause poor drivability and increased emissions. If the engine runs rough or misfires, have it checked promptly to prevent damage to the catalytic converter.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with back-probing pins
- Wiring diagram for the EGR sensor C circuit
- Basic hand tools for connector and sensor access
- Vacuum pump or smoke machine for EGR system testing



Reading P044E

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

Often seen with

P0400 Exhaust Gas Recirculation Flow Malfunction · **P0401** EGR Flow Insufficient Detected · **P0402** EGR Flow Excessive Detected · **P044D** EGR Sensor C Circuit High · **P044F** AIR System Switching Valve A Circuit High

See it working

Watch the animated explainer [How Drive-by-Wire Works: Electronic Throttle Body](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p044e/>

