

GENERIC · POWERTRAIN

P044D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P044D

EGR Sensor C Circuit High

P044D means the engine computer has detected an abnormally high voltage on the EGR Sensor C circuit, which is typically the sensor that reports the actual lift or position of the exhaust gas recirculation valve. The computer expects the sensor signal to stay within a calibrated range, and a sustained high voltage tells it the circuit is either shorted to power, open, or the sensor itself has failed.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or stalling when coming to a stop, especially when the EGR valve should be closed
- A slight surge or hesitation during light-throttle acceleration
- Increased engine knock or pinging under load if the EGR valve stays closed
- Failed emissions test due to high oxides of nitrogen (NOx) or an incomplete readiness monitor
- In rare cases, a noticeable drop in fuel economy if the fault affects closed-loop EGR control

Common causes, most likely first

- 1 A short to voltage on the sensor signal wire between the EGR sensor and the powertrain control module (PCM)
- 2 An open or high-resistance ground circuit for the EGR sensor, causing the signal to float high
- 3 A failed EGR sensor C itself, such as a cracked internal element or worn potentiometer
- 4 Corroded, pushed-back, or damaged terminals at the EGR sensor connector or PCM connector
- 5 A chafed or pinched wire harness near the EGR valve or exhaust components
- 6 A faulty PCM driver for the sensor reference or signal circuit, though this is uncommon
- 7 Aftermarket or remanufactured EGR valve assemblies with incorrect sensor resistance



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data for P044D to confirm the fault occurred under specific operating conditions
- 2 Visually inspect the EGR sensor C connector and harness for corrosion, pushed pins, or chafing, and repair as needed
- 3 Measure reference voltage and ground at the EGR sensor C connector with the key on, engine off, and compare to manufacturer specifications
- 4 Back-probe the sensor signal wire and compare its voltage to the scan tool's EGR sensor C parameter to verify circuit integrity
- 5 Disconnect the sensor and check for a short to voltage on the signal wire with the key on, engine off, repairing the harness if voltage is present
- 6 Test the EGR sensor C resistance or voltage output through its full range of travel and replace the sensor or valve assembly if it is out of specification
- 7 Clear the code, perform a road test with the appropriate EGR monitor enable conditions, and verify the repair with a final scan

What a high EGR sensor signal really means

- A high voltage on the EGR sensor C circuit is often caused by a poor ground rather than a short to power, because a floating ground pulls the signal voltage up toward reference voltage.
- Many technicians replace the EGR valve only to find the same code returns because the real fault is a chafed signal wire inside the harness loom near the exhaust manifold.
- On some vehicles, EGR Sensor C is not a separate component but a second potentiometer inside the EGR valve assembly, so a sensor fault requires replacing the entire valve.
- A dirty or carbon-fouled EGR valve can cause the sensor to report an implausible high voltage at certain positions, mimicking an electrical fault even when the wiring is sound.
- The PCM may set P044D intermittently if the sensor signal briefly spikes during aggressive driving, so always check for loose connectors before condemning the sensor.

Can I keep driving with P044D?

You can usually continue driving with P044D, but avoid heavy acceleration and long uphill pulls because a disabled EGR system can cause engine knock and higher combustion temperatures. Have the fault diagnosed soon to prevent potential damage and to pass emissions testing.



Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with back-probing pins
- Wiring diagram and connector pinout for the specific vehicle
- Hand tools for connector and component access
- Vacuum pump or scan tool bidirectional control for EGR valve actuation

Reading P044D

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

Often seen with

P0401 EGR Flow Insufficient Detected · **P0403** EGR Circuit Malfunction · **P044A** EGR Sensor C Circuit · **P044B** EGR Sensor C Circuit Range/Performance · **P044C** EGR Sensor C Circuit Low

See it working

Watch the animated explainer [How Regenerative Braking Works in Electric Cars](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p044d/>

