

GENERIC · POWERTRAIN

P04E9

OBD-II TROUBLE CODE

P04E9

EGR Temperature Sensor D Circuit Intermittent/Erratic

P04E9 indicates that the powertrain control module has detected an intermittent or erratic signal from the EGR temperature sensor D circuit, which monitors the temperature of the exhaust gas being recirculated into the intake. The computer sets this code when the sensor voltage momentarily jumps, drops out, or behaves in a way that does not match expected temperature changes under the current operating conditions.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Slight rough idle or hesitation during light acceleration when the EGR valve is active
- Intermittent surging or stumbling that comes and goes without a clear pattern
- A pending code that appears and clears itself over several drive cycles
- Reduced fuel economy in some cases due to incorrect EGR flow calculations
- Occasional pinging or spark knock under load if EGR delivery is affected

Common causes, most likely first

- 1 Frayed, chafed, or intermittently shorted wiring in the EGR temperature sensor D circuit
- 2 Corroded or loose electrical connector pins at the sensor or the powertrain control module
- 3 A failing EGR temperature sensor that produces an erratic resistance signal when hot or vibrating
- 4 Excessive carbon buildup on the sensor tip causing delayed or unstable temperature readings
- 5 Internal fault in the powertrain control module driver circuit for the sensor signal
- 6 Poor ground connection shared with the EGR sensor circuit causing voltage fluctuations



How to diagnose and fix it

- 1 Inspect the EGR temperature sensor D connector and wiring for chafing, corrosion, or loose pins, and repair as needed
- 2 Perform a wiggle test on the sensor harness while watching live sensor data to reproduce the intermittent signal
- 3 Compare the EGR temperature sensor D reading against a known-good reference or an infrared thermometer during warm-up
- 4 Check the sensor resistance across its operating temperature range and replace it if the value jumps erratically
- 5 Clean carbon deposits from the sensor tip and the EGR passage if buildup is present
- 6 Verify the ground circuit for the sensor with a voltage drop test under load
- 7 If all external circuits and the sensor test good, diagnose the powertrain control module signal circuit for an internal fault

What intermittent EGR sensor codes really mean

- An intermittent code like P04E9 often leaves no stored freeze-frame data, so the fault may not be present when you scan the vehicle, making a wiggle test and live data graphing essential.
- A sensor that tests perfectly on a cold engine can still fail when exposed to exhaust heat, so always test the EGR temperature sensor D circuit at operating temperature.
- Carbon buildup on the sensor tip is frequently misdiagnosed as a failed sensor, but cleaning the tip and passage often restores a stable signal without replacement.
- A poor ground shared with other engine sensors can create erratic voltage on the EGR temperature circuit, so check ground integrity before condemning the sensor.
- This code does not always mean the EGR valve itself is faulty; the valve may be working correctly while only the temperature feedback signal is unstable.

Can I keep driving with P04E9?

The vehicle is generally safe to drive with P04E9 because the fault affects only EGR temperature feedback and does not cause a immediate safety risk. Avoid prolonged heavy acceleration or towing until the intermittent circuit is repaired, since unstable EGR feedback can slightly affect combustion control and emissions.

Tools that help

- OBD-II scan tool with live data and graphing capability
- Digital multimeter with min/max recording
- Infrared thermometer
- Wiring diagram for the EGR temperature sensor circuit
- Electrical contact cleaner and dielectric grease
- Hand tools for connector and sensor access



Reading P04E9

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 4** Auxiliary emission controls.
- E9** 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 · **P04E8** EGR Temperature Sensor D Circuit High · **P04EA** EVAP System Small Leak Detected - Fuel Tank Side

See it working

Watch the animated explainer [How Coil-on-Plug Ignition Works: Coil and Spark Plug](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p04e9/>

