

GENERIC · POWERTRAIN

P2429

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2429

Exhaust Gas Temperature Too High (Bank 2)

P2429 indicates that the powertrain control module has detected an exhaust gas temperature on bank 2 that exceeds the safe threshold, typically measured by a dedicated exhaust gas temperature sensor. The computer sets this code when the sensor signal indicates sustained overheating, which can damage expensive emissions components if ignored.

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

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Reduced engine power or limp mode in some vehicles as a protective measure
- A burning or hot metal smell from the exhaust area after driving
- Poor fuel economy or rough running if the overheating affects combustion
- In rare cases, visible smoke or discoloration on exhaust components

Common causes, most likely first

- 1 Faulty exhaust gas temperature sensor on bank 2 providing an inaccurate high reading
- 2 Excessive exhaust temperatures caused by a lean fuel mixture, such as a vacuum leak or failing fuel injector
- 3 Retarded ignition timing or incorrect camshaft timing leading to high exhaust temperatures
- 4 A clogged or restricted catalytic converter or diesel particulate filter increasing backpressure and heat
- 5 Cooling system issues, such as low coolant or a failing water pump, that raise overall engine temperature
- 6 Wiring damage or corrosion in the sensor circuit causing a false high signal
- 7 Overfueling from a leaking injector or incorrect injection timing on diesel engines



How to diagnose and fix it

- 1 Use a scan tool to read live exhaust gas temperature sensor data and compare bank 2 to bank 1 or to expected values
- 2 Inspect the sensor wiring and connector for damage, corrosion, or loose pins, and repair as needed
- 3 Check for vacuum leaks, intake leaks, and fuel trim abnormalities that could cause a lean condition
- 4 Verify ignition timing and camshaft timing are within specification, especially if other codes are present
- 5 Test the exhaust gas temperature sensor resistance or voltage output against the manufacturer's specification and replace if faulty
- 6 Perform a backpressure test on the exhaust system to check for a restricted catalytic converter or particulate filter
- 7 After repairs, clear the code and verify the exhaust gas temperature readings return to normal during a test drive

When the sensor is not the culprit

- A P2429 code is frequently triggered by a failing exhaust gas temperature sensor itself, but technicians who replace the sensor without checking fuel trims often see the code return because a lean condition is the real cause.
- On diesel vehicles, this code often appears alongside regeneration-related codes, and a restricted particulate filter can cause exhaust temperatures to spike even when the sensor is accurate.
- Bank 2 refers to the side of the engine that does not contain cylinder number one, so on V-type engines a mechanical issue affecting only that bank, such as a failed injector or camshaft, is a common root cause.
- The code does not always mean the exhaust is dangerously hot at the moment; a skewed sensor can report high temperatures when the actual exhaust gas temperature is normal, leading to unnecessary replacement of exhaust components.
- In some vehicles, a P2429 code can be set by a software calibration issue, and a powertrain control module reflash may be required after all hardware checks pass.

Can I keep driving with P2429?

Avoid driving under heavy load or at high speeds until the fault is diagnosed, because sustained high exhaust temperatures can melt catalytic converter substrates or damage turbochargers. If the check engine light is flashing or the engine runs poorly, stop driving and have the vehicle towed.

Tools that help

- OBD-II scan tool with live data capability
- Infrared thermometer
- Digital multimeter
- Vacuum gauge
- Exhaust backpressure gauge



Reading P2429

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

Often seen with

P2428 Exhaust Gas Temperature Too High (Bank 1) · **P242A** Exhaust Gas Temperature Sensor Circuit Bank 1 Sensor 3 · **P242B** Exhaust Gas Temperature Sensor Circuit Range or Performance · **P242C** Exhaust Gas Temperature Sensor Circuit Low Bank 1 Sensor 3 · **P242D** Exhaust Gas Temperature Sensor Circuit High Bank 1 Sensor 3

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/p2429/>

