

GENERIC · POWERTRAIN

P04FE

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P04FE

Catalyst Heater Circuit Performance Bank 1

P04FE means the powertrain control module (PCM) has detected that the heater circuit for the catalytic converter on bank 1 is not performing as expected, typically because the heater element is not drawing the current or reaching the temperature the PCM commands. The PCM monitors the heater circuit's electrical behavior and the resulting catalyst temperature, and it sets this code when the measured performance falls outside the expected range.

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.
- A slight delay in catalytic converter light-off, which may cause a temporary increase in emissions during cold starts.
- In some cases, a rough idle or hesitation during the first few minutes after a cold start if the catalyst is not heating quickly enough.
- Possible reduced fuel economy if the PCM alters fuel control to compensate for slow catalyst warm-up.
- On vehicles with remote start or early catalyst monitoring, the check engine light may come on shortly after a cold start.
- Often no symptoms besides the warning light, especially in warm weather or when the failure is intermittent.

Common causes, most likely first

- 1 Failed catalytic converter heater element (open circuit or shorted).
- 2 Damaged or corroded wiring or connector at the heater circuit, including chafed harnesses near the exhaust.
- 3 Blown fuse or faulty relay that supplies power to the catalyst heater.
- 4 PCM software calibration issue or internal driver fault in the heater control circuit.
- 5 Poor ground connection for the heater circuit, leading to excessive voltage drop.
- 6 Aftermarket or incorrect catalytic converter installed without a functioning heater.
- 7 Extreme cold ambient temperatures causing the heater to struggle, though this usually sets a different code.



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm the code is current and not history.
- 2 Inspect the heater circuit fuse and relay, and replace any blown fuse or faulty relay.
- 3 Visually inspect the heater wiring and connector for damage, corrosion, or loose pins; repair as needed.
- 4 Measure resistance of the heater element with a multimeter and compare to specification; replace the catalytic converter if out of range.
- 5 Check voltage drop on the ground circuit and power supply under load to rule out excessive resistance.
- 6 If electrical checks pass, verify PCM command and circuit integrity with a bidirectional scan tool or oscilloscope; reprogram or replace PCM if faulty.
- 7 Clear codes and perform a drive cycle to confirm the repair and ensure the monitor completes.

Heater circuit faults that mimic converter failure

- A failed heater element does not always mean the catalytic converter itself is bad; the converter may still function once warmed by exhaust, so replacing it without testing the heater circuit wastes money.
Corroded connectors at the heater are common because the circuit lives in a harsh environment, and a simple terminal cleaning often fixes the code.
 - Some vehicles use the heater circuit to bring the catalyst up to temperature quickly for emissions compliance, so a fault may only set during cold starts and not reappear on a warm engine.
 - A weak battery or charging system can cause the heater to draw less current than expected, setting a false performance code.
- After replacing a catalytic converter, the PCM may need a relearn or adaptation reset to recognize the new heater's characteristics.

Can I keep driving with P04FE?

You can usually continue driving with this code because the engine will still run normally, but avoid long periods of idling or repeated short cold-start trips until it is repaired. Have the circuit checked soon to prevent increased emissions and possible damage to the catalytic converter over time.

Tools that help

- OBD-II scan tool with live data and bidirectional control
- Digital multimeter
- Test light
- Wiring diagram for the specific vehicle
- Socket set and basic hand tools



Reading P04FE

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

Often seen with

P0420 Catalyst System Efficiency Below Threshold (Bank 1) · **P0430** Catalyst System Efficiency Below Threshold (Bank 2) · **P04FB** Crankcase Ventilation Hose Connection Sensor Range/Performan · **P04FC** Crankcase Ventilation System Performance · **P04FD** EGR Actuator A Control Processor Performance

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/p04fe/>

