

BMW · POWERTRAIN

P1463

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1463 · BMW

Heated Catalyst Battery Temperature Sensor 1 Electrical

P1463 on BMW vehicles indicates that the engine control module (ECM) has detected an electrical fault in the circuit for the heated catalyst battery temperature sensor, which is sensor 1. The ECM monitors this sensor to ensure the heated catalyst system can safely raise the catalyst to operating temperature, and this code means the signal voltage is outside the expected range or the circuit is open or shorted.

SYSTEM

Powertrain

CODE TYPE

BMW specific

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light (CEL) on the dashboard.
- Often no symptoms besides the warning light, as the vehicle may continue to drive normally.
- Possible slight decrease in fuel economy if the heated catalyst remains inactive.
- In rare cases, a rough idle or hesitation during cold starts due to improper catalyst heating.
- No noticeable performance issues in most driving conditions.

Common causes, most likely first

- 1 Faulty battery temperature sensor 1 for the heated catalyst.
- 2 Damaged or corroded wiring harness or connector at the sensor.
- 3 Open or short circuit in the sensor wiring between the sensor and the ECM.
- 4 Failed heated catalyst control module or relay.
- 5 ECM software glitch or internal fault (less common).
- 6 Poor electrical connection due to water intrusion or corrosion.



How to diagnose and fix it

- 1 Use a BMW-specific scan tool to read the fault memory and confirm P1463 is current, then clear it to see if it returns.
- 2 Visually inspect the sensor and its wiring for obvious damage, corrosion, or loose connectors.
- 3 Measure the resistance of the battery temperature sensor with a multimeter and compare to BMW specifications.
- 4 Check for continuity and short circuits in the wiring between the sensor and the ECM.
- 5 Test the heated catalyst control module and relay for proper operation.
- 6 If the sensor is faulty, replace it with a genuine BMW part and clear the fault memory.
- 7 If wiring is damaged, repair or replace the affected section of the harness and verify the repair.

Diagnosing P1463 on BMW Heated Catalyst Systems

- The battery temperature sensor for the heated catalyst is often overlooked because it is not part of the main engine management system, but its failure can prevent the catalyst from reaching optimal temperature. A common misdiagnosis is to replace the catalytic converter itself when the actual problem is a simple sensor or wiring fault, so always perform electrical tests first.
 - On some BMW models, the heated catalyst system is only active during cold starts, so the fault may not cause noticeable drivability issues, leading owners to ignore it.
 - Corrosion at the sensor connector is a frequent cause, especially in regions with road salt, and may require cleaning or replacement of the connector pins.
- The ECM may set P1463 if the sensor signal is intermittent, so wiggle-test the harness while monitoring live data to catch loose connections.

Can I keep driving with P1463?

It is generally safe to continue driving with P1463, as the vehicle will likely operate normally, but avoid extended idling or heavy loads until the fault is repaired to prevent potential catalyst damage. Have the system diagnosed soon to ensure emissions compliance and optimal cold-start performance.

Tools that help

- BMW-specific OBD-II scan tool
- Digital multimeter
- Wiring diagram for the heated catalyst circuit
- Socket set and trim removal tools
- Contact cleaner and dielectric grease



Reading P1463

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (BMW): its meaning depends on the make.
- 4** Auxiliary emission controls.
- 63** The exact fault within that area.

Often seen with

P1461 Exhaust Gas Temperature Control Bank 1 Range Performance · **P1462** Exhaust Gas Temperature Control Bank 2 Range Performance · **P1464** Fuel Level Sensor Circuit Ground Signal · **P1461** Air Conditioning Pressure Sensor Circuit Low Input · **P1462** Air Conditioning Pressure Sensor Circuit High Input · **P1464** ACCS to PCM High During Self-Test · **P1461** Heated Catalyst Gate Voltage Signal Low · **P1462** Heated Catalyst Internal Control Module Checksum ROM Error · **P1464** Heated Catalyst Battery Temperature Sensor 2 Electrical · **P0420** Catalyst System Efficiency Below Threshold (Bank 1) · **P0430** Catalyst System Efficiency Below Threshold (Bank 2)

See it working

Watch the animated explainer [Turbocharger Trainer: Boost, Wastegate and Intercooler](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/bmw-p1463/>

