

GENERIC · POWERTRAIN

P00F5

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P00F5

Humidity Sensor Circuit High

P00F5 indicates that the powertrain control module has detected an abnormally high signal voltage on the humidity sensor circuit, which is used to measure ambient moisture for engine and climate control strategies. The sensor's output is above the expected range, so the computer flags the circuit as faulty and may disable humidity-dependent functions.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering and auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Slightly reduced fuel economy or altered idle quality in some vehicles
- Automatic climate control may not respond correctly to humidity changes
- Possible hesitation or stumble during cold starts in damp conditions
- In rare cases, the engine may enter a default operating mode that affects performance

Common causes, most likely first

- 1 Failed humidity sensor sending an incorrect high-voltage signal
- 2 Damaged or corroded wiring harness between the sensor and the PCM
- 3 Poor electrical connection at the sensor or PCM connector
- 4 Moisture intrusion into the sensor connector causing a short to voltage
- 5 Faulty powertrain control module (PCM) internal circuit
- 6 Aftermarket accessories or improper wiring repairs interfering with the circuit

How to diagnose and fix it

- 1 Inspect the humidity sensor connector and wiring for corrosion, moisture, or physical damage
- 2 Check the sensor's reference voltage and ground circuits with a digital multimeter
- 3 Compare the sensor's live data reading with a known-good value or a scan tool's humidity parameter
- 4 Perform a wiggle test on the harness while monitoring the sensor signal for intermittent changes
- 5 Replace the humidity sensor if the signal remains high with correct power and ground
- 6 Repair or replace damaged wiring and clear the diagnostic trouble code
- 7 Verify the repair by test-driving the vehicle and confirming the code does not return



Humidity sensor faults that fool technicians

- A high-voltage code often results from a disconnected or corroded ground, not a failed sensor, so always verify the ground circuit before condemning the sensor.
- Some vehicles share the humidity sensor signal with the ambient temperature sensor, and a fault in that shared circuit can set P00F5 without any humidity sensor problem.
- Aftermarket remote starters or alarm systems tapped into the sensor wiring can introduce voltage spikes that mimic a high signal, so check for non-factory wiring first.
- The PCM may set this code only after a specific number of key cycles, so a simple code clear without repair will usually result in the light returning.
- On vehicles with active grille shutters, a stuck shutter can alter the humidity sensor's reading by trapping moisture, leading to a false high-voltage code.

Can I keep driving with P00F5?

The vehicle is generally safe to drive with P00F5 because the fault mainly affects humidity-dependent strategies and does not cause a safety hazard. Avoid extended driving in heavy rain or very humid conditions until the issue is repaired, as the engine may run with less optimal calibration.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Electrical contact cleaner
- Small pick and terminal removal tools

Reading P00F5

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
0	Fuel and air metering and auxiliary emission controls.
F5	The exact fault within that area.

Often seen with

P0071 Ambient Air Temperature Sensor Range/Performance · **P0072** Ambient Air Temperature Sensor Circuit Low · **P0073** Ambient Air Temperature Sensor Circuit High · **P00F4** Humidity Sensor Circuit Low · **P00F6** Humidity Sensor Circuit Intermittent/Erratic



See it working

Watch the animated explainer [Car Relay Test Bench: Test 4-Pin and 5-Pin Relays](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p00f5/>

