

GENERIC · POWERTRAIN

P0108

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0108

MAP/Barometric Pressure Circuit High Input

P0108 means the manifold absolute pressure (MAP) sensor or barometric pressure (BARO) circuit is reporting a voltage higher than the engine computer expects for the current operating conditions. The powertrain control module (PCM) sets this code when the signal voltage on the MAP or BARO sensor circuit stays above the calibrated high threshold, indicating a short to voltage, an open ground, or a sensor that has failed high.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Often no symptoms besides the warning light, especially if the sensor fails only at certain altitudes or temperatures.
- Rough idle or unstable engine speed because the PCM is using an incorrect load signal for fuel delivery.
- Poor fuel economy or rich-running condition from over-fueling based on a falsely high pressure reading.
- Hesitation, stumble, or reduced power during acceleration as the PCM misjudges engine load.
- Hard starting or stalling, particularly on vehicles that use the MAP sensor for the primary load input.
- A noticeable lack of power at high altitude if the BARO portion of the circuit is affected.

Common causes, most likely first

- 1 A short to voltage on the signal wire between the MAP or BARO sensor and the PCM, often from chafed insulation against a nearby power wire.
- 2 An open or high-resistance ground circuit at the sensor, which drives the signal voltage high.
- 3 A failed MAP or BARO sensor that internally shorts the signal line to its reference voltage.
- 4 Corroded, pushed-back, or water-intruded terminals at the sensor connector or PCM connector.
- 5 A faulty PCM driver or internal pull-up resistor on the signal circuit, though this is less common.
- 6 Aftermarket electrical accessories or alarm wiring that backfeed voltage onto the sensor reference circuit.
- 7 A restricted or disconnected vacuum hose to the MAP sensor that causes the sensor to read atmospheric pressure when the engine expects vacuum.



How to diagnose and fix it

- 1 Connect a scan tool and record the MAP and BARO voltage readings with key on, engine off, then compare them to the expected values for your altitude.
- 2 Inspect the MAP or BARO sensor connector and the PCM connector for corrosion, pushed pins, or water intrusion, and repair any damaged terminals.
- 3 Backprobe the sensor signal wire with a digital multimeter and check for a voltage that is higher than the reference voltage or stuck near 5 volts.
- 4 Wiggle-test the harness while watching the scan tool data to reveal an intermittent short to voltage or an open ground.
- 5 Measure resistance from the sensor ground pin to battery negative to confirm the ground circuit is intact and has less than one ohm.
- 6 If the circuit checks good, substitute a known-good MAP or BARO sensor and clear the code to see whether the high input returns.
- 7 Repair the shorted signal wire or replace the faulty sensor, clear the adaptive memory, and verify the code does not reset after a road test.

What a high MAP reading really means

- A high signal voltage on a MAP circuit usually means the sensor is reporting near-atmospheric or higher pressure, so the PCM adds fuel as if the engine is under heavy load even at idle.
- Many technicians replace the MAP sensor first, but a chafed signal wire shorting to a 5-volt reference or a bad ground is just as common and costs far less to fix.
- On vehicles that share a single sensor for MAP and BARO functions, a failing sensor can set P0108 without any driveability complaint because the PCM only uses the BARO value for altitude compensation.
- A disconnected or cracked vacuum hose to the MAP sensor can mimic a high input at idle because the sensor sees atmospheric pressure instead of manifold vacuum, so always check the hose before condemning the sensor.
- P0108 can be set by a low battery or charging system fault that spikes the reference voltage during cranking, so check system voltage and grounds before chasing the sensor circuit.

Can I keep driving with P0108?

You can usually drive the vehicle to a repair shop, but expect poor fuel economy, rough running, or reduced power, and avoid heavy towing or sustained high-speed driving until the fault is repaired. If the engine stalls or runs very poorly, stop driving and have the vehicle towed to prevent damage to the catalytic converter from unburned fuel.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter with backprobe pins
- Vacuum gauge and hand vacuum pump
- Wire terminal removal and repair kit
- Service information with wiring diagrams for the MAP/BARO circuit

Reading P0108

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

Often seen with

P0105 MAP/Barometric Pressure Circuit Malfunction · **P0106** MAP/Barometric Pressure Circuit Range/Performance · **P0107** MAP/Barometric Pressure Circuit Low Input · **P0109** MAP/Barometric Pressure Circuit Intermittent · **P0172** System Too Rich (Bank 1)

See it working

Watch the animated explainer [How a Car Clutch Works: Diaphragm Clutch Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0108/>

