

CHRYSLER · POWERTRAIN

P1107

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1107 · Chrysler

MAP Sensor Circuit Intermittent Low Voltage

P1107 on Chrysler vehicles means the powertrain control module (PCM) has detected an intermittent low-voltage condition on the manifold absolute pressure (MAP) sensor signal circuit. The PCM expects the MAP sensor to report a voltage that rises and falls smoothly with engine vacuum, and this code sets when the signal momentarily drops below the plausible range or glitches low during a key-on or running self-test.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Check engine light illuminated, often with no other noticeable symptoms
- Intermittent rough idle or stumbling that comes and goes, especially over bumps or in wet weather
- Momentary hesitation or surge during light-throttle acceleration
- Poor fuel economy or black smoke from a rich condition if the low signal is frequent
- Occasional hard start or stall after the engine is warm
- A scan tool datastream showing MAP voltage dropping toward zero volts for a split second

Common causes, most likely first

- 1 Chafed, cracked, or internally broken MAP sensor signal wire between the sensor and PCM
- 2 Corroded or loose MAP sensor connector terminals, especially at the sensor pigtail
- 3 Failed MAP sensor with an intermittent internal fault that opens when hot or vibrating
- 4 Poor ground at the MAP sensor ground circuit or engine block ground strap
- 5 Water intrusion into the MAP sensor connector or wiring harness from a missing splash shield
- 6 PCM connector terminal fretting or a faulty PCM driver, though this is far less common



How to diagnose and fix it

- 1 Inspect the MAP sensor connector and wiring for chafing, corrosion, or pushed-back terminals, then wiggle-test the harness with the engine running while watching MAP voltage on a scan tool
- 2 Measure MAP sensor reference voltage and ground at the sensor connector with a voltmeter, comparing against battery voltage and chassis ground
- 3 Back-probe the MAP signal wire at the PCM and at the sensor and perform a voltage drop test while flexing the harness to catch an intermittent open
- 4 Check the MAP sensor ground circuit resistance to the engine block and clean any corroded ground points
- 5 Replace the MAP sensor if the wiring and grounds pass but the voltage still drops out during a road test over rough pavement
- 6 Repair or replace the affected section of harness with soldered and heat-shrunk connections, then clear the code and verify with a full drive cycle
- 7 If the fault persists after all wiring and sensor checks, test the PCM connector terminals and consider PCM replacement only as a last resort

Intermittent MAP faults hide in the harness

- A MAP sensor that tests perfectly on a cold engine can still set P1107 once heat and vibration open a hairline crack inside the sensor housing, so a bench test alone is not conclusive.
- Chrysler PCMs often log P1107 from a single low-voltage glitch during cranking, which means a marginal battery or slow starter can mimic a MAP sensor fault.
- Technicians who replace the MAP sensor without flex-testing the harness frequently see the code return because the real fault is a broken signal wire inside the loom near the intake manifold.
- A leaking or restricted intake manifold gasket can cause vacuum fluctuations that make the MAP signal drop low intermittently, so check for vacuum leaks before condemning the sensor.
- P1107 is sometimes stored alongside misfire or fuel trim codes, and clearing only P1107 without addressing the underlying lean or rich condition will bring it back.

Can I keep driving with P1107?

You can usually drive with P1107 because the fault is intermittent, but avoid heavy acceleration and long trips until it is diagnosed, since a sudden MAP dropout can cause a stall or a rich-running condition that damages the catalytic converter over time.



Tools that help

- OBD-II scan tool with live datastream and graphing capability
- Digital multimeter with back-probe pins
- Wire-piercing or back-probe test leads
- Vacuum gauge
- Soldering iron and heat-shrink tubing for harness repairs
- Electrical contact cleaner and dielectric grease

Reading P1107

P Powertrain: engine, transmission and emissions.

1 Manufacturer-specific code (Chrysler): its meaning depends on the make.

1 Fuel and air metering.

07 The exact fault within that area.

Often seen with

P1106 Oxygen Sensor Circuit Bank 2 Sensor 1 Voltage Too Low/Air Le · **P1106** Engine Torque Control Signal 2 Circuit Malfunction · **P1106** BARO Circuit Range Performance Malfunction · **P1106** BARO Circuit Range Performance Malfunction · **P1106** MAP Sensor Circuit Voltage Intermittent · **P1106** Dual Alternator Lower Fault Manifold Absolute Pressure (MAP) · **P1106** MAP Sensor Circuit Intermittent High Voltage · **P0107** MAP/Barometric Pressure Circuit Low Input · **P0108** MAP/Barometric Pressure Circuit High Input · **P0171** System Too Lean (Bank 1) · **P0300** Random/Multiple Cylinder Misfire Detected

See it working

Watch the animated explainer [How Misfire Detection Works: Crankshaft Speed](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1107/>

