

CHRYSLER · POWERTRAIN

P1106

OBD-II TROUBLE CODE

P1106 · Chrysler

MAP Sensor Circuit Intermittent High Voltage

P1106 on a Chrysler vehicle means the powertrain control module (PCM) saw the manifold absolute pressure (MAP) sensor signal voltage spike above the normal range intermittently, rather than sitting steadily within its expected 0.5–4.5 volt window. The PCM logs this code when the high-voltage condition appears and then disappears, so the fault is not present at every key cycle.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Check engine light (malfunction indicator lamp) illuminated, often with no other noticeable symptom
- Intermittent rough idle or a stumble that comes and goes, especially when the engine is warm
- Brief hesitation or surge during light acceleration that the driver may feel as a hiccup
- Poor fuel economy over time because the PCM substitutes a default MAP value when the signal is erratic
- Occasional hard start or extended crank when the faulty signal is present at startup
- No symptoms besides the warning light in many cases, because the glitch is too brief to affect driveability

Common causes, most likely first

- 1 Chafed or intermittently shorted MAP sensor signal wire in the engine harness, often near the intake manifold or a sharp bracket
- 2 Loose or corroded MAP sensor connector terminals that lose contact as the engine moves
- 3 Failing MAP sensor that internally spikes its output voltage when hot or under vibration
- 4 Damaged or plugged MAP sensor vacuum port or hose causing the sensor to read an impossible high pressure
- 5 Electrical interference from a nearby ignition component or a poor ground shared with the MAP sensor circuit
- 6 PCM connector terminal tension loss or internal PCM driver fault on the MAP signal circuit (less common)



How to diagnose and fix it

- 1 Inspect the MAP sensor connector and wiring for chafing, corrosion, or loose terminals, and wiggle the harness while watching live MAP voltage on a scan tool
- 2 Check the MAP sensor vacuum hose and port for cracks, blockage, or oil sludge that would distort the pressure reading
- 3 Back-probe the MAP sensor signal wire at the sensor and at the PCM and compare voltages with the key on and engine running to isolate a wiring drop
- 4 Measure reference voltage and ground at the MAP sensor connector to confirm the sensor has a clean 5-volt supply and a good ground
- 5 Replace the MAP sensor only after wiring and vacuum checks pass, then clear the code and verify the signal stays stable during a road test
- 6 If the code returns with good wiring and a new sensor, inspect the PCM connector terminals and perform a continuity and short-to-power test on the signal circuit
- 7 Road-test with a scan tool recording MAP voltage and freeze-frame data to confirm the intermittent high-voltage event is gone before releasing the vehicle

Why a wiggle test beats parts swapping

- A MAP sensor that spikes high voltage intermittently often passes a static resistance test, so the fault only shows up when the harness is flexed or the engine bay is hot.
- Technicians who replace the MAP sensor without checking the connector often see P1106 return because the real problem is a spread terminal or a chafed wire that still shorts under vibration.
- A plugged or collapsed MAP sensor vacuum hose can make the sensor report a high pressure that looks like an electrical high-voltage fault, so vacuum integrity must be checked before condemning the sensor.
- P1106 is sometimes set by a poor engine ground that raises the reference voltage on the sensor circuit, which is why ground straps and battery negative connections deserve a close look.
- The PCM may run in speed-density default mode while P1106 is pending, so fuel trim and idle data can look normal even though the MAP signal is glitching.

Can I keep driving with P1106?

You can usually drive short distances to a repair shop because the PCM substitutes a default MAP value, but avoid heavy acceleration or towing until the intermittent signal is fixed. If the engine begins to stumble, stall, or run poorly, stop driving and have the vehicle towed.



Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with back-probe pins
- Vacuum gauge and hand vacuum pump
- Wire terminal pick and connector release tools
- Service information for Chrysler MAP sensor circuit wiring and voltage specifications

Reading P1106

- P** Powertrain: engine, transmission and emissions.
-
- 1** Manufacturer-specific code (Chrysler): its meaning depends on the make.
-
- 1** Fuel and air metering.
-
- 06** The exact fault within that area.

Often seen with

P1107 Oxygen Sensor Heating Circuit Bank 2 Sensor 1 Short To B+ · **P1108** Oxygen Sensor Heating Circuit Bank 2 Sensor 1 Output Too Low · **P1107** AIR System Diagnosis Solenoid Circuit Fault · **P1107** BARO Circuit Low Input · **P1108** BARO Circuit High Input · **P1107** BARO Circuit Low Input · **P1108** BARO Circuit High Input · **P1107** MAP Sensor Voltage Intermittent Low · **P1108** BARO to MAP Sensor Comparison Too High · **P1107** Dual Alternator Lower Circuit Malfunction · **P1108** Dual Alternator Battery Lamp Circuit Malfunction · **P1107** MAP Sensor Circuit Intermittent Low Voltage · **P1108** BARO To MAP Sensor Circuit Comparison Too High · **P0106** MAP/Barometric Pressure Circuit Range/Performance · **P0107** MAP/Barometric Pressure Circuit Low Input · **P0108** MAP/Barometric Pressure Circuit High Input

See it working

Watch the animated explainer [How a Fuel Injector Works: Pulse Width and Spray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1106/>

