

CHRYSLER · POWERTRAIN

P1297

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1297 · Chrysler

No Change In MAP From Start To Run

P1297 on Chrysler vehicles means the powertrain control module (PCM) did not see the manifold absolute pressure (MAP) sensor signal change as expected when the engine transitioned from start-up to normal running. The PCM compares the MAP reading at key-on and during cranking to the reading once the engine is running, and it sets this code when the signal stays too flat or does not respond to the change in engine vacuum.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

**Fuel and air
metering (injector
circuits)**

Symptoms you may notice

- Malfunction indicator lamp (check engine light) illuminated on the dashboard
- Often no symptoms besides the warning light, especially if the MAP sensor is only slightly lazy
- Rough or unstable idle quality, particularly right after a cold start
- Hesitation or stumble when accelerating from a stop
- Poor fuel economy or rich-running exhaust smell
- Intermittent stalling or hard starting in more severe cases

Common causes, most likely first

- 1 Faulty or contaminated MAP sensor that responds sluggishly to vacuum changes
- 2 Vacuum leak in the intake manifold, throttle body gasket, or vacuum hoses causing an unexpected MAP signal
- 3 Clogged or restricted MAP sensor vacuum port or passage in the intake manifold
- 4 Wiring problem in the MAP sensor circuit, such as a chafed wire, corroded connector, or poor ground
- 5 Failed PCM or a software calibration issue that misinterprets the MAP signal during start-to-run transition
- 6 Engine mechanical issue such as low intake vacuum from a worn camshaft or excessive carbon buildup
- 7 Aftermarket air intake or modifications that alter the expected MAP signal range



How to diagnose and fix it

- 1 Connect a scan tool and record live MAP sensor data at key-on, during cranking, and after the engine starts to confirm the signal does not change as expected
- 2 Inspect the MAP sensor vacuum port and intake manifold passage for carbon or oil fouling, and clean them if restricted
- 3 Perform a visual inspection of all vacuum hoses and intake gaskets, using a smoke machine to locate any leaks
- 4 Check the MAP sensor connector and wiring for corrosion, chafing, or loose pins, and verify reference voltage and ground at the sensor
- 5 Test the MAP sensor with a hand vacuum pump and multimeter to confirm it produces a smooth, proportional voltage change
- 6 Replace the MAP sensor if it fails the vacuum test or if cleaning does not restore proper response
- 7 Clear the code and perform a road test with live data to verify the MAP signal now changes correctly from start to run

What a lazy MAP sensor hides from you

- A MAP sensor can pass a basic voltage check at key-on and still be too slow to respond during the start-to-run transition, which is exactly the condition P1297 monitors.
- Carbon buildup on the MAP sensor tip or in its vacuum port is a common cause on high-mileage Chrysler engines, and cleaning the port often fixes the code without replacing the sensor.
- A small vacuum leak that only appears when the engine is cold can trigger P1297 because the MAP signal does not drop as expected once the engine starts and vacuum builds.
- Technicians sometimes replace the MAP sensor only to find a chafed wire in the harness near the intake manifold that intermittently shorts the signal, so always wiggle-test the harness while watching live data.
- P1297 can be set by a PCM calibration issue on certain Chrysler models, so check for any applicable software updates before condemning the sensor or wiring.

Can I keep driving with P1297?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or long trips because a faulty MAP signal can cause poor fuel economy and drivability problems. If the engine is running rough or stalling, stop driving and have it diagnosed promptly.

Tools that help

- OBD-II scan tool with live data capability
- Hand vacuum pump with gauge
- Digital multimeter
- Smoke machine for vacuum leak detection
- Basic hand tools for sensor and hose removal



Reading P1297

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

Often seen with

P0107 MAP/Barometric Pressure Circuit Low Input · **P0108** MAP/Barometric Pressure Circuit High Input · **P0171** System Too Lean (Bank 1) · **P0172** System Too Rich (Bank 1) · **P0505** Idle Control System Malfunction

See it working

Watch the animated explainer [How Airbags Work: A 50 km/h Crash in Slow Motion](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1297/>

