



P1297 · Mitsubishi

No Charge In MAP From Start To Run

P1297 on Mitsubishi vehicles means the engine computer compared the manifold absolute pressure (MAP) sensor reading at key-on with the reading once the engine started and running, and saw no expected change in pressure. The computer expects a drop in manifold pressure (vacuum) when the engine starts and idles, and this code sets when that change does not occur within the monitored window.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Mitsubishi specific	Medium	Intermediate	Fuel and air metering (injector circuits)

Symptoms you may notice

- Often no symptoms besides the warning light, especially if the fault is intermittent or only occurs during a specific start sequence.
- Rough or unstable idle, particularly right after a cold start when the engine management strategy relies on the MAP signal.
- Hesitation or stumble when accelerating from a stop, because the computer is not receiving an accurate load signal.
- Poor fuel economy or rich-running smell if the MAP sensor is stuck at a high-pressure reading.
- Hard starting or extended cranking on some vehicles when the sensor signal is frozen or disconnected.
- Occasional stalling when coming to a stop if the idle speed control is misled by an incorrect MAP value.

Common causes, most likely first

- 1 Failed or contaminated MAP sensor that no longer responds to changes in manifold pressure.
- 2 Vacuum hose to the MAP sensor cracked, disconnected, or plugged with carbon, so the sensor never sees engine vacuum.
- 3 Wiring problem in the MAP sensor circuit, such as a rubbed-through wire, corroded connector pin, or poor ground.
- 4 Intake manifold vacuum leak large enough to prevent the expected pressure drop at startup.
- 5 Engine mechanical condition that prevents normal vacuum generation, such as low compression or incorrect valve timing.
- 6 Faulty engine computer or a software calibration issue, though this is far less common than sensor and hose problems.
- 7 Aftermarket air intake or modifications that alter the MAP sensor mounting or vacuum routing.



How to diagnose and fix it

- 1 Inspect the MAP sensor vacuum hose and its connection at the intake manifold for cracks, disconnection, or blockage, and replace the hose if suspect.
- 2 Check the MAP sensor electrical connector for corrosion, loose pins, or pushed-out terminals, and verify the reference voltage and ground at the sensor with a multimeter.
- 3 Use a scan tool to compare the MAP sensor reading at key-on, engine off, with the reading at idle; a normal sensor should show a clear drop in pressure (increase in vacuum) when the engine starts.
- 4 Measure manifold vacuum with a mechanical gauge at idle and compare it with the MAP sensor reading to confirm whether the sensor or the engine is at fault.
- 5 If the sensor reading does not change with applied vacuum from a hand pump, replace the MAP sensor with a quality OEM or equivalent part.
- 6 Check for intake manifold vacuum leaks using a smoke machine or carburetor cleaner around gaskets and hoses, and repair any leaks found.
- 7 Clear the code and perform a road test with several start cycles to confirm the repair, and verify that no other codes return.

What a stuck MAP sensor hides

- A MAP sensor can fail in a way that still produces a plausible-looking voltage, so a simple voltage check at idle may pass while the sensor is actually stuck and unresponsive to pressure changes.
- Technicians often replace the MAP sensor first, but a cracked or disconnected vacuum hose at the sensor is just as common and costs far less to fix.
- This code can set after an engine replacement or major intake work if the vacuum hose routing is incorrect or a restrictor is missing from the hose.
- A dirty throttle body or a misadjusted idle speed can prevent the expected manifold pressure change at startup and trigger P1297 even when the MAP sensor is good.
- On some Mitsubishi models, a weak battery or poor ground can cause the computer to misread the MAP signal during cranking, so check battery condition and grounds before condemning the sensor.

Can I keep driving with P1297?

You can usually drive the vehicle with P1297 set, but avoid hard acceleration and long trips until the fault is diagnosed, because the computer may be running on a default load value that hurts fuel economy and emissions. If the engine idles poorly, stalls, or hesitates severely, have it checked promptly rather than continuing to drive.



Tools that help

- Scan tool with live data capability
- Handheld vacuum pump with gauge
- Multimeter
- Mechanical vacuum gauge
- Smoke machine for intake leak testing
- Basic hand tools for hose and sensor replacement

Reading P1297

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

Often seen with

P0106 MAP/Barometric Pressure Circuit Range/Performance · **P0107** MAP/Barometric Pressure Circuit Low Input · **P0108** MAP/Barometric Pressure Circuit High Input · **P0171** System Too Lean (Bank 1) · **P0505** Idle Control System Malfunction

See it working

Watch the animated explainer [How a Starter Motor Works: Pre-Engaged Starter](#) on Auto Veteran to see the parts involved moving.

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

