

MITSUBISHI · POWERTRAIN

P1294

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1294 · Mitsubishi

Target Idle Speed Not Reached

P1294 on Mitsubishi vehicles means the engine computer commanded a specific target idle speed but the actual engine speed stayed outside the acceptable window for too long. The powertrain control module monitors idle stability through the crankshaft position sensor and throttle position, and it sets this code when the idle does not converge on the target within the calibrated time and RPM margin.

SYSTEM

Powertrain

CODE TYPE

**Mitsubishi
specific**

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

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

Symptoms you may notice

- Idle speed that hunts, surges, or sits noticeably higher or lower than normal
- Engine stalling when coming to a stop or when the transmission is shifted into gear
- Rough or shaky idle felt through the steering wheel and seat
- Often no symptoms besides the warning light if the deviation is small
- Poor fuel economy or a slight hesitation on tip-in from a stop
- Accessory loads such as air conditioning or headlights making the idle drop sharply

Common causes, most likely first

- 1 Carbon buildup on the throttle body bore and plate restricting airflow at small openings
- 2 Dirty or failing idle air control (IAC) valve or electronic throttle actuator
- 3 Vacuum leaks from cracked intake hoses, intake manifold gaskets, or PCV plumbing
- 4 Faulty engine coolant temperature (ECT) sensor reporting a cold engine when warm
- 5 Contaminated or incorrectly gapped spark plugs and worn ignition components
- 6 Clogged or restricted positive crankcase ventilation (PCV) system
- 7 Mechanical issues such as low compression or a misadjusted base idle



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm the target versus actual idle speed and engine temperature
- 2 Inspect the intake tract for vacuum leaks and cracked hoses before touching any parts
- 3 Clean the throttle body bore and plate with approved cleaner and perform a throttle relearn
- 4 Test the IAC valve or electronic throttle actuator for correct movement and resistance
- 5 Verify ECT sensor readings against actual engine temperature with a scan tool
- 6 Check spark plugs, ignition coils, and PCV system for wear or restriction
- 7 Clear the code and road test through several idle cycles to confirm the repair

Why idle codes are often misdiagnosed

- A throttle body that was cleaned without a relearn will often set P1294 again because the PCM has not learned the new closed-throttle position.
- A failing ECT sensor can skew the target idle without ever setting its own code, so always compare its reading to actual temperature.
- Small vacuum leaks at the intake manifold gasket often only show up when the engine is cold and the gasket has not expanded.
- A weak battery or poor ground can cause the PCM to lose its idle learned values and command an incorrect target speed.
- P1294 can be stored by a dirty mass airflow (MAF) sensor reporting low airflow even when the throttle body is clean.

Can I keep driving with P1294?

You can usually drive the vehicle to a shop, but avoid prolonged idling in traffic and do not ignore stalling at stops. If the engine stalls repeatedly or the idle is dangerously low, stop driving and have it diagnosed.

Tools that help

- OBD-II scan tool with live data and bidirectional controls
- Vacuum gauge
- Throttle body cleaner and lint-free shop towels
- Digital multimeter
- Basic socket and wrench set



Reading P1294

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

Often seen with

P0128 Coolant Thermostat (Coolant Temperature Below Thermostat Reg · **P0171** System Too Lean (Bank 1) · **P0505** Idle Control System Malfunction · **P0506** Idle Control System RPM Lower Than Expected · **P0507** Idle Control System RPM Higher Than Expected

See it working

Watch the animated explainer [How Coil-on-Plug Ignition Works: Coil and Spark Plug](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/mitsubishi-p1294/>

