

CHRYSLER · POWERTRAIN

P1289

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1289 · Chrysler

Manifold Tune Valve Solenoid Circuit Open Or Shorted

P1289 on a Chrysler vehicle means the powertrain control module (PCM) has detected an open or short circuit in the electrical path for the manifold tune valve solenoid, which is the solenoid that controls the intake manifold tuning valve. The PCM commands the solenoid to change intake runner length for better low-end torque and high-rpm airflow, and it monitors the circuit for expected voltage; when the voltage stays out of range, it stores this code and may disable the valve strategy.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering (injector circuits)

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms besides the warning light
- A slight loss of low-end torque or a flat spot during acceleration because the intake tuning valve stays in one position
- Rough or unstable idle quality on some engines when the valve fails to move as commanded
- A faint clicking or buzzing from the solenoid area if the coil is shorted internally
- Reduced fuel economy in stop-and-go driving due to the PCM running a default intake tuning strategy

Common causes, most likely first

- 1 Broken, corroded, or disconnected wiring or connector pins at the manifold tune valve solenoid
- 2 Failed solenoid coil that is open or shorted internally
- 3 Damaged or stuck manifold tune valve linkage that overloads the solenoid and damages its circuit
- 4 Corrosion or water intrusion in the solenoid connector causing high resistance
- 5 PCM driver circuit fault, though this is far less common than wiring or solenoid failure
- 6 Rodent damage to the solenoid harness in vehicles parked outdoors



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm P1289 is the only circuit code and not a symptom of a broader harness problem
- 2 Visually inspect the solenoid connector and the harness from the PCM to the solenoid for chafing, corrosion, or loose pins
- 3 Measure solenoid resistance with a digital multimeter and compare it to the Chrysler service specification for the engine
- 4 Check for battery voltage at the solenoid connector with the key on and verify the ground side of the circuit with a test light
- 5 Command the manifold tune valve on and off with a scan tool and listen for solenoid click and watch for valve movement
- 6 Repair or replace the faulty solenoid, connector pigtail, or harness section, then clear the code and verify the circuit passes a full drive cycle
- 7 If the circuit tests good at the solenoid but the code returns, perform a PCM driver test and inspect the PCM connector for corrosion

What the manifold tune valve code hides

- A stuck or binding manifold tune valve linkage can burn out a good solenoid and set P1289 again shortly after replacement, so always check valve movement by hand before installing a new solenoid.
- The PCM may set P1289 only after a specific number of failed monitoring cycles, so a solenoid that tests fine cold can still be intermittent when the engine bay heat-soaks.
- Chrysler intake manifold tuning solenoids on some engines share a ground path with other actuators, so a corroded ground splice can set P1289 along with unrelated codes.
- A shorted solenoid coil can pull down the PCM driver and cause a no-start or misfire condition that looks like a completely different fault until the solenoid connector is unplugged.
- Aftermarket solenoids with incorrect resistance are a common comeback cause; verify the replacement coil resistance matches the original before assuming the PCM is faulty.

Can I keep driving with P1289?

You can usually drive the vehicle with P1289 because the engine runs in a default intake tuning mode, but avoid heavy towing or aggressive acceleration until the circuit is repaired. If the check engine light flashes or the engine misfires, stop driving and diagnose the circuit immediately.



Tools that help

- OBD-II scan tool with Chrysler enhanced data and bidirectional controls
- Digital multimeter with resistance and voltage measurement
- Test light or logic probe
- Wire terminal pick and connector release tools
- Factory service information for solenoid resistance and circuit pinout

Reading P1289

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

Often seen with

P1288 Turbocharge Bypass Valve Short To B+ · **P1288** Accelerator Pedal Position Sensor 3 Circuit High Voltage · **P1288** Cylinder Head Temperature Sensor Out of Self-Test Range · **P1288** Intake Manifold Short Runner Solenoid Circuit Open Or Shorte · **P1288** Switching Solenoid for Air Assisted Injection Valves Bank 2 · **P0660** Intake Manifold Tuning Valve Control Circuit/Open (Bank 1) · **P2004** Intake Manifold Runner Control Stuck Open (Bank 1) · **P2008** Intake Manifold Runner Control Circuit/Open (Bank 1)

See it working

Watch the animated explainer [Four-Stroke Engine Cutaway: Intake to Exhaust](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1289/>

