

CHRYSLER · POWERTRAIN

P1275

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1275 · Chrysler

Accelerator Pedal Position (APP) Sensor 1 Circuit

P1275 on Chrysler vehicles indicates that the powertrain control module has detected an out-of-range or implausible signal from the Accelerator Pedal Position (APP) Sensor 1 circuit, which is the primary input for driver torque request. The computer compares this signal against expected values and the second APP sensor, and it sets the code when the voltage falls outside the calibrated window or fails a rationality check.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering (injector circuits)

Symptoms you may notice

- The electronic throttle control warning light or check engine light illuminates on the instrument cluster.
- The engine may enter limp-home mode, limiting engine speed to idle or a low threshold.
- The accelerator pedal may feel unresponsive or require excessive travel to accelerate.
- Intermittent hesitation or surging may occur as the faulty signal fluctuates.
- Often no symptoms besides the warning light, especially if the fault is stored but not currently active.
- Cruise control may become inoperative because the system relies on valid APP signals.

Common causes, most likely first

- 1 Worn or contaminated accelerator pedal position sensor 1 internal to the pedal assembly.
- 2 Corroded, loose, or damaged electrical connector at the APP sensor or powertrain control module.
- 3 Chafed or open wiring in the APP sensor 1 signal or reference circuit.
- 4 Poor ground connection for the APP sensor circuit, causing voltage offsets.
- 5 Failed powertrain control module driver or internal fault affecting the 5-volt reference.
- 6 Aftermarket floor mats or debris obstructing full pedal travel, leading to implausible signal correlation.



How to diagnose and fix it

- 1 Inspect the accelerator pedal area for obstructions and verify that the pedal moves freely through its full range.
- 2 Check for any technical service bulletins or software updates for the powertrain control module that address APP sensor rationality.
- 3 Perform a visual inspection of the APP sensor connector and wiring for corrosion, pin tension, or damage, and repair as needed.
- 4 Back-probe the APP sensor 1 signal wire and compare voltage readings to the manufacturer's specification through the full pedal sweep.
- 5 Measure the 5-volt reference and ground circuits at the sensor to confirm they are stable and within specification.
- 6 If the signal is erratic or out of range while reference and ground are good, replace the accelerator pedal assembly with the integrated sensor.
- 7 Clear the code and perform a relearn or calibration procedure if required, then verify the repair with a road test.

What most technicians overlook on P1275

- A weak or intermittent ground at the APP sensor can mimic a failed pedal assembly, so always load-test the ground circuit before condemning the sensor.
- The APP sensor 1 and sensor 2 signals are typically inverse of each other; a code for sensor 1 can be set by a skewed sensor 2 that fails the correlation check.
- Aftermarket floor mats or a bent pedal arm can prevent the pedal from returning fully, causing a plausible but out-of-range signal at rest.
- Water intrusion into the connector from a leaking windshield or cowl can corrode the terminals and set P1275 without any visible damage to the sensor itself.
- A low battery or poor charging system can cause the 5-volt reference to drop, triggering APP codes that disappear after the battery is charged.

Can I keep driving with P1275?

If the vehicle is in limp-home mode, driving is limited and potentially unsafe in traffic, so arrange a diagnostic scan before continuing. If the light is on but the car drives normally, you can drive cautiously to a repair shop, but avoid heavy acceleration and towing until the fault is resolved.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter with back-probe pins
- Wiring diagram for the specific Chrysler model
- Torque wrench and socket set for pedal assembly removal
- Contact cleaner and dielectric grease for connector repair



Reading P1275

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

Often seen with

P1276 Accelerator Pedal Positioning Sensor 1 Circuit · **P1277** Accelerator Pedal Position Sensor 1 Circuit Low Voltage · **P1276** Cylinder 6 High To Low Side Open · **P1277** Cylinder 7 High To Low Side Open · **P1276** Accelerator Pedal Position (APP) Sensor 1 Performance · **P1277** Accelerator Pedal Position Sensor 1 Circuit Low Voltage · **P2122** Accelerator Pedal Position Sensor D Circuit Low · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation · **P2138** Throttle/Pedal Position Sensor D/E Voltage Correlation

See it working

Watch the animated explainer [How a Catalytic Converter Works: 3D Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1275/>

