

CHRYSLER · POWERTRAIN

P1121

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1121 · Chrysler

TP Sensor Circuit Intermittent High Voltage

P1121 on a Chrysler vehicle means the powertrain control module (PCM) has detected an intermittent high-voltage condition on the throttle position (TP) sensor circuit. The PCM monitors the TP sensor signal and sees it spike above the normal range for a brief moment, then return, which is why it is stored as intermittent rather than a hard fault.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Chrysler specific	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- The check engine light (malfunction indicator lamp) is illuminated, often with no other noticeable symptoms.
- The engine may stumble or hesitate briefly during acceleration when the intermittent high-voltage signal occurs.
- The transmission may shift harshly or at the wrong time because the PCM uses throttle position for shift scheduling.
- A momentary loss of power or a surge may be felt, especially when the throttle is held steady.
- In some cases, the engine may enter limp-home mode and limit speed or RPM.
- The cruise control may disengage unexpectedly if the PCM sees an invalid throttle signal.

Common causes, most likely first

- A worn or dirty throttle position sensor that produces intermittent high-voltage spikes as the wiper moves across the resistive track.
- Corroded, loose, or damaged terminals in the TP sensor connector or the PCM connector.
- A chafed or broken wire in the TP sensor signal circuit that intermittently shorts to a higher voltage source.
- A faulty ground connection for the TP sensor, causing the signal voltage to float high intermittently.
- A failing PCM that misinterprets a normal signal, though this is less common than sensor or wiring issues.
- Aftermarket accessories or poor electrical repairs that introduce voltage spikes into the 5-volt reference circuit.



How to diagnose and fix it

- 1 Connect a scan tool and check for stored and pending codes, then view live throttle position data while wiggling the TP sensor connector and harness to see if the voltage spikes.
- 2 Inspect the TP sensor connector and wiring for corrosion, loose pins, or chafing, and repair any damaged terminals or wires.
- 3 Back-probe the TP sensor signal wire at the PCM and monitor voltage with a multimeter while moving the throttle by hand; look for glitches above the normal 0.5–4.5 volt range.
- 4 Check the 5-volt reference and ground circuits at the TP sensor for intermittent opens or shorts using a multimeter and a wiring diagram.
- 5 If the sensor signal is erratic only at certain throttle positions, replace the throttle position sensor with a quality part and clear the code.
- 6 After repairs, clear the codes and perform a road test with the scan tool recording TP sensor data to confirm the intermittent high voltage is gone.
- 7 If the problem persists after sensor and wiring repairs, suspect the PCM and perform pinpoint tests according to Chrysler service information before replacement.

Intermittent TP Sensor High Voltage Traps

- A common mistake is replacing the TP sensor without checking the connector and harness first; a loose ground or chafed wire can mimic a failing sensor and the new part will not fix the code.
- The code can set from a momentary voltage spike that lasts only milliseconds, so a static multimeter check may look perfect while a lab scope or scan tool with graphing capability is needed to catch the glitch.
- On many Chrysler vehicles, the TP sensor shares a 5-volt reference with other sensors; a short in another sensor's circuit can pull the reference high and set P1121 even though the TP sensor itself is fine.
- A dirty throttle body or carbon buildup can cause the throttle plate to stick slightly, making the TP sensor wiper move erratically and produce intermittent high-voltage signals that look like an electrical fault.
- P1121 is often stored alongside codes for other throttle-related circuits, so always diagnose the root cause rather than treating each code as a separate sensor failure.

Can I keep driving with P1121?

You can usually drive the vehicle short distances to a repair shop, but avoid aggressive acceleration or sustained high speeds because an intermittent throttle signal can cause sudden hesitation or limp-home mode. If the engine repeatedly stumbles or the vehicle enters limp mode, stop driving and have it towed to prevent a dangerous loss of power.



Tools that help

- OBD-II scan tool with live data and graphing capability
- Digital multimeter with back-probe pins
- Lab scope for capturing intermittent voltage spikes
- Wiring diagram for the specific Chrysler model
- Basic hand tools for connector and sensor removal

Reading P1121

- 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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- 1** Fuel and air metering.
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- 21** The exact fault within that area.

Often seen with

P1120 Oxygen Sensor Heater Circuit Bank 2 Sensor 1 Open · **P1122** Oxygen Sensor Heater Circuit Bank 2 Sensor 2 Open · **P1120** Accelerator Pedal Position Sensor Circuit · **P1122** Pressure Sources Switching Valve Circuit High Input · **P1120** Starter Switch High Input · **P1120** Secondary Throttle Position Sensor Circuit Fault · **P1122** Throttle Position Higher Than Expected · **P1120** Throttle Position Sensor Out Of Range Low · **P1122** Throttle Position Stuck Closed · **P1122** Pedal Position Sensor A Circuit Low Input · **P1122** Throttle Position Higher Than Expected · **P1120** Throttle Position Sensor 1 Circuit · **P1122** Throttle Position Sensor Out of Range · **P1120** Throttle Position Sensor Out of Range · **P1122** Throttle Position TP Sensor Circuit Intermittent Low Voltage · **P1120** Throttle Position (TP) Sensor 1 Circuit · **P1122** TP Sensor Circuit Intermittent Low Voltage · **P1120** Pedal Position Sensor Circuit · **P1122** Pedal Position Sensor 1 Low Input · **P0121** Throttle Position Sensor A Circuit Range/Performance · **P0123** Throttle Position Sensor A Circuit High Input · **P0122** Throttle Position Sensor A Circuit Low Input

See it working

Watch the animated explainer [How a Car Clutch Works: Diaphragm Clutch Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1121/>

