



P1125 · Ford

Throttle Position Sensor Intermittent

P1125 on a Ford means the powertrain control module (PCM) has detected an intermittent fault in the throttle position sensor (TPS) circuit, where the signal drops out or jumps erratically rather than failing completely. The PCM compares the TPS voltage against expected values and flags the code when the signal is momentarily lost or inconsistent during driving.

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

Symptoms you may notice

- The check engine light may be the only sign, with no noticeable change in how the engine runs.
- A brief stumble or hesitation during acceleration when the TPS signal cuts out.
- Occasional surging or uneven idle quality that comes and goes.
- The transmission may shift harshly or at the wrong time if the PCM loses throttle position data.
- In some cases, the engine may enter limp mode or limit power momentarily.

Common causes, most likely first

- 1 Worn or dirty tracks inside the throttle position sensor causing intermittent contact.
- 2 Loose, corroded, or chafed wiring in the TPS harness or connector.
- 3 A poor ground connection at the sensor or PCM.
- 4 Water or oil intrusion into the TPS connector.
- 5 A failing PCM driver circuit for the TPS reference voltage (less common).
- 6 Aftermarket or incorrectly installed throttle body components affecting sensor alignment.

How to diagnose and fix it

- 1 Inspect the TPS connector and wiring for looseness, corrosion, or chafing, and repair as needed.
- 2 Back-probe the TPS signal wire and watch for voltage drops or spikes while slowly opening the throttle by hand.
- 3 Check the TPS reference voltage (usually 5 volts) and ground circuit for stability.
- 4 Clean the throttle body and TPS mounting area if contamination is present.
- 5 Replace the throttle position sensor if the signal is erratic during the sweep test.
- 6 Clear the code and perform a road test to confirm the fault does not return.
- 7 If the code persists after sensor replacement, inspect the PCM connector and wiring for intermittent faults.



Intermittent TPS faults that fool technicians

- A TPS can test perfectly on a cold engine and only act up when heat or vibration affects the internal contacts, so a sweep test should be done both cold and after warming the engine.
- The wiring harness near the throttle body often rubs against brackets or the hood, causing intermittent shorts that only appear when the engine moves under load.
- P1125 can be set by a dirty throttle body that causes the PCM to see an unexpected TPS voltage at closed throttle, so cleaning the throttle plate is a valid first step before replacing parts.
- Some Ford models use a throttle position sensor integrated into the throttle body, and replacing just the sensor may not be possible, requiring a whole throttle body assembly.
- A weak battery or charging system can cause voltage spikes that mimic a TPS fault, so check battery and ground integrity before condemning the sensor.

Can I keep driving with P1125?

You can usually drive the vehicle with P1125, but avoid aggressive acceleration and be prepared for occasional hesitation or limp mode. Have the fault diagnosed soon, as an intermittent TPS can worsen and affect transmission shifting and engine power.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Back-probe pins or breakout box
- Basic hand tools (screwdrivers, socket set)
- Throttle body cleaner and shop rags

Reading P1125

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

Often seen with

P0121 Throttle Position Sensor A Circuit Range/Performance · **P0122** Throttle Position Sensor A Circuit Low Input · **P0123** Throttle Position Sensor A Circuit High Input · **P0505** Idle Control System Malfunction · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation



See it working

Watch the animated explainer [How a Wideband Air-Fuel Sensor Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1125/>

