

FORD · POWERTRAIN

P1795

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1795 · Ford

Idle Switch Circuit Malfunction

P1795 on Ford vehicles indicates that the powertrain control module (PCM) has detected an abnormal signal from the idle switch circuit, which is part of the throttle position sensor (TPS) or accelerator pedal assembly. The PCM expects a specific voltage or continuity state when the throttle is closed, and it flagged the circuit because the signal does not match that expectation.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Intermediate	Transmission

Symptoms you may notice

- The check engine light (malfunction indicator lamp) is illuminated, often with no other noticeable symptoms.
- The engine may idle at an incorrect speed, either too high or too low, or fluctuate unexpectedly.
- The vehicle may stall when coming to a stop or when the throttle is released.
- Poor fuel economy or a rich-running condition may occur because the PCM cannot correctly identify closed-throttle operation.
- Automatic transmission may shift harshly or at the wrong time due to incorrect idle signal interpretation.
- In some cases, the engine may hesitate or stumble during light acceleration from a stop.

Common causes, most likely first

- A faulty or misadjusted throttle position sensor (TPS) that incorporates the idle switch function.
- Damaged, corroded, or disconnected wiring in the idle switch circuit, including the connector at the TPS or PCM.
- A sticking or binding throttle plate or accelerator pedal linkage that prevents the idle switch from closing.
- An open or shorted idle switch circuit inside the TPS, often due to wear or contamination.
- A failed or failing powertrain control module (PCM) idle switch input circuit, though this is less common.
- Aftermarket or improperly installed throttle body components that alter the idle switch signal.
- Engine vacuum leaks or other intake issues that cause the PCM to see an unexpected idle condition and set the code.



How to diagnose and fix it

- 1 Use a scan tool to read live data and verify the idle switch status (closed/open) and TPS voltage at closed throttle; compare to Ford specifications.
- 2 Visually inspect the TPS connector and wiring for corrosion, chafing, or loose pins, and repair as needed.
- 3 Check the throttle plate and linkage for binding or carbon buildup; clean the throttle body and verify free movement.
- 4 Measure resistance or continuity across the idle switch terminals (if applicable) and compare to the factory service manual values.
- 5 Perform a TPS voltage sweep test with a multimeter to check for dead spots or erratic signals that indicate a faulty sensor.
- 6 If the TPS is faulty, replace it and perform a throttle position relearn or idle relearn procedure as required for the specific Ford model.
- 7 Clear the diagnostic trouble codes and verify the repair by test-driving the vehicle and confirming the idle switch status changes correctly in live data.

Idle switch faults that fool many technicians

- A dirty throttle body is a frequent culprit: carbon buildup can hold the throttle plate slightly open, preventing the idle switch from closing and setting P1795 even when the TPS itself is good.
- On many Ford models, the idle switch is integrated into the TPS, so a faulty TPS may not always set a TPS code but can still trigger P1795; always check TPS live data rather than just resistance.
- Wiring harness damage near the throttle body or along the intake manifold is common due to heat and vibration, and a visual inspection alone may miss internal wire breaks.
- A misadjusted accelerator pedal cable or a sticking pedal assembly can mimic an idle switch failure, so verify mechanical return to the closed position before replacing electrical parts.
- P1795 can be set by a low battery or poor ground connection at the PCM, causing voltage irregularities that the PCM interprets as an idle switch circuit fault.

Can I keep driving with P1795?

You can generally drive the vehicle with P1795 set, but be alert for stalling at low speeds or when stopping, and avoid heavy traffic or situations where an unexpected stall could be dangerous. Have the fault diagnosed promptly to prevent drivability issues and potential transmission damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Throttle body cleaner and shop rags
- Factory service manual or wiring diagram for the specific Ford model
- Basic hand tools (screwdrivers, socket set, pliers)



Reading P1795

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

Often seen with

P0122 Throttle Position Sensor A Circuit Low Input · **P0123** Throttle Position Sensor A Circuit High Input · **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 Crank and Cam Position Sensors Work](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1795/>

