

FORD · POWERTRAIN

P1585

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1585 · Ford

Throttle Control Unit Malfunction

P1585 on Ford vehicles indicates that the powertrain control module (PCM) has detected a malfunction within the electronic throttle control (ETC) system, which manages the throttle plate via an electric motor rather than a traditional cable. The PCM monitors throttle position sensor (TPS) signals and motor command circuits, and when the correlation between expected and actual throttle movement falls outside the programmed limits, it stores this code and typically illuminates the wrench or check engine light.

SYSTEM

Powertrain

CODE TYPE

Ford specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Illumination of the check engine light or a dedicated wrench warning light on the dashboard
- The engine may enter limp mode, limiting vehicle speed to a low threshold
- A noticeable lack of power or hesitation when pressing the accelerator pedal
- The throttle may feel unresponsive or sticky, with delayed reactions to pedal input
- Rough idle or stalling when coming to a stop
- Often no symptoms besides the warning light, especially if the fault is intermittent

Common causes, most likely first

- 1 Carbon buildup or mechanical binding on the throttle plate, preventing smooth movement
- 2 Faulty throttle position sensor (TPS) or accelerator pedal position (APP) sensor sending inaccurate signals
- 3 Damaged or corroded wiring and connectors in the throttle actuator control circuit
- 4 Failed electronic throttle body (ETB) motor or internal sensor
- 5 PCM software issue or internal fault in the throttle control driver circuit
- 6 Low battery voltage or poor grounds affecting the ETC system operation



How to diagnose and fix it

- 1 Inspect the throttle body for carbon deposits and clean it thoroughly with throttle body cleaner
- 2 Check the battery voltage and ensure the charging system is functioning properly
- 3 Visually inspect the throttle body connector and wiring for corrosion, chafing, or loose pins
- 4 Use a scan tool to monitor throttle position sensor and accelerator pedal position sensor readings for smooth progression
- 5 Perform a throttle body relearn or idle relearn procedure after cleaning or replacement
- 6 Test the throttle actuator motor resistance and compare to factory specifications
- 7 If all else fails, replace the electronic throttle body and reprogram the PCM if necessary

Common Missteps When Diagnosing P1585

- A dirty throttle body is the most frequent cause of P1585 on Ford vehicles, yet many technicians replace the entire unit before attempting a proper cleaning and relearn procedure.
- Intermittent P1585 codes often stem from a weak battery or poor ground connection, so always verify stable voltage before condemning the throttle body.
- The code can be set by a faulty accelerator pedal position sensor even though the throttle body itself is fine, so don't overlook the pedal assembly during diagnosis.
- After replacing the throttle body, a relearn procedure is mandatory; skipping it will cause the code to return immediately and may create drivability issues.
- Some Ford models require a PCM reprogramming update to address false P1585 triggers, so check for technical service bulletins before replacing hardware.

Can I keep driving with P1585?

You can usually drive the vehicle to a repair shop, but expect reduced power and possible limp mode; avoid heavy acceleration and highway driving until the fault is repaired.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Throttle body cleaner and soft brush
- Socket set and screwdrivers
- Factory service information or wiring diagrams



Reading P1585

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Ford): its meaning depends on the make.
- 5** Vehicle speed, idle control and auxiliary inputs.
- 85** The exact fault within that area.

Often seen with

P0121 Throttle Position Sensor A Circuit Range/Performance · **P0221** Throttle Position Sensor B Circuit Range/Performance · **P2101** Throttle Actuator Control Motor Circuit Range/Performance · **P2111** Throttle Actuator Control System - Unable to Open · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation

See it working

Watch the animated explainer [How Hydraulic Brakes Work: Pedal to Caliper](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1585/>

