

FORD · POWERTRAIN

P1483

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1483 · Ford

Power to Cooling Fan Exceeded Normal Draw

P1483 on Ford vehicles means the cooling fan control circuit is drawing more current than the powertrain control module expects when the fan is commanded on. The computer monitors the fan circuit and flags this code when the current exceeds the calibrated normal range, indicating a short, a failing fan motor, or excessive mechanical drag.

SYSTEM

Powertrain

CODE TYPE

Ford specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

- The cooling fan may run continuously at full speed even when the engine is cold
- The fan may not run at all if the excessive draw has damaged the control module or blown a fuse
- Engine coolant temperature may rise above normal in traffic or at idle
- The air conditioning may stop cooling effectively because the condenser fan is not working
- A blown fuse or melted fan connector may be visible under the hood
- Often no symptoms besides the warning light if the excessive draw is intermittent

Common causes, most likely first

- 1 Seized or binding cooling fan motor bearings causing excessive current draw
- 2 Short circuit in the fan motor windings or internal fan motor fault
- 3 Damaged or corroded fan wiring harness or connector causing high resistance and current spikes
- 4 Faulty fan control module or relay that is not regulating current properly
- 5 Debris or mechanical obstruction preventing the fan blade from turning freely
- 6 Corroded or loose ground connection for the fan circuit increasing resistance
- 7 Powertrain control module (PCM) internal fault incorrectly limiting or misreading fan current



How to diagnose and fix it

- 1 Inspect the cooling fan blades for debris, binding, or physical damage and rotate the fan by hand to check for resistance
- 2 Check the fan circuit fuse and relay, and test for battery voltage and ground at the fan connector with the fan commanded on
- 3 Measure the current draw at the fan motor with a clamp meter and compare to the manufacturer's specification
- 4 Disconnect the fan motor and check resistance across the motor terminals and from each terminal to ground to rule out a short
- 5 Inspect the wiring harness between the fan control module and the PCM for chafing, corrosion, or loose pins
- 6 Substitute a known-good fan motor or control module to confirm the fault before replacing expensive modules
- 7 Clear the code and verify the repair by running the engine and commanding the fan on with a scan tool while monitoring current

Fan current draw tells the real story

- A fan that spins freely by hand can still draw excessive current when powered because the motor windings or brushes are failing internally, so a visual check alone is not enough.
- Ford fan control modules often fail in a way that commands the fan on high speed continuously, which can mask the original excessive draw fault and lead to a dead battery if left unattended.
- The code can set intermittently from a corroded connector that only acts up in wet weather, so a wiggle test of the fan harness while monitoring current is a valuable step that many technicians skip.
- Replacing the fan motor without checking the ground circuit can leave the code returning because a poor ground raises current draw on the entire circuit.
- On some Ford models, a failing thermostat or coolant temperature sensor can cause the PCM to run the fan excessively, which then overheats the fan motor and sets P1483 as a secondary code.

Can I keep driving with P1483?

You can drive short distances with the warning light on, but avoid heavy traffic, long idles, and towing until the fault is repaired because the fan may not cool the engine properly. If the temperature gauge climbs above normal, pull over and shut the engine off to prevent overheating damage.

Tools that help

- OBD-II scan tool with bidirectional fan control capability
- Digital multimeter
- Clamp-on current meter
- Socket and wrench set
- Wire terminal pick and electrical contact cleaner



Reading P1483

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Ford): its meaning depends on the make.
- 4** Auxiliary emission controls.
- 83** The exact fault within that area.

Often seen with

P0217 Engine Over-Temperature Condition · **P0480** Cooling Fan 1 Control Circuit Malfunction · **P0481** Cooling Fan 2 Control Circuit Malfunction · **P0482** Cooling Fan 3 Control Circuit Malfunction · **P0483** Fan Rationality Check

See it working

Watch the animated explainer [How a Radiator Fan Relay Circuit Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1483/>

