



P1473 · Ford

Fan Secondary High with Fans Off

P1473 on Ford vehicles means the powertrain control module (PCM) commanded the cooling fans off but still detected a high voltage signal on the secondary fan circuit, indicating an unexpected short to power or a fan control module fault. The PCM monitors the secondary fan control circuit for voltage when the fans should be at rest, and any voltage above the expected threshold sets this code.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Intermediate	Auxiliary emission controls

Symptoms you may notice

- Often no symptoms besides the warning light, as the fans may still operate normally when commanded
- Cooling fans may run continuously even with the engine cold or the air conditioning off
- Battery drain if the fan circuit remains powered with the ignition off
- Overheating if the short prevents the fans from being commanded on when needed
- Blown fuse or melted relay in the fan control circuit
- A/C performance issues if the fan control module is faulty and affects condenser airflow

Common causes, most likely first

- 1 Short to power in the secondary fan control wiring, often from chafed insulation against a hot or sharp engine component
- 2 Failed fan control module (FCM) or integrated relay assembly keeping the circuit energized
- 3 Stuck-closed cooling fan relay supplying voltage to the secondary fan circuit at all times
- 4 Corroded or damaged connector pins at the fan motor or control module causing a false high-voltage signal
- 5 PCM internal fault incorrectly reading the secondary fan circuit voltage
- 6 Aftermarket alarm or remote start wiring tapped into the fan circuit and backfeeding voltage



How to diagnose and fix it

- 1 Verify the code with a scan tool and check live data for fan control commanded state versus actual fan operation
- 2 Inspect the secondary fan wiring harness for chafing, pinched wires, or contact with hot exhaust components
- 3 Disconnect the fan control module and check for voltage on the secondary fan control circuit with the key off; any voltage indicates a short to power
- 4 Test the cooling fan relay for stuck contacts by swapping with a known-good relay of the same part number
- 5 Check connector pins at the fan motor and control module for corrosion, fretting, or pushed-out terminals
- 6 If wiring and relays test good, substitute a known-good fan control module and clear the code to see if it returns
- 7 As a last step, diagnose the PCM for internal faults only after all external circuits are verified good

Why P1473 Often Isn't the Fan Motor

- A shorted fan motor can backfeed voltage into the secondary control circuit and set P1473 even though the motor still spins when commanded, so always check for voltage on the control wire with the fans off.
- Ford fan control modules on models like the Focus and Escape often fail internally in a way that keeps the secondary circuit energized, and replacing the fan motor alone will not fix the code.
- Aftermarket remote start or alarm installers frequently tap the fan circuit for climate control features, creating a backfeed that sets P1473 only when the aftermarket system is active.
- The PCM may set P1473 intermittently if the fan relay coil is failing but not yet open, so a relay that clicks does not guarantee it is not sticking closed under heat.
- Do not replace the PCM for P1473 until you have load-tested the secondary fan circuit with a bulb or scope, because a high-resistance short can fool a basic multimeter.

Can I keep driving with P1473?

You can drive short distances to a repair shop, but avoid heavy traffic or long idling because the fans may not activate correctly and the engine could overheat. If the temperature gauge climbs above normal, pull over and shut the engine off immediately.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Test light or incandescent bulb for load testing circuits
- Wiring diagram for the specific Ford model
- Relay puller and terminal pick set



Reading P1473

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

Often seen with

P1472 EVAP Emission Control System LDP Circuit Short To Ground · **P1474** Low Fan Control Primary Circuit · **P1472** Diagnostic Module Tank Leakage DM-TL Switching Solenoid Cont · **P0480** Cooling Fan 1 Control Circuit Malfunction · **P0481** Cooling Fan 2 Control Circuit Malfunction · **P0691** Fan 1 Control Circuit Low

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-p1473/>

