



P1271 · Ford

Cylinder 1 High To Low Side Open

P1271 on Ford vehicles means the powertrain control module (PCM) has detected an open circuit between the high and low sides of the fuel injector circuit for cylinder 1. The PCM monitors the injector driver circuit and sets this code when the expected current flow is missing, indicating a break in the wiring or a failed injector coil.

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

Symptoms you may notice

- Illuminated check engine light, often with no other symptoms besides the warning light
- Rough idle or misfire felt as a shake or stumble, especially when cold
- Noticeable loss of power and reduced fuel economy
- Engine may run in limp mode with reduced performance
- Hard starting or stalling, particularly when the engine is cold
- Possible sulfur or raw fuel smell from the exhaust if the injector is stuck open

Common causes, most likely first

- 1 Open or damaged wiring between the PCM and the cylinder 1 fuel injector
- 2 Failed cylinder 1 fuel injector (open internal coil)
- 3 Corroded or loose electrical connector at the injector or PCM
- 4 Broken or chafed wire harness near the intake manifold or valve cover
- 5 Faulty PCM driver circuit for the injector (rare but possible)
- 6 Rodent damage to the injector wiring harness

How to diagnose and fix it

- 1 Inspect the cylinder 1 injector connector for corrosion, looseness, or pushed-out pins
- 2 Check the injector coil resistance with a multimeter and compare to the manufacturer's specification
- 3 Perform a wiggle test on the injector harness while watching live misfire or injector data
- 4 Check for continuity and short-to-ground on the high and low side wires between the injector and PCM
- 5 Repair any damaged wiring, replace corroded terminals, and apply dielectric grease
- 6 If the injector coil is open, replace the cylinder 1 fuel injector
- 7 Clear the code and verify the repair with a road test and live data monitoring



What Ford Techs Check Before Replacing Injectors

- A loose or corroded connector at the cylinder 1 injector is far more common than a failed injector itself, so always inspect and clean the terminals before condemning the part.
- The code can be set by a chafed wire in the harness where it rubs against the intake manifold or valve cover, so a visual inspection of the entire run is essential.
- On some Ford engines, the injector harness is part of the main engine harness and a break inside the loom may only show up during a wiggle test with the engine running.
- A failed PCM driver is rare, but if the injector and wiring test good, check for driver operation with a noid light before replacing the computer.
- This code does not always mean the injector is dead; a poor ground or low battery voltage can cause the PCM to misreport an open circuit, so verify battery and ground integrity first.

Can I keep driving with P1271?

You can drive a short distance to a repair shop, but avoid heavy acceleration or long trips because the misfire can damage the catalytic converter and reduce engine power. If the engine runs very rough or stalls, stop driving and have it towed.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Noid light or injector test light
- Wire probe and jumper wires
- Factory service information for wiring diagrams and resistance specifications

Reading P1271

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

Often seen with

P1272 Accelerator Pedal Position Sensor 2-3 Correlation · **P1273** Accelerator Pedal Position Sensor 1 · **P1272** Cylinder 2 High To Low Side Open · **P1273** Cylinder 3 High To Low Side Open · **P1272** Accelerator Pedal Position Sensor 2 · **P1273** Accelerator Pedal Position Sensor 1 · **P0201** Injector Circuit Malfunction - Cylinder 1 · **P0301** Cylinder 1 Misfire Detected · **P0351** Ignition Coil A Primary/Secondary Circuit Malfunction



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-p1271/>

