



P1278 · Ford

Cylinder 8 High To Low Side Open

P1278 on Ford vehicles indicates that the powertrain control module (PCM) has detected an open circuit between the high side and low side of the fuel injector for cylinder 8. This means the electrical path through the injector coil is broken, so the PCM cannot command that injector to fire, resulting in a dead cylinder and a rough-running engine.

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

Symptoms you may notice

- Engine misfire and rough idle, often felt as a shaking or stumbling sensation
- Noticeable loss of power and reduced fuel economy
- Check engine light illuminated, sometimes flashing if the misfire is severe
- Often no symptoms besides the warning light, especially at higher speeds or light load
- Possible fuel smell from unburned fuel entering the exhaust
- Shaking or vibration that worsens under acceleration or when climbing hills

Common causes, most likely first

- 1 Open or damaged wiring between the PCM and cylinder 8 injector, including chafed, broken, or corroded wires
- 2 Failed cylinder 8 fuel injector with an open internal coil
- 3 Loose, corroded, or disconnected electrical connector at the cylinder 8 injector
- 4 Faulty PCM driver for the cylinder 8 injector circuit (rare but possible)
- 5 Rodent damage or pinched harness causing an open circuit in the injector wiring

How to diagnose and fix it

- 1 Inspect the cylinder 8 injector connector for looseness, corrosion, or pushed-out pins and repair as needed
- 2 Perform a resistance test on the cylinder 8 injector and compare it to a known-good injector on another cylinder
- 3 Check continuity and resistance of the high and low side wires from the PCM to the injector, looking for opens or high resistance
- 4 Wiggle-test the harness while monitoring injector resistance or a noid light to catch intermittent opens
- 5 If wiring and connector are good, replace the cylinder 8 fuel injector
- 6 If the injector and wiring test good, diagnose the PCM driver circuit for the cylinder 8 injector
- 7 Clear the code and verify the repair with a test drive and live misfire data



Don't overlook the injector connector

- A loose or corroded connector at the cylinder 8 injector is a very common cause of this code and is often missed when technicians go straight to replacing the injector.
- The code can set intermittently due to a wire that only opens when the engine is hot or vibrating, so a simple resistance check on a cold engine may not reveal the fault.
- Cylinder 8 on Ford V8 engines is often at the back of the engine bay, where heat and access make the connector and wiring more prone to damage and harder to inspect.
- A failed injector coil can test open when hot but show normal resistance when cold, so testing after a road test or with a heat gun can be more reliable.
- This code does not always mean the injector itself is bad; the PCM driver or a chafed harness section can cause the same open-circuit condition.

Can I keep driving with P1278?

You can drive the vehicle short distances to a repair shop, but avoid heavy acceleration, towing, or long trips because the misfire can overheat the catalytic converter and cause further damage. If the check engine light is flashing, stop driving and have the vehicle towed.

Tools that help

- OBD-II scan tool with live misfire and injector data
- Digital multimeter for resistance and continuity testing
- Noid light or injector test light
- Factory wiring diagrams for the specific Ford model
- Basic hand tools and a test light

Reading P1278

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

Often seen with

P1279 Control Sleeve Sensor Circuit Range Performance · **P1279** VTEC System Malfunction Front Bank 2 · **P1277** Accelerator Pedal Position Sensor 1 Circuit Low Voltage · **P1277** Cylinder 7 High To Low Side Open · **P1277** Accelerator Pedal Position Sensor 1 Circuit Low Voltage · **P0208** Injector Circuit/Open - Cylinder 8 · **P0308** Cylinder 8 Misfire Detected · **P0358** Ignition Coil 'H' Primary/Secondary Circuit



See it working

Watch the animated explainer [How a Refrigerator Works: The Cooling Cycle](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1278/>

