

FORD · POWERTRAIN

P1298

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1298 · Ford

IDM Failure

P1298 on Ford vehicles indicates that the Injector Drive Module (IDM) has reported an internal failure to the Powertrain Control Module (PCM). The IDM is responsible for supplying the high-current pulses that fire the fuel injectors, and when it detects a fault within its own circuitry, it sets this code and typically disables injector operation to prevent damage.

SYSTEM

Powertrain

CODE TYPE

Ford specific

SEVERITY

High

FIX DIFFICULTY

Professional

AREA

Fuel and air
metering (injector
circuits)

Symptoms you may notice

- Engine cranks but will not start or stalls immediately after starting
- Rough running or misfire under load if the module is partially functional
- Reduced engine power or limp mode
- Fuel smell from unburned fuel if injectors are not firing
- Often no symptoms besides the warning light if the failure is intermittent

Common causes, most likely first

- 1 Internal failure of the Injector Drive Module (IDM) itself
- 2 Corroded or damaged electrical connectors at the IDM or injector harness
- 3 Chafed or shorted wiring in the injector drive circuits
- 4 Failed fuel injector with a shorted coil causing the IDM to shut down
- 5 Poor ground connection for the IDM or engine block
- 6 Water intrusion into the IDM housing or connector
- 7 Voltage supply issues to the IDM from the battery or fuse box



How to diagnose and fix it

- 1 Perform a visual inspection of the IDM, its connectors, and the injector harness for corrosion, chafing, or water damage
- 2 Check for any other stored codes, especially injector circuit codes, that may point to a specific cylinder or wiring fault
- 3 Measure battery voltage and inspect the IDM power and ground circuits with a multimeter under load
- 4 Disconnect the injectors one at a time and check for shorts to ground or low resistance that could overload the IDM
- 5 Test the IDM output signals with an oscilloscope or noid light to confirm whether it is commanding the injectors
- 6 If all external circuits and injectors test good, replace the IDM and clear the code
- 7 After repair, clear codes and verify the engine starts and runs without the code returning

IDM failure often misdiagnosed as injector fault

- A shorted fuel injector can cause the IDM to set P1298 even though the module itself is healthy, so always test injector resistance before replacing the module.
- The IDM is often located in a vulnerable spot where water can pool, leading to internal corrosion that sets this code intermittently.
- P1298 can be stored alongside P0200-series injector codes, but the presence of those codes does not guarantee the injectors are at fault; the IDM may be shutting down due to an internal fault.
- Some Ford models use a combined IDM and PCM, and in those cases the code may indicate a PCM driver failure rather than a separate module.
- A weak battery or poor ground can cause the IDM to log this code without any permanent damage, so always verify power and ground integrity first.

Can I keep driving with P1298?

Do not drive the vehicle with P1298 stored, as the engine may stall without warning or fail to start, creating a safety hazard. Have the vehicle towed to a repair facility for proper diagnosis.

Tools that help

- OBD-II scan tool
- Digital multimeter
- Oscilloscope
- Noid light set
- Wiring diagram for the specific Ford model



Reading P1298

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

Often seen with

P0200 Injector Circuit Malfunction · **P0201** Injector Circuit Malfunction - Cylinder 1 · **P0202** Injector Circuit Malfunction - Cylinder 2 · **P0203** Injector Circuit Malfunction - Cylinder 3 · **P0204** Injector Circuit Malfunction - Cylinder 4

See it working

Watch the animated explainer [How a Boxer Engine Works: Flat Engine Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1298/>

