



P1317 · Ford

Injector Circuit IDM Codes Not Updated

P1317 on Ford vehicles means the powertrain control module (PCM) has not received updated injector circuit diagnostic feedback from the injector driver module (IDM), so it cannot confirm that the fuel injectors are being commanded and monitored correctly. The PCM sets this code when the expected IDM status message is missing or stale on the communication link, not when a single injector has electrically failed.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Professional	Ignition system and misfire

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or misfire under load if the IDM fault affects injector firing
- Reduced engine power or limp-home mode on some Ford models
- Hard starting or intermittent no-start when the IDM communication is lost
- Poor fuel economy or increased emissions due to unmonitored injector operation

Common causes, most likely first

- 1 Faulty injector driver module (IDM) or internal IDM communication failure
- 2 Damaged or corroded wiring between the PCM and IDM, especially the IDM status/signal circuit
- 3 Poor electrical connections at the PCM or IDM harness connectors
- 4 Low or unstable battery voltage causing the IDM to drop offline intermittently
- 5 Water intrusion or heat damage affecting the IDM or its connector
- 6 PCM software or internal fault preventing it from processing IDM messages
- 7 Aftermarket electrical accessories or poor grounds disturbing the communication bus

How to diagnose and fix it

- 1 Scan all modules for stored codes and verify P1317 is current, then record freeze-frame data
- 2 Inspect battery condition, terminals, and charging voltage to rule out low-voltage dropouts
- 3 Visually inspect the IDM connector and PCM connectors for corrosion, water, or loose pins
- 4 Perform a wiggle test on the IDM-to-PCM harness while watching live IDM status data
- 5 Check continuity and resistance on the IDM communication circuit against the Ford wiring diagram
- 6 Substitute a known-good IDM only after wiring and power/ground checks pass
- 7 Clear codes and road-test to confirm the IDM status updates and P1317 does not return



Why the IDM message goes missing

- P1317 is a communication/status code, not a direct injector resistance code, so replacing injectors without checking the IDM link is a common and expensive misdiagnosis.
- A weak or failing battery that still starts the engine can cause the IDM to reset intermittently and set P1317 without any drivability complaint.
- Corroded pins at the IDM connector often look fine from outside; back-probing the status circuit while flexing the harness reveals intermittent opens that a static meter check misses.
- On some Ford applications the IDM is integrated into the PCM or a separate module, so confirm the exact configuration before ordering parts.
- Aftermarket alarms, remote starters, or poor ground additions can disturb the communication bus and trigger P1317 even when the IDM itself is healthy.

Can I keep driving with P1317?

You can usually drive short distances to a repair shop if the engine runs normally, but avoid heavy load or long trips because a failing IDM can cause misfires or a sudden loss of power. If the engine is misfiring, stalling, or in limp mode, stop driving and have it diagnosed promptly.

Tools that help

- OBD-II scan tool with Ford-specific module access and live data
- Digital multimeter with back-probe pins
- Ford wiring diagram for the IDM and PCM circuits
- Battery load tester and charging system tester
- Contact cleaner and dielectric grease for connector service

Reading P1317

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Ford): its meaning depends on the make.
3	Ignition system and misfire.
17	The exact fault within that area.

Often seen with

P1316 Spark Plug Voltage Detection Circuit Malfunction Front Bank · **P1318** Spark Plug Voltage Detection Module Reset Circuit Malfunction · **P1318** Injection Timing Piston Position Sensor Circuit · **P1316** Misfire Rate Exceeds Emissions · **P1316** Spark Plug Voltage Detection Circuit Malfunction Front Bank · **P1318** Spark Plug Voltage Detection Module Reset Circuit Malfunction · **P1316** Injector Circuit IDM Codes Detected · **P0201** Injector Circuit Malfunction - Cylinder 1 · **P0300** Random/Multiple Cylinder Misfire Detected · **P0600** Serial Communication Link Malfunction



See it working

Watch the animated explainer [Helicopter Flight Simulator: Learn the Three Controls](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1317/>

