



P1142 · Ford

Fuel Restriction Condition

P1142 on Ford vehicles indicates that the powertrain control module has detected a fuel restriction condition, typically by monitoring the fuel rail pressure or the fuel level in the tank and comparing it to expected values. The computer sets this code when the fuel system cannot deliver the required volume or pressure, often due to a clogged filter, a weak pump, or a pinched line. This is a manufacturer-specific code, so it does not have a generic SAE definition.

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

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Engine hesitation or stumble during acceleration, especially under load
- Loss of power at higher speeds or when climbing hills
- Difficulty starting, particularly after the vehicle has been sitting
- Occasional misfire or rough idle that may worsen when fuel demand increases

Common causes, most likely first

- 1 Clogged or restricted fuel filter, which is the most common cause on higher-mileage Ford vehicles
- 2 Weak or failing fuel pump that cannot maintain adequate pressure and volume
- 3 Pinched, kinked, or collapsed fuel supply line or hose
- 4 Restricted fuel pickup screen inside the fuel tank (sock filter)
- 5 Faulty fuel pressure sensor or fuel rail pressure sensor sending inaccurate readings
- 6 Contaminated fuel or debris in the tank blocking the pickup
- 7 Restricted fuel injector screens or a stuck-closed injector reducing flow



How to diagnose and fix it

- 1 Connect a scan tool and check for any related codes, then inspect live fuel pressure and fuel trim data to confirm the restriction
- 2 Perform a fuel pressure and volume test at the fuel rail, comparing results to Ford specifications for the specific model and engine
- 3 Replace the fuel filter if it has not been serviced recently, as this is the cheapest and most likely fix
- 4 Inspect the fuel lines and hoses for kinks, pinches, or collapse, especially along the frame rails and near the tank
- 5 If pressure remains low, check the fuel pump pickup screen and the tank for contamination or debris
- 6 Test the fuel pump electrical circuit, including the relay, fuse, and wiring, to rule out a voltage drop causing weak pump operation
- 7 If all else checks out, replace the fuel pump assembly and retest fuel pressure and volume to confirm the repair

Fuel restriction traps on Ford vehicles

- A clogged fuel filter is often overlooked because many Ford models have a filter that is not part of the scheduled maintenance, so it can become severely restricted without ever being changed.
- A weak fuel pump can set P1142 without completely failing, so a simple pressure test at idle may pass while a volume test under load reveals the restriction.
- The fuel pressure sensor on some Ford engines can drift and report a false restriction, so always verify actual pressure with a mechanical gauge before replacing the pump.
- Contaminated fuel from a single bad fill-up can clog the pickup screen and set this code, so inspect the tank for debris if the filter and pump test good.
- P1142 can be stored alongside misfire codes if the restriction leans out the mixture, so do not chase ignition faults until fuel delivery is confirmed.

Can I keep driving with P1142?

You can usually drive the vehicle to a repair shop, but avoid heavy acceleration, towing, or high-speed driving because a lean condition from fuel restriction can cause misfires and potentially damage the engine. If the engine stalls or loses power noticeably, stop driving and have it towed.

Tools that help

- OBD-II scan tool with live data capability
- Fuel pressure test gauge kit
- Fuel volume test container and stopwatch
- Hand tools for filter and line replacement
- Digital multimeter for circuit testing
- Safety glasses and fuel-resistant gloves



Reading P1142

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

Often seen with

P0087 Fuel Rail/System Pressure - Too Low · **P0171** System Too Lean (Bank 1) · **P0174** System Too Lean (Bank 2) · **P0230** Fuel Pump Primary Circuit Malfunction · **P0300** Random/Multiple Cylinder Misfire Detected

See it working

Watch the animated explainer [How Regenerative Braking Works in Electric Cars](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1142/>

