

GENERIC · POWERTRAIN

P016F

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P016F

Closed Loop Fuel Pressure Control At Limit - Pressure Too Low

P016F indicates that the powertrain control module (PCM) has commanded the fuel pressure control system to its maximum correction limit while still detecting that actual fuel pressure remains too low. In plain terms, the computer is trying as hard as it can to raise fuel pressure, but the measured pressure is not reaching the commanded target, so the system has hit its control limit.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms.
- Reduced engine power or a limp-home mode when the PCM limits load to protect the fuel system.
- Rough idle, hesitation, or stumbling during acceleration due to insufficient fuel delivery.
- Extended cranking time or difficulty starting, especially when the engine is cold.
- Poor fuel economy or increased emissions as the engine runs leaner than commanded.
- In rare cases, engine misfire or stalling under load if pressure drops severely.

Common causes, most likely first

- 1 A weak or failing fuel pump that cannot deliver enough volume or pressure.
- 2 A clogged fuel filter or restricted fuel line preventing adequate flow.
- 3 A leaking or faulty fuel pressure regulator that bleeds pressure back to the tank.
- 4 A faulty fuel pressure sensor sending an inaccurate low-pressure signal to the PCM.
- 5 A stuck-open or leaking fuel injector causing a pressure drop in the rail.
- 6 A restricted fuel pump pickup screen or in-tank filter sock.
- 7 Wiring or connector issues in the fuel pressure control circuit, including poor grounds or chafed wires.



How to diagnose and fix it

- 1 Connect a scan tool and verify the code is current, then check live fuel pressure data against the commanded pressure to confirm the low-pressure condition.
- 2 Inspect the fuel system for external leaks and check the fuel filter for restriction, replacing it if service life is unknown or flow is poor.
- 3 Perform a fuel pressure and volume test at the rail using a mechanical gauge to compare actual pressure with the PCM's commanded value.
- 4 Test the fuel pressure sensor and its wiring for correct reference voltage and signal return, looking for corrosion or open circuits.
- 5 Check the fuel pressure regulator for proper operation, including vacuum line integrity and evidence of diaphragm leakage.
- 6 If pressure remains low, command the fuel pump on with a scan tool and measure voltage and current draw at the pump connector to rule out wiring or pump failure.
- 7 Replace the fuel pump or pressure control module only after confirming the pump cannot meet pressure and volume specifications, then clear the code and verify repair with a road test.

Why low fuel pressure is not always the pump

- A fuel pressure sensor that reads low when pressure is actually correct will set P016F without any real fuel delivery problem, so always verify with a mechanical gauge before condemning the pump.
- Restricted fuel filters are a common cause that is frequently overlooked because the filter may be inside the tank or under the vehicle and not part of routine maintenance on many modern cars.
- A leaking fuel injector can drop rail pressure enough to trigger this code while also causing rich-running symptoms on one cylinder, so misfire counters and fuel trim data should be reviewed together.
- The fuel pressure control system may use a pulse-width-modulated pump driver module; a failing module can mimic a weak pump and set P016F even when the pump itself is healthy.
- P016F can be stored alongside lean-condition codes such as P0171, but the low fuel pressure is the root cause, so diagnosing the pressure fault first prevents unnecessary replacement of oxygen sensors or intake parts.

Can I keep driving with P016F?

You can usually drive the vehicle to a repair shop, but avoid heavy acceleration, towing, or sustained high-speed driving because the engine may run lean and enter reduced-power mode. If the engine stalls, misfires badly, or the check engine light begins flashing, stop driving and arrange a tow.



Tools that help

- OBD-II scan tool with live fuel pressure and fuel trim data
- Fuel pressure test gauge kit
- Digital multimeter for circuit and voltage checks
- Fuel line disconnect tools
- Service information for fuel pressure specifications and pump control wiring

Reading P016F

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
1	Fuel and air metering.
6F	The exact fault within that area.

Often seen with

P0087 Fuel Rail/System Pressure - Too Low · **P0171** System Too Lean (Bank 1) · **P0172** System Too Rich (Bank 1) · **P0191** Fuel Rail Pressure Sensor Circuit Range/Performance · **P0230** Fuel Pump Primary Circuit Malfunction

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/p016f/>

