

CHRYSLER · POWERTRAIN

P1171

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1171 · Chrysler

Fuel System Lean During Acceleration

P1171 on Chrysler vehicles means the powertrain control module detected a lean fuel condition specifically while the engine was accelerating, based on oxygen sensor feedback showing more oxygen in the exhaust than the computer commanded. The code is set when the fuel trim correction needed to bring the air-fuel ratio back to stoichiometric exceeds the calibrated threshold during acceleration.

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

Symptoms you may notice

- Illuminated check engine light, often with no other symptoms besides the warning light
- Hesitation or a flat spot when accelerating from a stop or merging onto a highway
- Loss of power or sluggish acceleration under load
- Occasional engine stumble or misfire during hard acceleration
- Rough idle or unstable idle quality in some cases
- Reduced fuel economy if the lean condition persists

Common causes, most likely first

- 1 Vacuum leak from a cracked or disconnected intake hose, intake manifold gasket, or vacuum line
- 2 Dirty or failing mass airflow sensor reporting less air than actually enters the engine
- 3 Weak or failing fuel pump unable to deliver enough volume under acceleration demand
- 4 Clogged fuel filter or restricted fuel line reducing pressure during high-demand conditions
- 5 Leaking intake manifold gasket or throttle body gasket allowing unmetered air
- 6 Faulty upstream oxygen sensor biased lean or slow to respond
- 7 Leaking or stuck-open purge solenoid or EVAP system component admitting extra air



How to diagnose and fix it

- 1 Scan all stored and pending codes and record freeze-frame data to confirm the lean condition occurred during acceleration
- 2 Inspect the entire intake tract for vacuum leaks using a smoke machine or carburetor cleaner while watching fuel trims
- 3 Check fuel pressure and volume under load against Chrysler specifications, including a road test with a gauge taped to the windshield
- 4 Clean or test the mass airflow sensor and verify its reported airflow matches expected values at idle and during snap throttle
- 5 Inspect and test the upstream oxygen sensor for proper switching and response time
- 6 Verify the purge solenoid closes properly and does not leak vacuum into the intake at the wrong time
- 7 Repair the identified fault, clear codes, and perform a road test with live data to confirm fuel trims stay within specification during acceleration

What most technicians miss on P1171

- A vacuum leak that only opens under engine torque or vibration can set P1171 without ever showing up during a stationary idle test, so a road test with a smoke machine or live fuel trim monitoring is essential.
- A weak fuel pump that passes a static pressure test can still fail to deliver enough volume during acceleration, which is why volume testing under load matters more than a simple pressure gauge reading.
- Chrysler's lean acceleration code can be triggered by a dirty mass airflow sensor that reads slightly low without setting a mass airflow sensor code, so cleaning or graphing its output is a cheap first step.
- An exhaust leak upstream of the oxygen sensor can pull in outside air and fool the sensor into reporting a false lean condition, leading to unnecessary fuel system repairs.
- P1171 often appears alongside misfire or lean bank codes, and ignoring those companion codes can send you chasing the wrong system; always diagnose the full code set together.

Can I keep driving with P1171?

You can drive the vehicle short distances to a repair shop, but avoid hard acceleration, towing, or sustained high-speed driving because a persistent lean condition can overheat the catalytic converter and cause expensive damage. If the engine is misfiring or losing power noticeably, stop driving and have it towed.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Smoke machine for intake leak detection
- Fuel pressure gauge with a long hose for road testing
- Digital multimeter for sensor and circuit testing
- Carburetor cleaner or propane for quick vacuum leak checks
- Vacuum gauge for intake manifold vacuum testing



Reading P1171

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

Often seen with

P0171 System Too Lean (Bank 1) · **P0174** System Too Lean (Bank 2) · **P0300** Random/Multiple Cylinder Misfire Detected · **P0420** Catalyst System Efficiency Below Threshold (Bank 1) · **P0455** EVAP System Leak Detected (Large)

See it working

Watch the animated explainer [How a Helicopter Flies: Rotor and Tail in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1171/>

