

CHRYSLER · POWERTRAIN

P1216

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1216 · Chrysler

Fuel Solenoid Response Time Too Short

P1216 on Chrysler vehicles means the powertrain control module (PCM) commanded the fuel solenoid and measured a response time that was shorter than the calibrated minimum, indicating the solenoid reacted too quickly or the circuit is behaving abnormally. The PCM monitors the electrical and hydraulic response of the fuel solenoid circuit and flags this code when the measured time falls below the expected window.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air
metering (injector
circuits)

Symptoms you may notice

- Illumination of the check engine light, often with no other symptoms noticed by the driver
- Rough idle or unstable engine speed, especially when the fuel solenoid is actively controlling delivery
- Hesitation or stumble during acceleration as fuel delivery timing is affected
- Reduced fuel economy or a rich-running condition if the solenoid response is erratic
- Intermittent engine surging or shuddering at steady cruise speeds
- Hard starting or extended cranking in some cases where the solenoid response is consistently too fast

Common causes, most likely first

- 1 Faulty fuel solenoid with an internal short or stuck armature causing an abnormally fast response
- 2 Damaged or chafed wiring in the fuel solenoid control circuit creating a short to voltage or ground
- 3 Corroded or loose electrical connector at the fuel solenoid or PCM
- 4 PCM software calibration issue or internal driver fault causing incorrect response-time measurement
- 5 Contaminated or degraded fuel causing the solenoid valve to move too freely or stick briefly
- 6 Aftermarket or incorrect fuel solenoid installed that does not match Chrysler specifications



How to diagnose and fix it

- 1 Connect a scan tool and record all stored and pending codes, then clear codes and road-test to see if P1216 returns
- 2 Visually inspect the fuel solenoid connector and wiring harness for chafing, corrosion, or loose pins
- 3 Measure resistance across the fuel solenoid terminals and compare to Chrysler service specifications
- 4 Back-probe the solenoid control circuit at the PCM and check for shorts to voltage or ground with a multimeter
- 5 Check fuel quality and condition, and verify fuel pressure is within specification
- 6 If electrical checks pass, substitute a known-good fuel solenoid and retest the circuit response
- 7 If the code persists after all circuit and component checks, reprogram or replace the PCM per Chrysler service procedures

What the response-time window really means

- A response time that is too short often points to an electrical short in the control circuit rather than a failed solenoid, so harness inspection should come before parts replacement.
Technicians commonly misdiagnose P1216 as a fuel pump or injector problem because the symptoms overlap, but the code specifically monitors the fuel solenoid response time and not fuel pressure directly.
- Aftermarket fuel solenoids with different internal spring rates or coil resistance are a frequent cause of this code on older Chrysler vehicles because the PCM calibration expects the original response window.
- A weak or failing battery or charging system can cause voltage fluctuations that make the solenoid respond faster than expected, so always verify battery and charging system health first.
The PCM may set P1216 intermittently without storing any drivability symptoms, and clearing the code without addressing the root cause often leads to a comeback within a few drive cycles.

Can I keep driving with P1216?

You can usually drive the vehicle with P1216 set, but avoid aggressive acceleration and long trips until the fault is diagnosed, because an erratic fuel solenoid can cause drivability issues or increased emissions. If the engine runs rough, hesitates, or stalls, stop driving and have the vehicle inspected promptly.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter with back-probe pins
- Chrysler service information for circuit specifications
- Fuel pressure gauge
- Basic hand tools for connector and component access



Reading P1216

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

Often seen with

P1215 Cylinder 3 Fuel Injector Circuit Short To B+ · **P1217** Cylinder 5 Fuel Injector Circuit Short To B+ · **P1217** Engine Over Temperature Overheat · **P1215** Fuel Injector 3 Circuit High Voltage · **P1215** Ground Fault Detection Indicated · **P1217** Fuel Solenoid Response Time Too Long · **P1215** Pedal Position Sensor C Circuit Low Input · **P1217** Pedal Position Sensor C Circuit Intermittent · **P1215** Ground Fault Detection Indicated · **P1217** Fuel Solenoid Response Time Too Long · **P0087** Fuel Rail/System Pressure - Too Low · **P0093** Fuel System Leak Detected - Large Leak · **P0251** Injection Pump Fuel Metering Control 'A' (Cam/Rotor/Injector

See it working

Watch the animated explainer [Turbocharger Trainer: Boost, Wastegate and Intercooler](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1216/>

