

CHRYSLER · POWERTRAIN

P1380

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1380 · Chrysler

Misfire Detected Rough Road Data Not Available

P1380 on Chrysler vehicles means the powertrain control module (PCM) has detected a misfire condition but cannot confirm whether the road surface is rough enough to cause false misfire readings. The PCM relies on a rough road signal from the anti-lock brake system (ABS) module or a dedicated sensor, and when that data is missing, it stores this code and may disable misfire detection to protect the catalytic converter.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system and misfire

Symptoms you may notice

- Malfunction indicator lamp (MIL) illuminated on the dashboard, often with no other noticeable symptoms
- Engine may run rough or stumble if an actual misfire is present alongside the missing rough road data
- Reduced fuel economy or slight loss of power if the PCM defaults to a conservative strategy
- Possible hesitation or surging during acceleration on uneven road surfaces
- Other ABS or traction control warning lights may illuminate if the root cause is in the ABS system
- In some cases, the engine may enter limp mode or limit RPM if the PCM cannot verify misfire status

Common causes, most likely first

- 1 Faulty or disconnected rough road sensor (if equipped) or damaged wiring to the sensor
- 2 ABS module failure or loss of communication between the ABS module and the PCM over the controller area network (CAN) bus
- 3 Wheel speed sensor fault causing the ABS module to withhold rough road data
- 4 Open or shorted circuit in the rough road signal wire between the ABS module and PCM
- 5 Corroded or loose grounds affecting the ABS module or PCM communication
- 6 Software calibration issue in the PCM or ABS module requiring a flash update
- 7 Failed PCM (rare, but possible if all other circuits test good)



How to diagnose and fix it

- 1 Connect a scan tool and check for additional ABS, body, or communication codes that may point to the root cause
- 2 Inspect the wiring and connectors at the ABS module, rough road sensor (if equipped), and PCM for corrosion or damage
- 3 Test the rough road sensor signal circuit for continuity and proper voltage according to the factory service information
- 4 Verify CAN bus communication between the ABS module and PCM using a scan tool or oscilloscope
- 5 Check all grounds and power feeds to the ABS module and PCM, cleaning and tightening as needed
- 6 Reprogram the PCM and ABS module with the latest calibration if a technical service bulletin (TSB) applies
- 7 Replace the faulty ABS module, rough road sensor, or PCM only after all other tests pass

Rough road data comes from the ABS module

- Many technicians replace the PCM when the real fault is a failing ABS module or a bad wheel speed sensor that prevents rough road data from being broadcast.
- A dirty or damaged wheel speed sensor can cause the ABS module to stop sending rough road information without setting an ABS code, so always inspect sensor tone rings and connectors.
- P1380 often appears after battery replacement or low voltage events that disrupt module communication, so clearing codes and rechecking after a full battery charge is a smart first step.
- On some Chrysler models, the rough road signal is derived from the ABS wheel speed sensors rather than a dedicated sensor, so a mismatch in tire size or pressure can trigger this code.
- This code does not always mean the engine is misfiring; it can be set by a communication glitch alone, so avoid replacing ignition components until you verify actual misfire data with a scan tool.

Can I keep driving with P1380?

You can usually drive the vehicle with P1380 set, but avoid aggressive acceleration and towing until the fault is repaired because the PCM may not detect a real misfire that could damage the catalytic converter. If the engine runs rough or the check engine light flashes, stop driving and seek service immediately.

Tools that help

- OBD-II scan tool with ABS and manufacturer-specific capabilities
- Digital multimeter (DMM)
- Oscilloscope for CAN bus and signal analysis
- Factory service information or wiring diagrams
- Basic hand tools for connector and sensor inspection



Reading P1380

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

Often seen with

P0300 Random/Multiple Cylinder Misfire Detected · **P0301** Cylinder 1 Misfire Detected · **P0302** Cylinder 2 Misfire Detected · **P0500** Vehicle Speed Sensor Malfunction · **U0121** Lost Communication With Anti-Lock Brake System (ABS) Control

See it working

Watch the animated explainer [Four-Stroke Engine Cutaway: Intake to Exhaust](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1380/>

