

CHRYSLER · POWERTRAIN

P1105

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1105 · Chrysler

Open Or Shorted Condition Detected In The Baro Read Solenoid Control Circuit

P1105 on Chrysler vehicles means the powertrain control module (PCM) has detected an open or shorted condition in the electrical circuit that controls the barometric pressure read solenoid. The PCM monitors the solenoid's control wire for expected voltage changes and flags the code when the circuit does not respond as designed, which can affect how the engine calculates fuel and spark under changing altitude or barometric pressure.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or poor driveability at high altitude or during sudden weather changes
- Slightly reduced fuel economy or sluggish acceleration
- Intermittent hesitation or stumble when the PCM attempts to update barometric pressure
- Failed emissions test due to the stored code and possible readiness monitor issues

Common causes, most likely first

- 1 Damaged or disconnected barometric pressure read solenoid connector
- 2 Broken, chafed, or corroded wire in the solenoid control circuit
- 3 Failed barometric pressure read solenoid (open or shorted internally)
- 4 Corroded or loose PCM connector pins at the solenoid control terminal
- 5 Internal PCM driver failure for the solenoid control circuit
- 6 Rodent damage or moisture intrusion in the wiring harness near the solenoid



How to diagnose and fix it

- 1 Inspect the barometric pressure read solenoid connector for looseness, corrosion, or pushed-out pins and repair as needed
- 2 Check the solenoid control circuit for continuity to ground and for shorts to voltage using a digital multimeter
- 3 Measure the solenoid's resistance and compare it to the manufacturer's specification to confirm it is not open or shorted
- 4 Wiggle-test the harness while monitoring solenoid resistance or circuit voltage to expose intermittent faults
- 5 Verify power and ground at the solenoid with the key on, then check the control wire back to the PCM for continuity
- 6 If the circuit and solenoid test good, substitute a known-good solenoid and clear the code to see if it returns
- 7 As a last step, inspect the PCM connector and driver circuit, and replace the PCM only after all other causes are ruled out

What the baro read solenoid really does

- Many Chrysler vehicles use the barometric pressure read solenoid to switch between atmospheric pressure and manifold pressure sources, so a fault can cause altitude-related fuel trim errors that do not set a misfire code.
- A common misdiagnosis is replacing the PCM when the actual problem is a chafed control wire behind the engine block or near the exhaust manifold where heat damage is hidden.
- The solenoid can test good on a bench but fail intermittently when hot, so a wiggle test and heat soak test are more reliable than a single resistance reading.
- P1105 can be set by a poor ground connection at the solenoid mounting bolt even when the control circuit itself is intact, so always verify the ground path.
- Drivers often ignore this code because the vehicle seems to run fine, but the PCM may default to a calculated barometric pressure that degrades fuel economy and emissions over time.

Can I keep driving with P1105?

You can usually continue driving with P1105 because the engine will default to a calculated barometric pressure value, but avoid sustained high-altitude driving or heavy towing until the fault is repaired. If you notice rough running, hesitation, or reduced power, have the vehicle diagnosed promptly to prevent further driveability issues.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wire piercing probes or back-probe kit
- Electrical contact cleaner
- Factory service information for circuit diagrams and resistance specifications



Reading P1105

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

Often seen with

P1107 Oxygen Sensor Heating Circuit Bank 2 Sensor 1 Short To B+ · **P1106** Oxygen Sensor Circuit Bank 2 Sensor 1 Voltage Too Low/Air Le · **P1106** Engine Torque Control Signal 2 Circuit Malfunction · **P1107** AIR System Diagnosis Solenoid Circuit Fault · **P1106** BARO Circuit Range Performance Malfunction · **P1107** BARO Circuit Low Input · **P1106** BARO Circuit Range Performance Malfunction · **P1107** BARO Circuit Low Input · **P1106** MAP Sensor Circuit Voltage Intermittent · **P1107** MAP Sensor Voltage Intermittent Low · **P1106** Dual Alternator Lower Fault Manifold Absolute Pressure (MAP) · **P1107** Dual Alternator Lower Circuit Malfunction · **P1106** MAP Sensor Circuit Intermittent High Voltage · **P1107** MAP Sensor Circuit Intermittent Low Voltage · **P0106** MAP/Barometric Pressure Circuit Range/Performance · **P0108** MAP/Barometric Pressure Circuit High Input · **P0107** MAP/Barometric Pressure Circuit Low Input

See it working

Watch the animated explainer [How Misfire Detection Works: Crankshaft Speed](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1105/>

