

CHRYSLER · POWERTRAIN

P1406

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1406 · Chrysler

EGR Valve Pintle Position Circuit

P1406 on Chrysler vehicles means the engine computer has detected a problem with the electrical circuit that reports the EGR (exhaust gas recirculation) valve pintle position. The computer compares the pintle position sensor signal against expected values and flags the code when the voltage or resistance falls outside the valid range.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

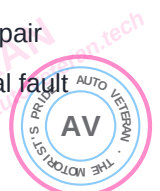
- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or stalling after the engine warms up
- Surging or hesitation during light-throttle acceleration
- Poor fuel economy or increased emissions
- A slight decrease in engine performance at cruising speed
- Occasional pinging or spark knock under load

Common causes, most likely first

- 1 Faulty EGR valve pintle position sensor or the valve assembly itself
- 2 Damaged or corroded wiring harness at the EGR valve connector
- 3 Loose or backed-out pins in the EGR valve electrical connector
- 4 Open or shorted circuit in the pintle position signal wire
- 5 Carbon buildup on the EGR valve pintle preventing proper movement
- 6 Failed engine computer driver circuit for the EGR position sensor

How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm the code is current and not a history code
- 2 Visually inspect the EGR valve connector and wiring for corrosion, chafing, or loose pins
- 3 Measure resistance and voltage on the pintle position sensor circuit and compare to Chrysler specifications
- 4 Remove the EGR valve and check the pintle for carbon buildup or mechanical binding
- 5 Test the pintle position sensor with a scan tool while manually moving the valve to verify smooth signal changes
- 6 Replace the EGR valve assembly if the sensor or pintle is faulty, then clear codes and verify the repair
- 7 If the circuit tests good and the valve is new, check the engine computer driver circuit for an internal fault



What most technicians miss on P1406

- A sticking pintle caused by carbon buildup often sets P1406 without any driveability complaint, so the valve should be removed and inspected before any electrical parts are replaced.
- The pintle position sensor is frequently integrated into the EGR valve on Chrysler engines, meaning a failed sensor requires replacing the entire valve assembly rather than a separate sensor.
- Corroded terminals inside the EGR valve connector can mimic a failed sensor, so always perform a loaded voltage drop test on the signal wire rather than trusting a simple unplugged resistance check.
- P1406 can be set by a momentary glitch in the sensor signal that does not repeat, so clearing the code and test-driving under the same conditions as the freeze-frame data is essential before condemning parts.
- A vacuum leak or exhaust restriction elsewhere in the EGR system can cause the pintle to travel outside its expected range and trigger P1406 even when the valve and wiring are healthy.

Can I keep driving with P1406?

You can usually continue driving with P1406 because the engine will default to a safe EGR strategy, but avoid long trips or heavy loads until the fault is repaired. Prolonged driving with a faulty EGR circuit can increase emissions and may lead to rough running or stalling in some conditions.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with back-probing pins
- Wire terminal pick and electrical contact cleaner
- Hand tools for EGR valve removal (ratchet, sockets, extensions)
- Vacuum pump or hand-held vacuum gauge for testing EGR operation

Reading P1406

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Chrysler): its meaning depends on the make.
4	Auxiliary emission controls.
06	The exact fault within that area.

Often seen with

P0401 EGR Flow Insufficient Detected · **P0403** EGR Circuit Malfunction · **P0404** EGR Circuit Range/Performance · **P0405** EGR Sensor A Circuit Low · **P0406** EGR Sensor A Circuit High



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-p1406/>

