

CHRYSLER · POWERTRAIN

P1305

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1305 · Chrysler

Ignition Coil 2 Primary Feedback Circuit

P1305 on a Chrysler vehicle means the powertrain control module (PCM) has detected a fault in the primary feedback circuit for ignition coil number 2, which is the low-voltage signal the PCM uses to command the coil to fire and to confirm the coil actually fired. The PCM monitors the voltage on this circuit and sets the code when the feedback does not match what it expects during engine operation.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system
and misfire

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms besides the warning light
- A noticeable engine misfire or rough running condition, especially under load or acceleration
- Reduced engine power or a limp-home mode if the misfire is severe enough to trigger protective strategies
- Shaking or vibration felt through the steering wheel or seat at idle
- A flashing check engine light in severe cases, indicating a misfire that could damage the catalytic converter
- Slightly worse fuel economy or a faint raw-fuel smell from the exhaust if the misfire is persistent

Common causes, most likely first

- 1 A failed ignition coil on cylinder 2, where the primary winding or internal feedback circuitry has opened or shorted
- 2 Damaged or corroded wiring and connector terminals between the PCM and the coil 2 primary circuit
- 3 A chafed or open wire in the coil 2 primary feedback circuit, often caused by heat, vibration, or rodent damage
- 4 A faulty powertrain control module (PCM) driver or feedback sensing circuit, though this is less common
- 5 Poor electrical connections at the coil pack or at the PCM harness, including loose pins or water intrusion
- 6 A short to ground or short to voltage on the feedback wire that corrupts the signal the PCM expects to see



How to diagnose and fix it

- 1 Inspect the ignition coil 2 connector and the PCM harness connector for corrosion, loose pins, or water intrusion, and clean or repair as needed
- 2 Perform a visual inspection of the coil 2 primary circuit wiring for chafing, burns, or rodent damage along the harness route
- 3 Use a digital multimeter to check the resistance of the coil 2 primary winding and compare it to the manufacturer's specification
- 4 Back-probe the feedback circuit at the PCM and at the coil while cranking or running the engine to verify the signal is present and correct
- 5 Swap ignition coil 2 with a known-good coil from another cylinder and see if the code follows the coil or stays with the cylinder
- 6 Check for continuity and short-to-ground or short-to-voltage on the feedback wire between the coil and the PCM, repairing the harness if faulty
- 7 If all wiring and the coil test good, follow the manufacturer's diagnostic flow for PCM driver testing before condemning the PCM

What the feedback circuit really tells you

- The primary feedback circuit is not the same as the secondary ignition circuit, so a coil that fires a strong spark can still set P1305 if its internal feedback signal is faulty.
- A misfire that moves to a different cylinder after swapping coils confirms the coil is at fault, but a code that stays on cylinder 2 points to wiring or the PCM driver.
- Chrysler coil packs on some engines share a common power feed, so a single bad coil can sometimes affect the feedback signal of another coil if the shared circuit is compromised.
- Heat and vibration commonly crack the insulation on the feedback wire near the coil connector, causing an intermittent code that only appears after the engine warms up.
- Do not replace the PCM based on P1305 alone; the feedback circuit is a low-current signal that is easily disturbed by a poor ground or a weak battery.

Can I keep driving with P1305?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or sustained high-speed driving because a persistent misfire can overheat and damage the catalytic converter. If the check engine light is flashing, stop driving and have the vehicle towed.



Tools that help

- OBD-II scan tool with live data and misfire counter capability
- Digital multimeter with back-probe pins
- Factory service information or wiring diagram for the specific Chrysler model
- Basic hand tools for coil removal and connector access
- Test light or logic probe for quick circuit checks

Reading P1305

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

Often seen with

P1300 Misfire Detected Fuel Level Too Low · **P1300** Igniter Circuit Malfunction No 1 · **P1301** Fire Due To Increased Exhaust Temperature · **P1301** Cylinder 1 Misfire · **P1304** Cylinder 4 Misfire · **P1303** Cylinder 3 Misfire · **P1302** Cylinder 2 Misfire · **P1300** Random Misfire · **P1300** Ignition Timing Adjustment Circuit · **P1301** Cylinder 1 Misfire · **P1302** Cylinder 2 Misfire · **P1300** Random Misfire · **P1303** Cylinder 3 Misfire · **P1304** Cylinder 4 Misfire · **P1300** Ignition Coil 1 Primary Feedback Circuit · **P1301** Boost Calibration High · **P1302** Boost Calibration Low · **P1303** EGR Calibration Fault · **P1304** EGR Calibration High · **P1300** Boost Calibration Fault · **P1300** Ignitor Circuit

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-p1305/>

