

CHRYSLER · POWERTRAIN

P1354

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1354 · Chrysler

IC Output High Pulse Detected When Grounded Cyl 4

P1354 on Chrysler vehicles means the engine computer detected an unexpected high voltage pulse on the ignition coil output circuit for cylinder 4 while that circuit was commanded to ground. The coil driver inside the computer or the wiring to the coil is not pulling the circuit low as expected, so the computer flags the cylinder 4 ignition output as faulty.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system and misfire

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Engine misfire or rough running, especially under load or at idle
- Reduced engine power or limp mode in some Chrysler models
- Shaking or vibration felt through the steering wheel or seat
- Poor fuel economy or a strong fuel smell from the exhaust
- Hard starting or intermittent stalling when the fault is active

Common causes, most likely first

- 1 Faulty ignition coil on cylinder 4 with an internally shorted or open primary winding
- 2 Damaged or chafed wiring between the powertrain control module (PCM) and the cylinder 4 coil
- 3 Corroded or loose connector pins at the coil or PCM harness
- 4 Failed ignition coil driver inside the PCM
- 5 Aftermarket or incorrect coil with wrong primary resistance
- 6 Moisture intrusion into the coil connector or spark plug well

How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data for P1354
- 2 Inspect the cylinder 4 coil connector and harness for corrosion, chafing, or loose pins
- 3 Swap the cylinder 4 ignition coil with a known-good coil from another cylinder and recheck the code
- 4 Measure primary and secondary resistance of the cylinder 4 coil and compare to specification
- 5 Back-probe the coil control circuit at the PCM and check for a short to voltage or an open circuit
- 6 Check the PCM ground and power feeds, then test the driver circuit with a noid light or oscilloscope
- 7 Replace the faulty coil, repair the harness, or reprogram or replace the PCM as the final step



What the coil driver test really shows

- A P1354 can set from a coil that tests fine cold but breaks down when hot, so always test the coil after a road test that reproduces the misfire.
- The code name refers to the computer's internal driver, but the most common real-world cause is still the coil or its connector, not the PCM itself.
- Chrysler PCMs are sensitive to aftermarket coils with incorrect resistance, and a new but wrong-spec coil can set P1354 immediately after installation.
- A shorted coil on cylinder 4 can damage the PCM driver over time, so replacing only the coil without checking the driver circuit risks a repeat failure.
- P1354 often appears alongside misfire codes for cylinder 4, and diagnosing only the misfire without checking the coil control circuit can lead to unnecessary spark plug or injector replacement.

Can I keep driving with P1354?

You can usually drive a short distance to a repair shop, but avoid heavy acceleration and long trips because a persistent misfire can overheat the catalytic converter and waste fuel. If the engine is shaking badly or flashing the check engine light, stop driving and have it towed.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with resistance and voltage scales
- Oscilloscope or noid light for coil driver testing
- Basic hand tools for coil and connector removal
- Wiring diagram for the specific Chrysler model

Reading P1354

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



Often seen with

P1351 VVT Sensor Range Performance Problem Bank 2 · **P1351** Injection Sensor Circuit · **P1352** Needle Lift Sensor · **P1353** Ignition Coil B Primary Circuit · **P1351** Ignition Diagnostic Monitor Signal Lost To PCM Or Out Of Ran · **P1352** Ignition Coil A Primary Circuit · **P1353** IC Output High Pulse Detected When Grounded Cyl 3 · **P1351** Ignition Control Circuit Voltage High · **P1352** IC Output High Pulse Detected When Grounded Cyl 2 · **P1353** Ignition Coil B Primary Circuit Fault · **P1351** Ignition Diagnostic Monitor Circuit Input Fault · **P1352** Ignition Coil A Primary Circuit Fault · **P1352** IC Output High Pulse Detected When Grounded Cyl 2 · **P1353** IC Output High Pulse Detected When Grounded Cyl 3 · **P1351** IC Circuit High Voltage · **P1353** Misfire Cylinder 6 With Fuel Cut-off · **P1352** Misfire During Start Cylinder 6 · **P1351** Misfire Cylinder 5 With Fuel Cut-off · **P0304** Cylinder 4 Misfire Detected · **P0354** Ignition Coil D Primary/Secondary Circuit Malfunction

See it working

Watch the animated explainer [How a Car Thermostat Works: Wax Pellet and Cooling Fan](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1354/>

