

CHRYSLER · POWERTRAIN

P1356

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1356 · Chrysler

IC Output High Pulse Detected When Grounded Cyl 6

P1356 on Chrysler vehicles means the powertrain control module (PCM) commanded the ignition coil for cylinder 6 to fire, but it detected a high-voltage pulse on the coil control circuit when that circuit was supposed to be grounded. The computer saw an unexpected electrical spike on the cylinder 6 coil driver circuit during the dwell period, indicating a fault in the coil, wiring, or PCM driver.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system and misfire

Symptoms you may notice

- Check engine light (malfunction indicator lamp) illuminated, often with no other symptoms
- Rough idle or misfire felt as a shake or stumble, especially when the engine is cold
- Reduced engine power or hesitation during acceleration
- Increased fuel consumption due to incomplete combustion
- Possible flashing check engine light if the misfire is severe enough to damage the catalytic converter
- In some cases, the engine may stall or be hard to start

Common causes, most likely first

- 1 Faulty ignition coil on cylinder 6 (internal short or open in the primary winding)
- 2 Damaged or chafed wiring in the coil control circuit between the PCM and the coil
- 3 Corroded or loose electrical connector at the cylinder 6 ignition coil
- 4 Failed PCM driver for the cylinder 6 coil control circuit (rare but possible)
- 5 Electrical interference from a nearby component, such as a failing spark plug wire or alternator
- 6 Poor engine ground connection causing voltage spikes on the coil control circuit



How to diagnose and fix it

- 1 Inspect the cylinder 6 ignition coil connector and wiring for corrosion, chafing, or loose pins; repair as needed
- 2 Swap the cylinder 6 ignition coil with a known-good coil from another cylinder and see if the code moves to that cylinder
- 3 Use a digital multimeter to check the resistance of the cylinder 6 coil primary and secondary windings against factory specifications
- 4 Check for voltage spikes or abnormal signals on the coil control circuit using an oscilloscope while cranking or running the engine
- 5 Verify the integrity of the engine ground straps and battery connections, cleaning and tightening as necessary
- 6 If all external components test good, suspect the PCM and perform a driver circuit test or substitute with a known-good PCM for diagnosis
- 7 After repairs, clear the code and perform a road test to confirm the fault does not return

Don't overlook the coil driver circuit

- A high pulse on a grounded circuit often points to an induced voltage spike from a failing spark plug or coil boot, which can mimic a coil failure without the coil being defective.
- The code can be set intermittently by a loose ground connection at the engine block, so always check ground straps before condemning the PCM.
- Swapping coils is a quick diagnostic step, but if the code stays on cylinder 6, the problem is almost always in the wiring or PCM driver, not the coil itself.
- Some aftermarket ignition coils have different electrical characteristics that can trigger this code even when they function, so stick with OEM-quality replacements.
- A failing camshaft or crankshaft sensor can cause timing errors that lead to false cylinder 6 coil codes, so check for related codes before replacing parts.

Can I keep driving with P1356?

You can usually drive with P1356, but avoid heavy acceleration and long trips until it is diagnosed, 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 to a repair shop.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope (for advanced signal analysis)
- Socket set and wrenches for coil removal
- Electrical contact cleaner and dielectric grease



Reading P1356

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

Often seen with

P1355 Cylinder 1 Ignition Circuit Open · **P1357** Cylinder 1 Ignition Circuit Short To Ground · **P1355** IC Output High Pulse Detected When Grounded Cyl 5 · **P1357** IC Output High Pulse Detected When Grounded Cyl 7 · **P1355** Ignition Coil D Primary Circuit Fault · **P1357** Ignition Diagnostic Monitor Pulswidth Not Defined · **P1355** IC Output High Pulse Detected When Grounded Cyl 5 · **P1357** IC Output High Pulse Detected When Grounded Cyl 7 · **P1355** Misfire Cylinder 7 With Fuel Cut-off · **P1357** Misfire Cylinder 8 With Fuel Cut-off · **P0300** Random/Multiple Cylinder Misfire Detected · **P0306** Cylinder 6 Misfire Detected · **P0356** Ignition Coil 'F' Primary/Secondary Circuit

See it working

Watch the animated explainer [How a Coolant Temperature Sensor Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1356/>

