

VOLKSWAGEN · POWERTRAIN

P1356

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1356 · Volkswagen

Cylinder 1 Ignition Circuit Short To B+

P1356 on Volkswagen vehicles means the engine control module (ECM) has detected a short to battery voltage on the ignition coil circuit for cylinder 1. The ECM commands the coil to fire but sees voltage on the control wire that is higher than expected, indicating the wire is touching a power source or the coil has an internal fault.

SYSTEM

Powertrain

CODE TYPE

Volkswagen
specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Ignition system
and misfire

Symptoms you may notice

- Check engine light illuminated, often with no other noticeable symptoms
- Engine misfire or rough running, especially under load or acceleration
- Reduced engine power or limp mode in some models
- Shaking or vibration from the engine bay
- Difficulty starting or intermittent stalling
- Poor fuel economy or increased emissions

Common causes, most likely first

- 1 Faulty ignition coil for cylinder 1 with an internal short to battery voltage
- 2 Chafed or damaged wiring harness between the ECM and ignition coil, shorting to a power wire
- 3 Corroded or loose electrical connector at the ignition coil or ECM
- 4 Failed engine control module (ECM) driver circuit for cylinder 1
- 5 Aftermarket or incorrectly installed alarm/remote start wiring tapping into the ignition circuit
- 6 Moisture intrusion into the coil connector or wiring loom

How to diagnose and fix it

- 1 Scan all modules for stored codes and check freeze-frame data to confirm the fault is current
- 2 Inspect the ignition coil connector and wiring for corrosion, chafing, or loose pins
- 3 Swap the cylinder 1 ignition coil with another cylinder and see if the code moves
- 4 Measure resistance and voltage on the coil control wire from the ECM to the coil, looking for a short to battery voltage
- 5 Check for aftermarket wiring or accessories that may have been spliced into the ignition circuit
- 6 If wiring and coil are good, test the ECM driver circuit with an oscilloscope or known-good ECM
- 7 Repair or replace the faulty component and clear codes, then verify the repair with a road test



Before you replace the ignition coil

- A short to battery voltage on the coil control wire is often caused by a pinched harness where it rubs against the engine cover or intake manifold, not by the coil itself.
- Volkswagen coils from certain production periods are known for internal shorts that can set this code without any driveability complaint, so a simple swap test is more reliable than guessing.
- Aftermarket alarm or remote start installations frequently tap into the ignition coil wiring and can create a short to power that triggers P1356.
- The ECM driver for cylinder 1 can fail and hold the control wire high, mimicking a wiring short, so always verify the wire before condemning the module.
- This code can be stored intermittently by water intrusion into the coil connector after engine washing or heavy rain, so check for green corrosion on the pins.

Can I keep driving with P1356?

You can drive the vehicle short distances to a repair shop, but avoid hard acceleration and heavy loads because a misfiring cylinder can overheat the catalytic converter. If the engine is running very rough or flashing the check engine light, stop driving and have it towed.

Tools that help

- OBD-II scan tool with Volkswagen-specific software
- Digital multimeter
- Oscilloscope (for ECM driver testing)
- Wire piercing probes and back-probe kit
- Torque wrench and socket set

Reading P1356

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



Often seen with

P1358 Cylinder 2 Ignition Circuit Open · **P1355** Cylinder 1 Ignition Circuit Open · **P1357** Cylinder 1 Ignition Circuit Short To Ground · **P1358** Ignition Diagnostic Monitor Signal Out Of Self Test Range · **P1358** IC Output High Pulse Detected When Grounded Cyl 8 · **P1355** IC Output High Pulse Detected When Grounded Cyl 5 · **P1357** IC Output High Pulse Detected When Grounded Cyl 7 · **P1357** Ignition Diagnostic Monitor Pulswidth Not Defined · **P1358** Ignition Diagnostic Monitor Signal Out of Self-Test Range · **P1355** Ignition Coil D Primary Circuit Fault · **P1357** IC Output High Pulse Detected When Grounded Cyl 7 · **P1358** IC Output High Pulse Detected When Grounded Cyl 8 · **P1355** IC Output High Pulse Detected When Grounded Cyl 5 · **P1357** Misfire Cylinder 8 With Fuel Cut-off · **P1358** Misfire During Start Cylinder 9 · **P1355** Misfire Cylinder 7 With Fuel Cut-off · **P0301** Cylinder 1 Misfire Detected · **P0351** Ignition Coil A Primary/Secondary Circuit Malfunction

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/volkswagen-p1356/>

