

BMW · POWERTRAIN

P1365

 OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1365 · BMW

Misfire Cylinder 12 With Fuel Cut-off

P1365 on a BMW indicates that the engine control module has detected a misfire on cylinder 12 and has cut off fuel delivery to that cylinder to protect the catalytic converter from unburned fuel. The misfire is severe enough that the computer commanded a fuel cut-off, which is why the code specifically mentions fuel cut-off.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	BMW specific	High	Professional	Ignition system and misfire

Symptoms you may notice

- Rough idle or shaking, especially noticeable when the engine is cold or under load.
- Noticeable loss of power and reduced acceleration, as one cylinder is not contributing.
- The check engine light may be flashing if the misfire is severe enough to risk catalyst damage.
- Often no symptoms besides the warning light, especially if the misfire is intermittent or only occurs under specific conditions.
- Possible fuel smell from the exhaust if the fuel cut-off is not complete or if unburned fuel reaches the exhaust.
- In some cases, the engine may enter limp mode, limiting speed and RPM.

Common causes, most likely first

- 1 Faulty ignition coil or spark plug on cylinder 12.
- 2 Fuel injector failure or clogging on cylinder 12, causing a lean or rich condition.
- 3 Vacuum leak at the intake manifold near cylinder 12, leading to a lean misfire.
- 4 Low compression due to worn piston rings, valves, or head gasket issues on cylinder 12.
- 5 Wiring or connector issues to the ignition coil or fuel injector for cylinder 12.
- 6 Mechanical valvetrain problems such as a collapsed lifter or worn camshaft lobe on cylinder 12.
- 7 Engine control module software or hardware fault, though rare, misinterpreting misfire signals.



How to diagnose and fix it

- 1 Perform a visual inspection of the ignition coil, spark plug, and fuel injector connectors on cylinder 12 for damage or corrosion.
- 2 Swap the ignition coil and spark plug from cylinder 12 with a known good cylinder to see if the misfire moves, confirming a faulty component.
- 3 Use a spark tester to check for strong spark on cylinder 12; if weak or absent, diagnose the ignition circuit.
- 4 Check fuel injector operation with a noid light or by listening with a stethoscope; if faulty, test the injector resistance and wiring.
- 5 Run a compression test on cylinder 12 and compare with other cylinders to rule out mechanical issues.
- 6 Perform a leak-down test if compression is low to pinpoint valve or ring problems.
- 7 If all else checks out, inspect the engine control module wiring and consider software updates or module replacement as a last resort.

Cylinder 12 misfire: often overlooked causes

- Cylinder 12 is typically the last cylinder in a V12 engine, and its location at the rear of the engine bay can make access difficult, leading to overlooked maintenance like spark plug replacement.
- A fuel cut-off code does not always mean the injector is bad; the computer cuts fuel to protect the catalytic converter, so the root cause could be ignition or mechanical.
- Vacuum leaks at the intake manifold gasket near cylinder 12 are common on older BMW V12 engines and can cause a lean misfire that mimics a faulty injector.
- Wiring harness damage from heat or chafing is a frequent culprit on high-mileage BMWs, especially at the back of the engine where access is tight.
- A misfire on cylinder 12 can sometimes be caused by a failing crankshaft position sensor or reluctor ring, leading to incorrect misfire detection.

Can I keep driving with P1365?

Driving with a severe misfire can damage the catalytic converter and cause further engine damage, so it is best to avoid driving until diagnosed. If the check engine light is flashing, stop driving immediately and have the vehicle towed to a repair shop.

Tools that help

- OBD-II scanner with BMW-specific software
- Digital multimeter
- Spark tester
- Compression tester
- Noid light
- Mechanic's stethoscope



Reading P1365

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

Often seen with

P1366 Cylinder 4 Ignition Circuit Short To Ground · **P1355** Cylinder 1 Ignition Circuit Open · **P1364** Cylinder 4 Ignition Circuit Open · **P1366** TDC2 Sensor Intermittent · **P1364** Ignition Coil Primary Circuit · **P1366** Ignition Coil Cylinder 6 No Activation · **P1364** Ignition Coil Cylinder 4 No Activation · **P1366** TDC2 Sensor Intermittent · **P1364** IC Cylinder 4 Not Toggling After Enable · **P1366** IC Cylinder 6 Not Toggling After Enable · **P1355** IC Output High Pulse Detected When Grounded Cyl 5 · **P1364** Ignition Coil Primary Circuit Fault · **P1355** Ignition Coil D Primary Circuit Fault · **P1364** IC Cylinder 4 Not Toggling After Enable · **P1366** IC Cylinder 6 Not Toggling After Enable · **P1355** IC Output High Pulse Detected When Grounded Cyl 5 · **P1364** Misfire During Start Cylinder 12 · **P1355** Misfire Cylinder 7 With Fuel Cut-off · **P0300** Random/Multiple Cylinder Misfire Detected · **P0301** Cylinder 1 Misfire Detected

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/bmw-p1365/>

