



P1342 · BMW

Misfire During Start Cylinder 1

P1342 on BMW vehicles means the engine control module detected a misfire specifically during the startup phase on cylinder 1, typically within the first few hundred revolutions after cranking. The computer monitors crankshaft speed fluctuations and flags this code when cylinder 1 fails to contribute its expected power during that initial firing window, even if the engine runs smoothly once warmed up.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	BMW specific	Medium	Intermediate	Ignition system and misfire

Symptoms you may notice

- Rough idle or shaking immediately after a cold start that often clears within seconds
- A flashing or steady check engine light, sometimes accompanied by reduced engine power
- Noticeable hesitation or stumble when cranking, especially in cold weather
- Occasional hard starting or extended crank time before the engine catches
- Often no symptoms besides the warning light once the engine is running normally

Common causes, most likely first

- 1 Faulty or fouled spark plug on cylinder 1, especially from oil or carbon deposits
- 2 Weak or failing ignition coil on cylinder 1 that breaks down under cold, damp startup conditions
- 3 Leaking or clogged fuel injector on cylinder 1 causing an incorrect air-fuel mixture during cold start
- 4 Intake manifold gasket leak or vacuum leak near cylinder 1 that leans out the mixture only when cold
- 5 Low compression on cylinder 1 from worn rings, valve seats, or a sticking valve
- 6 Carbon buildup on intake valves, a common BMW issue that disrupts cold-start mixture on direct-injection engines
- 7 Faulty engine coolant temperature sensor sending an incorrect cold-start signal to the engine control module



How to diagnose and fix it

- 1 Scan all modules for stored and pending fault codes, then record freeze-frame data to confirm the misfire occurs only during startup
- 2 Inspect the cylinder 1 spark plug for fouling, wear, or incorrect gap and replace it if worn or contaminated
- 3 Swap the cylinder 1 ignition coil with a known-good coil from another cylinder and recheck for a code change to isolate a weak coil
- 4 Perform a cold-start fuel trim and injector balance test to check for a leaking or clogged injector on cylinder 1
- 5 Run a compression test and, if low, a cylinder leak-down test on cylinder 1 to rule out mechanical faults
- 6 Smoke-test the intake system for vacuum leaks near cylinder 1 and inspect the intake manifold gasket
- 7 Check the engine coolant temperature sensor reading against actual ambient temperature when cold and replace if skewed

Cold-start misfires that hide when warm

- A P1342 that only appears on the first start of the day often points to a coil or plug that breaks down under cold, damp conditions rather than a failed component that would misfire constantly.
- BMW direct-injection engines commonly develop carbon buildup on intake valves, which can cause a startup misfire on one cylinder even when the plug and coil test good.
- Technicians sometimes replace all coils and plugs only to find the real cause is a slightly leaking injector that drips fuel into cylinder 1 overnight and fouls the plug on the first start.
- A weak battery or slow cranking can trigger a startup misfire code because the engine control module sees inconsistent crankshaft speed during the first few revolutions, so always check battery health and cranking voltage.
- This code does not always mean the misfire continues once the engine is running; if the misfire counter stops after startup, focus diagnosis on cold-start enrichment and ignition components rather than a constant mechanical fault.

Can I keep driving with P1342?

You can usually drive the car if the misfire clears once the engine is warm and the check engine light is steady, but avoid hard acceleration and long trips until it is diagnosed. If the light flashes or the engine runs rough continuously, stop driving to prevent unburned fuel from damaging the catalytic converter.

Tools that help

- OBD-II scan tool with BMW-specific software for reading freeze-frame and misfire counter data
- Spark plug socket and torque wrench
- Ignition coil puller or trim removal tool
- Compression tester
- Fuel pressure gauge and injector balance tester
- Smoke machine for intake leak detection



Reading P1342

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

Often seen with

P1340 CKP CMP Sensor Signals Out Of Sequence · **P1341** Ignition Coil Output Stage 1 Short To Ground · **P1343** Ignition Coil Output Stage 2 Short To Ground · **P1340** Igniter Circuit Malfunction No 8 · **P1340** Camshaft Position Sensor B Circuit · **P1341** Camshaft Position Sensor B Circuit Range Performance · **P1340** Camshaft Position Sensor B Circuit Malfunction · **P1340** Multiple Cylinder Misfire During Start · **P1341** Multiple Cylinder Misfire With Fuel Cut-off · **P1343** Misfire Cylinder 1 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-p1342/>

