

GENERIC · POWERTRAIN

P0314

OBD-II TROUBLE CODE

P0314

Single Cylinder Misfire (Cylinder not Specified)

P0314 is a generic OBD-II code indicating that the engine control module has detected a misfire in a single cylinder, but the misfire monitor cannot determine which cylinder is at fault. The computer sees crankshaft speed fluctuations consistent with one weak cylinder, yet the misfire counter has not isolated the event to a specific cylinder number.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Ignition system and misfire

Symptoms you may notice

- Illuminated or flashing check engine light, especially under load or acceleration
- Noticeable engine shake or vibration at idle that may smooth out at higher RPM
- Rough running or hesitation during acceleration
- Reduced fuel economy and power output
- Often no symptoms besides the warning light, particularly if the misfire is intermittent
- Possible catalyst overheating smell or damage if the misfire is severe and prolonged

Common causes, most likely first

- 1 Faulty spark plug or ignition coil on one cylinder
- 2 Vacuum leak affecting a single intake runner or the intake manifold gasket near one cylinder
- 3 Leaking or clogged fuel injector causing an imbalance in one cylinder
- 4 Low compression from worn piston rings, valves, or a head gasket issue on one cylinder
- 5 Ignition system wiring or connector fault that intermittently affects one cylinder
- 6 Mechanical valvetrain problem such as a sticking valve or worn cam lobe
- 7 Engine control module software or misfire monitor calibration issue that prevents cylinder identification



How to diagnose and fix it

- 1 Scan all stored and pending codes with a capable scan tool to see if any cylinder-specific misfire codes are also present
- 2 Inspect spark plugs and ignition coils for wear, fouling, or damage, and swap components between cylinders to see if the misfire follows
- 3 Perform a cylinder balance test or use a scan tool with misfire counter data to identify which cylinder is contributing to the misfire
- 4 Check for vacuum leaks using a smoke machine or propane enrichment around the intake manifold and vacuum lines
- 5 Test fuel injector operation and fuel pressure, and consider injector cleaning or replacement if a single injector is suspect
- 6 Run a compression test and, if needed, a leak-down test to rule out mechanical faults on the affected cylinder
- 7 Verify ignition system wiring and connectors for intermittent faults, and check for technical service bulletins or software updates for the engine control module

Why the misfire monitor cannot name the cylinder

- P0314 often appears when the misfire is intermittent or occurs at low load, so the crankshaft speed signal is too noisy for the engine control module to assign the event to a specific cylinder.
- A single-cylinder misfire that is not identified can still damage the catalytic converter because unburned fuel overheats the catalyst, so ignoring a flashing check engine light is risky.
- Some vehicles set P0314 when the misfire is detected during a specific driving condition, such as deceleration or light cruise, and the cylinder identification logic is inhibited.
- A vacuum leak at the intake manifold gasket near one cylinder can cause a single-cylinder misfire that the computer may not attribute to that cylinder if the leak is small and intermittent.
- Technicians sometimes misdiagnose P0314 as a general engine problem and replace multiple ignition components, when a cylinder balance test would quickly isolate the weak cylinder.

Can I keep driving with P0314?

If the check engine light is steady, you can drive cautiously to a repair shop, but avoid hard acceleration and heavy loads. If the light is flashing, stop driving as soon as it is safe because a flashing light indicates a misfire that can rapidly damage the catalytic converter.



Tools that help

- OBD-II scan tool with misfire counter and cylinder balance capabilities
- Spark plug socket and wrench
- Compression gauge
- Vacuum gauge or smoke machine
- Fuel pressure gauge
- Digital multimeter for ignition wiring checks

Reading P0314

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
3	Ignition system and misfire.
14	The exact fault within that area.

Often seen with

P0300 Random/Multiple Cylinder Misfire Detected · **P0301** Cylinder 1 Misfire Detected · **P0302** Cylinder 2 Misfire Detected · **P0303** Cylinder 3 Misfire Detected · **P0304** Cylinder 4 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/p0314/>

