

GM · POWERTRAIN

P1243

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1243 · GM

Injector Circuit Cylinder 8 Intermittent

P1243 on a GM vehicle means the engine control module has detected an intermittent fault in the electrical circuit for cylinder 8's fuel injector, meaning the circuit momentarily opens, shorts, or behaves erratically rather than failing completely. The computer monitors injector current and voltage and flags this code when the expected electrical signature is not consistently present during engine operation.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	GM specific	Medium	Intermediate	Fuel and air metering (injector circuits)

Symptoms you may notice

- Often no symptoms besides the warning light, especially if the intermittent fault is brief and infrequent
- An occasional misfire or stumble that comes and goes, sometimes felt as a slight shake at idle or under light acceleration
- A flashing check engine light during episodes of misfiring, which indicates a catalyst-damaging misfire is occurring
- Rough running or reduced power that appears intermittently and may clear on its own
- Slightly worse fuel economy or a faint raw fuel smell if the injector intermittently fails to fire

Common causes, most likely first

- 1 Damaged or chafed injector wiring harness near cylinder 8, often from heat, vibration, or rodent damage
- 2 Corroded or loose electrical connector pins at the cylinder 8 injector or at the engine control module
- 3 Failing cylinder 8 fuel injector with an internally intermittent coil
- 4 Poor ground connection shared by the injector circuit, causing voltage fluctuations
- 5 Engine control module driver circuit fault for cylinder 8, though this is less common than wiring issues
- 6 Vibration-induced wire break inside the insulation that only opens under certain engine loads or temperatures



How to diagnose and fix it

- 1 Inspect the cylinder 8 injector connector and wiring for chafing, corrosion, or loose pins, and wiggle-test the harness while the engine runs to reproduce the fault
- 2 Check for stored history codes and freeze-frame data to confirm the fault is isolated to cylinder 8 and not a shared circuit issue
- 3 Measure injector resistance at the cylinder 8 injector and compare it to the other injectors to spot an intermittent coil
- 4 Perform a voltage drop test on the injector power and ground circuits while cranking or running to catch intermittent resistance
- 5 Swap the cylinder 8 injector with a neighbouring cylinder and see if the code follows the injector or stays with the cylinder
- 6 Repair or replace the faulty section of harness or connector, then clear codes and road-test under the conditions that originally set the code
- 7 If wiring and injector test good, scope the injector control signal at the engine control module to check for a failing driver

Intermittent injector faults that fool technicians

- A wiggle test of the harness while watching injector pulse width or misfire counters on a scan tool often reveals the intermittent fault faster than a static resistance check.
- This code can be set by a poor connection at the engine control module connector even when the injector and its local wiring test perfectly fine.
- Technicians sometimes replace the injector only to find the code returns because the root cause was a chafed wire hidden inside a loom near a hot exhaust component.
- An intermittent injector circuit can cause a misfire that is too brief to set a cylinder-specific misfire code, so P1243 may be the only clue.
- Cold solder joints or pin tension loss inside the injector connector can create a fault that only appears with engine vibration and not during a stationary test.

Can I keep driving with P1243?

You can usually drive cautiously to a repair shop if the light is steady and the engine runs smoothly, but avoid heavy acceleration or towing. If the check engine light flashes or the engine misfires noticeably, stop driving soon because raw fuel can damage the catalytic converter.



Tools that help

- OBD-II scan tool with live data and misfire counter capability
- Digital multimeter with min/max recording
- Automotive oscilloscope for injector pulse waveform analysis
- Noid light or injector pulse tester
- Wire terminal pick and electrical contact cleaner
- Factory service information for wiring diagrams and pinouts

Reading P1243

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (GM): its meaning depends on the make.
2	Fuel and air metering (injector circuits).
43	The exact fault within that area.

Often seen with

P1242 Cylinder 6 Injector Circuit Open Circuit · **P1244** Cylinder 8 Injector Circuit Open Circuit · **P1244** Wastegate Control Solenoid Valve Malfunction Low Input · **P1242** Throttle Vent Control Motor Circuit 2 Malfunction · **P1244** Closed Throttle Position Insufficient · **P1242** Sensor Power Supply High Input · **P1242** Throttle Vent Control Motor Circuit 2 Malfunction · **P1244** Closed Throttle Position Insufficient · **P1244** Alternator Load Input Failed High · **P0208** Injector Circuit/Open - Cylinder 8 · **P0308** Cylinder 8 Misfire Detected · **P0358** Ignition Coil 'H' Primary/Secondary Circuit

See it working

Watch the animated explainer [How an Elevator Works: Traction Lift in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/gm-p1243/>

