

GM · POWERTRAIN

P1237

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1237 · GM

Injector Circuit Cylinder 6 Intermittent

P1237 on a GM vehicle means the powertrain control module (PCM) has detected an intermittent fault in the electrical circuit for fuel injector number 6, which is the sixth cylinder in the firing order. The PCM monitors injector current and voltage and flags this code when the circuit momentarily opens, shorts, or behaves erratically without failing completely.

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 the injector still fires most of the time.
- An occasional misfire or stumble that comes and goes, sometimes felt as a slight shake at idle or during light acceleration.
- A brief loss of power or hesitation that may last only a second or two and then clear up.
- Rough running that is worse when the engine is cold or damp, then improves as the engine warms.
- A flashing check engine light during the moments the misfire is actively occurring, which indicates a catalyst-damaging misfire.
- Slightly higher fuel consumption or a faint raw-fuel smell if the injector is over-fuelling during the intermittent fault.

Common causes, most likely first

- Chafed, cracked, or corroded wiring in the injector 6 circuit, especially where the harness bends near the intake manifold or passes through a hot zone.
- A loose or contaminated electrical connector at injector 6, often caused by oil or coolant wicking into the terminal cavity.
- An injector 6 coil winding that is failing intermittently when hot, which changes resistance and current draw without setting a hard-fail code.
- A poor ground or intermittent power feed shared by the injector bank, which can affect one injector more than others depending on harness routing.
- A PCM driver circuit for injector 6 that is marginal and drops out under vibration or temperature swings.
- Internal engine mechanical issues such as a sticking valve or worn cam lobe that mimic an injector fault by causing an intermittent misfire the PCM associates with cylinder 6.



How to diagnose and fix it

- 1 Inspect the injector 6 harness and connector for chafing, corrosion, or loose terminals, and wiggle-test the wiring while watching live misfire and injector data.
- 2 Measure injector 6 resistance cold and again after the engine reaches operating temperature, comparing it to the other injectors on the same engine.
- 3 Perform a current-ramp or injector balance test with a lab scope or scan tool to see whether the injector coil is breaking down intermittently.
- 4 Check for technical service bulletins (TSBs) and known harness-routing issues on the specific GM platform before condemning parts.
- 5 Swap injector 6 with a known-good injector from another cylinder and see whether the intermittent misfire follows the injector or stays on cylinder 6.
- 6 If the fault follows the injector, replace injector 6 and clear the code; if it stays on cylinder 6, trace the harness back to the PCM and repair any damaged wire.
- 7 As a last step, test the PCM driver circuit for injector 6 and replace or reprogram the PCM only after all wiring and injector tests have passed.

Why P1237 often is not the injector

- A large share of P1237 cases on GM vehicles are fixed by repairing the harness or connector rather than replacing the injector, because the intermittent nature usually points to a connection problem rather than a failed coil.
- The code can set from a momentary glitch that lasts less than a second, so a technician who only checks the injector with a multimeter when the engine is cold may find nothing wrong and misdiagnose the vehicle.
- Heat and vibration are common triggers, so the fault often appears only during a test drive over rough roads or after the engine bay has heat-soaked, which means the wiring must be flexed and the injector tested hot.
- A misfire on cylinder 6 can also be caused by ignition or mechanical faults, and the PCM may set P1237 because it sees the injector current signature change during the misfire, so always confirm with a cylinder balance test before replacing parts.
- On some GM engines, oil leaking past the intake manifold gasket or valve cover can contaminate the injector 6 connector, creating an intermittent short that returns even after the injector is replaced unless the leak is fixed.

Can I keep driving with P1237?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or towing because an intermittent misfire can dump raw fuel into the exhaust and damage the catalytic converter. If the check engine light is flashing, stop driving and have the vehicle towed.



Tools that help

- OBD-II scan tool with live misfire and injector data
- Digital multimeter with min/max recording
- Lab scope with a low-current probe or injector current-ramp adapter
- Noid light or injector pulse tester
- Hand tools for harness and connector access

Reading P1237

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

Often seen with

P1226 Cylinder 2 Injector Circuit Short To Ground · **P1226** Control Sleeve Sensor Circuit · **P1235** Fuel Pump Control Circuit · **P1236** Fuel Pump Control Out Range · **P1226** Fuel Injector 2 Circuit Low Voltage · **P1226** Mechanical Guard Circuit Range Performance · **P1235** VSV 1/2/3 Circuit Range Performance · **P1236** VSV 1 Circuit · **P1235** Fuel Pump Control Out of Range · **P1236** Fuel Pump Control Out of Range · **P0206** Injector Circuit/Open - Cylinder 6 · **P0306** Cylinder 6 Misfire Detected

See it working

Watch the animated explainer [How a Padlock Works: Pin Tumbler Lock 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-p1237/>

