

GENERIC · POWERTRAIN

P2B00

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2B00

Cylinder 1 Injection Pulse Performance

P2B00 indicates that the powertrain control module (PCM) has detected an abnormal fuel injector pulse characteristic on cylinder 1, meaning the electrical command sent to that injector did not produce the expected response. The computer monitors injector circuit current and timing and flags this code when the pulse performance falls outside the calibrated window.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Hybrid propulsion

Symptoms you may notice

- Illumination of the check engine light, often with no other symptoms
- Rough idle or a noticeable misfire at idle and low speed
- Hesitation or stumble during acceleration
- Reduced engine power or poor fuel economy
- Shaking or vibration felt through the steering wheel and seat
- In some cases a flashing check engine light if the misfire becomes severe

Common causes, most likely first

- 1 Faulty or clogged fuel injector on cylinder 1
- 2 Damaged or corroded injector wiring harness connector
- 3 Open or shorted injector circuit in the harness
- 4 Failed injector driver inside the PCM
- 5 Low fuel pressure or restricted fuel supply
- 6 Contaminated fuel or excessive deposits in the injector
- 7 Poor electrical ground affecting injector operation

How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm the code and operating conditions
- 2 Inspect the cylinder 1 injector connector and harness for corrosion, chafing, or loose pins
- 3 Measure injector resistance and compare it to the manufacturer specification
- 4 Perform an injector balance or pulse test with a scan tool or oscilloscope
- 5 Check fuel pressure and volume to rule out a supply problem
- 6 Test the injector driver circuit from the PCM to the injector for continuity and shorts
- 7 Replace the faulty injector or repair the wiring, then clear codes and verify the repair with a road test



What the injector pulse code really means

- A clogged injector can pass a resistance test yet still fail a balance test, so electrical checks alone often miss the real fault
- Corroded pins at the injector connector are a frequent cause that gets overlooked when technicians jump straight to replacing the injector
- A failing PCM driver can mimic a bad injector, so the circuit should be tested before any parts are installed
- Low fuel pressure from a weak pump or restricted filter can set this code on a single cylinder without any injector fault at all
- This code does not always mean the injector is dead; it can be stored intermittently from vibration or heat-related connector issues

Can I keep driving with P2B00?

You can usually drive short distances to a repair shop, but avoid heavy acceleration and towing until the fault is diagnosed. If the check engine light flashes or the engine runs very rough, stop driving to prevent catalytic converter damage.

Tools that help

- OBD-II scan tool with live data and injector test capability
- Digital multimeter
- Oscilloscope or injector pulse tester
- Fuel pressure gauge
- Hand tools and electrical connector picks

Reading P2B00

P	Powertrain: engine, transmission and emissions.
2	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
B	Hybrid propulsion.
00	The exact fault within that area.

Often seen with

P0171 System Too Lean (Bank 1) · **P0201** Injector Circuit Malfunction - Cylinder 1 · **P0261** Cylinder 1 Injector Circuit Low · **P0264** Cylinder 2 Injector Circuit Low · **P0301** Cylinder 1 Misfire Detected



See it working

Watch the animated explainer [How Crank and Cam Position Sensors Work](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2b00/>

