

GM · POWERTRAIN

P1323

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

## P1323 · GM

### Loss of High Resolution RPM Signal

P1323 on a GM vehicle means the powertrain control module (PCM) has lost the high-resolution RPM signal it normally receives from the ignition control module or crankshaft position sensor circuit. The PCM uses this fast-switching signal to time spark and fuel delivery precisely, so when the signal drops out or becomes erratic the computer flags the circuit as failed.

| SYSTEM     | CODE TYPE   | SEVERITY | FIX DIFFICULTY | AREA                        |
|------------|-------------|----------|----------------|-----------------------------|
| Powertrain | GM specific | Medium   | Intermediate   | Ignition system and misfire |

### Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Intermittent engine stumble or misfire at idle or under light load
- Hard starting or a crank-no-start condition when the signal is completely lost
- Rough running and reduced power if the PCM substitutes a default timing value
- Tachometer needle fluctuation or dropout on vehicles with an instrument-cluster tach
- Possible stalling at low speed or during deceleration

### Common causes, most likely first

- 1 Faulty crankshaft position sensor or ignition control module high-resolution output
- 2 Damaged or chafed wiring in the high-resolution signal circuit between the sensor and PCM
- 3 Corroded or loose connector terminals at the crankshaft position sensor or ignition control module
- 4 Excessive air gap or debris on the crankshaft reluctor wheel causing a weak signal
- 5 Failed PCM driver circuit for the high-resolution input
- 6 Poor engine ground or voltage supply to the ignition control module affecting signal quality
- 7 Aftermarket ignition components or a recent repair that disturbed the sensor harness



## How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm P1323 is active and not a history code from a past event
- 2 Inspect the crankshaft position sensor and ignition control module connectors for corrosion, pushed pins, or loose terminals
- 3 Check the high-resolution signal wire for continuity, shorts to ground, and shorts to voltage between the sensor and PCM
- 4 Measure the sensor air gap and inspect the reluctor wheel for damage or metallic debris
- 5 Verify good engine ground and battery voltage at the ignition control module before condemning any component
- 6 Swap in a known-good crankshaft position sensor or ignition control module only after circuit tests pass
- 7 Clear codes and perform a road test with a scan tool graphing high-resolution RPM to confirm the repair

## What the high-resolution signal actually does

- Many GM vehicles store P1323 as a history code after a low-voltage event or a stall, so always check whether the code is current before replacing parts.
- A failing ignition control module can produce a clean low-resolution RPM signal while the high-resolution output drops out, which fools technicians who only watch the main tach signal.
- Aftermarket remote starters and alarm systems tapped into the crank signal circuit are a frequent hidden cause of intermittent P1323 on older GM trucks and SUVs.
- The PCM may run the engine using a default timing strategy when the high-resolution signal is lost, so the vehicle can feel almost normal while the code is set.
- A weak battery or failing alternator that causes voltage dips during cranking can set P1323 without any fault in the sensor or wiring itself.

## Can I keep driving with P1323?

You can usually drive the vehicle short distances to a repair shop if the engine runs smoothly, but avoid heavy acceleration, towing, or long trips because a complete loss of the signal can cause a stall or a no-start. If the engine is misfiring, stalling, or cranking without starting, stop driving and arrange a tow.

## Tools that help

- OBD-II scan tool with live data and graphing capability
- Digital multimeter with min/max recording
- Oscilloscope for viewing the high-resolution signal waveform
- Feeler gauge set for checking crankshaft sensor air gap
- Basic hand tools and terminal pick set



## Reading P1323

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

## Often seen with

**P1362** Cylinder 3 Ignition Circuit Short To B+ · **P1350** Ignition Coil Power Output Stage 3 Open · **P1361** Cylinder 3 Ignition Circuit Open · **P1350** VVT Sensor Circuit Malfunction Bank 2 · **P1362** TDC1 Sensor No Signal · **P1361** TDC Sensor Intermittent Interruption · **P1350** Injection Sensor Solenoid · **P1362** Ignition Coil C Secondary Circuit · **P1361** Ignition Coil B Secondary Circuit · **P1361** Ignition Coil Cylinder 1 No Activation · **P1362** Ignition Coil Cylinder 2 No Activation · **P1361** TDC Sensor Intermittent Interruption · **P1362** TDC1 Sensor No Signal · **P1361** IC Circuit Low Voltage · **P1362** IC Cylinder 2 Not Toggling After Enable · **P1350** Ignition Control System · **P1361** Ignition Control IC Circuit Low Voltage · **P1362** Ignition Coil C Secondary Circuit Malfunction · **P1361** IC Circuit Low Voltage · **P1362** IC Cylinder 2 Not Toggling After Enable · **P1350** Ignition Control System · **P1361** Misfire Cylinder 10 With Fuel Cut-off · **P1362** Misfire During Start Cylinder 11 · **P1350** Misfire During Start Cylinder 5 · **P0335** Crankshaft Position Sensor A Circuit Malfunction · **P0336** Crankshaft Position Sensor A Circuit Range/Performance

## See it working

Watch the animated explainer [How a Supercharger Works: Roots Blower 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-p1323/>

