

HONDA · POWERTRAIN

P1318

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1318 · Honda

Spark Plug Voltage Detection Module Reset Circuit Malfunction Front Bank

P1318 on Honda vehicles indicates that the powertrain control module (PCM) has detected a malfunction in the reset circuit of the spark plug voltage detection module for the front bank of cylinders. The detection module monitors ionization voltage at the spark plugs to identify misfires, and its reset circuit ensures the module is properly reinitialized after each detection cycle; when the PCM sees an unexpected voltage or no reset confirmation, it logs this code.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Honda 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 misfire or rough running, especially under load or during acceleration.
- Slight hesitation or stumble when the engine is cold or during light throttle applications.
- Reduced fuel economy due to the PCM reverting to a default misfire detection strategy.
- In rare cases, the engine may enter limp mode if the PCM cannot reliably detect misfires.
- No drivability complaints at all, with the code appearing only during scan tool diagnostics.

Common causes, most likely first

- 1 Faulty spark plug voltage detection module on the front bank, often due to internal circuit degradation.
- 2 Damaged or corroded wiring in the reset circuit between the detection module and the PCM.
- 3 Loose or poor ground connection for the detection module, causing intermittent reset signals.
- 4 Failed ignition coil or spark plug causing abnormal voltage feedback that disrupts the reset circuit.
- 5 PCM software glitch or internal fault in the reset signal processing circuit.
- 6 Contamination or moisture intrusion into the detection module connector, leading to signal corruption.



How to diagnose and fix it

- 1 Connect a scan tool and verify P1318 is the only stored code; check for pending or history codes that might indicate a related misfire.
- 2 Inspect the spark plug voltage detection module connector and wiring for corrosion, loose pins, or chafed insulation, repairing as needed.
- 3 Test the ground circuit for the detection module using a multimeter to ensure resistance is below 1 ohm; clean and tighten grounds if necessary.
- 4 Swap the front bank ignition coil or spark plug with a known-good unit to see if the code follows, indicating a faulty component.
- 5 Check for technical service bulletins (TSBs) or PCM software updates specific to this code and apply any available calibration.
- 6 If wiring and components test good, substitute a known-good detection module and clear the code to confirm the fix.
- 7 As a last resort, diagnose the PCM reset circuit with an oscilloscope to verify signal integrity, replacing the PCM only if internal fault is confirmed.

Hidden Causes of P1318 Reset Circuit Faults

- A weak or failing ignition coil on the front bank can send abnormal voltage spikes back to the detection module, mimicking a reset circuit failure without setting a misfire code.
- Corrosion inside the detection module connector is a frequent culprit on older Hondas, especially in humid climates, and often goes unnoticed during visual inspection.
- The reset circuit shares a ground with other engine sensors; a single bad ground point can trigger P1318 along with unrelated codes, so always check grounds first.
- Some aftermarket spark plugs with incorrect resistance can disrupt the ionization voltage signal, causing the module to fail its reset self-test even though the plugs are new.
- P1318 can be set by a momentary voltage drop during engine cranking if the battery is weak, so load-test the battery before replacing any module.

Can I keep driving with P1318?

You can generally continue driving with P1318 if the engine runs smoothly, but avoid aggressive acceleration or heavy loads until the fault is repaired, as undetected misfires could damage the catalytic converter over time. If the check engine light flashes or the engine runs rough, stop driving and seek professional diagnosis immediately.



Tools that help

- OBD-II scan tool with Honda-specific software
- Digital multimeter
- Oscilloscope (for advanced signal testing)
- Socket set and trim removal tools
- Electrical contact cleaner and dielectric grease

Reading P1318

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

Often seen with

P1319 Knock Sensor 1 Circuit Short To Ground · **P1320** Knock Sensor 2 Circuit Short To Ground · **P1320** Igniter Circuit Malfunction No 5 · **P1319** Spark Plug Voltage Detection Module Reset Circuit Malfunction · **P1320** Ignition Signal · **P1319** Injection Timing Piston Position Sensor Circuit Range Perfor · **P1319** Spark Plug Voltage Detection Module Reset Circuit Malfunction · **P1320** Distributorless Ignition 4X Signal Intermittent · **P1320** IC Module 4X Ref Circuit Intermittent No Pulses · **P0300** Random/Multiple Cylinder Misfire Detected · **P0301** Cylinder 1 Misfire Detected · **P0302** Cylinder 2 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/honda-p1318/>

