

HONDA · POWERTRAIN

P1387

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1387 · Honda

CYP Sensor B No Signal

P1387 on Honda vehicles means the powertrain control module (PCM) is not receiving a signal from the CYP sensor B, which is a cylinder position sensor used to identify the exact position of the camshaft for sequential fuel injection and ignition timing. The PCM sets this code when it detects a complete absence of signal from that sensor circuit while the engine is running or cranking.

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.
- Engine may crank but fail to start or may start and stall immediately.
- Rough idle or misfire due to incorrect fuel injection timing.
- Reduced engine performance and poor fuel economy.
- Intermittent stalling while driving or at stops.
- In some cases, the engine may run in limp mode with limited RPM.

Common causes, most likely first

- 1 Faulty CYP sensor B (open or shorted internally).
- 2 Damaged wiring or connector at the CYP sensor B or PCM.
- 3 Corroded or loose electrical terminals in the sensor circuit.
- 4 Failed PCM driver circuit for the CYP sensor.
- 5 Mechanical damage to the sensor reluctor wheel or camshaft trigger.
- 6 Oil or debris contamination on the sensor tip.
- 7 Aftermarket alarm or remote start installation interfering with sensor wiring.

How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related stored codes in the PCM.
- 2 Inspect the CYP sensor B connector and wiring for damage, corrosion, or loose pins.
- 3 Measure the resistance of the CYP sensor B and compare to Honda specifications.
- 4 Check for proper voltage and ground signals at the sensor connector with the key on.
- 5 Perform a wiggle test on the harness while monitoring sensor signal on a lab scope.
- 6 If the sensor and wiring are good, test the PCM circuit and replace the PCM if faulty.
- 7 Clear the code and perform a road test to confirm the repair.



CYP Sensor B Diagnostic Traps on Hondas

- A common mistake is replacing the CYP sensor B when the real problem is a damaged wire in the engine harness near the timing belt cover.
- The CYP sensor B is often confused with the TDC or CKP sensors, but each has a distinct role and should be tested individually.
- Intermittent no-signal faults can be caused by a failing sensor that only drops out when hot, so testing must include a heat soak.
- Aftermarket engine components or a improperly installed timing belt can damage the sensor reluctor wheel and set this code.
- The PCM may not set this code if the sensor fails completely while the engine is off, so always check for a no-start condition first.

Can I keep driving with P1387?

If the engine starts and runs, you can drive cautiously to a repair shop, but avoid heavy acceleration or long trips because the engine may stall unexpectedly. If the engine will not start or stalls frequently, do not drive and have the vehicle towed to prevent safety risks.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope for signal waveform analysis
- Honda service information for sensor specifications
- Basic hand tools for connector and sensor access

Reading P1387

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



Often seen with

P1361 Cylinder 3 Ignition Circuit Open · **P1388** Control Unit Internal Throttle Control · **P1386** Internal Control Module Knock Control Error · **P1361** TDC Sensor Intermittent Interruption · **P1386** CYP Sensor B Intermittent Interruption · **P1361** Ignition Coil B Secondary Circuit · **P1386** Knock Sensor Control Zero Test · **P1361** Ignition Coil Cylinder 1 No Activation · **P1361** TDC Sensor Intermittent Interruption · **P1386** CYP Sensor B Intermittent Interruption · **P1388** Auto Shutdown ASD Relay Control Circuit Open Or Shorted · **P1361** IC Circuit Low Voltage · **P1361** Ignition Control IC Circuit Low Voltage · **P1388** Variable Cam Timing Overretarded Bank 2 · **P1386** Variable Cam Timing Overadvanced Bank 2 · **P1388** Auto Shutdown (ASD) Relay Control Circuit Open Or Shorted · **P1361** IC Circuit Low Voltage · **P1386** Control Module Self-test Knock Control Baseline Test Bank 1 · **P1361** Misfire Cylinder 10 With Fuel Cut-off · **P0335** Crankshaft Position Sensor A Circuit Malfunction · **P0340** Camshaft Position Sensor A Circuit Malfunction (Bank 1)

See it working

Watch the animated explainer [Manual Car Driving Simulator: Learn Clutch Control](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/honda-p1387/>

