



## P1361 · Honda

### TDC Sensor Intermittent Interruption

P1361 on a Honda means the powertrain control module (PCM) has detected an intermittent interruption in the top dead center (TDC) sensor signal, which is used to identify cylinder number one's compression stroke for sequential fuel injection and ignition timing. The PCM sets this code when the TDC signal drops out or becomes erratic for a brief period, often without storing a hard failure.

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

### Symptoms you may notice

- Often no symptoms besides the warning light, especially if the interruption is brief and the engine management system compensates
- Intermittent engine misfire or rough running that may come and go with temperature or vibration
- Hard starting or a no-start condition when the TDC signal is lost during cranking
- Reduced engine power or limp mode in some Honda models when the PCM cannot reliably determine camshaft position
- Occasional stalling at idle or during deceleration when the signal drops out
- A flashing or steady check engine light depending on how often the interruption occurs

### Common causes, most likely first

- 1 Faulty TDC sensor (also called the top dead center sensor or cylinder position sensor) due to heat, age, or internal failure
- 2 Damaged or corroded wiring harness and connector at the TDC sensor, often from oil leaks, chafing, or rodent damage
- 3 Poor electrical connection at the sensor pigtail or PCM connector causing intermittent signal loss
- 4 Debris or metal shavings on the sensor tip or reluctor wheel interfering with the magnetic pickup
- 5 Loose or worn timing belt or chain causing the TDC sensor air gap to vary or the reluctor wheel to wobble
- 6 PCM internal fault or software issue, though this is less common than sensor and wiring problems
- 7 Aftermarket or incorrect sensor installed previously that does not meet Honda specifications



## How to diagnose and fix it

- 1 Inspect the TDC sensor connector and wiring for corrosion, loose pins, or chafing, and repair as needed before replacing parts
- 2 Check the sensor tip and reluctor wheel for metal debris or damage, and clean or replace components if contamination is found
- 3 Measure the TDC sensor air gap and resistance (where applicable) against Honda specifications to confirm sensor condition
- 4 Perform a wiggle test on the harness while monitoring TDC signal data with a scan tool to catch intermittent interruptions
- 5 Replace the TDC sensor with a genuine Honda or OEM-equivalent part if resistance or signal testing indicates failure
- 6 Verify timing belt or chain condition and tension, and correct any mechanical timing issues that affect the sensor signal
- 7 Clear the code and road test under varying conditions to confirm the repair, and recheck for pending codes

## Why P1361 Often Isn't the Sensor

- A loose or failing timing belt can cause P1361 without any sensor fault, because the reluctor wheel wobbles and the air gap changes, so always inspect the belt and tensioner before condemning the sensor.
- Oil leaks from the valve cover or cam seal frequently contaminate the TDC sensor connector, causing intermittent signal loss that mimics a failed sensor and returns after replacement if the leak is not fixed.
- Some Honda models use a TDC sensor that shares a ground circuit with other sensors, so a bad ground elsewhere can set P1361 and other codes simultaneously, making circuit testing essential.
- Intermittent TDC codes often do not set a hard fault until the signal is lost for several seconds, so a scan tool with live data and a graphing function is far more useful than a simple code reader.
- Aftermarket sensors for Honda TDC applications have a high rate of out-of-box failure or incorrect signal output, so a new part does not automatically rule out the sensor as the cause.

## Can I keep driving with P1361?

You can usually drive short distances if the engine runs normally and the light is steady, but avoid hard acceleration, towing, or long trips until the fault is diagnosed. If the engine misfires, stalls, or the check engine light flashes, stop driving and have the vehicle towed to prevent catalytic converter damage.



## Tools that help

- Scan tool with live data and graphing capability
- Digital multimeter with min/max recording
- Feeler gauges for air gap measurement
- Basic hand tools and socket set
- Electrical contact cleaner and dielectric grease
- Oscilloscope (optional for advanced signal analysis)

## Reading P1361

**P** Powertrain: engine, transmission and emissions.

**1** Manufacturer-specific code (Honda): its meaning depends on the make.

**3** Ignition system and misfire.

**61** The exact fault within that area.

## Often seen with

**P1362** Cylinder 3 Ignition Circuit Short To B+ · **P1362** TDC1 Sensor No Signal · **P1362** Ignition Coil C Secondary Circuit · **P1362** Ignition Coil Cylinder 2 No Activation · **P1362** TDC1 Sensor No Signal · **P1362** IC Cylinder 2 Not Toggling After Enable · **P1362** Ignition Coil C Secondary Circuit Malfunction · **P1362** IC Cylinder 2 Not Toggling After Enable · **P1362** Misfire During Start Cylinder 11 · **P0335** Crankshaft Position Sensor A Circuit Malfunction · **P0336** Crankshaft Position Sensor A Circuit Range/Performance · **P0340** Camshaft Position Sensor A Circuit Malfunction (Bank 1) · **P0341** Camshaft Position Sensor A Circuit Range/Performance

## See it working

Watch the animated explainer [How an Oxygen Sensor Works: Live 3D Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/honda-p1361/>

