

P0341: CAMSHAFT POSITION SENSOR CIRCUIT RANGE/PERFORMANCE

OVERVIEW

Severity	:	<div><div></div></div> High
DIY Difficulty Level	:	<div><div>Intermediate</div></div>
Repair Cost	:	\$200-\$400
Can I Still Drive?	:	No

What Does The P0341 Code Mean?

This P0341 code basically means that the powertrain control module (PCM) detected a problem with the camshaft signal.

The camshaft position sensor (CPS) sends a specific signal to the PCM for Top Dead Center on the compression stroke as well as signals indicating the position of the cam sensor. This is accomplished through a reluctor wheel attached to the camshaft that passes by the cam sensor. Any time that the signal to the PCM is inconsistent with what the signal should be, this code is set.

NOTE: this code can also be set by extended cranking periods.

What Are The Symptoms Of The P0341 Code?

The car will likely run with this code set, as it is often intermittent and also because the PCM can often operate the vehicle in "limp-in/limp-home" mode even with a cam sensor signal problem.

There may be no noticeable symptoms other than:

- Poor fuel economy (if engine runs)
- Possible no start condition

What Are The Potential Causes Of The P0341 Code?

A code P0341 may mean that one or more of the following has happened:

- Cam sensor wiring routed too close to spark plug wiring (causing interference)
- Poor wiring connection at cam sensor
- Poor wiring connection at PCM
- Bad cam sensor
- Damaged reluctor wheel

How Can You Fix The P0341 Code?

NOTE: In some cases this engine code is generated on vehicles that do not actually have a camshaft position sensor. In those cases it basically means the engine is misfiring badly due to faulty spark plugs, spark plug wires, and often coils.

Often relacing the sensor fixes this code, but not necessarily. Therefore it's important to check the following:

- Check that the wiring isn't routed too close to any secondary ignition components (coil, spark plug wires, etc.)
- Visually inspect the wiring at the sensor for any burn marks, discoloration indicative of melting or chafing
- Visually inspect the cam sensor for damage
- Visually inspect the reluctor wheel through the cam sensor port (if possible) for any missing teeth or any damage
- If reluctor isn't visible from outside the engine, visual test can only be done by removing cam shaft or intake manifold (depending on engine design)
- If all checks out okay, then replace the sensor.

Related Camshaft Trouble Codes: [P0340](#), [P0342](#), [P0343](#), [P0345](#), [P0347](#), [P0348](#), [P0349](#), [P0365](#), [P0366](#), [P0367](#), [P0368](#), [P0369](#), [P0390](#), [P0391](#), [P0392](#), [P0393](#), [P0394](#).

Reference Sources

[Diagnostic Trouble Code \(DTC\) Charts and Descriptions for P0341](#) - Page 61.