P0021: "A" CAMSHAFT POSITION - TIMING OVER-ADVANCED OR SYSTEM PERFORMANCE (BANK 2)

OVERVIEW

Severity : Medium

DIY Difficulty Level : Intermediate

Repair Cost : \$40-\$400

Can I Still Drive? : No

What Does The P0021 Code Mean?

A P0021 code refers to the VVT (variable valve timing) or VCT (variable camshaft timing) components and the car's PCM (powertrain control module) or ECM (engine control module). VVT is a technology used in the engine to allow it to get greater power or efficiency at different running points.

That consists of a few different components but the P0021 DTC specifically refers to the camshaft (cam) timing. In this case, if the cam timing is above a set limit (over-advanced), the engine light will be illuminated and the code will be set. The "A" camshaft is either the intake, left, or front camshaft. A P0021 engine code is basically the same as a P0011 code, except this is for Bank 2, not Bank 1.

What Are The Symptoms Of The P0021 Code?

Most likely a P0021 DTC will result in one of the following: hard starting, poor idle, and/or stalling. There are potentially other symptoms as well. Of course, when trouble codes are set, the MIL (malfunction indicator lamp, a.k.a. the check engine light) illuminates.

What Are The Potential Causes Of The P0021 Code?

A P0021 DTC trouble code may be caused by one or more of the following:



- Incorrect camshaft timing
- Wiring problems (harness/wiring) in intake timing control valve control solenoid system
- Continuous oil flow to VCT piston chamber
- Failed timing valve control solenoid (stuck open)

How Can You Fix The P0021 Code?

This DTC code is a result of a mechanical fault of the VCT unit or related components, so there is no need for electrical diagnosis. Refer to vehicle specific repair manual to perform component tests for the VCT unit. Notes: Dealer techs have advanced tools and the ability to follow detailed troubleshooting steps, including the ability to test components using a scan tool.

Other related DTCs: <u>P0010</u>- <u>P0011</u>- <u>P0012</u>- <u>P0020</u>- <u>P0022</u>

Reference Sources

- Technical Service Bulletin for P0021 Subaru
- Technical Service Bulletin for P0021 Audi

