# P0015: "B" CAMSHAFT POSITION - TIMING OVER-RETARDED (BANK 1) OVERVIEW Severity : High DIY Difficulty Level : Intermediate Repair Cost : \$35-\$450 Can I Still Drive? : Yes (Short-term only)

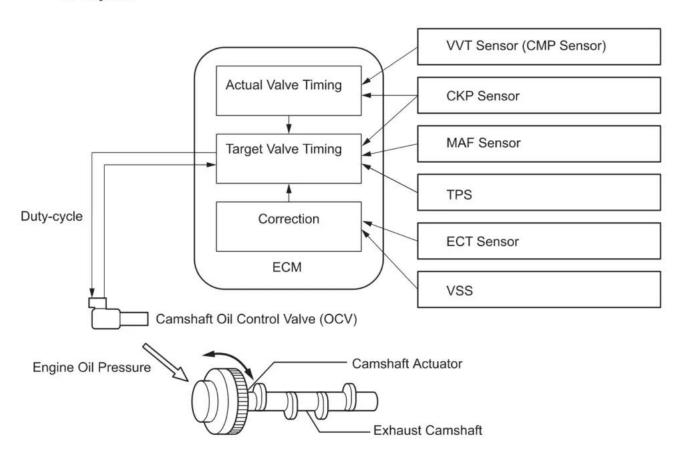
# What Does The P0015 Code Mean?

A code P0015 refers to the VVT (variable valve timing) or VCT (variable camshaft timing) components and the car's PCM (powertrain control module, also called an ECM).

That consists of a few different components but the P0015 DTC specifically refers to the camshaft (cam) timing. In this case, if the cam timing is over-retarded, the engine light will be illluminated and the code will be set. Bank #1 is the side of the engine that contains cylinder #1. The "B" camshaft shall be either the "exhaust," "right," or "rear" camshaft. Left/Right and Front/Rear are determined as if viewed from the driver's seating position.



# **VVT System**



Y A130637E02

P0015 wiring diagram

# What Are The Symptoms Of The P0015 Code?

Most likely a P0015DTC 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 P0015 Code?

A P0015 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 P0015 Code?**

The main thing to check is to verify the operation of the VCT solenoid. You're looking for a sticking or stuck VCt solenoid valve caused by contamination. 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>P0014</u>- <u>P0020</u>- <u>P0021</u>- <u>P0022</u>

## **Reference Sources**

- 2GR-FE ENGINE CONTROL SYSTEM SERVICE MANUAL for P0015 Toyota RAV4
- Technical Service Bulletin for P0015 Mazda
- Technical Service Bulletin for P0015 Nissan

