

P0390: CAMSHAFT POSITION SENSOR B CIRCUIT MALFUNCTION (BANK 2)

OVERVIEW

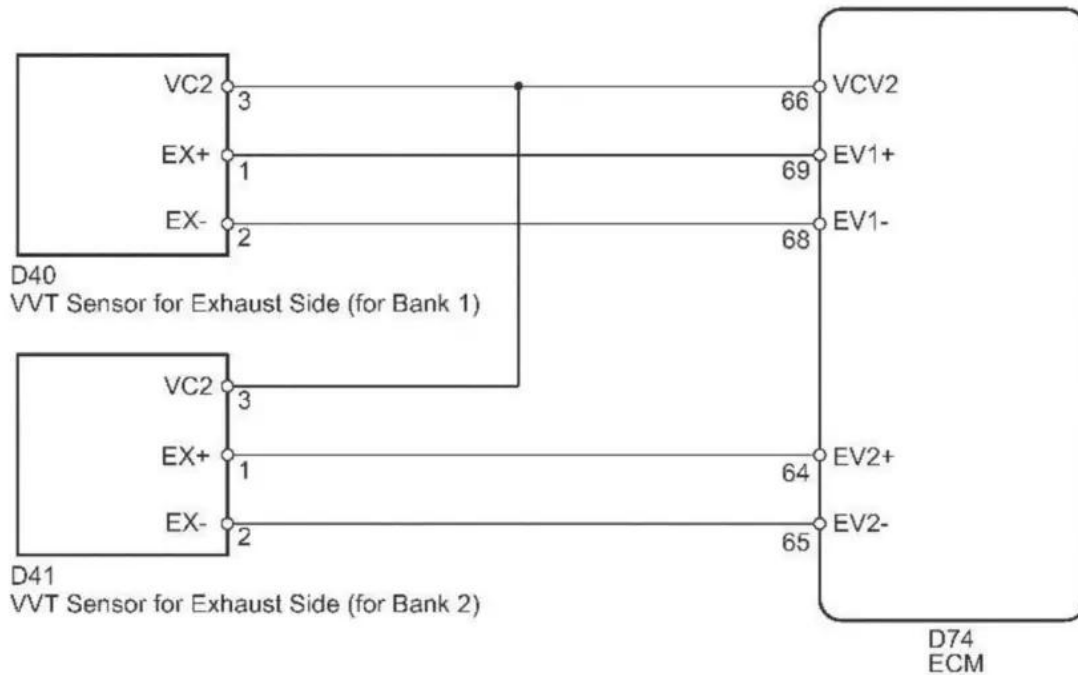
Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	\$200-\$400
Can I Still Drive?	:	No

What Does The P0390 Code Mean?

This P0390 trouble code indicates that a problem was detected in the camshaft position sensor circuit of bank 2.

Since it says circuit, that means the problem could lie in any part of the circuit – the sensor itself, the wiring, or the PCM. Don't just replace the CPS (camshaft position sensor) and think that will definitely fix it.

Note: The camshaft sensor "B" is generally the sensor on the exhaust camshaft. This code is basically identical to P0345, however refer to a vehicle specific repair manual to identify the correct sensor on your vehicle/engine.



P0390 wiring diagram

What Are The Symptoms Of The P0390 Code?

Symptoms can include:

- Hard starting or no start
- Rough running / misfiring
- Loss of engine power

What Are The Potential Causes Of The P0390 Code?

A code P0390 could mean one or more of the following has happened:

- a wire or connector in the circuit could be grounded/shorted/broken
- the camshaft position sensor may have failed
- the PCM may have failed
- there exists an open circuit
- the crankshaft position sensor may have failed

How Can You Fix The P0390 Code?

With a P0390 OBD-II trouble code, diagnosis can be tricky at times. Here are some things to try:

- Visually inspect all the wiring and connectors in the circuit
- Check for continuity in the circuit wiring
- Check the operation (voltage) of the camshaft position sensor
- Replace the camshaft position Sensor Bs required
- Check the crankshaft position circuit as well
- Replace circuit wiring and/or connectors as required
- Diagnose/replace the PCM as required

Reference Sources

[ENGINE CONTROL SYSTEM \[GASOLINE ENGINE \(V-6\)\] SERVICE MANUAL for P0390](#) - Pages 538-540.