

GENERIC · POWERTRAIN

P34B3

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P34B3

A Camshaft Position Actuator Position Sensor A Circuit High Bank 2

P34B3 indicates that the powertrain control module has detected an abnormally high voltage on the signal circuit of the camshaft position actuator position sensor for bank 2, sensor A. This high voltage reading tells the computer that the sensor circuit is likely open, shorted to power, or that the sensor itself has failed, preventing accurate feedback on camshaft phaser position.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or unstable engine operation, especially when cold
- Reduced engine power or limp mode under certain conditions
- Poor fuel economy or increased emissions
- Intermittent stalling or difficulty starting
- Unusual engine noises from the valvetrain area due to incorrect camshaft timing

Common causes, most likely first

- 1 Faulty camshaft position actuator position sensor on bank 2
- 2 Open or shorted signal circuit in the sensor wiring harness
- 3 Corroded or damaged electrical connector at the sensor or PCM
- 4 Failed camshaft position actuator solenoid or phaser mechanical issue
- 5 PCM internal fault or software calibration issue
- 6 Contamination or debris interfering with the sensor retractor wheel



How to diagnose and fix it

- 1 Perform a visual inspection of the sensor, connector, and wiring for damage or corrosion
- 2 Use a scan tool to check live data for the camshaft position actuator sensor voltage and compare to specifications
- 3 Test the sensor signal circuit for continuity and shorts to power or ground using a multimeter
- 4 Check the sensor's reference voltage and ground circuits at the connector
- 5 Replace the camshaft position actuator position sensor if testing indicates it is faulty
- 6 Repair any damaged wiring or connectors and clear the diagnostic trouble codes
- 7 Verify the repair by test-driving the vehicle and confirming the code does not return

Common misdiagnosis traps for P34B3

- A high voltage code is often caused by a simple open circuit in the wiring rather than a failed sensor, so always check continuity before replacing parts.
- The camshaft position actuator position sensor is sometimes confused with the camshaft position sensor itself, but they serve different functions and have different part numbers.
- Oil sludge or debris can accumulate on the sensor tip and cause erratic readings that mimic an electrical fault, so cleaning the sensor may resolve the issue.
- In some vehicles, a failing camshaft phaser or solenoid can cause the sensor to read out of range, setting this code even though the sensor is good.
- After repairs, the PCM may require a relearn procedure for the camshaft actuator to ensure proper timing and prevent code recurrence.

Can I keep driving with P34B3?

It is generally safe to drive with this code if the engine is running smoothly, but avoid aggressive acceleration or heavy loads until diagnosed. If the engine runs rough, stalls, or enters limp mode, seek professional repair promptly to prevent further damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Basic hand tools (socket set, screwdrivers)
- Electrical contact cleaner



Reading P34B3

- P** Powertrain: engine, transmission and emissions.
- 3** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 4** Auxiliary emission controls.
- B3** The exact fault within that area.

Often seen with

P0011 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0012** 'A' Camshaft Position - Timing Over-Retarded (Bank 1) · **P0340** Camshaft Position Sensor A Circuit Malfunction (Bank 1) · **P34B2** A Camshaft Position Actuator Position Sensor A Circuit Low B · **P34B4** B Camshaft Position Actuator Temperature Sensor Circuit Bank

See it working

Watch the animated explainer [Four-Stroke Engine Cutaway: Intake to Exhaust](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p34b3/>

