

GENERIC · POWERTRAIN

P34AB

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P34AB

A Camshaft Position Actuator Temperature Sensor Circuit High Bank 2

P34AB indicates that the powertrain control module has detected an abnormally high voltage signal from the camshaft position actuator temperature sensor on bank 2, which is the side of the engine that does not contain cylinder number one. The sensor circuit is reporting a voltage above the expected range, which usually means the sensor is not providing a valid temperature reading and the circuit may be open or shorted to power.

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 when the camshaft actuator is not being controlled correctly.
- Reduced engine performance or power, especially at low speeds or during acceleration.
- Poor fuel economy as the engine management system defaults to a less efficient operating strategy.
- In some cases, the engine may enter limp mode or exhibit hesitation when the fault is active.
- A noticeable decrease in throttle response or an increase in engine noise from the affected bank.

Common causes, most likely first

- 1 A faulty camshaft position actuator temperature sensor on bank 2, where the internal thermistor has failed and sends a high voltage signal.
- 2 Damaged or corroded wiring between the sensor and the powertrain control module, such as an open circuit or a short to voltage.
- 3 A loose, corroded, or disconnected electrical connector at the sensor or at the control module.
- 4 Contamination or sludge buildup on the sensor tip, which can alter its resistance and cause a high voltage reading.
- 5 An internal fault in the powertrain control module that incorrectly interprets the sensor signal, though this is less common.
- 6 Engine oil quality issues or low oil pressure affecting the camshaft actuator, which may indirectly influence sensor readings.
- 7 Aftermarket or incorrect sensor installation that does not meet the original equipment specifications.



How to diagnose and fix it

- 1 Perform a visual inspection of the sensor, its connector, and the wiring harness for signs of damage, corrosion, or loose connections.
- 2 Use a scan tool to read live data for the camshaft position actuator temperature sensor on bank 2 and compare it to ambient temperature after a cold soak.
- 3 Check the sensor's reference voltage and ground circuits with a digital multimeter to confirm the circuit integrity and identify any open or short circuits.
- 4 Test the sensor's resistance with a multimeter and compare it to the manufacturer's specification for the current temperature.
- 5 If the sensor is faulty, replace it with a high-quality original equipment or equivalent part and clear the diagnostic trouble codes.
- 6 Repair any damaged wiring or connectors found during testing, using proper soldering and heat-shrink techniques to ensure a lasting repair.
- 7 After repairs, road-test the vehicle and verify that the code does not return and that live data readings are within normal range.

Common oversights when diagnosing P34AB

- A high voltage reading from this sensor often results from a simple open circuit in the wiring rather than a failed sensor, so always check continuity before replacing parts.
- The camshaft position actuator temperature sensor is sometimes integrated into the actuator assembly, meaning a sensor fault may require replacing the entire actuator on certain engines.
- Oil sludge or debris can coat the sensor and cause a high resistance reading that mimics a circuit fault, so inspecting the sensor tip for contamination is a critical step.
- This code can be set by a low battery or charging system issue that causes voltage spikes, so verifying battery and charging system health is a wise preliminary check.
- A faulty sensor on bank 2 may not produce noticeable drivability symptoms because the engine can often default to a safe operating mode, leading some to dismiss the code as unimportant.

Can I keep driving with P34AB?

You can generally continue driving with this code, but avoid aggressive acceleration or heavy loads until the fault is repaired, as the engine may be running with reduced efficiency and performance. If the check engine light begins flashing or you experience severe power loss, stop driving and seek professional diagnosis immediately.



Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Socket and ratchet set
- Torque wrench
- Contact cleaner and dielectric grease

Reading P34AB

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

Often seen with

P0011 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0016** Crankshaft/Camshaft Position Correlation (Bank 1 Sensor A) · **P0021** 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P34A9** A Camshaft Position Actuator Temperature Sensor Range/Perfor · **P34AC** A Camshaft Position Actuator Position Sensor A 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/p34ab/>

