

GENERIC · POWERTRAIN

P34A8

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P34A8

A Camshaft Position Actuator Temperature Sensor Circuit Bank 2

P34A8 indicates that the powertrain control module has detected an abnormal signal from the camshaft position actuator temperature sensor on bank 2 of the engine. This sensor monitors the temperature of the camshaft phaser or actuator assembly, and the code sets when the reported temperature falls outside the expected range or the circuit behaves erratically.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms.
- Rough idle or engine misfire when the camshaft phaser is not functioning optimally.
- Reduced engine performance or power, especially during acceleration.
- Poor fuel economy due to incorrect camshaft timing adjustments.
- In rare cases, the engine may enter limp mode or exhibit hard starting.

Common causes, most likely first

- 1 Faulty camshaft position actuator temperature sensor.
- 2 Damaged or corroded wiring or connector at the sensor.
- 3 Open or short circuit in the sensor signal or ground circuit.
- 4 Contaminated or degraded engine oil affecting sensor readings.
- 5 Internal mechanical issue with the camshaft phaser or actuator.
- 6 Powertrain control module software or hardware fault (less common).

How to diagnose and fix it

- 1 Perform a visual inspection of the sensor and its wiring for damage or corrosion.
- 2 Use a scan tool to check live data for the sensor temperature reading and compare to actual engine temperature.
- 3 Test the sensor resistance and continuity according to the manufacturer's specifications.
- 4 Check the sensor signal circuit for opens, shorts, or excessive resistance with a multimeter.
- 5 Verify the sensor ground circuit and reference voltage are within specification.
- 6 Replace the camshaft position actuator temperature sensor if testing indicates failure.
- 7 Clear the diagnostic trouble codes and perform a road test to confirm the repair.



What the P34A8 sensor really monitors

- The camshaft position actuator temperature sensor is often integrated into the phaser assembly, so a code may require replacing the entire unit rather than just the sensor.
- Engine oil quality plays a critical role; sludge or low oil pressure can cause the phaser to overheat and trigger this code even when the sensor is good.
- A faulty sensor can cause the PCM to default to a fixed camshaft timing strategy, leading to reduced performance and fuel economy without obvious driveability symptoms.
- Misdiagnosis often occurs when technicians replace the sensor without checking the wiring harness for chafing or heat damage near the exhaust manifold.
- This code can be set by a low battery or charging system issue that causes erratic sensor signals, so always verify battery voltage and grounds first.

Can I keep driving with P34A8?

You can generally continue driving with this code, but avoid heavy acceleration or towing until it is repaired. Prolonged driving with a faulty sensor may lead to reduced engine performance and increased emissions, so schedule a diagnosis soon.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Basic hand tools (socket set, screwdrivers)
- Manufacturer-specific wiring diagram
- Oil pressure gauge (optional)

Reading P34A8

P	Powertrain: engine, transmission and emissions.
3	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
4	Auxiliary emission controls.
A8	The exact fault within that area.

Often seen with

P0010 'A' Camshaft Position Actuator Circuit (Bank 1) · **P0011** 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0016** Crankshaft/Camshaft Position Correlation (Bank 1 Sensor A) · **P0340** Camshaft Position Sensor A Circuit Malfunction (Bank 1) · **P0345** Camshaft Position Sensor A Circuit (Bank 2)



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/p34a8/>

