

GENERIC · POWERTRAIN

P34C4

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P34C4

A Camshaft Position Actuator Control Circuit Driver Current/Temperature Too High Bank 1

P34C4 indicates that the engine control module (ECM) has detected excessive current or temperature in the driver circuit for the bank 1 camshaft position actuator, which is typically a solenoid that adjusts camshaft timing. The ECM monitors the circuit and sets this code when the current draw or driver temperature exceeds a safe threshold, often due to a short, a failing actuator, or wiring damage.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission controls

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or engine misfire, especially when cold
- Reduced engine performance or poor fuel economy
- Intermittent stalling or hesitation during acceleration
- Unusual engine noises from the valvetrain area
- In some cases, the engine may enter limp mode

Common causes, most likely first

- 1 Faulty camshaft position actuator solenoid (internal short or mechanical binding)
- 2 Wiring harness damage such as chafed wires, corrosion, or loose connectors
- 3 Oil sludge or debris clogging the actuator, causing increased resistance
- 4 ECM driver circuit failure (rare but possible)
- 5 Aftermarket or incorrect solenoid installed previously
- 6 Poor electrical ground connection for the actuator circuit



How to diagnose and fix it

- 1 Perform a visual inspection of the actuator solenoid and its wiring for obvious damage or corrosion
- 2 Use a scan tool to check for related codes and freeze-frame data to confirm the fault conditions
- 3 Measure the resistance of the actuator solenoid and compare to manufacturer specifications
- 4 Check the voltage and ground at the solenoid connector with the key on and engine off
- 5 Test the circuit for shorts to ground or power using a multimeter and wiring diagram
- 6 If electrical tests pass, remove and inspect the solenoid for sludge or mechanical binding; clean or replace as needed
- 7 Clear codes and perform a road test to verify the repair, monitoring live data for actuator current and temperature

Common misdiagnosis traps for P34C4

- A dirty oil control valve or solenoid can cause excessive current draw without any electrical fault, so always check for sludge before replacing parts.
The code may be set by a failing ECM driver even when the solenoid tests good, so don't overlook the module if all else checks out.
- Intermittent wiring issues often only appear when the engine is hot or vibrating, so wiggle-test the harness while monitoring live data.
- Replacing the solenoid without addressing oil contamination can lead to repeat failures, so flush the oil system if sludge is found.
This code is often accompanied by camshaft position correlation codes, which can mislead diagnosis if not addressed together.

Can I keep driving with P34C4?

You can usually drive with this code, but avoid aggressive acceleration and heavy loads until repaired, as prolonged driving may cause further damage to the actuator or catalytic converter. If the engine runs rough or enters limp mode, seek service immediately.

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)
- Oil pressure gauge (if checking for sludge)



Reading P34C4

- P** Powertrain: engine, transmission and emissions.
- 3** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 4** Auxiliary emission controls.
- C4** 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) · **P0341** Camshaft Position Sensor A Circuit Range/Performance

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/p34c4/>

