

GENERIC · POWERTRAIN

P26A5

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P26A5

Engine Coolant Bypass Valve A Position Sensor Circuit Range/Performance

P26A5 indicates that the powertrain control module (PCM) has detected an out-of-range or performance fault in the position sensor circuit for engine coolant bypass valve A. The PCM expects a specific sensor voltage or signal pattern as the valve moves through its commanded range, and the actual signal does not correlate with the commanded position within the calibrated limits.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Computer and output circuits

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Poor heater performance or inconsistent cabin heat, especially at idle
- Engine coolant temperature that rises or falls more slowly than normal
- Rough idle or stalling when the engine is cold, due to incorrect coolant flow
- Reduced fuel economy or slightly elevated emissions during warm-up
- In rare cases, the engine may enter a fail-safe mode with reduced power

Common causes, most likely first

- 1 Faulty coolant bypass valve position sensor or the valve assembly itself
- 2 Wiring damage (open, short, or chafed) in the sensor circuit
- 3 Corroded or loose electrical connector at the bypass valve or PCM
- 4 Coolant contamination or debris obstructing the valve, causing it to stick
- 5 Failed thermostat or cooling system air pockets affecting valve operation
- 6 PCM software calibration issue or internal PCM fault (less common)

How to diagnose and fix it

- 1 Scan all modules for stored codes and freeze-frame data to confirm P26A5 is the primary fault
- 2 Visually inspect the bypass valve connector and wiring for corrosion, damage, or looseness
- 3 Measure sensor reference voltage and ground at the valve connector with a digital multimeter
- 4 Command the bypass valve through its full range with a scan tool and observe sensor signal response
- 5 Check coolant level and condition, and pressure-test the cooling system for air pockets or leaks
- 6 If the signal is erratic or absent, replace the bypass valve position sensor or valve assembly as required
- 7 Clear codes and perform a road test to verify the repair and ensure the monitor runs to completion



What the bypass valve sensor code hides

- A stuck-open thermostat can mimic a bypass valve sensor fault because the PCM sees unexpected coolant temperature changes and sets a correlation code.
- Air trapped in the cooling system after a coolant service is a frequent cause of this code, as the valve cannot move correctly against an air pocket.
- The position sensor is often integrated into the bypass valve assembly, so a sensor fault may require replacing the entire valve rather than just the sensor.
- Intermittent wiring faults can set P26A5 only under specific vibration or temperature conditions, so a wiggle test of the harness is essential during diagnosis.
- Some vehicles use the bypass valve for rapid cabin heating and emissions warm-up, so a fault may not trigger drivability symptoms but will affect heater performance.

Can I keep driving with P26A5?

The vehicle is generally safe to drive with P26A5, but avoid prolonged idling in cold weather and monitor the temperature gauge for overheating. Have the fault diagnosed soon to prevent potential cooling system or emissions issues.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter
- Cooling system pressure tester
- Basic hand tools (sockets, wrenches, screwdrivers)
- Wiring diagram for the specific vehicle

Reading P26A5

P	Powertrain: engine, transmission and emissions.
2	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
6	Computer and output circuits.
A5	The exact fault within that area.

Often seen with

P0128 Coolant Thermostat (Coolant Temperature Below Thermostat Reg · **P0597** Thermostat Heater Control Circuit/Open · **P2181** Cooling System Performance · **P26A4** Engine Coolant Bypass Valve A Position Sensor Circuit · **P26A6** Engine Coolant Bypass Valve A Position Sensor Circuit Low



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/p26a5/>

