

GENERIC · POWERTRAIN

P266B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P266B

A Rocker Arm Actuator Position Sensor Circuit Range/Performance Bank 2

P266B indicates that the powertrain control module (PCM) has detected an out-of-range or performance fault in the rocker arm actuator position sensor circuit for bank 2. This sensor reports the actual position of the variable valve timing rocker arm actuator, and the PCM compares that signal against expected values to set this code when the signal is erratic, stuck, or outside the valid range.

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
- Rough idle or misfire, particularly when the engine is cold or under light load
- Reduced engine power or sluggish acceleration due to improper valve timing
- Poor fuel economy as the PCM defaults to a fixed valve timing strategy
- Intermittent stalling or hesitation during acceleration
- Audible ticking or tapping from the bank 2 valve cover area if the actuator is mechanically binding

Common causes, most likely first

- 1 Faulty rocker arm actuator position sensor on bank 2
- 2 Damaged, chafed, or corroded wiring in the sensor circuit (open, short, or high resistance)
- 3 Loose or contaminated electrical connector at the sensor or PCM
- 4 Mechanical binding or wear in the rocker arm actuator assembly, preventing proper movement
- 5 Oil sludge or debris obstructing the actuator, causing restricted motion and a false position reading
- 6 PCM internal fault or software issue affecting the sensor signal interpretation (rare)



How to diagnose and fix it

- 1 Perform a visual inspection of the bank 2 sensor, connector, and wiring for damage, corrosion, or looseness; repair as needed
- 2 Use a scan tool to check for related codes and freeze-frame data, and verify the sensor signal with a live data stream while manipulating the harness
- 3 Measure resistance and voltage on the sensor circuit according to the manufacturer's specifications to rule out wiring faults
- 4 Remove and inspect the rocker arm actuator and sensor for mechanical binding, sludge, or wear; clean or replace components as required
- 5 If the sensor tests out of range, replace the rocker arm actuator position sensor and clear the code
- 6 After repairs, clear codes and perform a road test to confirm the code does not return and the live data reads correctly
- 7 If the fault persists, follow the manufacturer's diagnostic flow chart for PCM testing or reprogramming

What the P266B code often hides

- A dirty or sludged engine can cause the actuator to bind, setting this code even when the sensor itself is good; always check oil condition and maintenance history.
- The sensor circuit often fails intermittently due to heat or vibration, so a wiggle test of the harness while watching live data is more reliable than a static resistance check.
- Some vehicles use the same sensor signal for multiple functions, so a fault may also affect other systems like variable valve timing or cylinder deactivation, leading to additional codes.
- Replacing the sensor without addressing a mechanically binding actuator will lead to a repeat failure, so always verify free movement of the actuator.
- A low battery or charging system issue can cause erratic sensor signals and set this code; check battery voltage and ground connections before condemning the sensor.

Can I keep driving with P266B?

You can usually drive the vehicle with this code, but avoid heavy acceleration or towing until it is repaired, as improper valve timing may cause poor performance or increased emissions. If the engine runs rough or stalls, seek service promptly to prevent further damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Basic hand tools (socket set, screwdrivers, pliers)
- Feeler gauges or mechanical inspection tools
- Factory service information for circuit specifications



Reading P266B

- 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.
- 6B** The exact fault within that area.

Often seen with

P0011 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0021** 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0300** Random/Multiple Cylinder Misfire Detected · **P266A** A Rocker Arm Actuator Position Sensor Circuit Bank 2 · **P266C** A Rocker Arm Actuator Position Sensor Circuit Low Bank 2

See it working

Watch the animated explainer [How a Catalytic Converter Works: 3D Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p266b/>

