

GENERIC · POWERTRAIN

P266D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P266D

A Rocker Arm Actuator Position Sensor Circuit High Bank 2

P266D indicates that the powertrain control module has detected an abnormally high voltage signal from the rocker arm actuator position sensor on bank 2 of the engine. This sensor reports the physical position of the rocker arm actuator, which is part of a variable valve timing or cylinder deactivation system, and a high signal typically means the circuit is open, shorted to voltage, or the sensor's internal resistance has shifted out of 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 under light load if the affected cylinder's valve timing is incorrect
- Reduced engine power or limp mode when the fault is active
- Poor fuel economy due to incorrect valve lift or deactivation strategy
- Audible ticking or tapping from the valve cover area on bank 2 in severe cases
- Intermittent driveability issues that appear and disappear with temperature or vibration

Common causes, most likely first

- 1 Damaged or disconnected rocker arm actuator position sensor connector or wiring harness
- 2 Open circuit in the sensor signal or reference voltage wire
- 3 Short to voltage on the signal circuit, often from chafed insulation against a hot or moving component
- 4 Failed rocker arm actuator position sensor itself, with internal resistance drifting high
- 5 Contaminated or degraded engine oil affecting actuator movement and sensor feedback
- 6 Mechanical binding or wear in the rocker arm actuator assembly causing the sensor to read out of range
- 7 Corroded terminals at the powertrain control module connector for the bank 2 sensor circuit



How to diagnose and fix it

- 1 Connect a scan tool and record the freeze-frame data for P266D, then clear the code and verify whether it returns immediately or only under specific conditions
- 2 Visually inspect the bank 2 rocker arm actuator position sensor connector and harness for looseness, corrosion, chafing, or heat damage
- 3 Measure reference voltage and ground at the sensor connector with the key on, engine off, and compare to the manufacturer's specification
- 4 Back-probe the signal wire and check for a short to voltage by monitoring the sensor voltage while wiggling the harness and tapping the actuator area
- 5 Check engine oil condition and level, then verify that the actuator moves freely through its full range if mechanically accessible
- 6 Substitute a known-good sensor or perform a resistance and voltage sweep test on the existing sensor to confirm the fault
- 7 Repair or replace the faulty wiring, connector, sensor, or actuator assembly as indicated, then clear codes and complete a drive cycle to confirm the repair

What a high sensor signal really tells you

- A high voltage code on a position sensor often means the signal wire is open rather than the sensor being defective, so a continuity check from the sensor to the PCM is more valuable than swapping parts.
- Engine oil sludge or low oil pressure can prevent the rocker arm actuator from reaching its commanded position, causing the sensor to report a high signal even when the electrical circuit is intact.
- Intermittent P266D codes that set only on cold starts or after a hot soak frequently trace to a harness connector that loses contact as the engine expands and contracts.
- Some vehicles use the same rocker arm actuator position sensor signal for both valve timing and cylinder deactivation diagnostics, so a single faulty sensor can set multiple related codes without any separate mechanical fault.
- A short to voltage on the sensor signal circuit can be caused by a nearby ignition coil or fuel injector harness rubbing through, which is easy to miss when the inspection focuses only on the sensor itself.

Can I keep driving with P266D?

You can usually drive the vehicle to a repair shop if the check engine light is the only symptom, but avoid heavy acceleration, towing, or long trips because incorrect valve timing on bank 2 can lead to misfires and potential catalyst damage. If the engine runs rough, misfires, or enters limp mode, stop driving and have the vehicle towed.



Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with back-probe pins
- Wiring diagram for the bank 2 rocker arm actuator position sensor circuit
- Hand tools for connector and harness access
- Mechanical vacuum gauge or oil pressure gauge for checking actuator operation

Reading P266D

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

Often seen with

P0011 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0302** Cylinder 2 Misfire Detected · **P266C** A Rocker Arm Actuator Position Sensor Circuit Low Bank 2 · **P266E** A Rocker Arm Actuator Position Sensor Circuit Intermittent/E · **P266F** A/C Refrigerant Distribution Valve A Control Circuit Driver

See it working

Watch the animated explainer [How Coil-on-Plug Ignition Works: Coil and Spark Plug](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p266d/>

