

GENERIC · CHASSIS

C0303

OBD-II TROUBLE CODE

C0303

Inlet Valve Front Right Performance

This code indicates that the powertrain control module has detected a performance issue with the front right inlet valve, which is part of the vehicle's variable valve timing or active engine mount system. The computer monitors the valve's response and sets this code when the actual position or timing does not match the commanded value within an expected range.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Chassis	Generic (all makes)	Medium	Intermediate	Brakes, steering and suspension

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Rough idle or slight engine vibration, especially when cold
- Reduced engine performance or sluggish acceleration
- Audible ticking or tapping noise from the front right side of the engine
- Poor fuel economy or increased emissions
- In rare cases, the engine may enter limp mode

Common causes, most likely first

- 1 Faulty inlet valve solenoid or actuator
- 2 Wiring damage or corroded connector at the valve
- 3 Clogged oil passage or sludge buildup affecting valve operation
- 4 Failed engine control module (ECM) driver circuit
- 5 Mechanical binding or wear in the valve assembly
- 6 Low engine oil level or degraded oil

How to diagnose and fix it

- 1 Check engine oil level and condition; top off or change oil if necessary
- 2 Inspect the electrical connector and wiring to the inlet valve for damage or corrosion
- 3 Test the inlet valve solenoid with a multimeter for resistance and function
- 4 Use a scan tool to command the valve and observe its response
- 5 Clean or replace the inlet valve if it is clogged or faulty
- 6 Check for technical service bulletins (TSBs) related to this code for your vehicle
- 7 If all else fails, diagnose the ECM driver circuit or replace the ECM



Common Missteps with Inlet Valve Codes

- A dirty or sludged engine oil system is a frequent culprit behind inlet valve performance codes, so oil maintenance history should be verified before replacing parts.
- The code can be set by a momentary electrical glitch, so performing a wiggle test on the connector while monitoring live data can reveal intermittent faults.
- Some vehicles use the inlet valve for active engine mounts, so a failed mount can mimic engine performance issues and set this code without any drivability symptoms.
- After replacing the valve, a relearn procedure may be required for the ECM to recognize the new component and prevent the code from returning.
- This code does not always indicate a failed valve; a restricted oil passage or low oil pressure can cause the same performance deviation.

Can I keep driving with C0303?

You can generally continue driving with this code, but avoid aggressive acceleration or heavy loads until it is diagnosed, as prolonged driving with a faulty inlet valve may lead to reduced engine performance or further damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Socket and wrench set
- Oil pressure gauge
- Wire probe and jumper wires

Reading C0303

C	Chassis: brakes, steering and suspension.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
3	Brakes, steering and suspension.
03	The exact fault within that area.

Often seen with

C0304 Outlet Valve Front Right Performance · **P0010** 'A' Camshaft Position Actuator Circuit (Bank 1) · **P0011** 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0020** 'A' Camshaft Position Actuator Circuit (Bank 2) · **P0021** 'A' Camshaft Position - Timing Over-Advanced or System Perfo



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/c0303/>

