



P1252 · Jaguar

VSV Stuck On VA/VV

P1252 on a Jaguar indicates that the Powertrain Control Module (PCM) has detected the Variable Valve Timing (VVT) solenoid, also called the Variable Valve Actuation (VVA) solenoid, is stuck in the energized or 'on' position. The PCM commands the solenoid to change oil flow to the camshaft phaser, but the expected change in camshaft timing does not occur, so the PCM flags the circuit as stuck on.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Jaguar specific	Medium	Intermediate	Fuel and air metering (injector circuits)

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms.
- Rough idle or unstable engine speed, especially when cold.
- Reduced engine performance and poor acceleration.
- Decreased fuel economy due to incorrect camshaft timing.
- In some cases, the engine may enter limp mode or exhibit hard starting.

Common causes, most likely first

- 1 Faulty VVT solenoid (stuck open or shorted internally).
- 2 Contaminated engine oil or sludge blocking the solenoid or oil passages.
- 3 Wiring harness damage (short to power, open circuit, or corroded connector) at the solenoid.
- 4 PCM software issue or internal driver failure (less common).
- 5 Mechanical binding in the camshaft phaser or VVT actuator.
- 6 Low oil pressure or oil flow restriction to the VVT system.

How to diagnose and fix it

- 1 Check engine oil level and condition; change oil and filter if dirty or overdue.
- 2 Inspect the VVT solenoid connector and wiring for damage, corrosion, or shorts.
- 3 Test the VVT solenoid resistance and compare to factory specification; replace if out of range.
- 4 Using a scan tool, command the VVT solenoid on and off and observe camshaft timing change to verify operation.
- 5 Check for oil pressure at the VVT solenoid feed; repair any restrictions or low pressure issues.
- 6 If the solenoid and wiring are good, inspect the camshaft phaser for mechanical binding or damage.
- 7 After repairs, clear codes and perform a road test to confirm the code does not return.



Oil quality and VVT solenoid sticking

- A stuck-on VVT solenoid often results from neglected oil changes, as sludge and varnish accumulate in the solenoid screen and cause it to jam in the energized position.
- The code can be set intermittently by a wiring short to power that only occurs when the harness is hot or vibrating, so a wiggle test of the harness while monitoring solenoid command is essential.
- Some technicians replace the VVT solenoid without checking oil pressure, only to have the new solenoid stick within weeks because the root cause was low oil pressure or a clogged oil gallery.
- On certain Jaguar engines, the VVT solenoid is controlled by a ground-side driver in the PCM; a short to ground in the harness can mimic a stuck-on solenoid and damage the PCM driver if not diagnosed.
- A P1252 can also be triggered by a mechanical issue in the camshaft phaser that prevents the cam from returning to the base position, making the solenoid appear stuck on even when it is functioning correctly.

Can I keep driving with P1252?

Driving with P1252 is generally safe for short distances, but avoid aggressive acceleration and high engine speeds until the fault is repaired, as incorrect camshaft timing can lead to poor performance and potentially damage the catalytic converter over time.

Tools that help

- OBD-II scan tool with live data and bidirectional control
- Digital multimeter
- Oil pressure gauge
- Basic hand tools (socket set, screwdrivers)
- Feeler gauges or micrometer (for solenoid testing)

Reading P1252

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Jaguar): its meaning depends on the make.
2	Fuel and air metering (injector circuits).
52	The exact fault within that area.

Often seen with

P1251 Start Of Injection Solenoid Circuit Short To B+ · **P1253** Fuel Consumption Signal Short To Ground · **P1251** Air Mixture Solenoid Circuit · **P1251** Throttle Position · **P1253** VSV Stuck On VR · **P1253** VTEC System Circuit Fault · **P1253** Pedal Correlation PDS1 and LPDS Low · **P0010** 'A' Camshaft Position Actuator Circuit (Bank 1) · **P0011** 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0012** 'A' Camshaft Position - Timing Over-Retarded (Bank 1)



See it working

Watch the animated explainer [How a Refrigerator Works: The Cooling Cycle](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1252/>

