

JAGUAR · POWERTRAIN

P1235

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1235 · Jaguar

VSV 1/2/3 Circuit Range Performance

P1235 on Jaguar vehicles indicates that the engine control module has detected an out-of-range performance signal from one or more of the Variable Valve Timing Solenoid circuits, designated VSV 1, 2, or 3. The computer compares commanded solenoid duty cycle against expected camshaft response and flags a range or performance error when the actual timing deviates beyond calibrated limits.

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

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- Rough idle or unstable engine speed at stoplights
- Reduced engine power or sluggish acceleration, especially at low RPM
- Poor fuel economy compared to normal driving
- Occasional engine misfire or hesitation during light throttle
- In rare cases, a rattle or ticking noise from the front of the engine at startup

Common causes, most likely first

- 1 Contaminated or degraded engine oil clogging the variable valve timing solenoid screens
- 2 Failed variable valve timing solenoid (open or shorted coil, stuck spool valve)
- 3 Wiring damage or corroded connector pins at the solenoid harness
- 4 Sludge buildup in the oil galleries feeding the camshaft phaser
- 5 Sticking or worn camshaft phaser mechanism
- 6 Engine control module software calibration issue or faulty module driver

How to diagnose and fix it

- 1 Verify engine oil level and condition; change oil and filter if overdue or contaminated
- 2 Use a scan tool to command each VSV solenoid on and off while watching camshaft timing response
- 3 Inspect solenoid connectors and harness for corrosion, chafing, or loose pins
- 4 Measure solenoid coil resistance and compare to Jaguar specification
- 5 Remove and clean or replace the affected VSV solenoid, checking screens for debris
- 6 Check oil pressure at the phaser feed gallery to rule out internal sludge blockage
- 7 If all mechanical and electrical checks pass, verify ECM software is current and reflash if needed



Oil quality drives VSV performance codes

- A large share of P1235 cases on Jaguars trace back to extended oil change intervals that leave varnish and sludge blocking the fine mesh screens on the VSV solenoids.
- The code can set intermittently from a momentary oil pressure drop at cold start, so a single occurrence after an oil change may not indicate a failed solenoid.
- Technicians sometimes replace all three solenoids when only one is sticking; command each circuit individually with a scan tool before condemning parts.
- A failing camshaft phaser can mimic a bad solenoid by not responding to commanded timing changes, so always verify actual cam angle movement before replacing electrical components.
- Aftermarket oil filters with poor anti-drainback valves can cause oil starvation to the phasers on startup, leading to repeat P1235 settings even after solenoid replacement.

Can I keep driving with P1235?

You can usually drive the car short distances at moderate speed to a repair shop, but avoid hard acceleration and sustained high RPM because variable valve timing is not responding correctly. If the engine runs rough or loses significant power, stop driving and arrange a tow to prevent further mechanical damage.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter for resistance and voltage checks
- Oil pressure gauge
- Basic socket and wrench set
- Torque wrench for solenoid fasteners

Reading P1235

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

Often seen with

P1236 Fuel Pump Control Out Range · **P1236** VSV 1 Circuit · **P1236** Fuel Pump Control Out of Range · **P0011** 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0012** 'A' Camshaft Position - Timing Over-Retarded (Bank 1) · **P0021** 'A' Camshaft Position - Timing Over-Advanced or System Perfo · **P0022** 'A' Camshaft Position - Timing Over-Retarded (Bank 2)



See it working

Watch the animated explainer [How Regenerative Braking Works in Electric Cars](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/jaguar-p1235/>

