

VOLKSWAGEN · POWERTRAIN

P1402

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1402 · Volkswagen

EGR Valve Circuit Short To B+

P1402 on Volkswagen vehicles means the engine control module has detected a short to battery voltage on the exhaust gas recirculation valve circuit, so the valve is receiving constant power when it should be pulsed to ground. The computer monitors the control wire and flags this code when the voltage stays high even with the valve commanded off, indicating a wiring or valve fault rather than a flow problem.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Volkswagen specific	Medium	Intermediate	Auxiliary emission controls

Symptoms you may notice

- Illuminated check engine light, often with no other symptoms besides the warning light
- Rough idle or stumbling when the engine is cold, because the EGR valve may stay stuck open or closed
- Slightly elevated fuel consumption as the engine runs a default EGR strategy
- Intermittent hesitation during light acceleration if the short is temperature or vibration sensitive
- Failed emissions inspection due to the stored fault and possible incomplete readiness monitors

Common causes, most likely first

- 1 Chafed or pinched control wire between the EGR valve and the engine control module shorting to a nearby battery-positive wire
- 2 Internally shorted EGR valve solenoid winding or connector pins bridged by corrosion or debris
- 3 Water or oil intrusion into the EGR valve electrical connector causing a conductive path to battery voltage
- 4 Damaged engine control module driver circuit, often after a previous valve failure or jump-start event
- 5 Aftermarket alarm or accessory wiring tapped into the same harness and shorting to power
- 6 Loose or corroded ground for the EGR circuit, which can make the control wire appear shorted to B+



How to diagnose and fix it

- 1 Clear the code and test-drive to confirm it returns, then check for any related EGR or mixture codes stored alongside it
- 2 Inspect the EGR valve connector and harness for corrosion, chafing, or contact with battery-positive wiring, repairing any damage found
- 3 Disconnect the EGR valve and measure voltage on the control wire with the key on; battery voltage with the valve unplugged points to a harness short
- 4 Measure resistance across the EGR valve solenoid terminals and compare with the manufacturer specification to rule out an internally shorted valve
- 5 Load-test the control wire from the valve connector back to the engine control module to find a short to B+ inside the harness
- 6 If the harness and valve test good, check the engine control module driver output with a scope or substitute a known-good module before replacement
- 7 After repair, clear codes, run the EGR readiness monitor, and verify the valve commands correctly during a road test

Why this code often misleads Volkswagen owners

- A short to B+ on the EGR control wire can be caused by a failed ignition coil or injector harness rubbing through nearby, so inspect the whole engine harness route rather than only the EGR connector.
- Many technicians replace the EGR valve first, but on Volkswagen models the control wire often shorts where the harness passes near the battery tray or exhaust heat shield, so a continuity and voltage-drop test saves unnecessary parts.
- This code does not mean the EGR valve is clogged or that flow is insufficient; a carbon-fouled valve will normally set a flow code instead, so cleaning the valve will not fix P1402.
- A weak or corroded ground for the EGR circuit can make the control wire read battery voltage with the key on, mimicking a short and leading to a misdiagnosed engine control module.
- Aftermarket wiring for alarms, audio, or trailer modules tapped into the same harness is a frequent hidden cause on older Volkswagens, so check for non-factory splices before condemning the valve.

Can I keep driving with P1402?

You can usually drive the vehicle short distances to a repair shop, but avoid sustained highway driving and heavy loads because the EGR system may default to a fixed strategy that affects emissions and fuel economy. If the engine runs rough or stalls, stop driving and have the fault diagnosed promptly.



Tools that help

- OBD-II scan tool with live data and readiness monitor capability
- Digital multimeter with voltage and resistance ranges
- Wiring diagram for the specific Volkswagen model and engine
- Back probe pins or breakout leads for connector testing
- Automotive oscilloscope for checking the EGR driver signal

Reading P1402

- P** Powertrain: engine, transmission and emissions.
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- 1** Manufacturer-specific code (Volkswagen): its meaning depends on the make.
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- 4** Auxiliary emission controls.
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- 02** The exact fault within that area.

Often seen with

P1400 EGR Valve Circuit Electrical Malfunction · **P1401** EGR Valve Power Stage Short To Ground · **P1401** Sub-Throttle Position Sensor Range Performance Problem · **P1400** Sub-Throttle Position Sensor · **P1400** Fuel Tank Pressure Control Solenoid Low Input · **P1401** Fuel Tank Pressure Control System Performance · **P1400** EGRC Solenoid Valve · **P1401** EGR Temperature Sensor · **P1400** Manifold Differential Pressure Sensor Circuit · **P1401** EGR Lifting Sender B283 · **P1400** DPFE Sensor Circuit Low Input · **P1401** DPFE Sensor Circuit High Input · **P1401** EGR Control Solenoid Circuit Signal Low · **P1400** Exhaust Gas Recirculation Valve Position Control · **P1401** Exhaust Gas Recirculation Valve Position Circuit · **P1400** Differential Pressure Feedback Electronic Sensor Circuit Low · **P1401** Differential Pressure Feedback Electronic Sensor Circuit High · **P1400** Heated Catalyst Battery Voltage or Current Too Low During Heating Bank 1 · **P1401** Heated Catalyst Current Too High During Heating Bank 1 · **P0401** EGR Flow Insufficient Detected · **P0403** EGR Circuit Malfunction · **P0402** EGR Flow Excessive Detected

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/volkswagen-p1402/>

