

GENERIC · BODY

B0273

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0273

HVAC Recirculation Door Circuit

B0273 indicates that the body control module (BCM) or HVAC control module has detected an electrical fault in the recirculation door circuit, which controls whether the cabin draws fresh outside air or recirculates interior air. The computer monitors the circuit for abnormal voltage or current and sets this code when the signal falls outside the expected range.

SYSTEM

Body

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Airbags, seats, doors, lights and comfort systems

Symptoms you may notice

- The air recirculation button may not respond or may not stay engaged when pressed.
- Airflow from the vents may remain stuck on fresh air or stuck on recirculate regardless of the setting.
- A faint clicking or whirring noise from behind the dashboard when the recirculation mode is changed.
- The windshield may fog more easily in humid weather because the system cannot switch to recirculate.
- Often no symptoms besides the warning light, especially if the door is stuck in one position that still provides acceptable comfort.

Common causes, most likely first

- 1 Failed recirculation door actuator motor, which is the most common cause due to worn brushes or stripped gears.
- 2 Binding or jammed recirculation door flap caused by debris, broken linkage, or a warped door.
- 3 Damaged or disconnected wiring harness at the actuator connector, often from rodent damage or repeated flexing.
- 4 Corroded or loose electrical connector pins at the actuator or control module.
- 5 Faulty HVAC control module or body control module output driver for the actuator circuit.
- 6 Blown fuse or poor ground connection shared by the HVAC actuator circuit.



How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related HVAC or body codes that could point to a shared circuit.
- 2 Inspect the recirculation door actuator connector and wiring for obvious damage, corrosion, or loose pins.
- 3 Measure voltage and ground at the actuator connector while commanding the door through the scan tool or control panel.
- 4 Remove the actuator and check whether the door flap moves freely by hand to rule out a mechanical bind.
- 5 Test the actuator motor directly with a known-good power and ground source to confirm it operates.
- 6 If the actuator is faulty, replace it and recalibrate the HVAC door positions as required by the vehicle manufacturer.
- 7 Clear the code and verify the recirculation function works correctly through several full cycles.

Recirculation door faults that fool technicians

- A recirculation door that is mechanically binding can mimic a failed actuator, so always check free movement of the flap before condemning the motor.
- Some vehicles use a stepper motor with no feedback potentiometer, and the module infers position from electrical pulses, so a partially shorted winding may set this code without a total failure.
- Rodent damage to the HVAC harness behind the glovebox is a frequent hidden cause that is easily missed during a quick visual inspection.
- The recirculation door may default to fresh air when the circuit fails, which can cause window fogging that drivers mistake for a separate climate control problem.
- After replacing the actuator, many vehicles require a recalibration procedure through the scan tool or a specific ignition cycle sequence to relearn the door limits.

Can I keep driving with B0273?

The vehicle remains safe to drive because the recirculation door only affects cabin air source and does not impact engine operation or safety systems. Avoid extended use of recirculate in humid conditions if the door is stuck, as window fogging may reduce visibility.

Tools that help

- OBD-II scan tool with HVAC actuator command capability
- Digital multimeter
- Trim removal tools
- Socket and ratchet set
- Test light or power probe



Reading B0273

- B** Body: airbags, seats, doors, lights and comfort systems.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 2** Airbags, seats, doors, lights and comfort systems.
- 73** The exact fault within that area.

Often seen with

B0268 HVAC Mode Door 1 Circuit · **B0270** Passenger Door Lock Switch Circuit · **B0272** Power Door Lock Switch Circuit · **B0274** Trunk Lid Release Switch Circuit

See it working

Watch the animated explainer [How the EVAP System Works: Fuel Vapour and Leak Test](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0273/>

