

GENERIC · BODY

B0283

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0283

HVAC Blower Motor Circuit

B0283 indicates that the body control module or climate control module has detected an abnormal condition in the electrical circuit that powers the HVAC blower motor. The computer monitors the circuit for opens, shorts, or excessive current draw and sets this code when the signal or current falls outside the expected range.

SYSTEM

Body

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Airbags, seats, doors, lights and comfort systems

Symptoms you may notice

- The blower motor may not run at any speed setting, resulting in no airflow from the vents.
- The blower may work only on certain speeds or intermittently, often stopping and starting without warning.
- A burning smell or visible smoke may come from the blower motor area if the motor is drawing excessive current.
- The blower motor may run continuously even with the climate control turned off.
- Often no symptoms besides the warning light if the fault is intermittent or only affects a specific speed range.

Common causes, most likely first

- 1 Failed blower motor drawing excessive current or seized bearings.
- 2 Blower motor resistor pack (or blower control module) failure, especially on vehicles with manual speed control.
- 3 Open or shorted wiring between the blower motor and the control module, including damaged connectors or chafed harnesses.
- 4 Blown fuse or faulty relay in the blower motor power circuit.
- 5 Poor ground connection at the blower motor or chassis ground point.
- 6 Faulty HVAC control head or body control module not commanding the blower correctly.



How to diagnose and fix it

- 1 Check the blower motor fuse and relay first, as these are the simplest and cheapest items to verify.
- 2 Inspect the blower motor connector and wiring for signs of overheating, corrosion, or loose pins.
- 3 Measure voltage at the blower motor connector with the blower commanded on to confirm power and ground are present.
- 4 Test the blower motor by applying battery voltage directly; if it does not run smoothly, replace the motor.
- 5 Check the blower motor resistor or control module for continuity and correct resistance values according to the service information.
- 6 Verify the ground circuit from the blower motor to the chassis with a voltage drop test.
- 7 If all electrical checks pass, diagnose the HVAC control head or body control module for proper command signals.

Blower motor circuit checks that save time

- A blower motor that spins freely by hand can still draw excessive current and set this code, so always check current draw with an ammeter rather than relying on visual inspection.
- On vehicles with automatic climate control, the blower control module often fails in a way that sets a circuit code but still allows the blower to run at full speed only, which can mislead you into replacing the motor unnecessarily.
- Corroded or melted connectors at the blower motor resistor are a common hidden cause, especially on older vehicles where the resistor pack is located in the air duct and exposed to moisture.
- This code can be set by a poor ground at the blower motor mounting bolt, so never overlook the ground circuit when the power and control signals appear normal.
- After replacing a failed blower motor, always clear the code and verify the new motor operates at all speeds; a shorted replacement motor or pinched wire can immediately reset the code.

Can I keep driving with B0283?

You can usually drive safely with this code, but you may lose heating, ventilation, and air conditioning function, which can impair windshield defogging in wet or cold weather. Avoid driving in conditions that require defrost until the fault is repaired, and do not continue driving if you smell burning or see smoke from the blower area.

Tools that help

- Digital multimeter
- Clamp-on ammeter
- Test light
- Socket set and trim removal tools
- Service information or wiring diagram



Reading B0283

- 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.
- 83** The exact fault within that area.

See it working

Watch the animated explainer [Engine Cooling System Trainer: How Engines Stay Cool](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0283/>

