

GENERIC · BODY

B0425

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

B0425

Audio Amplifier Internal Failure

B0425 means the audio amplifier module has reported an internal failure to the body control module or infotainment system, typically through a self-test or communication message. The amplifier's own diagnostics have detected a fault inside the unit, such as a failed output stage, power supply problem, or corrupted internal memory, rather than a problem with the speakers or wiring.

SYSTEM

Body

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Airbags, seats, doors, lights and comfort systems

Symptoms you may notice

- No sound from some or all speakers, often with the radio head unit still showing normal operation
- A popping, crackling, or distorted sound from one or more speakers before audio stops completely
- The amplifier may shut down intermittently and return after the vehicle is restarted
- A warning message or chime that fails to sound because the amplifier is offline
- Often no symptoms besides the warning light if the failure is in a non-critical internal circuit
- The infotainment system may display an audio system error or mute the volume automatically

Common causes, most likely first

- 1 Internal failure of the amplifier's output stage or power supply circuitry
- 2 Corrupted or failed internal memory or firmware in the amplifier module
- 3 Overheating damage from a blocked cooling fan or poor ventilation around the amplifier
- 4 Water intrusion or corrosion inside the amplifier housing, especially in vehicles with leaks
- 5 A shorted speaker or speaker wiring that stressed the amplifier and caused internal damage
- 6 Low or unstable voltage supply to the amplifier from a weak battery or poor ground connection
- 7 A manufacturing defect in the amplifier module that appears after years of service



How to diagnose and fix it

- 1 Verify battery voltage and charging system output, then check the amplifier's power and ground connections for tightness and corrosion
- 2 Inspect the amplifier harness connectors for bent pins, water intrusion, or loose terminals
- 3 Disconnect the speakers one at a time and check for shorted voice coils or wiring that could have damaged the amplifier
- 4 Check for technical service bulletins or software updates for the amplifier module that may address known internal faults
- 5 Perform a factory scan tool self-test of the audio amplifier and record any additional internal fault codes
- 6 If the amplifier passes external checks but still sets B0425, replace or reprogram the amplifier module as the internal failure is confirmed
- 7 After replacement, clear codes and verify audio output from all speakers with the radio at moderate volume

What B0425 does not always mean

- A shorted speaker or pinched speaker wire can mimic an internal amplifier failure by damaging the output stage, so always test speakers before condemning the amplifier.
- Some amplifiers set B0425 only after a low-voltage event such as a jump start or weak battery, and the code may clear after the battery is replaced and the module is reset.
- The amplifier may share a communication bus with other modules, and a fault on that bus can cause a false B0425 if the amplifier cannot complete its self-test.
- Water leaks into the trunk or under-seat amplifier locations are a common hidden cause, so inspect for damp carpets or corrosion on the amplifier case.
- A failed amplifier can still allow the head unit to appear normal, leading owners to replace the radio when the amplifier is the actual faulty component.

Can I keep driving with B0425?

The vehicle remains safe to drive because the fault affects only the audio system, but you should avoid relying on audio warnings or chimes and address the code soon to prevent further electrical stress. If the amplifier is overheating or smells of burning, stop using the audio system and have it inspected promptly.

Tools that help

- Digital multimeter for voltage and resistance checks
- Factory or advanced scan tool capable of audio module self-tests
- Trim removal tools for accessing the amplifier location
- Test speaker or known-good speaker for output verification
- Wiring diagram for the audio system



Reading B0425

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

Often seen with

U0184 Lost Communication With Radio · **U0185** Lost Communication With Antenna Control Module

See it working

Watch the animated explainer [Readiness Monitors and the OBD-II Drive Cycle](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/b0425/>

