

GENERIC · NETWORK

U0661

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

U0661

Lost Communication With Right Rear Temperature Actuator A

U0661 is a generic network communication code indicating that a control module on the vehicle's data bus has lost contact with the right rear temperature actuator, which is the small motor that moves a blend door to control rear cabin air temperature. The module that monitors this actuator, typically the rear HVAC control module or body control module, sets the code when it stops receiving expected messages or feedback from the actuator circuit.

SYSTEM Network	CODE TYPE Generic (all makes)	SEVERITY Low	FIX DIFFICULTY Intermediate	AREA Network communication
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Symptoms you may notice

- Rear climate control temperature cannot be adjusted or stays stuck at one setting
- Air from the rear vents remains hot or cold regardless of the setting
- A clicking or whirring noise from the rear trim area when the temperature is changed
- Rear HVAC panel buttons or touchscreen controls for rear temperature become unresponsive
- Often no symptoms besides the warning light, especially if the rear system is rarely used
- Intermittent operation of the rear temperature actuator that works on some drives and not others

Common causes, most likely first

- 1 Damaged or disconnected wiring harness at the right rear temperature actuator connector
- 2 Failed right rear temperature actuator motor or its internal position sensor
- 3 Corroded or loose pins in the actuator electrical connector
- 4 Blown fuse or poor ground shared by the rear HVAC control circuit
- 5 Failed rear HVAC control module or body control module that cannot communicate on the bus
- 6 Seized or binding blend door that overloads the actuator and causes it to drop offline
- 7 Software glitch or lost configuration in the module that controls the rear actuator



How to diagnose and fix it

- 1 Connect a scan tool and record all stored codes in every module, then clear U0661 and verify whether it returns immediately or only after a drive cycle
- 2 Inspect the right rear temperature actuator connector and wiring for chafing, corrosion, or pushed-out pins, and repair as needed
- 3 Check the fuse and ground circuit that supply power to the rear HVAC control module and actuator
- 4 Command the right rear temperature actuator through the scan tool and watch for movement and feedback; if it does not respond, test the actuator with a known-good unit
- 5 Remove the actuator and check that the blend door moves freely by hand; repair a binding door before installing a new actuator
- 6 If wiring and actuator are good, perform a network integrity test on the data bus and inspect for shorts or opens that isolate the rear HVAC module
- 7 After repair, clear codes, perform any required calibration or actuator relearn, and verify the rear temperature responds correctly through several full hot-to-cold cycles

What the rear actuator code really means

- U0661 is often set by a weak battery or low voltage during cranking, so check battery health and charging system before replacing any module
- A binding blend door is a common hidden cause; a new actuator will fail the same way if the door is not freed up first
- The code can appear after body shop repairs or water intrusion near the rear quarter panel, where the harness and connectors are easily disturbed
- Some vehicles require a scan-tool calibration or actuator relearn after replacement, and skipping it will leave the code stored even with good parts
- A failed rear HVAC control module can set U0661 along with communication codes for other rear components, so check for multiple U-codes before condemning the actuator

Can I keep driving with U0661?

The vehicle remains safe to drive because this fault only affects rear cabin temperature comfort and does not impair steering, braking, or powertrain operation. Avoid repeated attempts to adjust the rear temperature if you hear clicking, and have the circuit inspected when convenient to prevent further damage to the actuator or door.



Tools that help

- OBD-II scan tool with bidirectional control and module communication capability
- Digital multimeter for voltage, resistance, and continuity checks
- Trim removal tools to access the rear actuator and connectors
- Test light or fused jumper wire for circuit testing
- Service information or wiring diagram for the rear HVAC circuit

Reading U0661

U	Network: communication between the vehicle's control modules.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
6	Network communication.
61	The exact fault within that area.

Often seen with

U0662 Lost Communication With Right Rear Temperature Actuator B · **U0663** Lost Communication With Rear Mode Actuator · **U0664** Lost Communication With Rear HVAC Air Cutoff Actuator

See it working

Watch the animated explainer [How a Radiator Fan Relay Circuit Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u0661/>

