

Customer Outreach PO Box 8338 Saint Joseph, MO 64508

product.safety@altec.com connect.altec.com/login Phone 1-877-GO ALTEC Facsimile 1-877-659-9929

## IMPORTANT SAFETY RECALL

#### This notice applies to your vehicle. Refer to the provided list.

NHTSA Recall Number: 21V-998

February 18, 2022

Dear Altec Owner,

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act and Canada Motor Vehicle Safety Act.

Altec Industries, Inc. has decided that a defect which relates to motor vehicle safety exists in certain AA/AN67, AA/AN67-E100, and AN55-E88 aerial devices built from June 2017 to September 2021. This is to inform you that your vehicle may contain a defect that could affect the safety of a person. The hydraulic plumbing and/or electrical wiring could be connected improperly, preventing the unit from stopping boom movement when the operating range limits are reached. **Death or serious injury could result if the unit becomes unstable. Moving the boom beyond the operating range limits while using the material handling jib can cause the unit to become unstable.** 

Refer to the included notice for the items covered under the Altec Warranty Policy. If you had this repair performed before you received this notice, you may be eligible to receive reimbursement for the cost of obtaining a pre-notification remedy of the problem associated with this recall. All work will be performed at no charge to the customer when presented for repair.

Compare your unit's identifying information with the provided list to verify your unit is affected. You may also contact Altec or view your fleet through Altec Connect to determine if there are any other outstanding notices.

The inspection and repair can be performed by the customer, or you may contact Altec for further assistance. The inspection is expected to take 1 hours to complete. The repair is expected to take 1 hour to complete.

If you have sold or retired the unit, update the records through Altec Connect. If you have leased this equipment to another person or company, you are required by Federal Law to forward a copy of this notice to the lessee by first class mail within ten (10) days of the receipt of this notice.

For US owners: after contacting Altec, if you are still not able to have the safety condition remedied without charge and within a reasonable time, you may submit a complaint to: Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590 or call toll-free 1-888-327-4236 (TTY: 1-800-424-9153) or go to http://www.safercar.gov.

For Canadian Owners: if you are still not able to have the safety condition remedied by your dealer within a reasonable time, please contact Altec.

We regret this inconvenience; however, we are taking this action in the interest of your safety and continued satisfaction with Altec products.

Thank you for your immediate attention on this important matter.



#### **CUSTOMER SERVICE NOTICE CSN 842**

### **Platform-to-Ground Interlock Inspection**

Units Affected: Certain AA/AN67, AA/AN67-E100, and AN55-E88 aerial devices built from June 2017 to September 2021. Verify your unit is affected by reviewing the attached list or accessing Altec Connect.

Background: The affected units are equipped with a platform-to-ground interlock system to prevent material handling from the boom tip jib and winch with the booms in extended reach positions. Altec has learned that the hydraulic plumbing and/or the electrical wiring could be connected improperly to the platform-to-ground blocking valve, preventing the system from stopping boom movement when the operating range limits are reached.



Death or serious injury could result if the unit becomes unstable. Moving the boom beyond the operating range limits while using the material handling jib can cause the unit to become unstable.

**Customer Action**: Use the Inspection and Repair Procedure beginning on page 2 to check the interlock operation, and correct the plumbing if required. Do this no later than the next preventive maintenance interval or 30 days from the receipt of this CSN, whichever comes first.

**Requirements**: The inspection is estimated to take 1 hour and 1 person to complete. The use of the AXIS service interface is recommended. The repair is estimated to take 1 hour and 1 person to complete.

**Completion and Warranty:** The inspection and repair are covered under the Altec Warranty Policy and can be performed by Altec, the customer, or the customer's warranty provider. Altec will perform the work for free at an Altec facility. If the customer or the customer's warranty provider performs the work, a warranty claim must be submitted to be reimbursed for the cost of the parts and/or labor. Altec will allow up to \$90 for the labor to perform the inspection and up to \$90 for the labor to perform the repair. Customers are responsible for the travel costs of an Altec Mobile Service technician if the technician performs the work at the owner's location.

#### Altec Contact Info:



Phone: 1-877-GO ALTEC (1-877-462-5832) Options: 1 - Parts; 2 - Shop Service; 3 - Mobile Service; 4 - Technical Support; 5 - Global Rental Service Request; 6 - Chassis Repair

Altec Use Only			
Inspection labor	1.0 hr		
Repair labor	1.0 hr		
Account #	010.0393.43151.000.9195.000		
Travel	Not included		
NHTSA code	98		
Prime fail P/N	N/A		
Doc ref	N/A		

Altec Use Only				
Description	Part No.	Qty	Warranty	
N/A	N/A	N/A	N/A	

Page 1 of 8

Released: February 18, 2022

**Inspection and Repair Procedure**: The use of the AXIS service interface to read the lower boom angle and a digital level to read the upper boom angle is recommended for this inspection. If the AXIS is not available, two digital levels can be used with the assistance of a second person. Read and understand all steps of the instructions before beginning the procedure.

#### Setup

- 1. Position the unit on a level surface with adequate clearance to fully articulate the booms. Apply the parking brake, and chock the wheels. Engage the power take-off (PTO), and properly set the outriggers. Keep the elevator stowed on units with an elevator.
- 2. If the temperature outside is below 32 degrees Fahrenheit (0 degrees Celsius), use the Cold Weather Start-Up procedure in the Operator's Manual to warm the hydraulic oil before operating the unit. Do not operate the pump or engine at more than a fast idle until the hydraulic oil has warmed up.
- 3. Remove any tools and other items from the platform, except the liner.
- 4. If using the AXIS, connect it to the service port on the turntable, log in using your AXIS credentials, set it to display the lower boom angle, and use your mobile device from the platform to read the lower boom angle C during the inspection when operating the unit from upper controls. If not using the AXIS, attach a digital level to the top or bottom of the stowed lower boom, and have a second person read the lower boom

A=angle between upper and lower booms B=upper boom angle measured with digital level C=lower boom angle displayed on AXIS D=lower boom angle measured with digital level A = C - B; B = C - Aor A = 180 - B - D; B = 180 - D - A

Figure 1 — Equations for Boom Angles

angle D when required. In either case, use a digital level while in the platform to measure the upper boom angle B when required. Calculate the angles as specified according to Figure 1.

#### Testing Upper Boom Platform-to-Ground Interlock

- 5. Enter the platform, and put on the personal fall protection system. Use the upper controls for steps 6 through 10.
- 6. Unfold the upper boom to 20 to 30 degrees above the stowed lower boom.
- 7. Operate the boom function(s) as described below (refer to Figure 2).
  - AN series: Raise the lower boom, stopping when the amber indicator light on the turntable turns on.
    - If using AXIS, the lower boom angle C will now be between 103 and 107 degrees. Record angle C
    - If using a digital level, the lower boom angle D will now be between 73 and 77 degrees. Record angle D \_\_\_\_\_.



the booms, stopping both functions when the amber indicator light on the turntable turns on.

- If using AXIS, the lower boom angle C will now be between 103 and 107 degrees. Record angle C \_\_\_\_\_.
- If using a digital level, the lower boom angle D will now be between 73 and 77 degrees. Record angle D \_\_\_\_\_.



- 8. Calculate the three possibilities for angle B to use when unfolding the upper boom in step 9, based on values of 45 degrees, 55 degrees, and 60 degrees for angle A and using angle C or D from step 7 (refer to Figure 3).
  - If using AXIS for the lower boom angle C, calculate using B=C-A.
    - B1=C-45. Record angle B1 \_\_\_\_\_.
    - B2=C-55. Record angle B2 \_\_\_\_\_.
    - B3=C-60. Record angle B3



Figure 3 — Boom Positions for Steps 8-9

- For example, if C=106, then B1=106-45=61, B2=106-55=51, and B3=106-60=46.
- If using a digital level for the lower boom angle D, calculate using B=180-D-A.
  - B1=180-D-45. Record angle B1 \_\_\_\_\_.
  - B2=180-D-55. Record angle B2 \_\_\_\_\_.
  - B3=180-D-60. Record angle B3
  - For example, if D=74, then B1=180-74-45=61, B2=180-74-55=51, and B3=180-74-60=46.
- 9. Operate Upper Boom Unfold as described below (refer to Figure 3).
  - If the upper boom stops moving on its own between angles B1 and B2 as calculated in step 8 (corresponding to angle A between 45 and 55 degrees), release the control. The upper boom platform-to-ground interlock is functioning properly. Proceed to step 23.
  - If the upper boom has not stopped moving on its own when it reaches angle B3 as calculated in step 8 (corresponding to angle A = 60 degrees), release the control. The upper boom platform-to-ground interlock is not functioning properly. Proceed to step 10.

#### Inspecting Interlock Wiring and Plumbing

- 10. Move the booms to place the platform at the ground, and exit from the platform. Disengage the PTO, and turn off the engine. Remove the key from the ignition, and secure it following your employer's vehicle lockout/tagout procedure.
- 11. Remove the cover from the curb side of the turntable. Find the 2-spool platform-toground blocking valve and the lower control valve on the valve mounting plate on the side of the turntable (refer to Figure 4).
- 12. Check whether the turntable wiring harness is connected properly to the solenoid coils on the blocking valve as described below (refer to Figures 4 and 5).
  - a. The connector with the violet/black and black wires and labeled LB is plugged



into the lower boom coil, located between the LS1 and WP1 ports, farthest from the turntable.b. The connector with the orange/black and black wires and labeled UB is plugged into the upper boom coil, located between the LS2 and WP2 ports, closest to the turntable.

- 13. Check whether the plumbing between the blocking valve and the lower control valve is correct as described below (refer to Figure 5).
  - a. The hose from the port on the back of the lower boom section of the lower control valve is connected to port LS1 on the blocking valve.
  - b. The hose from the port on the back of the upper boom section of the lower control valve is connected to port LS2 on the blocking valve.
  - c. The hose from the C2 port of the lower boom section on the front of the lower control valve is connected to port WP1 on the blocking valve.
  - d. The hose from the C1 port of the upper boom section on the front of the lower control valve is connected to port WP2 on the blocking valve.



Figure 5 — Proper Interlock Wiring and Plumbing

- 14. Review the results of the wiring and plumbing inspection.
  - If the wiring harness is connected properly to the two coils and all four hoses are connected properly between the two valves, perform additional troubleshooting and take corrective action to restore proper operation of the upper boom platform-to-ground interlock. If necessary, contact Altec Technical Support for assistance as described on page 1. To verify that proper operation has been restored, proceed to step 17.
  - If the wiring is reversed and/or if any hoses are connected incorrectly between the two valves, proceed to step 15.

#### **Correcting Interlock Wiring and Plumbing**

15. If the connectors on the wiring harness are plugged into the wrong coils, unplug them and plug them into the opposite coils (refer to Figures 4 and 5).



# Death or serious injury can result from hydraulic oil being injected into the flesh when loosening or disconnecting hydraulic components. Remove the pressure before loosening or disconnecting hydraulic components.

Seek immediate medical attention if injured by escaping hydraulic oil. Serious infection or reaction can result if medical treatment is not given immediately.

Spilled hydraulic oil creates slick surfaces and can cause personnel to slip and/or fall. Keep the unit and work areas clean.

- 16. Disconnect any improperly plumbed hoses from the elbows in the incorrect ports on the 2-spool blocking valve, and connect them to the elbows in the correct ports on this valve (refer to Figure 5).
- 17. Reinstall the cover on the turntable.

#### **Retesting Upper Boom Platform-to-Ground Interlock**

- 18. Start the engine, and engage the PTO. Enter the platform, and put on the personal fall protection system. Use the upper controls for steps 19 through 23.
- 19. Move the lower boom to the vertical position and the upper boom to 20 to 30 degrees above the lower boom.
- 20. Operate the boom function(s) as described below (refer to Figure 6).
  - AN series: Raise the lower boom, stopping when the amber indicator light on the turntable turns on.
    - If using AXIS, the lower boom angle C will now be between 103 and 107 degrees. Record angle C \_\_\_\_\_.
    - If using a digital level, the lower boom angle D will now be between 73 and 77 degrees. Record angle D \_\_\_\_\_.





Figure 6 — Boom Positions for Step 20

- If using AXIS, the lower boom angle C will now be between 103 and 107 degrees. Record angle C \_\_\_\_\_.
- If using a digital level, the lower boom angle D will now be between 73 and 77 degrees. Record angle D \_\_\_\_\_.

- 21. Calculate the three possibilities for angle B to use when unfolding the upper boom in step 22, based on values of 45 degrees, 55 degrees, and 60 degrees for angle A and using angle C or D from step 20 (refer to Figure 7).
  - If using AXIS for the lower boom angle C, calculate using B=C-A.
    - B1=C-45. Record angle B1 \_\_\_\_\_.
    - B2=C-55. Record angle B2 \_\_\_\_\_.
    - B3=C-60. Record angle B3



Figure 7 — Boom Positions for Steps 21-22

- For example, if C=106, then B1=106-45=61, B2=106-55=51, and B3=106-60=46.
- If using a digital level for the lower boom angle D, calculate using B=180-D-A.
  - B1=180-D-45. Record angle B1
  - B2=180-D-55. Record angle B2
  - B3=180-D-60. Record angle B3
  - For example, if D=74, then B1=180-74-45=61, B2=180-74-55=51, and B3=180-74-60=46.
- 22. Operate Upper Boom Unfold as described below (refer to Figure 7).
  - If the upper boom stops moving on its own between angles B1 and B2 as calculated in step 21 (corresponding to angle A between 45 and 55 degrees), release the control. The upper boom platform-toground interlock is functioning properly. Proceed to step 23.
  - If the upper boom has not stopped moving on its own when it reaches angle B3 as calculated in step 21 (corresponding to angle A = 60 degrees), release the control. The upper boom platform-to-ground interlock is not functioning properly. Perform additional troubleshooting and take corrective action to restore proper operation of the upper boom platform-to-ground interlock. If necessary, contact Altec Technical Support for assistance. When proper operation has been restored, proceed to step 23.

#### Testing Lower Boom Platform-to-Ground Interlock

23. Move the booms to place the platform at the ground, and exit from the platform. Use the lower controls for steps 24 through 27. If using AXIS during these steps, use your mobile device from the lower controls to read the lower boom angle C. If not using AXIS during these steps, use a digital level to read the lower boom angle D.



24. Move the lower boom to the vertical position (refer to Figure 8).

Figure 8 — Boom Positions for Steps 24-25

25. Move the upper boom to a position 90 to 120 degrees from the lower boom.

- 26. Operate Lower Boom Raise as described below (refer to Figure 9).
  - If the lower boom stops moving on its own at an angle C between 103 and 107 degrees according to AXIS or angle D between 73 and 77 degrees according to the digital level, release the control. The amber indicator light on the turntable should not turn on. The lower boom platform-to-ground interlock is functioning properly. Proceed to step 27.



Figure 9 — Boom Positions for Step 26

• If the lower boom does not stop moving on its own at an angle C between 103 and 107 degrees according to AXIS or angle D between 73 and 77 degrees according to the digital level, release the control. The lower boom platform-to-ground interlock is not functioning properly. Perform required troubleshooting and take corrective action to restore proper operation of the lower boom platform-to-ground interlock. If necessary, contact Altec Technical Support for assistance. When proper operation has been restored, proceed to step 27.

#### **Completion**

27. Stow the booms, retract the outriggers, and put the unit back into service.

28 Complete the Inspection Sheet at the end of the CSN and return it to Altec.

Phone

Phone:

# City: \_\_\_\_\_State/Province: \_\_\_\_\_\_ ZIP/Mailing Code: \_\_\_\_\_Country: \_\_\_\_\_ Signature: \_\_\_\_\_

Submission of this form does not order parts or schedule service from Altec.

\* If the customer or the customer's warranty provider performs the repair, submit a warranty claim through Altec Connect to be reimbursed for the cost of the parts and/or labor.

Contact Altec for more information or to schedule the work to be done by Altec.

Make copies of this form for additional units if needed.

Company Name:

Service Company Name: \_\_\_\_\_

# **Inspection Sheet**

Complete this form and submit it to Altec to document inspection completion.

Choose one of these options for submission.

- Online through the customer portal Altec Connect\* Sign in or Register for an account at connect.altec.com/login
  - 1. Select Equipment
  - 2. Select Altec Product Notices
  - 3. Select Report a Completed APN
- Scan and Email to product.safety@altec.com
- FAX to 1-877-659-9929

Company Contact:

Company Street Address:

• Mail to: Customer Outreach; PO Box 8338; Saint Joseph, MO 64508

Model	Altec Unit Serial Number	Date Inspected



Scan here to access Altec Connect.