

**Safety Defect and Noncompliance Report Guide for Equipment  
Part 573 Defect and Noncompliance Report**

On December 20, 2013 Altec Industries Inc decided that a defect which relates to motor vehicle safety exists in the motor vehicle equipment listed below, and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573 Defect and Noncompliance Reports.

Date this report was prepared: **December 30, 2013**

Furnish the manufacturer's identification code for this recall (if applicable): **CSN 592**

1. Identify the full corporate name of the fabricating manufacturer of the vehicle being recalled. If the recalled vehicle is imported, provide the name and mailing address of the designated agent as prescribed by 49 U.S.C. §30164.

**Altec Industries, Inc.**

Identify the corporate official, by name and title, whom the agency should contact with respect to this recall.

**Joshua T. Chard**  
**Director, Corporate and Product Safety**

Telephone Number: **205-408-8627** Fax No.: **205-981-3733**

Name and Title of Person who prepared this report.

**Philip D. Purdy**  
**Manager, Technical Publications**

Signed: \_\_\_\_\_

### **I. Identify the Recalled Items of Equipment**

2. Identify the items of equipment Involved in the Recall, *for each make and model or applicable vehicle line (provide illustrations or photographs as necessary to describe the vehicle), provide:*

Generic name of the item: **Aerial Device**

Make(s): **Altec** Model Years Involved: **2010 - 2013** Model: AH75/85/100

Production Dates: Beginning: **April 2010** Ending: **November 2013**

### **II. Identify the Recall Population**

3. Furnish the total number of vehicles recalled potentially containing the defect or noncompliance.

<u>Model</u>	<u>Year</u>	<u>Number of Vehicles Potentially Involved</u>
<b>AH75/85/100</b>	<b>2010 - 2013</b>	<b>168</b>

Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance: **100 %**

Identify and describe how the recall population was determined – in particular how the recalled models were selected and the basis for the beginning and final dates of manufacture of the recalled vehicles:

**The recall population was determined by reviewing manufacturing records to identify units built with upper or lower control harness manufactured by MNStar Technologies.**

### **III. Describe the Defect or Noncompliance**

Describe the defect or noncompliance.

**The presence of moisture in the control module plug may cause an unwanted connection between pins which carry information to or from the control module. When these undesirable connections are made they may cause unintended motions of the boom or platform**

If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.

**MNStar Technologies, Inc.  
PO Box 806, 4201 Hwy 169 East  
Grand Rapids, MN 55744**

#### **IV. Provide the Chronology in Determining the Defect/Noncompliance**

4. With respect to a defect, furnish a chronological summary (including dates) of all the principle events that were the basis for the determination of the defect. The summary should include, but not be limited to, the number of reports, accidents, injuries, fatalities, and warranty claims.

**In October of 2013 an incident of unintended boom movement was reported on an AH75. After repeated unsuccessful attempts to recreate the failure, an examination of the control system components began in November of 2013. The upper control wiring harness was disassembled to search for defects. During disassembly it was found that sealing plugs were missing and moisture was present within the connector for the control module. The failure was recreated by spraying a large quantity of water into the connector plugs. After the introduction of the water, system malfunctions became apparent and eventually a platform level signal was interpreted by the control system without a command from an operator. It was observed that the subject machines wiring harness was different from other production units and may have been particularly susceptible to moisture intrusion. Further inspections found missing plugs on two other harnesses at the customer site and a new harness from manufacturing**

**Bench testing confirmed that the engaging the emergency stop would halt platform motion.**

#### **V. Identify the Remedy**

5. Furnish a description of the manufacturer's remedy for defect or noncompliance. Clearly describe the differences between the recall condition and the remedy.

**Altec will issue a recall letter (CSN 592) to owners of all affected unit directing them to replace the control module wiring harness.**

Clearly describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly.

**The new wiring harness has the proper seal plugs to prevent water ingress into the connectors.**

#### **VI. Identify the Recall Schedule**

6. Furnish a schedule or agenda (with specific dates) for notification.

**Customer notification estimated to be the week of February 17, 2014.**