

Part 573 Safety Recall Report

16V-835

Manufacturer Name : Altec Industries Inc.

Submission Date : NOV 15, 2016

NHTSA Recall No. : 16V-835

Manufacturer Recall No. : NR



Manufacturer Information :

Manufacturer Name : Altec Industries Inc.

Address : 210 Inverness Center Drive
Birmingham AL 35242

Company phone : 205-991-7733

Population :

Number of potentially involved : 2,194

Estimated percentage with defect : 18 %

Vehicle Information :

Vehicle 1 : 1995-1999 Altec Aerial Device

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Aerial Devices with Rosenboom Machine and Tool lower boom lift cylinders.

Production Dates : MAY 01, 1995 - AUG 15, 1999

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Description of Defect :

Description of the Defect : Improper hydraulic cylinder design

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : The cylinder end gland could fail which could cause uncontrolled boom movement increasing the risk of serious injury or death

Description of the Cause : NR

Identification of Any Warning that can Occur : The unit operator's manual and maintenance manual both describe cylinder inspection procedures. Cylinders with early evidence of separating end glands are normally identified during these inspections

Supplier Identification :**Component Manufacturer**

Name : Rosenboom Machine & Tool;
Address : 1530 Western Avenue
Sheldon IOWA 51201
Country : United States

Chronology :

Following a recent field failure involving a lower boom lift cylinder, an investigation was launched to review the overall design and failed component on the subject unit. To understand the design Altec engaged the cylinder manufacturer, Rosenboom Machine & Tool, to gain insight into the various aspects which could have attributed to the failure. The inspection of the field specimen confirmed a theory of material fatigue, with the presence of beach marks which are indicative of a fatigue fracture. Through this investigation it was found that although these cylinders have been in service for approximately 20 years, the original design of the cylinder can exceed the fatigue life of the head-gland retaining ring.

Due to the nature of the failure mode the potential for additional field failures exists

Description of Remedy :

Description of Remedy Program : Altec will issue MAB 641 to all affected customers requiring them to inspect the boom lift cylinder head gland for deformation.

Based upon the inspection findings, the customer will be instructed that (1) the unit can be continued to be used with restricted lower boom articulation until the cylinder is repaired or replaced or (2) if the deformation criterion is exceeded, the unit must be taken out of service until the cylinder is repaired or replaced

How Remedy Component Differs from Recalled Component : Repaired or replaced cylinders will incorporate a revised cylinder head gland

Identify How/When Recall Condition was Corrected in Production : Rosenboom cylinders with this end gland design are no longer used in production

Recall Schedule :

Description of Recall Schedule : NR
Planned Dealer Notification Date : NR - NR
Planned Owner Notification Date : JAN 09, 2017 - JAN 10, 2017

* NR - Not Reported