

Part 573 Safety Recall Report

21V-512

Manufacturer Name : Altec Industries, Inc.

Submission Date : AUG 27, 2021

NHTSA Recall No. : 21V-512

Manufacturer Recall No. : MAB 827



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 : 43

Estimated percentage with defect : 80 %

Vehicle Information :

Vehicle 1 : 2020-2021 Altec D2000/3000/4000 Derrick

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : All units produced with the SD40 gearbox between the affected dates could be involved. The recall population was determined from a review of production records.

Production Dates : OCT 01, 2020 - JUL 02, 2021

VIN Range 1 : Begin :

NR

End : NR

☐ Not sequential

Description of Defect :

Description of the Defect : The subject gearbox assembly relies on a retaining ring assembled into a groove in the motor adaptor housing to hold the internal brake and thrust plate assembly in place. The location of the groove was incorrectly located in the motor adaptor housing of the suspect population. The motor adapter housing groove that contains the retaining ring design also includes a chamfer that serves as a lead-in. It is possible the lead-in chamfer can hold the retaining ring in place without the ring being fully seated into the groove. If the retaining ring is improperly seated in the assembly, it could become dislodged from the groove. When this occurs the gearbox brake can no longer hold the boom's rotational position and could result in the boom freely rotating.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If the thrust plate is not contained properly and is forced from the housing unintended boom movement could occur resulting in potential injury and or property damage.

Description of the Cause : NR

Identification of Any Warning that can Occur : There is no warning that the retaining ring is not properly seated in the groove. If the ring fails, a preoperational inspection could detect the nonconforming gearbox.

Involved Components :

Component Name 1 : Paccar SD40

Component Description : Swing Drive Gearbox

Component Part Number : 970351336

Supplier Identification :

Component Manufacturer

Name : Paccar Winch

Address : 800 E. Dallas Street
Broken Arrow Oklahoma 74013

Country : United States

Chronology :

In early 2021, two incidents of the retaining ring becoming dislodged were caught during manufacturing quality control side-load testing. In April 2021, a customer identified a similar failure during the required side-load test after a gearbox replacement.

Altec had returned the previous failures to Paccar for evaluation per the standard process. The observations of failures and overall failure rate exceeding those observed on typical gearboxes led Altec to notify the supplier of the issue in April of 2021 to ask for a detailed analysis of the failed components.

In June, Paccar identified the machining issue and notified Altec of their finding and corrected the production gearboxes. In late June, Altec determined that manufacturing quality control side-load testing would not capture 100% of nonconforming units.

Description of Remedy :

Description of Remedy Program : The remedy includes a design change to remove the lead-in chamfer that improperly held the retaining ring and the nominal dimension and tolerance of the groove's location was adjusted to eliminate the tolerance stack-up issue.
Altec Warranty Policy covers the recall remedy.

How Remedy Component Differs from Recalled Component : The remedy components have the retaining ring groove machined to the new specifications to ensure that ring seats properly.

Identify How/When Recall Condition was Corrected in Production : Paccar identified the issue with the groove machine tolerance and updated the machining print and program to adjust the housing profile.

Recall Schedule :

Description of Recall Schedule : Altec will issue MAB 827 to the owners of the affected units. Altec does not have a dealer network and issues letters to owners only.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : SEP 02, 2021 - SEP 03, 2021

* NR - Not Reported