Part 573 Safety Recall Report 23V-029

Manufacturer Name : Kalmar Solutions, LLC
Submission Date : JAN 26, 2023
NHTSA Recall No. : 23V-029
Manufacturer Recall No. : NR

Manufacturer Information :

Manufacturer Name : Kalmar Solutions, LLC
Address : 415 E. Dundee Street
Ottawa KS 66067
Company phone : 785-229-6341

Population :

Number of potentially involved : 128
Estimated percentage with defect : 1 %

Vehicle Information :

Vehicle 1 : 2022-2022 Kalmar Ottawa T2 Ottawa T2
Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES
Body Style : OTHER
Power Train : DIESEL
Descriptive Information : Kalmar's supplier - Precision Hydraulic Cylinders - had a small number of cylinders produced in a lot by one employee and limited to 1 factory location that failed to have all the retainers installed on the cylinder. Potentially defective cylinders will have the cylinder rod pull out of the cylinder under manual force or the rod will come out the end of the cylinder under hydraulic force.
Defective cylinders are limited to PHC's North Carolina manufacturing plant, limited to cylinders produced and received at Kalmar between October-November 2022.
Production Dates : NOV 04, 2022 - NOV 21, 2022
VIN Range 1 : Begin : NR End : NR ☐ Not sequential

Description of Defect :

Description of the Defect : There is not an FMVSS noncompliance, as tilting cabs for service are not controlled by any FMVSS regulation.
The defect, however, is in a cab tilt hydraulic cylinder that when extended, can cause the cylinder to come apart. This, in turn, can cause the entire cab to fall forward potentially causing injury to a person should they be standing in front of the vehicle. The tilting of the cab only happens during daily inspections and/or maintenance, not during operation.
FMVSS 1 : NR
FMVSS 2 : NR
Description of the Safety Risk : If a person were standing in front of the cab, the safety risk is that during inspection, maintenance or service - when the cab is tilted - the cylinder could come apart and the cab could fall forward injuring the person.

Description of the Cause :	The cause comes from Kalmar's supplier, Precision Hydraulic Cylinders. The supplier had a small number of cylinders produced in a lot by one employee and limited to 1 factory location that failed to have all the retainers installed on the cylinder. Potentially defective cylinders will have the cylinder rod pull out of the cylinder under manual force or the rod will come out the end of the cylinder under hydraulic force. The cause is due to the supplier only partially testing cylinders and attempting to use statistical data to insure cylinders were assembled correctly.
Identification of Any Warning that can Occur :	No warnings that precede.

Involved Components :

Component Name 1 :	Cab Tilt Cylinder
Component Description :	CYLINDER, HYD 50mm BORE X 318mm STROKE, CAB TILT
Component Part Number :	Kalmar - 90037310 / PHC - 3117207

Supplier Identification :

Component Manufacturer

Name :	Precision Hydraulic Cylinders Inc.
Address :	196 N. 41 Hwy Beulaville North Carolina 28518
Country :	United States

Chronology :

On Friday, November 18th 2022, the Kalmar Ottawa Plant has a Safety Near Miss in the Upfit Building (South Line) at approximately 2:45 pm. The Cab Tilt Cylinder (Precision Hydraulic Cylinders, 3117207-1, Mfg Spec ESN0056) failed when the cab (Unit #364197) was lifted, causing the entire cab to fall on the TT (Unit #40668) in front of it while the units were being reworked on the south line.

Monday 21st 2022, PHC was contacted and all trucks were put on quality hold for inspection and verification.

PHC's Plant Manager, Pete Meriam, and Quality Manager, Cindy Hamner stated that 80% of the Cab Tilt Cylinders are produced in India, and 20% are produced in the USA.
The Cab Tilt Cylinder that failed was produced in PHC's plant in the USA.
PHC indicated that India does a quality inspection on 100% of the Cab Tilt Cylinders (these will have an "L" on the label) and their USA plants do spot quality checks only. The checks when performed are a 3-minutes stress

test.

End of November 2022, PHC determined that suspect cylinders were built by 1 operator and limited to certain lots.
Early December 2022, PHC came to the Ottawa plant and inspected and certified all inventory. PHC and Kalmar developed a test to certify trucks that were assembled. 100% of assembled trucks were inspected and certified prior to shipment.

To date - only the 1 cylinder that created the incident has been determined as defective.

On January 11th 2023, Kalmar identified 128 trucks shipped untested/uncertified with the suspect cylinder prior to all trucks being put on quality hold on Nov 21, 2022. This is driving the NHTSA recall.

Description of Remedy :

Description of Remedy Program :	Kalmar and PHC have developed a verification test that takes less than 1/2 hour to perform. A letter to customers with suspect cylinders will be sent out requiring inspection. An inspection will be performed at no cost to the customer. Kalmar/PHC will cover the cost of inspection. Dealers and Kalmar service technicians can perform the test.
How Remedy Component Differs from Recalled Component :	The defective component can have the rod pulled out of the cylinder under simple manual/human force. If the rod does not pull out of the cylinder under human/manual force, the cylinder is not defective.
Identify How/When Recall Condition was Corrected in Production :	All trucks were put on quality hold after the incident at the Ottawa Plant. PHC inspected all inventory at the Ottawa Plant used for production. PHC and Kalmar inspected and certified all assembled product. PHC has implemented a 100% inspection and test at their USA plant.

Recall Schedule :

Description of Recall Schedule :	Kalmar will draft dealer and owner notification letters and will plan to mail letters by February 10, 2023.
Planned Dealer Notification Date :	NR - NR
Planned Owner Notification Date :	NR - NR

* NR - Not Reported