



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** PE 19-016  
**Date Opened:** 11/12/2019  
**Investigator:** Peter Kivett  
**Approver:** Stephen Ridella  
**Subject:** Aerial Turntable Failures  
**Date Closed:** 03/05/2020  
**Reviewer:** Bruce York-B

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Kovatch Mobile Equipment Corp.  
**Products:** 2013 KME fire truck supplied with Kraft Hydraulic turntables  
**Population:** 6  
**Problem Description:** Fire truck aerial turntables may not be lubricated, potentially causing them to fail in a stuck position or free wheel into structures/power lines.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	2	2	2**
<b>Crashes/Fires:</b>	0	0	0
<b>Injury Incidents:</b>	0	0	0
<b>Fatality Incidents:</b>	0	0	0
<b>Other*:</b>	1	0	1

\*Description of Other: Kraft Fluid Systems summary report (March 7th, 2019)

\*\* Total eliminates duplicates received by ODI and manufacturer.

## ACTION / SUMMARY INFORMATION

**Action:** This Preliminary Evaluation (PE) is closed with safety recall (20V-006)

### Summary:

The Office of Defects Investigation (ODI) opened this PE on November 12th, 2019 after receiving 2 consumer complaints alleging the aerial turntable on their 2013 KME fire trucks were supplied from the manufacturer without lubrication. When inspected, it was found that some of the turntable internal gears had seized and other gearbox internals were severely corroded and pitted due to lack of lubrication.

ODI interviewed the two complainants and received documentation showing failed gearing and drive-planetaries due to a lack of lubrication. In addition, ODI visited the manufacturer's assembly plant to learn about the drive system and how it is received from the supplier Kraft Hydraulics. ODI learned the electric motor and apparatus are shipped dry. The system is then painted by KME prior to assembly on the fire truck when lubrication is then supposed to occur.

KME has acknowledged the missed production step of filling the turntables with lubricating oil after installation on the vehicle. The turntable gearbox is supposed to contain lubricating oil to reduce friction and protect internal gears from corrosion. If the turntable was not filled with lubricating oil, it may seize or freely traverse without control, possibly striking objects and potentially endangering fire fighter safety.

As part of the safety recall, KME will inspect and verify if the turntables contain lubricating oil. If not, they will be sent to the manufacturer for rebuild. If the owner has already incurred costs to remedy this issue, they will be directed in the notification letter to contact KME for reimbursement.

This Preliminary Evaluation has been closed with a voluntary safety recall released by the manufacturer (20V-006).

The ODI reports cited above can be reviewed at:  
<http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID>  
using the following complaint identification numbers: 1089324 and 11206194