



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: RQ 14-003
Date Opened: 08/06/2014
Investigator: Peter Kivett
Approver: Greg Magno
Subject: Aerial Fire Apparatus Cable Failure
Reviewer: Bruce York-B

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: SUTPHEN CORP., Sutphen Corporation
Products: MY 2000-2012 Sutphen Vehicles with Aerial Fire Apparatus
Population: 156
Problem Description: Cable failures resulting in unintended aerial ladder bucket retraction

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	0	0	0
Crashes/Fires:	0	0	0
Injury Incidents:	2	0	2
Number of Injuries:	6	0	6
Fatality Incidents:	0	0	0
Other*:	2	0	2
*Description of Other: Media reports			

ACTION / SUMMARY INFORMATION

Action: Open this Recall Query (RQ)

Summary:

On May 22, 2013 the Office of Defects Investigation (ODI) opened a Preliminary Evaluation investigation (PE13-017) on Sutphen SPH aerial ladder bucket equipped emergency vehicles for cable failures resulting in unintended bucket retraction.

ODI closed the PE on November 19, 2013 when Sutphen submitted a safety recall 13V-565 in which they concluded that the main bucket cables were wearing and failing. The bearings in the sheaves used in the extend/retract the system were seizing and preventing the sheaves from rotating. The cables sliding over the non-moving sheaves could wear and result in reduced load carrying capacity. Failure of the extend/retract system could result in either the aerial becoming inoperable or cause it to unexpectedly retract. This movement could result in damage to the vehicle and/or injuries to personnel on or around the vehicle.

Since the closing of PE13-017 ODI has been made aware (through media reports) of two post recall failures that resulted in 6 injuries. These failures occurred following the implementation of the recall remedy on the vehicles. ODI is also aware that Sutphen sent a field representative to assist and evaluate the failure mechanism in each event.

The first incident occurred in Belle Valley, PA on Wednesday June 25, 2014 where three people were injured when a platform cable failed. The second incident occurred in Hall County, Georgia on Tuesday July 22, 2014. In that case, three people were seriously injured when a platform cable failed. Both vehicles were remedied per safety recall 13V-565. As a result of the injuries and post remedy failures, ODI is opening this Recall Query (RQ) to assess the adequacy of the recall remedy.