



U.S. Department  
of Transportation  
**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** PE 15-008  
**Date Opened:** 02/27/2015  
**Investigator:** Peter Kivett **Reviewer:** Bruce York-B  
**Approver:** Frank Borris  
**Subject:** Front suspension ball joint failure

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Pierce Manufacturing  
**Products:** 2004 - current Pierce Fire trucks with the TAK-4 suspension  
**Population:** 1,500 (Estimated)

**Problem Description:** Failure of front ball joints that can result in a wheel off event.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	1	0	1
<b>Crashes/Fires:</b>	0	0	0
<b>Injury Incidents:</b>	0	0	0
<b>Fatality Incidents:</b>	0	0	0
<b>Other*:</b>	3	0	3

\*Description of Other: Media reports of failed ball joints on subject vehicles

## ACTION / SUMMARY INFORMATION

**Action:** A Preliminary Evaluation has been Opened

### Summary:

The Office of Defects Investigations (ODI) has opened this Preliminary Evaluation (PE) on Pierce Fire trucks manufactured with TAK-4 independent front suspensions for front ball joint failures. This investigation is based on a consumer complaint received on January 8th 2015. The Vehicles Owners Questionnaire (VOQ) #10671053 alleges the 2007 Pierce TAK-4 fire truck "was not steering correctly". ODI interviewed the complainant who described the vehicle as difficult to control/steer and felt the vehicle was unsafe. Furthermore the complaint stated the driver never felt in control. Upon inspection it was found the failure was related to the vehicles front suspension ball joint. The ball joint is identified as a "lifelong" front ball joint that became loose as a result of foreign intrusion getting into the boot assembly.

In addition, ODI is aware of media reports concerning the failure of a 3 Pierce TAK-4 fire trucks that resulted in a wheel-off events. Two of these events occurred in Baltimore, MD (July and August 2014) and a third occurred in Ann Arundel Co, MD (December 2014). The vehicles were responding to emergency calls when the failures occurred.

ODI has also identified a technical service bulletin (#355 issued 12/15/2014) issued by Pierce Manufacturing regarding TAK4 ball joint inspections.

This Preliminary Evaluation has been opened to assess the scope and safety related risk associated with the alleged defect.

The ODI report cited above can be reviewed at:  
<http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID>  
 using the following complaint identification numbers: 10671053