



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** PE 14-008  
**Date Opened:** 03/20/2014  
**Investigator:** Nate Seymour  
**Approver:** Frank Borris  
**Subject:** Brake Surface Grease Contamination  
**Date Closed:** 10/07/2014  
**Reviewer:** Bruce York-B

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** PALOMINO RV, Forest River, Inc.  
**Products:** 2013-14 Forest River Columbus 5th Wheel Recreational Vehicle  
**Population:** 1,297  
**Problem Description:** Certain owners have reported that the brake shoes installed as original equipment in their Forest River Columbus fifth wheel recreational vehicles, equipped with Lippert electrically-actuated drum brake assemblies, have become contaminated with wheel bearing grease after a short period in service.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	10	18	18**
<b>Crashes/Fires:</b>	1	1	1**
<b>Injury Incidents:</b>	0	0	0
<b>Fatality Incidents:</b>	0	0	0

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

## ACTION / SUMMARY INFORMATION

**Action:** Close this Preliminary Evaluation

### Summary:

The Office of Defects Investigation (ODI) opened this investigation based on 8 Vehicle Owner Questionnaires (VOQ) alleging grease contamination on the trailer brake shoes or drums. This condition could potentially increase the towing vehicle's stopping distance and therefore increase the risk of a crash.

During the investigation, ODI received 2 additional VOQs alleging the same problem. ODI sent Information Request letters to Forest River and the component supplier, Lippert Components, Inc. (LCI). In response, each provided complaint and warranty information for the subject & peer vehicles and components respectively. ODI visited multiple Recreational Vehicle (RV) dealers to survey their pre-delivery and maintenance inspections. In addition to local dealerships, ODI visited the Columbus, Forest River and LCI axle plants. ODI observed the hub assembly process at LCI and noted that the hub and bearings are assembled at a subassembly station and greased before transferring them to the main line for assembly on the axle. This allows for grease to escape the seal before ever being assembled. If the grease is not completely removed by the employee just prior to assembly, it may remain on the braking surface.

A thorough review of the available data revealed one crash. The crash was minor and although an injury was reported, ODI was not able to confirm as no police report had been generated. ODI attempted to interview both parties; however, the subject vehicle owner was the only respondent. At the time of the incident, no injuries were apparent and the police therefore did not respond. The subject vehicle owner later learned that the other party claimed an injury.

ODI's review of warranty data indicated that most owners recognized an issue with their trailer brakes early in the life

of the trailer. RVs are typically returned to the dealer for warranty work after the first month or two of ownership. Many units were corrected during this initial break in period. Others were corrected when receiving the first annual service, as is recommended in the owner's manual.

Grease on the vehicle's braking surface can diminish the vehicle's brake performance. However, as this issue exists at the time the trailer is originally purchased and does not get progressively worse over time and given that the trailers have one to two years in service with no significant events as the result of brake degradation, ODI does not believe this condition presents an unreasonable risk to safety. Forest River has initiated an Owner Notification Program (ONP) and will alert each subject vehicle owner that their unit should be inspected for grease on the braking surfaces if they have not already done so. LCI claims to have improved their training and material handling practices to reduce future issues.

This investigation is closed as further use of agency resources does not appear to be warranted. The closing of this investigation does not constitute a finding by NHTSA that no safety-related defect exists. The agency reserves the right to take further action if warranted by the circumstances.

The ODI reports cited above can be reviewed at:

<http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID> under the following complaint identification numbers:

110546092, 10560304, 10561961, 10563621, 10563591, 10564143, 10563464, 10567696, 10577479, 10587690