



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 10-040
Date Opened: 10/14/2010
Investigator: Tom Bowman
Approver: Frank Borris
Subject: Wheel Separation (Broken Studs)

Date Closed: 05/27/2011
Reviewer: Bruce York-B

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: DOUBLETREE RV
Products: MY 2008, 2009, 2010 DoubleTree RV (DRV)
Population: 922

Problem Description: Loss of wheel clamp may cause wheel mounting studs to fracture which can possibly result in a wheel separation.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	4	7	7**
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	0	0	0

***Description of Other:** DRV reported 2 wheel separation incidents during the 6-month period between Nov 2010 and May 2011.

** Count indicates duplicate reports received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: Close PE10-040. This investigation has been upgraded to an Engineering Analysis (EA11-007).

Summary:

As a part of PE10-040 investigation activities for both monitoring and to provide candidates for on-site field examinations, ODI had requested Doubletree RV (DRV) to inform ODI of all newly reported wheel separation incidents.

DRV has reported two newly-reported incidents since October, 2010.

(1) On November 3, 2010, DRV reported the complete separation of the left (driver side) - forward wheel assembly mounted to a 2010 model year DRV Mobile Suites RV equipped with aluminum wheels mounted on eight 9/16" wheel mounting studs.

(2) On May 2, 2011, DRV reported the complete separation of the right (passenger side) - rear wheel assembly mounted to a 2010 model year Elite Suites RV equipped with aluminum wheels mounted on eight 5/8" wheel mounting studs.

ODI, in conjunction DRV representatives, visited and inspected both of these vehicles shortly after receiving notification of the incident (before repairs were attempted) for the purpose of identifying contributory issues associated with components, component interfaces, and/or maintenance issues prior to pertinent evidence being lost or altered in the repair process.

To improve the mounting surface quality in new production vehicles, DRV instructed that paint be removed from hub faces as of January, 2011.

DRV also issued an owner letter in January, 2011 advising owners to check lug nut torque and notify DRV in the event of any owner concerns or problems regarding loosening or inability of the wheel retention system to maintain the specified torque.

The occurrence of a wheel end separation incidents prompts concern about the wheel end retention integrity of DRV units in the field and justifies further investigation activity.