



ODI RESUME

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

Investigation: EA 07-016
Prompted By: PE07-032
Date Opened: 11/16/2007
Principal Investigator: Peter Kivett
Subject: Overheated Brake Calipers

Manufacturer: Workhorse Custom Chassis
Products: 2000-2005 Workhorse Chassis Built with Bosh Brake Calipers
Population: 42907

Problem Description: One or more brake calipers may drag, causing the brakes to overheat.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	20	639	651
Crashes/Fires:	2	3	5
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	Confidential	Confidential	Confidential

*Description of Other: Unique VIN's for all brake related warranty.

Action: An Engineering Analysis (EA) has been opened.

Engineer: Peter Kivett

Date: 11/16/2007

Div. Chief: Richard Boyd

Date: 11/16/2007

Office Dir.: Kathleen C. DeMeter

Date: 11/16/2007

Summary: On June 25, 2007, the Office of Defects Investigation (ODI) opened a Preliminary Evaluation to investigate alleged overheating disc brake calipers and poor brake performance in model year (MY) 2000-2005 Workhorse Chassis recreational vehicles. To date, ODI is aware of 651 non-duplicative complaints on the subject vehicles combining both ODI and Workhorse's complaint population. During the PE, ODI discovered that the problem is most pronounced on the W20 and W22 CHASSIS, both equipped with Bosch hydraulic brake systems. The W24 Chassis uses a different brake system and is being examined as a peer to the complaint vehicles.

ODI'S analysis of the warranty and complaint data supplied by Workhorse during the PE indicates a dramatic drop in brake related complaints on vehicles built after May 2004. At that time Workhorse added in production Zerk fittings and grease lubrication to the brake master cylinder's bell crank linkage. ODI is aware of 3,782 unique warranty counts related to the alleged defect for the subject population. Of those claims, 88 were submitted on vehicles produced after the May 2004 production change.

During the Engineering Analysis, ODI and VRTC will conduct a vehicle testing program to inspect complaint vehicles and evaluate various mechanical functions of the vehicle's brake system. Attempts will be made to duplicate the braking problems being alleged and to determine the root cause.

Accordingly, this investigation has been upgraded to an Engineering Analysis to further study the frequency and scope of the alleged defect.