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09V-110
(4 Pages)

Associate Administrator for Enforcement
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
Washington D.C. 20590

Subject: Vehicle Defect Initial Information Report – 50901-C

Dear Associate Administrator:

Pursuant to Part 573.6 (c) (1), this Vehicle Defect Initial Information Report is submitted to the National Highway Traffic Safety Administration by Navistar, Inc. on behalf of Workhorse Custom Chassis, a wholly owned subsidiary.

(1) IDENTIFICATION OF VEHICLES [Part 573.6(c)(2)]

- Vehicle Models Involved:
 - Workhorse W22 series RV chassis.
- Vehicle Manufacturing Dates:
 - July 24, 2000 thru December 19, 2007.
- Other Identification Necessary to Describe Vehicles:
 - Equipped with axles that include Bosch ZOPS or Bosch ZOHT Pin Slide hydraulic disc brakes.

(2) COMPONENT MANUFACTURER [Part 573.6(c)(2)(iv)]

- This report relates only to a component Robert Bosch Corporation Automotive Group supplied, designed, manufactured, approved and certified to meet the requirements of FMVSS 105 in motor home applications.
- Contact information is:

Elie Azzi
Director, Product Warranty
Bosch Braking Systems Corporation
401 North Bendix Drive
South Bend, Indiana 46628
Phone: 574-237-3104

(3) VEHICLE POPULATION INVOLVED [Part 573.6 (c)(3)]

Model	Number of Suspect Vehicles		
	United States	Canada	Export
W22	47,055	2,226	80
Total Vehicles	47,055	2,226	80

(4) PERCENTAGE OF VEHICLES ESTIMATED TO CONTAIN THE DEFECT [Part 573.6 (c)(4)]

- It is estimated that 10% of the vehicles in suspect population could exhibit a brake-related issue caused by defect.

(5) DESCRIPTION OF DEFECT [Part 573.6 (c)(5)]

- Certain RV applications equipped with axles that include Bosch ZOPS or Bosch ZOHT Pin Slide hydraulic disc brakes when combined with occasional or seasonal vehicle operation may experience calipers sticking in the applied position. This can result in abnormal heat generation at the wheel end causing brake drag. Although the driver would normally have warning of the brake drag - if undetected by the driver, the temperature increase at the wheel end can eventually lead to soft pedal conditions due to brake fluid boil, and possible extended stopping distance.

(6) CHRONOLOGY OF PRINCIPAL EVENTS WHICH LED TO DETERMINATION OF A SAFETY DEFECT or TEST RESULTS THAT LED TO DETERMINATION OF NONCOMPLIANCE [Part 573.6 (c)(6)/(7)]

- 6/27/07 WCC received PE07-032 from NHTSA – alleged overheating disc brake calipers on MY2000 – 2005 WCC motor-home chassis. WCC initiated gathering of warranty and field report data.
- 8/10/07 WCC provided partial response to PE07-032, including documents requested (warranty, field reports, etc.).
- 9/14/07 WCC submitted complete response to PE07-032.
- 11/16/07 NHTSA elevated the investigation to EA07-016 to perform an in-depth analysis of the issue.
- 11/07 – 3/08 At the request of NHTSA, Bosch, WCC, and NHTSA participated in the inspections of customer vehicles with reported brake drag complaints. Bosch installed measurement equipment on identified complaint vehicles. In some cases overheating on certain wheel ends was recorded.

- 3/08 – 11/08 Suspect brake calipers from field investigations were returned to Bosch Engineering for analysis. The Bosch analysis included functional testing and dimensional checks of all components. The Bosch analysis revealed examples of piston growth.

NHTSA conducted an independent piston growth study using several different piston materials (including the Bosch phenolic piston) and made measurements after subjecting the pistons to humidity, temperature and pressure cycles. These tests also revealed piston growth (NHTSA test still ongoing).

Test results from both Bosch and NHTSA indicate piston hang up in the caliper bore is a result of piston growth due to moisture ingress over long periods of time in the RV chassis application. Piston hang up can cause overheating at the wheel end, which can cause the brake fluid to overheat with a resulting increase in braking distance.

- 12/08 WCC voluntarily provided updated warranty and field report data to NHTSA for analysis.
- 2/24/09 WCC and Navistar met with NHTSA and an analysis of WCC and NHTSA data revealed approximately 120 reports of apparent brake fluid boil due to pistons sticking in the caliper bore.
- 2/25/09 – 3/24/09 WCC and Navistar initiated an in-depth analysis of WCC and NHTSA complaint data.
- 3/23/09 WCC determined the extent of the suspect vehicle population.
- 3/25/09 WCC/Navistar declared safety recall 50901-C

(7) PROGRAM TO REMEDY DEFECT [Part 573.6 (c)(8)]

- The remedy has not been determined at this time. An amended report will be submitted at a later date outlining the remedy and schedule of implementation.

(8) PLAN FOR REIMBURSEMENT [Part 573.6 (c)(8)(i)]

- Some of the vehicles in this recall fall outside the warranty period; therefore, Navistar's plan for reimbursement of pre-notification remedies, on file and dated 1/7/2007, applies and instructions will be included in the customer notification.

(9) SCHEDULE FOR RECALL NOTIFICATION [Part 573.6 (c)(8)(i)]

- Availability of repair parts is undetermined as of the date of this report.

(10) RECALL NUMBER [Part 573.6 (c)(11)]

- WCC: 50901-C
- NHTSA: Not Yet Assigned

The undersigned should be contacted for any additional information regarding this recall at (260) 461-1890.

Sincerely,

A handwritten signature in cursive script that reads "R. L. Van Laar".

R. L. Van Laar
Compliance Manager
Navistar, Inc.

RV:ta