

**RECEIVED**

By Recall Management division at 10:58 am, Feb 20, 2014

P: 331-332-1590  
W: navistar.com

Date: February 19, 2014

This report serves as Navistar's notification to the U.S. Department of Transportation, National Highway Traffic Safety Administration that a defect related to motor vehicle safety, exists in certain LoneStar<sup>®</sup>, PayStar<sup>®</sup>, ProStar<sup>®</sup>, WorkStar<sup>®</sup>, and 9900 model trucks. Navistar, Inc. decided that this defect existed in these vehicles on 02/12/2014.

I. Manufacturer, Designated Agent, and Other Chain of Distribution Information

Manufacturer's corporate name:

- Navistar, Inc. for its INTERNATIONAL<sup>®</sup> brand trucks.

Designated Agent (imported vehicles): None.

If this notification concerns a defective or noncompliant component that the above identified manufacturer did not manufacture, identify that component and provide the name, address, and phone number of the manufacturer of the component (if this manufacturer is unknown, provide this information as to the supplier of the component):

Front brake Spider and S-Cam bracket  
Christine Wright  
Regional Quality Manager  
Meritor  
2135 W. Maple RD.  
Troy, MI 48084  
(248)435-1968

Name, address, email, and phone and fax numbers for the person(s) to whom inquiries about this report should be directed:

R.L. Van Laar  
Compliance Manager  
2701 Navistar DR.  
Lisle, IL 60532  
P: 331-332-1590  
[Rick.vanlaar@navistar.com](mailto:Rick.vanlaar@navistar.com)

Manufacturer's assigned Campaign number: 14501

## II. Identification of the Recall Population and Its Size

Complete the tables below for each group of vehicles subject to this notification. Additional tables may be necessary where there are more than three groups subject to a notification.

Make: International®
Model: LoneStar®
Model Year(s): 2012 and 2013
Inclusive dates of manufacture (month and year): 09/2011 through 9/2012
Body Style/Type (for non-passenger cars): Heavy Diesel Truck
Other information necessary to describe these vehicles: Class 8
Total number of these vehicles: 70; US 43, Canada 27, Export 0

Make: International®
Model: PayStar®
Model Year(s): 2012 and 2013
Inclusive dates of manufacture (month and year): 08/2011 through 08/2012
Body Style/Type (for non-passenger cars): Heavy Diesel Truck
Other information necessary to describe these vehicles: Class 8
Total number of these vehicles: 174; US 167, Canada 7, Export 0

Make: International®
Model: ProStar®
Model Year(s): 2012 and 2013
Inclusive dates of manufacture (month and year): 06/2011 through 10/2012

Body Style/Type (for non-passenger cars): Heavy Diesel Truck
Other information necessary to describe these vehicles: Class 8
Total number of these vehicles: 875; US 845, Canada 29, Export 1

Make: International®
Model: WorkStar®
Model Year(s): 2012 and 2013
Inclusive dates of manufacture (month and year): 7/2011 through 08/2012
Body Style/Type (for non-passenger cars): Heavy Diesel Truck
Other information necessary to describe these vehicles: Class 8
Total number of these vehicles: 75; US 74, Canada 1, Export 0

Make: International®
Model: 9900
Model Year(s): 2013
Inclusive dates of manufacture (month and year): 02/2011 through 02/2012
Body Style/Type (for non-passenger cars): Heavy Diesel Truck
Other information necessary to describe these vehicles: Class 8
Total number of these vehicles: 2 US only

Provide the following information as to all the groups of vehicles:

- Grand total number of vehicles: 1,196

The percentage of the recall population you estimate actually contain the defect or noncompliance:

- It is estimated that all (100%) of the vehicles in suspect population could have the defect.

Identify and describe how the recall population was determined (e.g., on what basis the recalled models were selected and how the inclusive dates of manufacture were determined):

- The suspect population is identified by models equipped with feature code 0504501, 0504504, or 04EWM Reduced Stopping Distance (RSD) brake linings and with or without feature code 04WCS Greased For Life front air S-cam brakes. The dates of manufacture were determined by models built from the date feature code 0504501, 0504504, and 04EWM were put into production through the date a production change was put into place for vehicles coded for the above codes.

Describe how the recall population is different from any similar vehicles not subject to this notification:

- The vehicles in the suspect population were built with RSD brake linings stamped brake spiders and non-gusseted S-cam brackets on the front axle. Since the production change, vehicles are built with cast brake spiders and S-cam tube bracket assemblies reinforced with gussets.

### III. Description of the Defect or Noncompliance and Chronology of Events

Describe the defect or noncompliance, including a summary and detailed description of the nature and physical location (if appropriate) of the defect or noncompliance. Graphic aids should be provided where necessary.

- The brake S-cam bracket assemblies on steer axles may exhibit fractures between the wing bracket and the tube steel when mounted to stamped spiders.
- Fractures between the wing bracket and the tube steel may result in an inoperative brake on the affected wheel end resulting in an unexpected pull condition during braking application or an unexpected increase in stopping distance.

Describe the cause(s) of the defect or noncompliance condition.

- Vibration triggered by the brake function, excites a modal alignment between the brake assembly and front axle. The resulting enhanced vibration leads to high stresses at the unsupported S-cam bracket.

Describe the safety consequence(s) of the defect or noncompliance condition.

- An unexpected pull condition during braking or an unexpected increase in stopping distance may contribute to a vehicle crash which may result in property damage, personal injury, or death.

Identify any warning(s) that may precede the defect or noncompliance condition.

- In many cases brake chatter is a precursor to S-cam tube bracket failure.

*For defects*, provide a dated, chronological summary of all the principle events that were the basis for the determination that the defect is related to motor vehicle safety, including a summary of all warranty claims, field or service reports, and other information such as numbers of crashes, injuries and fatalities.

- 04/18/2013 – Navistar receives first communication from the field of a unit with RSD brake linings and Greased for Life S-cam brackets with the S-cam tube broken from the wing bracket.
- 05/08/2013 through 10/07/2013 – Navistar received communications from the field of six additional units with RSD brake linings and Greased for Life S-cam brackets with the S-cam tube broken from the wing bracket.
- 08/30/2013 – Engineering and Product Compliance meet to determine the scope of the issue. There were no accidents or extended stopping distance reports in the failures reported to date. However, based on the number of reports above, Navistar initiates an investigation.
- 09/06/2013 – Navistar also receives first communication from the field of a vehicle with RSD brake linings without Greased for Life S-cam brackets experiencing S-cam tube breaking from the wing bracket. This report was outside the previous recall 12530 (NHTSA recall 12V-546) suspect population.
- 11/18/2013 – Navistar Engineering, Manufacturing, and Product Compliance meet to review part delivery records at the assembly plants and determined that some additional vehicles were built with stamped spiders and the suspect S-cam brackets without gussets.
- 12/03/2013 – Engineering and Product Compliance meet to determine the scope of the issue on vehicles outside the original recall population.
- 1/14/2014 – Engineering and Compliance meet to review all vehicle models built with stamped spiders and to review possible predicted failures based on FEA analysis with all configurations.
- 01/28/2014 – Engineering and Product Compliance finalize suspect Population on both categories of brake assembly components as referenced above.
- 02/12/2014 – Navistar declares a Safety Recall.

*For noncompliances*, identify the test results and other information considered in determining the existence of the noncompliance, and provide the date of each test and observation indicative of that noncompliance.

#### IV. The Remedy Program and Its Schedule

Describe the program for remedying the defect or noncompliance, including the plan for reimbursing those owners and purchasers who may have incurred costs to remedy the defect or noncompliance before receiving the manufacturer's notification concerning that defect or noncompliance. Also include, where applicable, details with dates concerning any production remedy that was conducted or will be conducted.

- The remedy for vehicles with 04CWS Greased For Life front air S-cam brakes will involve replacement of brake assemblies with stamped spiders with a brake assembly with cast spiders and s-cam tube bracket assemblies reinforced with gussets.
- The remedy for additional vehicles with RSD linings but without 04CWS Greased For Life front air S-cam brakes will involve replacement of stamped spiders with a cast brake spider and installing replacement S-cam tube bracket assemblies reinforced with gussets.

Provide the estimated date(s) on which owner and purchaser notifications will be issued and the estimated date(s) for completion of those notifications.

- The schedule for recall notification is based on the availability of repair parts which cannot be determined at this time. However, a plan to mail an interim owner notification letter may be developed if the final remedy will not be available before 04/21/2014.

Provide the estimated date(s) on which dealer and distributor notifications will be issued and the estimated date(s) for completion of those notifications.

- The schedule for recall notification is based on the availability of repair parts which cannot be determined at this time. However, a plan to mail an interim dealer notification letter may be developed if the final remedy will not be available before 04/21/2014.

Clearly describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly.

- The original brake spider was made from stamped steel and the corresponding S-cam bracket did not contain a gusset between the S-cam tube and wing bracket. The replacement brake spider is made from cast iron and the corresponding s-cam bracket contains a gusset between the S-cam tube and the wing bracket.

The undersigned should be contacted for any additional information regarding this recall on (331) 332-1590.

Sincerely,



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

RV: FI