

Safety Defect and Noncompliance Report Guide for Equipment
PART 573 Defect and Noncompliance Report⁴

On May 12, 2014, SAF-HOLLAND, Inc. decided that a defect which relates to motor vehicle safety exits in items of motor vehicle equipment listed below, and furnished notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573 Defect and Noncompliance Reports. The Office of Defects Investigation (ODI), Recall Management Division (RMD) assigned number XXX-XXX to this safety recall.

Date this report was prepared:

May 16, 2014

Furnish the manufacturer's identification code for this recall (if applicable):

SAF-HOLLAND warranty failure code is P022.

1. Identify the full corporate name of the fabricating manufacturer/brand name/trademark owner of the recalled item of equipment. If the recalled item of equipment is imported, provide the name and mailing address of the designated agent as prescribed by 49 U.S.C. §30164.

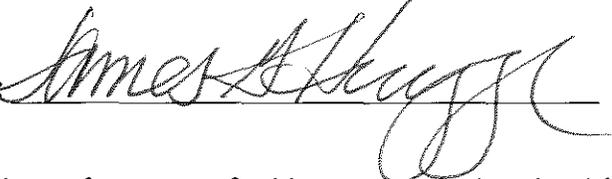
SAF-HOLLAND, Inc.
1950 Industrial Blvd.
Muskegon, MI 49443

Identify the corporate official, by name and title, whom the agency should contact with respect to this recall.

James G. Huyge, Director of Reliability & Risk Management
Telephone Number: (231) 777-4302 Fax Number: (231) 777-2515

Name and Title of Person who prepared this report.

James G. Huyge, Director of Reliability & Risk Management

Signed: 

⁴Each manufacturer must furnish a report, to the Associate Administrator for Safety Assurance, for each defect or noncompliance condition which relates to motor vehicle safety.

This guide was developed from 49 CFR Part 573, 'Defect and Noncompliance Reports' and also outlines information currently requested. Any questions, please consult the complete Part 573 or contact Mr. George Person at (202) 366-5210 or by FAX at (202) 366-7882, or E-Mails to RMD.ODI@dot.gov.

I. IDENTIFY THE RECALLED ITEMS OF EQUIPMENT

2. Identify the Items of Equipment Involved in this Recall, for each make and model or applicable item of equipment product line (provide illustrations or photographs as necessary to describe the item of equipment), provide:

Generic name of the item: Trailer Suspension Air Ride Axle System

Make: SAF-HOLLAND, Inc. **Model:** CXB series suspensions

Part Number: Per our response to question #3 **Size:** n/a

Function: Supports rear end of trailer

Other information which characterizes/distinguishes the items of equipment to be recalled: Data will be provided as our investigation develops the information.

Identify the approximate percentage of the production of all the recalled models manufactured by your company between the inclusive dates of manufacture provided above, that the recalled model population represents. For example, if the recall involved Equipment equipped with certain items of equipment from January 1, 1996, through April 1, 1997, then what was the percentage of the recalled Equipment of all Equipment manufactured during that time period.

The defective pivot bolts were incorporated into trailer axles that were sold to Original Equipment Manufacturers of commercial heavy duty trailers used in the transportation industry in Canada and the United States or were sold in repair kits directly to fleets. This recall covers 100% of our production of trailer axles and repair kits using the defective bolt between 08OCT13 and 30NOV13.

II. IDENTIFYING THE RECALL POPULATION

3. Furnish the total number of items of equipment recalled potentially containing the defect or noncompliance.

Part Number	Part Description	Also Known as	Year	Number of Items Potentially Involved
93201070	BOLT HEX 1.12"-7 X 8.0 GR8	Pivot Bolt	2013	11,259

Total Number Potentially Affected by the Recall:

11,259 pivot bolts incorporated into trailer axles or sold as replacement parts. We continue to analyze our manufacturing records to determine the suspension

models and repair kits that contain the defective bolts.

4. Furnish the approximate percentage of the total number of items of equipment estimated to actually contain the defect or noncompliance:

100% of part number 93201070 referenced above.

Identify and describe how the recall population was determined--in particular how the recalled models were selected and the basis for the beginning and final dates of manufacture of the recalled items of equipment:

During a meeting about a small rash of bolt failures in the field, the bolt supplier (Brunner Manufacturing Co., Inc.) mentioned that an irregularity of unknown origin in their heat treat vendor's (Chem-Plate Industries, Inc.) heat treat oven temperature records for work order (42915) that involved 11,259 bolts. It was stated that the irregularity was associated with two zones in the heat treat oven, but records of where individual bolts were located in the oven are not kept.

SAF-HOLLAND quality records indicate that the suspect bolts from work order 42915 were received between 08OCT13 and 31OCT13. The defective bolts are believed to have been used to manufacture suspensions between 08OCT13 and 30NOV13.

Effective 15MAY14 Brunner Manufacturing Co., Inc. will follow up with Chem-Plate Industries, Inc. requesting additional information concerning heat treat and quenching processes used during the suspected processing time frame.

III. DESCRIBE THE DEFECT OR NONCOMPLIANCE

5. Describe the defect or noncompliance. The description should address the nature and physical location of the defect or noncompliance. Illustrations should be provided as appropriate.

The defect is an intergranular quench crack at the point where the bolt head meets the body of the bolt.

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

The current prevailing theory is that improper/ineffective heat-treat process resulted in the defect.

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

Separation of the axle/suspension assembly from the trailer is possible if both sides of the pivot connection fail.

Identify any warning which can (a) precede or (b) occur.

The failure of a pivot bolt on one side of the axle/suspension assembly could result in the trailer becoming misaligned behind the tractor which will be immediately apparent to the driver.

If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.

Bolt Supplier	Heat Treat Vendor
Brunner Manufacturing Co., Inc.	Chem-Plate Industries, Inc.
1025 Parker Drive	1800 Touhy Avenue
Mauston, WI 53948	Elk Grove Village, IL 60007

Identify the name and title of the chief executive officer or knowledgeable representative of the supplier:

Ronald E. Brunner President, Brunner Manufacturing Co., Inc.
Marty Straus, Owner, Chem-Plate Industries, Inc.

IV. PROVIDE THE CHRONOLOGY IN DETERMINING THE DEFECT/NONCOMPLIANCE

If the recall is for a defect, complete item 6, otherwise item 7.

6. With respect to a defect, furnish a chronological summary (including dates) of all the principle events that were the basis for the determination of the defect. The summary should include, but not be limited to, the number of reports, accidents, injuries, fatalities, and warranty claims.

06FEB14 – 24APR14: SAF-HOLLAND, Inc. processed 11 warranty claims that involved the failure of pivot bolts on certain air ride suspension.

24APR14: Failed bolts sent to independent lab for analysis. Sample plan developed for other pivot bolt inventory at the SAF-HOLLAND, Inc. facility.

30APR14: Independent test lab examined two failed pivot bolts and concludes that the bolts had quench cracks that existed prior to coating at the under-head fillet.

05MAY14: SAF-HOLLAND, Inc. determines that the range of dates (14OCT13 – 14NOV13) the 11 suspensions containing failed pivot bolts were built by SAF-HOLLAND, Inc.

05MAY14: SAF-HOLLAND, Inc. meets with pivot bolt supplier and their heat treat vendor confirming prevailing theory that intergranular quench cracks point toward failed heat treat process on one lot of bolts. During the meeting our supplier & their heat treat vendor highlighted irregularities in certain heat treat records associated with work order 42915. Our investigation is focused on the date and times highlighted during the meeting.

12MAY14: SAF-HOLLAND, Inc. concludes that a defect which relates to motor vehicle safety exists in pivot bolts that were subjected to variations in the heat treatment processes managed by the supplier.

7. With respect to a noncompliance, identify and provide the test results or other data (in chronological order and including dates) on which the noncompliance was determined.

Not Applicable

V. IDENTIFY THE REMEDY

8. Furnish a description of the manufacturer's remedy for the defect or noncompliance. Clearly describe the differences between the recall condition and the remedy.

Replacement of all affected pivot bolts will be required

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

All new bolts will bear a white paint dot on the head of the bolt.

Identify and describe how and when the recall condition was corrected in production. If the production remedy was identical to the recall remedy in the field, so state. If the product was discontinued, so state.

SAF-HOLLAND, Inc. is validating 100% of pivot bolt inventory at the SAF-HOLLAND, Inc. facility.

VI. IDENTIFY THE RECALL SCHEDULE

Furnish a schedule or agenda (with specific dates) for notification to other manufacturers, dealers/retailers, and purchasers. Please, identify any foreseeable problems with implementing the recall.

The recall schedule will be developed in cooperation with Original Equipment Manufacturers of commercial heavy duty trailers used in the transportation industry.

VII. FURNISH RECALL COMMUNICATIONS

9. Furnish a final copy of all notices, bulletins, and other communications that relate directly to the defect or noncompliance and which are sent to more than one manufacturer, distributor, or purchaser. This includes all communications (including both original and follow-up) concerning this recall from the time your company determines the defect or noncompliance condition on, not just the initial notification. *A DRAFT copy of the notification documents should be submitted to this office by Fax (202-366-7882) or by E-Mail (RMD.ODI@dot.gov) for review prior to mailing.*

See attached draft cover letter and notification (XL-AS20030SB) to Original Equipment Manufacturers and repair instructions (XL-AS 20030RM) to be included with replacement bolts.

Note: These documents are to be submitted separately from those provided in accordance with Part 579.5 requirements.