OMB Control No.: 2127-0004

Part 573 Safety Recall Report

17V-660

Manufacturer Name: Navistar, Inc. **Submission Date: OCT 18, 2017** NHTSA Recall No.: 17V-660 Manufacturer Recall No.: 17510



Manufacturer Information:

Manufacturer Name: Navistar, Inc.

Address: 2701 Navistar Drive

Lisle IL 60532

Company phone: 331-332-1590

Population:

Number of potentially involved: 778 Estimated percentage with defect: 30 %

Vehicle Information:

Vehicle 1: 2015-2018 IC Bus RE

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style: OTHER Power Train: DIESEL

Descriptive Information: School bus; 60 to 90 passengers and feature code 03ADC or 03ADD (front

suspension).

• The suspect population is identified by RE school bus models equipped with feature code 03ADC (12,000 lb. front suspension) or 03ADD (14,000 lb. front suspension). The dates of manufacture were determined by when IC Bus began use of a two-piece drop hose fitting on the service brake chambers on the steer axle wheel ends through the date revised installation instructions went into effect at the assembly plant.

• The RE (rear engine) bus model air brake modulator valve is located rearward on the frame as compared to other bus models built with conventional engines. This requires the brake drop hose fittings on the brake chamber to be clocked differently

to maintain clearance.

Production Dates: NOV 05, 2014 - MAR 27, 2017

End: NR VIN Range 1: Begin: NR Not sequential

Description of Defect:

- Description of the Defect : The air brake drop hose fittings to the service brake chambers on the steer axle wheel ends may not be oriented correctly and when the steer wheels are turned to their fullest travel and with full suspension articulation, may result in hose contact with the tire and cause abrasion damage to the hose.
 - · Abrasion damage in an air brake hose to a service brake chamber on the steer axle may result in an air leak during brake application.

FMVSS 1: NR

FMVSS 2: NR

Description of the Safety Risk: • An air leak in the drop hose to a service brake chamber on the steer axle may result in an inoperative brake at the affected wheel end resulting in a pull condition during brake application or an unexpected increase in stopping distance.

> • A pull condition during brake application or an unexpected increase in stopping distance may contribute to a vehicle crash which may result in property damage, personal injury, or death.

Description of the Cause: When the airline fittings were revised, there was no articulation study completed to ensure there was no interference condition between the drop hose and the tire or rim with full suspension articulation.

Identification of Any Warning • Pre-trip inspection of the drop hose for abrasion.

that can Occur: • An audible air leak when the service brakes are applied.

• A pull condition during brake application. As the abrasion causes the hole in the line to increase the pull condition would increase.

Supplier Identification:

Component Manufacturer

Name: NR Address: NR

NR

Country: NR

Chronology:

- 05/23/2017 Navistar receives communication of the issue from the field.
- 06/2017 Navistar Engineering and Manufacturing meet to understand the scope of the issue and initiates field inspections and a review of the assembly process.
- 07/2017 Field inspections and assembly process reviews are completed. Approximately 30% of the field inspections on standard axles showed evidence of either the ABS sensor lead or the drop hose being rubbed by the tire. An engineering study of the influence from suspension articulation was initiated on standard axles.
- 8/2017 An engineering articulation study was initiated to determine if possible chafing could occur on the optional Hendrickson axles at full articulation. Field inspections showed no evidence of chafing using this optional axle.
- 9/2017 Navistar Engineering completes suspension articulation studies and meets with compliance to determine the final scope of the issue.
- 9/2017 Navistar finalizes the suspect population.
- 10/6/2017 IC Bus manufacturing contains the issue by clocking the fitting's 45 degrees inboard at the assembly plant. Note there was no RE production between 3/27/17 and the containment date.

• 10/11/2017 - Navistar declares a Safety Recall.

Description of Remedy:

- Description of Remedy Program: The remedy will involve clocking the drop hose fittings 45 degrees inboard and replacement of any drop hose or wheel speed sensor harness found with abrasion damage.
 - Navistar's plan for reimbursement of pre-notification remedies, on file with NHTSA and dated 10/28/2015, applies and reimbursement instructions will be included in the customer notification.

How Remedy Component Differs The remedy will properly orient the drop hose fittings resulting in proper from Recalled Component: clearance between the drop hose and tire in all tire and suspension angles where the original clocking of the fittings did not.

Identify How/When Recall Condition 10/06/2017 – IC Bus manufacturing began use of revised installation was Corrected in Production: instructions to clock the drop hose fittings 45 degrees inboard and use of a shorter drop hose.

Recall Schedule:

Description of Recall Schedule: It is estimated that the Customer and Dealer notification letter will be

mailed by 12/15/2017.

Planned Dealer Notification Date: DEC 15, 2017 - DEC 15, 2017 Planned Owner Notification Date: DEC 15, 2017 - DEC 15, 2017

* NR - Not Reported