



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 18-015
Date Opened: 12/17/2018
Investigator: Ryan Rahimpour
Approver: Stephen Ridella
Subject: Lap seat belts fail to latch

Date Closed: 09/11/2019
Reviewer: Bruce York-B

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Navistar, Inc.
Products: 2011-2016 Navistar IC school buses with AM Safe lap belts
Population: 1,035

Problem Description: Lap seat belt buckle plastic fingers break, preventing the tongue insert from latching in buckle.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	1	0	0
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	1	0	0

*Description of Other: Florida school bus fleets also confirm the issue.

ACTION / SUMMARY INFORMATION

Action: This PE is closed. See safety recall 19V-478.

Summary:

The Office of Defects Investigation (ODI) of the National Highway Traffic Administration (NHTSA), received a complaint from a school bus fleet alleging seat belt failures in their model year 2011 Navistar IC (Navistar) school buses, equipped with AmSafe non-retractable passenger two-point seat belts. Following receipt of this complaint, ODI reached out to multiple school bus fleets across the country operating similar buses and confirmed the problem also existed in other buses.

Following confirmation of similar seat belt failures in other school districts, NHTSA opened investigation (PE18-015) on December 17, 2018 to assess the manufacturer's data including warranty claims, field reports, design changes, etc.

The scope of this investigation included all model year 2011 through 2016 Navistar school buses. Analysis of the manufacturer data provided to NHTSA in response to this investigation showed high seat belt failure rates in model year 2011 Navistar BE, CE and RE school buses when compared to peer vehicles. The elevated failure rates dropped on vehicles produced after two design changes made by the manufacturer during the production of 2011-2016 seat belts. Navistar implemented a dimensional change to the metal tongue on April 25, 2012 and started utilizing a more robust (car-type) seat belt starting April 3, 2015. The combination of these two changes significantly decreased the seat belt warranty rates in model year 2012-2016 buses.

Navistar's testing and engineering analysis showed that long term cycle fatigue (buckling and unbuckling the seat belt) can cause the plastic fingers attached to the metal tongue to crack and fall off. The missing fingers can result in an elevated force necessary to latch the tongue in the buckle. The elevated force required can prevent the buckle from latching, increasing the risk of an injury in the event of a crash.

By a letter dated June 21, 2019 Navistar notified NHTSA of a safety defect in their model year 2011 Navistar IC BE, CE and RE school buses built with AmSafe non-retractable passenger two-point seat belts and initiated safety recall 19V-478.

With recall action 19V-478 taken by Navistar this investigation is closed. Further use of agency resources does not appear to be warranted. The closing of this investigation does not constitute a finding by NHTSA that a safety-related defect does not exist on other model or MY vehicles outside of the recall scope. The agency reserves the right to take further action if warranted by the circumstances.