



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION



Investigation: PE23004

Prompted By: Social Media and News Reports

Date Opened: 03/17/2023

Date Closed: 02/28/2024

Investigator: Nate Seymour

Reviewer: Joshua Neff

Approver: Tanya Topka

Subject: Blue Bird Draglink Failures

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Blue Bird Body Company

Products: 2016-2020 Blue Bird Vision

Population: 32,209

Problem Description: The draglink may separate from the steering knuckle resulting in a loss of directional control.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	0	0	0	3	3	0
Crashes/Fires:	0	0	0	0	0	0
Injury Incidents:	0	0	0	0	0	0
Number of Injuries:	0	0	0	0	0	0
Fatality Incidents:	0	0	0	0	0	0
Number of Fatalities:	0	0	0	0	0	0

Description of Other: Social Media and News Reports

ACTION/SUMMARY INFORMATION

Action: PE is closed

Summary:

On March 17, 2023, the Office of Defects Investigation (ODI) opened PE23-004 to investigate instances of drag link separation in model year (MY) 2016-2020 Vision school buses manufactured by Blue Bird Body Company (Blue Bird).

Since drag links are serviceable items that can wear out, ODI opened this investigation to understand why two drag links separated at the steering arm end shortly after having passed a routine inspection by multiple qualified entities. Two buses used in the same rural school district, owned and maintained by different bus

contractors, had both undergone similar annual and semi-annual inspections prior to the start of the school year. Both failed within a week of each other, approximately a month into the school year.

ODI interviewed the bus contractors and surveyed the industry to learn what inspection methods were being used and which ones were best at detecting wear in the components. ODI learned that the failed buses had not been inspected using the most thorough methods.

ODI collected the drag links from each of the failed buses. Assisted by the Pennsylvania State Police Motor Carrier Enforcement Division and using best practice inspection methods, ODI identified and collected a pre-separation drag link from a neighboring school district. The drag links underwent a teardown inspection at the Vehicle Research and Test Center (VRTC) jointly with Blue Bird and THK-Rhythm Automotive, the drag link manufacturer. In all cases, the visual analysis of each drag link end revealed that the grease at the steering arm end was dirty, discolored, and dry in texture, while the pitman arm end was still clean looking and fluid.

ODI reviewed the information request data submitted by Blue Bird. No other separations had been reported. ODI contacted additional fleets to determine whether any other separations had occurred that had not been included in the submitted warranty and claim data. None were found.

The grease fitting on the steering arm end is obscured by the steering arm itself. Therefore it is believed that inadequate maintenance resulted in the failures that had not been detected during the less-thorough prior inspections. Blue Bird has agreed to issue a notification to all owners to clearly identify all lubrication points and ensure all owners understand the proper lubrication and inspection methods. Blue Bird will also update their service manuals to convey the industry best practices of having someone turn the steering wheel while someone else inspects the drag links while the wheels are on the ground.

Since the drag link failures appear to be caused by maintenance and inspection deficiencies and not due to a design, material or manufacturing issue, this investigation is closed. The closing of this investigation does not constitute a finding by NHTSA that a safety-related defect does not exist. The Agency reserves the right to take additional action if warranted by future circumstances.