#### The information contained in this report was submitted pursuant to 49 CFR §573

# Part 573 Safety Recall Report

### Manufacturer Information :

Manufacturer Name : Blue Bird Body Company Address : P.O. Box 937 402 Blue Bird Boulevard Fort Valley GA 31030 Company phone : 478-822-2242

Manufacturer Name : Blue Bird Body Company

Submission Date : MAY 24, 2019

NHTSA Recall No.: 19V-391

Manufacturer Recall No.: R19AA - SB

#### **Vehicle Information :**

|  | 2015-2020 Blue   |  |  |  |                      |
|--|--|--|--|--|----------------------|
|  | BUSES, MEDIUM  | 1 & HEAVY VEH  | ICLES                                    |  |                      |
| Body Style :   |  |  |  |  |                      |
| Power Train :  | CNG/LPG  |  |  |  |                      |
| Descriptive Information :  | On certain 2015 to 2020 Vision School Buses, The ADB22X on the left (driver side) rear corner on school bus applications may experience an unintended reduction in the gap between the brake pad and rotor (running clearance), during operation which can lead to a dragging brake. |  |  |  |                      |
| Production Dates :   | NOV 15, 2013 - 1   | MAR 26, 2019   |  |  |                      |
| VIN Range 1:   | Begin :  | NR   | End :                                    | NR   | Not sequential       |
| Vehicle Type :<br>Body Style :<br>Power Train :<br>Descriptive Information : | CNG/LPG<br>On certain 2015<br>side) rear corne<br>in the gap betwo<br>which can lead t   | 4 & HEAVY VEH<br>to 2020 All Am<br>r on school bus<br>een the brake pa<br>to a dragging br | ICLES<br>erican s<br>applica<br>ad and r | school buses, The ADB22X<br>tions may experience an u<br>otor (running clearance), | inintended reduction |
| Production Dates :   |  |  |  | ND   |                      |
| VIN Range 1:   | Begin :  | NR   | End :                                    | NR   | Not sequential       |
|  |  |  |  |  |                      |



Number of potentially involved : 4,218 Estimated percentage with defect : 98 %

**Population :** 

## 19V-391

#### **Description of Defect :**

| Description of the Defect :      | On certain 2015 to 2020 Blue Bird School Buses, the Bendix ADB22X on the left (driver side) rear corner on school bus applications may experience an unintended reduction in the gap between the brake pad and rotor (running clearance), during operation which can lead to a dragging brake.  |
|----------------------------------|---|
| FMVSS 1 :                        | NR  |
| FMVSS 2 :                        | NR  |
| Description of the Safety Risk : | If the gap between the brake pad and rotor is eliminated, it may lead to high<br>temperatures at the wheel end. The high temperatures may lead to the<br>presence of smoke, smoke odor, or in remote cases a potential for fire, which<br>could result in school bus emergency evacuation procedures in uncontrolled<br>traffic situations.     |
| Description of the Cause :       | This condition results from the brake product's prior generation adjustment<br>mechanism design. Due to the direction of wheel rotation, the left rear<br>adjustment process is susceptible to unintended adjustments, in school bus<br>applications where there is a high number of park brake applications which<br>only occur on rear axles. |
|                                  | The left rear ABS sensor wire may become damaged due to high temperatures<br>and set an ABS fault which illuminates the ABS dash warning light. Odors<br>associated with high temperature brake pads may be detected. Smoke may be<br>observed coming from the left rear wheel.   |

#### **Supplier Identification :**

#### **Component Manufacturer**

Name : Bendix Commercial Vehicle Systems LLC

- Address: 901 Cleveland Street
- Elyria OHIO 44035
- Country: United States

#### **Chronology** :

January 2018 - May 2018

• A significant increase in occurrence rate of complaints of melted wheel speed sensors and/or overheating individual wheel ends, "the issue", from school bus customers in the field is noted. April 2018 – August 2018

- Conducted vehicle testing of school buses in the field and on test track.
- Conducted statistical problem-solving temperature and pressure testing at Navistar proving grounds on "Best of Best" brakes and "Worst of Worst" brakes. Not able to reproduce the issue. September 2018 December 2018
- Bendix initiates formal investigation into root cause analysis. The issue remains intermittent.

**19V-391** 

January 2019 – March 2019 Bendix engineering team visits various customer locations to inspect buses and investigate requirement of buses to apply parking brake at each stop. Warranty field return samples are collected and analyzed by Bendix Engineering team. March 1, 2019 - March 15, 2019 Lab testing results indicate correlation between high brake force and tube slip with the INA adjuster. Increased understanding of pre-trip pump down and full application of service brake to release park brake interlock. March 15, 2019 - April 1, 2019 Bendix engineering develops method to measure INA torque in lab testing. Defined test methodology to test difference between Left hand and right-hand brake. Observed tube slip effect in field test April 1, 2019 - April 10,2019 Bendix Engineering pursues further replication of vehicles with service/park interlock installed. A moderate effect is demonstrated on INA adjusters with no effect demonstrated on N2G adjuster. April 11, 2019 Bendix Product Integrity Committee recommends a field action to replace the left rear calipers on school buses equipped with INA adjusters with calipers featuring the next-generation N2G brake. May 21, 2019 Bendix notified OEMs of the recall campaign 19E030.

#### **Description of Remedy :**

| Description of Remedy Program :                                     | Bendix will provide replacement kits for left rear ADB22X calipers on<br>applicable school buses. The kit will contain a new caliper with an updated<br>clearance adjustment mechanism and necessary hardware to install the<br>caliper assembly. The kits will be installed through an OEM authorized<br>location at no cost to the vehicle owner. The remedy component has an<br>updated clearance adjustment mechanism that is internal to the ADB22X<br>assembly. It is identified by the ADB22X serialized production number. |
|---|--|
| How Remedy Component Differs<br>from Recalled Component :           |  |
| Identify How/When Recall Condition<br>was Corrected in Production : |  |

#### **Recall Schedule :**

Description of Recall Schedule :Parts will be available in July 2019Planned Dealer Notification Date :JUL 18, 2019 - JUL 18, 2019Planned Owner Notification Date :JUL 18, 2019 - JUL 18, 2019

\* NR - Not Reported

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