

Part 573 Safety Recall Report

18V-394

Manufacturer Name : New Flyer of America Inc.**Submission Date :** JUN 12, 2018**NHTSA Recall No. :** 18V-394**Manufacturer Recall No. :** R18-010**Manufacturer Information :**

Manufacturer Name : New Flyer of America Inc.

Address : 711 Kernaghan Avenue

Winnipeg, MB Canada 00 R2C3T4

Company phone : 204-224-6706

Population :

Number of potentially involved : 908

Estimated percentage with defect : 40 %

Vehicle Information :

Vehicle 1 : 2014-2016 New Flyer XT60

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Heavy Duty Sixty Foot Trackless Electric Trolley Urban Transit Bus. Population based on specific ZF Axle serial Numbers

Production Dates : FEB 28, 2015 - SEP 02, 2016

VIN Range 1 : Begin : 5FYE8YJ07EC045938 End : 5FYE8YJ04GC049593 Not sequential

Vehicle 2 : 2014-2017 New Flyer XN60

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : CNG/LPG

Descriptive Information : Heavy Duty CNG Sixty Foot Articulated Urban Transit Bus. Population based on specific ZF Axle serial Numbers.

Production Dates : DEC 31, 2014 - MAY 19, 2017

VIN Range 1 : Begin : 5FYC8YC1XEB046178 End : 5FYC8YC10HB051426 Not sequential

Vehicle 3 : 2015-2017 New Flyer XDE60

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Heavy Duty Diesel-Electric Sixty Foot Articulated Urban Transit Bus. Population based on specific ZF Axle serial Numbers

Production Dates : APR 13, 2015 - AUG 08, 2017

VIN Range 1 : Begin : 5FYH8YU07FC046453 End : 5FYH8YU08HC051454 Not sequential

Vehicle 4 : 2014-2017 New Flyer XD60

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : DIESEL

Descriptive Information : Heavy Duty Sixty Foot Diesel Urban Transit Bus. Population based on specific ZF Axle serial Numbers

Production Dates : FEB 04, 2015 - NOV 22, 2017

VIN Range 1 : Begin : 5FYD8YU19EB046191 End : 5FYD8YU07HB051644 Not sequential

Description of Defect :

Description of the Defect : On the ZF center axle of a sixty foot articulated bus, the surface roughness of the guide pins of the Knorr-Bremse SB model radial brake caliper, causes uneven or tapered brake pad wear, increased friction and noise. If uncorrected, this condition may result in the fracture of the brake carriage guide pin support bolt, resulting in a loss of braking effectiveness and possible contact of the brake caliper with the inner wheel rim. Please refer to Equipment Recall 18E-025.

FMVSS 1 : 121 - Air brake systems

FMVSS 2 : NR

Description of the Safety Risk : Failure of the support bolt on the Knorr-Bremse SB model brake caliper, would result in reduced braking efficiency on the associated wheel end of the ZF center axle and may result in extended stopping distances increasing the risk of crash or injury. Parking/Emergency brake effectiveness on the center axle may also be diminished. If left unchecked, contact with the wheel rim could result in the loss of tire air pressure to the inner dual wheel on the center axle.

Description of the Cause : The surface of the guide pins used on the center axle Knorr-Bremse SB model radial brake calipers, may not have been manufactured to proper tolerance. Roughness of the guide pin may result in the application of additional stress to the brake carriage guide pin support bolt, causing it to fracture. Please Refer to Equipment Recall 18E-025.

Identification of Any Warning that can Occur : Potential for brake noise and uneven or tapered brake pad wear.

Supplier Identification :

Component Manufacturer

Name : Knorr-Bremse AG

Address : Moosacher Str. 80

Munich FOREIGN STATES 80809

Country : Germany

Chronology :

In April of 2017 New Flyer was advised of four brake caliper failures at a major metropolitan transit agency in the northeast. Root cause of poor guide pin surface condition was confirmed with ZF the axle manufacture. Knorr-Bremse initiated a goodwill campaign to replace all the calipers at that customer (108 vehicles from this customer with ZF axles are still included in the recall population, they have received the improved product, and will be counted as completed, customer will be contacted and advised of received a pre-recall corrective action).

In June of 2017 ZF inquired if New Flyer was aware of any additional failures at other customer locations related to the previous failures, New Flyer had none to report.

In March of 2018 New Flyer was informed of two center axle brake caliper failures at large transit agency in the Midwest. ZF was informed, the damaged parts were sent for analysis and replaced under warranty.

In early April 2018, the analysis was completed by ZF who confirmed the same root cause as was seen on previous failures.

By mid-April 2018 New Flyer received verbal confirmation from customers that our competitors buses were also seeing this failure.

In late April 2018 ZF filed an equipment recall 18E-025 with NHTSA for the Knorr-Bremse SB Model Brake calipers.

On 6 June 2018 New Flyer received formal notification of the equipment recall from ZF and decided to initiate a vehicle safety recall.

Description of Remedy :

Description of Remedy Program : Brake calipers on the identified axles installed by New Flyer on production vehicles will be removed, serviced with a complimentary re-bushing kit and reinstalled at no cost to the owner. Customers who purchased aftermarket brake calipers will also be advised and offered the re-bushing kits..

How Remedy Component Differs from Recalled Component : Axle Serial Numbers - The recall population of the Knorr-Bremse SB model radial brake caliper (New Flyer Part Number 472465) installed on the ZF center axle of sixty foot articulated buses are based on the ZF production data with regards to specific axle serial numbers installed on New Flyer production buses.

Identify How/When Recall Condition was Corrected in Production : Knorr-Bremse modified the manufacturing process for the guide pins in January of 2017. The cut-in for this change has been determined by ZF, and is reflected in their listing of affected axle serial numbers provided to New Flyer.

Recall Schedule :

Description of Recall Schedule : Customer notifications will begin once the recall is acknowledged by the ODI and the sample customer letter is approved.

Planned Dealer Notification Date : JUN 25, 2018 - JUN 25, 2018

Planned Owner Notification Date : JUN 26, 2018 - JUN 29, 2018

* NR - Not Reported