

Part 573 Safety Recall Report

23V-722

Manufacturer Name : New Flyer of America, Inc.

Submission Date : DEC 08, 2023

NHTSA Recall No. : 23V-722

Manufacturer Recall No. : R23-20



Manufacturer Information :

Manufacturer Name : New Flyer of America, Inc.

Address : 711 Kernaghan Avenue
Winnipeg, MB 00 R2C3T4

Company phone : 204-224-6706

Population :

Number of potentially involved : 2,351

Estimated percentage with defect : 25 %

Vehicle Information :

Vehicle 1 : 2019-2024 New Flyer XD35, XD40, XN35, XN40

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : NR

Descriptive Information : This recall is based on an Allison Transmission, Inc. (ATI) recall issued under 23E079. The population was determined based on ATI's serial number (SN) list provided to New Flyer.

Products included are New Flyer buses produced with an Allison B400R or B3400xFE_R transmission. Buses without those transmissions are not included.

Production Dates : JAN 14, 2019 - OCT 20, 2023

VIN Range 1 : Begin : 2FYD8FV16KC054372 **End :** 5FYD8FV03RF108452 Not sequential

Description of Defect :

Description of the Defect : Under certain conditions, the output yoke bolt may loosen and potentially result in separation of the driveline from the transmission output shaft.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If the driveline separates from the transmission output shaft while driving, the vehicle may experience an unexpected loss of motive power, which may increase the risk of a crash.

Description of the Cause : ATI has not yet determined the cause of the loosening of the output yoke bolt. Transit bus duty cycles have a very high start/stop shift density. This generates significantly more torsional activity on this bolted joint than other applications. Testing by ATI and its customer is ongoing.

Identification of Any Warning that can Occur : The failure could occur with warning.

Involved Components :

Component Name 1 : TRANSMISSION

Component Description : TRANSMISSION-B400R

Component Part Number : 351260

Component Name 2 : TRANSMISSION

Component Description : TRANSMISSION-B3400XFE_R

Component Part Number : 620070

Component Name 3 : TRANSMISSION

Component Description : TRANSMISSION-B3400XFE_R W/COOLER

Component Part Number : 811430

Component Name 4 : TRANSMISSION

Component Description : TRANSMISSION-B400R GEN 5

Component Part Number : 874200

Component Name 5 : TRANSMISSION

Component Description : TRANSMISSION-B3400XFE_R

Component Part Number : 919377

Component Name 6 : TRANSMISSION

Component Description : TRANSMISSION-B400R TC421 GEN 6

Component Part Number : 967874

Component Name 7 : TRANSMISSION

Component Description : TRANSMISSION-B400R TC418 GEN 6

Component Part Number : 967879

Component Name 8 : TRANSMISSION

Component Description : TRANSMISSION-B3400XFER TC421 GEN 6

Component Part Number : 1019263

Component Name 9 : TRANSMISSION

Component Description : TRANSMISSION-B400R TC421 GEN 6 W/ COOLER NY

Component Part Number : 1011646NY

Component Name 10 : TRANSMISSION

Component Description : TRANSMISSION-B400R W/COOLER

Component Part Number : 513887NY

Component Name 11 : TRANSMISSION

Component Description : TRANSMISSION-B400R W/COOLER NY

Component Part Number : 875514NY

Supplier Identification :

Component Manufacturer

Name : Allison Transmission, Inc.

Address : Mail Code M23

One Allison Way Indianapolis Indiana 46222-3271

Country : United States

Chronology :

First instance was noted on a Field Report in December-2022. This issue was addressed by ATI under warranty for the customer. (No warranty claims have been received by New Flyer.)

New Flyer investigated additional reports of loose transmission yokes from the same US based property, and in July/August 2023 requested the transmission supplier (Allison Transmission, Inc [ATI]) assist and review.

August/September, 2023, through checks that ATI performed on the subject buses, a higher-than-expected number of fasteners holding the yoke to the transmission output shaft were identified.

New Flyer and ATI continued discussions surrounding the cause, which led to ATI issuing an equipment recall (NHTSA, 23E079). New Flyer was made aware of this recall on October 17, 2023, and held several conference calls with Allison for additional details.

A review of the issue and ATI's recall were the basis of a special meeting of New Flyer's Safety Committee on October 23, 2023, and consensus determined New Flyer would issue a recall, culminating in this submission.

There are no known injuries, deaths or accidents associated with this issue.

Description of Remedy :

Description of Remedy Program : New Flyer and/or ATI will coordinate with customers to make arrangements for ATI to inspect the output yoke bolts and, if necessary, tighten loose output yoke bolts. This will be performed at no charge to the customer. If a customer requires to perform the work themselves, New Flyer will reimburse through our normal warranty process.

New Flyer will provide reporting required in 573.7 with information obtained from ATI.

ATI is providing the required customer notification, associated with 23E079.

How Remedy Component Differs from Recalled Component : ATI increased the torque specification for the output yoke bolt for all B400R and B3400xFE_R transmissions. The clamp load for the output yoke bolt was increased by approximately 150%, nominal torque is being increased from the previous specification of 77.5 Newton-meters (Nm) to 130 Nm.

Identify How/When Recall Condition was Corrected in Production : Upon receiving notice from ATI on the recall, New Flyer stopped shipping affected buses until ATI personnel had entered our production plants and addressed the fasteners to the new torque spec.

Recall Schedule :

Description of Recall Schedule : Please note New Flyer does not have a dealer network - dates are aligned with our owner notification dates.

Planned Dealer Notification Date : NOV 30, 2023 - NOV 30, 2023

Planned Owner Notification Date : NOV 30, 2023 - NOV 30, 2023

* NR - Not Reported