

Part 573 Safety Recall Report**14V-532****Manufacturer Name :** New Flyer Industries Ltd.**Submission Date :** SEP 02,2014**NHTSA Recall No. :** 14V-532**Manufacturer Recall No. :** R14-019**Manufacturer Information :**

Manufacturer Name : New Flyer Industries Ltd.

Address : 711 Kernaghan Avenue

Winnipeg, MB Canada 00 R2C3T4

Company phone : 204-934-4876

Population :

Number of potentially involved : 731

Estimated percentage with defect : 15

Vehicle Information :

Vehicle : 2013-2013 New Flyer XD35

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : DIESEL

Descriptive Information : Heavy Duty Diesel Thirty Five foot Transit Bus
Manufactured between 25 Sep 2013 and 15 Jan 2014

Production Dates : MAR 14, 2013 -JUN 12, 2014

VIN (Vehicle Identification Number) Range

Begin : 5FYD8KV18DB043065

End : 5FYD8KV1XDB043066

 Not sequential VINs

Begin : 5FYD8KV09DC043416

End : 5FYD8KV0XDC043425

 Not sequential VINs

Vehicle : 2013-2014 New Flyer XD40

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : DIESEL

Descriptive Information : Heavy Duty Diesel Forty Foot Transit Bus
Manufactured between 24 May 2013 and 19 May 2014

Production Dates : MAR 14, 2013 -JUN 12, 2013

VIN (Vehicle Identification Number) Range

Begin : 5FYD8FV09DC041849

End : 5FYD8FV00DC041903

 Not sequential VINs

Begin : 5FYD8FV16DB043296

End : 5FYD8FV14DC043307

 Not sequential VINs

Begin : 5FYD8FV08DB043324

End : 5FYD8FV16DB043377

 Not sequential VINs

Begin : 5FYD8FV14DC043386

End : 5FYD8FV14DC043386

 Not sequential VINs

Begin : 5FYD8FV14DB043426

End : 5FYD8FV1XDB043429

 Not sequential VINs

Begin : 5FYD8FV19EB044251	End : 5FYD8FV15EB044280	<input type="checkbox"/> Not sequential VINs
Begin : 5FYD8FV12EC044411	End : 5FYD8FV17EC044422	<input type="checkbox"/> Not sequential VINs

Vehicle : 2013-2014 New Flyer XD60
 Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES
 Body Style : OTHER
 Power Train : DIESEL
 Descriptive Information : Heavy Duty Diesel Sixty Foot Transit Bus
 Manufactured between 31 May 2013 and 7 May 2014
 Production Dates : MAR 14, 2013 - JUN 12, 2014

VIN (Vehicle Identification Number) Range

Begin : 5FYD8YU19DC041789	End : 5FYD8YU19DC041811	<input type="checkbox"/> Not sequential VINs
Begin : 5FYD8YU00DC043440	End : 5FYD8YU02DC043455	<input type="checkbox"/> Not sequential VINs
Begin : 5FYD8YU08EC044336	End : 5FYD8YU02EB044354	<input type="checkbox"/> Not sequential VINs

Vehicle : 2013-2013 New Flyer XDE35
 Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES
 Body Style : OTHER
 Power Train : HYBRID ELECTRIC
 Descriptive Information : Heavy Duty Diesel Electric Thirty Five Foot Transit Bus
 manufactured between 17 Aug 2013 and 19 Feb 2014
 Production Dates : MAR 14, 2013 - JUN 12, 2014

VIN (Vehicle Identification Number) Range

Begin : 5FYH8KR11DC042314	End : 5FYH8KR13DC042315	<input type="checkbox"/> Not sequential VINs
Begin : 5FYH8KR14DC043456	End : 5FYH8KR16DC043457	<input type="checkbox"/> Not sequential VINs

Vehicle : 2013-2014 New Flyer XDE40
 Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES
 Body Style : OTHER
 Power Train : HYBRID ELECTRIC
 Descriptive Information : Heavy Duty Diesel Electric Forty Foot Transit Bus
 Manufactured between 14 Mar 2013 and 28 mar 2014
 Production Dates : MAR 14, 2013 - JUN 12, 2014

VIN (Vehicle Identification Number) Range

Begin : 5FYH8FR00DB041692	End : 5FYH8FR04DB041730	<input type="checkbox"/> Not sequential VINs
Begin : 5FYH8FU03DB041743	End : 5FYH8FU02DB041765	<input type="checkbox"/> Not sequential VINs
Begin : 5FYH8FU13DC041812	End : 5FYH8FU19DC041815	<input type="checkbox"/> Not sequential VINs
Begin : 5FYH8FU06DB042921	End : 5FYH8FU05DB042926	<input type="checkbox"/> Not sequential VINs
Begin : 5FYH8FR08DB042976	End : 5FYH8FR03DB042979	<input type="checkbox"/> Not sequential VINs

Begin : 5FYH8FR01DB043015	End : 5FYH8FR03DB043064	<input type="checkbox"/> Not sequential VINs
Begin : 5FYH8FU01DB043202	End : 5FYH8FU00DB043241	<input type="checkbox"/> Not sequential VINs
Begin : 5FYH8FR02DB043430	End : 5FYH8FR09DB043439	<input type="checkbox"/> Not sequential VINs
Begin : 5FYH8FR07DC044227	End : 5FYH8FR09DC044228	<input type="checkbox"/> Not sequential VINs
Begin : 5FYH8FU00EB044374	End : 5FYH8FU0XEB044379	<input type="checkbox"/> Not sequential VINs

Vehicle : 2013-2014 New Flyer XDE60

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Heavy Duty Diesel Electric Sixty Foot Transit Bus
Manufactured between 11 Dec 2013 and 06 Jun 2014

Production Dates : MAR 14, 2013 - JUN 12, 2014

VIN (Vehicle Identification Number) Range

Begin : 5FYH8YU1XDC043312	End : 5FYH8YU14DC043323	<input type="checkbox"/> Not sequential VINs
Begin : 5FYH8YU14EB044382	End : 5FYH8YU16EB044383	<input type="checkbox"/> Not sequential VINs

Vehicle : 2013-2013 New Flyer XE40

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : HYBRID ELECTRIC

Descriptive Information : Heavy Duty Electric Forty Foot Transit Bus
Manufactured in June of 2014

Production Dates : MAR 14, 2013 - JUN 12, 2014

VIN (Vehicle Identification Number) Range

Begin : 5FYB8FJ03DB043244	End : 5FYB8FJ05DB043245	<input type="checkbox"/> Not sequential VINs
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Vehicle : 2013-2014 New Flyer XN35

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : CNG/LPG

Descriptive Information : Heavy Duty Compressed Natural Gas Thirty Five Foot Transit Bus manufactured
between 26 Sep 2013 and 25 Apr 2014

Production Dates : MAR 14, 2013 - JUN 12, 2014

VIN (Vehicle Identification Number) Range

Begin : 5FYC8KB04DC043002	End : 5FYC8KB08DC043004	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8KB01DC043281	End : 5FYC8KB04DC043288	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8KB14DC043378	End : 5FYC8KB11DC043385	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8KB06DC043387	End : 5FYC8KB06DC043387	<input type="checkbox"/> Not sequential VINs

Begin : 5FYC8KB04DB043409	End : 5FYC8KB0XDB043415	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8KB0XE044288	End : 5FYC8KB00EB044297	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8KB06EC044332	End : 5FYC8KB06EC044332	<input type="checkbox"/> Not sequential VINs

Vehicle : 2013-2014 New Flyer XN40

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : CNG/LPG

Descriptive Information : Heavy Duty Compressed Natural Gas Forty Foot Transit Bus manufactured between 18 Apr 2013 and 25 Apr 2014

Production Dates : MAR 14, 2013 - JUN 12, 2014

VIN (Vehicle Identification Number) Range

Begin : 5FYC8FB17DC041776	End : 5FYC8FB14DC041783	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8FB07DC041915	End : 5FYC8FB03DC041944	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8FB19DC042234	End : 5FYC8FB15DC042313	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8FB03DC042866	End : 5FYC8FB05DC042870	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8FB18DC043388	End : 5FYC8FB1XDC043408	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8FB19DC044212	End : 5FYC8FB19DC044226	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8FB16DC044250	End : 5FYC8FB16DC044250	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8FB05EC044281	End : 5FYC8FB18EB044287	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8FB19EC044308	End : 5FYC8FB05EC044331	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8FB09EC044333	End : 5FYC8FB02EC044335	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8FB08EC044355	End : 5FYC8FB03EC044358	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8FB08EC044372	End : 5FYC8FB0XEC044373	<input type="checkbox"/> Not sequential VINs

Vehicle : 2013-2014 New Flyer XN60

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : CNG/LPG

Descriptive Information : Heavy Duty Compressed Natural Gas Sixty Foot Transit Bus manufactured between 12 Aug 2013 and 25 Apr 2014

Production Dates : MAR 14, 2013 - JUN 12, 2014

VIN (Vehicle Identification Number) Range

Begin : 5FYC8YC04DC041672	End : 5FYC8YC04DC041672	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8YC07DB042983	End : 5FYC8YC03DB043001	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8YC11DC044229	End : 5FYC8YC17DC044249	<input type="checkbox"/> Not sequential VINs
Begin : 5FYC8YC17EC044298	End : 5FYC8YC14EC044307	<input type="checkbox"/> Not sequential VINs

Description of Defect :

Description of the Defect : It has been determined that the mounting hole in the Brake Pedal Mounting Plate which accommodates the Brake Pedal Assembly to Brake Valve Actuator (BVA) installation, may be improperly dimensioned to accommodate the tolerance stack-up. This may result in the mounting plate being bolted, or “sandwiched”, between these two components during installation resulting in a misalignment of the internal pistons. Over time, scoring can occur to the surface bore of the piston inside the BVA valve, which can result in both resistance to brake pedal application during braking, and possibly brake drag once the brake pedal is released.

Description of the Safety Risk : Unanticipated resistance to brake pedal movement could result in extended stopping distances and increase the risk of a crash.

Description of the Cause : Improper brake pedal to brake valve installation due to brake pedal mounting plate design and tolerance stacking.

Identification of Any Warning that can Occur : Brake pedal may seem stiff to function.

Instances of brake drag have been reported.

Brake lamps may remain illuminated.

New Flyer standard brake warning system may activate.

Supplier Identification :

Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

Chronology :

In March of 2014 New Flyer (NF) Production investigated a Brake Valve Actuator (BVA) which malfunctioned during road test. Supplier analysis indicated no fault with the component. NF Engineering determined that the failure of the BVA internal piston may have been related to the tight installation tolerance for the BVA to Brake Pedal Assembly through the Brake Pedal Mounting Plate. A full review of the bench assembly installations was conducted by NF Quality Assurance.

In April of 2014 NF is informed by customer of four dragging brake incidents. On-site inspection detects damage to the internal bore of the BVA. NF Engineering analysis determines the damage is the result of "side loading" of the BVA internal piston, caused by a misalignment between the pistons of the BVA and the Brake Pedal Assembly. Misalignment is the result of the brake pedal mounting plate, being clamped or "sandwiched" between the BVA and the Brake Pedal Assembly during installation.

In late May of 2014 two similar reports are received from Canadian customers, an inspection and analysis of the valves involved show similar results. NF Engineering begins revising the Brake Pedal Mounting Plate designs, for production vehicles.

In June of 2014 a full review of the analysis results prompts an extended field test and inspection to be conducted at three different customer sites spread across North America, each from a differing production time period, in an effort to determine the potential scope of the issue.

On 7 August 2014 the results of the field testing and analysis are presented to senior staff for discussion and determination of corrective actions.

On 20 August 2014 NF decides to declare a recall with NHTSA on all products with this installation and conduct a field campaign to replace both the brake Pedal Mounting Plate and BVA on those vehicles.

Description of Remedy :

Description of Remedy Program : The brake pedal mounting plate will be replaced with a new design not subject to tolerance stacking. The Brake Valve Actuator (BVA) will also be replaced. New Flyer will pay for parts and labor to conduct this retrofit. Correction will either be done by New Flyer personnel at the customer location, or by the customer and labor can be claimed back through the New Flyer warranty system.

How Remedy Component Differs from Recalled Component : The new brake mounting plate will be visually different when viewed from the underside. The mounting hole for the BVA will be circular on the old style mounting plates, and will be shaped to provide valve clearance around the BVA on the new style plates.

Identify How/When Recall Condition was Corrected in Production : The new style mounting plates entered full production in June 2014.

Recall Schedule :

Description of Recall Schedule : Customer notifications will begin as soon as the recall is acknowledged by the ODI. New Flyer anticipates completion of customer notification within 2 weeks.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : NR - NR

* NR - Not Reported