

Safety Defect and Noncompliance Report Guide for Vehicles

05V-298  
(10 pages)

**PART 573 Defect and Noncompliance Report**<sup>1</sup>

On June 16th, 2005, New Flyer Industries [MFR] decided that a defect which relates to motor vehicle safety exists in the motor vehicles listed below, and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573 Defect and Noncompliance Reports.

Date this report was prepared: 16 June 2005

Furnish the manufacturer's identification code for this recall (if applicable): N/A

1. Identify the full corporate name of the fabricating manufacturer of the vehicle being recalled. If the recalled vehicle is imported, provide the name and mailing address of the designated agent as prescribed by 49 U.S.C. §30164.

New Flyer Industries Limited, 711 Kernaghan Avenue, Winnipeg, Manitoba, Canada, R2C 3T4

Identify the corporate official, by name and title, whom the agency should contact with respect to this recall.

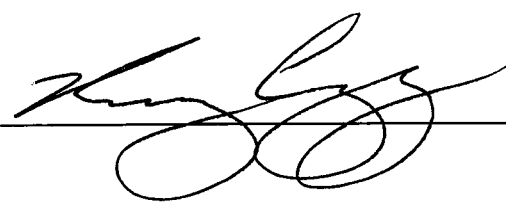
Kerry Legg – Safety & Compliance Manager – New Flyer Industries Limited

Telephone Number: (204) 934-4876 Fax No.: (204) 224-0248

Name and Title of Person who prepared this report.

Kerry Legg

Safety & Compliance Manager

Signed: 

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OFFICE OF  
DEFECTS INVESTIGATION

<sup>1</sup>Each manufacturer must furnish a report, to the Associate Administrator for Safety Assurance, for each defect or noncompliance condition which relates to motor vehicle safety.

This guide was developed from 49 CFR Part 573, "Defect and Noncompliance Reports" and also outlines information currently requested. Any questions, please consult the complete Part 573 or contact Mr. Jon White at (202) 366-5227 or by FAX at (202) 366-7882.

**I. Identify the Vehicle Models Involved in the Recall**

**2. Identify the Vehicles Involved in the Recall, for each make and model or applicable vehicle line (provide illustrations or photographs as necessary to describe the vehicle), provide:**

**Make(s):** D40LF Custom Build w/MAN Axles **Model Years Involved:** 2004 **Model(s):** Sales Release 912

**Production Dates: Beginning:** Jan 2004 **Ending:** Aug 2004

**VIN Range:**

**Beginning:** 026119 **Ending:** 026119,

**Beginning:** 026273 **Ending:** 026371,

**Beginning:** 026595 **Ending:** 026612 and

**Beginning:** 026814 **Ending:** 026913

**Vehicle Type:** 40 Foot Diesel **Bodystyle:** Low Floor

**Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall:**

Custom specification build for Southeastern Pennsylvania Transit Authority designated "SR912" unit numbers 5713-5830 and 5851-5950.

**Identify the approximate percentage of the production of all the recalled models manufactured by your company between the inclusive dates of manufacture provided above, that the recalled model population represents. For example, if the recall involved Widgets equipped with certain items of equipment from January 1, 1996 through April 1, 1997, then what was the percentage of the recalled Widgets of all Widgets manufactured during that time period.**

218 out of 1125 = 19.4 %

**II. Identify the Recall Population**

**3. Furnish the total number of vehicles recalled potentially containing the defect or noncompliance.**

<b>Model</b>	<b>Year</b>	<b>Number of Vehicles Potentially Involved</b>
Custom order - D40LF w/M.A.N. Axle	Manufactured between Jan 2004 and Aug 2004	218

**Total Number Potentially Affected by the Recall:** 218

**4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance:** 100%

**Identify and describe how the recall population was determined--in particular how the recalled models were selected and the basis for the beginning and final dates of manufacture of the recalled vehicles:**

Initial field reports sparked an examination of production records for this type of installation over last three years. Population was identified as affecting 218 buses, built for one specific consumer. These buses were manufactured between Jan 2004 and August 2004.

### **III. Describe the Defect or Noncompliance**

**5. Describe the defect or noncompliance. The description should address the nature and physical location of the defect or noncompliance. Illustrations should be provided as appropriate.**

There is no defect of the axle components as manufactured by M.A.N.  
During the manufacture and assembly of specific buses at the production facility for New Flyer Industries, the center-link assemblies for the M.A.N. axles were installed to incorrect axle specifications. The specifications were for a different model of axle, and were supplied to production by New Flyer Manufacturing Engineering department.

**Describe the cause(s) of the defect or noncompliance condition.**

The use of the incorrect axle specifications during installation resulted in an over-torque condition on the center link rod ends, and a mis-positioning of the adjusting clamp.

**Describe the consequence(s) of the defect or noncompliance condition.**

Improper securing of the center-link rod ends could cause the assembly to come apart, resulting in loss of vehicle steering control.

**Identify any warning, which can (a) precede or (b) occur.**

Normal Preventative Maintenance inspection of suspension components identifies a small degree of play between the center link and the center link rod-ends which should not exist.

**If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.**

M.A.N. Engines & Components Inc.  
591 SW 13th Terrace  
Pompano Beach, FL 33069

**Identify the name and title of the chief executive officer or knowledgeable representative of the supplier:**

Heiner Falke - Regional Sales Manager

#### **IV. Provide the Chronology in Determining the Defect/Noncompliance**

*If the recall is for a defect, complete item 6, otherwise item 7.*

**6. With respect to a defect, furnish a chronological summary (including dates) of all the principle events that were the basis for the determination of the defect. The summary should include, but not be limited to, the number of reports, accidents, injuries, fatalities, and warranty claims.**

**7. With respect to a noncompliance, identify and provide the test results or other data (in chronological order and including dates) on which the noncompliance was determined.**

Jun 10<sup>th</sup>, 2005, the customer reports second failure of the rod end of the center-link assembly while buses in service. It was then brought to the attention of the New Flyer Regional Manager who reported a potential issue to New Flyer Technical Services. The Axle manufacture was consulted as to possible cause.

Jun 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup>, entire customer fleet was inspected to determine impact. A total of 218 buses from a single manufacturing build were identified as having that same condition. Two center-link assemblies were removed from the customers' buses and returned to New Flyer for analysis.

Jun 13<sup>th</sup>, Axle manufacture visits customer to examine product. Determination is made that center-links were incorrectly installed by New Flyer.

Jun 14<sup>th</sup>, examination of center-link assemblies at New Flyer and investigation into improper installation begins.

Jun 15<sup>th</sup>, Tech Services makes final determination of the reason for incongruous installation. It was traced back to initial installation documents used on production floor for this custom build. Production documentation checked back to Jan 2003 to determine if the same error had occurred for any other custom builds. New Flyer Safety Committee recommends that a recall be done on the center-link assembly for this custom build. Letter sent to customer detailing problem and proposed solution. Parts ordered from manufacture.

Jun 16<sup>th</sup>, Regional Manager issues Field Service Action Report. Tech Services creates ITS to conduct interim inspection of hardware. Tech Services creates ITS to conduct replacement of center link assembly.

#### **V. Identify the Remedy**

**8. Furnish a description of the manufacturer's remedy for the defect or noncompliance. Clearly describe the differences between the recall condition and the remedy.**

As an interim measure until parts are available, all buses are to be immediately inspected to include the reorientation of the clamp on the center-link assembly, rod ends are to be re-torqued to the proper torque setting and inspected for play. Twenty center-link assemblies to be replaced immediately and returned to New Flyer for inspection in order to determine if customer must be advised to remove buses from service.

Once replacement parts can be furnished, the entire center-link assembly will be replaced on all units affected and an alignment of the vehicle steering will be carried out.

**Clearly describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly.**

Replacement assembly to be installed to the proper installation specifications.

**Identify and describe how and when the recall condition was corrected in production. If the production remedy was identical to the recall remedy in the field, so state. If the product was discontinued, so state.**

Problem was isolated to a customer specific model build. Production is complete.

#### **VI. Identify the Recall Schedule**

**Furnish a schedule or agenda (with specific dates) for notification to other manufacturers, dealers/retailers, and purchasers. Please, identify any foreseeable problems with implementing the recall.**

Customer was notified on 15 July 2005 upon detection of the fault. Customer will be provided with an additional notification once the DoT Recall Code has been issued. Components to be replaced as soon as parts become available.

#### **VII. Furnish Recall Communications**

**9. Furnish a final copy of all notices, bulletins, and other communications that relate directly to the defect or noncompliance and which are sent to more than one manufacturer, distributor, or purchaser. This includes all communications (including both original and follow-up) concerning this recall from the time your company determines the defect or noncompliance condition on, not just the initial notification. *A DRAFT copy of the notification documents should be submitted to this office by Fax (202-366-7882) for review prior to mailing.***

**Note that these documents are to be submitted separately from those provided in accordance with Part 573.8 requirements.**

*The Privacy Act of 1974 - Public Law 93-579, As Amended: This information is requested pursuant to the authority vested in the National Highway Traffic Safety Act and subsequent amendments. You are under no obligation to respond to this questionnaire. Your response maybe used to assist the NHTSA in determining whether a manufacturer should take appropriate action to correct a safety defect. If the NHTSA proceeds with administration enforcement or litigation against a manufacturer, your response, or statistical summary thereof, may be used in support of the agency's action.*



23 June, 2005

John R. Nielsen  
Senior Project Manager  
Southeastern Pennsylvania Transportation Authority  
13<sup>th</sup> Floor, 1234 Market St.  
Philadelphia, PA 19107-3728

Re: **Recall 05V-XXX – MAN Axle Center Link Assembly New Flyer PN 6328797**

Dear Mr. Nielsen,

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

New Flyer has decided that a defect which relates to motor vehicle safety exists in certain New Flyer transit vehicles. Further investigation has revealed that the following vehicles, operated by Southeastern Pennsylvania Transportation Authority (SEPTA) are affected:

<b>Make:</b>	New Flyer Transit Vehicle
<b>Model:</b>	D40LF
<b>VIN Range (last 6 digits):</b>	026119, 026273 to 025371, 026595 to 026612, and 026814 to 026913.

We regret any inconvenience which this action may cause you. However, we are concerned about your safety. The subject components require replacement due to incorrect installation technique used during production of the subject vehicles.

For specific information or assistance with regards to this defect, contact either your Regional Product Support Manager Dan Morris or New Flyer Customer Services at (204) 934-4874. If you no longer own this vehicle, please inform us when you call.

Federal regulations require that any vehicle lessor receiving this notice must forward a copy of this notice to the lessee within ten days.

This recall is being managed by New Flyer Ind. We will furnish the parts, the Instruction to Service (ITS-2668) and labor required to accomplish the recall.

**Headquarters/  
Winnipeg Facility**

711 Kernaghan Ave.  
Winnipeg, Manitoba  
R3C 3T4 Canada

Ph: (204) 224-1251  
Fx: (204) 224-0551  
e-mail: buses@newflyer.com

**Customer  
Services**

25 DeBaets St.  
Winnipeg, Manitoba  
R2J 4G5 Canada

Ph: (204) 982-8400

**Winnipeg Service  
Support Center**

111 Elan Blvd.  
Winnipeg, Manitoba  
R2J 4H1 Canada

Ph: (204) 982-9128  
Fx: (204) 233-4857

**New Jersey Service  
Support Center**

808 Garfield Ave.  
Jersey City, New Jersey  
07305-4423 USA

Ph: (201) 369-1200  
Fx: (201) 369-0345

**New Product  
Development**

Unit 7, 45 Beghin Ave.  
Winnipeg, Manitoba  
R2J 4B9 Canada

Ph: (204) 982-8413  
Fx: (204) 654-4941

**Crookston  
Facility**

214 5<sup>th</sup> Ave. SW  
Crookston, Minnesota  
56716 USA

Ph: (218) 281-5752  
Fx: (218) 281-5672

**St. Cloud  
Facility**

6200 Glenn Carlson Dr.  
St. Cloud, Minnesota  
56301 USA

Ph: (320) 203-0576  
Fx: (320) 203-0584

The replacement of the center link assembly will take approx. 45 minutes, the steering tow will then have to be checked/adjusted to meet specification. Failed components will be scrapped. If you had this repair performed before you received this letter, you may be eligible to receive reimbursement for the cost of obtaining a pre-notification remedy of the problem associated with this recall.

If we fail, or we are unable to remedy this defect without charge and, within a reasonable time, you may submit a written complaint to:

Administrator  
National Highway Traffic Safety Administration  
400 Seventh Street, SW  
Washington, DC, 20590

or call (888) 327-4236.

Thank you for your attention to this important matter.

Sincerely,



**Kerry Legg**  
Safety and Compliance Manager  
New Flyer Customer Service Support

cc: Dan Morris, Joe Funari, Hans Peper, Cliff Murray, Don Bean, Scott Halbesma.



June 15, 2004

John R. Nielsen  
Senior Project Manager  
Southeastern Pennsylvania Transportation Authority  
1234 Market Street  
Floor 13  
Philadelphia, PA  
19107-3728

Subject: Centre Link Assembly Failures Observed on New Flyer SR912 Vehicles

Dear John,

This letter is written in response to the centre link rod end failures observed on the New Flyer SR912 vehicles, identified as SEPTA unit numbers 5713-5830, 5851-5950.

Dan Morris sent failed parts back to New Flyer CSS immediately for analysis. A visual inspection revealed excessive movement between the tie rod end threads and the adjusting sleeve that is installed in the centre link. There was no movement observed between the adjusting sleeve and the centre link tube itself.

Through New Flyer's root cause analysis, it was found the production Hot Sheet, for SR912 was incorrectly written. The Hot Sheet was accidentally based on the Meritor installation from the previous SEPTA orders. Production, following the Hot Sheet noted above, loosened the center link end clamps and rotated them 180 degrees. This rotation resulted in the split in the clamp and the split in the centre link tube to be 180 degrees out of phase, ultimately causing an inadequate clamping force to hold the threads together.

Because the production Hot Sheet was based on the Meritor installation, the torque value for the clamp nuts/bolts was noted to be 155-175ft\*lbs. The actual torque value for this installation, based on the MAN specification, is 125ft\*lbs. This also led to the realization that the SR912 Service Manual torque specifications for the clamp bolt is incorrect. The New Flyer Service Manual indicates a torque value of 60+/-7ft\*lbs. This errant torque value in the manual was a direct result of incorrect source information and New Flyer's Publications department is making the necessary modifications immediately.

**Headquarters/  
Winnipeg Facility**

711 Kernaghan Ave.  
Winnipeg, Manitoba  
R3C 3T4 Canada

Ph: (204) 224-1251  
Fx: (204) 224-0551  
E: buses@newflyer.com

**Customer  
Services**

25 DeBaets St.  
Winnipeg, Manitoba  
R2J 4G5 Canada

Ph: (204) 982-8400

**Winnipeg Service  
Support Center**

111 Elan Blvd.  
Winnipeg, Manitoba  
R2J 4H1 Canada

Ph: (204) 982-9128  
Fx: (204) 233-4857

**New Jersey Service  
Support Center**

808 Garfield Ave.  
Jersey City, New Jersey  
07305-4423 USA

Ph: (201) 369-1200  
Fx: (201) 369-0345

**New Product  
Development**

Unit 7, 45 Beghin Ave.  
Winnipeg, Manitoba  
R2J 4B9 Canada

Ph: (204) 982-8413  
Fx: (204) 654-4941

**Crookston  
Facility**

214 5<sup>th</sup> Ave. SW  
Crookston, Minnesota  
56716 USA

Ph: (218) 281-5752  
Fx: (218) 281-5672

**St. Cloud  
Facility**

6200 Glenn Carlson Dr.  
St. Cloud, Minnesota  
56301 USA

Ph: (320) 203-0576  
Fx: (320) 203-0584

Due to the problems with the original installation as noted above, New Flyer is of the opinion that the tie rod and adjusting sleeves may be compromised. To reduce SEPTA's down-time, instead of replacing the clamps/nuts/bolts and removing the tie rod ends, inspecting, and repairing as necessary, New Flyer has decided to replace the entire center link assembly. This center link assembly will come equipped with new tie rods, clamps/nuts/bolts, and adjusting sleeves on both ends. The tie rod locking nuts will also be replaced during the repair.

Even though the replacement of the center link assembly is a relatively common occurrence and an uncomplicated procedure for a heavy-duty vehicle mechanic, New Flyer's Technical Services department will be generating an Instruction To Service document. ITS-2668 will give reinforce the correct torque values and installation procedures in addition to aiding in the logistical tracking of this retrofit campaign.

New Flyer has been in direct communication with the manufacturer of the aforementioned center link assembly and tie rod end nuts to solidify and decrease lead times as much as possible. 218 center link assemblies (NFIL PN 6328797) will be shipped to the Frontier Garage for delivery on Friday, June 17 prior to 5pm. 301 locking nuts (NFIL pn 6328801) are being shipped FedEx overnight out of the New Flyer Parts facility for Friday, June 17 delivery, prior to 12pm. The remaining 135 locking nuts will be shipped to New Flyer Parts from the supplier in Germany and New Flyer estimates delivery into SEPTA on Thursday, June 23.

Dan Morris, SEPTA's Regional Product Support Manager, is currently working with SEPTA garages and SEPTA's Warranty Department to resolve some of the logistics relating to the labor to achieve this center link assembly replacement, in addition to the movement of parts to the appropriate location.

New Flyer Publications is currently working on developing a Service Manual Bulletin to address the incorrect torque found in SEPTA's New Flyer Service Manual. This bulletin will be sent through the regular channels by the end of next week, and an electronic copy will be sent via email before this date.

New Flyer considers failures in the steering system requiring the utmost of attention. New Flyer's Safety Committee has already convened and discussed the matter. Because this installation is related to vehicle stability and driver control, New Flyer will be reporting this issue to the National Highway Traffic Safety Administration and will be acting as such. SEPTA will likely receive an official recall notice from New Flyer's Safety and Compliance Manager within 1-2wks, but this will not slow our progress to repair vehicles.

New Flyer regrets any inconvenience and service down times this may have caused SEPTA. New Flyer will continue to meet or exceed our contractual commitments to SEPTA in the future through our customer service support organization.

If you have any questions, please feel free to contact me at (204) 934-4871 or [scott\\_halbesma@newflyer.com](mailto:scott_halbesma@newflyer.com), or your New Flyer Regional Product Support Manager, Dan Morris, at (267) 408-1278.

Sincerely,

*DUPLICATE*

Scott Halbesma  
Manager, Technical Services  
New Flyer Customer Services

CC: Hans Peper, NF  
Cliff Murray, NF  
Mike Monsigneur, NF  
Kerry Legg, NF  
Don Bean, NF  
Dan Morris, NF  
Chris Novakowski, NF  
Carlos Godinez, NF