



24 May 2013

VIA EMAIL and MAIL

Jennifer Timian
Chief - Recall Management Division
US DOT – National Highway Traffic Safety Administration
Office of Defects Investigation (NVS-215)
1200 New Jersey Ave. SE,
Washington, DC 20590

Subject: Safety Recall Declaration – Start Push Button Switches.

Dear Ms. Timian:

New Flyer Industries Canada ULC and New Flyer of America Inc. (together “New Flyer”), is declaring recall status with regards to certain New Flyer transit vehicles equipped with a specific start push button switch.

It was noted in production that a specific style of switch would occasionally allow the bus engine to start without the switch being selected.

This poses a risk to personnel working on or near the engine in a maintenance environment.

Discussions with the switch manufacture have determined that a product change introduced new springs into the device with a lower yield force requirement. Batch lots and shipping records have determined when the new style switches entered New Flyer production. We have identified the specific buses these lots of switches may have been installed on and intend to inspect and replace as required.

All product currently leaving our production facilities have known good product installed.

New Flyer is in the process of contacting the customers who purchased the buses identified as having these suspect switches installed, with parts and instructions on how to complete this recall. A sample of that “Pre-Recall Notification” is attached.

New Flyer is filing the appropriate 573 defect report (see attached) and will manage all quarterly reporting for this recall.

If you have any further questions please contact me.

Sincerely,
NEW FLYER OF AMERICA INC.
NEW FLYER INDUSTRIES CANADA ULC

By: Kerry Legg
Vehicle Safety & Regulatory Compliance Manager
(204) 224-6706

Attachments: Sample Pre-Recall Notification Letter
573 Defect Report
Instruction to Service ITS5450

Safety Defect and Noncompliance Report Guide for Vehicles
PART 573 Defect and Noncompliance Report¹

On 23 May 2013, New Flyer Industries Canada ULC [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: 24 May 2012

Furnish the manufacturer's identification code for this recall (if applicable): R13-014

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 Canada ULC
711 Kernaghan Ave.,
Winnipeg, MB Canada
R2C 3T4

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

Mr. Kerry Legg
Vehicle Safety & Regulatory Compliance Manager

Telephone Number: (204) 224-6706

Fax No.: (204) 224-0248

Name and Title of Person who prepared this report.

Same as above.

Signed:



¹Each 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): New Flyer **Model Years Involved:** 2012 **Model(s):** XD35

VIN Range: Beginning: 041393 **Ending:** 041407

Vehicle Type: Heavy Duty Transit Bus **Body style:** Xcelsior Diesel Thirty Five Foot

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall: Recalled vehicles have start push buttons with a visible lot number falling within a specific switch production range.

Make(s): New Flyer **Model Years Involved:** 2012 **Model(s):** XD40

VIN Range: Beginning: 041332 **Ending:** 041351

VIN Range: Beginning: 041408 **Ending:** 041437

Vehicle Type: Heavy Duty Transit Bus **Body style:** Xcelsior Diesel Forty Foot

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall: Recalled vehicles have start push buttons with a visible lot number falling within a specific switch production range.

Make(s): New Flyer **Model Years Involved:** 2013 **Model(s):** XD60

VIN Range: Beginning: 041733 **Ending:** 041735

VIN Range: Beginning: 041789 **Ending:** 041789

Vehicle Type: Heavy Duty Transit Bus **Body style:** Xcelsior Diesel Sixty Foot

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall: Recalled vehicles have start push buttons with a visible lot number falling within a specific switch production range.

Make(s): New Flyer **Model Years Involved:** 2013 **Model(s):** XDE40

VIN Range: Beginning: 041743 **Ending:** 041743

VIN Range: Beginning: 041692 **Ending:** 041693

Vehicle Type: Heavy Duty Transit Bus **Body style:** Xcelsior Diesel Electric Forty Foot

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall: Recalled vehicles have start push buttons with a visible lot number falling within a specific switch production range.

Make(s): New Flyer **Model Years Involved:** 2013 **Model(s):** XDE60

VIN Range: Beginning: 041524 **Ending:** 041531

Vehicle Type: Heavy Duty Transit Bus **Body style:** Xcelsior Diesel Electric Sixty Foot

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall: Recalled vehicles have start push buttons with a visible lot number falling within a specific switch production range.

Make(s): New Flyer **Model Years Involved:** 2012-13 **Model(s):** XN40

VIN Range: Beginning: 041502 **Ending:** 041502

VIN Range: Beginning: 041776 **Ending:** 041778

VIN Range: Beginning: 041780 **Ending:** 041780

Vehicle Type: Heavy Duty Transit Bus **Body style:** Xcelsior Compressed Natural Gas Forty Foot

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall: Recalled vehicles have start push buttons with a visible lot number falling within a specific switch production range.

Make(s): New Flyer **Model Years Involved:** 2012-13 **Model(s):** XN60

VIN Range: Beginning: 040985 **Ending:** 040997

VIN Range: Beginning: 041816 **Ending:** 041817

VIN Range: Beginning: 041819 **Ending:** 041819

Vehicle Type: Heavy Duty Transit Bus **Body style:** Xcelsior Compressed Natural Gas Sixty Foot

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall: Recalled vehicles have start push buttons with a visible lot number falling within a specific switch production range.

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.

27.0 %

II. Identify the Recall Population

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

Model	Year	Number of Vehicles Potentially Involved
<u>XD35</u>	<u>2012</u>	<u>15</u>
<u>XD40</u>	<u>2012</u>	<u>50</u>
<u>XD60</u>	<u>2013</u>	<u>4</u>
<u>XDE40</u>	<u>2013</u>	<u>3</u>
<u>XDE60</u>	<u>2013</u>	<u>8</u>
<u>XN40</u>	<u>2012 - 2013</u>	<u>5</u>
<u>XN60</u>	<u>2012 - 2013</u>	<u>16</u>

Total Number Potentially Affected by the Recall: 101

4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance: 80%

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:

All Xcelsior model buses manufactured during a specific time period, equipped with a specific model of start push button switch, based on shipping records of specific batch lots of the switch from the component supplier.

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.

Start push button switch, may stay closed after switch selection. The internal springs of the switch are not sufficiently strong enough to overcome mild vacuum pressure created during selection.

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

If the start push button switch stays closed, the engine may start unexpectedly the next time the ignition circuits are enabled.

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

If the engine starts without warning there is potential for injury to persons working on the engine or in the engine compartment.

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

None

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

KISSLING Electrotec Inc.
320 A Business Parkway
Greer, SC 29651

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

Ives Van Heule
Sales Director

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.

In early May of 2013 some instances were reported at our manufacturing facilities of vehicle engines attempting to start or starting before the start push button was selected by production personnel. New Flyer QA personnel investigated the incidents and contacted the supplier of the switch on May 8th. On May 9th New Flyer QA personnel issued a SCAN (Supplier Corrective Action Notice) to KISSLING Electrotec Inc. in South Carolina. This initiated direct communications with the KISSLING parent engineering group in Europe to determine the cause of the failures.

Initial indications from their engineering group pointed to a modification incorporated into the switch in November 2012. That change to the component, was an attempt to reduced the strength of the internal springs from approx 28 Nm, which was thought to be too excessive, to approx.16 Nm of force. Examination of the springs from the failed components indicated that a spring strength of 16 Nm may not be sufficient to overcome the internal vacuum created by the push button seal during switch selection. Switches could be made to fail (remain closed) after 5 to 10 applications.

It is likely that the condition (if it exists) in the field has not been noticed, as vehicle vibration during normal operation would likely assist the internal springs in unseating the switch. It was deduced that if the switch remained seated long enough for the Master Run Switch to be cycled on, that the conditions for engine start would be recognized by the vehicle control system, and the engine would turn over without an active start switch selection. This results in a potential for injury to persons working on or around the engine in a maintenance environment.

These results were brought before the New Flyer executive committee on May 15th and a "Stop Ship" order was issued for all production buses. Five lots of switches (Lot 1224, 1226, 1228, 1230 and 1232) were identified as having the springs with the lower strength. Shipping records were identified and it was determined that the effected switches arrived and entered the New Flyer production stream on the 17th of November 2012. New Flyer then identified all buses shipped from New Flyer facilities just prior to that date, and created a target population of vehicles to be inspected.

KISSLING initially provided sufficient stock to New Flyer to inspect and correct the buses in production, once inspected and corrected the "Stop Ship" order was lifted on May 17th. An additional order for known good product was received by New Flyer on May 24th and will be directed to customer sites so that inspection can start the week of May 27th 2013. An "Instruction to Service" (ITS) or repair instruction, was created to inspect for the easily identifiable lot numbers on the switches, and replace as required.

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.

N/A

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.

Buses identified as potentially having the suspect switches installed, will be inspected to determine the lot number on the switches. If the lot numbers fall within the suspect range, the switches will be replaced with known good product.

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

The remedy component switches have a stronger internal spring. Visibly they display a different lot number than the affected component switches.

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.

Production remedy is the same as that for the field. All vehicles under New Flyer control were inspected and corrected as required with known good product prior to the "stop ship" order being lifted.

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.

A pre-Recall Notification has already been sent to customers to warn about the injury potential and to initiate retrofit coordination efforts.

Formal Recall Notifications to owners will be sent out upon receipt of notification from the NHTSA Recalls Office, the assignment of the recall code and approval of customer communications.

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 electronically or 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.