

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

On August 26th, 2004, Orion Bus Industries [MFR] decided that (a defect which relates to motor vehicle safety)(~~a noncompliance with Federal Motor Vehicle Safety Standard No. _____~~) exits 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: _____ August 26, 2004 ___ updated November 5, 2004 ___

Furnish the manufacturer's identification code for this recall (if applicable): _____
NHTSA#04V-425 _____

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.

Orion Bus Industries Ltd.
350 Hazelhurst Road
Mississauga, Ontario
L5T 4T8

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

Joe Labonte
Compliance and Safety Officer _____

Telephone Number: (905) 403-7832 ext. 3335 Fax No.: (905)403-8800

Name and Title of Person who prepared this report.

Joe Labonte
Compliance and Safety Officer _____

Signed: *J. Labonte*

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): Orion **Model Years Involved:** 2004 - 2004 **Model(s):** VII

Production Dates: Beginning: Jan. 2004 **Ending:** August 2004

VIN Range: Beginning: TBD **Ending:** TBD

Vehicle Type: Bus **Bodystyle:** All

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

Only Orion Model VII vehicles.

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.

100%

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
VII	2004	155

Total Number Potentially Affected by the Recall: 155

4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance: 70%

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:

The delivered units from January 2004 to August 2004 of all Orion VII models. The quantity provided is for all produced buses of this model in this time period.

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.

A manufacturing assembly of the walking beam connection to the rear suspension exhibits loose or breaking of bolts due to not aligned spacers.

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

Interference caused the connection bolts to be not aligned.

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

The bolts attaching the rear axle to the walking beam suspension can break. The axle then moves upward to the point of contacting the frame and having the tire contact the wheelwell. Partial rear wheel axle alignment is lost. The vehicle exhibits a braking effect on the rear wheel.

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

There is no indication that the axle disconnection is to occur.

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

diversified manufacturing incorporated
410 Ohio Street,
Lockport, N.Y. 14094

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

Brian Costello, president & CEO

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.**

Sunday August 8th, 2004 , NYCTA have a road call for service. Vehicle is not able to pull away from a stop.

Sunday August 8th, 2004 , Orion representatives visit service facility to investigate the nature of the disabled vehicle.

Wednesday August 11th, 2004 Orion manufacturing ensures all connections are aligned and of proper torque.

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.**

A tentative plan is to inspect and replace the spacer with one that will provide proper alignment where needed and confirm torque.

Updated November 8, 2004

Preliminary plan:

Orion will retrofit all NYCT buses using PFC 9 (Porteus Fastener Company) grade 9 bolts, nuts, and hard washers. Bolt length will be increased from 4 to 5" length. All existing stover nuts will be replaced with free-running PFC grade 9 hardware. The torque specification for this connection will increase from 460-480 ft-lbs to 600-625 ft-lbs. In addition to hardware changes, the spacer used in this connection will increase in thickness from 1/2" to 1". Orion has released the engineering documentation for this change to happen in NYCT but no buses have been retrofitted to date.

The documentation surrounding this change is currently under drawing review and should be processed early next week.

For all future Orion VII orders, the same hardware as above will be used, but the spacer will increase in length from 2" to 2-1/2". Documentation for this change should be completed by the end of November. We are unable to cut this change in as part of the retrofit due to potential interference between the spacer and out-of-tolerance welds found on the walking beam weldment.

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

The clamping force is maintained.

Updated November 8, 2004

Preliminary plan:

Bolt length will be increased from 4 to 5" length . All existing stover nuts will be replaced with free-running PFC grade 9 hardware. In addition to hardware changes, the spacer used in this connection will increase in thickness from 1/2" to 1".

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.

Wednesday August 11th, 2004 Orion manufacturing ensures all connections are aligned. All vehicles are inspected and corrected where needed prior to delivery. Manufacturing processes revised where connection is made. A revised spacer that provides clearance is now used.

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.

TBD

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.