Daimler Buses Recall Bulletin

Orion VII N.G. Models

1.0 WINDOW DELAMINATION RECALL NOTICE

Recall Number

National Traffic and Motor Vehicle Safety Number (NHTSA):

Subject

SAFETY DEFECT - Hehr Window Delamination.

Certain Vehicles Affected

Model(s): Orion VII

Model Years: 2006-2009, those having Hehr all glass windows.

Window Production Dates: Prior to November 2, 2008.

Bus Production Dates: Beginning: November 2008

Ending: April 2009.

General Information

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Daimler Buses North America (DBNA) has decided that a defect, which relates to motor vehicle safety, exists in some of its transit buses.

Defect

On certain transit buses equipped with anodized windows produced before November 2, 2008. The bond of the glass to the aluminum frame of the passenger windows is not adequate enough to hold the window attached to the frame.

Failure To Upgrade

The window could dislodge from the bus while in operation, possibly becoming a road hazard to other motorists which could result in a vehicle crash.

Cost To Remedy

Contact Hehr International to arrange an inspection. Windows will be provided and installed free of charge by Hehr.

Record of Completion

Report the completion of this work for each vehicle and deliver to:

Hehr International
Attention: Warranty Department

Inquiries

Contact Hehr International at 1-800-xxx-xxxx or Orion Service at 1-800-716-7466.

We are sorry to cause you this inconvenience, however, we have taken this action in the interest of your continued satisfaction with our products. If you have had this repair performed before you received this letter, you may be eligible to receive a reimbursement for the cost. Notify Hehr International to obtain a pre-notification remedy to the problem associated with this recall.

In Case of Dispute

If, after contacting DBNA at the location listed above, you are still unable to have the safety defect remedied, US residents may submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590. Vehicle Safety Hotline's toll free number: 1-888-327-4236 (TTY: 1-800-424-9153); or go to http://www.safercar.gov.

Canadian residents may submit a complaint to the Director, Vehicle Safety and Energy Operations, Road Safety and Motor Vehicle Regulation, Transport Canada, Ottawa, ON, K1A 0N5, or call (613) 993-9542

2.0 WINDOW DELAMINATION INSPECTION PROCEDURE

Introduction

This test procedure is intended to verify proper passenger window bond adhesion on an Orion VII N.G. bus. The purpose of this procedure is to determine if a window glass (vent section or transom) is in danger of coming off the window frame while the vehicle is in service.

When the failure criteria of this procedure **(See "Failure Criteria")** indicates that a window glass may be in danger of coming off the frame, the bus must be immediately attended to by having the delaminated window glass replaced.

Window Inspection

Date Label Identification

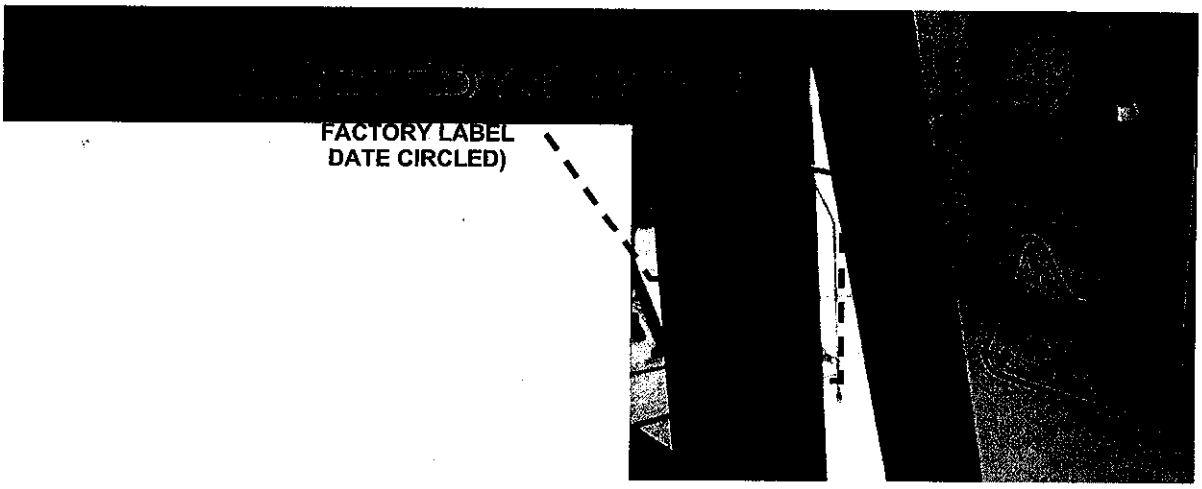


FIGURE 1-1 FACTORY LABEL ON WINDOW

NOTE

From inside the bus, the factory label is located on the inside edge of the window frame on the left side of the frame. (See Figure 1-1)

To determine if an Orion VII N.G. window requires bond adhesion testing, locate the factory label on the window and check the date on line 3 of the label.

a. If the date on the factory label is prior to November 3, 2008, continue with the steps in **"Test Procedure" on page 4.**

b. If the date on the factory label is after November 3, 2008, a new bonding process was used and the window will not require testing.

Test Procedure

Bond adhesion testing of the windows on an Orion VII N.G. bus is done by applying outward pressure on the window glass at specified pressure points to see if the glass can be pushed away from the frame it is bonded to. If any movement is observed between the window glass and frame, the location being tested is determined to be "Delaminated." A data sheet has been provided at the end of this procedure so that test results for each window can be recorded.

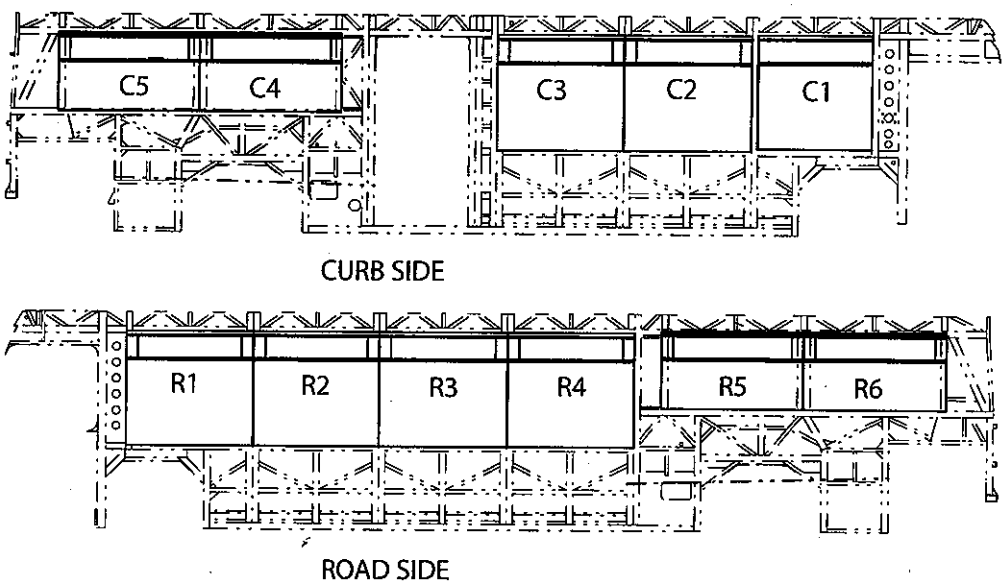


FIGURE 1-2 WINDOW NUMBERING

NOTE

It is not necessary to test the driver's window on the "road" side of the bus.

1. In the bus to be tested, number the windows from the front of the bus to back starting with #C1 (#C2, #C3, #C4, etc.) on the "Curb" side and #R1 from front to rear on the "Road" side. **(See Figure 1-2)**

2. On the data sheet, note the customer name, bus number, VIN number, and test date, as well as the type and size for each window on the data sheet.

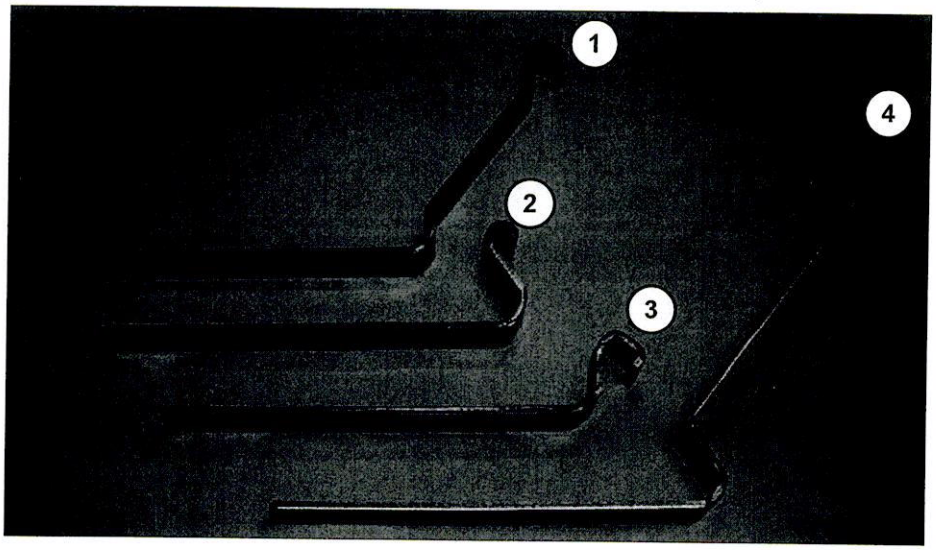


FIGURE 1-3 WINDOW TESTING TOOLS

NOTE

The window testing tool number corresponds to the number of holes in the base of the tool.

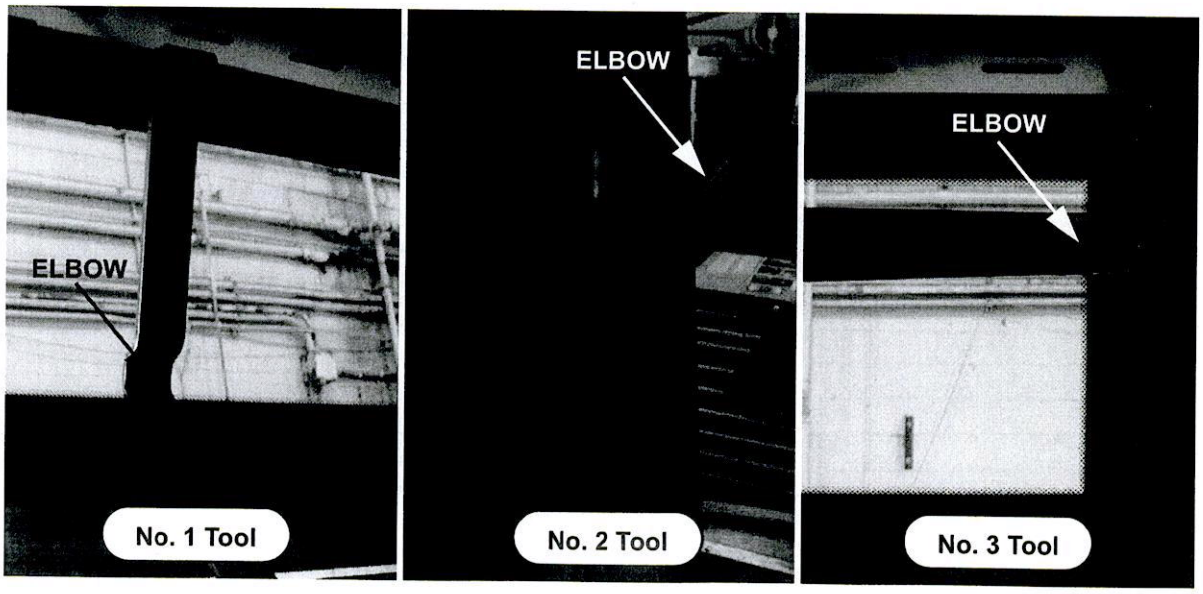


FIGURE 1-4 TOOL USE

3. With the window to be tested in the open position, select the appropriate testing tool **(See Figure 1-3)** and secure it to the lip of the window as shown in **Figure 1-4** so the elbow of the tool is at the pressure point being tested.
4. Apply a reasonable pressure (about 20 Lbs) on the tool handle with pressure applied to the glass at the locations shown in **"Window Load Test Points - Mullion-Hinged Windows" on page 8.**
5. Note whether any movement is detected with a "D" on the data sheet for each test point. No observed movement is indicated by a check mark entry for that test point location on the data sheet. Proceed around each window, and around the bus, testing all test locations on all windows.

Exceptions

a. **Driver's Barrier (C1) Window** - Using the No. 2 testing tool **(See Figure 1-3)** in the positions specified for a lower vent window in **"Window Load Test Points - Mullion-Hinged Windows" on page 8**, open the window behind the driver's barrier and test from **outside the bus.**

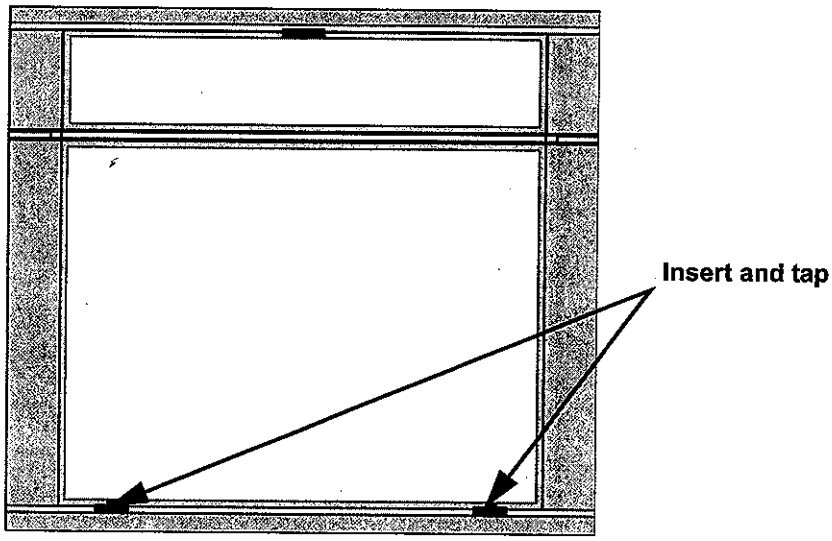


FIGURE 1-5 NON-EGRESS WINDOW

b. **Non-Egress Window** (without black or red pull-handle) - Open window by inserting screwdriver or similar flat-bladed implement between the base of the window and window frame in the locations shown in **Figure 1-5** and pushing in, then down, until a click is heard and the catch is released.

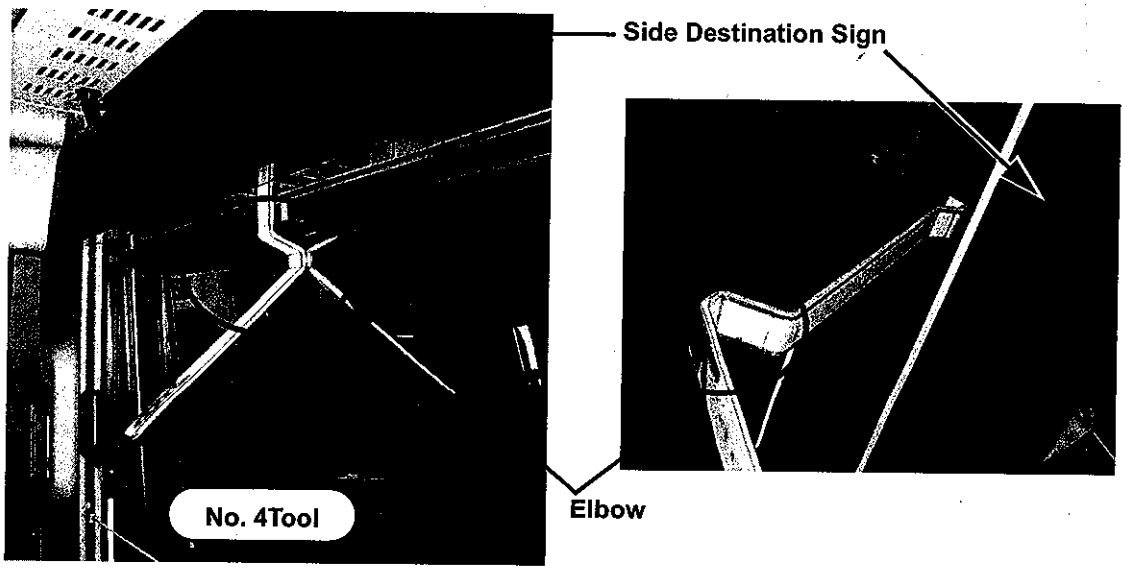


FIGURE 1-6 TOOL# 4 USED ON DESTINATION SIGN WINDOW

c. **Destination Sign (R1) Window** (if equipped) - Open the top-hinged side destination sign window and, from outside the bus, secure the No. 4 testing tool to the top edge of the window as shown in **Figure 1-6.**

   Use the No. 4 tool to test the four points labeled "X4" on the lower vent window as indicated in **"Window Load Test Points - Top-Hinged Windows" on page 9.**

Failure Criteria

The situation most likely to result in passenger window glass coming off the window frame is if the front edge of the window glass (the edge of the window facing the front of the bus) is completely delaminated. If airflow can get under the glass, it may pull the glass out of the window frame.

If any of the following conditions exist, the window glass must be replaced immediately:

Vent Section

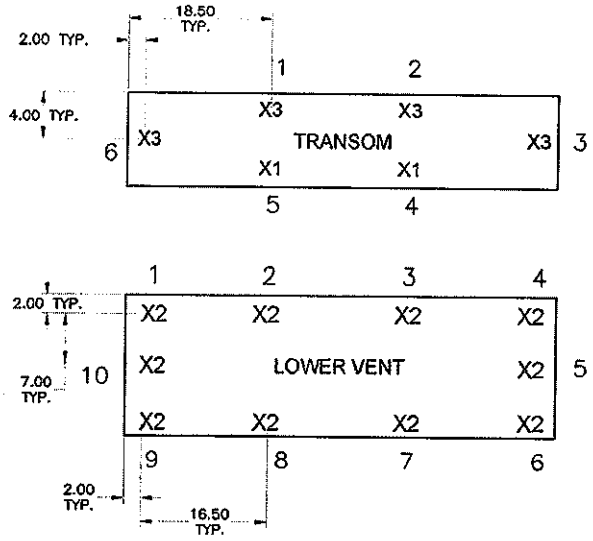
- 3 "D" points on forward leading edge
- All 4 sides or corners are "D" points
- All 4 corners are "D" points
- More than 4 test points are "D" points

Transom Section

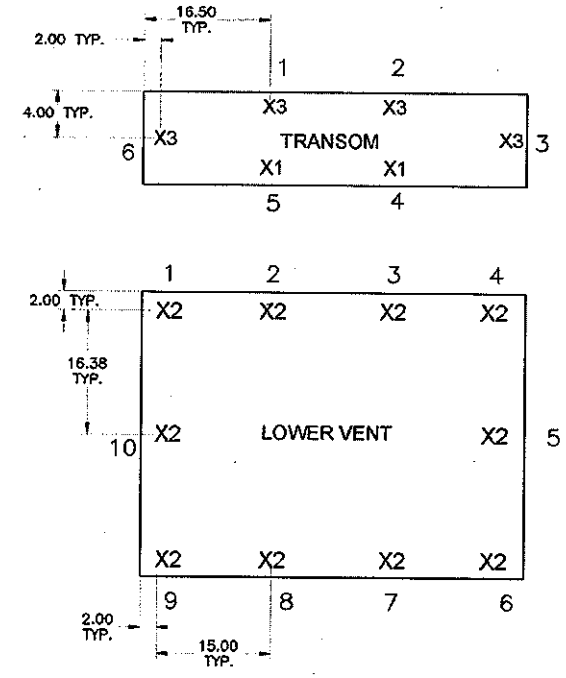
- More than 3 test points are "D" points

3.0 WINDOW LOAD TEST POINTS - MULLION-HINGED WINDOWS

UPPER STEP WINDOW



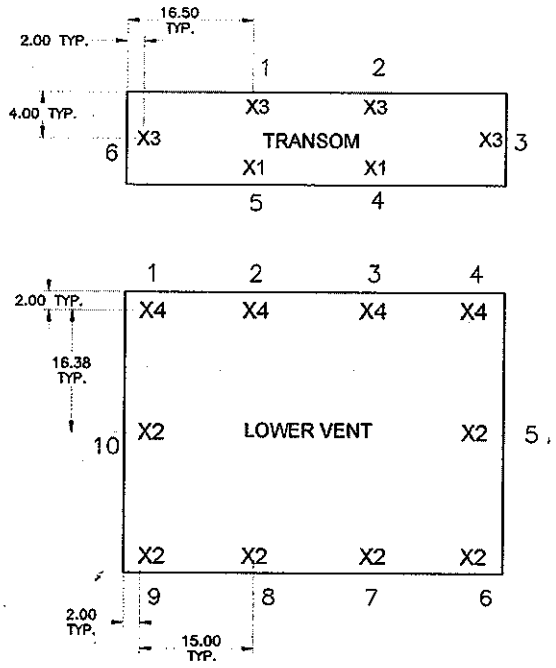
LOWER STEP WINDOW



NOTE: X(1,2,3) = Load Test Point and Tool Number

4.0 WINDOW LOAD TEST POINTS - TOP-HINGED WINDOWS

LOWER STEP WINDOW



NOTE: X(1,2,3,4) = Load Test Point and Tool Number

Customer _____ Bus # _____ VIN# _____ Test Date _____

Window #	Type Window	Load Test Points: Lower Vent 1	2	3	4	5	6	7	8	9	10	Transom or Top Glass 1	2	3	4	5	6
C1																	
C2																	
C3																	
C4																	
C5																	
R1																	
R2																	
R3																	
R4																	
R5																	
R6																	

Customer _____ Bus # _____ VIN# _____ Test Date _____

Window #	Type Window	Load Test Points: Lower Vent 1	2	3	4	5	6	7	8	9	10	Transom or Top Glass 1	2	3	4	5	6
C1																	
C2																	
C3																	
C4																	
C5																	
R1																	
R2																	
R3																	
R4																	
R5																	
R6																	

Notes: Type Window: US= Upper Step LS= Lower Step Dest= Destination Stat= Full Stationary
Data Entries: D= Delamination observed ✓ = No movement observed

APPENDIX 2 - WINDOW DELAMINATION DATA SHEET