



Service Bulletin No. 348

MODEL E4500 / J4500 Series Coaches	TYPE Field Change Program	SECTION/GROUP 3- Body	DATE Aug. 16, 2010
SUBJECT SE – GI WINDOW GLASS ASSEMBLY ADHESIVE DEBONDING			
CONDITIONS			

Ref. NHTSA Recall No.: 10V-373

Ref. Transport Canada Recall No.: 10-270

Customer Complaint:

On certain MCI E and J series coaches with SE – GI windows, the adhesive bond between the window glass assembly and the aluminum window frame may degrade. If the adhesive bond degrades (also commonly called debonding), the window glass assembly may detach from the coach. If the window glass assembly becomes partially or completely debonded from its frame, the window glass assembly may detach from the coach and cause potential injury to persons and/or damage to property.

Cause:

The probable cause of the debonding is as a result of the paint coating on the surface of the aluminum window frame not properly adhering to the surface of the aluminum, likely due to insufficient paint curing and/or possible chemical reaction between the paint and the adhesive.

Corrective Action:

MCI strongly encourages owners of the E4500 and J4500 model coaches listed below to implement the specified steps in this procedure as soon as possible.

61570	61610	61614-61616	61618-61686	61689-62226
62228-62338	62340-62535	62562-62586	62593-62645	62647-62685
62974-62984	62986-62994	63060	63094-63102	63335
63379-63398				

Parts

<u>Qty.</u>	<u>New P/N</u>	<u>Description</u>
1	03-27-1995	Kit, Window Retainer, SE – GI <i>Kit Contents Are:</i>
12	03-27-1780	Hinge Clip, SE – GI window, Long
2	03-27-1781	Hinge Clip, SE – GI window, Short
68	19-01-2074	Screw, Pan Head
a/r	23-06-0095	Adhesive, BetaSeal U-418, Tube BetaSeal to be locally procured. (One complete coach =16 tubes)
1	03-15-7738A	Verification Form, (Must be Returned to MCI, One Per Coach)

Service Procedure:



Read this entire procedure before beginning work.

Use Safe Shop Practices At All Times.

1. Park coach in direct sunlight. Turn off the air conditioning feature, allowing the the cabin air temperature to rise.
2. Turn the main battery disconnect switch to the OFF position. Chock both sides of the tires.

! WARNING

The potential may exist in which the window glass assembly may detach from the coach and cause potential injury to persons and/or damage to property.

Ensure that the area around the coach is roped off, and clear of personnel.

NOTICE

On a piece of paper, identify the location of any window that displays evidence of de-bonding from the frame as force is applied.

3. Ensure window is in locked position.
4. From inside the coach, carefully position a 4.0 x 4.0 x 0.5 inch flat wood block flat against the glass surface, the center of which should be six (6) inches from both edges (as shown in Figure 1). Position a push / pull gauge at the center of the wood block and apply 50 lbs. push force against the glass, perpendicular to the glass surface, to accentuate any partial de – bonding that may exist.
5. Look for any evidence of de-bonding from the frame, as force is applied.

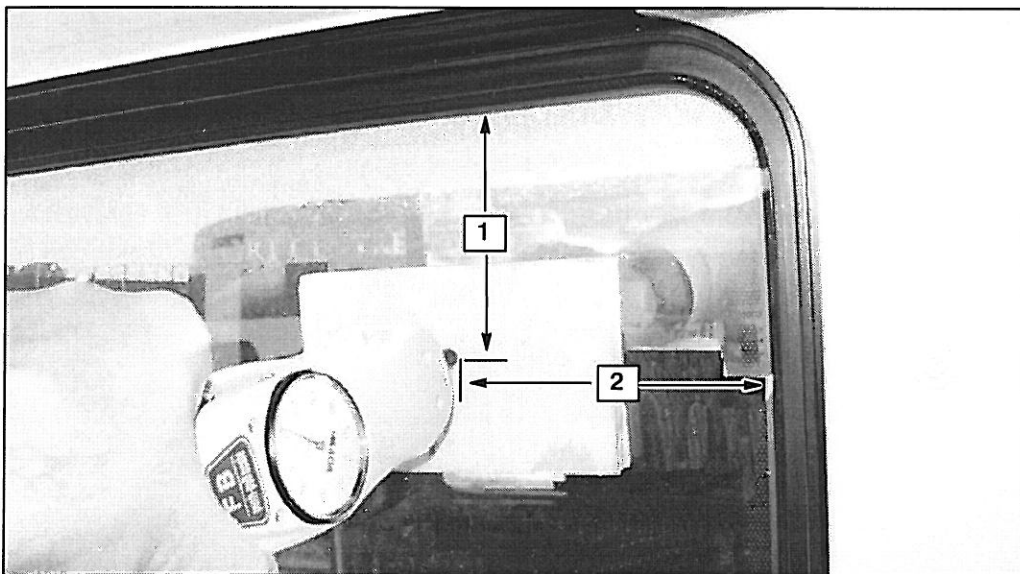


Figure 1.

<u>ITEM</u>	<u>DESCRIPTION</u>
1	Six (6) inches
2	Six (6) inches

6. Repeat Steps 3. to 5. at the remaining three (3) corner locations of the window.
7. Repeat Steps 3. to 6. to remaining coach windows.

NOTICE

If none of the windows display evidence of de-bonding from the frame as force is applied, proceed to Step 14.

If any of the windows display evidence of de-bonding from the frame as force is applied, proceed to Step 8. , with respect to each such window.

NOTICE

Warmer cabin temperatures and direct sunlight on the inner seal will allow easier removal of the window inner seal.

- Using a hook tool, remove the interior seal (from inside the coach cabin) from the de-bonded window by positioning the hook between glass and seal (refer to Figure 2). Pull up on the hook and turn counter-clockwise to remove seal from channel.

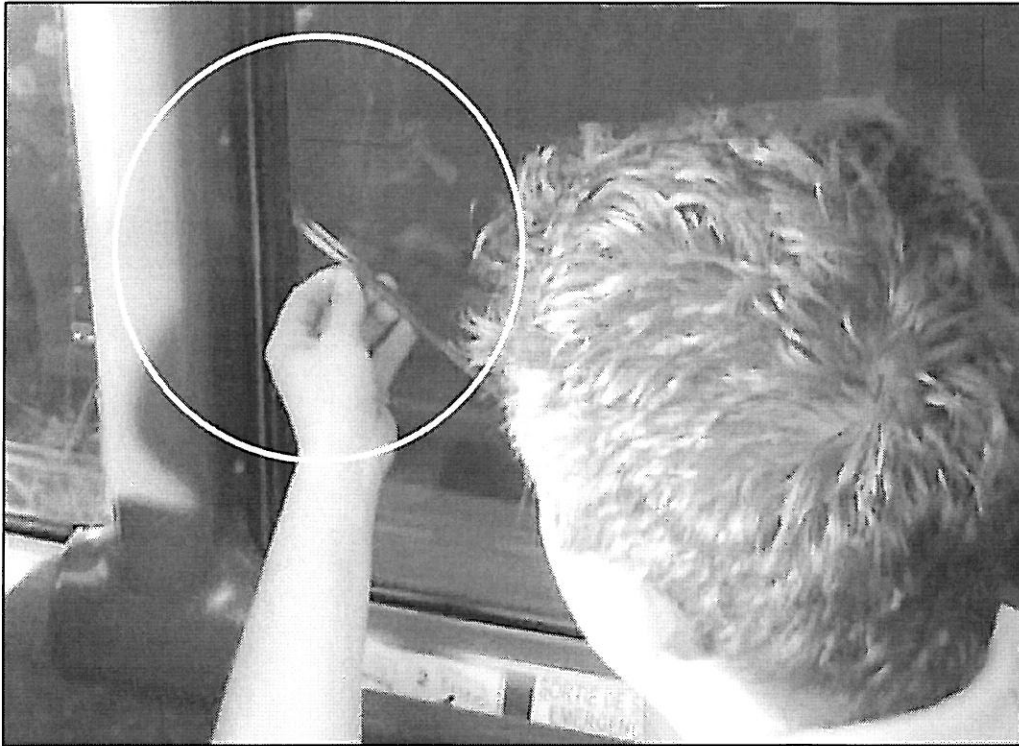


Figure 2.

- Ensure all residue is removed from the 1/8 inch wide and 1/2 inch deep channel. Using an isopropyl alcohol and water mixture and lint-free cloths, clean the vacated channel.

NOTICE

Allow enough time for isopropyl alcohol to evaporate.

NOTICE

The application gun must be perpendicular to the frame when applying the sealant, to ensure maximum penetration into channel (filling the void). Positioning the application gun at an angle will result in a rippling effect, which will not completely fill the void.

Cut the tip flat, not on an angle.

- Apply Betaseal, p/n 23-06-0095, to fill the channel (gap).

NOTICE

Betaseal skins over very fast. The bead must be worked within ten (10) minutes of application.

- Using a lacing tool or trowel, compress and square-off the bead to ensure a clean edge.
- Repeat Steps 8. to 11. to remaining windows displaying evidence of de-bonding.
- Perform a push test on the window twenty four (24) hours after application, to ensure retrofit was performed correctly.

14. Thoroughly clean the exterior window glass and frame.
15. Visually inspect the existing urethane bead across the top edge of the glass for signs of de-bonding or leaks. If present, carefully use a utility knife to remove the bead. This vacated area will be referred to as the "gap" for future reference in this procedure.

NOTICE

Do not use conventional glass cleaner to clean the glass, as they leave a film residue that resists bonding of the Betaseal to the surrounding surfaces.

16. Using isopropyl alcohol and water mixture and lint-free cloths, clean the entire area.

NOTICE

Allow enough time for isopropyl alcohol to evaporate.

NOTICE

If a gap was created in Step 15. , proceed to Step 17.

If a gap was not created in Step 15. , proceed to Step 20.

17. Apply a two (2) inch wide strip of masking tape across the top edge of the glass.

NOTICE

The application gun must be perpendicular to the frame when applying the sealant, to ensure maximum penetration into channel (filling the void). Positioning the application gun at an angle will result in a rippling effect, which will not completely fill the void.

Cut the tip flat, not on an angle.

18. Apply Betaseal, p/n 23-06-0095, to fill the gap. Apply an adequate amount of Betaseal to ensure that the resulting bead is flush with the glass edge and will contact the hinge clip.

NOTICE

Betaseal skins over very fast. Step 20. must be performed within ten (10) minutes of Step 18.

19. Remove masking tape, installed in Step 17. from the top edge of the glass. Using isopropyl alcohol and water mixture and lint-free cloths, clean the area where the masking tape was removed.

NOTICE

Allow enough time for isopropyl alcohol to evaporate.

20. Remove liner from the double-sided tape on the back of the hinge clip.

NOTICE

Hinge clip, p/n 03-27-1780, is to be installed on windows #1 to #6.

Hinge clip, p/n 03-27-1781, is to be installed on window #7 (shorter window located at the rear of the coach).

Coaches equipped with a wheelchair lift, do not require a hinge clip on the curbside, #7 window.

NOTICE

Do not allow the tape to touch the glass until hinge clip is aligned with window edges.

21. Align the hinge clip with the window (fore and aft) and swing the clip down until the double-sided tape contacts the glass (refer to Figure 3).

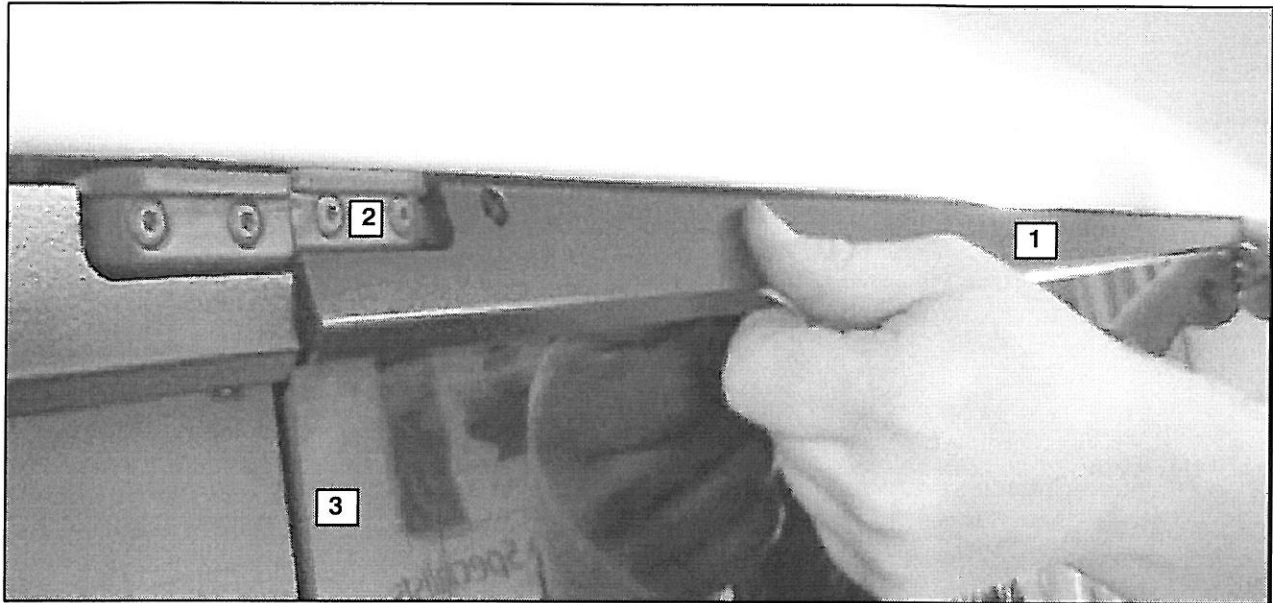


Figure 3.

<u>ITEM</u>	<u>DESCRIPTION</u>
1	Hinge clip, p/n 03-27-1780 or 03-27-1781
2	Existing hinge block
3	Window edge

22. Using the hinge clip as a template, drill the center hole in the hinge clip. Install one (1) screw, p/n 19-01-2074, in the center hole of the hinge clip (refer to Figure 4).



Figure 4.

23. Using the hinge clip as a template, drill the remaining holes in the hinge clip. Starting at the center and working out to the ends, secure to window using screws, p/n 19-01-2074.

24. Repeat Steps 14. to 23. for all remaining (thirteen) windows.

25. Allow twenty four (24) hours to fully cure.

Procedure complete.

Mail or fax the completed warranty claim form to MCI's warranty department, or photocopy and mail it to:

MCI Fleet Support
Attn: Warranty Department
7001 Universal Coach Drive
Louisville, KY 40258
Fax Number 1-800-360-8886

to receive credit for the hours used to complete this task. Contact the MCI Fleet Support Technical Center at 1-800-241-2947 for any further information.

Field Change Program Conditions:

The parts required for this change will be supplied without charge.

A labor allowance of 0.5 hour per coach will be granted for the procedure of performing the push test on affected E4500 / J4500 model coaches.

A labor allowance of 1.25 hour per coach will be granted for the procedure of installing fourteen (14) hinge clips on affected E4500 / J4500 model coaches.

As required upon inspection, a labor allowance of 1.0 hour per window glass assembly will be granted for the procedure of removing the existing interior seal, cleaning and application of Betaseal on affected E4500 / J4500 model coaches.

As required upon inspection, a labor allowance of 0.1 hour per window glass assembly will be granted for the procedure of removing the existing top exterior seal, cleaning and application of Betaseal on affected E4500 / J4500 model coaches.

This labor allowance will be credited to your MCI Fleet Support Parts Account on receipt of the attached "MCI Field Change Program Verification Form" and a "Warranty Claim Form" as detailed in your Owner Warranty manual to MCI's Warranty department. A "MCI Field Change Program Verification Form" needs to be submitted for each VIN affected. Photocopy the attached "MCI Field Change Program Verification Form" as required for the number of affected coaches in your fleet.

Motor Coach apologizes for any inconvenience resulting from this campaign, but urges you to implement this change as soon as possible.

Sincerely,

Motor Coach Industries
U.S. and Canadian Service Departments.



MCI FIELD CHANGE PROGRAM (FCP) VERIFICATION

CONTACT INFORMATION	
CUSTOMER NAME: _____ (PLEASE PRINT)	
FCP INFORMATION – ONE FORM PER UNIT	
FCP#: _____	Coach Model _____ Model Year _____
COACH SERIAL #: (At least the last 5 digits)	DATE COMPLETED __ / __ / __
MILEAGE:	
IMPORTANT: TO RECEIVE CREDIT FOR ANY ALLOWABLE LABOR CHARGES, THIS VERIFICATION FORM MUST BE RETURNED TO MCI UPON COMPLETION OF THE FCP.	
SUBMITTED BY: (Please Print) _____ DATE __ / __ / __	
TITLE: (Please Print) _____	
SIGNATURE: _____	
COMMENTS: 	

FAX TO: 1-502-318-8183

MAILING ADDRESS:

MOTOR COACH INDUSTRIES
ATTN: WARRANTY DEPT.
7001 UNIVERSAL COACH DRIVE
LOUISVILLE, KY 40258

MCI PART #03-15-7738