

Service Bulletin No. 1056

For ABC/ICP-staff only

COACH MODEL : C2045

BULLETIN TYPE : Product Improvement

MANUAL & SECTION : Maintenance Manual : Chapter 11 -

Body and accessories

Spare Parts Manual: Section 733409 -

Glass and accessories

DATE: November 30th, 2000

SUBJECT: Passenger windows:

inspection and adjustment

TERMS & CONDITIONS: Refer to separate covering letter.

DESCRIPTION:

This Bulletin provides the necessary information to address the passenger window hinge noise, and to allow correct positioning and retaining of the passenger side windows.

This Bulletin is one of a special series, custom made for ABC/ICP and intended for internal use by these companies and their branches. Under no circumstances should information contained herein be made public or used to replace or supplement customer oriented information without prior consent by Van Hool.

PARTS:

Always use genuine maintenance products and parts. Do not accept imitations.

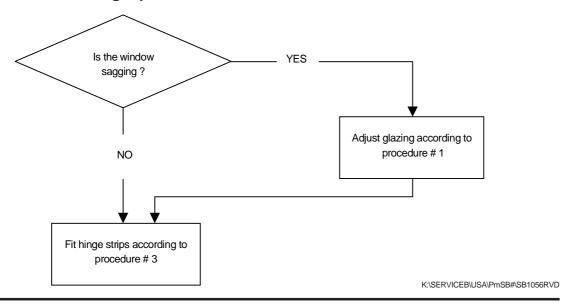
Part No.	Description	Qty
VH10679284	Window catch, new style, qty per window	2
VH660623508	Washer, stainless steel, 6.4x18x1.6 mm, qty per catch	3
VH10663910	Rivet, blind, stainless steel, watertight, 4x8 mm, qty per catch	3
VH10652729	Grease, heavy duty	#
VH10723041	Guide, window, qty per window	2
VH10723095	Spacer, 1.5 mm	#
VH10723096	Spacer, 2.5 mm	#
VH660281102	Bolt, flat head, M4x0.7x30, qty per guide	2
VH10731316*	Strip, hinge, ABS, qty per window	3
VH10637343	Padding, trapezoidal window, rubber, 40x8x5 mm, qty per window	4

^{*} Bulk part #

SERVICE PROCEDURES:

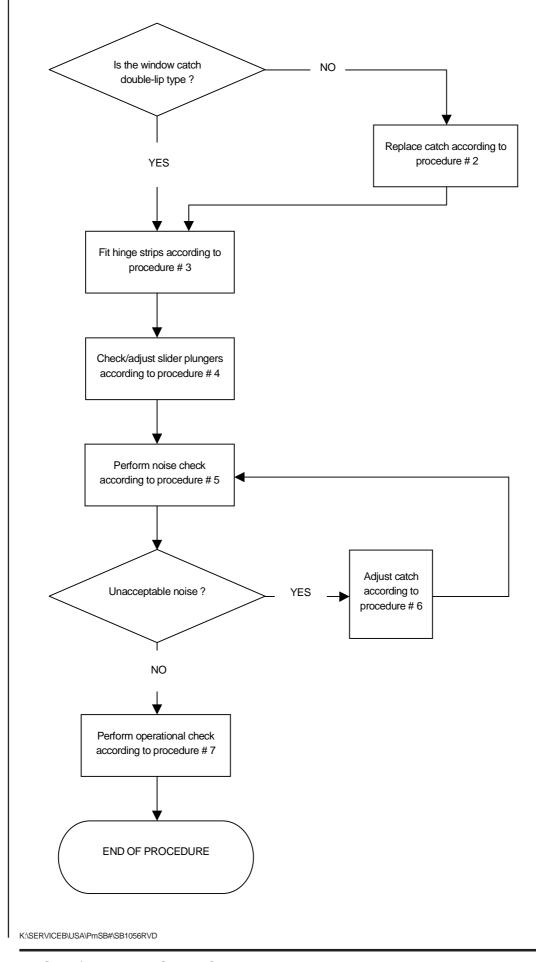
CAUTION
OBSERVE SAFE SHOP PRACTICES AT ALL TIMES. READ THE ENTIRE PROCEDURE BEFORE BEGINNING TO WORK.

1. Flow chart of checks and operations to be carried out on front trapezoidal windows, single pane:



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2. Flow chart of checks and operations to be carried out on passenger emergency windows :



3. Procedure #1 : To adjust trapezoidal (sloped) window pane :

- 1. Inside the coach, install two heavy duty dual cup suction tools onto the window pane.
- 2. With the aid of an assistant, hold the pane steady and pry out the entire inside window rubber seal using a blunt screwdriver.
- 3. Also with the aid of an assistant, raise the pane by the suction tools so that its upper edge butts the outside seal portion in the top window rail. Install four 1 9/16 x 5/16 x 3/16 inch (40x8x4,5mm) self-adhesive rubber spacers between the lower pane edge and the outside seal in the bottom window rail (see Figure 1). Make sure the spacers are evenly divided.
- 4. Reinstall the inside window seal. Start with the corner portions first using a wooden drift and a mallet, then proceed with the intermediate portions using only the mallet.
- 5. Remove the cup suction tools.
- 6. This ends the trapezoidal window adjustment procedure.

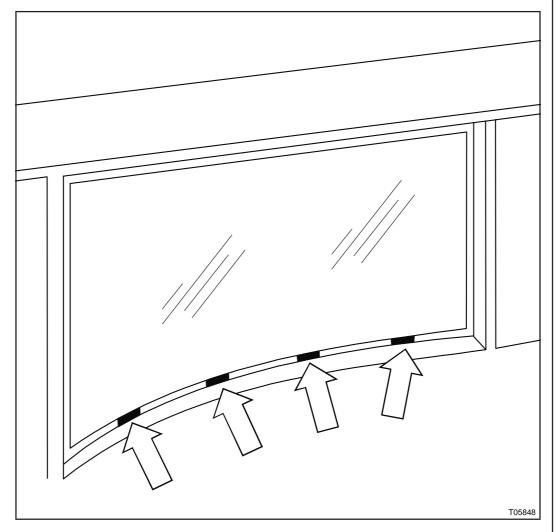
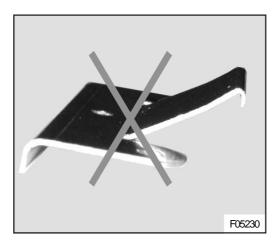


Figure 1: Location of rubber spacers

4. Procedure #2 : To replace a passenger emergency window catch :

- 1. Open the window.
- 2. Identify the type of catch. All single latch types have to be replaced. Double latch types have to be changed, only if they show factory modifications (see Figures 2, 3 and 4).



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Figure 2 : Single-latch type catch is no longer used in production

Figure 3 : Double-latch type catch replaces single-latch type

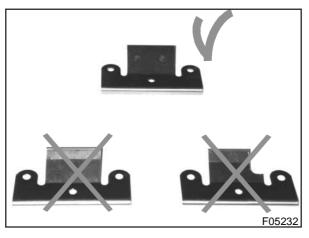


Figure 4: Double-latch type (top) catches are OK. Single-latch type (bottom left) and single or double-latch modified catches (bottom right) need to be replaced.

- 3. With a heavy duty drill, drill out the stainless steel rivets securing the catch to the window rail. Recover any spacers which may have been installed below the catch.
- 4. Remove the old catch.
- 5. Install a double lip catch using the OEM fitted spacers and rivets VH part # 10663910.
- 6. This ends the catch replacement procedure.

5. Procedure #3: To fit hinge strips:

NOTE

This procedure describes how to remove a trapezoidal window and fit hinge strips. The procedure to fit hinge strips to a passenger emergency window is similar but less elaborate, since removal of the window only requires opening it with the release handle and lifting it out.

- Inside the coach, undo and remove the machine screws securing the ornamental ABS molding to the slanted box channel below the trapezoidal window. Remove the molding.
- 2. Undo and remove the Phillips head bolts securing the bottom window rail to the two box channel mounting brackets (see Figure 5).

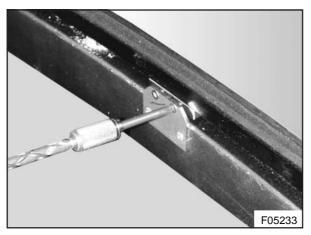


Figure 5 : Bottom window rail retaining bracket

3. Partly remove the rubber window seal in the left- and right-hand corners of the window. Undo and remove the two bolts securing the window frame to the left- and right-hand posts (see Figure 6).

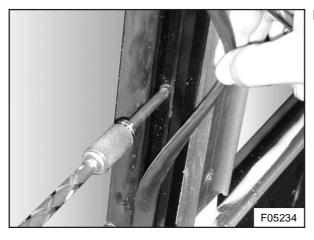


Figure 6: Frame to post bolt

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- 4. Open the window.
- 5. Remove the trim from the top window channel (see Figure 7).



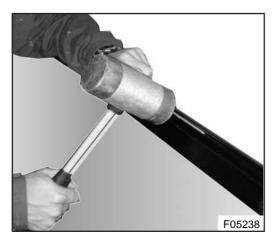
Figure 7 : Removing trim from top window channel

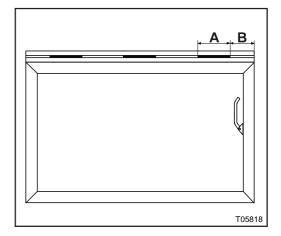
6. Remove both end stops (see Figure 8).



Figure 8: Removing an end-stop

- 7. Lift out the window.
- 8. Install three strips in the hinge slot as shown in Figures 9 and 10.





Figures 9 and 10 : Installation and relative position of strips. A = approximately 8 inches (200 mm); B = approximately 6 inches (150 mm).

- 9. Reinstall the window and trim.
- 10. This ends the procedure for fitting hinge strips.

6. Procedure #4: To check and adjust slider plungers:

- 1. Open the window.
- 2. Slip a suitable levering tool between the window and the window frame at the emergency release handle side and push the window sideways in the direction shown as far as it will go (see Figure 11).

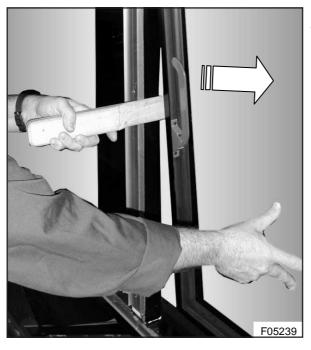
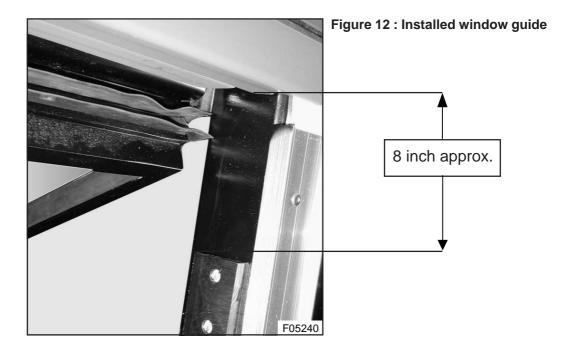


Figure 11 : Pushing the window sideways

- 3. Close the window by pushing outward and releasing. Open it with the release handle.
- 4. If the window opens easily, proceed to step 9.
- 5. If the window fails to open easily, free it by levering it towards the release handle.
- 6. Fit a window guide VH 10723041 to both the window posts with the tapered end pointing to the outside of the vehicle as shown in Figure 12.

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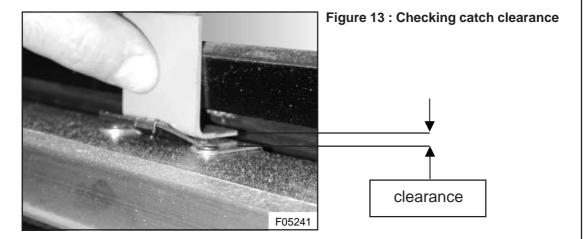
- 7. Repeat step 3.
- 8. If the window is still difficult to open, remove the rearmost window guide and add spacer VH10723095 (1/16 inch)(1.25mm) or spacer VH10723096 (3/32 inch)(2.5mm) as required.
- 9. This ends the procedure for checking and adjusting the slider plunger.

7. Procedure#5: To check for window noise:

- 1. Open the window, and close it again ensuring that the slider plungers are fully engaged with the catches.
- 2. From the inside, push the lower left- and right-hand corners outward. If there is no noise or play, proceed to step 4.
- 3. If noise or play can be noticed, adjust the window catch according to procedure # 6.
- 4. This ends the procedure for window noise check.

8. Procedure #6: To check and adjust a catch:

1. Hook the supplied jig under the slider plunger as shown in Figure 13.



- 2. Close the window carefully. If the jig touches the base of the catch, and the head of the fastening rivet, it is positioned correctly. Proceed to step 8.
- 3. If the jig passes over the catch base without touching it, the clearance needs to be adjusted.
- 4. Drill out the original catch rivets with the heavy duty drill supplied by Van Hool.
- 5. Fit the required number of washers between the catch base plate and the window frame. The number of washers will depend on the gap between the underside of the jig and the catch base. It is necessary to install the same number of washers at all 3 rivet positions of the catch.
- 6. Fit the catch to the window frame using VH part # 10663910 rivets.
- 7. Re-check the clearance with the supplied jig. Proceed to step 2, if the clearance is still out of specification.
- 8. This ends the procedure for checking and adjusting the emergency window catch height.
- 9. Procedure #7: To check window operation:

NOTE

Once a month all passenger emergency windows should be checked for proper operation.

- 1. From inside the coach, pull down the emergency release handle (see Figure 14). Maximum allowable force required: 20 lbf (9 kg).
- 2. Push the window outwards. Confirm that it opens without undue effort. Maximum allowable force required: 60 lbf (27 kg).

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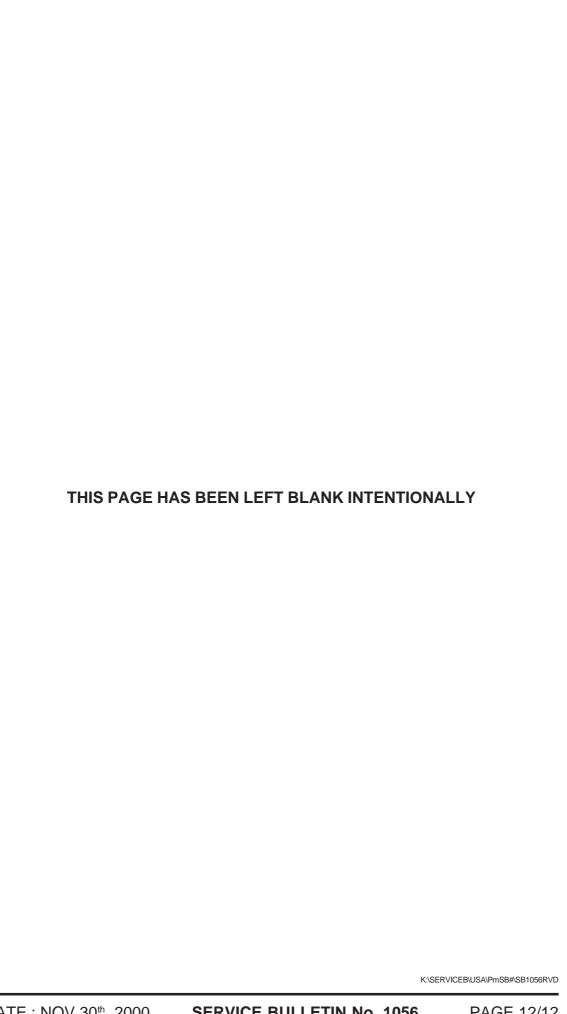
Figure 14: Checking window operation

- 3. Check and if necessary, correct the following:
 - emergency release handle : operation, actuation of slider plungers
 - catches : damage, lubrication
 - rubber seals : damage, general condition, sealing action
- 4. If needed, grease the catches with heavy duty grease VH10652729. This is a special grease compound that does not affect the sealing rubbers.
- 5. Close the window. This ends the procedure for the operational check of the emergency windows.

Service procedures complete

SERVICE INFORMATION:

- 1. New catches can be fitted without modification to the window rail.
- 2. Old catches must not be reused and should be discarded at once.
- 3. Only new style catches will be offered as spare parts. Part numbers remain unchanged.



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