SERVICE BULLETIN No.1134

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COACH MODEL	**:** AG300, A330, T2140, T2145, S2145 and C2045
BULLETIN TYPE	**:** Service Information
MANUAL & SECTION	**:** Maintenance Manual: Chapter 11 – Body and accessories Spare Parts Manual: N/A
PARTS BOOK REVISION	**:** No
DATE	**:** March 26, 2004
SUBJECT	**: Front and rear cap sealing**
TERMS & CONDITIONS	**:** No claims will be accepted with reference to this Bulletin

APPLICATION:

The service information subject of this Bulletin is applicable to all Van Hool AG300 and A330 city buses, and T2140, T2145, S2145 and C2045 coaches.

DESCRIPTION:

The procedure further in this Bulletin shows how the front and rear cap-to-roof seams on the above-mentioned units can be repaired and finished.

PARTS AND PRODUCTS:

To repair the cap seams, following products* can be used:

Part No.	Description*	Qty.
VH 10601034	Sika Tack® – Ultrafast, adhesive, black	#
VH 10549237	Sikaflex® - 252, sealer/adhesive black	#
VH 660193035	Sika® - 205, cleaner	#
VH 10877484	Sikaflex® 222, adhesive, U.V. resistant, black	#

(*) For your reference only. If these products are not available in your area, use similar polyurethane adhesives and cleaner.

- Products may be purchased from your nearest ABC Companies Parts Source dealer.
- Parts and products disposition: discard according to applicable environmental regulations.

Service personnel: please read, initial and circulate.

Service Manager	Parts Manager	Warranty Administrator	Workshop Foreman	Service Technician

PROCEDURE:

- If you do not have the expertise to perform present procedure, do not hesitate to go to your nearest ABC Customer Care & Parts Source dealership.

1. General:

- The time required to repair the roof seams depends on the size of the damage and can therefore not be established.
- This job should be executed by a technician experienced in body and trim repair.

2. Special tools, equipment or services:

- Adhesive gun
- Angle or die grinder
- Sander and sandblasting equipment (optional)
- Working platform

3. Preparations:

- Park the coach on a level surface with the front wheels straight. Apply the parking brake and shut down the engine.
- Switch off all systems and turn off the battery master switch.
- Put a “DO NOT OPERATE” tag on the instrument panel.
- Read the entire procedure before beginning to work.
- Install a stable working platform in the repair area.

4. To prepare cap to roof seam:

CAUTION: Observe safe shop practices at all times.

CAUTION : Make sure the working platform on which you stand is stable.

1) Using an angle or die grinder, remove all sealant and body filler from the affected seam. The gap should be about 5/32 inch (4 mm) wide and 19/64 to 25/64 inch (7.5 to 10 mm) deep, i.e. deep enough to expose the metal substructure on which the cap rests (see Figure 1).

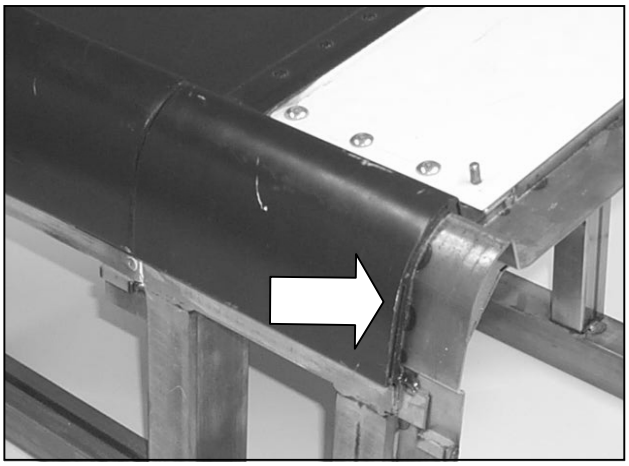

Figure 1: Mock-up showing the roof support corner bracket on which the fiberglass front cap is resting. The front cap part has been removed to show the bracket.

2) With a sander and a P80 grade sanding disc, remove all body filler in the area adjacent to the affected seam until unpainted fiberglass shows through.

3) Thoroughly clean the gap with a scraper or sandblaster. For the sealant to give maximum performance, it is imperative that the contacting surfaces are clean, dry, and free of dust, old adhesive, grease and oil.

4) Check the metal substructure for rust. If any rust is present, remove it with P80 grade sanding paper. Roughen the gap edges.

   NOTE: In case of severely rusted roof support corner brackets, it may be necessary to cut away the fiberglass part of the cap which rests on these brackets.
   With the brackets thoroughly clean, they should be painted with zinc primer. Once dry, a fiberglass repair panel can then be fitted in with VH 10601034 Sika Tack® - Ultrafast adhesive.

5) Using a blowgun, remove any debris and dust from the gap. Clean with VH 660193035 Sika® - 205, cleaner. Wipe-off excess cleaner with a clean rag. Allow remainder to evaporate.

   NOTE: When the cap and the roof are not entirely flush in relation to each other (see Figure 2), do not use body filler on the new seam. Proceed as follows:

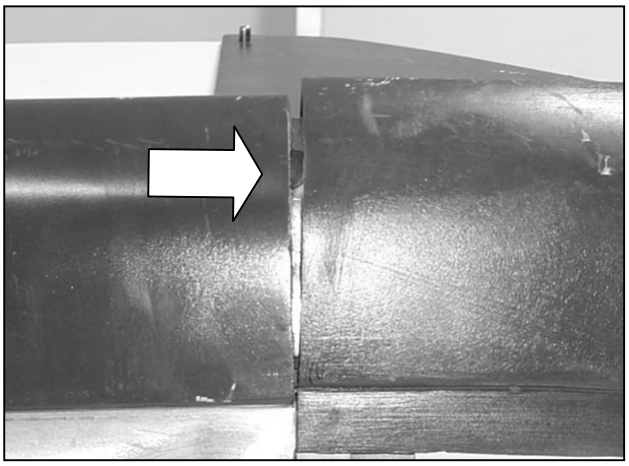

Figure 2: Mock-up showing cap and roof edges not flush and true

- → Sand and flatten the transition area until the base material (fiberglass, steel) shows through. All paint should be removed. Clean with degreaser.
- → Laying up fiberglass mats and resin, build up from the lowest part until approximately 1/16 inch (1.5 mm) below the highest part. Do not fill the new seam with fiberglass. Allow resin to cure.
- → Apply thin layers of body filler, until the surface of the filler is slightly proud of the surrounding bodywork. Do not use filler on the seam. Allow to harden.
- → Rub down the filler until body parts are flush, smooth and flat. Coat with several coats of primer, allow to dry between coats. Flatten with wet and dry P600 grade.
- → Clean with tack rag and degreaser.

6) Finish paint with appropriate two-pack paint. Allow to dry.

5. <u>To seal the cap to roof seam</u>:

1) With the paint dry, mask-off the area next to the gap, using masking tape.

2) Fill the gap evenly with VH 10877484 Sikaflex® 222 black UV resistant adhesive.
   If necessary, apply several layers until the gap has been completely filled (Figures 3 and 4).

3) Using a clean plastic spreader, wipe-off excess adhesive and spillover.

4) Remove the masking tape. Wipe-off any adhesive remaining on the paintwork next to the gap with VH 660193035 Sika® - 205 cleaner. Allow adhesive to cure.

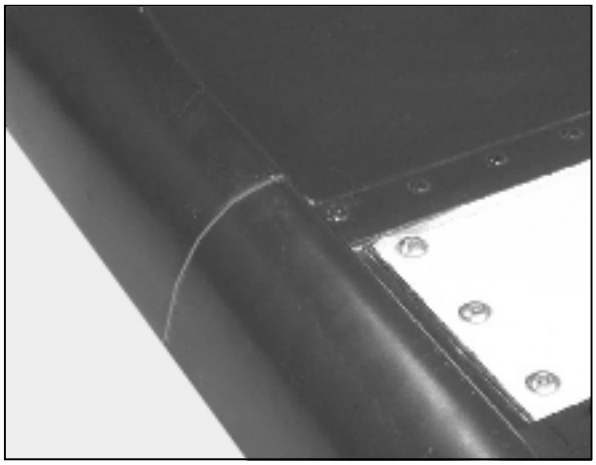

Figure 3: Gap ready to be sealed off

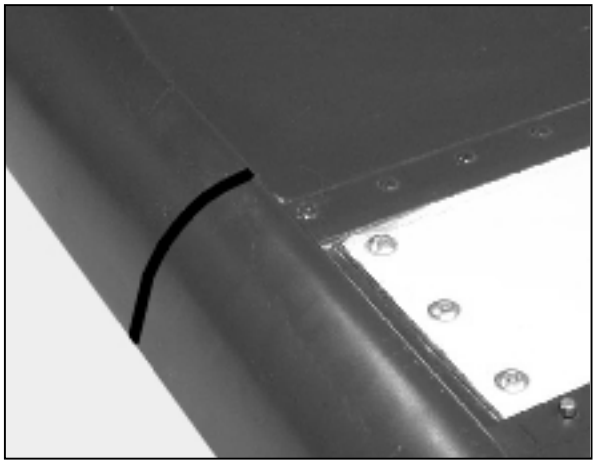

Figure 4: Gap sealed w/ Sikaflex® 222

Procedure complete.

DISCLAIMER:

The procedures contained herein are not exclusive. Van Hool cannot possibly know, evaluate, or advise the transportation industry of all conceivable ways in which a procedure may be undertaken or of the possible consequences of each such procedure. Other procedures may be as good, or better, depending upon the particular circumstances involved.
Each carrier who uses the procedures herein must first satisfy itself thoroughly that neither the safety of its employees or agents, nor the safety or usefulness of any products, will be jeopardized by any procedure selected.

SERVICE INFORMATION:

Service Bulletins are issued to supplement or supersede information in the Van Hool manuals. Note Service Bulletin number, date and subject on the register at the end of the relevant chapter(s). File Service Bulletin separately for future reference.