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INSTRUCTION TO SERVICE ITS: 4939

| | | | |
|------------------------------------|--|---|---------------------------------|
| SECTION: 405 Artic Joint | MODEL: <input type="checkbox"/> 30FT <input type="checkbox"/> 35FT <input type="checkbox"/> 40FT <input checked="" type="checkbox"/> 60FT <input checked="" type="checkbox"/> DSL <input type="checkbox"/> CNG <input type="checkbox"/> LNG <input checked="" type="checkbox"/> ELEC | TYPE: <input type="checkbox"/> HIGH FLOOR <input checked="" type="checkbox"/> LOW FLOOR | WRITTEN BY: Jermie Marasigan |
|------------------------------------|--|---|---------------------------------|

OBJECTIVE/SUBJECT:
 Repair and raise articulated joint bellows.

- PROCEDURE:**
1. Turn the main battery disconnect switch to the "OFF" position.
 2. From the outer topside of the artic joint locate the adjacent peaks on either side of the center hoop as well as the adjacent peaks at the fore and aft articulation bulkheads.
 3. Apply Polyurethane film tape NF P/N: 6407551 onto the bellows extrusion where the clamps will be installed to act as a dissimilar metal barrier.
 4. Clamp the peaks together using the A&A bellow's clip NF PN 6394515. Refer to Figure 1.



Figure 1: ROOF TOP BELLOW CLIP

5. From the inside of the coach, inspect the false ceiling bellows if drooping or sagging and repair if required.
6. Remove the interior false ceiling bellows.
7. Using a Polyurethane film tape with PSA (NF P/N: 6407551), bond the top peaks of the folds which come together above the aluminum support frame support frame. See Figure 2. The tape is only required (Qty = 20, 10 on each sides) at the outer location of the folding sections. Tape will be located from the stitching end toward the center line of the bellows. See Figure 3 & 4 for reference.
 - a. Clean the outer location of the folding sections where tape will be installed with common household cleaner (409, Fantastic etc.). Dry area then clean with alcohol.
 - b. Affix polyurethane tape 6" W X 7" L to bond the top peaks of the folds.



☞ **NOTE:** If the false ceiling bellows is not sagging, tape installation is not required.

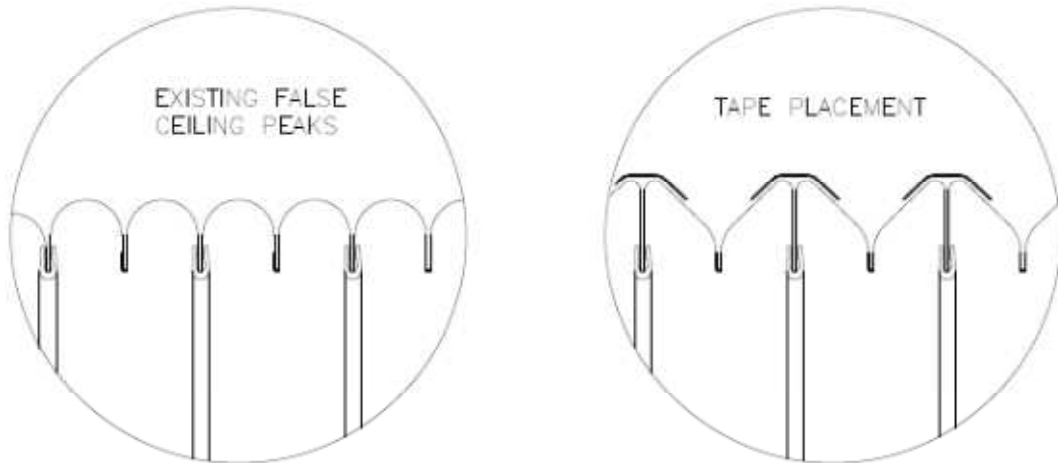


Figure 2: POLYURETHANE TAPE INSTALLATION REFERENCE



**Figure 3: FALSE CEILING BELLOWS REPAIR
(TAPE INSTALLED ON TWO FOLDING SECTION)**



**Figure 4: FALSE CEILING BELLOWS REPAIR
(TAPE HOLDING FOLDS TOGETHER)**

8. Inspect the outer bellows inner seams for damaged. If the inner bellows seam have rubbed/scrapped, follow procedure in Appendix A to repair bellow material.
9. Re-install the interior false ceiling bellows.
10. Turn the main battery disconnect switch to the “ON” position.



Appendix A

Bus Bellows Repair Kit Installation Method



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Bus Bellows Inside Abrasion Repair

Purpose: To describe the proper method(s) for repairing inside binding of Bus Bellow material due to abrasion.

Scope 1: Applies to Bus Bellows with inside binding worn but stitching is intact.

Procedure:



Step 1: Clean inside affected area with common household cleaner (409, Fantastic etc.)
Let area dry prior to proceeding.



Step 2: Apply a small piece of Tear-Aid tape approximately 0.75" wide x damaged length plus 0.5" overage on each side beyond damaged area. (1.0" longer than the affected abraded area to reduce the possibility of leakage)

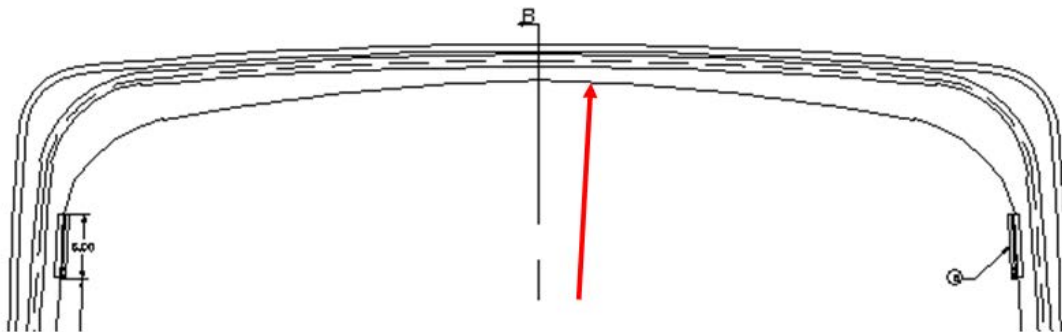


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Bus Bellows Inside Abrasion Repair



Step 3: Press and rub tape to insure adhesion to material and removal of any air bubbles. Affixing of tape can follow contour of damage or straight across along the seam.



Step 4: Place the aluminum binding strip P/N, K25412-1 over the area and crimp into place every 3.0" on the inside of the Bellow.



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Bus Bellows Inside Abrasion Repair

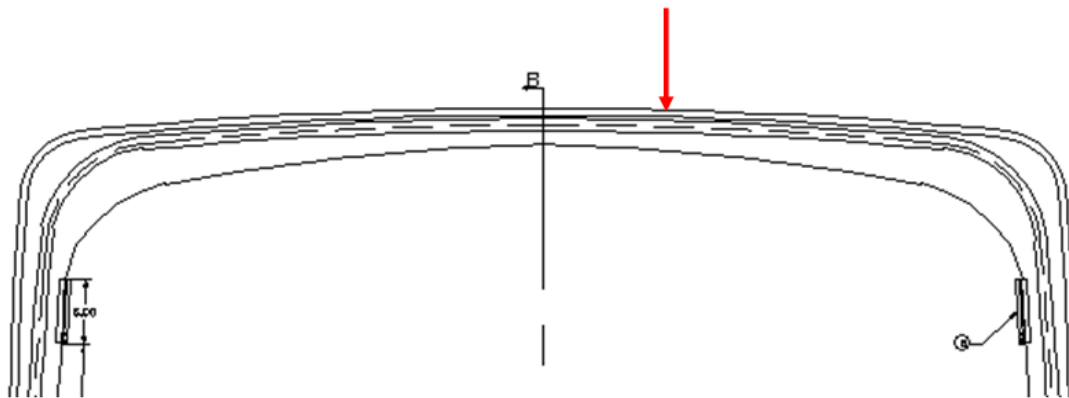


Scope 2: Applies to Bus Bellows with inside binding worn and stitching is damaged or slightly worn.

Step 1a: Review if the section has not opened and/or the seam wear appears intact. If intact then proceed to steps 1 - 4 above.

Step 2a: Additional sealing is required on the outside of the Bellows as a preventative measure to avoid leaking. Clean the Bellow at the wear point and apply a small bead of PRO SEAL 34 (A&A P/N 12000043).

Step 3a: Tool the bead into the area by dipping your finger into a water and soap solution and work the sealant into the valley.





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Bus Bellows Inside Abrasion Repair

Scope 3: Applies to Bus Bellows with inside binding worn and stitching is damaged resulting in the seam splitting open.

Step 1b: Thoroughly clean all surfaces inside and outside on the Bellows material and allow to dry.

Step 2b: Put a small bead of PRO SEAL 34 between the two (2) inside surfaces and then proceed with Steps 2 – 4 above.

Step 3b: Proceed with Steps 2a and 3a above.



| LABOUR ESTIMATE | | | | |
|------------------------|--|-----|-------|-----------------------|
| | Operation | Men | Hours | Labour Time M X HR |
| 1 | Install roof top bellow clips | 1 | 0.5 | 0.5 |
| 2 | Apply tape on the 2 false ceiling bellows | 1 | 0.5 | 0.5 |
| 3 | Repair inner seam bellows material / pleat | 1 | 1.0 | 1.0 |

| PARTS REQUIRED | | | | | |
|-----------------------|-------------|-------------------------|----------------------|-------|-------|
| Item | Part Number | Description | Qty. per Coach | Units | Notes |
| 1 | 6394515 | BELLOW CLIP | 4 | EA | |
| 2 | 6407551 | TAPE, POLYURETHANE FILM | 15 | FT | |
| 3 | 6411424 | ALUMINUM BINDING STRIP | 16 | EA | |
| 4 | 6411425 | PRO SEAL 34 | 0.1 | EA | |