



# INSTRUCTION TO SERVICE

ITS: 60713		06/12/2023
<b>SECTION:</b>	420 – Exterior Applied Parts	
<b>WRITTEN BY:</b>	Jeff Kosheluk	
<b>SUBJECT:</b>	Install new exterior hatch rings (bonded) and re-seal joint at the top (forward & rear side) of the roof panel (as required).	
<b>ISSUE:</b>	Rivets causing the hatch rings to crack and cracks in sealant (causes potential leaks).	
<b>SUMMARY:</b>	Install new exterior hatch ring and re-seal roof panels (as required) on the front/rearward side.	

# ITS60713

Ref. NHTSA Recall No.	Ref. Transport Canada Recall No.
Not Applicable	Not Applicable

**THIS ITS DOCUMENT SHOULD BE RETAINED AND REFERRED TO FOR FUTURE MAINTENANCE UNTIL THE NEW FLYER PARTS AND/OR SERVICE MANUAL IS UPDATED TO REFLECT WORK DONE AS A RESULT OF THIS DOCUMENT. ENSURE THAT THIS DOCUMENT IS AVAILABLE FOR PARTS AND MAINTENANCE STAFF GOING FORWARD.**

**SAFETY PRECAUTIONS MUST BE FOLLOWED ACCORDING TO ACCEPTED INDUSTRY STANDARDS AND LOCAL/PROPERTY REQUIREMENTS.**

**PROCEDURE:**

1. Park bus on a leveled surface and apply parking brake. Place wheel chocks underneath the front wheels.
2. Turn the main battery disconnect switch to the "OFF" position.
3. **Note: Safety equipment must be used when working on the roof of the bus. Follow information in service manual.**
4. Locate the front hatch on the roof. Remove inner hatch rings from the interior of the coach. Set aside to install later. Refer to Figure 1.



**Figure 1: Inner hatch ring**

5. Remove outer hatch from the exterior ring enclosure. See attached showing breakdown. Set aside to re-install later. Refer to Figure 2.

ITEM	QTY	PART #	DESCRIPTION	LID
1	1	T2082-1	HANDLE - RELEASE, (LT GRAY)	X
2	1	T2072-1	BASE - HANDLE, (LT GRAY)	X
3	1	T2053-1	HINGE, LT GRAY FIXED	X
4	1	T2673	DECAL- PICTOGRAPH, INSTRUCTIONAL	X
5	1	T2672	DECAL- WARNING, PICTOGRAPH	X
6	1	T2140	PIN- HINGE, SS	X
7	10	T2100	SCREW - #10 X .54", HI-LO THRD, SS	X
8	1	T1077-014	RELEASE ASSEMBLY- KNOB, ISR	X
9	1	T2531	SHIELD- RELEASE HANDLE, (LT.GRAY) ORDER T1976-015 REPLACEMENT KIT	X
10	1	T2776	LID- STANDARD SAFETY VENT II, (WHITE)	X
11	8.9ft	TAP-004-01	RP16 VHB TAPE, DBL SIDE 5/8" X36 YDS	
12	2	T2722	ABS STRIP, .09" X 27.25" X .75"	
13	2	T2721	ABS STRIP, .09" X 25.5" X .75"	
14	1	T2052-1	COVER, LT GREY FIXED HINGE	
15	1	T2062-1	HINGE - RELEASE, (LT GRAY)	
16	2	T2786	MOUNT - ULP LINKAGE MOUNT B	
17	8	008798	SCREW 10-24 X 3/4" SS BHHS W/P	
18	4	T1000-005	ASSEMBLY- LINK AND PLUNGER	
19	1	T2684	DECAL- ULTRA LOW PROFILE DUAL PURPOSE VENT	
20	8	T2789	CAP - PUSH-ON #10 BUTION HEAD SCREW	
21	7.3ft	T2710	GASKET- BULB, ULP HATCH	
22	2	T2785	MOUNT - ULP LINKAGE MOUNT A	
23	2	T2780	SUPPORT BAND- ULP FRAME	
24	1	T2760	FRAME- ULP HATCH, 300"R (L GRAY)	
25	4	T2042	SPRING - HEAVY DUTY PLUNGER	
26	8.9ft	T2002	SEALANT- ADHESIVE, 3/16" THK	
27	4	T2030	BOLT- SHOULDER, 5/16-18 UNC	

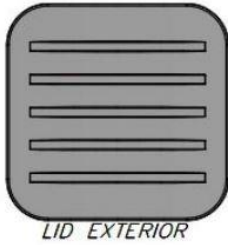
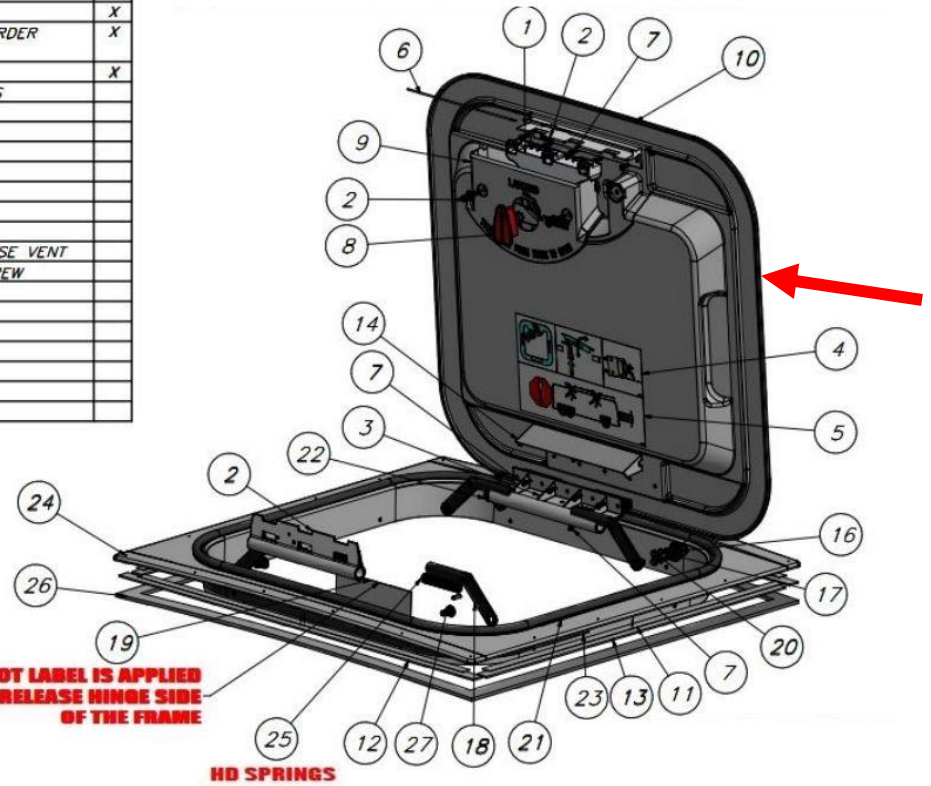
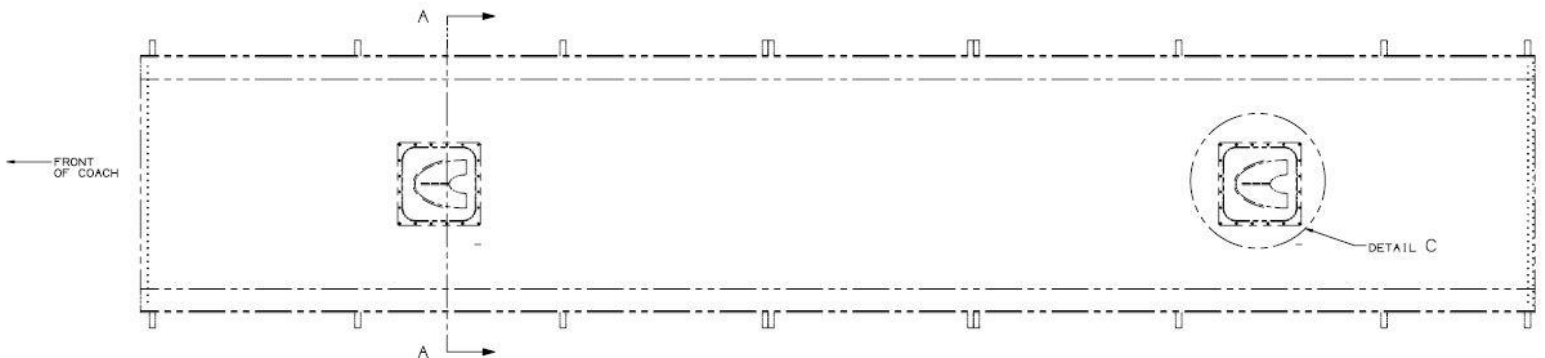
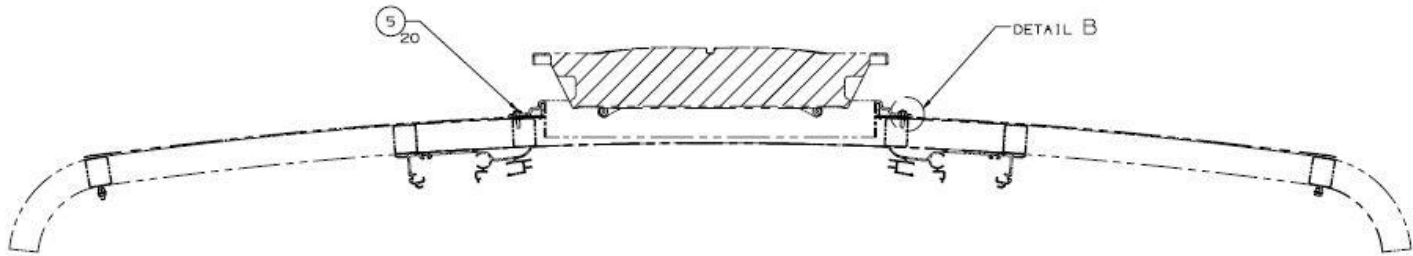


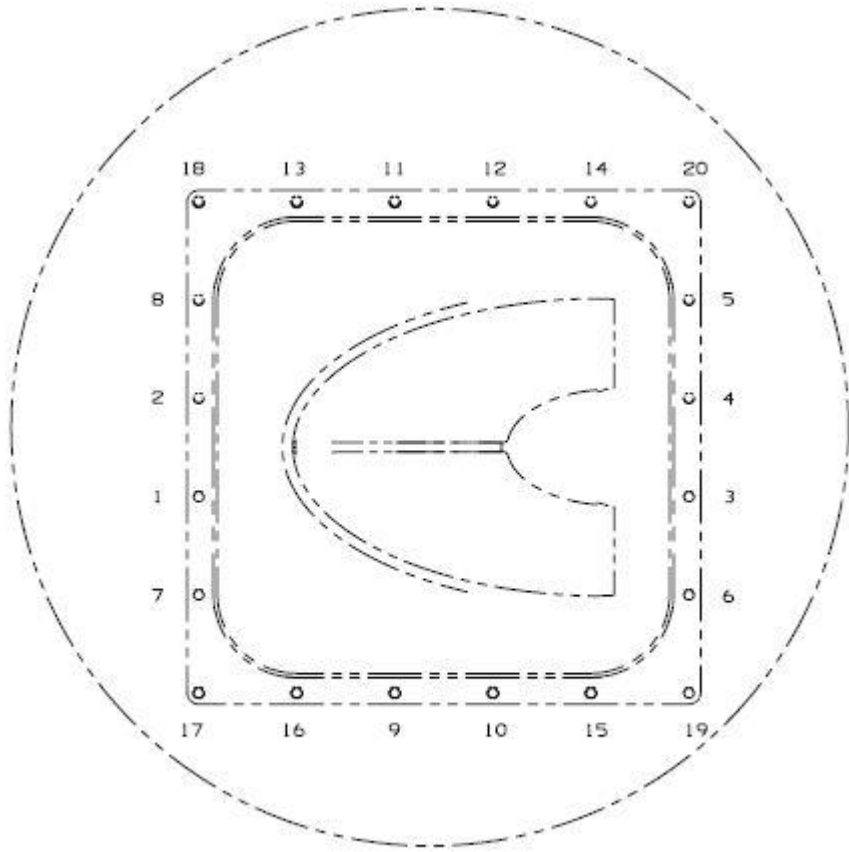
Figure 2: Breakdown of roof hatch

- Use a punch, pop out the rivets. Remove the man-drill from the rivets by drilling them out. Drill 0.203 diameter holes to remove rivets. Typical 20 places. For steps 6 - 12, see Figure 2 & 3.

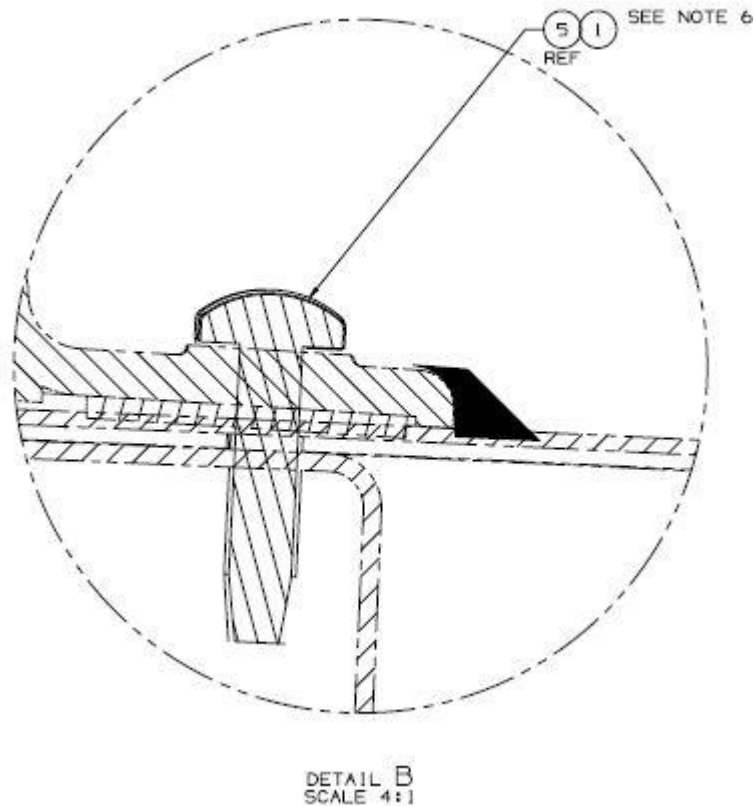




SECTION A-A  
SCALE 1:4



DETAIL C  
SCALE 1:4



**Figure 3: shown installation of the exterior roof hatch surround.**

Note: IF the flange on the roof hatch is not damaged, then only replace with mounting screws. Follow steps ...

7. Once rivets removed, carefully remove the existing exterior roof hatch surround. Be careful not to damage the aluminum roof panel. Clean the backside of the roof hatch surround with sika cleaner (PN: 055702). Allow to flash off for 5-10 minutes. Remove excess adhesive from roof and clean with isopropyl on the affected area – let flash off for 10 minutes.
8. Using the new exterior hatch surround (PN: 03-31-5121) as a template. Apply a bead of sealant along the perimeter on the backside of the hatch surround. Start with the corners to line up the existing holes from hatch install. Pre-drill the holes on the exterior hatch surround to 0.266" diameter. Drill out the existing hole to 0.266" diameter. Note: Remove film tape off the adhesive strip on the backside of the flange.
9. Apply sika sealant (PN: 055701) to tip of screw and install screw (PN: 008653). Tighten in place but ensure not to overtighten. Repeat for the other 3 corners, then finish off the remaining screws. Follow the tightening sequence as per Detail C. Note: Apply pressure on the roof panel to ensure proper contact between the roof hatch and roof panel. Do not overtighten screws to avoid cracking the roof hatch and uneven depression of the roof panel.



10. After all screws in place, clean away excess sealant squeezed out from the installation. Using soap water application to remove excess sealant. Apply a final bead of sealant (PN: 055701) along the perimeter of the hatch.
11. Re-install the hatch lid that was removed in step 5. Tighten all hardware. Install inner trim ring.
12. Repeat step 5 – 11 to rework the rear roof hatch.

**PART B: SEALANT TO BE REWORKED (AS REQUIRED)**

13. For areas on the forward & rear side of the roof panel, if void in sealant. Trim out affected area, clean with sika cleaner (PN: 055702) and let flash off for 5 – 10 minutes. Then re-seal with sika sealant (PN: 055701). Tool in sealant neatly.
14. Remove all tools and debris and return the bus to service condition.
15. Turn the main battery disconnect switch to the “ON” position.



LABOUR ESTIMATE				
	Operation	People	Hours	Labor Time
1	Replace affected cracked exterior roof hatch surround (front)	1	2.5	2.5
2	Replace affected cracked exterior roof hatch surround (rear)	1	2.5	2.5
3	R&R affected sealant voids at forward or rearward side of roof panel (as required)	1	1.5	1.5

PARTS REQUIRED					
Item	Part Number	Description	Qty. per Coach	Units	Notes
1	055701	Sika Sealant White	6	EA	
2	055702	Cleaner – Sika, 205	0.5	EA	
3	23-04-0005	Remover – Sika 208	0.5	EA	
4	134336	Alcohol - Isopropyl	0.01	EA	Purchased locally
5	008653	Screw – Self Tapping – ¼ -20 SS	40	EA	
6	03-31-5121	Exterior Roof Hatch surround	2	EA	