

LEAKING COVER REPAIR PROCEDURE

Date: OCT/07/2019

CA-231945

Rev.: 1

PRODUCT MODELS INVOLVED

This repair procedure involves the following product models:

- Legend 12 to 20 feet long models
- The following procedure is for models having serial number from #1607B0112 and higher.

PURPOSE OF THE REPAIR PROCEDURE

The following procedure describes steps in order to fix leakage issue into joints between some transversal I-Beams and Cover Panels. To prevent future leakage, that procedure shall be carefully followed using spare parts kit and tools suggested herein.

TOOLS NEEDED

The following tools suggested by the repair procedure are:

- A Robertson screwdriver
- 7/16" (11mm) socket wrench spanner
- 5/32" (4mm) Allen key
- 2x 50 ft (15m) Ratchet straps

LIST OF PARTS USED

Refer to the table below for replacement parts that would be needed.

PARTS NEEDED	12' to 20'	16' to 20'	NOTE
	QTY	QTY	
COV-AFS-LEG-COVER REPAIR-XX-COLOR-COMPLETE	REPAIR KIT		
COV-XXX-C CHANNEL XX-COLOR-L-COMPLETE	2	2	2 X LEFT C-CHANNEL
COV-XXX-C CHANNEL XX-COLOR-R-COMPLETE	2	2	2 X RIGHT C-CHANNEL
COV-LEG-11"C-CHANNEL CONNECTION W/SLOTS	4	4	
#8 X 32 1/2"RHSD SLFTP SCREW-Z/P-COLOR	25	25	
COV-XXX-SEAL- "LENGTH"	1	1	
COV-GEN-I TO C-CONNECTION SPACER	6	10	
COV-GEN-FOAM BUMPER	16	16	
1/4" FLAT WASHER (OD:0.625")	9	9	
COV-GEN-SEAL 0.430 "D" PROFILE X 18'	1	1	
REPAIR PROCEDURE # CA-231945	1	1	

To order the correct repair kit for the size of your Covana Cover, please refer to Covana service after sale. Please be prepared to provide the serial number of your cover.

STEPS TO FOLLOW

1. Lift the cover and remove the seal underneath the cover surface (Figure 2). Once this is complete put the green foam spacers on the swim spa (Figure 1).

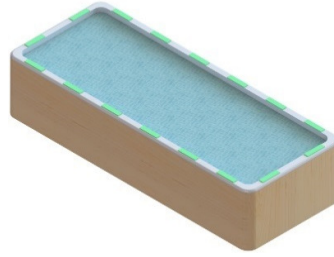


Figure 1

2. Lower the cover on the foam spacers.

- ⚠ Warning:** After step 2, pull the key out of the key-switch to prevent someone operating the spa cover during repair procedure. Derogating from this directive could cause serious injury.

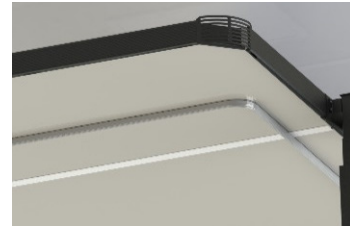


Figure 2

3. Remove the three screws on each of the corner brackets. Only remove those connected to the side C-channel and not the end one (Figure 3).



Figure 3

4. Remove the end C-channel with the corner bracket still attached to it. Put them in a safe place (Figure 4).

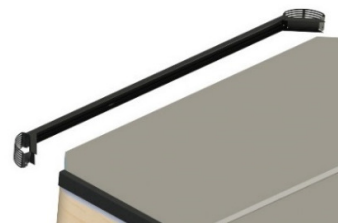


Figure 4

5. Remove the top plate from each of the four sleeves by removing the two screws on each side of the top plate (Figure 5).

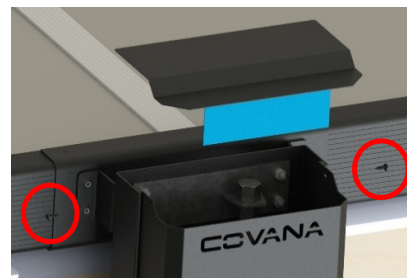


Figure 5

6. Remove the four nuts and carriage bolt from each of the sleeves (Figure 6).



Figure 6

7. Remove the four screws that hold the joint support bracket to the c-channel. Remove the four bolts that connect the post mount bracket to the c-channel on each jack of the Legend (Figure 7).

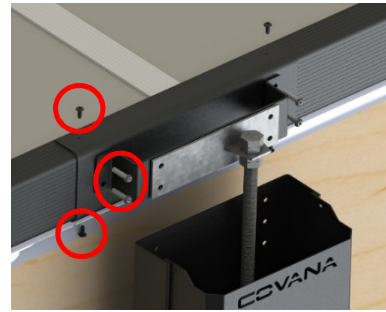


Figure 7

8. Remove the end panel. Put it in a safe place. If you have a 16' to 20', you will have to remove the two panels and the I-beam (Figure 8).

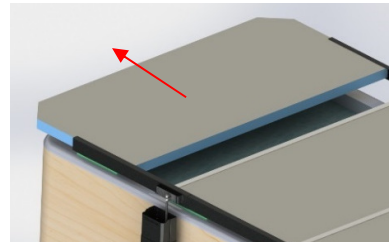


Figure 8

9. Remove the c-channel from the joint support bracket. You can discard those c-channels (Figure 9).

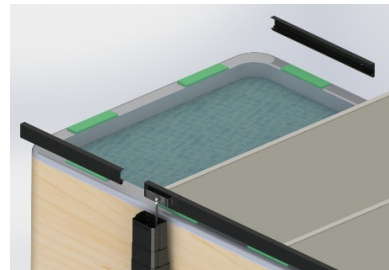


Figure 9

10. Remove the joint support bracket, the I-beam assembly and the panel and the center I-beam (Figure 10-11-12). If the seal of the I-beams is damaged please contact our customer support for additional help.

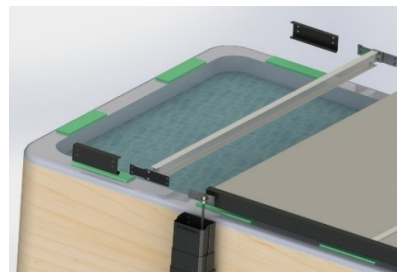


Figure 10

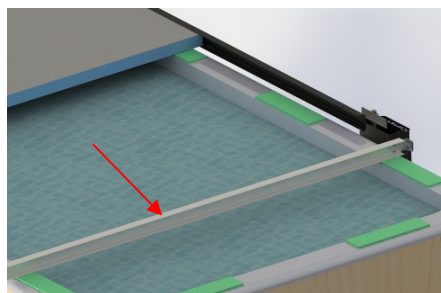


Figure 11

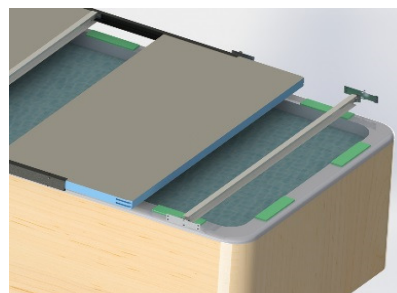


Figure 12

- Remove the I-to-C connection plate from all the I-Beams assemblies. (Figure 13-14).

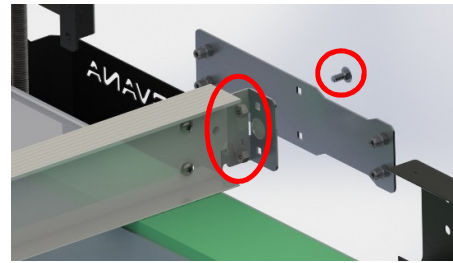


Figure 13

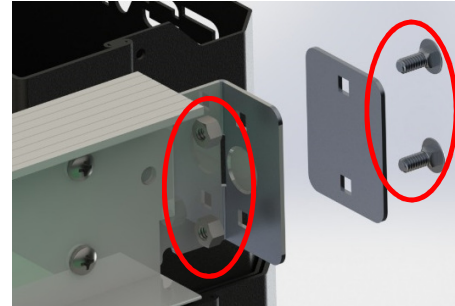


Figure 14

- Remove the punchable disc on *each* I-to-C spacer. (see Figure 15)

- Install the new slotted I-to-C long connection plate and flat washers on two I-beam. (Figure 16) Make sure the trimmed portion of the connection plate are facing the same way as the bend. Make sure the I-beam is free to move in the slots. (Figure 16).

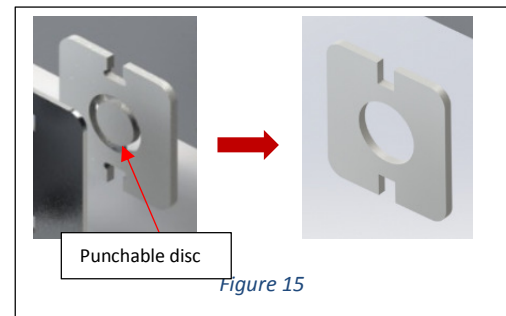


Figure 15

- Install the I-To-C spacer on each other I-Beams. (Figure 17)

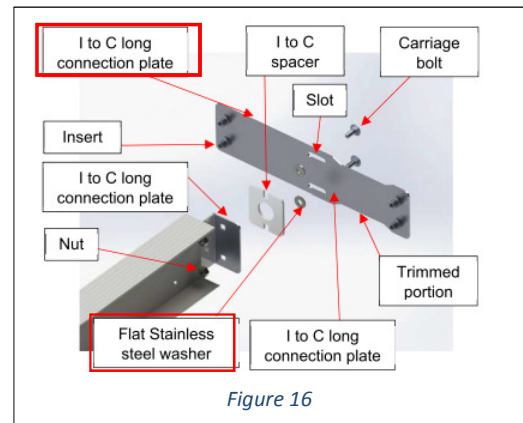


Figure 16

I-to-C Spacer

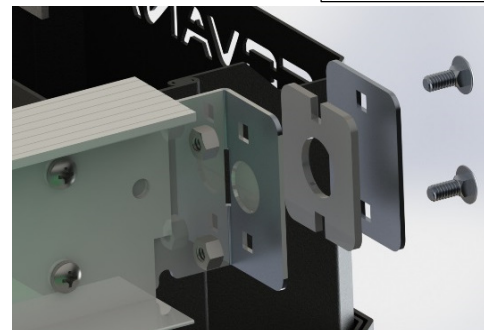


Figure 17

15. Reinstall the center panels back in his place and insert the I-beam in the c-channel. Make sure the bent part of the I-to-C bracket and the trimmed portion of the I-to-C connection plate are pointing towards the end of the cover. Make sure the I-beam is free to move in the slots (Figure 18).

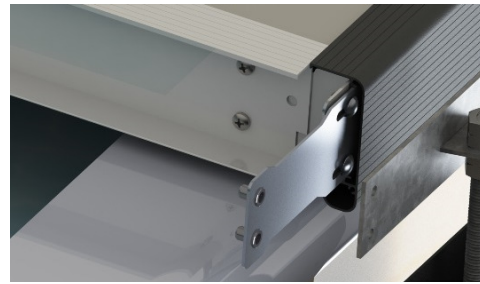


Figure 18

16. Insert the joint support bracket over the c-channel. Install the two bolts (Torque; 5 ft-lb) through the post mount bracket and the joint support bracket (Figure 19).



Figure 19

17. Insert the provided slotted c-channel in the joint support bracket (Figure 20) and install the two remaining bolts (Figure 21). **Do not tight those bolts yet.** The end c-channel must be free to move in its slots.



Figure 21



Figure 20

18. Reinstall the end panel back in its position in the c-channel. Make sure to not delaminate the cover while inserting it in the c-channel (Figure 22).

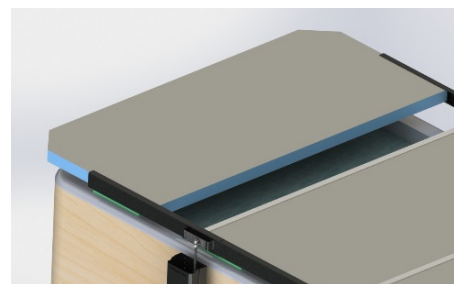


Figure 22

19. Put the end c-channel assembly back in place (Figure 23) and reinstall the three screws per corner bracket (Figure 24).

Repeat step 15 to 19 for the other side of the cover

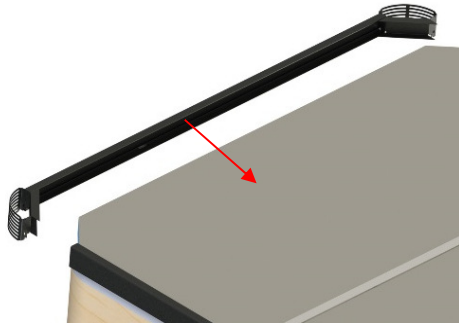


Figure 24

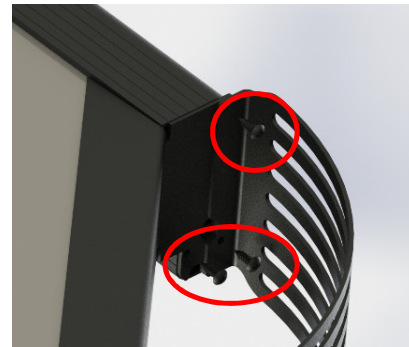


Figure 23

20. Using ratchet straps, compress the entire cover assembly (Figure 25) until you have a gap between the end c-channel and the middle c-channel of 1/16" to 3/16" (Figure 27). While you are compressing the cover make sure it stays as straight as possible and is safely staying on the foam bumpers.

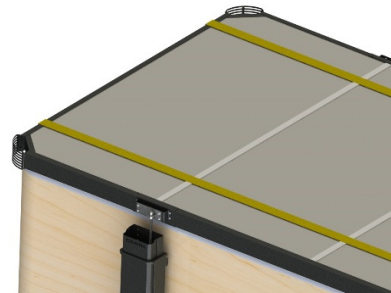


Figure 25

21. When you are satisfied with the required gap and the straps are secured, tighten the two bolts (5 ft-lb) that you left loose in step 17 (Figure 26). Repeat the process for all four jack assemblies.

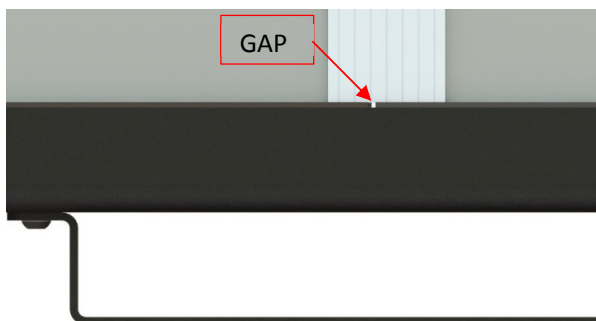


Figure 27



Figure 26

22. Drill a hole of 5/32" on the top and bottom of the c-channel and insert the #10-24 screws (Figure 28). The previous holes should still be aligned and should not need any drilling. Make sure the cover is perfectly straight and sitting on the foam spacers before drilling. Once the screws are in place you can safely remove the straps.



Figure 28

23. Reposition the sleeves and install the four bolts and nuts (Figure 29).



Figure 29

24. Reinstall the top plate on each of the sleeves with the two screws holding it in place (Figure 30).

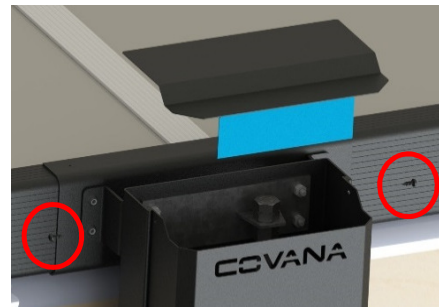


Figure 30

25. Once the Covana cover has been fully reassembled, raise the cover and remove the foam spacers and tape. Lower the cover and walk around the entire perimeter of the swim spa, observing where the inside surface of the cover will contact the swim spa. This will determine the best location to apply the seal.

26. Dry the swim spa edge and the underside of the cover with a clean cloth. Wait until it is dry.

⚠ CAUTION

Remove all dirt, oil and moisture for proper seal adhesion. The use of mild detergent can help clean the surface. Refer to the swim spa manufacturer's recommendation.

27. Apply the provided masking tape around the swim spa where the seal will be installed. The masking tape will ensure the seal is straight when pulled corner to corner. The ideal location for the seal is closer to the swim spa's interior edge, but on a flat surface (Figure 31). The minimum turn radius for the seal is 4 in. (10 cm).

⚠ CAUTION

The use of masking tape is recommended since it will protect the acrylic tub from the clips' glue. Furthermore, pulling the masking tape from one corner to the next will ensure straightness.

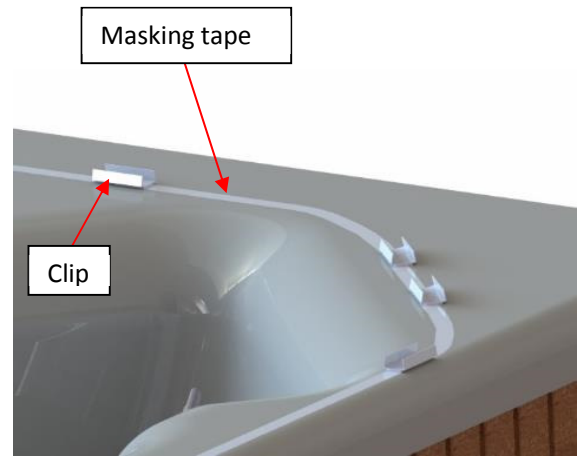


Figure 31

28. Apply the provided seal clips parallel to the masking tape around the swim spa and ensure to put more in the corners and on any tight turns (around filters, etc.). Keep in mind that a limited number of clips are provided (Figure 31)

Start installing the seal joint at the opposite side from the entrance of the spa (halfway in a clip), with the adhesive layer facing up toward the cover (Figure 32 and Figure 33)



Figure 32

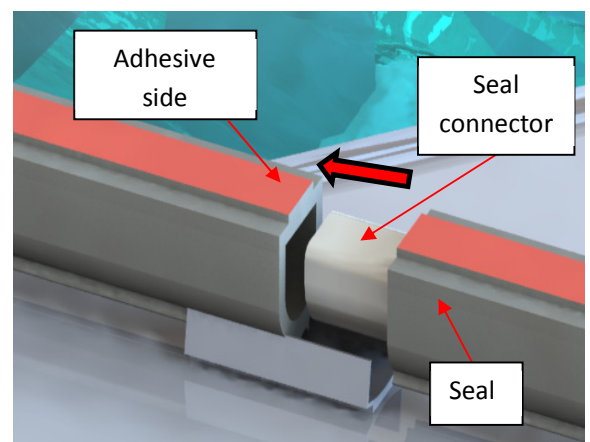


Figure 33

⚠ CAUTION

Do not install the seal joint near a control system or the critical components of the spa.