

### PRODUCT MODELS

- C-EP Cover with tensioner
- Legend Cover with tensioner

### PURPOSE OF THE REPAIR PROCEDURE

This repair procedure should be performed if there is a leaking issue of the seals between the I-beams and the cover panels on the C-EP or Legend swim spa cover.

### PREPARATION

- The cover must be closed.
- Gather the required tools, as seen in the table below.
- Make sure the hardware bags are complete. Call your local dealer if parts are missing.

TOOLS REQUIRED			
5/32" Allen key	Phillips screwdriver	Robertson screwdriver	
7/16" socket wrench and spanner	Gloves	9/16" wrench	

*Version française à la page 12.*

HARDWARE BAG NO. 20	QTY	CODE
3/32" Aircraft swaged wire rope eyelet	4	240852/53
5/16-18 x 5/8" Low profile socket screw	5	240804
5/16" Type A plain washer	9	200372
5/16-18 hex nylon lock nut	5	183038

HARDWARE BAG NO. 40	QTY	CODE
Groove flange hex shaft bushing	4	240851
No. 4 x 3/16" Round head sheet metal screw	13	240805
No. 8-32 x 1/2" Pan head square thread cutting screw	42	235540/41

HARDWARE BAG NO. 50	QTY	CODE
Cable gripper	4	240849
3/8-16 x 1 1/4" Coupling nut	4	240807
3/8-16 x 4" Hollow rod	4	240850
3/8-16 Wing nut	4	240806
3/8-16 Hex nut	4	244656
3/8" Washer	4	240802

**⚠ CAUTION**

Do not use power tools, some parts are fragile and may break under too much torque.

**⚠ WARNING**

This procedure must be performed by a certified Covana installer.

Make sure that the appropriate breaker is at off position in the electrical panel and keep the key out of the key switch socket at all times. The certified Covana installer must keep control of the key during the repair procedure. Derogation from this directive could cause serious injury or damage the cover. **Never use the key switch while the cover is not attached to its posts.**

### STEP BY STEP PROCEDURE

#### A- DETACHING COVER FROM POSTS

- 1) Use the Robertson screwdriver to remove the top cover by unscrewing the two Robertson no. 8 self-drilling screws (see image 1).

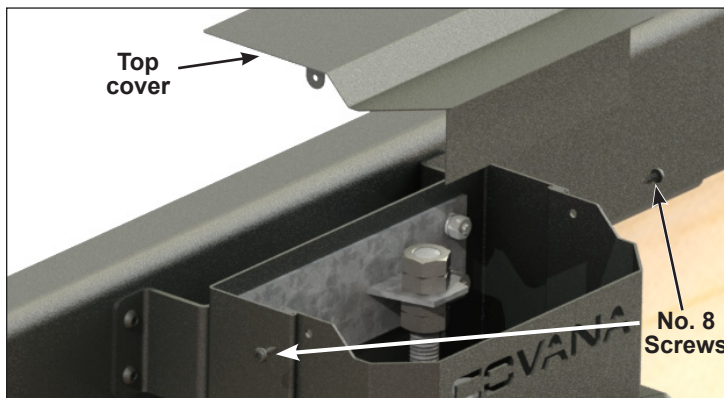


IMAGE 1

- 2) Use a 7/16" socket wrench to unfasten the sleeve from its cover mount bracket by unscrewing the four 1/4-20 x 3/4" carriage bolts (see image 2).

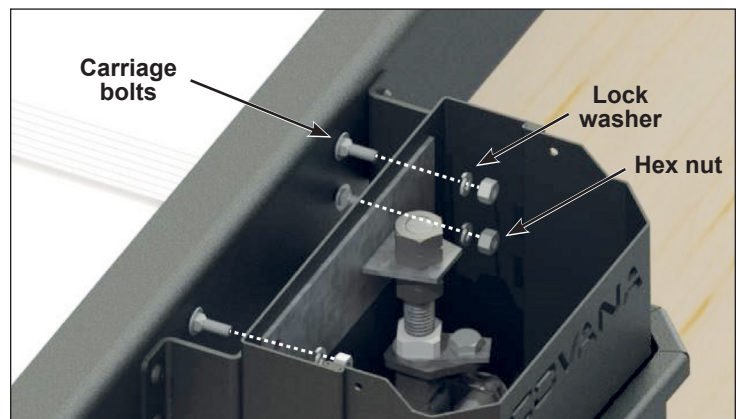


IMAGE 2

- 3) Repeat the previous steps for each post.
- 4) With the help of another person, remove the defective cover and set aside.

**B- FOAM INSTALLATION**

Install the foam spacers on the top of the spa using the masking tape provided in the seal bag to keep the spacers in place. There must be at least four foam spacers on each long side plus two in each corner. Do not stack foam spacers.

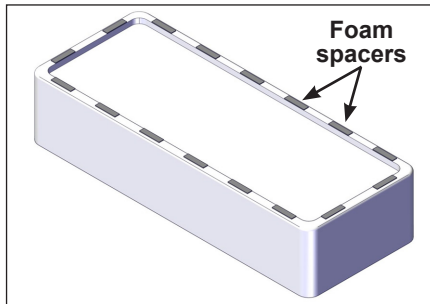


IMAGE 3

**⚠ CAUTION**

The foam spacers must be installed on the flat top surface of the spa.

**C- I TO C PLATE INSTALLATION ON THE I-BEAMS**

- 1) Install an I to C long connection plate as shown in image 4. See the table following the image for the fasteners to use.

**NOTE**

The trimmed portion of the I to C-long connection plates must be oriented in the same direction as the bent part of the I to C bracket.

Do not forget to orientate the nut inserts of the connection plate facing inwards see image 4.

Make sure the label TOP/DESSUS in the I-beam is facing upwards.

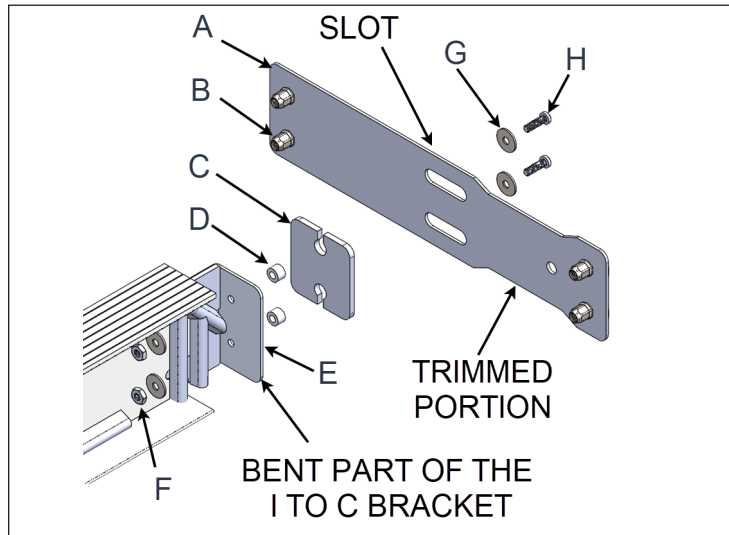


IMAGE 4

ID	DESCRIPTION	ID	DESCRIPTION
A	I to C long connection plate	E	I to C bracket
B	Insert	F	Nut no. 10-32
C	I to C spacer	G	Flat washer no. 10
D	Spacer	H	Screw no. 10-32 x 5/8"

**⚠ CAUTION**

Two I to C long connection plates must be installed per I-beam and on two I-beams.

Pay attention to the orientation of the trimmed portion of the I to C long connection plate.

Ensure the screws and nuts are not overly tight so they don't bend the I to C-bracket and the I to C-long connection plate.

Ensure the upright position of I-beam by ensuring the TOP/DESSUS label is pointed upwards.

Make sure there is grease in the inserts before installation; if not, apply anti-seize lubricant for stainless steel in the inserts.

Make sure the I-beam is free to move in the slots of the I to C long connection plates.

Make sure the spacers (item D, image 5) are in place between the I to C bracket and the I to C long connection plate.

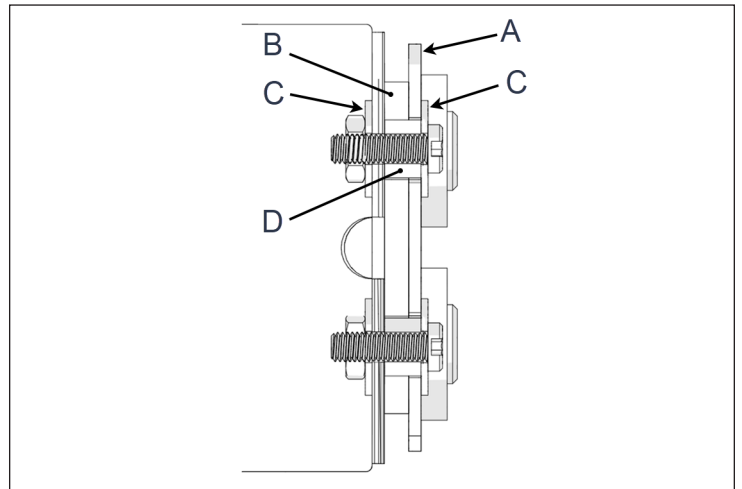


IMAGE 5

ID	DESCRIPTION
A	I to C long connection plate
B	I to C spacer
C	Flat washer no. 10
D	Spacer

**⚠ WARNING**

The orientation and the installation of each component shown in image 4 must be imperatively and exactly mounted as it is shown to successfully install the cover.

- 2) Repeat the previous steps for the opposite side of the I-beam and repeat on a second I-beam.
- 3) Use the no. 10-32 x 5/8" screws and no. 10-32 nuts. Insert the I to C spacer in between the I to C connection plate and the bracket. The screws and nuts can now be properly tightened (see image 6).

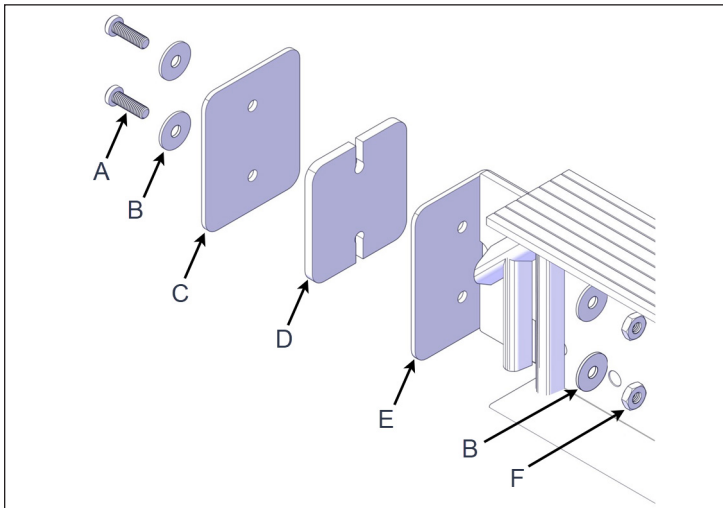


IMAGE 6

ID	DESCRIPTION	ID	DESCRIPTION
A	Screw no. 10-32 x 5/8"	D	I to C spacer
B	Flat washer no. 10	E	Bent part of the I to C bracket
C	I to C short connection plate	F	Nut no. 10-32

**D- CABLE INSTALLATION ON THE I TO C LONG CONNECTION PLATE**

- 1) Install the cable with the eyelet flat side in contact with the long connection plate, see image 7. See the table following the image for the fasteners to use.

**NOTE**

Check that the eyelet of the cable is parallel to the longitudinal side of the I to C long connection plate when it is installed.

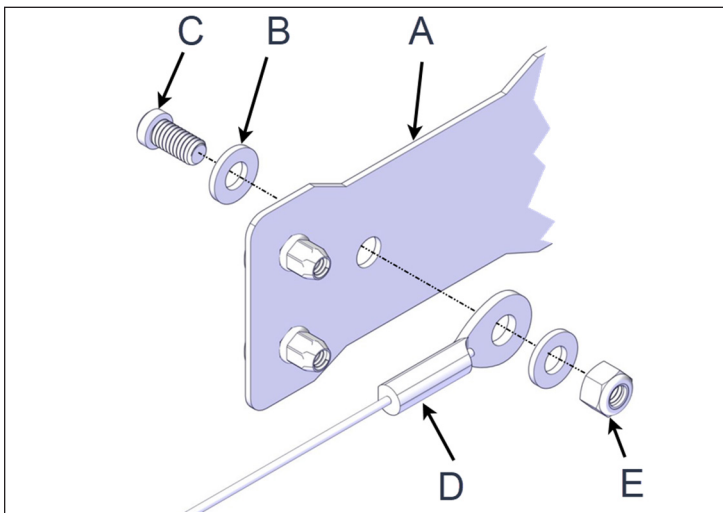


IMAGE 7

ID	DESCRIPTION	ID	DESCRIPTION
A	I to C long connection plate	D	Wire for Griplock installation
B	Flat washer 5/16" (2)	E	Lock nut 5/16-18
C	Screw 5/16-18 x 5/8"		

**E- PANEL INSTALLATION**

- 1) It is recommended to use a table or the shipping crate as a base to build the top middle section of the cover, and later transfer it to the spa once it is assembled.

**CAUTION**

If there is limited space, please follow the next steps while assembling directly onto the spa. Avoid scratching the spa or any components of the cover.

- 2) Install the escape hatch panel (approx. 47" x 96") onto the middle of the installation surface. Ensure the seal around the escape hatch opening is on the top and TOP/DESSUS label located in the panel hole is properly oriented.

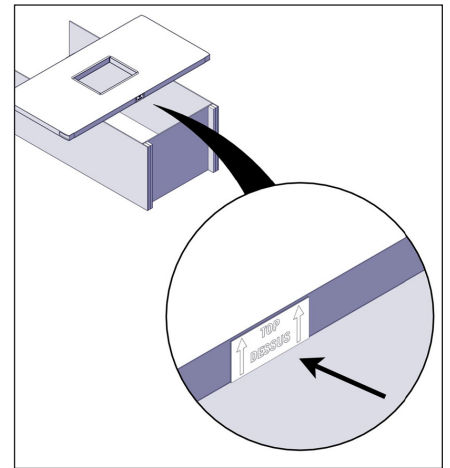


IMAGE 8

- 3) Install 2 long C-channels 94<sup>9</sup>/<sub>16</sub>" on the panel so that the middle of the C-channel, premarked with a center label (image 10), is aligned with the edge of the panel, see image 9.

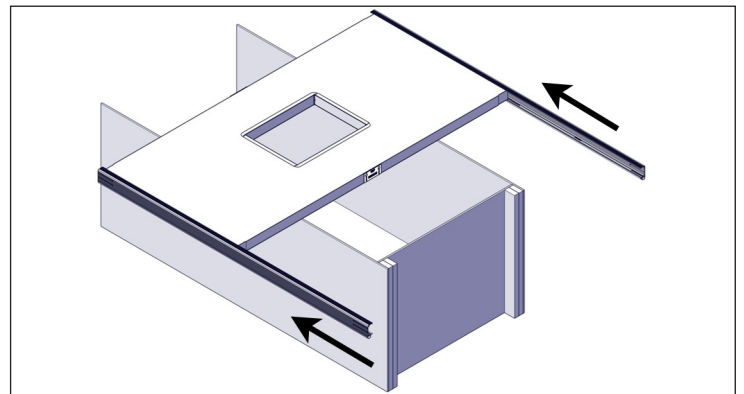


IMAGE 9

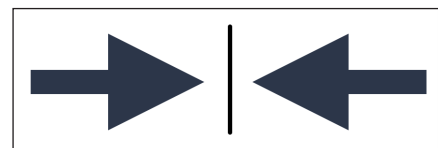


IMAGE 10

**WARNING**

When assembling the C-channel onto the foam panel, be careful not to delaminate the fiberglass.

- 4) Slide one I-beam with short I to C connection plates in the C-channels. Install the I-beam in such a manner that the bent portion of the I to C bracket is pointing outwards. Make sure it fits snugly with the foam panel. Ensure the top label in the I-beam is pointing upwards.

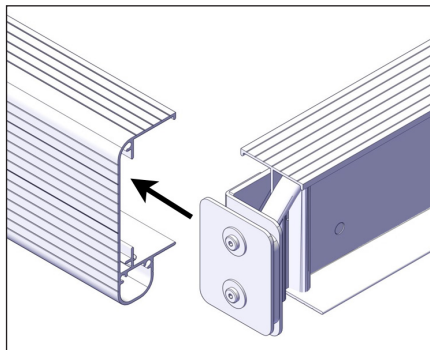


IMAGE 11

**⚠ CAUTION**

Ensure the upright position of the I-beam.  
 When inserting the I-beam into the fiberglass foam panel, make sure not to chip the fiberglass.  
 Make sure the I-beam has cleared bottom and top section.  
 While inserting the I-beam in the C-channel, make sure it is always square with the C-channel.

**⚠ CAUTION**

Ensure the proper insertion of the short I to C connection plate in the C-channel.

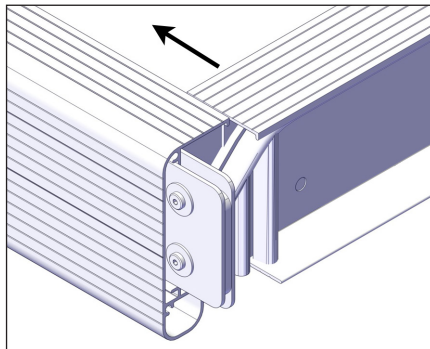


IMAGE 12

- 5) Slide the large panel (approx. 47" x 96") into the C-channels. Ensure the I-beam has slid over the panel on both the bottom and top side (image 13)

**⚠ CAUTION**

Ensure that the panel is pushed as far as possible by hand and is completely inserted in the I-beam.  
 If you have a color panel, make sure the colored side is on top.

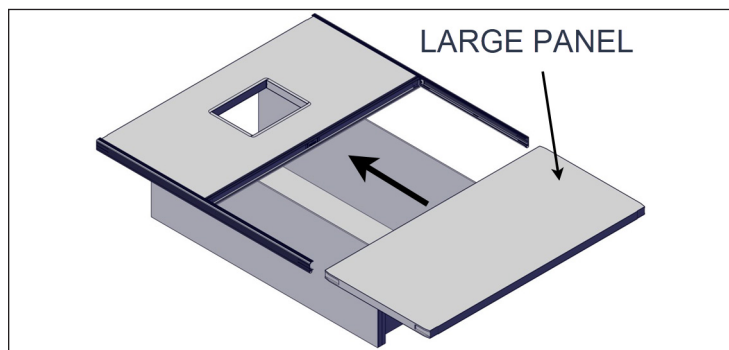


IMAGE 13

**⚠ CAUTION**

Make sure the panel side with the cut out shown in image 14 is pointing outward.

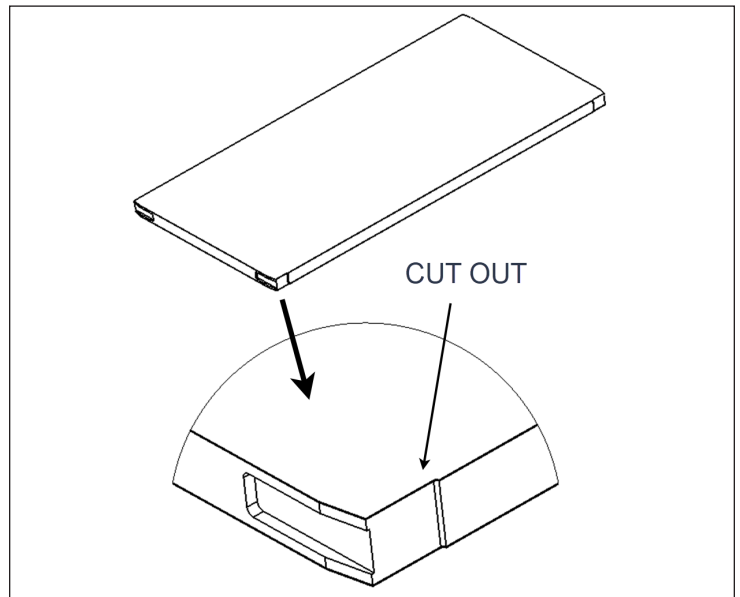


IMAGE 14

- 6) Install both I-beams with the long I to C connection plates. Ensure the trimmed portion of the I to C connection plate faces toward the end of the cover, see images 15 and 16.

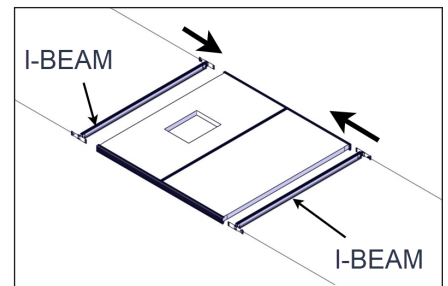


IMAGE 15

- 7) Align by hand the C-channels (left and right sides) in such a manner that the I to C connection plate holes are visible behind the C-channel.

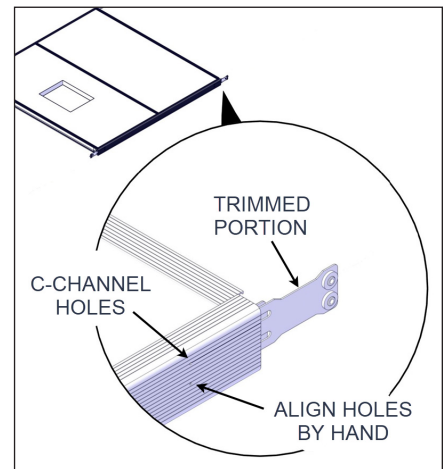


IMAGE 16

**⚠ WARNING**

Ensure the I-beam is oriented toward the top as indicated by the arrows on the TOP/DESSUS label.  
 When assembling the I-beam onto the foam panel, be careful not to delaminate the fiberglass.  
 Make sure the I-beam has cleared the bottom and top section.

- 8) Refer to image 17 for this step. Align the holes of the support bracket (item A), the holes of the post mount bracket (item D), and the holes of the long C-channel by hand. Assemble them with two 1/4" x 1" socket head screws. Tighten to a torque value of 5 ft-lb.
- 9) Repeat the previous step for the remaining brackets, see image 18.

**NOTE**

Remove the "Center" labels from the C-channels.

**⚠ WARNING**

Make sure the I-beam is still free to move in the I to C slots.

**NOTE**

For some spas, optional dual side brackets (item B, image 17) are needed to mount the cover to the posts. The installation of these brackets is made the same way as for the post mount brackets described in the previous step.

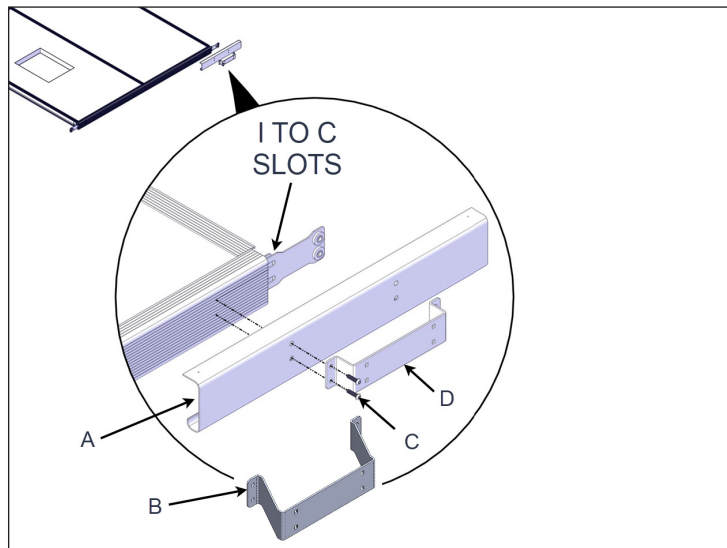


IMAGE 17

ID	DESCRIPTION	ID	DESCRIPTION
A	Support bracket	C	1/4-20 x 1" Soc rd head screw
B	Dual side bracket (optional)	D	Post mount bracket

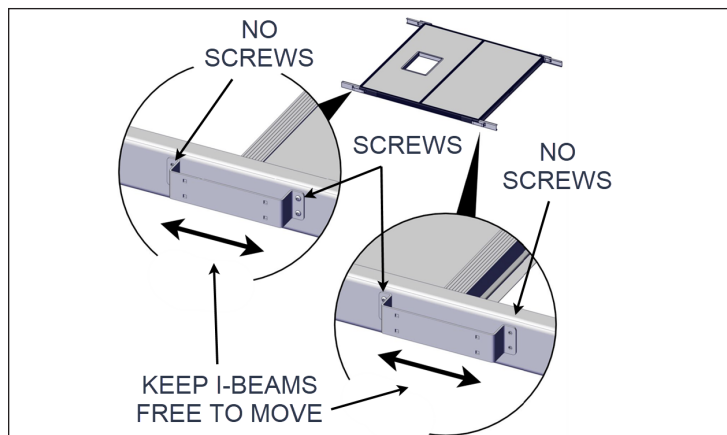


IMAGE 18

- 10) If it is not done yet, carefully position the assembled center section of the cover onto the middle of the spa. Try to align the cover as best as possible, see image 19.

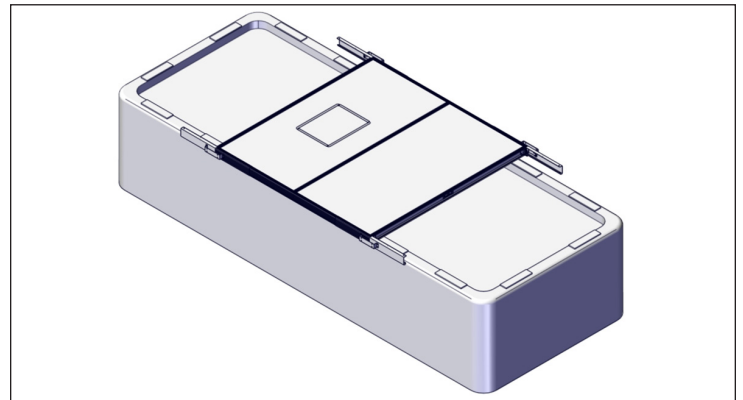


IMAGE 19

**⚠ CAUTION**

Failure to gently position the cover onto the spa could result in scratching the acrylic of the spa or damaging the cover. Ensure foam spacers are correctly positioned under the I-beams to simulate seal height.

- 11) Insert the side extension C-channel inside the support bracket, see image 20.

**NOTE**

There are two slots at one end of the C-channels. The slots must go toward the cover see image 20. Ensure that the long I to C connection plate is well inserted into the short C-channel. Make sure that the cable runs through the gutter of the side extension C-channel.

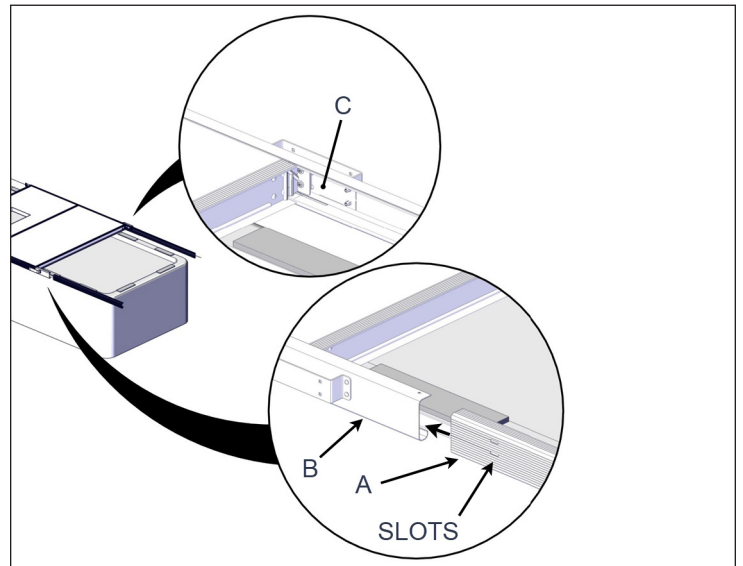


IMAGE 20

ID	DESCRIPTION	ID	DESCRIPTION
A	Side extension C-channel	C	I to C long connection plate
B	Support bracket		

12) Install two 1/4" x 1" hexagonal round head screws on the support bracket see image 21. DO NOT tighten those screws yet. The side extension C-channel must be free to move in its slots.

**NOTE**

In the previous step, install the screws but do not tighten yet to ensure a free movement of the extension C-channel.

Failure to follow this procedure will make the joint tightening between panels impossible.

Ensure that the screws run through the extension C-channel slots.

**⚠ WARNING**

Make sure the extension C-channel is free to move in its slots.

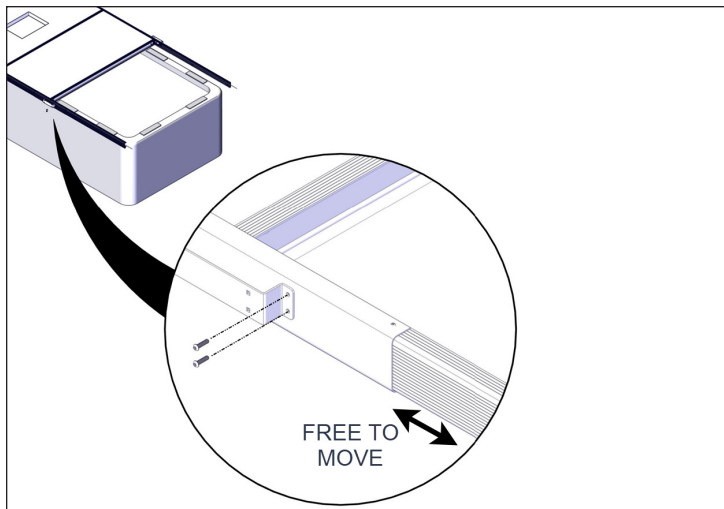


IMAGE 21

13) Repeat previous steps for the remaining side extension C-channels.

**SECTION FOR THE 16' TO 20' LONG SPA**

14) Slide in one of the remaining extra panels into the C-channels see image 22.

**⚠ WARNING**

Make sure the panel side with the cut out shown in image 22 is pointing outward.

**⚠ CAUTION**

It is very important to check if the I-beams have locked in properly into the foam panels.

If you have a color panel, make sure the colored side is on top.

**⚠ WARNING**

When installing the panels on the C-channels, be careful not to delaminate the fiberglass.

Ensure the I-beam has cleared the bottom and top section.

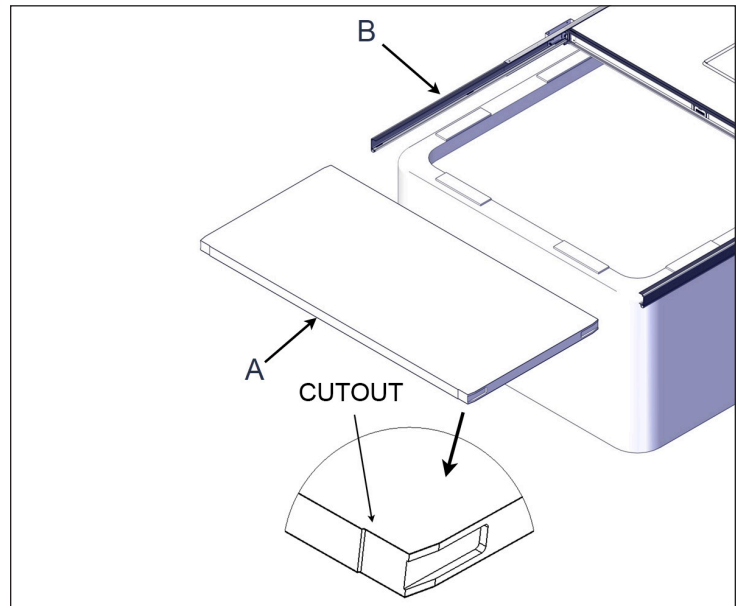


IMAGE 22

ID	DESCRIPTION	ID	DESCRIPTION
A	Extra rectangular panel	B	C-channel

**SECTION FOR ALL MODELS**

15) Slide an I-beam with the short I to C connection plates in the C-channels with the bent portion pointing outwards.

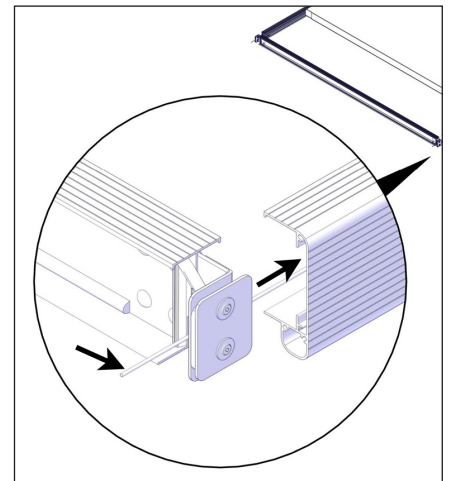


IMAGE 23

**NOTE**

Make sure that the wire passes through the I to C connection plate hole.

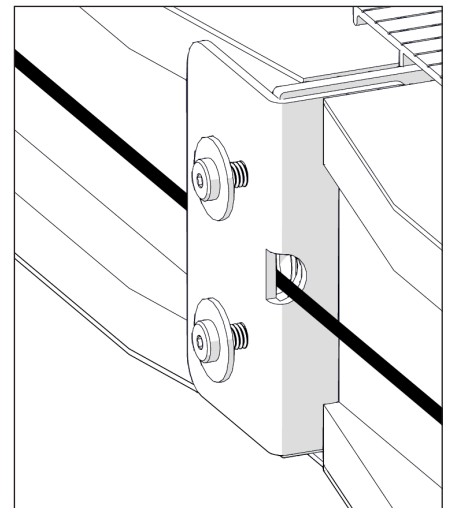


IMAGE 24

COVER REPLACEMENT

- 16) Insert one end panel with the tapered end toward the end of the cover. The end panel is tapered with a 45° cut.

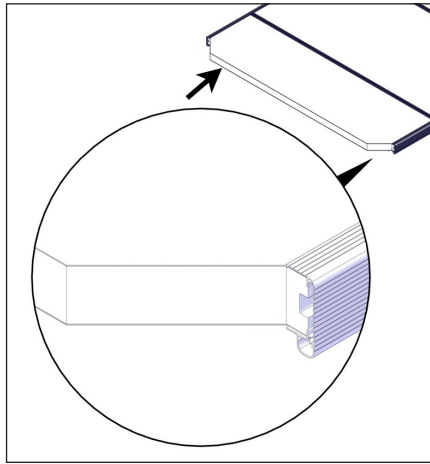


IMAGE 25

**⚠ CAUTION**

It is very important to check if the I-beams have locked in properly into the foam panels.

If you have a color panel, make sure the colored side is on top.

**⚠ WARNING**

When assembling the C-channel onto the foam panel, be careful not to delaminate the fiberglass.

Ensure the I-beam has cleared the bottom and top section.

- 17) For models 16' to 20' repeat on the opposite side the steps in SECTION FOR THE 16' TO 20' LONG SPA.
- 18) For models 12' to 20', repeat on the opposite side the steps in SECTION FOR ALL MODELS.

**D- END C-CHANNEL INSTALLATION**

- 1) Install an hexagonal guide bushing into each corner bracket support (the ones with a hole) using a Phillips screwdriver and three no. 4 x 3/16" round head screws.

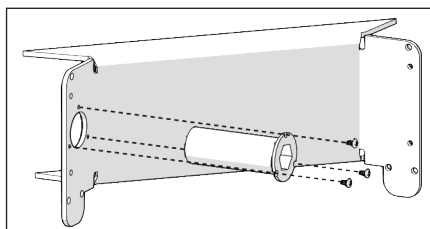


IMAGE 26

- 2) Install the left and right corner bracket supports on each end C-channel by using a no. 2 Robertson screwdriver and the no. 8 X 1/2" screws.

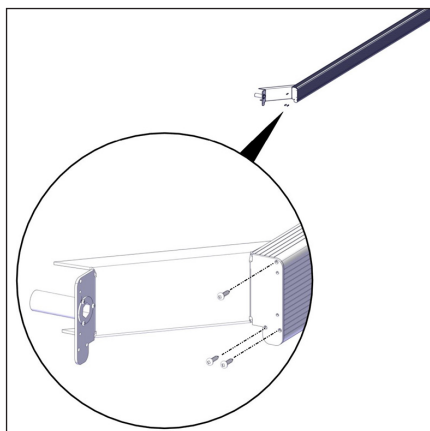


IMAGE 27

**NOTE**

Image 27 and 29 display the proper orientation of the left and right brackets.

**⚠ WARNING**

Do not over tighten the screws as they might break.

- 3) Take the assemblies made at the previous step (image 27) and slide them on the edge panels (image 29) located on each side of the cover. Make sure that the wire passes through the hexagonal guide bushings.

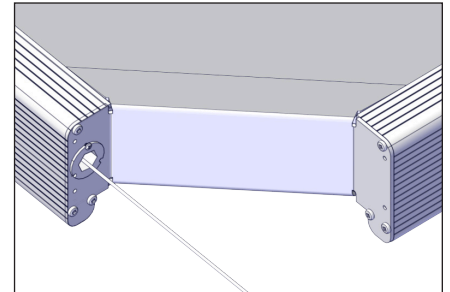


IMAGE 28

- 4) Use a no. 2 Robertson screwdriver to secure the corner bracket on the C-channel end by using the no. 8 x 1/2" screws (image 29).

**⚠ WARNING**

Do not over tighten the screws as they might break.

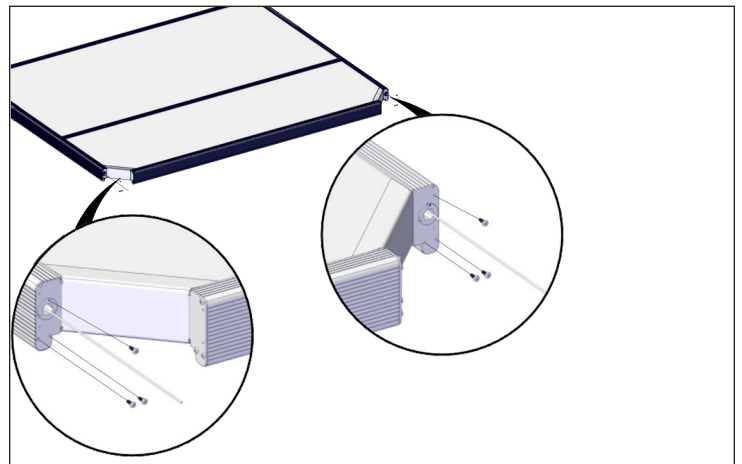


IMAGE 29

**E- GRIPLOCK INSTALLATION**

- 1) Install the Griplock completely into the hexagonal coupling nut, see image 30.
- 2) Check that the Griplock is well tightened in place.
- 3) Apply grease to the hollow threaded stud and install it into the hexagonal coupling nut until it reaches the Griplock extremity.

**⚠ DANGER**

The hollow threaded stud might be very sharp!

- 4) Ensure that the washer and the wing nut are mounted at the minimum distance of  $d=1/2"$ , see image 30.
- 5) Keep a gap between part A and part B as shown in image 30.

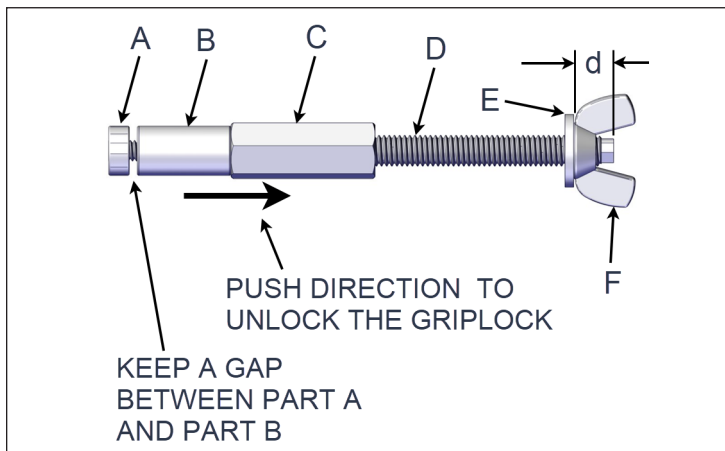


IMAGE 30

ID	DESCRIPTION	ID	DESCRIPTION
A	Griplock nut	D	Hollow threaded stud
B	Griplock	E	Flat washer
C	Hex coupling nut	F*	Win nut or 3/8-16 Hex nut

\* As you prefer, the Griplock can be used with the wing nut or with the hex. nut and a 9/16" wrench. This procedure refers only to the wing nut to simplify the text.

- 6) Push on the Griplock nut according to the specified direction to unlock the mechanism, see image 30.

- 7) Run the wire through the Griplock.

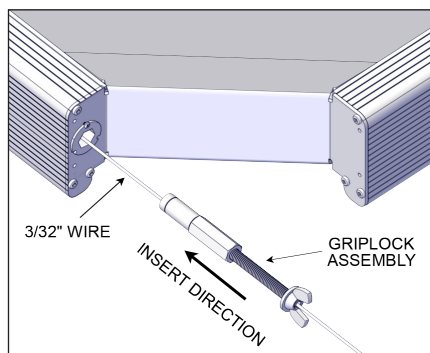


IMAGE 31

- 8) Insert the Griplock assembly into the hexagonal guide bushing (located in the outside corner bracket support), pull on the wire while pushing on the Griplock as much as possible.

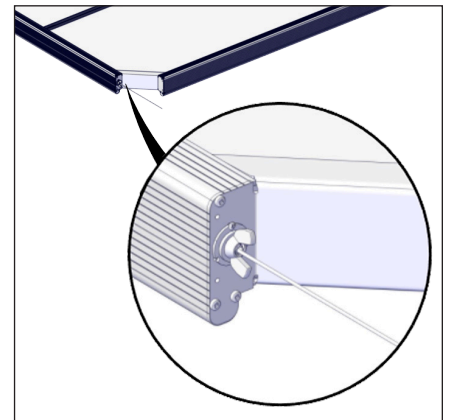


IMAGE 32

**NOTE**

If the Griplock assembly does not fit easily, it must be because the Griplock nut ("A" in image 30) has not been loosened enough.

- 9) Repeat previous steps for other Griplock assemblies on the 3 other corners.

**F- PANEL FINAL TIGHTENING**

- 1) Wear gloves and tighten the wing nut on the hollow bolt in order to compress the panels on the I-beams. Tighten simultaneously the 4 wing nuts by keeping the same number of turns to avoid that mobile parts get stuck on the C-channels and check the gap between the C-channels, see image 34.

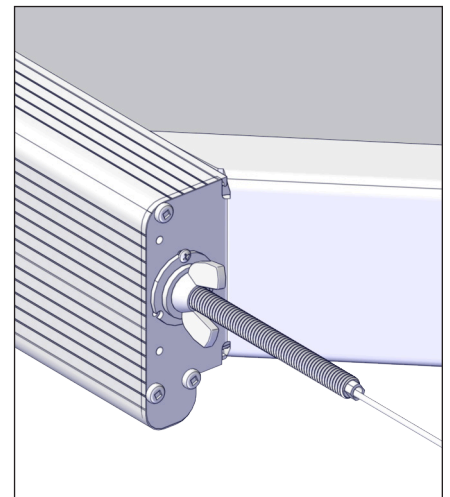


IMAGE 33

- 2) Repeat the process again and again until the short and long C-channels touch each other, see image 34.

If the C-channels still don't touch each other and it is not possible to tighten the wing nut any further, pull on the cable while pushing on the hollow threaded stud to continue the panel tightening. Be careful not to turn the hollow threaded stud, otherwise the cable could be lost.

**⚠ WARNING**

Stop tightening the wing nuts when the C-channels are in contact (no gap between the C-channels).



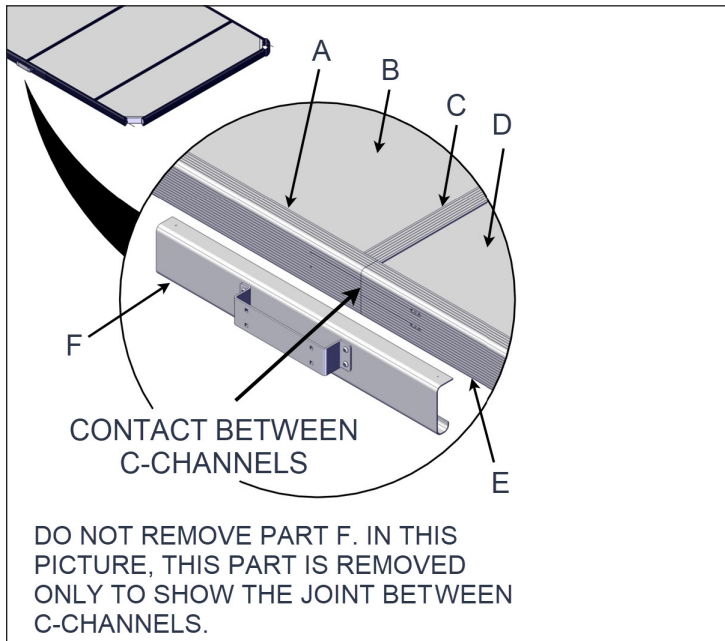


IMAGE 34

ID	DESCRIPTION	ID	DESCRIPTION
A	Middle C-Channel	D	Extra or end panel
B	Middle panel	E	Extension C-Channel
C	I-Beam with I to C long connection plate	F	Support bracket

3) When the previous step is completed, use a 5/32" (4 mm) allen key or Allen head wrench hex screwdriver bit to tighten the 1/4-20 X 1" round head screws on each sleeve mounting bracket and secure them well, see image 35. Those two screws need to be well tightened to keep the I-Beam seals compressed properly.

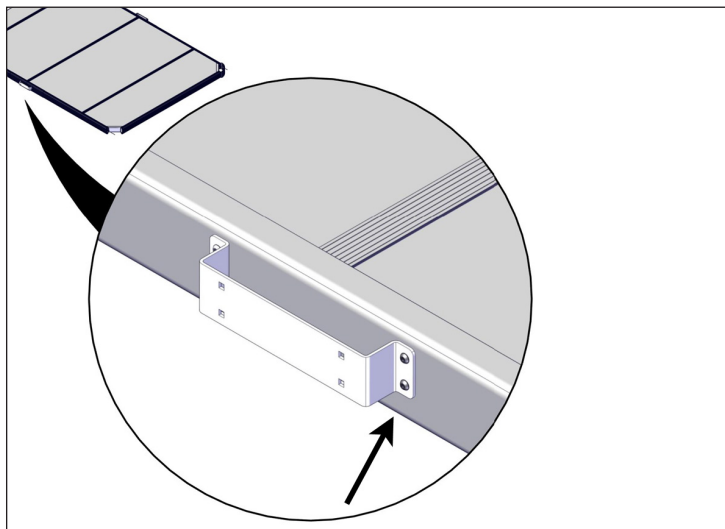


IMAGE 35

4) Repeat the previous steps for all remaining support brackets.  
 5) Next steps show how to drill holes to install the final screws on the support brackets. There are 4 holes to drill in the short support bracket (image 36) and 8 in the long support bracket (image 37).

**WARNING**  
 Make sure the cover is perfectly straight and sitting on the foam spacers before drilling.

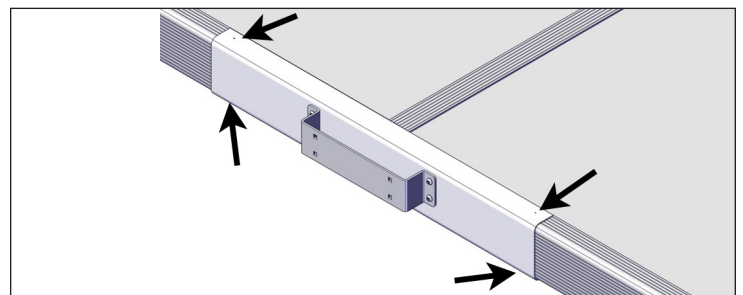


IMAGE 36

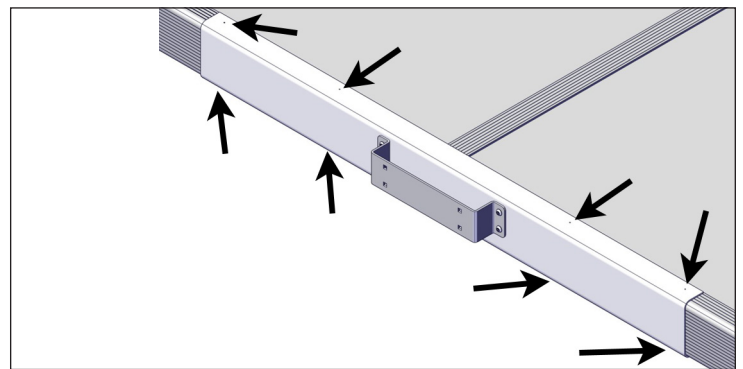


IMAGE 37

6) Use a 5/32" drill bit to drill the holes on the top and bottom of the support bracket. Use the pre-drilled holes in the support bracket as guidance.

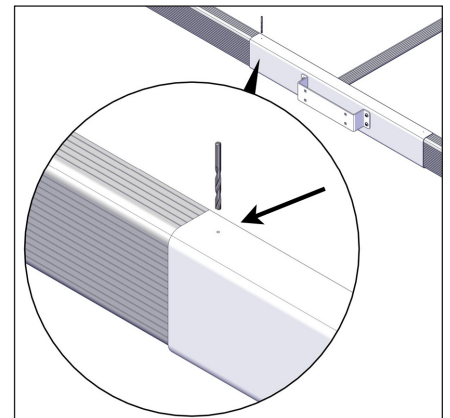


IMAGE 38

**CAUTION**  
 Do not drill the foam panel, only drill through the metal.  
 Be careful while cleaning holes; metal chips might scratch the painted parts.

7) Install the painted Phillips no. 10-24 x 1/2" tapping screws at the bottom and top of the support bracket (4 in the short support bracket and 8 in the long support bracket).  
 8) Repeat previous steps on the other corners.

**G- OUTSIDE CORNER INSTALLATION**

- 1) Remove the previously installed hexagonal guide bushing from each corner bracket support using a Phillips screwdriver. Keep them in a safe location for potential future use.

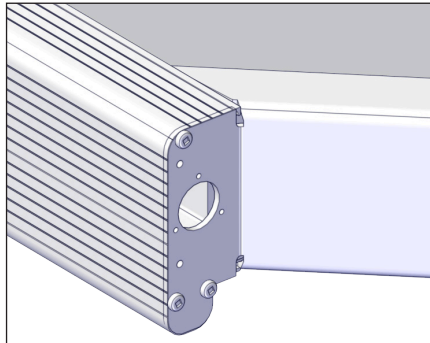


IMAGE 39

- 2) Push the wire in the C-channel and repeat this step on the 3 other cover corners.

- 3) Use a no. 2 6" long Robertson screwdriver to attach the outside corner bracket (left and right) on the corner bracket support by using the no. 8 X 1/2" screws.

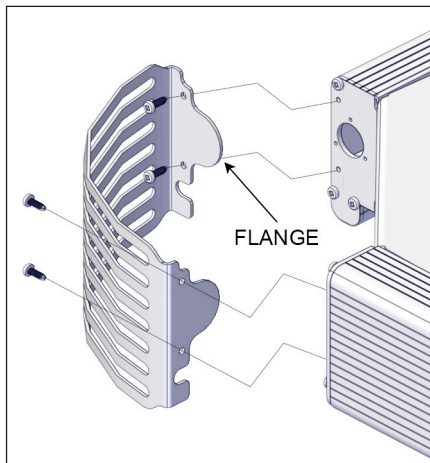


IMAGE 40

**⚠ WARNING**

Do not over tighten the screws as they might break.

**NOTE**

Make sure that the side of the outside corner having a circular flange covers the holes on the inside corner supports.

- 4) Repeat previous steps for the 3 other cover corners.

**H- ESCAPE HATCH INSTALLATION**

- 1) On the escape hatch, check if the release mechanism is working well. Make sure that the hatch arms are retracted when open and non-retracted when closed, see image 41.

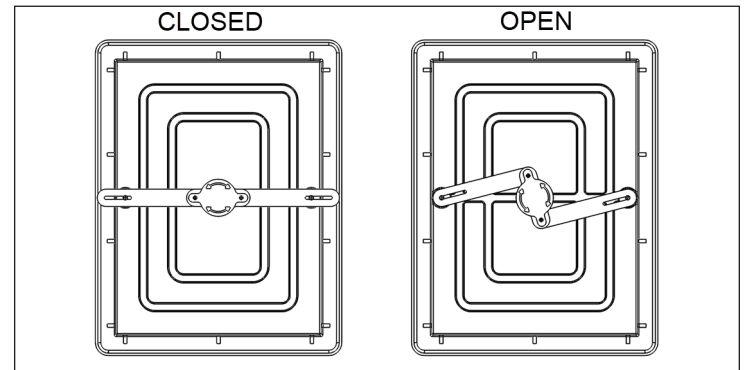


IMAGE 41

- 2) Turn the escape hatch handle to retract the arms and install it into the escape hatch opening of the center panel.

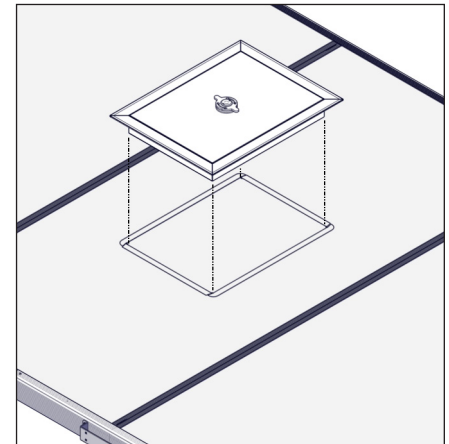


IMAGE 42

**⚠ WARNING**

Failure to install the escape hatch properly may impede the performance of the cover, such as vapor steam leakage, water infiltration and unwanted access to the spa.

All security risks such as drowning, injury or undesired entry due to an open cover without an escape hatch installed are not approved by Covana and product certification will be void.

**I- JOINING COVER TO POSTS**

- 1) Use a 7/16" socket and spanner to fasten the sleeve to its cover mount bracket using the 1/4-20 x 3/4" carriage bolts at the top with 1/4" lock washers and 1/4-20 nuts (see image 2).
- 2) Use the previously removed Robertson no. 8 x 1/2" self-drilling screws (two per post) to attach the top cover on the post (see image 1).
- 3) Repeat the previous steps for each post.
- 4) Put the power back on and the key back in its key switch socket. Operate the spa cover normally to see if everything is correct. If there is any issue with the cover, please refer to the troubleshooting section of the Owner's manual or call Covana for the Technical Support department.

**J- SEAL INSTALLATION**

Refer to the *Seal removal replacement procedure* (no. 245088) or the Legend Owner's manual to install the new contour seal.

**⚠ CAUTION**

If parts of the previous cover have been reused, make sure that there is no glue residue left before installing the new seal.

**IMPORTANT**

Reinstall the all-weather seals in their original position; i.e., on the outer sleeve extremity of every post.