



#### **COVER RECOMPRESSION PROCEDURE**

Date: April/29/2021

RPL023-CA-242896

Rev.: 0

#### PRODUCT MODEL INVOLVED

Herein, is the installation procedure involving the following product:

- Covana Legend
- Covana CEP

#### PURPOSE OF THE REPAIR PROCEDURE

This repair procedure must be performed to fix a leaking issue of the seals between I-Beams and the cover panels on a COVANA LEGEND or CEP, when the seals have been diagnosed as under compressed. Once this procedure is completed, it is recommended the fill once again the leaking document and test the cover to make sure the leaking is fixed.

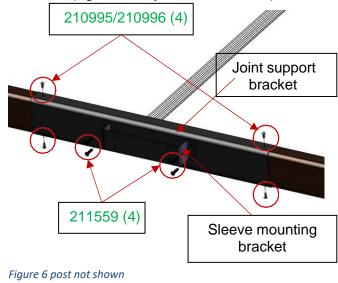
#### TOOLS AND PARTS NEEDED

To perform that installation, the following tools are needed:

- 1 X 5/32" (4 mm) Allen key or Head Allen Wrench Hex screwdriver Bit
- 1X 3/32" Allen key
- 1 X Cordless electrical drill
- 1 X #2 Phillips drive bit 6" long
- 1 X #1 Phillips screwdriver
- 1 X #2 Robertson drive bit 6" long
- 1 X 7/16" (11 mm) socket and spanner
- Measuring tape
- Step Ladder
- Seal J-Roller (recommended)
- Anti-seize lubricant

# A- STEPS TO FOLLOW TO PREPARE THE COVER

1) Use a 5/32" (4 mm) Allen key or an equivalent tool to loosen the ¼"-20 X 1" button head socket cap screws (211559) on each sleeve mounting bracket. Then use a #2 Phillips screwdriver 6" long to remove #10-24 X ½" round head Phillips cap screws (210995/210996) on each joint support bracket. (*Figure 6, post not shown*).



#### **B - STEPS TO FOLLOW TO REASSEMBLE THE COVER**

#### PANEL FINAL TIGHTENING

- Use the rachet straps to compress the entire cover assembly (*Figure 54*) until you are left with a gap between the short C-channel and the middle C-channel between 1/16" and 3/16" see *Figure 55*.
- 2. While you are compressing the cover make sure it stays as straight as possible by tightening both sides at the same time and is safely resting on the foam bumpers.



## CAUTION

Use cardboard or a non-abrasive material to protect panels while using ratchet straps.

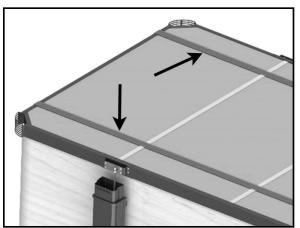


FIGURE 54: TIGHTENING WITH STRAPS

# WARNING

Do not over tightening the straps. Over tightening might permanently damage the sealing components of the I-Beams and allow for water infiltration. Tighten slowly and stop when the gaps are between 1/16" and 3/16".

Make sure both end C-channel and all corner brackets are in place before tighten the straps.

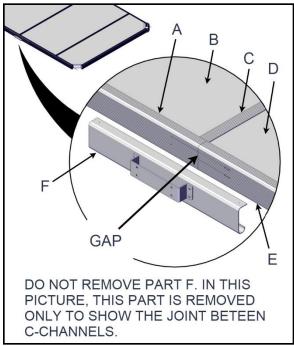


FIGURE 55: GAP BETWEEN C-CHANELS

ID	DESCRIPTION
А	MIDDLE C-CHANNEL
В	MIDDLE PANEL
С	I-BEAM WITH I TO C LONG CONNECTION PLATE
D	EXTRA OR END PANEL
Е	EXTENSION C-CHANNEL
F	SUPPORT BRACKET

3. When you are satisfied with the required gap and the straps are secured, <u>tighten the two</u> <u>screws (5 ft-lb torque)</u> see <u>*Figure 56*</u>.



### WARNING

Do not remove or loose straps until the assembly is final.

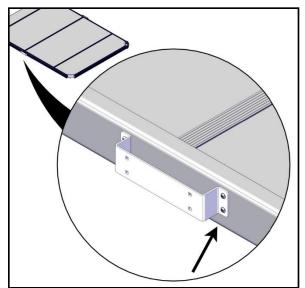


FIGURE 56: SUPPORT BRACKET SCREW TIGHTENING

- 4. Repeat the previous steps for all remaining support brackets.
- Next steps show how to drill holes to install final screws on the support brackets. There are 4 holes to drill for the short support bracket (*Figure 57*) and 8 holes to drill for the long support bracket (*Figure 58*).



### WARNING

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

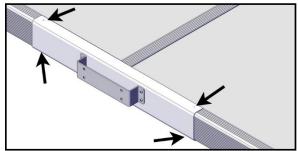


FIGURE 57: LOCATION OF THE DRILLING HOLES (4) IN THE SHORT SUPPORT BRACKET

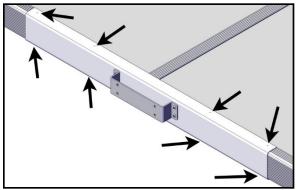


FIGURE 58: LOCATION OF THE DRILLING HOLES (8) IN THE LONG SUPPORT BRACKET

6. Use the provided 5/32" drill bit to drill the holes on the top and bottom of the support bracket see *Figure 59*. Use the pre-drilled holes in the support bracket as guidance.



# CAUTION

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

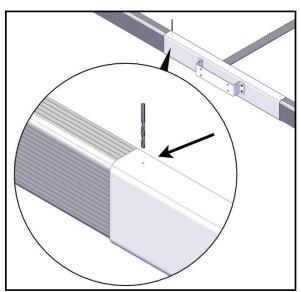


FIGURE 59: HOLE DRILLING THROUGH THE C-CHANNEL

7. <u>Install the painted Phillips #10-24 x 0.5''</u> tapping screws at the bottom and top of the support bracket see *Figure 60*.

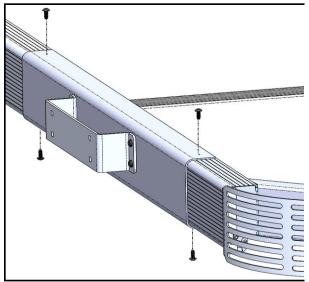


FIGURE 60: SCREW INSTALLATION ON THE SUPPORT BRACKET

8. Repeat previous steps on the other cover corners.

#### JACK INSTALLATION

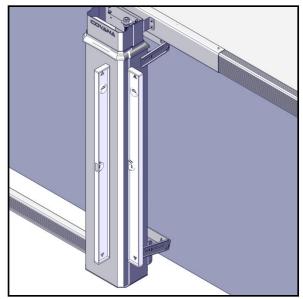


FIGURE 80: POST LEVEL ADJUSTMENTS

21. Check if the posts are still level on both vertical axes. If not, unscrew the mount arms and reposition the sleeves. Use the outer sleeve as a reference. Use the 48" (122 cm) level see *Figure 80*.

# $\triangle$

## WARNING

Failure to properly level the posts could cause aesthetic damage, even mechanical damage or malfunction.

24. For all posts, slide the all-weather seals down. Ensure they are properly seated on the outer sleeve base. Push down on the seal as shown in *Figure 82*.



Improper installation of the all-weather seal could result in unwanted performance and reduce the lifespan of the mechanical lifting components

Improper installation of the all-weather seal might cause damage to the lifting mechanism.

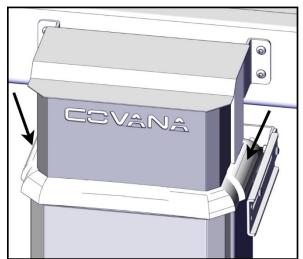


FIGURE 82: SEAL INSTALLATION

#### **TESTING THE COVER**



never completely lift the cover while performing this test sequence.

# V

## WARNING

For AC-operated models, all electrical connections must be done by a certified electrician.

- 1. Ensure there are no objects directly above or in the path of the cover opening while performing this test. If there is, do not fully lift while performing the start-up procedure.
- Use the key switch to lift it by approx. 8" (20 cm). Make sure the cover is lifted evenly (there are no corners higher than the others).
- 3. Bring the cover down again and ensure the cover is evenly seated on the pieces of foam all around the spa perimeter.
- 4. Lift the cover halfway up.
- Check if the middle sleeves are free by sliding them up and down by hand. Test if the middle sleeve slides without scratching or interfering with inner or outer sleeve. If all seems to function properly, lower the cover and check if the sleeves are level using the 48" (122 cm) level on both sides of the sleeves as shown in <u>Figure 80</u>.
- 6. Lift the cover all the way up (or as high as possible without objects obstructing cover) and pay attention to any abnormal sound (metal grinding or knocking). If so, stop any movement, consult the <u>TROUBLESHOOTING</u> section and inspect all the systems.
- 7. Lower the cover and ensure it stops at the zero position and the cover is evenly seated on all pieces of foam around the spa.
- Permanently mount the key switch at least 5 feet (1.5 m) away from the spa and 5 feet (1.5 m) above the deck or ground level see. Ensure the user has a clear view of the cover when operating it. Cut the power when installing the key switch.



# WARNING

The key switch must be permanently mounted and located 5 ft (1.5 m) away from the spa and 5 ft (1.5 m) above the deck or ground level see. This ensures the user has a clear view of the cover when operating it. Furthermore, the key switch terminal should be located in a location where no water downpour or debris could fall on it.

Failure to properly install the key switch according to these instructions will void the warranty and product certification.



Failure to properly install the key switch according to these instructions could result in injury or even death.

## TROUBLESHOOTING

PROBLEM	PROBABLE CAUSES	SOLUTIONS
The cover does not raise or lower (Silent motor and no movement)	<ul> <li>The GFCI is tripped.</li> <li>The power source is disconnected.</li> <li>Battery has low power.</li> <li>Controller is in "lockout" mode.</li> </ul>	<ul> <li>Reset the GFCI.</li> <li>Verify that the power source is enabled.</li> <li>Check the breaker panel.</li> <li>Verify whether the cables were damaged or pinched.</li> <li>Disconnect the battery for 60 seconds to reset the controller.</li> </ul>
The cover does not raise or lower. (Motor humming and some visible movement)	<ul> <li>Posts are frozen.</li> <li>Jack assemblies are jammed.</li> <li>The motor is obstructed.</li> <li>Posts are obstructed.</li> <li>The debris on the cover is to heavy.</li> <li>The power source is disconnected.</li> </ul>	<ul> <li>Charge battery.</li> <li>Remove all the debris from the top of the cover.</li> <li>Verify whether any posts are obstructed.</li> <li>Use methanol to free ice buildup on posts.</li> <li>Apply grease on the post assemblies.</li> <li>Verify the relative position of the four posts (See Foundation Preparation section).</li> <li>Call your Local authorized Covana dealer.</li> </ul>
The posts are not equally positioned.	<ul> <li>The chain skipped during operation.</li> <li>A spring pin at the bottom of a jack is broken.</li> <li>A drive shaft has fallen off.</li> <li>Excessive weight on one side of the cover.</li> <li>Controller does not calculate the height properly.</li> </ul>	<ul> <li>Verify whether a drive shaft has fallen off and if it is the case, reinstall the shaft.</li> <li>Lower the cover and replace the chain.</li> <li>Replace any missing or broken spring pin.</li> <li>Remove all debris from the top of the cover.</li> </ul>
The middle sleeve has gripped and might hNGave dropped abruptly	<ul><li>Posts are frozen.</li><li>The stopper kit is broken/missing.</li></ul>	<ul> <li>Verify the position of the all-weather seal, while cover is closed. It must be sitting on the top of the outer sleeve</li> <li>Check whether the stopper kit is broken/missing.</li> <li>Reinstall the sleeves.</li> <li>If all previous attempts failed, contact your local authorized Covana dealer.</li> <li>Check level on 2 faces of the sleeve.</li> </ul>

PROBLEM	PROBABLE CAUSES	SOLUTIONS
Escape hatch doesn't open/close	<ul><li>Mechanism is jammed.</li><li>Verify the position of the locking mechanism.</li></ul>	<ul> <li>Refer to the <u>USING THE ESCAPE HATCH</u> section.</li> <li>Remove theescape hatch from the underside of the cover and clean it to free the mechanism.</li> <li>If all previous attempts failed, contact your local authoriz ed Covana dealer.</li> </ul>
The cover raises unevenly.	<ul> <li>The chain is broken.</li> <li>A spring pin is broken.</li> <li>A drive shaft has fallen off.</li> <li>Posts are gripped</li> </ul>	<ul> <li>Call your local certified Covana dealer for technical support.</li> </ul>
Cover seal turned black.	. The seal has accumulated mold.	<ul> <li>Clean the affected areas with bleach and a soft brush. Rinse well with water.</li> </ul>