

COVANA

SPA COVER MANUFACTURER

OWNER'S MANUAL



MANUAL NO. 245092

C-EP COVER

MANUAL NO. 245092

First edition 12-02-2021

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0	OWNER'S MANUAL NEW RELEASE	12-02-2021

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INTRODUCTION

As part of its ongoing commitment to improve the quality, reliability, durability and safety of its products, Covana is proud to present this edition of the cover Owner's Manual.

The various sections that make up this manual will provide you with the most recent information allowing you to understand the operation of the cover, its installation and its maintenance in order to obtain complete satisfaction and to ensure maximum safety and comfort for users.

CONGRATULATIONS FOR THE PURCHASE OF YOUR NEW COVANA COVER

Thank you for choosing our product. The Covana cover you have chosen is the result of excellent engineering, attention to detail and a great deal of pride. With proper care and attention, your cover will last many years and offer great performance.

Although our products are built to last, we strongly recommend that you register your cover at the time of purchase to ensure an adequate follow-up process.

In fact, registering the cover allows us to quickly reach you in the unlikely event a safety notice has to be issued. Your product and safety are a top priority for us at Covana.

You will need your original sales receipt as proof of purchase to obtain warranty service and the work must be performed by a certified technician. If your cover is ever to malfunction, your product registration will allow us to access necessary information in a timely manner.

Experience the benefits of registering your cover at <https://www.covana.com/warranty.html>.

Please take a few minutes to read all the instructions before you use your new cover. This owner's manual indicates how your cover works, how to install it and how to care for it, so you will get the most from your cover for many years.

For service and advice, do not hesitate to call your local authorized Covana dealer.



FIGURE 1: C-EP COVER

IMPORTANT INFORMATION

Danger, Warning, Caution and Note are used throughout this manual to emphasize important points when necessary:



DANGER

Directs the user's attention to unsafe practices which could result in serious personal injury or death.



WARNING

Directs the user's attention to unsafe practices which could result in serious personal injury or severe damage to the cover.



CAUTION

Directs the user's attention to unsafe practices where personal injury is not likely but damage to cover components could occur.

NOTE

Indicates supplementary information essential to the proper operation of the cover or proper installation or proper maintenance.

The lifespan of your new cover depends on the kind of attention it receives. Pay close attention to the WARNINGS, CAUTIONS, and NOTES.

Read the various notices and instructions attached to the equipment.

Keep this manual in a safe location.

NOTE

Illustrations in this manual are used for reference only and may differ from the actual cover; however, key components addressed in the manual are represented as accurately as possible.

Before reproducing or copying this manual, in whole or in part, written consent must be obtained from Covana. Covana reserves the right to make changes without notice and without incurring any obligation.

SAFETY

The cover was designed, tested and certified to be installed over a residential spa under important installation instructions issued by Covana. Any other type of usage will void the warranty and product certification.

The extra load maximum weight provided in the TECHNICAL SPECIFICATIONS section of this manual is a provision for environmental outcomes, such as a small amount of leftover snow or damp leaves that temporarily accumulate on the cover and evenly distributed on the surface of the cover.

The cover was not designed to support any additional load or people walking or standing on its lid. Failure to observe this instruction will void the cover warranty and nullify its certification.

The power safety cover meets ASTM F1346-91 requirements.

DRUGS AND ALCOHOL



DANGER

The use of drugs or alcohol while operating the cover is strictly prohibited. The impairment of judgment, vision or hearing might affect the safety of other people or result in death.

IMPORTANT SAFETY INSTRUCTIONS



WARNING

KEEP THESE INSTRUCTIONS IN A SAFE LOCATION.

REVIEW THESE INSTRUCTIONS REGULARLY.

NOTE

READ AND FOLLOW ALL INSTRUCTIONS.

**DANGER**

- To reduce the risk of injury, do not allow children under the age of 18 to use this product unless they are supervised at all times.
- Failure to follow all the instructions may result in injury or even death.
- Do not climb or walk on the cover at any time.
- Do not allow children to have access to the cover operation without supervision.
- Never operate the cover until all people and objects are out of the spa.
- Do not operate the cover in extreme wind. See section Technical specifications for the wind limitations.
- The cover must be completely visible when operating the key switch.

**WARNING**

- Be sure to keep the key switch and key out of the reach of children under the age of 18.
- Do not put any type of fabric or plastic sheet, such as a tarpaulin or canvas, on the cover. This may overheat the cover and result in the deformation or delamination of the cover panels.
- Inspect the cover periodically. It should raise smoothly and evenly. Contact your Covana dealer if any unusual mechanical sound is heard during cover operations.

**DOS**

- Remove the key from the key switch after operating the cover. Store the key in a secure location when not in use. Users must bring the key in the spa with them to prevent the unauthorized operation of the cover.
- Never leave the key into the key switch.
- Check the cover frequently for any sign of deterioration.
- Have any repairs, adjustments or mechanical work performed by a certified Covana dealer as soon as possible when you notice any malfunction.
- Completely lower the cover when it is not in use or if the spa is not being monitored.
- The cover should only be operated by an adult.
- This product can be operated by an 8-year-old or older child and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge **ONLY** if they are supervised by an adult or have received instructions regarding safe use of the cover.
- Children must not play with the product. Cleaning and user maintenance must not be performed by children without supervision.



DON'TS

- Do not operate the unit before all mechanical and electrical connections are completely installed.
- Do not operate the cover while somebody is in the spa.
- Do not climb, walk, sit or stand on the cover at any time.
- Do not keep the cover open for more than 12 hours. This may cause permanent deformations to the cover.
- Do not converge or directly reflect sunlight on the cover. This could cause permanent damage.
- Do not wash the cover with harsh chemicals or cleaners.
- Do not use a pressure washer to clean any component of the cover. This could result in premature wear or damage.
- Do not use an extension cord to supply electrical power to the cover. The extension cord may not be properly grounded, and the connection is an electrical shock hazard. An extension cord may cause a voltage drop, which may cause the motor to overheat.



CAUTION

- Be sure to follow all instructions in this manual and use only accessories and tools approved by Covana.
- Do not rotate or slide the cover using its edges. This may damage the edge components.
- After removing a component, always keep it in a safe location on a clean and level surface to ensure proper functionality.



CAUTION

- This product mainly contains steel, plastic, fiberglass, foam, copper and die-cast aluminum. Please recycle properly according to the local rules.

RISK OF ELECTROCUTION



CAUTION

All electrical work should be done by a certified electrician, otherwise the certification and warranty will be void. Furthermore, any modifications to the electrical components will also void the warranty.



DANGER

Failure to comply with these instructions may result in death by electrocution or serious injury

**DANGER**

- Disconnect or turn off and secure all power supplies before starting any intervention on the cover.
- A circuit breaker needs to be incorporated into the fixed wiring at the time of installation. This circuit breaker must be accessible to the user or service technician to turn the power off for future maintenance or repair.
- Only a certified electrical contractor may perform any electrical maintenance on the cover. The wiring must comply with all applicable local electrical regulations.
- The control box must be connected to a circuit that is protected by a dedicated ground fault circuit interrupter (GFCI) that complies with all applicable local electrical codes and regulations.
- Install the cover in such a way that drainage directs water away from the electrical and the mechanical components at the base.
- Do not connect any auxiliary components to the electrical system of the cover unless they have been approved by Covana.
- Replace electrical components with original components provided or approved by Covana. Ask your dealer for replacement parts.
- To reduce the risk of electrical shock, replace a damaged electrical cord immediately. Failure to do so may result in death or serious personal injury due to electrocution.
- Do not bury the electrical wires into the ground unless using a direct-burial underground cable. Not respecting this precaution may result in death, or serious personal injury due to electrocution.

ELECTRICAL WARNING**WARNING**

- To reduce the risk of electrical shocks, the green-colored terminal (or the terminal marked "g," "gr," "ground," "grounding" or with a \equiv symbol) that is located inside the supply terminal box or compartment must be connected to the grounding connection provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying the equipment.
- All field-installed metal components, such as rails, ladders, drains or other similar hardware, within 10 ft (3 m) of the spa must be bonded to the equipment grounding bus with copper conductors not smaller than No. 6 AWG (4.11 mm / 13.30mm²). (NEC art. 680).

MODIFICATIONS TO THE COVER**WARNING**

- Any modifications to the cover, such as mechanical, electrical or aesthetic, may cause the cover to operate in an unwanted or dangerous way. Furthermore, these modifications are not permitted and might void the warranty and certification.
- The cover has been designed, tested and certified for the only purpose of covering and securing a spa. Any installation that differs partly or entirely from this purpose will void the warranty and certification.

**SAVE THESE
INSTRUCTIONS**

POSITION OF THE KEY SWITCH



WARNING

- The key switch must be permanently installed and located 5 ft (1.5 m) away from the spa and 5 ft (1.5 m) above the deck or ground level, see [Figure 2](#).
- Make sure the user has a clear view of the cover when operating it.
- Furthermore, the key switch must be located in an area where no water downpour or debris might fall on it.

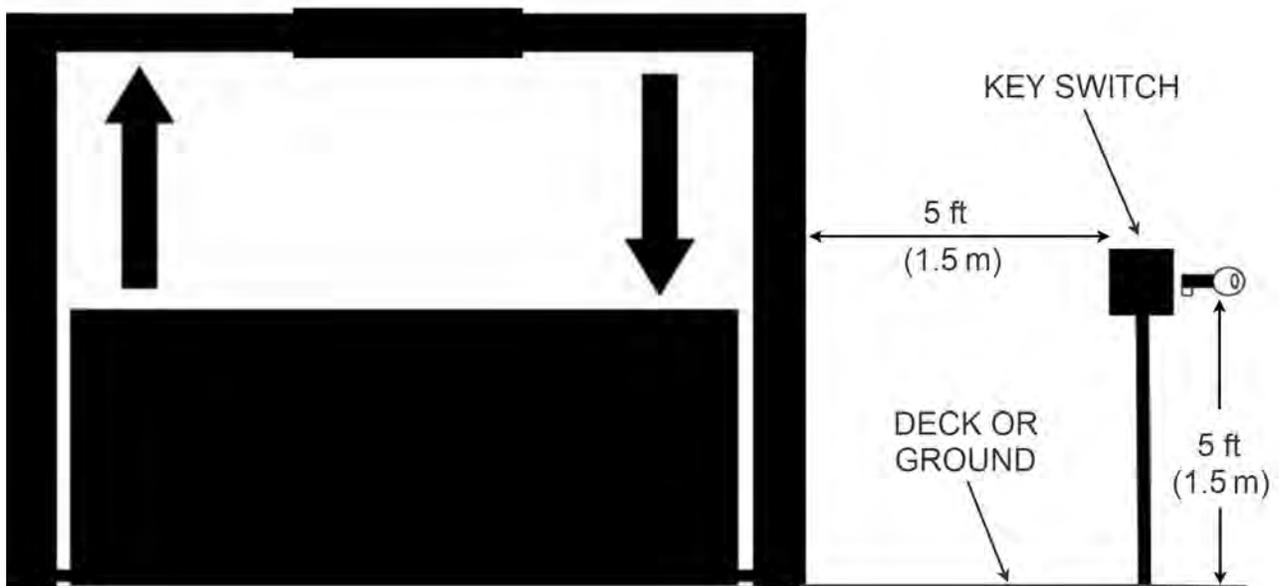


FIGURE 2: POSITION OF THE KEY SWITCH

LABELING

This section shows the location of all safety labels. They are positioned on various components for your safety.

 WARNING
<p>Removing any labels on the cover will void product certification.</p> <p>All labels should always remain visible.</p> <p>It is the owner's responsibility to ensure that these labels are always visible and should never be removed.</p>

RISK OF ELECTROCUTION

(For AC-operated models only)

This label warns you about the risk of electrocution. It is located on the AC control box

 WARNING
<p>RISK OF INJURY DISCONNECT OR TURN OFF ALL POWER SUPPLY BEFORE STARTING INTERVENTION ON THE SPA COVER</p>
 AVERTISSEMENT
<p>RISQUE DE BLESSURE DÉBRANCHER OU COUPER L'ALIMENTATION ÉLECTRIQUE AVANT TOUTE INTERVENTION SUR LE COUVERCLE DE SPA</p>
 ADVERTENCIA
<p>RIESGO DE LESIONES DESCONECTAR O APAGAR LA CORRIENTE ELÉCTRICA ANTES DE COMENZAR A TRABAJAR EN LA CUBIERTA DEL SPA</p>

FIGURE 3: RISK OF ELECTROCUTION

INFORMATION ON THE ELECTRICAL CABLES

These labels inform the user about the danger of electrocution with the presence of water near the electrical wiring.

The labels are located on the power cable near the key switch.

<p>LINE LE MANUEL D'INSTRUCTION</p>	<p>PROHIBIDO OPERAR EN EL AGUA CUBIERTA ESTANDO RIESGO DE LESIONES</p>
 ATTENTION	 ADVERTENCIA
<p>READ THE INSTRUCTION MANUAL</p>	<p>RISK OF INJURY WHILE IN WATER DO NOT OPERATE</p>
 CAUTION	
 CAUTION	 WARNING
<p>CONNECT ONLY TO A CIRCUIT PROTECTED BY A CLASS A GROUND FAULT CIRCUIT INTERRUPTER</p>	<p>AVERTISSEMENT</p> 
 ATTENTION	<p>NE PAS ACTIVER EN ÉTANT DANS L'EAU RISQUE DE BLESSURE</p>
<p>CONNECTER UNIQUEMENT À UN CIRCUIT PROTÉGÉ PAR UN DISJONCTEUR DIFFÉRENTIEL DE CLASSE A</p>	<p>100448</p>

FIGURE 4: DANGER WITH WATER

KEY SWITCH OPERATION DIAGRAM

This label shows you how to turn the key into the key switch to lift up or lower the cover.

The label is located on the key switch.

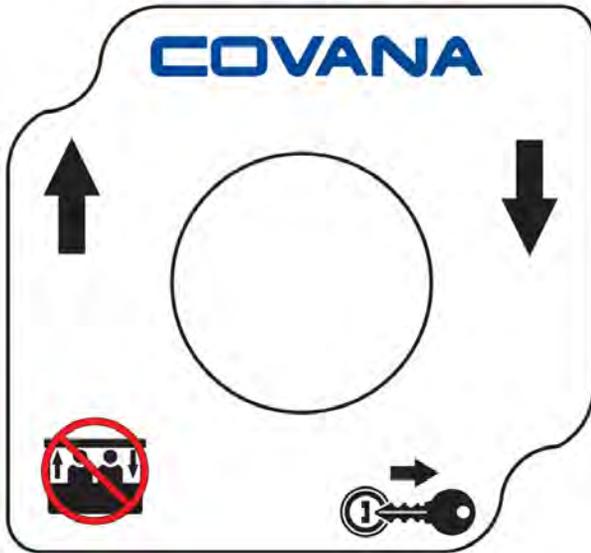


FIGURE 5: KEY SWITCH OPERATION DIAGRAM

TECHNICAL SPECIFICATIONS

This label shows the important technical specifications. It is located on the control box of the AC-operated model.

NOTE

This label also shows the serial number of the cover.

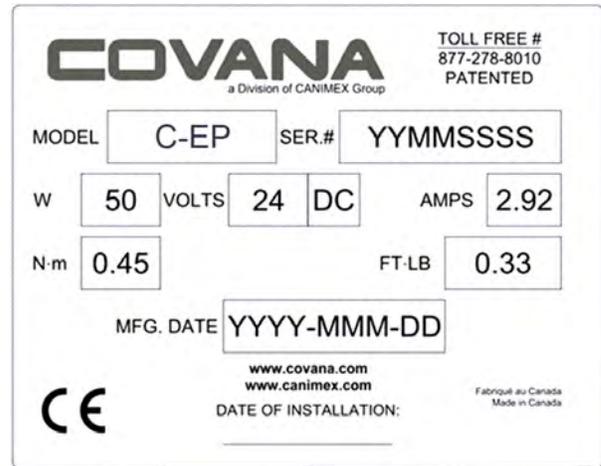


FIGURE 6: FOR BATTERY OPERATED MODEL ONLY

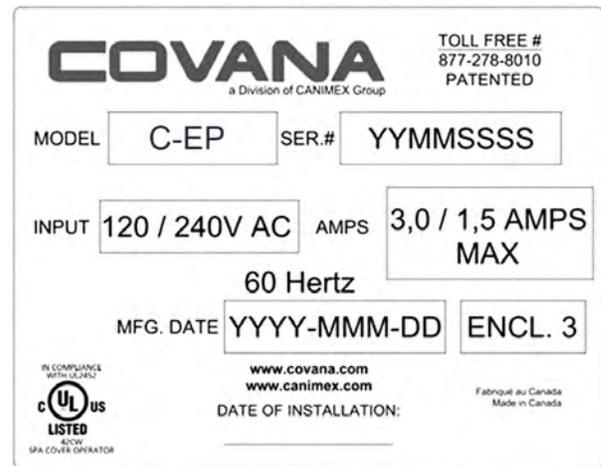


FIGURE 7: FOR AC OPERATED NORTH AMERICAN MODEL ONLY

NO STEP LABEL

This label is a reminder not to step on this area of the unit.

The label is located on the top of the control box of the AC-operated model.



FIGURE 8: NO STEP LABEL

AVOID DROWNING LABEL



FIGURE 9: AVOID DROWNING LABEL

DO NOT STEP ON THE COVER LABEL

This label is a reminder not to step on the cover. The labels are located on the end of the C-channels of the cover.

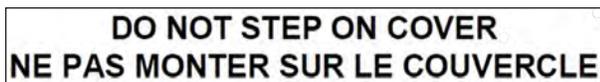


FIGURE 10: DO NOT STEP ON THE COVER LABEL

MAINTENANCE INFORMATION LABEL

This label displays the web site where you can get more information on maintenance procedures. It is located on one of the C-channels.



FIGURE 11: MAINTENANCE INFORMATION LABEL

CENTER LABEL

This label is located on the 94.6" (240 cm) long C-channel (remove after installation).

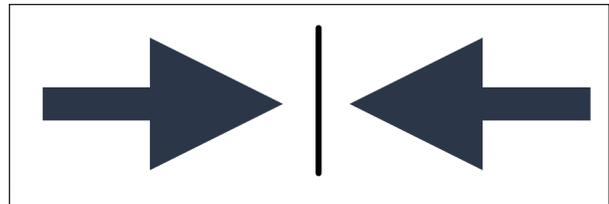


FIGURE 12: CENTER LABEL

TOP LABEL

This label is located on the I-Beams and the escape hatch opening.



FIGURE 13: TOP LABEL

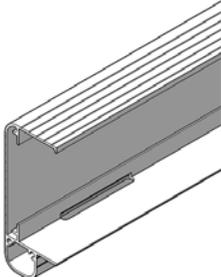
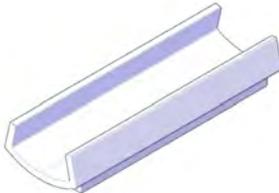
BATTERY SPECIFICATION LABEL

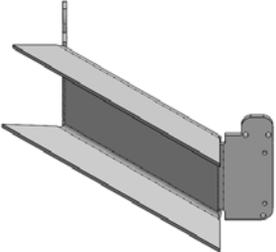
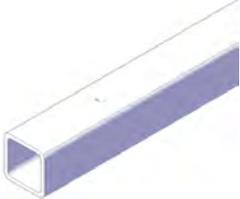
This label is located on the battery pack casing.

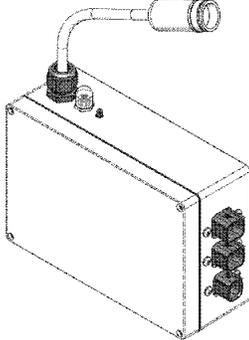
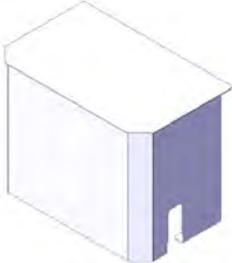


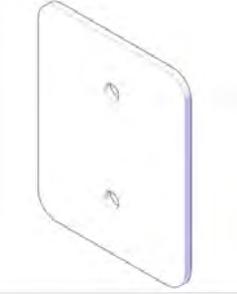
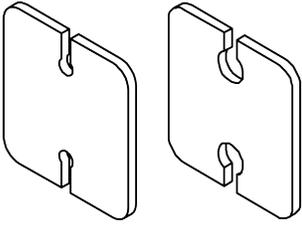
FIGURE 14: BATTERY SPECIFICATION LABEL

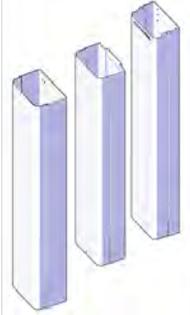
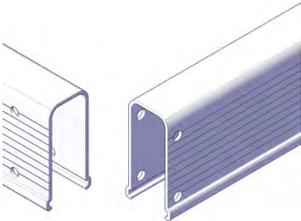
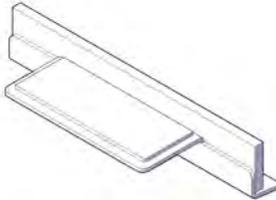
GLOSSARY

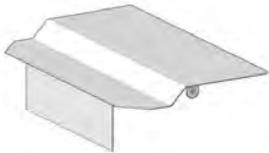
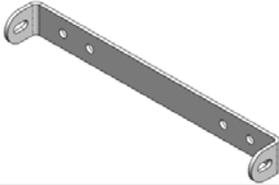
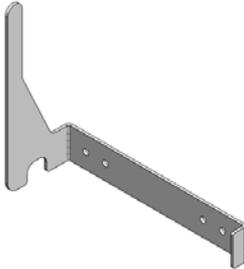
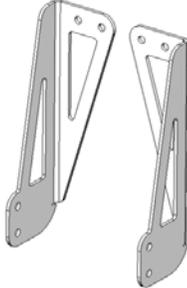
PART	IMAGE	FUNCTION
Sleeve all-weather seal		This all-weather seal protects sleeves from damage due to weather.
C-channel		The C-channel is the outer frame of the cover panels.
Contour seal		The contour seal ensures even contact between the cover and the spa, preventing the entry of contaminants into the spa or the loss of heat from the spa.
Contour seal installation clip		Contour seal installation clips are temporary parts used to facilitate the installation of the seal. The clips are used during the installation process to ensure the seal is installed properly.
Contour seal connector		The seal connector is used to link both ends of the contour seal.

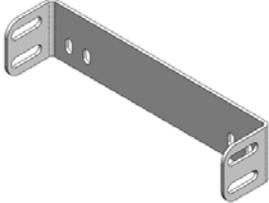
PART	IMAGE	FUNCTION
Outside corner		<p>The outside corner is an aesthetic aluminum grid fixed to the corner bracket.</p>
Outside corner bracket		<p>The outside corner brackets link the C-channels on the side to the ones in front and back.</p>
Drive shaft		<p>The drive shaft transmits the power between the jack assemblies.</p>
Escape hatch		<p>The escape hatch is a removable panel and part of the cover. Refer to section <u>USING THE ESCAPE HATCH</u>.</p>
AC control box (AC-operated model only)		<p>The AC control box powers and controls the lifting mechanism of the cover.</p>

PART	IMAGE	FUNCTION
Battery pack (Battery-operated model and battery backup only)		The battery pack is a sealed case where the two 12 V batteries are located.
Control box (for battery-operated model only)		The control box manages the movement of the unit.
Control box housing (for battery-operated model only)		The control box housing contains the control box and the battery pack of the cover.
I-beam		The I-beams are the aluminum extrusions installed between the cover panels.
I to C connection plate (long)		The long I to C connection plate makes the link between the I-beam, the C-channels, and the sleeves.

PART	IMAGE	FUNCTION
I to C connection plate (short)		<p>The short I to C connection plate is installed between the I- beams and C-channels.</p>
I to C spacer		<p>The I to C spacer creates the necessary space between the I to C connection plate, thus allowing the I-Beam to easily slide into the C-Channel. It prevents the over tightening of the I to C connection plates.</p>
Key switch		<p>The key switch is used to operate the cover.</p>
Foam spacer		<p>The foam spacer are used for the installation process to protect the spa from direct contact with the cover. They are removed after installation of the contour seal.</p>
Post mount bracket		<p>Post mount bracket links the sleeves and posts to the cover.</p>

PART	IMAGE	FUNCTION
Jack assembly (with or without motor)		The jack allows the cover to move up and down.
Support bracket		The support bracket strengthens the joint between the center C-channel to the C-channel on either side. It clips and is screwed on the top and bottom. It also acts as the link between the cover and the inner sleeve of the post via the cover mounting bracket.
Sleeve		The sleeves are aluminum extrusions to hide and protect the jacks.
U-frame		The U-frames protect the drive shaft. They are fastened to the bottom of the posts.
Wiper		The wiper is attached under the I-beams. This component ensures the waterproofing of the cover.

PART	IMAGE	FUNCTION
Top plate		<p>The top plate is a cover that is installed on the sleeve assembly.</p>
Tub mount bracket C-EP		<p>This bracket links the cover to the swim spa. If the swim spa is 50" (127 cm) high, two of these brackets are mounted on the swim spa per post. If the swim spa is 58" (147 cm) high, only one bracket is mounted at the bottom of the swim spa.</p>
Drilling template		<p>Facilitates the installation of the brackets and used to center the cover onto the swim spa.</p>
Short arms		<p>Links the upper tub mount bracket to the sleeve bracket for the 50" high swim spa.</p>
Long arms		<p>Links the swim spa to the sleeve bracket for the 58" high spa.</p>

PART	IMAGE	FUNCTION
Lower arms		Links the lower tub mount bracket to the sleeve bracket.
Sleeve bracket		Links the sleeve to the arms.

INSTALLATION PROCEDURE

This section shows the procedure on how to install your new cover on your spa.

It requires two people for certain steps.

Wear the necessary PPE such as protective glasses, boots and gloves.



CAUTION

The cover should be installed by a certified Covana installer. Having the cover installed by someone who is not certified will void the warranty.

Ask your local Covana dealer for information on certified installers.

TOOLS REQUIRED

- Scissors or a utility knife
- Sheet metal shears
- Robertson screwdriver
- Slotted screwdriver
- Phillips screwdriver
- Hammer
- 3/8" (10 mm) socket wrench and spanner
- 7/16" (11 mm) socket wrench and spanner
- 1/2" (13 mm) socket wrench and spanner
- 9/16" (21 mm) wrench
- 5/32" (4 mm) Drill bit (supplied)
- 9/32" (7 mm) Drill bit (supplied)
- 5/32" (4 mm) Allen key (supplied)
- 7/32" (5.5 mm) Allen key
- 25' (7.62 m) measuring tape
- Rubber mallet

- SAE or metric Socket kit
- 48" (122 cm) level
- Step ladder
- J-Roller with rubber roller

PREPARATION FOR THE INSTALLATION

To ensure safe use of the cover, it must be installed on a properly prepared surface. It is important to adequately prepare the foundation and carefully read the following recommendations.

SPA LOCATION CONSIDERATIONS

Make sure the future cover location is not subject to the water downpours or debris falling.

Make sure the base of the cover is not in a flood zone. Any damage caused by flooding or water accumulation will not be covered by the warranty.

Make sure there are no obstacles, such as branches or electrical power lines, in the operating area of the cover.

Refer to the Technical Specifications section for cover dimensions

Make sure there is safe access to the spa, free of obstacles or debris.

All the base components of the cover must be supported by the foundation.

Do not converge or directly reflect sunlight on the cover. This could cause permanent damage (Example: reflection from a window).

Make sure the cover is installed on a clean surface free of any vegetation, such as grass, branches or roots, or mineral contaminants, such as rocks, dust or sand.

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 [Figure 2](#). 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.

DANGER

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

WARNING

Failure to permanently install the key switch as indicated could void the warranty and certification. Only proper installation of the key switch combined with the suggested procedures and caution will reduce such risks.

Do not install the cover in an area prone to snow accumulation and water run-off.

FOUNDATION PREPARATION

The cover requires a clean, flat and level surface, such as an engineered wood deck or a concrete slab.

Each of the four jacks of the cover must be properly fastened to the spa frame. It is the installer's responsibility to ensure the cover is properly fastened in a safe manner.

Just like the spa, the cover requires a solid foundation. The foundation for the cover must be able to support at least 1,000 lb (454 kg).

Ideally, the cover must be put on the spa foundation, see Technical Specifications section. When not possible, a concrete pier or some cover's support dedicated slabs must be provided see Technical Specifications section. Those independent supports must respect the same level variation as mentioned below.

The foundation must be leveled with a maximum tolerance of 1" (2.5 cm) over a 153" (3.89 m) diagonal section and 112" (2.84 m) by 104 $\frac{1}{4}$ " (2.65 m) rectangle see [Figure 15](#). The annual variation in levelness for the same diagonal section cannot exceed 1/4" (6 mm).

A path at least 1" (2.5 cm) wide all around the perimeter of the spa is necessary to properly install the seal.

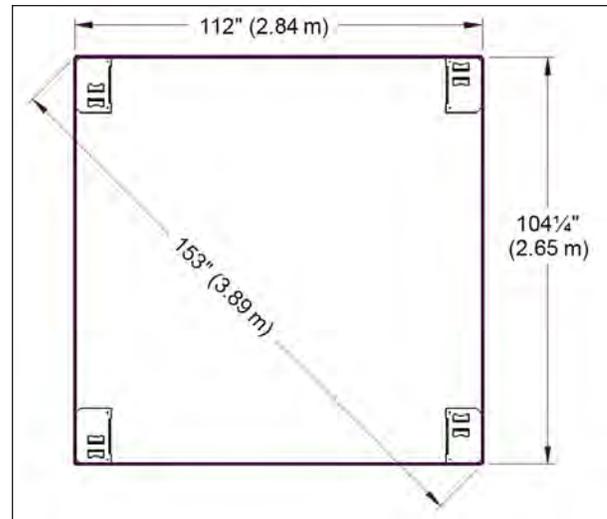


FIGURE 15: FOUNDATION DIAGONAL

CAUTION

Damage caused by inadequate foundation construction is not covered by the Covana warranty. It is the responsibility of the owner to provide a proper foundation.

Failure to follow these guidelines might cause permanent damage or improper functioning of the cover. Such damage might not be covered by the warranty.

DELIVERY

The following steps indicate how to handle the crate to avoid any damage to all components. It also shows how to unpack components.

NOTE

If you find any damage, refer to the Covana Damaged claim form attached to the crate, take pictures and simply refuse the delivery from the carrier.

UNPACKING PROCEDURE

1. Before uncrating the unit, ensure there is no visible damage to the crate. In case of any suspicious damage, take pictures first. If any damage is discovered, please call the

Covana customer service immediately.

2. Stand the crate in the vertical position. Ensure wind conditions allow for this to be done safely.
3. Use the sheet metal shears to cut and remove the metal strap around the crate.
4. Unscrew the #8 x 1.5" Robertson screws holding the front cover – 5 screws per side and 3 on the top. You might need a step ladder to reach the top screws, see [Figure 16](#).

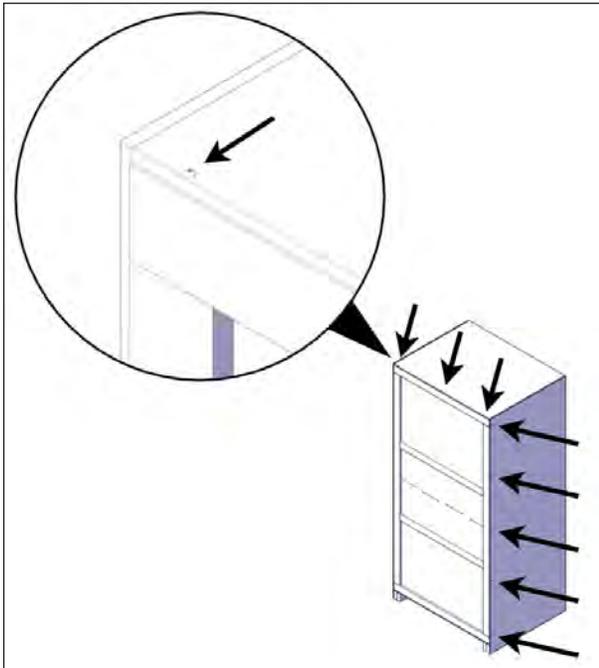


FIGURE 16: CARDBOARD REMOVAL

5. Remove the front cover and discard, see [Figure 17](#).
6. Remove the paper sheet covering parts inside the crate.

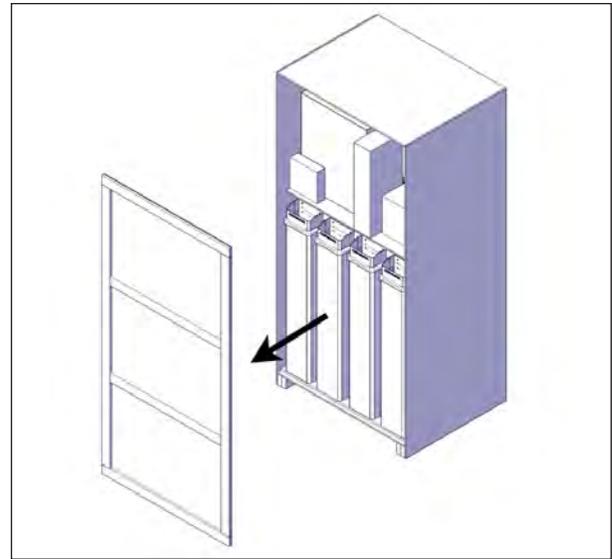


FIGURE 17: FRONT PANEL REMOVAL

7. Unscrew the two Robertson #8 x 1.5" screws holding the top of the sleeves – four sleeves: eight screws in total, see [Figure 18](#)
8. Remove all four sleeve assemblies.

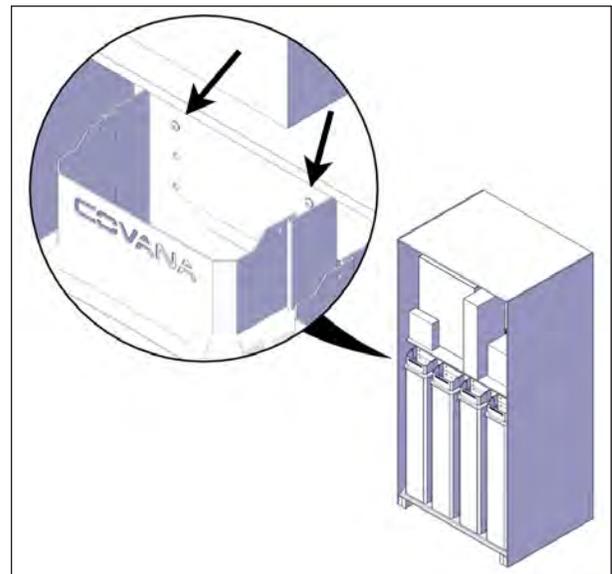


FIGURE 18: SLEEVE REMOVAL

9. Remove all boxes above the jack box, and keep in a safe location, see [Figure 19](#).

NOTE

All the hardware, brackets and other parts are located in these boxes.

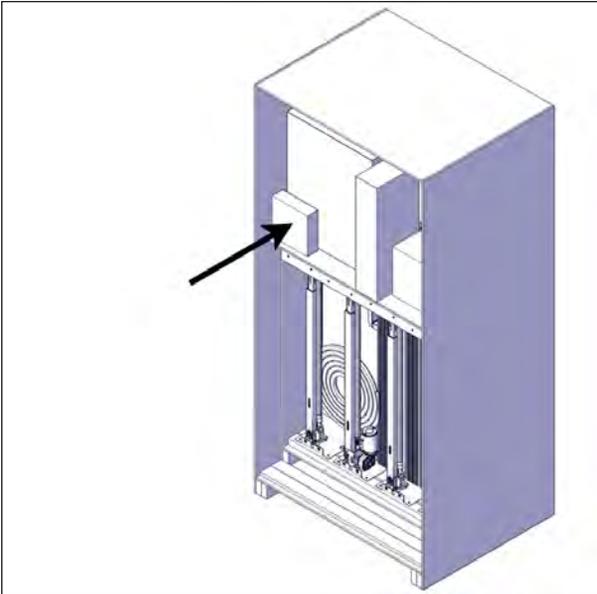


FIGURE 19: BOX REMOVAL

10. Unscrew the Robertson #8 x 1.5" screws holding the jack box – four screws per side: two screws at the top, two screws at the bottom, see [Figure 20](#).

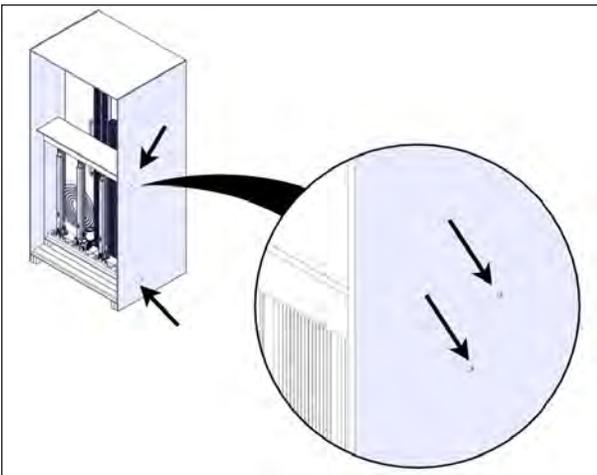


FIGURE 20: JACK BOX REMOVAL

11. With the help of another person, remove the jack box from the crate and keep it in a safe location, see [Figure 21](#).

**WARNING**

Carefully slide the jack box out.

Some parts can be damaged if the jack box is pulled out too roughly.

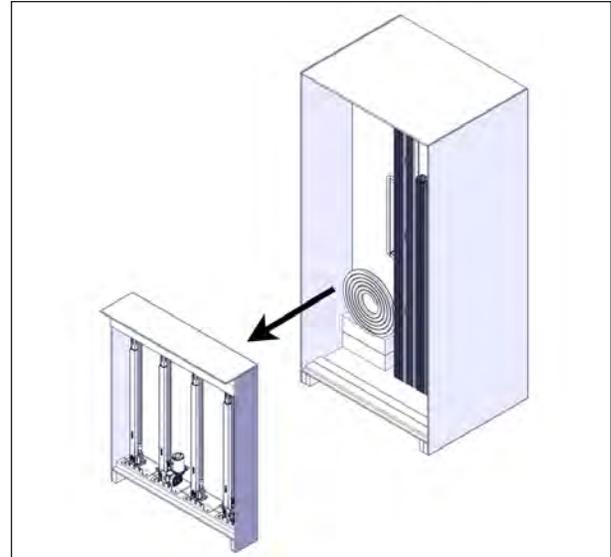


FIGURE 21: JACK BOX REMOVAL

12. Remove the jack assembly by unscrewing the Robertson #8 x 1.5" screws. There are two screws at the bottom of each jack, see [Figure 22](#).

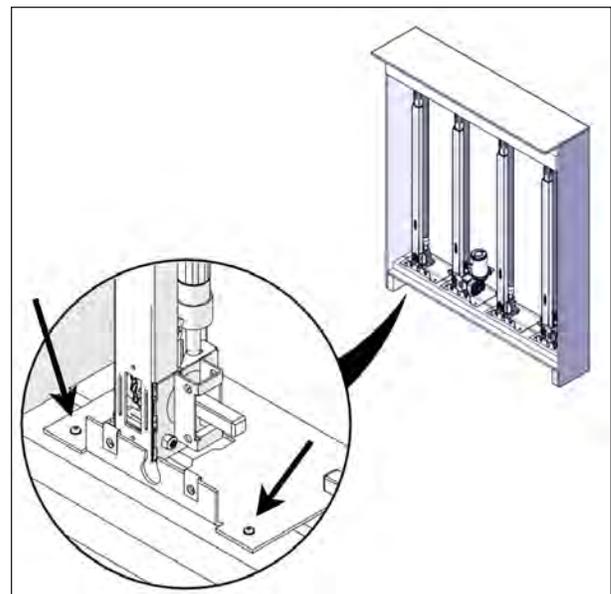


FIGURE 22: JACK BOTTOM SCREW REMOVAL

13. Remove the jack assembly top Robertson #8 x 1.5" screws. Once completed, keep the jack in a safe location on the ground, see [Figure 23](#).

**CAUTION**

Jacks may be greasy; wash your hands after manipulation or use gloves.

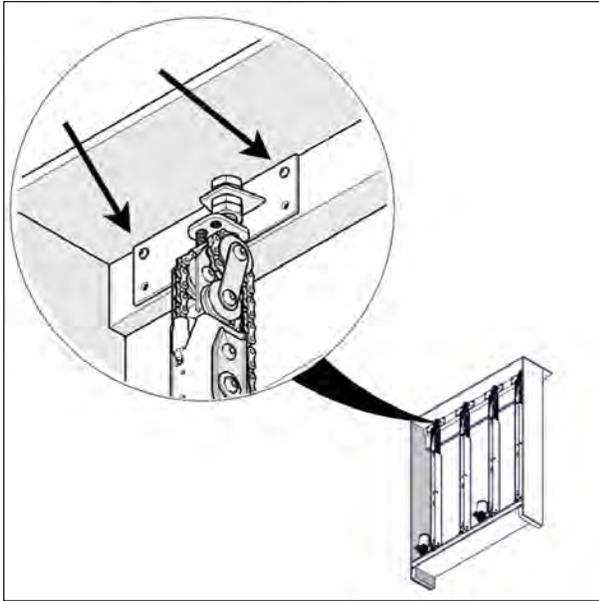


FIGURE 23: JACK TOP SCREW REMOVAL

14. Remove the seal and the foam spacers from the crate and keep them in a safe location, see [Figure 24](#).
15. Remove the C-channels and the I-beams from the crate and keep them in a safe location, see [Figure 24](#).

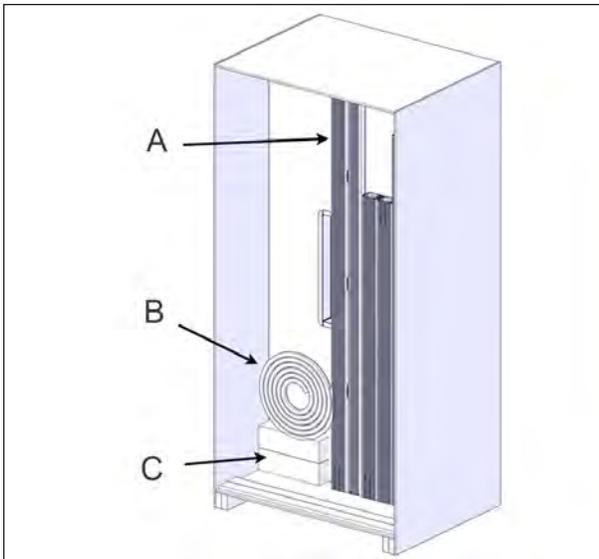


FIGURE 24: OTHER PART REMOVAL

ID	DESCRIPTION
A	I-BEAMS AND C-CHANNELS
B	SEAL
C	FOAMS

16. With the help of another person, lay the crate horizontally on its back. There should be one person on each side of the crate, see [Figure 25](#).

⚠ WARNING

The crate is heavy; you may require a third person to rotate the crate.

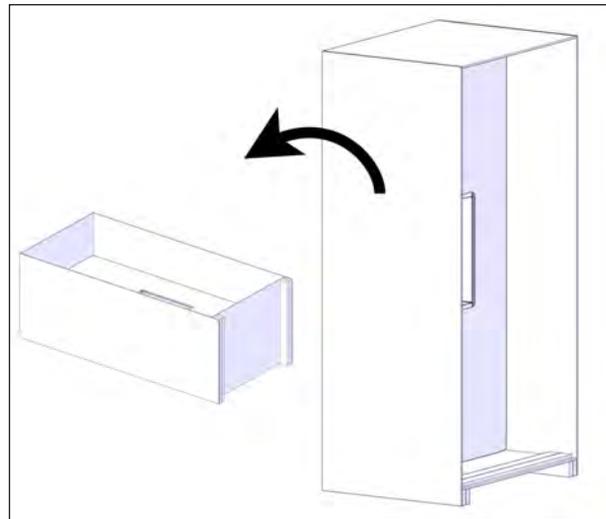
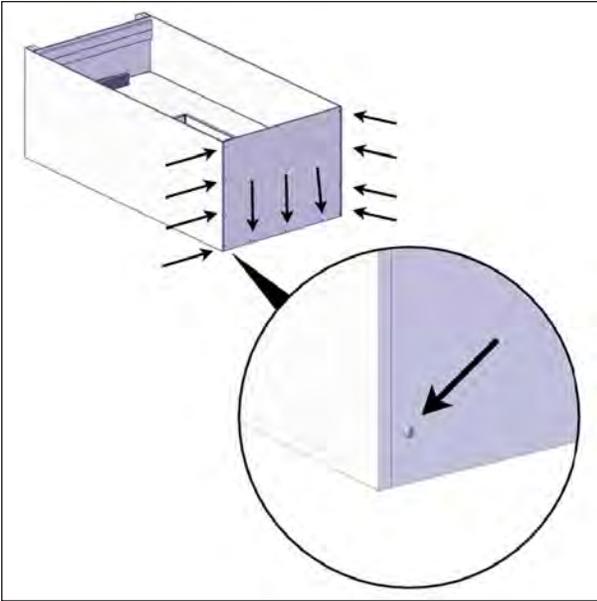


FIGURE 25: LAY THE CRATE ON ITS BACK

17. Unscrew the Robertson #8 x 1.5" screws (four on each side and three at the bottom) holding the top of the crate. Then, remove the top of the crate, see [Figure 26](#).

⚠ WARNING

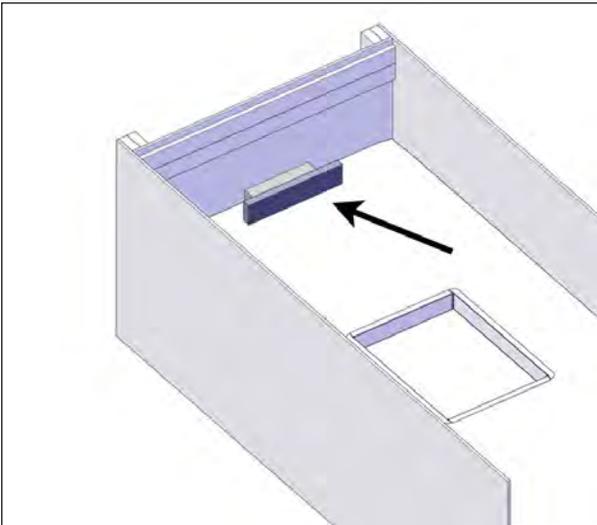
Do not further dismantle the crate; it will be used for future installation steps.

**FIGURE 26: TOP BOARD REMOVAL**

18. Unscrew the blocks that retain the panels. Remove the fiberglass panels from the crate and keep them in a safe location, see [Figure 27](#).

**WARNING**

Panels are fragile. Handle with care, they can easily be scratched or damaged.

**FIGURE 27: PANEL BLOCK REMOVAL**

HARDWARE IDENTIFICATION TABLE - BAGS

No. 10

12'-15" **13x**
17'-20" **21x**

12'-15" **25x**
17'-20" **41x**

9x

12'-15" **13x**
17'-20" **21x**

12'-15" **2x**
17'-20" **6x**

4x

No. 20

5x

4x

12'-15" **240853**
17'-20" **240852**

5x

9x

No. 30

17x

No. 40

13x

42x

4x

No. 50

4x

4x

4x

4x

4x

4x

No. 55

17x

17x

17x

No. E-60

11x

12'-15" (50") **64x**
15' (58")/17'-20" **56x**

12'-15" (50") **33x**

12'-15" (50") **81x**
15' (58")/17'-20" **73x**

12'-15" (50") **64x**
15' (58")/17'-20" **56x**

12'-15" (50") **64x**
15' (58")/17'-20" **56x**

No. 70

17x

9x

17x

17x

9x

9x

18x

Tools

1x

1x

1x

BAG	USE	QTY	DESCRIPTION
No. 10	Preparation of the I-Beams	4	I-TO-C CONNECTION SPACER LONG PLATE
		9	3/8" UNTHREADED SPACER
		13 or 21	10-32 HEX NUT
		25 or 41	5/8" FLAT WASHER
		13 or 21	10-32 x 5/8" LOW PROFILE SOCKET SCREW
		2 or 6	I-TO-C CONNECTION SPACER SHORT PLATE
No. 20	Cable installation on the I-to-C long connection plate	4	3/32" AIRCRAFT SWAGED WIRE ROPE EYELET
		5	5/16-18 x 5/8" LOW PROFILE SOCKET SCREW
		9	5/16" TYPE A PLAIN WASHER
		5	5/16-18 HEX NYLON LOCK NUT
No. 30	Cover mount bracket installation	17	1/4-20 x 1" BUTTON HEAD SOCKET CAP SCREW SS 18-8
No. 40S or 40M	Corner installation	4	GROOVE FLANGE HEX SHAFT BUSHING
		13	#4 x 3/16" ROUND HEAD SHEET METAL SCREW
		42	#8- 32 x 1/2" PAN HEAD SQUARE THREAD CUTTING SCREW
No. 50	Griplock installation	4	CABLE GRIPPER
		4	3/8-16 x 1 3/4" COUPLING NUT
		4	3/8-16 x 4" HOLLOW ROD
		4	3/8-16 WING NUT
		4	3/8-16 HEX NUT
		4	3/8" WASHER
No. 55	Spa	17	1/4-20 x 3/4" HEX STEEL STANDOFF
		17	1/4 LOCK WASHER
		17	1/4-20 x 3/8" HEX CAP SCREW
No. E-60S or E-60M	Top plate, sleeve & spa bracket	33*	#10- 12 x 3/4" PAN HEAD PHILLIPS SS 18-8 SELFTAPPING SCREW
		73 or 81	1/4-20 x 3/4" BUTTON HEAD SOCKET CAP SS 18-8 SCREW
		56 or 64	1/4" SS 316 LOCK WASHER
		56 or 64	1/4-20 SS 316 HEX NUT
		56 or 64	1/4" SS 316 FLAT WASHER
		11	#8 x 1/2" SELF-TAPPING SCREW

BAG	USE	QTY	DESCRIPTION
No. 70	U-frame, sleeve to cover installation	9	5/16-18 x 2" HEX CAP SCREW
		18	5/16" NYLON WASHER
		9	5/16-18 HEX NYLON LOCK NUT
		17	1/4-20 SS 316 HEX NUT
		17	1/4 SS 316 LOCK WASHER)
		17	1/4-20 x 3/4" SS 18-8 CARRIAGE SCREW
		9	1/4-20 x 1" SS 18-8 HEX CAP SCREW
N/A	Tools	1	5/32" HEX ALLEN KEY
		1	5/32" DRILL BIT
		1	9/32" DRILL BIT

* R200 (12' / 50") model only.

ASSEMBLY PREPARATION

Next steps show how to assemble the cover.

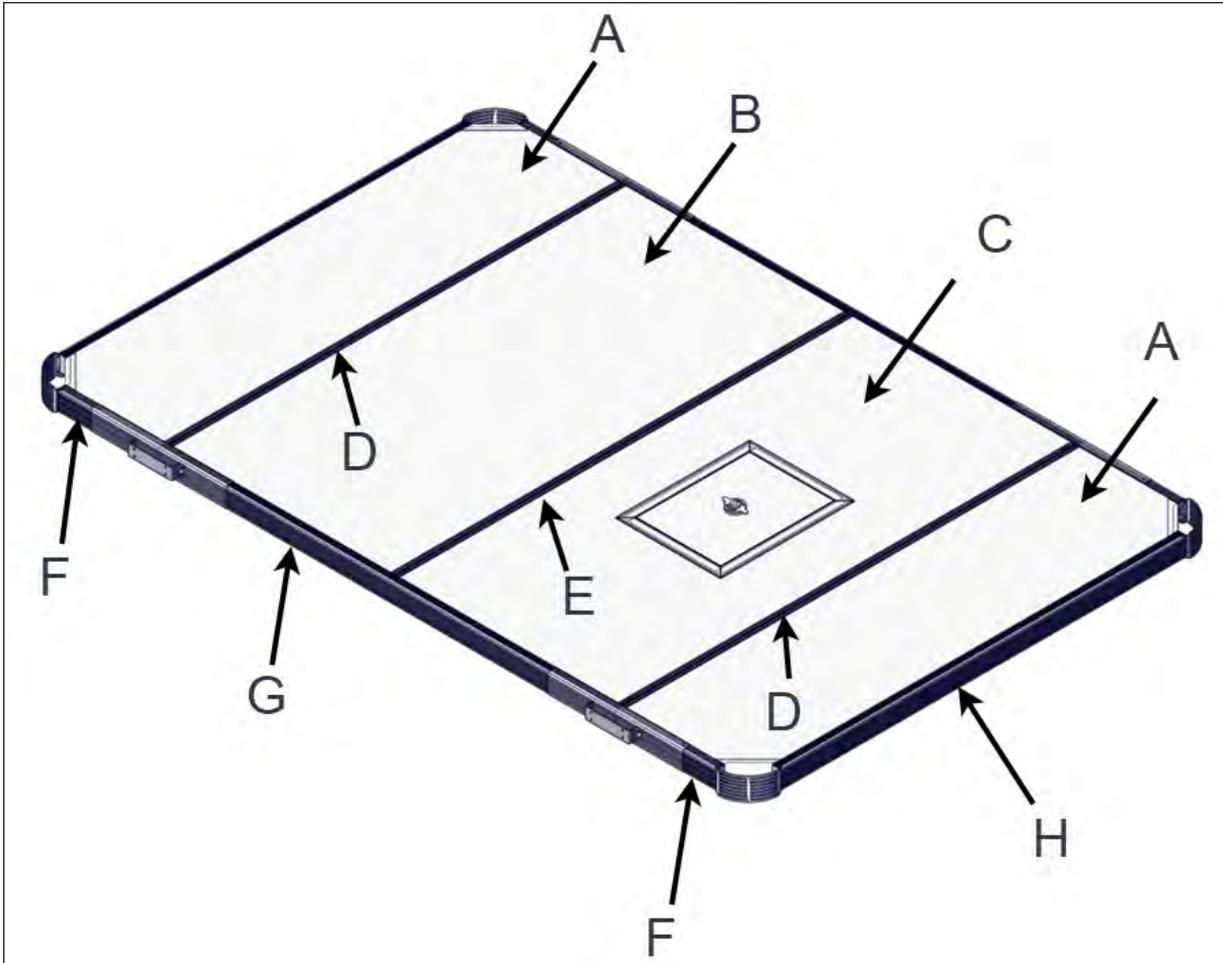


FIGURE 28: SPA COVER SETUP (12' AND 15' LONG)

ID	DESCRIPTION
A	END PANEL
B	MIDDLE PANEL
C	MIDDLE PANEL WITH ESCAPE HATCH
D	I-BEAM WITH I TO C LONG CONNECTION PLATE
E	I-BEAM WITH I TO C SHORT CONNECTION PLATE
F	SIDE EXTENSION C-CHANNEL
G	SIDE MIDDLE C-CHANNEL
H	END C-CHANNEL

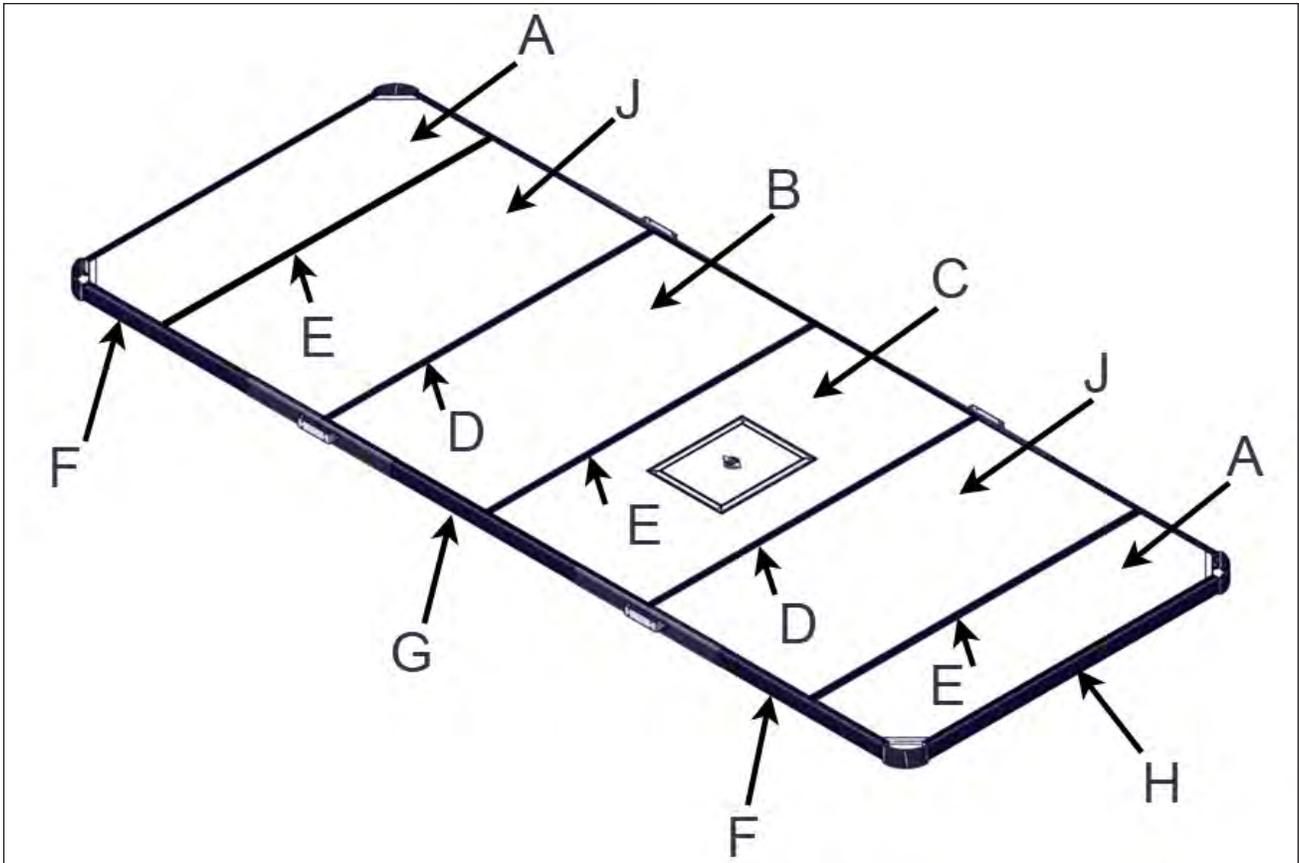


FIGURE 29: SPA COVER SETUP (17' AND 20' LONG)

ID	DESCRIPTION
A	END PANEL
B	MIDDLE PANEL
C	MIDDLE PANEL WITH ESCAPE HATCH
D	I-BEAM WITH I TO C LONG CONNECTION PLATE
E	I-BEAM WITH I TO C SHORT CONNECTION PLATE
F	SIDE EXTENSION C-CHANNEL
G	SIDE MIDDLE C-CHANNEL
H	END C-CHANNEL
J	EXTRA PANEL



WARNING

Before assembling, keep in mind to not over tighten screws. Power tools must not be used. The screws may break if the value of the torque is too high.

FOAM INSTALLATION

1. 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, see [Figure 30](#).



FIGURE 30: FOAM SPACER INSTALLATION



CAUTION

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



CAUTION

Failure to correctly position the cover on the spa could result in scratching of the acrylic or damaging the cover.

Make sure the foam spacers are correctly aligned under the I-beams and they are installed in each corner of the spa.

PREPARATION OF I-BEAMS

This section shows how to assemble I to C plates on the I-beams.

NOTE

Use hardware bag no. 10 for the following steps.

I TO C PLATE INSTALLATION ON THE I-BEAMS

1. Install an I to C long connection plate as shown in [Figure 32](#). See the table following

the figure 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 [Figure 32](#).

NOTE

Make sure the label TOP/DESSUS in the I-beam is facing upwards see [Figure 31](#).



FIGURE 31: TOP ORIENTATION OF I-BEAM

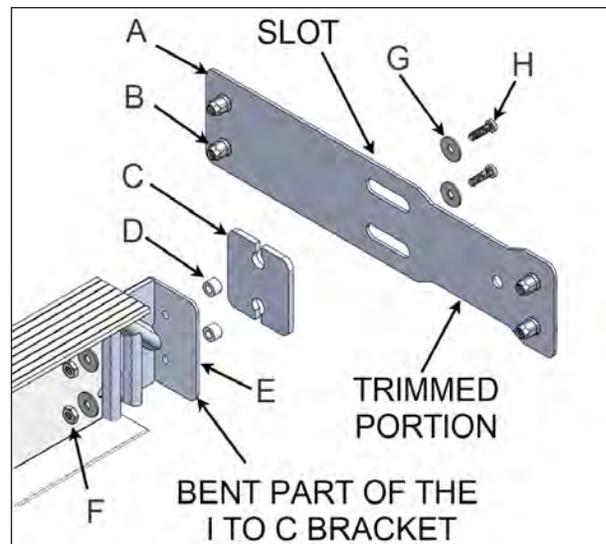


FIGURE 32: I TO C LONG CONNECTION PLATE INSTALLATION

ID	DESCRIPTION
A	I TO C LONG CONNECTION PLATE
B	INSERT
C	I TO C SPACER
D	SPACER
E	I TO C BRACKET
F	NUT #10-32

ID	DESCRIPTION
G	FLAT WASHER #10
H	SCREW #10-32x5/8

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 these 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, shown in [Figure 31](#), is pointed upwards.

Make sure there is grease in the inserts before installing it; if not, apply some 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, [Figure 33](#)) are in place between the I to C bracket and the I to C long connection plate.

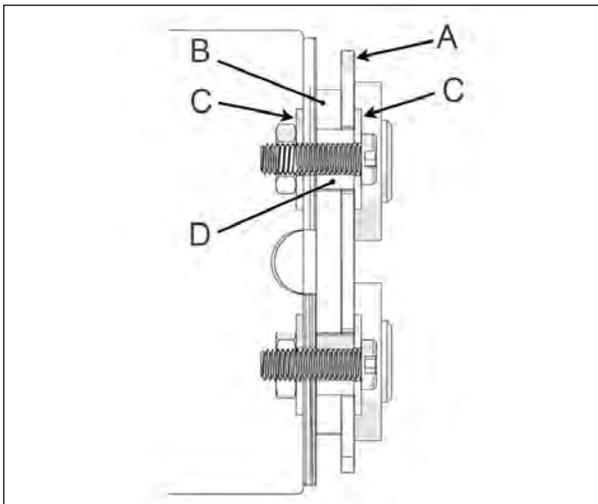


FIGURE 33: I TO C LONG CONNECTION PLATE SECTION VIEW

ID	DESCRIPTION
A	I TO C LONG CONNECTION PLATE
B	I TO C SPACER

ID	DESCRIPTION
C	FLAT WASHER #10
D	SPACER

WARNING

The orientation and the installation of each component shown on [Figure 32](#) must be imperatively and exactly mounted as it is shown on the figure to succeed the cover installation.

2. Repeat the previous steps for the opposite side of the I-beam and repeat on a second I-beam.
3. Next steps show how to assemble the I-beam with the short I to C connection plate.

QUANTITY OF I-BEAMS TO ASSEMBLE WITH THE SHORT I TO C CONNECTION PLATE	
COVER LENGTH	QUANTITY
12' AND 15' LONG	1
17' AND 20' LONG	3

4. Use #10-32 x 5/8" screws and #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 [Figure 34](#).

CAUTION

Two I to C connection plates must be installed per I-beam.

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

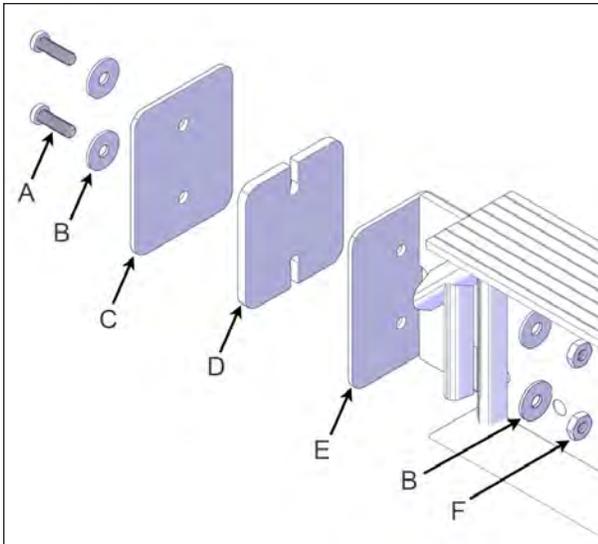


FIGURE 34: I-BEAM WITH THE SHORT I TO C CONNECTION PLATE INSTALLATION

ID	DESCRIPTION
A	SCREW #10-32 X 5/8"
B	FLAT WASHER #10
C	I TO C SHORT CONNECTION PLATE
D	I TO C SPACER
E	BENT PART OF I TO C BRACKET
F	NUT #10-32

CABLE INSTALLATION ON THE I TO C LONG CONNECTION PLATE

NOTE

Use hardware bag no. 20 for the following steps.

1. Install the cable with the eyelet flat side in contact with the long connection plate, see [Figure 35](#). 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.

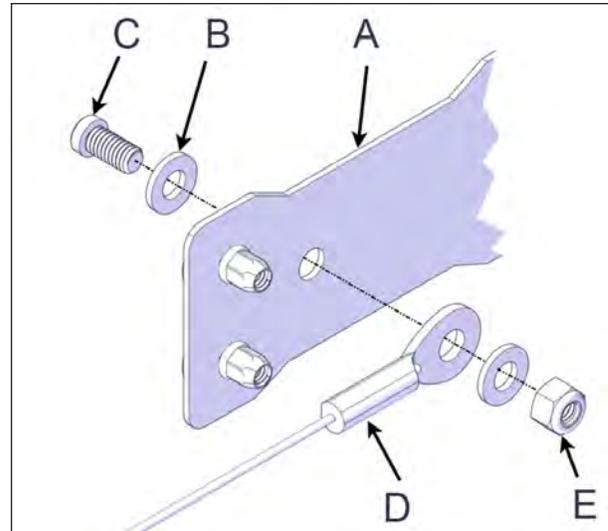


FIGURE 35: WIRE INSTALLATION

ID	DESCRIPTION
A	I TO C LONG CONNECTION PLATE
B	FLAT WASHER 5/16" (2)
C	SCREW 5/16-18 x 5/8"
D	WIRE FOR GRIPLOCK INSTALLATION
E	LOCK NUT 5/16-18

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" [119 cm x 244 cm]) onto the middle of the installation surface see [Figure 36](#). Ensure the seal around the escape hatch opening is on the top and TOP/DESSUS label ([Figure 36](#)) located in the panel's hole is properly oriented.

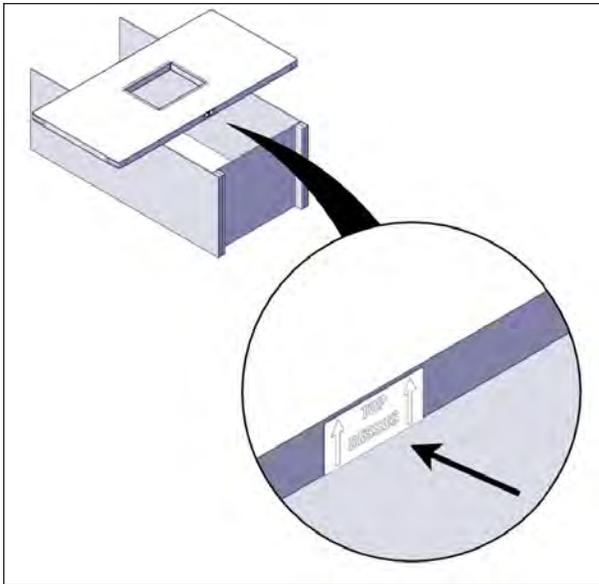


FIGURE 36: PANEL INSTALLATION

3. Install 2 long C-channels 94 9/16" (240 cm) on the panel so that the middle of the C-channel, premarked with a center label (Figure 38), is aligned with the edge of the panel, see Figure 37.

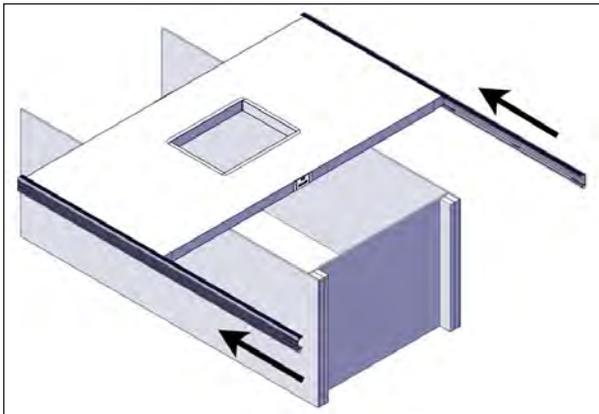


FIGURE 37: LONG C-CHANNEL INSTALLATION



FIGURE 38: CENTER LABEL



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 (Figure 39). Make sure it fits snugly with the foam panel. Ensure the top label in the I-beam is pointing upwards.

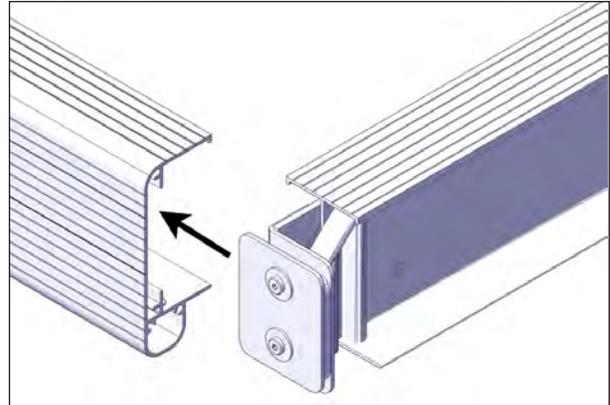


FIGURE 39: I-BEAM INSTALLATION



CAUTION

Ensure the upright position of the I-beam.

Ensure the proper insertion of the short I to C connection plate in the C-channel (Figure 40).

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 is it always square with the C-channel.

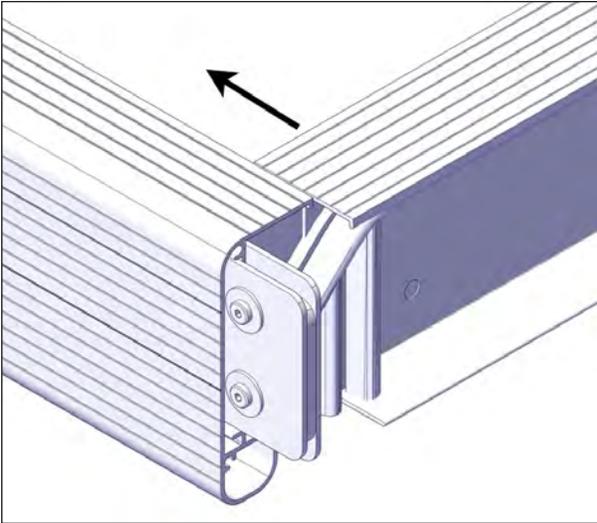


FIGURE 40: I-BEAM INSTALLATION

- Slide the large panel (approx. 47" x 96" [119 cm x 243 cm]) into the C-channels. Ensure the I-beam has slid over the panel on both the bottom and top side ([Figure 41](#)).

**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.

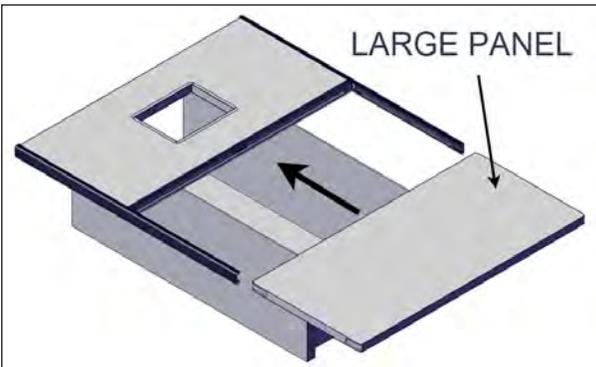


FIGURE 41: INSTALL LARGE PANEL INTO THE C-CHANNELS

**WARNING**

Make sure the panel side with the cut out shown in [Figure 42](#) is pointing outward.

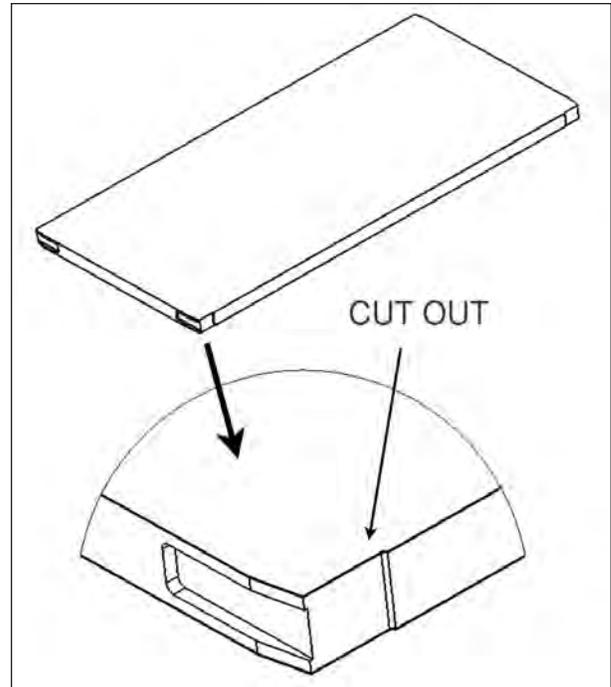


FIGURE 42: ORIENTATION OF THE PANEL

- 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 [Figure 43](#) and [Figure 44](#).
- 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, see [Figure 44](#).

**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.

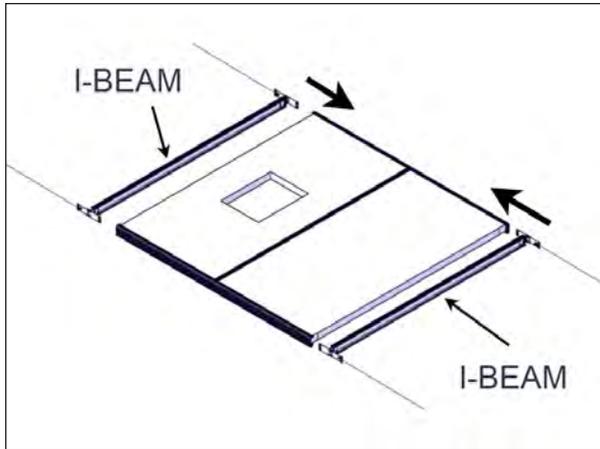


FIGURE 43: INSTALL BOTH I-BEAMS WITH LONG I TO C CONNECTION PLATES

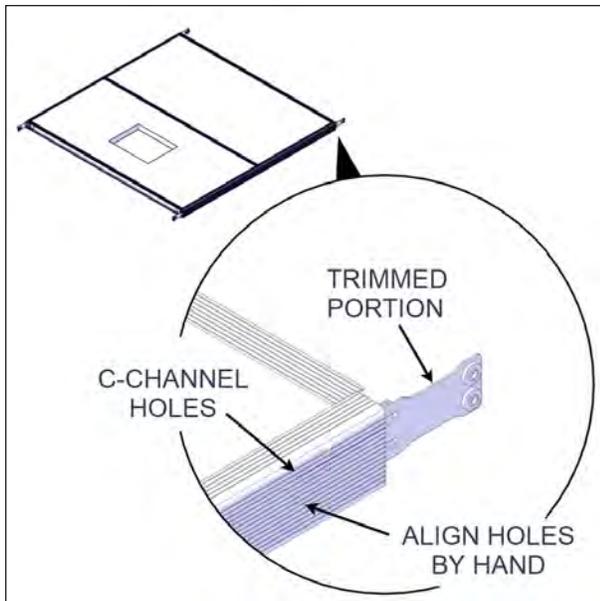


FIGURE 44: TRIMMED PORTION ORIENTATION

NOTE

Use hardware bag no. 30 for the following step.

8. Refer to [Figure 45](#) 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 [Figure 46](#).

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.

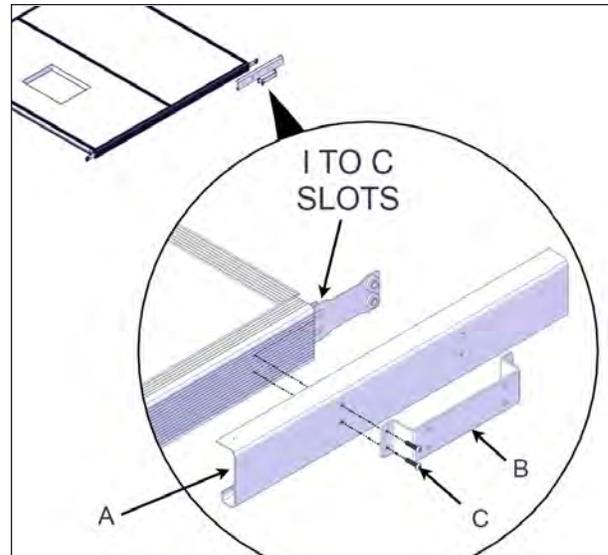


FIGURE 45: POST MOUNT BRACKET INSTALLATION

ID	DESCRIPTION
A	SUPPORT BRACKET
B	POST MOUNT BRACKET
C	1/4-20 X 1" SOC RD HEAD SCREW

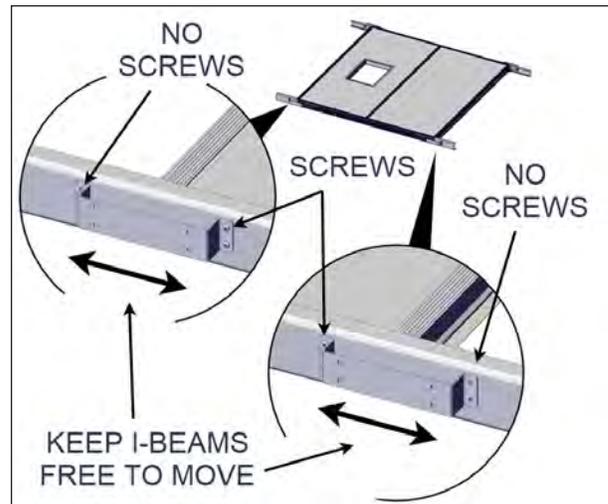


FIGURE 46: OTHER POST BRACKET INSTALLATION

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 [Figure 47](#).

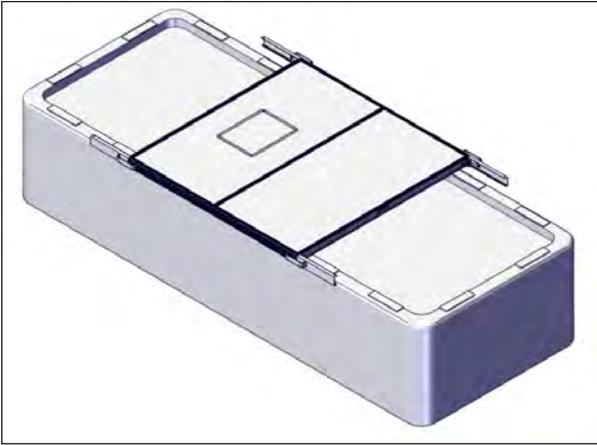


FIGURE 47: INSTALLATION OF THE COVER ON THE SPA



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 [Figure 48](#).

NOTE

There are two slots at one end of the C-channels. The slots must go toward the cover see [Figure 48](#).

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.

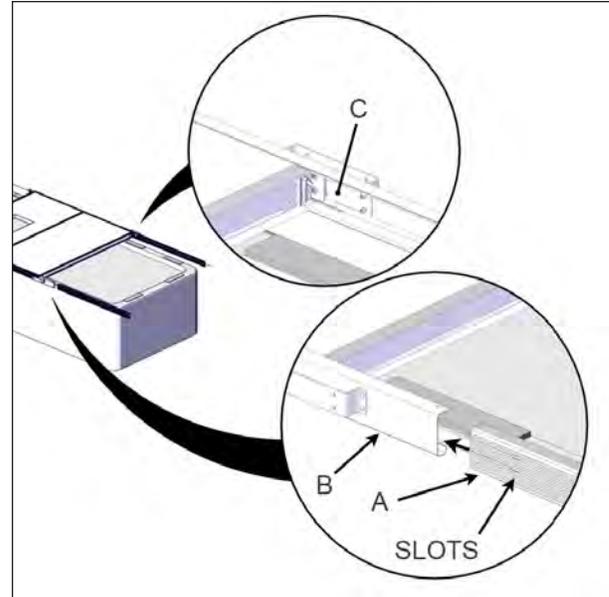


FIGURE 48: SIDE EXTENSION C-CHANNEL INSTALLATION

ID	DESCRIPTION
A	SIDE EXTENSION C-CHANNEL
B	SUPPORT BRACKET
C	I TO C LONG CONNECTION PLATE

NOTE

Use hardware bag no. 30 for the following step.

12. Install two 1/4" x 1" hexagonal round head screws on the support bracket see [Figure 49](#). DO NOT tighten those screws yet. The side extension C-channel must be free to move in its slots.

IMPORTANT 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 join tightening between panels impossible.

NOTE

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.

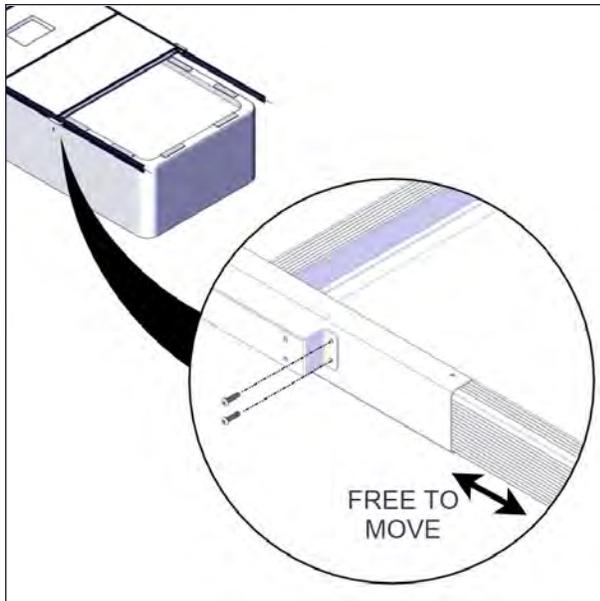


FIGURE 49: SCREW INSTALLATION

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

SECTION FOR THE 17' AND 20' LONG SPA

IMPORTANT NOTE

Steps in this section show how to install the extra I-beams and the extra panels (Figure 29) for the 17' and 20' long spa models.

- Slide in one of the remaining extra panels into the C-channels see Figure 50.

WARNING

Make sure the panel side with the cut out shown in Figure 50 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.

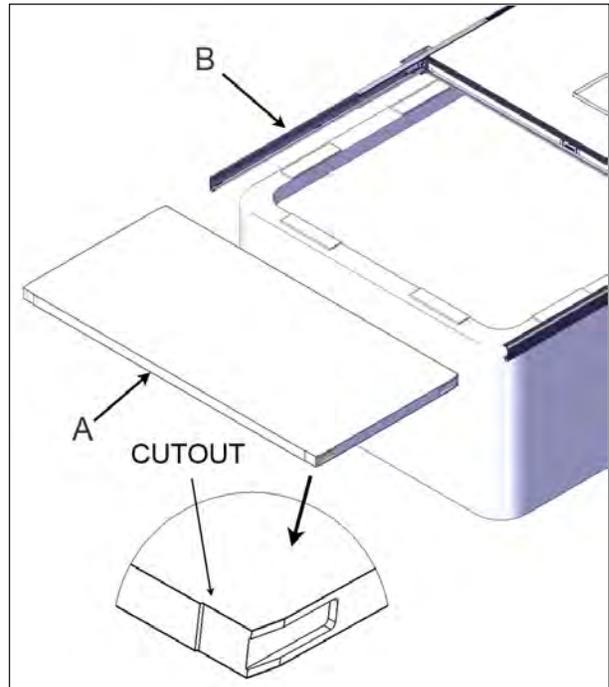


FIGURE 50: EXTRA PANEL INSTALLATION FOR 17' AND 20' LONG SPA MODELS

ID	DESCRIPTION
A	EXTRA RECTANGULAR PANEL
B	C-CHANNEL

SECTION FOR ALL MODELS

- Slide an I-beam with the short I to C connection plates in the C-channels with the bent portion pointing outwards see Figure 51.

NOTE

Make sure that the wire passes through the I to C connection plate hole (Figure 52).

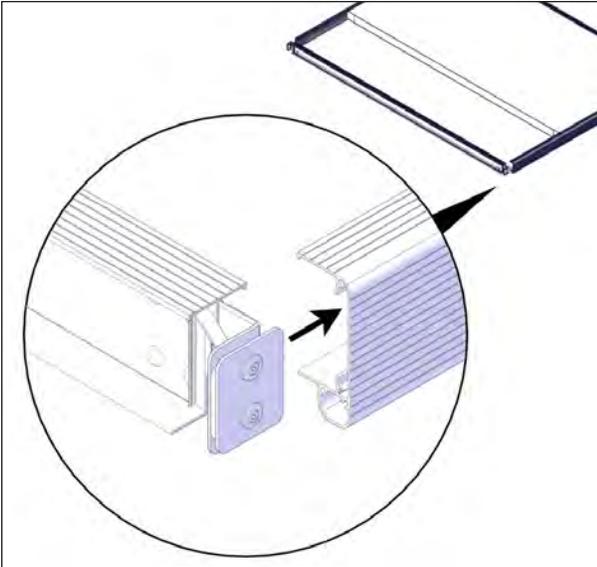


FIGURE 51: I-BEAM INSTALLATION

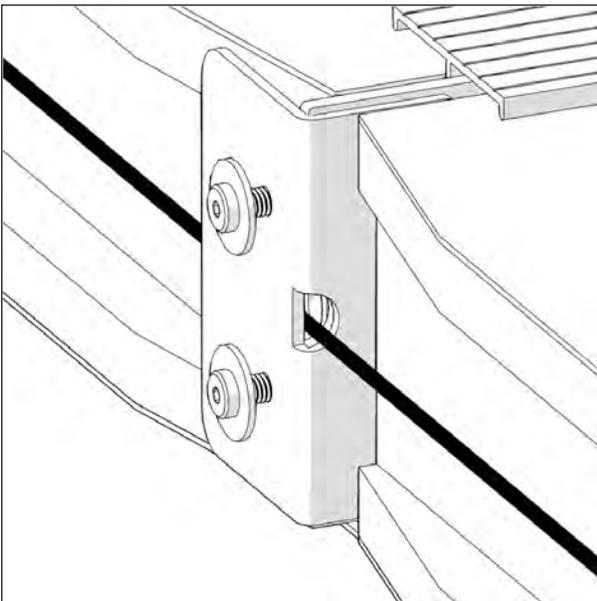


FIGURE 52: WIRE INSTALLATION THROUGH THE I TO C CONNECTION PLATE

16. Insert one end panel with the tapered end toward the end of the cover. The end panel is tapered with a 45° cut see [Figure 53](#).

**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.

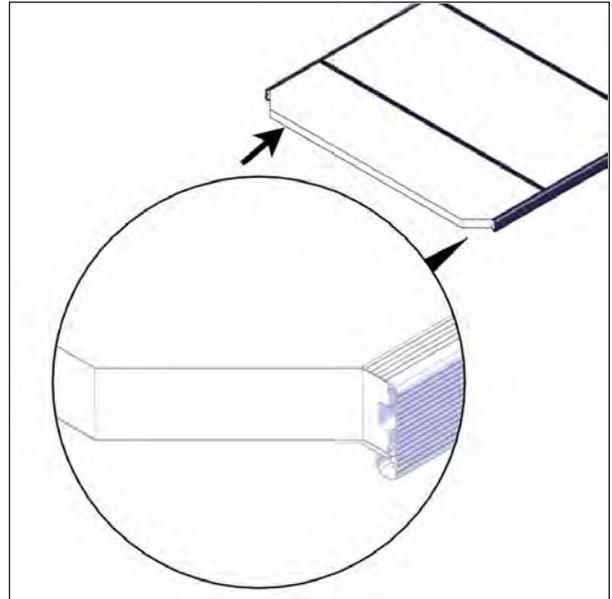


FIGURE 53: END PANEL INSTALLATION

17. For models 17' and 20' repeat on the opposite side the steps in [SECTION FOR THE 17' AND 20' LONG SPA](#).
18. For models 12' to 20', repeat on the opposite side the steps in [SECTION FOR ALL MODELS](#).

END C-CHANNEL INSTALLATION**NOTE**

Use hardware bag no. 40 for the following steps.

1. Install an hexagonal guide bushing into each corner bracket support (the ones with a hole) using a Phillips screwdriver and three #4 x 3/16" round head screws, see [Figure 54](#).

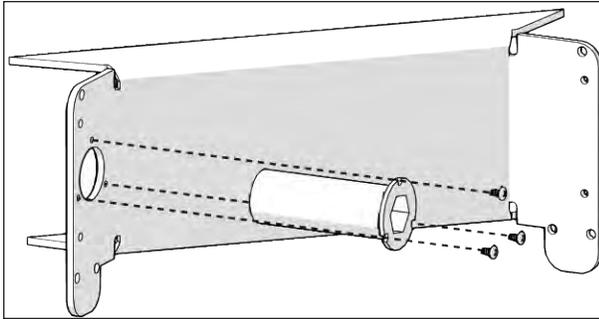


FIGURE 54: HEXAGONAL GUIDE BUSHING INSTALLATION

2. Install the left and right corner bracket supports on each end C-channel by using a #2 square screwdriver and the #8 X 1/2" screw, see [Figure 55](#).

NOTE

[Figure 55](#) and [Figure 56](#) display the proper orientation of the left and right brackets.



WARNING

Do not over tighten the screws as they might break.

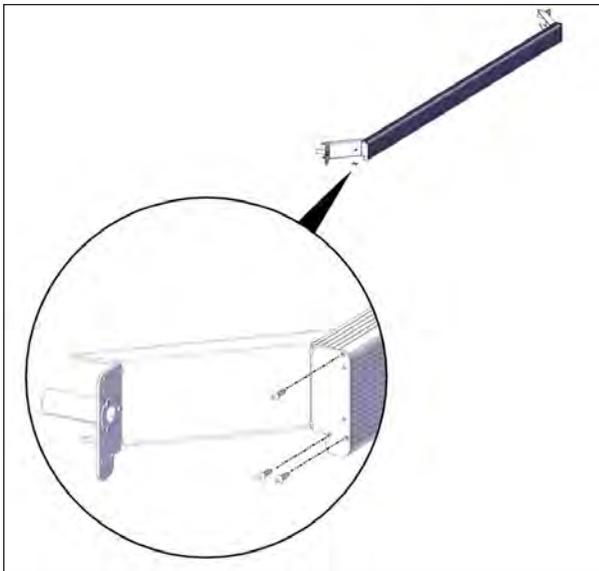


FIGURE 55: CORNER BRACKET SUPPORT INSTALLATION

3. Take the assemblies made at the previous step ([Figure 55](#)) and slide them on the edge panels ([Figure 56](#)) located on each side of the cover. Make sure that the wire passes through the hexagonal guide bushings ([Figure](#)

[57](#)).

4. Use a #2 square screwdriver to secure the corner bracket on the C-channel end by using the #8 X 1/2" screws ([Figure 56](#)).



WARNING

Do not over tighten the screws as they might break.

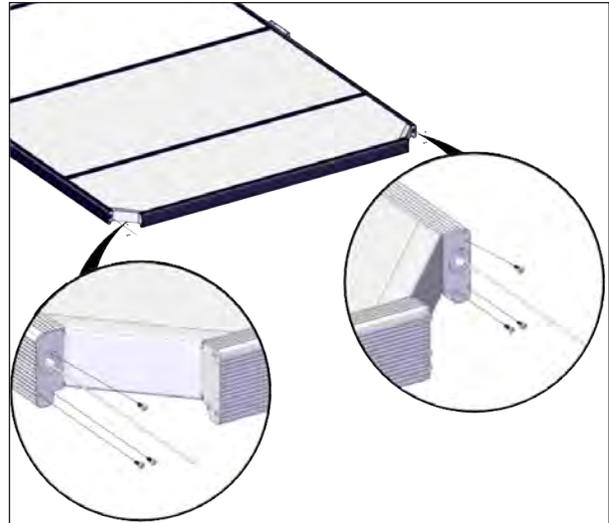


FIGURE 56: END C-CHANNEL INSTALLATION

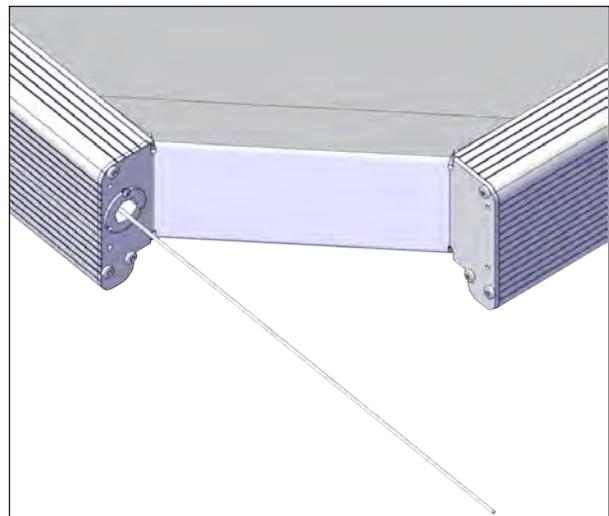


FIGURE 57: WIRE INSTALLATION

GRIPLOCK INSTALLATION

NOTE

Use hardware bag no. 50 for the following steps.

1. Install the Griplock completely into the hexagonal coupling nut, see [Figure 58](#).
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 [Figure 58](#).
5. Keep a gap between part A and part B as shown in [Figure 58](#)

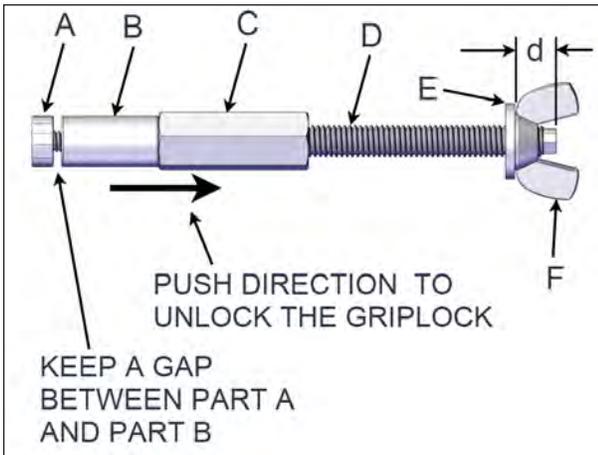


FIGURE 58: GRIPLOCK DEVICE

ID	DESCRIPTION
A	GRIPLOCK NUT
B	GRIPLOCK
C	HEX COUPLING NUT
D	HOLLOW THREADED STUD
E	FLAT WASHER
F*	WING 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 [Figure 58](#).
7. Run the wire through the Griplock, see [Figure 59](#).

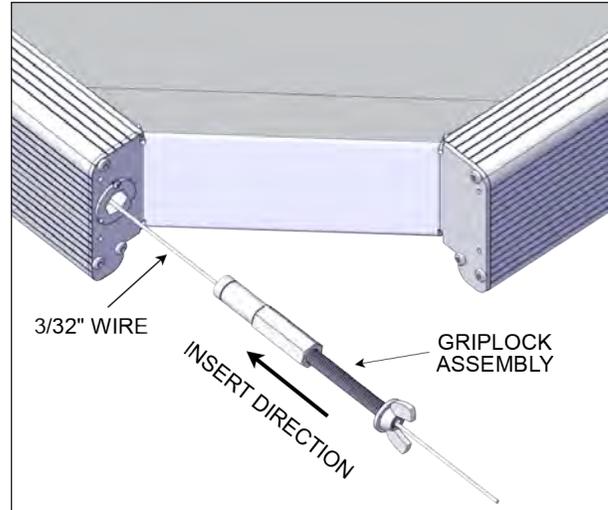


FIGURE 59: GRIPLOCK INSTALLATION

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, see [Figure 60](#).

NOTE

If the Griplock assembly does not fit easily, it must be because the Griplock nut ("A" in [Figure 58](#)) has not been loosen enough.

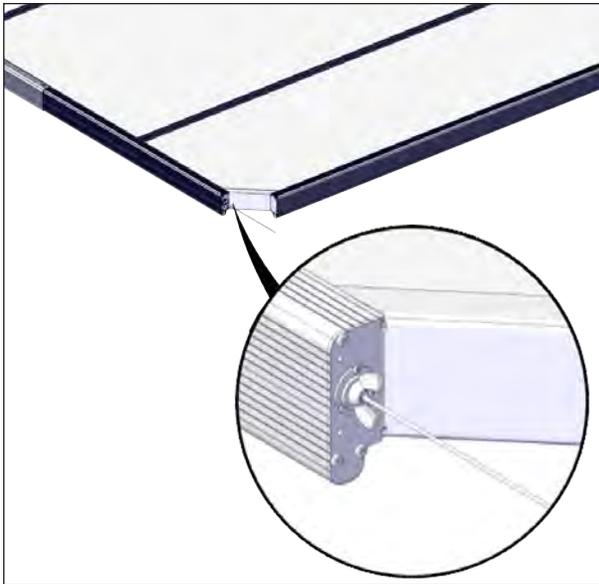


FIGURE 60: INSERT GRIPLOCK INTO THE HEXAGONAL GUIDE BUSHING

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

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 ([Figure 61](#)) and check the gap between the C-channels, see [Figure 62](#).

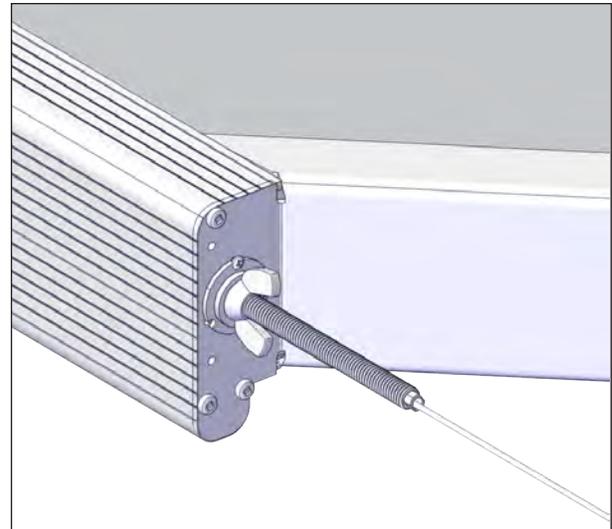


FIGURE 61: WIRE TIGHTENING

2. Repeat the process again and again until the short and long C-channels touch each other, see [Figure 62](#).

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.

	<p>WARNING</p>
<p>Stop tightening the wing nuts when the C-channels are in contact (no gap between the C-channels).</p>	

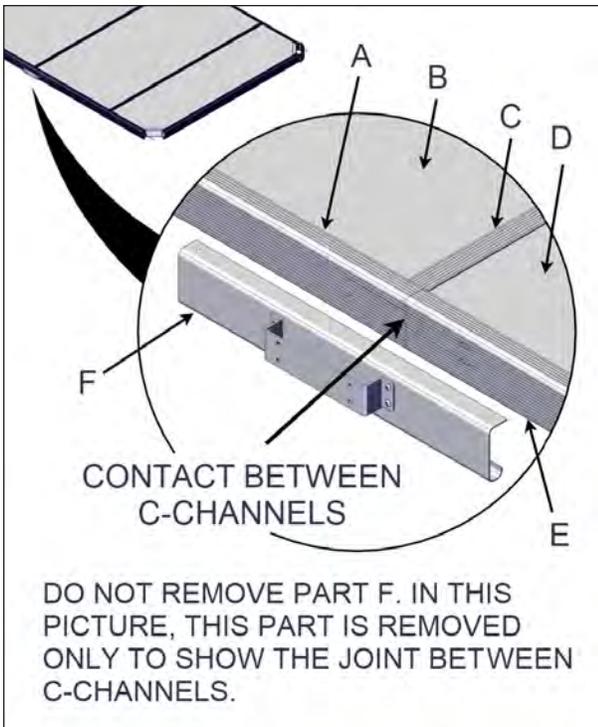


FIGURE 62: GAP BETWEEN THE C-CHANNELS

ID	DESCRIPTION
A	MIDDLE C-CHANNEL
B	MIDDLE PANEL
C	I-BEAM WITH I TO C LONG CONNECTION PLATE
D	EXTRA OR END PANEL
E	EXTENSION C-CHANNEL
F	SUPPORT BRACKET

- 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 [Figure 63](#). Those two screws need to be well tightened to keep the I-Beam seals compressed properly.

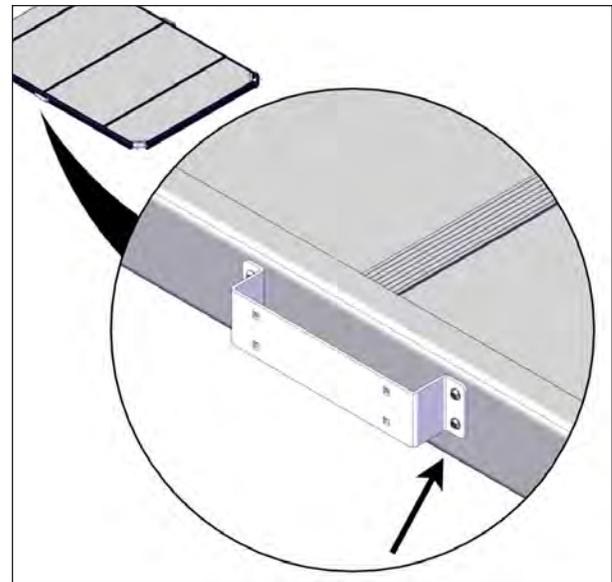


FIGURE 63: SUPPORT BRACKET SCREW TIGHTENING

- Repeat the previous steps for all remaining support brackets.
- 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 ([Figure 64](#)) and 8 in the long support bracket ([Figure 65](#)).

WARNING

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

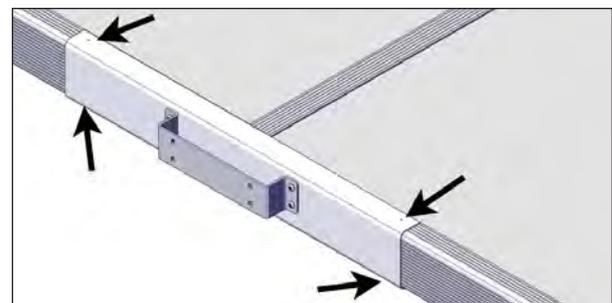


FIGURE 64: LOCATION OF THE DRILLING HOLES (4) IN THE SHORT SUPPORT BRACKET

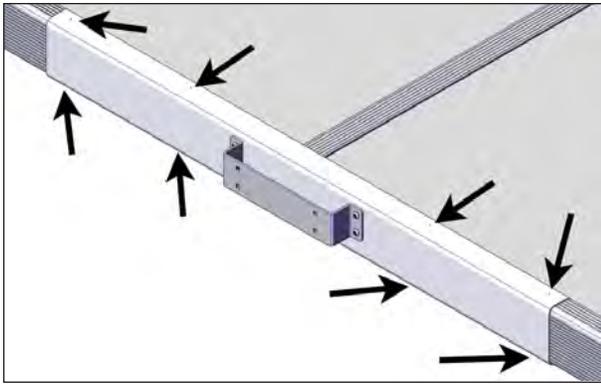


FIGURE 65: LOCATION OF THE DRILLING HOLES (8) IN THE LONG SUPPORT BRACKET

6. Use the provided 5/32" drill bit to drill the holes on the top and bottom of the support bracket see [Figure 66](#). 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.

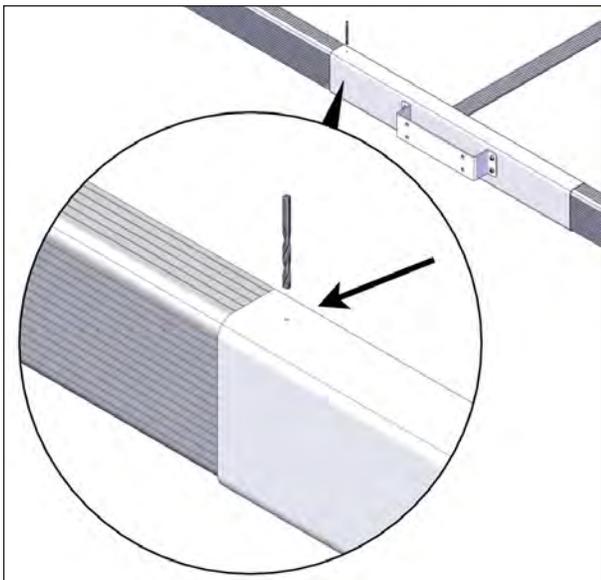


FIGURE 66: HOLE DRILLING THROUGH THE C-CHANNEL

7. Install the painted Phillips #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.

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.
2. Push the wire in the C-channel and repeat this step on the 3 other cover corners, see [Figure 67](#).

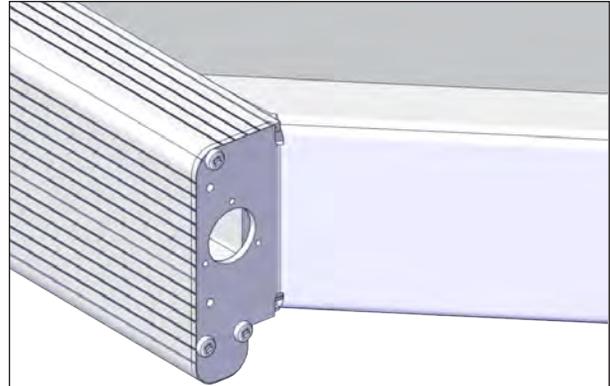


FIGURE 67: PUSH ROPE INSIDE THE C-CHANNEL

3. Use a #2 6" long Robertson screwdriver to attach the outside corner bracket (left and right) on the corner bracket support by using the #8 X 1/2" screws, see [Figure 68](#).

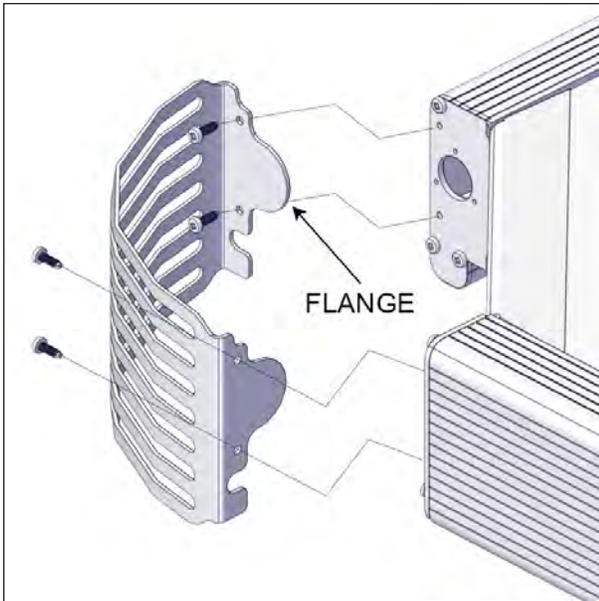


FIGURE 68: OUTSIDE CORNER INSTALLATION

**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.

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 [Figure 69](#).

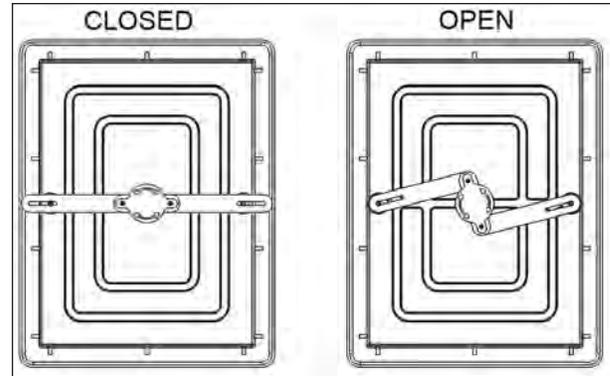


FIGURE 69: ESCAPE HATCH RELEASE MECHANISM

2. Turn the escape hatch handle to retract the arms and install it into the escape hatch opening of the center panel, see [Figure 70](#).

**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.

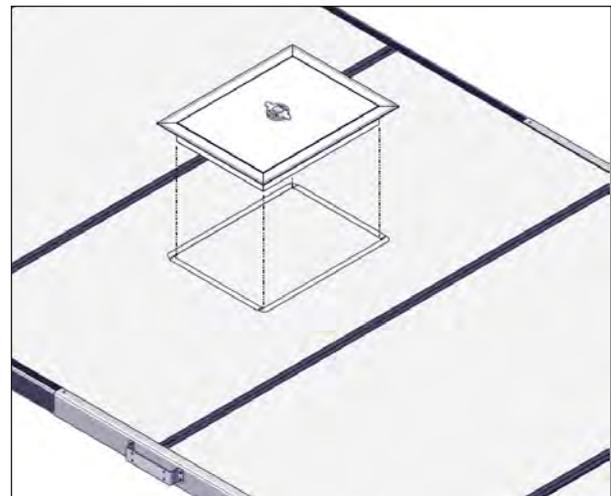


FIGURE 70: ESCAPE HATCH INSTALLATION

BRACKET INSTALLATION C-EP

1. Start off by ensuring that the cover is correctly positioned onto the swim spa. To do

so, use the drilling template and insert the template's extrusion on the C-channel, the long arm towards the swim spa see [Figure 71](#).

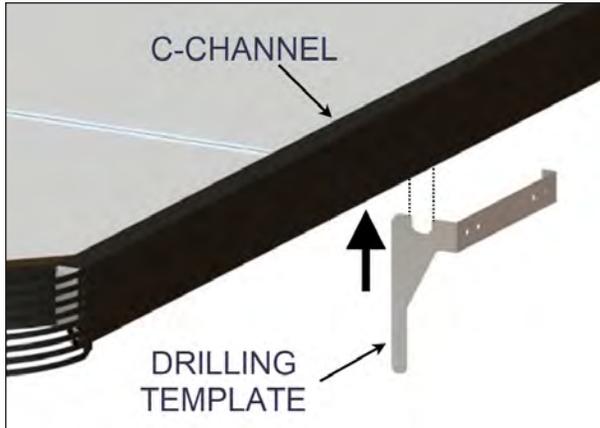


FIGURE 71: DRILLING TEMPLATE POSITIONNING

2. Ensure that the long arm of the drilling template is resting on the swim spa while the C-channel bottom portion is snug on the template see [Figure 72](#).

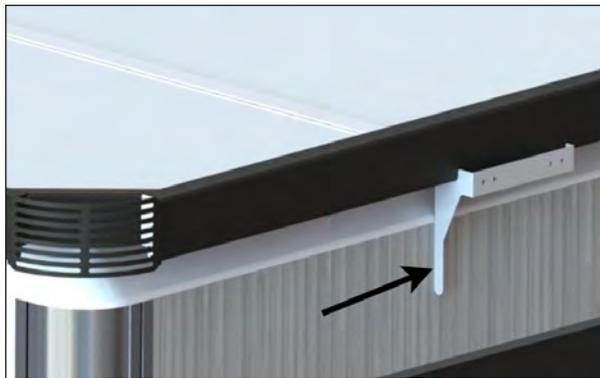


FIGURE 72: TEMPLATE LONG ARM POSITION

3. Repeat steps 1 and 2 for all four sides of the cover as shown in [Figure 73](#). Using the drilling template where the arrows are. This will ensure the cover is centered.



CAUTION

Do not touch or move the cover once it is correctly positioned

Incorrect positioning of the cover could result in drilling holes at the wrong position in the swim spa's frame.

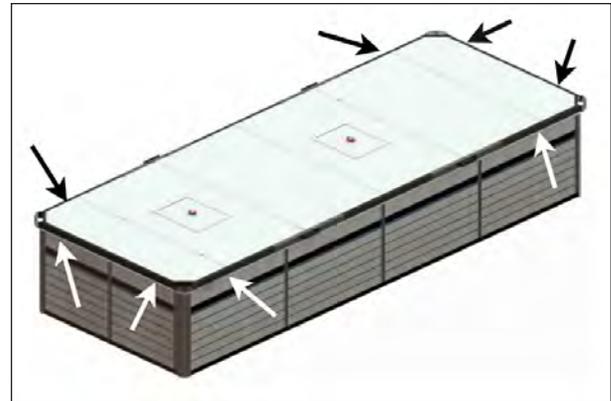


FIGURE 73: TOP COVER POSITIONING WITH THE DRILLING TEMPLATE AND THE SPA

4. Drill the four top holes of every post using the drilling template and the provided 9/32" drill bit see [Figure 74](#). The hole must go through the first metal layer of the spa frame (about 2½" (6.35 cm) deep into the panel).

NOTE

The template should be tight under the acrylic and its long arm should rest flat on the post mount bracket left side surface. The template should also be flat on the skirt panel.



CAUTION

Drilling deeper than 2½" (6.35 cm) will damage the swim spa shell.

Ensure the template is correctly positioned before drilling.

Make sure the bend is still at 90° see [Figure 74](#).

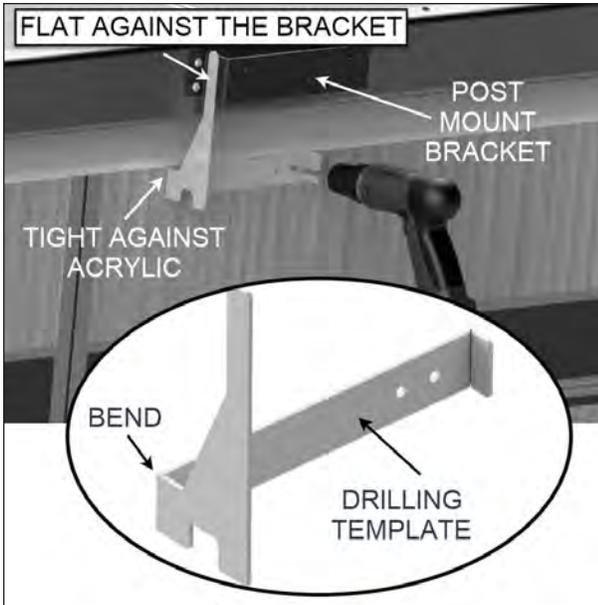


FIGURE 74: HOLE DRILLING

5. Repeat step 4 for all four posts.
6. Unscrew the panel retaining bracket of the spa with a flathead screwdriver see [Figure 75](#). Do not use a power tool.

WARNING

Never use power tools to install or remove hardware, as too much torque might break the hardware.

Refer to Endless Pools® for any further instructions and/or warnings regarding the removal of the swim spa panels.

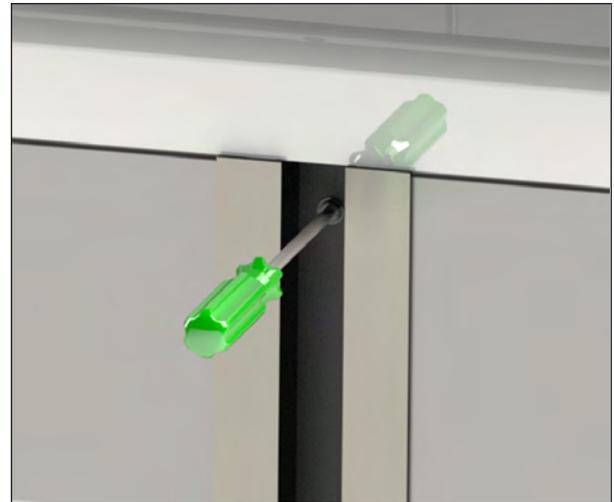


FIGURE 75: UNSCREW THE SPA PANEL

7. Remove the panels that block the access for the bracket fixation system of the cover see .

WARNING

Endless Pools® swim spa panels are wired due to the light band. Disconnect the wires on both sides of a panel before removing it. See manufacturer's instruction.

NOTE

Use hardware bag no. 55 for the following steps.

8. Install the 1/4-20 X 3/4" hex standoffs, 1/4" lock washer internal/external teeth and the 1/4" hex cap screw 3/8" long in the holes drilled in steps 4 and 5 in the order shown in [Figure 76](#).

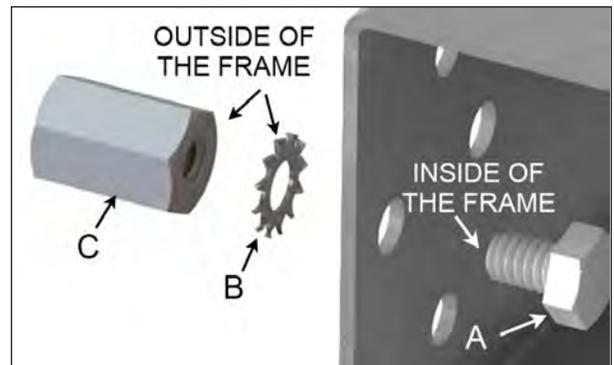


FIGURE 76: STANDOFF INSTALLATION

ID	DESCRIPTION
A	HEX CAP SCREW

ID	DESCRIPTION
B	LOCK WASHER INT/EXT TEETH
C	HEX STANDOFF

- Screw the standoffs tightly using a 1/2" wrench on the standoffs and a 7/16" wrench on the 1/4" hex cap screw see [Figure 77](#).



WARNING

The maximum torque applied on the 1/4" hex cap screw should be 6.5 in-lbs. A torque above that value could break the screw.

Never use power tools to install or remove hardware, as too much torque might break the hardware.



FIGURE 77: STANDOFF TIGHTENING

- Repeat steps 8 and 9 for every hole of all four posts. There are 4 holes for every post.

NOTE

Use hardware bag no. 60 for the following steps.

- Depending on the height of your swim spa, install the appropriate links sleeve/spa, either the short arms (50" high model; arms pointing down) or the long arms (58" high model) on the upper sleeve bracket already set on the sleeve. Use 1/4-20 x 3/4" button head socket cap screws and 1/4" flat washers outside of the sleeve brackets and 1/4" lock washers and 1/4-20 hex nuts inside of the sleeve brackets for all of the brackets fastening see [Figure 78](#) and [Figure 79](#).

NOTE

The short arms must go outside the sleeve brackets as shown in [Figure 78](#) while the long arms must go inside the sleeve brackets as shown in [Figure 79](#).

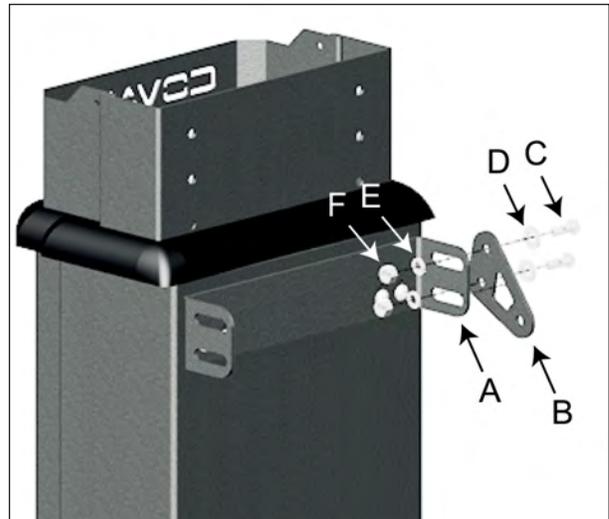


FIGURE 78: SHORT ARM INSTALLATION

ID	DESCRIPTION
A	SLEEVE BRACKET
B	SHORT ARM
C	BUTTON HD SOCKET CAP SCREW
D	FLAT WASHER
E	LOCK WASHER
F	HEX NUT

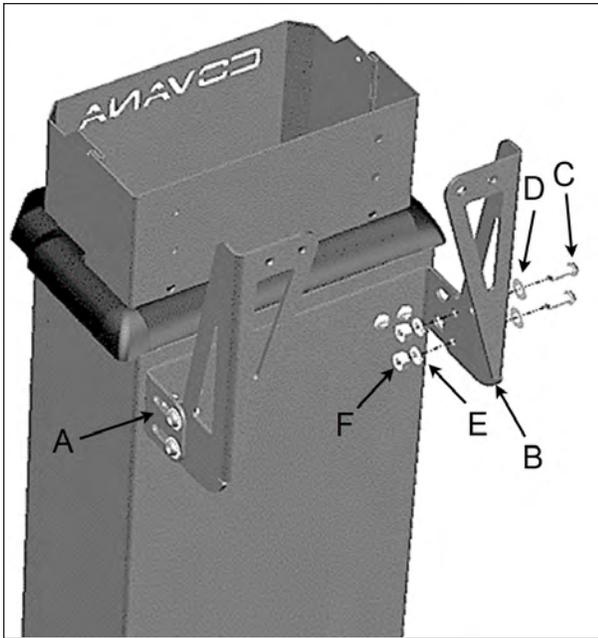


FIGURE 79: LONG ARM INSTALLATION

ID	DESCRIPTION
A	SLEEVE BRACKET
B	LONG ARM
C	BUTTON HD SOCKET CAP SCREW
D	FLAT WASHER
E	LOCK WASHER
F	HEX NUT

If you have a 58" high swim spa model, skip to step 13.

12. Install the tub mount bracket on the short arms using 1/4-20 x 3/4" button head socket cap screws, the 1/4" washers, the 1/4" lock washers and 1/4-20 hex nuts see [Figure 80](#).

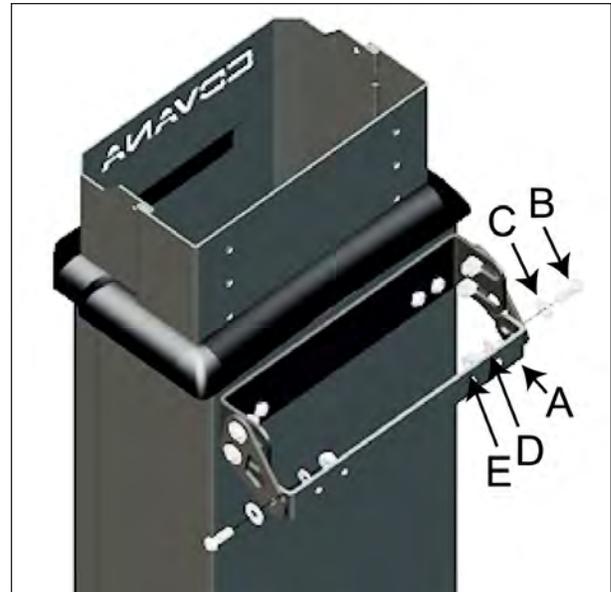


FIGURE 80: TOP TUB MOUNT BRACKET INSTALLATION

ID	DESCRIPTION
A	TUB MOUNT BRACKET
B	BUTTON HD SOCKET CAP SCREW
C	FLAT WASHER
D	LOCK WASHER
E	HEX NUT

13. For all swim spa models, install the lower arms and the tub mount bracket on the lower sleeve bracket already set on the sleeve using 1/4-20 x 3/4" button head socket cap screws, the 1/4" flat washers, the 1/4" lock washers and 1/4-20 hex nuts see [Figure 81](#).

NOTE

Lower arms must go outside of the lower sleeve bracket as shown in [Figure 81](#).

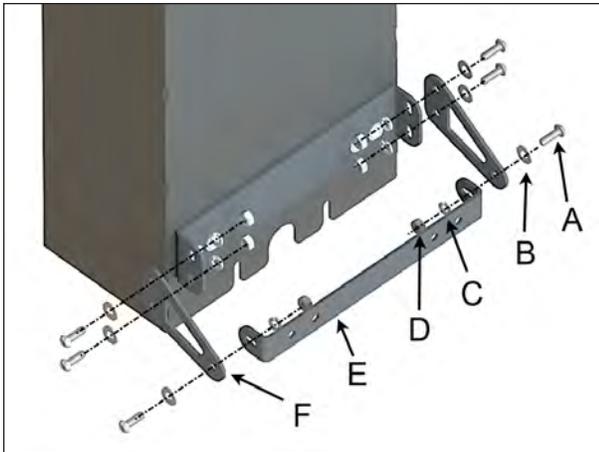


FIGURE 81: LOWER ARM AND TUB MOUNT BRACKET INSTALLATION

ID	DESCRIPTION
A	BUTTON HD SOCKET CAP SCREW
B	FLAT WASHER
C	LOCK WASHER
D	HEX NUT
E	TUB MOUNT BRACKET
F	LOWER ARM

14. Repeat steps 11, 12 and 13 for all four posts.
15. Once either the short arms and the tub mount brackets or the long arms are installed on the sleeves, approach the sleeves to the swim spa and screw the tub mount brackets or the long arms loosely to the standoffs using the 1/4-20 x 3/4" button head socket cap screws see [Figure 82](#) and [Figure 83](#).



FIGURE 82: INSTALLATION FOR 50" HIGH MODELS

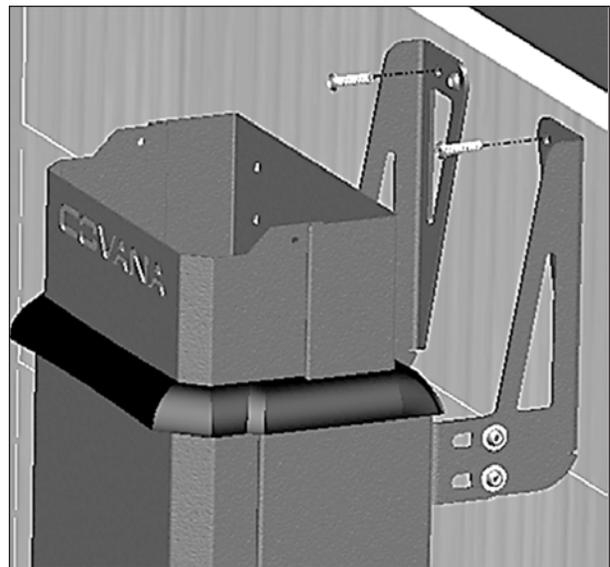


FIGURE 83: INSTALLATION FOR 58" HIGH MODELS

16. Ensure that the sleeve is well leveled using a level on two sides of it, see [Figure 84](#).



FIGURE 84: CHECK LEVEL ON POSTS

17. Push the bottom tub mount bracket against the spa plastic frame and use it as a template to mark the holes for all four posts see [Figure 85](#).

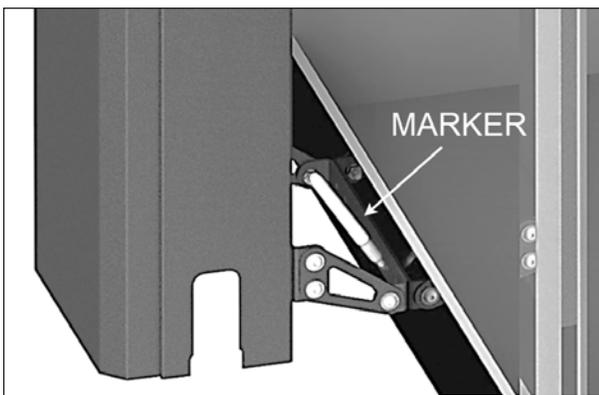


FIGURE 85: MARKING POSITION OF HOLES

18. Remove the sleeves from the spa. If you have a 50" model, remove the upper tub mount brackets installed at step 12 ([Figure 80](#)). If you have a 58" model, remove both long arms from each sleeve installed in step 11 ([Figure 79](#)).

NOTE

Do not discard these items; you'll need them later.

19. For all models, remove the lower tub mount brackets from the lower arms.

NOTE

Do not discard these items; you'll need them later.

20. Using the included 9/32" drill bit, drill the holes marked in step 17 ([Figure 85](#) and [Figure 86](#)).

NOTE

Holes should approximately be 1" (2.54 cm) deep.



WARNING

Drilling deeper than 1" (2.54 cm) could damage the swim spa.



FIGURE 86: HOLE DRILLING

21. Fasten the lower tub mount brackets on the swim spa using 1/4-20 x 3/4" button head socket cap screws, 1/4 lock washers and 1/4-20 hex nuts for all four posts. Nuts should be inside the frame see [Figure 87](#).

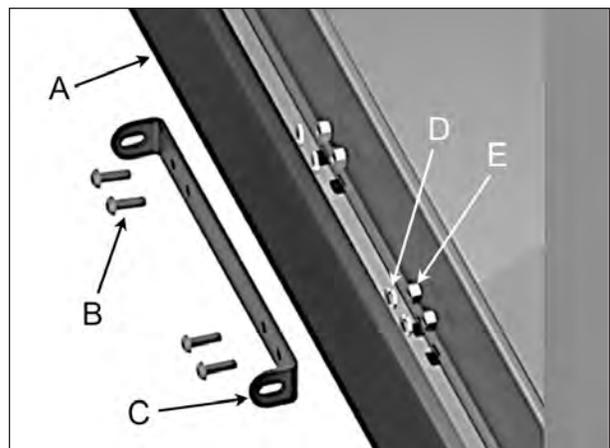


FIGURE 87: FASTEN LOWER TUB MOUNT BRACKET

ID	DESCRIPTION
A	SWIM SPA FRAME
B	BUTTON HEAD CAP SCREW
C	TUB MOUNT BRACKET
D	LOCK WASHER

ID	DESCRIPTION
E	HEX NUT

- Cut the foam around the hole areas behind the removed panels with a utility knife as shown in [Figure 88](#) to ensure that the standoffs will not interfere with the foam on the panels.

NOTE

The cut-out areas should be a rectangle approximately 2" (5 cm) high by 4" (10 cm) wide.

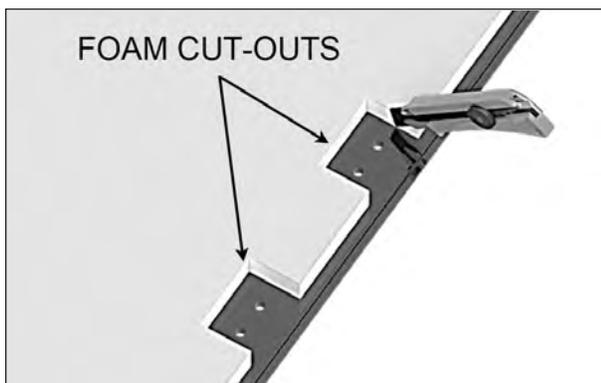


FIGURE 88: FOAM CUTTING

- Reinstall the panels removed at steps 6 and 7 ([Figure 75](#)).



WARNING

Refer to the manufacturer's guide for any further instructions and/or warnings regarding the installation of the swim spa panels.

If you have a 58" high spa model, skip to step 25.

- For 50" high spas, screw the tub mount bracket to the spa with four 1/4-20 x 3/4" button head socket cap screws using the provided 5/32" L hex key on hex standoff for all four posts see [Figure 89](#).



WARNING

Never use power tools to install or remove hardware, as too much torque might break the hardware.

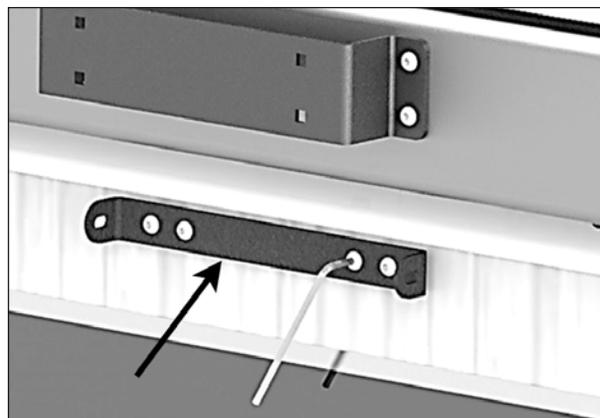


FIGURE 89: TUB MOUNT BRACKET INSTALLATION

If you have a 50" high spa model, skip to the next section.

- For 58" high spas, screw both right and left long arms to the spa with 1/4-20 x 3/4" button head socket cap screws using the provided 5/32" L hex key on hex standoff for all four posts see [Figure 90](#).

NOTE

The 58" model doesn't need a tub mount bracket. Screw the long arms directly in the standoffs behind the panel.



WARNING

Never use power tools to install or remove hardware, as too much torque might break the hardware.

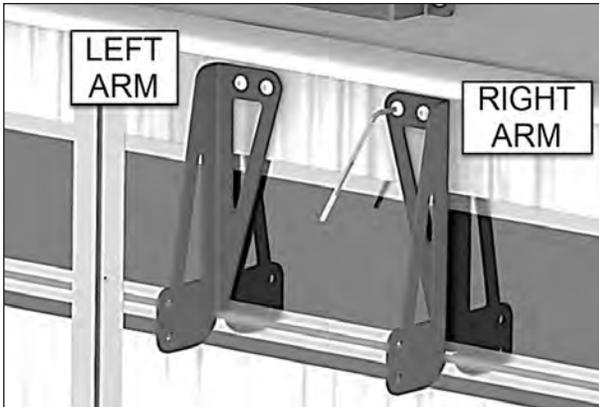


FIGURE 90: LONG ARM INSTALLATION

JACK INSTALLATION C-EP

1. Position the jacks in their locations. Motorized jacks should always be on the left side when looking at the spa see [Figure 91](#).

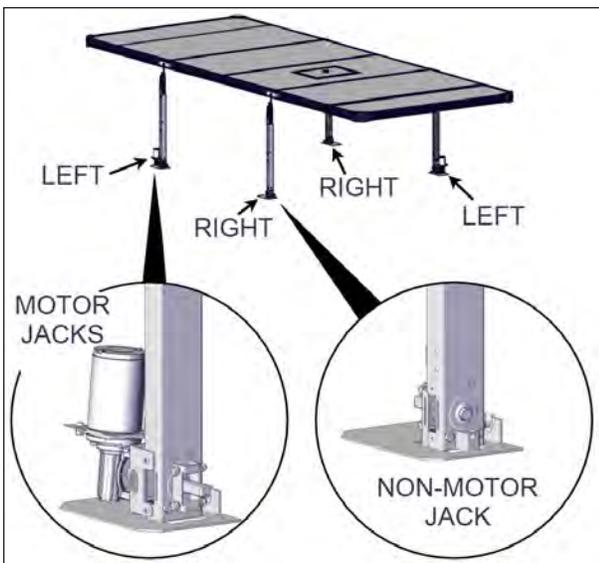


FIGURE 91: JACK POSITIONS

NOTE

Position the non-motor jack with the bonding lug ([Figure 92](#)) on the same side where the control box will be installed. Refer to section [ELECTRICAL DIAGRAMS](#) for more information.

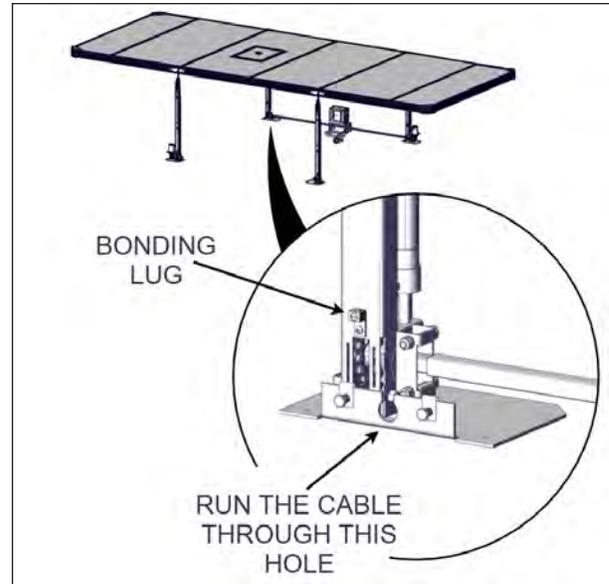


FIGURE 92: BONDING LUG POSITION

2. Slide the drive shaft over the square shaft of one motor-side jack see [Figure 93](#).

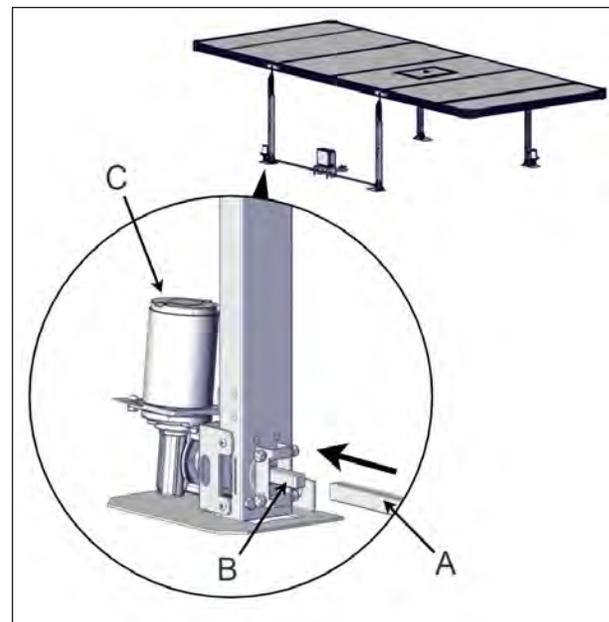


FIGURE 93: DRIVE SHAFT INSTALLATION ON THE MOTOR SIDE

ID	DESCRIPTION
A	DRIVE SHAFT
B	SQUARE SHAFT
C	JACK MOTOR

3. On the same spa side, install the drive shaft onto the non-motorized jack's shaft see .

NOTE

If drive shaft does not line up with non-motorized jack's shaft, the use of a 3/4" (19 mm) wrench or adjustable wrench can help. Slightly rotate the shaft as shown in .



WARNING

While installing the drive shaft, check if it has not been pulled out from the opposite side when manipulating the part.

Do not twist the motorized jack with the wrench. This jack contains a gearbox which could break when stressed from the output.

NOTE

Use hardware bag no. 70 for the following steps.

4. Install the U-frame over the drive shaft. The U-frame is attached to the post bracket of the motor and non-motor jacks. Fasten in place using the hardware provided: four hexagonal 5/16" x 2" screws and 5/16" nylon insert locknuts. Use a 1/2" (13 mm) socket wrench and spanner see [Figure 94](#).
5. Repeat the previous steps on the opposite side.

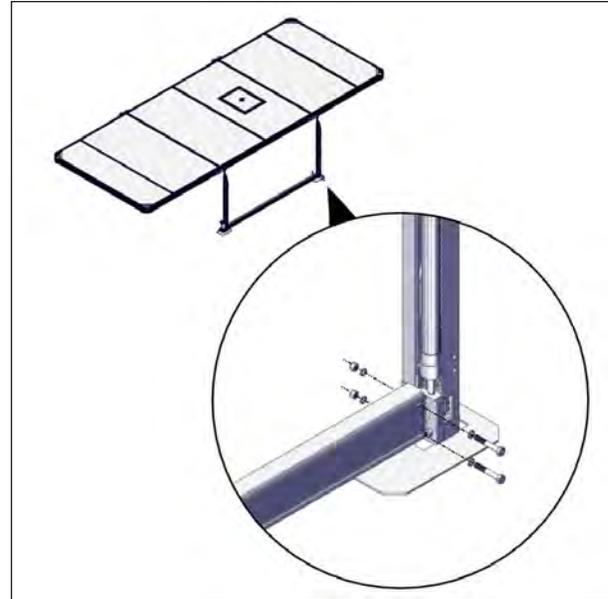


FIGURE 94: U-FRAME INSTALLATION

6. Check if the drive shaft is still engaged on both ends. Slip your fingers under the U-frames to do this operation.
7. Once the U-frames are installed, the jack lock screw located at the top of non-motor side jacks can now be unlocked safely. Remove the M8 x 35 mm locking screw and reinstall it in the hole next to it so you don't lose it. Remove the screw on both non-motor jack. You can remove the red tags on the non-motor jacks see [Figure 95](#).



WARNING

Failure to properly engage the drive shaft will cause the non-motor jack to elevate by itself.

Failure to remove the locking screw will break the lifting mechanism.

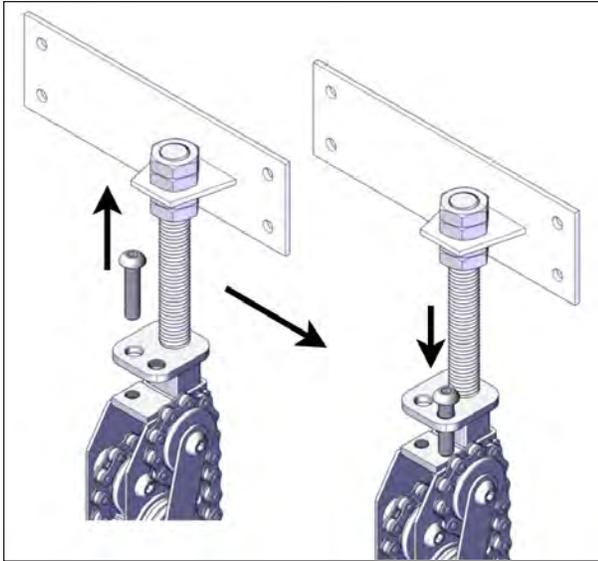


FIGURE 95: JACK LOCKING SCREW REMOVAL

8. For both motorized jacks, locate electrical cables that are found in the part boxes.

NOTE

The shortest cable goes on the side where the control box will be located. For the AC-operated model, position the AC control box so it is protected from direct sunlight.

9. Locate the short end of the cable, which can be identified from the metal compression connector near the end of the cable.
10. Run the connector through the center hole on the back of the motor jack's base plate.
11. Connect the cable to the motor harness and tighten the screws of the compression connector onto the base. The screws of the compression connector should be oriented horizontally. You might have to rotate the connector as shown on [Figure 96](#).
12. Let the remainder of the cable pass near the U-frame. The electrical hook-up will be explained further. When connecting the motor harness, you must hear a CLIC from the connector to confirm you have properly installed it.



WARNING

Ensure the proper orientation of harnesses when trying to plug in the motor.

Failure to properly clip on harness will cause damage to the electrical circuit.

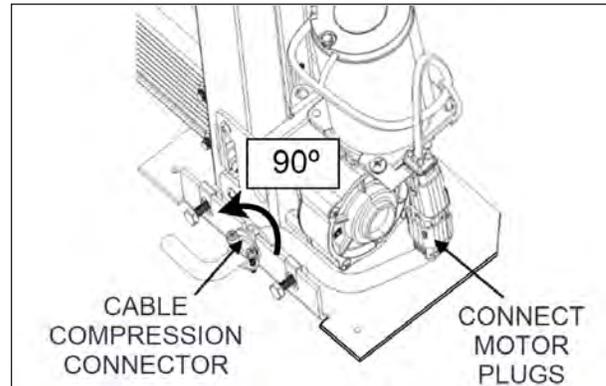


FIGURE 96: CONNECTOR AND PLUGS

13. Repeat previous steps for the second motorized jack.
14. The jack adapter located at the top of the jack can be adjusted by turning the threaded rod on the top of the jack. Adjust the height so that they match the cover mount bracket holes. Use the adjustable wrench 15/16" (24 mm) head. Repeat this step for all four jacks ([Figure 97](#)).



WARNING

The threaded rod must not be unscrewed more than 14" (35 cm). (Measure the length from the top of the threaded rod nut to the top of the bottom nut see [Figure 97](#).)

Further unscrewing is not considered safe and is not recommended by Covana.

Failure to follow these guidelines could cause serious injury.

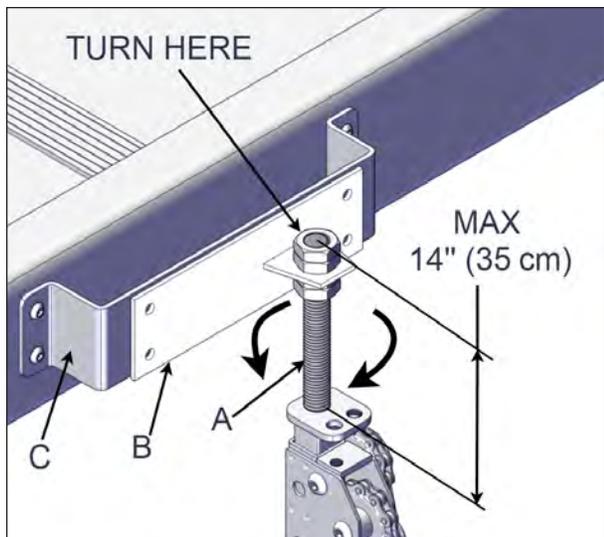


FIGURE 97: THREADED ROD ADJUSTMENT

ID	DESCRIPTION
A	THREADED ROD
B	JACK ADAPTER
C	POST MOUNT BRACKET

- Slide the sleeves over the top of the jacks and fasten them using the 1/4" x 3/4" carriage bolts at the top with 1/4" lock washers and 1/4" nuts. Use a 7/16" (11 mm) socket and spanner see [Figure 98](#).



CAUTION

When sliding the sleeves over the jacks, ensure the slot at the bottom of the outer sleeve is going to slide over the U-frame that covers the drive shaft. There are right and left models for sleeves see [Figure 99](#).

Handle the sleeves with care to prevent them from being scratched or otherwise damaged.

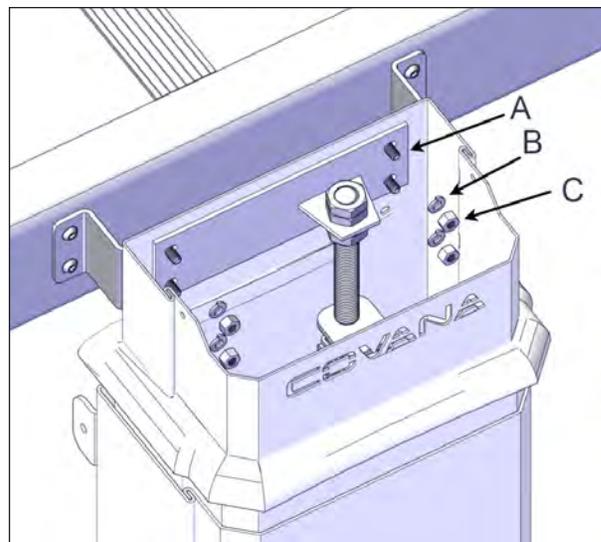


FIGURE 98: SLEEVE INSTALLATION

ID	DESCRIPTION
A	CARRIAGE BOLT 1/4-20 x 3/4"
B	LOCK WASHER 1/4"
C	NUT 1/4-20

- Repeat previous step for all jacks.

- Tighten 1/4" hexagonal screws at the bottom of all the sleeve base using a 7/16" (11 mm) socket wrench. Ensure that the washer is outside of the outer sleeve. This will ensure the sleeve is held correctly see [Figure 99](#).

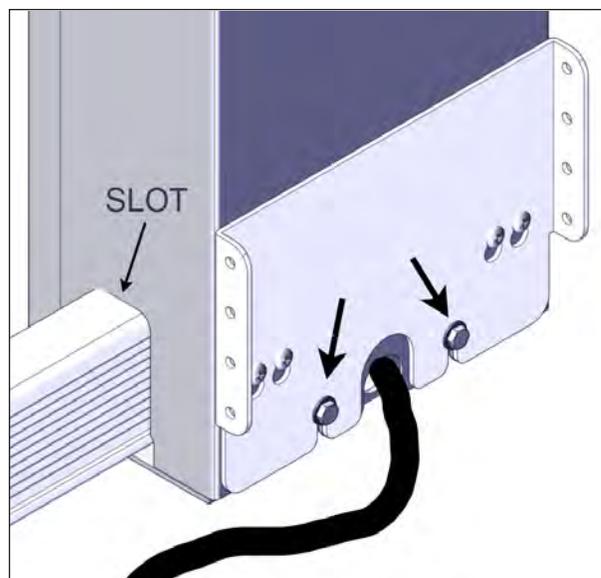


FIGURE 99: SLEEVE INSTALLATION

- Repeat previous step for all jacks.

If you have a 58" high swim spa model, skip to step 23.

19. Install the tub mount bracket mounted on the spa frame in between the short arms installed on the sleeve bracket see [Figure 100](#).
20. Using 1/4-20 x 3/4" button head socket cap screws, the 1/4" washers, the 1/4" lock washers and 1/4-20 hex nuts, screw the short arms to the tub mount bracket using the provided 5/32" L hex key see [Figure 100](#).

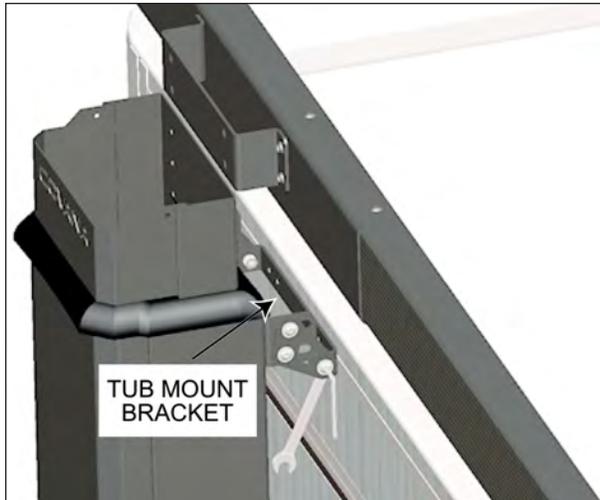


FIGURE 100: SLEEVE TOP INSTALLATION

21. Repeat previous steps for all four posts.
22. Verify if the posts are still leveled on both sides. If not, untighten the hardware and reposition the sleeves. Use the outer sleeve as a reference.

If you have a 50" high swim spa model, skip to step 27.

23. Install the long arms mounted on the spa between the sleeve mount bracket see [Figure 101](#).
24. Using 1/4-20 x 3/4" button head socket cap screws, the 1/4" washers, the 1/4" lock washers and 1/4-20 hex nuts, screw the long arms to the sleeve bracket using the provided 5/32" L hex key see [Figure 101](#).

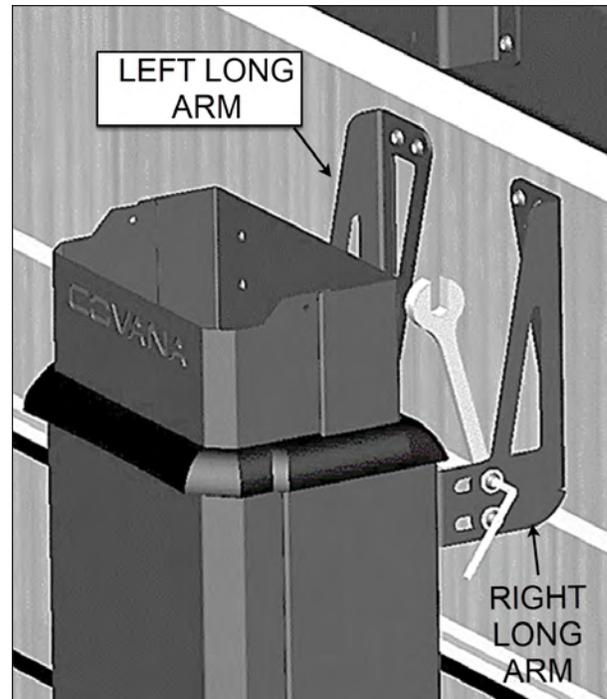


FIGURE 101: LONG ARM INSTALLATION

25. Repeat previous steps for all four posts.
26. Check if the posts are still leveled on both sides. If not, untighten the hardware and reposition the sleeves. Use the outer sleeve as a reference.
27. For all swim spa models, install the lower tub mount bracket between the lower arms.
28. Using 1/4-20 x 3/4" button head socket cap screws, the 1/4" washers, the 1/4" lock washers and 1/4-20 hex nuts, screw the lower arms to the tub mount bracket using the provided 5/32" L hex key see [Figure 102](#).

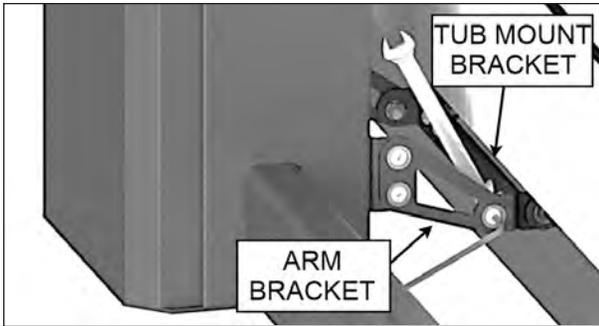


FIGURE 102: LOWER TUB MOUNT BRACKET INSTALLATION

29. Repeat previous steps for all four posts.
30. Check if the posts are still leveled on both sides. If not, untighten the hardware and reposition the sleeves. Use the outer sleeve as a reference. Use the 48" (122 cm) level.

WARNING

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

31. Attach the top cover for all four posts. Use the provided Robertson #8 self-drilling screws x 1/2" (2 screws per post) see [Figure 103](#).

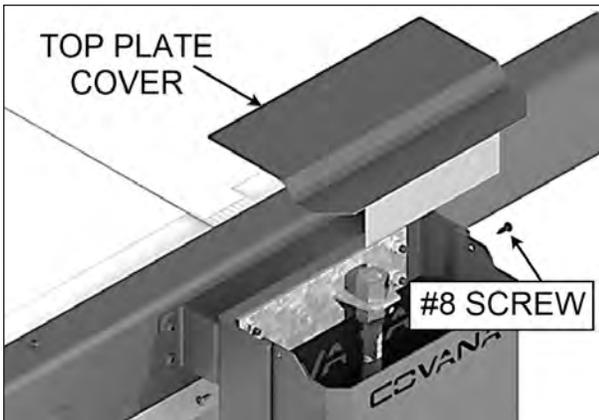


FIGURE 103: TOP PLATE INSTALLATION

32. For all four posts, slide the all-weather seals down. Ensure they are properly seated on the outer sleeve's base. Push down on the seal as shown in [Figure 104](#).

WARNING

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.

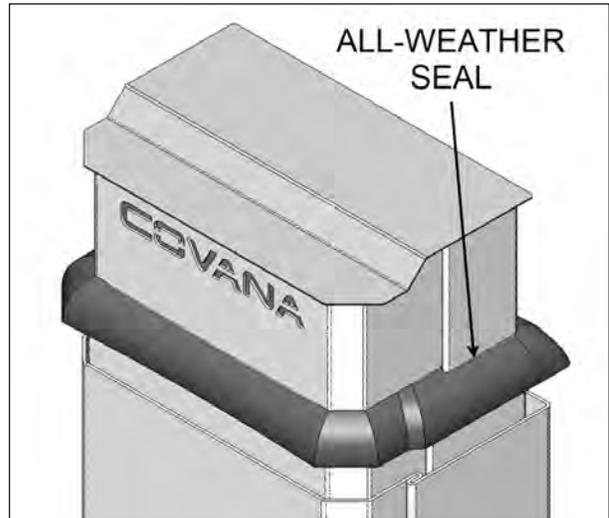


FIGURE 104: ALL-WEATHER SEAL ADJUSTMENT

ELECTRICAL CONNECTIONS

This section shows you how to connect electrical wiring to operate the cover.

RISK OF ELECTROCUTION

CAUTION

All electrical work should be done by a certified electrician, otherwise the certification and warranty will be void. Furthermore, any modifications to the electrical components will also void the warranty.

DANGER

Failure to comply with these instructions may result in death by electrocution or serious injury.

**DANGER**

- Disconnect or turn off and secure all power supplies before starting any intervention on the cover.
- For AC-operated model: A disconnect mean needs to be incorporated into the fixed wiring at the time of installation. This mean must be accessible to the user or service technician to turn the power off for future maintenance or repair.
- Only a certified electrical contractor may perform any electrical maintenance on the cover. The wiring must comply with all applicable local electrical regulations.
- For AC-operated model: The Covana AC control box must be connected to a circuit that is protected by a dedicated Ground Fault Circuit Interrupter (GFCI) that complies with all applicable local electrical codes and regulations.
- Install the cover in such a way that drainage directs water away from the electrical and the mechanical components at the base.
- Do not connect any auxiliary components to the electrical system of the cover unless they have been approved by Covana.
- Replace electrical components with original components provided or approved by Covana. Ask your dealer for replacement parts.
- To reduce the risk of electrical shock, replace a damaged electrical cord immediately. Failure to do so may result in death or serious personal injury due to electrocution.
- Do not bury the electrical wires into the ground unless using a direct-burial underground cable and proper digging. Not respecting this precaution may result in death, or serious personal injury due to electrocution.

ELECTRICAL WARNING**WARNING**

- To reduce the risk of electrical shocks, the green-colored terminal (or the terminal marked “g,” “gr,” “ground,” “grounding” or with a \equiv symbol) that is located inside the supply terminal box or compartment must be connected to the grounding connection provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying the equipment.
- All field-installed metal components, such as rails, ladders, drains or other similar hardware, within 10 ft (3 m) of the spa must be bonded to the equipment grounding bus with copper conductors not smaller than No. 6 AWG (4.11 mm / 13.30mm²). (NEC art. 680).

AC CONTROL BOX INSTALLATION**NOTE**

This section is for AC-operated model only. If you are installing a battery-operated model, skip to [BATTERY AND OPTIONAL SOLAR PANEL INSTALLATION](#).

1. Install the pre-assembled control box and its holding bracket on one of the U-frames between the two sleeves, see [Figure 105](#).

**WARNING**

Choose a side of the spa that will allow any maintenance to the box to be easily done but that will also avoid direct and constant sunlight exposure. In some region, the heat from the sun could impede the performance of the controller.

The AC control box must always be out of reach of anyone in the spa. It should be installed at a minimum distance of 4' [1.2m] away from any position in the spa.

The AC control box must be installed in its vertical position. The connectors must face the ground, see [Figure 105](#).

The AC control box connector must be installed at a minimum distance of 5" [127 mm] from ground level.

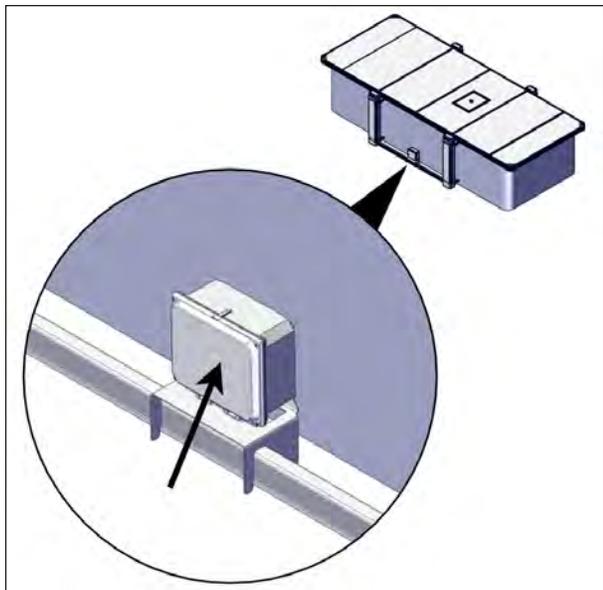


FIGURE 105: CONTROL BOX INSTALLATION

2. Once installed, a certified electrician must connect the AC control box to a power source following instructions from the [ELECTRICAL DIAGRAMS](#) section.



WARNING

A certified electrician must install a conduit connector that will be type 3 enclosure rated (not included). The hole diameter on the box is 22 mm ([Figure 107](#)). Refer to the [ELECTRICAL DIAGRAMS](#) section for wiring.

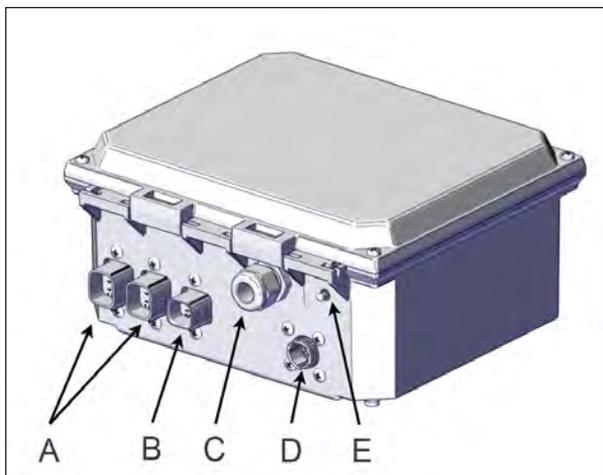


FIGURE 106: CONTROL BOX

ID	DESCRIPTION
A	MOTOR CONNECTORS

ID	DESCRIPTION
B	KEY SWITCH CONNECTOR
C	POWER LINE ENTRY
D	EMERGENCY BATTERY CONNECTOR
E	LED INDICATOR

3. Start by connecting the two motor jack harnesses to the AC control box, see [Figure 106](#). Use the wires shown in [Figure 7](#) in the Jack installation section. Put the exceeding wires as close to the spa as possible to hide and protect the wires.

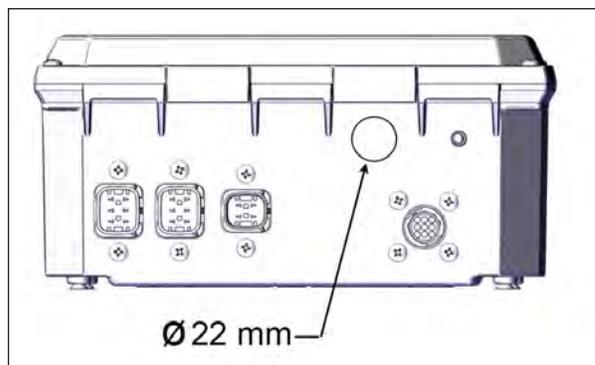


FIGURE 107: MAIN POWER LINE CONNECTION

4. Unpack the key switch and plug the harness into the AC control box, see item B in [Figure 106](#).

OPTIONAL EMERGENCY BATTERY BACKUP

NOTE

If you have purchased the optional emergency battery backup kit, it will be in one of the parts boxes. Install the charger in a safe, indoor location. The charger cuts the power once the battery is fully charged so you can keep the battery plugged on the charger.



DANGER

The charger must always be indoors, away from water. Damage, injury or death might occur if this instruction is not followed.

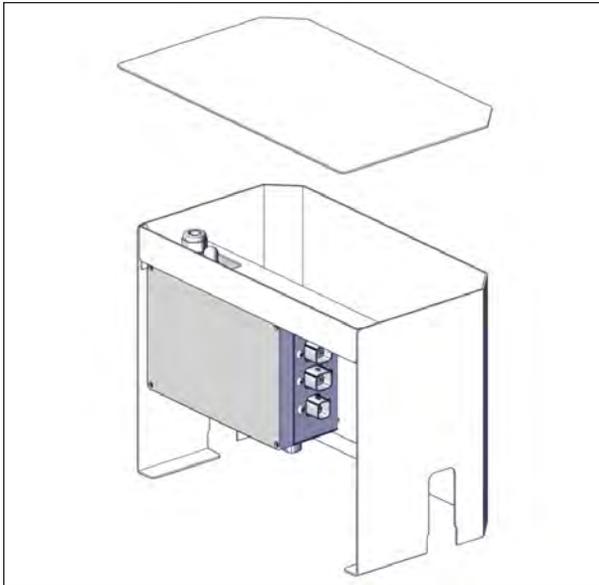
**WARNING**

The optional emergency battery backup must only be connected when needed. If the battery is left connected to the AC control box, damage to the battery and AC control box may occur.

BATTERY AND OPTIONAL SOLAR PANEL INSTALLATION**NOTE**

This section is for battery-operated models only. If you have the AC-operated model, skip to the next section.

1. Locate the control box housing and control box, see [Figure 108](#) and [Figure 109](#).
2. Start by connecting the two motor jack harnesses to the control box. Use the wires shown in [Figure 7](#) in the Jack installation section. Put the exceeding wires as close to the spa as possible to hide the wires.

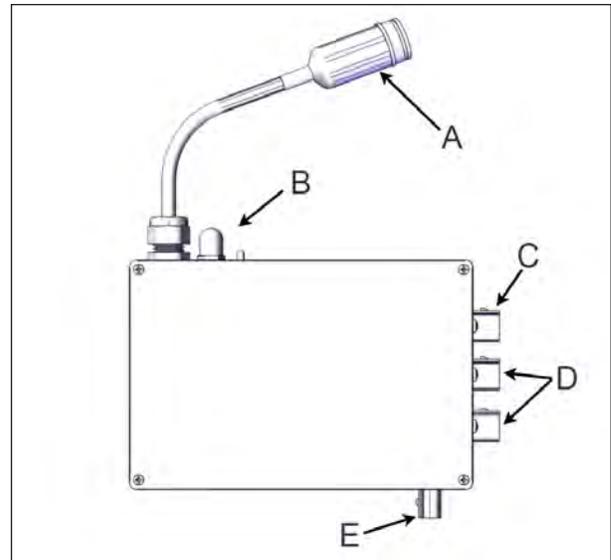
**FIGURE 108: CONTROL BOX HOUSING**

3. Unpack the key switch and plug the harness into the control box (item C, [Figure 109](#)).
4. Unpack the optional solar panel kit from the boxes and connect the solar panel harness (item E, [Figure 109](#)).

5. Install the optional solar panel on the side of the spa that is most exposed to the sun, directly onto the paneling of the spa, under the acrylic edge.

**DANGER**

Do not install the solar panel on the cover since the wire will hang above water and might cause electrocution.

**FIGURE 109: BATTERY/SOLAR PANEL CONTROL BOX**

ID	DESCRIPTION
A	BATTERY
B	CIRCUIT BREAKER
C	KEY SWITCH
D	MOTOR
E	SOLAR PANEL

6. Slide the control box housing onto the U-frame, see [Figure 110](#).
7. Install the remainder of the wires as near as possible to the spa to hide them.
8. Open the control box housing top and connect the battery harness. The battery is found in the parts boxes. Install the battery inside by opening the top and closing the control box.

NOTE

A second battery and a charger will also be in the parts boxes. Install the charger in a safe, indoor location. The charger cuts the power once the battery is fully charged so you can keep the battery plugged on the charger.



DANGER

The charger must always be indoors, away from water. Damage, injury or death might occur if this instruction is not followed.

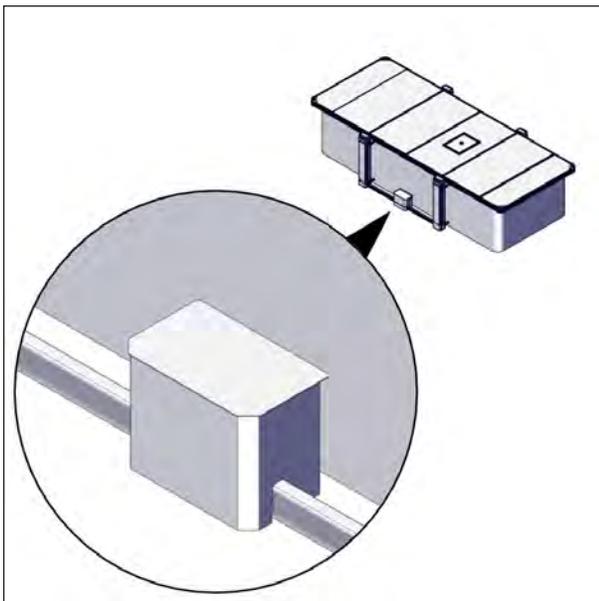


FIGURE 110: CONTROL BOX HOUSING INSTALLATION

TESTING THE COVER



CAUTION

If the cover is in an area with limited clearance, never completely lift the cover while performing this test sequence.



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 the cover while performing the start-up procedure.
2. Use the key switch to lift it by approximately 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.
5. 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.
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 [TROUBLESHOOTING](#) 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.
8. 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 [POSITION OF THE KEY SWITCH](#) section. 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 [POSITION OF THE KEY SWITCH](#) section. 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.

DANGER

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

WIPER INSTALLATION

1. Lift the cover halfway up to proceed to the next steps. The next steps are important for minimizing water intrusion.

CAUTION

Make sure the I-beams are dry and clean.
 Make sure ambient temperature is between 70°F to 100°F (21°C to 38°C) for the wiper installation.

2. Peel back the red siding of the double-sided tape of one wiper see [Figure 111](#).

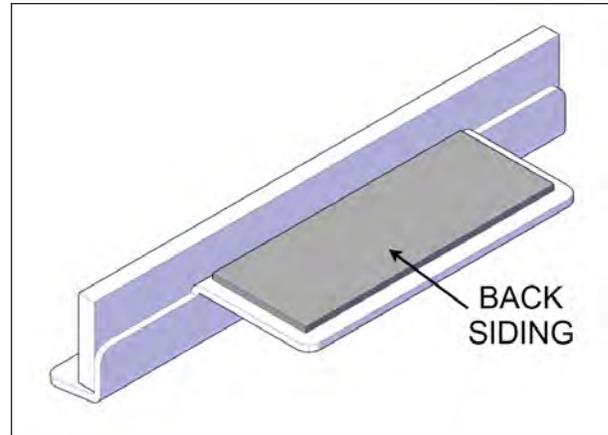


FIGURE 111: WIPER

3. Under the cover, locate an I-beam and orientate the wide flap of the wiper outwards of the cover see [Figure 112](#).

WARNING

Failure to properly install the wiper impedes performance.

Failure to install each wiper bracket properly can result in excessive cover leakage.

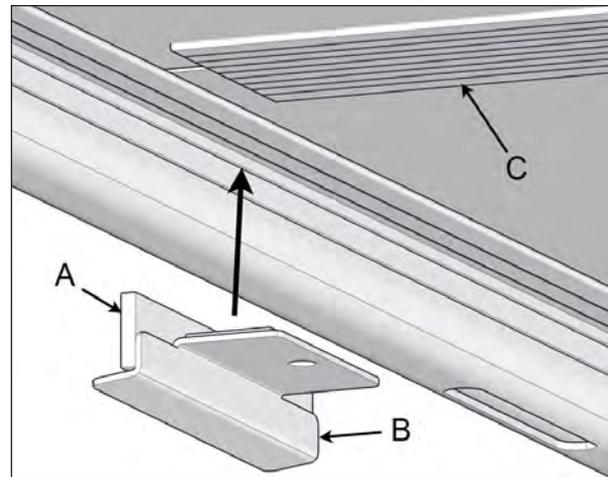


FIGURE 112: WIPER LOCATION

ID	DESCRIPTION
A	FLAP
B	WIPER BRACKET
C	I-BEAM

NOTE

At the final position of the wiper, the flap must touch the edge of the I-beam see [Figure 113](#).

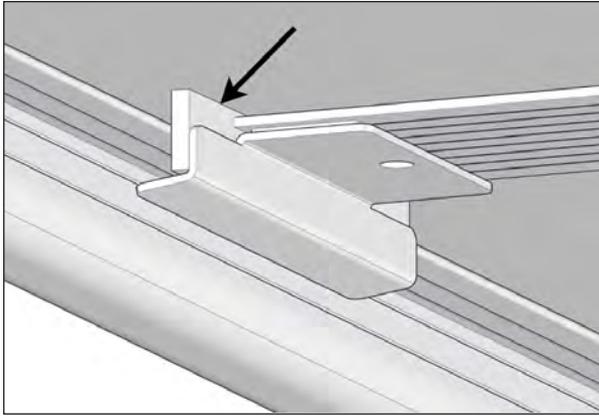


FIGURE 113: FINAL POSITION OF THE WIPER

4. Stick the wiper bracket on the middle of the I-beam by holding it in place and maintaining pressure for at least 60 seconds. This ensures a proper bond to the I-beam. Make sure you install the wiper flap at the edge of the I-beam directly into the gap between the I-beam and the C-channel, see [Figure 113](#).
5. Repeat previous steps for all wipers.

SEAL INSTALLATION



WARNING

The recommended tool to install the seal properly is a J-Roller with rubber roller (Covana part no. 239693), see [Figure 114](#).

The roller is not included in the tools. It must be free of scratches, clean and non-abrasive.

Covana is not responsible for any misuse of the tool and any damage done to the spa or the cover while using the roller.



CAUTION

It is recommended to install the seal when the ambient temperature is above 50 °F (10 °C)

Before installing the seal, it is strongly recommended to reduce the water vapor steam generated by the spa. To do this; stop the agitation of the water by turning off the recirculation pump, and then set the temperature of the spa water to be between 2 and 5 degrees under the ambient temperature. Wait until the water has the ambient temperature or use a plastic canvas to stop the vapor steam.

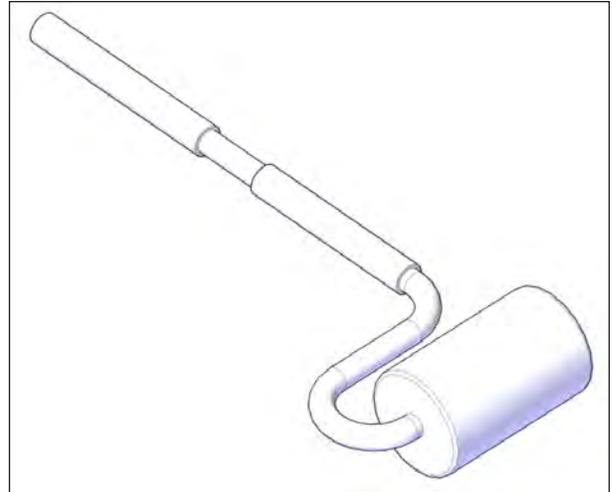


FIGURE 114: J-ROLLER WITH RUBBER ROLLER

1. Once the cover has been fully mounted, raise the cover and remove the foam spacers and tape.

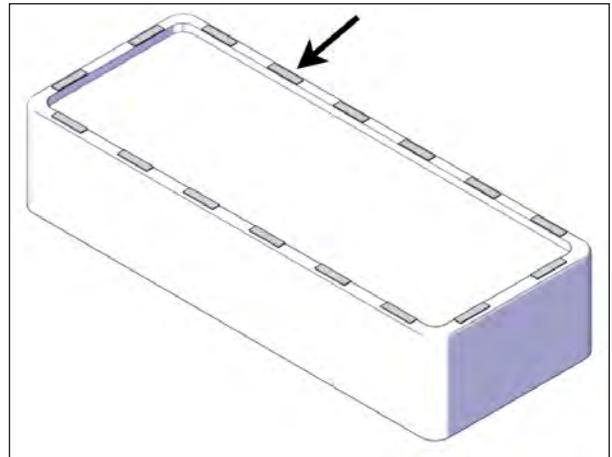


FIGURE 115: REMOVE FOAM SPACERS AND TAPE

2. Lower the cover and walk around the entire perimeter of the spa. Check where the inside surface of the cover makes contact with the spa. This determines the best location to install the seal.
3. Dry the spa top edges and the underside of the cover with a clean cloth.



WARNING

The spa top edges must be 100% dry and clean. Use isopropyl alcohol (IPA) if necessary.

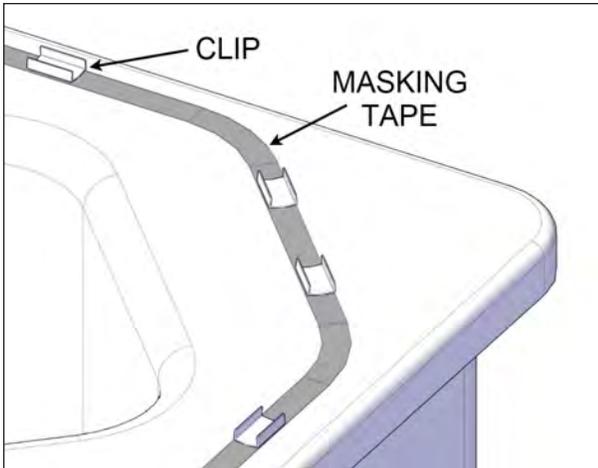


FIGURE 116: MASKING TAPE AND CLIPS

**WARNING**

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

Install the masking tape at the best location as possible according to the contact surface between the cover and the top edge of the spa.

4. The number of seal clips is limited. Temporarily install the clips all around the spa to ensure the best distribution (do not stick yet). The minimum turn radius for the seal is 4" (10 cm), see [Figure 116](#). Keep two clips for the seal joint connector as shown in [Figure 117](#). Once the distribution is done, stick the clips in place (on the tape if applied).
5. The seal joint starts on the opposite side from the spa entrance. Install two clips where the seal joint connector will be located, see [Figure 117](#).

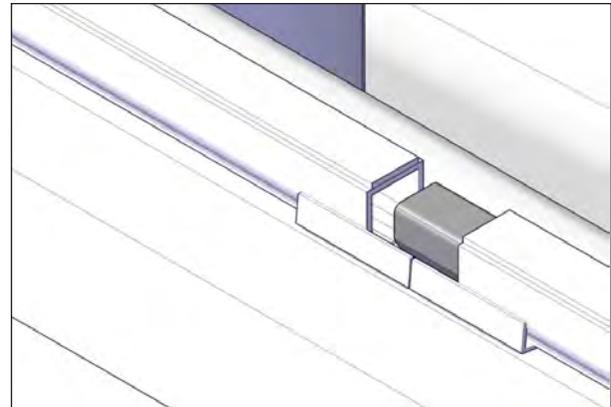


FIGURE 117: SEAL JOINT CONNECTOR

6. Start installing the seal joint with the adhesive layer facing up towards the cover, see [Figure 117](#) and [Figure 118](#).

**CAUTION**

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

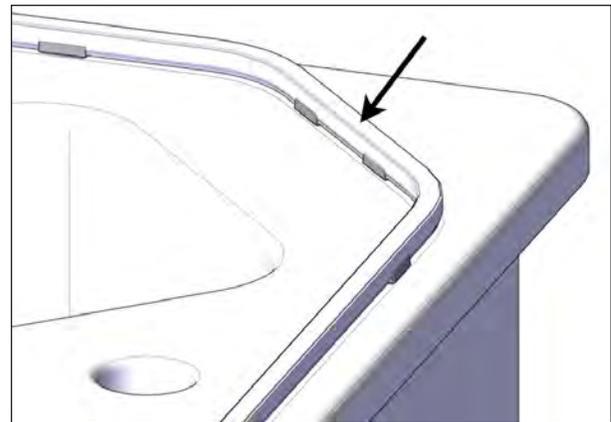


FIGURE 118: SEAL INSTALLATION

7. Once the seal is installed in the clips around the entire spa, cut the extra length as straight as possible for the best joint finishing results.
8. Insert the supplied seal connector in both ends of the seal. The use of masking tape to hold the two ends is recommended, see [Figure 117](#).



WARNING

At this point, if there is no water in the spa and the ambient air temperature is below 50 °F (10 °C), a temporary heater must be installed inside the spa for 10 to 15 minutes.

Once the heater is in the spa, lower the cover until it touches the seal to increase the air temperature.

While generating heat, regularly check interior air temperature and do not let it reach temperatures above 104 °F (40 °C). After 10 to 15 minutes, remove the heater and continue with the seal installation.

The rubber seal should not be overheated. Do not directly heat the acrylic or seal, as this may cause permanent damage.

Do not install the heater too close to the acrylic surface, as the surface could melt or catch on fire.

Install the heater on a pedestal or spacers so it will not rest directly on the acrylic of the spa.



WARNING

Make sure that the air temperature in the spa is still between 68 °F and 104 °F (20 °C and 40 °C) before proceeding to the next steps.

Remove all dirt, oil residues and moisture from the underside of the cover for proper seal adhesion, especially in wet spa installations. The use of mild detergent can help clean the surface.

Make sure the seal stays tight in the clips to ensure its proper positioning.

9. Test the seal placement by lowering the cover about 1/4" (6 mm) over the seal to ensure that the entire perimeter will make contact with the seal. If you are satisfied, raise the cover and remove the red plastic backing off the seal.
 10. Completely lower the cover onto the seal. Leave the cover in this position for at least 5 minutes to ensure a proper seal-to-cover adhesion.
 11. Slowly lift up the cover no more than 1/4" (6 mm) and leave the cover in this position for about 10 seconds, as this will allow the seal to slowly and fully release from the seal clips. You can also use a non-abrasive plastic tool
- or your fingers to help release the seal from the clips.
12. Once satisfied that the seal is released, lift up the cover 36" (91 cm) high. Apply a minimal pressure of 15 psi (103 kPa) on the seal with the roller as shown in [Figure 119](#) to properly bond the adhesive to the underside of the cover.

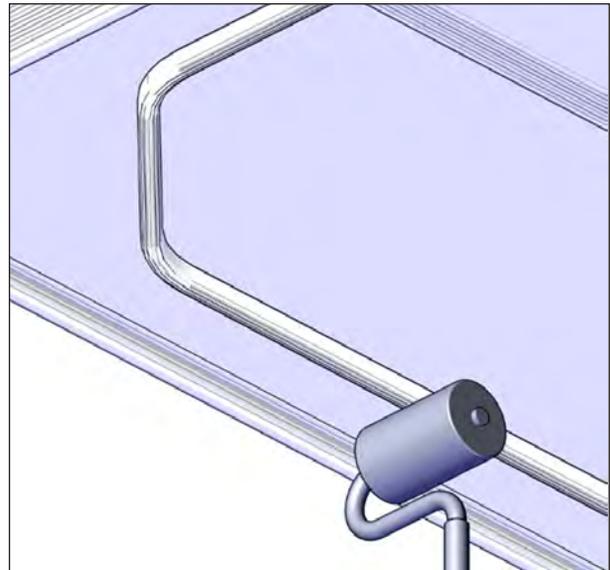


FIGURE 119: APPLY PRESSURE WITH ROLLER

13. Remove all seal clips and tape (if applied) from the spa top edges.
14. Lower the cover and stop at approximately 6" (15 cm) from the spa top edges.
15. Make sure the cover is flat with all corners at the same height.
16. Lower the cover, and make sure the seal is touching the spa all around. The heater can be put back in place if necessary.
17. Completely lower the cover and leave it closed for at least 24 hours. This will ensure the seal is properly bonded to the cover surface. The heater can be put back in place if necessary.
18. The seal installation is completed.

UPPER LIMIT RESET OF THE COVER

NOTE

Should there be an object that will obstruct the cover during operation, please follow the next steps to reset the maximum height of the cover.

If no obstruction, please skip to the last step of this section.

NOTE

Use the key switch to perform the following steps without interruption during the sequences.



WARNING

When following the next steps, the cover will ignore its upper limit. This means the mechanism can break if elevated too high.

1. The cover must be lowered to zero position. (Seal touches equally around spa perimeter).
2. Disconnect both motors (remove motor plug harness from the control box).
3. Disconnect the battery. If you are installing the AC-operated model, wait until the LED turns off to proceed to the next step.
4. Reconnect battery. (Ignore the step if you have an AC-operated model)
5. Using the key switch, turn UP (counter clockwise) and hold for at least 10 seconds.
6. Release the key.
7. Turn the key UP (counter clockwise) 10 times within 10 seconds.
8. Look at the control box LED. If the LED is flashing once about every 3 seconds, the reset process was successfully initiated.
9. You now have 30 seconds to reconnect the motors and set the upper height limit of the cover. Use the key switch to raise the cover.

NOTE

Every time that the height of the cover is changed, the 30-second countdown will restart. If that period of time is exceeded before having made the adjustments, you will exit the reset mode.

10. Raise the cover to the desired height.



WARNING

Do not exceed 120" (3 m) from the bottom of the sleeve to the underside of the cover. Refer to the [TECHNICAL SPECIFICATIONS](#) section for more information.

11. Once satisfied with the cover height, disconnect the battery again. If you have an AC-operated model, wait until the LED turns off. This is required to save the upper limit position.
12. Reconnect the battery. This is required to reboot the system (ignore the step if you have an AC-operated model).
13. Lower the cover to its zero position.
14. The initialization process was completed for the cover. This memorizes the upper limit of the cover.
15. Test the system by raising the cover. Check if the cover has saved the upper limit height.
16. Lower the cover to zero position.
17. Next section is a checklist for the installer and the customer. Please check the sections to ensure everything was done properly. It is very important to sign both copies and tear off the installer's copy.

INSTALLATION CHECKLIST (CUSTOMER COPY)

To ensure proper installation you must carefully read this checklist and confirm that you have completed all steps of the installation. The customer must receive a completed copy of this checklist.

(Please check each circle when the point is completed)

- The base preparation steps are done correctly (**Location and Foundation preparation sections**).
- The installation steps are done correctly (**Unpacking, Cover assembly, Lifting mechanism and Electrical connections sections**).
- The seal is properly installed and there is no steam leaking out around the cover. (**Seal application section**)
- The wipers are properly installed to make sure the cover is watertight (**Wiper installation section**).
- The key switch is **permanently installed** at least 5 ft (1.5 m) away from the spa and 5 ft (1.5 m) from the ground.
- The electrical portion of the installation was done by a certified electrician (**Electrical connections, Limit switch adjustment sections**).
- All parts supplied and included into the crate are installed.
- The start-up procedure is completed (**The key sequence responds correctly and Testing the cover section is completed**).
- The all-weather seal works properly (**The cover raises and lowers properly**).
- The middle sleeves slide freely (**Manually slide the middle sleeve up and down when the cover is half open**).

Serial number: _____

Installer name: _____ Signature: _____

Customer name: _____ Signature: _____

Customer address: _____

Date (YYYY/MM/DD): _____

Dealer name : _____

INSTALLATION CHECKLIST (INSTALLER COPY)

To ensure proper installation you must carefully read this checklist and confirm that you have completed all steps of the installation. The customer must receive a completed copy of this checklist.

(Please check each circle when the point is completed)

- The base preparation steps are done correctly (**Location and Foundation preparation sections**).
- The installation steps are done correctly (**Unpacking, Cover assembly, Lifting mechanism and Electrical connections sections**).
- The seal is properly installed and there is no steam leaking out around the cover (**Seal application section**).
- The wipers are properly installed to make sure the cover is watertight (**Wiper installation section**).
- The key switch is **permanently installed** at least 5 ft (1.5 m) away from the spa and 5 ft (1.5 m) from the ground.
- The electrical portion of the installation was done by a certified electrician (**Electrical connections, Limit switch adjustment sections**).
- All parts supplied and included into the crate are installed.
- The start-up procedure is completed (**The key sequence responds correctly and Testing the cover section is completed**).
- The all-weather seal works properly (**The cover raises and lowers properly**).
- The middle sleeves slide freely (**Manually slide the middle sleeve up and down when the cover is half open**).

Serial number: _____

Installer name: _____ Signature: _____

Customer name: _____ Signature: _____

Customer address: _____

Date (YYYY/MM/DD): _____

Dealer name : _____

OPERATE THE COVER

Please read the [SAFETY](#) section of this manual carefully before operating the cover.

RAISING/LOWERING THE COVER WITH THE KEY SWITCH

1. Make sure all debris and snow are removed from the top of the cover before operating.
2. Make sure there is nobody in the spa or near the spa when raising or lowering the cover.
3. Make sure there is no obstruction over or around the cover.
4. When raising or lowering the cover, hold the key until fully open or closed.
5. The cover will automatically stop in both the fully open and fully closed position.
6. Turn the key counterclockwise to raise the cover.
7. Turn the key clockwise to lower the cover.
8. The key automatically returns to center position when released (off position).
9. Always remove the key when the raising or lowering operations are completed and keep it in a safe location.



WARNING

Users must bring the key in the spa with them to prevent any unauthorized operation of the cover.

10. Install the rubber cap back on the key switch after each use.

IMPORTANT NOTE

Keep the spa cover fully closed when it is not used.

USING THE ESCAPE HATCH

FROM INSIDE THE SPA

1. Turn the red handle by a quarter turn in either direction to retract the arms, see [Figure 120](#).

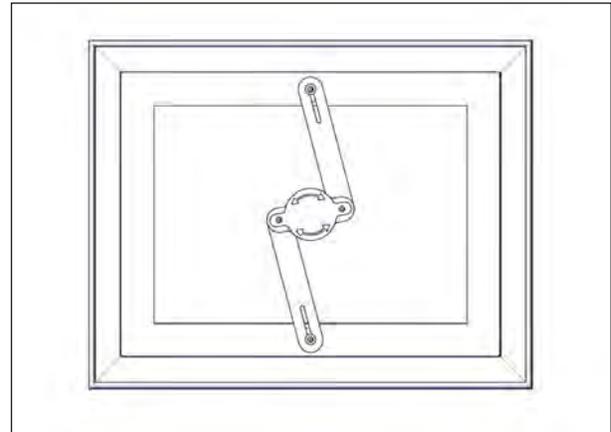


FIGURE 120: INSIDE HANDLE

2. Push straight up on the escape hatch and move it to the side, see [Figure 121](#).

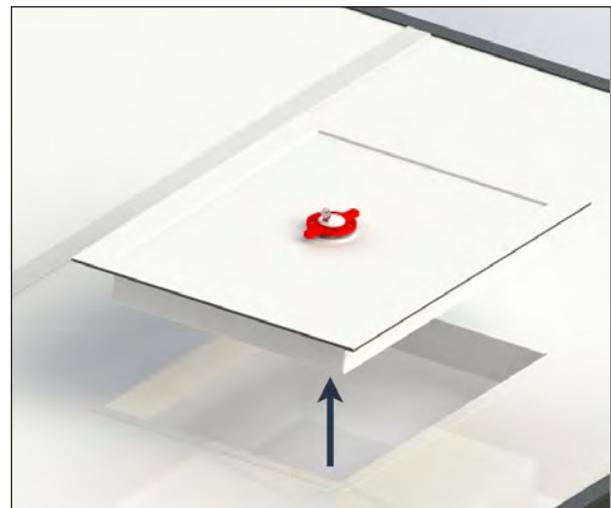


FIGURE 121: REMOVE HATCH

3. Escape via the hole and call for assistance if required.

FROM OUTSIDE THE SPA

1. Never step on the escape hatch as it may affect the removal and may jeopardize the life of the persons trapped in the spa.

2. Turn handle one quarter turn in either direction.
3. Lift the escape hatch straight up by gripping its sides and move it to the side.
4. Help the persons trapped below by pulling them out of the spa via the opening.

BATTERY CHARGING

NOTE

This section is for battery-operated models and Emergency-battery backup only.

The cover includes two 24 V DC battery packs.

Since the cover operates with these batteries, it is essential to maintain and charge the battery packs.

1. Use the battery charger provided and plug it in a regular wall power outlet. (110 V North America) (230 V Europe) ([Figure 122](#))
2. Plug the battery charger harness into the battery.
3. A red light should appear to indicate that it is charging.
4. Wait for the green light to appear. It indicates that the charging process is complete (Time may vary for charging).



WARNING

Only use the charger provided by Covana to charge the batteries.

Do not charge the battery when it is connected to the cover. Remove the battery and replace it with the second battery provided.

NOTE

The charger cuts the power once the battery is fully charged so you can keep the battery plugged on the charger.

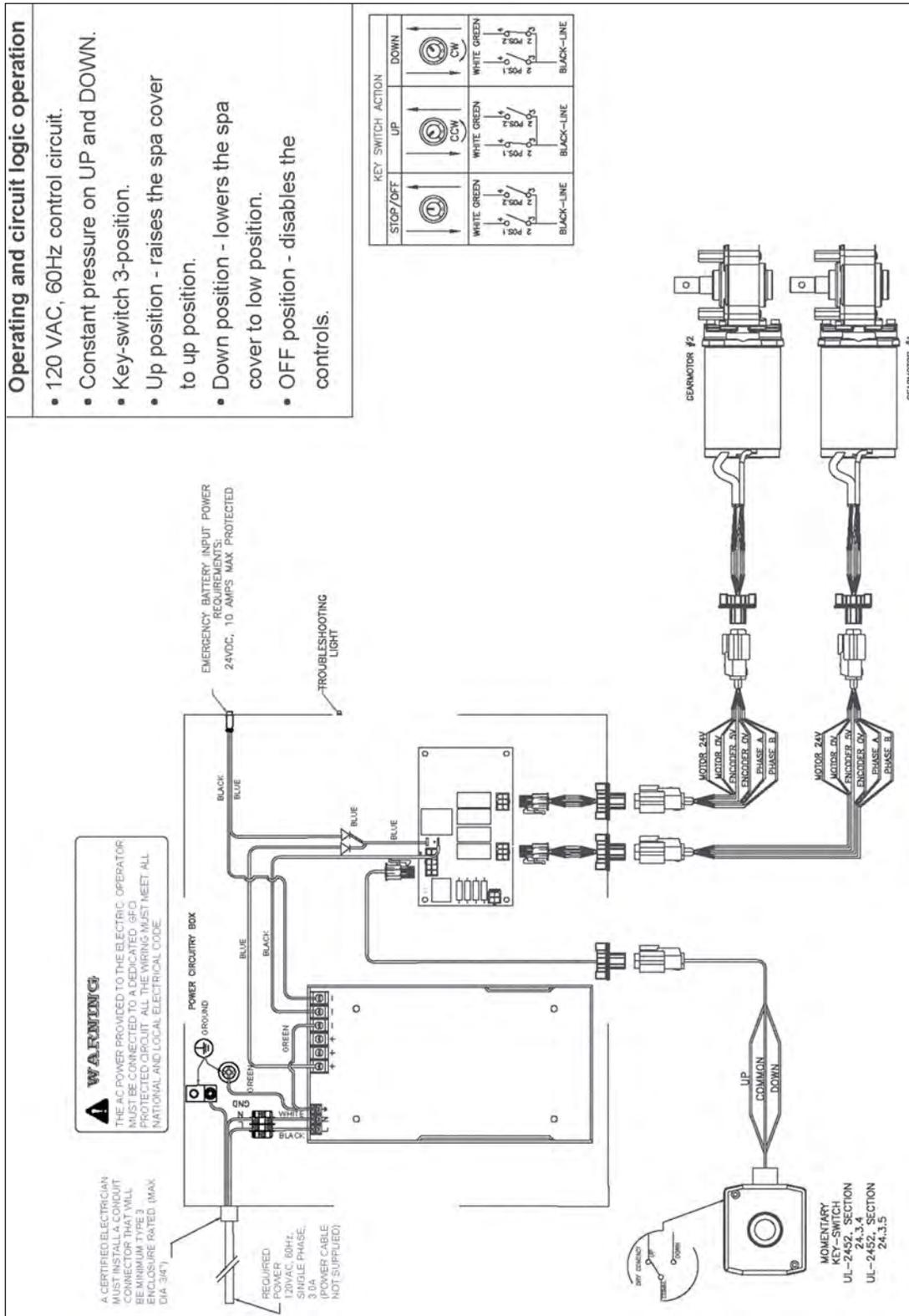


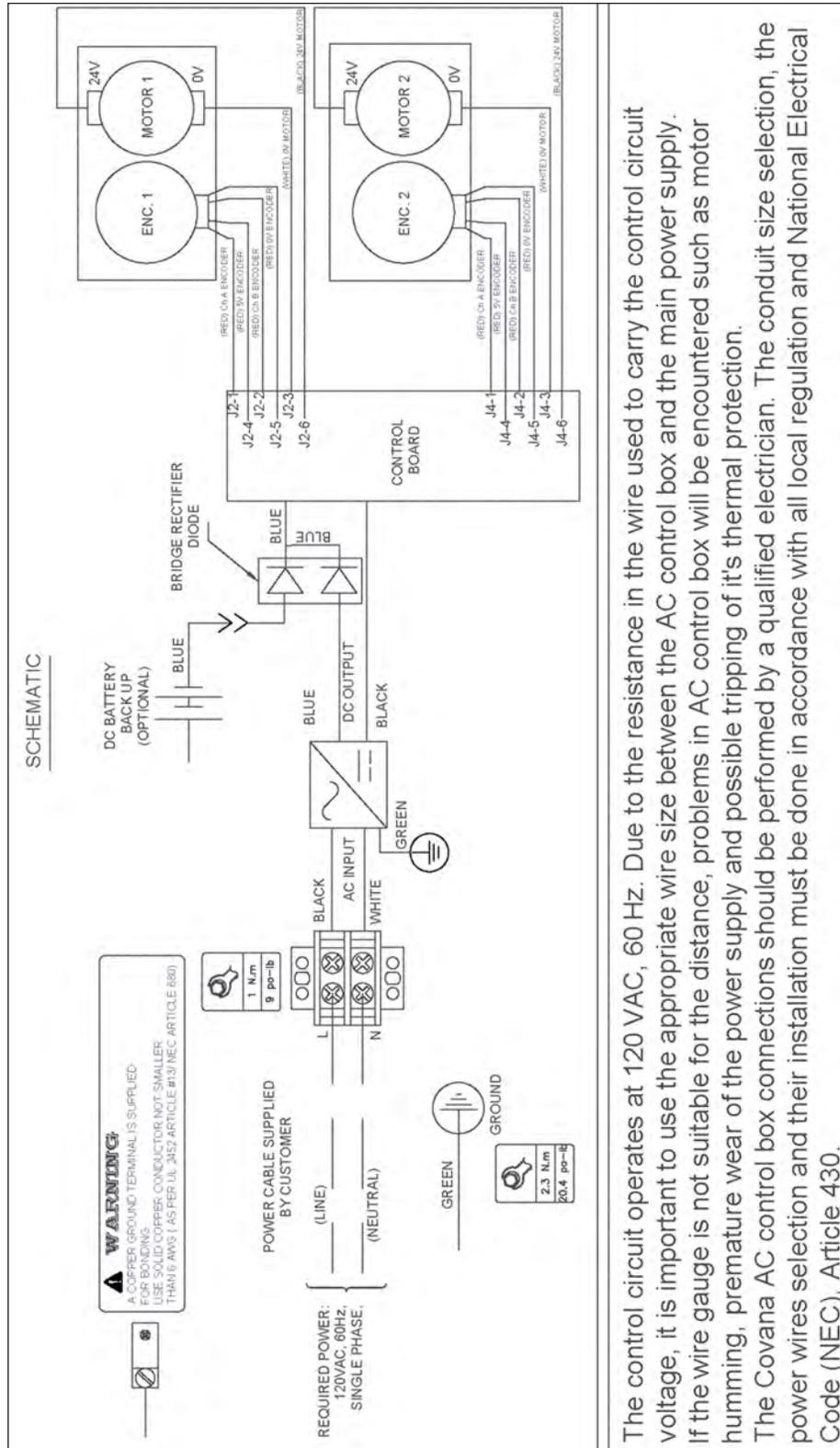
FIGURE 122: BATTERY CHARGER

ELECTRICAL DIAGRAMS

Next pages of this section show electrical diagrams of the cover.

WIRING DIAGRAM (NORTH AMERICA) – 60 HZ, 120 VAC CONTROL BOX





The control circuit operates at 120 VAC, 60 Hz. Due to the resistance in the wire used to carry the control circuit voltage, it is important to use the appropriate wire size between the AC control box and the main power supply. If the wire gauge is not suitable for the distance, problems in AC control box will be encountered such as motor humming, premature wear of the power supply and possible tripping of it's thermal protection. The Covana AC control box connections should be performed by a qualified electrician. The conduit size selection, the power wires selection and their installation must be done in accordance with all local regulation and National Electrical Code (NEC), Article 430.

MAINTENANCE

The product lifetime depends on the time you spend for the care and maintenance of the cover.

WINTERIZING

If you plan on winterizing your swim spa during the cold season, Covana recommends winterizing the cover as well. This process prevents any potential damage to the cover and minimizes the risk of freezing water damage to the spa. Please follow these instructions:



WARNING

These instructions are relevant for anyone who plans to stop using the spa for a long period of time or especially if the temperature goes below the freezing point.

1. Clean the cover completely to remove any dust, greasy residue or any other dirt from all surfaces.
2. Prepare the spa for closure by following the spa manufacturer's winterization instructions.
3. Completely close the cover on the spa. Make sure the seal touches the whole perimeter of the spa.
4. Make sure the escape hatch is properly seated on the cover and is closed and locked.
5. For AC-operated models: Remove the power from the cover. This can be done by shutting off and securing the circuit breaker powering the cover.
6. For Battery-operated models: Unplug the battery from the control box. Store your batteries in a safe, dry location between 59 °F (15 °C) and 86 °F (30 °C).
7. Install a waterproof canvas over the cover. Make sure to follow the spa manufacturer's guidelines during this step.
8. Install a waterproof and watertight protection canvas over the control box.



WARNING

Using any type of fabric or plastic canvas to cover the Covana cover during hot weather may damage the components. Only use such protection for the winterization procedure and during the cold season.

Remove any type of cover or plastic canvas as soon as seasonal temperatures are higher than the freezing point.

9. For regions with a long seasonal snowfall, remove excessive snow accumulation regularly or after a heavy snowfall to avoid damage to the structure of the cover. Do not let more than 12 in. (30 cm) of snow accumulate on the cover.
10. For Battery-operated models: During storage, charge batteries every month or leave them on the Covana battery charger. (Only use Covana-provided battery charger).

WASHING THE COVER

Washing the cover is an essential part to maintain and keep it in the best running conditions. Clean your cover as needed or when dirt, debris or leaves are present. We also recommend cleaning your cover before and after winterization.

TOOLS AND PRODUCT TO USE

- Use a 1% solution of household dish soap. The cleaner is required to have a neutral pH (pH range 6.5-7.5).
- Soft plastic brush
- Sponge
- Cloth

The following steps are guidelines to safely and properly clean the cover:

METHOD:

1. Rinse the cover with water in order to remove any large accumulated debris.

2. Apply the soap solution, working it across the surface in a scrubbing or circular motion. The surface of the cover panels can be cleaned with a sponge, cloth or a soft plastic brush.
3. Quickly rinse very thoroughly to remove all traces of soap; otherwise, a film will build up giving the panel a dull, dirty appearance.

! WARNING

Never use a pressure washer or high pressure to clean the cover. The high pressure could puncture the fiberglass roof.

Never use harsh detergents that may cause a chemical reaction and permanently damage the surface.

Do not use abrasive cleaners.

Do not use a cleaner or stain remover that contains chlorinated hydrocarbons or aromatic hydrocarbons.

! WARNING

Do not use power tools, since screws might break or strip.

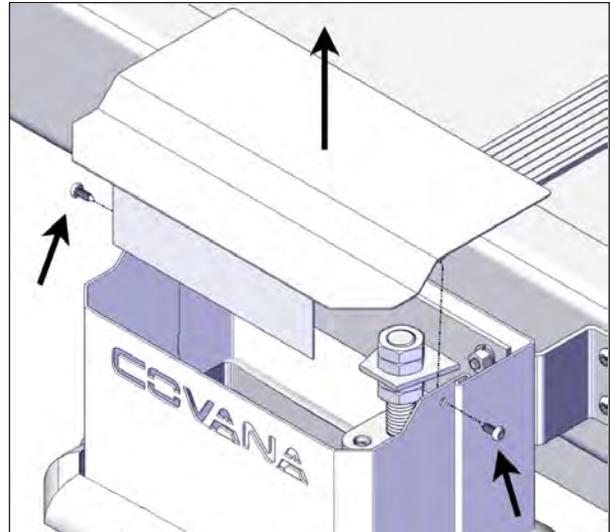


FIGURE 123: TOP PLATE REMOVAL

POST GREASING

This unit will require the following greasing maintenance to ensure the best performance.

The internal jacks require yearly greasing. Early in the fall season is the best time. The “Mobil Epic EP MOLY Grease” is recommended for cold and hot climates. Ideally, a sprayable grease or an equivalent low temperature synthetic grease.

NOTE

It is not possible to lift the posts even if the jack is unscrewed. Only the motor can raise or lower the jacks.

3. Remove the 1/4-20 x 3/4" carriage bolts (4) of the jack adapter, from each post using a 7/16" (11 mm) socket wrench, see [Figure 124](#).

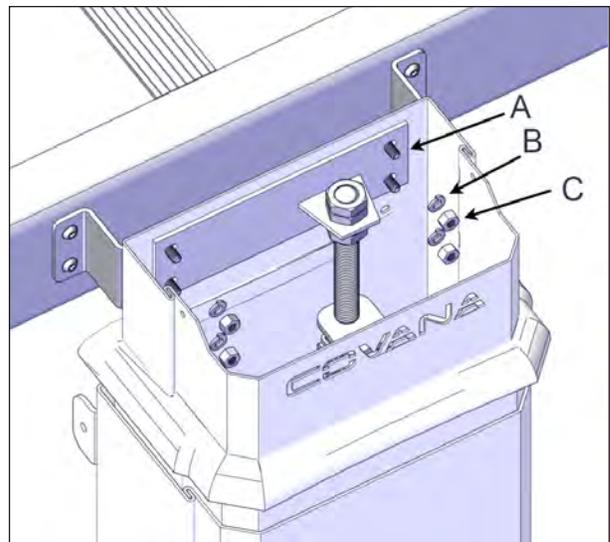


FIGURE 124: JACK ADAPTER SCREW REMOVAL

POST GREASING PROCEDURE

1. Lower the roof until it is fully closed.
2. Remove the #2 Robertson screws (2) on the top plate of each post, see [Figure 123](#). Keep the top plates and the screws in a safe location.

ID	DESCRIPTION
A	CARRIAGE BOLT 1/4- 20 X 3/4"
B	LOCK WASHER 1/4"
C	NUT 1/4- 20

4. Gently slide down the sleeve assembly, see [Figure 125](#).
5. Reinstall the jack adapters, but not the sleeves. Reinstall the 1/4-20 x 3/4" carriage bolts (4), see [Figure 125](#).



WARNING

If the jacks are raised without the cover fastened on, they will not be able to lower back to their original position.

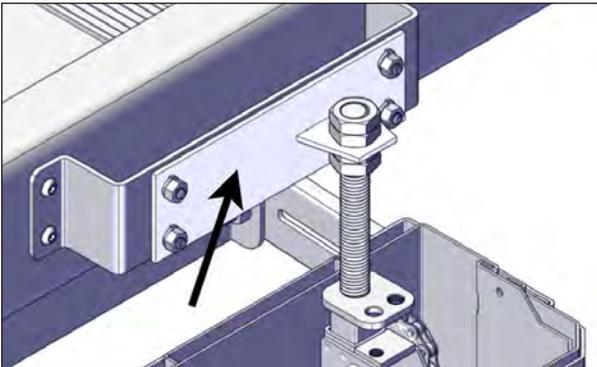


FIGURE 125: JACK ADAPTER SCREW REINSTALLATION

6. Raise the jacks until the system stops at its maximum limit, see [Figure 126](#).

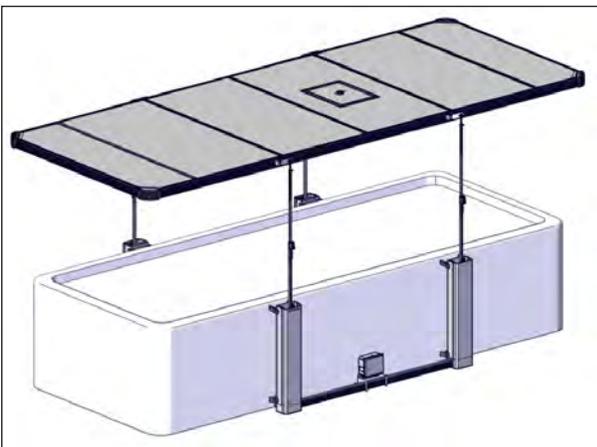


FIGURE 126: JACK RAISING

7. Spray grease on all the sliding parts and mechanical components of all jacks, see [Figure 127](#).

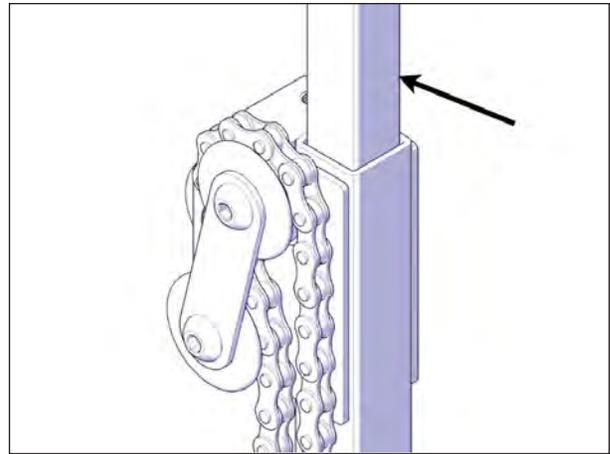


FIGURE 127: SLIDING PARTS TO GREASE

8. Inspect the chains for signs of deterioration. If this is the case, please call your local Covana dealer immediately, see [Figure 128](#).

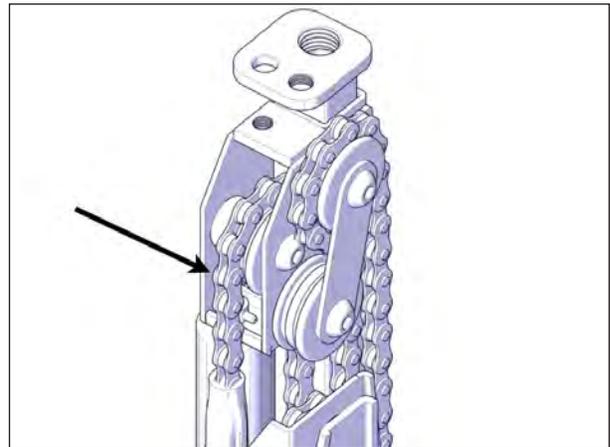


FIGURE 128: JACK CHAINS

9. Cycle the system up and down and inspect if any further grease should be added.
10. Lower the system completely until it stops automatically.
11. Reverse the previous steps to reinstall the sleeves. Do not forget to reinstall the seals on the sleeves.

PERIODIC MAINTENANCE TABLE

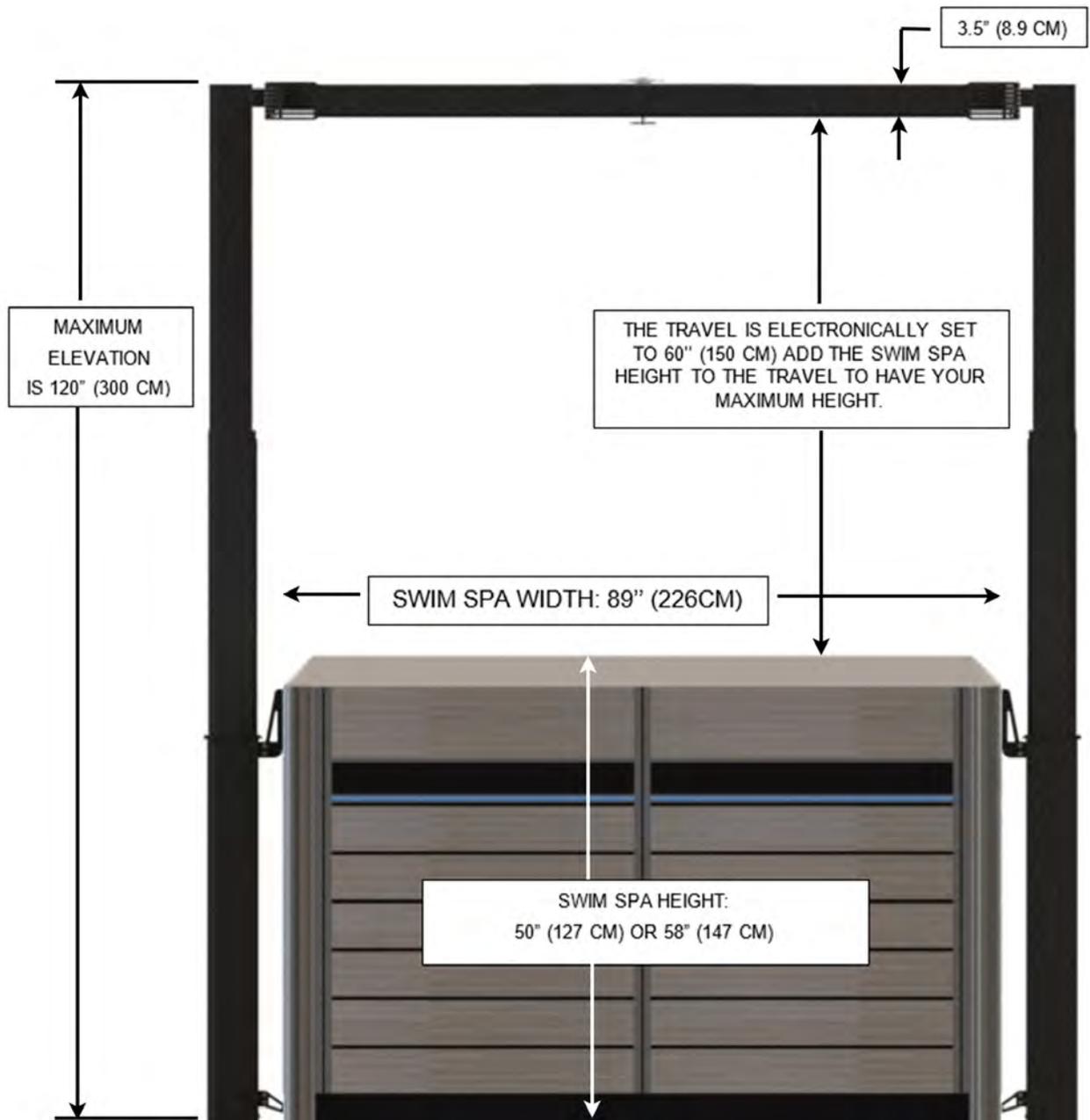
TASKS	FREQUENCY				
	EACH USE	WEEKLY	EVERY 3 MONTHS	YEARLY	AS NEEDED
Perform a visual inspection (debris, snow, ice, etc.).	X				
Check that the sleeves are correctly positioned. (Middle sleeves are not out of their normal position).	X				
Verify if all-weather seals are correctly positioned (in contact with the outer sleeves when the cover is closed).	X				
Listen to any unusual noises during operation.	X				
Verify the seal around the cover (no vapor steam leakage).		X			
Verify the lifting mechanism by raising and lowering the cover.		X			
Verify the anchoring of the cover.		X			
Check if the escape hatch works properly.		X			
Test the GFCI.			X		
Check the tension of the chains on all posts. *				X	
Lubricate chains on all posts. *				X	
Grease the jack assemblies. *				X	
Wash the cover with a mild detergent (i.e., dishwashing detergent) and water. Rinse well using only water.					X
Remove escape hatch and clean it with a mild detergent (i.e., dishwashing detergent) and water. Rinse well using only water.					X

*Contact your local Covana dealer

Please call your Covana dealer for any mechanical, electrical or aesthetic maintenance.

TECHNICAL SPECIFICATIONS C-EP

COVER SIDE VIEW



FRAME DIMENSIONS AND FOOT PRINT (CONCRETE PAD RECOMMENDED)

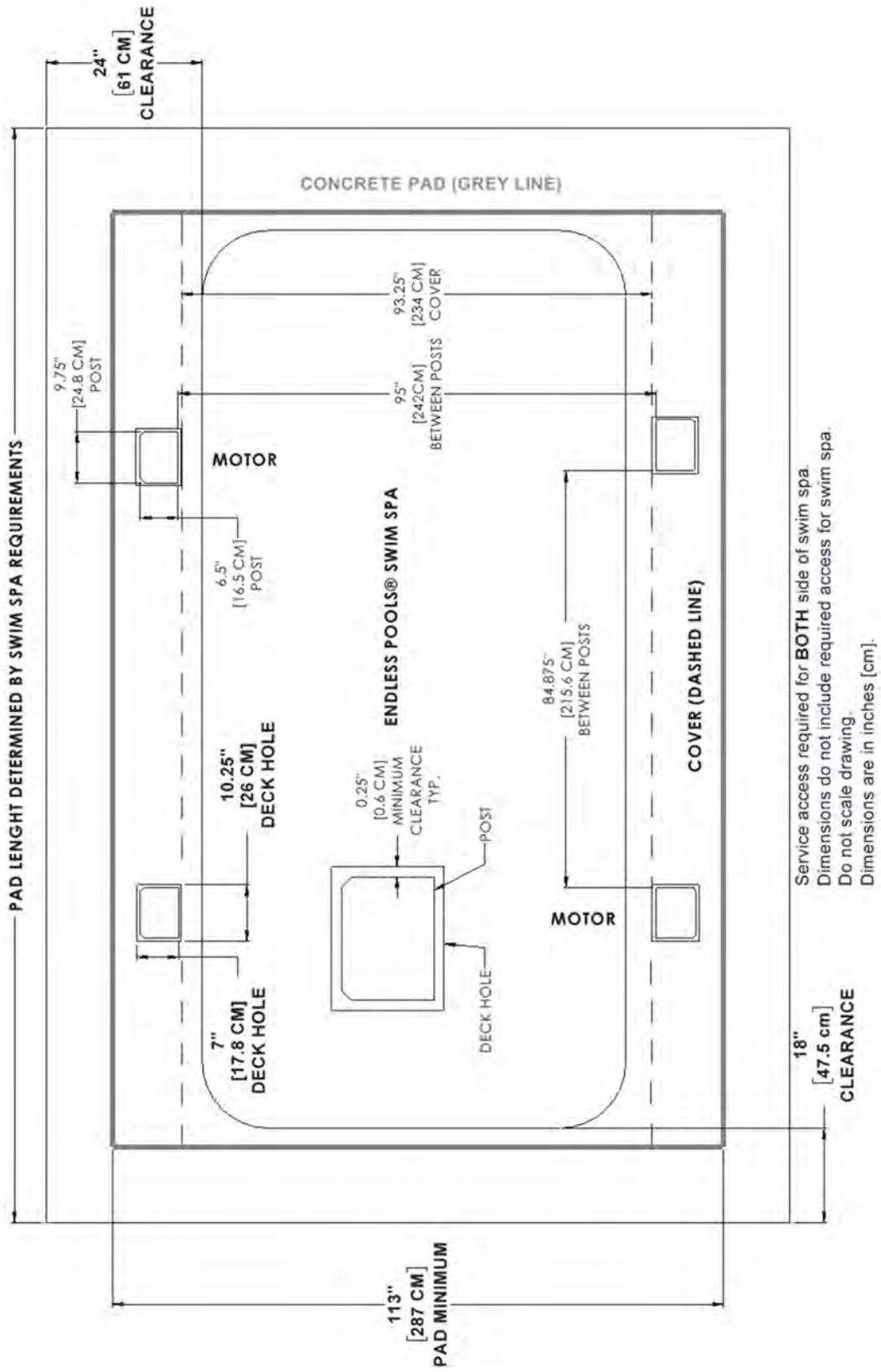


FIGURE 129: FRAME DIMENSIONS AND FOOT PRINT

CONCRETE PAD OPTIONS

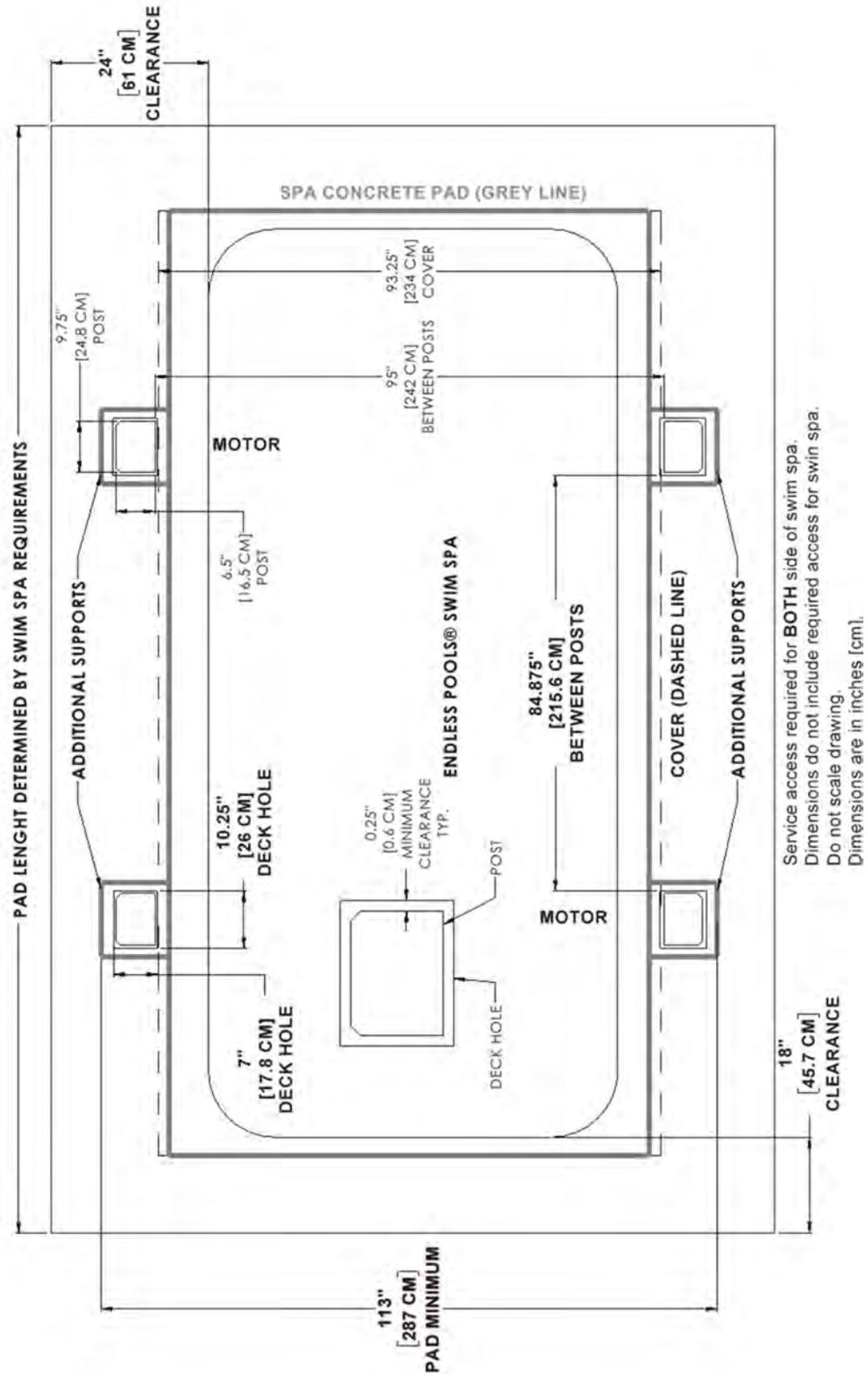


FIGURE 130: CONCRETE PAD OPTIONS

ELECTRICAL SPECIFICATIONS (AC OPERATED MODEL)

The cover requires a dedicated single phase 115 VAC (North America).

The cover must be installed in accordance with and comply with all applicable local codes and regulations. All wiring and connections should be performed by a certified electrician.

Wires and cables should be sized according to local codes and regulations.

NORTH AMERICAN REQUIREMENTS (AC OPERATED)

Voltage	115 V, 60 Hz (1 hot, 1 neutral, 1 ground)
GFCI	15 A single-pole GFCI (not included)
Continuous current draw	3 A



WARNING

Covana does not allow any modifications of the electrical system. Covana reserves the right to void the warranty if any modifications are done without its approval.

ELECTRICAL SPECIFICATIONS (BATTERY OPERATED MODEL)

Voltage	24 VDC System
Wall outlet voltage	115 VAC for charger North America (230 V AC European model)
Battery	24 V DC, 12 Ah, AGM sealed lead-acid battery

OPERATION LIMITATIONS



WARNING

The cover should never be used if the following conditions are reached.

Maximum wind	Gusts of 25 mph (40 km/h) while in the raised position and 37 mph (60 km/h) when completely lowered on the spa.
Maximum weight on the cover (evenly distributed)	200 lb. (90 kg)

NOTE

The load specification for the cover is a provision for environmental outcomes, typically some snow or damp leaves that could accumulate on the cover.

GENERAL SPECIFICATIONS

Lifting speed	2.5"/s (6.35 cm/s)
Total weight	920 lb (417 kg) (20' models)
Length of keyswitch electrical wire	25 ft. (7.6 m)

TROUBLESHOOTING

PROBLEM	PROBABLE CAUSES	SOLUTIONS
The cover does not raise or lower (Silent motor and no movement)	<ul style="list-style-type: none"> The GFCI is tripped. The power source is disconnected. Battery has low power. Controller is in "lockout" mode. 	<ul style="list-style-type: none"> Reset the GFCI. Verify that the power source is enabled. Check the breaker panel. Verify whether the cables were damaged or pinched. Disconnect the battery for 60 seconds to reset the controller. Charge battery.
The cover does not raise or lower. (Motor humming and some visible movement)	<ul style="list-style-type: none"> Posts are frozen. Jack assemblies are jammed. The motor is obstructed. Posts are obstructed. The debris on the cover is too heavy. 	<ul style="list-style-type: none"> Remove all the debris from the top of the cover. Verify whether any posts are obstructed. Use methanol to free ice buildup on posts. Apply grease on the post assemblies. Verify the relative position of the four posts (See Foundation Preparation section). Call your Local authorized Covana dealer.
The posts are not equally positioned.	<ul style="list-style-type: none"> The chain skipped during operation. A spring pin at the bottom of a jack is broken. A drive shaft has fallen off. Excessive weight on one side of the cover. Controller does not calculate the height properly. 	<ul style="list-style-type: none"> Verify whether a drive shaft has fallen off and if it is the case, reinstall the shaft. Lower the cover and replace the chain. Replace any missing or broken spring pin by lifting the outer sleeve, using an awl and a hammer.. Remove all debris from the top of the cover. If all previous attempts failed, contact your local authorized Covana dealer.

PROBLEM	PROBABLE CAUSES	SOLUTIONS
<p>The middle sleeve has gripped and might have dropped abruptly</p>	<ul style="list-style-type: none"> • Posts are frozen. • The stopper kit is broken/missing. 	<ul style="list-style-type: none"> • Verify the position of the all-weather seal. While cover is closed, it must be sitting on the top of the outer sleeve. • Check whether the stopper kit is broken/missing. • Reinstall the sleeves. • Check level on 2 faces of the sleeve. • If all previous attempts failed, contact your local authorized Covana dealer.
<p>Escape hatch doesn't open/close</p>	<ul style="list-style-type: none"> • Mechanism is jammed. • Verify the position of the locking mechanism. 	<ul style="list-style-type: none"> • Refer to the USING THE ESCAPE HATCH section. • Remove the escape hatch from the underside of the cover and clean it to free the mechanism. • If all previous attempts failed, contact your local authorized Covana dealer.
<p>The cover raises unevenly.</p>	<ul style="list-style-type: none"> • The chain is broken. • A spring pin is broken. • A drive shaft has fallen off. • Posts are gripped. 	<ul style="list-style-type: none"> • Call your local certified Covana dealer for technical support. • Do not operate the cover.
<p>Cover seal turned black.</p>	<ul style="list-style-type: none"> • The seal has accumulated mold. 	<ul style="list-style-type: none"> • Clean the affected areas with bleach and a soft brush. Rinse well with water.

COVANA LIMITED WARRANTY

The Limited Warranty starts twelve (12) months after the initial invoiced dealer purchase date from COVANA. If the unit is sold to a consumer within the first year, the Limited Warranty starts on the original consumer purchase date.

The limited warranty on COVANA Unit sold outside Canada and the United States will take effect sixty (60) days after the date shown on Covana/Canimex commercial invoice to the distributor or the COVANA authorized dealer.

The Limited Warranty is applicable only upon proof of purchase and solely to the original COVANA Unit owner bought from a COVANA authorized dealer and installed for residential use.

To obtain service, contact your COVANA authorized dealer as soon as possible, and use all reasonable means to protect the COVANA Unit from further damage. Upon proof of purchase, your COVANA authorized dealer will correct the defect subject to the terms and conditions contained in this limited warranty. The COVANA Unit owner is responsible for providing access to the COVANA Unit to perform the repair.

WARRANTY COVERAGE

SHELL & FIBER PANELS: 5 YEARS

COVANA warrants the Legend – Legend X – C-EP – Evolution fiber panels and the Oasis inner shell and outer shell against fracture, abnormal deformation or leaking for five (5) years from the original purchase date.

- **Labor** associated to replacement parts or repairs under this warranty is paid for three (3) years from the original purchase date.
- **Freight charges** related to replacement of parts under this warranty are paid for three (3) years from the original purchase date.

Discoloration and surface abrasions due to weathering will occur naturally over time and are not considered defects. Improper spa water chemistry and misuse of spa chemicals may cause discoloration of the inner shell. Inner shell discoloration is not considered a defect and is not covered under this warranty. Cover melting caused by convergent or indirect sunlight reflection or overheating from an insulating protection is not covered under this warranty. Falling debris causing damage to the COVANA Unit is not covered by this warranty. Condensation may occur due to hot tub water temperature and other outside environmental factors; this is deemed to be a natural phenomenon and it is not covered under this Limited Warranty.

STRUCTURE: 3 YEARS

COVANA warrants the aluminum frame, brackets and telescoping sleeves against breakage and fracture due to defects in materials and workmanship for three (3) years from the original purchase date.

- **Labor** associated to replacement of parts or repairs under this warranty is paid for one (1) year from the original purchase date.
- **Freight charges** related to replacement parts under this warranty are paid for ninety (90) days from the original purchase date.

Installation on any surface other than the one recommended in this manual, or any damage caused by this inappropriate installation or any damage caused by operation under conditions exceeding rated capacities (such as snow, artificial grass, furniture, creating overweight) is not covered under this warranty.

POWDER COAT: 3 YEARS

COVANA warrants the powder paint on all surfaces against chipping and peeling under normal conditions for three (3) years from the original purchase date.

- **Labor** associated to replacement of parts or repairs under this warranty is paid for one (1) year from the original purchase date.
- **Freight charges** related to replacement parts under this warranty are paid for ninety (90) days from the original purchase date.

Discoloration and surface abrasions due to weathering will occur naturally over time and are not considered defects. Chipping of powder paint on fastening hardware may occur during assembly and servicing of the COVANA Unit and are not covered by the warranty.

MECHANICAL COMPONENTS: 3 YEARS

COVANA warrants the mechanical components such as: the motor, gear boxes, chains, drive shafts and jacks, for three (3) years from the original purchase date.

- **Labor** associated to replacement of parts or repairs under this warranty is paid for one (1) year from the original purchase date.
- **Freight charges** related to replacement parts under this warranty are paid for ninety (90) days from the original purchase date.

Mechanical components damaged by mineral contaminants, such as rocks, dust or sand, undrained underground installations, undrained surface, flooding area or permanent water accumulation is not covered under the warranty.

LED LIGHT ASSEMBLY & ELECTRICAL COMPONENTS: 1 YEAR

COVANA warrants the LED light system and solar panel against manufacturing defect against malfunction for one (1) year from the original purchase date.

COVANA warrants the electrical components such as cables and wires, key switch assembly and limit switches against malfunction for one (1) year from the original purchase date.

- **Labor** associated to replacement of parts or repairs under this warranty is paid for one (1) year from the original purchase date.
- **Freight charges** related to replacement parts under this warranty is paid for ninety (90) days from the original purchase date.

Electrical damage caused by a non-permanent installation of the key switch 5 ft (1.5 m) away from the spa and 5 ft (1.5 m) above the ground as indicated in the installation manual could void the limited warranty.

COMPONENTS, PARTS AND ACCESSORIES: 90 DAYS

COVANA warrants components and accessories subject to normal wear such as: batteries, seals, roller shades, screens, key switch barrels cover, to be free of manufacturing defects for ninety (90) days from the original purchase date.

- **Labor** associated to replacement of parts or repairs under this warranty is paid ninety (90) days from the original purchase date.

- **Freight charges** related to replacement parts under this warranty are paid ninety (90) days from the original purchase date.

LIMITATIONS

COVANA offers replacement parts until the durations prescribed in the Warranty coverage end OR ninety (90) days from the replacement date.

Covana may void the warranty if:

- We determine that the COVANA Unit has been subjected to alteration, neglect, misuse, abuse or lack of maintenance or adjustment or installation of equipment which is not in accordance with guidelines within this manual.
- The electrical installation was not performed by a licensed electrical contractor or does not comply with all applicable local electrical codes and regulations.
- Any accessory, upgrade or modification implemented to the COVANA Unit are not original from COVANA.
- The installation or repairs were performed by other than a COVANA authorized dealer.
- The owner dismantles the COVANA Unit.
- The COVANA authorized dealer and/or the COVANA Unit owner did not consider and respect the relevance of all criteria, risks and liability stipulated in this manual prior to the installation of the COVANA Unit.

COVANA may void this limited warranty and cannot be held responsible for any damage after a repair or maintenance performed on a COVANA Unit even by a COVANA authorized dealer, which goes against this manual. COVANA is not liable for any injury, loss or damage, direct or consequential, arising out of the inability to use the COVANA Unit.

EXCLUSIONS

- COVANA excludes from this limited warranty a COVANA Unit installed in a commercial application.
- COVANA is not deemed responsible for failures or damages caused by installation in a humid area, flood zone, corrosive environment or acts of God or other causes beyond the control of COVANA.
- COVANA's warranty does not cover mileage allocation or travel expenses associated with any repair or replacement part.
- COVANA is not deemed responsible for any damage or malfunction caused by the relocation of the COVANA Unit not performed by a COVANA authorized dealer to another address.
- COVANA or the COVANA authorized dealer is not deemed responsible for any equipment, furniture or landscaping aside from the COVANA Unit.

DISCLAIMER AND LEGAL RIGHTS

This Limited Warranty overrules all other warranties, either expressed or implied. No other party than COVANA is authorized to alter this limited warranty in any way. This limited warranty gives you specific legal rights. You may also have other rights that vary depending on the country, state or province. COVANA//Canimex Inc.'s liability under this limited warranty, if any, will not exceed the original amount paid for the defective COVANA Unit. The limited warranty is exclusive and in lieu of all other warranties of quality, whether written, oral or implied.



Contact your local authorized Covana dealer for all service-related issues.

Made in Canada by Covana,
a division of the Canimex group

COVANA.COM

CANIMEX GROUP

PATENTED

CANADA 2,532,429

US 11/162,557

UK 0515168.3

AUSTRALIA 2006200251

The information in this manual was accurate at the time of print. The manufacturer reserves the right to change or improve its product without prior notice.