# COVANA

#### **SPA COVER MANUFACTURER**

#### **OWNER'S MANUAL**



**MANUAL NO. 252464** 

OASIS COVER

MANUAL NO. 252464

First edition 2023-11-30

| REVISION | DESCRIPTION                      | DATE       |
|----------|----------------------------------|------------|
| 0        | OWNER'S MANUAL NEW RELEASE       | 2023-11-30 |
| 1        | Simplified version of the manual | 2024-09-17 |
|          |                                  |            |
|          |                                  |            |
|          |                                  |            |
|          |                                  |            |
|          |                                  |            |
|          |                                  |            |
|          |                                  |            |
|          |                                  |            |

| CONGRATULATIONS!  | 6        |
|---|----------|
| IMPORTANT INFORMATION   | 6        |
| SAFETY  | <b>7</b> |
| DRUGS AND ALCOHOL   | 7        |
| IMPORTANT SAFETY INSTRUCTIONS                                     | 8        |
| RISK OF ELECTROCUTION   | 9        |
| ELECTRICAL WARNING  | 10       |
| MODIFICATIONS TO THE COVER  | 10       |
| LABELING  | 12       |
| PARTS NAME AND QUANTITY   | 14       |
| INSTALLATION PROCEDURE  | 16       |
| TOOLS REQUIRED  |          |
| PREPARATION FOR THE INSTALLATION                                  | 17       |
| HARDWARE IDENTIFICATION TABLE                                     | 19       |
| ASSEMBLY PREPARATION  | 20       |
| LIFTING MECHANISM INSTALLATION (PART 1)                           | 21       |
| AC LIGHT KIT INSTALLATION   | 26       |
| LIFTING MECHANISM INSTALLATION (PART 2)                           | 29       |
| TESTING THE COVER   | 31       |
| KEY SWITCH INSTALLATION   | 33       |
| NON-PERMANENT MOUNTING PLATES (OPTIONAL)                          | 34       |
| SEAL INSTALLATION   | 35       |
| ELECTRICAL CONNECTIONS  | 39       |
| LIMIT SWITCH ADJUSTMENT   | 40       |
| INSTALLATION CHECKLIST (CUSTOMER COPY)                            | 42       |
| INSTALLATION CHECKLIST (INSTALLER COPY)                           | 43       |
| OPERATE THE COVER   | 47       |
| RAISING/LOWERING THE COVER WITH THE KEY SWITCH                    | 47       |
| LED LIGHT KIT   | 48       |
| MANUAL OPERATION OF THE COVER                                     | 49       |
| WIRE GUARD REASSEMBLY   | 50       |
| ELECTRICAL DIAGRAMS   | 52       |
| WIRING DIAGRAM (NORTH AMERICA) (LIGHTS) – 60 HZ, 120 VAC OPERATOR | 52       |
| WIRING DIAGRAM (EUROPE) (LIGHTS) – 50 HZ, 230 VAC OPERATOR        |          |
| MAINTENANCE   | 58       |
| WINTERIZING   | 58       |
| WASHING THE COVER   | 58       |
| POST GREASING   | 59       |
| CHAIN LUBRICATION   | 61       |
| PERIODIC MAINTENANCE TABLE  | 62       |
| TECHNICAL SPECIFICATIONS  | 65       |

#### page-4 OASIS COVER

|   | COVANA COVER FRONT VIEW         | 65   |
|---|---------------------------------|------|
|   | FRAME DIMENSIONS AND FOOT PRINT | .66  |
|   | CONCRETE SLAB LAYOUT OPTION     | . 67 |
|   | ELECTRICAL SPECIFICATIONS       | 68   |
| Т | ROUBLESHOOTING                  | 70   |

# SAFETY AND IMPORTANT INSTRUCTIONS

#### **CONGRATULATIONS!**

Congratulations for the purchase of your new COVANA cover!

# **IMPORTANT NOTE**





PLEASE REGISTER YOUR COVER AT THE TIME OF PURCHASE TO ENSURE A PROPER FOLLOW-UP PROCESS.

# NOTE



FOR SERVICE
AND ADVICE,
DO NOT HESITATE
TO CALL YOUR
LOCAL AUTHORIZED
COVANA RETAILER.

# IMPORTANT INFORMATION

DANGER, WARNING, CAUTION and NOTE are used throughout this manual to emphasize important points when necessary:



#### **DANGER**

Directs your attention to unsafe practices which could result in serious personal injury or death.



#### WARNING

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



#### **CAUTION**

Directs your 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, proper installation or proper maintenance.

# **IMPORTANT NOTE**



READ THIS MANUAL BEFORE USING THE COVER.

#### NOTE

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

Keep this manual in a safe location for future reference.

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.



# **CAUTION**



THE COVER WAS NOT DESIGNED TO SUPPORT ADDITIONAL LOAD OR PEOPLE WALKING OR STANDING ON IT. FAILURE TO FOLLOW THIS INSTRUCTION WILL VOID THE WARRANTY AND ITS CERTIFICATION.

The power safety cover meets ASTM F1346-23 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.



#### **WARNING**

#### **CALIFORNIA PROPOSITION 65**

This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.



#### **DANGER**

- 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, walk, sit or stand on the cover at any time.
- Never operate the cover until all people and objects are out of the spa.
- Do not operate the cover in extreme wind. See Technical specifications section for the wind limitations.



#### **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 retailer if any unusual mechanical sound is heard during cover operations.



#### DO'S

- Remove the key from the key switch after operating the cover. Users must bring the key in the spa with them to prevent the unauthorized operation of the cover. Store the key in a secure location when not in use.
- Check the cover frequently for any sign of deterioration.
- Have any repairs, adjustments or mechanical work performed by a certified Covana retailer 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 step on or stack anything on the operator cover.
- Do not keep the cover open for more than 12 consecutive hours. Failure to follow this instruction may cause permanent deformations to the cover.
- 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**



DO NOT CONVERGE
OR DIRECTLY REFLECT
SUNLIGHT ON THE COVER.
THIS COULD CAUSE
PERMANENT DAMAGE
(E.G.: REFLECTION FROM
A WINDOW).



#### **CAUTION**

- Use only accessories and tools approved by Covana.
- Do not rotate or slide the cover using its edges.
   This may damage the edge components.
- When unpacking after delivery or disassembling parts, always keep them in a safe location on a clean and level surface as to not damage them.



#### **CAUTION**

- This product mainly contains steel, plastic, fiberglass, foam, copper and die- cast aluminum. Please recycle properly according to the local rules.
- The gearbox contains oil and other materials.
   Please recycle properly according to the local rules.
- The jack stroke is limited by two limit switches.
  These switches are pre-adjusted at the factory.
  Refer to the <u>LIMIT\_SWITCH\_ADJUSTMENT</u>
  section before making any adjustments. An improper adjustment can result in damage to the operator and/or to the cover.

#### **RISK OF ELECTROCUTION**



# WARNING



ALL ELECTRICAL
CONNECTIONS MUST
BE DONE BY A
CERTIFIED ELECTRICIAN
OTHERWISE THE
CERTIFICATION AND
WARRANTY WILL BE VOID.



#### **CAUTION**

Any modifications to the electrical components will 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 operator 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 retailer 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 = 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.
- Two lugs marked "bonding lugs" are provided on the external surface or on the inside of the supply terminal box or compartment. To reduce the risk of electric shock, connect the local common bonding grid in the area of the cover. Use terminals with an insulated or bare copper conductor not smaller than No. 6 AWG (4.11 mm / 13.30 mm<sup>2</sup>).
- 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 / 13.30 mm<sup>2</sup>) (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.

# SAVE THESE INSTRUCTIONS

# **LABELING**

# **WARNING**



REMOVING ANY LABEL ON THE COVER WILL VOID THE PRODUCT CERTIFICATION. ALL LABELS SHOULD ALWAYS REMAIN VISIBLE. IT IS THE OWNER'S RESPONSIBILITY TO ENSURE THAT THE LABELS ARE ALWAYS VISIBLE AND NEVER REMOVED.

| Label  | Description   | Location   | Label  | Description                                     | Location  |
|--|---|--|--|---|---|
| A WARNING  SECTION OF THE PROPERTY OF THE PROP | Risk of electrocution   | On the operator  |  | No step   | On the top of<br>the operator<br>cover                                |
| CAUTION  CAU | Risk of electrocution   | On the power cable   | OR COVANA  | Key switch<br>operation<br>diagram              | On the key<br>switch  |
|  | Technical<br>specifications<br>with serial number<br>(European<br>models)       | On the operator cover                                      | CALIFORNIA PROPOSITION   | Proposition 65<br>(North<br>American<br>models) | On the side of<br>the operator<br>cover                               |
| HOYAL GHSC ON YYMMSSSS IN 12 VOICE HIS IN 1 VIN 8 IN 10 VIN 155 IN 1 VIN 8 IN 10 VIN 155 IN 10 VIN 155 IN 10 VIN 155 IN 1 | Technical<br>specifications<br>with serial number<br>(North American<br>models) | On the operator cover                                      | Visit www.povana.com for recommended maintenance procedures and videos This load not be amount except by he consume Visitez www.covana.com pour des conseils et des vidéos sur les procédures d'entretien Seult-dissier pet entre oil ancocher | Maintenance<br>information                      | On one side<br>of the outer<br>shell                                  |
| AVOID DROWNING RISK. ENTI<br>FAILURE TO FOLLOW ALL INSTRUCTIONS MA<br>INSPECT COVER PEI<br>POWER SAFETY COVER MEETS ASTI<br>FOR FURTHER INFORMATION CONTA  |   | ENTRAPMENT<br>S MAY RESULT<br>R PERIODICAL<br>ASTM F1346-2 | T IN INJURY OR DROWNING.<br>LLY.<br>23 REQUIREMENTS.   | Avoid<br>drowning                               | On the four<br>exterior and<br>interior wall<br>faces of the<br>cover |

# **PARTS NAME AND QUANTITY**

| All-weather seal   | Seal        | Seal clips            | Seal connector        |
|--|-------------|-----------------------|-----------------------|
|  |             |                       |                       |
| 4x   | 1x          | 1x                    | 1x                    |
| Outer corner bracket   | Drive shaft | Foot plate            | U-frame link          |
| 0 0  |             |                       |                       |
| 4x   | 2x          | 4x                    | 1x                    |
| Key switch   | Foam spacer | Limit switch          | Motor frame           |
| 1x   | 8x          | 2x                    | 1x                    |
|  |             |                       |                       |
| Jack   | Operator    | Sleeve                | U-frame               |
| 2x motor<br>2x non-motor   | 1x          | 4x                    | 2x long<br>2x short   |
| Jack lock screw (A)  | Wire guard  | CTS-70                | Inner shell           |
| A B C C  |             |                       |                       |
|  | 1x          | 1x                    | 1x                    |
| la ESM   |             | Outer shell "Darling" | Outer shell "Shingle" |
| 1x A: Jack lock screw B: Top plate screw C: Bushing D: Alignment bracket (plas | tic)        |                       | R                     |
|  |             | 1x                    | 1x                    |

# INSTALLATION AND PREPARATION

# **INSTALLATION PROCEDURE**



#### **CAUTION**

The cover must be installed by a certified Covana installer (two people are required for certain steps). Having the cover installed by someone who is not certified will void the warranty.

#### **TOOLS REQUIRED**



#### PREPARATION FOR THE INSTALLATION

To ensure safe use of the cover, it must be installed on a properly prepared surface (see Figure 2).

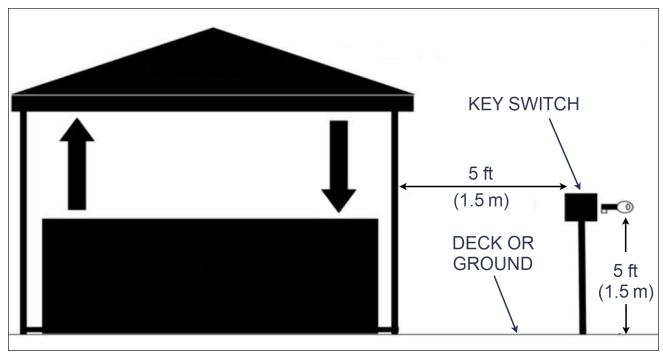


FIGURE 1: POSITION OF THE KEY SWITCH



FIGURE 2: PREPARATION FOR THE INSTALLATION

#### **FOUNDATION PREPARATION**

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

The four jacks must be properly anchored to the foundation. If you cannot meet this requirement, install a set of non-permanent mounting plates.

For an existing foundation, refer to the diagram in the Technical Specifications section.





#### **WARNING**

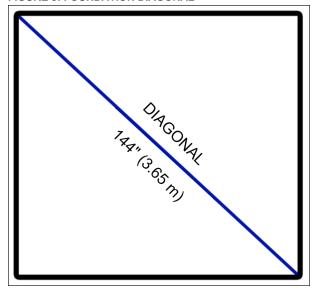
- The foundation must be leveled with a maximum tolerance of 1" (25 mm) over a diagonal section (see <u>Figure 3</u>). Refer to the minimum base size of the foot print in the Technical Specifications section.
- The annual variation in levelness for the same diagonal section cannot exceed 1/4" (6 mm).



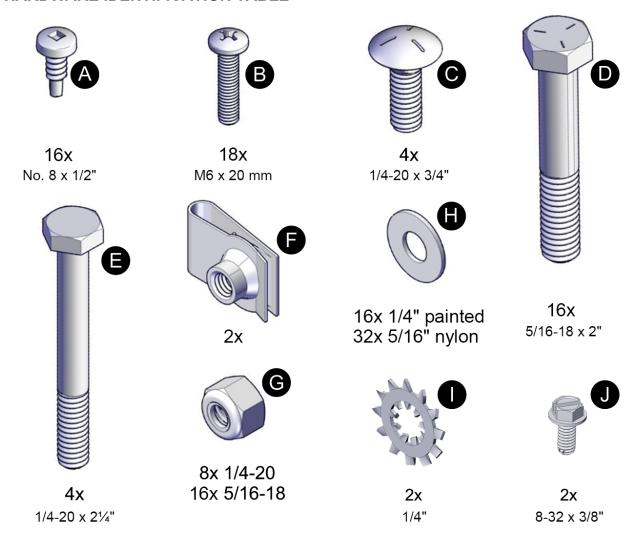
#### **CAUTION**

- Damage caused by inadequate foundation construction is not covered by the 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.

**FIGURE 3: FOUNDATION DIAGONAL** 



#### HARDWARE IDENTIFICATION TABLE

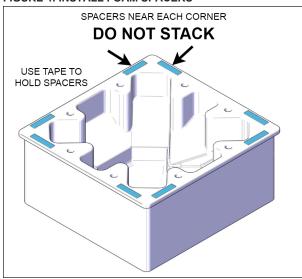


# HARDWARE IDENTIFIED IN IMAGES THROUGHOUT INSTALLATION REFERS TO THIS PAGE

NOTE: Extra parts are included in case some break or are lost during installation

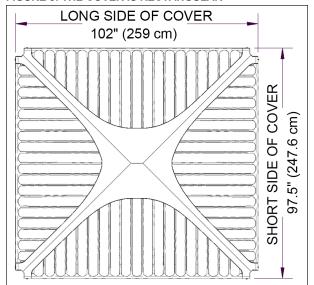
#### **ASSEMBLY PREPARATION**

#### FIGURE 4: INSTALL FOAM SPACERS

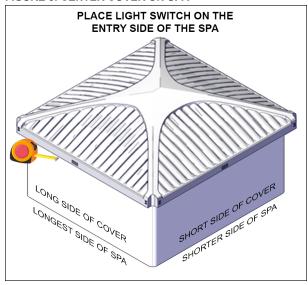




#### FIGURE 5: THE COVER IS RECTANGULAR



#### FIGURE 6: CENTER COVER ON SPA

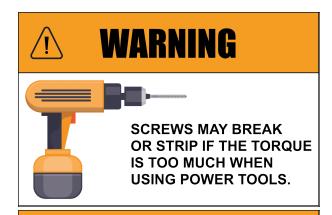




#### **WARNING**

- The cover alone weighs approximately 185 lb. (84 kg).
- When handling the cover, 2 people must support the outer and inner shells with both hands. A wide grip is best when handling the cover, as all four sides must be lifted equally.
- 3 to 4 people may be required. Remove the outer shell if the cover is too heavy to handle.
   Be careful not to fold the outer shell or scratch it on the inner steel frame.

# LIFTING MECHANISM INSTALLATION (PART 1)







DO NOT REMOVE THE ALIGNMENT BRACKET ON THE TOP OF THE JACK (PLASTIC PART).

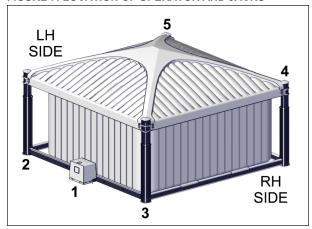
#### NOTE

The next steps are side-specific. They are for the non-motor left-hand side foot assembly.

Install the motor frame (usually to the opposite side of the spa entrance).

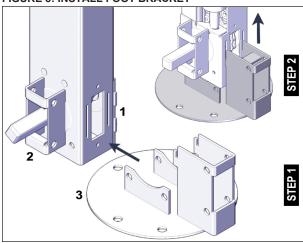
- Standard model: motor frame on the short side of the cover.
- Long side model: motor frame on the long side of the cover.

FIGURE 7: LOCATION OF OPERATOR AND JACKS



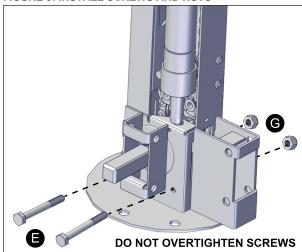
OPERATOR
 MOTOR LEFT-HAND SIDE JACK
 MOTOR RIGHT-HAND SIDE JACK
 NON-MOTOR RIGHT-HAND SIDE JACK
 NON-MOTOR LEFT-HAND SIDE JACK

FIGURE 8: INSTALL FOOT BRACKET



NON-MOTOR LEFT-HAND SIDE JACK
 RIGHT-HAND SIDE OF U-FRAME
 FOOT BRACKET

**FIGURE 9: INSTALL SCREWS AND NUTS** 



| E | $1/4-20 \times 2\frac{1}{4}$ " HEXAGONAL HEAD SCREWS |
|---|--|
| G | 1/4-20 NYLON-INSERT LOCK NUTS                        |

• Repeat with the non-motor right-hand side foot.

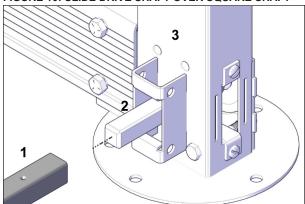


#### **CAUTION**

Lay the posts down before proceeding with the next step.

 Place the non-motor left-hand side jack in the remaining corner of the cover; the square shaft facing the motor frame, and the U-frame bracket facing inward.

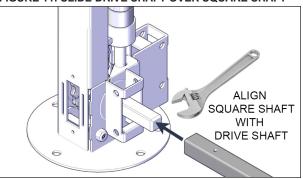
FIGURE 10: SLIDE DRIVE SHAFT OVER SQUARE SHAFT



| 1 | DRIVE SHAFT          |
|---|----------------------|
| 2 | SQUARE SHAFT         |
| 3 | LEFT MOTOR-SIDE JACK |

• Hold the non-motor left-hand side jack upright and in line with the left drive shaft.

FIGURE 11: SLIDE DRIVE SHAFT OVER SQUARE SHAFT

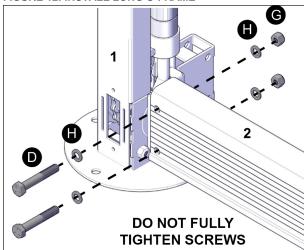




#### **WARNING**

Using the jack without the drive shaft properly connected may cause injury.

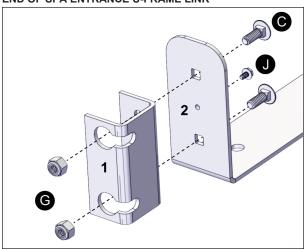
FIGURE 12: INSTALL LONG U-FRAME



| D | 5/16-18 x 2" HEX HEAD SCREWS   |
|---|--------------------------------|
| G | 5/16-18 NYLON INSERT LOCK NUTS |
| Н | 5/16" NYLON WASHERS            |
| 1 | NON-MOTOR SIDE JACK            |
| 2 | LONG U-FRAME                   |

· Repeat previous steps on the opposite side.

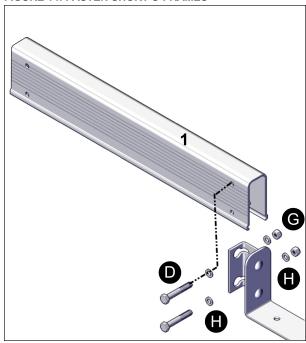
FIGURE 13: FASTEN ONE METAL COUPLER ON EACH END OF SPA ENTRANCE U-FRAME LINK



| С | 1/4-20 x 3/4" CARRIAGE BOLT                      |
|---|--|
| G | 5/16-18 NYLON INSERT LOCK NUTS                   |
| J | 8-32 x 3/8" HEX SLOTTED THREAD-<br>CUTTING SCREW |
| 1 | UNPAINTED METAL COUPLER                          |
| 2 | SPA ENTRANCE U-FRAME LINK                        |

• Fasten a short U-frame to each end of the spa entrance U-frame link (*Figure 14*).

FIGURE 14: FASTEN SHORT U-FRAMES

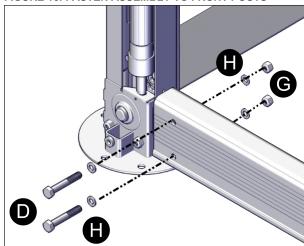


| D | 5/16-18 x 2" HEX HEAD SCREWS   |
|---|--------------------------------|
| G | 5/16-18 NYLON INSERT LOCK NUTS |
| Н | 5/16" NYLON WASHERS            |
| 1 | SHORT U-FRAME                  |

FIGURE 15: SLIDE ASSEMBLY BETWEEN FRONT POSTS



FIGURE 16: FASTEN ASSEMBLY TO FRONT POSTS



| D | 5/16-18 x 2" HEX HEAD SCREWS   |
|---|--------------------------------|
| G | 5/16-18 NYLON INSERT LOCK NUTS |
| Н | 5/16" NYLON WASHERS            |

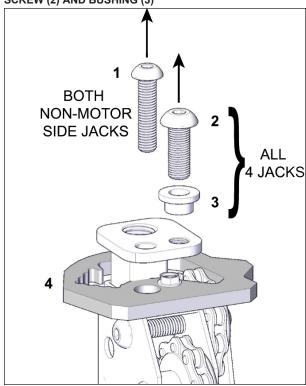
 Tighten all U-frame screws (make sure the drive shafts didn't fall off. If so, review the previous steps).



#### **DANGER**

Failure to verify the proper installation of the drive shafts could result in the non-motor-side jacks extending on their own.

FIGURE 17: REMOVE JACK LOCK SCREW (1), SOCKET SCREW (2) AND BUSHING (3)



| 1 | M8 x 50 mm JACK LOCK SCREW  |
|---|-----------------------------|
| 2 | 3/8" x 1" SOCKET HD SCREW   |
| 3 | BUSHING                     |
| 4 | ALIGNMENT BRACKET (PLASTIC) |

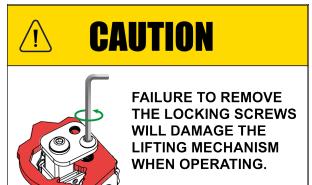
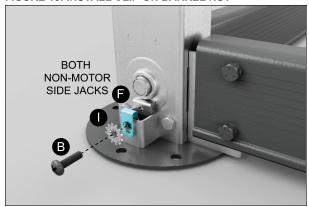


FIGURE 18: INSTALL CLIP-ON BARREL NUT



| В | M6 x 20 mm SCREV | V (do NOT | fully screw) | ) |
|---|------------------|-----------|--------------|---|
|   |                  |           |              |   |

- F CLIP-ON BARREL NUT
- I 1/4" INT./EXT. TOOTH LOCKWASHER

FIGURE 19: SLIDE SLEEVES OVER FOUR JACKS

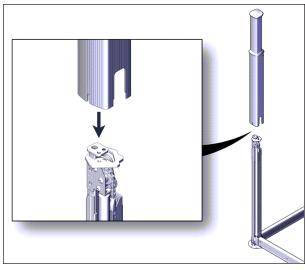
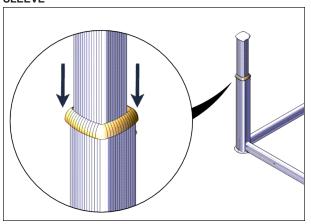


FIGURE 20: TIGHTEN SCREW ON EACH SLEEVE



FIGURE 21: SLIDE SLEEVE SEAL DOWN ON EACH OUTER SLEEVE

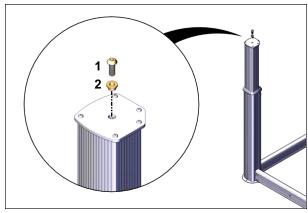




#### **WARNING**

Failing to properly position the seal may cause serious damage to the post mechanism.

FIGURE 22: INSTALL 3/8" X 1" SCREW AND BUSHING

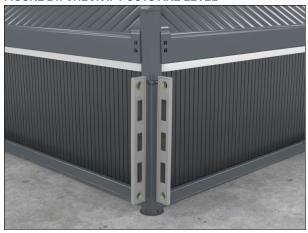


- 1 3/8" x 1" SOCKET HD SCREW
- 2 BUSHING

**FIGURE 23: CENTER THE COVER** 



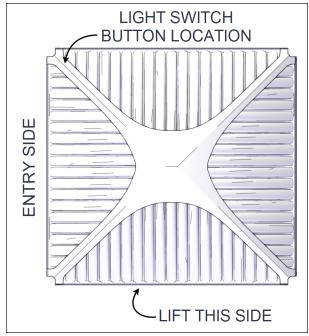
FIGURE 24: CHECK IF POSTS ARE LEVEL



#### **AC LIGHT KIT INSTALLATION**

 Lift the side of the outer shell opposite to the light switch button (16" max) (*Figure 25*). To do so, push on the steel frame of the inner shell to clear the metal inserts from the outer shell (*Figure 26*).

FIGURE 25: LIFT ONE SIDE OF THE OUTER SHELL

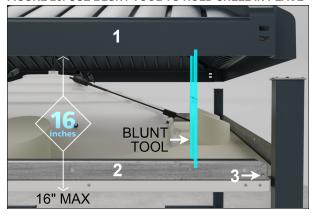




#### **CAUTION**

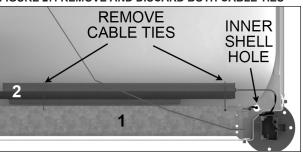
Always hold the outer shell at two different points spaced by about 34".

FIGURE 26: USE BLUNT TOOL TO HOLD SHELL IN PLACE



- 1 OUTER SHELL
- 2 STEEL FRAME (INNER SHELL)
- 3 METAL INSERT

FIGURE 27: REMOVE AND DISCARD BOTH CABLE TIES



- 1 CTS-70 (Continuous Tension System)
- 2 WIRE GUARD

FIGURE 28: REMOVE WIRE GUARD FROM INNER SHELL (LET IT HANG DOWN)





#### **WARNING**

Ensure the wire is clear of the inner and outer shells. It should only hang from the inner shell hole (*Figure 27*).

FIGURE 29: LOOSEN U-FRAME SCREWS (OPPOSITE CORNER OF THE LIGHT SWITCH BUTTON)

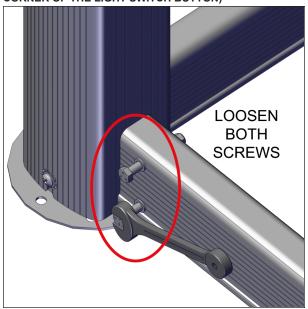




FIGURE 30: INSERT SLOTS OVER LOOSEN SCREWS

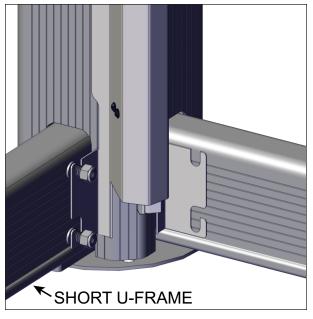


FIGURE 31: INSERT TAB BEHIND PLASTIC HOLDER

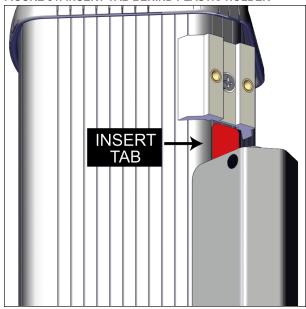


FIGURE 32: TIGHTEN BOTH SCREWS ON U-FRAME

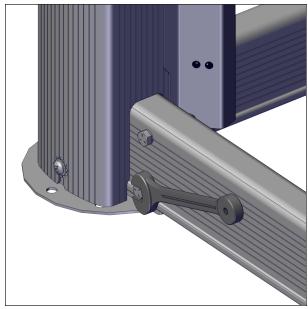
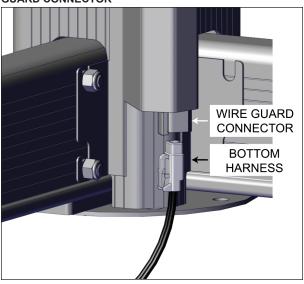
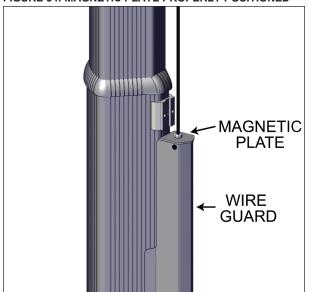


FIGURE 33: CONNECT BOTTOM HARNESS TO WIRE GUARD CONNECTOR

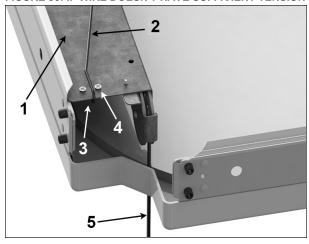


- · Lower the cover on the spa.
  - If the exiting wire has sufficient tension and the magnetic plate is properly positioned (<u>Figure 34</u>), slide the outer shell back on the inner shell.
  - If not, loosen the tension holder screws and pull back the tension wire until a slight resistance is felt (Figure 35). Once the resistance is felt, pull another inch. If the wire going to the post is tight enough, retighten the screws. Slide the outer shell back on the inner shell.

FIGURE 34: MAGNETIC PLATE PROPERLY POSITIONED



#### FIGURE 35: IF WIRE DOESN'T HAVE SUFFICIENT TENSION



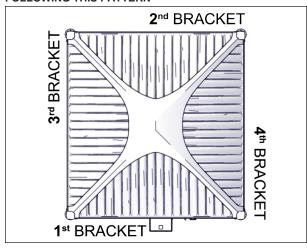
- CTS-70
   TENSION WIRE (GOING TO LED)
   TENSION HOLDER
   SCREW
   EXITING WIRE (GOING TO OPERATOR)
  - **CAUTION**



WHEN REINSTALLING
THE OUTER SHELL,
MAKE SURE THAT THE
STEEL FRAMES ARE
INSIDE THE OUTER SHELL.
ALSO, CHECK ALL
THE METAL INSERTS.

# LIFTING MECHANISM INSTALLATION (PART 2)

# FIGURE 36: INSTALL OUTER CORNER BRACKETS FOLLOWING THIS PATTERN

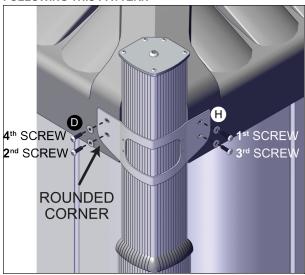




#### **WARNING**

Make sure the sleeve is correctly pressed against the outer shell before installing the screws.

# FIGURE 37: INSTALL CORNER BRACKET SCREWS FOLLOWING THIS PATTERN



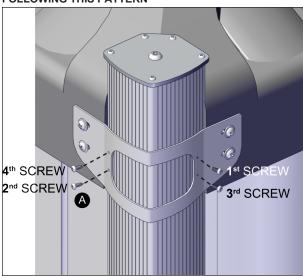
| D | M6 x 20 mm SCREWS    |  |
|---|----------------------|--|
| Н | 1/4" PAINTED WASHERS |  |

# CHECK IF THE POSTS ARE LEVEL BEFORE DRIVING IN THE SCREWS; IT IS VERY DIFFICULT TO REPOSITION THE SLEEVES ONCE SCREWED.

#### NOTE

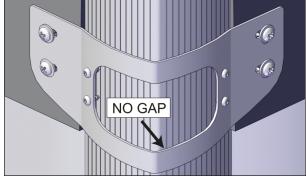
When fastening in the screws, pull the post towards you for a better fit of the corner bracket.

# FIGURE 38: INSTALL CORNER BRACKET SCREWS FOLLOWING THIS PATTERN



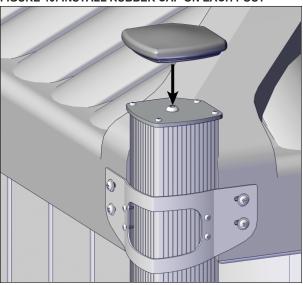
A No. 8 x 1/2" SELF-TAPPING SCREWS

#### FIGURE 39: AVOID GAP



· Repeat previous steps for each corner.

FIGURE 40: INSTALL RUBBER CAP ON EACH POST



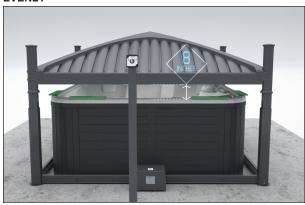
#### **TESTING THE COVER**

• Plug in the cover.

FIGURE 41: NO OBJECT ALLOWED ABOVE COVER (SEE LIMIT SWITCH ADJUSTMENT SECTION)



FIGURE 42: RAISE 8" — MAKE SURE COVER LIFTS EVENLY



• Check the installation of the brackets by trying to lift each sleeve. Review Lifting Mechanism Installation section (part 2) for any broken screws or to retighten screws if the sleeve keeps moving (*Figure 43*).

FIGURE 43: CHECK BRACKET INSTALLATION

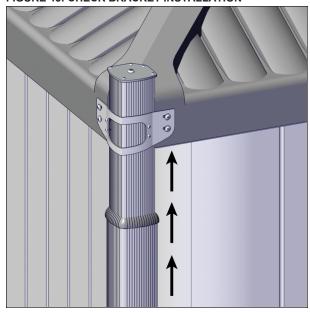
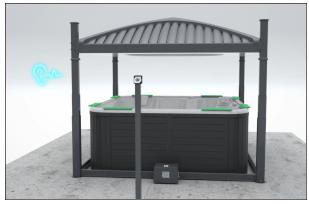


FIGURE 44: LOWER COVER — MUST TOUCH FOAM SPACERS



FIGURE 45: RAISE COVER — LISTEN FOR UNUSUAL SOUNDS



• Lower the cover and make sure it touches the foam spacers. If not, adjust the corner brackets.

FIGURE 46: LOWER COVER — MUST TOUCH FOAM SPACERS

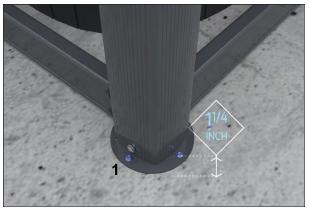


FIGURE 47: CHECK IF POSTS ARE STILL LEVEL



• Anchor jacks to the foundation (in at least one hole in the foot) and **insert at least 1¼" deep**.

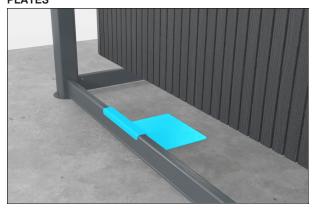
FIGURE 48: ANCHOR JACKS TO THE FOUNDATION



1 1/4" CONCRETE ANCHOR BOLT
OR
1/4" LAG BOLT FOR WOOD FOUNDATION

• If you cannot meet these requirements, install <u>NON- PERMANENT</u> <u>MOUNTING</u> <u>PLATES</u> <u>-</u>

FIGURE 49: OR USE NON-PERMANENT MOUNTING PLATES



#### **KEY SWITCH INSTALLATION**



#### **DANGER**

• The key switch must be:

Permanently mounted 5 ft away from the spa and 5 ft above the deck or ground level.

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 could result in injury or even death.



# **WARNING**





WHEN OPERATING THE COVER, THE USER MUST ALWAYS HAVE A CLEAR VIEW OF THE COVER AND ITS SURROUNDINGS.

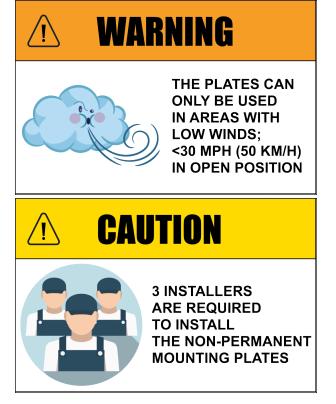
FIGURE 50: FASTEN BACKPLATE OF KEY SWITCH WITH FOUR SCREWS (NOT INCLUDED)



# NON-PERMANENT MOUNTING PLATES (OPTIONAL)

#### NOTE

This setup is only available for spa base sizes larger than 82" wide for standard COVANA units and 87" wide for long side COVANA units.



- Raise the cover to slightly lift the spa.
- Two installers must lift the spa at one end, 4" off the ground, while the third installer slips the mounting plate under the spa and hooks it over the U-frame. Two plates must be installed on each side.

FIGURE 51: INSTALL PLATES AS CLOSE AS POSSIBLE TO THE CORNERS

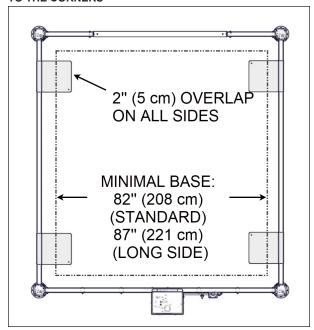
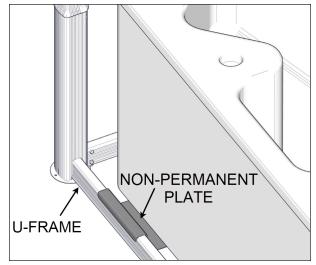


FIGURE 52: HOOK THE PLATES OVER THE U-FRAMES



#### **SEAL INSTALLATION**



# **CAUTION**



THE RECOMMENDED TOOL
TO INSTALL THE SEAL IS A
J-ROLLER WITH RUBBER ROLLER.

IT MUST BE FREE OF SCRATCHES, CLEAN AND NON-ABRASIVE.

**COVANA PART NO. 239693 (NOT INCLUDED)** 



#### **CAUTION**

- A path at least 1" (2.5 cm) wide all around the perimeter of the spa is necessary to install the seal.
- Install the seal when the ambient temperature is above 50 °F (10 °C).
- Reduce the water vapor steam generated by the spa (turn off the recirculation pump and set the temperature of the water between 2° and 5° under the ambient temperature). Wait for the water to reach the ambient temperature.

#### FIGURE 53: REMOVE FOAM SPACERS AND TAPE

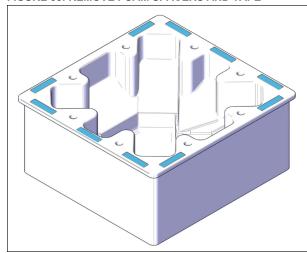
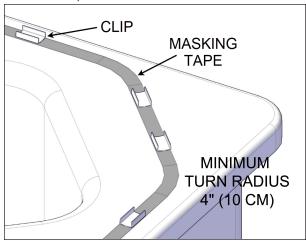


FIGURE 54: DRY TOP OF SPA AND UNDERSIDE OF COVER



FIGURE 55: APPLY MASKING TAPE CLOSE TO INTERIOR EDGE OF SPA, ON A FLAT SURFACE



 Distribute the clips around the spa (use two for the joint on the opposite side from the spa entrance). Once the distribution is done, stick them in place.



#### **CAUTION**

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

FIGURE 56: INSTALL SEAL IN CLIPS WITH ADHESIVE LAYER FACING UP

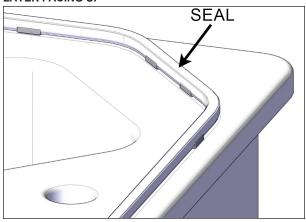
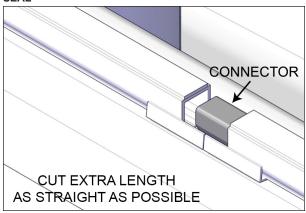


FIGURE 57: INSERT CONNECTOR IN BOTH ENDS OF THE SEAL



#### **WARNING**

- If there is no water in the spa and the ambient air temperature is below 50 °F (10 °C), a heater must be installed **on a pedestal** inside the spa.
- Do not directly heat the acrylic or the seal, as this may cause permanent damage.
- Once the heater is in the spa, lower the cover until it touches the seal. Regularly check the interior air temperature and do not let it reach temperatures above 104 °F (40 °C). After 10 to 15 minutes, remove the heater.
- 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.

FIGURE 58: LOWER COVER 1/4" OVER SEAL TO TEST SEAL PLACEMENT

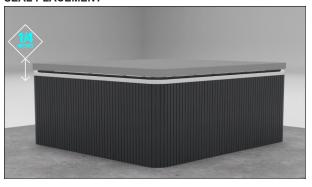


FIGURE 59: REMOVE RED BACKING OFF SEAL

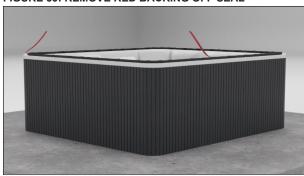


FIGURE 60: COMPLETELY LOWER COVER FOR AT LEAST 5 MINUTES

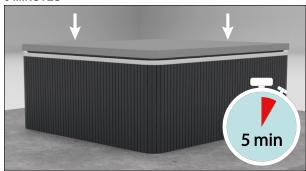


FIGURE 61: RAISE COVER 1/4" TO RELEASE SEAL FROM CLIPS

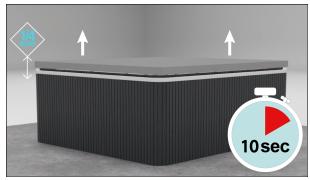


FIGURE 62: WHEN SEAL IS RELEASED, RAISE COVER 36"



FIGURE 63: APPLY 15 PSI PRESSURE WITH J-ROLLER

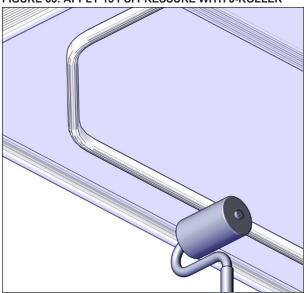


FIGURE 64: REMOVE CLIPS AND TAPE

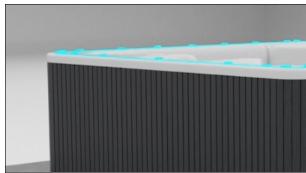


FIGURE 65: LOWER COVER 6" ABOVE SPA TO ENSURE CORNERS ARE AT SAME HEIGHT



FIGURE 66: LOWER COVER AND CHECK IF SEAL IS TOUCHING ALL AROUND SPA

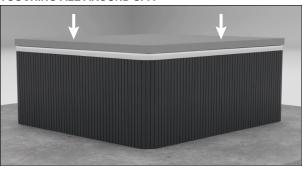
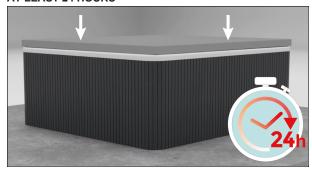


FIGURE 67: LEAVE COVER COMPLETELY CLOSED FOR AT LEAST 24 HOURS



# FIGURE 68: WRITE DATE OF INSTALLATION ON OPERATOR LABEL

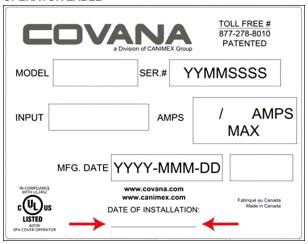


FIGURE 69: WRITE ADDRESS IN IMPORTER BOX (EUROPEAN MODEL SOLD IN SWITZERLAND)

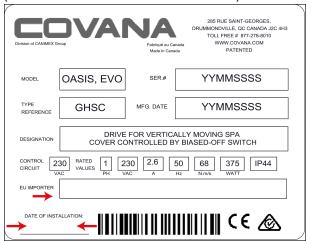


FIGURE 70: ATTACH YELLOW TAG TO COVANA KEY RING



 Complete the Customer's installation checklist as well as the Installer's installation checklist.

# **ELECTRICAL CONNECTIONS**

### **GROUNDING AND POWER SUPPLY CONNECTIONS**

- Remove the 4 screws on the bottom side of the operator cover and remove the cover (Figure 72).
- For the complete wiring diagrams refer to the Electrical diagrams section.

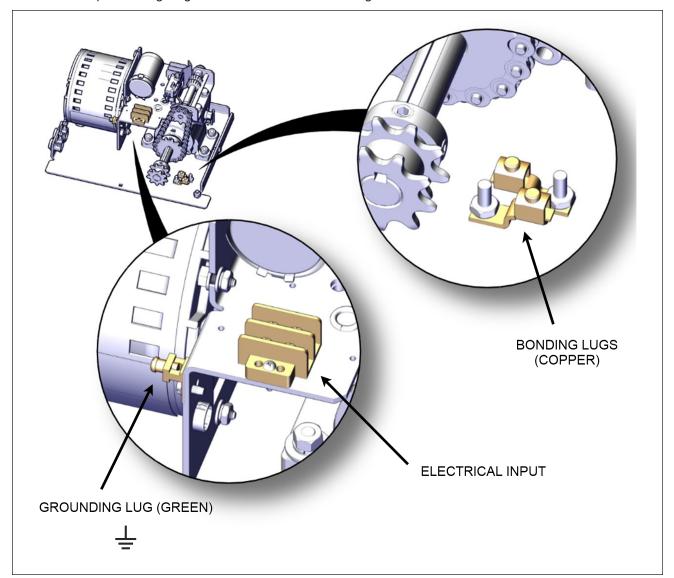
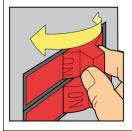


FIGURE 71: POWER SUPPLY CONNECTIONS

### LIMIT SWITCH ADJUSTMENT

# <u>(i</u>

# WARNING



DISCONNECT OR TURN
OFF POWER SUPPLY
BEFORE STARTING ANY
WORK ON THE COVER.
ALL ELECTRICAL WORK
SHOULD BE PERFORMED
BY A QUALIFIED
ELECTRICIAN.



# **WARNING**

Both limit switches have been factory-adjusted. If adjustments are required to ensure the cover does not come in contact with surrounding obstacles, the maximum height may be reduced. Never change the factory setting of the lower limit nor increase the upper limit beyond the factory setting.

FIGURE 72: REMOVE OPERATOR COVER

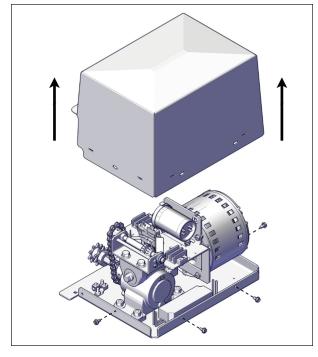
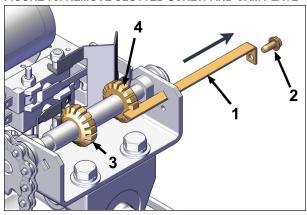


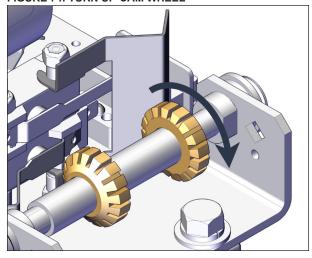
FIGURE 73: REMOVE SLOTTED SCREW AND CAM PLATE



| 1 | CAM PLATE      |
|---|----------------|
| 2 | SLOTTED SCREW  |
| 3 | DOWN-CAM WHEEL |
| 4 | UP-CAM WHEEL   |

To reduce the upper limit, turn the up-cam wheel.
 Removing a tooth is equivalent to removing 5/32"
 (4 mm) on the cover lifting stroke.

FIGURE 74: TURN UP-CAM WHEEL



Once the upper limit is set:

- 1. Reinstall the cam plate (make sure it is inserted in the slot of each cam wheel).
- 2. Reinsert the slotted screw.
- 3. Reinstall the operator cover (without the four screws).



# **WARNING**

Never operate the cover without the cam plate and retaining screw installed.

- Turn the power on and test the height of the cover. Repeat the previous steps if necessary.
- Once the adjustment is completed, fasten the operator cover with the four screws.

# INSTALLATION CHECKLIST (CUSTOMER COPY)

| C  | heck each circle when completed:   |  |  |  |  |  |  |
|----|--|--|--|--|--|--|--|
| O  | The base preparation steps are done correctly.   |  |  |  |  |  |  |
| O  | The installation steps are done correctly.   |  |  |  |  |  |  |
| O  | The seal is properly installed and there is no steam leaking out around the cover.   |  |  |  |  |  |  |
| 0  | The key switch is <b>permanently installed</b> at least 5 ft (1.5 m) away from the spa and 5 ft (1.5 m) from the ground.   |  |  |  |  |  |  |
| O  | The electrical portion of the installation was done by a certified electrician.  |  |  |  |  |  |  |
| O  | All parts supplied and included into the crate are installed.  |  |  |  |  |  |  |
| O  | The start-up procedure is completed.   |  |  |  |  |  |  |
| 0  | The four jacks have been properly anchored to the foundation OR a set of non-permanent mounting plates has been installed. |  |  |  |  |  |  |
| O  | The all-weather seal works properly.   |  |  |  |  |  |  |
| 0  | The middle sleeves slide freely (Manually slide the middle sleeve up and down when the cover is half open).                |  |  |  |  |  |  |
| O  | The date of installation has been written on the technical specifications label.   |  |  |  |  |  |  |
| O  | The yellow tag is attached to the COVANA key ring.   |  |  |  |  |  |  |
| S  | erial number:Date (YYYY/MM/DD):  |  |  |  |  |  |  |
| Ir | nstaller name:Signature:   |  |  |  |  |  |  |
| С  | Sustomer name: Signature:  |  |  |  |  |  |  |
| С  | Customer address:  |  |  |  |  |  |  |
| D  | Pate (YYYY/MM/DD):   |  |  |  |  |  |  |
| R  | Petailer name :  |  |  |  |  |  |  |

# **INSTALLATION CHECKLIST (INSTALLER COPY)**

| С  | heck each circle when completed:   |  |  |  |  |  |  |
|----|--|--|--|--|--|--|--|
| O  | The base preparation steps are done correctly.   |  |  |  |  |  |  |
| O  | The installation steps are done correctly.   |  |  |  |  |  |  |
| O  | The seal is properly installed and there is no steam leaking out around the cover.   |  |  |  |  |  |  |
| O  | The key switch is <b>permanently installed</b> at least 5 ft $(1.5 \text{ m})$ away from the spa and 5 ft $(1.5 \text{ m})$ from the ground. |  |  |  |  |  |  |
| 0  | The electrical portion of the installation was done by a certified electrician.  |  |  |  |  |  |  |
| O  | All parts supplied and included into the crate are installed.  |  |  |  |  |  |  |
| O  | The start-up procedure is completed.   |  |  |  |  |  |  |
| Ο  | The four jacks have been properly anchored to the foundation OR a set of non-permanent mounting plates has been installed.                   |  |  |  |  |  |  |
| O  | The all-weather seal works properly.   |  |  |  |  |  |  |
| 0  | The middle sleeves slide freely (Manually slide the middle sleeve up and down when the cover is half open).                                  |  |  |  |  |  |  |
| O  | The date of installation has been written on the technical specifications label.   |  |  |  |  |  |  |
| O  | The yellow tag is attached to the COVANA key ring.   |  |  |  |  |  |  |
| S  | erial number:Date (YYYY/MM/DD):  |  |  |  |  |  |  |
| In | staller name: Signature:   |  |  |  |  |  |  |
| С  | ustomer name: Signature:   |  |  |  |  |  |  |
| С  | ustomer address:   |  |  |  |  |  |  |
| D  | ate (YYYY/MM/DD):  |  |  |  |  |  |  |
| R  | etailer name :   |  |  |  |  |  |  |

# OPERATE THE COVER



# WARNING



READ THESE SECTIONS BEFORE USING THE COVER:

- IMPORTANT SAFETY INSTRUCTIONS
- MANUAL OPERATION OF THE COVER

# RAISING/LOWERING THE COVER WITH THE KEY SWITCH



# **DANGER**

Make sure the key switch has been:

- Permanently mounted 5 ft away from the spa and 5 ft above the deck or ground level.
- Located in a location where no water downpour or debris could fall on it.



# **WARNING**

Before operating the cover, make sure that:

- All debris and snow are removed from the cover.
- There is nobody in or near the spa.
- There is no obstruction over or around the cover.
- The cover is completely visible when operating the key switch.
- To raise the cover, press and hold the button while turning the key UP ( arrow).

- To lower the cover, press and hold the button while turning the key DOWN (♥ arrow).
- Install the rubber cap back on the key switch after each use.

# NOTE

The cover will automatically stop in both the fully open and fully closed position.

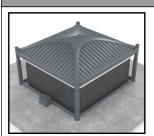


# WARNING



USERS MUST BRING THE KEY IN THE SPA WITH THEM TO PREVENT ANY UNAUTHORIZED OPERATION OF THE COVER.

# **IMPORTANT NOTE**



KEEP THE COVER FULLY CLOSED WHEN NOT IN USE.

# **LED LIGHT KIT**

To operate the lighting system, press the push button located under the cover.

The lighting system operates in 2 different modes:

- Color locked
- Color wheel

FIGURE 75: SWITCH LIGHTS OFF AND IMMEDIATELY BACK ON TO SELECT MODE

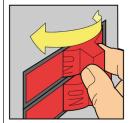




THE LIGHTS OFF WHEN NOT IN USE.

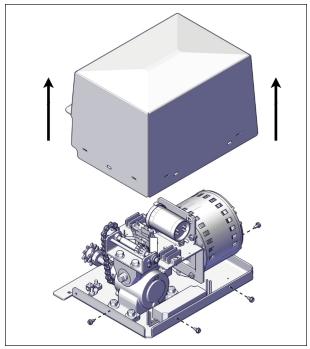
# MANUAL OPERATION OF THE COVER

# **WARNING**



DISCONNECT OR TURN
OFF POWER SUPPLY
BEFORE STARTING ANY
WORK ON THE COVER.
ALL ELECTRICAL WORK
SHOULD BE PERFORMED
BY A QUALIFIED
ELECTRICIAN.

FIGURE 76: REMOVE OPERATOR COVER



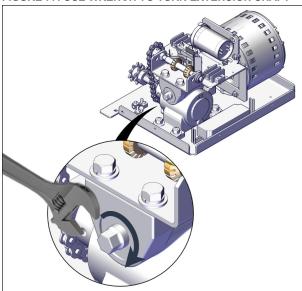
• Slowly turn the extension shaft clockwise to lower the cover, or counterclockwise to raise it. Stop immediately if any tension occurs.



# **WARNING**

Do not exceed the limits of the mechanism. Failure to respect this guideline may cause mechanical failure.

FIGURE 77: USE WRENCH TO TURN EXTENSION SHAFT



- · Reinstall the operator cover with the four screws.
- Reconnect and turn on the power supply.

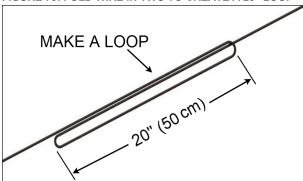
# **WIRE GUARD REASSEMBLY**

Reassemble the wire guard harness if the magnetic plate came off to let the wire out.

FIGURE 78: CHECK IF WIRE HAS BEEN DAMAGED



FIGURE 79: FOLD WIRE IN TWO TO CREATE A 20" LOOP

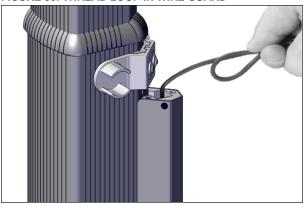




# **WARNING**

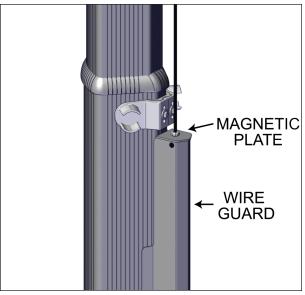
- Do not tape or fix the wire together.
- Ensure the wire is not caught in the post or twisted around any object before proceeding.

FIGURE 80: THREAD LOOP IN WIRE GUARD



 Reinstall the plate on top of the wire guard. The wire should have sufficient tension and look straight.

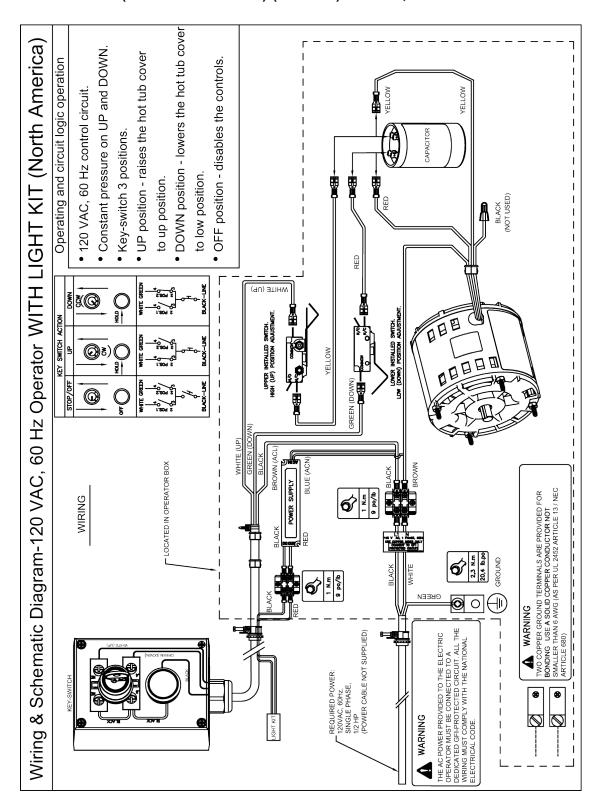
FIGURE 81: FINAL ASSEMBLY SHOULD LOOK LIKE THIS

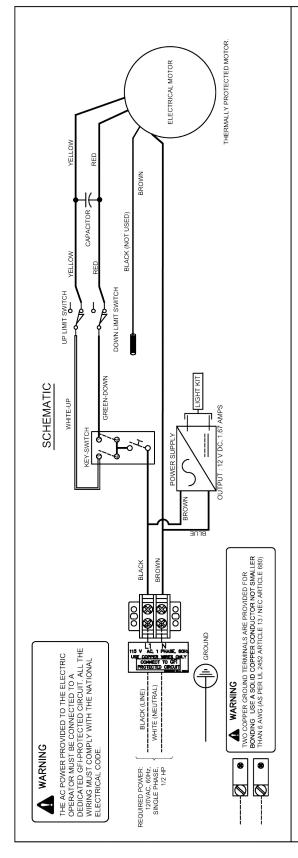


 Operate the cover by cycling it up and down. If the plate still comes off due to excessive tension, consult the Troubleshooting section or call your local Covana retailer.

# **ELECTRICAL DIAGRAMS**

WIRING DIAGRAM (NORTH AMERICA) (LIGHTS) – 60 HZ, 120 VAC OPERATOR



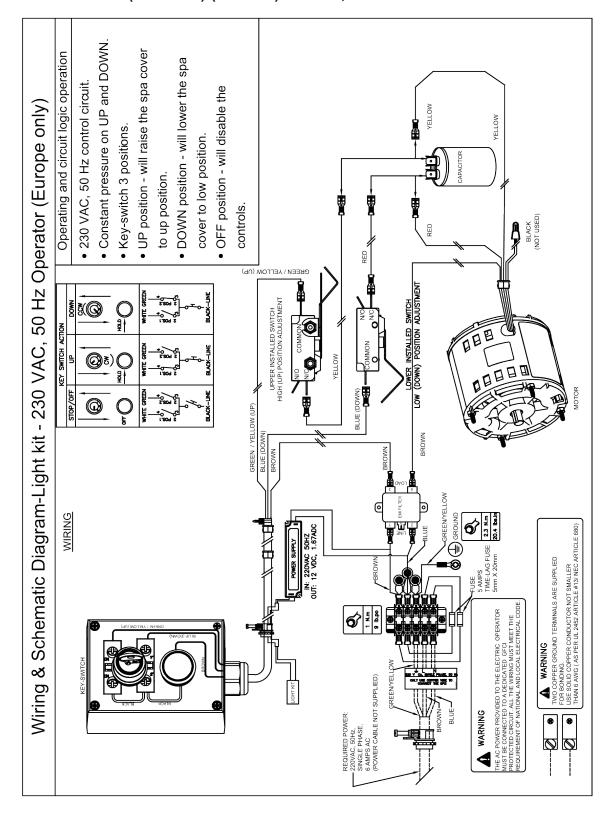


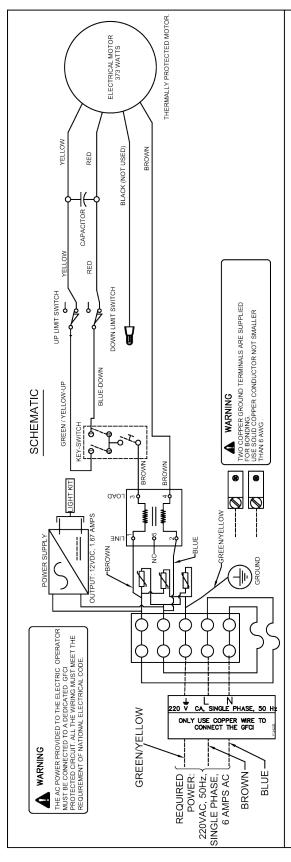
thermal overload. In case of over-use, the motor will overheat and will shutdown. Once the motor cools down to its Note: The spa cover operator is designed with an instant reverse single-phase motor with internal automatic reset operational temperature, the spa cover can be used again.

as specified in the National Electric Code (NEC), Article 430, allowing 5% volt drop, or comply to any other local codes The control circuit operates at 120 VAC, 60 Hz. Due to the resistance in the wire used to carry the control circuit All power wiring should be installed by a qualified electrician and may vary with respect to conduit size and type If wire gage is not suitable for the distance, problems in operator will be encountered such as motor humming, voltage, it is important to use the appropriate wire size between the operator and the main power supply. premature wear of the limit switches' contacts and possible tripping of the motor's thermal protection. and regulations. Power must be connected in accordance with local electricity codes.

Brevet en instance / Patent Pending www.covana.com

# WIRING DIAGRAM (EUROPE) (LIGHTS) - 50 HZ, 230 VAC OPERATOR





thermal overload. In case of over-use, the motor will overheat and will shutdown. Once the motor cools down to its Note: The spa cover operator is designed with an instant reverse single-phase motor with internal automatic reset operational temperature, the spa cover can be used again.

as specified in the National Electric Code (NEC), Article 430, allowing 5% volt drop, or comply to any other local codes The control circuit operates at 230 VAC, 50 Hz. Due to the resistance in the wire used to carry the control circuit All power wiring should be installed by a qualified electrician and may vary with respect to conduit size and type If wire gage is not suitable for the distance, problems in operator will be encountered such as motor humming, voltage, it is important to use the appropriate wire size between the operator and the main power supply premature wear of the limit switches' contacts and possible tripping of the motor's thermal protection. and regulations. Power must be connected in accordance with local electricity codes.

Brevet en instance / Patent Pending www.covana.com

# **MAINTENANCE**

The lifespan of this product depends on the time invested in its maintenance.

### **WINTERIZING**



# **CAUTION**



FOLLOW THESE INSTRUCTIONS
IF YOU PLAN TO STOP USING
THE SPA FOR A LONG PERIOD OF
TIME OR IF THE TEMPERATURE
DROPS BELOW FREEZING POINT.

- 1. Clean the cover 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. Close the cover. Make sure the seal touches the whole perimeter of the spa.
- 4. Turn off and secure the power supply of the cover.
- 5. Install a waterproof canvas on the cover, and another on the operator.



# CAUTION

Using any type of fabric or plastic canvas on the cover during hot weather may damage its components. Only use such protection for the winterization procedure and during the cold season; remove it as soon as seasonal temperatures are higher than the freezing point.



# **CAUTION**



REMOVE SNOW
REGULARLY OR AFTER
HEAVY SNOWFALL.
DO NOT LET MORE
THAN 12" (30 CM)
OF SNOW ACCUMULATE
ON THE COVER.

# **WASHING THE COVER**

Clean the cover as needed or when dirt, debris or leaves are present.

### **TOOLS AND PRODUCT TO USE**

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

### **METHOD:**

- 1. Rinse the cover with water to remove any large accumulated debris.
- 2. Apply the soap solution in a scrubbing or circular motion using a sponge, cloth or soft plastic brush.
- 3. Quickly rinse very thoroughly to remove all traces of soap; otherwise, a film will build up giving the cover a dull, dirty appearance.



# **WARNING**

- Never use a pressure washer or high pressure to clean the cover as it could puncture the outer shell.
- 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.

### **POST GREASING**

The internal jacks require yearly greasing to ensure the best performance. Early in the fall season is the best time.



### NOTE

The posts will not lift by removing the top plates. Only the motor can raise or lower the posts.

### POST GREASING PROCEDURE

• Lower the cover until it is fully closed.

### FIGURE 82: REMOVE RUBBER CAP FROM EACH POST

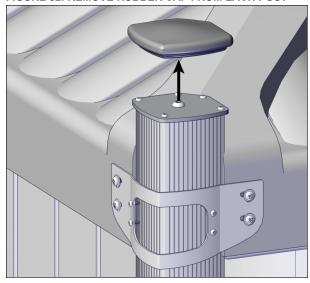
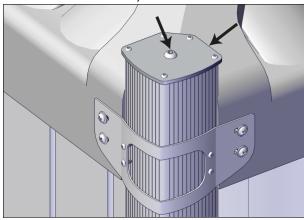


FIGURE 83: REMOVE TOP PLATE FROM EACH POST (6 SCREWS AND 1 BUSHING)





# **WARNING**

Failure to remove all four top plates will result in important damages to the cover.

FIGURE 84: RAISE JACKS ALL THE WAY UP WITH KEY SWITCH



FIGURE 85: SPRAY GREASE ON SLIDING PARTS AND MECHANICAL COMPONENTS OF EACH JACK

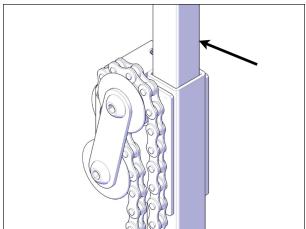
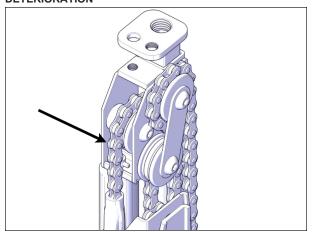


FIGURE 86: INSPECT CHAINS FOR SIGNS OF DETERIORATION



- Cycle the system up and down and check if more grease should be added.
- Lower the system completely until it stops automatically.
- Reinstall the top plate on each post with the five screws, as well as the hexagonal head screw and bushing.
- Reinstall the rubber cap on top of each post.

### **CHAIN LUBRICATION**

The transmission power chains attached to the operator require yearly greasing.

# WHITE LITHIUM GREASE IS RECOMMENDED FOR ALL CLIMATES. IDEALLY A SPRAYABLE GREASE OR AN EQUIVALENT LOW TEMPERATURE SYNTHETIC GREASE.

FIGURE 87: TWO CHAINS ARE ATTACHED TO THE OPERATOR (LEFT AND RIGHT)

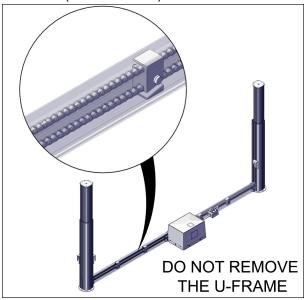


FIGURE 88: PARTIALLY UNSCREW THE SCREW AT THE BASE OF THE EXTERNAL SLEEVE

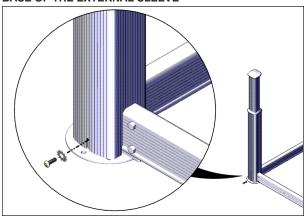
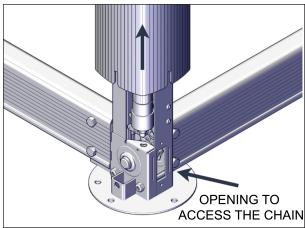


FIGURE 89: MANUALLY RAISE SLEEVE AND KEEP IT UP WITH WOODEN BLOCK



 Spray the chain lightly with grease while another operator cycles the cover up and down with the key switch.

FIGURE 90: LOWER SLEEVE AND TIGHTEN SCREW



• Repeat previous steps with the opposite post.

# PERIODIC MAINTENANCE TABLE

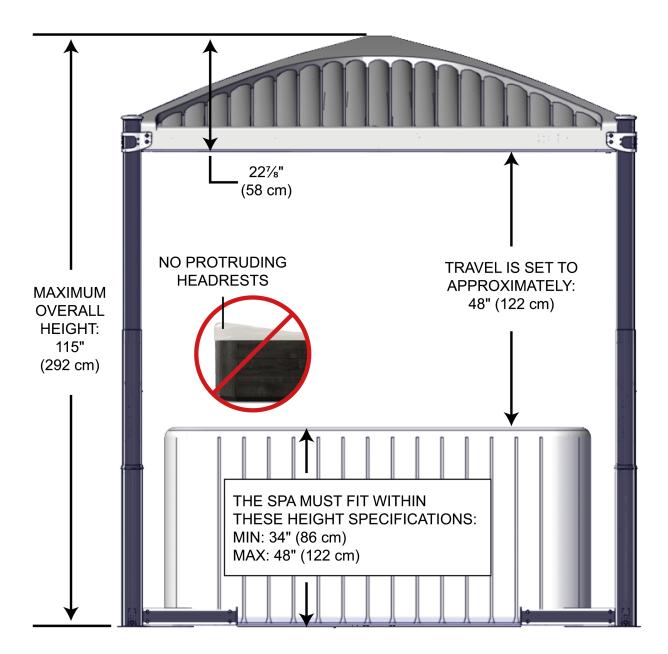
|                   |  |             | Frequence |                |          |  |  |  |
|-------------------|--|-------------|-----------|----------------|----------|--|--|--|
| Item              | Tasks  | Each<br>use | Weekly    | Every 3 months | Yearly   |  |  |  |
|                   | Perform a visual inspection (debris, snow, ice, etc.).   | <b>√</b>    |           |                |          |  |  |  |
| Cover             | Listen to any unusual noises during operation.   | , v         |           |                |          |  |  |  |
|                   | Wash with a mild detergent (i.e., dishwashing detergent) and water. Rinse well using only water. | As needed   |           |                |          |  |  |  |
| Sleeves           | Check if correctly positioned (middle sleeves are not out of their normal position).             | <b>√</b>    |           |                |          |  |  |  |
| All-weather seals | Check if correctly positioned (in contact with outer sleeves when cover is closed).              | <b>√</b>    |           |                |          |  |  |  |
| Roller shades     | Adjust the brackets if needed to prevent wrinkles.   |             | <b>✓</b>  |                |          |  |  |  |
| Seal              | Make sure there is no vapor steam leakage.   |             | <b>√</b>  |                |          |  |  |  |
| Lifting mechanism | Raise and lower the cover.   |             | <b>√</b>  |                |          |  |  |  |
| Anchors           | Check anchoring of cover.*   |             |           |                | <b>√</b> |  |  |  |
| GFCI              | Test GFCI.   |             |           | ✓              |          |  |  |  |
| Chains            | Check tension of each post and in U-frames.*   |             |           |                | <b>√</b> |  |  |  |
| Crialits          | Lubricate chains in each post and in the U-frames.*  |             |           |                | •        |  |  |  |
| Jacks             | Grease the jack assemblies.*   |             |           |                | <b>√</b> |  |  |  |

<sup>\*</sup>Contact your local Covana retailer.

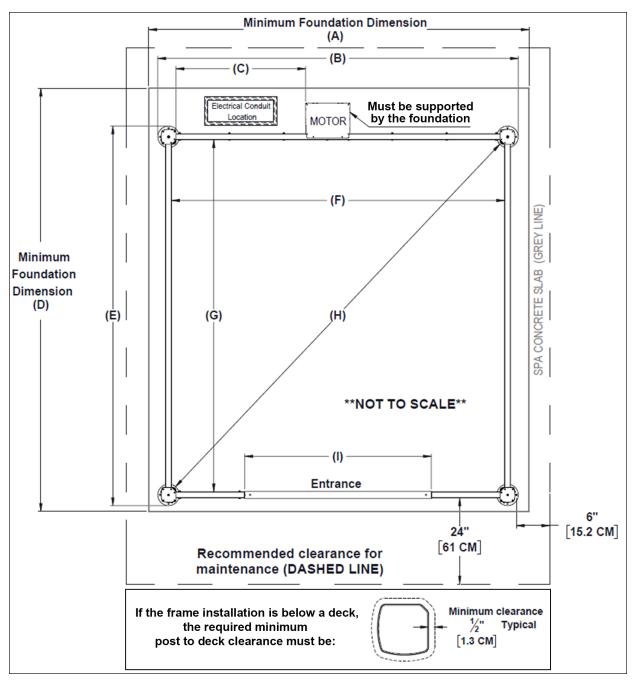
Call your Covana retailer for any mechanical, electrical or aesthetic maintenance.

# **TECHNICAL SPECIFICATIONS**

## **COVANA COVER FRONT VIEW**

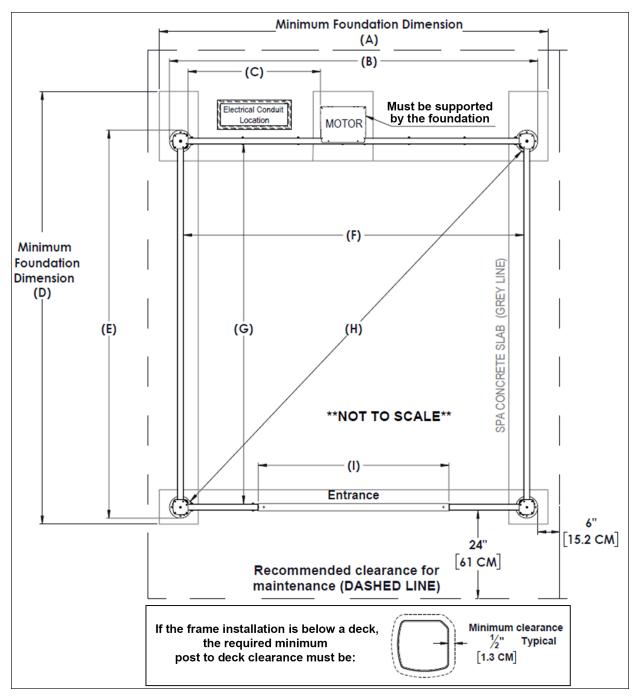


# FRAME DIMENSIONS AND FOOT PRINT



| INCH (mm) | Α      | В      | С     | D      | E      | F      | G      | Н      | ı      |
|-----------|--------|--------|-------|--------|--------|--------|--------|--------|--------|
| STANDARD  | 106    | 100.5  | 36.1  | 118    | 105.75 | 93     | 98     | 130.75 | 52     |
| MODEL     | (2692) | (2553) | (917) | (2997) | (2686) | (2362) | (2489) | (3321) | (1321) |
| LONG SIDE | 112    | 105.75 | 38.7  | 113    | 100.5  | 98     | 93     | 130.75 | 57     |
| MODEL     | (2845) | (2686) | (983) | (2870) | (2553) | (2489) | (2362) | (3321) | (1448) |

# **CONCRETE SLAB LAYOUT OPTION**



| INCH (mm) | Α      | В      | С     | D      | Е      | F      | G      | Н      | I      |
|-----------|--------|--------|-------|--------|--------|--------|--------|--------|--------|
| STANDARD  | 106    | 100.5  | 36.1  | 118    | 105.75 | 93     | 98     | 130.75 | 52     |
| MODEL     | (2692) | (2553) | (917) | (2997) | (2686) | (2362) | (2489) | (3321) | (1321) |
| LONG SIDE | 112    | 105.75 | 38.7  | 113    | 100.5  | 98     | 93     | 130.75 | 57     |
| MODEL     | (2845) | (2686) | (983) | (2870) | (2553) | (2489) | (2362) | (3321) | (1448) |

# **ELECTRICAL SPECIFICATIONS**

The cover requires a dedicated single phase 115 VAC (North America) or 230 VAC (Europe) hard-wired power supply.

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**

| Voltage      | 115 V, 60 Hz (1 hot, 1 neutral, 1 ground) |  |  |  |
|--------------|---|--|--|--|
| GFCI         | 15 A single-pole GFCI (not included)      |  |  |  |
| Current draw | Max 12 A                                  |  |  |  |

### **EUROPEAN REQUIREMENTS**

| Voltage      | 30 V, 50 Hz (2, 1 ground)            |  |  |  |
|--------------|--------------------------------------|--|--|--|
| GFCI         | 10 A single-pole GFCI (not included) |  |  |  |
| Current draw | Max 6 A                              |  |  |  |



# **WARNING**

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

### **OPERATION LIMITATIONS**



# **WARNING**

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

|                                  | Gusts of 30 mph (50 km/h) while in the raised position. Lower the cover when winds exceed 30 mph (50 km/h). |
|----------------------------------|---|
| IVIANIIIIUIII WCIUIIL OII LIIC I | 200 lb. (90 kg)   |
|                                  | Before operating the cover, make sure it is free of any dirt, debris, leaves, snow, etc.                    |

### **GENERAL SPECIFICATIONS**

| Lifting speed              | 2.5 in./s (6.35 cm/s) |
|----------------------------|-----------------------|
| Total weight 6             | 600 lb. (272 kg)      |
| Length of key switch cable | 25 ft (7.6 m)         |

# **TROUBLESHOOTING**

| PROBLEM  | PROBABLE CAUSES   | SOLUTIONS   |
|--|---|---|
|  |   | Reset the GFCI.   |
| The cover does not raise or lower (Silent                    | <ul><li>The GFCI is tripped.</li><li>The power source is disconnected.</li></ul>  | Verify that the power source is enabled.  |
| motor and no<br>movement)                                    |   | Check the breaker panel.  |
|  |   | Verify whether the cables were damaged or pinched.  |
|  | <ul> <li>Jack assemblies are jammed.</li> <li>The motor is obstructed.</li> <li>Posts are obstructed.</li> <li>The debris on the cover is too heavy.</li> </ul> | Remove all the debris from the top of the cover.  |
|  |   | Verify whether any posts are obstructed.  |
| The cover does not raise or lower.                           |   | Use methanol to free ice buildup on posts.  |
| (Motor humming and some visible                              |   | Apply grease on the post assemblies.  |
| movement)  |   | Verify the relative position of the four posts<br>(See Foundation Preparation section).   |
|  |   | If all previous attempts failed, contact your local authorized Covana retailer.   |
|  | <ul> <li>The post screws (attached to the outer shell) are loose.</li> <li>The chain skipped during operation.</li> </ul>                                       | Lower the cover completely and fasten the post back in at the correct height.   |
|  |   | Verify whether a drive shaft has fallen off and if it is the case, reinstall the shaft.   |
| The posts are not  |   | Lower the cover and replace the chain.  |
| equally positioned.  | <ul> <li>A spring pin at the bottom of a jack<br/>is broken.</li> </ul>   | lifting the outer sleeve, using an awl and a  |
|  | <ul><li>A drive shaft has fallen off.</li><li>Excessive weight on one side of<br/>the cover.</li></ul>  | hammer.   |
|  |   |   |
|  | and deven.  | If all previous attempts failed, contact your local authorized Covana retailer.   |
| The shades are   | <ul> <li>The internal spring is not wound enough.</li> <li>Too much tension in the internal spring.</li> <li>Holding bracket not parallels.</li> </ul>          | Consult shade installation manual.  |
| loose, retract<br>improperly and/ or<br>disconnect from the  |   | Remove the bottom bar and reset the tension back to "4 turns".  |
| brackets. The shades are wrinkling or bulging at the roller. |   | Make sure the outer sleeves are sitting on the foot plate, reposition the holding bracket so the roller shade is moving straight. |

| PROBLEM                             | PROBABLE CAUSES  | SOLUTIONS  |
|-------------------------------------|--|--|
|                                     | <ul><li>Posts are frozen.</li><li>The stopper kit is broken/missing.</li></ul>   | Verify the position of the all-weather seal. While cover is closed, it must be sitting on the top of the outer sleeve.   |
| The middle sleeve has gripped and   |  | Check whether the stopper kit is broken/missing.   |
| might have dropped abruptly         |  | Reinstall the sleeves.   |
|                                     |  | Check level on 2 faces of the sleeve.  |
|                                     |  | If all previous attempts failed, contact your local authorized Covana retailer   |
| The cover raises unevenly.          | <ul> <li>The chain is broken.</li> <li>A spring pin is broken.</li> <li>A drive shaft has fallen off.</li> <li>Posts are gripped.</li> </ul>             | <ul> <li>Call your local certified Covana retailer for technical support.</li> <li>Do not operate the cover.</li> </ul>  |
| Cover raises but<br>does not lower. | <ul> <li>The cam plate is incorrectly positioned or missing.</li> <li>The key switch is faulty.</li> <li>Limit switches cannot move properly.</li> </ul> | <ul> <li>Remove power before performing any electrical work.</li> <li>Ask a certified electrician only. Open the operator and check for faulty up and down limit switches.</li> <li>Check if there is any corrosion on the terminals and clean it if necessary.</li> <li>Open the key switch and check for faulty switch.</li> <li>Check if any electrical cables are damaged or pinched.</li> </ul> |
| Cover lowers but does not raise.    | <ul> <li>The cam plate is incorrectly positioned or missing.</li> <li>The key switch is faulty.</li> <li>Limit switches cannot move properly.</li> </ul> | <ul> <li>Remove power before performing any electrical work.</li> <li>Ask a certified electrician only. Open the operator and check for faulty up and down limit switches.</li> <li>Check if there is any corrosion on the terminals and clean it if necessary.</li> <li>Open the key switch and check for faulty switch.</li> <li>Check if any electrical cables are damaged or pinched.</li> </ul> |

| PROBLEM                                 | PROBABLE CAUSES   | SOLUTIONS   |
|---|---|---|
| Cover seal turned black.                | The seal has accumulated mold.                                | Clean the affected areas with bleach and a soft brush. Rinse well with water.   |
|   | The lighting assembly is faulty.                              | Check if the power source is enabled.   |
| Lights do not work.                     |   | Replace the light switch.   |
|   | The light switch is faulty.                                   | If all previous attempts failed, contact your local authorized Covana retailer.   |
| Magnetic plate is not holding in place. | Excessive tension in the Constant<br>Tension System (CTS 70). | Lift the side of the outer shell where the cable exits from the inner shell; remove the CTS 70 from the steel frame and grease the interior surfaces. |
|   | CTS 70 is stuck in place.                                     | Check that the CTS 70 pulley carrier can travel<br>the length of the CTS 70 without interfering<br>with any object.                                   |