

treesse

spa

**S**hadow



**Installation manual**

**READ AND FOLLOW ALL INSTRUCTIONS**

The installation of this spa is simple and immediate, however we advise you to read this manual carefully before installing it.

If you have problems, contact your authorised dealer.

Good luck with your work!

## **WARNING**

### **REDUCE THE RISK OF ELECTROCUTION**

1. Never place an electric appliance within 5 feet of the spa.

### **REDUCE THE RISK OF CHILD DROWNING**

1. Supervise children at all times.
2. Attach spa cover after each use.

### **REDUCE THE RISK OF OVERHEATING**

1. Check with the doctor before to use if pregnant, diabetic, in poor health, or under medical care.
2. Exit immediately if uncomfortable, dizzy, or sleepy. Spa heat can cause hypertermia and unconsciousness.
3. Spa heat in conjunction with alcohol, drugs, or medication can cause unconsciousness.

**WHEN PREGNANT** , soaking in hot water for long periods can harm your fetus. Measure water temperature before entering.

1. Do not enter spa if water is hotter than 100° F (38° C).
2. Do not stay in spa for longer than 10 minutes.

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## IMPORTANT SAFETY INSTRUCTIONS

### 1. READ AND FOLLOW ALL INSTRUCTIONS.

**2. WARNING** – To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

**3.** A wire connector is provided on this unit to connect a minimum 8 AWG (8.4 mm<sup>2</sup>) solid copper conductor between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5 m) of the unit. Minimum No. 6 AWG required in Canada. damage to the equipment.

**4. DANGER** – Risk of Accidental Drowning. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use this spa unless they are supervised at all times.

**5. DANGER** – Risk of Injury. The suction fittings in this spa are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible. Never operate spa if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.

**6. DANGER** – Risk of Electric Shock. Install at least 5 feet (1.5 m) from all metal surfaces. As an alternative, a spa may be installed within 5 feet of metal surfaces if each metal surface is permanently connected by a minimum 8 AWG (8.4 mm<sup>2</sup>) solid copper conductor to the wire connector on the terminal box that is provided for this purpose.

**7. DANGER** – Risk of Electric Shock. Do not permit any electric appliance, such as a light, telephone, radio, or television, within 5 feet (1.5 m) of a spa.

**8. WARNING** – To reduce the risk of injury:

**a)** The water in a spa should never exceed 40°C (104°F). Water temperatures between 38°C (100°F) and 40°C are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes.

**b)** Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa water temperatures to 38°C (100°F).

**c)** Before entering a spa, the user should measure the water temperature since the tolerance of water temperature-regulating devices varies.

**d)** The use of alcohol, drugs, or medication before or during spa use may lead to unconsciousness with the possibility of drowning.

**e)** Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.

**f)** Persons using medication should consult a physician before using a spa since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.

### 9. SAVE THESE INSTRUCTIONS.



**WARNING:** CHILDREN SHOULD NOT USE SPAS OR HOT TUBS WITHOUT ADULT SUPERVISION

**AVERTISSEMENT :** NE PAS LAISSER LES ENFANTS UTILISER UNE CUVE DE RELAXATION SANS SURVEILLANCE

**WARNING:** DO NOT USE SPAS OR HOT TUBS UNLESS ALL SUCTION GUARDS ARE INSTALLED TO PREVENT BODY AND HAIR ENTRAPMENT

**AVERTISSEMENT :** POUR ÉVITER QUE LES CHEVEUX OU UNE PARTIE DU CORPS PUISSENT ÊTRE ASPIRÉS, NE PAS UTILISER UNE CUVE DE RELAXATION SI LES GRILLES DE PRISE D'ASPIRATION NE SONT PAS TOUTES EN PLACE

**WARNING:** PEOPLE USING MEDICATIONS AND/OR HAVING AN ADVERSE MEDICAL HISTORY SHOULD CONSULT A PHYSICIAN BEFORE USING A SPA OR HOT TUB

**AVERTISSEMENT :** LES PERSONNES QUI PRENNENT DES MÉDICAMENTS ET (OU) ONT DES PROBLÈMES DE SANTÉ DEVRAIENT CONSULTER UN MÉDECIN AVANT D'UTILISER UNE CUVE DE RELAXATION

**WARNING:** PEOPLE WITH INFECTIOUS DISEASES SHOULD NOT USE A SPA OR HOT TUB

**AVERTISSEMENT :** LES PERSONNES ATTEINTES DE MALADIES INFECTIEUSES NE DEVRAIENT PAS UTILISER UNE CUVE DE RELAXATION

**WARNING:** TO AVOID INJURY, EXERCISE CARE WHEN ENTERING OR EXITING THE SPA OR HOT TUB

**AVERTISSEMENT :** POUR ÉVITER DES BLESSURES, USER DE PRUDENCE EN ENTRANT DANS UNE CUVE DE RELAXATION ET EN SORTANT

**WARNING:** DO NOT USE DRUGS OR ALCOHOL BEFORE OR DURING THE USE OF A SPA OR HOT TUB TO AVOID UNCONSCIOUSNESS AND POSSIBLE DROWNING

**AVERTISSEMENT :** POUR ÉVITER L'ÉVANOUISSEMENT ET LA NOYADE ÉVENTUELLE, NE PRENDRE NI DROGUE NI ALCOOL AVANT D'UTILISER UNE CUVE DE RELAXATION NI QUAND ON S'Y TROUVE

**WARNING:** PREGNANT OR POSSIBLY PREGNANT WOMEN SHOULD CONSULT A PHYSICIAN BEFORE USING A SPA OR HOT TUB

**AVERTISSEMENT :** LES FEMMES ENCEINTES, QUE LEUR GROSSESSE SOIT CONFIRMÉE OU NON, DEVRAIENT CONSULTER UN MÉDECIN AVANT D'UTILISER UNE CUVE DE RELAXATION

**WARNING:** WATER TEMPERATURE IN EXCESS OF 38 °C CAN BE INJURIOUS TO YOUR HEALTH

**AVERTISSEMENT :** IL PEUT ÊTRE DANGEREUX POUR LA SANTÉ DE SE PLONGER DANS DE L'EAU À PLUS DE 38 °C

**WARNING:** BEFORE ENTERING THE SPA OR HOT TUB, MEASURE THE WATER TEMPERATURE WITH AN ACCURATE THERMOMETER

**AVERTISSEMENT :** AVANT D'UTILISER UNE CUVE DE RELAXATION, MESURER LA TEMPÉRATURE DE L'EAU À L'AIDE D'UN THERMOMÈTRE PRÉCIS

**WARNING:** DO NOT USE A SPA OR HOT TUB IMMEDIATELY FOLLOWING STRENUOUS EXERCISE

**AVERTISSEMENT :** NE PAS UTILISER UNE CUVE DE RELAXATION IMMÉDIATEMENT APRÈS UN EXERCICE FATIGANT

**WARNING:** PROLONGED IMMERSION IN A SPA OR HOT TUB CAN BE INJURIOUS TO YOUR HEALTH

**AVERTISSEMENT :** L'UTILISATION PROLONGÉE D'UNE CUVE DE RELAXATION PEUT ÊTRE DANGEREUSE POUR LA SANTÉ

**WARNING:** DO NOT PERMIT ELECTRIC APPLIANCES (SUCH AS A LIGHT, TELEPHONE, RADIO, OR TELEVISION) WITHIN 1.5 M OF THIS SPA OR HOT TUB

**AVERTISSEMENT :** NE PAS PLACER

D'APPAREIL ÉLECTRIQUE (LUMINAIRE, TÉLÉPHONE, RADIO, TÉLÉVISEUR, ETC) À MOINS DE 1.5 M DE CETTE CUVE DE RELAXATION

**CAUTION:** MAINTAIN WATER CHEMISTRY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

**ATTENTION :** LA TENEUR DE L'EAU EN MATIÈRES DISSOUTES DOIT ÊTRE CONFORME AUX DIRECTIVES DU FABRICANT.

**WARNING:** THE USE OF ALCOHOL OR DRUGS CAN GREATLY INCREASE THE RISK OF FATAL HYPERTHERMIA IN HOT TUBS AND SPAS

LA CONSOMMATION D'ALCOOL OU DE DROGUE AUGMENTE CONSIDÉRABLEMENT LES RISQUES D'HYPERTHERMIE MORTELLE DANS UNE CUVE DE RELAXATION.

ERTHERMIA IN HOT TUBS AND SPAS

**WARNING: HYPERTHERMIA**

"Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6°F. The symptoms of hyperthermia include an increase in the internal temperature of the body, dizziness, lethargy, drowsiness, and fainting. The effects of hyperthermia include failure to perceive heat; failure to recognize the need to exit spa or hot tub; unawareness of impending hazard; fetal damage in pregnant women; physical inability to exit the spa or hot tub; and unconsciousness resulting in the danger of drowning.

**WARNING** – The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia."

## a) **READ AND FOLLOW ALL INSTRUCTIONS.**

**b)** A green coloured terminal or a terminal marked G, GR, Ground, Grounding, or the

symbol\* is located inside the supply terminal box or compartment. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying this equipment.  
\* IEC 60417, Symbol 5019.

**c)** At least 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 hot tub or spa to these terminals with an insulated or bare copper conductor not smaller than No. 6 AWG.

**d)** All field-installed metal components such as rails, ladders, drains, or other similar hardware within 3 m of the spa or hot tub shall be bonded to the equipment grounding bus with copper conductors not smaller than No. 6 AWG.

## e) **SAVE THESE INSTRUCTIONS.**


**WARNING** – This product is provided with a ground-fault circuit-interrupter (give location). The GFCI must be tested before each use. With the product operating, open the service door. When the product stops operating, this merely indicates that the door is equipped with an electrical interlock. Next, push the test button on the GFCI and close the service door. The product should not operate. Now open the service door, push the reset button on the GFCI and close the service door. The product should now operate normally. When the product fails to operate in this manner, there is a ground current flowing indicating the possibility of an electric shock. Disconnect the power until the fault has been identified and corrected.




Read this guide carefully before installing the appliance, and conserve this


booklet with care for any future consultation of users.

If you do not understand something, contact the manufacturer for an explanation.


 Installation must be carried out by qualified personnel in compliance with local regulations and national provisions regarding civil and industrial systems.

Before making electrical connection to the equipment, the installer must receive the declaration of conformity of the building's systems from the user. Without such document, the Manufacturer cannot be held responsible for damage to the systems or premises where the spa will be installed.


 Comply with regulations, instructions and measurements on the "Pre-installation technical sheet".

 Unauthorised actions, tampering or modifications that do not follow the information provided in this manual can cause damages, injuries or fatal accidents and null and void the warranty.

 During the installation of the spa, do not place objects inside it, even temporarily: they may fall down the drain

 When installing the spa, always use personal protective equipment (e.g., gloves, safety shoes, etc.)



 Persons not involved with appliance installation may not pass through or occupy the work area during appliance assembly.



## Ecological notes

Given their potential danger, the packaging materials must be kept out of reach of children and animals, and correctly disposed of in compliance with local regulations.

Treesse invites you to protect the environment by disposing of the material in special separate collection bins.

### EXPLANATION OF PICTOGRAMS



Danger! Situation presenting immediate danger, or a hazardous situation that could cause injury or death.



More info: helps the installer understand a topic better



The pictogram refers to text in another document



Ecological notes for respecting the environment

## 1 PREPARATIONS AND CHOICE OF POSITION



*The pre-installation sheet supplied at the time of purchase provides all the information necessary for a correct preparation of the installation environments.*

**Before installing the spa, check that everything has been prepared.** Find below a quick checklist, for complete information always refer to the pre-installation sheet.

Check that:

- A platform or a recess (in the case of recessed installations) of reinforced concrete, with a minimum thickness of 10 cm, has been created, perfectly flat and suitable for supporting the weight of the spa and the people within.
- Ø15 cm vents have been installed to ensure proper ventilation of the technical compartment
- Drainage grating around the perimeter has been installed to help preserve the equipment and the structure (even for indoor installations).
- Non-slip flooring has been installed in the area around the spa.
- For a recessed installation, a technical inspection port measuring at least 50 cm wide has been prepared on all sides of the spa.
- The connections to the electrical grid have been made in compliance with current regulations in force in the country of installation.
- A water softener has been installed for the water used to fill the spa if the water has a high degree of hardness.
- For outdoor recessed versions, the walls have been insulated to protect against the cold.



## More information

### OUTDOOR INSTALLATION

#### Preparations:

To run the electric cables from the main electrical panel to the spa underground ducts must be used and adequately protected against freezing by using insulation. It is also recommended to add drainage points in them to prevent standing water.

**Choice of position:** take into account the proximity of trees or hedges, and note that debris (e.g., leaves) can cause damage to the equipment over time that is not covered by warranty and make maintenance more expensive and frequent. It is also recommended to always install flooring around the spa, possibly anti-slip.

### INDOOR INSTALLATION

**Preparations:** in the area used to access the spa it is recommended to install anti-slip flooring. The evaporation of water in the spa in the presence of high internal temperatures can generate very high levels of humidity in the environment.

To avoid this problem, provide good natural or forced ventilation in the installation environment and, if necessary, a dehumidification system. Damage caused by this phenomenon is not covered by the manufacturer warranty.

**Choice of position:** Always take into account the size of the spa: narrow passages, doors and steps can be an obstacle to its transport to the desired place.

## 2 CHECKING SPA INTEGRITY



After having removed the spa from the packing, check its integrity.

Check:


- That there is no visible structural damage.
- That there are no cracks in the surface of the spa or in the outer covering (cracks due to incorrect transport or support are not covered by the warranty).
- The correct position of the sleeves and pipes.
- That any ties are not loosened.

If you notice any anomalies, do not proceed with the installation but rather promptly contact the Manufacturer.

## 1 MOVING


To move the spa to the place of installation a suitable lifting device (e.g., pallet jack) is required. As an alternative, provide for the availability of eight people.

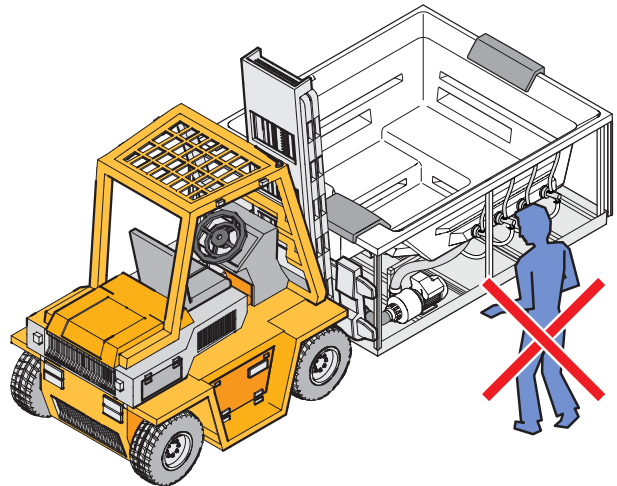
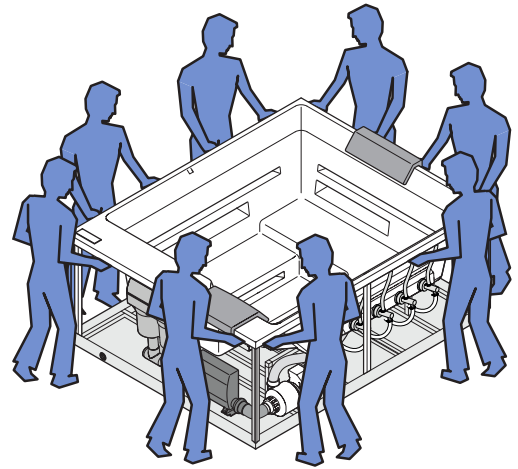
If the installation is indoor, before moving the spa make sure that it can **easily pass** through the doors and hallways to reach the desired place of installation.

 Movement must be carried out using personal protective equipment (e.g., gloves, safety shoes, etc.) and taking all the necessary safety precautions for those involved and to not damage the spa.



**During transport, lift the spa by holding it exclusively by the edge and NEVER by holding the plumbing lines or operational parts (e.g., pumps, etc.).**

 During movement, the surrounding area must be kept free of persons not involved in the operation, animals or objects (e.g., packaging, etc.) that could get in the way.





## 2 POSITIONING

### TEMPORARY POSITIONING



The installation of the spa should be done immediately upon receipt.

In any case, once unpacked, if it is necessary to temporarily place it on a surface awaiting the installation, it will be necessary to place level concrete slabs having a minimum thickness of 5 cm under the entire bottom of the spa.

*Since the temporary base may shift, it is recommended to leave the spa in that position for the shortest possible time.*

### POSITIONING IN THE PLANNED LOCATION

In case of **installation above ground (freestanding)**, place the spa in the installation environment (outdoor or indoor) and verify its perfect flatness, essential for proper operation.

For a **recessed installation**, lower the spa into the prepared space.

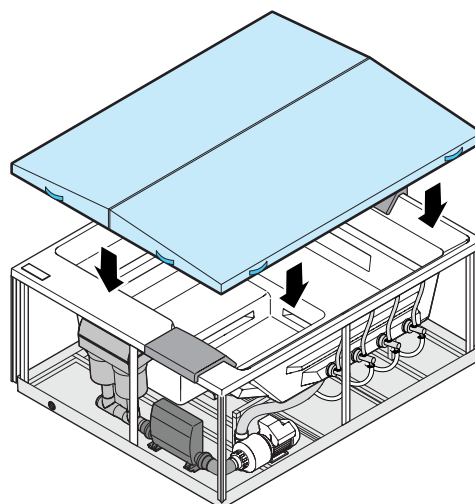
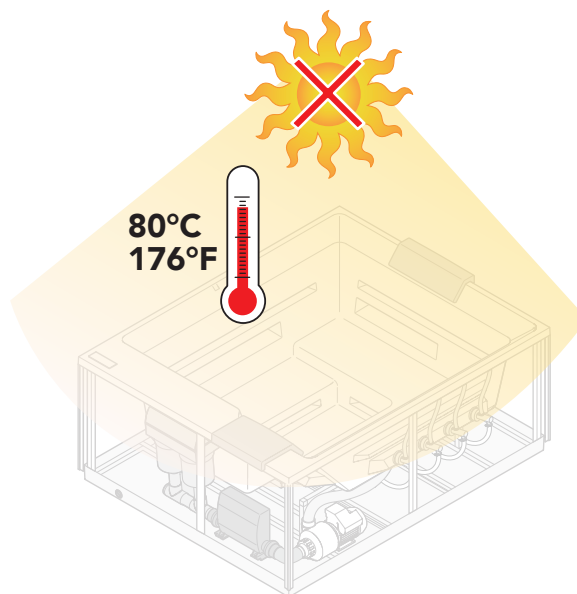


If it was not possible to provide a technical inspection port on all sides of the spa, a removable inspection hatch positioned on the side where the spa components are situated, is recommended.



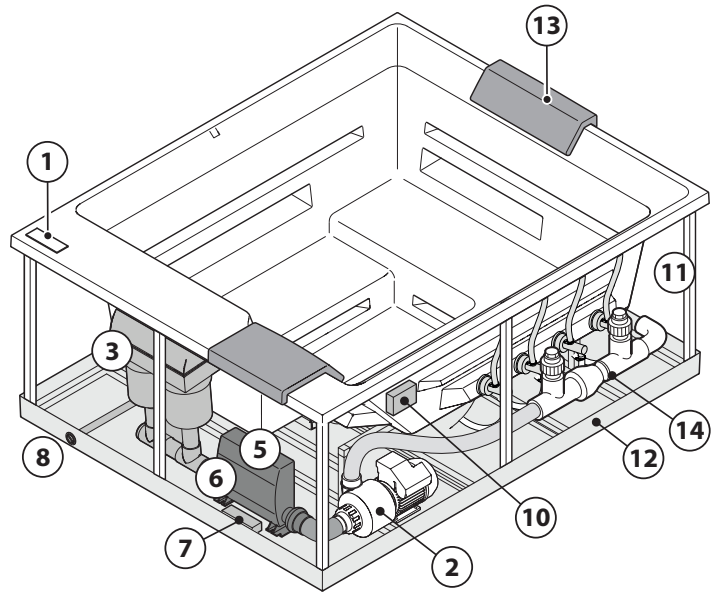
Do not leave the empty spa in **DIRECT SUNLIGHT**. The surface temperature could rise above 80°C resulting in serious damage, including cavitation and the deformation of the surface and components. Damage caused by direct exposure to sunlight is not covered by the warranty.

In such conditions place a cover (fixed or mobile) to protect the spa.




## 1 DESCRIPTION OF COMPONENTS

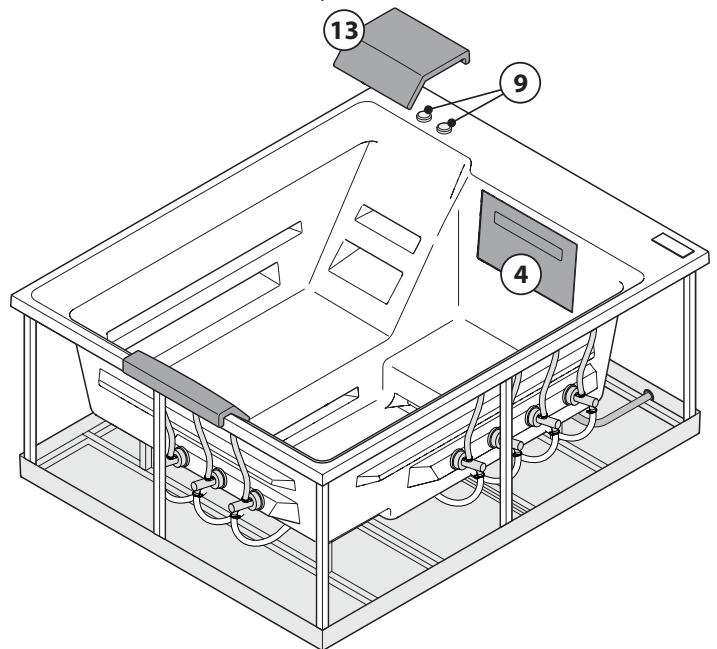
- 1 Control Panel
- 2 2-speed pump (water + recirculation)
- 3 Skimmer with paper filters
- 4 Skimmer cover panel
- 5 Electronic control unit
- 6 Heater (integrated with the control unit)
- 7 Chromotherapy control unit
- 8 Drain tap
- 9 Air regulators (under the pillow)
- 10 Ozone (option)
- 11 Frame
- 12 Base
- 13 Pillows
- 14 Preparation for the heat pump (OPTIONAL)



## 2 QUALIFICATIONS OF THE INSTALLER

 Before installation it is recommended to carefully read the safety warnings at the beginning of this manual and to always operate in perfect physical and mental condition.

The installer, qualified and authorised by the Manufacturer, must carry out the operations based on his or her professional qualifications. Any activities for which he or she is not qualified (e.g., plumbing or electrical connections) must be performed by specific and qualified professionals so as not to risk their own safety and that of others who interact with the equipment.



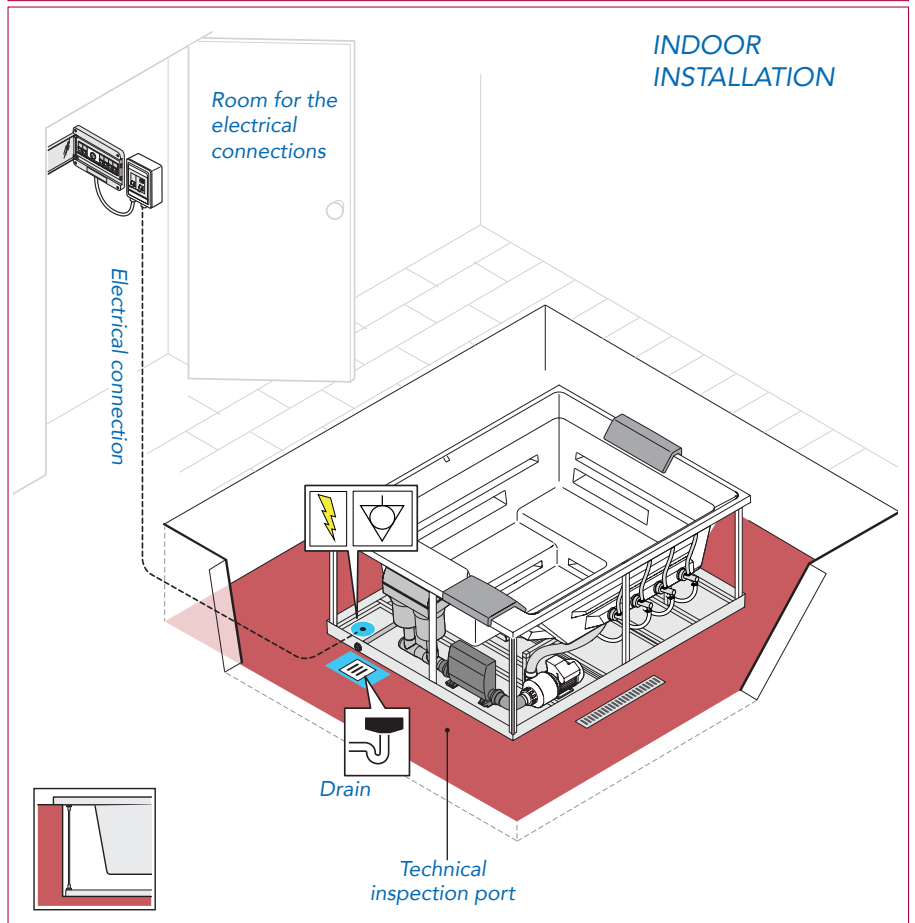
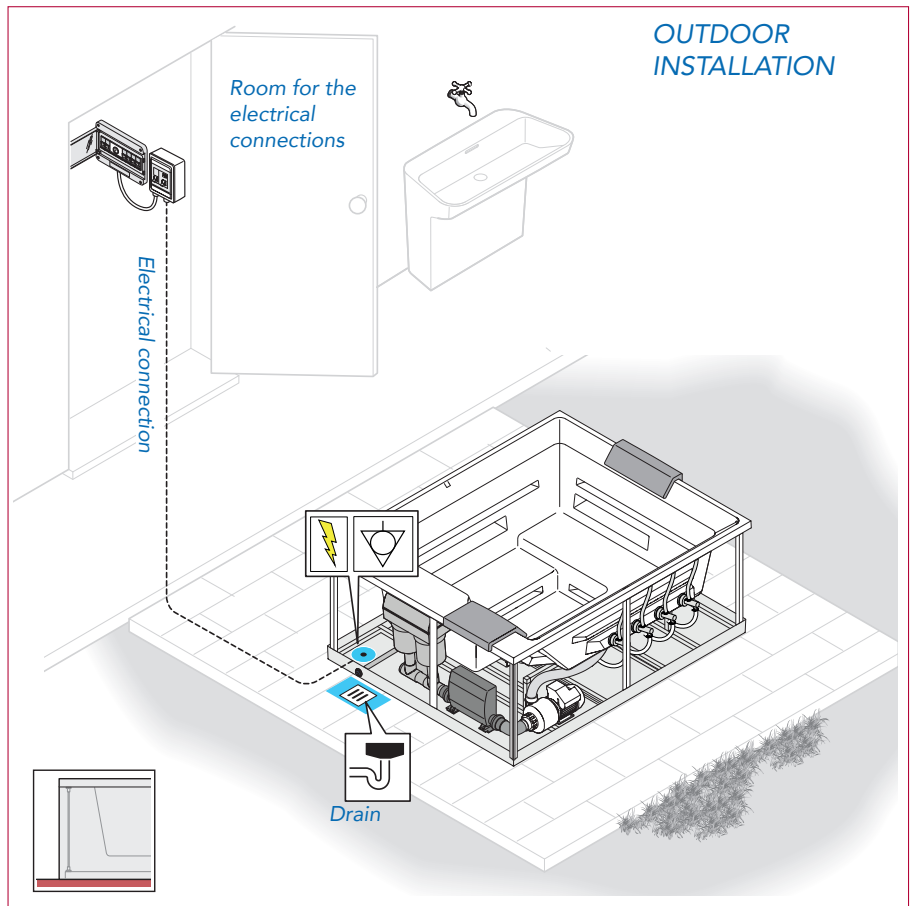
### 3 CONNECTIONS REQUIRED

To be used, the spa only requires an electrical connection (power supply).

Also prepare an electrical and plumbing connection to an exchanger (optional - if provided) - see following page.

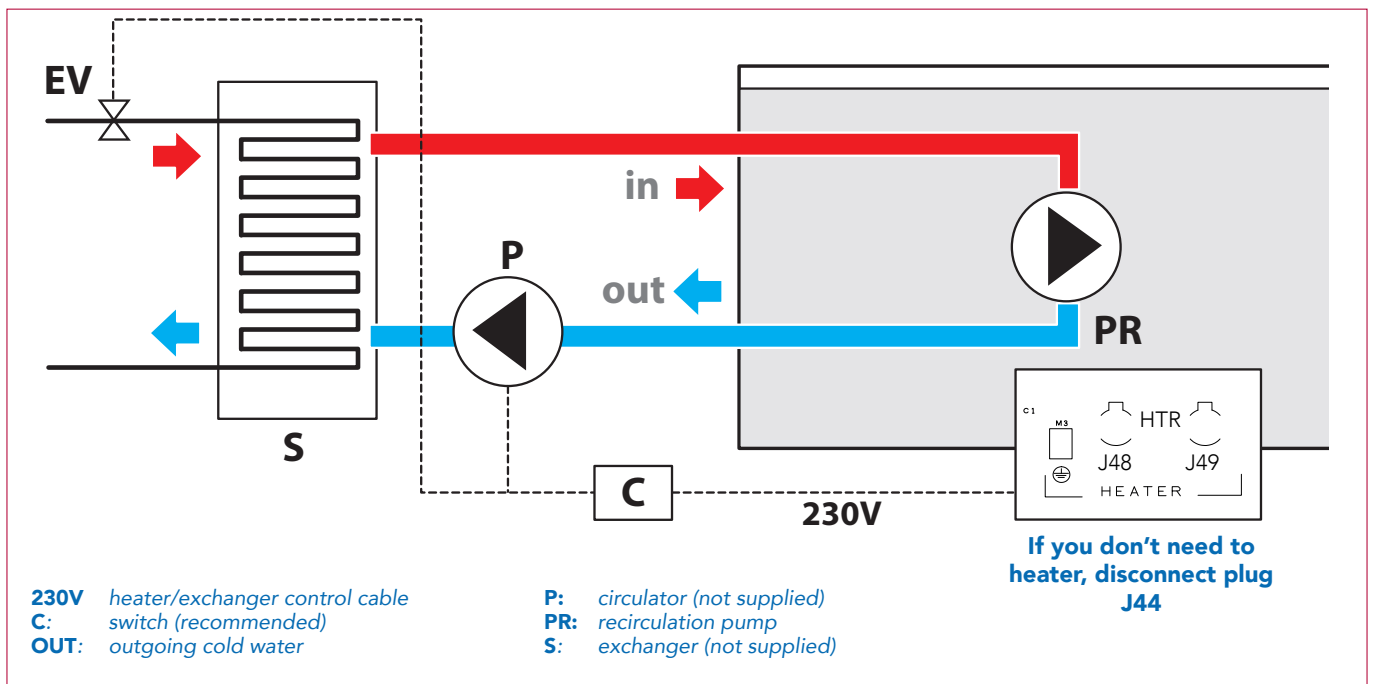
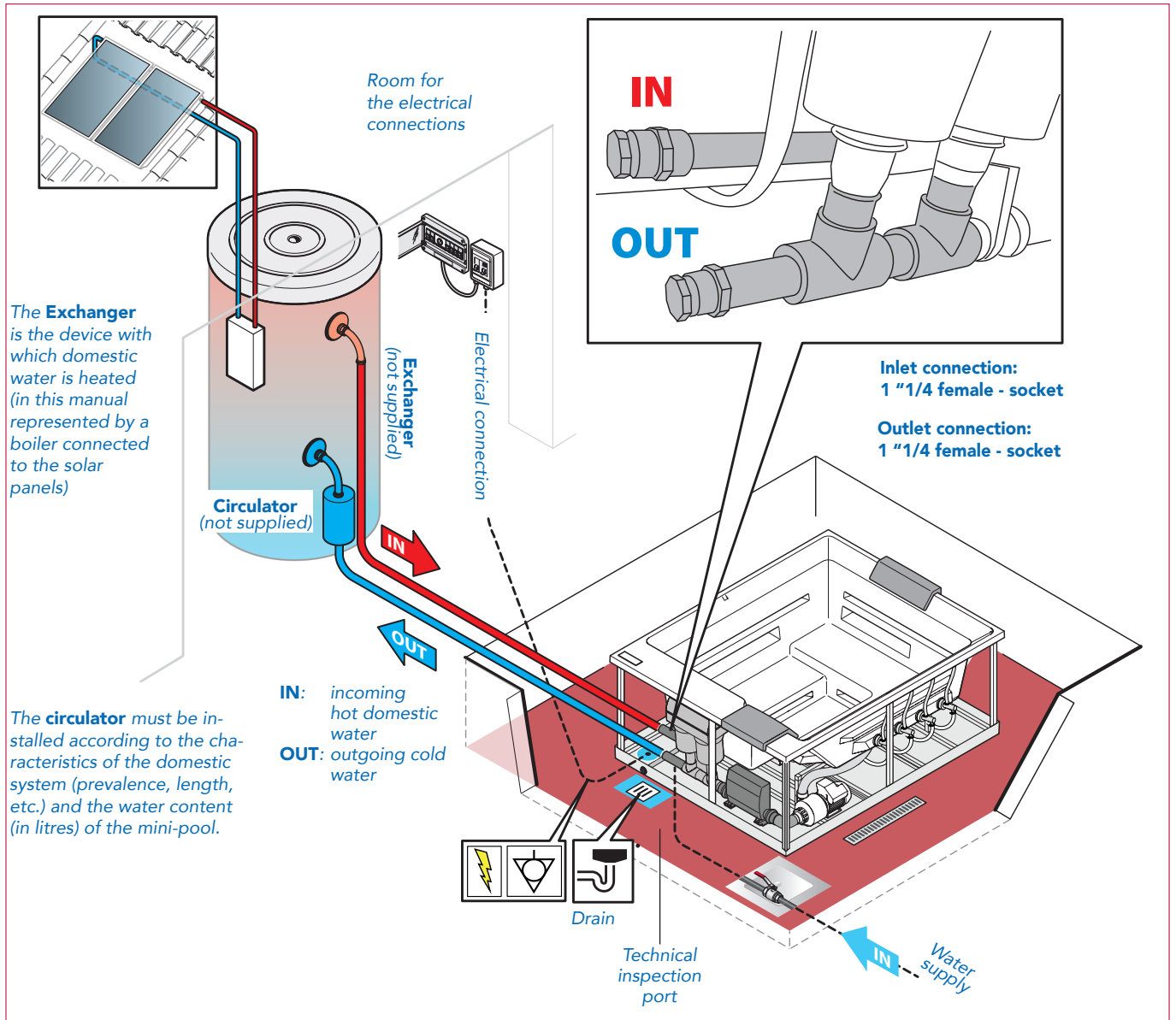
The following pages will provide detailed explanations of how to perform these preparations.

#### EXAMPLES OF OUTDOOR/INDOOR SPA INSTALLATION.



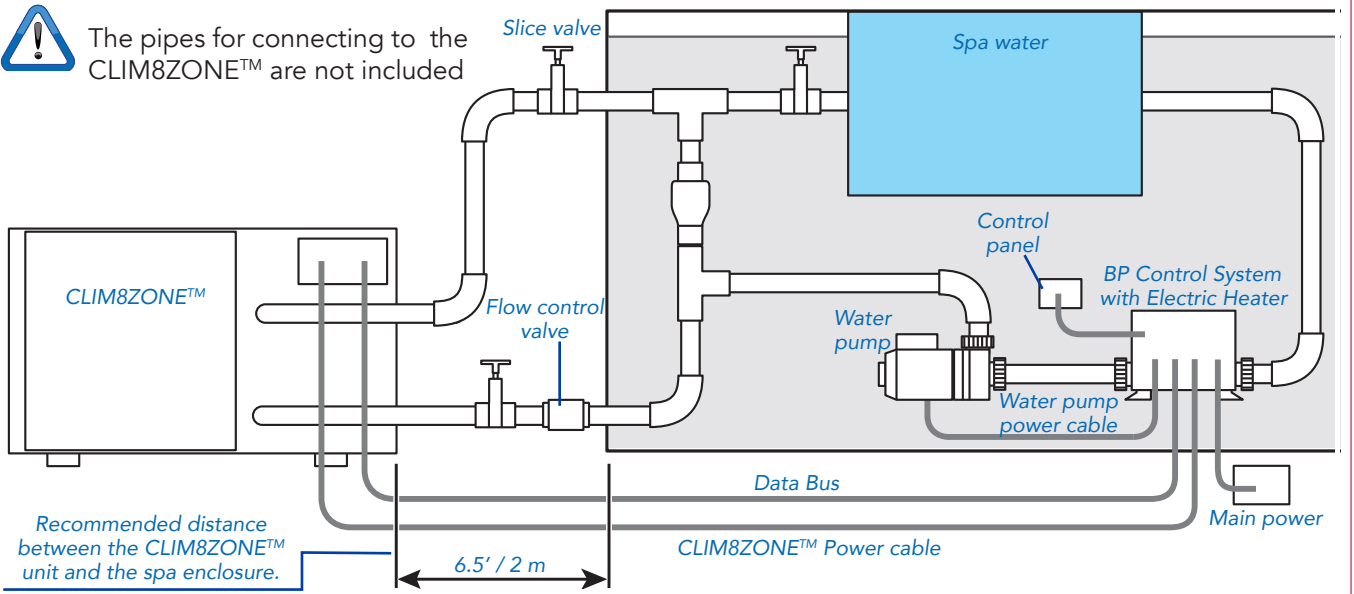


**PREPARATION OF CONNECTION TO AN OPTIONAL EXTERNAL EXCHANGER (NOT SUPPLIED)**

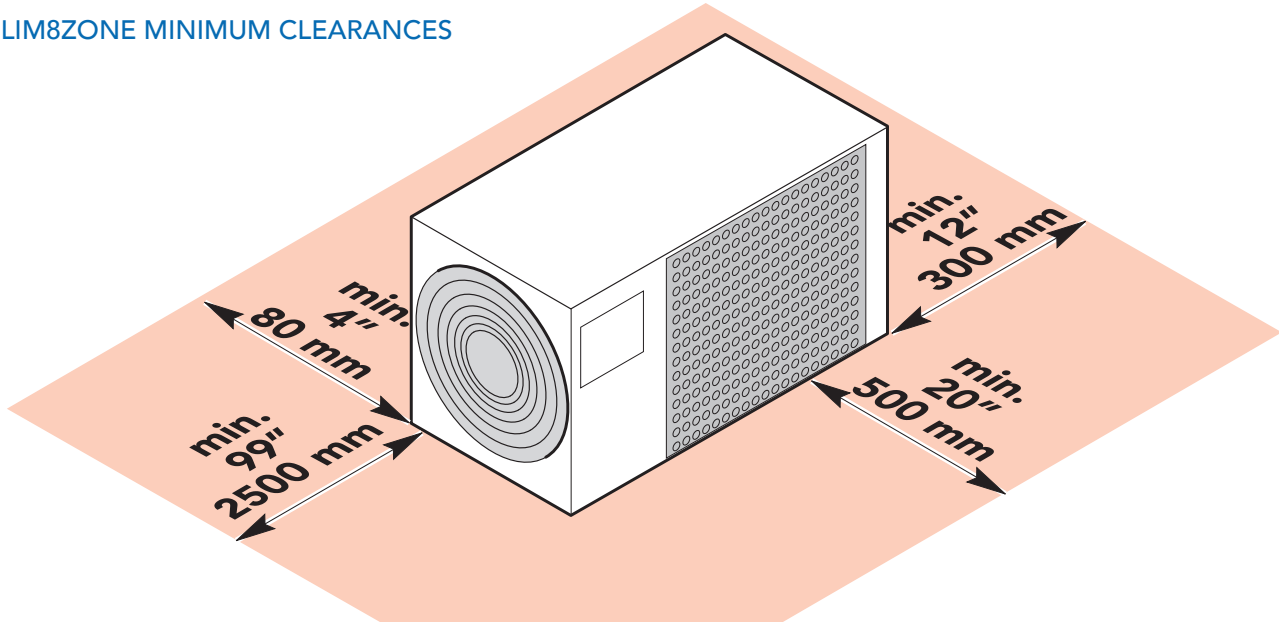




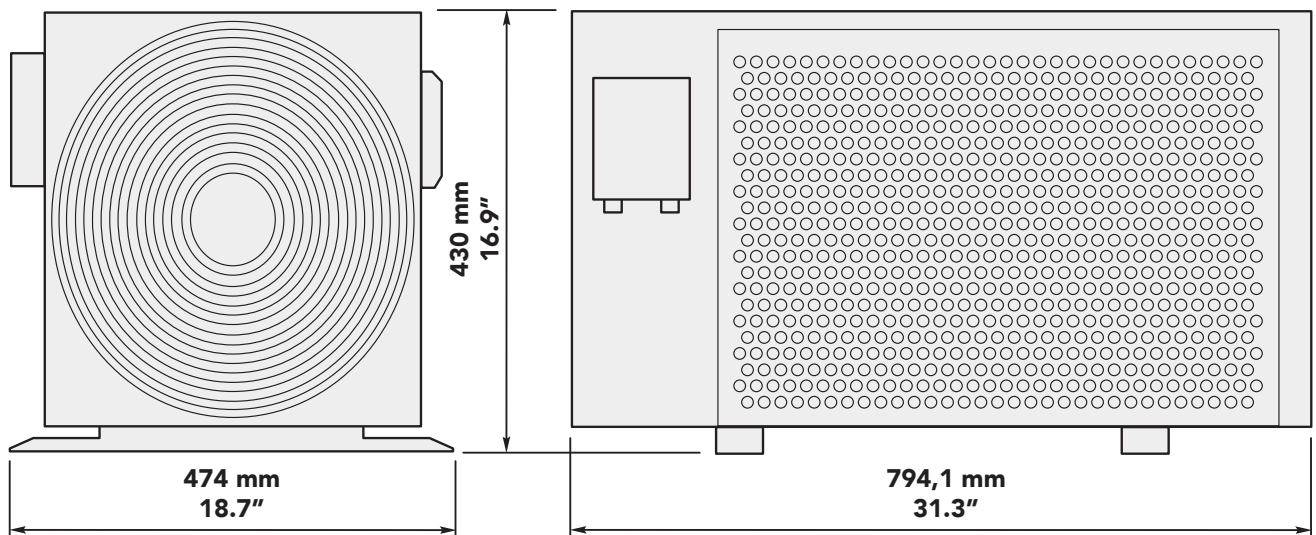
The pipes for connecting to the CLIM8ZONE™ are not included



CLIM8ZONE MINIMUM CLEARANCES



CLIM8ZONE DIMENSIONS



## 4 WATER SUPPLY



It is recommended to use ONLY tap water. If this is not possible refer to the "more information" section to the side.

### CHARACTERISTICS OF THE WATER SUPPLY

The optimal values for the water supply are as follows:

- Hardness between 7°F and 14°F (fresh water) - 200 to 400 mg/l (ppm).
- Total alkalinity (TA) between 80 and 125 mg/l (8-12.5°F).
- pH between 7.4 and 7.8.
- minimum inlet pressure: 150,000 Pa (1.5 bar)
- minimum inlet pressure: 300,000 Pa (3 bar)
- Water suitable for human consumption.



### More information

#### TAP WATER AND WELL WATER

To ensure maximum hygiene and durability of the spa it is essential to pay close attention to the quality of the water that will be used to fill it. It is important that the water used be drinkable. It is always advisable not to use well water because it may be very hard, rich in metals like iron and manganese, and have bacterial loads. Tap water is recommended. In the case of very hard or ferrous water it is always recommended to install softening and iron removal systems upstream. The company cannot be held responsible for issues related to the use of non-drinkable water or lack of installation of such systems. *The plumber is responsible for choosing the type of components to be used and the verification of compliance with the purity and potability parameters of the water supply.*



### More information

#### WATER HARDNESS

Water hardness (TH) is determined by the total content of calcium and magnesium present in the water, coming from their soluble salts.

##### Water classification:

.....up to 7°F	=	Very soft water
From 7°F to 14°F	=	Soft water
From 14°F to 22°F	=	Slightly hard water
From 22°F to 32°F	=	Fairly hard water
From 32°F to 54°F	=	Hard water
.....more than 54°F	=	Very hard water

(1°F = 10 mg calcium carbonate per litre of water)

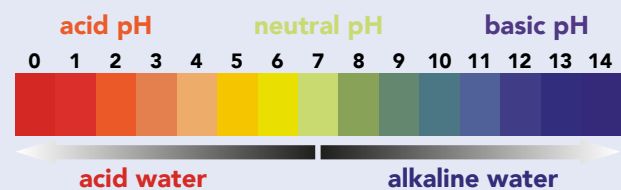
#### WATER ALKALINITY

Alkalinity (CAT) represents the concentration of bicarbonate ions present in the water. It is expressed as mg/L of calcium carbonate or in French degrees (°F). Ideal values of alkalinity range between 80 mg/L and 125 mg/L (8°F-12.5°F). Values outside of this range can more easily cause variations of the pH. Instead, alkalinity within the range noted makes it possible to "buffer" the pH value, resulting in fewer abrupt variations.

#### WATER PH

##### What is pH?

The pH is a chemical parameter that gives an idea of the acidity or basicity of the water. It can assume values between 0 and 14. By definition water is considered neutral if its pH is equal to 7. It is acidic if the pH is lower than 7 and basic if the pH is greater than 7. Disinfectants have an ideal pH at which they are most effective. In the case of heated water treated with bromine products it is recommended to keep the pH value in the range from 7.4 to 7.8 using chemical correctors as needed if the pH is higher or lower to bring the pH value back to the recommended interval.



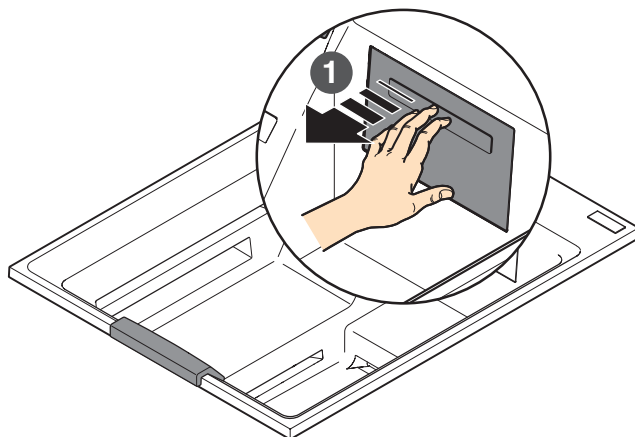
## 5 CLEANING THE PAPER FILTER


Cleaning/replacing the paper filter depends on how often the spa is used.

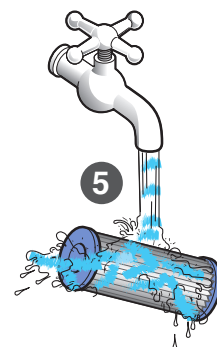
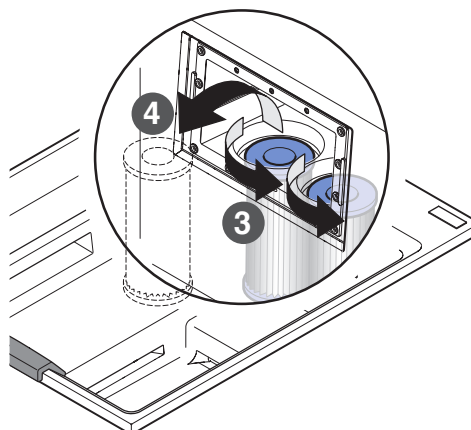
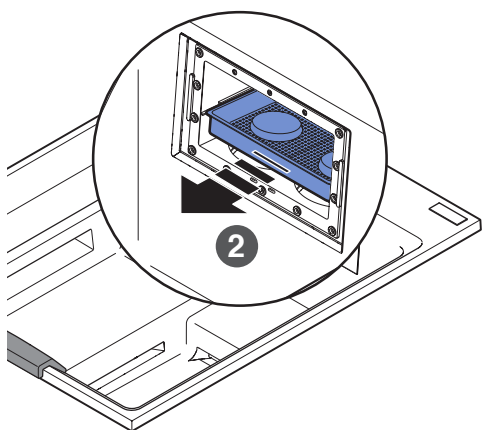
In general, rinse the cartridge every **2-3 weeks** with clean water to remove hair and other foreign substances. Be careful to clean well between the folds of the filter.

At each change of water, the filter cartridge must be immersed in a solution suitable for cleaning this type of filter, possibly overnight, or replaced.

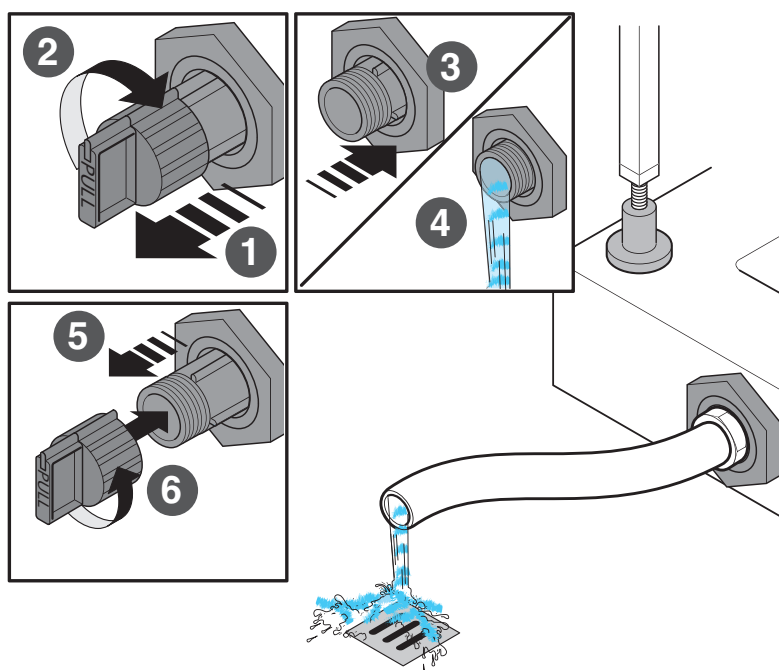
In any case refer to the instructions provided by the manufacturer of the cleaning product used.



 **Paper filters should be mounted when they are completely dry.**




## 6 EMPTYING THE SPA




Emptying takes place by carrying out the operations indicated in the figure on the side:

- 1 - Pull the knob out;
- 2 - Unscrew the cap;
- 3 - Loosen the check valve;
- 4 - The water is emptied.

If it is necessary to refill the spa, see the pertinent chapter on page 20.

 *The water can be drained at any time, without people inside the spa.*

*It is advisable to always empty the spa during maintenance and at the end of the season.*

 Before emptying the spa, especially if a shock treatment has just been performed, make sure that the values of disinfectants and additives are at normal values.

## 7 ELECTRICAL CONNECTIONS

The Treesse spas are built in compliance with UL laws (XXXXXXX) and are tested during production to ensure the safety of the installer and user.

**The connection must be made by an experienced, qualified electrician.**

### a) READ AND FOLLOW ALL INSTRUCTIONS.

**b)** A green coloured terminal or a terminal marked G, GR, Ground, Grounding, or the symbol\* is located inside the supply terminal box or compartment. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying this equipment. \* IEC 60417, Symbol 5019.

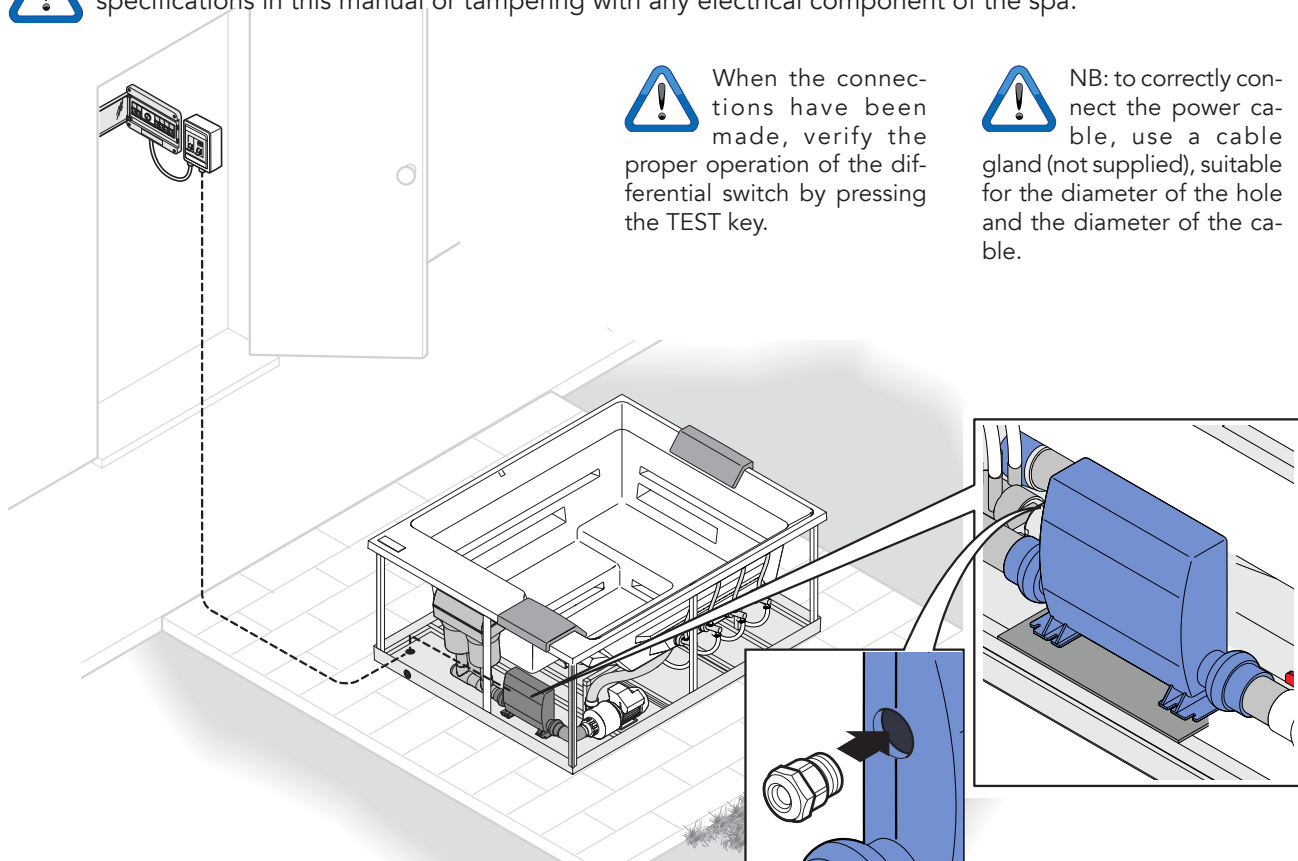
**c)** At least two lugs marked "BONDING LUGS" are provided on the external surface or on the inside of the supply terminal box or compartment. To reduce the risk of electric shock, connect the local common bonding grid in the area of the hot tub or spa to these terminals with an insulated or bare copper conductor not smaller than No. 6 AWG.

**d)** All field-installed metal components such as rails, ladders, drains, or other similar hardware within 3 m of the spa or hot tub shall be bonded to the equipment grounding bus with copper conductors not smaller than No. 6 AWG.

### e) SAVE THESE INSTRUCTIONS.

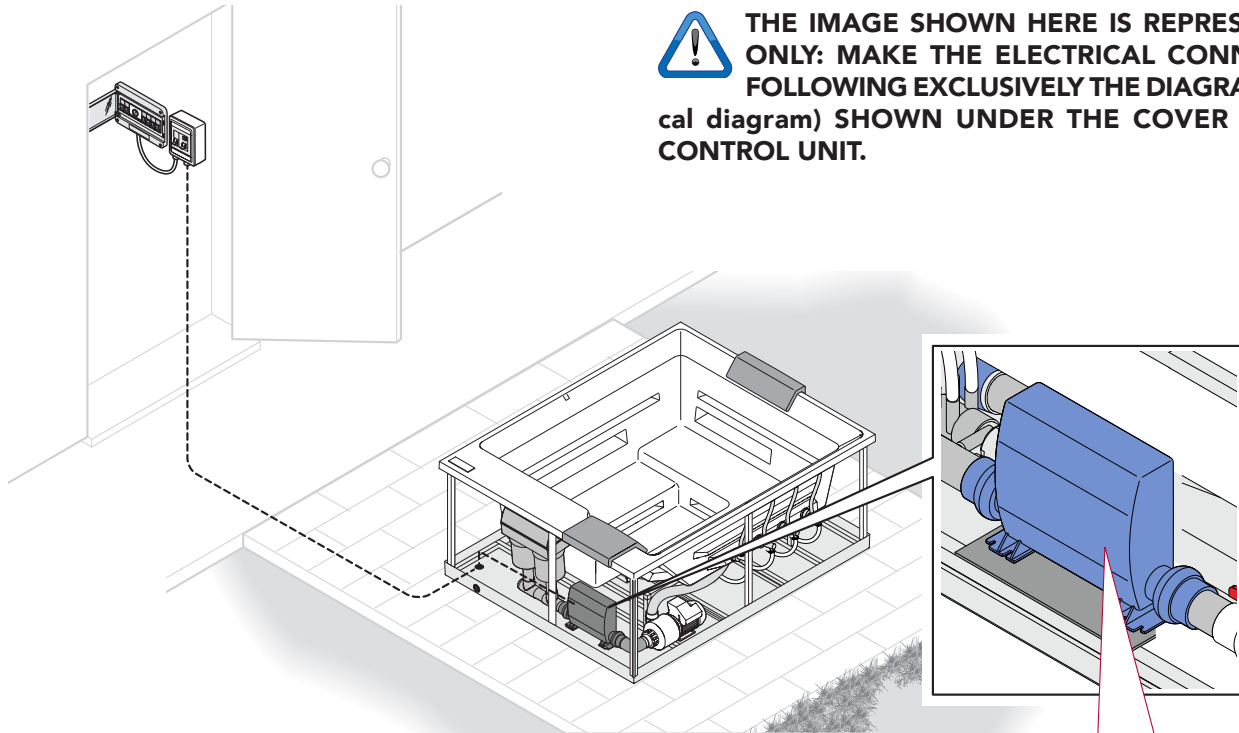


The Manufacturer is not responsible for connections made in a way that does not comply with local codes, the specifications in this manual or tampering with any electrical component of the spa.

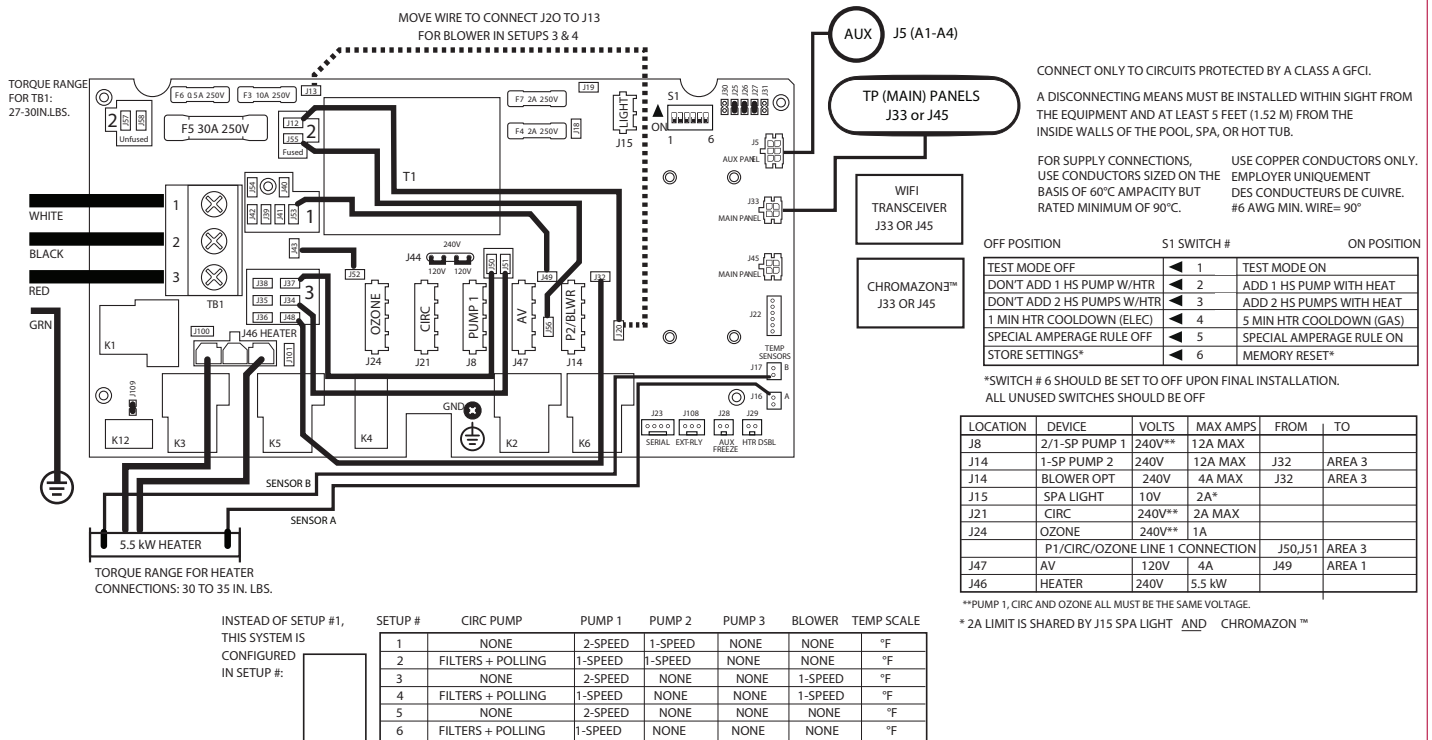




**WARNING** – This product is provided with a ground-fault circuit-interrupter (give location). The GFCI must be tested before each use. With the product operating, open the service door. When the product stops operating, this merely indicates that the door is equipped with an electrical interlock. Next, push the test button on the GFCI and close the service door. The product should not operate. Now open the service door, push the reset button on the GFCI and close the service door. The product should now operate normally. When the product fails to operate in this manner, there is a ground current flowing indicating the possibility of an electric shock. Disconnect the power until the fault has been identified and corrected.



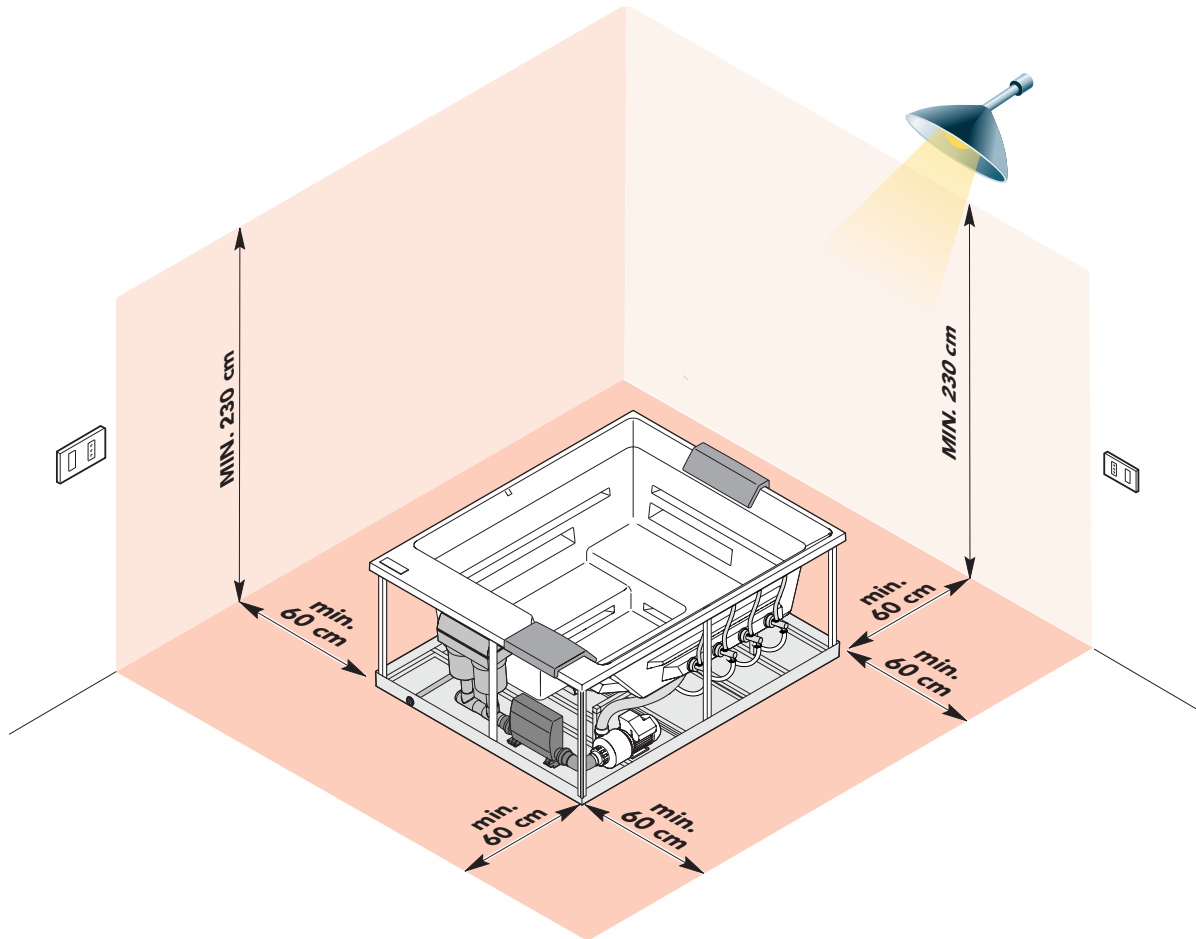
**! THE IMAGE SHOWN HERE IS REPRESENTATIVE ONLY: MAKE THE ELECTRICAL CONNECTIONS FOLLOWING EXCLUSIVELY THE DIAGRAM (electrical diagram) SHOWN UNDER THE COVER OF YOUR CONTROL UNIT.**



**SAFETY ZONE**



Local regulations prohibit any electrical installation (plug sockets, switches, lamps, etc.) in the area surrounding the spa for a distance of at least 60 cm and a height of 230 cm.



**8 TESTING AFTER INSTALLATION**

MAKE SURE THAT...	✓
The spa is level and stable.	
Electrical connections are made correctly in accordance with local and national codes and that the cables are not damaged, crushed or abnormally bent.	
The spa's drainage valve is closed.	
The spa is not leaking.	
Tools, documents or other items were not left under the spa or in the recess.	

## 1 FILLING THE SPA

Perform a preliminary cleaning of the spa using a bit of water and a mild detergent.

Do not use cloths or cleaners that are abrasive, aggressive or that contain solvents because they could irreparably damage the surface of the spa.



Do not start any operation until the spa has been completely filled, otherwise the spa could be damaged.

*Before filling, once again check the quality of the water supply. This is very important for the well-being of the users and for the long life of the spa.*



*For more information see chapter "Characteristics of the water supply" on page 15*

### FILLING

Make sure you have opened all the valves of the hydraulic system before filling the spa so as to allow all the air to come out of the system during the filling process.

For filling, use a rubber hose as shown in the figure.

The water used must meet the requirements detailed in the previous pages and summarised here:

*Potability*

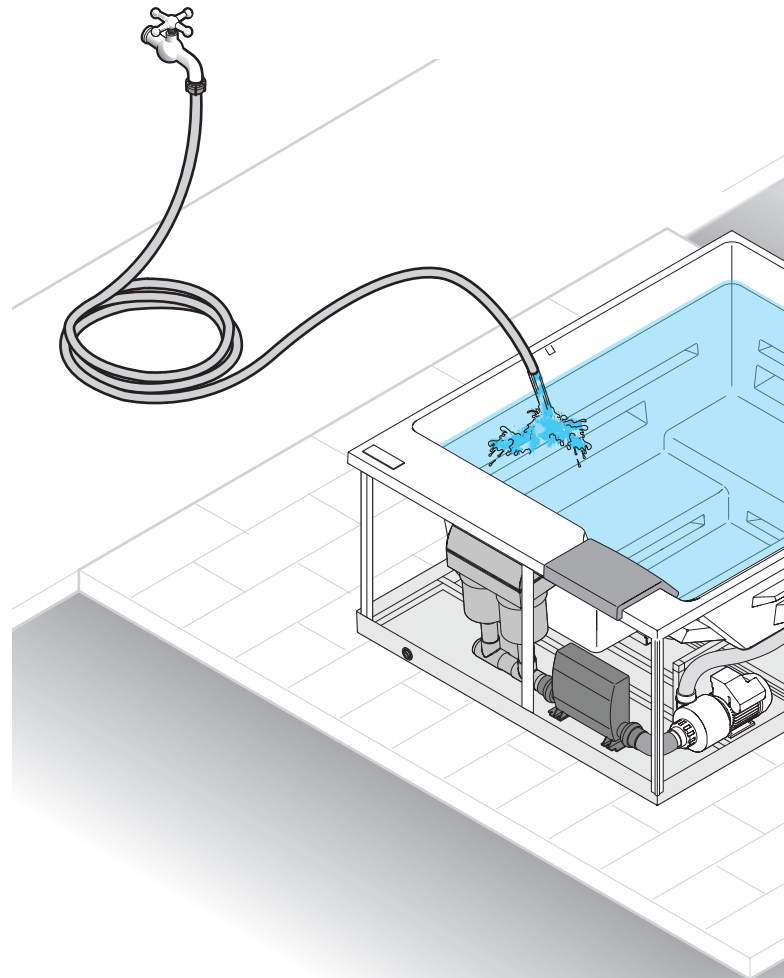
*Hardness (TH): between 10°F and 25°F (100 mg/l-250 mg/l)*

*pH: between 7.4 and 7.8*

*Alkalinity: 80 and 125 mg/l (8-12.5°F)*

Fill the spa until the water reaches about 6-7 cm from the upper edge.

*Manual filling with a garden hose*





## 2 FIRST RUN TOUCH CONTROL PANEL

### PREPARATION AND FILLING

Fill the spa to its correct operating level. Be sure to open all valves and jets in the plumbing system before filling to allow as much air as possible to escape from the plumbing and the control system during the filling process.

After turning the power on at the main power panel, the top-side panel display will go through specific sequences. These sequences are normal and display a variety of information regarding the configuration of the hot tub control.

### PRIMING MODE - M019\*

After the initial startup sequence, the control will enter Prime mode and an initializing mode screen will be displayed.

During the priming mode, the heater is disabled to allow the priming process to be completed without the possibility of energizing the heater under low-flow or no-flow conditions. Nothing comes on automatically, but the pumps can be energized by pushing the "Jet" keys.

If the spa has a circ pump, it can be activated by pressing the "Circ" key during priming process.

### PRIMING THE PUMPS

As soon as the "Priming mode" screen appears, push the "Jet 1" key once to start Pump 1 at low-speed and then again to switch to high-speed. Select the other pumps as required. The pumps will now be running in high-speed to facilitate priming. If the pumps have not primed after 2 minutes, and water is not flowing from the jets into the spa, do not allow the pumps to continue to run. Turn off the pumps and repeat the process.

**Note:** Turning the power off and back on again will initiate a new pump priming session. Sometimes momentarily turning the pump off and on will help it to prime. Do not repeat the operation more than 5 times.

If the pump(s) will not prime, shut off the power to the spa and call for service.

**Important:** a pump should not be allowed to run if priming has not been completed. Under NO circumstances should a pump be allowed to run without priming beyond the end of the 4 minute priming mode. Doing so may cause damage to the pump and cause the system to energize the heater and go into an overheat condition.



### EXITING PRIMING MODE

The system will automatically enter normal heating and filtering after the priming mode is completed, which will last 4 minutes.

You can manually exit priming mode by pressing the "Back" button on the "Priming mode" screen.

Note that if you do not manually exit the priming mode as described above, the priming mode will be automatically terminated after 4 minutes. Be sure that the pump(s) have been primed by this time.

Once the system has exited "priming mode", the top panel will momentarily show the set temperature. However, the screen will not yet show the water temperature.

This is because the system requires approximately one minute of water flowing through the heater to determine the water temperature and display it.

If any alarms appear during initial startup, read the instructions provided in the following table. If the solution is not possible, immediately contact the Manufacturer to request technical support.

In the meantime, do not try to repair or use the spa but rather disconnect it from the electricity and water supplies.

GENERAL MESSAGES	DESCRIPTION OF SIGNALS AND POSSIBLE SOLUTIONS
Frost protection (notification)	<p><b>Problem description:</b> a potential freezing situation has been detected, or the auxiliary frost protection switch has been closed.</p> <p>All pumps are activated, one at a time or all together depending on the system configuration. All the pumps are activated and remain active for at least 4 minutes once the freezing condition has ended, or when the auxiliary antifreeze switch is opened.</p> <p>In some cases, pumps may turn on and off and the heater may operate during Freeze Protection. This is an operational message, not an error indication.</p>
Water too hot M029	<p><b>Problem description:</b> one of the water temp sensors has detected that the spa water temp is 110 °F (43.3 °C) and the spa functions are disabled. System will auto reset when the spa water temp is below 108 °F (42 °C). Check for extended pump operation or ambient temp.</p>
Water level too low.	<p><b>Problem description:</b> This message can only appear on a system that uses a water level sensor. It appears whenever the water level is too low (or the water level sensor is disconnected) and automatically disappears when the water level is adequate.</p> <p>The pumps and heater turn off when this message is displayed.</p>

\* this message can be deleted from the top of the panel by pressing any key.

MESSAGES CONNECTED TO WATER HEATING	DESCRIPTION OF SIGNALS AND POSSIBLE SOLUTIONS
Reduced flow in heater M016	<b>Problem description:</b> there may not be enough water flow through the heater to carry the heat away from the heating element. The heater will restart in about 1 minute. See the "Water flow problems" section.
Reduced flow in heater* M017	<b>Problem description:</b> there is not enough water flow through the heater to carry the heat away from the heating element and the heater has been disabled. See "Flow Related Checks" below. When the problem is solved, reset the message (Reset the message).
The heater may be dry M028	<b>Problem description:</b> Possible lack of water in the heater or insufficient water flow in the heater. Each pool function is disabled for 15 minutes. Press "Reset the message" to re-enable the heater to switch on. See "Flow Related Checks" below.
The heater is dry* M027	<b>Problem description:</b> not enough water in the heater. All spa functions are disabled. Press "Reset the message" to re-enable the heater to switch on once the problem is solved. See "Flow Related Checks" below.
The heater is too hot* M030	<b>Problem description:</b> the water temperature sensors have detected too high temperatures, 47.8 °C (118 °F). All spa functions are disabled. Press "Reset the message" to re-enable the heater operation when the water temperature is below 42.2 °C (108 °F). See "Flow Related Checks" below.

\* this message can be deleted from the top of the panel by pressing any key.



## More information

### PROBLEMS CONNECTED TO THE WATER FLOW

Check that the water level is not too low, the suction flow is not blocked, the valves are working, the air is not trapped, the jets and pumps are ready.

In some systems, even when the pool is switched off, some functions occasionally activate to continue monitoring the temperature or the need to activate frost protection.

\* This message can be reset from the topside panel with any key press.

MESSAGES CONNECTED TO THE SENSORS	DESCRIPTION OF SIGNALS AND POSSIBLE SOLUTIONS
Temperature sensor not accurate - M015	<b>Problem description:</b> the sensors connected to the temperature measurement could be out of calibration by 3 °F. Call technical service if the message does not disappear within a few minutes.
Temperature sensor not accurate - M026	<b>Problem description:</b> the temperature sensors ARE out of sync. The Sensor Balance is Poor fault has been established for at least 1 hour. Call for Service.
Sensor fault - Sensor A: M031, Sensor B: M032	<b>Problem description:</b> A temperature sensor or sensor circuit has failed. Call for Service.

\* this message can be deleted from the top of the panel by pressing any key.

SYSTEM MESSAGES	DESCRIPTION OF SIGNALS AND POSSIBLE SOLUTIONS
Memory fault - Checksum error* - M022	<b>Problem description:</b> at power-up, the system has failed the program checksum test. This indicates a problem with the firmware (operation program) and requires a service call.
Memory alarm - Memory cancellation* - M021	<b>Problem description:</b> appears after any system setup change. Contact your dealer or service organization if this message appears on more than one power-up, or if it appears after the system has been running normally for a period of time.
Memory fault - Clock error - M020 - Not applicable on BP1500	Contact Technical Service.
Configuration error - The spa doesn't start	Contact Technical Service.
GFCI fault – The system is not connected to the GFCI – M036	<b>Problem description:</b> ONLY IN NORTH AMERICA. It may indicate an unsafe installation. Contact Technical Service.
Pump blocked in ON mode - M034	<b>Problem description:</b> the water may have overheated. POWER DOWN THE SPA. DO NOT ENTER THE WATER. Contact Technical Service.
A pump appears to have been ON when the spa was last powered - M035	<b>Problem description:</b> POWER DOWN THE SPA. DO NOT ENTER THE WATER. Contact Technical Service.
The water level is too low	<b>Problem description:</b> some systems have a water level sensor, and this message appears if it detects that the water level is too low.

\* this message can be deleted from the top of the panel by pressing any key.

## 2 FIRST RUN DIGITAL CONTROL PANEL

### FILL IT UP!

#### PREPARATION AND FILLING

Fill the spa to its correct operating level. Be sure to open all valves and jets in the plumbing system before filling to allow as much air as possible to escape from the plumbing during the filling process. Air may be trapped in the plumbing after filling the spa tub. Remove trapped air by priming the pumps. Priming will be discussed shortly.

After turning the power on at the main power panel, the panel will display a splash screen or startup screen. After the initial start-up sequence, the control will enter Priming Mode and display a Priming Mode screen **E**. Only pump icons appear on the priming mode screen. During the priming mode, the heater is disabled to allow the priming process to be completed without the possibility of energizing the heater under low-flow or no-flow conditions.

#### What is priming?

Priming removes trapped air from the plumbing. How do you know when a pump is done priming?

Priming is complete when water flows from the jets without air bubbles.

So, watch the jets as you prime the pump. If your spa has more than one pump, prime each pump one at a time. Why prime one at a time?

If multiple pumps are running, it is too difficult to determine which pump is circulating air bubbles, or the flow from one pump may hide the flow from another pump. Sometimes momentarily turning the pump Off and On will help it to prime. Do not do this more than 5 times. If the pump will not prime, shut Off the power to the spa and call for service.



**Priming Mode duration:**  
**4 minutes**

#### PRIMING MODE

**Priming Mode will last for 4 minutes**, or you can manually exit Priming Mode after the pump(s) have primed. Regardless of whether Priming Mode ends automatically or you manually exit Priming Mode, the control system automatically returns to normal heating and filtering at the end of Priming Mode.

#### PRIMING THE PUMPS

There are two ways to prime the pumps (and other water devices).

**#1** - Prime pumps by pressing the Spa Device buttons **C**.

**#2** - Prime pumps from the Priming Mode screen **E**.

One Priming Mode screen can display a maximum of six pumps (and other water devices). If there are more than six devices, a small navigation arrow will appear on the screen, indicating that more devices are available to control on the next Priming Mode screen. Press the RIGHT navigation button **G** to view the next screen.

The techniques for Priming pumps and running spa devices are almost identical.

This panel message **E** indicates that the spa is in Priming Mode. Note: Turning the power Off and back On again will initiate a new pump priming session. If you need more than 4 minutes to prime all of the pumps, cycle power to the spa.

#### Follow these steps to prime a two-speed pump:


Press the button (JETS 1, JETS 2, etc.) for that pump once to turn it On at low speed. Press the button again to run the pump at high speed. Run the pump at high speed for 2 minutes. If priming is not complete after 2 minutes, turn Off the pump and repeat the process.

#### Follow these steps to prime any one-speed pump, including a circulation pump:

Press the button (JETS 1, JETS 2, etc.) for that pump once to turn it On. Run the pump for 2 minutes. If priming is not complete after 2 minutes, turn Off the pump and repeat the process.

#### Which pump is the heater pump?

When the spa has just entered Priming Mode, press the LIGHT button **B** and see if any water flows. If so, you have a circulation pump serving as the heater pump. If not, a two-speed pump serves as the heater pump. A circulation pump is controlled with the LIGHT **B** button (in Priming Mode only). A two-speed heater pump is controlled by pressing the JETS 1 **A** button. Once the heater pump is primed, prime any additional pumps.

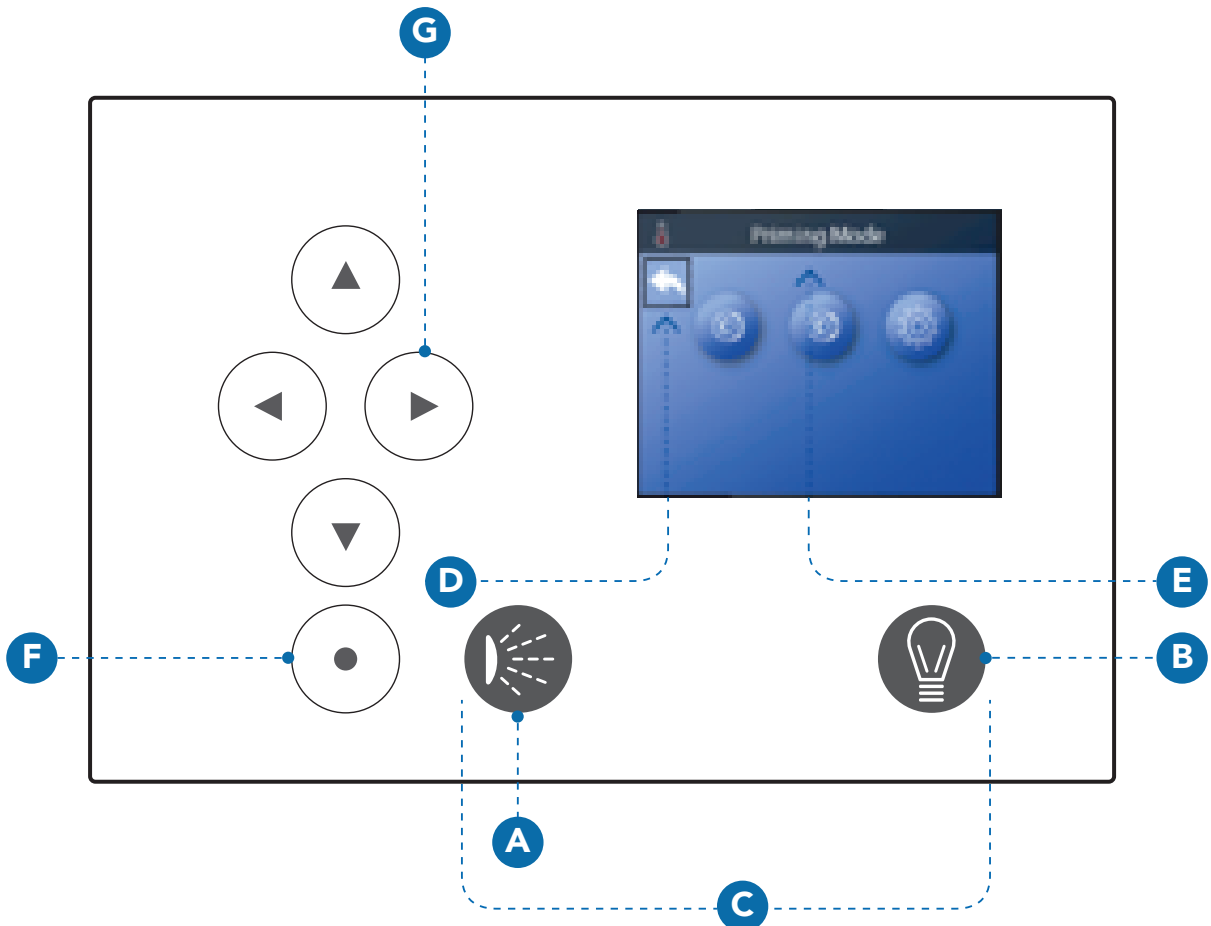
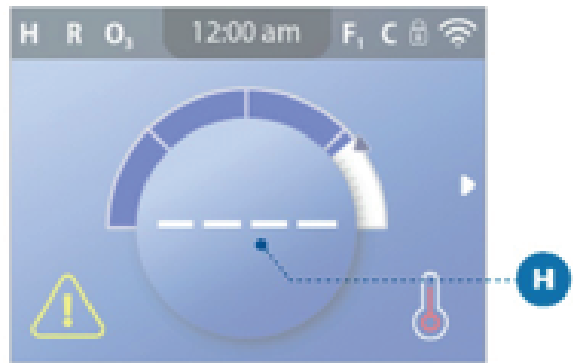
 **The heater pump is the most important pump to prime.**

**IMPORTANT: A pump should not be allowed to run without priming for more than 2 minutes. Under NO circumstances should a pump be allowed to run without priming beyond the end of the 4 minute Priming Mode. Doing so may cause damage to the pump and in some cases may cause the system to energize the heater and go into an overheat condition.**

**EXITING PRIMING MODE**

Priming Mode ends automatically. However, you can manually exit Priming Mode during this time by selecting the Back Arrow **D** and pressing the SELECT navigation button **F**.

When Priming Mode ends (automatically or manually) the panel will display dashes **H**. Once the control system cycles water through the heater for one minute, the dashes will be replaced by the water temperature.



## PANEL MESSAGES

This chapter lists all of the Panel Messages and explains each one. Some Panel Messages have corresponding Message Codes. If so, the Message Code appears below the Panel Message.

### MESSAGE CODES

The easiest way to explain a Message Codes is with a troubleshooting scenario. For example, what happens if the spa water overheats? The panel will display "The water is too hot". Also, the control system will capture the following information and save it in a fault log:

- Time-Of-Day;
- Water temperature, Set Temperature;
- The number of days that have passed since the water overheated;
- Temperature Range;
- Heat Mode;
- Message Code.

The Message Code links the Panel Message to the corresponding Fault Log information. On this panel, both the Panel Message text and the Message Code are displayed in the fault log.

### GENERAL MESSAGES

Several alerts and messages may be displayed in a sequence.

#### Possible freezing condition

A potential freeze condition has been detected, or the Aux Freeze Switch has closed. All water devices are activated. In some cases, pumps may turn On and Off and the heater may operate during Freeze Protection. This is an operational message, not an error indication.

#### The water is too hot

Message Code: M029 \*

The system has detected a spa water temp of 110°F (about 43°C) or more, and spa functions are disabled. System will auto reset when the spa water temp is below 108°F (about 42°C). Check for extended pump operation or high ambient temp.

#### The water level is too low

This message can only appear on a system that uses a water level sensor. It appears whenever the water level get too low (or the water level sensor is disconnected), and automatically disappears when the water level is adequate. Pumps and the heater turn Off when this message appears.

### HEATER-RELATED MESSAGES

#### The water flow is low

Message Code: M016 \*

There may not be enough water flow through the heater to carry the heat away from the heating element. Heater start up will begin again after about 1 minute.

See "Flow Related Checks" below.



#### The water flow has failed

Message Code: M017 \*

There is not enough water flow through the heater to carry the heat away from the heating element and the heater has been disabled. After the problem has been resolved, reset the message \*\*.

#### The heater may be dry\*\*

Message Code: M028 \*

Possible dry heater, or not enough water in the heater to start it. The spa is shut down for 15 minute. Reset this message\* to reset the heater start-up.

#### The heater is dry \*\*

Message Code: M027 \*

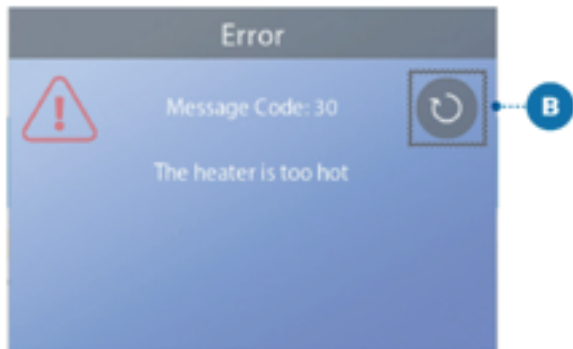
There is not enough water in the heater to start it. The spa is shut down. After the problem has been resolved, you must reset the message\* to restart heater start up.



**The heater is too hot\*\***

Message Code: M030 \*

One of the water temp sensors has detected 118°F (about 48°C) in the heater and the spa is shut down. You must reset the message\* when water is below 108°F (about 42°C).

**Flow-related checks**

Check for low water level, suction flow restrictions, closed valves, trapped air, too many closed jets and pump prime. On some systems, even when spa is shut down by an error condition, some equipment may occasionally turn on to continue monitoring temperature or if freeze protection is needed.

**EXIT AND CLEAR BUTTONS**

Some messages can be reset from the panel. Messages that can be reset will appear with a Clear button **B**. If the message has an Exit button **A**, the Message icon will remain on the Main screen once you exit the Message screen.

\*\* This message can be reset from the panel using the CLEAR button (view "EXIT and CLEAR Buttons" notes above).

**SENSOR-RELATED MESSAGES****Sensors are out of sync**

Message Code: M015 \*

The temperature sensors may be out of sync by 3°F. Call for Service if this message does not disappear within a few minutes.

**Sensors are out of sync\*\***

Message Code: M026 \*

The temperature sensors ARE out of sync. The fault above has been established for at least 1 hour. Call for Service.

**Sensor A Fault, Sensor B Fault**

Sensor A: Message Code: M031 \*

Sensor B: Message Code: M032 \*

A temperature sensor or sensor circuit has failed. Call for Service.

**SYSTEM-RELATED MESSAGES****Program memory failure\*\***

Codice del messaggio: M022 \*

At Power-Up, the system has failed the Program Checksum Test. This indicates a problem with the firmware (operation program) and requires a service call.

**The settings have been reset (Persistent Memory Error)\*\***

Message Code: M021 \*

Contact your dealer or service organization if this message appears on more than one power-up.

**The clock has failed\*\***

Message Code: M020 \*

Contact your dealer or service organization.

**Configuration error**

The spa will not Start Up. Contact your dealer or service organization.

### **The GFCI test failed (System Could Not Test the GFCI)**

Message Code: M036 \*  
(North America Only) May indicate an unsafe installation.  
Contact your dealer or service organization.

### **A pump may be stuck On**

Message Code: M034 \*  
Water may be overheated. POWER DOWN THE SPA.  
DO NOT ENTER THE WATER. Contact your dealer or  
service organization.

### **Hot fault**

Message Code: M035 \*  
A Pump Appears to have been Stuck ON when spa was  
last powered POWER DOWN THE SPA. DO NOT ENTER  
THE WATER. Contact your dealer or service organization.

\*\* This message can be reset from the panel using the  
CLEAR button.

## **REMINDER MESSAGES**

Reminder messages can be reset from the panel. Press  
the Clear Icon to reset the Reminder message.

### **General maintenance helps**

Reminder Messages can be suppressed by using the  
Reminders Screen. Reminder Messages can be chosen  
individually by the Manufacturer. They may be disabled  
entirely, or there may be a limited number of reminders  
on a specific model. The frequency of each reminder (i.e.  
7 days) can be specified by the Manufacturer.

### **Check the pH**

May appear on a regular schedule, i.e. every 7 days.  
Check pH with a test kit and adjust pH with the appro-  
priate chemicals.

### **Check the sanitizer**

May appear on a regular schedule, i.e. every 7 days.  
Check sanitizer level and other water chemistry with a test  
kit and adjust with the appropriate chemicals.

### **Check ozone**

May appear on a regular schedule.  
Change the UV as instructed by the manufacturer.

### **Service check-up**

May appear on a regular schedule.  
Do a service check-up as instructed by the manufacturer.  
Additional messages may appear on specific systems.



**Clean the filter**

May appear on a regular schedule, i.e. every 30 days.  
Clean the filter media as instructed by the manufacturer.

**Test the GFCI (or RCD)**

May appear on a regular schedule, i.e. every 30 days.  
The GFCI or RCD is an important safety device and must be tested on a regular basis to verify its reliability. Every user should be trained to safely test the GFCI or RCD associated with the hot tub installation. A GFCI or RCD will have a TEST and RESET button on it that allows a user to verify proper function.

**Change the water**

May appear on a regular schedule, i.e. every 90 days.  
Change the water in the spa on regular basis to maintain proper chemical balance and sanitary conditions.

**Clean the cover**

May appear on a regular schedule, i.e. every 180 days.  
Vinyl covers should be cleaned and conditioned for maximum life.

**Treat the wood**

May appear on a regular schedule, i.e. every 180 days.  
Wood skirting and furniture should be cleaned and conditioned per the manufacturers instructions for maximum life.

**Change the filter**

May appear on a regular schedule, i.e. every 365 days.  
Message Code: M03 \*  
Filters should be replaced occasionally to maintain proper spa function and sanitary conditions.

**Change the UV**

May appear on a regular schedule.  
Change the UV as instructed by the manufacturer.

**MISCELLANEOUS MESSAGES****Set the Time-of-Day**

When a control system that displays this message is powered On, its time-of-day is initialized to 12:00 PM. Setting the proper time-of-day is important for determining filtration times and other background features.

**MESSAGE NOTES**

Some messages include the "Call for Service" text as it requires a service technician to fix the problem.

If the panel is locked and a message alert appears, you will be taken to the Lock Screen (where you will need to Unlock the panel) before you can clear the message.

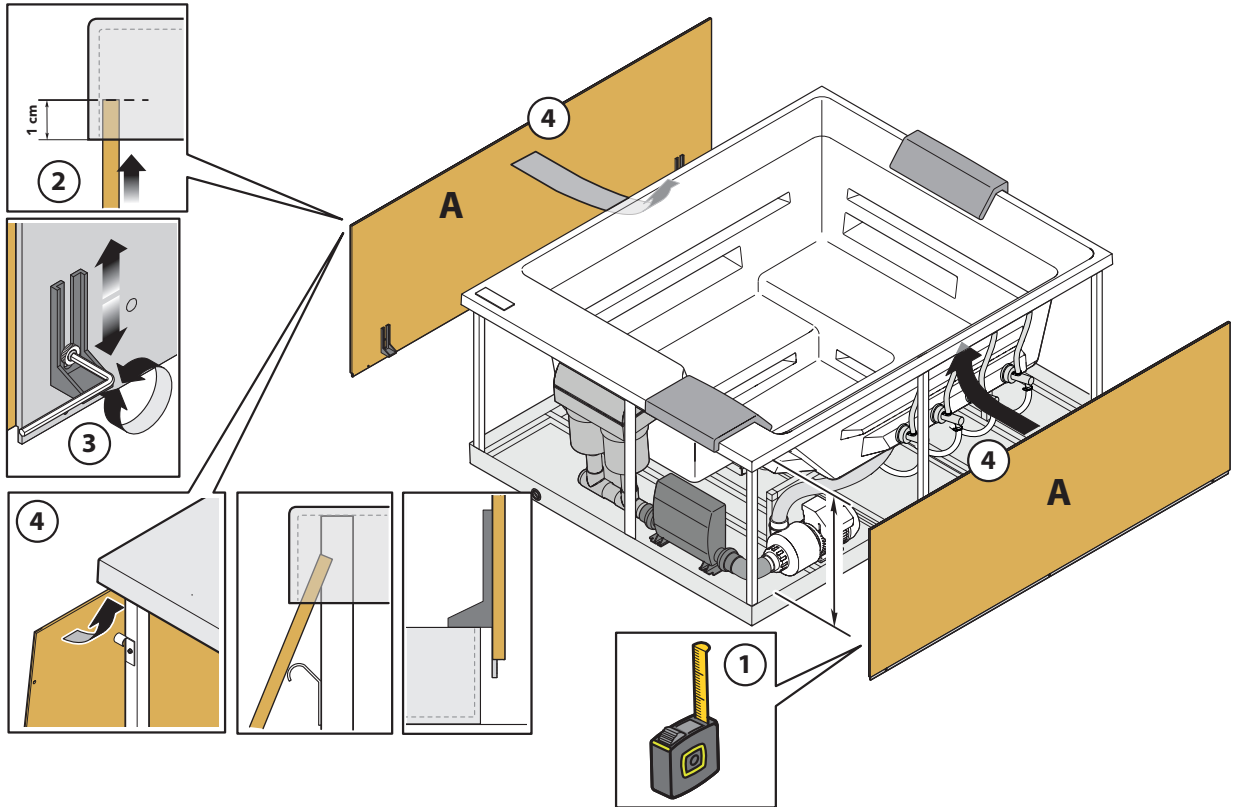
The Selection box defaults to the Clear or Exit icon **A** on the Message screen. Press the LEFT navigation button to move the Selection box to the Error/Warning/ Reminder icon **B**, and then press the SELECT navigation button to go to the System Information screen

**Communications error**

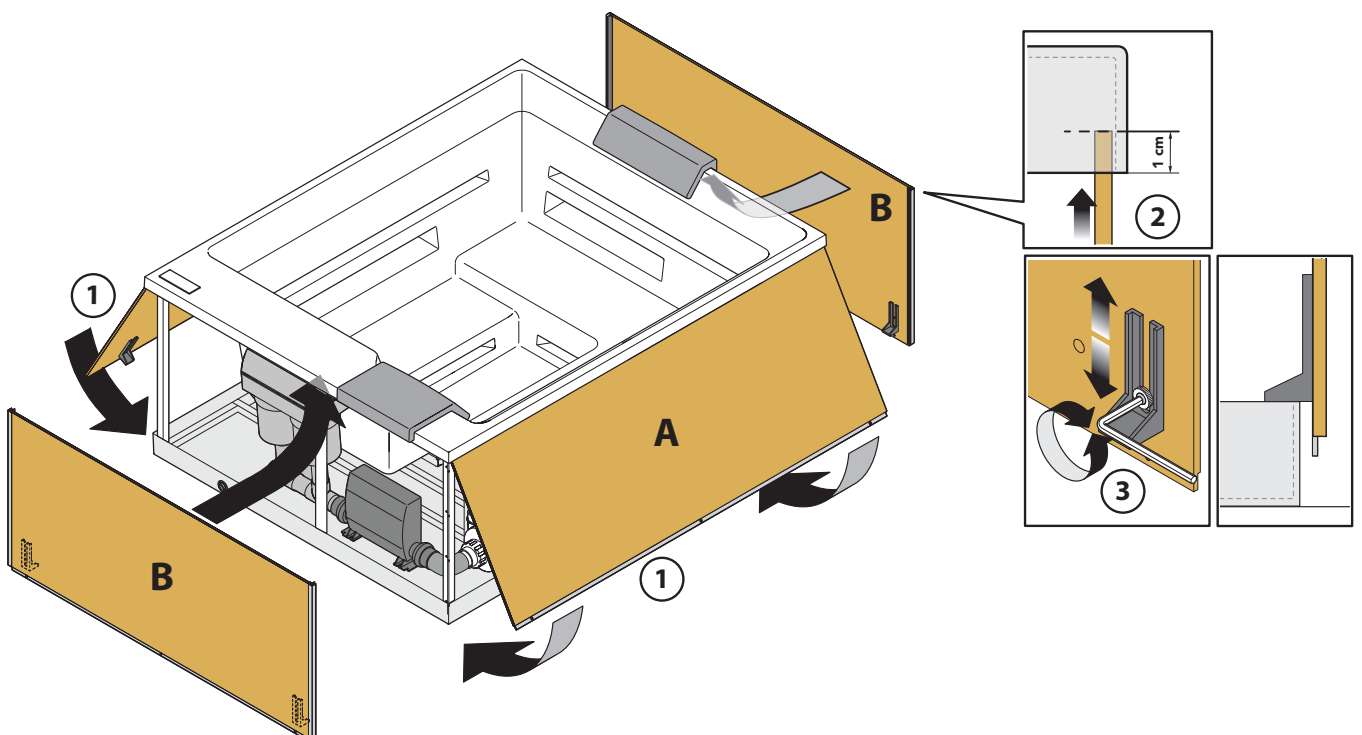
The control panel is not receiving communication from the Control System (view diagram below). This can appear briefly during system start-ups. This is normal. If it does not go away quickly, Call for Service.



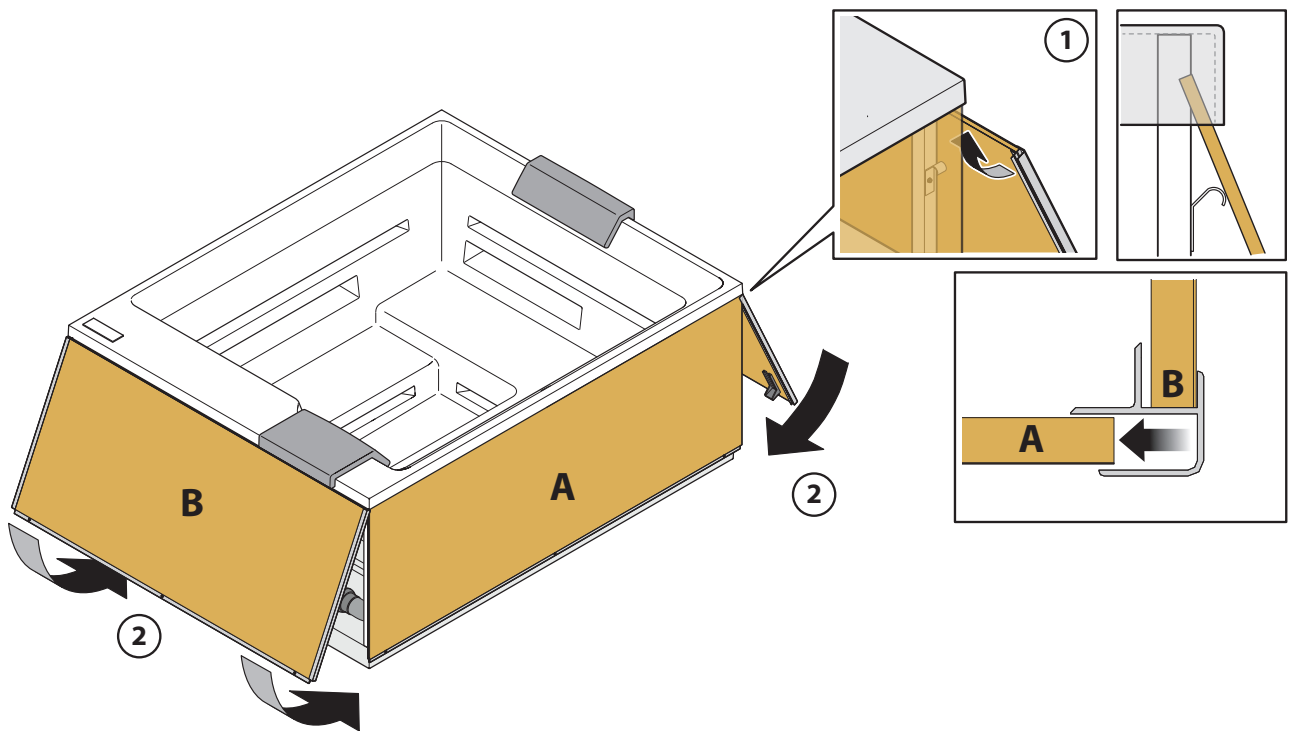
- 1 - measure from the upper edge of the base tray to the lower part of the tub edge (fig. 1)
- to this measure, add 1 cm, which will be inserted under the edge (fig. 2)
- adjust the bracket to the measurement resulting from the two previous points, and lock it with an Allen key (fig. 3).
- insert panels A (without corner pieces) as indicated in (fig. 4), starting from under the edge and then placing the bracket on the base tray



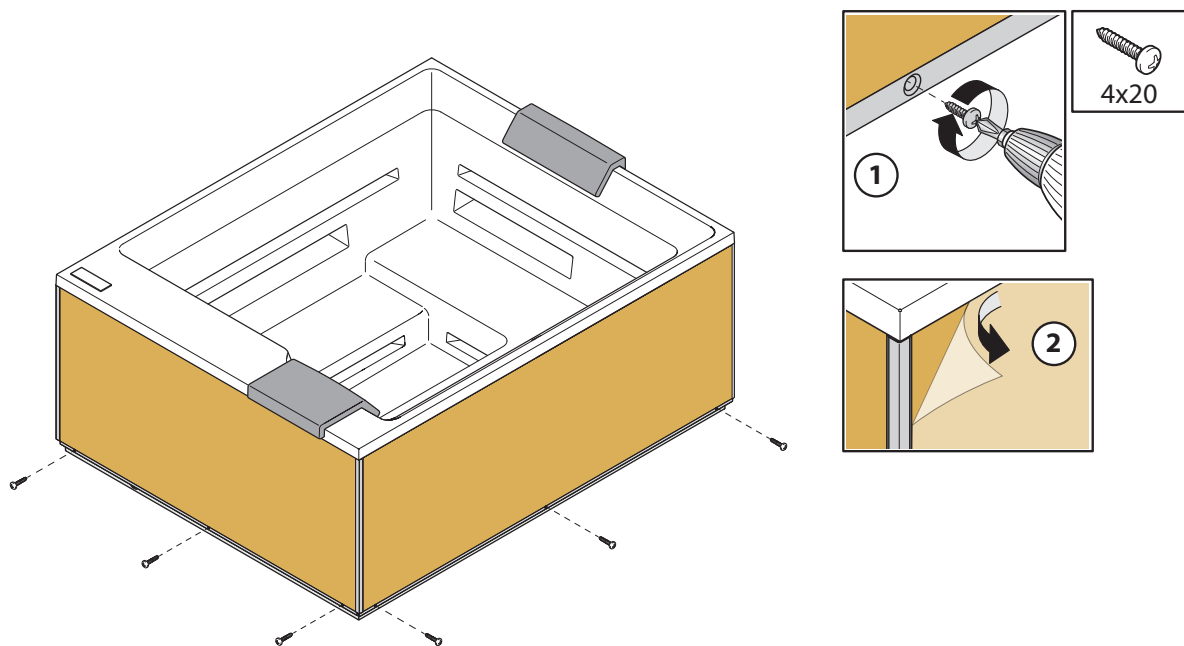
- 2 Proceed by installing panels "A" first and then panels "B".



- 3** On the corners, insert the aluminium profiles of panel B on panel A and ensure correct alignment.



- 4** Secure the panels to the base with the supplied screws. Remove the protective film from the panels.



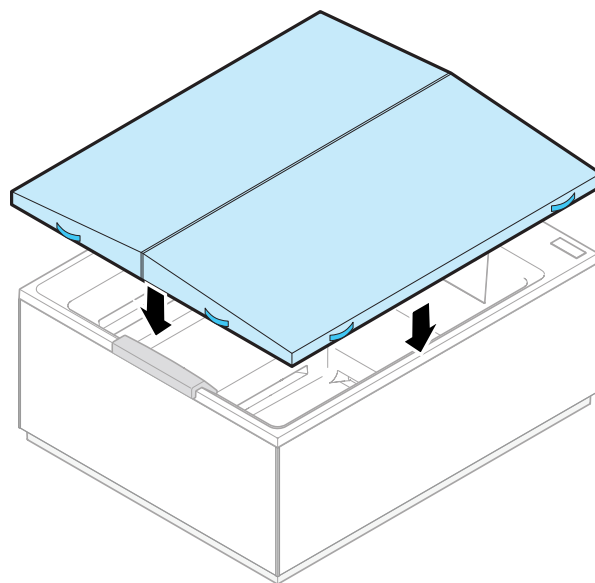
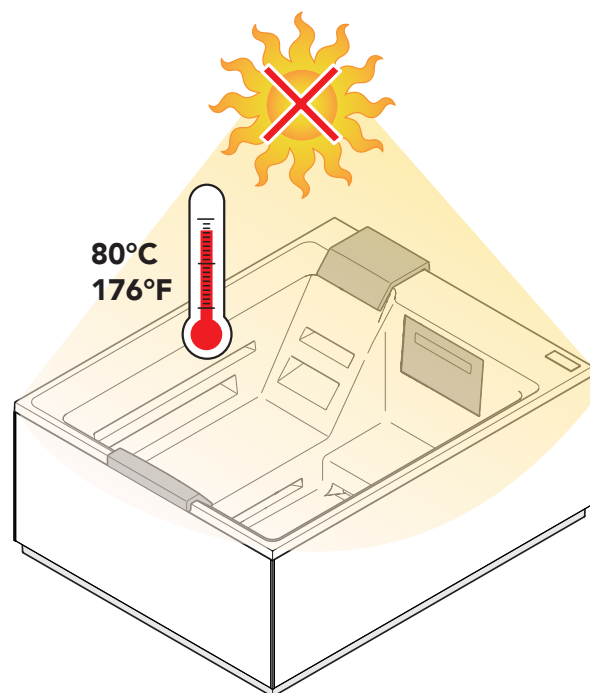


Do not leave the empty spa in DIRECT SUNLIGHT. The surface temperature could rise above 80°C resulting in serious damage, including cavitation and the deformation of the surface and components (damage caused by direct exposure to sunlight is not covered by the warranty).

Under these conditions or when not used, advise the owner to use a fixed or mobile cover to protect the spa (we recommend the optional Tressse covers).

In addition to preserving the surfaces, the cover will keep the water hot and protected against falling leaves and other outdoor debris.

The cover is especially useful if the spa is installed outdoors. In this case it might be useful to anchor it with lashing straps in order to prevent the wind from moving it or blowing it off.



Maximum care has been paid to guarantee the accuracy of this manual.

The Manufacturer reserves the right to modify the equipment or the documentation at any time, without notice.

Therefore there might be small differences between this manual and the product you have received: we apologise in advance for any inconvenience.

The total or partial reproduction of this manual without the Manufacturer's consent is prohibited. Measurements are purely indicative and not binding.

The original language of this manual is Italian: the Manufacturer is not responsible for any mistakes in translation/interpretation.

# treesse

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