



*wellspa*



**INSTALLATION MANUAL**  
MINIPOOL

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*Carefully read and follow all the instructions!*

# LIMITED MANUFACTURER'S WARRANTY

- **Limited Manufacturer's Warranty period length is 12 months starting from the invoice date of the unit.**
- **Limited Manufacturer's Warranty only applies if all shipping, storing, installation, operation and maintenance/cleaning conditions have been duly followed.**
- **Limited Manufacturer's Warranty covers the product against concealed defects and/ or other defects that appear only if the product has been used according to this installation manual.**
- **Limited Manufacturer's Warranty is limited only to repairs and or replacement of defective parts and the Manufacturer does not accept any further liabilities of any kind beyond that.**
- **Limited Manufacturer's Warranty covers only the replacement of the subparts suffering the defects and does not cover any shipping and/or replacement charges.**
- **Limited Manufacturer's Warranty does not cover normal wear of the unit upon intensive use or any damage to the unit or its sub-parts in result of improper and/or blatant use of the unit.**
- **Limited Manufacturer's Warranty for any parts in contact with water does not cover the defects and/or malfunction arising from water hardness, or impurity, or negligent cleaning problems.**
- **Limited Manufacturer's Warranty does not cover any indirect losses and/or loss of profits, nor does cover any indirect or related costs arising from the defect or malfunction of the unit.**

## POOL SHELL SURFACE WARRANTY

Producer shall guarantee that the inner surface of the shell of the minipool shall not bubble, crackle or delaminate during the period of two years following the initial date of purchase.

## ELECTRICAL AND CONTROL EQUIPMENT WARRANTY

Producer shall provide a warranty on material and production flaws of the minipool's electrical equipment – namely the pumps, the heater and the control system for a period of two years following the initial date of purchase.

## POOL COMPONENTS WARRANTY

Producer shall provide a warranty against losing of water tightness of piping components installed in the factory – namely jets, glued-on equipment, piping and hoses if such a defect arises from material or production flaws within the period of two years following the initial date of purchase. Other components – light emitting diodes, pillows, body finish and filter – shall be provided with a warranty that they are free of material or production flaws at the moment of purchase.

***Carefully read and follow all the instructions!***

# GENERAL SAFETY INSTRUCTIONS

**It is the spa owner's responsibility to read carefully and follow all the warnings and instructions described in this manual. Failure to do so may result in personal injury. The spa owner also must act in the interests of other persons to make certain that every spa user is aware of all the precautions described in this manual.**

## **Before operating your spa, read and follow all instructions!**

**WARNING:** Danger of drowning and physical injury! Take stringent precautionary measures to avoid unauthorized access or use by children. To avoid accidents, make sure that children could not use the pool without constant supervision.

**WARNING:** To avoid traumas take care when entering and leaving from the pool.

**WARNING:** Danger of physical injury! Never use the pool when the water inlet port covers of the pump are damaged or missing. The inlet ports of the pool pumps are sized to a certain specific waterflow created by the pump. Never replace this inlet with a different one.

**WARNING:** Danger of electrical shock! Do not permit placing any electrical appliances, inc. lamps, telephone, radio, TV-set closer to the pool than 1.5 meters. Never use any electrical appliances when you are wet.

**WARNING:** Danger of electrical shock! Install the device at least 2.5 m away from metal surfaces. Alternatively, it is permitted to install the pool up to 1,5 m from metal surfaces (metal housings of electrical appliances, metal water pump) in case the metal surfaces are permanently connected to a copper earthing conductor of at least 2.5 mm<sup>2</sup>, which is connected to the earthing terminal located on the control block in the equipment compartment. All metal parts to be installed outdoors, such as handles, ladders, discharge pipes or other similar equipment, located at 3 m from the pool, should be connected to the main earthing strap by means of earthing conductors.

**WARNING:** The power supply of the product should include a required circuit breaker, so that all unearthed supply cables could be disconnected. The switch should be easily accessible and visible to the user of the pool, while the circuit breaker should be installed by a qualified electrician, and at least 1.5 m from the pool water.

**WARNING:** Never use water maintenance chemicals before all users have left from the water. A contact with chemicals may be irritant to the skin or eyes of people.

**WARNING:** Persons suffering from infectious diseases should not use the pool.

**WARNING:** Pregnant women or women suspecting pregnancy should consult with a doctor before using the pool.

**WARNING:** Do not use the pool immediately after strenuous physical exercise.

**WARNING:** Long-term bathing in the pool may be harmful to your health.

***NOTE! Manufacturer reserves the right to change technical aspects on the products without prior notice.***

## REDUCING THE RISK OF PHYSICAL INJURY

Water temperature in the pool should never exceed 40°C. For adults in good health temperatures ranging between 38 °C to 40 °C are regarded as safe. Lower water temperatures are recommended for small children and in case bathing longer than 10 minutes. Since too high water temperatures can cause foetal injuries during the early months of pregnancy, pregnant women or women suspecting pregnancy should limit the water temperature in the pool to 38°C. If you are pregnant, please consult with your doctor before using the pool.

Before entering the pool the user should measure the water temperature with an accurate thermometer, since the deviation of water temperature adjustment devices can be up to +/- 2°C or devices can show incorrect temperature as a result of a possible malfunction.

Consuming alcohol, drugs or medication before using the pool or during bathing in the pool can lead to loss of consciousness and cause the danger of drowning.

Persons suffering from overweight or persons who have suffered from heart conditions, high or low blood pressure, problems with blood circulation or diabetics should consult with a doctor before using the pool.

Persons on medication should consult with their doctor before using the pool, since some medical drugs may cause drowsiness and some medical drugs may also affect pulse, blood pressure and circulation.

When the pool is not in use, attach the cover by means of belts and clamps. By this you help to avoid unsupervised children from entering the pool, and ensure the cover stays in place during heavy wind. However, it is not ruled out that using the cover, clamps or locks will not hinder access to the pool.

Before performing any maintenance works please contact the local authorised dealer. Inspect the pool visually to determine its state and examine if anything seems out of the ordinary. If any part seems to be damaged, loose or missing, stop your work. Contact immediately the local authorised dealer.

## HYPERTHERMIA – WHAT IS IT AND WHY IS IT DANGEROUS?

Long-term stay in hot water can induce hyperthermia. Hyperthermia occurs when the internal temperature of the body increases by several degrees above the normal body temperature (37°C). The symptoms of hyperthermia include dizziness, lethargy and increase of body's internal temperature.

### **The effects of hyperthermia include:**

- Incapability to sense danger
- Loss of capacity to sense heat
- Loss of capacity to sense when it is necessary to leave from the pool
- Physical incapability to leave from the pool
- Foetal injuries in pregnant women
- Loss of consciousness and danger of drowning

## REMOVING THE SIDE PANELS OF THE MINIPOOL

- Switch off the power before removing the side panels.
- Find the lounge seat in the minipool. The equipment compartment is under that seat.
- Using a special key, which is in a sealable plastic bag accompanying the user manual, remove the mounting screws of the side panel towards the equipment compartment. Then pull the lower part of the wooden panel outwards (approx. 10 cm) and downwards in order to lift the panel aside.



*Before removing the panels, switch off the power!*

# CHOOSING THE LOCATION FOR THE SPA

We recommend installing the minipool above the ground. To form or evaluate the preconditions of the adjusted sub-floor, consult with a local licensed construction company.

## PREPARING THE INSTALLATION SITE

### Ensure the following:

- Always place the minipool on a structurally stable, level surface. A minipool filled with water can be rather heavy. Check if the location you have chosen can bear the load of the minipool filled with water.
- Position the minipool in a way that the base of equipment compartment which contains all the electrical components (look from the picture below) would be easily accessible for periodical maintenance and service.
- Leave sufficient space around the whole minipool to ensure access to other hatches for occasional maintenance.
- Pay attention to the electrical cable input. There's a recommended corner for that (look from the picture below).

### Installation on the ground in outdoor conditions

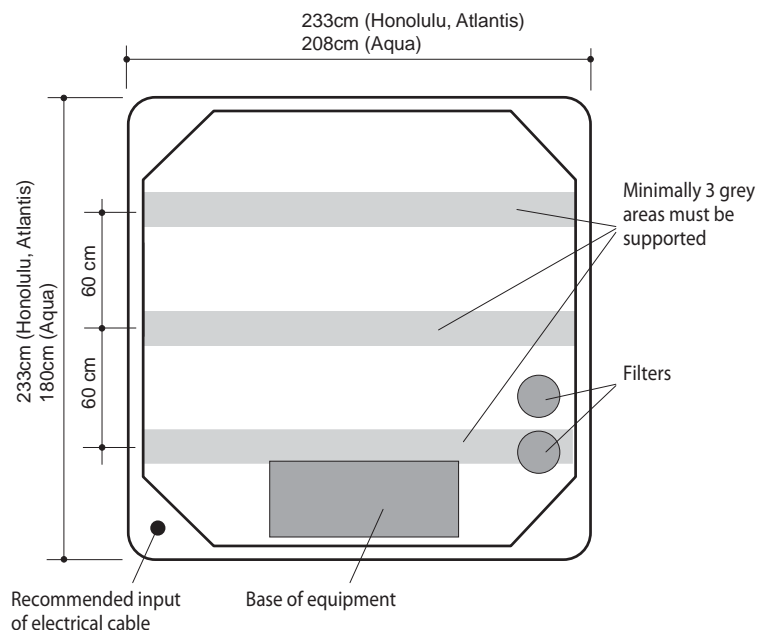
No matter where you will install your new minipool, it is essential that the installation surface is firm and durable. If you place the minipool together with a wooden subfloor outdoors, it is possible that in time the minipool will tilt on one side and need readjustment.

### Installation of the subfloor

In order to verify that your subfloor can bear the load of the minipool, you should know the maximum floor load of the subfloor. Consult with a qualified construction company or a construction engineer. For the weight of the minipool with water, see the table of the specifications of the minipool. The weight per square meter should not exceed the floor load of the subfloor, since it may result in serious constructional damages.

### Installation indoors / in the basement

If you install the minipool indoors, you should take into account some special requirements. The floor material should be slip-proof when wet. To avoid water from accumulating on the floor around the minipool, water drainage should be ensured. If you are building a new room for the minipool, it is recommended to install a discharge trap in the floor. Also bear in mind the measurements of the minipool to ensure it fits through the door into the room. Check the impact of moisture to exposed wood, dry walls, etc in the room. To reduce the impact, always cover the minipool with the pool cover after use, and use proper ventilation around the minipool. A qualified construction company/ engineer will help to decide, whether it is necessary to install additional ventilation.



*If wishing to mount the minipool in a building structure, consult with a licensed construction company.*

# REQUIREMENTS TO ELECTRICAL INSTALLATION

**Before connecting the control unit, carefully read this chapter!** Ignoring the instructions included in this chapter may result in serious faults in control units and other installed electrical equipment!

The device contains live electrical parts. While doing electrical installations or changing wiring the minipool **MUST BE** unplugged from electrical circuit or shut off using circuit breaker installed into the minipool wiring. Therefore, maintenance and repair works should be carried out by experienced and qualified personnel, after having taken all necessary precautionary measures.

**Since the Balboa BP2100 control unit does not contain supply interruption systems, the supply cable should be fitted with breaking and protection devices complying with the electrical installation requirements valid in the country of installation.**

*Maintenance and repair works to electrical equipment should be carried out by an experienced and qualified electrician, after having taken all precautionary measures.*

When the minipool is ready to use the minipool should be connected stationary to the power network. The power source used for supplying the minipool should not supply simultaneously other equipment or illumination. For the connection of the minipool no plug connections or extension cords should be used.

The supply chain of the minipool should be protected with fault current protection, with the tripping current not exceeding 30 mA, and with a circuit breaker calculated for the consumed power of the minipool.

Using supply for the minipool not in compliance with the instructions renders the guarantee by the independent testing institution and the manufacturer's warranty invalid. The Wellspa outdoor pool is intended for use in a power network with a neutral conductor and protective earth (TN-S system). The device should be installed and earthed by a professional electrician. It is vital to take into account all the electrical safety requirements of the target market in the course of installation. Take into account the permitted phase load.

## **Proper earthing is extremely important!**

Minipools are fitted with earth protection. The main earth terminal is located on the surface of the control block in the equipment compartment, to make it possible to provide a connection between a given point and any earthed metal part, metal water pipe, cable or earthed copper-plated earth rod at the distance of 1.5 m from the minipool, using equipotential bonding cables. The equipotential bonding cable should be a massive copper conductor with a crosssection of at least 2.5 mm<sup>2</sup>. Before installing the minipool, check compliance with local construction requirements.

## **NOTE!**

For local equipotential bonding it is important to mutually connect all extra electric conductors located in the room:

- Water, gas and discharge pipes made of metal
- Metal pipes of central heating/air conditioner
- Metal structures of the building
- Other metal parts in the vicinity, that can hold electrical potential

*Maintenance and repair works to electrical equipment should be carried out by an experienced and qualified electrician, after having taken all precautionary measures.*



# GENERAL DESCRIPTION

For connection into supply network, first remove the cover from the control block, mounted with 2 screws. The supply cable should be connected with a terminal strip located to the left from the circuit board. Before accessing the internal parts, the device should be disconnected from the power network by means of a circuit breaker.

**Balboa BP2100 control units operate with two different types of supplies:**

- **Single-phase: 230 V, 50 Hz, 32 A**
- **Three-phase: 400 V with neutral, 50 Hz, 16A per phase**

**The selected type of power supply should comply with:**

- the position of jumpers on the circuit board (see the instructions on the cover of the control block and on page 10)
- the position of other jumpers on the circuit board (for distribution of supply to loads)

These settings should be verified and ensured their compliance with the type of power supply. The type of selected connection influences the way the control unit controls load, and is configured with jumpers on the circuit board (see the instruction on the cover of the control block). In addition, the circuit board also contains other jumpers that should be connected correctly, according to the number of phases of the power supply. To access the jumpers, remove the protective cover from the board (see the photo below). Then check the positions of jumpers and switch-bank switches according to the drawings on page 10.

**The Jxx markings referring to power supply are printed on the board next to the jumper connections.**

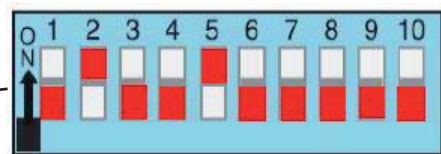
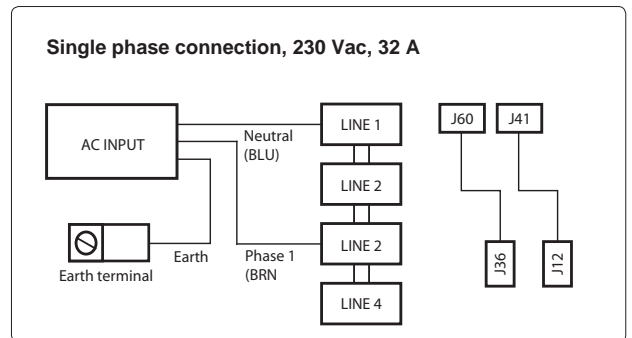


Remove the protective cover of the board, lifting the clampings with a screwdriver, as shown on the photos. The cover has 2 clampings in total.

*Maintenance and repair works to electrical equipment should be carried out by an experienced and qualified electrician, after having taken all precautionary measures.*

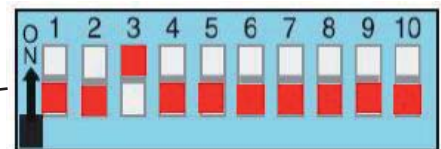
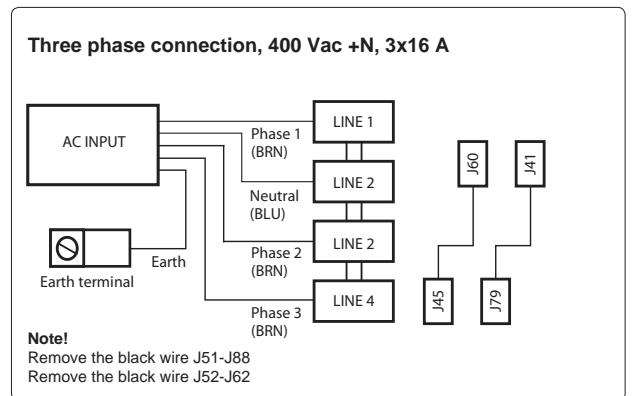
# SINGLE-PHASE CONNECTION 1X32A

In this mode the Balboa BP2100 control unit is connected with only one phase, the maximum current of the device is 32 A.



# THREE-PHASE CONNECTION 3X16A

In this mode the Balboa BP2100 control unit is connected with a three-phase 400 V system and a neutral cable. Connect the minipool permanently to the power network, following to the drawing. Connect the supply cable through the cable gland to a marked plastic junction box. It is important to tighten the cable gland around the cable so that the connection proves to be water-proof by visual checking. Reinstall the plastic cover of the control unit after connecting the supply cable.

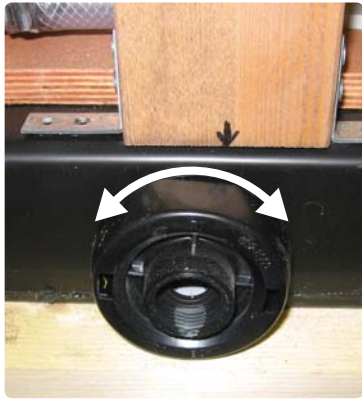


**Do not switch on the supply of minipool before the minipool has been filled to the required level (required level is 10 cm above the filters). running the minipool pump without water may immediately cause a failure and renders your warranty invalid.**

# PROCEDURES FOR START-UP

Start-up procedures may be carried out only after becoming thoroughly familiar with the minipool user manual. Switch off the power (OFF).

Find the lounge seat of the minipool. The equipment compartment is located directly under the seat.



Before filling the Wellspa outdoor pool with water, check that the drain valve is closed, to avoid water leak during filling the minipool.



Check pump connections (4), make sure these are water-tight, to prevent possible leaks into the equipment compartment.



Before filling the Wellspa outdoor pool with water, check that the drain valve is closed, to avoid water leak during filling the minipool. Check pump connections (4), make sure these are water-tight, to prevent possible leaks into the equipment compartment. Next, remove filters from filter canisters, turning the overflows of the filters counter-clockwise. Fill the minipool with a hose through an empty filter canister. If your minipool has two filters, as shown on the photos, place the hose into the filter canister, when filling the minipool with water.

**IMPORTANT!** After draining always fill the minipool through an empty filter canister. Otherwise air may remain in the pump and hinder it from creating a water circulation.

**IMPORTANT!** Water level should cover filters at least by 10 cm. After filling, reinstall the filters into the canisters, noting that the filter canister on the left has a telescope-type and the canister on the right a standard type overflow.



**After draining, always fill the minipool through the filter canister. Otherwise air may remain in the pump and hinder it from creating a water circulation. Water level should cover filters at least by 10 cm.**

Before switching on the control units for the first time, check that:

- there is enough of water in the minipool
- filters together with overflows are installed
- there is nothing that could block the water flow in the pipes
- all electrical installation procedures are carried out according to local requirements and in compliance with information provided on the installation of the electrical equipment.

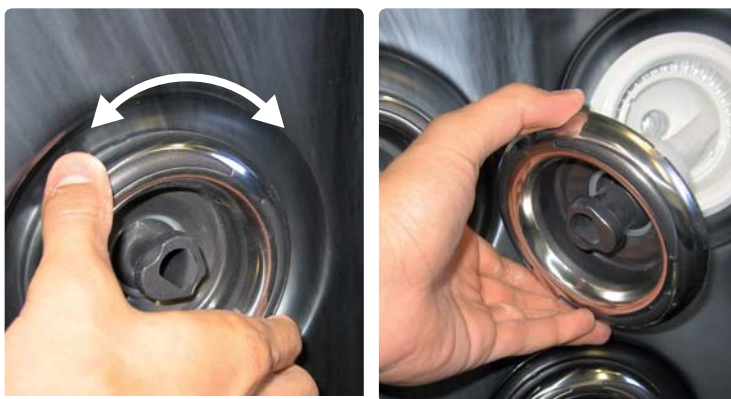
## 7.1 CONTROL PANEL TP800 PRIMING MODE

Switch on the supply of minipool, using a separately installed circuit-breaker of the line. After the power up and the initial start-up sequence, the control will enter Priming Mode and display a Priming Mode screen. Only pump icons appear on the priming mode screen. The system will automatically return to normal heating and filtering at the end of the priming mode, which lasts 4-5 minutes. 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 pump(s) can be energized by selecting the “Jet” buttons. Pumps can be turned on and off by pressing the Jets1 or Jets2 buttons during Priming Mode. Manually exit Priming Mode by pressing the “Exit” Button.

*After draining, always fill the minipool through the filter canister. Otherwise air may remain in the pump and hinder it from creating a water circulation. Water level should cover filters at least by 10 cm.*

Sometimes air can be trapped in the pumps. To help the system to prime, press the button Jets 1. Allow the pump to run for 30-45 seconds, to enable it to discharge air. Then press again the same button to switch off the pump. Repeat the same procedure with the second pump, using the button Jets 2.

If the jets do not start, either the water level is too low or air has remained in the pipes of the pump. To discharge air from the pumps, switch pumps on and off several times again. If the jets still do not start or are too weak, then it is possible that the jets are closed. To open the jets, turn the jet from the housing counterclockwise. To unscrew the jets then turn them counterclockwise using slightly bigger force than in regulation and take the insert out.



If the jets still fail to work, switch off the pumps from pump connections to avoid pressing out the water, carefully loosen the upper pump connection in order to discharge any air remaining in the equipment. Then tighten again pump connection and switch on the pumps. Switch pumps on and off several times, until jets start to work properly.

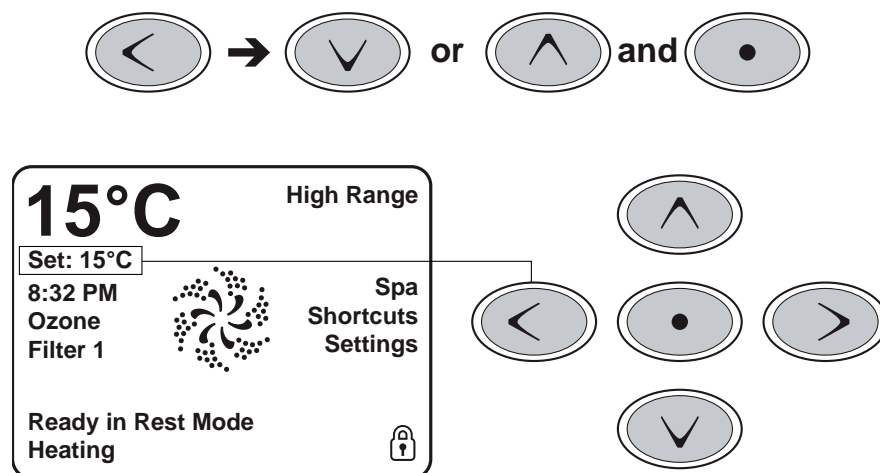
Before using the minipool, add to the water the chemicals specified in the Water Maintenance Manual. The set off chemicals for the initial use of the minipool are packed in the equipment compartment. For easy maintenance of water purity and safety, read the Water Maintenance Manual.

## 7.2 SET THE MINIPOOL TO WATER HEATING

After the priming mode, when all the jets are working properly, exit priming mode by pressing select button, choose "Exit" icon on the screen to go inside the main menu screen and set the minipool to water heating. The last measured temperature is constantly displayed on the LCD screen. Note that the last measured water temperature displayed on the screen is appearing after the pump has been running for at least 2 minutes.

On the main screen water temperature is the only parameter that user is able to change. To increase water temperature to a convenient level, take the following steps:

- Press the Left Arrow button (Step1 on the picture below) to change the Set Temperature number to white.
- The Set Temperature can then be adjusted with the UP and Down buttons. Each pressing of the buttons increases or reduces the temperature by 1 degree.
- The time for heating the water may vary, depending on the temperature of water used for filling the minipool, on the size of the minipool, and ambient temperature. Water temperature increases by approx. 2-3°C in an hour. When the water temperature has increased to the level of thermostat setting, the water heater switches off. Temperature in the Wellspa outdoor pool can be set to the maximum of 40°C and minimum of 15°C.
- Pressing the Select button or the Right Arrow button will save the new set temperature.



**Water temperature exceeding 40°C is highly dangerous and requires extreme care when used!**

To configure other features and programming functions of the control panel, please read the User manual which came together with the minipool.

When you are sure that the heater is operating, you can reinstall the side panel of the equipment compartment, removed at points 1-3 (see page 6).

To save energy and keep the minipool ready for use, cover the pool with the pool cover.

# CHANGING THE WATER IN THE MINIPOOL

- Switch off the power supply of the minipool.
- Open the black drain valve (look from the picture below), which is located on the bottom of the same side where the base of minipool equipment is located (under the lounge seat).

Open the drain valve to empty the pool

Water flows out approximately 1 hour. The minipool is empty when the flow of water in the drain hose stops.

- The minipool is emptied through a drain opening at the bottom of the pool. Pump/pumps and heater are emptied. In case of this model, a little of water remains in the seats and at the bottom of the minipool shell – remove the water by hand. The water which remains in the piping or equipment after draining should be removed only in case the minipool is prepared for winter.
- After draining, check the shell of the minipool and clean it as instructed.

To maintain the sheen of the surface it is necessary to avoid abrasive cleaning agents and aids that can damage the surface of the minipool. If not sure about the suitability of some cleaning agent, consult with the authorized dealer of the minipools. Be very careful with all cleaning agents and try not to leave soap residues to the surface of the minipool. Otherwise the water may start to foam when refilling the minipool.

- Close the drain valve before filling the minipool.
- **BEFORE SWITCHING ON POWER**, refill the minipool again with water, following the start-up procedure (on page 11).



# PROCEDURE FOR WINTER STORAGE PREPARATIONS

- Switch of power from the system and make sure any accidental switching on would be prevented.
- Remove the filter elements from the filter compartments.
- Remove the jet inserts and put them somewhere, where the temperature doesn't drop below zero degrees Celsius.
- Discharge water from the system, using the drain valve and hose.
- Open the equipment compartment (under the lounge seat) and find the pumps and the heater.
- Remove all drain plugs from both pumps.
- Unscrew the connections at both sides of both pumps and the heater.
- Disconnect the water hose located outside the pool from the drain valve, and lift the drain system back into the equipment compartment.
- Reinstall all the covers of the equipment.
- Install the pool cover and attach the retaining clamps (see photo below).



# COMMISSIONING IN SPRING

In spring or when you are again ready to take the outdoor pool into use, take the following steps:

- Make sure the pump connections are in place and undamaged.
- Make sure that all connection points you loosened are tightened again.
- Reinstall all inserts of jets, drain plugs of pumps, and close the drain valve.
- Fill the system, as normally.
- Switch on the power supply.
- Operate the pumps and keep the jets running for approx. 15 minutes.
- Drain the water.
- Control if the filters are clean and install the filters.
- Refill the minipool and treat with chemicals, as normally.



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