

Article No: OS030982B

PRODUCT MANUAL



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1. Prepare for Installation

1.1. Selection a Location

The SPA can be installed indoors and outdoors. When choosing a location, please take the following factors into consideration:

- *The weight of the SPA, including water and the user(s)
- *Drainage facilities: The drainage facility should be able to handle the maximum water capacity of the SPA.
- *Surface Condition

Please place the spa on a structurally sound and level surface that is large enough for the entire spa, for example, a concrete pad, concrete pavers or bricks or a reinforced deck. The adequacy of the structural support for a spa placed on a terrace, balcony, roof terrace or other elevated structure must be determined by a licensed structural engineer, architect or contractor depending on local and state requirements.

Do not place the SPA in a sink to avoid water accumulation and damage.

The spa warranty will be voided if an improper installation is performed. Structural damage due to an inadequate or improper foundation is not covered under warranty.

1.2. Delivery

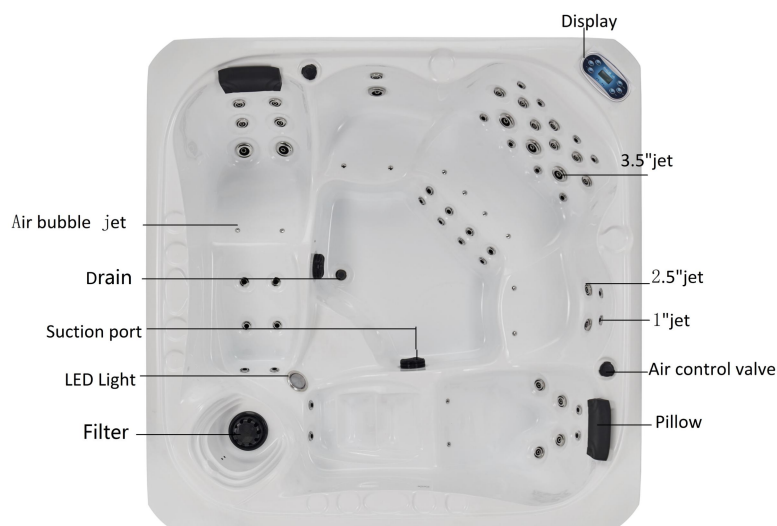
The SPA is erected sideways, packaged in carton and plywood and securely attached to a pallet. Use a trolley, forklift or similar tool to transport your SPA to the desired location.



2. Technical Parameter and Specification

Voltage	380V 50Hz
Electrical connection	3-phase, 16A
Hydraulic Pressure	0.1~0.2Mpa
Power of water pump	1500W*2pcs
Filter pump	350W*1pc
Power of heater	3000W *1pc
Power of air pump	300W*1pc
Colorful light	12V,100mA
Total Power	6650W

2.1. Structure of the SPA



Size	2350*2350*900mm	Pillow	2pcs
Shell	Aristech Acrylic (White)	Number of Seats	5
PS Skirt	Grey	3.5"jet	6pcs
Filter	1pc	2.5"jet	18pcs
LED Light	1pc	1"jet	32pcs
Ozone	1pc	Air bubble jet	12pcs
Air control valve	2pcs	Maximum water capacity	1000L
Suction port	2pcs		

Note

Air control valve

An air control valve will give you greater control over the power of the massage from your jets. The valve allows you to adjust the amount of air mixing with the pressurized water in the jets. You can decide whether you want a light tissue massage or a more forceful targeted hydrotherapy massage. Rotate the air valve handle clockwise to decrease air injection, rotate counterclockwise to increase air injection.

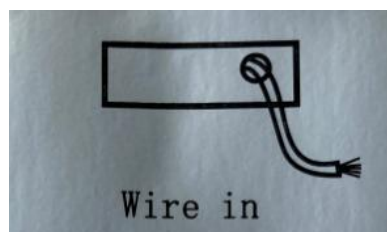
3. Wiring Instruction

The SPA has been assembled before delivery, you only need to connect it to the power supply to use it.

There are two ways of connecting the wires for Balboa system: 220V one-phase and 380V three-phase. For a better user experience, Pooli has chosen the 380V three-phase. There are 5 wires that need to be connected: 3 fire wires, 1 neutral wire and 1 ground wire.

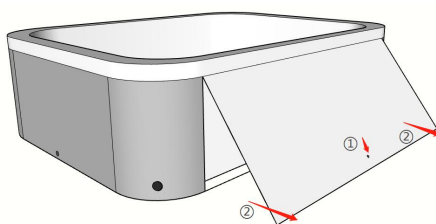
3.1. Find the Electrical Box and the Inlet

The electric box is located inside the removable skirt board. You will find the following stickers on the board.



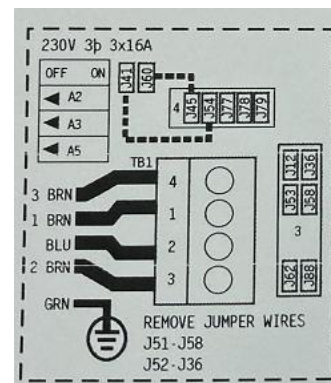
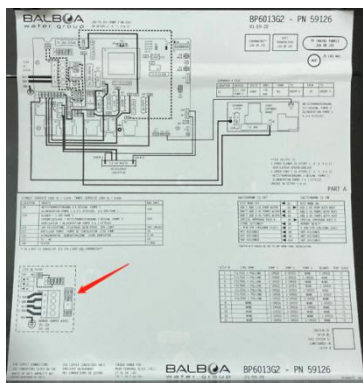
To open the skirt board, you need a pliers and a screwdriver.

- 1) Remove the gray screw cap at the bottom of the skirt board (use pliers if it's tight) , remove the screw with a screwdriver.
- 2) Hold the bottom of the skirt board with both hands and pull it out. (Note: The weight of the skirt is about 5KG)

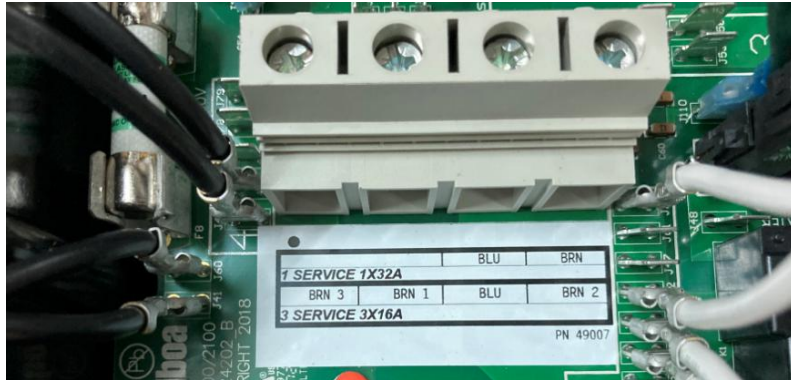


3.2. Connect to your power supply

- 1) Open the electric box, you will see a detailed circuit diagram attached to the back of the cover. Please refer to the small picture in the bottom left corner (230V 3P 3*16A) to connect to 380V. As shown in the picture below:



2) Find the sticker below in the corner of the electrical box where it connects to your household wires. Follow the instructions of "**3 SERVICE 3X16A**".



There are 5 wires that need to be connected (3 fire wires, 1 neutral wire and 1 ground wire). The first interface is connected to the fire wire (BRN 3), the second interface is connected to the fire wire (BRN 1), the third interface is connected to the neutral wire (BLU), and the fourth interface is connected to the fire wire (BRN 2). The ground wire needs to be connected to the second interface outside. Please refer to the actual sticker if the sticker is different from this manual.

3) When the wiring is completed, it should be as same as the picture below:



Important! A leakage protection switch with a current not less than 20A and a leakage current no more than 30MA should be installed in current front-end.

2. Fill the SPA with water

2.1. Preparation

- (1) Ensure that the spa is powered off.
- (2) Double check the drain valve is closed in case of water leaking from the SPA. The drain valve is located at the corner of the SPA cabinet. See 6.1 (page 31) for details.
- (3) Take out the filter core to enable filling of the spa through the filter itself (See 4.3 How to open/remove/change the filter?).

4.2 Fill your SPA within the standard level

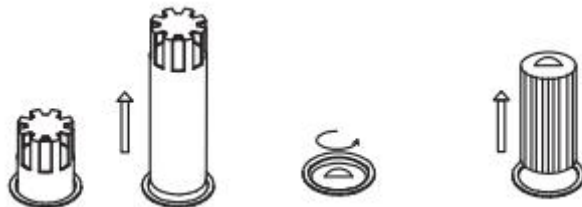
*Please refer to the water level marker on your tub (as picture below) and make sure the water is filled up within the standard range.



*Start all the pumps to test the system. See section 5. for the system instruction.

*Put the filter core back to the filter box. Please remove the protective film before use.

4.3 Additional Instruction: How to open/remove/change the filter?



- 1) Pull out the cover
- 2) Untighten the filter core by rotating it counterclockwise.
- 3) Remove the filter core from the box.
OR
Put the new filter core into the box and tighten it by rotating.
- 4) Put the cover back in place.

TP600 Control Panels

User Interface and Programming Reference – Standard Menus

System Model: BP-Series Systems BP6013G2
 Software Version: 7.0 and later
 Panel Model: TP600 Series
 Software Version: 2.3 or later



7

Fill it up!

Preparation and Filling

Fill the spa to its correct operating level.

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*

This mode will last for 4-5 minutes or you can manually exit the priming mode after the pump(s) have primed.



Regardless of whether the priming mode ends automatically or you manually exit the priming mode, the system will automatically return to normal heating and filtering at the end of the priming mode. 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 pushing the “Jet” buttons. If the spa has a Circ Pump, it can be activated by pressing the “Light” button during Priming Mode.

Priming the Pumps

As soon as the above display appears on the panel, push the “Jets1” button once to start Pump 1 in low-speed. Also, push the “Jets2” to turn 2nd pump on. The pumps will now be running to facilitate priming. If the pumps have not primed after 2 minutes, and water is not flowing from the jets in the spa, do not allow the pumps to continue to run. Turn off the pumps and repeat the process.

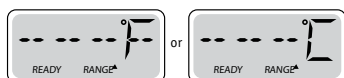
Note: Turning the power off and back on again will initiate a new pump priming session. Sometimes momentarily turning the pump off and on will help it to prime. Do not do this more than 5 times. If the pump(s) will not prime, shut off the power to the spa and call for service.

Important: A pump should not be allowed to run without priming for more than 2 minutes. Under NO circumstances should a pump be allowed to run without priming beyond the end of the 4-5 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

You can manually exit Priming Mode by pressing a “Temp” button (Up or Down). Note that if you do not manually exit the priming mode as described above, the priming mode will be automatically terminated after 4-5 minutes. Be sure that the pump(s) have been primed by this time.

Once the system has exited Priming Mode, the top-side panel will momentarily display the set temperature but the display will not show the temperature yet, as shown below. This is because the system requires approximately 1 minute of water



flowing through the heater to determine the water temperature and display it.

Spa Behavior

Circulation Pump Modes

If the system is equipped with a circulation pump, it will be configured to work in one of three different ways:

A programmable circulation pump will come on when the system is checking temperature (polling), during filter cycles, during freeze conditions, or when another pump is on.

The specific Circulation Mode that is used has been determined by the Manufacturer and cannot be changed in the field.

Filtration and Ozone

On circulation systems, the ozone will run with the circulation pump.

The system is factory-programmed with one filter cycle that will run in the evening (assuming the time-of-day is properly set) when energy rates are often lower. The filter time and duration are programmable.

A second filter cycle can be enabled as needed.

At the start of each filter cycle, the blower or Pump 2 will run briefly to purge its plumbing to maintain good water quality.

Freeze Protection

If the temperature sensors within the heater detect a low enough temperature, then the pump(s) and the blower automatically activate to provide freeze protection. The pump(s) and blower will run either continuously or periodically depending on conditions.

Temperature and Temp Range

Adjusting the Set Temperature

When using a panel with Up and Down buttons (Temperature buttons), pressing Up or Down will cause the temperature to flash. Pressing a temperature button again will adjust the set temperature in the direction indicated on the button. When the LCD stops flashing, the spa will heat to the new set temperature when required.

Press-and-Hold

If a Temperature button is pressed and held when the temperature is flashing, the temperature will continue to change until the button is released.

Dual Temperature Ranges

This system incorporates two temperature range settings with independent set temperatures. The High Range designated in the display by an “up” arrow, and the Low Range designated in the display by a “down” arrow.

These ranges can be used for various reasons, with a common use being a “ready to use” setting vs. a “vacation” setting. The Ranges are chosen using the menu structure below. Each range maintains its own set temperature as programmed by the user. This way, when a range is chosen, the spa will heat to the set temperature associated with that range.

For example:

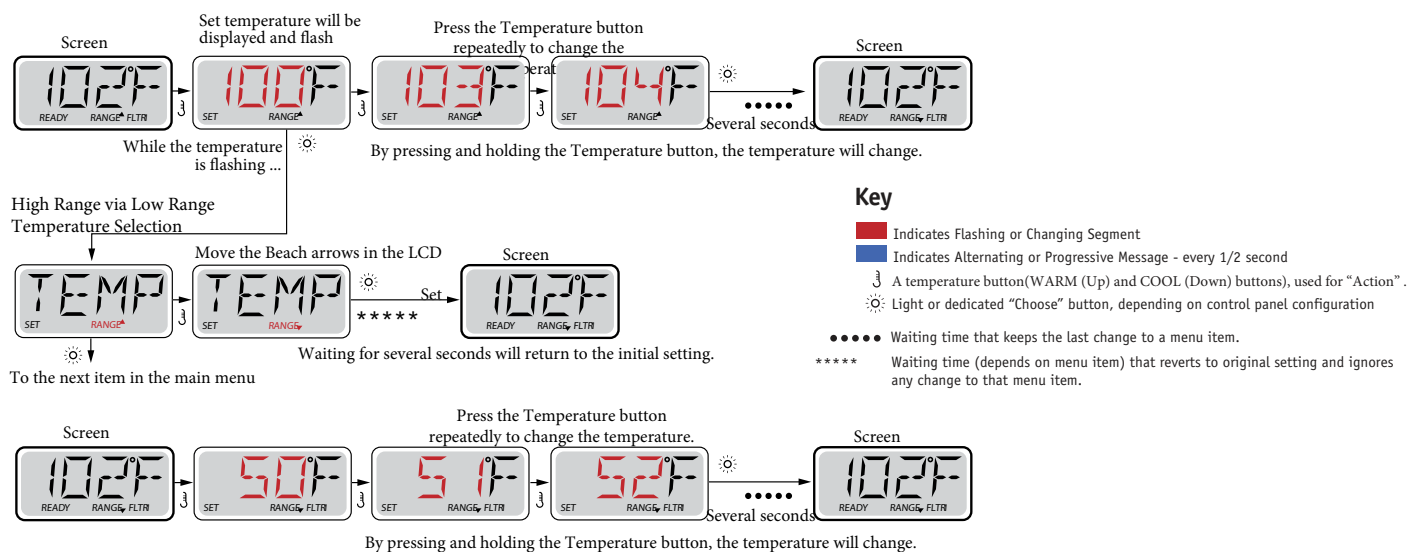
High Range might be set between 80°F and 104°F.

Low Range might be set between 50°F and 99°F.

More specific Temp Ranges may be determined by the Manufacturer.

Freeze Protection is active in either range.

*See Ready and Rest on Page 6
for additional heating control information.*



Mode – Ready and Rest

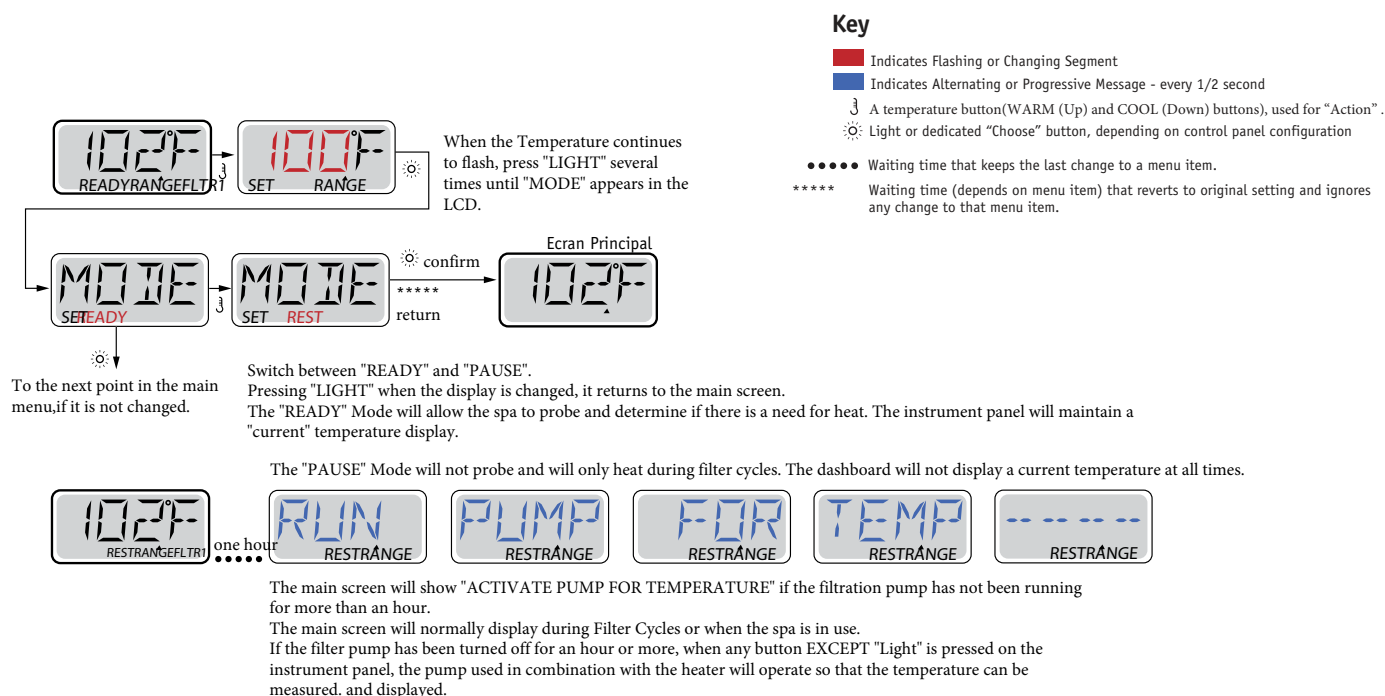
In order for the spa to heat, a pump needs to circulate water through the heater. The pump that performs this function is known as the “heater pump.”

The heater pump can be either a 2-Speed Pump 1 or a circulation pump(This spa uses a circulating pump).

REST Mode will only allow heating during programmed filter cycles. Since polling does not occur, the temperature display may not show a current temperature until the heater pump has been running for a minute or two.

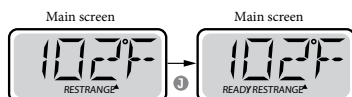
Circulation Mode

In Rest Mode, the spa will only heat to set temperature during programmed filter times, even though the water is being filtered constantly when in Circulation Mode.



Ready-in-Rest Mode

READY/REST appears in the display if the spa is in Rest Mode and Jet 1 is pressed. It is assumed that the spa is being used and will heat to set temperature. While Pump 1 High can be turned on and off, Pump 1 Low will run until set temperature is reached, or 1 hour has passed. After 1 hour, the System will revert to Rest Mode. This mode can also be reset by entering the Mode Menu and changing the Mode.



Restricting Operation

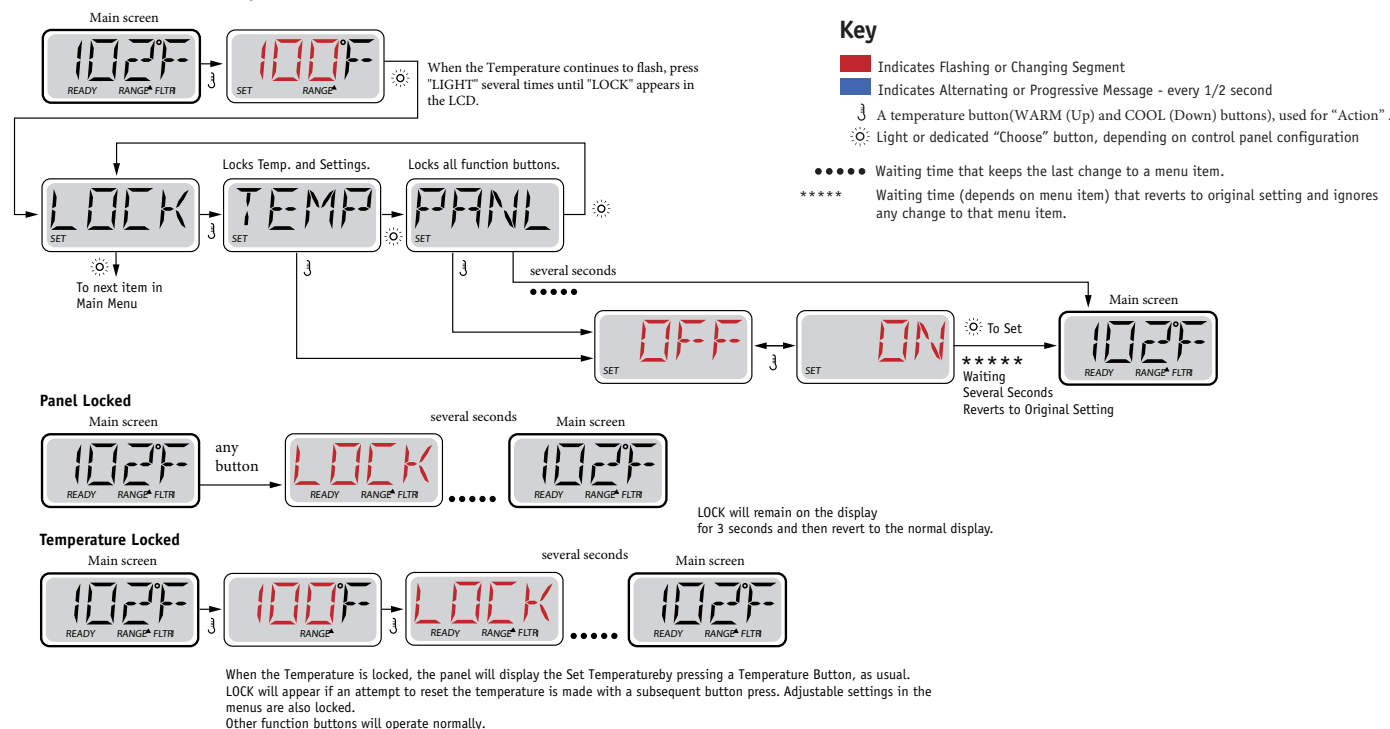
The control can be restricted to prevent unwanted use or temperature adjustments.

Locking the panel prevents the controller from being used, but all automatic functions are still active.

Locking the Temperature allows Jets and other features to be used, but the Set Temperature and other programmed settings cannot be adjusted.

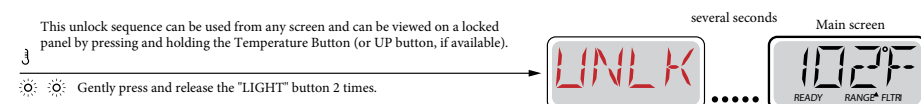
Temperature Lock allows access to a reduced selection of menu items.

These include Set Temperature, FLIP, LOCK, UTIL, INFO and FALT LOG.



Unlocking

This Unlock sequence may be used from any screen that may be displayed on a restricted panel.



While press and hold "UP" button, press the "LIGHT" button 2 times.

Hold (Standby)

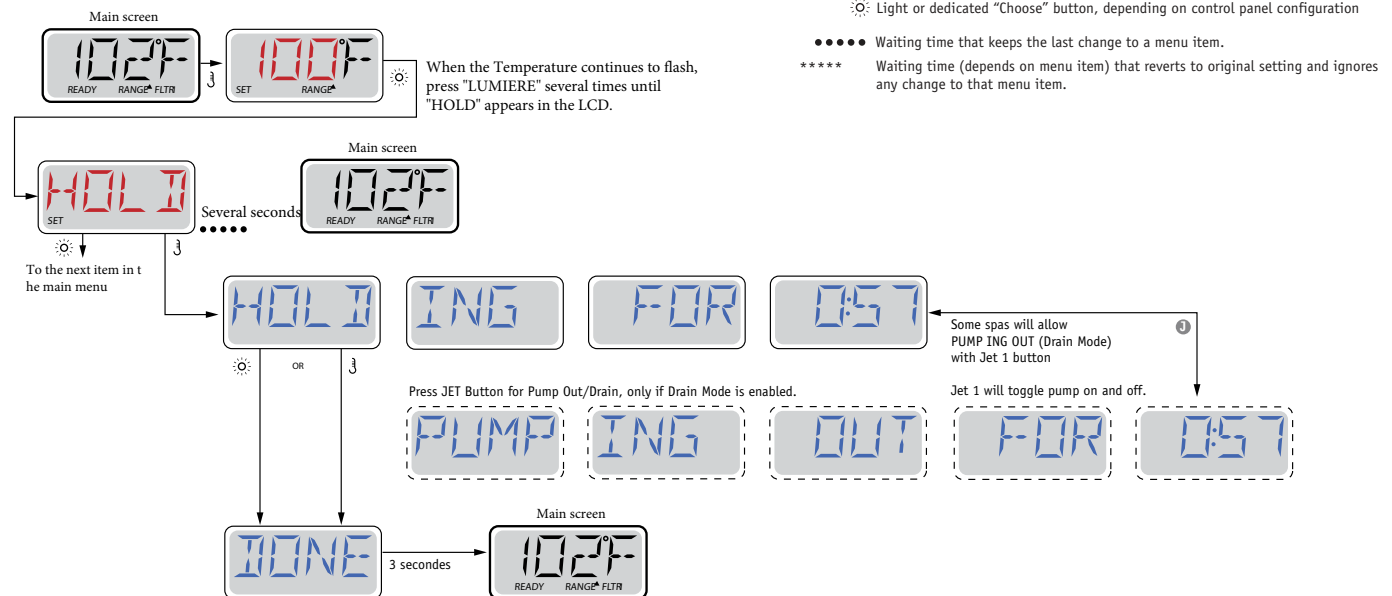
Hold Mode – M037*

Hold Mode is used to disable the pumps during service functions like cleaning or replacing the filter. Hold Mode will last for 1 hour unless the mode is exited manually.

Drain Mode

Some spas have a special feature that allows a pump to be employed when draining the water.

When available, this feature is a component of Hold Mode.



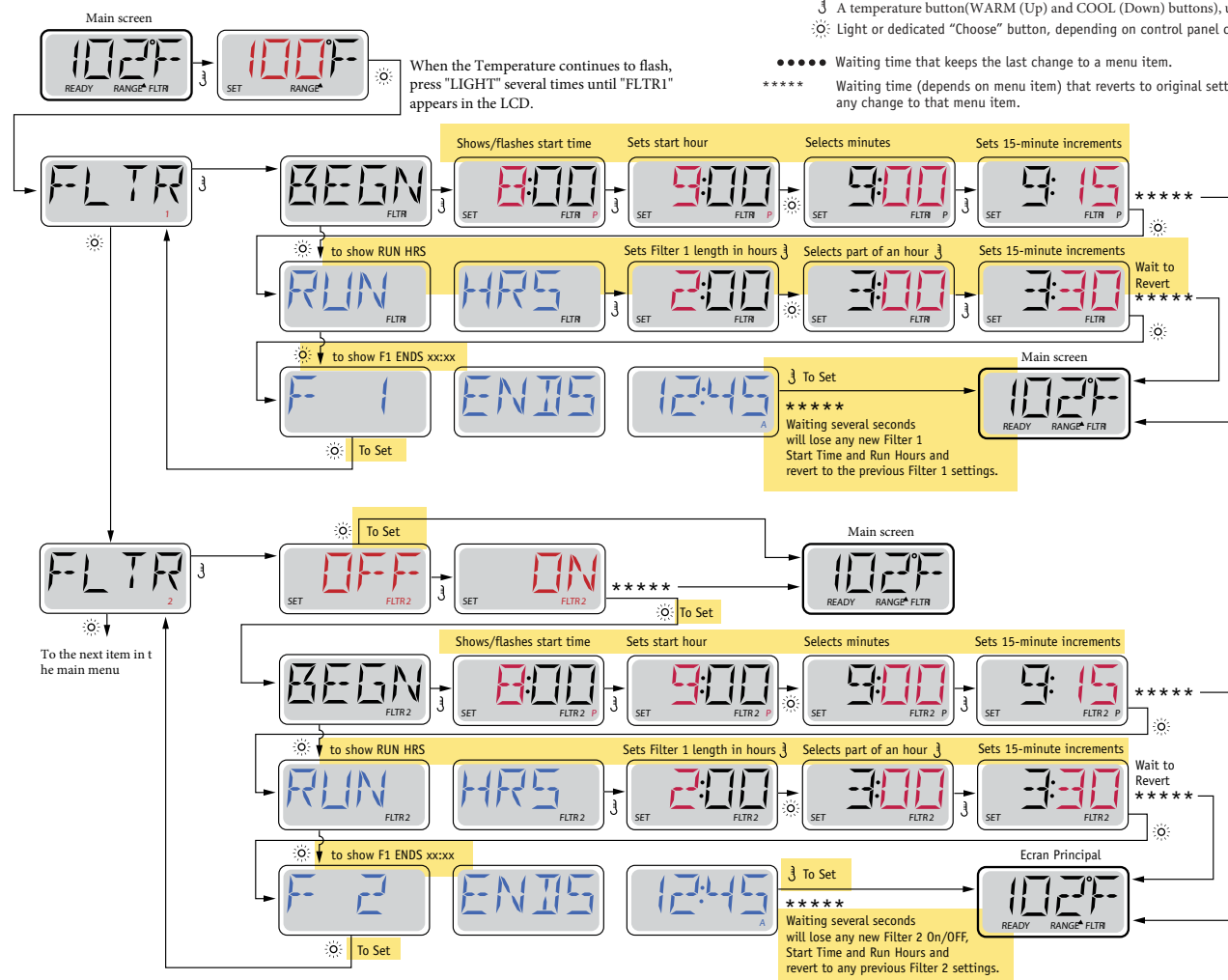
Adjusting Filtration

Main Filtration

Filter cycles are set using a start time and a duration. Start time is indicated by an "A" or "P" in the bottom right corner of the display. Duration has no "A" or "P" indication. Each setting can be adjusted in 15-minute increments. The panel calculates the end time and displays it automatically.

Key

- Indicates Flashing or Changing Segment
- Indicates Alternating or Progressive Message - every 1/2 second
- ⏏ A temperature button(WARM (Up) and COOL (Down) buttons), used for "Action".
- ☀ Light or dedicated "Choose" button, depending on control panel configuration
- Waiting time that keeps the last change to a menu item.
- ***** Waiting time (depends on menu item) that reverts to original setting and ignores any change to that menu item.



Filter Cycle 2 - Optional Filtration

Filter Cycle 2 is OFF by default.

It is possible to overlap Filter Cycle 1 and Filter Cycle 2, which will shorten overall filtration by the overlap amount.

Purge Cycles

In order to maintain sanitary conditions, secondary Pumps and/or a Blower will purge water from their respective plumbing by running briefly at the beginning of each filter cycle.

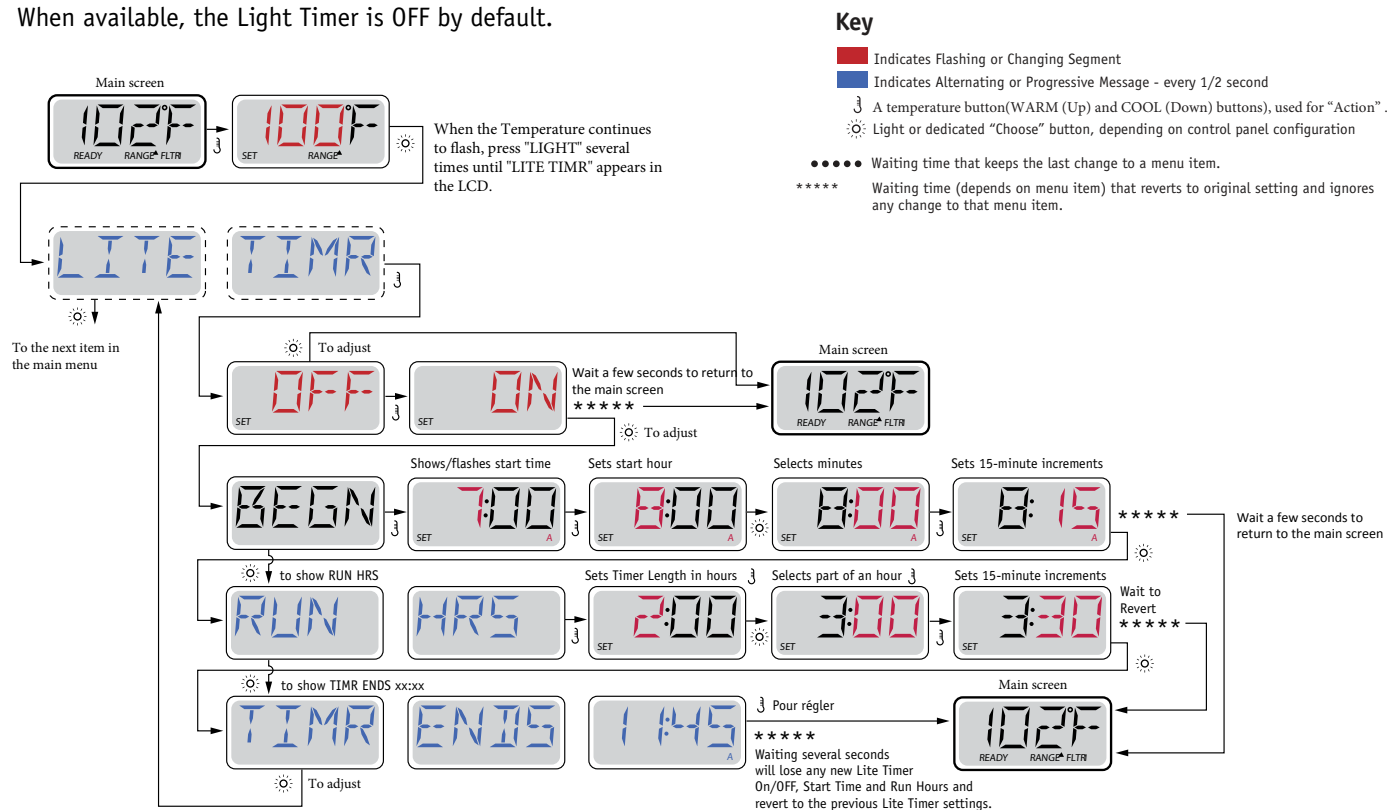
If Filter Cycle 1 is set for 24 hours, enabling Filter Cycle 2 will initiate a purge when Filter Cycle 2 is programmed to begin.

Light Timer Programming

Light Timer Option

If LITE TIMR does not appear in the Main Menu, the Light Timer feature is not enabled by the manufacturer.

When available, the Light Timer is OFF by default.



Preferences

F / C (Temp Display)

Change the temperature between Fahrenheit and Celsius.

12 / 24 (Time Display)

Change the clock between 12 hr and 24 hr display.

RE-MIN-DERS (Reminders)

Turn the reminder messages (like "Clean Filter") On or Off.

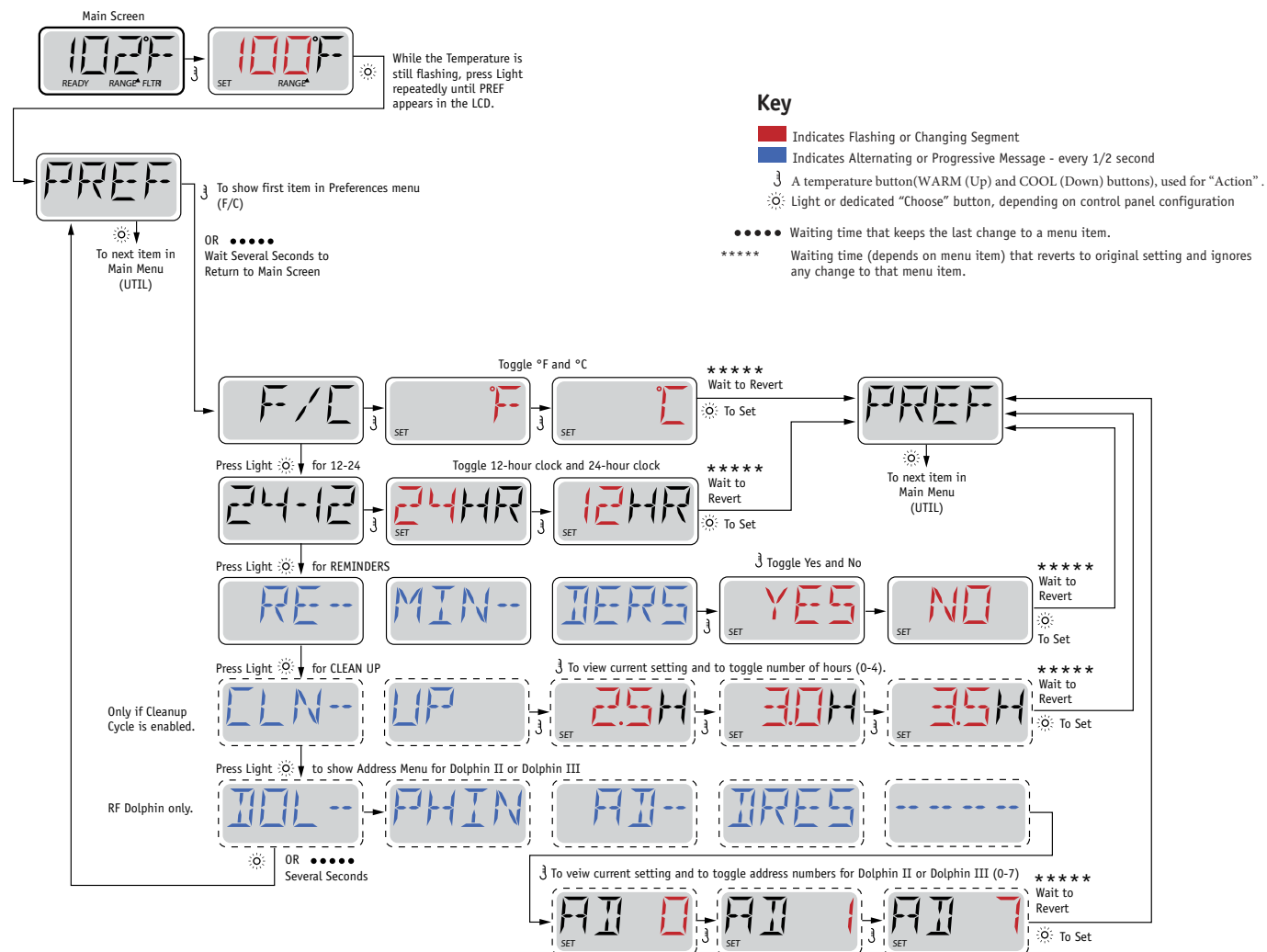
CLN-UP (Cleanup)

Cleanup Cycle Duration is not always enabled, so it may not appear. When it is available, set the length of time Pump 1 will run after each use. 0-4 hours are available.

DOL-PHIN AD-DRES (Dolphin II and Dolphin III) Applies to RF Dolphin only. (This message may not appear depending on the configuration)

When set to 0, no addressing is used. Use this setting for a Dolphin Remote which is factory set for no address by default. When set between 1 and 7, the number is the address. (See the Dolphin manual for details.)

Preferences



Utilities and Information

INFO (System Information sub-menu)

The System Information Menu displays various settings and identification of the particular system. As each item in the menu is highlighted, the detail for that item is displayed at the bottom of the screen.

SSID (Software ID)

Displays the software ID number for the System.

MODL (System Model)

Displays the Model Number of the System.

SETP (Current Setup)

Displays the currently selected Configuration Setup Number.

SIG (Configuration Signature)

Displays the checksum for the system configuration file.

Heater Voltage (Feature not used on CE rated systems.)

Displays the operating voltage configured for the heater.

Heater Wattage as Configured in Software (CE Systems Only.)

Displays a heater kilowatt rating as programmed into the control system software (1-3 or 3-6).

H _ (Heater Type)

Displays a heater type ID number.

SW _ (Dip Switch Settings)

Displays a number that represents the DIP switch positions of S1 on the main circuit board.

PANL (Panel Version)

Displays a number of the software in the topside control panel.

Additional Utilities

Utilities

In addition to INFO, The Utilities Menu contains the following:

GFCI (GFCI Test) **(Feature not available on CE rated systems.)**

GFCI Test is not always enabled, so it may not appear. This screen allows the GFCI to be tested manually from the panel and can be used to reset the automatic test feature. If the GFCI Test Feature is reset, the device will trip within 7 days. (See Page 17)

A / B (A/B Sensor Temperatures)

When this is set to On, the temperature display will alternate to display temperature from Sensor A and Sensor B in the heater.

FALT LOG (Fault Log)

The Fault Log is a record of the last 24 faults that can be reviewed by a service tech.

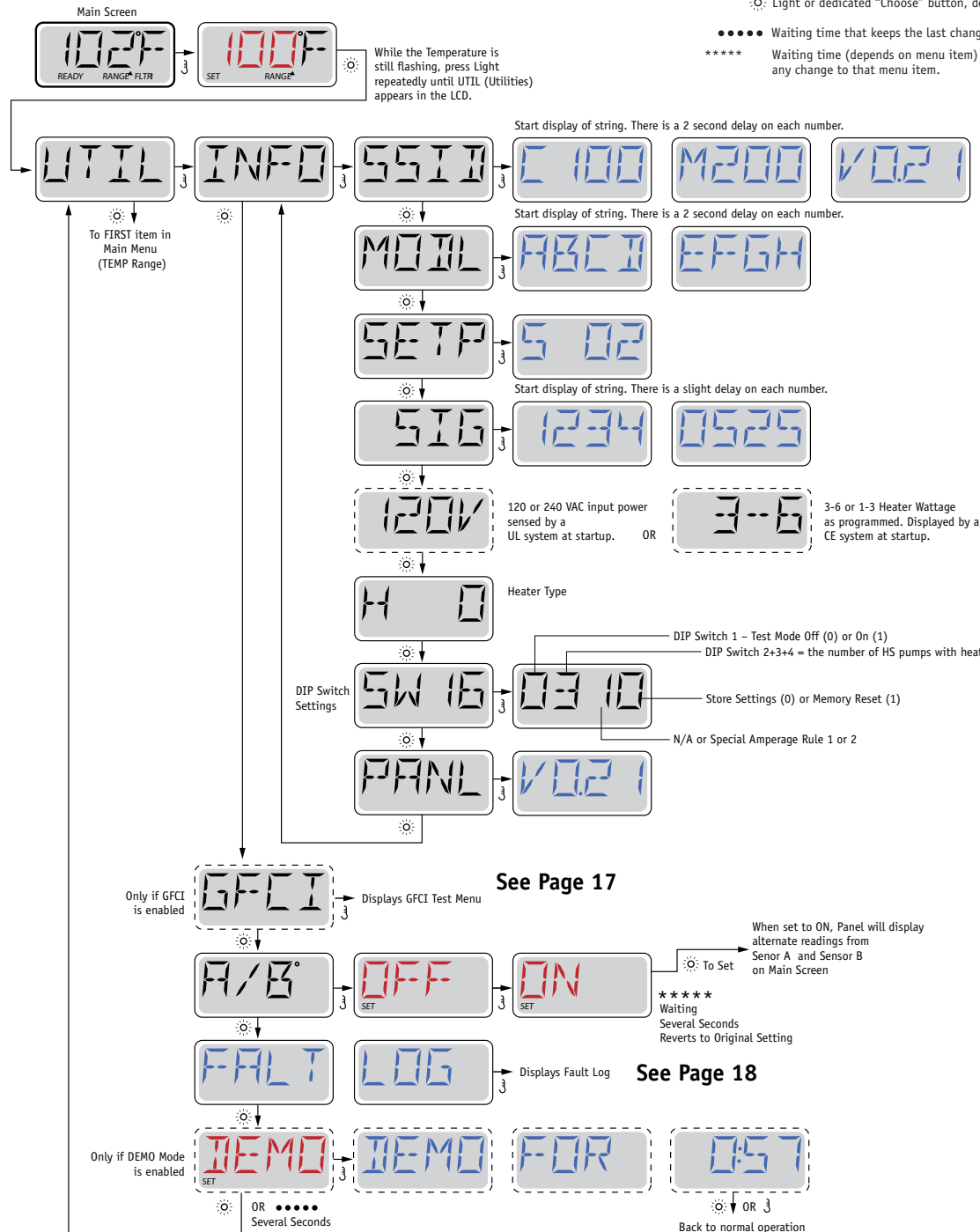
DEMO (Demo Mode)

Demo Mode is not always enabled, so it may not appear. This is designed to operate several devices in a sequence in order to demonstrate the various features of a particular hot tub.

Utilities

Key

- Indicates Flashing or Changing Segment
- Indicates Alternating or Progressive Message - every 1/2 second
- 3 A temperature button(WARM (Up) and COOL (Down) buttons), used for "Action".
- ☼ Light or dedicated "Choose" button, depending on control panel configuration
- Waiting time that keeps the last change to a menu item.
- ***** Waiting time (depends on menu item) that reverts to original setting and ignores any change to that menu item.



See Page 17

See Page 18

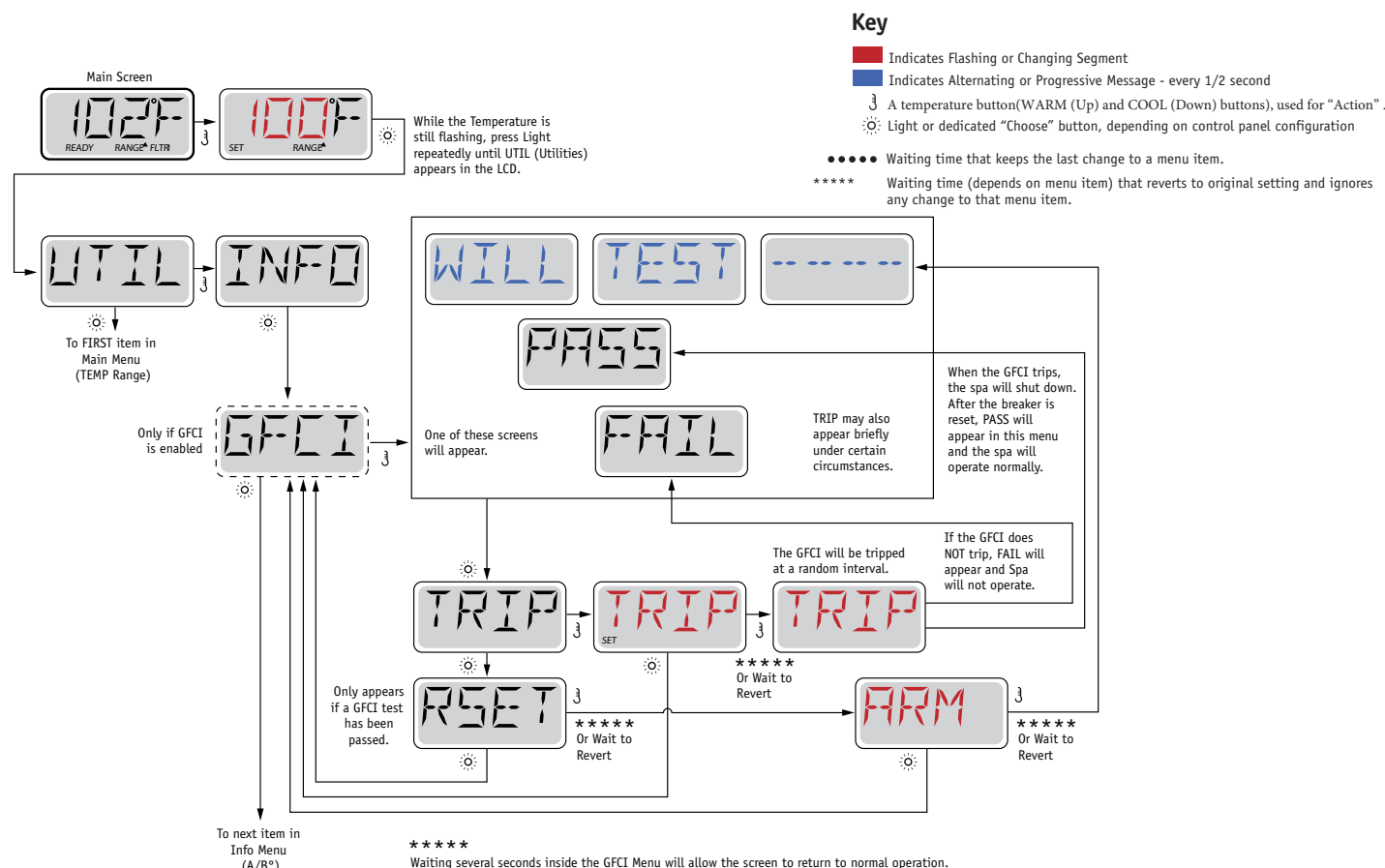
Utilities – GFCI Test Feature

Not Available on CE Rated Systems.

A GFCI is an important safety device and is required equipment on a hot tub installation.

Your spa may be equipped with a GFCI Protection feature. (UL rated systems only.) If your spa has this feature enabled by the manufacturer, the GFCI Trip Test must occur to allow proper spa function.

Within 1 to 7 days after startup, the spa will trip the GFCI to test it. (The number of days is factory programmed.) The GFCI must be reset once it has tripped. After passing the GFCI Trip Test, any subsequent GFCI trips will indicate a ground fault or other unsafe condition and the power to the spa must be shut off until a service person can correct the problem.



Forcing the GFCI Trip Test

The installer can cause the GFCI Trip Test to occur sooner by initiating it using the above menu.

The GFCI should trip within several seconds and the spa should shut down. If it does not, shut down the power and manually verify that a GFCI breaker is installed and that the circuit and spa are wired correctly. Verify the function of the GFCI with its own test button. Restore power to the spa and repeat the GFCI Trip Test.

Once the GFCI is tripped by the test, reset the GFCI and the spa will operate normally from that point. You can verify a successful test by navigating to the above menu. PASS should appear after a temp button is pressed from the GFCI screen.

The end-user must be trained to expect this one-time test to occur and how to properly reset the GFCI.

Warning:

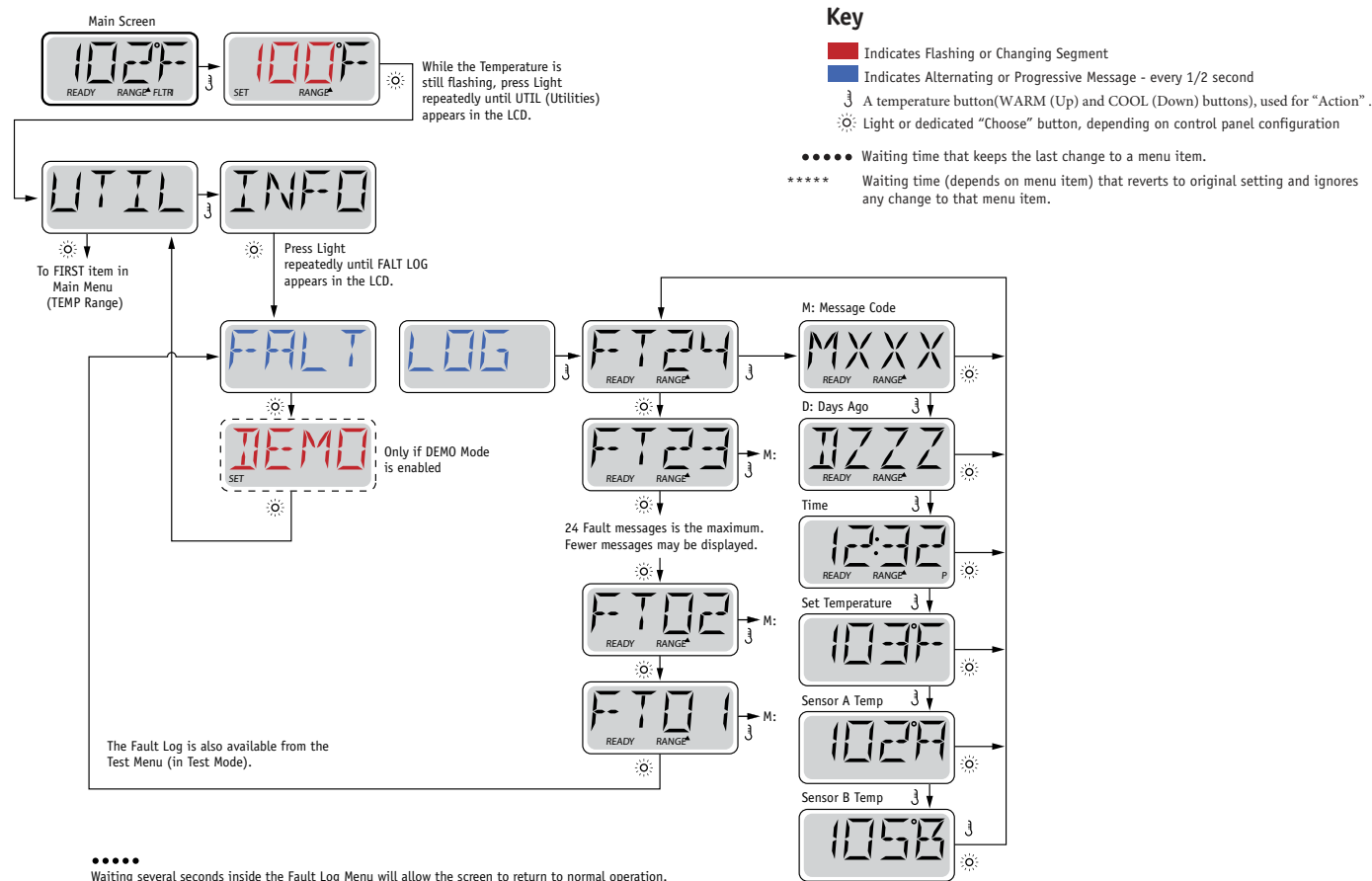
If freezing conditions exist, a GFCI should be reset immediately or spa damage could result. The end user should always be trained to test and reset the GFCI on a regular basis.

Utilities – Fault Log

A Little History can tell a lot

The Fault Log stores up to 24 events in memory and they can be reviewed under the Fault Log Menu.

Each event captures a Fault Message Code, how many days have passed since the fault, Time of the fault, Set Temperature during the fault, and Sensor A and B temperatures during the fault.



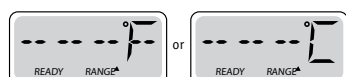
General Messages



Priming Mode – M019

Each time the spa is powered up, it will enter Priming Mode. The purpose of Priming Mode is to allow the user to run each pump and manually verify that the pumps are primed (air is purged) and water is flowing. This typically requires observing the output of each pump separately, and is generally not possible in normal operation. Priming Mode lasts 4 minutes, but you can exit it earlier by pressing any Temp button. The heater is not allowed to run during Priming Mode.

NOTE: If your spa has a Circ Pump, it will turn on with Jets 1 in Priming Mode. The Circ Pump will run by itself when Priming Mode is exited.



Water Temperature is Unknown

After the pump has been running for 1 minute, the temperature will be displayed.



Too Cold - Freeze Protection

A potential freeze condition has been detected, or the Aux Freeze Switch has closed, and all pumps and blower are activated. All pumps and blower are ON for at least 4 minutes after the potential freeze condition has ended, or when the aux freeze switch opens.

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.



Water is too Hot (OHS) – M029

One of the water temp sensors has detected spa water temp 110°F (43.3°C) and spa functions are disabled. System will auto reset when the spa water temp is below 108°F (42.2°C). Check for extended pump operation or high ambient temp.



Safety Trip - Pump Suction Blockage* – M033

The Safety Trip error message indicates that the vacuum switch has closed. This occurs when there has been a suction problem or a possible entrapment situation avoided. (Note: not all spas have this feature.)

M0XX numbers are Message Codes. See Page 15.

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

Heater-Related Messages



Heater Flow is Reduced (HFL) – 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 min. See “Flow Related Checks” below.



Heater Flow is Reduced (LF)* – 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. See “Flow Related Checks” below. After the problem has been resolved, you must press any button to reset and begin heater start up.



Heater may be Dry (dr)* – M028

Possible dry heater, or not enough water in the heater to start it. The spa is shut down for 15 min. Press any button to reset the heater start-up. See “Flow Related Checks” below.



Heater is Dry* – 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 press any button to reset and restart heater start up. See “Flow Related Checks” below.



Heater is too Hot (OHH)* – M030

One of the water temp sensors has detected 118°F (47.8°C) in the heater and the spa is shut down. You must press any button to reset when water is below 108°F (42.2°C). See “Flow Related Checks” below.



A Reset Message may Appear with other Messages.

Some errors may require power to be removed and restored.

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, some equipment may occasionally turn on to continue monitoring temperature or if freeze protection is needed.

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

Sensor-Related Messages



Sensor Balance is Poor – M015

The temperature sensors MAY be out of sync by 2°F or 3°F. Call for Service.



Sensor Balance is Poor* – M026

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 Failure – Sensor A: M031, Sensor B: M032

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

Miscellaneous Messages



No Communications

The control panel is not receiving communication from the System. Call for Service.



Pre-Production Software

The Control System is operating with test software. Call for Service.



°F or °C is replaced by °T

The Control System is in Test Mode. Call for Service.

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

System-Related Messages



Memory Failure - Checksum Error* – 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.



Memory Warning - Persistent Memory Reset* – M021

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 Failure - Clock Error* – M020 - Not Applicable on the BP1500

Contact your dealer or service organization.



Configuration Error – Spa will not Start Up

Contact your dealer or service organization.



GFCI Failure - System Could Not Test/Trip the GFCI – M036

NORTH AMERICA ONLY. May indicate an unsafe installation. Contact your dealer or service organization.



A Pump Appears to be Stuck ON – M034

Water may be overheated. POWER DOWN THE SPA. DO NOT ENTER THE WATER. Contact your dealer or service organization.



A Pump Appears to have been Stuck ON when spa was last powered – M035

POWER DOWN THE SPA. DO NOT ENTER THE WATER.
Contact your dealer or service organization.

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

Reminder Messages

General maintenance helps.

Reminder Messages can be suppressed by using the PREF Menu. See Page 11.

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.

Press a Temperature button to reset a displayed reminder message.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 7 days.

Check pH with a test kit and adjust pH with the appropriate chemicals.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 7 days.

Check sanitizer level and other water chemistry with a test kit and adjust with the appropriate chemicals.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 30 days.

Clean the filter media as instructed by the manufacturer. See HOLD on page 6.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 30 days.

The Ground Fault Circuit Interrupter (GFCI) or Residual Current Device (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.

Warning:

If freezing conditions exist, a GFCI or RCD should be reset immediately or spa damage could result. The end user should always be trained to test and reset the GFCI or RCD on a regular basis.

Reminder Messages Continued

CHNG

WATR

Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 90 days.

Change the water in the spa on regular basis to maintain proper chemical balance and sanitary conditions.

CLN

COVR

Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 180 days.

Vinyl covers should be cleaned and conditioned for maximum life.

TRT

WOOD

Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 180 days.

Wood skirting and furniture should be cleaned and conditioned per the manufacturers instructions for maximum life.

CHNG

FLTR

Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 365 days.

Filters should be replaced occasionally to maintain proper spa function and sanitary conditions.

CHNG

CART

Alternates with temperature or normal display.

As needed.

Install new mineral cartridge

Warning! Qualified Technician Required for Service and Installation

Basic Installation and Configuration Guidelines

Use minimum 6AWG copper conductors only.

Torque field connections between 21 and 23 in lbs.

Readily accessible disconnecting means to be provided at time of installation.

Permanently connected.

Connect only to a circuit protected by a Class A Ground Fault Circuit Interrupter (GFCI) or Residual Current Device (RCD) mounted at least 5' (1.52M) from the inside walls of the spa/hot tub and in line of sight from the equipment compartment.

CSA enclosure: Type 2

Refer to Wiring Diagram inside the cover of the control enclosure.

Refer to Installation and Safety Instructions provided by the spa manufacturer.

Warning: People with infectious diseases should not use a spa or hot tub.

Warning: To avoid injury, exercise care when entering or exiting the spa or hot tub.

Warning: Do not use a spa or hot tub immediately following strenuous exercise

Warning: Prolonged immersion in a spa or hot tub may be injurious to your health

Warning: Maintain water chemistry in accordance with the Manufacturers instructions.

Warning: The equipment and controls shall be located not less than 1.5 meters horizontally from the spa or hot tub.

Warning! GFCI or RCD Protection.

The Owner should test and reset the GFCI or RCD on a regular basis to verify its function.

Warning! Shock Hazard! No User Serviceable Parts.

Do not attempt service of this control system. Contact your dealer or service organization for assistance. Follow all owner's manual power connection instructions. Installation must be performed by a licensed electrician and all grounding connections must be properly installed.

CSA Compliance/Conformité

Caution:

- Test the ground fault circuit interrupter or residual current device before each use of the spa.
- Read the instruction manual.
- Adequate drainage must be provided if the equipment is to be installed in a pit.
- For use only within an enclosure rated CSA Enclosure 3.
- Connect only to a circuit protected by a Class A ground fault circuit interrupter or residual current device.
- To ensure continued protection against shock hazard, use only identical replacement parts when servicing.
- Install a suitably rated suction guard to match the maximum flow rate marked.

Warning:

- Water temperature in excess of 38°C may be injurious to your health.
- Disconnect the electrical power before servicing.

Attention:

- Toujours vérifier l'efficacité du disjoncteur différentiel avant d'utiliser différentiel avant d'utiliser le bain.
- Lire la notice technique.
- Lorsque l'appareillage est installé dans une fosse, on doit assurer un drainage adéquat.
- Employer uniquement à l'intérieur d'une clôture CSA Enclosure 3.
- Connecter uniquement à un circuit protégé par un disjoncteur différentiel de Class A.
- Afin d'assurer une protection permanente contre le danger de choc électrique, lors de l'entretien employer seulement des pièces de rechange identiques.
- Les prises d'aspiration doivent être équipées de grilles convenant au débit maximal indiqué.

Avertissement:

- Des températures de l'eau supérieures à 38°C peuvent présenter un danger pour la santé.
- Déconnecter du circuit d'alimentation électrique avant l'entretien.

Warning/Avvertimento:

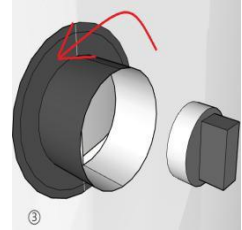
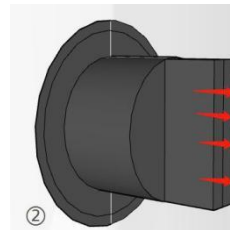
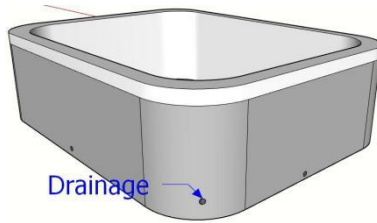
- Disconnect the electric power before servicing. Keep access door closed.
- Déconnecter du circuit d'alimentation électrique avant l'entretien. Garder la porte fermée.

6. Maintenance

6.1. How to drain the water from your SPA?

Please ensure the power is off before draining your SPA.

- (1) Locate the drain valve at the corner of your spa cabinet (marked as "drainage").
- (2) Pull the drain valve halfway out. When the pipe is pulled to its outermost position, the drain valve will be locked and cannot drain.
- (3) Remove the cap by turning it counterclockwise. The cap can be tight for the first time, you may need to use pliers.



- (4) The drain valve can be connected to a hose if you want to discharge water to other places.
- (5) Once the SPA is emptied, use a wet/dry vacuum cleaner to suck out the remaining water from the jet and the seat. Remember if the SPA has a bubble system, please turn on the power and turn on the air pump to drain the excess water. After about 10 seconds, user can turn off the power.
- (6) Finally, install the cover clockwise and return it to its position.

6.2. Water quality

The water in the SPA can be contaminated in many ways. Due to warm water and abundant food supplies, such as sweat, dander, skin cream and hair, bacteria can multiply explosively. Users can use some chemical additives to ensure good water quality. In addition, users need to check the pH of the water regularly. If the scale shows that the pH is 7, it is within the optimal range. Problems caused by water quality problems are not covered by the warranty.

- If the water is hard, use calcium stabilizers.
- Use disinfectants such as chlorine/bromine. You can balance the values by reviewing pH and alkalinity.

Weekly

- Add water appropriately.
- Check and adjust pH and alkalinity.
- Test the chlorine/bromine in the water.
- Add a scale stabilizer when the water is hard.
- Clean the filter paper core with water.

Every 3-4 months

- Clean the SPA. The swimming pool should be cleaned every quarter. Drain the water and clean the acrylic surface with a cleaner.

If the filter paper core is found to be damaged, please replace it in time.

7. Precautions of using the SPA outdoors

7.1 Environment of Using

1) Inlet water temperature: The inlet water temperature must be between 0°C and 40°C and ensure the water does not freeze in the product. The water would freeze and cannot flow if the temperature is lower than 0°C. If higher than 40°C, error codes would appear in the control system panel (because it is beyond the system's temperature detection range) and it will stop working.

2) All POOLI Spas are equipped with PU foam insulation around the tub, extra thermal insulation on the skirt/side wall and an insulated base plate of ABS at the bottom; plus the additional Spa cover for purchase, the lowest ambient temperature to use them outdoors would be around -20°C in winter. But this standard is limited to the following steps are strictly followed by end users.

7.2 Instructions and Requirements in Winter

Based on the above situations, to operate the spa correctly in winter, the user needs to follow steps and requirements below:

(1) The season of installing the product: best at the end of spring or early fall, it is recommended that be installed and electrified before the temperature gets to under 0°C.

(2) If user wants to use the product in Winter, please ensure there are enough water inside in the Spa and keep the power on, to avoid the water from freezing.

(3) If the user doesn't want to use it in Winter, the water in the spa should be drained away completely, then check and make sure there is no water left in the water pumps and the pipes; please twist off the inlet connector that is in the front of the water pump, keeping ventilation as long as possible to make the water evaporate (you can leave the cover off at the same time).

(4) If user needs to use and inlet the water into the spa in winter (or subzero temperature), please ensure that the water does not freeze before the spa is filled with water, and power it on as soon as possible to make sure normal using.

7.3 The Low Temperature Protection Function

For all Pooli models, the Low Temperature Protection Function is set in the operating system. As long as there is enough water and the power is on, when the temperature drops to a certain point, it would trigger the low temperature protection function of the system which will turn on the heater until the water is heated up to 10°C.

There are two modes in Balboa (BP series) system: "Keep standby" and "Rest". When the "Keep standby" mode is on, the heater starts to work whenever the actual temperature is lower than the setting temperature. However, under the "Rest" mode, the heater only starts working when the pump circulating cycle turns on. And the water can only be heated to about 10°C below the set temperature (for example the set temperature is 40°C, the water can only be heated up to around 30°C).

8. Troubleshooting Guide

Q: No power or the electricity leakage protection device is triggered.

- *Check if the electricity line is well connected.
- *Check the power supply, circuit and ground wire for leakage

Q: Bluetooth or radio does not work.

- *Check if the speakers is broken.
- *Check if the speaker cable is normal.
- *Check if the display is working properly.

Q: Water leaks from the pipes.

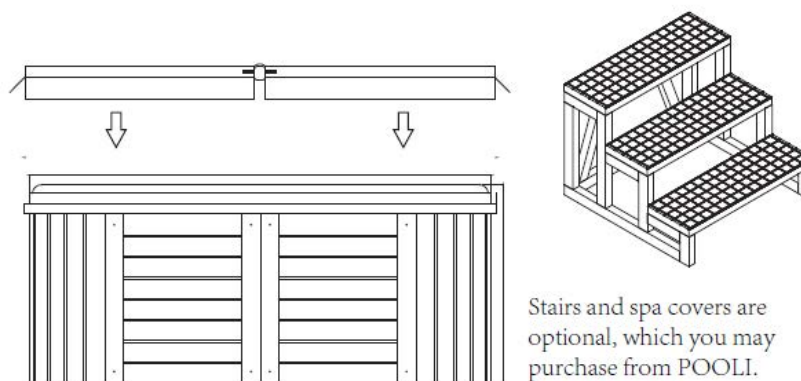
- * Replace the sealing ring if water leaks due to aging or damage of the sealing ring
- *Tighten the pipe joints if the pipe joints are loose.

Q:The temperature of the water cannot rise.

- *Put the cover on for quicker heating.
- *Check the heating time is set correctly and the heating temperature.
(It takes 40 minutes for 1000L of water to rise by 1 degree under ideal conditions)
- *If the weather temperature is too low, it may not be able to heat up, please pay attention to prevent the water from freezing.

Q: Jets are not working.

- *Check whether the system is turned on normally.
- *Check whether the water pump is working normally.
- *Check whether the jets are blocked.
- *Check whether the pipeline is blocked by objects.



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Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.



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