



## EMBRACE THE COLD

### Unlock your potential. Break through mental barriers. Feel invigorated.

A Chill Springs will change your outlook on life and allow you to break through your own boundaries and make you feel you can take on the world.

Cold water therapy is a recovery technique used by athletes and individuals looking to reduce muscle soreness and inflammation after physical activity. Some potential benefits of taking a Chill Springs include:

#### **Reducing muscle soreness**

Cold water immersion can help reduce muscle soreness by constricting blood vessels and reducing inflammation.

#### Improving recovery time

By reducing muscle soreness, the Chill Springs may also help athletes recover faster and be ready for their next workout or competition.

#### **Decreasing inflammation**

Cold water immersion may help reduce inflammation in the body, which can be beneficial for individuals with chronic inflammation or inflammatory conditions such as arthritis.

#### Improving circulation

Cold water immersion can stimulate blood flow and improve circulation, which may help with recovery and reduce the risk of injury.

It's important to note that the Chill Springs is not suitable for everyone and can be uncomfortable or even dangerous for some individuals. It's always best to consult with a healthcare professional before starting any new recovery routine.

WINNER.

# Start your cold journey with Chill Springs.

CHILL SPRINGS COLD PLUNGE WON THE MOST INNOVATVE PRODUCT FOR RETAIL AWARD!



# VOTED #1 MOST INNOVATIVE PRODUCT!



## CONTENTS

Quick Set Up Guide	04
The Purpose Of Your Chill Springs	05
Owners Responsibility	07
Health & Safety Warnings For The User	08
Technical Specifications	10
Position & Operation	12
Control Panel	14
Maintenance & Cleaning	19
The Insulated Cover	24
Troubleshooting & Error Messages	25
Fault Codes Table	26
Warranty And Repair	28
Disposing Of Your Product	30
Chill Springs Full Set Up Guide	31



## QUICK SET UP

# Before installing the Chill Springs, please ensure that there are no obstacles on the outside of the vents on the side of the chiller/fan.

If there are obstacles blocking the vents, it will cause the compressor to selfprotect and the Chill Springs water temperature cannot drop. Once your Chill Springs is in a position you are happy with please leave it laid flat for 24 hours for the refrigerant to settle in the compressor (Chill Springs are the same as a fridge or freezers and the gas needs to settle before use).

The Chill Springs can then be filled with water but it should not be turned on for 24 hours. We do recommend that you read the full manual though in particular the safety information before you use.



Simply place a garden hose into it. The tub will be completely filled in approximately 15-30 minutes, depending on water pressure



Plug in your tub to a 13 amp plug socket and set the desired temperature on the control panel



## THE PURPOSE OF YOUR CHILL TUB

The purpose of the Chill Springs is to allow people to experience cold water safely and efficiently in their own setting at home or in a commercial setting.

The Chill Tub is designed to go down to as low as 37 degrees, which is extremely cold and we advise you to read the safety instructions before getting in.

#### Who is it for?

The Chill Springs is designed for use by one person at a time and is suitable for adults only. If deliberate cold exposure is new to you please learn more about this first and make sure it is for you. We also advise you to read this manual fully before you take the plunge.

We recommend you start gradually with the temperature set at 40 degrees and shorter durations of up to a minute. This is to ensure you get used to it before you lower the temperature or increase your time.

Please note that children are not advised to use the Chill Springs.

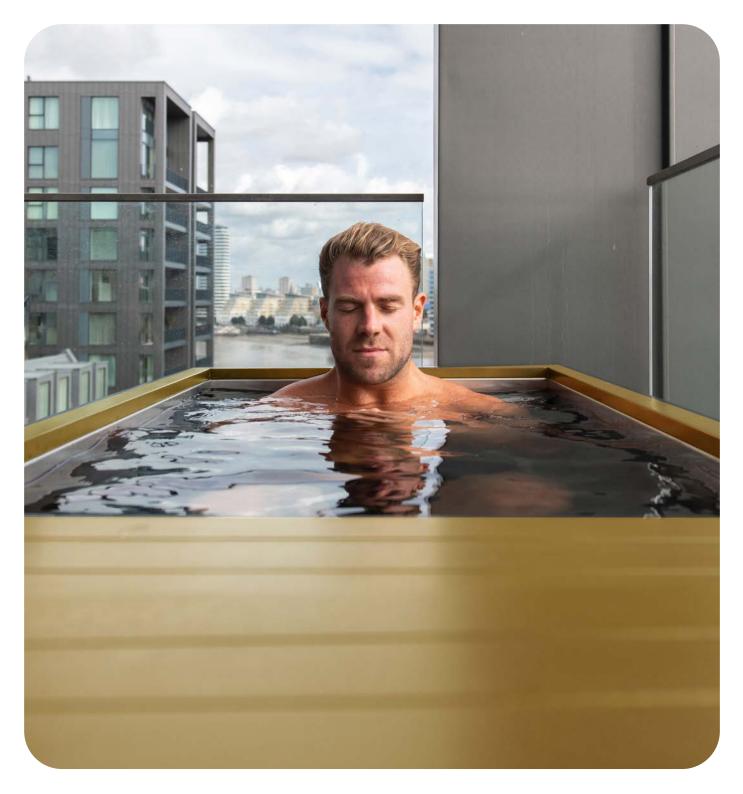
### TOP TIPS

**DO** build up slowly. Diving in at the deep end might not be the best idea could start off by gradually introducing your body to the cold water - feet, then legs, then torso and so on. Don't feel like you have to fully submerge on your first few attempts.

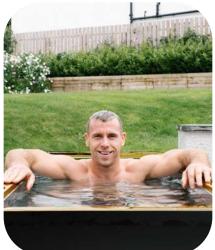
**DO** be mindful of your breathing. Learning to control your breath is a big part of being in cold water. How we breathe is often a very accurate indicator of how we are in our mind. So, if we're breathing fast and rapidly, then that means we're feeling quite frantic in our heads. If our breath is nice and slow and smooth and deep, we are maintaining an element of homoeostasis in our body, which keeps us calm.

**DO** take your experience into account when deciding what temperature to set your Chill Springs. For those who have never been exposed to any sort of cold water, you should start at around 10 degrees Celsius. If you regularly take cold showers, then you could start a little lower at 42 degrees.











## OWNERS RESPONSIBILITY

Chill Springs declines all liability for damages arising from failure to observe the following directions.

#### As the owner, it is your responsibility to:

- Ensure the safety of those using the Chill Springs and read and observe the health and safety warnings and safety recommendations as set out in this manual
- Maintain the materials of which the Chill Springs is made from by following the cleaning procedures in section 8 of this manual
- Use the Chill Springs according to the recommendations in this manual
- Only use our recommended engineers for service and repairs
- Ensure a safe electrical connection to the Chill Springs; which are 'class 1' appliances and must therefore be permanently connected, without intermediate junctions or extension cables, to the electrical network and to the protection circuit (earthing system) in your home
- Ensure that the cabling does not present a trip hazard
- Live electrical components and equipment (except those powered at a very low voltage not exceeding 12V) must be out of reach of individuals using the appliance.
- Parts containing electrical components must be positioned or fixed so that they cannot fall into the water
- There will likely be times when water spills out of the Chill Springs, especially when getting in or out and we recommend taking a commonsense approach and making sure there is good drainage for water on the floor around your Chill Springs and a non-slip surface to step on to

**CAUTION:** Before carrying out any maintenance operations, disconnect the appliance from the power supply.

**DO NOT** switch the power on to the Chill Springs until it is filled to the required level.

Running the pump dry, without water, could cause immediate damage and void your warranty.

Avoid flooding. We would advise that the level to which you fill your Chill Springs with water falls at least 20cm below the top to avoid flooding.

This level is something that will be different for everybody and we recommend that you become comfortable with what level of water works for you and observe what happens to the water levels when you get in - you can always then adjust accordingly.

Top-up the water periodically as it lowers due to users entering/exiting to keep the water level high enough.

Do use your insulated cover. It is advisable not to leave the Chill Springs uncovered when not in use since the temperature of the water will rise.

Damage arising by not following the guide or warnings are not covered by the warranty.

If you have any questions concerning the operation of your Chill Springs or the information in this manual, please do contact us.

## HEALTH & SAFETY WARNINGS FOR THE USER

#### Taking the plunge is a big step

Chill Springs declines all liability for damages arising for failure to observe the following directions.

**Health disclaimer:** If you're unsure about whether this is for you then please check with your doctor before using your Chill Springs.

Chill Springs are suitable for most people, most of the time, however we recommend to take a cautious approach and we would advise that people with reduced mobility, sensory, and/or cognitive abilities only use the Chill Springs if supervised and only if they have the knowledge necessary to use the equipment safely, as well as to understand the dangers arising from improper use.

Tolerance to cold water varies from person to person and we recommend being mindful of gradually building up the duration of use with the Chill Springs and be cautious when using it alone.

#### New to this?

It is quite dangerous to suddenly jump into cold water that's significantly cooler than what you're used to as it can cause a shock to the body. Therefore, enter the water slowly and keep your face shoulders and hands clear until your breathing is under control.

The cold-water shock response decreases with cold exposure experience and being mentally prepared.

#### A risk factor is hypothermia.

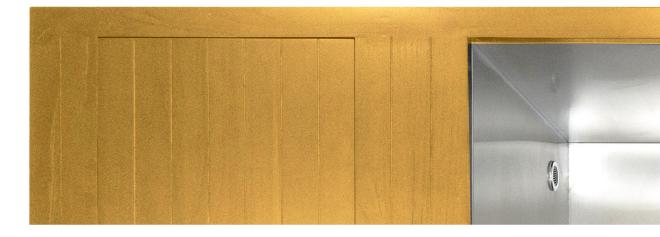
This occurs when you suffer a drop-in core body temperature and can eventually lead to loss of consciousness and heart failure. The amount of time you can spend in cold water without suffering from hypothermia is determined by the water temperature, your body size and shape, your level of cold adaptation and your experience, among other factors. Check with your doctor as relevant. Start with safe, short dips of 30 seconds to learn what your limits are. If you begin to feel uncomfortable or you start to shiver, listen to your body, get out and slowly warm up by walking around.

If you like, you can check the water temperature before entering the bath, to ensure that it is at temperature that is suitable for your experience in cold exposure. The temperature of the water is displayed as default on the control panel.

Children must be supervised near the Chill Springs to make sure they do not play with the equipment and do not carry out operations to be performed by adults (cleaning cycles/maintenance). Always attach the cover when not in use. Children are not advised to use the Chill Springs.

#### Please check with your doctor as relevant.

Pregnant women should talk to a doctor first, low temperatures are not advised. Anybody under medical care, such as people with heart conditions, diabetes, high or low blood pressure or other health problems must not use the Chill Springs without first consulting their doctor. People with infectious diseases should not use the Chill Springs without first consulting their doctor.



#### Do not use the Chill Springs after drinking alcohol or taking recreational drugs.

The use of alcohol or drugs can greatly increase the risk of fatal hypothermia when using the Chill Springs.

**Do not use your Chill Springs during extreme weather conditions** (during storms or floods etc). It is also recommended to place the Chill Springs in an area that will not attract standing water. Good drainage is essential so that the services compartment does not become submerged with water. If it does, switch the unit off and let everything dry out.

**Be very careful when getting in and out of the Chill Springs.** Surfaces may be slippery when wet.

In order to protect the pump from large pieces of debris - always do your best to keep the inlet (inside and right at the bottom of the unit) clean and clear.

**DO NOT** use other electrical appliances such as radios, hairdryers etc near the Chill Springs when it is not empty. It is important to maintain water cleanliness in accordance with Chill Spring's instructions by following the correct cleaning procedure, see section 8.

The Chill Springs has an automated cleaning cycle which runs constantly. During this time the pump, filter and Ozone cleaner run simultaneously. **DO NOT** use any unapproved chemicals or detergents unless you plan to rinse the Chill Springs thoroughly to remove any remnants of cleaning products before refilling with the water you will bathe in. Chemicals such as ammonia, combustible substances, bromine, fluorine are not advised on the Chill Springs as they may risk passing on to users.

**DO NOT** use a pressure washer to clean the Chill Springs as this may result in damage to the electrics and services compartment unit.

It is very important to keep the cover on when the Chill Springs is not in use - this is to prevent injury to children or animals and to also prevent water ingress to the services compartment when raining, if the user is placed outside.

Any repairs required must be made by a Chill Springs approved engineer. Chill Springs cannot accept liability for any damage arising from alterations or repair made by non-approved engineers.

It is the end user's responsibility to ensure the power supply used is on an RCD protected circuit.

For all operations and maintenance of the Chill Springs please refer to this manual and if in doubt please contact Chill Springs directly via email first – **info@chillsprings.com** 



# ICE TUB SPECIFICATIONS

**Power Supply** 15Amp 110V Water Capacity 106 Gallons **Dry Weight** 275lbs

**Chiller** 1.5hp **Draining** Hose Pipe connection

Materials 316 Stainless Steel, Aluminium, Teak

Antifreeze function Prevents the formation of ice or frost

**Ozone + Filtration** Built in ozone and filter system for clear water

**Cover Included** Insulated for reduced running costs

**Temperature** Settings as low as 37° degrees F







**Dimensions** 



## POSITION & OPERATION

Before installing the Chill Springs, please ensure that there are no obstacles on the outside of the vents on the side of the chiller/ fan. We recommend a 500mm space around the chiller for the best ventilation.

If there are obstacles blocking the vents, it will cause the compressor to self-protect and the Chill Springs water temperature cannot drop. Once your Chill Springs is in a position you are happy with please leave it laid flat for 24 hours for the refrigerant to settle in the compressor (Chill Springs are the same as a fridge or freezers and the gas needs to settle before use).

The Chill Springs can then be filled with water but it should not be turned on for 24 hours. We do recommend that you read the full manual though in particular the safety information before you use.

#### **Clearance and Circulation:**

#### **Clearance:**

Maintain a 20 in. clearance around the Chill Springs for optimal air circulation. Avoid placing the unit in enclosed spaces to ensure efficient heat dissipation this will also help prevent condensation.

#### **Circulation and Fan Operation**:

Ensure the unit is in a well-ventilated area.

#### **Power connection**

- 1. The Chill Springs must be plugged directly into an RCD protected circuit on a 13-amp socket or box.
- 2. Do not use an extension cable to run the Chill Springs, this can be a fire hazard.

#### To fill the Chill Springs for the first time

- Turn off the power to the Chill Springs before filling/draining and do not turn the power back on until the Chill Springs has been refilled.
- 2. Fill the Chill Tub to the desired level. It will take approximately 15-30 minutes to fill,

Depending on water pressure

- 3. Open the air bleed screw to exhaust air from the filter and pump housing. *See page 33 for more information*
- 4. Switch the power on only when it has been filled. The monitor will flash green, wait for 3-5 mins and it will enter the running state. The default temperature is 37 degrees.
- 5. Allow the Chill Springs to get down to the temperature as set on your controller. As the Chill Springs is affected by the environment please turn the machine on 6-12 hours in advance.

If the Chill Springs is set to 37 degrees, it will run the chiller until it reaches this temperature. Once the temperature then reaches 39 degrees it will turn the chiller on and cool to 37 degrees.

Where multiple users are using the Chill Springs frequently we recommend adding a **Pure & Simple** sanitizer. This is what we recommend as a proven, safe and powerful residual disinfection for Chill Springs. We do not recommend chlorine products or other salts.

#### To drain and refill the Chill Springs:

- 1. Turn off the power to the Chill Springs.
- 2. Drain the water using the hose pipe attachment to connect a hose pipe and then open the ball valve to let the water out.
- 3. Wipe out the inside of the Chill Springs with a clean cloth to clean any residual dirt or grime. DO NOT use any chemicals such as bathroom cleaner or stainless-steel cleaner - *see page 34 for details*.
- 4. When it is clean and rinsed, ensure the ball valve is closed. Re-fill using a hose pipe.
- 5. Switch the power back on to the Chill Springs and allow the water to get down to the temperature as set by on your controller.

### IMPORTANT

We recommend that you replace the water in the Chill Springs every 8-12 weeks depending on user levels and visible water quality. Frequency of water replacement depends on frequency of usage and care taken in maintaining water quality. It will become evident that the water needs changing when the water doesn't look clear. Drain and re-fill.

## CONTROL PANEL & SETTINGS

### **Chill Tub Original**



### Components



### **Key Definition and Operation**

#### () On/Off Key

- On the main interface, press this button to turn the Chill Springs on or off
- In the parameter interface and parameter setting interface, press this key to return to the main interface
- On the main interface, press and hold this button for 3 seconds to unlock or lock the screen.

#### (M) Function Keys

- On the main interface of the power on, press the Function button to switch between working modes.
- Cooling mode (regulates the set temperature only by cooling)
- Heating mode (regulates the set temperature only by heating)
- A Both (regulates the set temperature by heating and cooling)
- Set temperature. Once temperature has been selected and changed, the temperature will continue to flash until you press the () to set and confirm

#### $(\blacktriangle)(\blacktriangledown)$ Up and Down Key

- On the main interface, the two keys can be used to adjust the current set temperature.
  - ) Timer Key
- Press and hold the timer button for 3 seconds to enter the real-time clock setting interface
- When entering the real-time clock setting interface, the hour and minute positions will flash together
- Press the timer button again, the hour position will flash and the minute position will remain on
- Move the up and down keys to adjust the hour position
- After adjusting the hour position, press the timer button again, the hour position will remain on and the minute position will flash. Move the up and down keys to adjust the minute position
- After adjusting the minute position, press the timer button again to confirm and return to the main interface

- Press the timer button to enter the timing setting interface. At this time, the timing group 1 flashes (you can select the timing group through the up and down keys)
- When the current timing group is selected, the timing group flashes. At this time, press the timer button to enter the current timing group setting
- Use the timer button to alter either the minute or the hour time. The order is as follows the hour number for timing on, the minute number for timing off, and the minute number for timing off.
- After adjusting the time with the up and down keys, press the timer key again to return to the timer group 2 interface.
- After repeating the above operation, return to the main interface. The current timer group flashes. At this time, press the timer key for a few seconds, and the ON/OFF button will light up, indicating that the current timer group is valid.

#### Reset

• Pressing and holding the (b) key and (M) key together for 10 seconds can restore the default values of the parameters

#### **Forced Defrosting**

Press and hold () + (▼) for 10 seconds to enter forced defrosting

#### **Status Query**

Press and hold () + () for 5 seconds, collaborate with up and down keys to query running parameters.

#### **Parameter Settings**

In the shutdown state, press and hold the + for 10 seconds, combined with the up and down keys, to set various parameters.

#### **Conversion between Celsius and Fahrenheit**

 Press and hold () + M together for 3 seconds to allow for the conversion between Fahrenheit and Celsius degrees, with Celsius degrees displayed by default.

### **System Protection**

# Water Flow Monitoring and Recovery System

- Upon initiating the water pump for a duration of 10 seconds, the detection of a disconnected water flow switch for 2 consecutive seconds results in the identification of a water flow fault, prompting an immediate shutdown of the entire machine as a safety measure
- In the event of a water flow fault, the system is designed for automatic recovery. Notably, this fault is not suppressed during defrosting periods. The recovery process involves the automatic cycling and activation of the water pump, continuously monitoring and awaiting closure of the water flow switch. This cycle repeats every 2 minutes and 30 seconds until the switch is successfully closed.
- To indicate the occurrence of this fault, the remote control interface will display the code FFF, notifying users of the issue.

#### Water Flow Fault

- After running the water pump for 10 seconds, if the water flow switch is detected to be disconnected for 2 consecutive seconds, it will be a water flow fault and the entire machine is shut down
- After a water flow fault occurs, it can automatically recover. Please do not shield this fault during defrosting. After a water flow fault occurs, the water pump automatically cycles and starts, detecting the water flow switch until it is closed. Cycle every 2 minutes and 30 seconds
- The remote control will display FFF
- Winter Antifreeze Protection
- Detect the inlet temperature  $T_{IN}$  and ambient temperature  $T_{W}$  in standby mode
- When  $T_{IN} < 59^{\circ}F$  and  $T_W \le 32^{\circ}F$ ,enter the first level antifreeze state, and the unit will automatically start and operate the water pump mode; when  $T_{IN} > 15^{\circ}F$ or  $T_W \ge 35^{\circ}F$ , exit the antifreeze process

- O If  $T_{IN} ≤ 35^{\circ}F$  and  $T_W ≤ 32^{\circ}F$ , enter the second level antifreeze state, and the unit will automatically start and operate in heating mode; until  $T_{IN} > 59^{\circ}F$  or  $T_W ≥ 35^{\circ}F$  exit the antifreeze process
- O If T<sub>w</sub> malfunctions, it is up to T<sub>IN</sub> to decide whether to prevent freezing. If T<sub>IN</sub> malfunctions, T<sub>w</sub> decides whether to prevent freezing (TIN malfunctions can only enter first level antifreeze). If both T<sub>IN</sub> and T<sub>w</sub> malfunctions, the antifreeze function will not be processed
- The remote control will display AFP.

#### Water Inlet Temperature Sensor Fault Detection

- The detection of a short circuit or open circuit in the water inlet temperature sensor is identified as a fault in the sensor itself, specifically labeled as a water inlet temperature sensor fault. This triggers an automatic shutdown of the system as a protective measure
- The remote control will promptly indicate this issue with the identifier PP 1.

#### Discharge Temperature Sensor Fault Detection

- Detection of a short circuit or open circuit in the discharge temperature sensor is recognized as a fault in the sensor, termed as a discharge temperature sensor fault. This initiates an immediate system shutdown as a safety precaution
- The remote control will display the specific fault using the code PP 2 to notify users of this issue.

#### **Coil Temperature Sensor Fault**

- Detection of a short circuit or open circuit in the coil temperature sensor is recognized as a fault in the sensor itself, referred to as a coil temperature sensor fault
- In the event of this fault, the remote control will display the identifier PP 3 to indicate the specific issue.

#### Fault Detection: Ambient Temperature Sensor

- Detection of a short circuit or open circuit in the ambient temperature sensor is identified as a fault in the sensor itself. Consequently, the antifreeze conditions associated with it are canceled, allowing the system to resume normal operation
- When this fault is detected, the remote control will indicate the issue with the code PP 5.

#### **Low Pressure Protection**

- Following the system compressor's initial five minutes of operation, if the system's low-pressure switch is identified as disconnected for 10 consecutive seconds, it triggers the activation of low-pressure protection
- Exiting the low-pressure protection mode occurs upon detecting the closure of the low-pressure switch. However, if this fault recurs three times within 30 minutes, restoration becomes contingent on a power-off reset
- Notably, this fault is exempted during defrosting periods
- The remote control interface will indicate the occurrence of this issue with the code EE 2.

#### **High Discharge Temperature Protection**

- Once the compressor has been running for one minute, if the discharge temperature exceeds or equals 203°C (adjustable parameter P09), it signifies an overheating issue
- As a safety measure, the machine will halt, indicating an EE5 error on display. If the discharge temperature drops to 176°F or 15 degrees less than the peak, normal display resumes, and the high discharge temperature protection deactivates
- The compressor includes a 3-minute shutdown safeguard

- If this issue occurs three times within a span of 30 minutes, a power-off reset becomes necessary for restoration
- The remote control will also display EE5 when this protection mechanism triggers.

#### **Communication Failure**

- In the event that the motherboard fails to receive any communication signal from the remote controller within the first 20 seconds after initial power-up, it is regarded as disconnected from the remote controller. During this period, the system operates solely based on the mode switch signal without displaying any indication of disconnection
- Alternatively, if the motherboard remains connected to a remote controller but fails to transmit its status signal for 10 consecutive seconds, it is identified as a communication fault
- The occurrence of this communication fault is signaled by the remote control displaying EE 6.

## MAINTENANCE & CLEANING

### Maintaining your Chill Springs keeps it clean and hygienic, while also protecting it from damage.

If you want to keep it clean, you should combine both prevention and treatment to protect it. It has a built in Ozone and filter system for clear water.

### How to change the filter

#### Filter clean and change

The filter should be replaced every three months. We recommend that you clean the filter every 1-2 weeks depending on usage. We recommend the Chill Springs filter.

Turn off the Chill Springs before cleaning or changing the filter.

Open the hatch on the top and you can change the filter and open/ close ball valves inside.

- Outlet Valve
- Inlet Valve



When replacing the filter element, please close the water inlet and outlet valves of the tub, loosen the filter exhaust valve by counter clockwise, then unscrew the filter cover, remove the filter element, and replace the filter element.



After replacing the filter element. Screw on the filter cover, open the ball valves. Then open the exhaust valve slightly to ensure there are no air locks. After this you can turn the lce bath back on

### **Stainless Steel Maintenance**

#### **Cleaning Methods**

If regular routines are adopted, the cleaning of stainless steel is relatively easy.

Where however, the steel shows severe signs of surface discoloration (perhaps following periods of neglect, or misuse), the following cleaning methods should be applied.

Always attempt the mildest cleaning method first. Be patient and repeat it a fair number of times before resorting to more severe cleaning techniques.

#### Light Stains:

Light, superficial brown staining can be removed by routine cleaning as above, repeated as necessary.

#### **Moderate Stains:**

In case of moderate soiling, repeat the routine cleaning above or use a mild (nonscratch) household caustic cream-cleaner with a fine nylon scouring page.

Rub the surface as softly as possible using long even strokes in the direction of the polish lines. Avoid using a circular rubbing action. Rinse and follow by routine cleaning as above.

If this does not suffice, final resort may have to be made to the use of a coarser nylon scouring pad, but with the risk that the surface may become slightly affected.

Test for effect on a small area before proceeding with other areas.

#### Persistent Stains:

Persistent stains indicate an inherent or recurring problem, which if not addressed on a timely basis, could become progressively troublesome.

For example, a small rust spot with a halo around it indicates a fragment of carbon steel has been inadvertently embedded in the surface of the stainless steel.

Dab the spot with a cotton bud soaked in a 10% solution of nitric acid, keeping it moist for 20-30 minutes.

Repeat this treatment until the spot does not recur.

Severe rust stains may be removed by swabbing with a 10% solution of nitric acid for 15-20 minutes, repeating as necessary.

Very severe stains may require hard rubbing with a paste of fine household abrasive and 10% nitric acid, using a coarse nylon scouring pad.

All acid treatments however must be followed by a neutralizing rinse with calcium bicarbonate solution.

**Note**: Nitric acid (HNO<sub>3</sub>) is friendly towards stainless steel and a 10% solution (1-part nitric acid added to 9 parts water) is usually used.

**Caution: Concentrated nitric acid must be handled with care**, 10% solutions are less hazardous nevertheless, it is advisable to wear rubber gloves and eye protection. If accidental skin contact occurs, wash well with lots of water. Keep it out of reach of children, etc.

Consult the Material Safety Data Sheet for details.

#### **Scouring Pads**

3M manufacture a range of nylon nonwoven, fine, multi-purpose and heavyduty scouring pads under the trade name Scotch-Brite.

Check product suitability for its intended use with your retailer.

Soft nylon scouring pads should be adequate for dealing with most deposits.

#### **Cleaning Schedules**

If care is taken during installation, cleaning before 'hand-over' should not present any problems.

More attention however may be required if the installation period has been prolonged or hand-over delayed.

Following hand-over, the frequency of cleaning is dependent on the application - a simple rule is:

Clean the metal when it shows signs of staining to restore its original appearance.

## KEEPING THE WATER CLEAN

#### Changing the water

We recommend that you replace the water in the Chill Springs every 8-12 weeks depending on user levels and visible water quality. Frequency of water replacement depends on frequency of usage and care taken in maintaining water quality. It will become evident that the water needs changing when the water doesn't look clear. Drain and re-fill.

### **Cleaning the Chill Springs**

It is important that you use the new Nature's Pure Sanitizer to chemically treat the water to ensure that it is safe to bathe in. Although the water is cold, bacteria can still be present. Cold temperatures cannot kill germs, but only slow down their growth. You should still chemically treat the water to ensure that it is safe to bathe in.

#### **Recommended treatment:**

- We recommend dissolving the Nature's Pure sanitizer tablet in a jug of water before adding to the Chill Springs
- Use 1 x Pure & Simple Sanitizer Tablet twice per week
- This may need to be more frequent for heavily used Chill Springs
- Ensure you test the water regularly, including before use. Use quality test strips such as AquaSPArkle 4-way

The Nature's Pure sanitizer has been specifically formulated for cold water therapy as they have a fast rate of release with a low percentage of sanitizer.

### IMPORTANT

The use of any hot tub/multi-functional tablets is prohibited and will invalidate your warranty, as this may cause problems with the stainless steel structure. We recommend you only use the Nature's Pure Sanitizer tablets.

## SANITIZER TABLETS COMPARISON

Characteristics	Pure & Simple Sanitizer Tablet (dichlor)	Stabilized Chlorine tablets (trichlor)	MF Stabilized chlorine tablets (trichlor)	Bromine Tablets
Rate of Release	Fast	Slow	Slow	Slow
РН	6.0 - 6.5	2.9	3	4
UV Protection	~	~	~	×
Clarifier	×	×	~	×
Sanitizer %	43	90	87	95
Dispenser Required	×	~	~	✓
Suitable for Chill Springs	$\checkmark$	Check with manufacturer	Check with manufacturer	Check with manufacturer

#### Filter cleaning:

The filter should be replaced every three months and cleaned every 1-2 weeks depending on usage. We recommend using a cartridge filter cleaner such as InSpire Cartridge Cleaner, following the product instructions for use.



The water should be replaced every 8-12 weeks depending on use.

## THE INSULATED COVER

The cover to your Chill Springs that has been supplied as an upholstered item and needs handling with care as it is easily damaged.

It comes with a 1 year warranty. Our covers, and any future replacements, can be ordered directly via Chill Springs. The insulated cover is designed for three prime purposes:

- To insulate the water from warmer air temperatures, especially warm sunshine
- To stop debris from entering the water or the adjacent services area
- A physical deterrent for small children and animals endangering themselves by entering the cold water

It will benefit from a hose down every month, including the underside.

If there is a problem considered to be a manufacturing defect, this will be covered by the warranty, please contact us as needed. If the problem is due to bad handling or mis-operation unfortunately this will not be considered as a warranty repair.

Chill Springs covers are not designed to be stood upon, crawled across, used as places to stand on to change exterior light bulbs etc.

## TROUBLESHOOTING & ERROR MESSAGES

Problem	Solution	
The water is murky	Ensure the filter is clean. The filter should be cleaned every 1-2 weeks depending on usage and the filter changed every 3 months.	
	Change the water if it has become too dirty.	
My Tub won't get to temperature setTurn the appliance off for 2 minutes and turn back on, it will re degrees Fahrenheit.		
	Are both vents free of obstacles and walls, they require at least 8 in of space, ideally 12 in.	
	Check, is the compressor running, can you hear a fan, if not then please call us	
There is a bad smell coming from the Tub		
	If the water looks murky, drain and change it.	
The temperature is	The internal temperature probe is calibrated to within 0.3° +/-	
different to what my thermometer is showing	There could be an issue with the temperature sensor or PCB board. Please contact Chill Tubs directly via email – <b>info@chillsprings.com</b>	
My Chill Springs will not switch on	Ensure there is power to the plug socket you are trying to use. Check the fuse in the plug has not blown. Also check the breaker inside of the control box inside the unit.	
How do I drain my Tub?	To drain your Chill Springs, please locate the rubber cap on the removable panel on the bottom right hand corner. Please remove the rubber cap and attach your hose pipe connection (you will receive this with your Chill Springs). When you remove the wooden hatch, you will see a small red valve at the bottom, turn 90 degrees to open so the water may come out. Please remember to make sure your Chill Springs is turned off.	
	To fill, simply place your hose in the Chill Springs and leave until it has covered the vents. This time to fill will vary depending on your water pressure.	
How do I remove the air locks?	On top of your filter/pump you will have either a brass fitting or a gray hexagon shape cap. If you have a brass fitting with a small cap on, please unscrew the cap a little to release any air in the pump. If your Chill Springs has a gray hexagon shape cap, please loosen this a little to release the air until the water slowly comes out.	
I think the fuse may	Please unplug your Chill Springs and check the fuse in the plug socket.	
have tripped?	On the RCD box in the Chill Springs there are two plugs which are labelled pump and compressor. Please unplug the compressor by unscrewing it first, then unplug it and turn your Chill Springs on. If it stays on with just the pump running your compressor will need changing please call the After Sales team at (270) 819-5868 and we will be happy to assist you.	

## FAULT CODE TABLE

### System parameters

Parameter	Meaning	Range	Default	Remark
P01	Cooling inlet water temperature setting range	3 - 45°C (50°F - 113°F)	27 (81°F)	adjustable
P02	Heating inlet water temperature setting range	3 - 45°C (50°F - 113°F)	27 (81°F)	adjustable
P03	Defrost cycle	30 - 90 Min	45	adjustable
P04	Defrost entry temperature	030°C (32°F22°F)	-7 (19°F)	adjustable
P05	Exit defrosting temperature	2 - 30°C (36°F86°F)	13 (55°F)	adjustable
P06	Exit defrosting time period	1-12 Min	5	adjustable
P07	Model (single cooling/heat pump/single heating)	0 - single cooling 1 - heating & cooling 2 - single heating	0	adjustable
P08	Automatic inlet water temperature setting value	3 - 45°C (50°F - 113°F)	27 (81°F)	adjustable
P09	Discharge temperature protection value	85 - 110°C (185°F - 230°F)	95 (203°F)	adjustable
P10	Water pump operation mode	0 (ordinary) / 1 (special)	1	adjustable
P11	Differential setting temperature	1 - 4°C (2°F - 7°F)	1 (2°F)	adjustable
P12	Differential setting temperature	30 - 50°C (86°F - 122°F)	40 (104°F)	adjustable
P13	Target temperature difference between heating discharge and inlet water	5 - 100	35 (63°F)	adjustable
P14	Cooling electronic expansion valve exhaust regulating temperature	80 - 120	95 (203°F)	adjustable
P15	Steps of cooling electronic expansion valve under condition 0 (y0)	100 - 500	250	adjustable
P16	Steps of cooling electronic expansion valve under condition 1 (y1)	100 - 500	400	adjustable
P17	Steps of cooling electronic expansion valve under condition 2 (y2)	100 - 500	480	adjustable
P18	Steps of cooling electronic expansion valve under condition 3 (y3)	100 - 500	300	adjustable
P19	Steps of cooling electronic expansion valve under condition 4 (y4)	100 - 500	400	adjustable

P20	Steps of cooling electronic expansion valve under condition 5 (y5)	100 - 500	480	adjustable
P21	Steps of cooling electronic expansion valve under condition 6 (y6)	100 - 500	350	adjustable
P22	Steps of cooling electronic expansion valve under condition 7 (y7)	100 - 500	450	adjustable
P23	Steps of cooling electronic expansion valve under condition 8 (y8)	100 - 500	480	adjustable
P24	Steps of electronic expansion valve when defrosting	100 - 500	400	adjustable

### System Status Query

A01	Inlet water temperature	16ºF - 210ºF	Measured value
A02	Discharge temperature	16ºF - 210ºF	Measured value
A03	Coil temperature	16ºF - 210ºF	Measured value
A04	Ambient temperature	16ºF - 210ºF	Measured value
A05	Steps of electronic expansion valve	0 - 500	Measured value

### System Malfunction

Protection/ Fault	Wire Controller
Standby	
Normal startup	
Water inlet temperature sensor fault	PP 1
Discharge temperature sensor fault	PP 2
Coil temperature sensor fault	PP 3
Ambient temperature sensor fault	PP 5
Winter first level antifreeze protection	AFP
Winter second level antifreeze protection	AFP
Water flow fault	FFF
High pressure protection	EE 1
Low pressure protection	EE 2
Discharge temperature too high protection	EE 5
Phase-sequence protection	EE 4
Communication failure	EE 6
Defrosting	Defrost indication

## WARRANTY AND REPAIRS

### Our Chill Springs warranty provides coverage for defects in workmanship and defects or malfunctions that arise during normal use conditions for a period of 2 years from the date of delivery.

This warranty applies to commercial and residential use of the Chill Springs and only to the original purchaser or original owner if the product was purchased as a gift. The use of any hot tub/multi-functional tablets is prohibited and will invalidate your warranty, as this may cause problems with the stainless steel structure. We recommend you only use the Pure & Simple Sanitizer tablets. The warranty does not cover damage resulting from the addition of chemicals to the water, (excluding our recommended Pure & Simple Sanitizer) neglected filter care and replacement, power outages, low water flow, restricted air flow, or any other form of neglect, misuse, or abuse. There may be other exclusions to this warranty, as described in the Limited Warranty. It is important to carefully read and understand the terms of the Limited Warranty in order to fully understand the coverage provided.

#### **Warranty Limitations**

- The warranty period starts upon delivery of the Chill Springs
- The warranty does not cover damage caused by misuse, lack of maintenance, or lime scale deposits. Chemical abuse or poor water chemistry. Chill Springs Ltd reserves the right to replace the defective parts with factory or re-manufactured parts.
- Chill Springs Ltd is not responsible for any damage caused by alterations or modifications by the consumer.
- The warranty of the Chill Springs does not cover Ο defects, damage or failure caused by the common carrier, installer, user or other persons, pets or rodents, or resulting from, without limitation, any of the following: careless handling (lifting unit by plumbing, abrading finish, etc) including its own negligence; modification of any type for any reason) including modification to meet local codes); Improper installation (including installation not in accordance with instructions and specifications provided with the unit); connections supplied by the installer of the equipment; improper voltage supply or unauthorized electrical modification; misuse; incorrect operation, or lack of proper routine maintenance; operation of the unit without specified minimum amount of water or at inappropriate water temperature; use of abrasive or improper cleaners; or acts of God, such as lightening, floods, earthquakes etc.

for incidental or consequential damages or losses arising from any cause (e.g. water damage to carpet, ceiling, tiles, marbles, loss of use etc) including it's own negligence; damages to, respecting or resulting from: chemicals/misuse are used in the unit or hard water conditions; optional equipment not manufactured by the company but supplied with the dealer, installer or Company; the units prior usage as an operational of display; or defects that should have been discovered before installation.

- This warranty does not include labor, transportation, crane, or any other costs incurred in the removal and or re-installation of the original unit and/ or installation of a replacement unit; any costs relating to obtaining access for repair; or loss of use damage, including loss of sales, profit, or business under any circumstances. Chill Tub units are excluded of any warranty coverage if any addition, deletion, or modification of any kind whatsoever has been made to the unit (or to any component).
- The warranty does not cover defects of damage due to normal wear and tear, improper installation, alterations without the manufacturer written consent, accident, misuse, abuse, commercial or industrial use, the use of an accessory not approved by the manufacturer, failure to follow the user manual, or repairs made or attempted by anyone other than an authorized representative of the manufacturer.
- Chill Tubs Ltd will not provide compensation for delays in resolving warranty claims, or loss of use whilst the claim is in process.

#### **Registering the product warranty**

All products require registering using the product registration form within 7 days of installation. Failing to register may invalidate the warranty. Please fill in all information requested. To register your Chill Tub, please

### go to www.chilltubs.com/support

#### **Extent of Warranty**

This warranty extends only to the original consumer purchaser of the Chill Tub when invoiced and delivered. The warranty terminates upon any transfer of ownership prior to the expiration of the warranty period. Any modifications to the Chill Tub will void the warranty.

#### How to make a claim

If you are a Chill Tubs retailer making a claim on behalf of your customer, please log a claim using the warranty portal on the CRM.

If you are a Chill Tubs customer, please contact your Chill Tubs retailer who will make the claim on your behalf.

• In addition, Chill Tubs Ltd will not be responsible

## DISPOSING OF YOUR PRODUCT

# Before disposing of your Chill Tub, please make sure it is switched off and safe.

**Please note:** the refrigeration system contains gases and refrigerants which require specialist waste disposal. The valuable materials contained in a refrigeration appliance can be recycled.

Contact your local waste disposal depot for proper disposal of your Chill Tub and contact your local authority, or you can speak to us directly if you have any questions.

## FULL SET UP GUIDE

### Please follow this step by step guide when setting up your Chill Tub by yourself.

- Fill your Chill Tub to above the suction vents (this may take a while depending on your water pressure) or the advised water line.
- 2. Ensure the Chill Tub is plugged in and press the orange button to see the red light on the little trip switch.
- 3. You will see an orange light on the RCD box in the Chill Tub this will turn green after a few seconds.
- 4. Once it changes to a green light your Chill Tub is getting ready to work, you will notice a green flashing light on the control panel.

- 5. After a few minutes you'll notice the fan kick in, a minute after the flashing light will stop flashing which means the compressor is on.
- 6. Your Chill Tub is now cooling to your desired temperature.
- 7. Once it has reached your set temperature it will shut off the compressor and the fan.
- 8. After the water temperature has risen a few degrees, the fan and compressor will turn on again to cool back down to temperature.



