i15
(aka WS15000v2)

MANUAL

i15 MANUAL

Congratulations on your choice of the *Wellsys i15 Water Treatment System*. The *i15* model dispenses soft, chewable ice and ambient or hot water. The *Wellsys i15 Water Treatment System* provides exceptional quality and great tasting water with every use.

INTRODUCTION

Carefully read and follow all instructions to ensure proper and efficient operation of your *Wellsys Water Treatment System*. Contact your *Authorized Wellsys Dealer* if you have any questions.

Wellsys and *Authorized Wellsys Dealers* employ trained service personnel who are experienced in the installation, function, and repair of this equipment. This publication is written for use by these qualified individuals. *Wellsys* encourages users to learn about products, however, we believe that product knowledge and service is best obtained by consulting your *Authorized Wellsys Dealer.*

Wellsys Water Treatment Systems should be combined with selected water treatment components to create a system specifically tailored for each application by trained and qualified personnel.

Products manufactured and marketed by *Wellsys* and its affiliates are protected by patents issued or pending in the United States and other countries.

Wellsys reserves the right to change the specifications referred to in this literature at any time, without prior notice. Changes or modifications not expressly approved by *Wellsys* could void the warranty and user's authority to operate the equipment.

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SAFETY ALERT SYMBOLS

Read and follow all safety information carefully. The signal words used in this manual are selected as shown below and based on an assessment of the degree of potential injury or damage (severe or minor) and the occurrence of injury (occurs or has the potential to occur) when the warning is ignored:

⚠ **DANGER!**
Indicates a situation which, when not avoided, results in death or severe injury.

⚠ **WARNING!**
Indicates a situation which, when not avoided, has the potential to result in death or severe injury; and/or severe property damage.

⚠ **CAUTION!**
Indicates a situation which, when not avoided, results in or has the potential to result in minor injury; and/or minor property damage.

SAFETY PRECAUTIONS

Basic safety precautions should be followed, including the following:

Ensure all Local, State, and Federal Laws and Codes including health and safety guidelines are met when installing *Wellsys* Equipment. Only qualified service technicians should attempt installation and service of *Wellsys* Equipment. Always read the entire operating instructions before using the appliance and save these instructions for future use.

⚠ **DANGER!** *This product can cause death or severe injury if incorrectly operated, installed or maintained. The installation, maintenance, sanitizing and any repair must be performed by qualified persons trained by Wellsys International or their approved distributors only. Do not remove any panel or cover to protect against electrical shock and exposure to UV radiation.*

⚠ **DANGER!** *ELECTRICAL SHOCK HAZARD. Always use a dedicated and properly grounded outlet. Unit should be protected by ground-fault circuit interrupter (GFCI) or residual current device (RCD) having a rated residual operating current not exceeding 30mA. Use only Wellsys supplied power cord. Never use extension cords or power strips to connect unit. Do not use if the power supply cord is damaged. Always unplug from power supply prior to servicing.*

⚠ **WARNING!** *AUTHORIZED USE ONLY. This appliance is to be used for its intended purpose as described in this manual. Untrained individuals who use this manual assume the risk of any resulting property damage or personal injury. This appliance can't be used by children and persons with reduced physical, sensory, or mental capabilities or lack of experience.*

⚠ **WARNING!** *UV-C EMITTER (UV LAMP). This appliance contains a UV-C emitter (UV Lamp). UV-C radiation may, even in small doses, cause harm to the eyes and skin. Unintended use may result in the escape of dangerous UV-C radiation. Never operate the UV-C emitter if damaged or removed from enclosure. Do not touch or look directly into the emitter.*

⚠️ **WARNING!** **DO NOT OPERATE IF DAMAGED.** *Unplug and isolate water supply if abnormal conditions exist. Contact Wellsys or authorized dealer for repair, service, and installation to avoid hazards.*

⚠️ **WARNING!** **HOT WATER. Unit produces Hot Water in excess of 80ºC (175ºF).** *Water above 52ºC (125ºF) can cause severe burns or scalding. Keep unauthorized people and children away from the unit to avoid accidental dispensing of hot water.*

⚠️ **WARNING! CONNECT TO POTABLE WATER SUPPLY.** *This system is to be used for water only and is NOT intended for use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the system.*

⚠️ **WARNING! TIP HAZARD.** *Dispenser could tip or fall causing serious injury. Always install unit on a firm, flat, and level surface and secure unit to cabinet, wall, or floor if needed. Never place heavy items on top of unit and never climb, stand, or hang on unit or storage cabinet to prevent injury and damage.*

⚠️ **WARNING!** **UNIT IS HEAVY. TWO PERSON LIFT REQUIRED.** *Transport unit empty and always use material handling equipment or two people with proper lifting technique to reduce injury risk.*

⚠️ **WARNING!** **STORE AND TRANSPORT UNIT EMPTY. ALWAYS SANITIZE BEFORE USE.** *The unit must be completely drained before storing to avoid stagnation and reduce microbiological contamination (potential bacterial growth). Always sanitize before use to eliminate any potential microbiological contaminates.*

⚠️ **CAUTION!** **INDOOR USE ONLY.** *Intended for Household Use. Never expose to direct sunlight, heat sources, or ambient air temperature above 37°C (100°F) or below 2°C (35°F). Install indoors and keep unit away from excessive humidity. Never expose to freezing temperatures. Ensure there is adequate clearance around the unit to allow refrigeration system condenser to dissipate heat. Warmer environments require more clearance around the unit. Minimum clearance around all surfaces of the machine is 2-inches. Installs where the ambient temperature exceeds 27°C (80°F), require a minimum of 4-inches clearance for proper heat dissipation and efficient operation.*

⚠️ **CAUTION!** **USE A WATER PRESSURE REGULATOR. Wellsys** *will not be responsible for injury or damage caused by excessive water pressure. Input or feed pressure must be 40 psi to 60 psi. Be aware of any potential pressure surges caused by building/municipal pumping stations.*

⚠️ **CAUTION!** **USE UV STABILIZED SUPPLY LINES.** *Feed the unit with a potable ambient or cold-water supply only. Feed water over 37°C (100°F) can damage the treatment components. Water block devices and external leak detectors are strongly recommended. Locate the unit as close to the water supply and the electrical connections as possible. Immediately isolate or close water supply valve and contact service representative if leak is noticed.*

Contact Wellsys for assistance or help finding an Authorized Service Representative.

I15 FEATURES AND BENEFITS

Hot and Ambient Water and Ice
The i15 comes standard with Hot and Ambient Water Selections to meet a wide range of customer demands and makes and dispenses chewable ice.

Ice Storage and Water Capacity
The i15 has 1.25 liters of Hot Water and can hold up to 6.6lbs of Ice.

Large Dispense Area with Recessed Faucet
9inch dispense height with recessed faucet to protect from cross-contamination.

Leak Prevention
i15 Water Treatment Systems are supplied with a float valve to cut off the water supply in the case of a water leak or overfill.

Hot Water Safety Function
The *i15 Water Treatment System* has a built in Hot Water Safety Function. To dispense hot water, the user must press the hot water selection and *then* press the dispense button. This prevents children and the elderly from being burned from hot water. In addition, if hot water is selected, and not used for a certain period of time, the product will automatically switch back to the ambient water selection (the default selection).

ECO Mode
The *i15 Water Treatment System* has an Energy Saving Mode. Once the ice level is full, the unit will automatically turn on ECO mode. The ECO mode save energy by stopping the ice making operation (for a maximum of 6 hours). The machine can still be used to dispense ice and water while ECO mode is active.

UV-C LED
A UV-C LED is installed on the lower part of the ice tank. It sanitizes the melt water to provide more hygienic, cleaner ice.

CERTIFICATIONS

I15 Water Treatment Systems have been tested and certified to rigorous NSF and UL Standards. We believe that performance testing and certifications validate *Wellsys* as a world-leader in water treatment systems.

Wellsys I15 Component Certifications Include:

UL399 – Certified Drinking Water Cooler
Intertek Labs (ETL) Certified the *i15 Water Treatment System* to ANSI/UL 399 Standard for Drinking Water Coolers.

UL563 – Certified Ice Makers
Intertek Labs (ETL) Certified the *i15 Water Treatment System* to ANSI/UL 399 Standard for Drinking Water Coolers.

CSA C22.2 No. 120 CSA Standard for Refrigeration Equipment

NSF / ANSI 372 – Drinking Water System Components – Lead Content
Drinking Water System Components for low Lead Content.

MODEL/PART DESIGNATIONS

BRAND NAME	DESCRIPTION	MODEL - PART NUMBER
Wellsys	*i15 Counter Top* – Hot, Ambient, Ice	i15
	Serial#: Z10534-(YYMMDD)-00XXX	

SPECIFICATIONS

ITEM	i15
Water Connection	¼" Quick Connect
Rate Voltage	AC 120V/60Hz
Power Consumption	4.5A (505W)
Power Cord	1.9m (6.3ft)
IP Class	IPX1
Climate Class	N Class (32°C +/- 1°C) (89.6°F +/- 33.8°F)
Safety Device	Overheating protector. Water Level Detector. Water leakage shut-off valve. Fuse.
Hot Tank Size	1.25 Liters (42.3oz)
Ice Storage	6.6lbs (3kg) (Max)
Recommended Service Pressure	25-80psi (1.8-5.6 kgf/cm²)
Environmental Temperature	Max: 100°F (37.7°C) Min: 50°F (10°C)
Source Water Temperature	Max: 90°F (32.2°C) Min: 40°F(4.5°C)
Relative Humidity	55% at 78°F(25.5°C)
Refrigerant Gas	R134a (1.48oz +/-0.03oz)
R134a Pressures	280psig (19.3bar) (High Side)

SHIPPING SPECIFICATIONS

ITEM	i15
Width/Depth/Height	360mm W x 550mm D x 450mm H 14.2"W x 21.7"D x 17.7"H
Weight (dry)	71.9lbs. (32.6 kg)

17.7"

21.7"

14.2"

DISPLAY & CONTROL PANEL
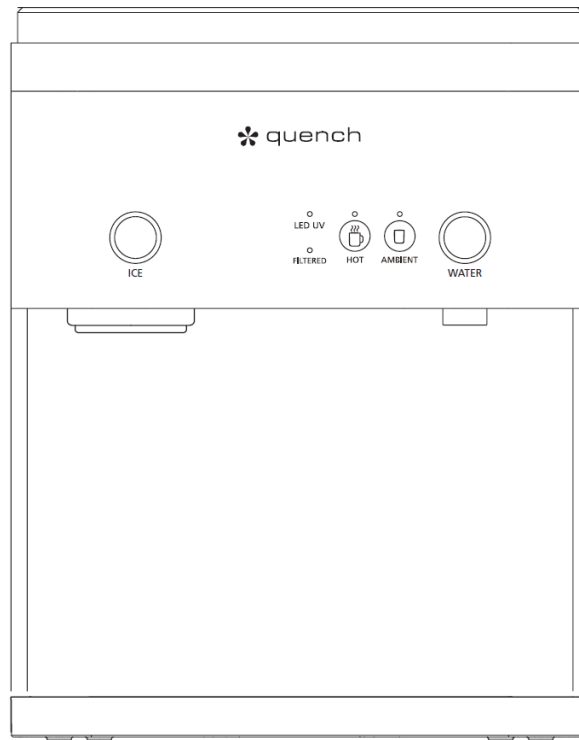
|		
ICE	**ICE LED**	ICE LED will be on when the ice is ready to be served, and blink while dispensing.
	ICE DISPENSE BUTTON	Push the button to dispense ice.
LED UV	**LED UV LED**	LED UV LED will be on when the product is in operation. (Yellow)
FILTERED	**Filtered LED**	FTLTERED LED will be on when the product is in operation. (White)
HOT	**HOT WATER LED**	HOT WATER LED is on when the hot water is selected. (Red)
	HOT WATER SELECT BUTTON	Push the button to select hot water.
AMBIENT	**AMBIENT WATER LED**	AMBIENT WATER LED is on when the ambient water is selected. (White)
	AMBIENT WATER SELECT BUTTON	Push the button to select ambient water.
WATER	**WATER LED**	WATER LED will be on when the water is ready to be served, and blink while dispensing.
	WATER DISPENSE BUTTON	Push the button to dispense ambient/hot water.
	ICE DISPENSE SPOUT	Ice is dispensed from ICE DISPENSE SPOUT.
	WATER DISPENSE SPOUT	Water is dispensed from WATER DISPENSE SPOUT.

OPERATING INSTRUCTIONS

The below pictures show the front user interface (UI) and control panel for the *I15 Water Treatment System.*

For Ice: Press the "Ice Dispense" button. While holding the button, the Ice LED will blink, and ice will dispense. Release to end.
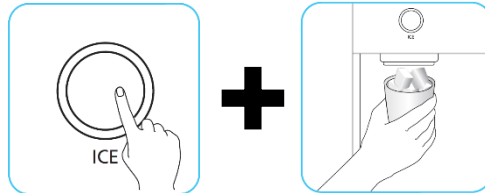
For Hot Water: Press the "Hot Water Select" button, then press and hold the "Water Dispense" button, and water will begin to dispense. While holding the button, the Water LED will blink. Release to end.
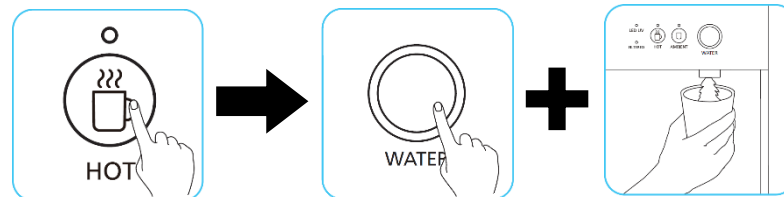
For Ambient Water: Press the "Ambient Water Select" button, then press and hold the "Water Dispense" button, and water will begin to dispense. While holding the button, the Water LED will blink. Release to end.
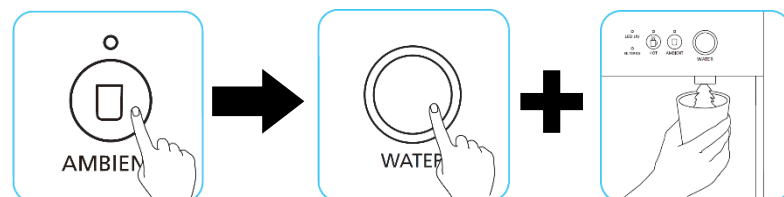
WELLSYS MANUFACTURED WATER TREATMENT SYSTEM LIMITED WARRANTY
UNITED STATES AND CANADA ONLY

Wellsys water treatment systems are guaranteed to the original purchaser to be free of defects in materials and workmanship for a period of three (3) years from the date of purchase, but in no event longer than forty-eight (48) months from the date of manufacture. Wellsys Commercial Products, LLC ("Wellsys") based in the U.S.A. and its affiliated companies are not liable for any cost of removal, installation, transportation, or any other charges which may arise in connection with a warranty claim.

This warranty does not cover damage or wear to products caused by abnormal operating conditions, accident, abuse, misuse, unauthorized or improper alteration or repair, damage caused by or resulting from shipping or accident, damage caused by hot water, freezing, flood, fire, or acts of God. The effects from chlorine corrosion, scaling and normal wear are specifically excluded from this warranty. This warranty does not cover products used outside the countries where the unit was purchased and does not cover products that were not installed in accordance with Wellsys printed installation and operating instructions obtained in training or from www.wellsys.us. Failure to follow all instructions for operation and maintenance voids the warranty. This warranty is not transferable.

To obtain warranty repairs or replacement, you must obtain a Return Authorization from Wellsys. To obtain a Return Authorization, you must submit a Return Authorization form with supporting documentation to Wellsys for evaluation. The form is available at www.wellsys.us. Supporting documentation must include, but is not limited to; proof of purchase, installation date, failure date, and supporting installation and maintenance data. After you submit a Return Authorization form and supporting documentation, Wellsys will determine whether a reasonably apparent defect in materials or workmanship covered by this limited warranty exists. If Wellsys determines the claimed defect is covered by this warranty, Wellsys will, at its sole discretion, determine whether to correct the defect or replace the unit, free of charge to you. If Wellsys determines that the unit should be returned for warranty service, Wellsys will approve of return in writing and will issue a Return Authorization which you must obtain prior to shipping the product. You are responsible for the cost of freight in to Wellsys.

Wellsys and its affiliated companies hereby limit the duration of any and all implied warranties to a maximum period of three (3) years from the date of purchase including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Consequential and incidental damages are not recoverable under this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

New Warranty Policy issued by Wellsys Commercial Products LLC, USA - January 10, 2014

Wellsys Commercials Products LLC   **Tel:** (800) 288-1891
3175 Bass Pro Drive   **Website:** wellsys.us
Grapevine, TX 76051

SERVICE REQUIREMENTS

⚠ **WARNING!** *Read and understand the contents of this manual before attempting to service the I15 Water Treatment System. Failure to follow the instructions in this manual could result in death, serious personal injury, or severe property damage. Only trained and qualified technicians should attempt to install, maintain, or service Wellsys Equipment.*

1. Visually inspect all electrical and water connections for signs of wear or damage.

⚠ **DANGER!** *HIGH VOLTAGE ELECTRICAL HAZARD. Unplug before inspection and service.*

⚠ **WARNING!** *ULTRAVIOLET RADIATION. Protect your skin and eyes against ultraviolet rays. Never look directly at an operating UV light. Disconnect before removing UV Lamp.*

⚠ **CAUTION!** *UV LIGHTS ARE HAZARDOUS. Lamps are considered Hazardous Waste and must be disposed of accordingly.   Refer to Product MSDS sheet for details.*

2. Ensure there is adequate (minimum of 2") clearance around the *i15 Water Treatment System* and clean the condenser grill and compressor fan to provide efficient cooling system operation.

3. Sanitize the unit per instructions in the sanitization procedures.

⚠ **WARNING!** *SANITIZER MAY CONTAIN HAZARDOUS CHEMICALS. Use of proper personal protective equipment such as rubber gloves and eye protection are required.*

4. Clean and sanitize external surfaces of the *i15 Water Treatment System*. Use soap and water or chemicals that are compatible with ABS plastic and will not damage or degrade the product surfaces.

5. Remove and clean the Faucet. Replace as needed.

6. Descale Hot Tank Annually, or as needed.

i15 PARTS LIST

No.	Part No.	Description	Photo
		WETTED PARTS (V1 + V2)	
1	11-2330-0	STEM TAIL TEE ¼	
2	11-2970-0	COUPLER MOTOR SPIRAL LEFT	
3	11-2971-0	COUPLER MOTOR SPIRAL RIGHT	
4	11-2974-0	COUPLER BUSHING SPIRAL	
5	11-2980-0	COVER DOOR ICE	
6	11-2981-0	DOOR ICE	
7	11-2987-0	GUIDE ICE FRONT	
8	61-1908-0	EPS PAD LOWER (WHITE)	
9	91-3611-0	ASSY TANK HOT – SUB	
10	91-3612-0	ASSY MANIFOLD FAUCET - SUB	
11	15000 DRAIN KIT	V1.5 DRAIN KIT	

12	15000 AUGER RINSE RETROFIT	AUGER RINSE RETROFIT	
13	41-2058-0	SENSOR ICE FULL LASER - RECEIVE	
14	41-2059-0	SENSOR ICE FULL LASER - SEND	
15	51-0347-1	FILTER 6" SED	
16	61-1839-0	EPS AUGER (LIGHT GRAY)	
17	21-0852-0	BKT AUGER LOWER	
18	31-0721-1	TU ELBOW AIR VENT	
19	41-1171-1	SENSOR LEVEL DETECTOR 1PIN BOTTOM	
20	41-1194-2	VALVE SOLENOID HIGH PRESSURE	
21	41-1405-0	PUMP DRAIN	

22	41-1432-2	SENSOR LEVEL DETECTOR 2PIN TOP	
23	FIFO	STEM TAIL TEE ¼	
24	21-0848-0	CUTTER AUGER	
25	21-0851-0	BKT AUGER UPPER	
26	11-3048-0	TUBING ¼" 330MM (BLUE)	
27	21-0892-0	WRENCH BOLT	
28	21-0893-0	WASHER	
29	31-0025-1	TUBE END ½"	
30	31-0325-1	SEAL SENSOR LEVEL COLD	
31	31-0422-0	SEAL DOOR ICE	
32	91-3619-0	ASSY TUBING 3/8 PE-RT - SUB	

33	91-3698-0	ASSY DOOR ICE	
34	11-3099-0	LINK DOOR ICE	
35	41-1550-0	STERILIZER UV LED TANK	
36	41-1768-4	VALVE SOLENOID 1WAY	
36.1	21-0867-1	AUGER	
37	21-0868-1	TANK HOT	
38	41-1795-0	SENSOR LEVEL DETECTOR -ICE TANK	
39	31-0431-0	CAP DRAIN (BLACK)	

40	31-0577-1	SEALING LEVEL SENSOR	
41	61-1835-0	EPS UNIT (LIGHT GRAY)	
ELECTRONIC PARTS (V1 + V2)			
42	11-2824-0	DECO DISPENSER LIGHT	
43	41-2048-0	POWER CORD PLUG B	
44	41-2064-1	SENSOR TEMPERATURE (TANK)	
45	91-3608-0	ASSY MOTOR GEARED - SUB	
46	41-0308-0	SENSOR TEMPERATURE (EVA)	
47	41-1285-0	MOTOR GEARED (DOOR)	
48	41-1911-1	MOTOR - ICE DISPENSE	

49	41-2018-0	TRANSFORMER	
50	41-2046-0	PCB MAIN	
HANDS-FREE PARTS (V1 + V2)			
51	ADS	AMBIENT DISPENSE STICKER	
52	CDS	COLD DISPENSE STICKER	
53	FOOT SWITCH XF-1D	2 PEDAL SYSTEM	
54	IDS	ICE DISPENSE STICKER	
55	WS150002PDLKIT	15000 ICE AND COLD PEDAL	
PANELS (V1 + V2)			
56	4419	WS 15000 STAND - PWS	
57	11-2964-1	15000 - COVER TOP	
58	21-0853-2	15000 - FRAME SIDE	
59	21-0854-0	15000 - FRAME REAR	

60	21-0860-0	15000 - COVER PCB UPPER	
61	21-0873-1	15000 - COVER RIGHT	
62	21-0874-1	15000 - COVER LEFT	
63	8421.99-9099	WS 15000 STAND	
64	91-3622-0	15000 - ASSY PLATE MIDDLE - SUB	
OTHER (V1 + V2)			
65	91-3646-0	15000 - ASSY DECO FAUCET (BLACK)	
66	11-3111-0	15000 - DECO DISPENSER (BLACK)	
67	91-3703-0	15000 - ASSY COVER FRONT - WELLSYS	
68	91-3703-0	15000 - ASSY COVER FRONT - WELLSYS	
69	91-2922-0	PWS OF AMERICA FACEPLATE	

70	91-3592-0	15000 - ASSY PLATE BASE - SUB	
71	91-3607-0	15000 - ASSY UNIT - SUB	
72	91-3614-0	15000 - ASSY TRAY	
73	91-3620-0	15000 - ASSY COVER REAR - SUB	
REFRIGERATION (V1 + V2)			
74	91-3616-0	15000 - ASSY PARTIAL CONDENSER - SUB	
75	21-0864-0	15000 - COMPRESSOR	
WETTED PARTS (V2 ONLY)			
76	41-2209-0	DISPENSE PUMP	
77	11-3436-0	TUBING 1/4 45mm (BLUE)	
78	41-2207-0	ICE MELT PUMP	
ELECTRONIC PARTS (V2 ONLY)			
79	15000 CIRCUIT BOARD 2.3	15000 V2.3 CIRCUIT BOARD	

i15 WATER FLOW DIAGRAM

i15 v1
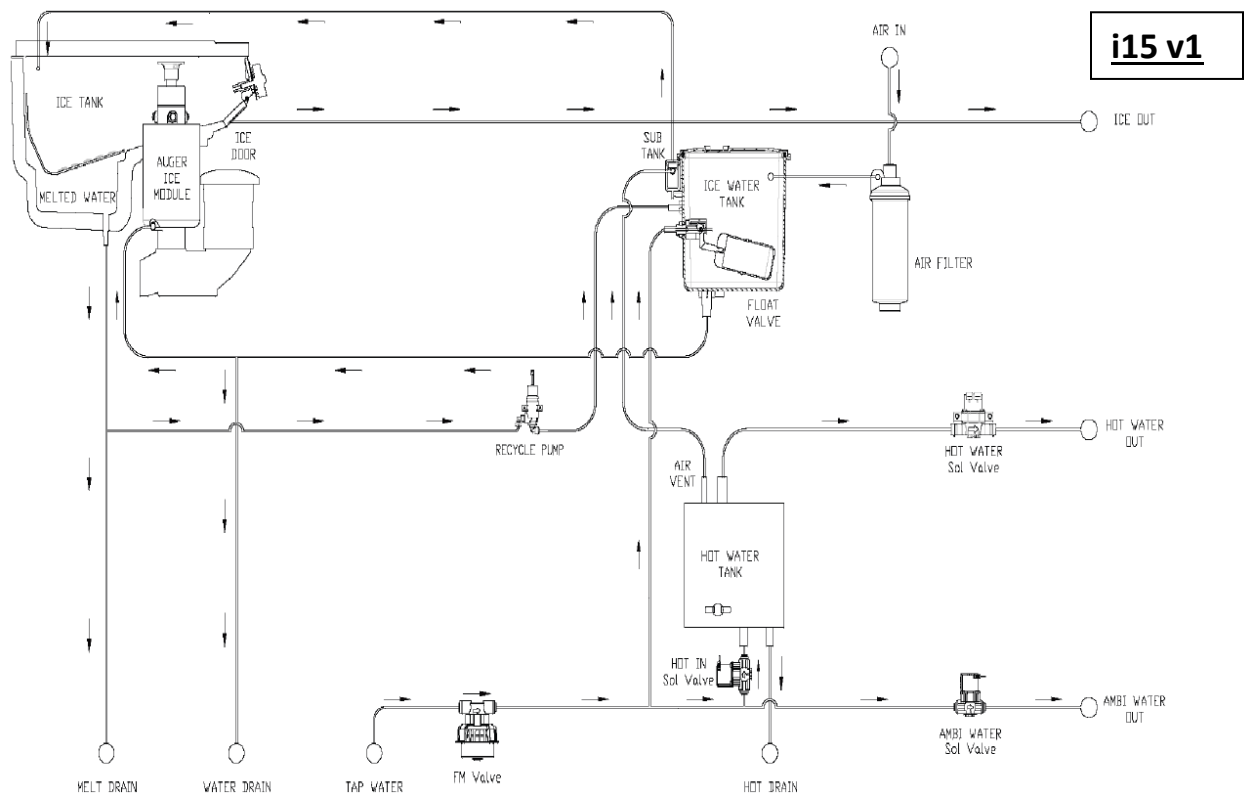
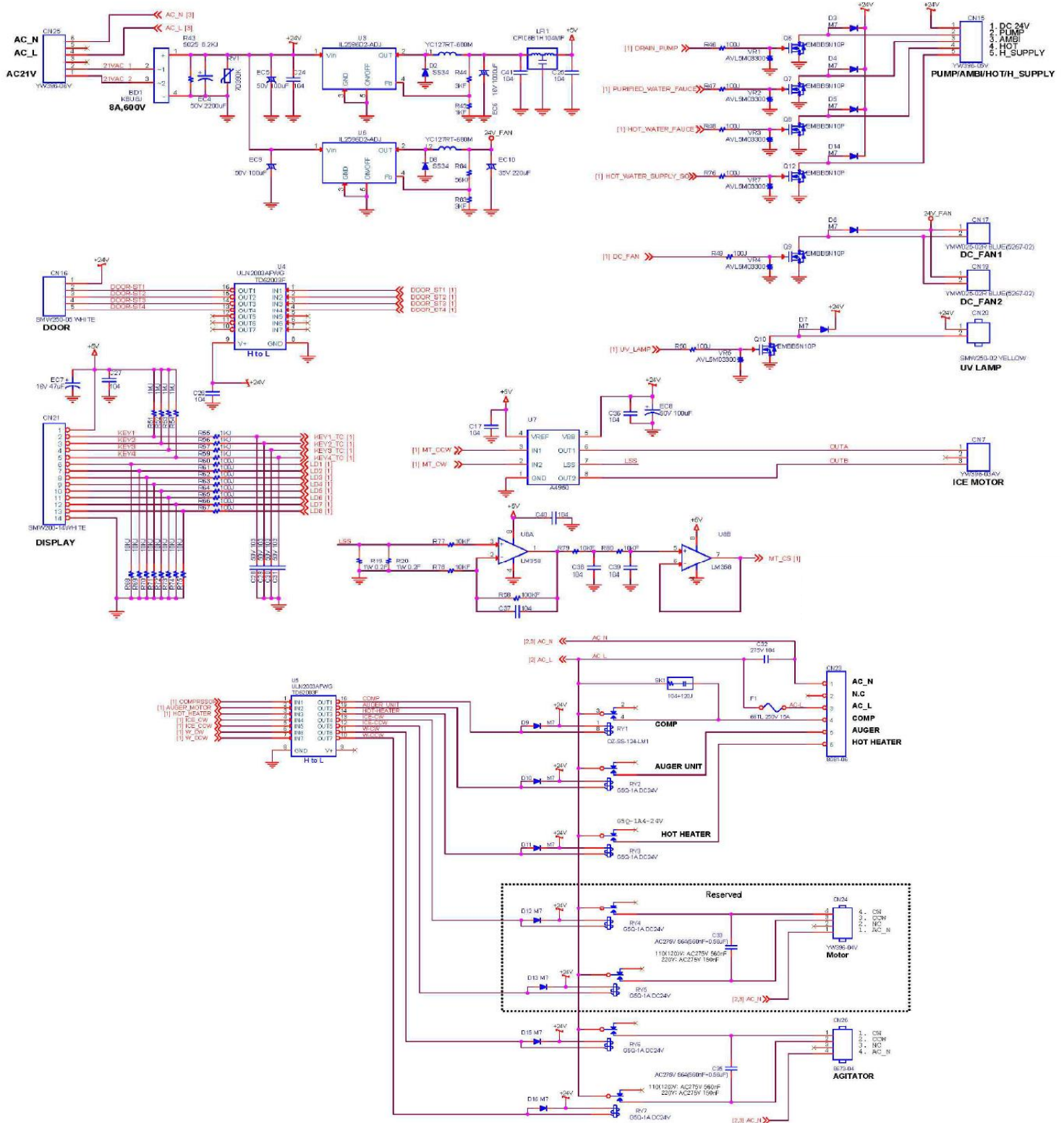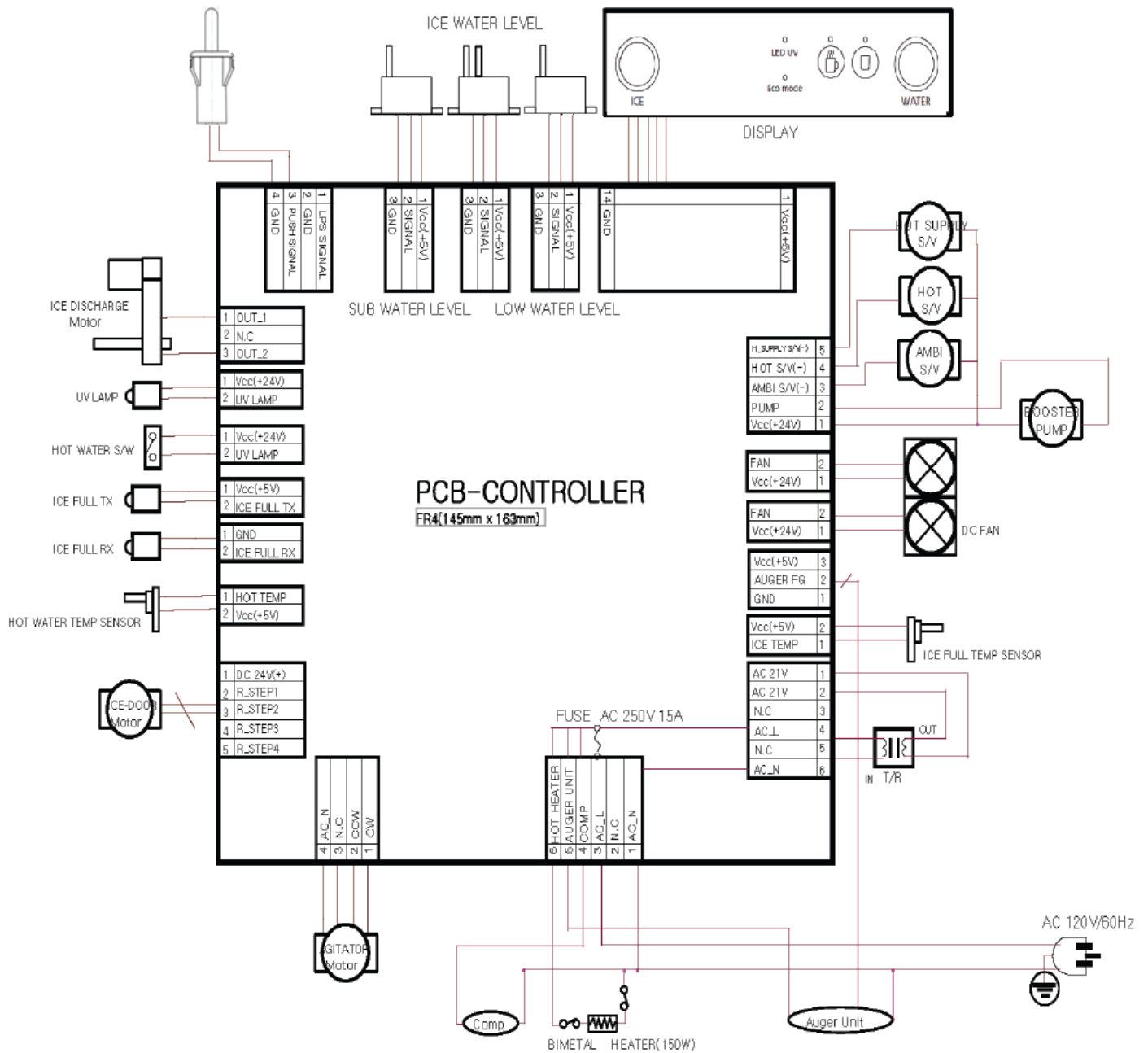**i15 v2**
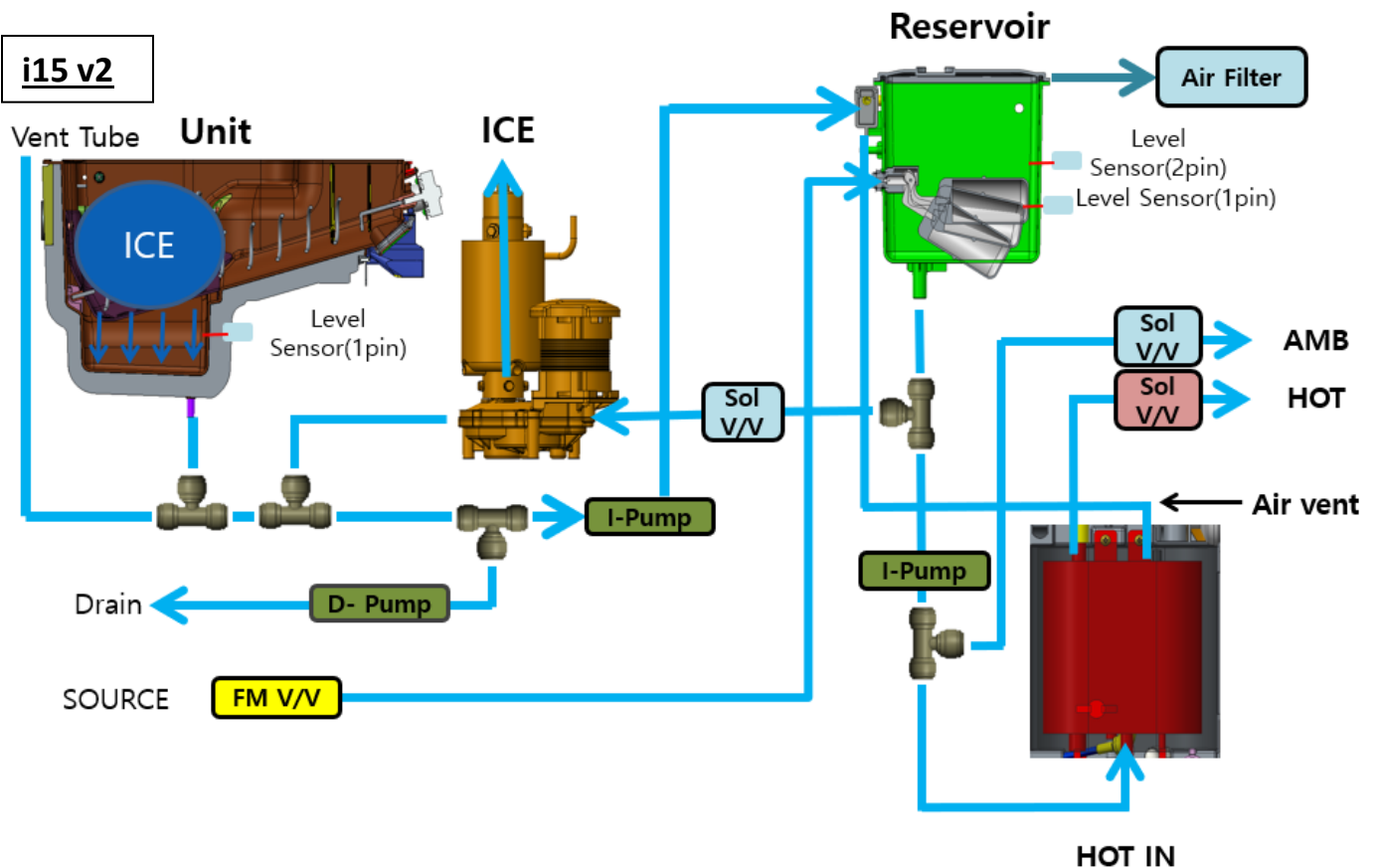
⚠️**DANGER!** *HIGH VOLTAGE ELECTRICAL HAZARD. PCB (Printed Circuit Board) contains High Voltage. Only trained and qualified technicians should attempt live testing.*

i15 PCB DIAGRAM

i15 EVAPORATOR TEMPERATURE SENSOR

The i15 has many sensors to maintain high performance of the system and protect key components from failure. However, the Evaporator temp Sensor can be too sensitive, and we recommend disconnecting this sensor when there are ice production issues. The Evaporator temperature Sensor measures the temperature of the evaporator and will send a signal to shut down the ice making auger if it detects any variance in temperature. However, due to differing water and environmental conditions, the ice may be harder or softer and the tolerance of the sensor is too narrow to accommodate normal operational differences.

There are other sensors in the i15 that perform a similar function and the manufacturer recommends disconnecting the Evaporator temperature Sensor. We have removed the evaporator temperature sensor from all future builds of the i15.

The below instructions describe the process for disconnecting the Evaporator Sensor in the i15.

Disabling the Evaporator Sensor in the i15:
1. Unplug the unit from power
2. Locate and gain access to the main board.
3. Locate and unplug the Evaporator Sensor. It Is located on the right side of the board and is the third connection up from the bottom. See connection circled below.
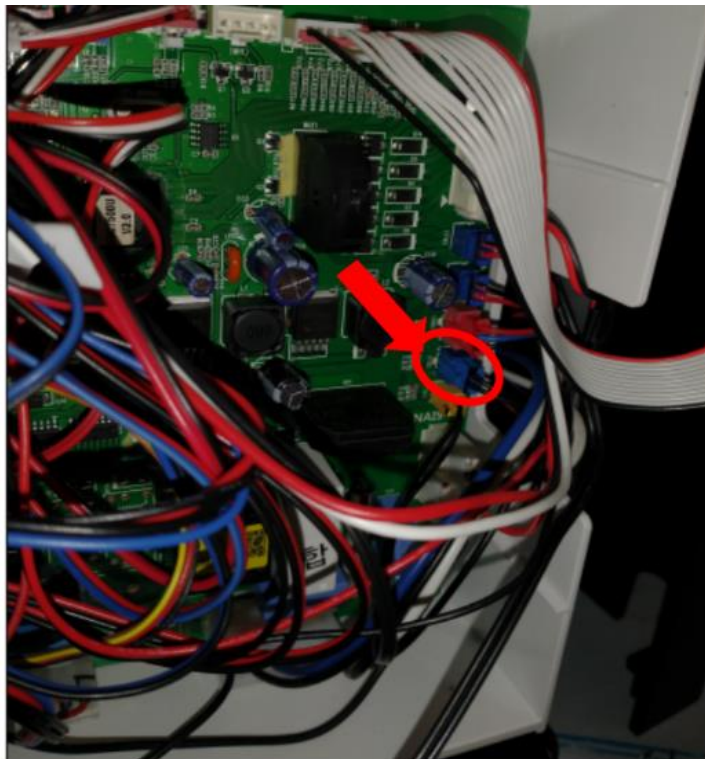
PRE-INSTALLATION

⚠️ **DANGER!** *ELECTRICAL SHOCK HAZARD.*
*Only qualified personnel who have read and understand this entire manual should attempt to install, or service this **i15 Water Treatment System**, failure to do so could result in death or serious injury. DO NOT plug into an electrical supply until specifically instructed.*

⚠️ **WARNING!** *ALWAYS SANITIZE BEFORE USE.*
Sanitize before use to eliminate any potential microbiological contaminates.

⚠️ **CAUTION!** *DRIP TRAY DRAIN.*
If you intend to provide a drip tray drain for your customer, be aware that you will be called multiple times per month to service and unclog the tubing leading away from the drip tray to drain. Users will clog the drain with paper clips, erasers, napkins, tea bags, gum, and various other intended items. Wellsys recommends you establish a minimum of weekly visits to the machine for cleaning of the drip tray drain.

Materials Needed:
- Personal Protective Equipment. Rubber or Nitrile Safety Gloves and Protective Eyewear
- Phillips Screwdriver
- Temperature Gage
- Water Pitcher or Container to collect water from the faucet
- 5-gallon container or drain basin
- Sanitizer - Household Bleach (5.25% Sodium Hypochlorite) or Citric Acid Based Cleaner
- ¼" Plastic Tubing, at least 4 feet in length, and assorted ¼" quick connect fittings
- TDS Meter and Test Strips for measuring chlorine – Optional
-

1. Unpack the **Wellsys i15 Water Treatment System** and check exterior for damage.
   ⚠️ **CAUTION!** *FILTER FLUSH REQUIRED.*
   ***i15's Water Treatment Systems** are not supplied with filters. Filters should be configured to optimize your system. Filters need to be configured and specified to do the job given the local water conditions, usage, maintenance schedule, and placement restrictions.*
   In order for our filters to perform as represented and to provide the best quality water possible, it is essential that filters be replaced periodically. The frequency of filter changes depends upon your water quality and your water usage. For example, if there is a lot of sediment and/or particles in your water, then you will have to change your filters more frequently than a location with little to no sediment. Be sure to replace your filters whenever you notice a decline in the performance, whether it is a drop in flow rate and/or pressure or an unusual taste in the water.

2. Flush thoroughly per filter manufacturers' recommendation with fresh water to drain.

3. Once flushed, install the filters. Following the flow direction on the filter.
   NOTE: Filters should not be flushed prior to 24 hours before installation to limit Microbial Growth.

NOTES ON INSTALLATION

1. Do not install the product at the following locations:
    - Near Fires
    - Near Flammables
    - In Humid Places
    - In front of air conditioners
    - Where exposure to rain or snow is possible
    - Outdoors or in direct sunlight
    - Near chemicals (volatile materials, organic solvents, etc.)
    - Near toilets
    - Anywhere the temperature may fall below 50°F.

2. Use source water within following quality range:
    - Water pressure: 1-7kgf/cm² (98-686 kPa)(14-99.6psi)
    - Water temperature: 39-100°F (4-38°C)
    - Turbidity: 0.5 NTU or less
    - pH: 5.8-8.5
    - Hardness: 300ppm or less
    - Water Quality: Water quality meeting the Drinking Water Quality standard

   *Please consult your distributor if source water quality is out of the specified range.
   *The warranty will be void if the product is connected to source water that is out of the specified range.
   *This product is not equipped with internal filtration. It is intended to be connected only to a potable water source.

3. When transporting the product, do not tilt it more than 45° from vertical.
   *Severe tilting can cause a performance degradation.

4. Install the product on a flat surface and adjust the level of the unit using a level gauge.
   *If the product is tilted more than 3°, overflow may occur.

5. Source water should not be above 100°F (38°C)
   *Hot water may cause performance degradation or system failure.

6. Keep the sides and rear of the unit at least 5 inches (127mm) away from walls or other objects for ventilation.

7. Do not bend the source water hose or place heavy objects on it.
   *If it is blocked, the water will not flow smoothly to the unit, and may cause performance degradation.

8. Do not place any heating system near the rear of the unit.

9. The power supply and source water must be directly connected to the unit.

INSTALLATION

It is very important to follow all instruction listed. Failure to do so may cause the system to not operate properly and may impact the long-term reliability of the system. DO NOT turn on the Hot Water switch at back of unit until the Hot Water tank has been primed with water.

1. Check incoming water pressure and ensure it is between 60-70PSI. If the water pressure is above 70PSI then a pressure reducing valve must be installed and set to lower the pressure to the optimal water pressure between 60-70PSI.
   A. Failure to follow this step may have a negative impact on the reliability of the system and may cause it to fail prematurely.
   B. Failure to follow this step may also affect the taste of the ice and water along with the replenishment rate of the ice.
   C. Failure to follow this step may also impact the life of the filters in a negative way
   D. Failure to follow this step may also cause a leak or similar failure.

2. Flush the filters.
   A. Remove the filter enclosure from the box and visually inspect all fitting. Notice that the RO membrane is not connected. It is shipped this way to ensure the preservatives remain inside the filter to protect the membrane.
   B. Flush the Pre-Sediment and Pre-Carbon filters for 5 minutes. Connect the source line into the input of the Pre-Sediment and a drain to the output of the Pre-Carbon.
   C. Turn the water on for 5 minutes then turn the water off. Remove the source and drain and reconnect the pre-existing connections.
   D. Flush the Bio Sure Plus Filter for 5 minutes. Connect the source line into the input of the Bio Sure Plus filter.
   E. Connect the drain into the output of the Bio Sure Plus filter. Turn the water on for 5 minutes and then turn the water off.
   F. Remove the source and drain and reconnect the pre-existing connections.
   G. Revers Flush the TCR Carbon Post Filter. Connect the source line into the output of the TCR filter. Connect the drain into the input of the TCR Filter.
   H. Turn the water on for 5 minutes and then turn the water off. Remove the source and drain and reconnect the pre-existing connections.
   I. Flush all 5 filters together. Connect the loose fittings to the RO

3. Connect the drain to the outside stem fitting.

4. Connect the product to the center stem fitting.

5. Connect the inline water coming from the Pre-Carbon through the ASO into the input.
   A. Connect the source line to the source on the outside of the filter box.
   B. Connect the drain to the drain on the outside of the filter box.
   C. Connect the secondary drain to the top of the TCR.

D. Turn the water on for 30 minutes or longer.

6. With the 60PSI going into the system after 30 minutes, the TDS of the water should be reduced approximately 98% after the RO membrane vs. the incoming tap TDS.

7. The TDS after the TCR Filter should only be 5-8 points higher
   A. As the system is flushing during each step, inspect for any leaks and/or loose connections.

8. Sanitize the Ice Bin and Water Reservoir (Full Sanitizing Guide on page 37)
   A. Remove the top lid by removing two screws on the back side of the top panel.
   B. Remove the top panel.
   C. Remove the front panel by removing two screws found behind the drip tray.
   D. Remove the ice and water spigots.
   E. Slide the front panel off.
   F. Remove the screws to be able to access the ice tank.
   G. Remove the lid to the ice tank with the insulation included.
   H. Remove the stainless-steel augers and the plastic bottom to the ice tank.
   I. Spray the inside of the tank with hydrogen peroxide and wipe out with a clean paper towel.
   J. Hydrogen peroxide should be approximately a 20% hydrogen peroxide to 80% water blend.
   K. Spray the plastic bottom with the same blend along with the stainless-steel augers.
   L. Reinstall the plastic bottom and the augers.
   M. Do one more light spray of hydrogen peroxide and put the top back on along with the insulation and screws.
   N. Remove the lid to the water reservoir.
   O. Spray the inside of the reservoir in the same way and wipe out.
   P. Spray a light mist and then put the lid to the reservoir back on.
   Q. Reinstall the front panel and the top panel.

9. Connecting the Filters to the i15 (a 3-4 gallon bladder tank must be used as well).
   A. Mount the filter enclosure under the sink.
   B. Attach the supply line to the water supply input on the filter enclosure.
   C. Attach the RO drain line to the RO drain connection on the filter enclosure.
   D. Connect the feed line from the filter enclosure to a tee.
   E. Connect the tee also to the bladder tank.

10. Ensure that the pressure of the bladder meets the manufacturers recommended pressure before allowing it to fill.
    A. Listen for the compressor and the auger running.
    B. Wait about 30-60 minutes for ice to be used after it starts making ice.
    C. You must wait until the hot tank completely fills before turning on the hot water switch, which is located on the back of the system behind the caution sticker (lower right side).

11. Prime the Hot Tank by dispensing hot water from the front of the unit until water begins to flow. Once complete, turn on the red Hot Tank switch on the back of the machine. This will enable the heating process for Hot Water feature.
*In the event that the hot water switch is turned on BEFORE the hot tank is primed, it is likely that a "dry heat" event will occur. The hot tank, empty of water, will begin to heat rapidly and trip the overload thermostat on the hot tank. This overload will have to be manually reset for the hot tank to operate correctly. The overload thermostat is located ON the hot tank itself, and the red reset button must be pressed to manually reset and restore operation to the hot tank.

Note: To ensure reliability and the highest performance, only genuine Wellsys filters should be used and must be changed on time. Please reference below for the filter change schedule.

1. Pre-Sediment Filter   1 year or 2500 gallons max
2. Pre-Carbon Filter   1 year or 2500 gallons max
3. Reverse Osmosis Membrane   3 years or 4500 gallons max
4. BIO-Sure Plus   1 year or 750 gallons
5. TCR   2 years or 2500 gallons
6. Air Filter   2 years in office environment

Filter schedule is only estimate and does not guarantee the life will last to this length of time. Many factors may impact the life of each filter including but not limited to poor water quality, low pressure, incorrectly installation, and neglect.

How to Assemble the Water Tray

Push the water tray onto the unit until you hear a "click" sound.

*This machine has an audible "beep" indicator when the water or ice is dispensed. To turn off the "beep" sound, simultaneously press and hold for 5 seconds both the HOT WATER and AMBIENT WATER select buttons until all LED indicators flash 5 times. To enable the "beep," repeat the same process.
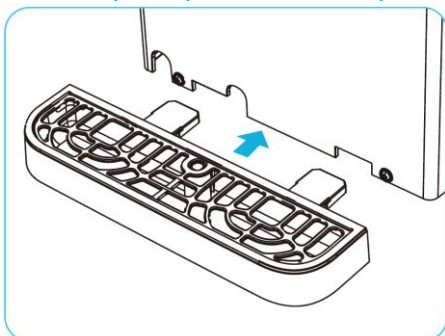
Stand Fastening

1. Remove the Drip Tray of unit and the Front Cover of Stand.

2. After placing the unit on the Stand, place your hand behind the Stand to secure the M6 hex bolts (x4).
   *After tightening, ensure it is stable and there is no danger of tipping or falling.

3. Once fixed, return the Drip Tray of unit and the Front Cover of Stand.

Drip Tray

Front Cover of Stand
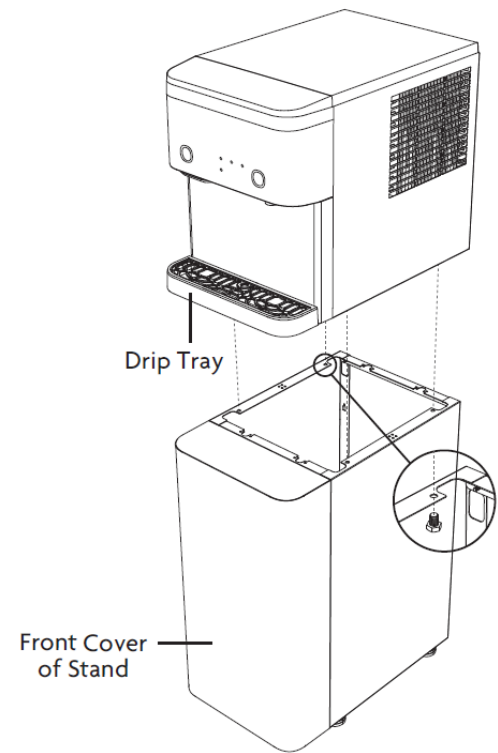
Bracket Fastening

1. Place the bracket on the wall at the installation site and mark the positions (x2).
   *There is only one bracket that could be fixed on the top or bottom side of the Stand.

2. Drill two holes in the marked position to fix the bracket to the wall.

3. Ensure the unit is fixed with the wall-mounted bracket, so that the unit does not fall if pushed.

Bracket
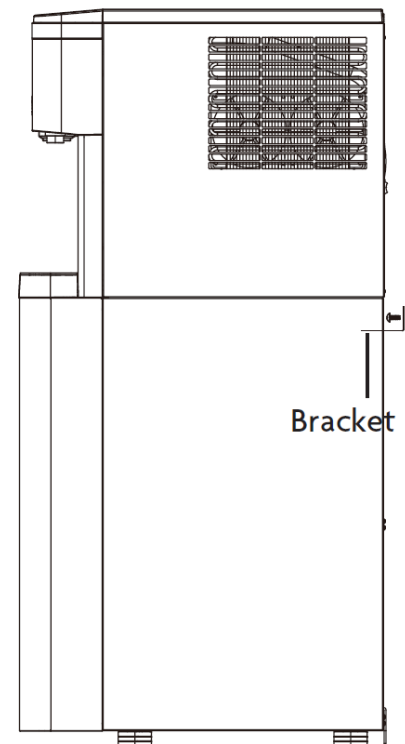
SANITIZING

Sanitize using a Household Bleach (5.25% Sodium Hypochlorite solution) or other approved cleaner throughout the cold and sparkling water circuits. Follow all instructions on sanitizing and flush with fresh water through the faucet until odor and taste is acceptable.

⚠ **WARNING!** *USE PROPER PERSONAL PROTECTIVE EQUIPMENT*
Always ensure proper ventilation and use proper personal protective equipment such as gloves and eye protection when using chemicals. Refer to Material Safety Data Sheet for specific requirements of each chemical product. Take all necessary precautions to prevent sanitizer from contacting eyes, clothing, and any other surfaces in could damage (carpets).

⚠ **DANGER!** *ELECTRICAL SHOCK HAZARD.*
Do not plug in unit unless qualified. Only qualified personnel who have read and understand this entire manual should attempt to install or service this unit.

⚠ **CAUTION!** *NEVER TURN ON HEATER BEFORE FILLING HOT TANK.*

Water Dispensing Spout Cleaning Method

1. Turn the water dispense faucet to the left.

2. Wipe the inside of the faucet with a soft cloth and cleaning agent. DO NOT use detergents, thinners, benzene, or wax for cleaning. This may cause discoloration or peeling off and may cause health problems.

3. After cleaning, assemble the water dispense spout back by turning it to the right.
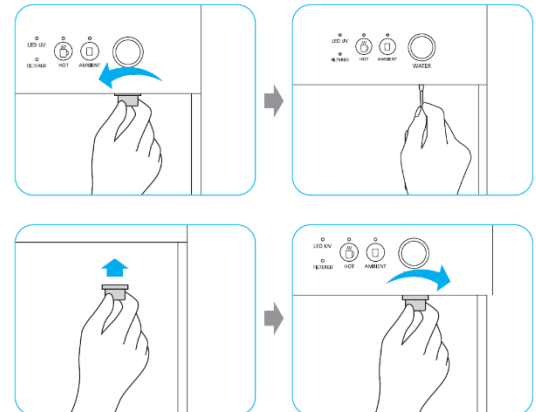
Ice Dispense Spout Cleaning Method

1. Pull down the ice dispense spout to disassemble it from the unit.

2. Clean the spout with a soft cloth and cleaning agent. After cleaning, put the spout cap back on the spout.

3. Insert the hook into the hole and push the spout upward. Make sure the front three hooks are properly inserted into the unit.
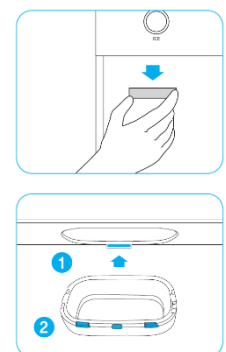
Ice Bin Cleaning

Preparation:
- Prepare a cleaning solution by mixing 0.2L of cleaning agent with 4L of clean water.
- Prepare additional 4L of clean water for rinsing operation
- Prepare a soft cloth and sanitary gloves.

STEP 1: Draining the water and ice

1. Turn off the Hot Water Switch located at the rear of the unit.

2. Shut off the water supply valve, so that no water can come into the unit.

3. Empty completely all ice from the system using the Ice Dispense Button.

4. Empty completely all water from the Reservoir Tank using the Water Dispense Button.
   *Do NOT drain the Hot Water

5. Connect the drain hose to the Drain Valve (located at the bottom & front side), and then proceed to drain remaining water. Once completed, remove the drain hose.

DRAIN VALVE
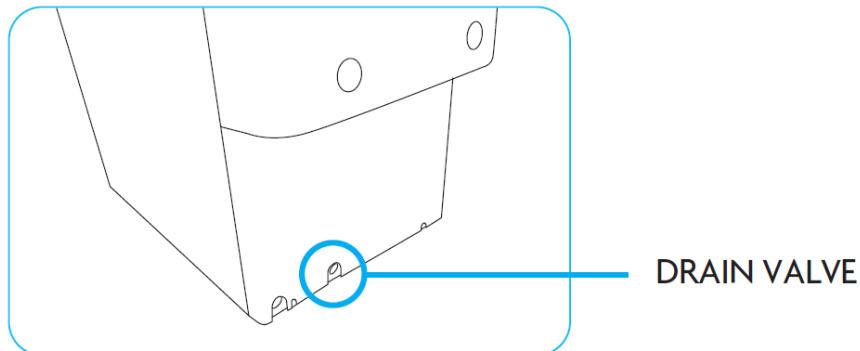
STEP 2: Disassembling the unit

6. Remove the Water Tray and remove the Top Cover & Front Cover by loosening the fixing screws. Set aside the front cover (*Be mindful of the wire that is attached)
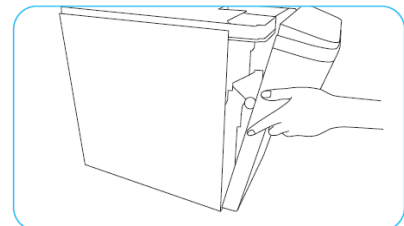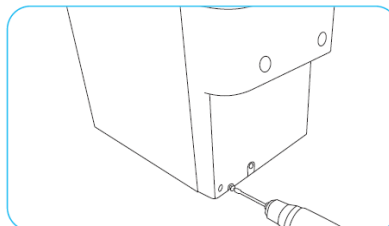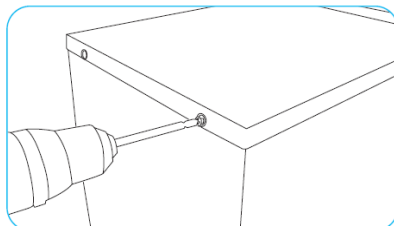

7. Remove the Ice Tank Cover by loosening the fixing screws, and then remove 2 augers by pulling them upward, take care not to lose the caps of the augers. (During the re-assembling of spirals, please pay attention to the shape of the joint).

8. Remove the White Ice Holding Basket from the unit and hand wash.
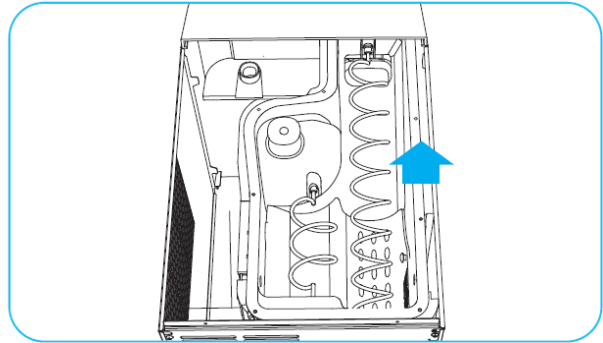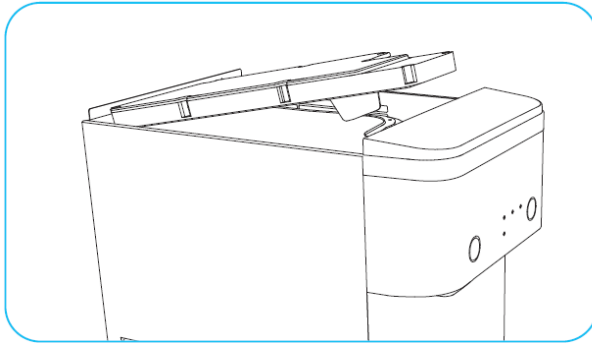
STEP 3: Descaling Operation

1. Pour prepared Cleaning Solution into the Ice Tank. *Be careful not to overflow the solution through the ice door or fill to the Air Filter Connection port.

2. Enter the "Cleaning Mode" by pressing the Hot Water Selection Button for 5 seconds.

3. Wait 30 minutes to remove the scale.
   *The "Cleaning Mode" will automatically stop after 30 minutes, but will stay idle on the "Cleaning Mode."
   *For a unit that has not had the scale removal operation performed for more than 6 months, or the product has been excessively used then it is recommended to wash for 60 minutes.

4. Connect the drain hose to the Drain Valve (located at the bottom and front side), and then proceed to drain completely all cleaning solution. Once completed, remove the drain hose.

5. Open the Pink Hot Water Drain Valve Cap and connect the drain hose to the Hot Water Drain Valve, and then proceed to drain completely all cleaning solution. Once completed, remove the drain hose and replace the Pink Hot Water Drain Valve Cap to its original location.

DRAIN VALVE

HOT WATER DRAIN VALVE
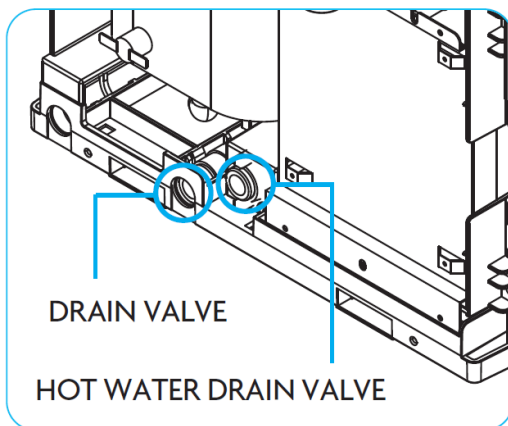
STEP 4: Rinsing Operation

14. Spray the inside of the tank with hydrogen peroxide (HO) and wipe out a clean paper towel. HO should be approximately 20% HO to 80% water blend.

15. Pour 4L of clean water into the Ice Tank for rinsing operation.

16. Exit the "Cleaning Mode" by pressing the Hot Water Selection Button for 5 seconds.

17. Re-enter the "Cleaning Mode" by pressing the Hot Water Selection Button for 5 seconds (for Rinsing Operation). *Caution: Ice making operation starts 5 minutes after exiting "Cleaning Mode," so it is important to re-enter "Cleaning Mode" within 5 minutes to prevent any ice-making during the sanitizing process.

18. Run the rinsing operation for 5-10minutes, then drain the water through the Drain Valve and Hot Water Drain Valve. *In the case that the dispensed water has an unusual taste or odor, it is recommended to repeat the rinsing operation again.

19. Exit the "Cleaning Mode" by pressing the Hot Water Selection Button for 5 seconds.

STEP 5: Cleaning the Reservoir Tank

20. Clean the Reservoir Tank with a clean, soft cloth.

STEP 6: Product Re-Assembly

21. Attach the White Ice Holding Basket and reinstall the 2 augers to original location. *Make sure to insert the tips of the spiral tightly into the fastening groove.

22. Assemble the Ice Tank cover and Front Cover and open the water supply valve to feed water to the unit.

23. Ensure that the unit is making ice and dispensing ambient water.

24. Verify that water is dispensing from the hot tank before turning the Hot Tank Switch back on. Once water begins to dispense from the Hot Tank, turn the Hot Tank Switch on.

25. Assemble the Top Cover and Water Tray.

STEP 7: Operation Check

1. Is the water dispensing smoothly as before?
2. Is the ice-making operation active after 3 minutes?

STEP 8: Cleaning Checkpoints

1. Wash your hands first and put on sanitary gloves. Clean up the tank with soft cloth or dry cleaner.
2. Properly dispose of used cleaner, sanitary gloves, etc. after cleaning.
3. Make sure tank cover is closed firmly and is installed properly.
4. Clean up the tank regularly every 6 months to a year.

<u>RESETTING THE HOT TANK OVERLOAD THERMOSTAT</u>

In the event of a "dry heat" scenario during installation, or if the water supply is blocked to the hot tank, overload thermostats are installed on the Hot Tank to prevent an unsafe heating situation and prevent damage to the unit. If these thermostats sense heat that is too high, they will trip and break the power circuit to the heating element. When this happens, the Overload Thermostat must be manually reset.

CAUTION!: Disconnect the machine from its power source before attempting the next steps. Failure to do so could cause electrical shock.

To do this, remove the upper and side panels of the unit and locate the hot tank. On the surface of the hot tank, where a section of insulation is cut away, the overload thermostat is mounted to the metal round of the tank. There is a small red/pink button in the center of the thermostat that must be pressed to reset the thermostat. Doing so will restore a continuous path for power to reach the heating element. Before doing so, ensure that water dispenses from the unit during the hot water dispense operation. If water flows from the hot tank, the tank is primed and full of water. Continue with resetting the thermostat. Water will begin heating, and hot water should be available within 5-10 minutes.

TROUBLESHOOTING INDEX

1. No water

2. No ice

3. Screeching/Whining Noise

4. Filtration

5. Hot Water Dispense produces water that is not hot

1. No water

Possible Reason (V1 Units)	Solution
Check Water Feed	This unit will only dispense what you have available. If the water is turned off or is feeding the unit with slow flow, little to no water will dispense.
Check the Leak Stop	If water gets into the bottom of the system, then the leak stop will shut off the water supply.

*V2 units will quickly dispense the water that is inside the system (reservoir and ice melt area) but if the water feeding is below 20psi when this water is depleted, it will stop dispensing water.

Possible Reason (V2 Units w/RO)	Solution
Supply Water Pressure	Check the water pressure into the filter bank and confirm adequate pressure, should be 60-70psi.
Low Water Pressure	If below 60psi: • Water may not be producing fast enough to keep up with demand. • Supply pressure may not allow the bladder tank to fill sufficiently. Change from an RO setup to a filtered setup or address issues with RO system. (Note: low water pressure will also cause the RO to waste more water as it attempts to fill the bladder tank, which will also reduce the life of the pre-filters.)

2. No ice

Possible Reason (V1 Units)	Solution
Insufficient Water, Low-Level Water Sensor	If water falls below the low-level sensor in the water reservoir, the ice making will stop, and will not attempt to make ice for 5 minutes. If this occurs several times, the water dispense light will blink and the system will have to be reset to operate again. Insure there is adequate flow of water into the system.
Evaporator Sensor Error or Failure	If the sensor fails or detects a colder temperature out of normal operation, the system will stop making ice for 10 minutes. This sensor can and SHOULD be bypassed. Unplug the sensor from the circuit board. It is the blue plug on the right side of the board.
Ice Tank Temperature Sensor Error or Failure	If the sensor fails or malfunctions, it will cause ice production to stop. This sensor can be bypassed like the Evaporator Sensor. It is the second plug from the bottom on the right side of the board.
RPM Sensor Error or Failure	Sensor is located on top of the gear motor. If it fails, or if the gear motor slows down due to hardness in the evaporator, it will shut down ice production. Hardness in the evaporator will cause ice to be physically harder and slow the evaporator. Ice dispense light will blink in this event. To remedy: • Drain and measure TDS from the evaporator and ice melt. • Share these values with Technical Support, • Properly descale the unit. • Check incoming water supply to the system. • Add the drain kit available FOC. This kit will help avoid this from occurring.

Possible Reason (V2 Units)	Solution
Insufficient Water, Low-Level Water Sensor	If water falls below the low-level sensor in the water reservoir, the ice making will stop, and will not attempt to make ice for 5 minutes. If this occurs several times, the water dispense light will blink and the system will have to be reset to operate again. Insure there is adequate flow of water into the system.
Evaporator Sensor Error or Failure	If the sensor fails or detects a colder temperature out of normal operation, the system will stop making ice for 10 minutes. This sensor can and SHOULD be bypassed. Unplug the sensor from the circuit board. It is the blue plug on the right side of the board.
Ice Tank Temperature Sensor Error or Failure	If the sensor fails or malfunctions, it will cause ice production to stop. This sensor can be bypassed like the Evaporator Sensor. It is the second plug from the bottom on the right side of the board.
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	be physically harder and slow the evaporator. Ice dispense light will blink in this event.
	To remedy:
	• Drain and measure TDS from the evaporator and ice melt.
	• Share these values with Technical Support,
	• Properly descale the unit.
	• Check incoming water supply to the system.
	• Add the drain kit available FOC. This kit will help avoid this from occurring.
	*If Ice Light blinks on a new install, that would represent this.

3. <u>Screeching/Whining Noise</u>

Possible Reason	Solution
Hard Water	This normally occurs when water is not treated with RO and hardness of water is high. Scale builds up in the gear motor as it is separated during freezing, the heat exchange is not performed properly, freon becomes much colder than intended, and ice becomes harder. This results in stress on the gear motor and causes screeching sounds. • Cleaning and descaling are recommended. • Draining of auger water is recommended as well. • Adding the drain kit is highly advised. • Change to RO filtration is highly advised.

4. <u>Filtration</u>

Ice systems are all very sensitive to hardness. For this reason, we recommend using RO where possible and almost always if TDS from the tap is greater than 150 PPM. For an RO to work properly it is very important that the following variables are addressed and performed properly.

- Incoming Water Pressure: RO's require 60-70psi to work properly.
- Lower PSI will cause the reduction in TDS to suffer greatly, as well as the recovery rate.
  - 60psi results in (roughly) 7.3oz/min from 80GPD membrane
  - 40psi results in (roughly) 2-3oz/min from 80GPD membrane
  - 60psi results in (roughly) 98% reduction of TDS from the RO
  - 40psi results in (roughly) 80-85% reduction of TDS from the RO
  - Example:
    - 500 Tap TDS at 98% reduction = 10TDS product water
    - 500 Tap TDS at 85% reduction = 75TDS product water
    - 500 Tap TDS at 80% reduction = 100TDS product water
    - With the mineral add back filter a high concentration of calcium will negatively impact the amount of scale that will, as a result, negatively impact ice systems.
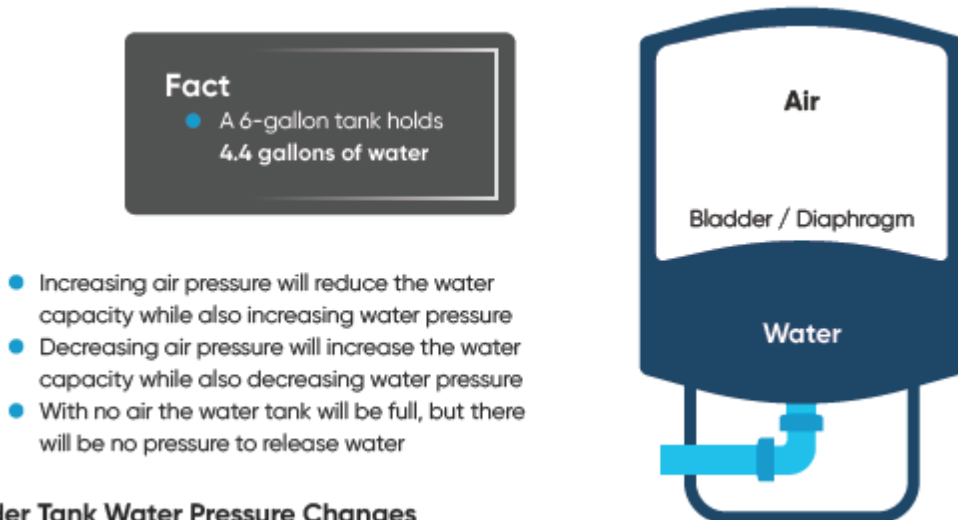
- When using a bladder, this is much more susceptible to manifesting itself as a problem.
  - As the bladder pressure pushes back on the filter, lower pressure will reduce recovery even beyond the above stated levels and will be unable to properly fill the bladder.
  - This will also result in burning through pre filters as it will take much more water to make little product water.
- Signs of this issue in gravity fed tanks will be manifested mostly through form of taste complaints, in this system it will manifest itself as no ice or running out of water prematurely.

Solutions for Low Water Pressure:
- Add a Booster Pump
- Use Carbon Filtration (be sure to remove the mineral add back filter)

Bladder Tanks:
- It is important that the right size bladder tank be used in conjunction with sufficient flow.
- It is ALSO important that the bladder tank be set to the correct pressure.

Fact
- A 6-gallon tank holds 4.4 gallons of water

- Increasing air pressure will reduce the water capacity while also increasing water pressure
- Decreasing air pressure will increase the water capacity while also decreasing water pressure
- With no air the water tank will be full, but there will be no pressure to release water

Air

Bladder / Diaphragm

Water

Bladder Tank Water Pressure Changes

Bladder tanks have fluctuating water pressure as they empty. This may impact the flow rate going to the ice system as the tank is depleted.
- The amount of bladder tanks, filter banks feeding the bladder, pressure, and if a booster pump are needed must all be considered for install requirements. No two accounts are the same and usage will greatly impact the decision. If you have a large bladder tank installed and you have reports of no ice, please revert to the above section on how to check to see if water flow is an issue.
- For large usage account with larger bladders, it may be necessary to have additional filter banks to improve the recovery time.
  - Please note that when doing this a booster pump may become necessary even if there a tap pressure of 60psi.

o Failure to take this into consideration may cause the bladder to ineffectively fill due to pressure drop with multiple units in line which mainly manifests itself as the larger bladder tanks get closer to filling

o This will also result in burning through pre filters and using a lot of water that will ultimately be just sent down the drain

Please see below for recommended air pressure that should be in the bladder depending on size of the bladder.

Size	Part Number	Size	Recommended Air Pressure
4 Gallon	EQGENE-0004	11" (Diam.) x 14" (Height)	6-7 psi
14 Gallon	EQGENE-0014	15" (Diam.) x 23" (Height)	6-7 psi
20 Gallon	EQGENE-0020	16" (Diam.) x 29" (Height)	7-10 psi
32 Gallon	EQGENE-0032	21" (Diam.) x 28" (Height)	7-10 psi
44 Gallon	EQGENE-0044	21" (Diam.) x 37" (Height)	10-15 psi
85 Gallon	EQGENE-0085	26" (Diam.) x 45" (Height)	10-15 psi
120 Gallons	EQGENE-0120	26" (Diam.) x 60" (Height)	10-15 psi

5. Hot Water Dispense produces water that is not hot

Possible Reason	Solution
Overload Thermostat Tripped	• Locate the Overload Thermostat mounted on the side of the hot tank. Press the red button to manually reset the thermostat and return the hot tank power circuit to normal operation.
Hot Tank Power Switch is off	• Locate the Hot Tank Power Switch on the back of the machine and switch it on.