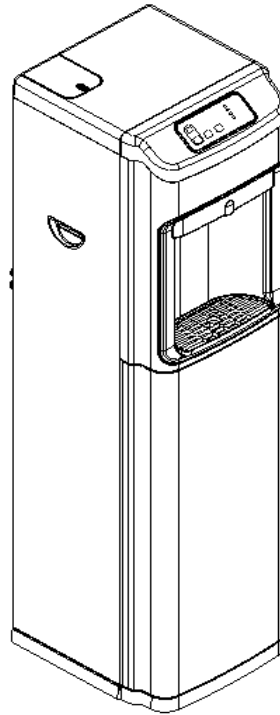


**MODEL FW-2000  
OPERATION  
MANUAL**



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Please read these instructions completely before operating this unit

## **Introduction**

Congratulations on your purchase of our revolutionary Bottle-less Water Cooler! Our coolers are all designed to replace the conventional 5 gallon water bottle while eliminating the hassles of deliveries, lifting bottles and eliminating plastic bottles from landfills. Our coolers are designed to produce pure great tasting water for the whole family that is clean and safe to drink.

Our coolers are connected to your city or well water supply to efficiently filter out tastes and odor, and to remove microscopic contaminants by using reverse osmosis purification technology. We manufacture a wide range of models to fit any home or office application.

**The H2O-2000 Model** has 3 temperature faucets; cold water is chilled around 44°F, hot water is heated at 180°F and ambient.

All International H2O models are manufactured and marked as “RO” or “F” assemblies. The “RO” assembly utilizes CSM Reverse Osmosis water purification technology which produces pure safe water from city or well water. The “RO” assembly is comprised of a 5-micron sediment filter, a carbon (GAC) 10-micron filter, CSM RO membrane and a post carbon filter to improve taste. The “RO” filter assembly requires a drain line connection to be installed which removes rejected water to the sewer.

The “F” assembly is comprised of sediment and carbon filter system, but not the RO membrane; therefore, it does not require a drain line connection.

**CAUTION: The filter version “F” must be used only with softened water or water that has less than 3.5-grains of hardness to prevent scaling and premature burnout of the heating elements.**

## **Receiving the Cooler**

### **Unpacking**

International H2O products are shipped completely assembled and ready to operate. Remove the top of the box and slide the water cooler out and save the box and packing materials.

### **Inspection**

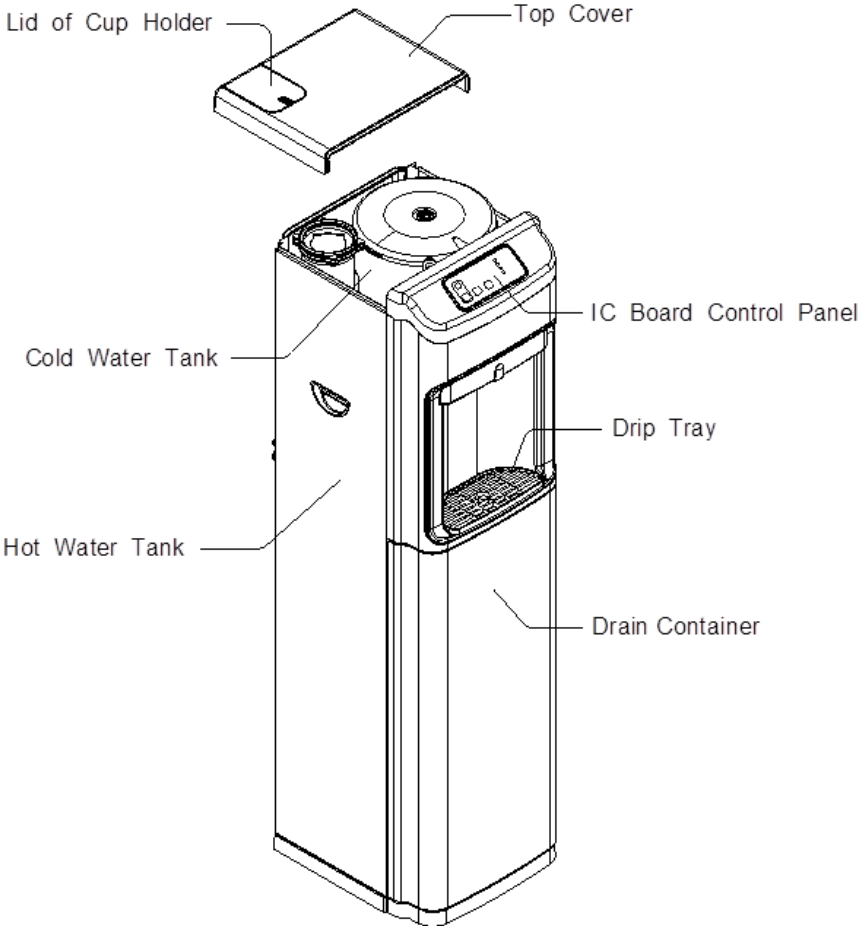
Inspect the cooler for shipping damage. Look at the exterior panels to see if they have been dented or damaged. Check the dispensing spigots in the front. Open the bottom panel to assure that the filter system is intact. Look at the back of the cooler to see if the compressor is secure and has not broken from the mounting. Inspect filter system to see that nothing is damaged or dislodged from shipping.

### **Description Model H2O-2000**

The H2O-2000 Model provides water at 3 different temperatures, dispensed from three spigots, “hot”, “cold” and ambient. The assembly drawing is shown in Figure 1. Water flows from the filter system into the ambient tank and the cold water tank simultaneously. The cold tank then feeds the hot tank which is heated by internal heaters. The level in the cold water tank is controlled by a float valve mechanism which controls a 4 way auto-shut off valve on the water feed line to maintain a

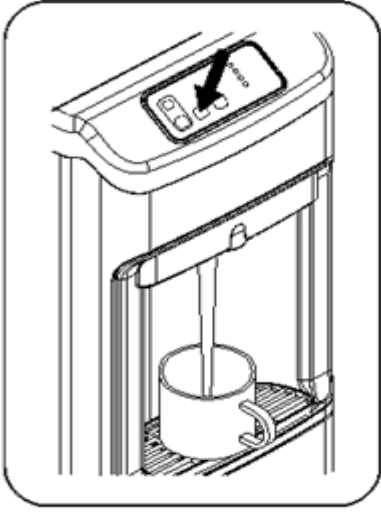
constant level of filtered water. Both models are available with reverse osmosis (RO) or standard filter (F) versions.

## **Description Model H2O-2000**



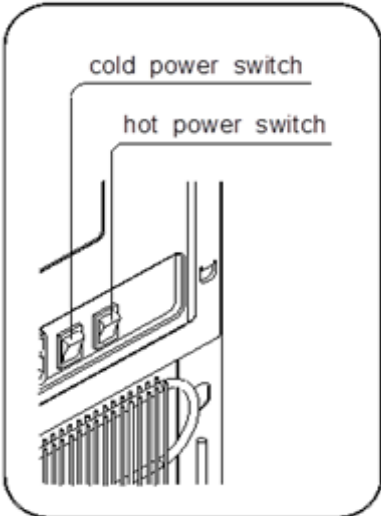
**Figure 1. Assembly Drawing Model H2O-2000**

## **Operation**



**Figure 2. Faucet operation**

When installation is complete, the unit will fill up with water and shut off when the tanks are full. Plug the unit in to an outlet and press the cold/hot faucets until a steady stream of water comes out.

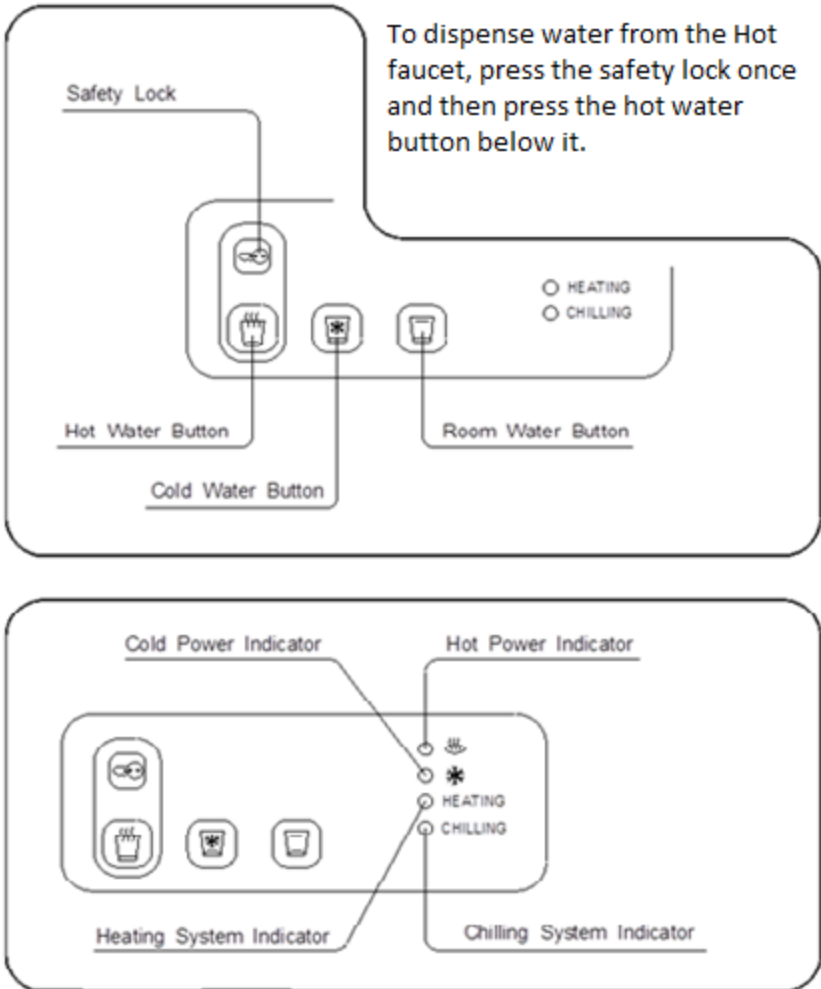


**\*Make sure the tanks are filled with water before continuing to the next step.**

Turn on the hot/cold switches located on the back of the cooler. Both hot/cold elements will begin chilling and heating the water inside the unit. Indicator lights will also illuminate of the front of the cooler.

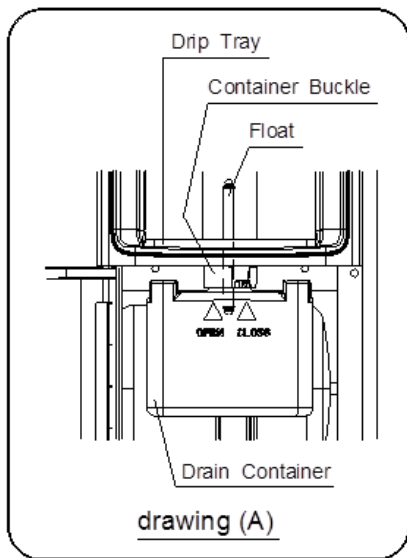
Figure 2. Hot and cold power on/off switch

## Operation Cont...



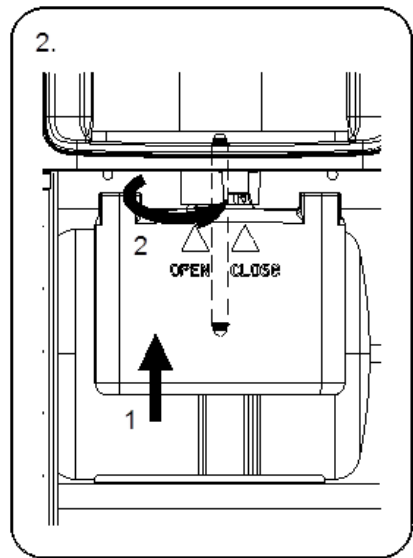
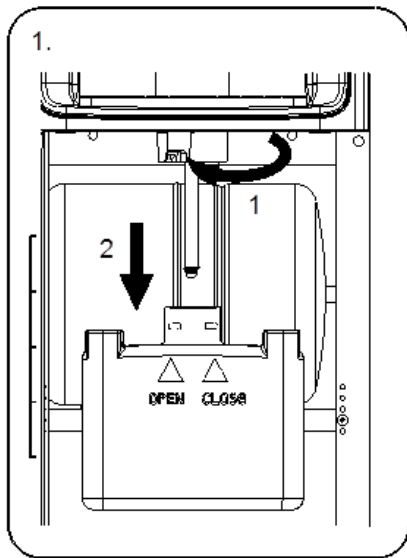
# **Drain Container Operation**





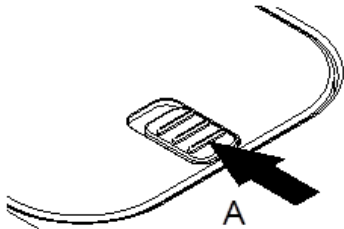
When the float rises higher than the drip tray, as shown in drawing (A), the drain container is nearly full and must be emptied immediately. The procedures are as follows:

1. Open the front lower cover, hold the container and turn the container buckle in clockwise direction to aligned with the triangle sign for open. Pull down the container and pour out the water.
2. After emptying the container, insert the opening to the container buckle and turn the buckle in counterclockwise direction to aligned with the triangle sign for close. Make sure the container is completely attached to the buckle to prevent it from falling off.

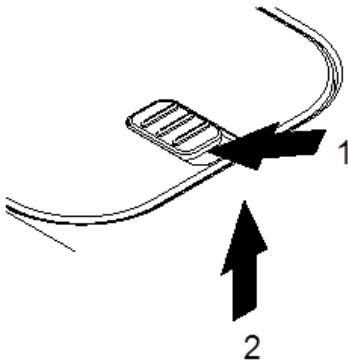


## Cup Dispenser Operation

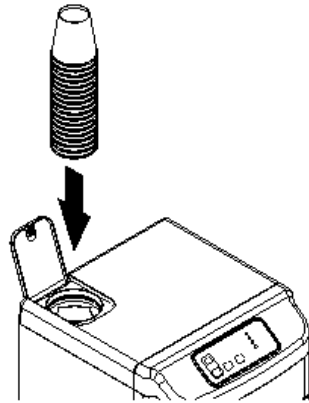
1. Push the clip on top of the cup dispenser lid as the arrow A is showing.



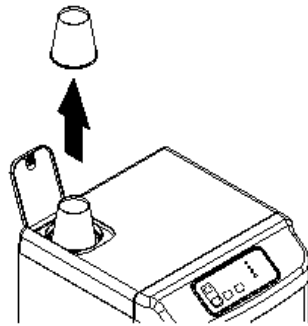
2. Hold the clip as shown in the picture by arrow 1, then lift up the lid as directed from arrow 2.



3. Please load the cups into the hidden cup dispenser with bottoms up. Push cups all the way down as the arrow is showing till no more may fit in.



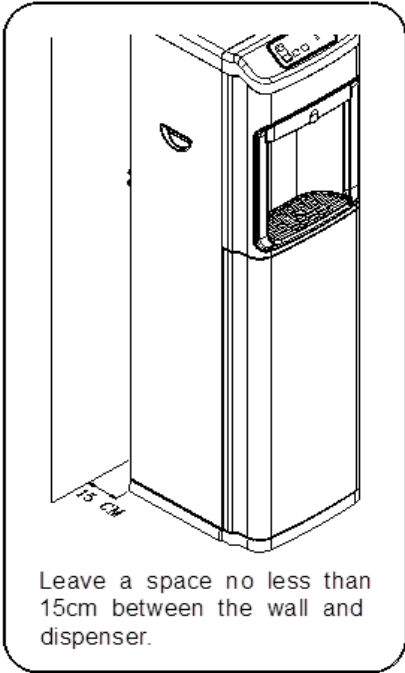
4. Simply pull out the cups gently when needed.



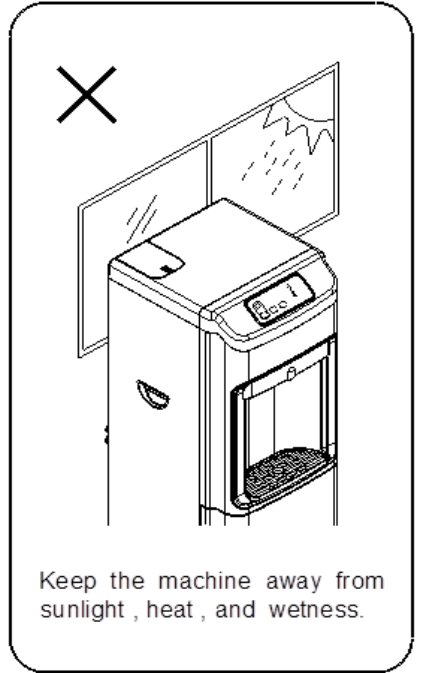
## **Positioning the Cooler**

1) It is not recommended to install this cooler in an area where water may cause severe or costly damage.

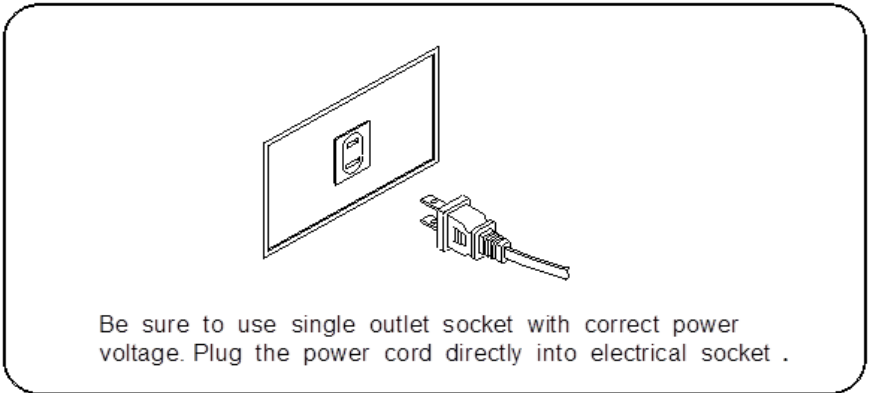
2) Do not position the cooler where it can be hit or bumped by Vacuum cleaners or floor waxing machines. This can cause breaks in the waterline, connection fittings and compressor tubing.



Leave a space no less than 15cm between the wall and dispenser.



Keep the machine away from sunlight , heat , and wetness.

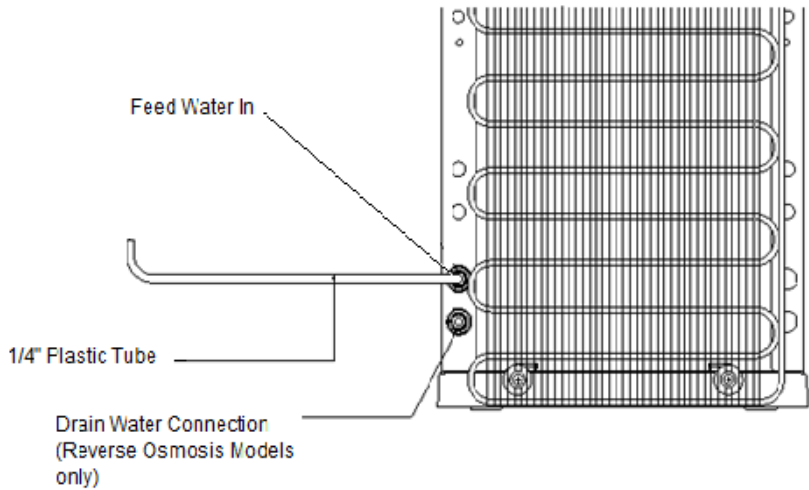


Be sure to use single outlet socket with correct power voltage. Plug the power cord directly into electrical socket .

## **Water Cooler Connections**

When you receive the water cooler, the water connections on

the back have of the cooler have tube plugs in them. These tube sections must be **removed** before making all your connections. To remove the tube sections see figure 7 “Disconnect”. The 1/4" plastic tubing should be used for making the Feed Water and Drain connections. If hard copper tubing is used for the Feed Water and Drain connections the bulkhead fittings must be changed to a metal fitting.

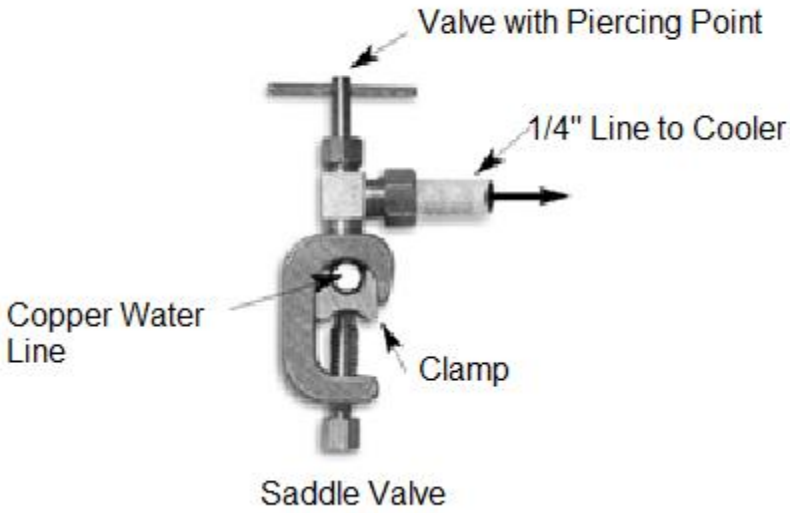


**Figure 4.** Water Cooler Connections

## Feed Water Connections

To connect the feed water, use the supplied self-piercing saddle valve to connect to the cold water supply line under the sink.

Attach the 1/4-inch tubing to the compression fitting on the side of the valve. Clamp the saddle valve over copper or plastic feed line (cold water only). Turn the handle on the valve until the needle stem pierces the tube. Then retract the needle 1-2 turns to start water flow. See Photo inset.

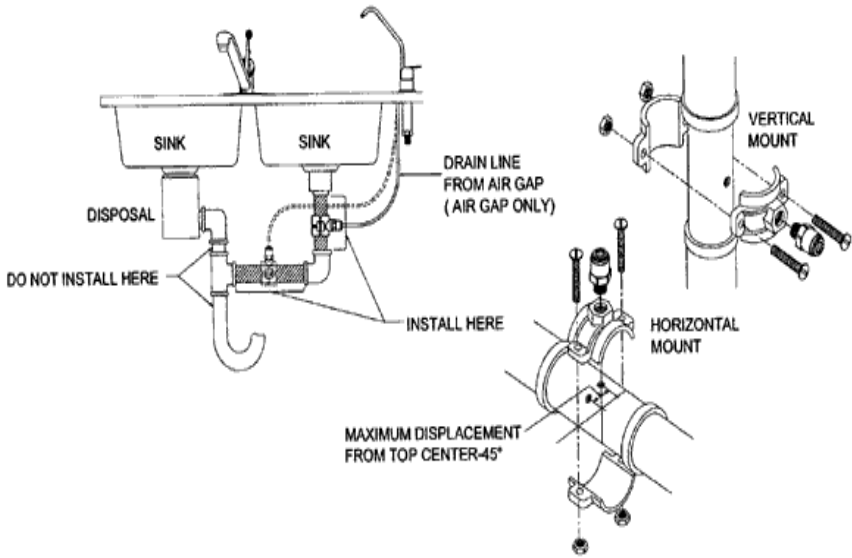


## **Drain Connection**

(Applies to models with Reverse Osmosis "RO" only)

The drain line in the back (Fig. 4) must be hooked to the drain line ahead of the normal sink water trap.

See Figure 5 below. Place the 2 part drain saddle on the drain pipe before the drain trap. Allow proper space for the drilling operation. Tighten the saddle bolts evenly on both sides. Using the opening in the drain outlet saddle as a guide, drill a 1/4" hole in the drain pipe. Clean any debris out of the drain saddle connection. Connect the drain line to the cooler using the 1/4" black tubing supplied.



**Horizontal Drain Line:**

Locate drain hole as close as possible to top of pipe (between 45° and top) and as far as practical from garbage disposal.

**Vertical Drain Line:**

Locate drain hole on a straight length of drainpipe next to "P"/"S" trap between trap and sink.

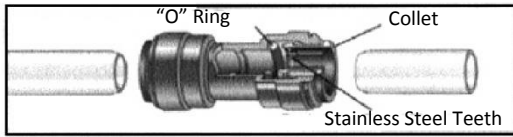
**Figure 5. Drain Connections for "RO" models**

## **EZ Connections**

The standard tubing connections on the water coolers are EZ connect fittings. Use the tubing and follow the instructions below in fig. 7 to make the connections. If you cut the tubing, make sure it is a square cut, fits squarely in the fitting and seals

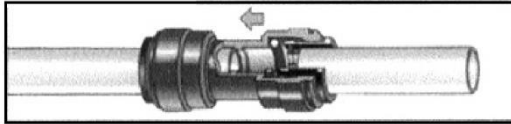
properly.

### Cut the tube square



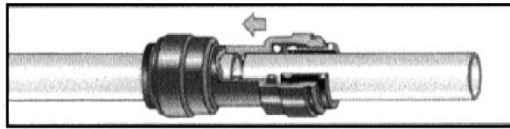
Cut the tube square. It is essential that the outside diameter is free of score marks and that burrs and sharp edges be removed before inserting into fitting. For soft thin walled plastic tubing we recommend the use of a tube insert.

### Insert tube



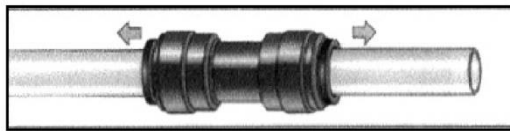
Fitting grips before it seals. Ensure tube is pushed into the tube stop.

### Push up to tube stop



Push the tube into the fitting, to the tube stop. The collet (gripper) has stain-less steel teeth which hold the tube firmly in position while the "O" ring pro-vides a permanent leak proof seal

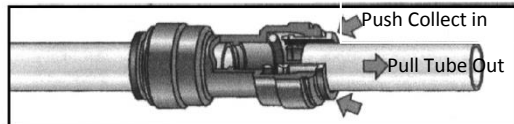
### Pull to check secure



Pull on the tube to check it is secure. It is good practice to test the system prior to leaving site and/or before use.

### Push in collet and remove tube

### Disconnect



To disconnect ensure the system is depressurized before removing fitting. Push in collet squarely against face of fitting. With the collect held in this position, the tube can be removed.

## Start-Up Flush

Open lower front door to access filter assembly, turn the water on at the at the water connection, this brings water to the ball valve.

Disconnect the tube from the 2nd stage carbon filter (circle in figure below) and place a cup or pan right underneath the hole to catch water. Open ball valve inside the cooler 1/4-turn (handle in line with tube is “on”) and let water flow through filters into the bucket or pan to push out air and carbon fines. When water runs clear, turn off ball valve and re-connect the tube to the filter.

Turn on the water to the filter system by opening the ball valve inside the cooler 1/4-turn (handle in line with tube is “on”). Check all connections to assure there are no leaks.



**Figure 6** Filter configuration model “F” with cooler door opened

## **Tank Flush**

Flush tanks out by draining all water through the (1) drain plug located on the back of the cooler and drain water through the



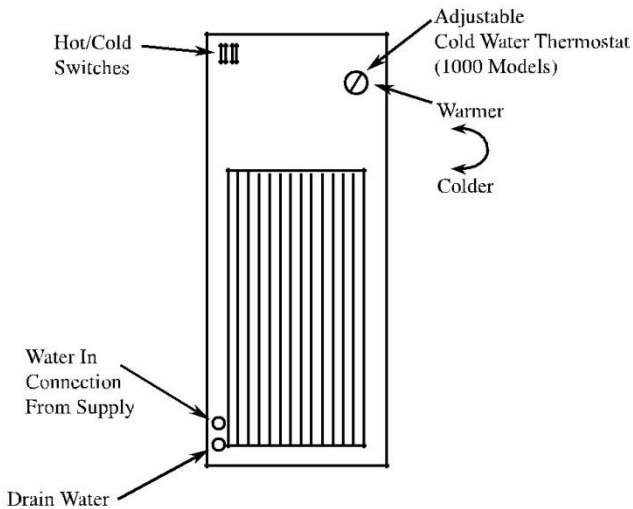
dispensing spigots. Fill and empty the tanks 3 times with the filtered water, this ensures great tasting water. When the tank has filled again with filtered water the cooler is ready to dispense water. You may now turn on the Hot and Cold buttons on the back of the machine. **NOTE: You should always turn on the Hot and Cold elements when they have water inside the tanks.**

**CAUTION. DO NOT TURN ON HOT OR COLD POWER CONTROLS YET.**

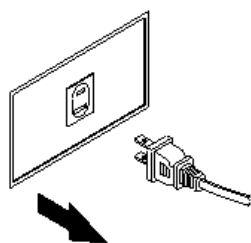
Remove the top cover of the cooler by removing 2 screws from back of top cover. Pull the cover off, exposing the main tank. This model uses a mechanical float valve to control flow to the tank. The unit does not have to be plugged in to start water flow.

Water will flow into the ambient, cold and then the hot tank as well. Let cooler tanks fill with the filtered water until full - about 1-hours for the 'RO' version, about 10-15 minutes for the 'F' version.

Observe the water level when full, and see that water input to the tank stops when it is full.



***Figure. 7*** *Back view of the Cooler Water Connections Model H20-2000*  
**Cleaning and Maintenance**



1. Please make sure the machine is completely disconnected from electricity before cleaning.

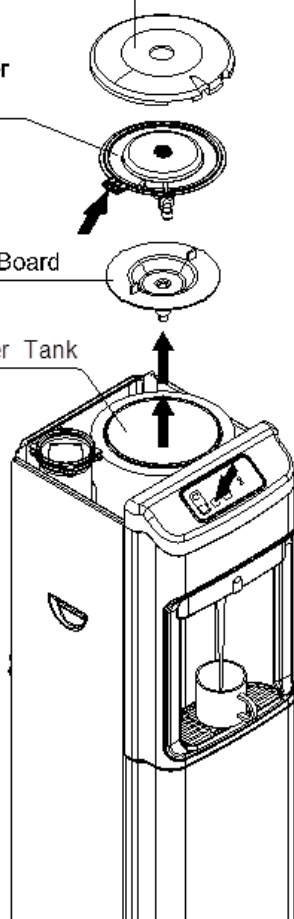
2. Remove the top cover by unscrewing the screws of left and right side plates. Open the interior lid of cold water tank (shown by the arrows) and take off the insulator board. Press cold and hot water buttons to let water drain out completely.

Styrofoam Cover for  
Cold Water Tank

Cold Water  
Tank Lid

Insulator Board

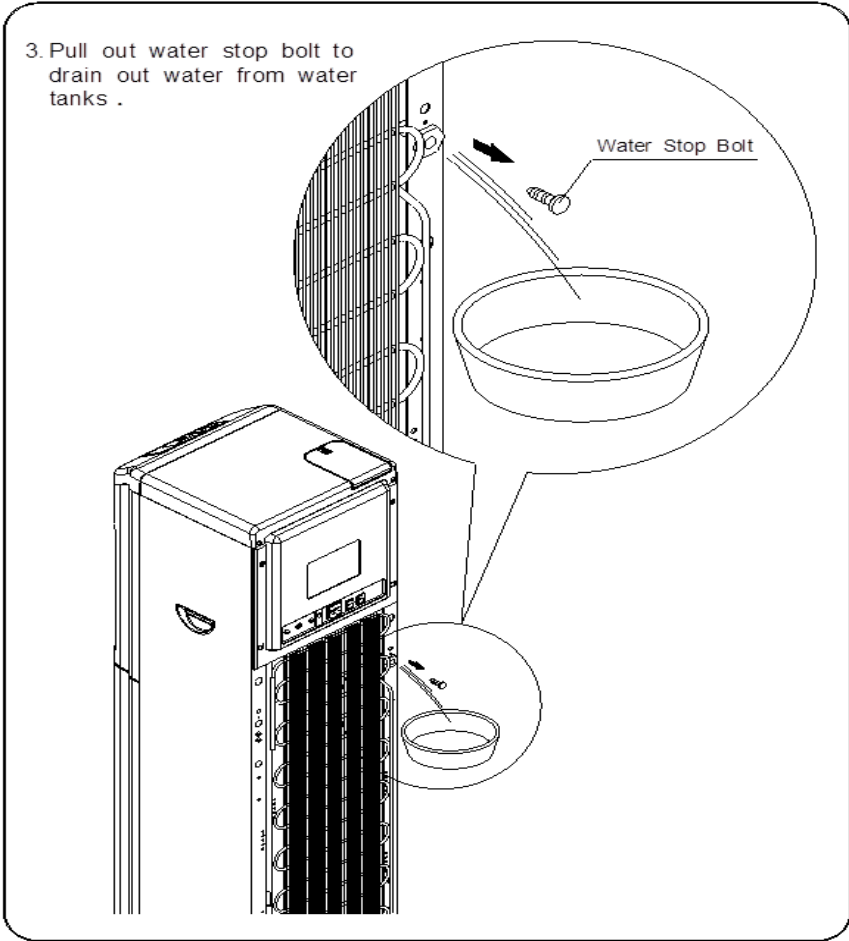
Cold Water Tank



## Sanitize

Fill main water tank with water. Add 1-2 teaspoons of liquid chlorine bleach. Let stand for 5-10 minutes. Drain the water then let water from filters refill tank and drain a second time. Remember to drain from dispensing spigots also.

**Note:** Upon completion of cleaning, wait at least 10 minutes after the power cord is plugged in before turning on the Hot and Cold Water buttons.



## Filter Replacement

**The filter elements must be replaced at regular intervals to maintain the quality of the water.**

The H2O-2000F has 3-stages of mechanical filtration. 1st stage 5-micron sediment filter, 2nd stage activated carbon filter and a 3<sup>rd</sup> stage post carbon filter. The filter elements in all stages must be replaced every **6 months**.

The H2O-2000RO model has the 3-stages of filtration plus an additional Reverse Osmosis membrane filter. The 3 pre filters must be replaced every **6 months**. The Reverse Osmosis membrane must be replaced every **3 years**.

**Replacement Procedures, Filtration Versions (F) H2O-2000F Coolers**

- a) TURN OFF POWER TO HOT/COLD ELEMENTS
- b) Swing open the front hinged cover.
- c) Close the ball valve to stop water flow through the filters.
- d) Place a towel under the filters to catch water. The filters will have water in them which will run out when the filters are unlocked.
- e) Twist the filters to remove them from their housings.
- f) These filters are disposable, encapsulated filters. Remove and discard the entire filter body. Replacement filters are sold as a set:

1<sup>st</sup> Stage sediment filter

2<sup>nd</sup> Stage carbon filter

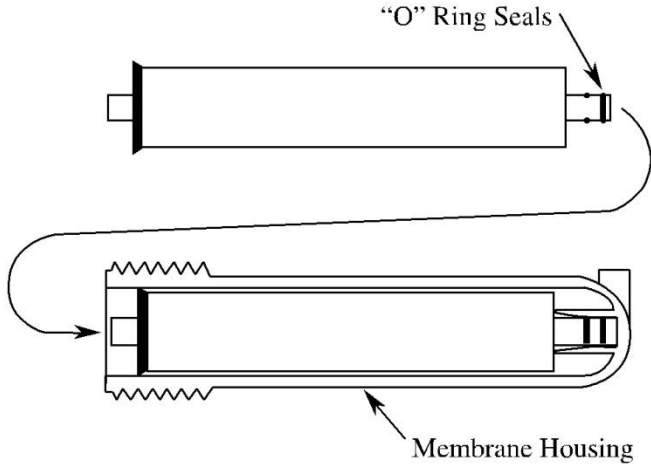
3<sup>rd</sup> Stage post carbon filter or (optional Nano silver)

- f) Twist new filters counter clockwise into the housing brackets.
- g) Open ball valve and let water flow through filters, when the cooler is full empty out the water into a bucket. This will eliminate the first batch of water which is full with carbon fines.
- h) After the cooler fills up again turn on the power to the cold and hot tanks. Wait a few minutes to assure there are no leaks and close the filter door.

# **Reverse Osmosis Membrane Replacement**

**RO versions (RO)** (every 3 years)

- a) Use the same procedure as above sec a-c.
- b) Remove the RO stage from the clips. Disconnect the white tubing from the RO housing cap.
- c) Remove the cap from the housing by unscrewing it.
- d) Using a pair of pliers, remove the RO element from the housing by grasping the tube end and pulling it out.
- e) Use RO filter replacement P/N CSM50 (50gpd). Insert the element into the housing with double “o”-ring end going in first—toward the bottom of the housing. Make sure the “o”-rings are sealed. Replace the cap. Reconnect the white tubing. Proceed as in above sec. g.



***Figure. 8*** RO Membrane Installation

## Trouble Shooting Guide

<b>PROBLEM</b>	<b>CAUSE</b>	<b>SOLUTION</b>
No Power	No electric current flowing.	Make sure the cooler is plugged in and check for improper connections.
Cold Water not cold enough	The cooler is placed too close to the wall.  Wire Condenser on backside is dusty.  Compressor does not have enough refrigerant.	Provide a minimum of 5" space between wall and back of dispenser. Clean wire condenser every three months. Place cooler in a well-ventilated area. Adjust thermostat.
Hot Water doesn't flow out of spigot	Air may be trapped in the line.	Hold the spigot down for 30 seconds to relieve air.
Won't cool	Controls not set.	Turn cold temperature switch "on" at back.
Panel not lit	No power.	Check that the power cord is in the socket and turn on the cold/hot buttons on the back of the cooler to the "on" position
No hot water at start up	Hot tank overheat protection sensor tripped.	1. Unplug cooler. 2. Let sensor cool down for 1 hour. 3. Reach through cooling grill with pencil or narrow screwdriver to press nude color reset button on upper sensor located on the hot tank.

**Note** - In the event of problems beyond the scope of the troubleshooting described in the manual, please call your selling dealer.

## Specifications

<b>Model No.</b>	<b>H2O-2000</b>
Voltage/Frequency	AC110V
Dimensions	(L)14 x (W)13 x (H)48
Weight (empty)	70 lb.
Hot Tank Capacity	.5 gal.
Ambient Tank Capacity	2.3 gal.
Cold Tank Capacity	1 gal.
Power Consumption	Hot Water: 500W
	Cold Water: 100W
Electric Power Cord Length	6Ft.

## **Warranty**

All International H2O products are warranted to be free from defects in materials and workmanship under normal use within the condition of operation listed for a period of 1 year from date of purchase. The compressor has a 5-year warranty.

There is no liability assumed by the company for damage due to water leakage or other secondary effects from any component defect. Labor is not covered in this warranty. The warranty applies when "Conditions of Operation" below are met.

### **Conditions of Warranty**

Water System Pressure 35 -100psi, Temperature, 40 -100degrees F,  
Water PH range 4-10, Max. TDS 1500 PPM, Turbidity, <1.0 NTU,  
Water Hardness < 20gpg, Iron <0.1 mg/l, Manganese <0.1 mg/l,  
Hydrogen Sulfide < 0.00 mg/l

\*For filter only systems ("F" models), water hardness must be less than 3.5 grains or 60 mg/liter





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Tel. (800) 439-0263

Fax (215) 354-0304

Email: [Sales@filterwater.com](mailto:Sales@filterwater.com)