

# Installation & Use Manual

*Original Instructions*

**Model: LVRC8WS2KWR ezH2O® Bottle Filling Station and Cooler**



## Description

Combination Vandal Resistant Refrigerated Drinking Fountain (Cooler) and Bottle Filling Station delivers chilled, clean potable drinking water. Top Bottle Filling section dispenses water for bottles at the press of the top button. While the bottom Water Cooler section, which houses the refrigeration and filtration systems, delivers a steady stream of water for direct drinking at the press of the front button.

## Ratings

- Electrical: 220Vac, 50Hz, (See nameplate for Amperage), 1 phase.
- Ambient Air Temperature: 50-100.4°F (10-38°C).
- Water Pressure: 20-100 psig (0.14-0.69 MPa).
- Maximum Water Temperature: 90 °F (32 °C).
- Refrigerant: HFC-R134a
- Ingress Protection: IP21
- For Indoor Commercial Use only.
- Water Inlet: 3/8" O.D. unplated copper tube.
- Waste Water Outlet: 1-1/4" O.D. tube

## Definitions

- DANGER** – Indicates death or serious injury will result if proper precautions are not taken.
- WARNING** – Indicates death, serious injury or property damage can result if proper precautions are not taken.
- CAUTION** – Indicates some injury or property damage may result if proper precautions are not taken.

**Authorized Service Personnel** – Factory trained personnel or personnel having working knowledge of electrical, plumbing and machine (appliance) maintenance procedures.

## Safety

### DANGER

- Please read these instructions completely before starting the installation or performing any service. Failure to follow the instructions and safety precautions in this manual can result in serious injury or death.
- After installation, keep these instructions in a safe location for future reference.
- Electric supply must be identical in voltage, cycle, and phase to that specified on nameplate.
- Electrical supply must have Ground Fault Circuit Interrupter (GFCI) protection.
- A means for disconnecting electrical supply to the unit must be incorporated in the fixed wiring in accordance with wiring rules. This is to allow electrical disconnection of the unit from electrical supply after installation.

### WARNING

- For use with clean, clear potable drinking water only. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before the system.
- Installation and connection to water and electrical mains must be in compliance with local and national laws.
- All Installation and Service work must be performed by an authorized service personnel.

### CAUTION

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge if they have been given supervision or instructions concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- To prevent a metallic taste or increased metal content in the water due to an electrolysis process caused by electrical feedback from the grounding of electrical equipment to water supply and water waste mains, connect to these mains using non-conductive materials. The provided filter meets this requirement.

## Installation

For correct and safe installation, please read these instructions completely.

### DANGER

- All Installation work must be performed by an authorized service personnel.
- Disconnect electrical supply serving the Installation area to reduce risk of electrocution.
- Unit not suitable for installations where water jets could be used.

### WARNING

- Shut off water supply serving the Installation area to reduce risk of water damage.
- Ensure proper ventilation by maintaining clearance from cabinet louvers to wall on each side of Cooler as specified in Rough-In.
- Never wire compressor directly to electrical supply.
- Thoroughly flush all water lines and fittings of all foreign matter before connecting to Cooler.
- Warranty is void if Installation is not made in accordance with current Manufacturing instructions.

### CAUTION

- Hose-sets are not to be used for connecting to water mains.
- If inlet pressure is above 100 psig (0.69 MPa), a pressure regulator must be installed in water supply line. Any damage caused by reason of connecting this product to water supply line pressure outside it's rated pressure, is not covered by warranty.
- Tools/Items required but not provided:
  - Center Punch
  - 1/2" Socket & Ratchet Wrench
  - 5/32" (4mm) Allen Wrench
  - Fasteners for wall type
  - Water Shut-off Valve with 3/8" (9.5mm) Compression outlet.
  - Waste Trap (non-metallic)
  - Safety Glasses
  - Protective Gloves
  - Electric Drill
  - 3/4" (19mm) Wrench or Crescent Wrench
  - Utility Knife
  - Tape Measure
  - Pencil

## Installation: Cooler Mounting

1. Remove wall mounting plate(s) from Cooler. Install Wall Mounting Plate(s) as per Rough-In.

**NOTE:** Mounting plate(s) MUST be supported securely. Add fixture support carrier if wall will not provide adequate support.

2. Install water cooler onto wall bracket and secure to wall.

## Installation: Water Line connection

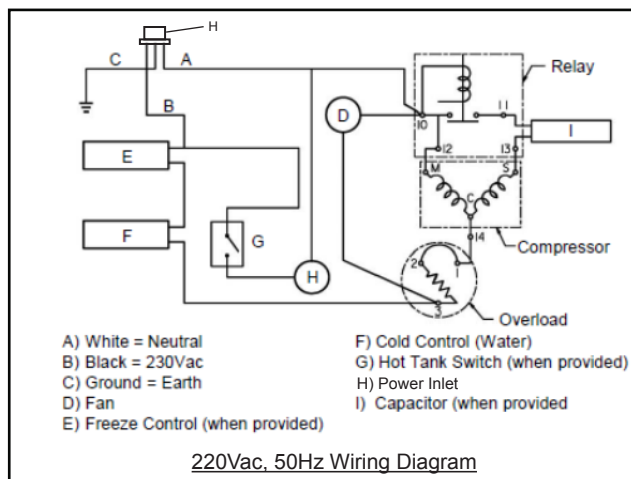
1. Ensure Mains Water Supply has Water Shut-off Valve with 3/8" (9.5mm) compression outlet.
2. Connect loose end of supplied 3/8" (9.5mm) unplated copper tube to Water Shut-off Valve. Other end of tube should be connected to inlet of Filter head. If not connected, simply insert into inlet fitting on Filter head until positive stop – approximately 3/4" (19mm). Then tighten locknut handtight to seal.

**NOTE:** If 3/8" (9.5mm) copper tube must be cut for proper fit, remove all burrs from the outside of tube and re-flush before use.

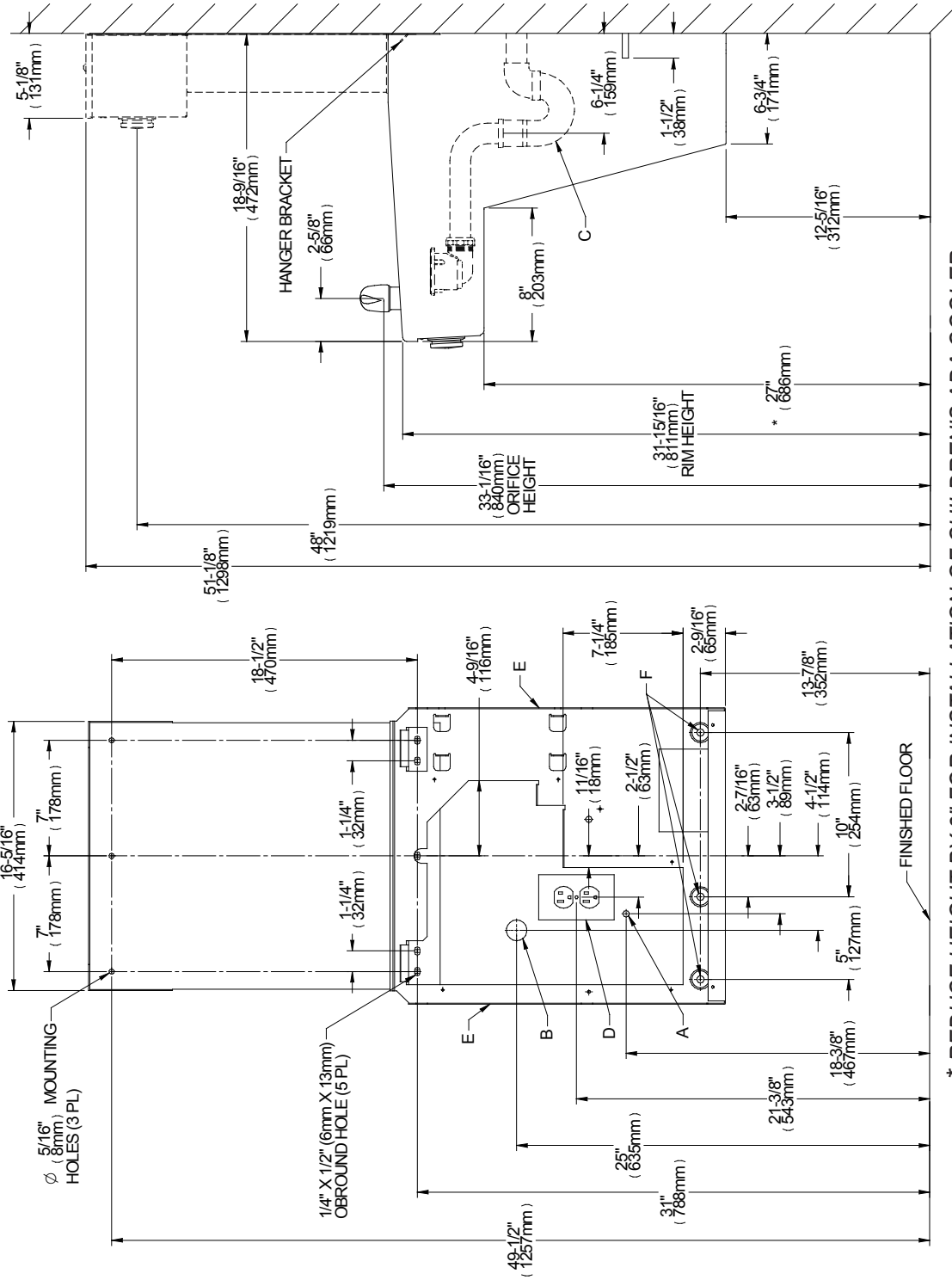
3. Install waste trap. Remove the slip nut and gasket from the waste trap and install them on the cooler waste line making sure that the end of the waste line fits into the waste trap. Assemble the slip nut and gasket to the waste trap and tighten securely.
4. It is recommended that the drain trap be insulated to avoid excessive condensation due to chilled water running through the trap.
5. Turn on building water supply and open Water Shut-off Valve. Check all connections for leaks and correct any found.

## Installation: Electrical connection

1. Rotate fan to insure proper clearance and free fan action.
2. Connect modular (C-13) end of International Power Cord Set (sold separately) into Power Inlet on Cooler and ensure plug-end reaches electrical outlet. **Do not plug into electrical outlet!**

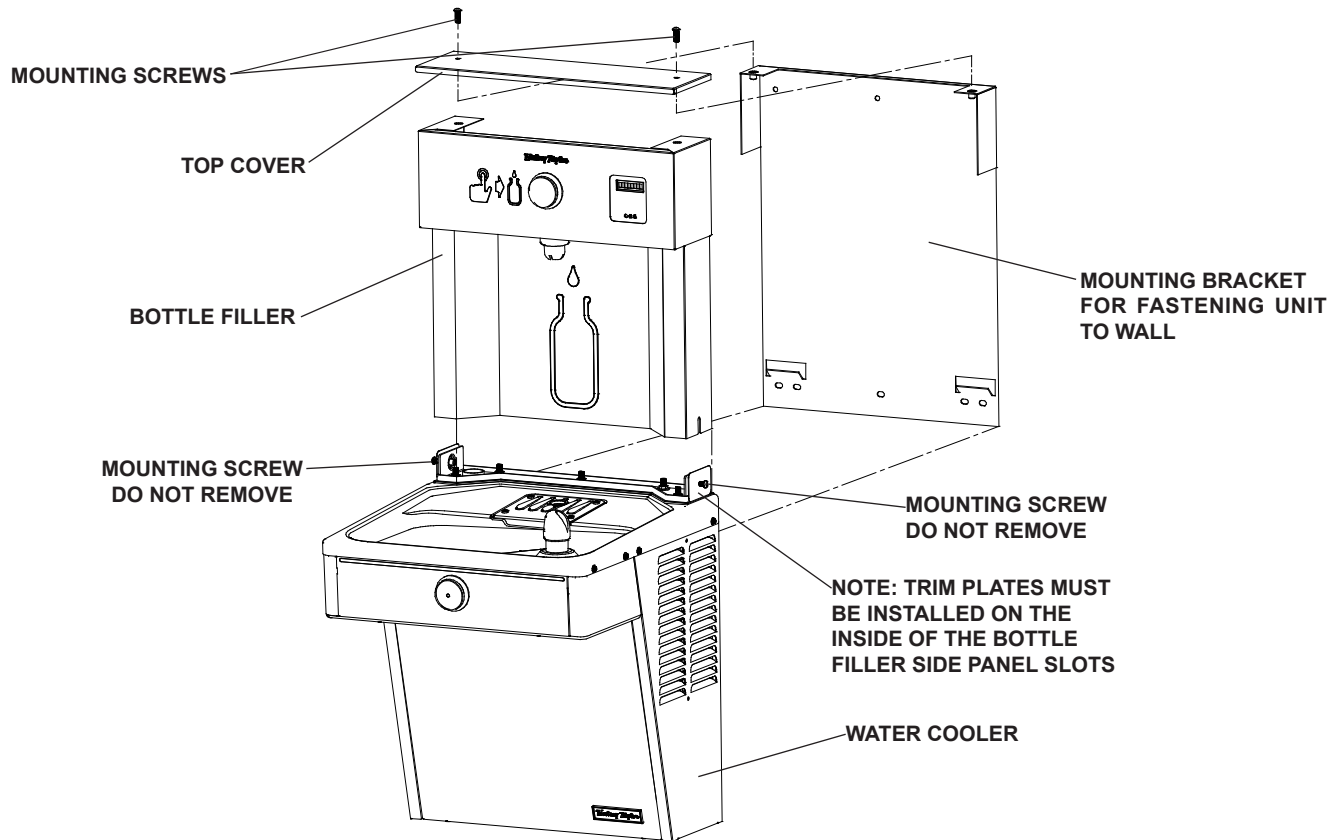


HTHBHVR8-25WR ROUGH-IN



**\* REDUCE HEIGHT BY 3" FOR INSTALLATION OF CHILDREN'S ADA COOLER**

- LEGEND:
- A = Water Mains Supply, 3/8" (9.5mm) O.D. compression outlet of Shut-off Valve (not provided) to be 1-1/2" (38mm) from Wall.
  - B = Waste Outlet, 1-1/4" (31.8mm) O.D. Drain Tube
  - C = 1-1/4" (31.8mm) Trap (not provided).
  - D = Electrical Mains Supply Duplex Outlet, 3-wire in Recessed Box. Must have Ground Fault Interrupter (GFCI) protection.
  - E = Ensure proper ventilation by maintaining 6" (152mm) minimum clearance from cabinet louvers to wall.
  - F = 7/16" (11mm) Bolt holes for fastening unit to wall.



## Installation: Bottle Filler Mounting

1. Remove Bottle Filler from carton.
2. Lay Bottle Filler on water cooler basin and cut insulation from tube even with bottom of unit, remove this insulation from the 3/8" tube, but do not discard.

**NOTE:** To prevent scratching the basin, place a towel or soft cloth over the entire basin when working above it.

3. Feed the waterline through the hole on top of water cooler.
4. Feed modular (C-13) end of International Power Cord Set up from the underside through hole on top of water cooler and hole in gasket, and connect to Power Inlet on Bottle Filler. Do not plug into electrical outlet.
5. With the power cord and waterline through the hole on top of water cooler place Bottle Filler on to mounting bracket on basin.

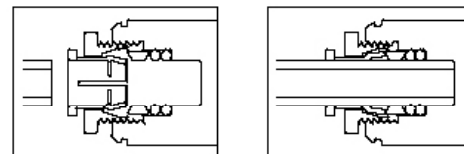
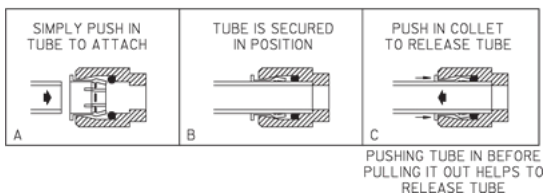
**NOTE:** Make sure bottle filler is installed properly on the basin gasket.

6. Once Bottle Filler is installed on basin mounting bracket, tighten the two screws (supplied) one on each side of the bottle filler.
7. Install Top Cover on Bottle Filler with two mounting screws (supplied).

**CAUTION:** Do not over tighten screws.

8. Install remaining tube insulation to the water line from bottle filler, connect Bottle Filler waterline inside of the water cooler by connecting the 3/8" water line with the 3/8" to 1/4" union and short piece of poly tube that was previously installed to the tee at the evaporator outlet.
9. Install filter cartridge, remove filter from carton, remove protective cap, attach filter to head by firmly inserting into head and rotating filter counterclockwise.

**NOTE:** If existing plumbing rough-in locations (Drain, Water In, Electric Supply) do not allow the filter to be mounted inside the cooler cabinet the filter can be installed horizontally below the unit. A retrofit kit is available to mount the filter beneath the cooler.



**Note:** Screw the locknut hand tight to seal

## Operation: Start-Up

1. Turn water supply on and inspect for leaks. Fix all leaks before continuing.
2. Connect plug-end of International Power Cord Sets from the Cooler and Bottle Filler into electrical outlets. Bottle Filler must have electrical power to dispense water. Be sure to reinstall fuse to the circuit or switch the circuit breaker back to the "ON" position.

### WARNING

Exposed electrically energized components. Use extreme caution.

3. Purge air from all water lines by:
  - Depressing button or front push bar of cooler/fountain.
  - Depressing the button at top of the Bottle Filler and verify water dispenses.

**NOTE:** Steady stream of water assures all air is removed.

4. The GREEN LED light on the Bottle Filler should illuminate showing good filter status along with the LCD Bottle Counter.
5. Recheck all water and drain connections with water flowing through system. Fix all leaks before continuing.
6. Once unit tests out, install Lower Panel on Water Cooler. Units are now ready for use.

## Operation: Bottle Filler Control Board Set-Up

### VERIFY CONTROL BOARD SOFTWARE

1. To verify the software program of the control board the unit will need to be shut down and restarted. The chiller (if present) does not need to be shut down and restarted.
2. The unit's lower panel must be open to access the power cord and wall outlet.
3. Shut down the unit by unplugging the power cord from the wall outlet or switching off the circuit breaker to the unit.
4. Restart the unit by plugging the power cord back into the wall outlet or by switching on the circuit breaker to the unit.
5. Upon start up, the bottle count display will show the software designation of BF11 or BF12.

### ACCESSING THE PROGRAMMING BUTTON

1. To access the program button, remove the top cover of the bottle filler. Remove the two (2) screws holding top cover to bottle-filler with a 5/32" allen wrench. Remove top cover. Do not discard mounting screws, they will be needed to reinstall the top cover after programming operations are completed. The programming button is located at the top right side of the unit on the control board.

### RESET THE FILTER MONITOR

1. Instructions apply to filtered units only.
2. Depress the program button for approximately 2 seconds until the display changes then release. The display will change and scroll through two messages:  
"RST FLTR" – Reset Filter Monitor  
"SETTINGS" – System Settings Sub Menu
3. If the program button is not pushed again the display will scroll through the two messages above for three cycles and then de-fault back to bottle count and be back in run mode. When the display changes to "RST FLTR", depress the button again. The display will change to show "FLTR =". Depress the button again and the display will show "FLTR =0"
4. The Green LED should be illuminated indicating that the visual filter monitor has been reset.

### SETTING RANGE OF THE IR SENSOR

1. Depress the program button for approximately 2 seconds until the display changes then release. The display will change and scroll through two messages:  
"RST FLTR" – Reset Filter Status LED  
"SETTINGS" – System Settings Sub Menu
2. If the program button is not pushed again the display will scroll through the two messages above for three cycles and then default back to bottle count and be back in run mode. When the display changes to "SETTINGS", depress the button again. The display will change to show "RNG SET" - Range set for IR sensor.

Continued from below:

2. When the display changes to "SETTINGS", depress the button again. The display will change to show  
"RNG SET" - Range set for IR sensor.  
"UNIT TYP" - Type of unit (REFRIG or NON-RFRG)  
"FLT SIZE" - Select filter capacity.  
"RST BCNT" - Reset bottle count
3. When display shows "UNIT TYPE" push program button once the display will show current value. Can be REFRIG or NON-RFRG
4. Push button once to change value. Once value is selected the display will show the new value. (Can be REFRIG or NON-RFRG)
5. "REFRIG"- stands for refrigerated product. In this setting the flow rate is estimated at 1.0 gallon per minute.
6. "NON-RFRG"- stands for nonrefrigerated product. In this setting the flow rate is estimated at 1.5 gallons per minute. Both "REFRIG" and "NON-RFRG" simulate 1 bottle equal to 20 oz.
7. Allow approximately 4 seconds to pass and the display will return to bottle counter and be in run mode.

### RESETTING BOTTLE COUNT

1. Depress the program button for approximately 2 seconds until the display changes then release. The display will change and scroll through two messages:  
"RST FLTR" – Reset Filter Status LED  
"SETTINGS" – System Settings Sub Menu
2. If the program button is not pushed again the display will scroll through the two messages above for three cycles and then default back to bottle count and be back in run mode. When the display changes to "SETTINGS", depress the button again. The display will change to show:  
"RNG SET"- Range set for IR sensor.  
"UNIT TYP" - Type of unit (REFRIG or NON-RFRG)  
"FLT SIZE" - Select filter capacity  
"RST BCNT" - Reset bottle count
3. If the button is not pushed again the display will scroll through the four messages above for three cycles and return to run mode.
4. When display shows "RST BCNT" push program button once the display will show current value e.g. "0033183".
5. Once display shows current value push the program button once more to reset back to 0. The display will show BTLCT = 0 for approximately 2 seconds and then return to run mode showing 00000000 bottles. NOTE: Once the bottle count is reset to zero there is no way to return to the previous bottle count.  
Testing the bottle counter:
6. REFRIG units: Place bottle or hand in front of sensor for 9.4 sec-onds to see bottle counter count 00000001, (This is based on filling a 20 oz. bottle)
7. NON-RFRG units: Place bottle or hand in front of sensor for 6.25 sec-onds to see bottle counter count 00000001, (This is based on filling a 20 oz bottle)

<p>"UNIT TYP" - Type of unit (REFRIG or NON-RFRG)  "FLT SIZE" - Select filter capacity  "RST BCNT" - Reset bottle count.</p> <ol style="list-style-type: none"> <li>When display shows "RNG SET" push program button once the display will show current value (can be 1 – 10) e.g. "RNG = 3".</li> <li>Once display shows current value push the program button to scroll through value of 1 – 10. Select the desired range setting.</li> <li>Once range is selected allow approximately 4 seconds to pass and then the display will go back to bottle counter and be in run mode.</li> <li>Test bottle filler by placing bottle or hand in front of sensor to make sure water is dispensed.</li> </ol> <p style="text-align: center;"><b>SETTING UNIT TYPE</b></p> <ol style="list-style-type: none"> <li>Depress the program button for approximately 2 seconds until the display changes then release. The display will change and scroll through two messages:  "RST FLTR" – Reset Filter Status LED  "SETTINGS" – System Settings Sub Menu  If the program button is not pushed again the display will scroll through the two messages above for three cycles and then default back to bottle count and be back in run mode.</li> </ol>	<p style="text-align: center;"><b>SETTING FILTER CAPACITY</b></p> <ol style="list-style-type: none"> <li>Depress the program button for approximately 2 seconds until the display changes then release. The display will change and scroll through two messages:  "RST FLTR" – Reset Filter Status LED  "SETTINGS" – System Settings Sub Menu  If the program button is not pushed again the display will scroll through the two messages above for three cycles and then default back to bottle count and be back in run mode.</li> <li>When the display changes to "SETTINGS", depress the button again. The display will change to show:  "RNG SET"- Range set for IR sensor.  "UNIT TYP" - Type of unit (REFRIG or NON-RFRG)  "FLT SIZE" - Select filter capacity  "RST BCNT" - Reset bottle count  If the button is not pushed again the display will scroll through the four messages above for three cycles and return to run mode.</li> <li>When display shows "FLT SIZE" push program button once. The display will show current value. Can be 3000GAL or 6000GAL.</li> <li>Push program button again to display the desired "FLT SIZE".</li> <li>Allow approximately 4 seconds to pass and the display will return to bottle counter and be in run mode.</li> </ol>
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## Service

For proper and safe servicing, please read these instructions completely.

### DANGER

- All Service and Maintenance must be performed by an authorized service personnel.
- Disconnect electrical supply to the unit before any service work to reduce risk of electrocution.
- Shut off water supply serving the unit before any service work to reduce risk of water damage.

### CAUTION

- To prevent scratching the basin, place a towel or soft cloth over the entire basin when working above it.
- Tools/Items required but not provided, for Servicing:
  - Safety Glasses
  - Protective gloves
  - Hex drives

## Service: Adjustments

1. Temperature Control: Factory set for 50°F ± 5° (10°C ± 5°) water under normal conditions. To adjust water temperature, turn screw clockwise for colder, counter clockwise for warmer.
2. Water Stream Height: Stream height is factory set at 35 psig (0.24 MPa). If supply pressure varies greatly from this, adjust screw using the access hole in the pushbutton (insert flathead screwdriver). Clockwise adjustment will raise stream and counter-clockwise adjustment will lower stream height. For best adjustment, stream should hit basin approximately 6.5" (165mm) from bubbler.
3. Water coming out of Bubbler continuously: When this occurs at the end of the compressor cycle, turn the cold control warmer (counterclockwise) ¼ turn.

## Service: Inspection/Cleaning

- Inspect Bottle Filler and Cooler twice each year for proper operation and performance.
  - Inspection of the unit will require disconnecting electrical supply, removal of panels, etc. and reassembly and return to service practices.
1. Cleaning: Warm, soapy water or mild household cleaning products can be used to clean the exterior panels. Extra caution should be used to clean the mirror finished stainless steel panels. They can be easily scratched and should only be cleaned with mild soap and water or Windex glass cleaner and a clean, soft cloth. Use of harsh chemicals or petroleum based or abrasive cleaners will void the warranty.
  2. Bubbler: Mineral deposits on the orifice can cause water flow to spurt or not regulate. Mineral deposits may be removed from the orifice with small round file not over 1/8" (3 mm) diameter or small diameter wire.

### CAUTION

DO NOT file or cut orifice material. Care must be taken not to damage the orifice(s)

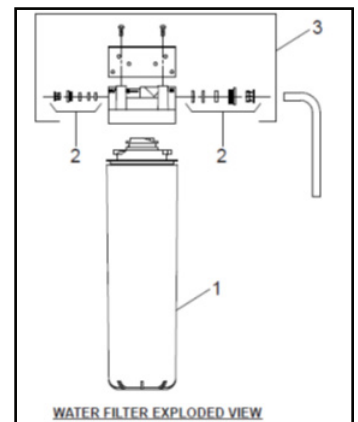
3. Condenser Fan Motor: Confirm condenser fan turns freely. If the condenser fan does not spin freely, have an authorized service personnel replace.
4. Ventilation: Cabinet louvers and condenser fins should be periodically cleaned with a brush, air hose or vacuum cleaner. Cleaning should be one twice each year or more frequently if needed due to environment. Excess dirt or poor ventilation can cause no cold water and compressor cycling on the compressor overload protector.
5. Water Flow: Confirm proper water flow. If water flow is slow, inspect filter or inline strainer for restriction. Replace filter cartridge if required. Disassemble inline strainer and clean if required.
6. Lubrication: Motors are lifetime lubricated.
7. Actuation of Quick Connect Water Fittings: Cooler is provided with lead-free connectors which utilize o-ring water seal. To remove tubing from the fitting, relieve water pressure, push in on the gray collar before pulling on the tubing. To insert tubing, push tube straight into fitting until it reaches a positive stop, approximately 3/4" (19mm).



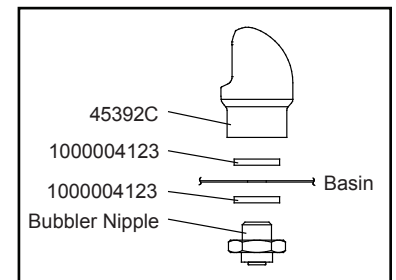
## Service: Inspection/Replacement

- Inspect Bottle Filler and Cooler twice each year for proper operation and performance.
  - Inspection of the unit will require disconnecting electrical supply, removal of panels, etc. and reassembly and return to service practices.
- Lower Front Panel:** To access the refrigeration system and plumbing connections, remove four (4) screws from bottom of cooler to remove the lower front panel.
  - Bottle Filler Removal:** Loosen but DO NOT remove the two (2) Mounting Screws from the sides of the Bottle Filler. Remove the two (2) Pinned Torx Head Screws from the Top Cover & remove the Top Cover. The Bottle Filler may then be lifted up and off the Water Cooler (The water line will still be connected from the Water Cooler to the Bottle Filler.).
  - Bubbler:** To remove the bubbler, first disconnect the electrical supply. The underside of the bubbler can be reached through the underside of the front section. Remove the cover and internal panel by removing the retaining screws. To remove the bubbler, remove the tubing from the quick connect fitting and loosen the bubbler nipple by turning counter-clockwise. Do Not Overtighten. After servicing, replace internal panel and cover and secure with retaining screws. Then replace the lower front panel and secure with four (4) screws.
  - Cleaning Strainer on Solenoid Valve:** To clean the strainer, unscrew the cap of the solenoid valve. Remove screen and rinse thoroughly with water. Insert screen back into solenoid valve and screw cap on. Make sure the o-ring is placed properly.

REPLACEMENT PARTS: WATER FILTER PARTS LIST		
Item No.	Part No.	Description
1	1000004058	Filter Assy-3000 Gal.
2	98926C	Kit-Filter Head Fitting Includes John Guest Fittings & 3/8" Elbow Fitting
3	1000004312	Assy-Filter & Bracket includes Filter Head/Mounting Bracket/John Guest Fittings/Screws



REPLACEMENT PART KITS	
Part No.	Description
1000004058	Filter - WaterSentry Plus
1000004058_12PK	Filter - WaterSentry Plus (12 Pack)
98546C	Kit - Aerator Replacement
98549C	Kit - Hardware & Waterway Parts
98552C	Kit - Retro Filter Mounting
98631C	Kit - Electrical Package 220V
1000004291	Kit - Solenoid Valve Replacement 220V
98668C	Kit - Filter Mounting Cover
98999C	Kit - Drain Pad
99000C	Kit - Button Assembly
1000001907	Kit - Top Cover Replacement
99002C	Kit - Gasket VR BF Tower/Basin
99003C	Kit - Reset Switch
99004C	Kit - Micro Switch



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