

**A171.8-UG-SO Series, A171.8-UG Series & A171.8-UG-VR Series**  
**Barrier Free, Wall Mounted Water Cooler**



**A171108F-UG-SO**



**A171108F-UG**



**A171408S-UG-VR**

A171108F-UG-SO / A171408F-UG-SO / A171108S-UG-SO / A171408S-UG-SO  
A171108F-UG / A171408F-UG / A171108S-UG / A171408S-UG  
171108F-UG-VR / A171408F-UG-VR / A171108S-UG-VR / A171408S-UG-VR

**TECHNICAL ASSISTANCE TOLL FREE TELEPHONE NUMBER:**

**1.800.591.9360**

Technical Assistance Fax: 1.626.855.4894



**NOTES TO INSTALLER:**

1. Please leave this documentation with the owner of the fixture when finished.
2. Please read this entire booklet before beginning the installation.
3. Check your installation for compliance with plumbing, electrical and other applicable codes.

**LIMITED WARRANTY - UNITED STATES & CANADA**

Murdock warrants that every cooler, bottle filling station, packaged water chiller, fountain and accessory to be free from defects in material and workmanship under normal use for one (1) year from date of install or eighteen (18) months after the date of shipment from the factory, whichever comes first.

Murdock warrants the compressor and hermetically sealed refrigeration system, including cooling coil assembly when part of the hermetically sealed refrigeration system, to be free from defects in material and workmanship under normal use for an additional four (4) years from the end of the one (1) year period described above.

This warranty does not cover installation or labor charges and does not apply to materials, which have been damaged by other causes such as mishandling or improper care or abnormal use. The repair or replacement of the defective materials shall constitute the sole remedy of the Buyer and the sole remedy of Murdock under this warranty. Murdock shall not be liable under any circumstances for incidental, consequential or direct charges caused by defects in the materials, or any delay in the repair or replacement thereof. This warranty is in lieu of all other warranties expressed or implied. Product maintenance instructions are issued with each unit and disregard or non-compliance with these instructions will constitute an abnormal use condition and void the warranty. Stainless steel must be protected on job site during construction and must be properly maintained after the water has been introduced into the water cooler or drinking fountain, or Murdock's limited warranty is void.

**LIMITED EXPORT WARRANTY - One year on parts only.**

Murdock assumes no responsibility for use of void or suspended data. © Copyright Murdock, City of Industry, CA Member of Morris Group International. Please visit [www.murdockmfg.com](http://www.murdockmfg.com) for most current specifications.



Federal Public Law 111-350 (No Lead)

Test rating conditions are compliant with ARI 1010.



Member of MORRIS GROUP INTERNATIONAL

**MURDOCK**  
15125 Proctor Ave.  
City of Industry, CA  
91746 U.S.A.  
Phone 800-591-9360  
626-336-4561  
Fax 626-855-4894  
[www.murdockmfg.com](http://www.murdockmfg.com)

**IMPORTANT**

This Fixture is intended for indoor use only and is not suitable for installation in an area where a water jet could be used as well as in environments where freezing may occur. This fixture dispenses water that has been lowered in temperature, but otherwise remains unchanged by the materials in the Water Cooler. It is common for electrical equipment to be grounded to water lines either within a structure or away from it. Every attempt should be made to prevent this kind of grounding from generating electrical feedback into the Water Cooler creating electrolysis. Electrolysis will cause a metallic taste or cause water metal content to increase.

**NOTICE**

A Dielectric Coupling must be used to connect the Water Cooler to the water supply. A nonmetallic Coupler is furnished with this Water Cooler to meet this requirement.

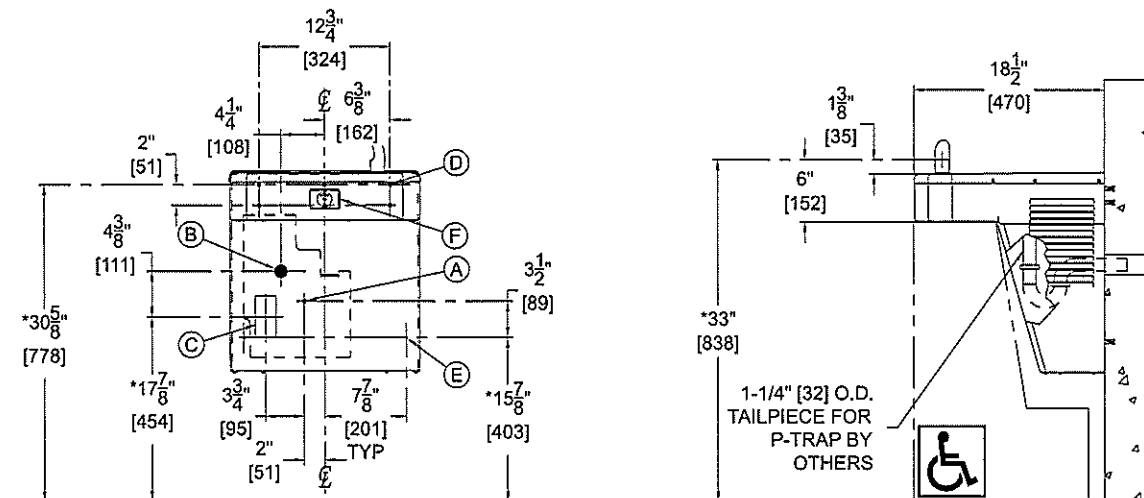
**ROUGHING-IN AND DIMENSIONAL DRAWING**

Prior to roughing-in, consult with local, state, and federal codes for proper mounting height. All installation and service may only be performed by authorized personnel. No unauthorized persons shall have access to the service area.

**GENERAL NOTES:**

1. ALL DIMENSIONS ARE IN INCHES [MM]
2. ALLOW 4 INCHES [102 MM] MINIMUM CLEARANCE PER SIDE FOR VENTILATION
- \*3. DIMENSIONS SHOWN ARE FOR ADA ADULT HEIGHT. ADJUST VERTICAL DIMENSIONS AS NECESSARY TO COMPLY WITH FEDERAL, STATE, & LOCAL CODES
4. STOP VALVE, P-TRAP, & ELECTRICAL OUTLET NOT SUPPLIED
5. IMPORTANT: COOLERS MUST BE ATTACHED TO WALL WITH APPROPRIATE ANCHOR SCREWS

- A. 3/8" O.D. SUPPLY INLET
- B. WASTE OUTLET FOR P-TRAP BY OTHERS FOR PROVIDED 1-1/4" O.D. TAILPIECE
- C. ELECTRICAL SERVICE ROUGH
- D. Ø3/8" HANGER BRACKET PUNCHING, 6 PLACES FOR ANCHORING HARDWARE BY OTHERS
- E. Ø1/4" PUNCHING, 2 PLACES FOR ANCHORING HARDWARE BY OTHERS
- F. PUSHBUTTON



**NOTES:** Dimensions indicated (\*) are for ADA frontal approach installation. Adjust vertical dimension (\*) as required to comply with federal, state, and local codes. For Child ADA compliant parallel approach, decrease Bubbler spout height to 30" maximum above finished floor. Provide clear floor space as required.

**PRIOR TO INSTALLATION:**

Important: Some options may slightly alter installation. To ensure proper installation, review the Manual thoroughly and verify rough-ins before beginning work. Leave this Manual with the owner or maintenance personnel upon completion of installation.

- Fixture mounting requirements: Industry standard wall construction, adequate to support the fixture and installer-provided Wall Anchors sufficient to secure the fixture.
- Receptacle(s) must be wired to a GFCI protected circuit. Fixture must be earth grounded per NEC (National Electric Code).
- Inspect fixture and all parts for damage.
- To avoid a hazard due to instability, fixture must be installed in accordance with the instructions.

**IMPORTANT:**

1. Waste P-Trap, Water Supply Service Angle Stop Valve, and 2" x 4" Electrical Plug-In Receptacle to be supplied by others in accordance with local codes. A P-Trap (by others) must be used for the Drain connection.
2. Provide 4" minimum clear space on fixture sides to allow for proper ventilation through Cabinet Louvers.
3. Water Supply Inlet is 3/8" Outer Diameter copper Tubing. Waste Outlet is 1-1/4" Outer Diameter.
4. Completely flush supply lines of all foreign debris before connecting to fixture. Water Cooler is designed to not cause problems with taste, odor, color, or sediment. Optional (-WF1) Water Filter is available should any of these problems arise from the Water Supply.
5. Do NOT solder Tubing inserted into the Coupler as damage to the O-Ring may result.
6. All burrs must be removed from outside of cut Tubing before inserting into Coupler or other components.
7. Power Supply must be identical in voltage, cycle and phase to that specified on the Water Cooler Data Plate. Electrical Outlet and furnished Power Cord with Plug must be used to supply power to fixture. Do NOT wire Compressor directly to the Power Supply.
8. This unit must be grounded per the requirements of applicable electrical codes.
9. Warranty is voided if installation is not followed per current Murdock Mfg. installation instructions and if components are assembled to the fixture that are not approved by Murdock Mfg.
10. Fixture is to operate within a water pressure range of 25 PSIG (172 kPa) to 105 PSIG (724 kPa). Warranty is void if the unit is allowed to operate outside the range of 25 PSIG (172 kPa) to 105 PSIG (724 kPa). A Pressure Regulator must be installed by others on supply line if inlet pressure is greater than 105 PSIG (724 kPa).
11. Due to cold waste water, Murdock Mfg. recommends that P-Trap supplied by installer be insulated to prevent excessive condensation.
12. **609.10 Water Hammer.** *Building water supply systems where quick-acting valves are installed shall be provided with water hammer arrester(s) to absorb high pressures resulting from the quick closing of these valves. Water hammer arresters shall be approved mechanical devices that comply with ASSE 1010 or PDI-WH 201 and shall be installed as close as possible to quick-acting valves.*

13. **609.10.1 Mechanical Devices.** Where listed mechanical devices are used, the manufacturer's specifications as to location and method of installation shall be followed.
14. For optimum performance, the fixture is to operate within the ambient temperature range of 41°F (5°C) to 111°F (44°C).
15. If the Power Supply Cord is damaged, it may only be replaced by authorized qualified persons.

**INSTALLATION:**

1. Mount Hanger Bracket to wall horizontally level as shown in Roughing-In and Dimensional Drawing.  
**NOTE:** Adjust height of Bracket if Bubbler outlet height is required to vary from that shown /indicated. Hanger Bracket **MUST** be securely anchored to wall with fasteners sufficient to support 3 times the weight of Water Cooler.  
**NOTE:** If wall cannot provide adequate support, order and install optional fixture support carrier.  
**NOTE:** If replacing a **competitors Water Cooler** you may be able to use existing mounting bracket.
2. Remove the Bottom Cover from the Water Cooler and set aside in a safe place. Place the Screws in a secure location for re-use in later stages of installation.
3. Hang the Water Cooler on the Hanger Bracket, ensuring the Bracket Tabs engage AND seat in the slots in the back of the Water Cooler. Verify Water Cooler is level, left to right AND front to back from bottom of unit. **NOTE:** The Bubbler stream may be adversely affected if unit is not square and level. Bottom of unit and Louvers should be used as reference to verify unit is square and plumb.
4. Anchor Water Cooler to wall at other mounting points in Base. Shim lower rear mounting points to level unit, if necessary.
5. Thoroughly flush the 3/8" O.D. supply line and then connect Water Cooler to water supply Angle Stop Valve (by others) with supplied 3/8" O.D. Copper Tubing.
6. Make up 1-1/4" O.D. Waste Connection for P-Trap (by others).

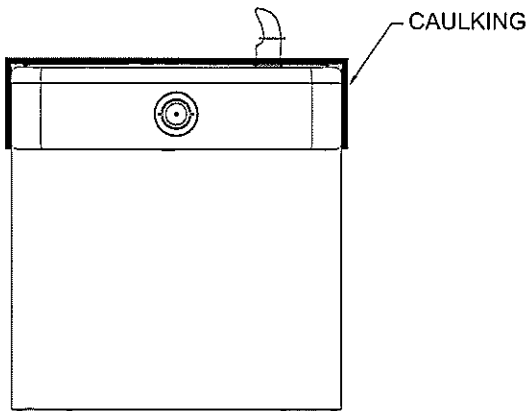
**START UP:**

1. Before connecting Power Supply and assembling Bottom Cover to Water Cooler, but after thoroughly flushing the supply line and connecting it to the fixture, turn on building water supply and check all connections for leaks.
2. Air within the Water Cooler system or the structure supply piping will cause an irregular Bubbler outlet stream until purged out by incoming water. Covering the Bubbler with a clean cup (or similar object) is recommended when first activating Water Cooler to prevent excessive splashing. Depress the Pushbutton until steady water stream is achieved.
3. If water flow requires adjustment, insert a slotted narrow blade Screwdriver through the hole centered on the Pushbutton to the Flow Regulator. Turning clockwise will increase flow and turning counterclockwise will decrease flow.
4. Recheck all water and drain connections with water flowing through system.
5. With power still **NOT** connected, carefully rotate Cooling Fan manually to insure proper clearance and free Fan action.
6. Plug Water Cooler into Electrical Outlet and make sure unit begins to function.
7. Assemble Bottom Cover to Water Cooler with Screws furnished.

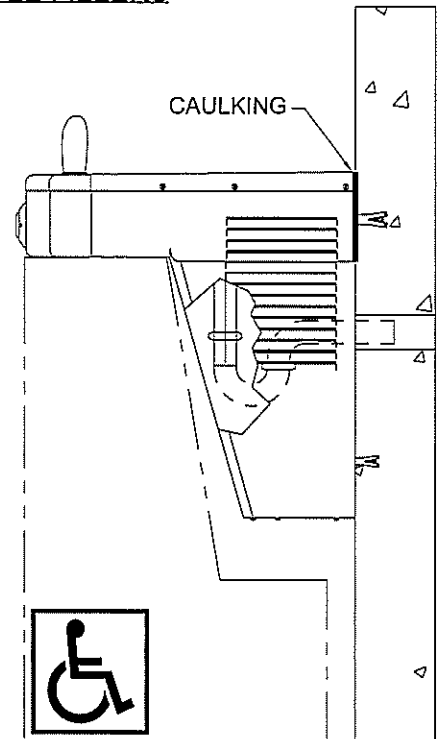
**OUTDOOR INSTALLATION INSTRUCTIONS A171.8-UG-VR ONLY:**

1. Caulk all around the basin where it contacts the wall and where apron contacts the wall as shown, to prevent rain water from leaking into the cabinet. **DO NOT CAULK THE REMOVABLE ACCESS COVER.**

**NOTE: THIS PROCEDURE NOT APPLICABLE FOR A171.8-UG-SQ, A171.8-UG, WITH EITHER -BF11, BF12 OR A171.8-UG-VR UNITS WITH BF11 OR -BF12 BOTTLE FILLERS**

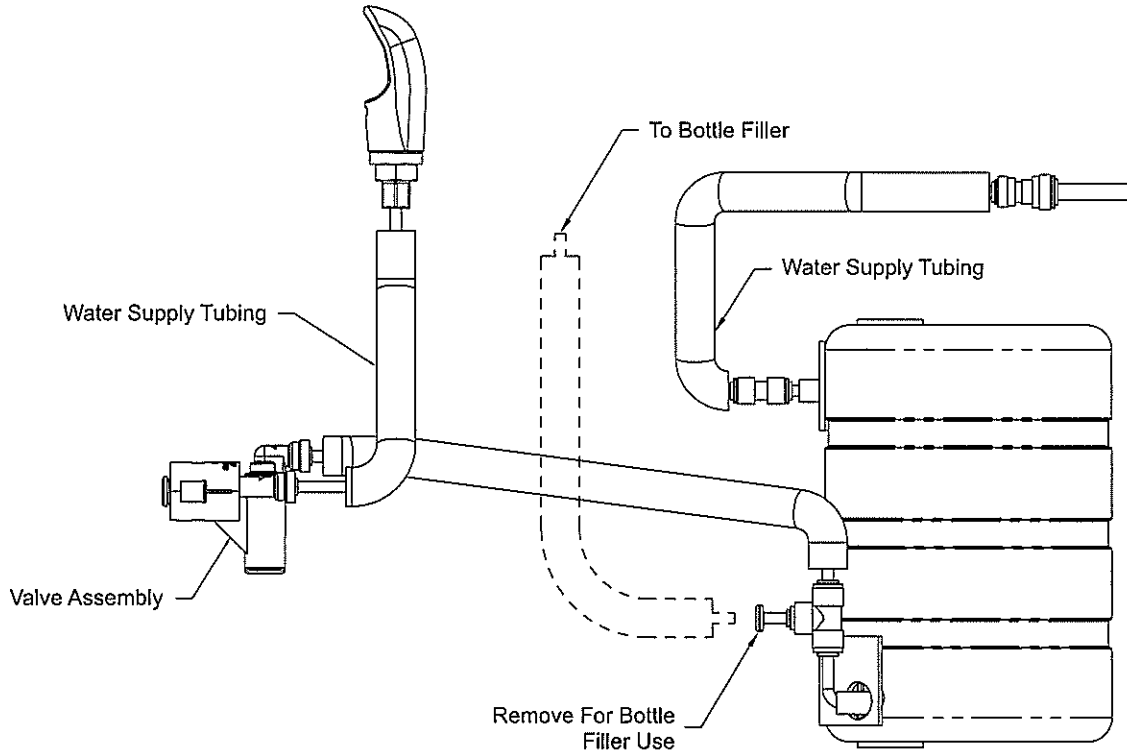


FRONT VIEW

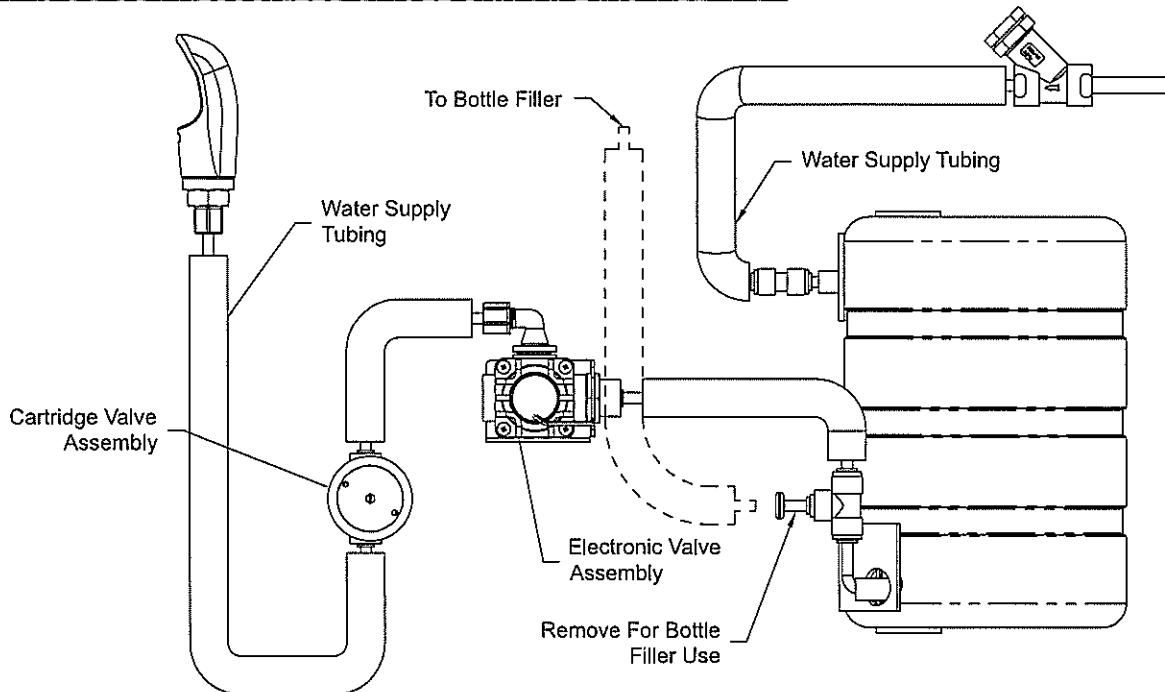


SIDE VIEW

**A171.8-UG & A171.8-UG-VR PRESSURIZED SINGLE UNIT PIPE INSTALLATION (WITH -BF OPTIONS)**



**A171.8-UG-SQ PRESSURIZED SINGLE UNIT PIPE INSTALLATION**



**TROUBLESHOOTING:**

**IMPORTANT: BEFORE MAKING ANY OF THE REPAIRS LISTED, MAKE SURE THE WATER COOLER IS DISCONNECTED FROM THE ELECTRICAL SUPPLY AND THE WATER SUPPLY VALVE IS SHUT OFF.**

**IMPORTANT : ASSUREZ-VOUS QUE LA FONTAINE D'EAU POTABLE RÉFRIGÉRÉE SOIT DÉBRANCHÉE DE LA PRISE DE COURANT MURALE ET QUE LE ROBINET D'ALIMENTATION D'EAU SOIT FERMÉ AVANT D'EFFECTUER LES RÉPARATIONS NÉCESSAIRES.**

**1. Adjustments:**

- a. Cartridge – The water flow can be adjusted using a slotted narrow blade Screwdriver and turning clockwise to increase flow and counterclockwise to decrease flow.
- b. Cold Water Thermostat – The water temperature can be adjusted using a slotted Screwdriver and turning clockwise to make colder and counterclockwise to make warmer.
- c. Bubbler Stream – Bubbler can be rotated slightly to direct the stream backwards or forwards. Adjust the stream to minimize splashing. Splashing may occur from Bubbler stream if the unit is not level. Shim lower mounting points, if necessary, to level Water Cooler.

**2. Compressor Does Not Run**

- a. Check the Power Supply Cord.
- b. Check the electrical Receptacle for power and correct voltage. The incoming voltage must be within 10% of the rated voltage on the Serial Nameplate.
- c. The Cold Thermostat is accessible by removing the Bottom Access Cover. If the Cold Thermostat Capillary Bulb loses its charge or becomes kinked, it will fail in the open position causing a disruption of power to the Compressor. Unplug the Water Cooler and using an ohm Meter, check for continuity across the two electrical Terminals on the Thermostat. Install a new Thermostat if there is no continuity.
- d. Check for loose wires within the Compressor Box. The incoming power Leads must be connected to the Overload and Relay.
- e. If all components check positive for continuity, then test the Wiring Harness Plug for continuity to see if there is a broken Wire within the Wiring Harness insulation.

**3. Compressor Runs – Water Is Warm**

- a. The most common cause for a Water Cooler to run without producing cold water is a loss of refrigerant. The Water Cooler must be taken to a certified refrigerant technician for repairs.
- b. Make sure the Condenser Fan Motor is operative. The Fan Blade must turn freely to help remove the heat.
- c. An incorrect refrigerant charge, restriction, or defective Compressor (not pumping) will also cause the Compressor to run without producing cold water. All these signs indicate a problem within the refrigeration system and the Water Cooler must be checked by an authorized service company.

**4. Compressor Cycling On Overload Protector**

- a. A dirty Condenser or a blocked Fan will cause a high head pressure and frequent cycling of the Overload Protector.
- b. Check the incoming voltage to make sure it is within 10% of the Serial Nameplate rating.
- c. A restriction or moisture in the system will also cause intermittent cycling. A certified refrigeration mechanic should be contacted in this situation.
- d. Change the Overload or Relay if defective.

5. Noisy Operation

- a. Check to make sure the fan blade is rotating freely.
- b. Make sure the water cooler is correctly mounted to the wall. Absence of the two lower mounting bolts may cause excess noise and vibration.
- c. Check the compressor mounting to make sure the pins and clips are not rattling. If the compressor appears to be noisy internally, it must be replaced.

6. Restricted Or No Water Flow

- a. Ensure water supply service stop valve is fully open.
- b. Verify minimum 20 psig supply line flow pressure.
- c. Check for twists or kinks in bubbler tubing.
- d. Check the water inlet strainer. Sediment from the main supply can get trapped in the screen along with installation materials such as pipe dope and flux. The screen should be cleaned and checked on a regular basis and replace if needed.  
**NOTE: STRAINER SCREEN MUST BE IN PLACE FOR WATER TO FLOW.**
- e. The cartridge valve located in the water control assembly or bubbler can also become clogged with foreign material. The cartridge valve can only be replaced and not repaired.
- f. Check flow adjustment. See start up note #3.
- g. The water cooler may also develop a freezing condition in which the water will become frozen inside the evaporator coil. This indicates a refrigeration problem or thermostat failure in which case the water cooler needs to be checked by a qualified technician.

**For Sensor Operated Coolers**

- h. If light within sensor does NOT flash when the users hands are within range:
  - i: Verify power supply to transformer
  - ii Replace defective 9VDC transformer.
  - iii: Transformer polarity crossed. Replace Transformer. (Sensor may be damaged and need replacing)
  - iv: Sensor in "Security Mode" after 90 seconds of constant detection. Remove source of detection and wait 30 seconds before checking.
  - v: Sensor range is too short or too long. See SENSOR RANGE ADJUSTMENT section.
  - vi: Sensor is picking up a highly reflective surface. Eliminate cause of reflection and wait.

**CLEANING & MAINTENANCE GUIDE:**

1. Motors have lifetime lubrication and do not require scheduled maintenance.
2. Excess dirt or poor ventilation will cause the compressor overload protector to turn the compressor off and it will cycle on and off with no cold water coming out of bubbler. Periodically clean with vacuum cleaner, air hose or brush the condenser fins and cabinet ventilation louvers. In environments where dirt and dust is more prevalent, clean more frequently.
3. Periodically remove access panels and clean out in-line strainer.
4. Do NOT use harsh chemicals, abrasive or petroleum based cleaners. Use of these will void the Acorn warranty.
5. Exterior panels can be cleaned using mild household detergents or warm, soapy water. Extra care must be used cleaning chrome plated items and mirror finished stainless steel. They can scratch easily and should only be cleaned using a clean, soft cloth and mild soap with water or a mild glass cleaner.

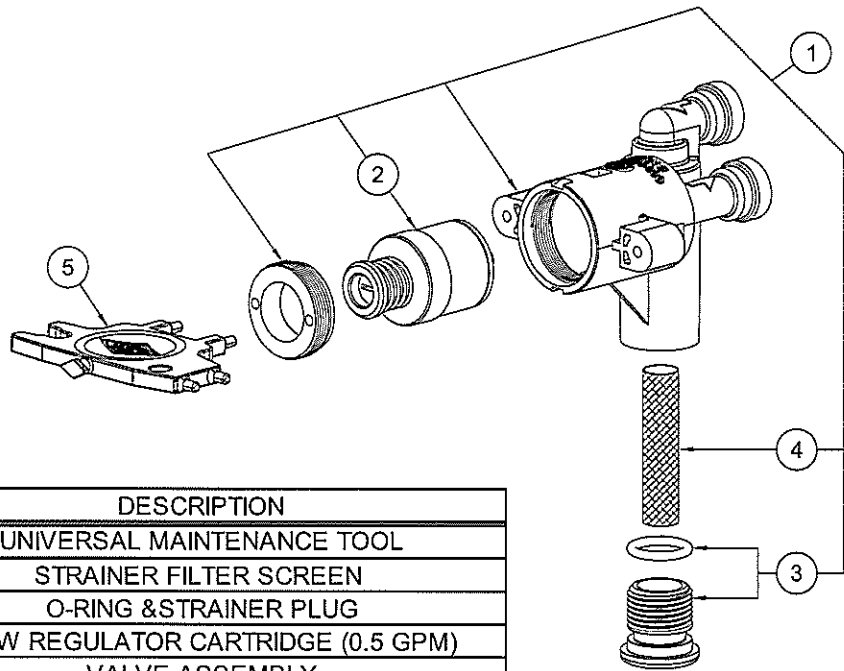


**CARTRIDGE REPLACEMENT/ STRAINER MAINTENANCE**

Note: Use the Universal Maintenance Tool to perform the following:

1. Strainer Plug **must** be removed before Cartridge replacement and Strainer maintenance (no need to turn the water off at the Angle Stop). Some residual water will drain during Plug removal.
2. Clean Strainer as needed using clean water.
3. Cartridge Replacement - insert diamond end of the Universal Tool into Pushbutton, rotate 90 degrees and pull firmly to remove the Button. Remove Cartridge Retaining Nut . Remove and replace Cartridge. When replacing Cartridge, be sure to align the inlet and outlet Ports on the Cartridge with the Ports in the Valve Body.

• **NOTE: STRAINER SCREEN MUST BE IN PLACE FOR WATER TO FLOW.**

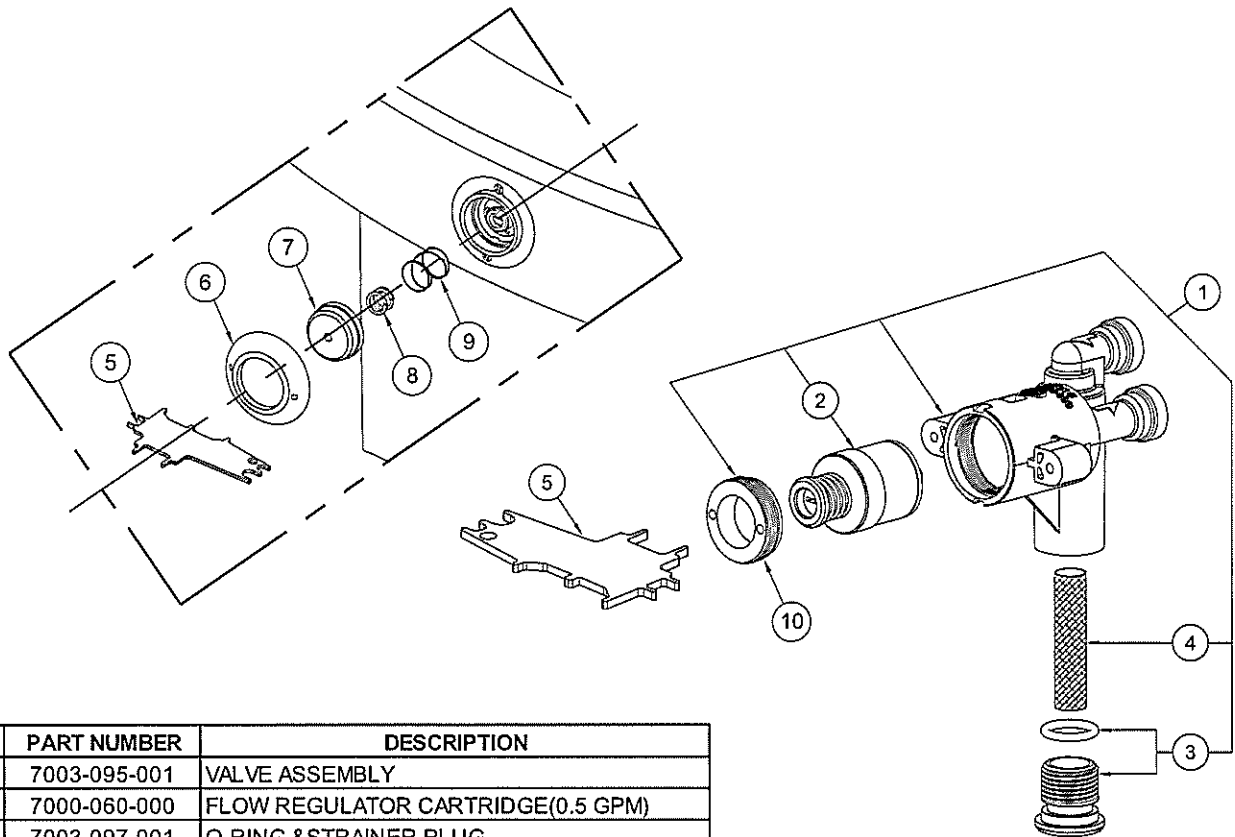


ITEM	PART NUMBER	DESCRIPTION
5	7003-830-000	UNIVERSAL MAINTENANCE TOOL
4	7003-864-000	STRAINER FILTER SCREEN
3	7003-097-001	O-RING & STRAINER PLUG
2	7000-060-000	FLOW REGULATOR CARTRIDGE (0.5 GPM)
1	7003-095-001	VALVE ASSEMBLY

**-VR VANDAL RESISTANT CARTRIDGE REPLACEMENT/ STRAINER MAINTENANCE**

Note: Use the -VR maintenance tool to perform the following:

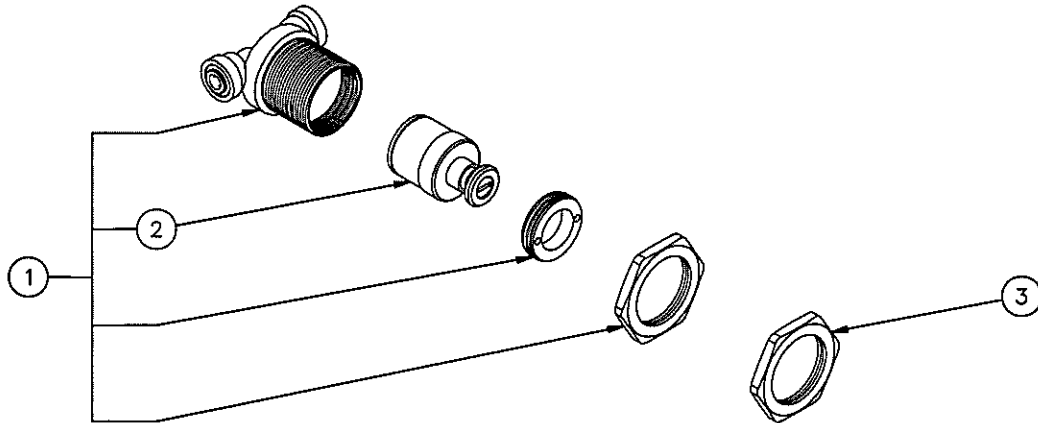
1. Strainer plug (4) must be removed before cartridge replacement and strainer maintenance (no need to turn the water off at the angle stop). Some residual water will drain during plug removal.
2. Clean strainer (4) as needed using clean water.
3. Cartridge replacement - Rotate and remove -VR pushbutton escutcheon (6) to release pushbutton (7) and springs (8)(9) to access cartridge.
4. Remove cartridge retaining nut (10) . Remove and replace cartridge (2). When replacing cartridge be sure to align the inlet and outlet ports on the cartridge with the ports in the valve body.
5. Install item (10) using maintenance tool (5) (Be careful not to over tighten)
6. Install button assembly items (6)(7)(8)(9) using maintenance tool (5). Insure springs are installed in button correctly.
7. Reinstall strainer (4) and plug (3) using maintenance tool (5).



ITEM	PART NUMBER	DESCRIPTION
1	7003-095-001	VALVE ASSEMBLY
2	7000-060-000	FLOW REGULATOR CARTRIDGE(0.5 GPM)
3	7003-097-001	O-RING & STRAINER PLUG
4	7003-864-000	STRAINER FILTER SCREEN
5	7003-194-199	(-VR) MAINTENANCE TOOL
6	7003-197-199	(-VR) PUSHBUTTON ESCUTCHEON, CHROME
7	7003-196-199	(-VR) PUSHBUTTON, CHROME
8	7003-195-000	(-VR) PUSHBUTTON OVERTRAVEL SPRING
9	7003-193-000	(-VR) PUSHBUTTON RETURN SPRING
10	7000-052-000	RETAINING NUT

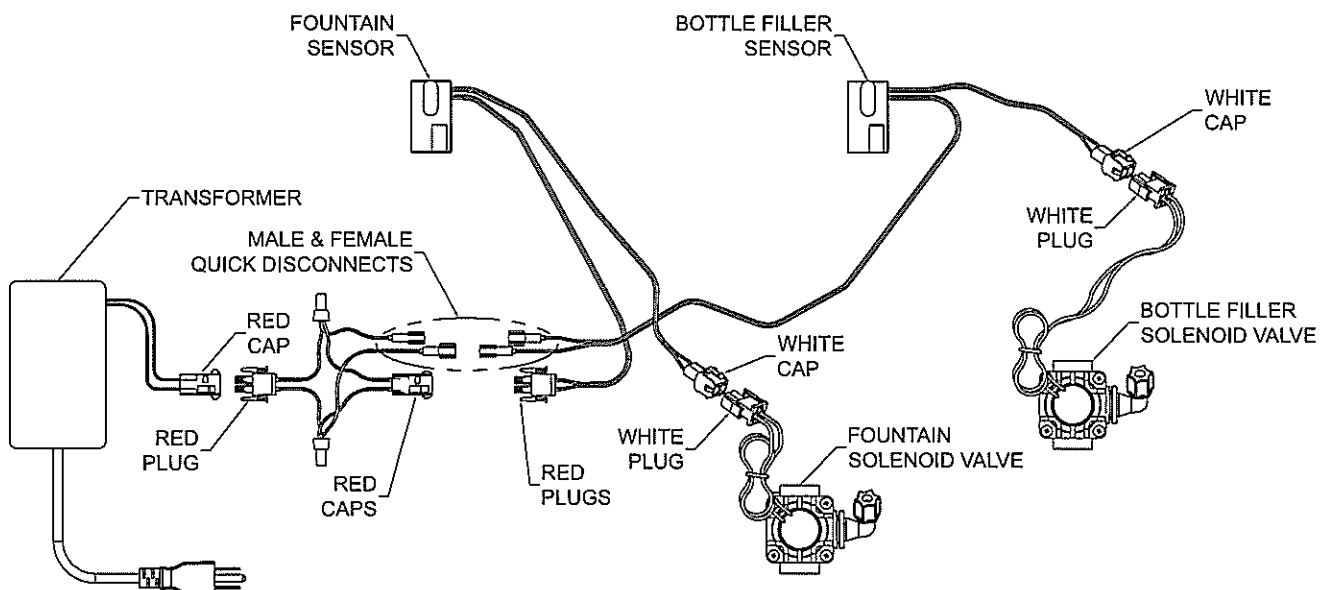
**NOTE: STRAINER FILTER SCREEN  
MUST BE IN PLACE FOR  
WATER TO FLOW.**

**-SO SENSOR OPERATED CARTRIDGE VALVE PARTS BREAKDOWN**



ITEM #	PART NUMBER	DESCRIPTION
1	7000-050-001	Valve Cartridge Assembly
2	7000-060-000	Valve Cartridge
3	7000-053-199	Jam Nut

**-SO SENSOR OPERATED WIRING DIAGRAM WITH -BF12**

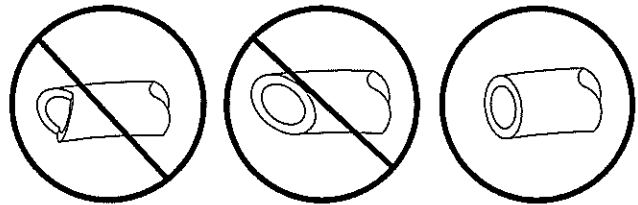


### PUSH-IN FITTING INSTALLATION

NOTE: FITTINGS AND TUBE SHOULD BE KEPT CLEAN, BAGGED AND UNDAMAGED PRIOR TO INSTALLATION.

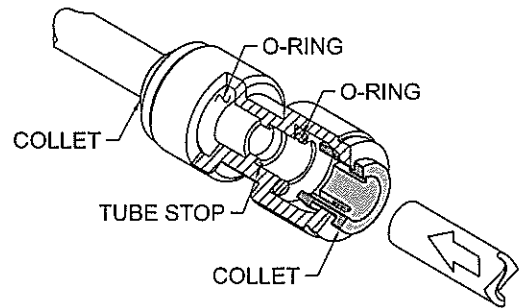
#### **TO CUT TUBE:**

Cut to fit length of 1/4" PE Tubing and remove any burrs or sharp edges. Ensure that the outside diameter is free from scored marks. Tube ends should be square.

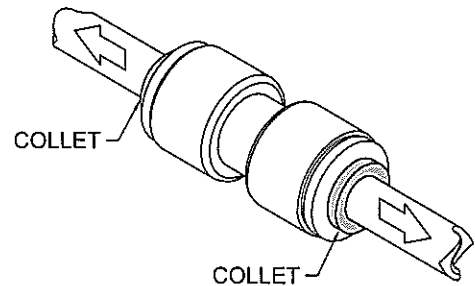


#### **INSERTING THE TUBE:**

1. Firmly and fully insert the Tubing end into the Push-In Fitting up to the Tube Stop located approximately 1/2" deep.

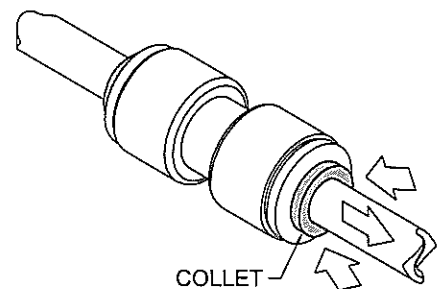


2. Pull on the fitted Tubing to ensure it is secure. Tube should not come free from the Fitting. Water test the Connection assembly prior to leaving the site to ensure there are no leaks.



#### **DISCONNECTING THE TUBE:**

To disconnect the tube from the Fitting, ensure that the water line is depressurized. Push Collet square towards the Push-In Fitting Body and hold. While holding the Collet in, pull on the plastic PE Tubing to remove from the Push-In Fitting.

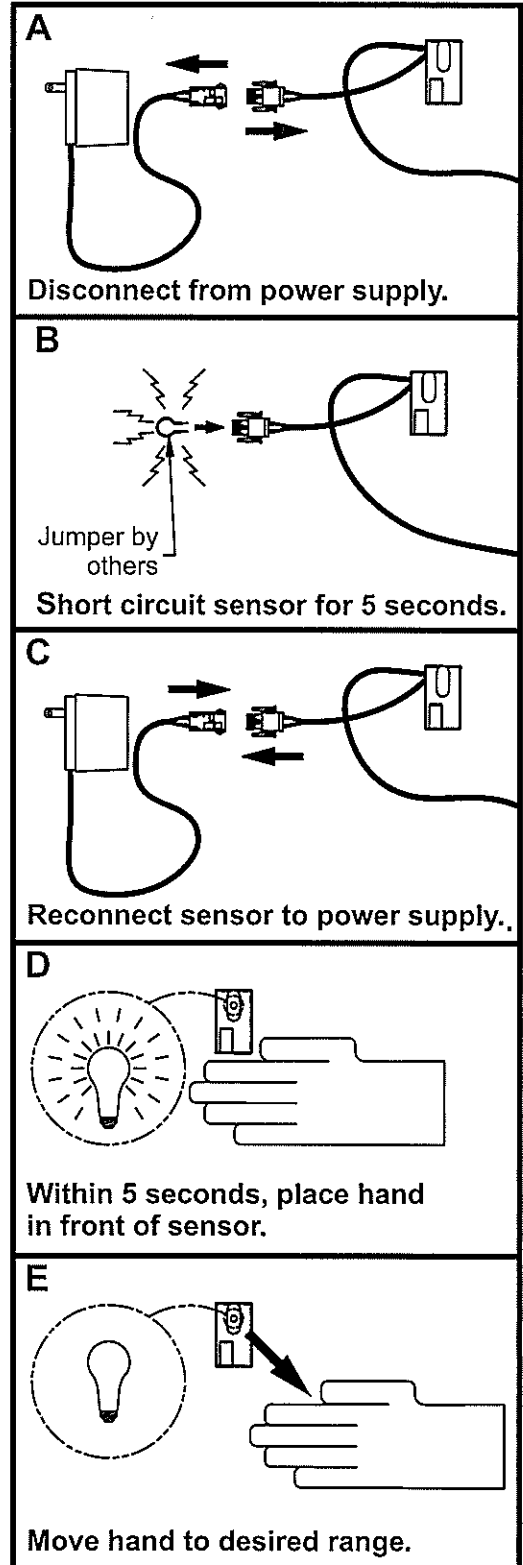


**FOR A171.8-UG-SO ONLY**

**SENSOR RANGE ADJUSTMENT**

- A. Disconnect sensor from power supply.
- B. Create a short circuit between the positive and negative connections on the sensor for five seconds. **WARNING:** Do NOT create a short circuit on the power supply or while the sensor is connected to the power supply.
- C. Reconnect the sensor to the power supply.
- D. Within 5 seconds of making the connection to the power supply, place and hold hand 2" to 4" in front of sensor.
- E. Once red light within sensor begins flashing quickly, move hand to preferred activation distance and hold there until light stops flashing.

Check sensor activation distance. If unsatisfactory, repeats steps A through E.



**WATER FILTER INSTALLATION:**

**IMPORTANT:**

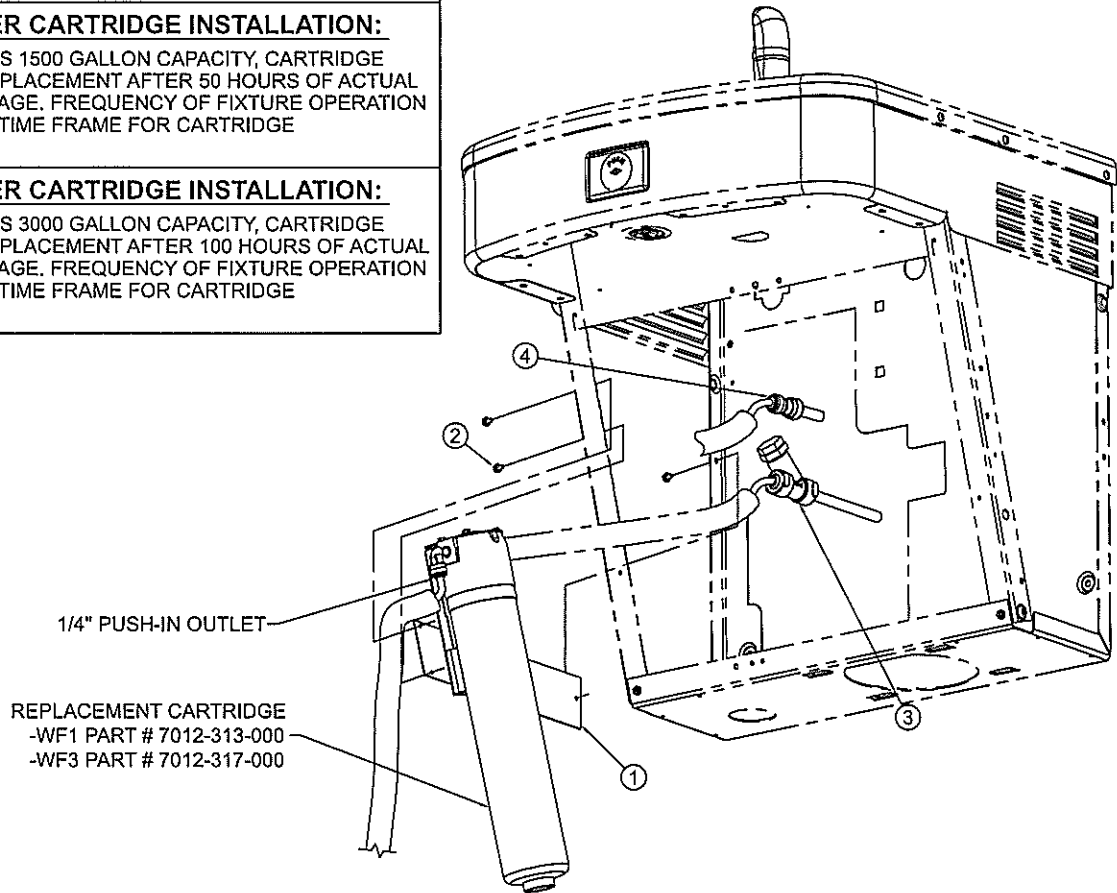
FLUSH 5 GALLONS OF WATER THROUGH THE FILTER BEFORE USE!

**-WF1 FILTER CARTRIDGE INSTALLATION:**

WATER FILTER HAS 1500 GALLON CAPACITY, CARTRIDGE WILL REQUIRE REPLACEMENT AFTER 50 HOURS OF ACTUAL OPERATIONAL USAGE. FREQUENCY OF FIXTURE OPERATION WILL DETERMINE TIME FRAME FOR CARTRIDGE REPLACEMENT.

**-WF3 FILTER CARTRIDGE INSTALLATION:**

WATER FILTER HAS 3000 GALLON CAPACITY, CARTRIDGE WILL REQUIRE REPLACEMENT AFTER 100 HOURS OF ACTUAL OPERATIONAL USAGE. FREQUENCY OF FIXTURE OPERATION WILL DETERMINE TIME FRAME FOR CARTRIDGE REPLACEMENT.



**INSTALLATION INSTRUCTIONS:**

- A- REMOVE THE BOTTOM HOUSING AND TURN OFF UNIT WATER SUPPLY. IF UNIT IS A REFRIGERATED MODEL, DISCONNECT FROM THE POWER SUPPLY.
- B- PLACE FILTER/BRACKET ASSEMBLY ① ON INSIDE OF UNIT FRAME AND ALIGN HOLES IN THE BRACKET WITH THE HOLES OF THE UNIT FRAME.
- C- USE THE SCREWS ② PROVIDED TO PASS THRU THE FRAME CLEARANCE HOLES AND SCREW INTO THE BRACKET HOLES.
- D- FOLLOW PE TUBE FROM "Y" STRAINER ③ OR PUSH-IN UNION ④ TO WHERE IT CONNECTS TO THE EVAPORATOR. DISCONNECT TUBE FROM EVAPORATOR, CONNECT TO FILTER INLET PUSH-IN CONNECTION.
- E- CONNECT NEW PE TUBE PROVIDED WITH FILTER TO EVAPORATOR PUSH-IN INLET, WHERE TUBE WAS REMOVED.
- F- TURN ON WATER. CHECK FOR LEAKS.
- G- IMPORTANT: FLUSH 5 GALLONS OF WATER THRU THE FILTER BEFORE ALLOWING FIXTURE USE.
- H- IF REFRIGERATED UNIT, TURN ON POWER SUPPLY AND CHECK UNIT FOR PROPER OPERATION.
- I- RE-INSTALL BOTTOM HOUSING.

**NOTES:**

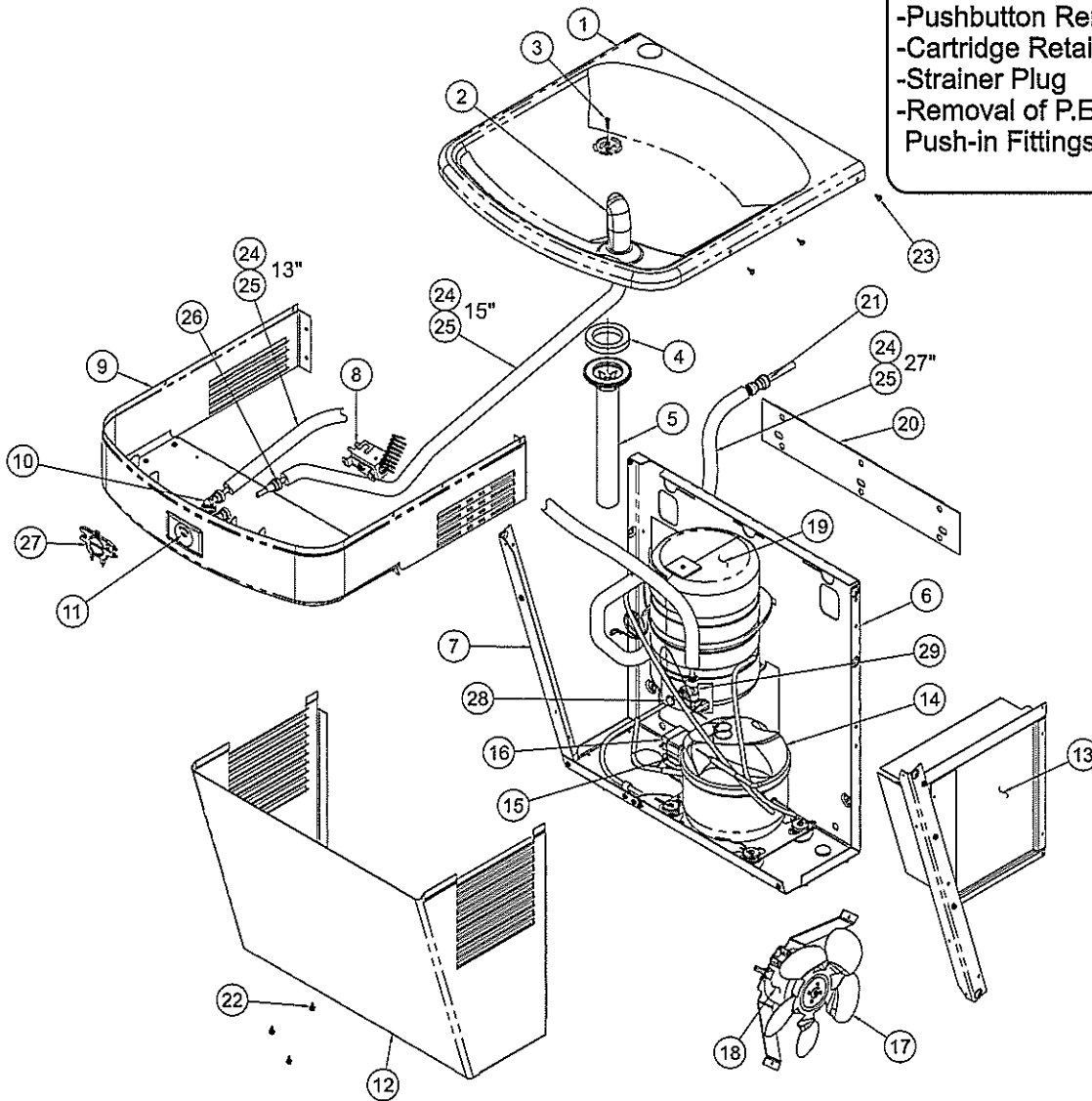
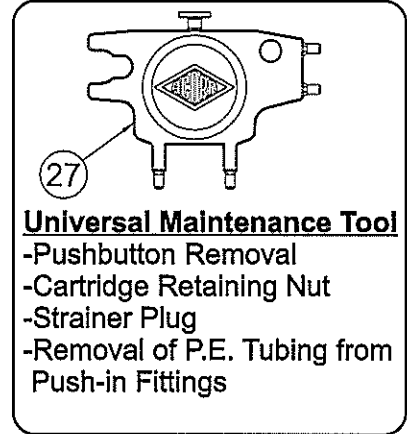
- 1- TO DISCONNECT THE TUBE FROM THE PUSH-IN FITTING TUBE HOLD DOWN GRIPPER AND PULL TUBE OUT SLOWLY.
- 2- TO CONNECT PUSH-IN FITTINGS, PUSH TUBE IN ALL THE WAY TO MAKE A GOOD CONNECTION. CARTRIDGE REPLACEMENT.

**A172.8-UG WATER COOLER PARTS BREAKDOWN**

NOTE: See page #16 for fixture drawing corresponding to table of parts below.

**NOTE:**

(\*) Flow Restrictor Only Available with Low Flow Bubbler



Standard A171.8 series refrigerated ADA Water Cooler shown. All 1/4" O.D. Plastic Tubing (24) must be insulated with (25) foam insulation.

NOTE: See next page for table of part numbers corresponding to drawing above.

**A172.8-UG WATER COOLER PARTS BREAKDOWN TABLE**

NOTE: See previous page (15) for fixture drawing corresponding to table of parts below.

ITEM #	PART NUMBER	DESCRIPTION
1	7003-161-001	BASIN TOP w/ PLUG
2	7000-099-002	LOW-FLOW FLEXIBLE BUBBLER ASSEMBLY
	7000-012-001	STAINLESS STEEL BUBBLER ASSEMBLY
3	0124-008-000	#8 x 3/4" LG PHIL FLAT HD TORX C/R SCREW
4	7000-006-000	FLAT DRAIN GASKET
5	7003-180-000	DRAIN TAILPIECE
6	7003-900-199	BACK PANEL
7	7003-007-199	SUPPORT STRUT
8	7003-250-000	COLD CONTROL
9	7003-953-020	APRON ASSEMBLY - GRAY
	7003-826-001	APRON ASSEMBLY - STAINLESS STEEL
10	7003-095-001	VALVE ASSEMBLY
11	7003-099-000	PUSHBUTTON
12	7003-951-020	COVER - GRAY
	7003-035-299	COVER - STAINLESS STEEL
13	7003-201-000	CONDENSER
14	7012-801-000	COMPRESSOR
	7012-030-001	COMPRESSOR - 220V
15	7012-802-000	START RELAY
	7012-031-000	START RELAY - 220
16	7012-803-000	START CAPACITOR
	7012-032-000	START CAPACITOR - 220
17	7003-350-000	FAN BLADE
18	7003-302-000	FAN MOTOR
	7012-062-001	FAN MOTOR - 220V
19	7003-125-001	EVAPORATOR ASSEMBLY
20	7003-950-199	HANGER BRACKET
21	1895-123-000	SUPPLY INLET CONNECTION
22	0124-031-000	#8 x 3/8" LONG SLOTTED HEX WASHER HD SCREW
23	0124-036-000	#8 x 1/2" LONG TORX BUTTON HEAD C/R SCREW
24	2169-000-000	1/4" O.D. TUBING
25	7012-055-000	TUBE INSULATION
26	7003-093-001	FLOW RESTRICTOR - LOW-FLOW BUBBLER ONLY
27	7003-830-000	UNIVERSAL MAINTENANCE TOOL
28	1895-715-000	1/4" PLUG
29	1895-710-000	1/4" O.D. PUSH-IN TEE

Repairs must be made with Murdock Manufacturing parts only. Please order through your local representative or distributor. The phone number to locate your local representative is 1.800.591.9360.



**A171.8-UG-VR COOLER PARTS BREAKDOWN**

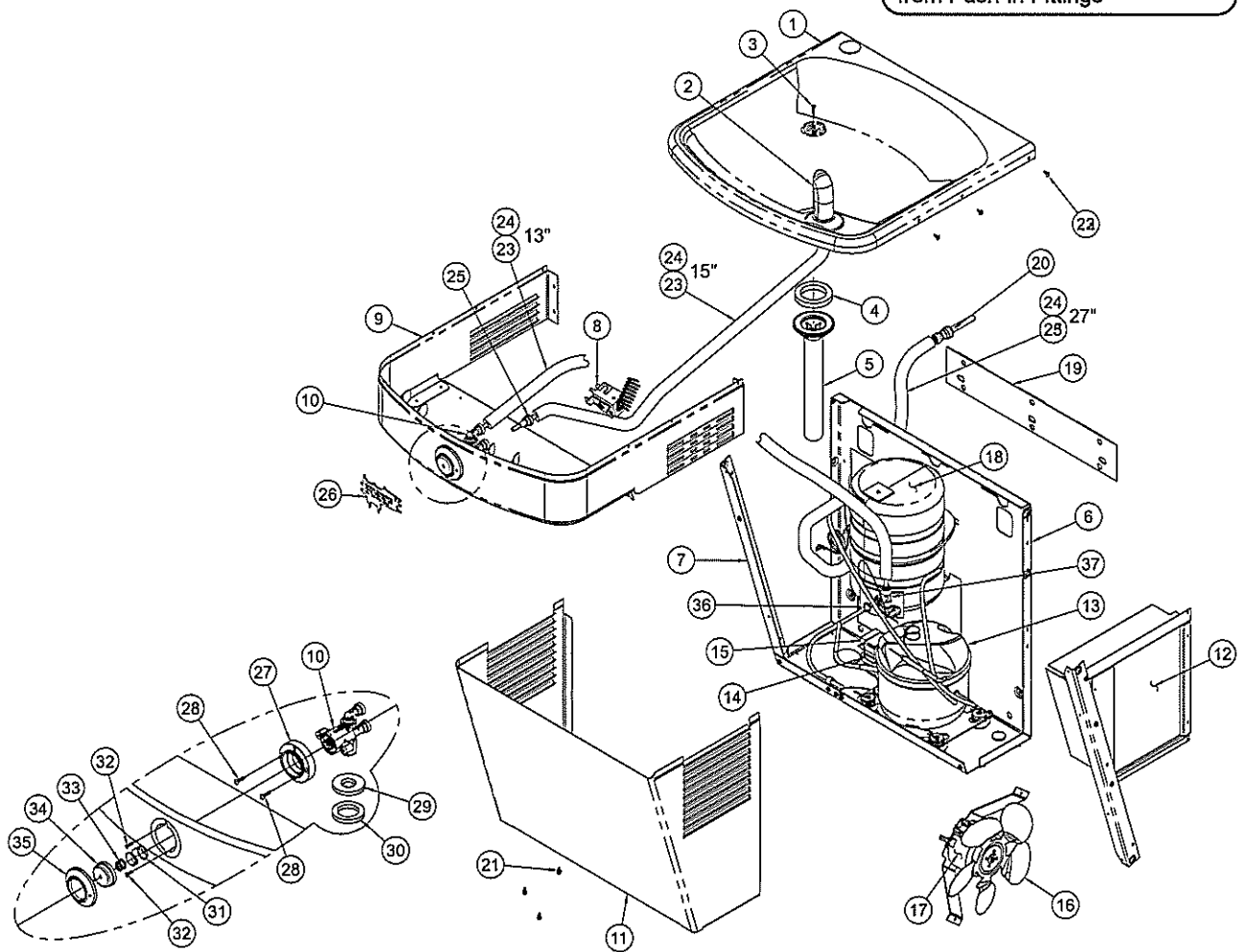
**NOTE:** See page #18 for fixture drawing corresponding to table of parts below.

Murdock Manufacturing  
Part#: 7003-194-199  
Ph: 800-743-8259

(26)

**Universal Maintenance Tool**

- Button Removal
- Cartridge Retaining Nut
- Strainer Plug
- Removal of P.E. Tubing from Push-in Fittings



VANDAL RESISTANT BUTTON & VALVE BREAKDOWN  
NOT TO SCALE

Standard A171.8-U-VR series refrigerated ADA cooler shown. All 1/4" O.D. Plastic tubing (24) must be insulated with (25) foam insulation.

**NOTE:** See next page for table of part numbers corresponding to drawing above.

**A171.8-UG-VR COOLER PARTS BREAKDOWN TABLE**

NOTE: See previous page (17) for fixture drawing corresponding to table of parts below.

ITEM #	PART NUMBER	DESCRIPTION
1	7003-161-001	BASIN TOP
2	7000-012-001	STAINLESS STEEL BUBBLER ASSEMBLY
	7000-099-002	LOW-FLOW FLEXIBLE BUBBLER ASSEMBLY
3	0124-008-000	#8 x 3/4" LG PHIL FLAT HD TORX C/R SCREW
4	7000-006-000	FLAT DRAIN GASKET
5	7003-180-001	DRAIN TAILPIECE
6	7003-900-199	BACK PANEL
7	7003-007-199	SUPPORT STRUT
8	7003-250-000	COLD CONTROL
9	7003-952-020	APRON ASSEMBLY - GRAY
	7003-211-002	APRON ASSEMBLY - STAINLESS STEEL
10	7003-095-001	VALVE ASSEMBLY (N/A FOR -SO)
11	7003-951-020	COVER - GRAY
	7003-035-299	COVER - STAINLESS STEEL
12	7003-201-000	CONDENSER
13	7012-801-000	COMPRESSOR
	7012-030-001	COMPRESSOR - 220V
14	7012-802-000	START RELAY
	7012-031-000	START RELAY - 220
15	7012-803-000	START CAPACITOR
	7012-032-000	START CAPACITOR - 220
16	7003-350-000	FAN BLADE
17	7003-302-000	FAN MOTOR
	7012-062-001	FAN MOTOR - 220V
18	7003-125-001	EVAPORATOR ASSEMBLY
19	7003-950-199	HANGER BRACKET
20	1895-123-000	SUPPLY INLET CONNECTION
21	0124-031-000	#8 x 3/8" LONG SLOTTED HEX WASHER HD SCREW
22	0124-036-000	#8 x 1/2" LONG TORX BUTTON HEAD C/R SCREW
23	2169-000-000	1/4" O.D. TUBING
24	7012-055-000	TUBE INSULATION
25	7003-093-001	FLOW RESTRICTOR - LOW-FLOW BUBBLER ONLY
26	7003-194-199	(-VR) MAINTENANCE TOOL
27	7003-198-199	(-VR) PUSHBUTTON MOUNTING SLEEVE
28	0124-055-000	#8x3/4 PHILLIPS ROUND HEAD SS SM SCREW
29	7003-199-000	AUTO-STOP CONDENSATION GASKET, UPPER
30	7003-200-000	AUTO-STOP CONDENSATION GASKET, LOWER
31	7003-193-000	(-VR) PUSHBUTTON RETURN SPRING
32	0161-062-000	#6-32 x 1/2" S/S PHIL FLAT HD SCREW
33	7003-195-000	(-VR) PUSHBUTTON OVERTRAVEL SPRING
34	7003-196-199	(-VR) PUSHBUTTON, CHROME
35	7003-197-199	(-VR) PUSHBUTTON ESCUTCHEON, CHROME
36	1895-715-000	1/4" PLUG
37	1895-710-000	1/4" O.D. PUSH-IN TEE

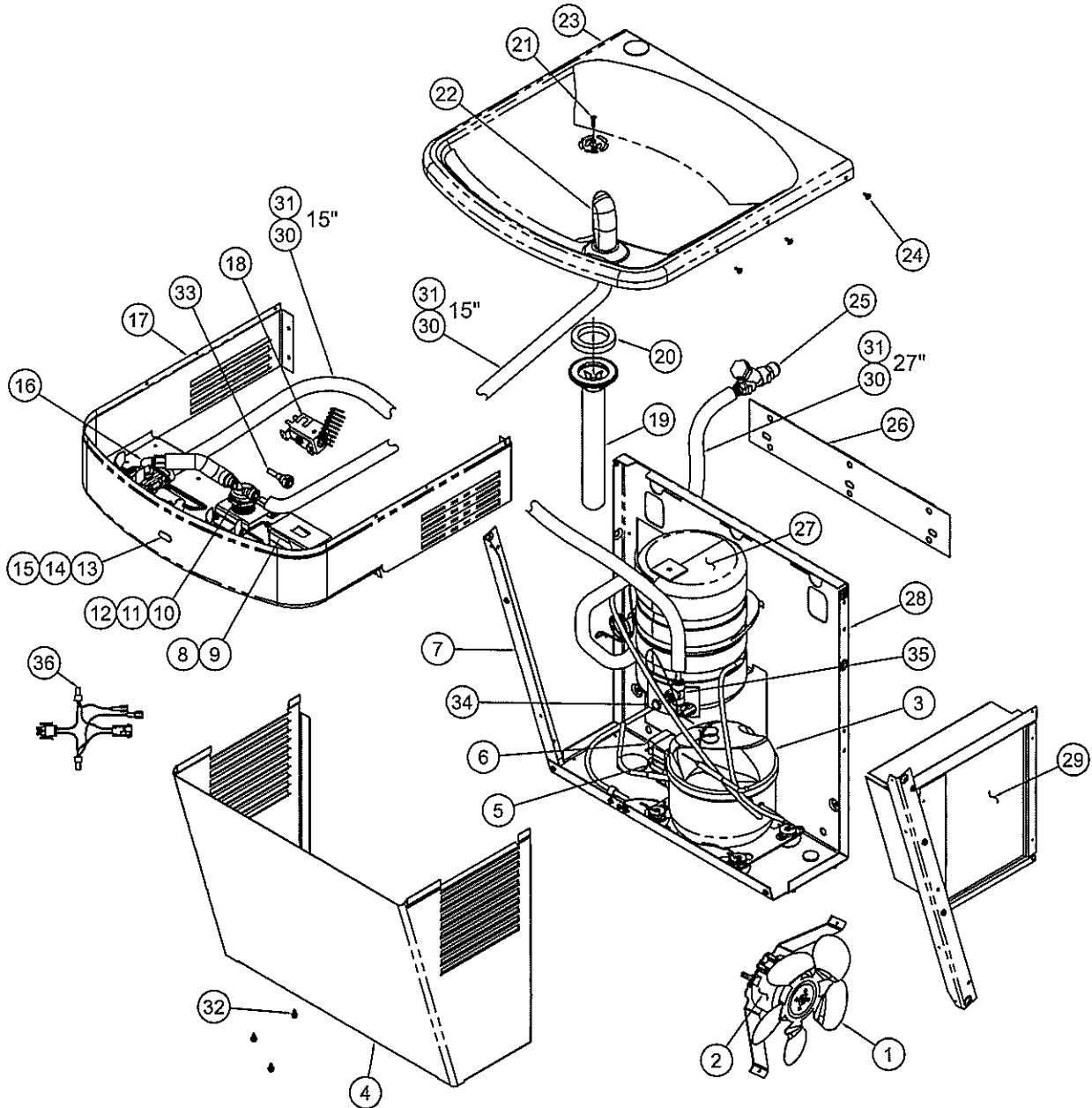
Repairs must be made with Acorn Engineering parts only. Please order through your local representative or distributor. The phone number to locate your local representative is 1.800.591.9360.

MURDOCK MFG. • 15125 Proctor Avenue • City of Industry, CA 91746 USA  
Phone 800-453-7465 or 626-333-2543 • Fax 626-855-4860 • www.murdockmfg.com

Member of  MORRIS GROUP  
ENGINEERS

**A171.8-UG-SO COOLER PARTS BREAKDOWN**

**NOTE:** See page #20 for fixture drawing corresponding to table of parts below.



Standard A171.8-UG-SO series refrigerated ADA cooler shown. All 1/4" O.D. Plastic tubing (30) must be insulated with (31) foam insulation.

**NOTE:** See next page for table of part numbers corresponding to drawing above.


**A171.8-UG-SO COOLER PARTS BREAKDOWN TABLE**

NOTE: See previous page (18) for fixture drawing corresponding to table of parts below.

ITEM #	PART NUMBER	DESCRIPTION
1	7003-355-000	FAN BLADE, 5 BLADE
2	7003-302-000	MOTOR, FAN 120V
	7012-062-001	MOTOR, FAN - 220 V
3	7012-801-001	COMPRESSOR ASSEMBLY, WITH ACCESSORIES
4	7003-951-020	LOWER CABINET - GRAY
	7003-035-299	LOWER CABINET - STAINLESS STEEL
5	7012-802-000	RELAY,PCT STARTING
6	7012-803-000	CAPACITOR, RUN TYPE
7	7003-007-199	SUPPORT STRUT
8	0711-407-001	240V AC/9V DC TRANSFORMER
9	7003-028-199	TRANSFORMER BRACKET
10	7000-050-001	VALVE CARTRIDGE ASSEMBLY
11	7000-060-000	FLOW REGULATOR CARTRIDGE (0.5 GPM)
12	7003-023-199	CARTRIDGE MOUNTING BRACKET, SENSOR OP.
13	2563-385-002	NANO SENSOR ASSEMBLY
14	7003-029-199	BRACKET, SENSOR
15	7001-203-199	SENSOR SPACER WITH BUSHING
16	7001-200-001	SOLENOID/VALVE MOUNTING ASSEMBLY
17	7003-922-020	APRON ASSEMBLY - GRANITE
	7003-029-005	APRON ASSEMBLY, STAINLESS STEEL
18	7003-250-000	COLD CONTROL (TEMPERATURE)
19	7003-180-000	WASTE TAILPIECE
20	7000-006-000	FLAT DRAIN ADAPTER GASKET
21	0124-008-000	#8 x 3/4" LG PHIL FLAT HD TORX C/R SCREW
22	7000-099-002	LOW FLOW BUBBLER ASSEMBLY
	7000-012-001	STAINLESS STEEL SOLID DRINKING BUBBLER ASSEMBLY
23	7003-161-001	COOLER TOP
24	0124-036-000	#8 x 1/2" LONG TORX BUTTON HEAD C/R SCREW
25	7000-021-001	"Y" STRAINER ASSEMBLY, 1/4" NPT
26	7003-950-199	HANGER BRACKET
27	7003-125-001	EVAPORATOR ASSEMBLY
28	7003-900-199	BACK PANEL
29	7003-201-000	CONDENSER
30	2169-000-000	1/4" O.D. LLDPE TUBING, BLUE
31	7012-055-000	FOAM PIPE INSULATION 3/8" I.D. x 1/4" THICK
32	0124-031-000	#8x3/8" LONG SLOTTED HEX WASHER HD SCREW
33	7003-093-001	FLOW RESTRICTOR - LOW FLOW BUBBLER ONLY
34	1895-715-000	1/4" PLUG
35	1895-710-000	1/4" O.D. PUSH-IN TEE
36	0711-450-001	2 STATION 9VAC WIRING HARNESS

Repairs must be made with Acorn Engineering parts only. Please order through your local representative or distributor. The phone number to locate your local representative is 1.800.591.9360.

MURDOCK MFG. • 15125 Proctor Avenue • City of Industry, CA 91746 USA  
Phone 800-453-7465 or 626-333-2543 • Fax 626-855-4860 • www.murdockmfg.com

Member of  MORRIS GROUP  
INDUSTRIAL



# Cooler Mounted Bottle Fillers

## INSTALLATION/MAINTENANCE INSTRUCTIONS

### BF11 & BF12 Bottle Filler Series

H<sub>2</sub>O  
to go!



**BF11**  
Pushbutton Operated  
Bottler Filler

H<sub>2</sub>O  
to go!



**BF12**  
Sensor Operated  
Bottler Filler

Please visit [www.murdockmfg.com](http://www.murdockmfg.com) for most current specifications.

#### TABLE OF CONTENTS

<u>Dimensional Data/Rough-Ins</u> .....	2
<u>Prior to Installation Information</u> .....	3
<u>Push-In Fitting Installation</u> .....	4
<u>BF11/BF12 Bottle Filler Installation</u> .....	5-11
<u>BF11/BF12 Water Supply Tubing Diagram</u> .....	12
<u>Optional -BCD Bottle Filler Counter Display</u> .....	13-14
<u>Troubleshooting</u> .....	15
<u>BF11/BF12 Repair Parts</u> .....	16-18
<u>Warranty Information</u> .....	19

Murdock™ assumes no responsibility for use of void or superseded data. © Copyright Murdock Mfg., City of Industry, CA. Member of Morris Group International. Please visit [www.murdockmfg.com](http://www.murdockmfg.com) for most current specifications.

**COMPLIES WITH STANDARDS**



Federal Public Law 111-350 (No Lead)



Member of MORRIS GROUP INTERNATIONAL

**MURDOCK**  
15125 Proctor Ave.  
City of Industry, CA  
91746 U.S.A.  
Phone 800-591-9360  
626-336-4561  
Fax 626-855-4894

[www.murdockmfg.com](http://www.murdockmfg.com)

7020-956-001

Date: 01/11/22



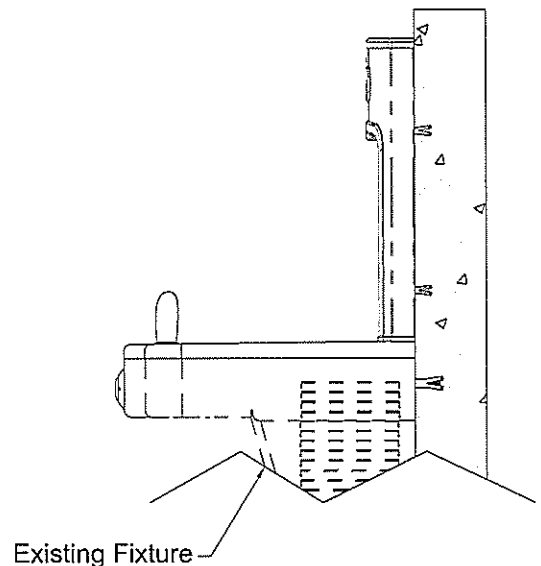
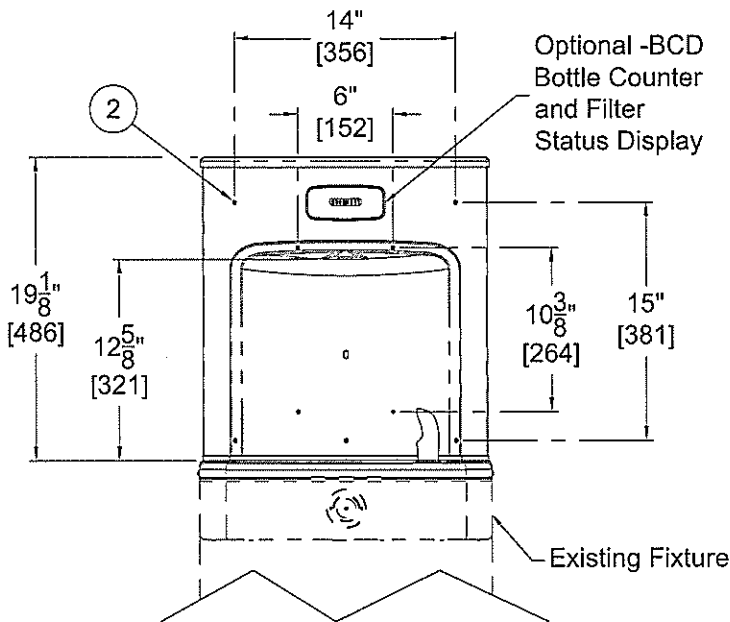
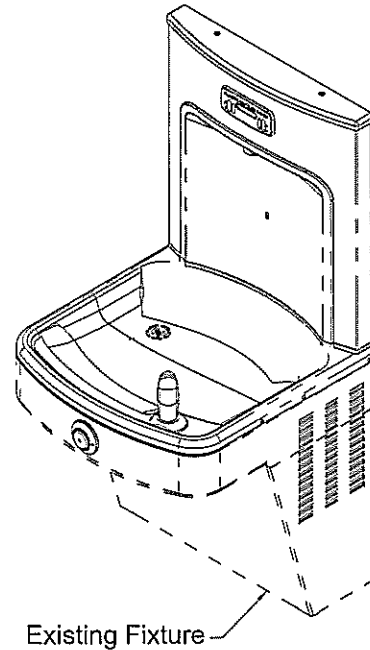
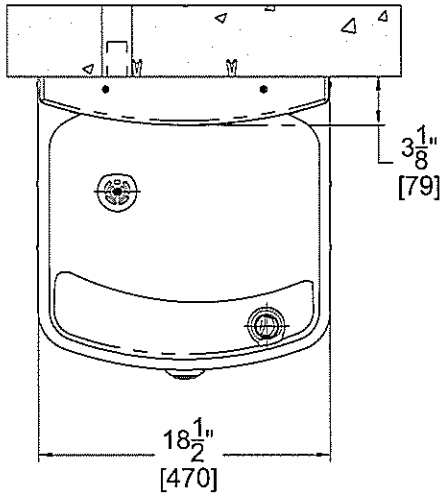
# Cooler Mounted Bottle Fillers

## INSTALLATION/MAINTENANCE INSTRUCTIONS

### DIMENSIONAL DRAWING

Prior to roughing in, consult with local, state, and federal codes for proper mounting height.

**Note: Rough-Ins are the same for BF11 & BF12**



**General Notes:**

1. All dimensions are in inches [MM]

2. Ø1/4" Holes, 10 Places for Anchoring Hardware, provided by others

MURDOCK MFG. • 15125 Proctor Avenue • City of Industry, CA 91746 USA  
 Phone 800-453-7465 or 626-333-2543 • Fax 626-855-4860 • www.murdockmfg.com





## Cooler Mounted Bottle Fillers

### INSTALLATION/MAINTENANCE INSTRUCTIONS

#### PRIOR TO INSTALLATION:

1. Some options may slightly alter installation. To ensure proper installation, review the Manual thoroughly and verify rough-ins before beginning any work. File this Manual with the owner or maintenance personnel upon completion of installation.
2. Carefully remove all fixture components from packaging, preventing scratching or damage. Inspect fixture and all parts for damage.
3. Provide rough-ins as shown on the roughing-in and dimensional drawing. (See rough-in details)
4. Water Supply Service Stop Valve, Water Connections and Electrical Connections to be supplied and installed by others in accordance with local codes.
5. Fixture mounting requirements: Industry standard wall construction, adequate to support the fixture and wall anchors (installer provided) sufficient to secure the fixture.
6. Fixture operates within water pressure range of 20 to 105 PSIG. Murdock will not warranty fixtures damaged when connected to supply lines with flow pressure lower than 20 PSIG or higher than 105 PSIG.
7. Water Supply inlet is 1/4" OD Polyethylene (PE) Tube.
8. Per UPC 609.10-All building water supply systems in which quick-closing Valves are installed shall be provided with devices to absorb the hammer caused by high pressure resulting from the quick-closing of the Valve. These pressure-absorbing devices shall be approved mechanical devices. Water pressure-absorbing devices shall be installed as close as possible to the quick-closing Valve.
9. Completely flush supply of all foreign debris before connecting to fixture. Bottle Filler is designed to provide trouble free drinking water unaffected by fixture connection tubing and fittings and will not cause problems with taste, odor, color or sediment.



## Cooler Mounted Bottle Fillers

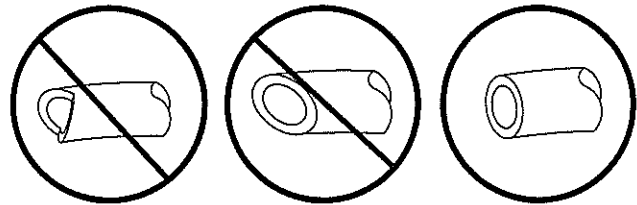
### INSTALLATION/MAINTENANCE INSTRUCTIONS

#### PUSH-IN FITTING INSTALLATION

NOTE: FITTINGS AND TUBE SHOULD BE KEPT CLEAN, BAGGED AND UNDAMAGED PRIOR TO INSTALLATION.

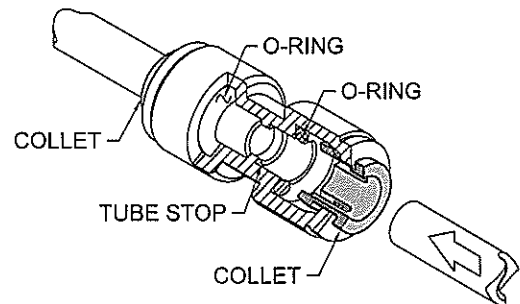
#### **TO CUT TUBE:**

Cut to fit length of 1/4" PE Tubing and remove any burrs or sharp edges. Ensure that the outside diameter is free from score marks. Tube ends should be square.

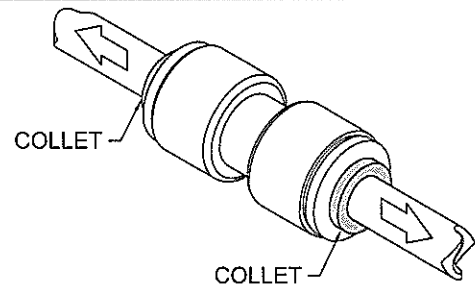


#### **INSERTING THE TUBE:**

1. Firmly and fully insert the Tubing end into the Push-In Fitting up to the Tube Stop located approximately 1/2" deep.

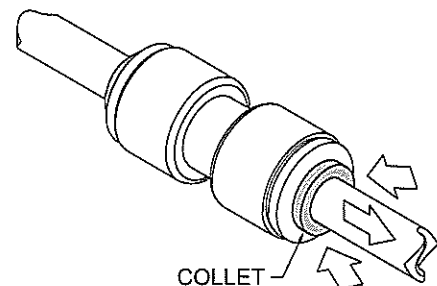


2. Pull on the fitted Tubing to ensure it is secure. Tube should not come free from the Fitting. Water test the connection assembly prior to leaving the site to ensure there are no leaks.



#### **DISCONNECTING THE TUBE:**

Prior to disconnecting the Tube from the Fitting, ensure that the Water Line is depressurized. Push Collet Square towards the Push-In Fitting Body and hold. While holding the Collet in, pull on the PE Tubing to remove from the Push-In Fitting.







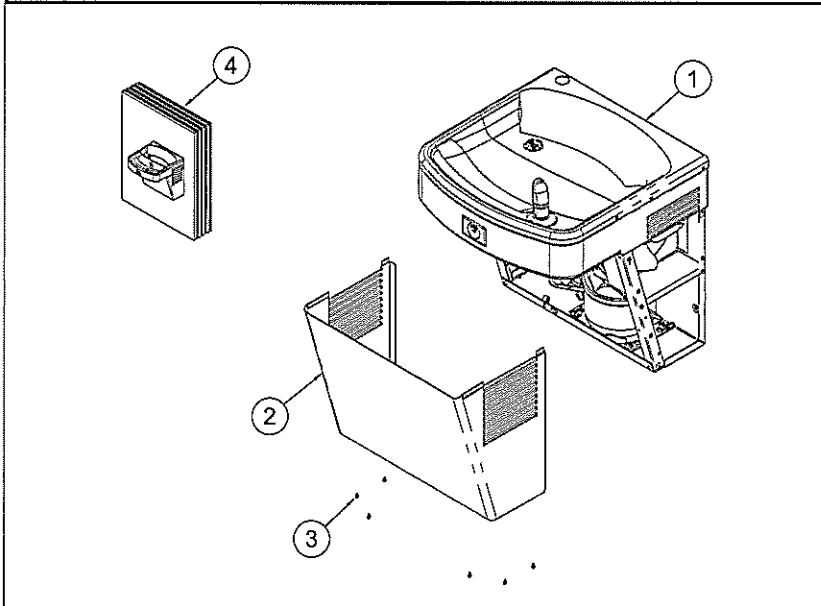
# Cooler Mounted Bottle Fillers

## INSTALLATION/MAINTENANCE INSTRUCTIONS

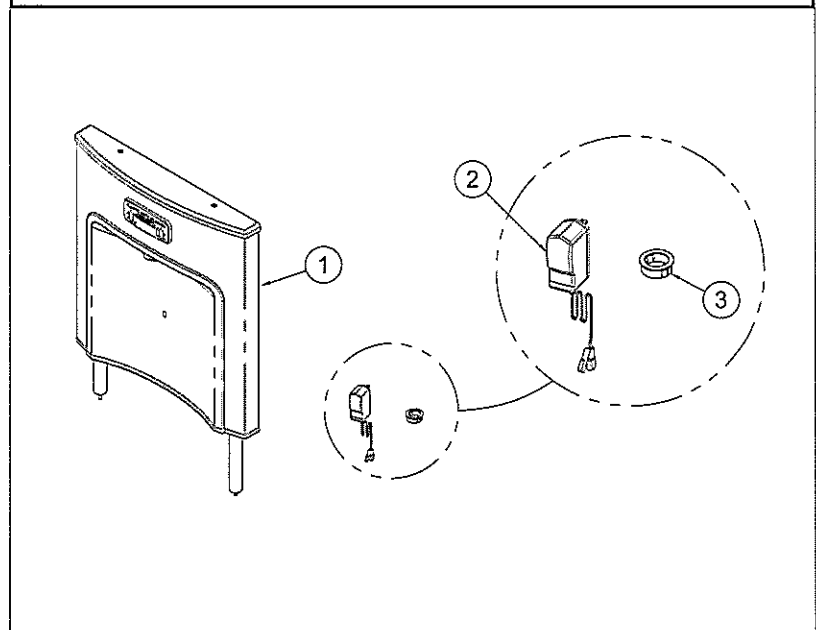
### BF11/BF12 INSTALLATION INSTRUCTIONS

**1** Install the newly obtained Water Cooler per the Installation Manual provided with the unit. Do not install Access Panel at this time. Shut-off water supply, then actuate Valve to relieve pressure. Place Screws and Panel in secure location for further use in Manual.

- ① Water Cooler Assembly
- ② Access Panel
- ③ #8 x 3/8" Hex Washer Head Screw
- ④ Water Cooler Installation Manual



**2** Remove Bottle Filler Assembly, Power Supply and Grommet from packaging, careful to avoid damage to Fixture and Fixture Sub Assemblies. Set Power Supply aside in a secure location.



- ① Bottle Filler Assembly
- ② Power Supply (Not provided with BF11)
- ③ Locking Grommet

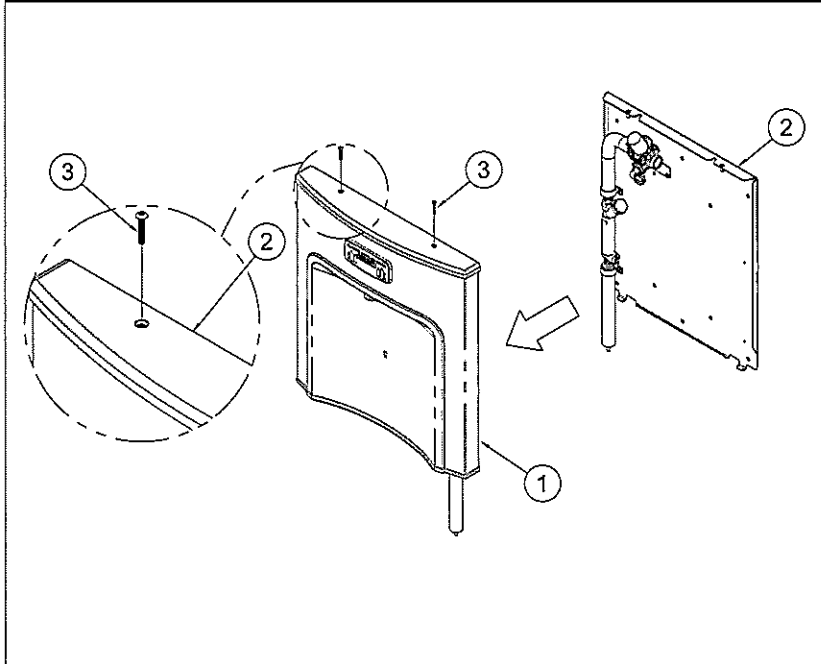


# Cooler Mounted Bottle Fillers

## INSTALLATION/MAINTENANCE INSTRUCTIONS

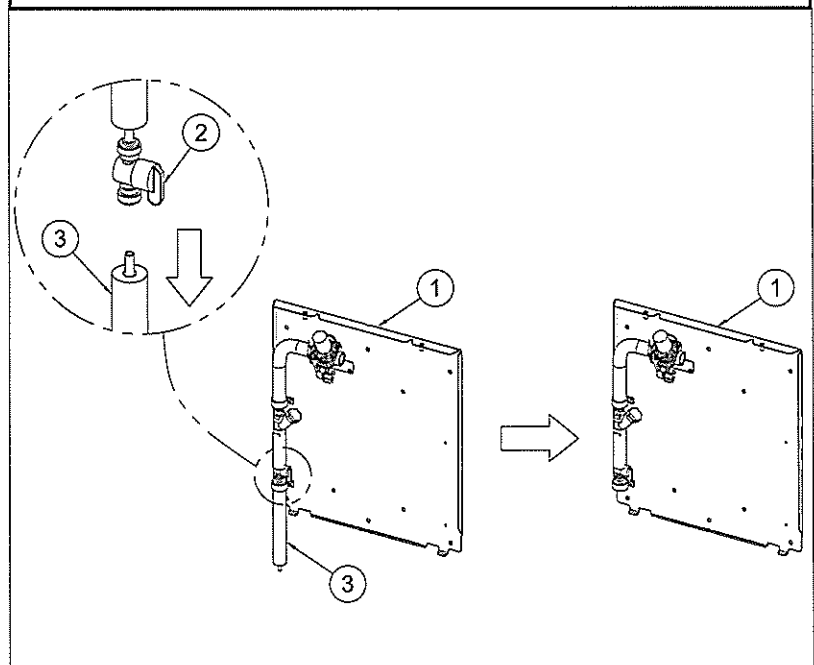
### BF11/BF12 INSTALLATION INSTRUCTIONS (CONTINUED)

**3** Unfasten Screws that hold the Bottle Filler Housing to the Mounting Panel. Place Bottle Filler Panel and Screws in a secure location.



- ① Bottle Filler Housing
- ② Mounting Panel
- ③ #10-32 x 1" Button Head Screw

**4** Disconnect the Water Supply Insulation and Tubing from 1/4" Shut-Off Valve that is located on the Mounting Panel.



- ① Mounting Panel
- ② Shut-Off Valve
- ③ 1/4" OD Tubing & Insulation

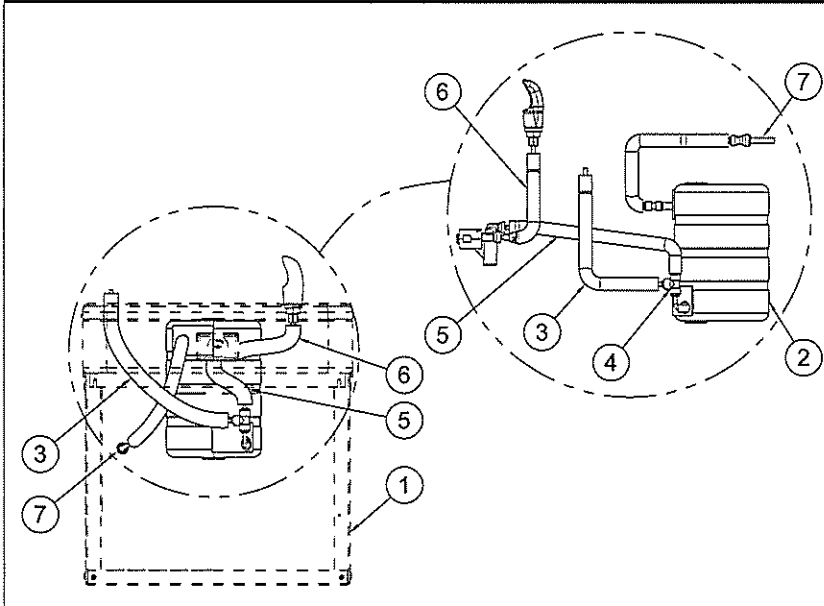


# Cooler Mounted Bottle Fillers

## INSTALLATION/MAINTENANCE INSTRUCTIONS

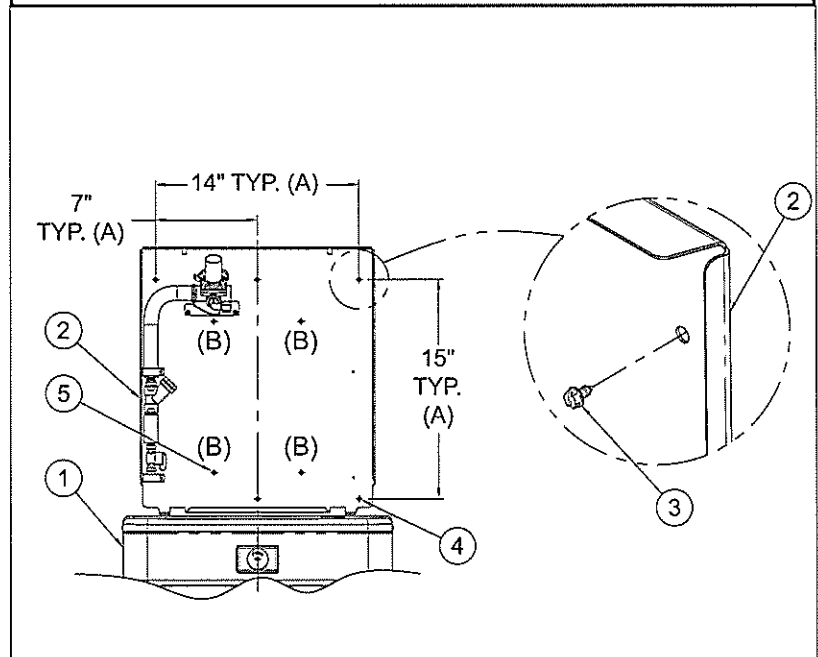
### BF11/BF12 INSTALLATION INSTRUCTIONS (CONTINUED)

**5** Connect the Bottle Filler Supply Tubing to the 1/4" Push-In Tee located on the Evaporator. The Evaporator is located within the Water Cooler Assembly. If fixture differs from layout, refer to page 12 for specific unit connections.



- ① Water Cooler Assembly
- ② Evaporator
- ③ 1/4" OD Tubing & Insulation (Bottle Filler Supply Tube)
- ④ 1/4" Push-In Tee
- ⑤ Water Supply Tubing (To Pushbutton Valve Inlet)
- ⑥ Water Supply Tubing (To Bubbler)
- ⑦ Supply Inlet

**6** Center Mounting Panel on top of Deck to finished wall and Secure with Anchoring Hardware, by others, for Ø1/4" Mounting Holes.



- ① Water Cooler Assembly
- ② Mounting Plate
- ③ Anchoring Hardware, by others
- ④ 6x Ø1/4" Mounting Holes (A)
- ⑤ Auxiliary Ø1/4" Mounting Holes (B) (If replacing BF2)

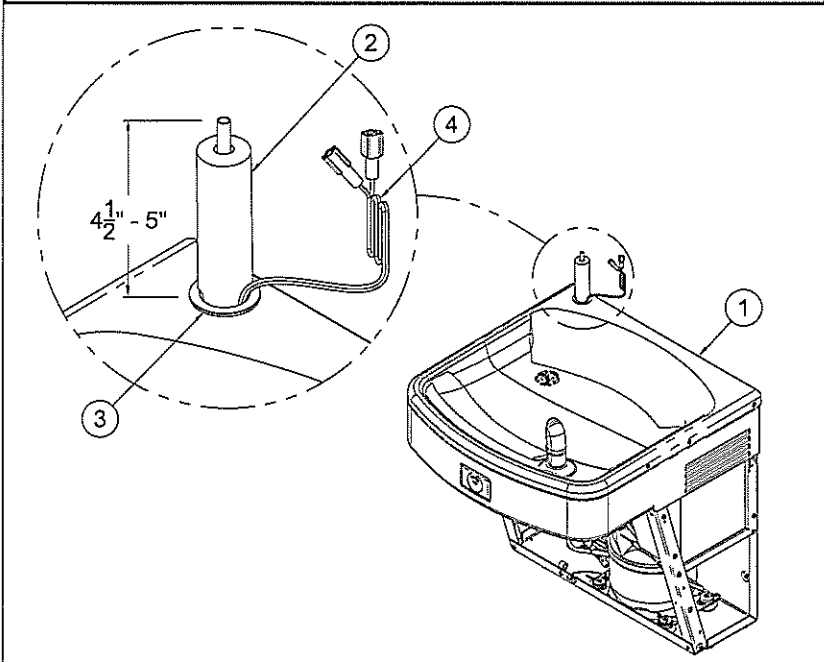


# Cooler Mounted Bottle Fillers

## INSTALLATION/MAINTENANCE INSTRUCTIONS

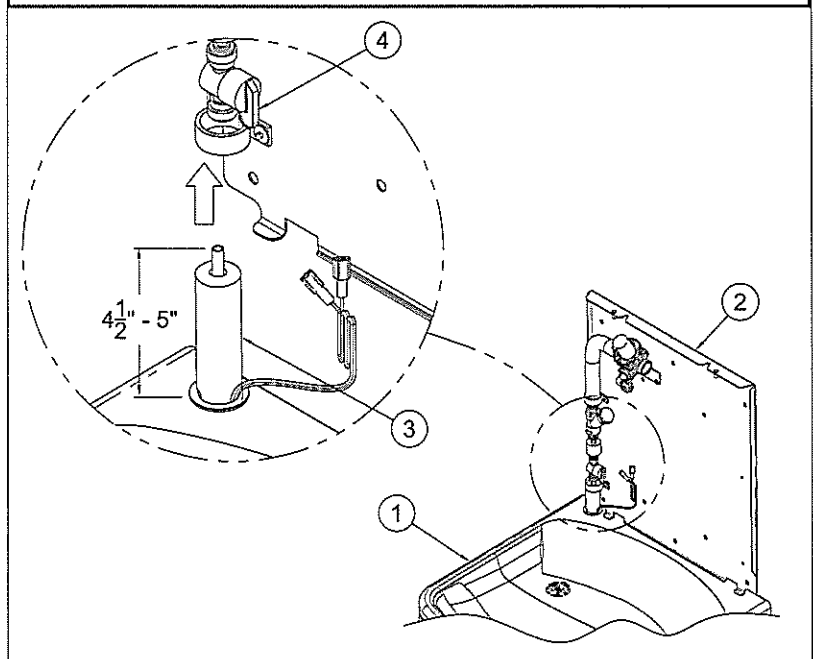
### BF11/BF12 INSTALLATION INSTRUCTIONS (CONTINUED)

**7** Push Tubing with Insulation and Power Wires up through hole in Basin. Install Grommet.



- ① Water Cooler Deck
- ② 1/4" OD Tubing & Insulation
- ③ Grommet
- ④ Power to Bottle Filler  
(Not required with BF11)

**8** Connect Water Supply Tube to the 1/4" Shut-Off Valve that is located on the Mounting Panel. Refer to page 4 for proper connection.



- ① Water Cooler Deck
- ② Mounting Plate
- ③ 1/4" OD Tubing & Insulation
- ④ Shut-Off Valve



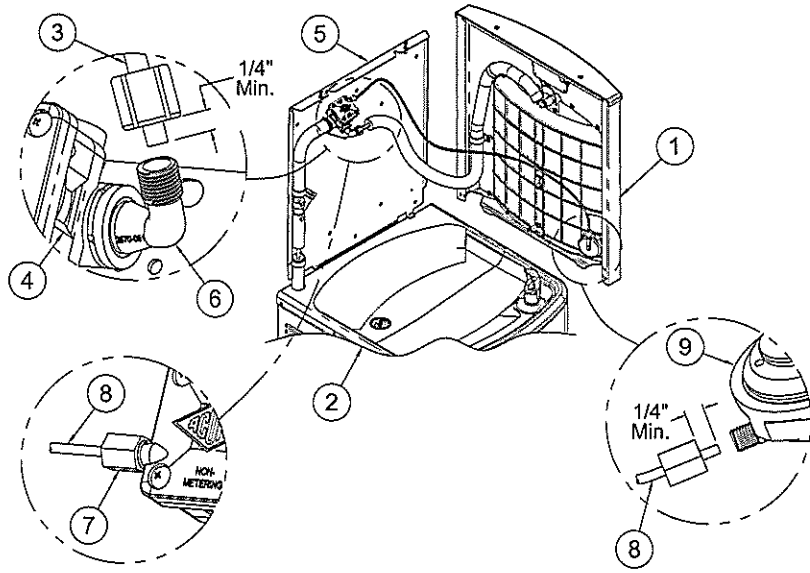
# Cooler Mounted Bottle Fillers

## INSTALLATION/MAINTENANCE INSTRUCTIONS

### BF11/BF12 INSTALLATION INSTRUCTIONS (CONTINUED)

#### BF11 SERIES

**9A** With Mounting Panel secured, place Bottle Filler Housing on top of the Water Cooler and connect water supply line from Bottle Filler to Pneumatic Valve Outlet. Connect 1/8" Air-Line to Pushbutton and Pneumatic Valve Inlet.

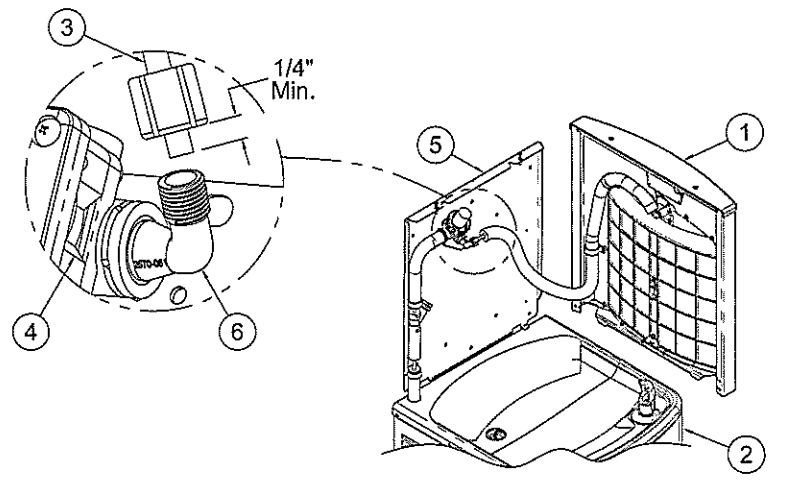


- ① Bottle Filler Housing
- ② Water Cooler Assembly
- ③ 1/4" O.D. Polyethylene Supply Line
- ④ Pneumatic Valve
- ⑤ Mounting Panel
- ⑥ Valve Water Supply Outlet Elbow
- ⑦ Valve Air-Line Supply Inlet
- ⑧ 1/8" O.D. Polyethylene Supply Line
- ⑨ Pushbutton

**! IMPORTANT**  
 FOR BF11 SERIES, FOLLOW STEP 9A  
 FOR BF12 SERIES, FOLLOW STEP 9B

#### BF12 SERIES

**9B** With Mounting Panel secured, place Bottle Filler Housing on top of the Water Cooler and connect water supply line from Bottle Filler to Solenoid Valve Outlet.



- ① Bottle Filler Housing
- ② Water Cooler Assembly
- ③ 1/4" O.D. Polyethylene Supply Line
- ④ Solenoid Valve
- ⑤ Mounting Panel
- ⑥ Valve Water Supply Outlet Elbow



# Cooler Mounted Bottle Fillers

## INSTALLATION/MAINTENANCE INSTRUCTIONS

### BF11/BF12 INSTALLATION INSTRUCTIONS (CONTINUED)

<b>BF12-BCD SERIES</b>	
<b>10A</b> Connect Electrical wiring as shown in diagram. If unit does not have -BCD Bottle Count Display, skip to step 10B.	

- ① -BCD Bottle Count Display
- ② Sensor
- ③ Solenoid Valve
- ④ Power Supply
- ⑤ Black Wire - BCD

<b>BF12 SERIES</b>	
<b>10B</b> Connect Electrical wiring as shown in diagram. If unit has -BCD Bottle Count Display, see step 10A before continuing.	

- ① Sensor
- ② Solenoid Valve
- ③ Power Supply

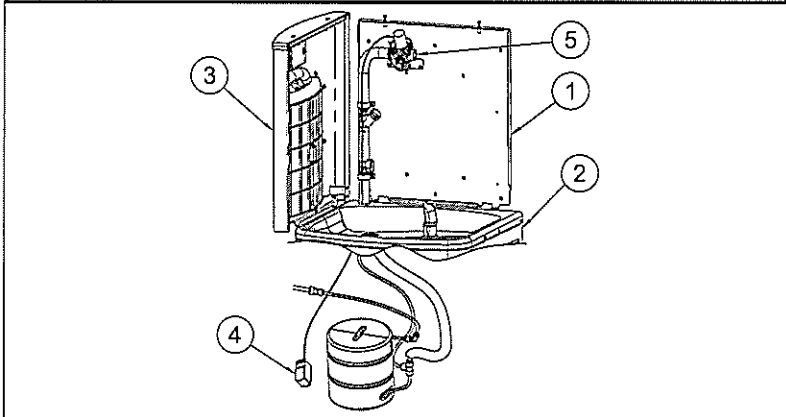


# Cooler Mounted Bottle Fillers

## INSTALLATION/MAINTENANCE INSTRUCTIONS

### BF11/BF12 INSTALLATION INSTRUCTIONS (CONTINUED)

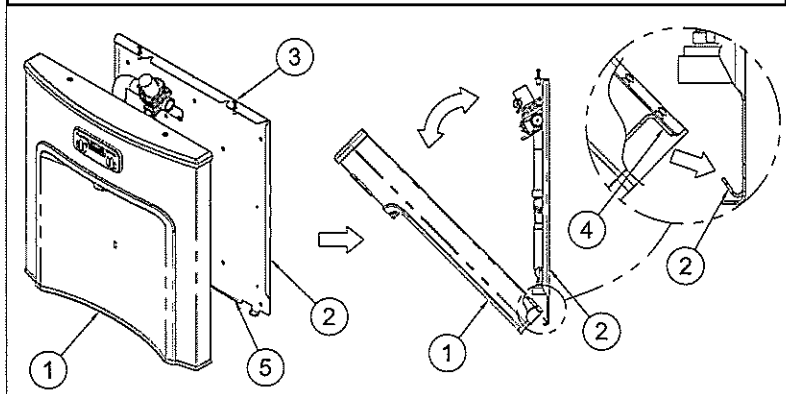
**11** Connect Power Supply, turn on water and check for leaks throughout the system.



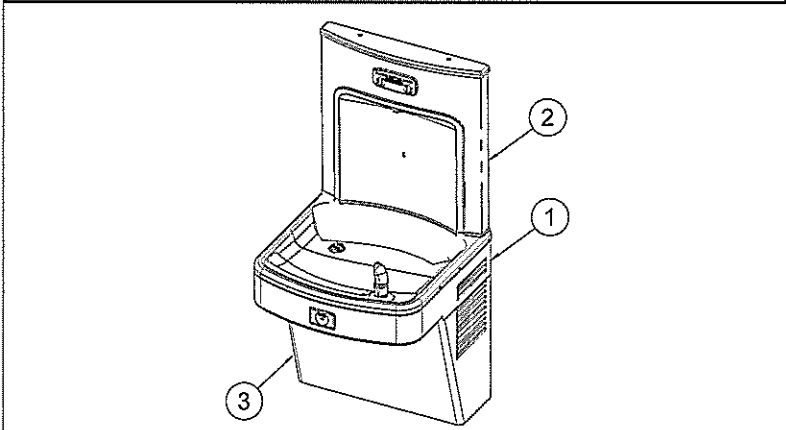
- ① Mounting Panel
- ② Water Cooler Assembly
- ③ Bottle Filler Housing
- ④ Power Supply
- ⑤ Solenoid Valve

**12** With fixture tested, install Housing to Mounting Panel. Angle Housing and engage Housing Bottom Flange to Mounting Panel Flange and close unit. Secure with Screws from step 3.

- ① Bottle Filler Housing
- ② Mounting Panel
- ③ #10-32 x 1" Button Head Screw
- ④ Housing Bottom Flange
- ⑤ Mounting Panel Flange



**13** Mount Water Cooler Access Panel to Water Cooler.



- ① Water Cooler
- ② Bottle Filler
- ③ Access Panel



## Cooler Mounted Bottle Fillers

### INSTALLATION/MAINTENANCE INSTRUCTIONS

#### ELECTRICAL INSTALLATION:

**NOTE: PLUG-IN POWER IS A STANDARD FEATURE.**

- 1A. Plug-In Operation: Plug Transformer provided into GFCI protected electrical service, used by the Bottle Filler.
2. Connect the Power Supply Wires to either the Sensor or -BCD Bottle Counter Display (if equipped).

#### START UP:

1. Air within the Bottle Filler System or the structure supply Piping will cause an irregular Spout outlet stream until purged out by incoming water. Hold cup (or similar object) directly below Filler Spout is recommended when first activating Bottle Filler to prevent excessive splashing. Activate Sensor until steady water stream is achieved.

#### OPERATING INSTRUCTIONS:

Position container to be filled directly in front of the Sensor and centered under the Filler Spout. Water flow starts automatically. When the container is almost filled, remove container. The water will stop flowing.

#### BOTTLE COUNTER ADJUSTING & RESETTING INSTRUCTIONS:

**NOTE: Bottle Counter Has Multiple Functions**

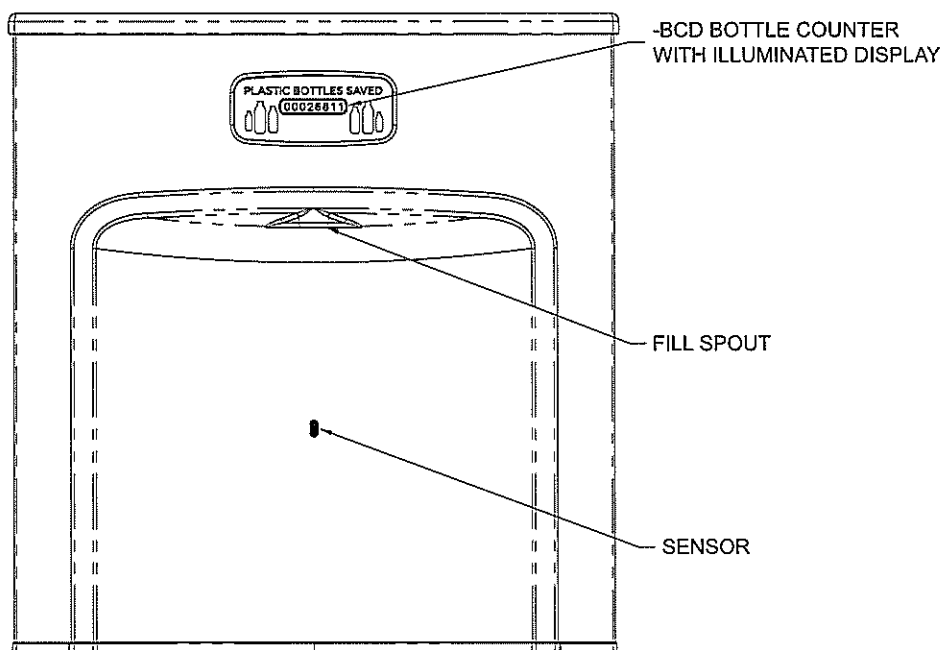
- Reset/ Mode Button
- Counts refilled bottles
- Adjustable for units with and without Filters
- "REPLACEMENT FILTER" alert function
- Alert reset, when Filter is replaced

#### **Description**

Illuminated LCD Display counts bottles and has a Filter replacement alert function.

#### **Bottle Counting Function**

The software applies a flow volume of approximately 16.9 fl oz (volume in standard size plastic water bottle) to each bottle counted. If the flow volume is less than 16.9 fl oz, there will be no count but the volume will accumulate, so that part way through the next cycle the total bottle count will change.





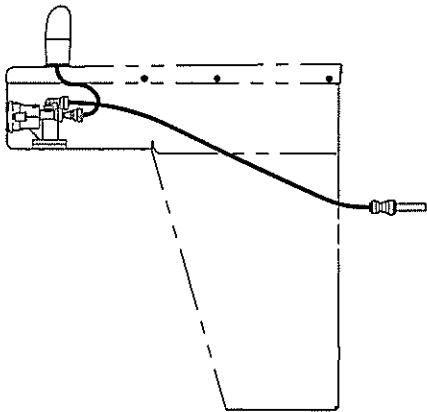


# Cooler Mounted Bottle Fillers

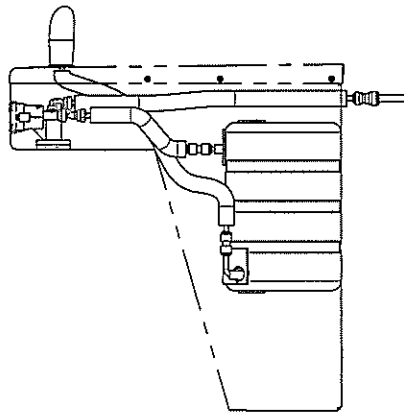
## INSTALLATION/MAINTENANCE INSTRUCTIONS

### BF11/BF12 Water Supply Tubing Diagram

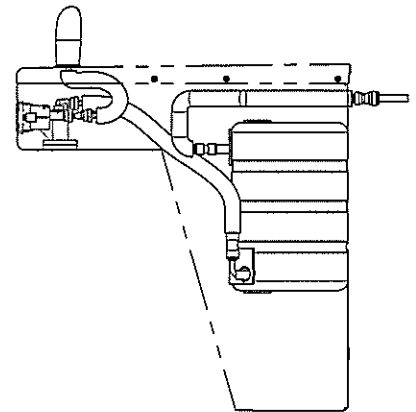
Install Tubing as shown below to add Bottle Filler to Fixture



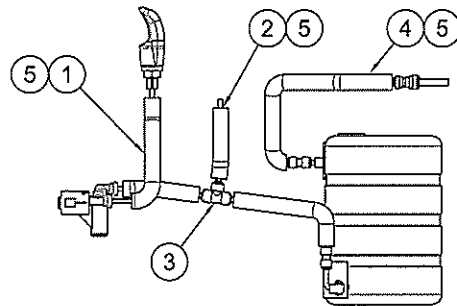
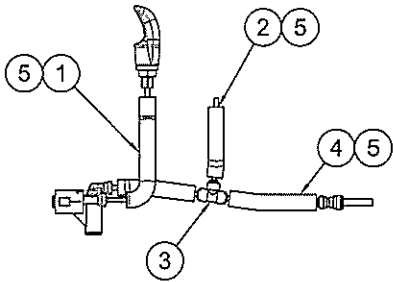
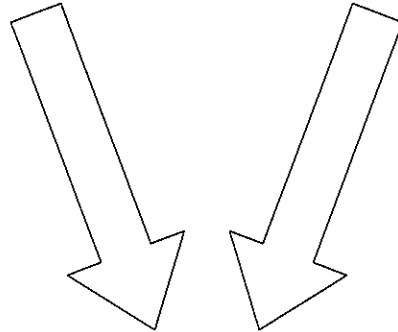
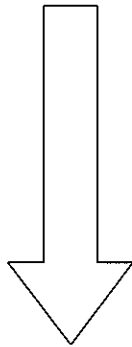
Non-Refrigerated Unit  
(Drinking Fountain)



Non-Pressurized Unit  
(Water Cooler)



Pressurized Unit  
(Water Cooler)



Pressurized with Bottle Filler

- ① Water Supply Line, to Bubbler
- ② Water Supply Line, to Bottle Filler
- ③ 1/4" O.D. Push-In Tee
- ④ Water Supply Line, Inlet
- ⑤ Foam Insulation



## Cooler Mounted Bottle Fillers

### INSTALLATION/MAINTENANCE INSTRUCTIONS

#### FILTER REPLACEMENT FUNCTIONS:

**NOTE:** When the volume accumulates to Filter capacity, the "REPLACE FILTER SOON" alert will appear on the display every time the Bottle Filler is activated.

#### Counter Modes

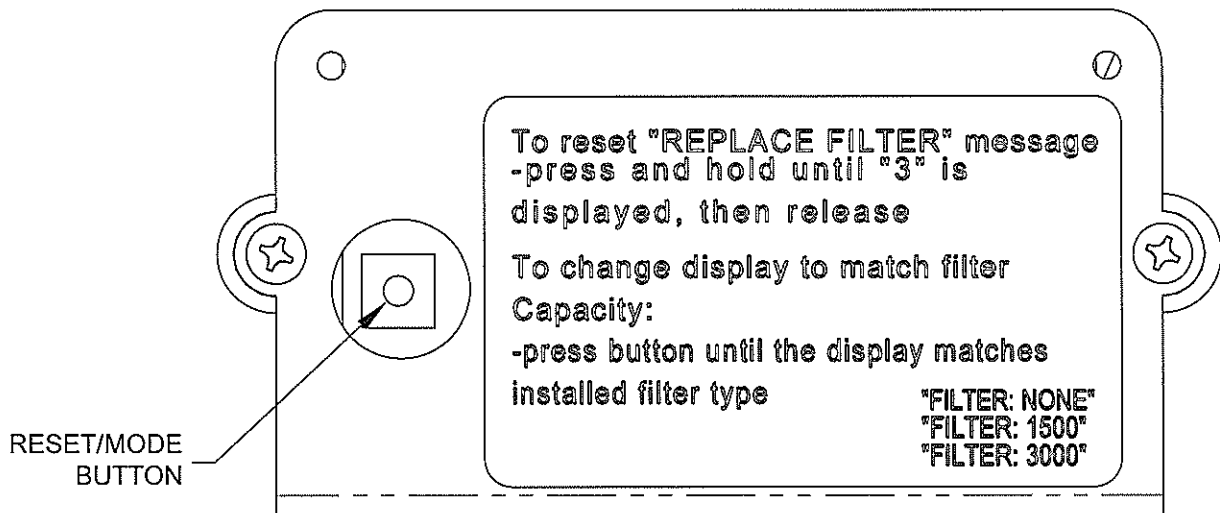
Located on the back of the display you will find the Reset/Mode button for the mode settings. The Reset/Mode Selection Button is accessible by removing the Housing, then locate the large hole in the back of the Display Mounting Bracket. Use your finger or nonconductive object to depress the Reset/Mode Selection Button.

#### **CAUTION: DO NOT USE SHARP OR METAL OBJECTS**

With this Reset/Mode Button, you are able to indicate whether or not the unit has a Filter or does not have a Filter. The Reset/Mode Button is used to remove the "REPLACE FILTER" alert after the Filter has been replaced.

#### Systems With or Without Filter:

- To reset "REPLACE FILTER" message:
  - Press and hold Button until "3" is displayed, then release.
- To change display to match Filter capacity:
  - Press and hold Button until the display matches installed Filter type, then release.
  - "FILTER NONE"
  - "FILTER 1500"
  - "FILTER 3000"





## Cooler Mounted Bottle Fillers INSTALLATION/MAINTENANCE INSTRUCTIONS

### TROUBLE-SHOOTING:

1. IF LIGHT WITHIN SENSOR DOES **NOT FLASH ONCE WHEN USER IS WITHIN RANGE:**
  - a. Verify 120VAC input & 9VDC output of Transformer.
  - b. Replace defective Transformer.
  - c. Sensor in "Security Mode" after 20 seconds of constant detection. Remove source of detection and wait 30 seconds before checking.
  - d. Sensor is picking up a highly reflective surface. Eliminate cause of reflection and wait 30 seconds before checking.
  - e. Replace defective sensor.
2. IF LIGHT WITHIN SENSOR LENS FLASHES ONCE WHEN THE USER IS WITHIN RANGE:
  - a. Repair bad connection from Sensor to Solenoid.
  - b. There is debris or scale in the Solenoid assembly. Remove Solenoid, pull out Plunger and Spring. Clean with scale remover solution.
  - c. There is debris or scale in center or two holes in convolution of the water diaphragm. Remove and clean.
3. **RESTRICTED OR NO WATER FLOW**
  - a. Ensure Water Supply service stop valve is fully open.
  - b. Verify minimum 20 PSIG supply line flow pressure.
  - c. Check for twist or kinks in Spout Tubing.
  - d. Check the water inlet "Y" Strainer. Sediment from the main supply can get trapped in the Screen along with installation materials such as pipe dope and flux. The Screen should be cleaned and checked on a regular basis and replace if needed.
  - e. Flow Control in spout clogged, remove & clean.
  - f. The Water Cooler may also develop a freezing condition in which the water will become frozen inside the Evaporator coil. This indicates a refrigeration problem or Thermostat failure in which case the Water Cooler needs to be checked by a qualified technician.
  - g. No power to Transformer connections loose or wires cut.

### CLEANING & MAINTENANCE GUIDE:

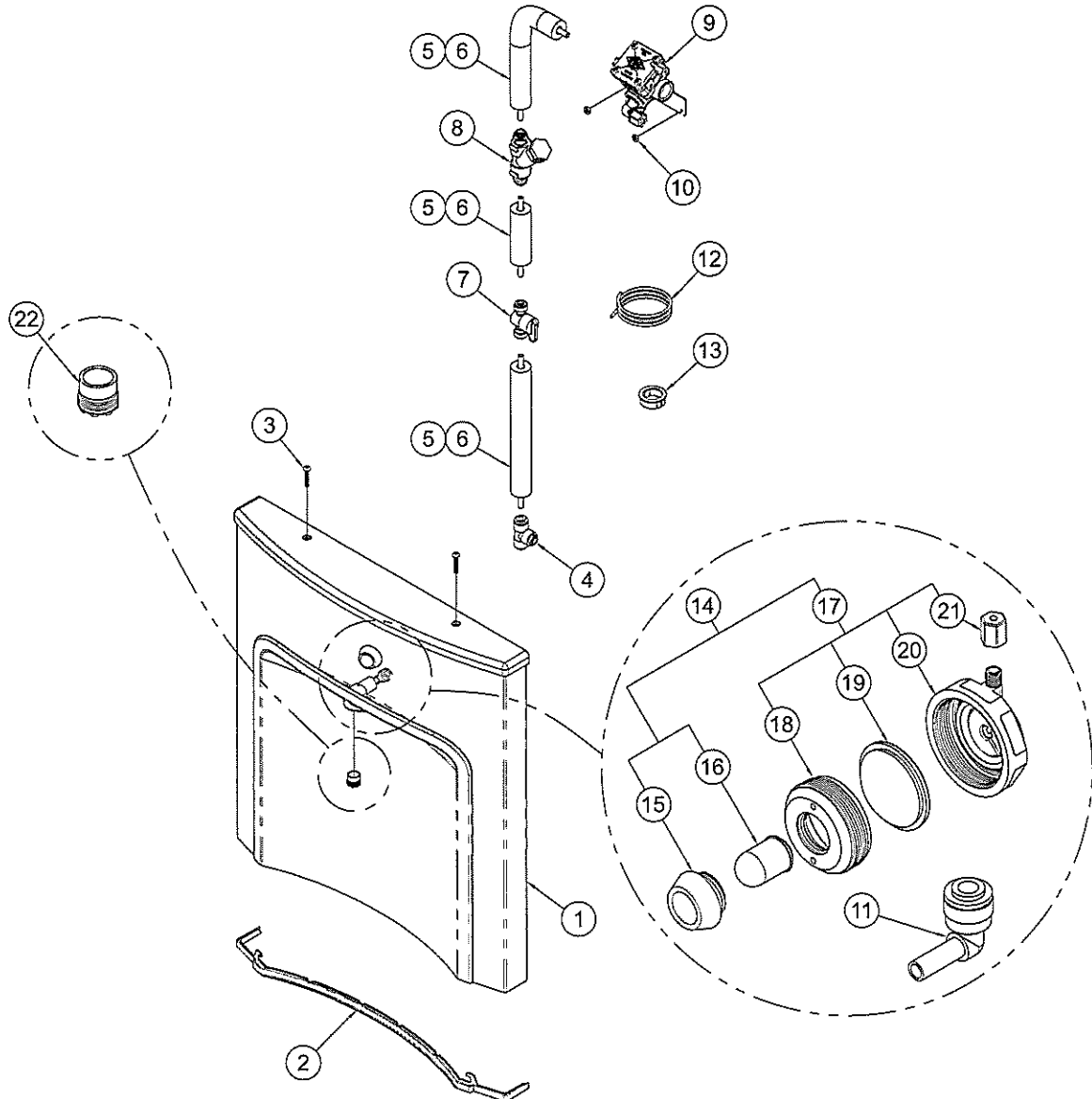
1. To remove water spots or rust spots, stainless steel cleaner/polish on a cloth is recommended.
2. If there are stubborn spots or if you wish to treat a scratch, synthetic abrasive general purpose pads such as Scotch-Brite® is recommended.
3. Apply stainless steel cleaner/polish to the synthetic abrasive pads and carefully rub the panel with the grain.
4. Do NOT use harsh chemicals, abrasive or petroleum based cleaners. Use of these will void the Murdock warranty. DO NOT use abrasives on powder coated units.
5. Stainless steel should be kept clean at all times. If a coating of stainless steel cleaner/polish is maintained, stainless steel surfaces will retain their new, clean, polished appearance indefinitely. Use clean mild soapy water for powder coated units.
6. Periodically remove Panels and clean out inline "Y" Strainer.



# Cooler Mounted Bottle Fillers

## INSTALLATION/MAINTENANCE INSTRUCTIONS

### BF11 PARTS LIST BOTTLE FILLER PARTS BREAKDOWN



ITEM#	PART NUMBER	DESCRIPTION	ITEM#	PART NUMBER	DESCRIPTION
1	CONTACT FACTORY	HOUSING ASSEMBLY, BF11	12	2150-003-199	1/8" OD LDPE TUBE, NATURAL, 3' LONG
2	7014-257-000	BOTTOM TRIM, H202GO	13	7100-441-000	LOCKING GROMMET, 1.188 DIA HOLE
3	0116-123-000	#10-32 x 1" BUTTON HEAD SCREW	14	2566-160-001	(-PBH) SIDE OUTLET PUSHBUTTON
4	1895-710-000	1/4" PUSH-IN UNION TEE	15	4005-030-199	AIR-TROL PUSHBTN ESCUTCHEON S/S
5	2169-000-000	1/4" O.D. LLDPE TUBING, BLUE	16	4005-031-199	AIR-TROL PUSHBUTTON
6	7012-055-000	FOAM PIPE INSULATION	17	2566-025-002	SIDE OUTLET PUSHBUTTON SUB-ASSY
7	7000-420-000	1/4 TURN SHUT-OFF VALVE	18	2566-022-000	ESCUTCHEON RETAINER
8	7013-210-001	"Y" STRAINER, BOTTLE FILLER	19	2566-001-000	AIR DIAPHRAGM
9	7014-290-005	PNEUMATIC VALVE MOUNTING ASSY	20	2566-055-199	DIAPHRAGM RETAINER SIDE OUTLET
10	0302-011-000	#6-32 UNC HEX NUT	21	1895-450-000	1/8" O.D. NYLON COMPRESSION NUT
11	1895-709-000	ELBOW, 1/4" PUSH-IN x 1/4" STEM	22	7013-119-000	NEOPERL LAMINAR NOZZLE

MURDOCK MFG. • 15125 Proctor Avenue • City of Industry, CA 91746 USA  
 Phone 800-453-7465 or 626-333-2543 • Fax 626-855-4860 • www.murdockmfg.com

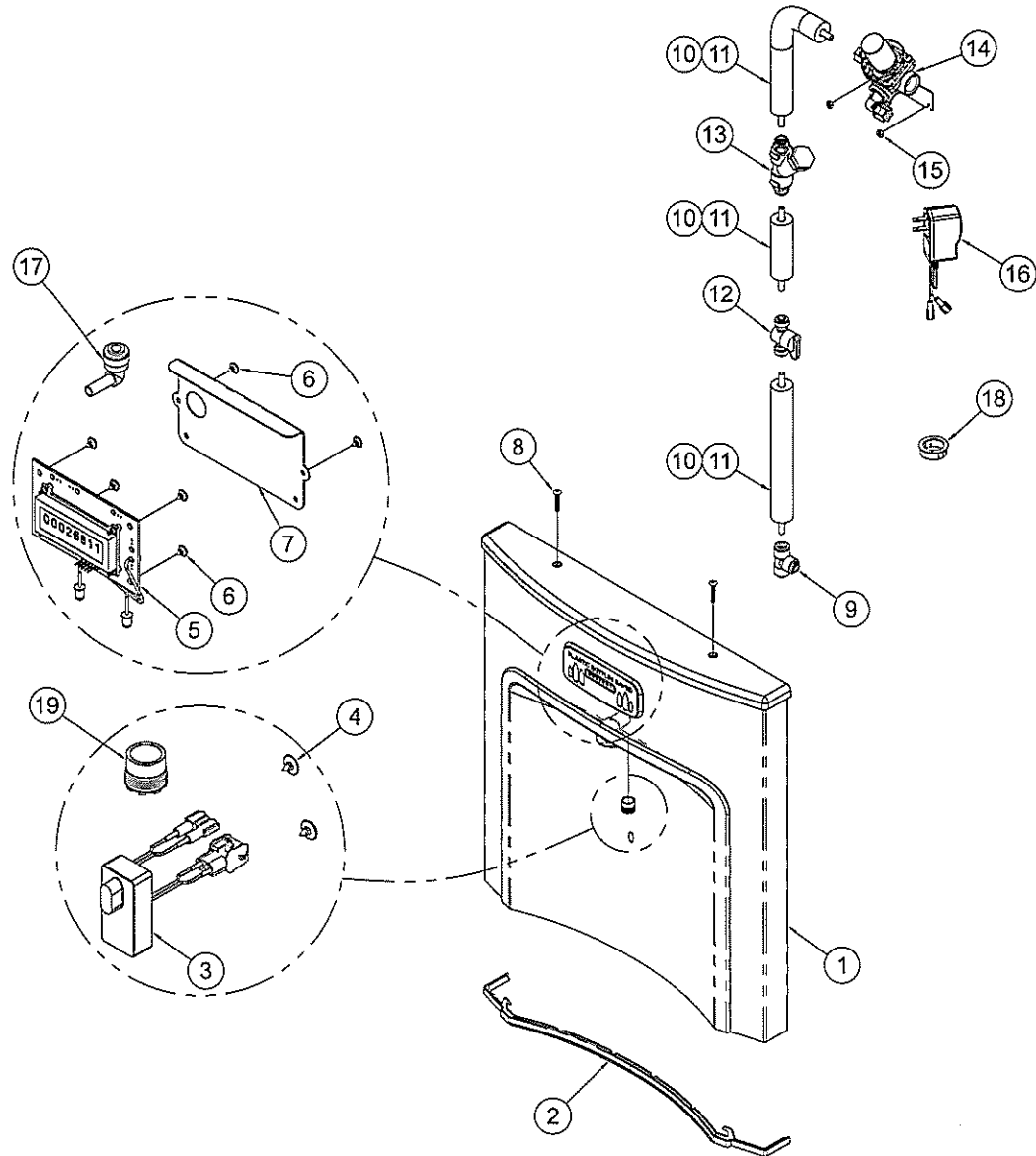




# Cooler Mounted Bottle Fillers

## INSTALLATION/MAINTENANCE INSTRUCTIONS

### BF12 PARTS LIST BOTTLE FILLER PARTS BREAKDOWN



ITEM#	PART NUMBER	DESCRIPTION	ITEM#	PART NUMBER	DESCRIPTION
1	CONTACT FACTORY	HOUSING ASSEMBLY, BF11/12	11	7012-055-000	FOAM PIPE INSULATION
2	7014-257-000	BOTTOM TRIM, H202GO	12	7000-420-000	1/4 TURN SHUT-OFF VALVE
3	2563-381-001	SENSOR "A" ASSEMBLY	13	7013-210-001	"Y" STRAINER, BOTTLE FILLER
4	0110-012-000	#6 x 3/16" TRUSS HEAD SCREW	14	7014-293-001	SOLENOID/VALVE MOUNTING ASSY
5	0716-111-001	BOTTLE COUNTER WITH CONNECTORS	15	0302-011-000	#6-32 UNC HEX NUT
6	0110-011-000	#6 x 3/16" PAN HEAD SCREW	16	0710-736-001	POWER SUPPLY
7	7014-253-199	SPLASH GUARD	17	1895-709-000	ELBOW, 1/4" PUSH-IN x 1/4" STEM
8	0116-123-000	#10-32 x 1" BUTTON HEAD SCREW	18	7100-441-000	LOCKING GROMMET, 1.188 DIA HOLE
9	1895-710-000	1/4" PUSH-IN UNION TEE	19	7013-119-000	NEOPERL LAMINAR NOZZLE
10	2169-000-000	1/4" O.D. LLDPE TUBING, BLUE			

MURDOCK MFG. • 15125 Proctor Avenue • City of Industry, CA 91746 USA  
 Phone 800-453-7465 or 626-333-2543 • Fax 626-855-4860 • www.murdockmfg.com

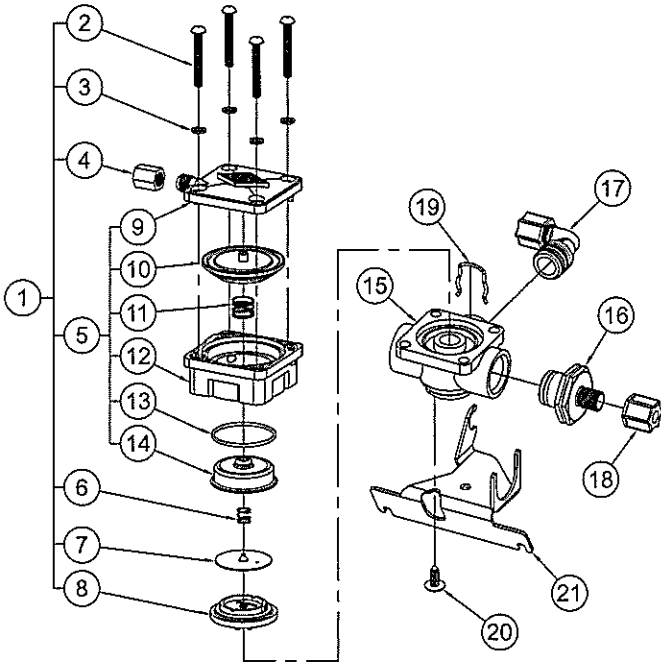




# Cooler Mounted Bottle Fillers

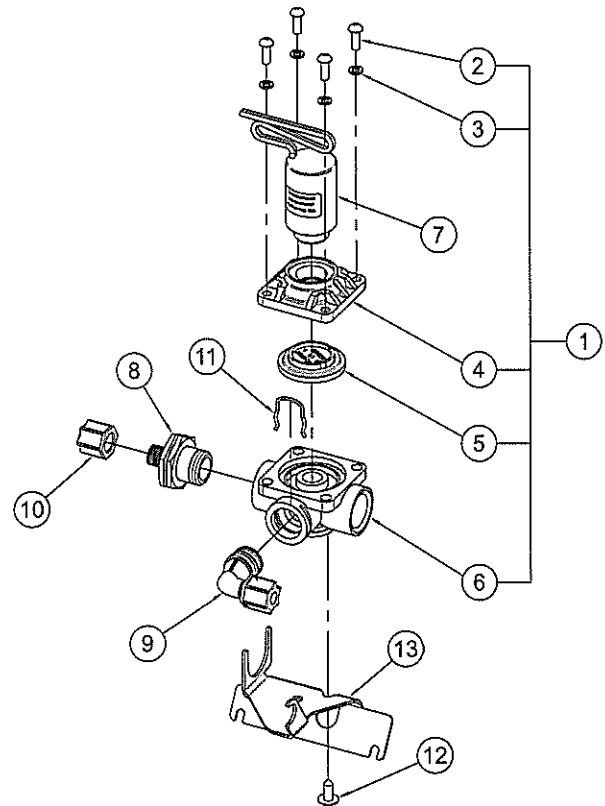
## INSTALLATION/MAINTENANCE INSTRUCTIONS

### BF11 VALVE BREAK DOWN



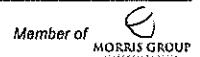
ITEM #	PART NUMBER	DESCRIPTION
1	2563-000-002	DIRECT ACTING ASSEMBLY
2	0116-012-000	#8-32 x 1-1/4" PHILLIPS ROUND HEAD
3	0331-003-000	#8 LOCKWASHERS
4	1895-450-000	1/8" PLASTIC COMPRESSION NUT
5	2563-000-001	DIRECT ACTING MOTOR ASSEMBLY
6	2563-008-000	PILOT ORIFICE PLATE SPRING
7	2563-019-001	PILOT ORIFICE PLATE ASSEMBLY
8	2563-010-001	WATER DIAPHRAM ASSEMBLY
9	2563-007-000	DIRECT ACTING COVER PLATE
10	2563-004-001	DIRECT ACTING DIAPHRAM ASSEMBLY
11	2563-003-000	ACTUATOR SPRING
12	2563-001-000	MOTOR HOUSING
13	0401-026-000	SEPERATOR CUP O-RING
14	2563-002-199	SEPERATOR CUP
15	2563-000-000	VALVE BODY
16	2800-108-001	1/4" INLET ADAPTER ASSEMBLY
17	2570-051-001	1/4" OD PLASTIC ELBOW ASSEMBLY
18	1895-461-000	1/4" OD NYLON NUT
19	0326-100-000	RETAINING CLIP
20	0124-010-000	#10 X 1/2" PHILLIPS TRUSS HEAD
21	7014-1293-199	BF11/12 VALVE MOUNTING BRACKET

### BF12 VALVE BREAK DOWN



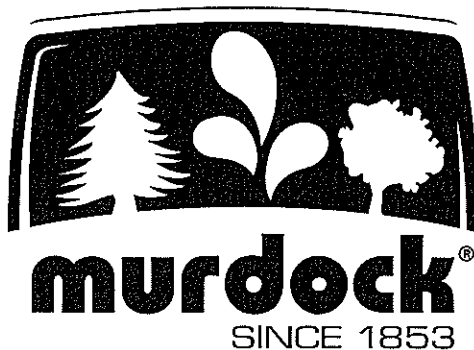
ITEM #	PART NUMBER	DESCRIPTION
1	2570-140-001	9-12 VDC SOLENOID OP VALVE ASSY
2	6502-043-000	#8-32 UNC x 1/2" PHILLIPS SCREW
3	0331-003-000	#8 LOCKWASHERS
4	2570-061-000	SOLENOID BONNET
5	2563-010-001	WATER DIAPHRAGM ASSEMBLY
6	2570-027-000	VALVE BODY
7	2563-326-001	9VDC LATCHING SOLENOID ASSEMBLY
8	2800-108-001	1/4" INLET ADAPTER
9	2570-051-001	1/4" OD PLASTIC ELBOW ASSEMBLY
10	1895-461-000	1/4" OD NYLON NUT
11	0326-100-000	RETAINING CLIP
12	0124-010-000	#10 X 1/2" PHILLIPS TRUSS HEAD
13	7014-1293-199	BF11/12 VALVE MOUNTING BRACKET

MURDOCK MFG. • 15125 Proctor Avenue • City of Industry, CA 91746 USA  
 Phone 800-453-7465 or 626-333-2543 • Fax 626-855-4860 • www.murdockmfg.com





## Cooler Mounted Bottle Fillers INSTALLATION/MAINTENANCE INSTRUCTIONS



### MAIL ADDRESS

P.O. BOX 3527  
CITY OF INDUSTRY, CA 91744 U.S.A.

### PHYSICAL ADDRESS

15125 PROCTOR AVENUE  
CITY OF INDUSTRY, CA 91746 U.S.A.

TOLL FREE 800-591-9360 • LOCAL 626-336-4561  
FAX 626-855-4894 • WEB [www.murdockmfg.com](http://www.murdockmfg.com)

### NOTES TO INSTALLER:

1. Please leave this documentation with the owner of the fixture when finished.
2. Please read this entire booklet before beginning the installation.
3. Check your installation for compliance with plumbing, electrical and other applicable codes.

### LIMITED WARRANTY - UNITED STATES & CANADA

Murdock warrants that its products are free from defects in material or workmanship under normal use and service for a period of one year from date of install or for 18 months after the date of shipment from the factory, whichever comes first. The sealed refrigeration system is warranted for five years. Murdock's liability under this warranty shall be discharged solely by replacement or repair of defective material, provided Murdock is notified in writing within one year from date of shipment, F.O.B. Industry, California.

This warranty does not cover installation or labor charges and does not apply to materials, which have been damaged by other causes such as mishandling or improper care or abnormal use. The repair or replacement of the defective materials shall constitute the sole remedy of the Buyer and the sole remedy of Murdock under this warranty. Murdock shall not be liable under any circumstances for incidental, consequential or direct charges caused by defects in the materials, or any delay in the repair or replacement thereof. This warranty is in lieu of all other warranties expressed or implied. Product maintenance instructions are issued with each unit and disregard or non-compliance with these instructions will constitute an abnormal use condition and void the warranty. Stainless steel must be protected on job site during construction and must be properly maintained after the water has been introduced into the water cooler or drinking fountain, or Murdock's limited warranty is void.

**LIMITED EXPORT WARRANTY** - One year on parts only.

