

A171-UG, A171-UG-VR, A171-UG-SO Series Barrier Free, Wall Mounted Drinking Fountain

MODEL SERIES:

A171100F-UG / A171400F-UG / A171100S-UG / A171400S-UG
A171100F-UG-VR / A171400F-UG-VR / A171100S-UG-VR / A171400S-UG-VR
A171100F-UG-SO / A171400F-UG-SO / A171100S-UG-SO / A171400S-UG-SO



A171100F-UG



A171400S-UG-VR



A171100F-UG-SO



Maintenance Advantage™
Water Cooler by Murdock Manufacturing

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.
4. **IMPORTANT:** Water supply to unit from RO Reverse Osmosis filtration systems will damage fixture components and void product Warranty.

IMPORTANT

OPTIONAL BOTTLE FILLER INSTALLATION DETAILS (MODEL # BF11, BF12, BF11S, BF12S):

This series is offered with optional Bottle Filler unit (packaged / shipped separately) which requires Wall mounting.

Rough-In and Installation details for Bottle Fillers are shipped with the Bottle Filler specified.

For Installation details refer to the specified Bottle Filler Product Page Downloads using the following link:

www.murdockmfg.com/bottle-fillers

TECHNICAL ASSISTANCE TOLL FREE TELEPHONE NUMBER:

1.800.743.8259

Technical Assistance E-Mail: Fieldservice@acorneng.com

For current Warranty click hyperlink [Product Warranty](http://www.murdockmfg.com/terms-and-warranty) or visit: www.murdockmfg.com/terms-and-warranty

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MURDOCK MFG. • 15125 Proctor Ave., City of Industry, CA 91746 U.S.A.
Phone 800-453-7465 or 626-333-7465

7020-983-001 Date: 10/15/2024 C

COMPLIES WITH
STANDARDS



• City of Industry, CA 91746 U.S.A.
• www.murdockmfg.com

A171-UG

murdock®
SINCE 1853

Member of



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CA, 91746 U.S.A.
Phone 800-453-7465

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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. A dielectric coupling must be used to connect the drinking fountain to the water supply. **NOTE:** A nonmetallic coupler is furnished with this drinking fountain to meet this requirement.

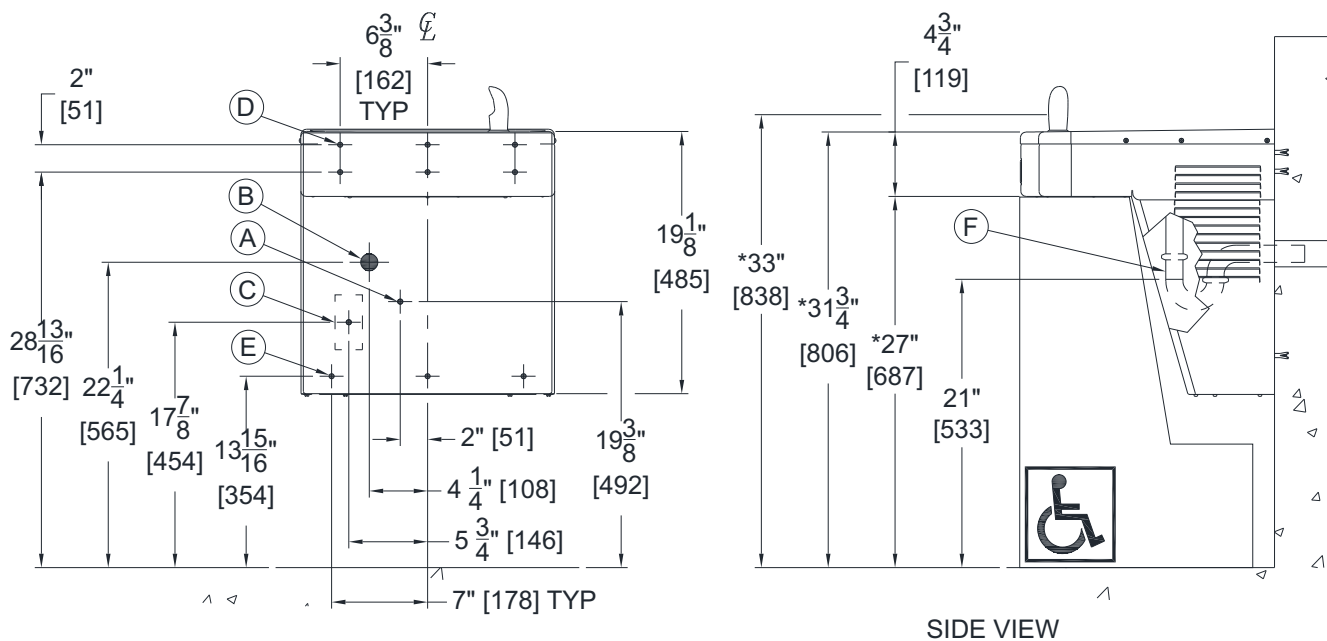
****NOTE:** -VR Series units are rated for outdoors. Refer to page 5 for complete details and requirements.

ROUGHING-IN AND DIMENSIONAL DRAWING

Prior to roughing 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.

Mounting Carrier: Refer to Installation details provided by Carrier manufacturer when unit is to be installed with In-W all Mounting Carrier (provided by others). **Compatible J.R. Smith® brand Carrier model is Figure # 0830.**

A171-UG Series Wall Mounted Drinking Fountain



Electrical Requirements (Non Chilled):

For -SO Sensor Control,
or Bottle Filler with Sensor (*Model BF12, BF12S*):
- Provide Duplex Receptacle on GFCI Protected Circuit
- 115VAC, 60Hz, 1A

- 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. SEE NOTE.
- D. Ø3/8" HANGER BRACKET PUNCHING, 6 PLACES FOR ANCHORING HARDWARE BY OTHERS
- E. Ø1/4" PUNCHING, 3 PLACES FOR ANCHORING HARDWARE BY OTHERS
- F. 1-1/4" [32] O.D. TAILPIECE FOR P-TRAP BY OTHERS

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN INCHES [MM]
- *2. DIMENSIONS SHOWN ARE FOR ADA ADULT HEIGHT. ADJUST VERTICAL DIMENSIONS AS NECESSARY TO COMPLY WITH FEDERAL, STATE, & LOCAL CODES
3. STOP VALVE & P-TRAP, NOT SUPPLIED
4. IMPORTANT: DRINKING FOUNTAIN MUST BE ATTACHED TO WALL WITH APPROPRIATE ANCHOR SCREWS

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 spout height to 30" maximum above finished floor. Provide Clear Floor Space as required. Compliance is subject to the interpretation and requirements of the local Code Authority.

PRIOR TO INSTALLATION:

Important: Some options may slightly alter installation including optional Bottle Filler. To ensure proper installation review the manual thoroughly and verify Rough-Ins before beginning work. File 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.
- Inspect fixture and all parts for damages.

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 Waste Connection.
2. Water supply is 3/8" Outside Diameter Copper Tube. Waste is 1-1/4" Outside Diameter.
3. Completely flush supply lines of all foreign debris before connecting to fixture. Drinking Fountain designed to not affect taste, odor, color, or sediment. Optional water filter (WF1) is available should any of these problems arise from the water supply.
4. If possible, limit exposure of the Drinking Fountain to direct sun light. The actual surface temperature of a Drinking Fountain in direct sunlight on a 90°F day, the Drinking Fountain would be about 140°F.
5. Do **NOT** solder Copper Tube when inserted into the Coupler as damage to the O-Ring will result.
6. All burrs must be removed from outside of cut Tubes before inserting into Coupler or other components.
7. **Warranty is voided** if installation is not made following current Murdock Mfg. installation instructions and if components are assembled to the fixture that is not approved by Murdock Mfg.
8. Fixture is to operate within a water pressure range of 20 PSIG (138 kPa) to 105 PSIG (724 kPa). Warranty is void if the unit is allowed to operate outside the range of 20 PSIG (138 kPa) to 105 PSIG (724 kPa). **Consult with UPC and local codes for maximum allowable water pressures.**
9. **Per UPC 609.10-** *All building water supply systems in which quick acting 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 will be installed as close as possible to the Quick Closing Valve.*

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 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 drinking fountain and set aside in a safe place. Save the screws in a secure location for re-use in later stages of installation.
3. Hang the Drinking Fountain on the Hanger Bracket, ensuring the Bracket Tabs engage AND seat in the slots in the back of the drinking fountain. Verify Drinking Fountain 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 Drinking Fountain 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 drinking fountain to water supply Angle Stop Valve (by others) with supplied 3/8" O.D. copper tube.
6. Make up 1-1/4" O.D. Waste Connection for P-Trap (by others) .
7. For outdoor installation, see outdoor installation instructions (Page 5)

START UP:

1. Before assembling bottom cover to the drinking fountain, but after thoroughly flushing the supply line and connecting it to the fixture, turn on building water supply and check all connections for leak.
2. Air within the drinking fountain 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 drinking fountain 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. Assemble bottom cover to drinking fountain with screws furnished.

IMPORTANT! Thoroughly, inspect all unit connections for water leaks.

TROUBLE SHOOTING:

IMPORTANT: BEFORE MAKING ANY OF THE REPAIRS LISTED, MAKE SURE THE DRINKING FOUNTAIN WATER SUPPLY VALVE IS SHUT OFF.

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. 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 fountain.
2. 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.

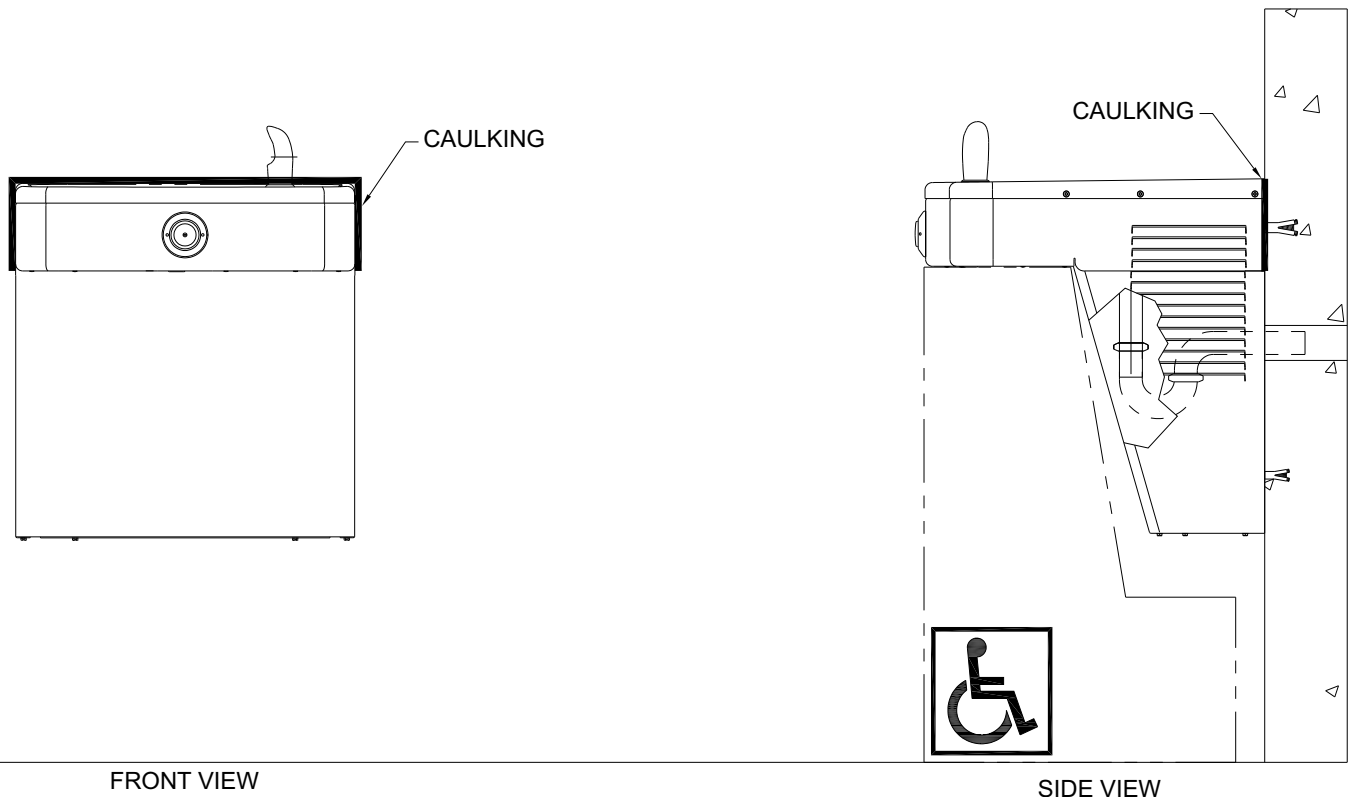
CLEANING & MAINTENANCE GUIDE:

1. Periodically remove access panels and clean out in-line strainer.
2. Do NOT use harsh chemicals, abrasive or petroleum based cleaners. Use of these will void the warranty.
3. 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.

OUTDOOR INSTALLATION INSTRUCTIONS - A171-UG-VR ONLY:

IMPORTANT: Only A171-UG-VR Series, BF11S, BF12S Stn Stl Bottle Fillers are rated for outdoors.

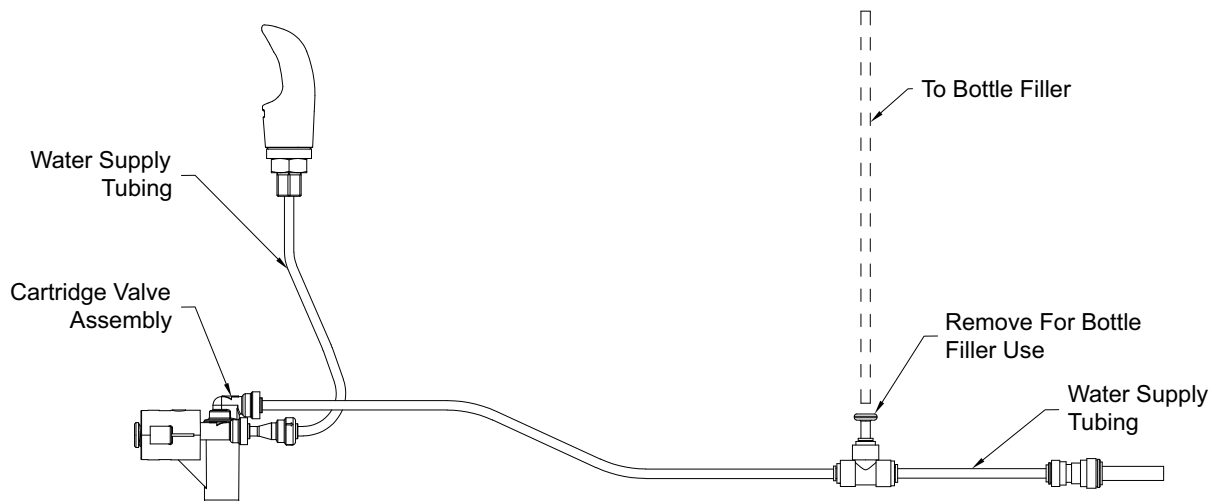
- Units installed outdoors presume average conditions and require adequate protection to prevent exposure to extreme hot or cold temperatures which will affect Warranty.
- Best practices include installation beneath an overhang and avoiding direct sunlight.
- Continual ambient temperatures exceeding 80°F (26.67°C) may cause compressor to wear prematurely.
- Units are not freeze resistant.
- Caulk all around the basin where it contacts the wall and where apron contacts the wall as shown, to reduce the possibility of rain water from leaking into the cabinet. **DO NOT CAULK THE REMOVABLE LOWER ACCESS COVER.**



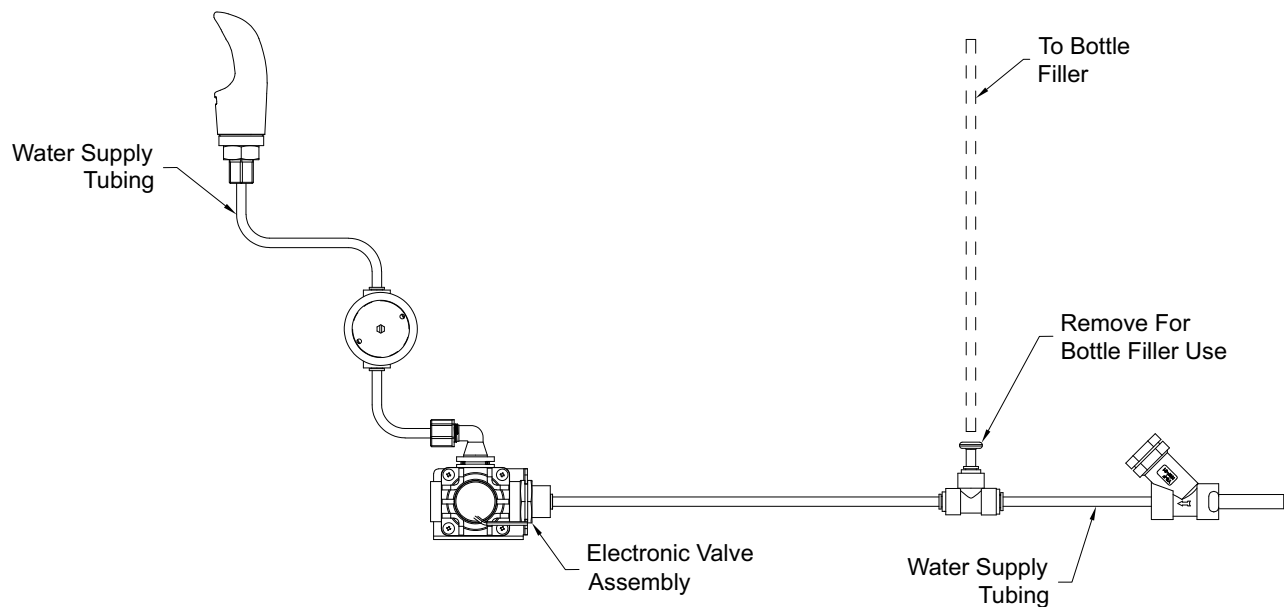
FRONT VIEW

SIDE VIEW

A171-UG & A171-VR-UG UNIT PIPING INSTALLATION (WITH -BF OPTIONS)



A171-UG-SO UNIT PIPING INSTALLATION (WITH -BF OPTIONS)

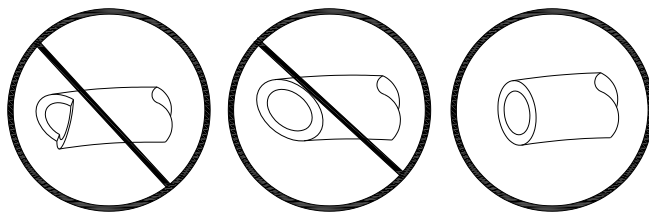


PUSH-IN FITTING INSTALLATION

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

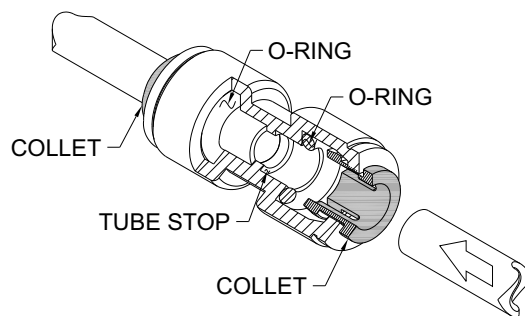
TO CUT TUBE:

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.

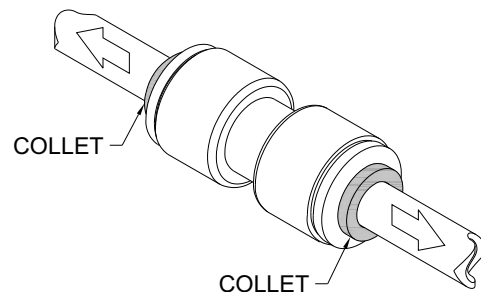


INSERTING THE TUBE:

1. Firmly and fully insert the tubing end into the push-in fitting up to the tube stop located approximately 1/2" deep.

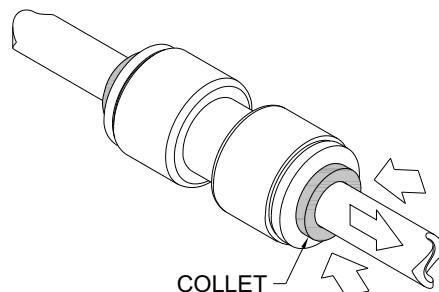


2. Pull on the fitted tubing to ensure it is secure. Tube should not come free from the fitting. Water test the connection assembly prior to leaving the site to ensure there are no leaks.



DISCONNECTING THE TUBE:

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 PE tubing to remove from the push-in fitting.



OPTIONAL WATER FILTER INSTALLATION:

(Not all Filter options shown below are offered with all units.)

-WF1EZ AND -WF3EZ FILTER (Detail A):

REFER TO INSTALL DETAILS SHIPPED WITH EZ-DOOR® FILTER
[WF1EZ INSTALL LINK](#) [WF3EZ INSTALL LINK](#)

-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. (-SO, -SOC, -FG MODELS)

IMPORTANT: FLUSH 3-5 GALLONS OF WATER THROUGH THE FILTER BEFORE INITIAL USE!

- Bubbler run time for approximately 10-15 minutes
- Bottle Filler run time for approximately 3-5 minutes

-WF3000 PFAS FILTER CARTRIDGE INSTALLATION:

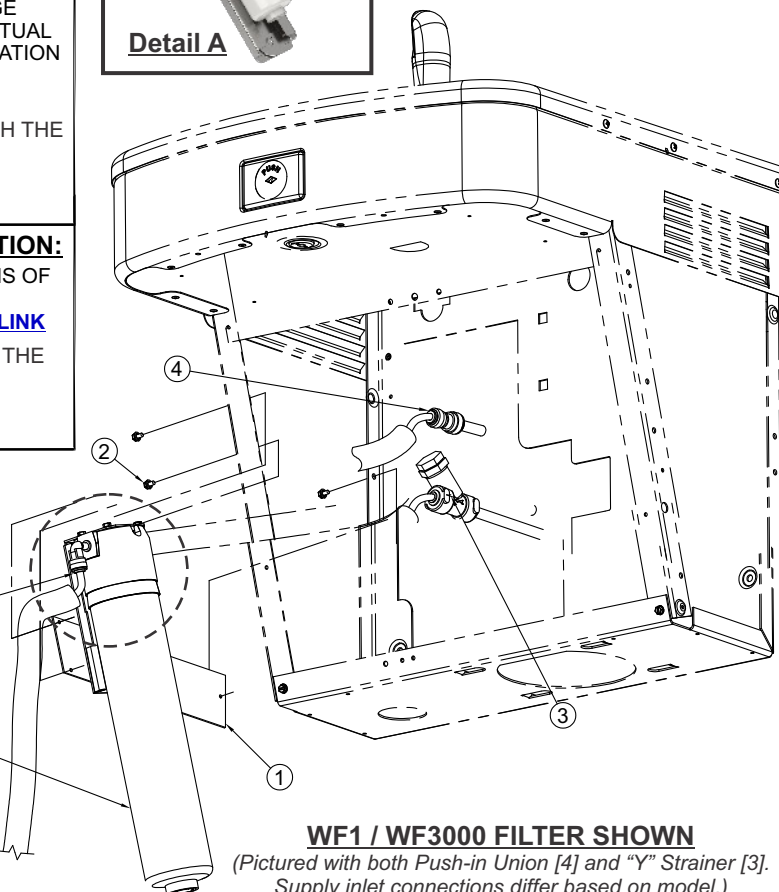
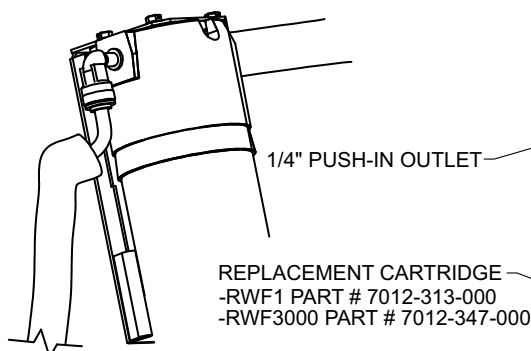
FILTER REQUIRES REPLACEMENT AFTER 3000 GALLONS OF USAGE OR (1) YEAR, WHICHEVER OCCURS FIRST. FOR ADDITIONAL DETAILS REFER TO [WF3000 INSTALL LINK](#)

IMPORTANT: FLUSH 6 GALLONS OF WATER THROUGH THE FILTER BEFORE INITIAL USE!

- Bubbler run time for approximately 12 minutes
- Bottle Filler run time for approximately 6 minutes



Detail A



WF1 / WF3000 FILTER SHOWN

(Pictured with both Push-in Union [4] and "Y" Strainer [3]. Supply inlet connections differ based on model.)

-WF1, -WF3000 INSTRUCTIONS:

A- Prepare unit for filter installation:

Remove the bottom housing and turn off unit water supply. If unit is a refrigerated model, disconnect power supply.

B- Assemble filter to fixture mounting bracket: 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- Chiller unit: Install Filter prior to Evaporator.

Non-Chilled unit: Install Filter prior to Pushbutton.

(Note: "Y" Strainer shown is provided on select models only.) Follow PE tube from "Y" strainer [3] or Push-in Union [4] to where it connects to the Evaporator (for chiller unit) or to Pushbutton (for non-chilled unit).

Disconnect tube from Evaporator or Pushbutton, connect to Filter inlet Push-in Connection.

Connect new PE tube provided with Filter to Evaporator push-in inlet, where tube was removed. Upon completion filter will be between "Y" Strainer and Evaporator (chiller) or Pushbutton (no chiller).

-WF1, -WF3000 INSTRUCTIONS continued:

F- Turn on water.

CHECK ALL CONNECTIONS FOR LEAKS!

G- IMPORTANT: follow flushing instructions for filter type before allowing fixture use.

H- For refrigerated unit, turn on power supply and check unit for proper operation.

I- Re-install bottom housing.

NOTES:

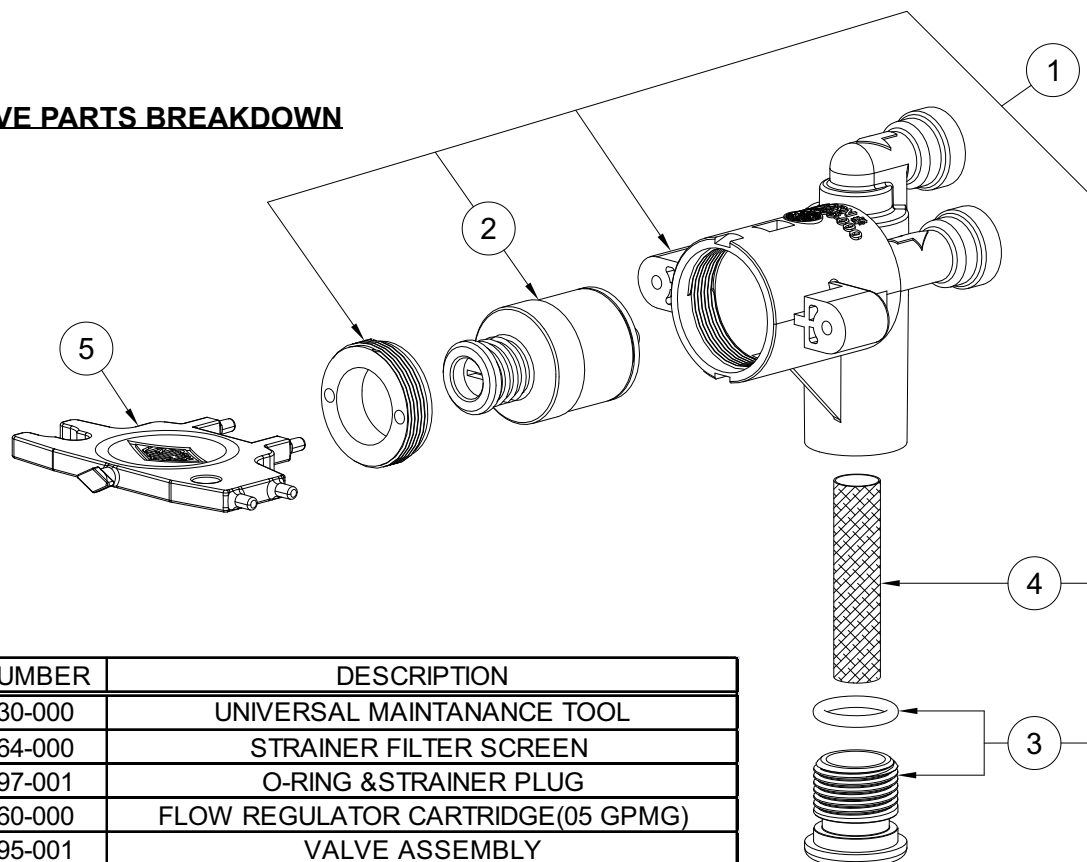
- 1- TO DISCONNECT THE TUBE FROM THE PUSH-IN FITTING TUBE HOLD DOWN GRIPPER AND PULL TUBE OUT SLOWLY.
- 2- TO CONNECT PUSH-IN FITTINGS, PUSH TUBE IN ALL THE WAY TO MAKE A GOOD CONNECTION. CARTRIDGE REPLACEMENT.

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 push button, 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.**

CARTRIDGE VALVE PARTS BREAKDOWN (STANDARD)

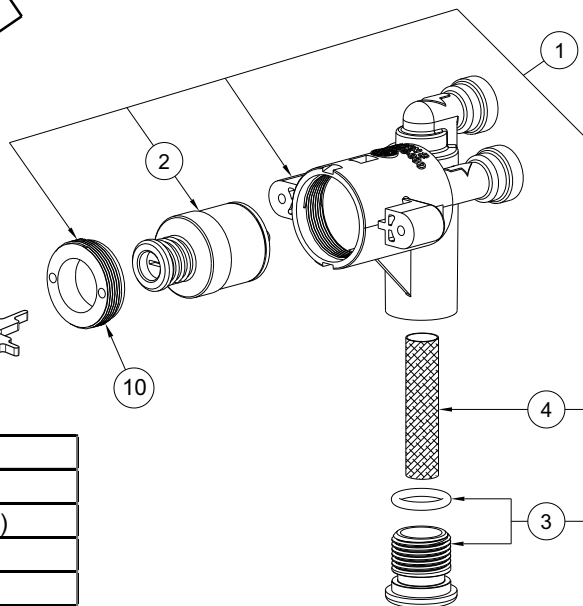
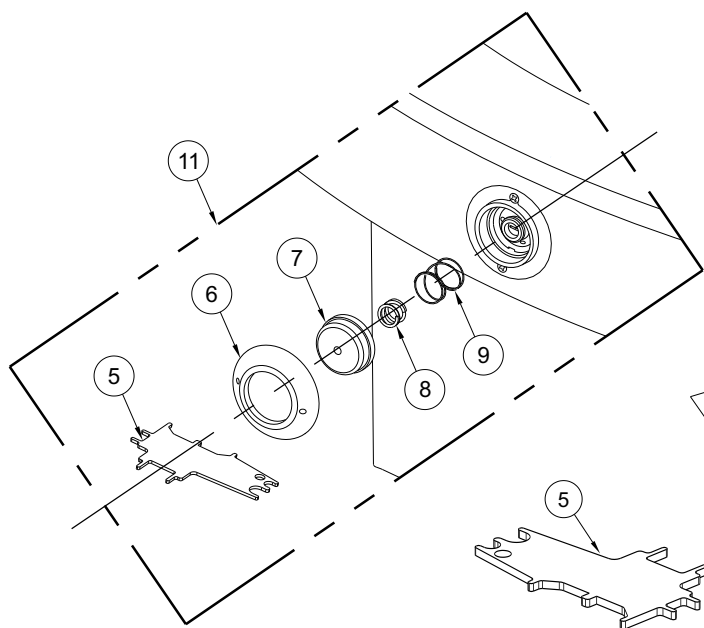


ITEM	PART NUMBER	DESCRIPTION
5	7003-830-000	UNIVERSAL MAINTANANCE TOOL
4	7003-864-000	STRAINER FILTER SCREEN
3	7003-097-001	O-RING &STRAINER PLUG
2	7000-060-000	FLOW REGULATOR CARTRIDGE(05 GPMG)
1	7003-095-001	VALVE ASSEMBLY

-VR VANDAL RESISTANT CARTRIDGE REPLACEMENT/ STRAINER MAINTENANCE

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

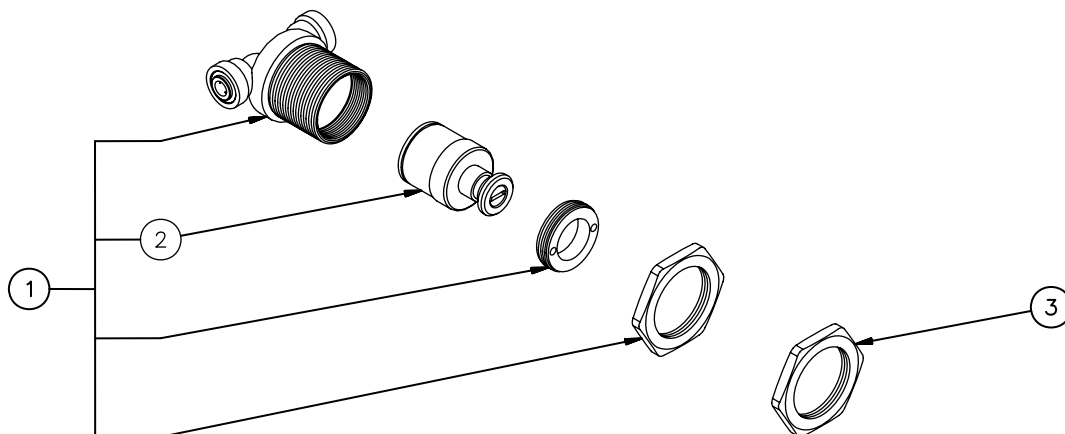
1. Strainer plug (4) **must** be removed before cartridge replacement and strainer maintenance (no need to turn the water off at the angle stop). Some residual water will drain during plug removal.
2. Clean strainer (4) as needed using clean water.
3. Cartridge replacement - Rotate and remove **-VR** 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
11	7003-099-001	(-VR) PUSHBUTTON ASSY - ITEMS #5 THRU #9

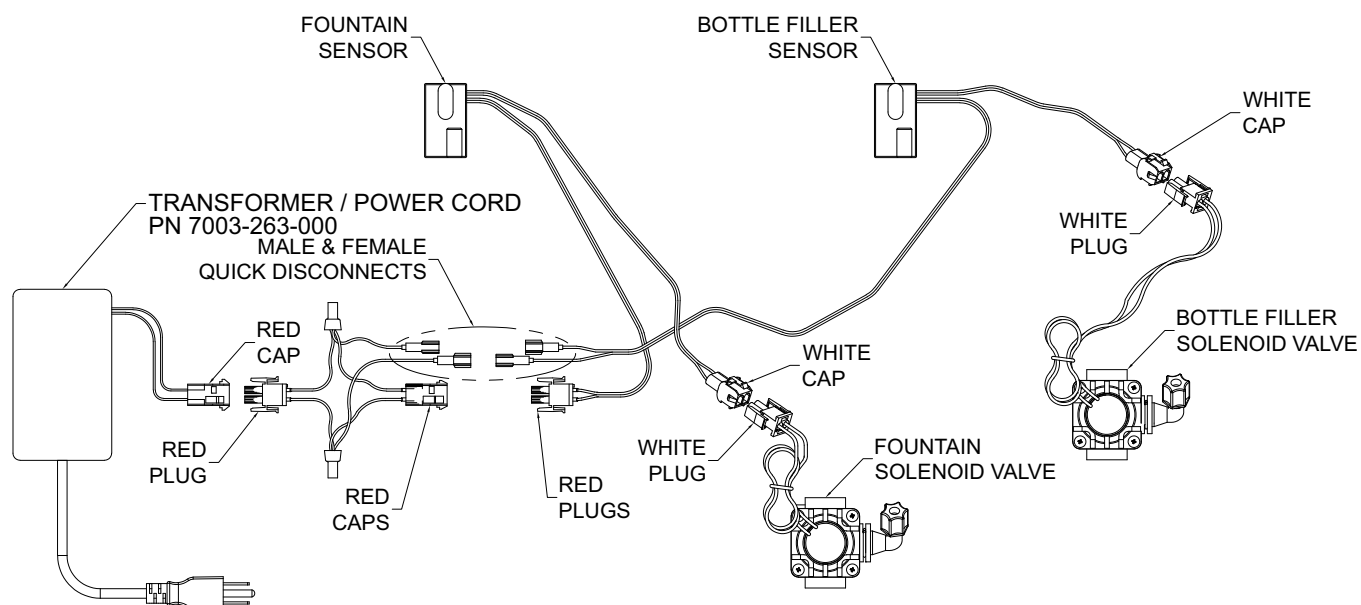
**NOTE: STRAINER FILTER SCREEN
MUST BE IN PLACE FOR
WATER TO FLOW.**

-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, -BF12S



FOR A171-UG-SO ONLY

SENSOR RANGE ADJUSTMENT

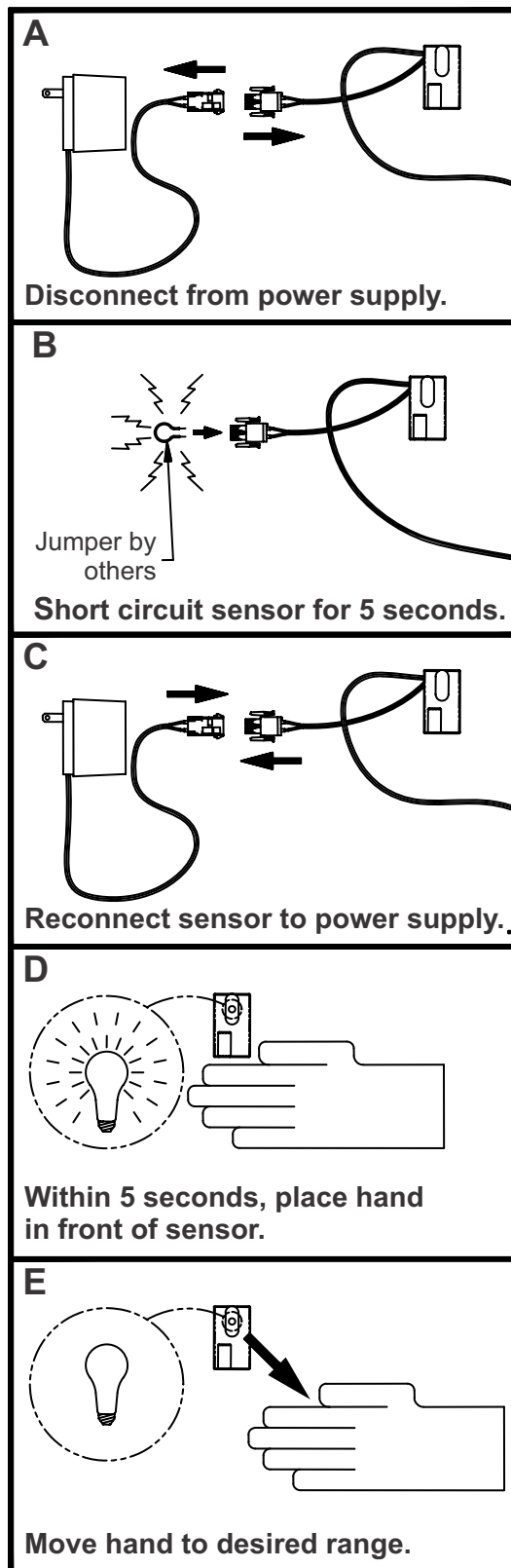
- A. Disconnect sensor from power supply.
- B. Create a short circuit between the positive and negative connections on the sensor for five seconds. **WARNING:** Do NOT create a short circuit on the power supply or while the sensor is connected to the power supply.
- C. Reconnect the sensor to the power 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.

TROUBLESHOOTING - For Sensor Operated Units

ISSUE: 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 ABOVE**
- vi: Sensor is picking up a highly reflective surface. Eliminate cause of reflection and wait.

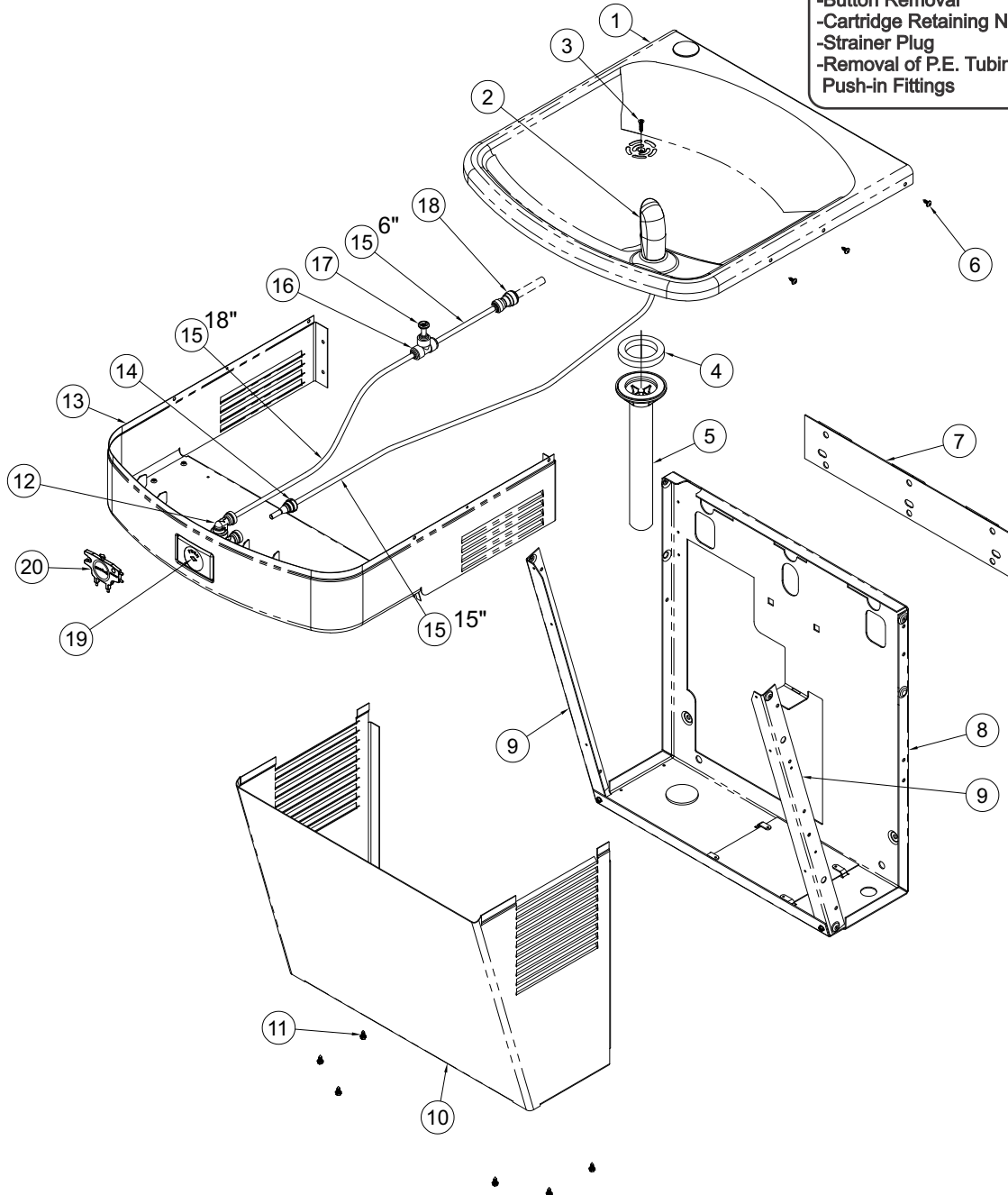
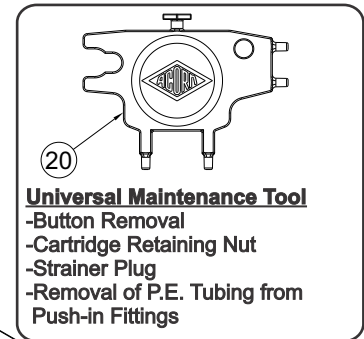


A171-UG DRINKING FOUNTAIN PARTS BREAKDOWN

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

NOTE:

** Flow Restrictor Only Available
With Low Flow Bubbler.



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

A171-UG DRINKING FOUNTAIN PARTS BREAKDOWN TABLE

NOTE: See previous page 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	STANDARD FLEXIBLE BUBBLER ASSEMBLY
	7000-012-001	LEAD -FREE STAINLESS STEEL BUBBLER ASSEMBLY
3	0124-036-000	#8 x 3/4" LG FLAT HD SELF TAPPING TORX C/R SCREW
4	7000-006-000	FLAT DRAIN GASKET
5	7003-180-000	DRAIN ADAPTER
6	0124-036-000	#8 x 1/2" LONG TORX ROUND HEAD C/R SCREW
7	7003-950-199	HANGER BRACKET
8	7003-900-199	BACK PANEL
9	7003-007-199	SUPPORT STRUT
10	7003-951-020	COVER - GRAY
	7003-035-299	COVER - STAINLESS STEEL
11	0124-031-000	#8x3/8" LONG SLOTTED HEX WASHER HEAD SCREW
12	7003-095-001	VALVE ASSEMBLY
13	7003-953-002	APRON ASSEMBLY - GRAY
	7003-826-002	APRON ASSEMBLY - STAINLESS STEEL
14	7003-093-001	FLOW RESTRICTOR - LOW-FLOW BUBBLER ONLY
15	2169-000-000	1/*4" O.D. PE TUBING (BLUE)
16	1895-710-000	1/4" x 3/8" O.D. TUBE UNION TEE (PUSH-IN)
17	1895-715-000	1/4" PLUG
18	1895-123-000	1/4" x 3/8" O.D. PUSH-IN SUPPLY INLET CONNECTION
19	7003-099-000	PUSHBUTTON
20	7003-830-000	UNIVERSAL MAINTENANCE TOOL

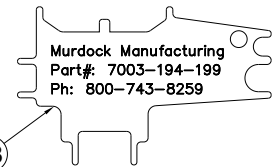
Repairs must be made with Murdock Manufacturing parts only. Please order through your local representative or distributor.

A171-UG-VR DRINKING FOUNTAIN PARTS BREAKDOWN

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

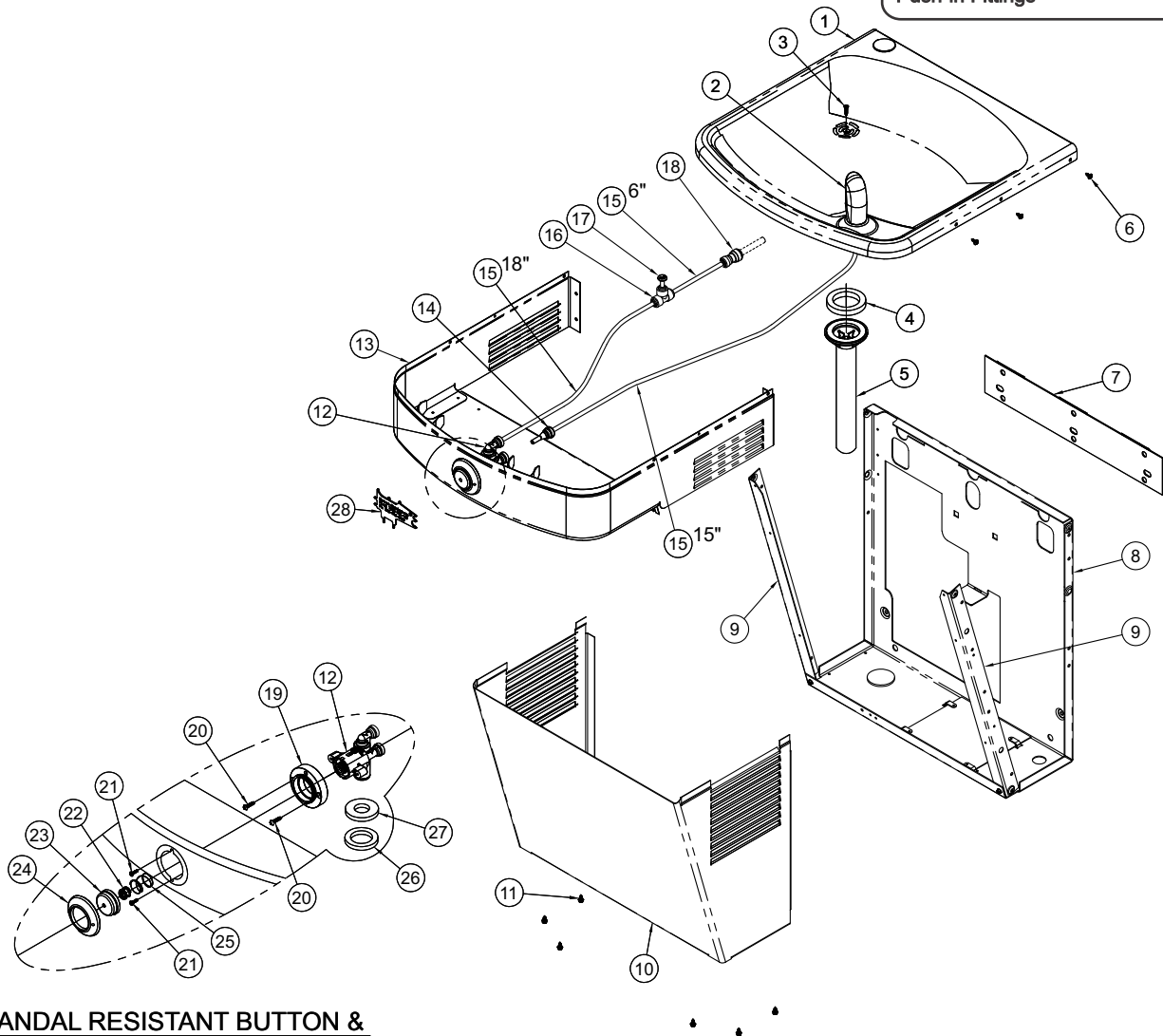
NOTE:

** Flow Restrictor Only Available
With Low Flow Bubbler.



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

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

A171-UG-VR DRINKING FOUNTAIN PARTS BREAKDOWN TABLE

NOTE: See previous page 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	STANDARD FLEXIBLE BUBBLER ASSEMBLY
	7000-012-001	LEAD -FREE STAINLESS STEEL BUBBLER ASSEMBLY
3	0124-036-000	#8 x 3/4" LG FLAT HD SELF TAPPING TORX C/R SCREW
4	7000-006-000	FLAT DRAIN GASKET
5	7003-180-000	DRAIN ADAPTER
6	0124-036-000	#8 x 1/2" LONG TORX ROUND HEAD C/R SCREW
7	7003-950-199	HANGER BRACKET
8	7003-900-199	BACK PANEL
9	7003-007-199	SUPPORT STRUT
10	7003-951-020	COVER - GRAY
	7003-035-299	COVER - STAINLESS STEEL
11	0124-031-000	#8x3/8" LONG SLOTTED HEX WASHER HEAD SCREW
12	7003-095-001	VALVE ASSEMBLY
13	7003-952-021	APRON ASSEMBLY - GRAY
	7003-211-004	APRON ASSEMBLY - STAINLESS STEEL
14	7003-093-001	FLOW RESTRICTOR - LOW-FLOW BUBBLER ONLY
15	2169-000-000	1/4" O.D. PE TUBING (BLUE)
16	1895-710-000	1/4" x 3/8" O.D. TUBE UNION TEE (PUSH-IN)
17	1895-715-000	1/4" PLUG
18	1895-123-000	1/4" x 3/8" O.D. PUSH-IN SUPPLY INLET CONNECTION
19	7003-198-199	(-VR) PUSHBUTTON MOUNTING SLEEVE
20	0124-055-000	#8x3/4" PHILLIPS ROUND HEAD SCREW
21	0161-062-000	#6-32x1/2" S/S PHIL FLAT HEAD SCREW
22	7003-195-000	OVERTRAVEL SPRING
23	7003-196-199	(-VR) CHROME PLATED PUSHBUTTON
24	7003-197-199	(-VR) CHROME PLATED ESCUTCHEON
25	7003-193-000	PUSHBUTTON RETURN SPRING
26	7003-200-000	LOWER GASKET
27	7003-199-000	UPPER GASKET
28	7003-194-199	(-VR) UNIVERSAL MAINTENANCE TOOL

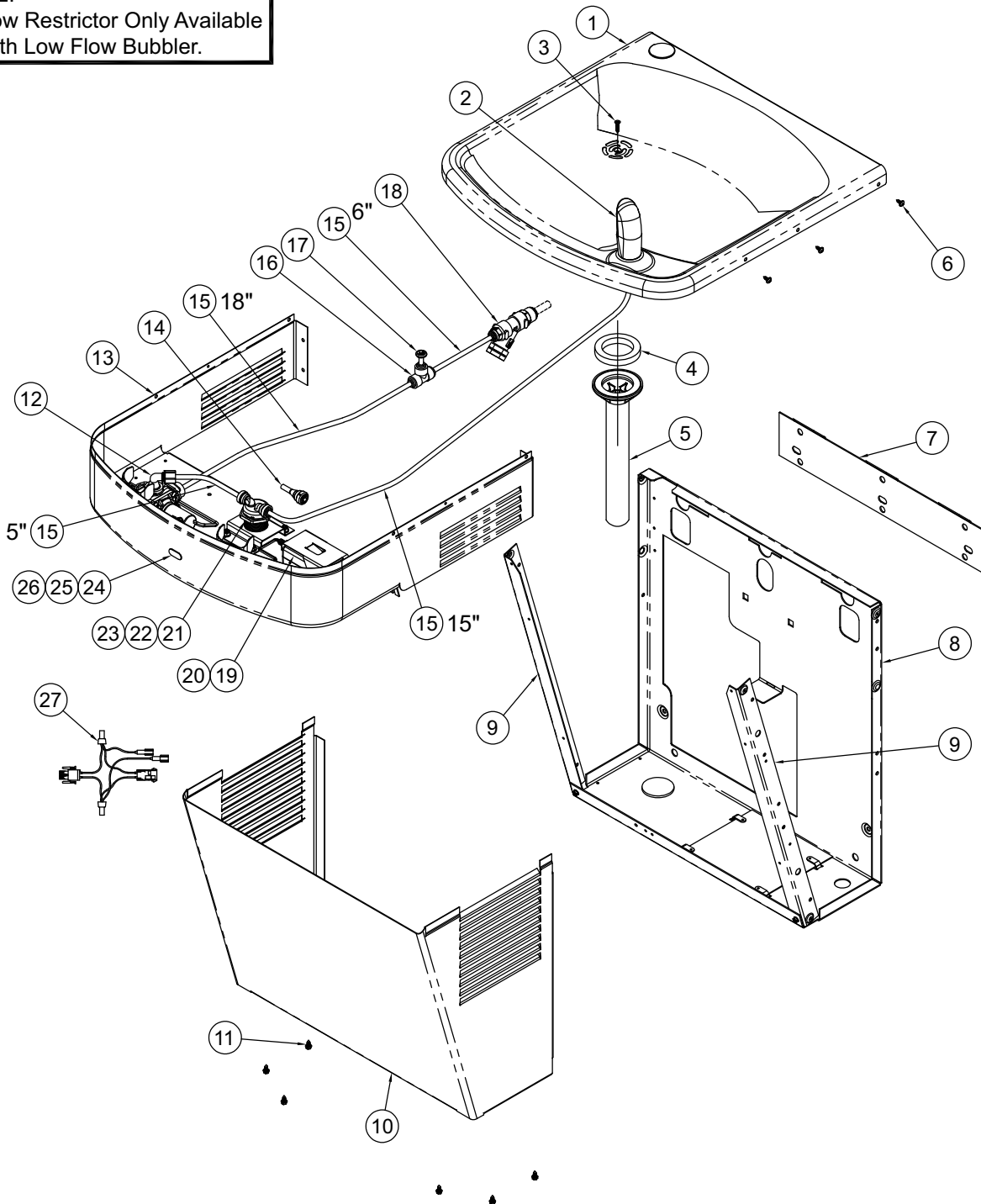
Repairs must be made with Murdock Manufacturing parts only. Please order through your local representative or distributor.

A171-UG-SO DRINKING FOUNTAIN PARTS BREAKDOWN

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

NOTE:

** Flow Restrictor Only Available
With Low Flow Bubbler.



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

A171-UG-SO DRINKING FOUNTAIN PARTS BREAKDOWN TABLE

NOTE: See previous page 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	STANDARD FLEXIBLE BUBBLER ASSEMBLY
	7000-012-001	LEAD -FREE STAINLESS STEEL BUBBLER ASSEMBLY
3	0124-036-000	#8 x 3/4" LG FLAT HD SELF TAPPING TORX C/R SCREW
4	7000-006-000	FLAT DRAIN GASKET
5	7003-180-000	DRAIN ADAPTER
6	0124-036-000	#10 x 3/4" LONG TORX ROUND HEAD C/R SCREW
7	7003-950-199	HANGER BRACKET
8	7003-900-199	BACK PANEL
9	7003-007-199	SUPPORT STRUT
10	7003-951-020	COVER - GRAY
	7003-035-299	COVER - STAINLESS STEEL
11	0124-031-000	#8 x 3/8" LONG SLOTTED HEX WASHER HEAD SCREW
12	7001-200-001	SOLENOID VALVE ASSEMBLY
13	7003-922-020	APRON ASSEMBLY - GRAY
	7003-029-003	APRON ASSEMBLY - STAINLESS STEEL
14	7003-093-001	FLOW RESTRICTOR - LOW-FLOW BUBBLER ONLY
15	2169-000-000	1/*4" O.D. PE TUBING (BLUE)
16	1895-710-000	1/4" x 3/8" O.D. TUBE UNION TEE (PUSH-IN)
17	1895-715-000	1/4" PLUG
18	7000-021-002	"Y" STRAINER ASSEMBLY 3/8" O.D. x 1/4" O.D.
19	0711-407-001	240VAC / 9VDC TRANSFORMER
20	7003-028-199	TRANSFORMER BRACKET
21	7000-050-001	VALVE CARTRIDGE ASSEMBLY
22	7000-060-000	FLOW REGULATOR CARTRIDGE (0.5 GPM)
23	7003-023-199	CARTRIDGE MOUNTING BRACKET (SENSOR OP)
24	2563-385-002	NANO SENSOR ASSEMBLY
25	7003-029-199	SENSOR BRACKET
26	7001-200-199	SENSOR SPACER
27	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.

BF11S & BF12S Stainless Steel Bottle Filler Series

springH2O®
BOTTLE FILLERS BY MURDOCK®



BF11S
Pushbutton Operated
Stainless Steel
Bottle Filler

Please visit www.murdockmfg.com
for most current specifications.



BF12S
Sensor Operated
Stainless Steel
Bottle Filler
(BF12S-BCD Shown)

TECHNICAL ASSISTANCE TOLL FREE TELEPHONE NUMBER:
1-800-743-8259

Technical Assistance E-Mail: FieldService@acorneng.com

! IMPORTANT

NOTE: To ensure fresh water supply, BF12S Stainless Steel Bottle Filler is provided with an Auto-Purge Sensor feature. Auto-Purge function is Factory pre-programmed to activate Bottle Filler for 10 second duration, 24 hours after the last activation of the unit. Purge cycle adjustments are possible with the optional **-AP Auto-Purge Function Controller** offered with the fixture or after the unit has been received using P.N. 2563-398-000.

<https://www.murdockmfg.com/option-ap-auto-purge-bottle-filler>

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.

For current Warranty click hyperlink [Product Warranty](#) or visit: www.murdockmfg.com/terms-and-warranty

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COMPLIES WITH
STANDARDS



NSF/ANSI 61



Federal
Public Law
111-380
(No Lead)



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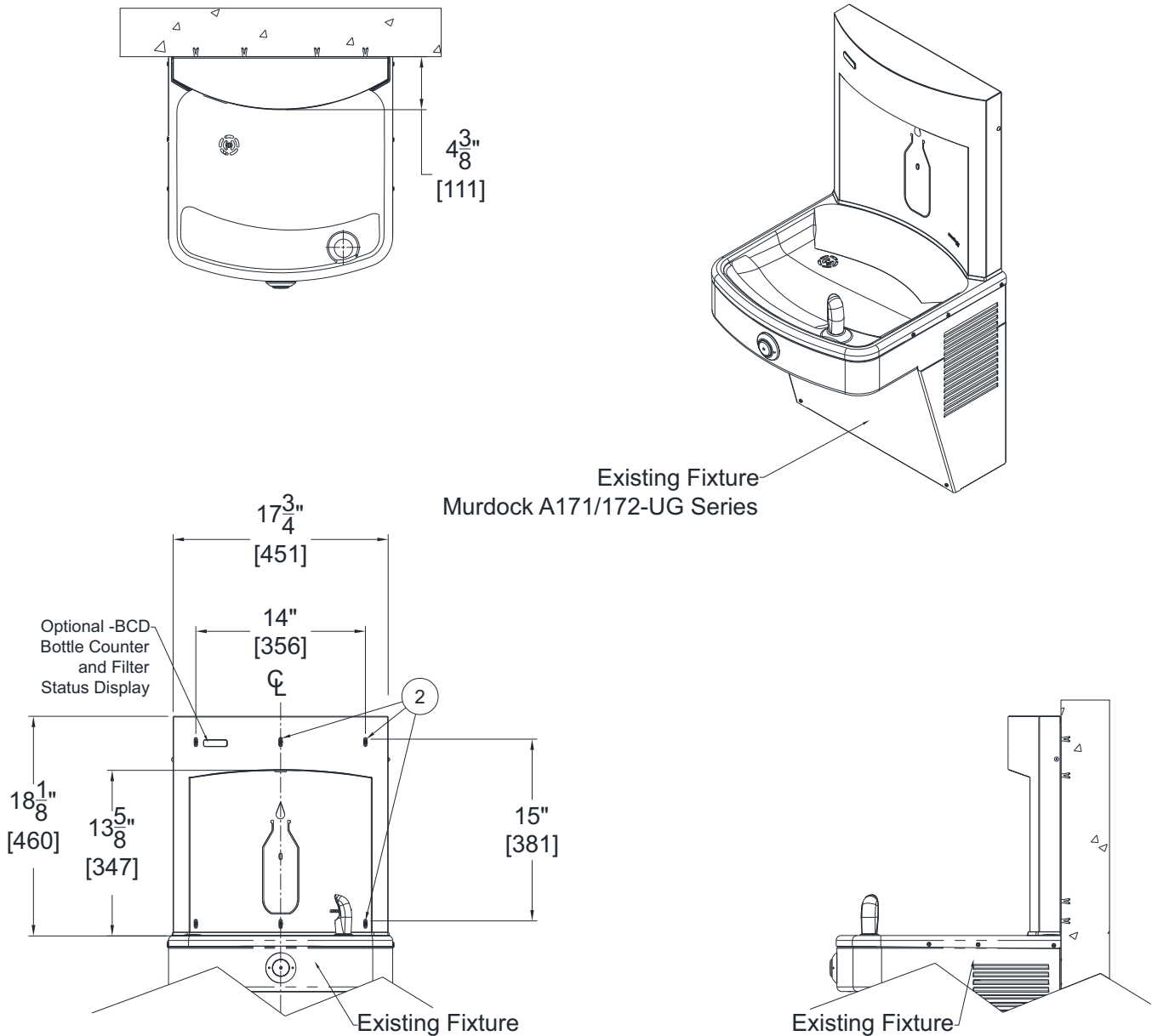
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SINCE 1853

15125 Proctor Ave, City of Industry,
CA, 91746 U.S.A.
Phone 800-591-9360
626-336-4561
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DIMENSIONAL DRAWING

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

Note: Backing / Mounting Rough-Ins are the same for BF11S & BF12S Bottle Fillers
(Electrical required for BF12S series using Cooler Receptacle).



General Note:

1. All dimensions are in inches [MM]
2. Ø1/4" Holes, 6 Places for anchoring Hardware provided by others.

PRIOR TO INSTALLATION:

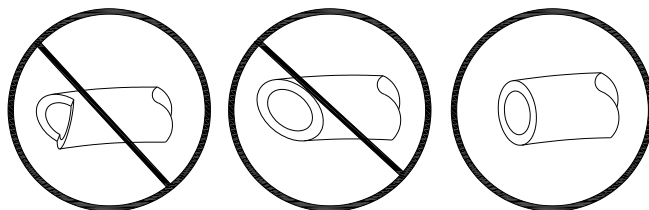
1. Some options may slightly alter installation. To ensure proper installation, review the Manual thoroughly and verify rough-ins before beginning any work. File this Manual with the owner or maintenance personnel upon completion of installation.
2. Carefully remove all fixture components from packaging, 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.

PUSH-IN FITTING INSTALLATION

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

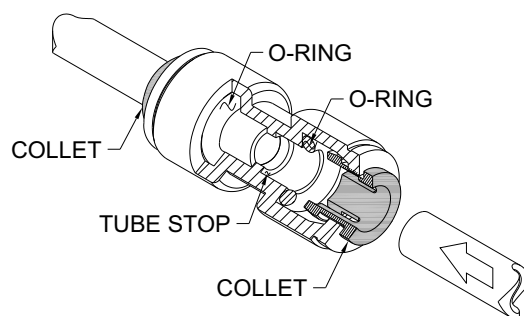
TO CUT TUBE:

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.

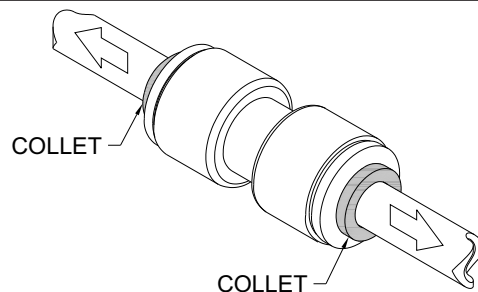


INSERTING THE TUBE:

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

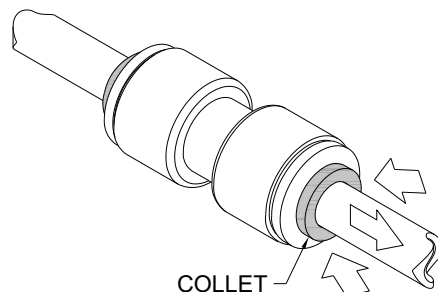


2. Pull on the fitted Tubing to ensure it is secure. Tube should not come free from the Fitting. Water test the connection assembly prior to leaving the site to ensure there are no leaks.

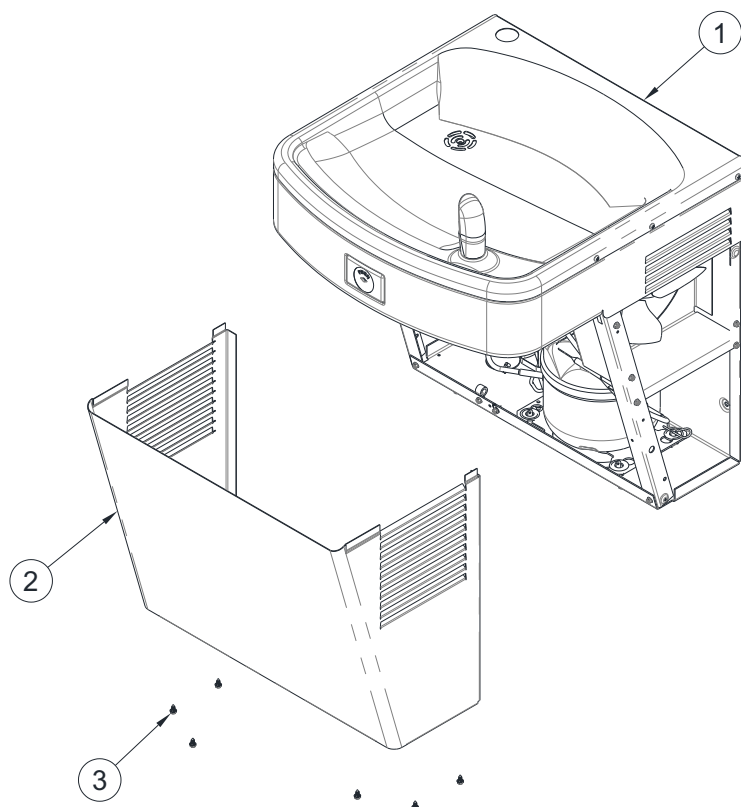


DISCONNECTING THE TUBE:

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.



BF11S/BF12S INSTALLATION INSTRUCTIONS

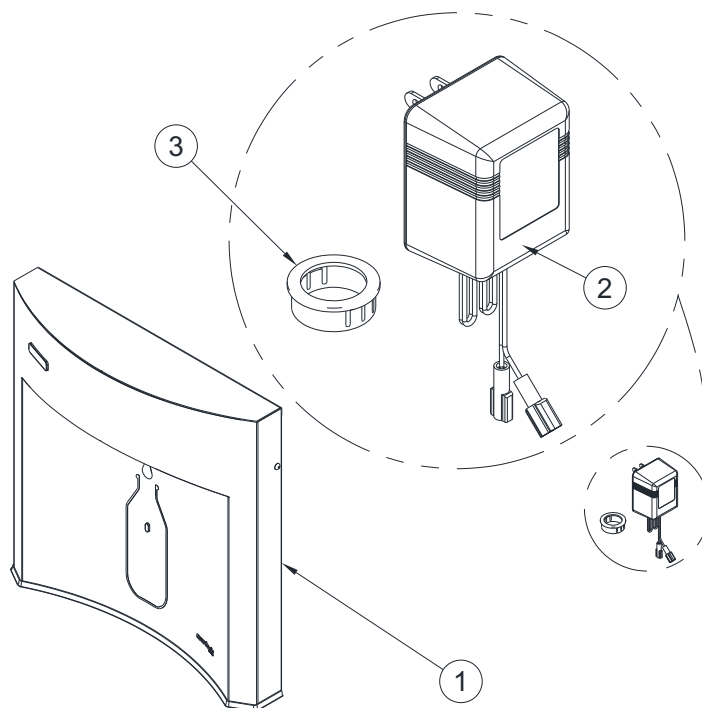


2 Remove Bottle Filler Assembly [1], Power Supply [2] (BF12S Models) and Grommet [3] from packaging, careful to avoid damage to Fixture and Fixture Sub Assemblies. Set Power Supply aside in a secure location.

- ① Bottle Filler Assembly
- ② Power Supply (BF12S ONLY)
Input: 100-240VAC, 50-60Hz,
Output: 9VDC. 0.8A
- ③ Locking Grommet

1 Install the newly obtained Water Cooler [1] per the Installation Manual provided with the unit. Do not install Access Panel [2] 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.

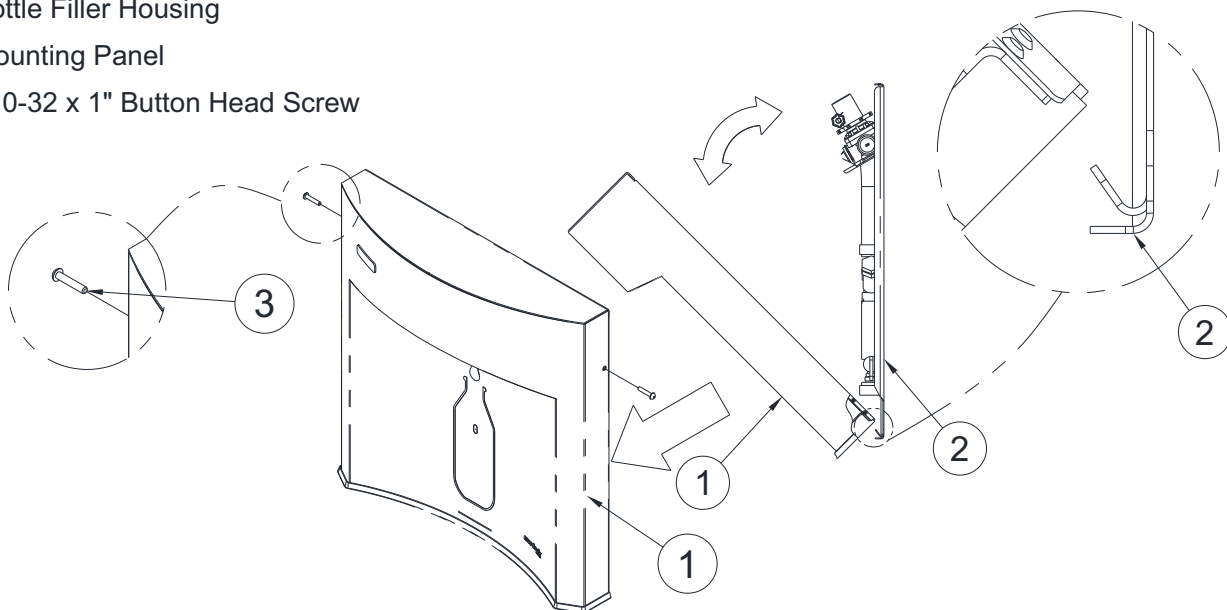
- ① Drinking Fountain/
Water Cooler Assembly
- ② Access Panel
- ③ #8 x 3/8" Hex Washer Head Screw



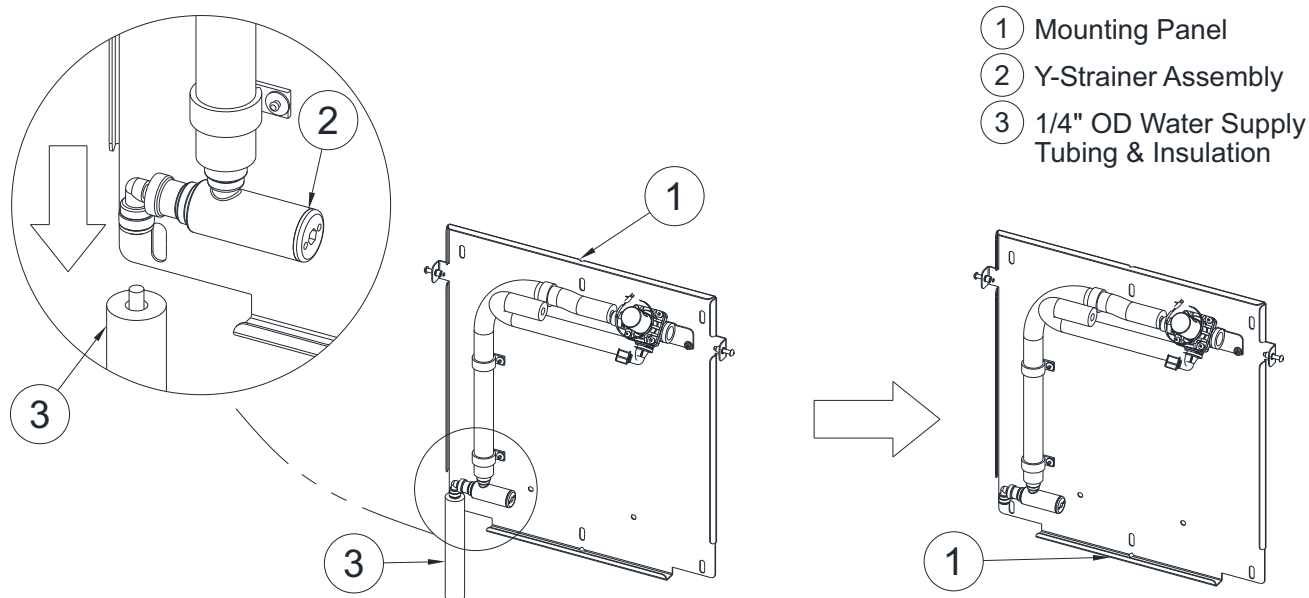
BF11S/BF12S INSTALLATION INSTRUCTIONS (CONTINUED)

- 3** Unfasten Screws that hold the Bottle Filler Housing [1] to the Mounting Panel [2]. Swing the Bottle Filler Housing [1] down and pull up and away from the Mounting panel [2] to separate the two pieces. Place Bottle Filler Panel and Screws [3] in a secure location.

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

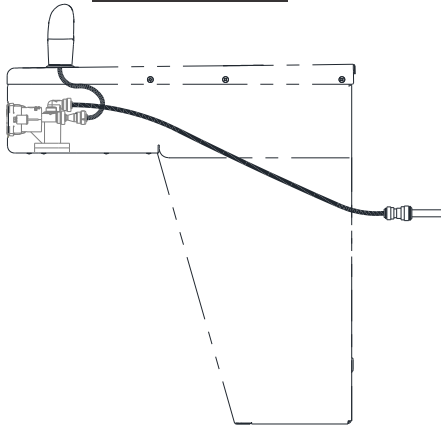


- 4** Disconnect the Water Supply Insulation and Tubing [3] from the Auto Y-Strainer [2] that is located on the Mounting Panel [1].

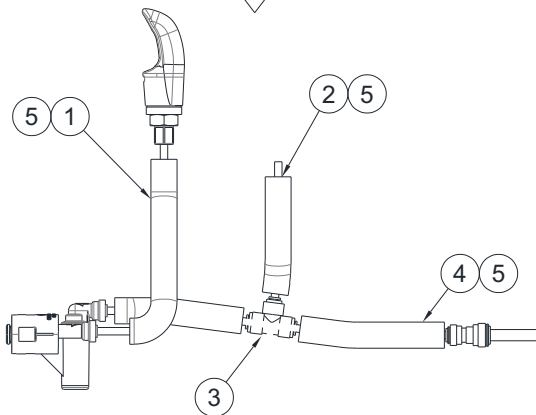
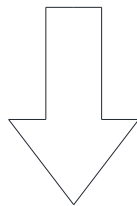


Water Supply Tubing to Bottle Filler Diagram

BF11S

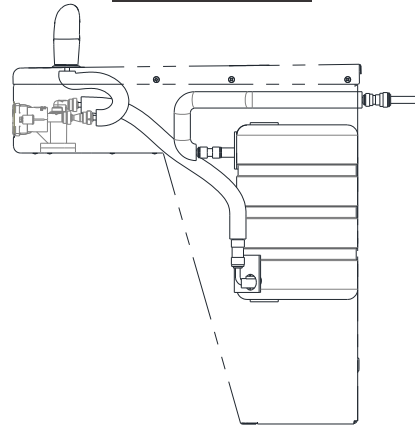


Non-Refrigerated Unit
(Drinking Fountain)

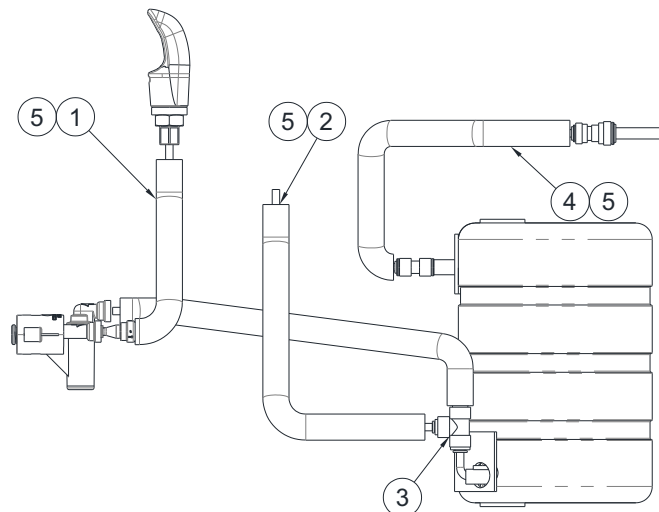
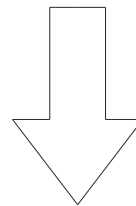


- ① Water Supply Line, to Bubbler
- ② Water Supply Line, to Bottle Filler
- ③ 1/4" O.D. Push-In Tee
- ④ Water Supply Line, Inlet
- ⑤ Foam Insulation (Recommended)

BF12S

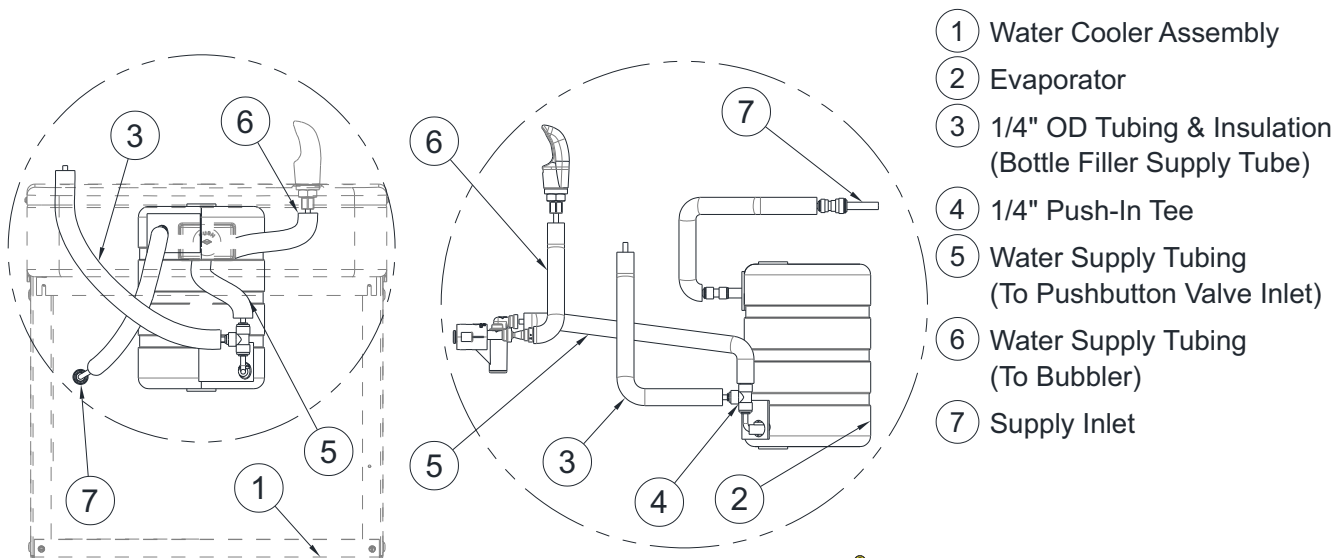


Refrigerated Unit
(Water Cooler)



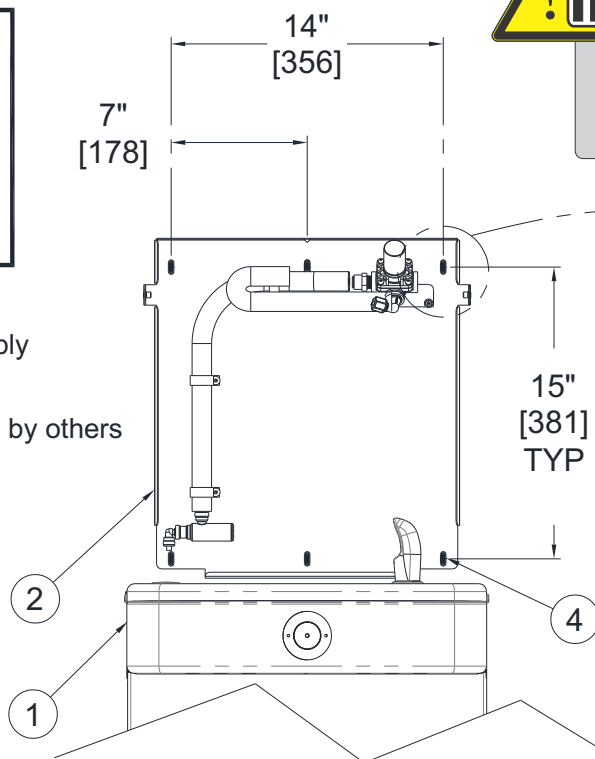
BF11S/BF12S INSTALLATION INSTRUCTIONS (CONTINUED)

- 5** Connect the Bottle Filler Supply Tubing [3] to the 1/4" Push-In Tee [4] located on the Evaporator [2]. The Evaporator [2] is located within the Water Cooler Assembly [1]. If fixture piping differs from layout shown, refer to page 7 for specific unit connections.

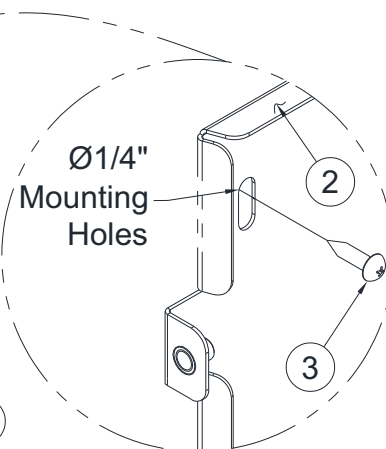


- 6** Center Mounting Panel [2] on top of Deck to finished wall and Secure with Anchoring Hardware, by others [3].

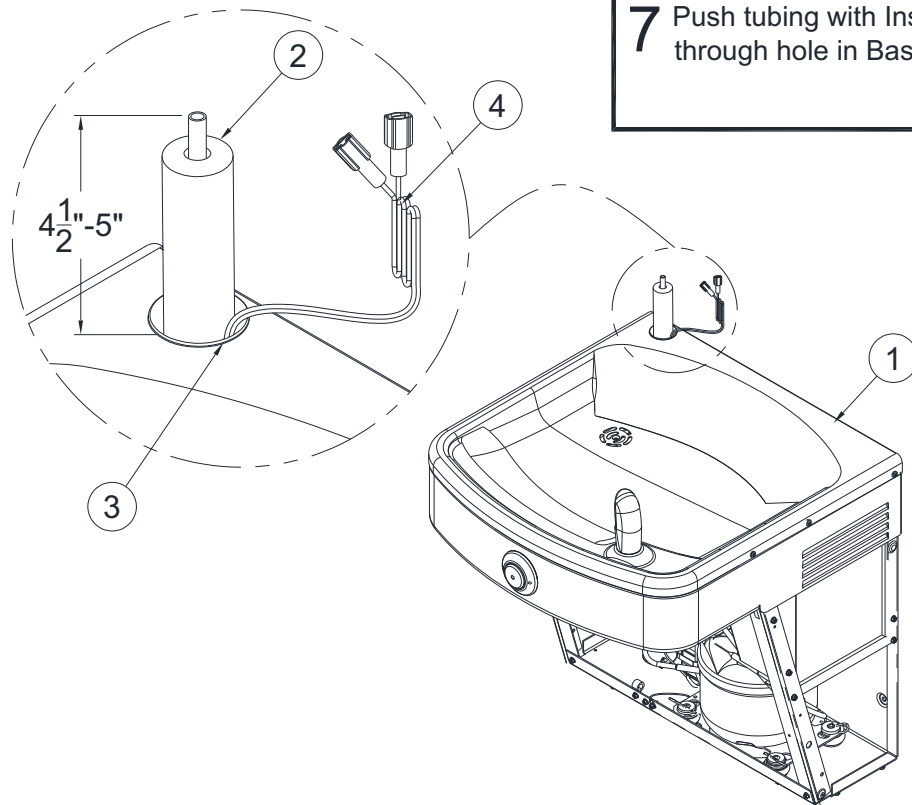
- 1 Drinking Fountain/
Water Cooler Assembly
2 Mounting Plate
3 Anchoring Hardware, by others
4 6x Mounting Holes



Unit Shown is a Chiller Model, for units without chiller refer to layout details on page 7



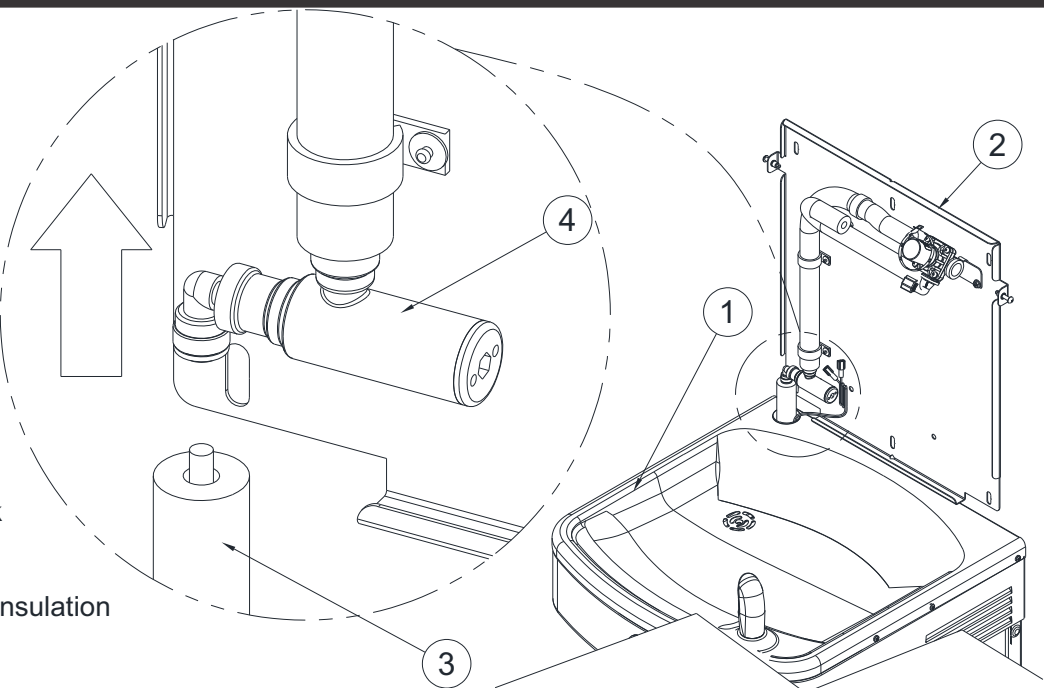
BF11S/BF12S INSTALLATION INSTRUCTIONS (CONTINUED)



7 Push tubing with Insulation [2] and Power Wires [4] up through hole in Basin. Install Grommet [3].

- ① Water Cooler Deck
- ② 1/4" OD Water Supply Tubing & Insulation
- ③ Grommet
- ④ Power to Bottle Filler (Not required with BF11S)

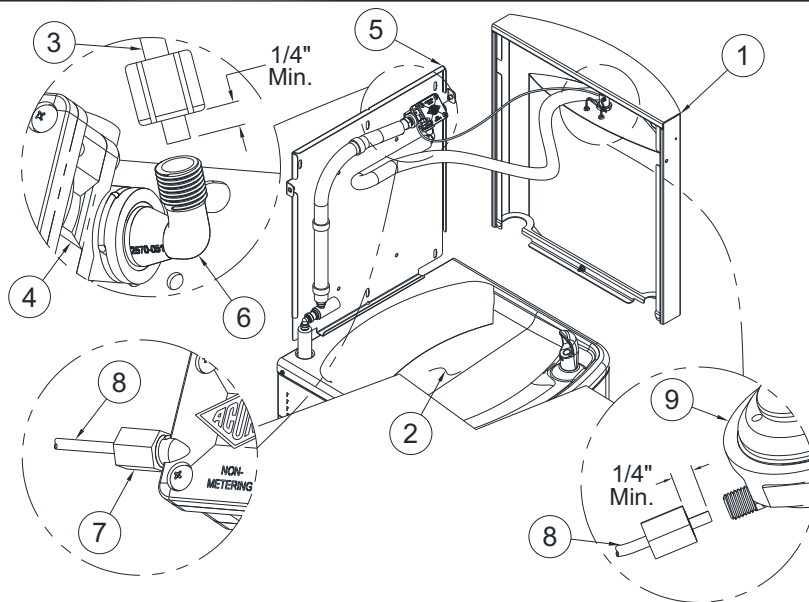
8 Connect Water Supply Tube to the Auto Y-Strainer [2] that is located on the Mounting Panel [2]. Refer to page 4 for proper connection.



- ① Water Cooler Deck
- ② Mounting Plate
- ③ 1/4" OD Tubing & Insulation
- ④ Auto Y-Strainer

BF11S/BF12S INSTALLATION INSTRUCTIONS (CONTINUED)

BF11S (PUSHBUTTON OPERATED)



9A With Mounting Panel [5] secured, place Bottle Filler Housing [1] on top of the Water Cooler [2] and connect water supply line [3] from Bottle Filler to Pneumatic Valve Outlet Elbow [6]. Connect 1/8" Air-Line [8] to Pushbutton [9] and Pneumatic Valve Inlet [7].

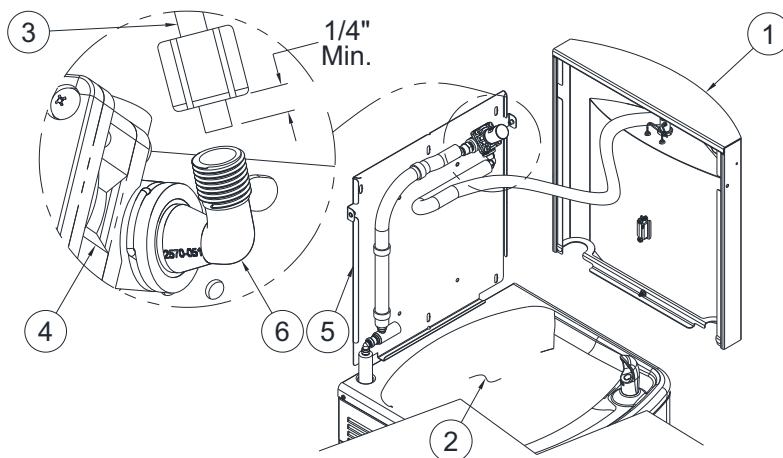
- 1 Bottle Filler Housing
- 2 Water Cooler Assembly
- 3 1/4" O.D. Polyethylene Supply Line
- 4 Pneumatic Valve
- 5 Mounting Panel
- 6 Valve Water Supply Outlet Elbow
- 7 Valve Air-Line Supply Inlet
- 8 1/8" O.D. Polyethylene Supply Line
- 9 Pushbutton



**FOR BF11S SERIES, FOLLOW STEP 9A
FOR BF12S SERIES, FOLLOW STEP 9B**

9B With Mounting Panel [5] secured, place Bottle Filler Housing [1] on top of the Water Cooler [2] and connect water supply line [3] from Bottle Filler to Solenoid Valve [4] Outlet [6].

BF12S (SENSOR OPERATED)



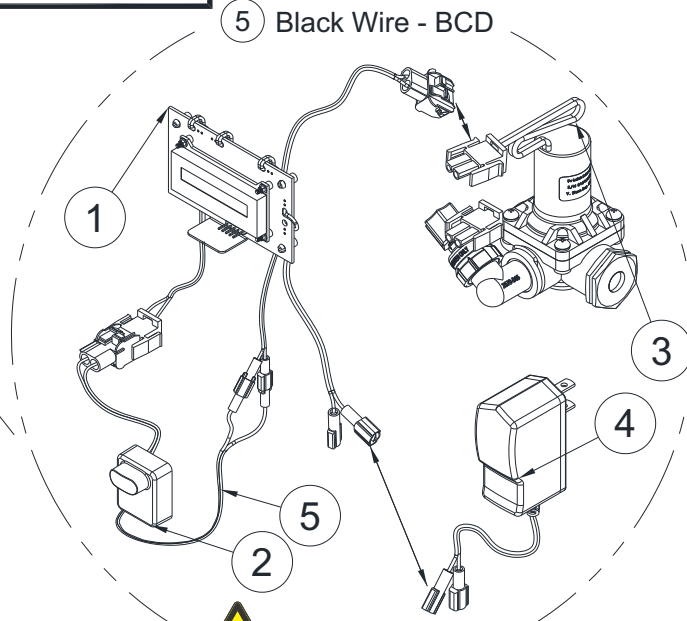
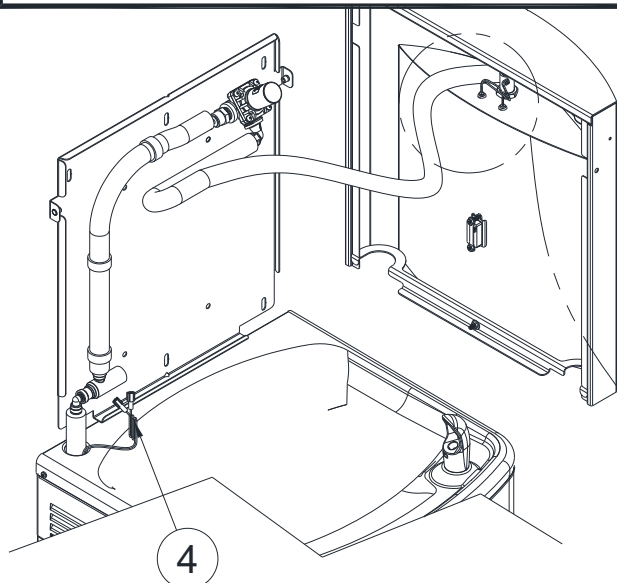
- 1 Bottle Filler Housing
- 2 Water Cooler Assembly
- 3 1/4" O.D. Polyethylene Supply Line
- 4 Solenoid Valve
- 5 Mounting Panel
- 6 Valve Water Supply Outlet Elbow

BF11S/BF12S INSTALLATION INSTRUCTIONS (CONTINUED)

BF12S -BCD OPTION

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

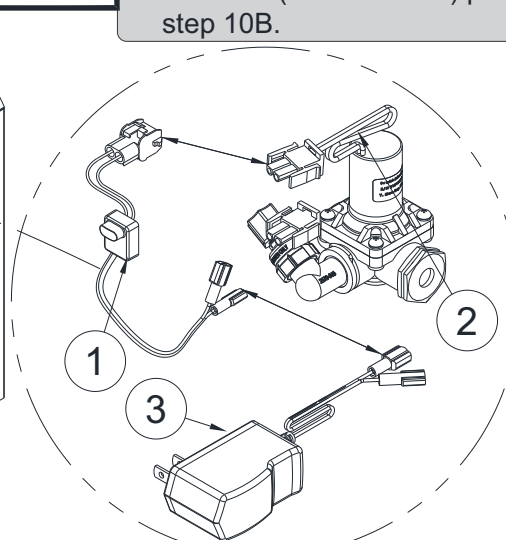
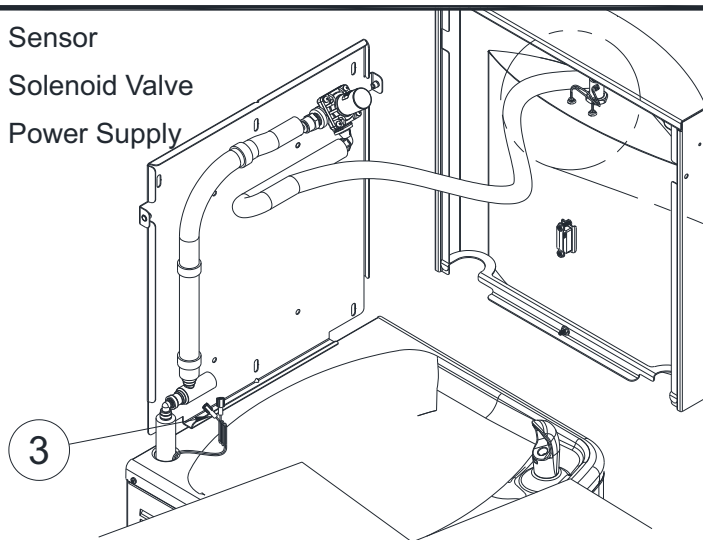
- ① Optional -BCD Bottle Count Display
- ② Sensor
- ③ Solenoid Valve
- ④ Power Supply
- ⑤ Black Wire - BCD



BF12S LESS -BCD OPTION

10B 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

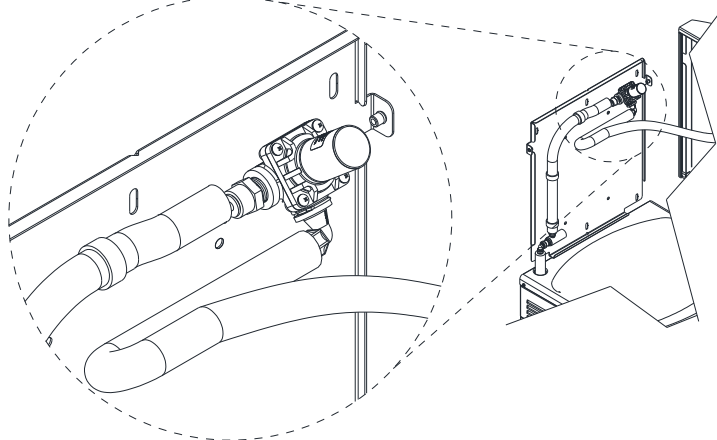
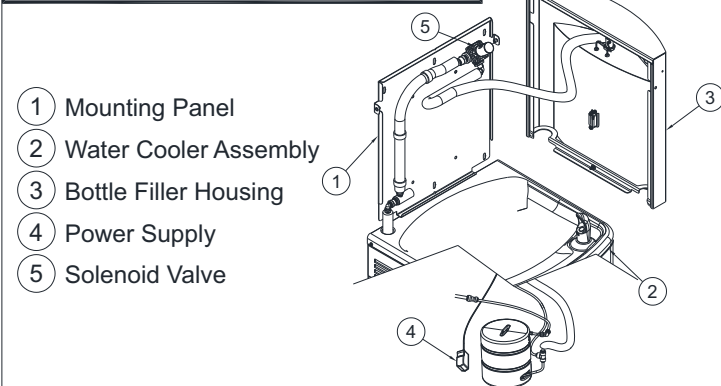


IMPORTANT

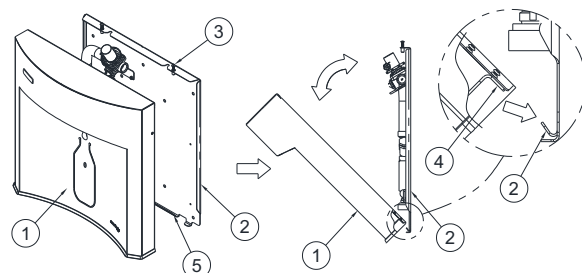
- If a BF11S unit is being installed proceed to next page.
- If BF12S (Without BCD) proceed to step 10B.

BF11S/BF12S INSTALLATION INSTRUCTIONS (CONTINUED)

11 Turn on water and check for leaks throughout the system. Then connect the Power Supply [4].



12 With fixture tested, install Housing [1] to Mounting Panel [2]. Angle Housing and engage Housing Bottom Flange [4] to Mounting Panel Flange [5] and close unit. Secure with Screws [3] from step 3.



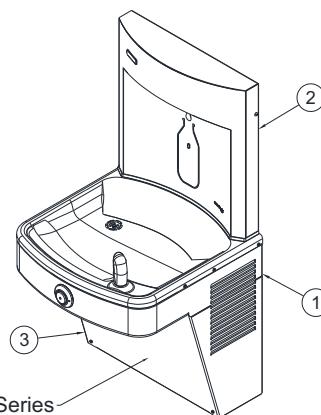
- 1 Bottle Filler Housing
2 Mounting Panel
3 #10-32 x 1" Button Head Screw
4 Housing Bottom Flange
5 Mounting Panel Flange

! IMPORTANT

To Properly Close Cover, Riser Tubing should reside within Upper Housing Chamber without interfering with other components. Avoid crimping Riser Tubing which connects Solenoid Valve to Bottle Filler Outlet by positioning the Solenoid Valve Elbow Outlet "slightly upward" before closing the Housing to Mounting Panel and positioning the Riser Tubing accordingly.

13 Mount Water Cooler Access Panel [3] to Water Cooler [1].

- 1 Water Cooler
2 Bottle Filler
3 Access Panel



BF12S SENSOR OPERATED ELECTRICAL INSTALLATION:

NOTE: PLUG-IN POWER IS A STANDARD FEATURE FOR BF12S AND BF12S-BCD.

1. Plug-In Operation: Plug Transformer provided into GFCI protected electrical service, used by the Bottle Filler.

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.

OPTIONAL -BCD 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

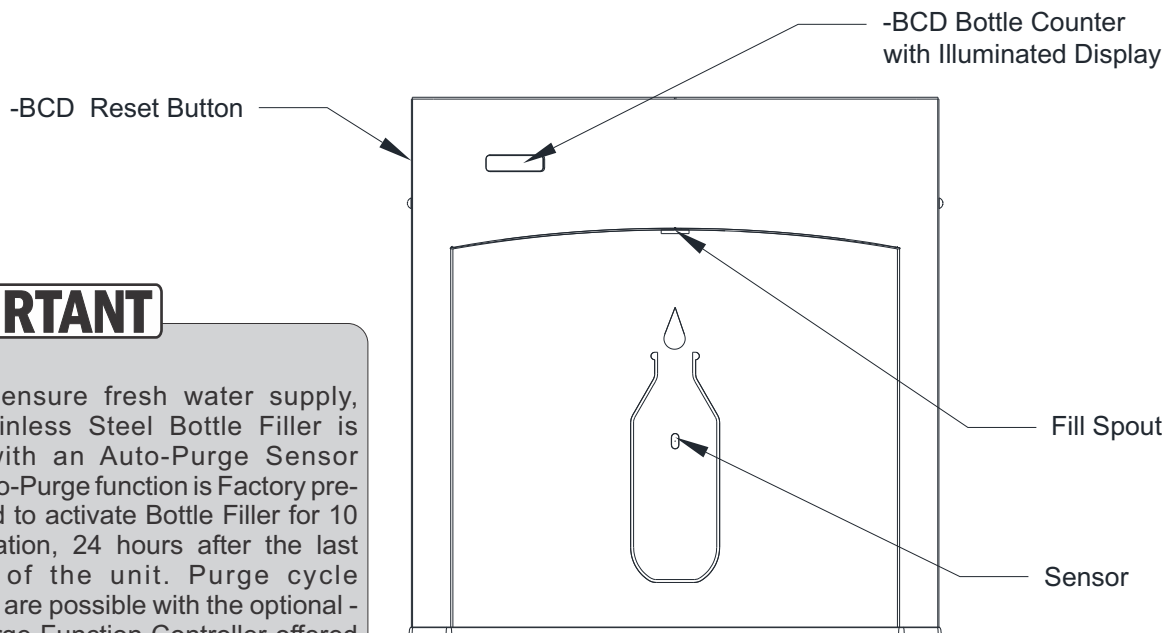
Illuminated LCD Display counts bottles and has a Filter replacement alert function.

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.



NOTE: To ensure fresh water supply, BF12S Stainless Steel Bottle Filler is provided with an Auto-Purge Sensor feature. Auto-Purge function is Factory pre-programmed to activate Bottle Filler for 10 second duration, 24 hours after the last activation of the unit. Purge cycle adjustments are possible with the optional -AP Auto-Purge Function Controller offered with the fixture or after the unit has been received using P.N. 2563-398-000.



OPTIONAL -BCD 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 locating the 1/8" hole on the same side as the display. Using a small object such as an Allen wrench push the lever to activate the 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:

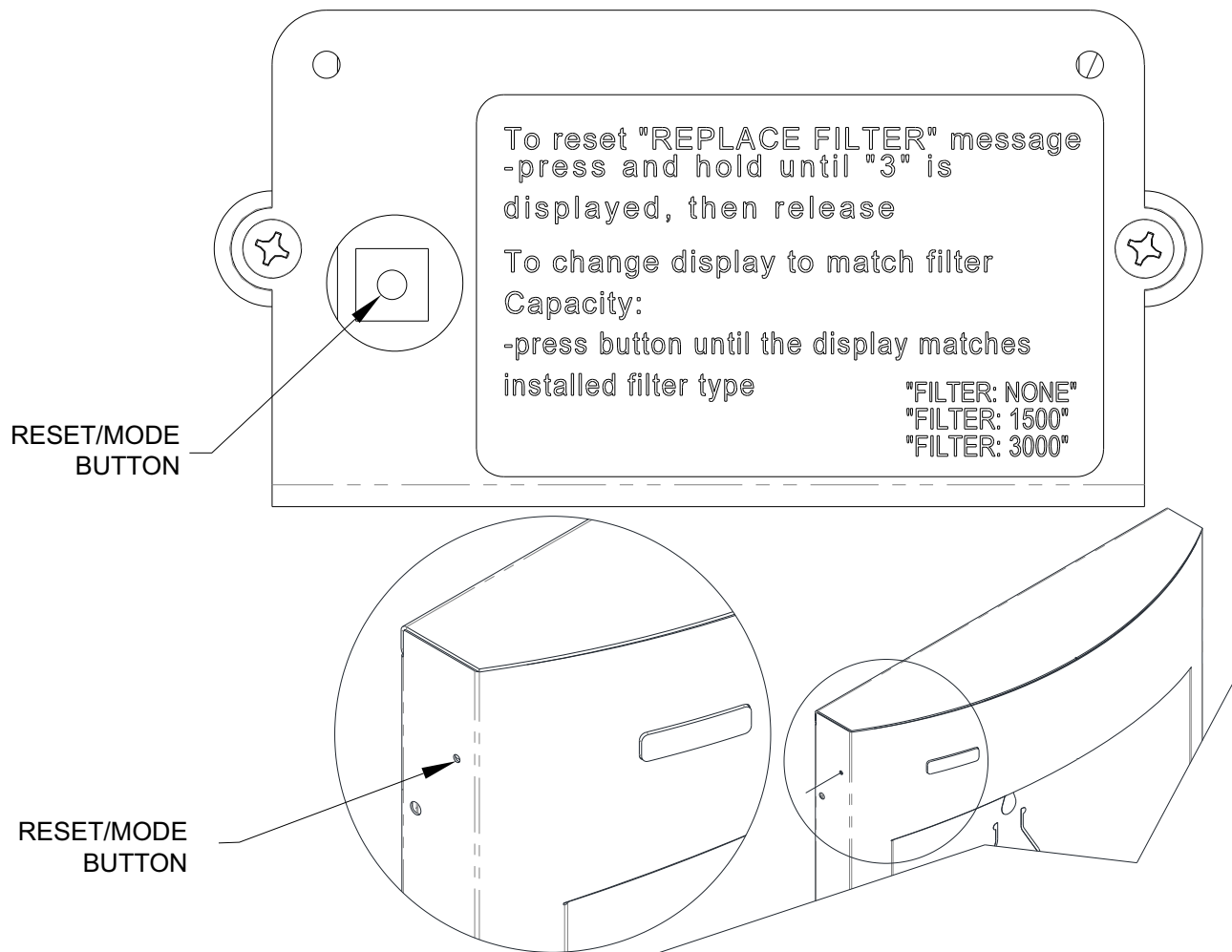
-Press and hold Button until the display matches installed Filter type, then release.

"FILTER NONE"

"FILTER 1500"

"FILTER 3000"

FACILITY FILTER



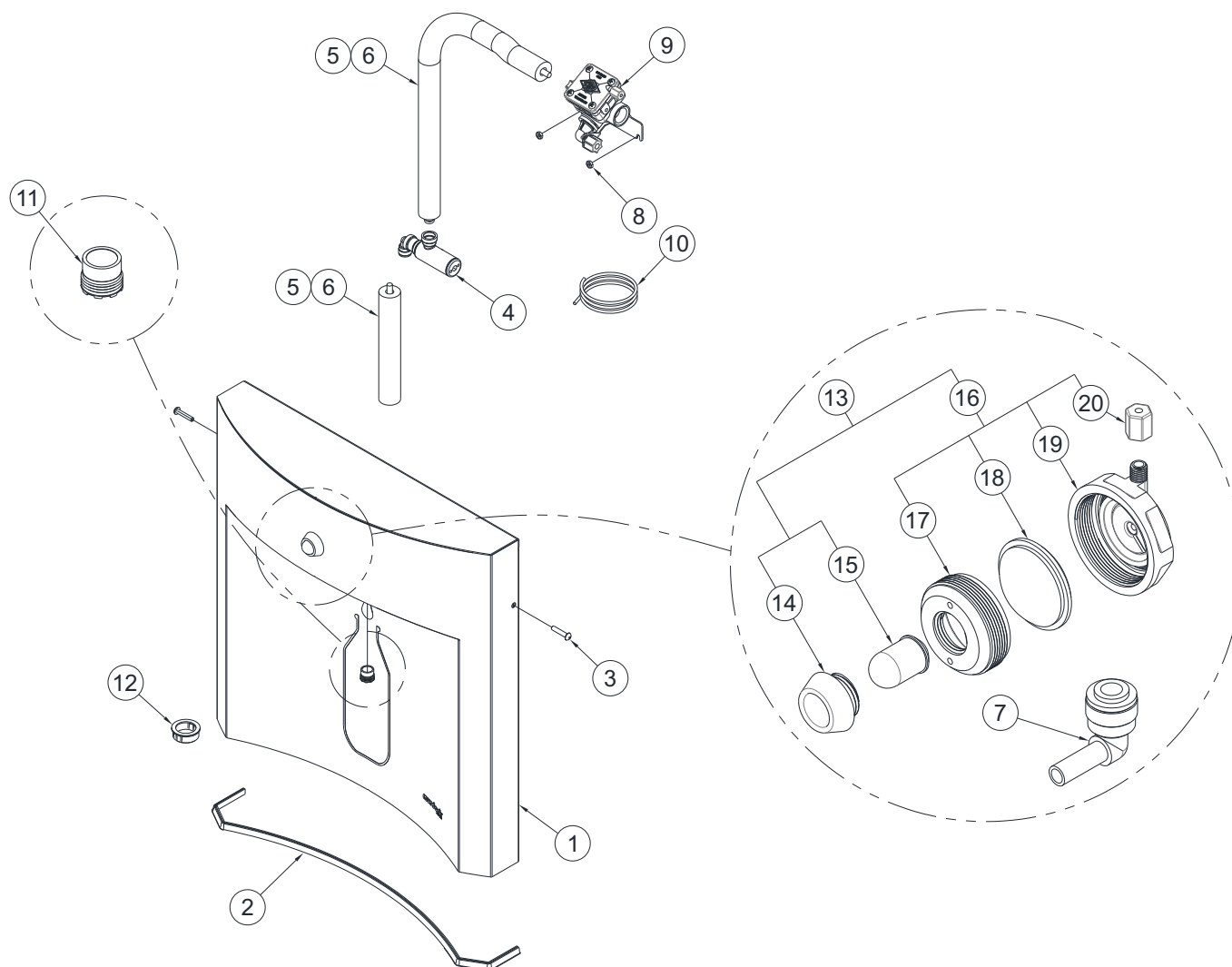
TROUBLE-SHOOTING:

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:

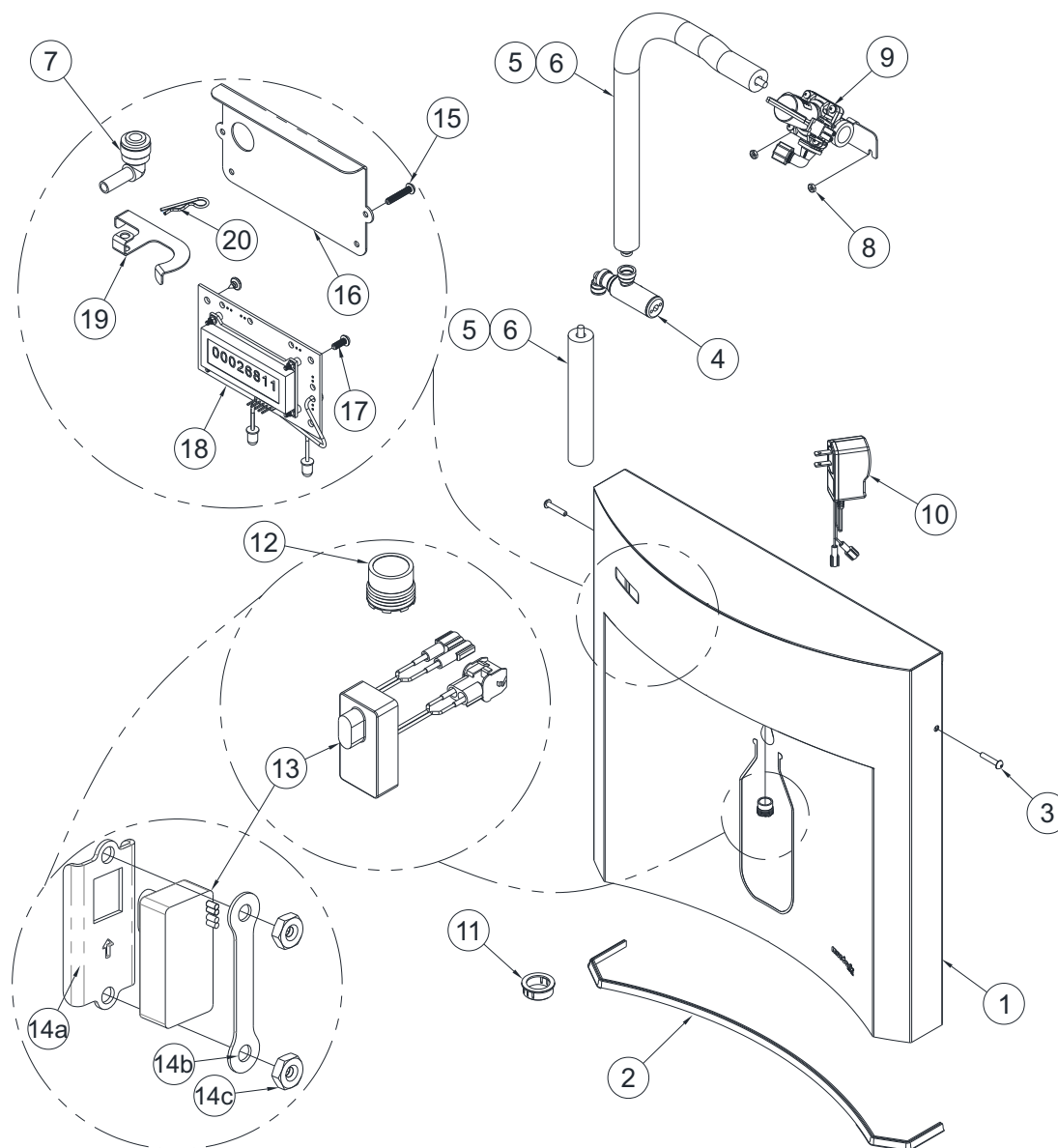
1. To remove water spots or rust spots, stainless steel cleaner/polish on a cloth is recommended.
2. If there are stubborn spots or if you wish to treat a scratch, synthetic abrasive general purpose pads such as Scotch-Brite® is recommended.
3. Apply stainless steel cleaner/polish to the synthetic abrasive 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.

BF11S BOTTLE FILLER PARTS BREAKDOWN



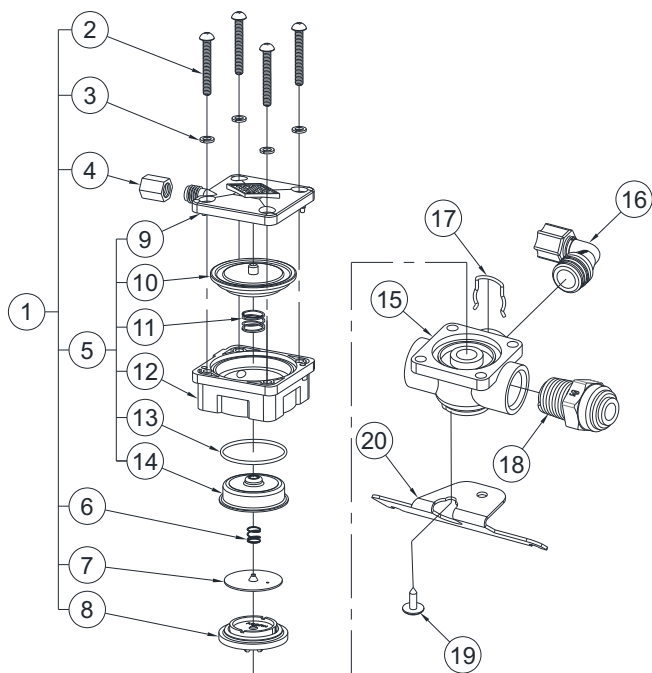
ITEM #	PART NUMBER	DESCRIPTION	ITEM #	PART NUMBER	DESCRIPTION
1	CONTACT FACTORY	HOUSING ASSEMBLY BF11S	11	7040-033-000	NEOPREL LAMINAR NOZZLE
2	7014-520-000	RUBBER TRIM	12	7100-441-000	LOCKING GROMMET, 1.188 DIA HOLE
3	0116-114-000	#10-32 X 1" BUTTON HEAD SCREW	13	2566-160-001	(-PHB) SIDE OUTLET PUSHBUTTON
4	7003-096-001	AUTO 'Y' STRAINER ASSEMBLY	14	4005-030-199	AIR-TROL PUSHBTN ESCUTCHEON S/S
5	7012-055-000	FOAM PIPE INSUL., .375" I.D. X 1.0" OD	15	4005-031-199	AIR-TROL PUSHBUTTON
6	2169-000-000	TUBE, .25" DIA, LLDPE (BLUE)	16	2566-025-002	SIDE OUTLET PUSHBUTTON SUB-ASSY
7	1895-709-000	ELBOW, 1/4" PUSH-IN X 1/4" STEM	17	2566-022-000	ESCUTCHEON RETAINER
8	0302-011-000	#6-32 UNC HEX NUT	18	2566-001-000	AIR DIAHPRAGM
9	7014-486-001	NON-METERING AIR-TROL VALVE	19	2566-055-199	DIAPHRAGM RETAINER SIDE OUTLET
10	2150-003-199	1/8" OD LDPE TUBE, NATURAL, 3' LONG	20	1895-450-000	1/8" O.D. COMPRESSION NUT

BF12S BOTTLE FILLER PARTS BREAKDOWN



ITEM#	PART NUMBER	DESCRIPTION	ITEM#	PART NUMBER	DESCRIPTION
1	CONTACT FACTORY	HOUSING ASSEMBLY BF12S	12	7040-033-000	NEOPRENE LAMINAR NOZZLE
2	7014-520-000	RUBBER TRIM	13	2563-395-001	SENSOR ASSEMBLY 'A'
3	0116-114-000	#10-32 X 1" BUTTON HEAD SCREW	14a	7014-474-199	SENSOR MOUNT
4	7003-096-001	AUTO 'Y' STRAINER ASSEMBLY	14b	7014-475-199	SENSOR HOLD DOWN
5	7012-055-000	FOAM PIPE INSUL., .375" I.D. X 1.0" OD	14c	0302-003-000	#8-32 HEX NUT
6	2169-000-000	TUBE, .25" DIA. LLDPE (BLUE)	15	0108-106-000	#6-32 UNC X 3/4" SS PHIL. RD. HD. SCREW
7	1895-709-000	ELBOW, 1/4" PUSH-IN X 1/4" STEM	16	7014-253-199	SPLASH GUARD
8	0302-011-000	#6-32 UNC HEX NUT	17	0108-103-000	#6-32 UNC X 3/8" SS PHIL. RD. HD. SCREW
9	7014-496-001	SOLENOID / VALVE MOUNTING ASSY	18	0716-111-001	BOTTLE COUNTER WITH CONNECTORS
10	0710-736-001	POWER SUPPLY	19	7014-476-199	RESET LEVER
11	7100-441-000	LOCKING GROMMET, 1.188 DIA HOLE	20	0341-103-000	COTTER PIN

BF11S VALVE BREAKDOWN



ITEM #	PART NUMBER	DESCRIPTION
1	2563-000-003	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	2563-000-003	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	2563-000-003	ACTUATOR SPRING
12	2563-001-000	MOTOR HOUSING
13	0401-026-000	SEPARATOR CUP O-RING
14	2563-002-199	SEPARATOR CUP
15	2570-067-000	VALVE BODY
16	2570-052-001	1/4" OD PLASTIC ELBOW ASSEMBLY
17	0326-100-000	RETAINING CLIP
18	1895-115-000	ADAPTER, 3/8" NPT
19	0124-010-000	#10 X 1/2" PHILLIPS TRUSS HEAD
20	7014-497-199	VALVE BRACKET

BF12S VALVE BREAKDOWN

ITEM #	PART NUMBER	DESCRIPTION
1	7014-499-001	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 DIAPHRAM ASSEMBLY
6	2570-067-199	VALVE BODY
7	2563-326-001	9VDC LATCHING SOLENOID ASSEMBLY
8	0326-100-000	RETAINING CLIP
9	2570-052-001	1/4" OD PLASTIC ELBOW ASSEMBLY
10	1895-115-000	ADAPTER, 3/8" NPT
11	0124-010-000	#10 X 1/2" PHILLIPS TRUSS HEAD
12	7014-497-199	VALVE BRACKET

