

A171-UG-D1-BFS Series and A171-UG-VR-D1-BFS Series
Barrier Free, Wall Mounted Drinking Fountain



A171400F-UG-D1-BF2S**
(* Subject to availability)



A171400S-UG-VR-D1-BF1S



A171100F-UG-D1-BFS / A171400F-UG-D1-BFS / A171100S-UG-D1-BFS / A171400S-UG-D1-BFS
A171100F-UG-VR-D1-BFS / A171400F-UG-VR-D1-BFS / A171100S-UG-VR-D1-BFS / A171400S-UG-VR-D1-BFS

TECHNICAL ASSISTANCE TOLL FREE TELEPHONE NUMBER:

1.800.591.9360

Technical Assistance E-Mail: fieldservice@acorneng.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.
4. **IMPORTANT: Water supply to unit from RO Reverse Osmosis filtration systems will damage fixture components and void product Warranty.**

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COMPLIES WITH
STANDARDS



NSF/ANSI/CAN 61

murdock[®]
SINCE 1853

Member of
MORRIS GROUP
INTERNATIONAL

15125 Proctor Ave, City of Industry,
CA, 91746 U.S.A.
Phone 800-453-7465

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. 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.

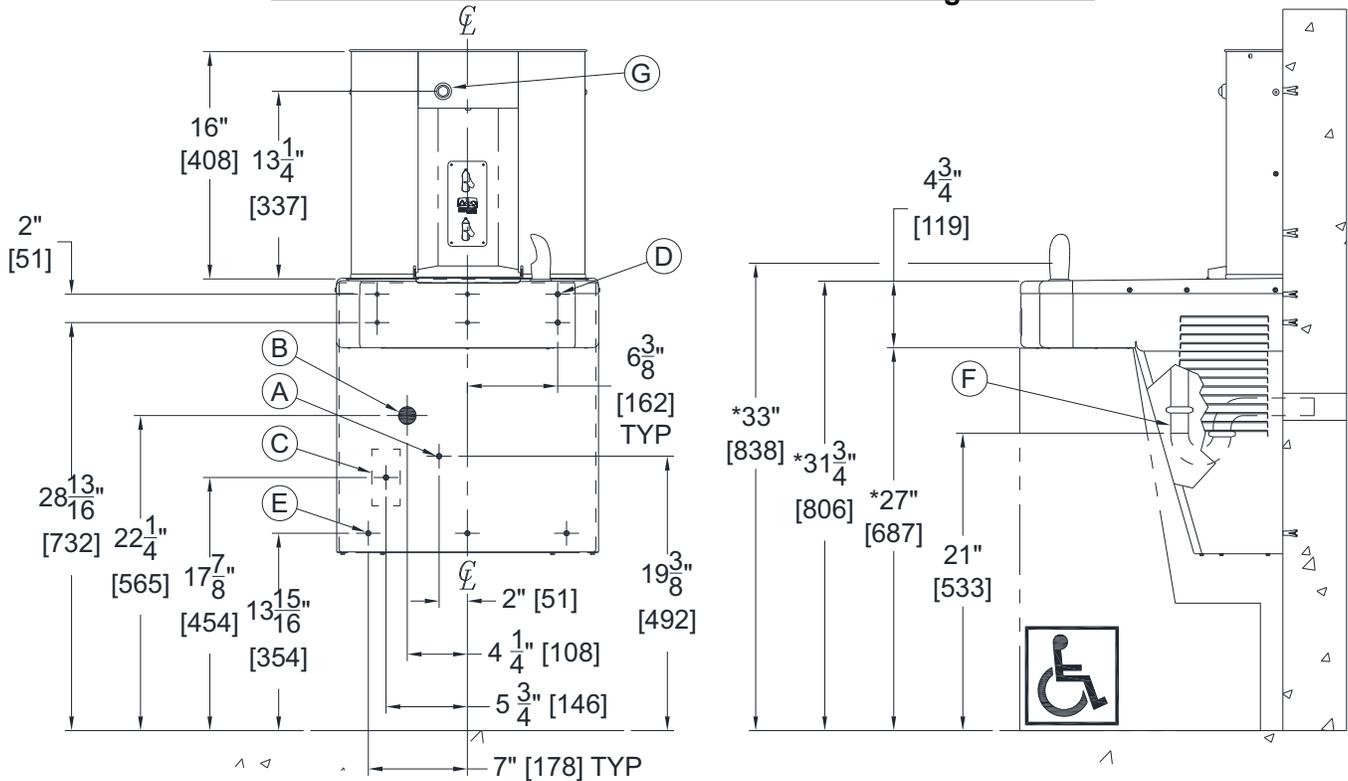
****NOTE:** Only -VR Series units are rated for outdoors. Refer to page 5 for complete details and requirements.

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.

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

A171-UG-VR-D1-BF Series Wall Mounted Drinking Fountain



Electrical Requirements (Non Chilled):
Provide for -BF2S Sensor Bottle Fillers Only
- 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 FOR -BF2
- 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
- G. BOTTLE FILLER PUSHBUTTON

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 Bubbler 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. 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 (BY OTHERS).*
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.

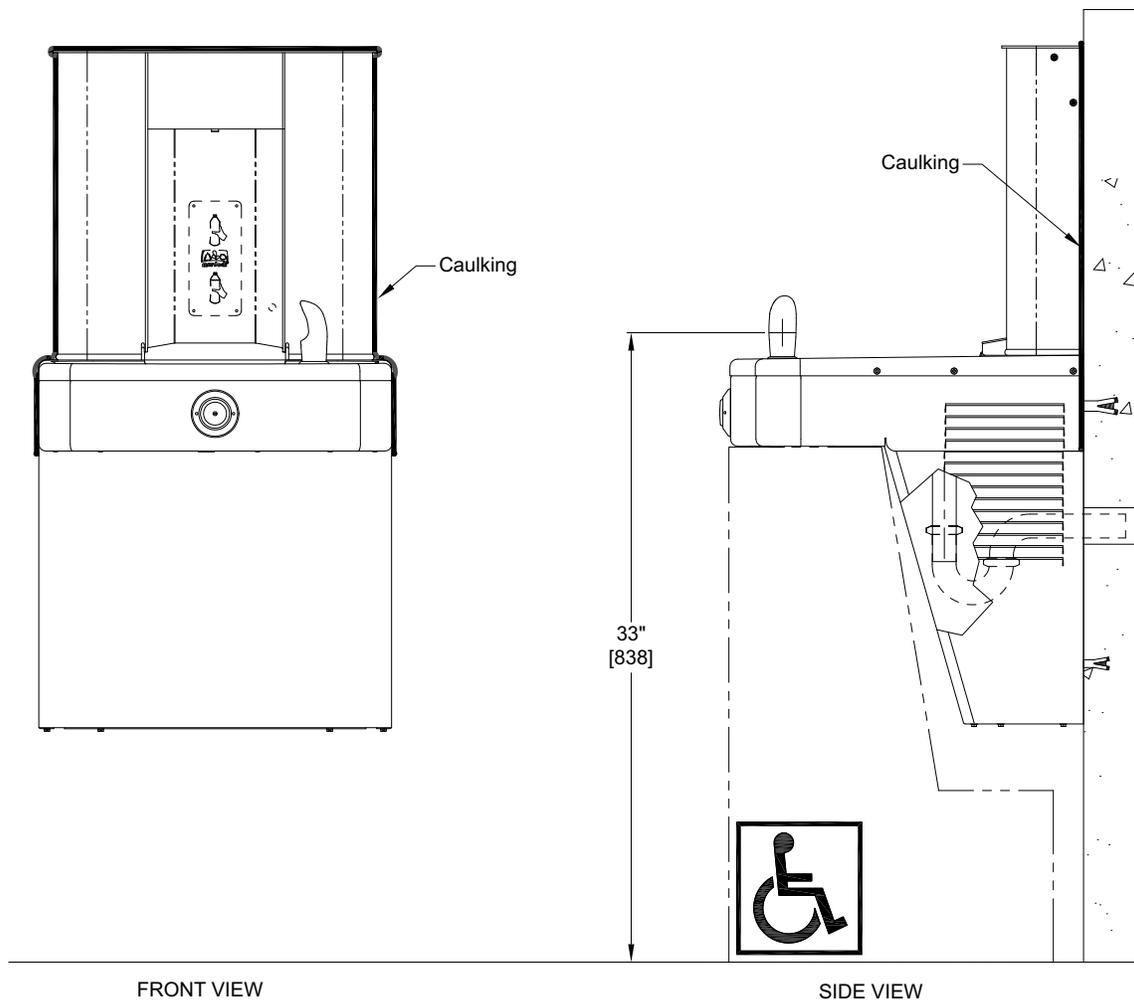
CLEANING & MAINTENANCE GUIDE:

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.

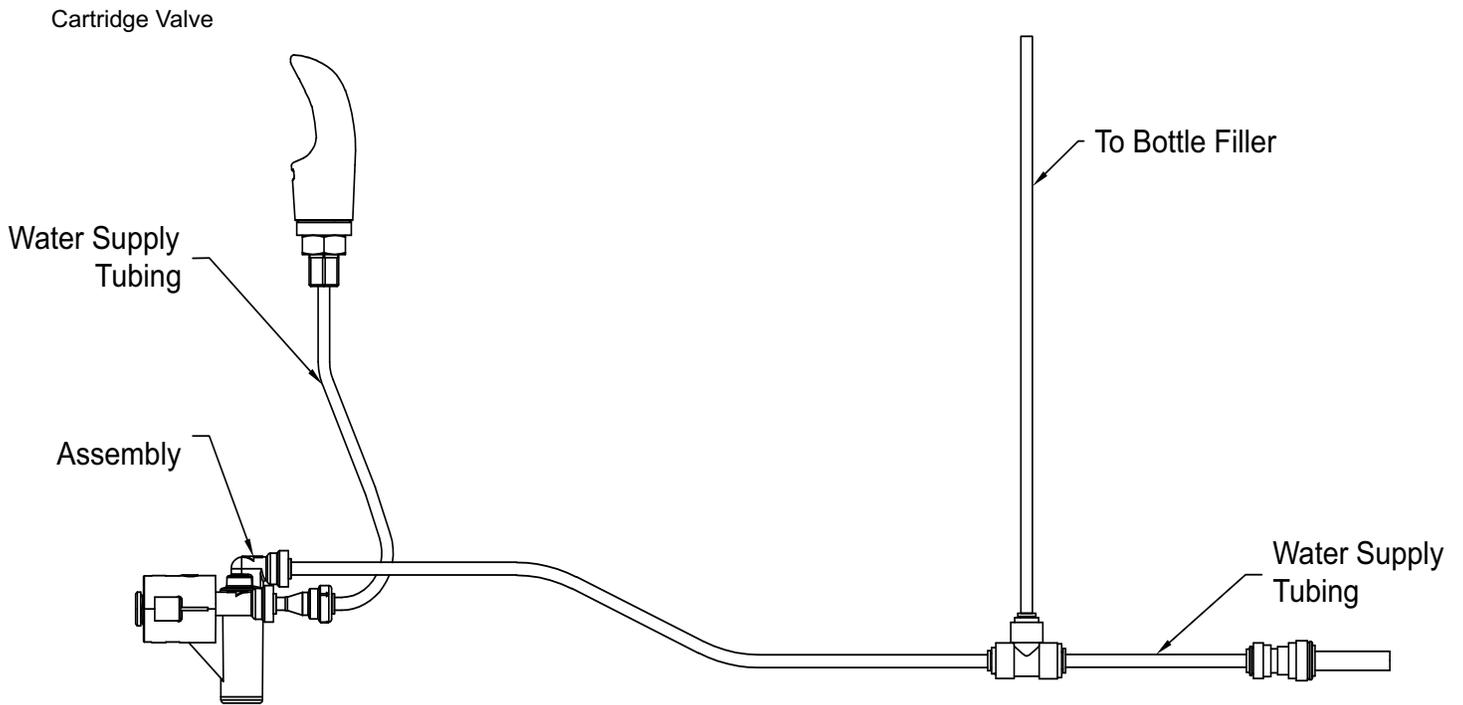
OUTDOOR INSTALLATION INSTRUCTIONS:

IMPORTANT: ONLY A171-UG-VR-D1 (-BF1S & BF2S) Series units are rated for outdoor use.

- 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.**



A171-UG-VR-D1-BFS BI-LEVEL UNIT PIPING INSTALLATION (WITH -BF OPTIONS)
(ALSO APPLIES TO A171-UG-D1-BFS)

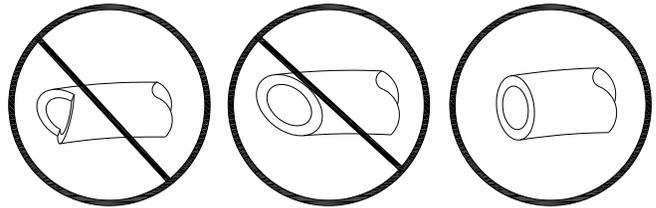


PUSH-IN FITTING INSTALLATION

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

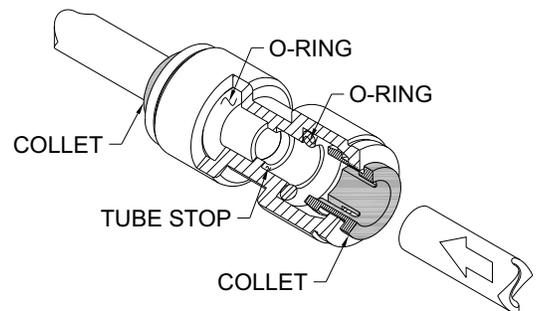
TO CUT TUBE:

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.

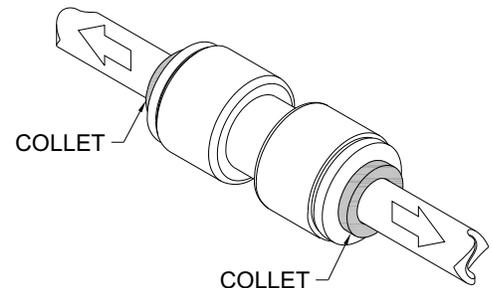


INSERTING THE TUBE:

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

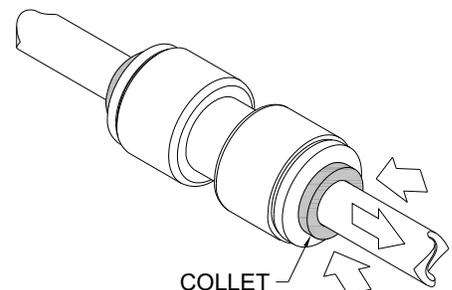


2. Pull on the fitted tubing to ensure it is secure. Tube should not come free from the fitting. Water test the connection assembly prior to leaving the site to ensure there are no leaks.



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:

-WF1EZ FILTER (Detail A):

REFER TO INSTALLATION DETAILS PROVIDED WITH -WF1EZ (REFERENCE INSTALLATION DRAWING 7020-009-001)

-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)

-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.

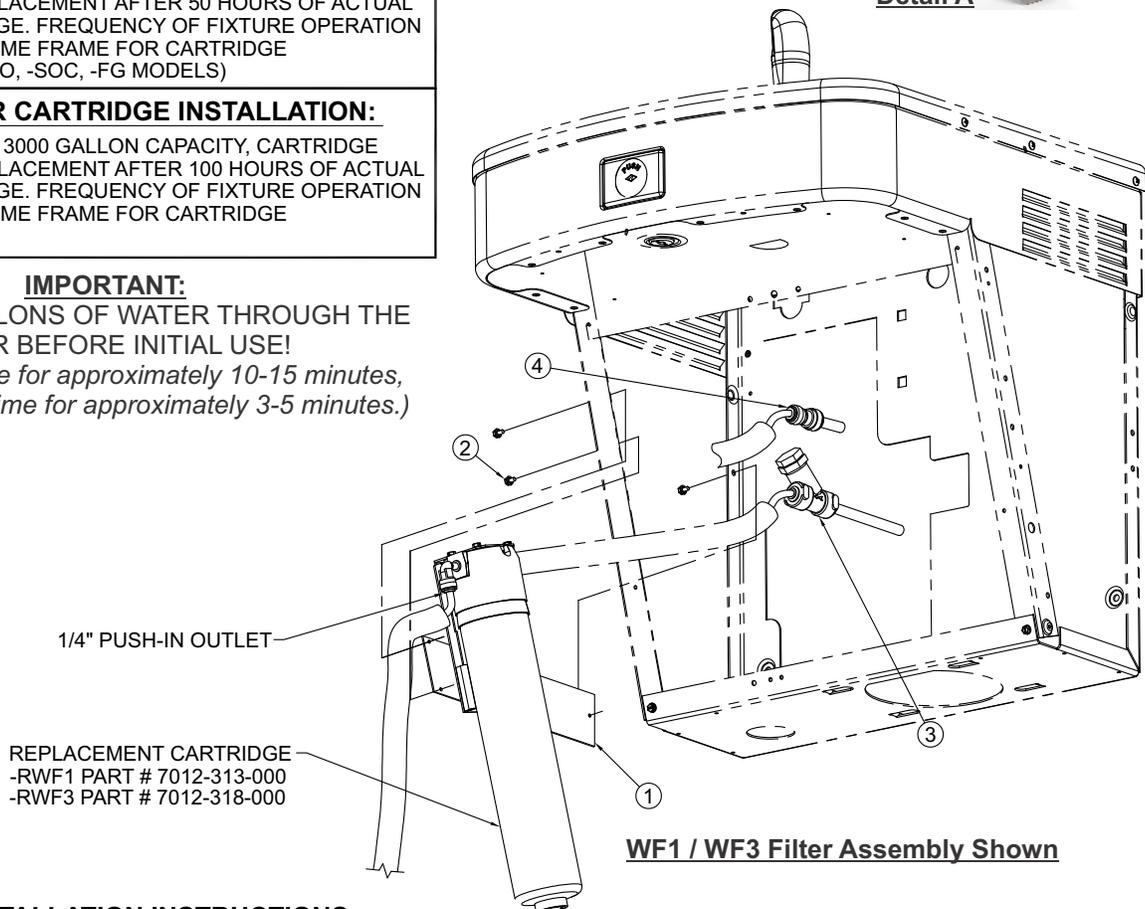
IMPORTANT:

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.)



Detail A



1/4" PUSH-IN OUTLET

REPLACEMENT CARTRIDGE
-RWF1 PART # 7012-313-000
-RWF3 PART # 7012-318-000

WF1 / WF3 Filter Assembly Shown

-WF1, -WF3 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/BRAKET 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.

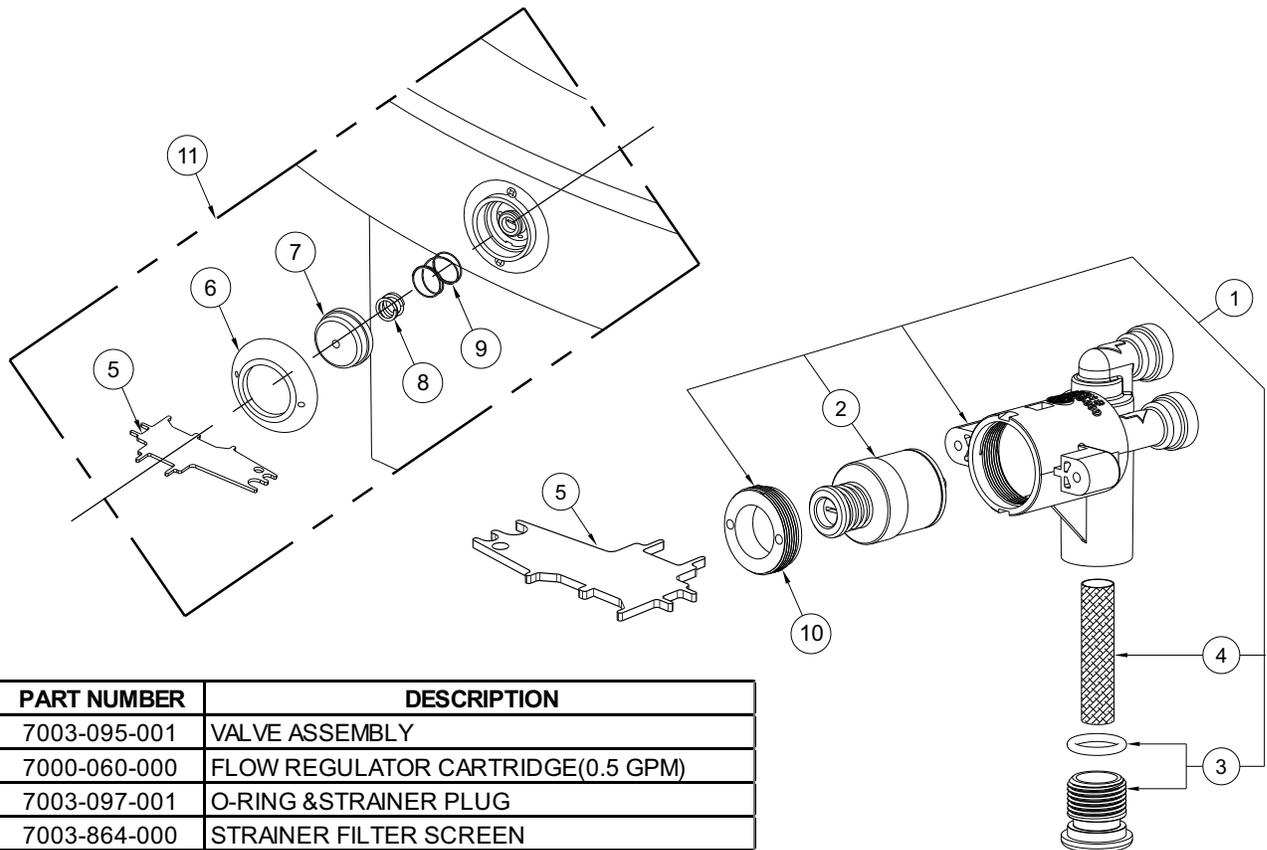
NOTES:

- 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.

A171-UG-VR-D1-BFS 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

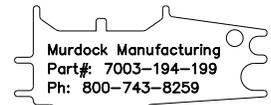
NOTE: STRAINER FILTER SCREEN MUST BE IN PLACE FOR WATER TO FLOW.

A171-UG-VR-D1-BFS DRINKING FOUNTAIN PARTS BREAKDOWN

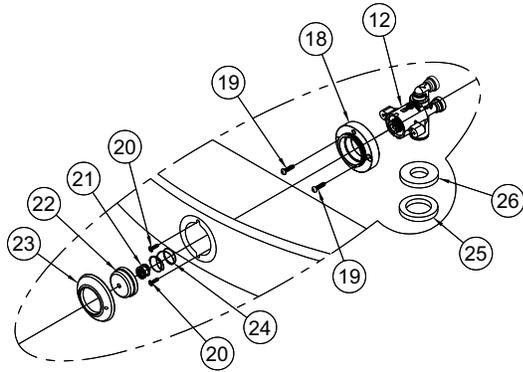
NOTE: See following page for fixture drawing corresponding to table of parts below.

NOTE:

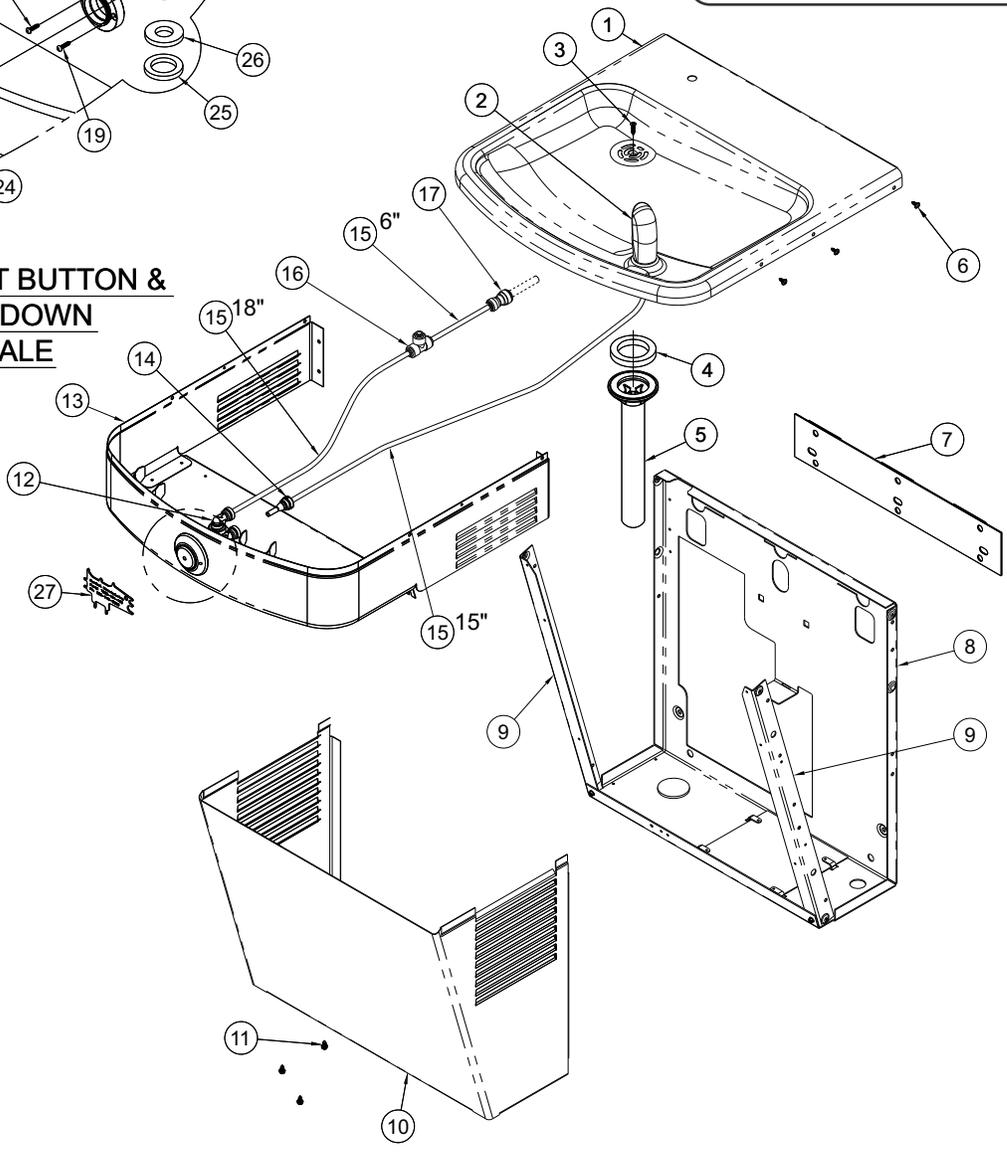
** Flow Restrictor Only Available
With Low Flow Bubbler.



- 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-D1-BFS DRINKING FOUNTAIN PARTS BREAKDOWN TABLE

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

<u>ITEM #</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	7003-871-199	BASIN TOP w/ Ø1/2" HOLE
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" O.D. TUBE UNION TEE (PUSH-IN)
17	1895-123-000	1/4" x 3/8" O.D. PUSH-IN SUPPLY INLET CONNECTION
18	7003-198-199	(-VR) PUSHBUTTON MOUNTING SLEEVE
19	0124-055-000	#8x3/4" PHILLIPS ROUND HEAD SCREW
20	0161-062-000	#6-32x1/2" S/S PHIL FLAT HEAD SCREW
21	7003-195-000	OVERTRAVEL SPRING
22	7003-196-199	(-VR) CHROME PLATED PUSHBUTTON
23	7003-197-199	(-VR) CHROME PLATED ESCUTCHEON
24	7003-193-000	PUSHBUTTON RETURN SPRING
25	7003-200-000	LOWER GASKET
23	7003-199-000	UPPER GASKET
27	7003-194-199	(-VR) UNIVERSAL MAINTENANCE TOOL

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

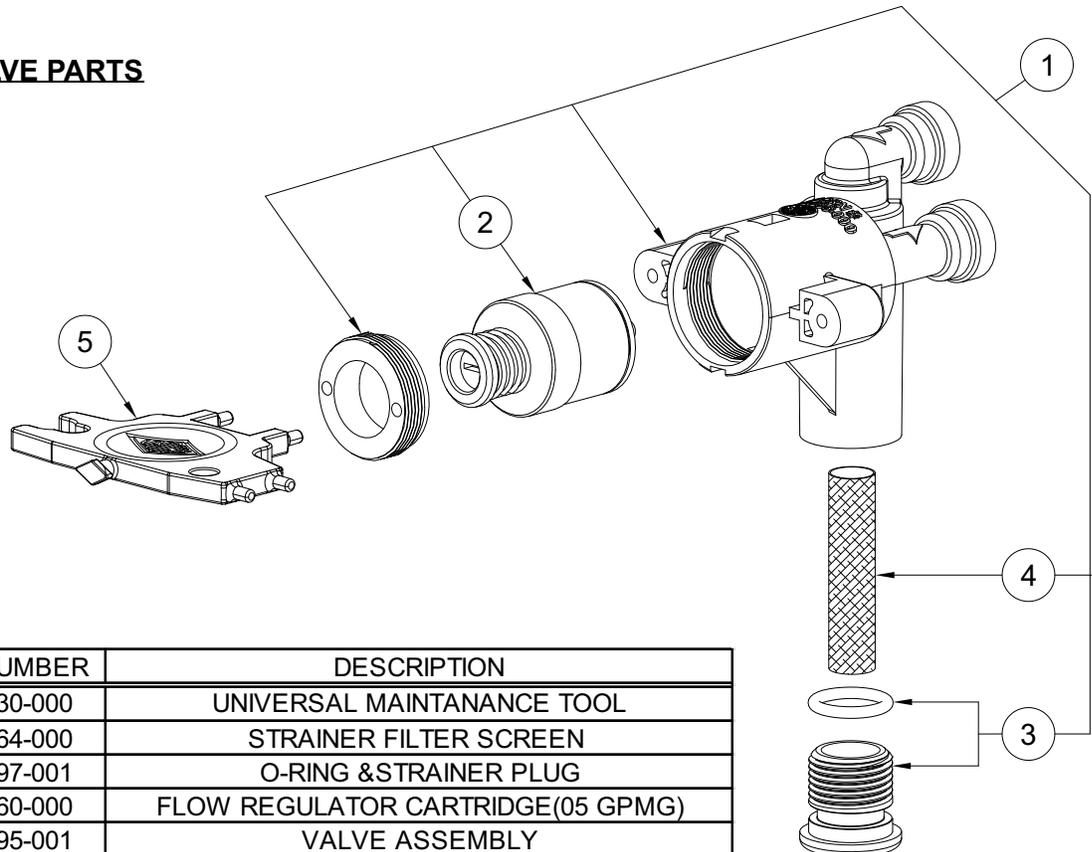
STANDARD PUSHBUTTON CARTRIDGE REPLACEMENT/ STRAINER MAINTENANCE
(INCLUDED AS REFERENCE ONLY)

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



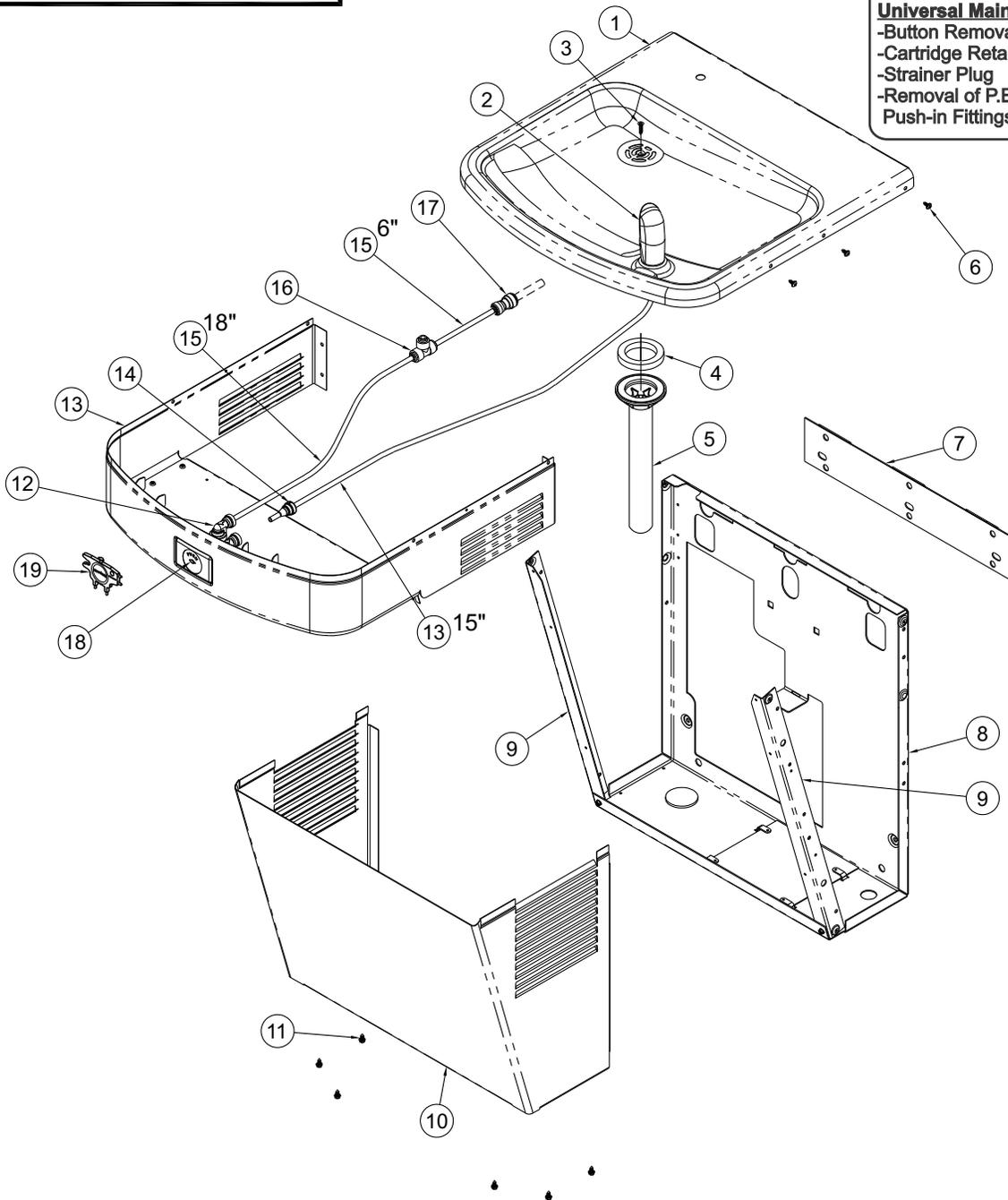
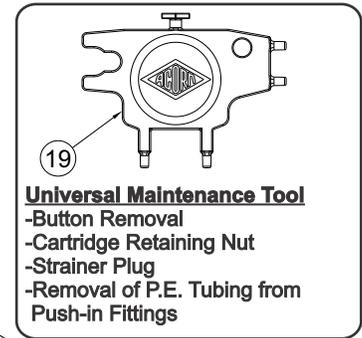
ITEM	PART NUMBER	DESCRIPTION
5	7003-830-000	UNIVERSAL MAINTANANCE TOOL
4	7003-864-000	STRAINER FILTER SCREEN
3	7003-097-001	O-RING & STRAINER PLUG
2	7000-060-000	FLOW REGULATOR CARTRIDGE(05 GPMG)
1	7003-095-001	VALVE ASSEMBLY

**A171-UG-D1-BFS DRINKING FOUNTAIN PARTS BREAKDOWN
(INCLUDED AS REFERENCE ONLY)**

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-D1-BFS DRINKING FOUNTAIN PARTS BREAKDOWN TABLE
(INCLUDED AS REFERENCE ONLY)

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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" O.D. TUBE UNION TEE (PUSH-IN)
17	1895-123-000	1/4" x 3/8" O.D. PUSH-IN SUPPLY INLET CONNECTION
18	7003-099-000	PUSHBUTTON
19	7003-830-000	UNIVERSAL MAINTENANCE TOOL

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