

**A191-BF Series**  
**Wall Mounted Drinking Fountain with**  
**Bottle Filler and Trim Panel**



A192100F-BF / A191400S-BF

**TECHNICAL ASSISTANCE TOLL FREE TELEPHONE NUMBER:**  
**1.800.743.8259**

Technical Assistance E-Mail: [Fieldservice@acorneng.com](mailto: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.

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

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COMPLIES WITH  
**STANDARDS**



NSF/ANSI 61



Federal  
Public Law  
111-380  
(No Lead)



Member of

  
MORRIS GROUP  
INTERNATIONAL

**murdock**<sup>®</sup>  
SINCE 1853

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Phone 800-591-9360  
626-336-4561  
[www.murdockmfg.com](http://www.murdockmfg.com)

**IMPORTANT**

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.

MGI Engineered Plumbing Products are designed in accord with applicable National Codes and Standards, which may include UPC, ANSI, and ASSE. Installers should use industry standard practice for details not covered within Manual. Prior to installation, supply lines must be flushed of all foreign material such as pipe dope, chips, or solder. Debris or foreign material in water supply may damage valve. An appropriate thread sealant is recommended on all threaded waste and supply connections to reduce the possibility of leaks.

When applicable: Industry standard wall backing, for wall hung fixtures, is required. Installer provided wall anchors and wall anchoring hardware must be appropriate for wall construction and have a minimum pull-out rating of 1000 lbs. (453.6 kg).

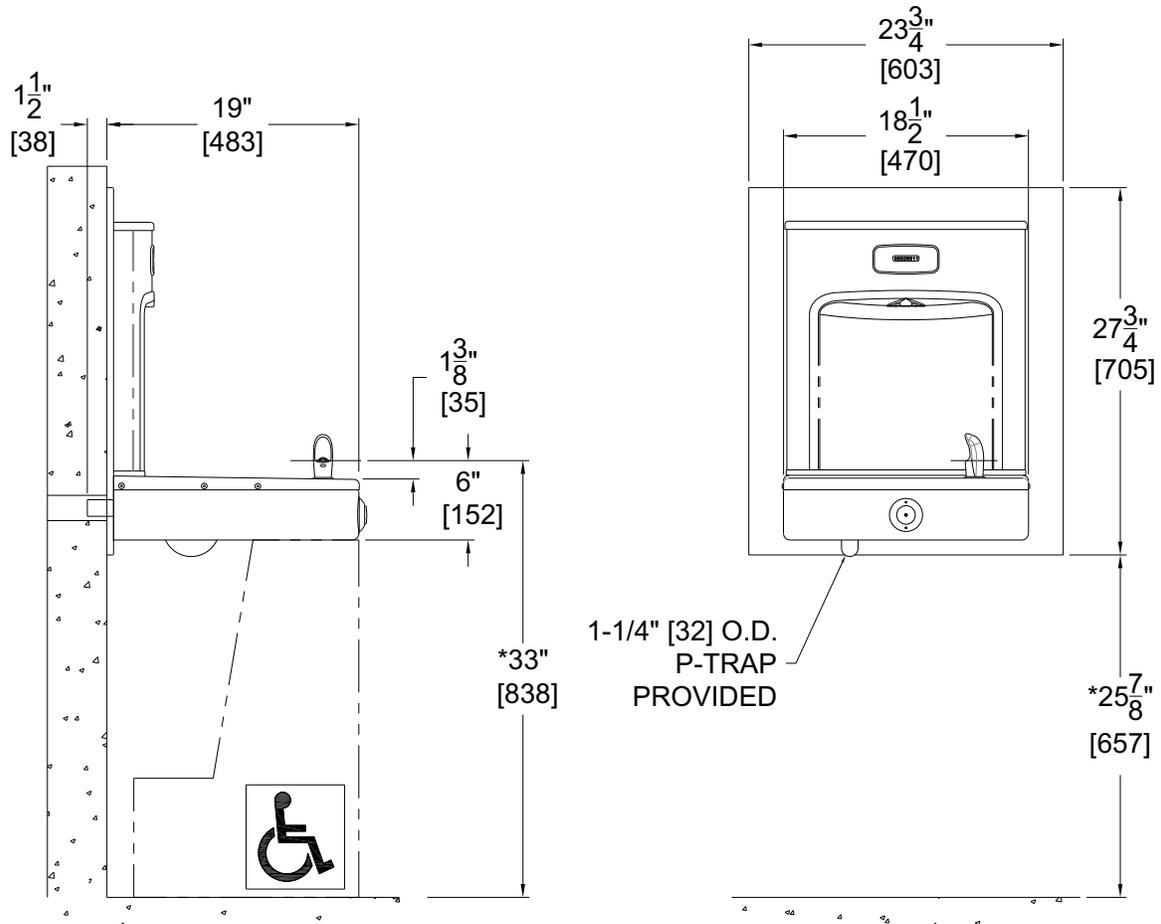
When applicable: ANSI, UFAS or ADA compliance is subject to the interpretation and requirements of the local code authority and is the responsibility of the installer for verification.

When applicable: Electrical receptacle(s) must be wired to a GFCI protected circuit. Fixture must be earth grounded per N.E.C. (National Electrical Code).

**DIMENSIONAL AND ROUGHING-IN DRAWING**

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

**A191-BF Wall Mounted Drinking Fountain and Bottle Filler Dimensional Drawing**



**GENERAL NOTES:**

1. ALL DIMENSIONS ARE IN INCHES [MM]
- \*2. DIMENSIONS SHOWN ARE FOR RECOMMENDED HEIGHT. ADJUST VERTICAL DIMENSIONS AS NECESSARY TO COMPLY WITH FEDERAL, STATE, & LOCAL CODES

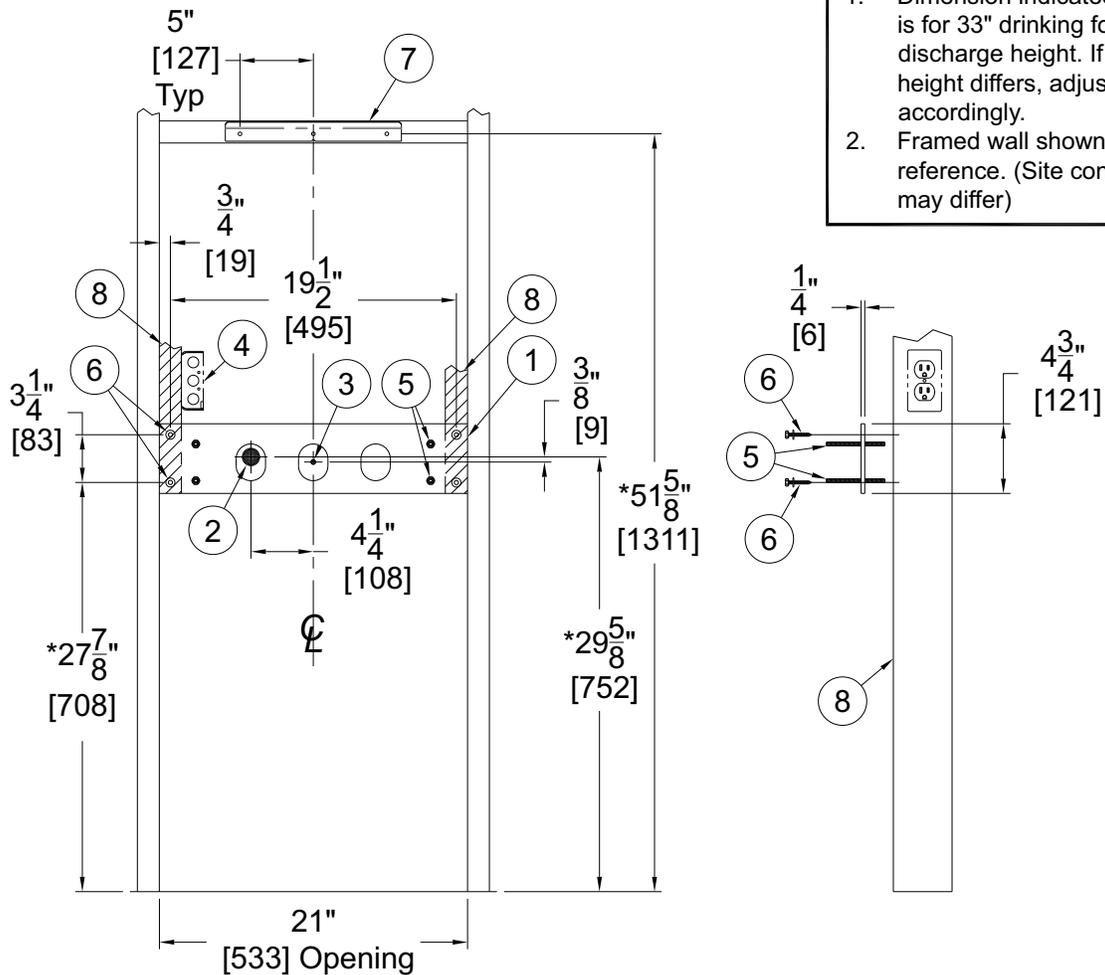
**NOTES:**

1. Dimensions shown for ADA compliant installation. For Child ADA 2010 compliant parallel approach installation, decrease height of \* dimensions by 2-3/4".
2. Provide clear floor space as required. Adjust vertical dimensions as required to comply with federal, state, and local codes.

**A191400S-BF Rough-In and Mounting Plate Detail**

General Notes:

1. Dimension indicated with (\*) is for 33" drinking fountain discharge height. If discharge height differs, adjust accordingly.
2. Framed wall shown for reference. (Site conditions may differ)



- |                                |   |
|--------------------------------|---|
| ① Supplied Wall Mounting Plate | ⑤ 5/16-18 UNC Studs and Hardware (Provided) |
| ② 1-1/4" OD Waste Outlet       | ⑥ 1/4" Screw and Washers by Installer       |
| ③ 3/8" NCT Supply Inlet        | ⑦ "S" Clip Mounting Bracket (Provided)      |
| ④ Junction Box by Installer    | ⑧ Support Framing by Installer              |

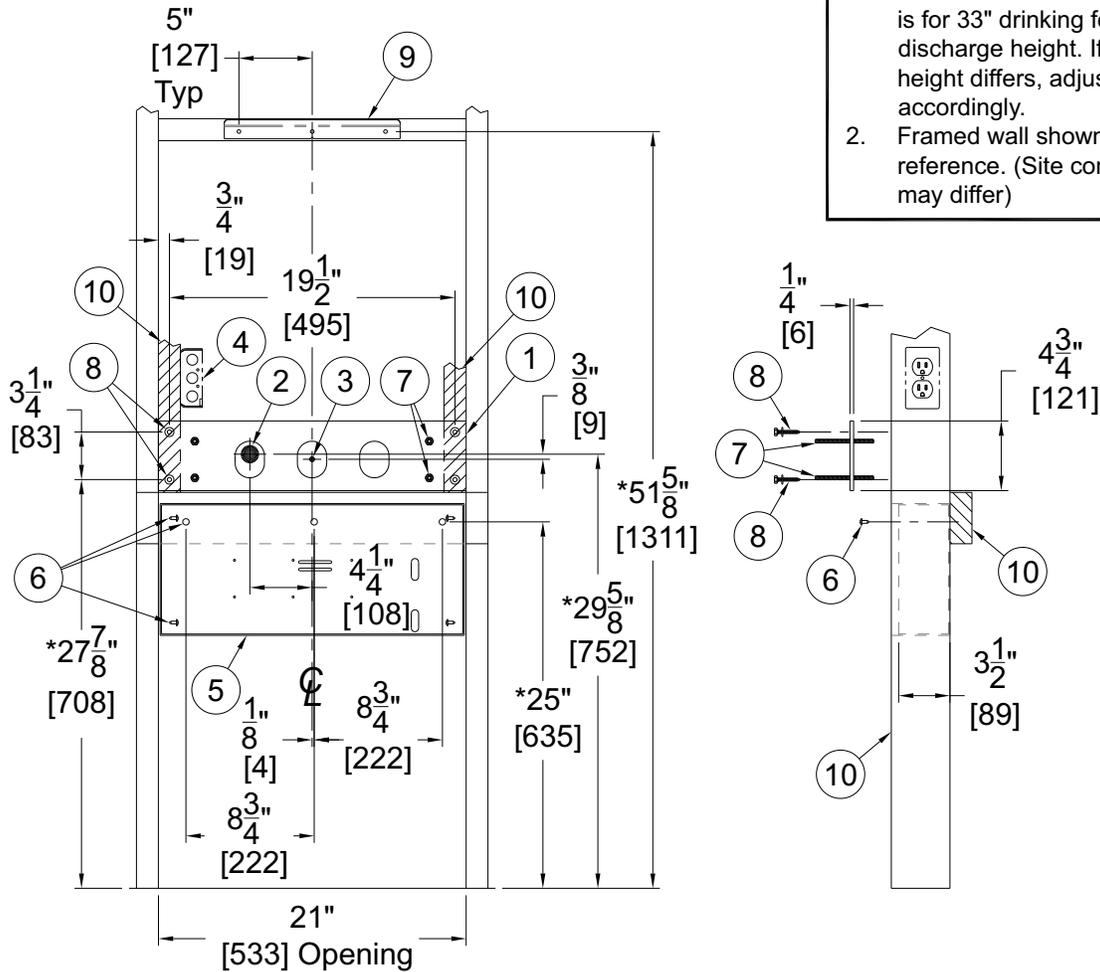
**NOTES:**

1. Dimensions shown for ADA compliant installation. For Child ADA 2010 compliant parallel approach installation, decrease height of \* dimensions by 2-3/4".
2. Provide clear floor space as required. Adjust vertical dimensions as required to comply with federal, state, and local codes.

**A191400S-BF-WF Rough-In and Mounting Plate Detail**

General Notes:

1. Dimension indicated with (\*) is for 33" drinking fountain discharge height. If discharge height differs, adjust accordingly.
2. Framed wall shown for reference. (Site conditions may differ)



- |                                |   |
|--------------------------------|---|
| ① Supplied Wall Mounting Plate | ⑥ #12 Screws by Installer                   |
| ② 1-1/4" OD Waste Outlet       | ⑦ 5/16-18 UNC Studs and Hardware (Provided) |
| ③ 3/8" NCT Supply Inlet        | ⑧ 1/4" Screw and Washers by Installer       |
| ④ Junction Box by Installer    | ⑨ "S" Clip Mounting Bracket (Provided)      |
| ⑤ Filter Enclosure             | ⑩ Support Framing by Installer              |

**NOTES:**

1. Dimensions shown for ADA compliant installation. For Child ADA 2010 compliant parallel approach installation, decrease height of \* dimensions by 2-3/4".
2. Provide clear floor space as required. Adjust vertical dimensions as required to comply with federal, state, and local codes.

**IMPORTANT:**

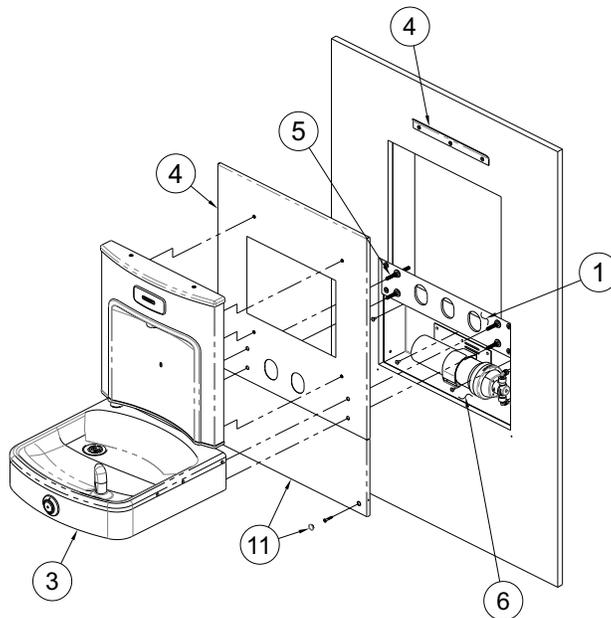
1. Water Supply Service Stop Valve and Water Connections to be supplied by others in accordance with local codes.
2. Waste is 1-1/4" Outer Diameter. Drinking Fountain water inlet is 3/8" Outer Diameter copper tube. Bottle Filler water inlet is 3/8" Outer Diameter copper tube. Water line by others.
3. Completely flush supply lines of all foreign debris before connecting to fixture. Optional Water Filter (WF), is available should any problems with taste, odor, color, or sediment arise from the water supply.
4. All burrs must be removed from outside of cut tubes before inserting into strainer or other components.
5. *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 shall be installed as close as possible to the quick closing valve.*

**PRIOR TO INSTALLATION:**

1. Read all installation instructions carefully, before proceeding.
2. Carefully remove all fixture components from packaging, preventing scratching or damage. Inspect fixture and all parts from damages and all parts that are bolted on.
3. Provide mounting surface, adequate to support the fixture and loads on the fixture.
4. Provide rough-ins as shown on the roughing-in and dimensional drawing, including water supply and drain pipe. (See rough-in details)
5. Completely flush water supply lines of all foreign debris, before connecting to the fixture.

**DRINKING FOUNTAIN INSTALLATION:**

1. Insert Wall Mounting Plate into the rough-in block out and secure using 1/4"-20 UNC mounting hardware (provided by others).
2. Install the four threaded studs into the Wall Mounting Plate.
3. Remove the basin top by taking out the drain screw and lifting at the front while pulling forward. Disconnect bubbler tube. Set top aside in a safe place where it will not be damaged. Place the screw in a secure location where it will not be lost.
4. Hang Upper Trim Panel on Mounting Clips.
5. Slide Fixture over studs and secure with nuts and washers.
6. For -WF option: Insert Filter Enclosure using #12 screws (by others).
7. Assemble P-Trap to drain adapter and then assemble to unit with Phillips head screws.
8. Make-up 1-1/4" outer diameter waste connection.
9. After thoroughly flushing the 3/8" outer diameter supply line, connect water supply to Angle Stop (by others).
10. Place drain gasket on drain adapter. Reconnect bubbler tube. Reassemble basin top to unit by engaging back clip and securing with screw.
11. For -WF option: Place Lower Trim Panel onto Upper Trim Panel and secure to wall with #12 wood screws (by others) and snap in Round Plug into bottom holes.

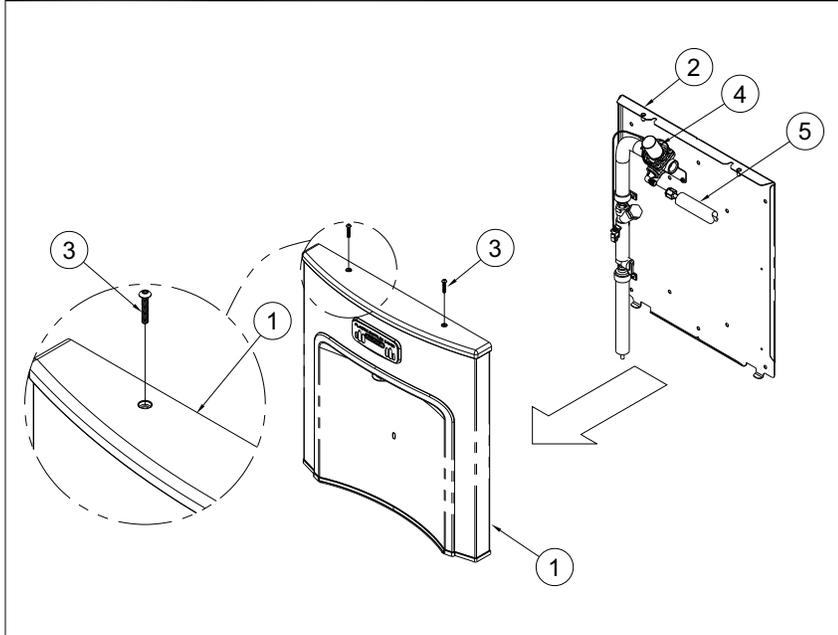


**DRINKING FOUNTAIN START UP:**

1. Thoroughly flush the supply line, turn on building water supply and check all connections for leaks.
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 front pushbutton until steady water stream is achieved.
3. If water flow requires adjustment, insert a slotted narrow blade screwdriver in the hole centered on the underside of the fixture in the knee clearance area up to the flow regulator. Turning clockwise will increase flow and turning counterclockwise will decrease flow.
4. Recheck all water connections with water flowing through system.

**BF11/BF12 INSTALLATION INSTRUCTIONS**

**1** Unfasten screws that hold the Bottle Filler Housing to the Mounting Channel. Disconnect insulated  $\frac{1}{4}$ " riser tubing from Solenoid Valve to separate. Place Bottle Filler Housing and screws in a secure location.



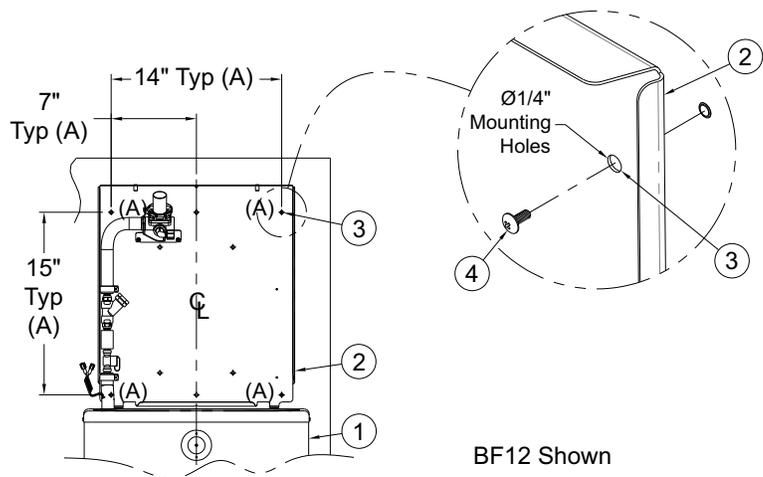
- ① Bottle Filler Housing
- ② Mounting Channel
- ③ #10-32 x 1" Button Head Screw
- ④ Solenoid Valve
- ⑤ 1/4" OD Insulated Tubing

**2** Center BF Mounting Channel over Fountain deck and anchor to upper trim panel, securing with wall anchors and anchoring hardware provided.

- ① Drinking Fountain deck and cabinet
- ② Mounting Channel
- ③ 4x Mounting Holes (A)
- ④ Anchoring Hardware provided

\*NOTE: Thread 1/4" OD insulated inlet tubing through Grommet and into cabinet prior to securing to wall.

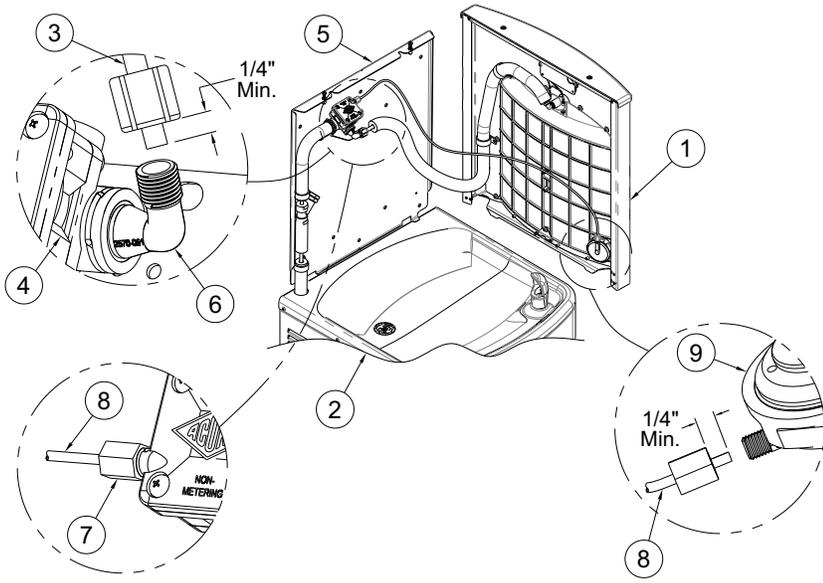
\*NOTE: Insulation Tubing may overlap Fittings. Illustrations may show exposed 1/4" OD Tubing for clarity only.



**BF11/BF12 INSTALLATION INSTRUCTIONS (Continued)**

**BF11 SERIES**

**3A** 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.

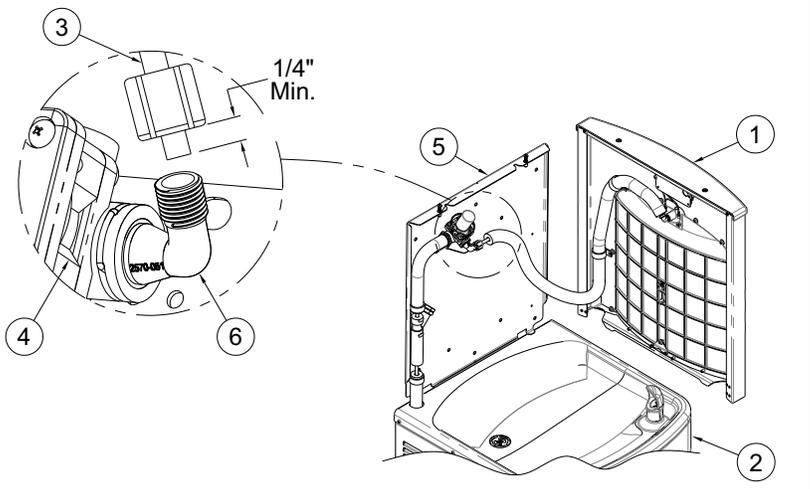


- ① Bottle Filler Housing
- ② Water Cooler Assembly
- ③ 1/4" O.D. Polyethylene Supply Line
- ④ Pneumatic Valve
- ⑤ Mounting Panel
- ⑥ Valve Water Supply Outlet Elbow
- ⑦ Valve Air-Line Supply Inlet
- ⑧ 1/8" O.D. Polyethylene Supply Line
- ⑨ Pushbutton

**! IMPORTANT**  
FOR BF11 SERIES, FOLLOW STEP 3A  
FOR BF12 SERIES, FOLLOW STEP 3B

**BF12 SERIES**

**3B** 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.

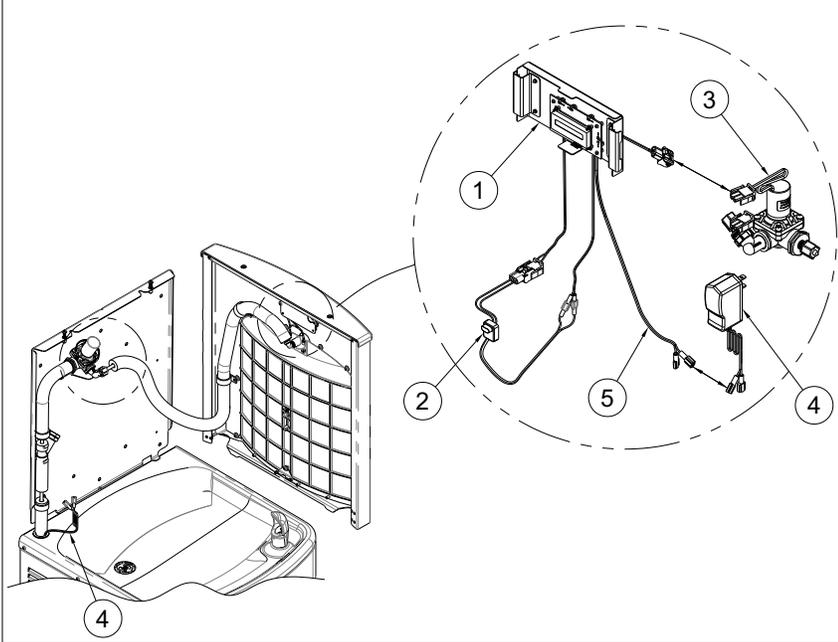


- ① Bottle Filler Housing
- ② Water Cooler Assembly
- ③ 1/4" O.D. Polyethylene Supply Line
- ④ Solenoid Valve
- ⑤ Mounting Panel
- ⑥ Valve Water Supply Outlet Elbow

**BF11/BF12 INSTALLATION INSTRUCTIONS (Continued)**

**BF12-BCD SERIES**

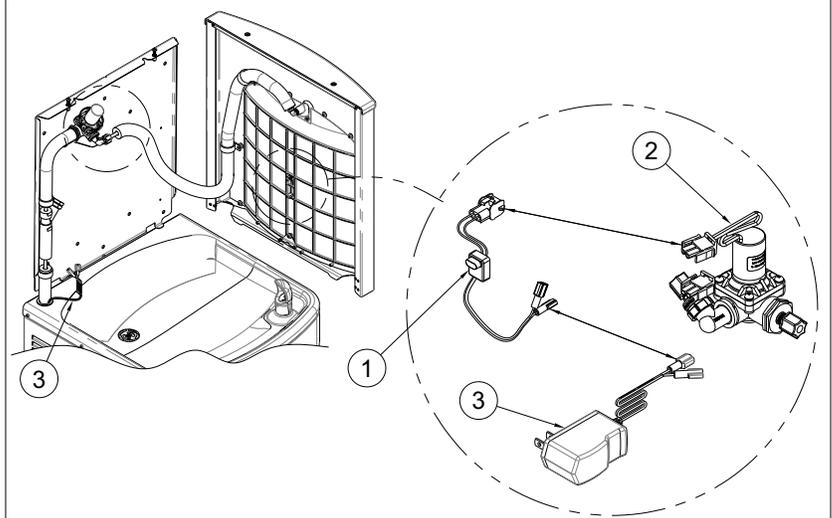
**4A** Connect Electrical wiring as shown in diagram. If unit does not have -BCD Bottle Count Display, skip to step 4B.



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

**BF12 SERIES**

**4B** Connect Electrical wiring as shown in diagram. If unit has -BCD Bottle Count Display, see step 4A before continuing.



- ① Sensor
- ② Solenoid Valve
- ③ Power Supply

**TROUBLE SHOOTING:**

**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.
- 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 point, if necessary, to level chiller.

**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 outlet 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. 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. Flow control in solenoid valve outlet elbow clogged remove & clean.
- h. No power to transformer connections, loose or wires cut.

**3. WATER DRIPS OR WILL NOT SHUT OFF:**

- a. Open fixture. Loosen nuts holding valve bracket assembly to bottom of fixture but, do not remove. Move complete valve bracket assembly further back from the front push pad and tighten to lock in place.
- b. Replace valve cartridge.

**CLEANING & MAINTENANCE GUIDE:**

1. Periodically remove fountain top and clean out in-line strainer.
2. Periodically remove panel of bottle filler and clean out inline “Y” strainer.

**For Stainless steel units:**

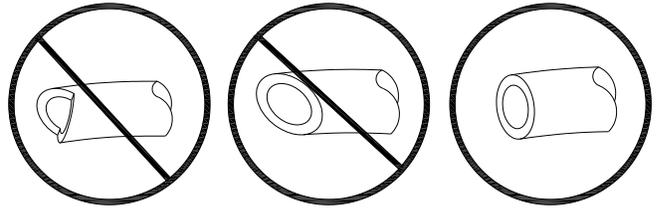
1. To Remove water spots or rust spots, stainless steel cleaner/polish on a cloth is recommended.
2. If there are stubborn spots or if you wish to treat a scratch, using synthetic abrasive general purpose pads, such as Scotch-Brite™, are recommended.
3. Apply stainless steel cleaner/ polish to the synthetic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

### **PUSH-IN FITTING INSTALLATION**

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

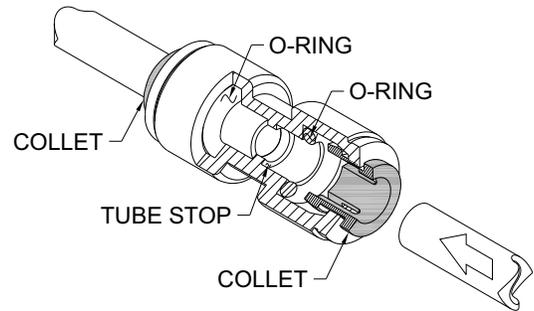
#### **TO CUT TUBE:**

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.

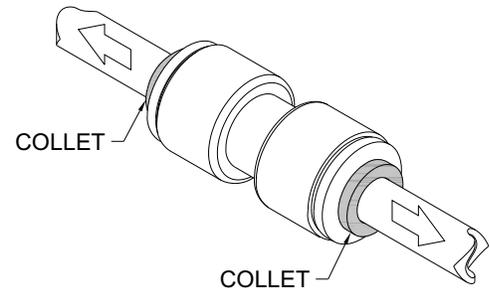


#### **INSERTING THE TUBE:**

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

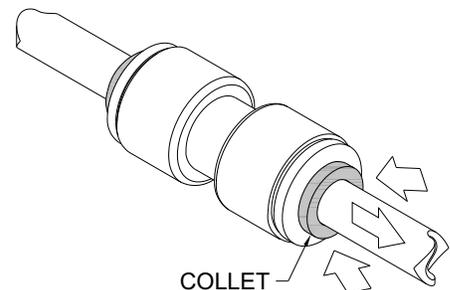


2. Pull on the fitted tubing to ensure it is secure. Tube should not come free from the fitting. Water test the connection assembly prior to leaving the site to ensure there are no leaks.



#### **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.



**CARTRIDGE REPLACEMENT/ STRAINER MAINTENANCE**

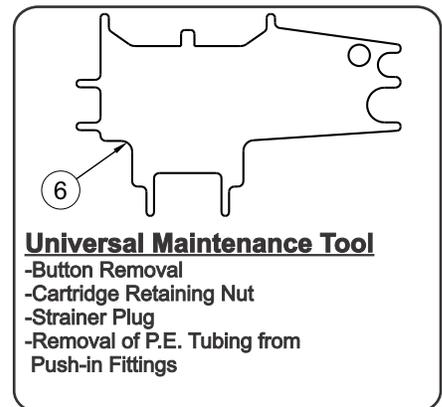
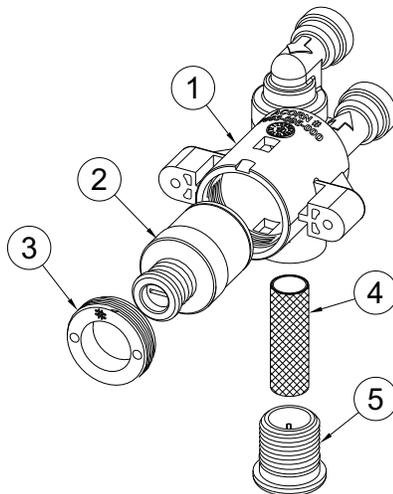
Note: Use the Universal Maintenance Tool to perform the following:

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.

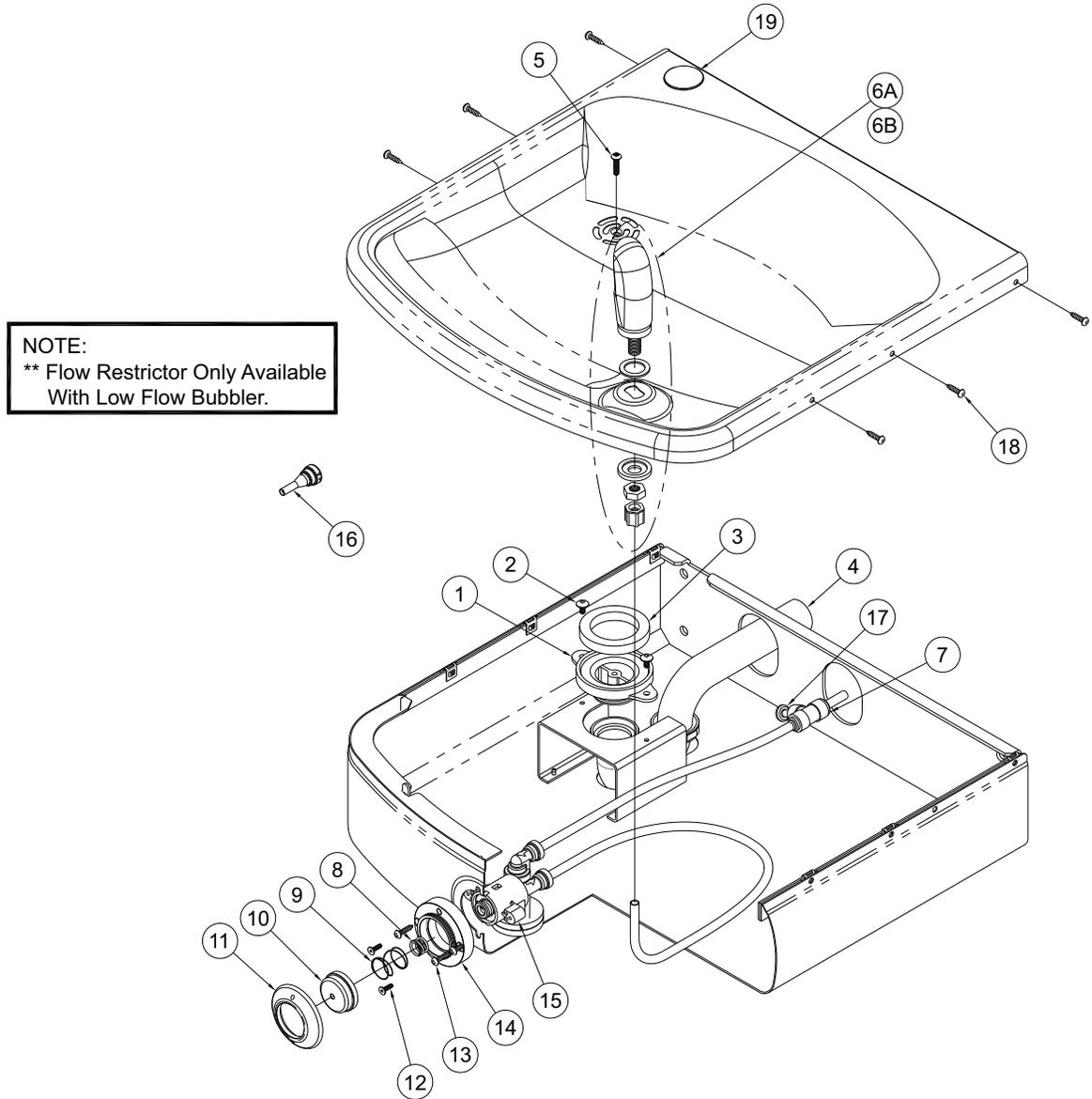
• **NOTE: STRAINER SCREEN MUST BE IN PLACE FOR WATER TO FLOW.**

**CARTRIDGE VALVE PARTS BREAKDOWN**

| ITEM # | PART NUMBER  | DESCRIPTION             |
|--------|--------------|-------------------------|
| 1      | 7003-095-002 | Valve Body Sub Assembly |
| 2      | 7000-060-000 | Valve Cartridge         |
| 3      | 7000-052-000 | Retaining Nut           |
| 4      | 7003-864-000 | Strainer, Auto Stop     |
| 5      | 7003-097-001 | Strainer Cap            |
| 6      | 7003-194-199 | Maintenance Tool        |



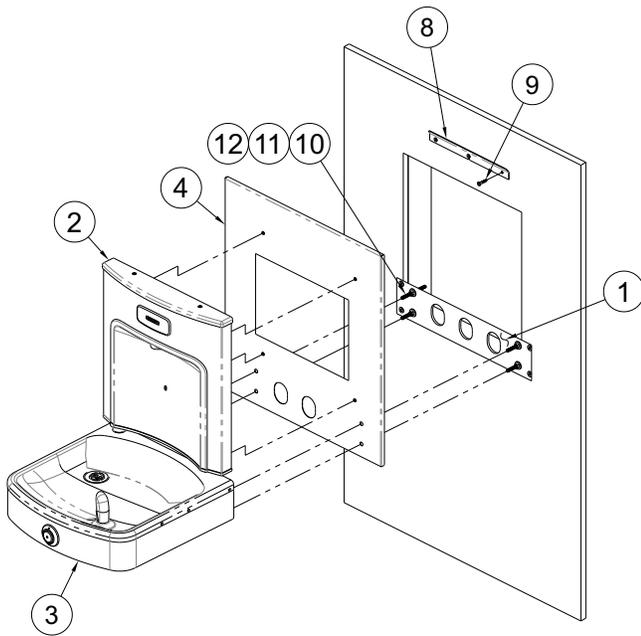
**DRINKING FOUNTAIN PARTS BREAKDOWN DRAWING**



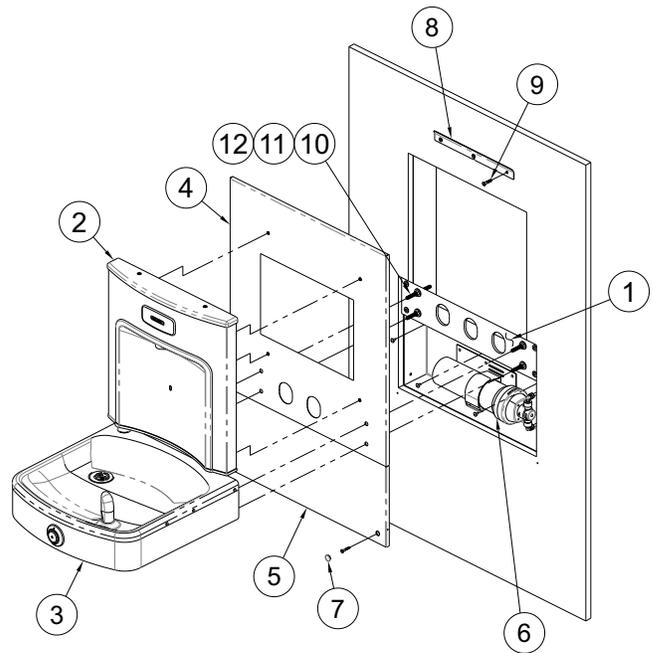
| ITEM # | PART NUMBER  | DESCRIPTION                             | ITEM # | PART NUMBER  | DESCRIPTION                             |
|--------|--------------|---|--------|--------------|---|
| 1      | 7000-005-199 | Drain Adapter                           | 10     | 7003-196-199 | Pushbutton, Chrome                      |
| 2      | 0116-016-000 | #10-32 x 3/8" Phillips Truss Head Screw | 11     | 7003-197-199 | Escutcheon, Chrome                      |
| 3      | 7000-006-000 | Flat Drain Adapter Gasket               | 12     | 0161-060-000 | #6-32 x 1/2" Socket Cap, Flat Hd Screw  |
| 4      | 7000-015-000 | 1-1/4" OD P-Trap                        | 13     | 0124-055-000 | #8 x 3/4" Phillips, Round Head Screw    |
| 5      | 0126-209-000 | #10-32 x 3/4" Torx Button Head Screw    | 14     | 7003-198-199 | Mounting Sleeve                         |
| 6A     | 7000-012-001 | Stainless Steel Bubbler Assembly        | 15     | 7003-095-001 | Valve Body Sub Assembly                 |
| 6B     | 7000-099-002 | Flexible Gray Bubbler Assembly          | 16     | 7003-093-001 | Flow Restrictor - Low-Flow Bubbler Only |
| 7      | 1895-710-000 | 1/4" Push-In Union Tee                  | 17     | 1895-715-000 | 1/4" Acetal Plug                        |
| 8      | 7003-195-000 | Spring, Overtravel                      | 18     | 0250-016-000 | #10 x 3/4" Sheet Metal Screw            |
| 9      | 7003-193-000 | Spring, Pushbutton Return               | 19     | 7003-166-000 | Round Plug                              |

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.

**DRINKING FOUNTAIN**



A191-BF

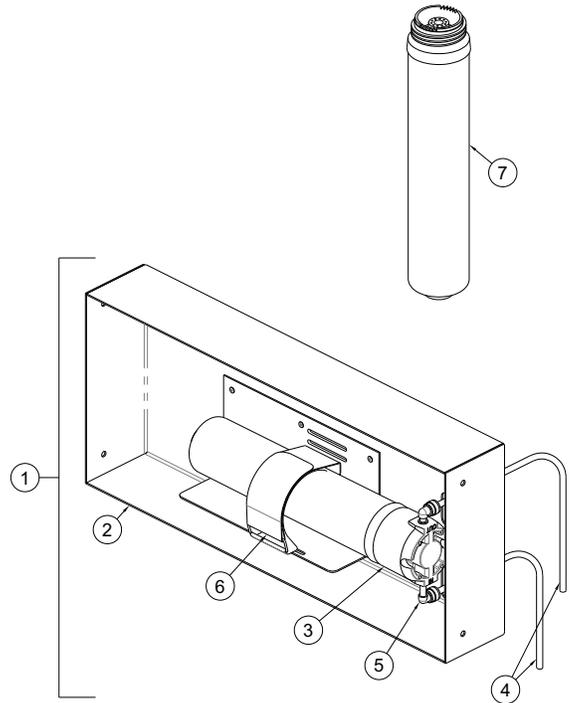


A191-BF-WF

| ITEM# | PART NUMBER  | DESCRIPTION  |
|-------|--------------|--|
| 1     | 7001-706-001 | Wall Mounting Plate  |
| 2     | BF11         | Bottle Filler with Pushbutton Operation                      |
|       | BF12         | Bottle Filler with Sensor Operation                          |
|       | BF12-BCD     | Bottle Filler with Sensor Operation & Bottle Counter Display |
| 3     | 7001-700-001 | Wide Contour Fountain  |
| 4     | 7001-725-199 | Upper Trim Panel Assembly                                    |
| 5     | 7001-726-001 | Lower Trim Panel   |
| 6     | 7001-730-001 | Filter Assembly, 1,500 Gallons                               |
|       | 7001-728-001 | Filter Assembly, 3,000 Gallons                               |
| 7     | 7001-726-000 | Round Plug   |
| 8     | 7001-709-199 | Bracket, Upper Trim Panel Support                            |
| 9     | 0250-013-000 | Wood Screw, No. 12 x 1-1/4", Flat Head, S/S                  |
| 10    | 0243-026-000 | Stud, 5/16-18 UNC x 4" Lg, Zinc Plated                       |
| 11    | 0332-006-000 | Flat Washer, 5/16 Zinc Plated                                |
| 12    | 0304-006-000 | Hex Nut, 5/16-18 UNC, Zinc Plated Steel                      |

## Optional -WF1 Water Filter

| ITEM | PART NUMBER  | DESCRIPTION                           |
|------|--------------|---------------------------------------|
| 1    | 7001-730-001 | FILTER ENCLOSURE ASSY, 1,500 GALLONS  |
| 2    | 7001-728-002 | FILTER ENCLOSURE                      |
| 3    | 7012-309-001 | WF1 FILTER, 1,500 GALLONS             |
| 4    | 2169-000-000 | 1/4" OD TUBE, 3-1/2 FEET LONG         |
| 5    | 1895-709-000 | ELBOW, 1/4" OD PUSH-IN x 1/4" OD STEM |
| 6    | 7012-319-000 | STRAP W/ BUCKLE                       |
| 7    | 7012-313-000 | REPLACEMENT CARTRIDGE                 |



## Optional -WF3 Water Filter

| ITEM | PART NUMBER  | DESCRIPTION                          |
|------|--------------|--------------------------------------|
| 1    | 7001-728-001 | FILTER ENCLOSURE ASSY, 3,000 GALLONS |
| 2    | 7001-728-002 | FILTER ENCLOSURE                     |
| 3    | 7012-333-001 | WF3 FILTER, 3,000 GALLONS            |
| 4    | 2169-000-000 | 1/4" OD TUBE, 3-1/2 FEET LONG        |
| 5    | 1895-709-000 | ELBOW, 1/4" PUSH-IN x 1/4" OD STEM   |
| 6    | 7012-319-000 | STRAP W/ BUCKLE                      |
| 7    | 7012-318-000 | REPLACEMENT CARTRIDGE                |

