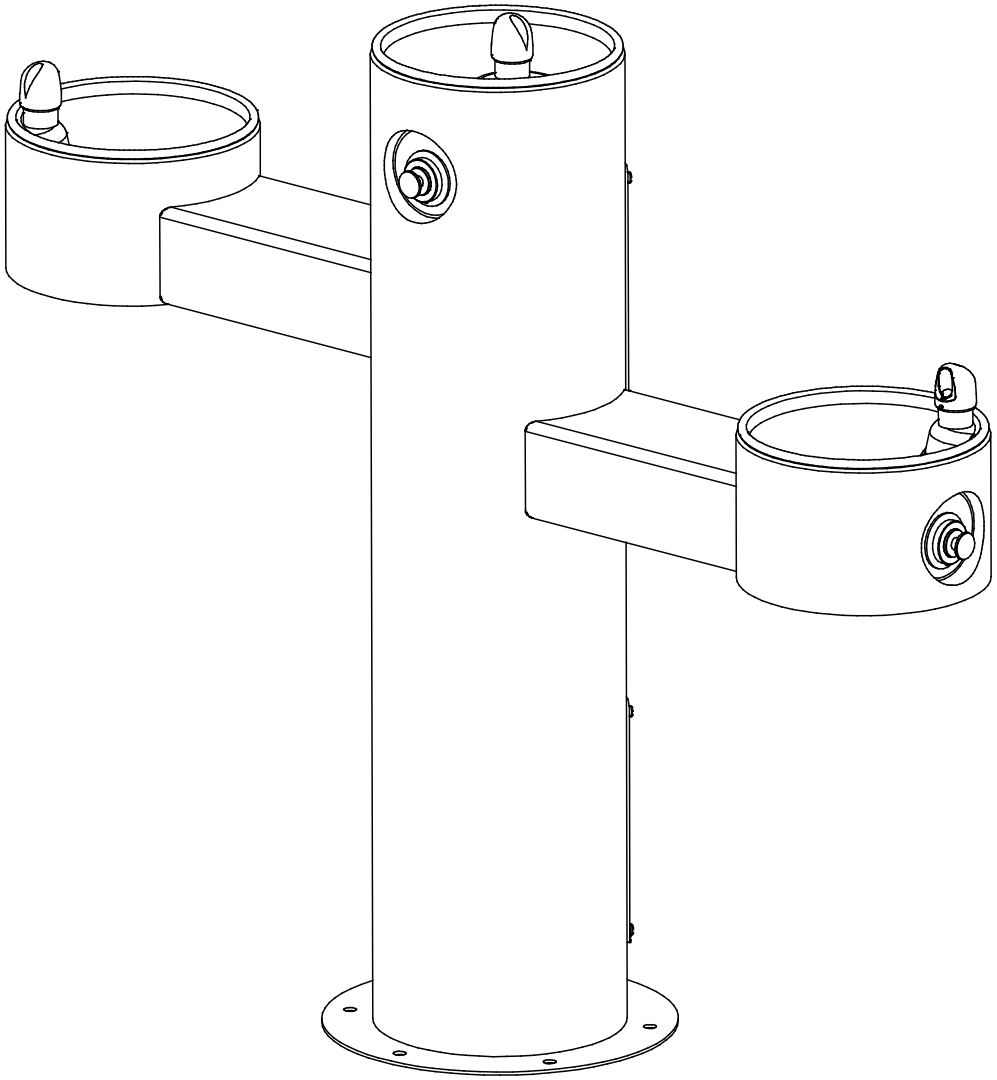
Owners Manual

Model 4430FR Tri-Level Tubular Fountain and Sanitary Freeze Resistant Triple Valve Control Assembly



INSTALLER

4430FR Fountains are among the easiest to install Fountains on the market today. To assure you install these models easily and correctly, PLEASE READ THESE SIMPLE INSTRUCTIONS BEFORE STARTING THE INSTALLATION. CHECK YOUR INSTALLATION FOR COMPLIANCE WITH PLUMBING, ELECTRICAL, AND OTHER APPLICABLE CODES. After installation, save these instructions for future reference.

INSTALLATION INSTRUCTIONS

IMPORTANT

ALL SERVICE TO BE PERFORMED BY AN AUTHORIZED SERVICE PERSON

IMPORTANT! INSTALLER PLEASE NOTE.

THE GROUNDING OF ELECTRICAL EQUIPMENT SUCH AS TELEPHONE, COMPUTERS, ETC. TO WATER LINES IS A COMMON PROCEDURE. THIS GROUNDING MAY BE IN THE BUILDING OR MAY OCCUR AWAY FROM THE BUILDING. THIS GROUNDING CAN CAUSE ELECTRICAL FEEDBACK INTO A FOUNTAIN, CREATING AN ELECTROLYSIS WHICH CAUSES A METALLIC TASTE OR AN INCREASE IN THE METAL CONTENT OF THE WATER. THIS CONDITION IS AVOIDABLE BY USING THE PROPER MATERIALS AS INDICATED. ANY DRAIN FITTINGS PROVIDED BY THE INSTALLER SHOULD BE MADE OF PLASTIC TO ELECTRICALLY ISOLATE THE FOUNTAIN FROM THE BUILDING PLUMBING SYSTEM.

IMPORTANT! INSTALLER PLEASE NOTE

* For freeze resistant valve to function properly, the valve must be installed in a non-freezing area or below frost line.
* Tubing must be cut to right length. Do not coil any excess tubing or it will cause the valve to malfunction.
* Do not pull up on lines coming out of the PVC column. This raises the water valve above the frost line. Use the nylon strap (ref. Item 10) to lift the unit to prevent damage to the valve.

General Installation Tips

1. Be sure to flush water supply line before you connect it to the inlet fitting on Freeze Resistant Valve System.
2. There is one combined drain line required for this unit that is for the drinking fountain basin and/or bottle filler drains and the valve/water supply line system. The bowl drain is the 1-1/2" PVC fitting at the bottom of the 8" PVC tube and the valve drains back up to the bowl drain through the air gap assembly (provided). Provide ample drainage. It's always better to have too much than not enough.
3. The column (8" PVC tube) must remain vertical. Be sure it remains vertical when backfilling the excavating trench.
4. When the concrete pad, for mounting the fountain is poured, be sure to allow adequate space around the top of the column for servicing the valve.
5. We recommend that the top of the column be flush or slightly above the top height of the concrete pad.
6. You should test the unit before you backfill. Simply blow on the clear, small diameter tubing. A steady stream should flow from the braided tubing line. When air pressure is removed from the clear tubing the water stream should stop.
7. Once you have tested the valve, backfilled the hole and poured the concrete mounting pad you are ready to set the fountain. After bolting the fountain in place connect the air control valve tubing, supply water tubing and drain lines. The water supply line must have a straight run from the basin bubbler down to the control valve. If a straight run is not maintained water will become trapped and freeze leaving the unit inoperable. Test the fountain again. If it fails to work, the air control line may be kinked or connected improperly. Be sure to keep water out of the air control line.
8. These products are designed to operate on 20 PSI to 105 PSI supply line pressure. If inlet pressure above 105 PSI, a pressure regulator must be installed in the supply line. Any damage caused by reason of connecting this product to supply line pressure lower than 20 PSI or higher than 105 PSI is not covered by warranty.

INSTALLATION INSTRUCTIONS FOR INSTALLING SANITARY FREEZE TRIPLE VALVE CONTROL ASSY.

1. Prepare trench for water supply and waste drain lines (if required by local codes). The hole should be deep enough to accommodate the PVC column and 5 cubic feet of porous fill (large broken rock). Additional porous fill may be required due to local ground conditions. (See Site Preparation Detail below).
2. Lay drain lines and water supply lines. Provide service shut off valve for maintenance. Flush the water supply line before attaching to the shut off valve.
3. Set PVC column in excavating pit. Connect the water supply line to the inlet on the PVC column. Remove valve assembly from the PVC column by carefully pulling up on the nylon strap. Pressure test the valve assembly for leaks. Check operation of the water valve by blowing on the small clear diameter tubing. A steady stream of water should flow from the braided tubing. After releasing air pressure from the small clear tubing the water stream should stop.
4. Replace the water valve into the PVC column. Make sure the supply hose coils into the bottom of the PVC column without any kinks. Cap the PVC column, protect the ends of the connecting tubes and backfill the trench. Keep the PVC column vertical at all times.
5. Form the concrete mounting pad and locate the fountain 3/8" minimum fasteners (not included) in the proper position. (Refer to Rough-in for correct location of fasteners.) (Fasteners not included). Pour concrete and finish. Be sure to keep concrete away from the top of the PVC column to allow removal of PVC cap to allow for future service. Let concrete set 4 hours minimum before mounting fountain.
6. Double check that the water valve is positioned fully at the bottom of the PVC column. Install insulation into the PVC column and push down onto the top of the water valve.
7. Mount the fountain onto the 3/8" minimum fasteners. (Fasteners not included). Level and shim fountain as required.
8. Connect the drain line, water line and air control lines. Excess lengths should be trimmed from the tubing. The water supply line must be positioned for positive drain back out of the fountain and down through the water valve. **Any water allowed to be trapped above the frost line will freeze leaving the unit inoperable.** Do not pull up on the connection lines as this could raise the valve above the frost line.
9. Check for proper operation by using fountain push buttons. If the valve does not work properly check for leaks or kinks in the air control line.
10. After insuring proper operation reassemble fountain. Installation of your fountain is now complete.

SUGGESTED SITE PREPARATION DETAIL FOR THE 4430FR FTN. WHEN USING THE SANITARYFR3 VALVE

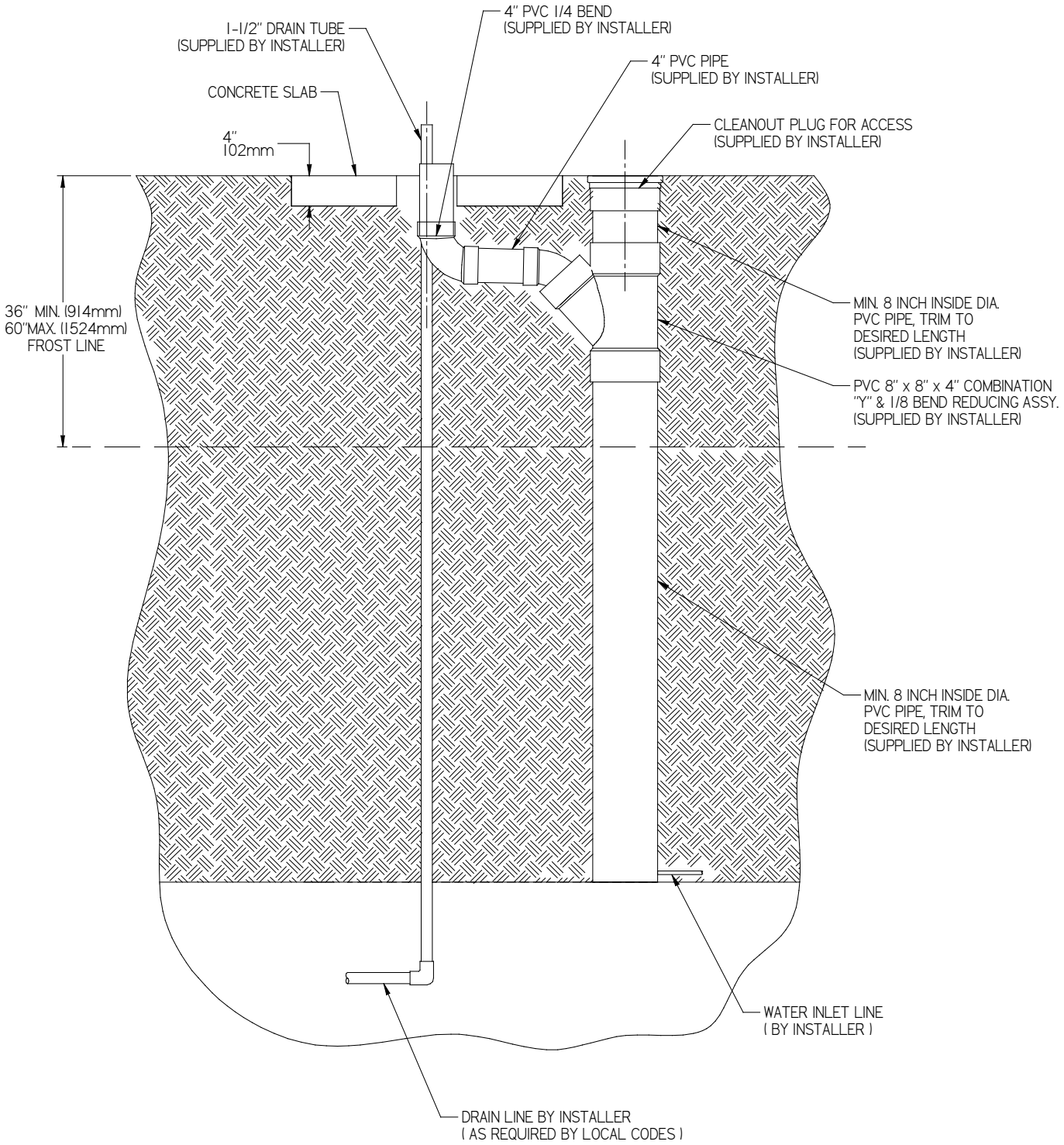


FIG. 1

SUGGESTED SITE PREPARATION DETAIL FOR THE 4430FR FTN. WHEN USING THE SANITARYFR3 VALVE

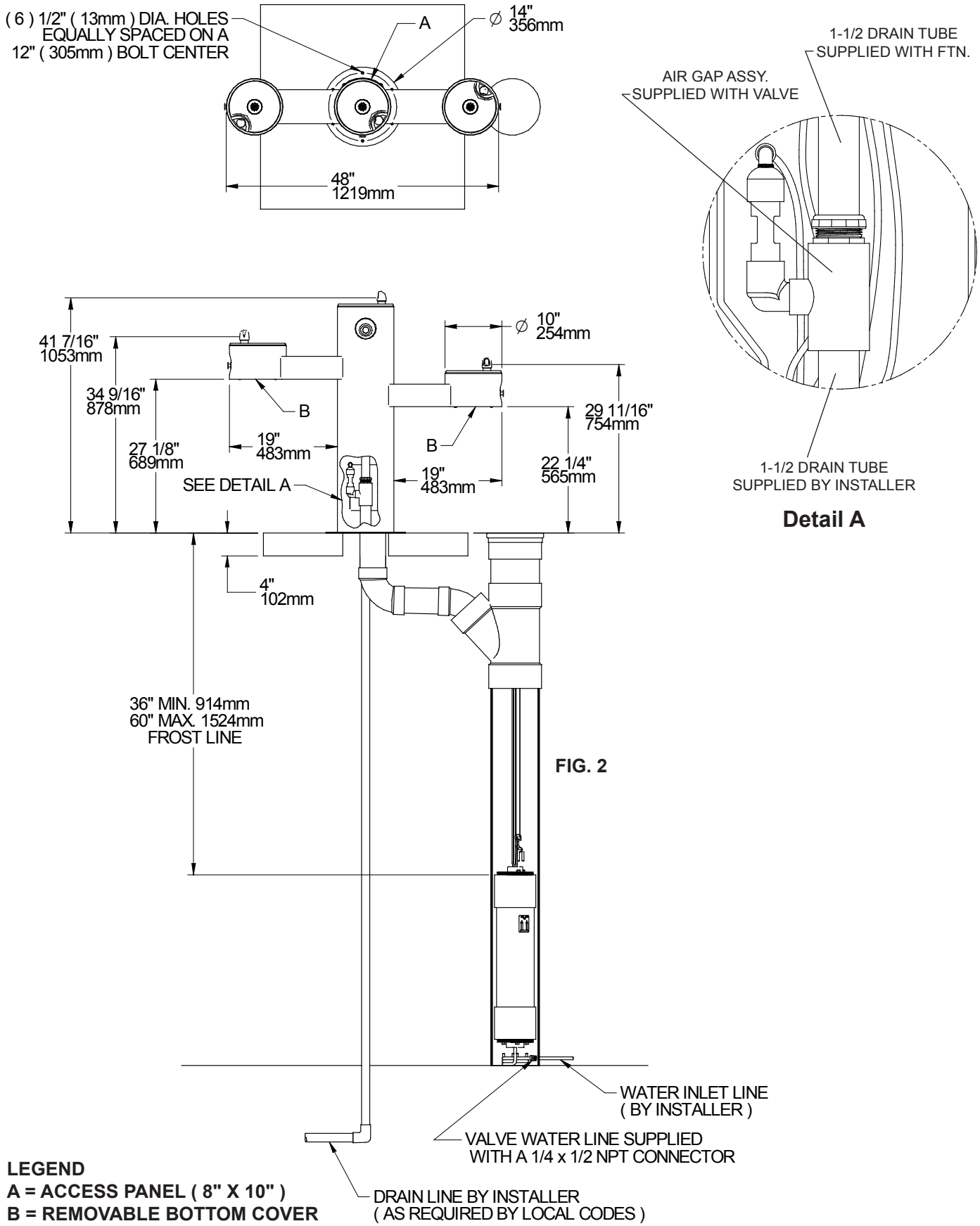


FIG. 2

LEGEND
A = ACCESS PANEL (8" X 10")
B = REMOVABLE BOTTOM COVER

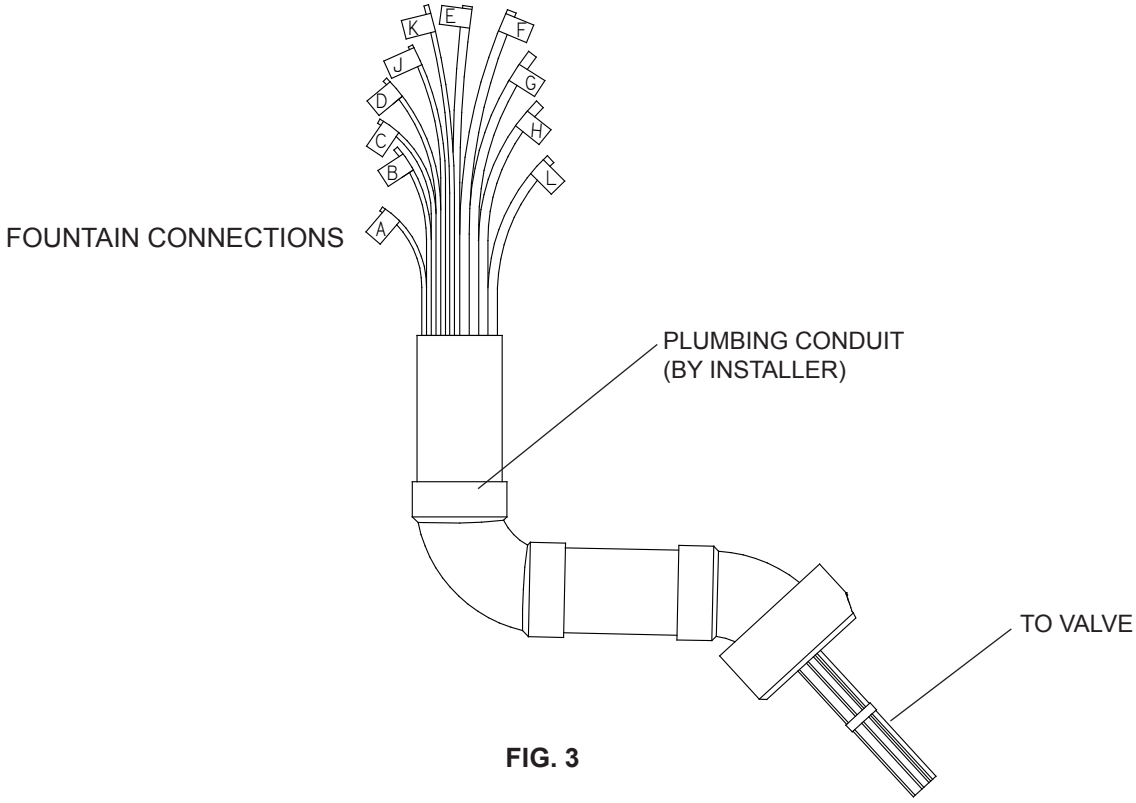
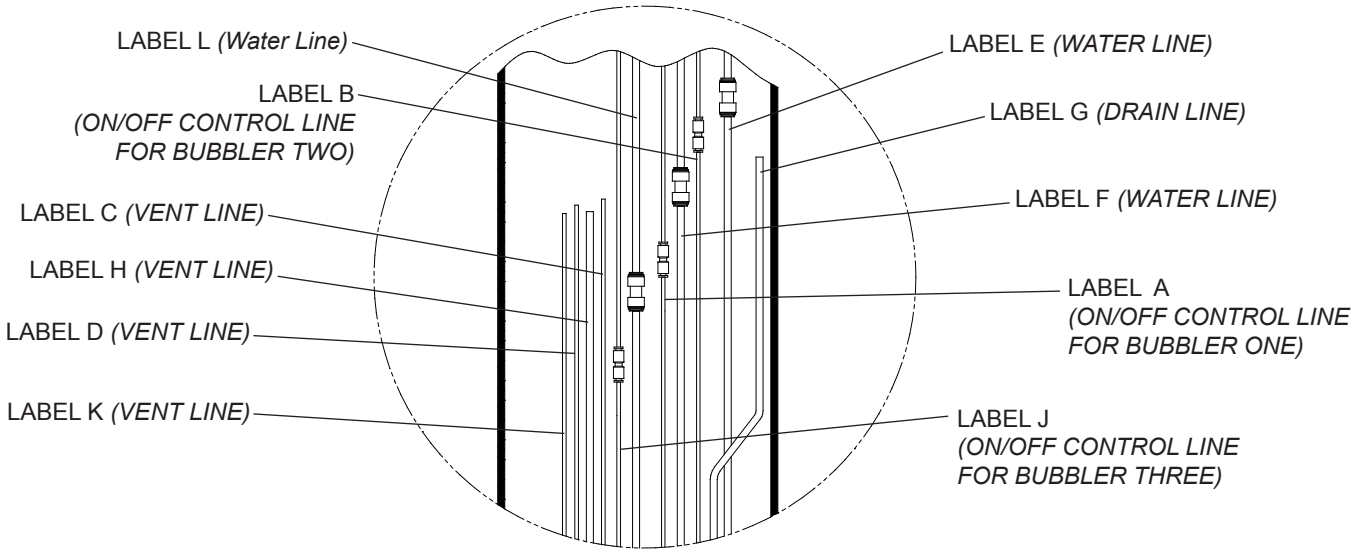


FIG. 3

INSTRUCTIONS FOR CONNECTING TUBES FROM VALVE TO FOUNTAIN(S)

Step 1 - Insert the 1/8” O.D. tube(s) (Labeled A, B & J) into the connector(s) (provided with fountain). Insert the 1/8” O.D. tube(s) coming from the fountain(s) push button actuator(s) into the connector(s). Trim any excess length.
Step 2 - Secure the 1/8” O.D. tube(s) (Labeled C, D & K) to the waste line assembly. This line is a vent line and should be open to the air.
Step 3 - Insert the 1/4” O.D. tube(s) (Labeled E, F & L) into the 1/4” union(s) (provided with valve assembly). Insert the 1/4” O.D. water lines coming from the fountain(s) into union(s). Trim any excess length.
Step 4 - Insert the 1/4” O.D. tube (Labeled G) into the air gap assembly.
Step 5 - Secure the 1/4” O.D. tube (Labeled H) to the waste line assembly. This line is a vent line and should be open to the air.



FOUNTAIN CONNECTIONS

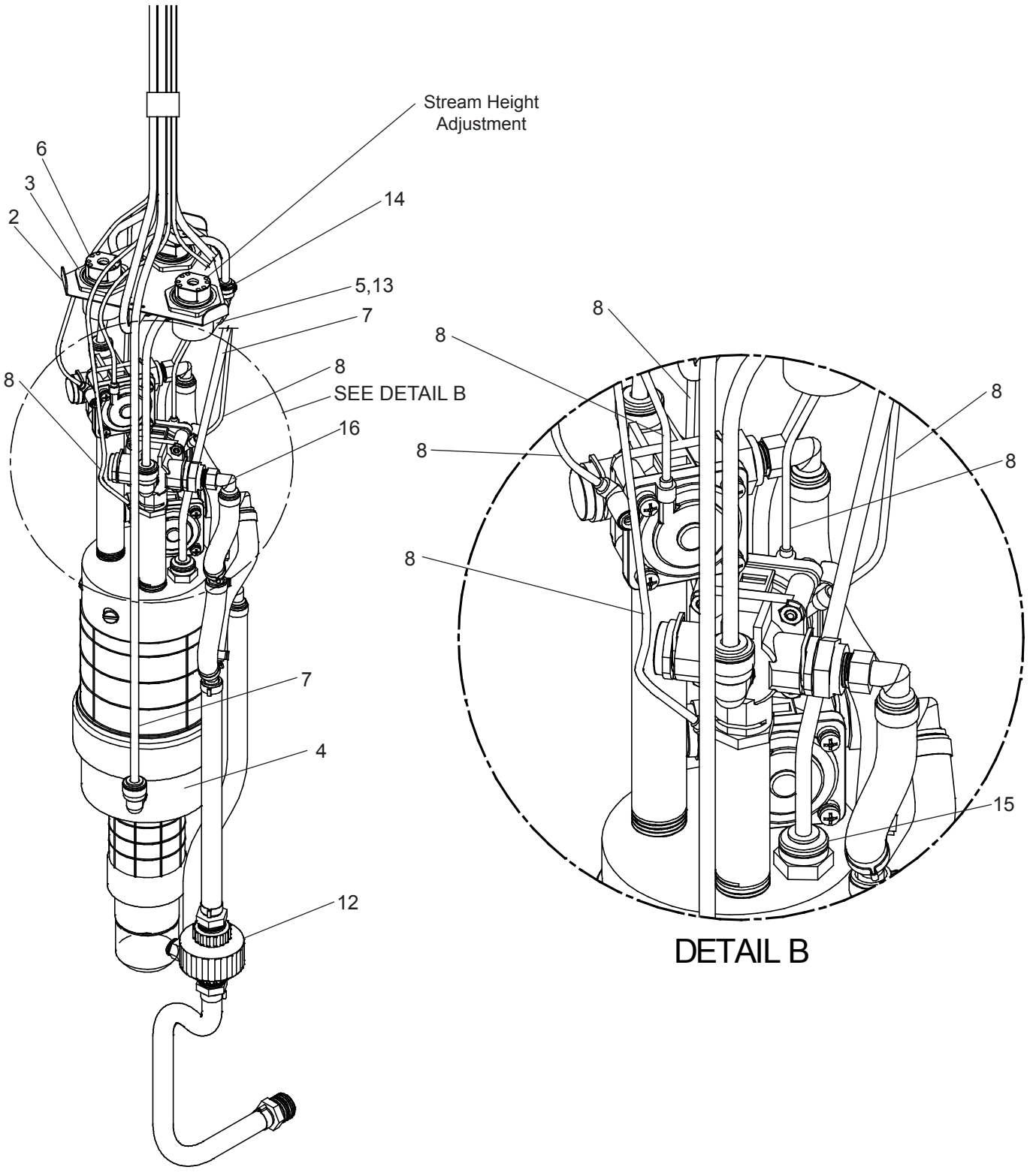

Stream Height Adjustment
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5,13
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SEE DETAIL B
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8
8
8
15
DETAIL B

FIG. 4

The Following Items are included with the SanitaryFR3 Valve

PARTS LIST		
ITEM NO.	PART NO.	DESCRIPTION
1	110175443890	Hex Nut - 3/8-16
2	1000003964	Bracket - Regulator Mtg (Serv)
3	40045C	Hex Nut - 1-5/16
4	1000003963	Triple Valve
5	50986C	Regulator Holder
6	56082C	Regulator Nut
7	56092C	Poly Tubing - 1/4” (Cut To Length)
8	56123C	Poly Tubing - 1/8” (Cut To Length)
9	56185C	Canister
10	75653C	Nylon Strap - 6 ft.
11	1000003970	Kit - Air Gap Assy.
12	56218C	Fitting - 1/2” Union w/Strainer
13	98678C	Kit - 1.0 GPM Regulator
14	70817C	Fitting - Elbow 1/4 Stem x 1/4 Tube
15	70828C	Fitting - Connector 1/4 x 1/4 NPTF
16	75639C	Fitting - Elbow 1/4 x 1/4 NPTF
17	75652C	U-Bolt
NS	70683C	Fitting - Union 1/4

NS = Not Shown

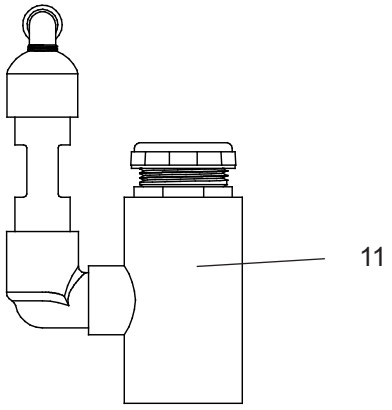


FIG. 5

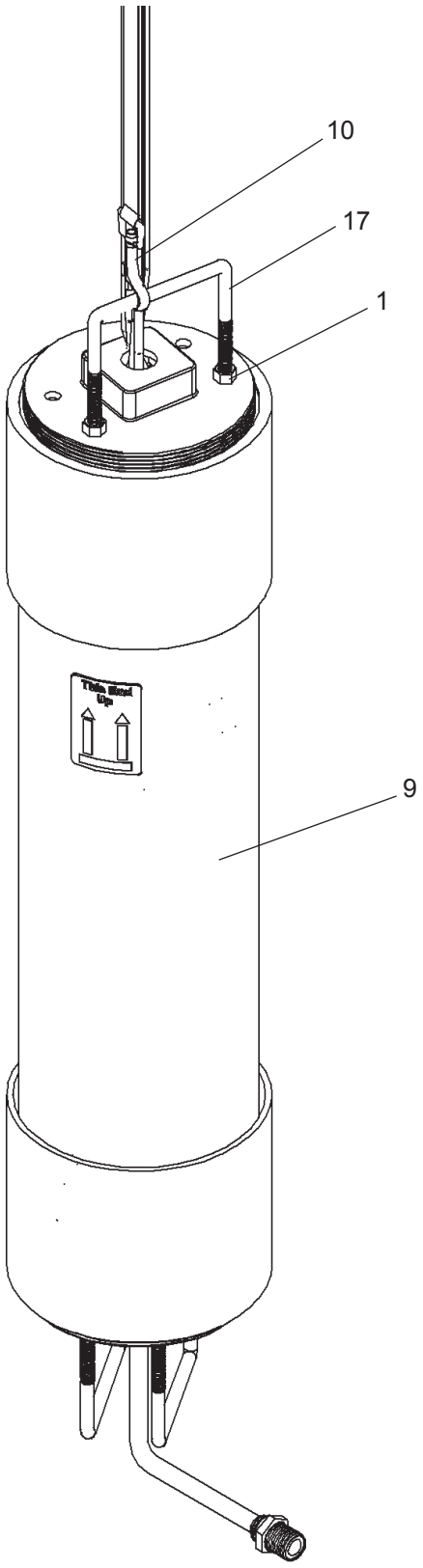
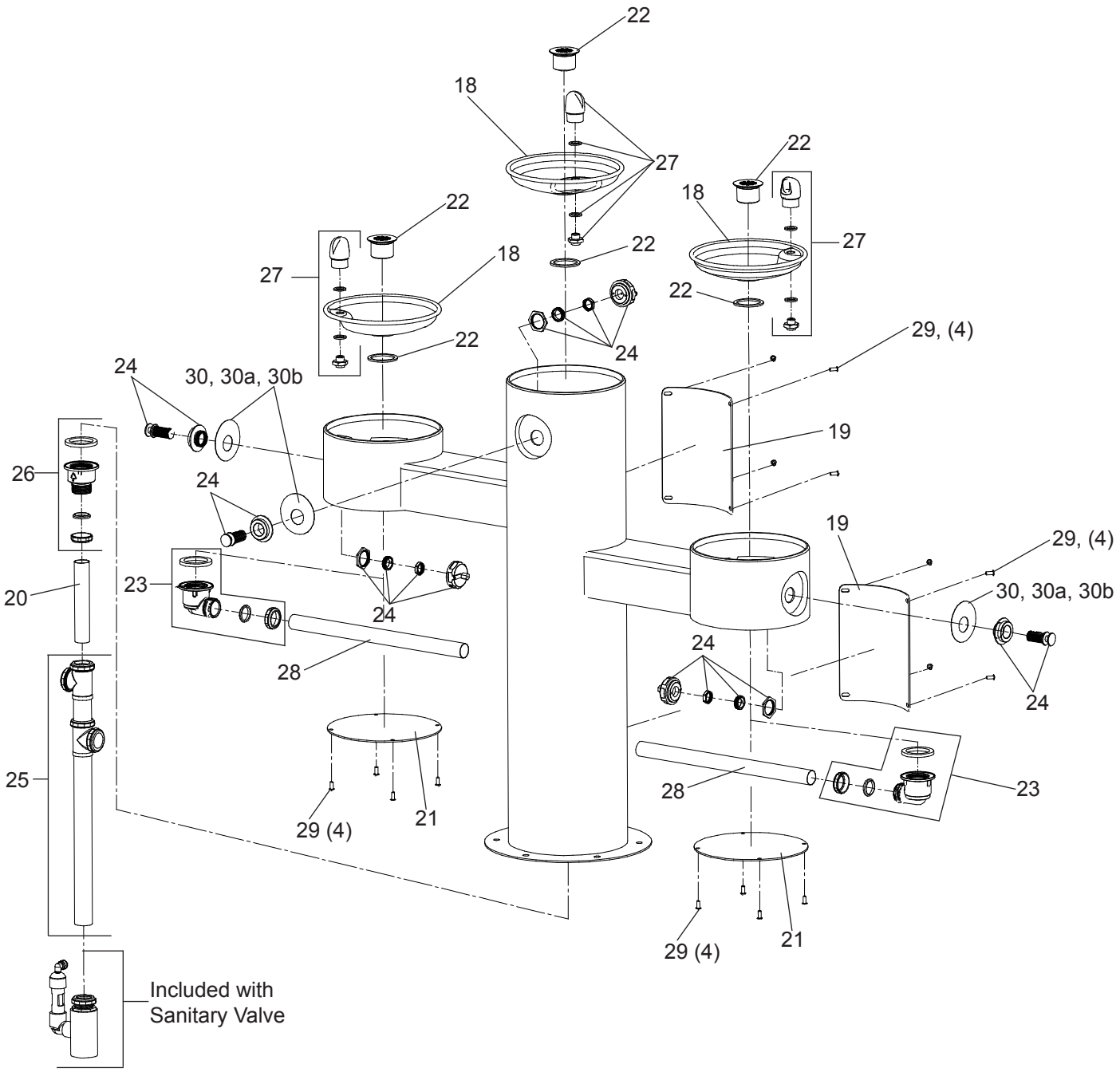


FIG. 6


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30, 30a, 30b
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19
29, (4)
20
23
24
30, 30a, 30b
24
28
24
25
29 (4)
21
28
23
29 (4)
21
Included with
Sanitary Valve

TROUBLESHOOTING AND MAINTENANCE

Troubleshooting

Insufficient Bubbler Flow: Check that the shut-off valve is wide open. Verify minimum 20 PSI supply pressure. Clean inlet strainer screen located in the valve body. Clean rubber orifice in flow control located below frost line in bushing between barb fitting and valve.

No Flow: Check for leaks in the air tubing going from the push button to the valve. Make sure the air tubing compression nut is hand tight. Disconnect air tube from push button. Place finger over air outlet. Push button to test diaphragm. Tighten diaphragm cap screws. Replace diaphragm if necessary.

Continued Insufficient or Varied Height of Bubbler Flow:

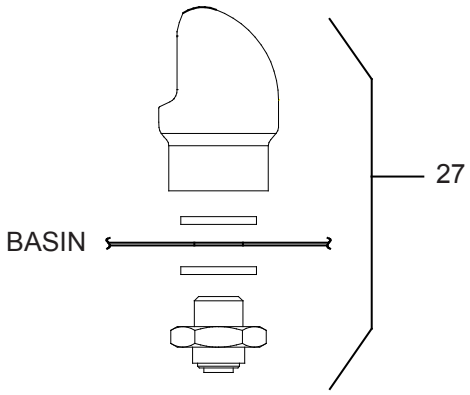
- Check for kinks in the tubing.
- Remove the valve assembly from the PVC column by carefully pulling up on the strap and connecting tubing at the same time. Check stream height from the bubbler. Stream height is factory set at 35 PSI. If supply pressure varies greatly from this, adjust the screw on the regulator (Item 13, Fig. 4, Page 6). Clockwise adjustment will raise stream and counter-clockwise adjustment will lower stream. For best adjustment stream height should be approximately. 1-1/2" (38mm) above the bubbler guard. Replace the valve into the PVC column. Make sure the supply hose coils into the bottom of the PVC column without any kinks and double check that the valve is positioned fully at the bottom of the PVC column.

Continuous Bubbler Flow: Insure that push button is not obstructed and springs back to normal position. Remove four screws which secure plastic diaphragm block to valve body. Pull plastic and rubber diaphragm assembly out of valve body. Locate tiny hole in rubber diaphragm just under lip of plastic part. Clean debris from this hole. Inspect valve seat for grooves. If valve seat was OK and diaphragm hole was free from debris, inspect rubber button located at center of floating steel disc in valve diaphragm block assembly. If button is worn, turn disc over or replace it. If diaphragm and seats are in good condition, stretch spring slightly. Spring is located behind floating stainless steel plate. Insure that air bleed port on valve plastic block assembly is not plugged.

The following items are included with the 4430FR Fountain

PARTS LIST		
ITEM NO.	PART NO.	DESCRIPTION
18	28467C	Basin
19	1000003812*	Panel - Access
20	40551C	Tailpipe - 1-1/4" X 6-7/8"
21	1000003813*	Cover-Bottom
22	0000000325	Kit - Drain Plug/Gasket
23	98684C	Kit - Drain/Elbow/Gasket/Nut/Washer
24	98901C	Kit - FR Push Button/Sleeve/Nuts
25	45734C	Tube-Drain
26	98683C	Kit - Plastic Drain
27	97446C	Kit - VR Bubbler
28	66346C	Tube - Drain
29	97247C	Kit - VR Torx Screws/Bit
30	28703C	Blank Nameplate Insert (only)
30a	28703C-LK	LK4430FR Nameplate Insert (only)
30b	28091C-HT	4430FR Nameplate Insert (only)
NS	75565C	Fitting - Double Male Connector
NS	56092C	Poly Tubing - 1/4" (Cut To Length) - To Bubbler
NS	56123C	Poly Tubing - 1/8" (Cut To Length) - To Actuator

*select color option to complete part number
NS = Not Shown



Vandal-Resistant Bubbler Detail FIG. 8

FINISH COLOR OPTIONS – *Choose color option to complete your model number, add as suffix example: 4430FRK**EVG

Matte finish: ☐ Evergreen = **EVG**

Gloss finish:

☐ Beige = **BGE**	☐ Gray = **GRY**	☐ Terracotta = **TER**
☐ Black = **BLK**	☐ Orange = **ORN**	☐ White = **WHT**
☐ Blue = **BLU**	☐ Purple = **PUR**	☐ Yellow = **YLW**
☐ Brown = **BRN**	☐ Red = **RED**	

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