

A131-VR / A1312-SO Series
Wall Mounted Drinking Fountain with Vandal Resistant Buttons and Sensor Operated



A131400S-VR



A131400S-SO

*** U.S. DESIGN PATENT D545,607 (Bowl Design)*

A131400S-VR / A131400F-VR & A131400S-SO / A131400F-SO

**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.

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**COMPLIES WITH
STANDARDS**



NSF/ANSI 61



Federal
Public Law
111-380
(No Lead)

murdock[®]
SINCE 1853

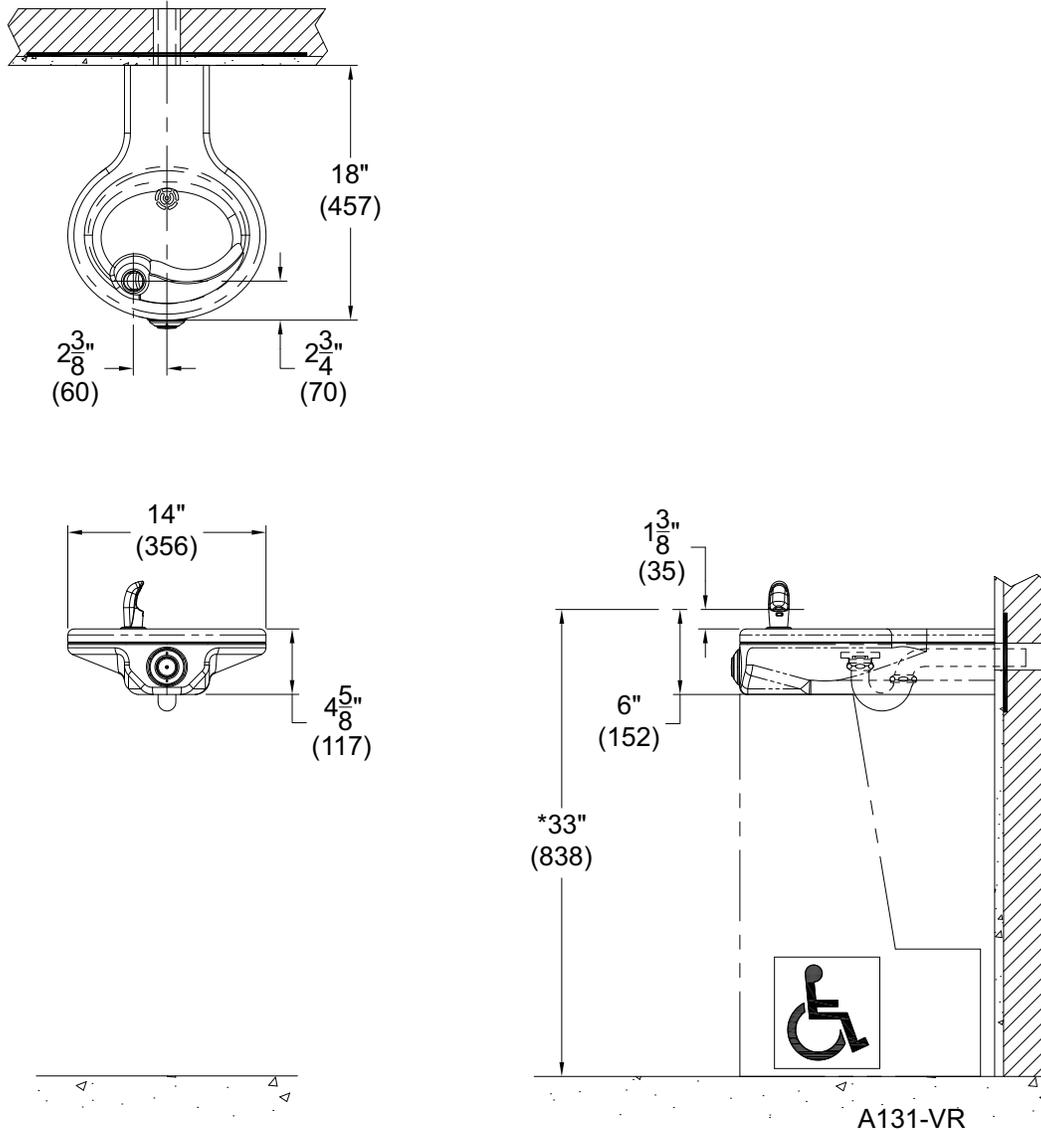
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ROUGHING-IN AND DIMENSIONAL DRAWING

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

A131400S-VR Wall Mounted Drinking Fountain

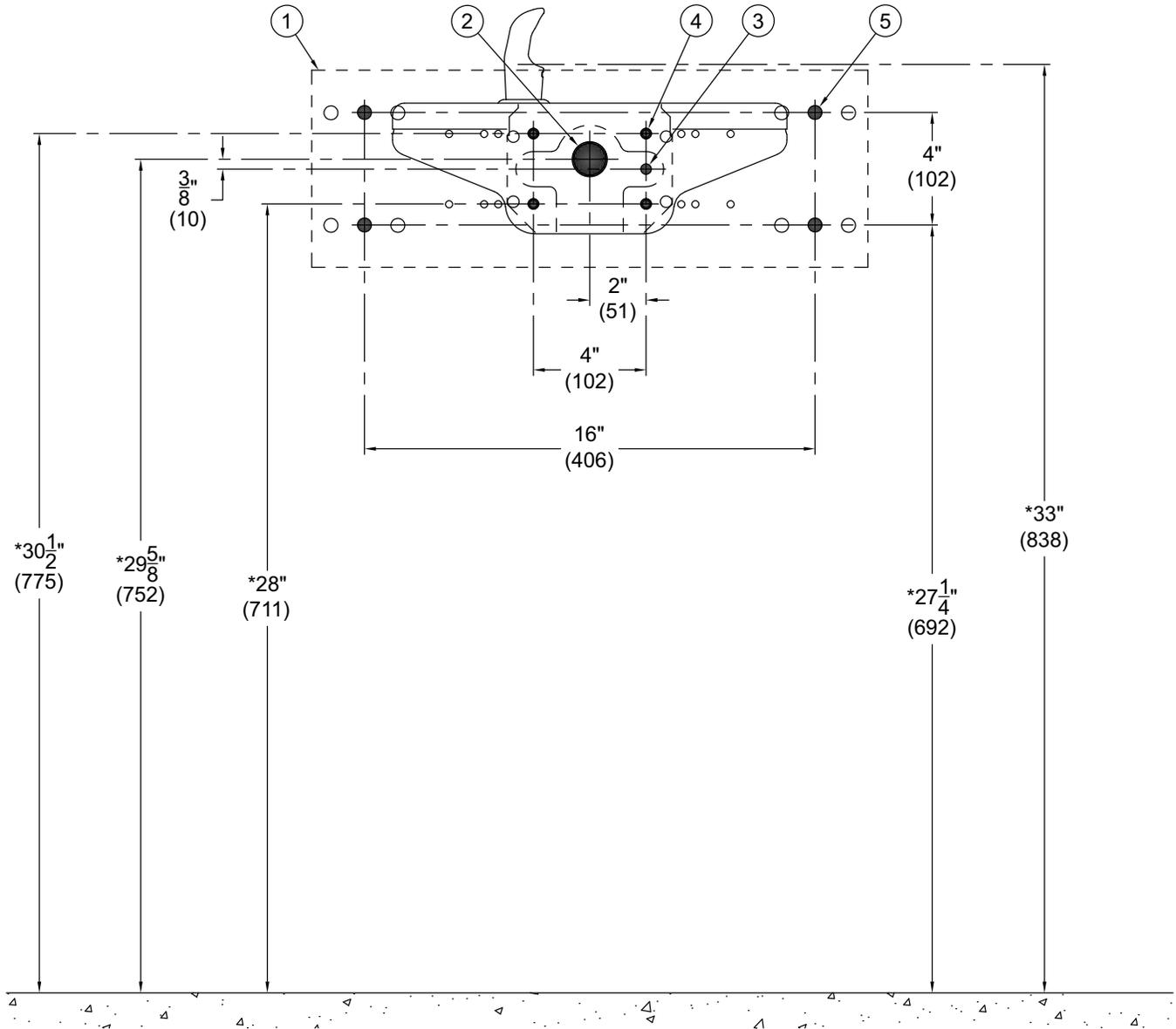


GENERAL NOTES:

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

NOTES: Dimensions shown for Adult ADA compliant installation. For Child ADA compliant parallel approach installation, decrease height of installation by 3 inches. Provide clear floor space as required. Adjust vertical dimensions as required to comply with federal, state, and local codes.

A131400S-VR / A131400S-SO Wall Mounted Drinking Fountain Rough-Ins



- ① PROVIDED WALL MOUNTING PLATE
- ② 1-1/4" O.D. WASTE OUTLET
- ③ 3/8" O.D. SUPPLY INLET

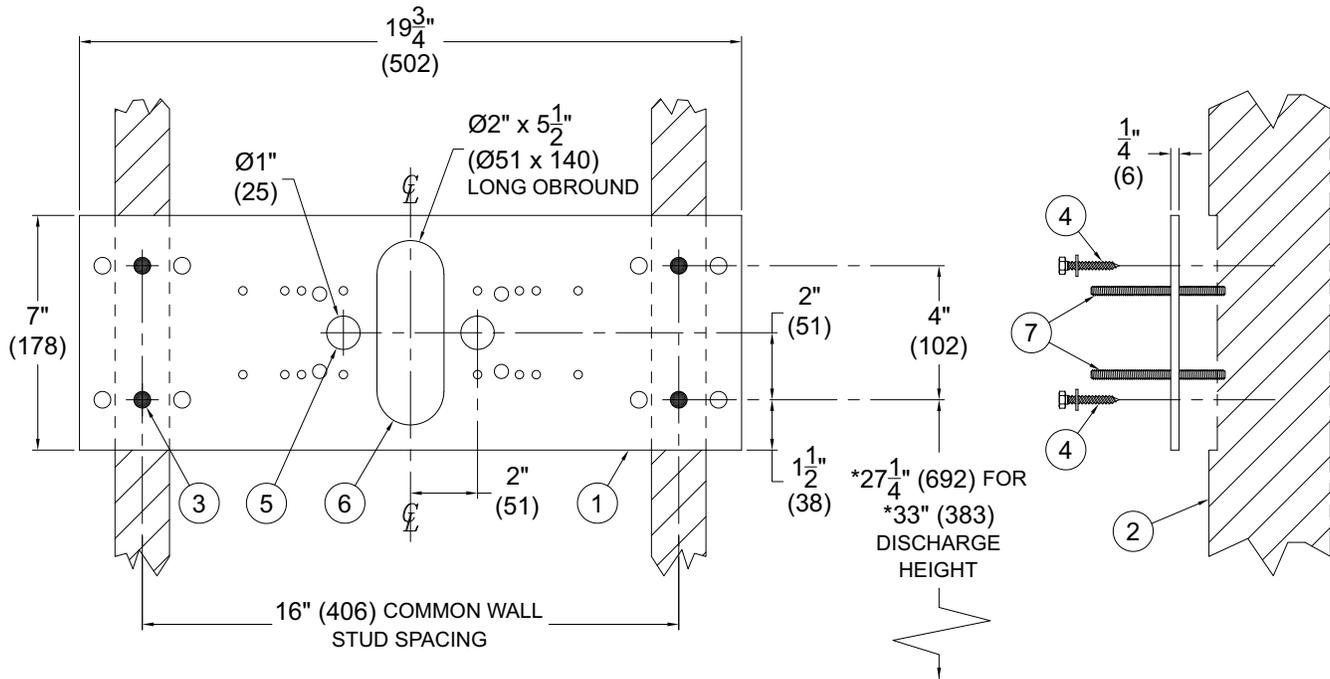
- ④ 5/16-18 UNC FIXTURE MOUNTING POINTS
- ⑤ Ø1/2" HOLES FOR MOUNTING PLATE

NOTES:

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

DIMENSIONAL DRAWING

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



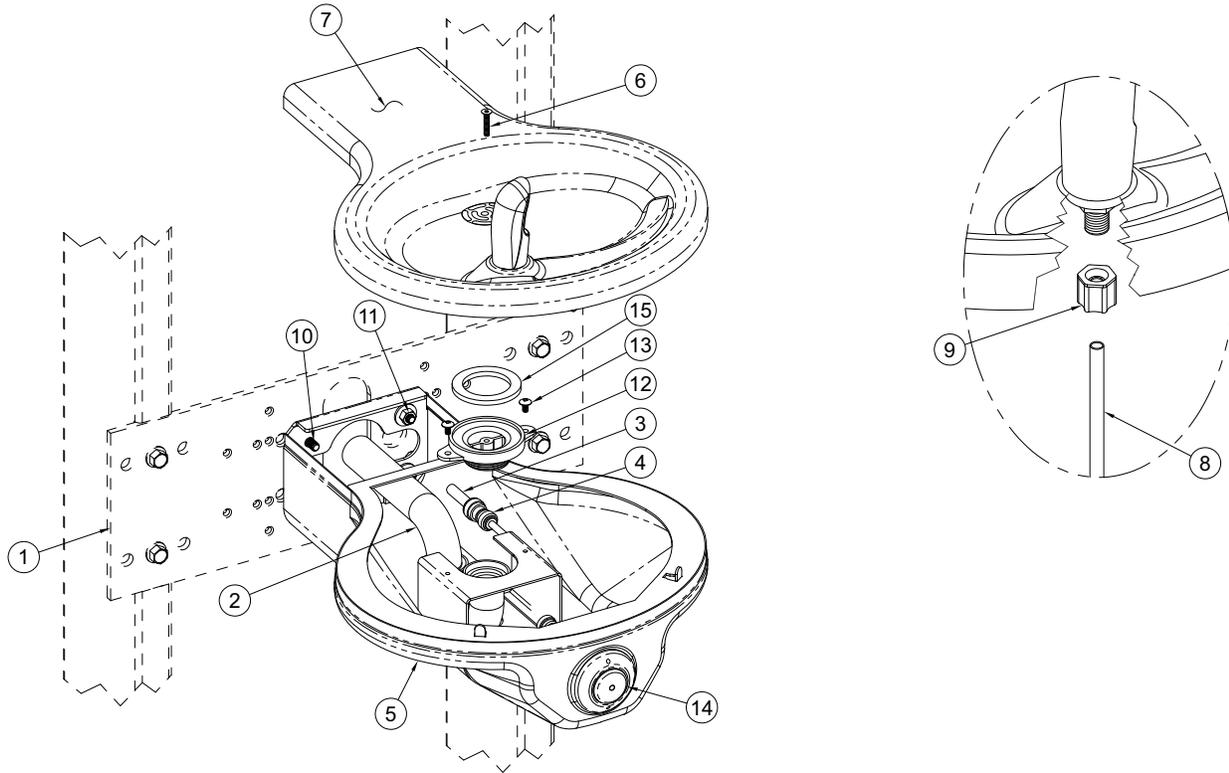
INSTALLATION INSTRUCTIONS:

- A- PLATE (1) INTENDED TO BE RECESSED FLUSH WITH SUPPORT FRAMING (2) PROVIDED BY INSTALLER. FRAME & BLOCK OUT SUPPORT USING DIMENSIONS SHOWN. FRAME SHOULD SUPPORT 300 LBS MINIMUM. (PLATE MAY BE MOUNTED ON FINISHED WALL, PROVIDED FRAME SUPPORTS 300 LBS MINIMUM.)
- B- MOUNTING PLATE (1) IS 1/4" THICK AND INCLUDES (18) 1/2" DIAMETER PUNCHING FOR ANCHORING HARDWARE BY OTHERS.
- C- STRIKE A LEVEL HORIZONTAL CHALK LINE TO LOCATE BOTTOM MOUNTING HOLES (3). REFERENCE DISCHARGE HEIGHT REQUIREMENTS FOR YOUR MODEL AND FACILITY TO DETERMINE CORRECT HEIGHT AT FINISHED FLOOR (AFF).
- D- AFTER POSITIONING PLATE CORRECTLY, FIX PLATE TO WALL USING APPROPRIATE, INSTALLER PROVIDED ANCHORING HARDWARE (4).
- E- MAKE UP APPROPRIATE SUPPLY (5) AND WASTE (6) ROUGHS THROUGH MOUNTING PLATE OPENINGS. A STRAIGHT SUPPLY STOP IS RECOMMENDED.
- F- LOCATE 5/16" THREADED STUDS MOUNTING HARDWARE AND THREAD STUDS (7) THRU PLATE SO THAT A MINIMUM OF 1-1/4" OF THREAD PROJECTS BEYOND THE FINISHED WALL MATERIAL.
- G- PROTECT THREADED STUDS (7), SUPPLY (5) AND WASTE (6) ROUGHS WHILE FINISHING WALL.

NOTES:

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

INSTALLING ONTO WALL:



- A- REFER TO PAGE (4) TO INSTALL PROVIDED WALL MOUNTING PLATE (1).
- B- ROUGH-IN WASTE OUTLETS AT DIMENSIONS SHOWN PAGE (3) FOR 1-1/4" OUTER DIAMETER PLAIN END P-TRAP (2).
- C- ROUGH-IN WATER SUPPLY AT DIMENSIONS SHOWN ON PAGE (3). THE 1/4" NOMINAL (3/8" O.D.) x 4" LONG COPPER TUBES (3) CONNECTED TO PUSH-IN UNION (4) (SHOWN) OR IN-LINE STRAINER PROVIDED WITH SENSOR OPERATED UNITS. STRAIGHT STOP RECOMMENDED ON SUPPLY PROVIDED BY INSTALLER.
- D- CAREFULLY REMOVE FIXTURE (5) AND COMPONENTS FROM THE PACKAGING PREVENTING SCRATCHING AND DAMAGE.
- E- REMOVE SCREW (6) TO REMOVE FOUNTAIN TOP (7) LIFTING AT THE FRONT & PULLING FORWARD. DISCONNECT TUBING (8) FROM BUBBLER BY UNSCREWING FERRULE NUT (9) AND SET TOP (7) ASIDE WHERE THEY WILL NOT GET DAMAGED.
- F- SLIDE FIXTURES (5) OVER STUDS (10) FROM MOUNTING PLATE (1) & SECURE WITH NUTS AND WASHERS (11).
- G- ASSEMBLE P-TRAP (2) TO DRAIN ADAPTER (12). ASSEMBLE TO UNITS WITH PHILLIPS SCREWS (13). MAKE-UP 1-1/4" O.D. WASTE CONNECTION.
- H- FLUSH WATER SUPPLIES OF ALL DEBRIS PRIOR TO CONNECTING TO FIXTURE.
- I- CONNECT WATER SUPPLY TO 1/4" NOMINAL COPPER TUBE (3). STRAIGHT SUPPLY STOP RECOMMENDED.
- J- RE-ATTACH TUBING (8) TO BUBBLER WITH FERRULE NUT (9). TEST OPERATION OF BUBBLER BY DEPRESSING BUTTON (14). REFERENCE PAGE (7) TO ADJUST FLOW RATE AS REQUIRED. CHECK ALL CONNECTIONS AND WASTE PIPING FOR LEAKS. CORRECT IF PRESENT.
- K- SET GASKET (15) ON DRAIN ADAPTER (12). RE-INSTALL TOP (7) ON HOUSING (ENGAGE THE BACK CLIP ON THE UNIT) AND SECURE WITH SCREW (6).

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 (Wf1), 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, drain pipe and gravel drain well. (See rough-in details)
5. Completely flush water supply lines of all foreign debris, before connecting to the fixture.

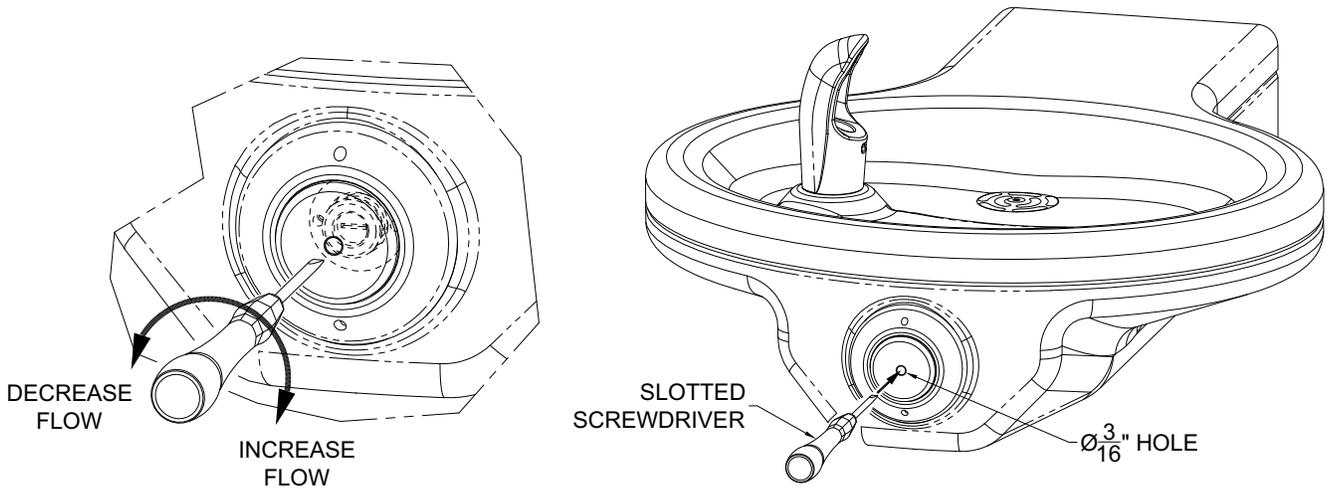
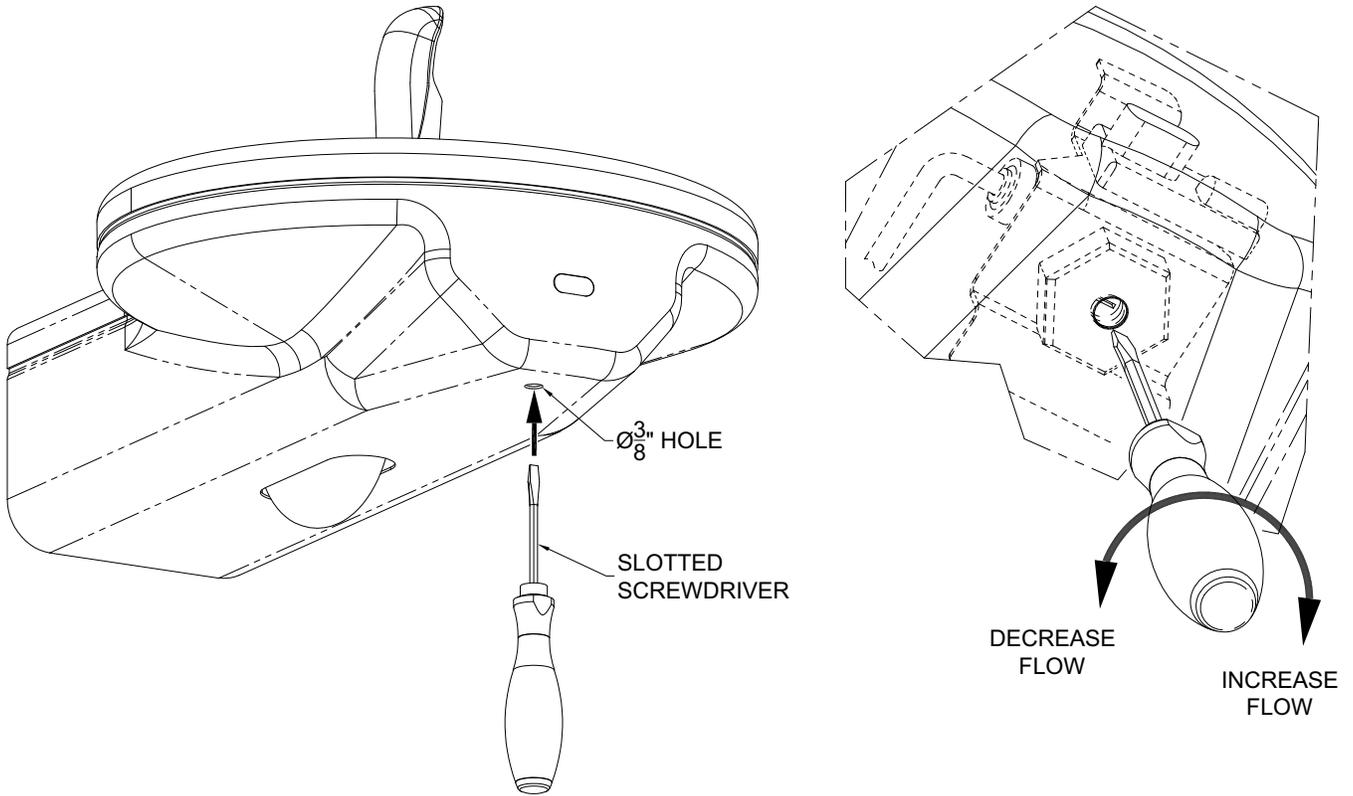
DRINKING FOUNTAIN INSTALLATION:

1. Secure Mounting Plate (A0000000-MP1) to stud frame or wall using appropriate mounting hardware, (Provided by Installer).
2. Install the four 5/16"-18 threaded studs into the Wall Mounting Plate.
3. If applicable Slide Spacers onto provided 5/16" threaded rod then install Optional Back Panel (-BP2) over rods.
4. Remove the drinking fountain 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.
5. Slide Fixture over studs and secure with nuts and washers.
6. Assemble P-trap to drain adapter and then assemble to unit with Phillips head screws.
7. Make-up 1-1/4" outer diameter waste connection.
8. After thoroughly flushing the 3/8" outer diameter supply line, connect water supply to the 3-way divider assembly. From the 3-way divider assembly, connect to drinking fountain bubbler.
9. Place drain gasket on drain adapter. Reconnect bubbler tube. Reassemble top to unit by engaging back clip and securing with screw.

DRINKING FOUNTAIN START UP:

1. Before connecting power supply, but after thoroughly flushing 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 push pad 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.

FLOW ADJUSTMENT:



PUSH-IN FITTING INSTALLATION

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

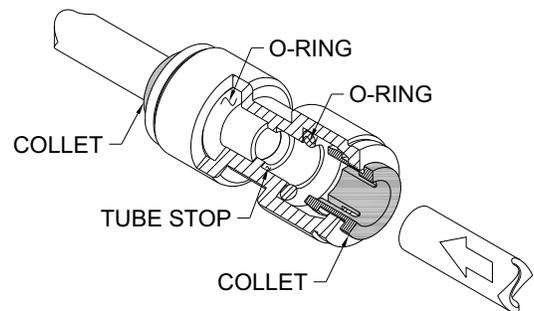
TO CUT TUBE:

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.

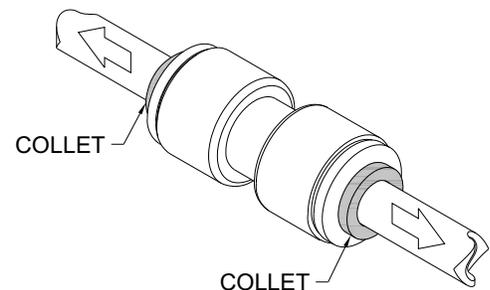


INSERTING THE TUBE:

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

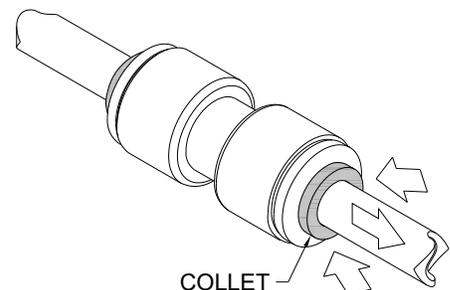


2. Pull on the fitted tubing to ensure it is secure. Tube should not come free from the fitting. Water test the connection assembly prior to leaving the site to ensure there are no leaks.



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.



Troubleshooting:

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

TROUBLESHOOTING:

1. ADJUSTMENTS:

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

SENSOR TROUBLE SHOOTING:

4. IF LIGHT WITHIN SENSOR DOES NOT FLASH ONCE WHEN USER IS WITHIN RANGE:

- a. Verify 120VAC input & 9VDC output transformer output 9VDC.
- b. Replace defective transformer.
- c. Transformer polarity crossed. Replace transformer, sensor may be damaged and also need replacement.
- d. Sensor in “Security Mode” after 30 seconds of consistent detection. Remove source of detection and wait 30 seconds before checking.
- e. Sensor is picking up a highly reflective surface. Eliminate cause of reflection and wait 30 seconds before checking.

5. 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 the center or two holes in convolution of the water diaphragm. Remove and clean.

CLEANING & MAINTENANCE GUIDE:

1. For A131-VR series, periodically remove the strainer clean or replace as needed.
2. For A131-SO series, periodically remove the basin top (deck) remove and inspect inline “Y” strainer

For Powder coated units: Units should be cleaned using a mild soap solution with a sponge or cotton cloth. Wipe down surfaces then rinse with clean water.

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, synthetic abrasive general purpose pads such as scotch brite are recommended.
3. 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.

CARTRIDGE REPLACEMENT/ STRAINER MAINTENANCE

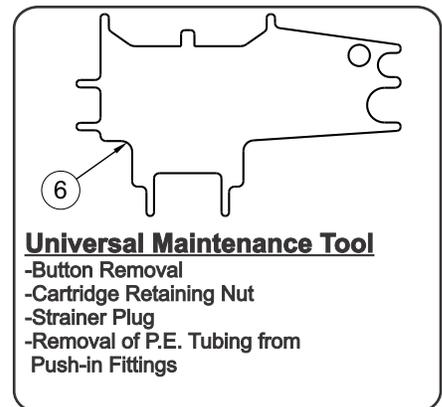
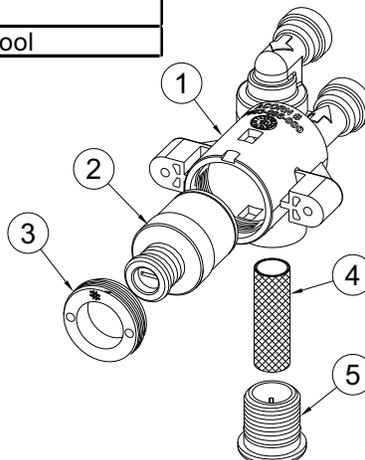
Note: Use the Universal Maintenance Tool to perform the following:

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.**

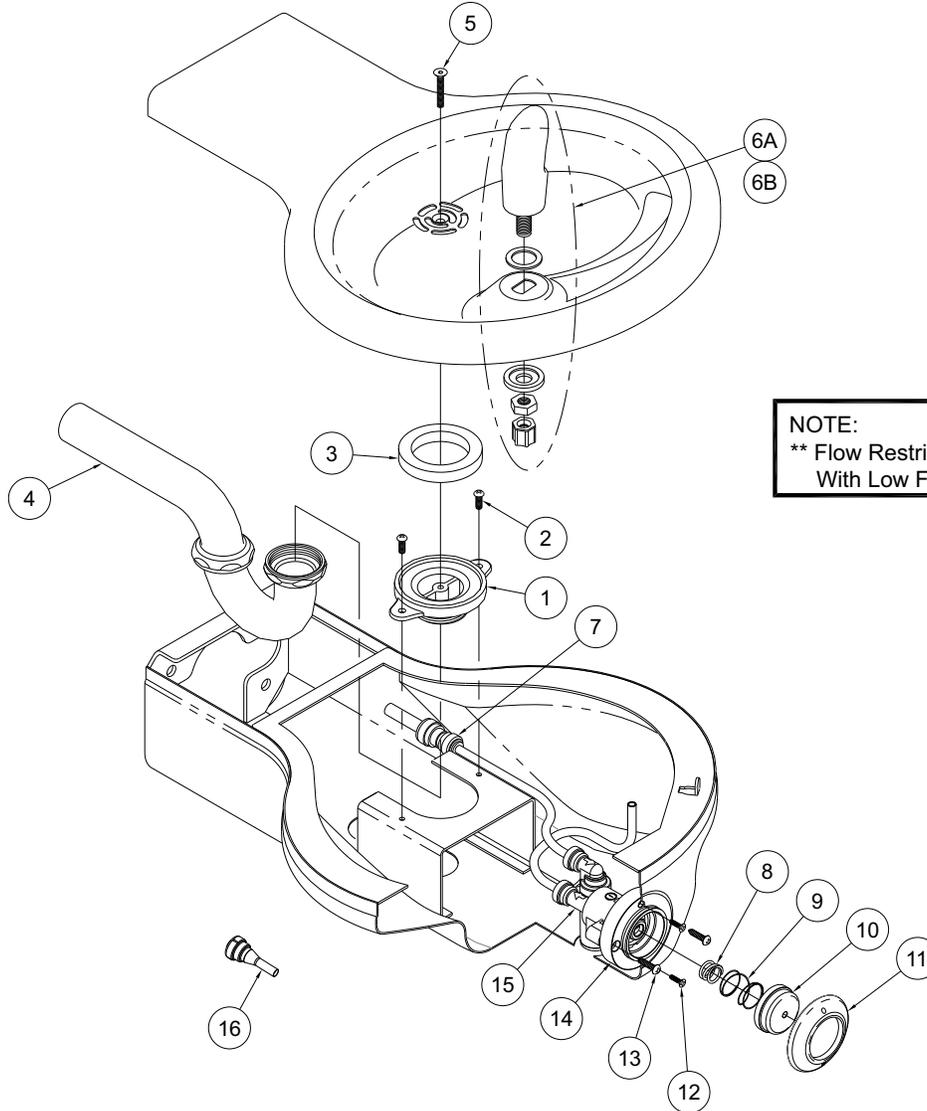
CARTRIDGE VALVE PARTS BREAKDOWN

ITEM #	PART NUMBER	DESCRIPTION
1	7003-095-000	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

Shown is the 18" long unit, however the parts are the same for the 14" long unit.



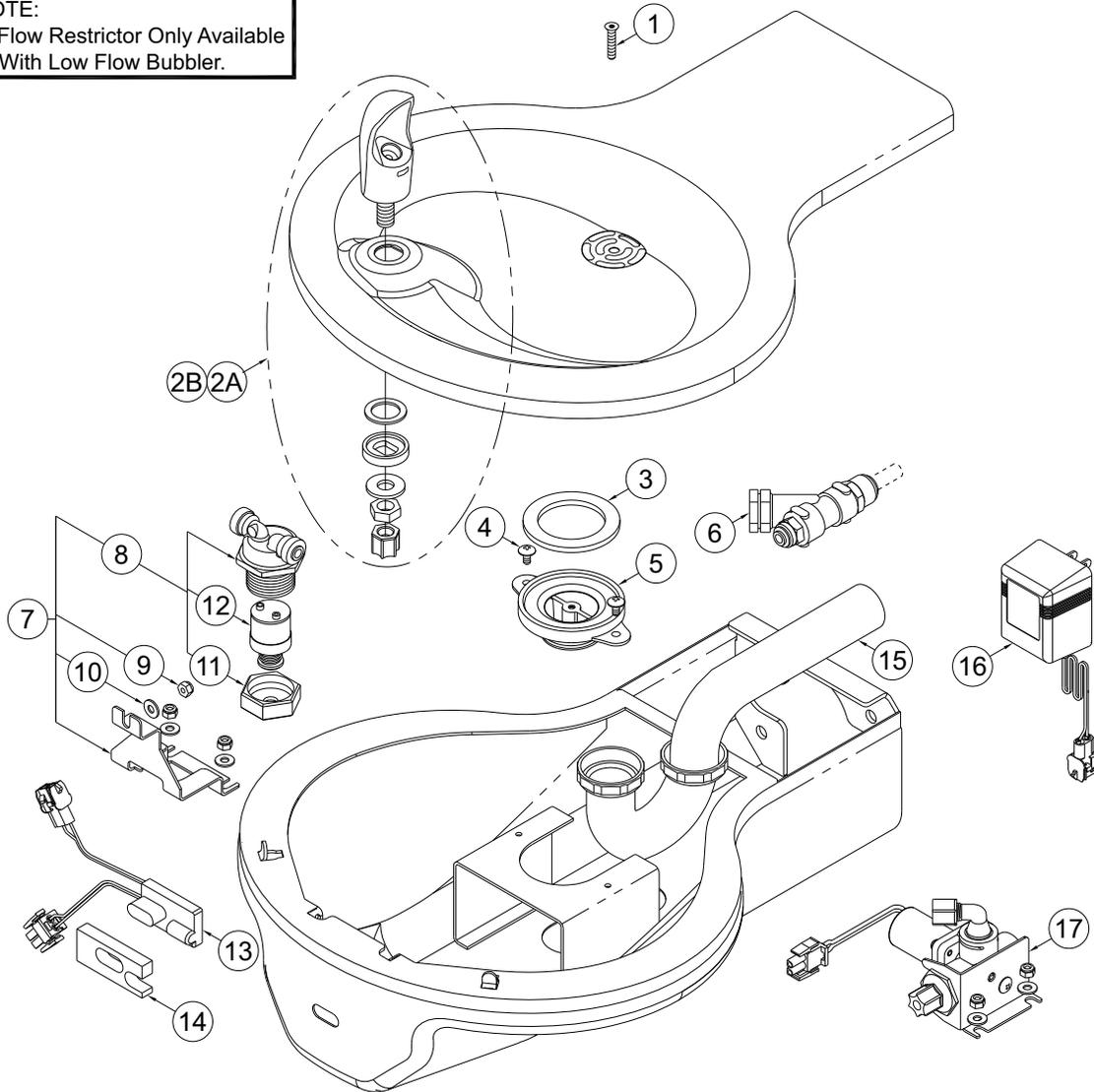
NOTE:
** Flow Restrictor Only Available
With Low Flow Bubbler.

ITEM #	PART NUMBER	DESCRIPTION	ITEM #	PART NUMBER	DESCRIPTION
1	7000-005-199	Drain Adapter	9	7003-193-000	Spring, Pushbutton Return
2	0116-016-000	#10-32 x 3/8" Phillips Truss Head Screw	10	7003-196-199	Pushbutton, Chrome
3	7000-006-000	Flat Drain Adapter Gasket	11	7003-197-199	Escutcheon, Chrome
4	7000-015-000	1-1/4" OD P-Trap	12	0161-062-000	#6-32 x 1/2" Phillips, Flat Head Screw
5	0152-010-000	#10-32 x 1" Hex Flat Head Screw	13	0124-055-000	#8 x 3/4" Phillips, Round Head Screw
6A	7000-012-001	Stainless Steel Bubbler Assembly	14	7003-198-199	Mounting Sleeve
6B	7000-099-002	Flexible Gray Bubbler Assembly	15	7003-095-001	Valve Body Sub Assembly
7	1895-123-000	1/4" x 3/8" OD Tube Union Push-In	16	7003-093-001	Flow Restrictor - Low-Flow Bubbler Only
8	7003-195-000	Spring, Overtravel			

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.

SENSOR OPERATED FOUNTAIN PARTS BREAKDOWN

NOTE:
** Flow Restrictor Only Available
With Low Flow Bubbler.



ITEM #	PART NUMBER	DESCRIPTION	ITEM #	PART NUMBER	DESCRIPTION
1	0152-040-000	Allen Flat Head Screw	9	0308-009-000	Nylon Insert Locknut
2A	7000-012-001	StainlessSteel Bubbler Assy	10	0331-004-000	Flat Waher
2B	7000-099-002	Flexible Gray Bubbler Assembly	11	7000-059-199	Valve Cap
3	7000-006-000	Flat Drain Adapter Gasket	12	7000-060-000	Valve Cartridge
4	0116-016-000	Phillips Truss Head Screw	13	2562-373-001	9V DC Sensor Assembly
5	7000-005-199	Drain Adapter	14	7001-202-199	Sensor Spacer
6	7000-021-000	"Y" Strainer	15	7000-015-000	1-1/4" OD P-Trap
7	7000-067-001	Flow Adjustment Valve & Sensor Bracket	16	0711-410-001	9V DC Plug-In Transformer
8	7000-050-001	Valve Assembly	17	7001-200-001	Solenoid Valve Assembly w/ Mounting Bracket

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