

M-DFBF-LR, M-DFBF-S, and M-DFBF-F
Barrier Free, Wall Mounted Drinking Fountain With Bottle Filler



M-DFBF-LR



M-DFBF-S



M-DFBF-F

M-DFBF-F / M-DFBF-LR / M-DFBF-S
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)

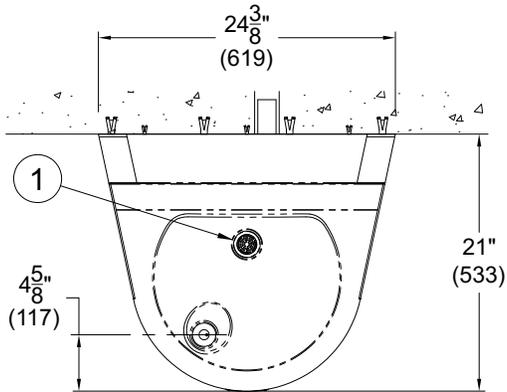


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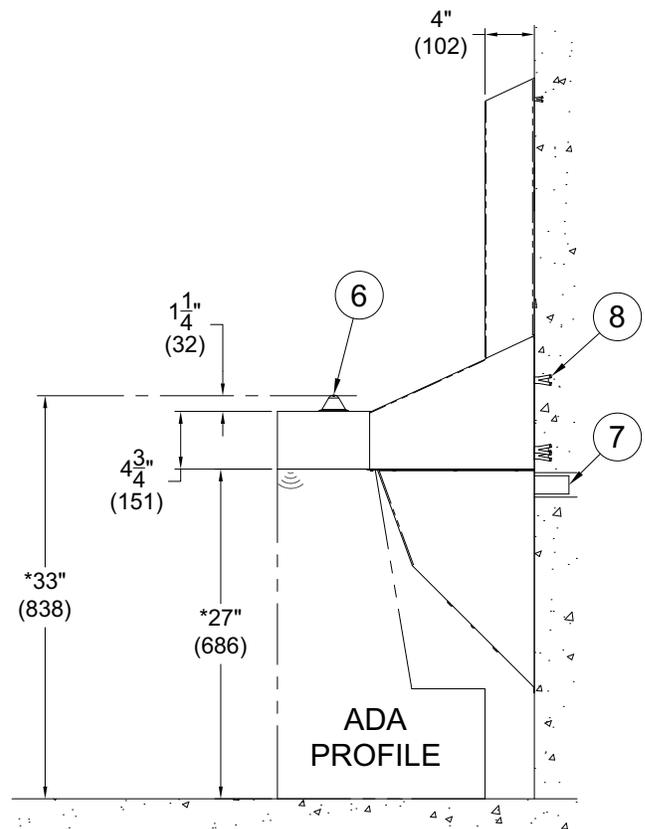
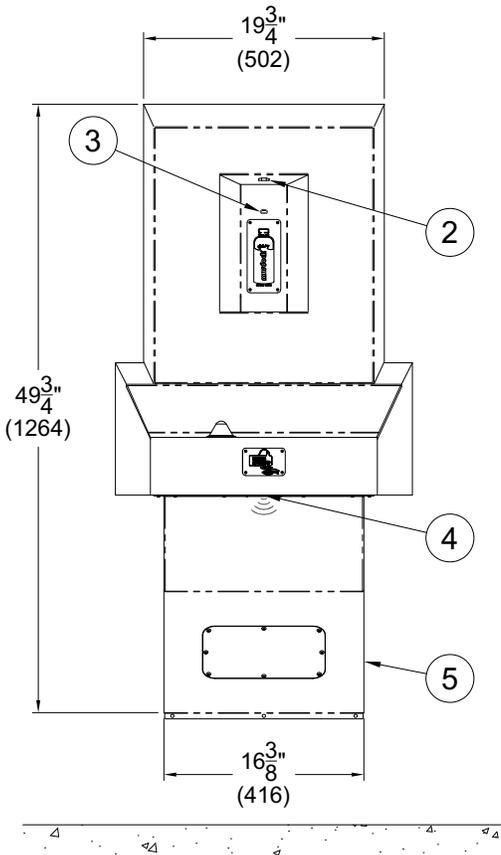
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NOTES:

1. GRID STRAINER
2. BOTTLE FILLER SPOUT
3. BOTTLE FILLER SENSOR
4. CONCEALED DRINKING FOUNTAIN SENSOR
5. TRAP COVER WITH ACCESS PANEL
6. LIGATURE RESISTANT DRINKING BUBBLER
7. 1-1/2 O.D. WASTE OUTLET
8. WALL ANCHORING HARDWARE (BY OTHERS)



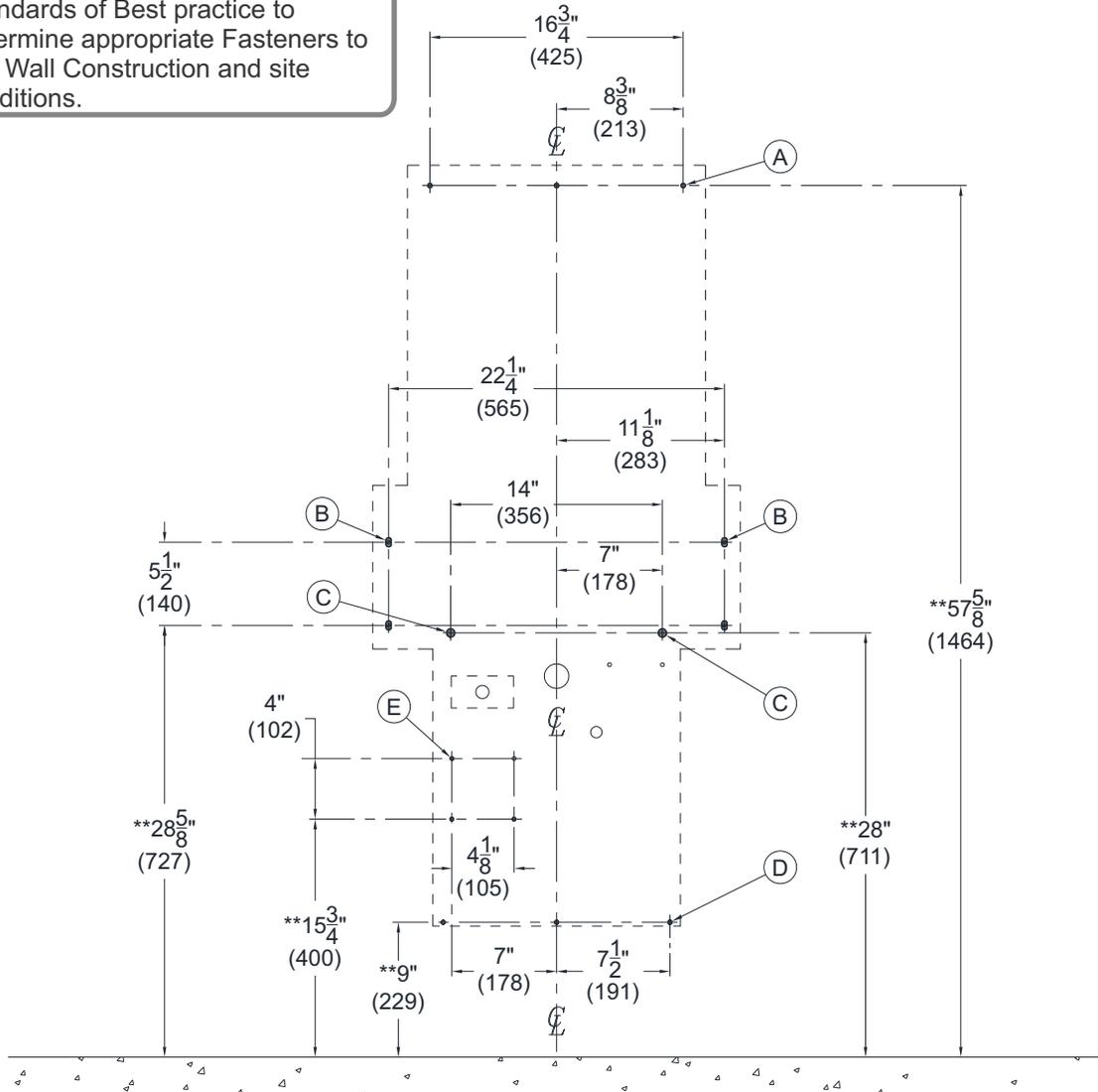
M-DFBF-S

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 discharge height to 30" maximum above finished floor. Provide clear floor space as required.

MOUNTING DIMENSIONS -ADA (Adult)



NOTE: Installer shall use Industry Standards of Best practice to determine appropriate Fasteners to suit Wall Construction and site conditions.

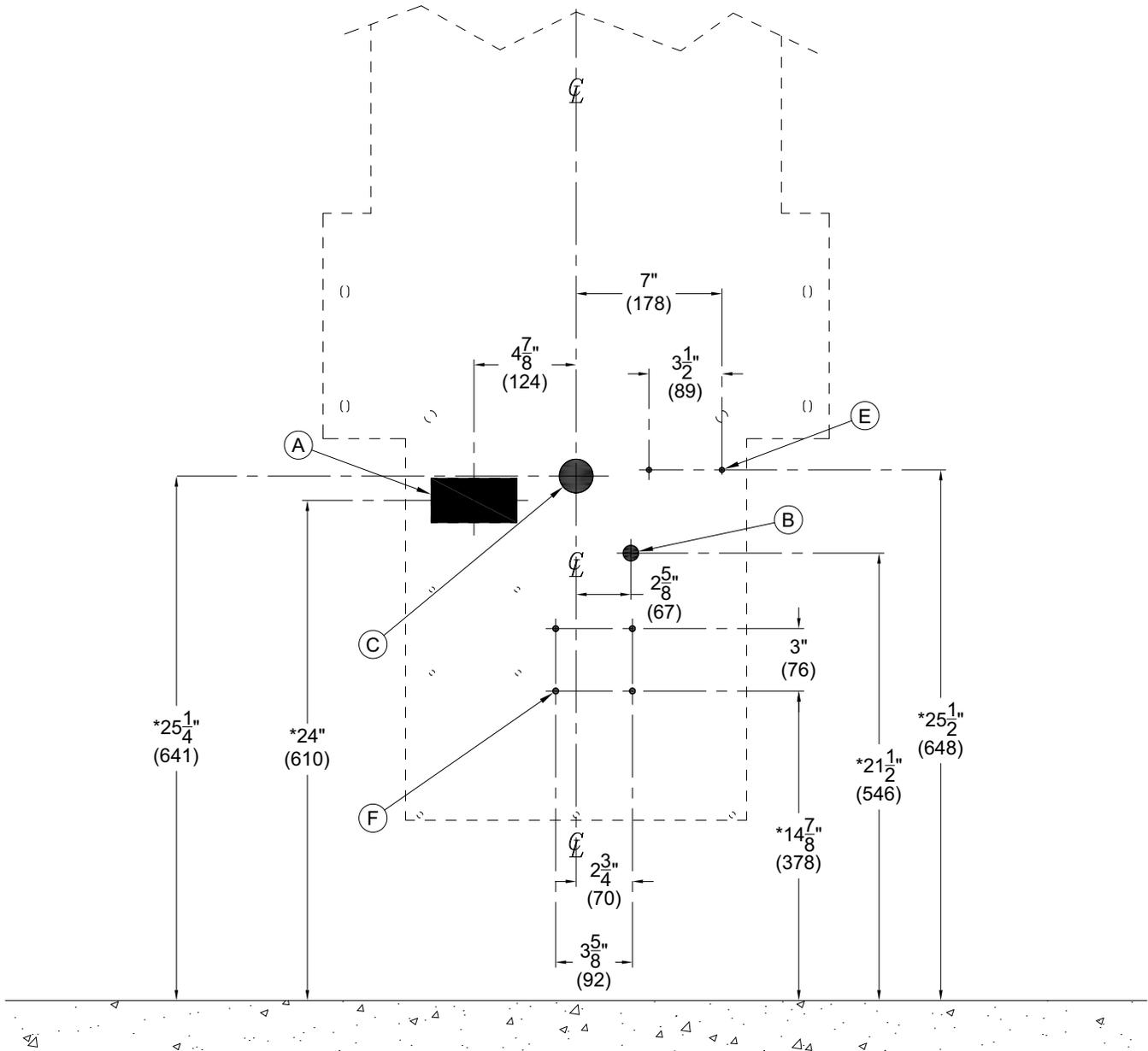


- (A) * Bottle Filler Hanger Bracket Mounting Points (3) Ø5/16" Holes For Installer Provided Wall Anchors And Anchoring Hardware.
- (B) * Fixture Support Mounting - (4) Ø3/8" x 5/8" Mounting Slots For Installer Provided Wall Anchors And Anchoring Hardware.
- (C) * Fixture Support Mounting - (2) Ø9/16" Mounting Hole For Installer Provided Wall Anchors And Anchoring Hardware.
- (D) * Trap Enclosure Mounting Points (3) Ø5/16" Holes For Installer Provided Wall Anchors And Anchoring Hardware.
- (E) (4) Ø1/4" Valve Plate Mounting Holes

NOTE: Callouts with (*) requires proper backing to secure wall anchors for fixture support mounting.

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 discharge height to 30" maximum above finished floor. Provide clear floor space as required.**

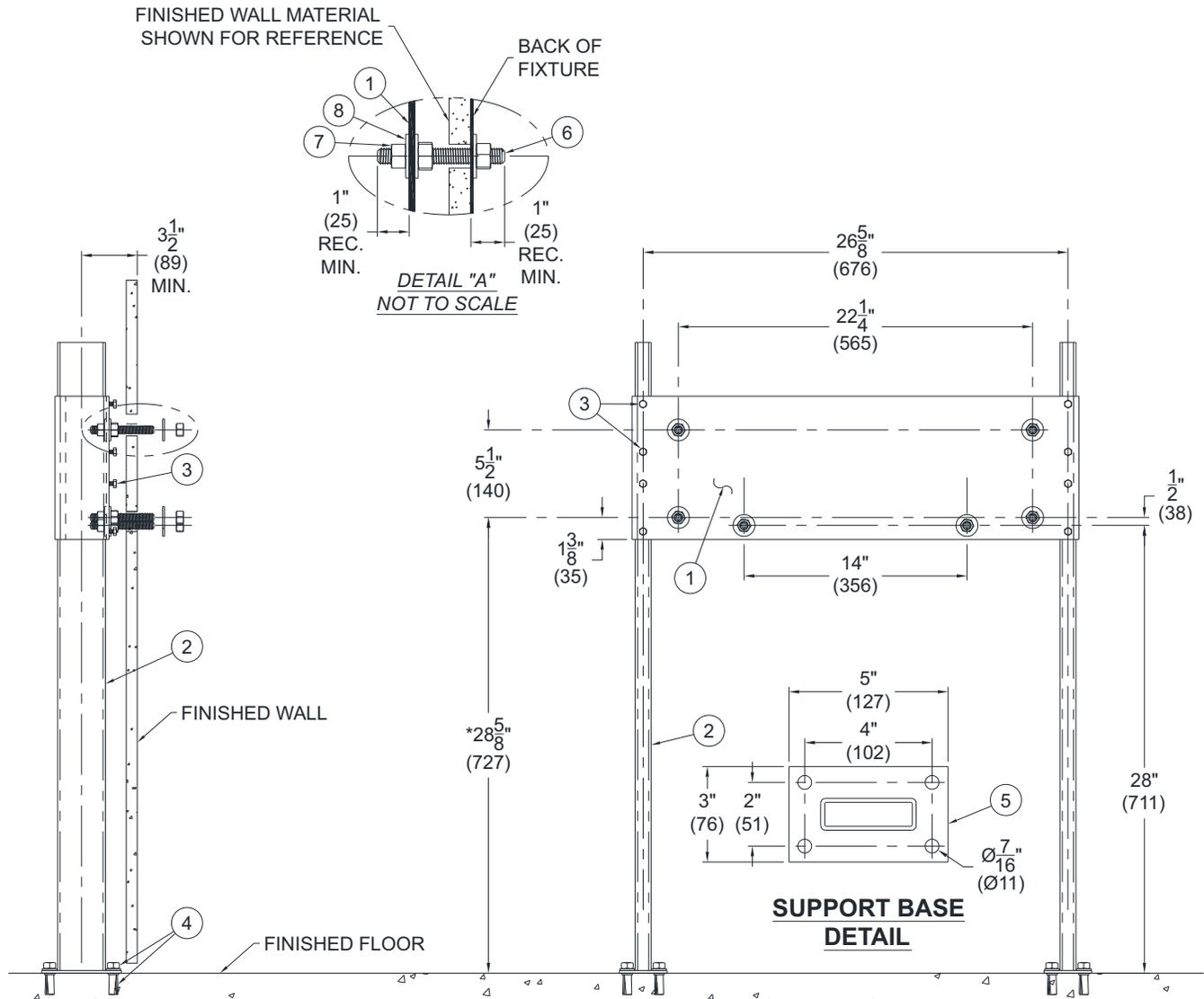
ROUGH-IN DIMENSIONS -ADA (Adult)



- (A) 120VAC, 60Hz, 3A (Max) GFCI Protected, Electrical Receptacle
- (B) 3/8" NCT Angle Stops (By Others)
- (C) 1-1/2" O.D. Waste Outlet
- (E) (2) Ø1/4" Mounting Holes for Optional Water Filter Bracket
- (F) (4) Ø1/4" Mounting Holes for Optional -BAT Battery Pack Mounting Plate

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 discharge height to 30" maximum above finished floor. Provide clear floor space as required.

OPTIONAL -MC MOUNTING CARRIER



INSTALLATION INSTRUCTIONS:

A- INSTALL HORIZONTAL SUPPORT ① BRACKET ONTO VERTICAL UPRIGHTS ② TO OBTAIN PROPER VERTICAL SPACING USING 1/4-20 UNC x 1/2" BOLTS ③ PROVIDED.

NOTE: FLOOR ANCHORS AND FLOOR ANCHORING HARDWARE ④ ARE PROVIDED BY INSTALLER.

B- ANCHOR SUPPORT BASES ⑤ TO A RIGID FLOOR OR OTHER RIGID SUBSTRUCTURE WITH INSTALLER PROVIDED HARDWARE ④. SEE DETAIL.

C- INSTALL 1/2"-13 UNC x 4" THREADED MOUNTING STUDS ⑥ NUTS ⑦ AND WASHERS ⑧ ONTO HORIZONTAL SUPPORT BRACKET ①.

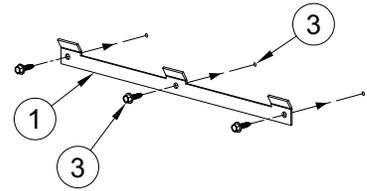
NOTE: ENSURE THERE IS AT LEAST 1" ENGAGEMENT OF MOUNTING STUDS ⑥ INTO BRACKET ① AND 1" BEYOND FINISHED WALL AS SHOWN IN DETAIL "A".

D- ALIGN AND POSITION FOUNTAIN ONTO MOUNTING STUDS ⑦. SECURE WITH REMAINING HARDWARE TO COMPLETE INSTALLATION.

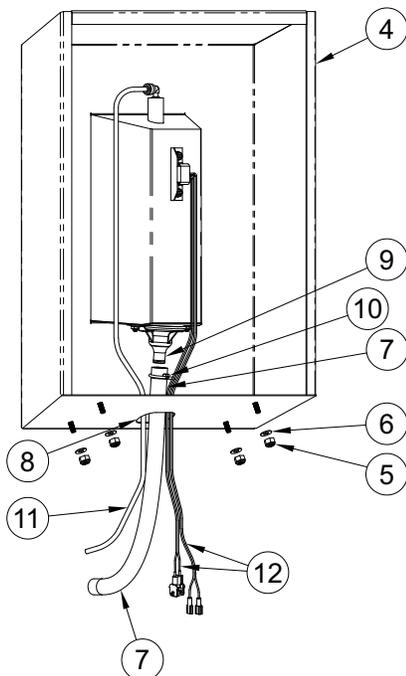
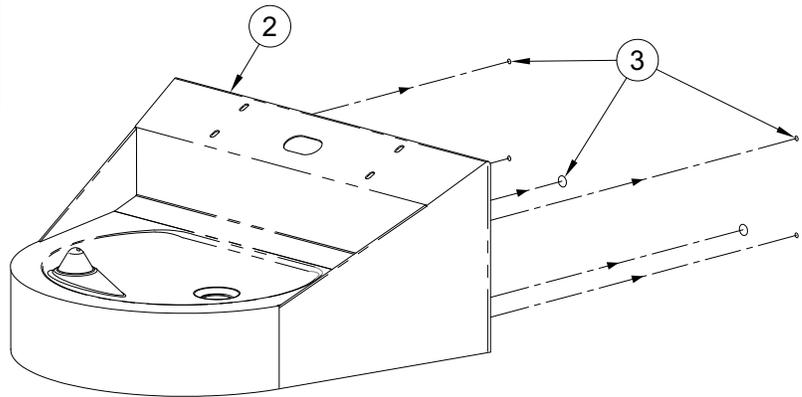
NOTES: Dimensions indicated (*) are for ADA frontal approach installation. Adjust vertical dimension (*) as required to comply with federal, state, and local codes. For Child ADA compliant parallel approach, decrease Bubbler discharge height to 30" maximum above finished floor. Provide clear floor space as required.

FIXTURE ANCHORING

- 1 Mount Bottle Filler Bracket **1** and Drinking Fountain Deck **2** to the wall using appropriate mounting and anchoring hardware **3**, provided by installer.



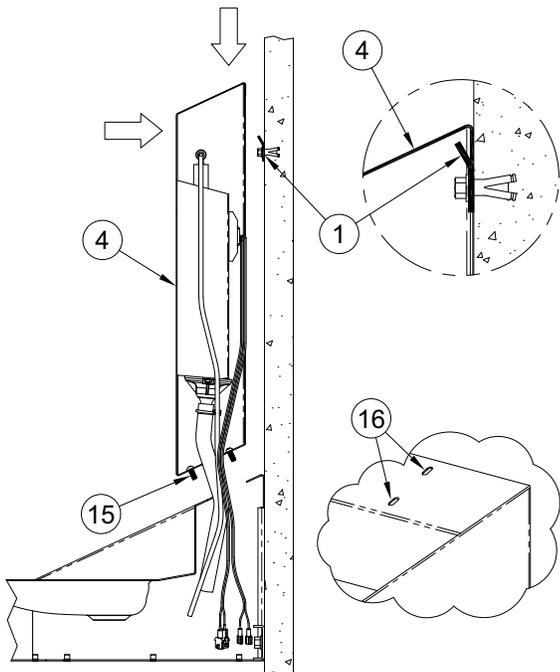
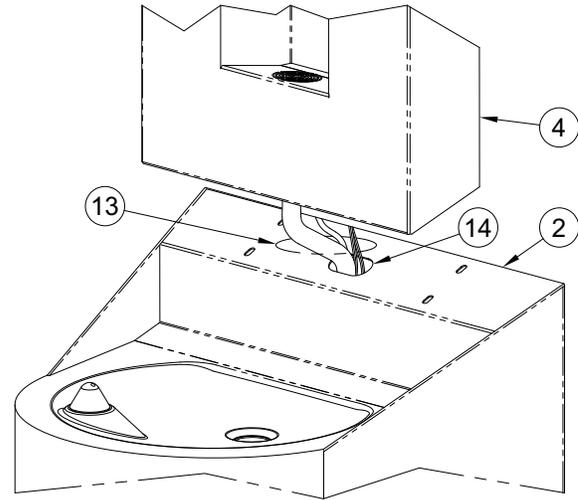
HINT: It may be advantageous to install deck trim such as faucets, soap dispensers or other accessories prior to wall mounting.



- 2 Prep the Bottle Filler Assembly **4** by removing the four (4) locknuts **5** and washers **6** and setting them in a secure location. Insert bottle filler drain hose **7** through slot **8** at the bottom of bottle filler assembly **4** and connect to drain adapter **9** and secure with spring hose clamp **10**. Feed bottle filler riser tube **11** and electrical wiring **12** through bottom slot **8**.

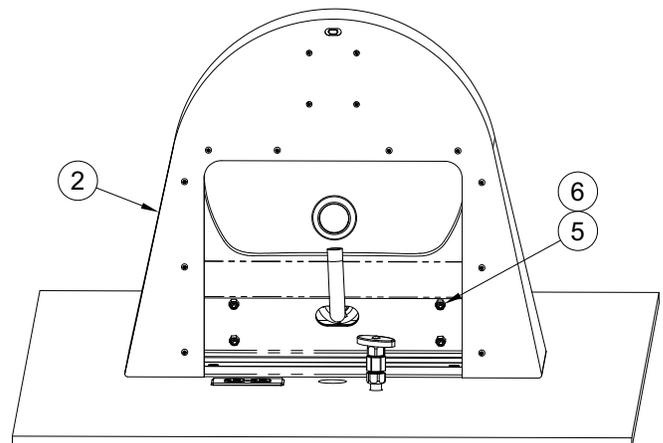
FIXTURE ASSEMBLY

3 Feed Bottle Filler Waste Hose, Riser Tube and Electrical Wiring bundle **13** through fountain deck slot **14**.



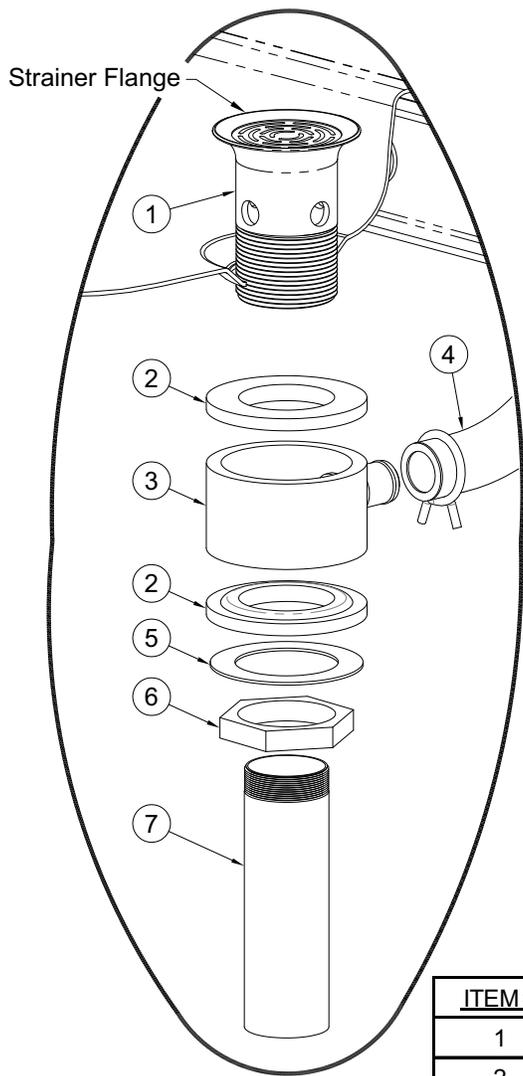
4 Push Bottle Filler Housing **4** against the wall and slide it downward so it engages with wall bracket **1** and that the four bolt **15** go into the deck slots **16**.

5 Secure Bottle Filler **4** to Drinking Fountain Deck **2** using the four lock nuts **5** and washers **6**.





HINT: Teflon tape is recommended on all threaded waste and supply connections.



6 Install grid strainer **1** to basin using plumbers putty on underside of grid strainer flange. Insert rubber gasket **2** over the grid strainer **1**, then drain body collar **3**, brass washer **5** and secure with chrome plated nut **6**. Slide bottle filler drain hose **4** onto drain collar nipple **3** and secure with spring hose clamp. Screw 1-1/4" O.D. tailpiece **7** into bottom of grid strainer **1**.

- ① Strainer w/ 1-1/2" - 16 UNE Threads & 1-1/4"-27 UNI Threads
- ② Rubber Gasket
- ③ Drain Collar Assembly
- ④ Bottle Filler Drain Hose With Spring Hose Clamp
- ⑤ Brass Washer
- ⑥ 1-1/2" - 16 UNI Rough Chrome Brass Nut
- ⑦ 1-1/4" - 27 UNE Tailpiece 4" Long

Assemble waste piping using teflon tape on all threaded connections and make up waste connections to 1-1/2" P-Trap.

ITEM#	PART NUMBER	DESCRIPTION
1	KYSCY002-001	STRAINER w/ 1-1/2"-16 UNE THREAD
2	4935-011-000	RUBBER GASKET
3	GVL00B01-003	DRAIN COLLAR ASSEMBLY
4	GVL00B02-199	7/8" O.D. FLEXIBLE DRAIN HOSE
5	4950-007-000	BRASS WASHER
6	4950-006-199	1-1/2"-16 UNI CHROME NUT
7	4970-102-000	1-1/4"-27 UNE x 4" LONG TAIL PIECE



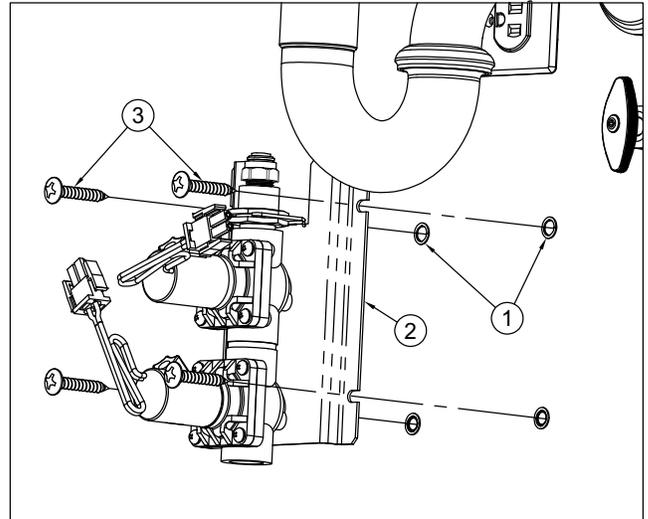
NOTE: Waste assembly may require field cutting and fitting by the installer.

VALVE INSTALLATION

! IMPORTANT

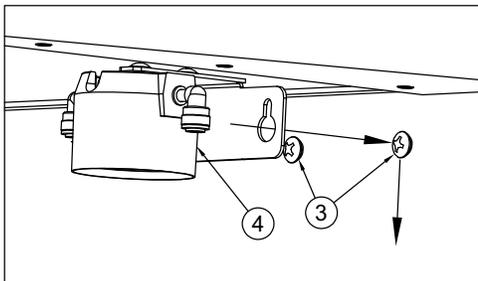
Before making up the supply connections, the supply lines must be flushed of all foreign material such as pipe dope, pipe chips, solder, sand, etc.

- 7** Install wall anchors **1**, provided by installer, at Valve Plate Dimensions on page (5). Secure Valve assembly **2** to wall using installer provided screws **3**.



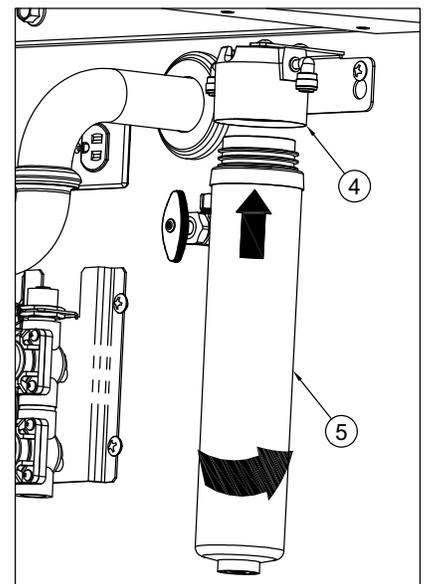
HINT: It may be advantageous to remove the filter from the filter head for easier installation, as shown.

OPTIONAL FILTER INSTALLATION



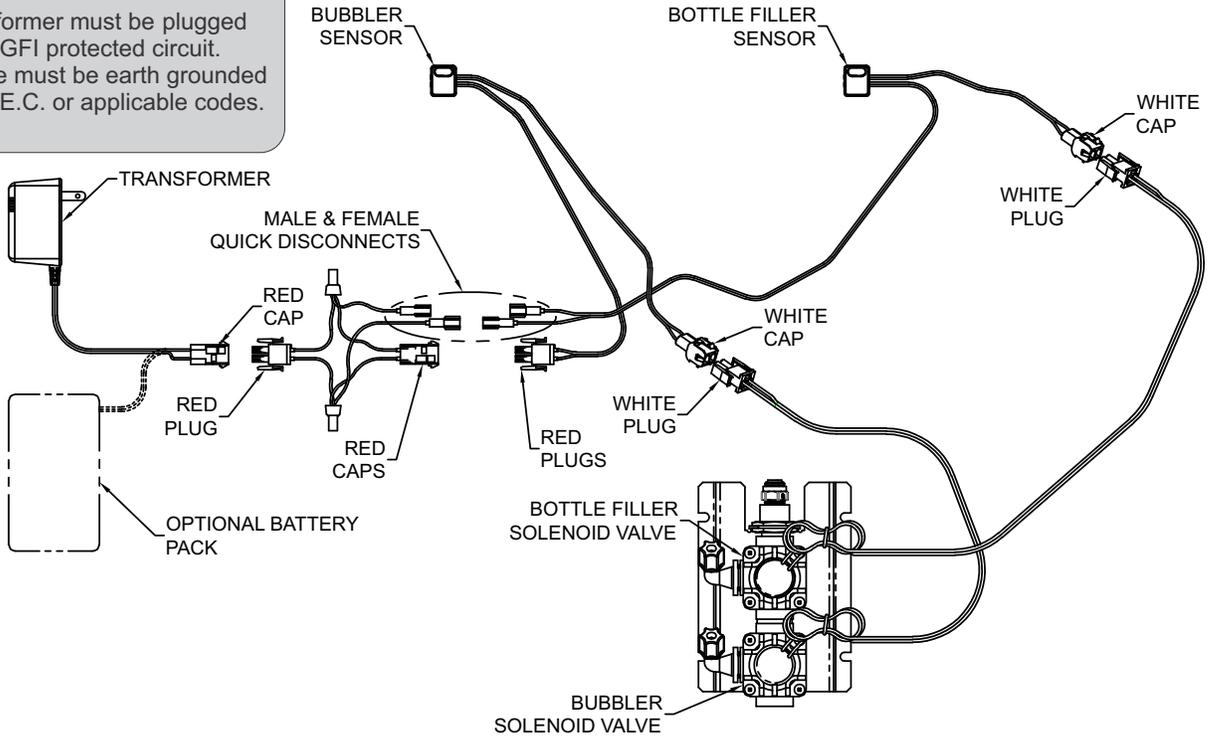
- 8** With installer provided screw **3** not fully engaged, push Filter Head bracket **4** against the wall and push down onto screws **3** and secure bracket

- 9** With Filter Head Assembly **4** secured to the wall insert Filter **5** and turn clockwise to tighten.

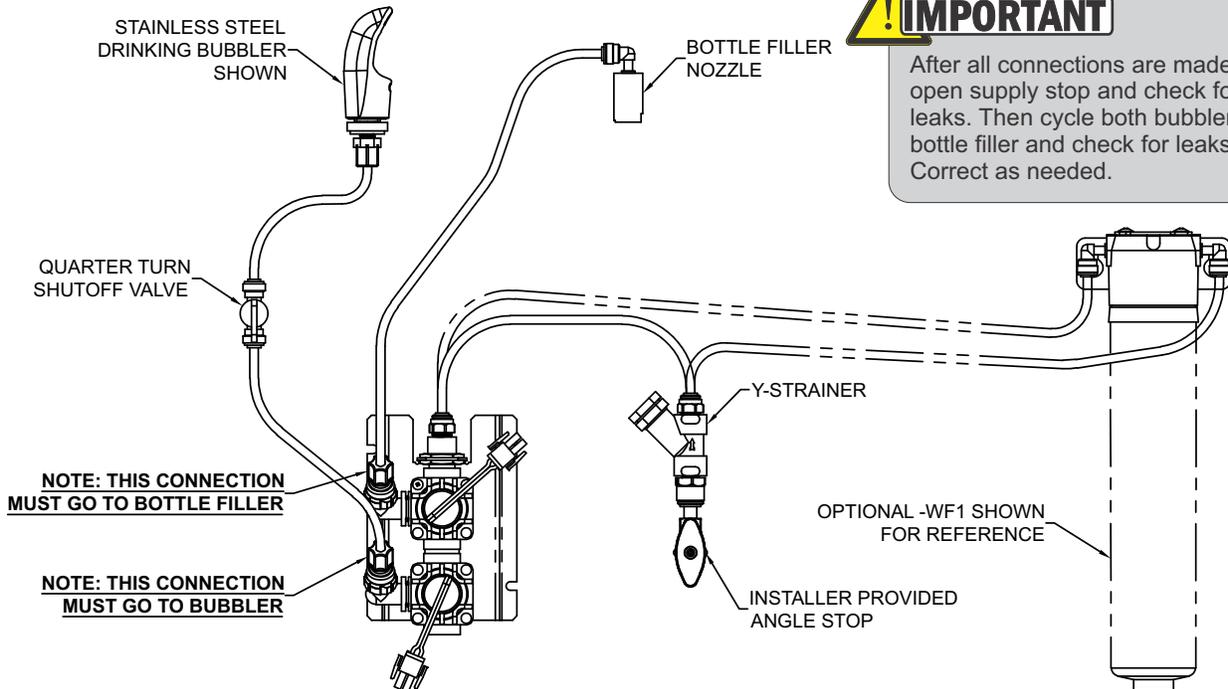


SENSOR OPERATION WIRING DIAGRAM;

! IMPORTANT
Transformer must be plugged into a GFI protected circuit. Fixture must be earth grounded per N.E.C. or applicable codes.



WATER PATH;



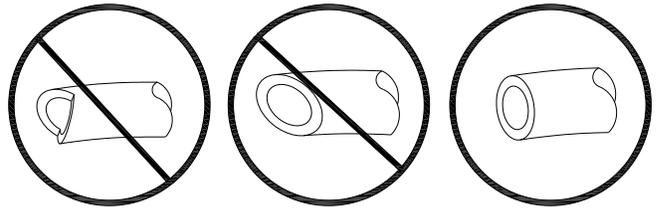
! IMPORTANT
After all connections are made open supply stop and check for leaks. Then cycle both bubbler and bottle filler and check for leaks. Correct as needed.

PUSH-IN FITTING INSTALLATION

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

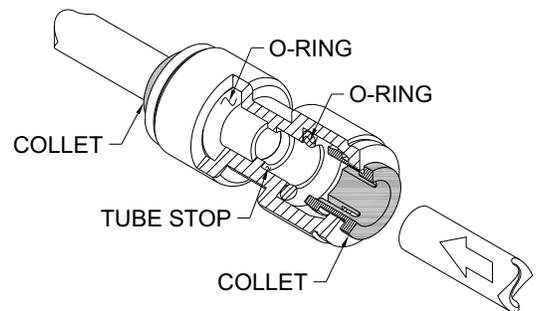
TO CUT TUBE:

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.

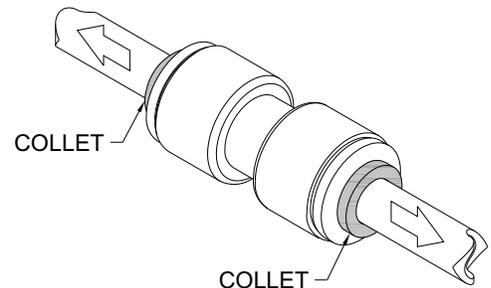


INSERTING THE TUBE:

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

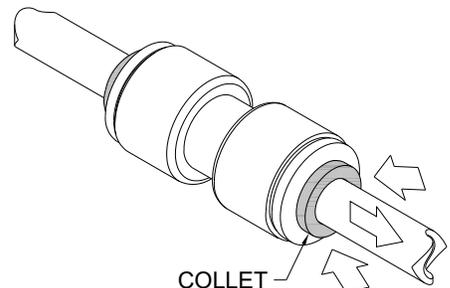


2. Pull on the fitted tubing to ensure it is secure. Tube should not come free from the fitting. Water test the connection assembly prior to leaving the site to ensure there are no leaks.



DISCONNECTING THE TUBE:

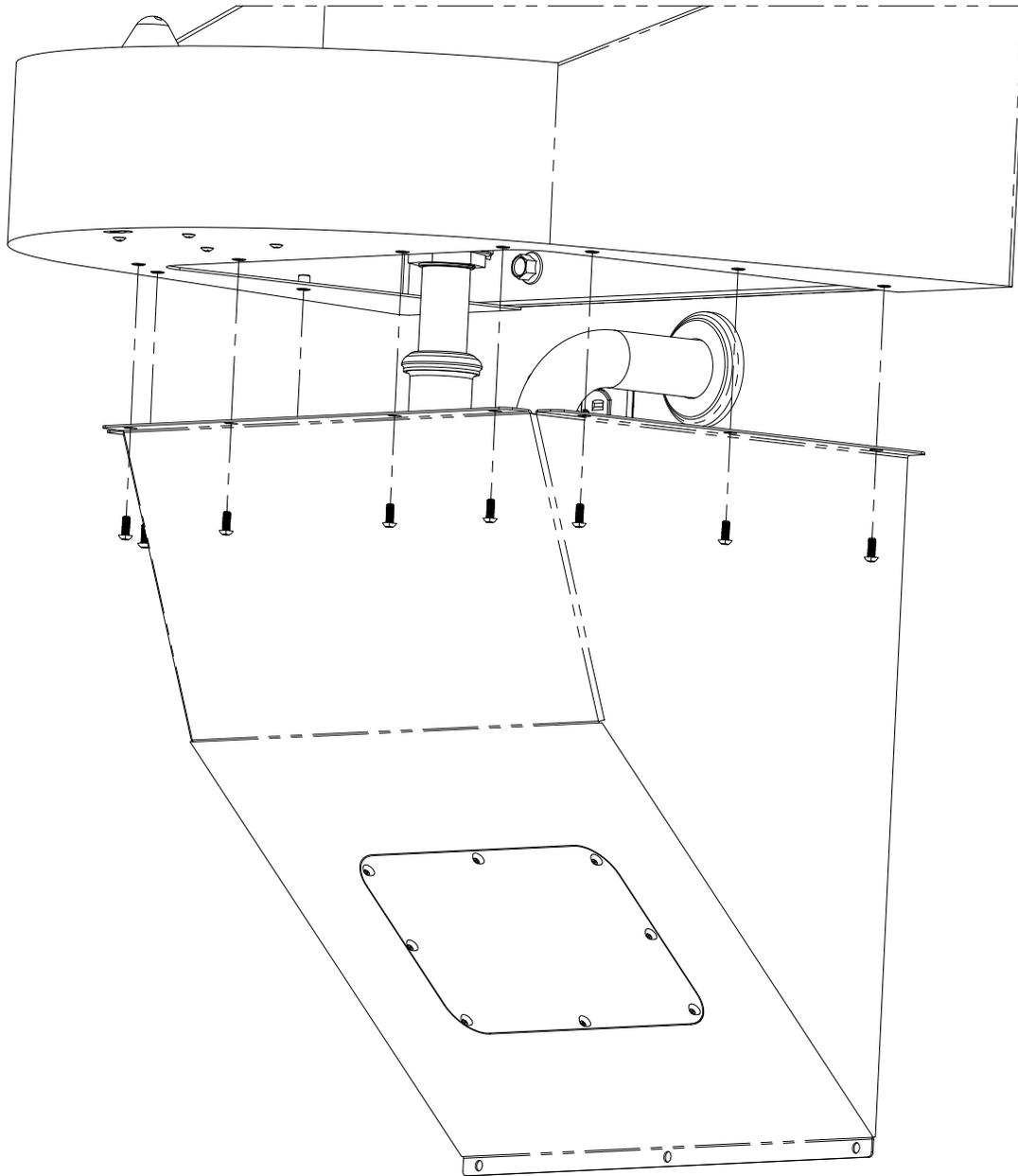
To disconnect the tube from the fitting ensure that the water line is depressurized. Push collet square towards the push-in fitting body and hold. While holding the collet in, pull on the PE tubing to remove from the push-in fitting.



ACCESS PANEL INSTALLATION



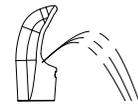
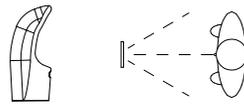
**BEFORE INSTALLING P-TRAP COVER
ENSURE THERE ARE NO WATER
LEAKS.**



Install P-Trap cover using #10-32 x 1/2" center reject hex head screws provided. Secure bottom of P-Trap cover to wall with wall anchors and anchoring hardware provided by installer.

9 VOLT DC SENSOR OPERATED VALVES

NORMAL VALVE FUNCTION: 9 Volt DC sensor operated valve has flow time of 90 seconds maximum. To reactivate, the user must move out of and return to the sensing area.

CONDITION: WATER DOES NOT FLOW 		
INDICATORS:	PROBABLE CAUSE:	SOLUTION:
Sensor flashes continuously every two seconds when hands are within range.	- Low battery warning.	- Replace battery.
Sensor does not flash when the users hands are within range.	- Circuit breaker tripped.	- Reset circuit breaker.
	- Battery completely used up.	- Replace battery.
	- Defective 9VDC transformer.	- Replace transformer.
	- Transformer polarity crossed.	- Replace transformer. (Sensor may be damaged & need replacement.)
	- Unit is in "Security Mode" after 90 seconds of constant detection.	- Remove sources of detection. Wait 30 seconds before checking.
	- Range is too short.	- Increase range.
	- Range is too long.	- Decrease range and wait 30 seconds.
	- Sensor is picking up a highly reflective surface.	- Eliminate cause of reflection. Wait 30 seconds before checking.
Sensor flashes once when the users hands are within range.	- Defective sensor.	- Replace sensor.
	- Stops or water main closed.	- Open stops or water main.
	- Bad sensor to solenoid connection.	- Ensure wires make proper contact.
	- Debris or scale in solenoid assembly.	- Remove solenoid, pull out plunger and spring, and clean with scale remover solution or pressurized air.
	- Debris or scale in diaphragm.	- Remove diaphragm and clean.
	- Debris or scale in strainer.	- Remove strainer and clean.
CONDITION: WATER CONTINUOUSLY 		
INDICATORS:	PROBABLE CAUSE:	SOLUTION:
Sensor flashes when users hands are within range.	- Debris or scale in diaphragm.	- Remove diaphragm and clean.
	- Diaphragm is defective or torn.	- Replace diaphragm.
Sensor does not flash when the users hands are within range.	- Sensor is dirty or covered.	- Clean or uncover sensor and wait 30 seconds.
	- Range too long or Highly Reflective Surface, Sunlight, Bright Lights, etc. are Triggering Sensor.	- Decrease range and wait 30 seconds.
		- Eliminate cause of reflection or Correct Lighting Correct Lighting Problem.
CONDITION: WATER FLOWS CONTINUOUSLY BUT STOPS WHEN HANDS ARE WITHIN RANGE  		
INDICATORS:	PROBABLE CAUSE:	SOLUTION:
Water runs continuously when sensor not activated. Sensor flashes when hands are within range and water shuts off.	- Solenoid polarity crossed.	- Disconnect solenoid and reverse polarity.

MINIMUM / MAXIMUM WATER PRESSURE (PSI) 30 / 100. MAXIMUM WATER TEMPERATURE 130°F.

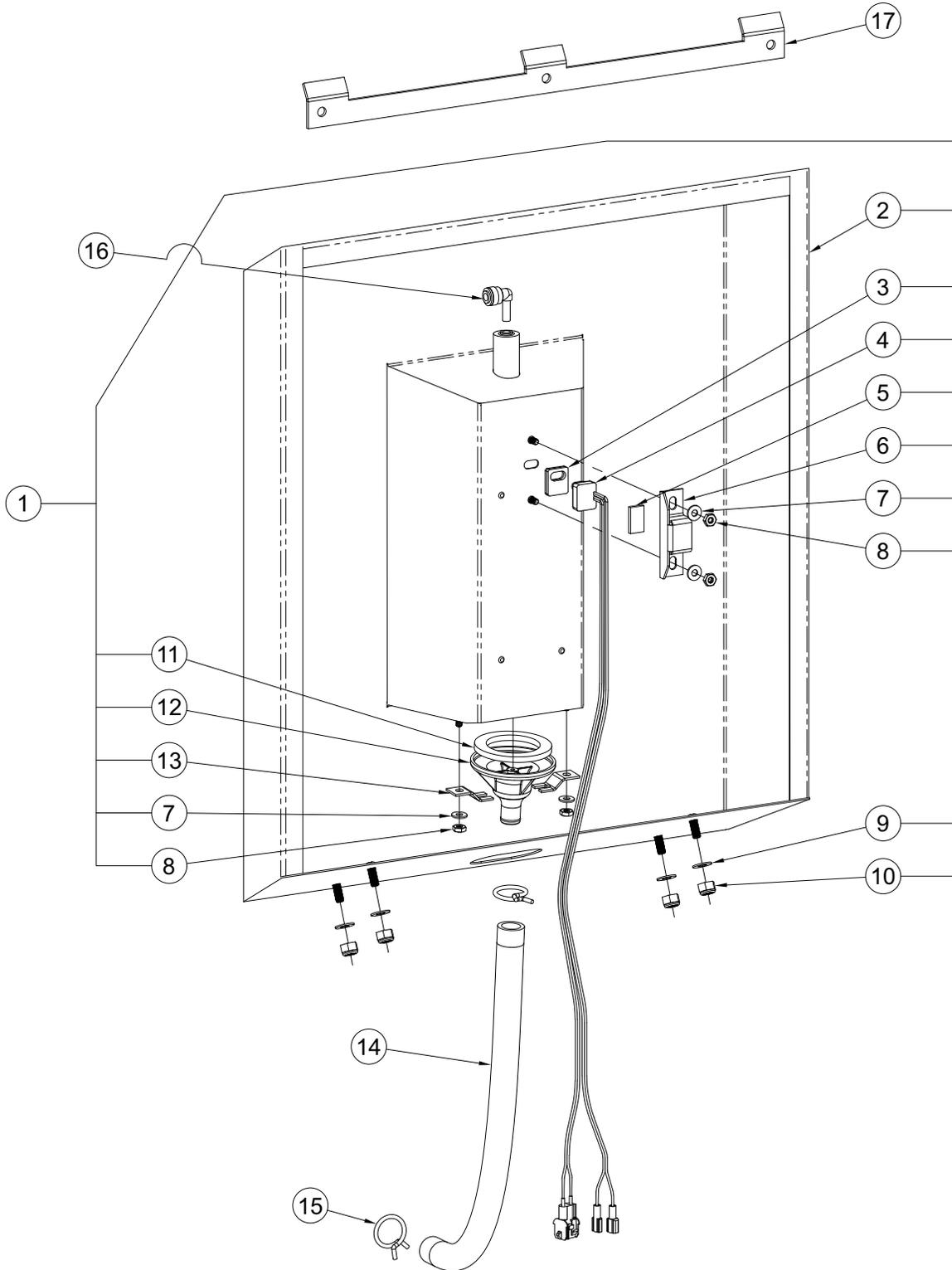
DRINKING FOUNTAIN PARTS BREAKDOWN TABLE

NOTE: See previous page #14 for fixture drawing corresponding to table of parts below

<u>ITEM#</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1A	4854-020-001	LIGATURE RESISTANT BUBBLER
1B	7000-012-001	STAINLESS STEEL CODE BUBBLER
1C	7000-099-002	GRAY FLEXIBLE BUBBLER
2A	GVL00C07-001	LIGATURE RESISTANT DECK
2B	GVL00G01-001	DECK FOR SS & FLEX BUBBLER
3	6560-001-000	#6-32 x 1/4" PHILLIS TRUSS HEAD SCREW
4	GVL00B11-001	SENSOR HOLD-DOWN BRACKET ASSEM
5	2563-390-001	BLUE NANO SENSOR ASSEMBLY
6	GVL00B12-199	SENSOR MOUNTING BLOCK
7	0112-002-000	#10-32 x 1/2" CENTER REJECT SCREW
8	4953-001-000	1-1/2" O.D. CHROME PLATED P-TRAP
9	7000-021-001	"Y" STRAINER 1/4" O.D. TUBE x 3/8" NCT
10	0710-735-001	120VAC/9VDC PLUG-IN TRANSFORMER
11	0710-359-001	9VDC BATTERY PACK w/ BRACKET
12	0710-358-001	BATTERY HOLDER ASSEMBLY
13	6155-013-199	BATTERY PACK HOLDER
14	7000-420-000	1/4" O.D. TUBE 1/4 TURN VALVE
15	0302-004-000	SOLENOID VALVE ASSEMBLY
16	0711-450-001	2 STATION 9VAC WIRING HARNESS
17	GVL00C13-001	P-TRAP COVER w/ ACCESS PANEL
18	7012-324-001	WF1 1,500 GALLON WATER FILTER ASSEM
19	7012-334-001	WF3 3,000 GALLON WATER FILTER ASSEM
20	RWF1	REPLACEMENT WF1 FILTER CARTRIDGE
21	RWF3	REPLACEMENT WF3 FILTER CARTRIDGE

BOTTLE FILLER PARTS BREAKDOWN

NOTE: See page #17 for fixture drawing corresponding to table of parts below



BOTTLE FILLER PARTS BREAKDOWN TABLE

NOTE: See previous page #16 for fixture drawing corresponding to table of parts below

<u>ITEM#</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	GVL00C06-001	COMPLETE BOTTLE FILLER ASSEMBLY
2	GVL00C06-002	BOTTLE FILLER HOUSING ASSEMBLY
3	7013-009-001	NANO SENSOR SPACER ASSEMBLY
4	2563-380-001	NANO SENSOR ASSEMBLY
5	7013-019-199	1/8" THINK FOAM TAPE
6	GLV00B14-199	SENSOR HOLD-DOWN BRACKET
7	0331-004-000	#10 FLAT WASHER
8	0302-004-000	#10-32 UNF STAINLESS STEEL HEX NUT
9	0331-005-000	1/4" FLAT WASHER
10	0304-018-000	1/4-20 UNC NYLON HEX NUT
11	7000-006-000	DRAIN ADAPTER GASKET
12	7003-182-000	DRAIN ADAPTER
13	GVL00B08-199	DRAIN ADAPTER HOLD-DOWN CLIP
14	GVL00B02-199	7/8" O.D. FLEXIBLE DRAIN HOSE
15	7003-184-000	7/8" SPRING HOSE CLAMP
16	1895-709-000	1/4" PUSH-IN x 1/4" STEM ELBOW
17	GVL00B03-199	HANGER BRACKET