Whitehall Manufacturing®
Manufacturer of Healthcare and Rehabilitation Products since 1946

Ligature Resistant, Fully Recessed, Wall Mounted, Electric Drinking Fountain

Model WHAR81.8-BF

TECHNICAL ASSISTANCE TOLL FREE TELEPHONE NUMBER: 1-800-743-8259

Technical Assistance E-mail: Fieldservice@acorneng.com

IMPORTANT

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.

Industry standard wall backing, for wall hung fixtures, is required. Installer provided wall anchors and wall anchoring hardware must be appropriate for wall construction.

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.

Valve Assembly: Recommended working water pressure is 30 psi (2.07 bars) minimum to 100 psi (6.89 bars) maximum. Maximum temperature is 130°F (54.4°C). Valve assembly must be drained prior to being subjected to freezing temperatures.

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.

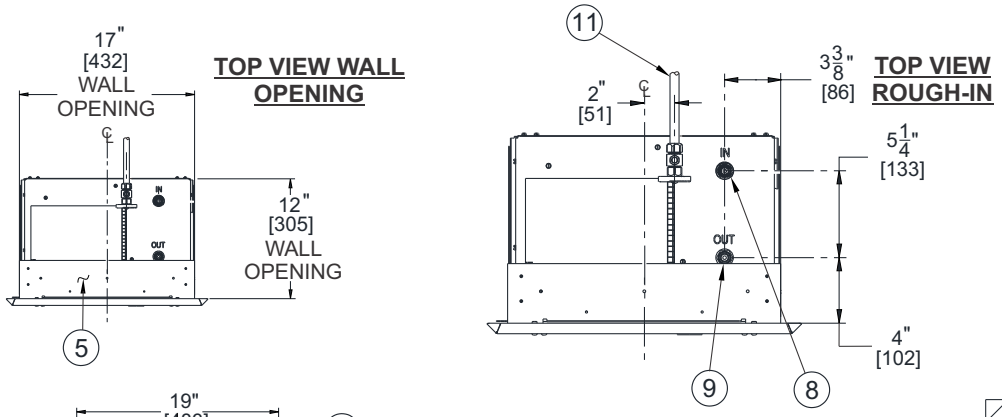
Teflon tape is recommended on all threaded waste and supply connections to reduce the possibility of leaks.

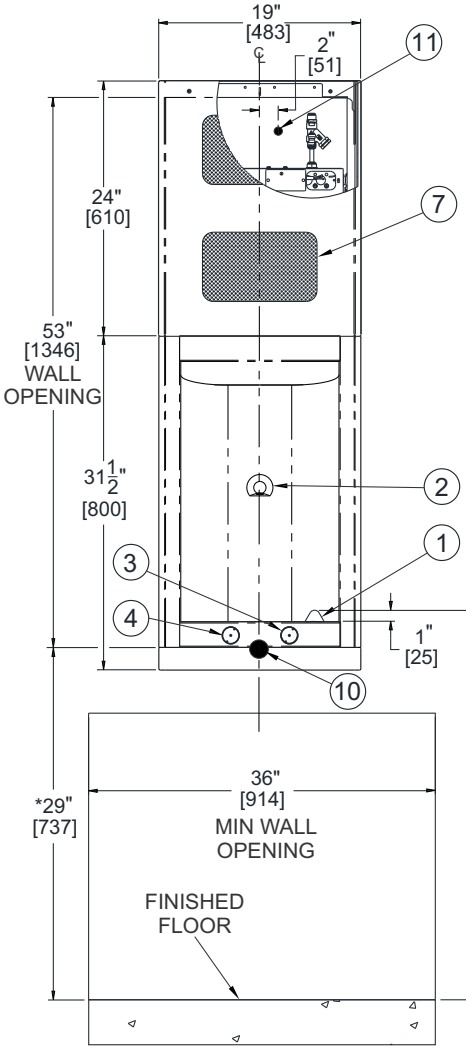
Provide 110-120VAC/60Hz/3A (MAX) electrical receptacle for factory supplied 120VAC/9VDC, 100mA plug-in transformer.

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

WHAR81.8-BF ROUGHING-IN AND DIMENSIONAL DRAWING:

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





GENERAL NOTES:

1. LIGATURE RESISTANT BUBBLER
2. OPTIONAL -BF LIGATURE RESISTANT CUP/BOTTLE FILLER
3. VANDAL RESISTANT PUSHBUTTON ACTUATOR FOR BUBBLER
4. VANDAL RESISTANT PUSHBUTTON ACTUATOR FOR CUP/BOTTLE FILLER
5. MOUNTING FRAME ASSEMBLY
6. 8.0 GPH CHILLER
7. VENTILATION GRILL

ROUGH-IN PLUMBING NOTES

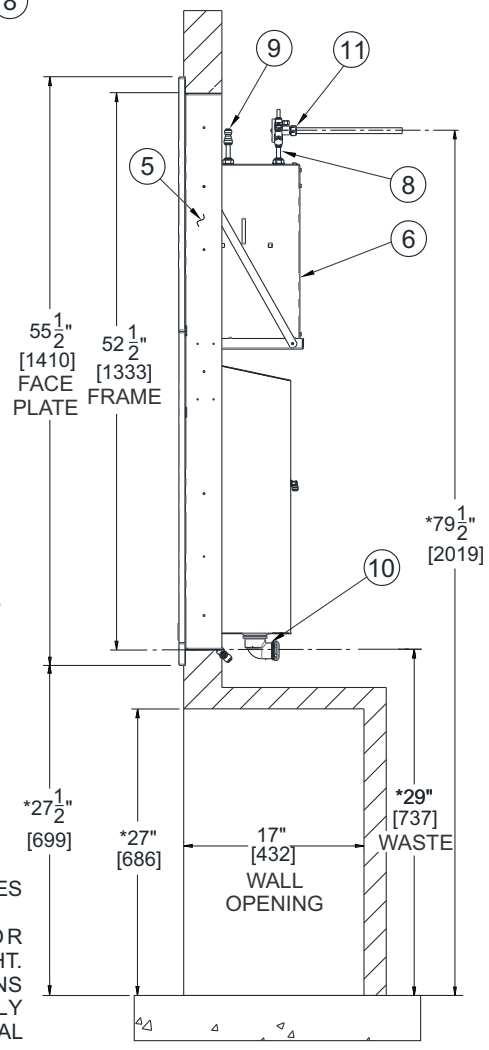
8. 3/8" OD CHILLER WATER INLET
9. 3/8" OD CHILLER WATER OUTLET
10. 1-1/4" SLIP JOINT WASTE CONNECTION
11. WATER SUPPLY INLET

NOTES:

I. ALL DIMENSIONS ARE IN INCHES [MM]

*II. DIMENSION SHOWN IS FOR RECOMMENDED ADULT HEIGHT. ADJUST VERTICAL DIMENSIONS AS NECESSARY TO COMPLY WITH FEDERAL, STATE, & LOCAL CODES

III. STOP VALVE NOT PROVIDED



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! Not intended for use with RO or DI treated water supply.**
5. **REMOTE CHILLER Unit includes Factory installed Leak Detector Shut-Off Valve; refer to complete details in Chiller Installation Manual PN 7020-900-001.**

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. Leave 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.
- Receptacle(s) must be wired to a GFCI protected circuit. Fixture must be earth grounded per NEC (National Electric Code).
- All components are shipped loose and must be inspected to ensure all parts are present and not damaged.
- To avoid a hazard due to instability, fixture must be installed in accordance with the instructions.

IMPORTANT:

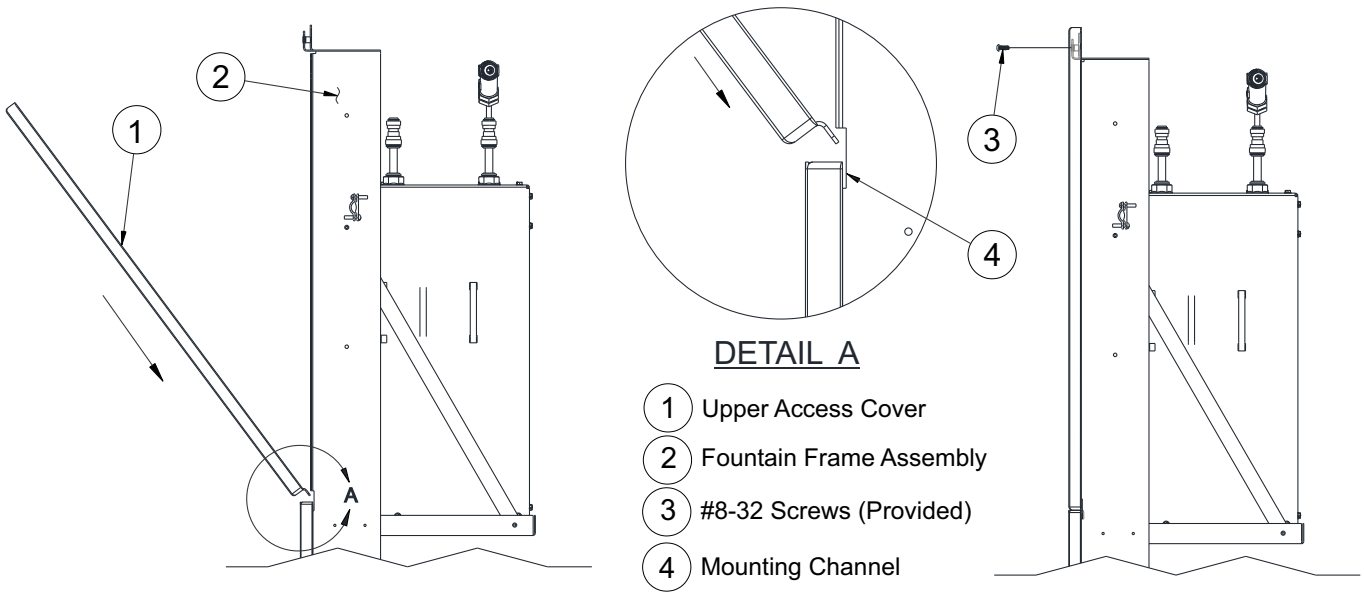
1. Waste P-Trap, Water Supply Service Angle Stop Valve. A P-Trap (by others) must be used for the Drain connection.
2. Water Supply Inlet is 3/8” Outer Diameter copper Tubing. Waste Outlet is 1-1/4” Outer Diameter.
3. Completely flush supply lines of all foreign debris before connecting to fixture. Water Cooler is designed to not cause problems with taste, odor, color, or sediment. Optional (-WF3000) Water Filter is available should any of these problems arise from the Water Supply.
4. **DO NOT SOLDER** Tubing inserted into the Coupler as damage to the O-Ring may result.
5. All burrs must be removed from outside of cut Tubing before inserting into Coupler or other components.
6. Power Supply must be identical in voltage, cycle and phase to that specified on the Water Cooler Data Plate.
7. This unit must be grounded per the requirements of applicable electrical codes.
8. Warranty is voided if installation is not followed per current Murdock Mfg. installation instructions and if components are assembled to the fixture that are not approved by Murdock Mfg.
9. 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.**
10. Due to cold waste water, Murdock Mfg. recommends that P-Trap supplied by installer be insulated to prevent excessive condensation.
11. ***609.10 Water Hammer**. Building water supply systems where quick-acting valves are installed shall be provided with water hammer arrester(s) to absorb high pressures resulting from the quick closing of these valves. Water hammer arresters shall be approved mechanical devices that comply with ASSE 1010 or PDI-WH 201 and shall be installed as close as possible to quick-acting valves.*
12. ***609.10.1 Mechanical Devices.** Where listed mechanical devices are used, the manufacturer’s specifications as to location and method of installation shall be followed.*

INSTALLATION STEPS: (ILLUSTRATED ON FOLLOWING PAGES)

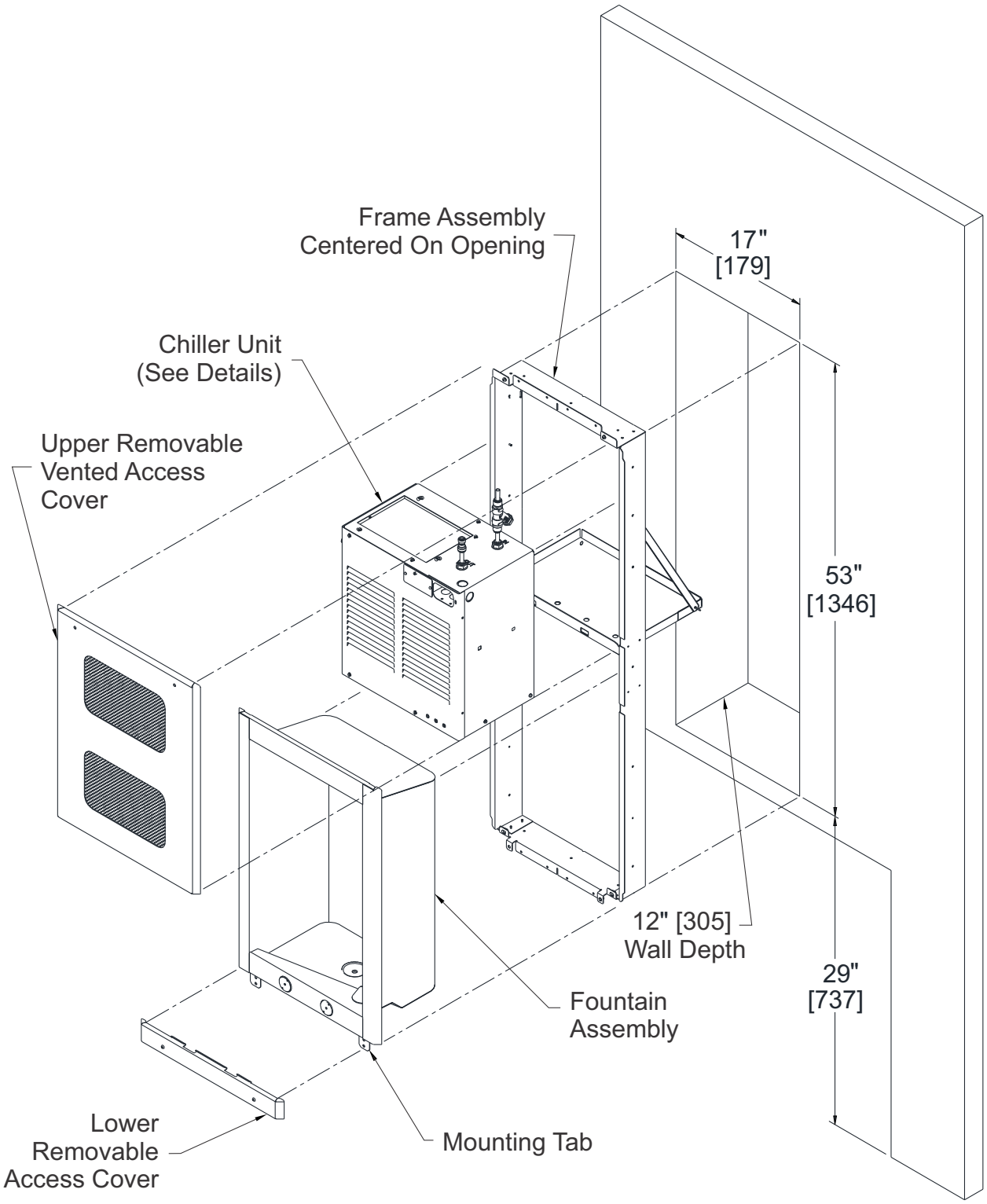
1. Provide wall opening as indicated in Rough-in sheet. Provide structural support around opening for frame anchoring if required.
2. Carefully remove Drinking Fountain and Chiller mounting frame from packaging to prevent damage.
3. Insert and center mounting frame into the rough-in blockout, with sides, top and bottom flange against finished wall. Level and secure using mounting hardware provided by the installer. Verify if level and shim if necessary.
4. Secure Frame to wall through sides top and bottom using anchoring hardware by others.
5. Place the Chiller Unit onto the basepan of the frame assembly. Make up electrical connections as required. Refer to A910.8 Chiller manual 7020-978-001 for complete Chiller installation information.
6. Position the top of the Fountain assembly over the Frame S-clip just below the Chiller basepan and engage while securing bottom tabs to Frame assembly with #10-32 screws and washers provided. Scews must thread into captive nuts behind Frame tab. Tighten screws to pull the Fountain flush with the wall.
7. Make up supply connections to 3/8” OD Tube x 1/4” OD Tube Y-Strainer Chiller and riser connections from Chiller to Fountain. Riser 1/4” OD tube from Chiller to Fountain should be insulated to prevent condensation and maintain cool water temperature. Refer to Water Path and Chiller detail.
8. Make-up 1-1/4” OD waste connection.
9. After thoroughly flushing supply line, connect water supply to chiller.

START UP:

1. Before assembling the upper and lower Removable Access Covers to the Fountain, but after thoroughly flushing the supply line and connecting it to the fixture, turn on building water supply and check all connections for leaks.
2. Air within the Fountain or the structure supply piping will cause an irregular outlet stream until purged out by incoming water.
3. Recheck all water and drain connections with water flowing through system.
4. Install upper Removable Access Cover to the Fountain by sliding the Cover into the Fountain’s Mounting Channel (DETAIL A), then secure the upper and lower Covers to the Fountain’s frame using the supplied #8-32 screws & washers (Illustrated Below).



WHAR81.8-BF INSTALLATION:

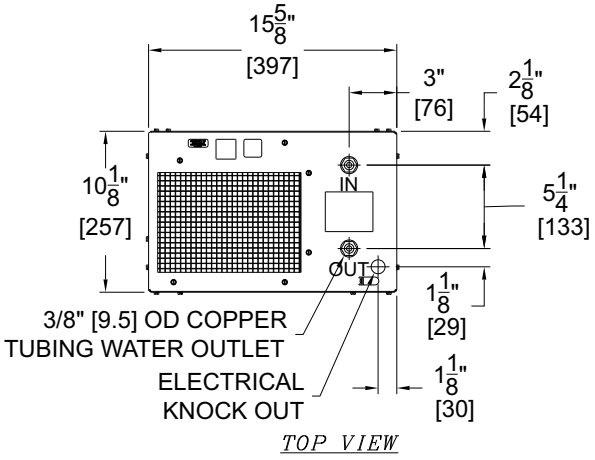


WHAR81.8-BF CHILLER ELECTRICAL:

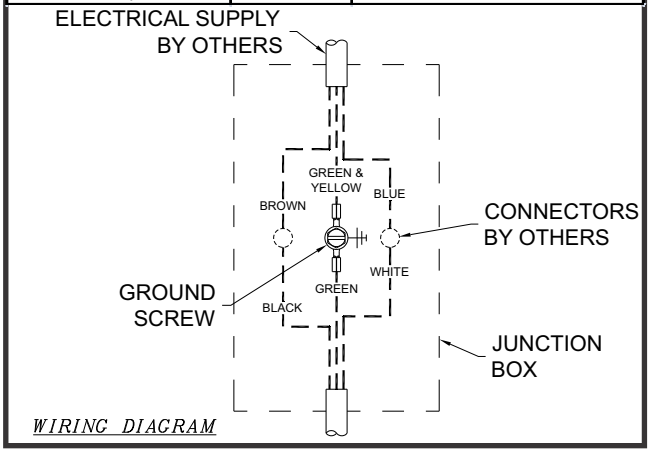
This fixture is intended to dispense water that has been lowered in temperature, but otherwise remains unchanged by the materials in the water cooler. It is common for electrical equipment to be grounded to water lines either within a structure or away from it. Every attempt should be made to prevent this kind of grounding from generating electrical feedback into the water cooler creating electrolysis. Electrolysis will cause a metallic taste or cause water metal content to increase.

NOTE: Remote water chiller is intended for indoor installation (fixture has not been rated for outdoor installation). A dielectric coupling must be used to connect the water chiller to the water supply. A nonmetallic coupler is furnished with this water cooler to meet this requirement.

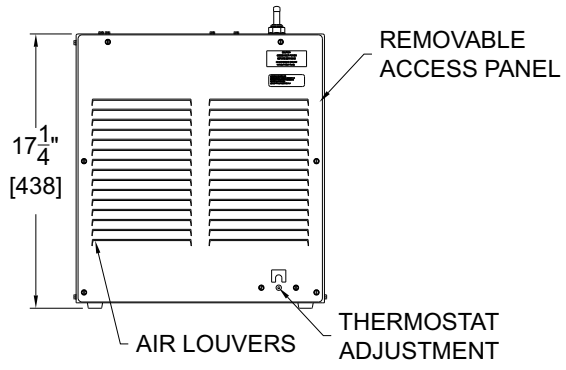
ROUGH-IN:

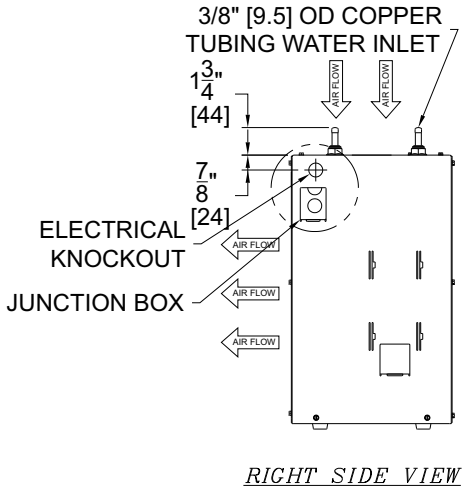


POWER CONNECTIONS FOR SINGLE PHASE CHILLER		
VOLTAGE / HERTZ	F.L. AMPS	CHILLING CAPACITY
115VAC / 60Hz	4.6 AMPS	8.0 GPH
230VAC / 50Hz	2.5 AMPS	8.0 GPH



NOTE: INSTALLER MUST REMOVE THE REMOVABLE ACCESS PANEL TO LOCATE THE JUNCTION BOX TO MAKE UP WIRING CONNECTIONS

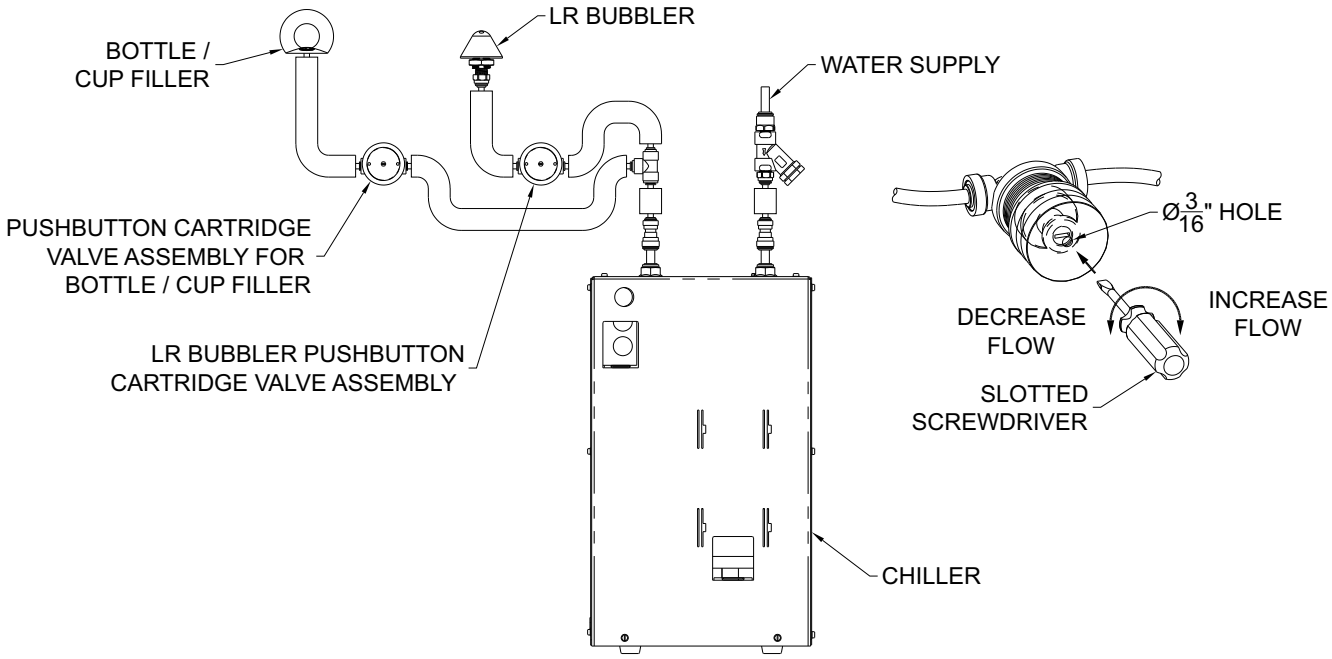




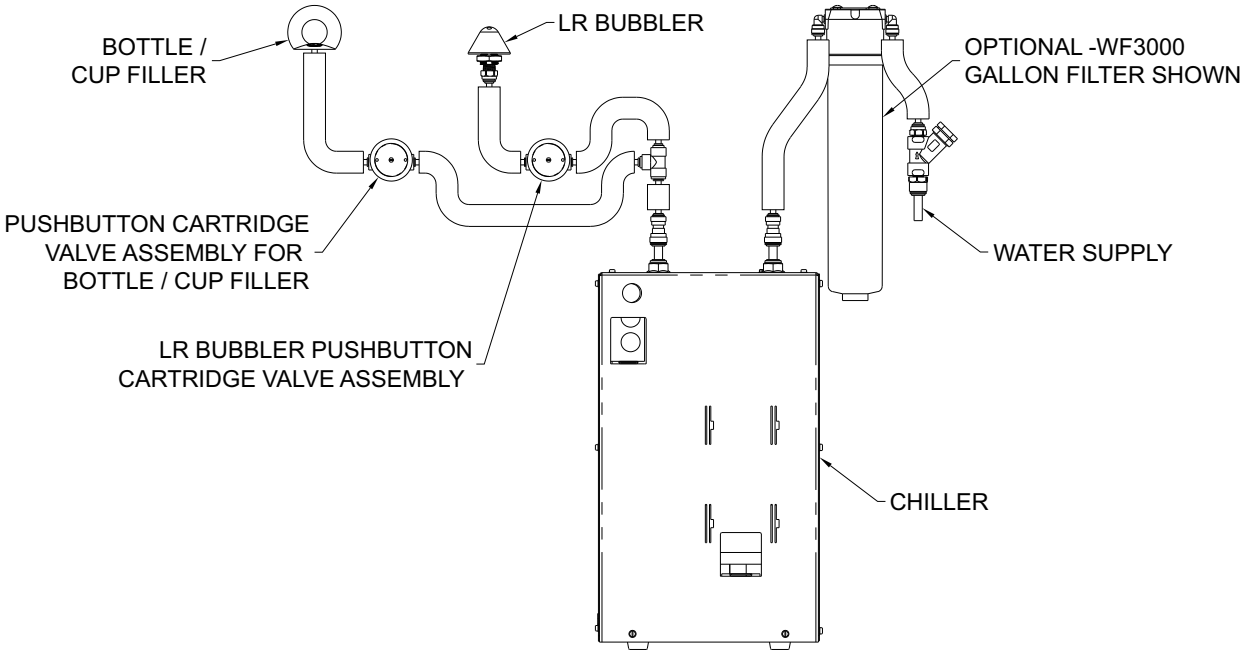
GENERAL NOTES:
1. ALL DIMENSIONS ARE IN INCHES [MM].
2. ALLOW 4 INCHES [102MM] MINIMUM CLEARANCE ON TOP AND FRONT FOR VENTILATION.
3. IT IS RECOMMENDED THAT ALL WATER OUTLETS BE CONNECTED DIRECTLY AND NO MORE THAN 7 FEET AWAY FROM THE CHILLER. FOR ANYTHING GREATER THAN 7 FEET, CHILLED WATER MAY NOT BE EXPOSED UNTIL ALL WATER IN RISER HAS BEEN RELEASED. ALL CHILLED WATER PIPING IS INTENDED TO BE COVERED WITH APPROPRIATE INSULATION TO MAINTAIN TEMPERATURE AND AVOID CONDENSATION

WHAR81.8-BF WATER PATH AND CHILLER DETAIL:

STANDARD PIPING SCHEMATIC



STANDARD PIPING SCHEMATIC WITH OPTIONAL -WF3000

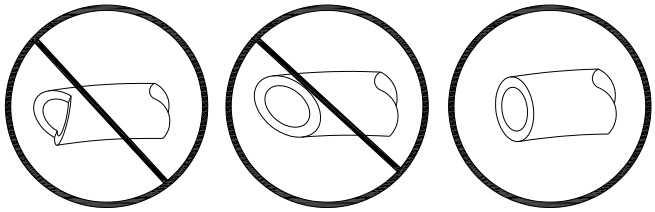


PUSH-IN FITTING INSTALLATION

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

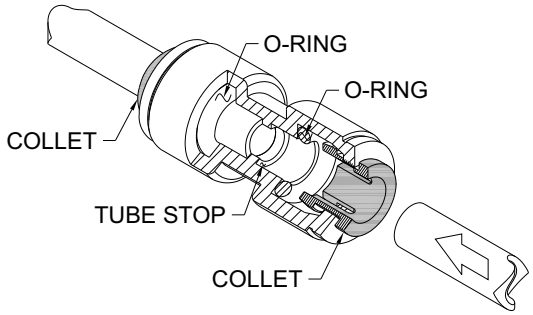
TO CUT TUBE:

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.

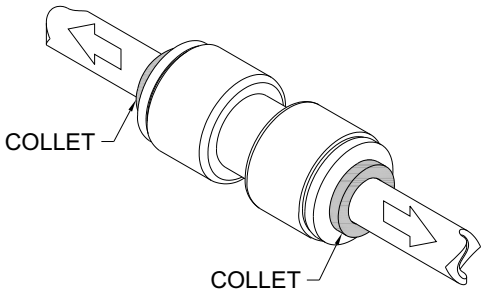


INSERTING THE TUBE:

1. Firmly and fully insert the Tubing end into the Push-In Fitting up to the Tube Stop located approximately 1/2" deep.

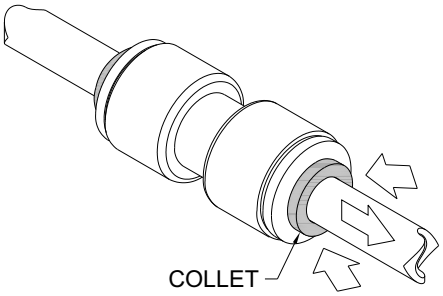


2. Pull on the fitted Tubing to ensure it is secure. Tube should not come free from the Fitting. Water test the connection assembly prior to leaving the site to ensure there are no leaks.



DISCONNECTING THE TUBE:

Prior to disconnecting 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.



LEAK DETECTOR SHUT-OFF VALVE

The Murdock Leak Detection Shut-Off Valve feature is intended to limit the possibility of a potentially catastrophic leak, caused as a result of water leakage from a Fitting, Plastic (PE) Tubing, Copper Tubing or other water bearing component within the Fixture. The Shut-Off Valve is provided as standard for all Chiller devices. It is Factory installed to the Bottom Plate (IE lowest point) within the Chiller Housing where it will sense the presence of water leakage and then initiate shut-off of the primary Water Supply Line into Fixture.

OPERATION:

1. Fixture water supply comes from the Wall and goes directly into the Leak Detection Shut-Off Valve, where it passes through and feeds (optional) Water Filter and then enters the Chiller.

2. The Leak Protection Valve Consists of; Water Supply Inlet and Outlet, Expanding Cotton Pill, Pill Chamber with Hinged Lid, and a Spring Loaded Piston.

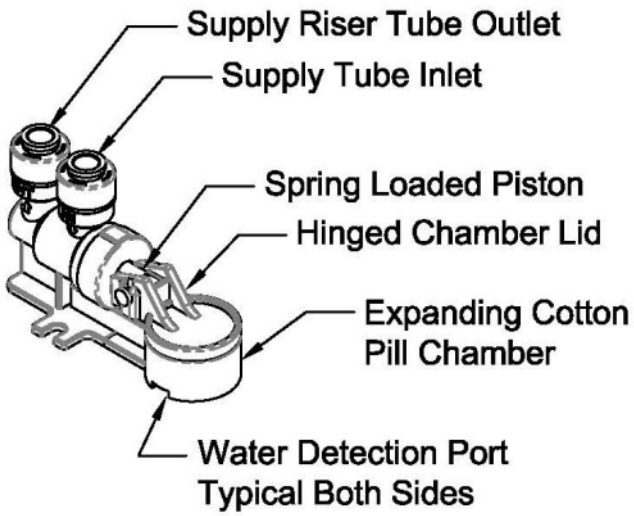
3. Primary Water Supply to fixture passes into and out of Leak Protection Valve prior to feeding fixture components via the Water Supply Inlet and Outlet.

4. The Leak Protection Valve, positioned at the bottom of the Fixture cabinet, contains a Cotton "Pill" in a Chamber. The Pill Chamber has Water Detection Ports to detect when an excess of Water is within Cabinet.

5. When leaking water enters the Pill Chamber Detection Port, the Cotton Pill absorbs it and expands. When the Cotton Pill expands, it triggers the Pill Chamber Hinged Cap (Lever) to open, which in-turn moves the Spring Loaded Piston to close the valve, shutting off Water Supply Outlet thereby preventing leaking water to flow beyond the Leak Detection Shut-Off Valve.

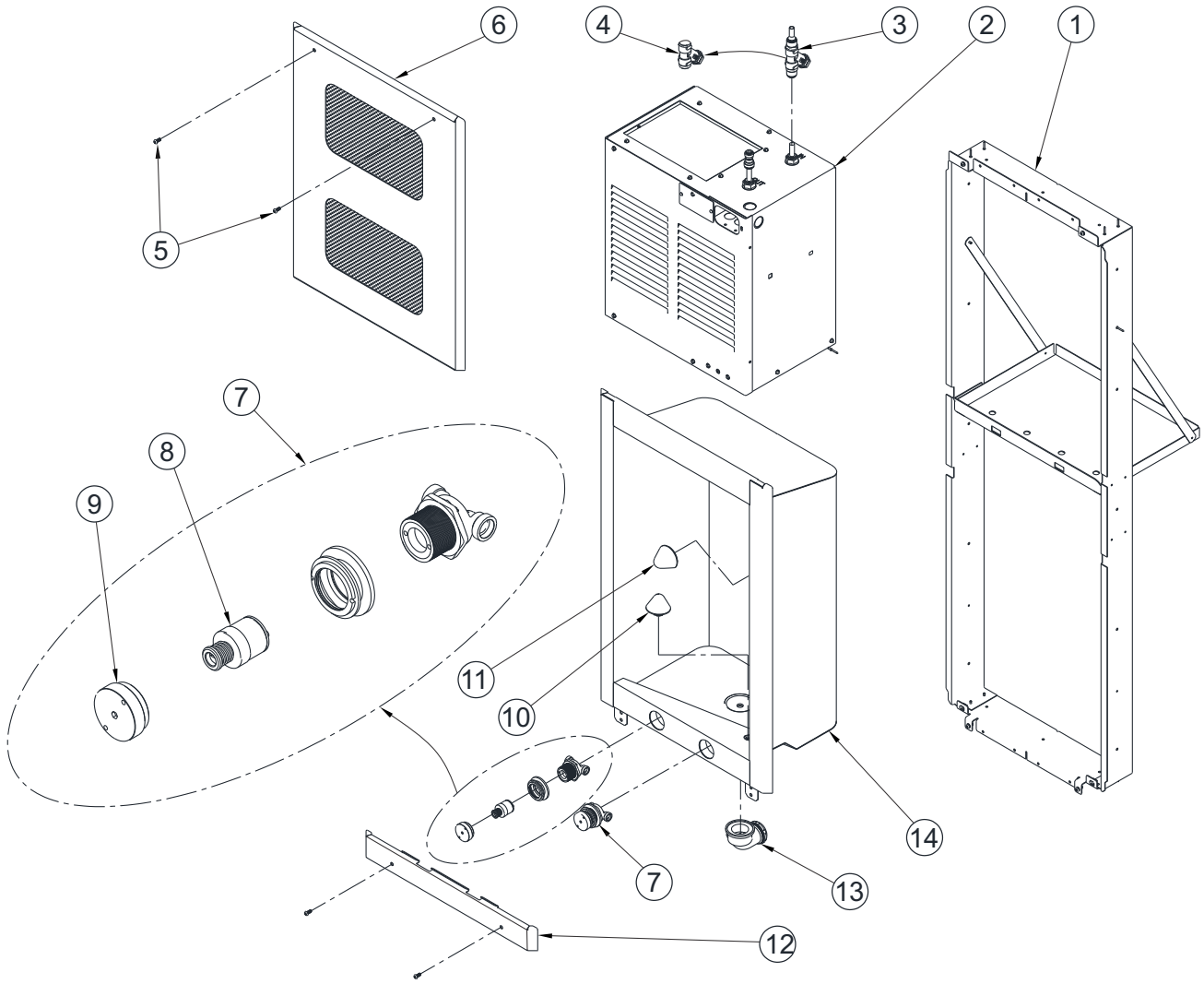
REPLACEMENT: Once leak is detected and repaired by a qualified professional, Fixture operation may be easily restored by replacing the Cotton Pill, and closing the Hinged Pill Chamber Lid which will reset the Shut-Off Valve in the open position. The Leak Detector Valve is provided with total of (2) Cotton Pills to allow one-time replacement.

Shut-Off Valve is sold complete using P.N. 1895-157-000 and includes (2) Cotton Pills.



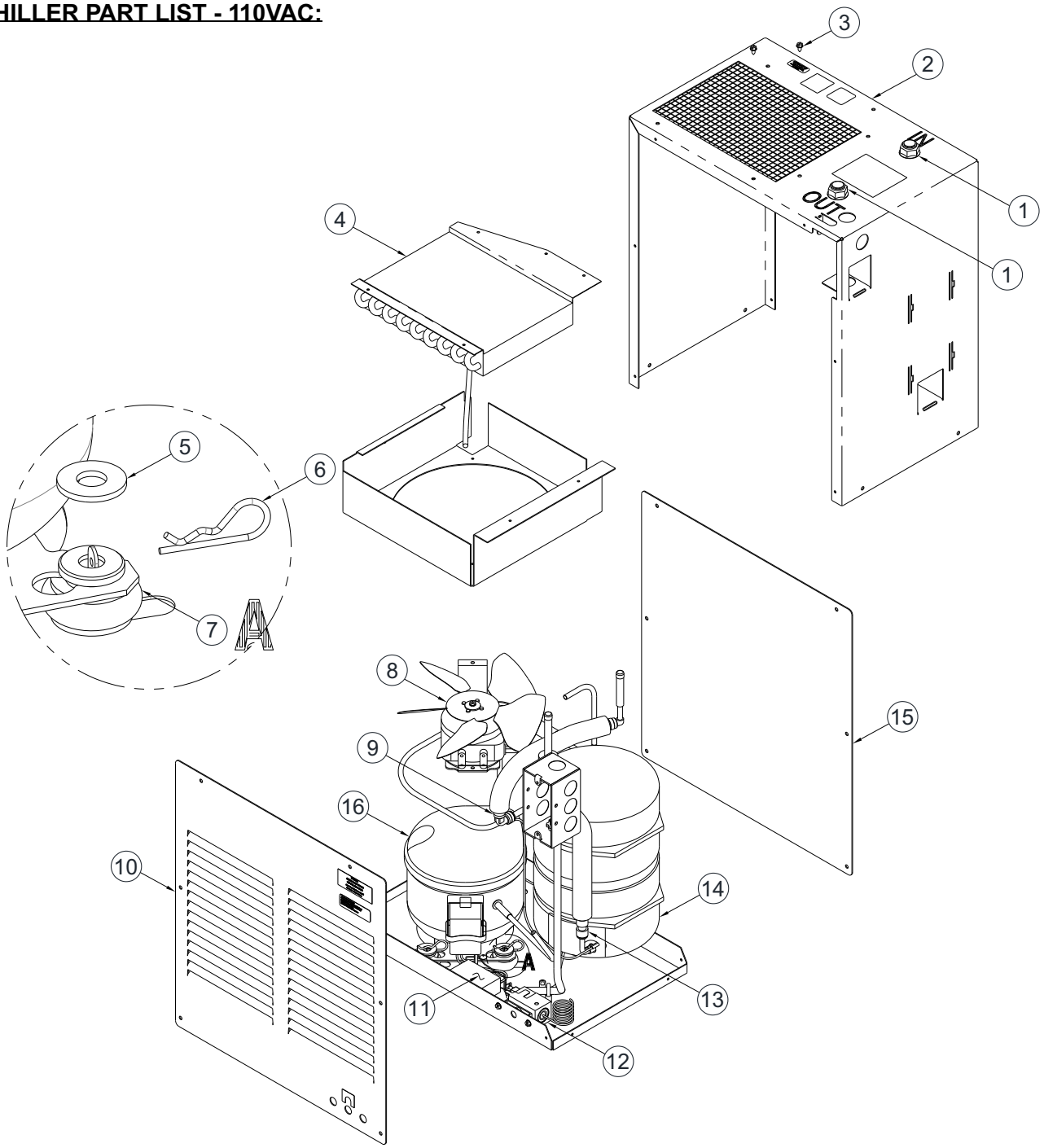
Leak Detection Shut-Off Valve Detail

WHAR81.8-BF PART LIST:



ITEM #	PART NUMBER	DESCRIPTION	ITEM #	PART NUMBER	DESCRIPTION
1	7035-440-001	FRAME ASSEMBLY, RECESSED FOUNTAIN	8	7000-060-000	FLOW REGULATOR CARTRIDGE (0.5 GPM)
2	7008-050-001	8.0 GPH CHILLER	9	7000-091-001	PUSHBUTTON W/HEX ASSY
3	7000-024-001	"Y" STRAINER ASSY, W/ 1/4" NPT X 3/8" OD	10	4854-020-001	DECK BUBBLER ASSY., (LR-BPH)
4	7000-024-001	"Y" STRAINER ASSY, W/ 1/4" NPT	11	4854-030-001	NOZZLE ASSY, LR BOTTLE FILLER
5	0112-044-000	#10-32 X 1/2" WHT HEX C/R BTN HD SCREW	12	Contact Factory	BOTTOM TRIM PANEL, WHITE
	0112-002-000	#10-32 X 1/2" S/S HEX C/R BTN HD SCREW		7035-444-199	BOTTOM TRIM PANEL, STAINLESS STEEL
6	Contact Factory	VENT PANEL, WHITE	13	4956-056-001	GRID STRAINER LR W/CLOSE ELL ASSY
	7035-430-001	VENT PANEL, STAINLESS STEEL	14	Contact Factory	BACK PANEL, WHITE
7	7000-065-001	PUSH BUTTON W/ CARTRIDGE VALVE ASSY		7035-410-002	BACK PANEL, STAINLESS STEEL

CHILLER PART LIST - 110VAC:



ITEM #	PART NUMBER	DESCRIPTION	ITEM #	PART NUMBER	DESCRIPTION
1	1895-712-000	3/8"OD - 1/4" OD BULKHEAD CONNECTION	9	1895-708-000	1/4" OD PUSH-IN ELBOW CONNECTION
2	7008-010-199	HOUSING	10	7008-012-199	FRONT PANEL
3	0124-031-000	#8-3/8" HEX WASHER HD SLOTTED SCREW	11	7012-803-000	CAPACITOR
4	7008-015-001	CONDENSOR ASSEMBLY	12	7003-250-000	TEMPERATURE CONTROL
5	0332-013-000	1" OD x 7/16" ID FLAT WASHER	13	1895-121-000	1/4" OD PUSH-IN CONNECTION
6	7012-150-000	3/32" x 1-5/8" HITCH PIN	14	7003-115-001	EVAPORATOR ASSEMBLY
7	7012-805-000	RUBBER FOOT FOR TATUNG	15	7008-013-199	BACK PANEL
8	7003-002-004	115V FAN MOTOR	16	7012-801-001	115V COMPRESSOR ASSY