DRINKING FOUNTAINS
INSTALLATION/MAINTENANCE INSTRUCTIONS

A191.8 Series
Barrier Free, Wall Mounted Chilled Drinking Fountain

TECHNICAL ASSISTANCE TOLL FREE TELEPHONE NUMBER: 1.800.743.8259

Technical Assistance E-Mail: Fieldservice@acorneng.com

IMPORTANT: INSTALLATION FOR FREEZE RESISTANT OPTION "-FRA" WILL DIFFER FROM STANDARD! REFER TO DESIGNATED FREEZE RESISTANT INSTALLATION DETAILS PRIOR TO ROUGH-IN AND FIXTURE INSTALL - FRA SERIES OPTIONS. FOR ADDITIONAL INFORMATION VISIT: www.MurdockMfg.com/Resources OR CONTACT YOUR LOCAL SALES REPRESENTATIVE.

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

COMPLIES WITH STANDARDS

NSF/ANSI 61

Federal Public Law 111-380 (No Lead)

murdock® SINCE 1853

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626-336-4561
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Member of MORRIS GROUP INTERNATIONAL

IMPORTANT

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.

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.

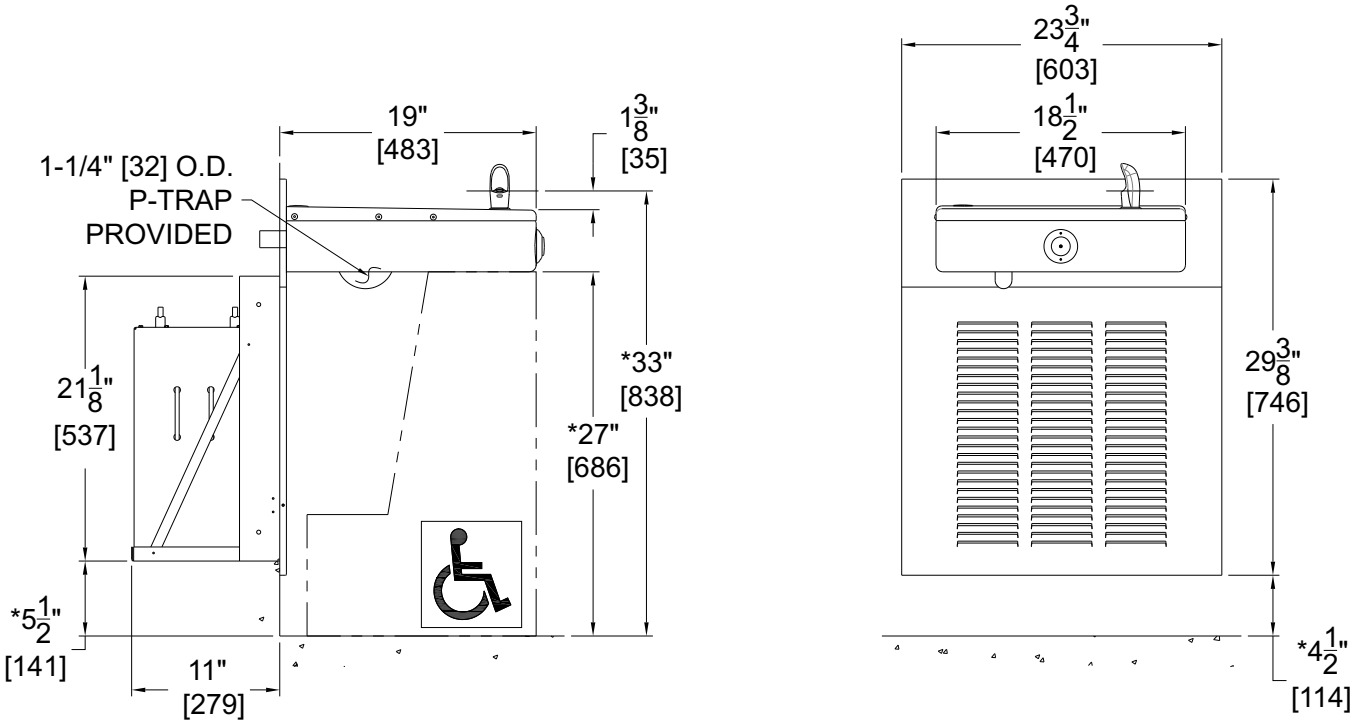
When applicable: Electrical receptacle(s) must be wired to a GFCI protected circuit. Fixture must be earth grounded per N.E.C. (National Electrical Code).

NOTICE

A dielectric coupling must be used to connect the water cooler to the water supply. A nonmetallic coupler is furnished with this water cooler to meet this requirement.

DIMENSIONAL DRAWING

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



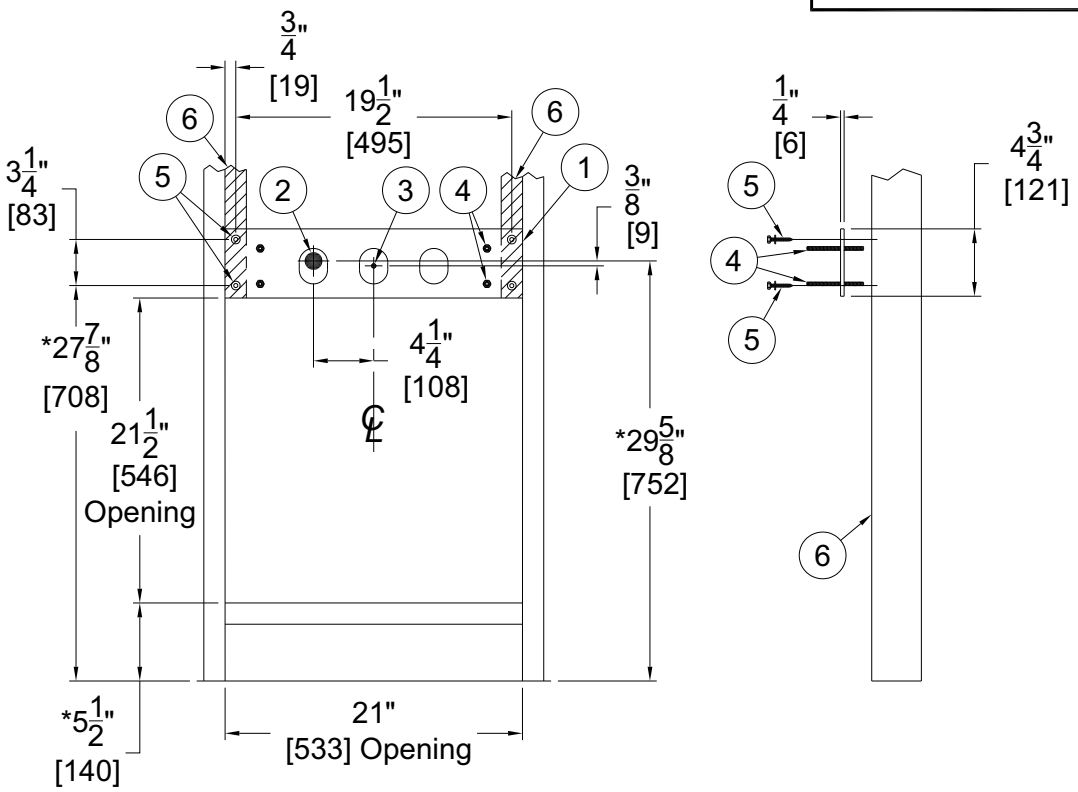
GENERAL NOTES:
1. ALL DIMENSIONS ARE IN INCHES [MM]
*2. DIMENSIONS SHOWN ARE FOR RECOMMENDED HEIGHT. ADJUST VERTICAL DIMENSIONS AS NECESSARY TO COMPLY WITH FEDERAL, STATE, & LOCAL CODES

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.

A191408S 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
2. 1-1/4" OD Waste Outlet
3. 3/8" NCT Supply Inlet
4. 5/16-18 UNC Studs and Hardware (Provided)
5. 1/4" Screw and Washers by Installer
6. 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:

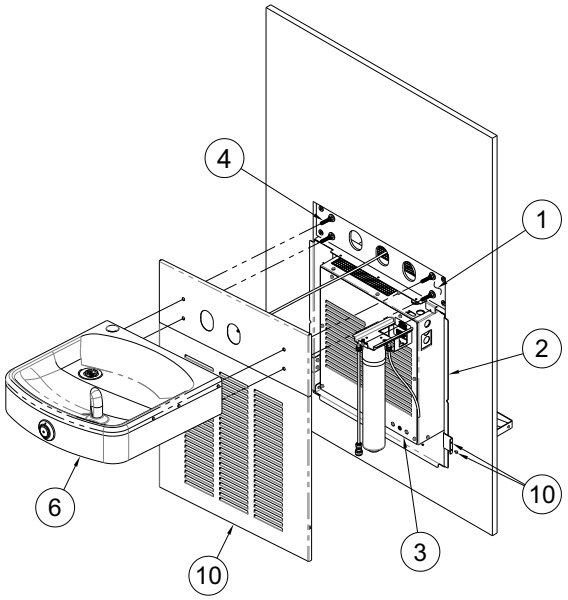
1. Water Supply Service Stop Valve, Water Connections and Electrical Connections to be supplied by others in accordance with local codes.
2. Provide 4” minimum clear space in front of bottom trim panel and above in-wall chiller to allow for proper ventilation.
3. Waste is 1-1/4” Outer Diameter. Chiller water inlet is 3/8” Outer Diameter copper tube. Chiller water outlet is 3/8” Outer Diameter copper tube. 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 from in-wall chiller to drinking fountain must have adequate insulation.
4. Completely flush supply lines of all foreign debris before connecting to fixture. Water cooler designed to not cause problems with taste, odor, color, or sediment. Optional Water Filter, is available should any of these problems arise from the water supply.
5. Do NOT solder tubes inserted into the chiller, bottle filler or the fountain strainer as damage to the o-rings on the push-in fittings may result.
6. All burrs must be removed from outside of cut tubes before inserting into strainer or other components.
7. Power supply must be identical in voltage, cycle and phase to that specified on the chiller data plate. Refer to submittal.
8. This unit must be grounded per the requirements of applicable electrical codes.
9. WARNING: Warranty is voided if installation is not made following current Murdock Mfg. installation instructions and if components are assembled to the fixture that are not approved by Murdock Mfg.
10. Fixture operates within water pressure range of 174 kPa (25 psig) to 724 kPa (105 psig). Murdock Mfg. will not warranty chiller damaged when connected to supply lines with flow pressure lower than 174 kPa (25 psig) or higher than 724 kPa (105 psig). A pressure regulator must be furnished by others on supply line if inlet pressure is greater than 724 kPa (105 psig).
11. Due to cold waste water, Murdock Mfg. recommends that waste piping supplied by installer be insulated appropriately to prevent excessive condensation.
12. *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. It is common for electrical equipment to be grounded to water lines either within a structure or away; otherwise, remains unchanged by the materials in the water cooler. Every attempt should be made to prevent this kind of grounding from generating feedback into the water cooler creating electrolysis. Electrolysis will cause a metallic taste or cause water content to increase.
6. Electrical Receptacle(s) must be wired to a GFCI protected circuit. Fixture must be earth grounded per NEC (National Electrical Code).
7. Completely flush water supply lines of all foreign debris, before connecting to the fixture.

DRINKING FOUNTAIN INSTALLATION:

1. Position Wall Mounting Plate and fix to wall using 1/4” wood screws and washers (provided by others).
2. Insert Frame Assembly into the rough-in block out and secure using 1/4”-20 UNC mounting hardware (provided by others).
3. Place the Chiller Unit onto the base pan of the Frame Assembly.
4. Install the four threaded studs into the Wall Mounting Plate.
5. Remove the Drinking Fountain top by taking out side screws and 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.
6. Slide Fixture over studs and secure with nuts and washers.
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. Place drain gasket on drain adapter. Reconnect bubbler tube. Reassemble top to unit by engaging back clip and securing with screw.
10. Place Lower Trim Panel onto Upper Trim Panel and secure to Brackets on both sides with screws provided.

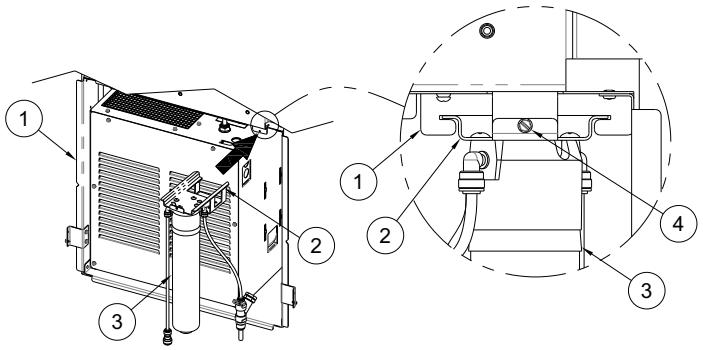


DRINKING FOUNTAIN START UP:

1. Before connecting power supply, but after thoroughly flushing the supply line and connecting it to the cooler, 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.
3. Depress front pushbutton until steady water stream is achieved.
4. 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.
5. Recheck all water connections with water flowing through system.
6. With power still NOT connected, carefully manually rotate cooling fan to ensure proper clearance and free fan action
7. Provide power to water chiller and make sure unit begins to function.
8. Assemble louvered bottom trim panel with screws provided to brackets on either side of wall mounting frame.

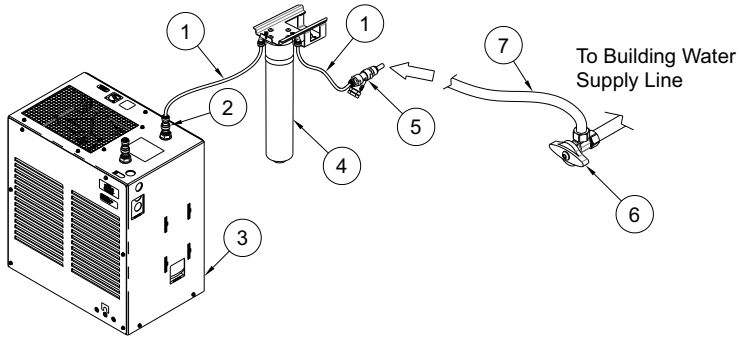
OPTIONAL WATER FILTER

1 If the optional -WF1 or -WF3 Water Filter is included with Fixture, slide and mount Water Filter Bracket to Chiller Mounting Frame Assembly. Secure Bracket with #8 x 3/8" Hex Washer Head Screw.



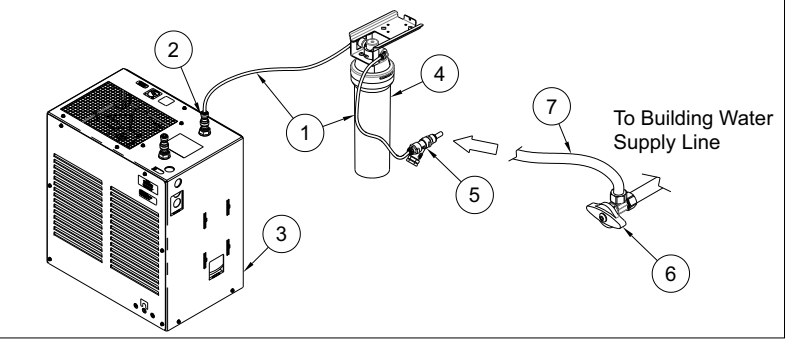
1. Chiller Mounting Frame Assembly
2. Water Filter Bracket Assembly
3. Water Filter
4. #8 x 3/8" Hex Washer Head Screw

2A (-WF1 Water Filter Tubing)
After thoroughly flushing supply line, make up the supply line connection to the 1/4" OD x 3/8" OD Push-In Y-Strainer and from Y-Strainer to the Water Filter inlet. From Filter outlet, make up connections to chiller inlet.



1. 1/4" OD PE Tubing
2. 1/4" x 3/8" Tube Union Push-In
3. Chiller
4. -WF1 Water Filter
5. 1/4" OD x 3/8" OD Push-In Y-Strainer
6. Angle Stop Recommended, by others
7. Supply Line, provided by installer

2B (-WF3 Water Filter Tubing)
After thoroughly flushing supply line, make up the supply line connection to the 1/4" OD x 3/8" OD Push-In Y-Strainer and from Y-Strainer to the Water Filter inlet. From Filter outlet, make up connections to chiller inlet.



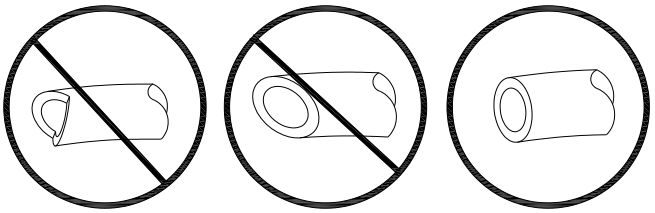
1. 1/4" OD PE Tubing
2. 1/4" x 3/8" Tube Union Push-In
3. Chiller
4. -WF3 Water Filter
5. 1/4" OD x 3/8" OD Push-In Y-Strainer
6. Angle Stop Recommended, by others
7. Supply Line, provided by installer

PUSH-IN FITTING INSTALLATION

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

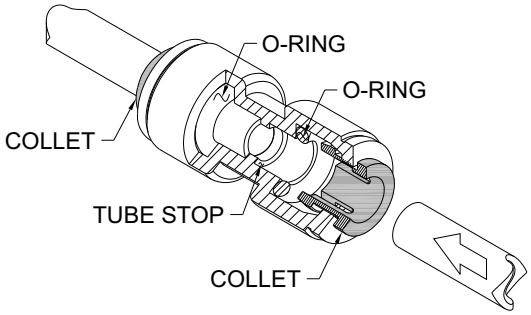
TO CUT TUBE:

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.

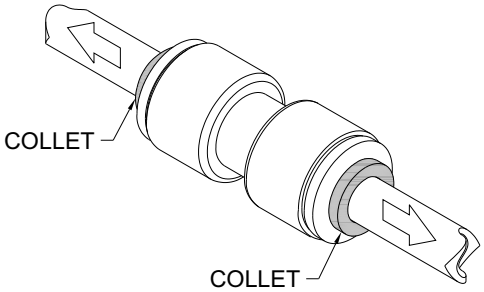


INSERTING THE TUBE:

1. Firmly and fully insert the tubing end into the push-in fitting up to the tube stop located approximately ½" deep.

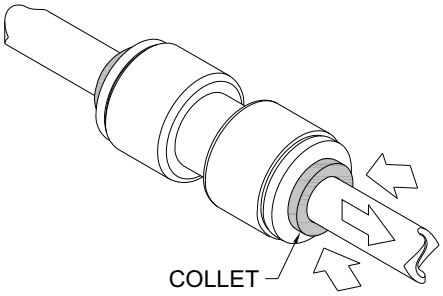


2. Pull on the fitted tubing to ensure it is secure. Tube should not come free from the fitting. Water test the connection assembly prior to leaving the site to ensure there are no leaks.



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.



TROUBLE SHOOTING:

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

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. COMPRESSOR DOES NOT RUN:

a. Check the electrical supply for power and correct voltage. The incoming voltage must be within 10% of the rated voltage on the serial nameplate.
b. If the cold thermostat capillary bulb loses its charge or becomes kinked, it will fail in the open position causing a disruption of power to the compressor. Disconnect electrical supply to the water chiller and using an ohm meter check, for continuity across the two electrical terminals on the thermostat. Install a new thermostat if there is no continuity.
c. Check for loose wires within the compressor box. The incoming power leads must be connected to the overload and relay.
d. If all components check positive for continuity, then test the wiring harness plug for continuity to see if there is a broken wire within the wiring harness insulation.

3. COMPRESSOR RUNS - WATER IS WARM:

a. The most common cause for a water chiller to run without producing cold water is a loss of refrigerant. The water chiller must be taken to a certified refrigerant technician for repairs.
b. Make sure the condenser fan motor is operative. The fan blade must turn freely to help remove the heat of compression.
c. An incorrect refrigerant charge, restriction or defective compressor (not pumping) will also cause the compressor to run without producing cold water. All these signs indicate a problem within the refrigeration system and the water chiller must be checked by an authorized service company.

4. COMPRESSOR CYCLING ON OVERLOAD PROTECTOR:

a. A dirty condenser or a blocked fan will cause a high head pressure and frequent cycling of the overload protector.
b. Check the incoming voltage to make sure it is within 10% of the serial nameplate rating.
c. A restriction or moisture in the system will also cause intermittent cycling. A certified refrigeration mechanic should be contacted in this situation.
d. Change the overload or relay if defective.

5. NOISY OPERATION:

a. Check to make sure the fan blade is rotating freely.
b. Check the compressor mounting to make sure the pins and clips are not rattling. If the compressor appears to be noisy internally, it must be replaced.

6. 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. The water chiller may also develop a freezing condition in which the water will become frozen inside the evaporator coil. This indicates a refrigeration problem or thermostat failure; in which case, the water chiller needs to be checked by a qualified technician.
I. No power to transformer connections, loose or wires cut.

7. 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. Motors have lifetime lubrication and do not require scheduled maintenance.
2. Excess dirt or poor ventilation will cause the compressor overload protector to turn the compressor off and it will cycle on and off with no cold water coming out of bubbler. Periodically clean with vacuum cleaner, air hose or brush the condenser fins and cabinet ventilation louvers. In environments where dirt and dust is more prevalent, clean more frequently.
3. Periodically remove fountain top and clean out in-line 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.

CARTRIDGE REPLACEMENT/ STRAINER MAINTENANCE

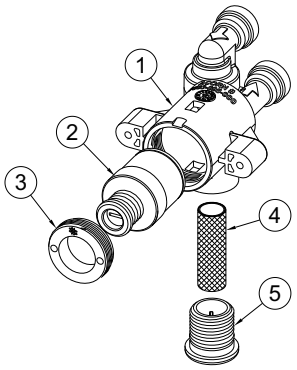
Note: Use the Universal Maintenance Tool to perform the following:

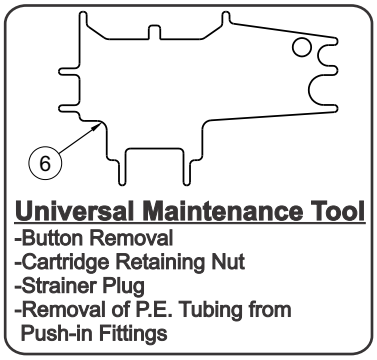
1. Strainer Plug must be removed before Cartridge replacement and Strainer maintenance (no need to turn the water off at the Angle Stop). Some residual water will drainduring Plug removal.
2. Clean Strainer as needed using clean water.
3. Cartridge Replacement - insert diamond end of the Universal Tool 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

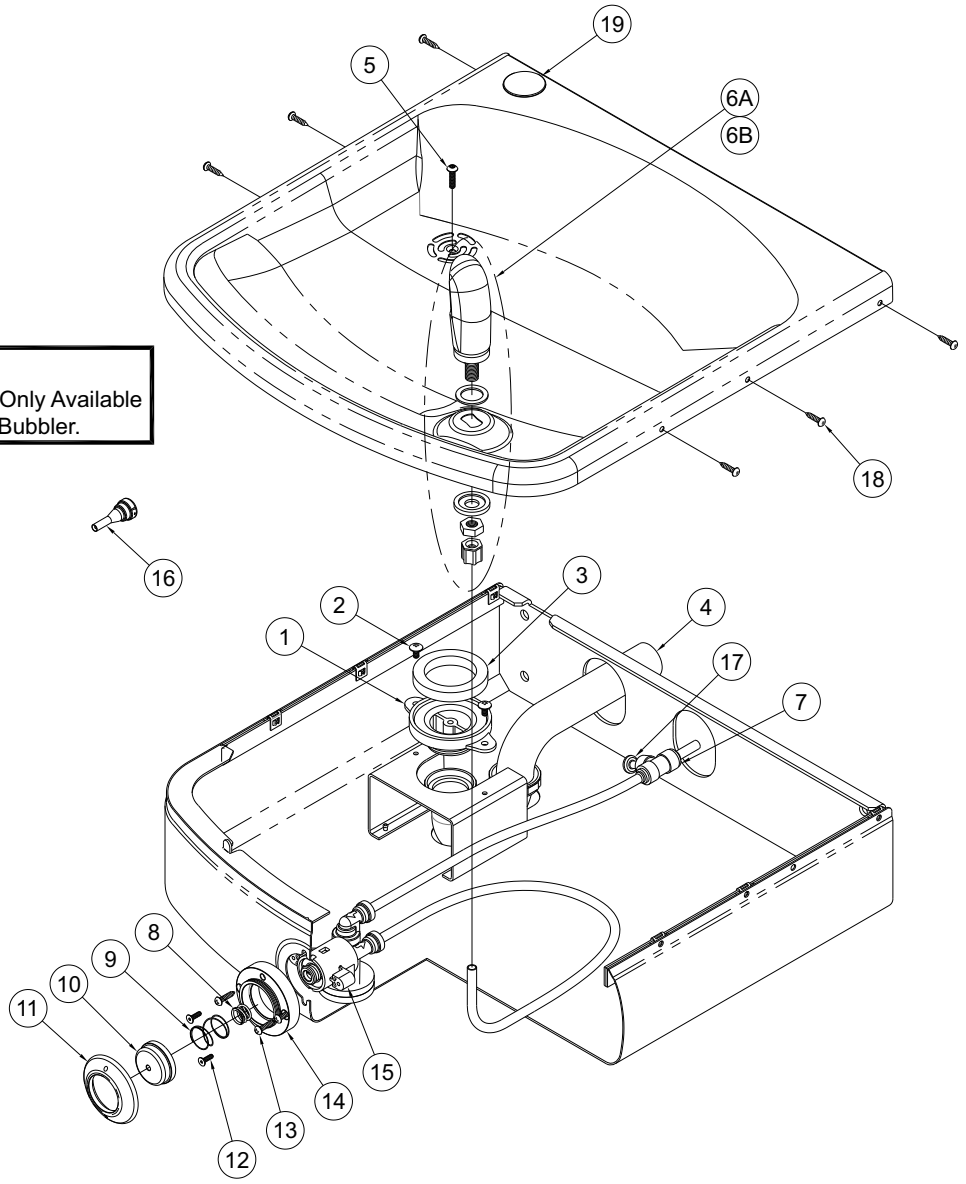
ITEM #	PART NUMBER	DESCRIPTION
1	7003-095-000	Valve Body Sub Assembly
2	7000-060-000	Valve Cartridge
3	7000-052-000	Retaining Nut
4	7003-864-000	Strainer, Auto Stop
5	7003-097-001	Strainer Cap
6	7003-194-199	Maintenance Tool





DRINKING FOUNTAIN PARTS BREAKDOWN DRAWING

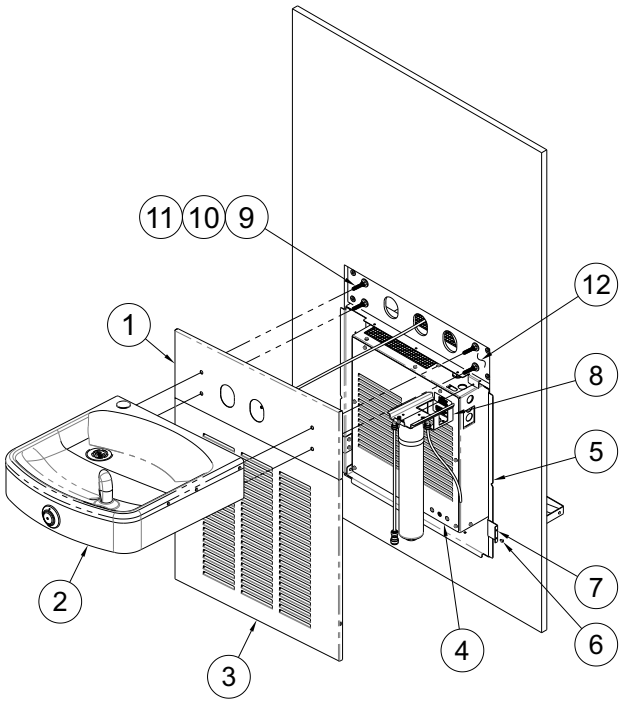
NOTE:
** Flow Restrictor Only Available With Low Flow Bubbler.



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	No. 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.

A191.8 SERIES BREAKDOWN

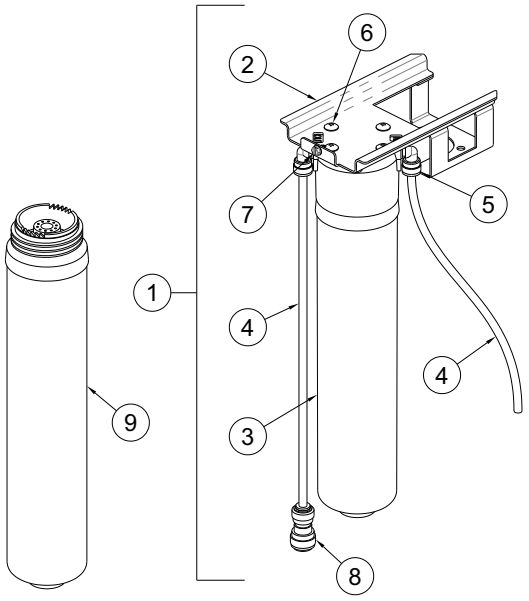


ITEM #	PART NUMBER	DESCRIPTION
1	7001-725-199	Upper Trim Panel Assembly
2	7001-700-001	Wide Contour Fountain
3	7000-239-199	Lower Trim Panel
4	7008-010-001	Chiller Assembly
5	7014-230-001	Frame Assembly, Chiller Mount
6	0701-722-001	#8 x 3/8" S/S Phil Hd Sheet Metal Screw
7	7014-213-199	Bracket, Trim Panel Mount
8	7014-060-001	Filter Assembly, 1,500 Gallons
	7014-061-001	Filter Assembly, 3,000 Gallons
9	0243-026-000	Stud, 5/16-18 UNC x 4" Lg, Zinc Plated
10	0332-006-000	Flat Washer, 5/16" Zinc Plated
11	0304-006-000	Hex Nut, 5/16-18, Zinc Plated Steel
12	7001-706-001	Weldment, Wall Mounting Plate

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.

Optional -WF1 Water Filter

ITEM	PART NUMBER	DESCRIPTION
1	7014-060-001	FILTER ASSY, 1,500 GALLONS
2	7014-060-002	BRACKET, FILTER MOUNT
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	0124-010-000	#10 x 1/2" LONG TRUSS HEAD SCREW
7	0124-031-000	#8 x 3/8" LONG SLOTTED WASHER SCREW
8	1895-123-000	1/4" x 3/8" O.D. TUBE UNION PUSH-IN
9	7012-313-000	REPLACEMENT CARTRIDGE



Optional -WF3 Water Filter

ITEM	PART NUMBER	DESCRIPTION
1	7014-061-001	FILTER ASSY, 3,000 GALLONS
2	7014-060-002	BRACKET, FILTER MOUNT
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	0250-011-000	#10 x 1/2" LONG TRUSS HEAD SCREW
7	0124-010-000	#8 x 3/8" LONG SLOTTED WASHER SCREW
8	1895-123-000	1/4" x 3/8" O.D. TUBE UNION PUSH-IN
9	7012-318-000	REPLACEMENT CARTRIDGE