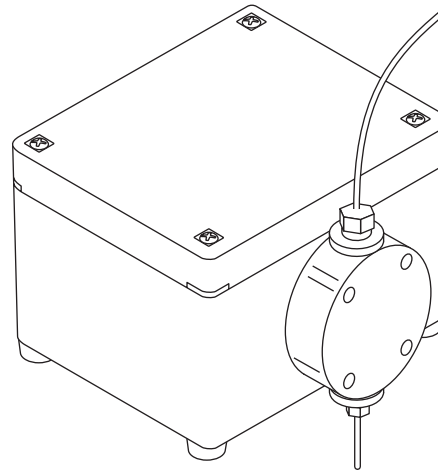


mr.steam® aromaflo

Operation and Installation Instructions

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**Fragrance Metering Pump for Commercial Steam Rooms
CU-AromaFloA 120V**

! WARNING Do not use with water soluble fragrance or fragrance containing emulsifiers or aldehydes. AromaFlo pump damage may result. MrSteam oils are approved for operation with this pump.

! WARNING The use of any oils other than Mr.Steam oils may introduce excessive concentration of oil into the steam room, resulting in a health hazard.

! WARNING Vapors may cause drowsiness and dizziness. Keep out of the reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If swallowed, rinse mouth with water (only if the person is conscious), seek medical advice immediately and show this container or label.

! WARNING Highly Flammable. Keep away from sources of ignition— No smoking. Keep container tightly closed & in a well-ventilated place. This material & its container must be disposed of as hazardous waste.

! WARNING Not for use in acrylic or fiberglass rooms. Material Safety Data Sheet (MSDS) available upon request

! WARNING

This room is equipped with an aromatic oil dispensing system.

Leave the room immediately if you have any adverse or allergic reactions, including difficulty breathing or eye, nasal, throat, or skin irritation and seek medical attention.

mr_steam® Commercial Steam Generators
Sussman-Automatic Corp. 43-20 34th Street, Long Island City, NY 11101
1 800 76 STEAM • www.mrsteam.com

NOTE: Sussman-Automatic strongly recommends that this warning sign (supplied) be posted in a conspicuous location near the steam room.

IMPORTANT NOTE:

As you follow these instructions, you will notice warning and caution symbols. This blocked information is important for the safe and efficient installation and operation of this AromaFlo. These are two types of potential hazards that may occur during this installation and operation:

! WARNING
states a hazard which may cause serious injury or death if precautions are not followed.

! CAUTION
signals a situation where minor injury or product damage may occur if you do not follow instructions.

IMPORTANT NOTE:

THIS HIGHLIGHTS INFORMATION THAT IS ESPECIALLY RELEVANT TO A PROBLEM-FREE INSTALLATION.

GENERAL INSTALLATION

! CAUTION The AromaFlo pump is qualified for use with Mr.Steam commercial steam generators. The use with other brand equipment must be qualified by installation owner/ installer. For use with commercial steam rooms only. Not for use in residential installations.

1. Mr.Steam AromaFlo Pumps are designed and intended for indoor use only and are to be located indoors in a dry clean location and not subject to moisture, condensation or similar high humidity environments.
2. Do not install AromaFlo Pumps outdoors.
3. Do not install AromaFlo Pumps in a location where water could freeze.
4. Do not install AromaFlo Pumps near flammable or corrosive materials and chemicals. Installation in areas having high concentrations of chlorine (such as pool equipment room) should be avoided.
5. Install AromaFlo Pump on a solid and level surface.
6. Provide access to AromaFlo Pump for servicing.
7. The unit should not be installed in areas accessible to the general public (ie:utility room). A LOCKED UTILITY ROOM IS STRONGLY RECOMMENDED.
8. Height difference between metering pump and 90 degree T is to be held to a maximum 6 ft.(see page 5).
9. Place scent container below metering pump. Height difference between metering pump and scent container is to be no greater than a maximum of 3 feet(see page 5).

CLEARANCE TO HEAT SOURCES

- Do not install the metering pump directly below or above the steam generator where it is subject to heat.
- Distance between metering pump and heat source (e.g. steam generator, heating system) minimum 3 ft. If this distance of minimum 3 ft cannot be maintained, install a radiation plate or heat insulation between the heat source and metering pump.
- Ambient temperature at pump should not exceed 90° F.

INSTALLING THE 90 DEGREE T & ATOMIZING NOZZLE

1. For optimal results locate the 90 degree T (not provided) and atomizing nozzle in the steam supply line between 16" and 36" from the steam head (see page 5).
2. T must face downward as shown on (see page 5).
3. Screw the atomizing nozzle into 90° T fitting.(see page 5).

Note: The further the 90° T is from the steam head (more than 36") the more the fragrance will heat up and degrade. Conversely, the closer the 90° T is to the steamhead (less than 16") the less the fragrance will "mix" with the steam (and some may go down the drain).

IMPORTANT NOTE: Follow the installation instructions for the steam pipeline in the Mr.Steam Commercial Steam Bath Installation and Operating Manual (PUR 101376).

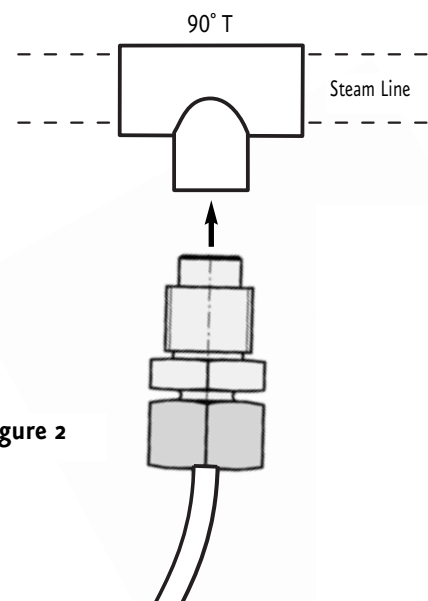


Figure 2

INSTALLING THE PRESSURE HOSE TO ATOMIZING NOZZLE

1. Unscrew the nut from the atomizing nozzle and insert the pressure hose through the nut.
2. Firmly push the pressure hose onto the atomizing nozzle (see page 5).
3. Screw on the nut

IMPORTANT NOTE: HAND-TIGHTEN ONLY

INSTALLATION OF PRESSURE HOSE TO AROMAFLO PUMP.

1. Unscrew the pressure end nut from the pump head and remove the shipping hose and the pressure end nut.
2. Insert the pressure hose through the hole of the pressure end nut and firmly push the pressure hose onto the pressure valve.
3. Screw the pressure end nut onto the pressure valve and tighten the nut by HAND only.

INSTALLATION OF SUCTION HOSE IN SCENT CONTAINER

1. Locate the "container cover" in the AromaFlo box.
2. Unscrew the cover from the Mr.Steam scent container and discard.
3. Insert the suction hose with the open end from below through the hole in the container cover (see Fig. 3).
4. Insert the filter into the scent container so that the filter rests on the bottom.
5. Screw the cover onto the scent container.

NOTE: Limit height difference between metering pump and scent container to 3 feet.

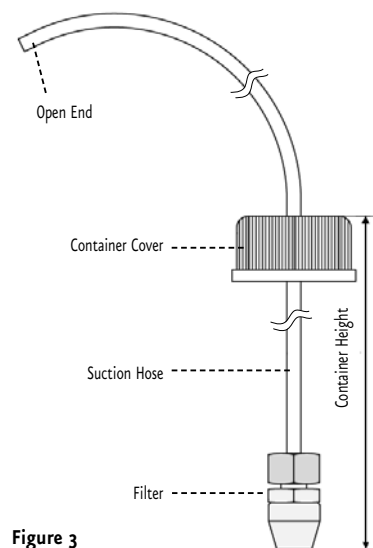


Figure 3

INSTALLATION OF SUCTION HOSE TO AROMAFLO PUMP

1. Unscrew the suction end nut from the pump head and remove short end of shipping hose (see Fig. 3)(discard shipping hose, keep pressure end nut).
2. Remove suction end nut from the shipping hose.
3. Insert the open end of the suction hose through the hole of the suction end nut.
4. Firmly push the hose onto the cone of the suction valve at the pump head.
5. Screw the suction end nut to the suction valve.

IMPORTANT NOTE: HAND-TIGHTEN ONLY.

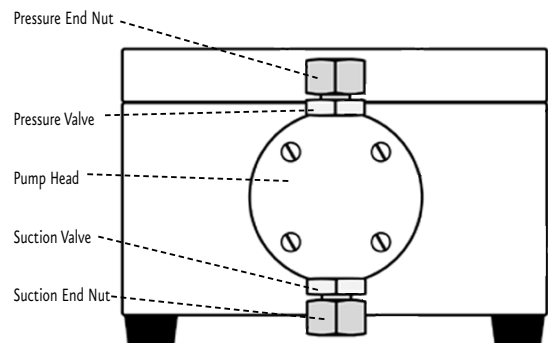
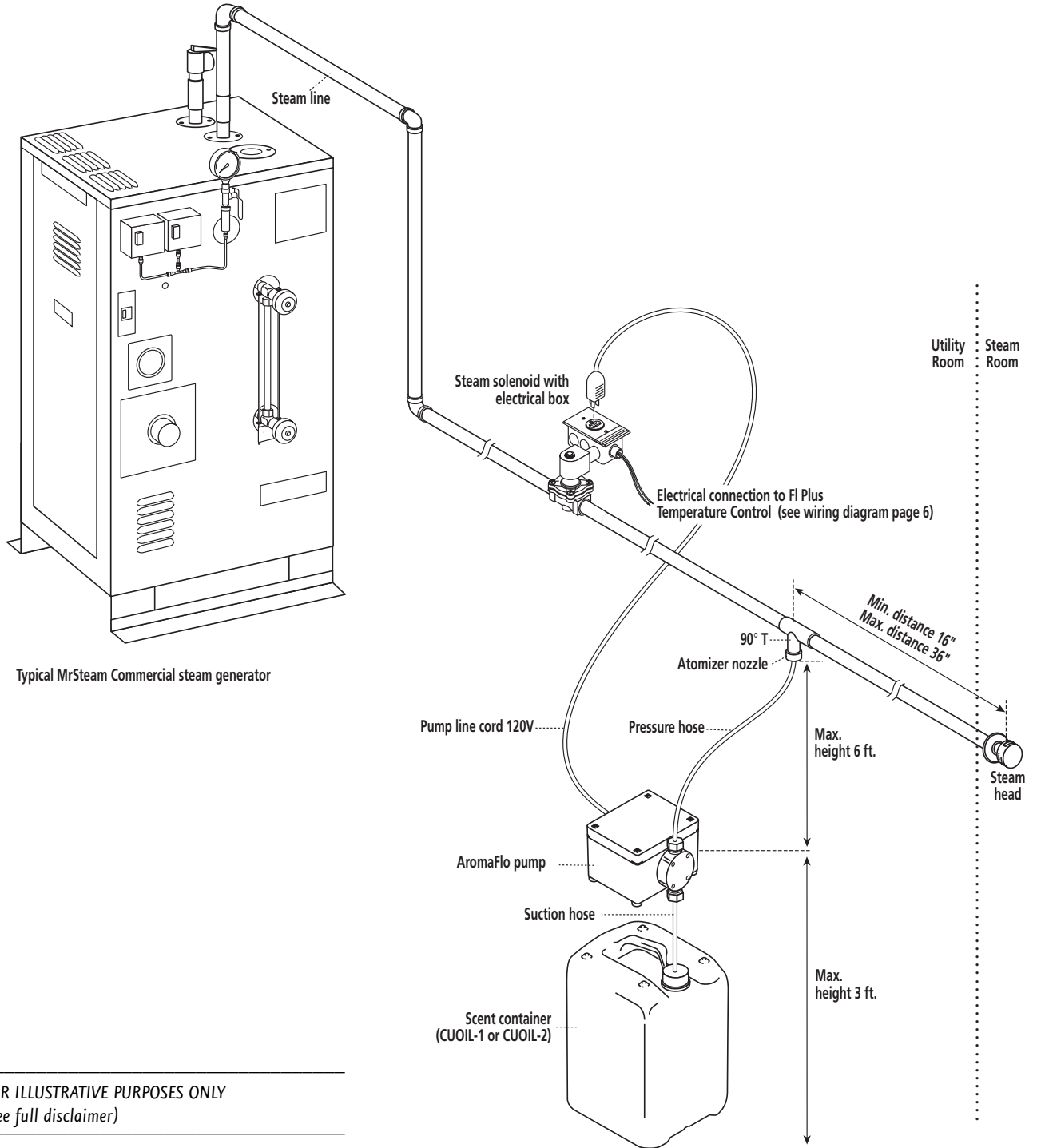


Figure 4

TYPICAL AROMAFLO INSTALLATION

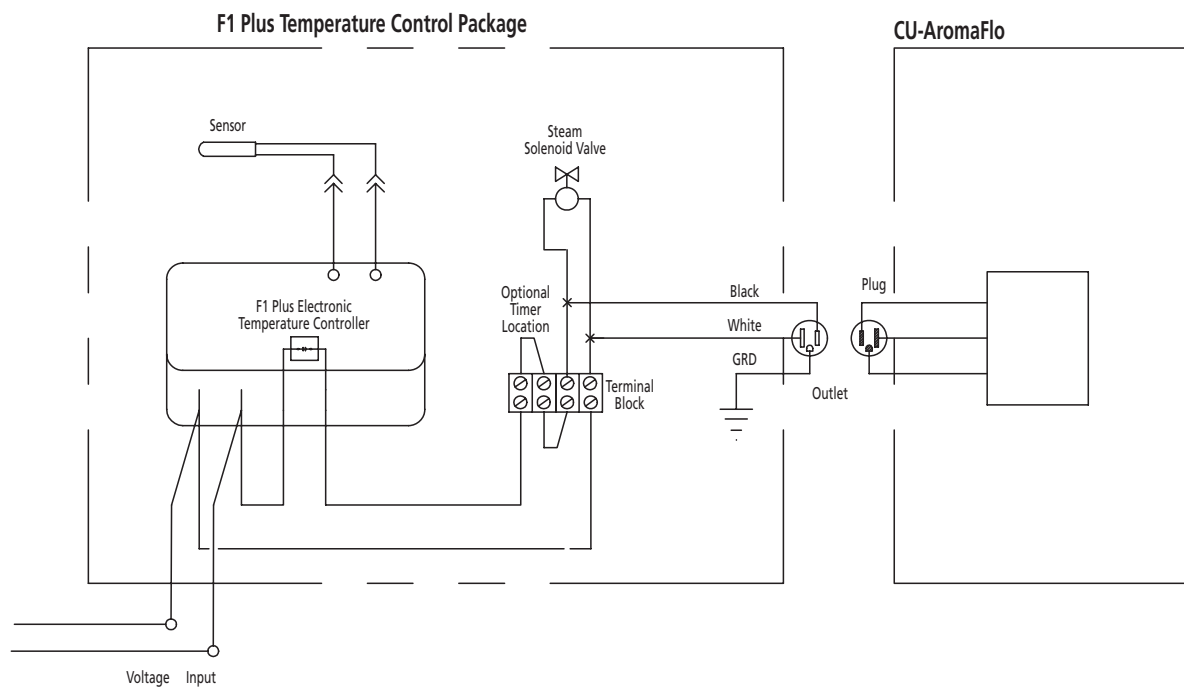


FOR ILLUSTRATIVE PURPOSES ONLY
(see full disclaimer)

ELECTRICAL CONNECTION OF METERING PUMP

CAUTION This metering pump is factory wired and operates on 120VAC/60Hz power supply. Refer to nameplate on AromaFlo pump. If the power cord of the metering pump is damaged it must be replaced by the Sussman-Automatic service department or similarly qualified personnel in order to avoid risks. All electrical connections to be made by a licensed, qualified electrician. Disconnect all power to the steam generator before making power connections.

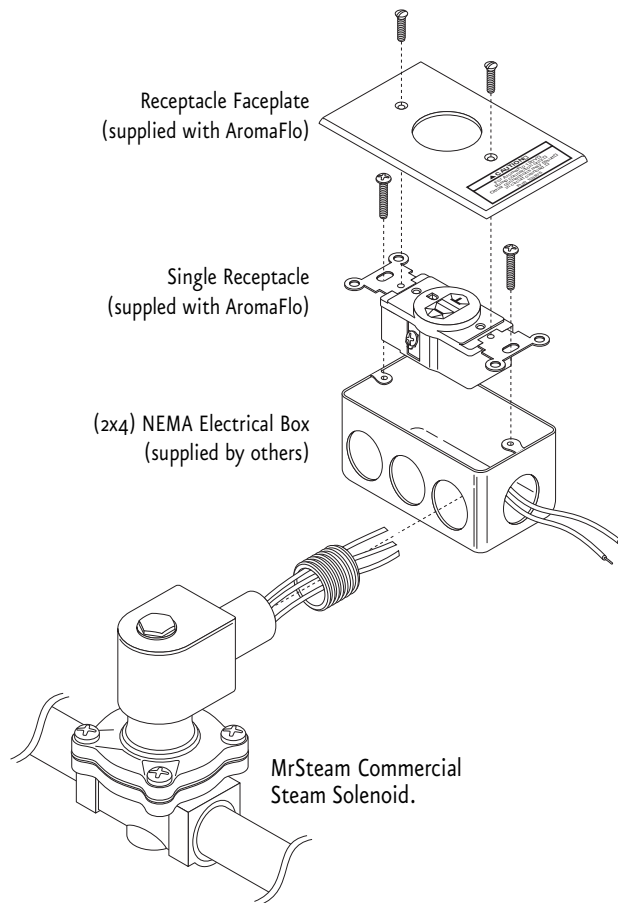
F1 PLUS CONTROL AND CU-AROMAFLO WIRING SCHEMATIC



ELECTRICAL BOX ASSEMBLY

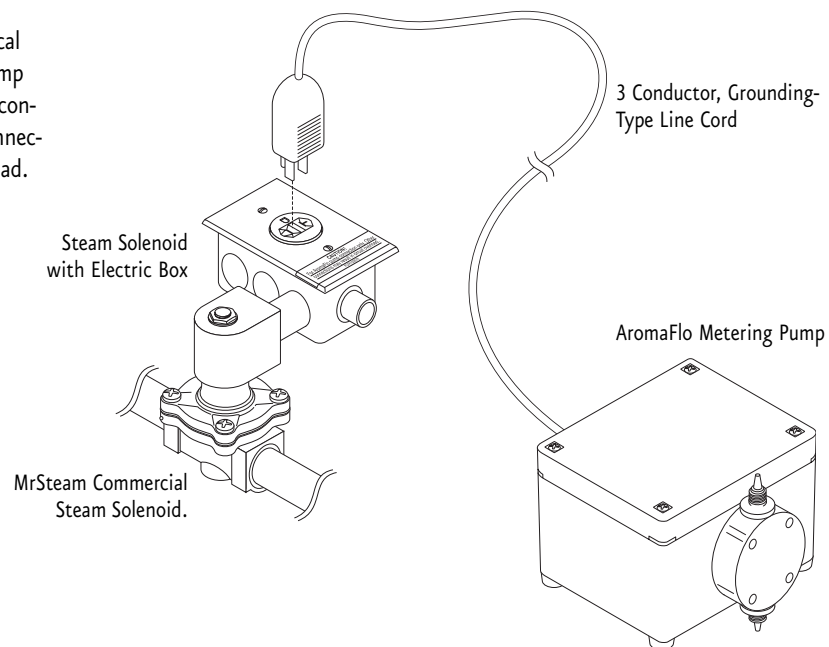
! CAUTION To avoid possible electric shock, the AromaFlo pump must be suitably grounded according to National Electric and local Codes. Disconnect all power supplies before proceeding. Such wiring should be done by a licensed electrician.

NOTE: Refer to the wiring diagram on pg.6 for all wiring connections



FULLY ASSEMBLED

! CAUTION The electrical outlet shown is for AromaFlo Pump connection only. Make no other connections to this outlet. Other connections may result in circuit overload.



START-UP

INITIAL PRIMING OF THE PUMP

1. Insure Mr.Steam scent container is full.
2. Insert the short injector hose onto the tip of the injector (see Fig. 5).
3. Unscrew the pressure end nut from the pump head and remove the pressure hose from the pressure valve (see Fig.3).
4. Insert the open end of the injection hose onto the pressure valve (see Fig. 5).
5. Draw liquid from the injector slowly and evenly. Continue until the injector is full of liquid.
6. If you have drawn up the injector completely and no liquid is in the injector, remove the injector hose from the pressure valve.
7. Drain injector. Repeat steps until the injector is filled.

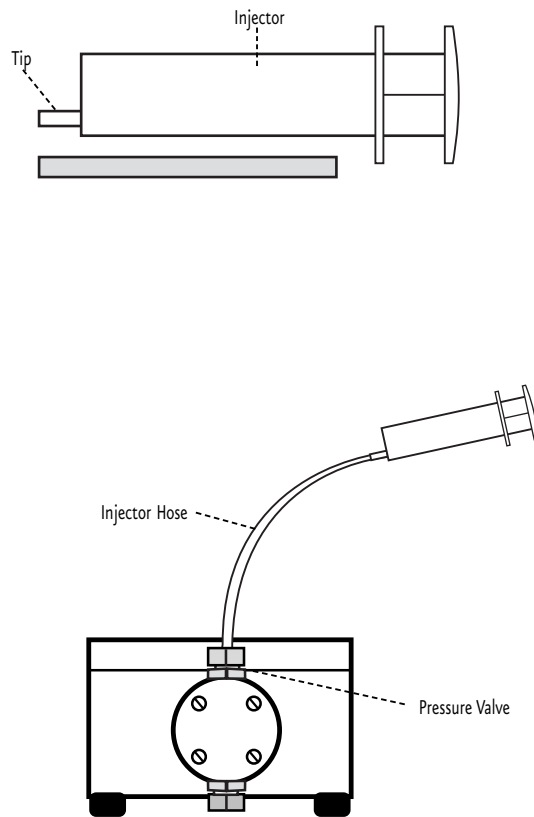


Figure 5

FILLING THE PRESSURE HOSE

1. Insure the AromaFlo Pump is primed and the scent container is full.
2. Locate the Push-button at the rear of the metering pump (see Fig. 6). Depress this push-button to start metering pump.
3. Continue to depress push-button until the pressure hose is filled with liquid.

IMPORTANT NOTE: Push button to be used only for initial filling of the pressure hose.

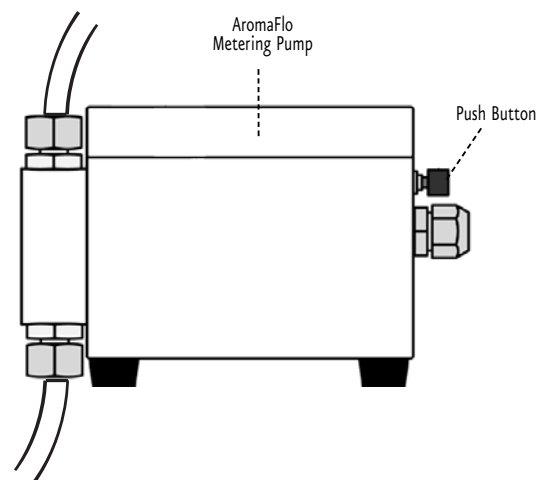


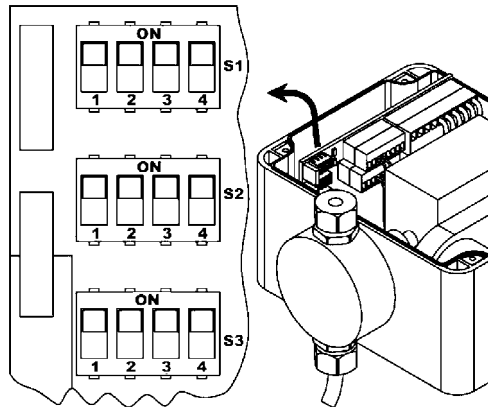
Figure 6

ADJUSTING THE AMOUNT OF OIL DELIVERY

! WARNING The metering pump has been factory set to deliver a suitable amount of aromatic oil into a typical sized steam room. PLEASE CONTACT THE MRSTEAM TECHNICAL SERVICE DEPARTMENT BEFORE CHANGING THIS SETTING. Increasing the settings may introduce excessive concentration of oil into the steam room, resulting in a health hazard.

! CAUTION Switch off power before opening cover to prevent electric shock!

Location of Programming Switch



Circuit board inside metering pump
Note: Switch 3 should not be adjusted

! WARNING

This room is equipped with an aromatic oil dispensing system.

Leave the room immediately if you have any adverse or allergic reactions, including difficulty breathing or eye, nasal, throat, or skin irritation and seek medical attention.

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Warning Sign

PROGRAMMING

Programming Switch is located inside the metering pump.

1. After switching off power supply, open cover of the metering pump
2. Program the switches to desired settings
3. Close cover of the metering pump
4. Reconnect the power

The AromaFlo is factory set to deliver 0.07 ounces (VOLUME) of MrSteam essential oil every 1 minute 15 seconds (INTERVAL).

Increase and/or decrease the VOLUME and INTERVAL settings in any combination to adjust the flow of essential oil. Use the settings guide provided.

Contact the MrSteam Technical Service Department at (800) 76 STEAM (East coast) or (800) 72 STEAM (West coast) for assistance or additional information.

	VOLUME SWITCH S ₁ (TOP)	PROGRAMMING SWITCH	STAND-BY SWITCH S ₂ (BOTTOM)	
↑ DECREASE	ON OFF	ON OFF	ON OFF	↑ INCREASE
	0.018 Oz	*1 min 15 sec <small>Factory "Interval" Setting</small>		
	0.035 Oz	2 min 30 sec		
	0.053 Oz	3 min 45 sec		
	*0.070 Oz <small>Factory "Volume" Setting</small>	5 min		
	0.088 Oz	6 min 15 sec		
	0.106 Oz	7 min 30 sec		
↓ INCREASE	0.123 Oz	8 min 45 sec		↓ DECREASE
		*Factory Setting		

"X" indicates switch position.
 In this illustration the switch is "On".

MAINTENANCE

Maintenance of Metering Pump

IMPORTANT NOTE: Clean the suction and pressure valves of deposits every 6 months, more frequently if necessary.

Maintenance of Suction Valve

1. Disconnect power supply.
2. Unscrew the suction end nut and remove the suction hose.
3. Unscrew suction valve. Carefully remove the valve spring with the pressure bolt and the valve plate.
4. Rinse suction valve, valve spring, pressure bolt and valve plate with clear water. Remove deposits using a moist cloth.
5. Clean the spring guide in the pump head and the valve seat in the suction valve by means of a moist cloth. Remove deposits and debris.
6. Position the valve plate in the valve seat and place the valve spring with the pressure bolt in the centre of the valve plate.
7. Carefully screw the suction valve with the valve spring into the pump head and tighten by **HAND** only.
8. Install the suction hose, see page 4, "Installation of Pressure Hose."

IMPORTANT NOTE:

The valve plate must be level in the pump head!

Maintenance of Pressure Valve

1. Disconnect power supply.
2. Unscrew pressure end nut and remove pressure hose.
3. Unscrew pressure valve. Cautiously remove the valve spring with the pressure bolt and the valve plate.
4. Rinse pressure valve, valve spring, pressure bolt and valve plate with clearwater. Remove deposits using a moist cloth.
5. Clean the valve seat in the pump head and the spring guide in the pressure valve with a moist cloth and remove deposits.
6. Position the valve plate in the valve seat of the pump head and place the valve spring with the pressure bolt in the center of the valve plate.
7. Cautiously insert the pressure valve with the valve spring into the pump head and tighten it by **HAND** only.
8. Install the pressure hose, see page 4, "Installation of Pressure Hose."

IMPORTANT NOTE:

The valve plate must be level within the pump head. Insert the valve spring without off-setting the pressure valve spring guide.

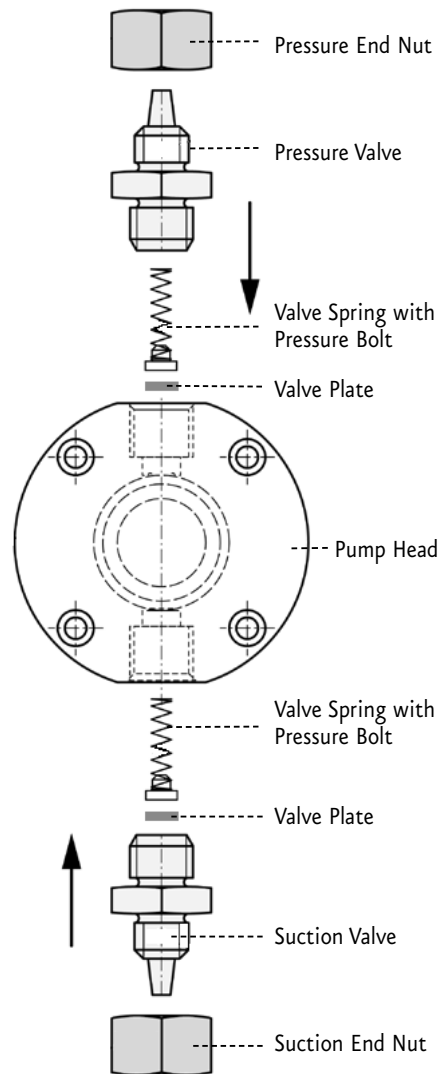


Figure 9

TROUBLESHOOTING

Metering pump does not prime

1. Check if voltage is available.
2. Check liquid level in scent container. Replenish liquid, if necessary.
3. Check for air bubbles in the suction hose or the pump head. To eliminate air bubbles see: Priming Pump.
4. Check valves for contamination. Clean valves, if necessary.
5. Check filter in container for contamination. Rinse filter under clean water.

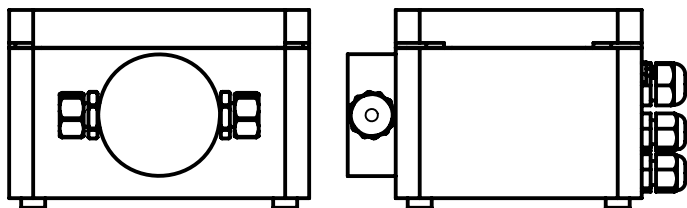
Metering pump does not inject oil into steam room

1. Check if voltage is available.
2. Check liquid level in scent container. Replenish liquid, if necessary.
3. Check for air bubbles in the suction hose or the pump head. To eliminate air bubbles see: Priming Pump.
4. Check valves for contamination. Clean valves, if necessary.
5. Check filter in container for contamination. Rinse filter under clean water.
6. Check the pressure hose for kinking or jamming. Straighten or replace.
7. Check if liquid is freely flowing through the atomizing nozzle when the metering pump is energized. Apply compressed air through the atomizing nozzle. Attach the compressed air at the point of connection of the pressure hose.

Metering pump oil delivery too much or too little

See page 8 or call Sussman-Automatic Corp. 1-800-76 STEAM

TECHNICAL SPECIFICATIONS



Dimensions: 7" L x 6.5" W x 4.5" H

Weight: 5 pounds

EN 60335, UL-CSA

Motor voltage 120 VAC, 50/60 Hz
 Power consumption, total [W] 12 Watt

LIST OF SPARE PARTS

DESCRIPTION	PART NO.
Pump Head	103861
Pressure/Suction Hose (ordered by the foot)	E01-1032

AROMAFLO-A ONE-YEAR LIMITED WARRANTY

Sussman-Automatic Corporation hereby extends to the original purchaser of its AromaFlo-A a warranty against defects in its material and workmanship for the term indicated below.

This warranty is only valid on AromaFlo-A products purchased and used in the United States of America and Canada. This warranty applies only to the original purchaser. This warranty is also subject to the terms set forth below.

Sussman-Automatic Corporation will repair or replace (at its option) an AromaFlo-A product if it fails to conform to this warranty. This warranty period commences on the date the AromaFlo-A product was first purchased by the original purchaser. All warranty work will be performed without charge when the AromaFlo-A product is returned within one year of the date of purchase to the location designated by Sussman-Automatic Corporation in accordance with the terms and conditions noted below.

SUSSMAN-AUTOMATIC CORPORATION warrants the AromaFlo-A product from manufacturing defects for one year from the date of the product was first purchased by the original purchaser.

IMPORTANT NOTE: Several items are not within the control of our manufacturing processes and are not considered manufacturing defects.

SUSSMAN-AUTOMATIC CORPORATION WILL NOT BE RESPONSIBLE FOR DAMAGE DUE TO:

- The use of oils, fragrances or other materials not supplied by Mr.Steam.
- Handling after removal from the original packaging.
- Use of abrasive cleaners, chlorine-based cleaners, abrasive cleaning pads, or similar materials and/or cleansers are used or if there is any misuse and/or abuse. Use of these materials and/or cleaners can cause damage.
- Damage as a result of its location and/or environment including exposure to excessive temperatures.
- Improper installation such as over-tightening connections.

TERMS, CONDITIONS AND EXCLUSIONS

To ensure expedient processing of any warranty claim, a Merchandise Return Authorization (MRA) must be obtained by the original consumer purchaser and prominently shown on any correspondence or packages. Returns made without a MRA will not be processed. To obtain a MRA, call 1-800-76 STEAM (East Coast), 1-800-72 STEAM (West Coast).

The purchaser is responsible for all shipping charges. All AromaFlo-A products returned pursuant to an MRA must be shipped freight prepaid. Proof of purchase (original sales receipt) identifying the model number and serial number must accompany all warranty claims.

This warranty does not apply to repairs or replacements necessitated by any cause beyond the control of Sussman-Automatic Corporation including, but not limited to, any malfunction, defect or failure caused by or resulting from unauthorized service or parts, improper maintenance and/or problems arising due to local water conditions, operation contrary to furnished instructions, shipping or transit accidents, modification, or repair by the user, abuse, misuse, neglect, accident, incorrect power line voltage, fire, flood or other Acts of God.

The foregoing is in lieu of all other expressed warranties and Sussman Automatic Corporation does not assume or authorize any party to assume for it any other obligation or liability.

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