

WARNINGS

The use of fragrance oils may introduce excessive concentration of oil into the steam room, resulting in a health hazard.

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

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 person is conscious) and seek medical advice immediately.

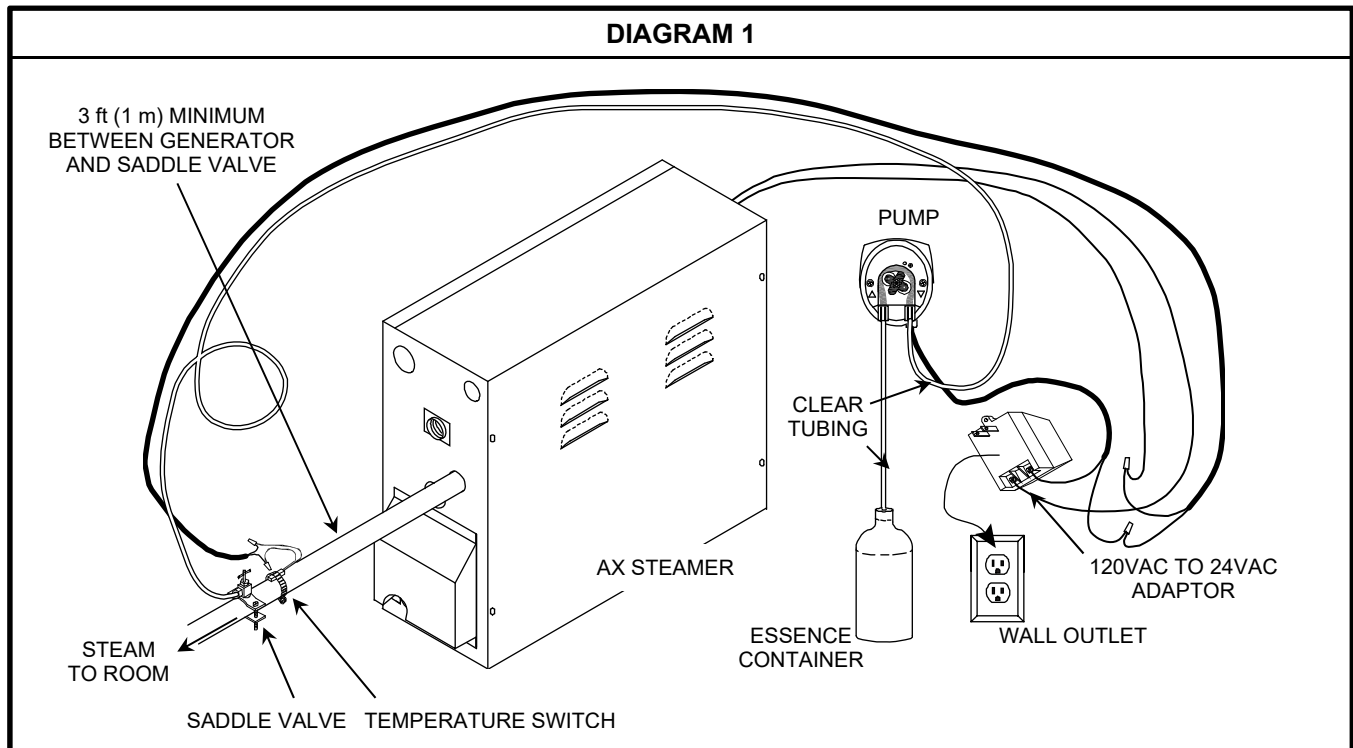
Essential oils may be highly flammable! Keep away from sources of ignition. No smoking! Keep container tightly closed and in a well ventilated place.

Not for use in acrylic or fiberglass rooms.

The pump has been factory set to deliver a suitable amount of aromatic oil into a typical sized steam room. Use caution when increasing the speed on the pump as this may introduce excessive concentration of oil into the steam room, resulting in a health hazard.

The Model A220P-2 Fragrance Injector Pump is intended for use with Amerec's AX series steam. The pump should be not more than 4' above the Essence Container and not more than 4 ft below the saddle valve. The pump is powered by a 120VAC/24VAC adaptor plugged into a standard wall outlet. *An on/off switch located on the side of the Fragrance Injector Pump must be turned on and remain in the on position.* One wire from the 24V transformer connects to the pump's power cord, the other pump wire connects through a thermal switch to a terminal on the AX steamer's Options terminal block. Another wire connects the matching terminal of the Options block to the other transformer terminal. A relay in the steamer switches the pump on and off as needed for the room, as set using the A6 bath control.

Installation Overview



General Installation

! **Do not** install Fragrance System in a location where water could freeze.

! **Do not** install near flammable or corrosive materials and chemicals. Installation in areas having high concentrations of chlorine (such as pool equipment room) should be avoided.

! **Do Not** install in areas accessible to children. A LOCKED ROOM IS STRONGLY RECOMMENDED

1. Locate the Essence bottle and caddy to monitor the consumption of essential oils and for easy oil refilling.
2. Attach the pump to a secure vertical surface.
3. Provide access for servicing and refills.
4. Height difference between the pump and essence container as well as pump and saddle valve, is to be held to a maximum of 4 ft.

Install the Saddle Valve (Diagram 2)

The saddle valve supplied should be mounted on top of the 1/2" copper steam line as far away from the steamer as possible. The steam line should slope away from the generator to prevent essence from draining back into steam tank. *Oils flowing back into the steamer can cause the water to foam resulting in erratic operation, excessive spitting of hot water into the steam room and possible damage to the steamer.*

- Slide the brass nut onto clear transfer out hose followed by plastic compression fitting.
- Insert the brass sleeve inside the clear transfer-out hose.
- Tighten the brass nut.
- Tighten the saddle valve's piercing arm all the way down through the 1/2 inch copper steam line then turn it all the way back out.

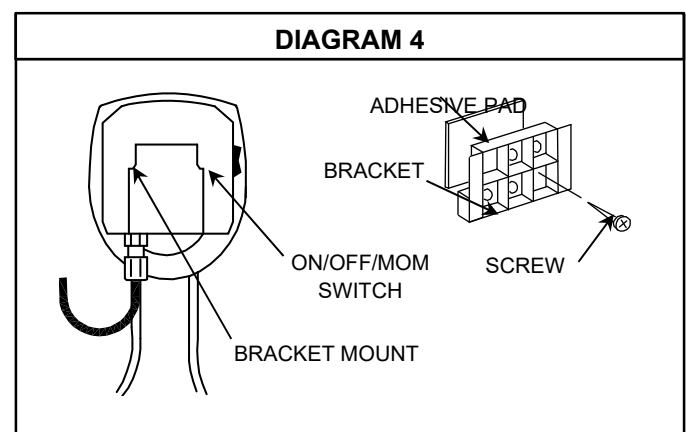
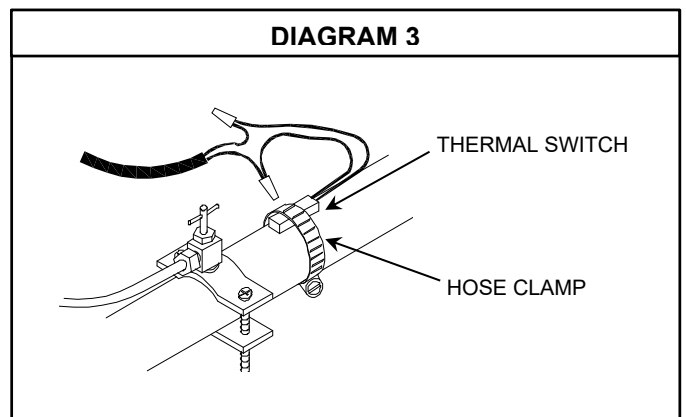
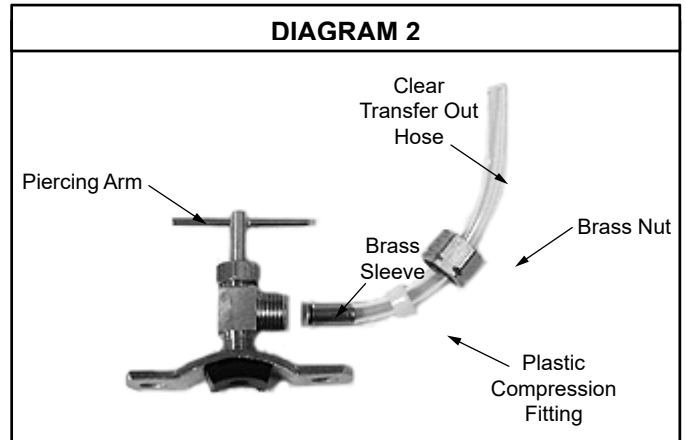
Install the Thermal Switch (Diagram 3)

The thermal switch should be mounted on top of the steam line near the saddle valve. The thermal switch ensures that oil is added only while steam is being sent to the room.

- Use the provided hose clamp to secure the thermal switch to the pipe as shown in diagram 3. Tighten the clamp only enough to secure the switch to the pipe. *Do not over tighten!*
- Connect the switch's wires to two of the wires in the provided cable and route the cable for later connection to the steamer and pump.

Pump Installation with the Provided Bracket

- Mount the plastic bracket with the provided screw (see diagram 4)
- In case of tiled or low friction walls use the supplied adhesive pad as follows:
Peel off one of the two protective foils from the pad, stick the pad to the bracket, peel off the second protective foil and proceed to mount the bracket with the provided screw;
- Slide the grooves on the back of the pump over the bracket.



Essence Oil Bottle and Caddy Installation

- Unscrew bottle cap and remove swivel cover to expose 1/4" hole in cap (Diagram 5).
- Insert clear tubing through hole in the cap.
- Insert the end of the hose into the filter weight so that it exits from the flared end of the weight.
- Insert the filter's barbed fitting in the same end of the hose.
- Tighten the hose by sliding the weight over the barb until it is flush with the filter. (Diagram 6 shows the installation of the suction filter)
- It is strongly recommended to use the suction filter in all situations, assuring that it reaches the bottom of the essence bottle. It should be cleaned periodically to remove product residue.
- Drop hose, with weight and filter attached, through the bottle opening and allow the filter body to reach the bottom of the essence bottle (Diagram 7).
- Screw cap on bottle, leaving the cap loose enough to allow for ventilation.
- Mount bottle caddy to a vertical surface with two (2) screws provided (Diagram 7).
- Set bottle in caddy.

Install the Pump Tubing (See Diagram 8)

The pump has two tubing connections at the bottom of the front side. The left connection is the inlet, where the essence oil enters from the bottle's suction tube. The right connection is the outlet, where the transfer tube carries oil to the saddle valve. The inlet is marked on the clear cover with a \triangle and the outlet is marked with a ∇ .

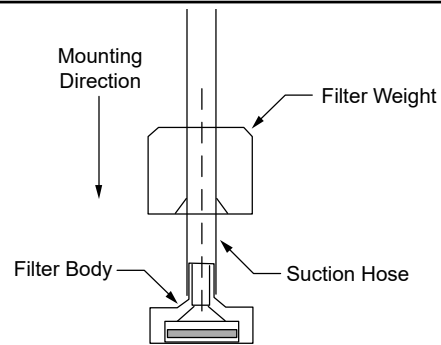
For proper pump operation, the pump must be no more than 4' above the bottom of the essence bottle and no more than 4' below the saddle valve.

- Route the suction tubing from the essence bottle to the pump making sure there are no kinks in the tubing and that the tubing is protected from sharp edges, heat or other conditions which could damage it. Lightly secure the tubing in place as needed for protection.
- Unscrew inlet nut from pump.
- Insert the open end of the suction tube from the bottle through the hole of the inlet's nut and firmly push the tube end onto the cone of the pump's inlet fitting.
- Screw the inlet's nut onto the suction fitting.
**** (Hand tighten only) ****
- Repeat these steps for the outlet's transfer out tube connection to the saddle valve. *Keep the tubing away from contact with the steam pipe!*
- We recommend putting a loop in the outlet tubing, near the saddle valve, to help isolate the pump from the steam line (see Diagram 1).

DIAGRAM 5



DIAGRAM 6

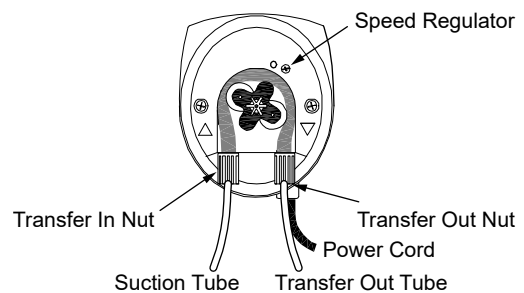


IMPORTANT: Leave the cap loose enough to allow for ventilation!

DIAGRAM 7



DIAGRAM 8



Prime the pump (see Diagram 9)

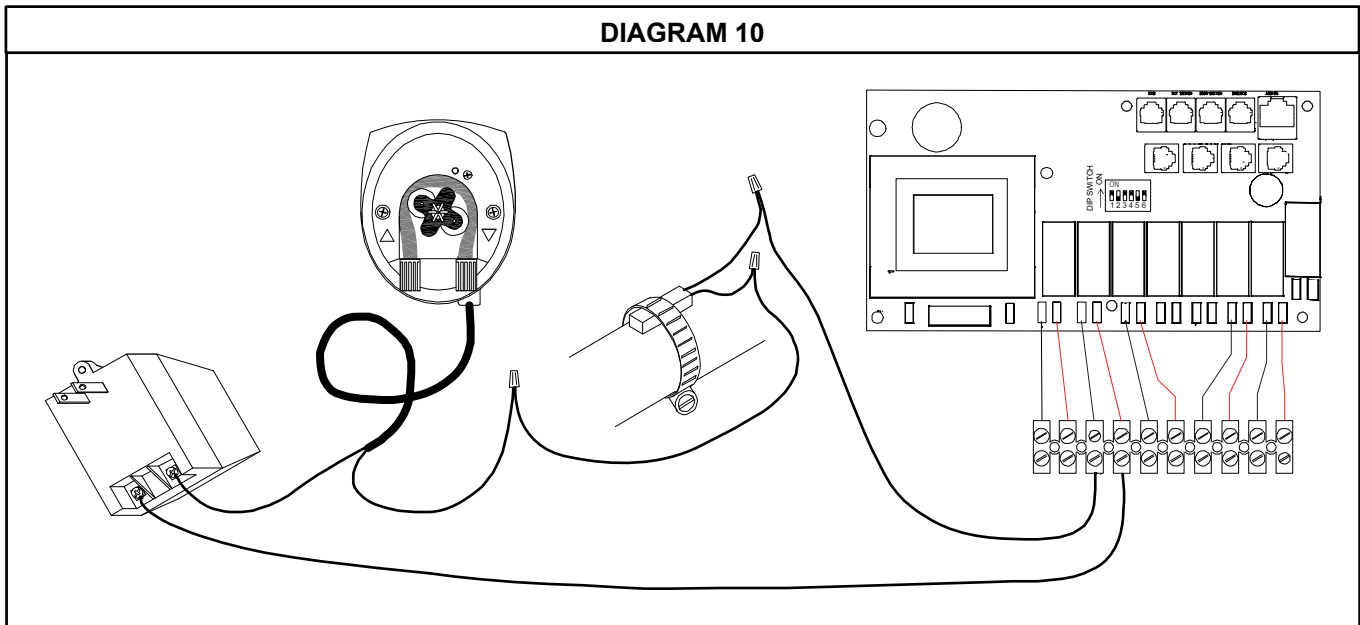
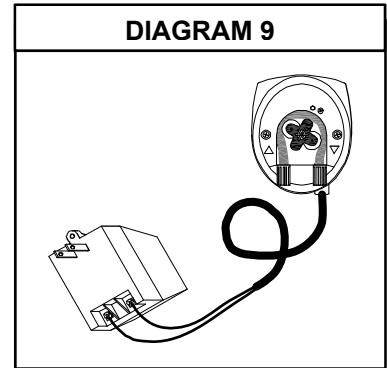
The power adapter transformer converts 120VAC from a wall outlet to the 24VAC needed for the pump operation. Strip both leads of the pump's power cord to about 3/8 in (9,5 mm) and connect them to the transformer

Prime the pump by first making sure there is fragrance oil in the reservoir and all tubing is properly installed, then connect the loose pump wire to the transformer. Plug the transformer in to its wall outlet. The pump should start turning. Wait until oil has pumped into the loop in the transfer out tubing then unplug the transformer.

Disconnect one of the pump wires from the transformer. It will be used again in the next section.

Wire the Fragrance System

One wire from the 24V transformer connects to the pump's power cord, the other pump wire connects through a thermal switch to a terminal on the AX steamer's Options terminal block. Another wire connects the matching terminal of the Options block to the other transformer terminal. A relay in the steamer switches the pump on and off as needed for the room, as set using the A6 bath control.



- Take the end of the 25' cable from the thermal switch, find the same two wires which are connected to the switch, and strip them 1/4" to 3/8" (6,3 – 9,5 mm). Route one wire through a knockout out in the steamer and connect it to one of the AUX terminals on the options terminal block. Connect the other wire from the switch to the free wire from the pump's power cord.

If you haven't already chosen an AUX option to use for fragrance control on the A6, do so now. Choose an AUX option, set it to fragrance and name it. Note which AUX you have set (AUX0, AUX1 or AUX2) and use that options terminal block connections to control the fragrance pump circuit. Refer to the A6 operating instructions as needed.

- Connect a wire from the other terminal block connection for the chosen AUX option and run it to the free connection on the transformer.
- Plug the transformer into its wall outlet.

Initial Test

With the steamer power on, use the A6 to start a bath and to turn on the fragrance pump. It may take a few steam baths to determine how much fragrance you like. The amount of oil added depends on the how long the pump is turned on (the A6' Pump time setting), how much time you wait between pump operations (the A6's Stop or Pause time setting) and the pump speed setting on the pump. Fragrance will also vary a little in a long steam bath because the thermal switch ensures you only add oil while steam is entering the room (This to reduce the risks of clogging the needle valve with oil residue).

Start adjusting the amount of fragrance used by changing the settings using the A6's Pump and Stop (Pause) times. Longer pump or shorter stop times for more oil, shorter pump or longer stop times for less. If necessary, make a small adjustment to the pump speed using the speed regulator (see Diagram 8) then use the A6 again.

Speed (Flow Rate) Adjustment (see Diagram 8)

- To adjust the speed remove the protective cap to the right of the LED with a small screw driver
- To reduce speed, turn the speed regulator screw counter-clockwise
- To increase speed, turn the speed regulator screw clockwise
- The speed is set at the factory on the minimum level and should be tested for user preference at this speed first.

Service

Always keep oil in the essence bottle. If the bottle is empty, the pump's hose can be damaged by running dry and it may be necessary to re-prime the system once the bottle is refilled.

Trouble Shooting -

- If the essence supply into the steam line becomes clogged, tighten the piercing arm (see diagram 2) all the way down through the copper steam line and then all the way back out.
- If the essence scent is too strong and the pump is set at its lowest setting, the essence can be diluted with 100% safflower oil available at most grocery stores.

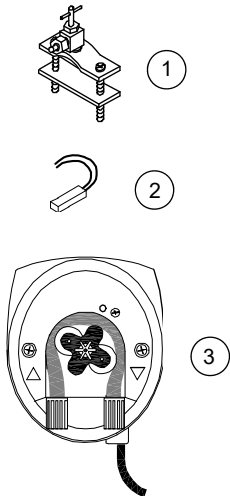
Tubing Replacement

- Disconnect the unit from the power supply.
- Disconnect both tubes from their pump connections. Move the tube ends out of the way and secure them so they do not spill the fragrance oil.
- Remove the transparent front cover.
- Turn the roller assembly so that the rollers are situated vertically, slide the connection on the left toward you, pulling the tube out of its seat and manually rotate the roller assembly clockwise until it is possible to extract the right hand side connection from its seat;

To install the tube -

- Turn the roller assembly so that the rollers are lined up horizontally;
- Insert the connection in its seat on the left of the pump with the curved side towards the rear of the pump and pushing the tube into its seat while manually rotating the roller housing clockwise until it is possible to insert the right hand side connection into its seat;
- Insert the cover starting from the top, with the textured side facing the pump and pushing slightly on the sides until it clicks in place.
- Connect the pump tubing. Refer to the Pump Tubing section and Diagram 8 on page 3.

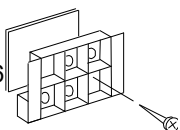
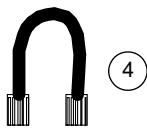
Replacement Parts



Item	Provided	amerec Part #	Description
	1	1301-15	Hose Clamp for Thermal Switch
1	1	2064-720	Saddle Valve
2	1	3119-08	Thermal Switch
3	1	3174-01	Fragrance Pump, with Tubing
	1	5011-06	Replacement Squeeze Tube
4	1	5332-04	Transformer, 120VAC-24VAC
	1	8221-03	Caddy for Fragrance Bottle
	1	9253-1731	Fragrance, Eucalyptus, 16 oz
5	1	*	Wall Mounting Bracket and Adhesive Pad
	1	*	Tubing, 12 ft
6	1	*	Filter and Weight

* These parts are part of the fragrance pump kit. Contact Technical Support for additional or replacement parts.

9223-224 KIT,FRAGRANCE INJECTOR,AX		
QTY	P/N	Description
1	1301-15	CLAMP,HOSE,WORM DRIVE,#08,1/2-
1	2064-720	FTG,SADDLE VALVE,BRASS
1	2191-05	CONNECTOR,WIRE,GRAY 30-071
1	3119-08	SWITCH,HI-LIMIT,75C+/-5,PEPI C
1	3174-01	PUMP,FRAG,PR-7,W/HOSE
1	4211-196	INST,INSTALL&OP,FRAGRANCE,AX
1	4990-01	BOX,SHIP,11-1/4x8-3/4X6
1	5332-04	POWER,CONVERTER,120V-24VAC,SCR
1	8221-03	CADDY,FRAGRANCE PUMP BOTTLE
1	9253-1731	FRAGRANCE,EUCALYPTUS,16 OZ,FOR PUMP



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For further assistance, contact

amerec

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