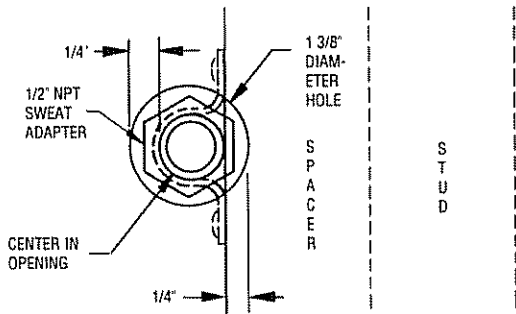
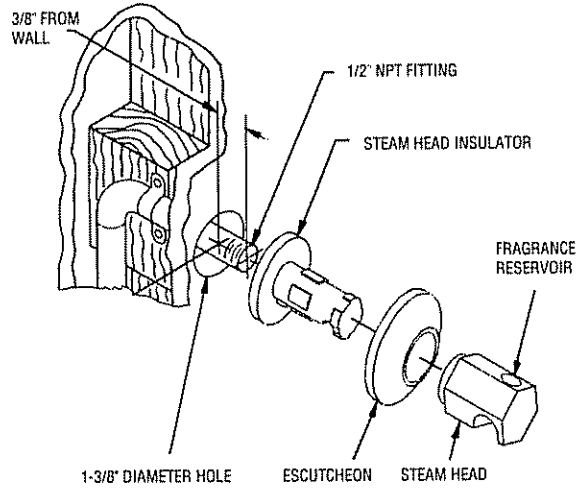


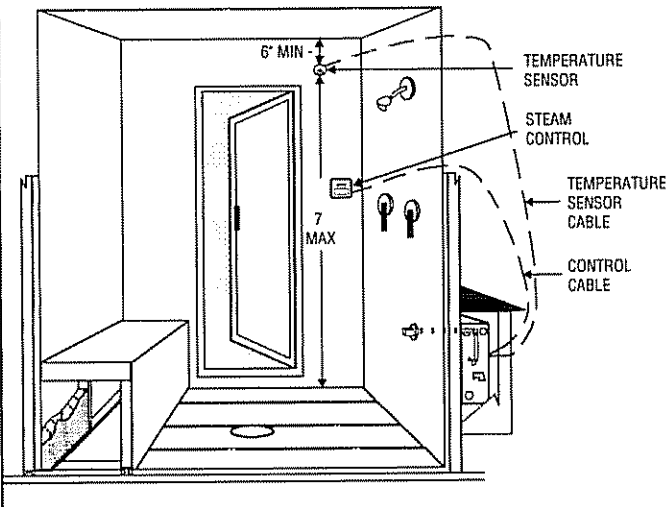
**DIAGRAM 5**



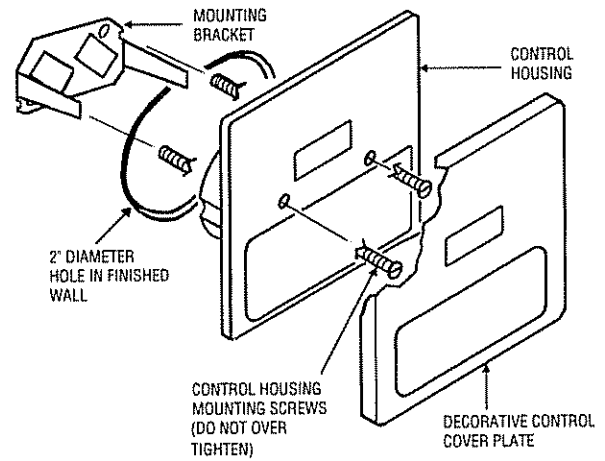
**DIAGRAM 6**



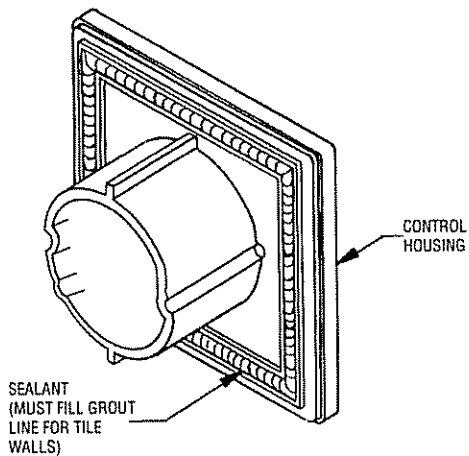
**DIAGRAM 7**



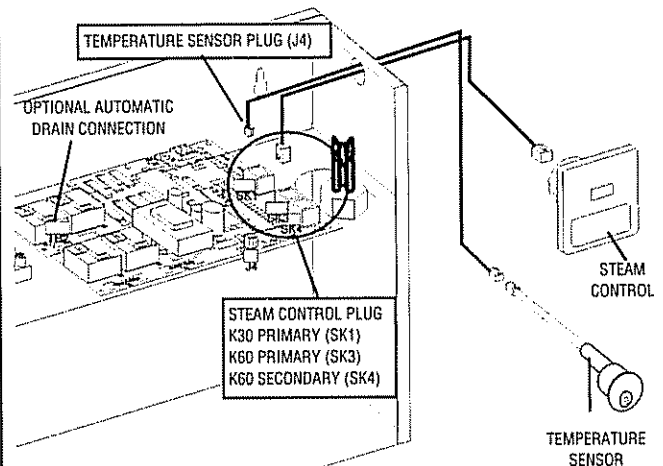
**DIAGRAM 8**



**DIAGRAM 9**



**DIAGRAM 10**



**SECTION 5: PLUMBING INSTRUCTIONS (continued)**

SEE DIAGRAM 2, 5 & 6 ON PAGE 4

**3. INSTALL STEAM HEAD INSULATOR:** Apply silicone caulk to the finished wall side of the steam head insulator and screw on hand tight until it is flush with the wall with the opening pointing down. If a hand tight fit does not align with the opening pointing down, use teflon tape on the steam line threads to adjust the fit.

**4. INSTALL STEAM HEAD AND ESCUTCHEON:** Place the escutcheon over the steam head insulator then slide the steam head on until the escutcheon rests firmly against the finished wall. Tighten the hex head screw underneath the steam head to secure it in place with the allen wrench provided. The steam head should be level with its fragrance reservoir at the top. See diagram 6.

**IMPORTANT**

Check all of the standard fixtures in the steam room. All fixture penetrations must be sealed with 100% silicon caulk to avoid moisture damage within walls.

**5. INSTALL PRESSURE RELIEF VALVE**

Install the pressure relief valve into its port on the generator. The pressure relief valve outlet must drain in accordance with local and national codes.

**6. INSTALL DRAIN VALVE**

Install 1/2" NPT male sweat adapter directly into the tank as shown in diagram 2. Install a 1/2" union. Run a 1/2" copper drain line to a gravity flow drain. Do not run the drain uphill. The drain must be connected in accordance with local and national codes. See diagram 2.

**SECTION 6: WIRING INSTRUCTIONS**

SEE ELEC. INFO. CHART ON PG. 6 & DIA. 7, 8, 9 & 10 ON PG. 4, WIRING DIA. ON PG. 14

**1. CONTROL CABLE ROUGH-IN**

The low voltage control can be mounted up to 25 feet from the generator either inside or outside the steam room, also see #6 optional secondary generator control. String the 25' cable from the control location through 1/2" holes in the wall studs or ceiling joists to the generator. Note: Do not staple through or damage cable. Use factory supplied cables only. Optional for tile rooms, a 1 gang rough-in box may be installed at the desired control mounting location. A mounting plate with proper 2" diameter hole is included with the control kit. Tile up to the 2" hole in mounting plate as indicated in diagram 14.

**2. TEMPERATURE SENSOR CABLE ROUGH-IN**

It is recommended that the sensor be mounted in the steam room 6" from the ceiling, but not directly over the steam dispersion head or more than 7 feet above the floor. String the sensor cable from the sensor location through 1/2" holes in the wall studs or ceiling joists to the generator location. Leave 12" of slack at the sensor location. Note: Do not staple through or damage cable. Use factory supplied cables only.

**3. ELECTRICAL ROUGH-IN**

Size wire for the generator as indicated by the Electrical Information Chart on page 6. Use correct size and type to meet electrical codes. Leave 4 feet of slack wire at generator location for finish hookup. Connect the generator to a dedicated circuit breaker. A GFI device is not required by UL. One may be installed if required by local codes or the owner. A GFI device will tend to nuisance trip due to heater element aging.

**4. ELECTRICAL FINISH**

Materials (locally available):  
- 3/4" Strain relief for supply wire

- A. Route the copper supply wire with appropriate strain relief through the hole marked POWER ENTRY.
- B. Connect the supply wires to terminals marked L1 and L2.
- C. Connect the ground to the ground lug (green screw)

**5. INSTALL GENERATOR CONTROL**

The low voltage control can be mounted directly to a finished wall either inside or outside the steam room. Using a 2" hole saw, drill a hole in the finished wall where the control is to be mounted (the control cable should already be roughed-in to this location). Locate the control cable, pull it out through the 2" hole and plug it into the connector on the back of the control housing. With the decorative cover removed, screw the two 3" control housing mounting screws 1/4" into the mounting bracket. See diagram 8. Run a bead of 100% silicon caulk in-between the 2 ridges around the perimeter on the back of the control housing. See diagram 9. Insert the mounting bracket into the wall cavity by first pushing with the control housing and then with a hard flat surface on the control housing mounting screws which extend out through the control face. Once the mounting bracket has been inserted into the finished wall, center the control and tighten the mounting screws to draw the control housing securely against the finished wall. Do not over tighten the mounting screws. Install the decorative cover plate by sliding the top of the cover plate over the tab on the top of the control housing and pushing on the bottom of the cover plate to complete the snap fit. See diagram 11. Route the generator end of the control cable through the generator hole marked CONTROL WIRING ENTRY using the strain relief provided. Plug the control cable into the connector on the printed circuit board assembly. Insert cable into connector SK1 if a K30 control is used or connector SK3 if a K60 control is used. See diagram 10.

**6. OPTIONAL SECONDARY GENERATOR CONTROL**

As an option, a second K60 control can be installed with an AK generator to provide ON/OFF control both inside and outside the steam room. The second control should be installed as described in paragraphs 1 & 5, with the second control cable plugged into connector SK4 for the K60 Control on the printed circuit board assembly. See diagram 10.

**7. INSTALL TEMPERATURE SENSOR**

The temperature sensor should be mounted 6" below the ceiling, inside the steam room, but not directly over the steam dispersion head or more than 7 feet above the floor. Using a 7/8" hole saw, drill a hole in the

(continued page 7)

**WARNING**

*The pressure relief valve must be installed in such a fashion that the risk of scalding is reduced to a minimum. Draining the pressure relief valve into the steam room may present a scald hazard.*

*Boiling water may be discharged from the drain. Proper precaution should be taken to insure safety.*

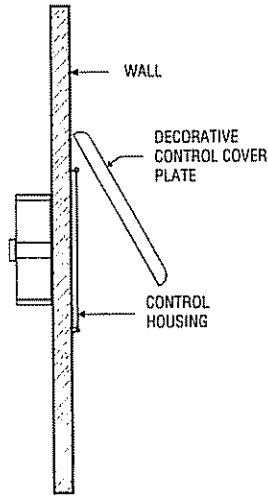
*Draining the tank into the steam room may present a scald hazard and/or damage materials used to construct the steam room.*

*Electrical shock hazard - Disconnect all electrical power before servicing the generator. All wiring should be installed by a licensed electrical contractor in accordance with local and national codes.*

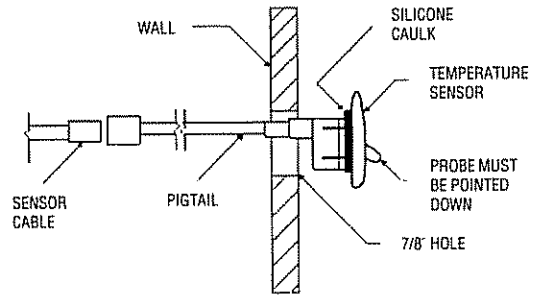
*The generator is designed for hookup with copper wire only.*

continued

**DIAGRAM 11**



**DIAGRAM 12**



**ELECTRICAL INFORMATION CHART**

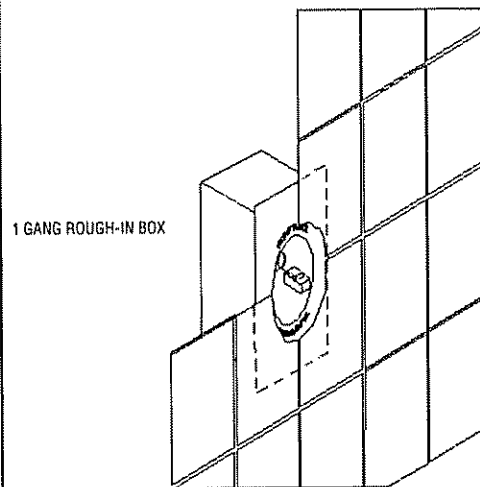
STEAM GENERATOR MODEL NO	AC VOLTAGE	PHASE	NOMINAL WATTAGE		NOMINAL AMPERAGE		UL RECOMMENDED PROTECTIVE DEVICE		RECOMMENDED MINIMUM COPPER SUPPLY WIRE*
			@208	@240	@208	@240	@208	@240	
AK5	208 / 240	1	3750	5000	18.0	21.0	25	30	10-2 W/G
AK7	208 / 240	1	5250	7000	25.3	29.0	35	40	8-2 W/G
AK10	208 / 240	1	7500	10000	36.1	41.5	50	60	6-2 W/G

\* Observe wire sizes for 208 VAC installations. 208 VAC wired units must be supplied with a minimum of 195 VAC while operating (heating). Unit is rated for copper wire only. All wire is UL approved 300V 75 deg C minimum unless otherwise specified.

**DIAGRAM 13**

This diagram intentionally left blank.

**DIAGRAM 14**



**SECTION 6: WIRING INSTRUCTIONS (continued)**

SEE DIAGRAM 12 ON PAGE 6

finished wall where the sensor is to be mounted (the sensor cable should already be roughed-in to this location) Locate the sensor cable, pull it out through the hole and plug it into the temperature sensor. It is best to tape the sensor and cable connection together to avoid disconnection inside the wall. Apply silicon caulk as shown in diagram 12 and insert the sensor in the hole. Make sure that the sensor probe is pointing down once installed. Tape the sensor in place while the silicone hardens. Route the generator end of the

sensor cable through the generator hole marked CONTROL WIRING ENTRY using the control cable strain relief. Plug the sensor cable into the connector marked J4 on the printed circuit board assembly. See diagram 10.

**SECTION 7: OPERATIONAL TEST**

1. Assure power and water are on.
2. Press the ON/OFF. The control should light-up.
3. Allow 10 minutes for the steam to start.
4. Once the steam starts, press the ON/OFF. The steam should stop; there shouldn't be any water flow. The control should not be lit-up.
5. Press the ON/OFF. The control should light up.
6. Within one minute the unit should again produce steam. It should call for water once every two minutes or more depending on its power rating. It's

normal for the flow of steam out the steam head to slow for up to 10 seconds each time the unit calls for water.

7. The unit will shut down automatically in 30 minutes if the K30 Control is used, or up to 60 minutes if the K60 Control is used. When the time runs out the steam will stop and there should not be any water flow. The control should not be lit.

8. If the unit does not operate as described above, refer to SECTION 9: TROUBLESHOOTING GUIDE.

**THE UNIT IS NOW READY FOR OPERATION.**

**SECTION 8: SERVICE**

SEE ELECTRICAL INFORMATION CHART ON PAGE 6

**1. DESCRIPTION OF AMEREC AK SERIES GENERATOR**

The AK series is one of AMEREC's high performance line of steam generator products. Electronic circuitry is used throughout to provide closed loop temperature control, soft steam element switching and a 30 or 60 minute timer.

The Printed Circuit Assembly (the "PCA") provides the basic functions necessary to produce steam. The PCA controls makeup water, provides a water level permissive for powering the elements and provides raw DC power for the system.

The PCA also provides regulated non-interruptible 5.0 VDC power for the generator control and temperature sensor. It provides the interface circuitry between the control and the PCA, provides the room temperature control loop, power switching for "soft steam" and a fixed 30 minute steam bath timer or adjustable 60 minute timer.

**2. MAINTENANCE OF AK SERIES STEAM GENERATORS**

- **VISUAL INSPECTION** - Whenever the generator is opened, inspect for any evidence of water leaks. Inspect the wiring for any evidence of overheating. Check all electrical connections for tightness.

- **FLUSH TANK** - Flush monthly, or more often, depending on local water conditions.

**- FLUSHING PROCEDURE:**

1. The generator should be cool.
2. Press the ON/OFF. The control should light.
3. Open the manual drain valve.
4. The unit will drain without heating the water.
5. Allow the water to run for a full 10 minutes, then press the ON/OFF. The control light should turn off. (continued page 9)

**WARNING**

***Electrical shock hazard - Disconnect all electrical power before servicing the generator. All wiring should be installed by a licensed electrical contractor in accordance with local and national codes.***

***For continued safe operation use factory authorized replacement elements only.***

continued