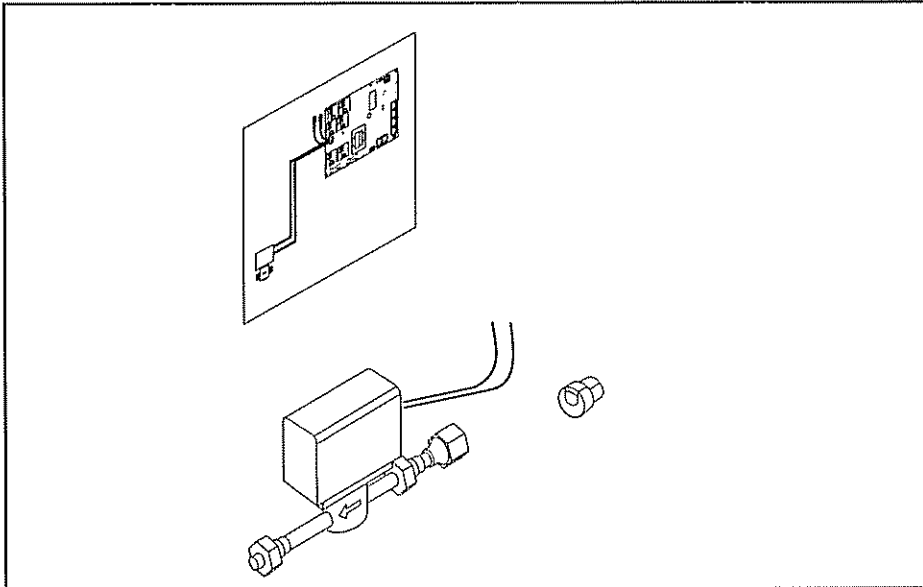


ADK Installation and Service Instructions



AUTOMATIC DRAIN OPTION KIT

MODEL ADK

SAVE THESE INSTRUCTIONS

**READ ALL INSTRUCTIONS CAREFULLY
BEFORE INSTALLATION.**

SECTION 1: GENERAL INFORMATION

The Steam Generator is listed by Underwriters Laboratories. The Underwriters Laboratories listing will remain valid so long as the Option Kit is installed per these instructions.

This ADK Option Kit upgrades a Generator to automatically flush and drain twenty (20) minutes after the last use. It will leave the tank empty after the flush and drain cycle. A second ADK Option is used for ganged generators.

WARNING

Electrical grounding is required on all Steambath Generators.

Do not remove or change the Generator's grounding unless specifically directed to do so by these instructions.

All electrical supplies to the Generator should be disconnected before and during the installation of this Option.

All wiring must be installed by a licensed electrical contractor in accordance with local and national codes.

*All plumbing must be installed by a licensed plumber in accordance with local and national codes.
(an air gap or check valve may be required)*



DIAGRAM 1

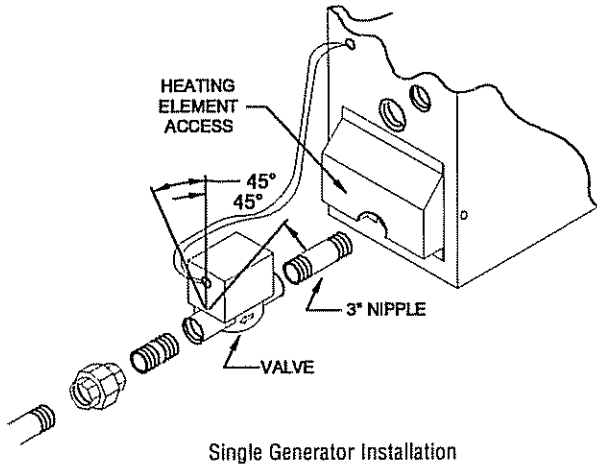


DIAGRAM 2

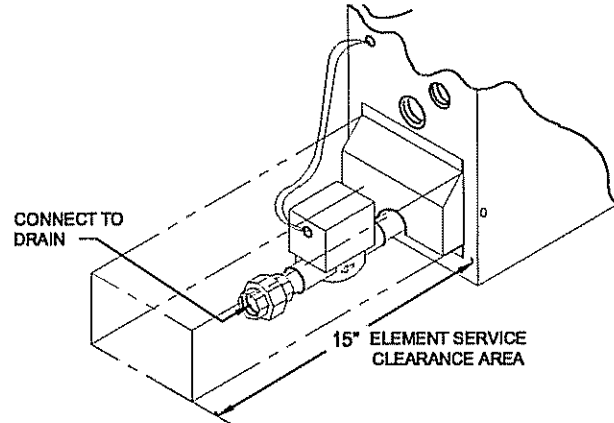


DIAGRAM 3

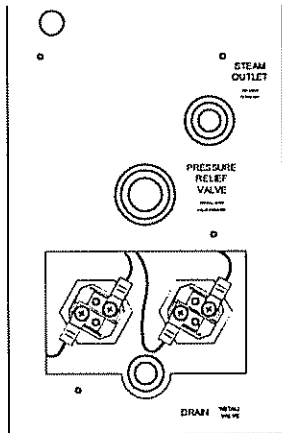


DIAGRAM 4

SHELF, BENCH OR FLOOR MOUNT

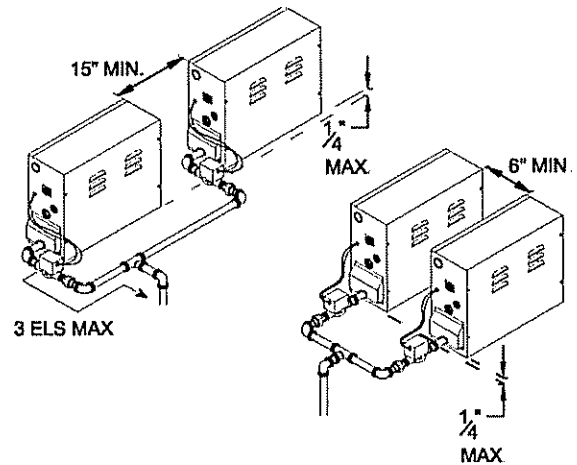


DIAGRAM 5

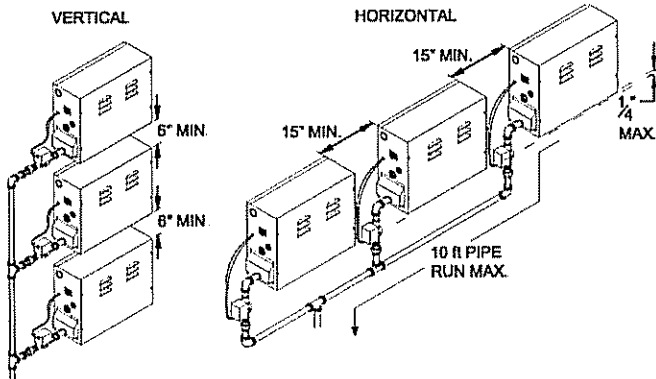
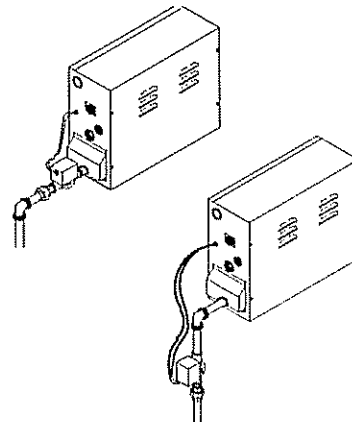


DIAGRAM 6

WALL MOUNT - HORIZONTAL



SECTION 2: INSPECT EXISTING LOCATION

1. Count the total number of Generators at this site.
2. If there are two (2) or three (3) Generators this kit must be installed on all Generators.
3. If there is only one Generator proceed to Section 3A. If there are two (2) or three (3) Generators skip ahead to Section 3B.

SECTION 3A: SINGLE GENERATOR PLUMBING INSTRUCTIONS

All plumbing shall be installed by a licensed plumbing contractor and conform to local and national codes. (an air gap or check valve may be required)

- MATERIAL (Locally available)
- 1/2 inch copper pipe for the tank drain
 - Fittings for drain as required
 - Pipe thread compound or teflon tape

1. If the Option is being installed in an existing Generator it will be necessary to remove enough drain plumbing to install the motorized drain valve. See Diagrams 1, 2 & 3 for guidance.

2. Install the 3" nipple to the tank. Attach the motorized drain valve to the nipple. The drain valve should be upright and level.

IMPORTANT
The motorized drain valve's direction is A to B or in the arrow direction. Do not tilt over 45 degrees. See Diagram 1.

Run a 1/2" copper drain line from the motorized drain valve outlet to a gravity flow drain. Do not run the drain uphill. The drain must be connected in accordance with local and national codes.

IMPORTANT
All Generator plumbing must be installed so that removing the valve clears the element service clearance area shown in Diagram 2.

SECTION 3B: MULTIPLE GENERATOR PLUMBING INSTRUCTIONS

All plumbing shall be installed by a licensed plumbing contractor and conform to local and national codes (an air gap or check valve may be required)

- MATERIAL (Locally available)
- 1/2 inch copper pipe for the tank drain
 - Fittings for drain as required
 - Pipe thread compound or teflon tape

2. Install all automatic drain valves provided. All valves should be installed as shown in Diagrams 1 thru 6.

IMPORTANT
All motorized drain valve outlets must be within six (6) feet and one (1) 90° bend of the site gravity drain.

Use pipe thread compound or teflon tape on all threaded fittings.

IMPORTANT
Detailed drain connection information is in the Installation Instructions packed with the Generators. The instructions must be used to assure proper drain operation.

1. If this is an old installation being upgraded, it can require up to three (3) automatic drain valves, one per generator.

IMPORTANT
If additional drain valves or automatic drain valve kits are required, call the Service Department at 1-800-363-0251.

WARNING

All plumbing must be installed by a licensed plumber in accordance with local and national codes. (an air gap or check valve may be required by local codes)

Boiling water may be discharged from the drain. Draining the tank into the Steam Room may present a scald hazard and/or damage materials used to construct the Steam Room.

SECTION 4:

This section intentionally left blank

DIAGRAM 7

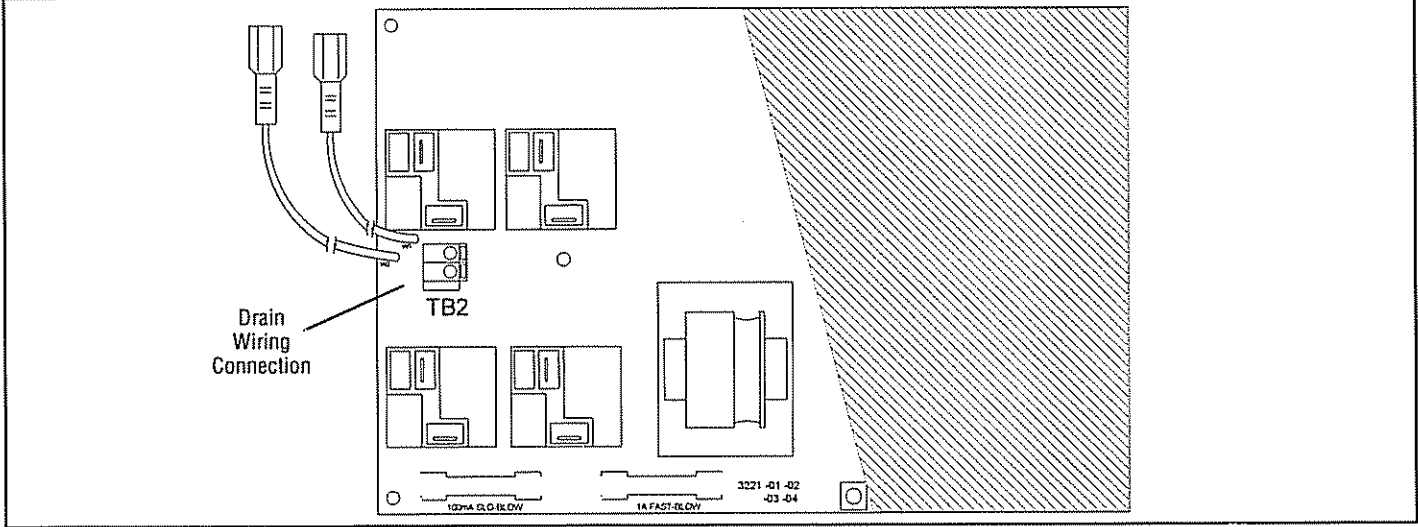


DIAGRAM 8

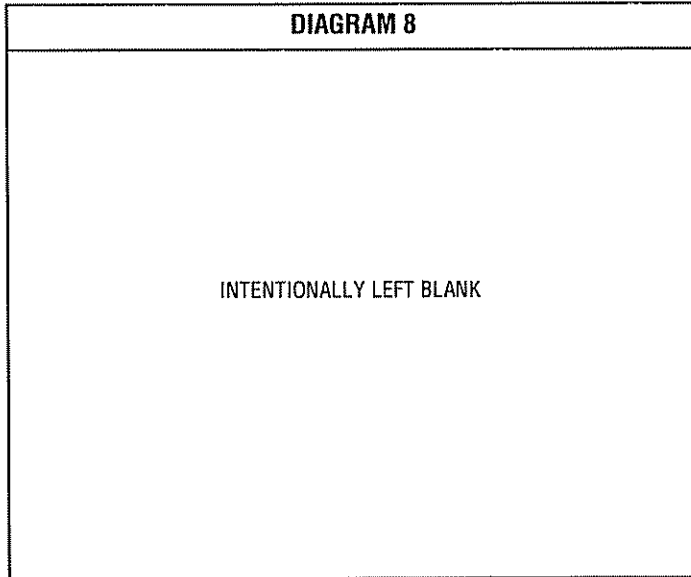


DIAGRAM 9

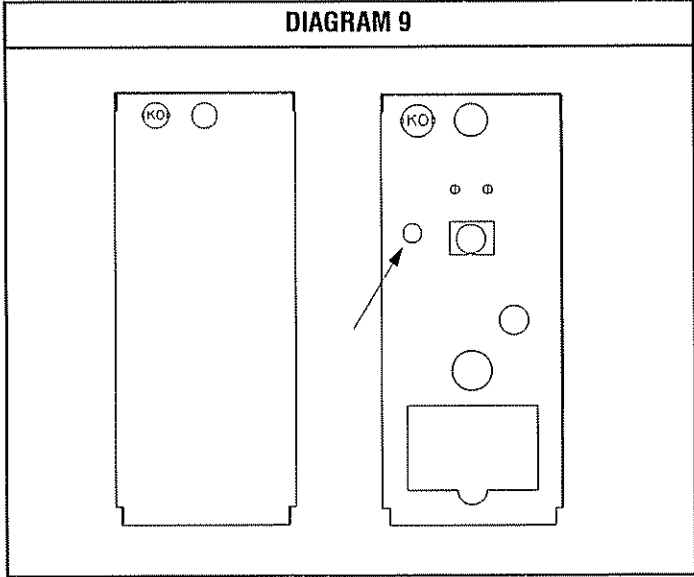


DIAGRAM 10

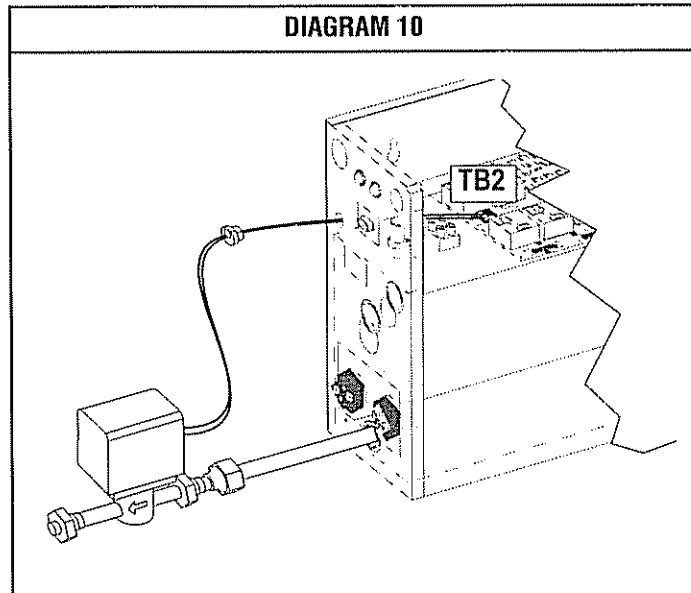
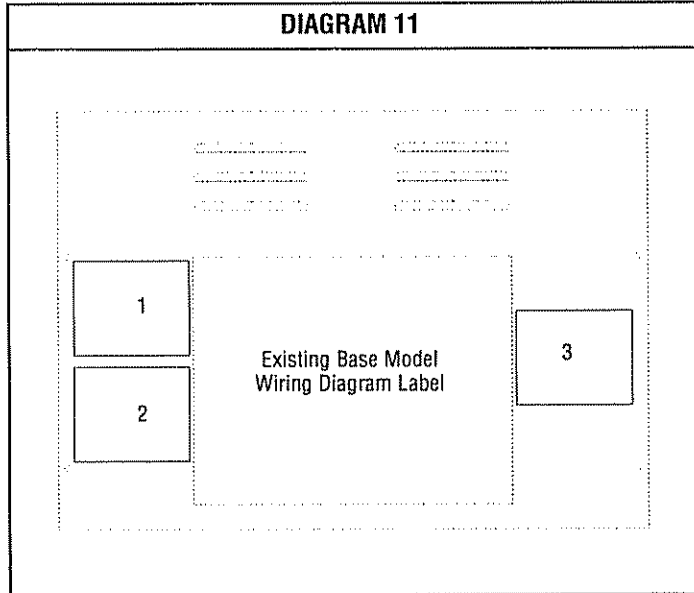


DIAGRAM 11



SECTION 5: WIRING

SEE DIAGRAMS 7, 9 & 10

- 1 The safety of this equipment requires power and control wiring be segregated into the areas shown in Diagram 7.
- 2 Route the drain valve wires through the 9/16" knock out near the steam outlet. See Diagram 9 & 10. Use the strain relief provided. Route the wires through the bushing in the chassis into the TB2 drain terminal block on the PCA. See Diagram 10.
- 3 For multiple Generator installations check for other motorized drain valves in the system. All drain valves connect to TB2 terminal block on PCA's.

SECTION 6: INSTALL WIRING DIAGRAM LABEL

SEE DIAGRAM 11

- 1 Check the inside of the Generator front cover.
- 2 Select an unused location for the ADK Wiring Diagram label provided
- 3 Check/remove any dirt or grease in the selected mounting location.
- 4 Peel off the label's backing and affix the label to the front cover.
- 5 Replace the cover onto the Generator and secure with the four (4) screws.

SECTION 7: OPERATIONAL TEST

- 1 Assure power and water are on
 - 2 Turn on the Generator(s) using the owner's control. Allow the tank(s) to fill completely
 - 3 Turn off the Generator(s) using the owner's control.
 - 4 Twenty minutes (20) after the turn off, the Generator(s) shall fill with water for forty (40) seconds then stop
 - 5 Within three (3) minutes the Generator(s) shall fill with water for twenty (20) seconds then stop.
 - 6 During steps 4 and 5 the Generator shall drain and no water shall come out the steam head(s).
- The unit is now ready for operation.**

WARNING

All electrical supplies to the Generator should be disconnected before and during installation of this Option.

User Shock Hazard! 220V wires attached to this Option must be routed per these instructions.

User Shock Hazard! If existing wiring is disturbed assure that the final installation meets Diagram 11.

SECTION 8: TROUBLESHOOTING GUIDE

There are no user serviceable parts in the Generator. All repair should be performed by a qualified service person. For additional assistance or the factory authorized service person nearest you call the Service Department at 1-800-363-0251. The Troubleshooting Guide below is meant as a general aid only. Follow ACTION TO BE TAKEN in order until the problem is resolved

SYMPTOMS	PROBABLE CAUSES	ACTION TO BE TAKEN
All Drain Valves do not close.	PCA faulty or Drain Valve faulty	1. Identify and replace the PCA. 2. Replace the Motorized Drain Valve.
All Drain Valves stay closed.	PCA faulty or Drain Valve faulty	1. Identify and replace the PCA. 2. Replace the Motorized Drain Valve
Drain Valves appear to open but water comes out any steam head during flush and drain cycle	Drain Plumbing	1. Correct drain plumbing using this document. Correct ganged or multiple Generators using the Installation Instructions.
Slave Drain Valve does not operate properly	PCA faulty or Cable faulty	1 Check that the Cable between the two generator PCA's (if used) is installed and secure at both ends 2 Replace in order the slave PCA then master PCA
All other problems	Various	1 Call the Service Department at 1-800-363-0251.

DIAGRAM 12

Automatic Drain Wiring Diagram

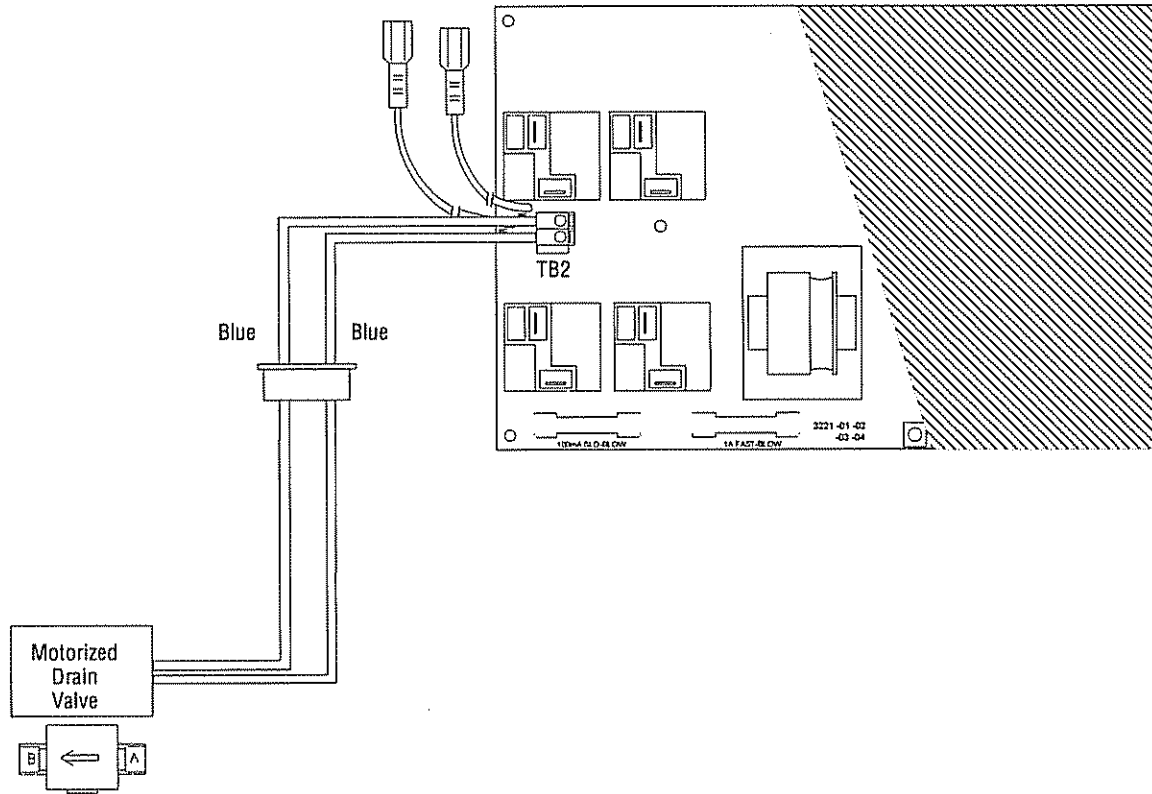


DIAGRAM 13

EXPLODED VIEW

NUMBER	NAME	DESCRIPTION
1	LABEL	WIRING DIAGRAM
3	DRAIN VALVE	MOTORIZED
4	STRAIN RELIEF	BLACK

