homeward **b**ath

INSTALLATION & OPERATION MANUAL

(6kW, 9kW & 12kW Steam Generator & Control Panel)





Mandatory Reading Installation Updates – Page 4
Parts Request Info – Page 26

Note: French and Spanish manuals available at www.homewardbath.com

Contents

DE	AD ME FIRST	2
CC	MMON INSTALLATION PROBLEMS:	2
	ARNINGS:	
	NDATORY READING	
	INSTALLATION OF 9KW AND 12 KW STEAM GENERATORS	
	USING THE TERMINAL BLOCK	4
	INSTALLATION OF THE KEYPAD EXTENSION WIRE	4
	RT 1: STEAM GENERATOR	
	USER INSTRUCTIONS	
	CHOOSE YOUR TYPE OF MACHINE	
	MAINTENANCE	
	STEAM GENERATOR CLEANING	
	SENSOR PROBE REMOVAL FOR DIRECT CLEANING	
	CHOOSING PROPER LOCATION	6
	INSTALLATION DRAWING OF THE STEAM GENERATOR	
	INSTALLATION OF STEAM LINE	
	BLUEPRINT FOR THE STEAM ENGINE	
	ELECTRICAL REQUIREMENTS:	
	AMPERE METER	
	ASSEMBLY GRAPH FOR POWER WIRE	10
	Wiring Diagram 220-240V (1PH/2PH)	
	INSTALLATION OF THE TOP LIGHT	
	STEAM GENERATOR CONFIGURATION	
	TROUBLE SHOOTING:	14
	DELUXE KEYPAD ERROR CODES	14
	INSTRUCTIONS FOR RESETTING THE MANUAL HI-LIMIT SWITCHES	
	SPECIFICATIONS	
	RT 2: STANDARD CONTROL PANEL	
	CONTROL PANEL BLUEPRINT	
	CONTROLLER INSTALLATION INSTRUCTIONS	
	TEMPERATURE DETECTOR INSTALLATION	
	CONTROLLER PANEL ILLUSTRATION	_
	OPERATION INSTRUCTIONS	
	RT 3: DELUXE CONTROL PANEL	
	CLEANING INSTRUCTIONS	
	SAFETY AND OPERATION INFORMATION	
	BLUEPRINT FOR THE CONTROL PANEL	
	INSTALLATION INSTRUCTION OF CONTROLLER	
	TEMPERATURE DETECTOR INSTALLATION	
	CONTROLLER FUNCTION INSTRUCTION	
	KEYPAD OPERATION	
	OPTIONAL- DUAL KEYPAD	
	SCHEMATIC	
	RT 4: ADDITIONAL INFORMATION	
	LIST OF PARTS FOR ALL GENERATORS	
	TO EXPEDITE PARTS REQUEST	
	WARRANTY INFORMATION & REGISTRATION	27

READ ME FIRST

- 1. Verify the parts checklist to ensure that all necessary parts have been received.
- 2. DO NOT TWIST THE PLUGS together when connecting the keypad and/or the keypad extension wire to the steam generator cable. Twisting will damage the pins and it is not covered under the warranty.
- 3. Keypad box contains:
- a. Keypad
- b. Steam head
- c. Escutcheon (temperature detector foundation)
- 4. Light kits are available for the GS08 Steam Generators. White lights and chromotherapy lights are available. Contact your place of purchase.

COMMON INSTALLATION PROBLEMS:

99% of the issues with these units upon the first power up can be traced to one of two items:

- 1. Is the unit connected to 220v? The unit has no neutral wire just L1, L2 and Ground. To properly test for the 220v you must test the L1 and L2 wires together and you should get 220v. If you test individually the L1 and L2 that can give you a false reading.
- 2. Is the wiring that connects the keypad to the steam generator damaged? Pull apart the connections (there are two, one near the keypad and one near the steam engine) and make sure none of the pins are bent or missing. If any are bent or missing replace the appropriate cable. Make sure when reconnecting the cables, they are tight.

ATTENTION: MANDATORY READING INSTALLATION UPDATES – PAGE 4

WARNING: Damaged and missing pins are not covered by the warranty. They are inspected before shipping.

WARNINGS:

WARNING!

To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

WARNING!

To reduce the risk of injury:

- The wet surfaces of steam enclosures may be slippery. Use care when entering or leaving.
- b. The steam head is hot. Do not touch the steam head and avoid the steam near the steam head.
- Prolonged use of the steam system can raise excessively the internal human body temperature and impair the body's ability to C. regulate its internal temperature (hyperthermia).

WARNING!

Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6° F. The symptoms of hyperthermia include an increase in the internal temperature of the body, dizziness, lethargy, drowsiness, and fainting. The effects of hyperthermia include:

- a) Failure to perceive heat;
- Failure to recognize the need to exit the steam bath; b)
- Unawareness of impending risk; c)
- d) Fetal damage in pregnant women;
- e) Physical inability to exit the steam bath; and
- f) Unconsciousness.

WARNING!

The use of alcohol, drugs, or medication can greatly increase the risk of hyperthermia.

Limit your use of steam to 10 – 15 minutes until you are certain of your body's reaction.

Excessive temperatures have a high potential for causing fetal damage during the early months of pregnancy. Pregnant or possibly pregnant women should consult a physician regarding correct exposure.



Caution: Do not place wiring in close proximity to hot water or steam pipes.



Attention: If the installation and operation instruction are not read or understood, do not install. Install the controller based on the installation instruction.

If the controller is installed outside the steam room, the temperature sensor must be installed in the steam room. To prevent overheating, operate the controller as described in this manual only.

**Not for Space Heating Purposes

MANDATORY READING

INSTALLATION UPDATE BULLETIN

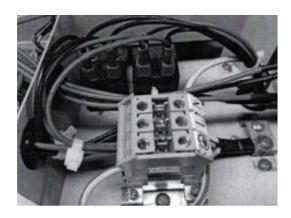
INSTALLATION OF 9KW AND 12KW STEAM GENERATORS

When connecting the power supply for the 9KW and 12KW steam generators, there may be some difficulty connecting the 8 and 6-gauge wires into the terminal block. In order to make these connections as easy as possible, you can remove steam generators wires from the terminal block and wire nut the wires directly to your power source. This will make the electrical connections easier.

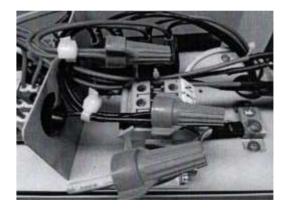
USING THE TERMINAL BLOCK

When using the connection terminal block, the connection can become loose due to expansion and contraction from the heat and the small vibrations caused when the unit is running. After the initial installation the connection must be checked after 30 days to make sure the connection is still tight (tighten if necessary), then the connection should be checked about every 6 months after that.

If desired, connections may be made directly not using the terminal block. Follow the instructions above for the 9kW and 12kW steam generators.



Terminal block connected



Terminal block by-passed using wire nuts

INSTALLATION OF THE KEYPAD EXTENSION WIRE

When connecting the keypad and/ or the keypad extension wire to the Steam Generator cable, DO NOT TWIST THE PLUGS. They are to be PUSHED together, twisting will damage the pins and it is not covered under the warranty.

The Temperature detector foundation and locknut for temperature detector foundation (escutcheon) for the temperature sensor, comes in a bag inside of the keypad box. Also included is the Steam Head.

Light kits are available for the GS08 Steam Generators. **White light and chromotherapy lights are available.** Contact your place of purchase.

PART 1: STFAM GENERATOR

USER INSTRUCTIONS

Attention: We are not responsible for the malfunction and damage from improper installation that does not comply with the user's manual.

- 1. Make sure the model and the accessories are correct, including the voltage 220V input.
- 2. Make sure the steam power is matched with the dimensions of the steam room. Pay attention to the steam room's cubic feet measurements and construction materials. See below on how to choose your type of machine.
- 3. Make sure to read this manual carefully for correct and effective use.
- 4. We shall not be responsible for the product damage or malfunction caused by self-installation or the operation procedures which is not in compliance with the Operation and Instruction Manual.
- 5. Please check the contents when the package arrives to ensure it is in good condition. If you find any damage in the package, please contact the transportation company or the supplier to claim any damage.
- 6. This product must be used indoors.

CHOOSE YOUR TYPE OF MACHINE

Measure the length, width, and height in feet of the current steam shower or bathtub room.

Example; L:7 x W:5 x H:8 = 280 Cubic feet x 2 to get complete cubic measurement

Note: Multiplying the cubic feet by two is done to account for heat loss due to the room having natural stone such as granite or marble, exterior walls, ceiling height exceeding 8 feet, ceramic tile, or glass walls.

6kW: Heats rooms 140-320 cubic feet 9kW: Heats rooms 320-460 cubic feet 12kW: Heats rooms 460-700 cubic feet

MAINTENANCE

Perform water discharge operation after each use. The unit will drain automatically 20 minutes after use.

- 1. Wait for the completion of automatic water discharge after each use of the steam engine to make sure the water in the tank is discharged completely before cutting off power supply.
- 2. There should not be any leaking or damage to the steam engine, steam nozzle, components and pipes. They should be checked monthly.
- 3. Clean the water supply pipes of the steam engine once a year.
- 4. Check all the connections, water, and electric, to see if they have become loose or are damaged due to overheating.
- 5. Check the calcium build up in the water tank and on heating element. If the scale is thick, clean it (use diluted citric acid to soak for 15-30 minutes).
- 6. Remove the water level sensor needle four times per year to clean the scale off the needle.

STEAM GENERATOR CLEANING

MAKE SURE POWER IS OFF

IF you can observe that the steam generator is draining after use, this means the tank is not clogged with debris or other material from use. The tank cleaning procedure is not too difficult.

You must introduce the citric acid solution into the tank. 6- and 9-Kw units have a 1.5-gal tank, the 12Kw has a 3.2-gal tank. This can be done by disconnecting the steam line and with a funnel and hose pour the solution into the tank. If the steam line cannot be disconnected you can unscrew the pressure relief valve and pour the solution in through the opening. Both openings go to the tank. Fill the tank until the solution starts to come out of the steam outlet or the pressure relief valve opening. Replace the steam line or the pressure relief valve, then turn on the steam generator and let it produce steam for about one minute, then shut it off at the circuit

breaker and let sit for an hour or overnight. Then restart the generator and let it run for about 5 minutes and shut it off at the key pad. Wait until the automatic drain allows the solution to exit the tank or use the manual drain button on the key pad. Once again, it is most important you are able to actually verify the solution has been drained out from the unit. By verifying the draining of the solution, you know the tank is not clogged. If the tank is clogged it leads to premature heating element failure and other issues. This procedure will also clean the water level sensor probe.

If the tank is not draining please call 1-866-783-2661 or 216-587-6790 for assistance

SENSOR PROBE REMOVAL FOR DIRECT CLEANING

Make sure the power is shut off at the circuit breaker. The water level sensor probe is located on top of the steam generator tank. You need to remove the cover of the steam generator, next locate the large transformer, near it should be a hole with three wires going into it and attached to tabs. That is the water level sensor. Older units have a ceramic sensor. The newer units have a two-piece sensor, a nylon threaded ring and a red rubber center. The electrical connections are the same, the sensor removal is slightly different. Note the color of the attached wires and the polarity of the tab they are attached to. Unplug the wires and unscrew the sensor. The newer two-piece sensor requires you to unscrew the ring then pull the red plug up to expose the sensor probes. Make sure there is no scale or debris on any of the three probes. Reverse the above procedure to reinstall the sensor.

If needed the probe connections are as follows

Red wire connects to the shortest probe and is the positive wire (+)

Yellow wire connects to the middle length probe and is the negative wire (-)

Black wire connects to the longest probe and is the Ground wire.

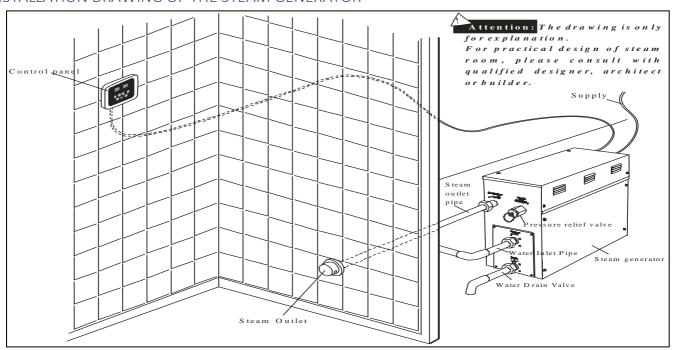
CHOOSING PROPER LOCATION

Recommended locations for proper installation:

- 1. The steam box should not be located further than 16 feet away from the steam room.
- 2. The steam generator should not be installed in the steam room.
- 3. The steam generator should not be installed outdoors or in any place that will influence the security of the machine.
- 4. Do not install it in any places where the water might freeze.
- 5. Do not install near flammable objects or chemicals (coal, gas, etc.)
- 6. The steam generator should be installed in a dry and ventilated place.
- 7. Make sure the steam generator is secured on the wall and is horizontally positioned.
- 8. On the other three sides, there has to be at least 6 inches of space left between steam generator and any other object.
- 9. The place where the machine is installed must be accessible for cleaning and possible service work.
- 10. The steam generator should be in a close proximity to a drain for convenient Water Drain Valve hook-up.
- 11. After use, the steam pipe, safety valve, drain valve, water pipe, steam outlet is still very hot.
- 12. Place steam outlet away from bathers.
 - Attention: install an exhaust fan outside of the steam room so that it can expel any excess steam for proper ventilation.
- 13. The shorter and straighter the steam lines, the more efficient they will be.
- 14. The unit should be slightly higher than the steam outlet to allow condensation to drain out of the steam head.
- 15. Avoid using 90-degree fitting. Use 45-degree bends to allow better steam flow.
- 16. The steam line **must** be insulated.

<u>Attention:</u> The steam generator (including the controller) is ETL approved.

INSTALLATION DRAWING OF THE STEAM GENERATOR





INSTALLATION OF STEAM LINE

Attention: The installation of all the pipes should be completed by qualified plumbers or technicians.

- 1. Use brass or copper pipes only.
- 2. Do not use black, galvanized or PVC pipes for steam line.

Water supply pipe (1/2") PVC or PEX is adequate

- 1. Connect cold water pipe to water inlet.
- 2. Install shutoff valve in the water supply pipe. The shutoff valve should be installed in a place where it is easily operated in case of emergency.
- 3. Clean the water supply line completely before connecting it to the steam engine.
- 4. It is suggested that a water filter should be installed in the water supply pipe.
- 5. The water pressure should be no less than 20 pounds/square inch (psi), and no more than 75 (psi). If necessary, decrease or increase the pressure accordingly. Higher water pressure can cause banging when filling with water.

Steam line must be 3/4"

- 1. Do not install any valves in the steam line. The steam line can never be obstructed.
- 2. Install a brass or copper steam line (size 3/4") between the steam outlet and the steam nozzle.
- 3. The insulation material used to insulate the steam pipe should be resistant to temperature as high as 248° F or higher.
- 4. Do not bend the pipe so that the water will stay in the curve of the steam line.
- 5. The shorter the steam line, the better. Try to decrease the number of elbows and avoid abrupt turns. Use 45-degree bends instead of 90-degree T.
- 6. Have no valleys or dips in the output steam line.
- 7. Do not connect the drain valve into the steam line.
- 8. Do not connect the pressure release valve into the steam line.
- 9. Make sure the steam line is well insulated.

Steam nozzle is 3/4"

WARNING!

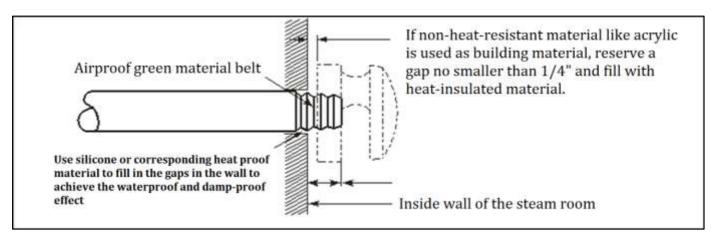
The steam nozzle and steam outlet are very hot! Avoid installing the steam nozzle near steam bathers.

- 1. Install the steam nozzle 8-12 inches above the ground.
- 2. The steam spray outlet should be installed face down. Wrap a few circles Teflon tape around the threads of the steam pipe, install the steam nozzle and tighten with hands. Do not tighten the steam head onto the steam pipe. It may cover the steam head's output holes.

Note: Aromatherapy oils are placed in the indentation at the top of the steam nozzle.

<u>Attention:</u> In order to protect the steam nozzle, do not use any tools to tighten that will scratch finish, use a little soapy water and soft sponge to wipe, and do not use corrosive chemical solutions or abrasive cleaning tools.

<u>Attention:</u> Please consult your distributors of building materials like acrylic, fiberglass or other heat-resistant material around the installation and position of steam nozzle. It is suggested that MS-103412 heat resistant material is used.



Drainpipe (1/2")

According to national and local codes, the steam engine drain valve should be equipped with drainpipe. The drainpipe must be able to handle 200-degree water. The steam engine will drain water on its own after 20 minutes. It is a gravity drain.

Attention: drainpipe should not incline upwards.

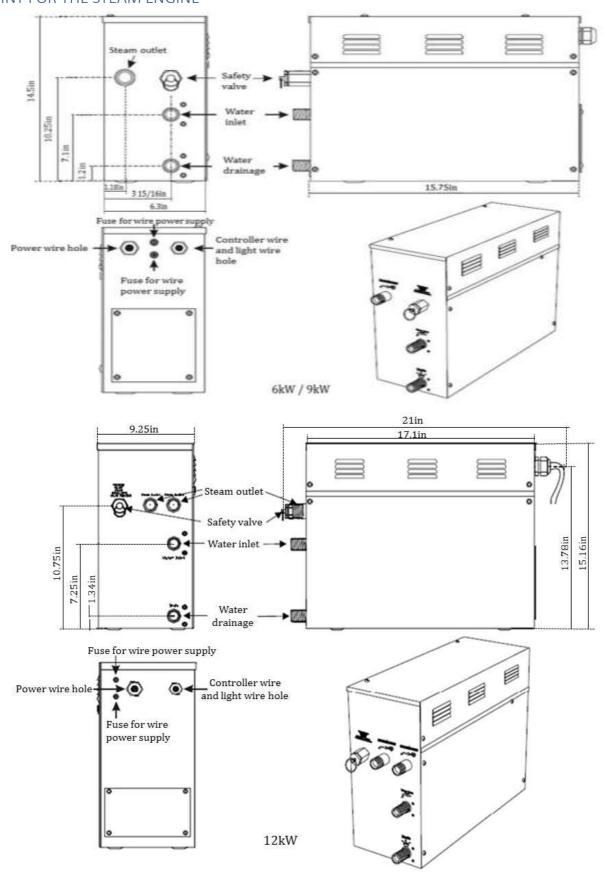
Safety valve (Pressure Release Valve)

- 1. Safety valve is to prevent too much steam pressure in the interior steam engine.
- 2. The pressure limit range of safety valve is 10 PSI. If the pressure should become too high over this value, the valve will release the pressure.

Attention:

- 1. For safety, do not dismantle the pressure release valve.
- 2. To maintain the proper and automatic operation of pressure release valve, make sure the connection is tight.

BLUEPRINT FOR THE STEAM ENGINE



Attention: Keep the steam engine clean.

<u>Attention:</u> To avoid damage to the equipment, do not connect power directly to the components.

IMPORTANT: Each unit is provided with a pressure-release device (safety valve) to address overpressure due to inadvertent blockage of the output steam head or piping.

ELECTRICAL REQUIREMENTS:

Electricity supply circuitry:

- 1. Test the voltage of the electric supply and make sure that the steam engine is supplied with suitable electric power.
- 2. Insulated copper wire should be used with a heat-resistant temperature of 190°F and a specified voltage of 500V. Refer to national or local electricity code for the specifications. Refer to the ammeter for the ampere.
- 3. Make sure the steam engine and power supply are appropriate for each other.
- 4. Install an independent GFCI circuit breaker between the power supply and the steam engine.

Important: All the connections must be in accordance with national and local electricity code and be installed by professional electricians.

Note: All units are 220-240 Volts. The terminal may read N, L, G. The N is not a neutral. It is the second leg of the 220V of the power source.

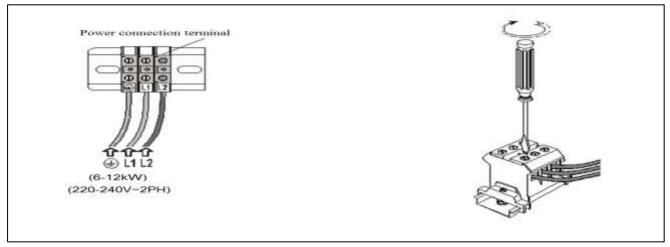
AMPERE METER

Type	Applicable Space of	Electricity supply	Electrical current Draw (Amps)	Specifications for
	room (ft ³)	,,	, , ,	power wire (A W G)
GS08-6kW	140-320	220-240V / (1PH/2PH)	27.3A (30 Amps)	#10 or 6mm
GS08-9kW	320-460	220-240V / (1PH/2PH)	41A (50 Amps)	#8 or 8mm
GS08-12kW	460-700	220-240V / (1PH/2PH)	55A (60 Amps)	#6 or 10mm

ASSEMBLY GRAPH FOR POWER WIRE

Attention: To avoid the damage to the equipment, do not connect power directly to components.

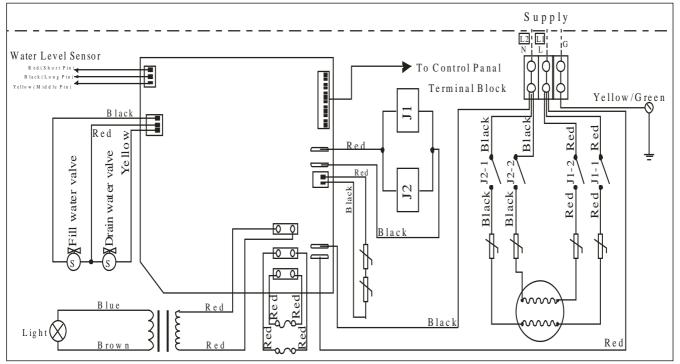
WARNING! This graph is for explanation only. For actual installation, refer to national and local electric codes and consult with a professional electrician.



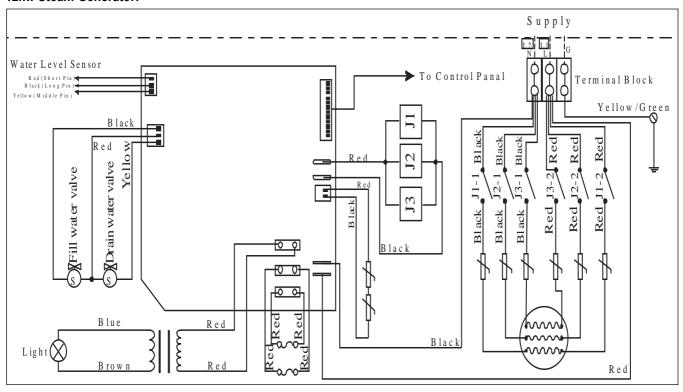
See Installation Update Bulletin on Page 4.

Wiring Diagram 220-240V (1PH/2PH)

6 & 9kw Steam Generators:



12kw Steam Generator:



Note: All Units are L1, L2 and Ground. The neutral is Line 2 (second leg).

NOTE: NOW AVAILABLE FOR THE GS08 STEAM GENERATORS

LED Lighting Kits - White or Chromotherapy Lights

Hole for light is 1 13/16in. Diameter of light is 2 3/16in. Length of light is 1 1/2in

Drip Pan - 20x10x1 and weighs 3 lbs

*For pricing, please contact your place of purchase

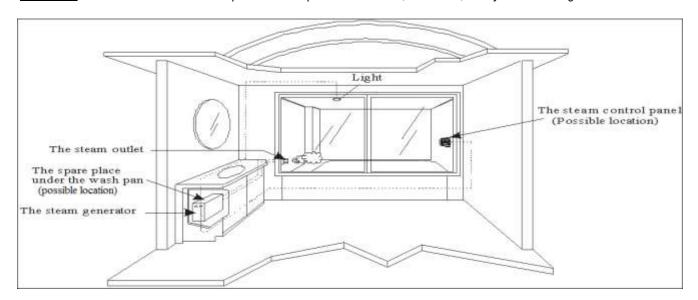


INSTALLATION OF THE TOP LIGHT

<u>Attention:</u> 12V output port is available for 12V DC accessories (not included).

The total draw on the 12V circuit cannot be more than 35W

Attention: Do not let the electrical components be exposed to moisture; otherwise, it may cause damage or short circuit.



<u>Caution:</u> The illustration is just for explanation, the practical installation must comply with the national electric code, and installed by professional electrician.

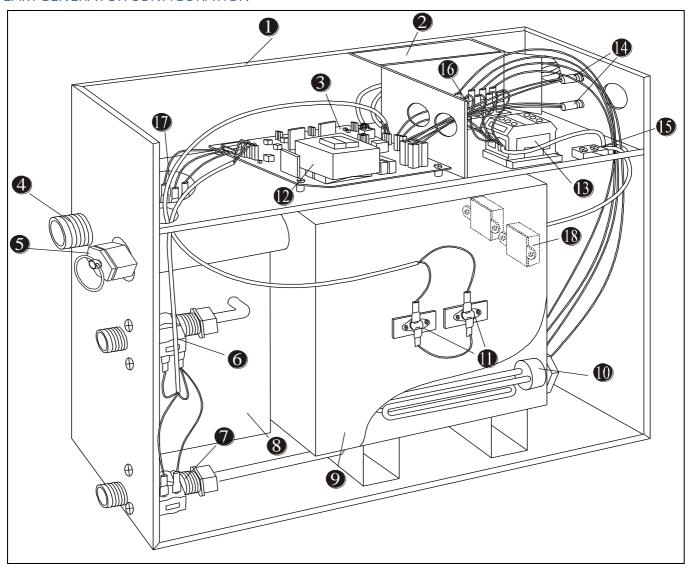
Note: The Temperature Sensor MUST be as far away as possible from the steam outlet and inside the room. It should be about shoulder high where occupant will be sitting.

The steam outlet must be far away from any occupant to prevent burning.

The keypad can be mounted inside the room or outside.

The keypad must not be placed in direct contact with water spray.

STEAM GENERATOR CONFIGURATION



- 1. Enclosure
- 2. Insulation bracket
- 3. Circuit board
- 4. Steam outlet
- 5. Pressure release valve (safety valve)
- 6. Water fill valve

- 7. Water drain valve
- 8. Subsidiary water tank
- 9. Main water tank
- 10. Heating element
- 11. 221°F Hi-limit
- 12. Transformer

- 13. Terminal block
- 14. Fuse
- 15. Ground connector
- 16. Relays
- 17. Water level sensor
- 18. 221°F Manual Hi-limit

TROUBLE SHOOTING:

Trouble	Causes of Trouble	Trouble-Shooting Method
The machine does not start when power is supplied	The fuse is burned The wire connection terminal is loose Bad Contact in the connection wire between the controller and the steam engine	Change the fuse (on the shell 0.8A/250V) Plug-in the wire connection terminal Make sure the steam engine and controller are in good contact. Check pins on controller cable
GFCI switch breaks automatically	The wire connector is damp or damaged The heating element is damaged	Check whether the wire connector is damp or damaged, and dry with dryer if dampened Change the heating element
Machine is started, hot water comes out from the drain with little or no steam	The water drain valve is broken Key pad cable pins broken or bent	Change the water drain valve Replace cable
The display screen on the control panel does not display	Power wire is not connected properly. Connection plug between the control panel and the electrically controlled box is loose (check pins) Trouble with plug board Key pad cable pins broken or bent	 Check if the connection plug between the control panel and the electrically-controlled box has become loose. Change a plug board Replace cable
Water leakage	The water pipe connector is loose or broken Water leakage in the water input valve or the water drainage valve	Tighten the loose connector and/or change the broken pipe Change the water input valve or the water drainage valve
No steam when starting the machine	 No electricity No water, red light of keypad blinking The set temperature is too low (over 120°) Trouble with wire 	Check the power supply Check the water input pipe and water input valve Reset the temperature Replace cable Contact the MFG
The steam does not come out, there are water sounds in the machine	The steam pipe is jammed Key pad cable pins broken or bent	Cut power supply to check whether the steam pipe is clean Check drain valve Replace cable
The light cannot be turned on	 The fuse is burned The light is broken The wire is broken The plug does not have good contact 	 Change the fuse (on the shell 1A/250V) Change the light bulb Change wire Replace plug
The display box displays normally, but with no steam output	Too much pressure inside the steam engine, so the system breaks for heat protection The heat protection wire is broken Manual hi-limit switch tripped	Check the steam transport pipe and restore automatically after heat protection cools Check the heat protection wire to make sure the connection is good See manual hi-limit (page 15)

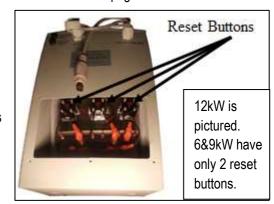
DELUXE KEYPAD ERROR CODES

Error Code	Problem	Solution
E1	Water level sensor failure	Check the cable connection to the water level sensor. If it's not loose, replace water level sensor.
E2	Temperature sensor short circuit	Replace the keypad.
E3	Temperature sensor open circuit	Check the temp sensor cable connection from keypad to the temp sensor cable. Make sure cable connection is ok.
E4	No water in the tank within 4 minutes	Check whether the water inlet pipe is blocked. If no problem, check whether the water inlet valve is jammed. If the water inlet valve is jammed, clean the net inside the water inlet valve or replace it.
E5	Communication failure between steam generator and keypad or between both keypads.	Single keypad: Check cable connections at both ends of cable. Make sure the pins on both ends of the cable are not bent or broken. If bent or broken, the cable will need to be replaced. Dual Keypad: If E5 shows on sub-keypad, check cable connection between both keypads. If E5 shows on both keypads, check the control cable connection between steam generator and main keypad. If the pins on either cable are bent or broken, cable will need to be replaced.

INSTRUCTIONS FOR RESETTING THE MANUAL HI-LIMIT SWITCHES

If the unit fills with water but does not produce steam, the issue may not be the heating element.

- 1. Shut off the power to the unit at the breaker.
- 2. Remove the top of the steam generator and make sure the power connections are tight.
- 3. There is an update that allows you to disconnect the wires from the terminal block and wire nut them together. This will not void the warranty and eliminates the need for checking the tightness of the electrical connections as stated on page 4 of the manual.
- 4. If power connections are tight, go to the side of the steam generator where the electrical connections are.
- 5. You will see a plate that is held on by 6 screws, remove that plate.
- 6. You will have direct view of the heating elements and the power connections.
- 7. Above each element is a small black plastic square. In the center of that square is a reset button, push each one if you hear a click that was your problem. This is a hi-limit heat protector.
- 8. If that does not solve the problem, unscrew the bottom wire from each element. The elements are mounted vertically.
- 9. If you have a voltage tester set it to tone, touch the top element terminal with the terminal below it.
- 10. You should get a buzz, if you do the element is good.
- 11. Do the same thing for the second element.
- 12. If there is no sound the element is bad and needs replacing.



SPECIFICATIONS

Important: The list below is for reference only. In actual checking and repairing, based on the national and local codes, ask professional service personnel for advice.

Power Output	6kW	9kW	12kW
Potency Error	±10%	±10%	±10%
Duration	>1500V	>1500V	>1500V
Resistance (MΩ)	>20W	>20W	>20W
Steam Pressure	0.14MPa	0.14MPa	0.16MPa
Steam Volume (ml/min)	180	260	360
Steam Production Time	4-8 mins	4-8 mins	4-8 mins
Water Tank Volume	1.5GAL	1.5GAL	3.2GAL
Applicable space of the room (ft³)	140-320	320-460	460-700

Important: The parameter listed in the above table may vary from place and temperature, please consult a qualified designer or architect for more detailed use.

NOTE: Steam Bath Generators are considered to be able to operate above atmospheric pressure in abnormal operation and shall therefore, comply with UL clause 64.8.

PART 2: STANDARD CONTROL PANEL

Attention: Before installing the controller, make sure the steam generator is shut off otherwise damage may occur.

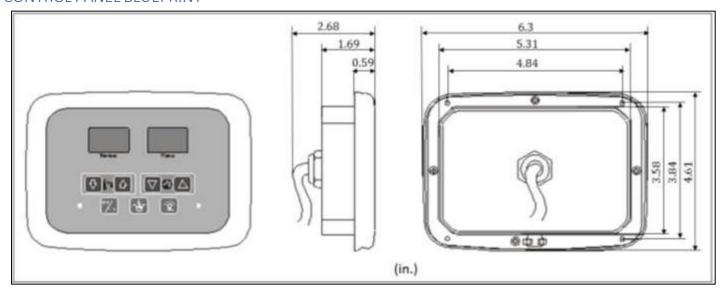
Do not use a controller that is not specifically designed for the steam generator, do not use the controller to operate steam generator of another brand.

The instructions include important safety, operation and maintenance information. Keep the instruction manual handy.

If the steam generator is damaged or does not operate normally, do not continue to install or use.

Note: When connecting the keypad wire, push the plugs together. Do not twist.

CONTROL PANEL BLUEPRINT



CONTROLLER INSTALLATION INSTRUCTIONS

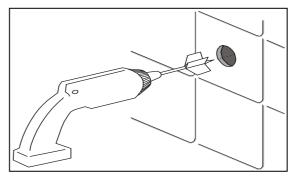
Attention: Before installing the controller, make sure the steam engine is shut off.

Step one

Determine the installation location of the controller.

For installation:

- 1. 4 -5 feet away from the ground or convenient height inside or outside the room.
- 2. Locate controller on separate wall from steam nozzle.
- 3. Do not expose yourself to the direct spray of steam.



The controller wire is 1.5 feet long with a controller extension wire going to the steam engine being 19.5 feet long. Installation of controller panel should be in a position **not more than 21 feet from the steam engine.**

<u>Attention:</u> Do not install the controller under the water pipe or in a position where it will be sprayed with water.

Step two

Drill a round hole of 1.4" in diameter in a chosen position. Or see note.

Step three

Pull the controller wire through the round hole, connect it to the corresponding wire in the engine.

Attention: Do not over tighten or clip the controller wire.

Step four

Start the power for the steam engine, check and adjust connection, check each item on the keypad to make sure everything is working properly.

<u>Attention:</u> Before setting the controller, make sure the steam engine is shut off.

Step five

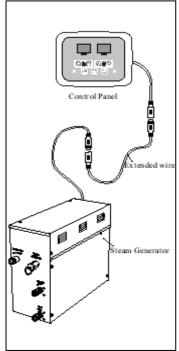
Remove the paper at the bottom.

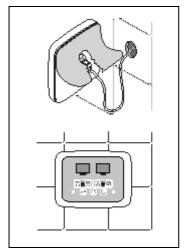
To achieve good adhesion, make sure surface is clean and dry.

Attention: Level controller.

Step six

Locate the display screen at the 12 o'clock position and press tight. Adhere controller to the wall.

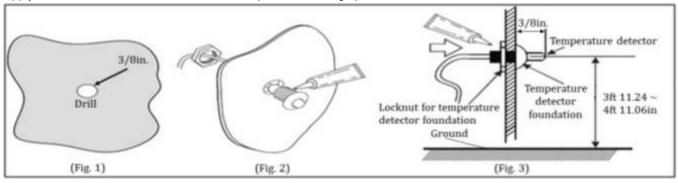




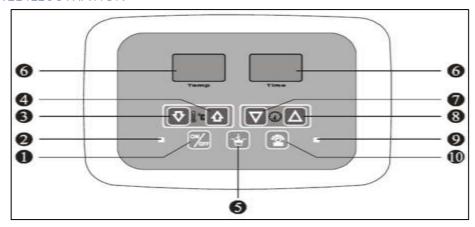
NOTE: The controller/keypad can be mounted flush on the wall. A rectangular opening that is 5 3/8"x3 5/8" needs to be cut out.

TEMPERATURE DETECTOR INSTALLATION

- 1. The position of the temperature sensor should be about shoulder high where occupant will be sitting. Avoid installing near the steam outlet.
- 2. As shown in Fig.1, drill a small hole (3/8") in the selected position.
- 3. Apply silicone along the edge of the back of the detector foundation (as shown in Fig.2).
- 4. Use a locknut to lock the detector foundation. (As shown in Fig.2)
- 5. Push the temperature detector and go through the back of the detector foundation (As shown in Fig.3)
- 6. The temperature detector should be installed by extending about 3/8" from the front of the room for accurate temperature.
- 7. Apply silicone to the back and set the detector. (As shown in Fig.3)



CONTROLLER PANEL ILLUSTRATION



- 1. Power ON/OFF
- 2. Steam Indicator LED
- 3. Steam Temperature Adjust Key--Low
- 4. Steam Temperature Adjust Key--High
- 5. Water drain Key—Manual Override

- 6. LED Screen
- 7. Steam Time Adjust Key-Low
- 8. Steam Time Adjust Key—High
- 9. Power Indicator LED / standby
- 10. Mood Light ON/OF

Note: The unit will automatically drain 20 minutes after the unit has been off

OPERATION INSTRUCTIONS

- 1. When power supply is applied to the steam box system the RED stand-by light (#9) will be illuminated. (see **Illustration of the controller panel** for location)
- Pressing the ON/OFF button will start the system. The steam box will fill with water. This will take a few minutes; the water may cycle on and off a few times as the water tank fills. This is normal operation. The display will show ambient Temperature and Running time - 8 hrs. Both red lights will be off.
- 3. When the Red light next to the ON/OFF button becomes illuminated, the system is operating and will start generating steam in 4 8 minutes. If it starts to flash, it indicates a lack of water in the tank.
- 4. Pressing the UP and Down arrows under the temperature display will adjust the temperature accordingly. The temperature range is 25°C to 68°C or 78°F to 150°F. The unit will cycle on and off to maintain the set temperature. See #7 for instructions on switching between Fahrenheit and Celsius.
 - Once the user has adjusted the temperature to their preference, the temperature lights will blink several times and the time and temp will be the active setting. The unit will display room temperature.
- 5. When system is on, press UP or DOWN triangle keys on control panel to adjust running time, meanwhile, time display window shows the time you desire. The steam time range is 1 minute to 8 hours. When setting time to less than 1 hour, the time unit is by the minute; when more than 1 hour, the unit is hour and time display window will indicate "8 h" (hours).
- 6. When system is on, press the LIGHT key to turn on lights; press again to turn off. If applicable.
- 7. When system is in standby mode, press DOWN temperature key and UP triangle key at the same time. **This will switch between Fahrenheit and Celsius.**

Attention:

- 1. Use soft cloth with soap and water to clean the controller. **Technical Assistance:** For any information or assistance, call 866-783-2661.
- 2. Do not use abrasive cleaning tools.

Helpful Hints:

Steam Generator does not produce steam:

If your steam shower has been working with no issues, and one day the steam generator just doesn't come on, make sure the time and temperature are set (even if you have never changed it). Sometimes the unit will reset and if the time and/or the temperature are not set, the unit will not come on.

During initial start-up, set to the maximum temperature for first time operation. Afterwards lower to preferred temperature setting.

If the unit has been operating properly and then all of a sudden water fills the tank and the steam indicator LED light goes out and there is no steam, check the 221°F hi-limit switch (page 15). If this occurs, there is a reset button at the center of the switch. Press the button. Check each button that is above each heating element and that should solve the problem.

The reset button can be tripped during shipment or as a new installation. The steam indicator LED light goes out and there is no steam, check the 221°F hi-limit switch (page 15). If this occurs, there is a reset button at the center of the switch. Press the button. Check each button that is above each heating element and that should solve the problem.

PART 3: DELUXE CONTROL PANEL

CLEANING INSTRUCTIONS

- 1. Use soft cloth with a little soap water to clean the controller.
- 2. Do not use abrasive cleaning tools or material.

SAFETY AND OPERATION INFORMATION

Warning: If the installation and operation instructions are not read or understood, do not install or use, to prevent serious damage or injury. Install the controller based on the installation instructions, otherwise, the temperature in the steam room will be too high or will not heat properly. If the controller is installed outside the steam room, the temperature sensor must be installed in the steam room. Operate based on the instructions otherwise the controller may lose control or the bathroom will be overheated.

Caution: Do not install the controller wire in the same wire conduit with any other wire. Do not get close to hot water or steam pipe otherwise the controller may not operate properly or the bathroom will be overheated.

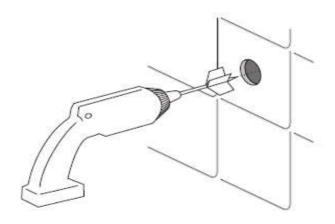
Important: Before installing the controller, make sure the power to the steam generator is shut off otherwise the controller may not operate properly or get damaged.

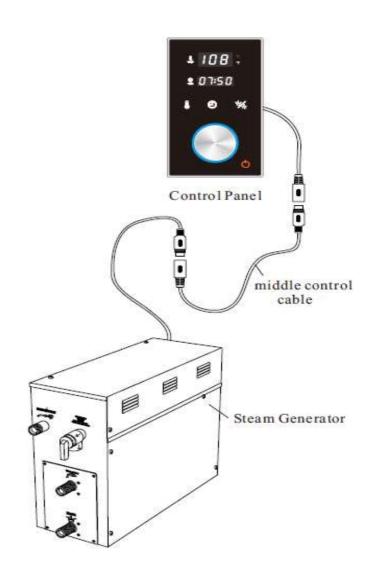
Do not use controller other than as described with this steam generator. Do not use the controller to operate steam generator of other brands otherwise the controller may not operate properly or the machine will get damaged.

The instructions include important safety, operation and maintenance information. Keep the instructions readily available.

If the steam generator is damaged or not running properly, do not

continue to install or use the controller.





BLUEPRINT FOR THE CONTROL PANEL

- Complete set including:
 - Control panel
 - Temperature sensor and holder
 - User manual
 - Middle cable between dual panels (6.5 feet)

INSTALLATION INSTRUCTION OF CONTROLLER

Important

Before installing the controller, make sure the steam generator is shut off otherwise the controller may not operate properly or be damaged.

Step One:

The controller is designed to be installed in the steam room. Points to consider:

- 1. 4-5 feet from the ground or a convenient height.
- 2. Keep away from the steam nozzle and do not expose under the direct spray of steam or water.
- Install on a wall.
- 4. The position of installation should facilitate easy operation and convenient wiring. The controller wire is 1.6 feet long, with an extension wire of 20 feet long. The installation of the controller should be in a position not more than 21 feet from the steam generator.

Important

Do not install the controller under the water pipe or in a position where the keypad is in constant contact with water.

Step Two:

Drill a round hole of 1 3/8 inches in diameter in a chosen position, no larger or smaller.

Step Three:

Attention: Do not twist the cables.

Pull the controller wire through the round hole, connect it to the extension wire and then to the steam generator and connect with the corresponding wire in the generator. Do the same when unplugging.

Important Do NOT pull tight, fix tight or clip the controller wire in case of damage to it. Do not secure the key pad to the wall at this time.

Step Four:

Start the power supply to the steam generator, check connection, check each item on pages 23-24 to make sure all functions work.

Important

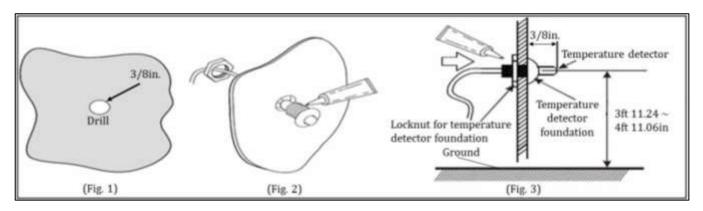
Before attaching the controller, make sure the steam generator is shut off otherwise the controller may not operate properly or become damaged.



Step Five:

TEMPERATURE DETECTOR INSTALLATION

- 1. The position of the temperature detector should be about shoulder high while sitting and as far away as possible from the steam head. Avoid installing near the steam outlet or room door.
- 2. As shown in Fig. 1, drill a small hole of 3/8in. in the selected position.
- 3. Apply a circle of silicone along the edge of the back of the detector foundation (as shown in Fig 2)
- 4. Use a lock nut to lock detector foundation. (as shown in Fig .2)
- 5. Let the temperature detector go through the back of the detector foundation (as shown in Fig. 3)
- 6. The temperature detector should be installed by extending about 3/8 in from the front of the room to make sure the speed and accuracy of the temperature control is correct.
- 7. Apply glue to the back and fix the detector. (as shown in Fig. 3)



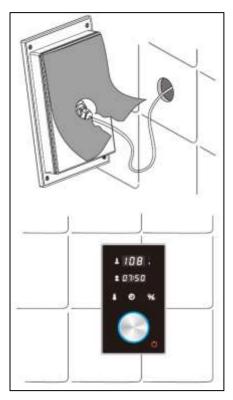
Step Six:

Remove the cover paper at the bottom. To achieve good adhesion effect, keep the sticking surface clean and dry.

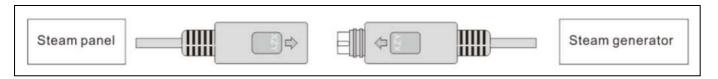
Important: To ensure horizontal installation of the controller, use a level.

Step Seven:

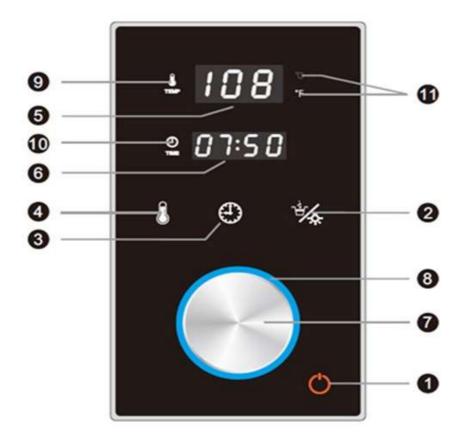
Locate the display screen in the vertical direction of 12 o'clock and press the controller to stick it to the wall.



CONTROLLER FUNCTION INSTRUCTION



<u>Attention:</u> Avoid bending the pins inside the cable connection the control panel and steam generator. Make sure the arrows on the male and female ends are lined up as illustrated below. <u>**DO NOT TWIST.**</u>



Power ON/OFF
 Temp indicator LED
 Light/manual drain
 Time indicator LED
 Time icon
 Time adjust
 Fly shuttle button
 Temp unit indicator
 Temp adjust & C/F switch
 Backlight of fly shuttle button

KEYPAD OPERATION

The blue ring around the fly shuttle indicates the unit is in standby mode and ready for operation (8).

Press the on/off button to start the operation of the generator. (1)

Note - If the Steam Light (9) starts blinking, it means there is no water coming to the generator. Determine the cause and correct. The unit will display the default time (6) and ambient temperature (5). To find out the default temperature press the temperature adjustment button (4).

The unit will fill with water and after a few minutes begin to produce steam

Once the unit has been shut off either by the time setting or manually pressing the on/off button (1), the automatic drain function of the generator will engage after about 20 minutes. If you do not want to wait for the automatic drain to engage, you can override it by pressing the Light/Manual drain button (2). This will start the drain process immediately.

While the unit is in operation, you would press the Light/Manual Drain (2) button to engage the light feature of the system.

Temperature conversion: C to F or F to C. While the system is in standby mode, press and hold the thermostat button (4) for 2 seconds.

Make sure the unit is running by pressing the on/off button (1)

The default time and temperature will be displayed and the unit will start to fill with water.

- 1. **TO CHANGE THE TIME FOR THE CURRENT SESSION ONLY**, press the time button (3), the hour will flash (6). Rotate the fly shuttle (7) to the desired hour, press the fly shuttle (7) to set the hour. The minutes will start to flash (6), rotate the fly shuttle to the desired minutes, then press the fly shuttle (7) to set the desired time.
- 2. **TO CHANGE THE TEMPERATURE FOR THE CURRENT SESSION ONLY**, press the temperature button (4) and the temperature display will begin to flash (5). Rotate the fly shuttle (7) to the desired temperature (5) and press the fly shuttle (7) to set the temperature. The Steam temperature range is 25 C to 68 C or 78 F to 155 F.

CHANGING THE DEFAULT VALUES

Make sure the unit is running by pressing the on/off button (1)

To change the default time

- 1. Press the time button (3) on the keypad. The hour setting will flash (6).
- 2. Rotate the fly shuttle (7) to the desired time. Press fly shuttle button (7).
- 3. The minutes display will start blinking (6). Rotate the fly shuttle button (7) to the desired minutes.
- 4. Press the timer button (3) for a few seconds or until a beep is heard.
- 5. New default time is set.

CHANGING THE DEFAULT TEMPERATURE

- 1. Press the temperature indicator (4). The display (5) will flash current temperature setting.
- 2. Rotate the fly shuttle (7) until the desired temperature is displayed (5).
- 3. Press and hold the temperature indicator (4) for a few seconds or until a beep is heard.
- 4. The new temperature is set.

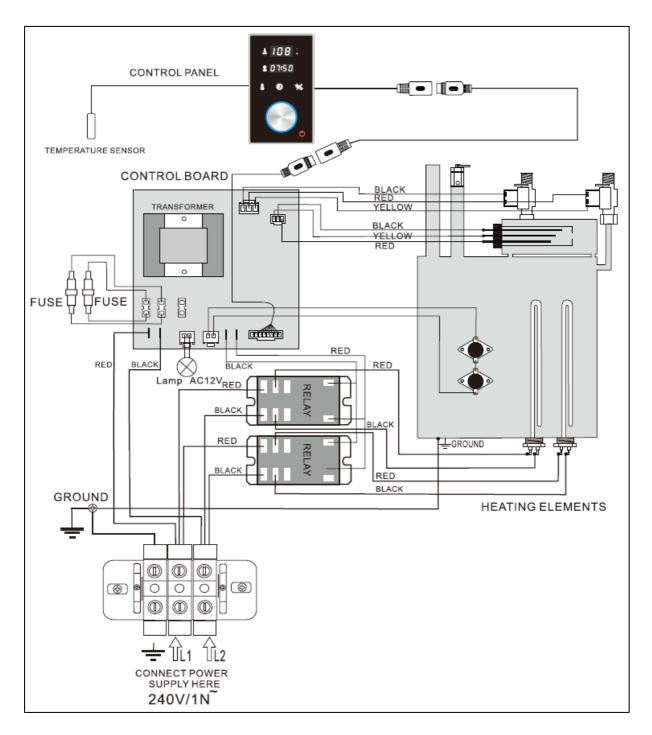
BRIEF TROUBLE SHOOTING GUIDE

- E1 Water level sensor failure
- E2 Temperature sensor short circuit
- E3 Temperature sensor open circuit
- E4 No water in the tank within 4 minutes
- E5 Communication failure between steam generator and keypad or between both keypads.

OPTIONAL- DUAL KEYPAD

System has the same main control panel and subpanel. The subpanel does not include steam control cable and external temp sensor. Functions on the main panel and subpanel are the same.

SCHEMATIC



PART 4: ADDITIONAL INFORMATION

LIST OF PARTS FOR ALL GENERATORS

08-01-01	GS08 3 kW HEATING ELEMENT FOR SG 6 KW (X2)
08-01-02	GS08 4.5 kW HEATING ELEMENT FOR SG 9 KW (X2)
08-01-03	GS08 4 kW HEATING ELEMENT FOR SG 12 KW (X2)
08-01-04	GS08 2.25 KW HEATING ELEMENTS FOR 4.5 KW
08-01-05	GS08 6/9 KW SILICONE TANK SEAL
08-01-06	GS08 12 KW SILICONE TANK SEAL
08-01-07	GS08 6/9 KW SS HEATING ELEMENT PLATE
08-01-08	GS08 12 KW SS HEATING ELEMENTS PLATE
08-02-01	GS08 INLET VALVE
08-02-02	GS08 DRAIN VALVE
08-02-03	GS08 6/9 kW WATER LEVEL SENSOR
08-02-04	GS08 CIRCUIT BOARD
08-02-06	GS08 MANUAL HIGHLIMIT SWITCHES
08-02-07	GS08 RELAYS
08-02-08	GS08 RELAY TO MANUAL HI-LIMIT SWITCH WIRE
08-02-09	GS08 MANUAL HI-LIMIT TO HEATING ELEMENT WIRE
08-02-10	GS08 12V TRANSFORMER & FUSE W/PLUGS POWER WIRE
08-02-11	GS08 CIRCUIT BOARD TO POWER TERMINAL H/TEMP WIRE
08-02-12	GS08 CIRCUIT BOARD WIRE WITH 90DEG. CLIP
08-02-13	GS08 12V TRANSFORMER
08-02-14	GS08 MAIN GROUND WIRE
08-03-01	GS08 FUSE
08-03-02	GS08 FUSE HOLDER
08-04-01	GS08 GENERATOR CABLE - MALE END
08-04-02	GS08 KEYPAD CABLE - FEMALE END
08-04-03	GS08 TEMPERATURE PROBE WIRE - LONG DETACHABLE
08-04-04	GS08 12V ACCESSORY WIRE
08-04-05	GS08 KEYPAD EXTENSION CABLE - MALE & FEMALE ENDS
08-04-08	GS08 WATER LEVEL SENSOR HARNESS
08-04-09	GS08 WATER LEVEL SENSOR SECURING NUT
08-04-10	GS08 4.5KW WATER LEVEL SENSOR
08-04-11	GS08 12 KW WATER LEVEL SENSOR
08-04-12	GS08F DUAL KEY PAD CONNECTION WIRE – MALE PINS
08-04-13	GS08F/Z KEYPAD LONG CONNECTION WIRE
08-04-14	GS08Z DUAL KEYPAD CONNECTION WIRE – FEMALE
08-04-15	GS08H KEY PAD TEMP PROBE WIRE REPLACEMENT
08-05-01	GS08 1/2 INCH STEAM HEAD - CHROME
08-05-02	GS08 3/4 INCH STEAM HEAD - CHROME
08-05-03	GS08 3/4 NCH STEAM HEAD - BRUSHED NICKEL
08-05-04	GS08 3/4 INCH STEAM HEAD - OIL RUBBED BRONZE
08-05-05	GS08 3/4 INCH STEAM HEAD - GOLD
08-05-06	GS08 LONG TEMPERATURE FOUNDATION
08-05-07	GS08 PRESSURE RELEASE VALVE
08-05-08	GS08 SHORT TEMPERATURE FOUNDATION
08-06-01	GS08A KEYPAD GOLD TRIM
08-06-02	GS08A KEYPAD CHROME TRIM
08-07-01	GS08A FOAM PAD - DOUBLE SIDE ADHESIVE
08-07-02	GS08H FOAM PAD - DOUBLE SIDE ADHESIVE DELUXE

TO EXPEDITE PARTS REQUEST

Please visit homewardbath.com/support. If you require additional assistance, call 866-783-2661.

WARRANTY INFORMATION & REGISTRATION

Please visit our website: <u>nomewardbath.com/warrant</u>	<u>y-registration</u>
Please note serial number:	

Registration must be completed within 45 days of receipt to be valid.

A full description of the warranty is available on the Homeward Bath website.

