

THERMASOL

Cleanse Your Body. Purify Your Soul.

Installation & Maintenance Manual

Power Pak-2 **230V 3 Phase** 2 Room Steambath Generator

WARNING

- DO NOT USE THIS PRODUCT UNLESS YOU HAVE CONSULTED YOUR DOCTOR AND RECEIVED WRITTEN PERMISSION TO DO SO. USE OF THIS PRODUCT MAY BE HAZARDOUS TO YOUR HEALTH.
- STEAM IS HOT! DO NOT TOUCH OR GO NEAR THE STEAM HEAD FROM THE TIME THE UNIT IS "ON", UP TO ONE HOUR FROM THE TIME THE UNIT IS OFF. SEVERE BURN WILL OCCUR IF YOU COME IN CONTACT WITH THE STEAM HEAD OR STEAM EMITTING FROM THE STEAM HEAD.
- NEVER ATTEMPT TO FILL AROMA THERAPY RESERVOIR ON THE STEAM HEAD WHEN UNIT IS IN THE "ON" POSITION. SEVERE BURNS WILL OCCUR.
- DO NOT USE THERMASOL AROMA THERAPY OILS OR SKIN CARE PRODUCTS OR ANY PRODUCT IN CONJUNCTION WITH YOUR THERMASOL UNIT WITHOUT CONSULTING WITH YOUR ALLERGIST OR DOCTOR BEFORE USE. THESE PRODUCTS MAY BE HAZARDOUS TO YOUR HEALTH.
- YOUR SHOWER MAY BE A SLIP AND FALL HAZARD CHECK WITH YOUR CONTRACTOR OR TILE MANUFACTURER REGARDING THE SAFE USE OF YOUR FLOORING IN A STEAM APPLICATION. SLIPPING AND FALLING INTO THE STEAM HEAD ITSELF OR INTO THE STREAM OF STEAM EMITTING FROM THE STEAM HEAD WILL CAUSE SERIOUS BURNS, OR PHYSICAL INJURY.

Headquarters

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CONSUMER WARNING

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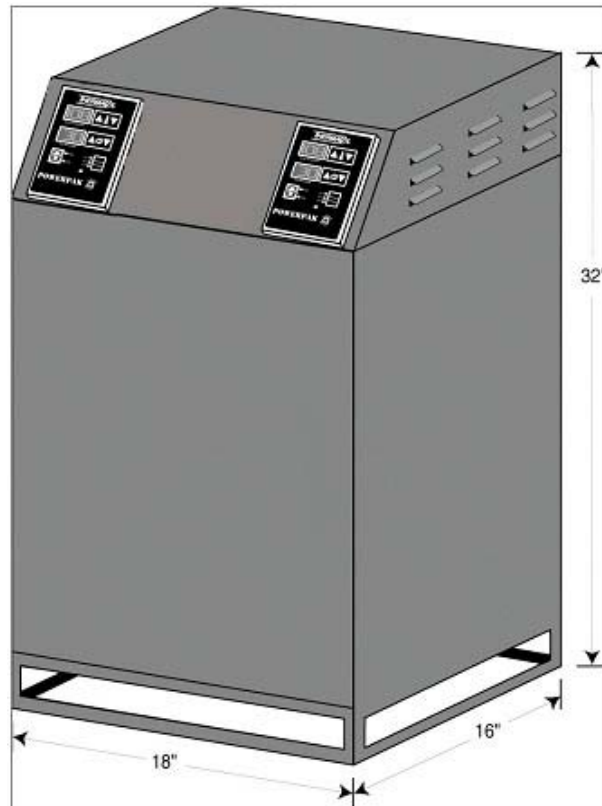
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Generator Installation Instructions



Sizing Your Steam room

Sizing:

1. Calculate the total volume of the enclosure. (Length x Width x Height = Total Volume).
2. Using the Volume total, multiply by the number to the right of your shower wall material shown below.

Example:

7 ft. long x 4 ft. wide x 7 ft. high = 196 cubic feet
 196 cubic ft. x 1.65 (marble) = 323.4 cubic ft.

NOTE: Add 10% for every foot exceeding 7 ft. in ceiling height. Add 10% for every exterior outside wall.

▪ Fiberglass, Acrylic, Cultured Marble	.65
▪ Corian	No Change
▪ Ceramic tile on waterproof sheetrock, cement bed or mortar bed	No Change
▪ All glass tile, glass block walls	1.35
▪ Natural stone tiles 3/8" to 1/2" (marble, travertine, slate, granite, etc.)	1.65
▪ Natural stone tiles on cement bed or mortar bed	1.65
▪ Natural stone slab 3/4" to 1"	1.85

Requirements For Proper Installation

1. Use copper or brass fittings only. **(NEVER USE GALVANIZED FITTINGS)**
2. The water inlet, steam outlet & pressure relief valve, should be installed with unions for easy removal.
3. The generator must be upright, accessible and on a level surface with all connections on the back. Access panel on top and front must be unobstructed and allow for easy access.
4. Unit may be installed up to 50 feet away from shower area.

Caution: If the unit is run without water, serious damage may result! This possible damage is not covered under Thermasol's warranty.

Parts Enclosed

- Steam generator with built-in controls
- Steam room temperature sensor & 25 foot lead wire
- Polished chrome steam head

Materials Needed

- Pipe compound
- Copper or brass nipples - size and quantities per instructions
- In-line filter (recommended)
- 3/8" brass or copper union
- Wire (sizes and quantities per instructions)
- Copper tubing or pipe
- Wire cap nuts
- Flex conduit
- Brass or copper tee connection & plug

Tools Needed

- Pipe wrench
- Tubing cutter
- Flaring tool (if flared fittings are used)
- Wire cutters or wire strippers
- Adjustable wrench
- Screwdrivers (phillips & regular)
- Solder & Flux
- 3/16" & 1.5" masonry drill bits
- Drill motor
- Propane Torch
- Other tools as required

Water Inlet Installation

Refer to figure 1 for the following:

1. Connect tee to the hot or cold water supply line. Install copper pipe or tubing to the tee. If an in-line filter is to be installed on the water line to the generator, (which is suggested), it would be preferable to install the tee on the cold water line.
2. Install a brass shut-off valve on the water inlet line in an accessible area prior to the brass union and recommended in-line water filter.
3. Before making the last connection to the 3/8" water inlet line coming to the unit, flush the water line into a pail to remove any silt or other materials that may be in the line.
4. Make the final connection and turn on water. All Thermasol generators are equipped with an automatic water fill system. The water will stop after unit is filled.
Make sure the power flush is in the closed position.

IMPORTANT: MAXIMUM SUPPLY WATER PRESSURE IS 70 P.S.I.

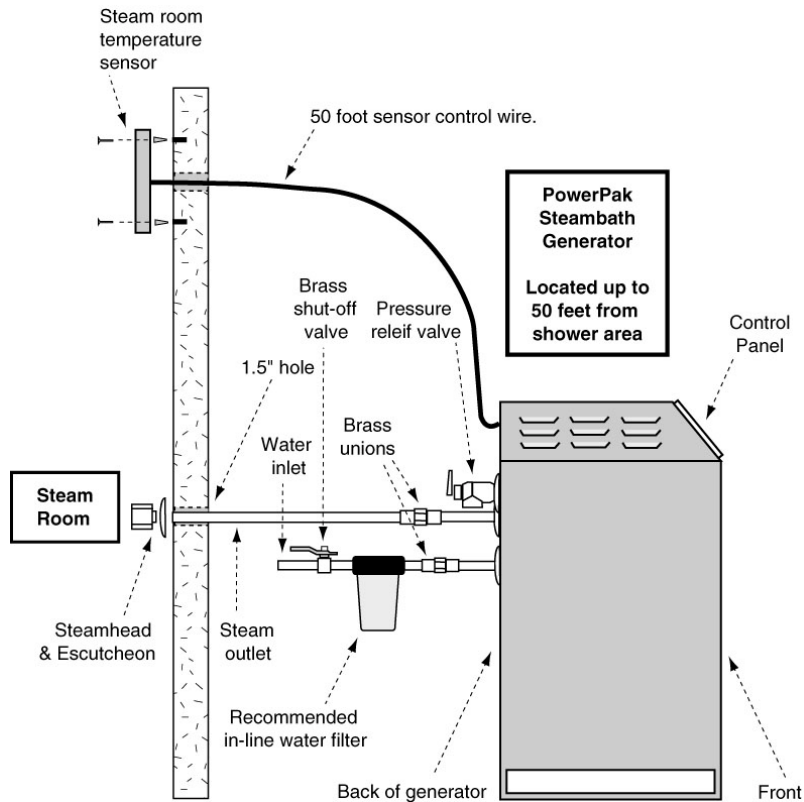


Figure 1

Steam Head Installation

1. Drill a 1.5" diameter hole in the shower wall or wall for the steam outlet line. Refer to figure 2 as a guide for the proper location of the hole.

◆ **Caution: The steam head is hot! And should not be located near a seat or bench!**

2. Connect 1" F.I.P. copper pipe or copper tubing and 1" brass union onto the steam outlet. Run a 1" copper pipe from the union to the 1.5" hole in wall. Install a 1" M.I.P. on the end of the 1" pipe for the steam head.
3. Attach the steam head and escutcheon to the copper pipe.

CAUTION: Do not obstruct the steam line with any shut-off valves, plugs or caps. All Thermasol steam generators are designed to build NO PRESSURE.

◆ **Note:**

The steam line can run up, down, or horizontal; but cannot run down and then up. If it does, a water trap may be produced at the low point blocking the flow of steam. Insulate the steam outlet piping if the piping run exceeds 10 feet or is exposed to cold areas. **Use steam rated insulation.**

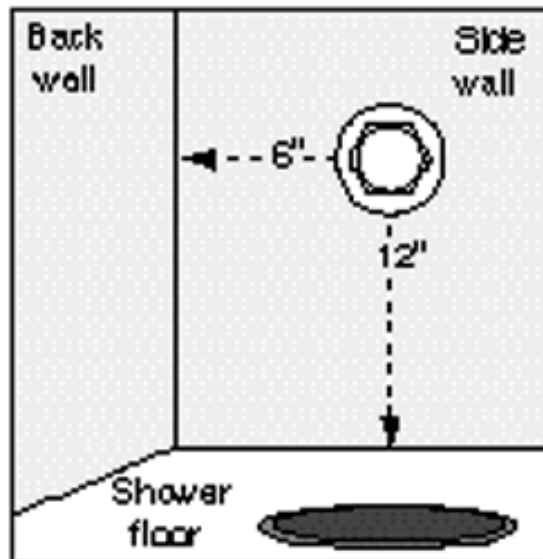


Figure 2

Electrical Installation

NOTE: All electrical wiring must comply with local electrical codes.

Wire sizes recommended by National Electric code. Minimum wire temperature rating 90C.

Generator Model	Phase	Wire Gauge	Breaker Size	Fuse	Cubic Feet	kW
600	3	6	60	35A	600	18
900	3	6	70	40A	900	24
1200	3	4	90	50A	1200	30
1500	3	4	110	60A	1500	36

1. Turn off all electricity to the working area at the main breaker panel.
2. Connect the 230V 3 phase A.C. electrical supply to L1, L2 and L3 on the junction block, if present, or directly to the contactors if the junction block is not present (figure3).
3. Install the temperature sensor in the steam room approximately 5 feet above the floor. (figure 1)

NOTE: DO NOT mount sensor near steam head!

4. Bring the control sensor wires to the generator. With the top cover removed, connect the control sensor wires, using wire nuts, to the two loose wires on the back of the control panel.
5. Replace top access cover. Turn on both water and power to the generator.
6. Test the control touch pad to ensure it is wired properly. If any problems arise, call (800) 776-0711.

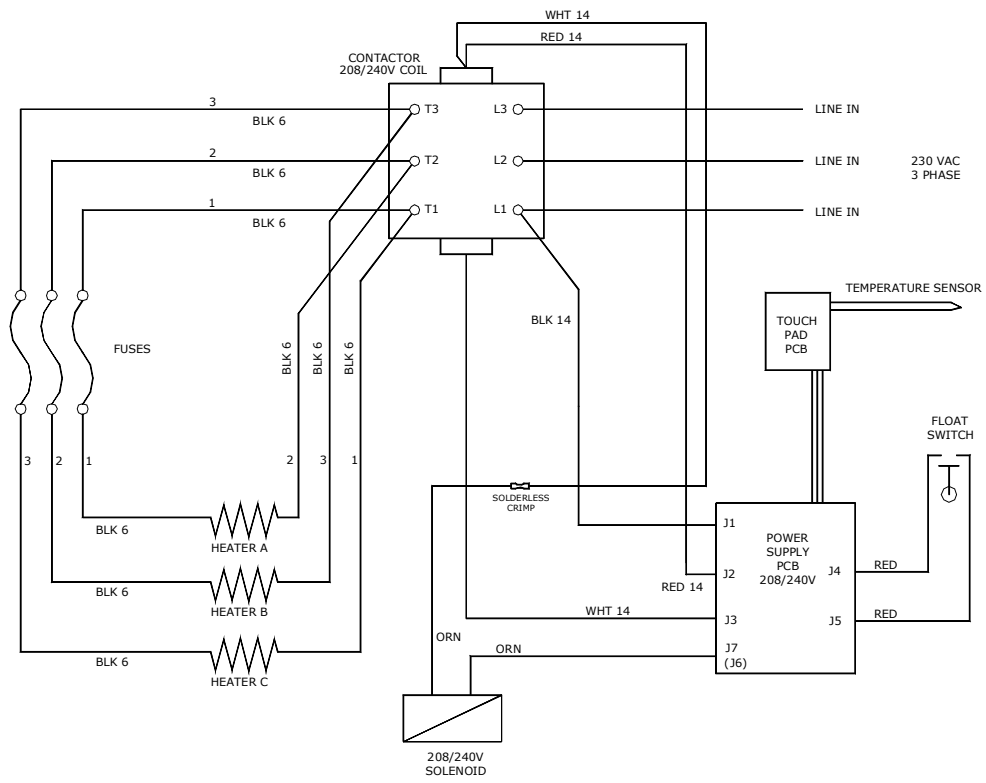


Figure 3

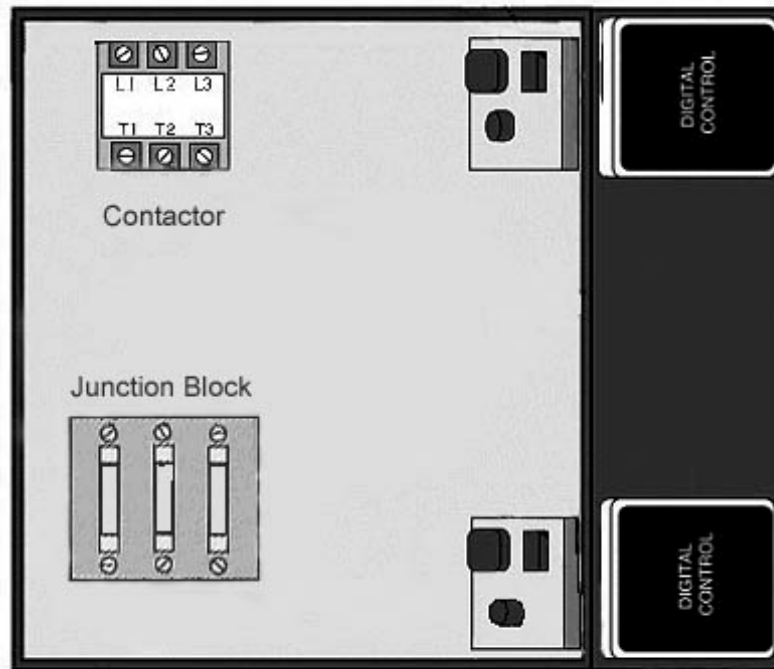


Figure 4

Power Pak Controller Operating Instructions

1. After installation – turn on power to unit at the breaker. You will see a flashing dash and “12” in the upper window & “00” in the lower window (figure 5A).
2. First set the clock by pressing the “clock-start-stop” button once (figure 5B). You should see the light next to the “set clock” come on. Next, press the “day select” button until you reach the day you are at. The day is indicated on the left side of the upper window. (Monday = 1, Tuesday = 2, etc., etc.).
** (It is very important clock be set for the current day. If you are programming this unit on a Tuesday, then set the clock and day for Tuesday, day 2.) Using the arrows to the right of both windows set the current time in military time (24-hour clock). As an example 11:32 am would read 11 in the upper window and 32 in the lower window. 2:45 PM would read 14 in the upper window and 45 in the lower window.
3. Now you will set the “Steam Start Time”. Press the “Clock-Start-Stop” button once. You should see the light next to the “Start Time” come on and the light next to the “Steam” come on. Using the arrows set the time you want the steam to begin on that day from now onward. The day is “Select” button for each day and using the arrows to set the time you want the unit to begin steaming. Always end on the day you started with to ensure you have all the days programmed.
4. Next, set the “Steam Stop Time”. Press the “clock-Start-Stop” button once. You should see the light next to the “Stop Time” come on and the light next to the “Steam” remain on. Using the arrows set the time you want the steam to stop for that day from now onward. The day is indicated on the left side of the upper window. To program the rest of the week, press the “Day Select” button the day you started with to ensure you have all the days programmed.
5. Now you will set the Powerflush program (figure 5C). **You must set the “Flush” time at least ½ hour past the “Steam Stop” time when no one is inside the steam room.** Press the “Clock-Start-Stop” button once. You should see the light next to the “Start Time” come on and the light next to the “flush” come on. Using the arrows, set the time you want the flush to start for that day from now press the “Day Select” button for each day and using the arrows to set the time you want the unit to begin its Powerflush. Always end on the day you started with to ensure you have all the days programmed. The Powerflush stops automatically at the end of its cycle. (Approximately 45 minutes).
6. Next set the temperature. Press the “Clock-Start-Stop” button once (figure 5D). You will see the day indicated now on the right side of the lower window and the desired temperature in the upper window. Using the arrows set the temperature you want for that day from now onward. The day is now indicated on the right side of the lower window. To program the rest of the week, press the “day Select” button for each day and using the arrows to set the temperature you want for that day. Always end on the day you started with to ensure you have all the days programmed.
7. It is now time to jump out of the program area. You are currently in the temperature setting mode. Make sure your day is correctly set. (Monday = 1, Tuesday = 2, etc., etc.). Remember, the day is now indicated on the right side of the lower window. Press the “Clock-Start-Stop” button once. This will take you out of the program mode and into the sleep (non-active) mode. A dash and the current time should be showing.

After Programming, to make the unit steam immediately, press the ON/OFF manual button once. You should see the “Steam” light flash continuously.

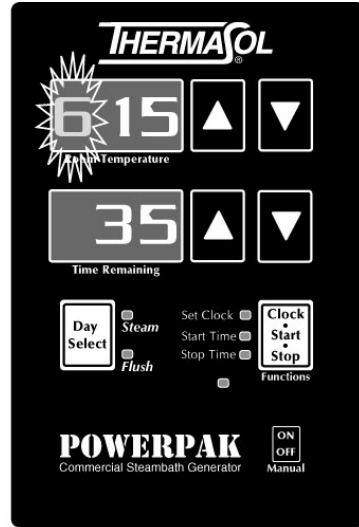
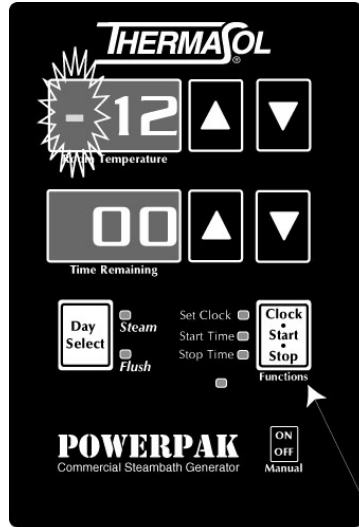


Figure A

Figure B

Function Switch

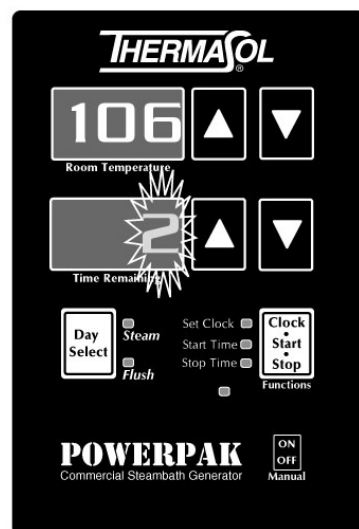
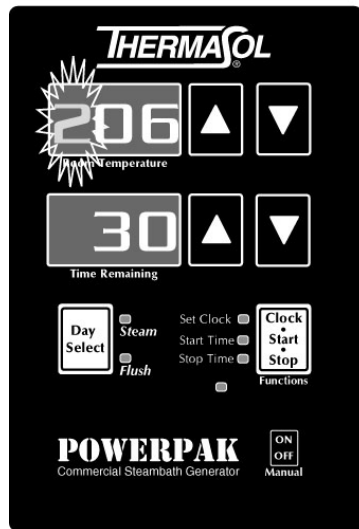


Figure C

Figure D

Figure 5

Periodic Maintenance

1. A power flush should be performed once a day. This can be programmed to occur automatically.
2. After the initial installation, the heating elements and water feeder assemblies should be removed and inspected for excessive calcium build up every 3 months. (figure 6) If excessive calcium build up is detected, spray the affected areas with CLR or similar type cleaner and scrub with a soft bristled non-metallic brush.
3. Rinse the assemblies thoroughly in clean water before re-installing them.
4. After six to nine months, it should be evident if the inspection & cleaning process needs to occur more often or less often. Adjust your schedule accordingly.

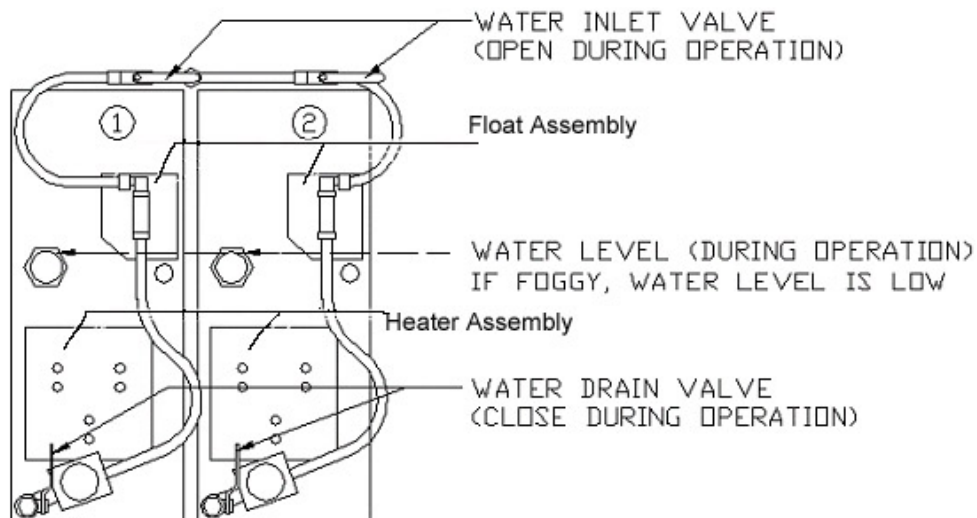


Figure 6

Replacement Parts

Part Number				
	PP-600	PP-900	PP-1200	PP-1500
Ball Valve	02-8136	02-8136	02-8136	02-8136
Contactora	03-3970	03-3970	03-3970	03-3970
Float Switch	03-4660	03-4660	03-4660	03-4660
Individual Fuse	03-2397	03-2398	03-2399	03-2400
Heater Assembly Gasket	04-8346	04-8346	04-8346	04-8346
Individual Heating Element	03-2353-230	03-2353-230	03-2353-230	03-2353-230
Power Supply	03-4794	03-4794	03-4794	03-4794
Sight Glass	02-2330	02-2330	02-2330	02-2330
Temperature Sensor	A04-7350	A04-7350	A04-7350	A04-7350
Touch Pad Control	A04-0460	A04-0460	A04-0460	A04-0460
Water Feeder Assembly	A09-0559 PP	A09-0559 PP	A09-0559 PP	A09-0559 PP
Water Feeder Gasket	04-8345	04-8345	04-8345	04-8345