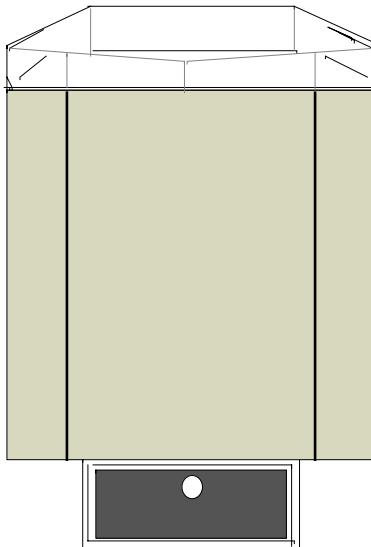


# Sauna Craft CTT Heater Installation Manual



## NOTES FOR ALL HEATERS

### Heater Guard Fence:

A non-metallic guard (not included) shall be provided and installed as follows:

- a) 4" from CW Series heaters
- b) 6" from FM Series heaters

### Sauna Rocks (included):

- 1) Wash the rocks before placing on heater.
- 2) **Do not pack rocks too tightly into rock tray. There should be pockets of air. Stack rocks loosely in a "pyramid" like pile. Packing rocks too tightly will trap heat and cause the hi-limit to trip.**
- 3) These units must not be operated without the igneous rocks in place

### Water:

Do not soak the heater with water. Water should be used in moderation Sprinkling with a ladle is recommended.

### Manual Reset High Limit Control:

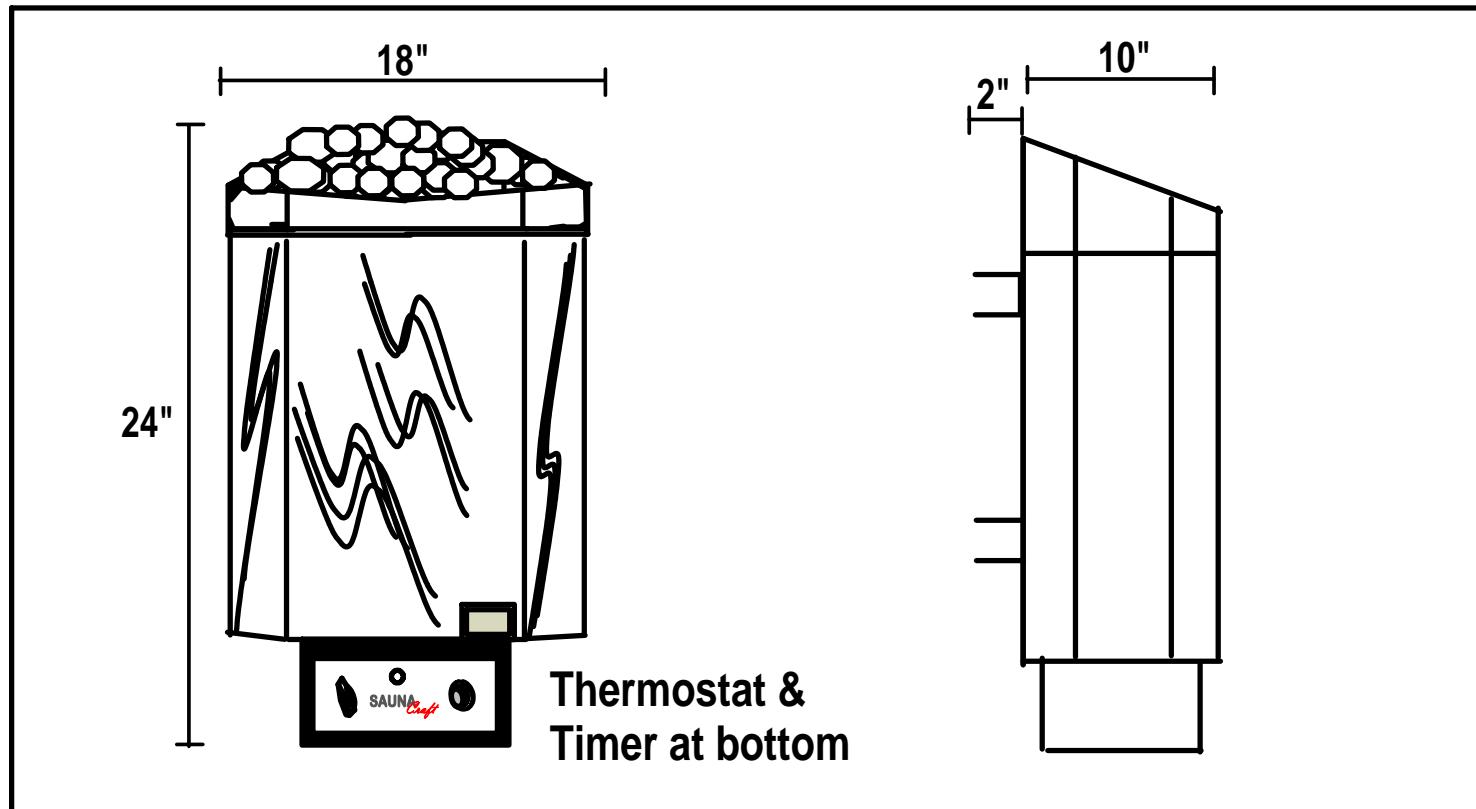
- 1) This safety device must not be by-passed in the wiring of this sauna heater.
- 2) Should the high temperature limit control trip frequently, a qualified serviceman should be contacted.

- A licensed electrical contractor should do all electrical work.
- Do NOT use a G.F.I breaker.
- All cables used in the installation of these units must be rated for 300 VAC.
- All cables supplied and connected to these units must be rated for 90° Celsius.

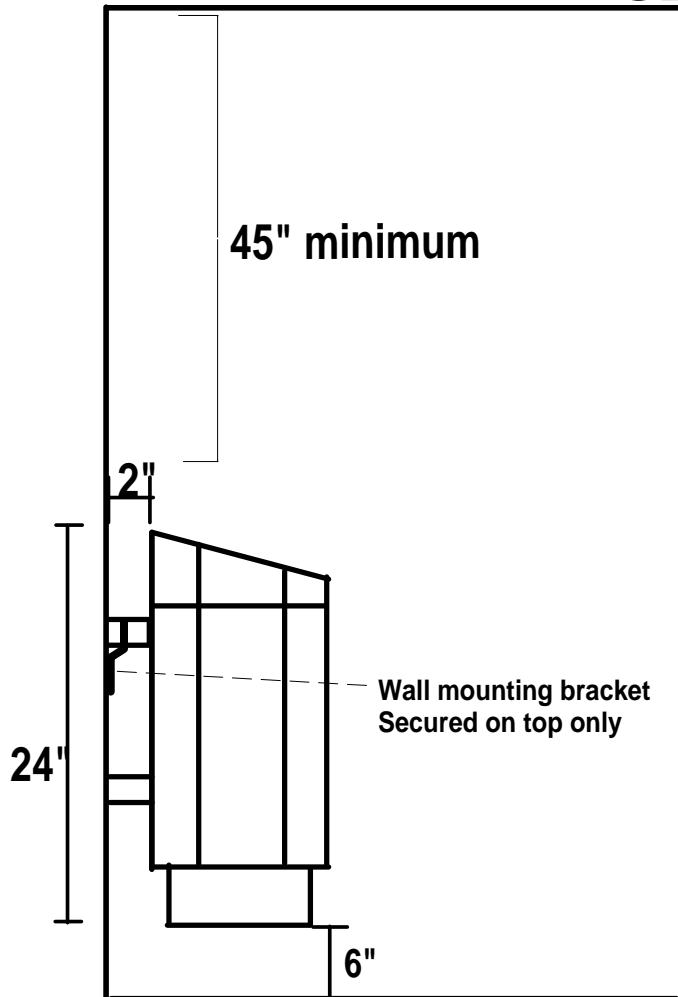
### FIRST TIME USE

When using the sauna for the first time it is normal to have a little smoke. The elements are burning off oil residue left by the manufacturing process. Turn the sauna on for ½ hour, leave the door open and do not go inside.

# SAUNA CRAFT CTT HEATER w/ BUILT IN CONTROL

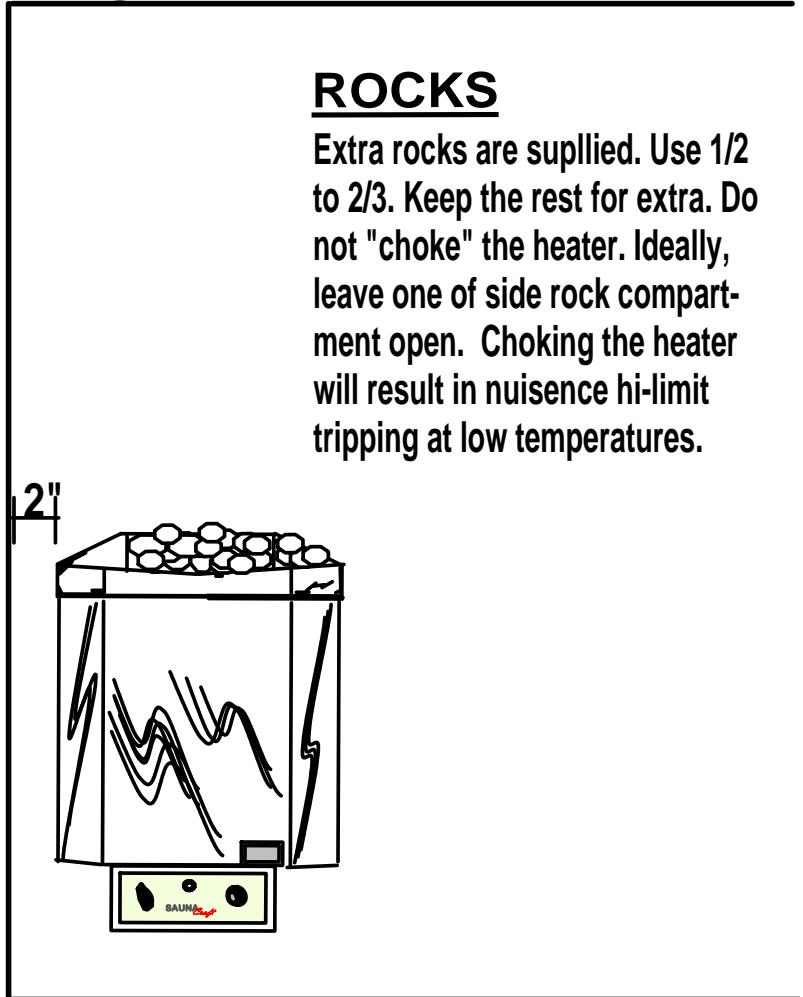


## CEILING



## ROCKS

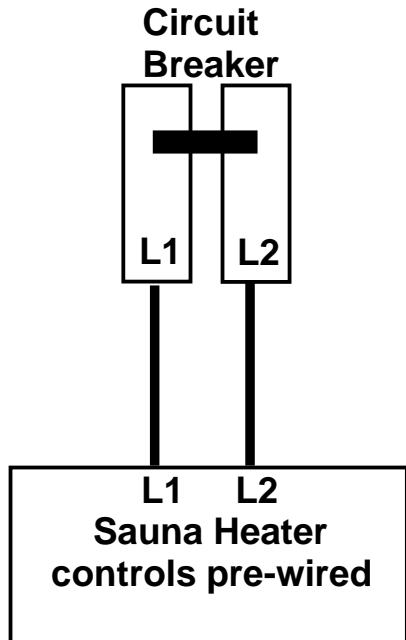
Extra rocks are supplied. Use 1/2 to 2/3. Keep the rest for extra. Do not "choke" the heater. Ideally, leave one of side rock compartment open. Choking the heater will result in nuisance hi-limit tripping at low temperatures.



# CTT SERIES HEATER WIRING DIAGRAM

CTT heaters have controls built into the front bottom of heater

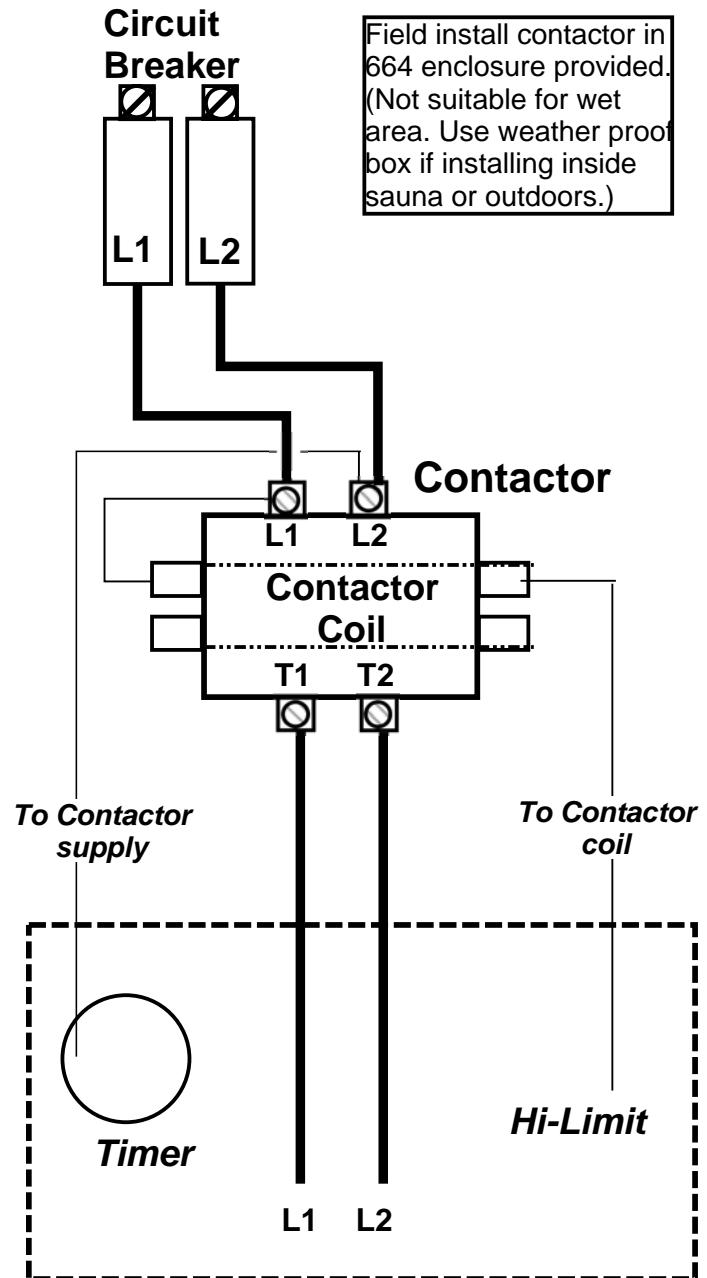
**4 - 6 KW / 240 VOLT / 1 PHASE**



Control rated to 30 amps.

No magnetic contactor required for heaters up to 6 kw (240volt)

**7.5 - 9 KW / 1 PHASE**



Watts	Volts	Phase	Wire Size	Circuit Breaker
4000	240	1	10	30
5000	240	1	10	30
6000	240	1	10	30

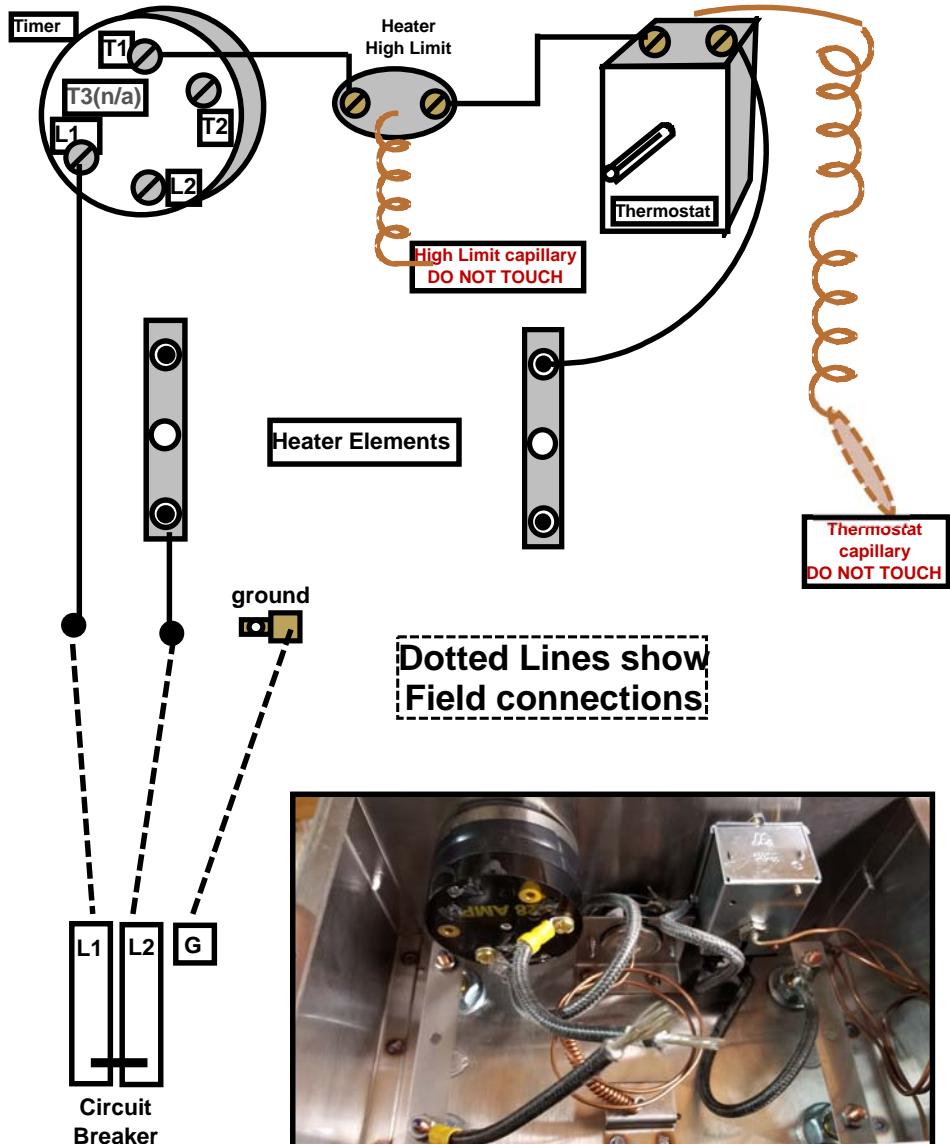
Wire/breaker size is recommendation only  
Consult your licensed electrician to confirm your requirements

**DO NOT USE G.F.I.  
BREAKER**

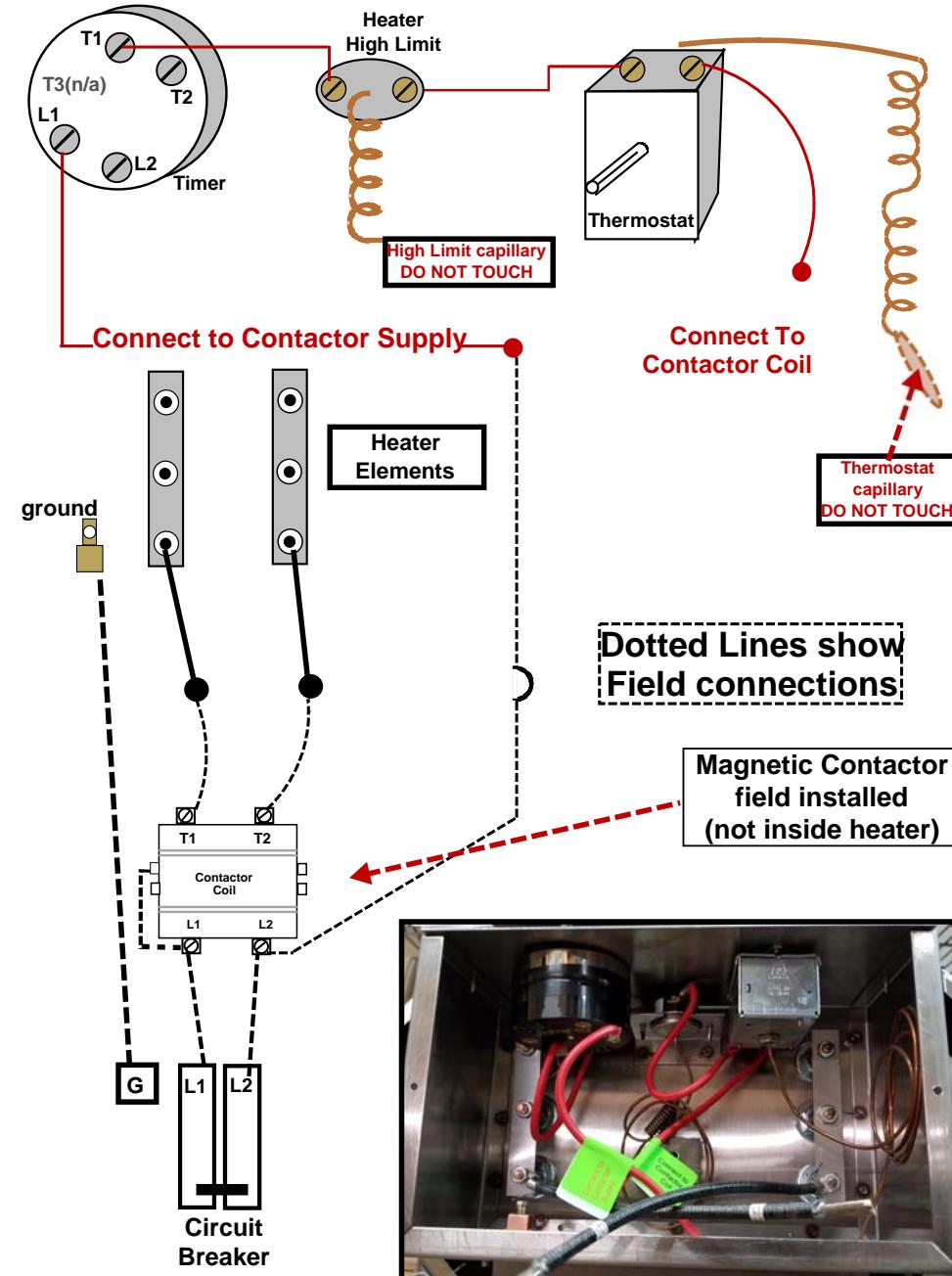
Watts	Volts	Phase	Wire Size	Circuit Breaker
7500	240	1	8	40
9000	240	1	8	40

Wire/breaker size is recommendation only  
Consult your licensed electrician to confirm your requirements

### CTT INTERNAL WIRING 4 to 6 kW



### CTT INTERNAL WIRING 7.5 & 9 kW (with separate contactor)



# **SAUNA ROCK PLACEMENT-SC**

## **SAUNA CRAFT HEATERS**

### **FILLING THE ROCK COMPARTMENT (FIGURES 10-14)**

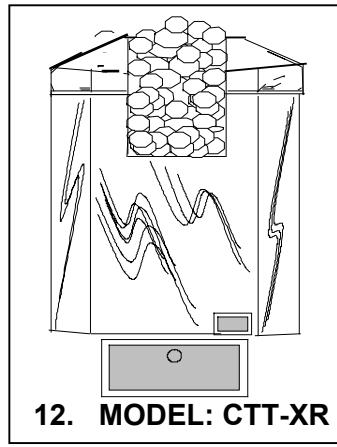
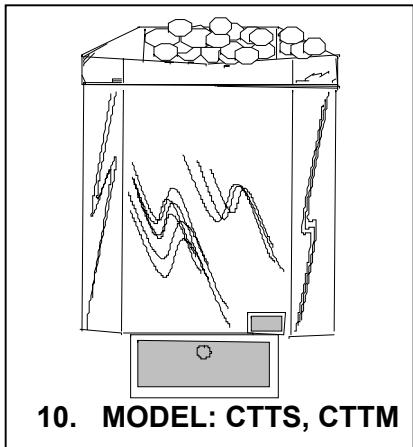
The rocks should not be stuffed into every nook and cranny. This will "choke" the heater, trapping the heat inside and will result in nuisance tripping of the heater's built-in hi-limit. Placing the rocks properly improves heater operation and speeds up the heat up time.

Extra rocks are supplied. Depending on the heater model, you will use about 1/2 to 2/3. Keep the rest for extra.

The rocks should filled as indicated below:

**CWS, CWM (Figure 10):** *Fill center and one side chamber. Leave the other side chamber*

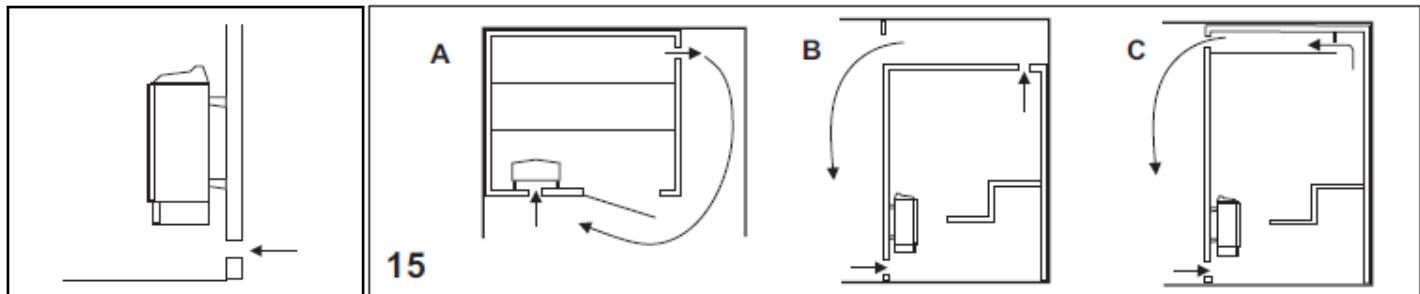
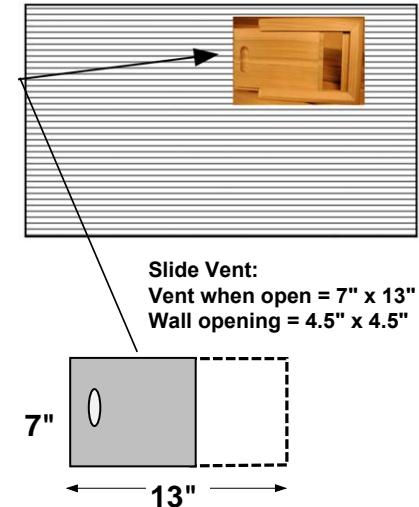
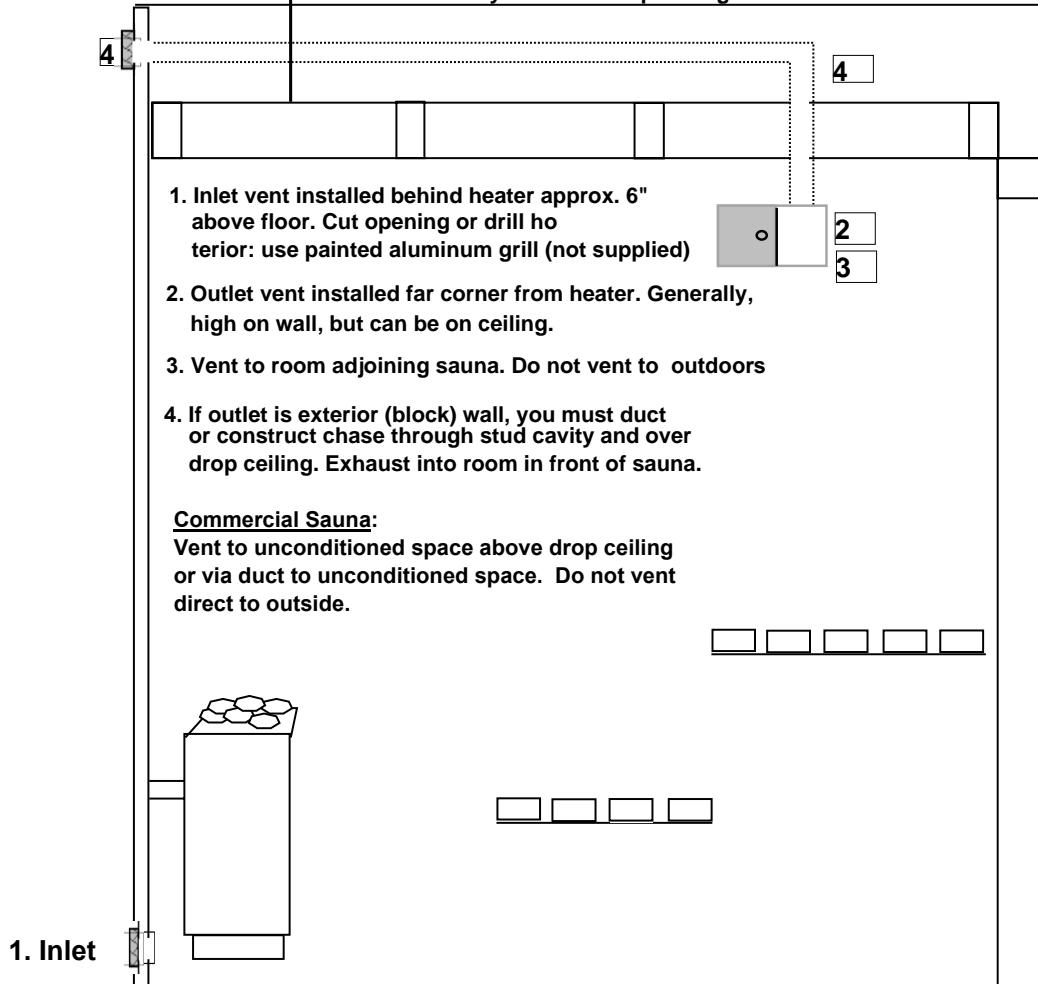
**CW-XR (Figure 12):** *Fill center. Leave side chambers open. .*



# Slide Vent Cover

2a

If outlet is exterior wall, you must run duct or construct a chase through stud cavity and over drop ceiling. Exhaust into room in front of sauna.



The inlet vent should be driven straight through the wall directly below the center of the heater.

The cross-section of the vent for a family sauna is approx. 19 sq.in.

For larger saunas approx. 40 sq.in

Position the air inlet and outlet vents as far away from one another as possible (diagonally opposite). The outlet vent should be located high on a wall or in the ceiling, and should have the same cross-section area as the inlet vent. Spent air should always be led back into the same room from which it is drawn into the sauna – it must never be discharged directly into the open air. In this way, the air flowing from the sauna is continually being replenished in the room outside.

**A:** Outlet vent through the sauna wall (seen from above). The vent is placed high up, near the ceiling.

**B:** Outlet vent through the cavity above the sauna ceiling (seen from the side).

**C:** Outlet vent through a drum under the ceiling in the sauna (seen from the side). The outlet duct should be placed at an angle between the ceiling and the wall. The drum can be built of wooden panelling and have the same area as the outlet vent.

# SAUNA TROUBLE SHOOTING

<u>Problem</u>	<u>Probable Cause</u>	<u>Remedy</u>
<b>Note: Except where noted otherwise, reference to control refers to TPT3 mechanical control</b>		
Heater will not start	Control wired incorrectly	Check wiring diagram carefully to ensure control circuit is wired correctly
	High temperature control has tripped	Using pencil or other non-condutive material, carefully push in "reset" button at front bottom of heater
	Thermostat off or set below room temperature	Turn thermostat clockwise. Saunas are generally set to between
	Timer off	Turn timer clockwise
	No Power	Turn on breaker. If on, it may be faulty or installed incorrectly. Call for service.
	Faulty magnetic contactor (applies only to heaters 7.5 kw & larger)	Call for assistance. Call service person.
Sauna not hot enough	Temperature not set high enough	Set thermostat higher-
	Thermostat sensor not positioned properly	
	Thermostat miscalibrated	Recalibrate or replace
Sauna on, but no real heat. Elements are not glowing red.	Sauna has been wired at 120 volt. (Note: two 120 volt lines does not make 240 volt.)	Call qualified service person. Using meter, confirm there is 240 <u>across</u> line 1 and line 2.
One or more elements not glowing red	One or more elements burned out	Replace element
Pilot light on. No Heat	High Limit tripped	Reset. (See above)
	High Limit defective	Replace high limit
<b>High Limit trips frequently</b>	<b>Too many rocks or rocks packed too tightly, trapping heat inside. (very common)</b>	<b>Leave one side of rock tray free of rocks. Rocks should be stacked so that air can pass through.</b>
	Thermostat broken or miscalibrated	Recalibrate or replace
	(Public) Sauna being tampered with by users; i.e. splashing water or placing wet towel on thermostat sensor bulb	Close sauna to public use. Run heater for 2-3 three hours. If sauna does not trip, this suggests the problem is user tampering.
	High Limit defective	Replace high limit
Sauna too hot	Sensor not properly positioned	Reposition sensor or lower thermostat setting to compensate.
	Thermostat broken or miscalibrated	Recalibrate or replace
Breaker trips frequently	G.F.C.I. breaker was used	Replace with standard breaker
	Breaker too small for heater installed	Replace with properly rated breaker
	Short circuit or ground in wiring	Call service person.

## **HOW TO TAKE A SAUNA**

1. Start with a brief shower using warm water and soap. Rinse thoroughly. Do not towel dry.
- 2 Enter the pre-heated sauna - 9 or 10 on numbered dial (80°-90° C on temp dial). Take a towel in with you to sit on.

Relax and allow your body to perspire freely in the soft dry heat. Do not throw water on the rocks in this first session. Do not expect to begin and finish your sauna in a few minutes. Even in the extreme heat of a sauna, it takes time for your body temperature to rise and for you to begin to perspire freely.

- 3 Stay inside the sauna only as long as it feels pleasant. Go out now and then to cool off and freshen up with a quick cool shower. How long you stay in the sauna is up to you. It depends on your comfort level. It is not an endurance test. People often start at 5-10 minute intervals and work up to longer periods.

Young children love saunas. Let them splash about in a tub of water on the floor or the lower benches where it is somewhat cooler. But remember to keep an eye on them at all times

- 4 Re-enter the sauna. Sprinkle water on the hot rocks to bring up a little steam and increase the humidity. This will increase the feeling of heat and assist the perspiration process. If you like add a few drops of scented essence such as eucalyptus into the water you splash on the rocks. It will disperse throughout the sauna.
- 5 Take a cold shower. Repeat the sauna/cold water cycle as often as you desire.
- 6 Dry yourself completely. Then sit or lie down, letting your body relax.
- 7 Relax, treat yourself to a cold drink and enjoy a sensation of true well-being. Don't get dressed until your body has cooled down and your pores have closed. Never get dressed right after your sauna. This will only cause you to perspire

**NOTE:** When used for the first time, you will notice smoke coming off the heater elements. This is normal. Leave the door open and allow the sauna to run about 30 minutes.

### **Technical Support**

Before calling, please review the trouble-shooting guide in this manual. When calling please have the following information:

Heater Model # \_\_\_\_\_  
\_\_\_\_\_

Contactor Model # \_\_\_\_\_  
(Applies only to heaters 7.5 kw or larger)

### **Contact Information**

Sauna Craft  
115 Bowes Rd, Unit 2  
Concord, ON  
L4K 1H7  
Phone: 905-738-9443  
Fax: 905-738-2486