

THE INSTALLATION & OPERATION OF YOUR LOG BURNING SPACE HEATER

The Tile Fire



SAFETY NOTICE: IF THIS SOLID FUEL ROOM HEATER IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.



**UNDERWRITERS
LABORATORIES
INC.®**
UL LISTED 1482

KENT

GENERAL:

The Tile Fire has been designed to burn wood and logs only. Fossil fuels such as coal are not suitable for use in this appliance. The best type of wood is sound, seasoned, dried, and correctly sized hardwood. Lengths over 19 inches should be avoided. If hardwoods are not readily available, we suggest avoiding green soft woods which have a high resin content.

A FEW DO'S AND DON'TS TO ENSURE PEAK EFFICIENCY & GOOD OPERATION OF YOUR TILE FIRE:

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- ★ **Do Not** use your Tile Fire with the door open.
- ★ **Do Not** use your Tile Fire for burning rubbish -- it is not an incinerator. Rubbish can cause dangerous soot build-up.
- ★ **Do Not** burn salt borne drift wood or chemically treated timber in your Tile Fire, as use of this can seriously affect the heater.
- ★ **Do Not** burn masses of paper, cardboard or similar materials in your Tile Fire.
- ★ **Do Not** allow children to play with or near the Tile Fire. It's not a toy and can get very hot!!!
- ★ **Do** add ONLY the amount of wood necessary to heat the area comfortably between refuellings. This is especially important during mild weather operation.
- ★ **Do** be careful when refuelling your Tile Fire. The door can be opened only when the bypass damper has been pulled fully out.
- ★ **Do Not** leave your Tile Fire unattended with the door open.
- ★ **Do Not** use gasoline, gasoline-type lantern fuel, kerosene, charcoal, lighter fuel or similar liquids to start or freshen up a fire in this heater. Keep all such liquids well away from the heater while it is in use.
- ★ **Do Not** clean the ash from your heater too often — the ash deposits on the hearth in fact assist the burning process.
- ★ **Do** check chimney connector at least twice monthly during the heating season, to determine if a creosote build-up has occurred.
- ★ **Do** write for the National Fire Protection Association's booklet 'Using Coal and Wood Stoves Safely' (NFPA No: HS-10-1978). The address of the NFPA is 470 Atlantic Avenue, Boston N.A. 02210 U. S. A.
- ★ **Do not** connect this unit to a chimney flue serving another appliance.
- ★ **Do Not** overfire your Tile Fire. In the unlikely event of the unit glowing red, close the airslide control.

TILE FIRE MAINTENANCE:

Your Tile Fire requires very little maintenance and will maintain its good looks for a long time with just a little attention.

HEARTH

The special burning feature of the Tile Fire is assisted if the ash deposits are not removed completely. We suggest you leave about 1 inch of levelled ash on the hearth when you empty the unit. When emptying your Tile Fire, the ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in the soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

CHIMNEY & CHIMNEY CONNECTOR:

When wood is burned slowly, it produces tar and other organic vapours, which combine with expelled moisture to form creosote. The creosote vapours condense in the relatively cool chimney of a slow-burning fire. As a result, creosote residue accumulates on the inside of the chimney and chimney connector. When ignited, the creosote makes an extremely hot fire. The chimney connector and chimney should be inspected at least twice monthly during the heating season to determine if a creosote build-up has occurred. If creosote has accumulated it should be removed promptly to reduce the risk of a chimney fire.

DOOR GLASS: This will require cleaning from time to time, and a razor blade scraper or steel scouring wool and water are the best tools. Do not use water when glass is hot.

CABINET & TILES: A little detergent and soft cloth will keep your unit clean and looking new.

CHANGING TILES: Please refer to the Installation section of this manual.

PRINCIPAL OF OPERATION OF THE TILE FIRE:

The volatile gases given off by wood will burn, but only in the presence of high temperatures and oxygen. The secondary chamber at the top of the main chamber has been specially designed to slow the gases down and force them back over the hearth. The gases become thoroughly mixed with the air supply, and this, together with the high temperatures on the hearth and at the base of the upper chamber make the gases burn, releasing much more heat per pound of wood than conventional burning. There are two controls which affect the rate of burning — a by-pass damper and an air slide. The by-pass damper is controlled by the lever to the right of the unit above the door. This must be pulled out when lighting the fire. With the by-pass damper open (fully out) the hot gases can escape up the chimney connector, and warm the heating system to operating temperature. Once the fire is established, the damper must be closed (lever fully in) and left in this position unless the door is opened. The door cannot be opened while the damper is in. The air supply is controlled by the knob on the left hand side of the unit and allows a controlled air supply into the main chamber to give the best burning characteristics at the rate of firing required.

Moving the knob to the **Left** allows more air in and the fire burns faster. Moving the knob to the **Right** gives a slower controlled burn. The knob should be fully to the left during light up and after refuelling.

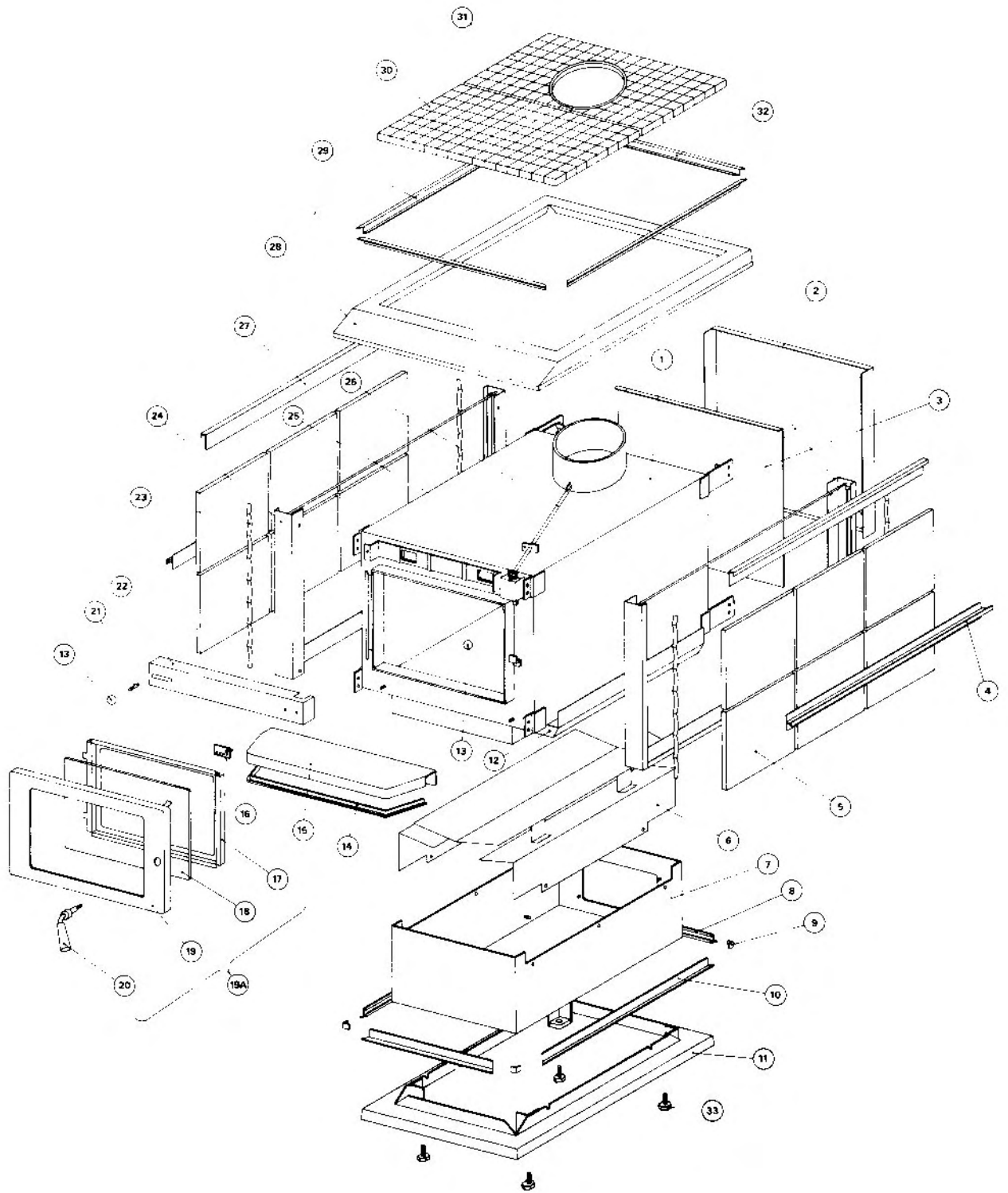
LIGHTING THE TILE FIRE: Do not use a grate or elevate fire. Build fire directly on hearth.

1. Pull the bypass damper lever forward and open the door. Move the air slide knob to the left so that it is in the 'full open' position. Place several pieces of crumpled newspaper in the centre of the Tile Fire, criss-cross 8 or 10 pieces of dry kindling wood on top of the paper, then stack several small pieces of dry wood over the kindling.
2. Ignite the paper and close the door. Leave the damper lever pulled out. This will allow the hot gases to vent directly into the chimney and quickly create the necessary draft for combustion.
3. The fire will take a few minutes to establish itself. When it has, open the door add two or three logs, depending on size, then close the door and push the bypass damper lever in for the normal operation (this will lock the door closed). The air slide knob should be fully open, and when the flames have started to char the logs the slide can be adjusted to suit burning conditions and heat requirements.
4. To restart a fire from overnight operation, simply rake hot embers towards the front of the Tile Fire and add a couple of logs so that they rest on the hot cinders. Open the air slide and the logs should begin burning in just a few minutes.

LOADING THE TILE FIRE:

One of the great features of your Tile Fire is that it can be fully loaded and left to burn efficiently for many hours. There are, however, ways in which you should load your Tile Fire to give you maximum efficiency and reduced maintenance.

- ★ It doesn't make sense to add more wood than you have to. You will get the best efficiency when you add only the amount of wood needed until next time you are free to refuel.
- ★ Don't be afraid to use woods of different types, shapes, diameters and lengths (up to 19" long).
- ★ Always try to place the logs so that air can flow between them. This will enhance combustion and fire appearance considerably.
- ★ Always use dry wood. If you have green or wet wood, use only small amounts mixed in with dry wood on a good hot fire.



TILE FIRE 1984 PARTS LIST

1.	HEAT EXCHANGER WELD ASSEMBLY		20-09-008
2.	BACK PANEL		20-06-058
3.	REAR HEAT SHIELD		20-09-063
4.	TILE DIVIDER		20-06-174
5.	TILE		75-25-VARIOUS
6.	PLINTH HEAT SHIELD ASSEMBLY		20-09-049
7.	PLINTH ASSEMBLY	(NORDIC BRONZE)	20-09-066
		(BLACK)	20-09-067
8.	PLINTH TRIM — END		20-09-014
9.	PLINTH TRIM CORNER GUSSET		20-09-016
10.	PLINTH TRIM — SIDE		20-09-013
11.	PLINTH BASE WELD ASSEMBLY	(NORDIC BRONZE)	20-09-031
		(BLACK)	20-09-034
12.	HEAT EXCHANGER DUCT		20-09-065
13.	CONTROL KNOB — DAMPER ROD AND AIR SLIDE		20-06-074
14.	ASH SPILL TRAY TRIM		20-09-015
15.	ASH SPILL TRAY WELD ASSEMBLY	(NORDIC BRONZE)	20-09-053
		(BLACK)	20-09-054
16.	NAMEPLATE — KENT		75-01-110
17.	GLASS RETAINER		20-04-137
18.	CERAMIC DOOR GLASS		20-06-151
19.	DOOR WELD ASSEMBLY	(NORDIC BRONZE)	20-04-292
		(BLACK)	20-06-145
19a.	DOOR ASSEMBLY — COMPLETE	(NORDIC BRONZE)	20-04-293
		(BLACK)	20-04-290
20.	DOOR HANDLE		20-04-289
21.	AIR SLIDE HANDLE		20-06-073
22.	AIR SLIDE COVER WELD ASSEMBLY	(NORDIC BRONZE)	20-09-058
		(BLACK)	20-09-057
23.	TILE SPACER		20-06-067
24.	TILE FRAME WELD ASSEMBLY	(NORDIC BRONZE)	20-09-092
		(BLACK)	20-09-093
25.	DAMPER ROD GUIDE		20-04-410
26.	DAMPER ROD		20-04-435
27.	TILE SUPPPORT CHANNEL		20-06-090
28.	TOP SURROUND WELD ASSEMBLY	(NORDIC BRONZE)	20-09-061
		(BLACK)	20-09-064
29.	TOP SURROUND TRIM — SIDE		20-09-011
30.	TOP DECORATIVE PANEL — FRONT	(NORDIC BRONZE)	20-09-020
		(BLACK)	20-09-024
31.	TOP DECORATIVE PANEL—REAR—WELD ASSEMBLY	(NORDIC BRONZE)	20-09-018
		(BLACK)	20-09-017
32.	TOP SURROUND TRIM — END		20-09-012
33.	ADJUSTING FEET (SET SCREW M12 x 25 HEX HEAD)		92-11-016-45

INSTALLATION INSTRUCTIONS

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GENERAL

The Tile Fire has UL listing and must be installed in accordance with the listing and the Standard for Chimneys, Fireplaces and Vents, NFPA No:211. Where a permit is required, this should be obtained prior to installation and we suggest that you advise your insurance company that you are having the heater installed. The clearances shown in these instructions are necessary to prevent overheating of nearby combustibles and the drying out of lumber in the house structure.

FLOOR PROTECTOR (STOVE MAT):

The Tile Fire must be installed with the floor protected by a UL listed Floor Protector of $\frac{3}{8}$ " Asbestos Mill Board or $2\frac{1}{4}$ " Masonry Brick. The floor protector must extend at least 16" in front of, and at least $5\frac{7}{16}$ " to either side of the appliance.

The heater must be levelled when placed on the floor protector. Four bolts are supplied as feet under the heater and the level of the unit can be altered by adjusting these.

MINIMUM CLEARANCES TO COMBUSTIBLES:

Conventional installation with single wall connector pipe is shown in Fig. 1.

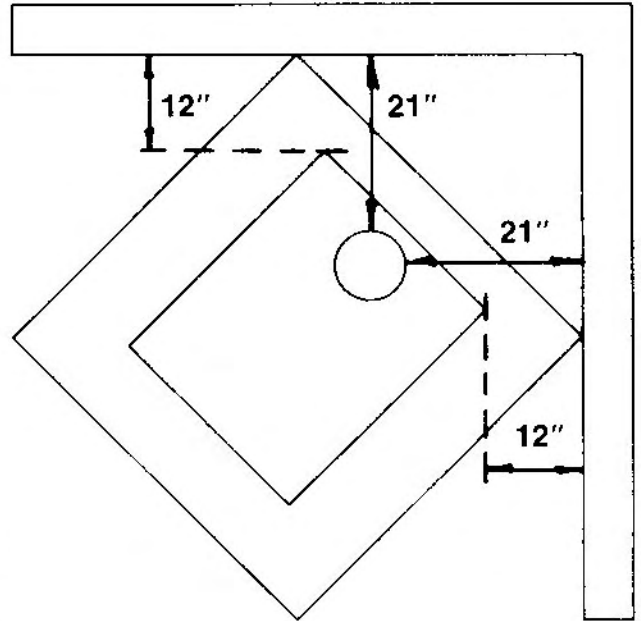
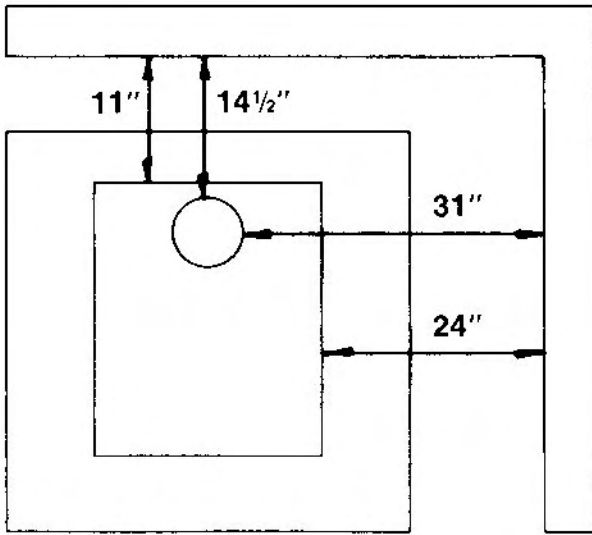


Fig. 1

Clearances will be reduced by using Dura-vent type DVL or Ameri-vent DBSP listed stovepipe as shown in Fig.2.

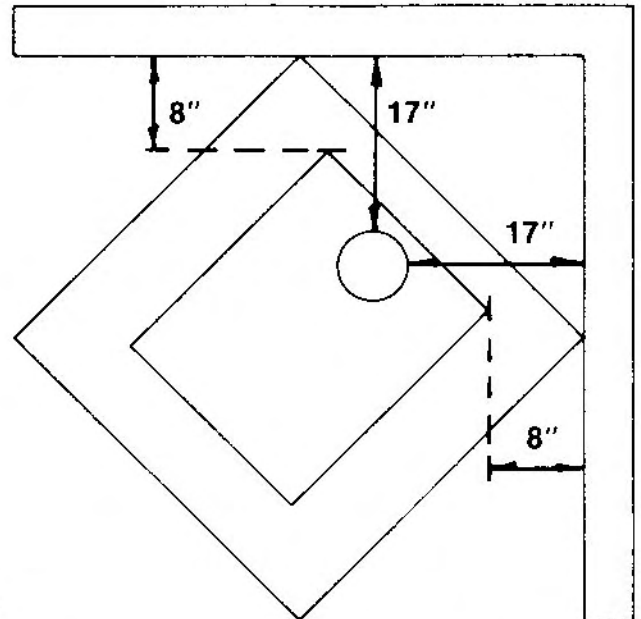
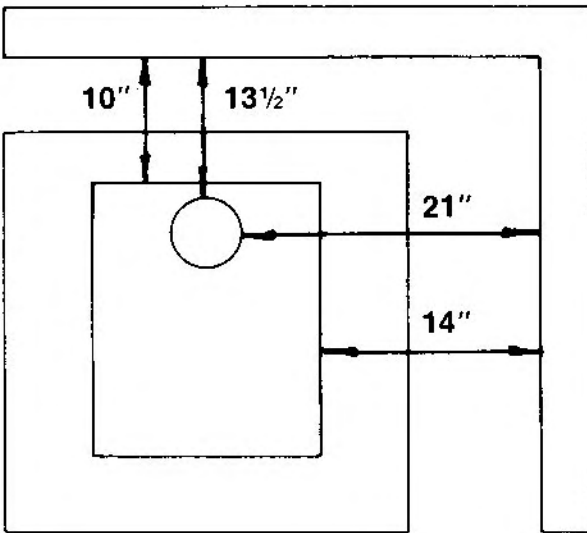


Fig. 2

For further reduced clearances, obtain requirements for construction of a protected wall and the allowable reduction in clearances, from your local building authority.

INSTALLATION:

EQUIPMENT REQUIRED: 1 x Tile Fire Place (With Tile Pack)
1 x Chimney — A chimney suitable for use in residential type and building and heating appliances.

CHIMNEY CONNECTOR:

This must be 26 MSG (0.016") minimum black or blue steel pipe. It is recommended that, if possible, the chimney be vertical without elbows and installed to the manufacturer's instructions. Restrictions or leaks in the chimney can cause smoking under certain conditions, due to poor draft. All joints between sections should be fixed using self-tapping screws and must be air-tight. If necessary, joints can be sealed with a chimney-sealing cement.

PROCEDURE:

1. Select the location for the heater bearing in mind the clearances required (see previous page).
2. Check the proposed chimney route to ensure that it is clear of roof supports.
3. Mark the centre of the proposed chimney on the ceiling and plumb to position the floor protector. Install the floor protector.
4. Remove all individually packed parts. Ensure that all cardboard and polystyrene packers are removed.

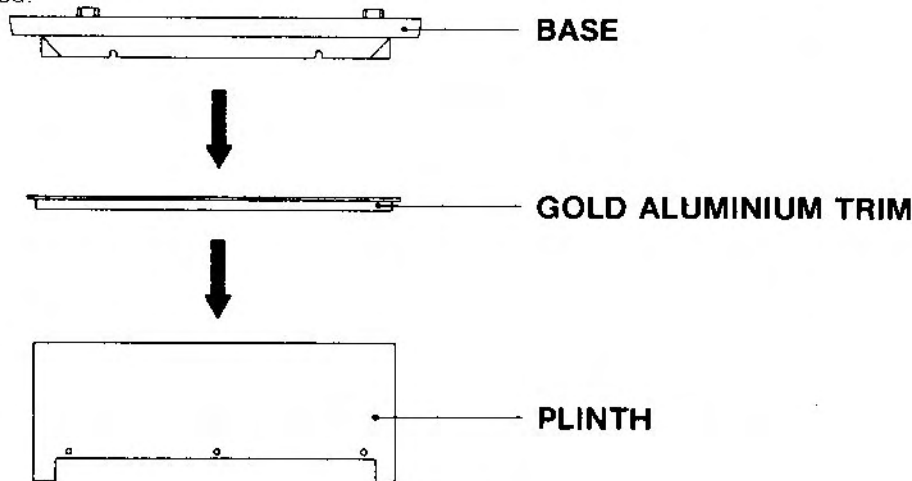


Fig. 3

5. Assemble the plinth, as shown in Fig. 3.
 - (a) Insert the gold aluminium trim into the plinth.
 - (b) Insert the base between the trim and the aluminized steel heat shields in the plinth. Then tighten the 4 locknuts to clamp the assembly together. Avoid overtightening.

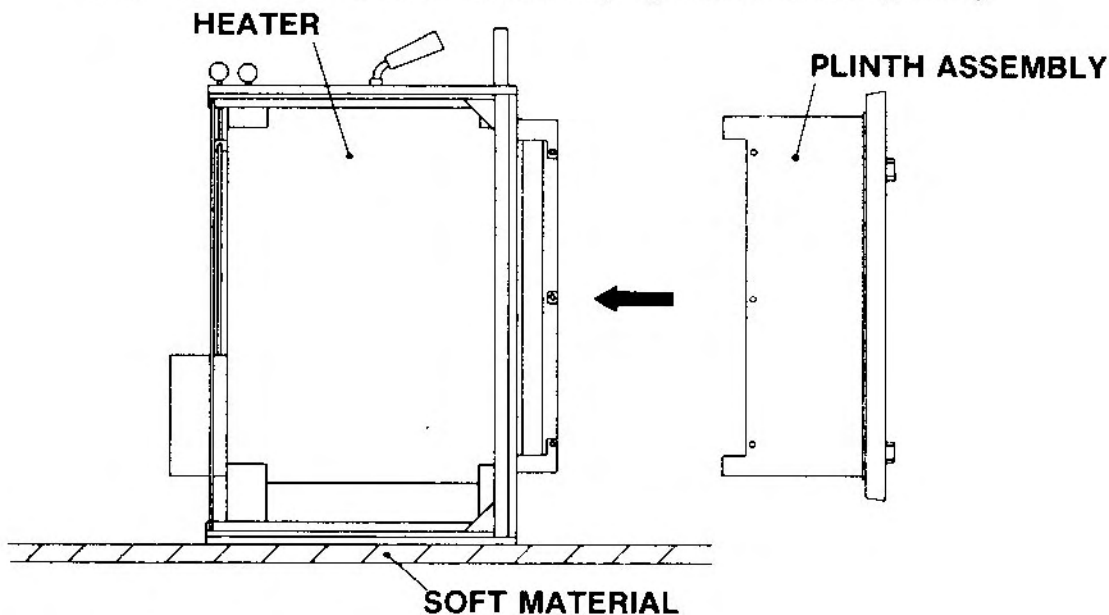


Fig. 4

6. Assemble the plinth to the heater, Fig. 4.
 - (a) Tip the heater on to its back on soft material to avoid damage.
 - (b) Attach the plinth assembly using the six M6 mushroom head screws supplied.
 - (c) Carefully lift the heater forward on to its feet.
7. Place the heater on the hearth. Check the clearances, see Figs. 1. & 2.
 - (a) Ensure heater is in its final position and is level. Four adjusting feet on the base are provided for levelling.
 - (b) Ensure a minimum air gap of .35" (9mm) is left between the hearth and the base of the heater.

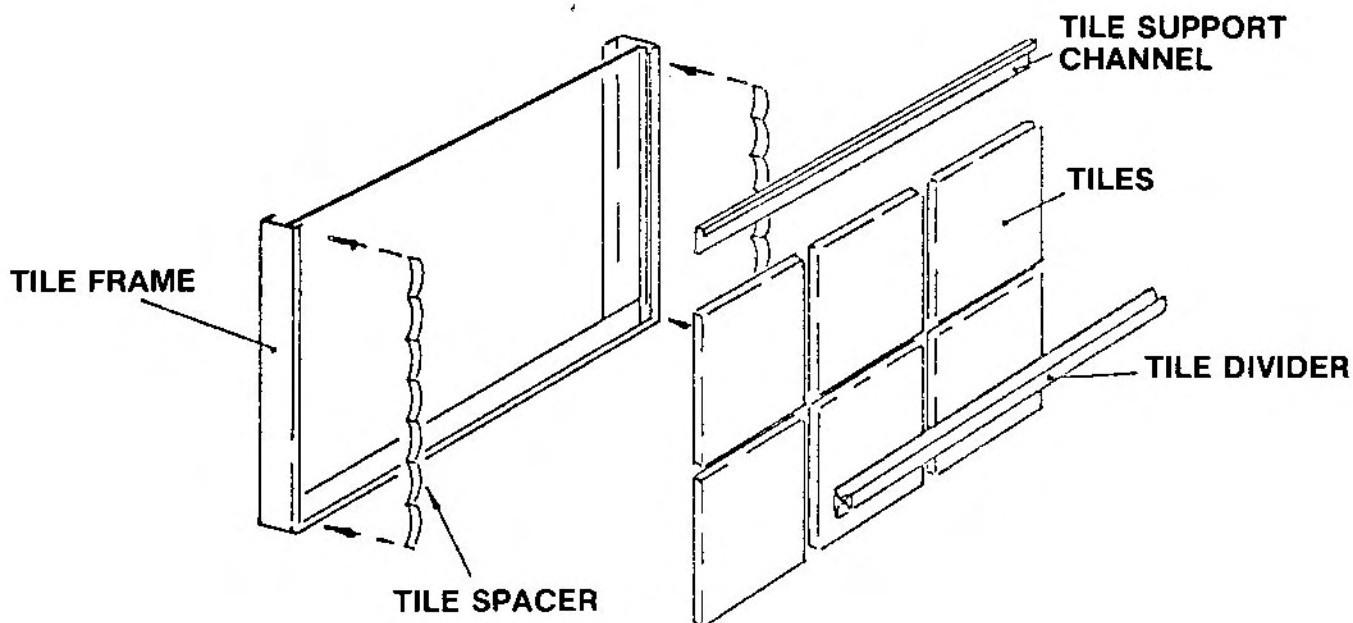


Fig. 5

8. Before fitting the flue to the heater, fit the 12 ceramic tiles as follows:
 - (a) Carefully place 3 ceramic tiles in a row along the bottom groove in each side. Fit the end tiles first, placing the tile tensioning springs in position while doing so. The springs fit vertically at each end of the tile rows, to prevent excess tile movement. If there is no excessive movement, springs can be discarded.
 - (b) Slide the aluminium tile divider down on top of these tiles, so that the narrow edge faces outwards. The groove on the tile divider should fit over the top of the tiles.
 - (c) Carefully slide the remaining 3 tiles for each side down on top of the tile divider.
 - (d) Fit the tile support channels onto the top row of tiles, see Fig. 5.
 - (e) Fit the top surround in place, making sure it is properly located.
 - (f) Place the two top decorative panels in place.
9. Install the 6" factory-built chimney kit according to the instructions supplied with the kit.
10. Attach the bottom length of chimney connector to the heater chimney with self-tapping screws. Ensure the chimney is securely installed.
11. The Tile Fire is now ready to use.

KENT HEATING LIMITED
P.O. BOX 23-340, PAPATOETOE,
AUCKLAND, NEW ZEALAND
ALSO AT: P.O. BOX 40507, PORTLAND,
OREGON 97204