

Sears

owners manual

MODEL NUMBER

143.841620



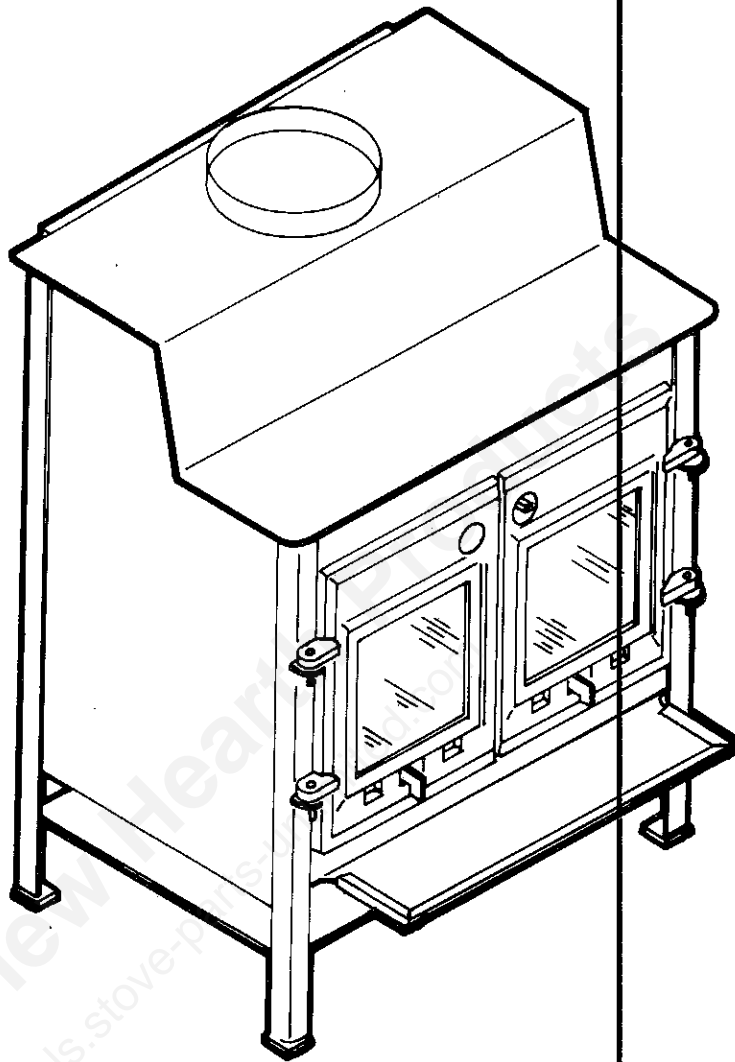
File No. MH11953

CAUTION:

Read All Instructions
Carefully Before
Starting the Installation
or Operating the Heater

Do Not Use This
Heater in Mobile
Homes or Trailers

Save This Manual
For Future Reference



WOOD BURNING ROOM HEATER

- Assembly
- Installation
- Operation
- Repair Parts

Sears, Roebuck and Co., Chicago, Ill. 60684 U.S.A.

PRINTED IN U.S.A.

FORM 85338 4/82

introduction!

Please read our instructions before you install and use your new Wood Burning Room Heater. This will help you obtain the full benefits from your heater. This will also help you avoid any needless service costs that result from causes we cannot control.

If you want your heater professionally installed, contact your SEARS SALESMAN. He will arrange for prompt, quality installation by SEARS AUTHORIZED INSTALLERS.

SEARS INSTALLATION POLICY

All installation labor arranged by SEARS shall be performed in a neat, workman-like manner in accordance with generally accepted trade practices. Further, all installations shall comply with all local laws, codes, regulations, and ordinances. The customer shall also be protected, during installation, by insurance relating to property damage, workmen's compensation and public liability.

SEARS INSTALLATION WARRANTY

In addition to any warranty extended to you on the Sears merchandise involved, which warranty becomes effective the date the merchandise is installed, should the workmanship of any Sears arranged installation prove faulty within one year, Sears will, upon notice from you, cause such faults to be corrected at no additional cost to you.

Tools and Materials Needed

TOOLS

Pencil
6 Foot Folding Rule or Tape
Tin Snips
Drill, Hand or Electric
Drill Bit (For Sheet Metal Screws)-
1/8" Dia.
Gloves
Screw Driver

MATERIALS

Model 143.841620

8" Pipe, 8" Elbow, Collar and Thimble;
as required (24 gauge min.)
1/2" Sheet metal screws
8" Inside diameter Underwriters Laboratories (UL)
Listed Residential Type (Triplewall) and Building
Heating Appliance Chimney or existing masonry
chimney.
Floor Protector Material
as specified on page 5.
Furnace Cement. (Manufacturer recommends: Rutland
Black-Code 78 or equivalent).

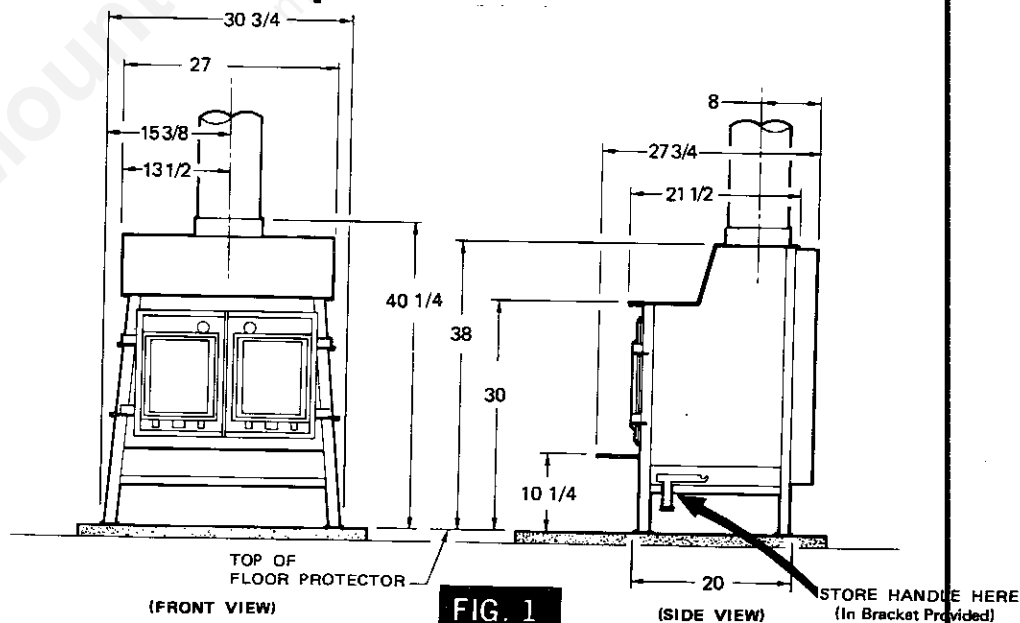
safety rules

Read these rules and the instructions carefully. Failure to follow them could cause a malfunction of the heater. This could result in death, serious bodily injury, and/or property damage.

1. Check your local codes. The installation must comply with their rulings.
2. DO NOT install this heater in a mobile home or trailer.
3. Always connect this heater to a Class A factory built or masonry chimney and vent to the outside. Never vent to another room or inside a building. Make sure the chimney is high enough to give a good draft.
4. DO NOT connect a wood burning heater to an aluminum Type B gas vent. Pipe must be triple wall in construction or clay-lined masonry chimney. This is not safe and is prohibited by the National Fire Protection Association Code. This heater requires a masonry or a UL Listed Residential Type and Building Heating Appliance Chimney. (Triplewall).
5. Inspect chimney connector and chimney before and frequently during the heating season for any accumulation of creosote or soot which must be removed (see CHIMNEY MAINTENANCE, page 8).
6. Provide air for combustion from outside the house into the room where the heater is located. If the intake is not in the same room, air must have free access to the room.
7. CAUTION - The special paint used on your heater may give off some smoke while they are curing during first few fires. Build small fires at first.
8. CAST IRON PARTS MUST BE "SEASONED" TO AVOID CRACKING. BUILD ONLY SMALL FIRES ON FIRST USE.
9. To prevent injury, do not allow anyone who is unfamiliar with the operation to use the heater.
10. For further information on using your heater safely, obtain a copy of the National Fire Protection Association (NFPA) publication "Using Coal and Wood Stoves Safely" NFPA No. HS-10-1978. The address of the (NFPA) is Battery Match Park, Quincy, MA 02269.
11. **DISPOSAL OF ASHES** -Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.
12. **CARING FOR ENAMELED PARTS** -This heater has an enameled outside jacket. Enamel baked onto the steel or iron is very durable but it will not stand rough handling or abuse. When installing your heater, use care in handling. Clean with soap and warm water when heater is not hot. DO NOT use any acids or scouring soap, as these wear and dull the finish. ENAMEL DISCOLORATION WILL OCCUR IF THE HEATER IS OVERFIRED. FOLLOW OPERATING INSTRUCTIONS CAREFULLY.

CAUTION: Do not touch the heater until it has cooled.

heater dimensional specifications



door handle instructions

The special heater door handle is used to open and close both the doors and air shutter. Store the handle near the heater - Do not have it on the hearth extension where it can get hot.

TO OPEN THE DOORS

1. Open the air shutters
2. Insert handle in right hand door as shown below and unlock door by turning handle counter clockwise.
3. Open right and left hand doors as shown below.

TO CLOSE THE DOORS

1. Use the handle provided and close left door and then right door.
2. Insert handle over latch stud on right door and push door firmly closed.
3. Turn handle clockwise to lock door as shown in figure below.

NOTE: The insert handle will automatically disengage itself from the latch.

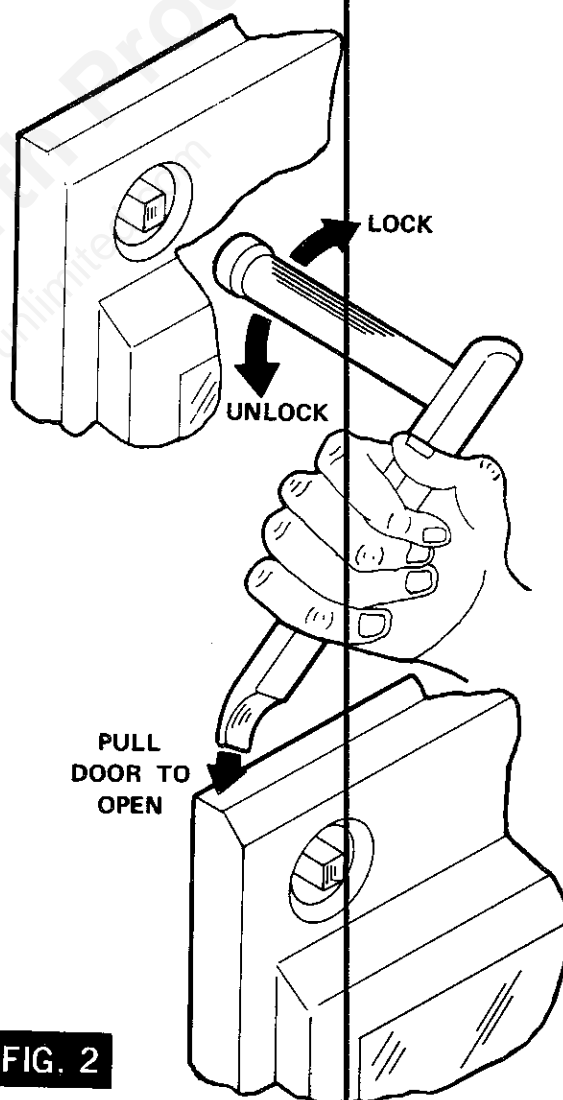


FIG. 2

locating the heater

AS A LOCATION IS SELECTED, KEEP THE FOLLOWING IN MIND:

1. Keep the chimney connection as short as possible. The heater must have its own chimney flue. Do not connect any other appliance to the same flue.
If there is no chimney near where you wish to place the heater, you can use a UL Listed Residential Type and Heating Appliance Chimney (Triplewall). (Fig. 7)
2. Place the heater on solid masonry or solid concrete. When the heater is used on a combustible floor, use a non-combustible floor protector of 3/8" thick asbestos millboard or equivalent or a U.L. listed floor protector. Have the floor protector extend 16" in front of the heater, 8" to each side, 2" to the rear; underneath and 2" to each side of the chimney connector. (See Figure 5).
3. Check Figures 3, 4 and 5. You should have at least the clearances shown from the heater and the connector pipe to combustible surfaces. If you have a solid brick or stone wall behind your heater, you can place the heater as close as you wish to the wall. If the wall is only faced with brick or stone, treat it as a combustible wall.

MINIMUM CLEARANCE TO COMBUSTIBLE WALLS

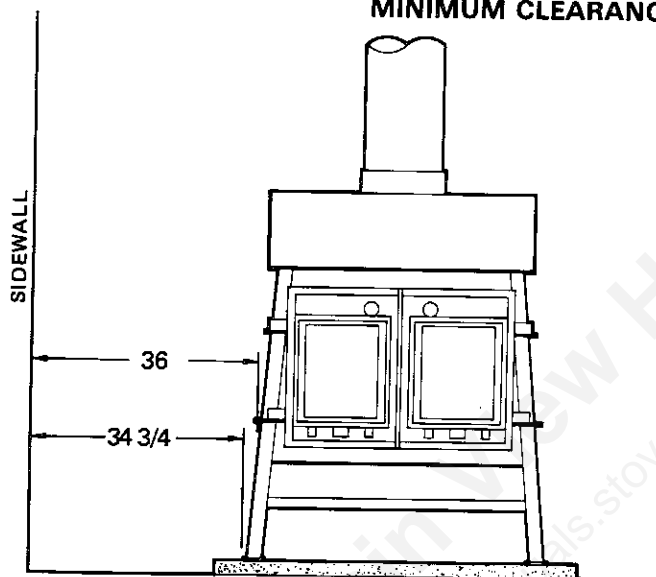


FIG. 3 (FRONT VIEW) Floor Protector

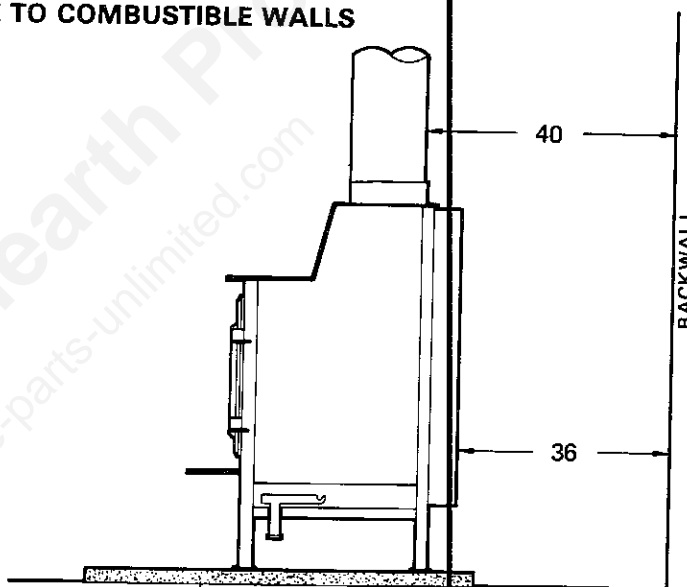


FIG. 4 (SIDE VIEW) Floor Protector

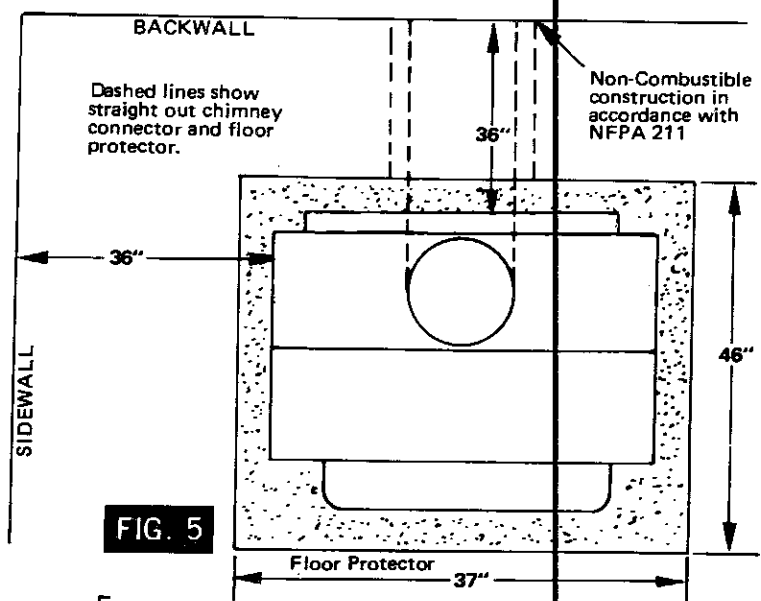


FIG. 5

chimney connection

MASONRY CHIMNEY

Masonry chimney must be 8" x 8" minimum clay-lined. Before using an existing masonry chimney, clean the chimney and inspect the flue liner to be sure it is safe to use. Make repairs before attaching the heater.

Look at Fig. 6. The connector pipe and fittings you will need to connect directly to a masonry chimney are shown.

DO NOT connect this unit to a chimney flue serving another appliance.

The chimney used for a heater must not be used to ventilate the cellar or basement. If there is a cleanout opening at the base of the chimney, close it tightly.

UL LISTED CHIMNEY

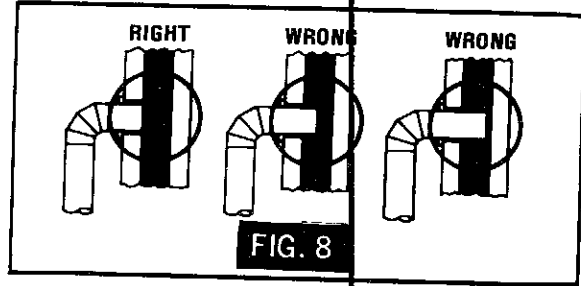
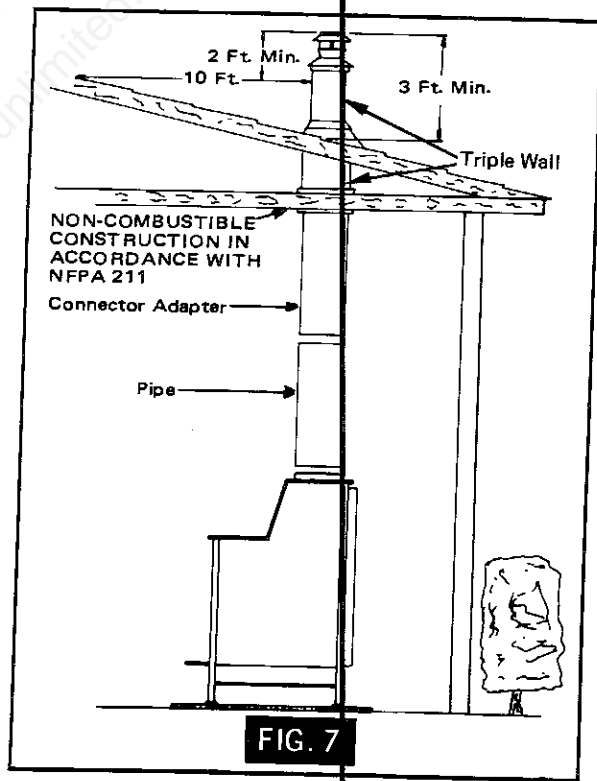
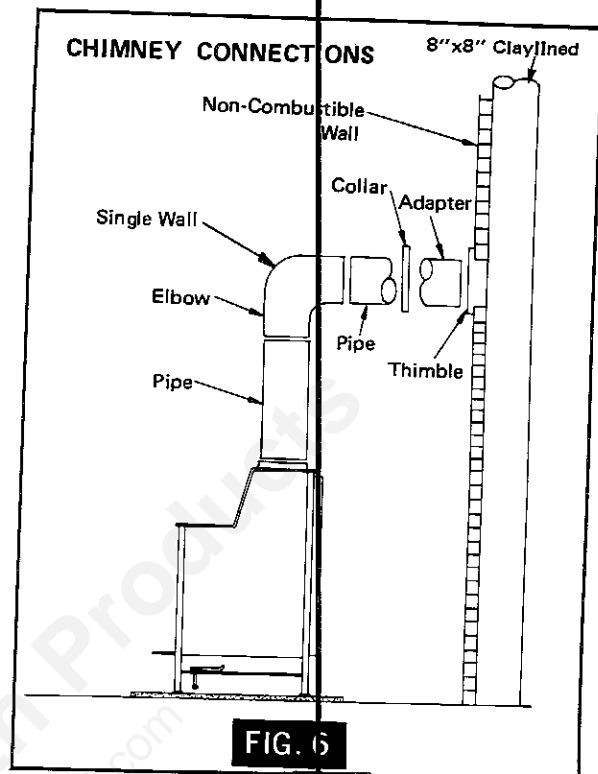
Carefully follow chimney manufacturer's instructions. Use only a UL Listed Residential Type and Building Heating Appliance Factory-Built Chimney. (Triplewall).

If your chimney starts at the ceiling (Fig. 7), you will need enough pipe to reach the ceiling; and must be 8" triple wall pipe from ceiling through roof, single wall 8" pipe from heater to ceiling.

The top of the chimney must be at least 3 feet above the roof and be at least 2 feet higher than any point of the roof within 10 feet (Fig. 7).

RULES FOR STOVEPIPE INSTALLATION

1. The crimped end of the connector pipe fits inside the heater flue collar. Install additional pipe and elbow **CRIMPED END TOWARD THE HEATER**. This will allow any condensation in the flue to run back into the heater.
2. Slope any horizontal pipe upward toward the chimney at least $\frac{1}{4}$ inch for each foot of horizontal run.
3. You must have at least 19 inches of clearance between any horizontal piping and the ceiling.
4. The pipe cannot extend into the chimney flue (Fig. 8).
5. Seal each connector pipe joint with furnace cement. Also seal the pipe at the chimney.
6. Use 3 sheet metal screws at each joint to make the piping rigid.
7. Do not put a damper in a connector pipe.



operating instructions

FUEL

Use hardwood, 20" to 24" that has been split and air dried (seasoned) for 6 months to obtain maximum burning efficiency.

Use solid wood fuel only-- Do not use coal or charcoal.

LIGHTING

1. Open the two draft slides until they stop to provide maximum draft.
2. Open the doors and place paper and kindling on the hearth for starting the fire.
3. Light fire and close the doors.
4. Add wood after fire is burning briskly. Use care not to smother the kindling fire.
5. Adjust the draft slides to maintain a comfortable room temperature. Close the draft slides to reduce the burning, thereby decreasing the room temperature. Open the draft slides to speed up the burning, thereby increasing the room temperature.

ADDING FUEL

When possible, add small amounts of fuel each hour or as needed instead of adding large quantities of fresh fuel every 8 to 10 hours. This will give more complete combustion and less build-up of tars, soot, or creosote in the chimney.

1. Fully open the draft control slides before opening the feed door.
2. After adding fuel, operate heater one half hour with draft wide open to reduce the possibility of creosote formation in the chimney.

MINIMUM FIRE

Close the draft slides until they are completely closed to provide minimum draft for overnight burning. A small amount of air will still find its way into the firebox to prevent any build-up of unburned gases.

CAUTION

Do not use grate or elevate fire; build fire directly on hearth.

CAUTION

Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen-up" a fire in this heater.

CAUTION

Keep all flammable liquids, especially gasoline from the vicinity of the unit whether in use or in storage.

service hints

Do not expect a heater to draw. It is the chimney that creates the draft. Smoke spillage into the house or excessive build-up of water or creosote in the chimney are warnings that the chimney is not drawing properly. Correct the problem before using heater. Possible causes are:

1. The connector pipe may be pushed into the chimney too far, stopping the draft (Fig. 8).
2. Do not connect two heaters into the same chimney flue.
3. Do not use the chimney to ventilate the cellar or basement. If there is a cleanout opening at the base of the chimney, close it tightly.
4. If the chimney is too cool, moisture will condense in the chimney and run back into the heater. Creosote formation will be rapid and may block the chimney. Build your heater fire large enough to keep the chimney warm to prevent condensation.
5. If the fire burns well but sometimes smokes or burns slowly, it may be caused by the chimney top being lower than another part of the house or a nearby tree. The wind blowing over a house or a tree falls on top of the chimney like water over a dam, beating down the smoke. The top of the chimney should be at least 3 feet above the roof and be at least 2 feet higher than any point of the roof within 10 feet (Fig. 6).

chimney maintenance

Creosote - Formation and Need for Removal

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote, tars or soot. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this 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 buildup has occurred.

If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.

Chimney fires burn very hot. If the chimney connector should glow red, immediately call the fire department, then reduce the fire by closing the inlet air control and pour a large quantity of coarse salt, baking soda or cool ashes on top of the fire in the firebox. CAUTION: A chimney fire may cause ignition of wall studs or rafters which you thought were a safe distance from the chimney. If you have a chimney fire, have your chimney inspected by a qualified person before using again.

brick replacement instructions

1. Place 4 bricks on end against the two side walls underneath the brick retainer.
2. Install the bottom brick.
 - a. Place 4 bricks on each side with 9" length running side to side.
 - b. Place 2 bricks in center with the 9" length running front to back.
3. Place 5 bricks on end against the inside back of the heater.

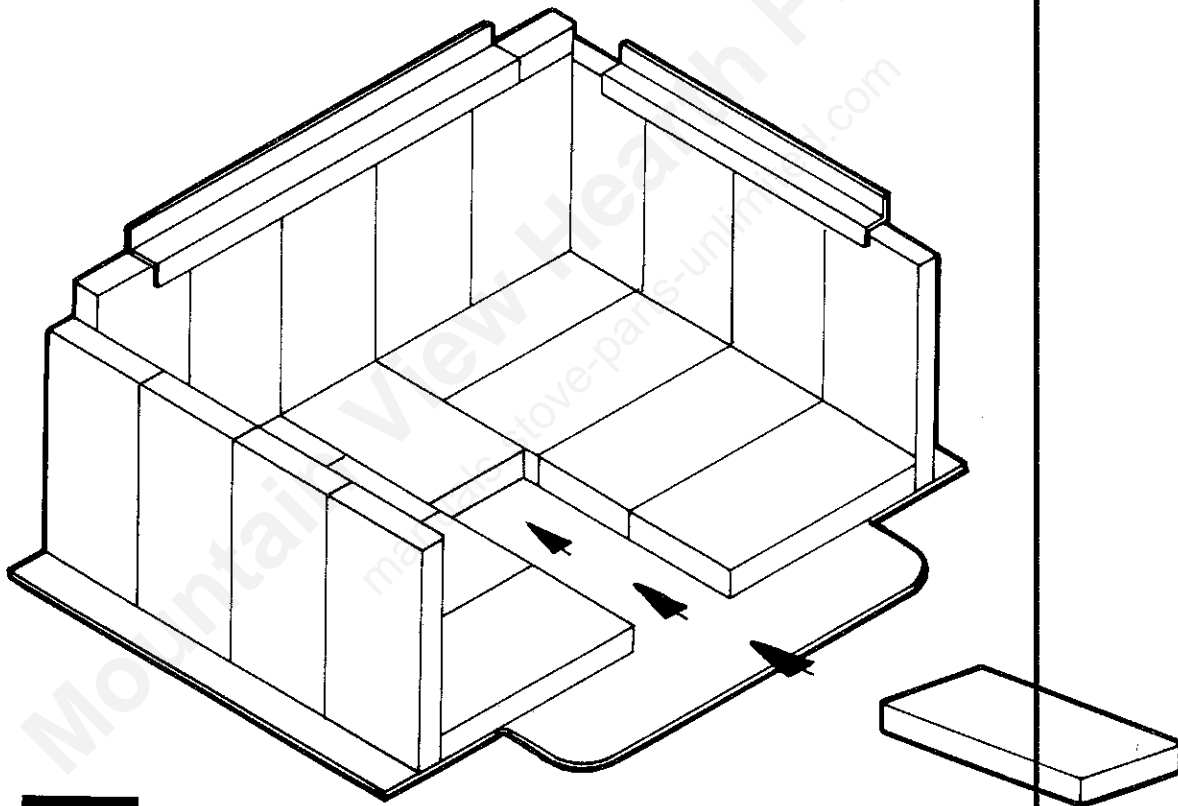
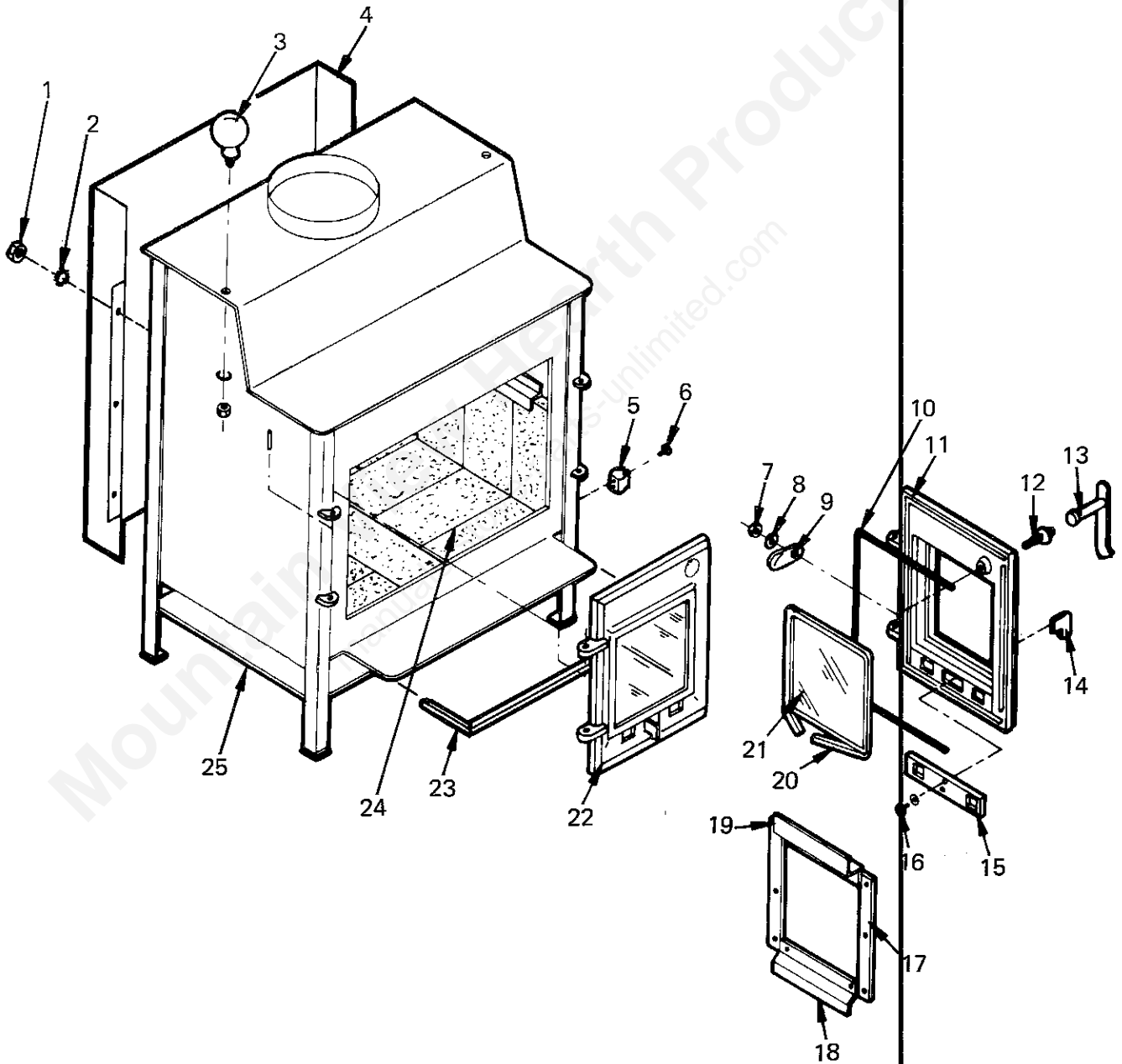


FIG. 9

BODY CUTAWAY SHOWING BRICK ALIGNMENT

repair parts

SEARS WOOD BURNING ROOM HEATER
MODEL NO. 143.841620



repair parts

WOOD BURNING ROOM HEATER

Model No. 143.841620

Key No.	Part No.	Description	
1	83004	10 - 24 Hex Nut	(6 Req'd)
2	83213	No. 10 Lock Washer (External Tooth)	(6 Req'd)
3	89080	Brass Knob	(Optional)
4	67722	Back Heat Shield	
5	89174	Handle Bracket	
6	83225	Pop Rivet 1/8"	(2 Req'd)
7	83206	5/16 - 18 Hex Nut	
8	21880	Door Latch Spacer	
9	21940	Door Latch	
10	21969	Rope Gasket	
11	21871	Right Door	
12	86255	Door Latch Bushing	
13	67689	Handle	
14	89180	Draft Control Knob	
15	21876	Draft Slide	
16	83202	10-24 x 3/8 Machine Screw	(2 Req'd)
17	21781	Glass Side Retainer	(2 Req'd)
18	21877	Bottom Glass Retainer	
19	21947	Top Glass Retainer	
20	88047	Glass Gasket	
21	89155	Glass	
22	67683	Left Door Assembly**	
23	86290	Hearth Trim	
24	89066	Firebrick	(23 Req'd)
25	21938	Heat Shield (Bottom)	
*	85338	Owners Manual (F642-4682)	

* Not Shown

** Parts for L/H Door Assembly can be ordered as needed by using key number 10 and 14 thru 21 which are common between the L/H and R/H Doors.

Sears

**owners
manual**

MODEL NUMBER

143.841620

HOW TO ORDER

REPAIR PARTS

TELL SEARS YOU

WANT IT

INSTALLED ---

THEN RELAX

WOOD BURNING ROOM HEATER

Now that you have purchased your Air-Tight Woodburning Heater, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. stores. Be sure to provide all pertinent facts when you call or visit.

The Model Number will be found on a plate mounted on the back of the heater. Always mention the Model Number when requesting service or repair parts for your Heater.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST.

1. The PART NUMBER
2. The PART DESCRIPTION
3. The MODEL NUMBER: 143.841620
4. The SERIAL NUMBER _____

If the part you need is not stocked locally, your order will be transmitted to a Sears Repair Parts Distribution Center for quick handling.

When Sears arranges the installation, you can be sure the job is done right. We will arrange for professional workmanship... and we'll take care of the entire project. What's more, during installation you get insured protection... against property damage and also against accidents to workmen. All you have to do is talk to your Sears salesperson or call your nearest Sears store today for detailed information.

Sears, Roebuck and Co., Chicago, Ill. 60684 U.S.A.

F642-4682

FORM 85338 4/82