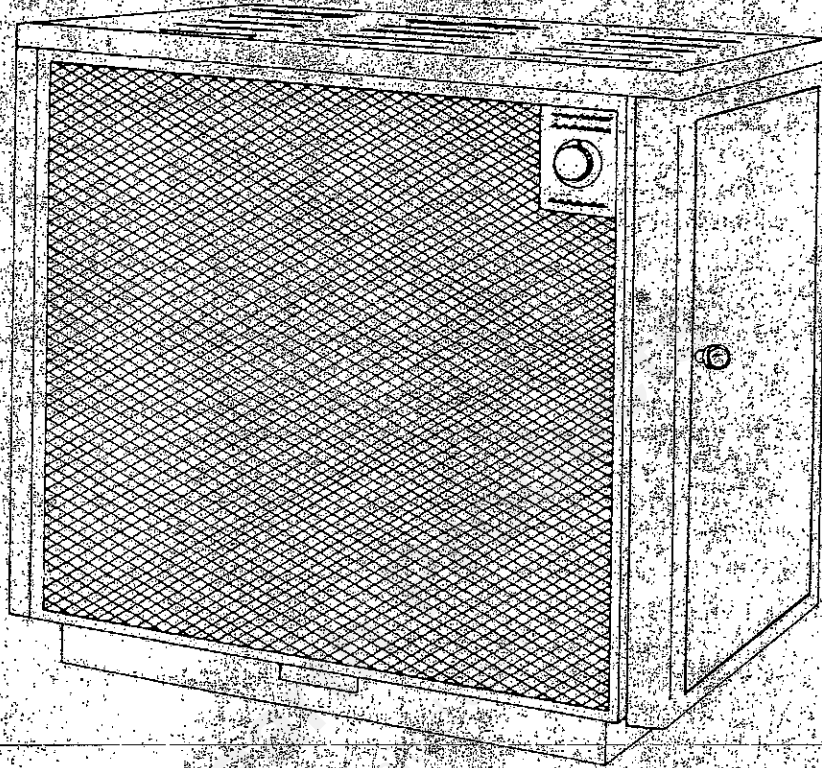


# Sears

## owners manual

MODEL NUMBER  
143.840652



**CAUTION:**  
Read All Instructions  
Carefully Before Start-  
ing The Installation.

Do Not Use This  
Heater in Mobile  
Homes or Trailers

Save This Manual For  
Future Reference.

# AUTOMATIC WOOD BURNING CIRCULATOR

- Installation
- Operation
- Repair Parts

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

# rules for safe installation and operation

1. Read these rules and the instructions carefully. Failure to follow them could cause malfunction of the heater. This could result in death, serious bodily injury, and/or property damage.
2. Check your local codes. The installation must comply with their rulings.
3. Do not install this heater in a mobile home or trailer.
4. Always connect this heater to a chimney and vent to the outside. Never vent to another room or inside a building.
5. Do not connect a wood burning heater to an aluminum Type B gas vent. This is not safe and is prohibited by the National Fire Protection Association Code. This heater requires a Class "A" chimney. It may be masonry or an All-Fuel pre-fabricated chimney. Pre-fabricated chimneys must be listed by Underwriters Laboratories (UL) Inc. The inside diameter must be at least 6 inches.
6. Make sure the chimney is high enough to give a good draft. Keep the chimney and pipe clean inside to avoid blockage. Otherwise smoking will result.
7. Provide air for combustion from the outside into the room where the heater is located. If the intake is not in the same room, the air must have free access to the room.
8. Keep the ashpit section free of excess ashes. Failure to do so will cause grate warpage and burn out.
9. CAST IRON PARTS MUST BE "SEASONED" TO AVOID CRACKING. BUILD ONLY SMALL FIRES DURING YOUR EARLY USE. Never build extremely large fires in your heater.
10. To prevent injury do not allow anyone who is unfamiliar with the operation to use the heater.

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

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## tools and materials needed

### TOOLS

Pencil  
6 Foot Folding Rule or Tape  
Tin Snips  
Drill, Hand or Electric  
Drill Bit (For Sheet Metal Screws)

### MATERIALS

6" Vent Pipe, 6" Elbow, Collar, Thimble, as Required  
1/2" Sheet Metal Screws  
6" Inside diameter class A All-Fuel U.L. Listed Factory Built Chimney or Existing Masonry Chimney.  
Fireproof base, 3 feet by 5 feet

# installation

Look at Fig. 3. The vent pipe and fittings you will need to connect to a masonry chimney or a 6" ALL-FUEL CHIMNEY on the outside wall are shown.

If your ALL-FUEL CHIMNEY starts at the ceiling (Fig. 4) you will need a 6" elbow, and enough 6" single wall vent pipe to reach the ceiling.

Connect the heater to the chimney. The crimped end of the vent pipe fits inside the heater flue collar. Additional pipe and elbow should be installed. **CRIMPED END TOWARD THE HEATER.** This will allow any condensation in the vent pipe to run back into the heater.

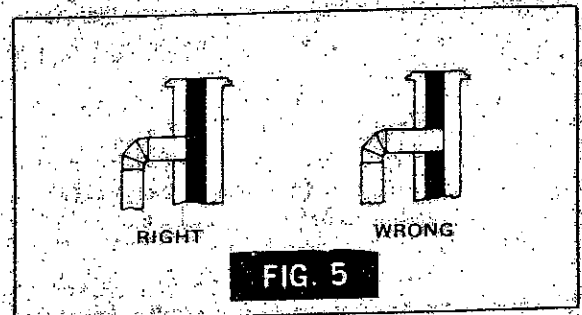
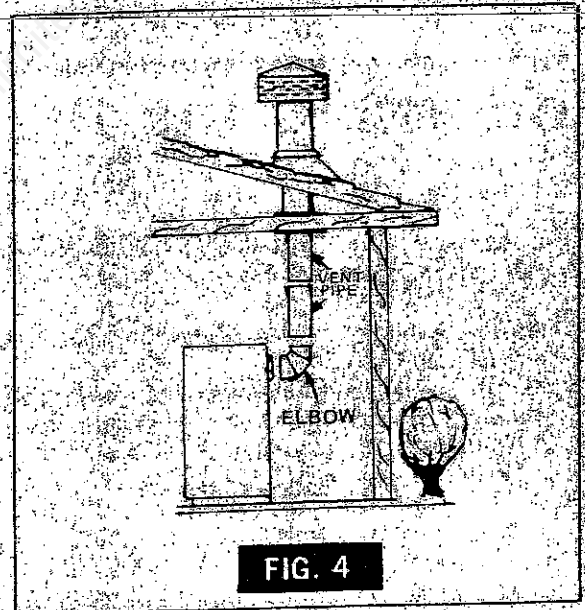
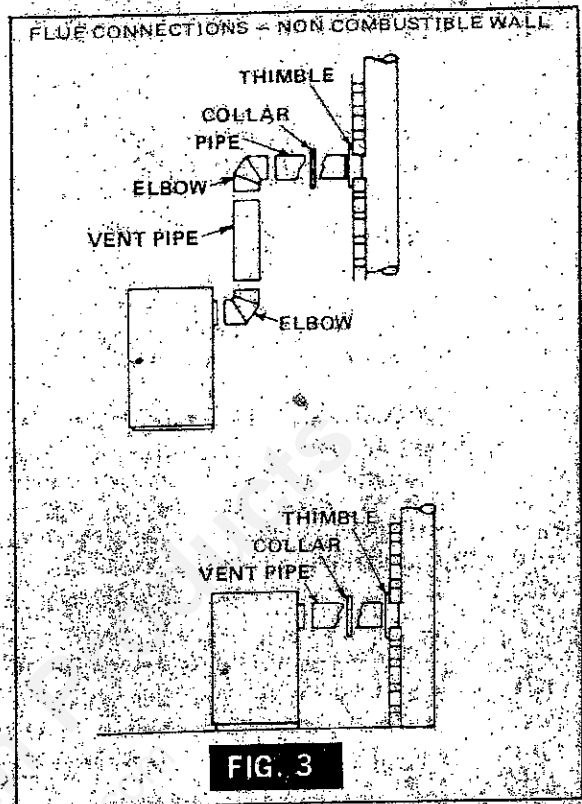
These rules apply to the vent pipe installation:

1. Avoid using more than 2 elbows.
2. Any horizontal pipe should be pitched upward toward the chimney at least 1/4 inch for each foot of horizontal run.
3. Be sure that you have at least 18 inches of clearance between the horizontal piping and the ceiling.
4. Be sure the pipe does not extend into the chimney flue (Fig. 5).

For better performance seal each vent pipe joint with furnace cement. Also seal the pipe at the chimney. After sealing use 3 sheet metal screws at each joint to make the piping rigid.

## NOTE: BEFORE FIRING HEATER

1. Remove plastic knob from inside of main door and install on outside.
2. Slide firebricks toward the rear so no gaps remain between them.



# service hints

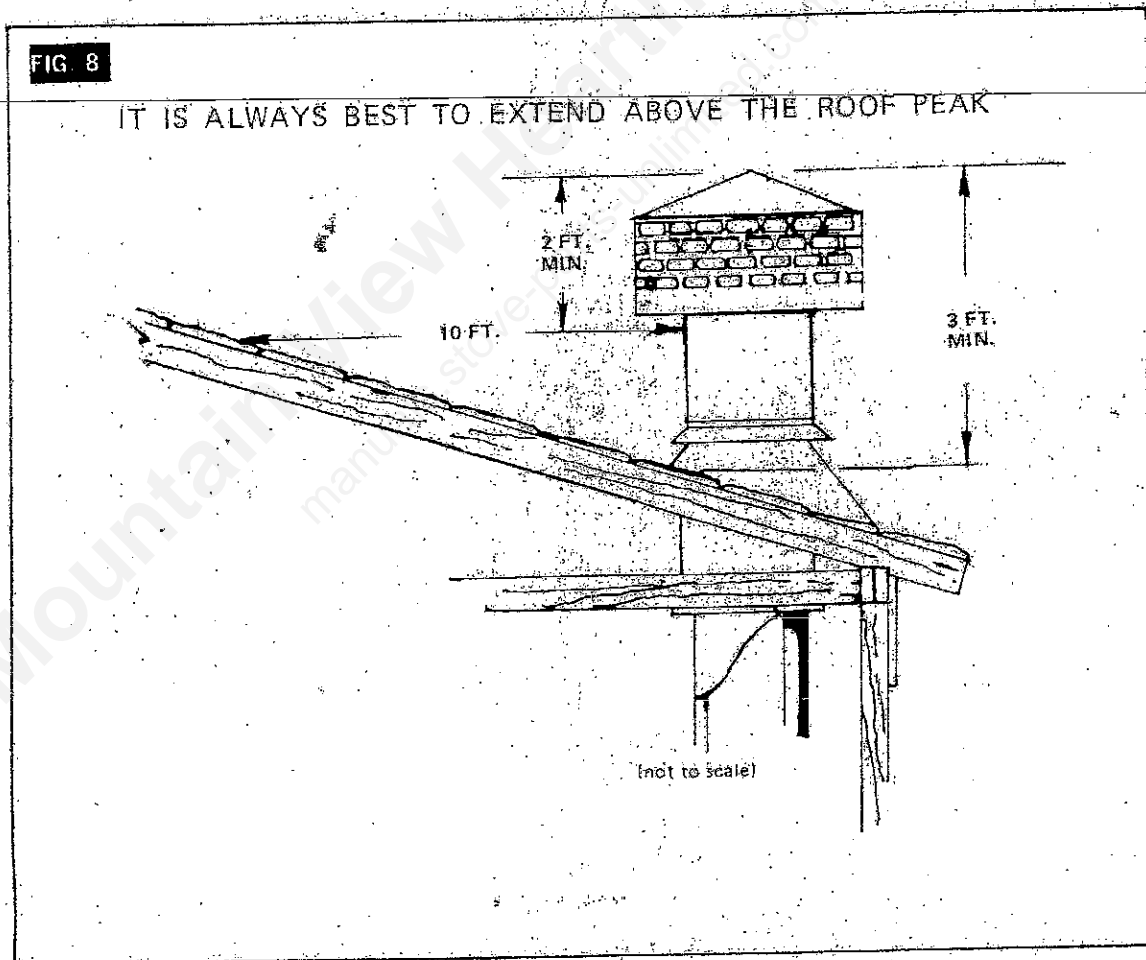
Do not expect a heater to draw. It is the chimney that creates the draft. If there is not enough draft, check these points:

1. The vent pipe may be pushed into the chimney too far, stopping the draft.
2. Do not connect two heaters into the same chimney flue. If it cannot be avoided, be sure that one pipe is higher than the other so that the two openings will not be opposite each other. Never connect two appliances using different fuels to the same chimney flue.
3. 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, it must be closed tightly.

4. 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. 8).

## CARING FOR ENAMELED PARTS

This heater has enameled outside jacket. Enamel baked onto the steel or iron and is very serviceable, but it will not stand rough handling or abuse. When setting up 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.



# repair parts

## SEARS AUTOMATIC WOODBURNING CIRCULATOR MODEL NUMBER 143.840652

Key No.	Part No.	Description
1	66000	Cabinet Left Side
2	65930	Cabinet Top
3	83080	*Screw, Round Head No. 6 - 32 x 1-1/2
4	83081	*Nut, Hex No. 6 - 32
5	66440	Cabinet Back
6	65950	Cabinet Front
7	89063	Thermostat Knob
8	85079	Thermostat Dial Indicator
9	67187	Thermostat
10	89064	Chain
11	67194	Cabinet Door Frame
12	89065	Door Hinge (2 required)
13	67293	Cabinet Door
14	83093	Stove Spring Latch
15	89062	Door Knob
16	21063	Back Brace
	85153	Owners Manual (F642-6677)

\* Standard Hardware Item - May Be Purchased Locally

# repair parts

## SEARS AUTOMATIC WOODBURNING CIRCULATOR MODEL NUMBER 143.840652

Key No.	Part No.	Description
17	67169	Heat Jacket
18	17130	Back Liner
19	66960	Flue Collar
20	88032	Flue Collar Gasket
21	17150	Back Liner Support
22	66080	Grate & Liner Support
23	89066	Firebrick (10 required)
24	40055	Fire Grate (2 required)
25	17120	Front Liner
26	21175	Smoke Curtain
27	17210	Hinge Pin (Smoke Curtain)
28	17060	Thermostat Baffle
29	67367	Feed Door (Includes Key No. 30)
30	88042	Rope Gasket (44")
31	89001	Handle (coil wire)
32	65960	Base
33	67266	Floor Shield Kit
34	67132	Draft Damper
35	40075	Draft Damper Frame
36	17200	Draft Damper Pin
37	65980	Ash Pan
38	83818	Clip, Pin (2 required)
39	17350	Firebrick Retainer
40	21430	Hinge Pin (4 required)
41	83819	Hinge Pin Clip (4 required)
42	88042	Rope Gasket (29")
43	67368	Ash Door
44	LK-26	Door Latch Kit (2 req'd) (Includes Key No. 31)
-	42-84066	Blower Kit (Optional Accessory)