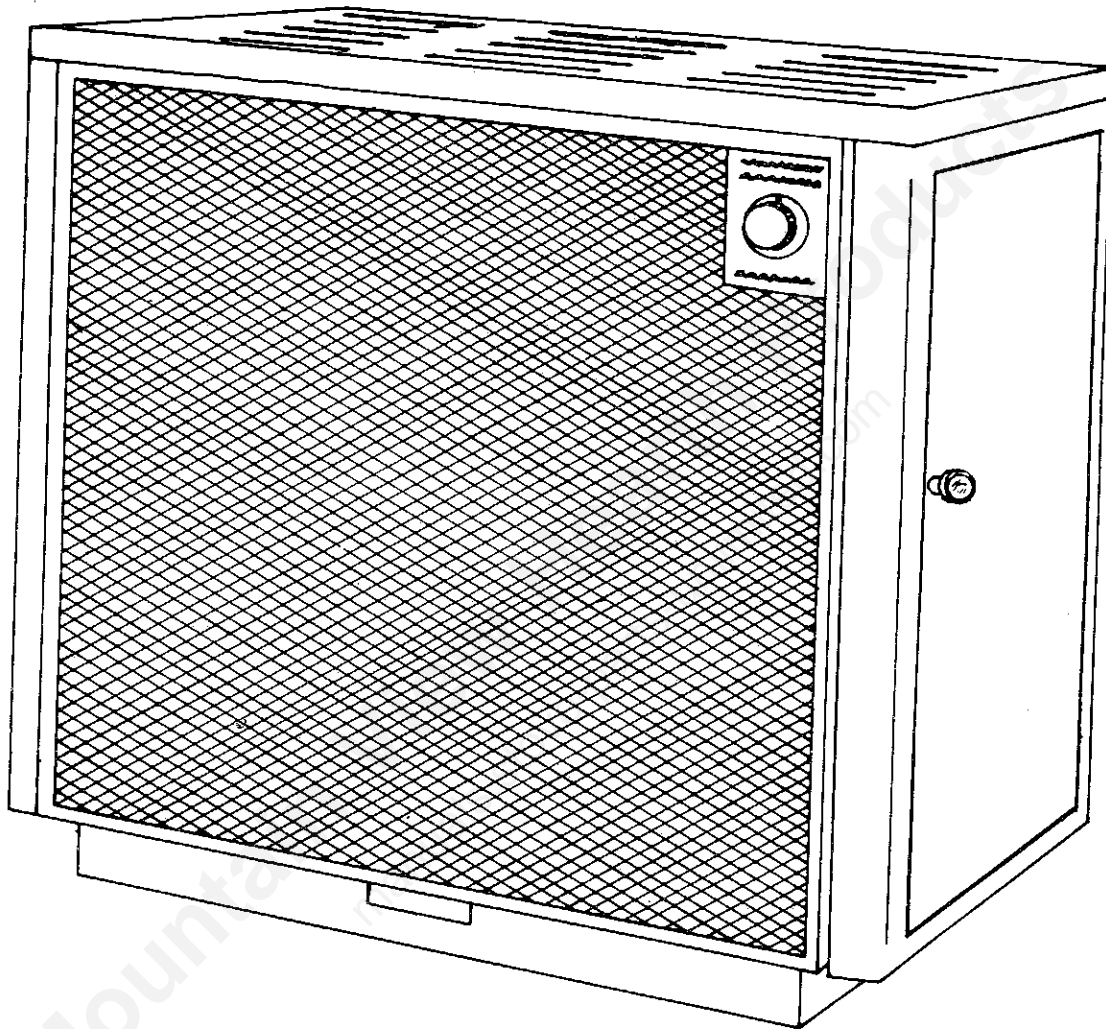


owners manual
Wonder Coal

**THERMOSTAT CONTROLLED
COAL OR WOOD BURNING CIRCULATOR**



MODEL 2607

CAUTION:
Read Instructions Carefully
for Safe Operation

- Installation
- Operation
- Repair Parts

UNITED STATES STOVE COMPANY

SOUTH PITTSBURG, TENNESSEE 37380

85188 6/77

CONGRATULATIONS!

You've purchased one of America's Finest Coal Burning Heaters.

By heating with coal you're helping **CONSERVE AMERICA'S ENERGY!**

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 coal or 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" masonry or 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 ash pan 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.

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 material, 3 ft. x 5 ft.

locating the heater

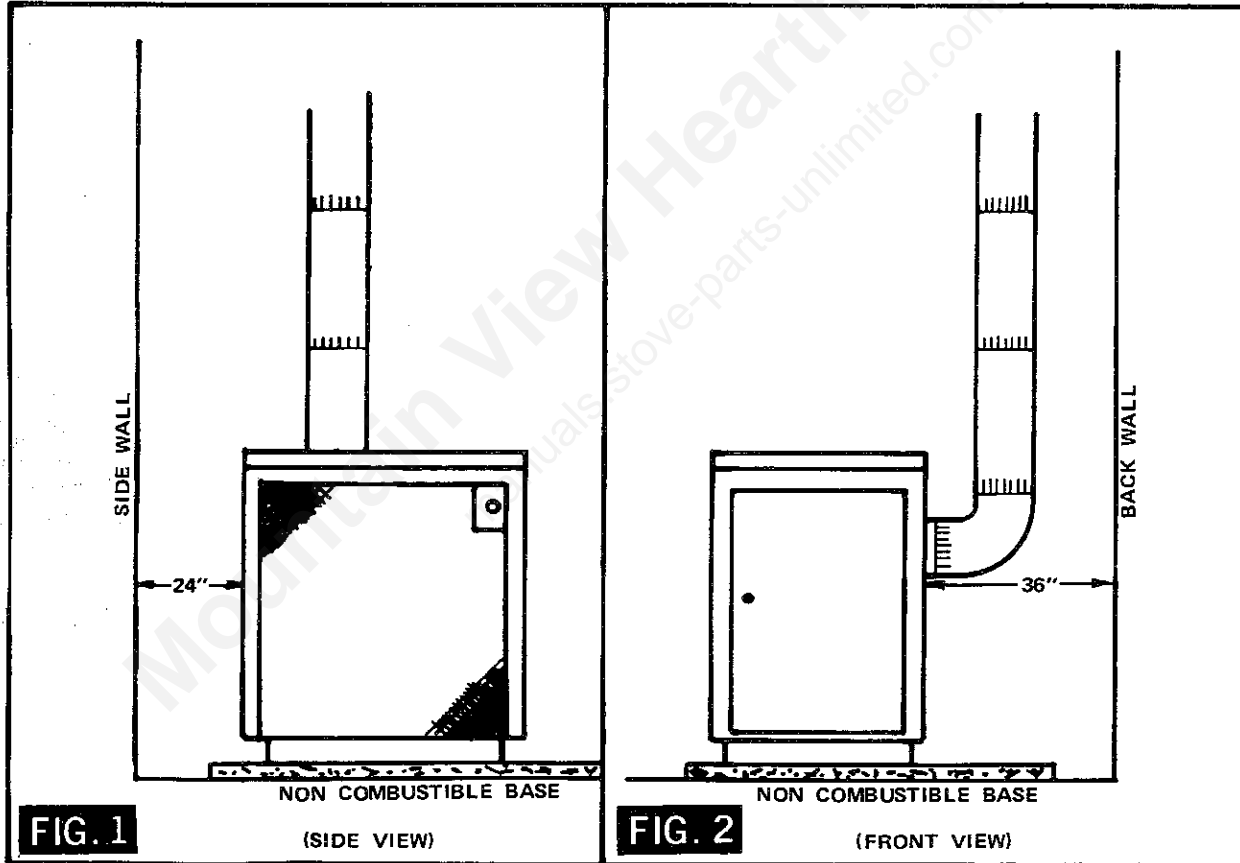
AS A LOCATION IS SELECTED, KEEP THE FOLLOWING IN MIND:

1. The chimney connection should be as short as possible. The heater must have its own chimney. Do not connect any other appliance to the same flue.
2. Place the heater on a fireproof base of brick, patio stone or other fireproof insulating material. The base should extend at least 18" beyond the door side of the heater and should extend under the flue pipe in the back.

If there is no chimney near where you wish to place the heater, you can use a UL Listed 6" Type "A" Prefabricated All-Fuel Chimney. (Fig. 4).

3. Check Figs. 1 and 2. You should have at least the clearances shown from the heater and the vent pipe to combustible surfaces.

MINIMUM CLEARANCE TO COMBUSTIBLE WALLS



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" 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 flue to run back into the heater.

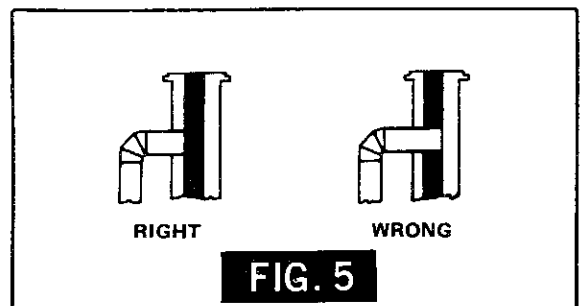
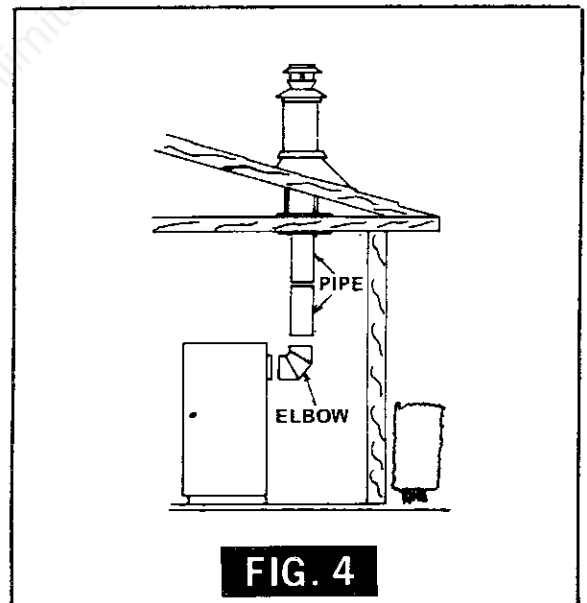
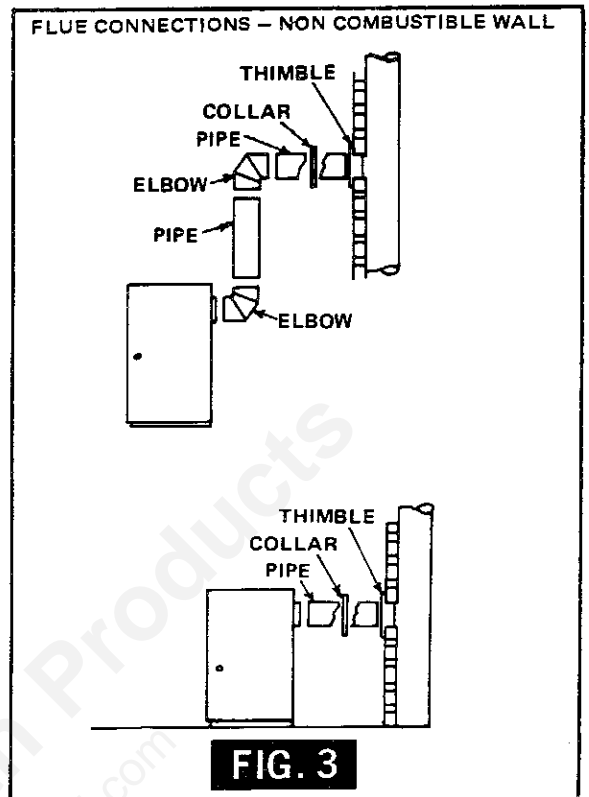
These rules apply to the vent pipe installation.

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. Finally 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.



operation

1. Set thermostat on High to provide maximum draft.
2. Open feed door and lay the fire. Use ample kindling to insure a quick start.
3. Light fire and close feed door.
4. Add 15 Lbs. of coal after fire is burning briskly.
5. Set thermostat to maintain desired temperature in room. Medium setting is normally satisfactory. Set higher or lower for maximum comfort.
6. Shake grates vigorously fore and aft $\frac{1}{2}$ " to dump ashes into ash pan at least once every 12 hours of operation.
7. Empty ash pan as needed before it is filled, to avoid spillage. When the fire is out, the grate can be pulled straight out of the ash door to dump all residue for thorough cleaning.

CAUTION

DO NOT OPERATE THIS HEATER WITH FEED OR ASH DOOR OPEN. THIS HEATER IS DESIGNED FOR THERMOSTATIC OPERATION. OPERATION WITH EITHER DOOR OPEN WILL OVERHEAT UNIT.

Egg size Bituminous coal or Hardwood 20" to 24" long, split and air dried (seasoned) for 6 months is recommended for best operational efficiency.

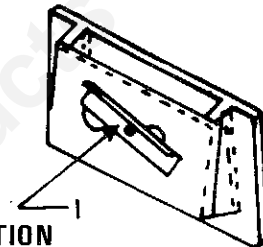
MINIMUM FIRE

When coal is burned very slowly for a long time, a thick layer of soot is deposited in the combustion chamber and in the flue pipe. When wood is burned very slowly for a long time, tars and distillates are formed. They are deposited on the inside of the flue pipe. All of these deposits may ignite and burn causing overheating in the flue system.

The tar and soot formation can be reduced. Adjust the "minimum fire" air shutter on the draft control (Fig. 6). To reduce tars, turn air shutter (No. 1) so that a larger opening is exposed.

NOTE: Increase the minimum fire only as needed. Increasing the minimum fire may cause over heating at "LO" thermostat setting.

FIG. 6



CAUTION

Coal gases can "EXPLODE" and discharge smoke, soot and ashes into room.

1. Always set thermostat on HI before adding fuel.
2. Never add more than 20 lbs. of coal at one time or build up a charge of more than 50 lbs. in the combustion chamber.
3. Never smother the fire when adding any charge. This reduces the draft and can produce an accumulation of "coke" gas which will explode.

adjusting the thermostat

The thermostat control was adjusted at the factory. The location of the heater may require a change in calibration.

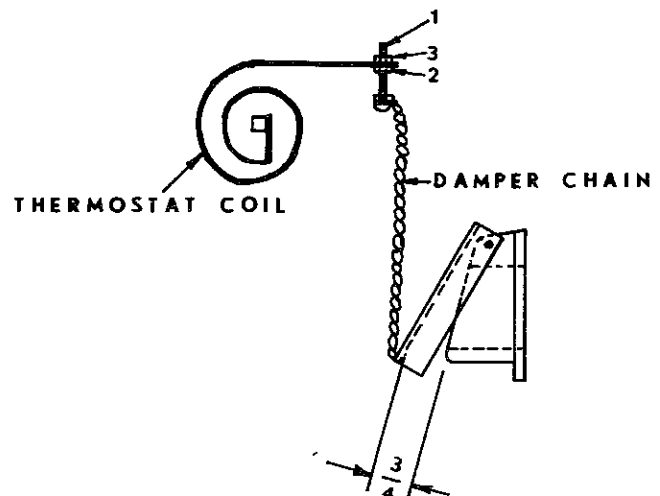
The thermostat control is designed to hold the draft damper open $\frac{3}{4}$ " with the thermostat knob set at "medium" heat in a 72° environment before lighting the heater (Fig. 7).

1. Follow operating instructions and operate the heater as received from factory.
2. If the room temperature is not maintained satisfactorily using the primary thermostat settings from LO to HI, then the thermostat operating range may be adjusted as follows:
 - A. To increase the amount of heat, adjust the chain suspension bolt (No. 1) to increase the draft damper opening.
 - 1) Loosen lock nut (No. 2) $\frac{1}{4}$ " on bottom side of thermostat coil.
 - 2) Tighten lock nut (No. 3) on top side of thermostat coil to raise the chain suspension bolt.
 - B. To decrease the amount of heat, adjust the chain suspension bolt (No. 1) to decrease the draft damper opening.
 - 1) Loosen lock nut (No. 3) $\frac{1}{4}$ " on top side of thermostat coil.
 - 2) Tighten lock nut (No. 2) on bottom side of thermostat coil.
3. If the amount of heat is too much on mild days with the thermostat set on LO:
 - A. Check the adjustment of the air shutter (see "Minimum Fire" heading under "Operation" instructions).

- B. Check the feed and ash doors to be sure they are closed tightly and the gaskets are sealing.
- C. Check the vent pipe to see that it is sealed in the flue collar.

MORE THAN ONE RECALIBRATION MAY BE NECESSARY.

FIG. 7 RECALIBRATING THERMOSTAT



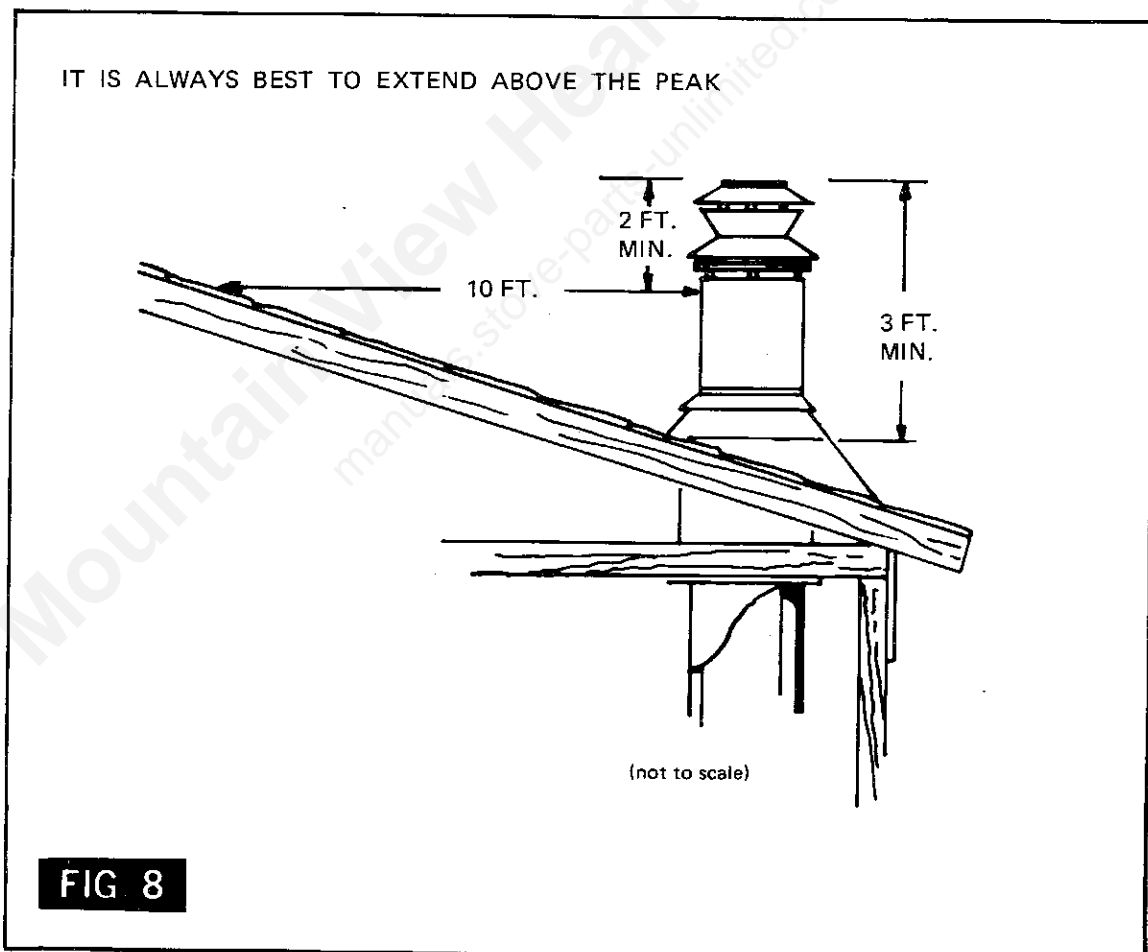
NOTE: At room temperature and "medium" setting, the draft door should be open approximately halfway, ($\frac{3}{4}$ ").

service hints

1. Do not expect a heater to draw. It is the chimney that creates the draft.
2. The vent pipe may be pushed into the chimney too far, stopping the draft.
3. 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.
4. 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.
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. 8).
6. If the fire does not burn well and the heater smokes, the flue passage is probably reduced in size by a thick layer of soot or tar deposits, or an accumulation of residue in an elbow or horizontal section of flue pipe. The flue pipes must be kept open and free of deposits.

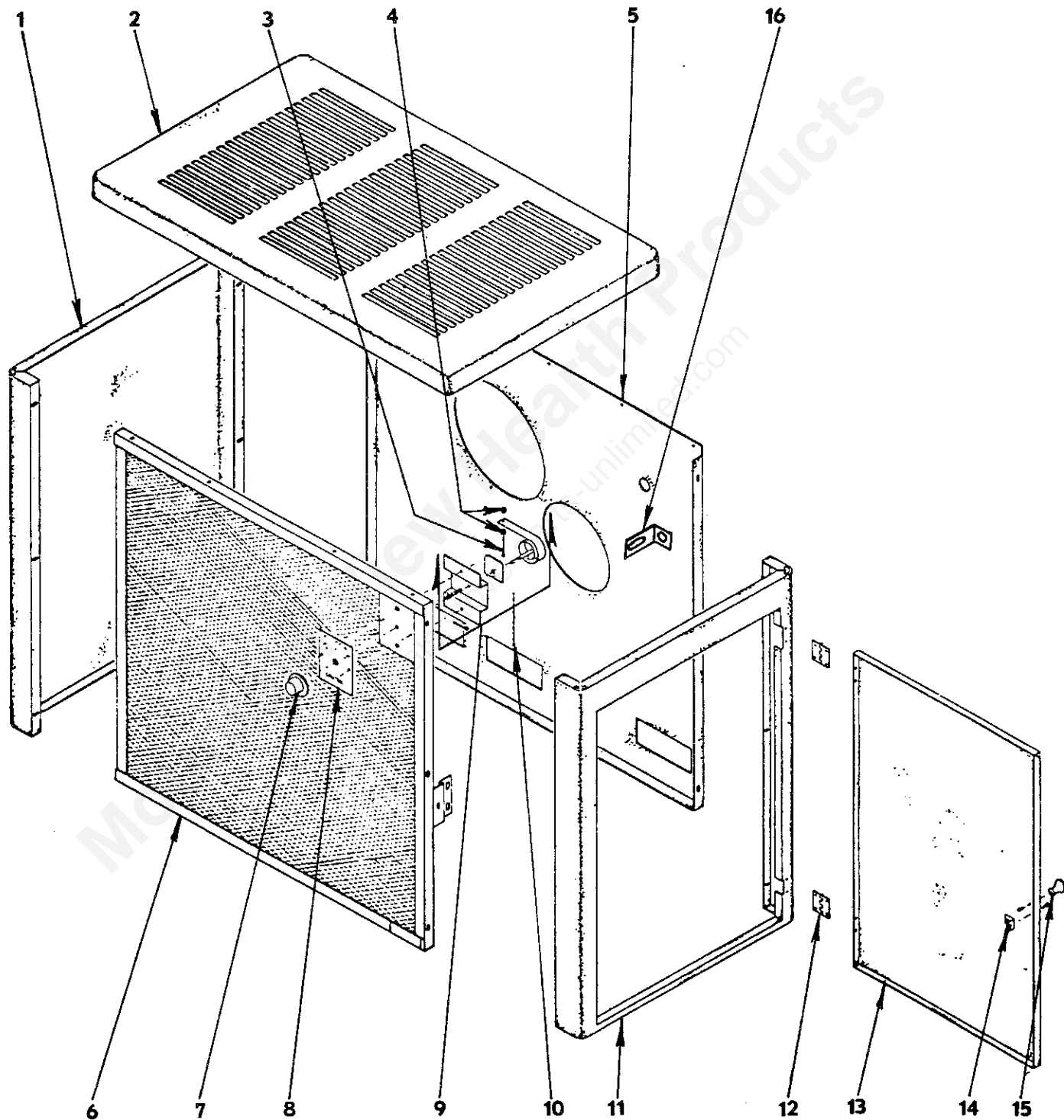
CARING FOR ENAMELED PARTS

This heater has an enameled outside jacket. Enamel is 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

THERMOSTAT CONTROLLED COAL OR WOOD BURNING CIRCULATOR MODEL 2607



repair parts

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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 (2 Required)
5	66440	Cabinet Back
6	65950	Cabinet Front
7	89130	Thermostat Knob
8	85079	Thermostat Dial Indicator
9	67187	Thermostat Assembly
10	89064	Chain
11	67194	Cabinet Door Frame
12	89065	Door Hinge (2 required)
13	67243	Cabinet Door
14	83093	Stove Spring Latch
15	89062	Door Knob
16	21063	Back Brace

* Standard Hardware Item — May Be Purchased Locally

repair parts

THERMOSTAT CONTROLLED COAL OR WOOD BURNING CIRCULATOR MODEL 2607

Key No.	Part No.	Description
17	67169	Heat Jacket
18	66960	Flue Collar
19	88032	Flue Collar Gasket
20	40132	Top Brick Retainer (Cast Iron) (2 required)
21	89066	Fire Brick (10 required)
22	21548	Smoke Curtain
23	40100	Liner (Cast Iron) (3 required)
24	17210	Hinge Pin (Smoke Curtain)
25	17060	Thermostat Baffle
26	88042	Rope Gasket (44")
27	67447	Feed Door Assembly (Cast Iron) (includes Key Nos. 26, 28, 29, 47)
28	40092	Feed Door Handle (Cast Iron)
29	89001	Handle Wire Coil
30	40131	Grate Support – Sides (Cast Iron) (2 required)
31	83818	Clip (2 required)
32	65960	Base Assembly
33	67132	Draft Control Damper
34	67266	Floor Shield Kit
35	40075	Draft Damper Frame
36	17200	Hinge Pin (Draft Damper)
37	21552	Throttle Plate
38	40101	Coal Grate (Cast Iron)
39	67444	Ash Pan
40	24430	Hinge Pin (4 required)
41	40045	Shaker (Cast Iron)
42	88042	Rope Gasket (29")
43	67368	Ash Door Assembly (includes Key Nos. 42, 44)
44	LK-26	Latch Kit
45	83819	Clip (4 required)
46	40102	Coal Grate Frame (Cast Iron)
47	21467	Latch Spacer (2 required)
48	17270	Front Catch Brace
*	40130	Grate Support – Rear (Cast Iron)

* Not Illustrated

owners manual

HOW TO ORDER REPAIR PARTS

THIS MANUAL WILL HELP YOU TO OBTAIN EFFICIENT, DEPENDABLE SERVICE FROM THE HEATER, AND ENABLE YOU TO ORDER REPAIR PARTS CORRECTLY.

KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

WHEN WRITING, ALWAYS GIVE THE FULL MODEL NUMBER WHICH IS ON THE NAMEPLATE ATTACHED TO THE BACK OF THE 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
4. The NAME of ITEM

UNITED STATES STOVE COMPANY
P. O. Box 151
South Pittsburg, Tennessee 37380