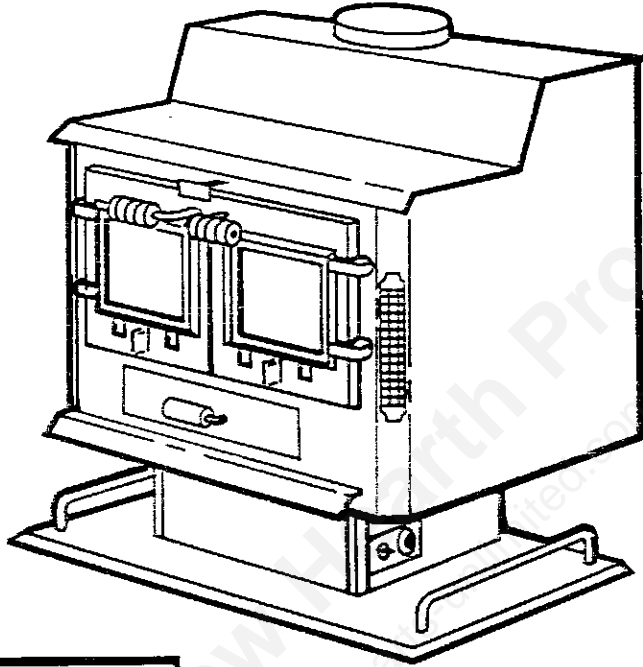


owners manual
SEQUOYAH ROOM HEATER



CAUTION:
Read All Instructions
Carefully Before Starting
The Installation or
Operating The Heater.

Improper Installation
Could Void Your
Warranty!

Model 4224

FREESTANDING ROOM HEATER

- Assembly
- Installation
- Operation
- Repair Parts



Save This Manual
For Future Reference.

**DO NOT USE THIS HEATER
IN A MOBILE HOME OR TRAILER**



UNITED STATES STOVE COMPANY

P. O. Box 5349, Chattanooga, TN 37406



rules for safe installation and operation

Read these rules and instructions carefully.

SAFETY NOTICE: If this heater is not properly installed, a house fire may result. For your safety, follow the installation instructions. Contact local building or fire officials about restrictions and installation inspection requirements in your area.

1. Check your local building and fire codes. This installation must comply with their rulings.
2. **DO NOT** install this heater in a mobile home or trailer.
3. **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.
4. Always connect this heater to a chimney or vent to the outside. Never vent to another room or inside a building.
5. The freestanding room heater requires a masonry or a UL Listed Residential Type and Building Heating Appliance Chimney.
6. Be sure the masonry fireplace is clean and in a safe condition. Have the chimney inspected by the fire department or a qualified inspector. Your insurance company may be able to recommend a qualified inspector.
7. Make sure the masonry chimney is high enough to give a good draft. (a minimum of 2' above highest roof peak).
8. Inspect the chimney twice monthly during the heating season for any deposit of creosote or soot. Such deposits must be removed. See CHIMNEY MAINTENANCE, Page 7.
9. **DO NOT BE ALARMED IF HEATER SMOKES UPON INITIAL FIRING.** The special paint used on this heater must be cured during initial firing. This smoking will occur only on initial firing.
10. **CAST IRON PARTS MUST BE "SEASONED" TO AVOID CRACKING. BUILD ONLY SMALL FIRES DURING THE FIRST FEW DAYS OF USE.**
11. To prevent injury, do not allow anyone to use this heater who is unfamiliar with the correct operation of the heater.
12. For additional information on using your Room Heater safely, obtain a copy of the National Fire Protection Association (NFPA) publication "Chimneys, Fireplaces, and Solid Fuel Burning Appliances" NFPA No. 211. The address of NFPA is Batterymarch Park, Quincy, MA 02269.
13. **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.
14. Keep the ashpit section free of excess ashes.
15. Observe clearances to combustible materials specified in this manual to avoid a fire hazard.
16. The metals used in construction of the heater has a light coating of oil. This could give off smoke and/or odors when heater is used for the first couple of times. This should disappear after a short period of time. Once this burn-off has occurred, it should not reoccur. **CARING FOR PAINTED PARTS** - This heater has a painted outside jacket, which is 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. **PAINT DISCOLORATION WILL OCCUR IF THE HEATER IS OVERFIRED. FOLLOW OPERATING INSTRUCTIONS CAREFULLY.**
17. The glass on this unit will stay clean and require less cleaning if you build small hot fires. The glass will not stay clean if you build large smoldering fires with the air inlets and outlet damper closed. The gases and particulates become trapped in the firebox area during a smoldering fire and create deposits on the glass and firebox walls. With a good draft and the air outlets open the "air wipe" system will keep the glass clean.

UNLOADING TIPS The heater has a total weight of approximately 500 lbs. Some tips on how to best get this heater to the desired installation location are as follows:

1. Remove doors from front of heater by lifting straight up when doors are open.
2. Remove grate and grate liners.
3. Remove ash pan.

The above steps will take approximately 80 - 90 lbs. of weight out of the unit weight and should better facilitate locating the unit for installation.

CAUTION: Do not touch the metal or glass surfaces of the heater until it has thoroughly cooled.

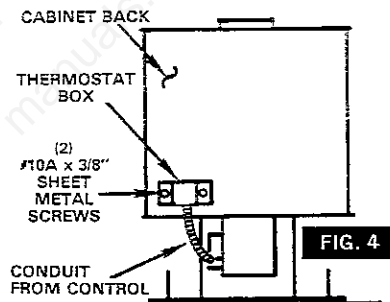
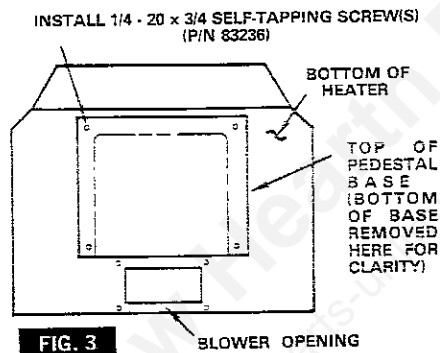
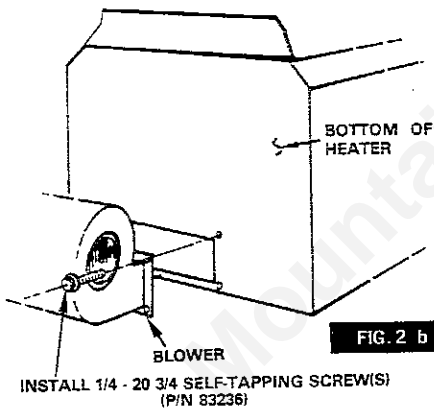
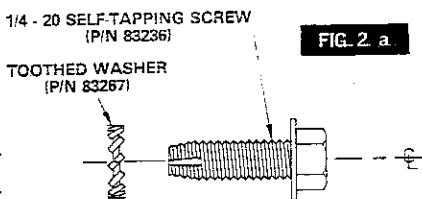
Assembly Instructions

FOR SEQUOYAH 4224 ROOM HEATER

NOTE: Unpack heater as close as possible to installation area.

PEDESTAL AND BLOWER INSTALLATION

1. Lift doors from hinges and remove from heater.
2. Remove grate, grate side liners and ash pan from heater.
3. Position heater on its back.
4. Remove pedestal base and blower assembly from carton.
5. Secure blower to bottom of heater with (4) (P/N83236) 1/4-20 x 3/4 self-tapping screws provided (Fig. 2b). Use the "toothed" washer (P/N 83267) provided with one of the (4) self-tapping screws to attach blower. (Fig. 2a)
6. Secure pedestal base to bottom of heater with (4) 1/4-20 x 3/4 self-tapping screws provided (Fig. 3).
7. Position heater upright on pedestal.
8. Position thermostat box on heater cabinet back and secure box with (2) 10A x 3/8" sheet metal screws provided (Fig. 4).



chimney connection

MASONRY CHIMNEY

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. (SEE P. 4, item 6).

Look at Fig. 5. 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. If connector pipe must go through a combustible wall before entering the masonry chimney, consult a qualified mason or chimney dealer. The installation must conform to local fire codes, and NFPA 211.

UL LISTED CHIMNEY

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

If your chimney starts at the ceiling (Fig. 6), you will need enough pipe to reach the 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. 6).

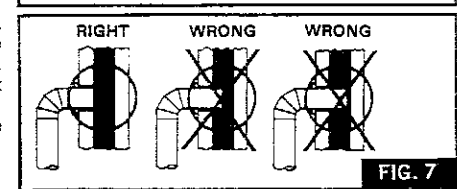
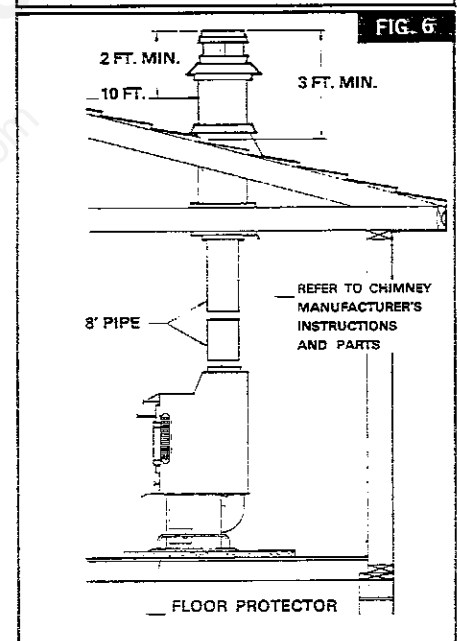
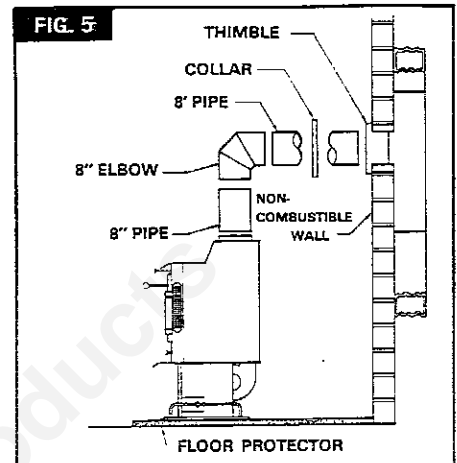
RULES FOR STOVEPIPE INSTALLATION

1. The crimped end of the connector pipe fits inside the heater flue collar. Install additional pipe and elbow with the 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 18 inches of clearance between any horizontal piping and the ceiling.
4. The pipe cannot extend into the chimney flue (Fig. 7).
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. It is recommended that no more than two 90° bends be used in the stovepipe installation as more than two may decrease the amount of draw and possibly cause smoke spillage.

BAROMETRIC DRAFT REGULATOR (OPTIONAL)

In some installations, it may be desirable to install a barometric draft regulator in the chimney connector. A barometric draft regulator should be located in the same room (pressure zone) as the heater. When installing a barometric draft regulator, follow the barometric draft regulator manufacturer's instructions.

The benefits of using a draft regulator are to minimize creosote formation and maintain a constant draft.



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. 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 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. Failure to remove creosote or soot may cause a house fire, creosote may be removed by using a chimney brush or other commonly available materials.

Chimney fires burn very hot. If the chimney catches fire, immediately call the fire department, then reduce the fire by closing the inlet air control. 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.

NOTE

A draft reading of .05 to .06 w.c. is suggested for proper burning of this unit

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 functioning properly. Correct the problem before using the heater.

Possible causes are:

1. The chimney used for this heater must not be used for any other appliance.
2. The chimney used for this heater must not be used to ventilate a cellar or basement.
3. If there is a cleanout door at the base of the fireplace chimney, close it tightly.
4. If the chimney is remaining too cool, water will condense in the chimney and run back into the fireplace. Creosote formation will be rapid and may block the chimney. Operate the heater at a high enough fire to keep the chimney warm preventing 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 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 2 feet higher than any point of the roof within 10 feet. (Fig. 6)

Glass Cleaning - To clean the glass in your heater, wait until it has cooled. Spray the glass lightly with a mild oven cleaner. Follow instructions of the cleaner manufacturer.

Caring For Painted Parts - The paint 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. PAINT DISCOLORATION WILL OCCUR IF THE HEATER IS OVERFIRED. FOLLOW OPERATING INSTRUCTIONS CAREFULLY.

operating instructions

FUEL - WOOD

Use Hardwood that has been split and air-dried for at least six months to obtain maximum burning efficiency.

CAUTION

When burning wood fire do not elevate fire; build fire directly on integral grate.

LIGHTING INSTRUCTIONS.

1. Open the air shutter on each door (Fig. 9).
2. Open the damper fully. This can be done by pushing the damper arm all the way to the back of the unit. The damper handle is in front just above the doors.
3. Open both doors and place paper and kindling in the firebox.
4. Light the fire and close the doors until the kindling is burning.
5. Open the doors and add fuel as desired.

EXTENDED OPERATION

1. The temperature in the room and the rate at which wood is burned can be controlled by adjusting the air shutter and the damper (Fig. 9).
2. Fuel should be added in small amounts to give more complete combustion and uniform room temperature.
3. The Freestanding Room heater may be used with the doors open or closed. When the doors are open, place the fire screen (Model 41FS) which covers the entire fireplace heater front opening on the hearth extension. Have doors fully open or fully closed. Do not use the heater with the doors partially open. (See page 14 for optional 41FS Firescreen).
4. Always open the damper and the air shutters fully before opening the doors. This will improve the chimney draft and reduce the possibility of small amounts of smoke coming into the room when the doors are opened.
5. **EMPTY THE ASHES REGULARLY. DO NOT ALLOW ASHES TO BUILD UP. IF THE ASH PAN IS NOT EMPTIED REGULARLY, THE GRATE WILL GET MUCH HOTTER. THEREFORE, CAUSING BUCKLING AND SHORTENING THE LIFE OF THE GRATE.** Dispose of hot ashes properly (see Note 13, page 4).
6. Please keep blower area clean and free from small debris such as bark, etc. The fan on this unit could possibly pull these particles into the chamber surrounding the firebox! These particles could ignite and be blown out the hot air outlets creating a fire hazard.

OPERATING TIPS

This heater is designed to give you the maximum heat output per pound of wood. The tips given here are based on information gathered over the past few years and are offered to ensure you receive the best performance possible from your unit.

KEY CONTROLS:

- 1) The DAMPER is one of the most important controls you have on this unit. If used properly, it can make a major difference in the performance of your unit. When initial fire is started, the damper should be toward the open position (handle pushed back). As the unit heats up and the fire begins burning vigorously, the damper should be pulled toward the closed position (handle pulled forward). **BE SURE DAMPER is fully open before opening doors.**
- 2) The AIR INLET CONTROLS located on each door are another key factor in the performance of your unit. These can be set at many different settings depending upon the amount of heat desired.
- 3) The BLOWER SYSTEM is the other key factor in the performance of your unit. It should be set according to the amount of heat desired in the various firing modes.

MODES OF OPERATION:

- 1) **LOW FIRE MODE (OVERNIGHT):** This mode of operation is desirable for long periods of low heat. The (3) key controls listed above would be set as follows:
 - a) DAMPER—half closed to entirely closed position.
 - b) AIR INLETS—closed to slightly open position.
 - c) BLOWER—"automatic" setting with speed control set on low-medium speed.
- 2) **MEDIUM FIRE MODE:**
 - a) DAMPER—half closed/open
 - b) AIR INLETS—half closed/open
 - c) BLOWER—automatic or manual setting with variable speed medium - high.
- 3) **HIGH FIRE MODE:**
 - a) DAMPER—half to fully open
 - b) AIR INLET—fully open
 - c) BLOWER—manual or automatic with speed control on high speed

By experimenting with the (3) key controls listed above, you can find the best combination for your particular needs. The various firing modes listed above are for general information in helping you set the unit to your desired heating needs.

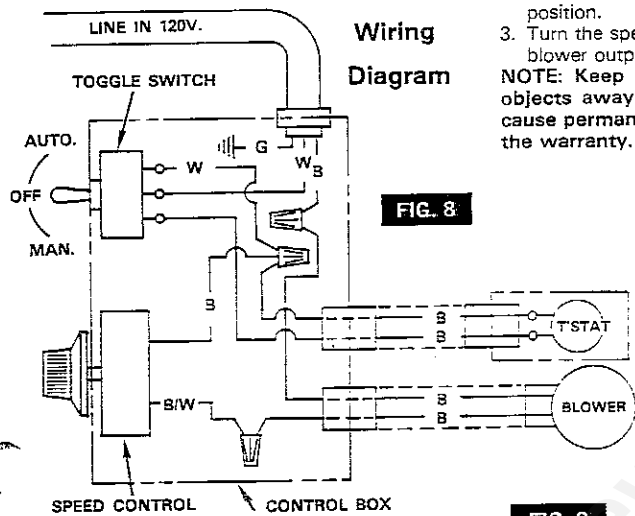
MISCELLANEOUS TIPS:

- 1) In some cases, it has been found that by placing wood in the unit from front to back (18" length required) instead of side to side (24" length), the unit will heat more effectively.
- 2) Again, the damper is one of the most important controls on this unit. Its main purpose is to allow you to keep heat in the firebox instead of allowing it to go out the flue. By experimenting with various damper positions, you can find the best position for your particular heating needs.
- 3) It is recommended that the blower be turned off when opening and closing the doors. This will prevent smoke from being blown into the room and will also keep hot air from being blown directly on your hands.

Blower operation

The blower assembly is equipped with a thermostat to automatically switch on the blower 15 to 20 minutes after firing the heater.

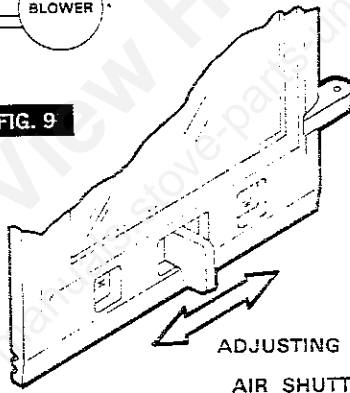
NOTE: If the blower does not come on quickly enough to suit you in your particular installation, you can make it come on sooner by moving the thermostat box upward on the cabinet back. This can be done by drilling (2) 1/8" diameter holes (using the holes in the thermostat box as guides) and securing the thermostat box with the (2) 10A x 3/8" sheet metal screws provided. (See Fig. 5 on page 5 for an illustration showing the location of the thermostat box.)



G — GREEN
 B — BLACK
 W — WHITE
 B/W — WHITE WITH BLACK STRIPE

WARNING
 Route Power Supply Cord
 Away From Heater

FIG. 9

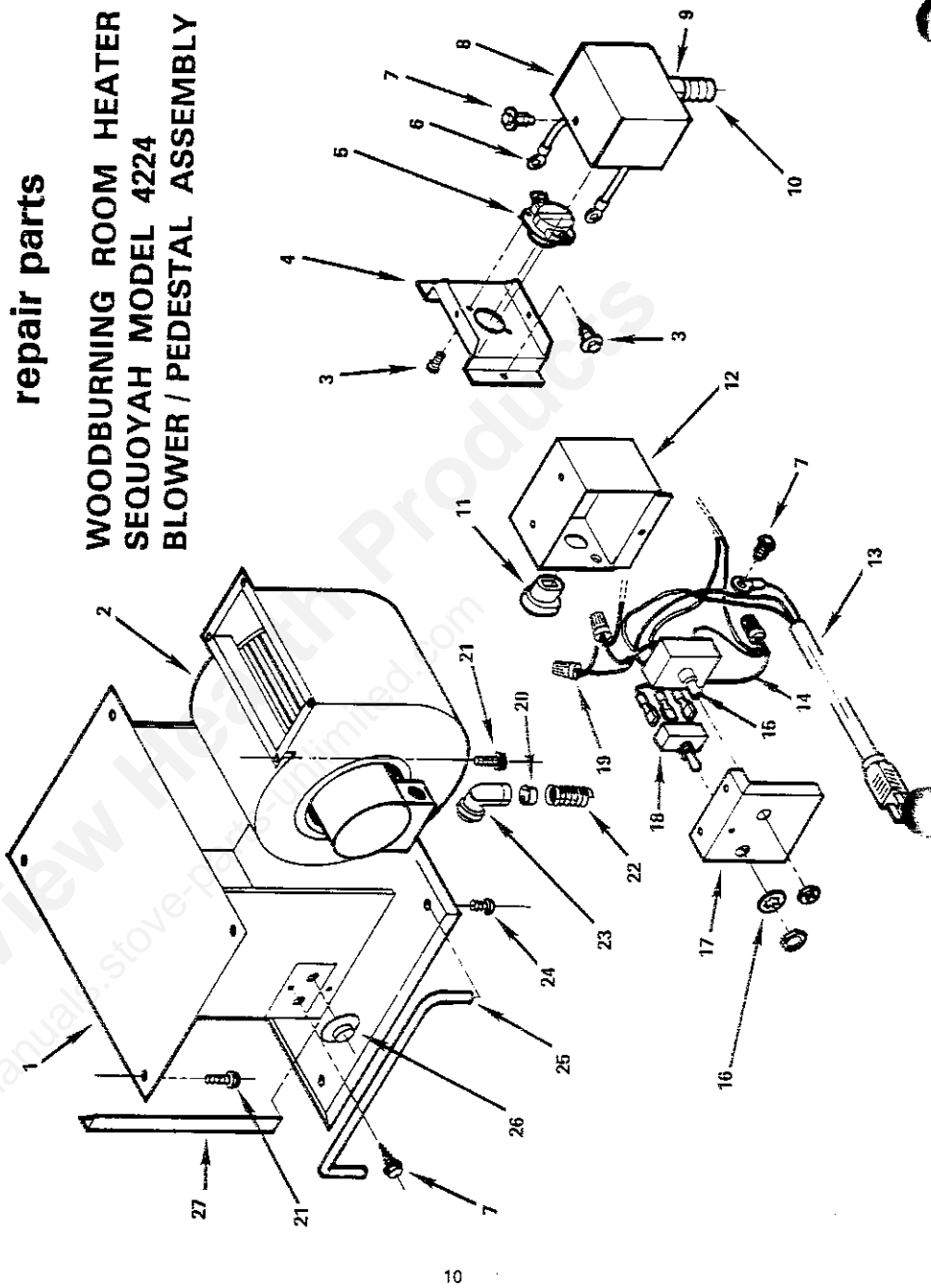


NOTE

During opening and closing of the feed doors of this heater, it may seem that the fit of the doors are "too tight." As the heater is fired, the gasketing "settles" or "seats" itself in the doors. The tight fit at the factory and before the heater's initial firing is to insure a good seal after the gasketing "settles."

repair parts

**WOODBURNING ROOM HEATER
SEQUOYAH MODEL 4224
BLOWER / PEDESTAL ASSEMBLY**



Repair parts

WOODBURNING ROOM HEATER

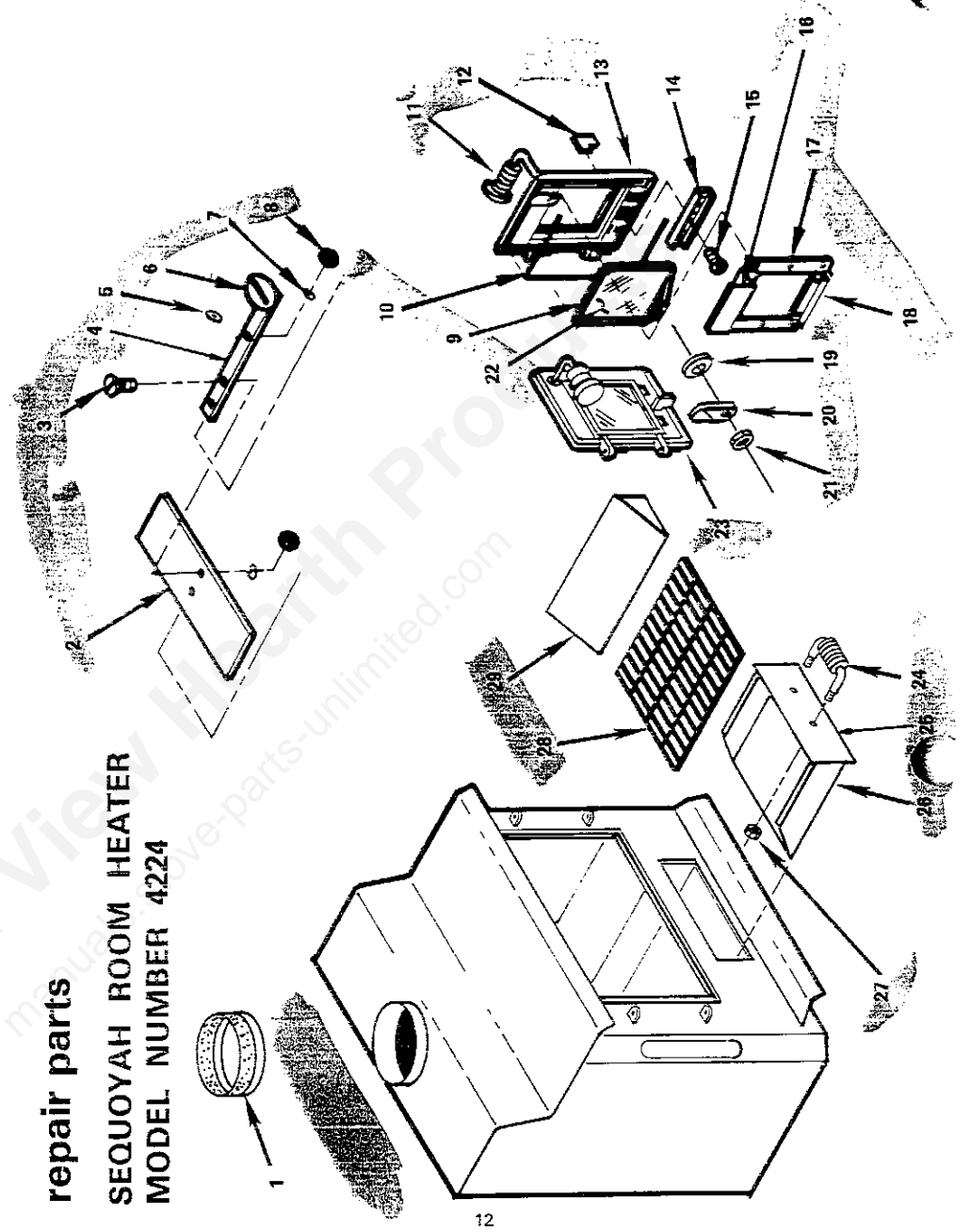
SEQUOYAH MODEL 4224

BLOWER / PEDESTAL ASSEMBLY

Key No.	Part No.	Description	Qty.
1	68018	Base, Pedestal Assembly	1
2	80133	Blower Motor	1
3	83245	Screw, Sheet Metal (10A x 3/8 HX W HD 2 serrated)	4
4	22209	Bracket, Blower Control	1
5	80138	Control, Limit (ON -- 110° F.; OFF -- 90° F.)	1
6	80144	Wire, Jumper	1
7	83222	Screw, Sheet Metal (10B x 3/8 HX W HD Z)	7
8	22210	Cover, Blower Control	1
9	80086	Connector, Conduit (180° x 3/8)	1
10	80061	Conduit, (3/8 x 28")	1
11	80109	Relief, Strain	1
12	22347	Box, Control	1
13	80116	Cord, Power Suppiv	1
14	80118	Wire, Jumper	1
15	80030	Control, Speed	1
16	83240	Washer, Lock	1
17	22062	Cover, Control Box	1
18	80004	Switch, Toggle	1
19	80006	Nut, Wire (73B)	3
20	83801	Bushing, Anti-Short	4
21	83236	Screw, Thread Cutting (1/4-20 x 3/4)	8
22	80061	Conduit, (3/8" x 17")	1
23	80062	Connector, Conduit (90° x 3/8)	3
24	83005	Screw, Machine (10-24 x 1/2 PHEN)	4
25	89216	Trim, Rail	2
26	89157	Knob	1
27	89217	Trim, Pedestal Corner	2
*	68012	Blower Motor Assembled	1
	68010	Pedestal / Blower Assembly, Complete	1

* NOT SHOWN

repair parts
SEQUOYAH ROOM HEATER
MODEL NUMBER 4224



Repair parts

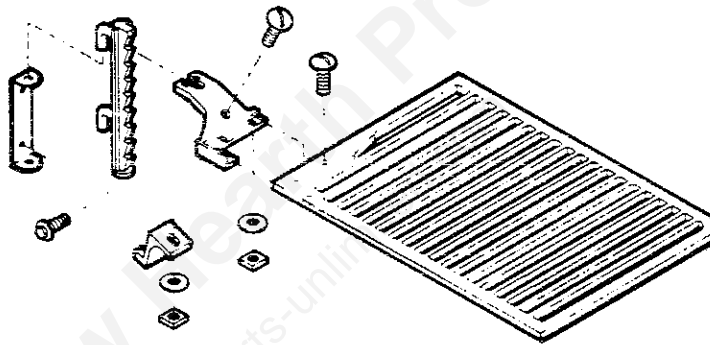
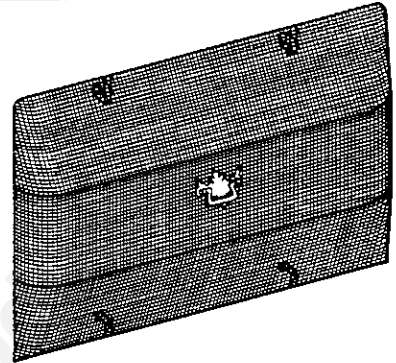
SEQUOYAH ROOM HEATER MODEL NUMBER 4224

Key No.	Part No.	Description
1	68039	Decorative Ring
2	22049	Damper
3	83102	Screw, Machine (1/4-20 x 1-1/4" SL FL HD) (3 req'd)
4	22048	Damper Arm
5	83257	Pushnut (2 req'd)
6	85432	Nameplate, Sequoyah
7	83108	Washer, Lock (1/4L) (3 req'd)
8	83072	Nut, 1/4-20 (3 req'd)
9	88047	Gasket, Glass Seal
10	88033	Gasket, Door Seal (39")
11	89189	Handle, Door
12	40163	Knob, Draft Control (2 req'd)
13	22074C	Door, R/H Feed
14	21876	Slide, Draft
15	83202	Screw, Machine (#10-24 x 3/8 RD PH HD) (11 req'd)
16	68016	Retainer, Glass Top
17	21781	Retainer, Glass Side (2 req'd.)
18	22338	Retainer, Glass Bottom
19	83835	Washer, Flat
20	22083	Glass (2 Per Unit)
21	83243	Nut, Lock (7/16-20)
22	89155	Glass (2 Per Unit)
23	68019	Door, L/H Feed
24	89214	Handle, Ash Pan
25	22478	Ash Pan Front
*	83051	10 - 24 x 1/2 Machine Screw (4 ea.)
26	22345	Ash Pan Body
27	83274	Nut (2 req'd)
28	40248	Grate, Wood
29	40249	Liner, Firebox (2 req'd)
*	68008	Door, R/H (Complete Assembly)
*	67994	Door, L/H (Complete Assembly)
*	88042	Ash Pan Front Gasket (30")
*	85433A	Owner's Manual

* NOT SHOWN

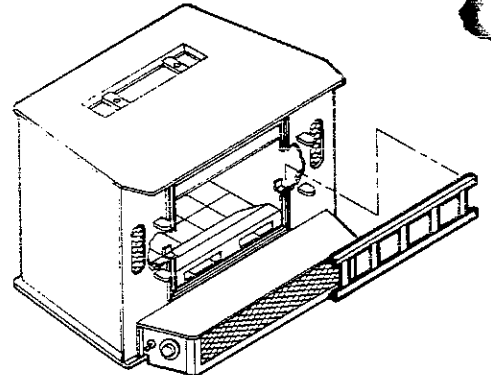
OPTIONS

41FS
"Optional"
Firescreen
Kit



42BG
"Optional"
Barbecue Grill
Kit

42LR
"Optional"
Log Retainer
Kit



NOTE: If you decide to order any of the "options" shown in this manual either:
(A) – Contact your dealer;
(B) – Contact the factory as listed on the back cover.

Notes

Mountain View Hearth Products
manuals.stove-parts-unlimited.com

LIMITED WARRANTY 4224 FREESTANDING HEATER

WARRANTY:	The United States Stove Company warrants its solid fuel room heaters against burn-out or cracking of any steel or cast iron parts, failure of door glass, and failure of electrical components of the blower.
TIME PERIOD:	The warranty period extends 20 years from date of purchase by original owner, on steel parts, three years from date of purchase by original owner on cast iron parts, one year from date of purchase by original owner on door glass and electrical components of the blower.
CLAIM PROCEDURE:	Any defects relating to above should be reported to United States Stove Company, giving description and pertinent data. Include proof of purchase, which will be returned on request.
OUR RESPONSE:	Providing the heater has been installed and used in accordance with the owners manual supplied with the heater, The United States Stove Company will either: (1) Replace the defective part free of charge, including payment of any labor charges, or (2) Replace the heater free of charge, including payment of any labor charges.
NOT COVERED:	Smoking problems are not covered under this warranty. Inadequate draft is generally due to the design or installation of the flue system.
WARRANTOR:	United States Stove Company, P. O. Box 5349, 3500 N. Hawthorne St., Chattanooga, TN 37406
NOTE:	This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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 OR OPTIONS, ALWAYS GIVE
THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST:

- | | |
|-------------------------|----------------------------|
| 1. The PART NUMBER | 3. The MODEL NUMBER: 4224 |
| 2. The PART DESCRIPTION | 4. The SERIAL NUMBER _____ |

UNITED STATES STOVE COMPANY
P. O. Box 5349 — Chattanooga, Tennessee 37406 — (615) 698-3435