

Models 2800 and 3200
FIREPLACE GRATE HEATERS



Installation / Operator's Manual #31320

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INTRODUCTION

IMPORTANT INFORMATION

Read these instructions carefully before installing and using the appliance. Keep for future reference. Should you have any questions concerning the construction or condition of your fireplace (i.e. cracks, loose mortar, creosote deposits, etc.) Contact your local building inspector or fire marshal.

- ✓ Always have operational smoke or ionization detectors in your home.
- ✓ To prevent injury or damage, do not allow anyone unfamiliar with solid fuel to operate this unit.
- ✓ Do not store fuel or other combustible materials within marked clearances.
- ✓ Do not burn garbage, plastics, "green" wood, composite wood products or coal. These materials can produce gases and byproducts that may harm the chamber and produce excessive amounts of creosote.
- ✓ Never start a fire with gasoline, kerosene, charcoal lighter fluid or other flammable liquids.
- ✓ Black metal on front of unit is HOT - keep children away.
- ✓ Install and use only in a masonry fireplace.

GRATE HEATER SPECIFICATIONS

	CLAY-28	CLAY-32
BTU OUTPUT/HR.*	35,000	45,000
EST. HEATING CAPACITY*	1200 sq. ft.	1200 sq. ft.
MAX. LOG LENGTH	24"	24"
WEIGHT	175 lbs.	210 lbs.
DOOR SIZE	16" x 20"	18" x 26"
BLOWER SIZE	220 CFM	220 CFM
POWER REQUIREMENT	15 AMP, 115 VOLT AC, 60Hz grounded circuit	

DISCLAIMER NOTICE

The BTU ranges and heating capacity specifications are provided as guidelines only and in no way guarantee the output or capacity of the unit. In warmer climates, on average, the fireplace can be expected to heat a greater area than indicated.

Other factors which affect the actual area that the unit will heat include: the conditions of the building, heat loss, type of construction, amount of insulation, type of air movements and location of the unit. The actual BTU output depends on the type of condition of the wood being burned, draft setting and the chimney that the fireplace is hooked up to.

NOTE: Your Clayton warranty is at the end of this manual. Be sure to complete and return the warranty registration card to the manufacturer. If you have any problem your local dealer cannot help you with, please contact the manufacturer direct.

ABOUT YOUR CLAYTON GRATE HEATER

Your new Clayton Fireplace Grate Heater is about to surprise you in several ways.

First, the realization of how much heat your masonry fireplace really can provide...if it didn't all go up the chimney.

Second, how simple it is to install the Clayton. Glide it in, secure it with the built-in clamps, plug in the cord — that's it!

Third, how the design of your Clayton provides a beautiful, uninterrupted view of the fire while adding to its natural beauty and exploiting its warmth.

As simple as it is to install, it is still important to follow all the instructions carefully and accurately, as they are intended to help eliminate fire hazards.

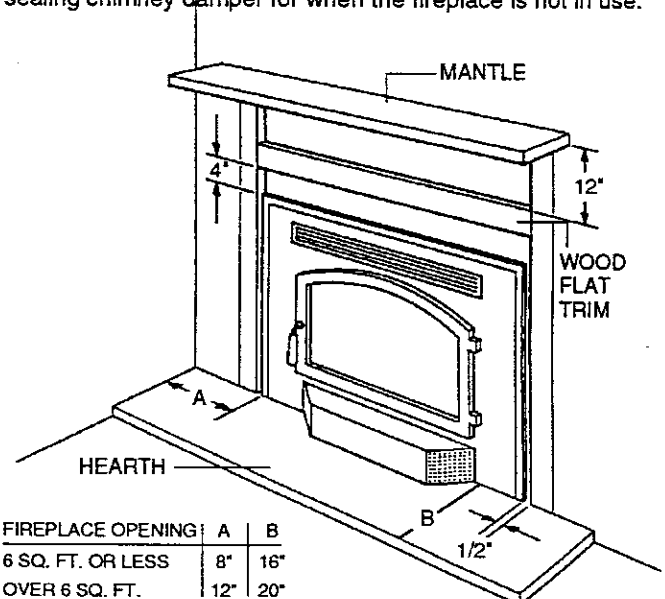
PLANNING YOUR

FIREPLACE INSTALLATION BEFORE INSTALLATION CAN BEGIN

Thoroughly inspect (or have inspected) your chimney and masonry fireplace to verify that all local building codes and NFPA 211 standards for construction are met. Be sure all deficiencies (i.e. loose bricks, cracks, creosote deposits) are corrected or repaired. Your chimney must conform to the standard for chimneys, fireplaces, vents and solid fuel appliances as set by NFPA 211 and all other mechanical codes. Flue size of the chimney must be 8" x 12" or 9" round. A nonconforming fireplace or chimney could be a fire hazard, and the cost of repair is far out-weighted by loss of personal property or life.

No less important for safety is the fireplace hearth. The hearth for a fireplace opening of 6 sq. ft. or less, should extend at least 16" out in front of the facing materials, and 8" beyond the sides of the opening. If your fireplace opening is 6 sq. ft. or larger, the minimum measurements for the hearth should be 20" in front of the opening and at least 12" beyond each side of the opening. The minimum depth measurement of a floor level hearth should be 18" from fireplace. Hearth material must be a non-combustible material no less than 1" thick.

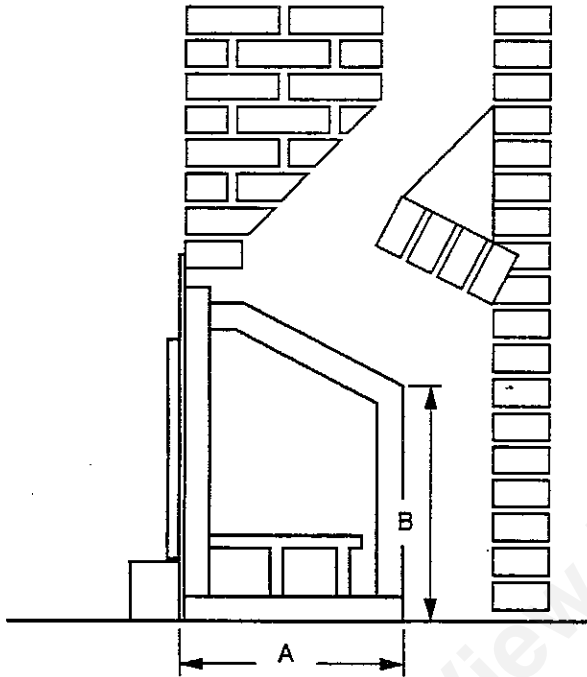
The chimney damper must be permanently locked in the OPEN position. If you failed to secure the damper, it may accidentally close, resulting in smoke spillage into the home causing property damage. You may however, install a top sealing chimney damper for when the fireplace is not in use.



MINIMUM CLEARANCES

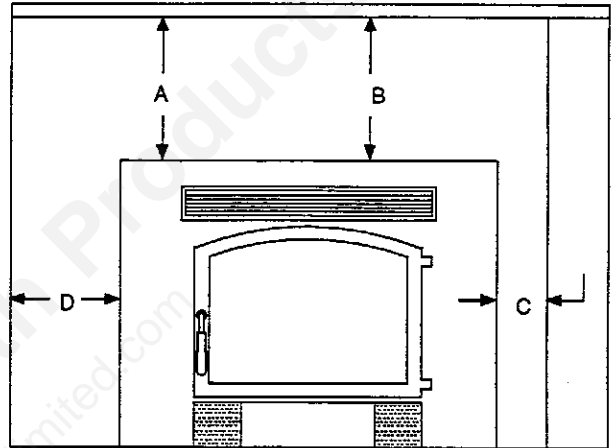
REQUIRED FIREPLACE INSIDE DIMENSIONS

	MODEL	
	CLAY 28	CLAY 32
A - DEPTH REQUIREMENT	18"	18"
B - HEIGHT AT BACK	19-1/2"	21-1/2"



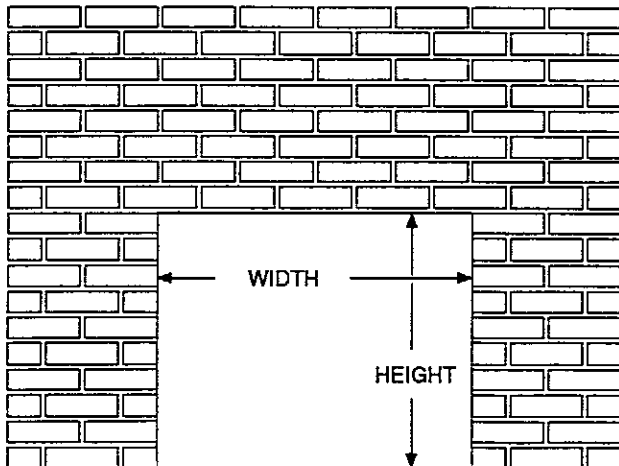
MINIMUM CLEARANCE TO COMBUSTIBLES

	MODEL	
	CLAY 28	CLAY 32
A - TO WOOD MANTLE	18"	18"
B - TO TOP FACE TRIM*	18"	18"
C - TO SIDE TRIM	6"	6"
D - TO SIDE WALL	16"	16"



REQUIRED FIREPLACE OPENING SIZES

	MODEL	
	CLAY 28	CLAY 32
A- Width at back of opening	26"	26"
Width of opening for faceplate	30-38"	30-42"
B- Height at back of opening	19-1/2"	21-1/2"
Height of opening for faceplate	25-27 1/2"	27 1/2-32"



CHIMNEY REQUIREMENTS

Your Clayton Grate Heater unit is to be installed only in masonry fireplaces constructed in accordance with the requirements of the standard for chimneys, fireplaces, vents, and solid fuel burning appliances, NFPA No. 211, or applicable local code requirements.

For further information on using your unit safely, obtain a copy of the National Fire Protection Association Publication "Using Coal and Wood Stove Safely". NFPA No. HS-8-1974.

Both publications are available by writing to:

Publication Department
National Fire Protection Association
470 Atlantic Ave.
Boston, MA 02210

sealing chimney damper for when the fireplace is not in use.

INSTALLATION

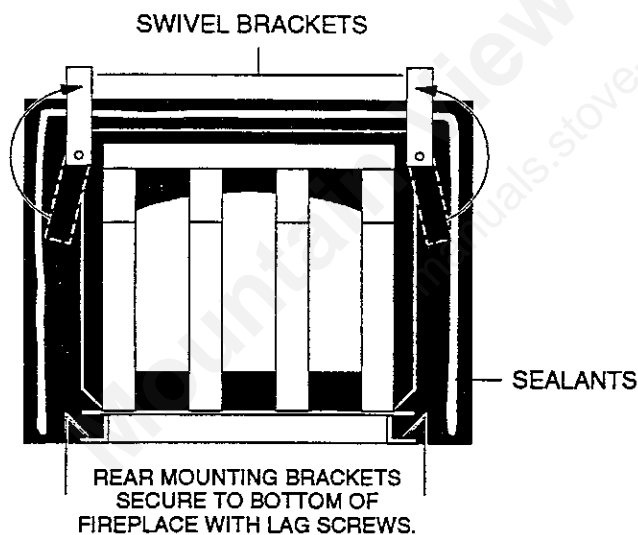
Slide your Clayton Grate Heater unit into the center of your fireplace opening. Adjust the back leveling leg, using 9/16" wrench, to bring unit to level. Mark the holes for the bottom mount brackets on the firebrick base. Low spots or voids in masonry where the fireplace meets the fireplace must be filled and smoothed with masonry cement to prevent air seepage into fireplace or smoke seepage into the room. Air leakage around fireplace may cause excessive burn rates which will develop excessive temperatures.

Remove grate heater unit from fireplace. Using a 1/2" masonry bit, drill bottom mount holes and insert lead plugs into holes.

A 3" band of insulation is provided to seal the perimeter of the grate heater. Apply to rear of face before pushing into place. Slide the unit back into the opening and run lag screws through bottom mount brackets into lead plugged holes and tighten with 7/16" wrench.

Slide top mounting brackets over threaded rods, bringing bracket flush with inside of masonry fireplace. (Brackets move freely to adjust to necessary angle required.) Thread 1/2" nuts onto rods and tighten to create a clamping effect between top mounting brackets and fireplace. Visually inspect the integrity of the seal between fireplace and masonry from the inside. Recaulk if necessary.

Plug the power cord into a standard, grounded electrical household outlet. (Turn on blower to make sure outlet is working.)



OPERATION

BEFORE BUILDING A FIRE

Slow burning wood fires produce tar and organic vapors which when combined with expelled moisture create creosote. In the relatively cool chimney of a slow burning fire, these creosote vapors condense to create a residue, which quickly accumulates in the flue lining. Should this creosote accumulation become ignited, it will make an extremely hot fire which can damage the chimney, the home, and inflict personal injury.

Frequent inspections are recommended for the first few months of operation then every two months throughout the heating season. Remove the creosote as required.

Your Clayton Grate Heater Insert is a very efficient unit, capable of expelling high amounts of heat from a moderate sized fire. Over firing, (extremely large fires) is not necessary, nor recommended, as it can be dangerous, resulting in damage, warping or discoloration of your heating unit. It may also cause failure of fireplace or flue materials.

Always be aware of children and their curiosity. The front face of this unit can also get very hot resulting in skin burns. Keep all combustibles, furniture, and clothing at a safe distance. Ashes should be disposed of properly. A metal container with a tight fitting lid placed on a non-combustible surface or the ground is recommended if the ashes are to be buried or otherwise dispersed. Leave them in the metal container until all cinders have completely cooled.

Operate fireplace only with the glass door completely open or tightly closed. Do not allow hot logs or coal to contact or rest against the glass door as this may cause breakage.

STARTING A FIRE

This unit is designed for use with solid wood fuels only.

To start a fire in your Grate Heater, we recommend you start with a split log positioned in the center of the grate, split side facing the front. Line crumpled newspaper on either side of the log. Place kindling against log and newspaper in a tent fashion. (This allows air to circulate around kindling for easier burn.) Light the paper and kindling. Leave the door ajar, (do not leave fireplace unattended) this allows the flue to heat up and draw. Once you have a bed of burning coals add additional wood logs.

When a preset temperature is reached, the unit's thermostatic "snap disk" will automatically turn on the forced air fans. These fans will circulate the heated air through the heat exchange tubes and into the room. The control on the blower housing allows you to adjust fan speed.

● Do not overfire unit

CARE AND MAINTENANCE

Glass Door - Your Clayton Grate Heater has a special air wash system to help keep the glass free of soot during normal use. Most soot accumulation occurs upon the start-up procedure. By leaving doors ajar during start-up, the glass will be warmed, helping to prevent condensation. Prior to closing doors, wipe glass with newspaper to remove any soot that may have been deposited. For heavier accumulations, clean glass with a solution of warm soapy water. Do not use abrasive cleaners on the glass or trim.

Blower/Air Fans - The fan assembly unit has no user serviceable parts but on occasion may be vacuumed to remove accumulated dust. The motors themselves are factory sealed and require no additional lubrication.

Replacement parts for your Grate Heater are available through your Clayton Dealer.

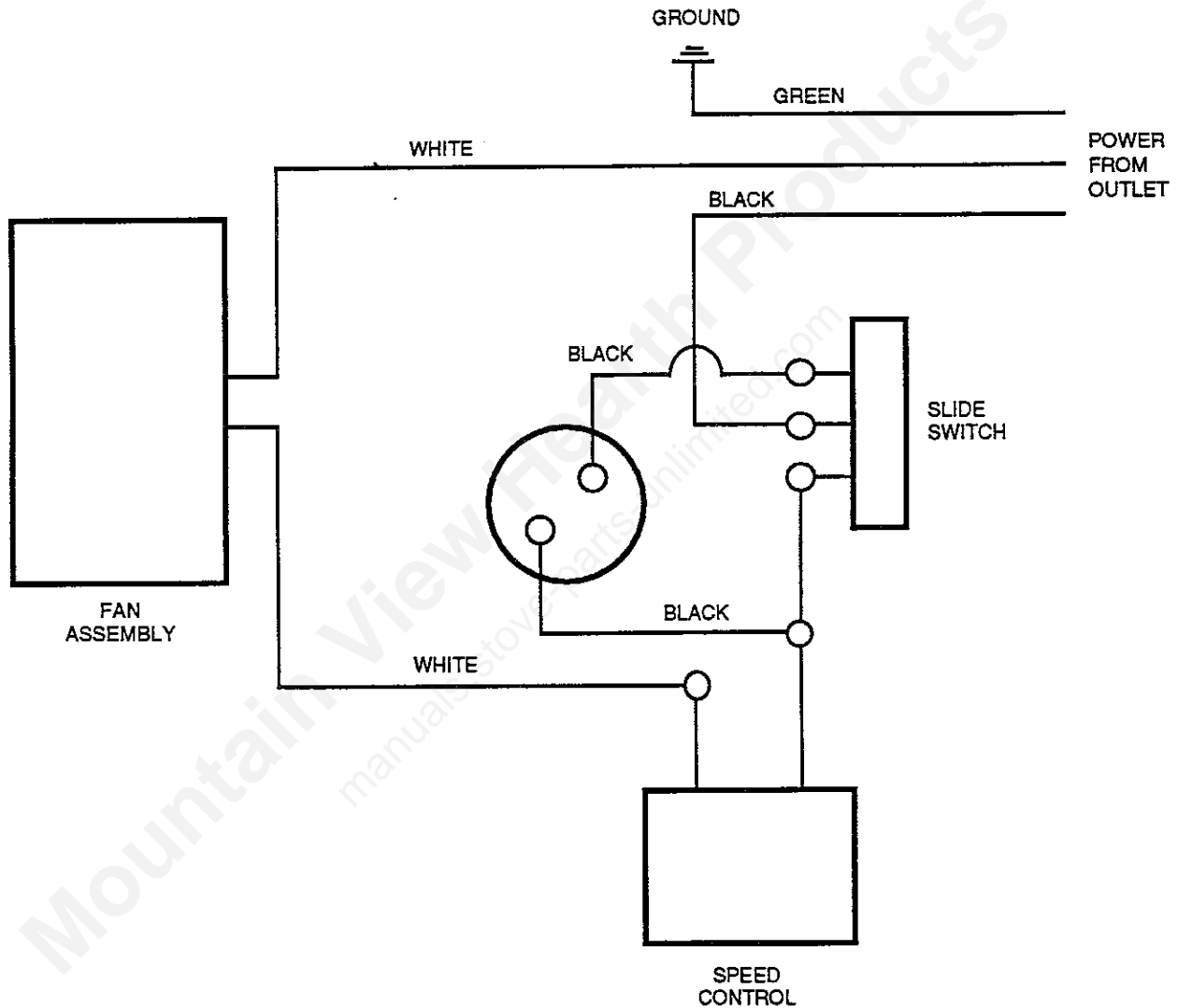
All servicing should be done by a qualified service representative.

ELECTRICAL INSTALLATIONS

Attach GREEN (ground) wire from power supply cord to blower housing. The BLACK (hot) power cord connects to center post of Slide Switch. A BLACK wire (hot) is connected from one side of Slide Switch to one side of Thermo Snap Switch, another BLACK (hot) wire runs from the other side of Snap Switch and connects with "Power In" wire of the speed control. The "Power Out" wire (WHITE) from the Speed control is connected to one wire from the side of the Fan Assembly.

The other WHITE wire from the Fan Assembly connects to the WHITE (neutral) wire from the Power Cord. The grounding integrity is noncomplete.

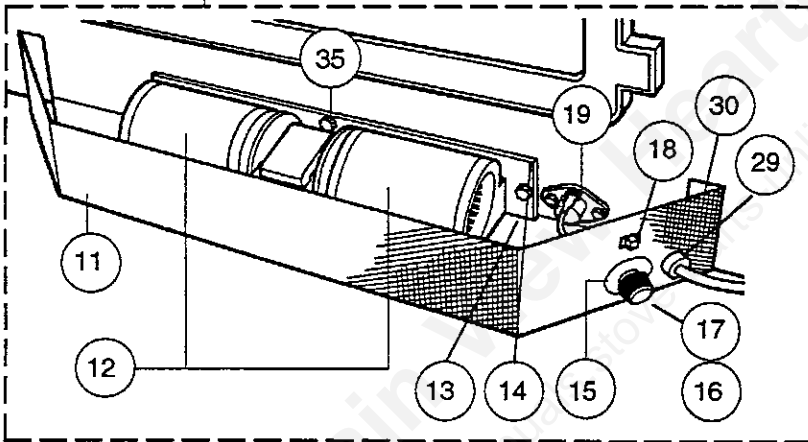
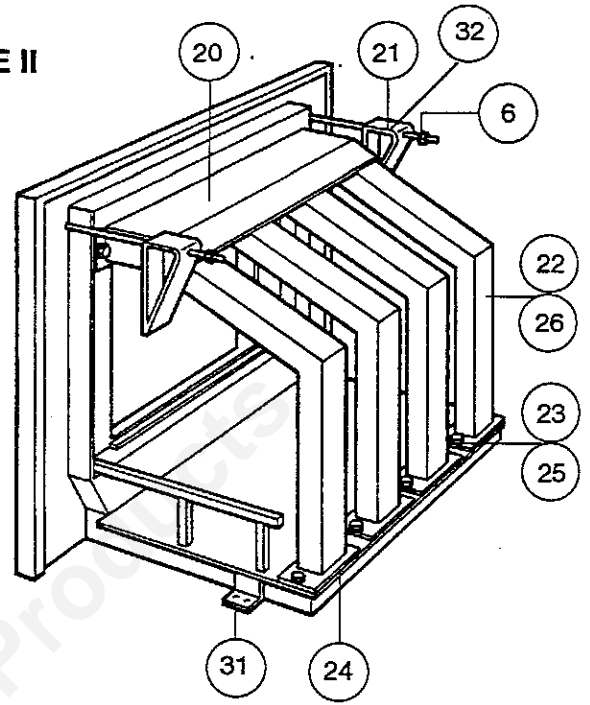
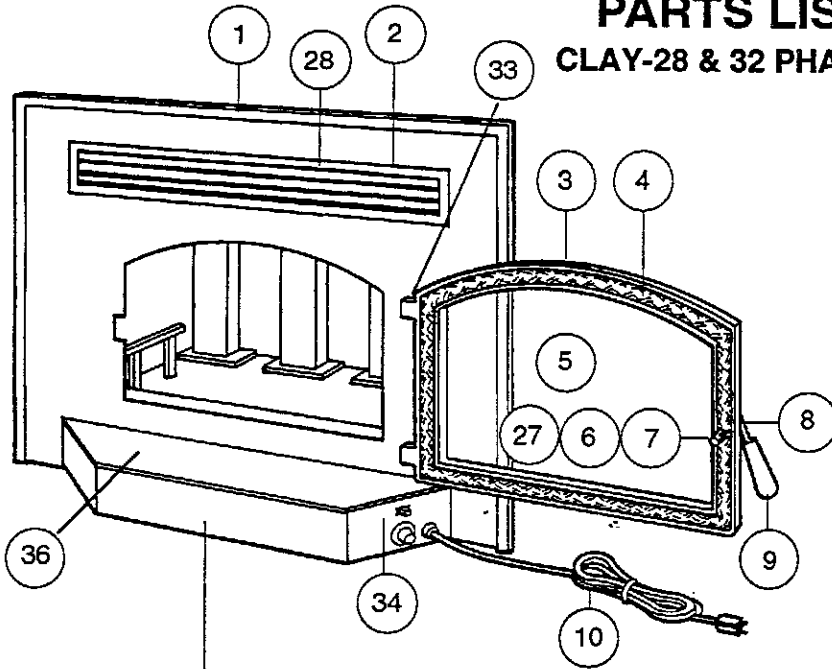
NOTE: The lead wires from the Fan Assembly should run away from the fireplace unit as opposed to towards the heat.



ALL WIRING MUST BE DONE BY A QUALIFIED ELECTRICIAN.

PARTS LIST

CLAY-28 & 32 PHASE II



ITEM	PART#	DESCRIPTION
1	95928	Gold Trim (2800)
	95932	Gold Trim (3200)
2	68270	Gold Grill
3	10294	Gold Plated Door (2800)
	10296	Gold Plated Door (3200)
4	99466	3/4" Rope (2800)
5	93940	Glass (2800)
	93965	Glass (3200)
6	22560	3/8" Hex Lock Nut
7	19260	Cam
8	19360	Handle
9	95660	Wood Knob
10	42365	Cord
11	10832	Screen
12	46700	Blower

ITEM	PART#	DESCRIPTION
13	10836	Blower Bracket
14	90920	Blower Gasket
15	41250	Label
16	42375	Reostat
17	41255	Knob
18	42370	Switch
19	45575	Snap Disc
20	10835	Baffle Plate
21	10834	Clamp
22	10828	Air Tube (2800)
23	21500	5/16 x 1/2" grade 5 bolt
24	90915	Tube Gasket
25	20200	5/16" lockwasher
26	10833	Air Tube (3200)
27	2207M	3/8" lockwasher
28	19365	Grill Clips
29	40799	heyco fitting
30	21100	#8 x 1/2" phms
31	20600	leveling legs
32	2547M	3/8" flat washer
33	21390	7/32 x 1" spring pin
34	32004BL	#8 x 1/2" tek
35	22760	1/4 x 3/8" hex bolt
36	132105	hearth plate

Limited Warranty

CIRCULATING HEATERS



United States Stove Company warrants to the original purchaser its Circulating Heaters against premature failure of any component due to workmanship, quality, or materials as follows:

TIME PERIOD:

Firebox.....	Three Years
Flue Collar.....	Three Years
All Doors (Feed and Ash).....	Three Years
Bi-Metal Thermostat.....	Two Years
Cast Iron and Steel Liners and Retainers.....	One Year
Grates.....	One Year
Door Gaskets.....	One Year
All Electrical Components (Including Blower).....	One Year
Cabinet and Trim.....	One Year

CLAIM PROCEDURE

Any defects should be reported to United States Stove Company or its dealer and/or distributor giving descriptions and pertinent data, including proof of purchase which will be returned upon request.

Providing the heater has been installed and used in accordance with the Owners Manual supplied with the heater, United States Stove Company will either:

- 1) Replace the defective part free of charge
- 2) Replace the heater free of charge
- 3) Where the defect is of a cosmetic (non-functional) nature, United States Stove Company will bear reasonable expense to refurbish the heater, including such items as welding, painting, and incidental labor. "Reasonable" is defined by terms of this warranty as \$25.00/hour with full refund for any purchase of parts.

NOT COVERED

Specifically not covered under terms of this limited warranty or any other warranty are problems relating to smoking or creosote. Smoking is attributable to inadequate draft due to the heater itself. Creosote formation is largely attributable to improper operation of the unit and/or draft as mentioned above. Also, not covered are:

- 1) Removal and re-installation cost
- 2) Service calls to diagnose trouble (unless authorized in writing by the manufacturer, distributor, or dealer)
- 3) Painted surfaces, brass or brass-colored surfaces
- 4) Damage or defect caused by improper installation, accidents, misuse, abuse or alteration
- 5) Transportation or shipping costs

LIMITATIONS AND EXCLUSIONS

- 1) United States Stove Company shall not be liable for incidental, consequential, special, or contingent damages anyone might suffer as a result of their breach of this written warranty or any implied warranty.
- 2) Should the heater be replaced by United States Stove Company "free of charge", all warranty obligations are thereby met.
- 3) Parts and/or service replacements made under the terms of this warranty are warranted only for the remaining period of the original heater warranty.
- 4) Without specific written exclusionary waivers, no one has authority to add to or vary this limited warranty, or to create for United States Stove Company any further obligation or liability in connection with this heater or any other applicable accessory. Any further warranty implication applicable to this heater or any applicable accessory is limited in duration to the same time period as the original statement in the above schedule.

YOUR DUTIES

- 1) This heater, including all applicable accessories, must be installed and operated in accordance with local authorities having jurisdiction and the instructions furnished with the Owners Manual.
- 2) You should keep as permanent record your proof of purchase or canceled check or invoice).

PROBLEM/RESOLUTION

- 1) As purchaser, you must first contact the dealer and/or distributor from whom you purchased your heater.
- 2) If within a reasonable period of time you do not receive satisfactory service from the distributor and/or dealer, write United States Stove Company, customer Service Department, including complete details of the problem and/or problems you are experiencing, details of your installation, your proof of purchase, and the heater serial number or test agency code number.

WARRANTOR

The warrantor of record is United States Stove Company, P.O. Box 151, 111 Industrial Drive, South Pittsburg, Tennessee 37380. Phone number 615-837-2100.

NOTE

This warranty gives you specific legal rights; and, you may also have other rights which vary from state to state.

IMPORTANT

Keep this warranty card for future reference.

We congratulate you on your selection of United States Stove Company and its products. As the oldest solid fuel manufacturer in the United States (since 1869), the United States Stove Company is very proud of its products, service, employees, and satisfied customers. As president of United States Stove Company, I would like to hear from you if you are not satisfied with the manner in which you have been handled by our distributor, dealer, representative, customer service department, parts department, or sales department. Please write me at the above address.

Sincerely,


Richard Rogers
President

OWNERSHIP RECORD

DEALER'S NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

DATE OF PURCHASE _____

PRODUCT MODEL NO _____

WARNOCK HERSEY / SERIAL NO. _____

NOTES _____

The Claytons have been safety tested by Warnock Hersey Inc.
to the following standard: UL 907.

**Registration
Card must be
completed and
mailed within
10 days of
purchase
to validate
warranty.**

UNITED STATES STOVE COMPANY WARRANTY REGISTRATION CARD

PLEASE PRINT CLEARLY

1) Name _____

Address _____ City _____

State _____ Zip _____ Phone (_____) _____

2) Dealer's Name _____

Address _____ City _____

State _____ Zip _____ Date of Purchase _____

3) Product Model No. _____ Serial No. _____

4) First learned of Clayton through: _____

5) Purchased this unit because: _____

6) Additional Comments: _____

Please complete and mail within 10 days of purchase to validate warranty