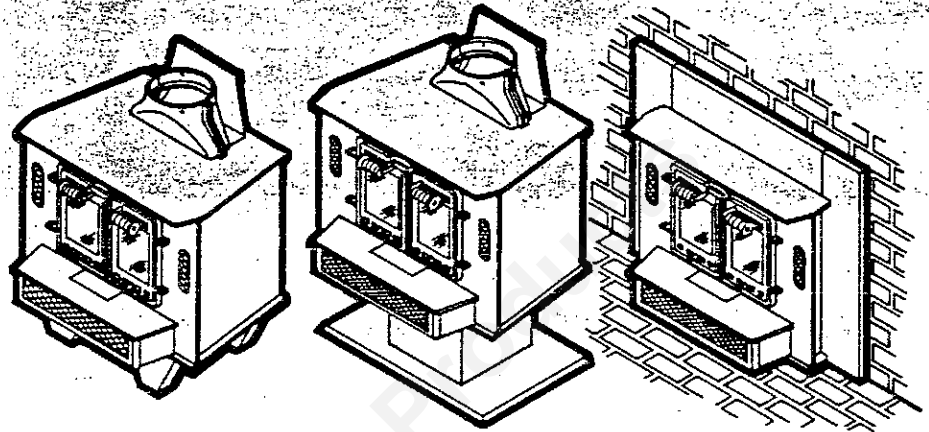


owners manual Forester Room Heater



Model 4100A / 4101A

FREE STANDING AND
FOR INSTALLATION IN MASONRY FIREPLACES

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

Improper Installation
Could Void Your
Warranty!



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.

DO NOT USE THIS HEATER IN A MOBILE HOME OR TRAILER

Save This Manual
For Future Reference.

- Assembly
- Installation
- Operation
- Repair Parts



UNITED STATES STOVE COMPANY

P. O. Box 5349 — 3500 North Hawthorne Street
Chattanooga, Tennessee 37406

FORM 85438B 11/87

CONGRATULATIONS!

You've purchased one of America's Finest Wood and Coal Burning Heaters. By heating with wood you're helping CONSERVE AMERICA'S ENERGY! Wood is our Renewable Energy Resource. Please do your part to preserve our wood supply. Plant at least one tree each year. Future generations will thank you.

tools and materials needed

TOOLS

- Pencil
- 6 Foot Folding Rule or Tape Measure
- Electric Drill (1 1/4")
- Drill Bit (For Sheet Metal Screws)-1/8" Dia.
- Screw Driver (Blade-Type)
- 3/8" Box, Open End or Small Adjustable Wrench
- Gloves

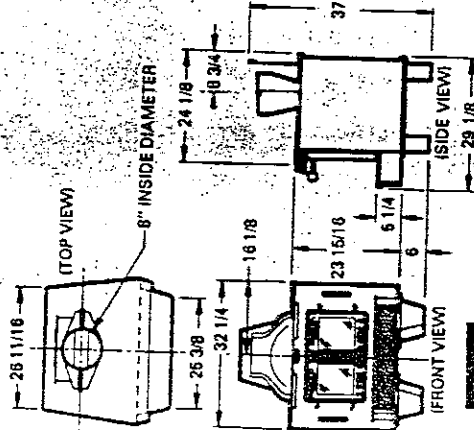
MATERIALS - FREE STANDING / PEDESTAL HEATER
8" Pipe, 8" Elbow, Collar and Thimble;
as required (24 gauge min.)

Sheet Metal Screws - (No. 10A x 1/2")
8" Inside diameter Underwriters Laboratories (U.L.)
Listed Residential Solid Fuel Factory-Built
Triplewall Chimney or existing masonry chimney;
Furnace Cement (Manufacturer Recommendations;
Rutland Black Code 78 or equivalent).

MATERIALS-FREESTANDING / PEDESTAL & INSERT
Floor Protector as specified on Page 4 or Page 7
of this manual.

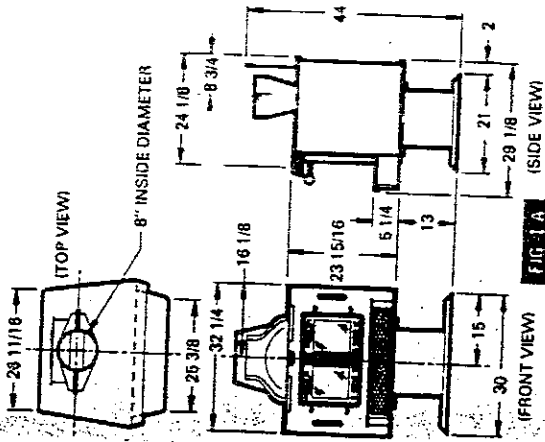
- 9/16" box, open end or small adjustable wrench
- 5/16" Nut Driver or 5/16" Socket w/Ratchet

Forester 4100A / 4101A Free Standing Room Heater Dimensions



4100A / 4101A (42CK)

Forester 4100A / 4101A Pedestal Room Heater Dimensions



4100A / 4101A (42PK)

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. Install the Fireplace Insert in a masonry fireplace only with a masonry chimney that is constructed in accordance to NFPA 211. DO NOT install the Fireplace Insert in a factory-built metal fireplace (Zero Clearance). 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.
 3. Always connect this heater to a chimney and vent to the outside. Never vent to another room or inside a building.
 4. The freestanding room heater requires a masonry or a UL Listed Residential Type and Building Heating Appliance Chimney.
 5. 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.
 6. Make sure the masonry chimney is high enough to give a good draft.
 7. 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 11.
 8. A grate may be used in this heater. Bituminous or anthracite coal can be used. (See page 10).
 9. DO NOT BE ALARMED IF HEATER SMOKE UPON INITIAL FIRING. The special paint used on this heater must be cured during initial firing. This smoking will occur only on initial firing.
- UNLOADING TIPS** The 4100A/4101A Heater has a total weight of approximately 360 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 firebrick and air manifold from inside of firebox.
 3. Remove front grill on hearth assembly by loosening the (4) phillips head screws (2 on each side). (This is highly recommended to keep from bending this grill during handling).
- The above steps will take approximately 70 lbs. of weight out of the heater and should better facilitate locating the unit for installation.
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. DO NOT USE the coal bricks that are manufactured from coal dust and a wax-type binder.
 17. 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.** The firebox walls in this heater may become slightly distorted over a period use. The slight distortion does not affect the operation of the unit.

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

Locating The Free Standing Forester 4100A / 4101A Room 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 Solid Fuel Factory-Built Chimney (Fig. 10).

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 millboard having a thermal conductivity of $K=0.84 \text{ BTU in./ft.}^2 \text{ hr. deg. F.}$ with 28-gauge sheet metal or a UL listed floor protector.

MINIMUM CLEARANCE TO COMBUSTIBLE WALLS

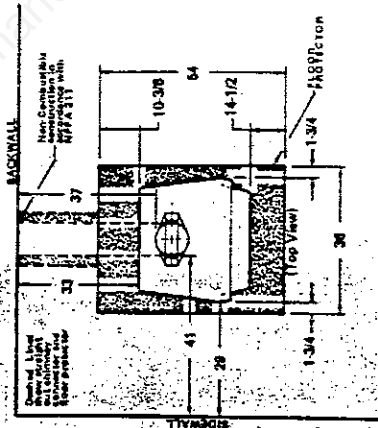


FIG. 2

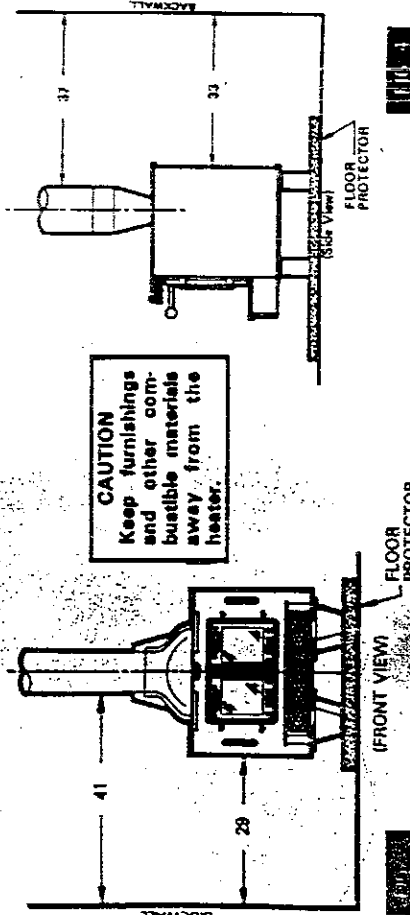


FIG. 3

Assembly Instructions for Forester 4100A/4101A Free Standing Room Heater

LEG INSTALLATION

1. Make sure the doors, firebrick, air manifold and/or other loose objects are removed from the firebox.
2. Rotate the heater backwards onto the back side.
3. Position the leg assembly on the bottom of the heater as shown in Fig. 5. Mark the hole locations using the leg assembly holes as locators. Using an electric drill and the drill bit (7/32" dia.) provided, drill (8) holes in the bottom of the cabinet in the locations shown in Fig. 5.
4. Mount the four legs (leg covers towards front of heater) using the (8) 1/4-20 self-threading screws provided, with an adjustable or 3/8" wrench.
5. Rotate heater upright on legs and place heater in desired location.
6. Install firebrick and air manifold as shown in Fig. 21.

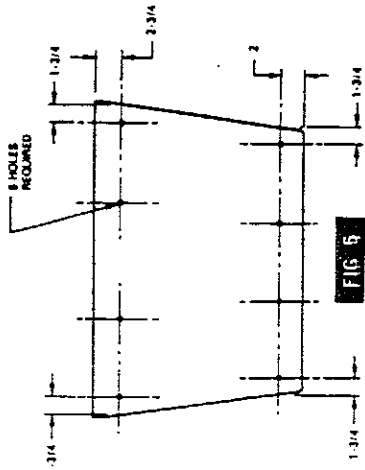


FIG. 5

FLUE ADAPTER INSTALLATION

1. Place flue gasket on flue adapter and install assembly into flue (Fig. 7).
2. Install flue tie down bars so that the ends rest on the inside shoulders of the flue adapter. The bolts welded to the bars should go through the holes provided in the brackets welded to the inside of the flue.
3. Secure assembly with 3/8-16 nuts and lockwashers provided.
4. Hold tie down bars in place and tighten nuts with an adjustable or 9/16" wrench.
5. Install doors.

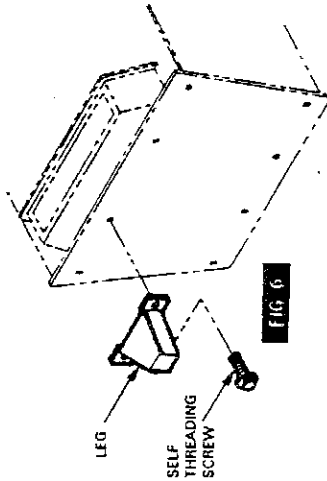


FIG. 6

DOOR INSTALLATION

1. When facing the front of the heater, the left hand and right hand doors are to be mounted on the hinge pad rods that are located on the front of the heater, by sliding the door hinge pads that are on the door over the rods. The left hand door is mounted to the left hand hinge pad rods and the right hand door is mounted to the right hand hinge pad rods.

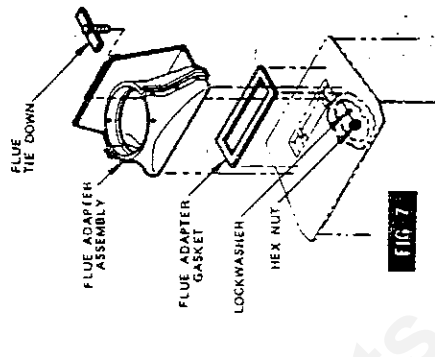


FIG. 7

NOTE: Both Handles are to fit horizontally when both doors are closed on unit as shown in Fig. 3.

NOTE

During opening and closing of the 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".

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. 3, item 5).

Look at Fig. 8. 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. 9), 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. 8).

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 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. 10).
 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.
 8. 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 REGULATORS (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.

FLUE CONNECTION - NON-COMBUSTIBLE WALL

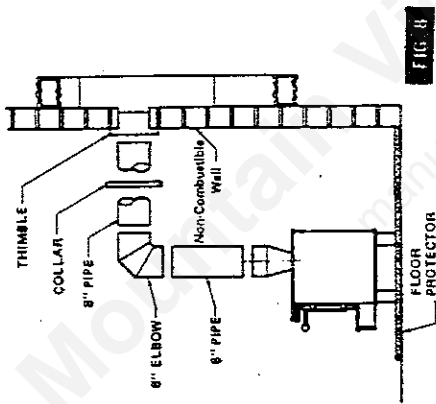


FIG. 8

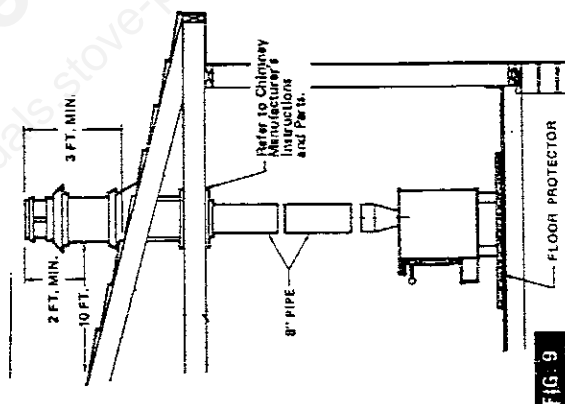


FIG. 9

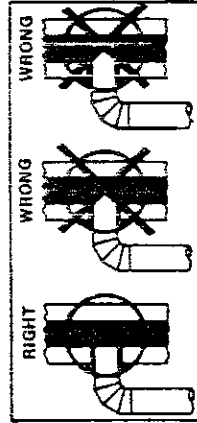


FIG. 10

Forester 4100A / 4101A Fireplace Insert Dimensions

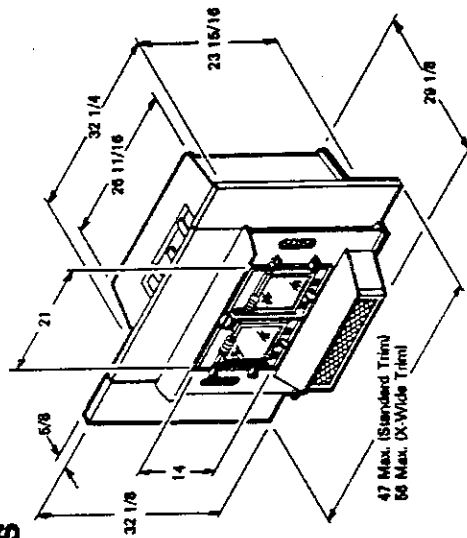


FIG. 11

Minimum Clearances To Combustible Surfaces

The clearances shown in Fig. 12 below must be maintained between the edge of the Fireplace Insert and decorative wooden mantels or mantel supports. If the wood trim or mantel of your fireplace is closer to the insert than these dimensions, they must be moved to at least the dimensions shown. Failure to observe these clearances could result in ignition of the mantel or wood trim.
The brick or stone hearth extension of your

fireplace must extend a minimum of 18" in front of the Fireplace Insert. Clearance to any combustible wall must be a minimum of 22" as shown in Fig. 12.

CAUTION
KEEP FURNISHINGS AND OTHER COMBUSTIBLE MATERIALS AWAY FROM THE FIREPLACE INSERT.

IMPORTANT: (Fig. 13)

The distance from the fireplace front surface to the front edge of the insert top must be within the dimensions shown. Make sure the flue opening on the fireplace insert completely clears the lintel of the fireplace. This will insure a proper draft.

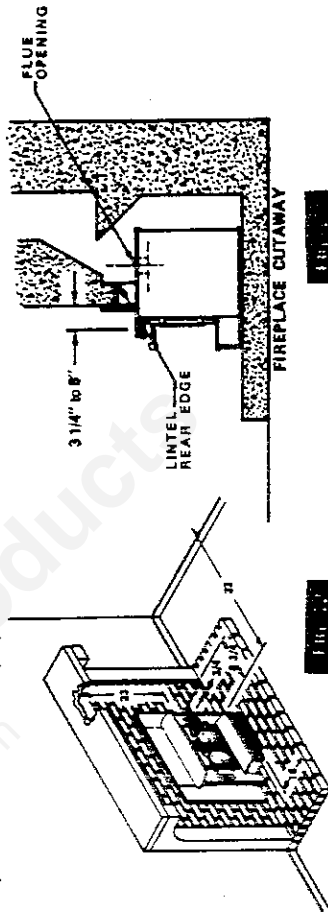


FIG. 12

FIG. 13

locating the Fireplace Insert

The Fireplace Insert is to be located in an existing solid masonry fireplace. This fireplace should be constructed per NFPA 211. **DO NOT INSTALL THIS FIREPLACE HEATER IN A FACTORY-BUILT METAL OR ZERO CLEARANCE FIREPLACE.**

The fireplace must have a masonry chimney with an approved flue tile liner. Inspect the chimney carefully to be sure that it is clean and that the tile and masonry is in a safe condition.

Measure the fireplace width, height and depth as shown in the following Table. The fireplace opening dimensions must fall within the dimensions shown in this Table for proper and safe installation.

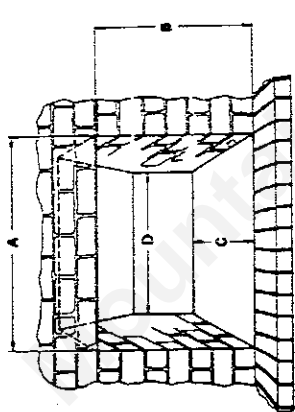


FIG. 13 Fireplace Opening Dimensions

FIREPLACE OPENING DIMENSIONS	41084101 FIREPLACE INSERT	
	MORE THAN	LESS THAN
A	32 1/2"	63"
B	24"	36"
C	16"	
D	27"	

installation instructions

1. **DAMPER** - The damper in the masonry fireplace must be removed or blocked open. The handle for the damper should be completely removed so that it cannot accidentally cause the damper to close when the Fireplace Insert is installed.

2. **LEVELING** - The Fireplace Insert must be level when it is installed to assure a uniform burn and to facilitate a proper fit of the trim to the front of the masonry fireplace. In addition to being level, the Fireplace Insert should be flush with the hearth extension so that the Fireplace Insert can easily slide into or out of the fireplace opening. A method is shown below for making the Fireplace Insert level and flush with the hearth extension:

LEVELING METHOD - If the bottom of your present fireplace is uneven or is lower than the hearth extension, it may be filled with ready mixed concrete. By mixing the concrete a little on the wet side, it will flow and be virtually self leveling.

U. S. Stove also offers a leveler roller kit for use with this Fireplace Insert (Kit No. 42LV. See Page 19).

If you have an ash cleanout door, it should be lifted enough to sit flush with the new fireplace hearth.

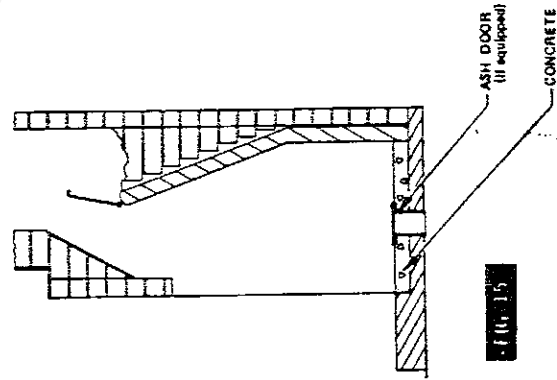


FIG. 15

assembly instructions

After the fireplace hearth has been leveled, the Fireplace Insert should be slid into position. Carefully check to see that the flue opening in the Fireplace Insert is unobstructed and that the smoke leaving the insert can rise directly into the fireplace chimney. (See Fig. 13).

The cast iron Fireplace Insert doors may be removed by lifting them off their hinges. Next remove the firebrick, air manifold and/or other loose objects. This will help reduce the weight of the Fireplace Insert, making it easier to slide in and out.

TRIM ASSEMBLY

- Slide the Fireplace Insert into the fireplace to the depth desired within the limits of installation. (See Fig. 13).
- Place trim panels on the insert taking care to insure panels fit flat with the face of the fireplace. The panels should be aligned with one another to prevent gaps between the panels.
- Mark the insert at the upper and the lower edge of the trim panels with a pencil.
- Remove trim panels and slide the insert out of fireplace about 12 inches.
- Replace each panel to the location marked.
- Using an electric drill and the 7/32" dia. drill bit provided, drill through bracket mounting hole (slot) through the cabinet of the insert.

CAUTION: DO NOT DRILL THROUGH THE FIREBOX OTHERWISE SMOKE AND COMBUSTIBLE GASES WILL LEAK INTO THE ROOM WHEN THE FIRE IS BUILT IN THE INSERT.

- Mount the trim panels using a 3/8" or adjustable wrench and the (6) 1/4-20 self threading screws provided. (Fig. 16).

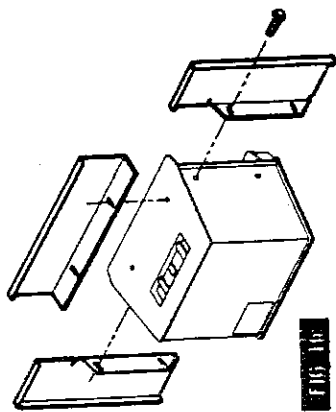


FIG. 16

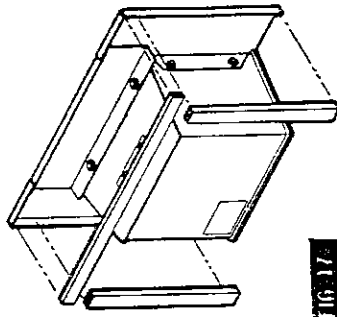


FIG. 17

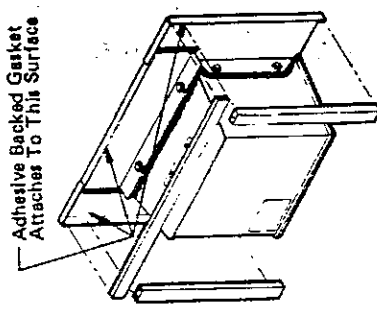


FIG. 18 (OPTIONAL)

OPTIONAL
Using furnace cement, carefully run a bead of cement around the backside of the trim to seal all air leaks. (Fig. 18).

GASKET INSTALLATION

The adhesive backed gasket attaches to the back side of the trim that you've just installed. This gasket will seal against the brick front of your fireplace (Fig. 17).

- Measure and cut the gasket material into three pieces. The two side pieces are 30 1/2" long. The top gasket is cut according to length required.
- Carefully remove the backing from the top gasket and install it across the full width of the top trim.
- Remove the backing from each side trim gasket and install them starting from the bottom and working up.
- Slide the Fireplace Insert back into your fireplace until the gasket seals securely against the fireplace front.

NOTE: If your fireplace front is irregular preventing the gasket from completely sealing, please order additional gasket material. (U. S. Stove Gasket Part No. 88065) It is important that the fireplace trim seal against the front of your fireplace to obtain proper draft and drawing in the chimney and to prevent heat loss when the Fireplace Insert is not in operation.

Operating Instructions

WOOD FUEL

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 the fire directly on hearth.

FUEL — COAL

The Forester 4100/4101 is also designed to burn anthracite (hard) or bituminous (soft) coal. Use U. S. Stove grate 42CG or G22 for burning coal fuel.
NOTE: When 42CG grate is used, air manifold (Key No. 2, page 12, 16 and 17) must be removed.

LIGHTING INSTRUCTIONS

1. Open the air inlet shutter on each door (See Fig. 20).
2. Open the damper fully. This can be done by pushing the damper arm all the way to the back of the unit.
3. The damper handle is in front just above the doors.
4. Open both doors and place paper and kindling in the firebox.
5. Light the fire and close the doors until the kindling is burning.
6. 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 damper (Fig. 19).
2. Fuel should be added in small amounts to give more complete combustion and uniform room temperature.
3. The Fireplace heater may be used with the doors open or closed. When the doors are open, place the fire screen which covers the entire fireplace heater front opening on the hearth extension. (U. S. Stove Kit 41FS). Have doors fully open or fully closed. Do not use the heater with the doors partially open.
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. Dispose of hot ashes properly (see Note 13, page 3).
6. Please keep hearth 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
- 2) MEDIUM FIRE MODE:
 - a) DAMPER—half closed/open
 - b) AIR INLETS—half closed/open
 - c) BLOWER—automatic or manual setting
- 3) HIGH FIRE MODE:
 - a) DAMPER—half to fully open
 - b) AIR INLET—fully open
 - c) BLOWER—manual or automatic.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 (22" 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.

WARNING

Fireplace inserts equipped with doors should be operated only with the doors fully open or the doors fully closed. If the doors are left partly open, gases and flames may be drawn out of the fireplace insert front opening, creating risks and hazards from both fire and smoke.

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. Keep all such liquids well away from the heater while it is in use.

chimney maintenance

Creosote and Soot - 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.

When coal is burned, the products of combustion combine with moisture to form a soot residue which accumulates on the flue lining. When ignited, this soot makes an extremely hot fire.

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 .06 to .08 w.c. is suggested for proper burning of this unit when using wood or bituminous coal as fuel. When using anthracite coal, this draft reading is a minimum reading.

service hints

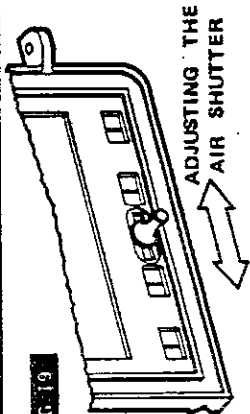
Do not expect a heater to draw. It is the chimney that creates the draft. Smoke spillage into the house or excessive build up of water or creosote in the chimney are warnings that the chimney is not functioning properly. Correct the problem before using the heater.

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 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 chimney does not seem to draw or if smoke spills into the house from around the trim, be sure that

OVERFIRING OF THE HEATER MAY CAUSE A HOUSE FIRE. IF A UNIT OR CHIMNEY CONNECTOR GLOWS, YOU ARE OVERFIRING.

FIG. 19



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.

the trim gasket is sealing tightly against the fireplace front.

6. 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. 10)

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.

blower operation

The blower assembly is equipped with a thermostat designed to automatically switch on the blower 25 to 35 minutes after firing the heater (see Fig. 20-A). The thermostat can easily be adjusted to cause the blower to switch on either sooner or later, if desired. To make blower turn on earlier, rotate the indicator on the thermostat to a lower position (towards 'A'). To make blower turn on later, rotate the indicator to a higher position (towards 'E'). Use a standard flat-blade screwdriver to turn the indicator on the thermostat. To locate thermostat, refer to repair parts drawing and list (Key No. 1) on pgs. 14 & 15. **NOTE:** When burning coal, the blower will take longer to switch on at the automatic setting. This is due to the elevation of the bed of coals. (U. S. Stove Model 42CG Coal Grate).

AUTOMATIC OPERATION

1. Plug the service cord into a 120V., 60 HZ outlet.
2. Switch the toggle switch to the auto (automatic) position.
3. The blower will switch "ON", automatically when the firebox reaches proper temperature.

NOTE: The time period needed for the blower to operate on automatic depends on the mode of operation and setting on the thermostat (see p. 10 "Operating Instructions and Tips").

MANUAL OPERATION

1. Plug the service cord into a 120V., 60 HZ outlet.
2. Switch the toggle switch to the man. (manual) position.

NOTE: Keep all debris, ashes and any other objects away from blower hearth as it may cause permanent damage to blower and void the warranty.

FIREBRICK PLACEMENT INSTRUCTIONS

1. Place (5) firebricks side by side with the 4-1/2" side facing the backwall. (See Fig. 21).
2. Place the remaining (5) firebricks end to end with the first firebricks.
3. Install the air manifold with the square end tabs towards the front of the heater and seated down between the firebox front and firebrick. (Fig. 21).

Rotate here
with Flat-Blade
Screwdriver

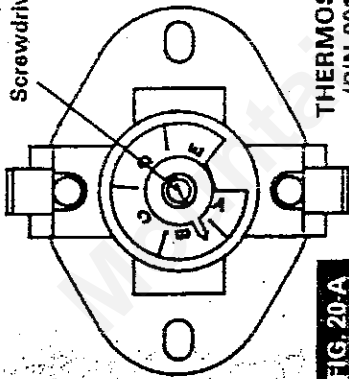
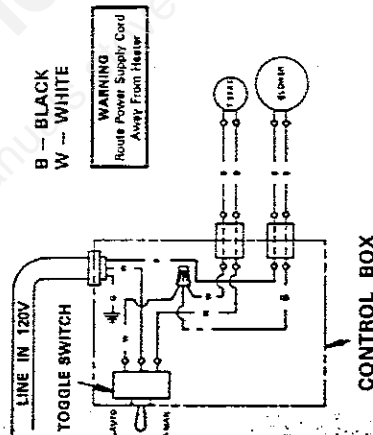


FIG. 20-A

THERMOSTAT
(P/N 80146)

FIG. 20-B



Door Handle Replacement Instructions

1. Remove handle(s), washer(s), door latch and 7/16" nut(s) from door(s).
2. Assemble right hand door handle as shown in Fig. 22. Slide handle into hole at the top of door. Add (2) washers and latch (making sure handle is horizontally - 3 o'clock position, hole will be 30° off of vertical centerline of latch - 11 o'clock position; bent part of latch will be on the right when looking at heater from front). Next, add (1) 7/16"-20 nut onto threaded shaft of handle and tighten.

NOTE: BOTH HANDLES ARE TO FIT HORIZONTALLY WHEN BOTH DOORS ARE CLOSED ON UNIT AS SHOWN IN FIG. 3. Page 4.

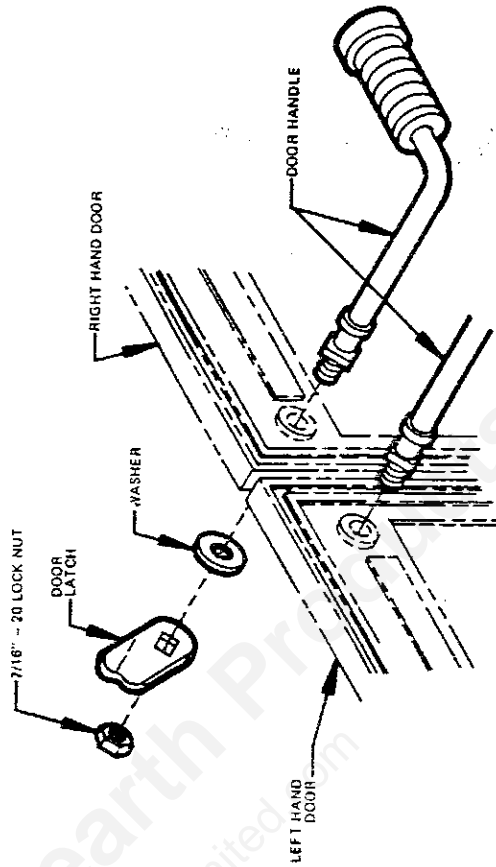


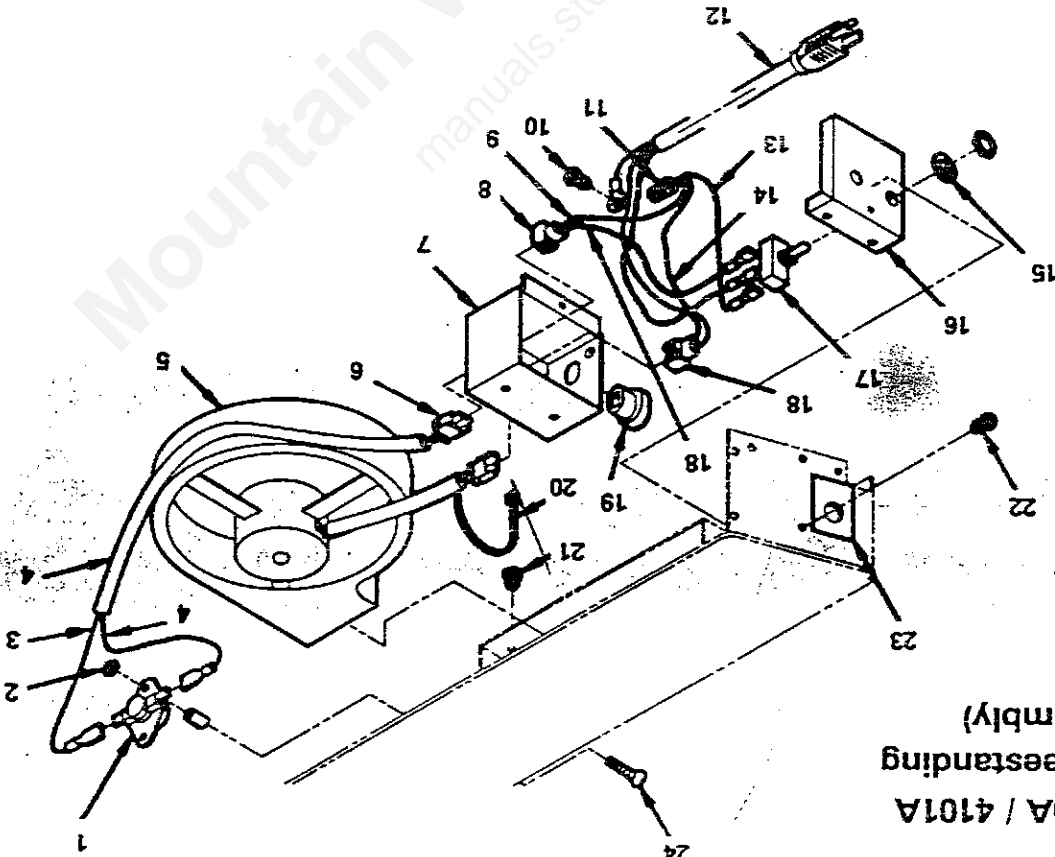
FIG. 22

NOTE

During opening and closing of the 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

4100A /4101A Blower Assembly



repair parts
Forester 4100A / 4101A
Insert and Freestanding
(Blower Assembly)

Key No.	Part No.	Description
*	83110	Square Nut (10 - 24) (4 Req'd.)
1	80148	Thermostat
2	83234	Hex Nut, #8-32 (2-Req'd.)
3	80122	Jumper Wire (2 Req'd)
4	80120	Vinyl Tubing
5	80115	Motor
6	80092	Male Connector (2 Req'd.)
7	22061	Box, Control
8	80094	Connector, Female ** (2-Req'd.)
9	80119	Wire, Jumper
10	83220	Screw, Thread Cutting
11	80008	Nut, Wire
12	80016	Cord, Power Supply
13	80118	Wire, Jumper
14	80151	Wire, Jumper
15	83240	Washer, Lock (Internal Tooth)
16	22062	Cover, Control Box
17	80004	Switch, Toggle
18	80117	Wire, Jumper
19	80109	Bushing, Strain Relief
20	80123	Tie, Cable (2-Req'd.)
21	83245	Screw, Sheet Metal (10A.x3/8 HX W HD serrated) (2 Req'd.)
22	83222	Screw, Sheet Metal (10B.x3/8 HX W HD serrated) (2 Req'd.)
23	85444	Label, Blower Control
24	83235	Screw, Machine (# 8 - 32 x 1 SL FH HD) (2-Req'd.)
*	67822	Blower Assembly Complete
*	41BH	Blower Hearth Assembly Complete

* Not Shown
** Includes two terminals per connector

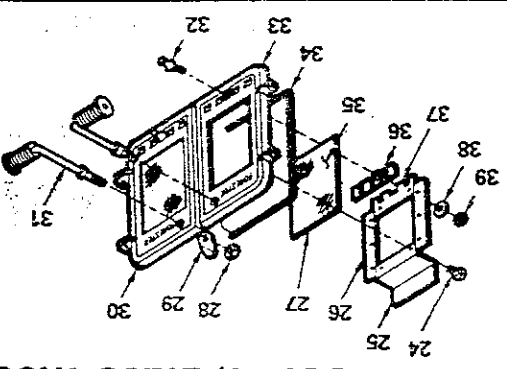
repair parts

MODEL NUMBER 4100A / 4101A

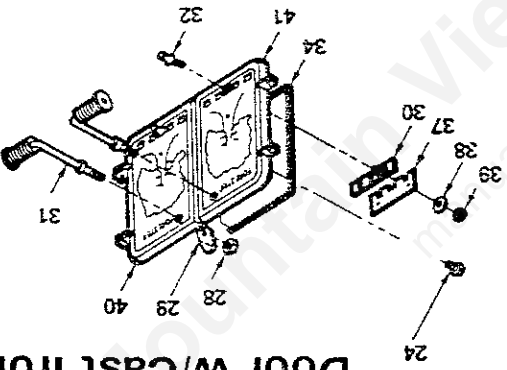
Key No.	Part No.	Description
1	89066	Firebrick (10 Req'd.)
2	22307	Manifold, Air
3	22049	Damper, Flue Outlet
4	83002	Washer, Lock 1/4 (split) (3 Req'd.)
5	83072	Nut, Hex - 1/4" - 20 (3 Req'd.)
6	22048	Arm, Damper Adjustment
7	83102	Screw, Machine - 1/4 - 20 x 1-1/4 SL FL HD (3 Req'd.)
8	83267	Fastener, Pushnut (2 Req'd.)
9	85388	Nameplate, "Forester"
10	69003	Plate, Hearth Extension
11	22308	Panel, Hearth Extension Bottom
12	67815	Hearth Extension Grill Assembly
13	89233	R/H Hearth Trim (Brass Plated)
14	89219	Hearth Trim (Brass Plated)
15	89224	L/H Hearth Trim (Brass Plated)
16	83005	Screw, Machine - #10 - 24 x 1/2 PH TR (4 Req'd.)
17	83236	Screw, Machine - 1/4 - 20 x 3/4 HZ F (4 Req'd.)
18	83192	Nut, Clip (#10 - 24) (4 Req'd.)
19	83166	Screw, Sheet Metal - 10A x 1/2 SL HX BLK (6 Req'd.)
20	85442	Label, Hearth Extension
21	89221	L/H Cabinet Top Trim (Brass Plated)
22	89223	Cabinet, Top Trim (Brass Plated)
23	89222	R/H Cabinet Top Trim (Brass Plated)
24	83202	Screw, Machine - #10 - 24 x 3/8 PH RD PLN (20 Req'd.)
25	22424	Retainer, Glass Top (2 Req'd.)
26	21781	Retainer, Glass Side (4 Req'd.)
27	226025V	Gasket, Glass (2 Req'd.)
28	83243	Nut, Lock - 7/16" - 20 NF (Thin-Top) (1-Req'd.)
29	22083	Latch, Door
30	22315	Door, Right Hand (For Glass Inset)
31	89189	Handle, Door (2 Req'd.)
32	40022	Knob, Draft Control (2 Req'd.)
33	22313	Door, Left Hand (For glass inset)
34	22319	Gasket, Rope (1/2") 36" long (2 Req'd.)
35	89165	Glass (8" x 10") (2 Req'd.)
36	22314	Slide, Draft (2 Req'd.)
37	22316	Retainer, Glass Bottom (2 Req'd.)
38	83091	Washer, Flat (#10) (2 Req'd.)
39	83244	Nut, (Keys #10-24) F (2 Req'd.)
40	22318	Door, Right Hand (Solid Cast)
41	22317	Door, Left Hand (Solid Cast)
*	69004	Complete L/H Door Assembly (4100)
*	69006	Complete R/H Door Assembly (4101)
*	69005	Complete R/H Door Assembly (4100)
*	69007	Complete R/H Door Assembly (4101)
*	85438	Owner's Manual (4100A / 4101A)

* Not Shown

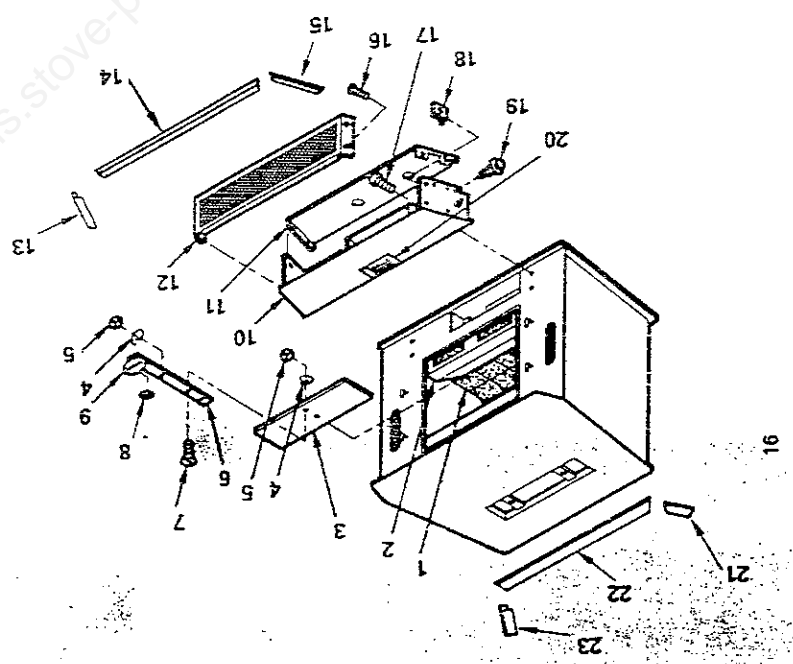
4100A
Door w/Glass Inset



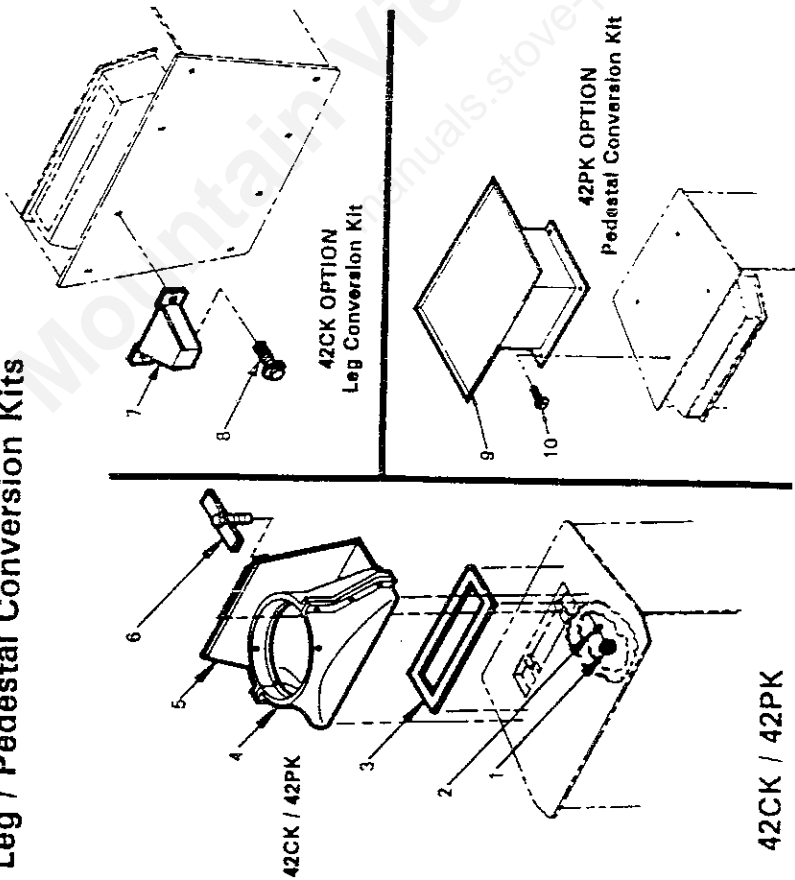
4101A
Door w/Cast Iron



repair parts
Forester 4100A / 4101A
Insert and Freestanding



Forester 4100A / 4101A Free Standing Room Heater Leg / Pedestal Conversion Kits



42CK / 42PK PARTS LIST

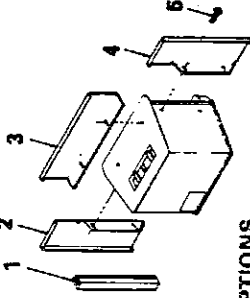
KEY	PART NO.	DESCRIPTION	QTY.
1	83238	Nut, Hex 3/8" - 16	2
2	83237	Washer, Lock 3/8 (split)	2
3	88054	Gasket, Flue	1
4	67921	Flue Adapter Assembly (8")	1
5	22205	Shield, Flue Adapter	1
6	67920	Flue, Tie-Down	2
7	67840	Legs	4
8	83236	Screws, Thread cutting 1/4-20 x 3/4 HX W (Type F)	8
9	67924	Base Pedestal	1
10	83236	Screws, Thread Cutting 1/4-20 x 3/4 HX W (Type F)	4
11*	89185	Drill, Twist (Black Type F) (7/32" dia.)	1

* Not Shown

Forester 4200A / 4201A Fireplace Insert KIT #42MB - MATTE BLACK TRIM KIT #42MBW - MATTE BLACK TRIM (X-WIDE) PARTS LIST

KEY	PART NO.	DESCRIPTION	QTY.
1	42MB		
	42MBW		
1	88055	Gasket (10' Roll)	1
2	22067	Trim, R/H	1
3	22068	Trim, Top	1
4	22066	Trim, L/H	1
5	83236	Screws, Thread cutting 1/4-20 x 3/4 HX W (Type F)	6
6*	88056	Cement, Furnace (4 oz. Tubel) (Optional not supplied with kit)	1
7*	89185	Drill, Twist	1

* Not Shown

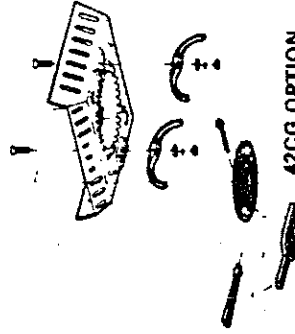


OPTIONS 42MB / 42AP / 42MBW / 42APW

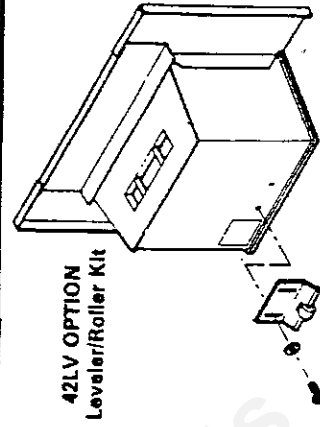


41FS Option Firescreen Kit

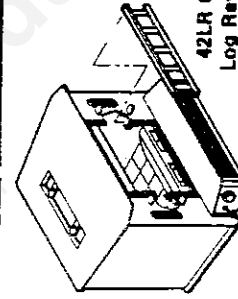
Optional Kits For Forester 4100 / 4101 Heater



42CG OPTION Coal Grate Kit



42LV OPTION Leveler/Roller Kit



42LR OPTION 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.



LIMITED WARRANTY

FIREPLACE INSERT/FREESTANDING HEATERS

WARRANTY:	The United States Stove Company warrants its solid fuel fireplace insert/freestanding 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 5 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 OR "OPTIONS"

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 AND SERIAL NUMBER WHICH IS ON THE NAMEPLATE LOCATED ON THE INSIDE OF THE BACK ON THE HEARTH EXTENSION.

WHEN ORDERING REPAIR PARTS OR OPTIONS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST:

1. The PART NUMBER
2. The PART DESCRIPTION
3. The MODEL NUMBER: 4100A Forester Room Heater
 4101A Forester Room Heater
4. The SERIAL NUMBER: _____

BEFORE INSTALLING YOUR HEATER, CHECK THE ABOVE APPROPRIATE BOX AND FILL IN THE SERIAL NUMBER OF YOUR HEATER IN THE SPACES PROVIDED ABOVE.

UNITED STATES STOVE COMPANY

P. O. Box 5349 - 3500 N. Hawthorne Street - Chattanooga, Tennessee - (615) 698-3435