

BRUNCO

“Tame Those Wild Heating Bills with a Brunco”



BRUNCO Hearthglow Stove



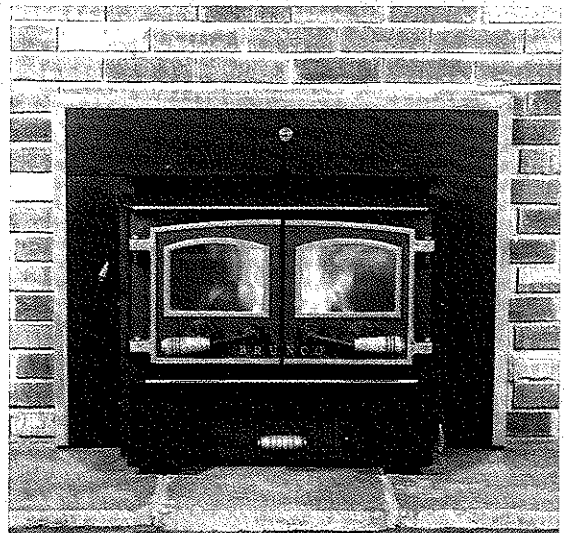
BRUNCO Firelite Stove



BRUNCO Spitfire Stove



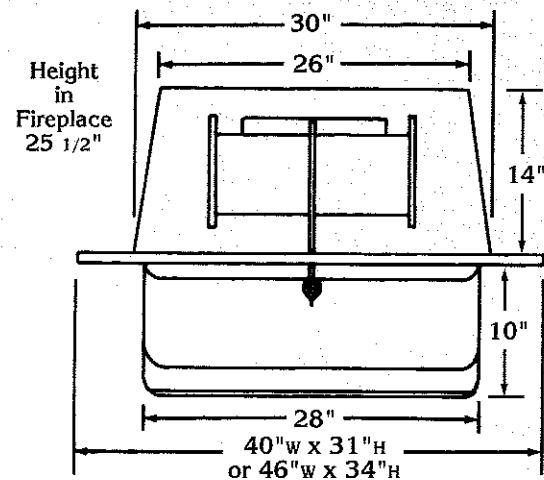
BRUNCO Firelite Fireplace Heater
Firelite Backvent - 24" to top of flue outlet



BRUNCO Hearthglow Insert

Specifications:	Hearthglow Stove	Hearthglow Insert	Firelite	Spitfire
Firebox Length	23"	23"	29"	18"
Blower CFM	265	200	150	265
Fuel	Coal	Coal	Coal	Coal
Flue Size	8"	4 1/2" x 12"	6"	6"
Approx. Sq. Ft.	2000	2000	1800	1500
Ash Pan	Standard	Standard	Standard	Standard
Depth	27"	24"	18 1/2"	20 1/2"
Height	34"	25 1/2"	27" plus legs	33 1/4"
Width	27 1/2"	30"	34"	23"
Weight	550 lbs.	560 lbs.	470 lbs.	380 lbs.
Shaker grates	Standard	Standard	Standard	Standard
Mobile Home	No	No	No	Yes
Clearance from Combustibles:				
Hearth Extension	16"	16"	16"	16"
Shielded Mantel	N.A.	16"	16"	N.A.
Side	30"	10"	36"	36"
Rear	24"	N.A.	30"	30"
Vertical Flue	17"	N.A.	19"	18"
Horizontal Flue	18"	N.A.	18"	18"

Hearthglow Insert Dimensions:



- Circulation blowers are standard
- Brass doors as shown on Firelite Stove and Hearthglow Insert are optional
- 5 year limited warranty
- Cast iron shakable grate systems
- Coal burner - exempt from E.P.A. emission standards - Regulation 40 CFR 60

All solid fuel burners require class A chimneys, must be installed on approved non-combustible hearth and comply with wall clearance requirements. Check local building and fire codes and read owner's manual for details before installation.

Featuring Safety • Efficiency • Durability



Products of
L.B. Brunk & Sons, Inc.
Salem, Ohio 44460

Dealer:

Save These Instructions

Owners Instructions

For

Brunco Spitfire Coal Stove

**"All instructions must be in accordance with local
and state codes which may differ from this manual"**

**Manufactured by: L. B. Brunk & Sons, Inc.
10460 St. Rt. 45 N
Salem, Oh 44460**

BRUNCO SPITFIRE STOVE

General Instructions

The Brunco Spitfire is designed for use as a freestanding coal burning stove for home or mobile home use. It has been properly tested and labeled by Arnold Greene Testing Laboratories, Natick, Mass. The standard used for the testing and evaluation was Underwriters Laboratories, Inc. Standard for solid fuel type room heaters ANSI-UL 1482. This heater complies with federal regulation YOCFR60 as a coal burning heater. Use of any other solid fuel except for coal ignition purposes is a violation of federal E.P.A. clean air laws.

SAFETY NOTICE: IF THIS BRUNCO SPITFIRE STOVE IS NOT PROPERLY INSTALLED A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS. CONTACT YOUR LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

A) Check list of parts

1. Firebrick
 2. Grate Shaker Handle
 3. Blower & Cord
 4. Blower Speed Control
 5. Pkg. of Screws
- Optional parts - Mobile Home Kit

B) Assembly of Stove:

1. Install firebrick in place by slipping top of brick under retainer and lifting up and setting bottom of brick into place.

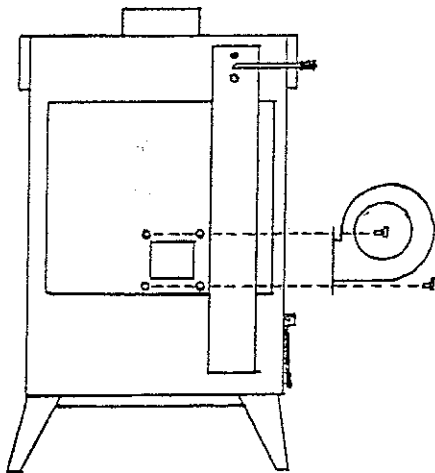


FIG 1

2. Install blower on back of stove with the *Four* screws provided as shown in diagram. The fan housing of the blower should be upward with the cord on the right side as you face the back of the right side as you face the back of the stove. This will keep the blower from interfering with the draft intake flap. A variable speed control is included with your stove and may be plugged into a regular 115 volt wall receptacle, giving you a convenient switch with adjustable blower speed.

3. The grates should be checked by putting the shaker handle on the extended grate and rocking back and forth.

C) Installation of Stove:

1. The Brunco Stove should always be installed on a noncombustible surface. This material should be applied to the floor underneath the stove extending in front 16", on the sides approx. 8", and out the back at least under the flue connection area of the heater, and 2" to either side of the connector. Floor protection material must be at least equal to 3/4" asbestos millboard.

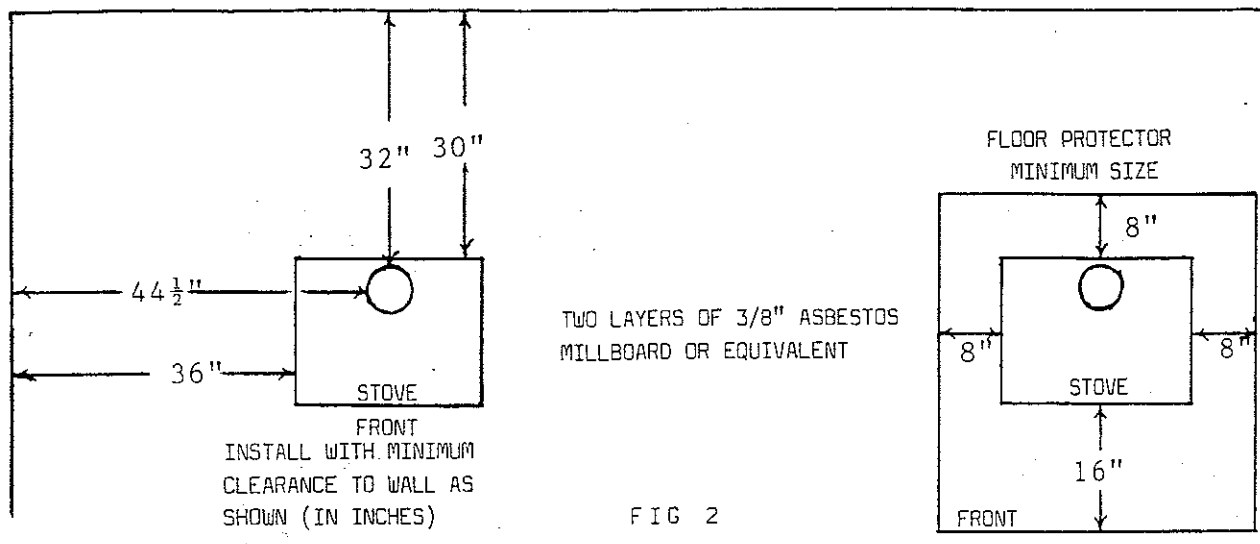


FIG 2

2. Install 30" from combustible wall to the back of 36" from the sides of the stove. Closer clearance may be achieved by use of approved noncombustible wall protectors of brick. Your local dealer will be able to assist you with these specifications. All home furnishings must be kept at least 36" from the stove to avoid the occurrence of fire.

3. Connect only to a 6" or larger class A masonry chimney or all-fuel factory built chimneys that are approved by Underwriters Laboratories. Use of aluminum type B gas vent for solid fuels is unsafe and prohibited by the National Fire Protection Association code. The chimney should extend at least three feet above the roof and at least two feet above the nearest point of roof within 10 feet of the chimney. The wall thimble or chimney connection must comply with local building and fire codes and should be of approved material and safety inspected by your local authorities.

In order for the smoke pipe to pass through any combustible wall or ceiling it must be an insulated or air cooled thimble designed and tested as such. If a masonry thimble is used it should be surrounded by at least 8" of solid masonry with a 1" air space before contacting any combustible material. Once the pipe passes through a wall or ceiling it is necessary to continue with a class A masonry or all-fuel factory built chimney to the termination for safety and performance.

4. Use at least 24 gauge pipe inside the room with at least 18" clearance from pipe to combustible material on wall or ceiling. It is not recommended to use more than one elbow in stove pipe. The chimney connection pipe should extend at least 2" into the chimney but not so far that it blocks air flow. Note that the smoke collar is designed for the pipe to fit inside. All creosote will not drip out the joints of the flue pipe. Drip free elbows are also recommended. Each joint should be drilled and sheet metal screwed. A damper is recommended in the smoke pipe approx. 1-2 feet above the stove when burning wood, or a barometric draft regulator may be used when burning coal. This will help to control the draft of the flue pipe so that overheating does not occur. A draft that is too low will often cause the stove to smoke. The longer the pipe length and the larger number of elbows, the greater the chance of dangerous creosote and ash build-up. The Brunco will achieve maximum heat output without lengthy pipes. All horizontal pipes should be tilted at least 1/4" per foot upward toward the chimney.

5. Fill out warranty registration with the model name and serial number of the unit. This information will be found on the name plate (on the back of the stove.) File the warranty copy in your file for future reference and mail the card to Brunco. This should be done at the time the unit is installed.

D) The first fire:

1. Blower should be plugged into regular 115 volt wall outlet and checked for good operation. The stove may be operated under normal conditions with the blower either in the on or off position. We recommend that the blower should be left running when the stove is burning at a hotter than average temperature.

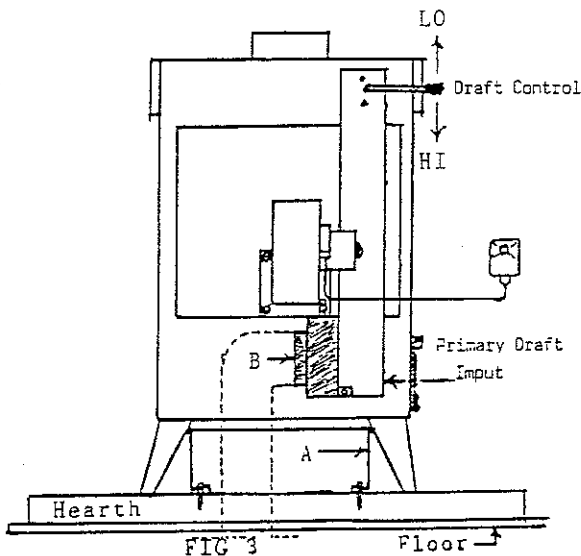
2. Burn a small newspaper fire in the stove to check the draft of the chimney. A poor drafting chimney may cause the stove to smoke. If this should be the case, necessary steps should be taken to improve the chimney draft.

3. Build a wood fire in the stove and fire up slowly so that the paint and stove can cure properly. There will be some smoke smell during the first few fires as the paint on the stove cures from the heat. The wood fire will then be used to ignite coal fuel. The use of wood for heat in this stove, except for coal ignition is a violation of U.S. E.P.A. clean air laws.

4. The glass window is designed for better heat performance as well as good looks. Treat it carefully and you will get very little breakage problem. It is designed to withstand both wood or coal heat. The glass may become smoked over when the stove is being used. You will find that a hotter fire will help to keep the glass clean.

5. Always use leather gloves when servicing an operating stove.

E) Mobile Home Installation:



1. When the Brunco Spitfire is used in a mobile home the same clearance and installation requirements apply. In addition a mobile home kit (available from the Brunco dealer) including the bolt down leg features and outside air supply box must be used.

A) The four leg fasteners must be hooked over the plate on the inside of the stove legs and lag screwed or bolted to the floor in such a way as to keep the stove from shifting during mobile home transport.

B) The outside air box should be bolted to the back of the stove next to the primary draft input.

Using the lower right hand bolt of the blower to secure as shown in diagram. A 4" diameter galvanized steel or aluminum ducting must be used to gain outside supply air by either extending through the floor or the wall behind the stove. All joints should be drilled and screwed together.

2. "WARNING" - DO NOT INSTALL IN SLEEPING ROOM.

"CAUTION" - THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL AND CEILING/ ROOF MUST BE MAINTAINED.

3. The chimney required for mobile home use must be a 6" diameter all-fuel class A, U.L. listed factory built chimney and shall be attached directly to the room heater and shall extend at least 3 feet above the part of the roof through which it passes. All roof-chimney terminators shall be able to be removed at or below an elevation of 13½ feet above ground level and reinstalled without the use of special tools. A spark arrester chimney cap should be used with at least 3/8" openings, but not larger than ½" in diameter openings. Insulated stainless steel chimneys such as Metalvent, Metalbestos, or Pro-Jet are three such approved chimneys.

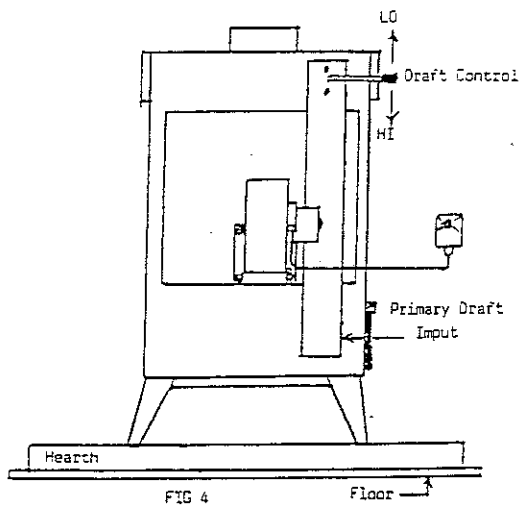
F) Operation:

1. Build your solid fuel fire directly on top of the cast iron shaker grates. No additional grate is needed. Ignite a small amount of wood fuel and then cover it with stove size bituminous coal which in turn will become ignited. The draft controls should be set for maximum output until the coal begins to burn. When the coal bed becomes hot, then more coal as needed may be added and the draft control settings should be set to the desired heating requirements.

2. A coal fire should not be built above the top of the firebrick, or the bottom of the loading door. The grates will need to be kept free of dead ash to gain maximum heat efficiency with coal.

3. A good grade of clean washed coal is recommended for use in this stove. It will achieve better, cleaner combustion and will not jam up the grates as badly and will make less clinker ash. A clean coal and proper draft settings will produce a finer ash rather than a clinker.

4. The bi-metal draft control should be adjusted so that the damper is just touching closed when the stove is burning at the desired temperature. The lever may be lowered to increase heat



output. The heat sensitive spring will automatically open or close the damper then to help maintain proper stove temperature. The bi-metal spring is activated by the temperature of the stove, not by room temperature.

5. The spinner draft knobs below the door may be opened as required to provide secondary air supply above the fire. Good air. The settings of these controls will vary somewhat with each chimney draft and installation and will need to be adjusted accordingly to achieve desired heat output. At no time should the stove be operated to such an extent that any portion becomes "Red Hot".

6. Ash pan should be emptied on a regular basis so that no ashes build up to the bottom of the grates. If ashes touch the grates it reduces draft efficiency and could cause the grates to burn out. Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible materials, pending final disposal. If 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.

7. 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 away from the heater while it is in use.

8. It is not recommended to leave the stove unattended at any time with the door open. **DO NOT** leave the ash door open at any time except to remove ashes.

9. 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. The chimney connector and chimney should be inspected at least once every two months during the heating season to determine if a creosote or soot buildup has occurred. If creosote or soot has accumulated, it should be removed at once to reduce the risk of a chimney fire. Cleaning may be done with mechanical chimney cleaners or wire brushes and rods that are available through your Brunco dealer. Also you will find certified chimney sweeps available in most areas who provide cleaning services.

10. The glass window in the door will need to be cleaned periodically. To do this, open the door and use a cleaner formulated to remove creosote and smoke or soot buildup. An oven cleaner may be used, but could etch the glass and cause it to smoke over even more quickly. Keep logs from hitting against the glass to prolong its life. Replacement windows are available from your Brunco dealer.

G) RECOMMENDED FUEL: The coal burning Brunco heater requires the use of nut size anthracite coal, or stove size bituminous coal fuel.

H) WARNING: The installation of this stove must comply with state and local requirements and be inspected by the state or local building inspector if required.

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

I) FURTHER INFORMATION: For further information on using your heater safely, obtain a copy of the National Fire Protection Assoc. publication "Using Coal & Wood Stoves Safely", NFPA no. HS-8-1974. Batterymarch Park, Quincy, MA 02269.

J) ENJOY the warmth and beauty of your new stove and use wisdom and common sense in the operation of the solid fuel heater. However inconvenient or unhandy, always put safety first.

CHECK LIST:

1. _____ Have you read all instruction?
2. _____ Is your chimney clean and of approved style?
3. _____ Do you have proper draft on the flue?
4. _____ Is the furnace installed to code?
5. _____ Do you have proper wall and floor clearance?
6. _____ Are the pipe joints screwed together?
7. _____ Is your wood well cured?
8. _____ Are you burning the proper fuel?
9. _____ Are all electrical connections correct and protected from hot areas?
10. _____ Have you sent in your warranty card.

PARTS LIST FOR BRUNCO SPITFIRE STOVE

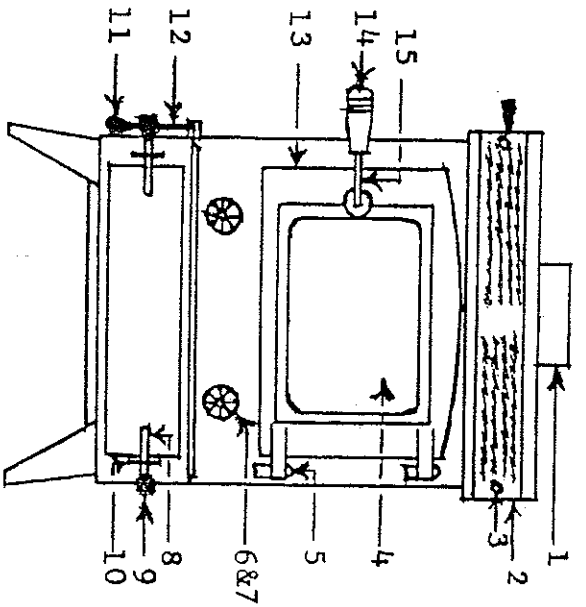


Figure #1

- 1 - SFS5 6" Smoke Collar Welded (1)
- 2 - SFS6 Air Deflector (1)
- 3 - SFS7 Deflector Bolts (2)
- 4 - SFS8 9 x 13 Hi-Temp Glass (1)
- 5 - SFS9 Hinge Pins (1)
- 6 - SFS10 Cast Iron Spin Dials (2)
- 7 - SFS11 Spin Dial Bolts & Nuts (2ea.)
- 9 - SFS12 Ash Pan Latch (2)
- 10- SFS14 Latch Plate Welded (2)
- 11- SFS15 Shaker Handle & Spring (2)
- 12- SFS16 Shaker Handle (1)
- 13- SFS17 Cast Iron Door (1)
- 14- SFS18 Wood Door Handle (1)
- 15- SFS19 Door Handle Rod (1)

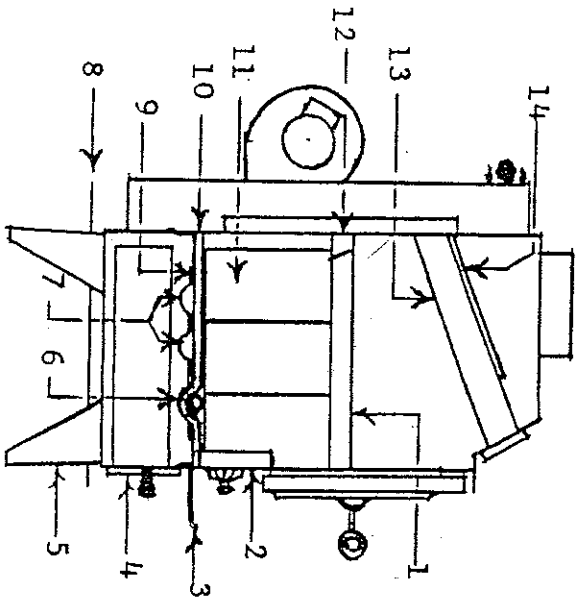


Figure #2

- 1 - SFS20 Side Brick Retainer Welded (2)
- 2 - SFS4 Vented Cast Iron Brick (1)
- 3 - SFS21 Dust Shelf Welded (1)
- 4 - SFS22 Ash Pan (1)
- 5 - SFS23 Legs Welded (4)
- 6 - SFS1 Long Cast Iron Grate (1)
- 7 - SFS2 Short Cast Iron Grates (2)
- 9 - SFS25 Grate Tie Bar & Three Keys (1set)
- 10- SFS3 Cast Iron Grate Support (2)
- 11- SFS26 1 1/4 x 4 1/2 x 9 Firebrick (10)
- 12- SFS27 Back Brick Retainer Welded (1)
- 13- SFS28 Heat Tubes Welded (4)
- 14- SFS29 Removable Baffle (1)

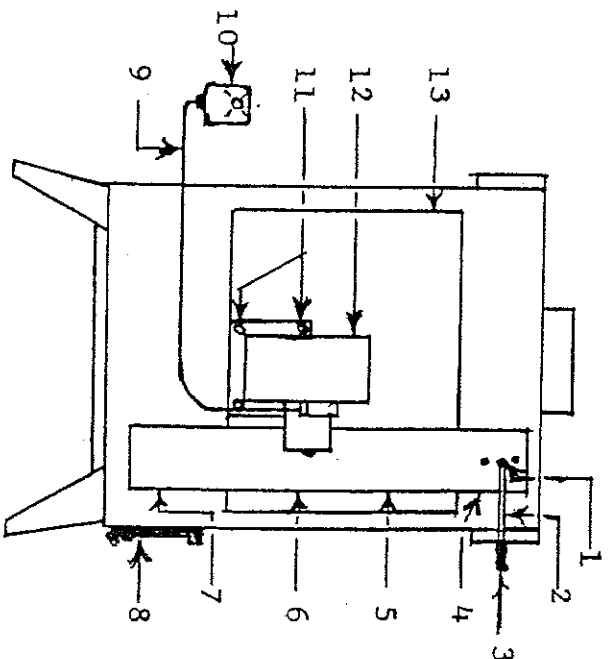


Figure #3

- 1 - SFS30 Coil Pivot Shaft (1)
- 2 - SFS31 Auto Draft Control (1)
- 3 - SFS32 Spring Handle (1)
- 4 - SFS33 Bimetal Coil Not Shown (1)
- 5 - SFS34 Linkage Chain " (1)
- 6 - SFS35 Auto Draft Assembly (1)
- 7 - SFS36 Auto Draft Flap Not Shown (1)
- 8 - SFS37 Shaker Handle Clip Welded (1)
- 9 - SFS38 Blower Cord (1)
- 10- SFS39 Vari Speed Control (1)
- 11- SFS40 Blower Mounting Screws (4)
- 12- SFS41 265CFM Blower (1)
- 13- SFS42 Hot Air Jacket Welded (1)
- SFS43 1/2" Fiberglass Door Seal (Not Shown)
- Loading Door Requires 5 Feet
- Ash Pan Requires 4 Feet
- SFS44 Optional Mobile Home Kit (Not Shown)