# Owners Instructions For Brunco Firelite Coal Stove May Be Used As A Freestanding Or Fireplace Hearth 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 FIRELITE COAL STOVE

#### General Instructions

The Brunco Firelite Stove is designed for use as a fireplace hearth stove or as a freestanding coal burning heater. It has been properly tested and labeled by the Arnold Green Testing Laboratories, Natick, MA. The standard used for the testing and evaluation was Underwriters Laboratories, Inc. standard for solid fuel type room heaters UL1482 and fireplace stove UL907.

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

#### A) Check List of Parts:

1 - Smoke Apron

2 - Blower & Cord Assembly

3 - Mounting Bolt & Plate

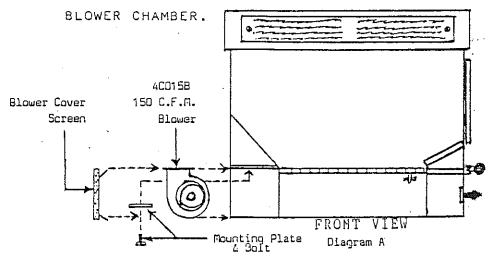
4 - Blower Cover

5 - Firebrick

6 - Owners Packet

#### B) Assembly of Stove:

- 1 Install firebrick in place by slipping top of brick under retainer, lifting up, and setting bottom of brick into place. The left side brick lays on the angle above the blower chamber.
- 2 Hang the smoke apron on the pins located at the top of the front door frame. This is designed to help reduce smoke loss out of the door.
- 3 Check the operation of the grates by rocking them back and forth. When the stove is in use, the shaker handle should be pushed into the retainer clip to lock the grates.
- 4 Install the blower in the blower chamber at the lower left side of the stove, using the 1/2" x 1" bolt and large square washer, as shown in diagram A. Be sure that the blower is positioned as shown and fits flat against the top of the blower chamber.



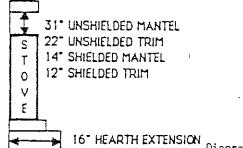
NOTE: THE EIGHT SMALL HOLES ON THE BLOWER FLANGE ARE NOT USED.

5 - Plug the white and yellow wires into the terminals of the snapdisk thermostat in the forward section of the blower chamber. Install the three position switch in the hole provided in the center of the cover screen. Snap cover screen into position with the cord and grommet in the lower notch. The three positions of the blower control switch are manual, off and automatic.

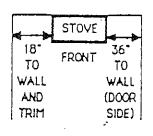
# C) Installation of the Firelite as a fireplace stove:

- 1 Install on a noncombustible solid masonry hearth and provide at least 16" of noncombustible extension out in front of the stove. This may be done by use of an approved hearth extender floor mat.
- 2 Use either the optional backplate available from your Brunco Dealer to seal off the front of the fireplace or directly connect the smoke outlet into the chimney, using at least 24 gauge smoke pipe.
- 3 A short length of 24 gauge stove pipe approximately 8 12" long is recommended on the back of the stove to extend the smoke back under the chimney opening.
- 4 CAUTION: Wood mantles and/or combustible trim around the fireplace or side walls must be shielded or kept at a safe distance as shown in the following diagram B.

#### HEARTH MODE





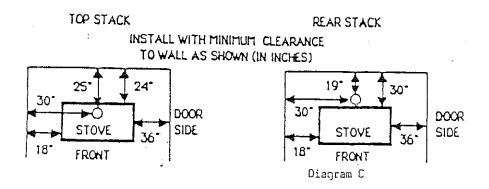


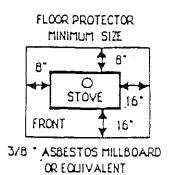
FOR USE IN A MASONRY FIREPLACE BUILT IN ACCORDANCE WITH THE UNIFORM BUILDING CODE.

# D) Installation of the Firelite as a freestanding stove:

- 1 The optional leg kit with a heat shield <u>must</u> be used at any time that this stove is used as a freestanding heater. A freestanding stove is any installation other than setting the stove on a non-combustable brick or stone fireplace hearth. The optional leg kit is available from your local Brunco Dealer.
- 2 The Brunco stove should always be installed on a non-combustable surface. This material should be applied to the floor underneath the stove, extending in front 16", on the sides, and out the back as shown in diagram C. Floor protection material must be at least equal to 3/8" asbestos millboard.
- 3 The Stove must be installed at a safe distance from combustible wall on either back or sides of stove, as shown in diagram C. Closer clearance may be achieved by use of approved non-combustable wall protectors or brick. Your local Brunco 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.

#### FREESTANDING MODE





- 4 Connect only to a 6" or larger class A masonry chimney or all-fuel factory built chimneys that are approved by Under Writers 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 ten 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.
- 5 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 inches 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 connections should be made this way so that condensation will not drip out the joints of the flue pipe. Drip free elbows are also recommended. Each joint should be drilled and sheet metal screws. A barometric draft regulator may be used when burning coal. This will help 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 the number of elbows the greater the chance of dangerous soot 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.

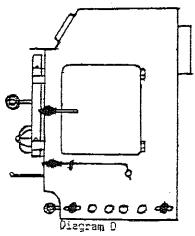
# E) The First Fire:

- 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. Build several small fires with each one becoming hotter. There will be some smoke smell during the first couple of fires as the paint on the stove cures from the heat.

- 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 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 cleaned and also the front door will swing open for cleaning.
  - 5 Always use leather gloves when servicing and operating the stove.

# F) Operation:

- I Build your solid fuel fire on top of the grates, starting with a small amount of paper or cardboard then adding kindling wood until a good firebed is established and the temperature of the stove is stabilized. Now the unit is ready to start adding coal in small amounts until the coal fire is started.
- 2 The 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 The primary draft control is located under the loading door as shown in diagram D. Sliding the control forward and backward adjusts the air input which directly effects the stove temperature. During normal operation it is recommended that the secondary air be open a minimum of 1/8".



- 4 The spinner draft knobs on the door may be opened as required to provide secondary air supply above the fire. At no time should the stove be operated to such an extent that any portion becomes "RED HOT".
- 5 The 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 in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustable floor on the ground, well away from all combustible material, 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.
- 6 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.

- 7 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 soot build-up has occurred. If 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, wire or poly 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.
- 8 The glass window in the front door will need to be cleaned periodically. To do this open the door and use a cleaner formulated to remove smoke or soot build-up. An oven cleaner may be used, but etch the glass and cause it to smoke over even more quickly. Replacement windows are available from your Brunco Dealer.
- 9 It is not recommended to leave the stove unattended at any time with the doors open. **DO NOT** leave the ash door open at any time except to remove ashes.
- G) RECOMMENDED FUEL: Stove size bituminous coal.

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

- 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.
- I) FURTHER INFORMATION: For further information on using your heater safely, obtain a copy of the National fire Protection Association publication "Using Coal & Wood Stoves Safely", NFPA #HS-8-1974. Batterymarch Park, Quincy, MA 02269.
- J) ENJOY the warmth and beauty of your new Brunco stove and use wisdom and common sense in the operation of the solid fuel heater. However inconvenient or unhandy, always put safety first.
- K) NOTE This stove is not approved or recommended for use in mobile homes.

August 1990

# CHECK LIST

1)	<del></del>	Have you read all instructions?
2)	;	Is your chimney clean and of approved style?
3)		Do you have proper draft on the flue?
4)		Is the stove installed to code?
5)	TO 100 100 100 100 100 100 100 100 100 10	Do you have proper wall and floor clearance?
6)		Are the pipe joints screwed together?
7)		Are you burning the proper fuel?
8)		Are all electrical connections correct and protected from hot areas?
9)		Have you sent in your warranty card?

## BRUNCO FIRELITE II

#### Figure #1

- 1 FL1 Air Deflector (1)
- 2 FL3 Cast Iron Spin Dials (2)
- 3 FL4 Spin Dial Bolt & Nut (2 ea.)
- 4 FL38 Fireguard Bolts (2)
- 5 G50S Short Cast Iron Grate (1)
- 6 FL61 Grate Linkage (1)
- 7 G50L Cast Iron Grate (1)
- 8 FL10 Cast Iron Shield (1)
- 9 FL16 Brick Retainer (Welded) (1)
- 10 FL7 6" Smoke Collar (Welded Top or Back) (1) 10 FL65 Draft Slide (1)
- 11 FL20 Smoke Apron Hooks (Welded) (2)

# Figure #2

- 1 FL41 Draft Control Spring Handle (1)
- 2 FL42 Side Door Latch Handle (Welded) (1)
- 3 FL11 Brass Spring Handle (1)
- 4 FL11 Brass Spring Handle (1)
- 5 FL13 Blower Screen (1)
- 6 F662 Ash Pan (1)
- \*7 WSD Cast Iron Door Requires Part #WS8 (1)
- 8 WS8 6½ x 16 Tempered Glass (1)
- 9 WS43 Air Deflector Bolts (2)
- \*WSDB Optional Solid Brass Door Aslo Requires part #WS8.

# Figure #3

- 1 FL63 Ash Pan Handle (1)
- 2 FL11 Brass Spring Handle
- 3 FL46 Cast Iron Side Loading Door (1)
- 4 FL16 Shaker Handle (1)
- 5 FL48 Draft Assembly Mounting
- 6 FL49 Draft Flap (Not Shown) (1)
- 7 FL50 Latch Plate (Welded) (2)
- 8 FL11 Brass Spring Handle (Ash Pan) (2)
- 9 FL17 Shake Handle Lock (Welded) (1)
- 10 FL51 Dust Shelf (Welded) (1)
- 11 FL9 Wood Handle (1)
- 12 FL52 Door Latch Handle (Welded) (1)
- 13 FL2 Hinge Pins For Viewing Door (2)
- 14 FL53 Draft Control Lever (1)

# Figure #4

- 1 FL29 Heat Tubes (Welded) (4)
- 2 FL54 Removable Baffle (1)
- 3 11/4" x 4 1/2" x 9" Firebrick (4)
- 4 FL64 Firebrick 1 1/4" x 5" x 13" (1)
- 5 4C015 150 CFM Blower (1)
- 6 FL24 Blower Mounting Plate (1)
- 7 FL25 Mounting Plate Bolt (1)
- 8 FL56 11/4 x 91/4 x 14 Firebrick
- 9 FL57 11/4 x 121/4 x 9 Firebrick (1)

# Figure #5

1 - FL58 Smoke Apron (1)

# Figure #6

(Optional Leg Kit Used As Freestanding)

- 1 FL31 Leg Bolts (4)
- 2 FL32 Heat Shield (1)
- 3 FL33 Legs (4)

## Figure #7

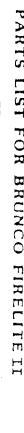
1 - FL34 Fiberglass Gasket Used with Backshield (1)

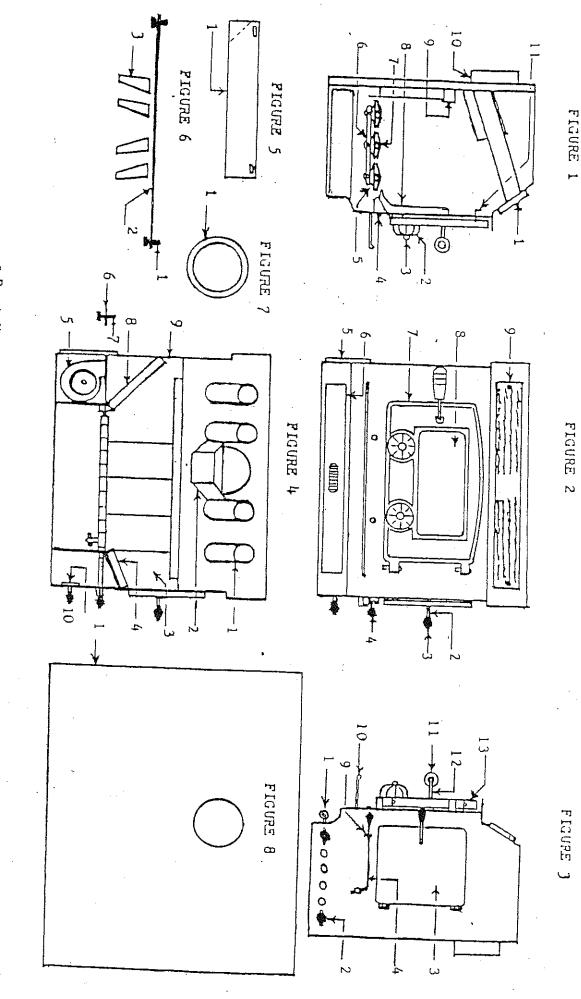
FL60 (Not Shown) 10' Self Stick Fiberglass Seal. Used with Backshield.

# Figure #8

(Optional Backshields for Fireplace Hearth)

- 1 FL35A Backshield 32 x 40
  - FL35B Backshield 32 x 48
  - FL35C Backshield 36 x 54
  - FL36 (Not Shown) (Optional) Fireview
  - Screen
  - FL37 (Not Shown) 1/2" Fiberglass Door Seal
    - 4' Loading Door
  - 5½' Glass Door
    - 5' Ash Door
  - FL59 Self Stick Glass Gasket
    - 4' Glass Door





Part Numbers on Reverse Side
 Figures 6,7,& 8 are optional accessories • Figure 7 & 8 are used together