



**MODEL KI-100  
FIREPLACE INSERT  
Installation and Operation Instructions**

**IMPORTANT**

**SAVE THIS MANUAL FOR FUTURE REFERENCE. READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING THE INSTALLATION OR OPERATING THE FIREPLACE INSERT.**

## GENERAL INFORMATION – IMPORTANT

Read all instructions carefully before starting the installation or operating the fireplace insert. This will help you obtain the full benefits from your fireplace insert.

**NOTICE: THIS FIREPLACE INSERT MUST BE INSTALLED IN A MASONRY FIREPLACE AND THE CHIMNEY MUST HAVE A LINER. CHIMNEYS WITHOUT LINERS POSE A FIRE HAZARD AND SHOULD NOT BE USED.**

**DO NOT INSTALL THIS FIREPLACE INSERT IN A PREFABRICATED FIREPLACE. THE CONCENTRATED HEAT AT THE INSERT FLUE OUTLET MAY BE DAMAGING TO THE THIN METAL USED IN MOST PREFABRICATED FIREPLACES.**

Be sure that the installation of the fireplace insert is made in accordance with all local and national building codes.

An optional blower, Model K1B-1, may be purchased for use with your fireplace insert. The clearance for the blower must be considered when installing the fireplace insert. A clearance of 4½ inches must be maintained between the fireplace masonry hearth and the fireplace insert hearth. (See Figure 3) Refer to the installation and operating instructions packed with the blower.

An optional firescreen, Model KS-1, may be purchased for your fireplace insert.

## PREPARATION OF MASONRY FIREPLACE AND CHIMNEY

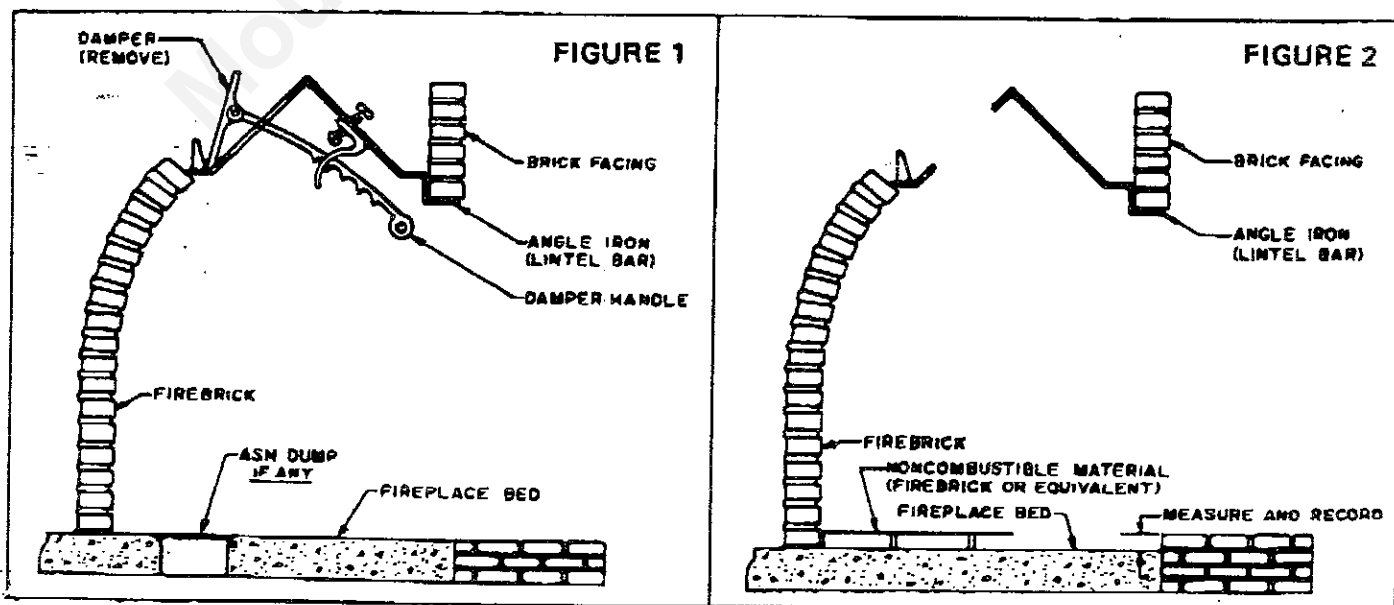
1. If possible, remove the damper in your fireplace. The damper must be open to insure that your insert will work properly. If removal is not possible or practical, the damper must be wired open. See Figure 1.
2. Clean and inspect the chimney. The chimney should be cleaned of all soot. Check the chimney for loose bricks and cracks. Make the necessary repairs, if any, before installing the fireplace insert.

**NOTICE: CHIMNEYS IN NEED OF REPAIR POSE A POTENTIAL FIRE HAZARD.**

3. Clean the inside of the fireplace. The masonry fireplace does not have to be scrubbed clean but soot, ashes and dirt should be swept out.

Make sure all firebrick joints are sealed. Be sure to check between brick facing, (See Figure 1) and back of angle iron. This is a critical area. Make sure there is no opening between them, even a hairline crack. If you have an ash dump in the fireplace, it must be packed with noncombustible insulation and sealed. Check joints on both sides of the vertical facing (face and firebrick). It is very important that if any cracks are found, they are sealed before installation of your fireplace insert. The sealant used must be noncombustible type.

4. Check to see if your fireplace bed is level with the hearth. If the hearth is higher than the fireplace bed, measure and record the difference. Obtain a noncombustible material such as firebrick and build up the back of the fireplace bed to the same level as the hearth. (See Figure 2.)



## CHECKING MEASUREMENTS OF THE FIREPLACE

1. Measure from the face to the center of the throat (damper opening) of the fireplace. (See Figure 3.) The center of the smoke outlets of the fireplace insert must line up with the center of the throat (damper opening) of the masonry fireplace. If the smoke outlets on the insert are blocked in any way, the fireplace may spill smoke into the room.
2. Using the measurements from Step 1, measure from the center of the smoke outlets on the insert toward the front of the insert. (See Figure 4.) Mark this distance across the top of the insert. Be sure your mark is straight with the front of the fireplace. When installing the insert line up the mark with the front of the masonry fireplace. (See Figure 4.)
3. Slide the insert into the existing fireplace until the mark you made on the insert lines up with the face of the existing fireplace.

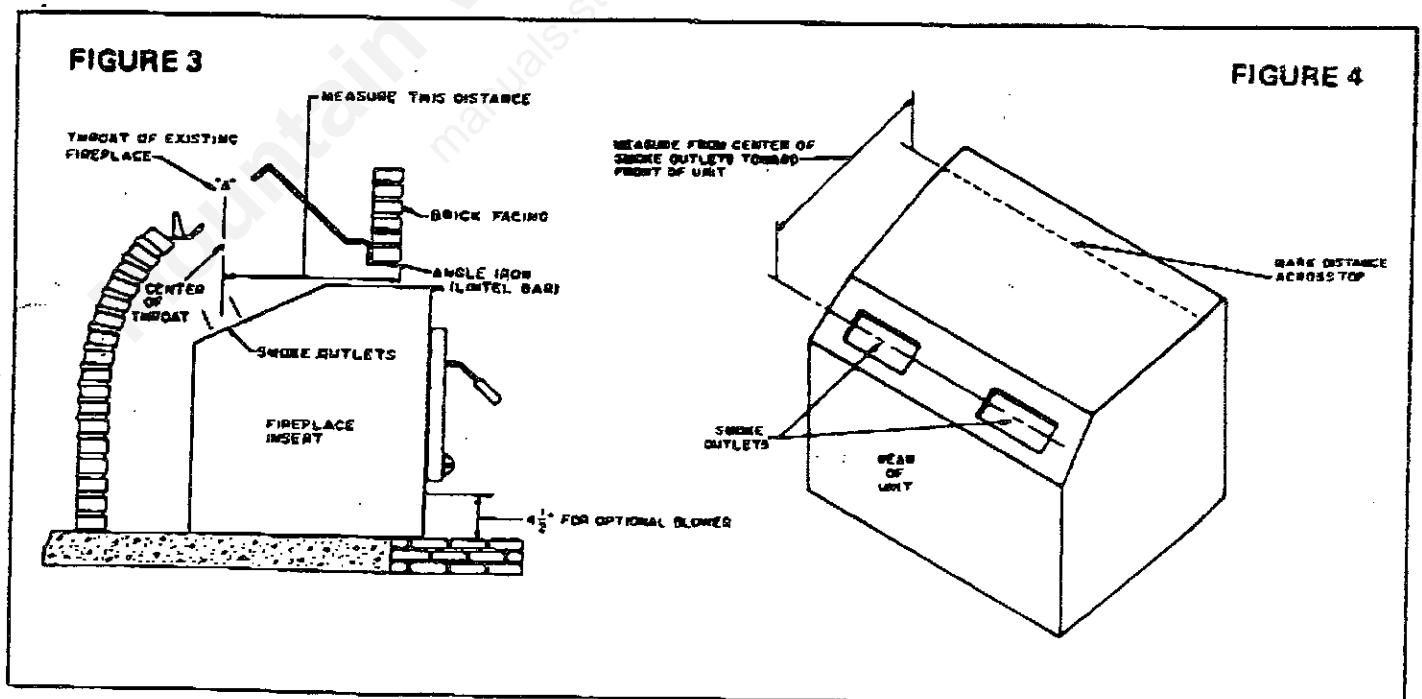
**NOTE:** You may wish to cover your fireplace hearth with some type of material to protect it. Do not leave any material used to cover the hearth underneath the insert. Remove the material before going to the next step.

4. The space between the insert and the fireplace must be filled with a glass fiber or mineral wool (matte or blanket type, with or without aluminum backing) insulation.

**CAUTION:** Use only noncombustible insulation, do not use paper backing.

One method of filling the space is to take a piece of glass fiber or mineral wool insulation 14½ inches wide and fold it in the center (aluminum backing to the inside if equipped) and place it in the space and then push it in until it is flush with the masonry fireplace. The object is to seal the opening as air-tight as possible.

**CAUTION:** Take care when filling the space at the top of the insert so as not to block the insert smoke outlets or the chimney throat.



## INSTALLING THE SURROUND ON THE INSERT

The Trim Kit, Model No. KT-1, consists of a top panel, a right side panel and a left side panel.

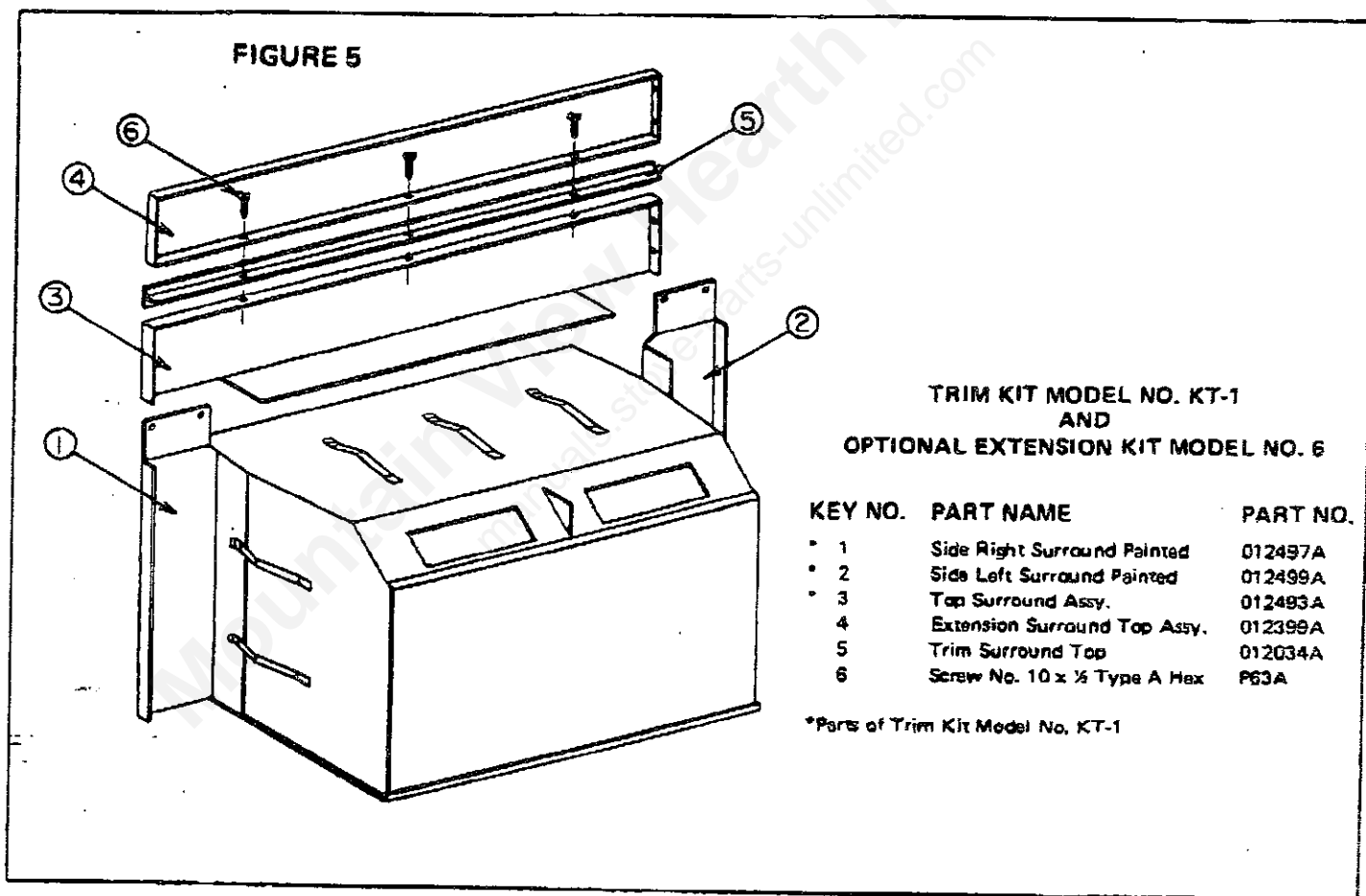
An Extension, Model No. 6, is available for use with your Trim Kit for fireplaces with higher than normal openings.

Refer to Figure 5 for installation and parts identification.

1. Place each side part against the insert with the wide flange facing the insert. Slide rearward until the flange is under the spring fingers welded to the sides of the insert and the trim is against the fireplace.

**NOTE:** If the Extension, Model No. 6, was purchased attach the extension and the decorative strip to the top of the trim with the three screws provided. See Figure 5.

2. The top is installed to the insert in the same manner after both sides are installed. Place the wide flange on the top of the insert and slide rearward under the spring fingers until the trim is against the fireplace. No other adjustment is necessary.

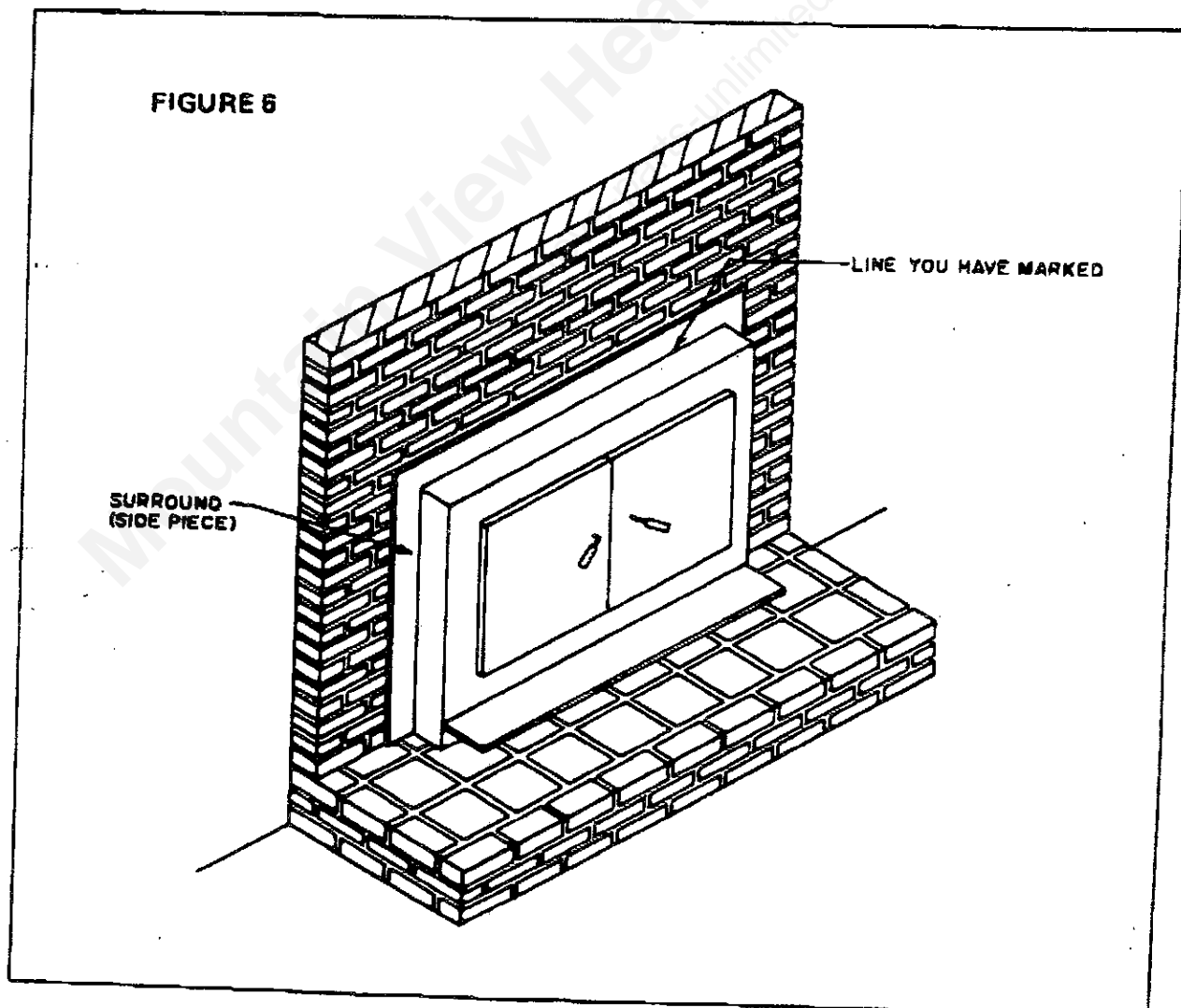


## ATTACHING SURROUND AND INSERT TO MASONRY FIREPLACE

In rare instances, a fireplace may have a very irregular face (such as one made with field stone) that may make it necessary or desirable to attach the trim to the fireplace. In these instances, the trim can be attached by using ¼-inch lead anchors which can be obtained at any hardware store. Since there is no need to seal the trim kit, a minimum number of anchors may be used. It is recommended that two anchors be used on the top panel and one anchor used per side panel.

If attachment is necessary:

1. Drill four 5/32-inch diameter holes through the trim and into the masonry front of the fireplace to mark the spot where your lead anchors will be set.
2. Remove the trim panels from the insert.
3. Drill the four holes in the masonry fireplace about 1 to 1½ inches deep with a ¼-inch diameter masonry bit. Insert the lead anchors into the holes and push them in until they are flush with the face of the fireplace.
4. Reinstall the trim kit panels as described in the section above and line the panels up with the holes that have been drilled in the fireplace. Secure the panels to the masonry fireplace with the 4 screws provided with the anchors.



## HOW TO OPERATE FIREPLACE INSERT

1. Open the doors and place a wood or coal grate basket into the fireplace insert before starting the first fire.

**NOTE:** Although wood can be burned without a grate, burning coal requires that combustion air get under the coal. Therefore, always use a grate when burning coal.

2. Place paper and kindling on grate and light fire.

**WARNING:** NEVER USE GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN THIS FIREPLACE. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE FIREPLACE WHEN IT IS IN USE.

**NOTE:** THE FIRST FEW FIRES YOU BUILD SHOULD BE MODERATE AND SLOW BURNING TO ALLOW THE CAST IRON DOORS OF THE UNIT TO BE RELIEVED OF THE INTERNAL STRESSES CAUSED BY CASTING.

3. Add wood or coal after fire is burning briskly.
4. When operating the fireplace insert with the doors closed, the burning rate of the fire may be controlled by opening or closing the draft spinners. These spinners are adjustable to allow more air to the fire to increase the burning rate or less air to the fire to decrease the burning rate. The draft spinners are located on the doors.

**CAUTION:** SPINNER MAY GET VERY HOT. USE HAND PROTECTION WHEN ADJUSTING.

When operating the fireplace insert with the doors open, be certain to install the optional safety screen over the front of the fireplace opening. This safety screen will prevent sparks and coals of fire from popping out of the insert.

## REMOVAL OF ASHES

Ashes should be placed in 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.

## FIREPLACE CHIMNEY MAINTENANCE

As with any solid fueled appliance, regular chimney maintenance is necessary. The National Fire Protection Association recommends chimney maintenance at least once each year before the heater is put into service. Each yearly check should include a thorough cleaning of the entire flue system and complete inspection to determine any need for repairs. Since larger chimneys tend to stay cooler allowing more condensation flue gases on chimney walls, cleaning may be required more often to minimize the potential for chimney fire from excess creosote and soot.

**CAUTION:** EXCESSIVE CREOSOTE BUILD-UP CAN CREATE THE POSSIBILITY OF VERY DANGEROUS CHIMNEY FIRES. DO NOT IGNORE CHIMNEY MAINTENANCE.

KEY NO.	DESCRIPTION	PART NO.
1	Weldment, insert painted	012134S
2	Feed Door Left Painted	012152S
3	Rope, Fiberglass 53½" long	009535-11S
4	Pin	011394S
5	Bolt, ¼-13 x 3" Hex BOF Stl.	010419S
6	Spinner Painted	010465S
7	Pin	P626S
8	Nut ¼-13 Hex BOF Stl.	010427S
9	Feed Door Right Painted	012153S
10	Handle	010199S
11	Screw, No. 10-24 x 3/8 Pan Hd. BOF	P229S
12	Screw, shoulder 3/8 x 5/8 BOF Stl.	009038S
13	Latch, Plate	010190S
14	Shim .767 ID x .032 THK. Stl.	010800S
15	Nut 5/16-18 Hex Plain Stl.	009038S
16	Latch Linkage Assembly	010785S
17	Bracket, Latch	010255S
18	Screw, ¼-20 x ½ Hex	P370S
19	Panel, Front Side Left Painted	012140S
20	Panel, Front Bottom Painted	012143S
21	Panel, Front Top Painted	012142S
22	Panel, Front Side Right Painted	012141S
23	Screw, ¼-20 x ½ Mach. Hex Hd.	P370S
24	Washer, ¼ Split Lock	P831S
25	Shield Door Radiation	011123S
26	Locknut, 5/16-18NC	012199S

