Fireplace Manufacturers Incorporated

The Symbol of Excellence

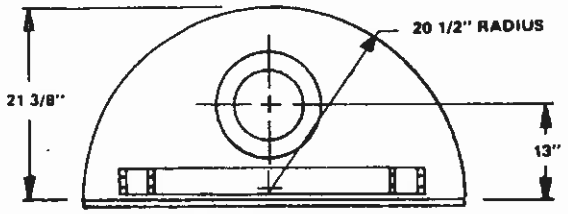
MANUFACTURED HOUSING "FULLVIEW" FIREPLACE SYSTEMS

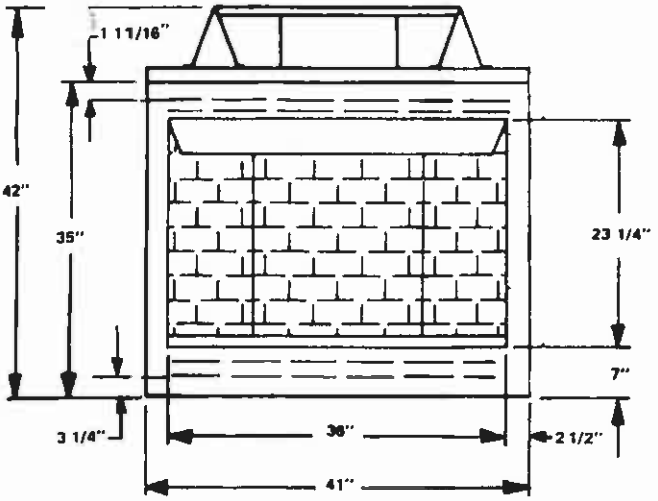
DELUXE II MODEL 36 ECM II
CUSTOM MODEL 36 EM II

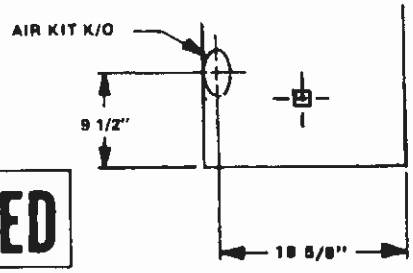
INSTALLATION & OPERATION INSTRUCTIONS

SAVE THIS BOOK

This book is valuable. In addition to telling you how to install and maintain your fireplace and chimney, it also contains the information that will enable you to obtain repair parts when needed. Keep it with your other important papers.







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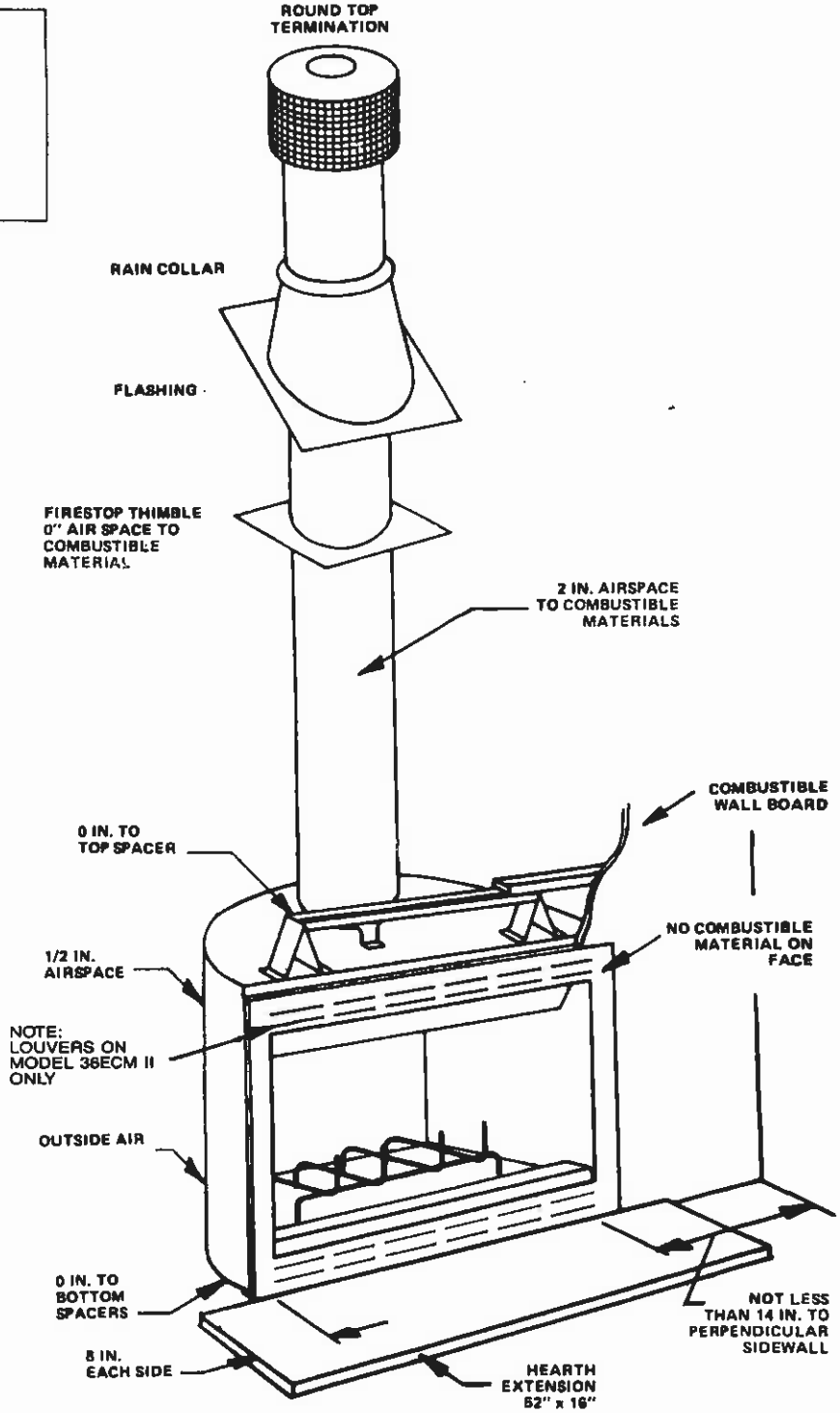


FIG. A

MANUFACTURED BY FIREPLACE MANUFACTURERS INC.
2701 SO. HARBOR BLVD., SANTA ANA, CA 92704

EXCLUSIVELY FOR THE COLEMAN COMPANY

INSTALLATION INSTRUCTIONS

INTRODUCTION

- **IMPORTANT NOTICE.**
  These instructions are for the use of qualified individuals specially trained and experienced in installation of this type equipment and related system components.
  Installation and service personnel are required by some States to be licensed. **Persons not qualified shall not install this equipment nor interpret these instructions.**
- **NOTE:** The words "Shall" or "Must" indicate a requirement which is essential to satisfactory and safe product preformance. The words "Should" or "May" indicate a recommendation or advice which is not essential and not required but which may be useful or helpful.

- Before beginning the installation of your fireplace, read these instructions through completely.

- These **FMI** components and this fireplace are designed and manufactured for satisfactory performance when installed and used according to this Manual. Unless you use **FMI** components which have been designed and tested for this fireplace system, you may cause a fire hazard.

- Careless or improper operation may also cause a fire hazard.

- The **FMI** warranty does not cover, and **FMI** disclaims any responsibility for, damage or malfunction caused by the following actions:

  a) Modification of the fireplace, components, doors, air inlet system and damper control.

  b) Use of any component part not manufactured or approved by **FMI** in combination with a **FMI** fireplace system.

- This model fireplace **36ECM II & 36EM II** meets the construction and safety standards of H.U.D. for application in mobile homes when installed according to these instructions.

- **MINIMUM CLEARANCES TO COMBUSTIBLES:**
  Framing and enclosures may safely make direct contact with the spacers on the top of the fireplace. The fireplace may sit directly on combustible flooring. The fireplace opening must not be less than 14" from a combustible, perpendicular side wall (SEE FIG. 2A). This can be reduced to 3" if a FMI PWS-36 protective wall shield is used. The chimney requires 2" clearance to combustible materials except at the thimble when penetrating the roof. The thimble provides for zero clearance from it to combustible materials.

  DO NOT PACK REQUIRED CLEARANCE SPACES WITH INSULATION OR OTHER MATERIALS

- **HEIGHT:**
  The minimum height of the chimney, measured from the base of the fireplace to the flue outlet, is 11 feet. The maximum height of the chimney system is 20 feet. This is to prevent smoking, excess draft, fire hazard, structural imparement.

- **WARNING:**
  THIS FIREPLACE AND CHIMNEY SYSTEM IS NOT APPROVED FOR USE IN A MOBILE HOME BEDROOM OR ANY ROOM USED FOR SLEEPING.

CAUTION:

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

INSTALLING THE FIREPLACE:

STEP 1. Frame the opening for the fireplace using the dimensions shown in FIG. 1 or FIG 2A or FIG. 2B.

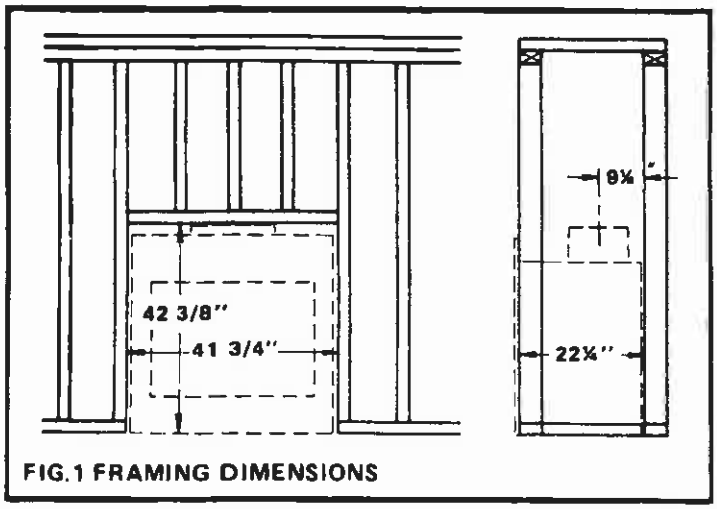


FIG.1 FRAMING DIMENSIONS

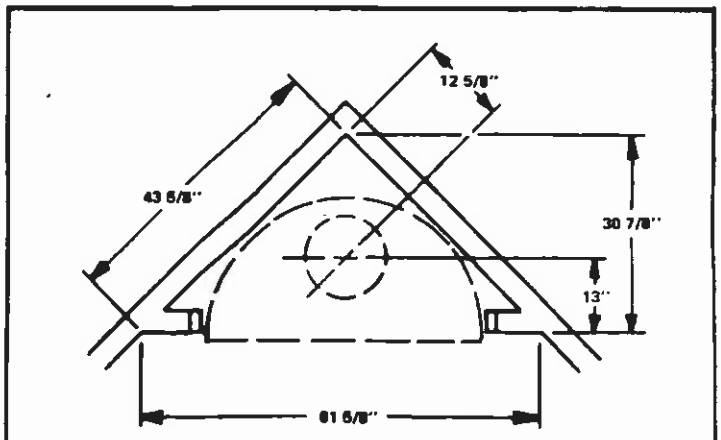


FIG. 2A FRAMING DIMENSIONS AT 45°

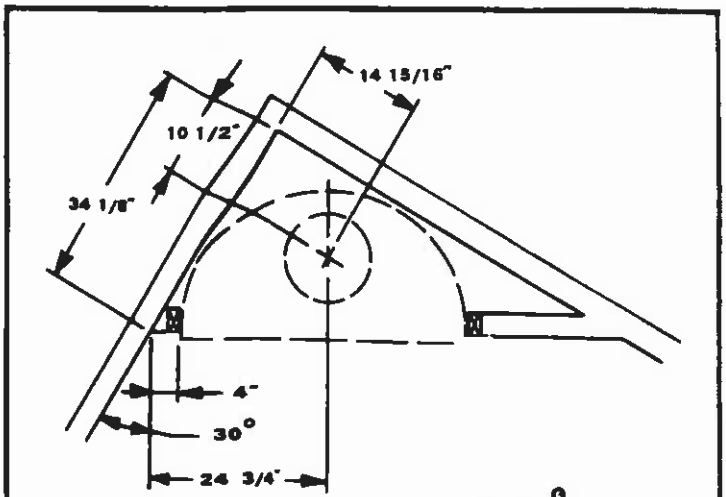


FIG. 2B FRAMING DIMENSIONS AT 30°

STEP 2: Set the fireplace directly in front of this opening and slide the unit back until the mounting flanges touch the side framing. SEE FIG. 3B

STEP 3: Check the level of the fireplace and shim with sheet m if necessary.

STEP 4: When the fireplace is installed upon a combustible floor a galvanized steel ember protector must be installed between the fireplace and the hearth extension as illustrated in FIG. 4 or use a sand-cement grout between the fireplace and an on-site-constructed hearth extension. CAUTION: FAILURE TO INSTALL MAY CAUSE A FIRE HAZARD.

STEP 5: Secure the fireplace to the floor of the mobile home to prevent shifting. Use the tie down straps provided with the fireplace. SEE FIG. 5.

STEP 6: Cut a 6" hole in the floor or wall as shown in FIG. 6 or 7. Mount the wall eyebrow or the floor air inlet as shown. **CAUTION: AIR INLET DUCTS ARE NOT TO TERMINATE IN ATTIC SPACE.**

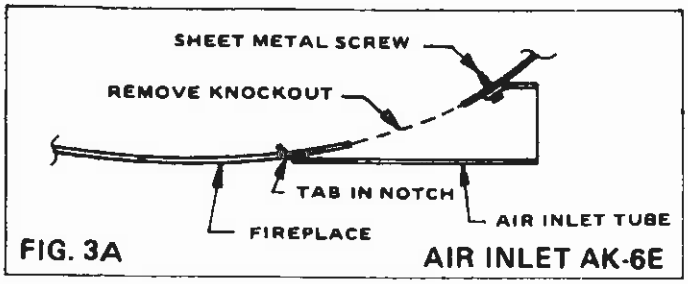


FIG. 3A AIR INLET AK-6E

NOTE: TUBE ALSO INSTALLS IN OTHER DIRECTION, USE H S IN TABS OF AIR KIT TO ATTACH TUBE TO BACK OF FIREPLACE AS SHOWN.

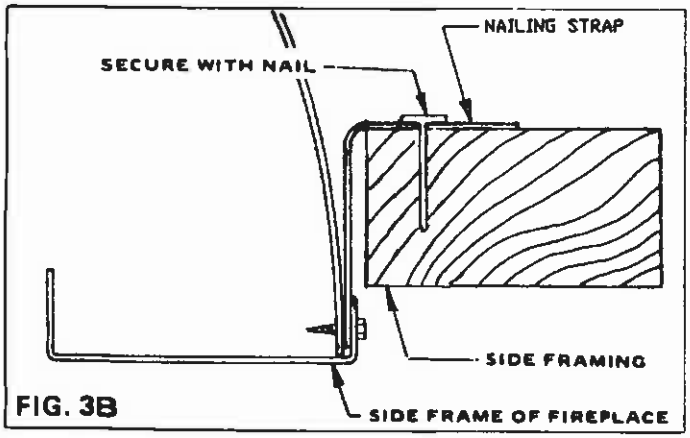


FIG. 3B

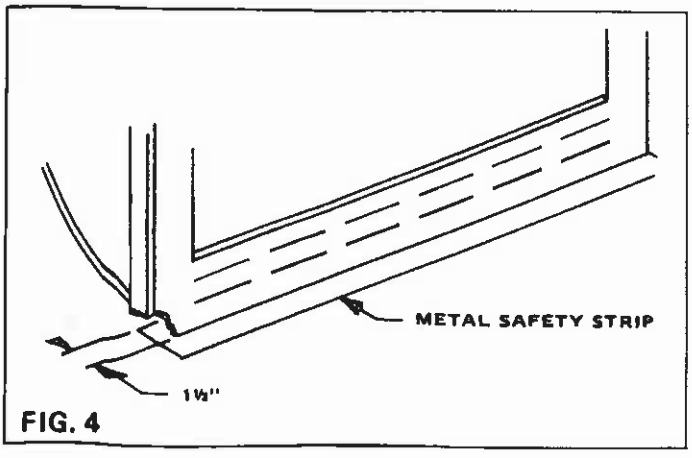


FIG. 4

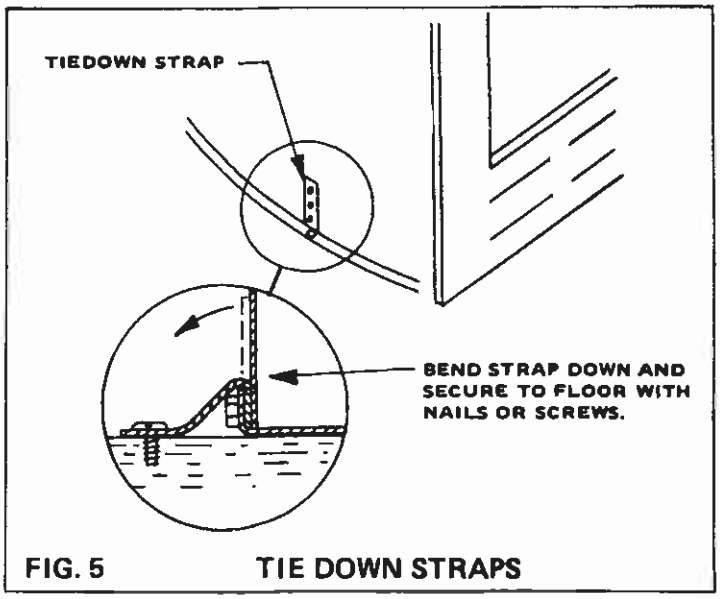


FIG. 5 TIE DOWN STRAPS

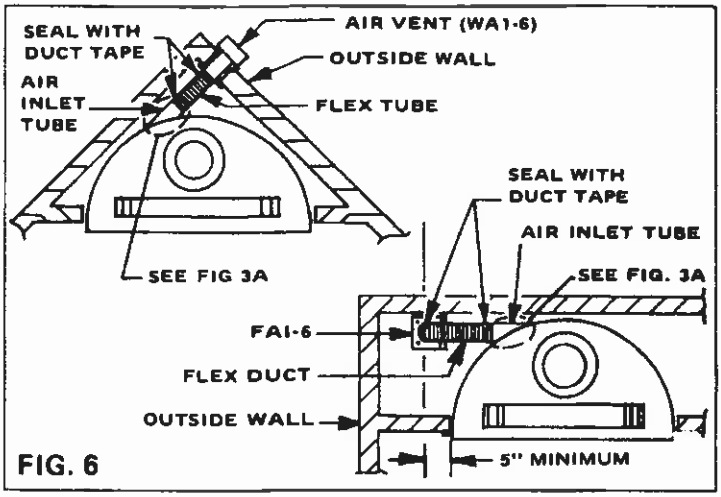


FIG. 6

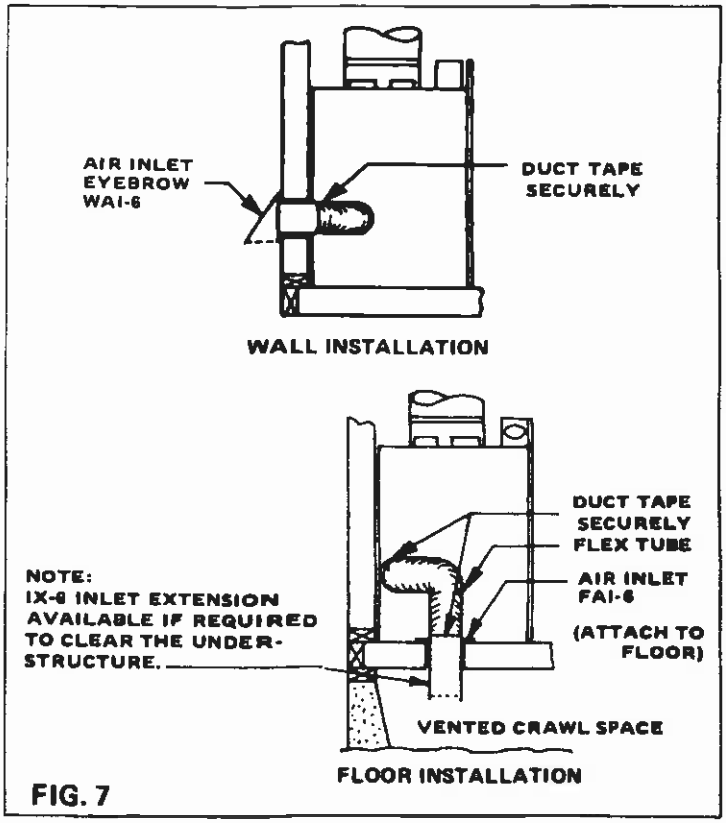


FIG. 7

STEP 3: Place the RTL-8DM onto the pipe end as illustrated and secure with the screws provided. (SEE FIG. 11).

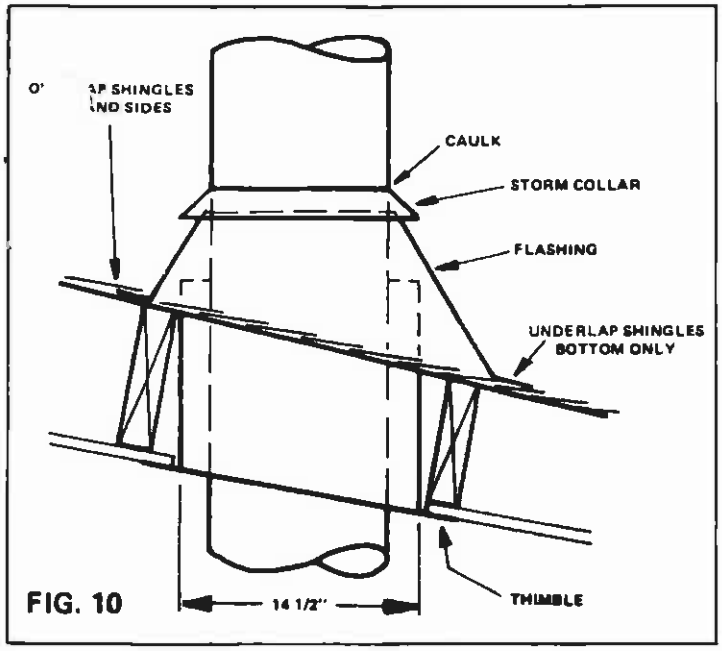


FIG. 10

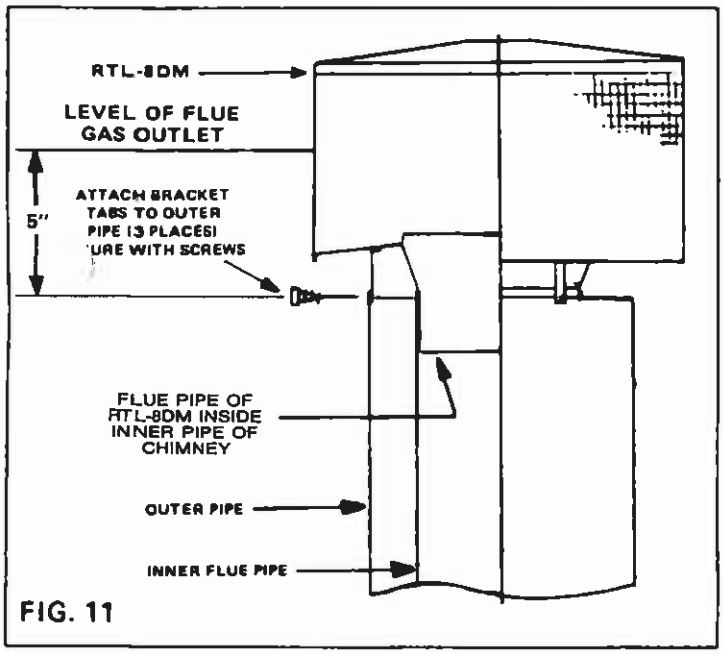


FIG. 11

CAUTION: DO NOT SEAL VENTILATION OPENINGS ON THE ROOFTOP FLASHINGS.

Follow the installation instructions provided with the termination being used.

SUPPORT WIRES:

IMPORTANT: If an exposed portion of chimney is greater than 5 feet above the roof line, use support wires to keep chimney secure. The support wires may be attached to the outer pipe of the chimney with screws, provided the screws are not long enough to penetrate the inner flue pipe.

NOTE:

The exposed part of the chimney can be painted to match the house decor. Clean the part to be painted to remove any grease or oil then paint with a primer paint before applying the finish paint.

10 FOOT RULE:

All chimney terminations must extend a minimum of 3 feet in height above the highest point where it passes through the roof and must be at least 2 feet above the peak of the roof if within a horizontal distance of 10 feet from the peak. (SEE FIG. 12).

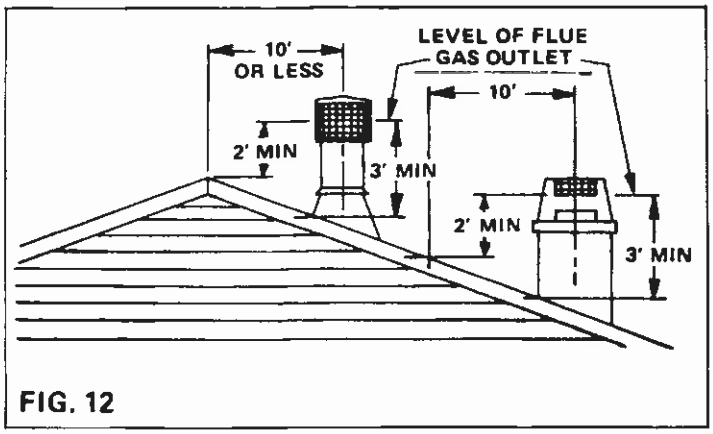


FIG. 12

HEARTH EXTENSION:

A hearth extension projecting a minimum of 16" in front of and a minimum of 8" beyond each side of the fireplace opening is required to protect combustible floor construction in front of the fireplace. Use FMI hearth extension HE 36 or a layer of non-combustible, inorganic material having a thermal conductivity of K=0.84 BTU IN./FT.^{2}HR F (or less) at 1" thick. Example of determining hearth extension equivalent. If the material selected has a K Factor of 0.25, such as glass fiber, then the following formula would apply: 0.25/0.84 x 1"=.30 thk. This must be covered by any non-combustible material such as tile, slate, brick, concrete, metal, marble, stone, etc. Fasten the hearth extension to the floor to prevent shifting. (SEE FIG. 13 & 13A)

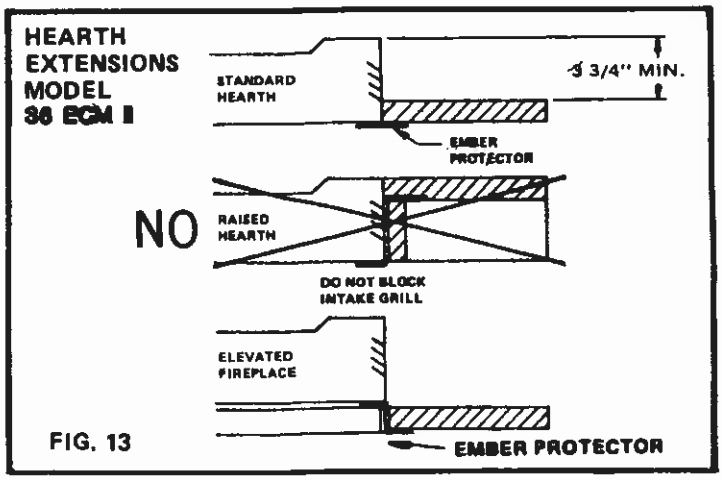


FIG. 13

WARNING: FIRE HAZARD

HEARTH EXTENSION IS TO BE INSTALLED ONLY AS ILLUSTRATED.

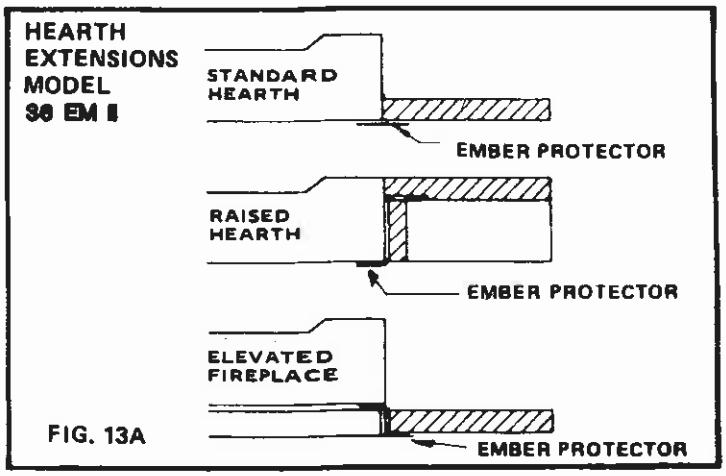


FIG. 13A

FINISHING YOUR FIREPLACE:

Combustible materials may make direct contact with sides and top of the fireplace face. It is important that combustible materials do not overlap the face itself. Brick, tile or other noncombustible materials may be applied to the face provided that any gap between the material around the fireplace opening be caulked to prevent the seepage of combustible products.

MANTLE:

A mantle may be installed if desired. See FIG 14, 14A & 15 for minimum heights above and beyond opening of fireplace face.

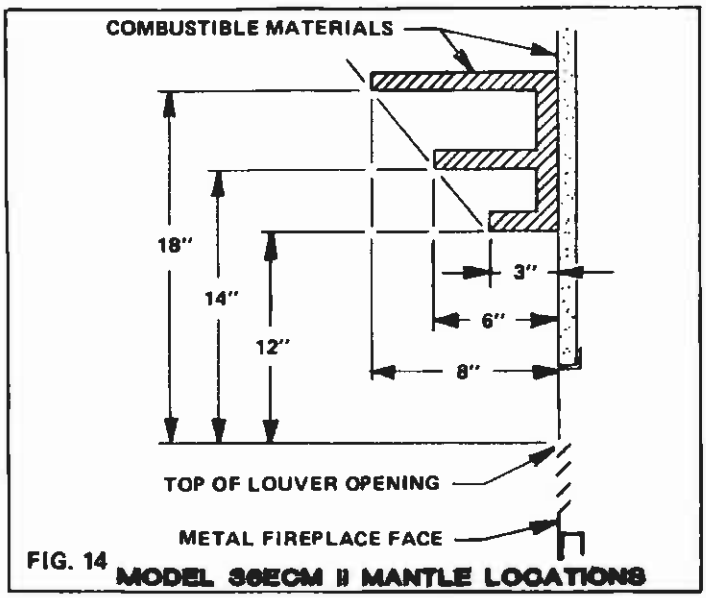


FIG. 14 MODEL 36ECM II MANTLE LOCATIONS

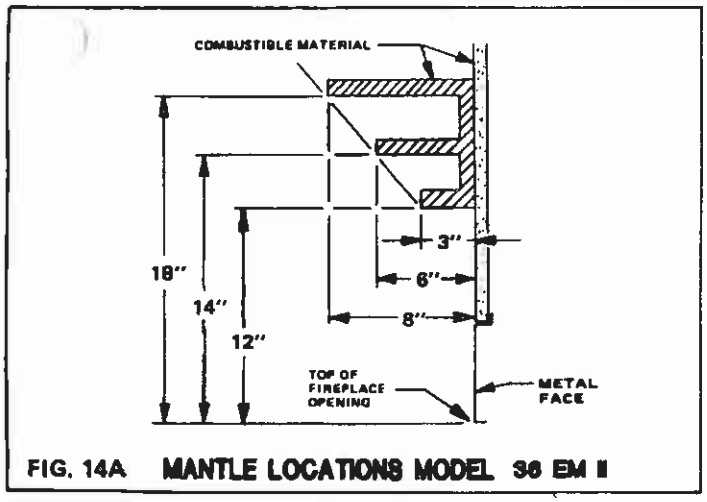
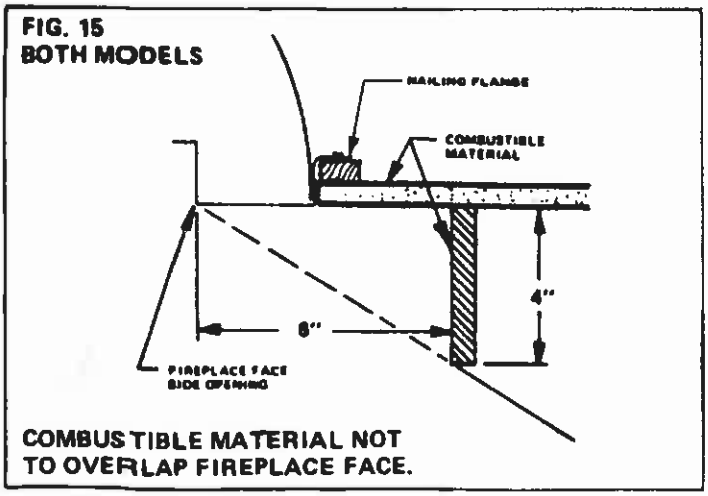


FIG. 14A MANTLE LOCATIONS MODEL 36 EM II

FIG. 15
BOTH MODELS



COMBUSTIBLE MATERIAL NOT TO OVERLAP FIREPLACE FACE.

INSTRUCTIONS ON THE SAFE USE OF THE FIREPLACE.

BUILDING A FIRE:

Open the damper fully.

Criss-cross small pieces of wood on your grate and place crumpled pieces of paper under it.

Place 3 logs to the rear and light the newspaper.

Close the fireplace screen to prevent the escape of sparks and embers.

Avoid using damp wood or wood with high pitch content.

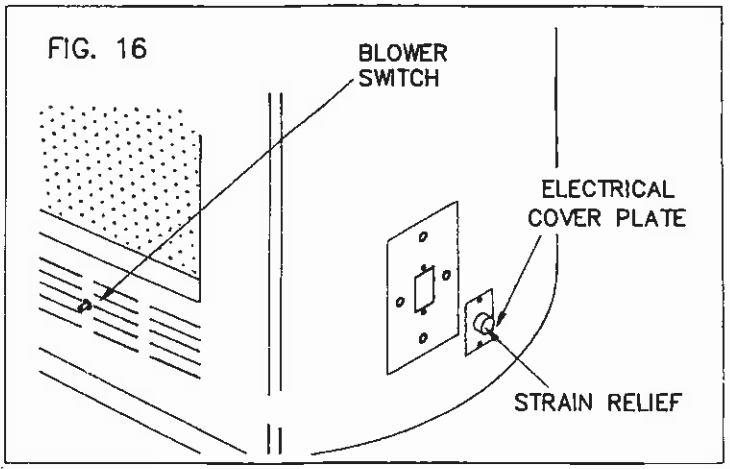
Add additional pieces of wood gradually to avoid a large roaring fire. **DO NOT OVER FIRE. SERIOUS DAMAGE OR INJURY MAY RESULT.**

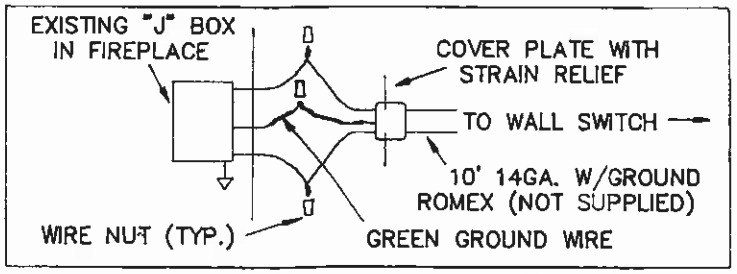
DISPOSAL OF ASHES:

Ashes should be placed in a metal container with a tight 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 the soil or otherwise locally dispersed, they should be retained in a closed container until all cinders have thoroughly cooled.

Fireplace mounted blower switch is now supplied as requested by Manufactured Housing Builders and Home owners, instead of the 14 ga. romex. Connect a 14 ga. romex wire to the fireplace through the strain relief grammet. Ground to the green wire on fireplace. Hy-pot test the installation with on-off switch off.

NOTE: Wall switch not supplied with the fireplace.
SEE FIG. 16.





CREOSOTE-FORMATION AND NEED FOR REMOVAL:

When wood is burned slowly, it produces tar and other organic vapors, which combined 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. WARNING: THE CHIMNEY SHOULD BE INSPECTED AT LEAST TWICE A YEAR DURING THE HEATING SEASON TO DETERMINE IF A CREOSOTE BUILD-UP HAS OCCURED. IF CREOSOTE HAS ACCUMULATED, IT SHOULD BE REMOVED TO REDUCE THE RISK OF CHIMNEY FIRE.

CHIMNEY CAP REMOVAL: In order to clear creosote from the flue, the chimney cap must be removed.

If the terminations is a round top characterized by 3 ft. of exposed pipe and a round cap, simply remove the 3 sheet metal screws that secure the termination to the last section of pipe and lift the cap off.

For chase style terminations with a pyramid cap, remove the screws that secure the cap, at the four corners.

Place the cap aside.

The flue is now clear for cleaning.

Be certain to clean all loose debris from spark arrestors before replacing terminations.

MAINTENANCE AND SAFETY:

Your fireplace produces a great amount of heat. Always keep the area around the fireplace clear of furniture and other combustible materials. **NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN ANY FIREPLACE. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE FIREPLACE WHILE IN USE.**

GENERAL:

THE REFRACTORY BACK, SIDES, AND BOTTOM LINING THE FIREPLACE ARE MADE FROM A COMBINATION OF MATERIALS INCLUDING REFRACTORY CEMENT AND WATER. "CURE" THE REFRACTORY LINING BY BUILDING ONLY SMALL FIRES THE FIRST 2 OR 3 TIMES YOU USE THE FIREPLACE. LARGE ROARING FIRES BUILT ON "UNCURED" REFRACTORY COULD GENERATE STEAM WITHIN THE REFRACTORY AND CAUSE CRACKS.

Check the hearth for cracks and damage. Because the firebrick refractory is repeatedly heated and cooled, this can cause hairline cracks to form. This is normal and does not damage the fireplace. If however, a crack should become large (1/16" wide or larger) then the refractory should be repaired. Use FMI Repair Kit PK-1. In the event of a large separation or crumbling the refractory should be replaced. Have repairs done by a qualified service technician. Burn only dry seasoned wood as this helps prevent creosote build-up in the flue. Do not use wood products with synthetic binders like artifical logs or plywood as these produce abnormally high temperatures. Keep the firescreen closed at all times when burning except when adding fuel.

NEVER CLOSE THE DAMPER UNTIL YOU ARE CERTAIN THAT THERE ARE NO MORE WARM EMBERS.

OPERATING AND MAINTENANCE INSTRUCTIONS FOR MODELS EQUIPPED WITH GLASS DOORS:

A fireplace equipped with glass doors operates much differently than a fireplace with an open front. A fireplace with glass doors has a limited amount of air for combustion. Excessive heat within the fireplace can result if too large a fire is built or if the combustion air gate is not completely open. The following tips should be followed to assure that both the fireplace and the glass door retain their beauty and function properly.

Both the flue damper and the glass doors must be fully open before starting fire. This will provide sufficient combustion air and maintain safe temperatures in the firebox.

Follow the procedure outlined on page 5 for building a fire.

IMPORTANT: The glass must be allowed to warm slowly and evenly. The tempered glass will withstand a gradual temperature rise to 550° F, which is more than a normal fire will generate. An excessively hot fire can be created by such materials as pitch laden logs, very dry mill end lumber, large amounts of paper or cardboard boxes. Always keep the fire well back from the doors and never allow flames to contact the glass.

WARNING: FIREPLACES EQUIPPED WITH GLASS DOORS SHOULD BE OPERATED ONLY WITH DOORS FULLY OPEN OR DOORS FULLY CLOSED. BI-FOLD DOORS, IF LEFT PARTLY OPEN, MAY DRAW GAS AND FLAME OUT OF THE FIREPLACE OPENING CREATING RISKS OF BOTH FIRE AND SMOKE. SEE FIG. 17.

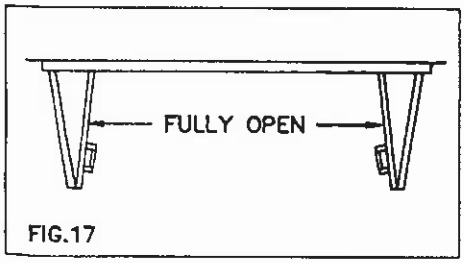


FIG.17

The fireplace flue damper must always remain open until the fire is totally out. Partially burned logs can appear to be out even when still burning and giving off dangerous gases. If the damper is closed too soon, these gases may escape into room.

DAMPER OPERATION:

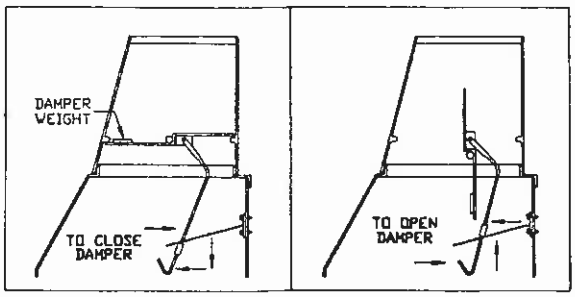
The flue gas damper is located inside the firebox similar to a conventional masonry fireplace. Look within the top of the fireplace and locate the damper handle extending from the damper. Pushing the lever up opens the damper. The reverse closes it. This can be easily accomplished with a fireplace poker.

Use the illustration below, for the proper procedure for opening and closing the new "fail safe" damper system.

CLEANING THE GLASS:

- Clean the glass with any commercial glass cleaner or soap and water.
- DO NOT use any abrasive material to clean glass.
- DO NOT clean glass with cool water if the glass is still hot from fire.

To remove doors, press up on upper door support spring (FIG 18) until the door guide is free of the supporting spring. Tip door towards middle of fireplace opening and lift door up out of the lower clip. Reverse procedures to replace.



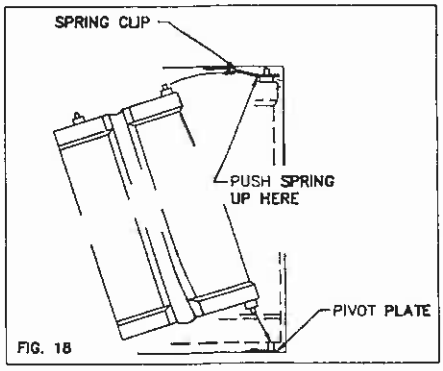


FIG. 18

KEEP YOUR FIREPLACE SAFE

NEVER USE GASOLINE OR HIGHLY FLAMMABLE MATERIALS TO START A FIRE!

AIR KIT OPERATION:

The damper rod for the air kit is located inside the firebox, and extends above the rear firebrick. Push the rod up to open the air damper. The reverse closes the damper.

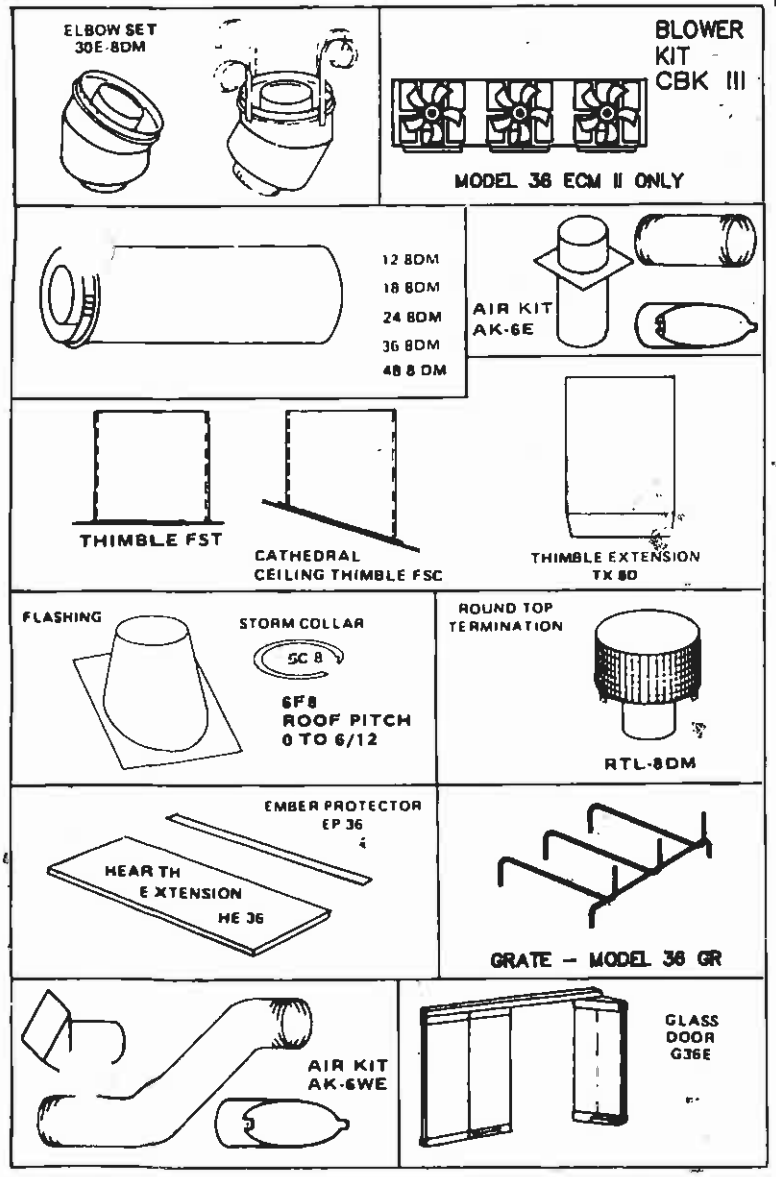
NO.

The air kit damper should be open while the fireplace is in use. This supplies outside air for combustion instead of using all inside room air. The damper should be closed when the fireplace is no longer being used to prevent the entry of cold outside air into your home.

FIREPLACE GRATE:

The unit has been equipped with a grate designed to keep the operation of your fireplace efficient and safe. Do not attempt to defeat its purpose. The size and position of the grate was engineered to give the ideal combustion characteristics for the fire. WARNING. DO NOT REPLACE WITH A LARGER OR DIFFERENTLY POSITIONED GRATE. By keeping your logs within the grate and not on the hearth you will prevent the chance of having a log "spill" or roll out of the fireplace. DO NOT OVERLOAD THE FIREPLACE. Piling excessive wood on your grate will not increase efficiency and could possibly cause smoke to enter your room.

REPLACEMENT PARTS



INSTRUCTIONS WHEN OFFSET OF CHIMNEY IS NEEDED

TO INSTALL ELBOWS

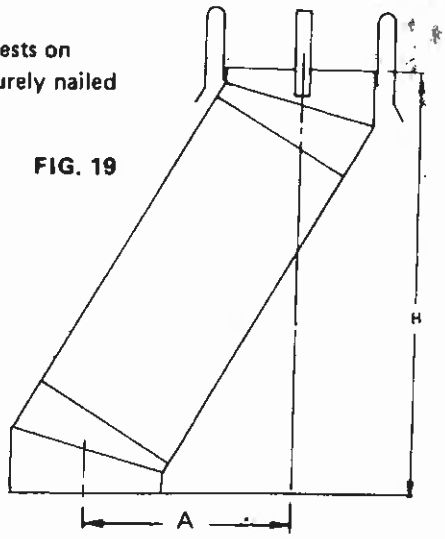
1. To achieve desired offset, you may install combinations of 12", 18", 24", 36", 48" lengths of double wall pipe (see single offset chart and FIG. 19).

2. Chimney weight above offset rests on return elbow. Straps must be securely nailed to rafters or joists.

RISE AND OFFSETS

A	B	48	36	18	12
4 3/8	16 3/8				
9 3/4	25 1/2				1
12 3/4	30 3/4			1	
15	34 3/4				2
18	40			1	1
21 1/4	46 1/4		1		
23 3/4	49 1/4			1	2
27 3/4	56 3/4	1			

FIG. 19



DETERMINING AMOUNT OF PIPE:

When planning the amount of pipe and termination needed to properly install your fireplace, consult the lineal gain chart below. The amount of gain shown in the right side column is the actual gain without any allowance to subtract for the pipe joint overlap. The lap allowance has been calculated in the figure given. SEE FIG. 20.

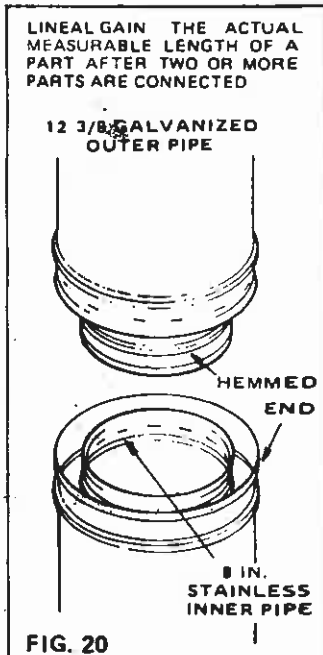


FIG. 20

LINEAL GAIN

PART NO.	DESCRIPTION	GAIN (IN.)
36 ECM II 36 EM II	FIREPLACE	41 7/8
12-8DM	PIPE SECTION	10 5/8
18-8DM	PIPE SECTION	16 5/8
24-8DM	PIPE SECTION	23 5/8
36-8DM	PIPE SECTION	34 5/8
48-8DM	PIPE SECTION	46 5/8
RTL-8DM	ROUND TERMINATION	6
CTL-8DM	CHASE TERMINATION	1 TO 12

When ordering replacment parts for this fireplace be sure to include the model number on your order. The model number for this fireplace is 36ECM II, 36EM II MANUFACTURED HOUSING.

GLASS DOOR AND FAN SERVICE INSTRUCTIONS

The Symbol of Excellence

CAUTION: TURN OFF ELECTRICAL BREAKER TO THE FIREPLACE.

NOTE: Refer to Page 1 for illustrations.

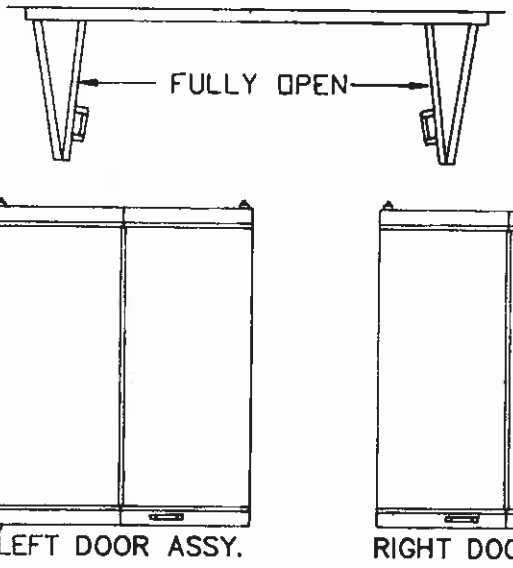
1) Remove the glass doors.
2) Remove the grate from the fireplace.
3) Tip out the bottom front refractory by lifting the back end of the bottom front refractory and lifting out.
4) Lift out the access plate.
5) Unplug the blower electrical cord.
6) Remove 4 screws holding the blower assembly, tip the top end of the blower assembly towards you and lift out.
7) Install the new blower assembly and secure with 4 screws.
8) Plug the blower electrical cord into the receptical in the fireplace.
9) To complete the installation follow steps 1 – 5 in reverse order.

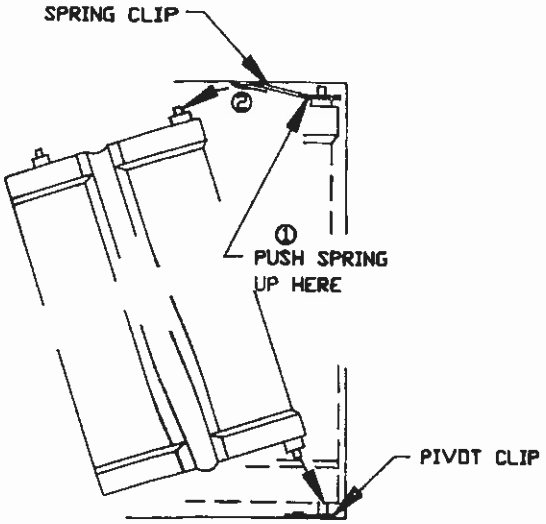
DOOR PLACEMENT

1) Select the right door panel as identified in the diagram.
2) Fold the door in half and place the long pin into the lower pivot plate.
3) Rock the top of the door to the left and tuck the two top pins into the upper rail. Rock the door back to the right and snap the right most pin into the hole in the spring clip.
4) Close the door so that it sits flat in one half of the opening. Do not be concerned at this point that the door does not sit square.
5) Repeat steps 2 through 4 for the left door.

ALIGNMENT

1) Place pieces of cardboard or similar material under the bottom of the doors so that they sit square; have about an 1/8 inch gap between them; and are evenly spaced from the outer edges.
2) Carefully mark with pencil one edge of each bottom pivot plate.
3) Remove the cardboard supports, open each door halfway, align the pivot plates with your mark and tighten the lower screws.
4) Hold the door up so that the door sits square and tighten each spring clip.
5) The door should now close freely, and be aligned. You may require a little more adjustment, but if the initial alignment was correct and the lower pivot clips are aligned with the marks you made, only the top spring clips need adjustment.





INSTALLATION INSTRUCTIONS
BLOWER MODELS CBK-III and CBK-EII

CAUTION: TURN OFF ELECTRICAL BREAKER TO THE FIREPLACE.

1) Remove the glass doors.
2) Remove the grate from the fireplace.
3) Tip out the bottom front refractory by lifting the back end of the bottom front refractory and lifting out.
4) Lift out the access plate.
5) Install the new blower assembly and secure with 4 screws. (SEE FIG. 3 and FIG. 4)
6) Remove the front face switch tab by pushing it from the inside out. (SEE FIG. 5)
7) Install switch. (SEE FIG. 2)
8) Plug the switch and the blower electrical cord into the receptical in the fireplace. (SEE FIG. 4)
9) To complete the installation follow steps 1 – 4 in reverse order.

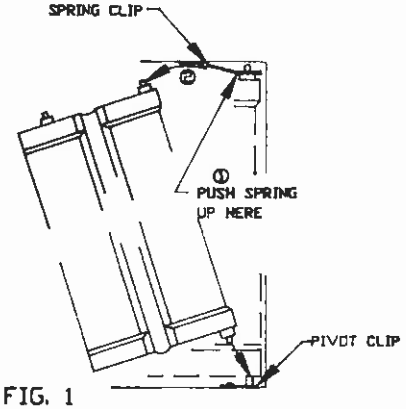


FIG. 1

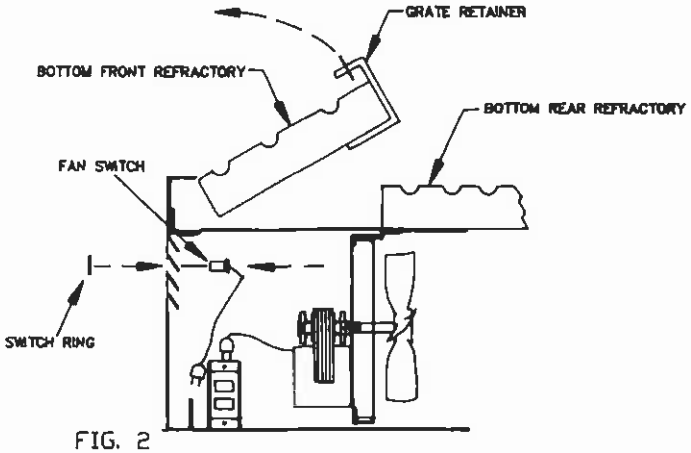


FIG. 2

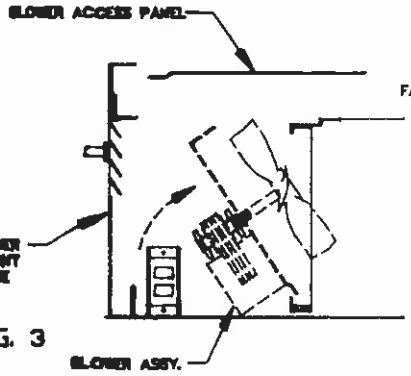


FIG. 3

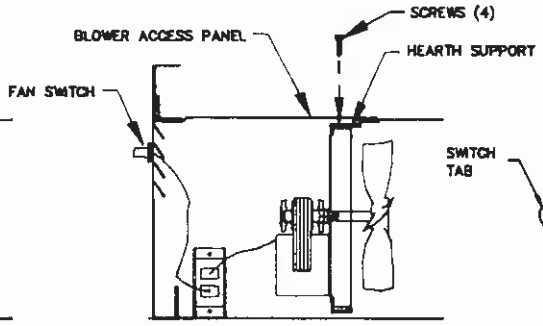


FIG. 4

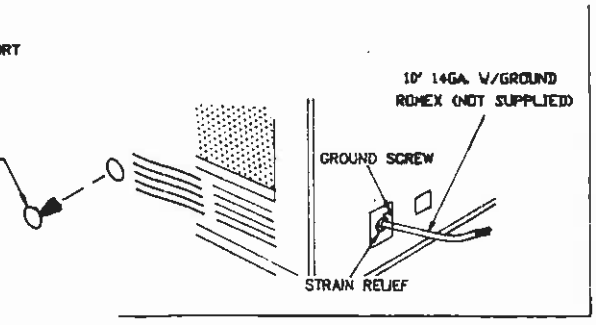
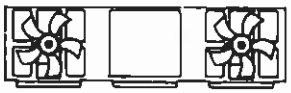


FIG. 5


DELUXE BLOWER KIT CBK-III


BLOWER KIT CBK-E II

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