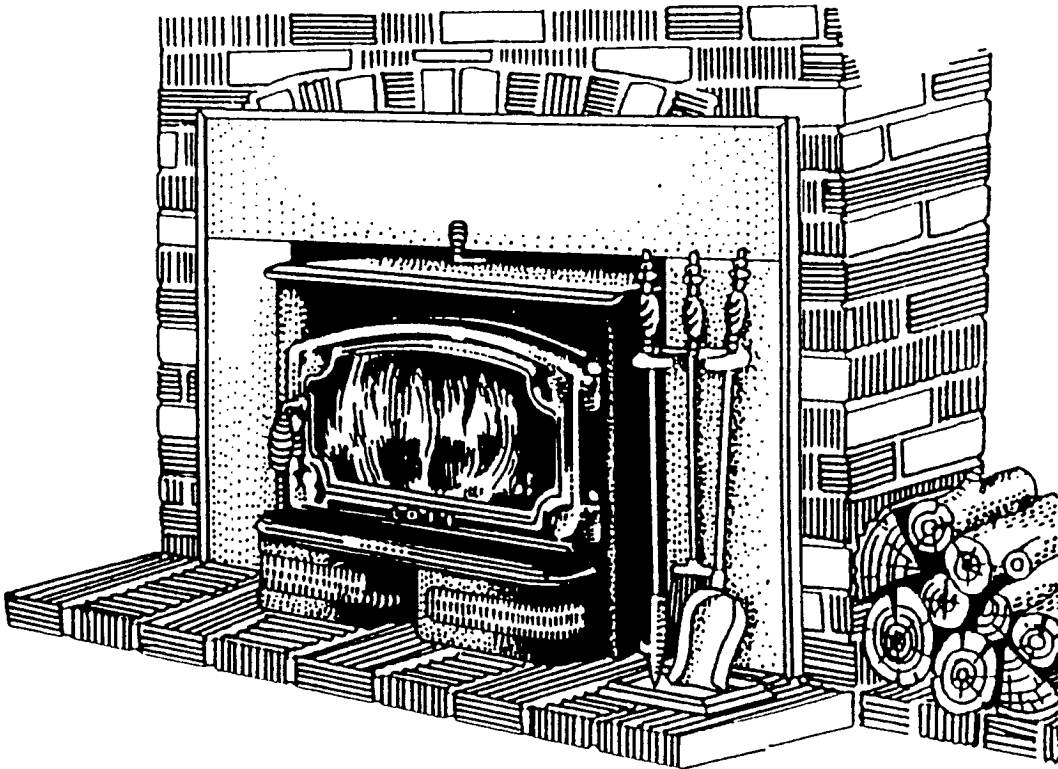


FL/X/LX INSTALLATION MANUAL

JULY '86

I.C.B.O.
No. TL-116



Printed in USA

SAVE THESE INSTRUCTIONS

LOPI ENERGY SYSTEMS
Mfg. by Travis Ind. Inc.
10850 117th Pl. N.
Kirkland, Wa. 98033

1085C

WA 98033

Tested To UL 907 (U.S.A.) ULC 5628 (CANADA)

PLEASE MAKE NOTE OF THE STOVE SERIAL NUMBER BEFORE INSTALLING.

INSTALLATION

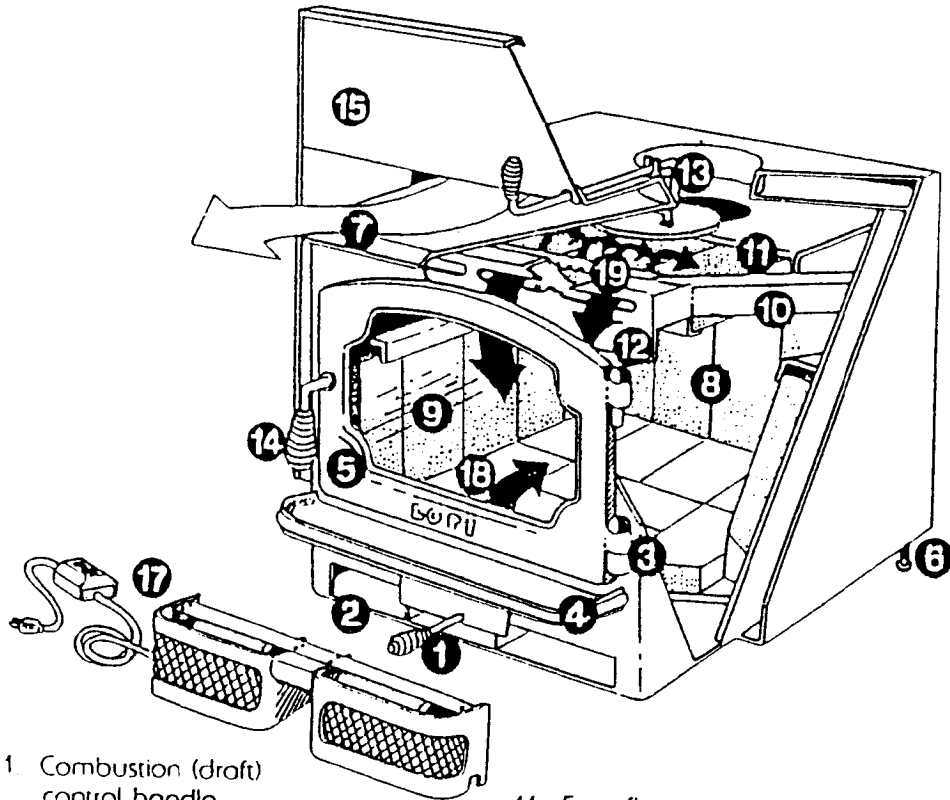
For installation in masonry fireplaces with a minimum chimney height of 12', minimum inside dimension of chimney should be 8 square inches and maximum inside dimension of 10" x 12". If maximum inside dimension exceeds 10" x 12" we recommend use of a direct connector. DO NOT INSTALL IN A ZERO CLEARANCE FIREPLACE!!! Install and use only in accordance with the manufacturer's installation and operating instructions.

ASSEMBLY:

To make the installation of your fireplace insert easier remove the boxed materials within the insert firebox. Please read all instructions before installing and using your stove.

INSTALLATION TOOLS NEEDED: Standard screwdriver, tape measure, pliers, level, gloves, 1/2" open end wrench and pencil.

Below is a cut-away illustration of an insert highlighting the names, parts and operations that will be mentioned in this manual.



- | | |
|---|---|
| 1. Combustion (draft) control handle. | 11. Free floating masonry baffle. |
| 2. Convection air (cool air intake). | 12. Air wash. |
| 3. Hinges. | 13. Bypass damper. |
| 4. Ashlip. | 14. Spring handles. |
| 5. Loading doors (optional solid brass). | 15. Panels. |
| 6. Leveling bolts. | 16. Start up air housing (not shown). |
| 7. Convection air (warm air outlet). | 17. Optional 220 CFM fan. |
| 8. Firebrick. | 18. Start up air. |
| 9. High temperature glass. | 19. Secondary air. (1 & 2 models only). |
| 10. Primary induction air tubes (one on each side). | |

Your LOPI fireplace insert will come packaged in several boxes. These will include:

1. **Stove Master Box** - Includes the stove firebox, doors with handles, firebrick, baffle, angle, hardware kit, and manual (single door unit doors are packaged separately. Includes hardware for doors and glass braces)
2. **Glass Box** - Includes two pieces of glass for the double door units or one piece of glass for the optional single door ("X" insert only) of high temperature glass and non-asbestos fiberglass gasketing
3. **Ash Lip** - Includes one cast ash lip and hardware
4. **Panel Box** - Includes two side panels, one top panel and hardware

Accessories available through your local LOPI dealer. These optional packages include:

1. Brass trim for ash fender
2. Brass trim for panels.
3. 220 CFM fan.
4. Reduced clearance mantle shield
5. Single door for X insert only (brass or cast).
6. Double doors in brass or cast.
7. Etched glass (double or single door.)
8. Firescreen.

NOTE: LOCK EXISTING FIREPLACE DAMPER IN 'OPEN' POSITION BEFORE INSTALLING INSERT.

Installing your insert requires some preparation and homework. It is very important to learn your local building codes. You may be required to obtain a building permit before installing your insert. Your local Building Inspection Department will be happy to assist you with information regarding installation and safety requirements in your area. Also, notify your home insurance company that you plan to install a fireplace insert. Before using the insert, be sure to have a local Building Inspector approve your installation in writing.

LOPI inserts are intended for installation in accordance with the Standards for Chimney Fireplaces and Vents, NFPA No. 211.

You should inspect your fireplace for good integrity throughout the system. There should be no missing bricks, mortar, cracks or heavy deposits of creosote. It is recommended that your fireplace be cleaned and inspected by a professional chimney sweep before installing your stove.

NOTE: DO NOT CONNECT THE INSERT TO A CHIMNEY SYSTEM SERVING ANOTHER APPLIANCE OR AIR DISTRIBUTION DUCT.

Certain areas also require a direct flue connection for insert installation. All LOPI inserts have been tested and approved with or without the use of a direct flue connection.

NOTE: LOPI'S NEW INTERIOR FLUE DAMPER ALLOWS EASY INSTALLATION OF AN 8" DIRECT FLUE CONNECTION ON ALL OF ITS INSERT MODELS. TO FIT THE CONNECTOR PIPE TO THE FLUE ON THE UNIT YOU WILL BE REQUIRED TO NOTCH THE PIPE TO FIT IT OVER THE DAMPER CONTROL ROD.

WARNING: CARELESS INSTALLATION IS THE MAJOR CAUSE OF SAFETY HAZARDS. CHECK ALL LOCAL BUILDING AND SAFETY CODES BEFORE INSTALLATION OF THE UNIT.

Your fireplace insert is very heavy and requires at least two people to move it safely. The insert can be damaged by mishandling. Before installing, check and clean your masonry chimney system thoroughly. If in doubt about its condition, seek professional advice from your authorized LOPI dealer or certified chimney sweep.

WARNING: DO NOT REMOVE BRICK OR MORTAR FROM EXISTING FIREPLACE TO INSTALL UNIT. IT IS NECESSARY TO PERMANENTLY SEAL ANY OPENING BETWEEN THE MASONRY OF THE FIREPLACE AND THE MASONRY FACING.

DIRECT FLUE CONNECTOR:

All LOPI inserts have been tested with and without a direct flue connect (DFC). A DFC is highly recommended for chimneys exceeding a 10" x 12" inside diameter to promote a better draw. A DFC is suggested for all insert installations in Canada.

For DFC kits, please consult your authorized dealer and follow the manufacturer's requirements for installation.

NOTE: DIRECT FLUE CONNECTION MAY BE REDUCED TO 6" IF A MINIMUM OF 15' OF LINER IS USED.

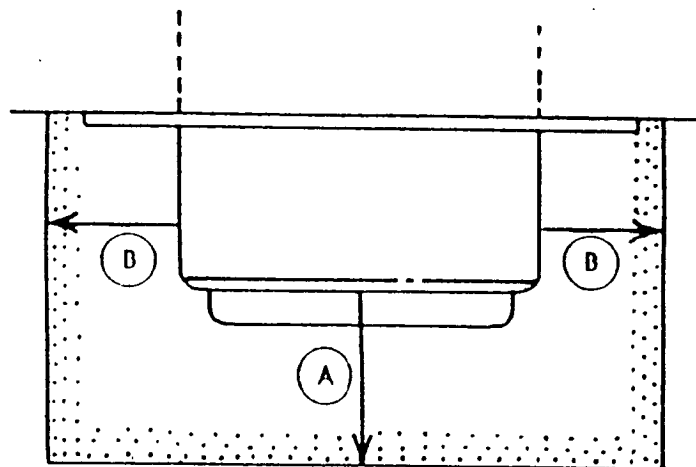
FLOOR PROTECTION:

Floor protection of fireplace hearth must meet the standards required for clearance to combustibles.

The non-combustible material (raised or flush) should extend at least:

A = 18" (455mm) in front of the insert loading doors.

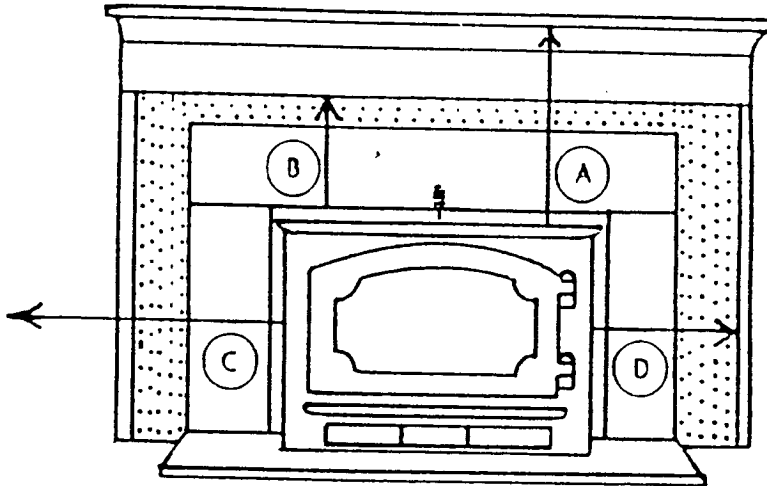
B = 8" (205mm) to both sides of the insert.



The stove requires a non-combustible hearth extension of 18" (455mm) from the front of the unit, and 8" (205mm) to both sides. If you do not have a non-combustible hearth or your existing hearth does not meet these minimum requirements, you will be required to install a fireproof non-combustible hearth extension or pad.

CLEARANCES TO COMBUSTIBLES:

Before installing your insert, make sure that your fireplace meets the clearances to combustibles set up in the table. **FAILURE TO INSTALL YOUR INSERT TO THESE CLEARANCES MAY PRESENT A SERIOUS FIRE HAZARD.**



MODEL X INSERT

A = TO MANTLE	29" (736MM)
B = TO TOP FACING	25" (635MM)
C = SIDEWALL	23" (584MM)
D = SIDE FACING	15" (381MM)
E = ANY ROOM	36" (914MM)

MODEL FL INSERT

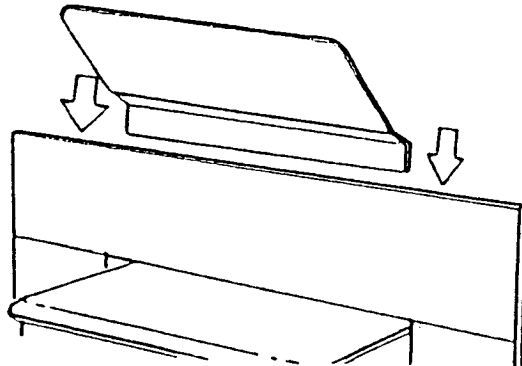
A = TO MANTLE	25 1/2" (648MM)
B = TO TOP FACING	25 1/2" (648MM)
C = SIDEWALL	21 1/2" (546MM)
D = SIDE FACING	12" (305MM)
E = ANY ROOM	36" (914MM)

MODEL LX INSERT

A = TO MANTLE	37" (940MM)
B = TO TOP FACING	33" (838MM)
C = SIDEWALL	22" (560MM)
D = SIDE FACING	15" (381MM)
E = ANY ROOM	36" (914MM)

MANTLE CLEARANCE REDUCTION:

Clearances to the combustible mantle or top facing can be reduced with the use of LOPI's listed component Mantle Reduction Shield.



To install, simply pull the top panel gently away from the fireplace and place the mantle shield behind the panel. The force of the panel against the fireplace will hold the mantle shield in place.

The following reduced clearances can be achieved with the use of this shield:

MODEL X	- Combustible Mantle or Top Facing	= 19" (483mm)
MODEL FL	- Combustible Mantle or Top Facing	= 19.5" (495mm)
MODEL LX	- Combustible Mantle or Top Facing	= 23.5" (597mm)

INSTALLATION OF INSERT INTO FIREPLACE:

LEVELING BOLTS

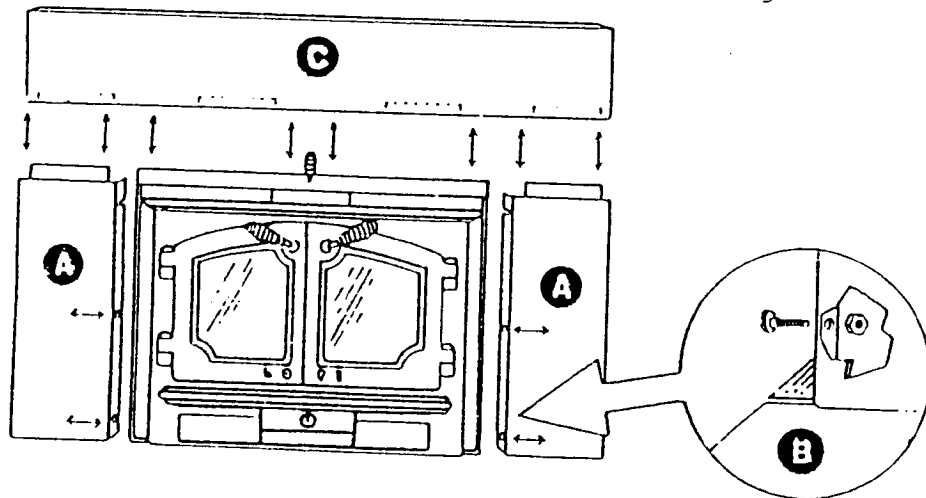
If your fireplace is stepped down from the hearth, you will be required to utilize the leveling bolts located within the hardware package.

These bolts screw into the welded nuts located along the rear bottom of the firebox within the convection chamber. You will need to lean the unit back and install the leveling bolts through the bottom of the weld nut. Measure the distance that your fireplace floor drops from the hearth and adjust the leveling bolts to this height.

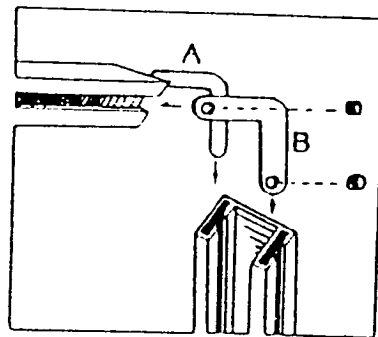
... from the insert to lighten it. With the help of at least one other person, lift the insert and place it about half way into the fireplace opening. You may have to further adjust the leveling bolts at this time.

FACING PANELS/INSULATION INSTRUCTIONS:

Panels are provided in various sizes to frame the insert, and together with the insulation are designed to make the fireplace airtight from the room. These panels must extend at least 2" (50mm) beyond the fireplace opening.



1. Align side panels (A) with the sides of the convection chamber. **BE SURE** that the inside panel flange (the side with the notch) fits **INSIDE** the convection chamber, not butted up to the outside.
 2. Align holes and install bolts from the inside of the convection chamber (B). Secure nuts to bolts and tighten. Due to the limited space, it is advisable to use a dime to tighten the screw while the nut is held in place.
 3. Once side shields are secured, position the top panel (C) over the stove. Now align clips and slide over side panel flanges and the top of the stove heat chamber. Press down firmly for a secure fit.
- If you purchased the LOPI optional panel trim, it should be installed now.



- A Front Corner Bracket
- B Rear Corner Bracket

1. Place trim face down on the floor as it would appear on the insert.
2. Place corner brackets in appropriate slots. Small corner brackets go to the front face of the trim, large corner brackets with screws holes go in back.
3. Once in place, insert set screws and firmly secure with provided allen wrench.
4. Slide completed trim over panels. You may wish to add two sided tape at the ends of the trim to hold it firmly against the bottom of the side panels.

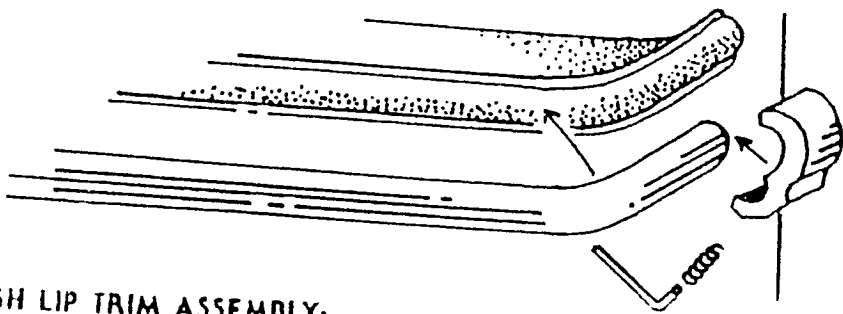
To make the fireplace airtight, remove the backing off the 2- 1/2" (63mm) thick by 2" (51mm) wide strip of insulation that was provided with your panels. Attach the insulation on the backside of the panels, completely around the outside perimeter, allowing a little of the insulation to stick out past the panel edge.

Now, slide your insert in so that the panels are flush to the fireplace opening, being careful not to scratch the hearth underneath.

With a screwdriver, tuck the exposed insulation behind the panels for an airtight fit. Check for a good seal by holding a match around the perimeter of the facing panels to determine if any drafts are occurring. If so, fill the spot with more insulation and recheck.

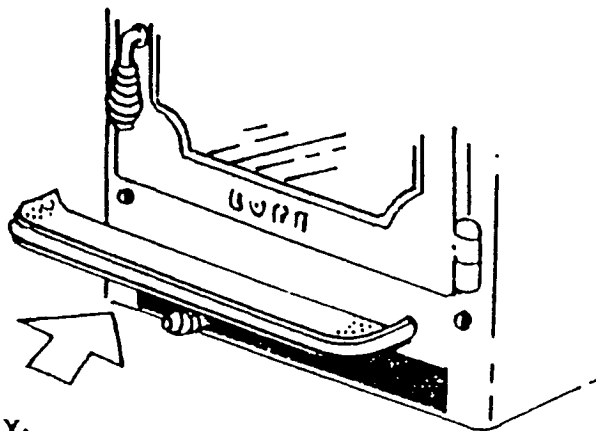
OPTIONAL BLOWER:

All LOPI fireplace inserts come with optional 220 CFM blowers. These blowers must be installed before you assemble the ash lip to the unit and before you install the ash lip trim. Installation instructions are included in blower boxes.



ASH LIP TRIM ASSEMBLY:

If you are going to install the ash lip trim you will need to install it before the ash lip and the optional blower is installed on the unit. To install, position the trim over the ash lip and place the 2 brass clips over the trim. The clips go over the trim at the very ends of the ash lip. To attach the clips, hook the bottoms of the clips to the bottom of the ash lip and force it up and over the trim until it snaps into place. Now while holding the ash lip and trim tightly together secure the clips in place with the provided allen set screws and wrench.



ASH LIP ASSEMBLY:

Your insert comes with a cast ash lip to collect any spillage that may occur when cleaning the unit or loading wood. If you plan to use the optional Brass Ash Lip Trim you must do this now before installing the Ash Lip to the unit (see instructions under ASH LIP TRIM ASSEMBLY).

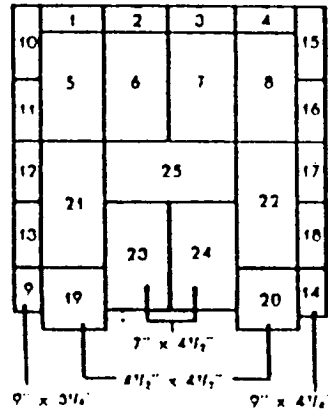
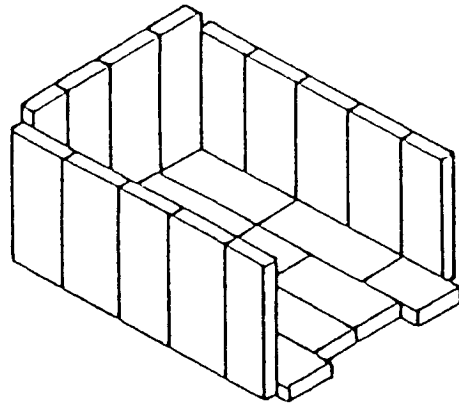
To install this piece, locate the ash lip box. Remove the 5/16" bolts and washers from the ash lip. Put a washer on each bolt and attach by aligning the screws from the inside of the stove, through the holes on the face of the unit located under the loading doors. Align the ash lip and secure the bolts with a 1/2" wrench.

DO NOT OVERTIGHTEN OR YOU WILL STRIP HOLES IN ASH LIP!

FIREBRICK FLOOR INSTALLATION:

Firebrick is provided to protect and extend the life of the steel and help radiate heat evenly throughout the stove.

MODEL X

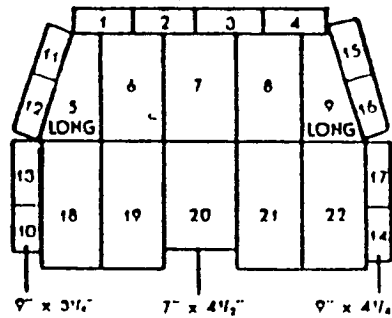
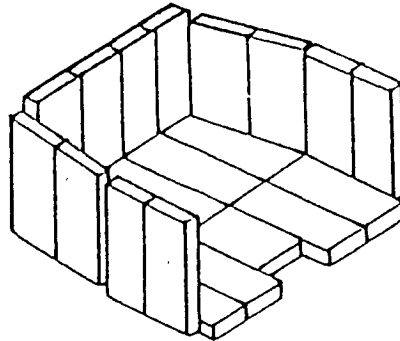


MODEL X

Please follow the numerical sequence of the brick layout as illustrated below. When installing the floor bricks, lift the upright backwall bricks and slide the floor bricks underneath. In this way, the backwall bricks will be set upon the floor bricks.

All firebrick are full size except numbers 23 and 24 which are 4 1/2" x 7"; numbers 19 and 20 which are 4 - 1/2" x 4 - 1/2"; number 9 which is 3 - 1/4" x 9" and number 14 which is 4 - 1/4" x 9".

MODEL FL

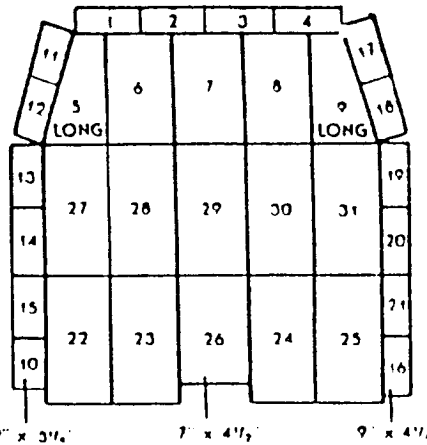
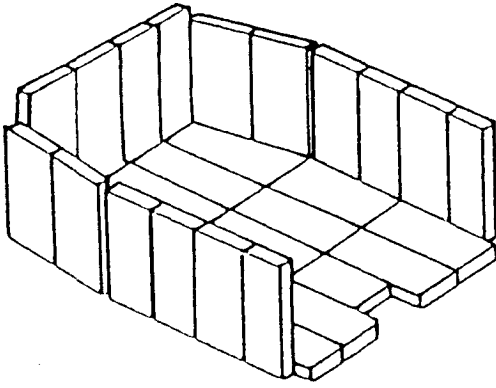


MODEL FL

Please follow numerical sequence of the brick layout illustrated below. When installing the floor bricks, lift the upright backwall bricks and slide the floor bricks underneath. In this way, the backwall bricks will set upon the floor bricks.

All firebricks are full size except number 20 which is 4 - 1/2" x 7"; number 14 which is 4 - 1/4" x 9"; number 10 which is 3 - 1/4" x 9" and numbers 5 and 9 which are 4 - 1/2" x 9 diagonally cut brick (long cut)

MODEL LX



MODEL LX

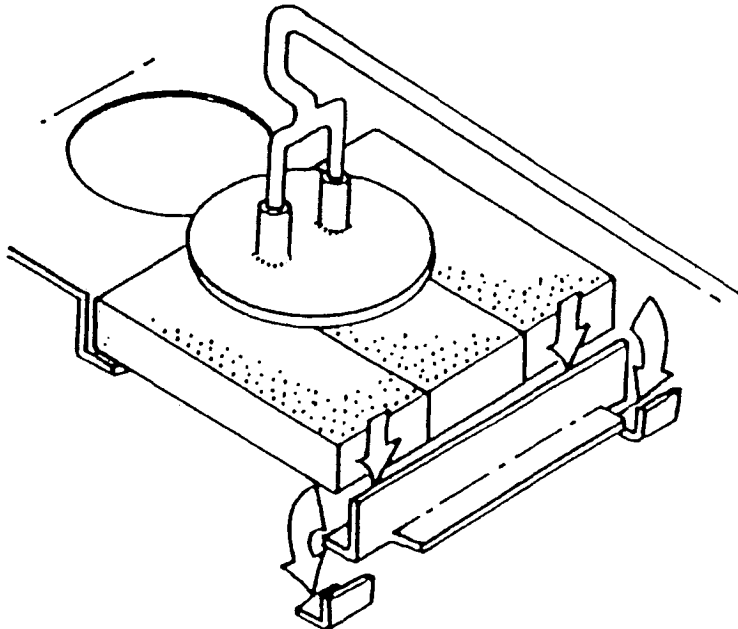
Please follow the numerical sequence of the brick layout illustrated below. When installing the floor bricks, lift the upright backwall bricks and slide the floor bricks underneath. In this way, the backwall bricks will be set upon the floor bricks.

All firebrick are full size except number 26 which is 4 - 1/2" x 7"; number 16 which is 4 - 1/4" x 9"; number 10 which is 3 - 1/4" x 9" and numbers 5 and 9 which are 4 - 1/2" x 9" diagonally cut brick (long cut).

MASONRY DAFFLE INSTALLATION:

The masonry baffle is designed to retain and ignite unburned volatile gases that would otherwise escape up the flue. This results in high efficiency, low particulate emissions and greater heat transfer.

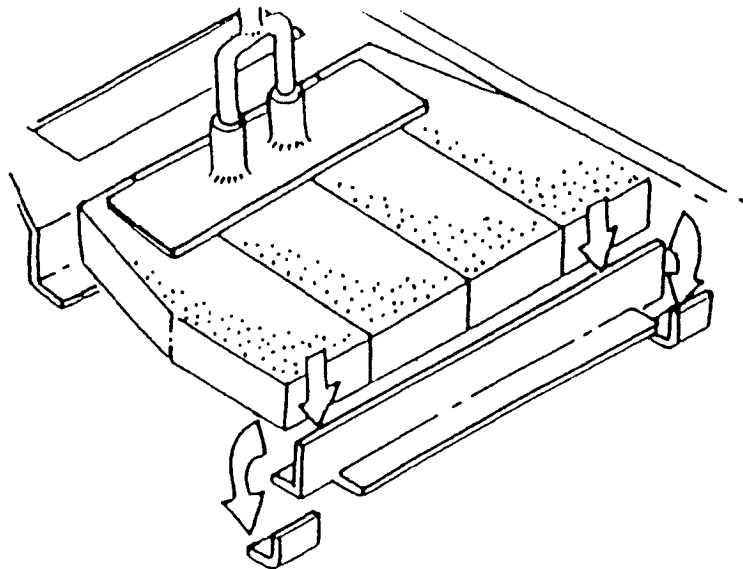
DO NOT OPERATE INSERT WITHOUT THE DAFFLE IN PLACE. DOING SO CAN RESULT IN AN UNSAFE OPERATING CONDITION AND VOID YOUR WARRANTY.



MODEL X

Locate the "T" shaped angle iron (see diagram), and position the angle iron into the clips welded to the front sides of the stove.

Center three full size firebrick on the angle iron as shown in illustration.



**MODEL FL
MODEL LX**

Locate the "T" shaped angle iron (see diagram), and position the angle iron onto the clips welded to the front side of the stove

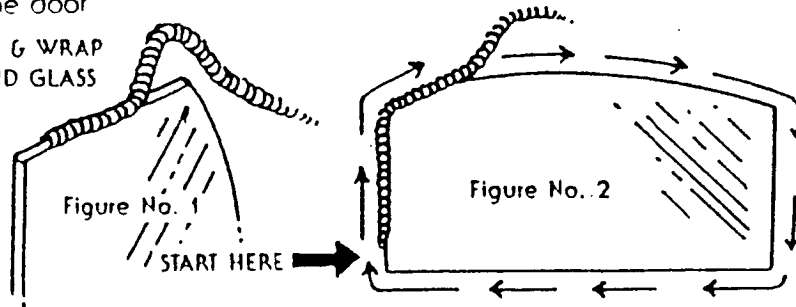
You will need two full bricks and two angle cut bricks (short cut) Position these on the angle iron, placing the angle cut brick to the outside with the angle facing to the outside (see illustration).

GLASS INSTALLATION:

Read all instructions before starting:

- A From the glass kit box, remove the glass and gasketing material
- B The gasketing is provided to ensure a proper airtight seal between the glass and the door

**CENTER & WRAP
AROUND GLASS**



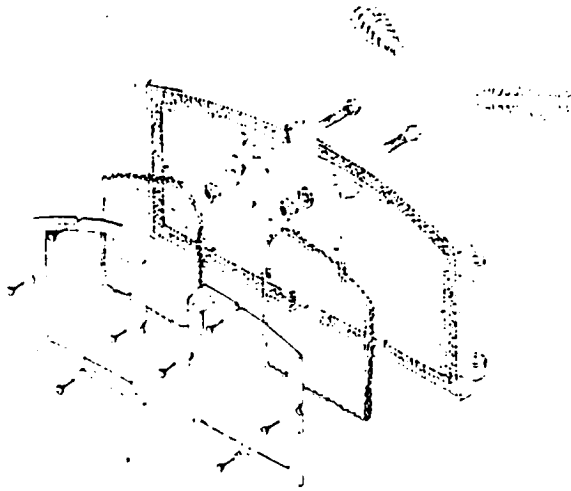
C To attach the gasketing material, simply remove the paper backing, center, and wrap around the edge of the glass (see Figure 1).

D When applying gasketing material, always start on the outside lower corner (Figure 2) This will ensure that the frayed ends will start and end in an area that is not visible when doors are installed

E Trim off any excess

DOUBLE DOOR ASSEMBLY:

- 1 Remove doors from stove and position them face down on a table or the floor (Place on towel to protect door surface)
- 2 Take gasketed glass and center it into the door frame. If the glass is etched, place the etched surface face down so the etching will face out when installed
- 3 Remove the 2 cast retainers from the stove hardware kit along with the 8 self-tapping screws. Place the cast retainers over the glass and align the notches in the retainer with the pre-drilled holes on the door. Secure the retainer with 4 screws each



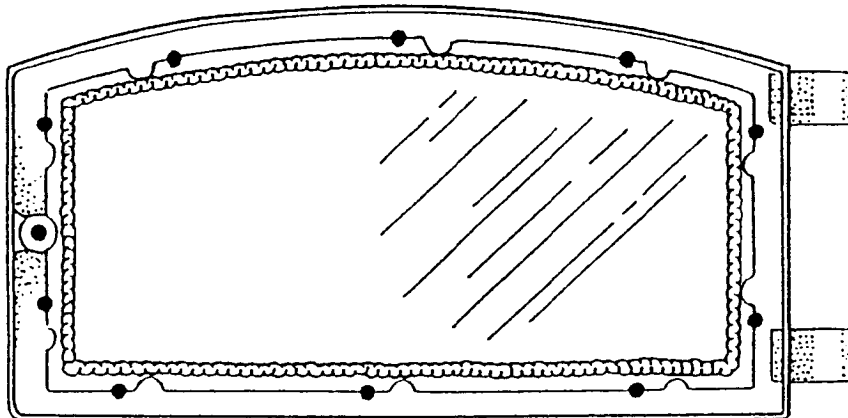
4. Tighten the screws down in an even manner to ensure equal distribution of pressure on the glass. Failure to do so could result in glass breakage. Secure screws until frame and glass are snug and will not move. **BE CAREFUL NOT TO OVERTIGHTEN!**

5. If glass is broken during operation, replace immediately. **USE ONLY LOPI GLASS FROM YOUR LOCAL LOPI DEALER DO NOT SUBSTITUTE!**

NOTE: HANDLE DOORS AND GLASS GENTLY. NEVER SLAM OR ABUSE DOORS. REPLACE ALL BROKEN OR CRACKED GLASS.

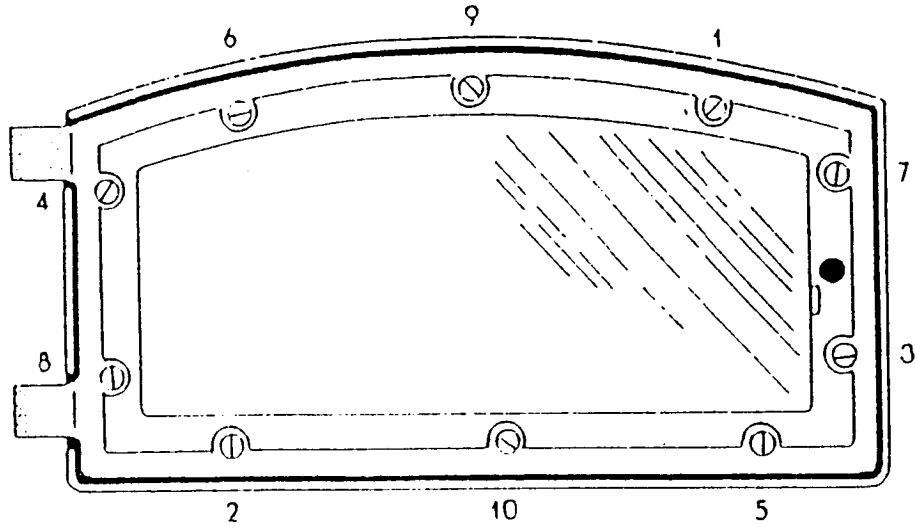
SINGLE DOOR ASSEMBLY:

1. From the single door box, remove the Door Shell, the Cast Retainer, one Door Handle and one hardware kit which consists of - 1 Stamped Steel Cam, 2 Securing Nuts, 10 Self-Tapping Screws and 2 Hinge Pins.



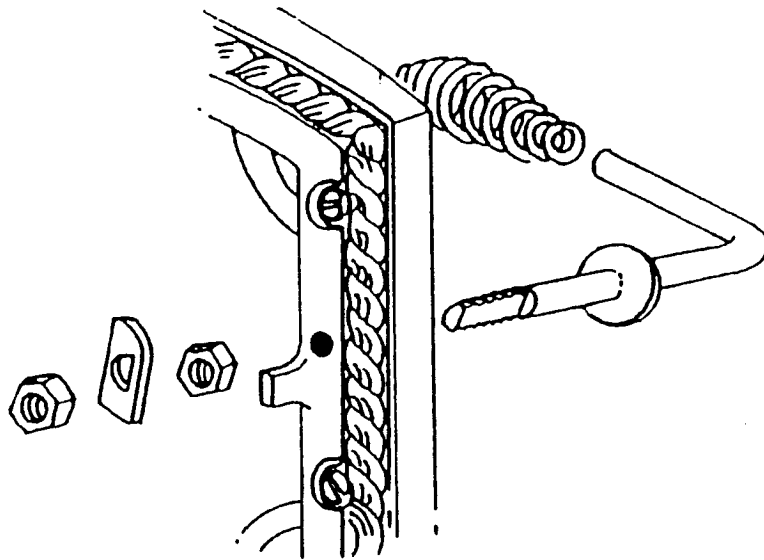
2. To assemble the door, place the Cast Retainer facedown so the hinges face out to the right side (see illustration). Next place the gasketed glass into the Cast Retainer. If it is etched glass make sure that the etched surface is facing out toward you. The glass fits snugly within the recesses of the Cast Retainer.

3. Now position the Door Shell over the top of the glass and retainer. Once the shell has been positioned over the glass and retainer, squeeze all three pieces tightly together with both hands and gently flip over. Be careful not to dislodge any of the pieces.

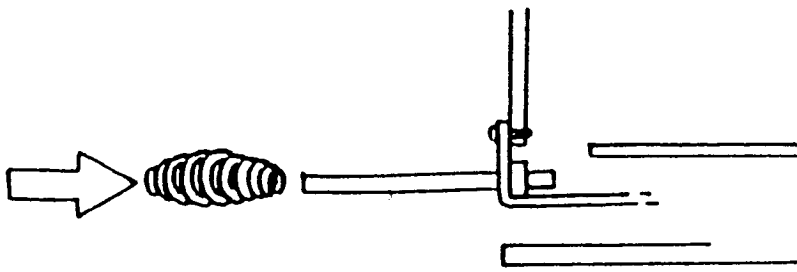


4. Once the door parts have been flipped over, adjust the Cost Retainer so the securing holes on the retainer align with those on the Shell Door. Secure the door, glass and retainer together with the 10 self-tapping screws. Large one piece door uses only 8 self tapping screws. Tighten screws in the configuration shown. Tighten the screws in an even manner to ensure equal distribution of pressure on the glass. Failure to do so could result in glass breakage.

5. Once the door is assembled, place the hinge pins into the door and hang the door onto the face of the stove.



6. Finally assemble the door handle. To do this first swing the door open and run the door handle through the handle hole in the door. Next take one of the securing nuts and tighten it down with your hand until snug. Now turn the door handle in so it is facing inward and horizontal to the top of the stove. Hold the handle in this position and slip the stamped steel cam over the exposed threaded end of the handle. Now thread the final securing nut down onto the handle so the two nuts sandwich the cam. Tighten by hand until snug. Now close the door and turn the handle down. This will lock the door in place. If you achieve a tight secure seal open the door by turning the handle counter-clockwise. If the door is too tight, turn back both securing nuts 1/2 turn and re-tighten. If needed, keep adjusting the securing nuts until doors close securely.



DRAFT CONTROL HANDLE:

To finish the installation you will need to attach the draft control and damper handle. Locate 2 6" spring handles in the hardware kit and screw into place by pushing the spring handles over the handle rods while turning the spring counter-clockwise.

PLEASE REFER TO THE OPERATION & MAINTENANCE GUIDE BEFORE BURNING YOUR NEW STOVE!!