

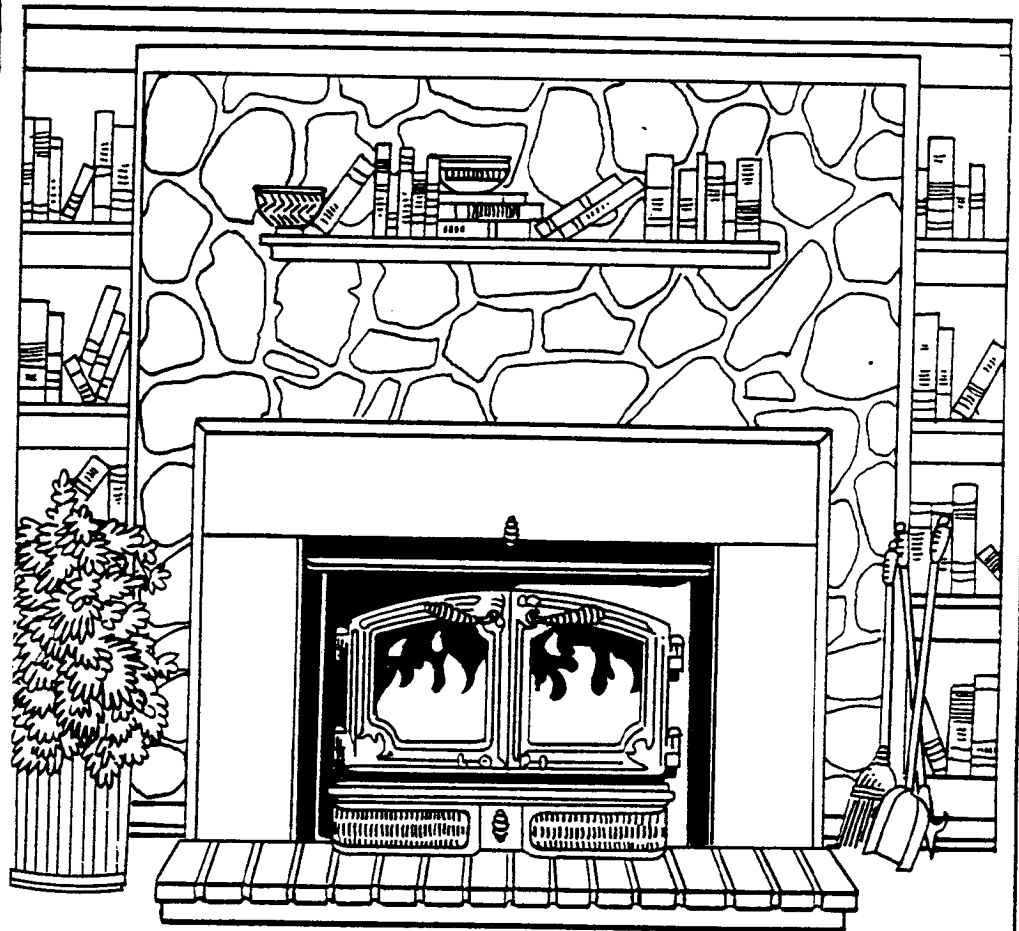
85

SAVE THESE INSTRUCTIONS

OWNER'S MANUAL

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

85 - 86 - 87



Models X, FL & LX FIREPLACE INSERTS

LOPI ENERGY SYSTEMS WEST, LTD.
10850-117th Place N.E. Kirkland, WA 98033

Tested To UL 907 (U.S.A.)

ULC 5628 (CANADA)

PLEASE MAKE NOTE OF THE STOVE SERIAL NUMBER BEFORE INSTALLING.

INSTALLATION

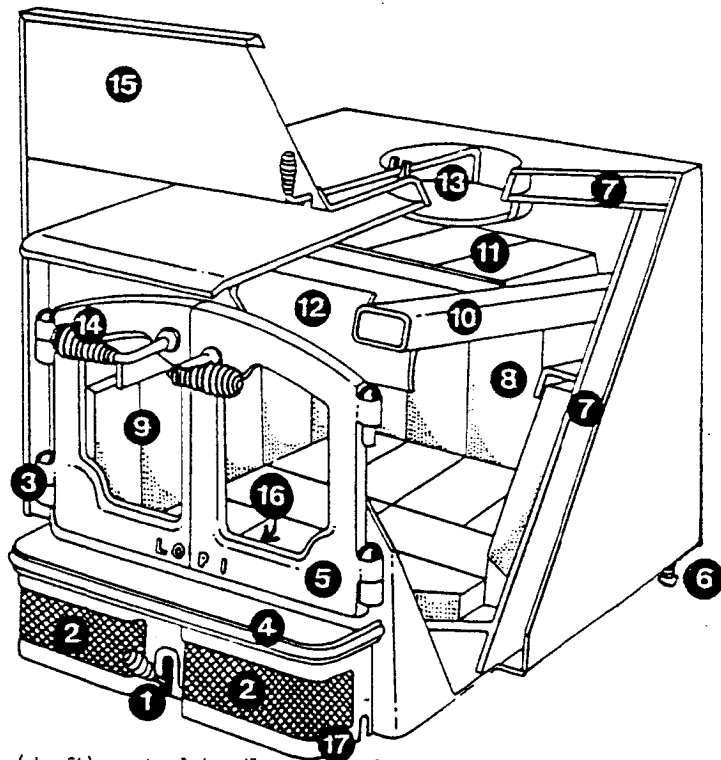
For installation in Masonry Fireplaces with a Minimum Chimney Height of 12'. Minimum Inside Dimension of Chimney should be 8 square inches and Maximum Inside Dimension of 10" x 12". If Maximum Inside Dimension exceeds 10" x 12" we recommend use of a Direct Connector. DO NOT INSTALL IN A ZERO CLEARANCE 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/BASIC TOOLS NEEDED: Standard screw driver, 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.
2. Convection air (cool air intake).
3. Hinges.
4. Ashlip (optional brass).
5. Loading doors (optional solid brass).
6. Leveling bolts.
7. Convection air (warm air outlet).
8. Firebrick.
9. High temperature glass.
10. Secondary induction air tubes (one on each side).
11. Free floating masonry baffle.
12. Air wash.
13. Internal flue damper.
14. Spring handles.
15. Panels.
16. Start up air housing (not shown).
17. Optional 220 CFM fan.

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 separate, 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) unit of high temperature glass and non-asbestos fiberglass gasketing.
3. Ashlip Box - Includes cast or optional brass ashlip with bolts and washers mounted in ashlip.
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 panels.
2. 220 CFM Fan.
3. Reduced clearance Mantle Shield.
4. Single Door for X insert only (Brass or Cast).
5. Double Doors in Cast, Brass
6. Etched Glass (Double or Single door).
7. Firescreen (not available for single door unit).

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 in 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 AN AIR DISTRIBUTION DUCT.

Certain areas 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.

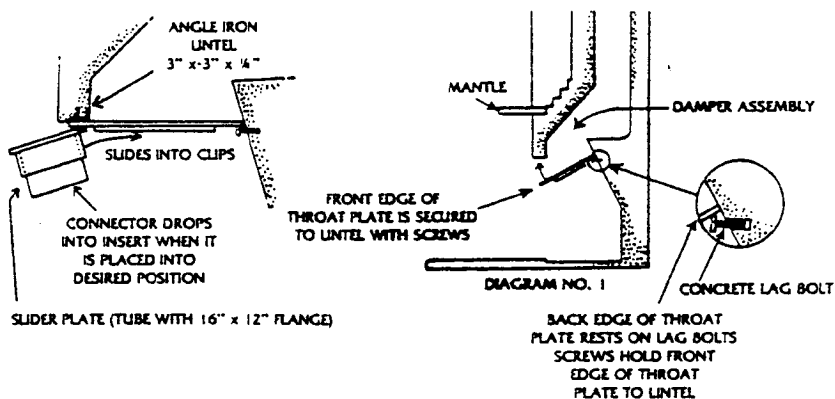
Your fireplace insert is very heavy and requires at least two people to move it safely. The insert can be damaged by mishandling. Before installing, check and clean your masonry chimney system thoroughly. If in doubt about its condition, seek professional advice from your authorized LOPI dealer or certified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

INSTALLATION USING A 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. DFC is required for all insert installations within CANADA.

Below is an illustration showing an example of a DFC.



1. Lock open or remove the existing fireplace damper.
2. Measure the smoke chamber opening and cut the connector plate to fit it allowing enough overlap to secure the plate to the lintel and to the masonry. Making a cardboard template first is highly recommended.
3. Next, cut an 8" diameter hole in the connector plate for the connector pipe.
4. Install the connector plate to the firebox top smoke chamber opening. Use concrete lag bolts to secure the plate. Seal the edges with gasket or furnace cement.
5. Run either an 8" chimney connector or flexible pipe from the flue on the insert and through the connector plate.
6. Secure the pipe to the insert flue with two sheet metal screws. This will require you to drill into the stove flue collar.

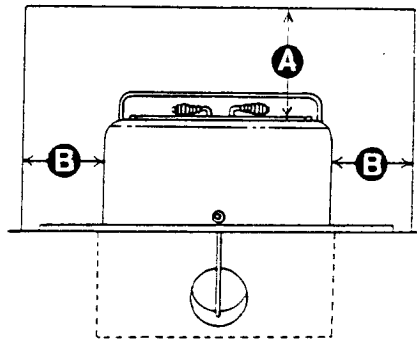
7. Secure and seal flue pipe to the connector plate with furnace cement.
8. Removal for purposes of inspection or cleaning is opposite of installation.

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

FLOOR PROTECTION:

Floor protection or fireplace hearth must meet the standards required for clearances to combustibles.

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

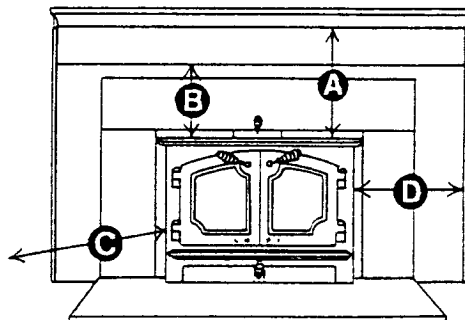


A=18" (455mm) in front of the insert loading doors
 B=8" (205mm) to both sides of the insert

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 (SX)

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

MODEL LX INSERT

A=TO MANTLE	-37"	(940mm)
B=TO TOP FACING	-33"	(838mm)
C=SIDEWALL	-22"	(589mm)
D=SIDE FACING	-15"	(381mm)
E=ANY ROOM COMBUSTIBLE	-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.

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 on both sides 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.

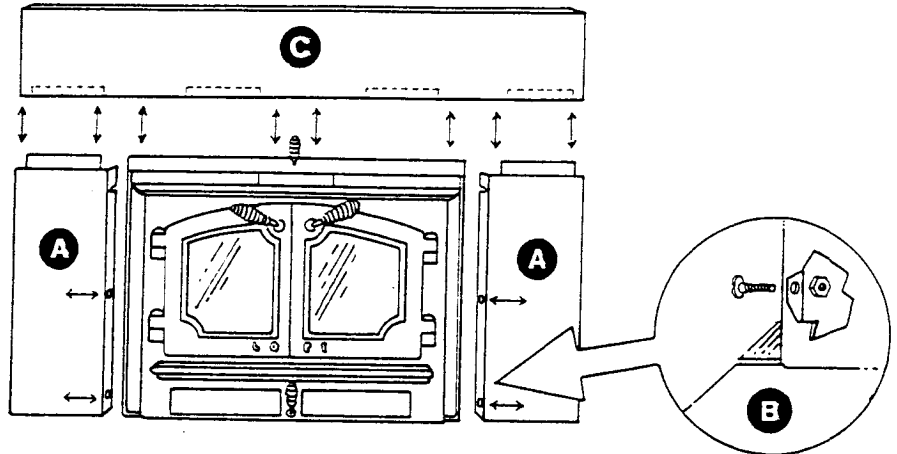
Remove all contents from the insert to lighten the weight. With the help of at least one other person lift the insert and place it about half-way into the fireplace opening.

You may have to further adjust the leveling bolts at this time.

FACING PANELS/INSULATION INSTRUCTIONS:

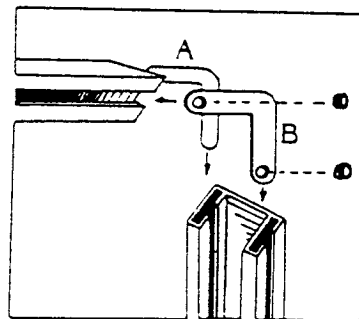
Panels are provided in various sizes to frame the insert and together with the insulation are designed to make the fireplace airtight from the room. These panels must extend at least 2" (50mm) beyond the fireplace opening.

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.



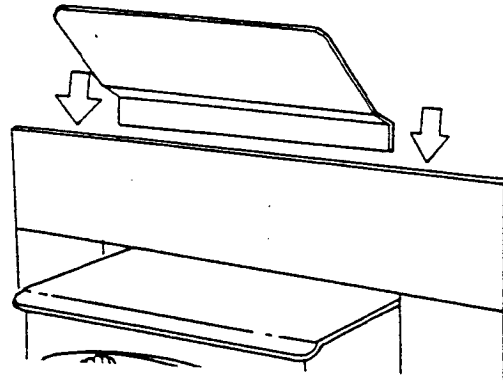
A Front Corner Bracket
B Rear Corner Bracket

1. Place trim face down on 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 screw holes go in back.
3. Once in place, insert set screws and firmly secure with allen wrench provided.
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" (64mm) 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.

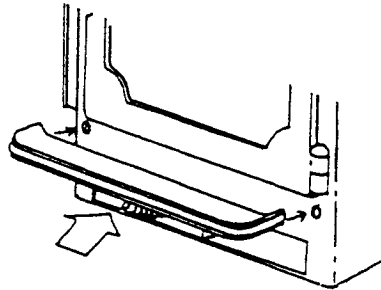
With a screwdriver, tuck the exposed insulation behind the panels for an airtight fit. Check for a good seal by holding a match around the perimeter of the facing panels to determine if any drafts are occurring, if so, fill the spot with more insulation and recheck.



OPTIONAL MANTLE SHIELD:

If you have purchased the optional mantle shield to reduce clearances to the mantle or facing it should be installed at this time.

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.



ASHLIP INSTALLATION:

The stove comes with a cast, or optional brass plated ashlip to collect any ash spillage.

To install this piece, locate the ashlip box. Within the box, find the ashlip, and two 5/16" bolts and washers. Remove the bolts and washers from the ashlip. Put a washer on each bolt and attach by aligning the screws through the face of the unit. Align ashlip and secure with a 1/2" wrench. DO NOT OVERTIGHTEN OR YOU WILL STRIP HOLES IN THE ASHLIP.

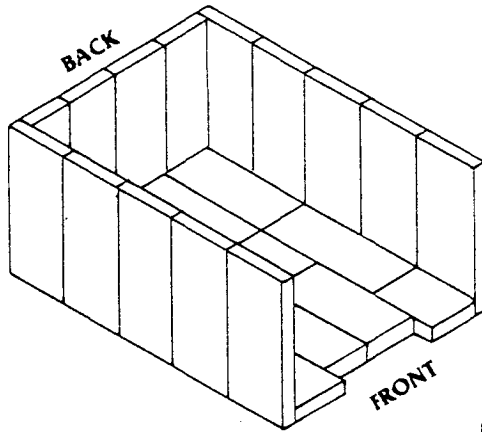
FIREBRICK FLOOR INSTALLATION:

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

MODEL X

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 22 and 23 which are 4 1/2" x 4 1/2" and numbers 24 and 25 which are 4 1/2" x 7 1/2".



TOP VIEW

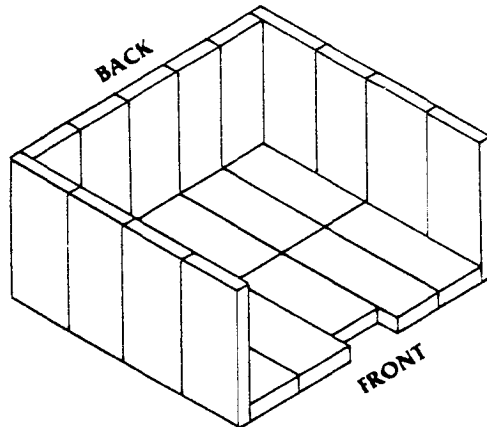
	1	3	5	7	
6					14
8	2	4	6	8	15
11		20			16
13	19			21	18
12	22	24	25		17
				23	

MODEL X

MODEL FL

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 set upon the floor bricks.

All firebricks are full size except number 23 which is 4 1/2" x 7 1/2".



TOP VIEW

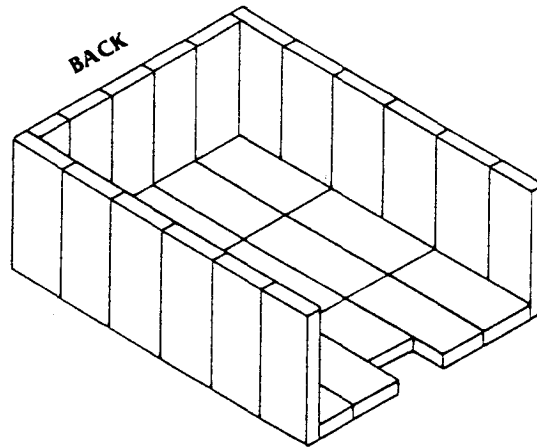
	1	3	5	7	9	
11						15
12	2	4	6	8	10	16
14		20				18
13	19		23	21	22	17

MODEL FL

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 32 which is 4 1/2" x 7 1/2".



TOP VIEW

1	3	5	7	9
2	4	6	8	10
23	24	25	26	27
28	29	32	30	31

MODEL LX

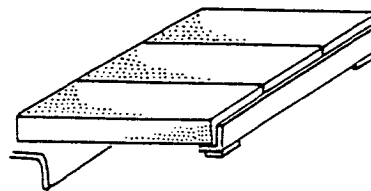
MASONRY BAFFLE INSTALLATION:

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

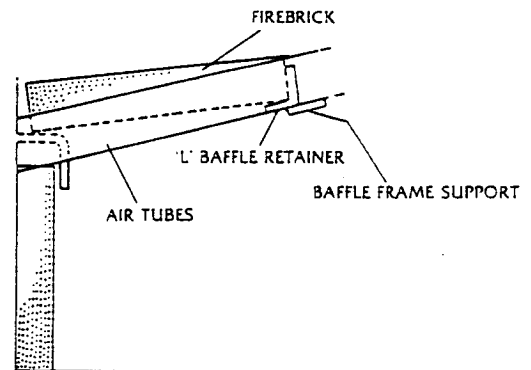
MODEL X

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

Center three full size firebrick, on the angle iron, toward the middle of the stove. There should be a small gap (1/2") on each side of the stove.



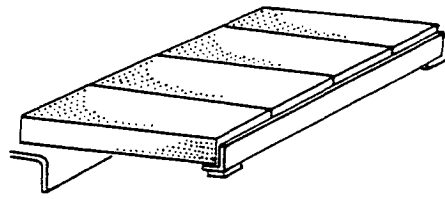
MODEL X



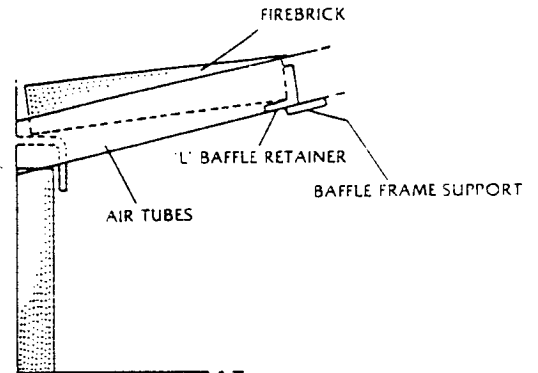
MODEL FL

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

Center four full size firebrick, on the angle iron, toward the middle of the stove. There should be a small gap (1/2") on each side of the stove.



MODEL FL

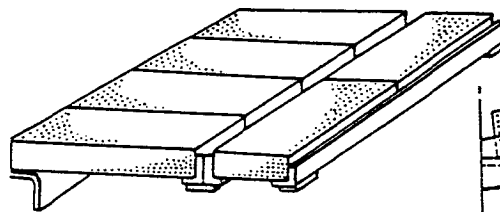


MODEL LX

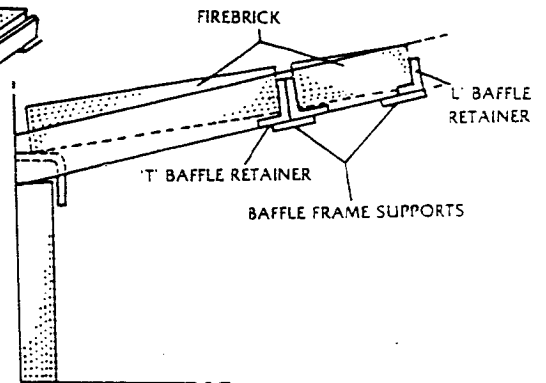
Locate the "T" shaped angle iron (see diagram), and position the angle iron onto the clips welded to the sides of the stove.

Next, locate the "L" shaped angle iron (see diagram), and position the angle iron onto the clips welded to the sides of the stove.

Position two full size firebrick horizontally between the "L" shaped angle iron and the "T" shaped angle iron. Place your hand at the front of the angle iron and push toward the back of the stove until movement is restricted to ensure proper baffle placement.



MODEL LX



Center four full size firebrick toward the center of the firebox (see diagram). This will leave a small gap (1/2") on each side of the stove.

GLASS INSTALLATION:

Read all instructions before starting:

1. Glass Gasketing:
 - 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.
 - 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.

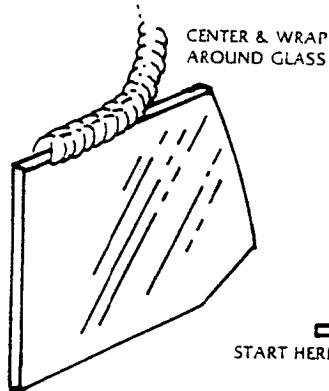


Figure No. 1

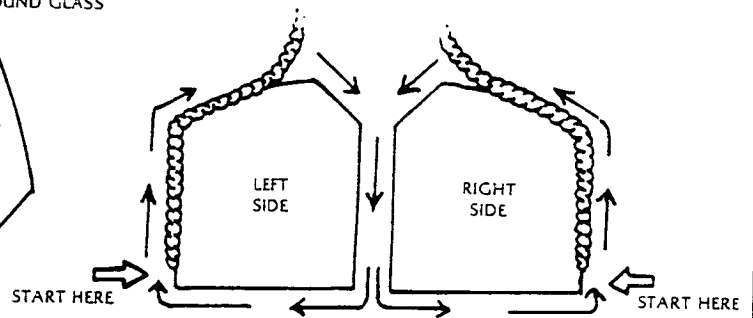
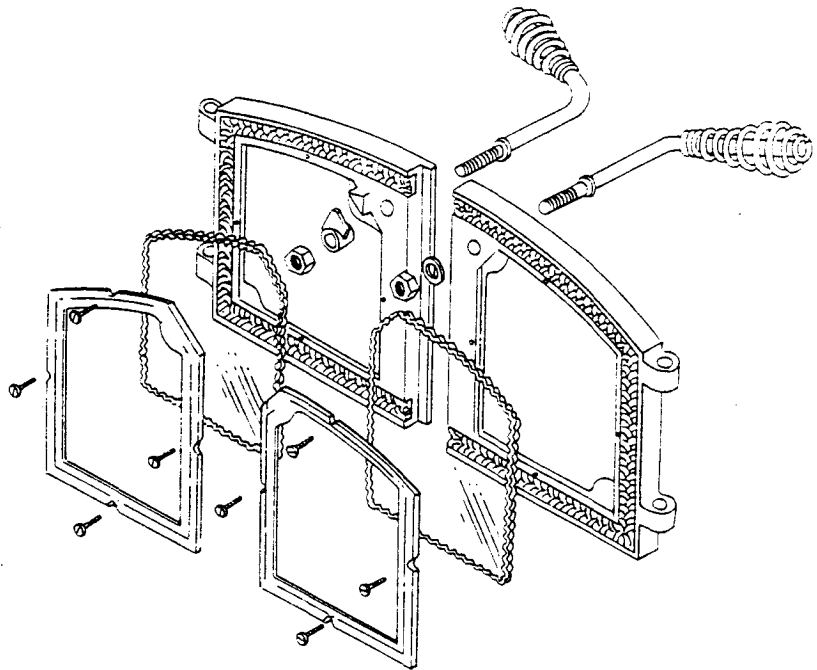


Figure No. 2

2. Glass Assembly in Doors:

- A. Remove door from stove and position face down on a table or counter top. To protect work surface and door, place doors down on a towel or blanket.
- B. Center gasketed glass into door frame. If etched, place etched surface face down so that the etching will face toward the outside when installed. On double door unit remove 2 glass retainers and 8 self tapping screws from hardware package in stove. On single door unit remove 6 glass braces and 12 self tapping screws from hardware package in door box.
- C. On double door, place cast glass retainer over the glass and align notches with drilled holes on door. Secure retainer with 4 screws each. On single door, place two 4" braces on the top of the door and two 6" braces on the bottom of the door and one 6" brace on each end of the door (see illustration). Align the holes on the braces with those drilled in the door. Secure braces with two screws each.



DOOR AND GLASS ASSEMBLY ILLUSTRATION

- D. Tighten screws down in an even manner to ensure equal distribution of pressure on the glass. Failure to do so could result in glass breakage.
- E. Secure screws until frame and glass are snug and will not move (Do not overtighten).
- F. 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.

X INSERT OPTIONAL SINGLE DOOR HANDLE ASSEMBLY:

Once the glass has been installed, find the two hinge pins in the door box hardware package and install the door onto the stove.

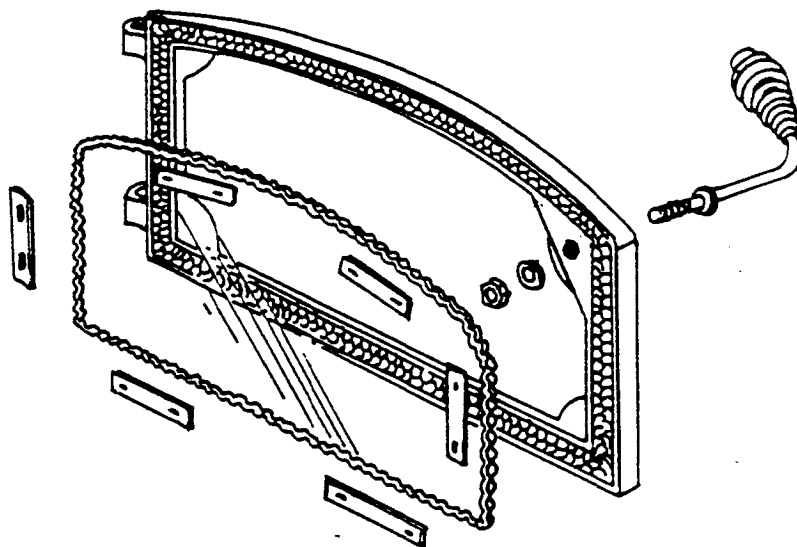
To install the door handle remove hardware, cast cam, securing nut and handle from the hardware package in the door box.

Run the handle through the door and turn the handle straight up so the "D" slot on the handle rod faces downward. Holding the handle in this position, slip the cam over the rod with the flat face of the cam facing outward. Tighten down the cam with the nut.

Do not overtighten nut against the cam. You should tighten the nut down about half a turn more than you can tighten the nut by hand.

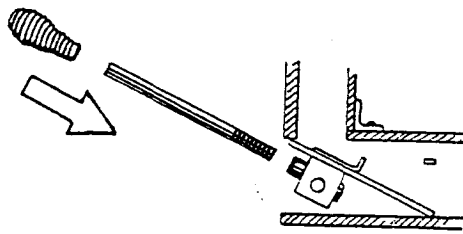
Close the door and seal by lifting handle up and over clockwise.

To open, lift the handle and turn counter/clockwise.



SPRING HANDLES:

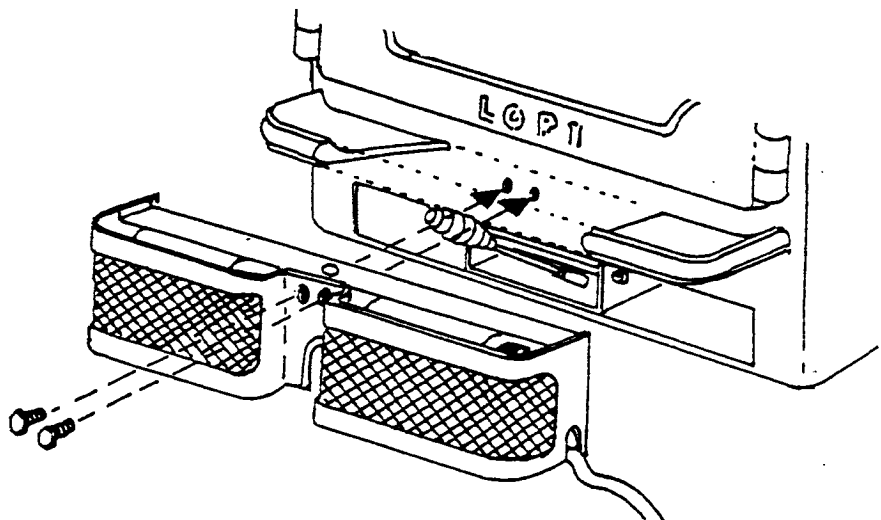
When doors are in place on the unit you will need to install the spring handle. To install the handle, simply push the spring handle down over the metal post while at the same time turning clockwise. This will allow the spring handle to open enough to allow for easy placement over the metal post.



DRAFT CONTROL HANDLE

To finish the installation you will need to attach the draft control handle. To do this, remove the 6" threaded rod from the hardware package in stove. Attach by screwing into the welded nut located beneath the ashlip. Do not tighten down too tight as the nut can break off.

Once the handle is in place position the small spring handle over the rod.



OPTIONAL 220 CFM FAN:

To install the optional fan, find the two mounting screws located on the stove face under the ashlip. Remove the two screws using a standard screw driver. Then, slide the fan under the ashlip lining up the mounting holes of the fan to those on the stove face. Secure with the two self threading screws (removed by you) using a standard screw driver.

NOTE: All LOPI 220 CFM Fans are equipped with a thermostat control. The thermostat control will allow the fan to operate only when the fan is in use. The thermostat activates at approximately 125 degrees F and turns off at approximately 85 degrees F. For further information regarding fan operation, please consult your Operators & Maintenance Manual.

BEFORE OPERATING YOUR INSERT PLEASE READ YOUR OWNERS OPERATING AND MAINTENANCE MANUAL!!!

WARNOCK HERSEY



Tested & Inspected by