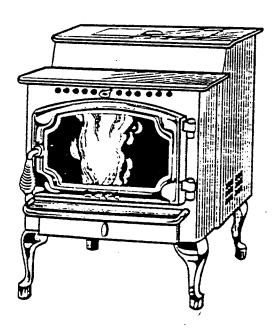
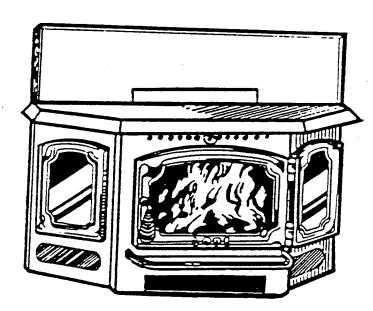


OWNER'S MANUAL

Preparation, Installation, Operation & Maintenance KEEP THIS MANUAL MARCH '93





Model 400 PS - Pellet Stove Model 400 PI - Pellet Insert

Manufactured By:



SAFETY PRECAUTIONS

- VIEWING DOOR AND ASHPAN MUST BE CLOSED AND LATCHED DURING OPERATION.
- THIS UNIT MUST BE PROPERLY INSTALLED IN CROER TO PREVENT THE POSSIBILITY OF A HOUSE FIRE. FOR YOUR SAFETY THE INSTALLATION INSTRUCTIONS MUST BE STRICTLY ADHERED TO. DO NOT USE MAKESHIFT METHODS OR COMPROMISE INSTALLATION.
- CONTACT YOUR LOCAL BUILDING OFFICIALS TO OBTAIN A PERMIT AND INFORMATION ON ANY IN-STALLATION RESTRICTIONS OR INSPECTION RE-QUIREMENTS IN YOUR AREA. ALSO, NOTIFY YOUR INSURANCE COMPANY THAT YOU ARE INSTALLING A PELLET BURNING APPLIANCE.
- THIS UNIT'S EXHAUST SYSTEM WORKS WITH A NEGATIVE COMBUSTION CHAMBER PRESSURE AND A LOW POSITIVE CHIMNEY PRESSURE. IT IS VERY IMPORTANT THAT THE EXHAUST SYSTEM BE COMPLETELY AIRTIGHT AND PROPERLY INSTALLED. THE CHIMNEY JOINTS SHOULD BE SEALED WITH RTV 500 DEGREES FAHRENHEIT (500° F) (250° C) SILICONE SEALANT. IMPROPERLY INSTALLED STOVES ARE THE MAJOR CAUSE OF HOME FIRES.
- NEVER BLOCK FREE AIRFLOW THROUGH THE OPEN VENTS OF THE UNIT.
- NEVER TRY TO REPAIR OR REPLACE ANY PART OF THE APPLIANCE UNLESS INSTRUCTIONS ARE GIVEN IN THIS MANUAL. ALL CTHER WORK SHOULD BE DONE BY A TRAINED TECHNICIAN.
- WAIT UNTIL THE APPLIANCE HAS CCOLED BEFORE CARRYING OUT MAINTENANCE PRO-CEDURES.
- TRAVIS INDUSTRIES, INC. GRANTS NO WARRANTY, IMPLIED OR STATED. FOR THE INSTALLATION OR MAINTENANCE OF YOUR STOVE, AND ASSUMES NO RESPONSIBILITY FOR ANY CONSEQUENTIAL DAMAGE(S).
- DO NOT INSTALL IN A SEDROOM OF A MOBILE HOME.
- KEEP FOREIGN OBJECTS OUT OF THE HOPPER.
- ALWAYS FOLLOW THE INSTRUCTIONS IN THE OWNER'S MANUAL.
- KEEP THIS MANUAL FOR LATER USE.

- THE LOPI 400 APPLIANCE IS DESIGNED AND APPROVED FOR THE BURNING OF PELLETIZED WOOD FUEL ONLY. THE BURNING OF ANY TYPE OF FUEL OTHER THAN THAT LISTED WILL VOID ALL WARRANTIES AND THE SAFETY LISTING OF THE UNIT. DO NOT ATTEMPT TO BURN ANY OTHER FUEL THAN SPECIFIED IN THIS MANUAL
- THE EXHAUST SYSTEM SHOULD BE CHECKED TWICE A YEAR MINIMUM FOR ANY BUILD-UP OF SCOT OR CREOSOTE.
- GASOLINE OR OTHER FLAMMABLE LIQUIDS MUST NEVER BE USED TO START THE FIRE OR "FRESHEN UP" THE FIRE. DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE LIQUIDS IN THE VICINITY OF THIS APPLIANCE.
- ASHES MUST BE DISPOSED OF IN A METAL CONTAINER WITH A TIGHT FITTING LID, AND PLACED ON A NON-COMBUSTIBLE SURFACE BEFORE FINAL DISPOSAL
- THIS UNIT MUST BE CONNECTED TO A GROUNDED, STANDARD 110 VOLT, 60 HZ ELECTRICAL OUTLET. NEVER ROUTE THE POWER CORD UNDER OR IN FRONT OF THE UNIT.
- DO NOT, UNDER ANY CIRCUMSTANCES, CUT OR REMOVE THE GROUNDING PRONG FROM THE POWER CORD.
- DO NOT USE AN ADAPTOR PLUG.
- BEFORE REMOVING PANELS, DISCONNECT THE POWER CORD FROM THE ELECTRICAL OUTLET.
 NOTE: TURNING THE CONTROL SWITCH OFF DOES NOT DISCONNECT THE POWER TO ALL ELECTRICAL COMPONENTS.
- WHEN INSTALLED IN A MOBILE HOME, THE UNIT MUST BE GROUNDED TO THE STEEL CHASSIS OF THE MOBILE HOME AND BOLTED TO THE FLOOR IN COMPLIANCE WITH AND ACCORDING TO H.U.D. REQUIREMENTS.
- THE APPLIANCE WILL NOT OPERATE USING NATURAL DRAFT OR WITHOUT A POWER SCURCE FOR THE BLOWERS AND FUEL-FEEDING SYSTEMS.

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EATURES AND SPECIFICATIONS

FREESTANDING

* ALCOVE

MOBILE HOME

MASONRY FIREPLACE INSERT

FACTORY-BUILT (Z.C.) FIREPLACE INSERT

CONVENIENT

LONG BURN TIME

VERSATILE

CLOSE CLEARANCES

DURABLE

POWERFUL EFFICIENT FANS

SUPERIOR AUGER SYSTEM

HUGE HOPPER

STAINLESS STEEL FIREPOT

QUIET OPERATION

Stove

Insert

Heating Capacity SQ/FT	3 (EPA Exempt) Up to 50	
Height from floor to top of stove on: Pedestal	34 1/4" (870 mm) 30 1/8" (765 mm) 30 1/8" (765 mm) 28 3/4" (730 mm) 24" (610 mm) 25 1/4" (641 mm) 65 (29 KG) (Estimated) 250 (118 KG) 115 Volts, 3 Amps, 60 HZ	Depth Into Fireplace

^{*} See Page 20 for exact fireplace sizing.

FUEL: The unit is designed to operate using 1/4 inch diameter pellets that comply with A.P.F.I. standards. If the fuel does not comply to this standard, the unit may not operate as designed. If the pellets are larger that 1/4 inch diameter the unit may need adjustments; consult with your dealer.

NOTE:

- Store pellets in a clean dry place.
- Emissions information and efficiency information based on tests conducted by E.E.M.C. Laboratory. BTU, output will vary depending on pellet size, moisture content, burn rate and pellet type. Heating capacity is subject to variations due to cellet type, relative moisture content, floor plan, degree of home insulation, and temperature zone.
- A.F.P.I. Association of Pellet Fuel Industries.
- Heating Capacity is based on maximum burn rate.
- Maximum burn time is based on low burn rate.

PREPARATION FOR INSTALLATION -

READ THIS ENTIRE MANUAL BEFORE YOU INSTALL AND USE YOUR NEW APPLIANCE. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.

PREPARATION:

- 1. Remove all tape and packaging.
- 2. Remove the wood shipping frame from around and under the appliance.
- 3. Check that no parts have become loose and the appliance has not been damaged during shipping.
- 4. Remove the hardware pack from the appliance.
- 5. READ THE OWNER'S MANUAL BEFORE PROCEEDING.
- * Appliance should be located such that no doors, drapes, furniture or other combustibles can be placed close or
- * The appliance must be installed in a level, secure position.
- Required Floor Protection:

Minimum size 26 1/8"W x 31 1/2"D (664mmW x 800 mmD) Front - 6" (152 mm) of non-combustible material with a minimum thickness Sides - 0" (0 mm) of 25 gauge (.018", .5mm) floor protection must extend Back - 0" (0 mm)

Chimney Lengths	Maximum	
Vertical	33' (10.06 m)	Minimum Subject to income
Horizontal	10' (3.05 m)	Subject to installation. See Fig. 9
Combined Horizontal & Vertical	4' Horizontal 30' Vertical 10' Horizontal 25' Vertical	Subject to installation. See Fig. 4&9 Any Lesser Combination is Acceptable.

NOTE #1: On chimneys with vertical heights that exceed 15' and/or horizontal runs that exceed 4', a 4" diameter

NOTE #2: When this unit is installed above 4000' in altitude, 4" diameter pellet vent should be used.

- * Do not obtain combustion air from attic, garage, unventilated crawl space or any other enclosed space. Do not locate combustion air inlet at an elevation higher than exhaust termination.
- Outside air (combustion air intake) is recommended, but not required, for all residential installations, but is required for mobile home installations. If an outside air intake (combustion air intake) is used, it must be connected to a 1-3/4", or larger, metal or aluminium duct with a rodent screen fixed to the termination.

NOTE: TRAVIS INDUSTRIES, INC., recommends that an outside air (combustion air) intake be used in all installations. If one is not used, there is a possibility of combustion gases (smoke) being released into your home.

- * The LOPI 400 pellet stove exhaust vent accepts 3" diameter pellet vent pipe. Some of the brands
- 1. Duravent Model PL-Vent Simpson Dura-Vent P.O. Box 1510 Vacaville, CA 95688 (707) 446-1786 or 1-800-227-8846
- 2. James A. Ryder MFG Model PL-Vent Ryder Mfg., Inc. 241 Arvin Avenue Stoney Creek, Cntario Canada (416) 662-1701
- 3. MetalFab Model Pellet Vent P.O. Box 1138 Wichita, KS 67201 (316) 943-2351

NOTE: 4" diameter may be substituted when a 3" to 4" adapter is used.

See manufacturer's installation instructions for precautions required for passing vent through a combustible wall or ceiling. Do not connect this appliance to a vent serving another appliance.

All sections of pellet vent must be fastened to each other with sheet metal screws and silicone sealed with type 500 degree Fahrenheit (260°C) RTV (high heat) silicone sealer, to ensure that the joints are airtight.

PREPARATION FOR INSTALLATION — PELLET STOVE (cont.)

Your Pellet Stove appliance comes completely assembled. Options are available for the different types of installations. The options are listed below and are boxed separately from the appliance. They require assembly.

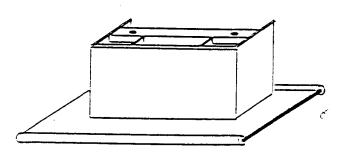
- Pedestal.
- 2. Leg Kit, Black.
- 3. Leg Kit, Brass.
- Leg Kit, Cast Black
- 5. Vertical Pipe Adapter

When lifting the appliance, you may choose to remove the interior components to make it lighter. Refer to the care & maintenance instructions in this manual for the proper sequence of removal and replacement of internal components.

Pedestal Assembly;

Coen the box marked Pedestal and remove the pedestal and the two attachment bolts and washers (3/8" diameter - 16 X 3/4" hex. head boit).

Lift the stove onto the pedestal. Line up the threaded bolt holes in the bottom of the stove with the two holes in the mounting angle of the pedestal (some models use clips that attach to the side of the pedestal – the same directions apply).

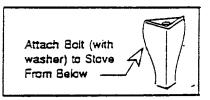


Using a 9/16⁻ open-end or socket wrench, fasten the pedestal to the stove with the supplied bolts and washers. NCTE: Keep the two front leg bolts in place when installing on a pedestal – otherwise air will enter through these poles.

Leg Kit, Black Assembly:

Open the box marked Lag Kit, Black and remove the four 5-1/2" high black steel legs, complete with rubber-tipped leveling bolts (on certain models they are not rubber tipped — the same directions apply), the four attachment bolts (3/8" clameter - 16 X 3/4" hex. head bolt) and the washers.

Raise the stove on some pieces of lumber to a height of about 7. Make sure to level the stove at this point using shims under the pieces of lumber. Line up the hole in the top of the leg with the threaded bolt hole in each comer of the stove bottom. Using a 3/16" open end or socket wrench, fasten the leg to the stove with the supplied attachment bolts and washers, making sure the legs are flush with the comers of the stove.

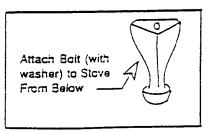


To level the stove, first make sure the leveling bolts with the rubber ends (some models come with steel bolts—the same directions apply) are screwed into position and backed off just enough to penetrate below the steel ponion of the leg. Unscrew each leveling bolts just enough so each leveling bolt is an equal distance from the floor. You may wish to use a piece of wood or other spacer to measure this distance. As long as the lumber holding the stove in place is properly leveled, the stove will be level when the leveling bolts are adjusted properly and the lumber is removed. Next, lower the stove onto the ground and check for a level position. If slight adjustments need to be made, make sure to first raise the stove before turning the leveling bolts. The rubber tips of the leveling bolts will tear if they are adjusted while weight is applied to them.

3. & 4. Leg Kit, Brass or Cast Black Assembly:

Coen the box marked Leg Kit, Brass (or Cast) and remove the four 7-7/8" high legs, complete with rubber-tipped leveling bolts(on certain models they are lot rubber tipped—the same directions apply), the four attachment bolts (3/8" diameter - 16 X 3/4" hex. head bolt) and the washers.

Use the same directions listed above for the Leg Kit, Black assembly. The one difference is that the Brass (or Cast) legs are taller, and the stove should be lifted approximately 8 1/2" above the floor before attachment.



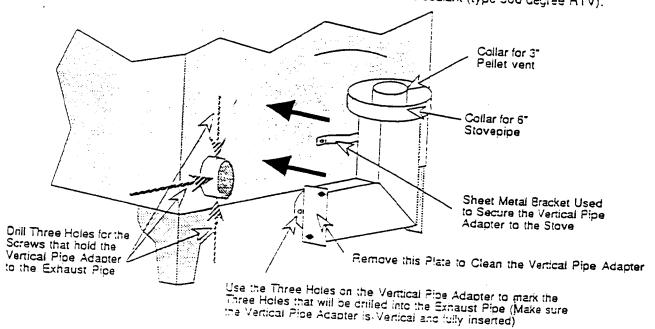
PREPARATION FOR INSTALLATION — PELLET STOVE (cont.)

Vertical Pipe Adapter:

The vertical pipe adapter is an optional item used to center the pellet vent on the pellet stove. It allows for a more compact installation then using offsets on the pellet vent. To install the vertical pipe adapter, follow the directions below.

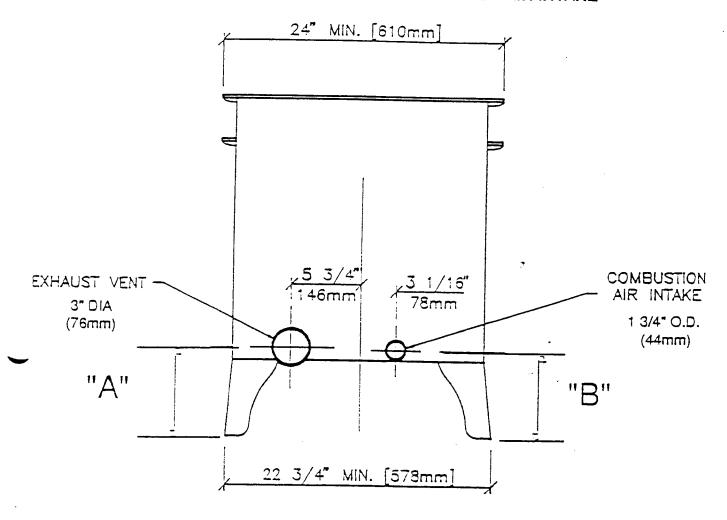
- 1. Take the vertical pipe adapter, along with the 5 screws, out of the box and inspect for any damage.
- 2. When determining the final position of the stove, take into consideration the location of the vertical pipe adapter once it is installed. It is best to install the vertical pipe adapter before determining the location of the stove, making the final alignment with the pellet vent more accurate.
- 3. The vertical cipe adapter allows for the use of 3" pellet vent or 6" singlewall or doublewall stovepipe. Use the appropriate collar for the vent type used.
- Insert the vertical pipe adapter onto the pellet stove and align it so the length of the adapter is vertical. On the the vertical pipe adapter where it connects to the exhaust pipe there are three holes. One is on the outward side, one is on the too, and one is located on the bottom. Make a mark on the exhaust tube where these holes line up. Make sure the pipe adapter is all the way against the exhaust pipe and the three marks where placed on the exhaust pipe.
- Apply a high-temperature silicone sealant (type 500 degree RTV) around the outside perimeter of the exhaust pipe near the end and slide the vertical pipe adapter into place. Attach the vertical pipe adapter vertical pipe adapter and into the holes that were drilled in step 4. Inspect the connection between the necessary.

 5. The vertical pipe adapter has a depter has
- The vertical pipe adapter has a sheet metal bracket used to secure the vertical pipe adapter to the stove. It attaches to the back of the stove in two locations. Drill the 9/64" holes in the back of the stove. Drill phillips-head screwariver.
- 7. The vertical pipe adapter can now be attached to the vent. Make sure to seal the connection between the vertical pipe adapter and vent with a high-temperature silicone sealant (type 500 degree RTV).



FREESTANDING INSTALLATION - SPECIFICATIONS

LOCATION OF EXHAUST VENT AND OUTSIDE COMBUSTION AIR INTAKE



•	<u>"A"</u>	<u>"B"</u>
PEDESTAL	13 7/8" (352mm)	14 1/2" (368mm)
LEGS, BRASS	9 3/4" (248mm)	10 7/8" (276mm)
LEGS, CAST	9 3/4" (248mm)	10 7/8" (276mm)
.LEGS, BLACK	8 3/8" (213mm)	9 1/2" (241mm)

FIGURE 1

FREESTANDING INSTALLATION SPECIFICATIONS (cont.)

FLOOR PROTECTION: (Fig. 2 & 3)

G. Front

6" (152 mm) NOTE: Front floor protection is measured from the door opening.

H. Sides

0" (0mm)

H. Back

0" (0mm)

NOTE: Floor protector should extend to areas below and 2" (50 mm) to each side of a "tee" when used (See Fig. 6).

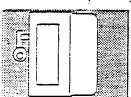
CLEARANCE TO COMBUSTIBLES:

INTERIOR VERTICAL FLUE INSTALLATION

Figures 2 & 3

A	Sidewall to unit	9" - (229 mm)
В	Backwall to unit	11" - (279 mm)
C	Corner wall to unit	2" - (51 mm)
D	Flue vent/chimney	3" - (76 mm)

VERTICAL PIPE ADAPTER



J	belief Abut	0	200Asbib
g•	- (229 mm)	9-	- (229 mm)
7	- (178 mm)	9-	- (229 mm)
2"	- (51 mm)	2*	- / 51 mm)

3" -(76 mm)

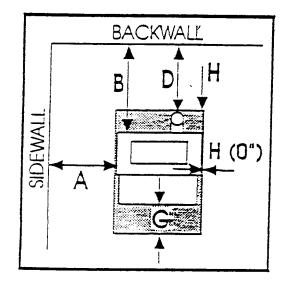
3° -(76 mm)

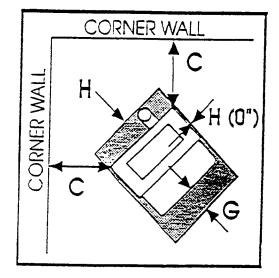
NOTE: Dimension "C", corner to unit, and "B", backwall to unit, will vary depending on the type and brand of pellet vent or interior connector used. Always maintain the "D" dimension, pellet vent/interior connector clearance, when installing this unit. Check your pellet vent/interior connector instructions for information on its size and clearance required to comustibles. NOTE: Singlewall interior connectors require a minimum 3" clearance to combustibles.

HORIZONTAL THROUGH THE WALL INSTALLATION OR VERTICAL EXTERIOR INSTALLATION

Figures 2 & 3

A	Sidewall to unit	9"	-	(229 mm)
В				(76 mm)
C	Corner Wall to unit	2"	-	(51 mm)
D	Flue vent/chimney	3-		(.76 mm)





FIGURES 2&3

HORIZONTAL CORNER INSTALLATION

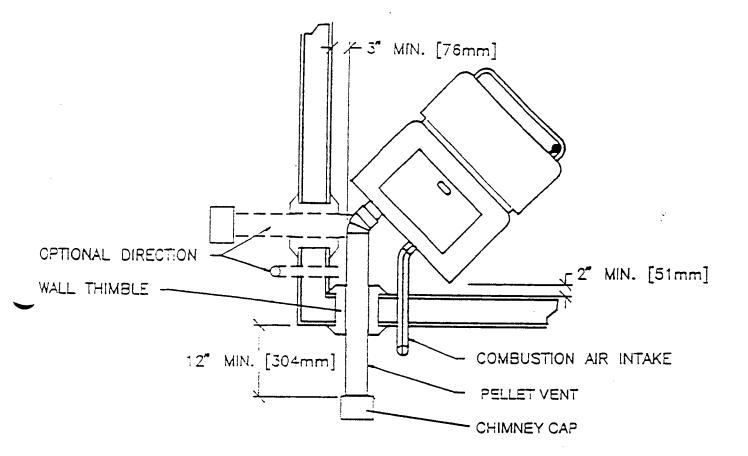
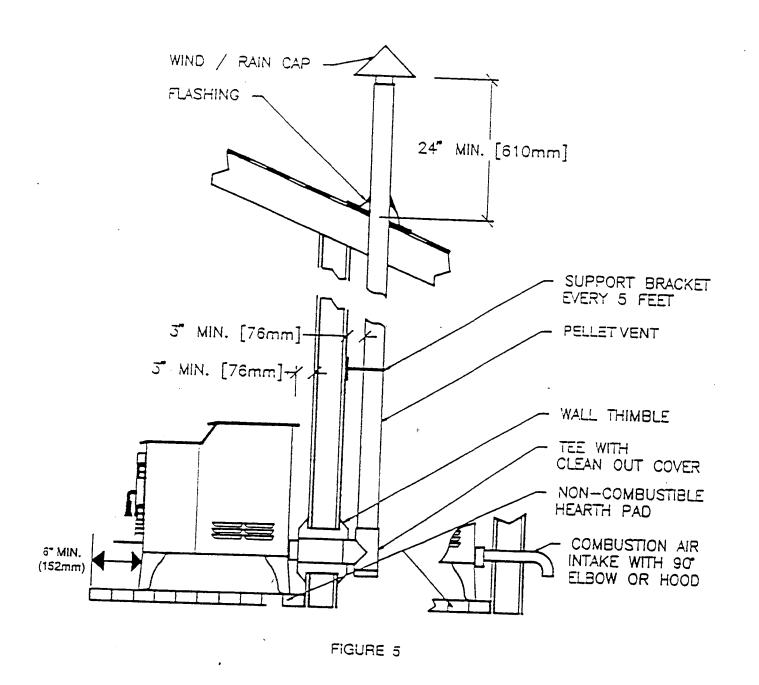


FIGURE 4

- A minimum of 4 feet (1219 mm) below or beside and a minimum of 1 foot (305 mm) above any door or window that opens, or any opening into a building.
- A minimum of 2 feet (610 mm) from any adjacent building.
- A minimum of 7 feet (2134 mm) above grade, when located adjacent to public walkways.
- A minimum of 2 feet (610 mm) above grass, plants or other combustible surfaces.

ERTICAL EXTERIOR FLUESYSTEM

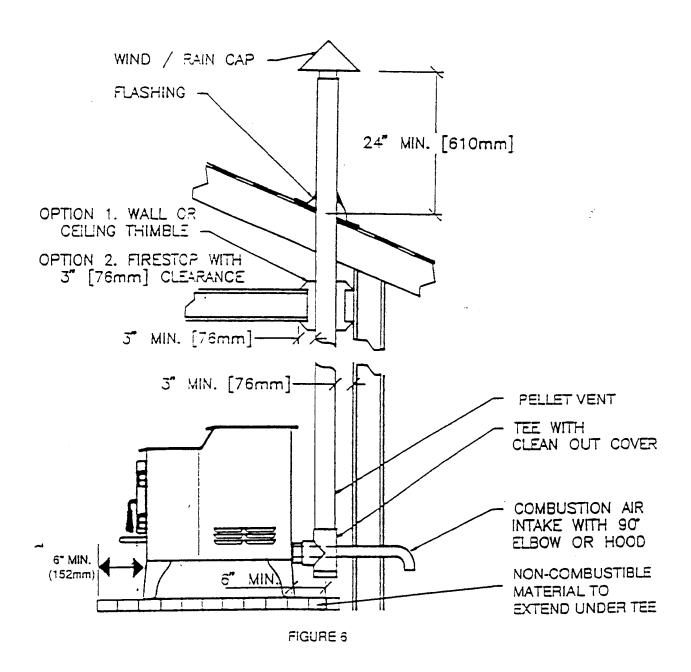
NOTE: FOR STANDARD OR CORNER INSTALLATION, STANDARD INSTALLATION SHOWN.



- A minimum of 4 feet (1219 mm) below or beside and a minimum of 1 foot (305 mm) above any door or window that opens, or any opening into a building.
- A minimum of 2 feet (610 mm) from any adjacent building.
- A minimum of 7 feet (2134 mm) above grade, when located adjacent to public walkways.
- A minimum of 2 feet (610 mm) above grass, plants or other combustible surfaces.

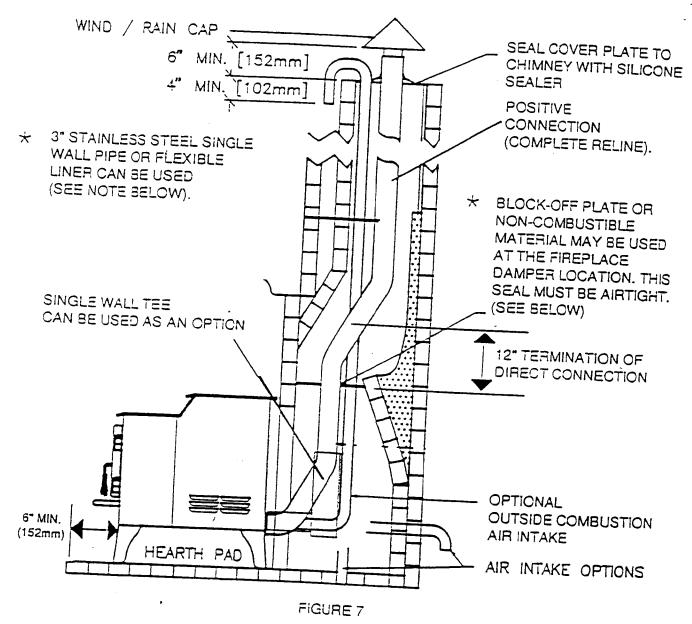
INSIDE VERTICAL INSTALLATION WITH ROOF TERMINATION

NOTE: FOR STANDARD OR CORNER INSTALLATION, STANDARD INSTALLATION SHOWN.



- A minimum of 4 feet (1219 mm) below or beside and a minimum of 1 foot (305 mm) above any door
 or window that opens, or any opening into a building.
- A minimum of 2 feet (610 mm) from any adjacent building.
- A minimum of 7 feet (2134 mm) above grade, when located adjacent to public walkways.
- A minimum of 2 feet (610 mm) above grass, plants or other combustible surfaces.

HEARTH STOVE INSTALLATION INTO EXISTING MASONRY & ZERO CLEARANCE (METAL) FIREPLACE



NOTE: Masonry fireplace installations require a direct connection or positive (complete reline) connection to the chimney flue. With a direct connection a block-off plate made of metal or other non-combustible material (i.e. Kaowool or high temperature fiberglass insulation) must be used at the damper location and sealed airtight. The singlewall pipe or flexible liner must extend past the block-off plate or insulation by one (1) foot (305 mm) or to the first flue tile if the chimney has a tile lining.

With a positive connection, the block-off plate at the damper location is optional, but a sealed cover plate is required at the top of the chimney. A positive connection (complete reline) is recommended for ease of cleaning. Zero clearance (metal) fireplace installations require a complete re-line to topof chimney.

VERTICAL INSTALLATION INTO EXISTING FACTORY BUILT CHIMNEY

NOTE: FOR STANDARD OR CORNER INSTALLATION, STANDARD INSTALLATION SHOWN.

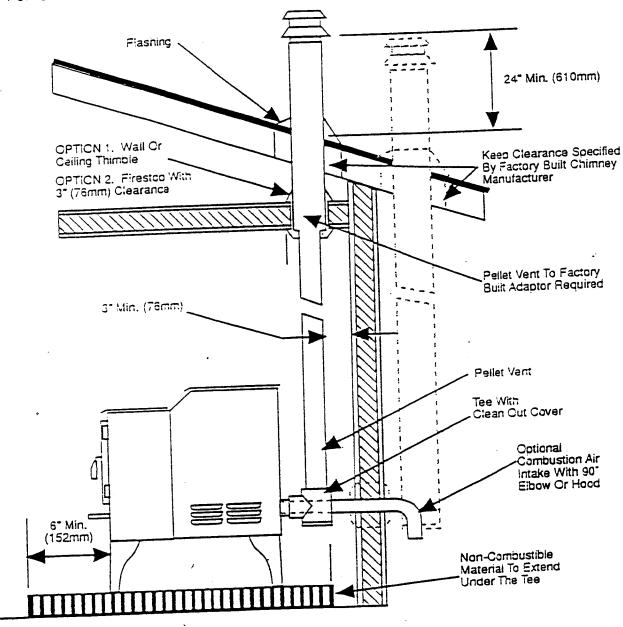
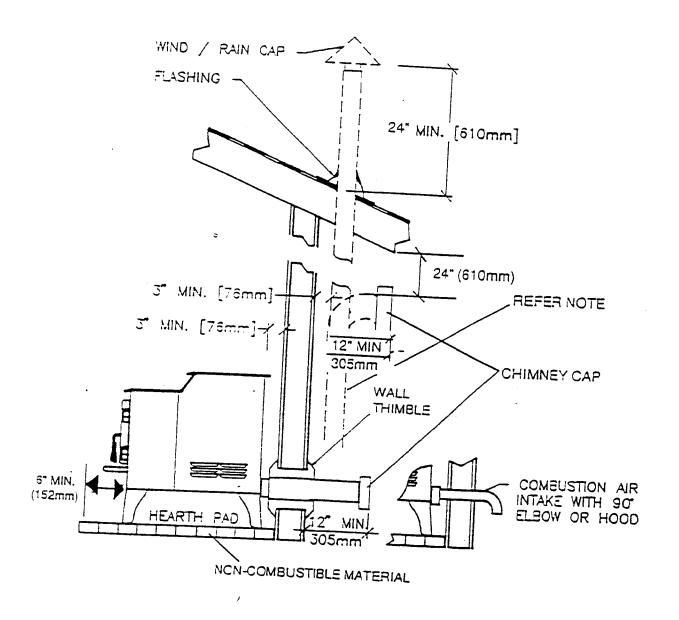


FIGURE 8

- A minimum of 4 feet (1219 mm) below or beside and a minimum of 1 foot (305 mm) above any door or window that opens, or any opening into a building.
- A minimum of 2 feet (610 mm) from any adjacent building.
- A minimum of 7 feet (2134 mm) above grade, when located adjacent to public walkways.
- A minimum of 2 feet (610 mm) above grass, plants or other combustible surfaces.

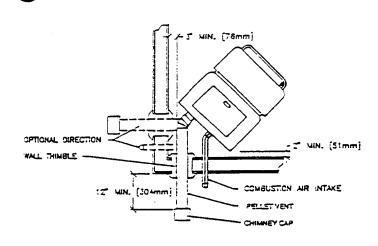
HORIZONTAL INSTALLATION



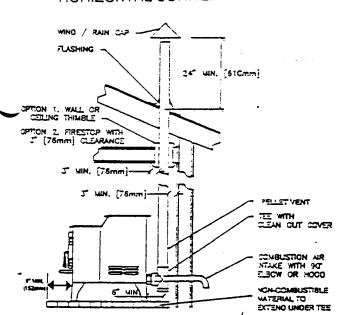
NOTE: A 6 ft. (1829mm) vertical rise is recommended to maintain a better draft. However, a shorter rise may be used. Vertical installation as in Figure 5 is preferred. If a shorter rise is used and the termination is under an eave or overhang, the termination must be at least 24" (610mm) from the combustible material, and the chimney must be vented at least 12" (305mm) from the dwelling.

- A minimum of 4 feet (1219 mm) below or beside and a minimum of 1 foot (305 mm) above any door or window that opens, or any opening into a building.
- A minimum of 2 feet (\$10 mm) from any adjacent building.
- A minimum of 7 feet (2134 mm) above grade, when located adjacent to public walkways.
- A minimum of 2 feet (610 mm) above grass, plants or other combustible surfaces.

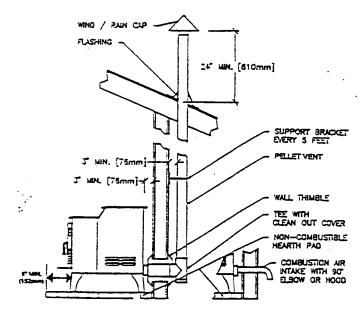
MOBILE HOME INSTALLATION



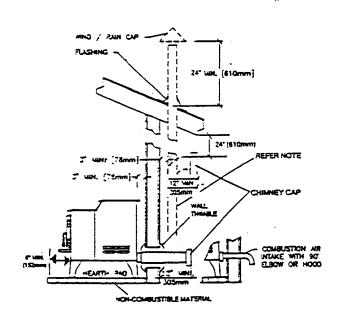
HORIZONTAL CORNER INSTALLATION



INSIDE VERTICAL INSTALLATION WITH ROOF TERMINATION



VERTICAL EXTERIOR FLUE SYSTEM



HORIZONTAL INSTALLATION

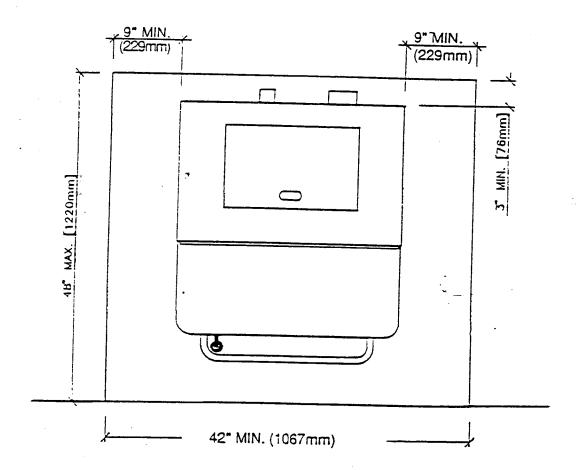
CAUTION: The structural integrity of the mobile home floor, wall, ceiling and roof must be maintained.

In addition to the FREESTANDING RESIDENTIAL INSTALLATION requirements, the following requirements are mandatory for installation into a mobile home:

- The stove must be permanently boilted to the floor of the mobile home.
 (Some states do not require this; check with your local building department.)
- 2. The stove must have permanent outside air (compustion air) intake.
- The stove must be grounded to the steel chassis of the mobile home.
 (Some states do not require this; check with your local building department.)

PAGE 16

RESIDENTIAL ALCOVE INSTALLATION



MINIMUM ALCOVE HEIGHT 60" - (1524mm)
MAXIMUM ALCOVE DEPTH 48" - (1219mm)

FOR INSTALLATION

READ THIS ENTIRE MANUAL BEFORE YOU INSTALL AND USE YOUR NEW APPLIANCE. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.

PREPARATION:

- 1. Remove all tape and packaging.
- 2. Remove the wood shipping frame from around and under the appliance.
- 3. Check that no parts have become loose and the appliance has not been damaged during shipping.
- Remove the hardware pack from the appliance.
- 5. READ THE OWNER'S MANUAL BEFORE PROCEEDING.
- Appliance should be located such that no doors, drapes, furniture or other combustibles can be placed close or swing closer than the minimum stated clearances.
- The appliance must be installed in a level, secure position.
- Required Floor Protection: (Fig. 10)

NOTE: Minimum hearth extension 24" W (610 mm) x 16" D (406 mm) from fireplace opening.

	\$	
Chimney Lengths	Maximum	Minimum
Vertical	33' (10.06 m)	Subject to installation. See Fig. 9
Horizontal	10" (3.05 m)	Subject to installation. See Fig. 4&9
Combined Horizontal & Vertical	4' Horizontal 30' Vertical 10' Horizontal 25' Vertical	Any Lesser Combination is Acceptable.

NOTE #1: On chimneys with vertical heights that exceed 15' and/or horizontal runs that exceed 4', a 4" diameter pellet vent is recommended.

NOTE #2: When this unit is installed above 4000' in altitude, 4" diameter pellet vent should be used.

- * Do not obtain combustion air from attic, garage, unventilated crawl space or any other enclosed space. Do not locate combustion air inlet at an elevation higher than exhaust termination.
- * Outside air (combustion air intake) is recommended, but not required, for all residential installations, but is required for mobile home installations. If an outside air intake (combustion air intake) is used, it must be connected to a 1-3/4°, or larger, metal or aluminum duct with a rodent screen fixed to the termination. Do not use P.V.C .duct.

NOTE: TRAVIS INDUSTRIES, INC., recommends that an outside air (combustion air) intake be used in all installations. If one is not used, there is a possibility of combustion gases (smoke) being released into your home, if there is a power outage while the unit is in operation.

- * The LOPI 400 pellet insert exhaust vent accepts 3" diameter pellet vent pipe. Some of the brands available for use with the LOPI 400 are:
- Simpson Dura-Vent P.O. Box 1510 Vacaville, CA 95688 (707) 446-1756 or 1-800-227-8846
- 1. Duravent Model PL-Vent . 2. James A. Ryder MFG Model PL-Vent Ryder Mfg., Inc. 241 Arvin Avenue Stoney Creek, Ontario Canada (416) 662-1701
- 3. MetalFab Model Pellet Vent P.O. Box 1138 Wichita, KS 67201 (316) 943-2351

NOTE: 4" diameter may be substituted when a 3" to 4" adapter is used.

See manufacturer's installation instructions for precautions required for passing vent through a combustible wall or ceiling. Do not connect this appliance to a vent serving another appliance.

All sections of pellet vent must be fastened to each other with sheet metal screws and silicone sealed with type 500 degree Fahrenheit (250°C) RTV (high heat) silicone sealer, to ensure that the joints are airtight.

PREPARATION FOR INSTALLATION — PELLET INSERT (cont.)

NOTE: The fireplace cavity must be thoroughly cleaned prior to installation. It should be cleaned with a wire brush or scraper and then painted with a latex paint to eliminate the possibility of odors from the fireplace being circulated into the house by the room air fan of the pellet insert.

For your safety, examine the fireplace and chimney prior to installation of the pellet insert to determine that they are free from cracks, loose mortar, creosote deposits, blockages, or other signs of deterioration. If evidence of deterioration is noted, the pellet insert should not be installed until after repairs have been made. Any opening between the masonry of the fireplace and the facing masonry must be permanently sealed.

Your pellet insert is listed for installation into masonry fireplaces, and is approved to be installed with or without positive or direct chimney connection.

Your pellet insert is also approved for installation into metal or zero-clearance (Z.C.) fireplaces. Metal or Z.C. installation requires a full reline with a 3" stainless steel single-wall pipe or a flexible liner.

Your LOP! 400 Pellet Insert appliance comes completely assembled, with the exception of the Switch Box, top panel and panel trim. Options available for the different types of installations are:

- 1. Adjustable Front Insert Support.
- 2. Ceramic Loc

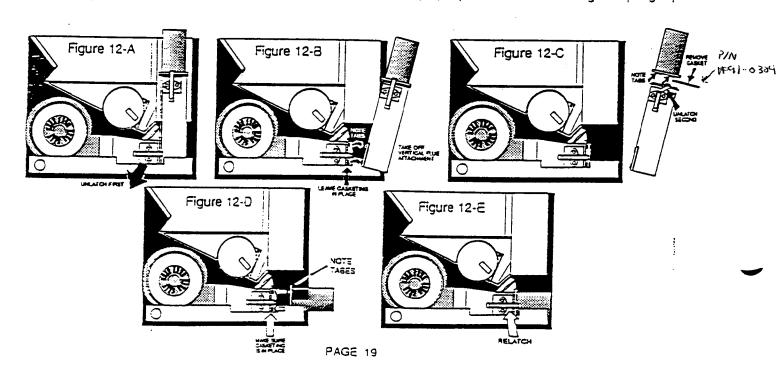
The above items come boxed separately and require assembly.

VENT CONFIGURATION:

The 400 Pellet Insert is equipped with a dual vent configuration. It can be vented vertically or horizontally. Before installing, you must determine which configuration will best suit your installation.

The unit comes set up for a vertical installation (Fig. 12-A). To change it to a horizontal venting configuration, remove the 1/4" hex head bolt and clamp holding the vertical vent to the base of the unit, next release the spring clip on the side of the lower vent duct (Fig. 12-b), and remove the vent assembly then release the spring clip holding the round portion of the vent to the rectangular portion (Fig. 12-C). To complete the change over, clip the round portion into the lower vent duct bracket (Figs. D &E).

NOTE: Make sure that the gaskets are not damaged and are in the proper position before latching the spring clip.



INSERT INSTALLATION SPECIFICATIONS

LOCATION OF EXHAUST VENT AND OUTSIDE COMBUSTION AIR INTAKE, DIMENSIONS REQUIRED FOR INSTALLATION INTO FIREPLACE AND PANEL SIZING.

LOPI 400 PANEL SIZING:

The LOPI 400 pellet stove comes with only one size panel. The outside dimensions of the panels are 37 7/8" (962mm) x 29" (737mm).

This panel is designed to cover a fireplace opening of 28" (711mm) x 37" (940mm)

PANEL EXTENDERS:

Panel Extenders are available for this model. They extend the amount of coverage by:

5 1/2" On Top 6 1/4" On Each Side

> EXHAUST VENT ACCEPTS IT FLEXIBLE OR RIGID STAINLESS STEEL EXHAUST VENT

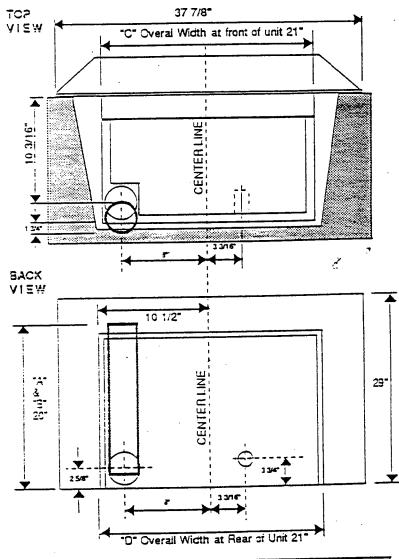
LOPI 400 FIREPLACE SIZING:

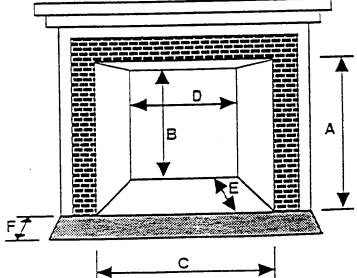
MEASURE AND CENTER THE UNIT INTO THE FIREPLACE BASED ON THE PROVIDED MEASUREMENTS.

PROVIDED MEASUREMENTS.		
A - MINIMUM HEIGHT (FRONT)	20"	(505MM)
B - MINIMUM HEIGHT (BACK)	20"	(505MM)
C - MINIMUM WIDTH (FRONT)	21"	(534MM)
D - MINIMUM WIDTH (BACK)	21"	(534MM
E - DEPTH INTO FIREPLACE	12 1/4"	(311MM

F - EXTENSION ONTO HEARTH

12 7/8" (327MM)





INSERT INSTALLATION SPECIFICATIONS (Cont.)

FLOOR PROTECTION: (Fig.10)

E. Front 0" (0mm)
F. Sides 0" (0mm)

NOTE: Although a non-combustible hearth extension is <u>not</u> required to extend past the front and sides of the insert, the insert must be installed on a non-combustible hearth that extends to the front and side edges of the insert.

CLEARANCE TO COMBUSTIBLES: (Fig. 10)

A.	Adjacent Sidewall	9" (229mm)
В. 🧃	Side Facing	8" (203mm)
C.	Top Facing	12" (305mm)
D.	Mantle	13" (330mm)

NOTE: For clearances, use this clearance diagram (fig. 10) or the clearance diagram on the safety label attached to the back of the appliance.

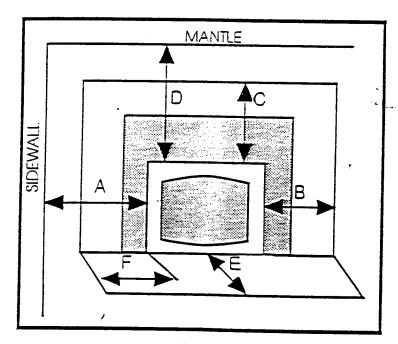


Figure 10

DIRECT CONNECTION:

- 1. Make sure the fireplace and chimney are thoroughly cleaned, inspected and repaired where necessary to make it safe. Paint with a latex paint as explained on Pg. 19.
- 2. Wire open or remove the firebox damper.
- 3. Measure the area of the firebox below the damper opening and above the lintel. Transfer these measurements to a piece of galvanized sheet metal (min. 24 gauge) and add 2" to each side. Mark the position of several holes on each side, to suit your specific installation, and drill 1/4" diameter holes. Next bend the 2" extended side to a 45° angle. The 2" lip with the 1/4" diameter holes will allow you to screw the plate to the firebox walls.

INSERT INSTALLATION SPECIFICATIONS - (cont.)

DIRECT CONNECTION: (Continued)

- A hole must be cut in the plate to allow the chimney connector to pass through from the appliance into the chimney. Mark the hole position on the plate so that the center of the hole is in line with the center line of the appliance flue. A flexible stainless steel connector works best if an offset is required.
- 5. Position the plate in the firebox where the measurements were taken. Secure the plate with screws through the holes in the lip, and seal around the outside edges of the plate with fiberglass insulation, furnace cement, or both.
- 6. Insert the chimney connector (flexible or rigid single-wall stainless steel, 3" diameter and at least 24" long) up through the hole in the plate and damper opening into the chimney. Seal where vent passes through block-off plate. This should be done on completion of connection.

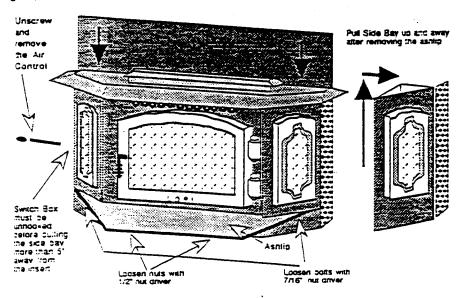
NOTE: Masonry fireplace installations require a direct connection or positive (complete reline) connection to the chimney flue. With a direct connection a block-off plate made of metal or other non-combustible material (i.e. Kaowcol or high temperature fiberglass insulation) must be used at the damper location and sealed airtight. The singlewall pipe or flexible liner must extend past the block-off plate or insulation by one (1) foot (305 mm) or to the first flue tile if the chimney has a tile lining.

With a positive connection, the block-off plate at the damper location is optional, but a sealed cover plate is required at the top of the chimney. A positive connection (complete reline) is recommended for ease of cleaning.

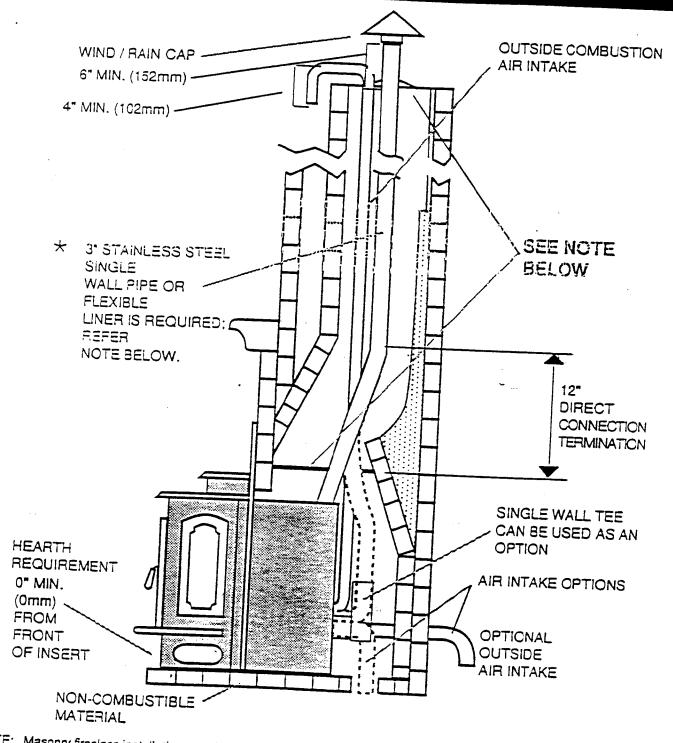
PANEL INSTALLATION:

NOTE: The 400 PI comes assembled with the two side Bay panels already installed. You will need to remove them prior to installation.

- 7. Lay a protective covering such as a towel or blanket on the floor to protect the floor and the panel finish. Remove, from the box marked Panels, one top panel. Make sure that the panel is large enough to cover the fireplace opening. NOTE: Adute the power cord out of the fireplace so that it exits through the lower outside front corner of the fireplace opening. DO NOT ROUTE THE POWER CORD UNDER THE UNIT.
- Unscrew the air control knob located on the right side of the insert. Loosen the two 1/2" nuts and 7/16" bolts located underneath the ashlip. This will allow the ashlip to be pulled up and away so the two side bays can be removed.
- Remove the two side bays by pulling them up and away from the insert. The insert can now be placed into
 position and connected to the exhaust system.
- 10. To re-install the side bays, follow the directions in reverse order. Make sure to slide the switch box into its slot on the right side bay (the power switch should be on top). Position the top panel over the insert and slide it onto the flanges provided.



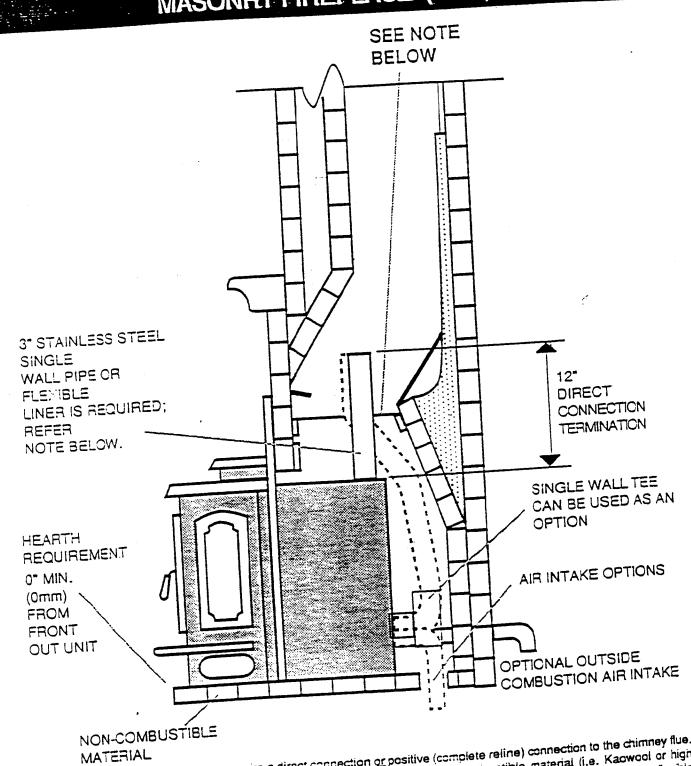
INSERT INSTALLATION INTO EXISTING MASONRY FIREPLACE



NOTE: Masonry fireplace installations require a direct connection or positive (complete reline) connection to the chimney flue. With a direct connection a block-off plate made of metal or other non-combustible material (i.e. Kaowool or high liner must extend past the block-off plate or insulation by one (1) foot (305 mm) or to the first flue tile if the chimney has a tile lining.

With a positive connection, the block-off plate at the damper location is optional, but a sealed cover plate is required at the top of the chimney. A positive connection (complete reline) is recommended for ease of cleaning.

INSERT INSTALLATION INTO EXISTING MASONRY FIREPLACE (cont.)

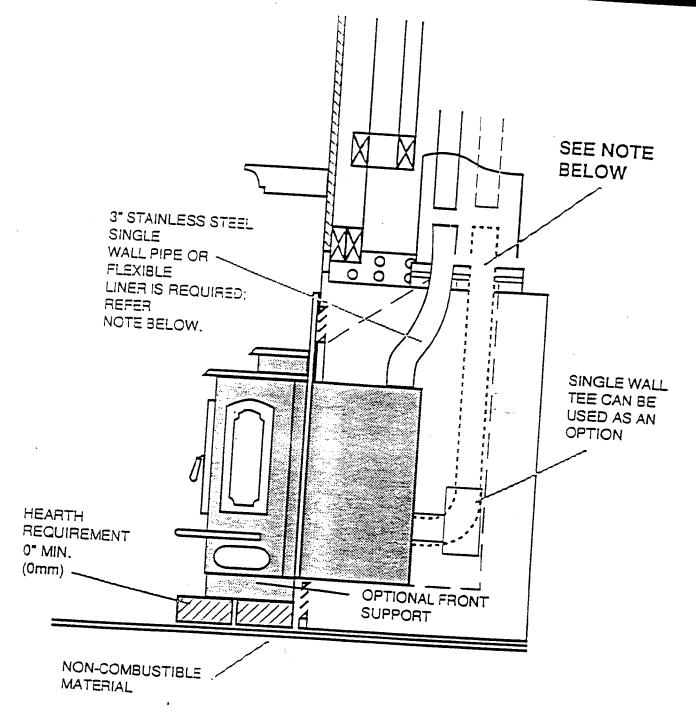


NOTE: Masonry fireplace installations require a direct connection or positive (complete reline) connection to the chimney flue.

With a direct connection a block-off plate made of metal or other non-combustible material (i.e. Kaowool or high With a direct connection a block-off plate made of metal or other non-combustible material (i.e. Kaowool or high with a direct connection a block-off plate at the damper location and sealed airtight. The singlewall pipe or flexible temperature fiberglass insulation) must be used at the damper location and sealed airtight. The singlewall pipe or flexible temperature fiberglass insulation) must be used at the damper location and sealed airtight. The singlewall pipe or flexible temperature fiberglass insulation) must be used at the damper location and sealed airtight. The singlewall pipe or flexible temperature fiberglass insulation) must be used at the damper location and sealed airtight. The singlewall pipe or flexible temperature fiberglass insulation) must be used at the damper location and sealed airtight. The singlewall pipe or flexible temperature fiberglass insulation must be used at the damper location and sealed airtight. The singlewall pipe or flexible temperature fiberglass insulation must be used at the damper location and sealed airtight.

With a positive connection, the block-off plate at the damper location is optional, but a sealed cover plate is required at the top of the chimney. A positive connection (complete reline) is recommended for ease of cleaning.

INSERT INSTALLATION INTO METAL (Z.C.) FIREPLACE

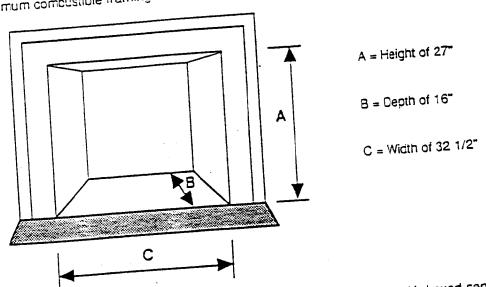


NOTE: A 3" stainless steel single wall pipe or a flexible liner is required to extend to the top of the existing chimney for metal (Z.C.) fireplaces. The existing chimney should be sealed at the bottom or top with a sheet metal plate or other non-combustible material (i.e. Kaowool or high-temperature fiberglass insulation).

NOTE: Outside air is optional unless this unit is being installed in a mobile home where it is required. If outside air is to be installed it must be obtained by running an outside air duct from the top of the chimney to the unit. NO MODIFICATION TO THE FIREBOX OF THE Z.C. (METAL) FIREPLACE IS ALLOWED.

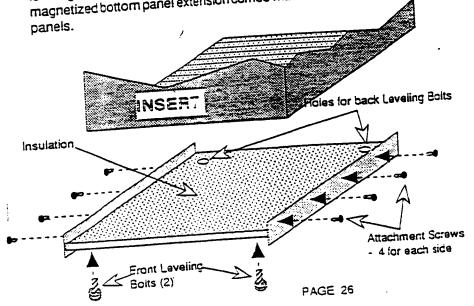
INSERT INSTALLATION - ZERO CLEARANCE (BUILT-IN)

The minimum combustible framing dimensions using 3" diameter type "L" listed pellet vent is listed below:



This type of installation requires the use of the floor shield kit. The floor shield is boxed separately and can be installed

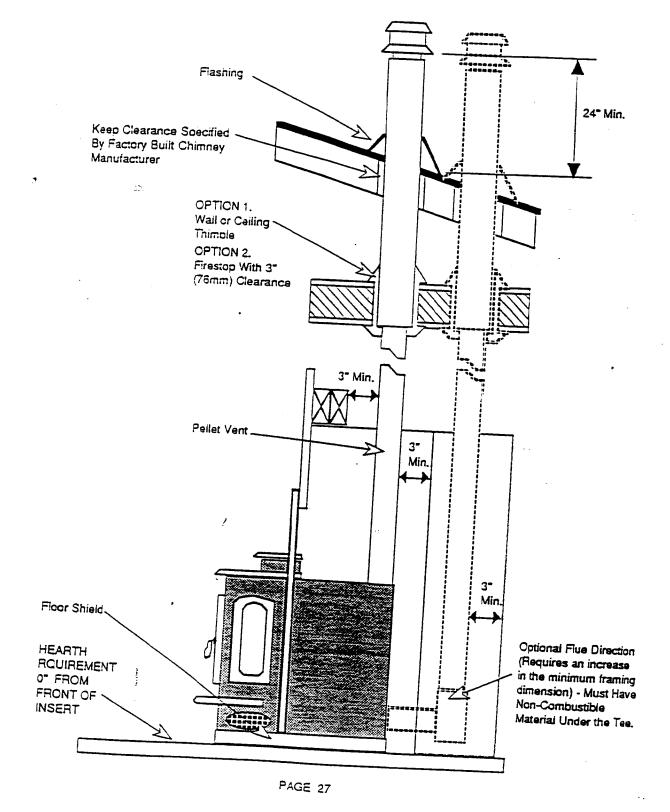
- Ta- the floor shield out of the box and make sure the insulation is still placed on the floor shield. The box contains by following the directions below: the noor shield, the bottom panel extension, 8 self-tapping screws, and 2 front leveling bolts.
- Prop up the front of the insert approximately one foot so that it rests on its rear edge. Remove the front leveling bolts already attached to the insert and discard. Remove the rear leveling bolts (if attached). Attach the floor shield to the bottom of the insert by screwing in the eight screws with a phillip-head screwdriver. Attach the two front 2. leveling boits included with the floor shield to the floor shield. Then re-attach the two rear leveling boits through the floor shield and into the insert.
- Return the stove to the upright position. 3.
- The insert can then be placed in the zero clearance cavity and leveled. To level, first measure the step-down before placing the insert into the cavity. Adjust the front and rear leveling bolts to accomodate any difference. Final leveling can be done by lifting the insert and turning the leveling bolts to accommodate the level installation. The 4. magnetized bottom panel extension comes with the floor shield and can be attached by placing it against the insert panels.



INSERT INSTALLATION - ZERO CLEARANCE (BUILT-IN)

(CONTINUED)

The pellet vent must maintain a 3" clearance from any combustible. Make sure to follow the clearance specified by the manufacturer for the factory built chimney when making the opening in the roof. Whenever a ceiling or floor is penetrated an approved thimble or firestop with 3" clearance must be used. See the illustration below for other specifications that must be met.



BEFORE YOU BEGIN

READ THIS ENTIRE MANUAL BEFORE YOU INSTALL AND USE YOUR NEW HEATER. FAILURE TO FOLLOW THE INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.

Before you start your first fire make sure you have read and understand the section titled **Safety**Precautions – any questions should be referred to your dealer. There are two things you will need to know before you start your first fire:



• The first time you start your heater, or if you completely run out of pellets, the auger will need to be primed by turning the heater on and turning the BURN RATE to "HIGH" for fifteen minutes. This will allow the pellets to feed up the auger and start to fall into the firepot before you start the heater.



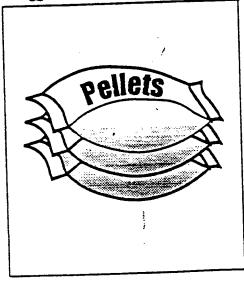
The first time your heater gets up to temperature you will smell the paint on the outside of the heater curing. This is normal. We recommend that you first fire you heater outside or leave all of the windows open for a couple hours during the first fire.

A WORD ABOUT PELLETS

Your heater was designed to burn wood pellets only. There are some facts you should know before you buy pellets. The paragraphs below detail the information you should know.

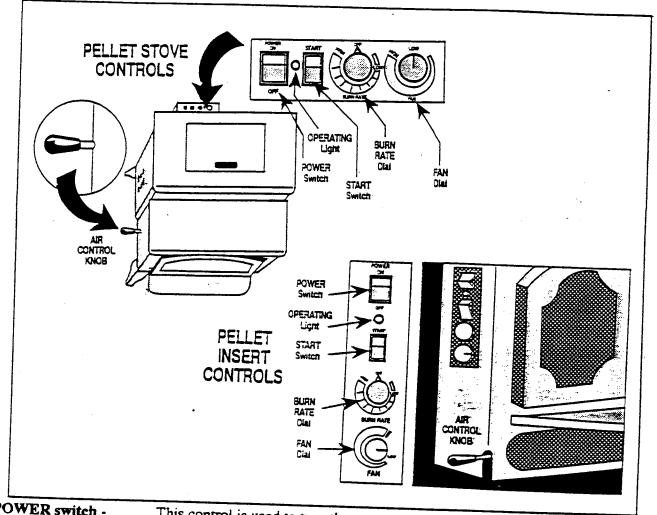
With the surge in popularity of pellet heaters came the tremendous increase in pellet demand. Because pellets are made from wood bi-products, pellet manufacturing is dependent upon the supply of these bi-products and the quality found therein. Unfortunately, this surge in pellet manufacturing has led to a decline in the quality of the raw materials used to produce the pellets. Ideally, pellets should have a very low moisture, ash, dirt, and salt content. Some pellets do not. Pellets should have a consistent diameter of 1/4", 5/16", or 7 mm. Pellets should also be no longer than 1 1/2" long. Some pellets are longer. There is no real pellet monitoring agency, so you must monitor pellet quality yourself.

We Suggest:



Buy only 3 bags of pellets before you purchase a large amount. Burn the pellets in your pellet heater and check for these signs of poor quality pellets: clinkers develop in the air holes on the bottom of the firepot (see the section "Maintenance Instructions"); the auger jams for no apparent reason, and when the hopper is cleaned out, the auger runs again; there is more than one-half cup of sawdust in the bottom of the bag of pellets; or, the pellets don't burn well on a low BURN RATE, and it seems the AIR CONTROL has to be pulled out all the way for the pellets to burn (a sign of wet or dirty pellets). It is best to check one brand of pellets verses another to see the difference first-hand. The Association of Pellet Fuel Manufacturers has set the following standards for pellets: density of at least 40 lbs. per cubic foot; 1/4" to 5/16" diameter; length no greater than 1 1/2"; 8200 BTU's/lb.; moisture under 8% by weight; ash under 1% by weight; and, salt under 300 parts per million.

LOCATION OF CONTROLS - SEE EXPLANATION BELOW



POWER switch -

This control is used to turn the stove on and off.



WARNING: Do not unplug the heater to turn it off. This heater relies upon electricity to push the flue gases out the pellet vent - turning it off may lead to smoke in your room.

OPERATING light -

This light indicates that the stove is in operation. It will not turn on until the POWER switch is on and the START switch is pressed. It will not turn off until the POWER switch is turned off and the heater has cooled

START switch -

This control starts the heater. It will need to be pressed each time the heater is re-started.

BURN RATE dial -

This dial controls the amount of pellets that are fed into the firepot and hence the amount of heat. This dial must be used in conjunction with the AIR CONTROL to operate the heater correctly.



HINT:

Adjust the BURN RATE and AIR CONTROL together. The higher the BURN RATE the farther out the AIR CONTROL should be.

FAN dial -

This dial controls the amount of heated air that is blown out of the heat exchange tubes above the door. Generally, the higher the BURN RATE the higher the FAN dial should be set.

AIR CONTROL -

This controls the amount of air entering the firepot (see the Hint above). Out is more air, in is less air.

TARTING YOUR HEATER

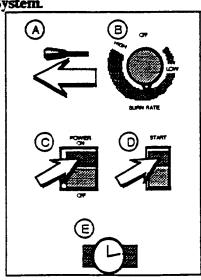
If you have an Auto-Ignition System, follow the directions in the section "Auto-Ignition Starting Your Heater" on the following page.

- Open the door and place 1/4 cup of pellets and Α either a wax-impregnated wood fire-starter or gelled fire-starter over the pellets in the center of the firepot and light. Close the door.
- Push the AIR CONTROL all the way in to the full В closed position.
- C Press the POWER button to "ON".
- Press the START switch. You will see the light D next to the POWER-button turn on.
- Turn the BURN RATE to "OFF". Ε
- F Wait until you see the fire starter and pellets burning steadily.
- Then pull the AIR CONTROL all the way out to the G full open position.
- Η Turn the BURN RATE to the "HIGH" setting. You should start to see pellets dropping into the firepot and ignite.
- ľ Wait fifteen minutes for the heater to get up to temperature before adjusting the controls.

AUTO-IGNITION STARTING YOUR HEATER

Do not use these instructions unless you have an Auto-Ignition System.

- Pull the AIR CONTROL all the way out to the full open Α position.
- В Turn the BURN RATE to a "Medium" setting.
- C Press the POWER button to "ON".
- Press the START switch. You will see the light next to the D POWER button turn on and pellets start dropping into the firepot. The heater will self-start in 5 to 7 minutes.
- Ε Wait fifteen minutes for the heater to get up to temperature before adjusting the controls.



RUNNING THE HEATER

Your pellet heater is a high efficiency heater designed to burn over a wide range of heat output. This wide range of heat output, along with the different variety of pellets, requires the operator to know how to adjust the heater to achieve the most efficient burn.

Step 1: Adjust the BURN RATE

After the heater has run for 15 minutes, the BURN RATE dial can be adjusted to suit the amount of heat needed. The higher the higher the BURN RATE is set, the faster the pellets will feed into the firepot and the more heat you will receive. The exact amount of heat will vary according to NOTE:



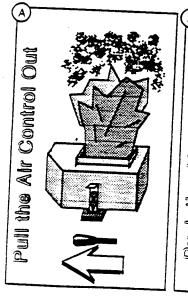
Pellets vary in the amount of heat they give off and the speed in which they feed. Drier, cleaner pellets give off more heat. Smaller length pellets feed faster than long pellets.

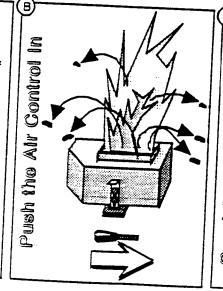
After the BURN RATE is set, the AIR CONTROL will need to be checked.

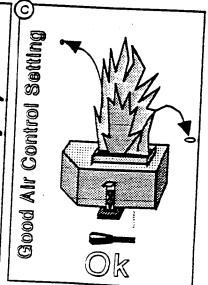
Step 2: Adjust the AIR CONTROL

The AIR CONTROL adjusts the amount of air entering the firepot. It is extremely important to adjust it correctly. It must be adjusted every time the BURN RATE is changed or when using different pellets. With the BURN RATE set to a particular setting, look into the firepot and check the flame. Ideally, the pellets should be agitating slightly, with an occasional ember flying up

- If the pellets aren't moving and no embers are jumping out of the firepot, and the flame is dark orange with black tips (see drawing "A" below), pull the AIR CONTROL out 1/2". Check again.
- If the pellets are moving vigorously with many burning pellets are jumping out of the firepot (see drawing "B" below) push the AIR CONTROL in 1/2". Check again.
- If the pellets are moving slightly with some embers jumping out of the firepot, and the flame is bright, jagged, and yellow, (see drawing "B" below) the AIR CONTROL is set correctly. Generally, the higher the BURN RATE, the farther out the AIR









NOTE:

Every bag of pellets you use will be different. Certain pellets will be heavier and won't want to move around in the firepot. Certain pellets will be wet, and take longer to burn. Certain pellets will be "dirtier" and produce a darker smoke. Pellets will even vary from bag to bag. If uncertain on where to set the AIR CONTROL, it is best to pull the AIR CONTROL out too far then to push it in too far.



HINT:

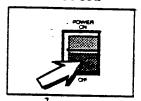
Generally, the label on the AIR CONTROL should be showing RED on HIGH, ORANGE on MEDIUM, and YELLOW on LOW.

Step 3: Adjust the FAN Dial

The Fan dial controls the amount of heated air that is blown out of the heat exchange tubes above the door. Generally, the higher the BURN RATE the higher the FAN dial should be set.

TURNING OFF THE HEATER

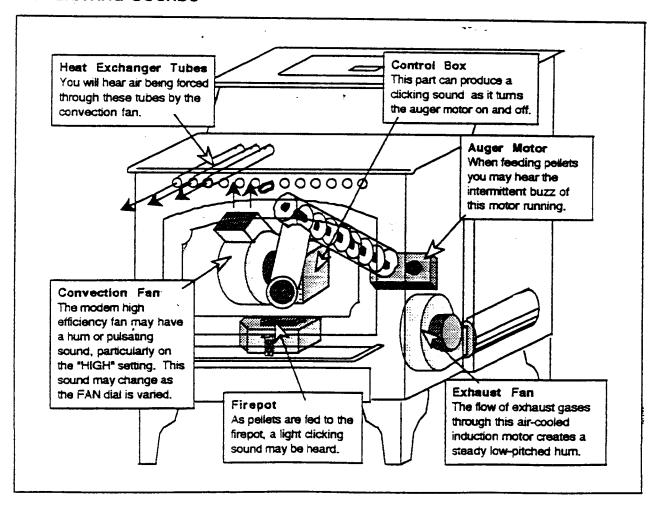
To turn the heater off, switch the POWER button to "OFF".





WARNING: Do not unplug the heater to turn it off. This heater relies upon electricity to push the flue gases out the pellet vent - turning it off may lead to smoke in your room.

NORMAL OPERATING SOUNDS



MAINTENANCE SCHEDULE

Your heater requires periodic maintenance to run. The steps involved with maintenance are usually quick and easy. Look through this maintenance schedule and plan accordingly.



WARNING: Failure to maintain your heater will lead to a restricted combustion air system, which may lead to smoke spillage into the room.

Daily Maintenance (when the heater is in use):

- Check the Firepot for Clinkers (Clean if Necessary)
- Check the Ashpan for Flyash (Clean if Necessary)

Weekly Maintenance:

- Clean the Heat Exchanger Tubes
- Clean the Firebox
- Clean the Glass
- Clean the Ash Traps

1,000 Pound Maintenance (every 25 Bags):

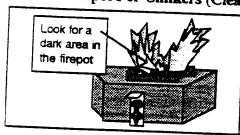
Clean the Hopper and Auger Tube

6,000 Pound or Yearly Maintenance (depends upon pellet quality)

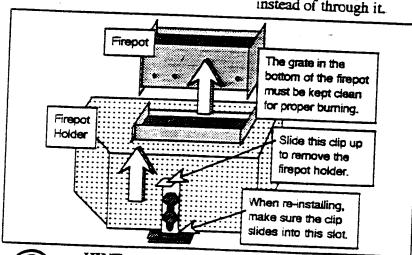
- Clean the Exhaust Ducts
- Exhaust Blower
- Convection Blower
- Pellet Vent

MAINTENANCE INSTRUCTIONS

Check the Firepot For Clinkers (Clean if Necessary)



While the pellet heater is running, look down into the firepot and check for any dark areas where the pellets refuse to light or glow. If this occurs, you will need to turn the heater off and remove any buildup on the firepot holes. You may find a piece of hardened ash that covers the holes in the firepot (a clinker) that will need to be removed. When replacing the firepot, make sure you insert it correctly, otherwise air will go around the firepot instead of through it.



To clean the firepot, first slide the clip on the firepot holder up and pull the firepot and holder out of the heater. The firepot can be slid out of the firepot holder (make sure to re-install it in the same position) for cleaning. Make sure all of the holes in the grate on the bottom of the firepot are clean. Clean out any flyash in the firepot holder before re-installing.



HINT:

If clinkers build up every day in your heater, you will want to check for air leaks (See the section "Air Leaks") and your pellets (See the section "A Word About Pellets"). Also, clinkers build up more often at a low BURN RATE than at a high BURN RATE

MAINTAINING YOUR HEATER (CONTINUED)

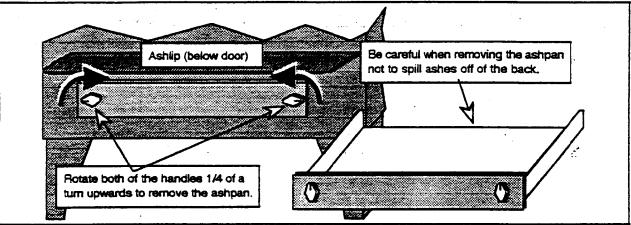
Check the Ashpan for Flyash

Look down through the window and check for flyash buildup in the ashpan. If you see more than 1" of flyash, turn the heater off, wait for it to cool and empty the ash. To empty the ashpan, turn both of the handles located under the ash lip 1/4 turn so the lines on the knobs are pointing up. Then pull the ashpan out, tilting it forward to prevent ash from spilling off the back. Reattach by following in reverse order. Store the ash in an air tight metal container placed on a non-combustible surface until thoroughly cooled before disposing.



NOTE:

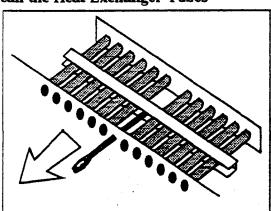
Certain pellets produce more ash than others. After a couple of days you should know when you will need to clean the ashpan.





WARNING: When re-attaching the ashpan, make sure it is fully inserted before turning the knobs 1/4 of a turn outwards. If there is not an air tight seal, there may be smoke spillage into the room.

Clean the Heat Exchanger Tubes



With the door closed, push the built in cleaner located above the door back and forth a couple of times. Wear a glove or use the tool included with this heater if the handle is hot. You should see flyash falling from the roof of the firebox. After cleaning, you may wish to brush any loose flyash into the ashpan. Cleaning the heat exchangers allows for better heat transfer.

Clean the Firebox and Glass

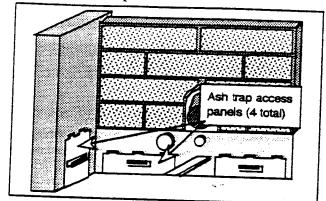
The firebox will need occasional cleaning to remove flyash that may build up around the firepot and hamper efficient burning. If there is an optional log set, remove the log set and brush it clean of flyash. Then brush all flyash off of the firebrick refractory and off the walls of the firebox. When done brushing off the flyash, clean out the flyash built up in the ashpan. The glass should be cleaned with a non-abrasive glass cleaner. This will increase the amount of light and heat given off by the heater, as well as add to its attractiveness.



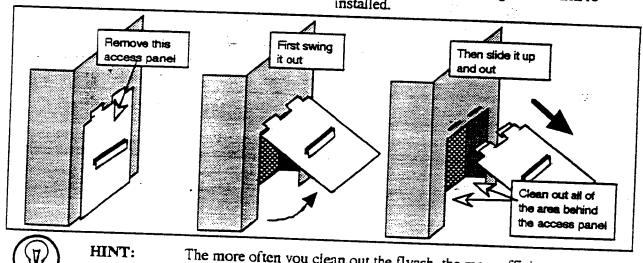
HINT:

We STRONGLY SUGGEST you buy a vacuum built specifically for cleaning pellet heaters. These vacuums are fire-resistant and make cleaning much easier. Because your heater is more efficient when kept clean, this vacuum will pay for itself in fuel costs.

Clean the Ash Traps

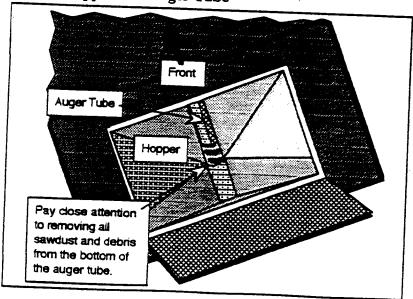


The ash traps are used to catch the flyash before it exits the firebox. The ash trap doors provide access to the ash traps so the flyash can be removed. First remove the firepot and firepot holder. There are four ash trap doors located along the bottom of the firebox. They are removed by pulling up then swinging out. All the flyash behind the doors can then be cleaned out. Use a vacuum cleaner to remove the flyash or remove the ashpan and brush the flyash onto the floor of the firebox and remove from there. Make sure the access panels lay flat against the surrounding metal when reinstalled.



The more often you clean out the flyash, the more efficient your heater will become.

Clean the Hopper and Auger Tube



The hopper and auger tube should be cleaned every 1,000 pounds of pellets burned. If you notice more than 1/2 cup of sawdust in the bottom of a bag of pellets, the hopper and auger should be cleaned every 500 pounds of pellets burned. Vacuum around the hopper and in the exposed portion of the auger tube. Pay close attention to getting any sawdust or debris out of the bottom of the auger tube. For inserts, accessing the hopper is more difficult. Use an extension on the vacuum to remove all debris.

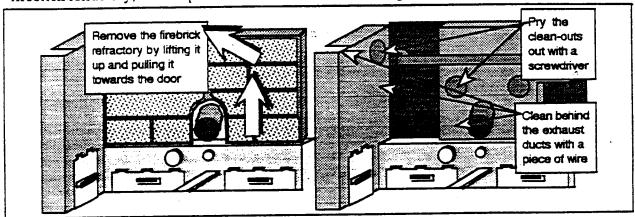


HINT:

This following sections detail difficult maintenance procedures that we strongly suggest be carried out by a TRAINED SERVICE TECHNICIAN, possibly by a service agreement set up by the dealer.

Clean the Exhaust Ducts

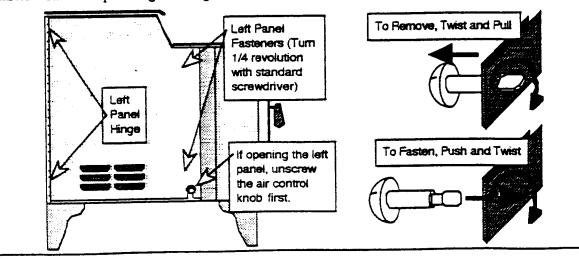
The exhaust ducts are located inside the firebox and are used to transfer heat. Every 6,000 pounds of fuel the flyash and soot from behind the exhaust ducts will need to be removed (perhaps more often depending on pellet quality). Remove the ash trap doors by following the directions in the section "Clean the Ash Traps". Remove the firebrick refractory by lifting it up and away from its holder on the back of the firebox. This will expose the two clean-outs on the back wall of the firebox. Remove these clean-outs, as well as the clean-outs on each side, by prying loose with a screwdriver. Tap against the exhaust ducts to remove the loose flyash first. Then brush away any soot or flyash that has built up behind the exhaust ducts. Use a piece of wire to reach the areas inside the exhaust ducts that are hard to reach. The soot and flyash will fall down to the ashtrap area. Vacuum out all of the flyash and soot. Replace the clean-outs, firebrick refractory, and firepot holder when finished cleaning.



ACCESSING INTERNAL COMPONENTS

FOR STOVES:

The internal components on a pellet stove are accessed by opening either of the hinged side panels. Before opening the panels, turn the stove off and let it cool for one hour. Remove the power cord from the electrical socket. For the left side panel the air control knob must be unscrewed. Open either of the side panels by taking a standard screwdriver and turning the two fasteners one-quarter turn. These fasteners hold the panel in place, and only need to be turned slightly to release. Then swing the panel back on the hinge. To re-attach, turn the screws onequarter turn while pressing them against their sockets.

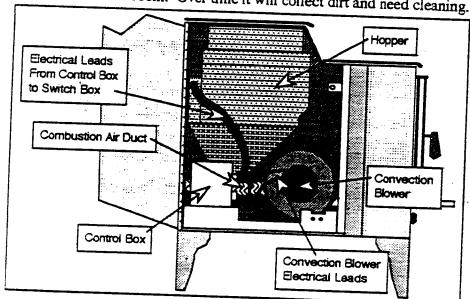


FOR INSERTS:

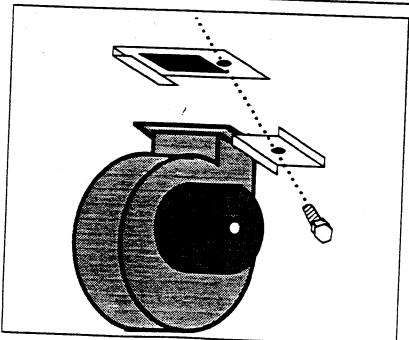
The internal components on either side of the insert are accessed by pulling the insert out of the fireplace. Turn the insert off and let it cool for one hour. Remove the power cord from the electrical socket. Lift off the brass trim around the surround panels and then slide off the top surround panel. Reach in above the insert and disconnect the pellet vent where it attaches to the insert (if it was sealed with sealant, make sure to re-seal with RTV 500° F. silicone). Put down a piece of cardboard on the hearth to prevent scratching. Then remove the door and draw the insert out by pulling from the door opening (pulling from the hopper area may damage the insert). With the insert drawn out onto the hearth the internal components can be accessed. Follow these directions in reverse order to re-install the insert.

Convection Blower

The convection blower pushes air through the heat exchanger tubes, transferring heat from within the firebox to the room. Over time it will collect dirt and need cleaning.



The first step is to open the left side panel (follow the directions in the section "ACCESSING INTERNAL COMPONENTS"). Disconnect the two power leads going to the convection blower. The orientation of these two wires does not matter when reattaching them.



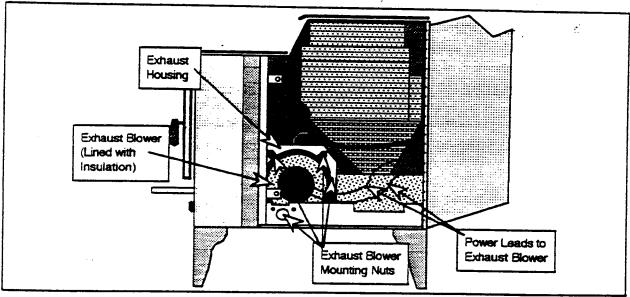
Use a 7/16" socket wrench to remove the single bolt located at the top of the convection blower. The convection blower can now be pulled out of the unit for cleaning. Clean off any dirt that has attached to the intake screen on the blower. Tap against the blower to dislocate any dirt from inside the blower and shake the dirt out. Check the impeller blade. If it is damaged, replace the blower. Follow the directions in reverse order to re-attach the convection blower.

Exhaust Blower

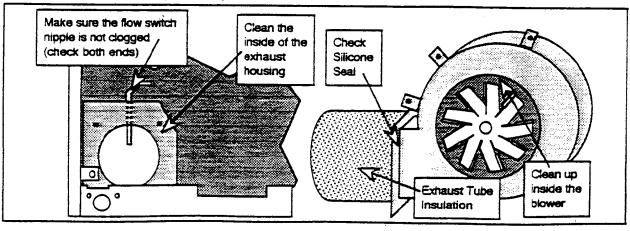
The exhaust blower pulls the combustion air through the heater and pushes the flue gases out the pellet vent. It collects flyash and must be cleaned every 3 tons of fuel burned. Follow the directions in "ACCESSING INTERNAL COMPONENTS" for accessing the right side. For stoves, remove the pellet vent connection at the back of the stove (make sure to re-seal with RTV 500° F. silicone).

Make sure the heater is unplugged, then disconnect the two power leads going to the exhaust blower. Use a 3/8" nut driver to remove the four mounting nuts that hold the exhaust blower in place. Three of the nuts are located on top of the exhaust blower while one is on the lower left and can only be accessed through a hole in the sheet metal. Remove the insulation surrounding the exhaust blower. Tilt the exhaust blower outwards and slide towards the side to remove. With the exhaust blower removed, check the gasketing that insulates the connection between the exhaust blower and the exhaust housing. Replace the gasket if it has deteriorated. Follow the directions in reverse order to re-attach the exhaust blower. Make sure to re-seal the pellet vent connections with RTV 500° F. silicone.

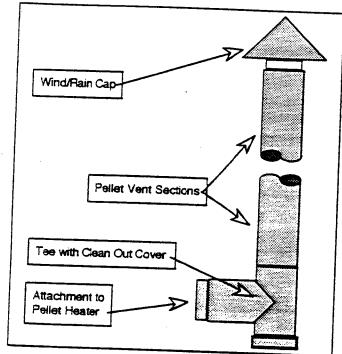
NOTE: The two electrical leads coming from the exhaust blower are black. They are connected to a green wire and a brown wire. It does not matter which color goes to which black exhaust blower lead.



Once the exhaust blower is removed, place it so the side that holds the gasket is up. Check the impeller blades for any damage and replace if necessary. Clean the inside of the blower, making sure to get the flyash up inside the blower. Check the silicone seal where the blower connects to the exhaust tube. Use RTV 500° F. silicone to reseal the joint. Use a new exhaust gasket if the existing one is torn or significantly worn.



Pellet Vent



Check the pellet vent for soot and creosote build-up, and have it cleaned by a certified chimney sweep if necessary.

The wind/rain cap should be cleared of any dirt or debris. The pellet vent sections should be inspected for soot and creosote build-up. Any build-up over 1/4" must be removed.

On stoves the dirtiest portion is often the "Tee" section directly next to the heater on vertical pellet vent systems. Fortunately, it is also the easiest to clean because it has a built in clean out cover. Simply remove the cover and vacuum out. While open, use a flashlight to look up the pellet vent to check for buildup.

On inserts the dirtiest portion is often the portion where the pellet vent turns upward. It can be accessed by unclipping the vertical or horizontal exhaust tube (see "Vent Configuration").



HINT:

The more often you clean out the pellet vent, the more efficient your heater will become. Furthermore, you will reduce the chance for any smoke spillage due to a clogged peilet vent system.



WARNING: Failure to clean the pellet vent system will lead to smoke spillage into the room. Furthermore, whenever any portion of the pellet vent is disconnected, the joints must be sealed with RTV 500° F. silicone

Problem:	Possible Cause:	Don't Call for Service Until You Check:
Heater wont' start	Fuse blown	See "Fuse Blown" below
(Indicator light won't	Heater not plugged in	Plug heater in
turn on)	Power button turned on and start button pressed	See "Starting Your Heater"
,	Power supply cut	Household fuse/breaker not blown
Firepot overfills on startup		See "Starting Your Heater"
	Fire starter did not fully ignite	See "Starting Your Heater"
	AIR CONTROL was not pulled out after the BURN RATE was set to "HIGH"	See "Starting Your Heater"
Diameter and the second		
Fire starter extinguishes	Heater was not turned on and the start button pressed_	See "Starting Your Heater"
soon after lighting	AIR CONTROL was pulled all the way out while the fire	0 10 1
• • •	starter was just starting to burn	See "Starting Your Heater"
Lazy and dark orange	Firepot is plugged	See "Check the Firepot"*
flame with black smoke	AIR CONTROL is set too low	See "Operating Your Heater"
•	Exhaust ducts are clogged	See "Clean the Exhaust Ducts"*
	Pellets are bad	See "Poor Quality Pellets" below
	Air leak	See "Air Leak" below 🦠 🧯
	Exhaust system is clogged	See "Exhaust Blower "*
Exhaust is smoky, but the	Heater was just started	This is normal
flame is okay	Pellets are bad	See "Poor Quality Pellets" below
Firepot overfills with	AIR CONTROL is too far in	See "Operating Your Heater"
pellets	Firepot is plugged	See: "Check the Firepot"*
	Air leak	See "Air Leak" below
	Exhaust ducts are clogged	See "Clean the Exhaust Ducts"*
	Exhaust system is clogged	See "Exhaust Blower"*
Pellets not feeding	Auger not primed	See "Starting Your Heater"
	Pellets have run out	Refill hopper with pellets
	Power switch "ON"	See "Starting Your Heater"
	Start switch pressed	See "Starting-Your Heater
	Heater plugged in, circuit not blown	Household fuse/breaker not blown
	Fuse not blown	See "Blown Fuse" below
	Auger flight jammed	See "Jammed Auger" below
West of the second seco	Power outage	Wait until power is restored
	Pellet Vent Blocked	See "Safety Features" below
Smoke smell in room	Momentary power outage	This is normal - see "Safety Features"
(Do not unping, flip the	Flue not sealed	See "Installation Instructions"
POWER switch to "OFF")	Automatic safety feature has shut off stove	See "Safety Features" below
	Flue system on insert version not fully sealed	See "Installation Instructions"
Heater turned off when	Power outage	See "Safety Features"
hopper is full	Automatic safety feature has shut stove off	See "Safety Features"
	Auger jammed	See "Jammed Auger" below
Fire goes out on low burn.	AIR CONTROL too far out	See "Operating Instructions"
-	Air leak	See "Air Leaks" below
	2	Con Report - Variation
Auto-Ignition System does	Burn Rate set too low	See "Starting Your Heater"

^{*} In the section "Maintenance Instructions" starting on page 33.

Air Leaks

If air leaks into the firebox from the door or ashpan not properly closing, the amount of air flowing through the pellets will decrease. A good way to simulate an air leak is to open the door just a crack while the heater is burning. You will notice that the flame gets very lazy and the brightness decreases. Your efficiency with an air leak is very poor, flyash will increase, and the glass generally becomes dirty. If your heater has a lazy, smoky flame or the pellets are stacking up in the firepot and the AIR CONTROL is all the way open, you should first check for a plugged firepot and then for an air leak.

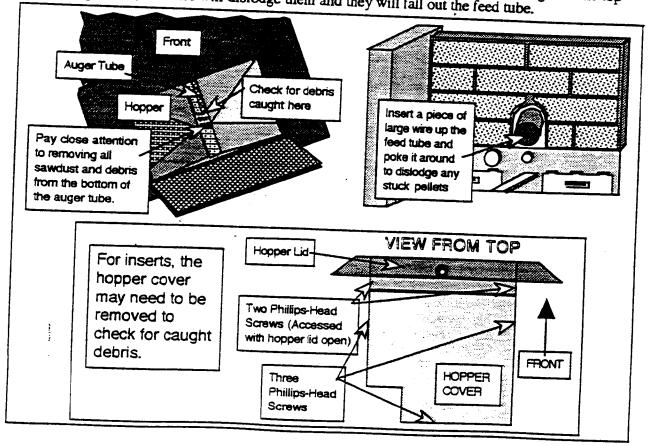
Check the following two areas for an air leak.

Ashpan Check the ashpan seal by pushing against it on either side to see if it rocks. If your ashpan can rock, you may need a new ashpan gasket. Another way to test the seal is to run a lit match around the perimeter of the ashpan while the heater is running. If there is an air leak, the flame will bend towards the leak. Door

To check the door seal, inspect the gasket around the door to see if it seals against the face of the heater. If it does not, the door may need to be aligned or the door gasket may need to be replaced. Another way to test the seal is to run a lit match around the perimeter of the door while the heater is running. If there is an air leak, the flame will bend towards the leak.

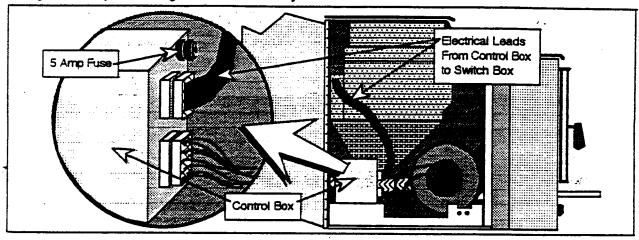
Jammed Auger

Augers can jam when an especially long and hard pellet gets caught, if the pellets are allowed to back-up the feed tube, or if a piece of debris is allowed into the hopper (a nail or screw especially). To check if the auger is jammed, clean and vacuum out the hopper. Turn the heater on and turn the BURN RATE to "HIGH". Look into the hopper and check to see if the auger is turning. If it is not, it could be jammed. Check for debris (e.g. a screw or nail) caught at the mouth of the auger tube opening. On inserts the hopper cover may need to be removed to check for debris. If there is nothing there, insert a piece of large wire up the feed tube and poke it around to dislodge any pellets stuck at the top of the auger tube. If pellets are lodged at the top of the auger tube, the wire will dislodge them and they will fall out the feed tube.



Fuse Blown

Make sure the heater is fully cooled and unplugged. Check the fuse by opening the left side panel (see the section "ACCESSING INTERNAL COMPONENTS" in the maintenance portion of this manual) and pulling out the fuse located on the control box. If the fuse has blown, it means a short has occurred, and your dealer should be called. Do not operate your heater until the reason for the blown fuse has been determined and fixed. It may have been a simple power surge or it may be a dangerous short inside your heater.



Poor Quality Pellets (also see the section "A Word about Pellets")

Check for poor quality pellets by burning different brands (usually 3 bags will give you a good indication). High quality pellets will not only burn better, but produce more heat. The extra cost for high quality pellets is worth it.

Bags of pellets should never be left uncovered outside. The plastic bag around the pellets should not be considered air or water tight. Pellets are usually thoroughly dried before bagging. So if the bag is exposed to damp conditions, the pellets will actually absorb water from the air.

Safety Features

Your heater has built in safety systems which may shut the heater off even though the heater has pellets and the POWER button is "ON".

Power Outages. During a power outage the heater will shut down unless the power outage is just momentary, in which case it will remain on if there is sufficient heat to keep burning.

Overheating. If your heater overheats the auger will shut off and no longer feed pellets. This will allow the heater to cool down safely. The heater will not restart until it has cooled sufficiently. If this happens frequently, turn the unit off and consult with your dealer to determine the problem.

Blocked Flue or Down Draft. This heater is equipped with a draft sensor. If a restriction or back draft occurs, the heater will automatically shut itself off. If the restriction or back draft is momentary, it will automatically resume operation. If the restriction is permanent, the heater will not start until the restriction is fixed.

How this Pellet Heater Works

This pellet heater is a combination of four systems working together to burn pellets and transfer the heat to your room. Your heater will only burn when there is an acceptable amount of air, pellets, and heat present in the firepot. Air is supplied through the Inlet/Exhaust System. Pellets are supplied through the Pellet Feed System. Heat comes from combustion and is transferred to the room through the Convection Heat System. The last system is the Safety System.

If any one of these systems does not work right, your heater will not operate correctly. When troubleshooting any problems with your stove, it is easiest to determine which system is working incorrectly and then go through each component of that system until the problem is found. The table below lists the major components of each system and tips for troubleshooting your heater (see the illustration on the next page for each component's location and appearance).

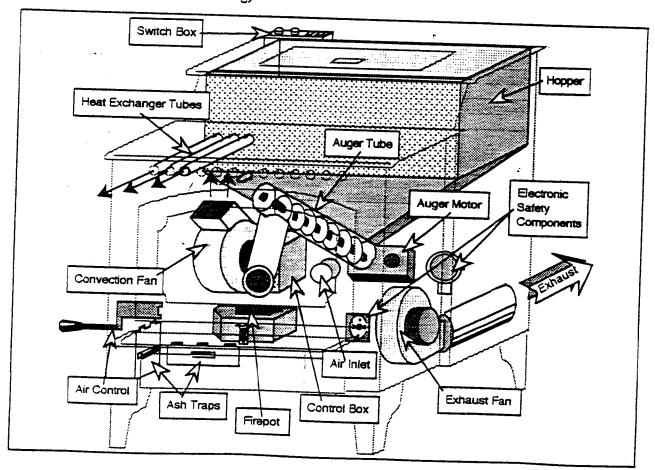
Inlet/Exhaust System

Consists of:	Ригрозе:	Troublach A. Co
Air Inlet	Provides optional outside air	Troubleshooting Tips
AIR CONTROL	Adjusts the amount of air going to the firepot	Aluminum duct not crushed or blocked Slides in and out
Firepot	Hold pellets	Holder on compating and it
Ash Traps	Trap flyash	Holder on correctly, no clinkers, no air leaks Cleaned out and on correctly
Exhaust Blower	Pull air through firepot and push flue gases out flue	Cleaned out



HINT:

This system is the hardest to troubleshoot and crucial to the heater's operation. It must be air tight through the entire chain of components. The most common problem is an air leak into the firebox. This will rob air from the firepot, making combustion incomplete (leading to more soot, more smoke, less heat, and overfeeding).



PAGE 44 TROUBLESHOOTING (CONTINUED)

Pellet Feed System

Consists of:	Purpose:	Troubleshooting Tips
Hopper	Stores pellets	Debris caught in mouth of auger tube
Auger Motor	Turns the spiraled auger flight	Not user serviceable*
Auger Tube	Pushes pellets to feed tube	See the section "Jammed Auger"
Switch Box	Determines the feed rate	Not user serviceable*
Control Box	Turns the auger on and off	Not user serviceable*

Convection Heat System

Consists of:	Purpose:	Troubleshooting Tips			
Convection Blower	Pushes air into heat exchanger tubes	Cleaned out			
Heat Exchanger Tubes	Draws the heat off of the fire	Not user serviceable*			
Switch Box	Determines the convection blower speed	Not user serviceable*			

Electronic Safety Components

Consists of:	Purpose:	Troubleshooting Tips
Electronic Safety	Turns the heater off for a blocked	Not user serviceable* (see the section
Components	flue or overheating	"Automatic Safety Features")



HINT:

This system is of utmost importance. Components should only be serviced by trained technicians. Call your dealer if there are any questions.

Replacement Parts

Ashpan	Ashpan Gasket			
Ashpan Handle	Auger Motor Ceramic Log with Bracket			
Auto-Ignition System Assembly				
Control Box	Convection Blower			
Door Gasket	Door Handle			
Exhaust Blower	Exhaust Blower Gasket			
Exhaust Tube Gasket (Inserts Only)	Firebrick Refractory			
Firepot	Flow Switch			
Flow Switch Tube	Glass			
Glass Gasket	Switch Box - Freestanding			
Switch Box Insert	120° F. Snap Disk SPDT - N.C. (System)			
120° F. Snap Disk SPST - N.O. (Convection Blower)	200 ^o F. Snap Disk SPST - N.C. (Hopper)			

^{*} These components can only be tested by replacing with a new component.

TRAVIS INDUSTRIES, INC. warrants the LOPI 400-PS or PI pellet heater to be defect-free in material and workmanship for five (5) years from the date of purchase, with the exception of the electrical components, fans, gaskets, refractory, auger assembly, firepot and moving parts. This does not include service call cost or any other additional charges. Check with your dealer for all costs if arranging a warranty call. The exceptions listed are warranted for one (1) year from the date of purchase to be defect-free in material and workmanship.

Exclusions to this limited warranty include: Injury malfunction to the product, loss, damage, defect, failure to function due to accident, negligence, misuse, improper installation, alteration or adjustment of the manufacturers settings of components, lack of proper and regular maintenance, damage incurred while the unit is in transit, alteration, or act of God.

This limited warranty excludes damage caused by normal wear and tear, such as paint discoloration or chipping, worn or torn gasketing. eroded or cracked refractory, etc. Also excluded is damage to the unit caused by abuse, improper installation, the use of fuel loads other than specified by the manufacturer or use not set forth in the Owner's Manual. An overfired condition will cause warped metal parts and discolored or burned-off paint.

TRAVIS INDUSTRIES, INC. is free of liability for any damages caused by the unit, as well as inconvenience expenses, material and labor charges incurred by the removal or reinstallation of any LOPI 400-PS or PI unit. Incidental or consequential damages are not covered by this warranty. In some states, the exclusion of incidental or consequential damage may not apply.

This warranty does not cover any loss or damage incurred by the use or removal of any component or apparatus to or from the LOPI 400-PS or PI unit without the express written permission of TRAVIS INDUSTRIES, INC. and bearing a TRAVIS INDUSTRIES, INC. label

Any statement or representation of LOPI 400-PS or PI products and their performance contained in LOPI 400-PS or PI advertising. packaging literature, or printed material is not part of this limited warranty.

This warranty is automatically voided if the unit's serial number has been removed or altered in any way.

Only the original purchaser of a LOPI 400-PS or PI heater is covered by this warranty. If the unit is used for commercial purposes, it is

No dealer, distributor, or similar person has the authority to represent or warrant LOPI 400-PS or PI products beyond the terms contained within this warranty. TRAVIS INDUSTRIES, INC. assumes no liability for such warranties or representations.

THIS LIMITED WARRANTY IS THE ONLY WARRANTY SUPPLIED BY TRAVIS INDUSTRIES, INC., THE MANUFACTURER OF THE UNITS. ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, ARE HEREBY EXPRESSLY DISCLAIMED AND PURCHASER'S RECOURSE IS EXPRESSLY LIMITED TO THE WARRANTIES SET FORTH HEREIN.

This warranty is limited to the time frame set forth above. In some states, time limitations on warranties do not apply.

HOW TO USE YOUR LOPI 400-PS or PI FIVE-YEAR WARRANTY: If you find your unit to be defective in workmanship or material within a 5-year period from the date of purchase contact your local authorized LOPI 400-PS or PI dealer. If your dealer is unable to repair your unit's defect, he may process a warranty claim through TRAVIS INDUSTRIES, INC., including the name of the dealership where you purchased the unit, a copy of your receipt showing the date of the unit's purchase, and the serial number on your unit. At that time, you will be asked to ship your unit, freight charges prepaid, to TRAVIS INDUSTRIES, INC. TRAVIS INDUSTRIES, INC., at its option, will repair or replace, free of charge, your LOPI 400-PS or PI unit if it is found to be defective in material or workmanship within the time frame stated within this limited warranty. TRAVIS INDUSTRIES, INC. will ship your unit, freight charges prepaid by TRAVIS INDUSTRIES, INC., to your regional distributor, or dealership.

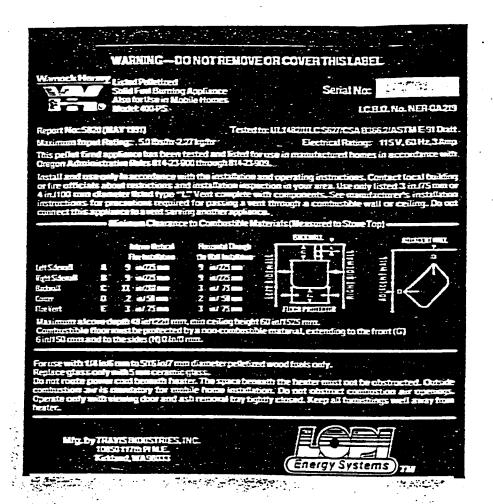
To register your TRAVIS INDUSTRIES, INC. Five-Year Warranty, complete the enclosed warranty card and mail it within ten (10) days of the unit purchase date to: TRAVIS INDUSTRIES, INC., 10850 117th Place N.E., Kirkdand, Washington 98033.

OTHER RIGHTS:

It his warranty provides you with certain legal rights. You may have warranty.	additional rights, which vary from state to state, in regards to this	
Unit Serial Number		_
Date of Purchase		
Dealer Name and Address	Complete and	
	save for your	
	records	
T		

Travis Industries, Inc. reserves the right to change, without notice, product features or specifications described.





ARNING - DO NOT REMOVE OR COVER THIS LABEL Listed Pelistized Soils Fuel Burning Appliance in masonry/factory built (2C) fireplaces/zero clearance (built-in) institlations.

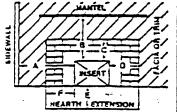




**** 400-P1 E3 *** Nec 6254 (JULY 1991) Electrical Retarg: 115 V, 60 Hz, 3 Amp a input Pating: S.O Bache-2.27 kg/hr

Out and use only in accordance with the installation and orating instructions. Contact local building or fire officials structions and installation inspection in your area. Do not bloss or morter from massing fireplace or after factory.

INSERT CLEARANCE DIAGRAM



um Claarance to Combustible Materials (Measured from insert Tool

•				
Adjacent Sidewall		A	9	in/220 mm
Mantle		9-	13	-in/330 mm
Too facing		C	12	In/305 mm
Side Facing		٥	5	W205 mm

combustible floor beyond hearth extension must be a non-conquisticle material, extending 0 in/0 mm (E) not 0 in/0 mm (F) to the sides of door opening, components. Required for Masonry Fireplace Installs

Components Required for Resoury Perplace Installations: Components Required for Factory Built Fireplace Installations: Listed 3 in/15 mm or 4 in/100 mm diameter flue lines. Components Required for Zero Clearance (Built-in) Installations: Roor Shield Xie No., 99300143, Minimum Framing Diameters. roun plants of rec. 230014. Immediate Process Research for complete installation requirements regarding this type of installation. installation.
For use with 1/4 in/6 mm to 5/15 in/7 mm diameter pelletized wood.

hers only.

Reptace glass only with 5 mm ceramic glass.

Reptace glass only with 5 mm ceramic glass.

Do not route power cord beneath heater. The space be heater must not be obstructed. Do not obstruct comb openings. Operate only with wirning door and ash rembiginty closed. Keep all furnishings well away from hand

Travis Industries, Inc.