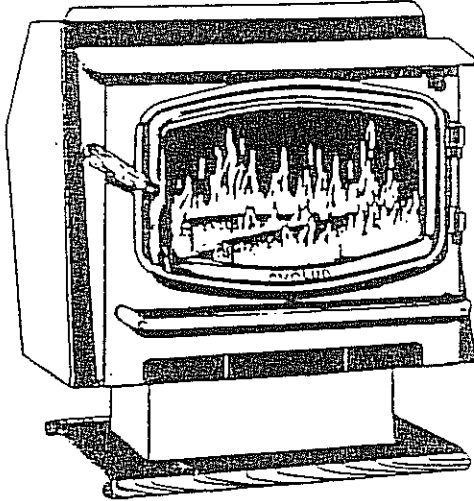


AVALON
WEST

INSTALLATION AND OPERATION

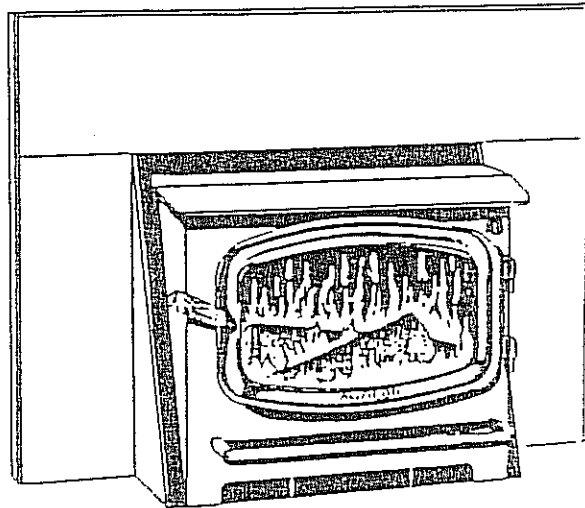
MANUAL

AVB 800



- * Insert
- * Freestanding Pedestal
- * Hearth Mode - zero clearance
- * Alcove

AVALON



20004 144TH AVENUE, WOODVILLE, WA 98072

We strongly recommend installation by qualified licensed professionals and inspection by your local building inspector.

GENERAL INFORMATION

Before installing your appliance contact your local building authority for specific requirements concerning permits or inspections. Your AVALON dealer will assist you in obtaining these names and experienced help for your installation. AVALON recommends professional installation. It's quicker, easier, not expensive and offers you more peace of mind.

A NOTE ON SAFETY:

When properly installed, certified AVALON heaters meet or exceed applicable safety standards and codes, and is assured by an internationally recognized agency. Improperly installed appliances can lead to hazardous conditions. For you and your family's security, please follow the installation and operation instructions carefully.

TESTING:

Your appliance has been tested to U.L. 1482 and U.L. 907. ICBO number TL 130. All testing completed by Omni Environmental Services, Beaverton, Oregon.

AVALON hearth mounted stoves and inserts are certified to U.S. standards for solid fuel appliances for installation in masonry fireplaces. All AVALON inserts are certified for installation with or without a positive flue connector. Hearth-mounts are certified for installation with positive flue connect in any listed factory built fireplace with Class A chimney or any factory built fireplace when installed with a chimney liner.

SAFETY PRECAUTIONS:

DO NOT connect this appliance to any chimney or ducting serving another appliance or any AIR DISTRIBUTION DUCT.

Before installing your appliance check the clearance diagram on the last page of the instructions to make sure adequate spacing is available for unit and hearth protection.

WARNING:

Do not make any changes or modifications to either the stove or an existing masonry fireplace itself to install this appliance.

Do not remove bricks or mortar of an existing masonry fireplace during the installation.

Do not use makeshift compromises.

Clearances can only be reduced by means approved by the local authority.

Do not use substitute components.

ASSEMBLY REQUIREMENTS:

Your AVB 800 comes completely assembled with 3 exceptions.

You will be required to place the firebrick lining within the stove and masonry baffle. The masonry firebrick for your stove and baffle will be found in a box inside your appliance.

When preparing to install your stove, remove the contents of the unit. Lighten the appliance and make it easier to move.

Secondly, the unit will have to be adapted for its intended use, whether as a freestanding stove, insert, hearth mount or alcove stove. Follow the instructions in the appropriate section.

Last thing, you will have to install the wooden knobs on the air control. This should be done after the stove is completely installed as this will prevent breakage.

INSTALLATION INSTRUCTIONS

PEDESTAL ASSEMBLY

The AVB 800 stove when used in the freestanding mode is mounted to a pedestal base.

To attach the pedestal, lift your stove on to the pedestal base and line-up the bolt holes on the bottom of the unit with the two tabs located on the pedestal base. Bolt the stove firmly onto the pedestal. When locating your stove onto the pedestal make sure it is centered so there is no danger of the unit tipping or falling. An alternate method is to turn the stove over on its back and bolt the pedestal on lying down.

NOTE: Put bricks in last.

All sections of chimney should be securely fastened together with 3 sheet metal screws. This includes the interior pipe to the flue collar on the stove.

Remember...your chimney should extend a minimum of three feet above your roof and at least two feet higher than any obstacle within ten feet of the chimney. Total minimum chimney height of twelve to fifteen feet is required.

WARNING: Do not connect this unit to a chimney flue serving another appliance.

Do not use makeshift materials or compromises in the installation.

INSTALLATION

Please read instructions completely and return your warranty card.

If you are going to use an existing masonry chimney for your appliance make sure the chimney is inspected and found in good and safe condition. If the existing chimney is not in good condition, repairs should be made before installation.

If you are going to use a factory built chimney it should be 6" in diameter and a type suitable for use with solid fuels. Follow the installation instructions packaged within the chimney appliance.

Wall, ceiling or roof penetrations can only be made with listed chimney components.
NOTE: Your interior single wall chimney must not pass through an attic, roof space, closet or similar unsealed space, floor, ceiling, wall or partition of combustible construction.

All sections of chimney should be securely fastened together by at least three sheet metal screws. This includes interior pipe to flue collar on stove. Crimped end must be installed downwards.

Remember...your chimney should extend a minimum of three feet above your roof and at least two feet higher than any obstacle within ten feet of the chimney. Total minimum chimney height of twelve to fifteen feet is required.

Use 6" diameter minimum 24 gauge Black connector with listed factory-built chimney suitable for use with solid fuels, or lined masonry chimney. Chimney must be kept clean.

POSITIONING YOUR AVB 800

Be sure when you place your stove in position it meets all minimum clearances to combustibles. These clearances are listed on the back page of this manual.

VERTICAL INSTALLATION WITH FACTORY-BUILT CHIMNEY:

Check to see that no ceiling support members will be cut to install chimney and support box.

1. Reposition if necessary
2. Position plumb bob over stove flue opening and mark location on ceiling.
3. Cut ceiling hole and frame in for support
4. Cut remaining holes and install chimney and components. NOTE: When installing flashing be sure to mastic edges and nail holes.
5. Move stove aside. Install floor protector, reposition, install connector.

See drawing 1 & 3 for parts required for vertical installation.

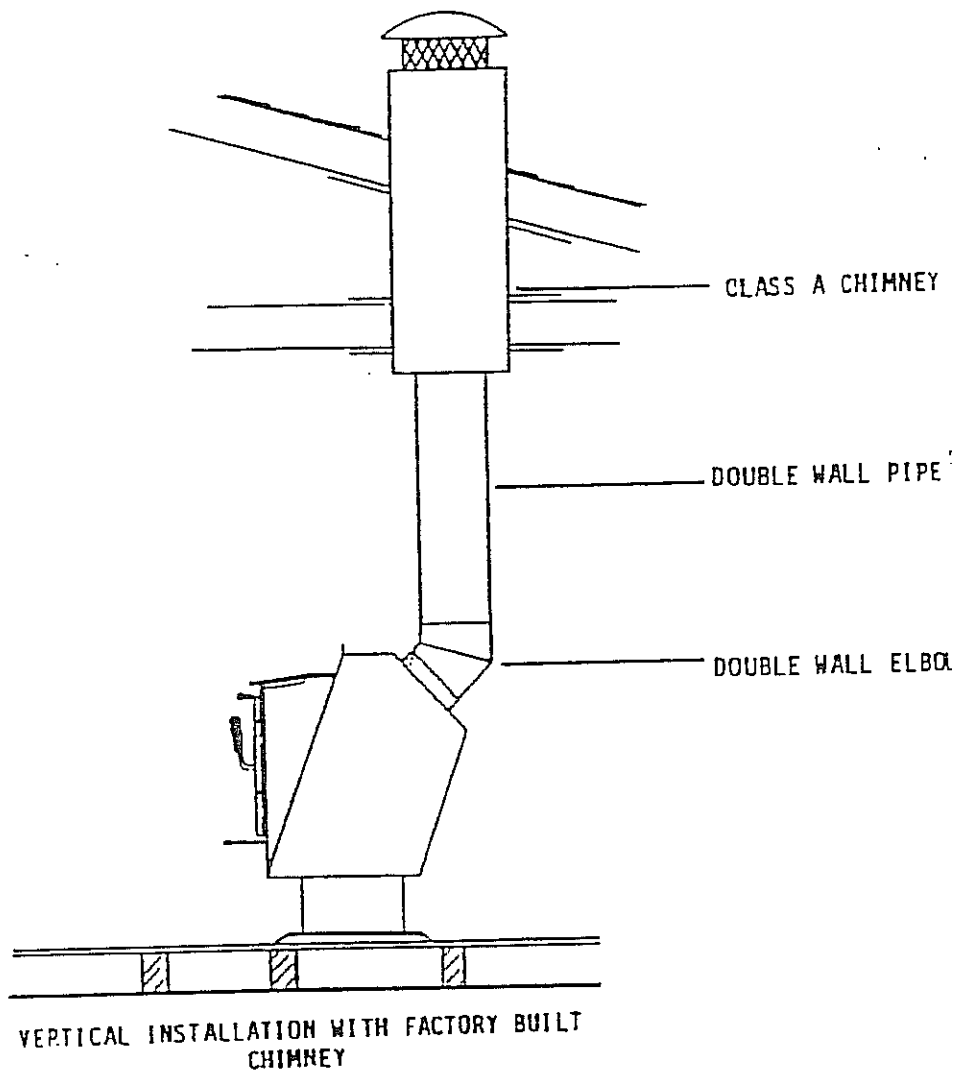


FIGURE 1

HORIZONTAL INSTALLATION (to outside of house)

1. Reposition if necessary.
2. Mark position of flue center on wall.
3. Cut wall hole and frame in for thru-the-wall assembly.
4. Install support on outside wall
5. Cut remaining holes and install chimney and components.
6. Move stove aside, install floor protector, reposition, install connector.

See drawing / 2 for parts required for thru-the-wall installation.

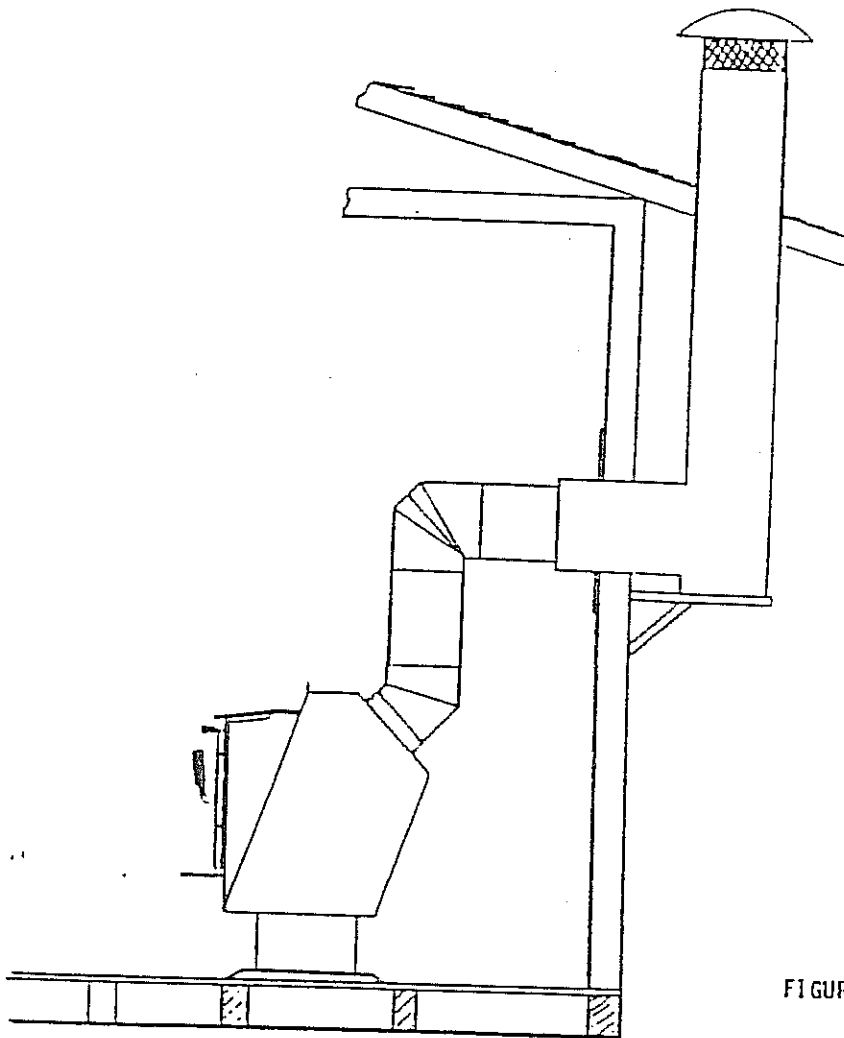


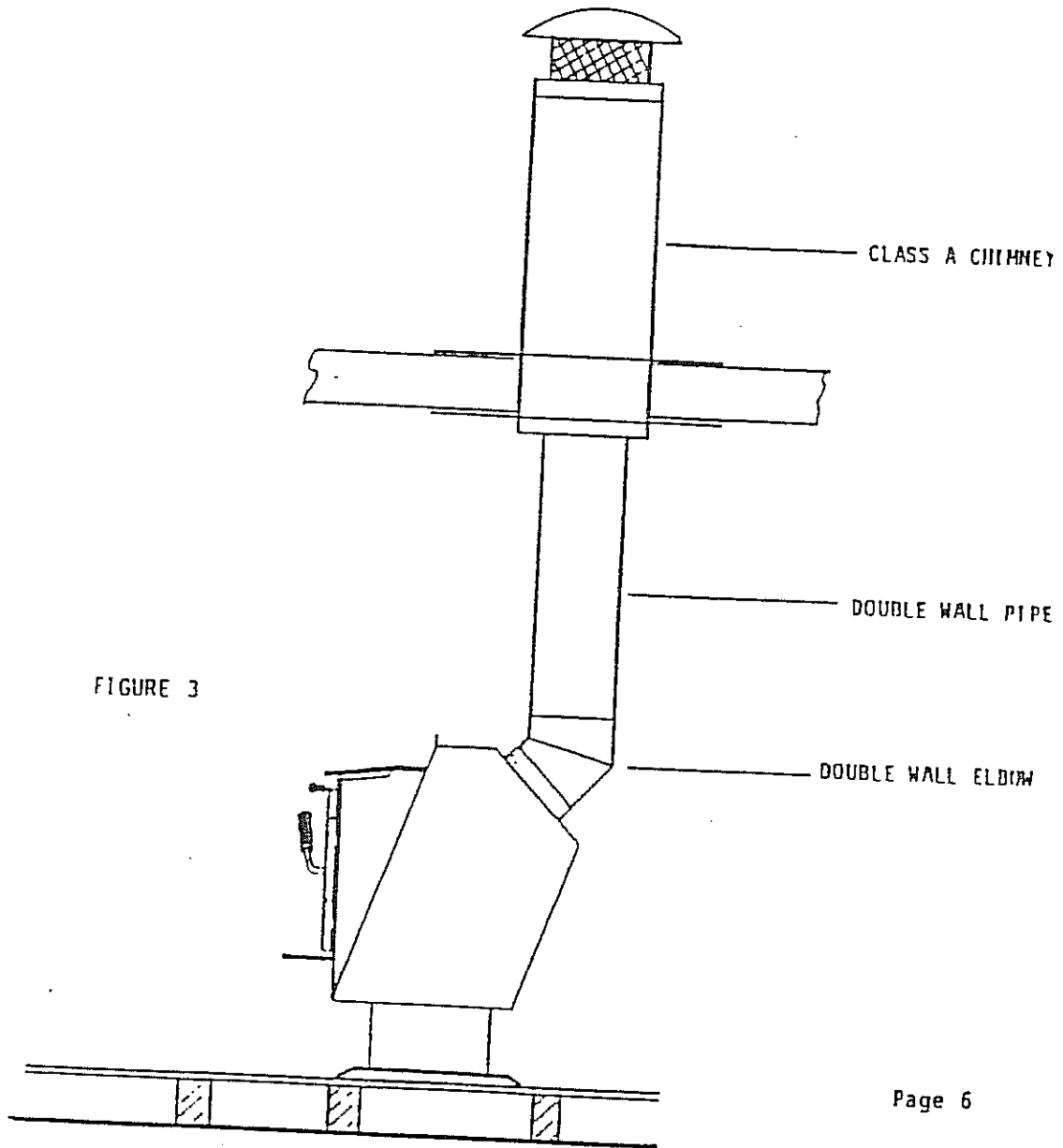
FIGURE 2

HORIZONTAL INSTALLATION - TO OUTSIDE OF HOUSE
(Thru-the-wall assembly)

ALLOWED/CLOSE CLEARANCE

Use 6" diameter Security double wall or Dura Vent air insulated connector to the ceiling plus Class A chimney system suitable for use with solid fuels.

Chimney must be kept clean.



INSERT INSTALLATION:

For your safety; (1) examine the masonry fireplace and chimney prior to installation of the fireplace accessory 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 fireplace accessory should not be installed until after repairs have been made. Before installing in the fireplace, seal around the flue collar and air chamber with furnace cement. Any opening between the masonry of the fireplace and the facing masonry must be permanently sealed.

Your AVB 800 is made for installation into masonry fireplaces. AVALON inserts may be installed with or without positive chimney connection.

CONVENTIONAL INSTALL (non-positive connect)

NOTE: Before installing in the fireplace, be sure to seal around the flue collar and air chamber with furnace cement.

1. Make sure fireplace and chimney are thoroughly cleaned.
2. Wire open or remove fireplace damper. (Fig. 4)
3. Place stove on hearth and make sure surround panels are large enough to cover opening. 1 1/2" - 2" overlap is necessary to accommodate fiberglass seal. Fiberglass wool insulation strips are used to seal between insert surround panels and face of fireplace.
4. Drill two 11/64" holes each side and screw on side panels with screws provided. Then clip on top panel.
5. Position insert approximately 6" from face of fireplace and glue insulation to back of panels to match fireplace opening.

NOTE: Adhesive to secure insulation to panels is available from your dealer.

6. Push insert in until firm seal is made against face of fireplace.
7. Install brick in stove and baffle as per instruction page.
8. Make sure insert is square in the fireplace opening and there are no air gaps or leaks around the surround panels.

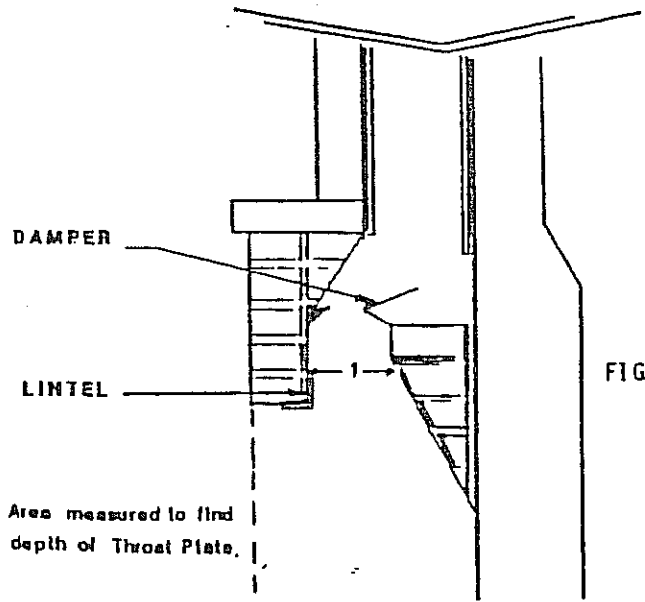


FIGURE 4

INSERT INSTALLATION (cont.)

POSITIVE CHIMNEY CONNECTION

1. Measure below damper area the width from side to side at rear of smoke chamber (Fig. 4)
2. Measure below damper area the width from side to side at front of smoke chamber.
3. Measure below damper front to back of smoke chamber.

Results should look similar to Fig. 5 .

Transfer these measurements to a piece of sheet metal (min. 24 gauge) large enough to accommodate your size. Then add 2" to perimeter and bend to 45°. (This extra 2" lip will allow you to screw this plate into the smoke chamber)

4. Position 6" hole to line up with chimney opening and cut hole.
5. Wire open damper.
6. Put plate in position, drill and lag in masonry with several screws. (Seal may be made using fiberglass insulation between masonry and metal.) Fig. 6 .
7. Once plate is in position slide pipe into plate up through damper.
8. You may now place your new appliance into the fireplace opening and position the connector pipe so it can easily be pushed into the flue opening on top of the insert. (Fig. 6)

9. Once this has been accomplished you can reach in and pull the connector pipe down into the flue of the insert. (NOTE: If ample room between the inserts top and the fireplace opening does not exist to pull the connector down, you may reach inside the stove and pull the connector down to the insert by placing your hand up through the flue opening of the stove.)

Your new insert is now connected to the chimney of your fireplace and you can place your surrounding panels in place. You will also need fiberglass wool insulating strips to seal surround panels to face of fireplace. Your surrounding panels consist of three panels - left, right and top. The side panels should be placed in position first and checked to make sure they cover the fireplace opening side to side adequately. (1 1/2" to 2" overlap is necessary to accommodate fiberglass insulation which will help insure an air-tight seal.) After the fit-up is checked, you may attach the side panels with the four self-tapping screws provided with your panels. It will be necessary to drill 11/64" holes at the punched locations in the panels when they are lined up for installation.

With the side panels in place, slide the top panel into place to complete the installation of the panels. Take the insulation strips and hold them in place around the surrounding panels as you push the insert in until the surrounding panels meet the face of the fireplace. Once your insert is in place, push any excess insulation in behind the panels. Check and make sure the unit is square in

INSERT INSTALLATION (cont.)

the fireplace opening and there are no air gaps in and around the surrounding panels.

Follow installation instructions in reverse order for periodic inspection and cleaning.

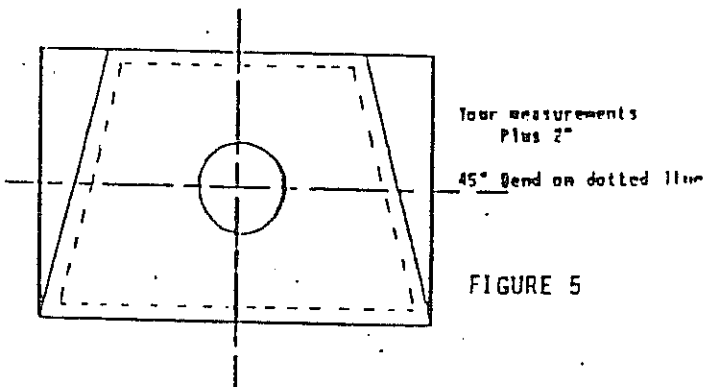


FIGURE 5

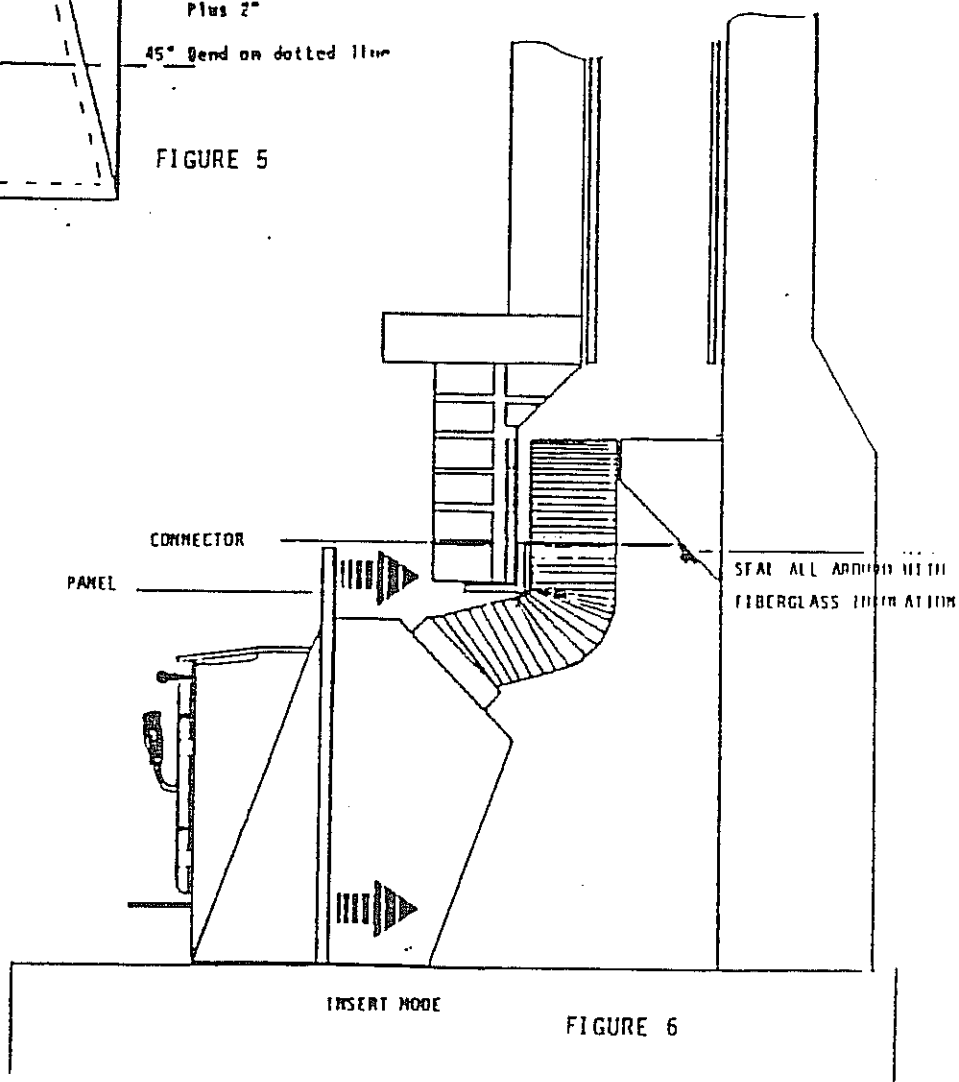


FIGURE 6

HEARTH MODE INSTALLATION:

1. Measure below damper area the width from side to side at rear of smoke chamber.
2. Measure below damper area the width from side to side at front of smoke chamber.
3. Measure below damper front to back of smoke chamber.

Results should look similar to Fig. 7 .

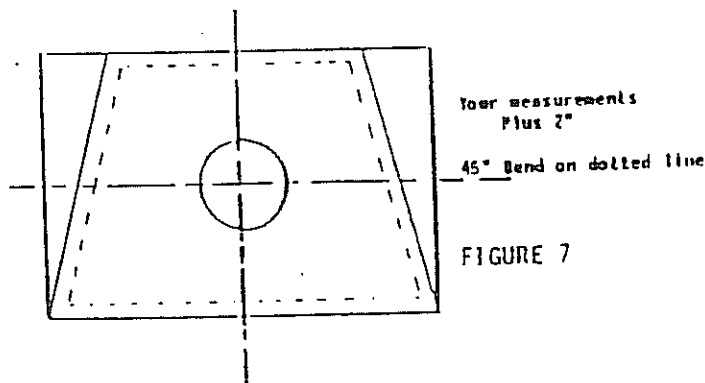
Transfer these measurements to a piece of sheet metal (minimum 24 gauge) large enough to accommodate your size. Then add 2" to perimeter and bend to 45°. (This extra 2" lip will allow you to screw this plate into the smoke chamber.

4. Position 6" hole to line up with chimney opening and cut hole.
5. Wire open damper.
6. Put plate in position, drill and lag in masonry with several screws. CHIP Seal may be made using fiberglass insulation between masonry and metal. (Fig. 8)
7. Once plate is in position, slide pipe into plate up through damper.
8. You may now place your new appliance into the fireplace opening and position the connector pipe so it can easily be pushed into the flue opening on top of the stove. (Fig. 8)
9. Once this has been accomplished you can reach in and pull the connector pipe down into the flue of the stove. NOTE: If ample room between the stove top and the fireplace opening does not exist to pull the connector down, you may reach inside the stove and pull the connector down to the stove by placing your hand up through the flue opening of the stove.

Follow installation instructions in reverse order for periodic inspection and cleaning.

See clearances on the last page of this manual.

The AVB 800 in the hearth mode can be used in any listed factory built fireplace with Class A chimney system or any factory built fireplace with a chimney liner.



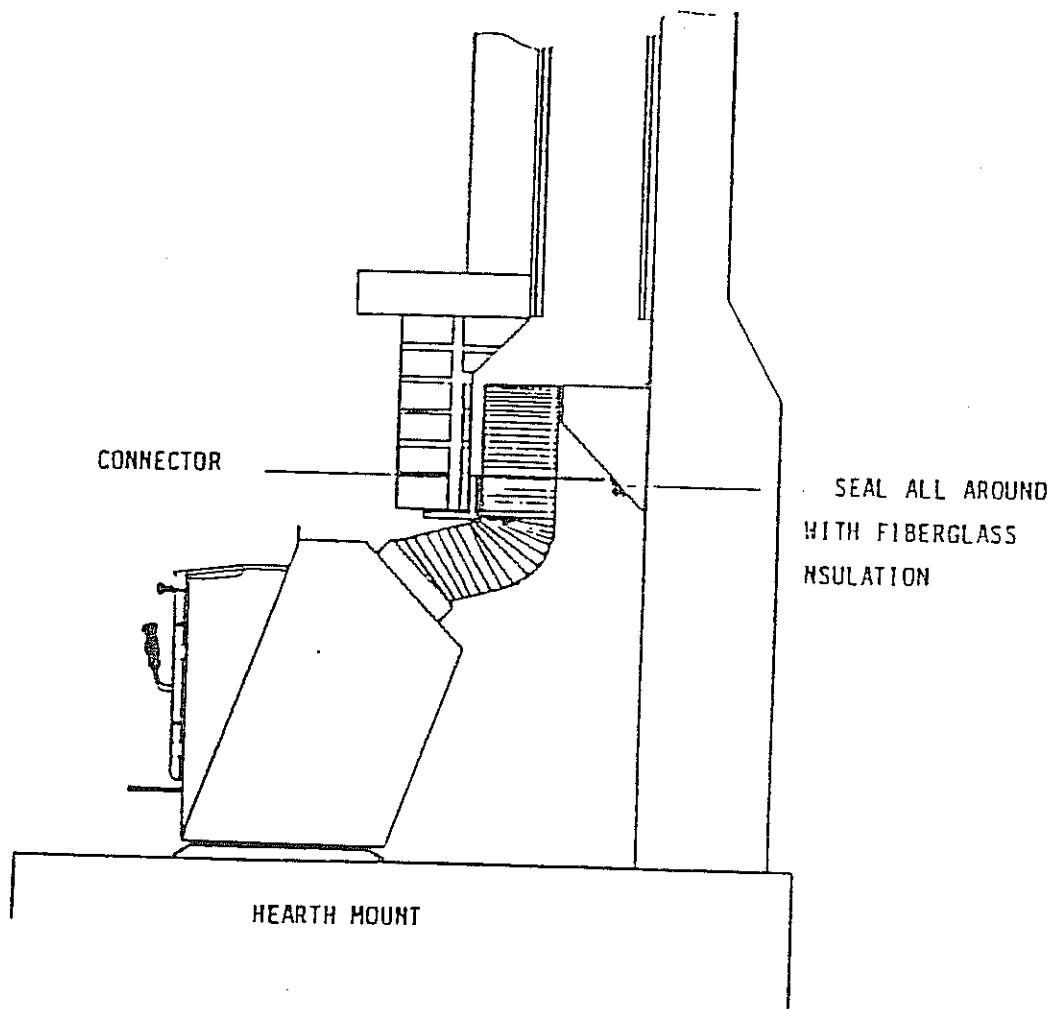


FIGURE B

FIREBRICK ASSEMBLY

Your new AVALON AVB 800 utilizes a firebrick liner to increase the even distribution of heat output and to increase heating efficiency on low or medium rates. This firebrick liner will also increase your stoves life considerably over a non-lined appliance.

Part of your stoves computer modeled combustion system is the firebrick baffle. This baffle not only holds valuable heat within the unit, it also retains the heat and helps ignite gases and particules passing over it before they can leave the appliance. This is commonly called secondary combustion and makes the appliance burn cleaner and more efficiently. This combustion system is also aided by an automatic impingment plate that extends the flame path increasing efficiency when the door is closed. When the door is opened, it swings open to remove smoke from the unit keeping flames and smoke from coming out of the door, a very effective safety feature.

Follow the assembly instructions and diagram below to install your firebrick.

ASSEMBLY INSTRUCTIONS

1. Install push rod "long" side through tube from back side.
2. Install impinger plate (see drawing) position pivot pins in hangers.
3. Install floor bricks in center of fire box as shown.
4. Install back bricks as shown on top of floor bricks.
5. Install front brick front center
6. Install side brick front to back, lean bricks from floor to side of stove, rear side brick wedges other bricks tight.
7. Install baffle brick retainer in hangers and fill with brick, use "black" brick in the middle. Make sure baffle brick sits in front of spacer.

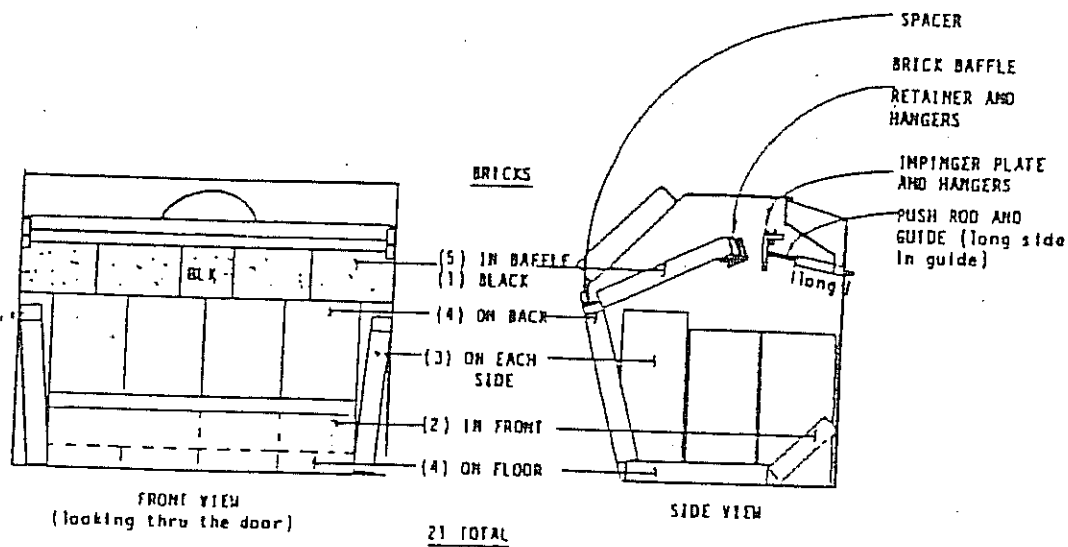


FIGURE 9

FAN INSTALLATION AND USE

The AVALON stove comes with the option of 2 fans; a squirrel cage rear mount or a dual squirrel cage front mount fan. Rear fan not available on 6" pedestal.

To install the rear fan, see instructions packaged with your fan.

To install the front fan, simply place under ash lip and hook right side retainer clip to inside of convection chamber, then push in. At the lower left is an adjustable retainer. Screw in until tight. This fan can be used in all modes.

OPERATION: ALL APPLIANCES

Please follow the instructions given in this section carefully.

To build a fire in disregard of the information provided in this section can cause permanent damage to your appliance and void your warranty.

This unit is not designed for use with the feed door open. Burning with the feed door open could create a safety hazard.

BURNING PROCEDURE

1. Open door and place paper and small dry kindling inside unit.
2. Make sure that the combustion air in-take control (located on the right hand side above the door) is fully open. Do this by pushing the control knob all the way to the right.
3. Now, light the fire. Once the kindling is burning add some small dry pieces of wood and close the loading door. NOTE: The first two or three fires in your new appliance will cause the high temperature paint your stove is painted with to cure. This will be evident by the paint giving off a slight odor and a small amount of smoke. For best results during the curing of the paint, burn small intense fires so the unit does not overheat. The high temperature paint cures best at medium temperatures. Also, the viewing glass may become somewhat obscure the first time or two as your unit is drying all moisture from the bricks and even the steel itself.
4. Next, add two or three medium size dry logs (use of green or wet wood in your stove will greatly decrease its efficiency).
5. To slow the rate of burn, you can close (push to the left) the combustion air intake control (on the right side front, above the door) partially.

NOTE: Over restricting the amount of combustion air into the stove will cause creosote buildup on glass and in the stove and flue. This will also greatly decrease the efficiency of the stove.

BURNING PROCEDURE (cont.)

Do not open door of your unit when the air control inlet is fully closed. There is a possibility with any solid fuel burning appliance doing so could result in a sudden flash of flames as the fire re-ignites with oxygen. However, the AVB 800 has been thoroughly safety tested to reduce or eliminate this possibility.

DAILY USE OF YOUR STOVE

During daily use of your stove you will learn what levels of burn best take care of your heating needs. You'll have fun getting familiar with your new appliance. Remember that in most applications AVALON units burn very well with the damper control fully closed and the air control set partially closed as well. (After coal bed is established.)

Some helpful hints: After loading your stove when you burn it continuously, open the air control and allow your stove to burn vigorously for 20 or 30 minutes. This will insure the burn-off of any creosote which accumulates over periods of extended use at low settings.

When high burn rates are required, open both the draft control and damper fully. (Although an open damper does not produce the maximum heat output.)

SAFETY IN OPERATION

1. Do not use this appliance for any purpose other than heating. Burn solid wood fuels only.
2. "Never use gasoline, gasoline-type lantern fuel, Kerosene, naphtha, engine oil, charcoal lighter fluid, or similar liquids to start or 'freshen up' a fire. Keep all such liquids well away from the fireplace accessory while it is in use."
3. Do not burn garbage in your stove, or use chemicals or fluids to start the fire.
4. Use caution when loading fuel into stove after it is already burning vigorously.
5. Do not overfire stove at any time. If stove glows red it is overfired.
6. Keep all household combustibles and store fuel at least 3 feet from stove at all times. Store fuel in a dry place well away from the heater.
7. Do not support or elevate fire off of firebrick. Burn fire directly on bricks. Do not use a grate.
8. Educate your children with the dangers associated with fire, and the presence of the hot appliance. Touching a radiating surface can cause serious burns. Child guards are available through your dealer.
9. Keep loading door closed at all times except to load fuel.
10. Avoid placing logs and fire against viewing glass.
11. Maintain the door and glass seal and keep them in good condition.
12. Do not modify your combustion air control to allow more air into your unit. This could create a hazardous condition.
13. Do not burn any kind of coal in this unit.
14. Do not slam door or strike glass.

MAINTENANCE

Regularly check your stove and fireplace, as well as chimney for sound structural integrity as well as cleanliness. Have your chimney cleaned regularly to insure no creosote build-up occurs.

WAYS TO PREVENT CREOSOTE BUILD-UP

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire.

The chimney should be inspected at least once every 2 months during the heating season to determine if a creosote build-up has occurred. If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

1. Burn your stove with air intake control wide open 20-30 minutes per day.
2. To minimize production of creosote, burn seasoned wood. This is wood which has been allowed to dry for several months.
3. Burn small intense fires rather than larger smoldering ones.
4. Do not completely close draft control during operation. This could cause the fire to smolder and may increase production of creosote.

Establish a routine for burning your new appliance. Check for creosote build-up until experience shows how often you need to clean to be safe. Be aware that the hotter the fire the less creosote is deposited. Contact your local municipal or provincial fire authority for information on how to handle a chimney fire. Have a clearly understood plan to handle a chimney fire.

In case of a chimney fire, call your fire department, and insure that the air inlet control and the door are both closed, to reduce the amount of air feeding the fire.

ASH DISPOSAL

During constant periods of use, such as in the cold winter months, ashes must be periodically removed from the stove's firebox to prevent a build-up which will affect the performance of the appliance and limit the fuel load capacity.

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled. Other waste must not be placed in this container.

BRASS

If your AVALON AV8 800 comes with a solid brass door and trim it will require periodical attention to retain its luster. Use a non-abrasive polish when polishing your brass and clean the door when it is cool. A suitable non-abrasive polish is available at your dealer.

GLASS

Clean glass in the door only when glass is cool, and use a non-abrasive cleaner. If glass should happen to be cracked or broken, wait until it has cooled before attempting to remove it. Do not operate unit with broken glass or without glass at all.

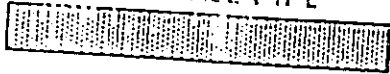
To replace glass, simply remove the glass retainers on back of door by removing the screws. Replace broken glass with Neoceram 5mm thick, provided by your AVALON dealer or call AVALON directly for assistance.

Do not use substitute glass. Remember, glass must be wrapped on edges with fiberglass gasketing available at your AVALON dealer. Gaskets to be used are 1 1/4" fiberglass weave for the door, and 1/16" round fiberglass weave for the glass.

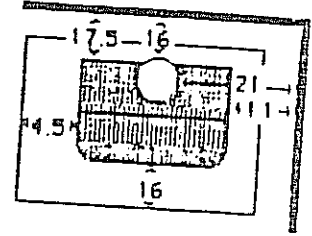
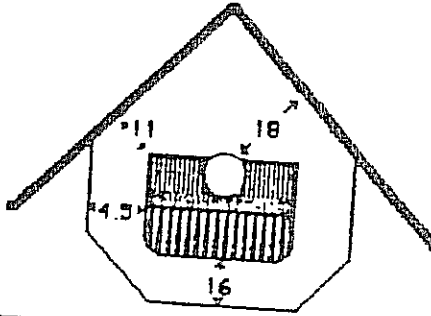
PLEASE SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE. THANK YOU FOR CHOOSING AVALON. YOU'LL BE GLAD YOU DID FOR MANY, MANY YEARS!

AVALON INSTALLATION SUPPLEMENT

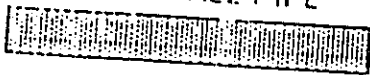
RESIDENTIAL
SINGLE WALL PIPE



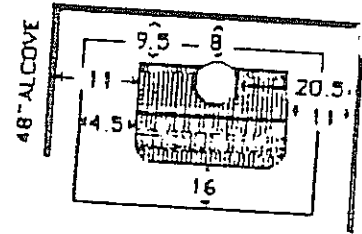
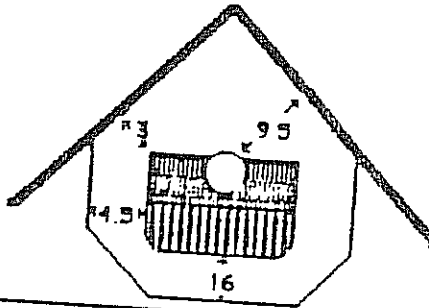
AVB800



RESIDENTIAL
ALCOVE
DOUBLE WALL PIPE



AVB800



48" ALCOVE

INSERT



AVB800

