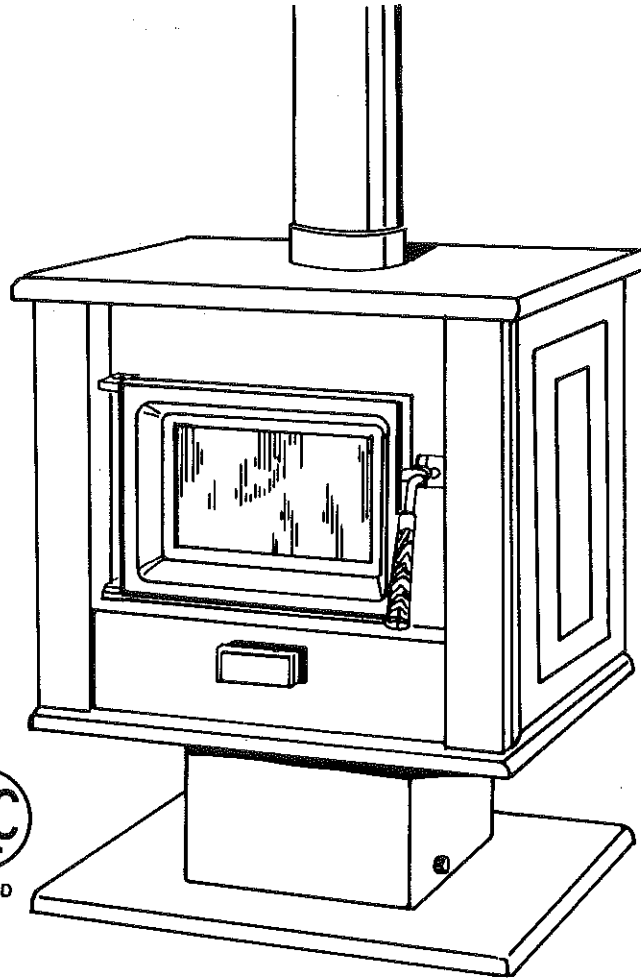




**MODEL 1800A/2400A**



## **INSTALLATION OPERATING & MAINTENANCE INSTRUCTIONS**



**W A R N I N G**




**READ AND FOLLOW THESE INSTRUCTIONS CAREFULLY  
BEFORE INSTALLING AND USING THIS APPLIANCE**













**" SAVE THESE INSTRUCTIONS "**



## SAFETY WARNINGS



When you see this symbol  throughout this manual the information that follows is vital to the safe installation and operation of this appliance.

-  If this appliance is not properly installed, operated and maintained a serious house fire may result.
-  Always follow the recommended clearances to combustibles for this appliance and the appliance chimney and chimney connector.
-  Never place wood, paper, furniture, drapes and other combustibles near the appliance.
-  Do not install this appliance in locations where gasoline, kerosene, charcoal lighter fluid, paint thinner or any other flammable liquid is stored or used.
-  The floor must be non-combustible or otherwise protected by a non-combustible floor protector. Follow the instructions in this manual for size and type of floor protection required.
-  If installing this appliance in conjunction with a masonry chimney be sure the chimney is in good condition and meets the minimum standards of the National Fire Protection Association (NFPA) Standard 211.
-  Special methods are required when passing a chimney or connector through a wall or ceiling. Follow the chimney manufacturer's instructions and local building codes.
-  If installing this appliance with a pre-fabricated listed metal chimney, it must be one of the types listed in this manual.
-  Only burn the type of fuel recommended in this manual. Do not burn trash, driftwood, artificial logs, flammable liquids, or any substances containing salts or corrosives.
-  The chimney and chimney connector must be inspected and cleaned regularly to avoid excessive creosote and soot build-up. Failure to do so can result in a serious chimney fire which may damage the chimney or may cause a house fire.
-  Appliance surfaces become hot during use. Keep children away from the appliance during operation. Do not allow anyone to operate this appliance who is not familiar with the instructions in this manual.
-  This appliance is suitable for use in mobile homes. Read and follow the specific installation instructions in this manual when installing in a mobile home.


Arrow woodstoves are UL listed for installation in accordance with National Fire Protection Association standard NFPA #211.

Check that local building codes do not supercede UL specifications.

Always obtain a building permit before installing stove to prevent unexpected cancellation of insurance protection benefits.

"For further information on using your heater safely, obtain a copy of the National Fire Protection Association publication "Using Coal and Woodstoves Safely," NFPA No. HS-10-1978. The address of the NFPA is 470 Atlantic Ave., Boston, MA 02210."

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## GENERAL INFORMATION

Arrow stoves are cartoned complete, requiring only chimney connections and protection for combustible floors. These instructions show conventional installation requirements and include supplemental instructions for mobile home installation. Read these instructions and follow precautions thoroughly. This woodstove is manufactured with a 6" (model 1800A) or an 8" (model 2400A) diameter flue collar. Use only the same diameter chimney connector and chimney (if using a listed metal chimney system) as the flue collar on the stove. Increasing or decreasing the chimney diameter can affect draft and cause poor performance of the appliance. See page 19 for more information regarding flue draft. Do not connect this unit to a chimney flue serving another appliance. Obtain a building permit before installing stove. Contact local building or fire officials about restrictions and installation inspection requirements in your area.



**WARNING: FAILURE TO INSTALL THIS APPLIANCE PROPERLY MAY CAUSE A SERIOUS HOUSE FIRE.**

We recommend that you plan your installation on paper using exact measurements for clearances and floor protection before actually installing this appliance. If an existing chimney is not utilized, position the stove to allow free passage of factory-built listed chimney through the ceiling and roof. Never cut roof trusses or rafters. Have a qualified building inspector review your plans before installation.

I.C.B.O. Recognition No. 4030. I.C.B.O. recognition does not apply to mobile home installation.

## MINIMUM CLEARANCES TO COMBUSTIBLES

The clearances listed below in Tables I and II are MINIMUM distances. Measure the clearance to both the stove and the chimney connector; the farthest distance is correct if the two clearances do not match. For example, if the stove is set as indicated in one of the tables but the connector is too close, move the stove until the correct clearance to the connector is obtained. This stove may be installed only with the clearances as shown below, in the situations pictured. Do not combine clearances from one type of installation with another in order to achieve closer clearances.

### CLEARANCES USING SINGLE WALL CONNECTOR (STOVEPIPE):

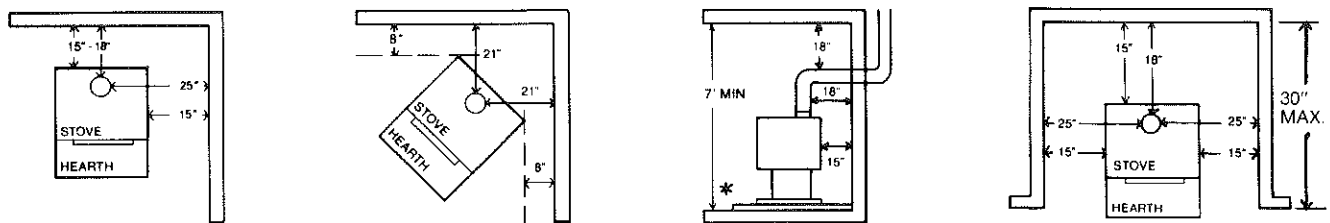


Table I

Use the minimum clearances shown in Table I for installation with single wall connector. Single wall connector must be at least 24 gauge mild steel or 26 gauge blue steel. Some clearances may be reduced as shown in Table II by using one of the listed chimney connectors shown on page 7 attached directly to the stove.

### CLEARANCES USING LISTED CHIMNEY CONNECTOR

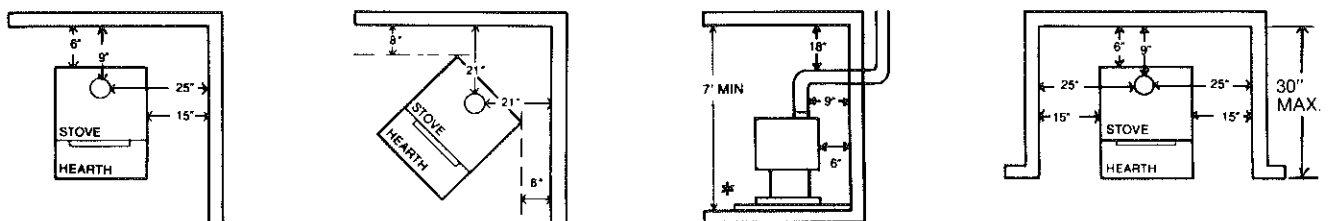


Table II

If further reduced clearances are needed, obtain requirements for construction of a protected wall from your local building authorities and their allowable reductions of the listed clearances.

\* On through-the-wall chimney installations, floor protection must extend past the back of the stove to the rear wall. See page 5 for complete floor protection requirements.

## FLOOR PROTECTION

The floor must be non-combustible or otherwise protected by a non-combustible floor protector. The stove base meets these requirements for the area directly beneath the unit. However, protection must extend at least 16" in front, 8" to either side of the stove door. (In Canada, 18" in front and 6" to either side and rear of stove itself.) If a millboard hearth is to be used, decorative stone, tile or brick may be applied using non-combustible mortar.

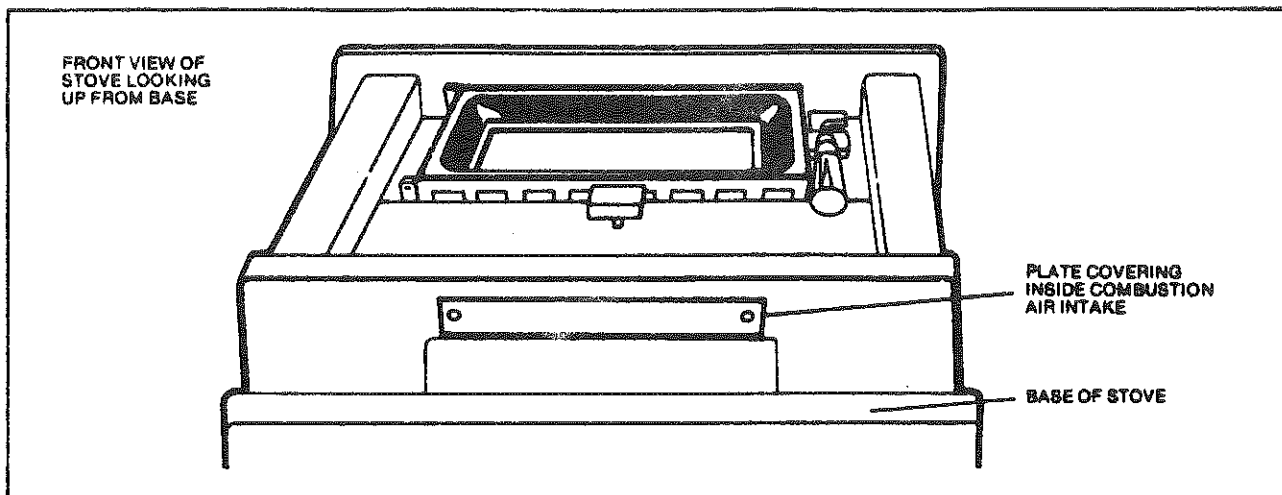
## MATCHING FLOOR PROTECTORS

A specially designed floor protector is available for your Arrow woodstove. These light weight easy to handle, inexpensive floor protectors install easily. Order part no. 55005 (model 1800) or no. 24024 (model 2400) from your Arrow dealer.

**NOTE:** The matching floor protectors will not meet the floor protection requirements for through-the-wall chimney installation. See "minimum clearances to combustibles" on page 4 of this manual. Floor Protector No. 55005 and No. 24024 may not be used on Mobile Home Installations.

## OUTSIDE COMBUSTION AIR

Outside combustion air must be used in all mobile home installations. It may also be required to achieve an adequate draft in houses that are airtight (fully insulated with caulked casings, storm windows, etc.) or where local codes require its use. **If outside air is not to be used, remove the plate covering the inside air intake.** (See illustration) This plate is located under the front of the stove and is removed by drilling out or breaking off the aluminum rivets.



## OUTSIDE COMBUSTION AIR INSTALLATION

It will be necessary to cut a hole in the floor under the stove to allow the use of outside combustion air. The pedestal serves as a duct to direct the air up the air intake port on the bottom of the stove body. Locate the stove so that clear access through the floor is available. Do not cut floor joists. The structural integrity of the floor must be maintained.

### FOR USE WITH FLOOR PROTECTOR NO. 55005 (MODEL 1800) AND NO. 24024 (MODEL 2400)

1. Follow instructions under clearances to combustibles for correct stove location.
2. Set stove on floor and mark a pencil line around the base to show where stove location will be.
3. Remove stove and mark a cut out the size of the outside air duct 4 5/8" back on Model 1800 and 5 1/2" back on model 2400 from the pencil line indicating the front of the stove base and centered along the width of the line.
4. Verify clear access through the floor by drilling a small hole in the four corners of area to be cut. Insert a long nail or wire through each hole so it will be visible from the underside of floor. Check that no obstructions exist and that there is access at least the size of the vent opening for outside air to enter.
5. Cut out the marked area for outside air.
6. Position the stove over the hole and line it up with the pencil lines marked in step 2.
7. Install floor protector. See separate instructions packed with floor protector.

## FOR MOBILE HOME INSTALLATIONS AND STANDARD INSTALLATIONS USING A HEARTH PAD

1. Follow instructions under clearance to combustibles and floor protection for proper stove and hearth pad location.
2. Set stove on pad and mark a pencil line around the base to show where stove location will be.
3. Remove stove and mark a cut out the size of the outside air duct 4 5/8" back on model 1800 and 5 1/2" back on model 2400 from the pencil line indicating the front of the stove base and centered along the width of the line. Cut this hole out of the hearth pad.
4. Position the hearth pad exactly where you want your final location to be.
5. Mark through the hearth pad for air intake hole to be cut in floor.
6. Move hearth pad aside and verify clear access through the floor by drilling a small hole in each of the four corners of area to be cut. Insert a long nail or wire through each hole so it will be visible from the underside of floor. Check that no obstructions exist and that there is access at least the size of the vent opening for outside air to enter.
7. Cut the marked area for outside air out of floor.
8. Place hearth pad in position lining up hole in pad with hole in floor.
9. Position the stove on the pad and line it up with the pencil lines marked in step 2.

## FLUE SYSTEMS

There are two separate and distinct parts to a flue system. The chimney connector and the chimney itself.

### CHIMNEY CONNECTOR--

The purpose of the chimney connector is to connect the stove to the chimney. The chimney connector must be the same size diameter as the flue outlet of the stove. There are two types of chimney connectors:

**Single wall connector**, otherwise known as stovepipe, must be at least 24 gauge mild steel or 26 gauge blue steel. Single wall connector requires at least 18" to combustible materials. Follow the minimum clearances in Table I on page 4 when using single wall connector. Single wall connector sections must be attached to the stove and to each other with the crimped (male) end toward the stove. This allows creosote to run into the stove and not onto the outside of the pipe. All joints including the connection at the stove collar should be secured using three sheet metal screws.

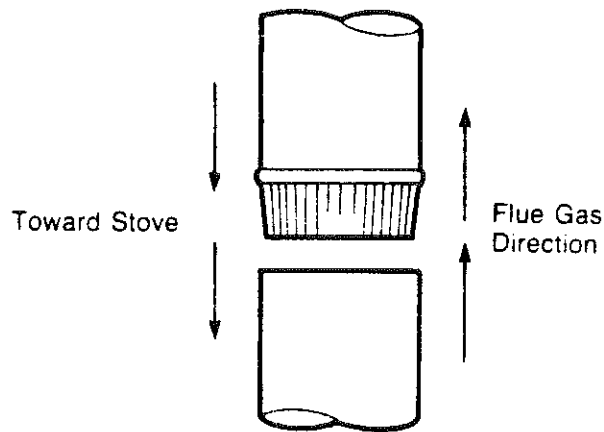


Figure 1

**Prefabricated listed chimney connector.** There are 5 brands of chimney connector listed for use on this woodstove. Using one of these listed connectors allows the reduced clearances to combustibles as shown in Table II on page 4. A listed connector must be used when installing this appliance in a mobile home. Listed chimney connectors must be used in conjunction with the same brand of listed chimney.

#### LISTED CHIMNEY CONNECTORS

<u>Manufacturer</u>	<u>Model or Style Designation</u>
American Metal Products	Ameritec DBSP
Simpson Dura-Vent	DVL
Selkirk-Metalbestos	VS-DK, DS
GSW Jackes-Evans	Superpipe 6
Security Chimneys, Ltd.	DL, DL42A

NOTE: Pro-Jet Chimney may be attached directly to the stove. Use Hi-Temp 3103 Chimney. See chimney component listings on page 10.

**WARNING:** ALWAYS FOLLOW CHIMNEY CONNECTOR MANUFACTURER'S INSTRUCTION FOR PROPER INSTALLATION.

**WARNING:** CHIMNEY CONNECTOR IS TO BE USED ONLY WITHIN THE ROOM, BETWEEN THE STOVE AND CEILING WALL. NEVER USE CHIMNEY CONNECTOR TO PASS THROUGH A COMBUSTIBLE CEILING OR WALL. ALWAYS MAINTAIN THE MINIMUM CLEARANCES TO COMBUSTIBLES AS DESCRIBED IN TABLES 1 AND 2.

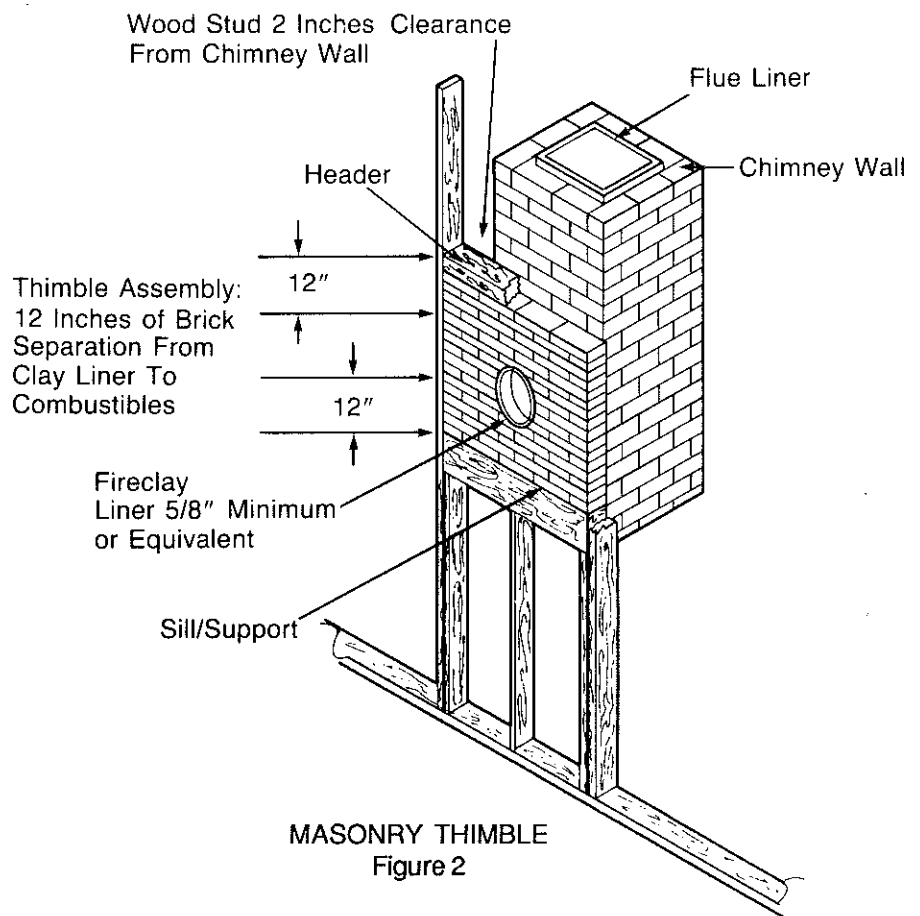
The chimney connector must be attached to either an approved masonry chimney or one of the listed factory built chimneys shown on page 8-10.

#### MASONRY CHIMNEY--

If using a masonry chimney, it must meet the minimum standards of the National Fire Protection Association (NFPA) Standard 211. It must have at least a 5/8" fire clay liner or a listed chimney liner system. Examine the chimney for cracks, loose mortar, other signs of deterioration and blockage. It is best to have the chimney inspected by a professional. Always be sure the chimney is cleaned before the stove is installed and operated.

The flue size of the masonry chimney should be between 36 and 96 square inches. Larger diameter chimneys should be relined to meet these requirements. Smaller or larger flue sizes can affect draft and cause poor stove performance. See page 19 for more information regarding draft. Do not install more than one appliance to any chimney.

Special methods are required when connecting the stove through a combustible wall to a masonry chimney. There are several methods to make this connection including the construction of a masonry thimble. Check with your local building authorities or consult NFPA 211.



MASONRY THIMBLE  
Figure 2

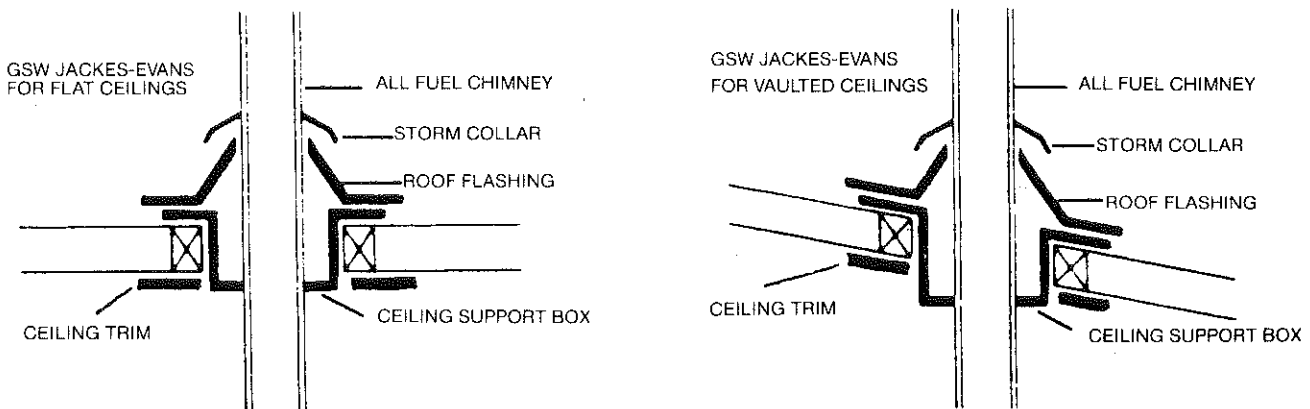
## LISTED FACTORY BUILT CHIMNEY

If using a listed factory built chimney, be sure it is one of the residential type and building heating appliance chimneys shown below and on pages 9 and 10. Follow the installation instructions provided by the chimney manufacturer and maintain the specified clearances to combustibles.

### GSW JACKES-EVANS CHIMNEY COMPONENTS

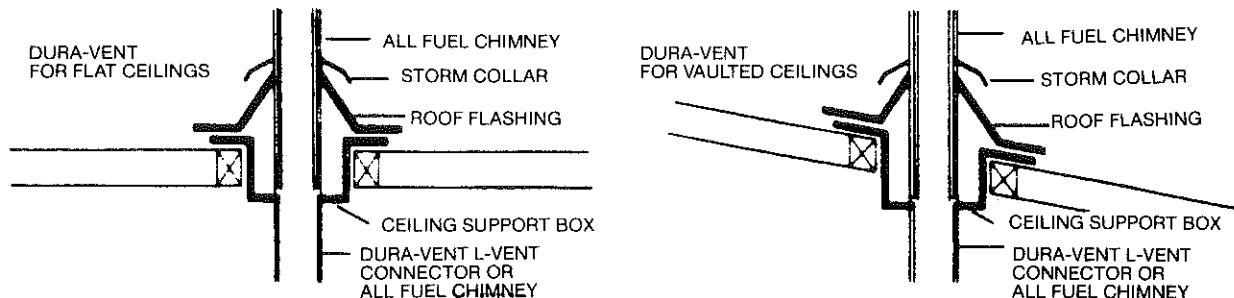
- Sections of either JSC8SA (model 2400) ---OR--- JSC6SA (model 1800) chimney to reach the height required in these instructions.
- (1) J588ASE (model 2400) or J586ASE (model 1899) stove adapter.
- (1) JSC8MHK (model 2400) or JSC6MHK (model 1800) ceiling support kit consisting of:
  - JSC8CCSB (model 2400) or JSC6CCSB (model 1800) ceiling support box with draw band.
  - J8CT (model 2400) or J6CT (model 1800) black ceiling trim.
  - JSC8AAF-GA (model 2400) or JSC6AAF-GA (model 1800) adjustable flashing assembly.
  - JSC8ASC-GA (model 2400) or JSC6ASC-GA (model 1800) storm collar.
  - JSC8RCMH (model 2400) or JSC6RCMH (model 1800) stainless steel rain cap with spark arrester.

NOTE: When using JSC8SA chimney you must use (1) JSC8SLB locking band at each chimney joint.



### DURA-VENT SDP DURA PLUS CHIMNEY COMPONENTS

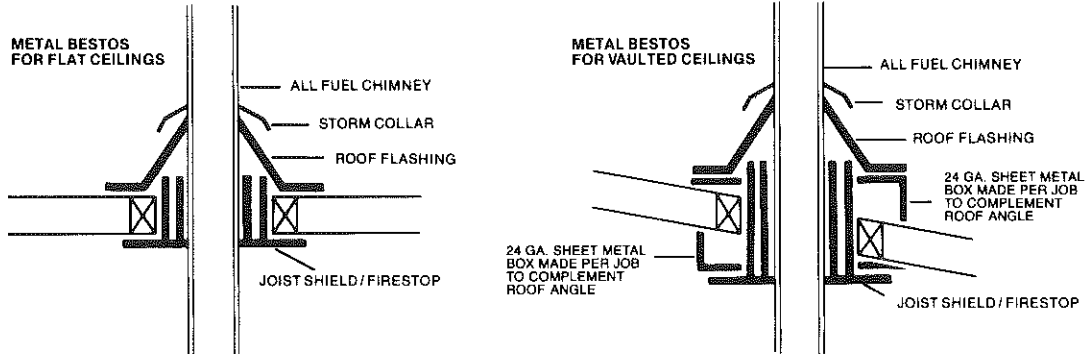
- Sections of Dura Plus SDP 8" (model 2400) or 6" (model 1800) chimney to reach the height required in these instructions.
- (1) Dura Plus SDP mobile home kit 8 DPMH 9296 (model 2400) or 6DPMH 9096 (model 1800) consisting of:
  - 9248B (model 2400) or 9048B (model 1800) 24" support box.
  - 9216 (model 2400) or 9016 (model 1800) starter section.
  - 9214 (model 2400) or 9014 (model 1800) 1 ft. chimney section.
  - 9221 (model 2400) or 9021 (model 1800) 2 ft. chimney section.
  - 9249 (model 2400) or 9049 (model 1800) roof flashing.
  - 9959 (model 2400) or 9059 (model 1800) storm collar.
  - 9284 (model 2400) or 9084 (model 1800) stainless steel top with spark arrester.





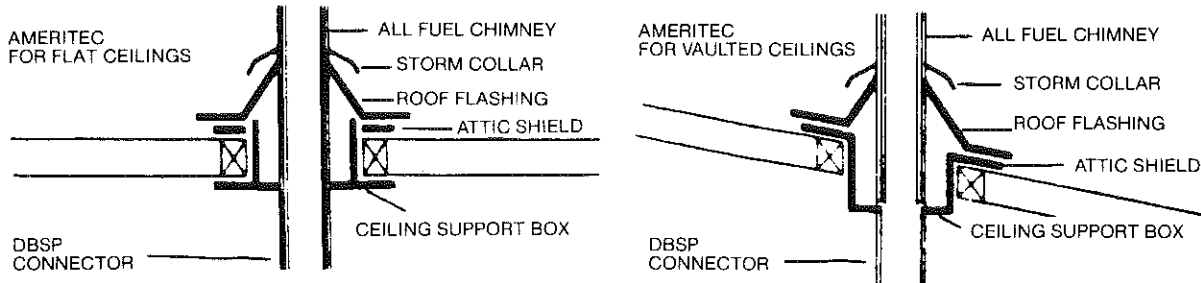
## METAL BESTOS CHIMNEY COMPONENTS

1. Sections of 8" (model 2400) or 6" (model 1800) SSII type HT chimney to reach the height required in these instructions.
2. (1) 8" (model 2400) or 6" (model 1800) SJSMH mobile home joist shield.
3. (1) 8" (model 2400) or 6" (model 1800) T-SFA roof flashing.
4. (1) 8" (model 2400) or 6" (model 1800) SCT storm collar.
5. (1) 8" (model 2400) or 6" (model 1800) T-SA round top cap with spark arrester.



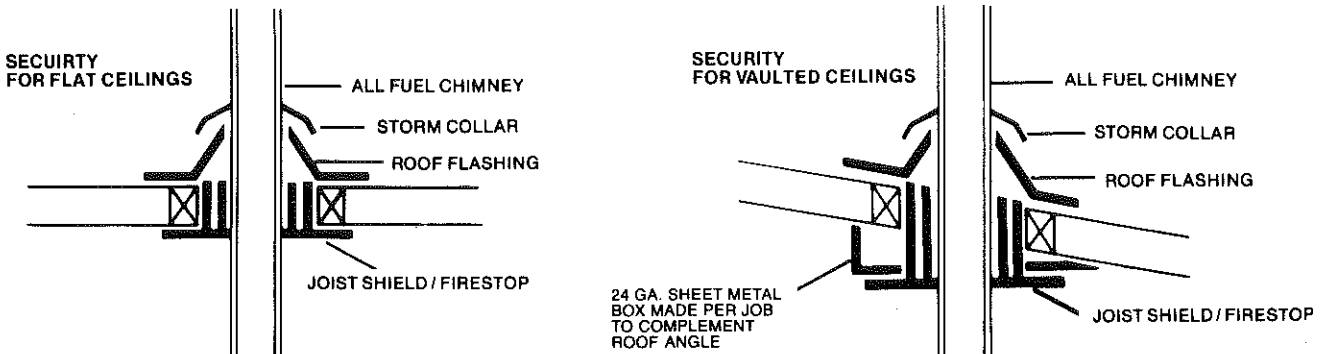
## AMERITEC CHIMNEY COMPONENTS

1. Sections of Ameritec DBSP 8" (model 2400) or 6" (model 1800) connector pipe and 18A adjustable length to reach from stove to ceiling.
2. Sections of 8HS (model 2400) or 6HS (model 1800) chimney to reach the height required in these instructions.
3. (1) 8" (model 2400) or 6" (model 1800) stove collar adapter.
4. (1) 8" (model 2400) or 6" (model 1800) chimney connector ring.
5. (1) 8HS-CSA (model 2400) or 6HS-CSA (model 1800) ceiling support box with adapter.
6. (1) 8HS-AIS (model 2400) or 6HS-AIS (model 1800) attic insulation shield.
7. (1) 8FB-RF (model 2400) or 6FB-RF (model 1800) roof flashing.
8. (1) 8FB-SC (model 2400) or 6FB-SC (model 1800) storm collar.
9. (1) 8HS-RCS (model 2400) or 6HS-RCS (model 1800) cap with spark arrester.



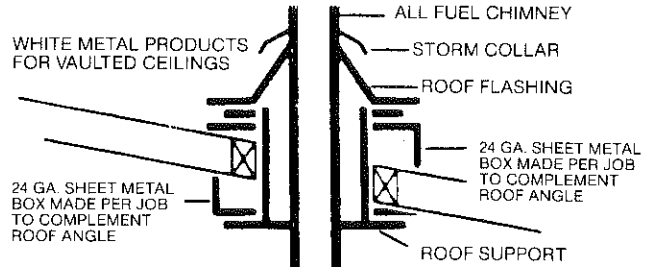
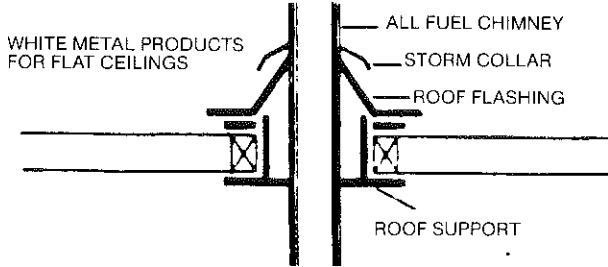
## SECURITY CHIMNEY COMPONENTS

1. Sections of 8" 8L (model 2400) or 6" 6L (model 1800) ASHT chimney to reach the height required in these instructions.
2. (1) 8RSA (model 2400) or 6RSA (model 1800) joist/radiation shield.
3. (1) 8" (model 2400) or 6" (model 1800) F, FP, FA, FB, or FBB roof flashing with storm collar.
4. (1) 8CPE (model 2400) or 6 CPE (model 1800) spark arrester cap.



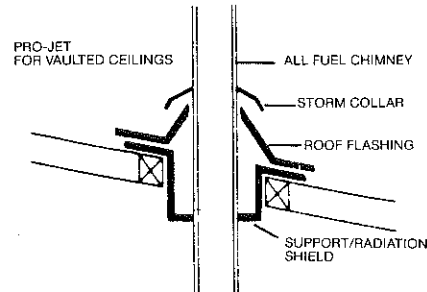
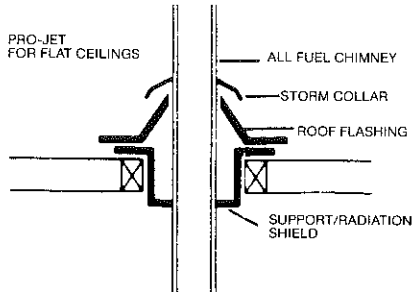
**WHITE METAL PRODUCTS**

1. Sections of 8 WHT (model 2400) or 6 WHT (model 1800) chimney to reach the height required in these instructions.
2. (1) 8WEP (model 2400) or 6 WEP (model 1800) end plate.
3. (1) 8MROS (model 2400) or 6MROS (model 1800) mobile home roof support.
4. (1) 8WK (model 2400) or 6WK (model 1800) kit consisting of:
  - (1) 8WRFF (model 2400) or 6WRFF (model 1800) roof flashing.
  - (1) 8WSC (model 2400) or 6WSC (model 1800) storm collar.
  - (1) 8WCA (model 2400) or 6WCA (model 1800) cap with spark arrester.



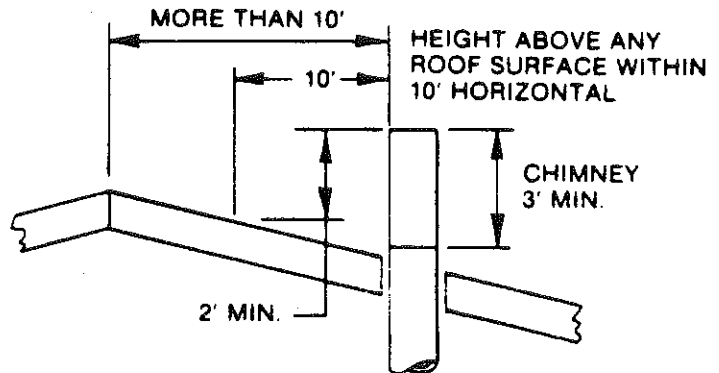
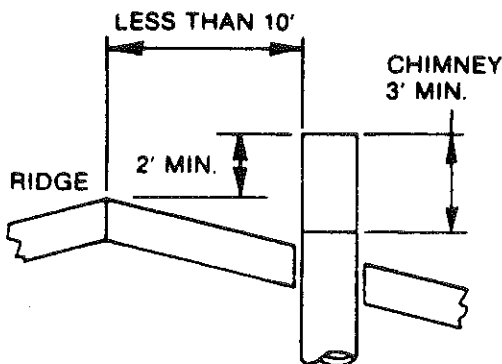
**PRO-JET CHIMNEY COMPONENTS**

1. Sections of 8" (model 2400) or 6" (model 1800) Hi-Temp 3103 chimney to reach the height required in these instructions.
2. (1) IF0824SC12 (model 2400) or IF0624SC12 (model 1800) slip connector.
3. Use one of the following support/radiation shields:
  - F08RRF (model 2400) or IF06RRF (model 1800) rafter radiation shield or --- OR---
  - IF081SR (model 2400) or IF 061SR model 1800) intermediate support radiation shield ----OR----
  - IF08CFRS (model 2400) or IF06CFRS (model 1800) ceiling/firestop radiation shield.
4. (1) IF08RF17 (model 2400) or IF06RF17 (model 1800) roof flashing with storm collar.
5. (1) IF08RCSA (model 2400) or IF06RCSA (model 1800) cap with spark arrester.



**CHIMNEY HEIGHT REQUIREMENTS**

Regardless of whether you use a masonry chimney or a listed metal chimney it must be the required height above the roof or other obstructions. The minimum requirement is that the chimney must be at least 3 feet higher than the highest point where it passed through the roof and at least 2 feet higher than the highest part of the roof or structure that is within 10 feet of the chimney measured horizontally.



The height requirement is necessary in the interest of safety and does not necessarily assure proper flue draft. We recommend a total system height of at least 12 feet, measured from the stove fue collar to the top of the chimney, including the chimney cap. See page 19 for more information regarding flue draft.

## MOBILE HOME INSTALLATION

Arrow woodstoves meet the Department of Housing and Urban Development (HUD) requirements when installed in an Arrow (UL Listed) Mobile Home Package.

- Obtain a building permit before installing the stove.
- Follow sections in this book for minimum clearances, hearth requirements, stove location, and outside air intake installation.
- The structural integrity of the mobile home floor, walls, and ceiling/roof must be maintained.

The Arrow Mobile Home Package includes an outside air intake vent with screen, four hold-down clips and lag bolts, a chimney adaptor sleeve, a chimney trim ring and hardware.

The stove must be installed to the following criteria:

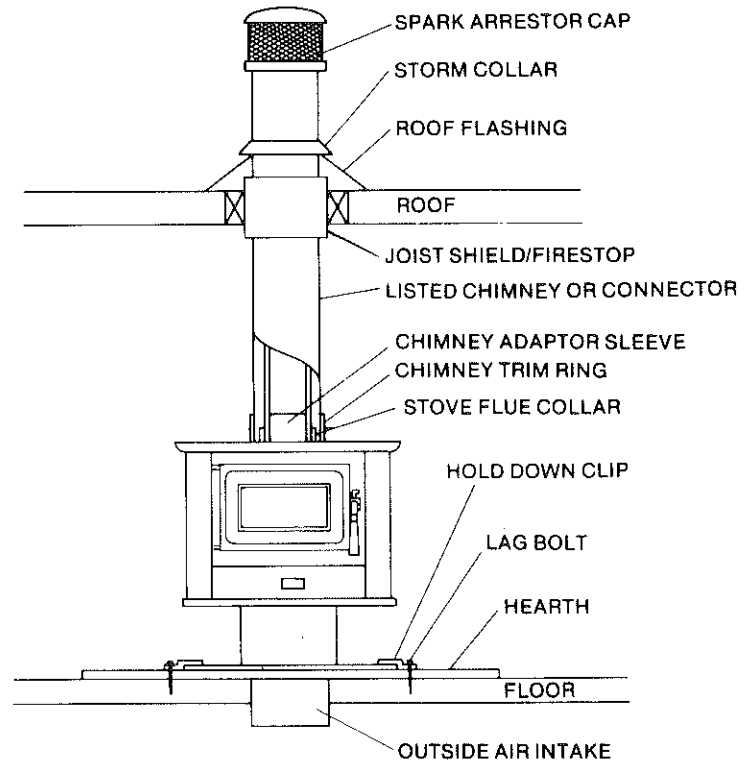
- Do not install in a sleep room.
- An outside combustion air source is required to feed air into the fire chamber. See page 5 for complete instructions.
- \* The stove must be securely attached to the mobile home floor using the brackets and screws from the mobile home kit.
- The weight of the stove, chimney connector and hearth protection must be spread over an area so as not to exceed the 40 pound per square foot load limit.  
Floor protection requirements as shown on page 6 must be followed.
- The stove must be installed with one of the pre-fabricated listed factory built metal chimneys and connectors with spark arrestor as shown in this manual. Do not use single wall connector (stovepipe) when installing this stove in a mobile home.

Note: Check with local or state authorities to see if any additional requirements must be met in your area.

- The listed factory built chimney or chimney connector shall attach directly to the stove using the proper size adaptor sleeve from mobile home kit. Use the 6" sleeve for the model 1800A or the 8" sleeve for the model 2400A.
- Install the chimney adaptor sleeve into the stove flue collar.
- Slide the first section of chimney over the adaptor sleeve and set so that the chimney section is supported by the outer stove collar. Drill three 5/32" holes for sheet metal screws through chimney, stove flue collar, and adaptor sleeve. (See Fig.4 for hole locations on page 12.)
- Remove first section of chimney. Using a 3/16" diameter drill, enlarge the three 5/32" holes just drilled in both the chimney and stove flue collar. (Do not enlarge 5/32" holes in adaptor sleeve.) Reinstall the first chimney section. Secure by using the three 2" long self tapping sheet metal screws. Insert screws through the chimney, stove flue collar and tap into the adaptor sleeve.

Place trim ring around the first section of chimney at the base so it sits flush with the top of the stove. Compress trim ring tightly around chimney section, drill hole and fasten with sheet metal screws.

- Always follow chimney manufacturer's instructions for installation and clearances to combustibles.



TYPICAL MOBILE HOME INSTALLATION  
Figure 3

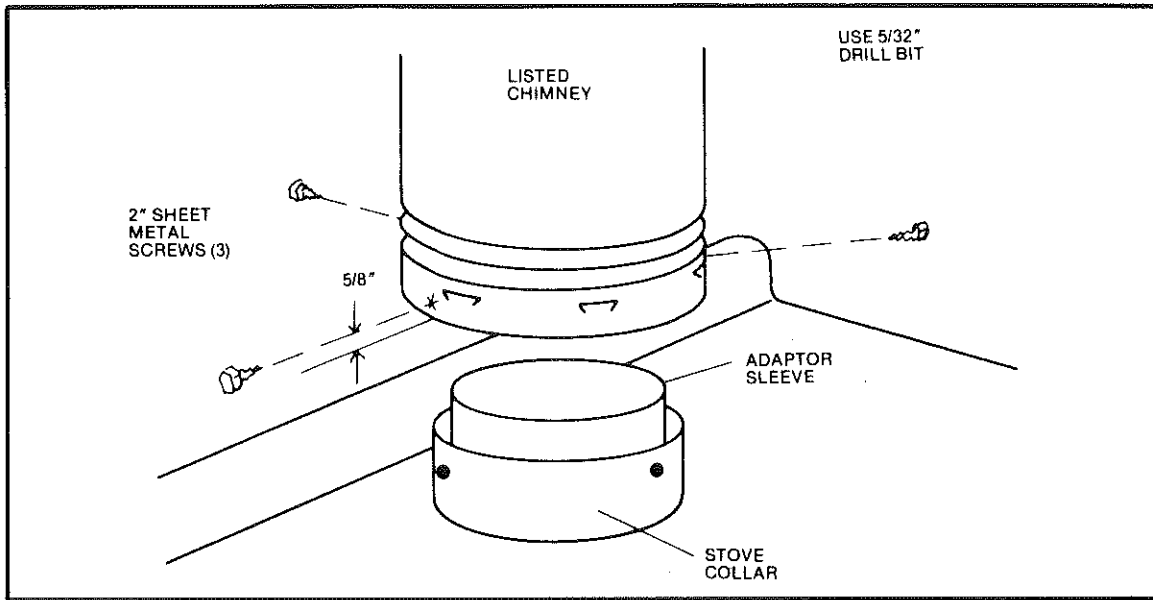
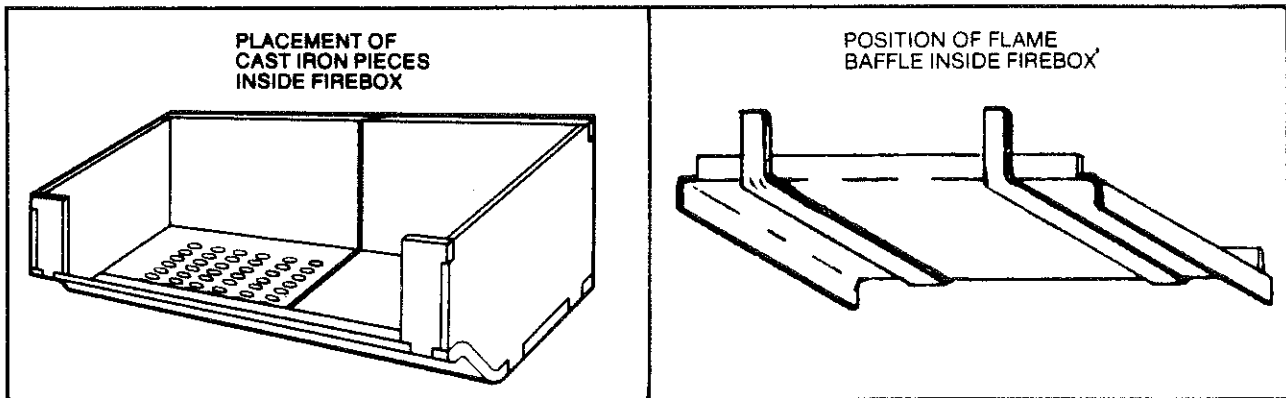


Figure 4

**PRE-USE CHECK**

Use the following checklist as a guide to be sure your installation is correct and complete.

- All of the safety warnings have been read and followed.
- Floor protection requirements have been followed.
- Chimney connector is properly installed.
- The proper clearances from the stove and chimney to combustible material have been met.
- The masonry chimney is inspected and cleaned -or- the factory built metal chimney is in-stalled according to the manufacturer's instructions and clearances.
- The chimney meets the required minimum height.



Now that your Arrow stove is installed check inside the firebox to make sure that the cast iron pieces are in place as shown in above illustration. Make certain flame baffle is in position on two hangers at top of firebox.

## DOOR INSTALLATION

The fuel loading door is hinged on the left (facing the front of the stove). The door handle on the right side of the door engages the safety latch mounted to the face of the stove to close and latch the door securely. The door handle shaft is threaded to allow for adjustment as the door gasket compresses during use.

Install the door by fitting the upper and lower hinge pins on the left side of the door into the hinge mounting brackets on the stove face. The hinge brackets are to the left of the firebox opening. Be sure the pins are fully engaged into the brackets.

## LATCH ADJUSTMENT

The door has been factory adjusted for proper fit. However, if the door handle has been rotated it may need re-adjusting. With the door open, turn the door handle clockwise as far as it will go. Now turn the door handle back counter-clockwise until the handle is in a vertical position with the wood end pointing downward. To engage the safety latch, close the door up to the latch. Rotate the handle 90 degrees (1/4 turn) counter-clockwise and push the door in firmly. Rotate the handle down clockwise so that it returns to its original vertical position.

The door should fit tightly against the stove face. If it seems loose, open the door and rotate the handle one complete turn counter-clockwise. This will adjust the door handle approximately 1/16". If necessary, repeat the adjustment one complete turn at a time until handle locks securely into the safety latch and door fits tightly.


**CAUTION:** Avoid spinning the handle completely around except when adjusting the fit. This will cause the door to go out of adjustment. Do not allow anyone to operate this appliance without reading and understanding the instructions in this manual.

## BLOWER

The high performance 465 CFM blower is mounted inside of the stove base. The blower speed is controlled by a knob located at the lower right hand side of the stove base. Turn this switch to the "OFF" position. Unit must be plugged into a grounded 15 amp fused 115 VAC maximum household receptacle. Do not route power cord so that it may come in contact with stove surfaces that may become hot while in use. **AVOID SHOCK HAZARDS!** Turn on the fan switch and check for proper operation. The blower should turn on at full speed first and then slow down as the control knob is turned clockwise. In the event of a power failure, the stove may be operated without the blower.

## FUEL

Arrow Model 1800A and 2400A are for use with natural wood and bituminous coal. Never burn trash in this appliance.

 **WARNING:** DO NOT USE ARTIFICIAL LOGS THAT CONTAIN WAX, PARAFFIN, OR OTHER INGREDIENTS THAT CAN RELEASE VOLATILE GASSES WHICH MAY CONDENSE ON THE INSIDE OF THE FIREBOX AND CHIMNEY. SOME ARTIFICIAL LOGS CONTAIN FLAMMABLE LIQUIDS THAT MAY CAUSE AN UNCONTROLLABLE FIRE.

**CAUTION:** Do not burn driftwood or any material containing salts or corrosives. Doing so will damage the stove and void the manufacturer's warranty.

## COAL FUEL

Bituminous coal: use 3" or smaller. Maximum draft at flue collar, for coal firing, .1 inches of water. If draft readings are higher than .1 inches of water, installation of a barometric draft regulator in the flue pipe is recommended. When using coal as a fuel do not dampen down the firing rate. Always operate with draft slide in the full open position.

Coal should be stored inside whenever possible away from moisture and out of direct sunlight.

## WOOD FUEL

### Hardwood vs. Softwood

Your woodstoves performance depends a great deal on the quality of the firewood you use. Contrary to popular belief, one species of wood varies very little to the other in terms of energy content. All seasoned wood, regardless of species, contains about 8,000 btu's per pound. The important factor is that hardwoods have a greater density than softwoods. Therefore, a piece of hardwood will contain about 60% more btu's than an equal size piece of softwood. Since firewood is commonly sold by the cord (128 cu. ft.) a volume measurement, a cord of seasoned oak (hardwood) would contain about 60% more potential energy than a cord of seasoned pine (softwood).

There are many definitions of hardwood and softwood. Although not true in every case, one of the most reliable is to classify them as coniferous or deciduous.

Softwoods are considered coniferous. These are trees with needle-like leaves that stay green all year and carry their seeds exposed in a cone. Examples of softwood trees are douglas fir, pine, spruce, and cedar.

Softwoods, being more porous, require less time to dry, burn faster and are easier to ignite than hardwoods.

Deciduous trees are broadleaf trees that lose their leaves in the fall. Their seeds are usually found within a protective pod or enclosure. Hardwoods fall into this category. Some examples of deciduous trees are oak, maple, apple, and birch. However it should be noted that there are some deciduous trees that are definitely not considered hardwoods such as poplar, aspen and alder. Hardwoods require more time to season, burn slower and are usually harder to ignite than softwoods.

Obviously you will use the type of wood that is most readily available in your area. However, if at all possible the best arrangement is to have a mix of softwood and hardwood. This way you can use the softwood for starting the fire giving off quick heat to bring the appliance up to operating temperature. Then add the hardwood for slow, even heat and longer burn time.

## MOISTURE CONTENT

Regardless of which species of wood you burn, the single most important factor that effects the way your stove operates is the amount of moisture in the wood. The majority of the problems woodstove and fireplace insert owners experience are caused by trying to burn wet, unseasoned wood.

Freshly cut wood can be as much water as it is wood, having a moisture content of around 50%. Imagine a wooden bucket that weighs about 8 pounds. Fill it with a gallon of water, put it in the firebox and try to burn it. This sounds ridiculous but that is exactly what you are doing if you burn unseasoned wood.

## SEASONING

Seasoned firewood is nothing more than wood that is cut to size, split and air dried to a moisture content of around 20%. The time it takes to season wood varies from around nine months for softwoods to as long as eighteen months for hardwoods. The key to seasoning wood is to be sure it has been split, exposing the wet interior and increasing the surface area of each piece. A tree that was cut down a year ago and not split, is likely to have almost as high a moisture content now as it did when it was cut.

The following guideline will ensure properly seasoned wood.

1. Stack the wood to allow air to circulate freely around and through the wood pile.
2. Elevate the woodpile off the ground to allow air circulation underneath.
3. The smaller the pieces, the faster the drying process. Any piece over six inches in diameter should be split.
4. Cover the top of the woodpile for protection from rain and snow. Avoid covering the sides and ends completely. Doing so may trap moisture from the ground and impede air circulation.


The problems with burning wet, unseasoned wood are twofold. First, you will receive less heat output from wet wood because it requires energy in the form of heat to evaporate the water trapped inside. This is wasted energy that should be used for heating your home. Secondly, this moisture evaporates in the form of steam which has a cooling effect in your firebox and chimney system. When combined with tar and other organic vapors from burning wood it will form creosote which condenses in the relatively cool firebox and chimney. See the maintenance section of this manual for more information regarding creosote formation and need for removal.



**WARNING: BURNING WET UNSEASONED WOOD CAN CAUSE EXCESSIVE CREOSOTE ACCUMULATION. WHEN IGNITED IT CAN CAUSE A CHIMNEY FIRE THAT MAY RESULT IN A SERIOUS HOUSE FIRE.**

# OPERATION

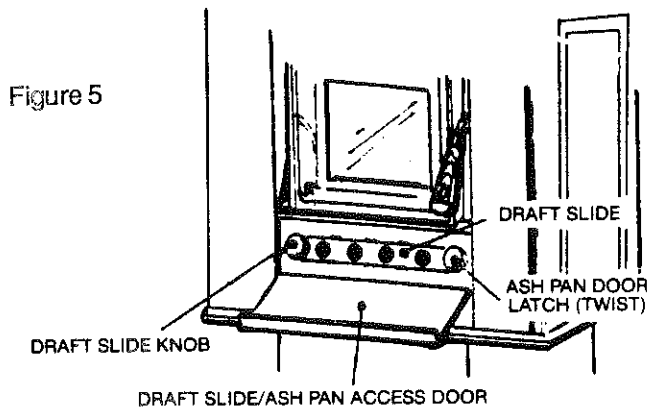
## GENERAL INFORMATION

 **WARNING:** DO NOT ATTEMPT TO OPERATE THIS WOODSTOVE WITHOUT READING AND UNDERSTANDING THESE OPERATING INSTRUCTIONS THOROUGHLY. FAILURE TO OPERATE THIS APPLIANCE PROPERLY MAY CAUSE A SERIOUS HOUSE FIRE

 **WARNING:** NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IT IS IN USE.

The Arrow model 1800A and 2400A woodstoves are efficient woodburning appliances designed to burn natural, seasoned wood or coal. Do not burn artificial logs or driftwood.

A manual draft slide control located behind the draft slide/ash pan access door below stove loading door regulates the amount of combustion air available to the fire, thus controlling the rate of burn. Moving the draft slide all the way to the left opens the air intake. Moving it to the right closes it. The more combustion air allowed into the firebox, the hotter and faster the fire will burn. Closing the air intake slows the rate of combustion resulting in a slower burning fire. Experience with your stove, the quality of your firewood and local conditions will determine the proper draft slide setting for maintaining the heat output that best suits your needs.



## BREAK-IN PERIOD

Build your first few fires small to allow the high temperature paint on your stove to cure. During this period excessive temperatures may damage the paint. Allow adequate ventilation to dissipate smoke and odor that may come from the paint during curing. See the accompanying pamphlet entitled "About Curing Your Stove Paint..." for complete paint curing instructions.

## STARTING THE FIRE

**NOTE:** Build the fire directly on the firebox floor. Do not use a grate or otherwise elevate the fire. Be sure ash pan door is closed and securely latched.

## USING WOOD FUEL:

1. Place several crumpled newspaper pages (at least 6) on the firebox floor.
2. Cover the paper with several pieces of kindling. The kindling should be less than 1" in diameter, well seasoned, dry split firewood.
3. Place three or four small pieces of firewood, two to three inches in diameter on the kindling. Stack the wood carefully; close enough to keep each other hot, but far enough away to allow air and flame between them.
4. Move the draft slide control all the way to the left to open the air intake.
5. Light the newspaper in several places, starting at the back of the firebox and working towards the front.
6. Close the door to prevent smoke spillage BUT DO NOT LATCH. This allows extra air into the firebox for start-up while pre-heating the glass to help keep it cleaner.


**NOTE:** If the chimney flue is cold due to low outside temperatures, several pieces of crumpled paper on TOP of the fuel can help to establish a draft in the flue. Light this paper when lighting the kindling in step 5.

 **WARNING:** DO NOT LEAVE THE FIRE UNATTENDED WHEN THE DOOR IS UNLATCHED. CARELESSLY PLACED FIREWOOD COULD FALL OUT OF THE FIREBOX CREATING A FIRE HAZARD.

7. When the kindling is consumed and the firewood is burning briskly (about 5 to 10 minutes) add a minimum of three average sized pieces of split firewood. Close the door and latch it securely.

**CAUTION:** Do not slam stove door or otherwise impact the glass. When closing door, make sure that logs or other objects do not protrude to impact against the glass.

8. After about 45 minutes to 1 hour the stove will have reached operating temperature. You may slow down the burn rate by adjusting the temperature setting to the right. Turn on the blower and adjust the speed as desired.

 **WARNING: ALWAYS OPERATE THIS APPLIANCE WITH THE DOOR CLOSED AND LATCHED EXCEPT DURING START-UP AND RE-FUELING.**

## USING COAL FUEL:

**NOTE:** Maximum flue draft not to exceed .1 inches of water column as measured with a draft meter. See page 19 for more information regarding flue draft.

1. Place several crumpled newspaper pages (at least 6) on the firebox floor.
2. Cover the paper with several pieces of kindling. The kindling should be less than 1" in diameter, well seasoned, dry, split firewood.
3. Place three or four small pieces of firewood, two to three inches in diameter on the kindling. Stack the wood carefully; close enough to keep each other hot, but far enough away to allow air and flame between them.
4. Move the draft slide control all the way to the left to open the air intake.
5. Light the newspaper in several places.
6. Close the door to prevent smoke spillage but do not latch. This allows extra air into the firebox for start-up while pre-heating the glass to help keep it cleaner.

 **WARNING: DO NOT LEAVE THE FIRE UNATTENDED WHEN THE DOOR IS UNLATCHED. CARELESSLY PLACED FIREWOOD COULD FALL OUT OF THE FIREBOX CREATING A FIRE HAZARD.**

7. When kindling is consumed leaving a bed of hot coals, start adding coal to the fire a little at a time.
8. Continue adding small amounts of coal until a hot bed of burning coals about 3" deep is established.
9. After about 45 minutes to 1 hour the stove will have reached operating temperature. When burning coal, it is recommended that the stove be operated with the draft slide fully open (all the way to the left). Turn on the blower and adjust the speed as desired.

 **WARNING: ALWAYS OPERATE THIS APPLIANCE WITH THE DOOR CLOSED AND LATCHED EXCEPT DURING START-UP AND RE-FUELING**

## RE-FUELING

When adding fresh wood or coal to an existing fire:

1. Open the air intake by moving the draft slide control all the way to the left.
2. Wait a few seconds, then open the door slowly.

**CAUTION:** Always open the door slowly while the fire is burning to avoid smoke and flame spillage. It is best to unlatch the door, wait a few seconds, then open the door slowly.

If the fire has been allowed to die down between re-fueling it may be necessary, to use smaller pieces of wood to re-kindle it. Leave the draft slide fully open after re-fueling for 10 to 20 minutes to re-establish a moderately high firing rate and bring the appliance back up to operating temperature.

## OPERATING EFFICIENCY

Rather than burning the stove hot and not running the blower, it is more efficient to adjust the damper down and use the blower to move air across firebox surfaces. This method of operation will conserve fuel and gain a maximum amount of heat from the stove. The Arrow model 1800A and 2400A woodburning stoves are designed to be an exceptional value in heating efficiency when installed, operated and maintained in accordance with the information in this manual. However, factors unique to your location, installation, or firewood can affect or alter the performance of this appliance. If you experience difficulty lighting the fire or sporadic burning refer to the flue draft section on page 19 of this manual or consult your local dealer.



# MAINTENANCE

**WARNING:** FAILURE TO MAINTAIN THIS APPLIANCE PROPERLY MAY CAUSE A SERIOUS HOUSE FIRE.

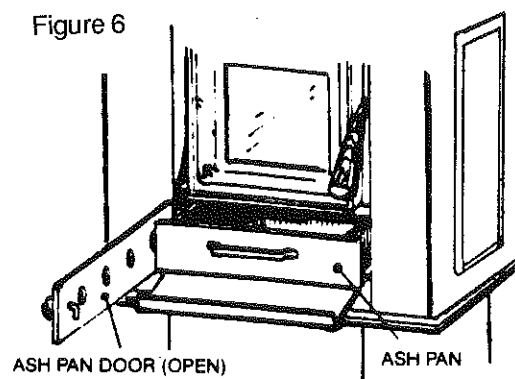
## ASH DISPOSAL

Ashes must be cleared or removed when accumulation approaches the top of the ash pan or obstructs draft flow through the holes in the grate.

To clean, open the ash pan access door by twisting the round wood door lock knob clockwise. Slide ash pan out and remove ashes with metal fireplace shovel. The ash pan can also be removed from the stove completely to facilitate cleaning. If removed, place pan on a non-combustible surface. For your safety, wear padded non-flammable hand and arm protection while clearing ashes (Fig. 6).

Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. The ashes should be retained in the closed container until all cinders have thoroughly cooled.

Figure 6



**WARNING:** ASHES SHOULD NEVER BE PLACED IN WOODEN OR PLASTIC CONTAINERS, OR IN PAPER OR PLASTIC BAGS, REGARDLESS OF HOW LONG THE FIRE HAS BEEN OUT. COALS HAVE BEEN FOUND TO STAY HOT FOR SEVERAL DAYS WHEN EMBEDDED IN ASHES.

**WARNING:** DO NOT OPERATE STOVE WITH ASH PAN ACCESS DOOR OPEN. OVERFIRING MAY RESULT WHICH CAN DAMAGE THE STOVE AND IGNITE CREOSOTE IN THE CHIMNEY, POSSIBLY CAUSING A HOUSE FIRE.

## CREOSOTE & SOOT

### Formation and need for removal.

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 newly started fire or from a slowly burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire which may damage the chimney or even destroy the house.

The chimney connector and chimney should be inspected at least twice monthly during the heating season to determine if a creosote or soot build-up has occurred. If so, it should be removed to reduce the risk of a chimney fire.

To help prevent creosote build-up, always burn dry, well seasoned firewood. When re-fueling after an extended low burn rate, allow the appliance to burn with the draft slide fully open for ten to twenty minutes to burn off creosote deposits that accumulate during the low burn.

Inspect the system at the stove connection and at the chimney top. Cooler surfaces tend to build creosote deposits quicker, so it is important to check the chimney from the top as well as the bottom.

The creosote and soot should be removed with a brush specifically designed for the type of chimney in use. A chimney sweep can perform this service. It is also recommended that before each heating season the entire system be professionally inspected, cleaned and repaired if necessary.

**WARNING:** FAILURE TO INSPECT AND CLEAN YOUR CHIMNEY SYSTEM REGULARLY CAN RESULT IN A SERIOUS FIRE WHICH MAY DAMAGE THE CHIMNEY OR CAUSE A HOUSE FIRE.

## DOOR GASKET


Check the door gasket periodically for proper seal. As the door gasket compresses or "seats" during use it will be necessary to adjust or tighten the door latch. See page 13 for information on how to adjust the latch. Wear or damage to the gasket material can cause air leakage into the firebox resulting in overfiring and loss of efficiency.

Replace the gasket when necessary with 5/8" diameter woodstove gasket material available from your local woodstove retailer or order part # 9038 Firedoor Gasket Kit from your nearest Heatilator dealer. The Firedoor Gasket Kit comes complete with gasket material, high temperature adhesive and instructions.

**WARNING:** DO NOT OPERATE THIS WOODSTOVE IF THE DOOR GASKET IS MISSING OR DAMAGED. DANGEROUS OVERFIRING CAN OCCUR WHICH CAN DAMAGE THE APPLIANCE OR IGNITE CREOSOTE IN THE CHIMNEY, POSSIBLY CAUSING A HOUSE FIRE. IF ANY PART OF THE WOODSTOVE OR FLUE SYSTEM IS GLOWING THE STOVE IS BEING OVERFIRED.

## DOOR GLASS

Inspect the glass regularly for cracks or breaks. If you detect a crack or break, extinguish the fire immediately and contact your Heatilator dealer for replacement.

 **WARNING: DO NOT OPERATE THE WOODSTOVE IF THE DOOR GLASS IS BROKEN OR MISSING. DANGEROUS OVERFIRING CAN OCCUR WHICH CAN DAMAGE THE APPLIANCE OR IGNITE CREOSOTE IN THE CHIMNEY, POSSIBLY CAUSING A HOUSE FIRE.**

The Arrow 1800A and 2400A have a built-in air wash system in the door to help keep the glass clean. The glass is sealed with gasket material on both side edges but not on the top or bottom. This leaves a 1/16" gap between the glass and the inner and outer door frames. The heat from the fire draws air through these gaps and over the inside of the glass. This air movement helps keep the smoke away from the glass surface. When operated at a low burn rate less air will be flowing over the glass and the smokey, relatively cool condition of a low fire will cause the glass to become coated.

These air channels, especially the bottom one, can become clogged if cleaning liquids or wet ashes are allowed to run down the glass into this area. We suggest that the door be removed and placed face down on a protective surface for cleaning or to apply liquid glass cleaner to a cloth first; then wipe the glass. If the deposits on the glass are not very heavy, normal glass cleaners work well. Heavier deposits may be removed by using a damp cloth dipped in wood ashes or by using a commercially available oven cleaner. After using an oven cleaner, it is advisable to remove any residue with a glass cleaner, or soap and water. Oven cleaner left on during the next firing can permanently stain the glass and damage the finish on plated metal surfaces.

**CAUTION:** Take care when using oven cleaners as they may be caustic. Always follow label instructions and warnings.

Check to be sure these gaps are even and free of obstructions such as ash and creosote. If after cleaning the gaps appear to be too tight, uneven or closed off, it will be necessary to adjust them. There are four (4) 1/8" allen head screws on the back side of the door, one (1) in each corner under the door gasket. Loosen these screws by turning them counterclockwise a little at a time until the air wash gaps are even and at least 1/16" wide. If the glass becomes loose or slides easily, the screws are backed off too far. Reposition the glass and tighten the screws evenly until the glass is secure.

**NOTE:** A little care during normal cleaning will prevent build-up in the air channels and help the glass stay cleaner.

Do not clean the glass with materials that may scratch or otherwise damage the glass. Scratches on the glass can develop into cracks or breaks. Never attempt to clean the glass while a fire is in the unit.

The best way to keep the glass clean is to operate the woodstove efficiently by using dry, well seasoned wood and burning moderate to hot fires.

## BLOWER

The blower motor bearings are factory lubricated for years of trouble free operation. However, damage can occur if dust and lint is allowed to build-up on the fan blades. Keep the area around the blower clean, free from debris, dust, lint or any other foreign materials that can damage the blower if drawn into the fan blades.

# FLUE DRAFT

Like all modern woodburning appliances, the model 1800 A and 2400 A require the proper amount of flue draft to ensure safe and efficient operation. Flue draft is measured as negative pressure in the chimney. The amount of negative pressure determines how strong the draft is. The draft is important because it draws the combustion air into the firebox and pulls the smoke out of the chimney.

There are three basic criteria essential to establish and maintain flue draft:

1. Availability of combustion air
2. Heat generated from the fire
3. Diameter and height of the flue system

These three factors work together as a system to create the flue draft. Increasing or decreasing any one of them will effect the other two and thus change the amount of draft in the entire system.

## 1. Availability of combustion air

A source of air (oxygen) is required in order for combustion to take place. The air enters the firebox through an opening in the stove body. The amount of air allowed in is regulated by the draft slide control. The important thing is to realize that whatever air is consumed by the fire must be replaced. If you are using room air, the air is replaced through cracks around windows, under doors, etc. However, most newly constructed houses or existing homes fitted with tightly sealed doors and windows are relatively air tight. In this case, an outside air source must be made available to lead combustion air from outside the home into the stove.

## 2. Heat generated from the fire

Most of the heat produced from the fire is transferred into the heat exchanger of the stove, then into the room. However, part of this heat escapes up the chimney taking smoke and other combustion gases with it. Most modern wood burning appliances including the model 1800A and 2400A extract heat so efficiently the amount that goes up the flue can be minimal. This is one reason why it is important to burn well seasoned wood. The heat generated from the fire should be warming your home and establishing the flue draft. It should not be wasted by evaporating moisture out of wet, unseasoned wood.

## 3. Diameter and height of flue system

The inside diameter of the flue system should be the same size as the flue outlet collar on the stove. For the model 1800A it is 6", for the model 2400A it is 8". The height of the chimney should be at least 12 feet from the top of the stove and extend above the roof in accordance with the installation instructions on page 7. A specific volume of air, determined by the diameter and height of the chimney connector and chimney, is contained within the flue system. As heat from the fire enters the flue, it warms this air causing it to rise. The air moving up the flue draws smoke and more heated air from the fire with it, thus establishing draft. The amount of draft depends on the temperature of the heated air and the volume of air that is contained in the flue system.

## DRAFT PROBLEMS

For the model 1800A and 2400A, the flue draft needs to be between .04 and .10 inches of water column as measured with a draft meter. Most woodstove dealers have draft meters available to measure your flue draft if you suspect a problem. When burning coal, do not exceed .1 inches of water column.

If your fire has a tendency to always burn fast and hot regardless of how you adjust the temperature control then your flue draft is probably too high. If so, decrease the volume of air in the flue system by decreasing the height of your chimney or install a damper into the first section of chimney connector above the stove. The damper can be adjusted until you can control the rate of burn with the temperature control on the front of the stove.

However, a much more common problem is when the flue draft is too low. If the fire is hard to start and smoke spills out of the door, or you find it difficult to establish and maintain a moderately high burn rate, then the flue draft is too low and corrective measures must be taken.

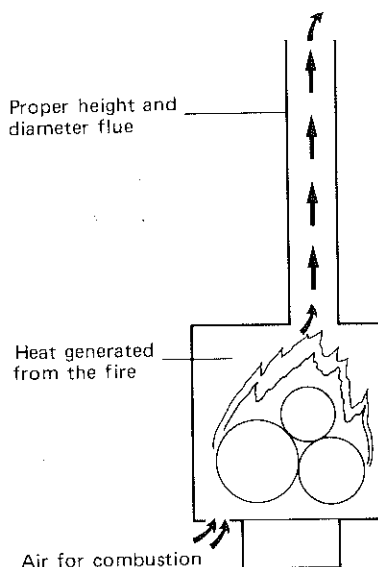


Figure 7

Be sure you have air available for combustion and that your firewood is dry and well seasoned. Build your fires properly according to the instructions given on page 15. Be sure your flue system is installed correctly and that it is the proper diameter and height. In addition, check for the following:

- All chimney connector sections are properly installed and the joints are sealed tightly.
- The chimney and chimney connectors are clean, free of creosote build-up.
- If utilizing an existing chimney that has been left unused over a period of time, be sure it is not obstructed with debris from animals or nesting birds.
- If using an existing masonry chimney, the chimney connector should pass through the wall of the flue lining but not extend into the flue itself. If the masonry chimney has a clean-out door be sure it is closed and tightly sealed.
- Make sure overhanging trees and branches are cut back within 10 feet of the top of the chimney.
- If the chimney cap is equipped with a spark arrestor screen, be sure it is clean and free of any build-up of soot or creosote.

If you still suspect you have a low draft problem it may be necessary to increase the volume of air in your flue system. Since the diameter of your flue system is matched with the size of the flue collar and should not be changed, then the height of the system will need to be increased. Add chimney a little at a time until the draft improves.

In some cases, regardless of what you do, it can still be difficult to establish the proper flue draft. This is especially evident when using an exterior factory-built chimney or exterior masonry chimney which is likely to have too large of a flue. Try placing several sheets of crumpled paper on top of your kindling as close to the flue outlet of the stove as possible. Light this paper first then the paper under the kindling. The heat generated from the rapidly burning paper on top of the kindling should help get the draft established.

Still other factors can effect how well your flue system performs. Neighboring structures, high winds, tall trees, even hillsides can effect the air currents around the chimney. Well designed chimney caps, wind directional caps, even draft inducing caps are available that can help. Your woodstove dealer is the local expert in your area. He can usually make suggestions or discover problems that can be easily corrected allowing your woodstove and flue systems to operate correctly as it has been designed , providing safe and economical heat for your home.

## ARROW WOODSTOVE AND FIREPLACE INSERT LIMITED WARRANTY

**DESIGNATION OF WARRANTOR.** This Limited Warranty is extended by Heatilator Inc., Division, HON INDUSTRIES, (hereinafter referred to as Heatilator), with respect to ARROW woodstoves and fireplace inserts (hereinafter referred to as stoves) as described herein, while in the possession of the original consumer purchaser.

**PRODUCT.** This ARROW stove is comprised of the stove proper (including steel components and cast iron refractory), blower assembly, speed control switch, and door seal. Except where specifically excluded from coverage hereunder, this Limited Warranty covers all of the components designated. See EXCLUSIONS AND QUALIFICATIONS below for further information on product coverage.

**WARRANTY.** This ARROW stove proper (including steel components and cast iron refractory) is warranted to be free of defects in material and workmanship for a period of five (5) years. The blower assembly, speed control switch and door seal are warranted to be free of defects in material and workmanship for a period of one (1) year.

**WHAT HEATILATOR WILL DO IN THE EVENT OF A DEFECT.** If this ARROW stove is found to be defective in material or workmanship (see Heatilator's right of investigation outlined below), Heatilator will repair or replace such defects in the ARROW stove at Heatilator's option, according to the following schedule:

- (1) During the first year of the Limited Warranty, Heatilator will repair or replace the defective component at no charge and also will pay for reasonable labor costs for repair work.
- (2) During the second through fifth years of the Limited Warranty, the purchaser must pay the following share of the current retail cost of the repair or replacement provided for the steel components and in the cast iron refractory in the stove proper: in the second year, 1/5; in the third year, 2/5; in the fourth year, 3/5; and in the fifth year, 4/5. The balance of the expense will be Heatilator's, excluding any freight charges or labor costs.

**EXCLUSIONS AND QUALIFICATIONS:** This Limited Warranty is subject to the following exclusions and qualifications:

- (1) This Limited Warranty does not apply to, and Heatilator assumes no responsibility for, any damages that result due to installation or operation not in accordance with both the Installation Instructions and Operating instructions furnished with the unit.
- (2) This Limited Warranty does not apply to any stove which has been modified or damaged in shipping or by improper handling, improper operation, abuse, misuse, accident or unworkmanlike repairs.
- (3) This Limited Warranty does not cover the glass in the glass door, surface finish of the stove, hearth pad, decorative trim, or catalytic combustor (where applicable).
- (4) This Limited Warranty extends only to the original consumer purchaser.
- (5) Heatilator does not warrant the structural performance of the stove when fuel products with abnormal burning characteristics, including, but not limited to, synthetic logs, wood treated with flammable liquid, logs made from pressed wood, driftwood or any material containing salts or corrosives, flammable liquids, trash or garbage are used. Fuel products with abnormal burning characteristics can cause build-up affecting the operation of the stove. Flammable liquid fuels are explosive and never should be used in this product.

- (6) Heatilator expressly excludes any liability hereunder for defects or damage caused by the installation or use of any components not expressly authorized and approved by Heatilator. Heatilator further assumes no liability for defects or damage caused by any modification not expressly authorized and approved by Heatilator. Unauthorized components or modifications could create a fire hazard by altering the safety design of the stove.
- (7) Labor costs to be borne by Heatilator pursuant to this Limited Warranty must be approved by Heatilator and must not exceed the retail price of the replacement parts.

#### LIMITATION OF LIABILITY

It is expressly agreed and understood that Heatilator's obligation and purchaser's exclusive remedy under this Warranty, under any other warranty express or implied (including merchantability), or otherwise, shall be limited to replacement or repair of only Heatilator brand components as above specified.

The duration of any implied warranty, including merchantability, applicable to this ARROW stove is limited to the duration of the foregoing Warranty. Some states do not allow limitations on how long an implied warranty lasts so the above limitation may not apply to you.

In no event shall Heatilator be responsible for any incidental or consequential damages caused by defects in the ARROW stove. Whether such damage occurs or is discovered before or after replacement or repair, and whether or not such damage is caused by Heatilator's negligence.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

**BUILDING CODES.** Since building code requirements vary greatly throughout the United States and Canada, users of this stove should determine in advance whether there are any building code restrictions on the installation or use of this stove. Heatilator makes no representation or warranty regarding building code compliance and shall not be responsible for compliance therewith.

**HEATILATOR NOT RESPONSIBLE FOR WORK DONE WITHOUT WRITTEN CONSENT.** Heatilator shall in no event be responsible for any warranty work done without first obtaining Heatilator's written consent.

**DEALERS HAVE NO AUTHORITY TO ALTER THIS WARRANTY.** Heatilator's employees and Dealers have no authority to make any warranty nor authorize any remedies in addition to or inconsistent with those stated above.

**OTHER RIGHTS.** This Warranty gives you specific legal rights. You may also have other rights which vary from state to state.

**HOW TO REGISTER A CLAIM AGAINST WARRANTY.** Contact the Dealer from whom you purchased your stove. If it is impossible to contact that Dealer, write Customer Service Department, 10340 S. W. Tualatin Road, P. O. Box 1299, Tualatin, Oregon, 97062. Heatilator reserves the right to investigate any and all claims against this Warranty.

HEATILATOR and ARROW are the registered trademarks of Heatilator Inc.



**Attention**

**WOODSTOVE  
INSTALLER**

*Please return these  
Operating & Installation  
Instructions to the  
Firebox  
for Consumer Use*

**heatilator**<sup>®</sup>  
THE WOODBURNING SPECIALISTS

DIVISION, HON INDUSTRIES

10340 S.W. Tualatin Rd.  
P.O. Box 1299  
Tualatin, Oregon 97062

1915 W. Saunders Road  
Mt. Pleasant, Iowa 52641