
UPLAND
WOODSTOVES

**Dealer's
HANDBOOK**



Table of Contents

Section	page
Introduction	1
Upland	2
A Short History of Woodstoves	3
Some Interesting Facts	4
Woodstoves vs. Woodburning Appliances	5
Typical Woodburning Characteristics	7
The Problem of Creosote	8
The Advantages of Cast Iron	9
Installation	12
Safety	17
Assembly	17
Questions and Answers	21
Ordering	26
The Upland Stoves	27
Model # 17	30
Model # 27	33
Model #107	35
Model #207	37
Warranty	40
Miscellaneous	42
Advertising Materials	43
Labels	44
Selected Bibliography	46
Footnotes	47
Sample Literature	48

Introduction

This handbook has been compiled for dealers to use as a sales aid. Our hope is that it will help you better understand the products you are selling and the company that produces them. We have included such things as installation and disassembly, and how our stoves compare to other types of stoves. We have tried our best to include all the helpful tips we can think of, though we know there are bound to be some we have missed. We have made our manual loose-leaf so it will be easy for you to drop old material and add new. Any comments on the content will be appreciated.

The people here at Upland are committed to giving you the best products and service available.

Upland

The Upland Stove Company is located in Greene, New York, and manufactures high quality cast-iron stoves. At present, we manufacture four models, the #17, #27, #107 and the #207. The #17 and #27 are completely airtight box-stoves, while the #107 and #207 are combination fireplaces and airtight box-stoves.

All parts used in our stoves are made from high grade iron, and are cast in the northeastern U.S.A. All of our stoves are hand-assembled in our single manufacturing facility.

Upland maintains its own fleet of trucks to transport the parts from the foundries to the factory. When possible, we use our own trucks to ship the completed stoves to the distributors. This enables us to make sure that damage is kept to a minimum.

Upland's latest improvement has been the addition of our own in-house computer. The computer serves a variety of functions, all designed to help us simplify and control operations so we can better serve our customers.

A Short History of Woodstoves

Back around 1740, a shortage of fuel wood developed in Philadelphia. To combat this problem, Benjamin Franklin decided to design a woodburning stove that was more efficient than conventional fireplaces. He designed what became known as "Pennsylvanian Fireplaces." These metal fireboxes were open in the front but could be provided with a set of sliding shutters to help increase efficiency. These fireplaces drafted air from below as well as from in front of the wood, and eventually sent the smoke out through a chimney.

In 1771, in an effort to create a still more efficient stove, Franklin designed his "smoke-consuming stove." This stove had a system of drafts that promoted the reburning of gases released by the initial burning of the wood. The stove was based on a design principle that funneled smoke, from the initial burn, up the center of the stove, back down the sides to be reburned, and finally up and out through a chimney. This somewhat complicated "downdraft" system was often difficult to understand and operate though, and the problem of "back-puffing" always plagued these fireplaces.

All the joints on the Franklin stoves were sealed, but it was not until 1836 that Isaac Orr of Washington, D.C. patented an "air-tight" stove. The term airtight has been used ever since to describe a completely metal stove that includes a system for controlling drafts.

The Scandinavian design that the Upland Stove Company incorporates into its stoves combines the best of Franklin's ingenuity with the simplicity and efficiency of time-proven design. The stoves are completely airtight with a controlled draft and baffle system that produces an S-shaped draft for efficiently providing constant, even heat.

Some Interesting Facts

One acre of forested land can produce one cord of wood per year, forever.

Trees are natural solar collectors, so woodstoves are really very simple, efficient, and inexpensive solar heaters.

One pound of wood burned in a good stove will emit no more pollutants than that same pound of wood allowed to rot on the forest floor.

Woodstoves vs. Other Woodburning Appliances

The stoves manufactured by The Upland Stove Company are designed and tested exclusively as woodburning devices.

The table below illustrates the effectiveness of woodstoves (listed here as "radiant stoves") compared to other types of woodburning appliances.

Appliance	Estimated Efficiency
Masonry fireplace with circulation	- 10 - 10
Manufactured fireplace	- 10 - 10
Manufactured fireplace with circulation and outside air	10 - 30
Free-standing fireplace	- 10 - 20
Radiant stove	50 - 70
Circulator stove	40 - 55
Fireplace insert	35 - 50
Furnaces	40 - 60

In trying to understand the idea of woodburning efficiency, Larry Gay has written,

"The notion of efficiency is man-made and needs to be carefully defined wherever applied. In our case 100 percent thermal efficiency corresponds to transfer of the total

*heat of combustion of wood to the room in which it is burned. Such a reference is unreal, since even with complete combustion some heat is needed to warm the chimney and create the draft. But the important thing is relative efficiencies in any case."*¹

A negative efficiency generally results from a lack of airtightness. The draft from a fire might become so strong in a poorly sealed room that instead of transferring heat to the room, the draft actually pulls heat from the room, in effect, heating the outdoors.

Upland Stoves are tightly fitted and sealed with furnace cement to provide airtightness. This enables the operator to manually control the draft to his or her liking.

In any discussion of woodburning efficiency, it should be noted that different types of wood have different burning characteristics. Soft woods burn fast and hot, while hard woods burn slower, and somewhat cooler, in comparison. We recommend using only seasoned, air-dried hardwoods in our stoves. Moisture content greatly affects the performance of a stove. Too much moisture in the wood causes the fire to burn cooler and greatly increases the amount of creosote produced. Hardwood that has been dried for one year seems to burn best, and emits the highest level of BTU's. The following table points out certain characteristics of different types of woods.

**Tests conducted by Auburn University*

Typical Wood Characteristics

Species:	Relative Amount of Heat:	Easy to Burn:	Splits?	Heavy Smoke?
ASH	high	yes	easily	no
BEECH	high	yes	easily	no
CHERRY	medium	yes	easily	no
DOGWOOD	high	yes	easily	no
ELM	medium	medium	hard	medium
GUM	medium	medium	hard	medium
HICKORY	high	yes	easily	no
MAPLE, hard	high	yes	easily	no
MAPLE, soft	medium	yes	easily	no
OAK, mixed	high	yes	easily	no
PECAN	high	yes	easily	no
SO. YELLOW PINE	high	yes	easily	yes
WHITE SYCAMORE	medium	good kindling	hard	medium
YELLOW POPLAR	low	medium	yes	medium
		good kindling	easily	

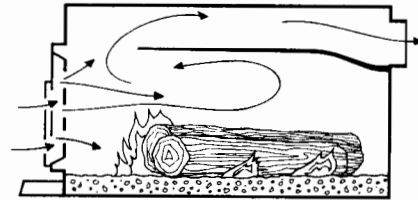
Data from *Firewood from the National Forests*, U.S. Department of Agriculture, Forest Service — Southern Region.

The Problem of Creosote

Creosote in woodburning equipment can cause safety problems. A high-volatile solid fuel, such as wood, experiences three stages of burning (drying, distillation, and the burning of carbon residue) simultaneously. The products released in the distillation of the wood combine to form a new substance termed creosote. The exact composition of creosote depends on the conditions under which it is formed and the temperature at which it is deposited. Some of the parameters which affect the formation of creosote are: type of wood, moisture content of wood, and the combustion process (air-fuel ratio, distribution of air within the stove area, and the temperature of the stove walls). What happens is that the components of the vapor produced by the burning of the wood escape up the flue. When they reach a cool enough spot on the stovepipe or flue they condense, attach themselves, and trap carbon that is carried in the smoke. This mixture dries on the pipe. As this continues to happen, a build-up occurs and chokes the stovepipe passage. The real danger of the creosote is that it is extremely flammable. If the creosote in a chimney should happen to ignite, the temperature of the fire within the chimney can reach 2000°F.

The best solution to the creosote problem is devising a way to burn more of the products given off by the burning wood, within the stove itself. Upland's stoves are all equipped with secondary air-inlets that help burn most of these products.

secondary air inlet
primary air inlet



The secondary air inlet combined with Upland's baffle system results in less creosote condensing in the flue and stovepipes, an increase in unit efficiency, and less smoke released.

The short-term solution to the creosote problem is up to the owner or operator of the stove. The build-up of creosote in the chimney can be controlled by controlling the temperature of the flue gasses. In general, the operator should not operate any unit that produces large amounts of creosote at flue temperatures below 300°F. This minimum temperature will depend on the type of flue being used. For an insulated flue, the flue temperature can be lower than that for an un-insulated flue, however, an insulated flue will produce a higher flue temperature if a creosote fire occurs.

The Advantages of Cast Iron

The Upland Stove Company is determined to produce the finest woodstoves in the world. To do so, we feel it is imperative to use cast iron. Not only this, but the cast iron itself must be of superior quality.

There are two major reasons why we feel that cast iron is absolutely necessary. The first is the durability of cast iron. Cast iron has a molecular structure that is a matrix of iron and carbon. When the iron rusts on the surface, the carbon in the matrix prevents rusting or oxidizing of any great depth. Steel, on the other hand, will rust and flake away and rust again until the wall thickness is substantially diminished.

The second major advantage of cast iron is its ability to transfer a more comfortable, even heat than steel. The thermal conductivity of iron in BTU's per hour per square foot per degree Fahrenheit is 41.5. The thermal conductivity of steel commonly used in woodstoves is 26.2². The conductivity of cast iron, then, is nearly 50% greater than that of steel.

The Upland Stove Company goes beyond simply using cast iron. The owners of Upland searched the northeast for foundries that could meet our exact specifications. The castings themselves must be of a superior quality. All of the castings for Upland Stoves are made from class 25 to 30 grey iron. This is a costly iron, but it offers the quality that we demand. Class 25 grey iron has a tensile strength of 25,000 lbs. It is the same iron that is used in heavy machinery, pump housings, and motor blocks; equipment for which stability and durability are important factors. Upland will not have casting made at a foundry that cannot promise this grade of iron.

Upland will not take advantage of uneducated consumers. We want to provide as much information as we can, as well as the finest stoves that can be built. We feel that cast iron is absolutely essential for a top quality stove. We use the best iron and the finest foundries that can be found in the United States. Our stoves are 100% cast iron. In his book *Wood Heat*, John Vivian makes the claim, "Still and all, if asked to recommend a modern woodstove, I vote for cast iron held together with bolts and cement."³ Upland firmly agrees with this view and we will build our stoves no other way.

Installation

Before you fire your stove for the first time we recommend that you place a 2" layer of sand in the bottom of the stove. This will protect the bottom of the stove from the direct heat of the fire that sits directly above. It is also our suggestion that a stove be fired outdoors the first time, or at least in a well ventilated room. The reason for this is that there may be a release of unpleasant odors during the curing of the paint.

Chimneys:

Woodstoves can be attached to existing masonry chimneys if they are *not* already being used by another appliance. An existing chimney should be thoroughly inspected for cracks or loose mortar. Fire in an unlined or cracked chimney can easily spread into the house. Many local fire companies will inspect your chimney free of charge. Any defects in the chimney should be repaired before using the woodstove. The chimney should also be cleaned of any soot build-up that could cause a chimney fire. Any new masonry chimneys should be installed by a professional who has knowledge and experience in chimney installations. It is not a job for a novice.

Common Chimney Problems:

- **Puff-back of smoke into house.**

The problem here could simply be that the chimney is not tall enough to create a sufficiently strong draft. The chimney should rise two or three feet above any roof edge that comes within ten feet of it.

- **Too many heating devices on a common flue.**

A woodstove should not be connected to a chimney that is already servicing a heating device.

- **Dirty chimney.**

Blockage can be caused by soot build up, bird nests, or fallen masonry. Chimneys can be checked by local fire departments and cleaned by chimney sweeps. Repair work should be done by a professional.

Interior Installation:

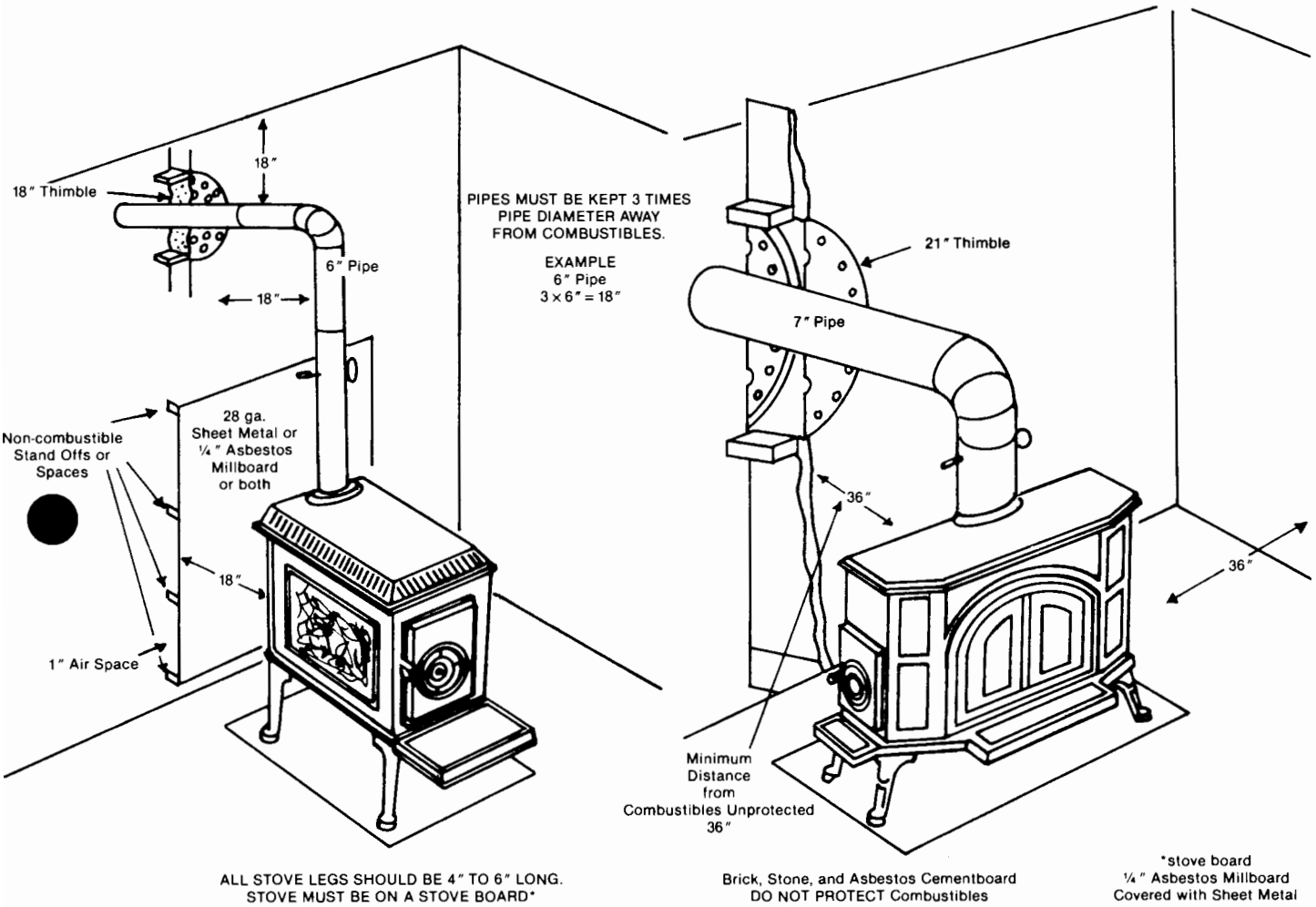
Your Upland Stove should be located where it will distribute the maximum amount of radiant and convected heat. There must be a clearance of 36 inches from any combustible surface. If the floor the stove is placed on is not made of stone or brick, an approved asbestos and sheet metal panel must be used under the stove. The panel should extend at least 18 inches in front of the stove and at least 12 inches beyond the sides and the back. If you desire to use a steel plate instead of the asbestos and sheet metal panel, the steel plate must be 28-gauge or thicker.

A stove may be placed closer to the wall *only* if an approved noncombustible material is installed on the wall in compliance with building and fire regulations.

The flue pipe should be installed with sheet metal screws at the stove collar and at all joints. Only use approved stovepipe. A flue damper may be installed in the flue near the stove to control the draft while the #107 & #207 are in the "fireplace" mode.

All of the Upland Stoves are designed for installation with the crimped end of the stovepipe inserted inside the stove collar. The pipe joints should run toward the stove rather than toward the chimney. This helps keep residue from running out of the pipe or onto the floor.

Below are diagrams of proper installation designs.



INSTALLATION OF ALL UPLAND STOVES MUST BE IN ACCORDANCE WITH LOCAL BUILDING AND FIRE CODES.

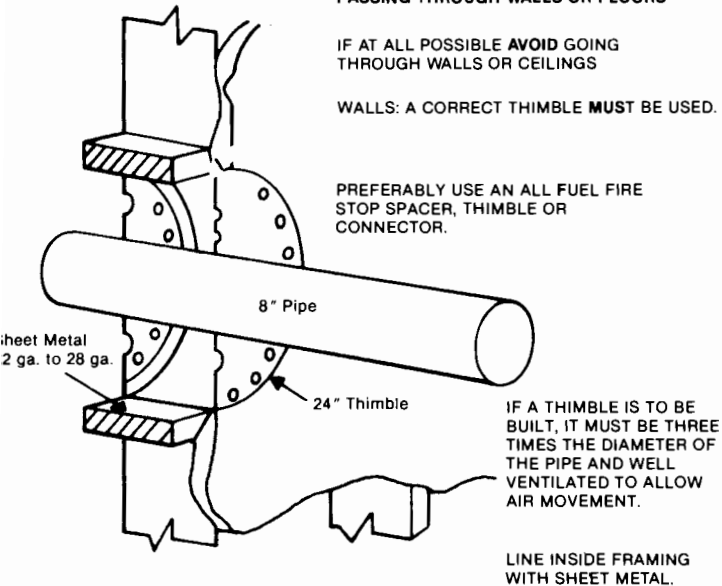
Close-ups of suggested installation procedures prepared by the National Association of Mutual Insurance Companies:

PASSING THROUGH WALLS OR FLOORS

IF AT ALL POSSIBLE AVOID GOING THROUGH WALLS OR CEILINGS

WALLS: A CORRECT THIMBLE MUST BE USED.

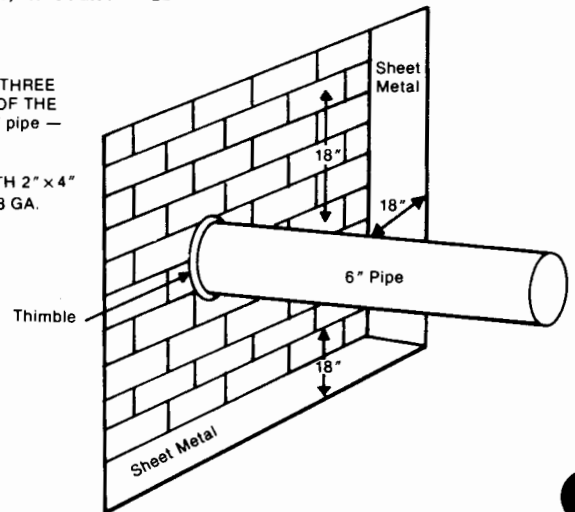
PREFERABLY USE AN ALL FUEL FIRE STOP SPACER, THIMBLE OR CONNECTOR.



CONNECTING THE STOVE PIPE TO A CHIMNEY, THROUGH A WALL

CUT WALL BACK THREE TIMES THE SIZE OF THE PIPE. Example: 6" pipe — $3 \times 6" = 18"$

FRAME HOLE WITH 2" x 4" WITH 22 GA TO 28 GA. SHEET METAL.



USE A THIMBLE AT CHIMNEY.

CEILINGS: WHEN YOU MUST PASS THROUGH A CEILING, THE ALL FUEL CONNECTOR OR FIRE STOP SPACER MUST BE USED AND INSTALLED ACCORDING TO THE MANUFACTURER'S REQUIREMENTS.

There are several types of prefabricated chimneys on the market at the present time. This type of chimney should be installed according to your dealer's and pipe manufacturer's specifications.

Safety

Our stoves have been safety tested to comply with UL 1482 standards. The testing was done by The Energy Testing Laboratory of Maine, which is operated by the Southern Maine Vocational Technical Institute. Each stove was tested under a variety of conditions, and each stove that we sell is in compliance with the proper standards.

Assembly

At Upland we combine the precision of handcraftmanship with the automation of an assembly line. All assembly of the Upland Stoves is kept under strict supervision. We have established our own specifications and we are careful to adhere to them. Our control is very effective since 100% of the assembly is performed in our one plant.

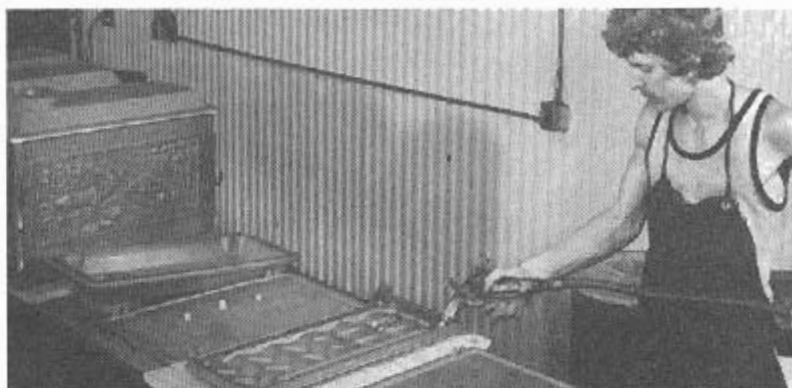
Once the parts are in our factory they are inspected. The edges of the pieces are inspected and ground to ensure a perfect fit. The pieces are then drilled and tapped, and placed in stock until needed for assembly.



The assembly of the stoves is done with painstaking care, yet in a smooth and orderly process. One person on the assembly line is responsible for the construction of the major portion of each stove. He receives the front doors and frame as a single unit. For each stove, the doors and frames have been fitted and mounted in a jig, then drilled as a single unit. The reason for this is simply that no two castings are going to be exactly alike. At Upland we make sure that the doors and frames form a perfect seal through this method of drilling. All other parts that require drilling are drilled on standard drill presses. Upland has made a conscious effort to standardize the bolts on the stoves. Every bolt is the same $\frac{1}{4}$ x 20 thread.

All the pieces used in the body of the stove are cast in tongue and groove design. This design provides a tight sure fit. In fact, should you remove the bolts from the stove, the tongue and groove fit, along with the furnace cement, would hold the stove together reasonably well. We do not suggest that you do this; we only hope to point out that Upland goes to great lengths to insure the finest, sturdiest stove that can be built.

Before the pieces are fitted together, every joint is lined with furnace cement. After the cement is applied, the pieces are assembled and bolted. When this is done, the cement is smoothed to form a perfect airtight seal. At this point the stoves are inspected. The castings, seals, and bolts are all examined.

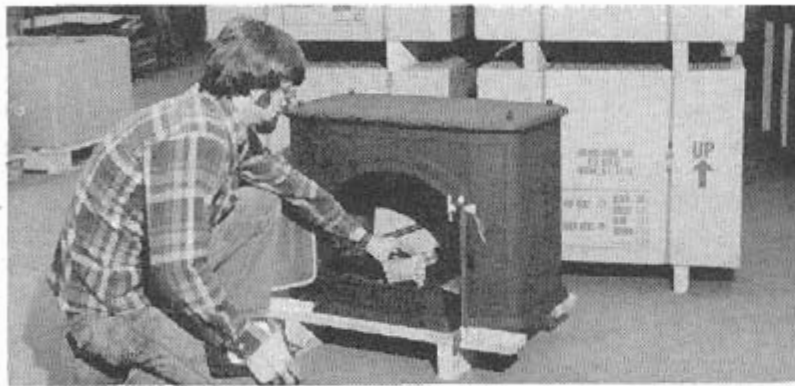


Once the body of the stove is together it is moved along the assembly line to be completely wire brushed and cleaned before being painted. This procedure reduces the possibility of chipping and rough spots. Upland uses 1100°F Thermolux paint on its stoves. The painter carefully inspects each stove he works on before and after the paint is applied.



At the next station, the chrome latches and finials are perfectly fitted by a skilled craftsman, and the door liners are inserted.

When the entire assembly is completed the stoves are again thoroughly inspected. Every stove that Upland sends from its factory must be in absolute and complete accord with the standards we have established. Any stove that does not meet the criteria we have established is simply scrapped.



At the final station on the assembly line all warning labels are properly attached and each stove is supplied with manuals, stove legs and accessories. When the stove is then ready, it is boxed and prepared for shipment. The stoves are then mounted on sturdily-built wooden skids. Upland goes to this expense because it assures us of a perfect stove reaching the customer.

Questions and Answers

1. What are conduction, convection, and radiation?

The transfer of heat is usually considered to occur by these three processes. Conduction is the transfer of heat from one part of a body to another, or to another body by short-range interaction of molecules and/or electrons. Convection is the transfer of heat by combining the mechanisms of fluid-mixing and conduction. Radiation is the emission of energy in the form of electro-magnetic waves. It is the energy you feel when you hold your hand in front of a fire.

2. Are there any safety features built into the Upland Stoves?

All parts are hand-fitted at the factory and sealed tightly with furnace cement. The doors are sealed with fireproof liners to ensure airtightness. The handles are adjustable to maintain constant pressure. The doors and front frames are drilled together to form a single unit. The #107 and #207, which can be used in a fireplace mode, come with a specially fitted spark guard that can be mounted over the opening. As a standard feature each stove comes with a special door-opening tool to make sure that the operator never burns himself when opening or closing the door.

3. What should be done to maintain the stoves when not in use?

After the heating season the stove should be thoroughly cleaned and the paint should be touched-up to prevent rust while the stove is not being used. Thermolux paint is used at the factory and can be obtained in an aerosol can.

4. Will an Upland Stove really save on fuel costs?

Yes, when the stoves are used properly they will provide ample heat at a minimum of cost. A full cord of wood, weighing about two tons, is roughly equivalent to a ton of hard coal, 200 gallons of #2 fuel oil, or 4,200 Kilowatt hours of electricity. At current prices in our country town the wood will cost \$50, the electric heat about \$60, the coal \$80, and the oil about \$170. Actual prices will vary around the nation. In general, the rule is that one cord of hardwood, a ton of hard coal, 200 gallons of heating oil, and 4,000 plus kwh of electricity will turn out the same amount of heat (John Vivian, *Wood Heat*).

5. Can a woodburning stove be put in any room?

First of all, the room must be big enough to maintain proper clearances. It is also necessary to have enough air entering the room to supply the draft of the fire. However, the Upland Stoves can require as little as 10% of the draft that other stoves may require because of its airtight structure and efficiently engineered baffle and draft wheel designs.

6. Can you cook on the Upland Stoves?

Yes. Upland Stoves provide enough heat and a good flat surface to cook on. As you learn to control the temperature, by setting the draft, you will find that cooking with wood can be a lot of fun.

Can I burn anything beside wood in my stove? Can I start a fire with liquid starters?

Absolutely not on both counts. Burn seasoned hardwoods only. These stoves are heating appliances, not trash burners! Do not use liquids to start fires! Make a small fire of kindling and paper in the front of the firebox. When the kindling has begun to burn well, place the larger firewood on top of the fire. Leave the firedoor partly open until the wood begins to burn well. When the wood is burning well, close the door and adjust the draft to the required heating level.

8. Do I lose efficiency with the doors opened to the fireplace mode?

Yes. When the doors are opened the stove does not function as an airtight. The draft of the chimney pulls air in faster which makes the fire burn faster and pull more heat up the chimney. You will probably feel more radiant heat with the doors open, but the amount of conducted heat is reduced.

9. Is there really a difference between steel and cast iron?

Yes. Cast iron contains more carbon than steel, and therefore is more resistant to warpage and distortion. According to the *Marks Engineering Handbook*, the thermal conductivity of steel commonly used in woodstoves, given in BTU's per hour per degree Fahrenheit per square foot is 26.2. The thermal conductivity of pure iron is 41.5, or nearly 50% greater than that of steel. Iron, therefore, conducts one and one half as much heat as steel in the same amount of time.

10. Are there different grades of cast iron?

Yes. One way of grading cast iron is by the tensile strength, or the amount of longitudinal stress a substance can bear. We use class 25 to 30 grey iron. That is, iron with a tensile strength of 25 to 30,000 lbs.

11. Why did Upland decide not to use thermostats?

Simplicity and Safety. Thermostats can be dangerous. If they should get stuck open the fire is going to run away. If they should get stuck closed you could end up with a smoldering fire. An Upland Stove can always be adjusted to the temperature you desire simply by setting the draft wheel to control the air intake. At Upland we build our stoves with maximum efficiency in mind, while keeping them as simple to operate as we can.

12. Why isn't there any firebrick in the Upland Stoves?

Steel stove promoters say they use firebrick to raise the temperature of the coals. This is supposed to make the fire burn more efficiently. More likely, the firebrick is used to protect the steel. Without it there would be a greater possibility that the steel might warp. The firebrick is placed inside the stove to absorb some of the heat. As a result, heat that could be radiating out is retained within the stove. During combustion the same amount of heat is given off whether or not there is firebrick lining in the stove. Since cast iron is not affected by intense heat the way steel is, there is no need to use firebrick.

Ordering

Stoves:

All dealer orders must be placed through their distributor. The initial order must include at least one of each model to give a complete representation of our line of stoves. Should this cause a direct conflict with something you are already carrying, call our Sales Manager, and he should be able to arrange something with you.

On subsequent orders, Models #207 and #27 must be designated as either top vent or back vent. The #17 can only be ordered as a back vent, and the #107 can only be ordered as a top vent (at a 45° angle).

Parts:

Replacement parts must also be ordered through your distributor. It is imperative, however, that any defective part be returned directly to the factory. The replacement parts will be shipped directly from the factory at Upland's expense.

When ordering parts include both the part names and the part number. Both the names and the numbers can be found in this manual in the sections dealing with the specific stoves.

The Upland Stoves

The Upland Stove Company prides itself on the design and construction of its stoves. We are making every effort to make the finest woodstoves possible. Here are several features that our stoves offer, and that you might want to point out to your customers.

All Upland stoves can be burned in a completely AIRTIGHT mode. The airtightness means that the air feeding the fire can be controlled both in direction and volume. By controlling the volume of air you control the heat output. By controlling the direction of the air you control the efficiency of the combustion.

Note the PIPE COLLAR. It is designed to be trouble free. The smoke pipe fits inside the flue collar so any residue flows back into the stove chamber to be reburned, rather than onto your floor or carpet. The Upland pipe collar is leak free.

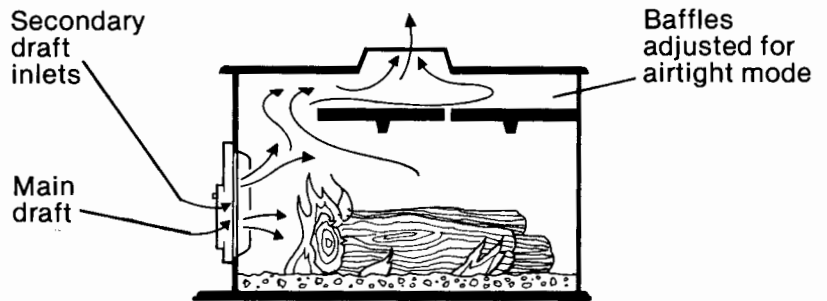
Mention that there are NO HIDDEN CHAMBERS. Upland is proud of the simplicity and efficiency of its design. The less complex the design, the easier it is to clean. The likelihood of creosote buildup is also greatly diminished by Upland's design.

The SINGLE UNIT DOOR AND FRAME ASSEMBLY is a unique design that ensures maximum airtightness and efficiency.

The function of the DRAFT WHEEL, the PRE-HEAT CHAMBER, and the AIR DISTRIBUTION PLATE are very important. Air enters the stove through the draft wheel into the preheat chamber and is directed to two different levels in the combustion chamber of the stove. The primary air is directed to the lower portion of the chamber to supply the wood with air for the initial or primary burn. The unburned gases are picked up by the air flow and, due to the BAFFLE DESIGN, must pass back over the primary fire as they travel to the flue outlet. This heats these gases before they come in contact with the secondary air entering from the pre-heat chamber. This baffle design, then, causes the draft to flow in an S-shaped pattern, promoting a more complete combustion of the fuel.

Because of the simplicity of this design and the elimination of any drafts from below, Upland Stoves create a burn that remains constant. The ultimate result is that, after setting the draft, there is absolutely no need for any sort of automatic damper or thermostat. Upland Stoves, through the fine simplicity of design, produce the most even and constant transfer of heat possible. In fact, studies by Auburn University have shown that baffle designs similar to Upland's specifications produce one of the more efficient and long-lasting burns possible.

The secondary draft inlets create a more thorough combustion.



Another thing that should be made clear is that all stoves come with STOVE HOES and DOOR OPENING TOOLS as standard equipment. The #107 and #207 also include SPARK GUARD SCREENS, for use in the fireplace mode, as standard equipment.

The 2-MODE BAFFLE DESIGN on the #107 and #207 allows proper air flow and maximum efficiency in both the “fireplace” and “airtight” modes.

All stoves are designed with TONGUE AND GROOVE construction for maximum airtightness.

The Upland Stove Company offers a variety of COLORS. Any of the Upland models can be ordered in traditional black, or in green, blue, or brown.

We at Upland have tried to design zero maintenance into our stoves by limiting the number of moving parts. The Upland Stoves have been designed with functional simplicity in mind.

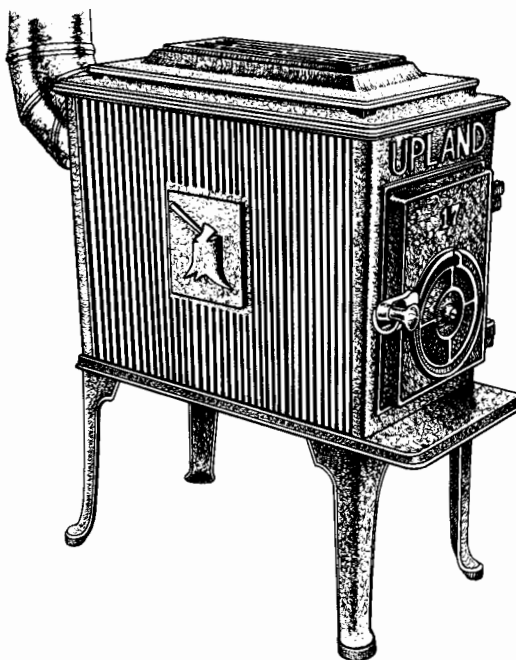
Model #17

The Upland #17 is a unique combination of American construction and traditional Scandinavian design. Fully sealed with asbestos gaskets and asbestos caulking, the #17 is airtight enough to hold a fire 10 hours or more on one load of wood, which makes it a great heat source for any home or cabin. We find it interesting that the Upland Stove Company has managed to achieve a level of excellence in their castings that should be the envy of most of our older foundries. This same level of excellence is present in every aspect of the Upland #17.

*—Frizelle-Enos Co., Inc.
Country Catalog*

The Model #17 is ideal for small camps or cottages where a person needs to heat two or three rooms. The #17 is rated at 27,000 BTU's with a heating capacity of 4,700 cubic feet (670 square feet), about two average size rooms. An owner in Connecticut recently wrote us that "we intend to use the #17 for most of our heating needs. Burn times of 16 hours are not uncommon."

Accessories included with the Model #17 are a cast iron radiator, a stove hoe, and a door-opening tool.



Model #17 "Airtight"

Specifications

Construction: All Cast Iron

Type: "Airtight"

Height: 27 inches

Height w/o legs: 17.5 inches

Width: 12.5 inches

Length: 21.75 inches

Shipping Weight: 125 lbs.

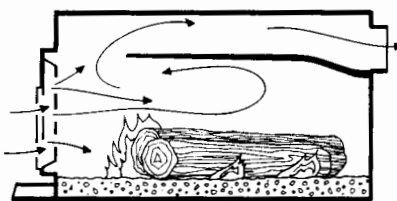
Flue Diameter: 5 inches or 6 inches

Finish: 1100° flat black

Fuel: Seasoned hardwood 16" long

Heating Capacity: 4700 cu. ft.

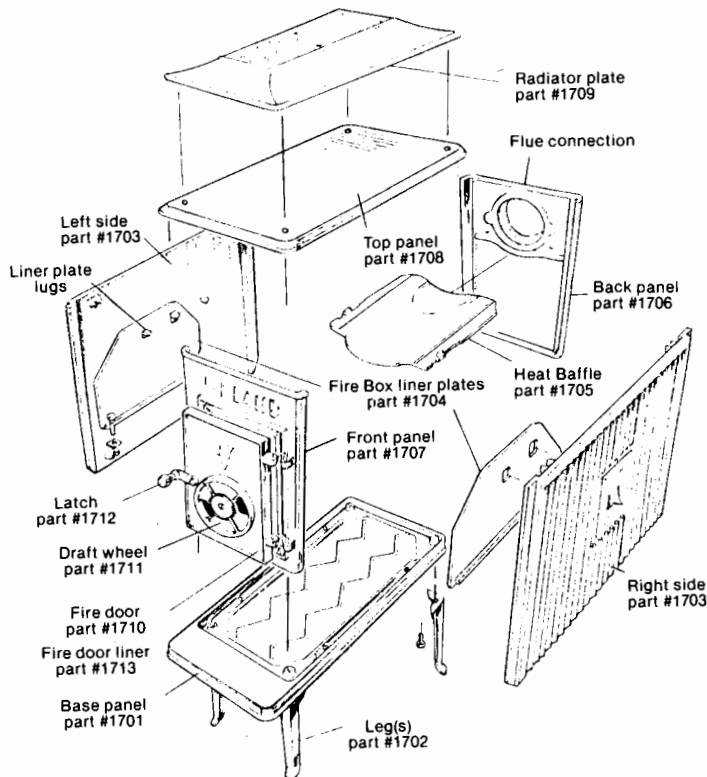
Vent: back (27,000 BTU)



The heat baffle system causes the gases to flow in an "S" pattern, limiting heat loss up the flue pipe and causing the wood to burn from front to back. This controlled flow pattern mixes unburned gases with preheated fresh air, aiding in a more complete combustion.

Disassembly:

First remove all sand and fire ash from the firebox. Next remove the baffle and sideplates, and turn the stove upside down. Remove the legs with a $\frac{7}{16}$ " open-end wrench. Use a flat, wide chisel to crack all the furnace cement on the sections you want to remove. The two side plates are also held on with $\frac{7}{16}$ " bolts. Remove the four bolts on the base panel and the four bolts on the top panel, and the stove will come completely apart. **REMEMBER, THE FRONT PANEL AND FIREDOOR IS ONE UNIT. IF YOU WISH TO REPLACE ONE, YOU MUST REPLACE BOTH.**



Model #27

The Model #27 is designed along the same lines as the #17. The draft pattern is the same S-shape. This stove holds a longer log than the #17 and features a bas-relief scene of a stag in the forest. Another feature this model offers is the option of a rear or top vent. This stove is capable of heating 3 to 4 average size rooms.

Accessories included with this stove are a stove hoe and a door opening tool.



Model #27 "Airtight"

Specifications

Construction: All Cast Iron

Type: "Airtight"

Height: 27 inches

Width: 12.5 inches

Height w/o legs: 17 inches

Length: 27.75 inches

Shipping Weight: 150 lbs.

Flue Diameter: 6 inches

Finish: 1100° flat black

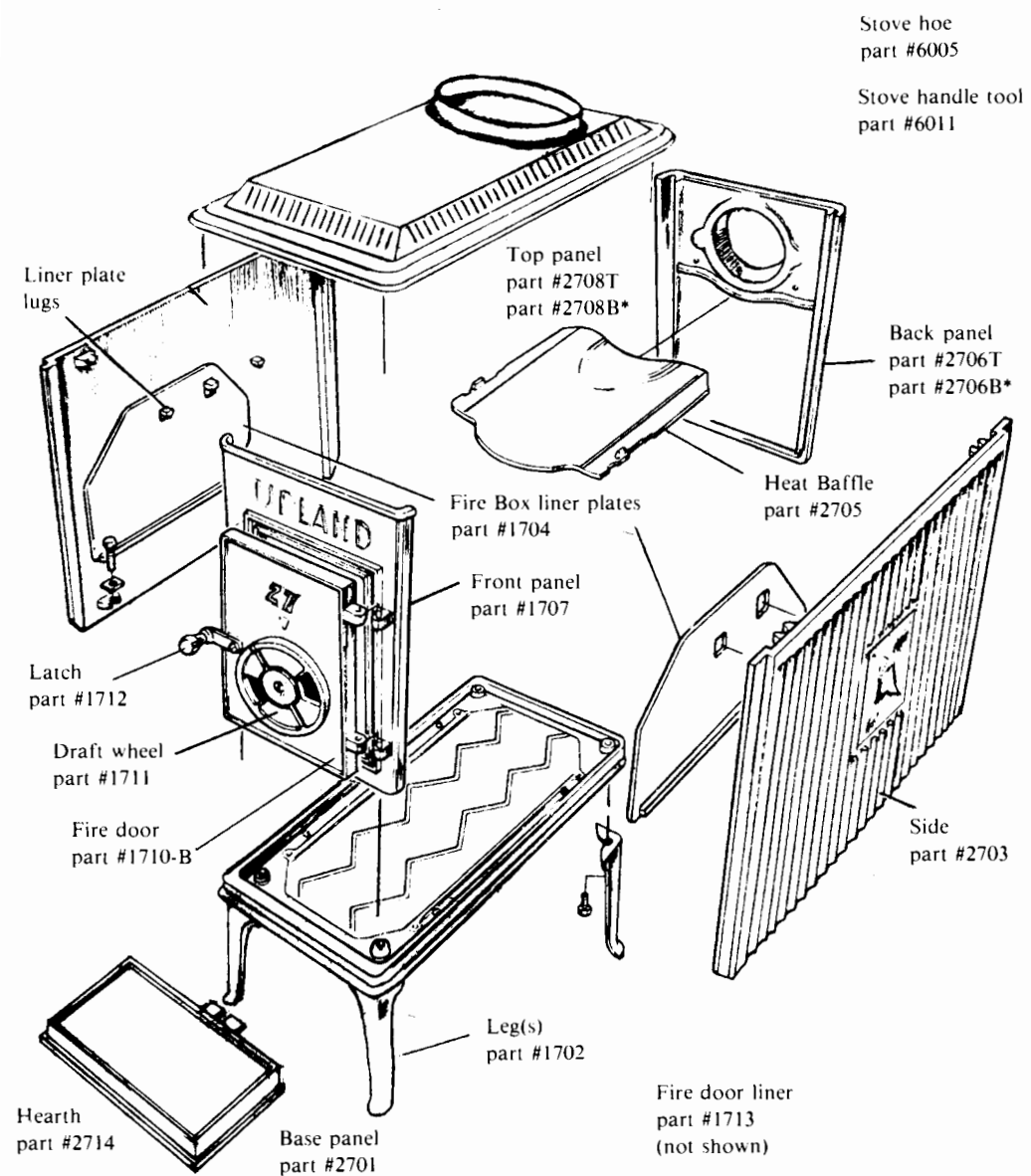
Fuel: Seasoned hardwood 20" long

Heating Capacity: 5875 cu. ft.
(33,000 BTU)

Vent: top or back

Disassembly:

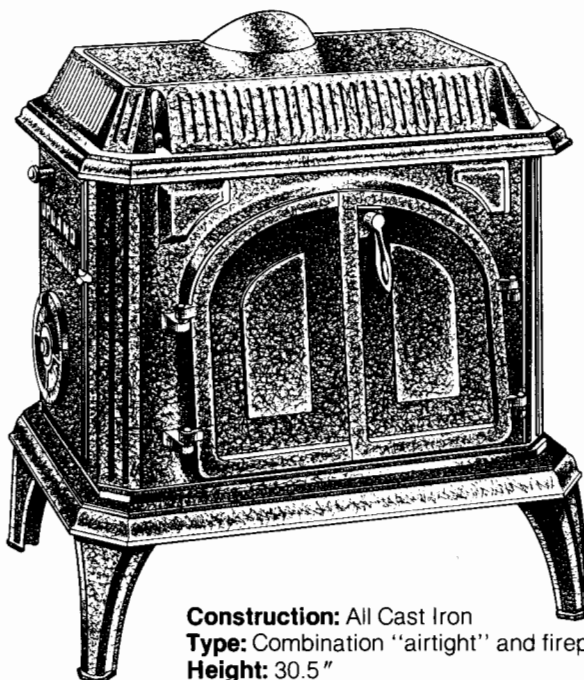
Disassembly of the Model #27 is exactly like that of the #17.



*Denotes Back Vent Option

Model #107

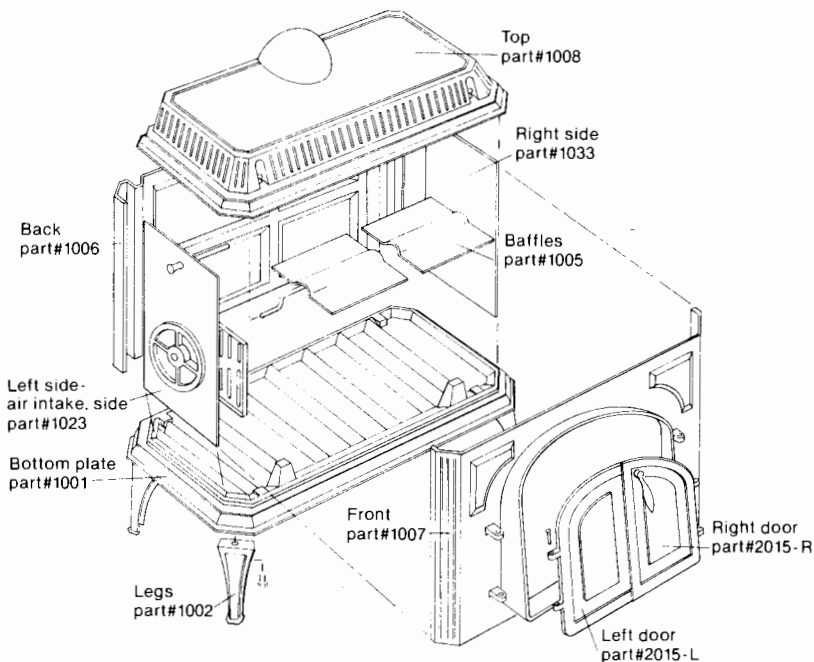
The Model #107 is the newest in the Upland line. Like the rest of the Upland Stoves, the #107 is made of high-quality cast iron. This stove is a combination airtight box-stove and fireplace. It has built-in baffle features that make it easy to convert from one mode to the other. The #107 has an offset flue collar for a wide variety of applications. The top of the stove offers a large cooking surface. Once the draft is set on this stove it can easily hold a fire for 10-14 hours.



Construction: All Cast Iron
Type: Combination "airtight" and fireplace
Height: 30.5"
Height w/o legs: 25"
Width: 20"
Length: 28"
Shipping Weight: 300 lbs.
Flue Diameter: 6"
Fuel: Seasoned hardwood maximum length: 23"
Heating Capacity: 7,500 to 9,500 cu. ft. 50,000 B.T.U.
Accessories: Spark guard, 20' stove hoe, and door opening tool (included)

Disassembly:

To disassemble the #107 first remove all the sand and ashes from the firebox. Next remove the nut on the rod attached to the left baffle, and slide the rod out of the stove. Remove the baffles, and lay the stove on its back. Remove the legs with a $\frac{7}{16}$ " wrench. Using a flat, wide chisel crack the furnace cement on the section(s) you wish to remove. Remove the four bolts on the base plate and the four bolts on the top plate, and the stove will come completely apart. **REMEMBER, THE FRONT PLATE AND THE DOORS ARE A SINGLE UNIT. IF YOU WISH TO REPLACE EITHER ONE, YOU MUST REPLACE BOTH.**



When ordering parts specify model number, part number, and part name.

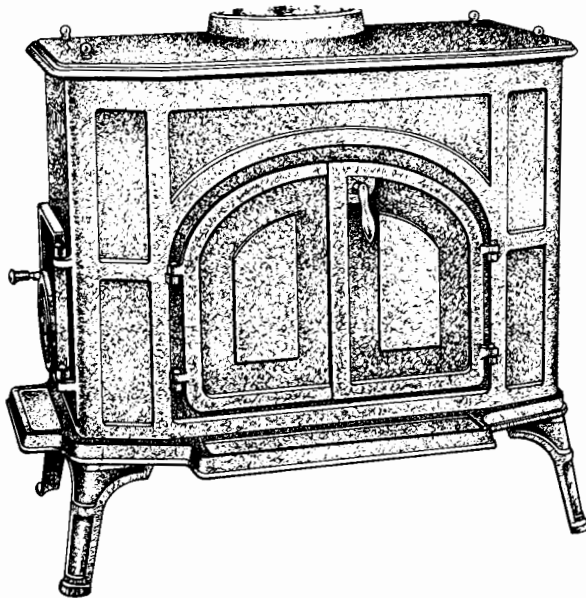
Model #207

The #207 is the largest stove that Upland manufactures. Like the #107 it can be used in either of two modes, fireplace, or airtight. The #207 is capable of heating 8-10,000 cubic feet. This translates into 5 or 6 average-size rooms. Accessories included with the #207 are a stove hoe, door opening tool, and spark guard.

Comparing this model with another American-made brand, John Vivian has stated,

“One model, designated the Upland #207 repeats many of the outward design features . . . including airtightness, but has eliminated most of the complex interior baffling and much of the cost. Only time and experience will tell, but for the typical American wood-burner, I’d bet the simpler design will prove the winner.”

John Vivian, *Wood Heat*.



Model #207 "Combination"

Specifications

Construction: All Cast Iron
Type: Combination "Airtight" and Fireplace

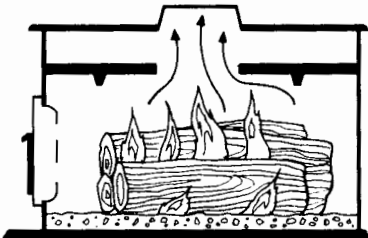
Height: 30 inches
Height w/o legs: 20.5"
Width: 18.5 inches
Length: 32 inches

Shipping Weight: 300 lbs.

Flue Diameter: 7 inches
Finish: 1100° flat black
Fuel: Seasoned hardwood 24" long
Heating Capacity: 8,000-10,000 cu. ft. (50,000 BTU)

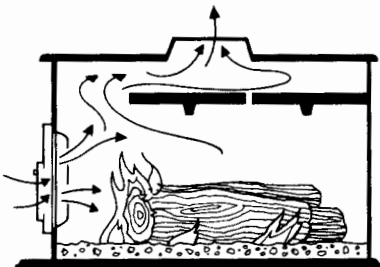
Accessories: Spark Guard and 28" Stove Hoe (included)

Vent: top and back



Fireplace Mode

A simple adjustment of the baffles allows a Franklin-like operation of the stove, creating the atmosphere of an open fire.

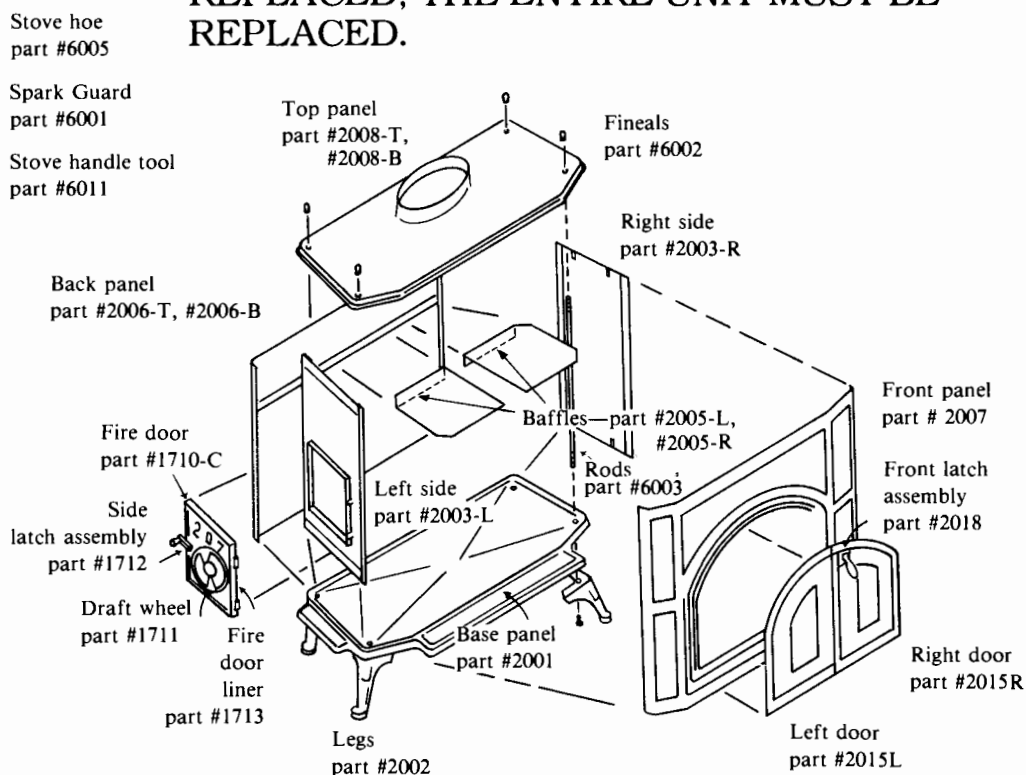


Airtight Mode

The heat baffle system causes the gases to flow in an "S" pattern, limiting heat loss up the flue pipe and causing the wood to burn from front to back. This controlled flow pattern mixes unburned gases with preheated fresh air, aiding in a more complete combustion.

Disassembly:

To disassemble the #207, first remove all sand and ashes from the firebox. Next remove the two baffles and lay the stove on its back. Remove the legs with a $\frac{7}{16}$ " wrench. When this is done, use a wide, flat chisel and crack all the furnace cement around the section(s) you wish to remove. Next remove the nuts from the four rods going through the stove. Pull the rods through the top, and the stove will come completely apart. **REMEMBER, THE FRONT PLATE AND THE FRONT DOORS ON EACH STOVE FORM A SINGLE UNIQUE UNIT. IF ONE PIECE IS BEING REPLACED, THE ENTIRE UNIT MUST BE REPLACED.**



When ordering parts specify model number, part number, and part name.

Limited Warranty

1. Nature of limited warranty.

We, Upland Stove Company, Inc., promise that the stove is free from defects in materials and workmanship.

2. Duration of the warranty.

This limited warranty shall be effective for a period of one year from the date of purchase of the stove.

3. Persons entitled to the benefit of this limited warranty.

Only the original purchaser of the stove is entitled to the benefits of this warranty. If the stove is sold or otherwise transferred by the original purchaser to another during the period of the warranty, such warranty shall automatically terminate.

4. Scope of the warranty.

During the one-year period of the warranty, we will, at our own expense, repair or replace the stove or any part found to be defective due to defects in materials or workmanship. We will have the option to repair or replace the part found to be defective or to replace the stove, all at our own expense. We shall determine who performs the repair or replacement of parts.

5. Exclusions from coverage of this warranty.

This warranty does not cover any damage to the stove or any of its component parts caused by misuse, mishandling or improper installation including installation not in strict conformity with local fire and building codes and regulations, operation of the stove other than in accordance with the operating instructions provided with the stove or ordinary wear and tear resulting from use of the stove.

6. Requirement to submit warranty card.

The dealer will provide you with a warranty card upon purchase of your new stove. The card must be completed and submitted as provided in the instructions contained on the card, to Upland Stove Company, Inc., within thirty days after the date of purchase. If the warranty card is not mailed within said thirty-day period, there will be no warranty of the stove or any of its component parts.

Miscellaneous

Pamphlets and Flyers

Upland Stove Company will supply pamphlets to distributors and dealers at no charge. The pamphlets that are available are on the following pages. Copies of NFPA Bulletin are available also.

Working Display Models

Upland Stove Company will reimburse dealers for using an Upland stove to heat their showroom. We will reimburse you \$50 for using a #207, \$45 for a #107, and \$25 for a #17 or #27, for one season.

Stock Rotation

We highly recommend you use your oldest stock first. When not in use, the stoves can rust inside, which will only detract from its appearance.

Service

In order to provide you with the best service, feel free to call Stuart Opp, Advertising Manager or Kevin Gilroy, Sales Manager. (607-656-4156) We're here to help *you*.

Labels

On the following pages are copies of the labels Upland places on its stoves. One label is a combined caution and serial number, one is an Energy Testing Laboratory sticker, and the third is a caution label, placed on the front of the stove, as required by UL 1482.

Caution and Serial Number

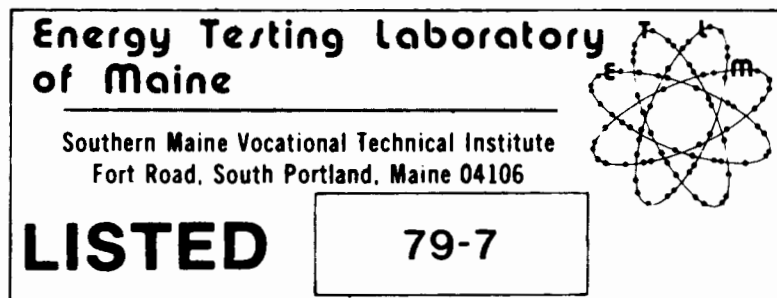
This label gives the minimum clearances from combustibles, and mentions cautions that the user of the stove should adhere to.

The serial number is in code. The first three digits are the model number, the next two are the date code, and the last four are the actual identification number. For example: 017-33-0001 is a Model #17 produced in August 1979 (33 code), being the first stove produced that month.

	<h3>CAUTION</h3>
	<p>FOR USE WITH SEASONED HARDWOODS ONLY. INSTALL AND USE ONLY IN ACCORDANCE WITH THE MANUFACTURERS INSTALLATION AND OPERATING INSTRUCTIONS. INSPECT AND CLEAN CHIMNEY FREQUENTLY. UNDER CERTAIN CONDITIONS OF USE CRESOTE MAY BUILD UP RAPIDLY. DO NOT OVER FIRE UNIT. NEVER USE FLAMMABLE LIQUIDS TO START FIRE.</p>
	<p>UPLAND STOVE CO., INC Greene, NY 13778</p>
<p>CLEARANCE FROM COMBUSTIBLES</p>	<p>SERIAL NO. <input type="text"/></p>

Energy Testing Lab Sticker

The Energy Testing Laboratory of Maine supplies us with stickers showing that they have tested our stoves and found that they comply completely with UL 1482 standards. The number on the sticker is the test report number. Copies of this test report can be ordered from Upland for \$3 a copy plus postage and handling.



Caution Label

The caution label on the front of the stove is intended to warn people, visually, that the stove is very hot while in operation. It is required by Underwriters Laboratory to help prevent burns and injuries to people unfamiliar with radiant space heaters.



CAUTION

**HOT WHILE IN OPERATION
DO NOT TOUCH, KEEP CHILDREN,
CLOTHING AND FURNITURE AWAY
CONTACT MAY CAUSE SKIN BURNS
SEE INSTRUCTIONS**

Bibliography

- Gay, Larry. *The Complete Book of Heating With Wood*. Charlotte, Vermont: Garden Way Publishing. 1974. —Accurate, thorough, and easily readable.
- Harrington, Geri. *The Woodburning Stove Book*. New York: Collier Books. 1977. — “All you need to know . . .”
- Kelman, Barbara, Gen. Ed. *Keeping Warm: A Guide for Wintertime*. New York: Quick Fox. 1978. — Only incidentally about woodstoves, but interesting and entertaining ideas for health and warmth.
- Newcomb, Wilburn W. *Woodstove Handbook*. Indianapolis, Ind.: Howard W. Sams & Co., Inc. 1978. —A handbook.
- Ross, Bob and Carol. *Modern and Classic Woodburning Stoves*. Woodstock, New York: Overlook Press. 1976. — Selecting, installing, manufacturers, importers, with special section on houses designed specifically for wood heat.
- Self, Charles. *Wood Heating Handbook*. Blue Ridge Summit, Pa: Tab Books. 1977. — A handbook.
- Sherman, Stove. *The Woodstove and Fireplace Book*. Harrisburg, Pa.: Stackpole Books. 1976. — A little bit about everything.
- Vivian, John. *Wood Heat*. Emmaus, Pa.: Rodale Press. 1976. — Covers the whole range of wood heating. Great bibliography. Revised in 1978 as *The New Improved Wood Heat*.
- Wik, Ole. *Wood Stoves: How to Make and Use Them*. Anchorage, Alaska: Alaska Northwest Publishing Co. 1977. — “How to” book.
-

Footnotes

¹Gay, Larry, *The Complete Book of Heating With Wood*, (Charlotte, Vermont: The Vermont Printing Company, 1976) p. 88.

²Mark's Engineering Handbook, p. 4-92.

³Vivian, John, *Wood Heat*, (Emmaus, Penn.: Rodale Press, 1978) p. 137.