care and operation

WHAT KIND OF WOOD TO USE?

Burn dry and well seasoned hardwood. Season wood *at least* six months, preferably a year to eighteen months. Woodburners who ignore this advice are likely to have dirty chimneys and poor performance from their heaters.

There are about 8600 BTU's of heat available from each pound of wood. It takes about 1000 BTU's to evaporate each pound of moisture from a log. The wetter the wood, the more energy it takes to get the moisture out of your firewood and less energy is available to heat your home. Seasoned wood produces more useable heat, 20-25% more in the case of some hardwoods. Seasoned wood will produce less creosote. Creosote is covered on page 8.

The moral is: Don't burn green wood. If you buy green wood, season it before using. With experience you can spot green wood easily. It is heavier; it looks different. Seasoned wood will show cracks radiating outward from the heartwood toward the bark, like wheel spokes. Green wood will not show this pattern of cracks.

Use the longest piece that will fit the fire box. The wood will tend to burn (especially with the draft turned low) from front to back in the fire box. The longer the stick, the longer the fire will hold.

You get roughly the same amount of heat from a pound of wood no matter what the species of tree it comes from. But wood is not sold by the pound, it is sold by volume - by the cord. Therefore, the dense heavy woods are the ones to buy, the ones that give you more pounds per cord.

The following figures, compiled by the United States Forest Products Laboratory, show the amount of heat available per cord of wood from a few representative tree species:

AVAILABLE HEAT PER CORD IN MILLIONS OF BTU*

	Green Wood	Air-Dry	% More Heat for Air-Dry Wood
Ash	16.5	20.0	21
Aspen (popple poplar)	10.3	12.5	25
Beech, American	17.3	21.8	26
Birch, yellow	17.3	21.3	23
Douglas Fir, heartwood	13.0	18.0	38
Elm, American	14.3	17.2	20
Hickory, shagbark	20.7	24.8	19
Maple, red	15.0	18.8	24
Maple, sugar	18.4	21.3	16
Oak, red	17.9	21.3	19
Oak, white	19.2	22.7	18

*BTU - British Thermal Unit

Other good, to moderately good, firewoods are apple, walnut, pecan, dogwood, cypress, sycamore and gum. The latter two are hard to split, as is elm.

A cord of wood measures four by four by eight feet. A cord of four foot logs thus stacked occupies 128 cubic feet and contains about eighty cubic feet of solid wood, the rest being air space between logs.

If you buy a cord of wood, cut it to length and split it, you will find it does not occupy 128 cubic feet when stacked. You have not been cheated. A cord cut to length and split packs more tightly and occupies less space.

If you want your wood to dry as quickly as possible, cut it to length and split it. Stack it where the air can move through the pile and shelter it from the weather. A wood shed with air vents in the side walls, like a tobacco drying barn, is effective.

If you cut your trees in the spring or summer, let them lie awhile, until the leaves wither. They will draw moisture from the wood, drying it more quickly than if you limbed the tree immediately.

A good time to cut your own wood is in the late winter or early spring, as soon as the woods are free from snow. Then hold the wood for use in eighteen months. This is often the best time to buy wood, too. Green wood can sometimes be had at lower prices in spring or early summer.

CAUTION

DO NOT USE COAL IN THIS HEATER

GET TO KNOW YOUR WOOD BURNING HEATER

Take the time to learn how different settings of the damper will affect burning. You will find that if you keep the air damper open one to two turns your heater operates at maximum efficiency. This can vary with the moisture in the wood. We cannot state just how much heat you will receive from your heater due to variations of chimneys and type of wood you are using. These all affect the way your heater burns.

Your wood should be placed into the unit from front to back. This allows the wood to roll toward the grate and receive its primary combustion air through the grate and ashes to fall through the grate in the ashpan. The secondary combustion air enters through the slots behind the door. This air sweeps the glass door clean and creates secondary combustion at the top of the unit.

Your manual spin draft control is located in the back of the unit beneath the blower, on top of the air intake assembly (see figure 1, page 3.) One to two turns open will give you an extended overnight efficient burn. Three to four turns open will allow more flame in the unit and a hotter burn.

DANGER

Do not operate stove with fuel door or ashpan open. This will cause fire to burn out of control and cause damage to electrical components on the unit.

The thermostat is factory set to switch on the blower at 120°F air temperature, and off at 90°F. The variable speed control knob located on top of the blower must be switched to the on position in order for the thermostat to activate the blower.