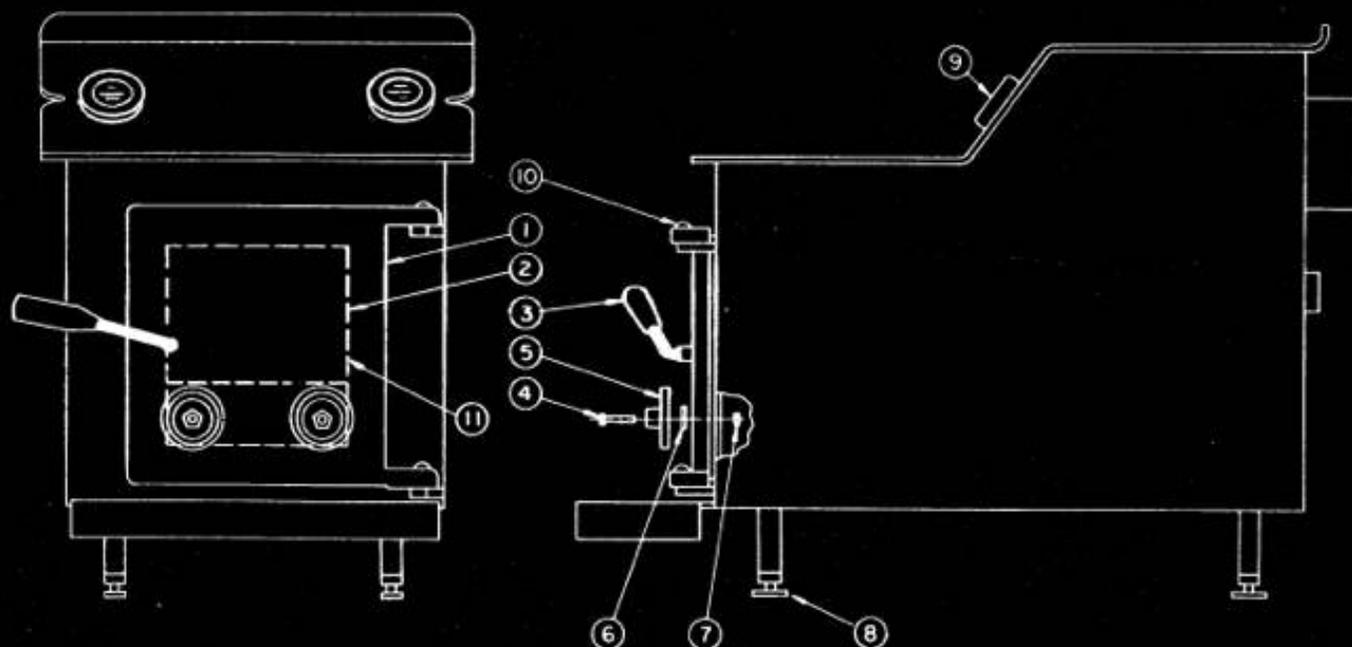


All Nighter[®] Stoves

INSTRUCTION MANUAL

for the proper care and safe operation of your new
RADIANT ROOM HEATER SOLID FUEL TYPE



ALL NIGHTER STOVE WORKS WEST, INC.

SAFETY NOTICE

IF THIS ALL NIGHTER SOLID FUEL ROOM HEATER IS NOT PROPERLY INSTALLED. A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

CONGRATULATIONS!

You are now the owner of an airtight, efficient woodburning stove! It should be a wholesome and ecologically correct addition to your environment. You may cook your meals as you heat your home on your new All Nighter Stove.

Please keep in mind that a woodburning stove requires a little more care and attention than other types of heaters. Wood must be cut, seasoned, stacked, and installed. Because the All Nighter is designed to burn for long periods, it is easy for the operator to burn the stove continuously. When the All Nighter is properly connected to a UL Listed Residential Type Building and Heating Appliance chimney or a masonry chimney (see "Evaluating an Existing Chimney," page 4), it only requires fuel additions a few times a day.

Do not forget to use the ashes on your garden, as they contain lime and small traces of potash and phosphorous.

Read this manual carefully before initial operation. We hope that it will be a helpful reference and that your All Nighter gives you many years of continued service.

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THINK SAFETY - AVOID POSSIBLE HAZARDS

THINK SAFETY This stove is to be operated only by a responsible person!

THINK SAFETY All persons operating this stove must be familiar with the safety and operating sections of this manual!

THINK SAFETY Never allow an uninformed person to assist in operation of this stove!

THINK SAFETY Never allow children to have access to this stove!

Ownership carries a responsibility which must be exercised. Many persons are qualified to operate a residential central heating system, since it can be controlled by a simple thermostat. In contrast, wood burning stoves should be operated only by qualified persons.

Get to know your stove, understand its habits, and you should be able to rest in cozy comfort.

SAFETY RULES

1. Installation must be in compliance with the state and local building codes. Consult your local building inspector for permits and advice prior to beginning installation.
2. Always use an Underwriters Laboratory Listed Residential Type Building and Heating Appliance chimney system.
3. Always consider the clearance dimensions given in the installation section of this manual as minimum. Never allow objects to be placed closer to the stove than 36".
4. Never run uninsulated stovepipe through combustible walls.
5. 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.
6. Keep chimney and stovepipe clear of creosote build-up to prevent chimney fires. Build-up should be checked periodically, especially during initial operation.
7. If stovepipe is used, it should be 22 or 24 gauge black or blued steel. NOTE: This pipe cannot be used to go through any combustible wall or ceiling.
8. Each joint in your pipe system should be fastened with three sheet metal screws evenly spaced around pipe.
9. This room heater is intended for use with wood fuels only. Do not use other fuels.

SAFETY NOTICE

IF THIS ALL NIGHTER SOLID FUEL ROOM HEATER IS NOT PROPERLY INSTALLED. A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

INSTALLING THE ALL NIGHTER STOVE

PREPARATION

1. Obtain a **BUILDING PERMIT** from your local building inspector for the installation of your ALL NIGHTER. Your All Nighter is not to be used in a mobile home.
2. When installing the stove on a combustible surface, use a **NONCOMBUSTIBLE MAT** beneath the stove as shown in the illustration. The material must be 3/8" asbestos millboard or equivalent material. The equivalent material must be approved by your local building inspector. This stove mat must extend a minimum of eighteen (18) inches out from the front door of the stove and eight (8) inches out from the sides and back of the stove (refer to the diagram below). Protection should also be placed under chimney connector, extending 2" all sides.
3. Instruct your installer to use **SECTIONS OF 22 GA or 24 GA 6 INCH BLACK OR BLUED STEEL STOVE-PIPE**, UL listed, insulated chimney sections, fittings, and connectors (as shown on page 3). Use only UL listed chimney components for your safety and for proper instructions. Use of aluminum type B gas vent for solid fuels is unsafe and prohibited by the National Fire Protection Association Code.
4. Use a **DRIP TEE** for ease of clean out and easy elimination of creosote build-up in the connection of your stove to either the stovepipe or chimney system. All stovepipe joints are to be connected with three sheet metal screws evenly placed around the pipe.

**FAILURE TO INSTALL THE APPLIANCE PROPERLY COULD
RESULT IN A HOUSE FIRE**

HELPFUL PUBLICATIONS

For further information on using your heater safely, obtain a copy of the National Fire Protection Association publication, "Using Coal and Wood Stoves Safely," NFPA No. HS-10-1978. The address of the NFPA is Battery March Park, Quincy, MA 02269

Other books which will be helpful in the safe operation of your All Nighter Stove are:

The Woodburning Encyclopedia, Vermont Crossroads Press,
Waitsfield, Vt.

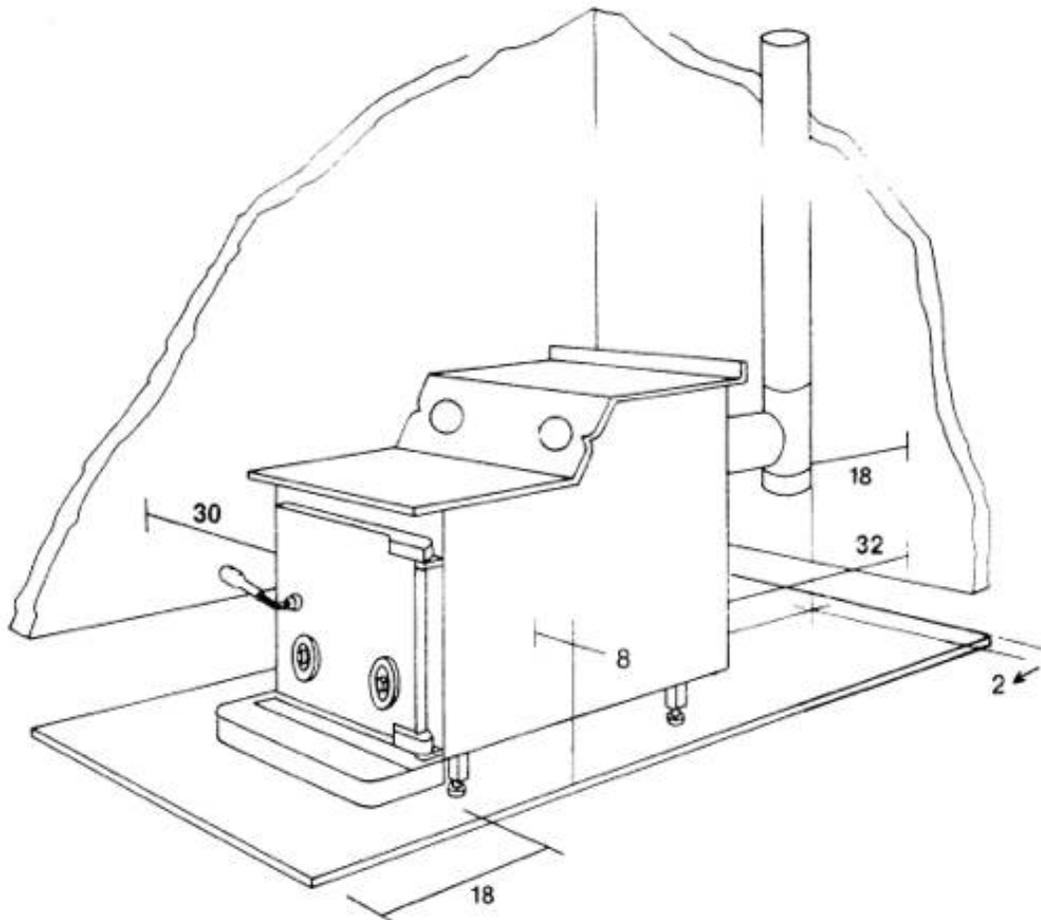
Modern and Classic Woodburning Stoves, Overlook Press,
Charlotte, Vt.

Wood Heat, Rodale Press, Emmaus, Pa.

Wood Burning Bulletins are also available from various Cooperative
Extension Offices.

INSTALLATION STEPS

- Step #1.** Place your stove on the non-combustible stove mat so that it is centered on the mat with at least 8 inches in from each side and the rear, also at least 18 inches of the mat must extend in front from a point below the stove door. Protection should include area under chimney connector, extending 2" all sides.
- Step #2.** Position your stove at least 36 inches away from any combustible wall to the rear, and 36" to a side wall.
- Step #3.** Be sure your stovepipe, when installed, will be at least 18 inches away from any combustible (wall) material.
- Step #4.** Level your stove by turning the adjustable legs up or down. Your stove should not rock or tip in any direction.
- Step #5** Install your U.L. Listed Residential Type Bldg. & Htg. Appl. chimney, following the manufacturers instructions that will be packed with it.
- Step #6.** Be sure to follow all local building codes as outlined by your local building inspector when you received your building permit.

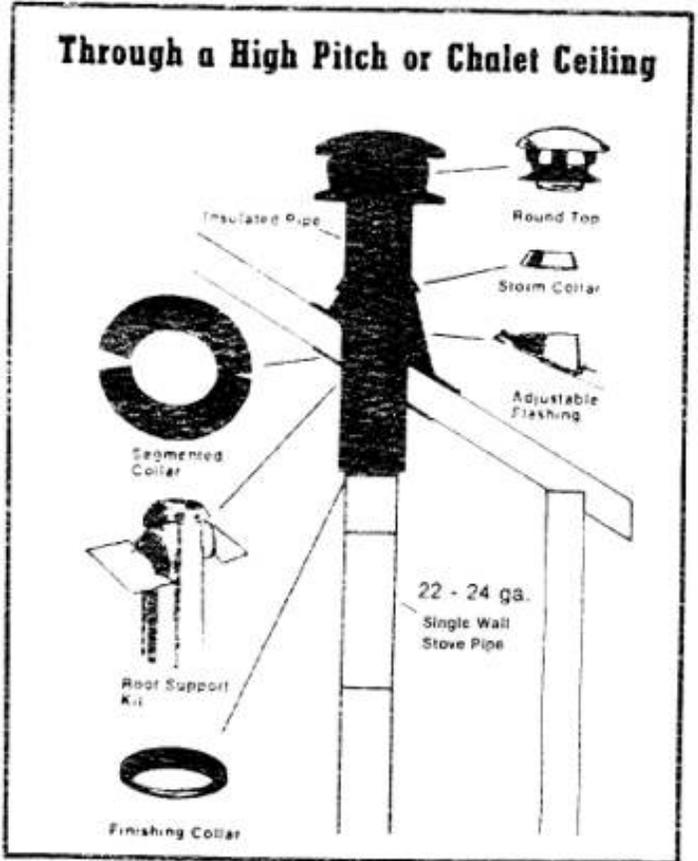
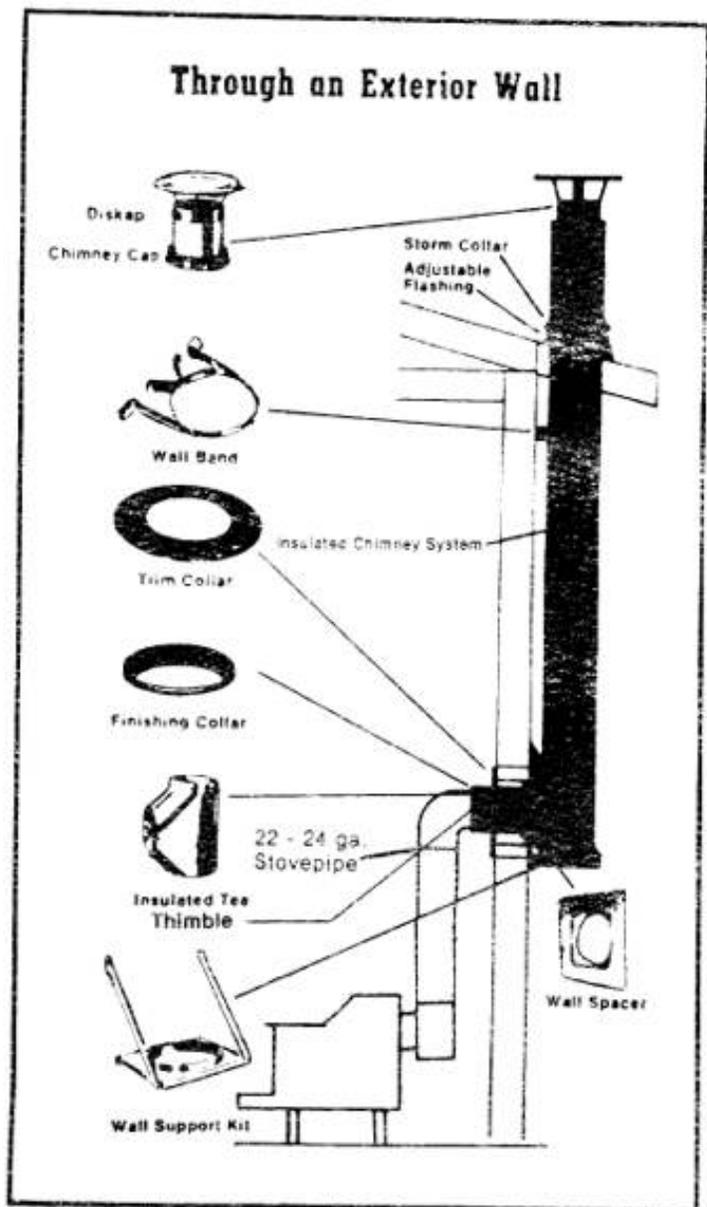
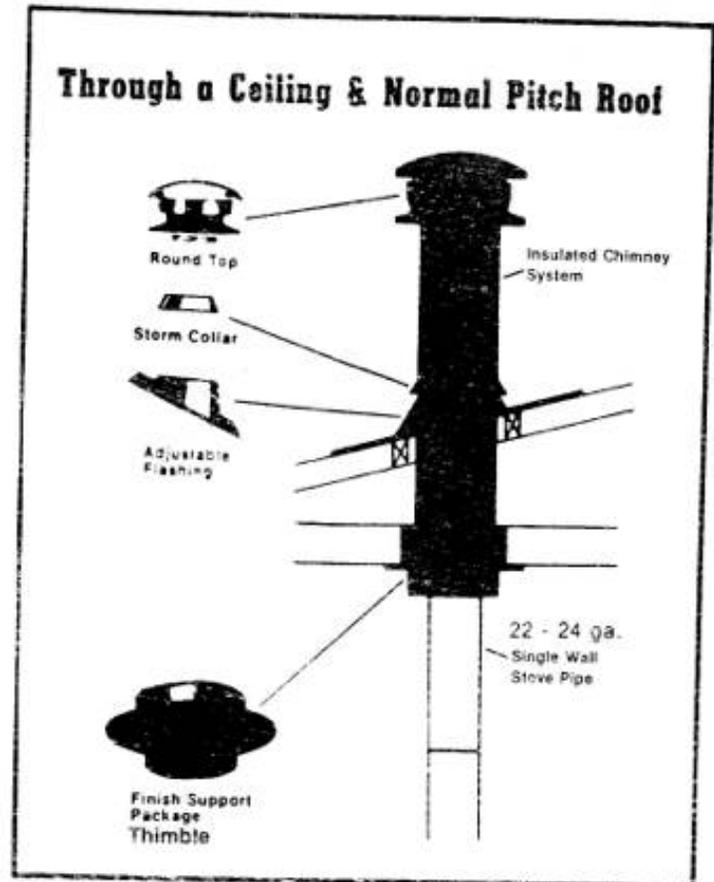


SOME NORMAL CHIMNEY INSTALLATIONS

Shown are some normal installations showing some of the necessary safety items using U.L. Listed Chimneys, Residential Type and Building Heating Appliance.

WE STRONGLY RECOMMEND:

That before you attempt any chimney system installation, you obtain the required permit from your local building inspector. Your local building inspector will also inform you on the proper local building codes pertaining to radiant room heaters and chimney system installations.



CHIMNEY CONSIDERATIONS

If you plan to use an existing chimney, the following steps should be performed:

- a. Make sure the chimney has a lining that is non-porous, smooth, and sealed; i.e. no holes or openings in the joints or liner.
- b. Make sure the chimney is clean and free of creosote build-up.
- c. The top of the chimney shall extend at least 3 feet above the highest point where it passes through the roof of a building, and at least 2 feet higher than any portion of a building within 10 feet.
- d. Make sure clean-out on chimney is air tight when closed.

- e. Chimney should have a chimney cap to help prevent down drafts.
- f. Never connect two stoves on the same level to a chimney.
- g. Do not extend height of chimney with a single wall metal extension.

If you plan to install your own chimney, follow the general examples which follow, *in addition to consulting your local building inspector* and stove dealer. Use only Underwriters Laboratory Listed Residential Type Building and Heating Appliance.

EVALUATING AN EXISTING CHIMNEY

A poorly constructed chimney will be a constant source of trouble and create a poor source of heat. The material used to construct a chimney may be any of a number of types: brick, stone, cement blocks, or insulated metal.

The construction of a chimney should be designed to retain as much heat as possible to reduce the cooling of your chimney and also reduce the creosote and condensation build-up especially when holding your fire overnight.

The lining should be smooth, clean and not porous, so that it is easily cleaned and will not absorb moisture. The size of the liner should not be reduced to a size smaller than the stovepipe connecting the stove to the chimney. Because smoke and heat travel upward in a spiral motion, a round liner is most desirable. A square or rectangular shaped liner with rounded corners is more efficient than one with sharp corners. Any space between the liner and outer wall should be DEAD AIR space, not a circulating air space. Dead air will retain heat; circulating air will chill the liner. A chimney may be much too large for the stove to operate in a satisfactory manner, but we seldom find one too high.

The following guidelines will assist in planning a stove-to-chimney installation. In addition to these guidelines, always consult your local building inspector.

1. The chimney to which the stove is to be attached should be clean, free of obstructions, and airtight.
2. A chimney lower than the roofline will be subject to a downdraft and increased creosote formation.
3. Single wall pipe will chill rapidly and cause creosote build-up.
4. A single brick wall chimney will also chill rapidly, causing creosote.
5. A porous cement block chimney without a good liner will give poor drafting and cause creosote problems.
6. A short single wall metal extension on the top of any chimney will chill rapidly and cause creosote.

7. The flue size, shape, and height of any chimney are equally as important as material used to construct the chimney.
8. All chimneys should be constructed with a clean-out that will be airtight when closed.
9. A straight chimney is best. If an offset chimney is unavoidable, it should be gradual, not sharp.
10. The height of any chimney should be several feet above the highest section of the roofline.
11. A chimney should have a chimney cap to help prevent downdrafts.

It is imperative that the installation be airtight. This is best accomplished by using furnace cement at each pipe joint, and where the stove is joined to the pipe, and where the pipe enters the chimney flue.

The All Nighter is designed to operate on an airtight principle. Any air leak will cause the draft to draw at points where least resistance is offered, such as at joints, where pipe enters flue, around loose flue thimble, other flue openings into chimney, around clean-out doors in chimney, or where decayed mortar between bricks has fallen out. All these could permit air to leak into the chimney. When this occurs, the gasses and smoke are not drawn off the stove in proper amounts, causing them to build up in the stove, and resulting in "back-puffing." All leaks must be eliminated. Air must enter only through the proper entrance.

Downdrafts in a chimney may cause a stove to smoke. A downdraft may be caused by air currents being deflected down the chimney by nearby objects, such as trees, buildings, or land formations. Downdrafts may also be caused by flue gasses which are chilled too quickly as they pass up the chimney. As the gasses cool, they become heavy and other gasses from the wood fire have to push a column of heavy air ahead of them in order to escape up the chimney. This could result in "back puffing" or back pressure, odors in the house, or poor combustion, which can be annoying. To correct a downdraft caused by a poor chimney design, it may be necessary to consult a professional who is able to improve the chimney design.

OPERATING THE ALL NIGHTER STOVE

BREAKING IN PERIOD

All new stoves require a break in period of at least seven days of continuous burning before they begin to operate at peak efficiency. Many new stove owners are unaware of this and sometimes become dissatisfied with their new stove. Please give your stove the opportunity to break in properly by following these instructions carefully.

We have applied a matte black 1200° F paint to your stove that requires that your first two or three days of operation should be slow to moderate burning so you may temper the finish and the construction of the stove. You should also realize that the All Nighter door is made of one of the finest quality castings that also requires a breaking in period.

FIRE BUILDING

1. Place paper and kindling toward the front half of the stove. Burning paper will help start the kindling, as well as help to create a draft in the chimney.
2. Open the draft vents on the door to allow air passage into the stove.
3. Ignite paper; when kindling is burning, add a small amount of dry wood and build up gradually to a hotter fire.

Do not stuff the stove, it needs oxygen. Never use kerosene or gasoline as starters. Mixing hard and soft woods is a good fire starter. A three log fire should be a minimum structure. Your All Nighter will handle most any type of wood, but some types produce more heat and will hold a fire longer.

When using split logs, avoid placing flat sides down. For the most heat combustion, air must be able to circulate around and through the fire. Do not use coal or charcoal as fuel. Use of such fuels may result in toxic emissions.

CAUTION! Open the door slowly when checking the fire or reloading.

To hold a fire overnight, fill the firebox over several burning logs. The draft vents should be open four turns for a normal overnight fire. Do not operate with the door open or ajar. Combustion air is to be provided through air inlet ports only.

The exact setting will depend on the chimney, on wind velocity, the type of wood, and the temperature. These same conditions will govern the amount of refueling necessary and the frequency of ash removal.

Under certain conditions of use, your All Nighter Stove may discharge a limited quantity of smoke when the charging door is open.

CAUTION! Do not use or store flammable liquids or materials in the vicinity of your stove!

CAUTION!

Overfiring the appliance may cause a house fire. If a chimney connector glows; you are overfiring.

ASH REMOVAL

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. If the ashes are disposed of by burial in the soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

The outside temperature and the temperature you wish to maintain in your home will generally determine the frequency of refueling and of ash removal. Other influencing factors will be the type of fuel available, how well your house is constructed and insulated, the location of the stove in the house in respect to doors, partitions, and open or closed stairways.

It is not necessary to remove all of the ashes. Up to an inch of ashes on the bottom of the stove makes a good bed on which to build a fire.

CREOSOTE - FORMATION AND NEED FOR CONTROL

An efficient, airtight, woodburning stove tends to build a deposit called "creosote" on the walls of the chimney system. If you are operating a low draft, burning soft woods (with lots of resins), the wood is wet or unseasoned, or the chimney is cool, you will develop a creosote build-up.

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

The chimney connector and chimney should be inspected at least twice monthly during the heating season to determine if a creosote build-up has occurred.

If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

Creosote may be detected by visually looking into a chimney. Professional chimney sweeps are capable of inspecting and cleaning your chimney. Heavy creosote build-up can be removed with standard flue cleaning equipment. This should be done at regular intervals.

There are a number of ways to keep creosote build-up in check:

1. Have the flue system cleaned at regular intervals.
2. Clean out the drip tee once a week.
3. Burn seasoned hardwoods as much as possible.
4. Burn an open fire from time to time or keep the damper open, especially when first building the fire. This lets the steam burn out of the wood. A quick hot fire will also heat the chimney walls and reduce creosote formation on the walls.
5. Burn a very hot fire once a week for an hour while the operator is in the area of the stove.

Should a chimney fire occur, call the fire department and close the screw vents on your stove.

If you have experienced a chimney fire and it is extinguished, do not go away from the chimney until you are absolutely assured that the chimney and surrounding structure has cooled, and is not damaged. Creosote-fed fires burn at temperatures which could damage steel or crack flue liners.

Creosote removal is achieved by disassembly of the stove pipe and removal of the creosote coating with wire brushes or similar tools. Similarly there are special wire brushes available to remove creosote from chimneys. See your local woodburning appliance store or refer to a chimney sweep for further information.

FUEL FOR THE ALL NIGHTER

Wood fuel keeps us in close touch with our ultimate life sustaining forces and Mother Earth. It is a fuel source that is not rationed.

Trees come in two divisions: softwoods and hardwoods. Softwoods usually have needles and have less heat potential. They are fast to heat, but are consumed rapidly. Softwoods are usually used for kindling. Hardwoods, usually broad leaved, are not always harder.

A cord of wood is a pile that is four feet wide, four feet tall, and eight feet long. This amounts to 128 cubic feet, but due to air spacing, a cord is usually considered to be approximately 96 cubic feet.

A stove cord is usually 16 inches long (one-third of a standard cord length).

Every tree has the same amount of heat energy in it pound for pound, approximately 8,600 BTU's (British Thermal Units). Different species have different densities, hence different weights. Most fruit wood is relatively dense, and is considered to be excellent fuel.

*Wood cut and used the same fall
Is worse than no wood at all.
Wood used in the fall, but cut in the spring,
Will a bright glow bring.*

-Anon.

CHARACTERISTICS OF SEVERAL WOOD VARIETIES

<u>Species</u>	<u>Wgt of 1 cu. ft. dry</u>	<u>Heat Value Rating</u>	<u>BTU/Cord (in millions)</u>	<u>Splitability</u>	<u>Coals</u>	<u>Sparks</u>
Hickory, Shagbark	45 lbs.	best	30.9	intermediate- tough	excellent	few
Beech	40 lbs.	best	27.5	tough	good	few
Maple, Sugar	39 lbs.	best	26.8	tough	excellent	few
Birch, Yellow	39 lbs.	avg.	26.8	intermediate	good	interm.
Maple, Red	34 lbs.	avg.	23.4	intermediate	excellent	few
Birch, White	34 lbs.	avg.	23.4	intermediate	good	interm.
Elm, American	31 lbs.	avg.	21.3	one of toughest	excellent	few
Pine, White	22 lbs.	poor	15.1	easy	poor	many

STOVE INSTALLATION CHECKLIST

- | | |
|---|---|
| <p>_____ 1. The stove is located on a noncombustible mat of 3/8" asbestos millboard or equivalent material.</p> <p>_____ 2. Floor protection extends out a minimum of 8 inches from the sides and back of stove and 18" from the front where the wood is loaded, and under chimney connector ext. (2" all sides) from combustible material.</p> <p>_____ 3. The stove is spaced at least 36" away from combustible material.</p> <p>_____ 4. Stovepipe of 22 or 24 gauge, 6" dia. black or blued steel is used.</p> <p>_____ 5. The stovepipe diameter is not reduced between the stove and the chimney flue.</p> <p>_____ 6. The total length of stovepipe is less than 10 feet.</p> <p>_____ 7. There is at least 24" between the top of the stovepipe and the ceiling or other combustible material.</p> <p>_____ 8. The stovepipe slopes upward toward the chimney and enters the chimney higher than the outlet of the stove firebox.</p> <p>_____ 9. The stovepipe enters the chimney horizontally through a fire clay thimble that is higher than the outlet of the stove firebox.</p> | <p>_____ 10. The stovepipe does not extend into the chimney flue lining.</p> <p>_____ 11. The inside thimble diameter is the same size as the stovepipe for a snug fit.</p> <p>_____ 12. A double walled ventilated metal thimble is used where the stovepipe goes through an interior wall.</p> <p>_____ 13. The stovepipe does not pass through a floor, closet, concealed space, or enter the chimney in the attic.</p> <p>_____ 14. A UL Listed Residential Type Building and Heating Appliance chimney is used where a masonry chimney is not available or practical.</p> <p>_____ 15. The chimney is in good repair.</p> <p>_____ 16. The chimney flue lining is not blocked.</p> <p>_____ 17. The chimney flue lining and the stovepipe are clean.</p> <p>_____ 18. A metal container with tight fitting lid is available for ash disposal.</p> <p>_____ 19. The building official or fire inspector has approved the installation.</p> <p>_____ 20. The company insuring the building has been notified of this installation.</p> <p>_____ 21. A fire has been built, draft was adequate, and the fire burned smoothly.</p> |
|---|---|

**LIMITED WARRANTY CERTIFICATE
FOR
THE ALL NIGHTER ROOM HEATER**

The undersigned warrants the ORIGINAL CONSUMER PURCHASER for residential use ONLY that:

The All Nighter all welded steel firebox and cast iron doors, under use as a wood-burning stove, will be free of defects in material and workmanship for a period of twenty-five (25) years from date of purchase, except as to paint.

Components of the stove are only warranted for a period of one (1) year from date of purchase against defects in material and workmanship, if properly installed and under ordinary use; HOWEVER, firebrick and optional items are specifically EXCLUDED from this warranty.

If such stove is found to contain the aforescribed defects within the warranty periods stated above, the undersigned shall, at its option, either repair or replace the firebox or any components without charge.

Written notice of any such defect occurring within the warranty period must be mailed by certified United States mail to the undersigned immediately on the discovery of the defect, together with a copy of this certificate, upon which the Original Consumer Purchaser will indicate the date purchased, serial number, and name and address of the Dealer. The undersigned will take remedial actions as provided above, within Sixty (60) days after the defect is substantiated.

This Warranty specifically EXCLUDES any incidental or consequential damages resulting from the purchase or use of a All Nighter Room Heater.

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.

This warranty gives you specific legal rights, and you may also have other legal rights which vary from state to state.

Model _____

Serial No. _____

ALL NIGHTER STOVE WORKS WEST, INC.
425 N. W. "K" Street
Richmond, IN 47374

DETACH AND MAIL IMMEDIATELY

SERVICE PARTS

(See Manual Cover for number references)

NO.	PART NAME	MID GLO. MOE	JUMBO MOE	GIANT GLO
1	DOOR	161087	161032	161030
2	DOOR BAFFLE	160288	160085	
3	COOL HANDLE	160070	160070	160070
4	3/8 - 16 x 4 BOLT	MO616C2	NO611C2	NO611C2
5	DRAFT SCREW VENT	160093	160093	160093
6	3/8 - 16 JAM NUT	NO60CHJ	NO60CHJ	NO60CHJ
7	3/8 - 16 HEX NUT	NO600CH	NO600CH	NO600CH
8	LEG BOLT	160094	160094	160094
9	ALUMINUM CAP	160069	160069	160069
10	HINGE PIN	ED707BH	ED707BH	ED707BH
11	GLASS ASS'Y	161110		161056

These parts may be ordered from All Nigher Stove Works West
Richmond, Indiana 47374

SPECIFICATIONS

	MID. GLO	JUMBO MOE	GIANT MOE		MID	JUMBO	GIANT
LENGTH	36"	31"	31"	FLUE SIZE	6"	8"	8"
WIDTH	21½"	31"	31"	MAX. LOG			
HEIGHT	31½"	31"	31"	LENGTH	24"	24"	24"
WEIGHT	436 LBS.	500 LBS.	470 LBS.				

BLOWER MODEL STOVES USE ALL NIGHTER BLOWER NO. 169011
THIS INCLUDES A UNIVERSAL ELECTRIC BLOWER JAIC 140N#

IMPORTANT!

The other side of this Warranty form must be property filled out and returned to All Nighter Stove Works West, Inc. Richmond, Indiana 47374 within 30 days of purchase or the warranty is null and void. The purchaser should fill out and Keep the top portion of this form for their own records.

OPERATING THE ALL NIGHTER.....

Breaking In.....

Fire Building.....

Ash Removal.....

Creosote - Formation and Control.....

FUEL FOR THE ALL NIGHTER.....

ALL NIGHTER INSTALLATION CHECK LIST.....

LIMITED WARRANTY..... Ba

DETACH AND MAIL IMMEDIATELY