

Englander[®]

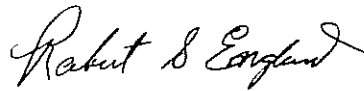


INSTALLATION & OPERATION MANUAL

INSTALLATION & OPERATION BOOKLET

You have just purchased an Englander wood or coal unit from a fine line of heating equipment. Each part of your unit is of high quality material and superior workmanship. We would like to thank you for purchasing our product and wish you many years of heating pleasure.

Sincerely,



R. S. England
President

CAUTION:

This unit must be installed in accordance with these instructions and must comply with local building and fire officials codes. Failure to do so could result in a chimney or house fire.

Keep children, furniture, fixtures, and all combustibles away from any Englander Unit.

Maintain a minimum clearance of 24" from fire box unit and 18" from flue pipe to any combustibles.

Read these instructions carefully before installing any model.

INSTALLATION & OPERATION MANUAL

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SECTION I: FLUE SYSTEM FOR FREESTANDING UNITS

A. Existing Flue System

If you have chosen an Englander freestanding unit, this unit is designed to connect to an existing flue system, such as masonry or premanufactured flue systems. If you have a masonry flue system you should inspect the inner liner very carefully for cracks in the liner. If there is no liner in your chimney, we recommend you install or have a stainless steel liner installed. If you have an existing premanufactured flue system you should inspect the inner liner to insure there is no buckling or warping and no cracks in the liner.

Whether you have a masonry or premanufactured flue system, you should clean the chimney before installing your new unit to the flue system. We strongly recommend you have a qualified chimney sweep clean and inspect your flue system. The sweep can spot problems you may unknowingly overlook. The sweep in most cases will be able to make the necessary repairs or at least recommend qualified people to do the work.

It is permissible to connect your unit to a chimney that has another unit connected into it. However, you should never make the connection at the same level. One will rob the other of draft pull and neither will operate in a satisfactory manner.

B. Flue Size Needed

In order to determine the proper size flue system necessary for your unit to operate properly, simply measure the inside diameter of the flue collar on the unit you have purchased. You will either have a 6" or 8" collar. The flue you install or already have must be the same size or larger as the flue collar on the unit. You can connect the unit to a larger flue system, but you cannot connect the unit to a smaller flue system. Example: Connecting a unit with a 8" collar to a 12" flue system is fine. Connecting a unit with a 8" flue collar to a 6" flue system is not recommended. This applies with either masonry or premanufactured flue systems.

C. Installation Of A New Flue System

1. Masonry flue: In the event you plan to install either a flue system yourself or have a flue system installed, there are several avenues you can take. In the mid and late seventies masonry flue systems became very popular. Even today a masonry flue system is a satisfactory system to have. If you are considering a masonry system, you should consult with your local building officials for the proper procedures in construction of a masonry flue system. We recommend you consult with and have your flue built by a licenced, bonded contractor.

Most masonry flues are placed against the outside wall and extended upward beside the house. The flue thimble is then inserted through the wall, making connection with the vertical flue and the stove flue pipe. Exercise extreme caution when drilling through the wall. You must maintain proper clearances between the connecting liner and any combustibles in the wall.

We also recommend that you have a flue door located at least 2' below your flue thimble connection for easy access and clean out. You should make this door as airtight as possible.

It is the customer's responsibility to insure that the chimney (or flue system) is safe and in good operating condition. England's Stove Works, Inc. will not be responsible for an accident contributed to a unit connected to a faulty chimney or flue system.

2. Premanufactured Flue System: In the past few years premanufactured flue systems have become very popular, because this type system is fairly easy to install and when installed correctly, it is very safe. There are many premanufactured flue systems on the market to choose from. In making your choice be sure the system has a recognized label of approval such as U.L., B.O.C.A. or I.C.B.O. Either of

these approvals will insure the flue system is constructed of the proper materials and meets required safety standards. Your local Englander dealer will usually handle a top grade and approved flue system such as Preway, White Metal Products or Metalbestos.

There are two very popular methods for installation of a premanufactured flue system. The first, most popular and least expensive is through the ceiling and out the roof. This is the most direct route and creates a tremendous draw because less pipe is required. It is less expensive because insulated pipe is only needed from the ceiling up. Single wall 24 gauge or thicker pipe is used from the ceiling to the unit.

The second method for installation of a premanufactured system is to go through the wall and up the outside of your home or structure. This method is more expensive because more insulated pipe is required. You must use insulated pipe through the wall and up the outside of your home. Whether you choose to go through the ceiling or through the wall you must exercise extreme caution in your installation. You must maintain proper clearances to combustibles in either installation. Your flue pipe manufacturer furnishes a wall thimble or ceiling support box, and when these are installed properly the correct safety clearances will be met. If you choose a premanufactured flue system and you feel you are not qualified or capable of installing the system, you can consult your local Englander dealer for information or a qualified contractor can install the system for you. It is the customer's responsibility to insure that the chimney (or flue system) is safe and in good operating condition, England's Stove Works, Inc. will not be responsible for an accident contributed to a unit connected to a faulty chimney or flue system.

SECTION II: FLOOR & WALL PROTECTION FOR FREESTANDING UNITS

A. Floor Protection

If your floor is constructed of a non-combustible material such as brick or concrete then there is no floor protection required or needed. If your floor is constructed of a combustible material such as hardwood, carpet or linoleum you must place protection between the unit and the combustible material.

There are many stove floor and wall boards on the market. One must be very cautious in choosing the proper protection. The board must be listed either U.L., B.O.C.A. or I.C.B.O. We highly recommend stove floor and wall boards manufactured by R-CO., located in Lakewood, New York. After examining the area in which you plan to locate your unit and you determine it requires a board, the next step is to select the proper size board needed. The Englander unit you choose will determine the board size. The board should be large enough to provide a minimum of 6' behind the unit and 6" on either side, with 18" in the front or the side where the door is located.

Models & Minimum Board Size Required:

18P, 24F, 24D, 24E, 24A	36" x 48"
28B, 28C, 28G, 28H, 28I, 24G, 28I, 28Q	48" x 48"

B. Wall Protection

Your Englander unit can be placed within 24" of a combustible wall such as paneling, wall paper, or sheetrock. However, in some areas, local code requires 36" clearance from any combustible which you must comply with. If you need to place your unit closer to a combustible wall you will require wall protection. There are many wall board manufactures available. These boards require a 1" air space between the board and the wall, reducing your clearance by 1/2". Again, we recommend Kemstone because they require no air space. You can place your unit within 12" of the Kemstone wall board which reduces your clearances by two-thirds. If you have a ceiling flue hook up, you need to have wall protection from the floor to the ceiling. If

you have a wall flue hook up, you need wall protection at least 12" above the wall thimble.

SECTION III: HANDLING YOUR UNIT

The first problem you may encounter is getting your unit in your home. The Englander stoves are well constructed which makes them rather heavy. To lighten the unit and make for easier handling, remove the door and firebrick and replace them when you have set your unit in place. It is recommended that you borrow or rent an appliance hand truck as well. Never try to handle your unit by yourself. As a rule, three or four adults can handle even the heaviest unit without any problems.

SECTION IV: FREESTANDING PLACEMENT & HOOK UP

Once you have your flue system complete and you have installed your floor and wall protection, you are now ready to place your unit and connect it to your flue system. If you are placing your unit on a stove board make sure you maintain the proper clearances as specified. Once you have placed your unit in position, follow these procedures: (Note: For use of single wall 24 gauge or thicker black pipe)

1. Start at the flue collar on your unit with the first connection. Place the male end of your first section into the collar on the unit. If you have a loose fit take the section apart and apply furnace cement around the male end of the section and reinsert into the flue collar on the unit.
2. Drill a small hole through the flue collar on the unit and through the male end of the piece which you have inserted. Insert a sheet metal screw through the flue collar on the unit and the pipe.
3. Once you have secured your first section, continue this process to your flue outlet thimble. Be sure to place the male end of each joint toward the unit, cement and place sheet metal screws in each connection. Wipe your pipe clean of excess cement and finger prints.
4. The unit you have purchased may not have a built in damper. If it doesn't you should place a damper in the first joint of the pipe from the unit. Your local dealer can supply you with a good cast iron damper.
5. After you have done the first four steps, attach the blower motor and any accessories you may have purchased. Place the gasket material in the door frame. You are now ready to build your first fire. (See section on building your first fire.)

SECTION V: INSTALLATION OF ENGLANDER HEARTH MODEL UNITS INTO EXISTING MASONARY OR PRE-MANUFACTURED FIREPLACE

A. Inspect your fireplace flue liner to insure it is in proper working order and free of any obstructions. Also, measure your opening and hearth to make sure the unit will fit properly. Your hearth must be a minimum of 14" wide (measure from the face of the fireplace) and 6" high (measure from the floor). Once you have determined your unit will adapt to your fireplace, follow these procedures:

1. Remove existing damper from fireplace. If unable to remove make sure it is in the open position and secure with a piece of wire to remain open.
2. Lay cover plate face down on floor and apply insulation around outside edges.

(Use fiberglass insulation with adhesive backing when available. If not, regular fiberglass will be suitable.)

3. Mount fireplace cover over opening, being careful to center.
4. Place unit on hearth and slide tight against cover plate. (Note: The plate has a pre-punched hole for the flue collar to extend through.) Make certain the cover plate is tight against the fireplace brick or stone work.
5. Attach your blower motor to your stove and any accessory items you may have purchased. Place your gasket material around the door frame on the unit. Now you are ready to build your first fire. (See section on building your first fire.)

SECTION VI: INSTALLATION OF ENGLANDER FIREPLACE INSERTS

Inspect your flue liner to insure it is clean and clear of any obstructions. Measure your opening to insure that it is large enough to accept the Englander insert you have chosen.

- A. Remove the damper from your existing fireplace. If unable to remove, make sure it is in the open position and secure with wire to remain open.
- B. Lay the coverplate face down on floor and apply insulation around the outer edges. (Use fiberglass insulation with adhesive backing if possible.)
- C. Place the insert in position on the fireplace and slide part of the way into the fireplace opening.
- D. You are now ready to attach the cover plate to the unit. You will notice the insert has a flange on both sides and across the top. The cover plate has clips welded on the back side, (one on each side of the cover plate and two at the top of the cover plate.) These clips are designed to insert behind the flange on the unit. Two people are usually required to set the cover plate in place properly.

1. One person should be on each side of the cover plate.
2. Lift the cover plate so the bottom of the plate is high enough to clear the top of the insert.
3. Slide the plate down, using the notches on either side of the unit in front of the side flanges, until the clip on the cover plate comes in contact with the top edge of the side flange. Using a flat head screwdriver, spread the clip on the plate enough to past the flange. Slide the cover plate down even further until the two clips on the cover plate come in contact with the flange on the top of the insert. Use a flat head screwdriver to spread the clips enough to pass by the top flange. Now slide the cover plate as far down as possible.
4. Slide the unit completely into the fireplace. Make sure the cover plate is very tight against your brick or stone work and that it is well insulated.
5. Attach your blower to the unit. Place your gasket material around the door and attach any accessory items you may have purchased. You are now ready to build your first fire. (See section on building your first fire.)

SECTION VII: FIRING YOUR UNIT

A. Making Your First Fire:

Place paper and kindling over the entire bottom of your unit so you can start an even burning fire. Open both draft controls and light your fire, letting the fire burn freely until the kindling is well caught. Now place several pieces of split hard wood on the fire and allow them to burn freely. (Note: Your new unit will smoke for a few minutes. This is called cooking out. This is a one time affair and is no cause for alarm.) After you have established a hot bed of coals, place several logs in your unit and set your draft controls on the door to regulate the amount of heat you want your unit to generate.

B. Everyday Fueling:

Depending on the model you have selected and the amount of area you wish to heat, you should get from 8 to 12 hours burning time and good heat from a stoking of wood or coal, (stoking means filling the unit full). After you have established a hot bed of coals, fill your unit with good hard wood and open both draft controls on the doors 1/2" to 3/4 of an inch. Allow your unit to burn freely for 15 to 30 minutes. This enables the wood you just placed in the unit to get caught. Now close your drafts completely and open one quarter to one half turn. This procedure should give you 8 to 12 hours burn time and good heat.

No two systems draw quite the same. You may find it necessary to experiment with the draft controls on the door.

Follow the above procedure each time you stoke your unit.

Remember: The more draft entering the fire box the hotter your fire will burn and the faster the wood will be consumed. If you for any reason have problems regulating your unit, consult your local dealer or the manufacturing plant.

SECTION VIII: ASH REMOVAL

When the ash build up gets high enough so it tends to roll out the door it is time for you to remove the ashes. We recommend one of two ways to do so:

1. Every three to four weeks, let the fire burn out then remove all ashes except leaving at least one quarter inch of ashes on the bottom of the fire box. Then make another fire. (See Section VII-A Making Your Fire.)
2. Every seven to 14 days when the unit has burned all the wood and you have nothing left except for a hot bed of coals, push the hot coals (or live coals) back toward the rear of the unit. Take out as many ashes as possible, always leaving at least 1/4" of ashes in the back of the unit toward the front of your unit. Place split wood on the coals and fill the unit. (See Section VII-B Everyday Fueling.)

SECTION IX: CARE & MAINTAINANCE

There is very little maintainance to your unit. However, there are a few items of maintainance you should be aware of.

1. Preserving the finish—Your unit comes from the factory with a painted finish of high temperature heat resistant paint. To preserve the finish while dusting during the heating season (when the unit is hot) wipe with a damp cloth. In summer months dust your unit with furniture polish while you are dusting your furniture. Never use stove polish on any Englander unit.
2. Repainting your unit—You may find it necessary to repaint your unit every four to five years, especially if you have been cooking on your unit. This is the most important part of your maintainance. The unit is under warranty as long as you own

the unit. However, if the fire box on the unit rusts out from the outside, the warranty becomes void. If rust spots occur simply use steel wool to remove the rust and repaint. (Use high temperature stove paint).

3. Blower assembly—If you have selected a unit with a blower system, there are two oil ports on the motor housing of the blower. Prior to each heating season you should use 3 in 1 oil or sewing machine oil, placing 3 or 4 drops of oil in each oil port.

4. Door & window gasket—Each unit comes with a gasket kit for the door. This gasket should be replaced every two years. To replace, use a flat head screwdriver to scrape the old gasket off and put the new one in its place. If you have a unit with glass in the doors or a glass window model, the gasket for the window should be replaced every three years. To do so remove the glass from the unit and scrape the old gasket off and replace with new gasket. Replace glass back in unit.

SECTION X: CHIMNEY & FLUE PIPE MAINTAINANCE

A. Chimney & flue system maintainance:

Whether you have a masonry or premanufactured flue system or whether you have a free standing, hearth model or insert unit, it is essential you have your chimney inspected and cleaned every year. Cleaning your chimney is not a difficult task and many stove owners choose to inspect and clean their own flue system. However, many owners will contact a local chimney sweep to inspect and clean their flue system. We highly recommend you have a professional chimney sweep inspect and clean your flue system. Remember that a professional can spot problems you may overlook.

B. Flue pipe maintainance:

Whether you are connecting your free standing unit to a masonry or premanufactured chimney system, you should have 24 gauge or thicker single wall stove pipe to connect your unit to your flue system. This pipe requires a certain amount of maintainance. You should clean the pipe once a year usually right after the heating season or just before the coming heating season. This pipe will also have to be replaced every three to five years depending on the thickness of the pipe (the thicker the longer it will last).

Note: It is a good idea to clean your chimney and flue pipe in the spring to eliminate any lingering odor through the summer months.

SECTION XI: THINGS THAT COULD CAUSE YOUR STOVE TO SMOKE

It is of utmost importance that installations are made air tight. This is best accomplished by using furnace cement at each pipe joint and where the elbow or first joint of pipe enters the heater and where the chimney flue. Any existing air leaks will cause the draft to draw at points where least resistance is offered, such as: at the joints where pipe enters chimney flue, around loose flue thimble, other flue openings into the chimney, around cleanout doors in chimney, and where decayed matter between bricks has fallen out permitting air to enter chimney. When this takes place, the gases and smoke are not drawn off the stove in proper quantity, causing them to build up in volume within the stove, which results in "back puffing." All such leaks must be sealed off air tight. In other words, the entire chimney "pull" or "draft" must be on the draft entrance only.

There are two main causes of chimney down draft. One readily recognized is air

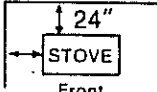
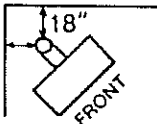
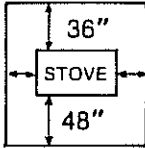
currents being deflected down the chimney by nearby objects such as a tree, building, or hill. The other cause, equally or more common, but seldom understood or recognized is that in many chimneys the flue gases are chilled too quickly as they pass up the chimney. The temperature of the flue gases drops and they become heavy and then other gases from the wood fire have to push a column of heavy air ahead of them in order to escape up the chimney. This often results in back puffing or back pressure, odors in the house, or poor combustion which can be annoying. If you have a smoking problem that you can't correct, consult your local dealer or the customer service department at the factory for assistance.

SECTION XII: WHAT CAUSES CREOSOTE FORMATION?

Creosote is caused from the condensation of the vapor that exists within the escaping smoke. The density of the vapor is dependent on the moisture content of the fuel. However, a severe downdraft condition, caused from taller objects surrounding the chimney, such as a hill, trees, other buildings, or from a chimney with loose bricks around the vents, will cause creosote formation. Under such conditions, the cold air drifts into and down the chimney, chilling the escaping vapor within the smoke below the dew point and depositing this residue on the inside of the chimney walls. The latter is sometimes corrected through the use of an "open vented" type of chimney cap. However, this type cap will not correct poorly constructed chimneys, or chimneys in bad state of repair. Such chimneys must be repaired by rebricking or repainting.

IT IS IMPORTANT TO KEEP THE CHIMNEY FLUES AND STOVE PIPE FREE OF EXCESS FORMATIONS OF CREOSOTE.

The most important thing you can do to keep creosote formation down is to refer to Section VII-B—Everyday Firing. Follow this procedure as close as possible. By doing so you will help eliminate creosote buildup.

<p>Install With Minimum Clearances To Walls As Shown 24" from stove to wall</p>  <p>Front Sidewall-Backwall Installation</p> <p>18" from flue to wall</p>  <p>Corner Installation</p>	<p>PREVENT HOUSE FIRES Install and use only in accordance with manufacture's instructions and Local Building Codes.</p> <p>Chimney type: Minimum 6" diameter approved residential type. Chimney connector: 6" diameter Minimum 24 gauge</p> <p>Install at least 18" from wall and 18" from ceiling Blue steel Special methods are required when Passing through a wall or ceiling. See instructions and building codes.</p> <p>Test standards: U.L. 737, 1482. See BOCA Research Report 80-9, ICBO. Research Report 4051. Testing and Inspecting Agency Froehling & Robertson, Inc. Richmond, Virginia!</p> <p>Manufactured by: ENGLAND STOVE WORKS, INC. P. O. Box 206 Monroe, Va. 24574</p>	<p>Floor Protector Minimum Size 36" x 48"</p>  <p>Floor Protector Material Type of Fuel Approved: Wood & Coal Approved U.L. or equivalent</p>
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To The Customer:

We have supplied you with as much information as we feel necessary to cover any installation you may desire. However, we cannot cover unforeseen situations that may not be covered in this booklet.

Never second guess any problems in the installation of your wood stove. If you have a situation not covered in this booklet, please contact your local dealer or you may contact the factory by letter or phone:

**England's Stove Works, Inc.,
P. O. Box 206,
Monroe, VA 24574
804-929-0120**

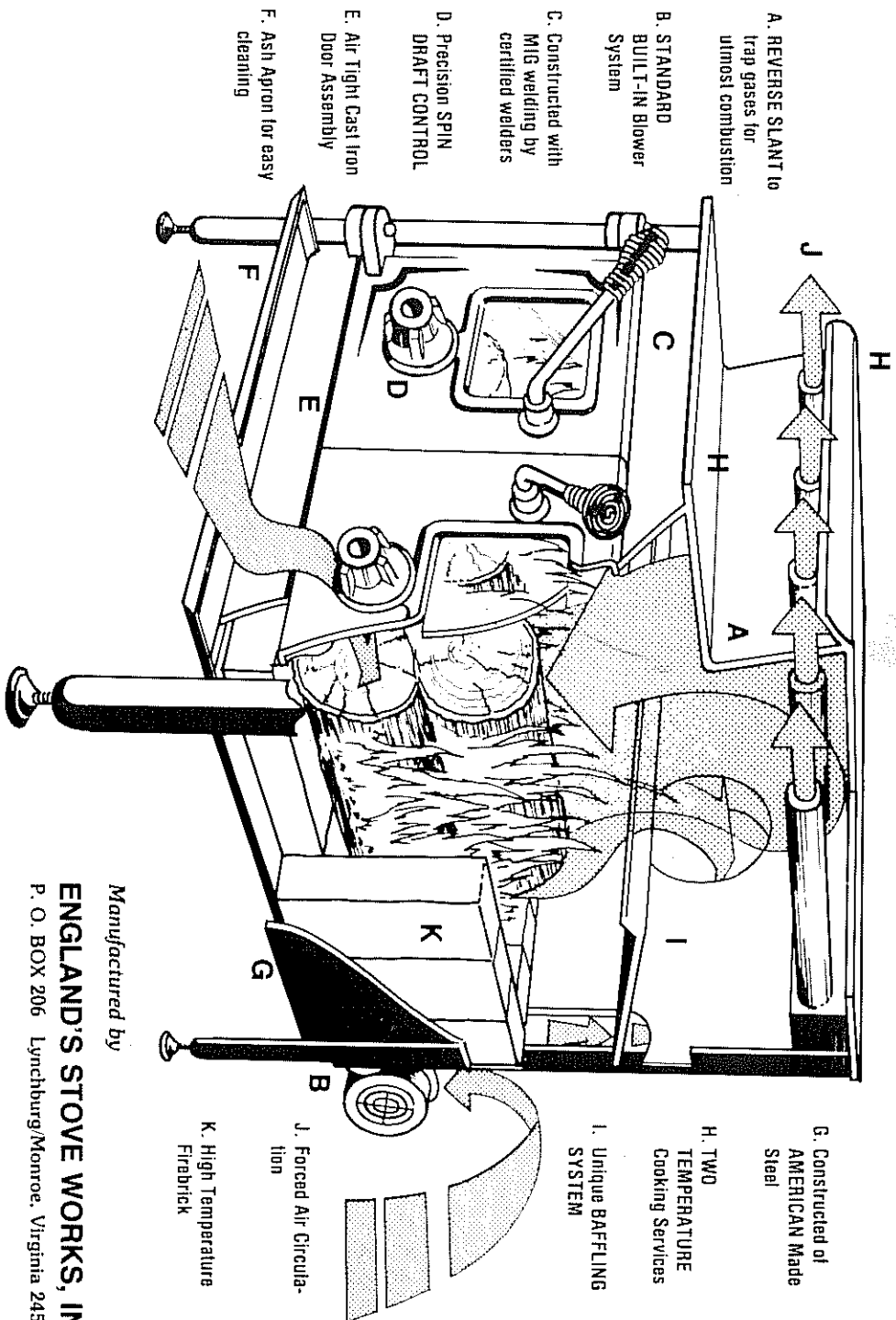
Please write to us and let us know how your unit is performing. We are always striving to make a good product even better and your letters help in letting us know how we can improve.

Thank you very much for your patronage.

Sincerely,



**R. G. ENGLAND
Executive Vice President
General Manager**



A. REVERSE SLANT to trap gases for utmost combustion

B. STANDARD BUILT-IN Blower System

C. Constructed with MIG welding by certified welders

D. Precision SPIN DRAFT CONTROL

E. Air Tight Cast iron Door Assembly

F. Ash Apron for easy cleaning

G. Constructed of AMERICAN Made Steel

H. TWO TEMPERATURE Cooking Services

I. Unique BAFFLING SYSTEM

J. Forced Air Circulation

K. High Temperature Firebrick

Manufactured by

ENGLAND'S STOVE WORKS, INC.

P. O. BOX 206 Lynchburg/Monroe, Virginia 24574