INSTALLATION & OPERATION MANUAL

Thank you for purchasing this product from a fine line of heating equipment. Each unit is constructed of the highest quality material and built by craftsmen who truly take pride in their workmanship. Please read this manual before attempting to move or install your unit. We wish you many years of safe heating pleasure with your new heating appliance.

CAUTION:

This unit must be installed in accordance with these instructions and must comply with local building and fire codes. Failure to do so could result in a chimney or house fire. Keep children, furniture, fixtures, and all combustible materials away from any heating appliance. Maintain a minimum clearance of 30 inches (6 inches if using a heat shield) from the firebox and 18 inches from the flue pipe to any combustibles, unless you are using shielded or double wall pipe.

Visit our web site at <u>www.englandsstoveworks.com</u> for helpful information, frequently asked questions, parts & accessory orders and more.

DO NOT INSTALL THIS UNIT IN A MOBILE HOME!!!

READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLING THIS MODEL. SAVE THIS MANUAL FOR FUTURE REFERENCE.

NOTE: IF YOU HAVE A PROBLEM WITH THIS UNIT <u>DO NOT RETURN IT TO</u> <u>THE DEALER</u>. CONTACT CUSTOMER SERVICE @ 1-800-245-6489.

MODEL 24-G FURNACE

England's Stove Works highly recommends the use of smoke detectors and Carbon Monoxide detectors with any hearth product, including this unit. Follow all manufacturer's instructions when using smoke or Carbon Monoxide detectors.

SAFETY NOTICE

IF THIS STOVE IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS. CONTACT YOUR LOCAL BUILDING OR FIRE OFFICIALS CONCERNING RESTRICTIONS AND INSTALLATION INSPECTIONS IN YOUR AREA.



SECTION I: FLUE SYSTEM

A. Existing Flue System

If you have chosen a freestanding unit, this stove is designed to connect to an existing flue system, such as masonry or a pre-manufactured Class A flue system. If you have a masonry flue system, the inner liner should be inspected carefully for cracks; if there is no liner in your chimney, we recommend you install a steel liner or have one installed. If you have an existing pre-manufactured system the inner liner should be thoroughly cleaned before installing your new stove. We strongly recommend you have a qualified chimney sweep clean and inspect your entire system, as the sweep can spot problems you might overlook. The sweep in most cases can make any necessary repairs or recommend a qualified person to do so. It is not permissible to connect this unit to a chimney that is servicing another unit.

B. Flue Size

The proper flue size is determined by measuring the inside diameter of the flue collar on the unit. This stove is equipped with a six inch (6") TOP EXHAUST FLUE COLLAR. Therefore, the connector pipe should be six inches (6") and never less in diameter than the collar on the stove. The area of the chimney liner must also be equal to or greater than the area of the flue collar on the stove. If the area of the flue is greater than the collar, it should never be more than three (3) times greater.

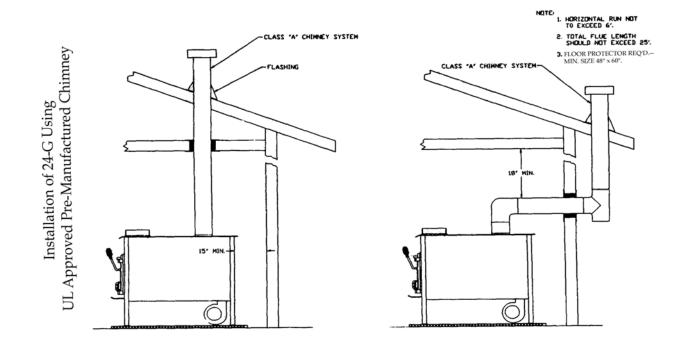
Example:

The area of a six inch (6") diameter flue collar is 28.87 square inches, therefore the connector pipe should be at least six inches (6") in diameter but no greater than 84.8 square inches.

The black connector pipe should be 24 gauge steel and eighteen inches (18") from a combustible wall or ceiling. This clearance can be reduced to six inches (6") if you are using a double wall or shielded pipe.

C. Installation of a New Flue System

1. Masonry Flue: In the event that you plan to install or have a system installed, there are several approaches that you can take. In the middle and late seventies masonry flue systems became very popular, and today this type system is satisfactory. If you are considering a masonry system, you should consult with your local building officials for the proper procedures on this type chimney. We recommend you consult with and have your flue built by a licensed, bonded contractor. Most masonry chimney systems are placed against an outside wall and extend upward beside the house. The flue thimble is then inserted through the wall, making the connection with the stovepipe and the vertical flue. Exercise extreme caution when drilling through the wall -- you must maintain proper clearance between the connecting liner and any combustible material in the wall.



We also recommend you have a flue clean-out door located at least two feet (2') below your thimble for easy cleaning of the system. This door should be made as airtight as possible. It is the consumer's responsibility to ensure the chimney system is safe and in good operating condition. The manufacturer will not be held responsible for an accident attributed to a unit connected to a faulty chimney system.

2. Pre-Manufactured Flue System: In the past few years pre-manufactured flue systems have become very popular, because this type system is easily installed and, when done correctly, is very safe. There are many pre-manufactured flue systems on the market, and when making your choice it should be U.L., B.O.C.A. or I.C.B.O. approved. Any of these systems are constructed of the proper materials and meet the proper safety standards. Your local dealer normally handles an approved brand of flue pipe. There are two very popular methods for installation of this type system.

<u>The first</u>, most popular and least expensive is through the ceiling and out the roof. This is the most direct route and creates a good draw because it requires less pipe. It is less expensive because insulated pipe is needed only from the ceiling to the roof and above -- single wall 24 gauge or thicker pipe is used from the unit to the ceiling if you maintain the eighteen inches (18") clearance from all combustible material.

<u>The second</u> method for installing a pre-manufactured system is to exit through the wall and run the system vertically up the outside of the 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 the structure. In either installation, proper clearances to combustibles should be maintained. Your flue pipe manufacturer furnishes a wall thimble or ceiling support box and, when installed properly, the correct clearances are achieved. If you are unable to install this type system your local dealer may be able to recommend a qualified contractor for this installation. It is the customer's responsibility to ensure that his system is installed properly and is in good operating condition. The manufacturer will not be responsible for an accident caused by a unit connected to a faulty flue system.

SECTION II: FLOOR AND WALL PROTECTION

A. Floor Protection

You will not need any floor protection if your floor is constructed of a noncombustible material such as brick or concrete. If your floor is constructed with a combustible material such as hardwood, carpet or linoleum, you must place protection between the stove and the combustible material.

There are many floor and wall board manufacturers, however, and you should be very cautious in choosing the proper protection. The type board you choose should be U.L. rated and listed. After examining the area in which you plan to place your stove and determining it requires a board, the next step is to select the proper size. The stove you choose will determine the size board that is required. The approved protector board should be large enough to provide a minimum of eight inches (8") behind the unit, eight inches (8") on either side and sixteen inches (16") in the front where the door is located. This stove requires a minimum of 48" x 60" floor protection.

B. Wall Protection

Your unit can be placed within fifteen inches (15") of a combustible wall such as paneling, wallpaper or drywall. In some areas local codes may require thirty-six inches (36") from a combustible, therefore it is very important that you check with local officials.

Note: Flue systems and flue pipe are not furnished with the unit.

SECTION III: FREESTANDING PLACEMENT AND INSTALLATION

The first problem you may encounter is getting your stove into your home -- all of our stove products are well constructed, which makes them rather heavy. Three to four adults can normally handle a unit, but we still recommend using a handcart. <u>Never attempt to handle a heating product alone</u>!!! The door and firebrick can be removed to lighten the unit; if this is done please make a note of the brick placement. After the unit is placed into position, install the flue collar, spring handles and any optional equipment.

Chimney Connector Pipe

The black pipe must be six inches (6") in diameter and at least 24 gauge steel pipe. Do not use aluminum or galvanized steel pipe, as it will not withstand the extreme temperatures generated by the stove. Also, do not use single wall connector pipe as a chimney -- you must connect your stove to a chimney comparable to those listed in Section I of this manual. The crimped end of your pipe should be inserted into the flue collar and, by doing this, all the pipe will be reversed. If you use this method any creosote will run back down the inside of your pipe and not out of the joints onto your stove. As a safety precaution, all joints should be sealed with high temperature silicone (AC-RTV3) and secured with three sheet metal screws.

For proper operation the chimney connector should be as short as possible and never exceed a six-foot (6') horizontal run. Horizontal runs of chimney connector pipe should have an upward slope of one quarter of an inch (1/4") per foot. You will need to maintain eighteen inches (18") of clearance from the wall and ceiling unless you are using double wall or shielded pipe.

Hot Air Hook-Up

You are now ready to distribute air from the 8" outlet on the top of the stove into your existing duct system. Always install the add-on-furnace's 8" diameter supply duct to the hot air trunk line of your existing hot air system, as close to the vent fan as possible. Thirty (30) gauge pipe or heavier should be used to make this connection; using the least possible amount of pipe will help the heat transfer to your duct system. Cut an eight-inch diameter hole in the main trunk line of the existing furnace duct, which is usually located on the top of the central furnace. Slide the eight-inch pipe from the add-on-furnace into the hole and seal the connection with duct tape. **NOTE**: Install a 8" 90 degree elbow inside this hole so that air flow from central furnace will not be directed back into the hot air pipe from the add-on furnace.

Thirty gauge or thicker black pipe should be used for the first two feet and then thirty gauge or thicker galvanized pipe can be used to connect to the existing furnace duct. Sheet metal screws should be used to secure each joint of pipe and an aluminum heat resistant tape can be wrapped around each joint to give an airtight seal.

The CA-18 blower can be installed by sliding the flange on the blower into the channel track located at the bottom and rear of the unit.

The AC-12 thermostat can be installed by plugging the 110 connection into the wall and the opposite end into the blower. The magnetic thermal disc should be attached to the rear wall of the stove in such a manner that the power cord does not come into contact with the stove. The thermostat will turn the blower on at approximately 140 degrees and shut the blower down at approximately 90 degrees. The frequency of the blower cycle will be affected by the placement of the thermostat on the rear of the unit. Mounting the thermostat closer to the blower will allow the blower to come on less frequently. We recommend the thermostat be placed in the center of the rear wall as a starting point.

SECTION IV: OPERATING INSTRUCTIONS

A. Building a Fire

CAUTION: NEVER USE KEROSENE, GASOLINE, DIESEL FUEL OR CHARCOAL LIGHTER FLUID TO LIGHT OR RE-KINDLE A FIRE.

NOTICE: Your new unit and the connector pipe may smoke for a short period of time. This is called "cooking out" and is no cause for alarm. It is a good idea to open all doors and windows in your dwelling during the first few hours of operation.

- 1. Place several wads of crushed paper over the entire bottom of the stove.
- 2. Place small dry sticks (kindling) of wood on the paper.
- 3. Be absolutely sure there are no combustibles in the immediate area of the stove.
- 4. Open the two cast iron dampers on the door by turning them counterclockwise.
- 5. Ignite the paper and leave the door cracked open until the fire is burning freely.
- 6. Once the kindling is burning freely, add several pieces of split dry wood to the fire. Allow this wood to start burning well before closing the door completely.
- 7. Close the door and adjust the cast iron dampers on the door by turning them clockwise.

B. Draft Controls

This unit has two draft controls on the door that control the amount of combustion air that enters the stove that in turn controls the amount of heat the unit generates. The controls are turned in a counterclockwise direction to let in more combustion air and produce more heat. You will have to experiment with the draft controls in order to find the most efficient settings for your flue system, as no two flues are the same. If you have a problem regulating this unit please contact our Customer Service department.

C. Do Not Over-Fire Your Unit

The use of flammable liquids, too much wood or burning trash in the stove may result in an "over-fired" unit. If the chimney connector pipe or stove turns red or white, the stove has been over-fired. In the event this happens, close the screw dampers on the door immediately! This condition can ignite creosote in the chimney and cause a house or chimney fire. This type fire can cause structural damage to the chimney system; do not use the stove again until the entire system has been checked thoroughly and any damaged parts repaired or replaced. A chimney sweep can normally perform this inspection.

D. Every Day Fueling

This unit is designed to burn four to five hours on one good load of seasoned wood. Prior to loading with new wood, pull the hot ashes to the front edge of the stove, and fill the unit with seasoned wood. Allow the stove to burn freely for at least fifteen minutes before closing the door -- once you have a good burn, close the door and adjust the screw dampers for your desired heat level. Follow this procedure each time you add fuel to the unit.

E. Ash Removal and Disposal

Regularly inspect the ash build-up in your stove and remove as necessary. Ashes should be placed in a metal container with an airtight lid. The ashes should always be placed on a non-combustible surface or on the ground, completely away from all combustible materials. They should be retained in the metal container until all cinders have thoroughly cooled. If you have a masonry chimney or a pre-manufactured chimney system, it is essential to check for creosote build-up at least twice per month.

SECTION V: CARE AND MAINTENANCE

A. Gaskets

Each unit is equipped with a gasket kit around the door which should be replaced every two years. To remove the old gasket, pull it from the channel and scrape off the old adhesive, then place new adhesive in the channel and then the new gasket. Close the door and allow twenty-four hours for the cement to harden prior to building a fire.

The replacement gasket for the door is part #AC-DGKC, and can be purchased from your local dealer or ordered from the factory (phone 800-516-3636).

B. Firebrick (Part #AC-LB & AC-SB)

This stove is equipped with fourteen (14) large and seven (7) small high density, high temperature firebrick. If the brick becomes chipped or cracked, especially on the sides of the firebox, it should be replaced. This item can be ordered from your local dealer or from the factory.

C. Finish (Part #AC-MCSP)

Your stove has been painted with 1200 degree Fahrenheit metallic charcoal paint that will retain its original look for several years. If your stove gets wet and rust spots appear, simply buff them off with plain steel wool and repaint with AC-MCSP. We recommend using this paint, as others may not withstand the high temperatures of a wood stove and may not adhere to the surface. You can order this paint from your local dealer or directly from the factory.

D. Blower System (Part #AC-18)

This unit is equipped with a 465-CFM blower, which has sealed bearings. The intake on this blower could become clogged with lint or dust over a period of time and it is a good idea to check this prior to the start of each heating season.

SECTION VI: CHIMNEY AND FLUE PIPE MAINTENANCE

A. Chimney Maintenance

Cleaning your chimney is not a difficult task, however, we highly recommend a professional be contacted for this job. He can not only clean the system, but will be able to perform a complete inspection of it. A professional can spot problems that you may overlook.

B. Flue Pipe Maintenance

When connecting your unit to the flue system, 24 gauge or thicker pipe should be used. Your pipe should be cleaned at least once a year and inspected monthly. Most people will clean their pipe and stove at the end of the heating season, as this will keep odors from entering the house during the summer months. The flue pipe should be replaced every three to five years, depending on the thickness of the pipe (thicker pipe will last longer).

SECTION VII: THINGS THAT COULD CAUSE YOUR STOVE TO SMOKE

It is very important that installations are made airtight. This is best accomplished by using furnace cement at all pipe joints and where the first section enters the stove and the chimney thimble. Any existing air leaks will cause the air to draw at points where the least resistance is offered -- such places are pipe joints, flue thimble, flue openings in the chimney, ash clean-out doors and cracks in the chimney. <u>These may cause air to enter</u> your system and not be drawn through the stove, which could result in a cool chimney, causing the smoke to build up in the system and eventually come back into the house.

This is called "back puffing" and can be helped by sealing all troublesome areas so they are airtight.

There are two main causes of chimney downdrafts that cause smoke to come back into the house. One is from an air current being deflected down the chimney by nearby objects such as trees, a building or a hill. The other is that in many chimneys the flue gases chill too quickly as they pass up the chimney. When the flue gas chills too quickly, it becomes heavy and will back up in the flue system; this will often result in "back puffing," poor combustion and smoke odors in the house. Burning the stove hotter, in some cases, will correct this situation (be careful not to "over-fire," see Section IV of this manual). If you have any of these problems or a poor-drawing chimney system, contact your local dealer or call the factory.

SECTION VIII: WHAT CAUSES CREOSOTE ?

Creosote is caused by the condensation of the vapor that exists in the escaping smoke -- the moisture level of your fuel will determine the density of this vapor. A severe downdraft as discussed previously will also cause creosote. Moisture will form at the coolest point in your chimney system and at this point will tend to form creosote. The ash is picked up by the moisture in the system and will build up or run back down the inside of your flue. This situation can sometimes be helped by installing an "open vented" type chimney cap, which will allow the chimney to maintain more heat to create a better draw and keep some of the wind currents from entering the flue system. This type cap will not correct a poorly constructed chimney or one in bad need of repair, however -- in some cases the system will require relining or even need to be rebuilt.

REPLACEMENT PARTS LIST FOR 24-G

AC-12	BLOWER THERMOSTAT
AC-18	465 CFM BLOWER WITH CORD
AC-DGKC	DOOR GASKET KIT
AC-FCGK	FLUE COLLAR GASKET
AC-LB	9" X 4" X 2 ¼" LARGE BRICK (14 REQUIRED)
AC-SB	9" X 4" X 1 ¼" SMALL BRICK (7 REQUIRED)
AC-SH	DOOR SPRING HANDLE
AC-MCSP	HI-TEMPERATURE CHARCOAL PAINT
CA-20	FLUE COLLAR (6")

All parts can be ordered from your local dealer or from the factory at (Parts Orders ONLY) 1-800-516-3636, or online at <u>www.englandsstoveworks.com</u>

If you have any questions or problems call the Customer Service Department.

CUSTOMER SERVICE DEPARTMENT

Have this information on hand if you phone the factory or your dealer regarding this product.

Retain for your files:

Model Number _____

Date of Purchase _____

Date of Manufacture _____ Serial #_____

LIMITED 5 YEAR WARRANTY <u>FROM THE DATE OF</u> <u>PURCHASE TO THE ORIGINAL OWNER</u>

The manufacturer extends the following warranties:

Five Year Period:

- 1. Carbon steel and welded seams in the firebox are covered for 5 years against splitting.
- 2. The cast iron door, hasp and hinges are covered for 5 years against cracking.

One Year Period:

- 3. Component parts such as combustor housing, flue collar, flame impingement plate, baffle plate, brick retainers, combustor plate and fasteners are covered for 1 year against cracking, breakage and welded seams from separating.
- 4. Electrical components, accessory items, glass and the painted surface are covered for 1 year from the date of purchase.

Conditions and Exclusions:

Damage from over-firing will void your warranty.

This warranty does not apply if damage occurs because of an accident, improper handling, improper operation, improper installation, abuse, or unauthorized repair made or attempted to be made.

The manufacturer is not liable for indirect, incidental, or consequential damages in connection with the product including any cost or expense providing substitute equipment or service during periods of malfunction or nonuse.

All liability for any consequential damage for breach of any written or implied warranty is disclaimed and excluded. Some states do not allow the exclusion or limitations of incidental or consequential damages, so the above may not apply to you.

Procedure:

Purchaser must give notice of claim of defect within the warranty period and pay transportation to and from a service center designated by the factory. The dealer from which the unit was purchased or the factory, at our option, will perform the warranty service.

Other Rights:

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

NOTE: THIS WARRANTY IS NULL AND VOID IF YOU DO NOT RETURN THE ATTACHED WARRANTY REGISTRATION WITH A COPY OF THE SALES RECEIPT <u>WITHIN 30 DAYS</u> FROM THE DATE OF PURCHASE. WARRANTY IS NOT TRANSFERABLE.

WARRANTY REGISTRATION for England's Stove Works

Purchased by (Name)				
Address				
City	State	Zip		
Telephone				
Email Address				
	DEALER INFORM	MATION		
Purchased From (Deale	er)			
Address				
City	State	Zip		
(Please be sure to refer to	UNIT INFORM sticker on back of ma	ATION anual or box to complete this s	ection)	
Model Number		Purchase Date		
Purchase Price				
Serial Number		Mfg. Date		
How did you first hear about our product? (please check one) Word of Mouth Burn Trailer Demonstration Internet Other:				
Rec'd. info. via phone	Dealer (Name	our product? (please check o of dealer):		
THIS REGISTRATION INFORM PLEASE MAIL THIS INFORMATI		FILE FOR THIS WARRANTY T		
	<u>Mail To</u> : England's Stove W Customer Service D P.O. Box 20 Monroe, VA 2 <u>Or, Fax To</u> 434) 929-4810 – 24	0epartment 06 4574 <u>5:</u>		

<u>Or, now available – Go online to complete your Warranty Registration</u>! Visit <u>www.englandsstoveworks.com</u> if you prefer to register online.