

# INSTALLATION AND OPERATION MANUAL

Thank you for purchasing this product, which is from a fine line of heating equipment.  
We wish you many years of safe heating pleasure with your new coal stove.

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

Visit our web page at [www.englandsstoveworks.com](http://www.englandsstoveworks.com) for helpful information,  
frequently asked questions, parts and accessory orders and more.

## CAUTIONS AND WARNINGS:

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 and Carbon Monoxide detectors.

**CAUTION:** Do not install this unit in a mobile home. This unit must be installed in accordance with the instructions and comply with your local building and fire codes. Follow the pipe manufacturer's instructions for passing through combustible walls and ceilings.

**WARNING:** READ THIS ENTIRE MANUAL PRIOR TO INSTALLATION AND SAVE IT FOR FUTURE USE. KEEP CHILDREN AND ALL COMBUSTIBLE MATERIALS AWAY FROM THIS STOVE.

**MODEL NUMBERS:**            27- C3000, 50-SHWC3 & 50-TRWC3  
                                      27- C2000, 50-SHWC2 & 50-TRWC2

**Note:** Maintain a minimum of thirty inches (30") from the firebox and eighteen inches (18") from the flue pipe to a combustible surface.

## →SAFETY NOTICE←

**FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PROPERTY DAMAGE, BODILY INJURY OR EVEN DEATH. FOR YOUR SAFETY AND PROTECTION, FOLLOW ALL THE INSTRUCTIONS. CONTACT YOUR LOCAL BUILDING OR FIRE OFFICIALS FOR RESTRICTIONS AND INSTALLATION INSPECTIONS IN YOUR AREA.**

Rev. 1/06



**A letter from our Technical Support department:**

**Thank you for purchasing this fine product from England's Stove Works!**

England's Stove Works was started, and is still owned by, a family that believes strongly in a "Do It Yourself" spirit – that's one reason you found this product at your favorite "Do It Yourself" store.

We intentionally design and build our stoves so that any homeowner can maintain his or her unit with basic tools, and we're always more than happy to show you how to do the job as easily and as inexpensively as possible.

From our free, downloadable service sheets; to our Pellet Service Video; to our new "wizard-style," click-through Troubleshooting guide on our web site, we have always tried to help our customers stay "heat-ready," especially when oil and electricity prices continue to skyrocket.

Please look at our vast Help section on our web site and call our Customer Service department at (800) 245-6489 if you need any help with your unit.

We are nearly always able to help "walk you through" any repairs, problems or questions you may have.

**PLEASE NOTE:** While information obtained on our web site and through our 800 number is always free of charge, there will be a service charge incurred with any "on-site" repairs or maintenance that we may arrange.

*Wishing you years of efficient, quality and "comfy" heating,*  
England's Stove Works  
Technical Support Department

**[www.englishstoves.com](http://www.englishstoves.com)**

**(800) 245-6489**

IF YOU HAVE A PROBLEM WITH THIS UNIT DO NOT RETURN IT TO THE DEALER.  
CONTACT CUSTOMER SERVICE at 1 (800) 245-6489.

## SECTION I: FLUE SYSTEM

### A. Existing Flue System

This unit is designed to connect to an existing flue system, such as masonry or a pre-manufactured Class A pipe system. If you have a masonry chimney the inside should be checked for cracks in the liner; if there is no liner in the chimney we recommend installing a stainless steel liner. If you already have a steel liner it should be carefully checked for buckling, warping or cracks. With either type system it is absolutely necessary to clean it before installation of this stove. A qualified chimney sweep can clean and inspect your system, and in many cases find problems the homeowner might overlook. The sweep can normally do chimney repairs or recommend a qualified person to do so. **Warning: Do not connect this stove to a flue system serving another heating appliance.**

### B. Required Flue Size

The proper flue size is determined by the inside diameter of the flue collar on the unit. This stove is equipped with a six inch (6") top or rear vent flue collar. This stove would require six inch (6") pipe, and a smaller diameter pipe should never be used. The area of the chimney liner should also be greater than the area of the flue collar on the stove, but never more than three times greater.

*Example:* The area of a six inch (6") flue collar is 28.87 square inches; therefore, the area of the flue liner should never be more than 84.8 square inches.

### C. Top or Rear Exhaust

This unit comes with an adaptable top or rear exhaust. The stove is shipped in the container ready for the top mounted flue collar (Part #CA-20). To change to the rear vent you will first remove the rear cover plate (Part #CA-22) and attach it to the top of the stove. Next, mount the flue collar to the rear opening of the stove. *NOTE:* When mounting the flue collar or the cover plate, it is very important that all the bolts are in tight and the gasket makes an airtight seal.

**Caution: Connector pipe should be 24-gauge or thicker steel pipe and eighteen inches (18") from a combustible wall or ceiling. If you are using double wall or shielded pipe the clearance can be reduced to six inches (6"). Follow the pipe manufacturer's installation instructions and directions for passing through combustible walls and ceilings. Check your local codes.**

### D. Installation of a New Flue System

**1. Masonry Flue:** If you are considering a masonry flue system, you should consult with your local building officials for the proper procedures in constructing this type flue system. We recommend a licensed, bonded contractor build this type system. Most masonry flues are placed against the outside wall and extend upward beside the house. The flue thimble is then inserted through the wall, making the connection with the vertical flue pipe; you must maintain proper clearance between the connecting pipe and any combustibles in the wall. **Follow the pipe manufacturer's installation and directions for passing through combustible walls and ceilings. Check codes in your area.**

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

**2. Pre-Manufactured Flue System:** In the past few years pre-manufactured flue pipe systems have become very popular, because this type system is easily installed. When installed properly this system is also very safe. In making your choice be sure the system has a recognized label of approval such as UL, B.O.C.A. or I.C.B.O. -- any of these approvals will ensure the flue system is constructed of the proper materials and meets required safety standards. Your local dealer will normally handle a top grade and approved flue system.

There are two very popular methods for installation of a pre-manufactured 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 fewer pipes are required. It is less expensive because insulated pipe is only needed from the ceiling and up; single wall 24-gauge or thicker pipe is used from the stove to the ceiling.

The second method is to go through the wall and 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 your home. You must maintain the proper clearances to combustibles in either installation. The pipe manufacturer furnishes a wall thimble and ceiling support box and, when installed properly, the required safety clearances will be met. If you choose a pre-manufactured flue system and do not feel qualified or capable of installing it, your dealer should be able to recommend a qualified contractor. It is the customer's responsibility to ensure the flue system is safe and in good operating condition. The manufacturer will not be responsible for an accident attributed to a stove connected to a faulty flue system. **Follow the pipe manufacturer's installation and directions for passing through combustible walls and ceilings. Check codes in your area.**

**Note: Flue systems and pipe are not furnished with this unit; they must be purchased separately. Do not install a pipe damper with this stove.**

## **SECTION II: FLOOR AND WALL PROTECTION**

### **A. Floor Protection**

If the floor is constructed of a non-combustible material such as brick or concrete, you are not required to have floor protection. If the floor is constructed of a combustible material such as hardwood, carpet or linoleum, floor protection must be placed between the unit and the combustible material.

There are many stove and wallboards on the market and you should be very careful in your selection. The board must be UL approved. The approved protector should provide a minimum of eight inches (8") behind the unit and on each side and a minimum of sixteen inches (16") in the front of the stove where the door is located. This stove requires a minimum 48" x 48" size floor protector.

## B. Wall Protection

This stove can be placed within thirty inches (30") of a combustible wall such as paneling and wallboard. The local code in your area should be checked, as some areas do require more than thirty inches (30"). If you need to place the unit closer to a combustible wall some type wall protection will be required. An approved wallboard can be used to reduce the clearance by mounting the board to the wall with a one-inch (1") air space between the board and the wall -- this will reduce the clearance by two-thirds (2/3), or to twelve inches (12") in thirty inch (30") local code areas. The wallboard only needs to be six inches (6") higher than the top of the unit. If the stove is placed this close to the wall it will require you to use shielded or double wall pipe, which will allow a clearance of six inches (6") from the pipe to a combustible surface.

## SECTION III: PLACEMENT AND INSTALLATION

### A. Placement

The first problem you might encounter is getting the unit into your home, as our stoves are well-constructed and rather heavy. The door and firebrick can be removed to lighten the load; we recommend that a diagram of the brick placement be made if you do decide to remove the firebrick. Never attempt to handle one of our units alone. As a rule, three or four adults can handle one of our units; however, we still recommend using a handcart. After the stove has been placed in position, replace the brick and door. The spring handles can then be installed on the door and damper rods by turning them counterclockwise. The flue collar and any accessories can then be added to the unit.

### B. Chimney Connector

The chimney connector pipe must be 24-gauge steel pipe and six inches (6") in diameter. **Do not** use aluminum or galvanized steel pipe as they will not withstand the extreme temperatures generated by this stove. Do not use single wall chimney connector pipe as a chimney on any stove -- you must connect your stove to a chimney comparable to those listed earlier in this manual.

The chimney connector pipe should be connected to the stove with the crimped end inserted in the flue collar. This will allow any creosote that forms inside the pipe to run back inside the stove and not down the outside of your chimney connector pipe. All joints should be sealed with stove cement and secured with sheet metal screws.

For proper operation, the connector pipe should be as short as possible and also have as few elbows as possible. Horizontal runs of connector pipe should not exceed six feet (6') and must have an upward slope of one-quarter inch (1/4") per foot. The standard clearance for connector pipe is eighteen inches (18"), which must be maintained unless you are using double wall pipe, shielded pipe or wall protection.

**Note: The manufacturer will not be responsible for an accident attributed to a unit connected to a faulty chimney or flue system.**

**\*IMPROPER INSTALLATION:** The manufacturer will not be held responsible for damage caused by the malfunction of a stove due to improper venting *or* installation. Call (800-245-6489) and/or consult a professional installer if you have any questions.

**IMPORTANT SAFETY NOTE:** If the unit or chimney connector pipe "glows" red (or white), the stove is over-fired. This condition could cause a house or chimney fire. Do not operate your unit too hot, or over-firing may result. (See Operating Instructions)

## **SECTION IV: OPERATING INSTRUCTIONS**

### **A. Building a Fire**

Type of fuel for USA – Coal only (Wood can be used to start the fire).

Type of fuel for CANADA – Wood or coal.

**CAUTION: Never light or re-start a fire with kerosene, gasoline, diesel fuel or any other flammable material.**

**Notice: Your new unit and the connector pipe may smoke for a few minutes which is called the “cooking out” process. We highly recommend that windows and doors in your dwelling be opened for one to two hours during this process.**

1. Be sure there are no combustible materials in the immediate area.
2. Open the draft controls completely on the bottom door and open the slide damper by moving it all the way to the left.
3. Place several wads of crushed newspaper across the bottom of the firebox.
4. Lay small dry kindling on the top of the paper.
5. Ignite the paper, close the door and allow the kindling to catch fire.
6. Now you can place several small pieces of dry split wood in the stove. At this point it may be necessary to open the bottom ash door to allow more combustion air to enter the unit.
7. When a good bed of red ash is built up, coal can be added in small amounts; continue to add coal in small amounts until there is a solid bed of burning coal. Leave the draft controls open and the bottom ash door cracked for ten to fifteen minutes.
8. At this time you should be able to fill the stove with coal and allow another burn time of five to ten minutes, then you can close the bottom ash door and the top slide damper (push to the right). The draft controls on the bottom door can be set to your comfort level. It is recommended these controls be screwed all the way in and then loosened at least one to two turns.

### **B. Draft Controls**

This stove has either one or two draft controls located on the small ash door, along with a slide draft located above the large door. The slide draft should only be in the open position when starting the stove; this control will normally be used when wood is being burned, and closed while burning coal.

The spin draft controls located on the ash door are the main controls to be used to regulate the coal unit. The more these drafts are opened, the more combustion air is allowed to enter the unit and thereby generate more heat. You will have to experiment with the various draft settings to find your individual comfort setting -- remember that no two flue systems are the same and the settings will differ, depending on your flue system.

### **C. Do Not Over-Fire Your Unit**

Burning flammable liquids or trash in the stove may result in over-firing. If the chimney system turns red or white the stove has been over-fired; if this situation occurs, all draft controls should be closed immediately. It is recommended, at this point, that you get out of the house and call the fire department. A chimney fire may cause structural

damage; therefore do not use the stove until the flue system is inspected and, if necessary, repaired or replaced. A chimney sweep can perform this inspection.

#### **D. Shaking**

Shaking is recommended at least twice daily and should only be done when there is a hot fire in the unit. The best results can be achieved by short, choppy strokes - however, if the unit is shaken too much the hot bed of coals could be lost into the ash pan.

**NOTICE: OVER-FIRING OR ALLOWING HOT ASHES TO BUILD UP IN THIS UNIT MAY CAUSE DAMAGE TO THE SHAKER GRATE SYSTEM. THIS TYPE DAMAGE IS NOT COVERED UNDER THE WARRANTY.**

#### **E. Refueling**

Be sure there is a hot bed of coals in the unit, and then crack the door for three to five minutes before adding coal to the stove. This will allow the smoke to clear through the flue system. Open the draft controls on the ash door completely and allow the stove to burn for ten to fifteen minutes at this setting. After the fire is burning freely, the draft controls can be set to your preferred level.

#### **F. Ash Removal and Disposal**

Ashes should never be allowed to build up to the point that the combustion air flowing under and through the coal is interrupted. Excess ash in the ash pan can cause damage to the grates and make the fire go out.

Wear thick leather gloves when removing the ash pan from the unit, as it will be very hot. The ashes should be placed in a metal container with a tight fitting lid and always placed on the ground or on a non-combustible surface. The container should also be kept away from any combustible materials. If you have a masonry or pre-manufactured chimney system, it is essential that it be checked for creosote at least twice per month.

### **SECTION V: CARE AND MAINTENANCE**

#### **A. Gaskets**

This unit is equipped with a gasket (Part #AC-DGKC) around each door that should be replaced at least every two years. The old gasket and adhesive can be removed from the channel with a screwdriver. Place the new adhesive and gasket in the channel and allow it to set up for twenty-four hours before building a fire.

If you find it necessary to replace the window gasket (Part #AC-GGK), the glass will first have to be removed from the stove. The old adhesive and gasket should be scraped from the glass. The new gasket already has adhesive on one side, and this can be attached to the glass by running it around the outer edges of the glass. Place the glass back into the stove after cutting off any excess gasket.

These parts can be ordered by your dealer or from the factory (800-516-3636).

Refer to the list at the rear of this manual for part numbers. You may order parts by calling (800) 516-3636 (for parts orders only) or logging on to [www.englishstoveworks.com](http://www.englishstoveworks.com).

## **B. Firebrick**

The coal stove is equipped with high density, high temperature firebrick. If any of the brick becomes chipped or cracked, especially on the sides of the firebox, it should be replaced. This item can be ordered by your dealer or from the factory.

## **C. Finish**

Your stove has been painted with high-temperature paint, which will retain the original look for years. If your unit should happen to get wet, rust spots might appear; these can be removed with plain steel wool and repainted with hi-temp. spray paint. We recommend this paint because other paints may not withstand the extreme temperatures the stove will generate. This item can be ordered by your dealer or from the factory.

## **D. Blower System**

At the rear of the unit is a blower duct for attaching the blower (Part #AC-16) to the stove. This blower is a squirrel cage motor type and will require oiling at the beginning of the heating season. There are two oil ports over each bearing for lubricating the motor, and any lightweight household oil can be used on this motor.

The intake on the blower may become clogged with lint or dust. Unplug the motor from the power source, and then remove the motor and impeller that is held on by two sheet metal screws. Clean out any foreign material and replace the blower.

## **E. Glass Cleaning**

It will be necessary to clean the glass two to three times a week depending on the type coal burned and the way the stove is operated. To clean the glass, let the stove cool down and use a stove glass cleaner or ammonia mixed with water.

# **SECTION VI: CHIMNEY AND FLUE PIPE MAINTENANCE**

## **A. Chimney Maintenance**

Cleaning your chimney is not a difficult task and many homeowners choose to inspect and clean their own systems. Others will contact a local chimney sweep to do this task. We highly recommend a professional do this job, as he will be able to spot troublesome areas the homeowner may overlook.

## **B. Flue Pipe Maintenance**

If you are connecting the unit to a masonry chimney or a pre-manufactured chimney system the pipe should be at least 24-gauge or thicker single wall pipe. This connector pipe should be cleaned at least once per year, and this is usually done after the heating season is over. This will keep odors from entering the house during the summer months. This pipe will have to be replaced every three to five years depending on the thickness (thicker pipe will last longer).

# **SECTION VII: THINGS THAT COULD CAUSE THE STOVE TO SMOKE**



It is very important that the installation be made airtight. This is best accomplished by using stove cement at each pipe joint, where the first section enters the stove flue collar and at any other connection such as the flue thimble. Any existing air leaks will cause air to draw into the system at the point of least resistance – such areas are pipe joints, flue thimble, flue openings in the chimney, ash clean-out doors and cracks in the chimney. These areas may cause air to enter the system and not be drawn through the stove, which could result in a cool chimney, causing the smoke to build up in the flue and eventually come back into the house. This is called “back puffing” and can be corrected by sealing all troublesome areas so they are airtight and operating the stove at a higher temperature.

Another problem is a downdraft in the flue system. Air currents being deflected down the chimney by nearby objects such as trees, buildings or a hill can cause this. Also, flue gases can chill too quickly as they pass through the system. This will cause the gases to become heavy and back up in the system, which will often result in “back puffing,” poor combustion and smoke odors in the house. Burning the unit hotter will, in some cases, help this situation. If you have a problem of this nature with your flue 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 cause creosote. Moisture will form at the coolest point in your chimney system and at this will tend to build 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 a higher temperature to create a better draw and keep some wind currents from entering the system. This cap will not correct a poorly constructed chimney or one in bad need of repair, however – some chimneys may have to be relined or even rebuilt.

### **REPLACEMENT PARTS LIST**

AC-16	Complete Blower Unit (27-C3000/50-SHWC3/50-TRWC3 only)
AC-DGKC	Door Gasket Kit
AC-FCGK	Flue Collar Gasket Kit
AC-LB	9" x 4" x 2 ¼" Large Firebrick
AC-MCSP	Hi-Temp. Metallic Charcoal Grey Spray Paint
AC-MBSP	Hi-Temp. Black Spray Paint
CA-20	6" Flue Collar (Includes Gasket & Hardware)
CA-22	6" Blank (Includes Gasket & Hardware)
CA-27C	Cast Iron Grates (3 Required)

All replacement parts can be ordered by your dealer or from our factory (Orders: 1-800-516-3636). If you have any questions or problems contact our Customer Service Department:

**CUSTOMER SERVICE DEPARTMENT**      [service@englanderstoves.com](mailto:service@englanderstoves.com)  
**P.O. BOX 206**      **(Tech. Questions: 800-245-6489)**  
**MONROE, VA 24574**      **(Parts Orders: 800-245-6489)**      **(FAX: 434-929-4810)**

**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 FROM THE DATE OF PURCHASE TO THE ORIGINAL OWNER**

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, firebrick, 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 WITHIN 30 DAYS 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 INFORMATION

Purchased From (Dealer) \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

### UNIT INFORMATION

**(Please be sure to refer to sticker on back of manual or box to complete this section)**

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: \_\_\_\_\_

*Where did you receive information about our product? (please check one)*

☐ Rec'd. info. via phone ☐ Dealer (Name of dealer): \_\_\_\_\_  
☐ Internet Other: \_\_\_\_\_

### IMPORTANT NOTICE

**THIS REGISTRATION INFORMATION MUST BE ON FILE FOR THIS WARRANTY TO BE VALID.  
PLEASE MAIL THIS INFORMATION WITHIN THIRTY (30) DAYS FROM THE DATE OF PURCHASE.**

#### Mail To:

England's Stove Works, Inc.  
Customer Service Department  
P.O. Box 206  
Monroe, VA 24574

#### Or, Fax To:

(434) 929-4810 – 24 hours a day

Or, now available – Go online to complete your Warranty Registration!

Visit [www.englishstoveworks.com](http://www.englishstoveworks.com) if you prefer to register online.