# JAMESTOWN

# Owners Manual Revised Edition, 1994

**Patents Pending 1991** 

# CONTENTS

Į.	SAFETYFIRST					
IL.	GENERAL INSTALLATION INSTRUCTIONS					
m.	INSTALLATION					
	<ul> <li>A. Clearances, JAMESTOWN Free Standing Stove</li> <li>B. Clearances, JAMESTOWN Zero Clearance Fireplace Insert</li> <li>C. Venting the JAMESTOWN Free Standing Stove</li> <li>D. Materials Necessary</li> <li>E. Installation Drawings and Directions</li> <li>F. General Installation Precautions</li> <li>G. Installation Instructions for J3020A Through The Wall Kit</li> <li>H. J3030T/J3030A, 45 Degree Adapter Installation Instructions</li> <li>I. J3030B 45 Degree Adapter Installation Instructions</li> <li>J. Installation Instructions for Framing Your Insert</li> </ul>	3 5 6 7 9 10 13 15 17				
IV.	OPERATION	23				
	A. Start Up Instructions B. Achieving A Clean Burn	23 24				
IV.	PELLET FUEL/POTENTIAL PROBLEMS	25				
v.	MAINTENANCE					
	<ul> <li>A. Cleaning &amp; Maintenance</li> <li>B. General Instructions on All Models</li> <li>C. Instructions for Cleaning Your Jamestown J1000B Pellet Stove</li> <li>D. Instructions for Cleaning Your Jamestown 2000T/2001T Pellet Stove</li> <li>E. Instructions for Cleaning Your Jamestown 3000A Pellet Heater</li> </ul>	26 27 27 28 29				
VII	OPERATING SAFETY FEATURES	35				
VII	L POWER FAILURE	35				
IX.	AUGER CARE	35				
ELI	ECTRICAL SCHEMATIC	37				
WI	RE DIAGRAM	39				
LIN	MITED FIVE YEAR WARRANTY	40				
TR	OUBLE SHOOTING	41				
UN	IT SPECIFICATIONS	45				
SEI	RVICE RECORD	48				
WA	RRANTY CARD	49				



erandrative a le la grecorgia di artice avec la constituta di menoni di di Septembri di Perometri (1996). Vivi

### SAMPLE SERIAL TAG

# GETTING TO KNOW YOUR NEW JAMESTOWN PELLET STOVE

### I. SAFETY FIRST!

Your new JAMESTOWN pellet burning stove (or insert) was designed to provide many years of trouble free enjoyment in your home. It is up to you, however, to learn how to safely operate your new stove. Please start by paying particular attention to each of the following points:

- A. SAFETY NOTICE: IF THIS STOVE IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS, CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.
- B. Read the owner's manual thoroughly before attempting to install and/or burn your new stove. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.
- C. Contact your local building officials for appropriate permits and information on possible restrictions or requirements on installation in your area.
- D. Burn pelletized bio-mass fuel which meets or exceeds APFI Standards only. Poor quality fuel will directly (and adversely) affect the efficiency and cleanliness of your new stove's operation. Your JAMESTOWN Dealer can help you make the proper fuel choice in your area.
- E. Always follow the lighting instructions in your owner's manual. Short cuts of any kind can be dangerous!
- F. ALWAYS keep flammable liquids away from your new stove.
- G. Follow the installation and maintenance instructions outlined in your owner's manual exactly.
- H. DISPOSAL OF ASHES: When removing fly-ash accumulations from your stove, always place them in a metal container with a tight fitting lid. The closed container must be placed on a non-combustible surface well away from all combustible materials, pending final disposal. The ashes should be retained in the closed container until all cinders have thoroughly cooled.
- The power supply cord must be routed away from hot or sharp surfaces and objects and plugged into
  a grounded three prong outlet meeting all applicable local and National codes.
- Never place a combustible object on your stove top or trivet.
- K. PLEASE NOTE: INATTENTION TO OR OTHER VIOLATION OF ANY OF THESE POINTS WILL CONSTITUTE SUFFICIENT CAUSE FOR THE VOIDING OF YOUR WARRANTY!

### II. GENERAL INSTALLATION INSTRUCTIONS

Masonry and Zero Clearance Chimneys: Many installations are connected to an existing fireplace chimney. This is where extreme caution should be taken. Some folks are getting an insert because they experienced a "poor" draft on their fireplace and feel that a pellet stove will solve that problem. This is true to a certain extent, however, the same problems potentially exist. The same down draft potential exists, you could have a large building or tree next to the house or the chimney may be too large in diameter for the amount of heat being released. When installing your insert, do not take short cuts. It is far less expensive to do it right the first time than to have to do it again. Follow these precautions....

- A) Any chimney over eleven (11') feet high should be relined with a four (4") inch stainless steel or galvanized flex pipe with a spark arrestor/rain cap at the termination point.
- B) Any chimney that has a history of "poor" draft should be relined with four (4") inch galvanized or stainless steel flex pipe with a spark arrestor/rain cap at the termination point.
- C) If your chimney is in poor repair, i.e., cracked flue tile, reline the chimney using four (4") inch stainless steel or galvanized flex pipe with a spark arrestor/rain cap at the termination point.
- D) Any chimney larger than ten (10") inch diameter should be relined using four (4") inch stainless steel or galvanized flex pipe with a spark arrestor/rain cap at the termination point.

Note: Be sure to allow a minimum of twelve (12") inches between the exhaust termination and the outside air tube... If you fail to do so you risk drawing exhaust air into the system and you will experience a lazy burn. Your unit simply will not perform up to it's potential.

Freestanding Stove Installations: A variety of installations are possible for a freestanding stove. Many folks will use our through the wall kit to install their stove against an outside wall. Some folks will be replacing their woodstove and use their existing chimney system. If a unit is being installed in a new home or an existing basement, a complete chimney system will be required. Just a few words of wisdom..... When using our J3020A install kit, be sure that the termination point is a minimum of twelve inches (12") from the side of the house. If strong winds are common in your area, we advise you also use two 90 degree elbows connected and then connect your spark arrestor. This will form a wind break and allow your unit to burn at maximum efficiency. We would also suggest in areas where the wind blows often that a large plate (18" x 18") is placed on the side of the house to provide easy cleaning should the wind carry the exhaust against the side of the house.

When using your existing chimney to install your pellet stove, be sure to line the chimney with four (4") inch galvanized or stainless steel flex if (A) the chimney has a prior history of bad draft or (B) if you have a chimney exceeding eleven (11') feet high. Be sure to seal all pipe connections.

Installations in new homes or in basements which require a complete new chimney system will require three inch (3") pipe when under eleven feet (11') and four inch (4") pipe when installation is over eleven feet (11') high.

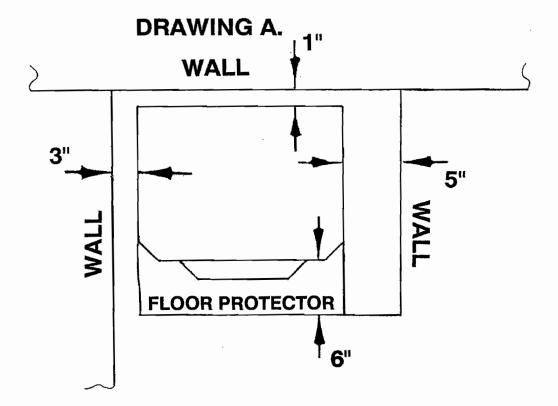
Note: When installing your stove, check your spark arrestor or rain cap and insure that it does not have a tight screen or louvers to restrict your draft. Check your spark arrestor/rain cap on a regular basis to see if it is plugged with soot.

### III. INSTALLATION

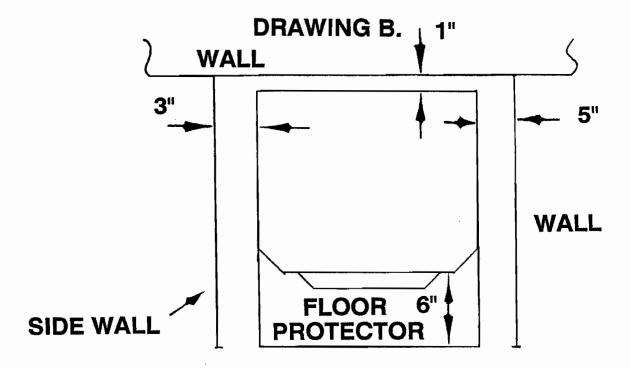
Your new JAMESTOWN Free Standing Pellet Stove or Zero Clearance Fireplace insert must be installed correctly to assure safe and efficient operation. As HI-TECK STOVES, INC. has no control over the installation or operation of your stove (or insert), HI-TECK STOVES, INC. grants no warranty, implied or stated, for the installation or maintenance of your new stove (or insert), and assumes no responsibility for any consequential damage. It is doubly important, then, that you exercise prudent judgement in deciding whether to install yourself or contract for installation with your dealer (or other professional installer your dealer recommends.)

### A. Clearances, JAMESTOWN Free Standing Stoves

Your new stove must be installed on a non-combustible floor pad or a masonry hearth. The hearth or floor pad must extend a minimum of 6" from the front of the stove. Please refer to drawing A.

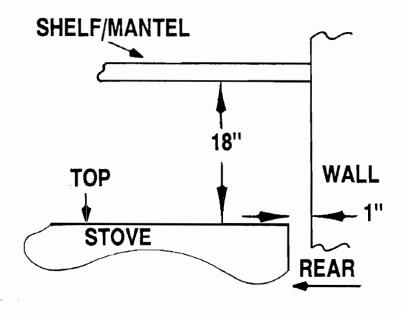


If you are installing your stove into an alcove, please refer to drawing B for minimum clearances.



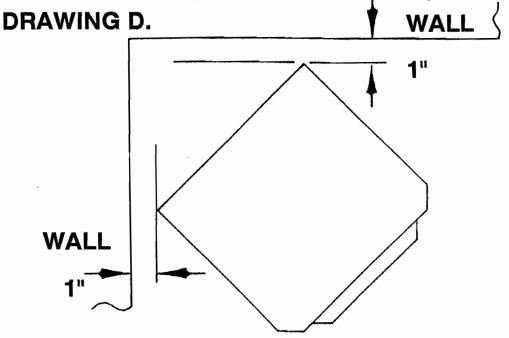
Vertical Clearances: The minimum distance from the top of your stove to the bottom of a shelf, mantel, or any combustible object above the stove is 18" (drawing C).

## DRAWING C.



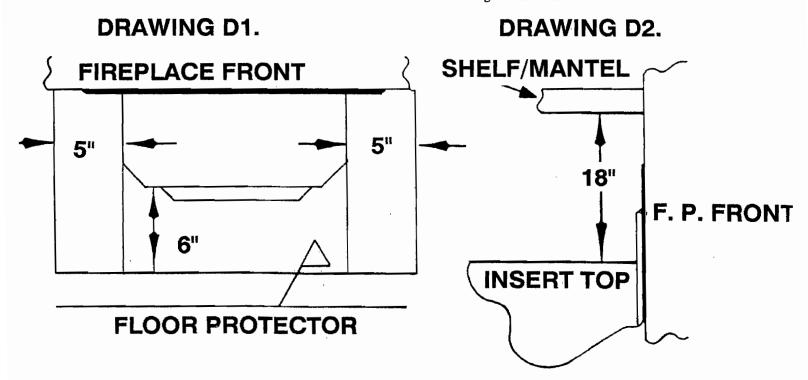
4 Patents Pending 1991

Corner Installations: If you are installing your stove in a corner, please refer to Drawing D.



### B. Clearances, JAMESTOWN Zero Clearance Fireplace Inserts

Minimum clearances to combustibles affect only the portion of your insert which protrudes into the room from the point of shroud attachment to the insert. The installation must include an approved non-combustible floor protection pad of at least 3/8" millboard (or equivalent) or a masonry hearth which extends a minimum of 6" from the front of insert (where the door gasket seals when closed) and 5" from either side. Additionally, the minimum distance from the top of the insert (trivet area) to the bottom of a mantel, shelf, or other combustibles is 18". Please refer to drawings D1 and D2.

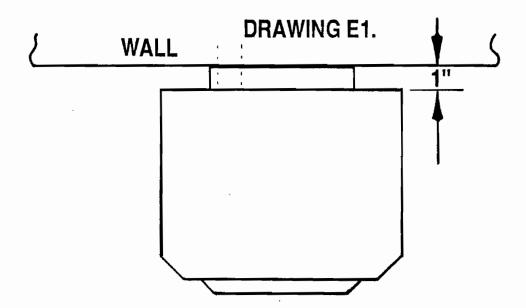


Critical note for all installations: The floor protection pad you select (unless you are installing on a masonry hearth) must be safety approved.

Follow code, installation instructions and use your own best judgement at all times.

### C. Venting the JAMESTOWN Free Standing Stoves

The most typical installation is parallel to and against an outside wall. For this installation, the simplest and least expensive approach is the JAMESTOWN model number J3020A Standard Installation Kit, available from your JAMESTOWN Dealer (please refer to Drawing E1 and follow the directions supplied with the kit).



If you are installing your new stove without the J3020A Standard Installation Kit, or installing other than parallel to and against an outside wall, you will need to closely review the following directions and acquire the proper materials outlined for your installation (your JAMESTOWN Dealer can help you with the necessary materials): "PL" Type pellet vent may be installed directly through a combustible wall, ceiling or roof, using a listed wall thimble, fire stop, or roof flashing. Clearance using a listed wall thimble will be a minimum of 1 1/2" to any combustible; using a fire stop or roof flashing requires 3" minimum clearance to any combustible. Routing the exhaust through the roof may be done in a conventional manner, or through an outside wall below the roof line, with three restrictions: 1. The exit terminal must be located not less than 60" from any opening through which combustion products could enter the building (i.e., doors, windows, vents), nor less than 24" from an adjacent building and not less than 7' above grade when located adjacent to public walkways. It must be so arranged that flue gasses are not directed so as to jeopardize people, overheat combustible structures, or enter a building. 2. For horizontal venting, the exhaust pipe must be terminated by a listed end cap or 45 degree elbow with a rodent screen cap that prevents rain or wind directly entering the exhaust pipe. For termination above the roof line, a listed rain cap must be used. 3. Each "PL" Type joint must be completely sealed using High Temperature Silicone ("RTV"), three sheet metal screws, and High Temperature Foil Tape.

Tools you will need include: saw(s), screwdrivers, 1/8" drill, 5/8" hex head socket or driver, tape measure, gloves, eye protection, and (for some installations) a sturdy ladder.

### D. Materials Necessary For:

### Horizontal venting, parallel to and against an outside wall

- a. 7" O.D. "PL" Type wall thimble
- b. 24" length of 3" "PL" Type pipe
- c. 3" "PL" Type end cap (or 45 degree elbow and rodent screen)
- d. 12" length of 1-5/8" flexible metal hose and rodent screen; 12" x 2" for the J3000A
- e. 3 oz. High Temperature Silicone Sealant (RTV)
- f. High Temperature Foil Tape
- g. 9 ea. 5/32" x 1/2" sheet metal or self-tapping screws

### 2. Horizontal venting, corner installation, outside wall, ADD TO LIST ONE:

- h. 3" 45 degree "PL" Type elbow
- i. Hose (d) length must be increased to 24"
- j. Additional screws (g)

### Venting vertically outside roof line, parallel to and against an outside wall, ADD TO LIST ONE:\*\*

- c. Subtract end cap
- k. 3" "PL" Type Tee
- 1. 3" to 4" "PL" Type increaser
- m. 4" "PL" Type rain cap
- n. 4" "PL" Type roof flashing
- o. 4" "PL" Type pipe (appropriate lengths)
- p. 4" "PL" Type wall brackets (one for each 5' of rise)
- q. Additional screws (g), RTV (e), and tape (f)

### \*\*OR J3020 STANDARD INSTALLATION KIT

### 4. Venting vertically outside roof line, corner installation, outside wall:

All materials above listed except end cap (c)

### Venting vertically inside roof line:

- Items d, e, f, g, k, l, m, n, o, q
- r. 4: "PL" Type roof flashing

### 6. Venting the JAMESTOWN Fireplace Inserts:

Your JAMESTOWN is listed by Warnock Hersey Test Lab to be installed using a complete 3" or 4" chimney liner to the termination point of the existing chimney.

It is strongly recommended that you contract with a professional installer, as there must be a positive seal above the flue of your fireplace, a complete re-line to the top of your chimney, and provision for a constant supply of fresh air available to the draft induction system during normal operation.

This is a safety issue and must not be taken lightly.

#### 7. Installation Notes

Caution should be taken when installing a unit in an old masonry fireplace. The flue tile may be weak, broken or have large globs of mortar obstructing the draft flow. Cleaning tends to be easier with a complete reline. Installations requiring in excess of eleven (11) ft. of pipe should adapt to a 4" chimney pipe versus a 3". This will improve your draft in many cases.

Galvanized or stainless steel flex pipe is recommended for all insert installations. A clean out "T" is recommended for cleaning and maintaining your chimney.

Some helpful hints in installing your JAMESTOWN insert...Remember your local dealer or dealer service representative is well versed on the installation of this product. We recommend you have them install your insert. It is important to clean your chimney and fireplace thoroughly and completely...No short cuts... If you don't, the convection blower will pick up the existing soot and fly ash and blow it into your home!!!!! Your home will smell musty....Not a pleasant smell...

Depending on the distance from your insert to the termination of your pipe, use the proper size of pipe. As a rule, 11' or more adapt to a 4", 11' or less of pipe use 3". Sorry...no "B" vent pipe. Use stainless steel or galvanized in every case. Be sure when you reline the chimney, you must seal your connection completely. If you don't you will have fly ash filter through your connection, into your fireplace cavity, be picked up by your convection blower and be dispersed throughout your house.

Follow code, installation instructions and use your own best judgement at all times.

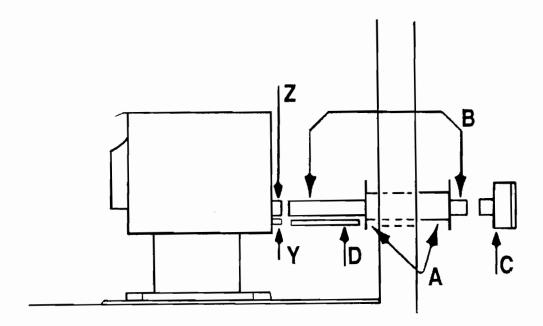
- The J3020A Standard Installation Kit provides outside air for combustion and requires only one
  hole to be cut in your wall (free standing stove only). Complete instructions and all the materials
  you will need for a simple "thru-wall" installation are in each kit.
- It is important that the materials above outlined be used exactly as specified; substitutions or shortcuts may be neither listed nor safe.
- Installations requiring more than 10 feet of exhaust or more than one 90 degree exhaust angle: the exhaust pipe diameter should be increased to 4". Max. two 90-degree elbows.
- The floor protection pad referred to throughout this manual must be safety listed, unless it is a non-combustible material.
- If you elect not to use self-tapping screws in your installation, you will not need the 5/16" hex driver referenced in the last paragraph of page six.
- Care must be taken to plug the power cord into a grounded three prong outlet, after your stove
  or insert is in place (minimizing the possibility of electrical shock.)
- Any installation incorporating an existing chimney must include a re-lining of the existing chimney.

### 8. Mobile Home Installation

All mobile home installations require the unit to be secured to the floor or fireplace hearth. Outside air for combustion is a standard requirement. It is also a requirement to have the units properly grounded. Should you have questions, please consult your local dealer or building official in your area.

### E. Installation Drawings and Directions:

 Horizontal venting, parallel to and against an outside wall without J2020T/J3020A Standard Installation Kit.



Step One: Determine Locations for and cut holes in wall for thimble (a).

Step Two: Install wall thimble (a).

Step Three: Apply 1/8" bead of RTV (e) around circumference of exhaust stub (z) 1/2" toward stove from end of stub, slide 3" pipe (b) over stub to rear cover of stove and secure with three screws (g).

Step Four: Apply 1/4" bead of RTV (e) around circumference of combustion air intake (y) near end of stub and slide 1-5/8" air intake tube (d) over stub to rear cover of stove.

Step Five: Position stove into alignment with holes in wall and gently slide stove up to wall, watching to be sure pipe (b) and tube (d) enter thimble and air intake hole properly.

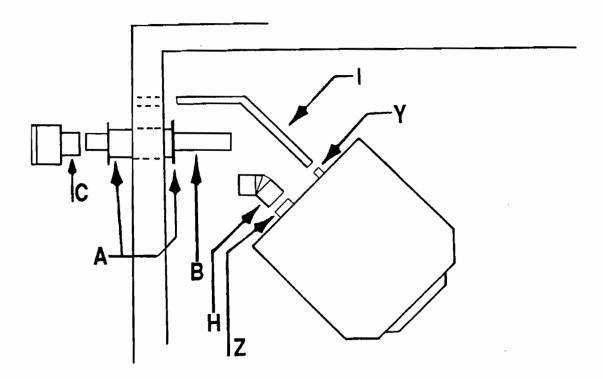
Step Six: Affix end cap (or elbow and rodent screen, c), using RTV (e), screws (g), and High Temperature Foil Tape (f).

Step Seven: Trim intake air tube approximately flush with outside wall and secure rodent screen.

- \* A templet is available to mark where the hole(s) should be. Consult your local dealer.
- \* The J3000A model requires a 2" intake air tube.

### F. General Installation Precautions

Horizontal venting, corner installation, outside wall



Step One: Determine locations for and cut holes in wall for thimble (a). (Use available template)

Step Two: Install wall thimble (a).

Step Three: Apply 1/8" bead of RTV (e) around circumference exhaust stub (z) 1/2" toward stove from end of stub, slide elbow (h) over stub to rear cover of stove (careful to watch for proper orientation) and secure with three screws (g). Secure pipe (b) to elbow (h) using RTV (e), screws (g), and tape (f).

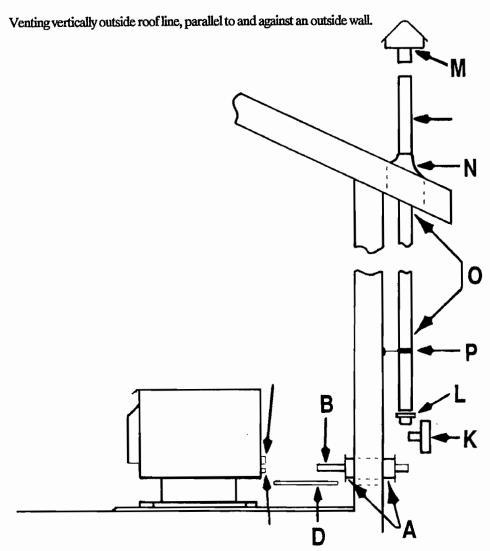
Step Four: Apply 1/4" bead of RTV (e) around circumference of combustion air intake (y) near end of stub and slide 1-5/8" air intake tube (d) over stub to rear cover of stove.

Step Five: Position stove into alignment with holes in wall and gently slide stove up to wall, watching to be sure pipe (b) and tube (d) enter thimble and air intake hole properly.

Step Six: Affix end cap (or elbow and rodent screen, c), using RTV (e), screws (j), and tape (f).

Step Seven: Trim intake tube approximately flush with outside wall and secure rodent screen.

\* A template is available to mark where holes should be.



3.

Step One: Follow Steps one through five and step number seven outlined in "Horizontal Venting" on page ten.

Step Two: Secure Tee elbow (k) to pipe (b), using RTV (e), screws (g), and tape (f), being sure to orient Tee cleanout opening downward.

Step Three: Cut (10" minimum diameter) hole in appropriate location in roof and install roof flashing (n).

Step Four: Secure increaser (I) to Tee (k), using RTV (e), screws (g), and tape (f).

Step Five: Secure appropriate lengths of pipe (o) from increaser up through (to a minimum of 24" above) roof flashing (n) using RTV (e), screws (g), and tape (f).

Step Six: Secure rain cap (m), using RTV (e), screws (g), and tape (f).

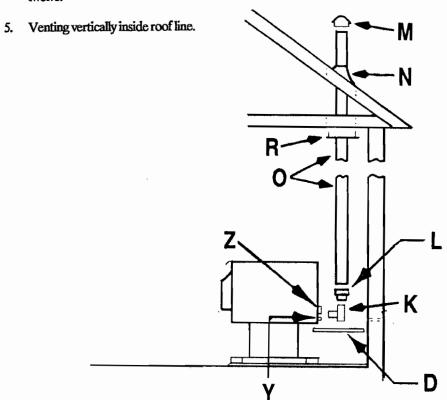
Step Seven: Secure wall brackets (p) at (minimum) 5' intervals.

NOTE: Installations must not exceed two 90-degree elbows or four 45-degree offsets.

### 4. Venting vertically outside roof line, corner installation, outside wall

Step One: Follow steps one through five and step number seven outlined in "corner installation" on page eleven.

Step Two: Follow Steps Two through Seven outlined in "venting vertically outside roof line" on page twelve.



Step One: Apply 1/8" bead of RTV (e) around circumference of exhaust stub (z) 1/2" toward stove from end of stub. Slide Tee (k) over stub to rear cover of stove (being sure to orient Tee cleanout opening downward) and secure with three screws (g).

Step Two: Secure increaser (2) to Tee (k), using RTV (e), screws (g), and tape (f).

Step Three: Cut (10" minimum diameter) holes in appropriate locations in ceiling and roof and install firestop (r) and roof flashing (n).

Step Four: Secure appropriate lengths of pipe (o) from increaser up through firestop and (to a minimum of 24" above) roof flashing, using RTV (e), screws (g), and tape (f).

Step Five: Secure rain cap (m), using RTV (e), screws (g), and tape (f).

Step Six: Cut 15/8" hole in closest exterior wall and secure the appropriate length of metal hose (d) as described in Steps Four and Seven on page ten.

\* The model 3000A has a 2" air intake kit.

NOTE: Installations must not exceed two 90-degree elbows or four 45-degree offsets.

### G. Installation Instructions For J3020A Through The Wall Kit

This kit contains all the materials you will need to complete a "thru-wall" installation, except eight screws. The screws you will need to obtain depend on the material from which your wall is made. Four will secure the wall thimble to the inside of your wall on one side and the four others to the outside of your wall on the other. A list of wall materials and the recommended screws for each material follow:

### MATERIAL

### **SCREW TYPE**

wood sheet metal dry wall masonry 3/4" no. 6 wood screw 1/2" no. 6 sheet metal screw

1-1/2" molly bolts

1" no. 6 sheet metal screws with plastic anchors

### 1. Kit contents:

- (a.) Air intake adapter housing with 4-3/4" air intake pipe
- (b.) 4-3/4 end cap (rodent screen)
- (c.) 19" length of 3" exhaust pipe with preformed bell
- (d) Wall thimble (2 piece)
- (e.) 3" double wall rain cap with rodent screen
- (f.) 1/2" no. 8 Hex teck screws (self drilling/tapping), 19 ea.
- (g.) RTV high temperature silicon sealant

### Tools required:

Hand drill, 1/4" hex driver (or pre-drill with 1/8" drill bit where necessary and use 1/4" socket and rachet, saw appropriate for cutting a 9" diameter hole in the wall on which you are installing, and screwdriver (s) appropriate to secure the screws which will fasten the wall thimble to your wall material.

### 3. Preparation:

A. Measure from the center of where you want your stove to sit then, \* to the left.... and \*\* above the top of the floor protection pad. (See chart below for \* and \*\* measurements for your specific model.) The point at which these two measurements come together on your wall will be the center of the 9" hole you will cut.

	J1000B W/LEGS	J1000B W/PED.	89 Model J2000T	J2000 90-Present	J3000A
*To the left	1/8"	1/8"	7-3/4"	3-1/2"	0" Center
**And	9-1/8" add 1-3/4" for leg balls	8-7/8"	15-1/16"	16-1/2"	12-7/8" add 1-3/4" for leg balls

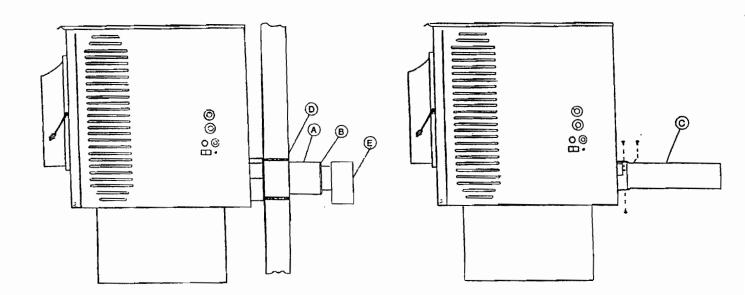
- B. Cut the 9" diameter hole in the installation wall.
- C. Position the stove near the installation site.

### 4. Installation:

A. Install wall thimble, black surface on the inside wall, with the eight screws you have provided.

B. Slide belled end of part "c" over stove exhaust stub as far as it will go and secure with 3" hex screws. Apply a liberal amount of RTV silicone to joint to insure an air tight seal. IMPORTANT! It is critical that no exhaust gases are allowed to escape at this joint.

# INSTALLATION INSTRUCTIONS FOR J3020A -CONTINUED-

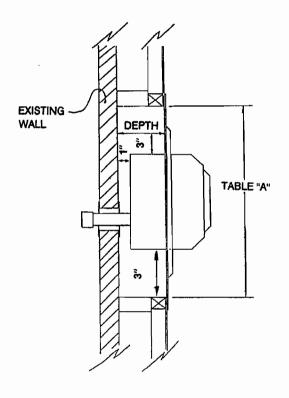


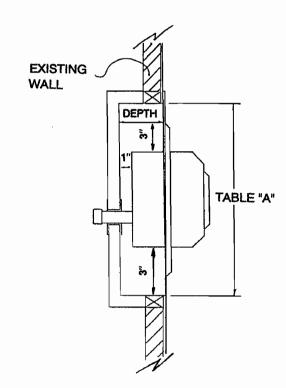
- C. Slip part "a" over installed exhaust pipe "c" and secure to back of stove, making certain to position the mounting flanges so the mounting holes align with those provided on the back of stove.
- D. Position the stove properly and slide into position, carefully guiding the assembled vent system through the wall thimble.
- E. Check for wall thimble fit. Adjust as necessary. Secure wall thimble with the eight screws you have provided.
- F. Install part "b" (on outside of wall), positioning the 3" hole in the center around the 3" exhaust pipe, and the outer sleeve inside the 4-3/4" intake pipe (be sure to orient part b so the sleeve is inside the 4-3/4" pipe and the lip around the plate containing the small air\intake holes is up against the pipe).
- G. Secure part "b" to 4-3/4" pipe using three screws (f).
- H. Slide part "e" over 3" pipe stub remaining (orienting the open end of the raincap downward) and secure with three screws (f).

### J3030T/J3030A, 45 Degree Adapter Installation Instructions

This kit combined with the J3020 installation kit contains all the materials required for a 45 degree through the wall (corner) installation, right or left hand side.

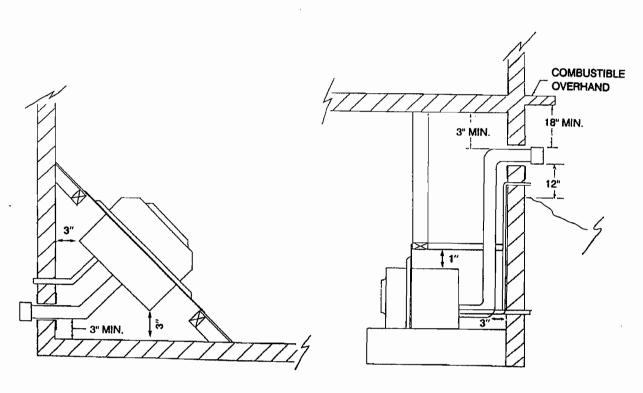
- 1. This kit contains:
  - I. 1-45 degree 3" elbow
  - J. 1-45 degree housing adapter
  - K. 20 #8 x 1/2" teck screws
  - L. 3" exhaust pipe extension
  - M. 4-3/4" air intake pipe extension
  - N. 4-3/4" coupler
  - O. air intake tube bracket (J3030T only)
  - P. cover plate (J3030T only)
  - Q. 4-#8x1/2" phillips machine screws and nuts
- 2. The tools required are the same as for the J3020A install kit.
- 3. Install the 3" exhaust pipe from the J3020A install kit (expanded end) onto the 45 degree elbow (non expanded end) using three (3) #8 teck screws. If the exhaust pipe extension (L) is required, cut to length and install onto previously assembled pipe. Note, where the joint will be, you may need to trim the first exhaust pipe so the joint to the 4-3/4" end cap (rodent screen) as it will not fit through. See figure 1.
- 4. Install assembled exhaust pipe/elbow onto exhaust stub of the stove, either left or right hand installation, maintaining horizontal positioning of the pipe., with three (3) # 8 teck screws. Apply a liberal amount of RTV to <u>all</u> joints. Important... It is critical to obtain an airtight seal. ....See J3020A install instructions and figure 2.
- 5. Install housing adapter "J" onto air intake adapter housing "A". Using four (4) # 8 x 1/2" phillips machine screws and nuts be sure to install "J" the proper way. If 4-3/4" extension is required, install it now using 4-3/4" coupler. Determine length of extension required, then cut to length either the extension pipe or the air intake adapter housing pipe depending on where you want the joint. Using six (6) # 8 x 1/2" teck screws fasten the pipes together using the 4-3/4" coupler. Keep in mind the teck screws will not go through the 4-3/4" wall thimble holes. See figure 3.
- Slip housing assembly over exhaust pipe. Center 4-3/4" around 3" exhaust pipe, and using # 8 teck screws, fasten to the stove back. See figure 4.
- 8. Seal all possible air leaks on connection surfaces with RTV. High temperature silicon.
- Using figures 5. for hole positioning from inside wall corner, finish installation as per J3020A instructions.





DETAIL 3.

DETAIL 4.



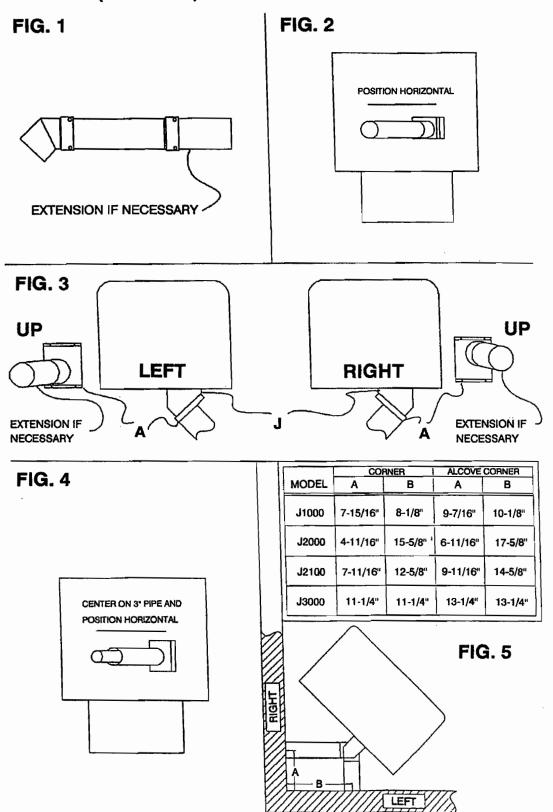
DETAIL 5.

DETAIL 6.

21 Patents Pending 1991

# Installation Instructions For J3030T/J3030A Continued (Illustrations)

terrigit for les sectos de formes de la la la la Mediant de manifoliste de la manifoliste de la manifoliste de



16 Patents Pending 1991

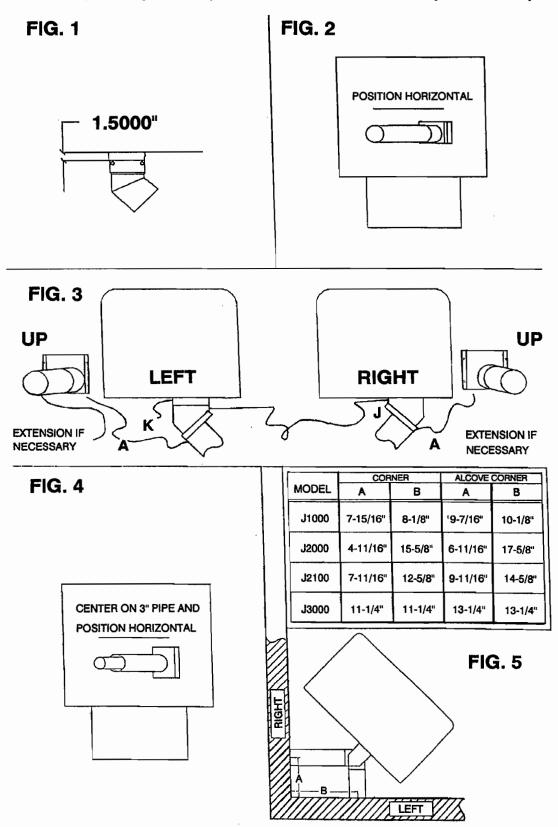
### I. J3030B, 45 Degree Adapter Installation Instructions

This kit combined with the J3020A Installation Kit contains all the materials required for a 45 degree through the wall (corner) installation, right or left hand side.

- This kit contains:
  - I. 1-45 degree 3" elbow
  - J. 1-45 degree housing adapter
  - K. Housing extention (for left hand installation)
  - L. 3" exhaust pipe extention
  - M. 4-3/4" air intake pipe extension
  - N. 4-3/4" coupler
  - O. 24 # 8 x 1/2" teck screws
  - P. 6#8x1/2" phillip screws with nuts
- The tools required are the same as for the J3020A Install Kit.
- Install the 45 degree elbow (right or left side) onto exhaust pipe so that the elbow comes to 1-1/2" from stove, maintain horizontal position of elbow. Fasten with three (3) # 8 x 1/2" teck screws. Seal joint generously with RTV. Silicon. See Figure 1.
- 4. A. For right hand installation, install two (2) #8 x 1/2" teck screws in the stove back. Leave screws loose enough to slip the housing adapter "J" onto elbow under the two "2" screws. Install the other two "2" screws on the other side. Tighten screws.
  - B. For left hand installations, install housing extention (K) to the stove back using four (4) #8 x 1/2" teck screws. If exhaust pipe extention (L) is required, determine length required, cut to length and install onto previously assembled pipe. Note... you may need to trim the first exhaust pipe so the joint will not end up too close to the 4-3/4" end cap (rodent screen) as it will not fit through. Apply liberal amounts of RTV. silicon to all joints to assure no leakage. See figure 2.
- 5. Install the 3" exhaust pipe from the J3030A install kit (expanded end) onto the 45 degree elbow (non expanded end) using three "3" #8 x 1/2" teck screws. If exhaust pipe extention (L) is required, determine length required, cut to length and install onto previously assembled pipe. Note...you may need to trim the first exhaust pipe so the joint will not end up too close to the 4-3/4" end cap (rodent screen) as it will not fit through. Apply liberal amounts of RTV. silicon to all joints to assure no leakage. See Figure 2.

### J3030B, 45 Degree Adapter Installation Instructions (Illustrations)

,我们就是我的现在分词,我们就是这个时间,我们就会说,我们就是我们的就是我的心理,但是我们的人的,我们就会的人,我们也不是我们的人。""我们是我们是我们是这个的 "我们就是我的,我们就是我们的,我们就是我们的,我们就是我们的我们的,我们就是我们的人,我想象别的人,我们就是我们的人,我们就是我们的人,我们就是我们的人,我们



18 Patents Pending 1991

### J. Installation Instructions For Framing Your Insert

In planning the installation for the fireplace it is necessary to install certain components before the fireplace is completely positioned and installed. These include the direct vent system and the electrical wiring.

Determine if the fireplace is to be installed inside the room (drawing D3), recessed in the wall (drawing D4), corner mounted (drawing D5) or elevated installation (drawing D6). Minimum clearances for the construction of the hearth are given in drawings (D1 and D2). Your fireplace insert can be installed with the standard C187 shroud or the large C188 shroud. The opening in the framing for the fireplace are listed in table "A".

SHROUD		WIDTH	HEIGHT
C187	Minimum	39.00	27.50
	Maximum	41.00	28.00
C188	Minimum	46.50	33.50
	Maximum	48.25	34.00

NOTE: These openings are measured from the top of the hearth.

The height of the hearth is optional but 12-14 inches is a good height if you want to sit on the hearth. The minimum depth of the framing is 13" for a direct vent and 22" for a vertical vent. All installations of this fireplace require outside air for combustion. With the instructions in your owners manual and the proper installation kit instructions you will be able to make all installations.

#### INSIDE ROOM INSTALLATION AND RECESSED IN THE WALL

### POSITIONING THE FIREPLACE (Drawings D3, D4, D5, D6).

Determine the exact position of the fireplace so the direct vent pipe is centered (if possible) between two studs. This will avoid any extra framing. The back of the fireplace may be positioned 1" inch from a combustible wall when using the JAMESTOWN standard, J3020A thru the wall installation kit. The fireplace framing should be constructed of 2 x 4 lumber or heavier. To install the fireplace as a recessed in the wall it is necessary to cut and frame a hole in the wall and build a small insulated chase. A chase is a boxlike structure built to enclose the fireplace.

CAUTION: THESE INSTRUCTIONS ARE NOT SUBSTITUTES FOR THE REQUIREMENTS OF LOCAL BUILDING CODES. THEREFORE, YOUR LOCAL BUILDING CODES MUST BE CHECKED TO DETERMINE THE REQUIREMENTS OF THESE STEPS.

### CORNER INSTALLATION (Drawing D5)

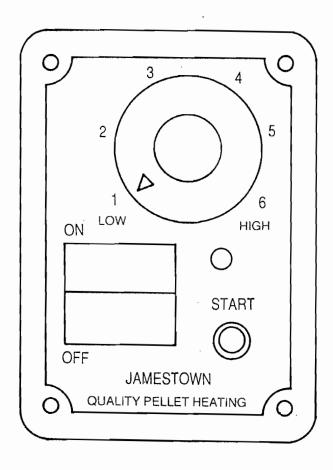
Positioning of the fireplace will vary depending on such factors as which shroud is being used and the amount of wall, facia or trim you want exposed. For all practical purposes setting the fireplace with the shroud in a position that is most desirable to serve form and function is the preferred way to finalize the fireplace's location. Either the standard or the large shroud will give the fireplace proper clearance

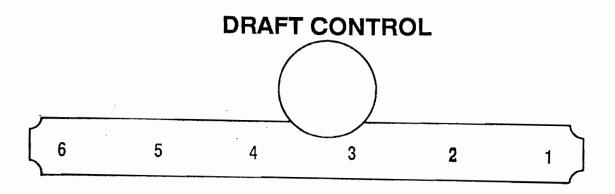
for the exhaust venting. Refer to Section II letter C of the owners manual for instructions, proper materials and clearances for your corner installation.

### 4. VERTICAL VENTING (Drawing D6)

When vertical venting is required a 3" inch space between the vent pipe and the wall must be held when locating the exhaust hole, it must be noted that the bottom of the cap must be 12" inches above the ground level. This is a minimum clearance. You must also maintain a minimum of 3" inches clearance from the ceiling.

# **JAMESTOWN CONTROL PANEL**





### IV.OPERATING YOUR NEW J1000B, J2000T, J3000A FREE STANDING STOVE OR YOUR J1001B HEARTH MODEL, J2001T FIRE PLACE INSERT.

### A. Start Up Instructions

You should first of all know how your stove works. Pellets are delivered to the fire pot by an auger/gravity system. Once inside the fire pot the pellet burn rate is controlled by either a thermostat or manual controls and the ashes are collected in the ash pan.

On the side of the stove are the operating switches. The rocker arm switch is the on/off switch. This turns the auger on and off. Switch this switch to "on". Your stove won't start if this switch is "off".

Right next to the on/off switch is the reset button. When you push the reset button a green light will come on - this means you've got power to the auger motor and fan.

Above the reset button is a dial. The dial is numbered 1-6, 1 being low and 6 being high. This dial controls both the fuel feed and the fan motor speed.

Next to these controls is the manual auger timer. This switch allows the pellets to be fed to the fire pot while the stove is warming. You can set the timer for between 1 to 15 minutes.

On the lower left hand side of your main controls is the draft control knob. This is adjustable from 1-6, 1 being low and 6 being high. For any fire to burn efficiently the draft must be properly adjusted.

Now that you know your unit, we can get a fire going. Fill the hopper with pellets. Make sure the on/off switch is on and push the reset button and check for the green light.

Set the fuel control dial to the "6" setting and the draft to "4". Now set the manual auger timer for about ten minutes. This will prime the auger with fuel.

When you see the pellets start to drop into the fire pot turn the fuel control to the "3" setting and the on/off switch to the off position.

The only time you need to prime the auger with fuel is when the hopper has been empty - when you run out of fuel or like now when you are starting your JAMESTOWN for the very first time.

Take a handful of pellets and put 'em in the fire pot. Be careful when you do this not to put too many in there or you will restrict the airflow and make the fire hard to light.

Add some firestarter - Talk to your dealer about which starter he would recommend - Some options are gelled alcohol, wax covered shavings, lighter cubes or even a propane torch. NEVER USE A FLAMMABLE LIQUID TO STARTA FIRE IN YOUR STOVE.

Turn the on/off switch back on again and push the reset button.

Light the fire. Keep the door cracked about one inch and leave it open for about three minutes.

After three minutes close the door but watch the fire to make sure the fire doesn't blow out. If it looks like it is going to go out; just open the door for a few more minutes.

Make sure your ash pan is closed tightly.

Turn the manual auger timer to about 8 minutes. This will allow your stove to warm up. If the fire starts to die down after the 8 minutes and pellets are not dropping, turn the manual timer on for another 5 minutes.

Shut Down: Switch the on/off rocker arm to the off position. The auger will shut down immediately while the draft fan and convection fan will continue to run until your stove has cooled down. Once the stove has cooled, the temp. sensors will shut both blowers off automatically. If.... your stove runs out of fuel and you have not shut off the rocker arm switch, the auger and draft fan will shut down automatically when the stove cools off but..... your convection fan will continue to run until you shut off the switch.

### B. Achieving A Clean Burn:

Setting the JAMESTOWN for a clean burn requires three basic steps:

- Decide on the rate of burn desired
- 2. Set the fuel rate at roughly that level (1-6 on your dial)
- Set the draft rate to correspond properly with the fuel rate

Step one, of course, requires no explanation.

Step two is quickly and easily achieved with a little experience.

Step three will also come with a little experience, as long as the operator knows what a clean burn looks like. This is where your Dealer will be of real service to you. Please take a day or two and experiment with your burn unit, you will quickly find a few settings you can feel comfortable with and, shortly thereafter, variations on basic settings.

Proper setting is actually just providing the optimum air/fuel ratio for the desired burn. A manufacturer must provide a unit which will burn at sea level and also at 11,000 feet above sea level, and it must be able to burn a wide variety of fuels. At sea level and burning 1/4" pellets, one has enough oxygen and fuel available to burn well at (or very near) the lowest settings. At sea level and burning a 5/16" pellet, it may burn better or worse at the lowest settings, depending on the installation method. At 11,000 feet of altitude, however, there simply isn't enough oxygen in the available air to burn any fuel at the lowest settings.

The same issues are at work when one sets at maximum burn. At sea level, the air/fuel ratios at the highest settings are quite different than at 11,000 feet, because there simply is more oxygen in a cubic foot of air at sea level than at a higher altitude, and the volume of oxygen in the same cubic foot changes with each increase or decrease of elevation.

Customer, it will be important, then, for each operator to understand that the minimum setting one should set for is the minimum one is able to achieve cleanly. Likewise, the maximum one should set for is the maximum one is able to achieve cleanly.

Additionally, the amount of fuel consumed, will be contingent on the elevation, installation, pellet size, and amount of heat requested. To make the statement that the unit will burn less than 1 lb. of fuel per hour, may, or may not, be true.

Once you have your fire going you need to set your air and fuel for a clean efficient burn.

Your flame should be crisp and brisk like a forge or a propane torch. Look for a real bright white or yellow flame with blue tones below. You should see a "popcorn" effect by the pellets in the fire pot. As the pellets hit the fire they should begin popping like "popcorn".

After the heat is "extracted" the air casts embers out of the fire pot and it becomes "fly ash". It may appear that these embers are quite large and you may feel that you are wasting some of the heat value of the pellet. If the embers smoke or flame when cast out of the fire pot, reduce the draft air.

You know you've got the most efficient, clean burn when you see a light brown or milky white ash on the window and a fine gray ash in the ash pan. YOUALSO WONT SEE ANY BLACK SOOT.

#### Thermostat:

If your unit is hooked to a wall thermostat the draft needs to be set at one position for both the high burn and the low burn.

This means you will only be able to set your fuel feed up to about 4 to 4-1/2 because you need sufficient draft to get a good clean burn. You also need to make sure that the draft isn't turned up so high that it blows the flame out on the low burn.

NOTE: You may notice an increase of air after a couple of weeks in operation. The blower motors will break-in and loosen up. This may require a slight adjustment. You will experience a different burn when using a 5/16 diameter pellet vs. a 1/4 diameter pellet. An adjustment may be required when switching from one to the other.

Should you feel your air and fuel adjustment is improper, first check the maintenance checklist (under Maintenance) then consult your local dealer.

### V. PELLET "FUEL"/POTENTIAL PROBLEMS:

CONDITIONS: Inability to achieve a clean burn; "smoky, orange, lazy" fires...fire extinguishing for lack of fuel.

We feel it is important to address fuel quality first and foremost in this section. It would stand to reason: if we are attempting to burn an extremely clean fire, then we need a reasonably clean fuel.

ASH is the typical residue of a pellet fire and a certain amount is expected. This ash (typically less than 2%), is normally eliminated from the appliance in two forms, both commonly referred to as "fly ash". The first form is "settle", this being the fly ash which settles into the ash pan area or on the horizontal surfaces near the firepot (grate). The second is "airborne" and is captured in the ash pockets found in most designs.

The distinguishing characteristic common to both is, they are ash which leaves the firepot with the flame (vertically) and do not collect in the firepot in any significant amounts, due to the "forge affect". Additionally, neither creates appreciable deposits on the glass, and neither collect as "soot" or "creosote"....they are relatively easy to remove.

Fuel containing more than nominal amounts (more than 2%) will, depending on the amount in percentage and other variables such as burn intensity setting, "leave" amounts of ash (not fly ash per se') below the incoming fuel and obstruct the airflow necessary to properly eliminate ash products from the firepot. As this condition persists, the accumulation of ash below the incoming fuel intensifies and, ultimately, closes off the air flow altogether. This, of course, eliminates the "forge effect". The final result is the extinguishing

of the flame for lack of oxygen (but not before sooting up the glass, not to mention the entire unit and exhaust system).

Another significant factor is moisture. As you are undoubtedly aware, moisture not only "dulls" any fire...it promotes collection of burn products on exhaust systems as well as in the ash collection chambers and shelves. It also causes a "crusting" of these burn products and intensifies the cleaning and maintenance effort.

Pellet size is yet another issue. The general consensus is that size should not matter a whole lot, as long as the other criteria in a high quality pellet are addressed properly. There is one characteristic specific to size, however, and that is actual feed rate. In the case of the JAMESTOWN (we're not unique) design, we have found that a 1/4" pellet will feed slightly faster than a 5/16" pellet. The result is a slightly hotter fire and a slightly shorter hopper fill cycle. Additionally, the air/fuel ration will require adjustment accordingly.

Last but not least, we feel the raw material used to produce a given pellet has an equal effect on it's quality. We highly recommend you do not burn corn, or any raw material other than dried wood unless you have tested them to your satisfaction in your JAMESTOWN unit or have been advised that we have done that testing and that it was a positive test.

A good rule of thumb, at least for now, is if it doesn't meet your criteria after having tested them yourself, or you are at all in doubt, don't use it.

The problems you will encounter due to poor fuel include...

- A. Dirty fire
- B. Smoking up of the glass
- C. Ash accumulations in the firepot
- Creosote type accumulations on the glass and in the exhaust system (becoming noticeable as the inability to burn cleanly at higher rates, which continues to worsen)
- E. Visable smoke at the rain cap

Note: Consult your Dealer for information and recommendations on the best fuel in your area.

### VI. MAINTENANCE

Please Note: All maintenance should be performed with the stove off and in a cool condition.

### A. Cleaning And Maintenance:

Let's talk about some things you will need to do to keep your pellet stove operating efficiently.....

Many service calls are made by dealers for routine cleaning or routine maintenance. Most of the cleaning and maintenance can be done by you ........ This will save you many dollars in service calls and it is very easily done. Check with your local dealer for information on their service and/or maintenance agreement, it may be just the ticket for you if you are short on time.

### **B.** General Instructions On All Models:

### How Often - Once or Twice a Week

Firebox Area - There will be some ash build up to the side, front and above the fire brick. Simply remove by using a small wisk broom, brushing the ash accumulation into the ash pan below.

Heat Exchanger Tubes - The heat exchanger tubes will collect fly ash over time. A scraper attached to a rod protruding through the front of the stove above the door permits these tubes to be scraped clean. The stove door should be kept closed when scraping the tubes. When you have finished cleaning the tubes push the rod completely in to avoid warpage. REMEMBER DO NOT TOUCH THE SCRAPER ROD WHEN THE STOVE IS HOT.

Ash Pan - Remove by turning the knob on the front of the ashpan counter-clockwise and pull the pan towards you. Empty the ashes into a noncombustible container. When replacing the ash pan, be certain it seals properly while turning your knob clockwise.

Fire Pot/Burn Grate - Inspect for accumulation of burn by-products and scrape off. Be sure to inspect the air inlet holes to make sure they're clear of ash. REMEMBER TO FIT THE FIRE POT SECURELY DOWN ON THE MANIFOLD WHEN REPLACING.

Manifold/Fire Pot Holder - This is the "empty box" on which the fire pot rests. If you have ash accumulations, take your vacuum and clean completely. After cleaning and each time the fire pot is replaced the fire pot must be seated. If the gasket is pushed down, fluff it up with a small screwdriver (metal should never hit metal when replacing the fire pot). Make sure the fire pot is securely sitting on the manifold. Sometimes it helps to gently tap it into place.

### How Often - After Every Ton of Pellets

Exhaust System - Inspect the spark arrestor/rain cap and clean any accumulations off the screen or slots. Inspect and clean the "T" connector, elbows and pipe, being certain to reassemble all components with secure and air tight seals. SPARKARRESTOR MAYNEED TO BE INSPECTED MORE OFTEN .... IMPORTANT ....

Seals and Gaskets - If at any time, the fire in your stove or insert tends to "lick" toward the glass more than normal, or if you begin to notice a change in the settings you need to select to achieve a given clean burn rate, you may have a loose or wearing gasket or seal. Inspect the gasket on the door, ash pan, fire pot and glass at least twice a season and replace as needed.

# C. Instructions For Cleaning Your Jamestown J1000B Pellet Stove:

### How Often - After Every 25 Bags Of Pellets

Ash Pockets - Remove the metal clean-out plates on each side of the fire box area. Behind the first plate is a second plate which is smaller, remove it as well. Using a bottle brush, clean all surfaces you can reach in each cavity. Ask your dealer about the Jamestown cleaning kit. (See diagram 1-1)

It is important to work the brush in all directions. Lightly tap on each wall of the stove with a hammer to loosen the more crusted ash down into the firebox. Continue to tap until all ash has fallen. Vacuum out all fly ash. Insert the bottle brush between the heat exchanger tubes and the top of the firebox and clean that 3/4" shelf off completely. It is essential that this area is cleaned. Brush around and between all heat exchanger tubes.

Bottom Ash Compartments - Remove the ash pan. Remove the two clean-out plates on the floor of the stove directly under the ash pan. Work the bottle brush in all directions and vacuum any loose fly ash. (See your dealer for a small hose adaptor for your vacuum.) Replace the clean-out plates and ash pan. (See diagram 1-2)

These procedures are similar to those necessary on your car when you change your oil, or on your furnace when you change your filter. Though they are simple procedures they can make a world of difference in the performance of your unit.

CAUTION.....IF THE ABOVE STEPS ARE NOT FOLLOWED YOUR UNIT WILL NOT PERFORM UP TO IT'S POTENTIAL. HI-TECK STOVES, INC. WILL LOOK UPON THIS AS MISUSE AND ABUSE AS STATED IN YOUR WARRANTY.

### D. Instructions For Cleaning Your Jamestown J2000T/2001T Pellet Stove:

BUT TRIBLE DU DUDO DE TURBERO DE PRESENTANTO DE RECHE DE CONTRACTOR DE COMPANION DE CONTRACTOR DE CONTRACTOR D

### How Often - After Every 40 Bags Of Pellets

Ash Pockets - Remove the firebrick on both sides of the firebox by removing the screw in the bracket at the top of each firebrick. Using a bottle brush, clean all surfaces you can reach in each compartment. It is important to work the bottle brush in all directions. Lightly tap the walls of the inside walls of the ash compartment and the inside walls of the firebox. Continue to tap until you can no longer see fly ash drop. Thoroughly vacuum out these compartments. See Diagram 2-1.

Upper Shelves - Insert the bottle brush between the heat exchange tubes and the firebox on each side and work the brush in all directions. This will clear a 3/4" shelf where fly ash builds up. Brush in between the heat exchange tubes. Remove the trivet on the top of the stove and tap gently on the top underneath the trivet until all fly ash has dropped. Vacuum the inside of the stove. See Diagram 2-2.

Inspection Plate - Remove the inspection plate just below and to the left of the pellet drop tube, exposing the back compartment of the unit. Using your bottle brush work all surface areas to the right of the compartment and to the left. Vacuum the compartment thoroughly (check with your dealer for a vacuum attachment to get into those hard to get places). See Diagram 2-2.

Replace inspection plate (being careful to attain a flush fit) and all firebrick.

These procedures are similar to those necessary on your car when you change your oil, or on your furnace when you change your filter. Though they are simple procedures they can make a world of difference in the performance of your unit.

CAUTION .... IF THE ABOVE STEPS ARE NOT FOLLOWED YOUR UNIT WILL NOT PERFORM UP TO IT'S POTENTIAL. HI-TECH STOVES, INC. WILL LOOK UPON THIS AS MISUSE AND ABUSE AS STATED IN YOUR WARRANTY.

### E. Instructions For Cleaning Your Jamestown J3000A Pellet Heater

### How Often - After Every 50 Bags Of Pellets

こと、これのでは野はいっての東西の野の野の大きのでは、ことにしているというという

Ash Pockets - Remove the metal clean-out plates on each side of the firebox area. Behind the first plate is a second smaller plate, remove it also. Using a bottle brush, clean all surfaces you can reach within these compartments. It is important to work the brush in all directions. Lightly tap the inside of these compartments as well as directly above the bricks gently with a hammer. Continue to tap until all the fly ash has dropped. Vacuum out these compartments thoroughly.

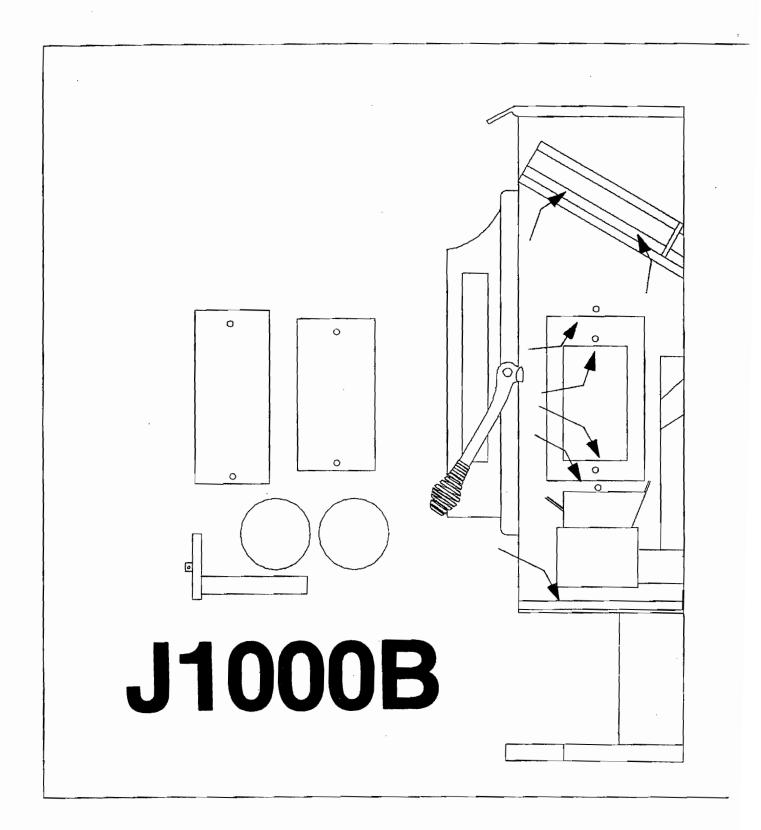
Upper Shelves - Insert the bottle brush between the heat exchange tubes and the sides of the firebox. There is a 3/4" shelf on each side of the heat exchange tubes. It is essential that this area be cleaned with the bottle brush. Brush all the fly ash off the "V" shaped baffle to the top of the firebox. Remove trivet and tap gently on the top of the unit until all the fly ash has fallen. Use the scraper rod to complete the cleaning of the heat exchange tubes.

Heat Exchanger Clean-out - Open the side panels of your stove (remove screws and swing open). To the front of the unit and just behind the front louvers you will find a little compartment to remove ash from the side heat exchanger. You will find one on each side of the stove. Remove the plates. Using the bottle brush, work the brush in all directions. Vacuum these compartments out thoroughly (you will find the vacuum attachment available at your dealers very helpful). See Diagram 3-1.

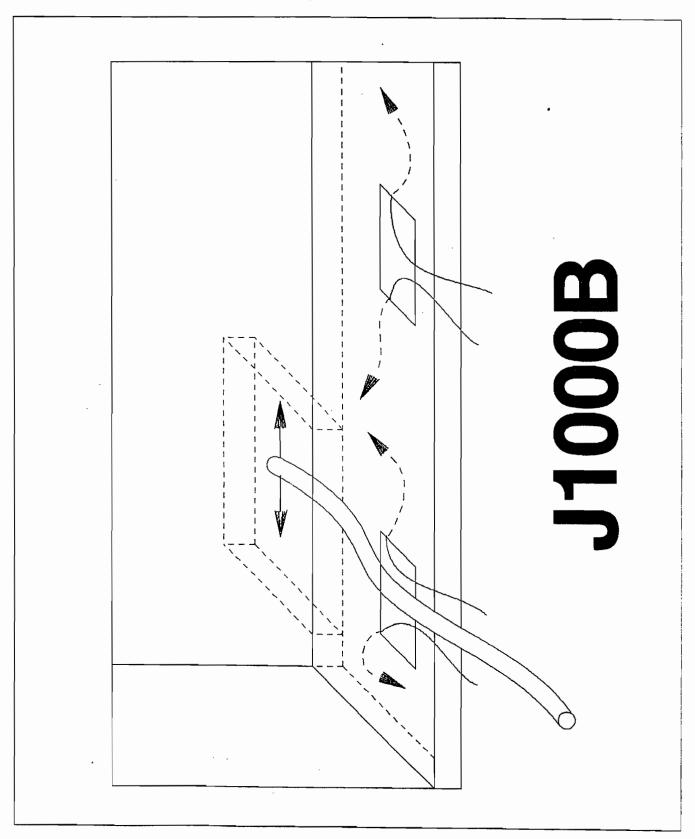
These procedures are similar to those necessary on your car when you change your oil, or on your furnace when you change your filter. Though they are simple procedures they can make a world of difference in the performance of your unit.

CAUTION...IF THE ABOVE STEPS ARE NOT FOLLOWED YOUR UNIT WILL NOT PERFORM UP TO IT'S POTENTIAL. HI-TECK STOVES, INC. WILL LOOK UPON THIS AS MISUSE AND ABUSE AS STATED IN YOUR WARRANTY.

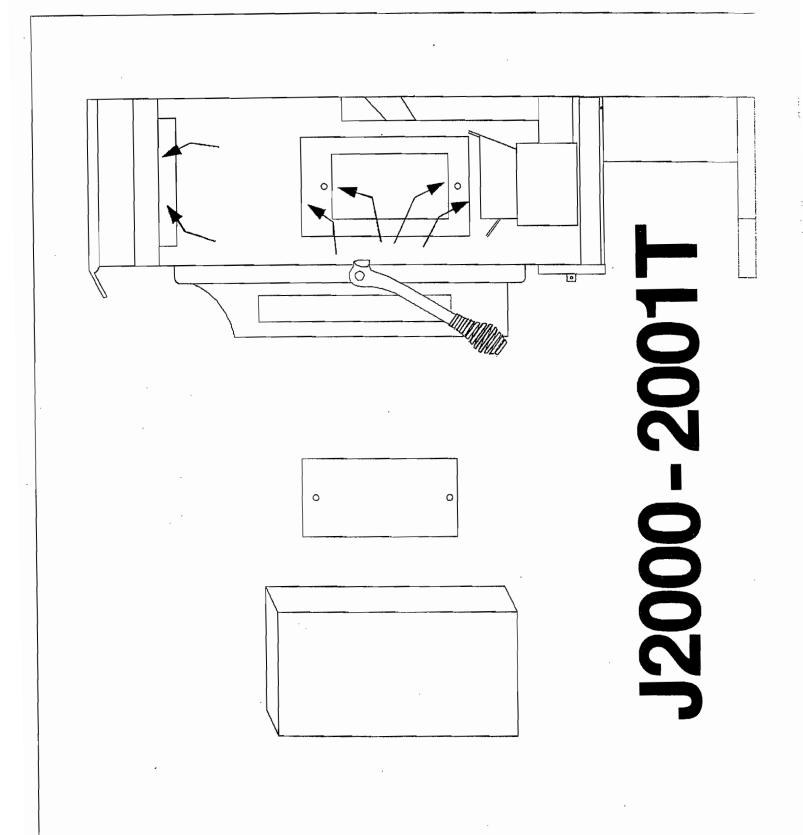
## **DIAGRAM 1-1**



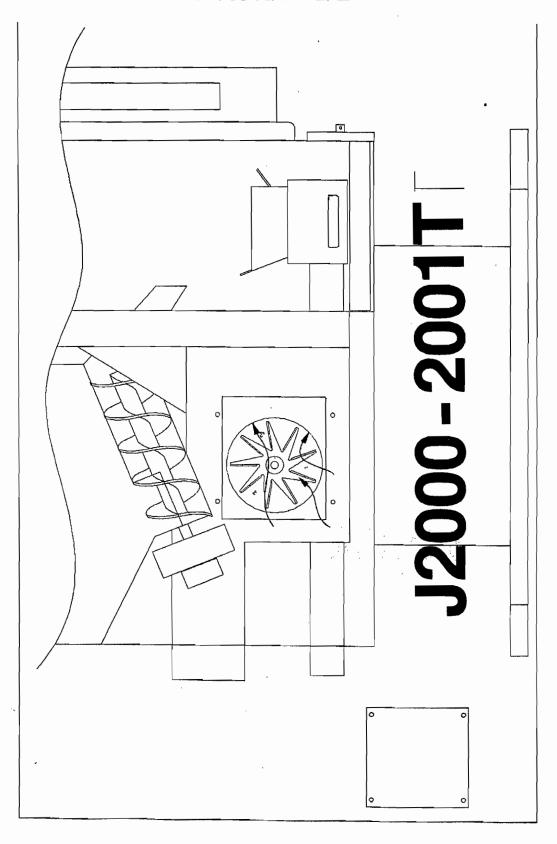
# **DIAGRAM 1-2**



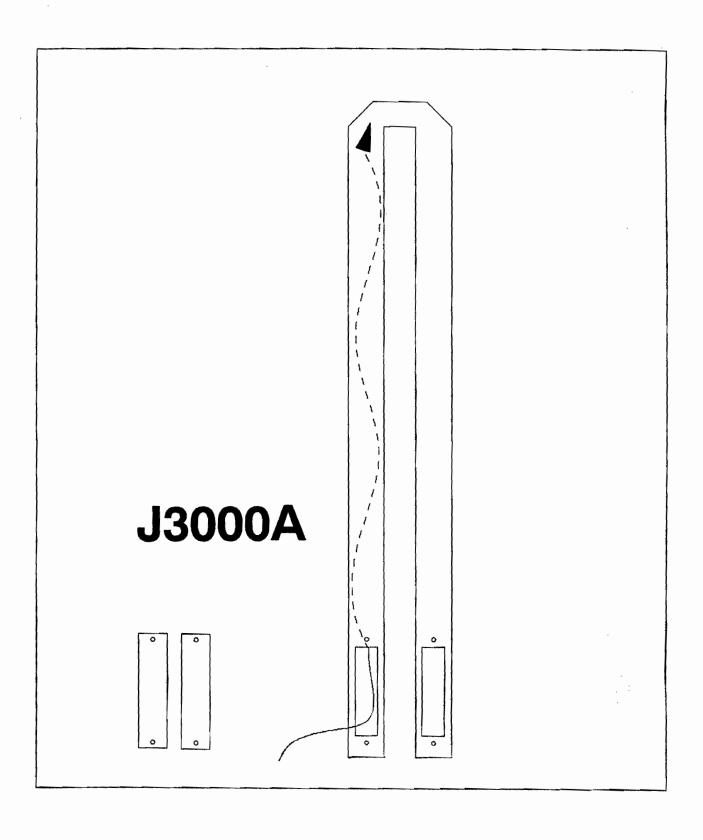
# **DIAGRAM 2-1**

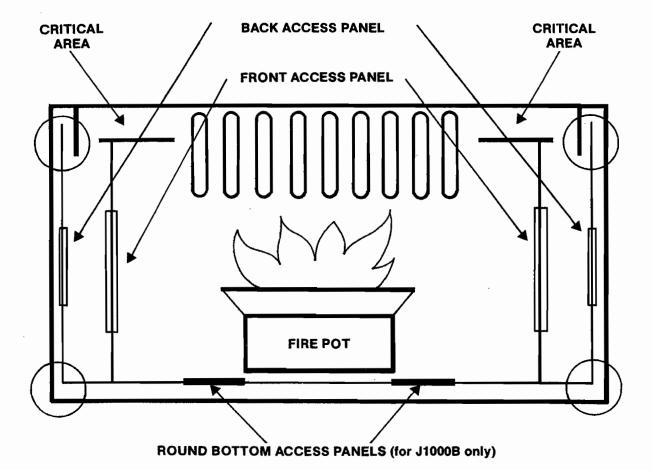


# **DIAGRAM 2-2**



# **DIAGRAM 3-1**





There are four (4) critical areas in the circles shown above that must be cleaned thoroughly as well as the two (2) shelf areas as shown above listed as critical areas.

When cleaning these areas, use the bottle brush on the top two shelf areas. Do not be afraid to push the brush hard and all the way back to clear the two shelf areas.

In addition to the brush, use a wire coat hanger to clear the narrow air passages shown in the circles above. After clearing these areas, use the vac attachment hose tube to ensure a clear path has been established.

After removing the two round access plates on the bottom, use the bottle brush and the vac attachment hose tube to ensure a clear path has been established. Enter through both holes and vac left and right as well as front and rear of the opening. The access hole on the left side extends further back, and is the passage leading to the exhaust of the stove.

<sup>\*</sup> If these areas are not cleaned, your unit will not burn efficiently!

## VII. OPERATING SAFETY FEATURES

Your JAMESTOWN stove or insert was designed with safety in mind. These include:

- A. Duel Full System Fuse Protection
- B. Thermal Protection on All Motors
- C. High Temperature Limit Switch
- D. Low Temperature Limit Switch
- E. Voltage Surge Suppression (on J1000B, J1001B, J2000T, J2001T, J3000E)

Please note: The JAMESTOWN product was designed with simplicity of circuitry (no computers) in mind. This design is sturdy and will operate efficiently for many years. It is strongly recommended, however, that only qualified personnel perform analytical, repair, or modification work unless otherwise specified.

### VIII. POWER FAILURE

A. In the event of a power outage or other interruption of the supply of power to your (J1000B, J1001B, 2000T, 2001T, 3000E) stove or insert, the entire system will shut down, possibly causing a small amount of smoke to escape from the stove temporarily.

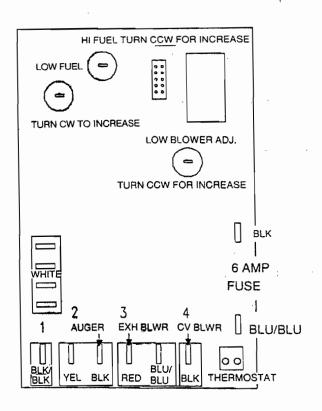
### IX. AUGER CARE

The auger and auger motor in your new stove (or insert) are the highest quality available. The entire apparatus is precision ground and assembled (this will promote self-cleaning and minimize "hard pellet" jams). It is very important, however, that foreign objects of any kind are not allowed into the fuel hopper. In the event something does "jam" the auger system, empty all pellets, and unplug the stove or insert. Remove the rear cover of the stove (for inserts, remove from the fireplace) and rotate the auger motor back and forth until the jam clears. If the jam is extremely stubborn, remove the auger assembly (your Dealer may have to help you with this). Clear the obstruction and reassemble. An auger motor cutoff kit has been installed to reduce the possibility of damage to your motor and/or gears.

## **ELECTRICAL SCHEMATIC**

## **C880 Circuit Board Adjustment**

Each circuit board is adjusted prior to shipment, however, due to varying installations, some on site adjustment is necessary.



Low Fuel. Adjusts minimum auger run time. Make adjustment in \*"Manual Mode" with fuel control on low

High Fuel. Adjusts maximum auger run time. Make adjustment in "Manual Mode" with fuel control on high.

Low Blower Adj. Adjusts low blower speed. Make adjustment in "Manual Mode" with fuel control on low.

\*Manual Mode means with thermostat "UP". If thermostat is not installed, jump across thermostat connections.

Adjustment	LOW FUEL		HIGH FUEL		LOW BLOWER
Auger Run Time	ON	OFF	ON	N OF	-
J1000-1001B	2.5	8.5	6.5	4.5	Adjust speed as necessary
J2000-2001T	2.5	8.5	8.0	3,0	<u> </u>
J3000E	2.0	9.0	5.0	6.0	

Adjustments may vary slightly. After adjustments are made, see III.D. "Settings for installations for thermostat".

Lower settings can be achieved when not using thermostat, by adjusting low fuel to approx. 2 sec on and lowering draft.

Note: Unit should be adjusted by your authorized service technician.

#### **Circuit Board Service**

Tools required: AC volt meter or 110V tester lamp.

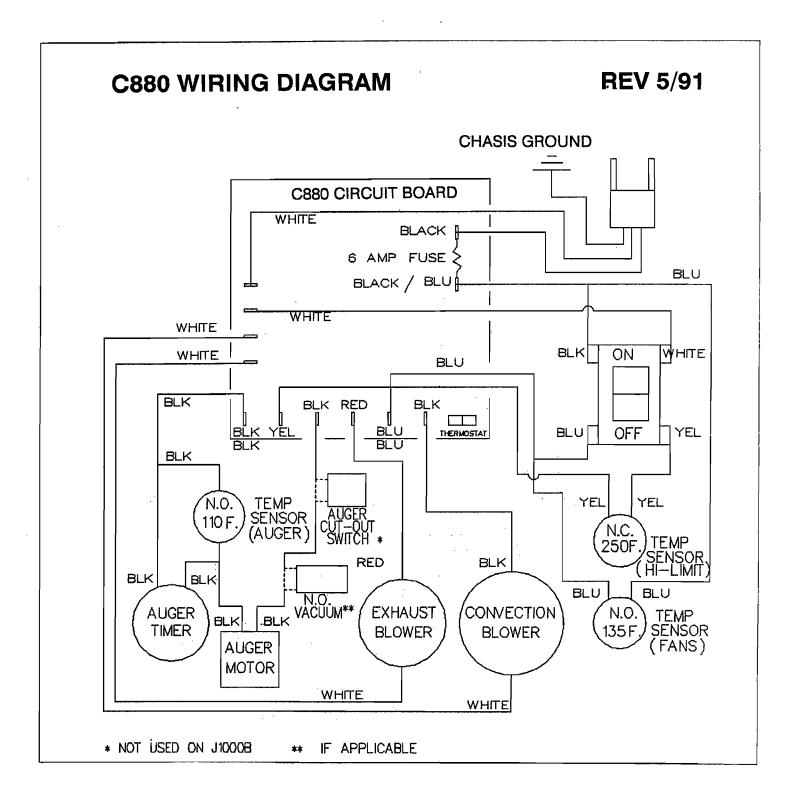
Each circuit board is tested prior to installation. If you and your customer have examined for and ruled out other potential causes of the problem, the circuit board should be tested on site.

Open side panel to access board (for insert, pull out far enough to access board). Make sure stove is plugged in. You need not remove the board or the terminals to the board. Do these tests in order. Start with stove "off" and on "manual" (thermostat up).

- 1. Switch stove to "on." Connect meter or tester between terminals 2 (yellow) and 3 (red). If there is no voltage, test across the on/off switch as it may be defective.
- Push start button. Green light should go on. Test between terminals 1 (black/black) and 2 (yellow). After one minute, there should be pulsing voltage.
- 3. Make certain stove is in "manual mode". Test between terminals 2 (yellow) and 4 (black). As you rotate fuel control knob, there should be variation in voltage.

If the three tests prove positive, the problem is not in the circuit board. If tests 2 or 3 prove negative, you should replace the circuit board and cable. Follow this procedure.

- Unplug stove.
- Remove and keep fuel control knob. Remove nuts on fuel control and start button shafts. Remove control board. Replace nuts.
- 3. Disconnect terminals on main circuit board. Remove circuit board. Please handle and package carefully.



## LIMITED FIVE YEAR WARRANTY

GENERAL: Manufacturer, Hi-Teck Stoves, Inc., will furnish a replacement for ANY PART of this product which fails in normal use and service within the applicable periods specified below, in accordance with the terms of this warranty. The exchanged part will be warranted for only the unexpired portion of the original warranty.

MAIN BODY STRUCTURE: If the main body of the unit fails within FIVE (5) years after original installation and operation, Hi-Teck Stoves, Inc. will either repair or replace the unit.

*ELECTRICAL*: If any electrical part fails within ONE (1) year after original installation and operation, Hi-Tech Stoves, Inc. will furnish a replacement part.

THIS WARRANTYWILL NOTAPPLY: a) to defects or malfunctions resulting from failure to properly install, operate or maintain the unit in accordance with the printed and taped instructions provided; b) to damage from abuse, accident, fire, flood and the like; c) to parts used in connection to normal maintenance, such as replacing gaskets, fiber boards, fire pots, the tarnishing and cleaning of brass, paint; d) to units that are not installed in accordance with applicable local codes, ordinances and good trade practices; e) to defects or damage caused by the use of any attachment, accessory or component not authorized by Hi-Teck Stoves, Inc.

SHIPPING COSTS: You will be responsible for the cost of shipping warranty replacement parts from our factory to our Hi-Teck (Jamestown) dealer and from the dealer to the location of your product. You also are responsible for any shipping cost of returning the failed part to the dealer. (If in Alaska, Canada you must also pay the shipping cost of returning the failed part to the port of entry into the continental United States.)

SERVICE LABOR WARRANTY: This warranty does not cover any labor expenses for service, nor for removing or reinstalling parts. All such expenses are your responsibility unless a service labor agreement exists between you and your dealer.

HOW TO OBTAIN WARRANTY PERFORMANCE: Normally, the installing dealer from whom the unit was purchased will be able to take the necessary corrective action by obtaining through Hi-Tech Stoves, Inc. any replacement parts. If the dealer is not available, simply contact any other dealer handling Hi-Teck products. The name and location of a local dealer can usually be found in your telephone directory or by contacting Hi-Teck Stoves, Inc. HOWEVER, ANY REPLACEMENTS ARE MADE SUBJECT TO VALIDATION BY HI-TECK STOVES, INC. OF INWARRANTY COVERAGE. An item to be replaced must be made available in exchange for the replacement.

MISCELLANEOUS: No one is authorized to make any warranties on behalf of Hi-Teck. ANY IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE APPLICABLE WARRANTY PERIODS SPECIFIED ABOVE. HI-TECK STOVES, INC. SOLE LIABILITY WITH RESPECT TO DEFECTIVE PARTS SHALL BE AS SET FORTH IN THIS WARRANTY, AND ANY CLAIMS FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARE EXPRESSLY EXCLUDED. Some states do not allow limitations on how long an implied warranty lasts, or for the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Hi-Teck Stoves, Inc. suggests that you immediately complete the information on the warranty certificate in the event warranty service is needed. Reasonable proof of the effective date of the warranty must be presented, otherwise the effective date will be based upon the date of manufacture plus 30 days. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## TROUBLE SHOOTING GUIDE

SYMPTOMS: Flame is lazy and orange, visible smoke "licks" toward the glass and inside the fire

box; the unit is smoking out the exhaust; the glass turns black in the space of a couple

of hours.

CAUSES: Air to fuel ratio is out of adjustment; air leaks in the system; plugged air passages e.g.

heat exchanger, exhaust, spark arrester. Poor fire pot fit.

REMEDY: Adjust your air to fuel ratio (if in doubt, heavy on the air!!!!!) Look for a flame that is

brisk and bright yellow. Check your door gasket, ash pan gasket and combustion fan

gasket. May have a weak combustion motor which needs replacement.

SYMPTOMS: Clinkers are developing in the fire pot. Glass is blacking up. You're not getting the

proper heat from your unit.

CAUSES: Inferior quality pellet; fire starter with a lot of residue; infrequent cleaning; combustion

air too low.

REMEDY: Use a good quality pellet at all times. There are many proven pellet fuels in the market.

Some have proven consistently good; some have proven inconsistent. You oft times get what you pay for. Consult your local dealer for advice on this matter and above all remember sometimes being "tight" will cost you! Check to make sure your fire pot is clean and that none of the holes in the pot are plugged. Clean them completely and often. Every three days the pot should be cleaned. Always make sure you have combustion air sufficient to carry or blow the ash residue from your fire pot to your ash compartments. Remember again, if in doubt, heavy on the air. You must get that

residue out of the pot or a fusion of the silica takes place, thus causing a clinker.

SYMPTOMS: On low setting the fire goes out. You see on low setting a cycular effect of your flame.

CAUSE: Your fuel setting is too low for your particular installation; it may be due to elevation,

installation; etc. On your J2000T, J2001T J1000B series stove you can expect a cycle

effect due to the fuel delivery system on these particular models.

REMEDY: It is important that each unit is "fine tuned" for its individual installation. Observe the

low burn for the space of thirty (30) minutes to assure the fire will sustain itself. Elevation is a real key player. In low elevations the air is much heavier than high

elevations. Each unit will be set differently to achieve the proper air to fuel ratio.

SYMPTOMS: Fuel does not feed from the hopper to the fire pot. Fire eventually goes out.

CAUSE: Auger Jam; damaged or defective auger motor; ON/OFF switch is in the OFF position;

defective timer board; high limit switch is activated.

REMEDY: Check to see that your ON/OFF switch is in the "ON" position. Allowyour unit a short

time to cool and then press your reset switch. If the unit was overheating and activating the high limit control switch, adjust your controls to a lower setting. If the unit continues to shut down, contact your local dealer for assistance. When you experience an auger jam, remove the pellets from the hopper to remove any possible obstruction, thus freeing the auger. Apply the power to the unit to see if the auger resumes. If not, there is a good chance your auger motor or gears have been damaged. Replace your auger motor. If you have no "iam" and your the auger shaft is free, check to see if a wire is

disconnected or loose.

SYMPTOM: Irregular fuel feed, surging of the convection and/or the circulation fan. Unable to

get power to system. No control over motor speed or fuel delivery.

CAUSE: Voltage variations on outside line. Tripped breaker, defective pot on control board.

REMEDY: Reset the circuit breaker, adjust unit to best adapt to the power curves. Check for

possible minor auger jams on DC system when operating on battery only....Charge

your batteries. If all else fails, replace the control board.

#### **BASIC TROUBLE SHOOTING**

The following is a compilation of trouble shooting sheets. For additional information and a more comprehensive trouble shooting technical guide, your service technician may refer to his service manual.

CONDITION: No fuel being fed into firepot

INSPECT: (a) Bottom of hopper for fuel flow into the auger

(b) Auger for "jam"

(c) Auger shaft collar connection to auger motor (it could be slipping). Tighten collar.

(d) Auger motor integrity

(e) Control Panel

(f) High temp. sensor

(g) Manual timer switch

(h) Auger low temp. sensor

Fuel in the hopper

## Flame "licking" toward glass excessively CONDITION: (a) Air to fuel ratio INSPECT: (b) Glass gaskets (c) Door Gaskets (d) Ash pan gasket (e) Firepot gasket Firepot for ash accumulation (g) Intake air channel obstructed (h) Exhaust being pulled through the air intake tube Exhaust channel for obstruction Spark arrestor plugged (k) Manual draft butterfly valve stuck or linkage is slipping Weak combustion fan (m) Poor quality pellets CONDITION: Unable to set for an efficient high or low burn INSPECT: (a) Fuel feed rate for range (b) Elevation adjustments (c) Manual control linkage may be slipping (d) Inconsistent pellet length (e) Vacuum leaks (refer to licking flame condition) CONDITION: Surging convection or combustion fan INSPECT: (a) Line voltage (b) Polarity

(e) Control board integrity

(c) Convection motor integrity

(d) Combustion motor integrity

#### CONDITION: Unit shuts down during burn

INSPECT:

- (a) High temp sensor for integrity
- (b) Auger jam
- (c) Exhaust plugged (clean unit thoroughly)
- (d) Low burn set too low
- (e) Temporary power outage
- (f) Control board integrity

#### CONDITION:

#### Complaint of soot in the house

INSPECT:

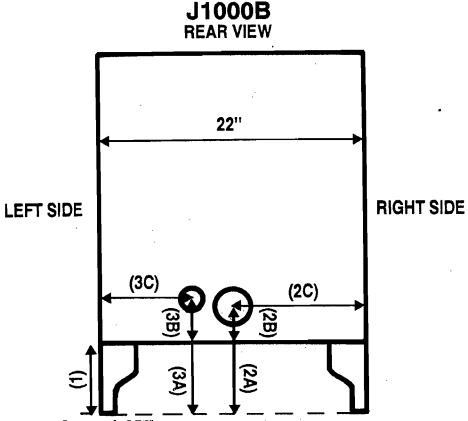
- (a) See when the unit was last cleaned
- (b) Exhaust connections sealed
- (c) Combustion fan sealed
- (d) Customer cleaning glass while convection fan is running
- (e) Poor air/fuel ratio
- \*\* (f) Fireplace insert installed without having cleaned the fireplace
- \*\* (g) Fireplace insert installed without a good positive connect, ash filtering down-

#### CONDITION:

#### The unit will not shut down

INSPECT:

- (a) Allow adequate time for unit to cool
- (b) Low auger temp sensor
- (c) Low combustion fan temp. sensor
- (d) Mis-wired
- (e) Control board integrity



Legs: From floor to unit, 5-7/8"

#### 2. Exhaust

- a) From hearth pad to exhaust center, 8-7/8"
- b) From hearth to exhaust center (hearth model), 3"
- c) From side of the unit to exhaust center, 11"

#### 3. Intake Air

- a) From hearth pad to intake air tube center, 9-1/2"
- b) From hearth to intake air tube center (hearth model), 3-5/8"
- c) From left side to intake air tube center, 7-7/8"

#### 4. Pedestal

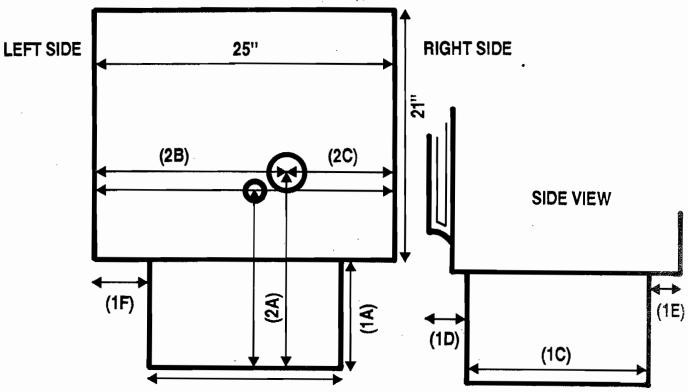
- a) Pedestal height, 6"
- b) Pedestal width, 15-1/4"
- c) Pedestal depth, 10"

#### NOTE:

- \* Exhaust tube is 3" diameter
- \* Air intake tube is 1-5/8" diameter
- \* Hearth pad may vary in thickness, always measure from the top of the pad.
- \* Brass leg balls will increase the height by 2-1/8" minimum. Make your adjustment.
- \* Caution.... Remember you are looking at the rear of the unit!!!

## J2000T/2100E

## **REAR VIEW**



#### Pedestal

- a) Pedestal base height, 9"
- b) pedestal base width, 16"
- c) Pedestal base depth, 15"
- d) Pedestal front to door front, 5"
- e) Pedestal back to unit back, 4-1/2"
- f) Pedestal side to unit side, 4-1/2"

#### 2. Exhaust

- a) From hearth pad to exhaust center, 16-1/2"
- b) From Left side of unit to exhaust center, 16"
- c) From right side of unit to exhaust center, 9"

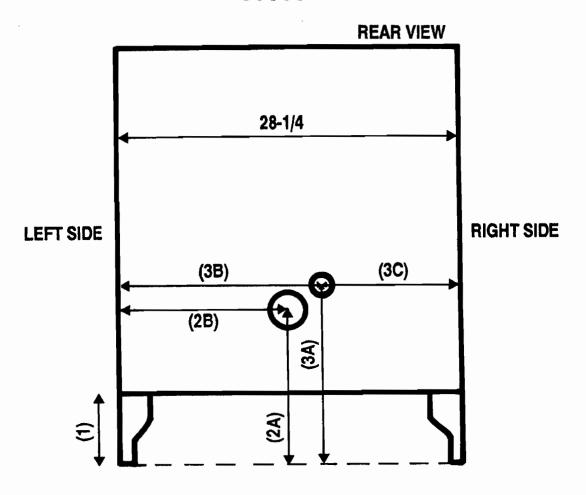
#### 3. Intake Air

- a) From hearth pad to intake air tube center, 15"
- b) From left side of unit to intake air center, 13-1/2"
- From right side of unit to intake air center, 11-1/2"

#### · NOTE:

- \* Exhaust tube is 3" Diameter
- \* Intake air tube is 1-5/8" diameter
- Hearth pad may vary in thickness, always measure from the top of hearth

## **J3000A**



- 1. Legs from floor to unit, 5-7/8"
- Exhaust
  - a) From hearth pad to exhaust tube center, 13"
  - b) From left or right side of unit to exhaust tube center, 14-1/8"
- 3. Intake Air
  - a) From hearth pad to intake air tube center, 15"
  - b) From left side of unit to intake air tube center, 17-3/4"
  - c) From right side of unit to intake air tube center, 11-5/8"

#### NOTE:

- \* Exhaust tube is 3" diameter
- \* Intake air is 1-5/8" diameter
- Hearth pad may vary in thickness; always measure from the top of hearth pad
- Brass leg balls will increase the height of unit by 2-1/8" minimum

## SERVICE RECORD

DATE	SERVICE OR CLEANING PERFORMED
<del></del>	

# **NOTES**

WARRANTY REGISTRATION CARD  Please type or print clearly in ink:					
NAME					
ADDRESS					
CTTY	STATE	ZIP			
PHONE NO.					
MODEL PURCHASED:					
SERIAL NUMBER		DATE PURCHASED			
DEALER NAME		DEALER LOCATION (CTTY)			
	PPY WITH YOUR DECISION TO B	V STOVE FOR A COUPLE OF WEEKS AND COMMENT UY A JAMESTOWN; IF NOT, WHY; AND WHETHER YOU			