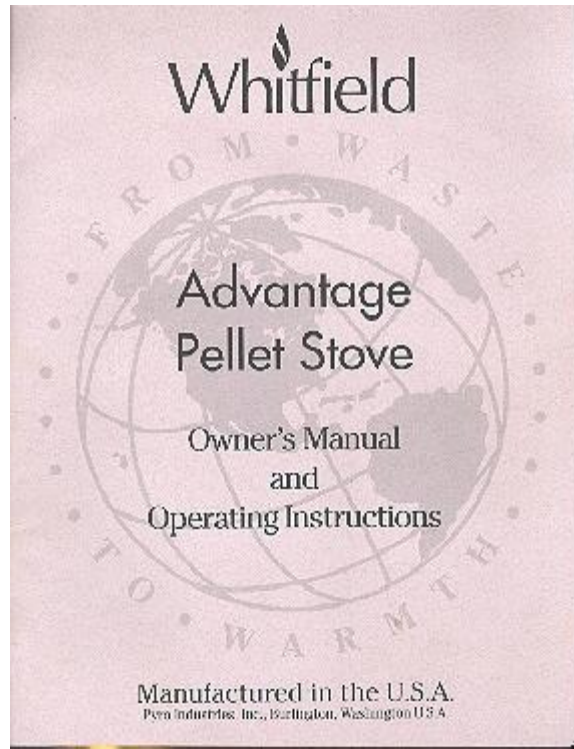


Whitfield Operating Instructions (short version)

[Back to pellet stove repair](#)



[THERE IS A LENNOX SITE FOR PARTS](#)

[Click her to go to link!](#)

Congratulations on the purchase of your Whitfield Pellet Stove!

When you purchased your Whitfield you joined other ranks of thousands of concerned individuals who's answer to their home heating system reflected their concern for aesthetics, efficiency, and our environment. We extend our continued support to help you achieve the maximum benefit and enjoyment available from your pellet stove.

Please familiarize yourself with this Owner's Manual before installing your Whitfield stove. This manual covers, in detail, the necessary steps required in assembling and installing your Whitfield Pellet stove in a safe manner.

We at Pyro Industries, Inc., the manufacturer of the "Original Pellet Stove" thank you for selecting a Whitfield as the answer to your home heating needs.

Sincerely,
All of us at Pyro Industries, Inc.

PELLETS - IMPORTANT: PLEASE READ

GENERAL INFORMATION

The Whitfield Advantage has been designed to burn wood residue pellets and non-wood pellets with up to 3% ash content (i.e... cardboard, nut hulls etc...). Agricultural pellets (i.e... corn, alfalfa etc..) are not permitted to be burned in your stove. Dirty fuel will adversely affect the performance of the stove. Caution: The use of dirty, wet and/or high sodium content fuel may void the warranty!

Wood pellets manufactured to the Association of Pellet Fuel Industries (A.P.F.I.) Certification Standard are available in two grades, "Standard" and "Premium". The primary difference between the two is the ash content of the pellets ("premium" has 1% or less ash content) ("Standards" has up to 3% ash content)

The A.P.F.I., specification for "Standard Grade" residential pellet fuel is as follows:

HEAT CONTENT: 8200 BTU/lb. minimum

BULK DENSITY: 40 lb./ cu. ft. minimum

MOISTURE CONTENT: 8% maximum

ASH CONTENT: 3% maximum size: 1/4" to 3/8"diameter, 1 1/2" long maximum

FINES: 0.5% maximum through a 1/8" screen

CLINKING

Silica (or sand) in the fuel, along with other impurities, can cause clinkering. A clinker is a hard mass of silica formed in the burning process. Clinkering is a function of the fuel, (not the stove), but adversely affects the performance of the stove by blocking off the air holes in the grate. Even an A.P.F.I. approved pellet fuel may tend to clinker. A clinker can be removed from the burn grate and placed in the ash pan with the use of the grate scraper / ash pan tool. See Routine Maintenance for more information on cleaning.

ASH

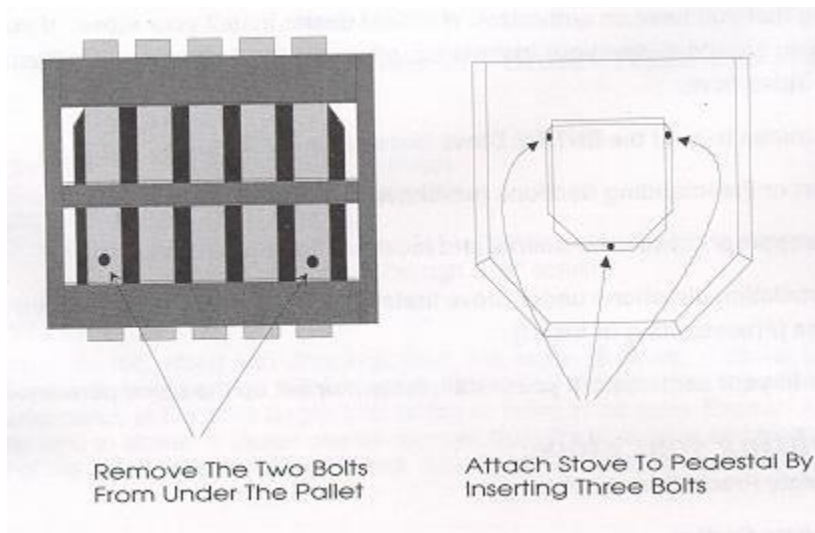
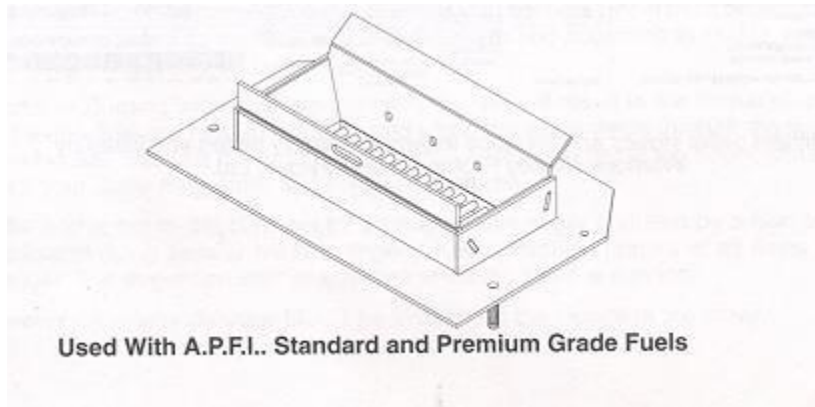
The frequency of removal of the ash and maintenance performed on the stove is directly proportional to the ash content of the fuel. A stove burning fuel with .25% ash content may only need to be cleaned out once every 1 to 2 weeks. However, a stove burning a fuel with 3% ash content may need cleaning every 1 to 2 days.

PLEASE NOTE: Pyro Industries, Inc., has no control over the manufacturing of pellet fuel and will not be held responsible for poor stove performance or any damage caused by inferior pellet fuels.

FUEL FEED RATES

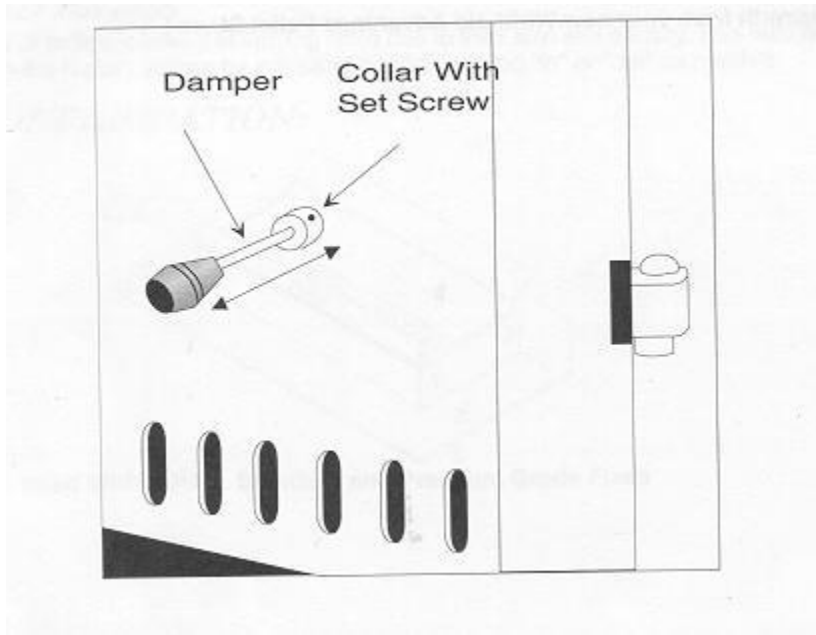
Different brands of pellets will feed at varying rates due to their size and density. This may require a slight adjustment from the factory setting by adjusting the damper rod "in" or "out" as needed.

GRATE CONFIGURATION:



PRE INSTALLATION ASSEMBLY

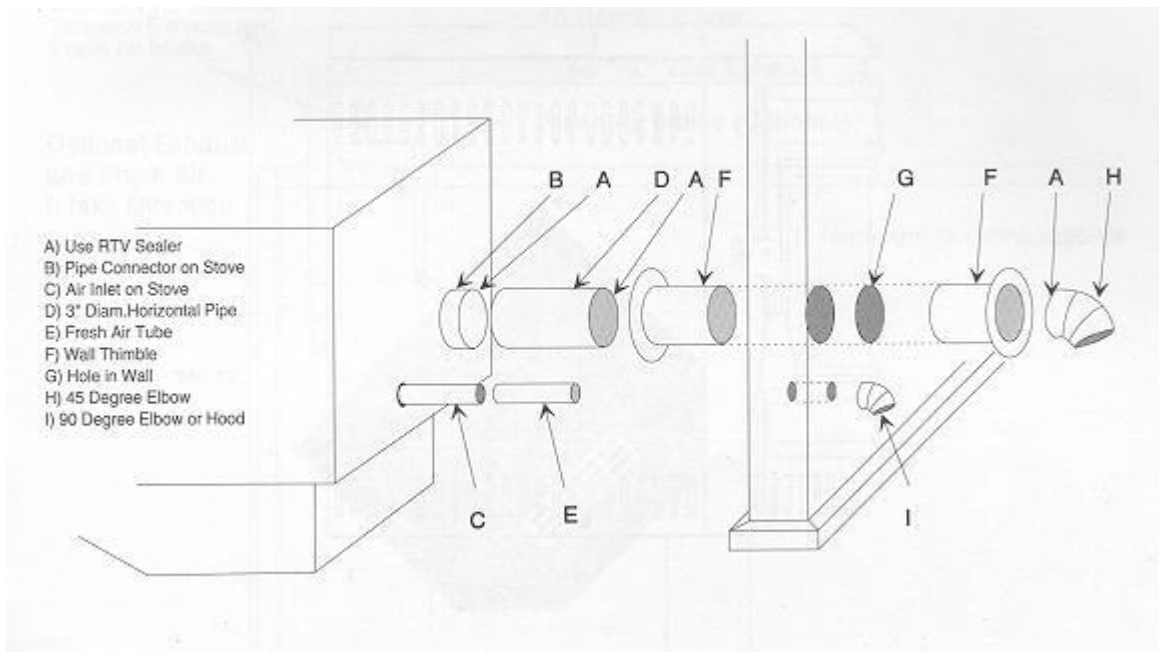
1. After removing the packaging from the stove, lift the hopper lid, and remove all pre-packaged items from the hopper. Also open the combustion chamber door and remove all pre-packaged items.
2. Using a 9/16" socket or open end wrench, remove the two bolts that secure the stove to the wooden pallet.
3. If your stove is a freestanding model, remove the pedestal from its container. Using the three short bolts packaged in the pedestal box, attach the pedestal to the bottom of the stove.
4. If your stove is an insert model, refer to Appendix E for instructions on installing your shroud.



DAMPER ROD ASSEMBLY

Remove the damper rod, handle and set collar from the box. Insert one end into the hole on the left side of the stove. Thread the rod into the press nut on the damper paddle. (You won't be able to see this nut.) The Damper Rod is preset at 2 1/4". Pull the rod to its fully extended position and measure from the side of the stove to the inside of the collar. If this distance is not 2 1/4", move the collar as needed and retighten the set screw with an Allen wrench. Push the rod in until the collar rests against the side of the stove.

INSTALLING YOUR FREESTANDING PELLET STOVE



STANDARD HORIZONTAL EXHAUST INSTALLATION

1. Locate proper position for the type "L" wall thimble (F). Use a saber saw or key hole saw to cut the proper diameter hole through the wall to accommodate the wall thimble. (G) Install the wall thimble in the hole.

2. Position the stove approximately 12" from the wall on the floor pad. Push type "L" pipe (D) through wall thimble (F). Squeeze a bead of high temperature silicone (RTV) sealer (A) around the end of the machined portion of the 3" pipe connector on the back of the stove (B). Firmly push on a section of type "L" pipe (D) until inner pipe liner pushes into the bead of RTV sealer.

3. Push the stove (with pipe attached) towards wall. Pipe (D) will go through the wall thimble (F). Position stove no closer than 1 " to the wall.

4. Install type "L" 45 degree elbow (H) with rodent screen cap (optional) on outside end of pipe. NOTE: The end of the exhaust pipe must extend a minimum of 12" from the outside of the building. Rodent screen should not be less than 3/8" in mesh.

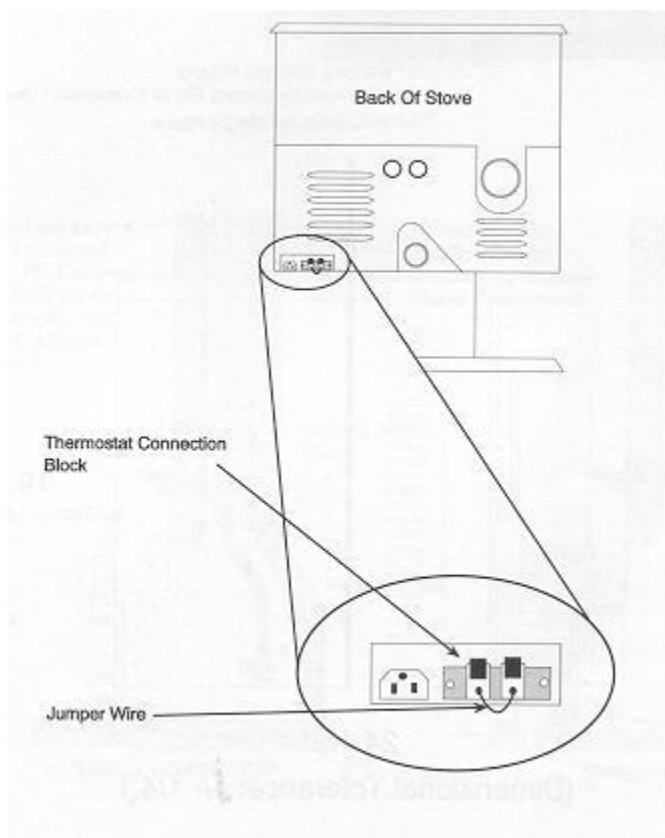
5. If installing with combustion air from outside; cut a separate hole through the wall for the fresh air tube (E). This tube must be 1 5/8" (min.) diameter, steel only. Connect outside air pipe to air inlet on stove (C). This tube must be terminated with a 90 degree elbow or hood. Air may also be drawn from the crawl space under the home.

(There are now exhaust thimbles with outside air intakes built in.)

THERMOSTAT INSTALLATION

NOTE: ALWAYS DISCONNECT POWER BEFORE PERFORMING THE THERMOSTAT INSTALLATION.

To Install A Wall Thermostat:



1. **Check the type of thermostat you are about to install, Solid State thermostats are NOT approved for use with the Advantage Series pellet stoves. Consult your authorized Whitfield Dealer for more details**

2. Unplug your stove from the wall outlet

3. Locate the thermostat connection block on the back of the stove.

4. Remove the jumper wire from the "jacks" on the connection block.

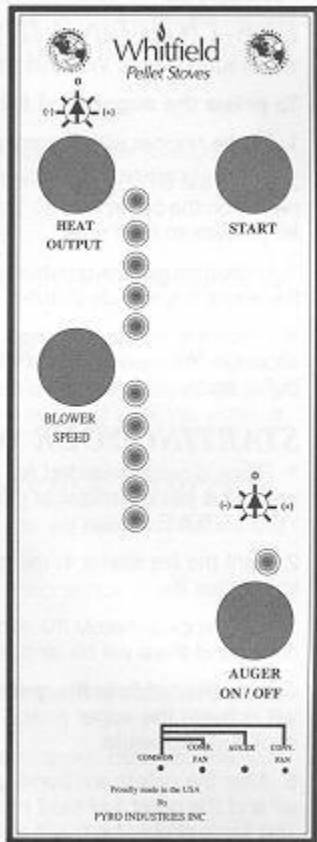
5. Insert the two wires from your thermostat into the jacks (one per jack).

6. Plug in the stove and you are ready to operate with your thermostat!

NOTE: If the jumper wire is missing, and you do not have a thermostat installed, your stove will operate on Heat Output position # 1 all the time and at all settings. All lights will flash.

STOVE OPERATING

CONTROLS



Control Panel

- **Start Switch** - The push button start switch activates the convection and the combustion blowers. If the exhaust temperature does not reach operating temperature within 30 minutes, the stove will automatically shut down. The blowers can be restarted by pushing the START SWITCH again.
- **Auger On/Off Switch** - The Auger On/Off switch activates the fuel feed (auger) motor only. The light located just above the switch will blink when the auger is turning. The Start switch has to be activated to give power to the Auger On/Off switch. When the Auger On/Off switch is pressed a second time, the fuel feed will stop and the blowers will continue to operate until the stove has cooled sufficiently.
- **Heat Output Switch** - When not using the optional thermostat, the Heat Output switch provides the ability to burn at separate five settings. The Heat Output switch regulates the fuel feed setting and the combustion air supply simultaneously.
- **Blower Speed Switch** - The Blower Speed switch controls the speed of the convection fan. Pressing this switch will increase or decrease the amount of heat exiting the stove. **THE BLOWER SPEED MUST BE AT THE MAXIMUM #5 SETTING WHEN THE HEAT OUTPUT SWITCH IS ON THE #5 POSITION.**

· **Damper Control** - The "push/pull" rod located on the lower left-hand side of the stove will NOT need to be manually adjusted every time you turn the fuel feed rate up or down. However, the damper allows the air-to-fuel-ratio to be "fine tuned". The proper air setting will vary from stove to stove depending on installation configuration, altitude and type of fuels being burned. If the flame is a smoky red/orange with evidence of soot at the top, pull the damper out until the flame begins to "dance". If the flame is short at the higher heat output settings, or the fire goes out on the #1 setting, loosen the set collar and push the damper approximately 1/4" in towards the stove. Lock the set color in place against the side panel of the stove.

NOTE: If the proper flame cannot be achieved with the damper control, adjustment of the trim controls may be necessary.

· **Combustion Fan Trim** - The Combustion Fan Trim is located just above the Heat Output Selector switch. Turning the Trim Control counter clockwise will decrease the amount of combustion air entering the burn grate. Turning the control clockwise will *increase* the amount of combustion air entering the burn grate. The Trim Control is factory set at the (0) position.

· **Auger Trim Control** - The Auger Trim Control is located just above the Auger On/Off switch. Turning the Trim Control counter clockwise will decrease the amount of fuel delivered to the burn grate. Turning the control clockwise will *increase* the amount of fuel delivered to the burn grate. The trim control is factory set at the (0) position.

Web Master: There is a new digital (no dials) control panel if yours dies.

These trim controls should be adjusted as a last resort. Always adjust the damper control first.

OPERATING INSTRUCTIONS

PRE-LIGHTING INSTRUCTIONS

When lighting your Whitfield Stove for the first time, the auger feed tube must be primed with pellets.

To prime the auger feed tube:

1. Fill the hopper with recommended pellet fuel and plug the stove into the wall outlet.
2. Press the START switch on the control panel. This will activate both blowers. Press the Auger ON/OFF switch on the control panel. This will activate the auger motor. Next, press the heat output switch to position #5 (maximum feed rate).
3. Look through the combustion chamber door and when you see the first pellets dropping into the grate the auger is then fully primed. It will take 10 to 15 minutes to prime the auger.
4. Once the auger is primed, unplug the stove to turn off the blowers and auger for a minimum of 30 seconds. You need only do this when priming the auger. Once the stove is shut down, plug it into the wall outlet again.

STARTING YOUR WHITFIELD PELLET STOVE

1. Place a recommended fire starter (see your dealer for appropriate fire starter in your area) in the burn grate and put a handful of pellets on top of the starter. **DO NOT USE FLAMMABLE LIQUIDS TO START YOUR STOVE.** (I buy the fireplace starter bricks, cut a small piece and light it. The box should last a few years, but I rarely turn off the stove.)
2. Light the fire starter in the grate with a match and close the door. Press the heat output selector switch to position 3.
3. After approximately 10 seconds, press the **START SWITCH**. You will notice that the fire will become active and there will be air coming from the heat exchanger tubes.
4. After the pellets in the grate are burning sufficiently (red hot coals), press the **Auger ON/OFF** switch: this will activate the auger motor. and pellets will begin to feed into the burn grate. Your blower motors will continue to operate.
5. After the pellets are burning well, press the **HEAT OUTPUT** selector to the desired setting. Combustion air and the pellet fuel feed rate will adjust automatically as the **HEAT OUTPUT** selector switch is pressed. The flame should be bright yellow in color and there should be no evidence of soot formation at the top of the flame. Press the **Blower Speed** control knob to increase or decrease the desired amount of convection air from your stove.

If operating your stove with a wall thermostat, adjust the heat output selector switch to the desired demand mode (#2 through #5 on the heat output selector switch). Next, adjust the wall mounted thermostat to the desired heat and your stove will automatically switch itself between a demand mode and a pilot mode.

GENERAL OPERATING CONSIDERATIONS

PROPER BURN CHARACTERISTICS: Your flame should be bright yellow under normal operation. If your flame becomes reddish/orange, your stove probably needs routine maintenance. Excessive amounts of fly ash build-up in the grate, clinkers in the grate, or leakage of air if the grate is not properly seated will starve the fire for air. (See **ROUTINE MAINTENANCE** for information on cleaning the stove). If the problem persists review the trouble-shooting section at the end of this manual.

PELLET FEED: The pellet feed system is designed to handle a wide range of pellet sizes. Different pellets can feed at considerably different rates. If the stove will not stay alight at the minimum fuel feed setting, those particular pellets may not be feeding fast enough. If this happens, adjust the damper rod (on the side of the stove) in or out to achieve a proper burn.

PELLET SIZE: You may notice a difference in the burn if you change pellet fuel sizes. The bigger the pellet, the slower it will feed and vice versa.

LONG BURN TIME: The stove may be safely operated on a continuous basis, but it is recommended that it be turned down overnight or when the room is vacated for long periods of time. A 40 lb. bag of pellets should last approximately 10 hours on high and 35 hours (or more) on low, depending on the type and size of pellets you are burning.

AUTOMATIC SAFETY FEATURES

Power Outage

During a power outage, the stove will shut down safely. (WHAT, the exhaust fan will stop and smoke will start to come out of the stove. Unless you have a very tall chimney that creates a vacuum to pull out the smoke) It will not automatically restart when the power is restored unless the exhaust is still up to temperature. A small amount of smoke may leak from the top of the window glass, the hopper and from the combustion air intake. This will not persist for more than 3 to 5 minutes and will not be a safety hazard.

To re-light the stove, follow the normal procedure for starting your stove.

NOTE: If you are installing this pellet stove in an area that is prone to frequent power outages, it is recommended that there be a minimum of 3' (Feet) of vertical vent pipe included in the installation to induce a natural draft in the event of a power failure.

Overheating

A high temperature switch will automatically shut down the stove if it overheats. The stove will need to be manually re-lit. Allow 45 minutes before re-lighting.

TURNING OFF YOUR WHITFIELD PELLET STOVE:

Press the Auger On/Off Switch to the "OFF" position. This will turn the auger motor off and pellets will stop feeding. Both blowers will continue to operate for a period of time (up to 45 minutes) until the exhaust temperature cools sufficiently. The blowers will automatically turn off at that point.

LIGHTING STOVE WITH OPTIONAL FASTFIRE SELF-IGNITER

If you have purchased the optional FASTFIRE Self-igniter from your dealer, you will need to perform the following start-up procedure:

1. Make sure the auger is primed (see **Pre-Lighting Instructions** above), then simply push the Start button on the control board to activate the igniter.
2. Press the Auger On/Off Switch to the "ON" position.
3. While the pellets will ignite on any heat output setting' it is recommended that the Heat Output

Knob be set to position #3 or #4.

4. Pellets will start feeding into the grate and should begin to ignite within three to seven minutes. The self igniter will automatically shut off after 15 minutes.

ROUTINE CLEANING

NOTE: STOVE WILL NEED TO BE SHUT OFF AND COOLED ENOUGH TO HANDLE BEFORE ROUTINE CLEANING IS PERFORMED.

ALWAYS DISCONNECT POWER BEFORE DOING ANY ROUTINE CLEANING.

The amount of fly ash bulid-up in your stove is directly proportional to the ash content of the fuel that you are using (see **PELLETS**, page 6). After a period of time (a week, or so) inspect the heat exchanger tubes, the burn grate, and the ash traps behind the fire brick. You will want to gauge your routine maintenance accordingly.

THE FOLLOWING AREAS NEED TO BE INSPECTED DURING ROUTINE CLEANING:

- Burn Grate . Heat Exchanger Tubes
- Ash Pan
- Ash Traps and Baffles

Burn Grate: The bum grate should be inspected periodically to assure that the air holes have not become clogged with ash or clinkers. The burn grate can easily be cleaned with the grate scraper/ash pan tool, or it can be removed for cleaning. It is very important to monitor the ash build up under the burn grate, as excessive build up may starve the fire of combustion air. When burning "Standard" grade pellets, it will be necessary to clean the ash pan more often than when burning "Premium" grade pellets.

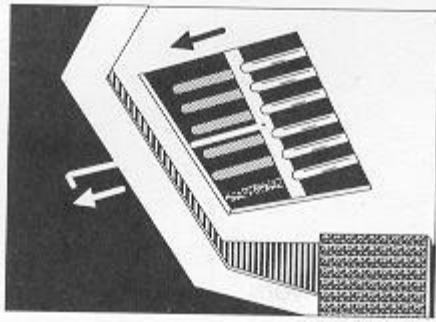


Heat Exchanger Tubes: located above the combustion chamber door is used for cleaning the tubes. By pulling this rod in and out a few times, you will clean the fly ash off the heat exchanger tubes. If your stove was recently turned off, the rod may still be hot. **Handy Hint:** you may want to wrap a damp cloth around the rod when you clean the tubes. This will prevent fly ash from being drawn into your house from the pulling action of the rod.

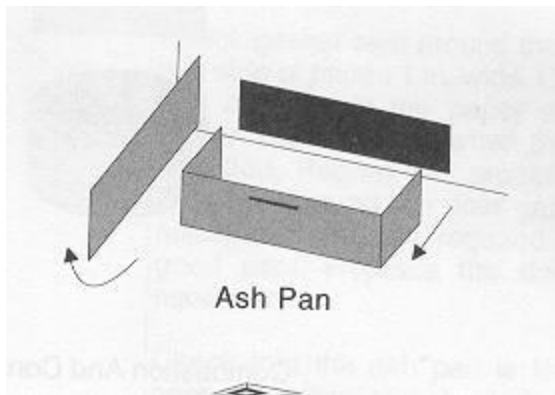
Ash Pan: The ash pan will have to be emptied whenever necessary. First, remove the ash pan trim piece located below the door. Grasp the knob located on the ash pan door and swing the door open. Then, using the ash pan/grate scraper tool, lift the grate out and sweep the top ash into the pan, below. Then, remove the ash pan with the tool. Be sure to gently dump the ashes into a non-combustible container. When finished, slide the ash pan back into the stove and close the ash pan door and replace the ash pan trim piece.

Cleaning of Ash Trap Baffles: Access to the ash trap baffles (behind the two side firebricks) is obtained by loosening the screws that hold the "Brick Retention Plates" in place and lifting the clips away from the stove. After the clips have been removed, remove each side brick first, then the center firebrick. Thoroughly clean out areas where ash has collected behind the firebrick. The amount of time between cleanings will be directly related to the ash content of the pellet fuel being burned. Excessive ash build up in the baffle area behind the brick panels will restrict the exhaust passages and cause less combustion air to enter the firebox and which can lead to poor performance and a "dirty burn".

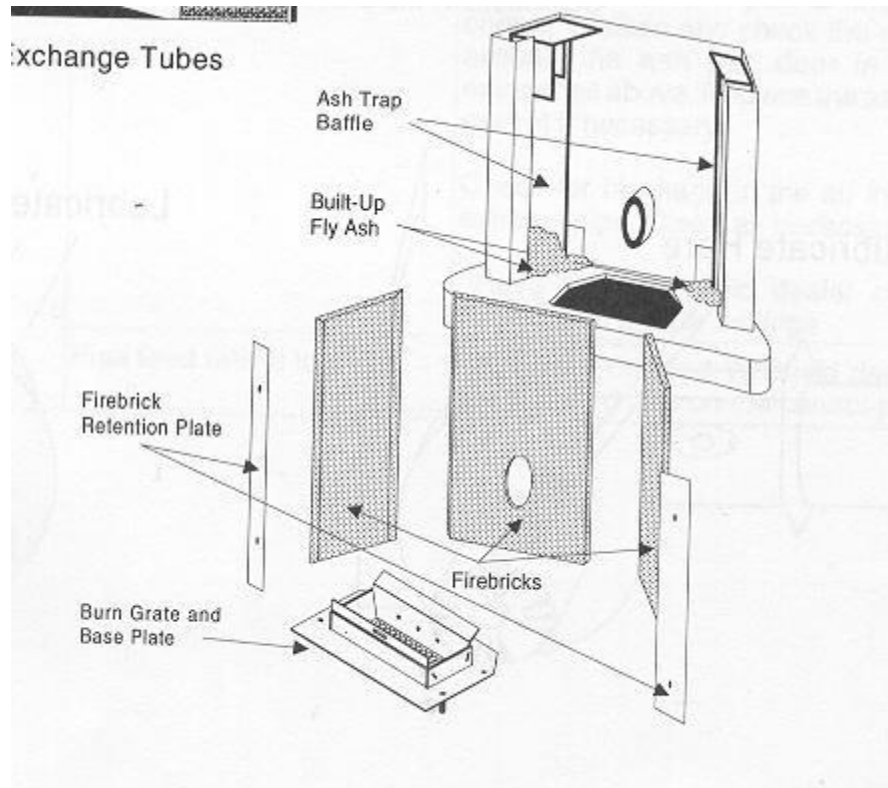
Handy Hint: After the first 10-20 bags of fuel, you may want to remove the firebrick and determine the rate at which the fly ash is building build up within the stove. Contact your dealer for more information should you have any questions regarding this procedure..



Heat Exchange Tubes



Ash Pan



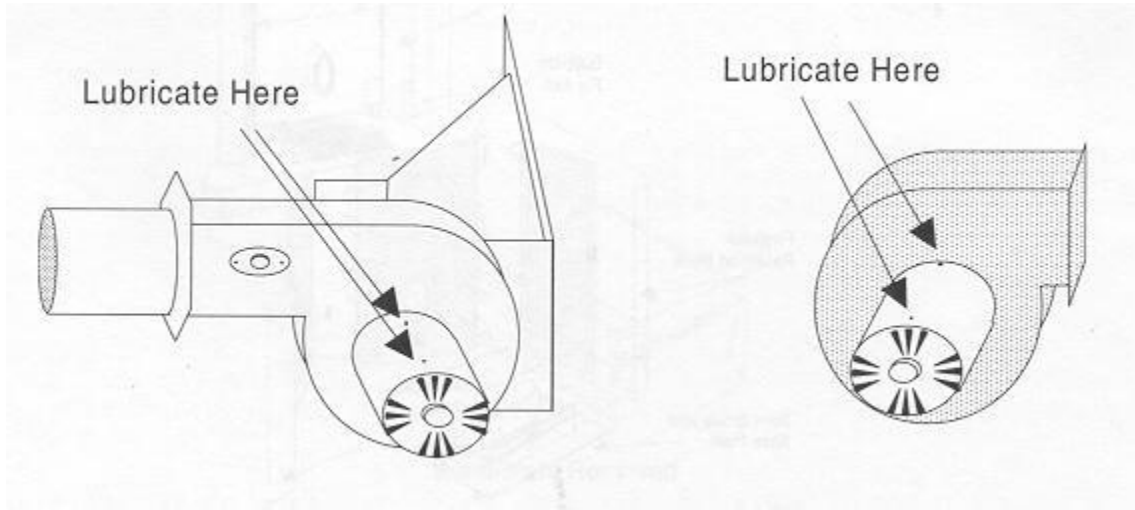
ROUTINE MAINTENANCE

The following areas need to be inspected as part of routine maintenance:

Door Rope Gasket: The condition of the rope gasket around the door and windows should be checked periodically and replaced or repaired if necessary.

Exhaust Vent: Inspect frequently and clean when necessary. Fly ash will accumulate at all bends in the exhaust system. Large amounts of fly ash will starve the fire for air.

Motor Lubrication: The two blower motors require lubrication annually with not more than two drops of high temperature turbine oil (available from your dealer) at the lubrication points shown below.



Trouble Shooting

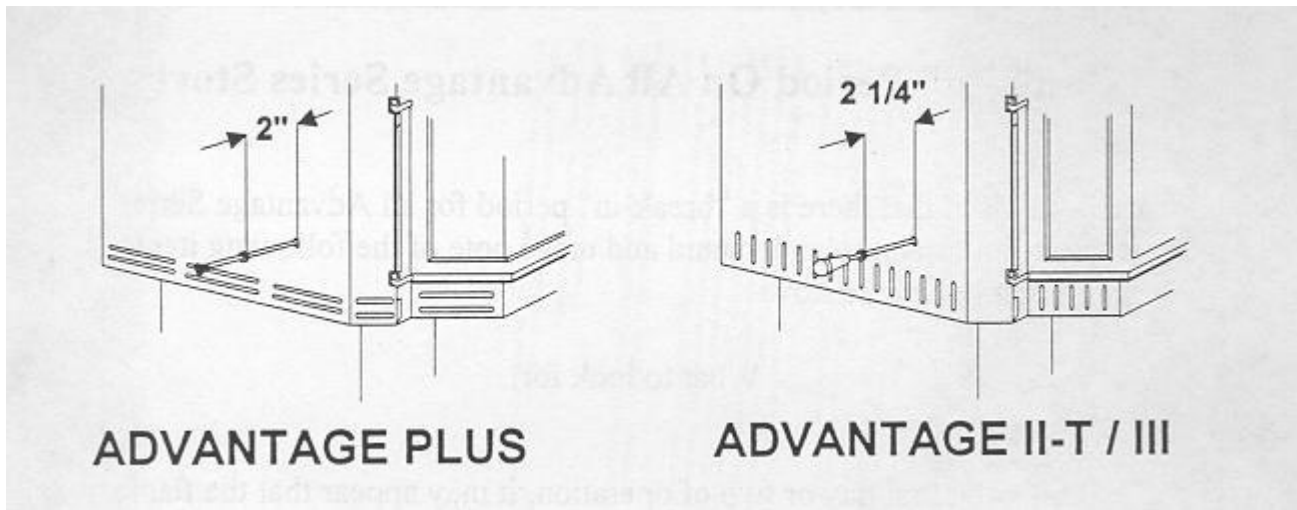
APPENDIX A TROUBLE-SHOOTING

UNPLUG STOVE BEFORE PERFORMING ANY MAINTENANCE WORK

PROBLEM	CAUSE(S)	SOLUTIONS
Fire burns with a lazy orange flame. Pellets build up in the grate and the window gets sooted up.	There is insufficient combustion air.	<p>Remove any clinkers or ash from the bottom of the grate that might be obstructing the primary air holes). Change to a better grade of fuel if necessary .</p> <p>Check that the damper is open sufficiently (pulled out).</p> <p>Check that the heat exchange tubes are not clogged with ash.</p> <p>Clean ash traps baffles.</p> <p>Check ash build up behind the side firebricks. Clean if necessary .</p> <p>Check gasket seal around the door. Use a thin strip of paper, 1 in. wide. Open the door and close it on the paper strip. A slight friction should be felt when the paper strip is pulled. Repeat this process at various locations around the door gasket. A small adjustment may be required to ensure a good seal. Replace the door gasket if necessary</p> <p>Check that the ash pan is latched in the correct position and check the gasket seal around the ash pan door in the same manner as above. Replace the ash pan door gasket if necessary.</p> <p>Check for blockage in the air inlet tube or exhaust pipe. Clean as necessary.</p> <p>Have your Whitfield dealer check your combustion blower settings.</p>
	Fuel feed rate is too high.	Have your certified Whitfield dealer adjust the fuel feed rate on the control panel.

PROBLEM	CAUSE(S)	SOLUTION
Fire goes out or stove shuts down automatically.	The hopper is empty.	Refill hopper.
	Pellets are not feeding.	See "Pellets will not feed" below.
	The high limit temperature switch has tripped.	Allow stove to cool for 1 hour and re-light. If the stove has been operating at a medium to high burn rate, and the convection fan has been turned down low, then the fan should be turned up higher. If this problem persists (particularly at lower burn rates) then the high limit snap switch should be replaced by your certified Whitfield dealer.
	The combustion air setting is too high.	Adjust damper in to reduce combustion air flow.
Pellets will not feed.	The fuel feed rate is too low.	Have your certified Whitfield dealer adjust the fuel control.
	The hopper is empty.	Refill hopper.
Stove runs for 30 minutes then shuts down.	The auger motor, circuit board, air inlet high limit switch or pressure switch may be defective.	Have your certified Whitfield dealer diagnose the problem and replace any parts if necessary.
	The exhaust gas is not up to temperature.	Press start switch and re-light stove if necessary.
	The low limit snap switch is not operating correctly.	Have your certified Whitfield dealer replace the low limit snap switch.
Blowers will not shut off after the fuel has been switched off and the stove has cooled down.	The wires to the low limit snap switch are loose or disconnected.	Check wires between the snap switch and the terminal block. Make sure there are good connections between the wires and their terminals.
	The low limit snap switch has failed in the closed position.	Have your certified Whitfield dealer replace the low limit snap switch.
Blowers will not operate when the start switch is depressed.	There is no power to the stove.	Check that the stove is plugged in to the wall outlet. Check to see if your circuit breaker has tripped.
	There is no power to the control board.	Check the wire connections between the high limit snap switch and the terminal block.

PROBLEM	CAUSE(S)	SOLUTION
There is soot or fly ash in the house.	The window is being cleaned when the stove is operating.	Turn down the convection fan or turn off stove before cleaning to prevent dispersion of ash and soot into the room.
	There is leakage at the joints between the combustion fan, exhaust pipe, and "L" vent. This will be evidenced by dust on the impeller of the convection fan, and in the heat exchanger tubes.	Seal up any leaks in the exhaust system with room temperature vulcanizing silicone sealer (RTV).
	For a fireplace insert installation; If the existing fireplace opening was not thoroughly cleaned and painted before the insert was installed, then the convection fan may be picking up the fireplace dust, soot or ash and blowing it into the house.	Pull insert away from fireplace opening. Thoroughly clean the opening and paint the inside of the opening with latex or an inexpensive spray paint to hold down the finer particles of dust.
	The vacuum cleaner is leaking.	Check your vacuum cleaner bag, replace the bag, or don't use a vacuum to clean out soot and fly ash from your stove.



ADVANTAGE PLUS ADVANTAGE II-T / III

When your new stove is installed; the exhaust should hooked up, the stove plugged in and the fire started. Check for proper operation at all heat output settings (#1 - #5). Look for a brisk yellow flame with no black tips.

Any adjustments for combustion air should be made at the damper by varying the spacing between the side of the stove and the inside of the damper set collar. The factory setting on the damper, as noted above, should correspond with the model you have.

If the fire goes out on the #1 setting, you will want to decrease the combustion air flow. Loosen the set collar and push the damper in by 1/4" intervals. Tighten the collar at its new position (2 1/2" - 2 3/4").

If the fuel is building up in the bum grate at the higher heat output settings, you will want to increase the amount of available combustion air. Loosen the set collar on the damper rod and pull the damper out. Do this 1/4" at a time. Tighten the collar at its new position (1 3/4" - 2").

After making any adjustment to the damper set collar, pull the damper rod out fully and re-check the dimension between the stove side panel and the inside of the set collar.

Should you find that the fire is still not burning properly, contact your authorized Whitfield Dealer for assistance.

Part No. 60020008

Technical Bulletin

PLEASE READ BEFORE LIGHTING STOVE!

"Break-in" Period On All Advantage Series Stoves

Please be advised that there is a "break-in" period for all Advantage Series Stoves. It is important to understand and make note of the following items when you first light your stove.

What to look for:

- During the first day or two of operation, it may appear that the flame pattern is somewhat short and vigorous. This is due to the "break-in" period of the auger motor.
- During this period, the auger motor will gradually speed up its rotation cycle as the gear box wears in. This will correspondingly increase the fuel feed rate. The flame pattern will grow accordingly, and the damper rod may need to be pulled out slightly to compensate.
- DO NOT ADJUST THE CONTROL BOARD'S INTERNAL SETTINGS AT THE TIME OF INSTALLATION!

All adjustments to compensate for burn characteristics should be done with the damper on the left hand side of the stove by moving it in or out slightly a quarter of an inch at a time. Please see your Owner's Manual or your Operation & Maintenance Video for more information about damper adjustments.