



DELL-POINT

EUROPA 75

WARNING:

Improper installation, adjustment, alteration, service or maintenance can cause injury, property damage, or loss of life. Refer to this manual. For assistance or additional information consult an authorized installer or service agency.

FOR YOUR SAFETY:

Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

Installation and service must be performed by an authorized installer or service agency.



**IMPORTANT: Save these Instructions.
Owners & Installation Manual**



GF75-1

TO THE NEW OWNER

Congratulations! You are the owner of a state-of-the-art stove by FPI.

Thank-you for purchasing a
FPI FIREPLACE PRODUCT.

The pride of workmanship that goes into each of our products will give you years of trouble-free enjoyment. Should you have any questions about your product that are not covered in this manual, please contact the FPI DEALER in your area.

Keep those FPI FIRES burning.

Safety Note: If this stove is not properly installed, a house fire may result. For your safety, follow the installation instructions, contact local building, fire officials, or authority having jurisdiction about restrictions and installation inspection requirements in your area.

The authority having jurisdiction should be consulted before installation to determine the need to obtain a permit.

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GREENFIRE BIOENERGY STOVE

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IMPORTANT: SAVE THESE INSTRUCTIONS

The GF75-1 Stove must be installed in accordance with these instructions. Carefully read all the instructions in this manual first. Consult the building authority having jurisdiction to determine the need for a permit prior to starting the installation.

NOTE: Failure to follow the instructions could cause a malfunction of the heater which could result in death, serious bodily injury, and/or property damage. Failure to follow these instructions may also void your fire insurance and/or warranty.

BEFORE YOU START

It is very important to ensure that the stove is installed in a safe manner. Be aware of fire prevention rules and laws in your area. All applicable National and Local codes must be met and complied with.

We recommend that you call an accredited professional or a dealer trained by FPI to guide you to install your stove.

Please note the battery back-up comes shipped inside the Ash pan. Please remove the battery before start-up.

The stove's electrical connection is to a standard grounded wall socket. Special care should be taken so the connection cable is not damaged in any way.

It is strongly recommended to install a smoke detector as well as an ABC type extinguisher near the stove. A power surge bar is also highly recommended to protect the electrical component.

If the stove is installed by an uncertified installer, FPI will not be held responsible for any faulty operation including poor performance of the stove.

IMPORTANT SAFETY INFORMATION

Only use approved fuels in multi-fuel burning appliances. Failure to comply with this may create a hazardous situation and will void all warranties.

In order to start your stove, always use a specified and approved fire starter material. Never use a flammable liquid like gasoline, barbecue fire starter or alcohol.

Never attempt to re-start your stove until it has fully cooled down. Never start the stove with a gel when the burn-pot is hot. This could generate serious burns. Always wait until the stove is cold before re-starting it.

Never use or store flammable products close to the stove while it's in use, or at any other time.

Manual feed (Icon 11) is only used to prime the auger when Hopper is empty. **Do not use** the manual feeding procedures to start-up your stove as these will create smoke in your house.

Ensure that the ash pan door is securely closed at all times when the stove is in use. Air pressure could ignite the gas accumulated in the burn-pot creating an overdraft condition in the combustion chamber altering the performance of the burn-pot.

The GF75-1 model will not feed fuel if the main door is not fully closed and the firebox in a negative pressure situation. This is a safety function of the appliance.

IMPORTANT:

Stove must be cold before any attempt to clean the glass is made. Do not use detergent containing abrasives to clean the windows or any other parts of the stove. Use only recommended products found at your local hearth shop for this type of cleaning.

IMPORTANT:

When cleaning the stove, always remove ashes into a steel container and place outside the residence. Use gloves to handle or to empty the ash pan.

Never use a vacuum cleaner to remove ashes from the stove, unless you can be sure the stove is fully cooled down.

IMPORTANT:

Before servicing the electrical panel, make sure that all electrical source is turned off to the stove.

UNIT LOCATION

1. For optimum benefit from your appliance, speak to your professional for help with your location.
2. The location you choose for your appliance can be a factor in how it will perform. Choose an interior location where the vent will not be affected by any external interference, i.e. trees, bushes, walls or fencing (refer to "Vent Termination Requirements" section). Make sure, at the time of the installation, that there is the least possible interference with the existing components of the house. Install a non flammable covering when necessary. Place the stove according to recommendations made on "Clearances" section or according to the safety label fixed on the stove.
3. You can use the wall behind the stove to pass the chimney system or simply join the stove to an existing chimney or a metal chimney, with the use of an approved liner.
4. Ensure that all clearances to combustibles are met as per the safety label and the diagrams on "Clearances" section.
5. This appliance does not need outside air unless there is a negative pressure within the room where the installation takes place. Make sure that the outside air supply for the burn-pot does not come from a garage, an attic or any restricted non-ventilated space. Air must come from the outside of the house directly into the room where the stove is installed.
6. This stove is not approved to be installed into a bedroom under any circumstances.
7. The flooring under the stove must be made of a non-combustible material, i.e. cement, ceramics, etc, and must extend at least 6" (152mm) all around the stove. Refer to the diagrams on "Clearances" section.

WHAT IS INCLUDED WITH THE GF75-1

Qty	Description
1 pc	User Manual
1 pc	AC Power Inlet
1 pc	Measuring 2 1/2 Cup Plastic
1 pc	Alligator Clip Black
1 pc	Alligator Clip Red
1 pc	Pipe Adapter Gasket (for Pressure Reducer Plate)
1 pc	Pressure Reducer Plate 1-1/4 ID
1 pc	Pressure Reducer Plate 1-5/8 ID
1 pc	Poker
1 pc	12-V Battery
1 pc	Battery Cage

INSTALLATION

CHIMNEY INSTALLATION

Important: Always use an approved 3" (76mm) PL type vent system which is approved for venting while burning corn. Using a different size vent will result in poor performance or eventual malfunction of your appliance which is not covered under warranty. Never exceed 3" diameter pipe.

Venting System

In order to get optimum performance from your appliance a good venting system and positive air supply is essential.

Type Of Chimney

Since this is a BioEnergy stove, it is advisable to use only venting recommended and approved for the burning of corn or other agricultural fuels. Regular pellet vent cannot withstand the continued use of these BioEnergy fuels and will deteriorate over time. Using recommended corn vent will prolong the lifetime of your system. Never use a non-approved pipe for the venting system. i.e. Dryer vent, "B" vent for gas vent, PVC/plastic pipe or single wall chimney system.

It is very important to take note that for horizontal venting that the vent length shall not exceed 48" (1219mm) chimney on an installation.

Always vent exhaust air to the outside atmosphere and never into enclosed spaces, i.e. garage, car port etc. Vent systems can become hot to touch, warn children of them to avoid the risk of burn.

Mobile Home Installation

The GF75-1 model is approved for installation in a mobile home of type (UM) 84-HUD. The outside air connection must always go directly to the atmosphere outside the building (refer to Diagram 2 in "Unit Dimensions" section).

High Elevation

High altitude (6000' / 1828m and more) reduces the air velocity which is drawn into the burn-pot. To help increase the air velocity, the chimney must have a minimum of 6' (1.82m) of vertical vent outside the house to help create a natural draught.

Negative Pressure In The House

The use of a bathroom fan, dryer, cooking hood fan, etc. can cause negative pressure, especially in new air tight homes. Combined these fans consume an average of 200 cfm, which is more powerful than the combustion fan on the GF75-1, creating negative pressure around the stove. To overcome this negative pressure, we recommend to install an outside air intake from

the atmosphere directly to the 1" connector on the back of the stove. (refer to Diagram 2 in "Unit Dimensions" section).

Pressure Reducer Plate

There are 2 Pressure Reducer Plates, one with a 1-1/4" and one with a 1-5/8" opening. These are sometimes needed in longer chimney runs or in high altitude installations. The Pressure Reducer Plate is designed to slow down the draft in your chimney in such situations.

1. Remove the 4 nuts & washers from the bolts (see Diagram 9 below) from the combustion exhaust outlet.

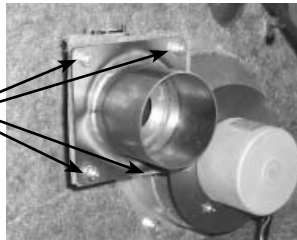


Diagram 9

2. Install the desired pressure reducer plate to the combustion exhaust outlet, ensuring that gaskets are replaced on both sides of the pressure reducer plate. One gasket is placed on each side of the pressure reducer plate.

3. Reverse step 1.

NOTE: Only 1 of the pressure reducer plates is used (not both). It is recommended to try the reducer plate with the 1-5/8" opening first.

12 VOLT BATTERY

A 12 volt battery is included with this stove. This standard battery back-up will ensure uninterrupted operation of your stove in the event of unexpected loss of electrical power. Note that this does not replace the regular 120 volt power supply to the stove. The battery is only a backup. The battery will generally last 7-9 hours on a full charge (depending on feed rate). Refer to "Electrical Diagram" section for details. It is recommended to have your battery connected at all times. The battery will trickle charge whenever electrical power is restored and will continue to charge throughout the process.

If there is no battery connected, a power interruption in excess of 5 seconds, will cause the stove to go into shutdown mode once power is restored with an error code of E5 or E6 in Display B. A power interruption of less than 5 seconds will result in the stove picking up where it left off upon restoration of power.

To facilitate the installation of a larger 12 volt battery we include, in the manual package, extension alligator clip leads.

Note: 12 volt batteries should never sit on stone or concrete.

HOW TO INSTALL THE BATTERY:

- 1) Remove battery cage and battery from ash pan.
- 2) Attach red positive wire to battery.
- 3) Attach black negative wire to battery.
- 4) Place battery into cage facing up.
- 5) Slide battery cage with battery inside over four screws and tighten.
- 6) Attach red battery wire to red wire from unit.
- 7) Attach black battery wire to black wire from unit.

Children should be kept away from the hot stove. For all other questions contact your local dealer.

IMPORTANT

Battery cage, non-spillable battery and packaging materials shipped inside bottom door. Please remove contents before start-up. See back panel for installation.

FIRST FIRE

DO NOT BURN THE APPLIANCE WITHOUT THE GLASS FRONT IN PLACE.

The **FIRST FIRE** in your stove is part of the paint curing process. To ensure that the paint is properly cured, it is recommended that you burn your fireplace for at least four (4) hours the first time you use it with the fan on.

When first operated, the unit will release an odour caused by the curing of the paint and the burning off of any oils remaining from manufacturing. Smoke detectors in the house may go off at this time. Open a few windows to ventilate the room for a couple of hours. The glass may require cleaning.

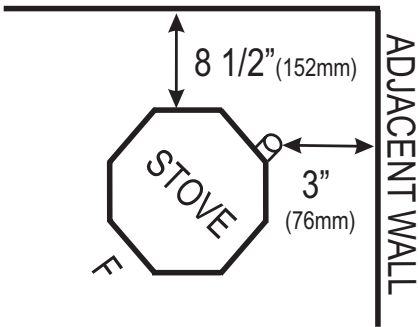
NOTE: When the glass is cold and the appliance is lit, it may cause condensation and fog the glass. This condensation is normal and will disappear in a few minutes as the glass heats up.

DO NOT ATTEMPT TO CLEAN THE GLASS WHILE IT IS STILL HOT!

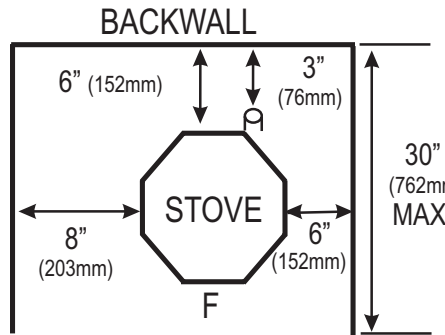
CLEARANCES

See the safety label on the back of the stove to know the exact distances to follow when installing the stove.

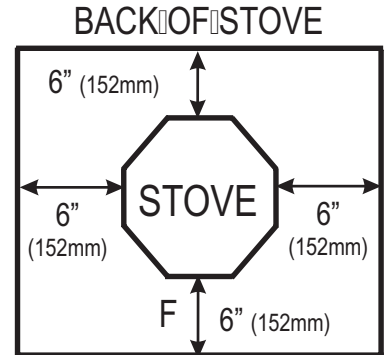
Corner Installation



Alcove Installation



Minimum Hearth Requirement



UNIT DIMENSIONS

Height and Depth

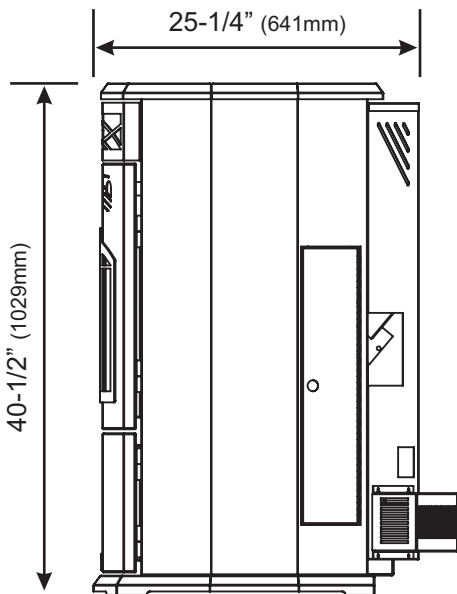


Diagram 1

Width

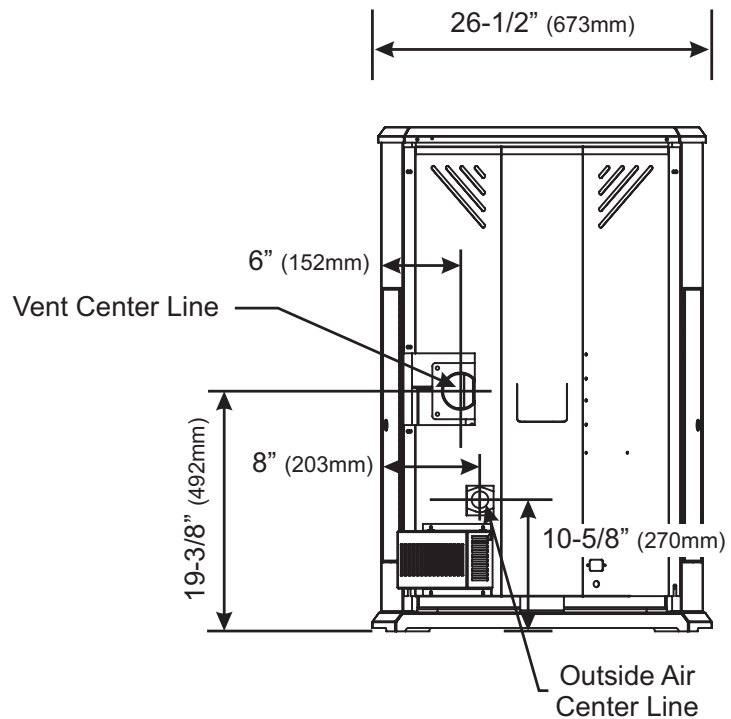


Diagram 2

INSTALLATION

VENT TERMINATION REQUIREMENTS

IT IS RECOMMENDED THAT YOUR PELLET STOVE BE INSTALLED BY AN AUTHORIZED DEALER/INSTALLER.

The diagram below references all horizontal applications. For vertical applications refer to B365 for Canada and NFPA 211 for the US along with pages 10 to 13 in this manual.

	Min. Clearance	Description
A	84" (2134mm)	Above public walkway, sidewalk or street.
B	72" (1829mm)	Within any gas regulator vent or mechanical air inlet to a building.
C	36" (914mm)	Within a building opening, air inlet of another appliance, an oil tank vent or property boundary
D	36" (914mm)	Horizontally of the vertical centerline of a gas meter/regulator and within height of 15ft. (4.5m) above.
E	12" (305mm)	Above grade level or any non-combustible surface such as cement or gravel.
F	36" (305mm)	To any building projection, adjacent wall or any combustible materials such as grass, trees, fencing, etc.
G	48" (1219mm)	From beside/below any door or window that may be opened.
H	12" (305mm)	Above any door or window that may be opened.
I	12" (305mm)	To inside or outside corner.
J	24" (610mm)	Below any eave or roof overhang.

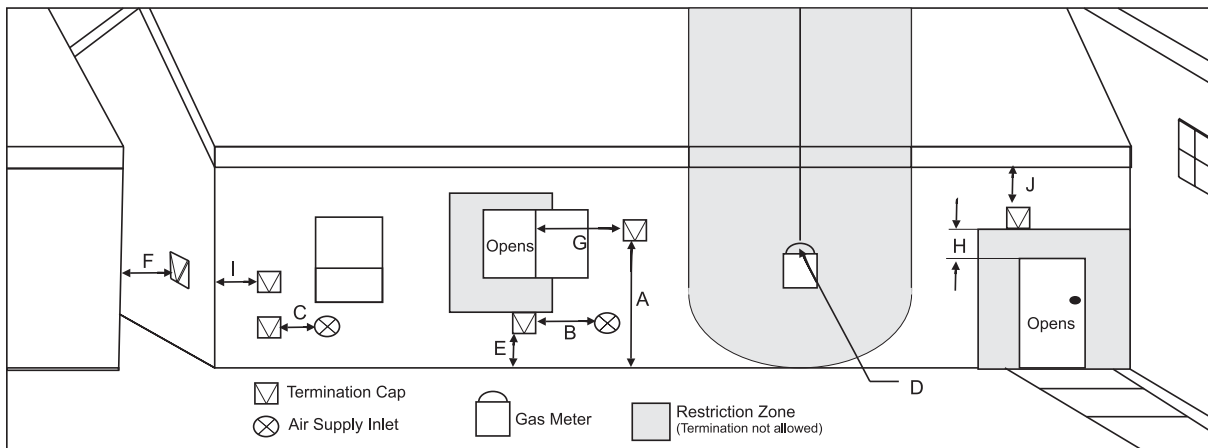


Diagram 3

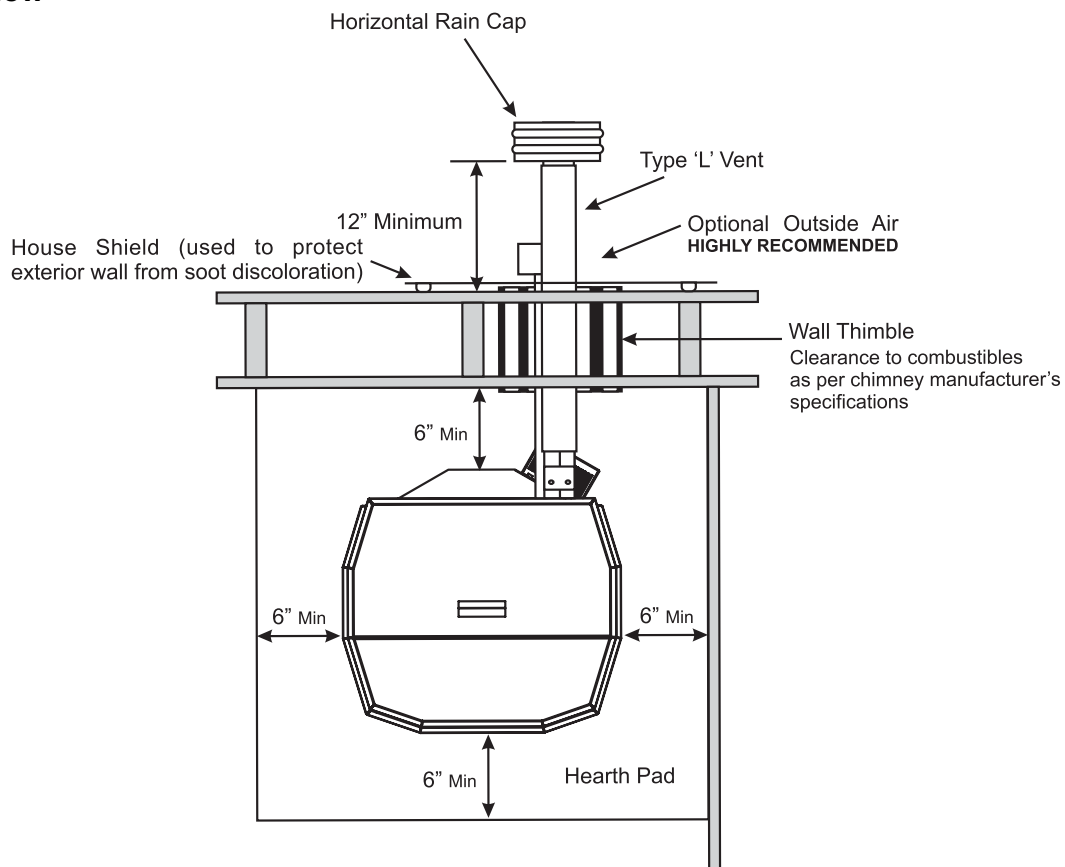
1. Do not terminate the vent in any enclosed or semi-enclosed areas that can build up a concentration of fumes.
2. Vent surfaces can become extremely hot. Keep children away from such areas. Non-combustible shielding or guards may be required.
3. Termination must exhaust above the inlet elevation. It is recommended to have a short vertical run which will help in the event of total power failure.
4. If the unit is incorrectly vented or the air to fuel mixture is out of balance, a slight discoloration of the exterior of the house might occur. Since these factors are beyond the control of FPI we grant no guarantee against such incidents.
5. When installing into an existing masonry chimney, you will probably need a short horizontal section to clear the lintel and allow the hopper lid to open. See diagram on page 13 for more details.
6. Do not terminate a vent underneath a veranda porch or deck unless fully open on a minimum of two sides beneath the floor.

NOTES:

- Vent terminations shall not be recessed into walls or siding.
- A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
- If the vent termination is accessible, a certified guard shall be installed.
- Local codes or regulations such as CAN / CSA B365 or USA NFPA 211 may require different clearances. Check with your local authorities.

HORIZONTAL TERMINATION

Top View



Side View

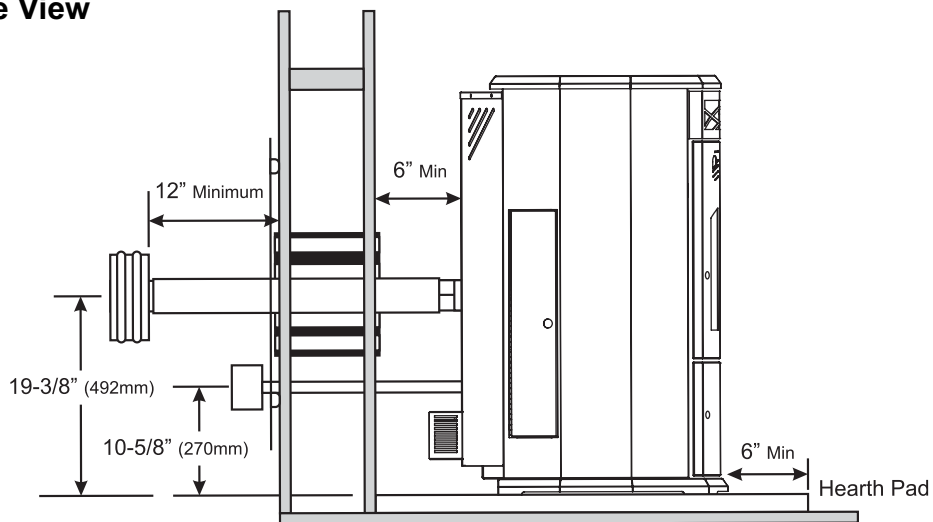


Diagram 4

OUTSIDE VERTICAL TERMINATION

Side View

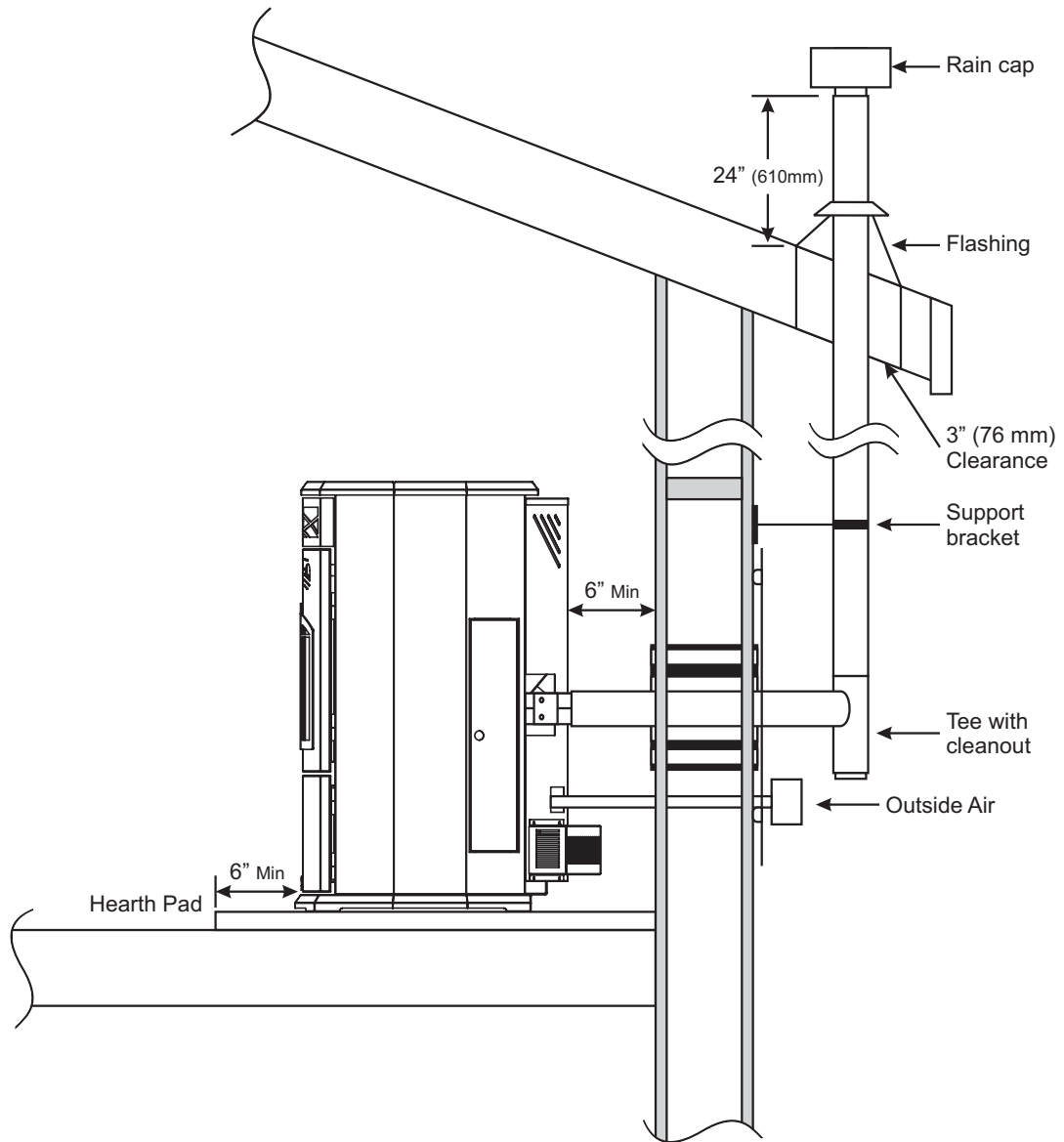


Diagram 5

VERTICAL TERMINATION

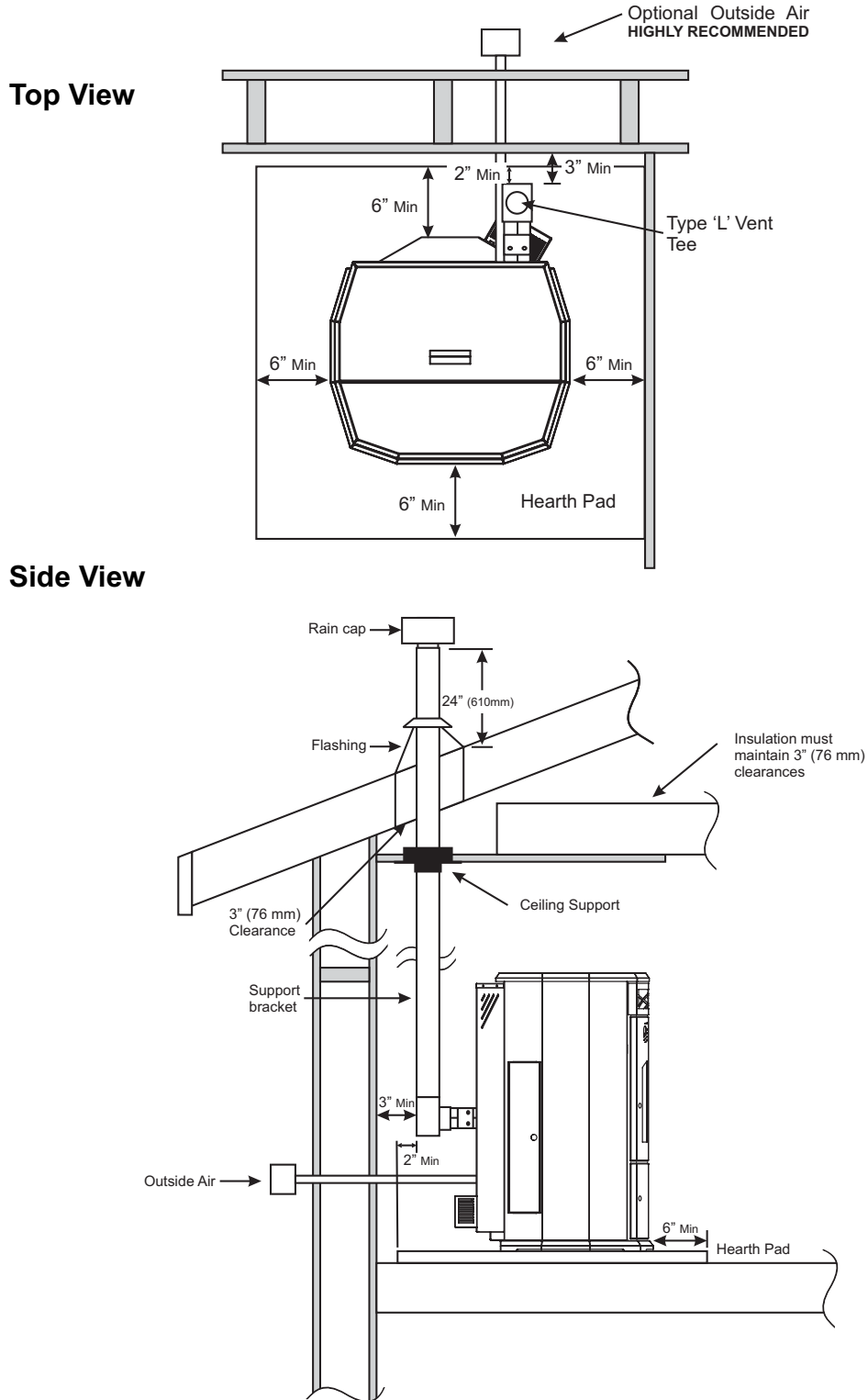


Diagram 6

INSTALLATION

EXISTING CLASS "A" CHIMNEY

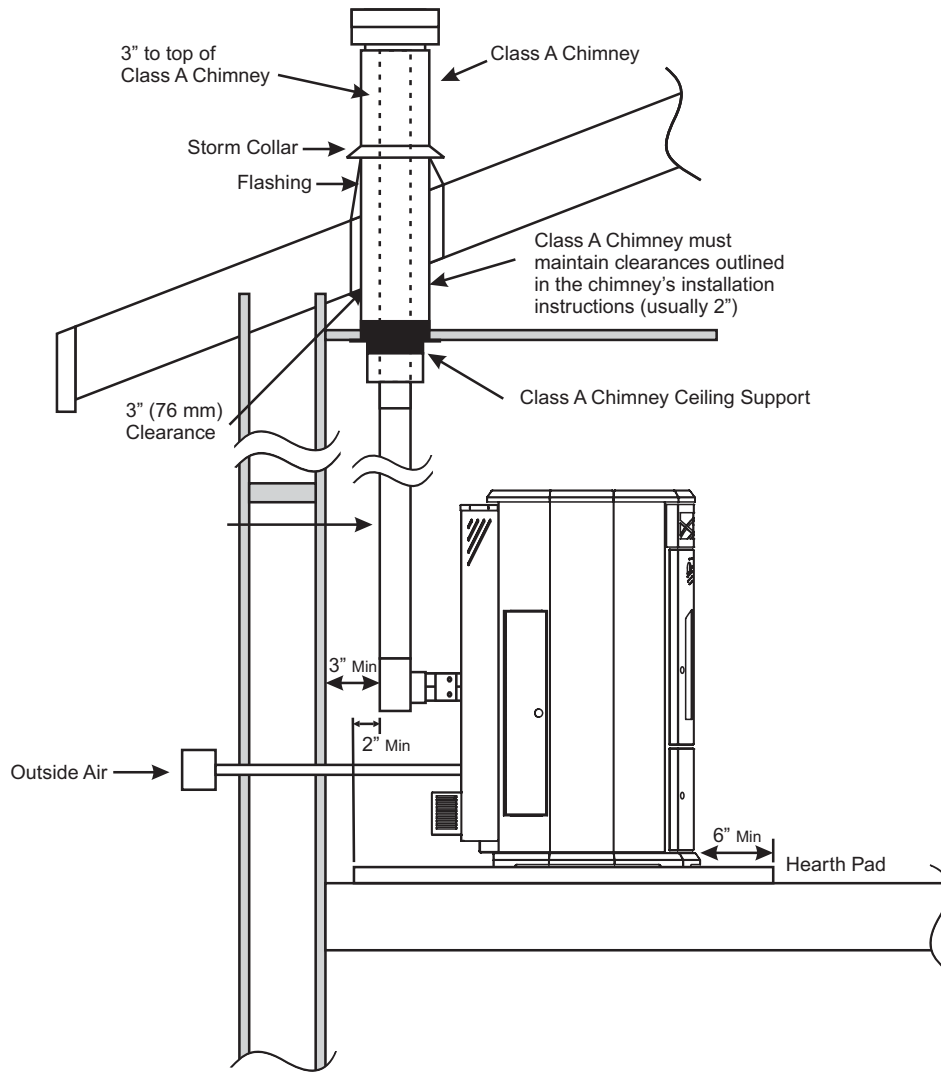


Diagram 7

EXISTING MASONRY CHIMNEY

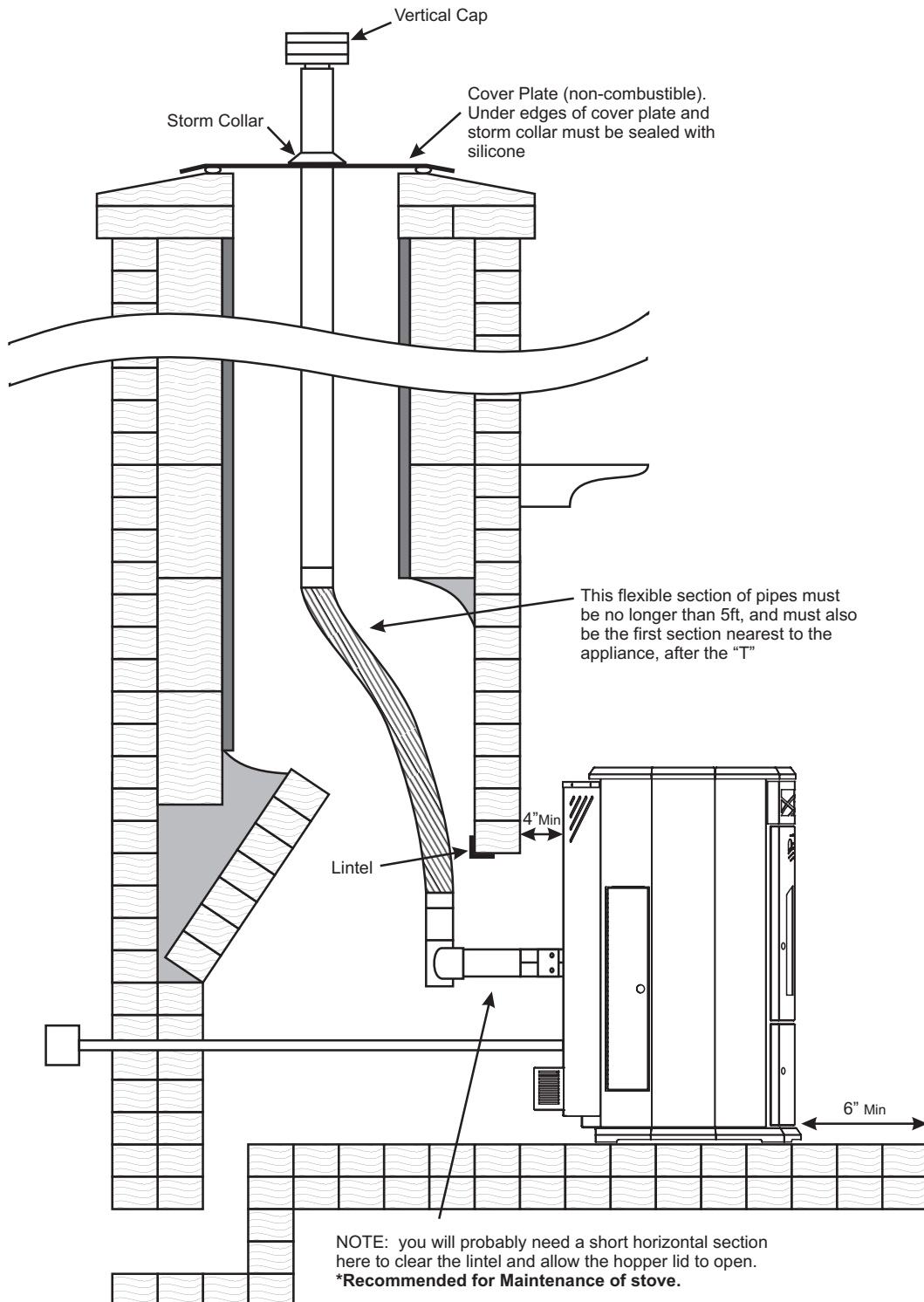
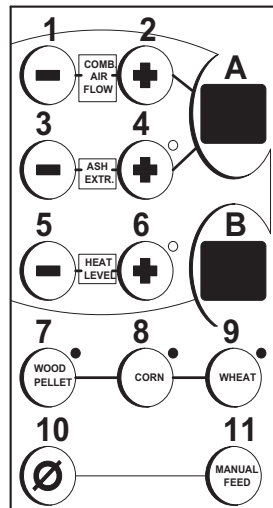


Diagram 8

OPERATING INSTRUCTIONS

GF75-1 START UP PROCEDURE

GF75-1 Start Up Procedures



Icon/Display	Description
1 & 2 Pre-set at factory	Combustion Blower
3 & 4 Pre-set at factory	Ash-extraction
A Display	Settings 1 to 20 for icons 1-2-3-4
5 & 6	Heat level 1 to 5
B Display	Settings 1 to 5, C1 & C2 and error codes
7	Wood Pellet Fuel Setting
8	Corn Fuel Setting
9	Wheat Fuel Setting
10	Stop Button
11	Auger Primary Mode

Start up from Cold Stove with Fuel in Hopper and Auger

(To Start from Empty Hopper of fuel, refer to Starting Procedures section in Manual.)

For best start-up regardless of fuel being used in your stove, use 1 & 1/2 measures of wood pellets as fuel for starting. This will quickly raise the burner and vent temperatures providing a better and faster start-up. Failure to use wood pellets for start up could result in slow and difficult start-up. Before starting each fire, first make sure the burn pot is completely emptied out. Never attempt to start with a burn pot containing previously burned pellets.

- 1) For best results in starting your GF75-1 stove, use only the approved fire starter material supplied. (This is available for sale from your GF75-1 dealer). Fill the measuring cup one and a half complete fills, and pour into your burn pot.



Sprinkle a capfull (from the starter material container) of starter material on top of the wood pellets in the burn pot. Using a match, ignite the starter material and close the firebox door. Do not stir the starter material into the wood pellets.



- 2) Immediately press on one of the green icons (7, 8 or 9) representing the type of fuel used in the hopper. The display B will indicate A1 and A2 for a combined total of 30 minutes.

Please note that icon 10 (stop) will be the only functional key during the first 30 minutes of the starting mode. All other keys are over-riden in the process. When the starting procedures are completed after the 30 minutes, display A will indicate "10" (ash extraction) and display B will indicate "3" (fuel feed rate).

- 3) Your stove is now ready to be adjusted to the heat level desired, by using icon 5 and 6. Setting Feed Rate:

- | | | |
|-------------------|----------------------|-------------------|
| 1) 1 - 1 1/2 lbs. | 2) 1 1/2 lb - 2 lbs. | 3) 2 - 2 1/2 lbs. |
| 4) 3 lbs. | 5) 4 lbs. | |

For best and most efficient results, use the laminated Mini-helic gauge setting guide (supplied with the manual) to make any combustion air adjustments. These are guidelines based upon the most efficient burns on average fuel types. These settings may vary a little with fuel quality variations.

Stop Button

Icon 10 is used to shut the stove down. Note, the ash management system continues to operate in this mode. The electronic panel will display EE.

918-421g

Quick Restart

In case of a short power failure without battery back-up, there is a possibility of starting the unit only if flames are present in the burn pot. **Caution:** Never use gel or matches if the flame or the fuel bed contains red embers which are visible in the burner or the burner is hot. Press and hold for 10 seconds the green icons (7,8 or 9) whichever represents the type of fuel deployed in the hopper. This will activate the second stage of the starting mode (A2).

VERY IMPORTANT

If the burner produces only smoke, immediately stop this procedure by pressing on the red icon (10). Wait until the stove is completely cold before starting up again.

Normal Operating Sounds of Pellet and BioEnergy Stoves

This is a mechanically driven product. It should be noted that you will hear sounds from your appliance. This is perfectly normal due to there being two fan motors and two auger motors used within your appliance.

Error Code	Problem	Solution
EE	Shows when stove is connected but shut down.	If desired, start stove.
E1	a) Poor start-up. Stove did not reach 130 degrees. b) Hopper empty.	Allow stove to cool then re-start. Follow procedure for cold start.
E2 **	This code is not in use.	
E3	Low voltage, below 10.5 VDC.	Charge battery.
E4	This code not in use.	
E5	Power interruption for more than ten seconds.	Allow stove to cool then restart.
E6	Indicates unit has been unplugged before the stop icon was pressed.	Plug into wall outlet.
E7	This code not in use.	
E8	This indicates circuit board failure.	Contact your dealer.
E9	This indicates circuit board failure.	Contact your dealer.
F1	This indicates circuit board failure.	Contact your dealer.
F2	This indicates circuit board failure.	Contact your dealer.
F3	This indicates circuit board failure.	Contact your dealer.
F4	Test code for board manufacturer.	Will not show in normal use.
F5	Auger feed motor fuse blown.	Clear jammed auger and replace fuse.
F6	Auger ash extraction motor fuse blown.	Clear jammed auger and replace fuse.

918-422e

OPERATING INSTRUCTIONS

CONTROL PANEL FUNCTIONS

Combustion Fan Adjustment

Use icon 1 to decrease or icon 2 to increase the pressure in the combustion chamber. These buttons are used to reduce or increase the amount of combustion air coming into the burn-pot.

Ash Extraction

Each type of fuel (wood pellet, corn and wheat) has its own ash percentage. Use icon 3 or 4 to decrease or increase ash removal rate. The extraction rate has been pre-set at the factory.

Heat Level Settings

Use icon 5 to decrease or icon 6 to increase the intensity of your desired heat. (BTU) Heat level 1 is regulated with a flow of approximately 1 lb (.45 kg) of fuel per hour and the heat level 5 is regulated with a flow of approximately 4 lbs (1.81 kg) of fuel per hour.

Icon 10: Is used to stop the stove. Display B will show C1, the fuel feed supply will stop, and the cleaning mode will be activated immediately evacuating the ashes accumulated in the burn-pot. The C2 mode controls the cooling mode and will automatically extinguish the fans when the stove is cold enough (90 degrees F).

When the stove is completely stopped, (approximately 1 hour 30 minutes) display B will show code EE.

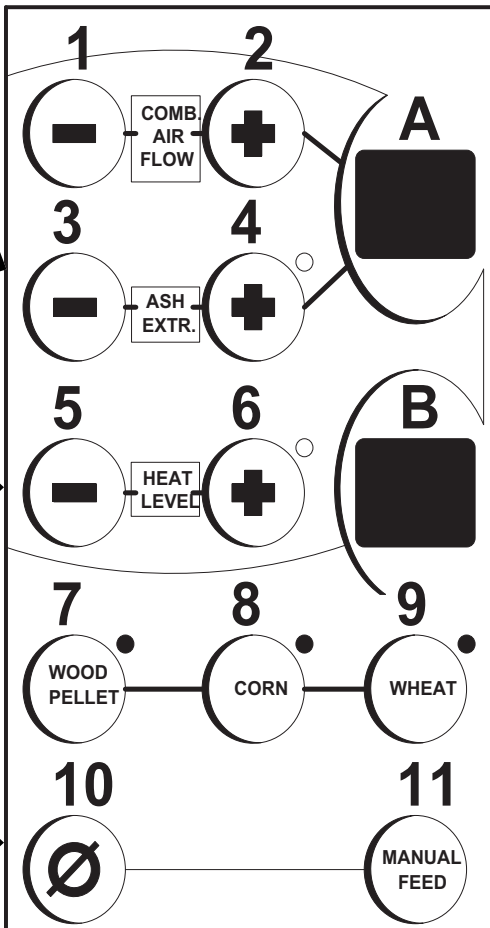


Diagram 10

Display A

This is a shared display between the Combustion fan level (Icon 1 & 2) and ash removal level (Icon 3 & 4). The combustion air display will show when Icons 1 or 2 are pressed. The Ash Extraction will show when Icons 3 or 4 are pressed.

Display B

Heat levels, (1 to 5) and the cleaning mode, (C1 and C2) as well as the error codes (E1 to F6) are shown on this display.

Fuel Selection Icons

- Icon 7:** Is used only for wood pellets.
- Icon 8:** Is used only for corn.
- Icon 9:** Is used only for wheat.

Stop Button

Convection Fan

This fan is used to force hot air into the room. There is no manual control for the speed of this convection fan, which is pre-programmed and computer controlled for each heat level. (1 to 5).

OPERATING INSTRUCTIONS

STARTING PROCEDURES

CAUTION: Do Not use the manual priming procedure for starting of your stove as this may cause smoke in your residence. Like all solid fuel fires, the initial start-up is crucial to the ongoing performance of your appliance. Failure to start your fire properly can lead to frustrations and continued re-light attempts.

To Start Your Stove

For best start-up regardless of fuel being used in your stove, use 1 & 1/2 measures of wood pellets as fuel for starting. This will quickly raise the burner and vent temperatures providing a better and faster start-up. Failure to use wood pellets for start up could result in slow and difficult start-up. Before starting each fire, first make sure the burn pot is completely emptied out. Never attempt to start with a burn pot containing previously burned pellets.

- 1) For best results in starting your GF75-1 stove, use only the approved fire starter material supplied. (This is available for sale from your GF75-1 dealer). Fill the measuring cup one and a half complete fills, and pour into your burn pot.



Sprinkle a capfull (from the starter material container) of starter material on top of the wood pellets in the burn pot. Using a match, ignite the starter material and close the firebox door.) Do not stir the starter material into the wood pellets).



- 2) Immediately press on one of the green icons (7, 8 or 9) representing the type of fuel used in the hopper. The display B will indicate A1 and A2 for a combined total of 30 minutes.

Please note that icon 10 (stop) will be the only functional key during the first 30 minutes of the starting mode. All other keys are over-riden in the process. When the starting procedures are completed after the 30 minutes, display A will indicate "10" (ash extraction) and display B will indicate "3" (fuel feed rate).

- 3) Your stove is now ready to be adjusted to the heat level desired, by using icon 5 and 6. Setting Feed Rate:

- 1) 1 - 1 1/2 lbs.
- 2) 1 1/2 lb - 2 lbs.
- 3) 2 - 2 1/2 lbs.
- 4) 3 lbs.
- 5) 4 lbs.

For best and most efficient results, use the laminated Mini-helic gauge setting guide (supplied with the manual) to make any combustion air adjustments. These are guidelines based upon the most efficient burns on average fuel types. These settings may vary a little with fuel quality variations.

Stop Button

Icon 10 is used to shut the stove down. Note, the ash management system continues to operate in this mode. The electronic panel will display EE.

OPERATION GUIDELINES FOR BURNING CORN AND WHEAT

IMPORTANT: Compared to wood pellets, agricultural based fuels such as Corn or Wheat require extra care, attention and understanding. Failure to adhere to these operating instructions could lead to Ash Auger failure, and /or build up of ash in the Burn-pot leading to system failure. Such issues are at the control of the operator and not to be considered appliance problems. The physical characteristics and composition of Corn and Wheat, are very different to that of wood. Following these guidelines and directions will help you better understand and control the performance of your appliance while burning Corn or Wheat.

When burning Corn or Wheat, the following steps will help you understand and establish control of the working parameters of the appliance for optimum performance during operation.

Initial Use Of GF75-1 For Burning Corn & Wheat

In order to become better acquainted with this new technology, we recommend to the first time user of wood pellet fuel only for the first few days. Once you are comfortable with the functions of the control pad and the changes in operation when using the controls with wood pellets, you can feel safe to move on to burning Corn or Wheat.

Preparation and Start-Up:

1. Fill hopper with Corn or Wheat and prime the Auger as per instructions in "Starting Procedures" section. To start your first fire, see the start-up instructions on the inside of the door for the control panel and the "GF75-1 Start Up Procedure" section. Remember regardless of the fuel you will be burning from your hopper, it is recommended that you **always use wood pellets to start your fire**. In operational mode, the appliance firebox is under a negative pressure. It is important to tightly close the door to the firebox immediately after lighting the fuel in the burn-pot and prior to pressing Icon 7,8 or 9, for your choice of fuel.
2. After lighting your fire in the Burn-pot, the stove will go through an automated factory pre-set start-up procedure for a total of 30 minutes. Display "B" will indicate "A1" then "A2" through this process. During this stage, the only button which can be used, is Icon 10, the "Stop" button. This is only in case of start-up failure.
3. Upon completion of this first 30 minutes, the stove goes into manual mode which will be indicated by the change on the display on the control board. Display "A" will now read "10" and "B" will read "03". Display "A", is a **shared display** between the **Combustion Fan** and the **Ash Removal system**. Display "B" indicates the **Fuel Feed rate**.
4. After the initial protected 30 minute start-up procedure, you will be able to make adjustments to the feed rate for heat output as required. Incremental changes are still protected on the keypad to ensure that each step, i.e. from feed rate 3 to feed rate 4 is not increased to feed rate 5 until feed rate 4 has had 25 minutes to stabilize. The ember bed should also be automatically maintained at around 3" in depth, or visibly around 5" from the top of the burn pot. There will be minimal fluctuation in the level, but this will average out over the period of operation. Maintaining this ember bed is important in the continued operation of your appliance.

OPERATING INSTRUCTIONS

Clinker Prevention

Clinkers are a result of incomplete combustion in your burn-pot and, if by chance they occur, can be controlled with correct use of your controls. Incomplete and poor combustion in your appliance is related to the level of the fuel bed height, the level of combustion air, the temperatures in your burn-pot, and the rate of ash extraction from your burn-pot.

In many cases, the use of certain gels and starter materials can cause the formation of clinkers in your burn-pot. Always use the recommended fire starter materials to start your BioEnergy stove. In the event that clinkers start to form during the initial 90 minutes, you can use the "poker" provided to gently break this formation and allow the unit to then continue as before. If you must open the firebox door whilst the unit is in operation, (to break a clinker), always open gently and slowly.



Diagram 11a: Calibration Indicator / Pressure Gauge (located below control panel at the side of the unit)

High Fuel/Ember Bed Control

If under the above display conditions, you have accumulated a high fuel/ember bed, the following guidelines should help you eliminate the problem and stabilize the fuel bed for future use. These should be one-time changes and settings for as long as you continue to use the same fuel. i.e. Corn or Wheat.

Burn-pot fuel bed: If you cannot see 5" of the burn-pot wall above your fuel/ember bed, the level is too high (refer to Diagram 11b in "Low Fuel/Ember Bed Control" section).

- Gradually increase combustion air to digital reading "12" by pressing icon 2.
- Gradually increase ash removal to digital reading "12" by pressing icon 4.

These will both show on display "A".

At this point you will notice an increase in the pressure reading on the round Pressure Gauge (refer to Diagram 11a) indicator located below the control panel. This will fluctuate as you increase or decrease air flow. (This is a good indicator to help you manage your settings.

Low Fuel/ember Bed Control

If under above display conditions, you have accumulated a low fuel/ember bed the following guidelines should help you eliminate the problem and stabilize the fuel bed for future use.

Burn-pot fuel bed: If you see more than 5 ½" - 6" of the burn-pot wall above your fuel/ember bed, the level is too low (refer to Diagram 11b).

After the initial start-up procedures and the unit has run undisturbed or unaltered for at least one hour, visually check the combustion air flow and ash removal indicator levels on the control panel. They should read "10" on the "A" display, and "03" on the "B" display.

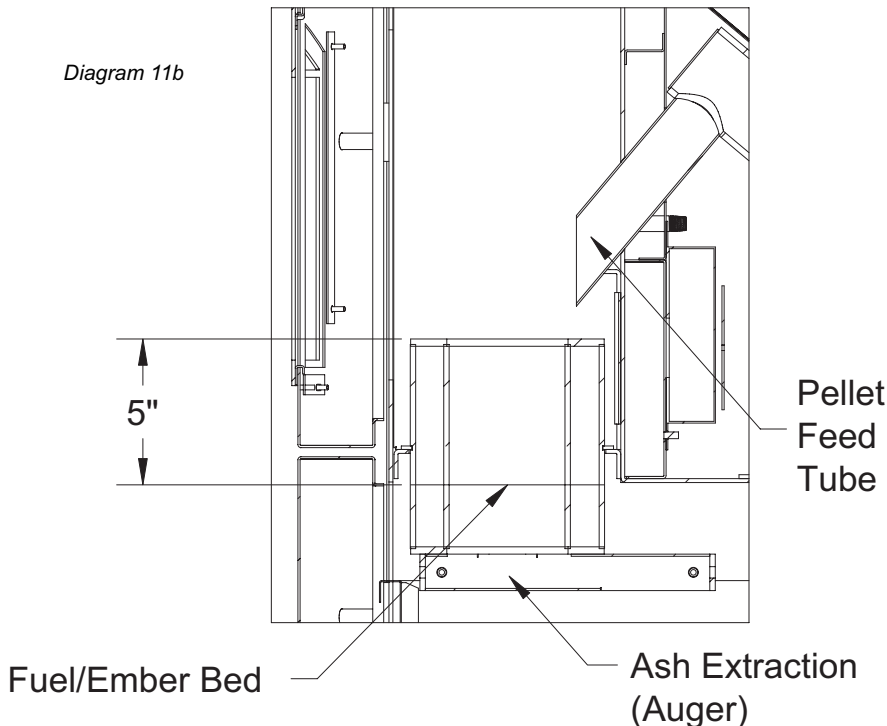
If under these display conditions, you have a **low fuel/ember bed**, the following guidelines should help you eliminate the problem and stabilize the fuel bed for future use. These should be one-time changes and settings for as long as you continue to use the same fuel. i.e. Corn or Wheat.

- Gradually **decrease combustion air** to digital reading "8" by pressing icon 1.
- Gradually **decrease ash removal** to digital reading "8" by pressing icon 3.

These will both show on display "A".

This will reduce the rate of ash removal, allowing the fuel/ember bed to build to the appropriate level. i.e. 5" from the top, or a 3" bed.

Diagram 11b



MAINTENANCE

Maintenance Schedule Using Wood Pellets

COMPONENTS OF STOVE	EACH START UP	WEEKLY	MONTHLY	ANNUALLY
REMOVE ASHES IN BURN-POT	X			
CHECK THE ASH REMOVAL SYSTEM		X		
EMPTY THE ASH PAN		X		
VACUUM OUT THE COMBUSTION CHAMBER (STEP 1)		X		
CLEAN THE BURN-POT JETS		X		
CLEAN THE CONVECTION PIPES SYSTEM			X	
CHECK THE BATTERY CONDITIONS			X	
CLEAN THE CONVECTION FAN (FLYWHEEL)				X
CLEAN THE COMBUSTION CHAMBER (STEP 2)				X
CLEAN THE COMBUSTION FAN (FLY-WHEEL)				X
INSPECT THE SEALS				X
CLEAN THE CHIMNEY				X

Maintenance Schedule Using Corn or Wheat

COMPONENTS OF STOVE	EACH START UP	EVERY 2-3 DAYS	WEEKLY	MONTHLY	ANNUALLY
REMOVE ASH FROM WITHIN BURN-POT	X				
CHECK THE ASH REMOVAL SYSTEM		X			
EMPTY THE ASH PAN		X			
CLEAN THE COMBUSTION CHAMBER (STEP 1)		X			
CLEAN THE BURN-POT JETS			X		
CLEAN THE CONVECTION PIPES SYSTEM				X	
CLEAN THE CONVECTION FAN (FLYWHEEL)				X	
CHECK THE BATTERY CONDITIONS				X	
CLEAN THE COMBUSTION CHAMBER (STEP 2)					X
CLEAN THE COMBUSTION FAN (FLYWHEEL)					X
INSPECT THE SEALS					X
CLEAN THE CHIMNEY					X

MAINTENANCE

Before each start-up, always check the level of ashes in the ash pan and remove if necessary. "Be sure to dispose of in a metal container and remove to outside of the building." Embers can stay hot for a long time after the fire has been extinguished.

Tools Required

Ratchet;
6" extension;
5/16" socket, wrench and nut driver;
7/16" socket, wrench and nut driver;
9/16" wrench;
1/8", 5/32", 3/16" Allen wrench;
1/4" nut driver;
Straight blade and Phillips head No. 2 screwdrivers;
Small Rubber mallet;
3/8" drill;
3" round wire brush that can be connected to a drill;
1/8" mini steel brush;
Small brass wire brush;
Vacuum cleaner with filter;
High temperature lubricant for ash cleaning gears

Maintenance Of The Combustion Chamber

STEP 1: Once a month, use a "shop-vac" style vacuum cleaner (avoid the use of a domestic style vacuum cleaner) with filter (only when the stove is cold) to remove the ashes accumulated around the burn-pot (Diagram 12). Clean the interior of the glass door. Use the "shop-vac" style vacuum cleaner brush to clean the pipes of the convection system (Diagram 13) as well as the 2 air intakes (Diagram 14).

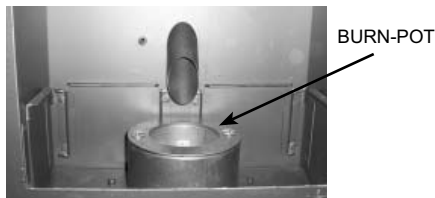


Diagram 12

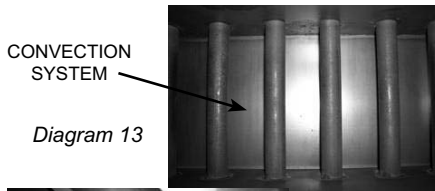


Diagram 13

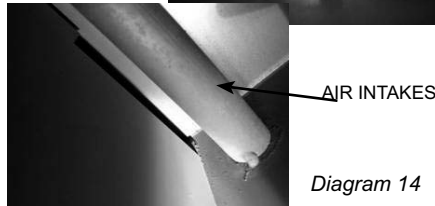


Diagram 14

STEP 2: The frequency of cleaning varies according to the type of fuel burned (see the maintenance charts) For an in-depth cleaning, repeat STEP 1. It may be necessary to use a rubber mallet to remove the four cleaning doors inside the firebox. Then use a 7/16 wrench to remove the brass bolts of the two access doors (Diagram 15). Hold the vacuum cleaner under the side wall and use a rubber mallet to lightly knock out accumulated ashes which are inaccessible with the vacuum cleaner (refer to Diagram 16).

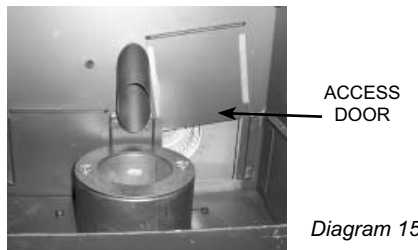


Diagram 15



Diagram 16

Before reinstalling the access doors refer to the section on the maintenance of the combustion fan. (clean the wings on the flywheel).

Maintenance Of The Burn-pot

Step 1: Use a 9/16 wrench to unscrew the two nuts (Diagram 17). Then to raise the ring, it may be necessary to insert a flat screwdriver between the outside of the burn-pot and the top ring (Diagram 18). If required, use a rubber mallet to loosen.

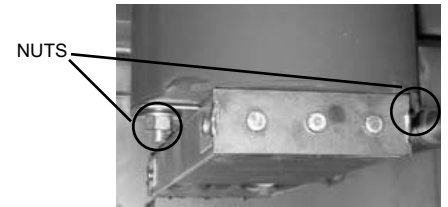


Diagram 17



Diagram 18

Step 2: remove the cylinder from inside the burn-pot (Diagram 19).

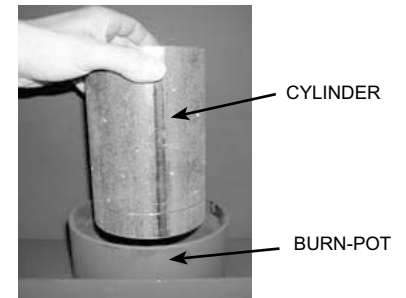


Diagram 19

Step 3: if necessary, use a steel brush installed onto a drill to remove minerals stuck to the interior wall of the cylinder.

Step 4: use a rod which has a diameter of 1/8" (3 mm) to clean the jets of the inner burn-pot (Diagram 20). Be sure to install the burn-pot cylinder correct way up. Angled holes to the top, straight holes to the bottom.

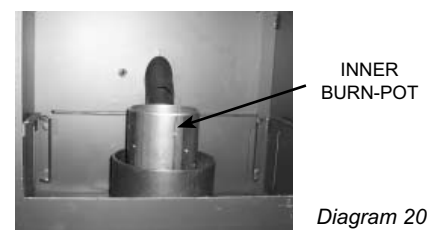


Diagram 20

Maintenance Of The Ash-extraction System

Step 1: refer to Diagram 21 to determine the condition of the three stainless steel ash screws. It can happen that the sugar released by the fuels containing corn or wheat can stick on the ash screws resulting in poor movement and removal.

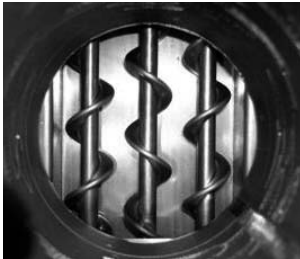


Diagram 21

Step 2: Use a 9/16 wrench to unscrew the two nuts (Diagram 17). Then to raise the ring, it may be necessary to insert a flat screwdriver between the outside of the burn-pot and the top ring (Diagram 18). If required, use a rubber mallet to loosen.

Step 3: Refer to Diagram 22. It is advisable to support the ash extraction system before you undo these 9/16" nuts as once they are removed, the ash extraction system will become loose and drop down. The "lovejoy" connection will now be loose. This is an important part that must not be misplaced or forgotten when re-assembling.

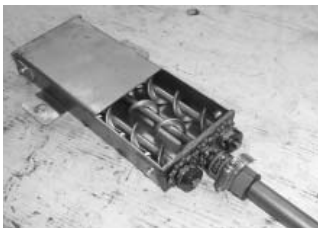


Diagram 22

Maintenance On The Combustion Fan (Connected To The Chimney)

There are two ways to clean the fan flywheel, either directly on the stove (Diagram 23) or removing the fan from the stove (Diagram 24).



Diagram 23

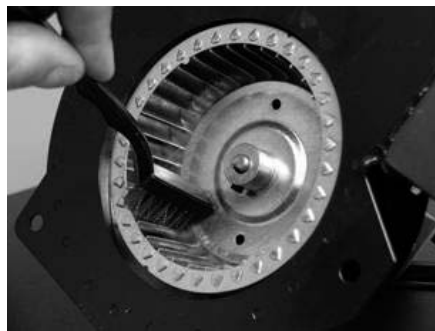
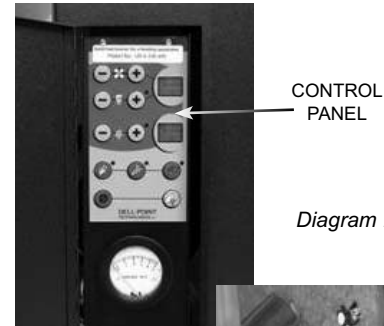


Diagram 24

To clean the flywheel, use a steel brush shown on Diagram 24. Clean each wing of the flywheel, which will increase the pressure on the calibration indicator and will reduce vibrations caused by accumulated ashes.

Maintenance On The Convection Fan

To reach the convection fan, remove the control panel (refer to diagram 25 & 26). Then using a brush and a vacuum cleaner, clean each plastic impeller which will increase the hot air volume displacement in the room and reduce or eliminate any vibrations.



CONTROL
PANEL

Diagram 25



Diagram 26

Maintenance On The Fuel Feeding System

At least once every year, empty the fuel hopper using a vacuum cleaner with filter, clean the fuel residues accumulated which are stuck at the bottom of the feed screw close to the nylon bushing (see Diagram 27).

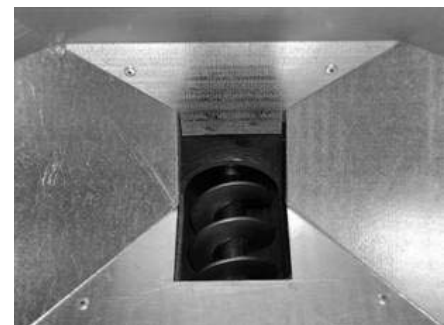


Diagram 27

MAINTENANCE

Inspection Of The Seals

At the start of each season, check gaskets on the door, fuel door and ash door by using a strip of paper which you will slip at several places between the seal and the stove (see Diagram 28). If the gaskets need to be replaced use only approved gasket and adhesive obtainable from your FPI dealer. A proper high temperature gasket adhesive is also required.



Diagram 28

Information On How To Clean The Chimney

At the start of each season or every 3 tons burned, check the accumulation of ashes inside the chimney. It is important to clean the full system including all lengths, T's and elbows.

Maintenance Of The Battery System

Check that the grips are well connected on the battery poles. Small test: start the stove without flame (cold). After 30 seconds, disconnect the plug which is connect to the wall socket. If the stove is functioning that means that the battery is well connected. **Never place a battery directly on concrete as this can damage the battery.**

Type Of Cleaning Product To Use For The Windows

Always use a proper cleaning product which can be found at any hearth retailer, designed for high temperature glass.

GF75-1 TECHNICAL DATA

Minimum Burning Capacity	8,500 BTU/h (when burning wood pellets) 1 lb/h
Maximum Burning Capacity	34,000 BTU/h (when burning wood pellets) 4 lb/h
Efficiency of the Burn-pot	Approximately 85%
Combustion Fan	Power varies from 25 CFM to 45 CFM
Convection Fan	Power varies from 35 CFM to 125 CFM
Fuel Hopper	Maximum capacity of 75 lb (34 kg)
Certification	UL, ULC, CE and EPA
Air Emissions (EPA)	0.6 g/h
Power Settings	5 levels of heat
Electrical 120 volts or 240 volts AC	Min. Capacity .25 amps (120 volts) .15 amps (240 volts) Max. Capacity .65 amps (120 volts) .35 amps (240 volts)
12 volts DC	Min. Capacity 1.8 amps (13.8 Volts DC) Max. Capacity 4.5 amps (13.8 Volts DC)
In stop mode	120 Volts or 240 Volts (.05 amps or .07 amps) 13.8 volts DC (.03 amps)
GF75-1 Dimensions Height Width Depth	40.5" (1029 mm) 26.5" (673 mm) 25.25" (641 mm)
Weight	Approximately 305 lb (138 kg)
Type of Chimney	FPI recommends the use of corn venting for all applications.
Diameter of the Chimney	3" (76 mm) of interior diameter

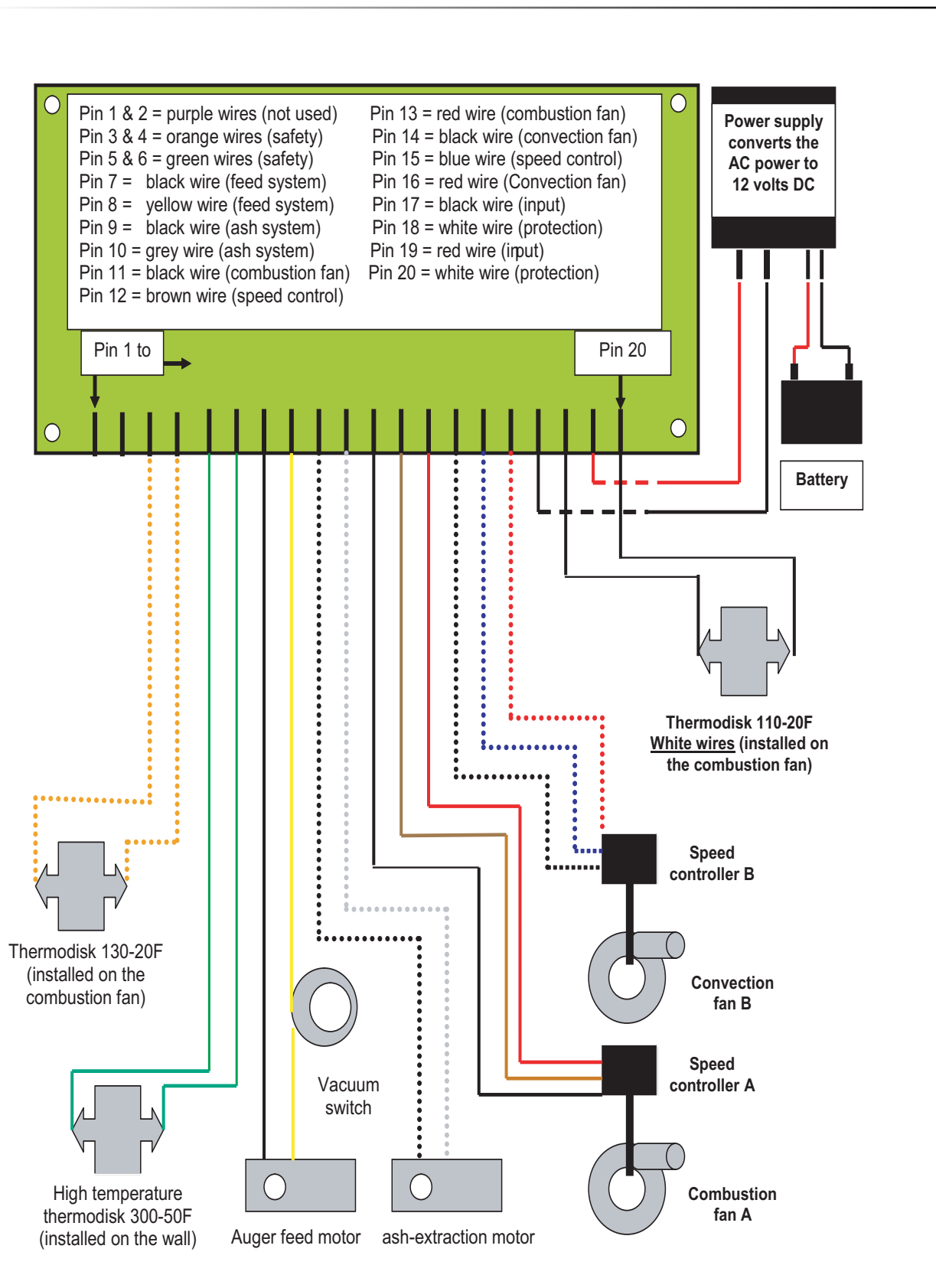
TROUBLESHOOTING

TROUBLESHOOTING

IMPORTANT: Always disconnect your stove before doing any maintenance or repairs. Only a qualified technician should take care of any electrical problems.

Error code	Problem	Solution
EE	Shows when stove is connected but shut down.	If desired, start stove.
E1	a) Poor start-up. Stove didn't reach 130 deg. b) Hopper empty.	Allow stove to cool then re-start. Follow procedure for cold start.
E2 **	This code is not in use.	
E3	Low voltage, below 9.6 VDC.	Charge battery.
E4	This code not in use.	
E5	Power interruption for more than ten seconds.	Allow stove to cool then restart.
E6	Indicates unit has been unplugged before the stop icon was pressed.	Plug into wall outlet.
E7	This code not in use.	
E8	This indicates circuit board failure.	Contact your dealer.
E9	This indicates circuit board failure.	Contact your dealer.
F1	This indicates circuit board failure.	Contact your dealer.
F2	This indicates circuit board failure.	Contact your dealer.
F3	This indicates circuit board failure.	Contact your dealer.
F4	Test code for board manufacturer.	Will not show in normal use.
F5	Auger feed motor fuse blown.	Clear jammed auger and replace fuse.
F6	Auger ash extraction motor fuse blown.	Clear jammed auger and replace fuse.

ELECTRICAL DIAGRAM (12 VOLTS)



TROUBLESHOOTING

GF75-1 MODEL MANUFACTURERS WARRANTY

FPI offers FIVE YEARS warranty coverage against manufacturers defects on the steel structure of the appliance. Parts and *subsidized labour.

FPI offers TWO YEARS warranty coverage against manufacturers defects on the combustion blower, convection blower, auger feed motor and ash removal auger motor. Parts and *subsidized labour.

FPI offers ONE YEAR warranty against manufacturers defects on all electronic components on the appliance at the time of purchase. Parts and *subsidized labour.

Conditions:

The warranty will commence on the purchase date of the appliance.

Any part or parts of this unit which in our judgement show evidence of such defects will be repaired or replaced at FPI's option through an authorized distributor or agent provided that the replaced part is returned to FPI via the distributor or agent Transportation Prepaid.

Replacement parts may be charged for until replacements are evaluated for manufacturers defects.

The authorized selling dealer is responsible for all in-field warranty and service work carried out on the FPI product. FPI will not be responsible or liable for results or costs of workmanship carried out by unauthorized service persons or dealers.

At all times, FPI reserves the right to inspect product in the field which is claimed to be defective.

All claims must be submitted to FPI by the authorized selling dealer. It is necessary and essential that all claims submitted provide all requested information for process to commence. i.e. Customer name, purchase date, model, serial number, problem, parts requested. Without this information, the claim will be invalid.

Exclusions:

The warranty does not extend to gasketing, paint or trim.

At no time will FPI be liable for any consequential damages which exceed the original price of the unit.

FPI has no obligation to enhance or modify any unit once manufactured, i.e. as products evolve, field modifications or upgrades will not be performed on existing appliances.

FPI will not be liable for travel costs for service work.

Installation, environmental, and user problems, are not the responsibility of the manufacturer and therefore not covered under the terms of the warranty policy.

Units showing signs of neglect or mis-use are not covered under the terms of the warranty policy.

Warranty will not extend to any part or parts which have been tampered with or altered in any way, or which in our judgement has been subject to mis-use, lack of maintenance, improper installation, neglect or accident, spillage, downdrafts caused by environmental or geographical conditions, inadequate ventilation, excessive offsets, negative air pressure caused by mechanical systems such as furnaces, fans, clothes dryers etc.

Freight damage to stoves and replacement parts is subject to a claim against the freight carrier by the dealer and therefore not covered by the warranty.

FPI will not be liable for acts of God or acts of terrorism which causes malfunction of the appliance.

Performance problems due to operator error will not be covered by this warranty policy.

Products made or provided by other manufacturers and used in conjunction with the operation of this appliance without prior authorization from FPI may nullify your warranty.

Any alteration that causes leaks from the appliance or venting is not the responsibility of FPI and therefore not covered under the warranty policy.

* Subsidy according to job scale predetermined by FPI.

