



DELL-POINT

GF45



WARNING:

Please read this entire manual before installation and use of this pellet fuel-burning room heater. Failure to follow these instructions could result in property damage, bodily injury or even death. Contact local building or fire officials about restrictions and installation inspection requirements in your area.

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

GF45

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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SAFETY LABEL

This is a copy of the label that accompanies each GF45. We have printed a copy of the contents here for your review. The safety label is located on the back panel of the stove.

NOTE: FPI units are constantly being improved. Check the label on the unit and if there is a difference, the label on the unit is the correct one.

323

Duplicate S/N

Serial No./ No de serie
323

DO NOT REMOVE THIS LABEL / NE PAS ENLEVER CETTE ÉTIQUETTE



CAUTION: HOT WHILE IN OPERATION. DO NOT TOUCH. CONTACT MAY CAUSE SKIN BURNS. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. SEE NAMEPLATE AND INSTRUCTIONS. DO NOT OVERFIRE. IF HEATER OF CHIMNEY CONNECTOR GLOWS, YOU ARE OVERFIRING. INSPECT AND CLEAN CHIMNEY AND CONNECTOR FREQUENTLY UNDER CERTAIN CONDITIONS OF USE. FLYASH BUILDUP MAY OCCUR RAPIDLY, MOVING PARTS MAY CAUSE INJURY.

WARNING: RISK OF SMOKE AND FLAME SPILLAGE. KEEP VIEWING AND ASH REMOVAL DOORS TIGHTLY CLOSED DURING OPERATION.

CAUTION: OPERATE THIS UNIT ONLY WITH THE FUEL HOPPER LID CLOSED. FAILURE TO DO SO MAY RESULT IN EMISSIONS OF PRODUCTS OF COMBUSTION FROM THE HOPPER UNDER CERTAIN CONDITIONS. MAINTAIN HOPPER SEAL IN GOOD CONDITION. DO NOT OVERFILL THE HOPPER.

AVIS: CHAUD LORSQU'EN OPÉRATION. NE TOUCHEZ PAS. PEAU, GARDEZ LES ENFANTS, LES VÊTEMENTS, LES MEUBLES À LA DISTANCE CONSIDÉRABLE. LISEZ L'ÉTIQUETTE ET LES INSTRUCTIONS. NE PAS SURCHAUFFER. SI LA FOURNAISE OU LE TUYAU DE CHEMINÉE ROUGISSENT, C'EST QUE VOUS SURCHAUFFEZ. INSPECTEZ ET NETTOYEZ LA CHEMINÉE ET LE TUYAU FRÉQUEMMENT. SOUS CERTAINES CONDITIONS D'USAGE, LE RÉSIDU DE CENDRE PEUT SE FAIRE RAPIDEMENT. TOUTE PIÈCE MOBILE PEUVENT CAUSER DES BLESSURES.

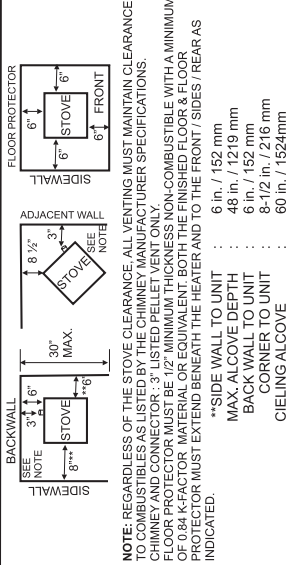
ATTENTION: IL Y A RISQUE DE FUMÉE ET DE FLAMME. GARDEZ LA PORTE DE VUE ET CELLE DES CENDRES FERMÉES HERMÉTIQUEMENT DURANT L'OPÉRATION.

AVIS: OPÉREZ CET APPAREIL AVEC LE COUVERCLE DE LA TRÉMIE FERMÉE. SINON IL PEUT EN RESULTER DES ÉMISSIONS DE PRODUITS DE COMBUSTION DE LA TRÉMIE SOUS CERTAINES CONDITIONS. MAINTENEZ LE COUVERCLE DE LA TRÉMIE EN BONNE CONDITION. NE REMPLISSEZ PAS LA TRÉMIE TROP PLEINE.

918-629

CONTACT YOUR LOCAL BUILDING OR FIRE OFFICIAL ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

CONTACTEZ VOTRE BUREAU DE CONSTRUCTION OU D'INCENDIE AU SUJET DES RESTRICTIONS ET DE L'INSPECTION D'INSTALLATION DANS VOTRE QUARTIER.



NOTE: PEUT IMPORTER L'ESPACE LIBRE DU POËLE. LE TUYAU DE VENTILATION DOIT TOUJOURS AVOIR 3" D'ESPACE LIBRE

CHEMINÉE ET CONNECTEUR : VENTILATION DE GRANULE DE BOIS CATALOGUÉ DE 3" SEULMENT.

MATÉRIEL NON-COMBUSTIBLE OU L'ÉQUIVALENT. S'ÉTENDANT EN DESSOUS DE LA FOURNAISE ET AU DEVAINT/CÔTES/ARRIÈRE COMME INDICQUÉ.

****MUR DU CÔTÉ À L'APPAREIL :** 6 pouces / 152 mm
MUR ARRIÈRE À L'APPAREIL : 6 pouces / 152 mm
PROFONDEUR MAXIMUM DE L'ALCOVE : 30 pouces / 762 mm
COIN À L'APPAREIL : 8 1/2 pouces / 216 mm

****De l'appareil au mur exige 8" d'espace libre d'accès aux contrôles.**

U.S. ENVIRONMENTAL PROTECTION AGENCY
Certified to comply with July 1990 particulate emission standards.
AGENCE DE PROTECTION ENVIRONNEMENTALE DES ÉTATS-UNIS
Certifié d'être conforme avec les standards d'émission de Juillet 1990

DATE OF MANUFACTURE / DATE DU MANUFACTURIER

2006	2007	2008	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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Distributed by: FPI Fireplace Products International Ltd., Delta, BC, Canada

Manufactured by/Manufacturé par: FPI Fireplace Products International Ltd., Delta, BC, Canada
Listed Room Heater, Pelletized Fuel Type
Also Suitable for Mobile Home Installation Pursuant to (UM) 84-HUD
Pieces Catalogue: Type - Poêle à Granule
Pour l'Installation Dans la Maison Mobile Sous (UM) 84-HUD

Model : GF45
Tested to : ASTM E1509, ULC C1482, ULC S627
Type of Fuel : Corn, Wheat, Pelletized Wood or Agricultural BioEnergy refer to Manual.
Electrical Rating : 120V, 4 Amps, 60 Hz
Input Rating : 7,096 - 28,387 BTU TYPICAL
NOTE: Replace glass only with 5mm ceramic. Components required for residential and mobile home installation: Listed Pellet Vent.
DANGER: Risk of electrical shock. Disconnect power before servicing unit. Do not route power cord beneath heater.

Model : GF45
Testés à : ASTM E1509, ULC C1482, ULC S627
Type de Gaz : Granules de Bois et Maïs
Évaluation Électrique : 120V, 4 Amps, 60 Hz
Évaluation Énergétique : 7 096 - 28 387 BTU Typique
NOTE: Remplacez la vitre avec de la céramique de 5mm remplacement. Produits exigés pour l'installation dans la maison résidentielle et mobile: Ventilation pour granules de bois cataloguée.
DANGER: Il y a risque de choc électrique. Débranchez avant d'essayer de faire le service sur cet appareil. Ne pas faire passer la corde électrique en dessous de la fournaise.

"PREVENT HOUSE FIRES"
 Install and use only in accordance with manufacturer's installation instructions and your local building codes.
CAUTION: Special methods are required when pressing chimney through a wall or ceiling. Follow the pipe manufacturer's instructions and local building codes for the clearance to combustibles required for the installation of the vent pipe being used. Do not pass chimney connector through a combustible surface. Do not connect this unit to a chimney flue serving another appliance.
WARNING: (MOBILE HOME) An outside air inlet must be provided for combustion and be unrestricted while unit is in use.
NOTE: Outside air is required.

"PRÉVENTION DES FEUX DE MAISON"
 Installez et utilisez seulement en accord avec les instructions d'installation du fabricant et des codes locaux.
AVIS: Des méthodes spéciales sont exigées lorsqu'une cheminée passe à travers un mur ou un plafond. Suivez les instructions du fabricant du tuyau et les codes locaux de construction pour l'espace libre des combustibles exigé pour l'installation du tuyau connecteur de cheminée à travers une surface combustible. Ne connectez pas cet appareil à un tuyau de cheminée servant un autre appareil.
ATTENTION: (MAISON MOBILE) Un tuyau extérieur d'air doit être fourni pour la combustion et doit être sans restriction lorsque l'appareil est en usage.
NOTE: A besoin d'air de l'extérieur

IMPORTANT: SAVE THESE INSTRUCTIONS

The GF45 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.

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.

IMPORTANT:

Before servicing the electrical panel, make sure that all electrical sources is turned off to the stove and the **power disconnected**. Do not forget to disconnect the battery, control board, fans and switches as well.

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 your pellet stove be installed by an authorized dealer / installer.

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 that you 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 components.

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.

Never attempt to re-start your stove until it has fully cooled down. Starting your stove using a gel is only recommended during automatic ignition failure.

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

The Prime button 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 GF45 model will not feed fuel if the front door or hopper lid are not fully closed and the firebox in a negative pressure situation. These are safety functions 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.

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 requires outside air.** Make sure that the outside air supply 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 back of the stove.
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 GF45

<u>Qty</u>	<u>Description</u>
1 pc	User Manual
1 pc	AC Power Inlet
1 pc	Measuring Cup
1 pc	Pipe Adapter Gasket (for Pressure Reducer Plate)
1 pc	Pressure Reducer Plate 1-1/4"
1 pc	Pressure Reducer Plate 1-5/8"
1 pc	Ash Poker
1 pc	7ft. 6in. Extension Cord
1 pc	Outside Air Kit

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.

Do not install a flue damper in the exhaust venting system of this unit.

Do not connect this unit to a chimney flue serving another appliance.

Type Of Chimney

Since this is a BioEnergy stove, it is necessary 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 burns.

Mobile Home Installation

The GF45 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 GF45, creating negative pressure around the stove. To overcome this negative pressure, the GF45 requires the installation of outside air from 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 from the combustion exhaust outlet.



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.

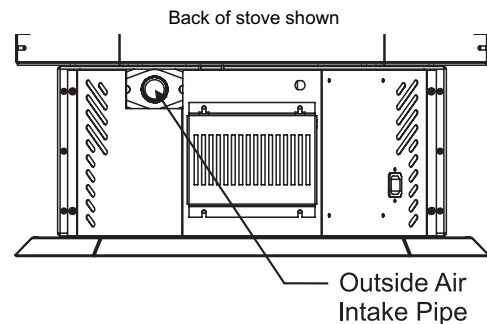
3. Reverse step 1.

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.

OUTSIDE AIR KIT INSTALLATION

Remove the outside air kit package from the ash pan. The outside air kit includes; 2 - 12" pipes, 2 - couplings and 1 - 90 degree elbow.

- 1) Secure the already attached coupling with pipe to the outside air intake pipe.
- 2) Secure the other coupling with pipe to the pipe from step 1.
- 3) Secure the 90 degree elbow to the pipe from step 2. Ensure that the elbow is pointed down and not up.



FIRST FIRE

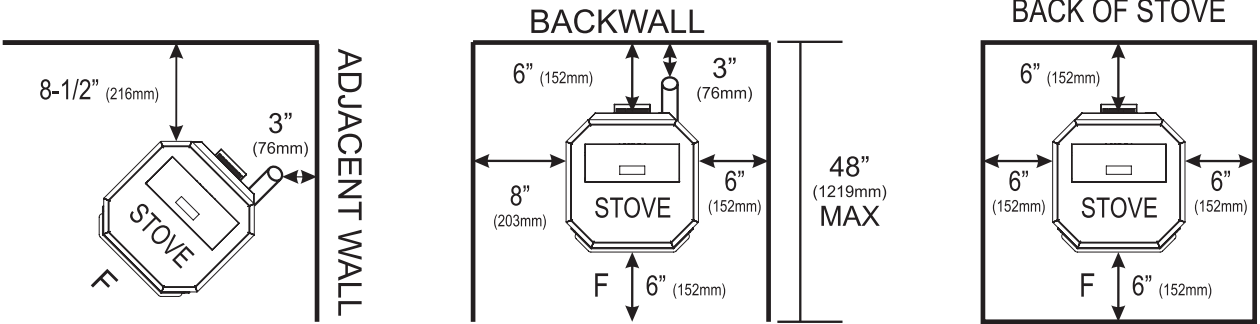
The **FIRST FIRE** in your stove is part of the paint curing process. To ensure that the paint is properly cured, it is recommended that you burn your fireplace for at least four (4) hours the first time you use it with the fan on.

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



Corner Installation

Alcove Installation

Alcove Ceiling height is 60" (324mm)
(measured from bottom of the unit.)

Minimum Hearth Requirement

Floor Protector of 0.84k factor minimum
is required beneath the Hearth.
(Please check with local authorities and regulations.)

UNIT DIMENSIONS

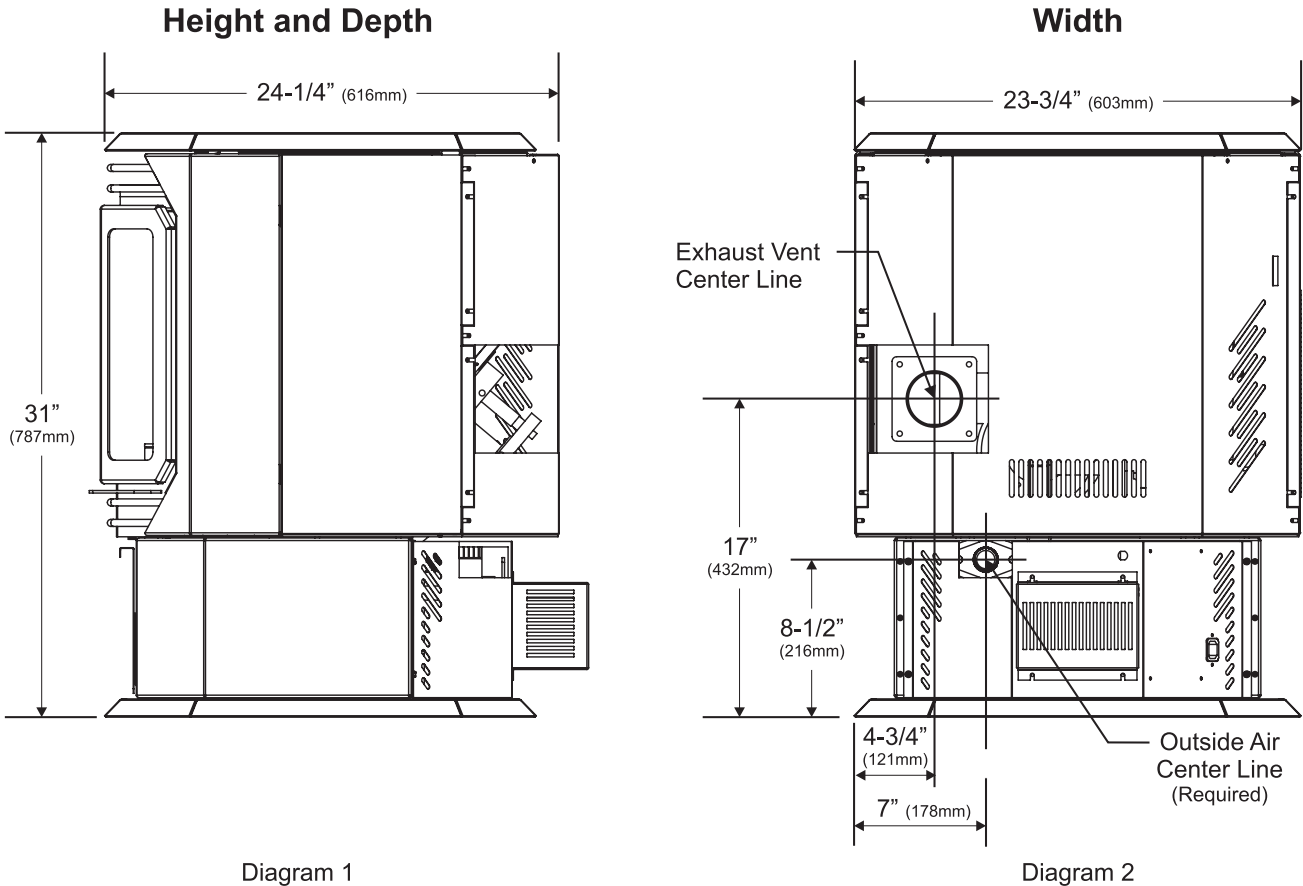


Diagram 1

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.

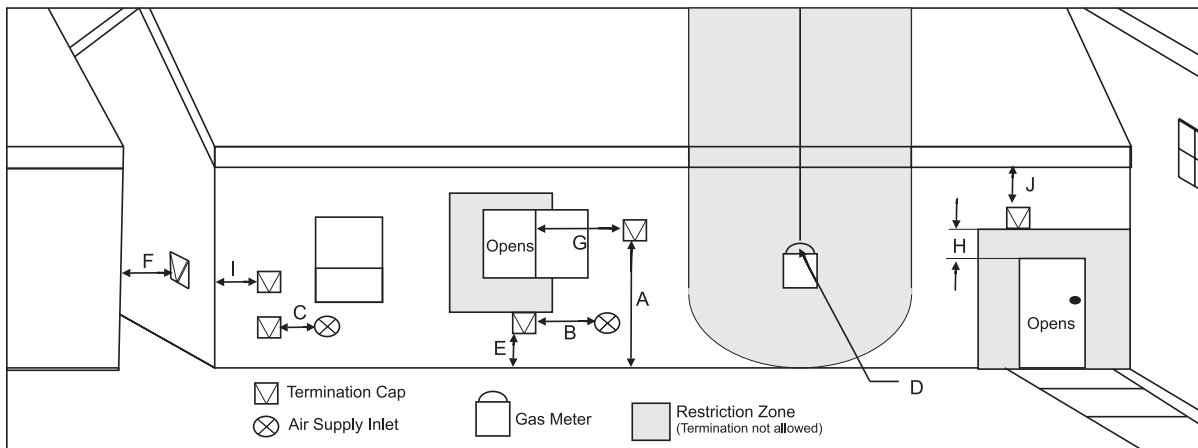


Diagram 3

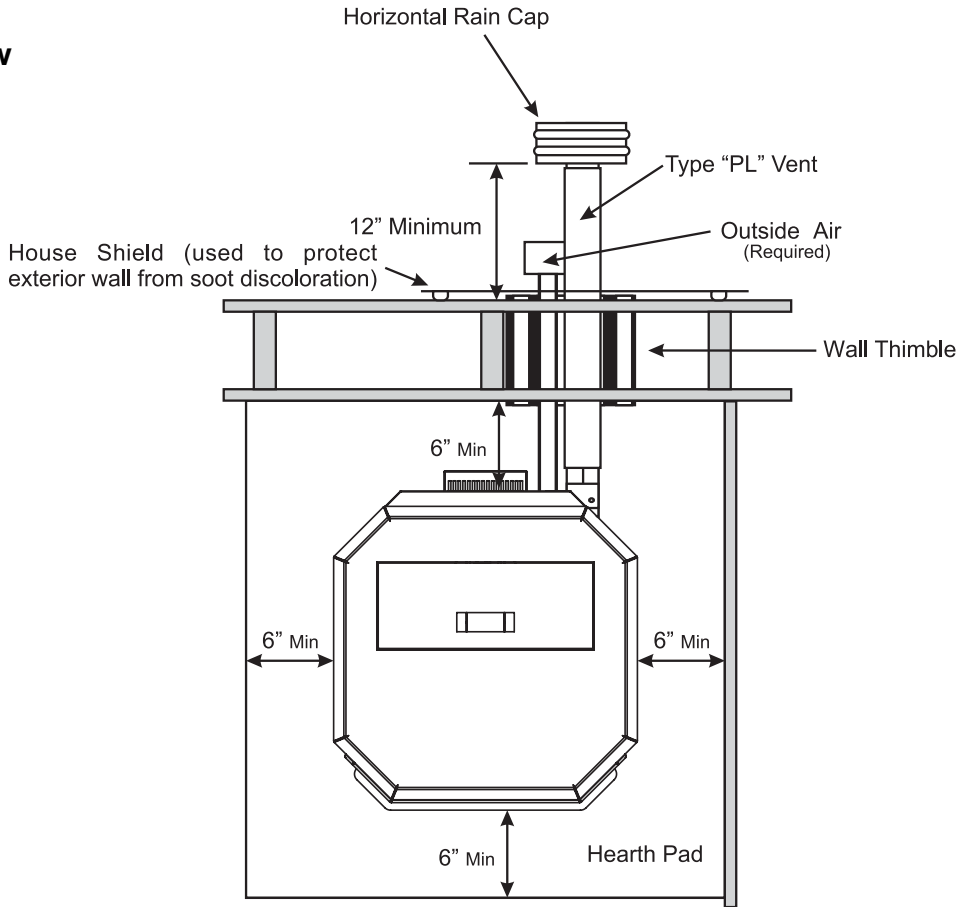
1. Do not terminate the vent in any enclosed or semi-enclosed areas that can build up a concentration of fumes.
2. Vent surfaces can become extremely hot. Keep children away from such areas. Non-combustible shielding or guards may be required.
3. Termination must exhaust above the inlet elevation. It 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

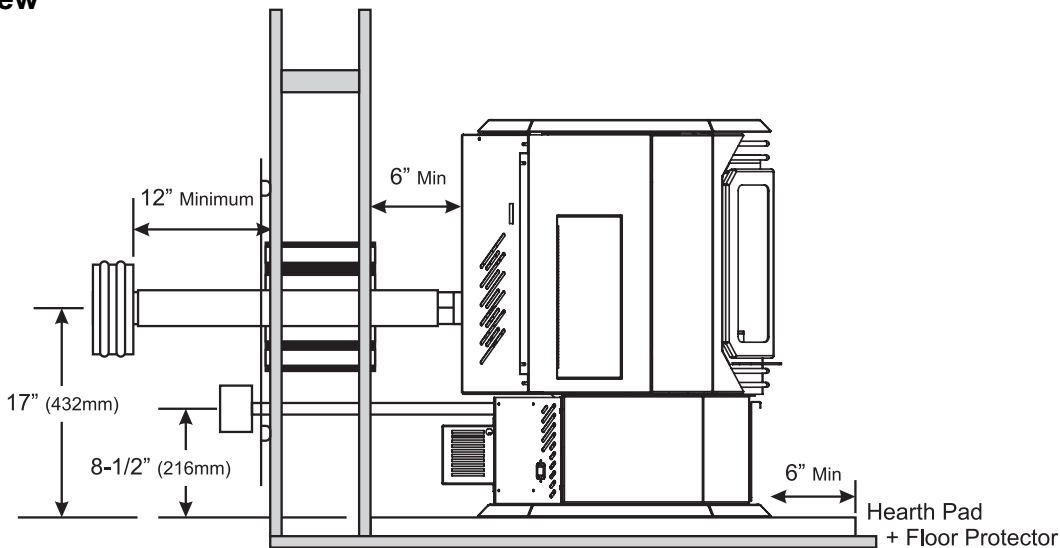


Diagram 4

INSTALLATION

INSTALLATION

OUTSIDE VERTICAL TERMINATION

Side View

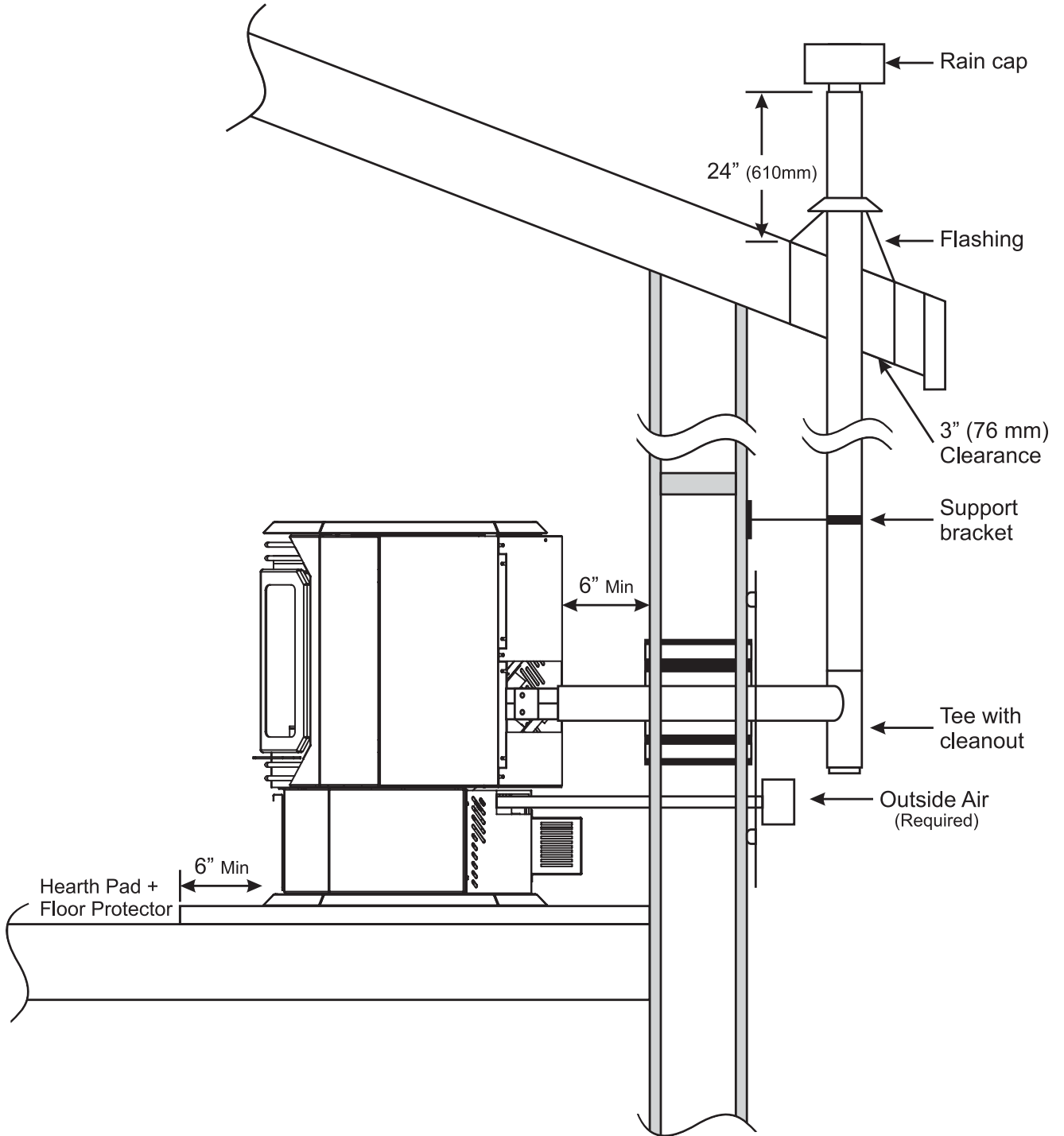
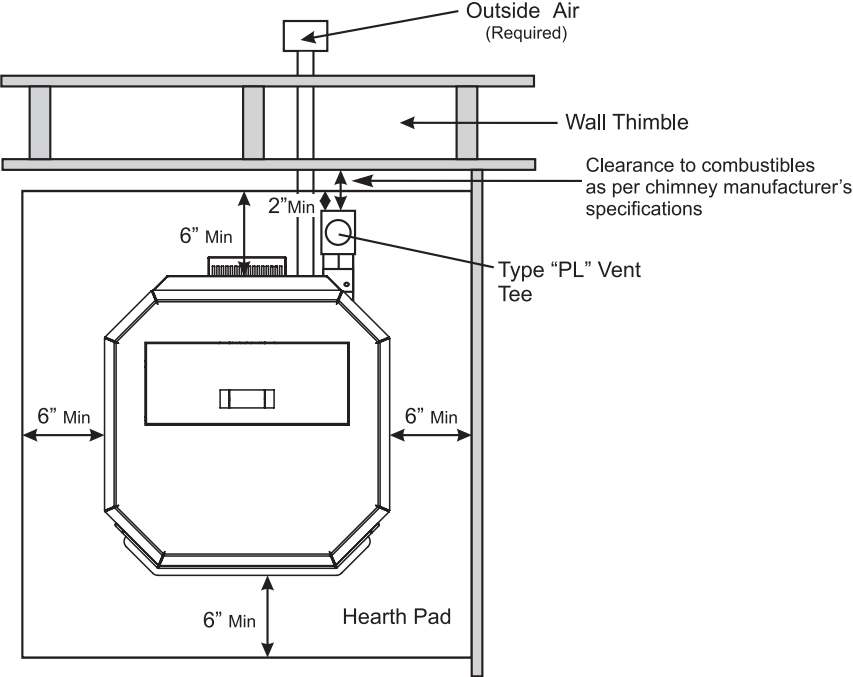


Diagram 5

VERTICAL TERMINATION

Top View



Side View

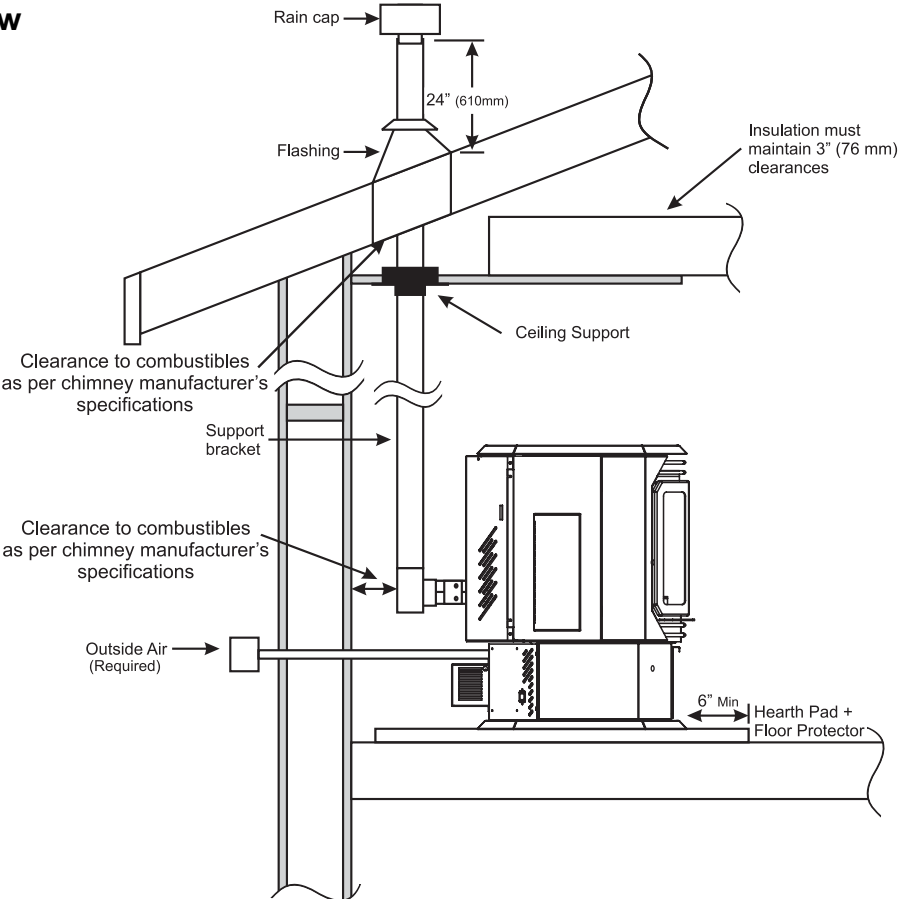


Diagram 6

INSTALLATION

EXISTING CLASS "A" CHIMNEY

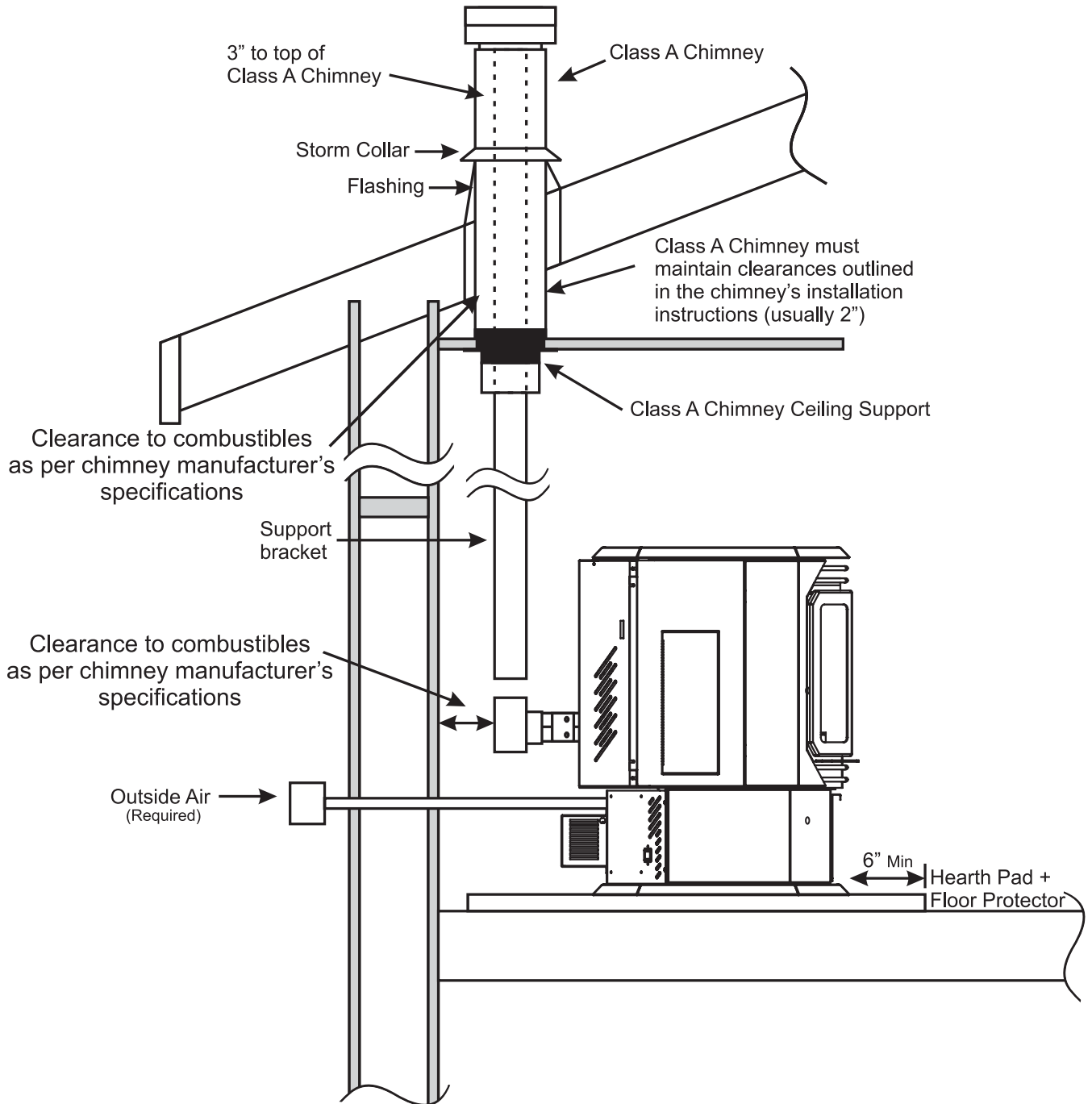


Diagram 7

EXISTING MASONRY CHIMNEY

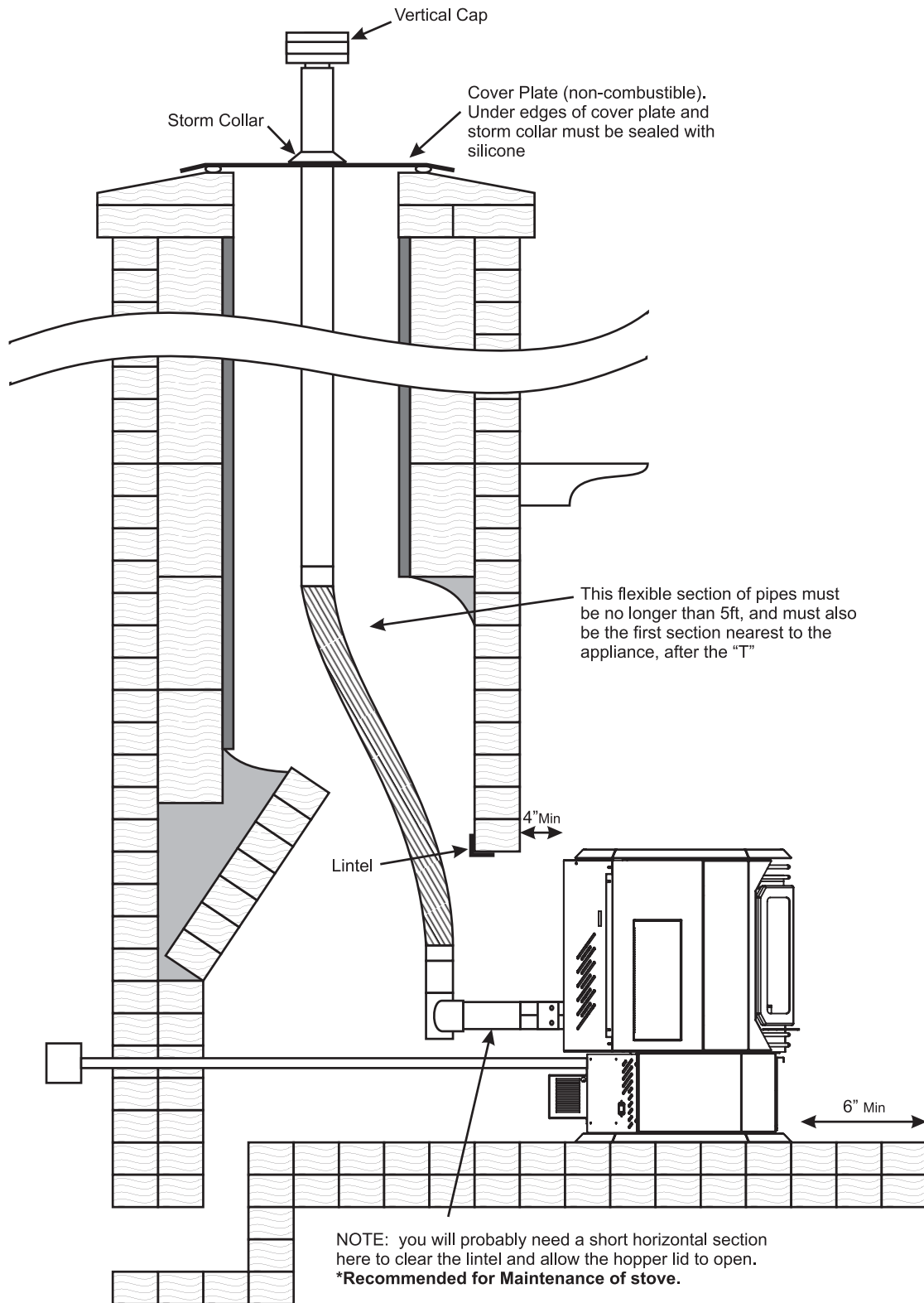


Diagram 8

INSTALLATION

OPTIONAL GREENKEY INSTALLATION

The Greenkey is needed in order to burn Corn or Wheat, without it you can only burn wood pellets.

To install the Greenkey;

- 1) Open control panel cover.
- 2) Insert the GreenKey into keyhole.
- 3) Close control panel cover.



NOTE:

If the Greenkey is removed while burning corn or wheat you have 20 seconds to put the greenkey back in place before the unit automatically goes into shut down mode.

OPTIONAL 12 VOLT BATTERY INSTALLATION

This 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 6-9 hours on a full charge (depending on feed rate). See "Electrical Diagram" section for details on hook-up. 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 immediately shutdown, once power is restored the stove will need to be restarted. 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, extension alligator clip leads in the battery installation kit.

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

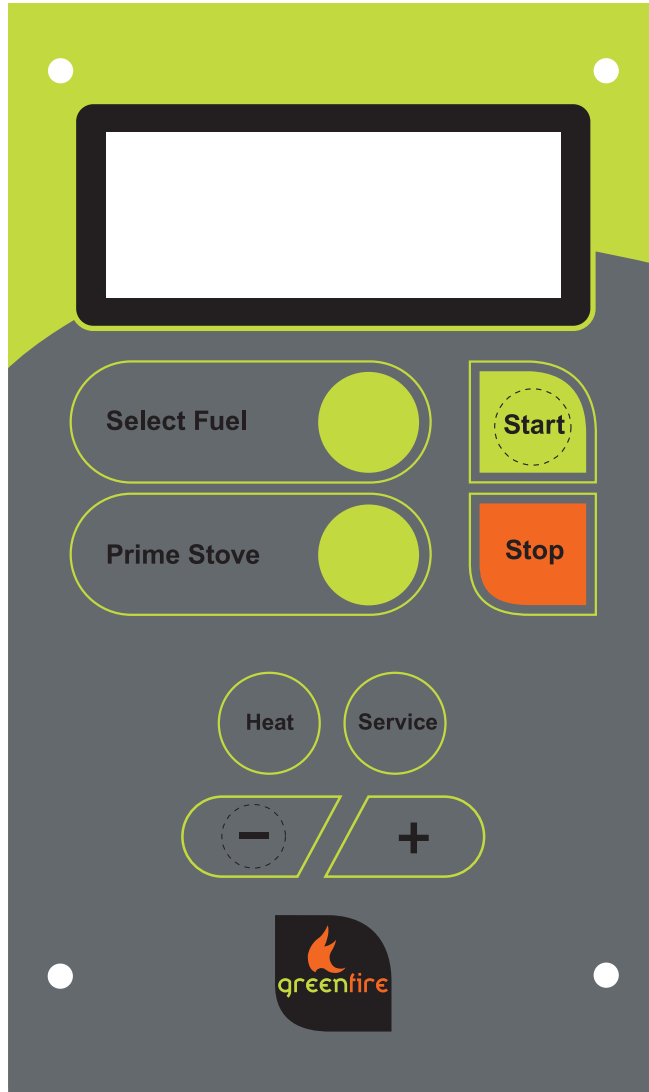
HOW TO INSTALL THE BATTERY:

- 1) Remove battery cage and battery from kit.
- 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.

OPERATING INSTRUCTIONS

CONTROL PANEL FUNCTIONS



Select Fuel

This button is used to select the appropriate fuel type that is going to be burned.

Prime Stove

This button is used **only** to prime the auger when the Hopper is empty.

Heat Level Settings

Select the desired heat level by pressing +/- buttons. Heat levels range from 1 to 5 for all fuels.

Start Button

This button is used to ignite the stove.

Stop Button

Stove goes into shut down mode which takes 120 minutes.

Service

Allows you to change fan speed settings and the ash feed auger settings, using the "+" and "-" buttons if necessary.

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

To facilitate your start up and regardless of fuel being utilized in your stove, you must use 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 will not ignite the stove. **Before starting each fire, first make sure the burn pot is completely emptied out.**

Never attempt to start with a partly filled burn pot.

Priming Stove: Empty Hopper

- 1) Open the Hopper Lid and fill with desired fuel to be burned.
NOTE: The Hopper can hold up to a 45 pound bag of fuel.
- 2) Close Hopper Lid.
- 3) Open the front door and place the measuring cup in the center of the burn pot directly under the feed tube. The measuring cup will need to be tilted in order to fit under the feed tube.
- 4) Close the Front Door.
- 5) Open the Control Panel Cover and press the "Prime Stove" button once. The Control Panel screen will display **Prime Feed**.
- 6) Wait 2 minutes to allow for the stove to prime. While the stove is priming you will see fuel spilling into the measuring cup.
- 7) After 2 minutes the Control Panel will return to the main screen. Open the front door and remove the measuring cup from the burn pot and pour the fuel back into the hopper.
- 8) Close Hopper Lid and Front Door.
- 9) Proceed to the steps below to burning the desired fuel type.

NOTE: If the stove does not prime within 2 minutes, ensure that the Hopper Lid and Front Door are properly closed. (The stove will not prime if the front door or hopper lid are open.) Press the "Prime" button again.

Burning Wood Pellets: Primed Hopper

NOTE: If the hopper is empty, follow steps 1 to 8 to Prime Stove.

- 1) Open the control panel cover, and select the fuel type by pressing the "Select Fuel" button until the screen displays **Wood**. The optional Green-Key is only needed for additional fuels, without it the unit will burn wood pellets only.
- 2) To ignite the stove press the "Start" button once and the screen will display **Ignition**. **Do not add any fuel to the burn pot. In Wood mode the stove will fill the burn pot before starting ignition.**
- 3) The ignition sequence will take approximately 7 minutes to complete. After 3-4 minutes you should start to see smoke coming from the burn pot. **This is normal**, it means that the igniter is working. When the pellets ignite and flames appear the smoke will disappear.

NOTE: To further ensure your start-up, after the initial 37 minutes, you now have control of the keypad for adjustment purposes. However, the keypad is protected to only allow single incremental rises and drops in fuel feed for 25 minutes at a time. This means should you enter two level changes to feed rate, i.e. from 3 to 5, the feed rate will first stabilize on 4 (3 lbs per hour) for a period of 25 minutes before increasing to 5 (4 lbs per hour). This is to allow the fire to build up rather than create a potential for extinguishing your fire.

As FPI does not have any control on quality or even the type of fuel marketed, they assume no responsibility from any faulty operation related to the type of fuel employed.

IMPORTANT:

On start up, always use wood pellets when operating unit from a cold start. Wood pellets ensure a faster and hotter starting fire which results in better performance.

To Stop Stove

NOTE: The unit will take 120 minutes to shutdown completely.

- 1) Press the "Stop" button on the control panel.
- 2) The screen display will show **Shut Down**.

OPERATION GUIDELINES FOR BURNING CORN & 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 will help you understand and establish control of the working parameters of the appliance for optimum performance during operation.

Initial Use Of GF45 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. Remember regardless of the fuel you will be burning from your hopper, **wood pellets must be used to start your fire.**

OPERATING INSTRUCTIONS

Burning Corn or Wheat: Primed Hopper

NOTE: If the hopper is empty, follow steps 1 to 8 to Prime Stove.

- 1) Open the control panel cover, if the GreenKey has not yet been inserted gently push the key into the keyhole on the control panel.
- 2) Select the fuel type by pressing the "Select Fuel" button until the appropriate fuel type is displayed on the screen.
- 3) Press the "Start" button and the screen will display **Manual Light**.
- 4) Open the front door and pour 2-1/2 cups of wood pellets into the burn pot. Ensure that the pellets are levelled out & cover the ignitor hole.
- 5) Close the front door.
- 6) Press the "Start" button again and the screen will display **Ignition**.
- 7) The ignition sequence will take approximately 7 minutes to complete. After 3-4 minutes you should start to see smoke coming from the burn pot. **This is normal**, it means that the igniter is working. When the pellets light and flames appear the smoke will disappear.

Selecting Proper Fuel Type

If you forget to select the proper fuel type. i.e. set at wood but hopper is filled with corn, the burn pot will fill with corn or wheat and will start smoking. Immediately press the 'Stop' button and allow the unit to clean itself out. The shutdown process will empty burn pot which takes 120 minutes.

NOTE: Do not open the door at any time.

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 the event that clinkers start to form, 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 while the unit is in operation, (to break a clinker), always open gently and slowly.



Diagram 9a: 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 9b in "Low Fuel/ Ember Bed Control" section).

- 1) Hold the 'Service' button down for approximately 6 seconds.

- 2) When **FAN** displays on the screen, gradually increase the combustion air to digital reading of "12" by pressing the "+" button. The default is 10, it ranges from 1 - 20.
- 3) Press the 'Service' button once and **ASH** will display, gradually increase the ash removal to digital reading of "12" by pressing the "+" button. The default is 10, it ranges from 1 - 20.
- 4) Press the 'Heat' button once to go back to main screen display.

At this point you will notice an increase in the pressure reading on the round Pressure Gauge (refer to Diagram 9a) 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 1/2" - 6" of the burn-pot wall above your fuel/ember bed, the level is too low (refer to Diagram 9b).

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 by holding the 'Service' button for approximately 6 seconds and check the settings for **FAN** and **ASH**. They should read "10".

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.

- 1) Hold the 'Service' button down for approximately 6 seconds.
- 2) When **FAN** displays on the screen, gradually decrease the combustion air to digital reading of "8" by pressing the "-" button. The default is 10, it ranges from 1 - 20.
- 3) Press the 'Service' button once and **ASH** will display, gradually decrease the ash removal to digital reading of "8" by pressing the "-" button. The default is 10, it ranges from 1 - 20.
- 4) Press the 'Heat' button once to go back to main screen display.

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.

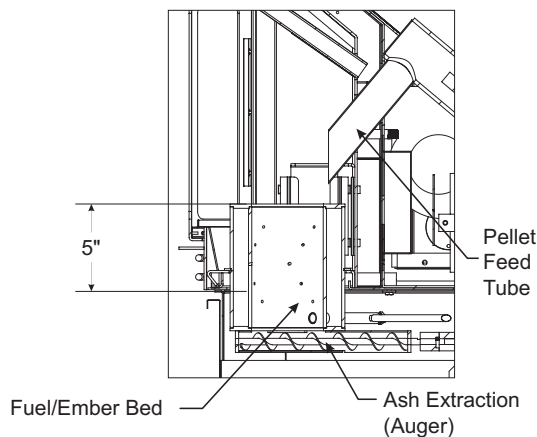


Diagram 9b

MAINTENANCE

MAINTENANCE

IMPORTANT NOTE:

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

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
INSPECT IGNITOR & TUBES		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
INSPECT IGNITOR & TUBES			X		

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;
 12" 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 10). Clean the interior of the glass door. Use the "shop-vac" style vacuum cleaner brush to clean the pipes of the convection system (Diagram 11) as well as the exhaust outlet (Diagram 12).

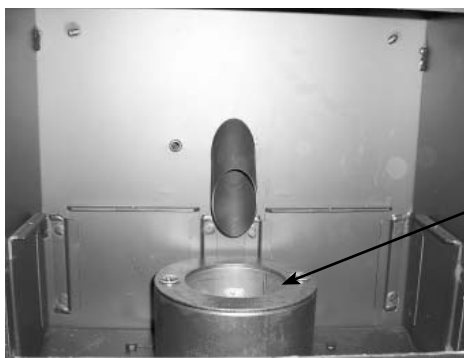


Diagram 10

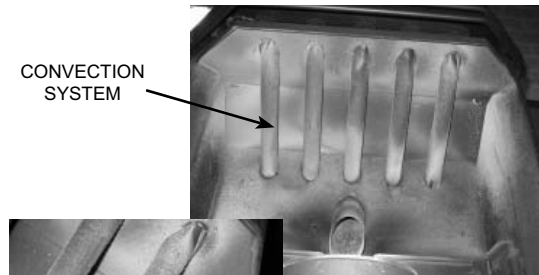


Diagram 11

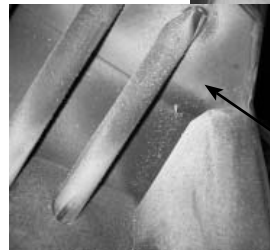


Diagram 12

STEP 2: The frequency of cleaning varies according to the type of fuel burned (see 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. 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 14).



Diagram 13



Diagram 14

Before re-installing the access doors refer to the section on the maintenance of the combustion fan, clean the wings on the flywheel.

MAINTENANCE

Maintenance Of The Ash-extraction System

Step 1: Refer to Diagram 15 to determine the condition of the three stainless steel ash screws. Sugars released by corn or wheat can stick to the ash screws resulting in poor movement and ash removal. Check by removing the ash-extraction system or look inside the burn pot.



Diagram 15

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 16. 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. Once removed soak screws in warm water to remove deposits stuck to them from burning corn or wheat, and use a copper based lithium grease on the auger gears.

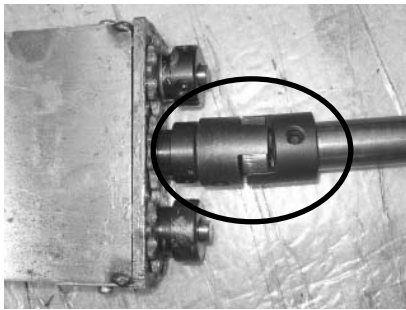


Diagram 16

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.

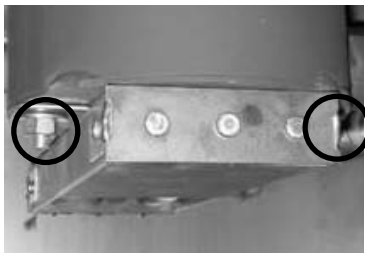


Diagram 17

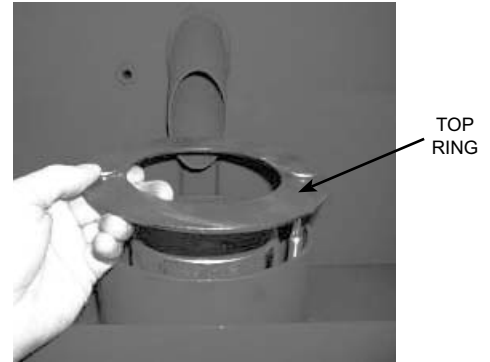


Diagram 18

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

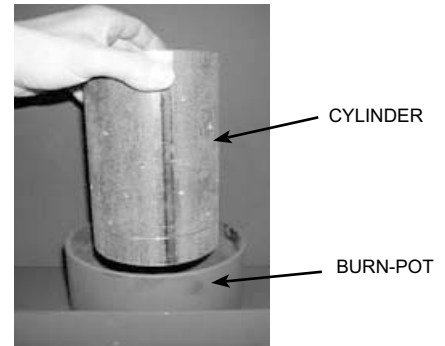


Diagram 19

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 the correct way up. Angled holes to the top, straight holes to the bottom.

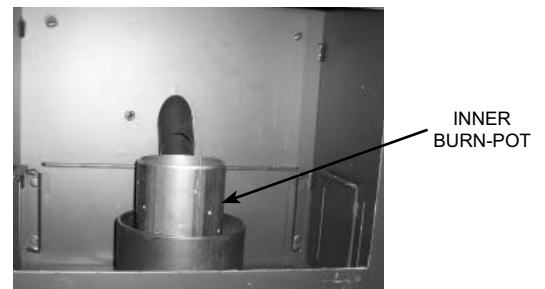


Diagram 20

Maintenance On The Combustion Fan (Connected To The Chimney)

IMPORTANT NOTE:
Always disconnect the power to your stove
before doing any maintenance or repairs.

There are two ways to clean the fan flywheel, either directly on the stove (Diagram 21) or removing the fan from the stove (Diagram 22).



Diagram 21

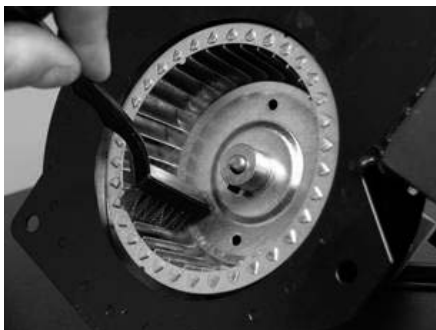


Diagram 22

To clean the flywheel, use a steel brush shown on Diagram 22. 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 23 & 24). 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.



Diagram 23

CONTROL
PANEL



Diagram 24

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 25).



Diagram 25

Inspection Of The Seals

At the start of each season, check gaskets on the door, hopper lid and ash door by using a strip of paper which you will slip at several places between the seal and the stove (see Diagram 26). Give the piece of paper a little tug and if it slips out easily 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 26

Information On How To Clean The Chimney

At the start of each season or every 3 tons of fuel 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 Glass

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

NOTE: Only clean glass when the stove has completely cooled down.

GF45 TECHNICAL DATA

Minimum Burning Capacity Maximum Burning Capacity	7,096 BTU/h (when burning wood pellets) 1 lb/h 28,387 BTU/h (when burning wood pellets) 4 lb/h
Combustion Fan Convection Fan	Power varies from 25 CFM to 45 CFM Power varies from 35 CFM to 125 CFM
Fuel Hopper	Maximum capacity of 45 lb
Certification	UL, ULC, ASTM and EPA exempt
Emissions	1.3 g/h
Heat Settings	5 levels of heat
Electrical 120 volts or 240 volts AC 12 volts DC In stop mode	Min. Capacity .25 amps (120 volts) .15 amps (240 volts) Max. Capacity .65 amps (120 volts) .35 amps (240 volts) Min. Capacity 1.8 amps (13.8 Volts DC) Max. Capacity 4.5 amps (13.8 Volts DC) 120 Volts or 240 Volts (.05 amps or .07 amps) 13.8 volts DC (.03 amps)
GF45 Dimensions Height Width Depth Weight	31" (787 mm) 23-3/4" (603 mm) 24-1/4" (616 mm) Approximately 274 lb (124 kg)
Type of Chimney	All approved listed Pellet Vent. FPI recommends the use of corn venting for all applications.
Diameter of the Chimney	3" (76 mm) of interior diameter

TROUBLESHOOTING

ERROR CODE	PROBLEM	SOLUTION
System Cooling Temp Overshoot	<p>The thermodisc temperature has exceeded 250F.</p> <p>1st Time; Hardware takes over and the unit goes into shutdown mode.</p> <p>2nd Time; When the unit is restarted, hardware takes over and the unit goes into shutdown mode.</p> <p>3rd Time; When the unit is restarted, hardware takes over and the unit goes into shutdown mode.</p>	<p>Allow the unit to shutdown and unit will automatically restart.</p> <p>Allow unit to shutdown. When screen displays "Ready to restart", the user must reset the unit by pressing the "STOP" button for 5 seconds. Once unit is reset, restart unit.</p> <p>Contact dealer, service is required.</p>
System Shutdown Check Fuel/Feed	When the temperature of the thermodisc falls below 110F, while in normal burning mode, the thermodisc will trip and the unit will go into shutdown mode.	Allow unit to shutdown and check for fuel in the hopper. Also ensure that the front door and hopper lid are securely closed.
System Shutdown Failed Startup	Initial startup did not reach 130F within the required time, unit will go into shutdown mode.	Follow the startup procedures as listed in the manual.
System Shutdown Contact Dealer	<p>a) The feed auger fuse is blown. Unit will go into shutdown mode. After shutdown, the screen will display "Fuse Error:EFF".</p> <p>b) The ash auger fuse is blown. Unit will go into shutdown mode. After shutdown, the screen will display "Fuse Error:EFA".</p> <p>c) If the glow plug fuse is blown, unit will go into shutdown mode. After shutdown, the screen will display "Fuse Error:EFG".</p>	<p>Contact dealer, service is required.</p> <p>Contact dealer, service is required.</p> <p>Contact dealer, service is required.</p>
System Shutdown Check Power	The input voltage is below 10.5V for more than 3 seconds. Unit will go into shutdown mode.	Allow unit to shutdown. When screen displays "Ready to restart", the user must reset the unit by pressing the "STOP" button for 5 seconds. Once unit is reset, restart unit.
System Shutdown Replace Key	The alternate fuel key has been missing for more than 20 seconds. Unit will go into shutdown mode.	Allow unit to shutdown. When screen displays "Ready to restart", the user must reset the unit by pressing the "STOP" button for 5 seconds. Once unit is reset, insert the greenkey and restart unit.

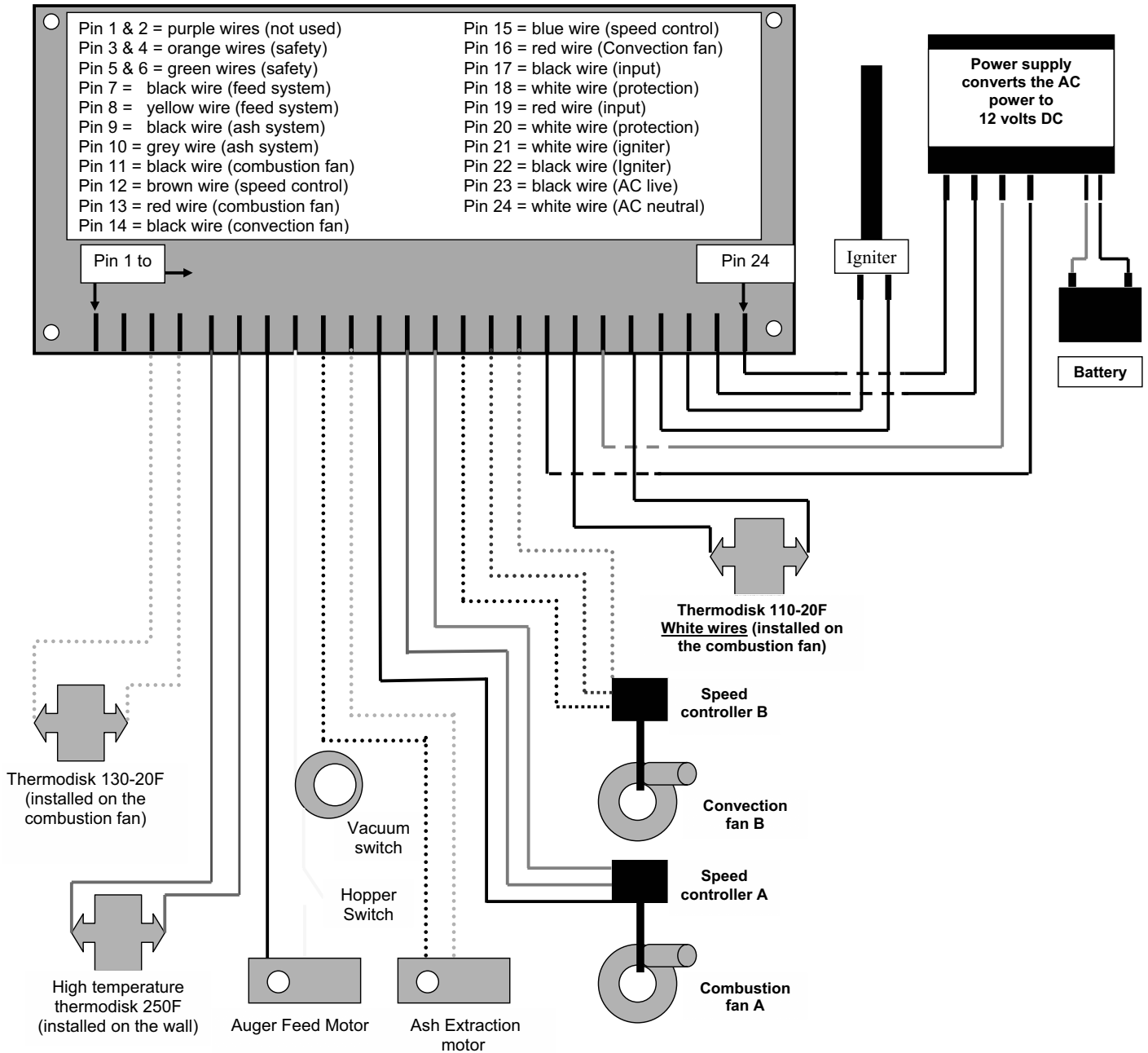
NOTE: Unit shutdown takes 120 minutes.

IMPORTANT:

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

TROUBLESHOOTING

ELECTRICAL DIAGRAM (12 VOLTS)



GF45 MANUFACTURERS WARRANTY

FPI offers a Limited Lifetime warranty, consisting of five years parts and *subsidized labor and parts only thereafter against manufacturers defects on the steel structure of the appliance and the burn pot.

FPI offers two years parts and *subsidized labor and 5 years parts only thereafter against manufacturers defects on fans, motors and the auger motor.

FPI offers two years parts and *subsidized labor and one year parts only thereafter against manufacturers defects on the fan controller, power supply and ceramic glass.

FPI offers two years parts and *subsidized labor against manufacturers defects on the control board.

FPI offers 6 months against manufacturers defects on the battery from the date of purchase.

Conditions:

The warranty will commence on the purchase date of the appliance to the original purchaser.

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.

Warranty is only valid if the maintenance schedule is followed as listed in the manual.

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.

