

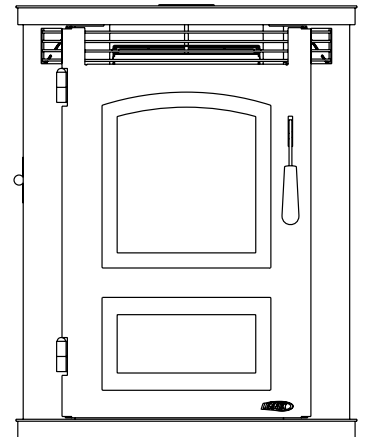


INSTALLATION AND OPERATION MANUAL

Free-Standing Pellet Stove

Save These Instructions For Future Reference

P/N 900116-00, Rev. B, 08/2018



Pellet Stove Model Montage™ 32FS



Report No. 14-200

A French manual is available upon request. Order P/N 900117-00.

Ce manuel d'installation est disponible en francais, simplement en faire la demande. Numéro de la pièce 900117-00.

This appliance must be properly installed and operated in order to prevent the possibility of a house fire. 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 your local building or fire officials to obtain a permit and information on any installation requirements and inspection requirements in your area.



www.nficertified.org

We recommend that our pellet hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Pellet Specialists or who are certified in Canada by Wood Energy Technical Training (WETT).



	! WARNING
	<ul style="list-style-type: none"> • Hot! Do not touch! The glass and surfaces of this appliance will be hot during operation and will retain heat for a while after shutting off the appliance. Severe burns may result. • Carefully supervise children in the same room as appliance. • IHP pellet-burning appliances are designed for use as a supplemental heater. They are not intended for continuous use as a primary heat source.

CONGRATULATIONS!

When you purchased your new pellet stove, you joined the ranks of thousands of individuals whose answer to their home heating needs reflects their concern for aesthetics, efficiency and our environment. We extend our continued support to help you achieve the maximum benefit and enjoyment available from your new pellet stove.

Thank you for selecting an Innovative Hearth Products (IHP) stove as the answer to your supplemental home heating needs.

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This installation and operation manual will help you obtain a safe, efficient, dependable installation for your appliance and vent system.

PLEASE READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE BEGINNING YOUR INSTALLATION

Packaging List

The assembled pellet stove model Montage™ 32FS is packaged with an accessory package in the hopper and a grate scraper tool secured to the pallet:

- One - Installation And Operation Manual
- One - Power Cord
- One - Grate Scraper Tool
- One - Wall Thermostat w/ 20 Foot Roll Of Wire
- One - 5/32" Allen Wrench
- One - Cleaning Brush

TESTING / LISTING

Listing: The listing laboratory is PFS Corporation and the listing mark is PFS. The report number is 14-200 for model Montage 32FS pellet stove.

Testing: In accordance with the specifications and procedures

- Listed and tested to ASTM E1509 & ULC C1482 / ULC S627 for installations as a freestanding room heater
- The safety/listing label is located on an inside hopper surface of the pellet stove. Please read this safety label carefully. It contains important information about installation and operation of this appliance.
- This appliance is tested and listed for residential and commercial installation according to current national and local building codes as:
 - A Free-Standing Room Heater
 - A Manufactured Home Heater

EPA (Environmental Protection Agency)

Status: EPA Certified (method 28) - This appliance has been tested to rigorous emissions standards, and has been certified by the Environmental Protection Agency.

USING THIS MANUAL

Please read and carefully follow all of the instructions found in this manual. Please pay special attention to the safety instructions provided in this manual.

PRODUCT IS SUBJECT TO CHANGE WITHOUT NOTICE

IMPORTANT SAFETY AND WARNING INFORMATION

READ THIS MANUAL IN ITS ENTIRETY AND UNDERSTAND THESE RULES TO FOLLOW FOR SAFETY.



WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer or service agency.



WARNING

Do not attempt to alter or modify the construction of the appliance or its components. Any modification or alteration may void the warranty, certification and listings of this unit.

1. DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.
2. Do not connect this appliance to air ducts or any air distribution system.
3. DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.
4. Do not use class B venting intended for gas appliances as a chimney or connector pipe on a pellet-fired appliance.
5. The minimum clearances must be maintained for all combustible surfaces and materials including; furniture, carpet, drapes, clothing, wood, papers, etc. Do not store combustibles within this clearance space (see *Clearances on Page 6*).
6. **INSTALLATION DISCLAIMER** - It is imperative that the exhaust venting system be installed correctly and sealed gas-tight (not allowing exhaust to leak). Follow the vent manufacturer's instructions for proper installation. Since IHP has no control over the installation of your stove, IHP grants no warranty, implied or stated for the installation or maintenance of your stove, and assumes no responsibility for any consequential damage(s).
7. Burning any kind of fuel consumes oxygen. If outside air is not ducted to the appliance, ensure that there is an adequate source of fresh air available to the room where the appliance is installed.
8. The appliance will not operate using natural draft, nor without a power source for the blower and fuel feeding systems.
9. Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire in this heater. Keep all such liquids well away from the heater while it is in use.
10. The authority having jurisdiction such as municipal building department, fire department, fire prevention bureau, etc. should be consulted before installation to determine the need to obtain a permit.
11. **APPROVED FUEL:** This appliance is designed specifically for use only with pelletized wood fuels only. This appliance is designed and approved for the burning of wood residue pellets with up to 2% ash content. This appliance is NOT approved to burn cardboard, nut hulls, cherry pits, corn, etc. regardless if it is in pellet form. Failure to comply with this restriction will void all warranties and the safety listing of the stove. Consult with your IHP dealer for more information on approved pellet fuels.
12. **CONTINUOUS OPERATION:** When operated correctly, this appliance cannot be overfired. Continuous operation at a maximum burn can, however, shorten the life of the electrical components (blowers, motors, and electronic controls), and is not recommended. Typical approved operation would include running at the low to mid range setting with occasional running on the maximum setting during the coldest periods of the winter. **DO NOT OVER-FIRE THIS STOVE.** Follow all instructions regarding the proper use of this stove.
13. **CAUTION: NEVER PUT FINGERS NEAR AUGER.** This appliance is equipped with a hopper lid switch, which is designed to stop the auger when the hopper lid is opened. **NEVER DISCONNECT OR BYPASS THIS SWITCH FOR ANY REASON.** Pellet fuel is fed to the UltraGrate™ by a screw auger. This auger is driven by a high torque motor. The auger is capable of causing serious harm to fingers. Keep pellets in the hopper at all times and keep fingers away from auger. The auger can start and stop automatically at any time while the stove is running.
14. **CAUTION: HOT WHILE IN OPERATION.** An appliance hot enough to warm your home can severely burn anyone touching it. Keep children, pets, clothing and furniture away. Contact may cause skin burns. Do not let children touch the appliance. Train them to stay a safe distance from the appliance.
15. **FLY ASH BUILD-UP:** For all wood pellet fuel-burning heaters, the combustion gases will contain small particles of fly-ash. This will vary due to the ash content of the fuel being burned. Over time, the fly-ash will collect in the exhaust venting system and restrict the flow of the flue gases. The exhaust venting system should be inspected regularly and cleaned as necessary.
16. **SOOT FORMATION:** Incomplete combustion, such as occurs during startup, shutdown, or incorrect operation of the room heater will lead to some soot formation which will collect in the exhaust venting system. A precautionary inspection on a regular basis is advisable to determine the necessity of cleaning. The exhaust venting system should be inspected regularly and cleaned as necessary.
17. **DISPOSAL OF ASHES:** Ashes should be placed in a steel container with a tight fitting lid and moved outdoors immediately. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled.
18. The instructions must be strictly adhered to. Do not use makeshift methods or compromise in the installation.
19. Do not abuse the door glass by striking, slamming or similar trauma. Do not operate the stove with the glass removed, cracked or broken.
20. **SAVE THESE INSTRUCTIONS.**
21. See the safety / listing label on the appliance hopper lid.

WARNING

This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer, and Carbon Monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

PLANNING YOUR INSTALLATION

Questions To Ask Local Building Official

A correct installation is critical and imperative for reducing fire hazards and perilous conditions that can arise when wood pellet burning appliances are improperly installed. The installer must follow all of the manufacturers' instructions.

WARNING

Check all local building and safety codes before installation. The installation instructions and appropriate code requirements must be followed exactly and without compromise. Alterations to the stove are not allowed. Do not connect the stove to a chimney system serving another stove, appliance, or any air distribution duct. Failure to follow these instructions will void the manufacturers warranty.

The installation of this appliance must conform to local codes and applicable state and federal requirements. Familiarity with these requirements before installation is essential. Important considerations to discuss with local building officials include:

1. **Applicable codes** (i.e. Uniform Mechanical Code, State or Regional Codes).
Electrical codes:
In USA, NEC, ANSI/NFPA 70 – Latest Edition
In Canada, CSA C22.1 – Latest Edition
2. Local amendments
3. Is a permit required - cost. You may wish to contact your insurance company to ask if they require this.
4. If outside combustion air is required
5. Rooms where the installation is not allowed

Power Supply Requirements

These requirements must be met unless otherwise specified by state or local authorities.

- **Power Cord** - The power cord must be plugged into a standard, 120 Volt, 60 Hz grounded electrical outlet with proper ground and polarity. The power cord must be routed to avoid contact with any of the hot or sharp exterior surface areas of the stove.
- **Power Supply** - 575 Watts, and will peak up to 782 Watts during the 30 minute cycle when igniter is operating.
- **Manufactured Home Installations** - When installed into a manufactured home, the appliance must be electrically grounded to the steel chassis of the manufactured home (see **Page 8, Manufactured Home Requirements**).

WARNING

Electrical grounding instructions: This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug. Do not route power cord under or in front of appliance.

Smoke Detector Recommended

Since there are always several potential sources of fire in any home, we recommend installing smoke detectors. If possible, install the smoke detector in a hallway adjacent to the room (to reduce the possibility of occasional false activation from the heat produced by these appliances). If your local code requires a smoke detector be installed within the same room, you must follow the requirements of your local code. Check with your local building department for requirements in your area.

Carbon Monoxide Monitor Recommended

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Some people are more affected by carbon monoxide than others, including pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

It is against federal regulations to operate wood heaters in a manner inconsistent with operating instructions in the manual.

Surge Protectors

A surge protector is recommended to ensure the stove's electrical components are not damaged due to a surge in the electrical supply. Only high quality protectors listed to UL1449 should be used - low quality protectors do not provide the protection needed.

Installation / Maintenance Standards

National Fire Protection Association – The primary NFPA standard that refers to installation and maintenance of pellet stoves and venting is NFPA 211 – Latest Edition: Chimneys, Fireplaces, Vents, and Solid Fuel appliances.

SELECTING A LOCATION

The design of your home and where you place your stove will determine its value as a source of heat. This type of appliance depends primarily on air circulation (convection) to disperse its heat, and therefore, a central location is often best. There are other practical considerations, which must be considered before a final selection of locations is made. Some of which includes:

- Existing Chimneys
- Pellet Fuel Storage
- Aesthetic Considerations
- Roof Design (rafter locations and roof pitch)
- Room Traffic
- Proximity to Combustibles
- Electrical Wiring



CAUTION

These appliances are very heavy. The use of a heavy duty escalara (stair step hand truck) is recommended for lifting the appliance.

NEGATIVE PRESSURE WARNING

This appliance is not designed to be operated in a negative pressure environment. In very airtight homes with large kitchen exhaust fans, furnace cold air returns, fresh air exchange systems and any other air system in close proximity to the heating appliance may create a negative pressure in the same room as the heating appliance. This can create dangerous condition, drawing combustion by-products into the home. Be sure your home has adequate makeup air to eliminate negative pressures caused by the above-mentioned sources. Outside air connected to the appliance probably will not resolve such a problem as the stove is not the source of negative pressure. IHP accepts no liability for damages resulting from negative pressures described here.

Ventilation Requirements - Provide adequate air for combustion. The fresh air requirements of this appliance must be met within the space where it will be installed. Ventilation is essential when using a solid-fuel-burning heater. In well insulated and weather tight homes, it may inhibit the rate the exhaust flows through the venting system (caused by a shortage of air in the home). The lack of air is caused by many common household appliances which exhaust air from the home (such as a furnace, heat pump, air conditioner, clothes dryer, exhaust fans, fireplaces, and other fuel burning appliances). Also, the combustion process of this heater uses oxygen from inside the dwelling. If the available fresh air delivery in the dwelling is insufficient to support the demands of these appliances, problems can result (i.e. excessive negative pressure will result in performance problems. To correct this problem it may help to open a window (preferably on the windward side of the house) or install an outside combustion air duct to the appliance.

FLOOR PROTECTION

This appliance requires noncombustible floor protection **(the hearth pad or alternate floor protection material does not require a thermal rating).**

A noncombustible floor protector must fully cover the area beneath the appliance and extend 6" to the front, 6" to the sides, and up to 6" from the back as illustrated in *Figure 1*.

If the floor protection is to be stone, tile, brick, etc., it must be mortared or grouted to form a continuous noncombustible surface. In Canada, if a chimney connector / venting extends horizontally over the floor, protection must also cover the floor under the connector / venting and at least 2" (51 mm) to either side (recommended but not required in the US). See Clearances and Hearth Protection shown in *Figure 1*.

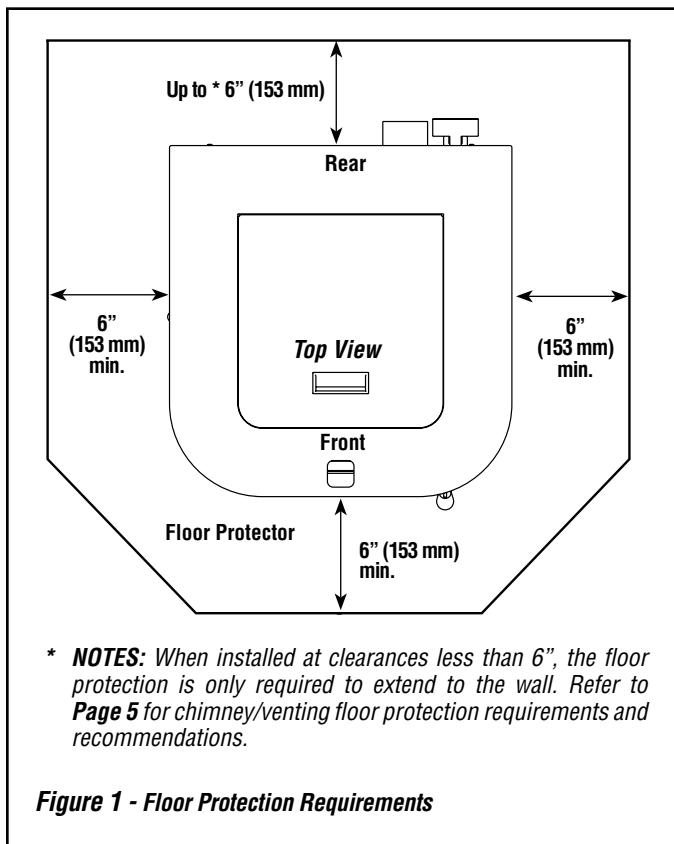


Figure 1 - Floor Protection Requirements

CLEARANCES - Montage™ 32FS

Standard residential, commercial or manufactured home installation. These appliances require the following minimum clearances to combustibles:

**MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS
NE PAS ENLEVER CETTE ÉTIQUETTE DÉGAGEMENT MINIMUM POUR LES
MATÉRIAUX COMBUSTIBLES**

Freestanding Stove Installation / Installation Du Poêle Autonome
Manufactured (Mobile) Home, Residential or Commercial Installation /
Installation Résidentielle Ou Dans Une Maison réfabriquée (Mobile)

A - Side wall to unit	4" (102 mm)
B - Back wall to unit	2" (51 mm)
C - Side wall to unit Corner	1" (25 mm)
D - Max. Depth of Alcove	① 24" (610 mm)
E - Flue to Wall	② 3" (76mm)

① Minimum Alcove Measurements - Height 48" (1220 mm) x Width 31" (788 mm) x Maximum Depth 24" (610 mm)
② See vent manufacturer to verify clearances

Table 1

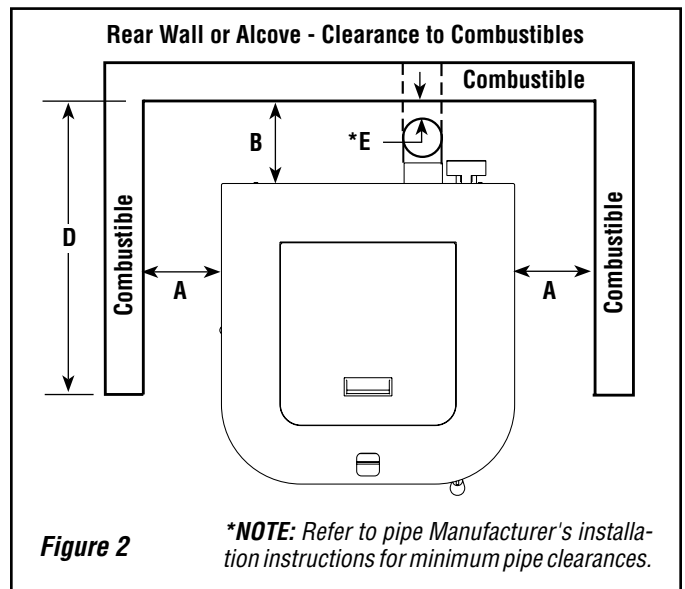


Figure 2

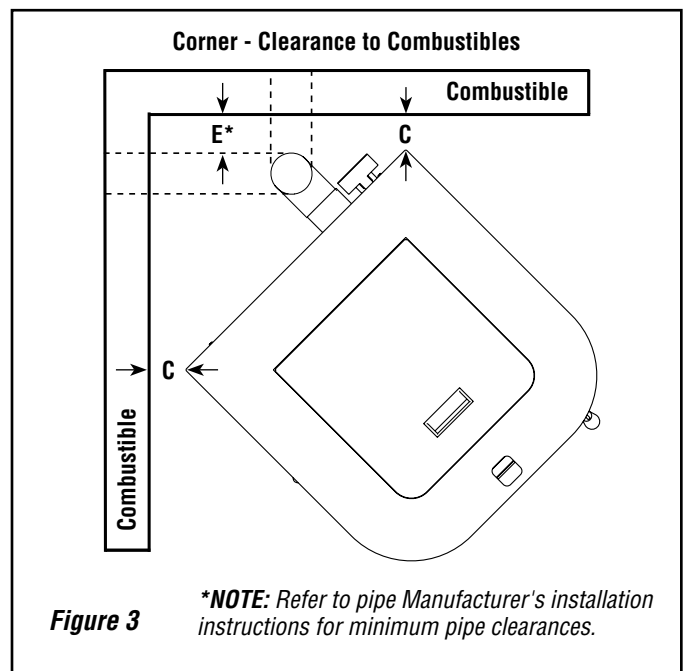


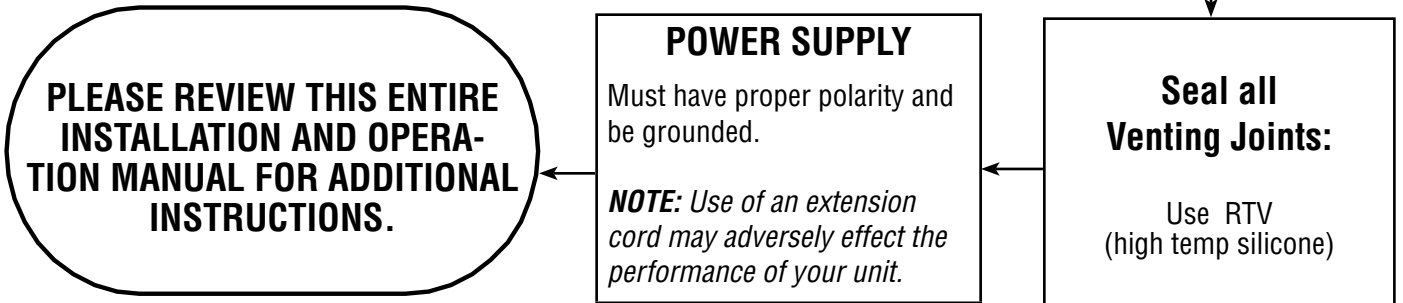
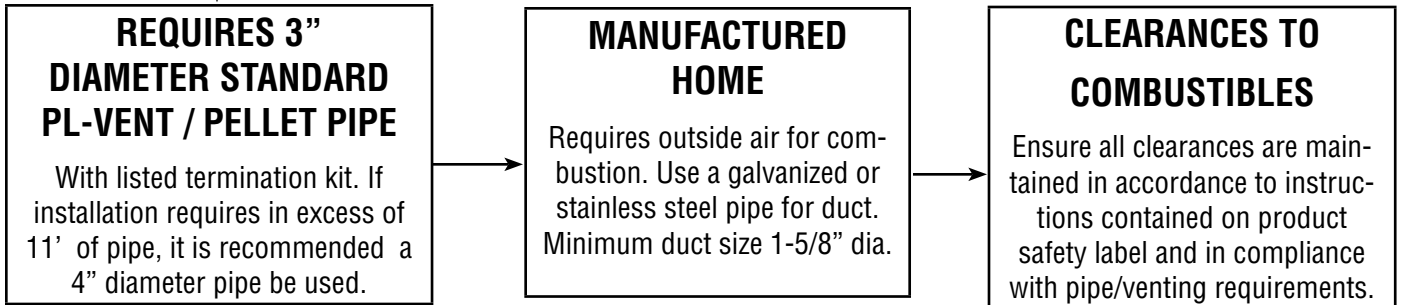
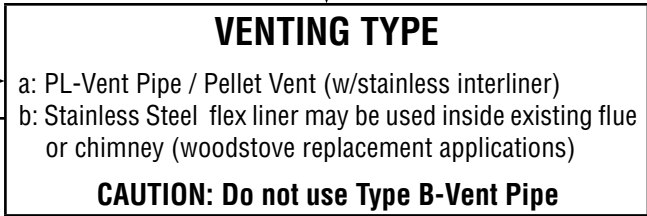
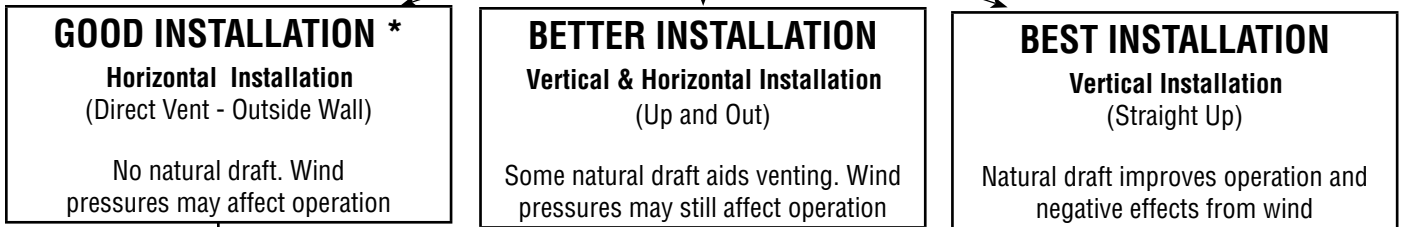
Figure 3

! IMPORTANT

- **Minimum clearances specified may not allow for ease of operation and maintenance (please take this in to account when planning the installation). If installed to the minimum clearances, removal of the appliance may be necessary for servicing.**
- **Recommended clearance zone from the front of the appliance to combustibles is 4 feet minimum.**
- **Clearances to combustibles for the appliance can only be reduced by means approved by the regulatory authority.**

INSTALLATION TIPS

INSTALLATION TIPS
Select Your Installation Type

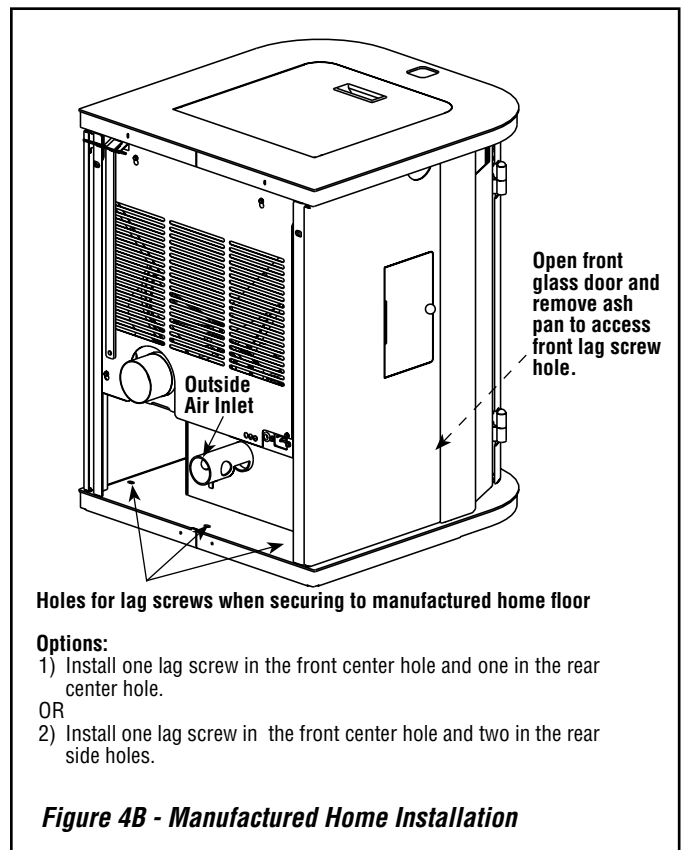
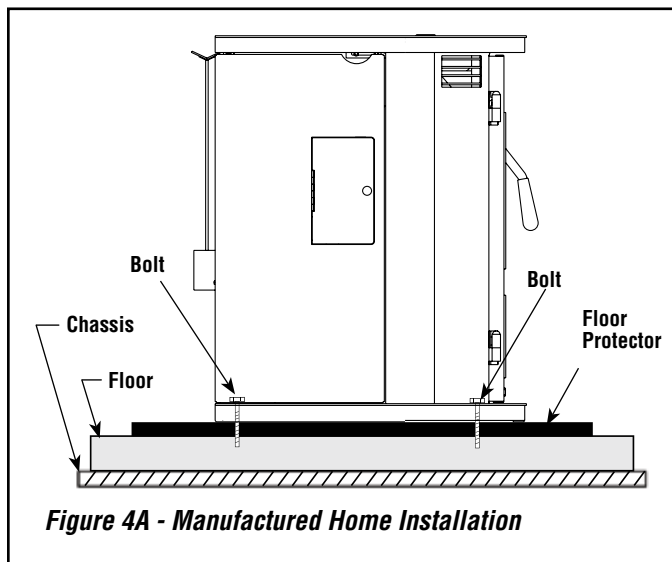


* In horizontal vent installations It is recommended that when an appliance is vented directly through a wall, a minimum of 6 feet (1.83 M) of vertical pipe is installed to create some natural draft. This will reduce the possibility of smoke or odor entering the dwelling during appliance shutdown or loss of power.

MANUFACTURED HOME INSTALLATION

In addition to the standard installation instructions, the following instructions may be required by local, state or federal building codes:

- Installation should be in accordance with the Manufactured Home and Safety Standard (HUD), CFR 3280, Part 24.
- The stove must be permanently bolted to the floor using two or three 1/4" or 5/16" diameter x 5" lag screws as shown in **Figures 4A, 4B, 5A and 5B**.
- Connecting the Montage™ 32FS stove to outside combustion air is required in manufactured home installations and when required by local building codes. An outside air inlet must be provided for combustion and be unrestricted while unit is in use. Use a galvanized or stainless steel pipe for the duct (the outside air inlet on the stove is 1-5/8" diameter). The air intake on the exterior of the home should always be located a minimum of 18" below the flue termination (see **Figures 4B and 15**). The Inlet shall remain free of obstruction while unit is in operation and constructed in a manner so as to prevent material from dropping into the inlet or into the area beneath the dwelling. The inlet shall also have a screen with openings not larger than 1/4" to prevent rodents from entering.
- Stove must be permanently electrically grounded to the steel chassis of the manufactured home using a 8 GA copper wire and a serrated or star washer (to penetrate paint or protective coating to ensure grounding). The location selected for ground attachment to the stove must be dedicated for this purpose. Grounding must comply with NFPA-70-latest edition standards, CSA C22.1-latest edition in Canada, as well as any local codes.
- See **Pages 11 through 17** for additional information on venting requirements.
- **WARNING: DO NOT INSTALL THIS STOVE IN A SLEEPING ROOM IN A MANUFACTURED HOME.**
- **CAUTION: THE STRUCTURAL INTEGRITY OF THE MANUFACTURED HOME FLOOR, WALLS, CEILING/ROOF MUST BE MAINTAINED.**



Manufactured Home Exhaust Vent Pipe Installation Guidelines

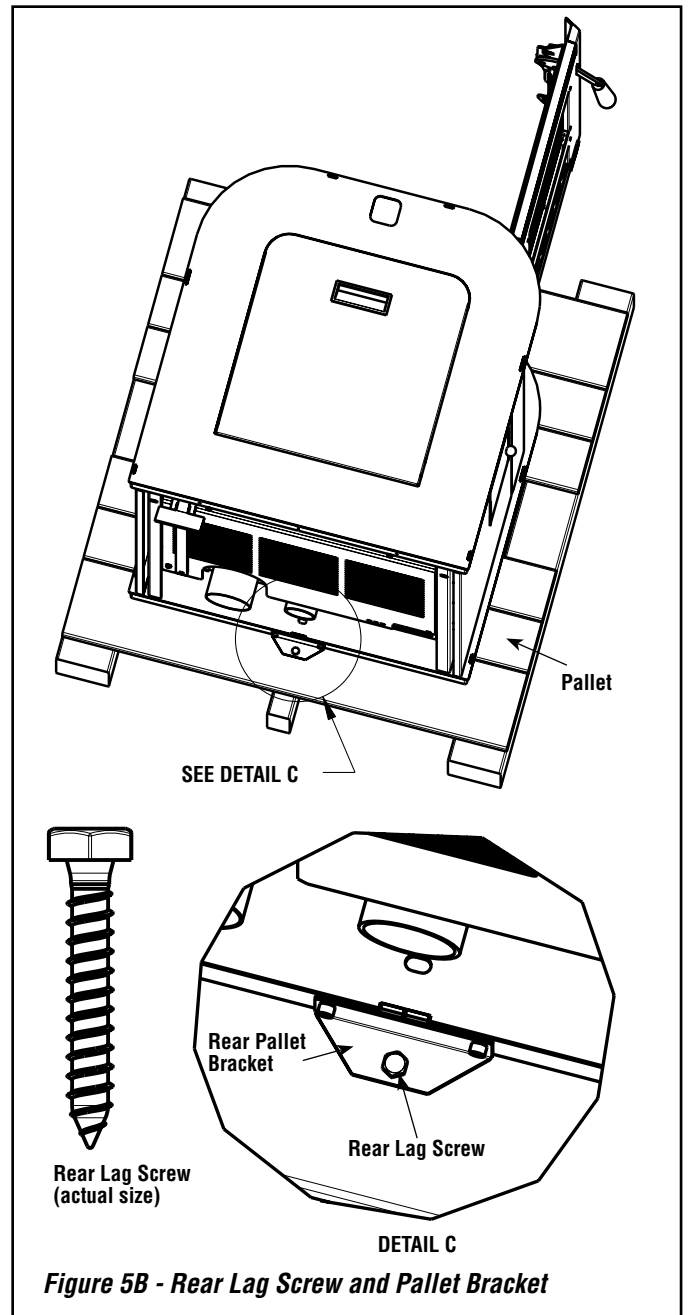
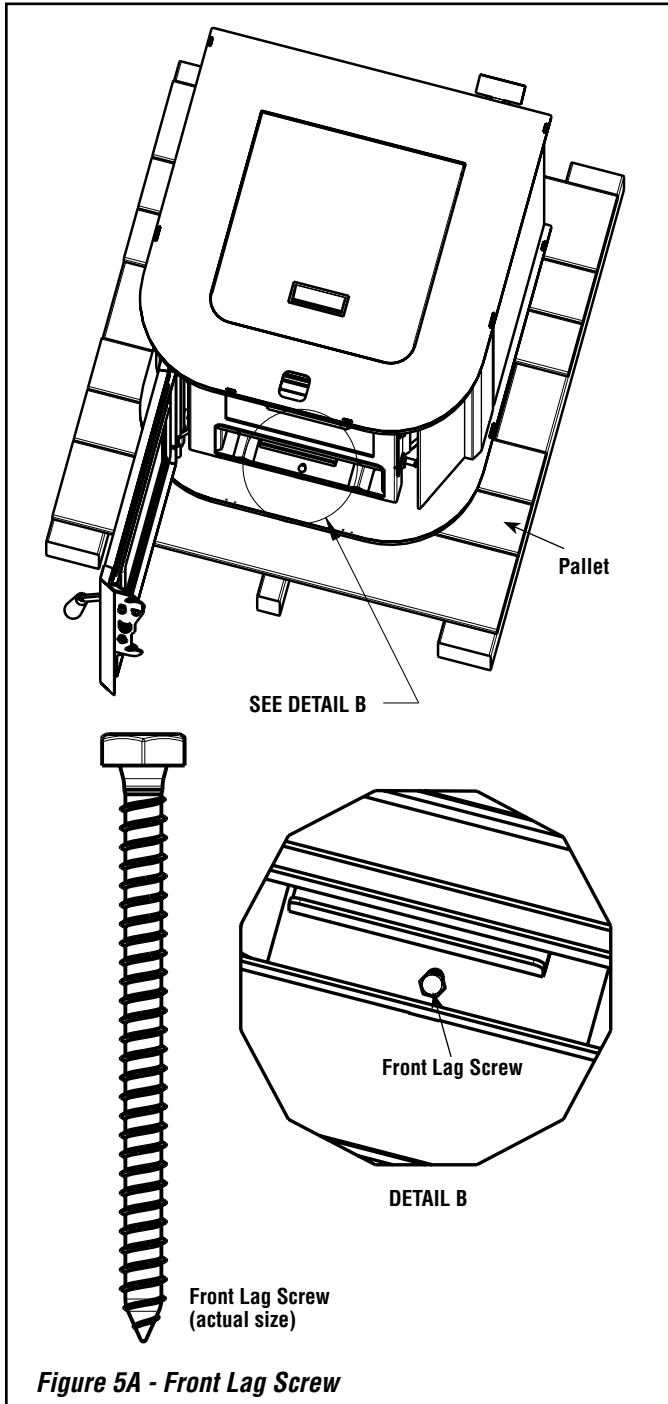
This stove is approved for venting with Type L and Type PL pellet vent pipe listed to UL 641 and ULC S609. The pipe should extend at least 3 feet above the part of the roof through which it passes. The top of the pipe should be at least 2 feet above the highest required elevation of any part of the manufactured home within 10 feet of the pipe (see **Page 13, Manufactured Home Chimney Height Requirements**).

If the exhaust vent exits the manufactured home at a location other than the roof, and exits at a point 7 feet or less above the ground level on which the manufactured home is positioned a guard or method of enclosing the pipe shall be provided at the point of exit for a height of up to 7 feet. The openings, if any, in this guard shall not allow a 3/4" rod to pass through. A 1/2" rod could pass through but should not be able to touch the pipe when inserted through the opening a distance of 4 inches.

INSTALLATION

Removing Appliance From Pallet

1. After removing the packaging from the stove, lift the hopper lid, and remove all prepackaged items that were shipped in the hopper. Next, open the stove door and remove all prepackaged items.
2. With the stove door open, remove the ash drawer and set aside. Using a 7/16" socket or open end wrench, remove the front lag screw (see **Figure 5A**).
3. Using a 5/32" allen wrench remove the two screws in the rear pallet bracket (see **Figure 5B**). Using a 7/16" socket or open end wrench, remove the rear lag screw (see **Figure 5B**).



Installation Check List

It is strongly recommended that you have an IHP dealer install your stove. If you install your stove yourself, you should review your installation plan with an IHP dealer.

Check list:

Check off each item as you proceed with the installation process.

- Read the ENTIRE stove installation section first
- Determine the appropriate measurements and locations for your installation.
- Follow the installation directions in this manual.
- Be sure to pre-fit all items before you install, fasten, or set up the appliance permanently.
- Measure for exhaust (also outside air tube when applicable) and mark the location. Place the unit in place to make sure it's correct before cutting holes in your wall.

Prior to lighting your appliance:

- Review the safety precautions section.
- Review the pellet *FUEL* section.
- Review and follow the Operating Instructions.
- Plug power cord connector into corresponding connector on the back of appliance (see **Figures 7 and 8** showing connector locations).

After you have begun operation of your appliance:

- Review the routine cleaning / maintenance information.
- Enjoy the warmth from your new IHP pellet stove!

Damper Location and Adjustment

Damper Air Control

Located behind the right side panel on model Montage 32FS.

Adjustment Procedure

Using a 1/4" nut driver or socket, loosen the damper setscrew (see **Figure 6**). Adjust in 1/4" increments until optimum combustion air flow is achieved. Retighten the damper setscrew.

For less air push in and for more air pull out.

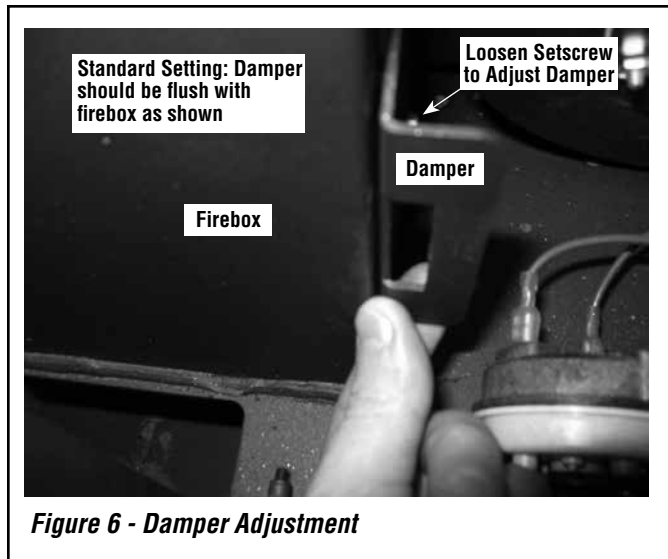


Figure 6 - Damper Adjustment

Thermostat Installation:

NOTE: Always Disconnect Power Before Performing The Thermostat Installation.

A 24 volt wall thermostat and 20 feet of 18-gauge thermostat wire is included in the accessory package. It is recommended that the thermostat and thermostat wire be installed by an IHP dealer.

Installation Steps:

1. Unplug stove power cord from the wall outlet.
2. Locate the thermostat terminal block (see **Figures 7 and 8**).
3. Loosen the two terminal screws on the terminal block and remove the jumper.
4. Connect the two wires from your thermostat to the terminals (one per terminal). Ensure that the yellow wires from the harness remain connected to the terminal block and tighten the terminal screws. Make sure the wires are firmly connected to the thermostat.
5. Plug in the stove and you are ready to operate with your thermostat!

IMPORTANT NOTE: Install the thermostat per the manufacturers instructions, provided with the thermostat. Failure to follow manufacturers instructions could result in a malfunction. Pay special attention to the thermostat location requirements. If the location requirements are not adhered to the appliance, erratic operation or failure may occur.

Do not mount the thermostat where it may be affected by:

- Radiant heat from the stove, fireplaces, sun or other heat sources.
- Drafts or dead spots behind doors or in corners.
- Hot or cold air from ducts.

NOTE: See Wiring Diagram on Page 29.

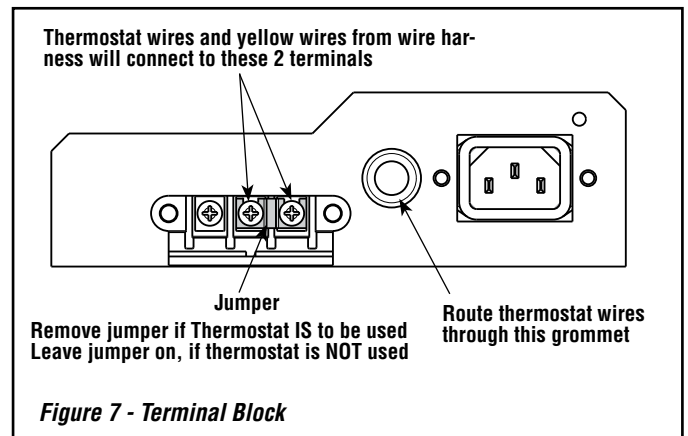


Figure 7 - Terminal Block

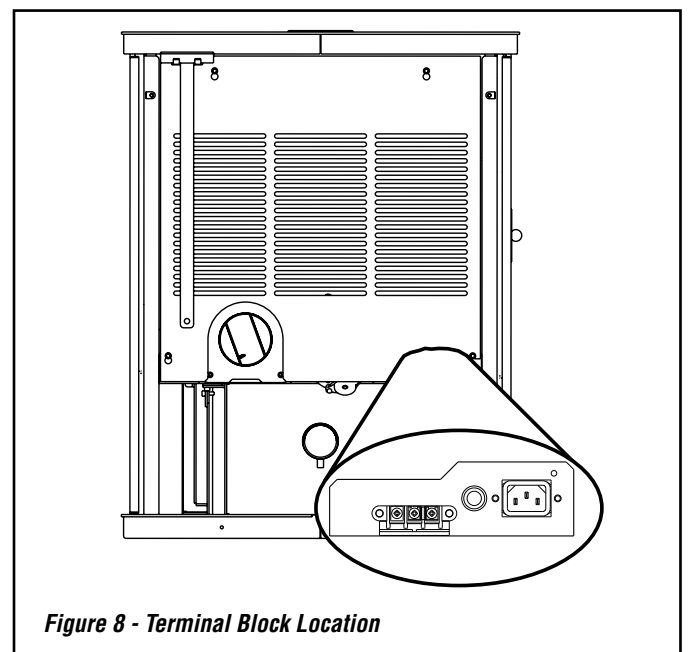


Figure 8 - Terminal Block Location

VENTING REQUIREMENTS

It is recommended that only an IHP dealer install your pellet stove. The specified installation requirements must be followed to ensure conformity with both the safety listing of the appliance and local building codes. All clearances, installation instructions and precautions specified by the vent manufacturer must be followed.

Selecting a Location

Review the appliance clearance requirements before installing the venting system (see **Page 6**). Position the appliance far enough away from walls to allow adequate room for servicing. Choose the appliance location with the least amount of interference with the house framing, plumbing, wiring, etc.

Preferred Vent Configuration

For the best performance, we recommend a vent run design which runs vertically and terminates above the roof line. This design will allow natural draft to improve the flow of flue gases and will aid in combustion and stove performance.

NOTE: 30 feet maximum vertical vent allowed (6 inches minimum vertical).

Type of Pipe

This stove is approved for venting with Type L and Type PL pellet vent pipe (sometimes referred to as “L-Vent pellet vent”, listed to UL 641 or ULC S609). Connect the pellet vent pipe or the “tee” to the flue collar using a minimum of three screws and seal as specified in “Pipe/Liner Joint Requirements” on this **Page**. **Do not use class B gas chimney or single wall chimney as a substitute.**

Size of Pipe

These pellet stoves are approved for use with the following vent sizes: 3” (75 mm) standard, or 4” (100 mm), see **Page 14** - for determining correct size vent). When 4” pipe is used: for horizontal vent installations use a 3” (75 mm) to 4” (100 mm) adaptor - available from vent manufacturer. For vertical installations use a 3” (75 mm) to 4” (100 mm) “tee” - available from vent manufacturer.

Offsets

In every installation, a single or double clean-out “tee” is recommended for every ninety-degree offset (this tee will help collect ash residue and will allow for routine cleaning without the need to disconnect sections of pipe).

Pipe Clearances/Requirements

See pipe manufacturers instructions for installation of venting components and clearances. Follow pipe manufacturers installation precautions for passing pipe through a combustible wall or ceiling (i.e. use an approved thimble).

NOTES

- *Offsets and horizontal runs accumulate fly-ash and soot which reduces the exhaust flow and performance of the stove.*
- *Total Offsets in venting system should not exceed 270° total in direction change.*
- *Maximum Vertical Vent - 30 feet (9.14 M)*

- *Horizontal Runs - The maximum total horizontal run must not exceed 10 feet (3.1 meters).*
- *Horizontal run of pipe requires 1/4” (7 mm) rise per foot.*
- *Pellet vent pipe requires 3” (75 mm) clearance from outside of pipe unless otherwise specified by vent manufacturer - all diameters: 3” (75 mm) and 4” (100 mm). A support bracket must be installed every 4 feet (1.2 m) of pellet vent pipe on the exterior wall of the house unless otherwise specified by vent manufacturer.*
- *It is not recommended to terminate exhaust vent on the prevailing wind side of the house.*
- *In Canada, where the venting may pass through a wall, or partition of combustible materials, the installation shall conform to CAN/CSA-B365. When installing the wall thimble and other venting components, follow the vent manufacturers instructions. Maintain an effective vapor barrier at the location where the chimney or other component penetrates to the exterior of the structure.*

Pipe/Liner Joint Requirements

Silicone sealant and three screws are required to secure the first vent connection to the appliance flue collar. Secure the remaining vent sections using (3) three screws minimum per section, unless otherwise specified by vent manufacturer’s instructions. ALL horizontal joints must be sealed gas-tight (air tight, sealed connection). Use RTV high temperature silicone or Interam, if necessary, to provide a complete seal between vent sections.

Connection to Masonry Chimney through a Wall

Be sure to verify the construction of a masonry chimney, as it may have combustible framing.

Approved liner when relining Masonry or Factory-Built Fireplaces is 2100HT (degree F.) liner listed to UL 1777 or ULC S635.

Connection to an Existing Class A Chimney

A chimney adaptor can be used to make the connection from 3” (75 mm) or 4” (100 mm) pellet vent pipe (listed to UL 641 or ULC S609) to existing UL chimney system. Verify with the pipe manufacturer that your pipe brands will interconnect.

Horizontal Vent Installations

On all horizontal vent installations (short, horizontal runs with no vertical pipe); care should be taken when choosing a location for terminating the vent. It is not recommended to directly vent the exhaust on the prevailing wind side of the house. It is recommended that when an appliance is vented directly through a wall, a minimum of 8 feet (2.5 m) of vertical pipe should be installed to create some natural draft. This will reduce the possibility of smoke or odor entering the dwelling during appliance shutdown or loss of power.

Vent Termination

Do not terminate vent in an enclosed or semi-enclosed area such as: carports, garage, attic, crawl space, under a deck, porch, narrow walkway, closely fenced area, or any location that can build up a concentration of fumes such as a stairwell, covered breezeway etc.

Vent surfaces can get hot enough to cause burns if touched. Adults should supervise children when they are in the area of a hot stove. Non-combustible shielding or guards may be required.

Termination Cap

The termination of the outside chimney of the pellet stove shall be located in accordance with the following:

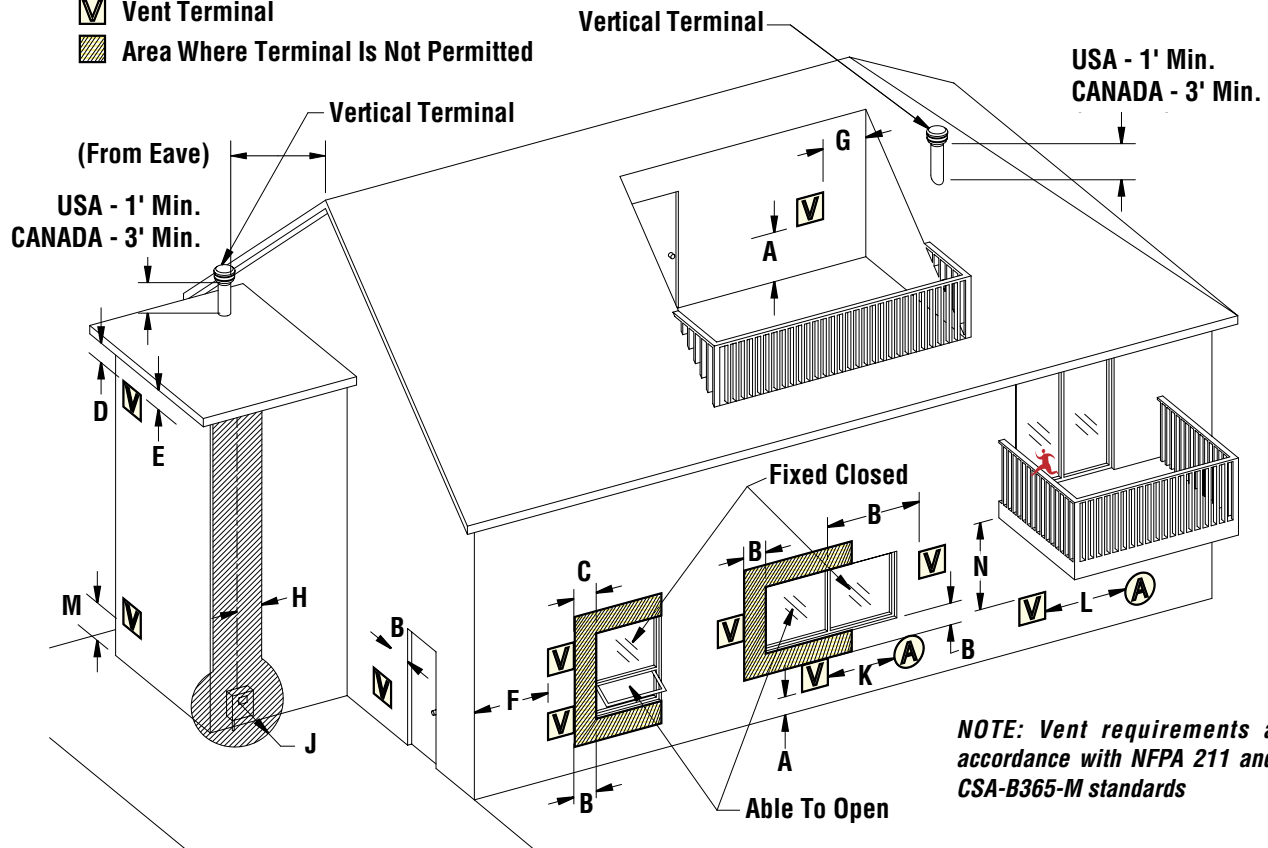
- A. Higher than 3 feet (.92 m) above any forced air inlet (air conditioner, etc.) located within 10 feet (3 m).

- B. Not less than 4 feet (1.2 m) below, 4 feet (1.2 m) horizontally from or 1 foot (3.1 m) above any gravity air inlet (door, window, etc.) which flue gases could reenter the dwelling.
- C. Not less than 2 feet (.6 m) from combustible materials such as an adjacent buildings, fences, protruding parts of the structure, roof overhang, plants and shrubs, etc. and not less than 7 feet (2.1 m) above grade when located adjacent to the public sidewalks (access). The final termination of the exhaust system must be configured so that flue gases do not jeopardize the safety of people passing by, overheat combustible portions of nearby structures or enter the dwelling.

- D. The distance from the bottom of termination to grade is 12" (305 mm) minimum unless otherwise specified by the vent manufacturer. This is conditional upon plants and nature of grade surface: Be careful to choose a location for the vent termination which does not expose people or shrubs to high heat from the exhaust gases. The exhaust gases are not hot enough to ignite grass, plants and shrubs located in the vicinity of the termination although they should be a minimum of 3 feet (.92 m) away. The grade surface under the termination must not be a lawn.
- E. Since sparks may escape from the exhaust pipe of any stove, use caution when positioning the vent pipe. Refer to pipe manufacturer's instructions when installing and terminating the exhaust. The vent pipe should be horizontal and never run the pipe in a downward direction (recommend a 1/4" [7 mm] rise per foot horizontal).

Vent Termination Locations

-  Air Supply Inlet
-  Vent Terminal
-  Area Where Terminal Is Not Permitted



- A = Refer to vent manufacturer's installation instructions for the required clearance above grade, veranda, porch, deck, or balcony.
- B = Clearance to window or door that may be opened (min. 12"/30cm above - 48"/1.2m below and to the side)
- C = Clearance to permanently closed window *(min. 12"/30cm)
- D = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of *(min. 24"/60cm) from the centerline of the terminal (min. 22"/55cm) check with local code.
- E = Clearance to unventilated soffit *(min. 12"/30cm)
- F = Clearance to outside corner *(min. 12"/30cm)
- G = Clearance to inside corner *(min. 12"/30cm)
- H = Not to be installed above a meter/regulator assembly within *(min. 36"/90cm) horizontally from the centerline of the regulator.
- J = Clearance to service regulator vent outlet *(min. 72"/1.8m)
- K = Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance *(min. 48"/1.2m)

- L = Clearance to a mechanical air supply inlet *(min. 120"/3.1m)
- M = **Clearance above paved sidewalk or a paved driveway located on public property *(min. 84"/2.1m)
- N = ***Clearance under veranda, porch, deck, or balcony (min. 12"/30cm)

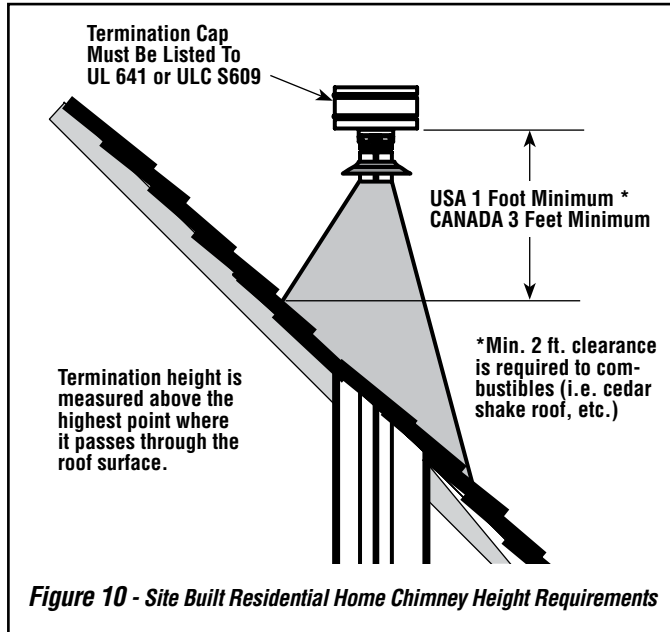
NOTE:

- * Local codes or regulations may require different clearances.
- ** A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
- *** Only permitted if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

Figure 9

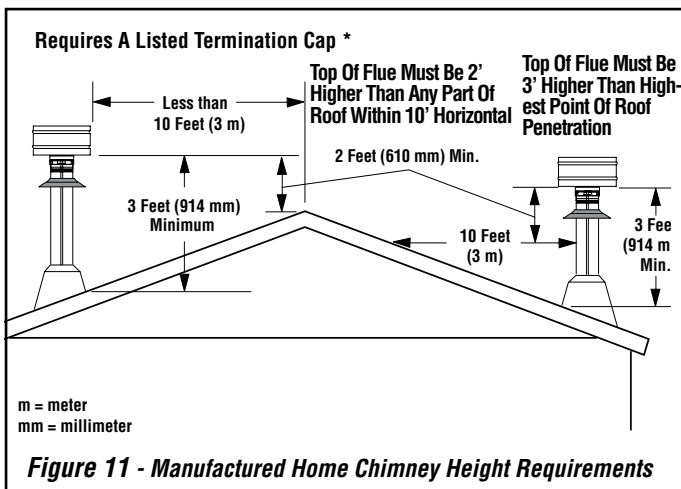
Chimney Height Requirements - Site Built Residential Home

The vent termination height required is - USA, 1-foot minimum; Canada 3-feet minimum above the roof penetration point as illustrated below (Ref. USA - National Standard, NFPA 211 and Canada National Standard CSA B365-01. Check with your local building official for additional requirements for your area.



Chimney Height Requirements - Manufactured Homes

The chimney must extend 3' (.92m) above the level of roof penetration and a minimum of 2' (.61m) higher than any roof surface within 10' (3m) (see below). Check with your local building officials for additional requirements for your area.



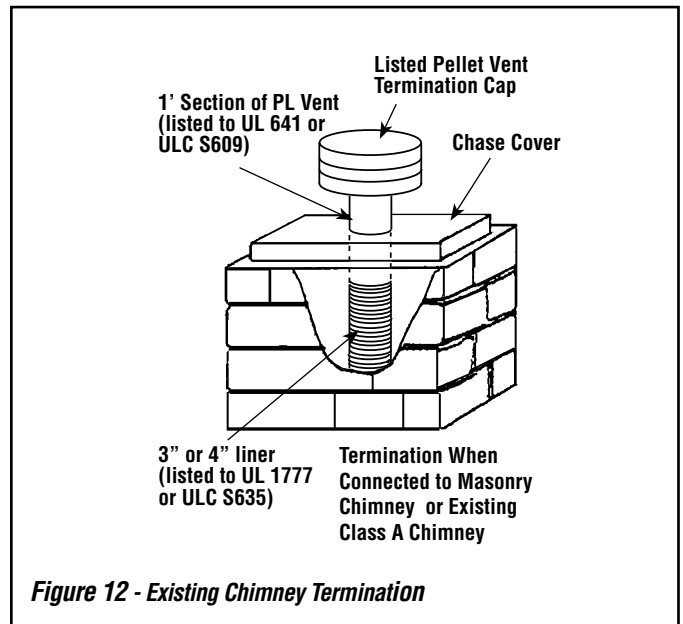
To pass inspection in nearly any jurisdiction, the chimney must meet both safety and exhaust flow requirements. The (3' by) 2' by 10' rule applies to both masonry and factory-built chimneys

*** Ref. USA - National Standard, NFPA 211-latest edition and Canada National Standard CSA B365-01-latest edition. Vents installed with a listed cap shall terminate in accordance with the terms of the cap's listings.**

Termination When Connected to Masonry Chimney or Existing Class A Chimney

A flexible corrugated chimney liner has much greater resistance to the flow of flue gases than does a rigid liner. For this reason we recommend that a larger, 4" liner be used on vertical runs exceeding 15 feet or that rigid venting be used. See **Figure 12**.

If a flexible corrugated chimney liner is used, it must be fully extended to eliminate any sagging and to improve the exhaust flow.



Determining Size Of Pipe To Install

To determine what diameter pipe to use in an installation (3" or 4"), first find the "equivalent pipe length" using the following guidelines, then plot this number and the altitude on the chart (**Figure 13**).

Fill out the installation chart, and calculate your total equivalent pipe length. After you have the total equivalent pipe length, use the *Pipe Selection Chart* (**Figure 13**) below to determine if your installation requires 3" or 4" exhaust pipe.

Installation Chart

Type of Pipe	# of Elbows or Feet of pipe		Equivalent Feet	Total Equivalent Feet
90° Elbows/ Tee (A & G)		x	5 Feet (1.5 m)	
45° Elbows (C)		x	3 Feet (1 m)	
Horizontal (B & F)		x	1 Feet (.3 m)	
Vertical (E)		x	.5 Feet (.15 m)	

Table 3

Sample Installation Chart

Type of Pipe	# of Elbows or Feet of pipe		Equivalent Feet	Total Equivalent Feet
90° Elbows/ Tee (A & G)	2	x	5 Feet (1.5 m)	10 (3 m)
45° Elbows (C)	1	x	3 Feet (1 m)	3 (1 m)
Horizontal (B & F)	3	x	1 Feet (.3 m)	3 (1 m)
Vertical (E)	8	x	.5 Feet (.15 m)	4 (1.2 m)

Total Equivalent Feet = 20

Table 4 - Sample Chart for Figure 14

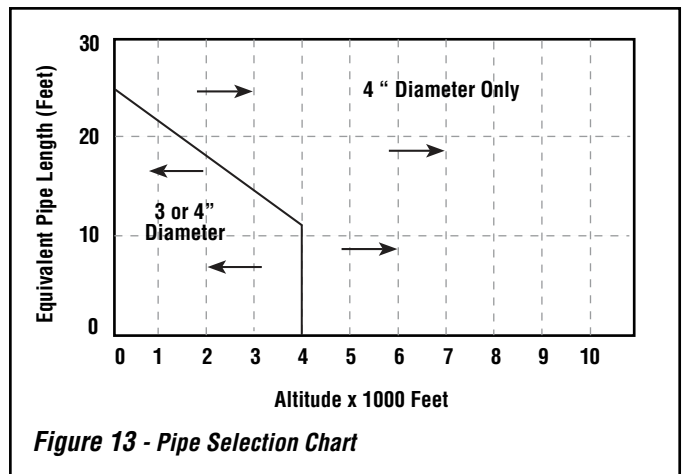


Figure 13 - Pipe Selection Chart

NOTE: All equivalent pipe styles shown for model Montage™ 32FS.

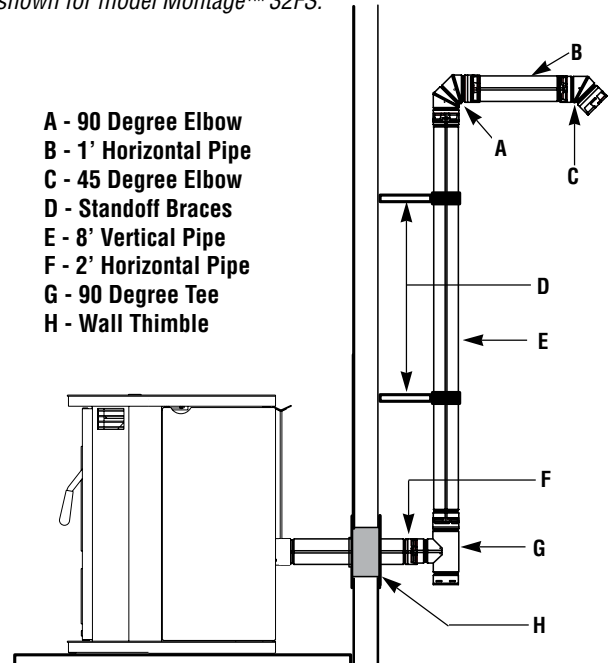


Figure 14 - See Sample Installation Chart

Standard Horizontal Vent Installation

Installing Montage™ 32FS

This stove is approved for venting with Type L and Type PL pellet vent pipe listed to UL 641 or ULC S609.

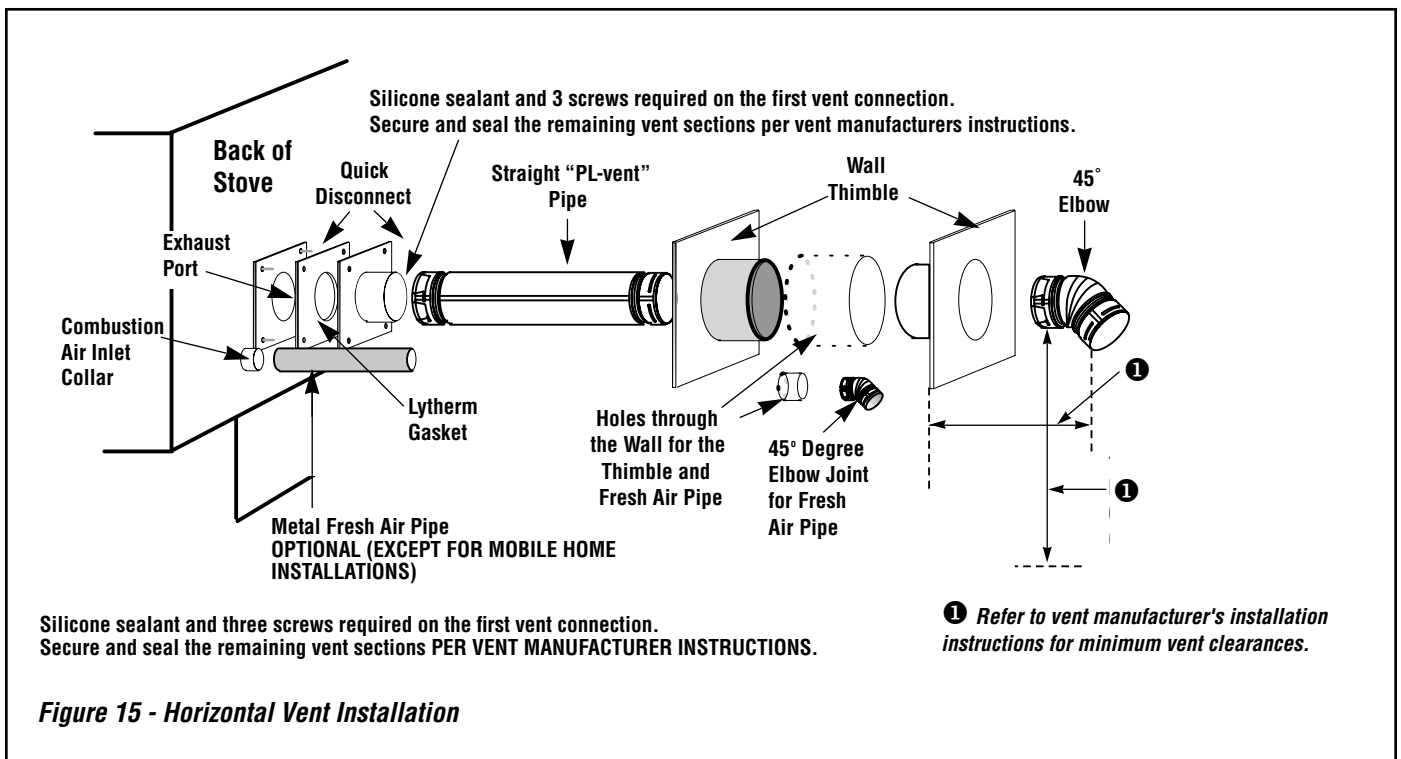
1. Locate the proper position for the listed type “PL” wall thimble. Avoid cutting wall studs when installing your pipe. Use a saber saw or keyhole saw to cut the proper diameter hole through the wall to accommodate the wall thimble. Use extreme caution to avoid cutting into power lines within the wall of the home. The hole size will depend on the brand of pellet vent that you are using. Install the wall thimble in the hole.
2. **ALL INTERLOCKING PIPE CONNECTIONS MUST BE SEALED GAS-TIGHT AND SECURED TOGETHER PER VENT MANUFACTURER INSTRUCTIONS.**

Position the stove approximately 12” (305 mm) from the wall on the floor pad. Push the “PL” pipe through the wall thimble. Squeeze a bead of high temperature silicone (RTV) sealer around the end of the machined portion of the 3” (76 mm) pipe connector on the back of the stove. Firmly push on a section of “PL” pipe until inner pipe liner pushes into the bead of RTV sealer.

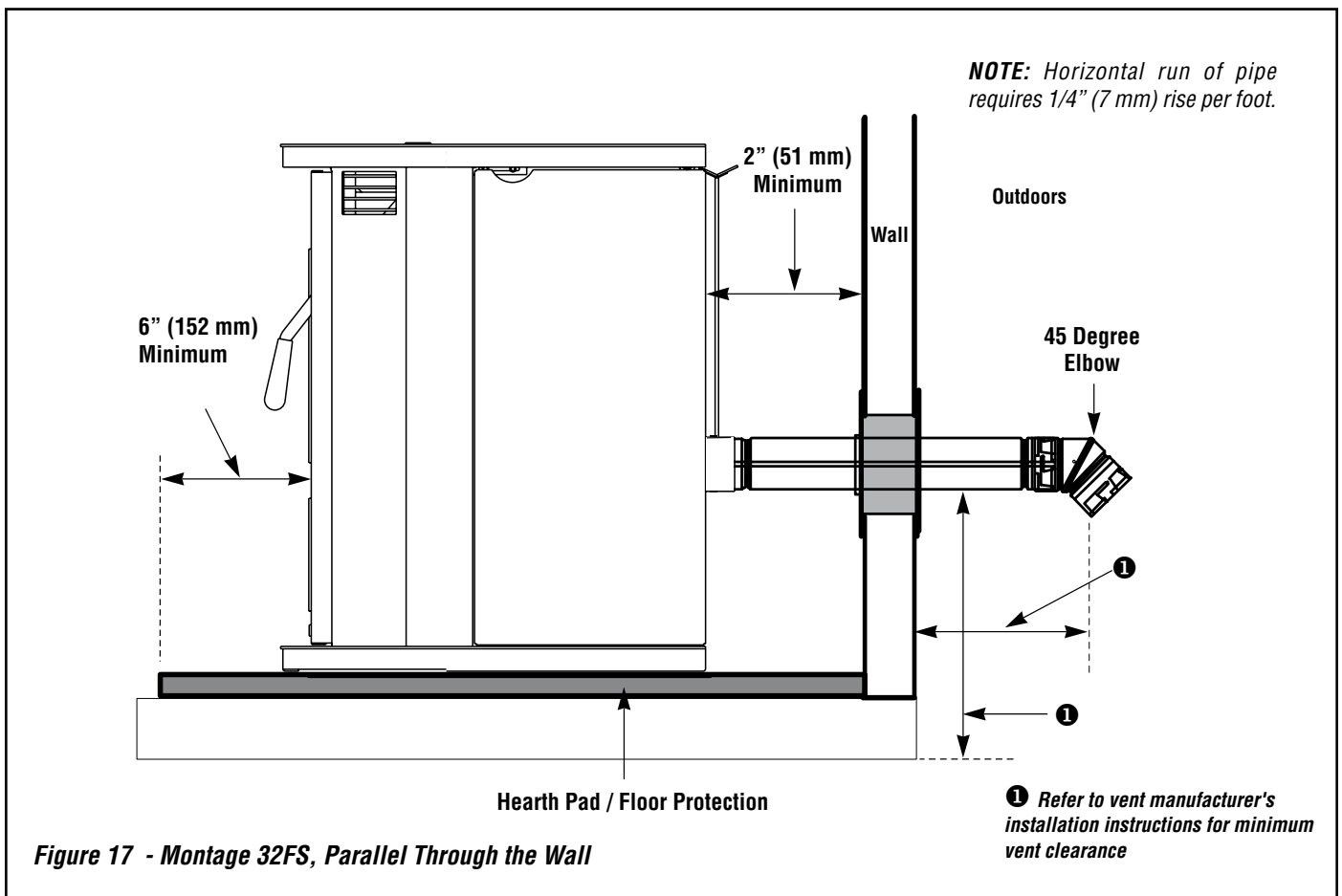
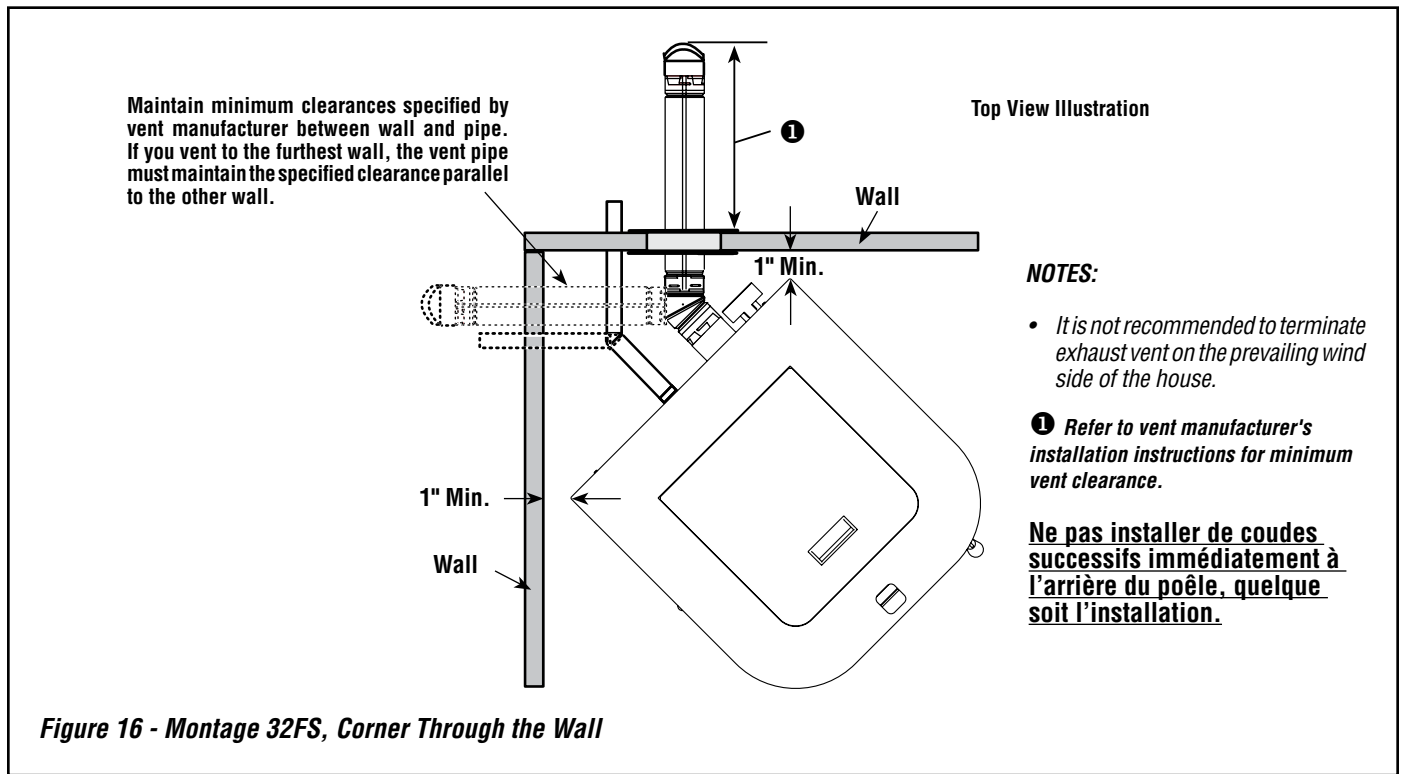
3. Push the stove with pipe attached towards the wall (the pipe will go through the wall thimble). Do not position the back of the stove closer than 2” (51 mm) from the wall (see *Clearances, Page 6*).
4. Install listed type “PL” 45 degree elbow with rodent screen or cap on outside end of pipe. The Inlet shall remain free of obstruction while unit is in operation and constructed in a manner so as to prevent material from dropping into the inlet or into the area beneath the dwelling. The inlet shall also have a screen with openings not larger than 1/4” to prevent rodents from entering.
5. If the installation includes a source of outside combustion air; cut a separate hole through the wall for the fresh air tube. This tube should be 1-5/8” (42 mm) minimum diameter I.D., steel only. Connect outside air pipe to air inlet on stove. This tube must be terminated with a 45 degree elbow or hood. The air intake on the exterior of the home should always be located a minimum of 18” below the flue termination and must remain free of obstruction. The inlet must also have a screen with openings not larger than 1/4” to prevent rodents from entering.

NOTES:

- Combustion air may also be drawn from a vented crawl space under the home.
- All joints for connector pipe are required to be fastened together per the vent manufacturers instructions. If vented horizontally, joints must be made gas-tight (air tight, sealed connection) in a manner as specified on this page (see instruction #2). **INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.**
- Greater back clearance will improve the ease of serviceability of the stove.
- The end of the exhaust pipe must extend a minimum distance from the outside of the building. Refer to the vent manufacturer's instructions for this clearance requirement.



Standard Horizontal Installation Configurations
Montage™ 32FS



Standard Vertical Installation Configurations

Model: Montage™ 32FS

This free-standing model may be connected to an existing flue or by installing listed type “PL” vent pipe. If a liner is run all the way to the top of the existing chimney, the existing flue should be sealed with a steel plate. Start a vertical run with a Tee at the back of the stove. Other options are illustrated below.

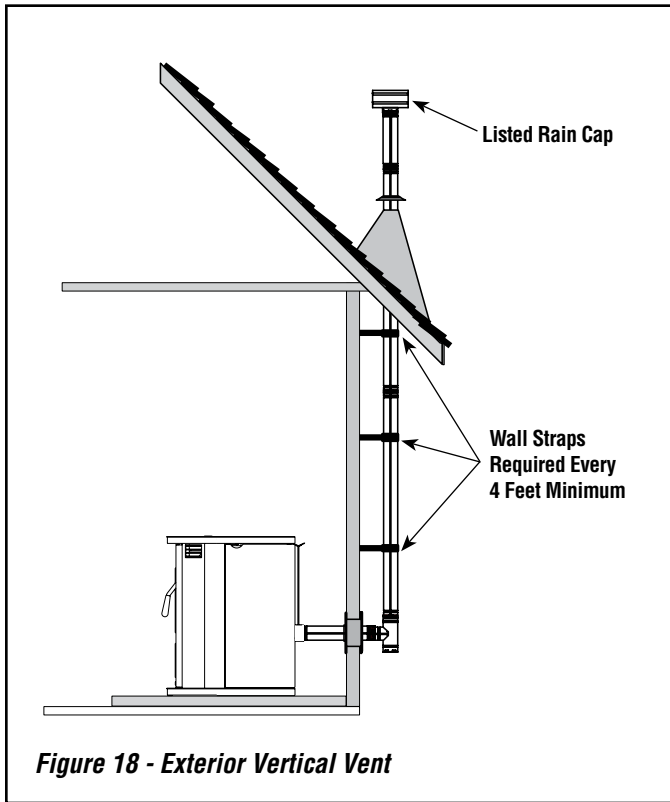


Figure 18 - Exterior Vertical Vent

Preferred Installation – Vertical Vent Through the Roof

This venting configuration allows for the best stove performance. The vertical pipe promotes natural draft and with the chimney inside the dwelling, the flue gases stay warm, thus rising at a consistent rate.

NOTE: See Pages 11 and 12 for Vent Termination Requirements

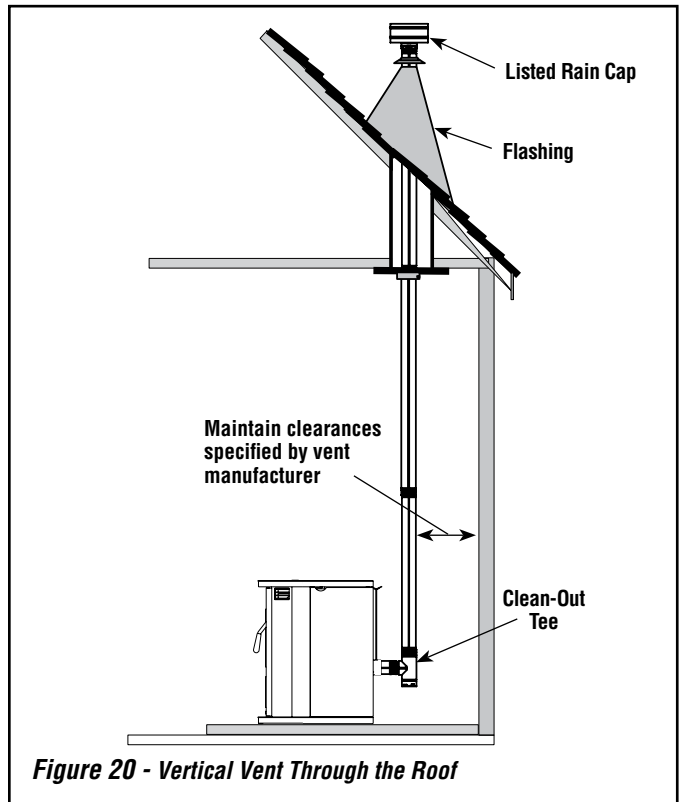


Figure 20 - Vertical Vent Through the Roof

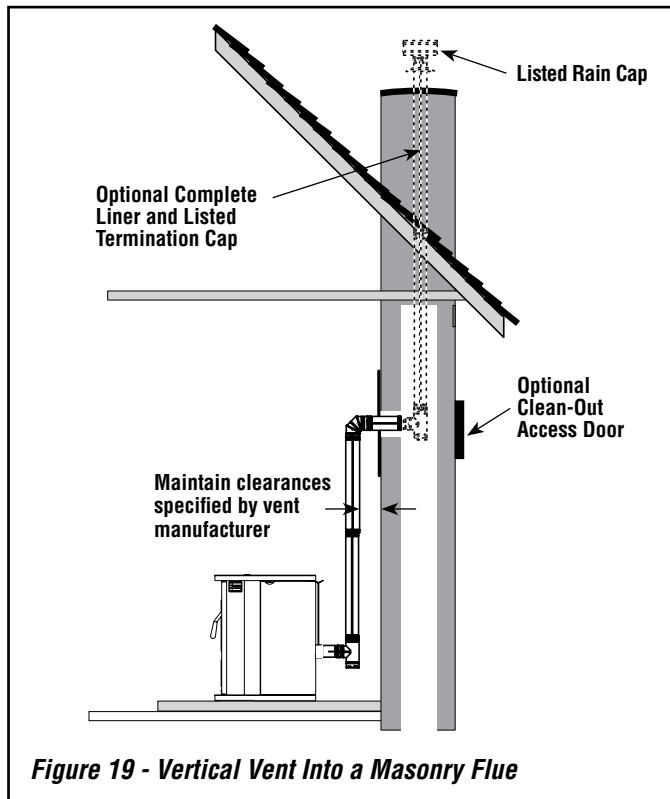


Figure 19 - Vertical Vent Into a Masonry Flue

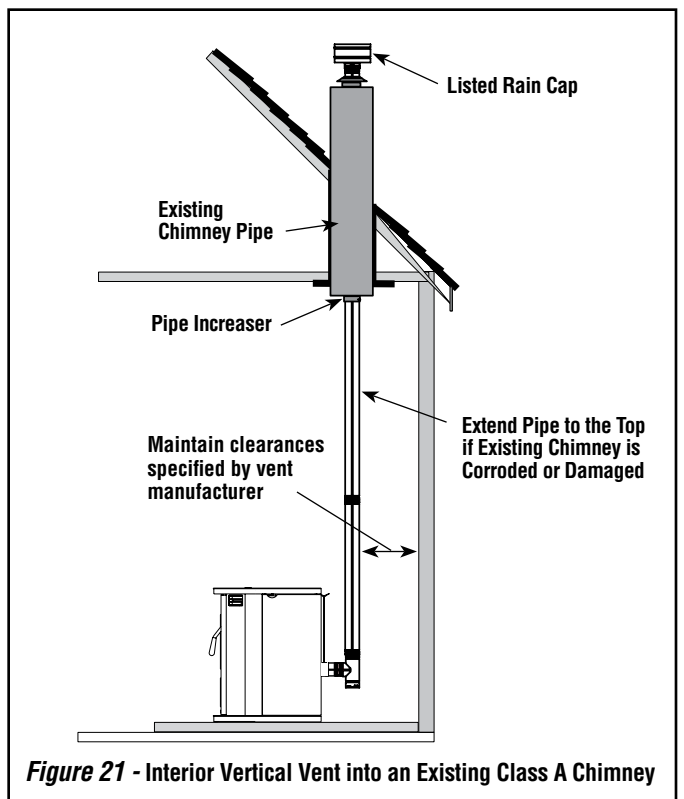
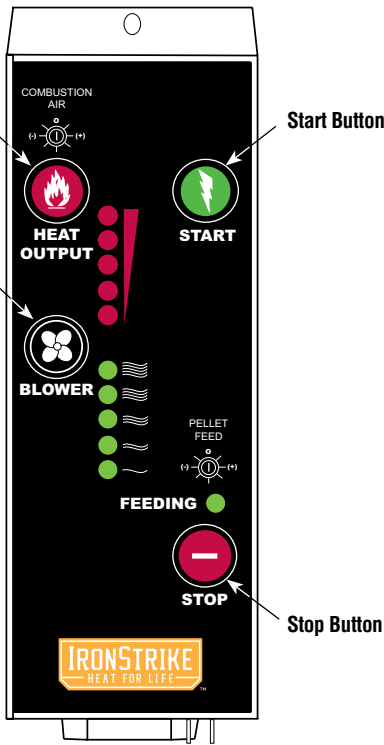
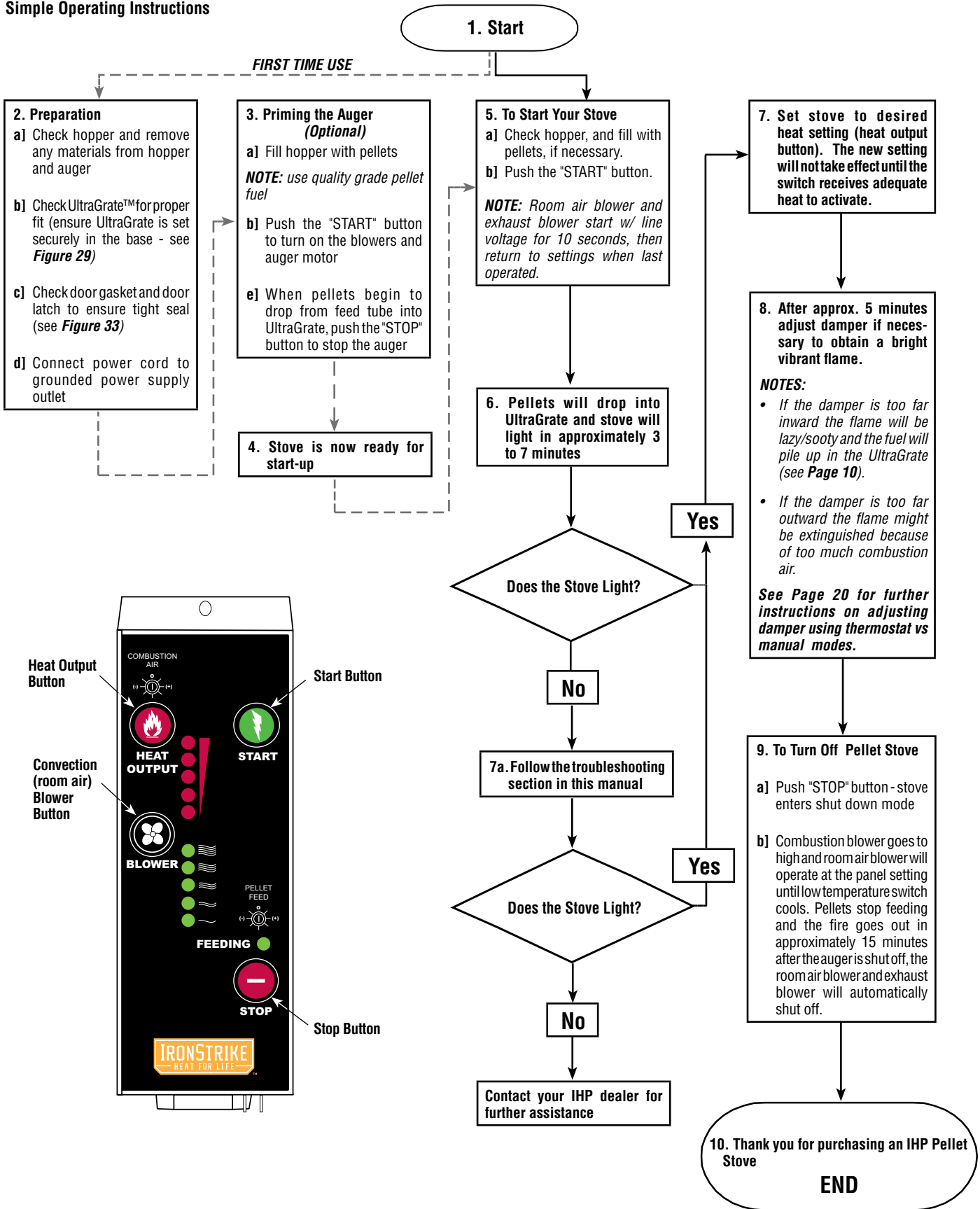


Figure 21 - Interior Vertical Vent into an Existing Class A Chimney

CARE AND OPERATION

Simple Operating Instructions



Control Board Operation

START BUTTON

The "START" Button turns on the pellet stove. If the exhaust does not reach operating temperature within 30 minutes, the stove will automatically shut down. The pellet stove can be restarted by pushing the "START" Button again.

RESTART

AUGER ON (green LED) - The auger restarts and returns to delivering fuel to the UltraGrate™.

STOP BUTTON

NOTE: The "START" Button has to be activated to give power to the AUGER ON/OFF button.

The "STOP" button turns the pellet stove OFF. When the LED is green, the auger is ON.

SHUT DOWN (LED off) - Auger turns OFF and fuel delivery stops. The blowers will continue to operate until the stove has cooled sufficiently. Stove enters shut down mode.

HEAT OUTPUT BUTTON

When not using a wall thermostat, the "HEAT OUTPUT" button provides the ability to burn at five separate settings from low (#1) to high (#5). The "HEAT OUTPUT" button regulates the fuel feed setting and the combustion air supply simultaneously.

Each time the "HEAT OUTPUT" button is pressed the heat output will advance to a higher setting. When at the highest setting (#5), if the button is pressed again it will go back to the lowest setting. Settings can be changed at any time but will only take affect after the start-up cycle is complete.

CONVECTION (ROOM AIR) BLOWER BUTTON

The "BLOWER" button operates the convection blower. This will change the flow of hot air into the room. Five settings are available from low (#1) to high (#5). When the "BLOWER" button is pressed, the green indicator light will scroll from low to high. When at the highest setting (#5), if the button is pressed again it will go back to the lowest setting.

When the "HEAT OUTPUT" button is on position #5, the lowest blower setting is #3. When the heat output button is on position #4, the lowest blower setting #2. This is a safety precaution to protect against overheating. Blower settings can be changed at any time, but will only take affect after the start-up cycle is complete.

NOTE: The control board has an internal memory which recalls the last setting prior to loss of power.

IMPORTANT NOTE: If the fuel feed trim or combustion air trim needs to be adjusted, contact your dealer or qualified technician to calibrate internal software. The trim controls should only be adjusted for the proper flame if all other options did not achieve proper adjustment. It is recommended that the damper be used to fine-tune your stove to your particular fuel and installation configuration (see Damper Adjustment on Page 10 and Damper Adjustment Guidelines on Page 21).

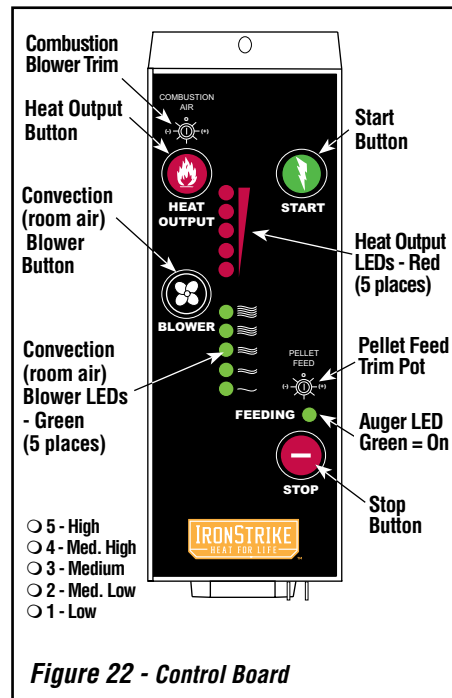


Figure 22 - Control Board

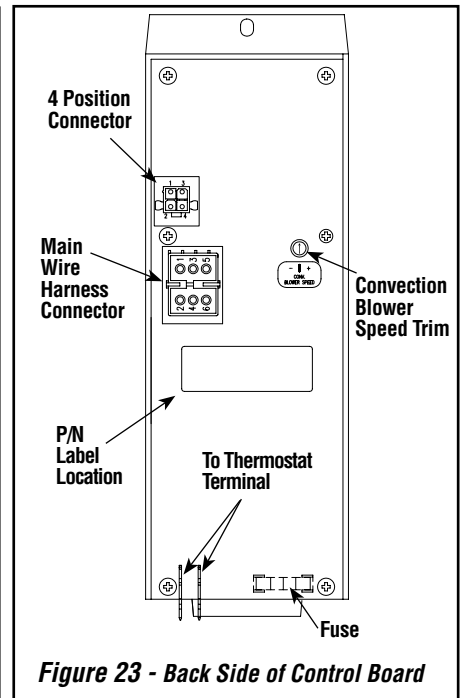


Figure 23 - Back Side of Control Board

Fuel Delivery Rate

The "HEAT OUTPUT" button manages the fuel delivery rate by controlling the amount of time the auger motor will run as follows:

Heat Output Setting	Auger Motor OFF/ON Time (seconds)	* Lb.'s Per Hour Fuel Delivery	♦ Approximate BTU Per Hour Fuel Delivery	Burn Time (hours)
(#5) High =	1.3 / 0.9	3.8 Lb.'s /hr.	32,000 BTU/hr	15
(#4) Med.High =	1.8 / 0.9	3.0 Lb.'s /hr.	25,000 BTU/hr	18
(#3) Med.=	2.2 / 0.9	2.5 Lb.'s /hr.	21,000 BTU/hr	22
(#2) Med.Low =	2.6 / 0.9	2.0 Lb.'s /hr.	17,000 BTU/hr	31
(#1) Low =	3.1 / 0.9	1.5 Lb.'s /hr.	13,000 BTU/hr	37

Table 5 - Model Montage™ 32FS

NOTE: Maximum hopper capacity is 55 lb.'s

* Feed rates are approximations only. Actual feed rate will vary depending on size, quality and length of fuel used and variations in line voltage.

♦ Estimated heat input based on fuel value of 8400 BTU per lb. of fuel.

⚠ WARNING

Never empty pellets from the Burn-Pot into the hopper. Pellets that may appear to be cool may retain enough heat to ignite other pellets resulting in smoke or fire damage.

DO NOT OVERFIRE THIS STOVE. This may cause serious damage to your stove and void your warranty. It also may create a fire hazard in your home. IF ANY EXTERNAL PART OF THE UNIT BEGINS TO GLOW, YOU ARE OVERFIRING. Immediately press the "STOP" button on the control board.

Pre-lighting Instructions

During an initial start-up, or in the case where the hopper has run out of fuel, it will be necessary to prime the auger feed system.

To prime the auger feed system:

1. Fill the hopper with recommended pellet fuel and plug the stove into the wall outlet.
2. Press the "START" button on the control board to start the fuel feed. Next, press the "HEAT OUTPUT" button to position #5 (maximum feed rate).
3. Look through the combustion chamber door and when you see the first pellets dropping into the UltraGrate™, the auger is then fully primed. It will take 10 to 15 minutes to prime the auger.
4. Once the auger is primed, press the "STOP" button to turn off the auger (LED will go off).

Starting Your Pellet Stove

1. Make sure the auger is primed (see *Pre-Lighting Instructions* on this page), then simply push the "START" button on the control board to activate the Fastfire™ igniter.
2. While the pellets will ignite on any heat output setting, it is recommended that the "HEAT OUTPUT" button be set to position #3. Pellets will start feeding into the UltraGrate and should begin to ignite in approximately three to seven minutes. The Fastfire igniter will automatically shut off after 8 minutes.
3. After the pellets are burning well, press the "HEAT OUTPUT" selector to the desired setting. Combustion air and the pellet fuel feed rate will adjust automatically as the "HEAT OUTPUT" button is pressed. The flame should be bright yellow in color and there should be no evidence of soot formation at the top of the flame. Press the "BLOWER" speed button to increase or decrease the blower speed to the desired level.
4. If operating your stove with the wall thermostat, adjust the "HEAT OUTPUT" button to the desired demand mode (#1 through #5 on the "HEAT OUTPUT" button). Next, adjust the wall mounted thermostat to the desired room temperature and your stove will automatically switch between a demand mode and stand-by mode.

NOTES:

Cold Start - When the "START" button is pressed when the appliance is cold, voltage will bypass its normal circuit through the low limit thermal switch (for 20 minutes to allow adequate time for the low limit thermal switch to heat [140° F min.] which will close the circuit). The combustion and convection blowers will start at maximum speed. After approximately 10 seconds both blowers will default to settings they were at after the last shut down was completed (indicated by LED's #1 to #5). The Fastfire igniter will operate for approximately 8 minutes. The auger will turn continuously for a predetermined duration at the respective Heat Output Settings, followed by the normal operating mode.

Re-Fueling While in Operation

1. Open hopper lid and fill hopper with pellets.
2. Make sure the hopper lid is completely closed.
3. Check to make sure the stove remains lit.
4. If the flame goes out, press the "start" button on the control panel to re-ignite.

CAUTION: Failure to ensure pellets in the UltraGrate remain burning after re-fueling may result in smoke escaping from the unit.

General Operating Considerations

Proper Burn Characteristics: Your flame should be bright yellow under normal operations. If your flame becomes reddish/orange, your stove probably needs routine maintenance. Excessive amounts of fly-ash build-up in the UltraGrate, clinkers in the UltraGrate, or leakage of air if the UltraGrate is not properly seated, will starve the fire for air. (See *Routine Maintenance* for information on cleaning the stove). If the problem persists, review the troubleshooting section at the end of this manual.

Manual and Automatic Operation

Your pellet stove can be operated in either the manual or automatic mode. The manual mode is used when operating without a wall thermostat. The automatic mode is used when utilizing a wall thermostat. When utilizing the thermostat capability, the burn time can be extended dramatically depending on thermostat setting. **NOTE:** It is normal for some ash to build up on the inner glass surface at the lower Heat Output settings.

Manual Operation

Pressing the "START" button will initiate the start-up cycle. The auger LED will be green to indicate the "on" status. The blower speeds and pellet feeds are fixed during this time to provide appropriate ignition. The Fastfire igniter system will light the pellets fed to the UltraGrate, after about 3 minutes. After the start-up cycle, your stove will be in the run mode. At this point the stove will operate with the heat output ("HEAT OUTPUT" button) and blower settings ("BLOWER" button) selected. These settings can be selected either during or after the start-up cycle. Pressing the "STOP" button during the run mode will initiate the shut down cycle (feeding LED will go off). The pellets will stop feeding and the blowers will run at a fixed speed for approximately 10 minutes. At this point your stove is safely shut down. The stove can be restarted by pressing the "START" button during the shut down cycle.

Automatic Operation

Your stove is capable of running in an automatic mode with the use of a wall thermostat.

For the wall thermostat to control the operation of the stove, set it to a temperature that will put it in the demand mode (calling for heat). The thermostat will establish either a demand mode or a stand-by mode. The thermostat should be set for the desired room temperature. If the room temperature drops below the level on the thermostat the stove will automatically begin the start-up cycle, as explained in the *Manual Operation* section.

Once the start-up cycle is completed the stove will operate at whatever heat and blower setting you have selected. For best operation under thermostat control, the medium or high settings are recommended. When the desired room temperature is reached the stove will automatically go into the shut down cycle. The pellet feed will stop and the blowers will continue for a controlled time allowing safe shut down of your stove. All lights will remain on when the thermostat is open. The "HEAT OUTPUT" and "BLOWER" settings can be changed at any time, but only take affect during the run mode. When the temperature in the room drops to the level set at the thermostat, the stove will again begin the start-up cycle and resume automatic operation in the demand mode.

NOTE: If the "START" button is pressed while the thermostat is in the standby mode the stove will not restart until the thermostat closes (calling for heat).

Turning Off Your Stove

Press the "STOP" button to initiate the shut down cycle (auger LED will be red). The pellets will stop feeding and the blowers will continue to run on a timed cycle. The stove will shut down safely upon completion of the shut down cycle.

Shutdown Mode - When the thermostat opens (not calling for heat), or the auger "STOP" button is pressed (feeding LED will be off), power to auger motor will be discontinued. The blowers will continue at the control board setting until the low limit thermal switch cools enough (below 120° F) to open. For safety, the blowers will continue to run for approximately 10 minutes before the unit shuts down.

Damper Operation

The damper assembly controls the amount of combustion air that is delivered to the firebox. With the damper adjusted all the way in, the airflow will be at its minimum. As the damper is moved outward, more air is delivered (see *Damper Location and Adjustment* on **Page 10**).

It will be necessary to monitor the appearance of the flame during the first 4-8 bags of pellets. If the flame is smoky red or orange with evidence of soot at the top of the flame, the damper will need to be adjusted to deliver more combustion air (see *Damper Location and Adjustment* on **Page 10**). If the flame is "short" at the higher burn rates and appears to burn the pellets out of the UltraGrate™ faster than they can be resupplied, or there are significant variations of flame height within a single burn setting, the damper may need to be adjusted to deliver less combustion air.

After the damper is adjusted, re-evaluate the appearance of the flame. It may be necessary to continue adjusting the damper in increments until proper combustion is achieved (the flame should become a brighter yellow and begin to "dance").

Once the damper has been properly set (and if the routine maintenance is performed as needed), the damper should not require re-adjustment unless you are changing from a premium grade pellet to a standard or high ash pellet, in which case the damper may need to be moved outward to help prevent the accumulation of ash or clinkers in the UltraGrate.

Damper Adjustment Guideline

Lack of Combustion Air:

By opening the damper, this will increase combustion air delivery. Symptoms of insufficient combustion air include; unburned fuel, lazy smoky or red / orange flame, excessive ash or soot, excessive buildup on glass, fuel may "pile-up."

Contributing factors:

- High Altitude – Lack of oxygen
- Restrictive Venting (elbows, horizontal runs, cold external chimneys, etc.)
- Dirty / Poor Quality Fuel
- Lack of Maintenance

NOTE: Excessive amounts of fly-ash built-up in the UltraGrate™, clinkers in the UltraGrate or leakage of air (if the grate is not properly seated) will starve the fire for air. See Routine Maintenance, on Pages 22 through 26 for information on cleaning requirements.

Excessive Combustion Air:

Adjusting the damper to a more closed position will reduce the combustion air delivery. Symptoms of excessive air include; fuel burns too quickly (results in smoking or smoldering pellets), white to yellow flame, etc. If the damper is open too far, the burning pellets will lift off the grate and fly up into the air much like popping corn does. Another flame characteristic of a damper that is open too far is a flame that has significant variation in height on any single burn setting.

NOTE: Excessive combustion air reduces efficiency.

Contributing factor:

- Venting system providing excessive draft.
- Dry, hot burning fuel

Correct Combustion Air / Proper Burn Characteristics:

When the damper is correctly set, the burning pellets should move (wiggle) around slightly and the flame should be bright yellow.

Automatic Safety Features

Power Outage:

During a power outage, the stove will shut down safely. The stove will automatically restart when power is resumed. The solid state control board has an internal memory that will retain heat output and blower speed settings through voltage interruptions.

A small amount of smoke may leak from the top of the window glass, the hopper and from the combustion air intake, if the stove is vented horizontally with no vertical pipe. This will not persist for more than 3 to 5 minutes and will not be a safety hazard. It may set off your smoke alarm.

NOTE: If the area in which you live is prone to frequent power outages, it is recommended that a minimum of 8 feet (2-1/2 meters) of vertical vent pipe be included in a free-standing installation to induce a natural draft in the event of a power failure.

Overheating:

High temperature thermal switches will automatically shut down the stove if it overheats. Allow up to 45 minutes cooling time before re-lighting. Keep enough convection air going through stove to keep it cooling properly (adjust convection [room air] blower speed to a higher setting), this will ensure long life of the stove. If the overheating continues, contact your IHP dealer for more information.

FUEL

CAUTION

The use of unapproved, dirty, wet and / or high salt content fuel will void the warranty!

Fuel Specifications - Using the UltraGrate™ burn system, this appliance has been designed to burn wood residue pellets only (with up to 2% ash content). Agricultural pellets (i.e. corn, alfalfa etc.) are not permitted to be burned in the stove. Dirty fuel will adversely affect the performance of the stove. The pellet fuel should meet P.F.I. (Pellet Fuel Institute) standards for standard grade or premium grade residential and commercial pellet fuel. If the pellet fuel meets these standards, it will be printed on the bag. Any questions regarding pellet fuel can be answered at the Pellet Fuels Institute (PFI), www.pelletheat.org.

Pellet Feed/Pellet Size - The pellet feed system is designed to handle a wide range of pellet sizes up to a maximum of 5/16" diameter. Different pellets may feed at considerably different rates. You may notice a difference in the burn if you change pellet fuel sizes. The longer the pellet, the slower it will feed and vice versa. If the stove will not stay burning at the minimum fuel feed setting, those particular pellets may not be feeding fast enough. If this happens, reduce the amount of combustion air by adjusting the damper. See **Pages 10 and 21** before adjusting the damper.

Clinkering - Silica (or sand) in the fuel, along with other impurities, can cause clinkering. A clinker is a hard mass of silica formed in the burning process. Clinkering is a function of the fuel, (not the stove), but adversely affects the performance of the stove by blocking off the air passages in the grate. Even P.F.I. approved pellet fuel may tend to clinker. A clinker can be removed from the UltraGrate™ and placed in the ash pan with the use of the grate scraper/ash pan tool furnished with your stove. See *Routine Maintenance* (on **Pages 22 through 26**) for more information on cleaning.

Ash - The frequency of removal of the ash and maintenance performed on the stove is directly proportional to the ash content of the fuel and the operation duration of your pellet stove. Low ash fuel may allow longer intervals between cleaning, however, a stove burning high ash fuel may need to be cleaned as often as everyday.

Fuel Feed Rates - Different brands of pellets will feed at varying rates due to their size and density (length and diameter). This may require a slight adjustment in the damper control (see **Page 10**) or the fuel feed trim control to compensate (see **Page 19**).

NOTE: See *Fuel Delivery Rate* on **Page 19** for burn times.

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

Pellet Fuel Storage -

- **Store your wood pellets in a dry place to prevent them from absorbing excess moisture.**
- **Do Not store your wood pellets within the clearance zone of the stove.**
- **Do Not store your wood pellets in a place that would block removal of the ash pan or block access to refueling the hopper.**

Wood pellets manufactured to the pellet fuels institute (P.F.I.) certification standard are available in two grades, Standard and Premium. The primary difference between the two is the ash content of the pellets.

The P.F.I. specification for standard grade and premium grade residential and commercial pellet fuel is as follows:

- CHLORIDES (Salt): Less than 300 p.p.m. to avoid stove and vent rusting.
- BULK DENSITY: 38 to 40 lb. / Cu. Ft. minimum
- MOISTURE CONTENT: 8% to 10% maximum
- ASH CONTENT: < 2% maximum (standard grade) < 1% maximum (premium grade)
- FINES: 0.5% to 1% maximum through a 1/8" screen
- BTU CONTENT: There are a number of variations in pellet fuels that are not included in PFI standards. For example, BTU (heat value) content may range from just under 8,000 to almost 9,000 BTU, depending upon species and region of the country and other variables.

ROUTINE MAINTENANCE

IMPORTANT CAUTIONS:

- **UNPLUG POWER CORD AND ENSURE APPLIANCE IS COLD BEFORE PERFORMING ANY MAINTENANCE WORK.**
- **Some brands of pellets produce more ash and clinkers than others. Therefore the frequency of performing the following cleaning procedures depends to a great degree on the quality of the pellets burned.**
- **Not cleaning this unit will cause it to burn poorly and will void your warranty for this appliance.**
- **When removing ash build-up, use an approved ash vacuum only. A cleaning brush can be used to loosen any ash build-up before vacuuming. DO NOT USE A STANDARD HOUSEHOLD VACUUM OR "SHOP VAC" AS THE FILTERS WILL LEAK THE FINE PARTICLES OF ASH INTO THE HOME.**
- **THIS WOOD HEATER NEEDS PERIODIC INSPECTION AND REPAIR FOR PROPER OPERATION. IT IS AGAINST FEDERAL REGULATIONS TO OPERATE THIS WOOD HEATER IN A MANNER INCONSISTENT WITH OPERATING INSTRUCTIONS IN THIS MANUAL.**

NOTES:

- **Cleaning schedule will vary depending on quality of pellets used. Burning high ash pellets will require more frequent cleaning.**
- **Using a drop cloth is recommended as some ash may spill onto the floor during the cleaning process.**

Cleaning

The following areas need to be inspected and cleaned during routine cleaning:

- Heat Exchange Tubes / Tube Scraper (Homeowner)
- Baffle Plates (Qualified Technician Only)
- Proof of Fire Switch (Qualified Technician Only)
- Window Wash (Homeowner)
- Ash Clean-Out Ports (Qualified Technician Only)
- Paint Touch-up (Qualified Technician Only)
- UltraGrate (Burn Grate) (Homeowner)
- Ash Slide Plate (Homeowner)
- Ash Pan (Homeowner)
- Exhaust Passages / Vent Pipe and Creosote Removal (Qualified Technician Only)
- Gaskets (Qualified Technician Only)
- Cleaning Rear Stove Compartment (Qualified Technician Only)

Heat Exchange Tubes

(Recommended Frequency of 2 days to 2 weeks*)

Tube Scraper - Using the hole in the handle of the Grate Scraper Tool “grab” the scraper rod as shown in **Figure 26**. Using the Grate Scraper Tool, pull the rod up and out towards the opening of the firebox. Continue pulling until the Tube Scraper reaches the top of the firebox. Pull the tube scraper out, then repeat 2–3 times to remove fly-ash from the heat exchange tubes.

It may be easier to clean the tubes if the heat exchanger baffle plate is removed first (located in the firebox below exchange tubes).

Baffle Removal - The baffle plate contains two keyhole slots (see **Figures 24A and 24B**), which allows the two retaining screws to remain in place while removing the baffle plate. To remove baffle, loosen the two screws holding the baffle in place (do not fully remove). Slide the baffle plate to the left until the screw heads clear the open end of the key hole slots. Remove the baffle plate diagonally through door opening. The tube scraper rod can now be pulled in a more horizontal manner, which allows the scraper to move more freely.

NOTE: The baffle plate should be removed at least once a year to allow for a thorough cleaning.

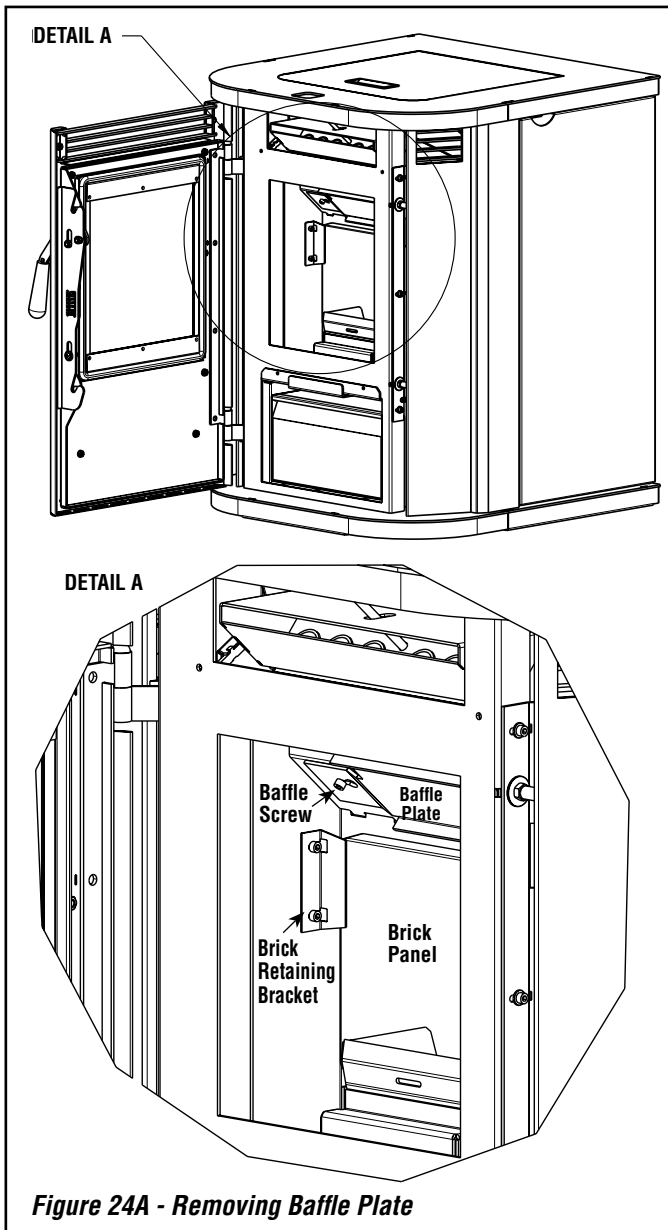


Figure 24A - Removing Baffle Plate

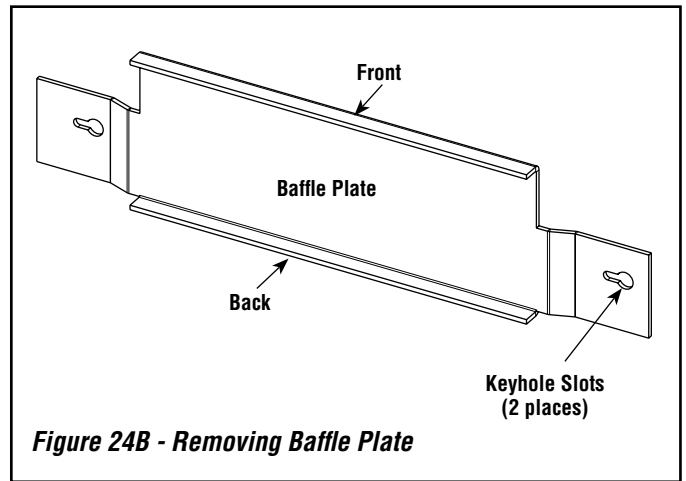


Figure 24B - Removing Baffle Plate

Cleaning Behind Tube Scraper

(Recommended Frequency of 2 weeks - 2 months*)



Clean between the heat exchange tubes using a cleaning brush as illustrated in **Figure 25**.

With tube scraper rod pulled out 2 to 3 inches, insert brush behind tube scraper and remove ash build-up. Clean to the left and right side of heat exchanger, between tubes and the top of the firebox.

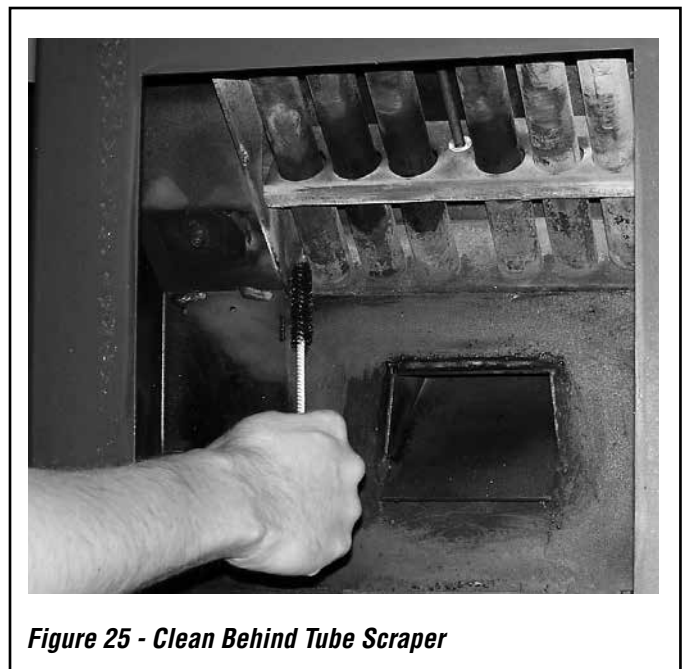


Figure 25 - Clean Behind Tube Scraper

***Burning fuel with a high ash content or an improperly adjusted damper may require more frequent cleaning and stove maintenance.**

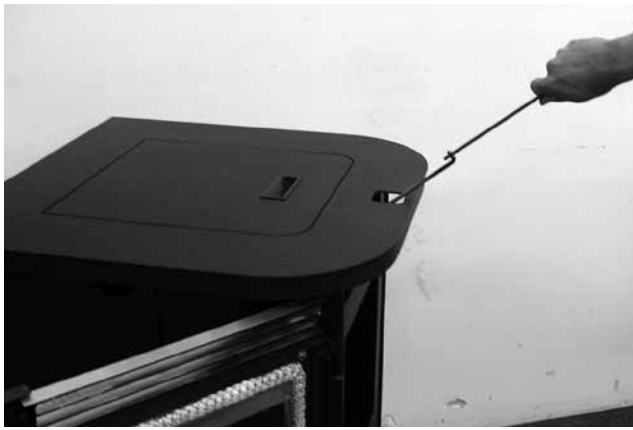


Figure 26 - Pulling Tube Scraper Rod

Proof of Fire Switch

(Recommended Frequency of 1 year or after every 100 bags of fuel used*)

This switch needs to be removed and cleaned after every 100 bags of fuel burned.

Cleaning Procedure:

- 1) **UNPLUG STOVE!**
- 2) Locate the switch behind the right side panel, mounted on the combustion blower.
- 3) Using a flat-head screwdriver, remove the 2 screws which secures the switch to the blower housing.
- 4) Using a dry cloth, wipe off any flyash build-up on the sensor portion of the switch.
- 5) Reinstall switch. Ensure wires are properly connected to the switch and the connectors are not making contact with the blower housing. Close side panel.

NOTE: Failure to clean the proof of fire switch when needed may result in nuisance shut-downs because the fly-ash build-up insulates heat from reaching the switch.

Window Wash

(Recommended Frequency of 1 year*)*

Using a small brush, sweep out all debris buildup from behind the window wash bracket as shown in **Figure 27**.

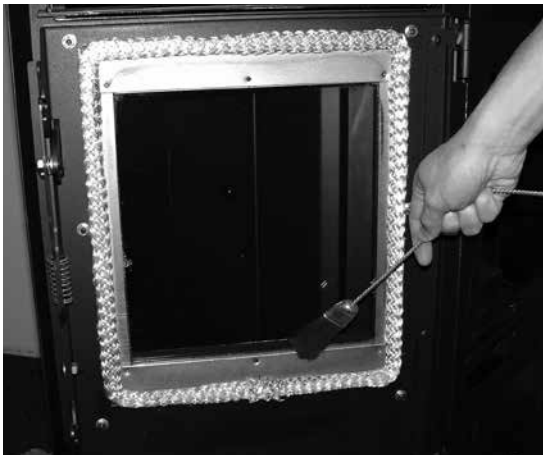


Figure 27 - Clean Behind Window Wash Bracket Using Brush

Ash Clean-out Ports

(Recommended Frequency of 1 year*)*

IMPORTANT NOTES:

- ENSURE APPLIANCE IS COLD BEFORE BEGINNING.
- FIREBRICK PANEL MUST BE INSTALLED BEFORE OPERATING UNIT.
- ASH CLEAN-OUT PORTS MUST BE CLEANED OUT AS PART OF ROUTINE MAINTENANCE.

Accessing Ash Clean-Out Ports

- 1) Open firebox door.
- 2) Remove Firebrick Panel (see **Figure 24A**):
 - a. Remove the two firebrick retainer brackets using a 5/32" allen wrench (located on the left and right side of the firebrick inside firebox). Loosen the screws (do not remove) until screw heads can be removed through the key hole slots in the brackets.
 - b. With the brick retainer brackets removed, lift firebrick panel up and out.
- 3) Using an approved ash vacuum, remove the ash build-up. A cleaning brush can be used to loosen any ash build-up before vacuuming.
- 4) Reinstall firebrick panel.
- 5) Close firebox door.

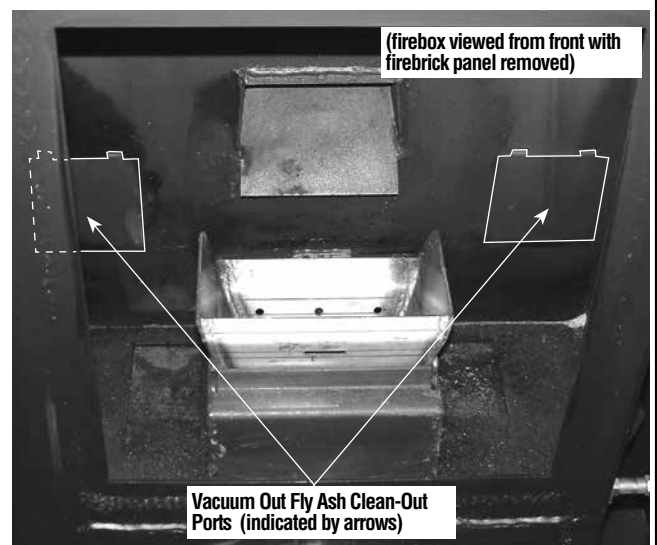


Figure 28 - Ash Clean-Out Ports

Soot and Flyash:

Formation and need for removal - The products of combustion will contain small particles of flyash. The flyash will collect in the exhaust venting system and restrict the flow of the flue gases. Incomplete combustion, such as occurs during startup, shutdown, or incorrect operation of the room heater will lead to some soot formation which will collect in the exhaust venting system. The exhaust venting system should be inspected at least once every year to determine if cleaning is necessary.

***Burning fuel with a high ash content or an improperly adjusted damper may require more frequent cleaning and stove maintenance.**

UltraGrate™ (Burn Grate)

(Recommended Frequency of 1 – 7 days*)

Inspect the UltraGrate periodically so that the air holes don't clog with ash or clinkers. The UltraGrate can easily be cleaned with the grate scraper tool, or it can be removed. It is very important to monitor the ash build up under the UltraGrate, as too much of ash will block combustion air from entering the grate, causing pellets to pile-up in the grate. A clogged grate will reduce the overall performance of the stove, cause dirty glass and if not cleaned may lead to smoke escaping the stove. The ash build-up under the grate is easily dumped into the ash pan by pulling out the ash slide weekly (see *Ash Slide Plate*, **Figure 30**).

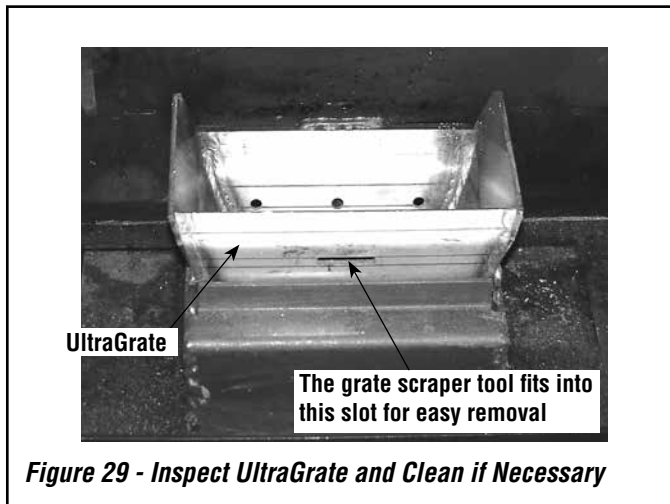


Figure 29 - Inspect UltraGrate and Clean if Necessary

Ash Slide Plate

(Recommended Frequency of 1 to 2 Weeks*)

Ash that accumulates around the grate can be “dropped” into the ash pan as follows:

1. Open the firebox door.
2. Pull open the ash release slide plate as shown in **Figure 30**.
3. Using a brush, sweep the ashes from the firebox through openings to the ash pan.
4. Close the ash slide plate, then close the firebox door.

IMPORTANT NOTE: Make sure to fully close the ash slide plate when complete. Failure to close the ash release slide plate completely may cause the fuel to burn poorly (due to reduced air flow through the grate), which may then cause pellets to “pile up” in the grate. The ash slide must be fully closed for the firebox door to close.

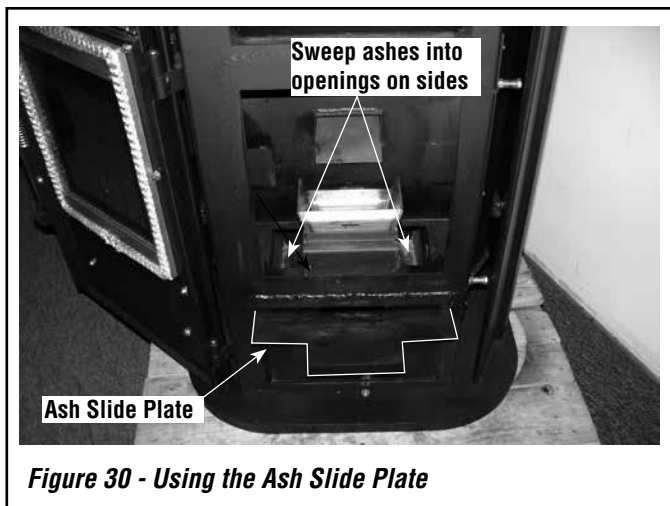


Figure 30 - Using the Ash Slide Plate

Ash Pan

(Recommended Frequency of 2 Days - 2 Weeks*)

The ash pan will have to be emptied periodically, depending on amount of fuel consumed. The ash pan is located in the pedestal. See **Figure 31**.

CAUTION: Disposal of Ashes - Ashes should be placed in a steel container with a tight fitting lid and moved outdoors immediately. The closed container should be placed on a non-combustible floor or the ground - well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled.

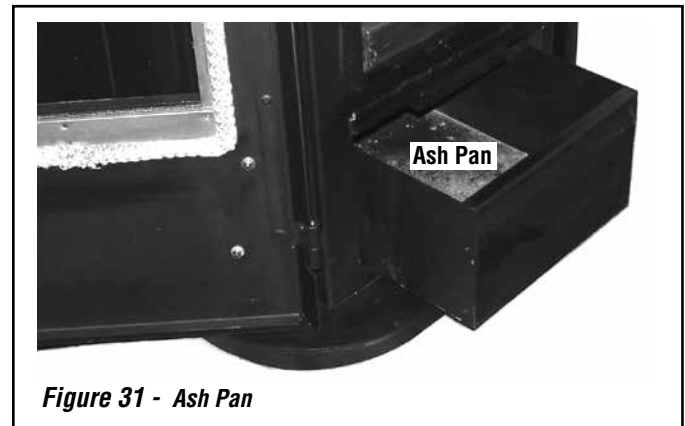


Figure 31 - Ash Pan

Creosote Removal

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining.

When ignited this creosote makes an extremely hot fire. The chimney connector and chimney should be inspected at least once every two months during the heating season to determine if a creosote buildup has occurred.

If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

Exhaust Passages and Vent Pipe

(Recommended Frequency of Yearly*)

Inspect frequently and clean when necessary. Fly-Ash will accumulate at all bends in the exhaust system.

NOTE: Large amounts of fly-ash build-up will create a lack of combustion air. Removing the clean-out tee cap on vertical installations will allow an inspection of the ash build-up in the clean-out tee and will help you to decide how frequently more extensive cleaning must be performed.

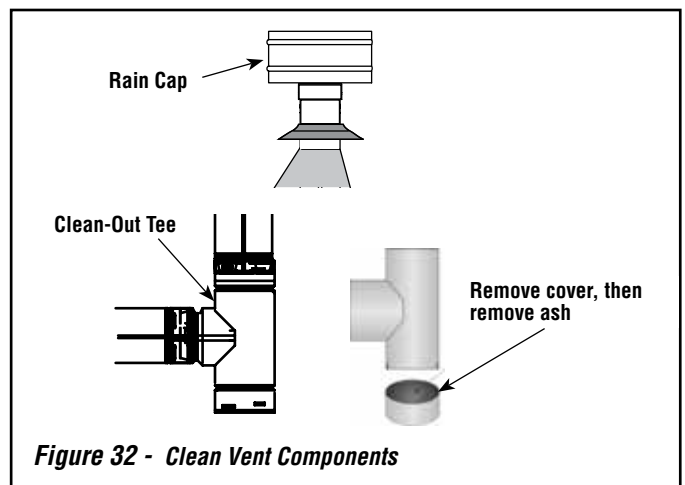


Figure 32 - Clean Vent Components

Door Rope Gasket

The condition of the rope gasket around the door and windows should be checked periodically and replaced or repaired if necessary. The door gasket does not need to be "tight" in all areas, since a small amount of leakage is not hazardous or detrimental to the performance of your stove.

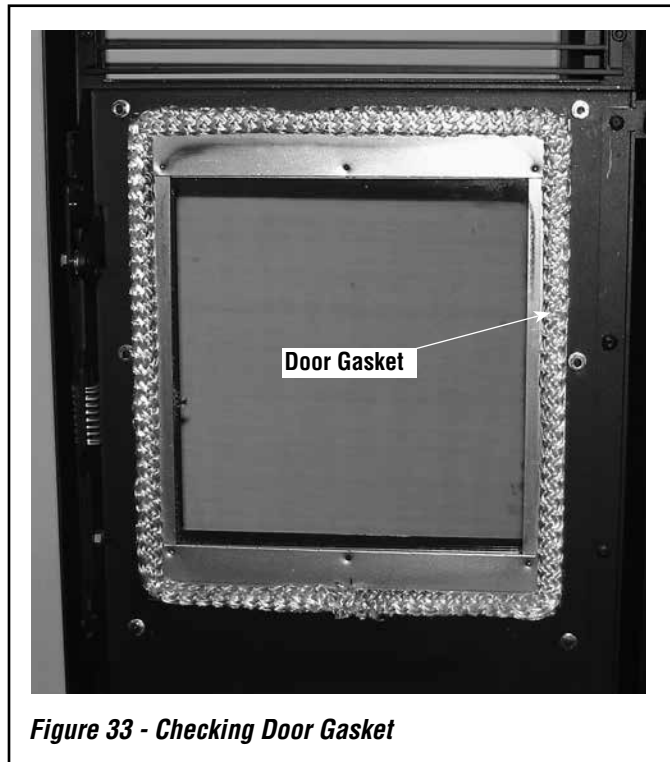


Figure 33 - Checking Door Gasket

Opening Side Panels

The hinged side panels are held closed with magnets. To open, grab the upper portion of the side panel (at front of stove) and pull each panel outward (see **Figure 34**). The side panels will hinge open from the back. **After maintenance is complete, close the side panels.**

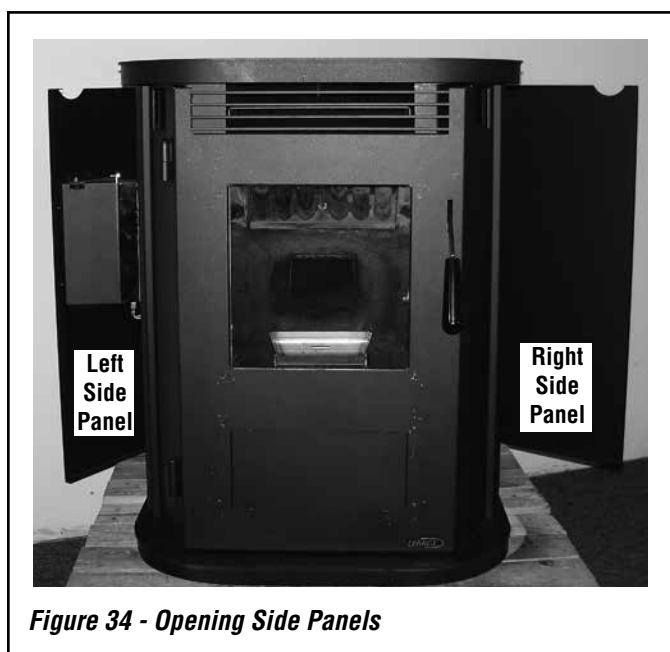


Figure 34 - Opening Side Panels

Motor Lubrication

The blowers are permanently lubricated by the manufacturer. Do not apply oil to any part of the blower, doing so may cause damage.

Blower Cleaning

(Recommended Frequency of Yearly*)

Clean the air holes on the motors of both the exhaust and room air blowers annually. Remove the exhaust blower from the exhaust duct and clean out the internal fan blades as part of your fall start-up.

Rear Stove Compartment

The rear stove compartment should be cleaned periodically (a minimum of once a year). **DISCONNECT ELECTRICAL CORD PRIOR TO CLEANING STOVE.** Any household dust, pet hair or sawdust should be vacuumed or wiped out of the rear compartment of the stove, room air blower, and combustion blower (paying special attention to vacuuming out the intakes of both blowers). The electrical components should be wiped clean.

Cleaning Glass

DO NOT CLEAN THE GLASS WHEN THE STOVE IS HOT.

CAUTION: Do not open the front door when the stove is hot. Clean the glass using a soft cloth or paper towel and a household glass cleaner or gas stove window cleaner. A commercial glass cleaner designed for stoves is recommended. Do not use abrasive cleaners. A damp cloth with a small amount of ash from the firebox can also be used to clean the glass.

Servicing Glass

CAUTION: BE CAREFUL NOT TO ABUSE THE DOOR ASSEMBLY BY STRIKING OR SLAMMING IT. IF THE DOOR ASSEMBLY OR GLASS IS BROKEN OR DAMAGED, THEY MUST BE REPLACED BEFORE HEATER CAN BE SAFELY OPERATED. USE ONLY COMPONENTS PROVIDED BY THE MANUFACTURER AS REPLACEMENT PARTS.

Small Area Paint Touch-up

The stove body is painted with a quality high-temperature stove paint. Use only model TSPK-B Stove Paint, Catalog # H8159. Do not touch-up your stove with any other paint.

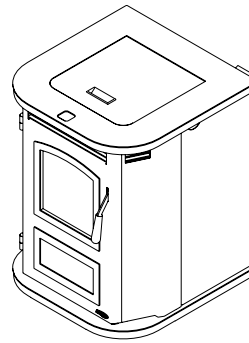
Using one small piece of 320 grit sand paper and lightly sand the blemish so that the edges are "feathered" or smooth to the touch between the painted and bare surfaces. Do not let the sand paper gum up with paint, as this will cause scratches on the metal surface. If there are any scratches, use 600 grit sandpaper instead. Mask off surfaces you do not want painted. Paint lightly over the bare surface first as this will act as an undercoat. Then paint over a larger area in smooth even strokes to blend.

***Burning fuel with a high ash content or an improperly adjusted damper may require more frequent cleaning and stove maintenance.**

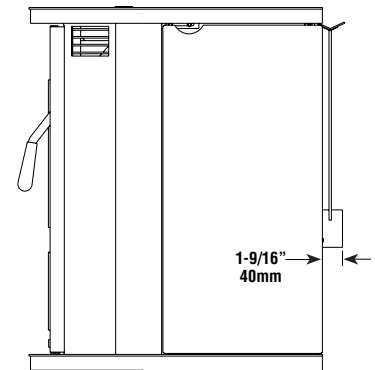
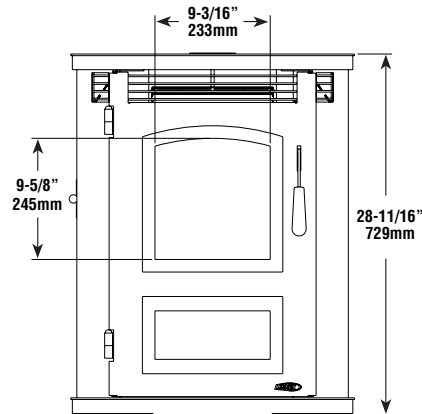
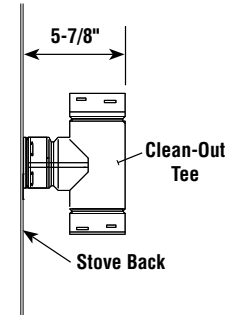
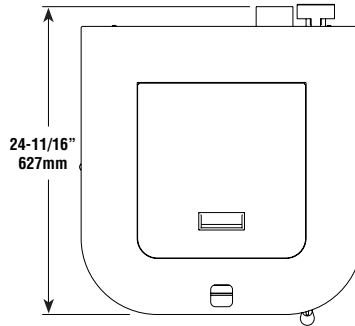
SPECIFICATIONS - Montage™ 32FS

Product Reference Information

Cat. No.	Model	Ship. Weight	Ship. Volume
H6839	Montage 32FS	285 lb.	22.06 cu. ft.



Flue Size	3" (76 mm) Rear
Floor Protection Requirements	Front and Sides: 6" (152 mm) Back: Up to 6" (152 mm) ❶
Hopper Capacity	55 Lbs. ❷
Burn time	15 - 37 hours ❷
Fuse, Control Board Fuse, Igniter	5 Amp, 250 volt, 3AG ❸ 6 Amp, 125 volt ❸
Heat Input (BTU's per hour)	13,000 - 32,000 BTU/hr ❷
Emissions	< 4.03 gr/hr EPA Certified
Efficiency	82%
Convection (room air) Blower	150 CFM; 1.5 Amps, 2175 rpm
Combustion Blower	95 CFM; 1.0 Amps, 3000 rpm
Auger Motor	1.25 RPM; .48 Amps
Standard Features	Fastfire™ Self Igniter Wall Thermostat (wire included)



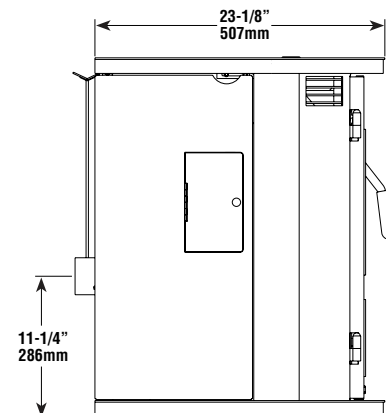
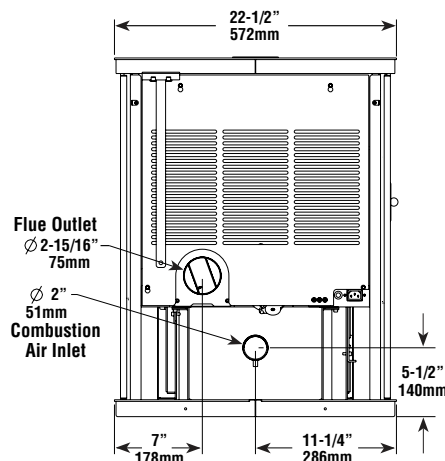
NOTES:

- Dimensions shown are approximations only (+/- 1/4")
- Approved for Manufactured Home Installations.
- Optional Kits Available - Decorative trim kits, log set, window screen and 3" and 4" Quick Disconnect kits.
- The burn grate is designed with advanced UltraGrate™ technology.

❶ In Canada floor protection is required directly underneath and 2" from the sides of the flue or chimney adaptor. This is recommended in the US.

❷ Burn times, hopper capacity and BTU input may vary depending on the size and type of fuel used.

❸ Fuses are rated as fast acting.



COMPONENT DEFINITIONS

- **Air Wash**

A small slot in the door that allows room air to be pulled into the firebox and pours over the inside surface of the door glass to inhibit the build up of soot.

- **Auger (A)**

A motor powered screw device that transfers the fuel from the hopper to the feed chute to deliver pellets to the UltraGrate™.

- **Auger Motor (B)**

It drives the auger. Motor specifications are: 0.5 Amp, 1.25 RPM (revolutions per minute).

- **Blower, Convection (Room Air) (C)**

The blower function is to transfer the heat from the appliance to heat the room air.

- **Blower, Combustion (Exhaust) (D)**

It has a radial impeller to deliver more air to the UltraGrate™. It pulls air into the UltraGrate by creating a negative pressure. This is done by extracting the exhaust gases out of the firebox and pushing the exhaust downstream to the flue exit.

- **Thermal Switches, High Limit**

There are two of these high-limit thermal switches on this model. If a temperature reaches the high limit temperature, the reset switch will “trip” and stop the flow of electricity to the auger motor. The thermal switches will not reset until they have cooled below low reset temperature).

- **Auto Reset Thermal Snap Switch for Room Air Blower (L250-30F, N/C*) (E)**– This switch will trip at 250° F and will automatically reset when it reaches a temperature of 220° F. This switch is located on the room air blower jacket and is designed to detect an overfire condition.

- **Auto Reset Thermal Snap Switch for Combustion Air Inlet (L250-30F, N/C*) (F)** This switch will trip at 250° F and will automatically reset when it reaches a temperature of 220° F. This switch is designed to detect reversed flow or excessive heat in the ashpan area. -This switch is located on the firebox base behind the convection jacket, directly above the ashpan. This switch is most easily accessed by removing the ashpan

- **Thermal Switch, Low Limit (Ceramic, F140-20F, N/O*) (G)**- This “proof of fire” switch will close at 140° F and will not open until it reaches a temperature of 120° F. This switch is located on the combustion blower (behind the right side panel). It is designed to shut down the stove (auger motor and both blowers) if it does not detect the heat of a fire at the end of the initial startup period.

- **Hopper Lid Switch (H)**

It is located on the left hinge area inside the hopper. It detects whether the hopper lid is open and will turn off the auger motor if the hopper lid is not properly closed. When opening the hopper when refueling, do not allow the hopper lid to remain open too long or the fire may extinguish. **NEVER DISCONNECT OR BYPASS THIS SWITCH FOR ANY REASON.**

- **Hopper (I)**

The hopper is where the pellets are stored.

- **Control Board (Heat Output Button) (J)**

It controls power to the feed system - auger motor and combustion blower. Use the heat output button to adjust to any of the five feed rate settings (which controls the burn rate).

- **Pressure Switch (K)**

A safety device used to shut off the feed system (auger motor) if there is too much back pressure in venting system. Some possible causes are as follows:

- The venting system is obstructed.
- High altitude or other misc. environmental conditions affecting exhaust flow.
- Improper venting system.

The Pressure Switch is located inside the right access door right next to the combustion blower.

- **UltraGrate (Burn Grate) (L)**

This is where combustion occurs and may be referred to as the “Burn Grate”.

* **N/C = Normally Closed**

N/O = Normally Open

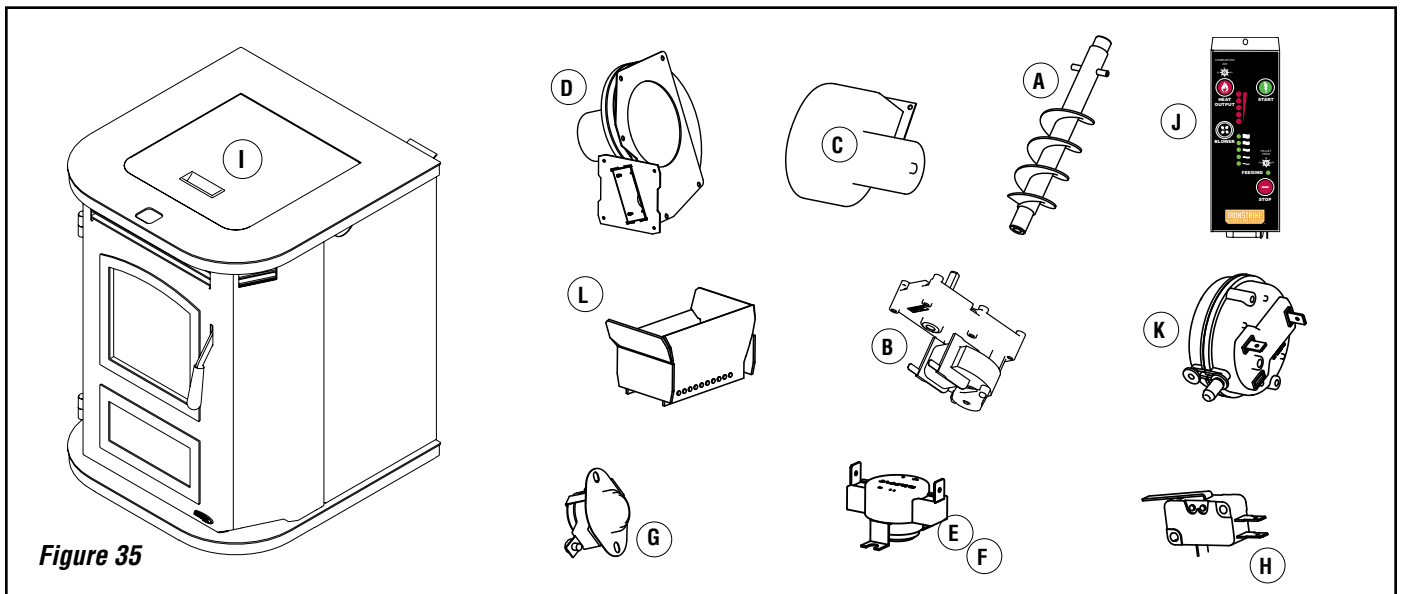


Figure 35

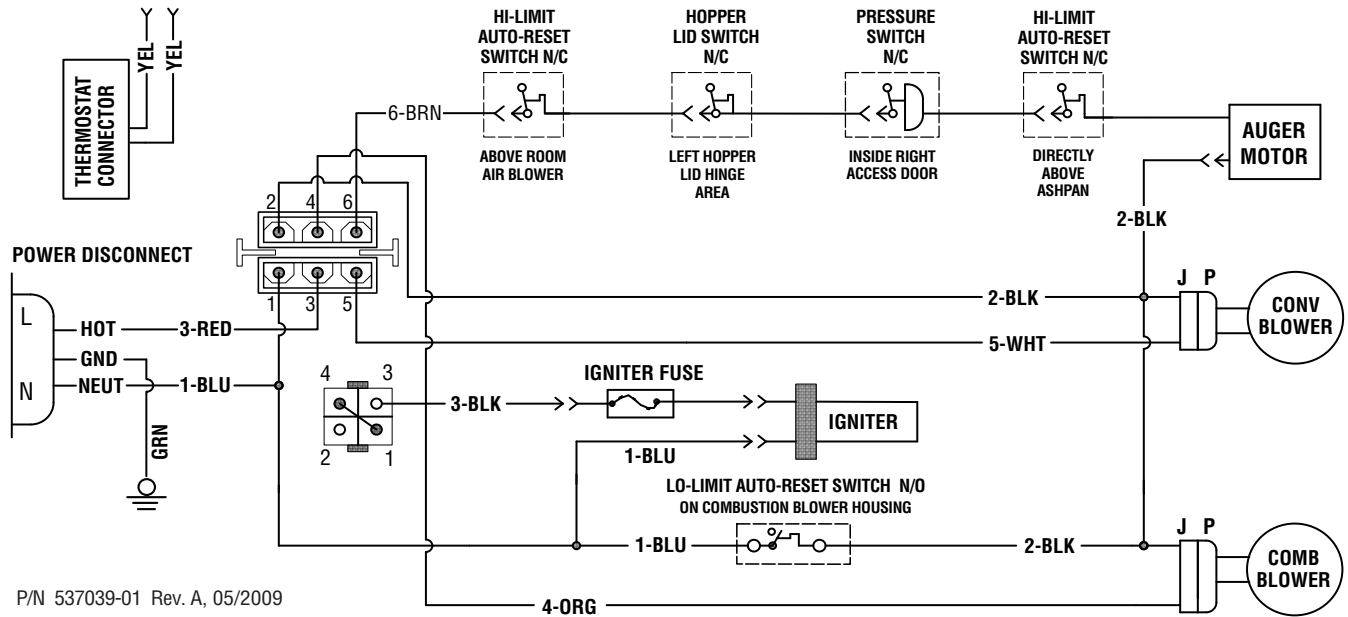
Montage™ 32FS Wire Diagram

NOTE: SWITCH CONDITIONS
GIVEN AT ROOM TEMPERATURE,
STOVE OFF

J = JACK
P = PLUG

N/C = NORMALLY CLOSED
N/O = NORMALLY OPEN

← = FEMALE DISCONNECT
→ = MALE DISCONNECT
○ = STUD CONNECTION



P/N 537039-01 Rev. A, 05/2009

Figure 36 - WIRING DIAGRAM 120 V AC

TROUBLESHOOTING

QUALIFIED TECHNICIANS ONLY

Unplug Appliance Before Performing Any Troubleshooting or Maintenance

PROBLEM	CAUSE(S)	SOLUTIONS
1. Fire burns with a lazy orange flame. Pellets build up in the and there is excessive glass soot that is difficult to remove (Ash and soot are a product of combustion with any wood products, so some build-up on the glass is normal).	<p>A)</p> <ul style="list-style-type: none"> • There is insufficient combustion air. • Fuel feed rate is too high. 	<p>A₁) Lack of maintenance (clean UltraGrate™, clean-out ports, exhaust flow passages, venting system, combustion blower intake, etc.</p> <ul style="list-style-type: none"> • Remove any clinkers or ash from the bottom of the UltraGrate that might be obstructing the primary air holes. • Check that the heat exchange tubes are not coated with ash. • Clean internal exhaust ducts. • Check gasket seal around the door. Use a thin strip of paper, 1 in. wide. Open the door and close it on the paper strip. A slight friction should be felt when the paper strip is pulled. Repeat this process at various locations around the door gasket. Replace the door gasket if necessary. • Check for blockage in the air inlet tube or exhaust pipe. Clean as Necessary. • Inspect glass seal to ensure that it is in good condition and is properly seated to the door. <p>A₂) Fuel trim may need to be adjusted down for faster feeding fuels.</p> <p>A₃) Change to a better grade of fuel if necessary (See <i>Fuel Specifications on Page 22</i>). Check that the damper has been opened enough for the amount of fuel fed.</p> <p>A₄) Have your IHP dealer check your combustion blower for proper operation.</p> <p>A₅) The venting system design is too restrictive (call your IHP Technician to evaluate how the installation can be corrected to satisfy the exhaust flow requirements of the appliance).</p> <p>A₆) Adjust the damper to increase combustion air flow.</p>
2. Fire goes out or stove shuts down automatically	<p>A) Stove has run out of fuel.</p> <p>B) Pellets are not feeding.</p> <p>C) The high limit temperature switch has tripped.</p> <p>D) There is too much combustion air for the amount of fuel.</p> <p>E) The proof of fire switch is opening, disconnecting power to the auger motor.</p>	<p>A) Refill hopper.</p> <p>B) See (Pellets will not feed) this Page.</p> <p>C) Allow the appliance to cool for 1 hour, then re-light. If the stove has been operating at a medium to high burn rate with the room air blower adjusted to low, there may not be enough air flow to dissipate the heat. On higher feed rates, adjust the blower speed to a higher setting. If this problem persists (particularly at lower burn rates) then the high limit thermal switch may need to be replaced by your dealer.</p> <p>D) Adjust the damper to reduce combustion air flow.</p> <p>E) Clean proof of fire switch (see maintenance section). If this does not correct problem, check switch for proper operation. Replace if necessary.</p>
3. Pellets will not feed.	<p>A) The hopper is empty.</p> <p>B) The auger motor or control board may be defective. The pressure switch tap or hose may be blocked.</p> <p>C) Back pressure in venting tripping pressure switch.</p> <p>D) Thermostat is in stand-by mode.</p> <p>E) Thermostat wires disconnected.</p> <p>F) High limit thermal switch may have been tripped.</p> <p>G) Self-aligning bearings in auger motor may be misaligned.</p> <p>H) Fines or wet fuel in auger.</p> <p>I) Hopper lid is open.</p> <p>J) Hopper lid switch is faulty.</p>	<p>A) Refill hopper.</p> <p>B) Check to be sure that there is no blockage in the pressure tap or hose. Have your IHP dealer diagnose the problem and clean or replace any necessary parts.</p> <p>C) If new installation check for excessive 90° bends, long horizontal runs or excessive vertical run of 3" pipe. Possibly change to 4" pipe. If older installation check for excessive ash accumulation in pipe or other obstructions. Clean out pipe.</p> <p>D) Check to see if thermostat is set to low or if sun is shining directly on thermostat.</p> <p>E) Reinstall wires.</p> <p>F) Allow stove to cool. Increase room air blower setting.</p> <p>G) Gently tap the auger motor.</p> <p>H) Clean out fines or wet fuel in auger and hopper. Use PFI certified fuel only and store bags in a dry location.</p> <p>I) Close Hopper Lid.</p> <p>J) Replace hopper lid switch if determined to be faulty.</p>

TROUBLESHOOTING

QUALIFIED TECHNICIANS ONLY

Unplug Appliance Before Performing Any Troubleshooting or Maintenance

PROBLEM	CAUSE(S)	SOLUTIONS
4. Blowers will not operate when the ON/OFF start button is depressed.	<p>A) There is no power to the stove.</p> <p>B) There is no power to the control board.</p> <p>C) The low limit thermal switch has failed in the closed position.</p>	<p>A) Check that the stove is plugged in to the wall outlet.</p> <p>B₁) Check if the house circuit breaker has tripped.</p> <p>B₂) Check the wire connections on the high limit thermal switch and control board.</p> <p>C) Have your IHP dealer replace the low limit thermal switch.</p>
5. There is soot or fly-ash in the house.	<p>A) The window is being cleaned when the stove is operating.</p> <p>B) There is leakage at the joints between the combustion blower, connection or exhaust pipe connections. This will be evidenced by dust on the impeller of the room air blower, and in the heat exchanger area.</p> <p>C) The vacuum cleaner is leaking.</p>	<p>A) Turn down the room air blower or turn off stove before cleaning to prevent dispersion of ash and soot into the room.</p> <p>B) Seal up any leaks in the exhaust system with room temperature vulcanizing high temperature silicone sealer (RTV).</p> <p>C) DO NOT use a standard household vacuum or "shop vac" as the filters will leak the fine particles of ash into the home. Clean the stove with an approved ash vacuum ONLY.</p>
6. Stove will not light.	<p>A) The igniter element may have failed.</p> <p>B) There is not enough pellets in the UltraGrate.</p>	<p>A) Check igniter element fuse in rear stove compartment. Call your IHP dealer. See <i>Lighting Procedure Without Igniter, Page 20</i>.</p> <p>B) Prime the feed system (see <i>Pre-lighting Instructions, Page 20</i>).</p>
7. Fault	<p>A) The low limit thermal switch is not operating correctly (stuck in open position)</p> <p>B) Stove has run out of fuel.</p> <p>C) A disk has tripped / pressure switch.</p>	<p>A) Have your IHP dealer replace the low limit thermal switch.</p> <p>B) Refill hopper.</p> <p>C) Blower intake, exhaust passages and/or venting system needs cleaning (follow routine and annual maintenance procedures).</p>
8. Blowers run continuously	A) Wire harness and/or control board has been damaged – unplug stove and contact dealer.	A) Contact your local IHP dealer.
9. Blinking red lights on control board LED's.	A) Thermostat circuit in not closed	<p>A₁) If a wall thermostat is not installed, a jumper is required between the 2 thermostat terminals (see <i>Figures 7 and 8 on Page 10</i>). If the jumper is missing contact your IHP dealer.</p> <p>A₂) The wall thermostat (if used) is defective or there is a break in the connections or thermostat wire.</p>

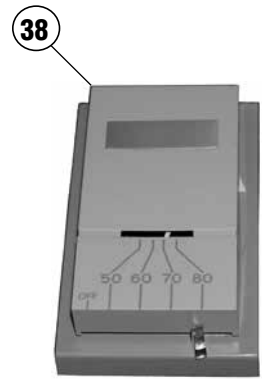
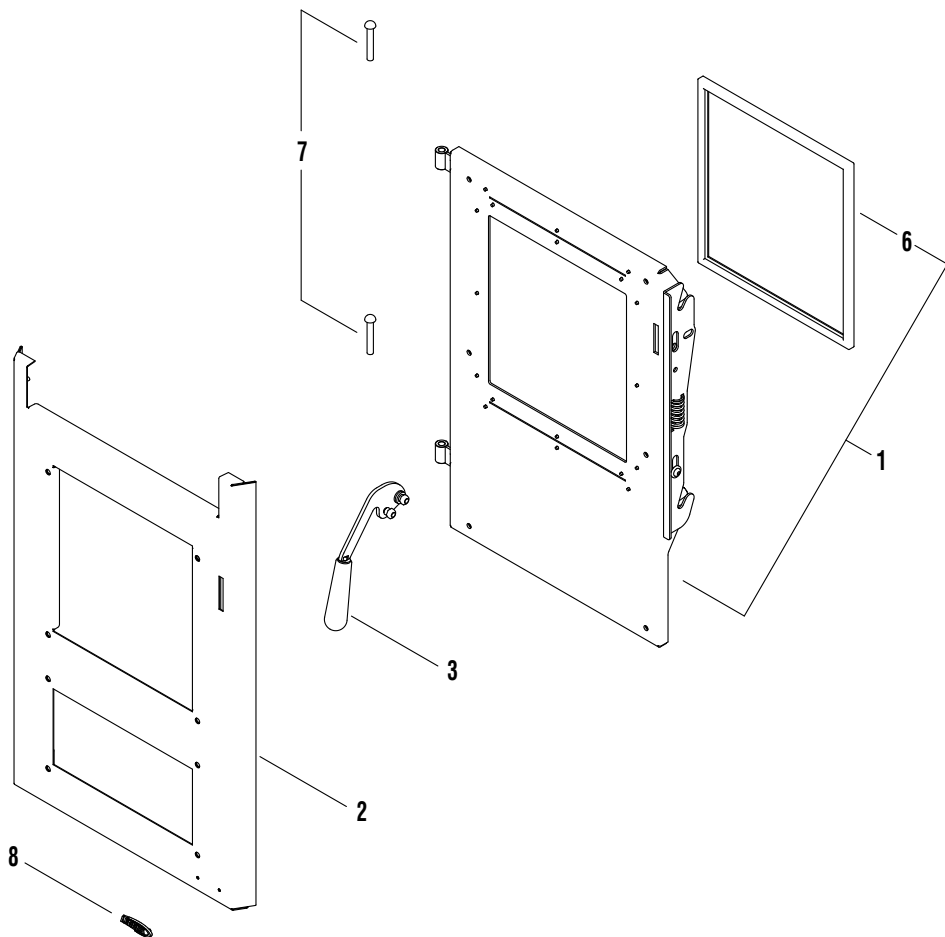
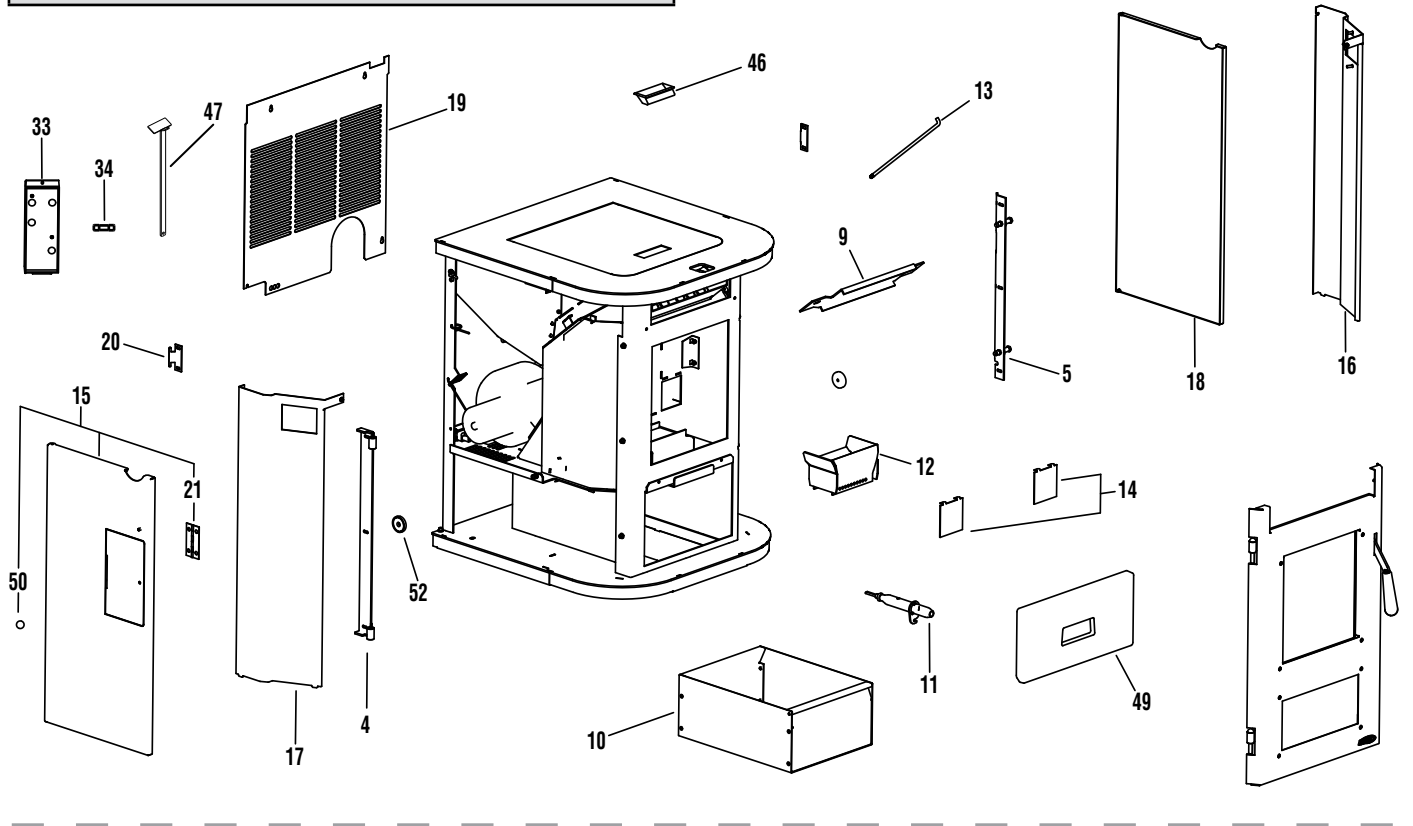
REPLACEMENT PARTS LIST - MONTAGE™ 32FS

Contact an IHP dealer to obtain any of these parts. Never use substitute materials. Use of non-approved parts can result in poor performance and safety hazards.

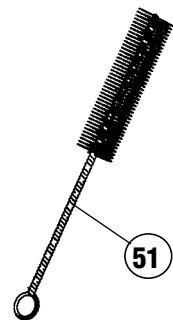
DOOR PARTS		
Item #	Cat. No.	Description
1	H7045	Door Assembly
2	H7046	Face Assembly
3	H7047	Door Handle Assembly
4	H7048	Hinge Plate Assembly
5	H7049	Latch Plate Assembly
6	H7404	Door Rope Kit, 4 ft.
7	12050506	Door Hinge Pin (2 per pkg.)
8	H7050	Logo Pewter Badge (nameplate)
FIREBOX PARTS		
9	H7051	Heat Exchanger Baffle Assembly
10	H7052	Ash Pan Assembly
11	12150213	Igniter Assembly (Instr. Form # 506033-07)
12	12158905	UltraGrate™
13	17150009	Scraper Rod
49	H7054	Refractory Panel
14	H7055	Ash Clean-out Covers (Pair)
PANELS		
15	H7056	Left Side Door Assembly
16	H7057	Right Corner Panel Assembly
17	H7058	Left Corner Panel Assembly
18	H7059	Right Side Door
19	H7060	Stove Back Cover
20	H7061	Side Door Hinge Bracket
21	H7062	Hinge, 3" (1 per pkg.)
ELECTRICAL		
22	H7309	Convection Blower Assembly
23	H7310	Combustion Blower Assembly
24	H7312	Hopper Lid Switch Bracket (1 per pkg.)
36	H7063	Hopper Lid Switch (1 per pkg.)
26	H7065	High Limit Auto Reset Reverse Flow Snap Switch Assembly, L250-30F N/C, (1 per pkg.) (on firebox base behind convection jacket & above the ash pan)
28	12147705	High Limit Auto Snap Switch, L250-30F N/C, (3 per pkg.) (on convection jacket)
37	H5887	Low Limit Auto Proof of Fire Snap Switch Assembly, F140-30F N/O, (1 per pkg.) 57601

Item #	Cat. No.	Description
27	12155907	Igniter Inline Holder with Fuse
29	16050001	Pressure Switch
30	H5898	Pressure Switch Hose
31	H7066	Wiring Harness
32	H3079	Power Cord
33	H7881	Control Board
50	12051409	Control Panel Knob
34	12055908	Fuse, Control Board and Igniter, (12 per pkg.)
35	H5886	Auger Motor
38	16050205	Wall Thermostat
***	H3457	Wire, Thermostat
57	H7386	AC Receptacle (for power cord)
MISC.		
40	H7068	Flue Outlet Tube Assembly
52	H5916	Round Door Magnet
41	11756300	Auger Shaft Assembly
42	H7311	Auger End Plate
43	12041300	Auger Collar Assembly
44	12051001	Auger Motor Bumper (5 per pkg.)
45	12051100	Upper Shaft Bushing, Brass (12 per pkg.)
46	H4958	Hopper Lid Handle
47	12055500	Scraper Tool
GASKETS		
53	61050016	Flue Outlet Gasket (5 per pkg.)
54	61050005	Combustion Blower Gasket (5 per pkg.)
55	61057203	Convection Blower Gasket (5 per pkg.)
56	H7074	Auger Tube End Cap Gasket (5 per pkg.)
51	12050004	Cleaning Brush

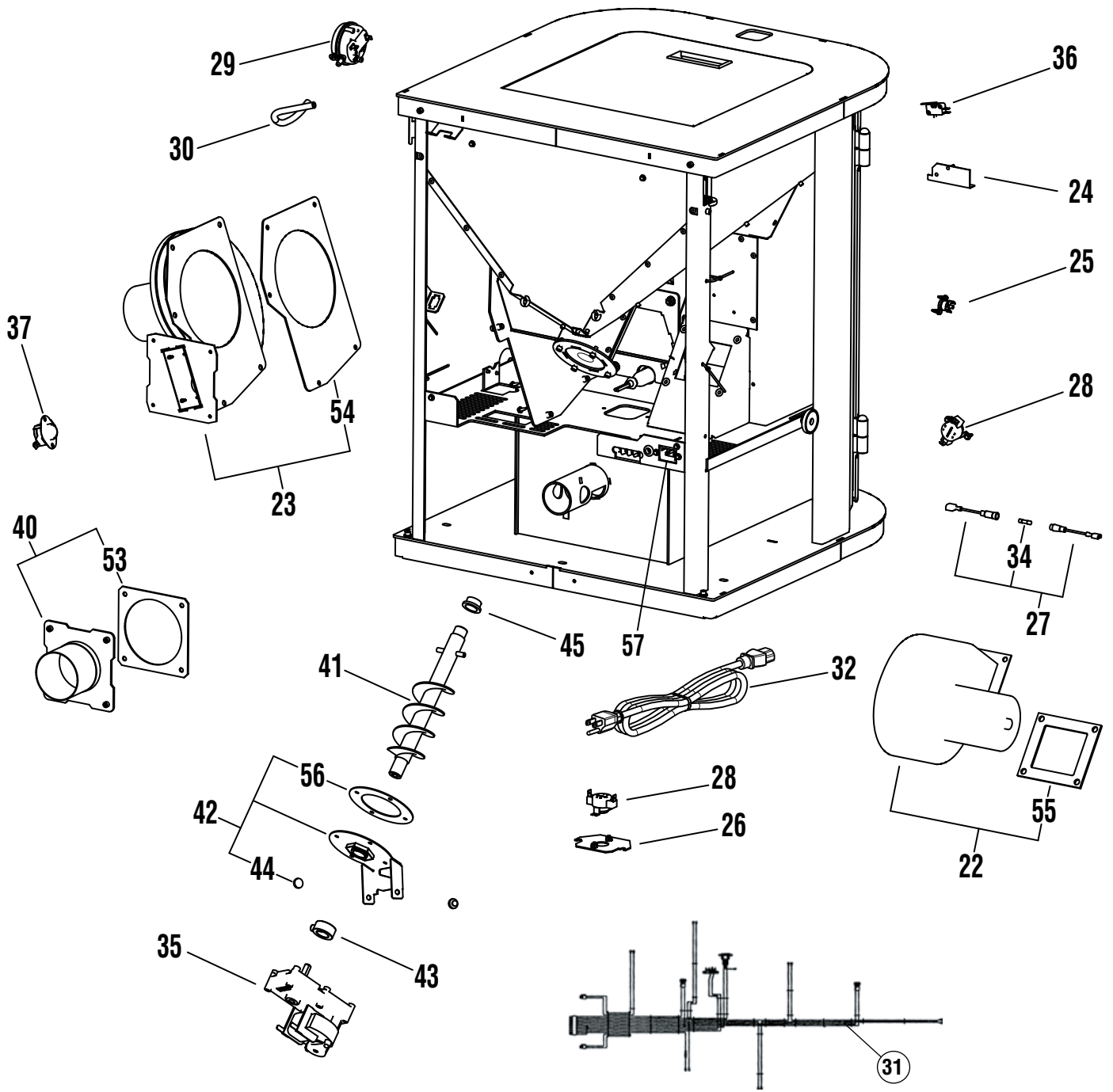
REPLACEMENT PARTS - MONTAGE™ 32FS



Includes 20 feet of thermostat wire



REPLACEMENT PARTS - MONTAGE™ 32FS

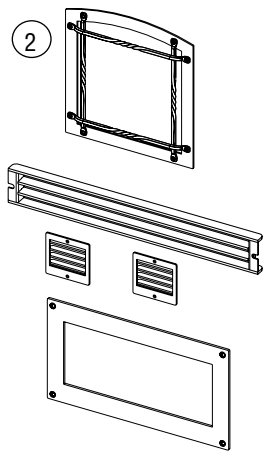


OPTIONAL ACCESSORIES - MONTAGE™ 32FS

Item #	Cat. No.	Model	Description
Optional Accessories			
2	H6841	MONT-32FS-ART	Artisan Accessory Trim Kit, Matte Black (775201M)
3	H6842	MONT-32FS-ARCH	Arch Accessory Trim Kit, Matte Black (775201M)
4	H6843	MONT-32FS-GOTH	Gothic Cast Iron Accessory Kit, Black Paint (775201M)
5	H0244	DLS-PM	Log Set (775077M)
6	H8159	TSPK-B	Touch-up Paint, Black
7	12050093	QDPC-3	Quick Disconnect Pipe Connector, 3" (ref. Form # 506033-02)
7	14M81	QDPC-4	Quick Disconnect Pipe Connector, 4" * (ref. Form # 506033-02)
8	H8974	RC-S-STAT-AC	Remote, T-Stat , Alternating Current, RCVR
9	H8865	RC-S-TOUCH	Remote, Touch Screen, Thermostat, On/Off
10	H8861	RC-S-STAT	Remote, LCD Stat, Thermostat, On/Off
11	H8860	RC-S-1	Remote, Two Button, Timer, On/Off Or Timer Mode
12	F2236	RCKit4001	Remote, Simple On/Off

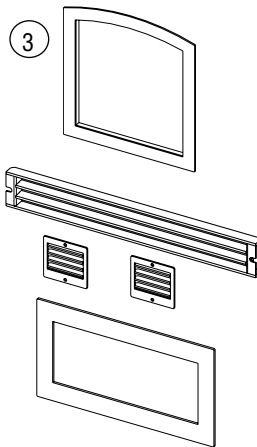
NOTE: The form numbers referenced are the part numbers of the instruction sheets included in kits.

* Converts from standard 3" outlet to 4"



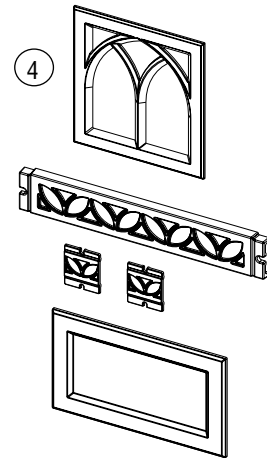
Form # 775201M

Artisan Accessory Kit, M32FS, Matte Black



Form # 775201M

Arch Accessory Kit, M32FS, Matte Black

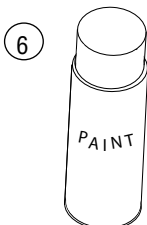
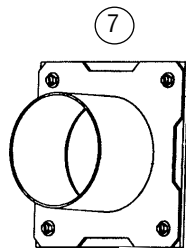


Form # 775201M

Gothic Accessory Kit, M32FS, Black Paint



Form # 775077M



NOTE: DIAGRAMS & ILLUSTRATIONS ARE NOT TO SCALE

NOTES

Innovative Hearth Products IronStrike® Pellet Stove and Insert Limited Lifetime Warranty

THE WARRANTY

Innovative Hearth Products ("IHP") Limited Lifetime Warranty warrants your IronStrike® brand pellet fueled stove or insert ("Product") to be free from defects in materials and workmanship at the time of manufacture. The Product body, heat exchange tubes and ceramic glass carry the Limited Lifetime Warranty. Ceramic glass carries the Limited Lifetime Warranty against thermal breakage only. After installation, if covered components manufactured by IHP are found to be defective in materials or workmanship during the Limited Lifetime Warranty period and while the Product remains at the site of the original installation, IHP will, at its option, repair or replace the covered components. If repair or replacement is not commercially practical, IHP will, at its option, refund the purchase price or the wholesale price of the IHP Product, whichever is applicable.

IHP will also pay IHP prevailing labor rates, as determined in its sole discretion, incurred in repairing or replacing such components for up to five years. THERE ARE EXCLUSIONS AND LIMITATIONS to this Limited Lifetime Warranty as described herein.

COVERAGE COMMENCEMENT DATE

Warranty coverage begins on the date of purchase. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the Product by an independent IHP dealer/distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from IHP, regardless of the installation or occupancy date.

EXCLUSIONS AND LIMITATIONS

This Limited Lifetime Warranty applies only if the Product is installed in the United States or Canada and only if operated and maintained in accordance with the printed instructions accompanying the Product and in compliance with all applicable installation and building codes and good trade practices.

This warranty is non-transferable and extends to the original owner only. The Product must be purchased through a listed supplier of IHP and proof of purchase must be provided. The Product body and heat exchange tubes carry the Limited Lifetime Warranty from the date of installation. Vent components, trim components and paint are excluded from this Limited Lifetime Warranty. The following do not carry the Limited Lifetime Warranty but are warranted as follows:

- Accessories** – Repair or replacement for 90 days from the date of installation
- Cast iron burn pot** - Replacement for five years from the date of installation
- Electrical components** – Repair or replacement for two years from the date of installation
- Firebrick/refractory** – Replacement for 90 days from the date of installation
- Gaskets** – Repair or replacement for one year from the date of installation
- Gold & nickel plating** - Replacement for two years from date of installation. Excludes tarnishing
- Steel burn grate** - Replacement for two years from the date of installation
- Logs** – Replacement for 90 days from the date of installation
- Labor** – Prevailing IHP labor rates apply for the warranty period of the component

Parts not otherwise listed carry a 90 day warranty from the date of installation.

Whenever practicable, IHP will provide replacement parts, if available, for a period of 10 years from the last date of manufacture of the Product.

IHP will not be responsible for: (a) damages caused by normal wear and tear, accident, riot, fire, flood or acts of God; (b) damages caused by abuse, negligence, misuse, or unauthorized alteration or repair of the Product affecting its stability or performance (The Product must be subjected to normal use. The use of fuels other than those outlined in the operation manual provided with the Product will void all warranties and liabilities.); (c) damages caused by failing to provide proper maintenance and service in accordance with the instructions provided with the Product; (d) damages, repairs or inefficiency resulting from faulty installation or application of the Product.

This Limited Lifetime Warranty covers only parts and labor as provided herein. In no case shall IHP be responsible for materials, components or construction which are not manufactured or supplied by IHP or for the labor necessary to install, repair or remove such materials, components or construction. Additional utility bills incurred due to any malfunction or defect in equipment are not covered by this warranty. All replacement or repair components will be shipped F.O.B. from the nearest stocking IHP factory.

LIMITATION ON LIABILITY

It is expressly agreed and understood that IHP's sole obligation and the purchaser's exclusive remedy under this warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified herein.

In no event shall IHP be liable for any incidental or consequential damages caused by defects in the Product, whether such damage occurs or is discovered before or after repair or replacement, and whether such damage is caused by IHP's negligence. IHP has not made and does not make any representation or warranty of fitness for a particular use or purpose, and there is no implied condition of fitness for a particular use or purpose.

IHP makes no expressed warranties except as stated in this Limited Lifetime Warranty. The duration of any implied warranty is limited to the duration of this expressed warranty.

No one is authorized to change this Limited Lifetime Warranty or to create for IHP any other obligation or liability in connection with the Product. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. The provisions of this Limited Lifetime Warranty are in addition to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

INVESTIGATION OF CLAIMS AGAINST WARRANTY

IHP reserves the right to investigate any and all claims against this Limited Lifetime Warranty and to decide, in its sole discretion, upon the method of settlement.

To receive the benefits and advantages described in this Limited Lifetime Warranty, the appliance must be installed and repaired by a licensed contractor approved by IHP.

Contact IHP at the address provided herein to obtain a listing of approved dealers/distributors. **IHP shall in no event be responsible for any warranty work done by a contractor that is not approved without first obtaining IHP's prior written consent.**

HOW TO REGISTER A CLAIM AGAINST WARRANTY

In order for any claim under this warranty to be valid, you must contact the IHP dealer/distributor from which you purchased the product. If you cannot locate the dealer/distributor, then you must notify IHP in writing. IHP must be notified of the claimed defect in writing within 90 days of the date of failure. Notices should be directed to the IHP Warranty Department at 1769 East Lawrence Street; Russellville, AL 35654 or visit our website at WWW.IRONSTRIKE.US.COM.

WARRANTY

Your pellet stove is covered by a limited warranty (provided with appliance). Please read the warranty to be familiar with its coverage.

Retain this manual. File it with your other documents for future reference.

PRODUCT REFERENCE INFORMATION

We recommend that you record the following important information about your fireplace. Please contact your IHP dealer for any questions or concerns.

REPLACEMENT PARTS

See **Page 32 through 34** for a complete replacement parts list. Use only parts supplied from the manufacturer.

Normally, all parts should be ordered through your IHP distributor or dealer. Parts will be shipped at prevailing prices at time of order.

When ordering repair parts, always give the following information:

1. The model number of the appliance.
2. The serial number of the appliance.
3. The part number.
4. The description of the part.
5. The quantity required.
6. The installation date of the appliance.

If you encounter any problems or have any questions concerning the installation or application of this system, please contact your dealer.

IHP
1769 East Lawrence Street
Russellville, AL 35654
visit us at www.IronStrike.us.com

Model Number _____
Serial Number _____
Date Installed _____
Dealer's Name _____
Dealer's Phone Number _____

 NATIONAL FIREPLACE INSTITUTE CERTIFIED www.nficertified.org	We recommend that our pellet hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Pellet Specialists or who are certified in Canada by Wood Energy Technical Training (WETT).
	 Wood Energy Technical Training www.wettinc.ca

Innovative Hearth Products (IHP) reserves the right to make changes at any time, without notice, in design, materials, specifications, and prices, and also to discontinue colors, styles, and products. Consult your local distributor for fireplace code information.

