



FREEDOM STOVES

The INDEPENDENCE

Owners Manual • Model PS21



⚠ CAUTION

CHECK BUILDING CODES PRIOR TO INSTALLATION.

- INSTALLATION MUST COMPLY WITH LOCAL, REGIONAL, STATE AND NATIONAL CODES AND REGULATIONS.
- CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.

INSTALLER: Leave this manual with party responsible for use and operation.

OWNER: Retain this manual for future reference.

⚠ WARNING ⚠

PLEASE READ THIS ENTIRE MANUAL BEFORE INSTALLATION AND USE OF THIS PELLET FUEL-BURNING ROOM HEATER. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN PROPERTY DAMAGE, BODILY INJURY OR EVEN DEATH.



- DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.
- DO NOT OVER FIRE - IF ANY PART STARTS TO GLOW, YOU ARE OVER FIRING. REDUCE FEED RATE. OVER FIRING WILL VOID YOUR WARRANTY.
- COMPLY WITH ALL MINIMUM CLEARANCES TO COMBUSTIBLES AS SPECIFIED. FAILURE TO COMPLY MAY CAUSE FIRE.



HOT SURFACES! GLASS AND OTHER SURFACES ARE HOT DURING OPERATION AND COOL DOWN.

- DO NOT TOUCH GLASS UNTIL IT IS COOLED
- NEVER ALLOW CHILDREN TO TOUCH GLASS
- KEEP CHILDREN AWAY
- CAREFULLY SUPERVISE CHILDREN IN SAME ROOM AS STOVE
- ALERT CHILDREN AND ADULTS TO HAZARDS OF HIGH TEMPERATURES
- HIGH TEMPERATURES MAY IGNITE CLOTHING OR OTHER FLAMMABLE MATERIALS
- KEEP CLOTHING, FURNITURE, DRAPERIES AND OTHER FLAMMABLE MATERIALS AWAY

Congratulations! Welcome to the Freedom Stove Family

NOTE: Clearances may only be reduced by means approved by the regulatory authority having jurisdiction.

A. Sample of Serial Number / Safety Label • LOCATION: Back of appliance

Serial Number → FS-2021022

Model Name → PS21

Test Lab and Report → Intertek 23317

CAUTION: HOT WHILE IN OPERATION DO NOT TOUCH. KEEP CHILDREN AND CLOTHING AWAY. CONTACT MAY CAUSE SKIN BURNS. KEEP FURNISHINGS AND OTHER COMBUSTIBLE MATERIAL FAR AWAY FROM THE APPLIANCE. SEE NAMEPLATE AND INSTRUCTIONS / CHUD PENDANT LE FONCTIONNEMENT NE PAS TOUCHER, GARDER LES ENFANTS ET LES VÊTEMENTS À L'ÉCART. LE CONTACT PEUT CAUSER DES BRÛLURES DE LA PEAU. GARDER LES MEUBLES ET AUTRES MATÉRIEAUX COMBUSTIBLES LOIN DE L'APPAREIL. VOIR LA PLAQUE SIGNALÉTIQUE ET LES INSTRUCTIONS

PELLET FUEL ROOM HEATER, ALSO FOR USE IN MOBILE HOME, CHAUFFAGE AMBIANT À GRANULÉS, AUSSI POUR UTILISATION EN MAISON MOBILE

INSTALLATION REQUIREMENTS: Refer to local codes and the chimney manufacturer's instructions for precautions required for passing a chimney through a combustible wall or ceiling. Place on non-combustible floor protection which extends 6 inches to the front and 6 inches to each side of the fuel opening. See owner's manual for additional clearance information. **Use a 3" or 4" diameter type "L" or "PL" venting system.**

EXIGENCES D'INSTALLATION : Reportez-vous aux codes locaux et aux instructions du fabricant de la cheminée pour les précautions requises pour faire passer une cheminée à travers un mur ou un plancher combustible. Placer sur une protection de sol incombustible qui s'étend sur 15 cm (6 pouces) vers l'avant et 15 cm (6 pouces) de chaque côté de l'ouverture de la trémie. Voir le manuel du propriétaire pour des informations supplémentaires sur le dégagement. **Utilisez un système de ventilation de type "L" ou "PL" de 75 mm (3 pouce) ou 100 mm (4 pouces) de diamètre.**

INSPECT AND CLEAN EXHAUST VENTING SYSTEM FREQUENTLY / INSPECTER ET NETTOYER FRÉQUEMMENT LE SYSTÈME D'ÉVACUATION DES GAZ.

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS / DÉGAGEMENTS MINIMAUX PAR RAPPORT AUX MATÉRIEAUX COMBUSTIBLES

Backwall/Sidewall / Mur arrière/latéral	A	2 inches (50.8 mm)
Corner / Coin	C	2 inches (50.8 mm)
Floor Protection / Protection de sol	D	6 inches (152.4 mm)

OPERATION: Operate this unit only with the fuel hopper lid closed. Failure to do so may result in emission of products of combustion from the hopper under certain conditions. Maintain hopper lid in good condition. Do not overfill the hopper. **ATTENTION – N'utilisez cet appareil qu'avec le couvercle de la trémie de carburant fermé. Le non-respect de cette exigence peut entraîner, dans certaines conditions, l'émission de produits de combustion de la trémie.** Ne remplissez pas le joint de la trémie en bon état. Ne pas remplir la trémie au-dessus du niveau minimum.

U.S. ENVIRONMENTAL PROTECTION AGENCY: Certified to comply with 2020 particulate emission standards using pellet fuel. **This wood heater needs periodic inspection and repair for proper operation. Consult the owner's manual for further information. It is against federal regulations to operate this wood heater in a manner inconsistent with the operating instructions in the owner's manual.** / Certifié conforme aux normes d'émission de particules 2020 en utilisant du combustible à pellets. **Ce poêle à bois nécessite une inspection et une réparation périodiques pour un bon fonctionnement. Consultez le manuel du propriétaire pour plus d'informations. Il est contraire aux réglementations fédérales d'utiliser ce poêle à bois d'une manière incompatible avec les instructions d'utilisation du manuel du propriétaire.**

2021	2022	2023	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
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Manufacturer Date

**DO NOT REMOVE THIS LABEL
NE PAS ENLEVER CETTE ÉTIQUETTE**

No.12 Chuanguan Road, Zhejiang Lijin Hardware Technology Industrial Park Huzhen Town Jinyun County, Lishui City, Zhejiang Province, China (ZHEJIANG)
ZHONGLI TOOLS MANUFACTURE CO.,LTD



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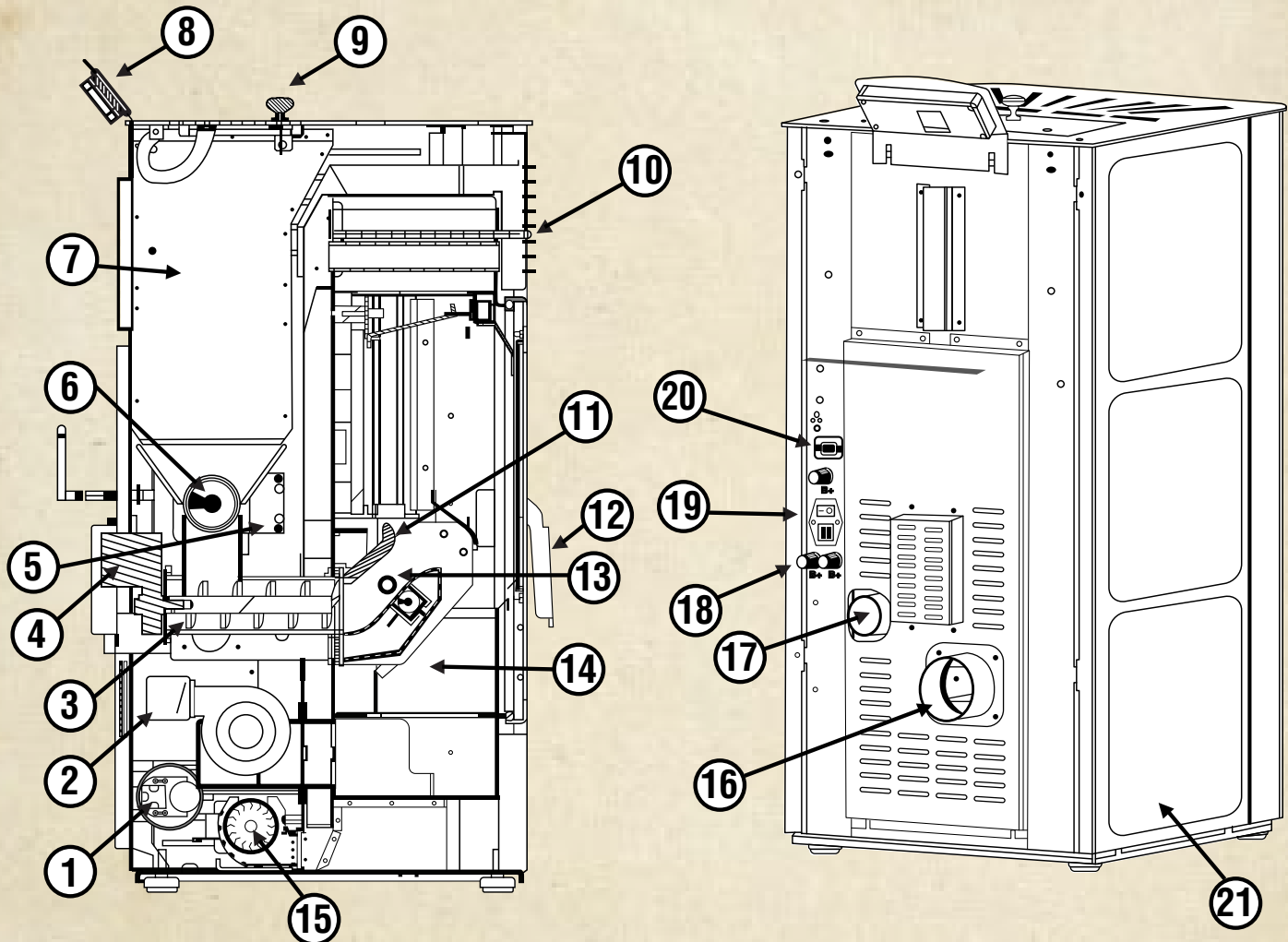
CAUTION! Check building codes prior to installation!

- Installation **MUST** comply with local, regional, state and national codes and regulations.
- Consult local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.

SAVE THESE INSTRUCTIONS. This manual will help you to obtain efficient, dependable service from the stove, and enable you to order repair parts correctly. **KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.**



Stove Diagram



1. Negative Pressure Switch
2. Exhaust Motor
3. Secondary Feeding Auger
4. Secondary Feeding Motor
5. Primary Feeding Motor
6. Primary Feeding Auger
7. Hopper
8. Display Screen
9. Hopper Handle
10. Heat Exchange Scraper Rod
11. Burn Pot

12. Door Handle
13. Igniter
14. Ash Box
15. Distribution Motor
16. Smoke Vent Exhaust
17. Air Intake
18. Backup Battery Power Connection
19. Power Switch with Fuse
20. WIFI Connect
21. Interchangeable Side Panel



Product Specifications

STOVE CERTIFICATION	
Model	PS21
Laboratory	InterTek
Report No.	104753020MID-001
Type	Safety Testing
Standard(s)	ASTM E1509-12 UL 1482-2011 ULC S627-2021

STOVE CERTIFICATION	
Model	PS21
Laboratory	InterTek
Report No.	104753020MID-002
Type	Particulate Emissions
Standard(s)	EPA SFR Part 60-2015 ASTM E2515-17 UL 2779-17 CSA B415.1-2010 (R2020)

BURN RATE (kg/hr) (dry)	HEATING EFFICIENCY (%HHV)**	HEAT OUTPUT (BTU/hr)***
HIGH - 1.93	80.3	27,884
MEDIUM - 0.90	75.5	12,250
LOW - 0.63	75.2	8,526
OVERALL - 0.94	77.9	13,136

* Weighted average LHV efficiency using data collected during EPA emissions test.

** Weighted average HHV efficiency using data collected during EPA emissions test.

*** A range of BTU outputs based on EPA Default Efficiency and the burn rates from the maximum EPA test.

**** Based on the maximum feed rate per hour multiplied by approximately a pound of pellets

DIMENSIONS	
Height	37 inches / 41 inches w/ legs
Width	18 inches / 1457mm
Depth	21 inches / 533 mm
Weight	225 lbs.

HEATING SPECIFICATIONS	
Fuel Burn Rate* (Lowest setting)	1.2 lbs./hr.
Burn Time (Lowest setting)	32.5 hrs. (Approx)
BTU Output***	7,500-28,000
BTU Input****	34,7000
Hopper Capacity	40 lbs.

*Pellet size may affect the actual rate of fuel feed and burn. Fuel feed rates may vary by as much as 20%. Use PFI listed premium fuel for best results.

ELECTRICAL SPECIFICATIONS	
Electrical Rating	120 volts / 60 HZ
Operational Amps	.6
Starting Amps	4.8



Model PS21 Pellet Stove is Certified to comply with 2020 particulate emission standards.

**EPA Certification #
EPA Certified Emissions 1.58**

WARNING: THIS WOOD HEATER HAS A MANUFACTURER - SET MINIMUM LOW BURN RATE THAT MUST NOT BE ALTERED. IT IS AGAINST FEDERAL REGULATIONS TO ALTER THIS SETTING OR OTHERWISE OPERATE THIS WOOD HEATER IN A MANNER INCONSISTENT WITH OPERATING INSTRUCTIONS IN THIS MANUAL.

WARNING: IT IS AGAINST FEDERAL REGULATIONS TO OPERATE THIS HEATER IN A MANNER INCONSISTENT WITH THE OPERATING INSTRUCTIONS IN THE OWNER'S MANUAL.

NOTE: This installation must conform with local codes. In the absence of local codes you must comply with the ASTM E1509, ULC S627-2021, UL 1482-2011

SAFETY AND EPA COMPLIANCE:

Your pellet stove has been approved for installation in the USA and Canada. It may also be installed in a manufactured or mobile home. Your stove is Certified UL, EPA & ULC.

This appliance is a freestanding heater. It is not intended to be attached to any type of ducting. It is not a furnace.



Product Specifications and Important Safety Information

GLASS SPECIFICATIONS

This appliance is equipped with 5mm ceramic glass. Replace glass only with factory glass. Please contact your dealer for replacement glass.

MOBILE HOME APPROVED

This appliance is approved for mobile home installations when not installed in a sleeping room and when an outside combustion air inlet is provided. The structural integrity of the mobile home floor, ceiling, and walls must be maintained. The appliance must be properly grounded must be grounded directly to the steel chassis, bolted to the floor, and use either collinear or coaxial type venting to acquire outside air. Class "PL" connector pipe.

- **WARNING: THIS UNIT MUST NOT BE INSTALLED IN THE BEDROOM (per HUD requirements).**
- **CAUTION: THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL, AND CEILING/ROOF MUST BE MAINTAINED.**
- **IMPORTANT:** Read this entire manual before installing and operating this product. Failure to do so may result in property damage, bodily injury, or even death.
- Proper installation of this stove is crucial for safe and efficient operation.
- Install vent at clearances specified by the vent manufacturer.
- **DO NOT** connect the pellet vent to a vent serving any other appliance or stove.
- **DO NOT** install a flue damper in the exhaust venting system of this unit.
- Use of outside air is not required for this unit in all cases, **but is recommended.**
- Contact your local building officials to obtain a permit and information on any additional installation restrictions or inspection requirements in your area.
- **DO NOT** throw this manual away. This manual has important operating and maintenance instructions that you will need at a later time.
- Always follow the instructions in this manual.
- This appliance is designed for the use of palletized fuel that meet or exceed the standard set by the Pellet Fuel Institute (PFI).
- **NEVER** use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or 'freshen up' a fire in this stove. Keep all such liquids well away from the stove while it is in use.
- **WE RECOMMEND** a working Smoke and Carbon Monoxide (CO) detector be installed in the same room as this product. Install a Smoke and Carbon Monoxide (CO) detector on each floor of your home; in case of accidental fire from any cause it can provide time for escape. The Smoke and Carbon Monoxide (CO) detector must be installed at least 15 feet from the appliance in order to prevent undue triggering of the detector.
- **DO NOT** unplug the stove if you suspect a malfunction. Turn the ON/OFF SWITCH to "OFF" and contact your dealer.
- Your stove requires periodic maintenance and cleaning (see "**MAINTENANCE**"). Failure to maintain your stove may lead to improper and/or unsafe operation.
- **Disconnect the power cord and backup battery** (if applicable) **before performing any maintenance!** **NOTE:** Turning the ON/OFF Switch to "OFF" does not disconnect all power to the electrical components of the stove when battery backup option is installed.
- Never try to repair or replace any part of the stove unless instructions for doing so are given in this manual. All other work should be done by a trained technician.
- **DO NOT** operate your stove with the viewing door open. The auger will not feed pellets under these circumstances and a safety concern may arise from sparks or fumes entering the room.
- Allow the stove to cool before performing any maintenance or cleaning. Ashes must be disposed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible surface or on the ground, well away from all combustible materials, pending final disposal. **DO NOT put ashes in trashcan.**
- The exhaust system should be checked monthly during the burning season for any build-up of soot, creosote, and ash.
- **DO NOT** touch the hot surfaces of the stove.
- Educate all on the dangers of a high-temperature stove.
- Young children should be supervised when they are in the same room as the stove.
- The hopper and stove top will be hot during operation; therefore, you should always use some type of hand protection when refueling your stove.
- A power surge protector is required. This unit must be plugged into a 110 - 120V, 60 Hz grounded electrical outlet. Do not use an adapter plug or sever the grounding plug. **DO NOT** route the electrical cord underneath, in front of, or over the heater. **DO NOT** route the cord in foot traffic areas or pinch the cord under furniture.
- Unless your Freedom stove is hooked up to a backup battery, it will not operate during a power outage. If a power outage does occur, check the heater for smoke spillage and open a window if any smoke spills into the room.
- The feed door must be closed and sealed during operation.
- **NEVER** block free airflow through the open vents of the unit.
- Keep foreign objects out of the hopper.
- The moving parts of this stove are propelled by high torque electric motors. Keep all body parts away from the auger while the stove is powered. These moving parts may begin to move at any time while the stove has power.
- **DO NOT** place clothing or other flammable items on or near this stove.
- **CAUTION: BURNING FUEL CREATES CARBON MONOXIDE AND CAN BE HAZARDOUS TO YOUR HEALTH IF NOT PROPERLY VENTED.**



Fuel Specifications



WARNING: THIS PRODUCT AND THE FUELS USED TO OPERATE THIS PRODUCT (WOOD), AND THE PRODUCTS OF COMBUSTION OF SUCH FUELS, 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

Your pellet stove is designed and tested with premium grade pellets that comply with Pellet Fuels Institute (PFI) standards. Pellet fuel quality can fluctuate from manufacturer to manufacturer, and even from bag to bag. Freedom Stoves, LLC recommends using only fuel that is certified by the Pellet Fuels Institute (PFI) Minimum of 40.0-48.0 lbs density per cubic feet, 0.230" to 0.305" diameter, length no greater than 1.5", moisture under 8% by weight, and ash under 1% by weight. Pellets that are soft, contain excessive amounts of loose sawdust, have been, or are wet, will result in reduced performance and may cause damage to your stove. Store your pellets in a dry place.

DO NOT store the fuel within the installation clearances of the unit or within the space required for refueling and ash removal.

Doing so could result in a house fire.

DO NOT over-fire or use volatile fuels or combustibles, doing so may cause personal and property damage hazards.

Fuel Material

- Made from sawdust and/or other wood by-products
- Source material typically determines ash content

Higher Ash Content Material

- Hardwoods with high mineral content
- Bark and leaves as source material
- "Standard" grade pellets and other biomass

Lower Ash Content Material

- Softwood; pine, fir, etc.
- Materials with lower mineral content
- "Premium" grade pellets

Performance

- Higher ash content requires more frequent maintenance.
- "Premium" grade pellets will produce the highest heat output.
- Burning pellets longer than 1-1/2 inches (38mm) can cause inconsistent feeding and/or ignition.

Clinkers

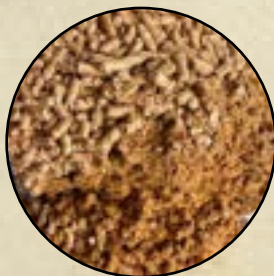
- Minerals and other non-combustible materials, like sand, will turn into a hard glass-like substance when heated.
- Trees from different areas will vary in mineral content. For this reason, some fuels will produce more clinkers than others.

Moisture

- Always burn dry fuel. Burning fuel with high moisture content takes energy to dry and tends to cool the appliance thus, robbing heat from your home.
- Damp pellet fuel could turn back into sawdust which does not flow properly through the feed system.

Storage

- Wood pellets should be left in their original sealed bag until ready to use, to prevent moisture.
- Do not store fuel within the specified clearance areas, or in a location that will interfere with routine cleaning and maintenance procedures



Caking Poor Quality Pellet



Use Premium Wood Pellets

NOTICE
Freedom Stoves, LLC is not responsible for stove performance or extra maintenance required as a result of using fuel with higher ash or mineral content.

NON-COMBUSTIBLE MATERIALS SPECIFICATION

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750° C and UL763 shall be considered non-combustible materials.

COMBUSTIBLE MATERIALS SPECIFICATION

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flameproofed or not, or plastered or unplastered shall be considered combustible materials.



Stove Location

Installation and service of this appliance should be performed by qualified personnel.

NOTICE: Check building codes prior to installation.

- Installation **MUST** comply with local, regional, state and national codes and regulations.
- Consult your insurance agent, local building inspector, fire officials or authorities having jurisdiction over restrictions, installation inspection and permits.

It is a good idea to plan your installation on paper, using exact measurements for clearances and floor protection, before actually beginning the installation.

Consideration must be given to:

- Safety, convenience, traffic flow.
- Route and length of vent pipe needed.
- Heat distribution within the home.

Since pellet exhaust can contain ash, soot or sparks, you must consider the location of:

- Windows
- Air Conditioner
- Overhangs, soffits,
- Air Intakes
- Landscaping, vegetation
- porch roofs, adjacent walls

WARNING! RISK OF FIRE DAMAGED PARTS COULD IMPAIR SAFE OPERATION. DO NOT INSTALL DAMAGED, INCOMPLETE OR SUBSTITUTE VENTING COMPONENTS.

WHERE TO PUT YOUR PELLET STOVE?

Place pellet stove as close to the space you want to heat as possible. Insulated basements make good locations because you take advantage of the natural way heat rises to upper floors. Installing pellet stove near a stairway is an ideal location because it provides heat to the upper and lower levels of the home. The best placement within the room is near an exterior wall so it can be vented directly outside.

This unit should never be placed in a bedroom.

Chimney & Draft

CAUTION

- **DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE.**
 - **DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.**
- MAY ALLOW FLUE GASES TO ENTER THE HOUSE***

LOCATING YOUR APPLIANCE & CHIMNEY

Location of the stove and chimney will affect performance.

- Install through the warm airspace enclosed by the building envelope. This helps to produce more draft, especially during lighting and die-down of the fire.
- Penetrate the highest part of the roof. This minimizes the effects of wind loading.
- Locate termination cap away from trees, adjacent structures, uneven roof lines and other obstructions.
- Minimize the use of venting elbows.
- Consider the appliance location relative to floor and ceiling and attic joists.

STOVE DRAFT

Stove draft is determined by the “Pa” (Paskal) setting for each heat level. Stove will automatically adjust combustion fan speed to match that setting and can be adjusted. Please contact technician before adjusting.

A good flame to see when operating a pellet stove is yellow and quick, which allows it to carry the ash out of the burn pot. If the flame is too fast, it will lead to the unwanted pop-corning effect, where the pellets that are glowing will bounce out of the burn pot. Reduce air if needed.

If the fire is orange and reddish in color with soot forming at the top of the flame, increase air slowly. If the flames burn to whitish yellow, reduce air. The goal is to have the ash fly out of the burn pot while the pellets themselves are being burned completely.

WARNING

RISK OF ASPHYXIATION! NEGATIVE PRESSURE CAN CAUSE SPILLAGE OF COMBUSTION FUMES AND SOOT.



Helpful Hints

Cleaning burn pot: Take the opportunity to scrape the burn pot to remove carbon buildup whenever your stove is not burning. An ash vacuum is handy to remove the residue. **MAKE SURE YOUR STOVE IS COLD** when using vacuum. Carbon buildup can be scraped loose with the fire burning using the special tool provided with your stove. Scrape the floor and sides of the burn pot. The carbon will be pushed out by the incoming fuel. Always wear gloves when scraping the burn pot.

Disposal of Ash: Ashes should be placed in a steel container with a tight fitting lid and placed on a non-combustible floor or on the ground, far away from 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 thoroughly cooled. Do not place other waste shall not be placed in this container.

Soot and Fly Ash: The products of combustion will contain small particles of fly ash. The fly ash will restrict the flow of the flue gases. Incomplete combustion, such as occurs during startup, shutdown or incorrect operation of the unit will lead to some soot formation which will collect in the exhaust venting system. To determine if cleaning is necessary, the exhaust venting system should be checked once a year.

Creosote may form when burning wood pellets on low. The venting system should be inspected periodically throughout the heating season to assess if creosote buildup has occurred. If a creosote layer of 1/8" or more has formed, it should be removed to reduce the risk of a chimney fire. **IF FIRE OCCURS, CONTACT FIRE DEPARTMENT RIGHT AWAY, shut down the stove and evacuate the home/residence.** Before using the unit, have venting system thoroughly inspected and replace any damaged components.

Smoke detectors are highly recommended on each level of your home.

If your detector activates, it may be due to:

CAUSE: Paint curing process **SOLUTION:** Open window near the unit for the first few hours of burning

CAUSE: Exhaust drawn back inside dwelling **SOLUTION:** Outside connection to unit is necessary

CAUSE: Vent Leakage **SOLUTION:** Using manufacturer's recommendations, seal pipe joints.



Installing Your Freedom Stove

TOOLS AND SUPPLIES

Tools and building supplies normally required for installation, unless installing into an existing masonry fireplace/chimney:

- | | | | |
|------------------------|------------------------------------|-------------------------|-----------------------|
| • Reciprocating Saw | • Level | • Gloves | May also need: |
| • Phillips Screwdriver | • Non-Combustible Sealant Material | • Safety Glasses | • Vent Support Straps |
| • Tape Measure | • Hammer | • Electric Drill & Bits | • Venting Paint |

INSPECT APPLIANCE AND COMPONENTS

- Carefully remove the appliance and components from the packaging.
- The vent system components and decorative trim may be shipped in separate packages.
- **Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**

INSTALL EXHAUST VENT AT CLEARANCES SPECIFIED

- Most pellet vent pipe requires a minimum of 3" of clearance to combustible materials although some can be installed at 1" clearance.
- Follow the vent manufacturer's instructions along with all local codes regarding installation of the venting.
- **DO NOT** use makeshift compromises when installing this appliance, serious consequences may result.

Attention: DO NOT vent under any porch, deck, awning, or in any semi enclosed or roofed area. Doing so may result in unpredictable airflow at the vent cap under certain conditions and can affect the performance of your stove, as well as, other unforeseeable issues.

INSTALLATION SAFETY

- Read this entire manual before you install and use your pellet stove. Failure to follow instructions may result in property damage, bodily injury, or even death! (See specific installation details for clearances and other installation requirements)
- A Freestanding Unit supported by pedestal/legs and placed on a non-combustible floor surface in compliance with clearance requirements for a freestanding stove installation.
- Your pellet stove may be installed to code in either a conventional or mobile home (see SPECIAL MOBILE HOME REQUIREMENTS). The installation must comply with the Manufactured Home and Safety Standard (UM), 84-HUD, 24CFR Part 3280.
- It is recommended that only an authorized technician install your pellet stove, preferably a NFI certified specialist.
- **DO NOT CONNECT THIS UNIT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.**
- The use of other components other than stated herein could cause bodily harm, heater damage, and void your warranty.

WARNING

- **RISK OF FIRE OR EXPLOSION! DAMAGED PARTS COULD IMPAIR SAFE OPERATION. DO NOT INSTALL DAMAGED, INCOMPLETE OR SUBSTITUTE COMPONENTS.**
- **KEEP APPLIANCE DRY.**
- **RISK OF FIRE, EXPLOSION OR ELECTRIC SHOCK! DO NOT USE THIS APPLIANCE IF ANY PART HAS BEEN UNDER WATER.**
- **CALL A QUALIFIED SERVICE TECHNICIAN TO INSPECT THE APPLIANCE AND TO REPLACE ANY PART OF THE CONTROL SYSTEM WHICH HAS BEEN UNDER WATER.**

ATTENTION! WARRANTY WILL BE VOIDED IF:

- Installation and use of any damaged appliance or vent system component.
 - Modification of the appliance or vent system.
 - Installation other than described in this manual.
- Any such action may cause a fire hazard.*



Clearances

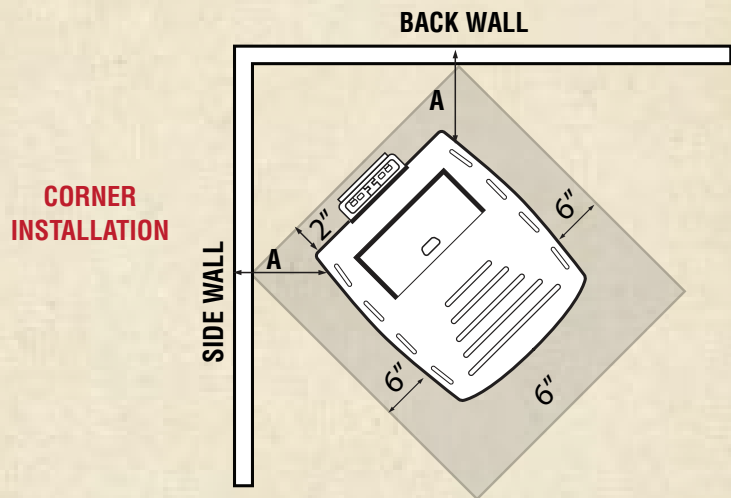
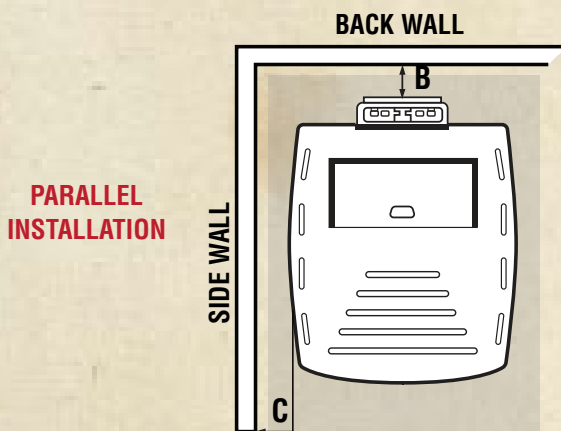
CLEARANCES

Your pellet stove has been tested and listed for installation in residential, mobile home, and alcove applications in accordance with the clearances given. For safety reasons, please adhere to the installation clearances and restrictions. Any reduction in clearance to combustibles may only be done by means approved by a regulatory authority.

CORNER (A)	BACK (B)	SIDE (C)	FRONT
2 inches min. 50.8 mm	2 inches min. 50.8 mm	2 inches min. 50.8 mm	6 inches min. 152.4 mm

FLOOR PROTECTION:

This stove must have a non-combustible floor protector (ember protection) installed beneath it if the floor is of combustible material. The floor pad or non-combustible surface should be large enough to cover at least the area under the product and beyond the front and beyond each side of the fuel loading and ash removal openings as listed below. This applies to both freestanding heaters and insert heaters. Floor protector should measure 2" in back and 6" on sides and in front.



- Place the stove away from combustible walls at least as far as shown in the above illustration.
- Note that the clearances shown are minimum for safety but do not leave much room for access when cleaning or servicing. Please take this into account when placing the stove.
- Due to high temperatures, the stove should be placed out of traffic and away from furniture and draperies.
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns to skin and/or clothing.
- Young children should be carefully supervised when they are in the same room as the stove.
- Clothing and other flammable materials should not be placed on or near this unit.



WARNING



RISK OF FIRE OR BURNS! PROVIDE ADEQUATE CLEARANCE AROUND AIR OPENINGS AND FOR SERVICE ACCESS. DUE TO HIGH TEMPERATURES, THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.



CAUTION

THIS APPLIANCE MUST BE VENTED TO THE OUTSIDE.

MOBILE HOME INSTALLATION

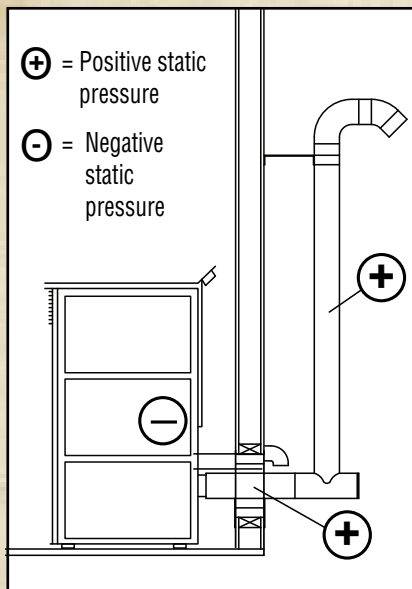
When installing this unit in a mobile home, several requirements must be followed:

1. The unit must be bolted to the floor. This can be done using an appropriate fastener for the application.
2. The unit must also be connected to outside air.
3. Floor protection and clearances must be followed.
4. The appliance must be properly grounded to the frame of the mobile home using a minimum of 14 AWG copper solid or stranded, insulated or bare wire or equivalent.
5. No sleeping room.

NOTICE: Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY. Actual installation may vary due to individual design preference.



Venting & Use of Elbows



The Freedom Pellet Stove depends on a combustion fan to pull air through the unit for combustion. The venting system restricts the ability of the combustion fan to move the required amount of air through the unit. A system with too much resistance will result in incomplete combustion, more frequent required cleaning and poor unit performance. It is always best to choose a location for the appliance that will result in a venting system with the shortest equivalent vent length (EVL). It is best to have your venting system designed before you finalize your purchase of an appliance.

Equivalent Vent Length

The equivalent vent length for common pellet vent components are:

- 90° Elbows or Tee: 5 EVL Units
- 45° Elbow: 3 EVL Units
- Vertical Pipe or Liner: ½ EVL Unit
- Horizontal Pipe or Liner: 1 EVL Unit

The total allowable equivalent vent length is:

- 20 EVL for 3" pellet vent pipe or liner
- 30 EVL for 4" pellet vent pipe or liner

Due to the potential for fly ash accumulation in horizontal venting sections, the maximum permissible horizontal venting length is: 4ft. for 3" pellet vent pipe and 8ft. for 4" pellet vent pipe.

EXAMPLE

First Floor Installation

A unit is to be installed using 3" Pellet Pipe with 3 feet of horizontal pipe, a Tee, 10 feet of vertical pipe, a 90° elbow and a termination cap.

The equivalent vent length is:

3 ft. of Horizontal Pipe (1 x 3 EVL)	= 3 EVL
90° Elbow or Tee (1 x 5 EVL)	= 5 EVL
10 ft. of Vertical Pipe (10 x .5 EVL)	= 5 EVL
90° Elbow or Tee (1 x 5 EVL)	= 5 EVL
Termination Cap	= 0 EVL
Equivalent Vent Length	= 18 EVL

In the example system detailed above, the EVL was 18 which is less than the maximum of 20 EVL for 3" pellet vent pipe, thus this is a satisfactory venting configuration.

EXAMPLE

Connection to Masonry Chimney

A unit is to be installed using 3" Pellet Pipe with 2 feet of horizontal pipe, a Tee, 4 feet of vertical pipe, a 90° elbow, a Tee, 21 feet of vertical liner, and a termination cap.

The equivalent vent length is:

2 ft. of Horizontal Pipe (1 x 2 EVL)	= 2 EVL
90° Elbow or Tee (1 x 5 EVL)	= 5 EVL
4 ft. of Vertical Pipe (4 x .5 EVL)	= 2 EVL
90° Elbow (1 x 5 EVL)	= 5 EVL
90° Tee (1 x 5 EVL)	= 5 EVL
21 ft. of Vertical Liner (21 x .5 EVL)	= 10.5 EVL
Termination Cap	= 0 EVL
Equivalent Vent Length	= 29.5 EVL

In the example system detailed above, the EVL was 29.5 which exceeds the maximum of 20 ft. for 3" pellet vent pipe, thus 3" vent pipe should not be used in this installation. However, since 4" pipe can support an EVL up to 30, the use of 4" pipe would create a satisfactory installation.

Note: When the amount of vertical pellet vent pipe in the system exceeds 15 feet, 4" pellet vent pipe should be used.

Note: Equivalent Venting Length decreases as altitude increases.

- Long runs of flex or PL vent pipe installed directly vertical from the flue stub may require more frequent cleaning due to fly ash falling off inside and collecting directly above the combustion blower outlet.
- 4" stainless steel flex vent piping is only allowed for use in masonry fireplaces and chimneys or factory built wood-burning fireplaces with Class A metal chimneys.
- All pellet vent pipe must be secured together either by means provided by pipe manufacturer or by 3 screws at each joint.
- Use only the specified venting components. Use of any other components will void the product warranty and may pose a hazard.
- **DO NOT** install a flue damper in the exhaust venting system of this appliance.
- **DO NOT** connect this unit to a chimney flue serving another appliance.
- Install vent at clearances specified by the vent manufacturer.
- Use high temp silicone to create an effective vapor barrier at the location where the chimney or outside air ducting passes through to the exterior of the structure.



Termination Location and Vent Information

VENT TERMINATION MINIMUM CLEARANCES

Preferred Method #1

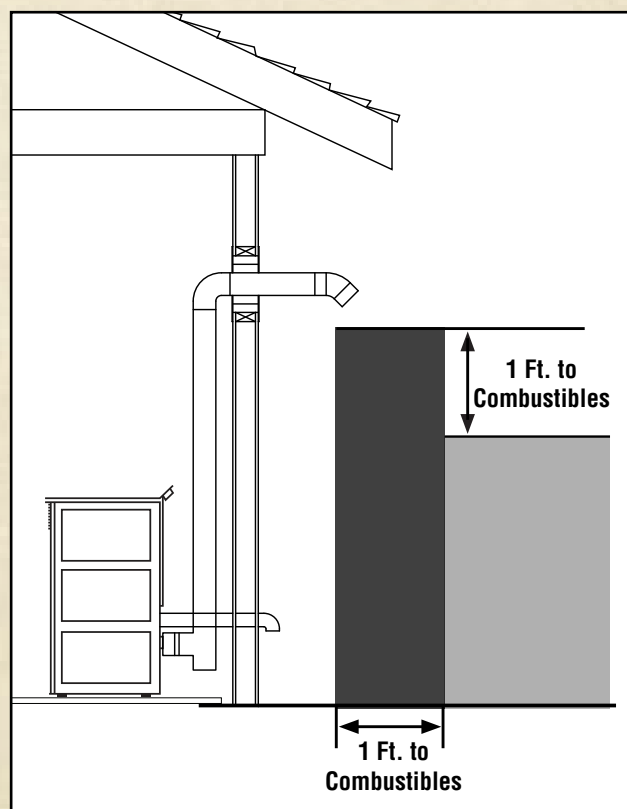
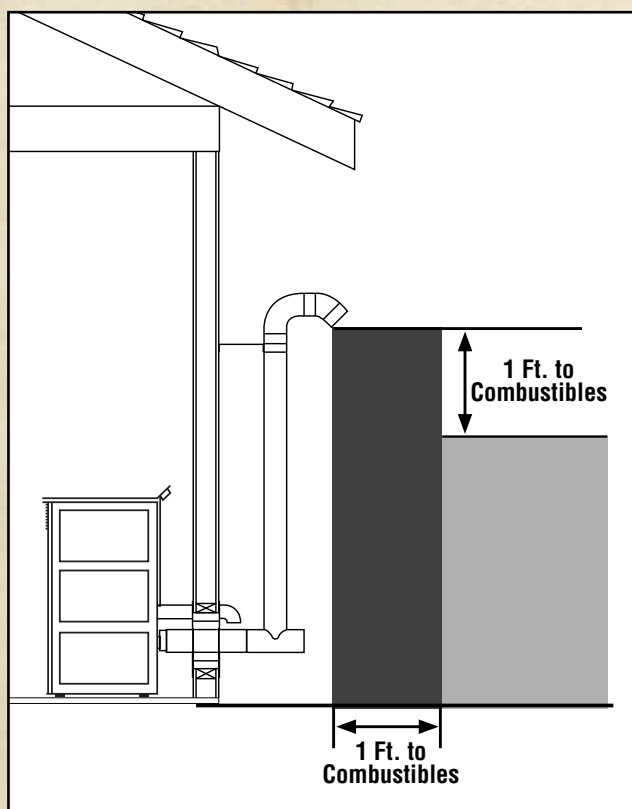
This method provides excellent venting for normal operation and allows the stove to be installed closest to the wall. 2" from the wall is safe; however, 6" allows better access to remove the rear panel. The vertical portion of the vent should be three to five feet high. This vertical section will help provide natural draft in the event of a power failure.

DO NOT place joints within wall pass-through.

Preferred Method #2

This method also provides excellent venting for normal operation but requires the stove to be installed farther from the wall. The vertical portion of the vent should be three to five feet high and at least 1"- 3" from a combustible wall (install per manufacturer's specs). This vertical section will provide natural draft in the event of a power failure. If the stove is installed below grade be sure the vent termination is at least 12" above grade. The vent outlet must also be 1 foot from the house/building.

DO NOT place joints within wall pass-through.



CAUTION

KEEP COMBUSTIBLE MATERIALS (SUCH AS GRASS, LEAVES, ETC.) AT LEAST 3 FEET AWAY FROM THE FLUE OUTLET ON THE OUTSIDE OF THE BUILDING.



Venting Through Existing Chimney

VENT TERMINATION MINIMUM CLEARANCES

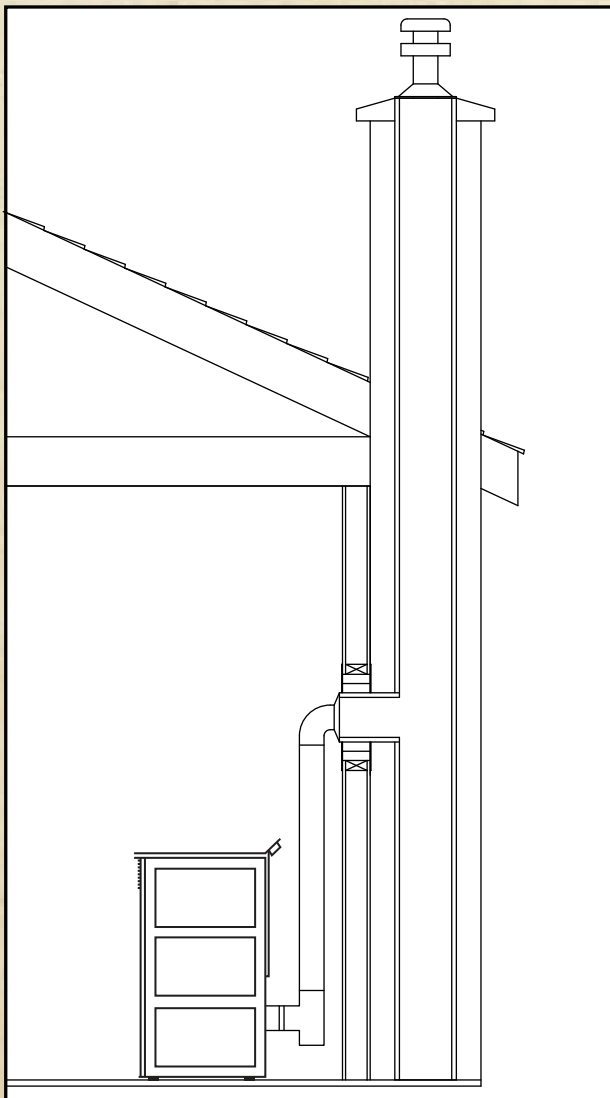
Installing Into An Existing Chimney

Method #3

This method provides excellent venting for normal operation. This method also provides natural draft in the event of a power failure. If the chimney condition is questionable* you may want to install a liner.

See Example 6

Be sure to design the venting so that it can be easily cleaned.



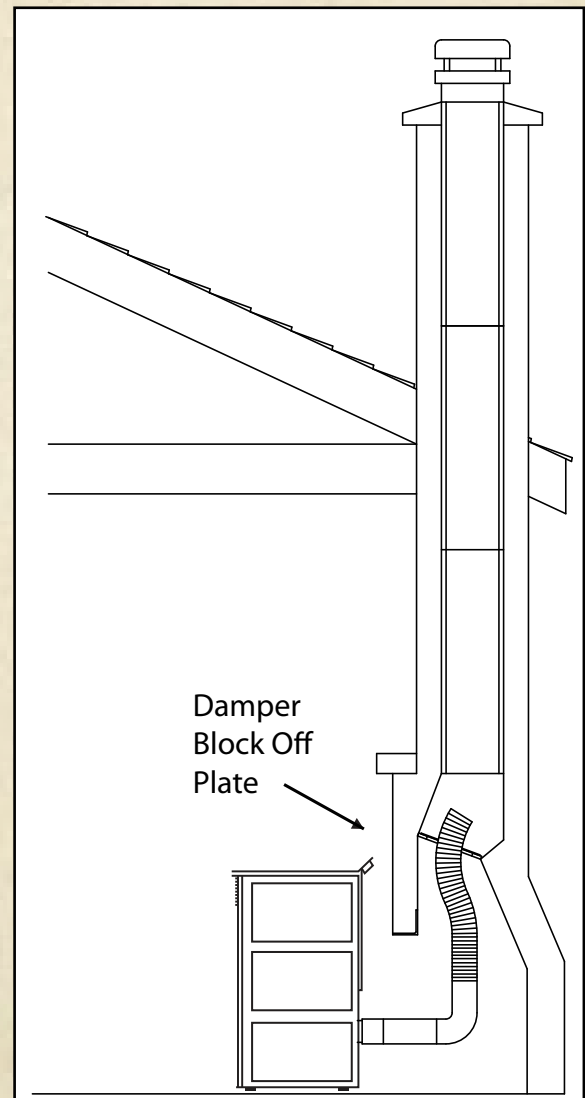
Installing Into An Existing Fireplace Chimney

Method #4

This method provides excellent venting for normal operation. This method also provides natural draft in the event of a power failure. If the chimney condition is questionable* you may want to install a liner.

See Example 5

Be sure to design the venting so that it can be easily cleaned.



ATTENTION

In some places in the US and Canada it is required that the vent pipe extend all the way to the top of the chimney. *The chimney should be inspected and cleaned before installing your stove. If you discover that the chimney does not have a clay tile liner or has cracks or flaking of the tile liner you will need to install a stainless steel liner within the chimney. In most cases the inside diameter of this liner should be 4". Either flexible or rigid liner may be used for this purpose. Refer to Method 5 & 6.



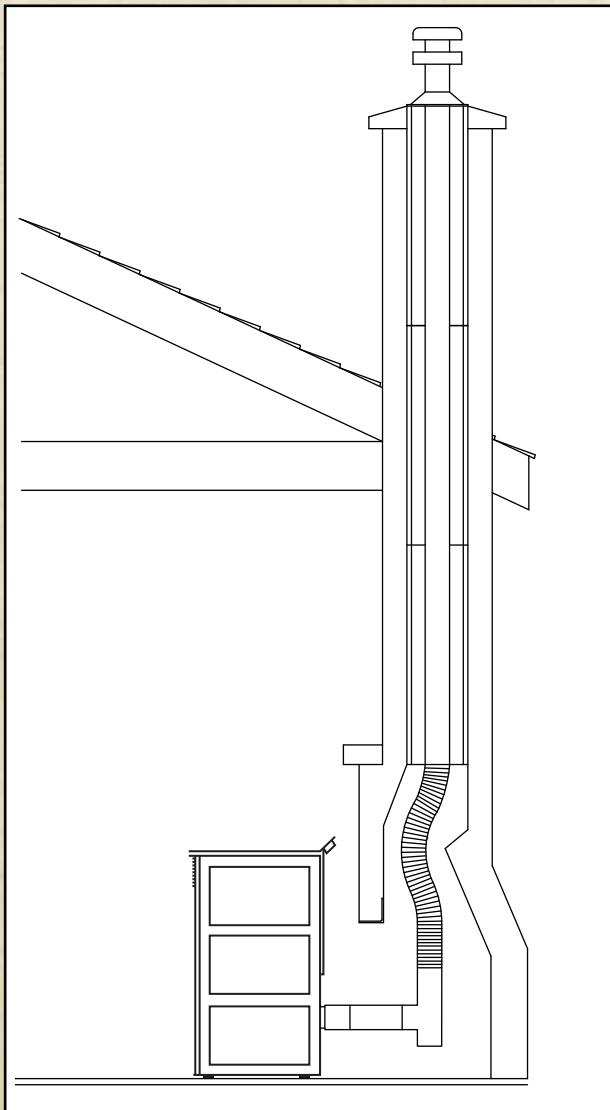
Venting Through Existing Chimney w/ Full Liner

VENT TERMINATION MINIMUM CLEARANCES

Installing Into An Existing Chimney w/Full liner Method #5

This method provides excellent venting for normal operation. This method also provides natural draft in the event of a power failure.

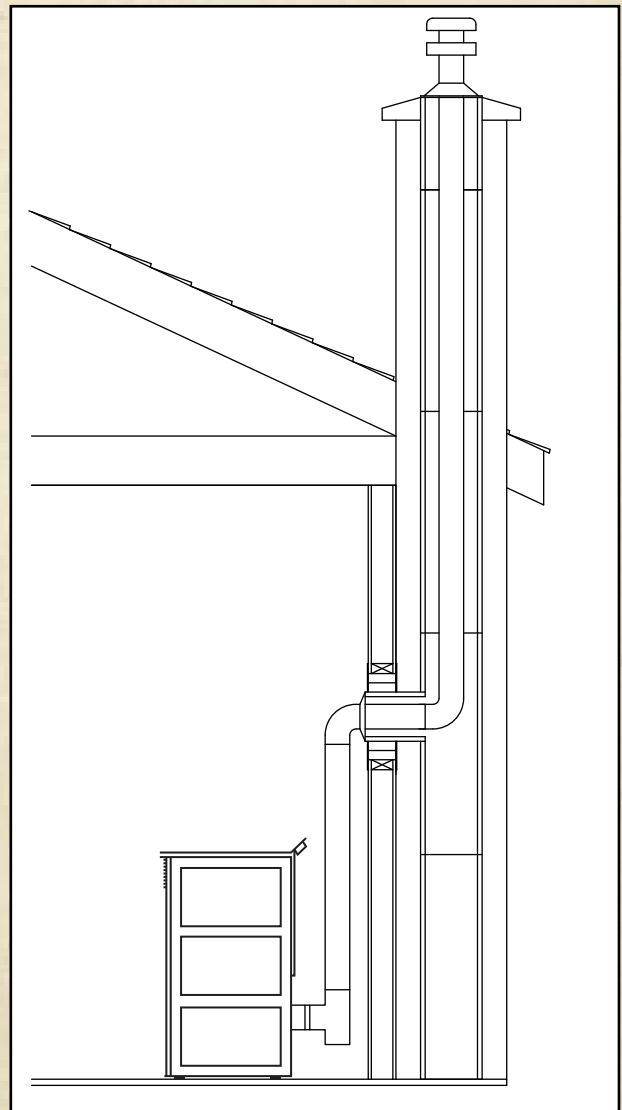
In this method a cap should also be installed on the chimney to keep out rain. Be sure to use approved pellet vent pipe fittings. Pipe size should be increased to 4" using this method.



Installing Into An Existing Chimney w/Full liner Method #6

This method provides excellent venting for normal operation. This method also provides natural draft in the event of a power failure.

In this method a cap should also be installed on the chimney to keep out rain. Pipe size should be increased to 4" using this method.



ATTENTION

In some places in the US and Canada it is required that the vent pipe extend all the way to the top of the chimney. The pipe or liner inside the chimney should be 4" diameter.



Vent Install Through Ceiling & Wall

VENT TERMINATION MINIMUM CLEARANCES

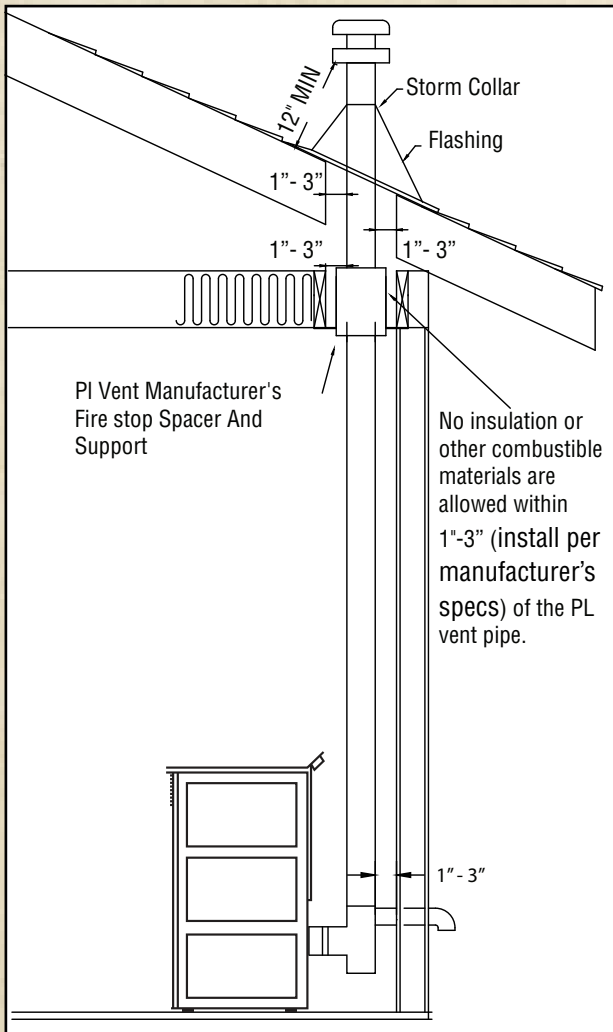
Installing Through The Ceiling

Method #7

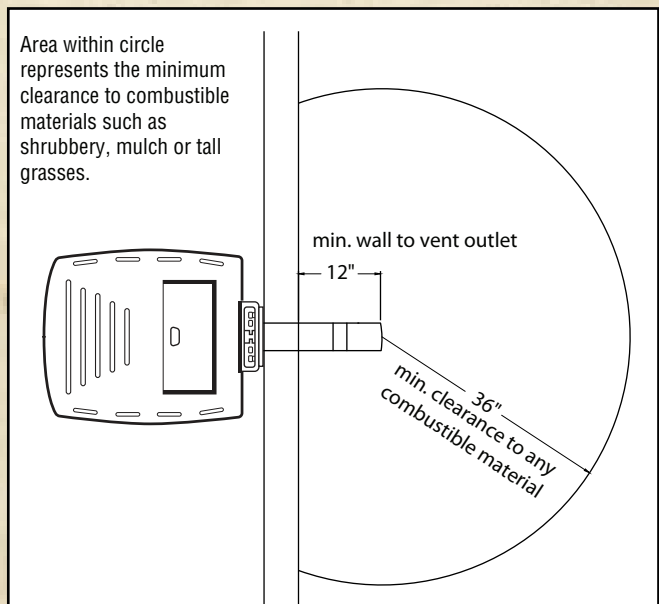
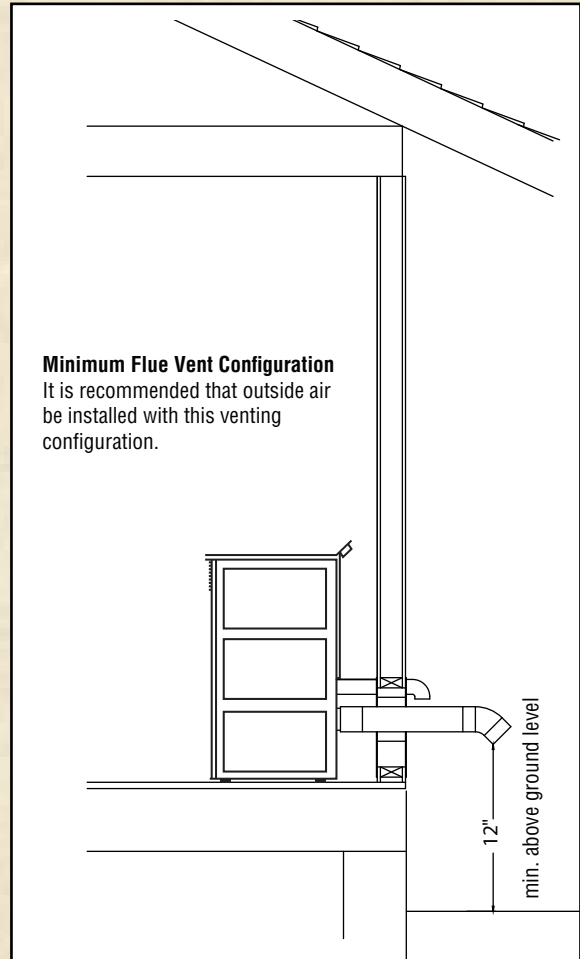
Through the ceiling vent, follow PL vent manufacturers recommendations when using wall and ceiling pass through.

DO NOT place joints within wall pass-through.

Par cheminée



Installation à travers le





Avoiding Smoke And Odors

Negative Pressure, Shut-down, and Power Failure:

To reduce the probability of back-drafting or burn-back in the stove during power failure or shut-down conditions, the stove must be able to draft naturally without exhaust blower operation. Negative pressure in the house will resist this natural draft if not accounted for in the pellet appliance installation. Heat rises in the house and leaks out at upper levels. This air must be replaced with cold air from outdoors, which flows into lower levels of the house. Vents and chimneys into basements and lower levels of the house can become the conduit for air supply, and reverse under these conditions.

Use of the battery back up system is recommended to avoid these issues.

OUTSIDE AIR

Outside air is recommended in all installations. Per national building codes, consideration must be given to combustion air supply to all combustion appliances. Failure to supply adequate combustion air for all appliance demands may lead to back drafting of those and other appliances.

When the appliance is roof vented: The air intake is best located on the exterior wall oriented towards the prevailing wind direction during the heating season.

When the appliance is side-wall vented: The air intake is best located on the same exterior wall as the exhaust vent outlet and located lower on the wall than the exhaust vent outlet. Approved coaxial venting is preferred

Outside air can supply the demands of the pellet stove, but consideration must be given to the total house demand. House demand may consume the air needed for the appliance. It may be necessary to add additional ventilation to the space in which the pellet appliance is located. Consult with your local HVAC professional to determine the ventilation demands for your house.

VENT PIPE

Be sure to use approved pellet vent pipe wall and ceiling pass-through fittings to go through combustible walls and ceilings. Be sure to use a starting collar to attach the venting system to the stove. The starting collar must be secured to the flue stub with at least three screws, and sealed with high temp silicone caulking. 4" stainless steel flex vent piping is only allowed for use in masonry fireplaces and chimneys or factory built wood burning fireplaces with class A metal chimneys.

Pellet venting pipe (also known as Type L or PL vent) is constructed of two layers with air space between the layers. This air space acts as an insulator and reduces the outside surface temperature to allow a clearance to combustibles of only 1 to 3 inches (install per manufacturer's specs). The sections of pipe lock together to form an air tight seal in most cases. Follow venting manufacturer's recommendations for sealing pipe joints.

Where passing through an exterior wall or roof, be sure to use the appropriate pass-through device providing an adequate vapor barrier. Venting manufacturers provide these pass-through devices.

Vent Configurations:

To reduce probability of reverse drafting during shut-down conditions it is recommended that you:

- Install the pellet vent with a minimum vertical run of five feet, preferably terminating above the roof line.
- Install outside air intake.
- Install battery back up to avoid power outage.

To prevent soot damage to exterior walls of the house and to prevent re-entry of soot or ash into the house:

- Maintain specified clearances to windows, doors, and air inlets, including air conditioners.
- Vents should not be placed below ventilated soffits. Run the vent above the roof.
- Avoid venting into alcove locations.
- Vents should not terminate under overhangs, decks or onto covered porches.
- Maintain minimum clearance of 12 inches from the vent termination to the exterior wall. If you see deposits developing on the wall, you may need to extend this distance to accommodate your installation conditions.

Freedom Stoves assumes no responsibility for, nor does the warranty extend to, smoke damage caused by reverse drafting of pellet stoves under shut-down or power failure conditions.



Outside Air

(OPTIONAL, UNLESS INSTALLING IN A MOBILE HOME)

Freedom Stoves recommends attaching outside air in all installations, especially lower level and main floor locations. Although coaxial vent is preferred, co-linear venting is also acceptable.

Per national building codes, consideration must be given to combustion air supply to all combustion appliances. Failure to supply adequate combustion air for all appliance demands, may lead to back-drafting of those and other appliances.

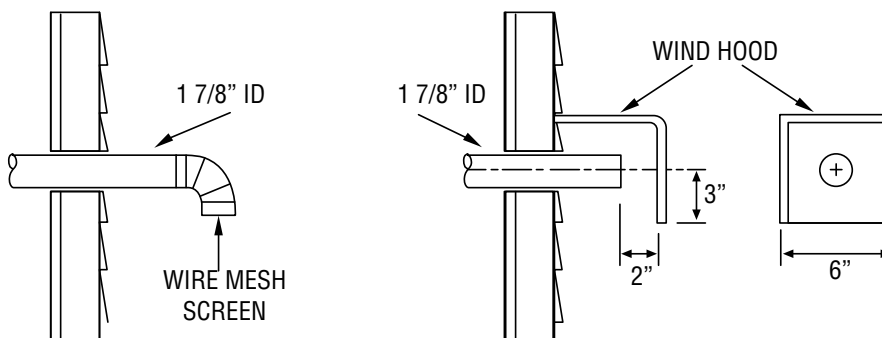
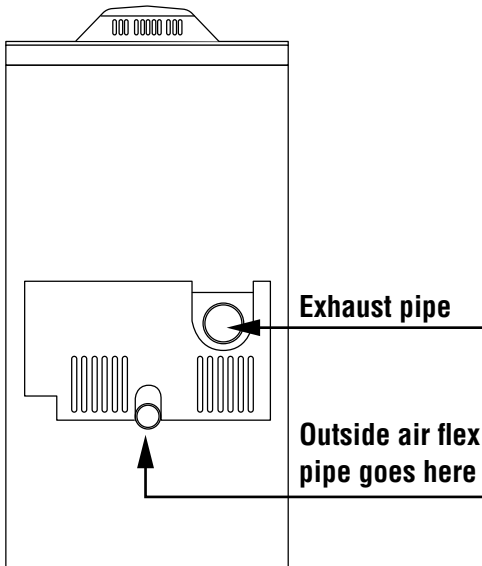
When the appliance is side-wall vented: The air intake is best located on the same exterior wall as the exhaust vent outlet and located lower on the wall than the exhaust vent outlet.

When the appliance is roof vented: The air intake is best located on the exterior wall oriented towards the prevailing wind direction during the heating season.

The outside air connection will supply the demands of the pellet appliance, but consideration must be given to the total house demand. House demand may consume some air needed for the stove, especially during a power failure. It may be necessary to add additional ventilation to the space in which the pellet appliance is located. Consult with your local HVAC professional to determine the ventilation demands for your house.

To install outside air use 2" non-combustible flex pipe. The pipe should be run outside and terminate to the side or below the vent pipe outlet so the flue outlet is more than 12" from the inlet cover. The Termination Cap should be used to keep birds, rodents, etc. out of the pipe.

Use silicone to create an effective vapor barrier at the location where the chimney or outside air ducting passes through to the exterior of the structure.

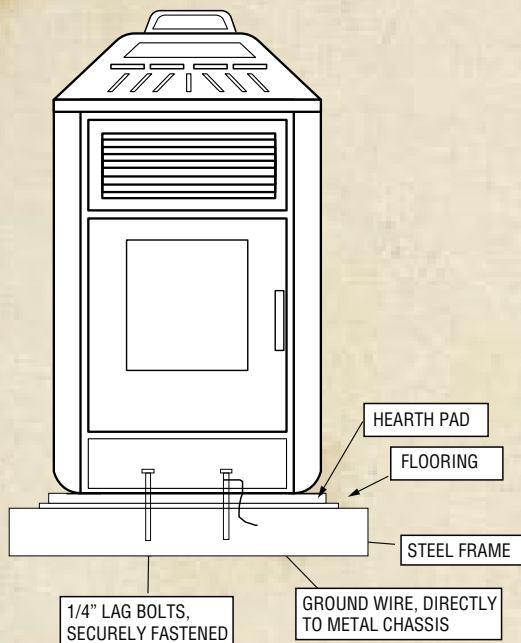


TYPICAL FRESH AIR TERMINATION

NOTE: Dimensions from the floor to your stoves inlet/exhaust pipes are approximate and may vary depending on your installation.



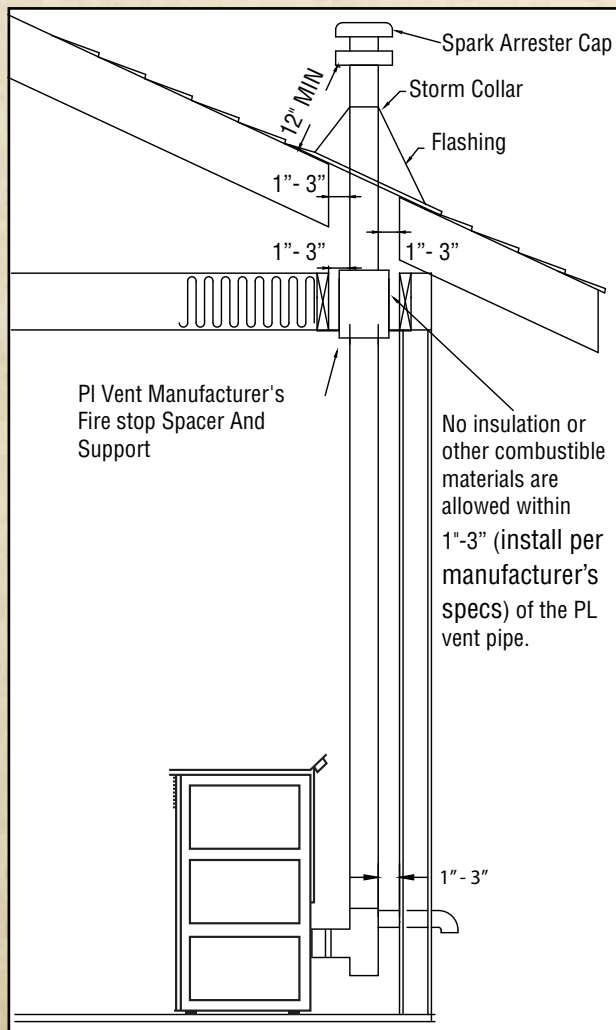
Mobile Home Installation



Mobile home installation should be done in accordance with the Manufactured Home and Safety Standard (HUD), 24 CFR, Part 3280. Canadian installations require that the heater must be connected to a 3 or 4 inch, factory-built chimney conforming to CAN/ULC-S629. *See the installation illustrations in this manual for minimum height above the roof.* The chimney installation must allow for removal in case of mobile home transportation, especially outside connections. You may contact your local building authority or person having jurisdiction on height restrictions.

In order for this unit to be installed in a mobile home the following criteria must be met:

- The unit must be secured to the floor using lag bolts in the holes provided in the pedestal base.
- Ensure that the unit is permanently electrically grounded to the chassis of your home with 14 gauge copper wire.
- All exhaust systems must have a spark arrestor.
- The Independence pellet stove can be used with either collinear or coaxial type venting to acquire outside air. The outside air connection is located on the back of the unit (see illustration page 14) and should be hooked to a flexible metal intake pipe per the vent manufacturers specifications



IT IS MANDATORY TO TAKE THE COMBUSTION AIR FROM THE OUTSIDE WHEN INSTALLING THIS UNIT IN AIR TIGHT OR MANUFACTURED/MOBILE HOMES.

CAUTION: The structural integrity of the manufactured home floor, wall, and ceiling/roof must be maintained. Make sure to maintain an effective vapor barrier by sealing with silicone where the chimney or other components penetrate to the exterior of the structure. Refer to and follow the chimney manufacturer's installation instructions.

WARNING: DO NOT INSTALL IN SLEEPING ROOM.

NOTE: *Only the free standing model is approved for installation into a mobile home.*



Fire Safety

To provide reasonable fire safety, the following should be given serious consideration:

- Leave hopper lid closed, except when filling the stove.
- To shut down, turn stove off, but **DO NOT** unplug. Allow to run.
- Install at least one smoke detector and Carbon Monoxide (CO) detector on each floor of your home.
- Follow the smoke detector manufacturer's placement and installation instructions and maintain regularly.
- Conveniently locate a Class A fire extinguisher to contend with small fires in an emergency.

IN THE EVENT OF A HOPPER FIRE:

1. Turn stove OFF, DO NOT unplug.
2. If SAFE, check the hopper and remove excess fuel & extinguish.
3. If NOT SAFE, evacuate and notify fire department as necessary.



FREEDOM STOVES DISCLAIMS ANY RESPONSIBILITY FOR, AND THE WARRANTY WILL BE VOIDED BY THE FOLLOWING ACTIONS:

- **INSTALLATION AND USE OF ANY DAMAGED APPLIANCE.**
- **INSTALLATION AND/OR USE OF ANY COMPONENT PART NOT APPROVED BY FREEDOM STOVES.**
- **MODIFICATION OF THE APPLIANCE.**
- **OPERATING APPLIANCE WITHOUT FULLY ASSEMBLING ALL COMPONENTS.**
- **INSTALLATION OTHER THAN AS INSTRUCTED BY FREEDOM STOVES.**
- **OVER-FIRING OF THE UNIT.**
- **IMPROPER FUEL / ADDITIVES.**

OR ANY SUCH ACTION THAT MAY CAUSE A FIRE HAZARD.

INSPECT APPLIANCE & COMPONENTS

- Remove appliance and components from packaging and inspect for damage.
- Report to your dealer any parts damaged in shipment.
- Read all the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum



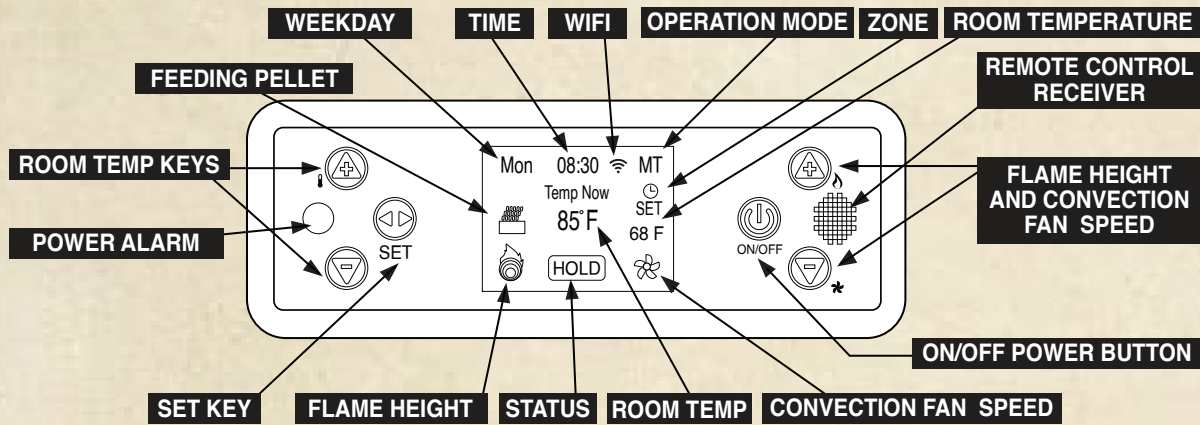
DAMAGED PARTS MAY IMPAIR SAFE OPERATION.

- **DO NOT INSTALL DAMAGED COMPONENTS.**
- **DO NOT INSTALL INCOMPLETE COMPONENTS.**
- **DO NOT INSTALL SUBSTITUTE COMPONENTS.**

*This pellet stove needs periodic inspection and maintenance for proper operation.
It is against federal regulations to operate this stove in a manner inconsistent with operating instructions in this manual.*



Control Panel and Remote Control



CONTROL PANEL

All functions and settings can be accessed using the panel mounted on top the stove. The blowers and automatic fuel supply are controlled from this panel. Incorrect use or settings may damage the stove and void the stove warranty. The control panel functions are a follows:


ON/OFF POWER BUTTON

- Press the ON/OFF power button for 3 seconds to turn stove on.
- When pushed, the stove will automatically ignite. No other fire starter is necessary.

SET KEY

- Press to enter the setting menu.
- Use this key to set current time, combustion mode, and timed ON/OFF.

ROOM TEMP KEYS

- Use plus (+) and minus (-) keys to set desired room temperature.
- While stove is in operation, press  key to check exhaust temperature and WiFi status.

FLAME HEIGHT AND CONVECTION FAN SPEED

- Press plus (+) button display and enter fire power mode. Low to high, F1-F5. Use +/- button to adjust.
- Press minus (-) button display and enter hot air speed. Low to high, S1-S5. Use +/- button to adjust.

REMOTE CONTROL

POWER ON/OFF BUTTONS

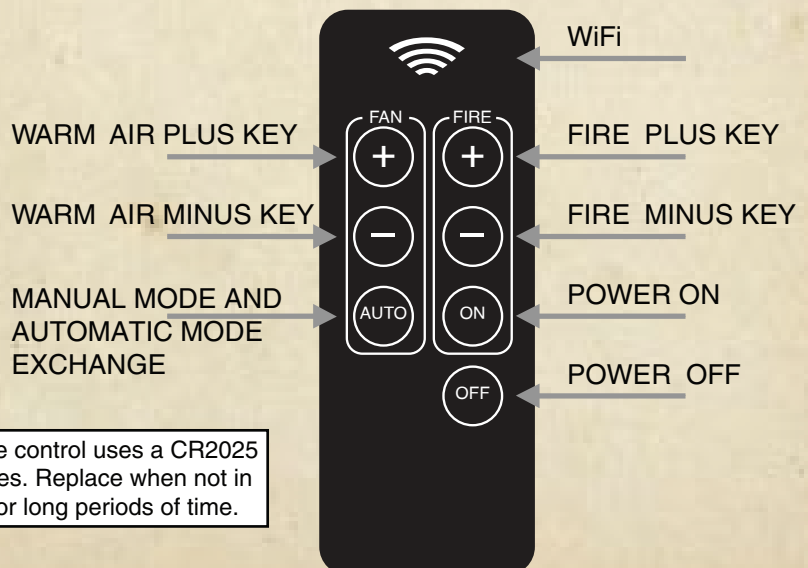
- Press on or off to access control panel.

WARM AIR PLUS (+) and MINUS (-)

- Press FAN plus (+) or minus (-) keys to control warm air circulation.

FIRE PLUS (+) and MINUS (-)

- Press FIRE plus (+) or minus (-) keys to control fire power.






Turning Freedom Stove On And Off

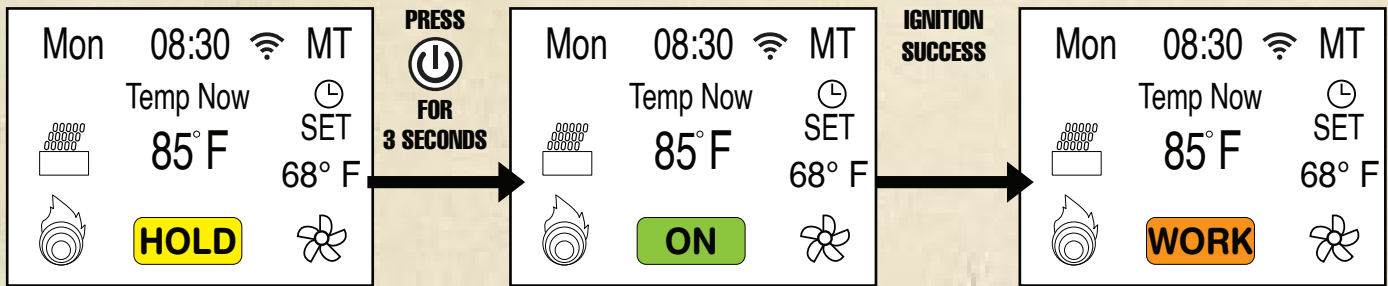
TURN POWER ON

- Power Button Located behind stove.
- Push to “ON” position.




AUTOMATIC IGNITION

- Press and hold  3 seconds.
- Stove will automatically ignite.
- About seven (7) minutes later, pellets will start burning.

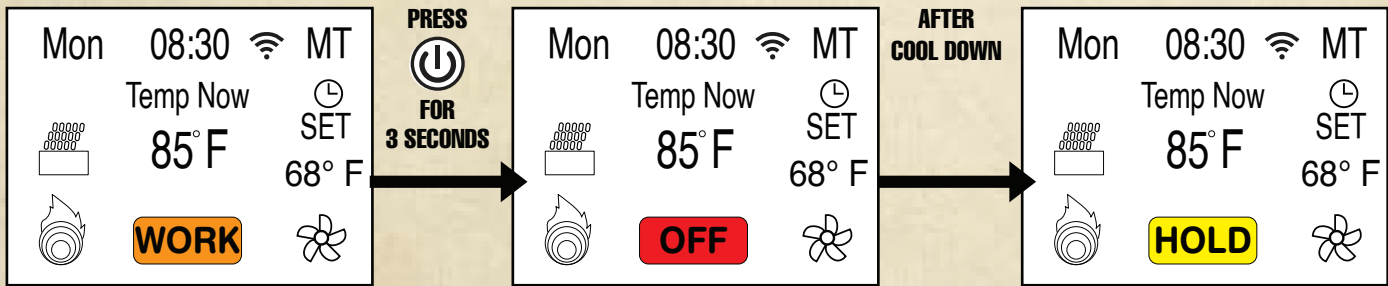


TURNING STOVE OFF

- Press and hold  3 seconds.
- Screen will display the message **TURNING OFF**.
- Auger motor will stop loading pellets.
- Exhaust and convection motor will continue working until stove cools and temperature drops lower than 120°F.
- Stove will enter into **OFF** mode.
- Process takes time. 30 minutes to no flame, 2 hours until cool.

AUTO IGNITION FAIL
 In case of an auto ignition fail:

- Remove all pellets from the burner pot.
- Restart stove.



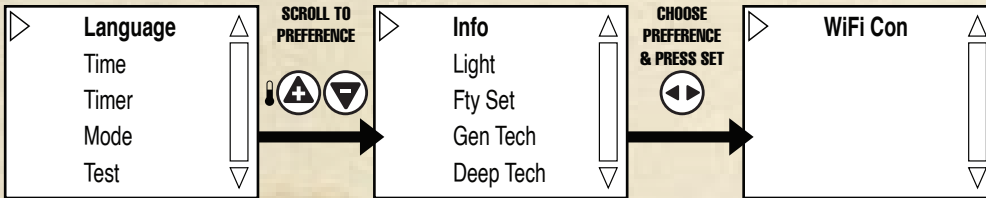


Setting Up Your Freedom Pellet Stove

SETTING UP STOVE MENU

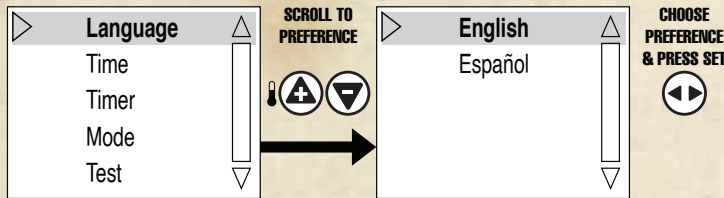
- When stove is on, press the SET button.
- Menu will appear as below. Language, Time, Timer, Mode, and Test.
- Using the PLUS (+) and MINUS (-) buttons to scroll through the menu, press to enter the interface of menu item chosen.

MENU



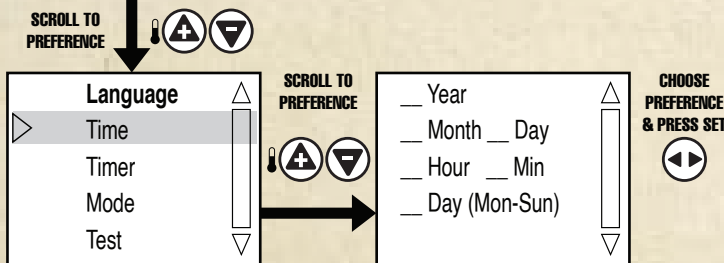
SETTING LANGUAGE

- Using scroll to **LANGUAGE**.
- Using scroll to language preference.
- Press to set.



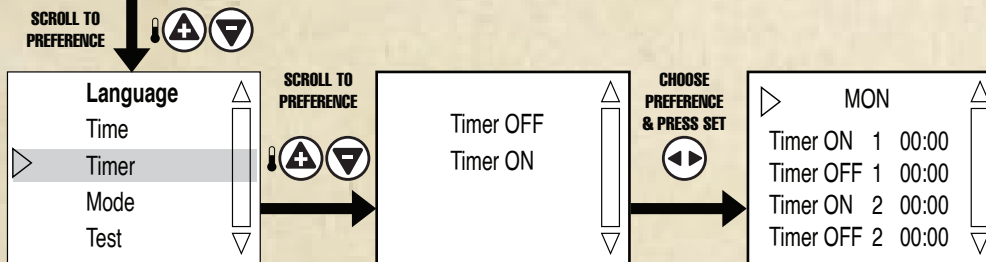
SETTING TIME & DATE

- Using scroll to **TIME**.
- Using scroll through menu to enter Year/Month/Day/Hour/Minute/Day (Mon-Sun).
- Press to set each item.



SETTING WEEKLY TIMER

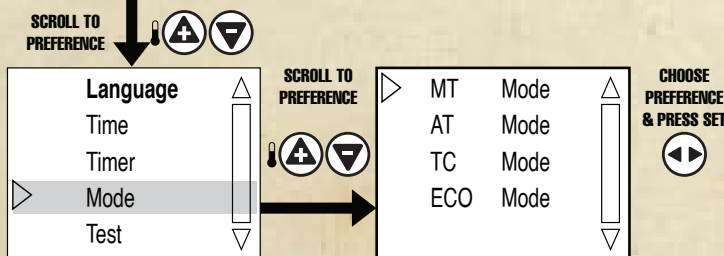
- Using scroll to **TIMER**.
- Using scroll through menu to enter ON/OFF Timers.
- Press to set timer information.



SETTING MODE

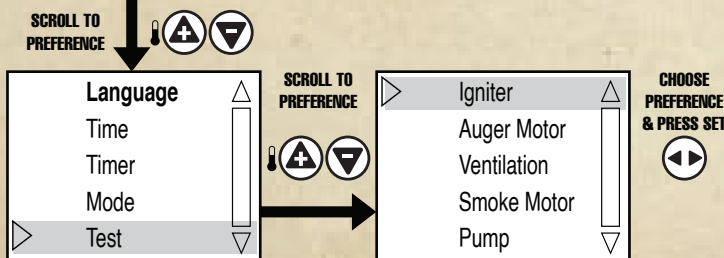
- Using scroll to **MODE**.
- Using scroll through menu to choose mode.
- Press set on desired mode.

See Next Page for description of MODE settings.



TESTING MODE/SELF CHECK

- Using scroll to **TEST**.
- Using scroll through menu to choose item to test.
- Press set to run test on desired item.





MODE SETTINGS

MT Mode (Manual Temperature)

Set a fixed flame height and fan speed (Fire power is not automatically adjustable in this mode).

AT Mode (Automatic Temperature)

Stove functions according to temperature sensor. Once preset temperature is reached, stove will work at lowest fire power.

TC Mode (Temperature Control)

Stove functions according to indoor temperature control switch (indoor temperature control switch self-selection). Once preset temperature is reached, stove works at lowest fire power for 15 minutes. If the room temperature keeps increasing, stove will stop working. When stove reaches a temperature lower than preset temperature, stove will reignite.

ECO Mode (Economy Control)

Stove functions at highest fire power. Once preset temperature is reached, stove works at lowest fire power for 15 minutes. If the room temperature keeps increasing, stove will stop working. When stove reaches a temperature lower than preset temperature, stove will reignite.

SCREEN KEY

Info = Information

Fty Set = Factory Set

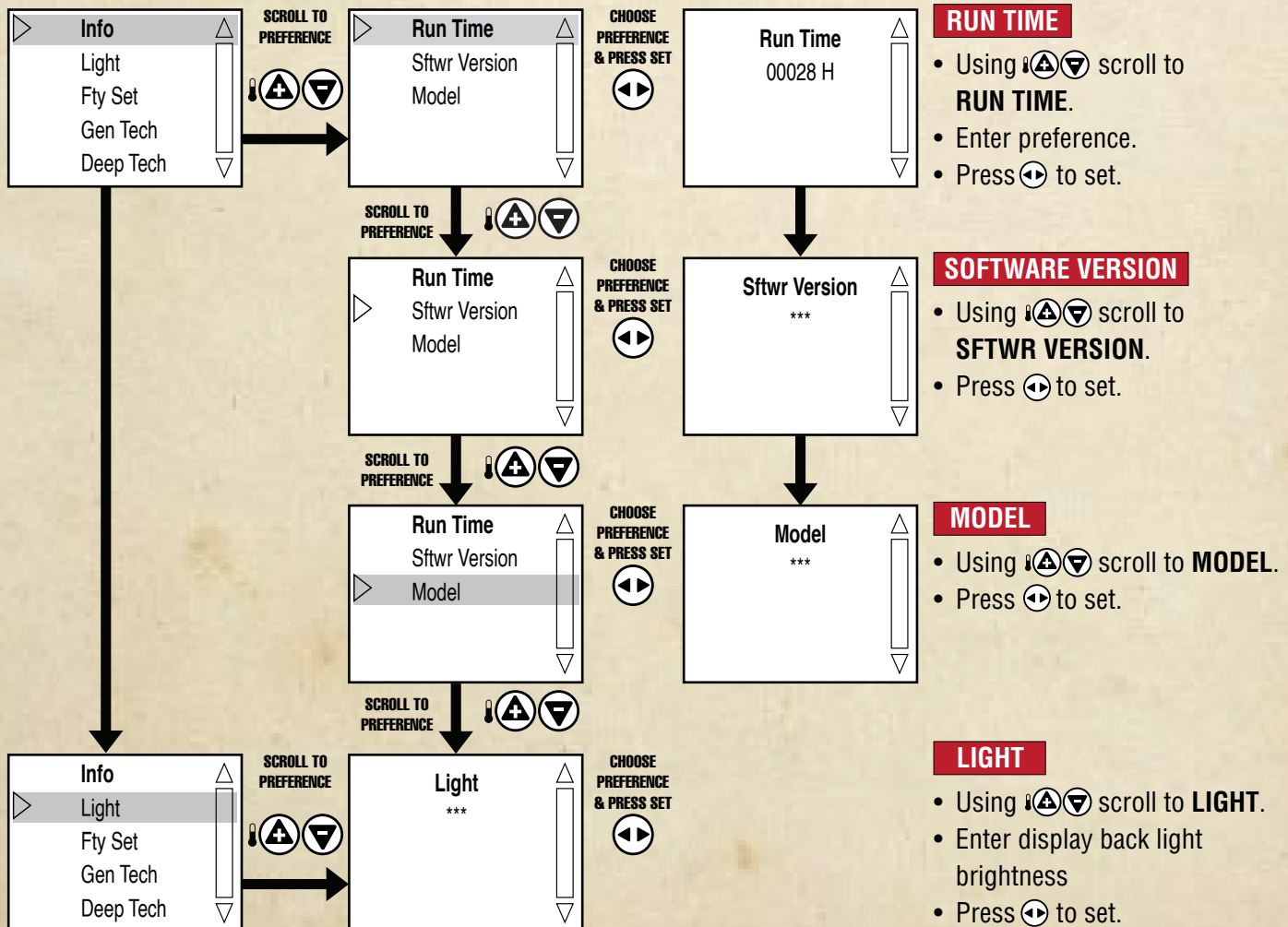
Gen Tech = General Technical

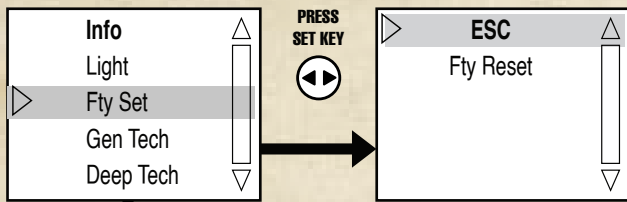
Deep Tech = Deep Technical

Sftwr Version = Software Version

INFORMATION

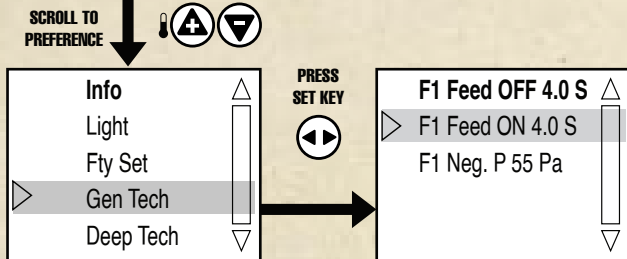
- Check the total running time, program version and fireplace model





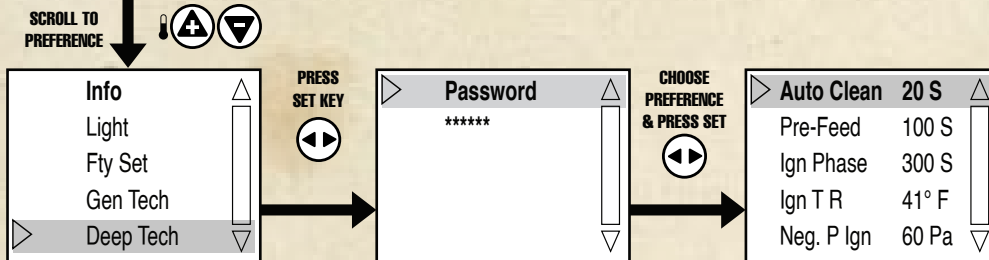
FACTORY RESET

- Restore factory settings.



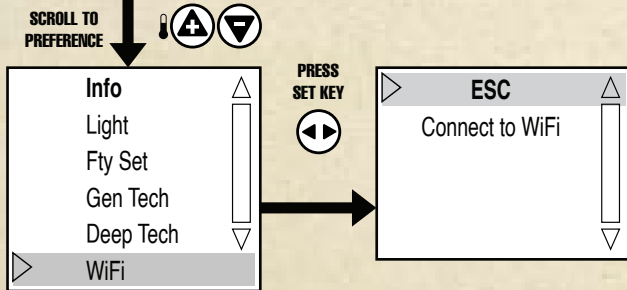
GENERAL TECHNICAL

- Set start and stop period of auger motor and speed of exhaust motor for each power level while stove is running.



DEEP TECHNICAL DEALER ACCESS

- Set start and stop period of auger motor and speed of exhaust motor for each igniting phase.
- Set igniting temperature.

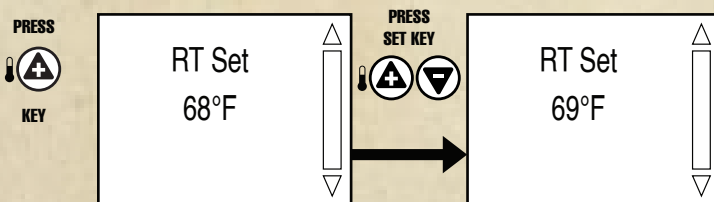


WiFi

- Connect to WiFi
- See WiFi section for additional information. (Pgs 25-29)

SET ROOM TEMPERATURE

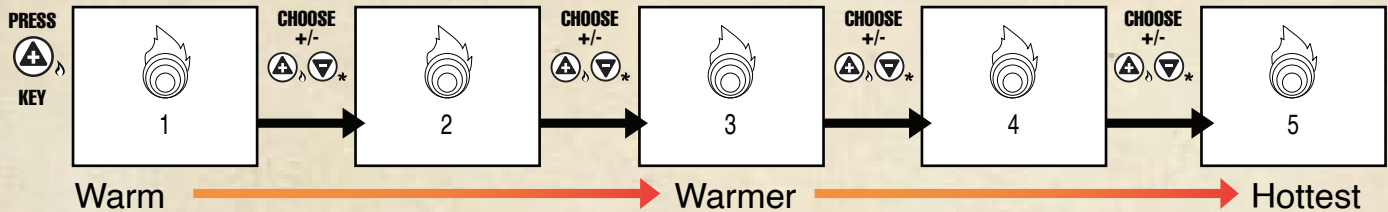
- With power on press to set the desired temperature. Increase temperature by pressing . Decrease temperature by pressing .
- Press to exit.





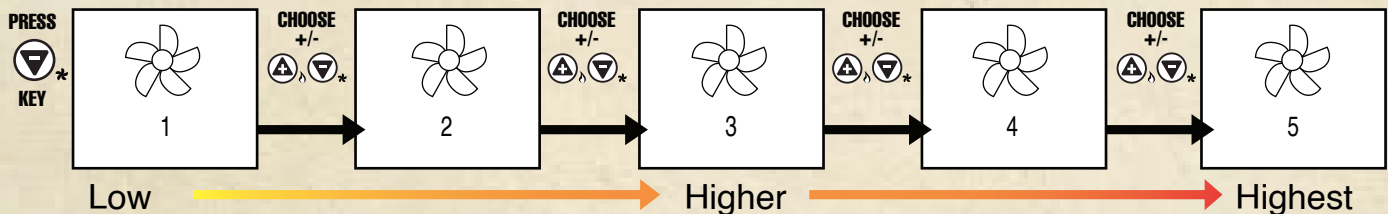
SET FIRE POWER LEVEL

- Press to enter FIRE POWER mode. There are five (5) fire power levels, one (1) lowest to five (5) highest.
- Press to adjust.
- Press to exit.



SET CONVECTION MOTOR SPEED

- Press to enter CONVECTION MOTOR (Ventilator) mode. There are five (5) speeds, one (1) lowest to five (5) highest.
- Press to adjust.
- Press to exit.



PARAMETER SETTINGS

PARTS	POWER LEVEL 1	POWER LEVEL 2	POWER LEVEL 3	POWER LEVEL 4	POWER LEVEL 5
AUGER MOTOR	OFF: 7.3 S ON: .6 S	OFF: 7.1 S ON: .7 S	OFF: 7S ON: .9 S	OFF: 6 S ON: 1 S	OFF: 5.7 S ON: 1.2 S
EXHAUST MOTOR	50	54	56	60	65

AUGER MOTOR:

- **EXAMPLE:** Power Level 1 OFF at 7.3 S and ON at .6 S means the auger motor will stop for 7.3 S, work for .6 S, stop for 7.3 S, work for .6 S....etc.

EXHAUST MOTOR:

- Adjustable Range 15-99Pa (DC 15V-24V). The bigger the value, the faster the speed. Lowest min speed 15. Highest max speed 99.

**NOTE: THIS PARAMETER IS ONLY FOR REFERENCE.
THE VARIED CALORIFIC VALUE OF PELLETS WILL CHANGE THE PARAMETERS**



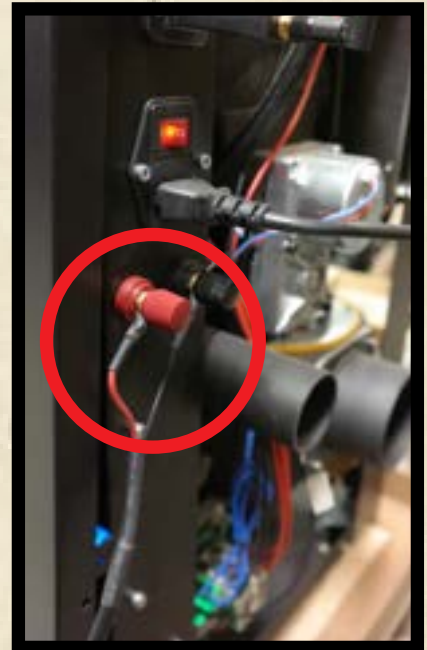
Stove Options

Battery Back Up - **24V ONLY**



For continued operation during a power outage this unit can be hooked up to a battery back up using **2-12 Volt batteries**. Connector can be found behind the stove.

The stove will keep batteries charged during normal operation on AC Power, but back up system should be **TESTED MONTHLY** to ensure battery life. When disconnecting power to stove for service **REMEMBER** batteries must also be disconnected.



Interchangeable Side Panels

This unit comes with interchangeable side panels. Change the decor of your stove by carefully remove the top of the unit by unfastening the four fasteners. Take out panel and replace with tiles of your choice.

Unit fits 12 x 12 ceramic tiles found at your local home improvement store.



Optional Leg Set

Raise your stove with our optional easy to install leg set.





WiFi Antenna Attachment

ATTENTION! Before attaching WiFi antenna, stove MUST be turned OFF



1. Take WiFi antenna out of box.



2. Screw the pieces together.



3. On the back of the stove insert into the WiFi connector.



4. Turn power button on.

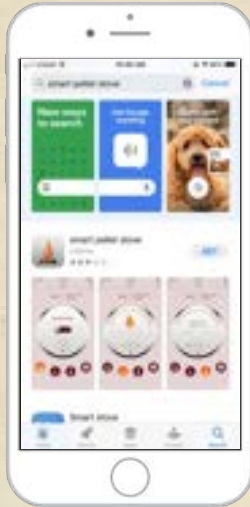
The Freedom Stove WiFi app allows you to control stove settings while in use. WiFi app does not power up the unit.



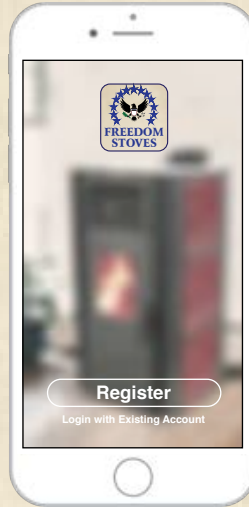
Smart Phone WiFi Set Up

Control your Freedom Stove with your Smart Phone

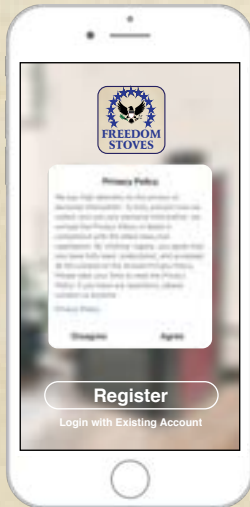
You will need 2.4 GHz WiFi



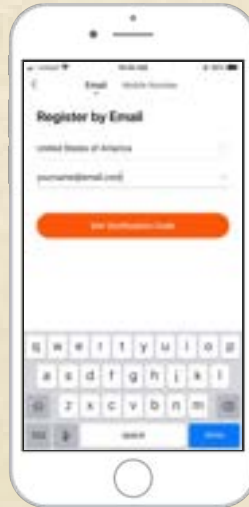
1. From the app store on your phone, download Smart Pellet Stove App.



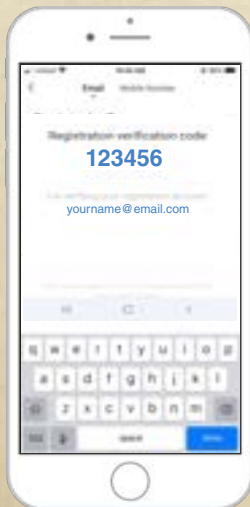
2. Click Registration



3. Follow app prompts



4. Input email information
5. Click "Get Verification Code"



6. Check email.
7. Enter verification code.



8. Create a password
9. Click done

(Continued on next page)


NOTE:
Some phones may ask for permission to use bluetooth, location and local devices.
Click allow/ok




Smart Phone WiFi Set Up cont.




BEFORE YOU CLICK DEVICE
You will have to complete these next steps on the stove control panel

10. Press "Set"  to enter menu




11. Press "Down"  to scroll to WiFi




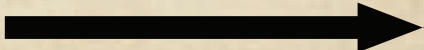
12. Press "Set"  to enter menu



13. Press "Down"  to scroll to "Bind WiFi"



14. Press "Set"  to enter menu

Next page 

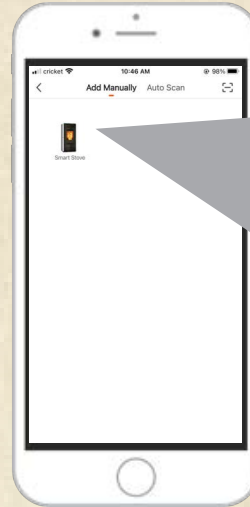


Smart Phone WiFi Set Up cont.

PLEASE NOTE: YOU HAVE 3 MINUTES TO COMPLETE THE NEXT FOUR STEPS



15. Click on "Add Device"



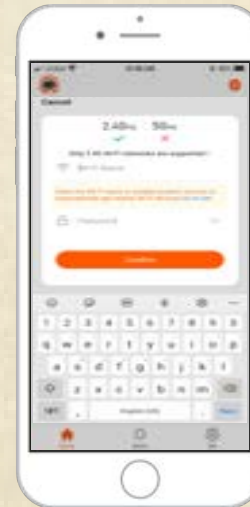
16. Choose Stove



CHOOSE ALLOW LOCATION



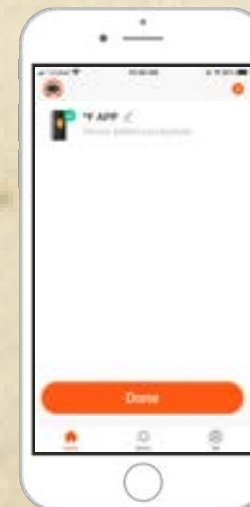
17. Click on "Make sure you complete the above steps"



18. Type in your WiFi Password



19. Phone will connect to your Wifi



20. Device added successfully
21. Click "Done"



Smart Phone WiFi Controls



Home Screen
Customize your stove
name here



Flame Screen
Set flame height
by pressing + / -
OR
by tracing line



Temperature Screen
Set temperature
by pressing + / -
OR
by tracing line



Fan Screen
Set fan speed
by pressing + / -
OR
by tracing line



Using Your Freedom Stove

- **DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE** - Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or “freshen up” a fire in this stove. Keep all such liquids well away from the stove while it is in use.
- **HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.**

ATTENTION: DO NOT BURN ANYTHING BUT PREMIUM GRADE WOOD PELLETS IN THIS STOVE.

DO NOT BURN:

- | | |
|--|--|
| 1. Garbage | 9. Manure or animal remains |
| 2. Lawn clippings or yard waste | 10. Salt water driftwood or other previously salt water saturated materials |
| 3. Materials containing rubber, including tires | 11. Unseasoned wood |
| 4. Materials containing plastic | 12. Paper products, cardboard, plywood, or particleboard. |
| 5. Waste petroleum products, paints or paint thinners, or asphalt products | The prohibition against burning these materials does not prohibit the use of fire starters made from paper, cardboard, saw dust, wax and similar substances for the purpose of starting a fire in an affected wood heater. |
| 6. Materials containing asbestos | |
| 7. Construction or demolition debris | |
| 8. Railroad ties or pressure-treated wood | |

Burning these materials may result in release of toxic fumes or render the stove ineffective and cause smoke.

PROPER FUEL

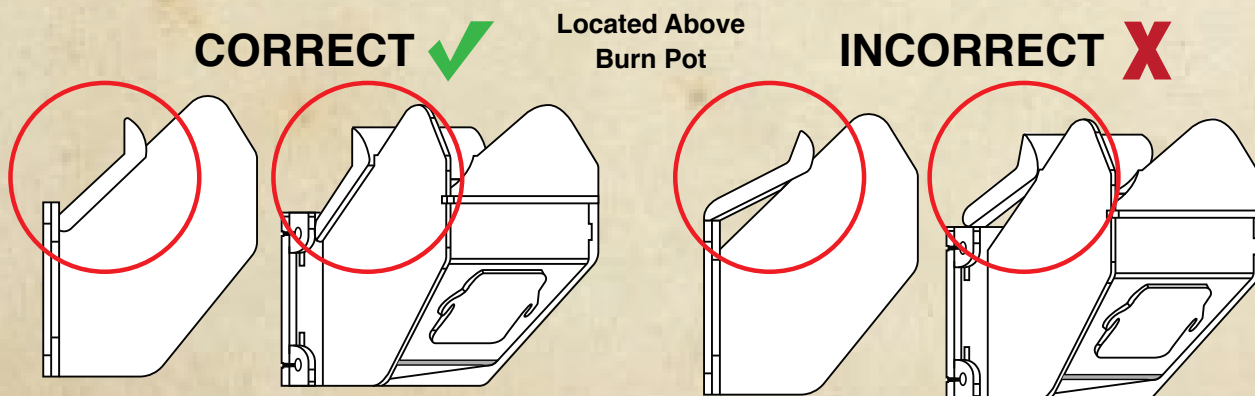
THIS STOVE IS APPROVED FOR BURNING PELLETIZED WOOD FUEL ONLY! Factory-approved pellets are those 1/4” or 5/16” in diameter and not over 1” long. Longer or thicker pellets sometimes bridge the auger flights, which prevents proper pellet feed. Burning wood in forms other than pellets is not permitted. It will violate the safety & emissions codes for which the stove has been approved and will void all warranties. The design incorporates automatic feed of the pellet fuel into the fire at a carefully prescribed rate. Any additional fuel introduced by hand will not increase heat output but may seriously impair the stoves performance by generating considerable smoke. Do not burn wet pellets. The stove’s performance depends heavily on the quality of your pellet fuel. Avoid pellet brands that display these characteristics:

1. **Excess Fines** – “Fines” is a term describing crushed pellets or loose material that looks like sawdust or sand. Pellets can be screened before being placed in hopper to remove most fines.
2. **Binders** – Some pellets are produced with materials to hold the together, or “bind” them.
3. **High ash content** – Poor quality pellets will often create smoke and dirty glass. They will create a need for more frequent maintenance. You will have to empty the burn pot plus vacuum the entire system more often. Poor quality pellets could damage the auger. We cannot accept responsibility for damage due to poor quality pellet fuel.

PRE-START-UP CHECK

Make sure burn pot is clean and air holes are not plugged. Clean the firebox. Clean door glass if necessary (a dry cloth or paper towel is usually sufficient). Never use abrasive cleaners on the glass or door. Check fuel in the hopper, and refill if necessary.

BEFORE STARTING YOUR STOVE, CHECK THAT THE BURNING SEAT IS PLACED CORRECTLY AS SHOWN







BUILDING A FIRE

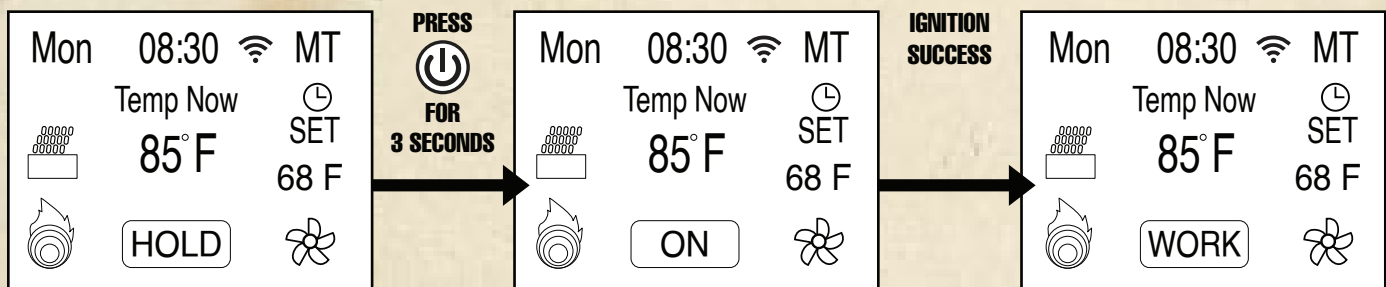
Never use a grate or other means of supporting the fuel. Use only the burn pot supplied with this stove. Hopper lid must be closed in order for the unit to feed pellets.

During the start-up period:

- **BURN POT MUST BE CHECKED AND ALL ASH REMOVED BEFORE STARTING.** Scrape or vacuum as needed.
- Plug in the unit and turn power switch on. Press the On Button for three (3) seconds.
- Screen will light up and stove will ignite.
- Stove will automatically fill the burn pot and the electric igniter will start the fire.
- Adjust feed rate to desired setting by pressing   buttons.
- **DO NOT** open the viewing door.
- **DO NOT** add pellets to the burn pot by hand.

If fire doesn't start in 12 minutes, press "On/Off", clear the burn pot, and start procedure again.

CAUTION: Burn Pot may be hot even if fire was not present.



NOTE: During the first few fires, your stove will emit an odor as the high temperature paint cures or becomes seasoned to the metal. Maintaining smaller fires will minimize this. Avoid placing items on stove top during this period because paint could be affected.



OPENING DOOR



If the door is opened while the stove is in operation it must be closed within 30 seconds or the stove will shut down. If the stove shuts down push the “On/Off” button to re-start your stove. The stove will have to fully shut down and turn off before you will be able to restart the stove.

ROOM AIR FAN

When starting your stove the Room Air Fan will not come on until the stove's heat exchanger warms up. This usually takes about 10 minutes from start-up.

IF STOVE RUNS OUT OF PELLETS


The fire goes out and the auger motor and blowers will run until the stove cools. This will take 90 minutes or longer depending on the heat remaining in the appliance. After the stove components stop running an error message will display on the screen.

Press and hold  until screen displays message **TURNING OFF**. Once turned off, press  to turn on.

REFUELING

- The hopper and stove top will be hot during operation; therefore, you should always use some type of hand protection when refueling your stove.
- Never place your hand near the auger while the stove is in operation.
- We recommend that you not let the hopper drop below ¼ full.
- **KEEP HOPPER LID CLOSED AT ALL TIMES EXCEPT WHEN REFILLING.**
- **DO NOT OVERFILL HOPPER.**

SHUT DOWN PROCEDURE

- Press and hold  for three (3) seconds.
- Screen will display the message **TURNING OFF**.
- Auger motor will stop loading pellets.
- Exhaust and convection motor will continue working until stove cools and temperature drops lower than 120°F.
- Stove will enter into **OFF** mode.

WARNING: NEVER SHUT DOWN THIS UNIT BY UNPLUGGING IT FROM THE POWER SOURCE.

SHUT DOWN FAULTS

1. Your stove is equipped with a high temperature thermo disc. This unit has an automatic reset. This safety feature has two functions.

A. To recognize an overheat situation in the stove and shut down the fuel feed or auger system.

B. In case of a malfunctioning convection blower, the high-temperature thermo disc will automatically shut down the auger, preventing the stove from overheating.

NOTE: On some units, once tripped, like a circuit breaker, the reset button will have to be pushed before restarting your stove.

On other units the thermo disc has no reset button and will reset itself once the stove has cooled. The manufacturer recommends that you call your dealer if this occurs as this may indicate a more serious problem. A service call may be required.

2. If the combustion blower fails, an air pressure switch will automatically shut down the auger.

NOTE: Opening the stove door for more than 30 seconds during operation will cause enough pressure change to activate the air switch, shutting the fuel feed off. The stove will shut down and show an **ERROR** message on the display

The stove has to fully shut down before restarting.



Maintenance

This heater needs periodic inspection and maintenance for proper operation. It is against federal regulations to operate this heater in a manner inconsistent with operating instructions in this manual.

CAUTION: RISK OF ELECTRIC SHOCK. WHEN SERVICING ELECTRICAL COMPONENTS, DISCONNECT UNIT AND ACCESSORY BATTERY (IF APPLICABLE)

- Failure to clean and maintain this unit as indicated can result in poor performance and safety hazards.
- Unplug your stove's electrical cord prior to removing the back panel or opening the exhaust system for any inspection, cleaning, or maintenance work.
- Never perform any inspections, cleaning, or maintenance on a hot stove.
- Do not operate stove with broken glass, leakage of flue gas may result.
- Attempts to achieve heat output rates that exceed heater design specifications can result in permanent damage to the heater.
- The cleaning interval depends on pellet quality and average heating power.
- Moist or high-ash & sawdust pellets may disrupt normal cleaning interval. Always use premium-quality pellets.

		MAINTENANCE SCHEDULE			
		1 Day	2-3 Days	30 Days	1 Year
EXHAUST SYSTEM PARTS	Burn Pot	●			
	Heat Exchange		●		
	Heat Exchange Deflector			●	
	Ash Pan		●		
	Glass		●		
	Fire Box			●	
	Venting			●	
	Combustion Fan			●	
	Convection Fan			●	
	Remote Controller Battery				●
	Control Board Batteries				●
	Door Frame Sealing Strip				●

VENTING

Creosote Formation – When any 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 or a newly started fire or from a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire, which may damage the chimney or even destroy the house. Despite their high efficiency, pellet stoves can accumulate creosote under certain conditions. **INSPECT YOUR VENT MONTHLY AND CLEAN AS NEEDED. ADJUST STOVE TO AVOID CREOSOTE.**

Fly Ash – This accumulates in the horizontal portion of an exhaust run. Though non-combustible, it may impede the normal exhaust flow. It should therefore be periodically removed.

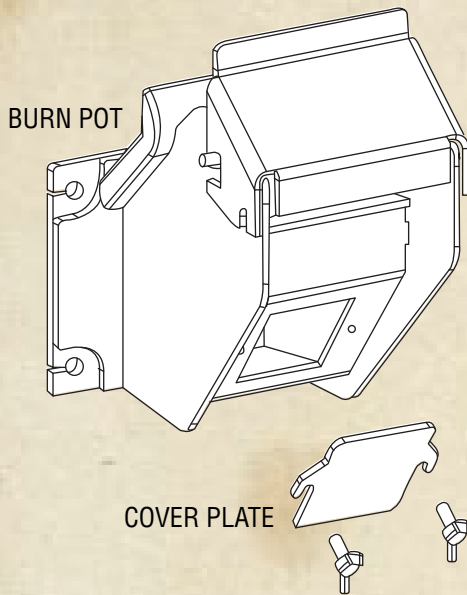
Inspection and Removal – The chimney connector and chimney should be inspected by a qualified person annually or per ton of pellets to determine if a creosote or fly ash build-up has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire. Inspect the system at the stove connection and at the chimney top. Cooler surfaces tend to build creosote deposits quicker, so it is important to check the chimney from the top as well as from the bottom. The creosote should be removed with a brush specifically designed for the type of chimney in use. A qualified chimney sweep can perform this service. It is also recommended that before each heating season the entire system be professionally inspected, cleaned and, if necessary, repaired. To clean the chimney, disconnect the vent from the stove.

WARNING: FAILURE TO PROPERLY MAINTAIN THE CLEAN OUTS WILL RESULT IN POOR PERFORMANCE OF THIS STOVE.

WARNING: DO NOT ATTEMPT TO OPERATE THE HEAT EXCHANGE TUBE CLEANER WHILE THE PELLET STOVE IS IN OPERATION OR COOLING DOWN; WAIT UNTIL PELLET STOVE HAS COOLED COMPLETELY BEFORE PERFORMING THIS PROCEDURE.



Burn Pot & Ash Pan Maintenance



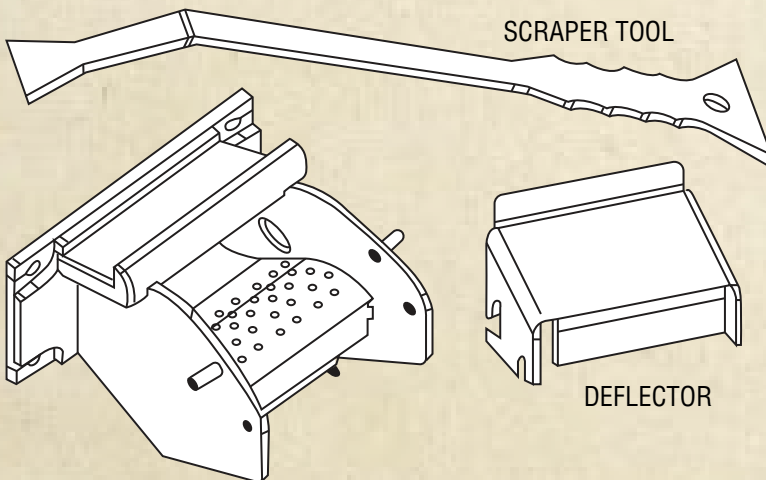
WEAR FLAME RESISTANT PROTECTIVE GLOVES

Burn Pot

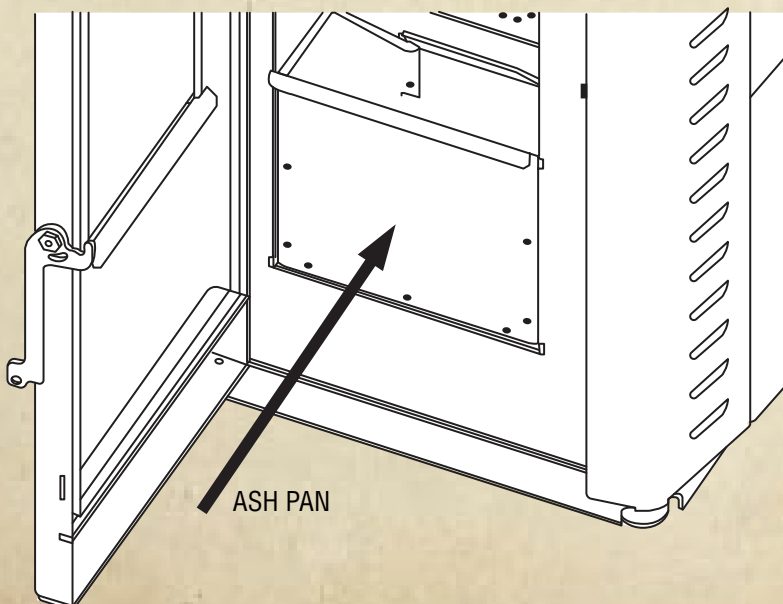
Periodically remove and clean the burn pot deflector and the area inside the burn pot housing. In particular, it is advisable to clean out the holes in the burn pot to remove any build up that may prevent air from moving through the burn pot freely.

To Clean Burn Pot:

- Make sure burn pot is cool.
- Loosen the cover plate fixing screw.
- Remove the cover plate.
- Use a vacuum to remove ash inside.
- Remove deflector.
- Using the scraper tool, scrape burn pot.
- Vacuum any remaining ash. Verify holes are open.
- Reassemble deflector and cover plate.



If a vacuum is used to clean your stove, we suggest using a vacuum designed for ash removal. Shop and household vacuums may leak ash into the room. **DO NOT VACUUM HOT ASH!**



WEAR FLAME RESISTANT PROTECTIVE GLOVES

Ash Pan (Every 2-3 Days)

To Clean Ash Pan:

- Make sure stove is cool.
- Open front of stove.
- Take out ash pan.
- Empty ash pan into noncombustible container with lid and set on noncombustible floor.
- Place cleaned ash pan back into stove.

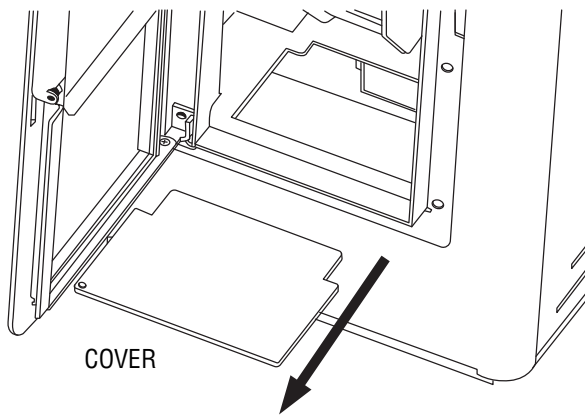
DO NOT PUT ASH IN GARBAGE!!



Flue Tubes, Exhaust Motor, Exhaust Fan, and Heat Exchanger Tubes Maintenance

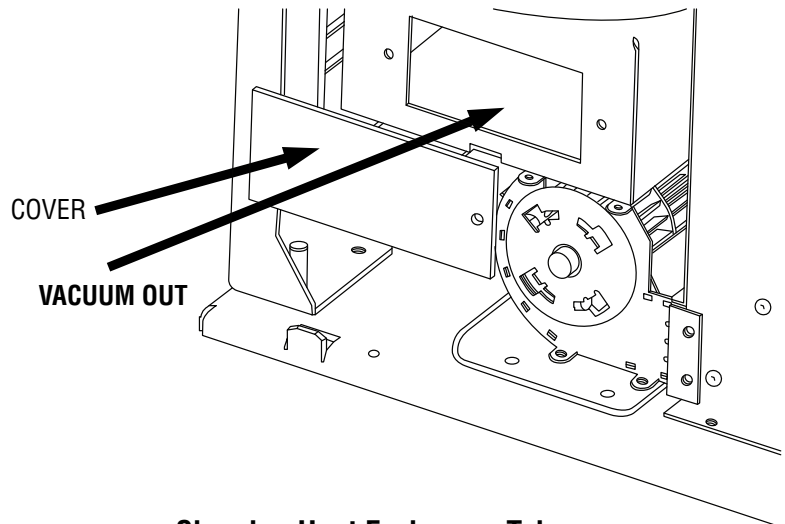
Cleaning flue tubes

- Open front door.
- Remove the cover on the bottom of the stove under the ash pan.
- Use an ash vacuum to clean out.
- Replace cover plate.



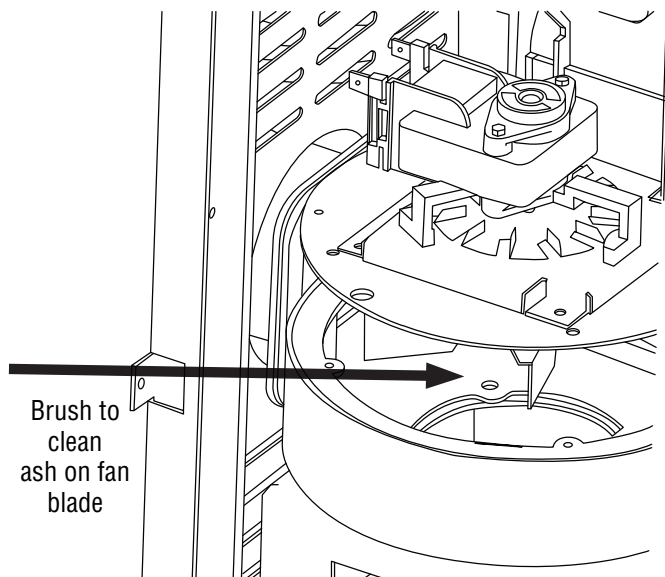
Cleaning the bottom of the exhaust motor

- Take off the cover.
- Ash vacuum can be used for cleaning.
- Replace cover plate.



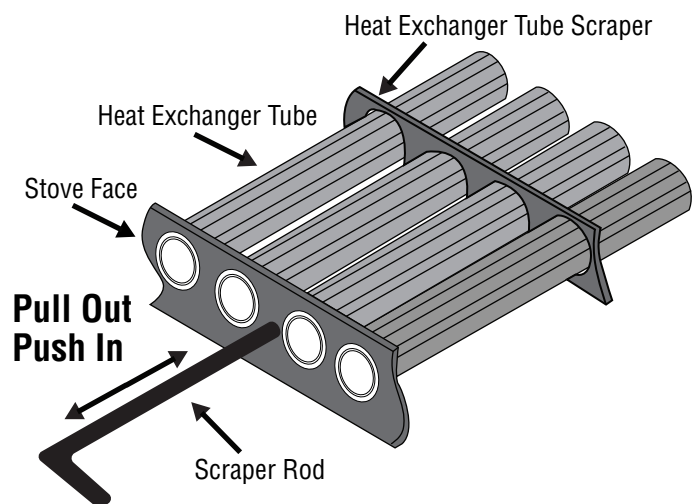
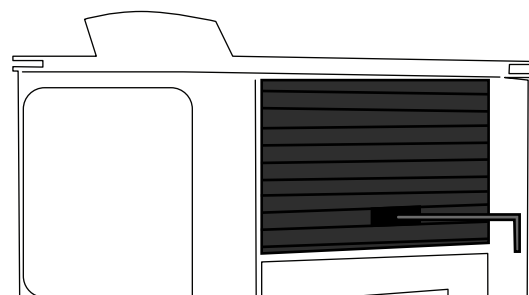
Cleaning the bottom of the exhaust motor fan

- Take out the exhaust motor and use a brush to clean the ash on the exhaust fan blade.



Cleaning Heat Exchanger Tubes

- **WARNING! PERFORM ONLY WHEN STOVE IS COOLED!!!**
- Pull out scraper rod from the front of the unit.
- Pull out and push in to clean tubes.





Glass Maintenance

Before Cleaning Glass:

Always make sure your stove glass has cooled down sufficiently before you attempt to clean it. Some think that slightly warm glass is easier to clean, but the glass will crack if applying cool water to hot glass. **GLASS BREAKAGE IS NOT COVERED UNDER WARRANTY.**

Cleaning Glass:

- Sweep out the wood ashes from the bottom of your stove and put them in a bowl to use later in the cleaning process.
- Using a **SOFT** brush, remove any loose bits of debris from the glass door and surrounding area.
- Use a soft cloth to wipe the inside of the stove glass down with some soapy water. You might be able to cut through some of the soot build up here alone if you use some elbow grease!
- Scrunch up some newspaper up into balls.
- Take the newspaper ball and dip into the water then the bowl of old wood ashes.
- Using the newspaper ball dipped in wood ash, gently scrub the stove glass in circular motions.
- Simply wipe away the residue with a clean cloth.
- Polish glass to finish off.
- Outer glass just use a light squirt of regular glass or window cleaner. Again, just be careful not to damage the stove with chemicals. Buff the glass with a soft dry cloth and your glass should now be clean.

Other Ways To Clean Your Stove Glass:

- Stove glass cleaning spray.
If you really do just want to get the job done, there are special stove glass cleaning sprays out there which offer the best in terms of convenience. **Always follow up with clean water to remove any cleaner film from glass.**



DIRTY



CLEAN

Tips:

- Remember that glass can scratch, so don't use anything abrasive on the glass that could damage it beyond repair.
- Don't wait too long between glass cleanings – the more soot builds up over time, the harder it is to remove.
- If you notice any damage to the rope seal around the door, or cracks in the glass, be sure to get them repaired.
DO NOT burn the unit until you do.
- Remember, if your glass is very dirty, your flue will be too. Always make sure you inspect the venting system regularly to avoid chimney fires.

Gasket/Door Seal:

- The seal ropes of door and glass should be checked at least once a year.
- While the unit is cool, inspect all door gaskets to insure proper seal. The gasket should be continuous without frays or tears; having a plyable gasket means having a correct seal for proper operation.
- Put a piece of paper between seal cord and surface of chamber, close the door, pull out the paper.
 - Paper does not come out - Seal is firm and does not need to be replaced.
 - Paper pulls out with no problem - Seal is worn and needs to be repaired or replaced.

Replacing Gasket

1. Order Gasket Replacement Kit: Gasket replacement kits contain both the new gasket and a sealant to help install it. Order this from the stove manufacturer or buy a generic kit and cut it to size. Be aware that rope gaskets for stove doors are significantly different than glass gaskets.
2. Remove Door from Stove: Use the screwdriver to remove any trim pieces from the door and set them aside. Open the stove door and lift it straight off its hinges. You may need to wiggle it slightly to loosen it up. Set the door aside on a flat surface, wrapping it in the towel so it will not get scratched. If you also wish to replace the glass gaskets, loosen the retainers and lift the glass out of the door.
3. Remove Old Gasket Material: Beginning with a putty knife or screwdriver, scrape away all of the old gasket material from the gasket groove. Any leftover remnants of the old gasket will interfere with the seal of the new installation and defeat the purpose of replacement. After you have peeled off the large bits, use a wire brush to remove the small pieces. Finally, wipe the whole area down with a rag soaked in a solvent solution.

CONTINUED ON PAGE 36



Replacing Gasket Continued

4. Install New Gasket: To install a door gasket, lay a small bead of the gasket glue or cement into the gasket groove. Then, simply drop the rope around the perimeter. There is no need to stretch it. If you are installing a glass gasket, there will probably not be any glue or cement, but rather a paper backing that peels off to reveal sticky tape. Replace the glass panel in the retainers after cleaning off the old gasket. Stick the new gasket around the edge of the glass.

5. Allow Glue to Dry and Reassemble: Follow the manufacturer's instructions for allowing the glue or cement to dry. This could take anywhere from 30 minutes to 24 hours. When it is dry, replace the door by sliding it back onto the hinges. Now test your pellet stove again to make sure there is a tight seal.

Smoke Pipe Maintenance

Cleaning Smoke Pipes:

- Brush all venting sections with appropriate rod and brush paying special attention to horizontal sections.
- Manually remove the T Cover downward.
- Clean.
- Place back on stove making sure it is firmly sealed.
- Be sure to inspect vent termination for build up and clean as needed.

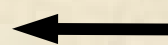


DIRTY



CLEAN

T Cover



Hopper Maintenance

Hopper Cleaning

- Vacuum out the hopper to remove all fines and dust when the stove is cool and will not be used.
- This should be done approximately every 50 bags

Hopper Gasket

- Inspect Hopper lid gasket for damage.
- Replace gasketing if frays, tears or other visible damage to gasket.



Power Fuse

Fuse Replacement



Igniter Fuse



Safety Reminders

When installing and operating your Freedom Stove, respect basic safety standards. Read these instructions carefully before you attempt to install or operate your pellet stove. Failure to do so may result in damage to property or personal injury and may void the product warranty.

Consult with your local building code agency and insurance representative before you begin your installation to ensure compliance with local codes, including the need for permits and follow-up inspections.

- **CAUTION: THIS APPLIANCE MUST BE VENTED TO THE OUTSIDE.**
- **CAUTION: THE STOVE IS HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.**
 - Due to high temperatures, this stove should be placed out of traffic and away from furniture and draperies.
 - Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burn to skin and/or clothing.
 - Young children should be carefully supervised when they are in the same room as the stove.
 - Clothing and other flammable materials should not be placed on or near this stove.
- Installation and repair of this stove should be done by a qualified service person.
- The appliance should be inspected before use and at least annually by a qualified service person.
 - More frequent cleaning may be required.
 - It is imperative that this stove and venting be kept clean.
- **CAUTION: WHEN THIS ROOM HEATER IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THE INSTALLATION INSTRUCTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.**
- **CAUTION: THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL, AND CEILING/ROOF MUST BE MAINTAINED.**
- **CAUTION: MOBILE/MANUFACTURED HOME GUIDELINES DO NOT ALLOW INSTALLATION IN A SLEEPING ROOM.**
- **CAUTION: KEEP COMBUSTIBLE MATERIALS SUCH AS GRASS, LEAVES, ETC. AT LEAST 3 FEET AWAY FROM THE POINT DIRECTLY UNDER THE VENT TERMINATION.**
- **CAUTION: USE OF IMPROPER FUELS, FIRE STARTERS OR ALTERING THE STOVE FOR HIGHER HEAT OUTPUT MAY CAUSE DAMAGE TO THE STOVE AND COULD RESULT IN A HOUSE FIRE. USE ONLY APPROVED FUELS AND OPERATION GUIDE LINES.**
- **CAUTION: BURNING COLORED PAPER, CARDBOARD, SOLVENTS, TRASH AND GARBAGE OR ALTERING THE STOVE FOR HIGHER HEAT OUTPUT MAY CAUSE DAMAGE TO THE STOVE AND COULD RESULT IN A HOUSE FIRE. USE ONLY APPROVED FUELS AND FOLLOW ONLY THESE OPERATION GUIDELINES.**



Errors and Solutions

ALARM 1 - MAINTENANCE ERROR (Maint)

Mon	08:30	WiFi	MT
	Maint	🕒	SET
	85° F		68° F
	OFF		

Stove needs maintenance

- Check entire stove.
- Perform cleaning and maintenance.
- Check programming.

ALARM 2 - IGNITION FAILURE ERROR (Ign Fail)

Mon	08:30	WiFi	MT
	Ign Fail	🕒	SET
	85° F		68° F
	OFF		

Stove ignition fails

- Check hopper to make sure there are pellets.
- Check for carbon and ash build up in the burn pot. Clean as needed.
- Ignition succeeding but alarms sounds. Adjust start up feed timing in general technical area of control.

ALARM 3 - HIGH FLUE GAS TEMPERATURE (H T Flue)

Mon	08:30	WiFi	MT
	H T Flue	🕒	SET
	85° F		68° F
	OFF		

Flue gas temperature too high

- Verify stove is clean.
- Decrease pellet feed in auger.

ALARM 4 - HIGH TEMPERATURE IN HOPPER (H T Hopper)

Mon	08:30	WiFi	MT
	H T Hopper	🕒	SET
	85° F		68° F
	OFF		

Hopper temperature too high

- Verify stove and hopper are clean.
- Decrease pellet feed in auger.
- Check temperature control switch. Replace if needed.



Errors and Solutions cont.

ALARM 5 - HOPPER EMPTY (Pellet Lack Alm)

Mon 08:30 MT
Pellet Lack Alm SET
 85° F 68° F
 OFF

Hopper is empty

- Fill hopper and restart stove.
- This message appears, but there are still pellets in the hopper:
 - May be bridged or foreign obstruction in hopper.
 - Empty hopper completely, refill and restart.

ALARM 6 - THERMOCOUPLE PROBLEM (TC Fault)

Mon 08:30 MT
TC Fault SET
 85° F 68° F
 OFF

Thermocouple problem, wrong match with or poor contacting with anode and cathode.

- Verify stove and venting are clean.
- Check the thermocouple connection.
- Change the thermocouple.

ALARM 7 - LOW PRESSURE ISSUE (Low NP)

Mon 08:30 MT
NP Fault SET
 85° F 68° F
 OFF

Pressure switch problem, or flue pipe with too low negative pressure.

- Check and clean the flue pipes.
- Re-check and close the door and hopper.
- Check door seal.
- Check pressure switch air tube for blockage at stove.

ALARM 8 - TEMPERATURE SENSOR PROBLEM / POOR CONTACT (NTC Fault)

Mon 08:30 MT
NTC Fault SET
 85° F 68° F
 OFF

Temperature sensor problem or poor contacting.

- Verify stove is clean.
- Check the connection.
- Change the temperature sensor if required.

ALARM 9 - FLUE GAS OVER TEMPERATURE (Fire Down)

Mon 08:30 MT
Fire Down SET
 85° F 68° F
 OFF

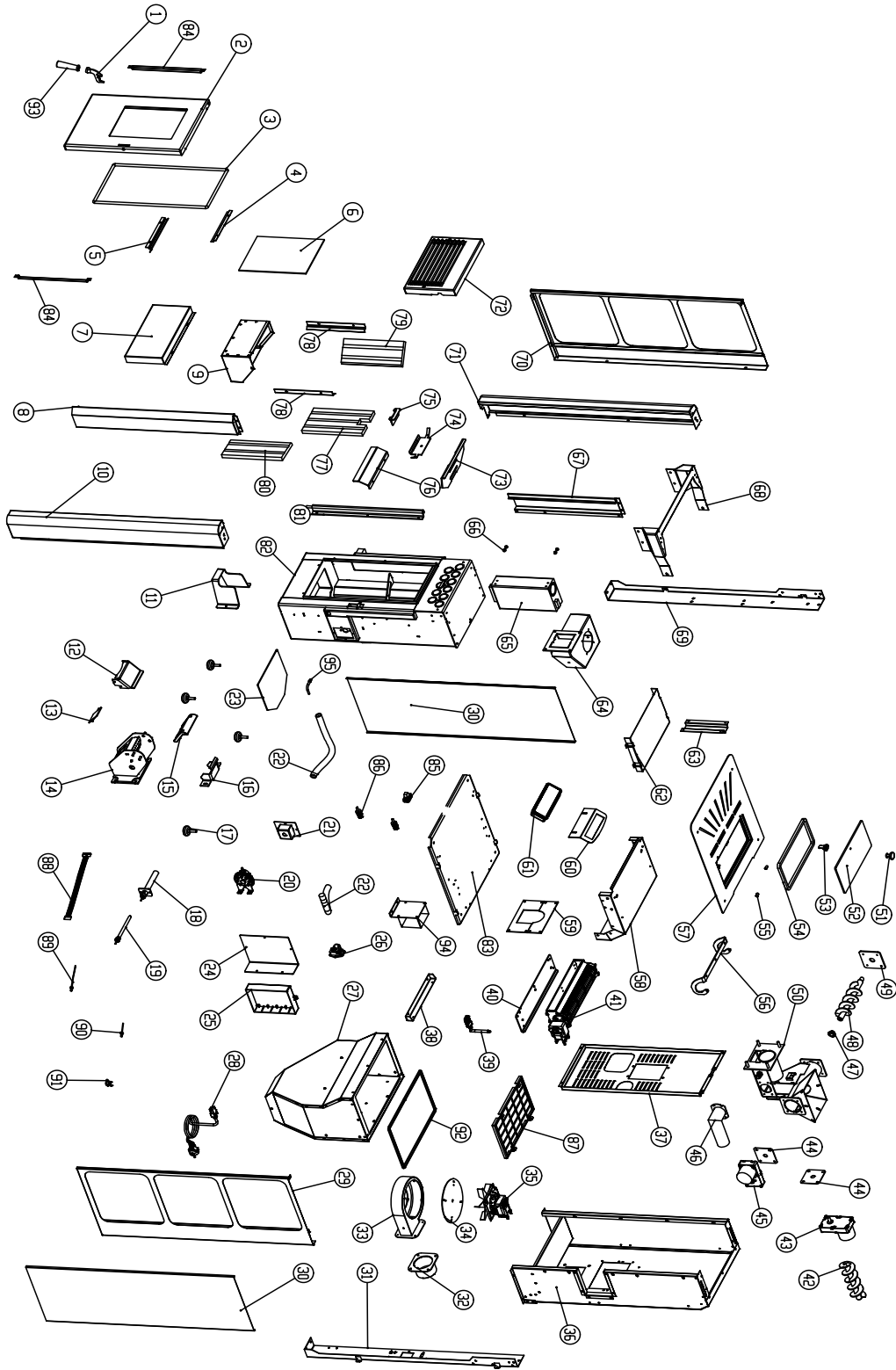
Over temperature of flue gas.

- Check and clean the unit and venting.
- Decrease pellet feeding.
- Change the mandatory downgrade temperature (after contacting the dealer).

ITEM	FAULTS	CAUSES	SOLUTIONS	REMARKS
1	<p>Fire is burning weakly with orange flame.</p> <p>Front glass gradually turns black.</p> <p>Burner pot is filling up with pellets.</p>	<ul style="list-style-type: none"> • Not enough air for combustion 	<ul style="list-style-type: none"> • Check to see if burner pot is clean. • Clear ashes from below burn pot. • Use premium quality pellets. • Check the air inlet duct and flue. Make sure they are empty and clean. • Check chimney for ash accumulation. • Check the stove door. • Check if blower is operating properly. • Have stove cleaned by technician. • Increase air in per technician. 	
2	<p>The fire is extinguished.</p> <p>Stove stops running.</p>	<ul style="list-style-type: none"> • The hopper is empty. • Pellets are not being delivered to hopper. • The chamber temperature is too low. • The front door is not sealed or properly closed. • Poor quality pellets used. • Not enough pellets are being fed. • Stove temperature is too high, and stove stops delivering pellets to the burner due to safety temperature limit (180°F temperature control). 	<ul style="list-style-type: none"> • Refill the hopper. • Check Error 3: Pellets not being delivered. • Wait for one hour until stove has cooled down completely. • See the maintenance requirements herein. • Only use approved pellets. • Have a professional technician adjust your stove. • Manually restart the stove after the stove has been totally cooled down and cleaned. 	
3	<p>Pellets are not being delivered.</p>	<ul style="list-style-type: none"> • The hopper is empty. • Auger feeding mechanism is blocked by foreign object(s). • Due to over-temperature, the auger has reached STI (Safe Temperature Limit) and stopped. • Faulty PC board or auger motor. • Pressure Switch - Lack of regular pressure. 	<ul style="list-style-type: none"> • Refill the hopper. • Clean the auger and hopper. • Manually restart the stove after the stove has been totally cooled down. • Have a professional technician check and replace faulty part. • Door closed, vent cleaned, pressure switch working 	
4	<p>The stove burns for a short while and then completely stops running.</p>	<ul style="list-style-type: none"> • Stove temperature is not reaching minimum limit. • Temperature sensor may not be working. • Defective wire connection of temperature sensor. • Defective PC board. 	<ul style="list-style-type: none"> • Clean tubes and vents and restart stove. • Check wires to make sure temperature sensor is properly connected. • NOTE: Only check PC board and wire when stove is unplugged. PC board should be repaired by professional technician. • Have professional replace temperature sensor and check PC board. 	
5	<p>The stove does not start.</p>	<ul style="list-style-type: none"> • No power supply. • Check fuse in power switch • Check igniter fuse 	<ul style="list-style-type: none"> • Check power connection. • Make sure there is sufficient voltage. • Switch batteries. • Replace fuse if necessary 	
6	<p>Ashes can be seen outside the stove.</p>	<ul style="list-style-type: none"> • The front door is open. • The exhaust system is not sealed. 	<ul style="list-style-type: none"> • Only open front door when stove is not in use. • During operation, always keep door closed. • Seal any leakage with high temperature sealing rope or heat resistant silicone materials. 	
7	<p>Abnormal noise.</p>	<ul style="list-style-type: none"> • Auger motor noise. • Room blower noise. • Exhaust blower noise. <p>** The normal noise of the stove during running is about 55dB.</p>	<ul style="list-style-type: none"> • Check auger motor to see if running properly. • Check blower to see if working properly. If necessary, replace the high temperature resistant damping cushion at the end of the blower. • Check exhaust blower motor to see if working properly. 	



Stove Parts Diagram



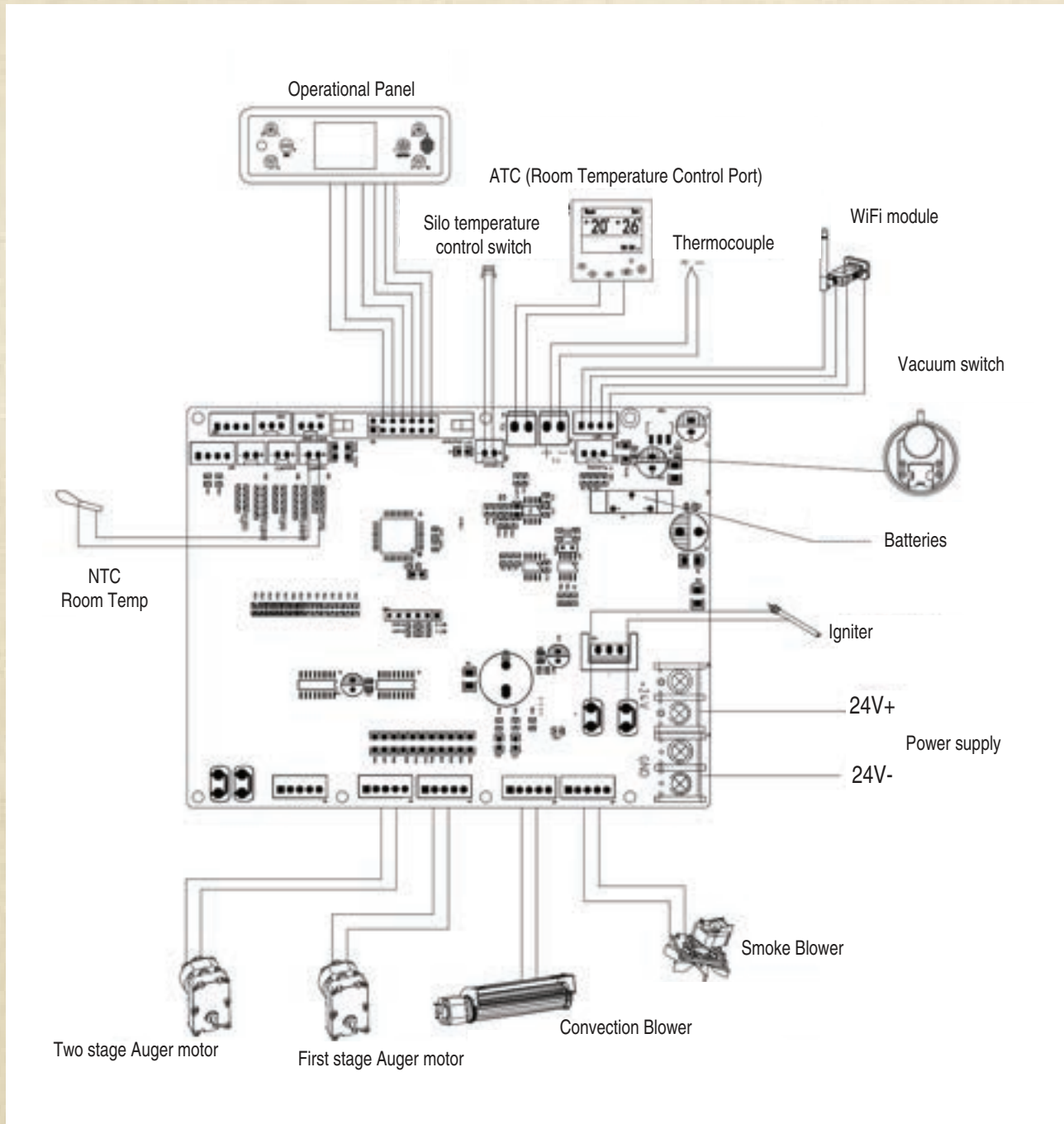


Part Numbers

No.	Spare Parts	Part No.			
			48	Secondary Feeding Roller	21048
1	Door Lock Hook	21001	49	Bearing End Cover	21049
2	Stove Door	21002	50	Pellet Feeding Welding Combination	21050
3	Sealed Rope	21003	51	Hopper Cover Knob	21051
4	Glass Platen (Upper)	21004	52	Hopper Cover	21052
5	Glass Platen (Bottom)	21005	53	Hopper Cover Knob Fixing Plate	21053
6	Door Glass	21006	54	Hopper Sealed Gasket	21054
7	Front Lower Cover	21007	55	Cover Bead	21055
8	Side Front Thermal Baffle(Right)	21008	56	Cover Bracket	21056
9	Ash Box	21009	57	Top Cover	21057
10	Front Right Upright	21010	58	Top Thermal Baffle	21058
11	Block Ash Baffle	21011	59	Back Thermal Baffle	21059
12	Small Block Fire Baffle	21012	60	Display Screen Holder	21060
13	Small Ash Cleaning Cover On Stove Burner	21013	61	Display Screen	21061
14	Burner	21014	62	Top Cover 2	21062
15	Burner Cover	21015	63	Cable Cover	21063
16	Cast Iron Platen	21016	64	Flue Welding Combination	21064
17	Stove Feet	21017	65	Converter	21065
18	Igniter Sleeve Welding Combination	21018	66	Insulation Pad	21066
19	Igniter	21019	67	Side Front Thermal Baffle(Left)	21067
20	Negative Pressure Switch	21020	68	Side Panel Bracket	21068
21	Igniter Cover	21021	69	Rear Left Upright	21069
22	Air Curtain Tube	21022	70	Side Frame(Left)	21070
23	Large Ash Cleaning Cover	21023	71	Front Left Upright	21071
24	Circuit Box Fixing Plate	21024	72	Radiating Plate	21072
25	Circuit Box	21025	73	Block Fire Baffle	21073
26	Three-in-one Power Switch	21026	74	Fire-Resistant Brick Platen (Upper)	21074
27	Hopper	21027	75	Block Fire Baffle Bracket	21075
28	Power Cable	21028	76	Front Air Baffle	21076
29	Side Frame(Right)	21029	77	Rear Fire-resistant Brick	21077
30	Insert Board Of Side Frame	21030	78	Fire-Resistant Brick Platen (Left & Right)	21078
31	Rear Right Upright	21031	79	Fire-Resistant Brick (Left)	21079
32	Smoke Outlet Pipe Combination	21032	80	Fire-resistant Brick (Right)	21080
33	Fan Base Combination	21033	81	Stove Door Hinge Plate Welding Combination	21081
34	Smoking Fan Mounting Plate	21034	82	Stove Body Welding Combination	21082
35	Exhaust Motor	21035	83	Bottom Base	21083
36	Thermal Baffle Combination	21036	84	Glass Platen (Left & Right)	21084
37	Back Cover	21037	85	USB Terminal Block	21085
38	Back Cover Holder	21038	86	Terminal	21086
39	Wifi Antenna	21039	87	Hopper Fence	21087
40	Heater Bracket	21040	88	Wire Harness	21088
41	Convection Blower	21041	89	Smoke Temperature probe (Thermocouple)	21089
42	Primary Feeding Roller	21042	90	Room Temperature Sensor(NTC)	21090
43	Secondary Feeding Motor	21043	91	105° Temperature Control Switch	21091
44	Motor Holder 1	21044	92	Top Cover Gasket	21092
45	Primary Feeding Motor	21045	93	Wood Door Handle	21093
46	Intake Pipe Welding Combination	21046	94	Charger Board With Holder	21094
47	Big Shaft Sleeve	21047	95	Negative Pressure Nozzle	21095



Wiring Diagram





Warranty

LIMITED 1 YEAR WARRANTY

WARRANTY COVERAGE:

Freedom Stoves, LLC warrants that the Products and their Component Parts will be free from defects in materials and workmanship for the applicable period of Warranty coverage set forth in the table below (“Warranty Period”). If a Product or Component Parts are found to be defective during the applicable Warranty Period, Freedom Stoves, LLC will, at its option, repair the applicable Component Part(s), replace the applicable Component Part(s), or refund the purchase price of the applicable Product(s). The maximum amount recoverable under this Warranty is limited to the purchase price of the Product. This Warranty is transferable from the original purchaser to subsequent owners, but the Warranty Period will not be extended in duration or expand in coverage for any such transfer. This Warranty is subject to conditions, exclusions, and limitations as described below.

WARRANTY PERIOD:

Warranty coverage begins at the date of sale. In the case of new home constructions, Warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the Product(s) by an independent, authorized Freedom Stoves, LLC dealer or distributor, whichever occurs earlier. However, the Warranty coverage shall commence no later than 12 months following the date of Product shipment from Freedom Stoves, LLC, regardless of the installation or occupancy date.

WARRANTY CONDITIONS:

- Freedom Stoves, LLC cannot control the quality of any Products sold by unauthorized sellers, this Warranty only covers Products that are purchased through a Freedom Stoves, LLC authorized dealer or distributor unless otherwise prohibited by law; a list of Freedom Stoves, LLC authorized dealers is available at freedomstoves.com.
- This Warranty is only valid while the applicable Product remains at the site of original installation.
- This Warranty is only valid in the country in which the Freedom Stoves, LLC authorized dealer or distributor that sold the applicable Product is authorized to sell applicable Product.
- ***This warranty is VOID if the unit is used to burn materials for which the unit is not certified by the EPA.***
- ***This warranty is VOID if the unit is not operated according to the owner’s manual.***

WARRANTY EXCLUSIONS:

This Warranty does not cover the following:

- Damage to painted, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under the Warranty.
- Repair or replacement of parts that are subject to normal wear and tear during the Warranty Period are not covered. These parts include: paint, wood and pellet gaskets, firebricks, grates, flame guides, batteries and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this Warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the applicable Product in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the applicable Product; (2) failure to install the applicable Product in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operation instructions; (7) installation or use of components not supplied with the applicable Product or any other components not expressly authorized and approved by Freedom Stoves, LLC; (8) modification of the appliance not expressly authorized and approved by Freedom Stoves, LLC in writing; and/or (9) interruptions or fluctuations of electrical power supply to the applicable Product.
- Non-Freedom Stoves, LLC venting components, hearth connections or other accessories used in conjunction with the applicable Product.
- Any part of a preexisting fireplace system in which an insert or Product is installed.
- Freedom Stoves, LLC’s obligation under this Warranty does not extend to the Product’s capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper Product for the application. Consideration must be given to the Product location and configuration, environmental conditions, insulation and air tightness of the structure.



Warranty cont.

This warranty is void if:

- The unit is used to burn materials for which the unit is not certified by the EPA.
- The unit is not operated according to the owner's manual.
- The applicable Product has been over-fired, operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, deformation/warping of interior cast iron structure or components, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The applicable Product is subjected to prolonged periods of dampness or condensation.
- There is any damage to the applicable Product due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

LIMITATIONS OF REMEDIES AND LIABILITY:

- **EXCEPT TO THE EXTENT PROVIDED BY LAW, FREEDOM STOVES, LLC MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. The owner's exclusive remedy and Freedom Stoves, LLC's sole obligation under this Warranty or in contract, tort or otherwise, shall be limited to replacement of the Component Part(s), repair of the Component Part(s), refund of the original purchase price of the applicable Product(s), or replacement of unit, as specified above; provided, however, that (i) if Freedom Stoves, LLC is unable to provide replacement of the Component Part(s) and repair of the Component Part(s) is not commercially practicable or cannot be timely made, or (ii) the customer is willing to accept a refund of the purchase price of the applicable Product(s), Freedom Stoves, LLC may discharge all such obligations by refunding the purchase price of the applicable Product. In no event will Freedom Stoves, LLC be liable for any incidental or consequential damages caused by defects in the applicable Product. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from State to State. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE FOR THE APPLICABLE PRODUCT. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.**

Warranty Service and/or Replacement Instructions

- Contact your installing distributor or dealer for Warranty service. If the installing dealer or distributor is unable to provide necessary parts, contact the nearest Freedom Stoves, LLC authorized dealer or supplier. Additional service fees may apply if you are seeking Warranty service from a dealer other than the dealer from whom you originally purchased the applicable Product.
- Check with your dealer or distributor in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this Warranty.
- For warranty registration, please visit freedomstoves.com.

Freedom Stoves LLC
2080 W. 9th Ave • Unit 329 • Oshkosh, WI 54904 • USA
freedomstoves.com