

INSTALLER: THESE INSTRUCTIONS MUST BE CONVEYED TO AND REMAIN WITH THE HOMEOWNER.



INSTALLATION AND OPERATING INSTRUCTIONS

THIS FIREPLACE HAS BEEN TESTED TO ASTM E 1509, UL 1482, ULC S627.

Auburn™

**PLEASE READ ENTIRE MANUAL BEFORE
YOU INSTALL OR USE THIS PELLET
BURNING HEATER.**

**If this heater is not properly installed, a
house fire may result.**

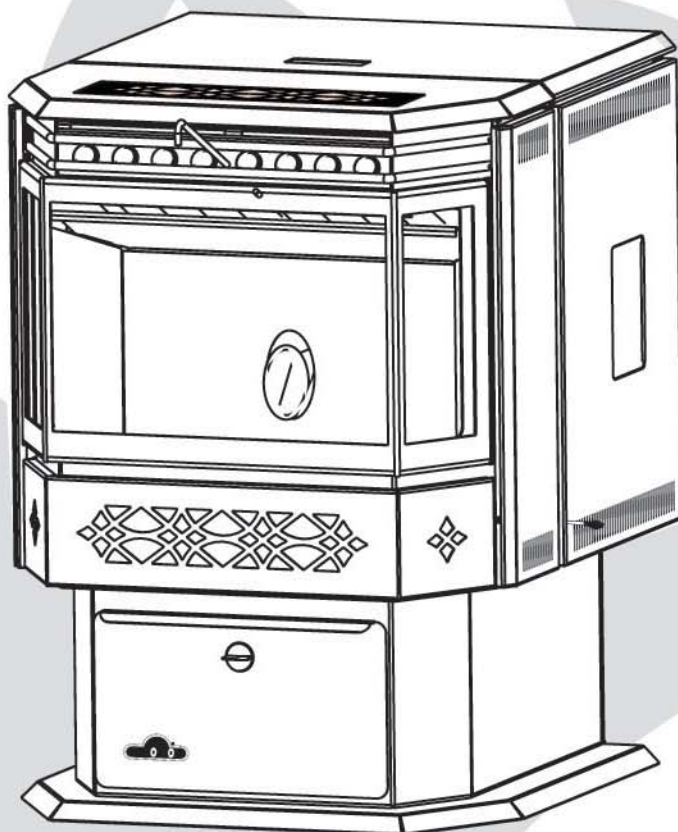
NPS40 Free Standing Pellet Heater



APPLY SERIAL NUMBER LABEL FROM CARTON



Serial No. XXXXXX000000
MODEL NO.



**Wolf Steel Ltd., 24 Napoleon Rd., Barrie, ON L4M 4Y8 Canada • (705)721-1212 • fax(705)722-6031
www.napoleonfireplaces.com • ask@napoleon.on.ca**

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PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

Before installation, consult with the authority having jurisdiction (building department, fire department etc...) to determine if there is the need to obtain a permit.

NAPOLEON Pellet Heaters are manufactured under the strict Standard of the World Recognized ISO 9001 : 2000 Quality Assurance Certificate.

NAPOLEON products are designed with superior components and materials, assembled by trained craftsmen who take great pride in their work. The complete fireplace is thoroughly inspected by a qualified technician before packaging to ensure that you, the customer, receives the quality product that you expect from NAPOLEON.

REQUIRED NEW WARRANTY INFO

NAPOLEON PELLETS HEATERS PRESIDENT'S LIFETIME LIMITED WARRANTY

The following materials and workmanship in your new NAPOLEON Pellet Heater are warranted against defects for as long as you own the heater. This covers: the pellet hopper, outer shell, ceramic glass (thermal breakage only) and ash drawer.

The combustion chamber and heat exchanger are warranted against defects for a period of five years. All other wearable parts and electrical components such as blowers, thermal switches and burner pot are covered and Napoleon will provide replacement parts free of charge during the first year of the limited warranty.

Labour related to warranty repair is covered free of charge during the first year. Repair work, however, requires the prior approval of an authorized company official. Labour costs to the account of NAPOLEON are based on a predetermined rate schedule and any repair work must be done through an authorized NAPOLEON dealer.

CONDITIONS AND LIMITATIONS

NAPOLEON warrants its products against manufacturing defects to the original purchaser only -- i.e., the individual or legal entity (registered customer) whose name appears on the warranty registration card filed with NAPOLEON -- provided that the purchase was made through an authorized NAPOLEON dealer and is subject to the following conditions and limitations:

This factory warranty is non-transferable and may not be extended whatsoever by any of our representatives.

The Pellet Heater must be installed by an authorized service technician or contractor. Installation must be done in accordance with the installation instructions included with the product and all local and national building and fire codes.

This limited warranty does not cover damages caused by misuse, lack of maintenance, accident, alterations, abuse or neglect. Operating heater on high for extended periods of time, is neglect. Parts installed from other manufacturers will nullify this warranty.

This limited warranty further does not cover any scratches, dents, corrosion or discolouring caused by excessive heat, abrasive and chemical cleaners nor chipping on porcelain enamel parts, nor any venting components used in the installation of the fireplace.

In the first year only, this warranty extends to the repair or replacement of warranted parts which are defective in material or workmanship provided that the product has been operated in accordance with the operation instructions and under normal conditions.

After the first year, with respect to the President's Limited Lifetime Warranty, NAPOLEON may, at its discretion, fully discharge all obligations with respect to this warranty by refunding to the original warranted purchaser the wholesale price of any warranted but defective parts).

After the first year, NAPOLEON will not be responsible for installation, labour or any other costs or expenses related to the reinstallation of a warranted part, and such expenses are not covered by this warranty.

Notwithstanding any provisions contained in the President's Limited Lifetime Warranty, NAPOLEON'S responsibility under this warranty is defined as above and it shall not in any event extend to any incidental, consequential or indirect damages.

This warranty defines the obligations and liability of NAPOLEON with respect to the NAPOLEON pellet heater and any other warranties expressed or implied with respect to this product, its components or accessories are excluded.

NAPOLEON neither assumes, nor authorizes any third party to assume, on its behalf, any other liabilities with respect to the sale of this product. NAPOLEON will not be responsible for: over-firing, downdrafts, spillage caused by environmental conditions such as rooftops, buildings, nearby trees, hills, mountains, inadequate vents or ventilation, excessive venting configurations, insufficient makeup air, or negative air pressures which may or may not be caused by mechanical systems such as exhaust blowers, furnaces, clothes dryers, etc.

Any damages to fireplace, combustion chamber, heat exchanger, brass trim or other component due to water, weather damage, long periods of dampness, condensation, damaging chemicals or cleaners will not be the responsibility of NAPOLEON.

The bill of sale or copy will be required together with a serial number and a model number when making any warranty claims from your authorized dealer. The warranty registration card must be returned within fourteen days to register the warranty.

Regular cleaning of the fine ash generated during the operation of this heater is a necessary part of maintaining your pellet heater. Failure of any components, which is attributed to poor maintenance, is not warrantable and will not be covered by this policy.

NAPOLEON reserves the right to have its representative inspect any product or part thereof prior to honouring any warranty claim.

WARNINGS AND SAFETY PRECAUTIONS



Do Not operate the heater if you smell smoke coming from the heater. Turn the Pellet Feed dial to "OFF", monitor your heater, and call a trained technician



Before installing this heater, contact the local building or fire authority and follow their guidelines. Notify your insurance company of this heater as well.



Do not start a fire with chemicals or fluids such as gasoline, engine oil, etc.



The exhaust system must be completely airtight and properly installed. It is recommended that the pellet vent joints be sealed with a minimum 500°F (260°C) silicone sealant. Install according to the vent manufacturers instructions.



Do not unplug the heater if you suspect a malfunction. Turn the Pellet Feed dial to "OFF" and monitor your heater.



If this heater is not properly installed, a house fire may result.



Never try to repair or replace any part of the heater unless instructions are given in this manual. All other work should be done by a trained technician.



Your heater requires periodic maintenance and cleaning. Failure to maintain your heater may lead to smoke spillage in your home.



The viewing door and ashpan must be closed and latched during operation.



Allow the heater to cool before performing any maintenance or cleaning. Ashes must be disposed in a metal container with a tight lid and placed on a non-combustible surface well away from the home or structure.



Never block free airflow through the open vents of the unit. Do not operate the heater if the flame becomes dark and sooty or if the burnpot overfills with pellets. Turn the Pellet Feed dial to "OFF" and periodically inspect the heater.



The heater is designed and approved for pelletized wood fuel only. Any other type of fuel burned in this heater will void the warranty and safety listing.

WARNINGS AND SAFETY PRECAUTIONS



During a power outage this heater will not operate. If a power outage does occur, check the heater for smoke spillage and open a window if any smoke spills into the room.



This heater must be connected to a standard 115 V., 60Hz grounded electrical outlet. Do not use an adapter plug or sever the grounding prong. Do not route the electrical cord underneath, in front of, or over the heater.



Keep foreign objects out of the hopper.



When installed in a mobile home, the heater must be bolted to the floor, have outside air, and **NOT BE INSTALLED IN THE BEDROOM** (Per H.U.D. requirements). Check with local building officials.



Disconnect the power cord before performing any maintenance.
NOTE:
Turning the Pellet Feed dial to "OFF" does not disconnect all power to the heater.



The exhaust system should be checked once a year minimum for any build-up of soot or creosote.

Operating Manual

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 heater can be very hot when burning. Children and pets must be kept from touching the fireplace when it is hot.



Combustible materials such as firewood, wet clothing, etc. placed too close can catch fire. Objects placed in front of the heater must be kept a minimum of 48" from the front face of the heater.



This heater can become very hot, you **MUST** wear leather work gloves when cleaning or handling this heater.



At no point should you use firewood or firelogs in this heater. The use of which could cause a house fire.

INTRODUCTION

GENERAL INSTRUCTIONS

Thank you for purchasing the Napoleon Pellet Heater.

This heater is designed for use with Pelletized Wood Only.

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.

Keep this manual handy for future reference.

This Pellet Heater, when installed, must be electrically grounded in accordance with the local codes, or in the absence of local codes, use the current CSA C22.1 Canadian Electrical Code in Canada or the ANSI/NFPA 70 National Electrical Code in the United States.

This heater will not operate using natural draft or without a power source for the blower systems and fuel feed system.

PELLET QUALITY

Pellet quality is important, please read the following:

Your Napoleon Pellet Heater has been designed to burn premium hard or soft wood pellets only. Do not use any other type of fuel such as fire logs or fire starting pellet, as this will void the warranties stated in this manual.

The performance and heat output of the pellet heater is directly related to the quality and moisture of the pellets.

CAUTION: It is important to select and use only pellets that are dry and free of dirt or any impurities such as high salt content. Dirty fuel will adversely affect the operation and performance of the unit and will void the warranty. The Pellet Fuel Industries (P.F.I.) has established standards for wood pellet manufacturers. We recommend the use of pellets that meet or exceed these standards. Ask your dealer for a recommended pellet type.

P.F.I. PELLET STANDARDS:

Fines (fine particles)	1% maximum through a 1/8" screen
Bulk Density	40 pound per cubic foot minimum
Size	1/4" to 5/16" diameter, 1/2" - 1 1/2" long maximum
Ash Content	1% maximum (Premium grade)
	3% maximum (Standard grade)
Moisture Content	8% maximum
Heat Content	Approximately 8200 BTU per pound minimum

If the fuel does not comply to this standard the unit may not operate as designed.

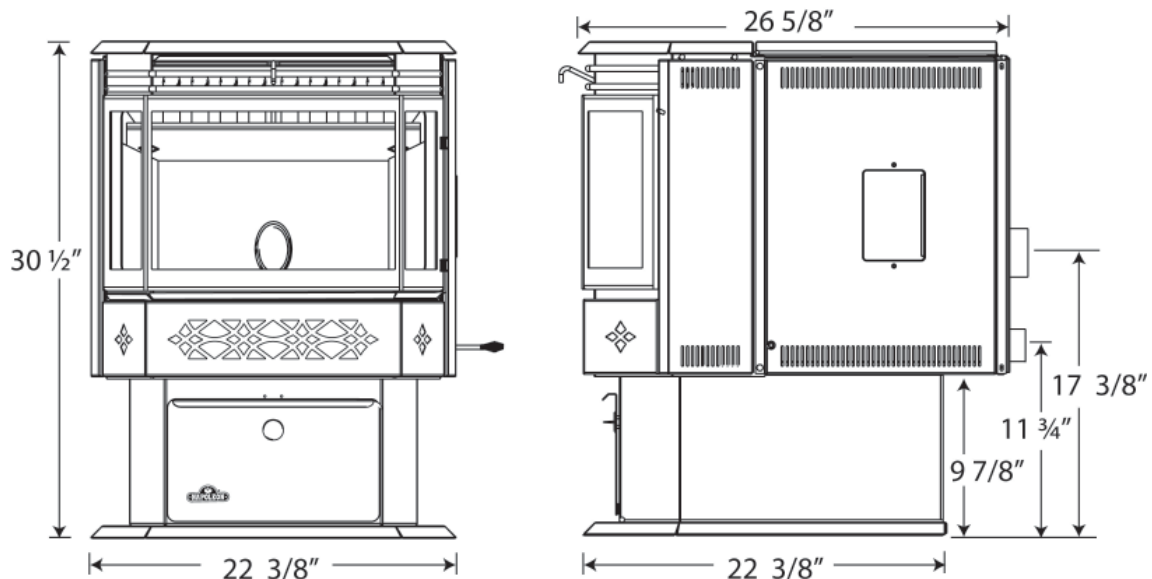
We recommend the use of premium grade (1% ash content) for longer stove life and less frequent cleaning.

SPECIFICATIONS

HEATING SPECIFICATIONS

Approximate Maximum Heating Capacity (in square feet)*	800 to 2000 Sq. Feet
Burn Rate (Pounds per Hour)**	1.0 to 5.0
Maximum Burn Time on Low Burn**	55 Hours
Hopper Capacity	55 Pounds
* Heating capacity will vary depending on the home's floor plan, degree of insulation, and the outside temperature. It is also affected by the fuel size, quality, and moisture level.	
** Small pellets will increase or decrease the stated burn rates and burn times. Differences of plus or minus 20% depending on fuel quality may occur.	

DIMENSIONS



SPECIFICATIONS

Electrical Rating	115 Volts, 3.6 Amps, 60Hz
Watts During Start-Up Sequence	400 (approximately)
Watts During Operation	180 (approximately)
Width	22 3/8"
Height	30 1/2"
Depth	26 5/8"
Weight	210 Pounds
Exhaust Collar	3"
Intake Collar	2"
Hopper Cap.	55 Pounds
EPA	Exempt
Burn Rate**	1.0 to 5.0 (Pounds Per Hour)
BTU/h**	8500 to 42500

EPA COMPLIANCE

This heater is EPA exempt from Phase II requirements, but has been tested for emissions using EPA test methods by Warnock Hersey.

NATIONAL
FIREPLACE
INSTITUTE®



CERTIFIED
www.nficertified.org

We suggest that our pellet products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

INSTALLATION

PLANNING YOUR INSTALLATION

READ THIS ENTIRE MANUAL BEFORE YOU INSTALL AND USE THIS HEATER. FAILURE TO FOLLOW THE INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.

Check with local building officials for any permits required for installation of this pellet heater and notify your insurance company before proceeding with installation.

Before installing we recommend placing the heater outside and load 5 pounds of pellets inside the hopper. Plug the heater in and let it run on HIGH until the pellets run out. This will cure the paint and burn off the oils on the steel, thereby minimizing any smell inside the home.

HEATER PLACEMENT

Have an authorized Napoleon dealer install the heater. If you install the heater yourself, have your dealer review your installation plans and/or installation.

Draw out a detailed plan of the installation including dimensions and verify the dimensions with the requirements listed in this manual.

When determining the location of the heater, locate the wall studs (for horizontal penetrations). You may wish to adjust the heater position slightly to ensure the vent does not intersect with a framing member.

Heater must be positioned so that no combustibles are within, or can swing within (e.g. drapes, doors), 48" of the front of the heater.

If the heater is placed in a location where the ceiling height is less than 7' above the base of the heater, the installation must follow the requirements in the section "Alcove Installations Requirements"

INSTALLATION OPTIONS

To install in a Residential or Mobile Home (see the section "Mobile Home Requirements")

All alcove installations (see the section "Alcove Installation Requirements")

Installation options for horizontal vent, vertical vent, or outside air compatible.

When installing your pellet heater use type L-Vent, L-Vent Fireplace Liner, or Type A Chimney (with adapter).

FLOOR PROTECTION REQUIREMENTS

The heater must be installed on a non-combustible floor protector extending the full depth of the heater and extending 6" in front and both sides (minimum .018" thick - 26 gauge).

The floor protector must extend under and 2" beyond each side and rear of a "Tee" (if used).

SAFETY FEATURES

HIGH LIMIT SWITCH:

Your heater is equipped with a high limit switch. In the event that the temperature of the heater approaches an unsafe operating temperature, this switch will shut down the pellet feed, which will eventually shut down the unit. If this happens, it is important to find out why the unit overheated. Contact your local dealer.

LOW LIMIT SWITCH:

This switch will automatically shut down the heater if the fire goes out.

BLOWER OVER-RIDE SWITCH:

Your heater is equipped with a convection blower that circulates hot air into your room. This switch will automatically turn the blower on, when the temperature at the back of the fire box reaches a certain temperature. The blower can cycle from your desired setting to maximum speed depending on the feed rate. When the heater cools back down, the blower will return to the initial setting.

VACUUM SWITCH:

This switch will sense lack of air flow through the heater and shut down the pellet feed. This lack of flow could be caused by a blocked vent.

POWER FAILURE:

In the event of a power failure, the heater will shut down. Once power is restored, the heater will restart, unless the convection air temperature has gone above the high limit switch setting. If this happens, contact your local dealer.

REFERENCE THE SCHEMATIC

CLEARANCES TO COMBUSTIBLES

STRAIGHT INSTALLATION

Through the Wall Installations

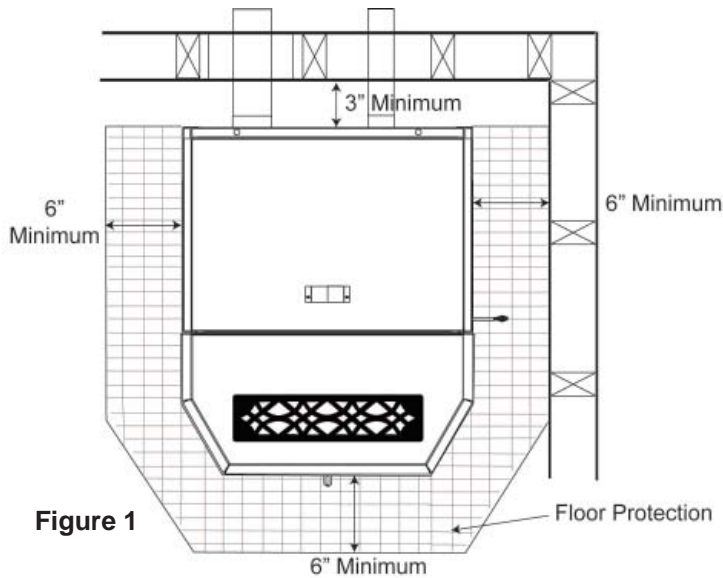


Figure 1

Interior Vertical Vents

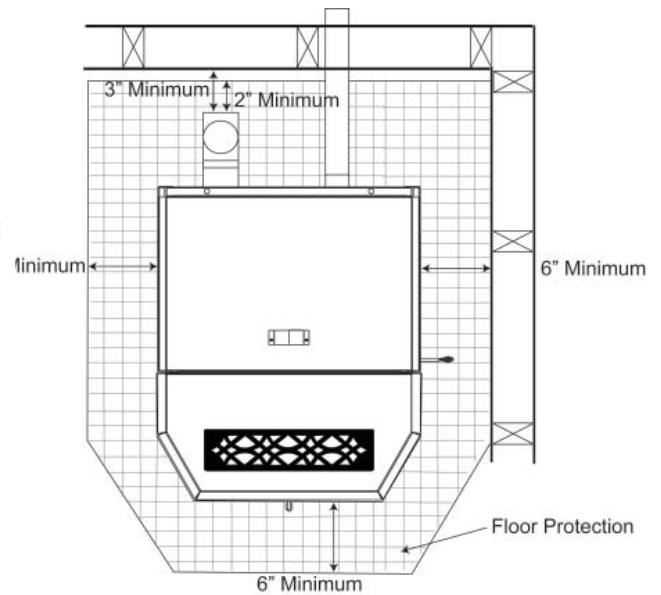


Figure 2

CORNER INSTALLATION

Through the Wall Vents

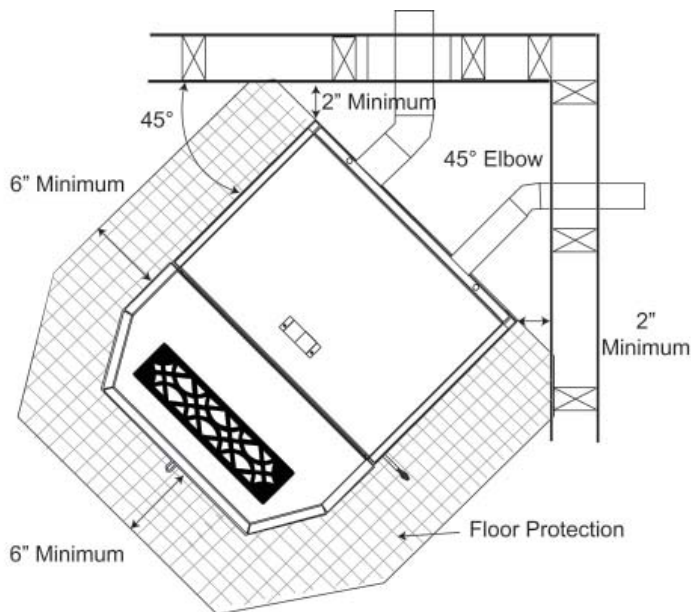


Figure 3

Interior Vertical Vents

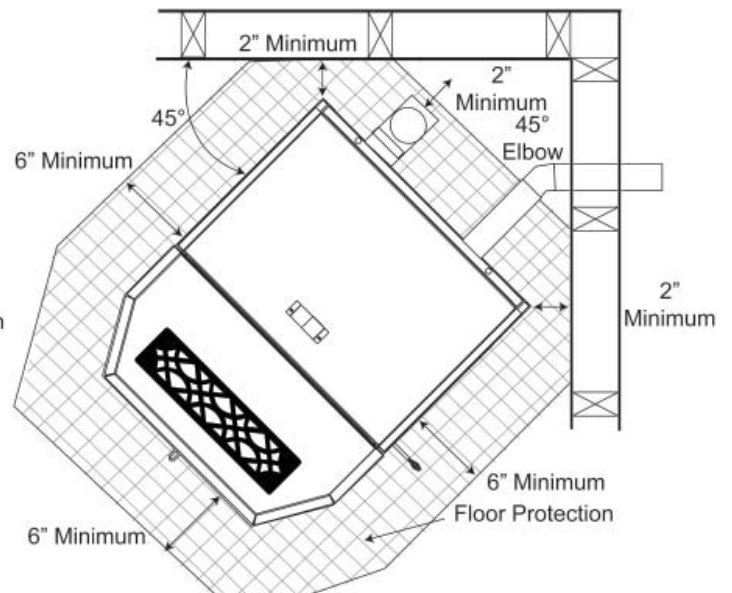
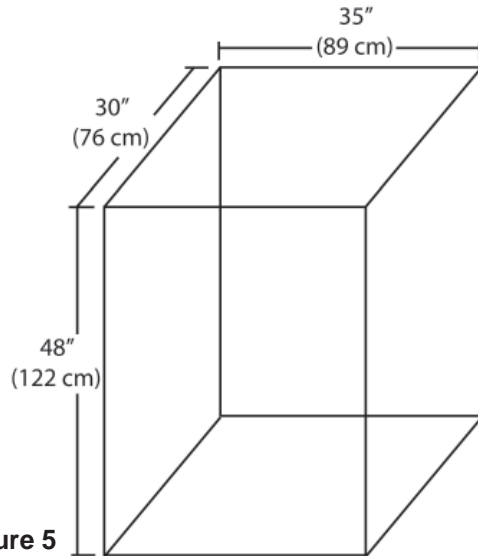


Figure 4

NOTE: If interior vertical pellet vent is used, the clearance to the back wall is determined by the upward-turning elbow or "Tee". It will vary in depth depending on the brand of pellet vent used (it is approximately 5"). Before placing the heater, connect the elbow or "Tee" and allow for the minimum 3" clearance to the combustible wall.

ALCOVE**Figure 5****Minimum Alcove Clearances****OUTSIDE AIR**

Outside air must not be drawn from an enclosed space (garage, unventilated crawl space).

Note: Napoleon strongly suggests using outside air for all residential installations, especially for those that are energy efficient, air-tight homes.

Outside air supply must not be over 15' long.

Outside air vents must be made with 1 3/4" diameter or larger metal or aluminum duct with a metal screen attached to the end to keep out rodents (P.V.C. or other materials may not be used).

The outside air inlet must not be above or within 12" of the chimney termination, must have a rain cap or down-turned elbow to prevent the water from entering and be located so that it will not become plugged by snow or other material.

MOBILE HOME

Installation into a Mobile Home should be in accordance with the manufactured home and safety standard (HUD), CFR 3280, part 24.

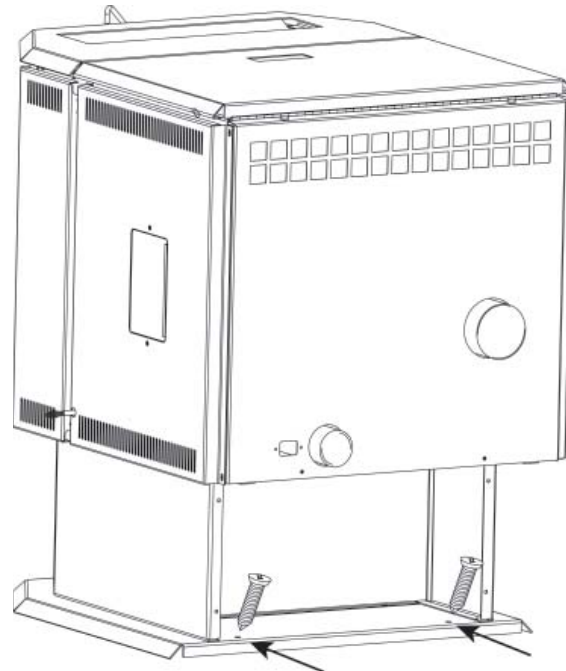
Outside air is required (used for combustion).

The heater must be bolted to the floor (Some states do not require this; check with your local building department).

The heater must be grounded to the steel chassis of the mobile home (Some states do not require this; check with your local building department).

WARNING: DO NOT INSTALL IN SLEEPING ROOM.

CAUTION: THE STRUCTURAL INTEGRITY OF THE MANUFACTURED HOME FLOOR, WALL, AND CEILING ROOF MUST BE MAINTAINED.

**Figure 7**

VENTING

PELLET VENT MUST MAINTAIN A MINIMUM 3" CLEARANCE TO ANY COMBUSTIBLE (install vent at clearances specified by the vent manufacturer).

DO NOT CONNECT THE PELLET VENT TO A VENT SERVING ANY OTHER APPLIANCE OR HEATER.

DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.

TYPE OF VENT

Must be an approved 3" or 4" Diameter Type "L" vent, vented to the outside or connect the vent to a factory built type "A" chimney using an adaptor; and/or stainless steel chimney liner for masonry fireplace installations. Use 4" diameter vent if vent or liner height is over 15' or if installation is over 4,000' above sea level.

INSTALLING THE PELLET VENT

The vent must have a support bracket every 5' when on the exterior wall.

To achieve optimum performance, keep vent runs as short as possible, especially on horizontal installations.

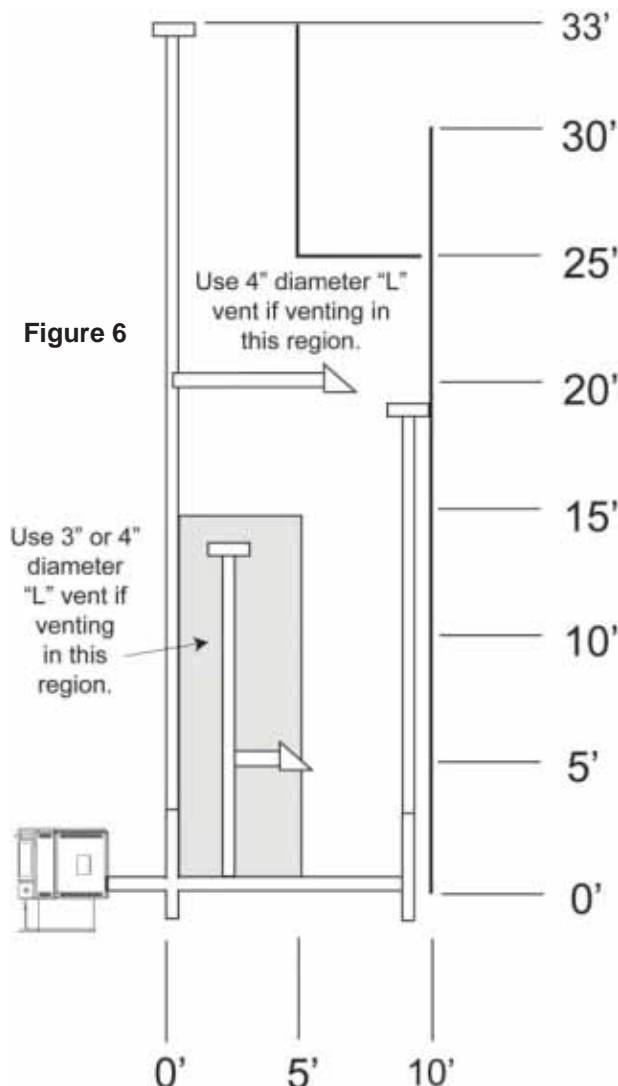
MAXIMUM VENTING:

Maximum venting height is 33'. Maximum horizontal offset is 10'. Use no more than 180' of elbows (two 90° elbows, or two 45° elbows and one 90° elbow, etc), plus termination.

VENT INSTALLATION:

Termination must exhaust above the air inlet elevation, and parallel or above the exhaust output of the pellet appliance. It is recommended that at least 3' of vertical pipe be installed to create some natural draft. This is to help prevent the possibility of smoke or odour during the appliance shut down. Horizontal sections must have a 1/4" rise every 12" of travel after 3' long.

The pellet vent connections must be sealed with HI-Temp RTV Silicone and screwed together with at least 3 3/8" long stainless steel screws. Seal each vent section by injecting a liberal amount of 500°F (260°C) RTV silicone sealant into the gap. We recommend sealing the outside of the vent connections to permit easier access when servicing.



VENTING THE PELLET HEATER

Use an approved wall thimble when passing the vent through walls and a ceiling support/fire stop spacer when passing the vent through ceilings (maintain a 3" clearance to any combustibles).

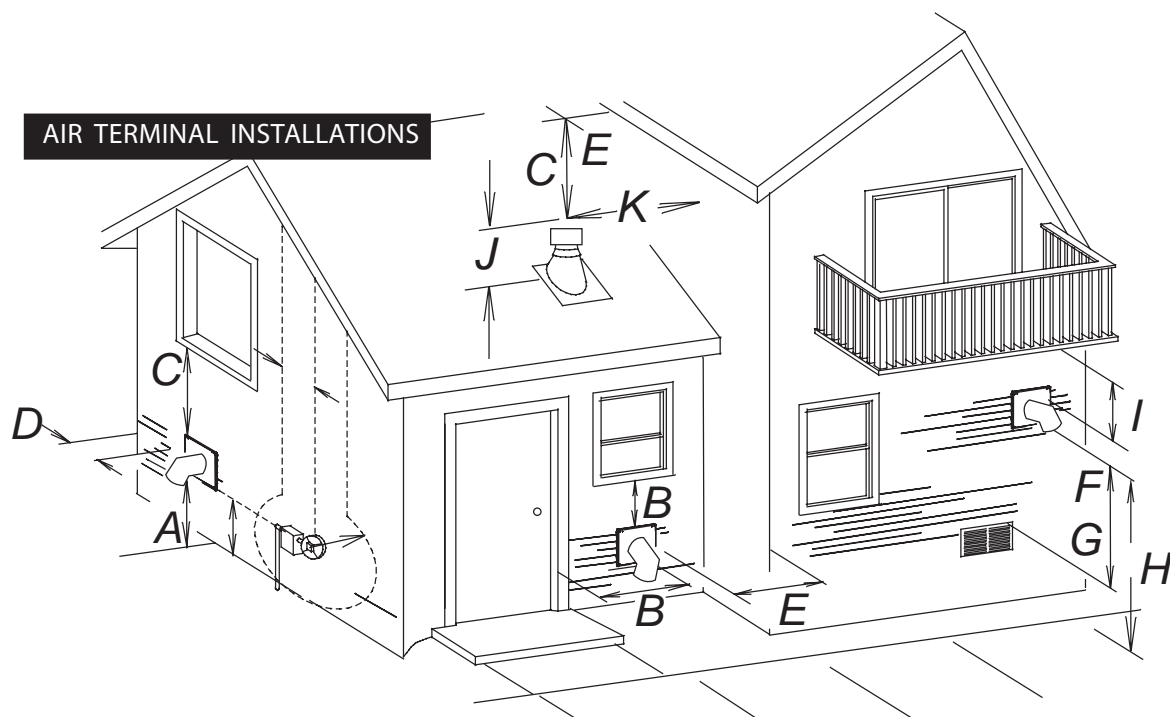
PELLET VENT TERMINATION

The vent termination must have an approved cap (to prevent water from entering) or a 45° downturn.

If the termination is located on a windy side of the house, an approved house shield is recommended to prevent soot from building up on the side of the house.

Horizontal terminations must protrude 12" from the wall, vertical terminations require 24".

Depending on pellet quality, vent configuration and air settings, black soot may occur on the terminal wall.



	CLEARANCE	
A	24 INCHES (61 cm)	Clearance above grade, veranda porch, deck or balcony. (Including Vegetation and Mulch)
B	48 INCHES (122 cm)	Clearance beside or below any windows or doors that open.
	12 INCHES*	Clearance above any window or door that opens.
C	18 INCHES	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet from the centerline of the terminal.
D	0 INCHES	Clearance to an outside corner wall.
E	3 INCHES	Clearance to an inside combustible corner wall or protruding combustible obstructions (vent chase, etc.).
F	9 INCHES	Clearance to a non-mechanical air supply inlet to the building or a combustion air inlet to any other appliance.
G	3 FEET	Clearance to a mechanical air supply inlet.
H	7 FEET**	Clearance above a paved sidewalk or paved driveway located on public property.
I	12 INCHES**	Clearance under a veranda, porch, deck or balcony.
J	24 INCHES	Clearance above the roof.
K	2 FEET	Clearance from an adjacent wall including neighbouring buildings.

* Recommended to prevent condensation on windows and thermal breakage

** This is a recommended distance. For additional requirements check local codes.

VENTING INSTALLATION EXAMPLES

HORIZONTAL EXHAUST THROUGH WALL INSTALLATION

TOP VIEW

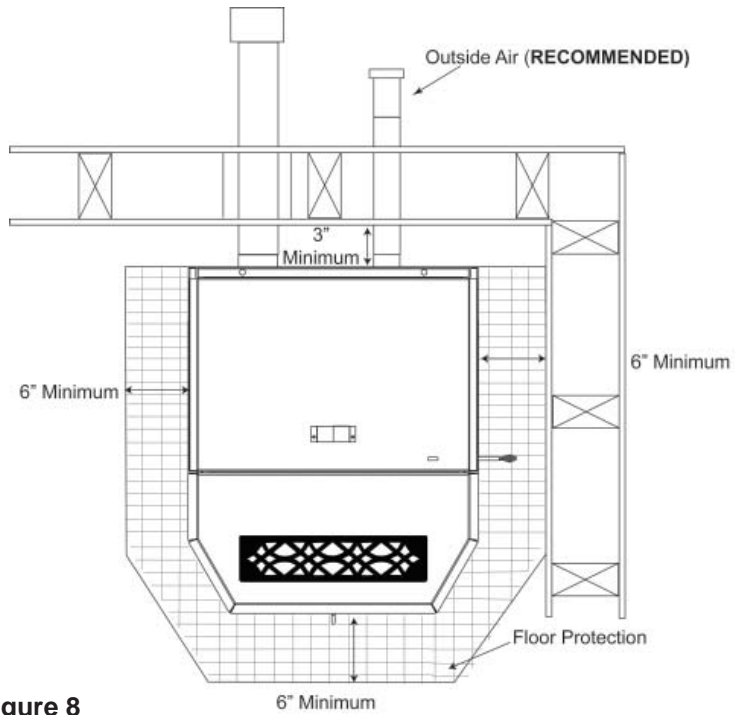


Figure 8

SIDE VIEW

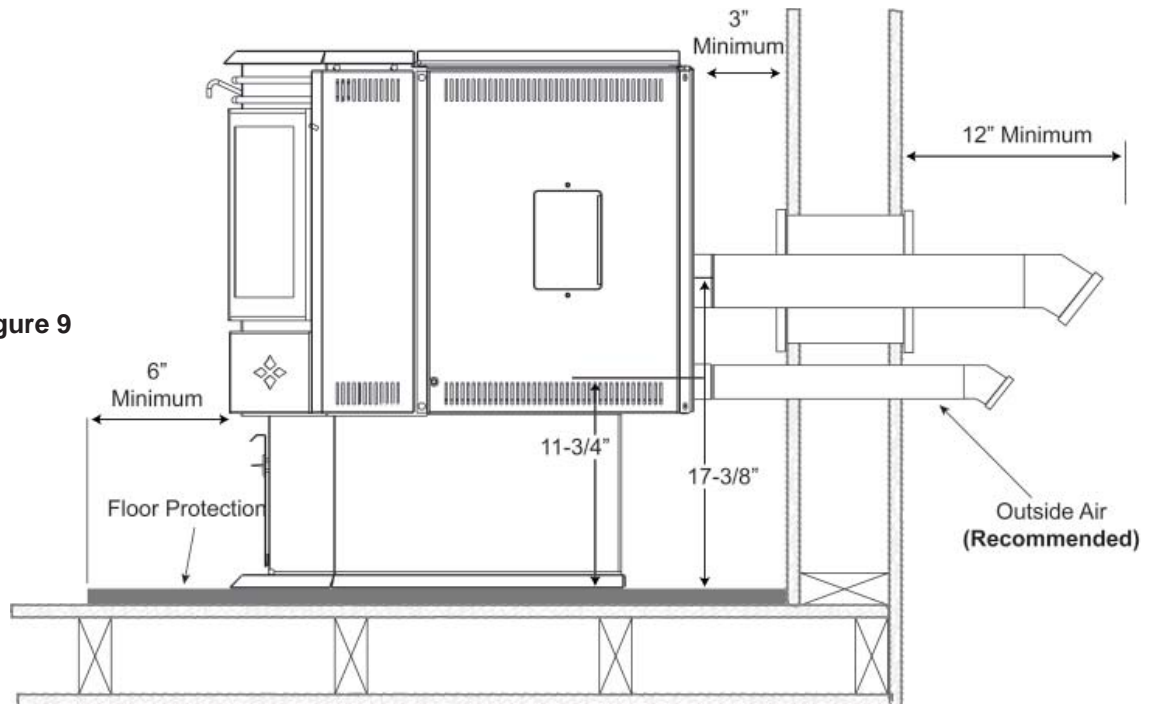


Figure 9

THROUGH WALL WITH VERTICAL RISE AND HORIZONTAL TERMINATION INSTALLATION

TOP VIEW

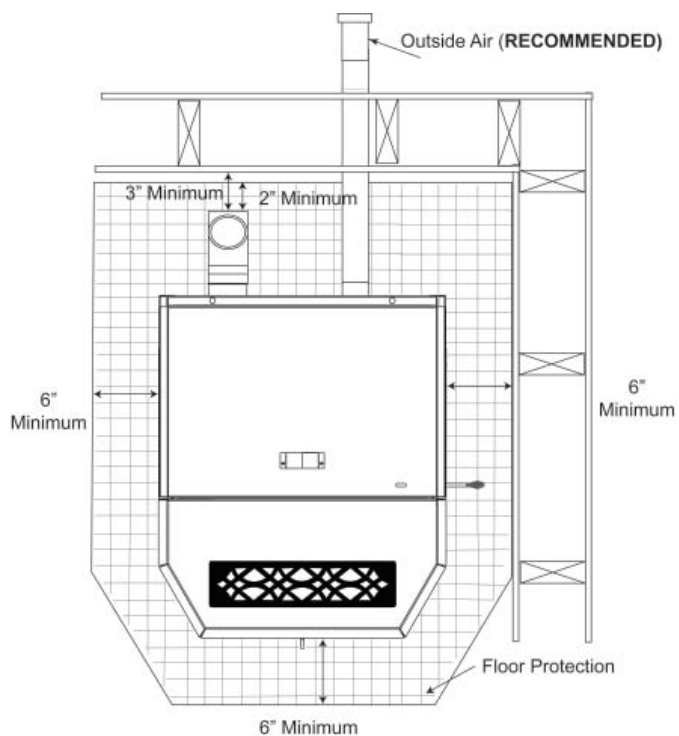


Figure 10

SIDE VIEW

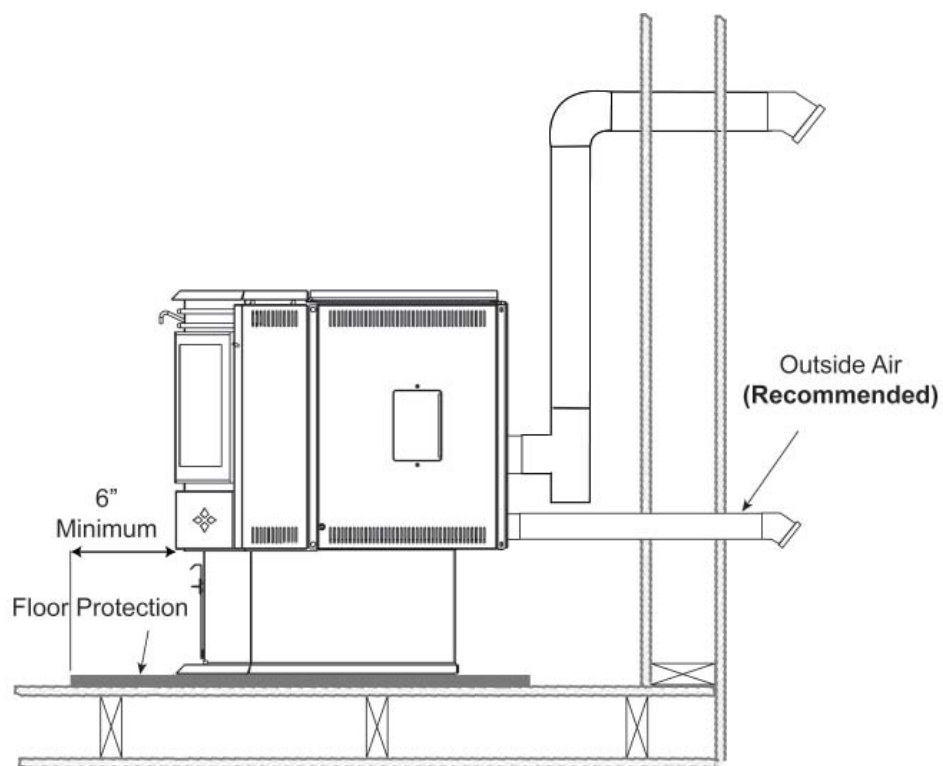


Figure 11

INSIDE VERTICAL INSTALLATIONS

TOP VIEW

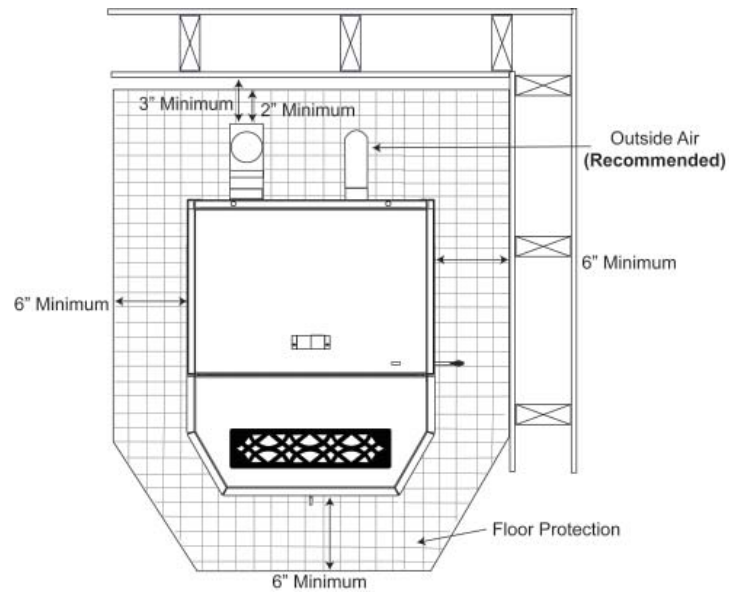


Figure 12

SIDE VIEW

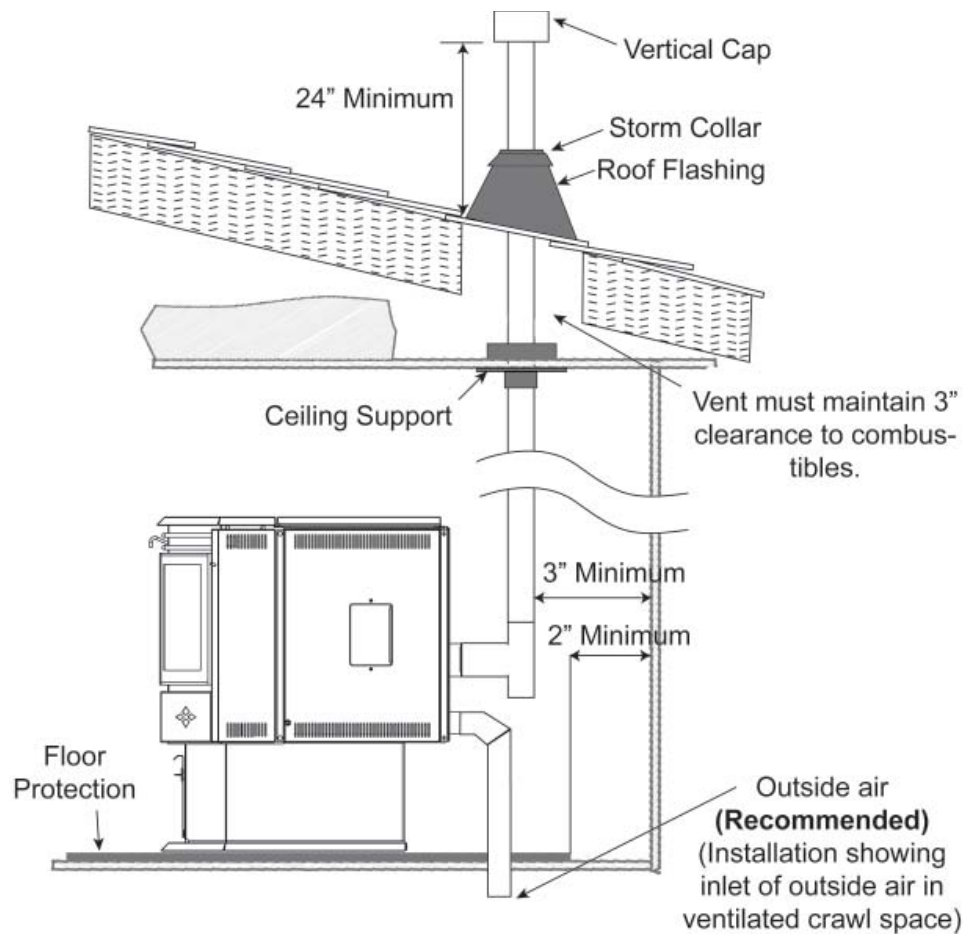


Figure 13

CLASS A CHIMNEY RETROFIT

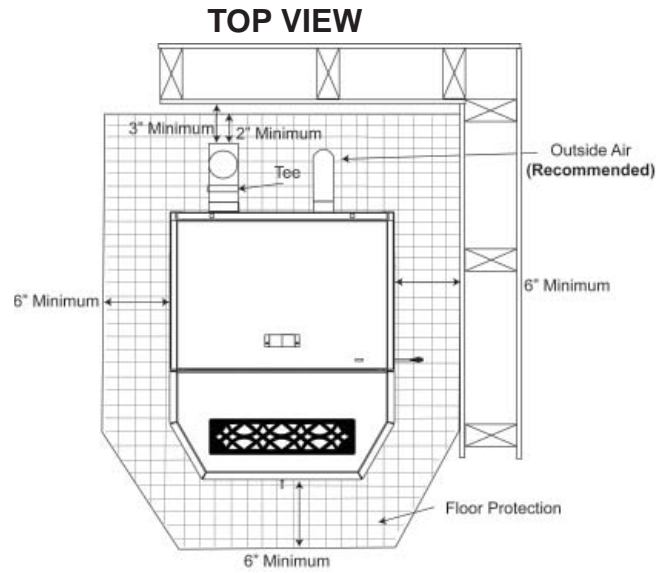


Figure 14

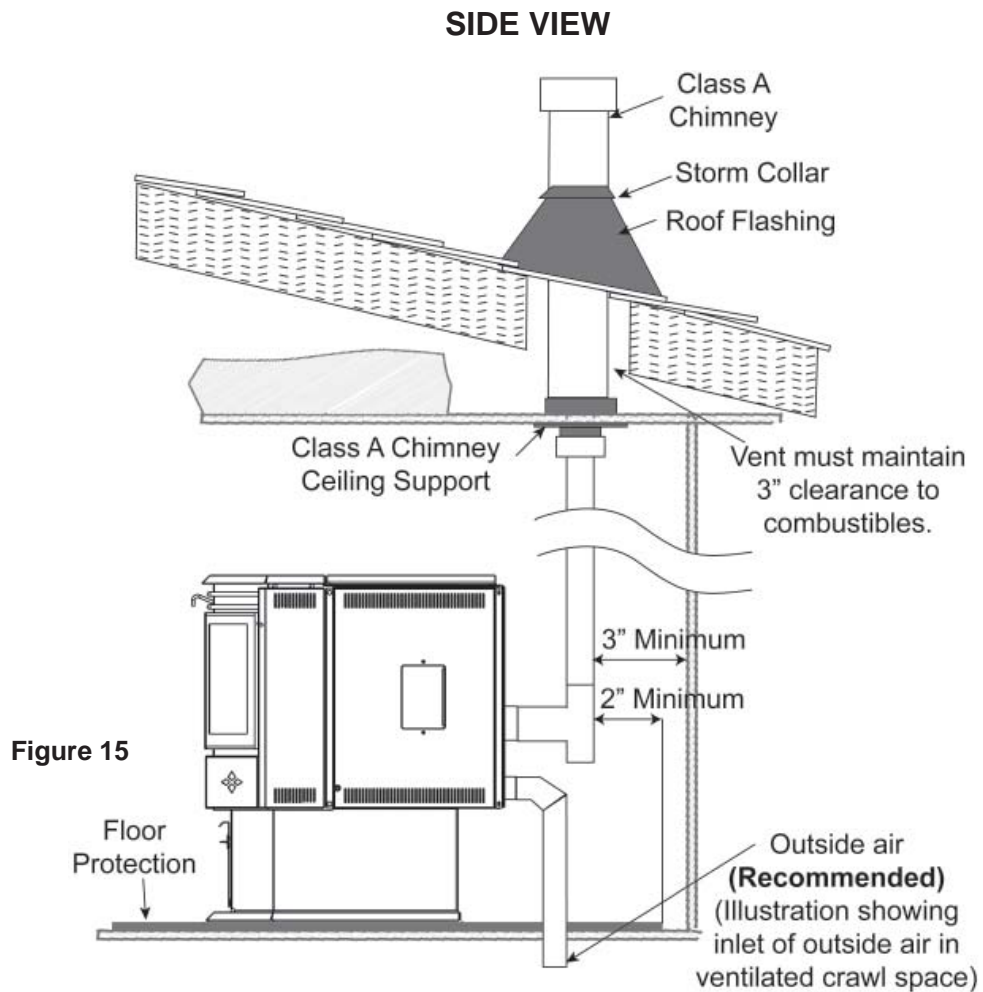
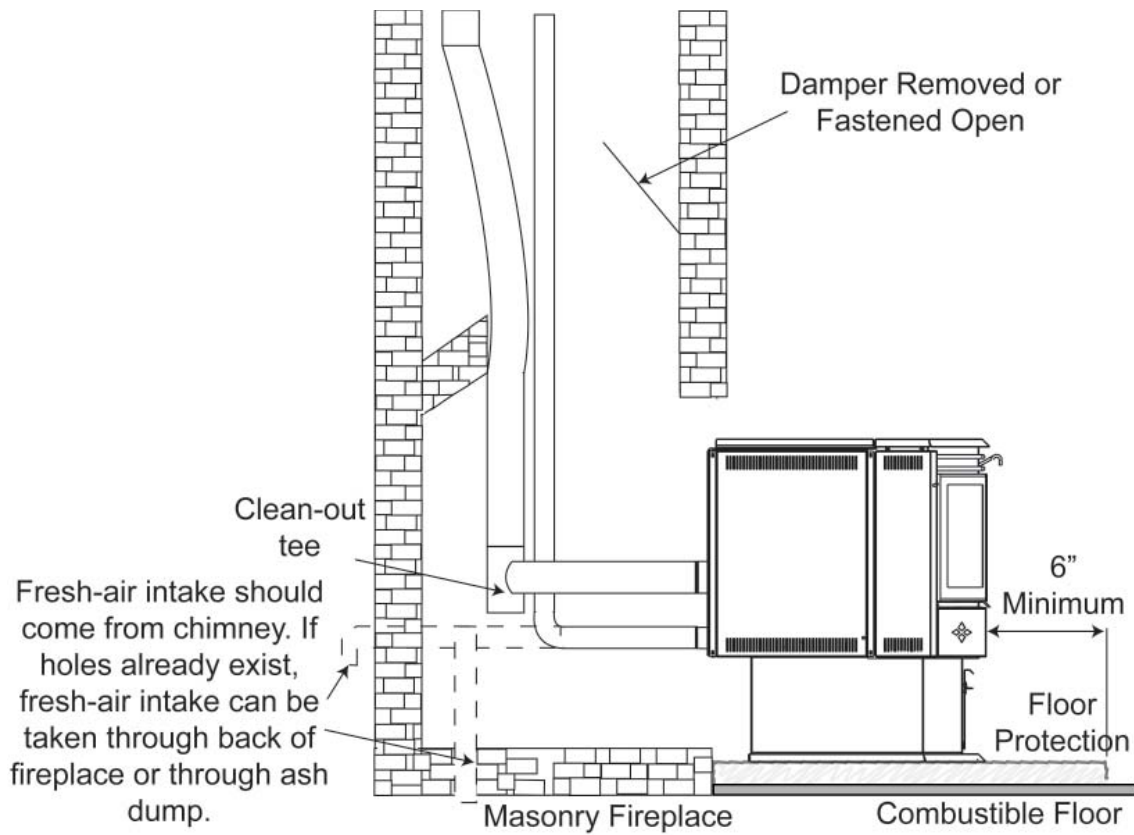


Figure 15

HEARTH MOUNT INSTALLATION



HEATER FINISHING INSTALLATIONS

BAFFLE

The baffle **MUST** be installed before burning this heater. The baffle has been shipped inside the hopper.

- Remove the baffle from the hopper.
- Align the baffle and pivot the baffle on a slight angle.
- Place the left side of the baffle tabs into the slots on the exhaust manifolds.
- Align the right side of the baffle tabs into the right side exhaust manifold slots and push the baffle back into place.

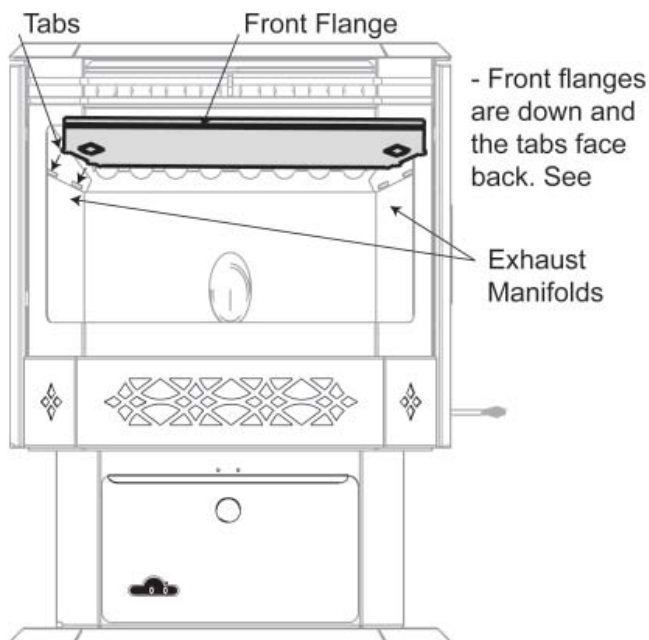


Figure 17

INSTALL VIEWING DOOR

The main viewing door has been boxed separate from the heater, but **MUST** be installed before burning the heater.

- Open both sides panels, exposing the bushing on the left and the latches on the right.
- Align the pins on the door, to the bushing on the left side of the heater, lower into place until both bushings touch.
- Door can now be latched closed.

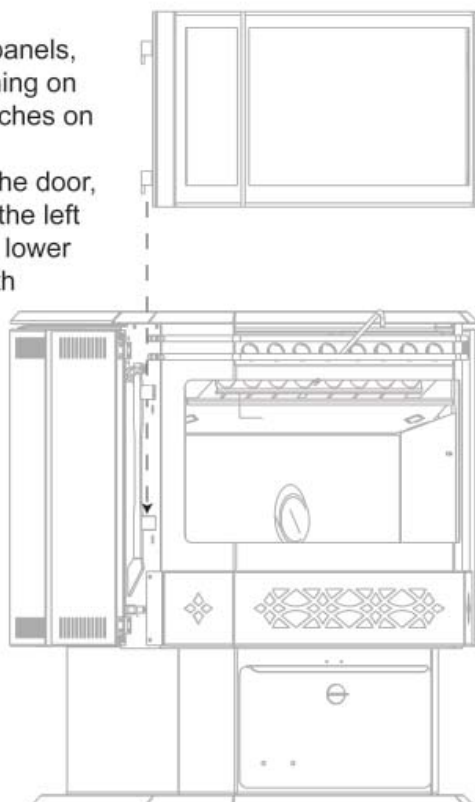
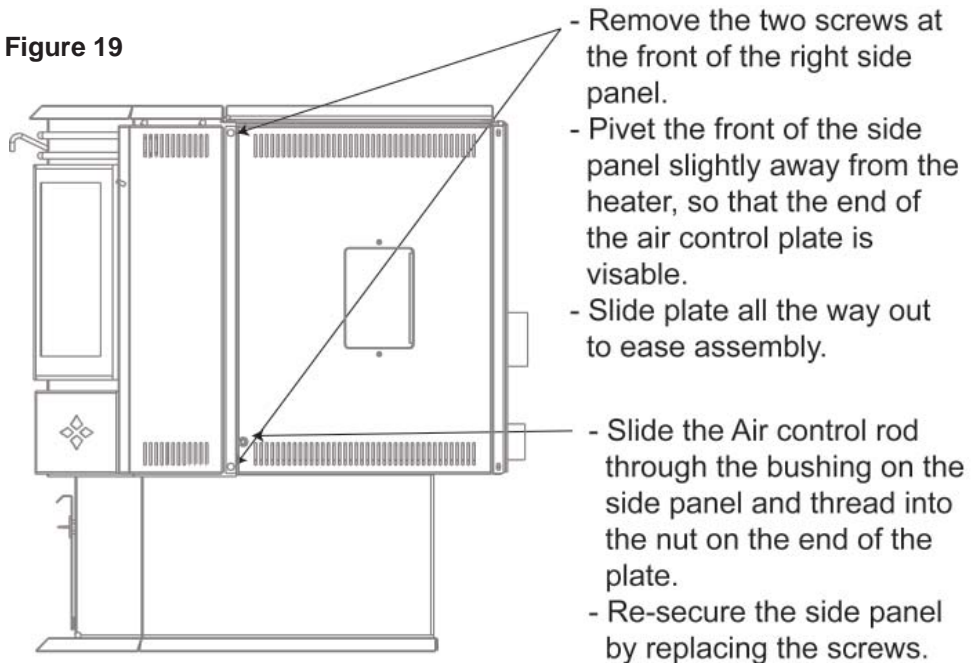


Figure 18

SPRING HANDLE AND AIR CONTROL ROD

Figure 19



OPERATING INSTRUCTIONS

CAUTION: Never use gasoline, lantern fuel, lighter fluid to start or "freshen-up" a fire in this heater. Keep all such fluids away from heater when in use.

Note: Make sure the burn pot liner is installed properly against the ignitor tube for proper operation. See Figure 26.

Due to different installation set ups, length and size of venting and fuel quality, the low feed setting from the factory will not always be correct. It may be necessary to experiment with feed rate vs air control. (For example, #2 may be your lowest setting).

If this is the first time the heater has started or the heater has run out of pellets, the auger will need to be purged.

Press "START" switch, turn the pellet feed dial to high to fill the auger full of pellets and pull the air control rod all the way out allowing air flow into the fire. If the heater does not reach the required temperature and turns off after 15 minutes, press the start switch again. This time turn the pellet feed dial to low, to prevent over filling the burn pot and continue with the start-up instructions below.

START-UP

1. Press "START" switch
2. Rotate the Pellet feed dial rate to optimum
3. If the heater stops running after approximately 15 minutes, press "START" switch again.

If no ignition is apparent and pellets are building up in the burner pot, remove pellets from the burner pot before restarting.

CAUTION: Heater may be hot.

Blower Speed Dial

By adjusting the Blower Speed dial you will vary the rate of airflow into the room by varying the speed of the convection blower. When you first start the heater, it should be placed in the "OFF" position in order to heat up the unit as quickly as possible. Once the room has come up to temperature, the control may be set to a comfortable level.

Note: The convection blower may cycle to high automatically depending on the setting of the pellet feed rate and the Blower Speed. This is a normal safety feature of the unit.

WARNING: IT IS NOT RECOMMENDED TO BURN THE UNIT ON LOW OR HIGH. THE MOST EFFICIENT SETTING IS 4 (OPTIMUM).

W415-0587

Note: The flashing amber light corresponds to the auger motor feeding the pellets. Wood pellets of different quality may affect the performance of the heater. If the heater has trouble operating at the ends of it's range, adjust the feed rate accordingly.

Pellet Feed Dial

This switch controls the amount of heat output. The switch has a scale (dial) from 1 through 5. At setting 5 the pellet feed rate is the greatest.



SHUT-DOWN

To turn your heater off, simply turn the feed dial counter-clockwise until the dial clicks to the "OFF" position. This will stop the feed of pellets. The blowers will continue to run to cool the heater. When cool enough, the heater will shut down. **DO NOT unplug unit while combustion blower is operating. This may lead to smoke escaping from the heater into the room.**

LIGHTING HEATER MANUALLY

Your heater can be lit manually without using the automatic igniter by following the procedure below.

CAUTION: Heater may be hot.

1. Press the start switch
2. Turn feed dial to "Optimum"
3. Place a "handful" of pellets into the burn pot.
4. Cover with a small amount of approved (non-volatile) fire starter gel.
5. Light fire started with a match and close the viewing door.

PROPER PELLET LOADING

Before loading pellets into the hopper first transfer the pellets from it's original plastic bag to a metal bucket.

Note: If the pellets are kept in the plastic bag, the bag may come in contact with the heater causing the bag to melt and the pellets to spill.

DO NOT load pellets into the hopper if they have been exposed to moisture. Moisture can cause pellets to swell and cause blockage in the feed system. Thoroughly dry pellets before placing into hopper.

MAINTENANCE

DAILY (WHENEVER USING THE HEATER)

OPEN MAIN VIEWING DOOR

WARNING:

The front of the heater becomes very hot during operation. Let the heater cool completely before conducting service.

1. Open the side doors on either side of the heater.

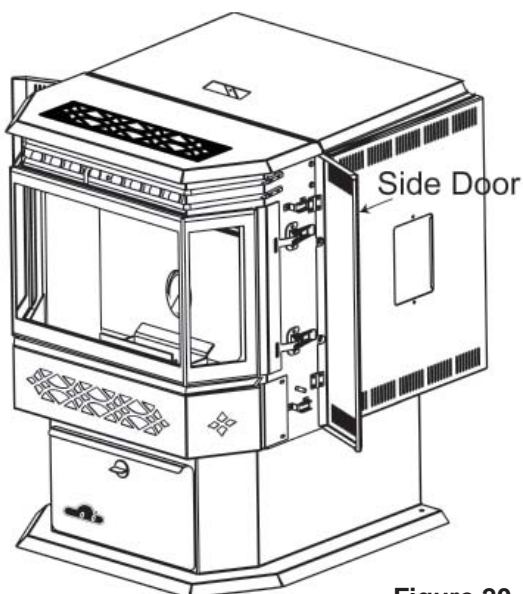


Figure 20

2. Within the left side door of the fireplace you'll find the cleaning tool. Remove the tool from the magnets, as you'll need it when conducting service and maintaining this heater.

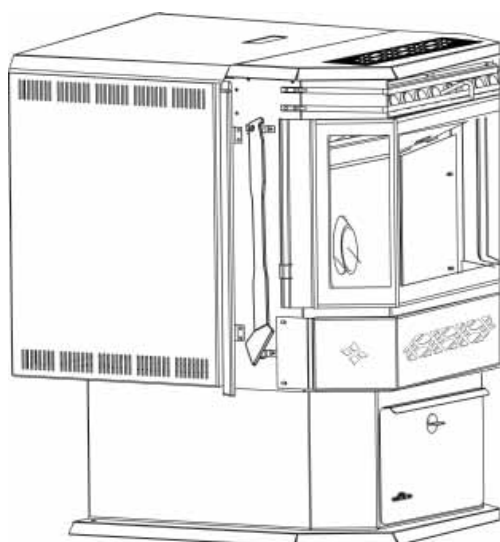


Figure 21

3. On the right side of the heater are two latches. Release the latches and swing the viewing door open.

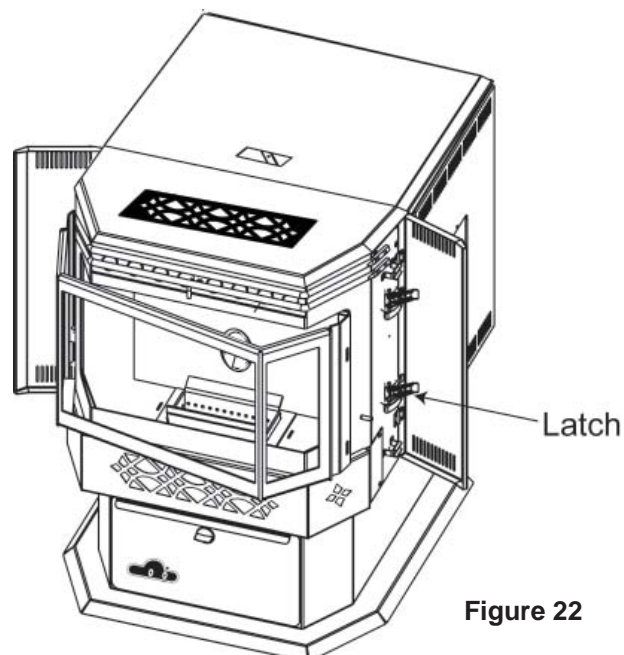


Figure 22

DISPOSAL OF ASHES

Ashes should be placed in a metal container with a tight fitting lid. The container should be placed on a non-combustible floor, well away from combustible materials, pending final disposal. If ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders are thoroughly cooled.

DAILY (WHENEVER USING THE HEATER) CONTINUED

INSPECT THE BURN POT

When burning, the flames should be bright orange with embers jumping from the burn pot.

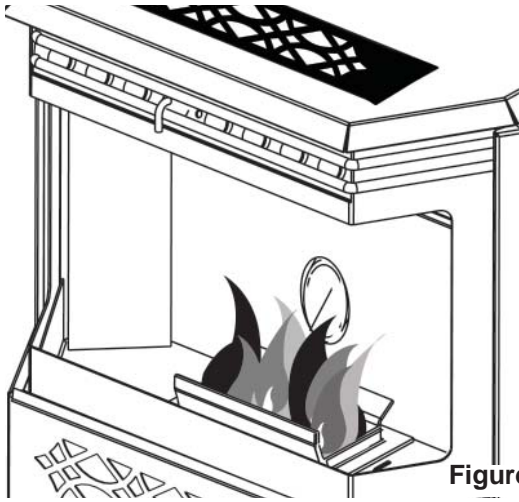


Figure 23

MAKE SURE PELLETS ARE NOT PILING UP

If the pellets build up over the burn pot, turn the pellet feed switch to "OFF".

If the flames seem to be coming only from the sides, or are orange/black, turn the heater off and check for build up.

The most likely causes are:

1. Feed rate has been set to maximum for an extended period of time. Turn feed rate to optimum.
2. The door, glass, or ash pan is open or has an air leak.
3. The burn pot requires cleaning.
4. The exhaust system requires cleaning.
5. The heater requires adjustment.
6. Poor pellet quality

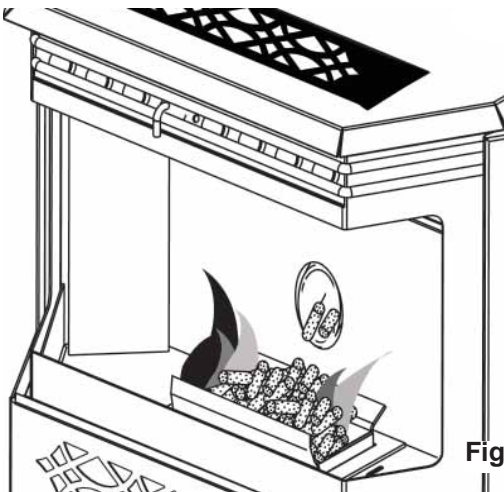


Figure 24

CLEANING THE BURN POT

WARNING:

Make certain the heater has fully cooled (approximately 25 minutes) before opening the door and conducting service.

To clean the burn pot, open the door and knock away any debris on the burn pot with cleaning tool. If severely clogged, remove the burn pot to gain better access.

Use the hook end of the tool inserting it into the hole located at the front of the burn pot. Once securely in place, lift the burn pot up and set aside on a non-combustible surface. See **Figure 25**. Using the scraping tool, remove all material that has accumulated in the burn pot.

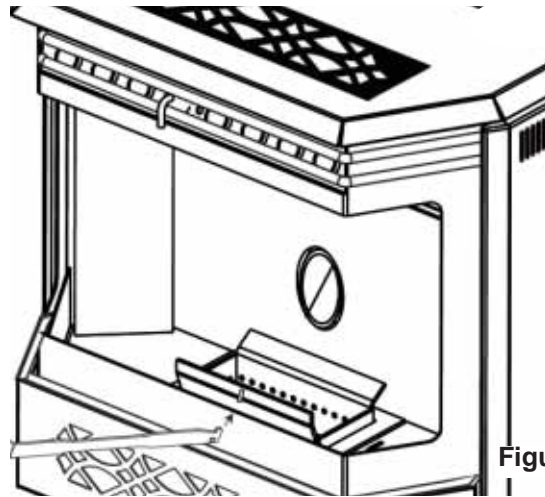


Figure 25

Re-install the burn pot ensuring ignition hole lines up with the ignitor.

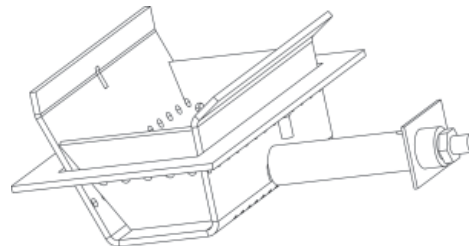


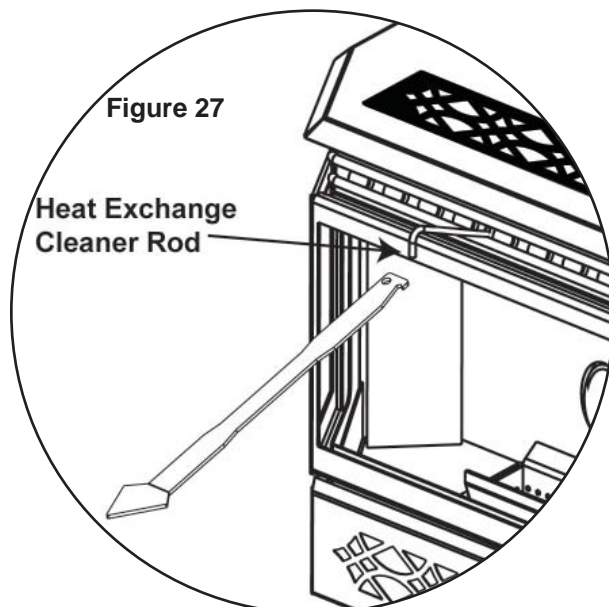
Figure 26

BI-WEEKLY (OR EVERY 10 BAGS OF PELLETS)

CLEANING THE HEAT EXCHANGE TUBES

WARNING:

The front edge of the hopper lid becomes very hot, do not touch the area below the handle.



WARNING:

This rod becomes very hot during operation. Use the scraper tool to move the cleaner rod.

The scraper tool is stored on the magnetic catch inside the left side door.

With the heater cool (or using the scraper tool), slide the heat exchange cleaner rod up and down several times.

Keep the viewing door closed so the fly ash does not enter the room.

Note: More frequent cleaning may be required depending upon pellet quality.

VACUUM HOPPER

Run the heater until the pellets run out, then open the hopper and vacuum out the entire hopper. The dust and any other debris near the bottom should be removed to prevent excessive build-up.

Cleaning the Optional Plated Surfaces

Fingerprints or other marks left on plated surfaces may become etched in place if they are not wiped clean prior to turning the heater on. Wipe the gold with a non-abrasive cleaning solvent and a soft cloth (make sure the heater is cool). Other cleaners may leave a film that may become etched into the finish.

BRUSH ASH INTO ASH PAN

The more often you clean out the fly ash, the more efficient your heater will burn.

WARNING:

The fire box becomes very hot during operation. Let the heater cool completely before conducting service.

1. Open the viewing door. See **Figure 20 and 21**
2. Lift the burn pot out of the firebox by using the cleaning tool. Make sure the burn pot has cooled before removing. Set burn pot on a non-combustible surface.

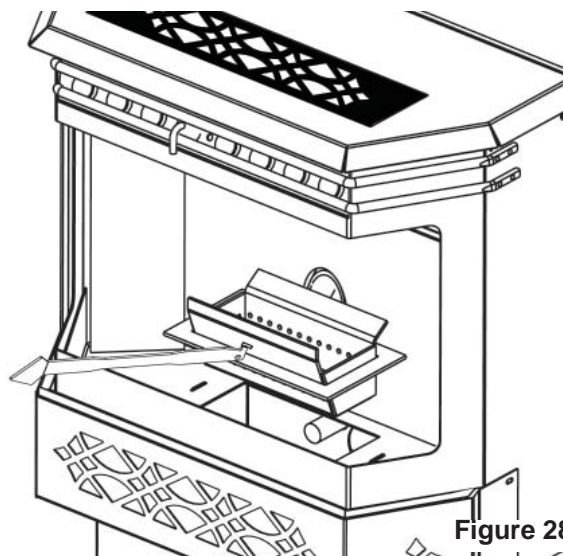


Figure 28

3. Brush all fly ash through the hole into the ash pan.

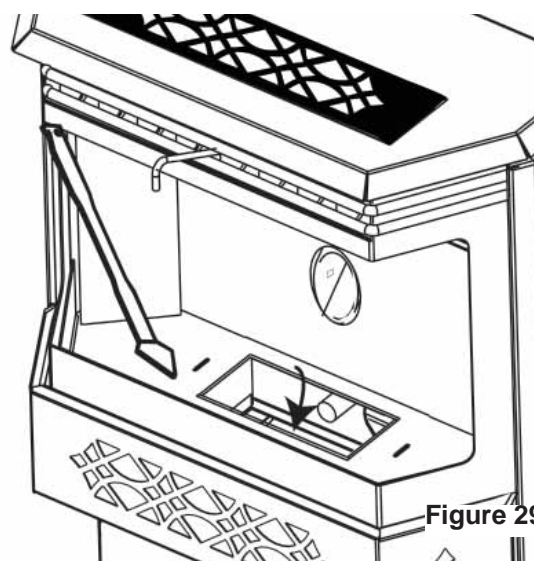


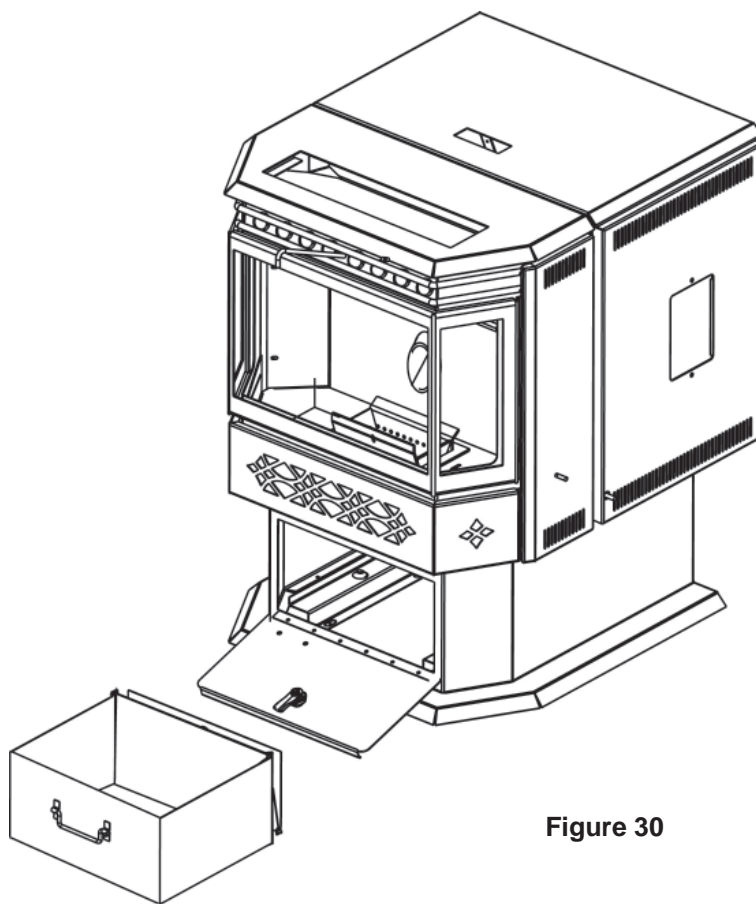
Figure 29

4. Replace the burn pot, close the viewing door and close both side doors.

BI-WEEKLY (OR EVERY 10 BAGS OF PELLETS) CONTINUED**CHECK ASH PAN, DISPOSE ASH IF NECESSARY****WARNING:**

The front of the heater becomes very hot during operation. Let the heater cool completely before conducting service. Gloves must be worn when cleaning or handling this appliance.

Do not allow ash to accumulate deeper than 2". When it is necessary to dump the ash pan, unlock the ash pan door and pull it down towards the floor. Using the handle on the ash pan, pull the pan out from under the heater and flip the cover up onto the ash pan when transporting the ashes to a closed container. The pan has handles front and back for carrying.

**Figure 30****Note:**

When replacing the ash pan make certain that the cover is opened and the ash pan is pushed in and seated on the rail locators. Close and lock the ash pan door.

Clean the Glass

Open the viewing door and clean the glass with a non-abrasive glass cleaner and rag. Cleaning the glass will increase the amount of light and heat given off by the heater.

ANNUALLY (OR EVERY TWO TONS)

WARNING:

Disconnect the power cord prior to conducting service.

The following section details extensive maintenance procedures. We strongly suggest these items be carried out by a trained service technician, possibly by a service agreement set up with your dealer.

SOOT AND FLYASH FORMATION

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

Note: More frequent cleaning may be required depending on pellet quality.

CLEAN THE VERTICAL EXHAUST DUCT

If the PRP40 or the brick kit GD832KT is in place, remove that accessory first.

1. Open side door, release the latch and pivot the viewing door wide open. See **Figure 20 and 22**.
2. Remove the four screws that are holding the left side panel onto the heater and set aside on a flat surface.

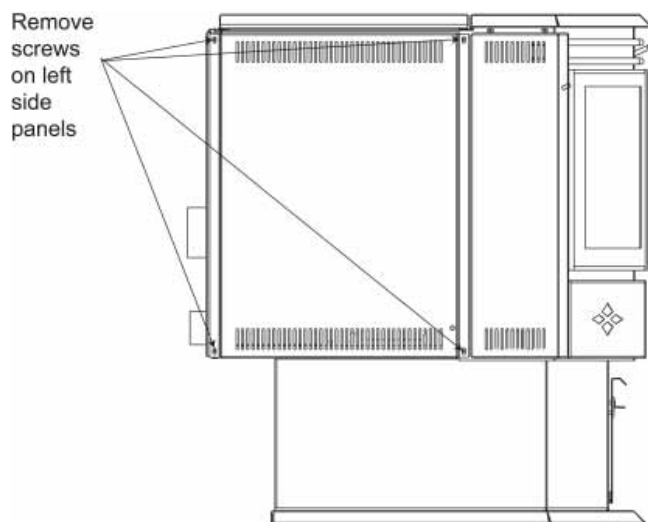


Figure 31

3. Remove the three screws on each exhaust manifold. One screw located in the fire box, the other two screws are located under the bushings on the left side and under the latches on the right side of the heater.

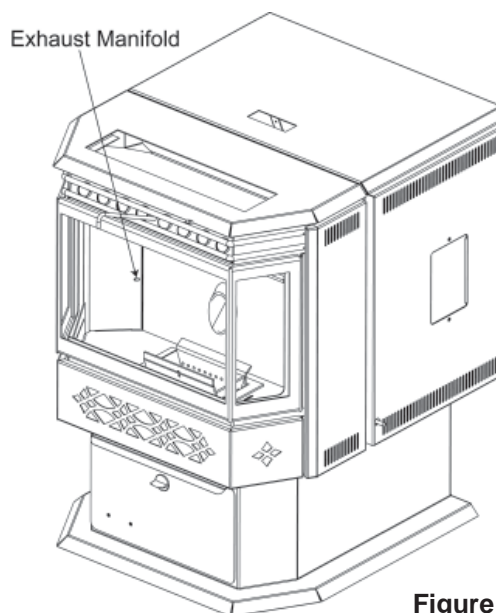


Figure 32

Remove the manifold and set aside on a non-combustible surface.

Using the cleaning tool, scrape out as much fly ash as possible from behind the left and right exhaust manifolds. Once clean, replace the exhaust manifolds and secure with the screws.

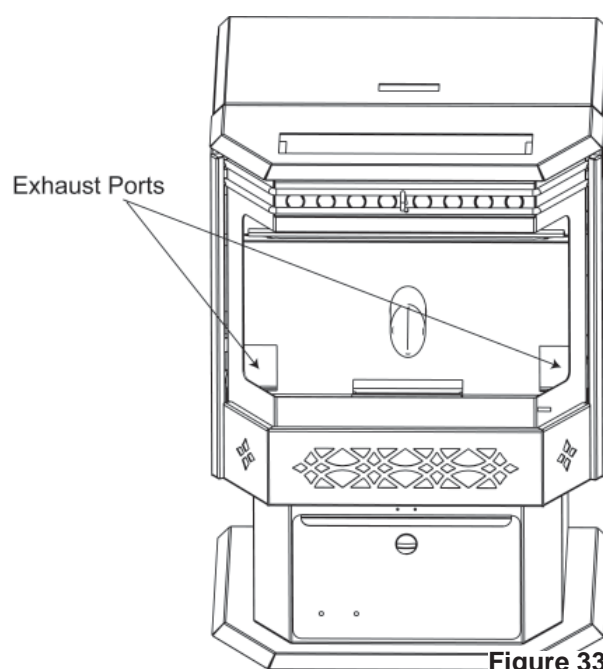


Figure 33

ANNUALLY (OR EVERY TWO TONS)

Note: Do not attempt this maintenance without a replacement exhaust blower motor mounting gasket.

Note: The heater becomes very hot during operation. Let the heater cool completely and disconnect the power cord prior to conducting service.

CLEAN THE EXHAUST BLOWER

1. With the left side panel still removed, start your maintenance on the exhaust blower.
2. Remove the six nuts holding the exhaust blower motor in place.

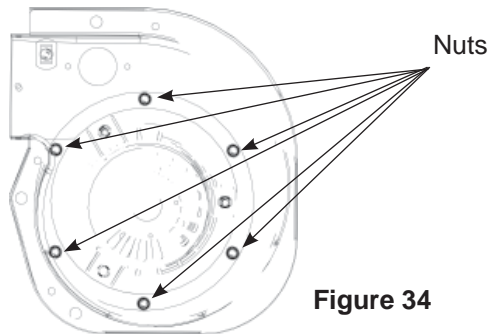


Figure 34

3. Pull the motor out being careful not to damage the wiring, unplug the two wires that are connecting the motor and gently set aside.
4. Start by cleaning the exhaust tube by feeding a brush or rag through the inside of the tube and out the exhaust blower housing.

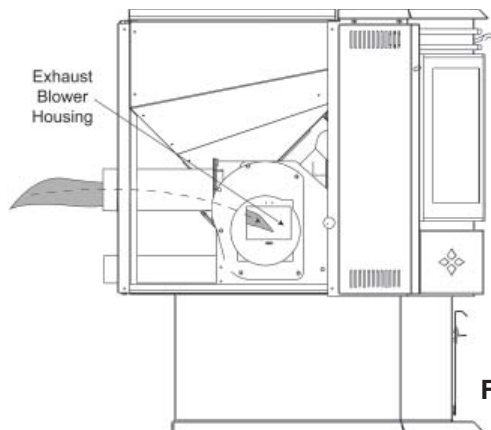


Figure 35

5. Vacuum out the exhaust ports and the blower housing.
6. With a bristle brush vacuum, clean the blades of the motor.
7. Place the new exhaust blower mounting gasket around the screw holes being very careful not to tear it.
8. Re-attach the wiring to the motor and place it back on to the housing, taking care that the side of the motor does not tear the gasket. Re-attach the nuts and then attach the side panel back onto the heater.

CLEAN THE VENT

Check for air leaks around the door, glass, and ash pan

Air leaks into the firebox will decrease the heater's performance greatly, leading to excessive soot, inefficient burning, and may even cause a malfunction.

Test the door seal by shutting the door on a piece of paper in various locations. If the paper can be easily slid out, air may be leaking around the door seal. Carefully inspect the door gasket and door catch.

Inspect the door gasket to make sure it is fully attached. Heater gasket cement can be used to re-attach if necessary. If the door gasket is worn or flattened, replace.

Check the door to make sure it latches correctly. The latch should engage with a slight amount of resistance, yet not be too difficult.

If the glass is cracked, replace.

Open the ash pan door and inspect the gasket around the perimeter of the ash pan door. Re-attach, or replace the gasket if necessary.

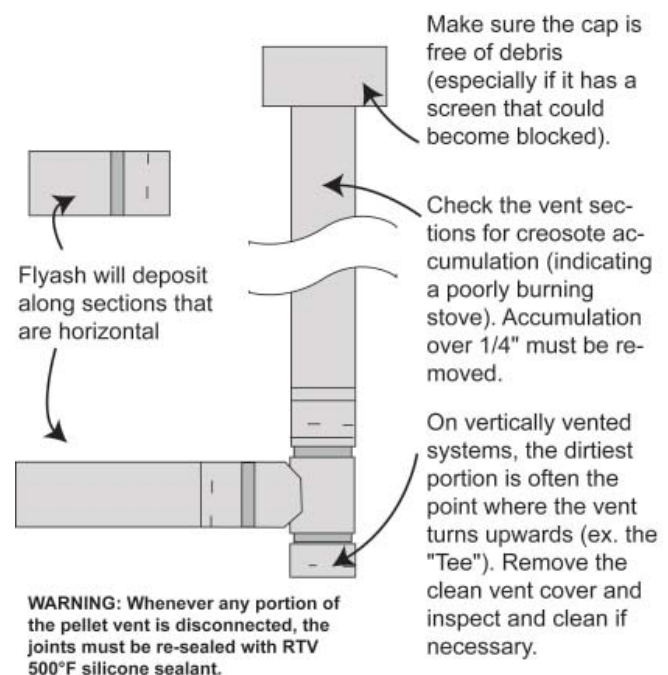


Figure 36

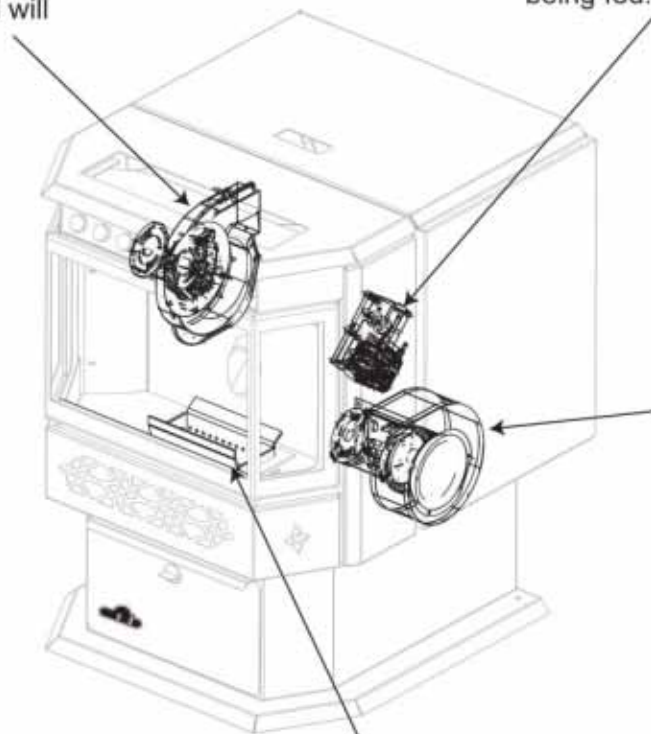
NORMAL OPERATING SOUNDS

Exhaust Blower

The flow of exhaust gases may create a low-pitched hum. As the pellet feed rate is altered this sound will change.

Auger Motor

An irregular buzz of the motor running might be heard when pellets are being fed.



Convection Blower

A low hum might be heard due to the high efficiency fan, especially on high. As the fan dial is turned this noise will change.

Burn Pot

A light clicking sound might be heard as the pellets are fed into the burn pot.

Figure 37

TROUBLESHOOTING

***NOTE: All troubleshooting procedures should be carried out by qualified technicians or installers.**

CAUTION: When checking connections, installing jumper wires (for test purposes only) or replacing components, unplug heater from the receptacle to prevent electrical shock or damage to the component.

SYMPTOM	TEST SOLUTION
The heater will not start	<ul style="list-style-type: none"> - Make certain there is power to the outlet and that the heater is plugged in. - With the heater unplugged, examine all connections. Make sure no exposed wires are touching the heater (except the chassis ground wire) and that they are all firmly connected. - Check the stability and placement of connections against the wiring diagrams in this manual. - Push the "START" switch. If the heater fails to start, unplug the unit. - Ensure that connections to the power control module are connected. - Place a jumper wire between the red and white wires that attach to the start switch. - Plug stove in, if stove starts replace switch. - Replace the power control if this fails. <p>CAUTION: Check the ignitor resistance before installing a new start-up timer as it may result in another failure to the new start-up timer due to a short in the ignitor. The proper resistance through the ignitor should be 30Ω to 50Ω (± 3Ω).</p>
The exhaust blower is not operating	<ul style="list-style-type: none"> - Remove the left side access panel and check all connections against the wiring diagram. - Apply 115V AC directly to the exhaust blower and if the motor does not run, replace the blower. - If the motor runs, have a dealer check the wire harness. - See "The heater will not operate when hot" section - Contact your local dealer or a certified technician for service.
The ignitor will not light the pellets however everything else in the heater operates	<ul style="list-style-type: none"> - Push the burn pot back against the ignitor tube making sure the ignitor lines up to the hole in the burn pot. - Make certain the air control rod is pushed in to start up position. - Check all the electrical connections on the 120°F (49°C) temperature sensor located on the exhaust channel. - Place a jumper wire between the two leads on the 120°F (49°C) temperature sensor and if the ignitor works, replace the sensor. - If it still fails to light, replace the ignitor.
The auger motor is not functioning normally	<ul style="list-style-type: none"> - Make certain the exhaust blower is operating - Check the condition of the vacuum hose (located on the left side of the heater). Should not be cracked or torn. - Check the manual reset button on the 200°F (93°C) temperature sensor. Before re-setting the red button, check for the cause of the over-heating. - If the auger still does not work, then apply 115V AC directly to the auger motor. If it still does not work, replace it. - Check the auger by bypassing the 200°F (93°C) temperature sensor with a jumper wire. If auger works, replace the sensor. - Check the vacuum sensor by placing a jumper wire between the blue wire and the black wire that are attached to the sensor. If the auger works, test to see if the exhaust blower is producing enough vacuum (may require cleaning). - If not, replace the vacuum sensor.

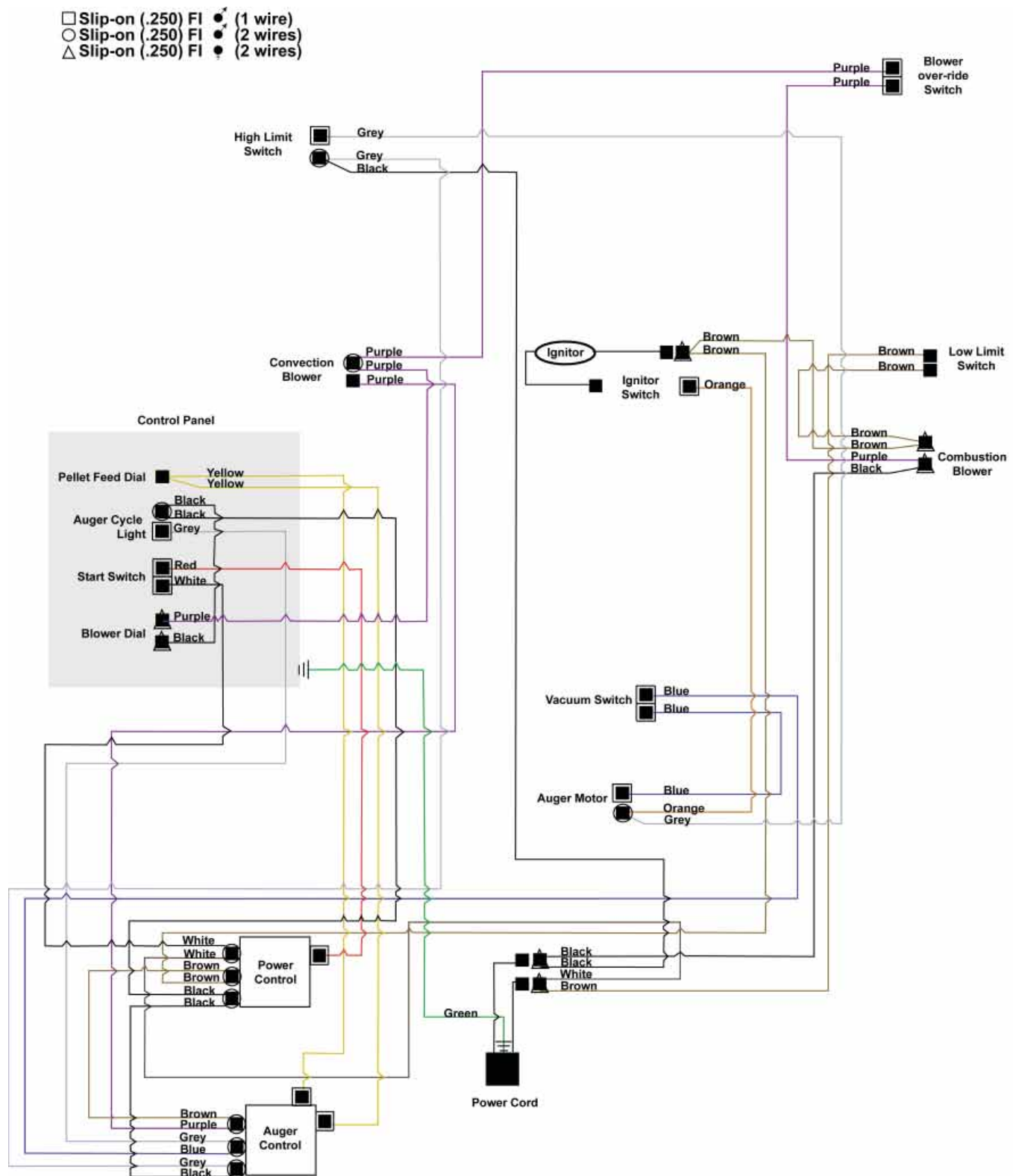
TROUBLESHOOTING CONTINUED

SYMPTOM	TEST SOLUTION
Feed rate dial has no effect on the fire (timer control only)	<ul style="list-style-type: none"> - Secure all connections to the power control module. - Perform a resistance test to the potentiometer by placing the two test leads from a multi meter into the leads of the potentiometer. The potentiometer should have a range of 850 KΩ (\pm 10%). <p>Potentiometer Readings:</p> <p>Full counter-clockwise (switched off) = open circuit, overload or infinite resistance</p> <p>Low fire 800 KΩ to 900 KΩ</p> <p>High fire 68 KΩ to 82 KΩ</p> <p>If the range is not close or does not vary then replace the potentiometer.</p>
The convection blower is not functioning normally	<ul style="list-style-type: none"> - Using the wiring diagram, compare all the connections between the controller, switch, and the convection blower. - If the convection motor will not run, apply 115V AC to the motor directly. Replace the blower controller if the motor runs. The convection blower has failed if the motor does not run. Replace the blower. - If the convection blower runs on high at all times (no control with the blower controller), check the connections from the 160°F (71°C) sensor (located on the upper left side on the rear of the fire wall) and convection blower controller to the blower. Disconnect one of the wires from the sensor and if control of the convection blower returns to the blower controller, replace the sensor. - If the motor is still on high, re-connect the sensor and replace the convection blower controller.
The heater will not operate when hot	<p>General</p> <ul style="list-style-type: none"> - Check the hopper for fuel. - Incorrect air damper setting may cause excessive air to consume the fire too quickly before the next drop of fuel. Therefore leaving the fuel completely unburned in the burn pot and will cause the fuel to burn cold and very slowly. Fuel also may build up and smother the fire. <p>Note: The unit may require a change to the vent system or installation of fresh air to correct air to fuel ratio problems.</p> <ul style="list-style-type: none"> - Combustion blower failure may occur because it is not turning fast enough to generate the proper vacuum in the fire box. Do a visual check to see if the motor is turning. - Check vacuum levels in the exhaust channel by bypassing the vacuum switch, then remove the vacuum hose from vacuum switch. When checking the vacuum exhaust place the open end of the vacuum hose on the gauge (readings must be above 0.10" W.C. on low fire). (Note: if the motor fails to reach a 0.10" W.C., then replace the combustion blower). - Poor quality fuel may not produce enough heat to keep the stove burning or operational. - If the exhaust temperature sensor fails try bypassing the sensor located on the exhaust blower. If the stove operates properly, the unit may require cleaning or a new sensor. Contact your local deal for service. - Unplug the stove, open the left side panel and jump the two brown leads that are attached to the 140°F (60°C) temperature sensor. If the stove operates replace the 140°F (60°C) sensor.

TROUBLESHOOTING CONTINUED

SYMPTOM	TEST SOLUTION
The 200°F (93°) high limit temperature sensor has tripped	<ul style="list-style-type: none"> - Reset the sensor and determine whether it was the convection blower or 160°F (71°C) temperature sensor failure. Bypass the 160°F (71°C) sensor. Does the convection blower not come on high? If no than replace the blower.
The heater will not turn off	<ul style="list-style-type: none"> - Disconnect one of the brown wires from the exhaust temperature sensor and if the unit continues to operate, contact your local dealer for service. - Compare the wiring diagram to the start control module and the connections to the 140°F (60°C) temperature sensor. Check the connections. - Remove one of the brown wires from the 140°F (60°C) temperature sensor. The heater should be shut down right away as long as the start button was not pressed within 15 minutes of this test. If the heater shuts down within 15 minutes, replace the 140°F (60°C) sensor. If the heater does not shut down in 15 minutes, test the switch. - The heater must be cold to test the switch. Pull the plug, then plug the heater back in. If the heater fails to start, replace the switch.
The heater keeps going out	<ul style="list-style-type: none"> - Due to different installation set ups, length and size of venting and fuel quality, the low feed setting from the factory will not always be correct. It may be necessary to experiment with feed rate vs air control. (For example, #2 may be your lowest setting). - If the heater goes out and leaves fresh unburned pellets or cigarette-like ashes in the burn pot, the fire is going out before the heater shuts off. - Check to see if the air control rod is in the correct position. - Turn the feed rate up slightly (poor quality pellets will require slightly higher settings). - Check to see if the heater needs a more complete cleaning as well as the burn pot, venting, etc... - Was there a power failure? - Contact your local dealer for service - If the heater goes out and there are no pellets in the liner, the auger is stopping. - See "The auger motor will not function normally" and "The exhaust blower will not function normally".

WIRING DIAGRAM



REPLACEMENTS

Contact your dealer for questions concerning prices and availability of replacement parts. Normally all parts can be ordered through your Napoleon dealer or distributor.

When ordering replacement parts always give the following information:

1. Model and Serial Number of the fireplace
2. Installation Date of the fireplace
3. Part Number
4. Description of part
5. Finish

For warranty replacement parts, a photocopy of the original invoice will be required.

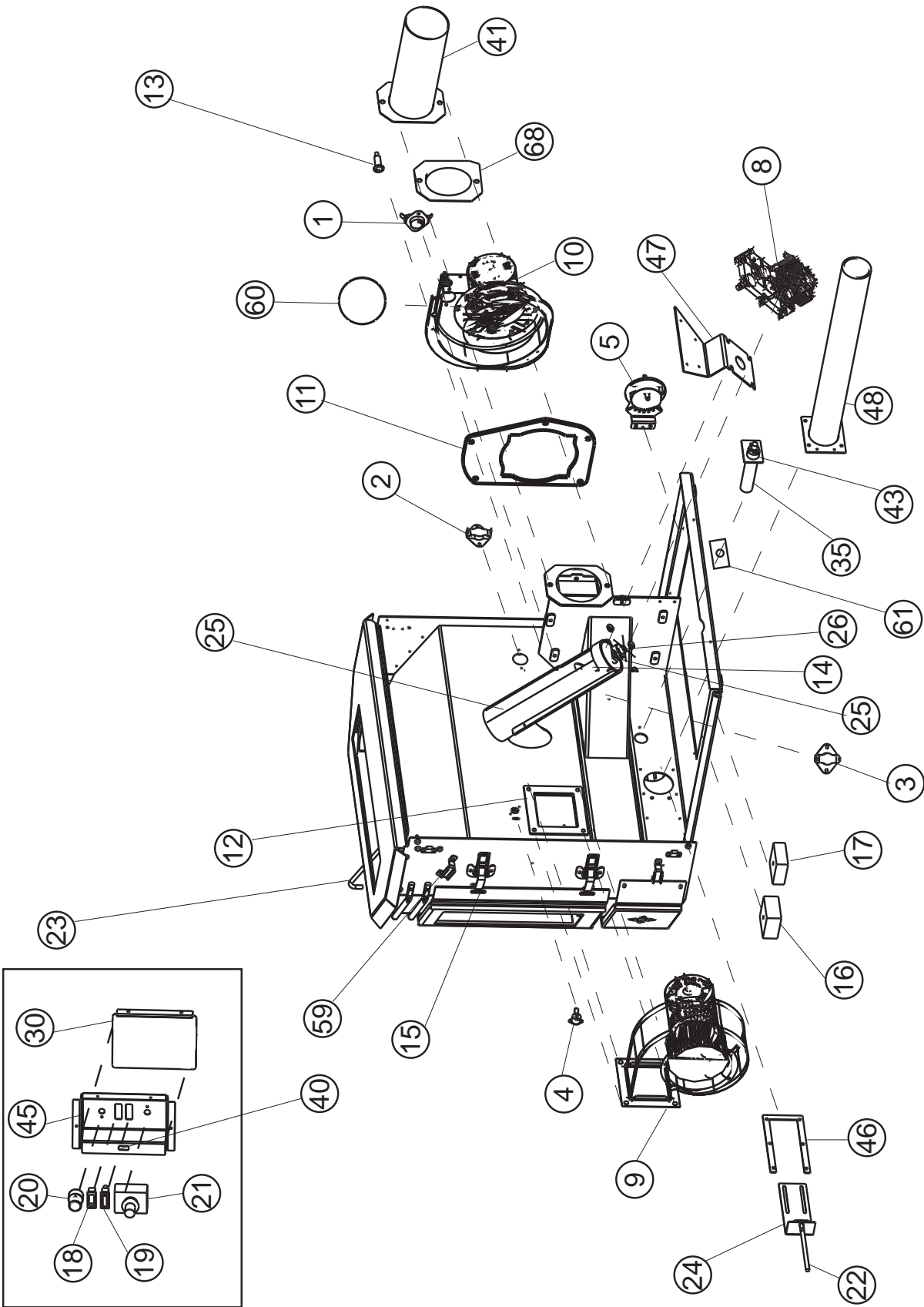
* Identifies items which are not illustrated. For further information, contact your Napoleon dealer.

REPLACEMENT PARTS		
#	PART NO.	DESCRIPTION
1	W660-0052	LOW LIMIT SWITCH 140°F (80°C)
2	W660-0053	OVER-RIDE SWITCH 160°F (71°C)
3	W660-0054	IGNITION SWITCH 120°F (60°C)
4	W660-0055	HIGH LIMIT SWITCH 200°F (93°C)
5	W660-0056	VACUUM SWITCH
6*	W380-0020	CONTROL KNOB
7*	W195-0004	POWER CORD
8	W435-0009	AUGER MOTOR
9	W062-0021	CONVECTION BLOWER
10	W062-0022	COMBUSTION BLOWER
11	W290-0111	COMBUSTION BLOWER MOUNTING GASKET
12	W290-0113	CONVECTION BLOWER GASKET
13	W255-0020	PRESSURE FITTING TAP
14	W570-0107	AUGER SCREW
15	W390-0002	DOOR LATCH
16	W190-0019	POWER CONTROL
17	W190-0020	AUGER CONTROL
18	W405-0001	AMBER LIGHT
19	W660-0058	POWER SWITCH
20	W660-0063	PELLET FEED SWITCH
21	W660-0062	VARIABLE SPEED W/O PAL NUT SWITCH
22	W555-0059	AIR CONTROL ROD
23	W555-0061	SCRAPER ROD
24	W010-1507	AIR CONTROL
25	W105-0012	NYLON BUSHING
26	W570-0110	SCREW SET
27*	W750-0163	HARNESS WIRE
28	W200-0202	FRONT ASH PAN COVER
29	W010-1529	HOPPER DOOR
30	W010-1528	CONTROL DOOR
31	W475-0483	BOTTOM OF PANEL
32	W705-0204	OUTER TOP PANEL
33	W475-0484	OUTER PANEL
34	W475-0485	OUTER PANEL
35	W720-0089	IGNITOR HOUSING
36	W010-1534	ASH DRAW
37	W390-0013	ASH DOOR LATCH
38	W010-1527	SIDE DOOR
39*	W385-0351	DIE CAST NAPOLEON LOGO
40	W390-0012	CONTROL PANEL LATCH
41	W010-1490	EXHAUST TUBE
42	W010-1488	BURNER POT
43	W357-0004	IGNITOR
44*	W325-0042	SMALL BLACK WIRE HANDLE
45	W350-0361	CONTROL HOUSING
46	W615-0073	AIR CONTROL SPACER
47	W080-0777	MOTOR BRACKET
48	W010-1491	COMBUSTION AIR TUBE ASSEMBLY

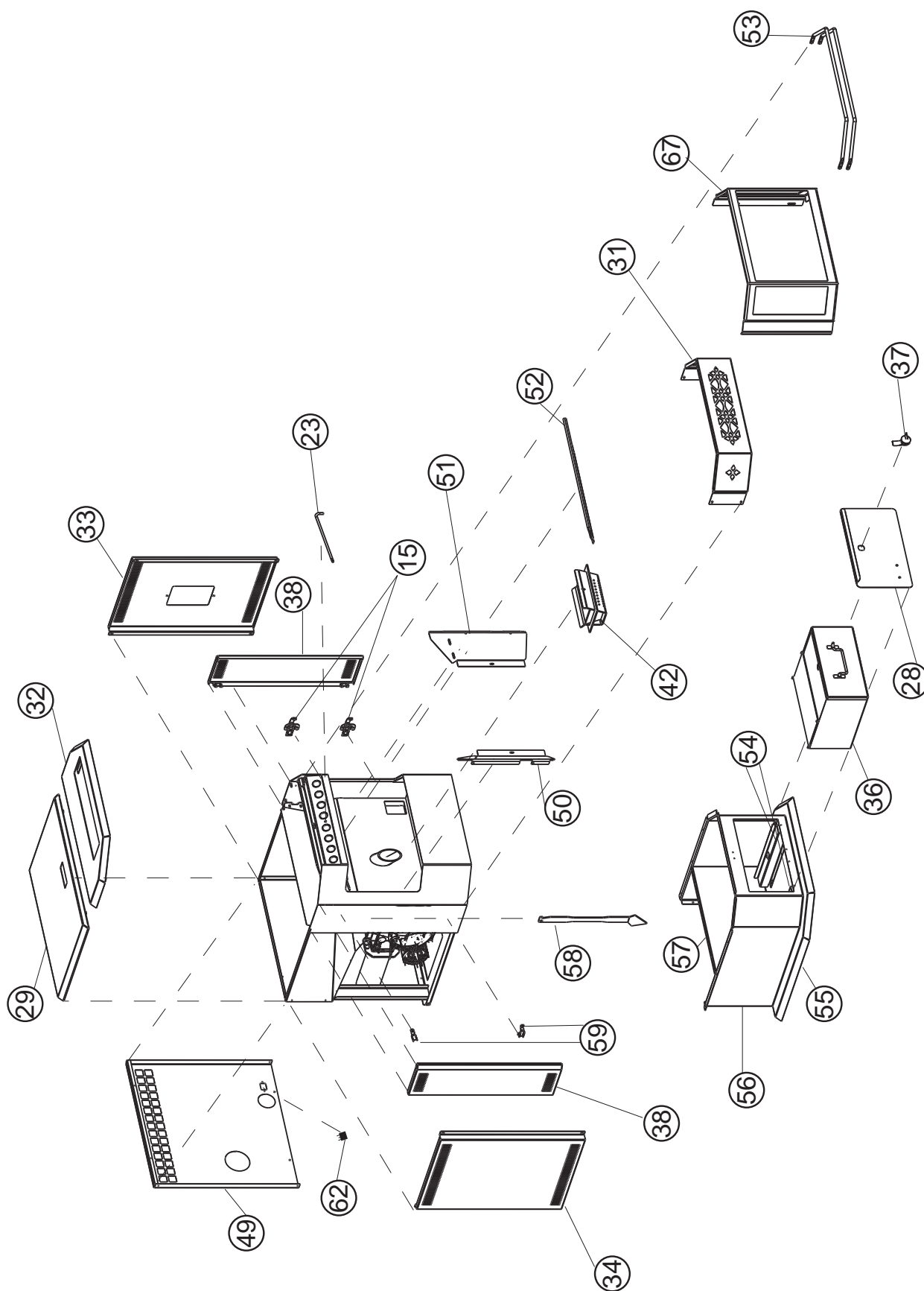
#	PART NO.	DESCRIPTION
49	W475-0482	OUTER REAR PANEL
50	W432-0083	LEFT EXHAUST MANIFOLD
51	W432-0084	RIGHT EXHAUST MANIFOLD
52	W018-0099	BAFFLE
53	W030-0022	ACCENT BAR (2)
54	W525-0009	ASH PAN RAIL (2)
55	W035-0170	PEDESTAL BASE
56	W495-0041	PEDESTAL HOUSING
57	W475-0477	PEDESTAL REAR PANEL
58	W600-0001	SHOVEL, SCRAPER TOOL
59	W430-0002	MAGNETIC DOOR CATCH ASSEMBLY (2)
60	W290-0120	MOTOR MOUNTING GASKET
61	W290-0119	IGNITION GASKET
62	W460-0004	RECEPTICAL
63*	W615-0078	SPACER, LATCH
64	W300-0038	GLASS, FRONT
65	W300-0037	GLASS, SIDE
66	W562-0022	GASKET
67	W225-0195	DOOR FRAME, BLACK
67	W225-0195G	DOOR FRAME, GOLD
67	W225-0195SC	DOOR FRAME, SATIN CHROME
68	W290-0112	EXHAUST GASKET

ACCESSORY REPLACEMENT PARTS		
69*	NPL40	DECORATIVE LOG SET
70*	NP832	DECORATIVE BRICK PANELS
71*	PRPP40	PORCELAIN REFLECTIVE RADIANT PANELS
72*	GS200-G	TRIVET
73*	GS200-SS	TRIVET
74*	NPHE-40	HOPPER EXTENSION (INCREASES HOPPER CAPACITY FROM 55 LBS TO 100 LBS PELLETS)

REPLACEMENTS PARTS DIAGRAM



REPLACEMENTS PARTS DIAGRAM



SERVICE AND MAINTENANCE LOG

OWNERSHIP RECORDS

Dealer's Name:

Dealer's Address:

City:

State/Province:

Zip Code/Postal Code:

Serial Number:

Date of Purchase:

Date Installed:

Notes:

[illegible]

