INSTALLER: LEAVE THIS MANUAL WITH THE APPLIANCE. CONSUMER: RETAIN THIS MANUAL FOR FUTURE REFERENCE.



INSTALLATION AND OPERATING INSTRUCTIONS

This fireplace has been tested to ASTM E 1509, UL 1482, ULCS 627

CPS40 PELLET STOVE HEATER

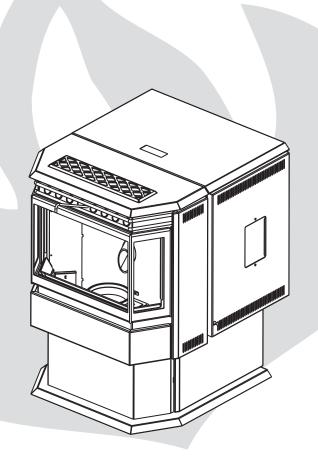
CERTIFIED FOR CANADA AND UNITED STATES USING ANSI/CSA METHODS.

SAFETY INFORMATION

▲ WARNING

PLEASE READ ENTIRE MANUAL
BEFORE YOU INSTALL OR USE THIS
PELLET BURNING HEATER.
If the heater is not properly installed, a
house fire may result causing personal
injury or loss of life.

- Contact local building or fire officials about restrictions and installation inspection requirements in your area.
- This heater is hot while in operation. Keep children, clothing and furniture away. Contact may cause skin burns.
- Do not start a fire with chemicals or fluids such as gasoline, engine oil, etc...













Wolf Steel Ltd., 24 Napoleon Rd., Barrie, ON, L4M 4Y8 Canada / 103 Miller Drive, Crittenden, Kentucky, USA, 41030
Phone (705)721-1212 • Fax (705)722-6031 • www.continentalfireplaces.com • ask@continentalfire.on.ca

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

NOTE: Changes, other than editorial, are denoted by a vertical line in the margin.

1.0 INTRODUCTION

1.1 WARNINGS & 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.



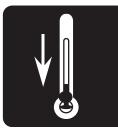
Never try to repair or replace any part of the heater unless instructions are given in this manual. All other work should be done by a trained technician.



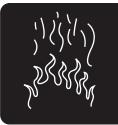
Your heater requires periodic maintenance and cleaning. Failure to maintain your heater may lead to smoke spillage in your home.



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.



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 to "OFF" does not disconnect all power to the heater.



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



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 become very hot, you MUST wear heat resistant gloves when cleaning or handling this heater.



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.



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

1.2 WARRANTY

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

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

CONTINENTAL® PELLET HEATERS PRESIDENT'S LIFETIME LIMITED WARRANTY

The following materials and workmanship in your new CONTINENTAL® 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 burn pot are covered and CONTINENTAL® will provide replacement parts free of charge during the first year of the limited warranty.

Any labour related to warranty repair is not covered.

CONDITIONS AND LIMITATIONS

CONTINENTAL® warrants its products against manufacturing defects to the original purchaser only. Registering your warranty is not necessary. Simply provide your proof of purchase along with the model and serial number to make a warranty claim. Provided that the purchase was made through an authorized CONTINENTAL® dealer your heater 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 discoloring caused by excessive heat, abrasive and chemical cleaners nor chipping on porcelain enamel parts, nor any venting components used in the installation of the heater. 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, CONTINENTAL® 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, Wolf Steel Ltd. 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, Continental's responsibility under this warranty is defined as above and it shall not in any event extend to any incidental, consequential or indirect damages.

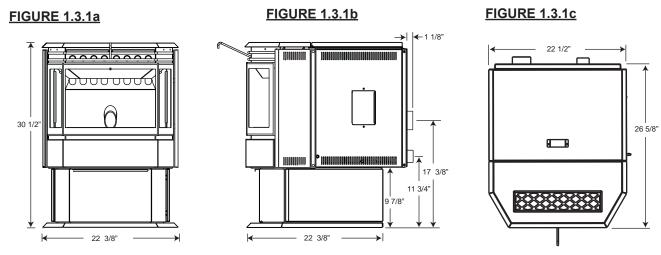
This warranty defines the obligations and liability of CONTINENTAL® with respect to the CONTINENTAL® pellet heater and any other warranties expressed or implied with respect to this product, its components or accessories are excluded.

CONTINENTAL® neither assumes, nor authorizes any third party to assume, on its behalf, any other liabilities with respect to the sale of this product. CONTINENTAL® 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.

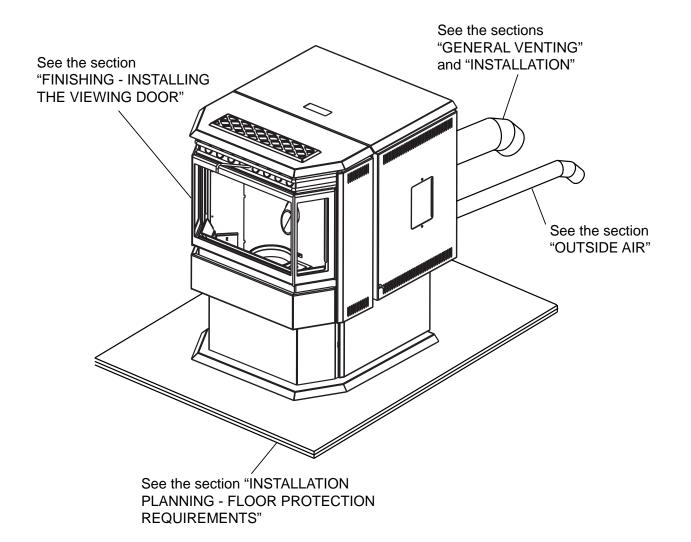
Any damages to heater, combustion chamber, heat exchanger, brass trim or other component due to water, weather damage, long periods of dampness, condensation, damaging chemicals or cleaners will not be the responsibility of CONTINENTAL®. Regular cleaning of the fine ash generated during the operation 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. CONTINENTAL® reserves the right to have its representative inspect any product or part thereof prior to honouring any warranty claim.

ALL SPECIFICATIONS AND DESIGNS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE DUE TO ON-GOING PRODUCT IMPROVEMENTS. CONTINENTAL® IS A REGISTERED TRADEMARK OF WOLF STEEL LTD. PATENTS U.S. 5.303.693.801 - CAN. 2.073.411, 2.082.915. © WOLF STEEL LTD.

1.3 DIMENSIONS



1.4 INSTALLATION OVERVIEW



2.0 GENERAL INFORMATION

Thank you for purchasing the Wolf Steel Ltd. Pellet Appliance. This appliance is designed for use with Pelletized Wood Only.

Please read this entire manual before installation and use of this pellet fuel-burning room appliance. Failure to follow these instructions could result in property damage, bodily injury or even death.

Keep this manual handy for future reference.

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

The protective wrap on plated parts is best removed when the assembly is at room temperature but this can be improved if the assembly is warmed, using a hair dryer or similar heat source.

2.1 PELLET QUALITY

WARNING

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 INSTITUTE (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.

Pellet quality is important, please read the following:

Your Wolf Steel Ltd. Pellet Appliance 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 pellets, as this will void the warranties stated in this manual.

The performance and heat output of the pellet appliance is directly related to the quality and moisture of the pellets. Store pellets in a cool dry area to prevent moisture absorption.

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 appliance may not operate as designed. We recommend the use of premium grade (1% ash content) for longer stove life and less frequent cleaning.

— 64.1

2.2 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.

2.3 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

^{**} 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.

2.4 SAFETY FEATURES

HIGH LIMIT SWITCH: Your appliance is equipped with a high limit switch. In the event that the temperature of the appliance 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 appliance if the fire goes out or fails to light within 15 minutes.

HOPPER DOOR INTERLOCK: Your appliance is equipped with a micro switch in the hopper assembly that shuts-off the auger when the hopper door is opened. Closing the door switches the auger back on, allowing pellets to feed again.

BLOWER OVER-RIDE SWITCH: Your appliance 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 appliance cools back down, the blower will return to the initial setting.

VACUUM SWITCH: This switch will sense lack of air flow through the appliance 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 appliance will shut down. Once power is restored, the appliance will re-start, unless the convection air temperature has gone above the high limit switch setting. If this happens, contact your local dealer.

2.5 EPA COMPLIANCE

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



www.nficertified.org

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

3.0 INSTALLATION PLANNING

▲WARNING

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

USE ONLY WOLF STEEL APPROVED OPTIONAL ACCESSORIES AND REPLACEMENT PARTS WITH THIS APPLIANCE. USING NON-LISTED ACCESSORIES AND REPLACEMENT PARTS (BLOWERS, DOORS, LOUVRES, TRIMS, GAS COMPONENTS, VENT COMPONENTS, ETC.) COULD RESULT IN A SAFETY HAZARD AND WILL VOID THE LIMITED LIFETIME WARRANTY.

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

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

3.1 APPLIANCE PLACEMENT

Have an authorized dealer install the appliance. If you install the appliance 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.

You may wish to adjust the appliance position slightly to ensure the vent does not intersect with a framing member. Appliance must be positioned so that no combustibles are within, or can swing within (e.g. drapes, doors), 48" of the front of the appliance.

If the appliance is placed in a location where the ceiling height is less than 7' above the base of the appliance, the installation must follow the requirements in the section "ALCOVE INSTALLATIONS REQUIREMENTS".

3.2 INSTALLATION OPTIONS

To install in a Residential or Mobile Home see the section "MOBILE HOME REQUIREMENTS".

For alcove installations see the section "ALCOVE INSTALLATION REQUIREMENTS".

For horizontal vent or vertical vent see the section "GENERAL VENTING".

See the section "OUTSIDE AIR" for this option.

3.3 FLOOR PROTECTION REQUIREMENTS

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

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

3.4 OUTSIDE AIR

Available from your Authorized Dealer (114KT)

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

<u>NOTE:</u> Wolf Steel Ltd. 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.

Outside air is required for all combustible built-in enclosure installations.

3.5 MOBILE HOME

WARNING

DO NOT INSTALL IN A SLEEPING ROOM.

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

Installation into a manufactured home or mobile home should be installed in accordance with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, in the United States or the Mobile Home Standard, CAN/CSA Z240 MH Series, in Canada.

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

29.4

FIGURE 3.5

4.0 GENERAL VENTING

AWARNING

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 OR CHIMNEY SERVING ANY OTHER APPLIANCE OR HEATER.

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

4.1 TYPE OF VENT

Must be an approved 3" or 4" diameter Type "L" or "PL" 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 appliance installations. Use 4" diameter vent if vent or liner height is over 15' or if installation is over 4,000' above sea level.

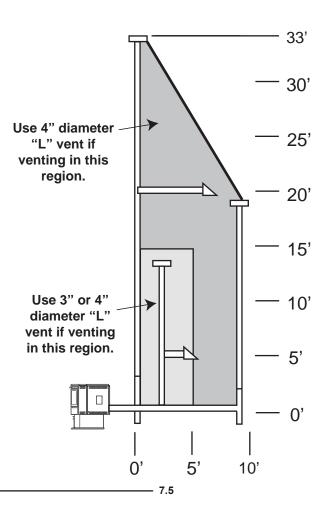
4.2 INSTALLING THE PELLET VENT

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 vent run is 10'. Use no more than 180° of elbows (two 90' elbows, or two 45' elbows and one 90' elbow, etc), excluding the tee and the 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 entering the home during the appliance shut down or in the event of a power outage. Horizontal sections must have a 1/4" rise every 12" of travel if longer than 3'.

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.



4.3 VENTING THE PELLET APPLIANCE

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

4.4 PELLET VENT TERMINATION

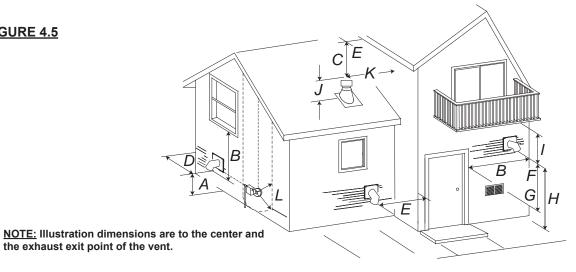
The vent termination must have an approved cap (to prevent water from entering) or a 45° downturn. If the termination is located on a windy side of the house, a shield is recommended to prevent soot from building up on the side of the house.

Horizontal terminations must protrude 12" from the wall, vertical terminations require a minimum 24" above the highest point that it penetrates through the roof.

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

4.5 **MINIMUM AIR TERMINAL LOCATION CLEARANCES**

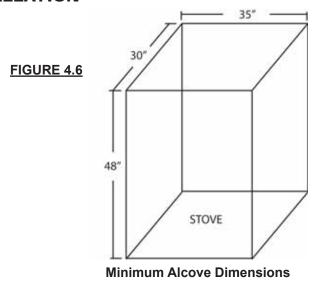
FIGURE 4.5



	CLEARANCES	
Α	24"	Clearance above grade, veranda porch, deck or balcony. (Including vegetation and multch)
	48"	Clearance beside or below any windows or doors that open.
В	12" *	Clearance above any window or door that opens.
С	18"	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet from the center line of the terminal.
D	0"	Clearance to an outside corner wall.
E	3"	Clearance to an inside combustible corner wall or protruding combustible obstructions (vent chase, etc.)
F	9"	Clearance to a non-mechanical air supply inlet to the building or a combustion air inlet to any other appliance.
G	3"	Clearance to a mechanical air supply inlet.
Н	7' **	Clearance above a paved sidewalk or paved driveway located on public property.
I	12" **	Clearance under a veranda, porch, deck or balcony.
J	24"	Clearance above the roof.
K	2'	Clearance from an adjacent wall including neighbouring buildings.
L	3' within a height of 15 feet above the meter / regulator as- sembly	Clearance to each side of center line extended above natural gas or propane meter / regulator assembly or mechanical vent.
*	Recommended to preve	ent condensation on windows and thermal breakage
**	This is a recommended	distance. For additional requirements check local codes.

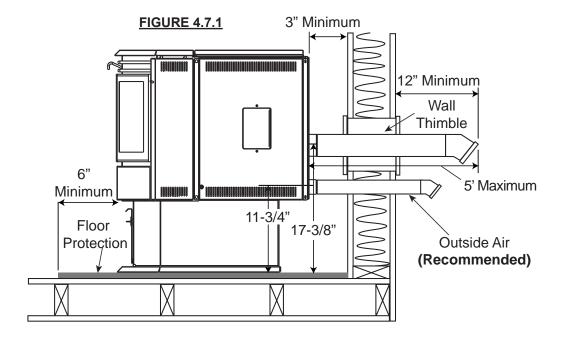
- 12.7

4.6 ALCOVE INSTALLATION

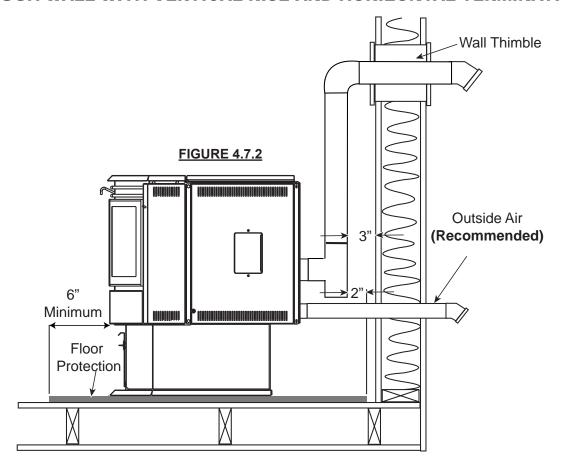


4.7 STOVE VENTING INSTALLATION EXAMPLES

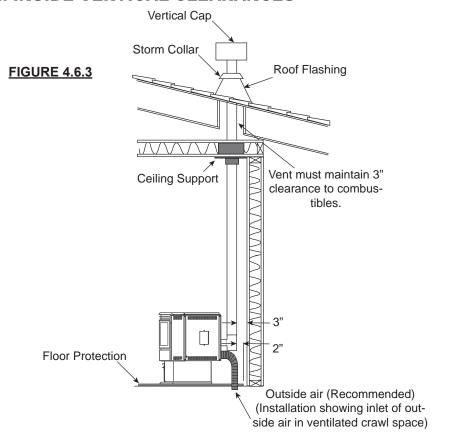
4.7.1 HORIZONTAL EXHAUST THROUGH WALL INSTALLATION



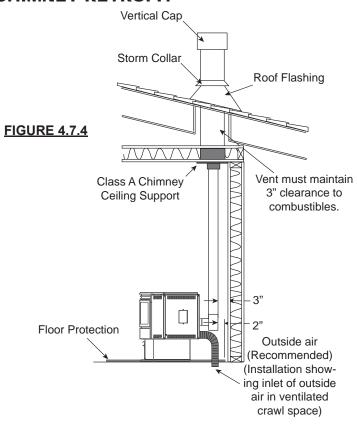
4.7.2 THROUGH WALL WITH VERTICAL RISE AND HORIZONTAL TERMINATION



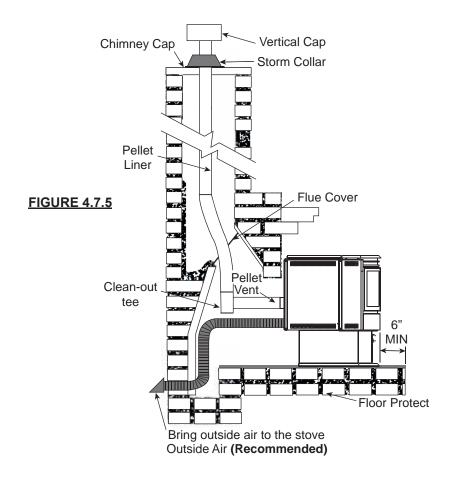
4.7.3 MINIMUM INSIDE VERTICAL CLEARANCES



4.7.4 CLASS A CHIMNEY RETROFIT



4.7.5 HEARTH MOUNT INSTALLATION



5.0 STOVE INSTALLATION

5.1 MINIMUM CLEARANCE TO COMBUSTIBLES

5.1.1 STRAIGHT INSTALLATION

FIGURE 5.1.1a

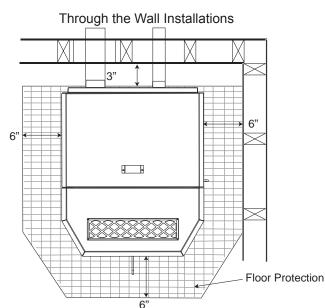
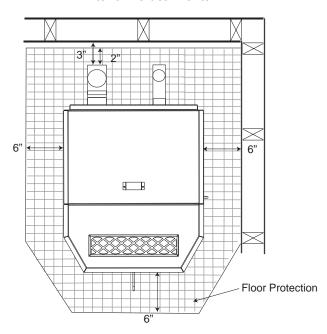
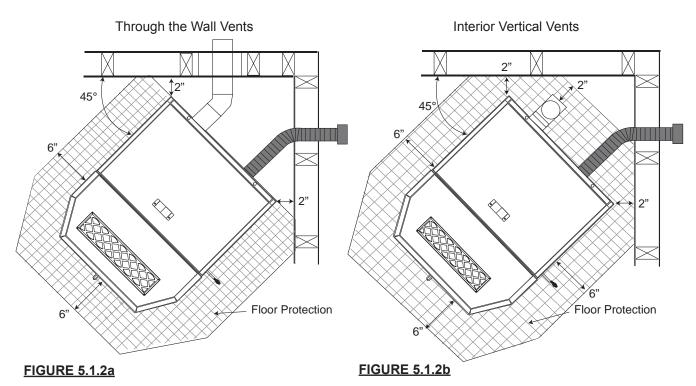


FIGURE 5.1.1b

Interior Vertical Vents



5.1.2 CORNER INSTALLATION



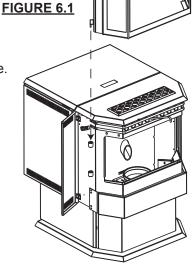
NOTE: If interior vertical pellet vent is used, the clearance to the back wall is determined by the upward-turning elbow or "Tee". It will vary in depth depending on the brand of pellet vent used (it is approximately 5"). Before placing the appliance, connect the elbow or "Tee" and allow for the minimum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

6.0 FINISHING

6.1 INSTALLING VIEWING DOOR

The main viewing door has been boxed separate from the appliance, but <u>MUST</u> be installed before burning the appliance.

- **6.1.1** Open both side panels, exposing the bushing on the left and the latches on the right.
- **6.1.2** Align the pins on the door to the bushing on the left side of the appliance. Lower into place until both bushings touch.
- **6.1.3** Engage the latch hooks into the door frame. Snap the rear handle hook to lock the latch closed.



7.0 OPERATING INSTRUCTIONS

7.1 PROPER PELLET LOADING

Before loading pellets into the hopper first transfer the pellets from it's original plastic bag to a metal bucket. Keep in mind that the auger stops when the lid is opened. If the lid is opened for several minutes, the fire may extinguish.

<u>NOTE:</u> If the pellets are kept in the plastic bag, the bag may come in contact with the appliance 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.

47 10

7.2 LIGHTING APPLIANCE MANUALLY

WARNING

HEATER MAY BE HOT.

OTHER THAN PLACING A HANDFUL OF PELLETS IN THE BURN POT FOR LIGHTING MANUALLY, NEVER FEED PELLETS THROUGH THE GLASS VIEWING DOOR. AN "OVERFIRE" CONDITION COULD OCCUR, IF MORE PELLETS ENTER THE FIREBOX THAN WHAT THE FEED TUBE CAN DELIVER. PELLETS MUST ONLY BE BURNED WITHIN THE BURN POT.

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

- Press the ON / OFF button.
- Place a "handful" of pellets into the burn pot.
- Cover with a small amount of approved (non-volatile) fire starter gel.
- Light fire starter with a match and close the viewing door.

_____ 47 1

LIGHTING INSTRUCTIONS

♠ WARNING

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.

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).

Always operate this appliance with the door closed. If this is the first time the appliance has started or the appliance 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 appliance 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.

7.3.1 START-UP

WARNING

HEATER MAY BE HOT.

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

A. Press "START" switch

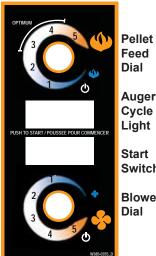
FIGURE 7.3

- В. Rotate the Pellet feed dial rate to optimum.
- C. Adjust the air control rod to the preferred setting (this position will vary depending on venting configuration and fuel quality).
- D. If the appliance stops running after approximately 15 minutes, press "START" switch again.

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

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.



47.13

Feed Dial

Auger Cycle Light

Start Switch

Blower

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 appliance, 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. Once the appliance has cooled down the blower will return to the set speed.

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

7.3.2 SHUT-DOWN

To turn your appliance 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 appliance. When cool enough, the appliance will shut down.

DO NOT unplug unit while combustion blower is operating. This may lead to smoke escaping from the appliance into the room.

— 47.14

8.0 GENERAL MAINTENANCE

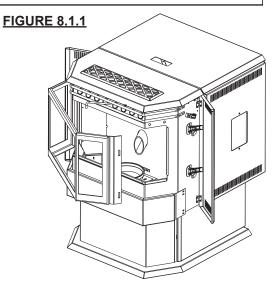
8.1 DAILY (WHENEVER USING THE APPLIANCE)

8.1.1 OPEN MAIN VIEWING DOOR

AWARNING

THE FRONT OF THE HEATER BECOMES VERY HOT DURING OPERATION. LET THE HEATER COOL COMPLETELY BEFORE CONDUCTING SERVICE.

- **A.** Open the side doors on either side of the appliance.
- B. On the right side of the appliance are two latches. Release the latches by pulling the rear handle forward and disengaging the hook from the door frame. Swing open the viewing door.



8.1.2 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.

— 40.2

8.1.3 INSPECT THE BURN POT

When burning, the flames should be bright orange with embers jumping from the burn pot. If not see "MAKE SURE PELLETS ARE NOT PILING UP" or "CLEANING THE BURNPOT" sections.



FIGURE 8.1.3

40.3

8.1.4 CARE OF GLASS

If the glass is not kept clean permanent discolouration and / or blemishes may result. Normal operation of your pellet heater will produce a build-up on the glass that should be wiped off daily. However, poor quality pellets or extended burning on the low setting will cause the glass to "smoke up" faster.

Refer to "REPLACEMENT PARTS" section to find out what this product is equipped with. Use only replacement glass available from your Authorized dealer.



DO NOT CLEAN GLASS WHEN HOT!

If necessary, clean the glass with a soft cloth or paper towel. You could use "wood stove" glass cleaner to remove heavy build-up.

Do not operate the heater with broken glass, as leakage of flue gases may result.

__ 5.2

8.1.5 CLEANING THE HEAT EXCHANGER TUBES

AWARNING

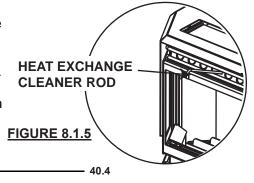
THE FRONT EDGE OF THE HOPPER LID BECOMES VERY HOT, DO NOT TOUCH THE AREA BELOW THE HANDLE.

THIS ROD BECOMES VERY HOT DURING OPERATION. WAIT TILL HEATER HAS COOLED COMPLETELY OR YOU MUST WEAR HEAT RESISTANT GLOVES WHEN CLEANING OR HANDLING THIS HEATER.

With the appliance cool (or wearing heat resistant gloves), slide the heat exchange cleaner rod up and down several times to prevent the build up of ash on the heat exchange tubes.

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

<u>NOTE:</u> More frequent cleaning may be required depending upon pellet quality.

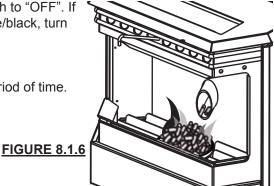


8.1.6 MAKE SURE PELLETS ARE NOT PILING UP

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 appliance off and check for build up of pellets.

The most likely causes are:

- **A.** Feed rate has been set to maximum for an extended period of time. Turn feed rate to optimum.
- **B.** The door, glass, or ash pan is open or has an air leak.
- **C.** The burn pot requires cleaning.
- **D.** The exhaust system requires cleaning.
- **E.** The appliance requires adjustment.
- F. Poor pellet quality



- 40.5

8.1.7 CLEANING THE BURN POT

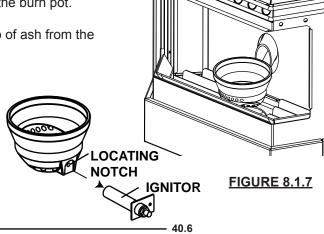
AWARNING

MAKE CERTAIN THE HEATER HAS FULLY COOLED (APPROXIMATELY 25 MINUTES) BEFORE OPENING THE DOOR AND

To clean the burn pot, open the door and knock away any debris on the burn pot. If severely clogged, remove the burn pot to gain better access. If removing the burn pot set aside on a non-combustible surface. Once removed, discard all material that has accumulated in the burn pot.

Make certain that all openings are clear of any build up of ash from the ledge below the burn pot.

Re-install the burn pot ensuring it sits level in the appliance. Also must ensure the ignitor and the burn pot locating notch line up when reinstalling the burn pot.



8.2 BI-WEEKLY (OR EVERY 10 BAGS OF PELLETS)

8.2.1 VACUUM FIREBOX

AWARNING

THE FIREBOX BECOMES VERY HOT DURING OPERATION. LET THE HEATER COOL COMPLETELY BEFORE CONDUCTING SERVICE.

The more frequently you clean out the fly ash, the more efficient your appliance will burn.

- A. Open the viewing door. See "OPEN MAIN VIEWING DOOR" section.
- B. Lift the burn pot out and set aside on a non-combustible surface.

 Remove the right and left louvres by lifting the louvres up and out of

LOUVRES FIREBOX AIR HOUSING



the firebox setting them on a non-combustible surface.

Re-install the burn pot ensuring it sits level in the appliance. Also must ensure the ignitor and the burn pot locating notch line up when reinstalling the burn pot.

8.3 **SEMI-ANNUALLY (OR EVERY TWO TONS OF PELLET)**

WARNING

THE FIREBOX BECOMES VERY HOT DURING OPERATION. LET THE HEATER COOL COMPLETELY BEFORE CONDUCTING SERVICE.

DISCONNECT THE POWER CORD PRIOR TO CONDUCTING SERVICE.

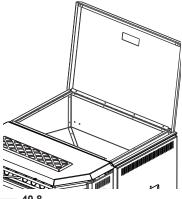
THE FOLLOWING SECTION DETAILS EXTENSIVE MAINTENANCE PROCEDURES. WE STRONGLY SUGGEST THESE ITEMS BE CARRIED OUT BY A TRAINED SERVICE TECHNICIAN, POSSIBLY BY A SERVICE AGREEMENT SET UP WITH YOUR DEALER.

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

8.3.1 VACUUM HOPPER

The more frequently you clean out the fly ash, the more efficient your appliance will burn.

- Α. Open the viewing door. See "OPEN MAIN VIEWING DOOR" section.
- B. Lift the burn pot out and set aside on a non-combustible surface. Remove the right and left louvres by lifting the louvres up and out of the firebox setting them on a non-combustible surface.



40.9

8.3.2 SOOT AND FLY ASH FORMATION

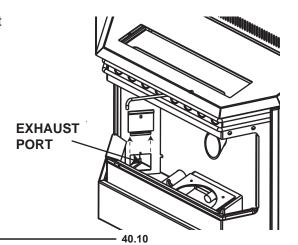
The products of combustion will contain small particles of fly ash. The fly ash will collect in the exhaust venting system and restrict the flow of the flue gases. Incomplete combustion occurs during startup, shutdown, or incorrect operation of the room appliance will lead to some soot formation which 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.

8.3.3 CLEAN THE VERTICAL EXHAUST DUCT

If the PRPP40 or the brick kit NP841KT is in place, remove that accessory first.

- Open side door, release the latch and pivot the viewing A. door wide open.
- B. Remove the one screw on each exhaust port located on either side of the fire box. Remove the exhaust port doors and set aside on a non-combustible surface.

Insert a vacuum into the exhaust port holes and remove as much fly ash as possible from behind the left and right exhaust manifolds. Once clean, replace the exhaust port doors and secure with the screws.

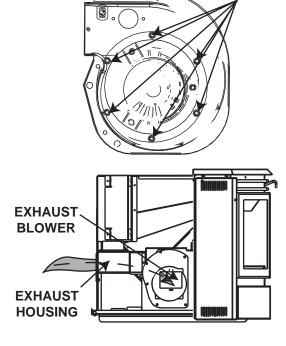


NUTS

8.3.4 CLEAN THE EXHAUST BLOWER

<u>NOTE:</u> Do not attempt this maintenance without a replacement exhaust blower motor mounting gasket.

- **A.** Remove the six nuts holding the exhaust blower motor in place.
- **B.** Pull the motor out being careful not to damage the wiring, unplug the two wires that are connecting the motor and gently set aside. (The pieces of gasket may be discarded.
- C. Start by cleaning the exhaust tube by feeding a brush or rag through the inside of the tube and out the exhaust blower housing.
- **D.** Vacuum out the exhaust ports and the blower housing.
- **E.** With a bristle brush vacuum, clean the blades of the motor.
- F. Place the new exhaust blower mounting gasket around the screw holes being very careful not to tear it.



G. 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 and then re-attach the nuts.

8.3.5 CHECK ALL SEALS

Check for air leaks around the door, glass, and ash pan and replace gaskets as required.

Air leaks into the firebox will decrease the appliance'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. Appliance 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.

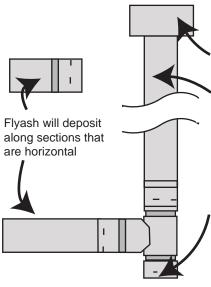
If the glass is cracked, re	eplace.	
•	·	40 12

8.3.6 CLEAN THE VENT

AWARNING

WHENEVER ANY PORTION OF THE PELLET VENT IS DISCONNECTED, THE JOINTS MUST BE RE-SEALED WITH RTV 500°F SILICONE SEALANT.

Vent system should be cleaned using chimney sweep brushes. We recommend this be done by a qualified chimney sweep.



Make sure the cap is free of debris (especially if it has a screen that could become blocked).

Check the vent sections for creosote accumulation (indicating a poorly burning heater). Accumulation greater than 1/4" must be removed.

On vertically vented systems, the dirtiest portion is often the point where the vent turns upwards (ex. the "Tee"). Remove the clean vent cover and inspect and clean if necessary.

40.13

8.4 IN THE EVENT OF A JAMMED AUGER

AWARNING

DISCONNECT THE POWER CORD PRIOR TO CONDUCTING SERVICE.

Occasionally damp fuel or foreign objects could get jammed in the auger screw. When this occurs it will be necessary to empty the hopper and/or remove the screw from the hopper assembly.

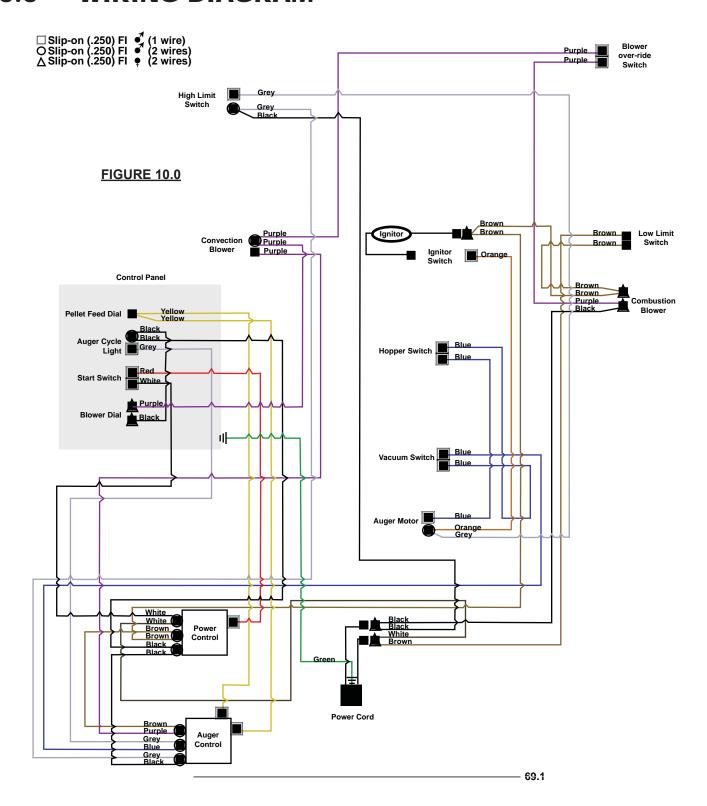
Start by emptying the pellets from the hopper. Sometimes the object causing the screw not to turn will be visible once the hopper has been emptied. If it is necessary to remove the screw start by removing both of the side panels and the rear panel. Locate the auger motor, remove the set screw that secures the motor to the auger screw. Remove the two hex bolts from the auger housing which will allow the auger screw to slide out. After you have removed the shaft, inspect it for bent flights, burrs, or broken welds. Remove any foreign material that might have caused the jam. Also, check the auger tube for signs of damage such as burrs, rough spots, or grooves cut into the metal that could have caused a jam.

40.14

9.0 NORMAL OPERATING SOUNDS

Convection Blower A low hum might be heard **Exhaust Blower** due to the high efficiency The flow of exhaust fan, especially on high. As gases may create a the fan dial is turned this FIGURE 9.0 low-pitched hum. As noise will change. the pellet feed rate is altered this sound will change. **Auger Motor** An irregular buzz of **Burn Pot** the motor running A light clicking sound might might be heard when be heard as the pellets are pellets are being fed. fed into the burn pot.

10.0 WIRING DIAGRAM



11.0 REPLACEMENTS

Contact your dealer or the factory for questions concerning prices and policies on replacement parts. Normally all parts can be ordered through your Authorized dealer / distributor.

FOR WARRANTY REPLACEMENT PARTS, A PHOTOCOPY OF THE ORIGINAL INVOICE WILL BE REQUIRED TO HONOUR THE CLAIM.

When ordering replacement parts always give the following information:

- Model & Serial Number of appliance
- · Installation date of appliance
- Part number
- · Description of part
- Finish

* IDENTIFIES ITEMS WHICH ARE NOT ILLUSTRATED. FOR FURTHER INFORMATION, CONTACT YOUR AUTHORIZED DEALER.

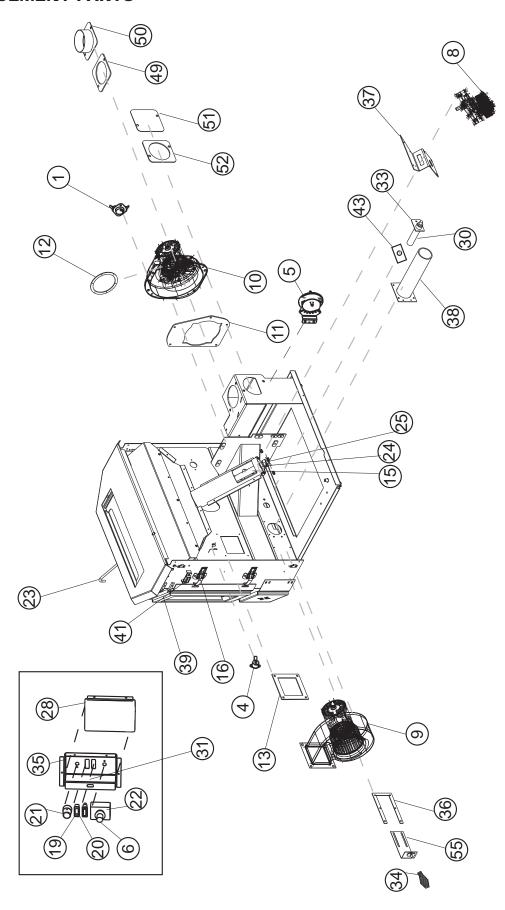
AWARNING

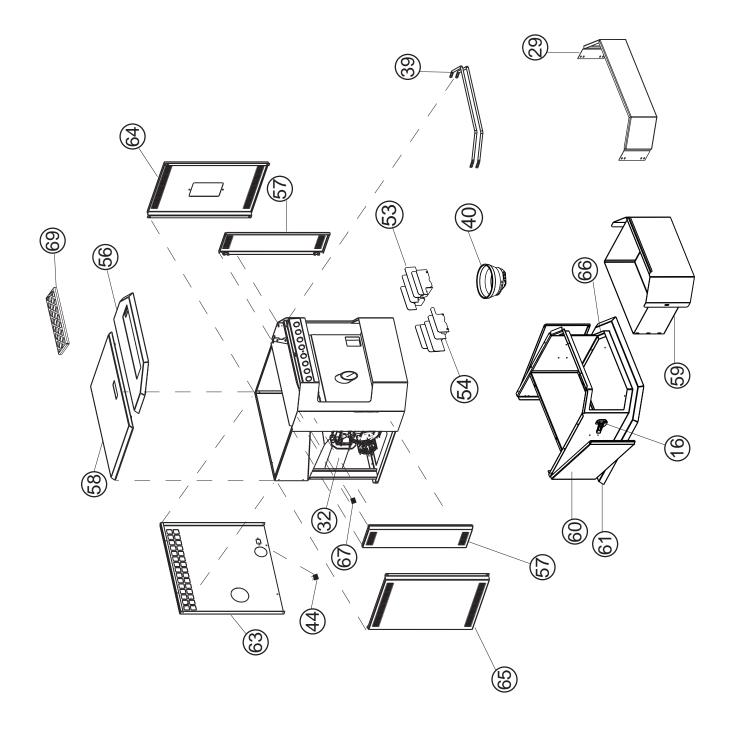
FAILURE TO POSITION THE PARTS IN ACCORDANCE WITH THIS MANUAL OR FAILURE TO USE ONLY PARTS SPECIFICALLY APPROVED WITH THIS APPLIANCE MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY.

		COMPONENTS
REF	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	W290-0120	COMBUSTION BLOWER MOTOR MOUNTING GASKET
13	W290-0113	CONVECTION BLOWER GASKET
14*	W255-0020	PRESSURE FITTING TAP
15	W570-0107	AUGER SCREW
16	W390-0002	DOOR LATCH
17	W190-0019	POWER CONTROL
18	W190-0020	AUGER CONTROL
19	W405-0001	AMBER LIGHT
20	W660-0058	POWER SWITCH
21	W660-0063	PELLET FEED SWITCH
22	W660-0062	VARIABLE SPEED W/O PAL NUT SWITCH
23	W555-0061	SCRAPER ROD
24	W105-0012	NYLON BUSHING
25	W570-0110	SCREW SET
26*	W750-0215	HARNESS WIRE
27*	W385-0430	CONTINENTAL® LOGO
28	W010-1528	CONTROL DOOR
29	W475-0647	BOTTOM PANEL
30	W720-0089	IGNITOR HOUSING
31	W390-0012	CONTROL PANEL LATCH
32	W010-1490	EXHAUST TUBE
33	W357-0004	IGNITOR
34*	W325-0042	SMALL BLACK WIRE HANDLE

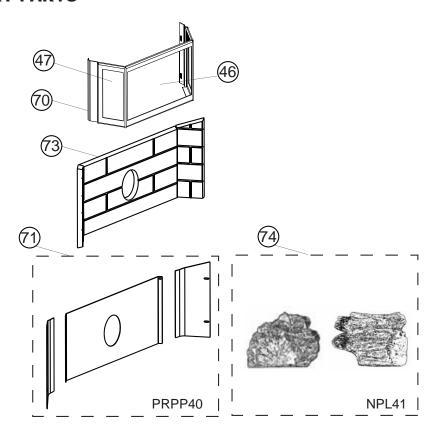
		COMPONENTS
REF	PART NO.	DESCRIPTION
35	W350-0361	CONTROL HOUSING
36	W615-0073	AIR CONTROL SPACER
37	W080-0932	MOTOR BRACKET
38	W010-1491	COMBUSTION AIR TUBE ASSEMBLY
39	W030-0022	ACCENT BAR (2)
40	W135-0320	CAST, BURN POT
41	W430-0002	MAGNETIC DOOR CATCH ASSEMBLY (2)
42*	W290-0120	MOTOR MOUNTING GASKET
43	W290-0119	IGNITION GASKET
44	W460-0004	RECEPTACLE
45*	W615-0078	SPACER, LATCH
46	W300-0038	GLASS, FRONT
47	W300-0037	GLASS, SIDE
48*	W562-0022	GLASS GASKET
49	W290-0122	EXHAUST GASKET
50	W010-1612	EXHAUST COLLAR
51	W010-0219	EXHAUST COVER
52	W290-0122	EXHAUST GASKET
53	W010-1673	RIGHT LOUVRE ASSEMBLY
54	W010-1685	LEFT LOUVRE ASSEMBLY
55	W010-1567	AIR CONTROL
56	W010-1508	WELDED TOP ASSEMBLY
57	W010-1527	SIDE DOOR ASSEMBLY
58	W010-1529	HOPPER DOOR ASSEMBLY
59	W010-1667	ASH PAN ASSEMBLY
60	W010-1668	PEDESTAL SIDE DOOR ASSEMBLY
61	W035-0191	PEDESTAL BASE
62*	W555-0059	AIR CONTROL ROD
63	W475-0482	OUTER REAR PANEL
64	W475-0484	OUTER PANEL, RIGHT
65	W475-0485	OUTER PANEL, LEFT
66	W652-0040	PEDESTAL GASKET
67	W660-0083	SWITCH, HOPPER
68	W750-0216	WIRE, JUMPER (TGGT)
69	W200-0302	TRIVET - BLACK
70	W225-0195	DOOR FRAME, BLACK
		ACCESSORIES
REF	PART NO.	DESCRIPTION
71	PRPP40	PORCELAIN REFLECTIVE RADIANT PANELS
72*	114KT	OUTSIDE AIR KIT - 5 FT (2" DIA.)
73	NP841KT	BRICK, REFRACTORY
74	NPL41	DECORATIVE LOG SET
75*	NPHE-40	HOPPER EXTENSION (INCREASES HOPPER CAPACITY FROM 55 LBS TO 100 LBS PELLETS)

11.1 REPLACEMENT PARTS





11.2 ACCESSORY PARTS



12.0 TROUBLESHOOTING

AWARNING

WHEN CHECKING CONNECTIONS, INSTALLING JUMPER WIRES (FOR TEST PURPOSES ONLY) OR REPLACING COMPONENTS, UNPLUG HEATER FROM THE RECEPTACLE TO PREVENT ELECTRICAL SHOCK OR DAMPAGE TO THE COMPONENT.

<u>NOTE:</u> Many of the following tests will require that the side panels are removed from the appliance or the insert be removed from its cavity to access the components. Before troubleshooting always confirm that all components are clean and free of ash build up.

The appliance will not start - Make certain there is power to the outlet and that the appliance is plugged in. - Hopper lid must be closed. - Push the "START" switch. If the appliance fails to start, unplug the appliance. - With the appliance unplugged, examine all connections. Make sure no exposed wires are touching the appliance (except the chassis ground wire) and that they are all firmly connected. - Check the manual reset hi limit switch. - Check the stability and placement of connections against the wiring diagrams in this manual. - Check that the burn pot is positioned properly. - 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. - Replace the power control if this fails. - The auger shaft may be jammed. For more information see "IN THE EVENT OF A JAMMED AUGER" section. - 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 300 to 500 (± 30). - Smoke in the room - Check all gasket seals. - Vent connections all sealed. - Appliance has failed to reach 140°F within 15 minutes and the blower has shut off. - Remove from cavity. - 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 harmess. - See "The appliance will not operate when hot" section - Contact your local dealer or a certified technician for service. - Poor quality or damp pellets take longer to light. - Push the burn pot back against the ignitor tube making sure the ignitor lines up to the hole in the burn pot. - 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 fa	SYMPTOM	TEST SOLUTION
The proper resistance through the ignitor should be 30Ω to 50Ω (± 3Ω). Smoke in the room Check all gasket seals. Vent connections all sealed. Appliance has failed to reach 140°F within 15 minutes and the blower has shut off. The exhaust blower is not operating Remove the left side access panel and check all connections against the wiring diagram. For the insert Pemove from cavity. 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 appliance 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 appliance in the appliance operates The proper resistance through the ignitor should be 30Ω to 50Ω (± 3Ω). Push te seals. Penove the left side access panel and check all connections against the wiring diagram. For the insert operate when hot's exhaust the motor does not run, replace the blower and if the motor does not run, replace the blower and if the motor does not run, replace the blower and if the motor does not run, replace the blower and if the motor does not run, replace the blower and if the motor does not run, replace the blower and if the motor does not run, replace the blower and if the motor does not run, replace the blower and if the motor does not run, replace the blower and if the motor does not run, replace the blower and if the motor does not run, replace the blower and if the wiring diagram. For the insert the wiring diagram. For the wiring diagram. Fo	The appliance will	 Make certain there is power to the outlet and that the appliance is plugged in. Hopper lid must be closed. Push the "START" switch. If the appliance fails to start, unplug the appliance. With the appliance unplugged, examine all connections. Make sure no exposed wires are touching the appliance (except the chassis ground wire) and that they are all firmly connected. Check the manual reset hi limit switch. Check the stability and placement of connections against the wiring diagrams in this manual. Check that the burn pot is positioned properly. 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. Replace the power control if this fails. The auger shaft may be jammed. For more information see "IN THE EVENT OF A JAMMED AUGER" section. CAUTION: Check the ignitor resistance before installing a new start-up timer as it
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42.9	not light the pellets however everything else in the appliance	 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.

SYMPTOM	TEST SOLUTION
The auger motor is not functioning normally	 Hopper lid must be closed. Make certain the exhaust blower is operating. Check the condition of the vacuum hose (located on the left side of the appliance). 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. Check that the auger set screw is tight and not slipping 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°) temperature sensor with a jumper wire. If auger works, replace the sensor. The auger shaft may be jammed. For more information see "IN THE EVENT OF A JAMMED AUGER" section. 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.
Feed rate dial has	- Secure all connections to the power control module.
no effect on the fire (timer control only)	 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 (± 10%). Potentiometer readings: Full counter-clockwise (switched off) = open circuit, overload or infinite resistance Low fire 900 KΩ to 1,050 KΩ High fire 56 KΩ to 62 KΩ
	- If the range is not close or does not vary then replace the potentiometer.
The appliance will not operate when hot.	 GENERAL 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. NOTE: The appliance may require a change to the vent system or installation of fresh air to correct air to fuel ratio problems. 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 appliance burning or operational. If the exhaust temperature sensor fails try bypassing the sensor located on the exhaust blower. If the appliance operates properly, the appliance may require cleaning or a new sensor. Contact your local deal for service. Unplug the appliance, open the left side panel and jump the two brown leads that are attached to the 140°F (60°C) temperature sensor. If the appliance operates replace the 140°F (60°C) sensor.

The 200°F (93°) high limit temperature sensor has fripped - Compare the valid not turn off - Disconnect one of the brown wires from the exhaust temperature sensor and if the appliance 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 exhaust temperature sensor and if the appliance 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 appliance should be shut down right away as long as the start button was not pressed within 15 minutes, test the switch. - The appliance must be cold to test the switch. Pull the plug, then plug the appliance back in. If the appliance fails to start, replace the switch. - Due to different installation set ups, length and size of venting and fuel quality, the wfeed 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 appliance goes out and leaves fresh unburned pellets or cigarette-like ashes in the burn pot, the fire is going out before the appliance 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 appliance 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 appliance goes out and there are no pellets in the burn pot, the auger may be slipping. - See "The auger motor will not function normally" and "The exhaust blower will not function normally" and surpliced and terminal are clear of obstructions.	SYMPTOM	TEST SOLUTION
the appliance 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 appliance should be shut down right away as long as the start button was not pressed within 15 minutes of this test. If the appliance shuts down within 15 minutes, replace the 140°F (60°C) sensor. If the appliance shuts down within 15 minutes, test the switch. The appliance must be cold to test the switch. Pull the plug, then plug the appliance back in. If the appliance fails to start, replace the switch. The appliance back in. If the appliance fails to start, replace the switch. The appliance back in. If the appliance fails to start, replace the switch. 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 appliance goes out and leaves fresh unburned pellets or cigarette-like ashes in the burn pot, the fire is going out before the appliance 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 appliance 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 appliance goes out and there are no pellets in the burn pot, the auger may be slipping. See "The auger motor will not function normally" and "The exhaust blower will not function normally". Excessive carbon build up in the fire appliance spees out and there are no pellets may also vary. Moisture content of pellets to on high, Pellets must be stored in a dry place. Areas such as a garage are too damp causing pellets to absorb moist	high limit temperature	temperature sensor failure. Bypass the 160°F (71°C) sensor. Does the convection blower
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 appliance goes out and leaves fresh unburned pellets or cigarette-like ashes in the burn pot, the fire is going out before the appliance 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 appliance 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 appliance goes out and there are no pellets in the burn pot, the auger may be slipping. See "The auger motor will not function normally" and "The exhaust blower will not function normally". Excessive carbon build up in the firebox, low heat out put a count put and lazy Appliance is burning dirty and lazy Appliance is burning dirty and lazy Pellets are dry. Check that all exhaust and intake pathways are clear of any obstructions. Exhaust blower is not convection blower is not functioning normally Check that all exhaust and intake pathways are clear of any obstructions. Exhaust blower is operation and is clean. Using the wiring diagram, compare all the connections between the controller, switch, and the convection 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 returns 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.		 the appliance 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 appliance should be shut down right away as long as the start button was not pressed within 15 minutes of this test. If the appliance shuts down within 15 minutes, replace the 140°F (60°C) sensor. If the appliance does not shut down in 15 minutes, test the switch. The appliance must be cold to test the switch. Pull the plug, then plug the
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burning dirty and lazy - Burn pot is clean. - Pellets are dry. - Venting and terminal are clear of obstructions. - Exhaust blower is operation and is clean. The convection blower is not functioning normally - 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.	build up in the firebox, low heat	quality since the materials they use to form pellets may also vary.Moisture content of pellets too high. Pellets must be stored in a dry place. Areas
blower is not functioning normally - 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.	burning dirty and	Burn pot is clean.Pellets are dry.Venting and terminal are clear of obstructions.
	blower is not functioning	 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.

13.0 SERVICE HISTORY

	Th	Appliance Solis heater must be serviced	Appliance Service History This heater must be serviced annually depending on usage.	
Date	Dealer Name	Service Technician Name	Service Performed	Special Concerns

14.0 NOTES
