

# PELLET STOVE INSTALLATION AND OPERATION MANUAL FOR STOVES WITH SERIAL NUMBERS 01086—01177



*Hearthland Itasca  
Pellet Stove*



*Hearthland Hiawatha  
Pellet Stove*



*Hearthland Nokomis  
Pellet Stove*



## SAFETY NOTICE

**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.**

**SAVE THESE INSTRUCTIONS.**

**CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.**

## WARNINGS

- **Hot! Do not touch!** The glass and surfaces of this appliance will be hot during operation and will retain heat for a while after shutting off the appliance. Severe burns may result!
- **Hearthland pellet burning appliances are designed for use as a supplemental heater. They are not intended for continuous use as a primary heat source.**



**CONGRATULATIONS** on the purchase of your **HEARTH LAND** stove! With the purchase of your new pellet stove, you have joined countless individuals whose answer to their heating needs reflects their concern for aesthetics, efficiency and our environment.

The following are key factors relating to the installation and operation of your stove and heating with wood pellet fuel.

1. A **quality installation which meets all safety and building code requirements is a must** for the safety of your family and for efficient, satisfactory operation of your stove.
2. **Use quality pellets with high BTU content and minimum “fines”, sawdust and loose materials.** Pellets vary greatly from company to company. Pellet quality contributes significantly to your stoves performance. **For peak performance it is recommended that you screen your pellets to prevent operational problems.** (See Section #5 “Wood Pellet Specifications”)
3. **Keep your stove’s burn grate clean.** A dirty burn grate restricts combustion air making it difficult to maintain proper combustion contributing to poor performance and increased fuel usage. (See Section #6 “Maintenance & Required Cleaning”)
4. **Keep your stove’s heat exchanger clean.** A dirty heat exchanger reduces heat transfer to convection air contributing to poor performance and increased fuel usage. (See Section #6 “Maintenance & Required Cleaning”)

In the majority of the cases, operational problems are the result of poor quality pellets, improper installation, and/or lack of cleaning. Daily care of your **HEARTH LAND** stove will provide clean, efficient, comfortable and environmentally friendly heating for many years. We extend our continued support to help you to achieve the maximum benefit and enjoyment from your new pellet stove. For additional information and operational tips go to:

**[www.Hearthlandproducts.com](http://www.Hearthlandproducts.com)**

Thank you for selecting Hearthland Products pellet stove as the solution to your zone heating needs.



### **COPYRIGHT NOTICE**

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# Important Safety Items



## IMPORTANT

- **Contact your local building official before** installation, to obtain the necessary permits and information on any installation restrictions or inspection requirements in your area.
- This unit must be properly installed to prevent the possibility of a house fire. The instructions and local building codes requirements must be strictly adhered to.
- Read, save and follow the instructions in this manual. It contains important safety, operating and maintenance instructions you will need.
- For your protection and well being, Hearthland Products recommends installing a smoke detector as well as a Carbon Monoxide detector in the room.
- When installed in a mobile home, the Hearthland must be bolted to the floor and supplied with outside air. **Under no circumstances should it be installed in a bedroom** (Per H.U.D. requirements).
- **NEVER** try to repair or replace any part of the stove unless instructed to do so by the Hearthland Customer Service Department. We recommend you use a trained technician for all repairs.
- **Stoves are dangerously hot.** Young children should be supervised when they are in the same room as the stove.
- The Hearthland is designed and approved for **pelletized wood fuel** only. Any other type of fuel burned in this stove will void the warranty and safety listing. Keep foreign objects out of the hopper.
- **NEVER** use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or 'freshen up' a fire in this heater. Keep all such liquids well away from the heater while it is in use.
- The Hearthland is designed to use a standard 115 Volt 3-prong grounded electrical outlet. **A grounded surge protector is strongly recommended to prevent damage to your stove in the event of lightning or other power surge instances.**

**Never** use an adapter plug or sever the grounding prong on the electrical plug.

**Never** route the electrical cord underneath, in front of, over the stove or over the exhaust piping.

**If** you suspect a malfunction push the "OFF" Touch Pad and inspect the stove.

Note: The Hearthland Stove will not operate during a power outage unless attached to a correctly sized generator or battery backup. If a power outage occurs, open a window to vent any smoke from room. If the malfunction persists unplug the unit and call your authorized dealer.

**Never** operate the stove if you smell smoke coming from anywhere on the stove. If this occurs turn your stove off and call your authorized dealer.

- **CAUTION:** Fuel is fed to the firebox by a screw auger driven by a high torque motor. This auger can start and stop without warning while stove is in operation. **NEVER** put fingers in or near pellet feed auger, as serious injury could occur. Note; **your Hearthland stove is equipped with a hopper mounted cut off switch** which prevents the auger from running when hopper lid is open. Do not tamper with this switch.



# IMPORTANT

- **Shut stove off** if the firepot overfills with pellets or the flame becomes dark and sooty. This indicates poor fuel combustion and the cause should be investigated and remedied. (See Trouble Shooting tips for possible causes)
- It's critical for proper operation that you **maintain unobstructed airflow through the intake vents** of the stove. The viewing door and ash pan must be closed and latched during operation. Never abuse the door by slamming it shut.
- The pellet appliance exhaust system works with **negative** combustion chamber pressure and **positive** chimney pressure. The exhaust system must be completely airtight and properly installed. All exhaust vent joints must be tightly sealed with gasket and or HI-TEMP (550°F) RTV silicone sealant, and at least 3 sheet metal screws per joint.
- For required periodic maintenance and cleaning refer to Section #6 "Maintenance & Required Cleaning" of this manual. Failure to maintain your stove may lead to poor operation and exhaust fume leakage into your home. **Only use replacement components that are authorized by Hearthland Products, LLC.**
- **Always disconnect** power from your stove before performing any maintenance. Power Cord must be unplugged. Pushing "OFF" Touch Pad does not disconnect all power to the stove.
- **To avoid accidental fire, DO NOT** place any flammable item on or near the stove.
- To prevent burns, **maintenance or cleaning, should only be performed on a cool stove.**
- **Hearthland Products grants no warranty, implied or stated, for the maintenance or installation of your stove, and assumes no responsibility whatsoever of any consequential damage to stove or its surroundings.**

## SAFETY LISTING:

In accordance with the procedures and specifications listed in ASTM E1509-04, ULC/ORD-C1482-M1990, and ULC S627-00 for solid fuel room stove, Hearthland Products, pellet stoves have been independently listed by Omni Test Laboratories, Inc. Portland, Oregon (an accredited testing laboratory). It is tested and listed for residential installation according to current national and local building codes as:

- FREESTANDING ROOM HEATER
- ROOM HEATER, PELLET FUEL-BURNING TYPE, ALSO FOR USE IN MOBILE HOMES

The Safety Listing Label is located on the rear panel. Read the label carefully. It contains information about the installation and operation of your stove. The stove's serial number is located on the safety label. Your serial number is preceded by a "OMNI-" (example OMNI-00000). (see diagram).

Listed by **ULC** Underwriters Laboratories Inc.  
Report No. R159099-04 4 428-6-41-4

**DO NOT REMOVE OR COVER THIS LABEL**

LISTED PELLET BURNING SPACE HEATER  
 ROOM HEATER, PELLET FUEL-BURNING TYPE, ALSO FOR USE IN MOBILE HOMES

MODELS / MODÈLES:  TASCQ  NOKOMS  VIVACELLION

**OMNI-**

**MADE IN USA**

TESTED PER ASTM E1509-04, ULC/ORD-C1482-M1990, ULC/ORD-C1482-M1990, ULC/ORD-C1482-M1990  
 THIS PELLET BURNING APPLIANCE HAS BEEN TESTED AND LISTED FOR USE IN MANUFACTURED HOMES IN ACCORDANCE WITH OREGON ADMINISTRATIVE RULES 81A-25-800 THROUGH 81A-25-809.

INSTALL AND USE ONLY IN ACCORDANCE WITH HEARTHLAND'S INSTALLATION AND OPERATING INSTRUCTIONS.  
 CONTACT LOCAL BUILDING OFFICIALS FOR ANY RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

FOR USE WITH ONLY 1/4" (6mm) DIA. (10mm) DIAMETER x 1 1/2" LENGTH MAXIMUM PELLETED WOOD FUEL.  
 USE OF OTHER FUELS MAY CAUSE A FIRE HAZARD OR INJURY.  
 MAX. INPUT RATING APPROXIMATELY 8.5 LBS. PER HOUR USING 400-470 BTU/LB OF PELLETED FUEL.  
 MAX. INPUT RATING APPROXIMATELY 9,300 BTU/HR FOR WOOD.

INSTALL ON A NON-COMBUSTIBLE FLOOR PROTECTOR EXTENDING UNDER THE APPLIANCE AND BEYOND THE FRONT  
 EXTENDING BEHIND AND TO THE FRONT OF THE UNIT PER DIAGRAM ABOVE.

**DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE**

VENTING SYSTEM: TYPE PL VENTING SYSTEM MUST BE USED. CLEARANCES FROM THE PL VENT ARE AS PER THE VENT  
 SYSTEM MANUFACTURER'S INSTRUCTIONS. SEE LOCAL BUILDING CODES AND APPLIANCE AND VENT MANUFACTURER'S  
 INSTRUCTIONS FOR PRECAUTIONS TO BE FOLLOWED IN PASSING A VENTING SYSTEM THROUGH A COMBUSTIBLE  
 WALL OR CEILING.

UNDER CERTAIN CONDITIONS OF USE, CREOSOTE BUILDUP MAY OCCUR RAPIDLY. INSPECT AND CLEAN VENTING  
 SYSTEM FREQUENTLY.

OPERATE UNIT ONLY WITH DOOR FULLY CLOSED AND ASH PAN SECURELY IN PLACE. REPLACE GLASS WITH CERAMIC  
 GLASS ONLY.

RATING: 120 VOLTS, 5.6 AMPS, 60 HZ. ROUTE POWER SUPPLY CORD AWAY FROM UNIT.

**LIGHTING/SHUTDOWN INSTRUCTIONS:**  
 TO TURN ON: PRESS START BUTTON.  
 DO NOT HOLD, AND DO NOT OPERATE AS DESIRED.  
 TO TURN OFF: PRESS "OFF".  
 REFER TO OPERATOR'S MANUAL FOR ADDITIONAL DETAILS.

**CAUTION: MOVING PARTS MAY CAUSE INJURY; DO NOT OPERATE WITH SIDE OR REAR ACCESS PANELS REMOVED!**  
 DANGEROUS RISK OF ELECTRIC SHOCK! DISCONNECT POWER BEFORE SERVICING UNIT!  
 WARNING: HOT PARTS DO NOT OPERATE WITH SIDE OR REAR ACCESS PANELS REMOVED!

MANUFACTURED BY HEARTHLAND PRODUCTS, LLC  
 FABRIQUÉ PAR: HEARTHLAND PRODUCTS, LLC  
 8711 GRAND AVE. SOUTH  
 GLOVERINGTON, WV 25420 USA  
 www.hearthlandproducts.com

DATE OF FABRICATION / DATE DE FABRICATION  
 2009  2010  2011  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC

POUR ÊTRE HOMOLOGUÉ AUTONOME/RECONNU PAR LES COMBUSTIBLES SOLIDES CONVIENT  
 ÉQUIPEMENT POUR INSTALLATION DANS LES MAISONS MOBILES.  
 TESTÉ PAR ASTM E1509-04, ULC/ORD-C1482-M1990, ULC/ORD-C1482-M1990  
 POUR L'UTILISATION DANS LES MAISONS MANUFACTURÉES SELON LES RÈGLES  
 ADMINISTRATIVES DE L'ÉTAT D'OREGON 81A-25-800 À 81A-25-809.

MINIMUM CLEARANCES TO COMBUSTIBLES / MINIMUM DE DÉGAGEMENTS À LA COMBUSTIBLE  
 2. INPO (25mm) - BACK WALL TO APPLIANCE  
 3. 6 INPO (152mm) USA, 18 INPO (457mm) CANADA - SIDE WALL TO APPLIANCE  
 4. 2 INPO (51mm) - WALL TO APPLIANCE CORNER  
 5. 18 INPO (457mm) - OVERHANG TO APPLIANCE  
 6. 6 INPO (152mm) USA, 18 INPO (457mm) CANADA - COMBUSTIBLES TO APPLIANCE FRONT

INSTALLER SELON ET UTILISER SELON L'INSTALLATION ET MANUFACTURIERS ET LES CONSIGNES D'UTILISATION.  
 LES FONCTIONNAIRES LOCAUX ENTRE EN CONTACT AVEC VOTRE BÂTIMENT OU PÉRI AU BUILET DES RESTRICTIONS ET  
 INSPECTION D'INSTALLATION DANS VOTRE ZONE.

AVERTIR INSTALLER PAS À CAPPARE, DANS UNE SALLE DE BAIN. POUR L'USAGE ONLY AVEC 1/4" (6mm) DIA.  
 (10mm) DIAMÈTRE EN BOIS PELLETÉ. L'UTILISATION DE L'AUTRE CARBURANT PEUT ENDOMMAGER L'UNITÉ ET  
 CAUSER UN ÉTAT DANGEREUX.  
 ENTRÉE ÉVALUANT 8500-8770 BTU/LB DE CARBURANT DE GRANULE.

INSTALLER SUR UN NON-COMBUSTIBLES DE SOL EN VERTU DE LA EXTENSION DE PROTECTION DE L'APPAREIL ET AU-  
 DELÀ DE LA UNITÉ. CONTACTER LES OFFICIELS BÂTIMENT LOCAUX POUR LES RESTRICTIONS ET L'INSTALLATION INSPECTION  
 COMBUSTIBLES DE PROTECTION DE L'EXTENSION SOUS SOL ET DE L'UNITÉ DE MANUFACTURE PAS-DESSUS.

NE RELIEZ PAS CETTE UNITÉ À UNE CHIMÈNEE SERVANT UN AUTRE APPAREIL  
 DANGEROUS RISK OF ELECTRIC SHOCK! DISCONNECT POWER BEFORE SERVICING UNIT.  
 DANGERS RISK OF ELECTRIC SHOCK! DISCONNECT POWER BEFORE SERVICING UNIT.  
 DÉGAGEMENTS AVEC L'ÉLEVÉ DE PL. SONT SELON LES INSTRUCTIONS DU CIRCUIT DE MISE À L'AIR LIBRE  
 MANUFACTURIERS. VOIR LE FAITURE LOCAL CODES ET LES INSTRUCTIONS D'APPAREIL ET D'ÉLEVÉ  
 MANUFACTURIERS POUR LES PRÉCAUTIONS À SUIVRE POUR PASSER LE CIRCUIT À L'AIR LIBRE PAR UN MUR  
 OU UN PLAFOND COMBUSTIBLE.

DANS CERTAINES CONDITIONS D'UTILISATION, LE CHARBON DE CRÉOSOTE PEUT SE PRODUIRE RAPIDEMENT.  
 EXAMINEZ ET NETTOYEZ LE CIRCUIT DE MISE À L'AIR LIBRE FRÉQUENTEMENT.

ACTIVER L'UNITÉ SEULEMENT AVEC DES PORTES ENTièrement FERMÉES REPLAÇANT LE VERRRE EN  
 POSITION. NE PAS TENIR LE DÉPART DE L'UNITÉ. NE PAS TOUCHER LE DÉPART DE L'UNITÉ.  
 ESTIMATION: 120 VOLTS 5,6 AMPÈRES 60 HERTZ. CORDE D'ALIMENTATION À DÉBRANCHER L'UNITÉ LORS  
 D'ENTRETIEN.

**ECLAIRAGE D'ARRÊT LES INSTRUCTIONS:**  
 AU TOUJOURS APPUYEZ SUR LE BOUTON "START".  
 NE PAS TOUCHER LE DÉPART DE L'UNITÉ.  
 POUR ÉTEINDRE, APPUYEZ "OFF".  
 CONSULTER LE MANUEL DE L'OPÉRATEUR POUR PLUS DE DÉTAILS.

AVERTISSEMENT: LES PIÈCES MOBILES PEUVENT CAUSER DES DOMMAGES. NE FONCTIONNEZ  
 PAS AVEC LE PAINNEAU OUVERT!  
 DANGERS RISK OF ELECTRIC SHOCK! DÉBRANCHER LA PUISSANCE AVANT UNITÉ  
 D'ENTRETIEN!  
 AVERTISSEMENT: LES PIÈCES MOBILES NE FONCTIONNENT PAS AVEC LE PAINNEAU OUVERT!

**CAUTION**

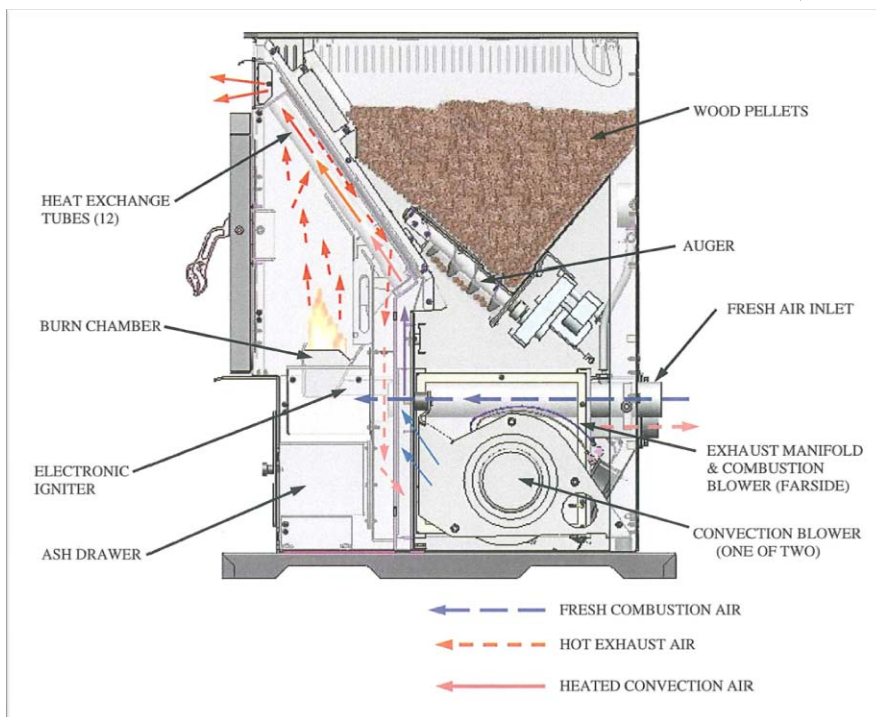
**HOT WHILE IN OPERATION.**  
**DO NOT TOUCH. KEEP CHILDREN, CLOTHING,  
 AND FURNITURE AWAY.**  
**CONTACT MAY CAUSE SKIN BURNS.**  
**SEE NAMEPLATE AND INSTRUCTIONS.**

VS0919\_E

# HOW YOUR HEARTHLAND STOVE WORKS

The operations and maintenance of your **Hearthland Series of pellet fuel appliances** are **unique** and should not be considered to be like a wood, coal, gas, electric, propane or oil burning stove appliance.

Wood pellet fuel is stored in the hopper. An auger delivers the fuel to the burn grate. The fuel rate, or heat output, is set by adjusting the **Heat Level** touch pad, (settings 1 to 4). A fan provides combustion air to the burn grate. The proper amount of combustion air is supplied to the burn grate automatically and changes as the Heat Level changes. The higher the **Heat Level**, the larger the amount of combustion air. The fuel burns in the burn grate, producing heat. Most of heat passes around the heat exchange tubes and is blown into the room by the convection fan. Exhaust gases exit through the stove's exhaust vent.

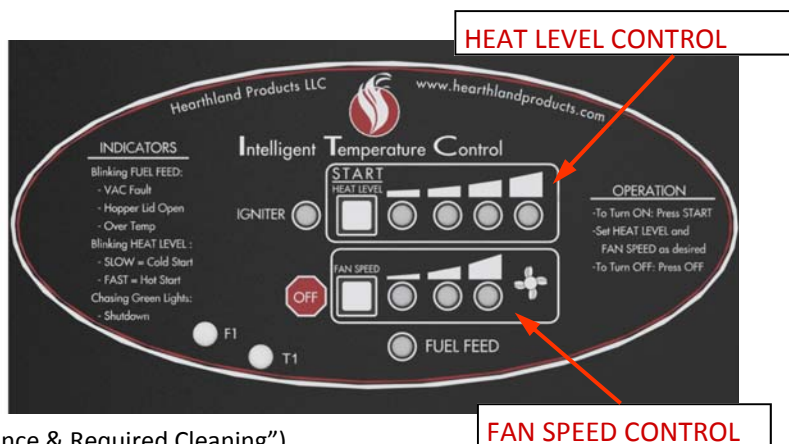


The Hearthland's heat output can be adjusted from **Heat Level** setting 1-4, by pressing on the Heat Level touch pad.

The convection fan can be adjusted using the **Fan Speed** touch pad to run faster or slower to correspond to the amount of heat being produced.

To turn off the stove, simply pressing "OFF" on the touchpad, and the unit will enter shutdown mode until the it has sufficiently cooled.

With uninterrupted fuel supply and proper performance of **cleaning**, your stove will run efficiently over extended periods of time. (See Section #6 "Maintenance & Required Cleaning")



## IMPORTANT

- Your **Hearthland stove** is designed to burn only wood pellets that comply to Association of Pellet Fuel Industries standards. (See Section #5 "Wood Pellet Specifications")
- Do not try to operate your stove with viewing door open. Pellets will not feed under these circumstances and a safety concern may arise from sparks or fumes entering room.
- If you are not drawing combustion air from outside, care must be taken to allow for adequate air make up, to avoid possible room air starvation when stove or other exhaust fans are in operation.
- It is highly recommended that you install a high quality **smoke detector** and **carbon monoxide** detector in the room where stove is installed. Care should be taken to make sure detectors are in working order at all times.

# AUTOMATIC SAFETY FEATURES

## **Shutdown Mode**

This mode stops the auger fuel feed system and runs the combustion & convection blowers for 10 minutes or until the stove exhaust cools below 120° F, at which point all electrical components will be off. Shutdown mode occurs when "OFF" is pressed on the touchpad or from other causes. If this happens unintentionally, find and correct the cause and press start on the touchpad. (See Section #9 "Troubleshooting")

## **Hopper Lid Switch**

This device is mounted on the right side of the hopper opening. When the hopper door is open, the switch stops the auger feed system. If the hopper door is left open for more than one minute, the unit will enter shut-down mode. If this happens unintentionally, simply close the door and press start on the touchpad.

## **Vacuum Switch**

The vacuum switch ensures that the vacuum of the entire combustion system is maintained. The switch is located on the inner rear wall of the unit and takes measurement from the fresh air intake tube. If the vacuum switch fails to read adequate negative pressure for more than one minute, the unit will enter shut down mode. This feature ensures that the stove will not operate with the door ajar or the ash pan tightened incompletely. If this happens, find and correct the cause and press start on the touchpad. (See Section #9 "Troubleshooting")

## **Intelligent Temperature Controller (ITC)**

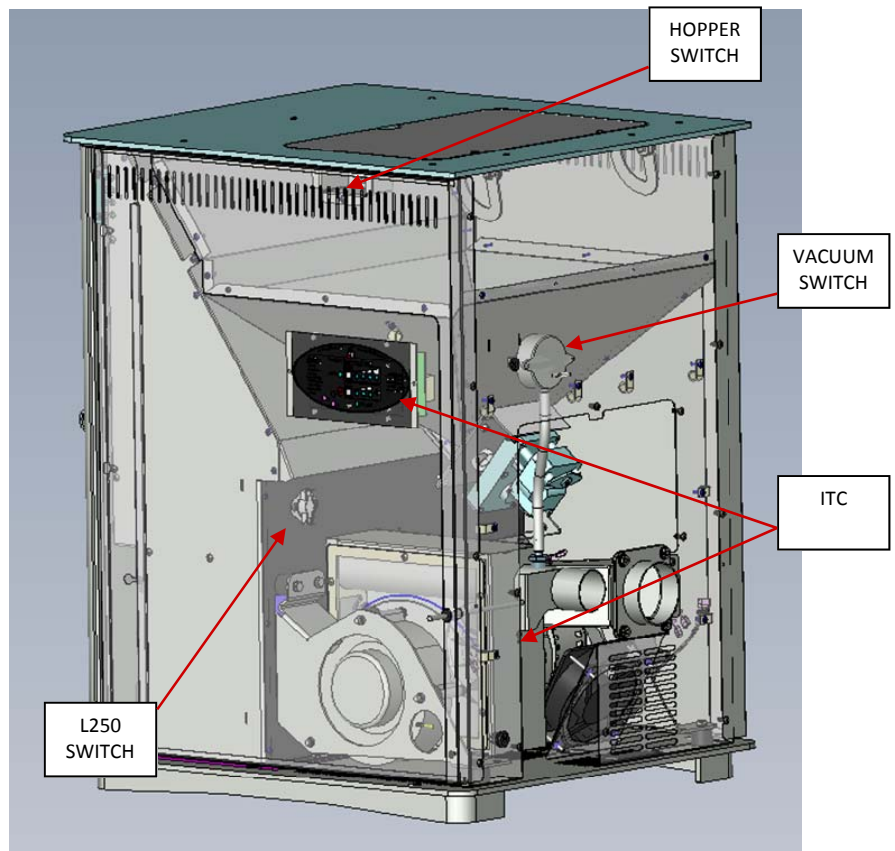
The ITC feature of your stove monitors the exhaust temperature and adjusts fuel feed accordingly to maintain consistent heat output temperatures. In this manner, the ITC is able to regulate stove heat settings with great accuracy, compensating for variations in fuel such as size and BTU content as well as optimizing fuel efficiency and preventing over-firing.

## **L250 High Limit Switch**

Your pellet appliance has a high temperature limit switch as an added safety measure if the ITC were to fail. If the temperature at this location exceeds 250° F, the unit will enter shut down mode. If this occurs, find and correct the cause and press start on the touchpad. (See Section #9 "Troubleshooting")

## **Power Loss Memory**

If the power is lost during operation, the stove will stop running and the fire will extinguish. When the power is restored, the stove will restart and return to the heat and fan setting it was operating at before power was lost.

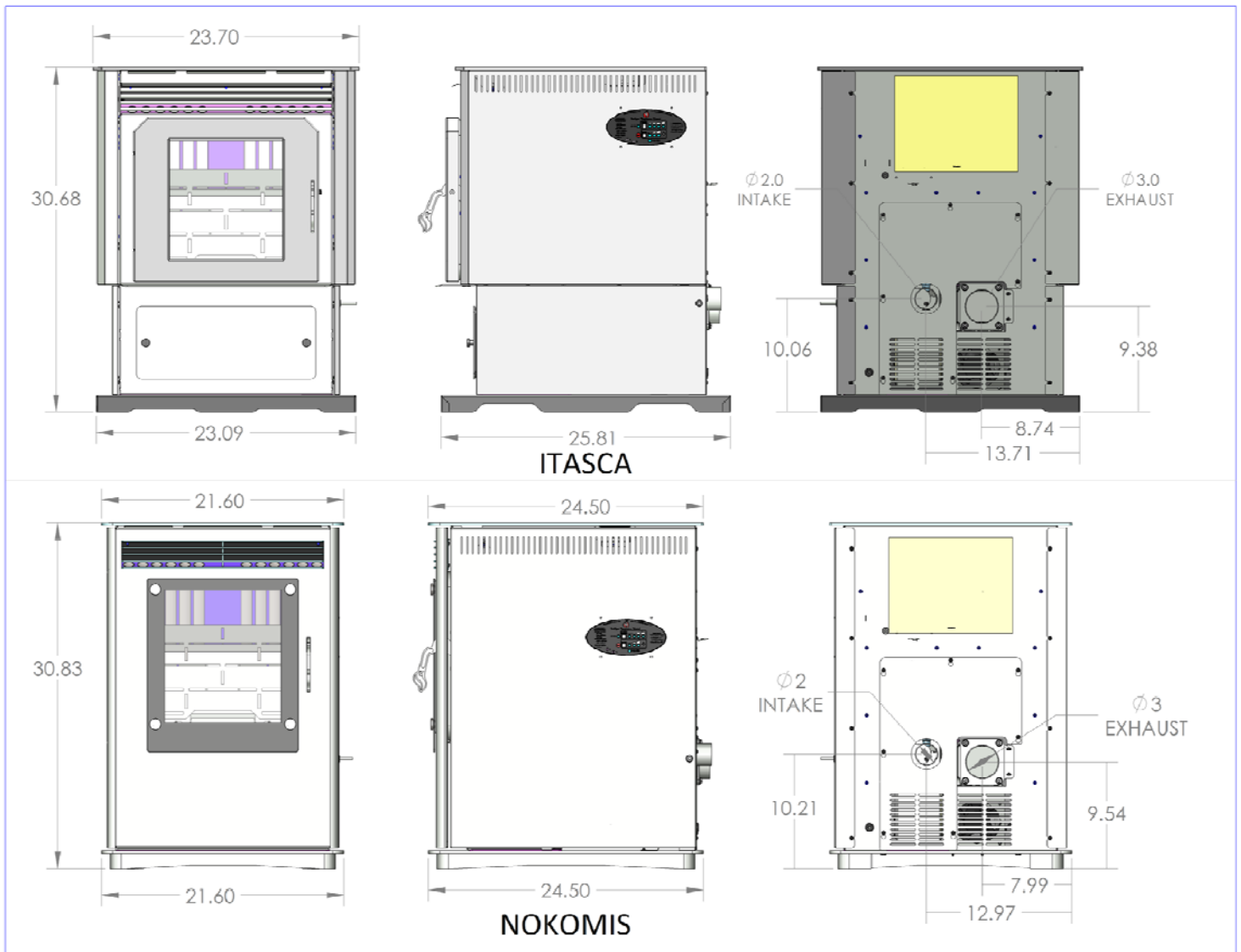


# SPECIFICATIONS

Heating capacity (sq. feet) *	Up To 2,500	Weight Itasca (lbs)	218
Fuel burn rate per hour **	1.25—5.9 lbs	Weight Nokomis (lbs)	254
BTU Input	10,875 - 51,300	Air Intake Diameter	2"
Hopper Capacity	70 lbs	Exhaust Diameter	3"
Hopper burn time at lowest setting	56 hrs	Efficiency	78%

\*Heating capacity will vary depending on such factors as the layout of your home, air circulation, degree of insulation, and the outside temperature.

\*\*Pellet BTU content will affect the actual rate of fuel feed and burn times. .



## Electrical Information

Your stove is wired at the factory for 120 V, 60 Hz operation, 5.5 amps at startup . Connect to a 120 V, 15 A circuit and use a 15 A time delay fuse or circuit breaker. It is recommended to use a ground fault outlet (GFCI) and a surge protector.



# PRE-INSTALLATION CHECK LIST

Unless you are experienced in stove installation, we recommend your Hearthland *Appliance* receive a Pre-delivery Check and be installed by your local Specialty Retailer, NFI (National Fireplace Institute) Pellet Specialist (USA) or WETT Certified Installer (CAN) . Hearthland Products neither grants or implies any warranty or responsibility for faulty installations!

## COMPLETE THIS CHECK LIST PRIOR TO INSTALLING YOUR HEARTHLAND STOVE:

- \_\_\_\_\_ Carefully read and save this "Owners Manual".
- \_\_\_\_\_ Have your local Dealer **demonstrate your Hearthland's operation, cleaning and maintenance steps.**
- \_\_\_\_\_ **Select a location.** The design of your home and the stove placement will determine its effectiveness as a source of heat. A pellet appliance depends on air circulation to circulate heat. Other practical considerations, to be considered before a final placement is decided on may include:  
**Existing Chimneys, Fuel Storage, Aesthetics , Roof Design (rafter locations & roof pitch), Room Traffic, Clearances to Combustibles, and Existing Wiring.**
- \_\_\_\_\_ The installation of this appliance **must conform to local codes and applicable state and federal requirements.** Becoming familiar with these requirements **before** installation is essential.
- \_\_\_\_\_ Select a location for the stove that adheres to required safety clearances.
- \_\_\_\_\_ Ensure the stove must be mounted on a hearth pad or equivalent.
- \_\_\_\_\_ **Attach proof of purchase to this manual and save for warranty questions.**

\*\*\*\*\*

## COMPLETE THIS CHECK LIST WHILE INSTALLING YOUR HEARTHLAND STOVE:

- \_\_\_\_\_ Read the Installation sections of this manual.
- \_\_\_\_\_ **Determine** the location and measurements needed to install the stove in your chosen location.
- \_\_\_\_\_ **Pre-fit** all items before you install, fasten or install the stove permanently.
- \_\_\_\_\_ **Make sure ALL** joints of "PL" vent and single wall stainless steel liner are tightly connected, **sealed with High Temp (550°F) RTV Silicone or Hi-Temp foil tape, including to the exhaust connector,** and are correctly installed. (Follow vent manufacturer's instructions.)

\*\*\*\*\*

## COMPLETE THIS CHECK LIST, BEFORE LIGHTING YOUR FIRST FIRE:

- \_\_\_\_\_ **Obtain final inspection** and approval by local building officials.
- \_\_\_\_\_ Carefully **clean all marks off the painted and polished metal parts** before the first firing. Use a soft cloth and a mild cleaner. Failure to do so may result in marks or finger prints being permanently visible on the surface.  
**Caution:** Never use an abrasive cleaner on any part of your stove.
- \_\_\_\_\_ **Clean and wipe the hopper** to remove any debris or residual oil from the manufacturing process.
- \_\_\_\_\_ **Your stove has been painted using** Stove Bright high temperature stove paint. This paint is not fully cured until the stove is fired (3) times. The initial (2) stove burns should be at heat setting 2 for 30 minutes. Between burns turn off the stove and allow painted surfaces to cool to room temperature. The third burn should be at heat setting 3 for 60 minutes. During this curing process fumes will be given off. Open windows and doors and use fans to provide fresh air while curing. Fumes will not be present after paint fully cures.
- \_\_\_\_\_ **Make sure that stove is connected to a surge protection unit.**
- \_\_\_\_\_ **Remove packaging materials from the burn area.**
- \_\_\_\_\_ **Fill the hopper with quality pellets. (See section #4.4 " Filling Hopper With Fuel")** Close hopper access door.
- \_\_\_\_\_ Follow the **Hearthland's Lighting and Intelligent Temperature Control Instructions. (See section #4.6 "Starting Stove")**

# EXHAUST SYSTEM



## IMPORTANT

- **THE PELLET VENT MUST MAINTAIN A MINIMUM 3" CLEARANCE TO ANY COMBUSTIBLE.**
- **(INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENT MANUFACTURER).**
- **DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.**
- **DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.**

### PELLET VENT TYPE:

- ⇒ Must be an approved 3" or 4" Diameter Type "PL" vent, vented to the outside or connect the vent to a factory built type "A" chimney using an adaptor.
- ⇒ Exception: A single wall "All Fuel" Stainless Steel chimney liner may be used inside a fireplace or fireplace installations.
- ⇒ Some venting manufactures do make "PL" vent for use with wood pellet fuel only and another type of "PL" vent for corn or bio mass fuels. If in doubt, plan for the future and use the corn or multi-fuel.
- ⇒ Use 4" diameter vent if vent or liner height is over 15' or if installation is over 3.000' above sea level.  
NOTE: 4" diameter vent may be used in all installations. If in doubt, use 4" diameter vent. (See diagram on Page 11. )

### VENT SAFETY PRECAUTIONS:

A "Clean Out Tee" (A) must be installed at the bottom of all vertical runs. These "Tee's" are to assist in periodically cleaning the vent. Single or Double clean out tees may be used. The exhaust system must be installed so the entire system can be cleaned without disassembly.

Termination must exhaust above the fresh air inlet elevation, and parallel or above the exhaust output of the pellet fuel appliance.

It is highly recommended that at least 3 feet of vertical pipe (B) be installed to create some natural draft. This is to help prevent the possibility of smoke or odor during the appliance shut down.

Horizontal sections must have a 1/4" rise every 12" of travel after 3' long.

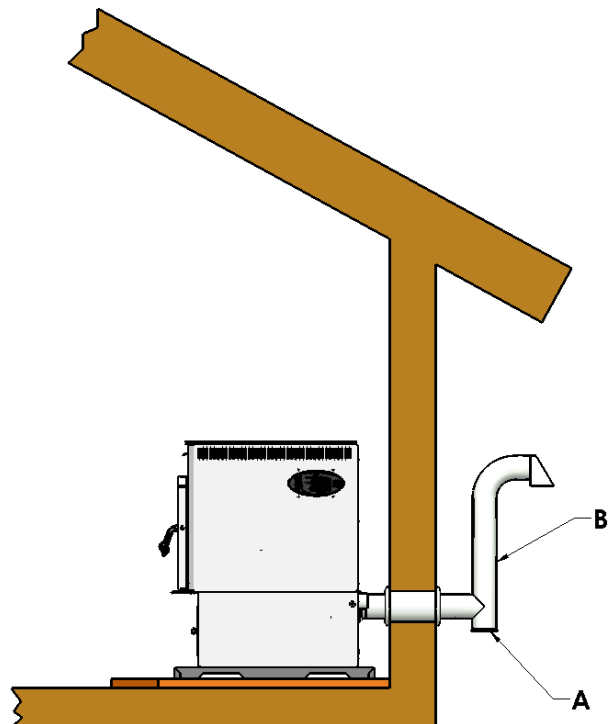
Use (3) fastening screws per joint.

Pellet vent connections must be sealed gas tight. Use High Temp (550°F) RTV Silicone or Hi-temp Aluminum foil tape.

Seal each vent section by injecting a liberal amount of sealant into the gap or wrap with foil tape.

It is strongly recommended that the exhaust system be terminated on the prevailing wind side of the home.

Appliance may not be placed in, or vented through



# EXHAUST SYSTEM (CONTINUED)

## DETERMINE VENTING SIZE AND DISTANCE:

It is recommended that the vent system be installed with a minimum of three feet (3') of vertical rise above the appliance exhaust port.

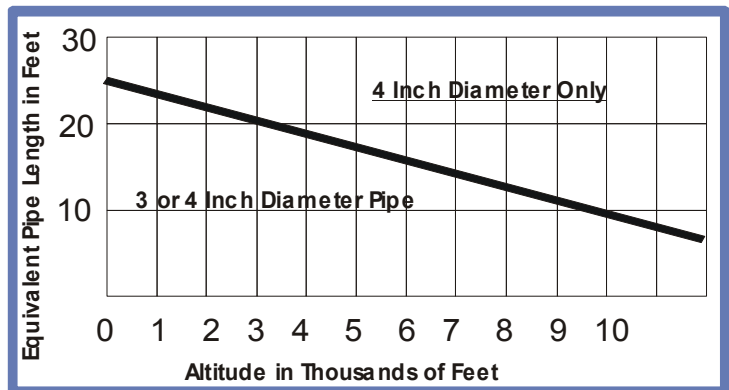
Equivalent Vent Length (EVL) is the method of determining vent sizes and lengths, that takes into account the effect of different component parts on air flow.

Pellet Venting Component	# of Elbows OR feet of Pipe	Multiply by	Equivalent Feet	Component Equivalent
90 Degree or Tee		X	5	
45 Degree		X	3	
Horizontal Pipe		X	1	
Vertical Pipe		X	.5	
			<b>Total Equivalent</b>	

**Step 1** Complete table above.

**Step 2** Ensure the Total Equivalent is or is less than 30.

**Step 3** Use the Sizing Chart to determine the proper venting size according to the Total Equivalent and the Altitude above sea level.



**NOTE:** In some cases it may be necessary to contact Hearthland Customer Service personnel to determine acceptable venting configurations and altitude adjustments.

Call: **1-888-883-2260.**

MAXIMUM VENT HEIGHT IS 33'.

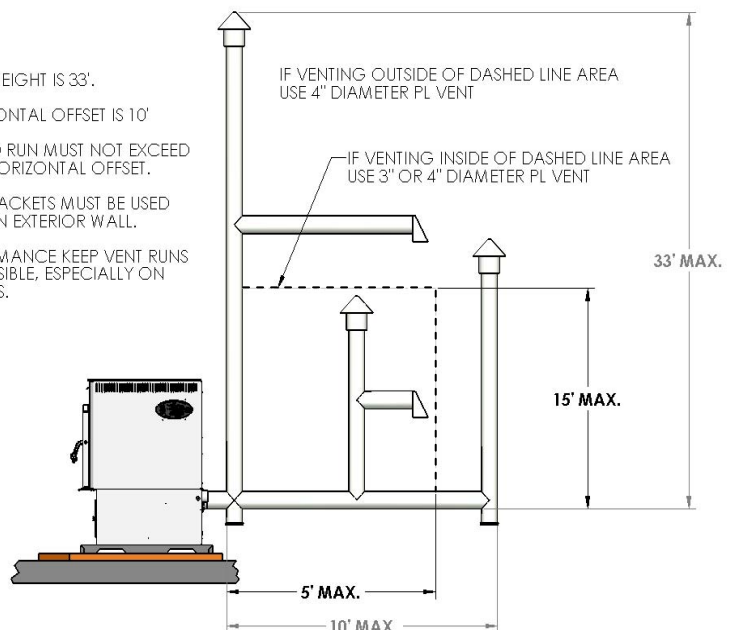
MAXIMUM HORIZONTAL OFFSET IS 10'

VENT HEIGHT AND RUN MUST NOT EXCEED 33' HIGH OR 10' HORIZONTAL OFFSET.

VENT SUPPORT BRACKETS MUST BE USED EVERY 5' WHEN ON EXTERIOR WALL.

FOR BEST PERFORMANCE KEEP VENT RUNS AS SHORT AS POSSIBLE, ESPECIALLY ON HORIZONTAL RUNS.

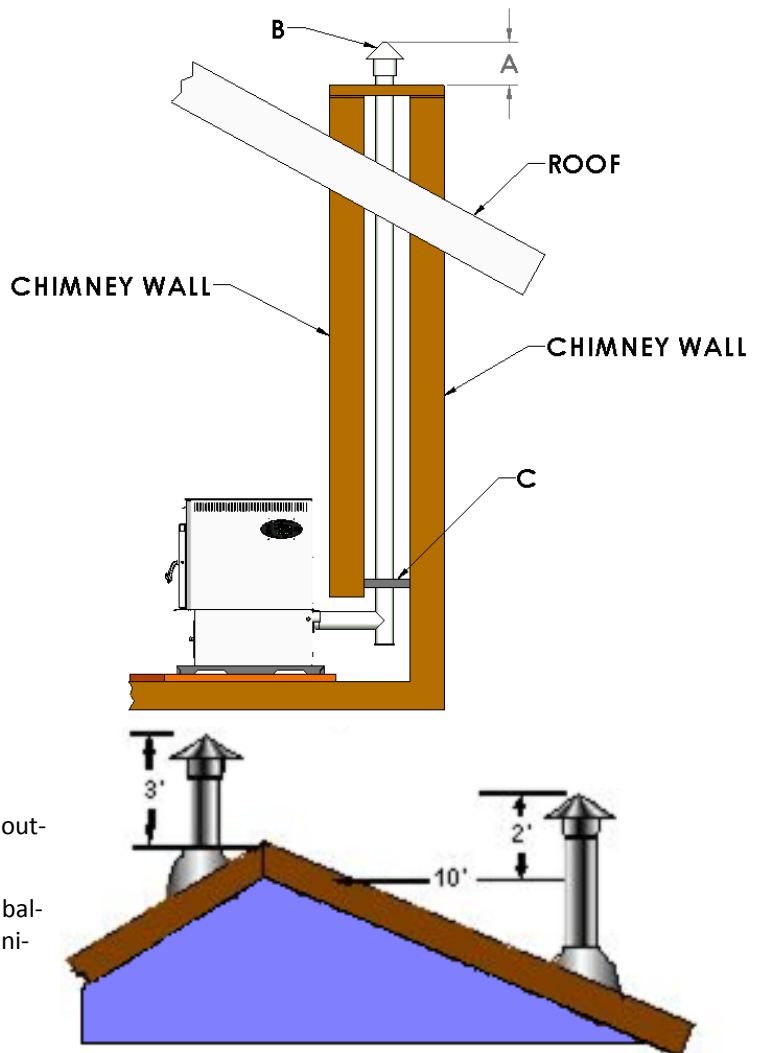
**Diagram for visual reference.**



## EXHAUST SYSTEM (CONTINUED)

### PELLET VENT TERMINATION:

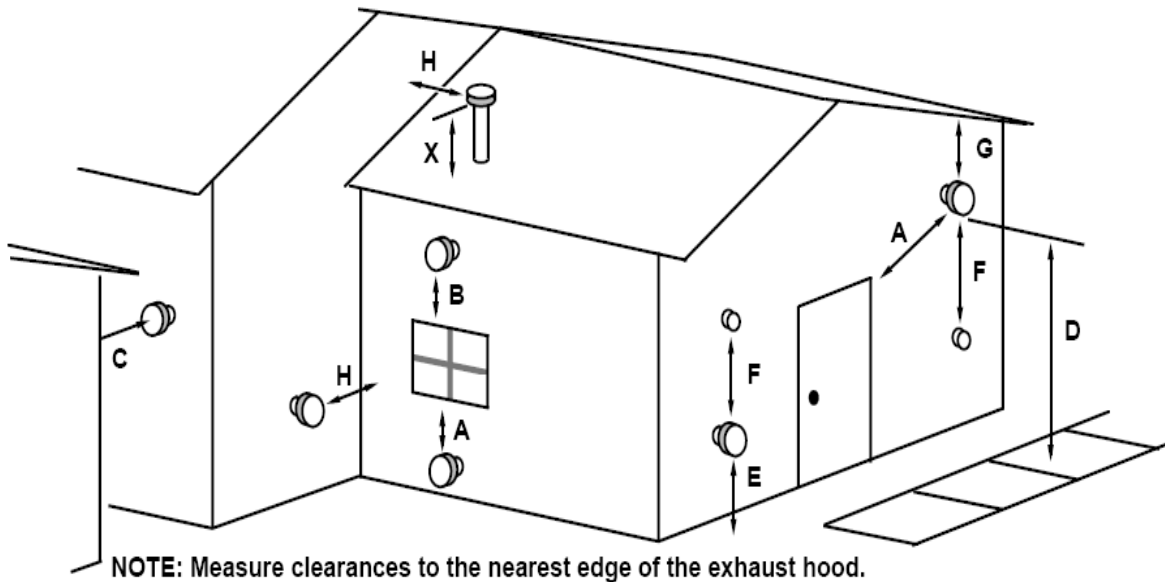
- Termination must be a minimum of 12" above the chase cap (**DIM "A"**) (note: the chimney must meet local codes for height above the roof or other obstructions)
- Must have an approved cap (**B**) (to prevent water from entering) or a 45° elbow downturn.
- If the termination is located on the predominantly windy side of the house, an approved house shield is recommended to prevent soot from accumulating on the side of the house.
- Must not be located where snow or other materials such as leaves, snow or grass, could block it.
- Must have a "Metal Seal Plate" or "Wall Thimble" at point (**C**)
- Horizontal terminations must protrude 12" from the wall, vertical terminations 24"
- Minimum 3' clearance above any forced air intake of any other appliance within 6'.
- Minimum 3' above a gas meter/regulator within 3' horizontally of the vertical centre line of regulator.
- Minimum 6' clearance to a gas service regulator vent outlet.
- Minimum 1' clearance under veranda, porch, deck or balcony. Permitted only if structure is fully open on a minimum of two sides beneath the floor.



## EXHAUST SYSTEM (CONTINUED)

### PELLET VENT TERMINATION:

- Vent must terminate on the exterior of the dwelling. Horizontal terminations must protrude a minimum 12" from the wall. Vertical terminations must protrude a minimum 24" from the roof surface. In addition, all clearances listed below must be met.
- Must have an approved cap (to prevent water from entering) or a 45° downturn with rodent screen.
- 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.
- Must not be located where it will become plugged by snow or other material.



- A Minimum 4' clearance below or beside any door or window that opens  
Minimum 1' clearance below or beside any window that does not open.
- B Minimum 1' clearance above any door or window that opens
- C Minimum 2' clearance from any adjacent building
- D Minimum 7' clearance above any grade when adjacent to public walkways  
**NOTE: Vent may not terminate in covered walkway or breezeway.**
- E Minimum 2' clearance above any grass, plants, or other combustible materials
- F Minimum 3' clearance from any forced air intake of any other appliance
- G Minimum 2' clearance below eaves or overhangs
- H Minimum 1' clearance horizontally from combustible wall
- X Must be a minimum of 2' above the roof

# OUTSIDE AIR INTAKE



## IMPORTANT

- **FOR MOBILE HOME INSTALLATIONS, OUTSIDE AIR INTAKE IS REQUIRED.**
- **Non-metallic material, such as PVC or ABS plastic piping, must not be used for outside air**

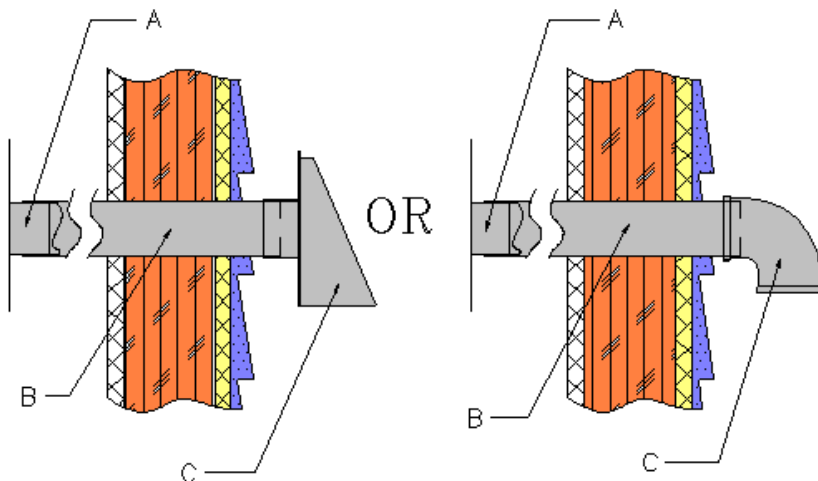
Outside air is strongly recommended for all other installations as well. Failure to install intake air may result in improper combustion as well as the unit emitting smoke during power failures.

Metal pipe, **ONLY**, either solid or flexible, must be used in all outside air installations.(B)

A wind shield, (C), over the termination of the outside air intake pipe or a 90 degree elbow or bend directed away from the prevailing winds **MUST** be used when an outside air pipe is installed through the side of a building. Keep the outside air pipe termination at least 1 foot away from the exhaust system termination. Keep the pipe termination clear of debris, ice & snow. Inspect the termination on a routine basis.

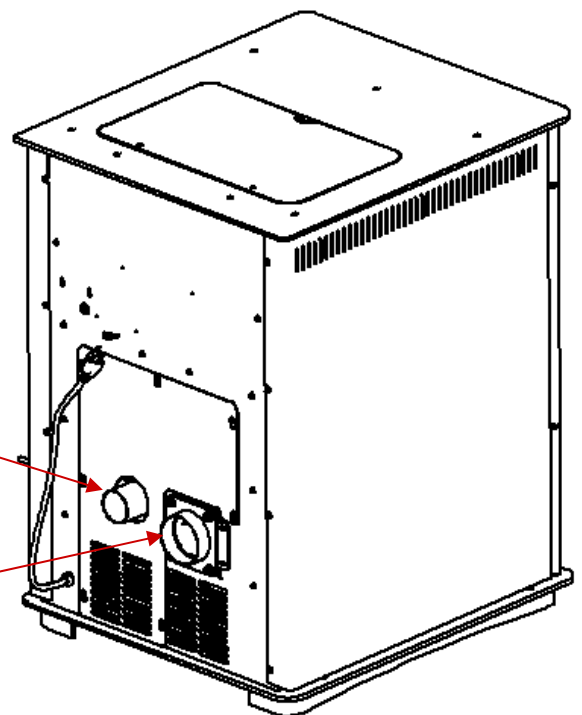
When outside air is taken from an existing chimney, the exhaust system must not terminate in the same chimney.

The air intake pipe on your stove is 2" OD. The outside air connecting pipe must be at least 2" ID  
The outside air connecting pipe must be as short and free of elbows as possible, and **must fit over** the air intake pipe on your stove.



2" AIR INTAKE

3" EXHAUST



# HEARTH PROTECTION & CLEARANCES

## **LOCATING STOVE:**

- ⇒ Keep in mind the following placement concerns; venting obstructions, outside air, electrical outlet, wall thermostat, heat distribution, traffic patterns and room use/size.
- ⇒ If the stove is placed in a location where the ceiling height is less than 7', it must follow the requirements in the section "Alcove Installation".
- ⇒ Although not required for safety reasons, it is strongly suggested that sufficient space be provided (a minimum of 24") on each side of the appliance and at the back of the appliance to enable servicing the unit if necessary. If this space is unavailable, a provision must be made to enable sliding the appliance out.

## **MINIMUM CLEARANCE TO WALLS & COMBUSTIBLES:**

- 2" From Back Of Stove
- 6" From Side of Stove (8" in Canada)
- 6" From Front Of Stove (18" in Canada)
- 16" From Top Of Stove (8" in Canada)
- 3" From PL Vent to Combustibles
- 2" From Back Corner of Stove
- 36" to drapes, doors, anything that can swing toward stove.

## **REQUIREMENTS FOR FLOOR PROTECTION :**

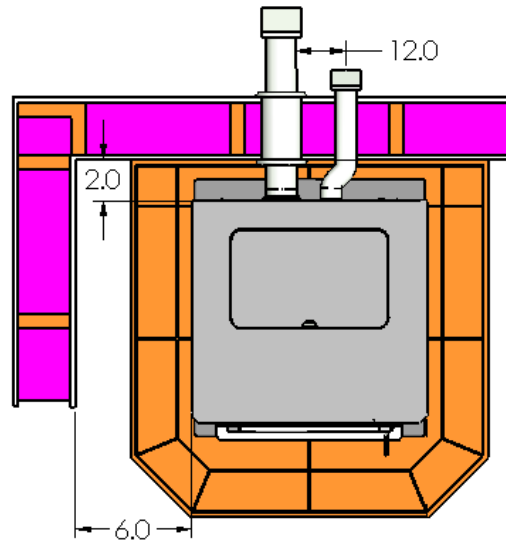
- ⇒ Stove and floor protection must be installed on a level secure floor.
- ⇒ It is important for your appliance to be level. Leveling should occur below the floor protection pad.
- ⇒ The stove must be installed on a non-combustible floor protector (i.e. sheet steel with cement, tile slate) extending the full width and depth of the stove.

## **FLOOR PROTECTION MUST EXTEND:**

- 6" beyond front of the stove ( 18" in Canada)
- 6" beyond sides of the stove ( 8" in Canada)
- 2" beyond rear of the stove and to either side of chimney tee.

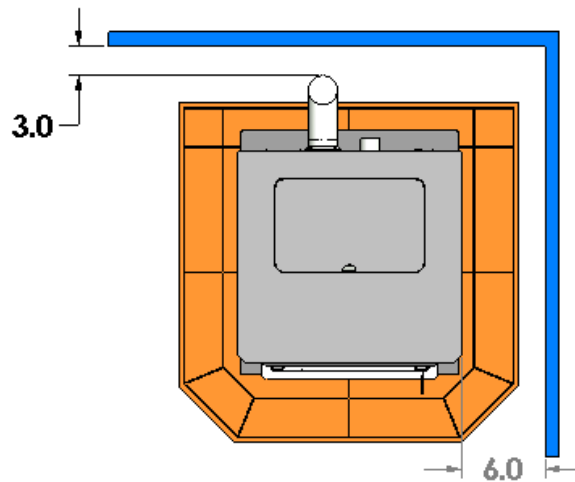
# HEARTH PROTECTION & CLEARANCES

## CLEARANCES—STRAIGHT THROUGH WALL INSTALLATION



THROUGH THE WALL

## CLEARANCES—INTERIOR VERTICAL INSTALLATION

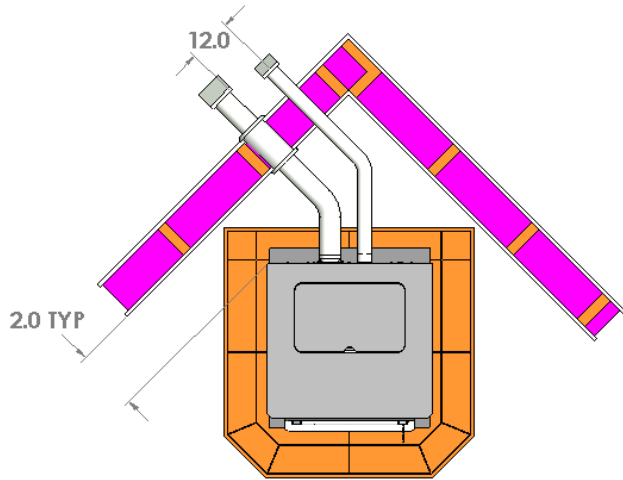


INTERIOR VERTICAL

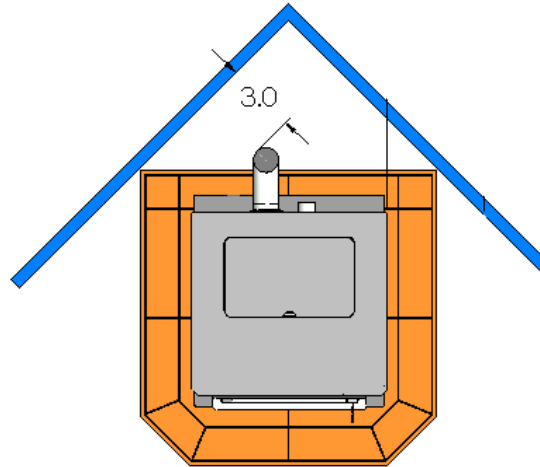


# HEARTH PROTECTION & CLEARANCES (CONTINUED)

## CLEARANCES – 45° CORNER INSTALLATION

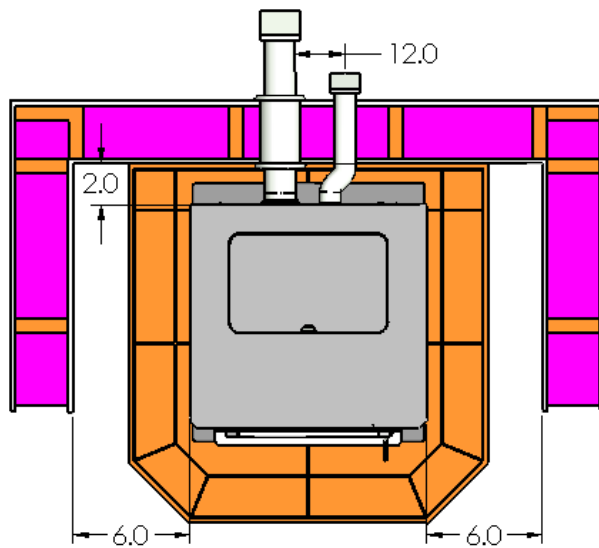


45° CORNER THROUGH WALL

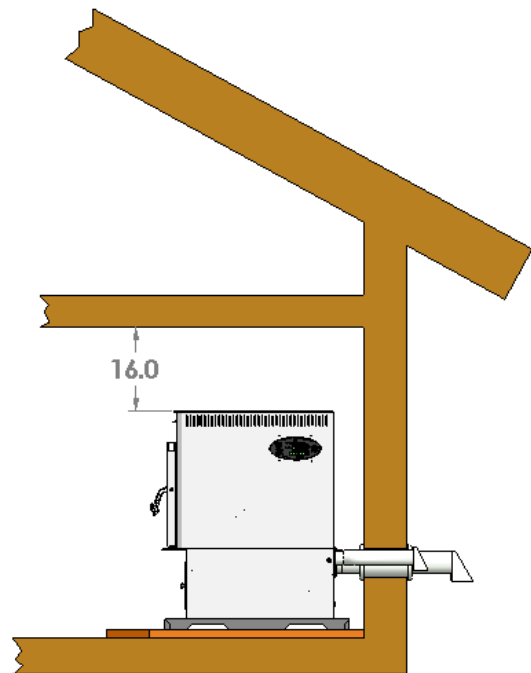


45° CORNER INTERIOR VERTICAL

## CLEARANCES – ALCOVE INSTALLATION



ALCOVE - THROUGH THE WALL



# SUGGESTED INSTALLATION TOOLS

Before starting your Hearthland Pellet Stove install, we recommended you review the following list of tools that may be required and have them ready if needed.

## Power Tools


- Shop Vacuum for clean up
- Reciprocating saw
- Electric drill
- Extension cord
- 4" or 5" diameter coring bit and drill (if going through concrete)

## Hand Tools


- Tape Measure
- Caulking Gun
- Pencil
- Allen (Key) wrench set
- Stud Finder
- Set of sockets or nut driver (7/16")
- Screwdriver, Phillip Tip
- Assortment of metal, masonry, and wood drill bits
- Flashlight
- Hand Truck or cart (for transporting stove to installation location)
- Hammer
- Level
- Utility knife
- Adjustable pliers (6 to 8 inches)
- Small hand broom and dustpan
- Furniture and Floor Protection

## Supplies

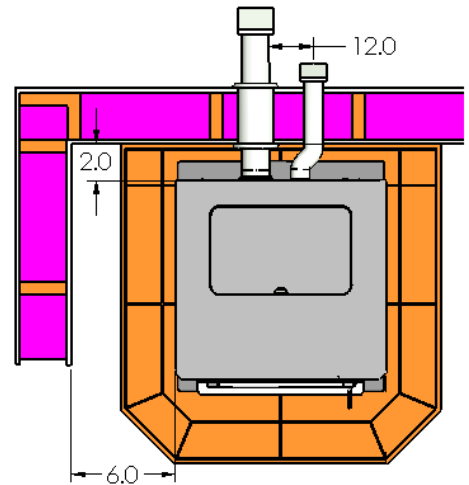

- Caulking tube of RTV Hi-Heat Silicone (550° F)
- Caulking tube of Clear Silicone
- Hi-Heat Aluminum Foil Tape
- Self drilling screws for venting joints ((3) per joint)
- Assortment of sheet and wood screws
- Paint for touch-up

# INSTALLATION

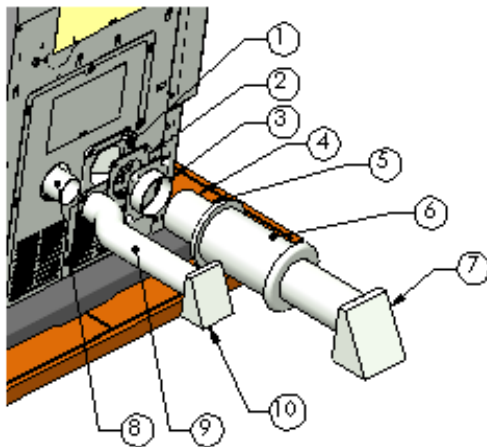
## THROUGH THE WALL, DIRECT VENT INSTALLATION.

1. Select the location for your stove, design the exhaust system and determine the brand and size of "PL" vent to be used.
2. Position the floor pad.
3. Following the "PL" vent manufacturer's specifications, mark and cut a hole through the wall to accommodate the wall thimble, (6), and the outside air pipe, (9), if outside air is to be used. Remember that the outside air intake must be located no closer than 12" from the vent exhaust. Try to avoid cutting wall studs, and use extreme caution to avoid cutting into power or water lines within the wall of your home.
4. Install the wall thimble, (6). Be sure to run a bead of silicone around the outside edges of the wall thimble to reduce drafts, both inside and outside. Insert the proper size of "PL" vent, (5), through the wall thimble, (6).
5. Place your stove on the floor pad, close to its final position. Leave room to connect the "PL" vent to "Quick Connect" end collar. Install the gasket (2) and "Quick Connect" exhaust end (3) to your stove to the "Quick Connect" mounting plate. Use the (4) 7/16" nuts, to secure tightly.
6. Place a bead of High Temp (550°F) RTV silicone around the end collar of the "Quick Connect" of your stove's exhaust, (3). Firmly push the "PL" vent pipe adaptor (4) into the bead of High Temp (550°F) RTV silicone.
 

**Note: If 4" PL vent is required, use an 3" to 4" Pipe Adaptor Increaser, (4), on the stove exhaust pipe.**
7. Connect the length of "PL" vent, (5), that is in the thimble, (6), onto the pipe adaptor (4). Fasten together with at least three sheet metal screws (approx. 3/8" in length). Place a bead of High Temp (550°F) RTV silicone around the connection.
8. Place your stove in its final position on the pad. Place another bead of High Temp (550°F) RTV silicone around the "PL" vent (6) and the inside of the wall thimble, to stop cold air drafts.
9. On the outside of the building, place an exhaust cap (7) or a 45 degree "PL" type elbow, (7), onto the end of the horizontal "PL" vent, (5). Optionally, place a rodent screen cap (may be required in some locals), on the end of the elbow, (7). Run a bead of High Temp (550°F) RTV silicone around all connections and around the "PL" vent pipe and the outside of the wall thimble. **Note:** The end of the exhaust pipe must extend a minimum of 12" from the outside of the building.



THROUGH THE WALL



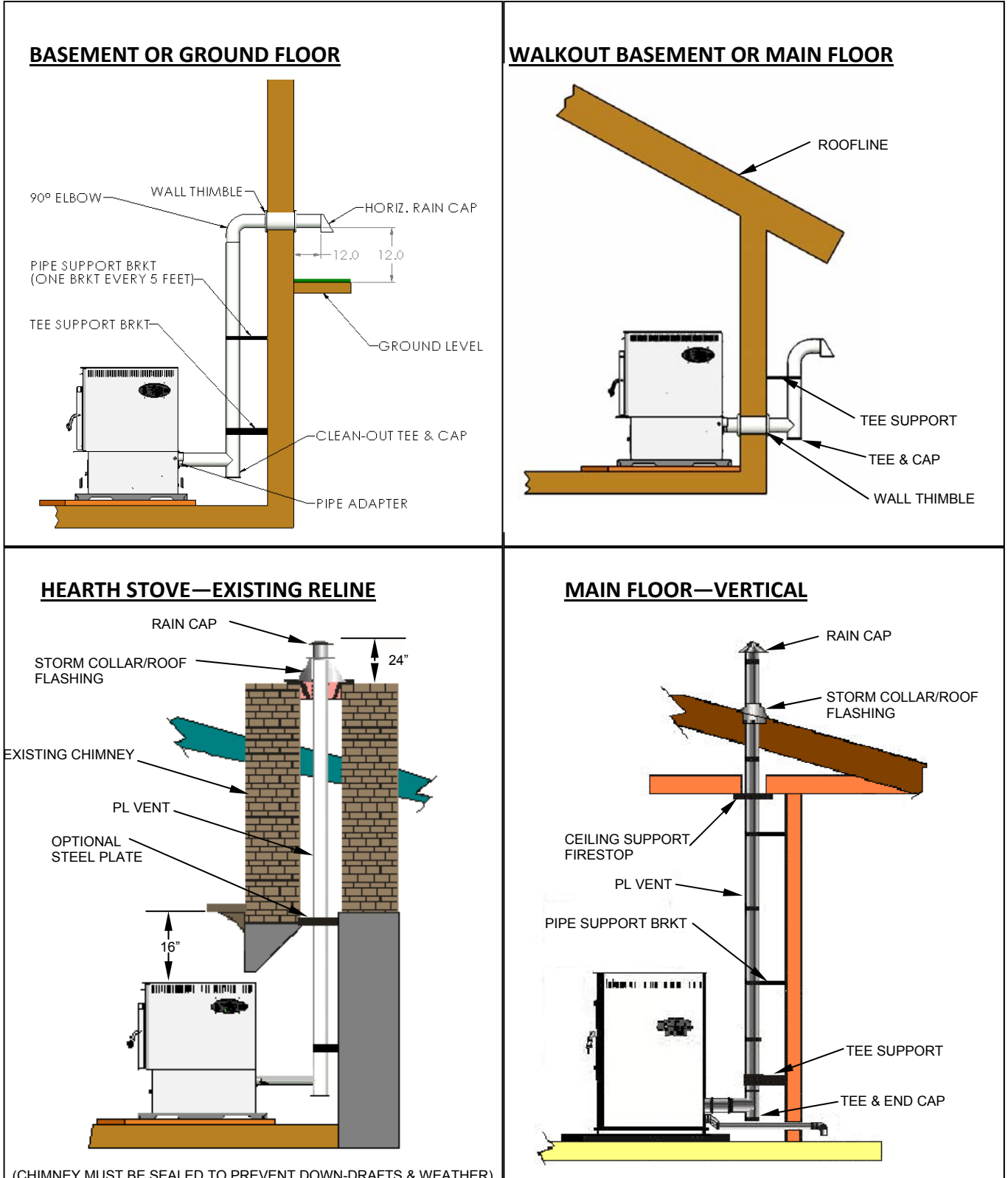
ITEM	DESCRIPTION
1	MOUNTING PLATE*
2	GASKET*
3	EXHAUST END*
4	PL PIPE ADAPTER
5	PL VENT LENGTH
6	WALL THIMBLE
7	PL END CAP
8	COMBUSTION AIR INLET*
9	METAL FRESH AIR PIPE
10	FRESH AIR INTAKE CAP

(\*SUPPLIED WITH STOVE)

**Note:** Most horizontal, through the wall installations may require a Clean-out Tee and minimum 3 feet vertical rise of pipe, inside or outside the building.

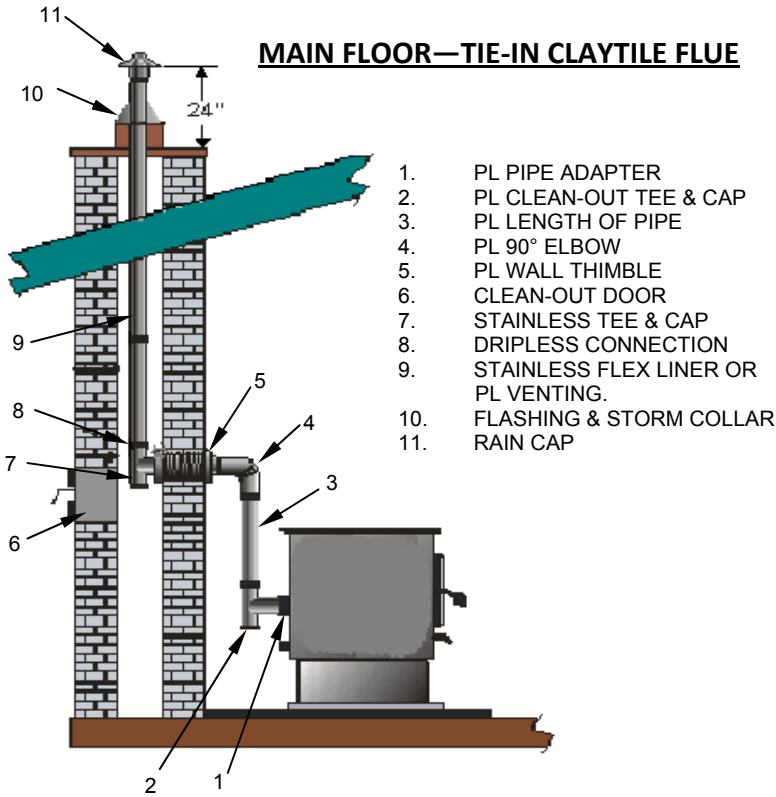
# INSTALLATION, CONTINUED

These styles of installation are highly recommended, due to possible backpressure in the exhaust caused by airflow around the outside of the structure, snow build-up, or power failure, etc.. These designs will improve venting performance and provide natural draft to help evacuate smoke from the appliance in case of power failure. Follow the same basic steps in locating your appliance, attaching the exhaust system and outside air intake to your stove as the previous examples.

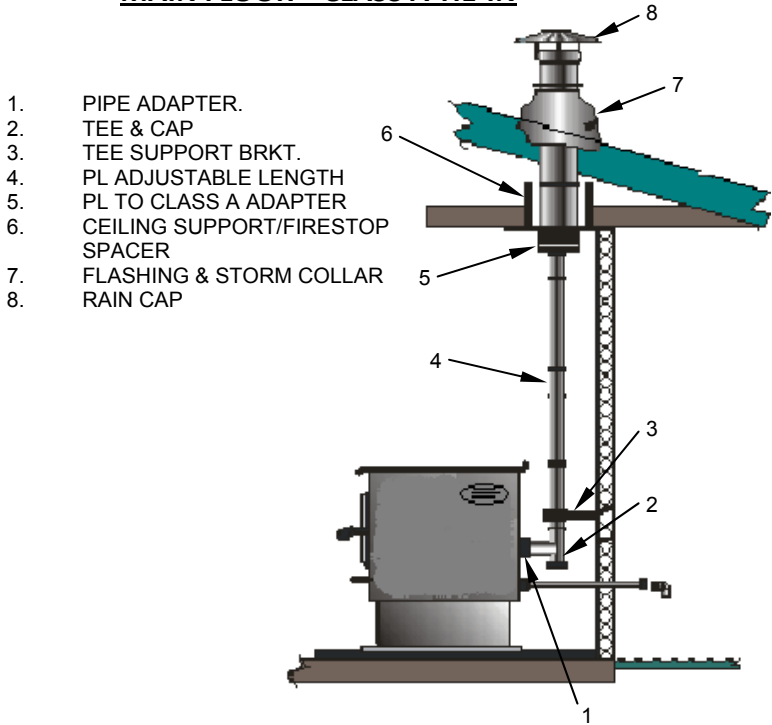


# INSTALLATION , CONTINUED

## MAIN FLOOR—TIE-IN CLAYTILE FLUE



## MAIN FLOOR—CLASS A TIE-IN



# MOBILE HOME INSTALLATION



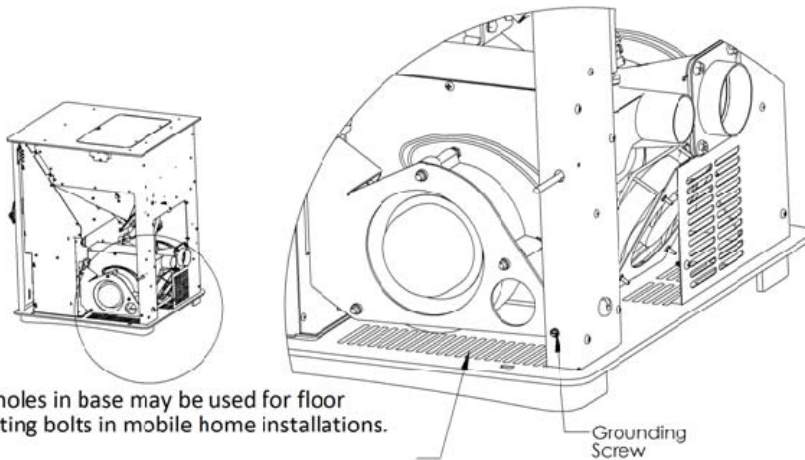
## IMPORTANT

- **FOR MOBILE HOME INSTALLATIONS, OUTSIDE AIR INTAKE IS REQUIRED.**
- **WARNING: DO NOT INSTALL STOVE IN SLEEPING ROOM.**
- **CAUTION: THE STRUCTURAL INTEGRITY OF THE MANUFACTURED HOME FLOOR, WALL, AND CEILING / ROOF MUST BE MAINTAINED!**
- **INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.**

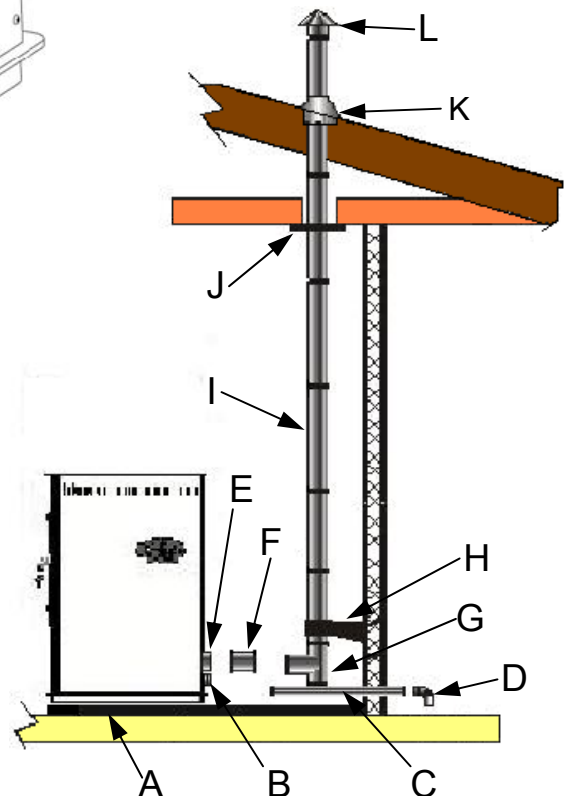
Your **Hearthland Series** appliance has been tested and listed for mobile home installation. It may be installed in a mobile home as a "Free Standing Stove" or a "Hearth Stove", see detailed install and clearance requirements in these sections as they imply there. (See Section # 2.6 "Outside Air Intake")

**In addition to all previously detailed installation requirements, mobile home installations must meet the following requirements:**

- Permanently bolt your stove to the floor using base vent holes.
- Electrically ground your stove or the pedestal to the steel frame of the home. Use a number 8 gauge copper wire, or equivalent.
- The stove must have a permanent outside air source with a ¼ inch screen over the inlet.
- For transportation all chimney/vent above the mobile home must be removed.
- Chimney/PL Vent must be 3" or 4" PL Vent and must extend a minimum of 36" above the roofline of the mobile home and must be installed using a UL / ULC listed ceiling fire stop (J) and rain cap (L), figure 26.



A	Floor Pad
B	Combustion Air Intake
C	Fresh Air Duct
D	Fresh Air Hood
E	Stove Exhaust
F	Pipe Adapter
G	Clean Out Tee
H	Tee Support Bracket
I	Pipe
J	Fire stop Spacer / Ceiling Support
K	Roof Flashing / Storm Collar
L	Rain Cap



# OPERATING INSTRUCTIONS



## IMPORTANT

- **COMPLETE THE CHECK LIST (Section #2.1 "Pre-Installation Checklist" ) PRIOR TO LIGHTING YOUR FIRST FIRE.**
- **When using your appliance, it is critical that the following concepts be understood and performed as required!**
- **Use only Hearthland Products supplied burn grate.**
- **Each stove installation is unique, therefore it is not possible for the manufacturer to preset all stove set-**

### SETTING THE AIR INTAKE DAMPER

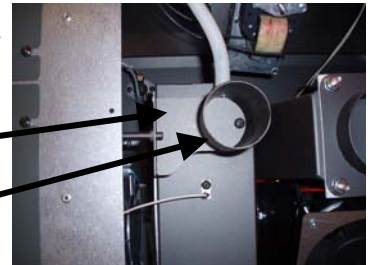
- The damper helps to control the amount of airflow supplied for combustion.
- Damper **pushed in** reduces airflow.
- Damper **pulled out** increases airflow.
- For ignition, push the air damper in completely, then pull outward approximately 1/4".
- This setting will be fine tuned after ignition (See Section #4.11 "Adjusting Air Intake Damper")

Damper Rod



Damper

Fresh Air Inlet



### DOOR OPERATION:

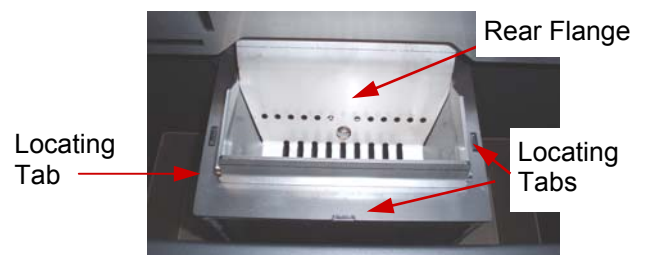
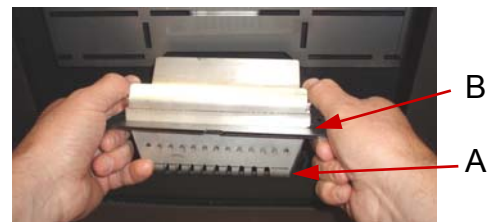
- Open the stove door by pulling the handle UP toward the TOP of the stove, until the door naturally opens. Swing door open to the left.
- Close the stove door by keeping the handle in the open position. Push the door firmly against the stove.
- Push the handle downward to the locked position.
- NOTE: If left open during operation for more than 60 seconds, the stove will enter shutdown mode.



### BURN GRATE REMOVAL & INSTALLATION:

**WARNING: Make sure the stove has totally cooled down before touching the burn grate.**

- The Fuel Burn Grate comes in two pieces; the burn grate (A) & the burn pot top plate (B).
- To remove the Burn Grate grab the Burn Grate and Burn Pot Top Plate and rotate the two parts out as a unit as shown in the photo on the right.
- To re-install ensure that the Burn Grate (A) is seated tightly in the Top Plate (B). Rotate the rear flange of the Burn Grate under the Brick Panel then seat the Top Plate over the 3 Locating Tabs. Ensure the Burn Grate and Top Plate are properly seated and level.



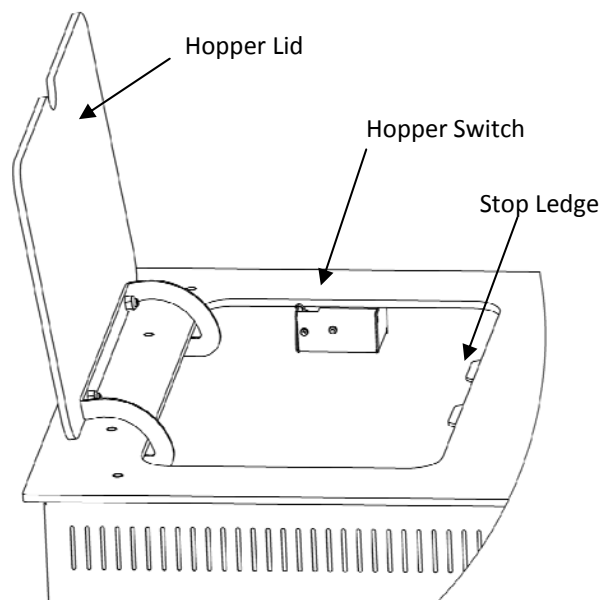
# OPERATING INSTRUCTIONS (CONTINUED)

## FILLING THE HOPPER WITH FUEL:

Open the hopper lid using the finger pull recess. Fully open the lid toward the back of the stove. Ensure the hopper is free of unwanted debris, MANUALS, or other foreign objects before adding wood pellets.

Fill the hopper with wood pellets only. The hopper has a 70 lb capacity. When filling, be careful not to spill any fuel on the top of the stove and floor as they can also pose a slipping hazard. Before closing the lid, verify there are no pellets on the hopper switch or stop ledge, as they may prevent the lid from closing properly. To close, gently lower the lid.

**Note:** To prevent injury, your stove is equipped with a switch that stops the auger when the hopper lid is open. If the lid is opened during operation longer than 60 seconds, the stove will enter shutdown mode. If this happens unintentionally, close the lid and press start on the touchpad.



## INTELLIGENT TEMPERATURE CONTROL (ITC) GENERAL OVERVIEW

The Intelligent Temperature Control (ITC) digital control is designed to give you flexibility on how you use your stove.

### The ITC can be operated in one of three modes:

- **Manual Mode** (Factory default)
- **Thermostat ON/OFF Mode**
- **Thermostat Modulated Mode** (High/Low)

### The touchpad has three functional buttons:

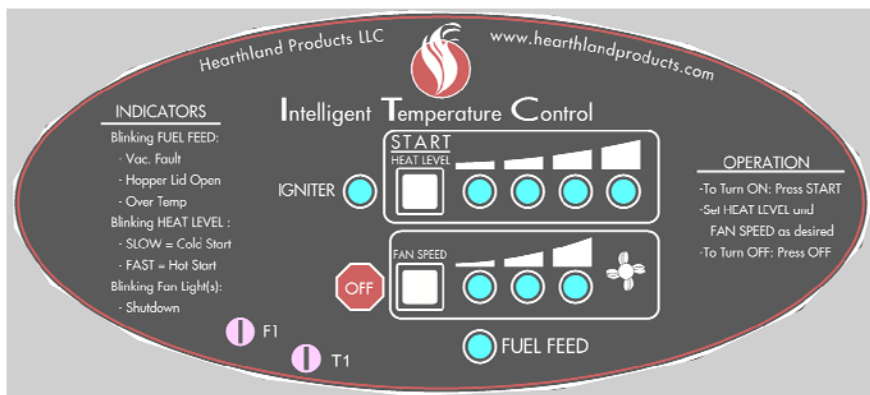
- **"START"** (HEAT LEVEL) begins your stove's ignition process and adjusts desired heat setting.
- **"FAN SPEED"** adjusts convection blowers (room heat) to desired setting.
- **"OFF"** begins shut down mode of your stove.

### Four indicator lights informing you of functional status:

- **"IGNITER"** LED indicates when the automatic Ignition System is under power.
- **"FUEL FEED"** LED solid indicates when the auger is turning and pellets are being fed to the burn grate. Blinking indicates vacuum fault, hopper lid open or stove over temp.
- **"HEAT LEVEL"** LED indicates current heat level setting. Blinking slow indicates cold start; blinking fast indicates hot start.
- **"FAN SPEED"** LED indicates the setting of the convection blowers (room heat). Blinking indicates shutdown mode.

### Two Trims allow for setting dependant adjustments at installation:

- **F1** is the Combustion Fan Trim. This allows for fine tuning of the combustion fan aiding in adjustment for elevation & venting.
- **T1** is the ITC temperature trim. This allows for heat setting temperature to be raised or lowered to meet your heating needs.





# OPERATING INSTRUCTIONS (CONTINUED)

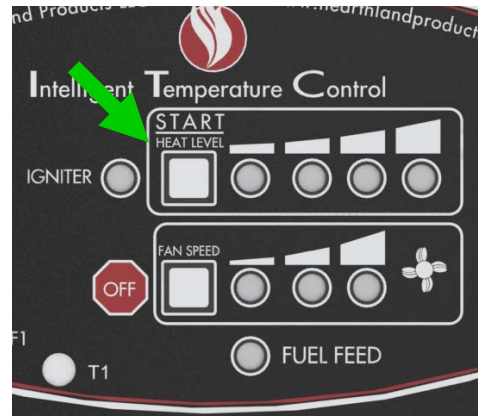
## STARTING STOVE:

- 1) **Verify the following before each starting, :**
  - ⇒ The burn grate is clean & properly seated.
  - ⇒ The door is properly closed.
  - ⇒ The hopper contains wood pellets and the lid is closed.
  - ⇒ The electrical cord is plugged in.

- 2) **Adjust the air inlet damper to be open approximately 1/4".**

- 3) **Press START on the ITC touch pad and the following will happen:**

- ⇒ **Combustion (exhaust) blower will start** at full power for several seconds, then will automatically adjust to facilitate ignition.
- ⇒ The **Heat Level LED will flash** indicating the current heat setting.
- ⇒ The **IGNITER LED will light** and the Auto-Igniter will begin to glow as viewed through the burn grate.
- ⇒ The **FUEL FEED LED will light intermittently** indicating when the auger is turning and fuel is being fed to the burn grate. The auger on time is 3 seconds and the off time will vary. **Note:** If the hopper and auger were empty, it will take longer for pellets to begin falling into the burn grate.
- ⇒ The **pellets will automatically ignite** in approximately 3 to 7 minutes.
- ⇒ After the flame has stabilized and the ITC detects a steady burn, the controller will exit start-up mode and enter burn mode. The Igniter light will go out and the heat setting LED will stop flashing and stay on steady.
- ⇒ **The Convection blowers (room heat) will start** once the ITC has detected a flame. They will start at full power for a few seconds and then drop to the fan speed setting indicated with LED's on the touchpad.



## SHUTTING OFF STOVE:

- 1) **Press "OFF" on the touch pad and the following will happen:**
  - ⇒ The Auger will stop dispensing fuel to the burn grate.
  - ⇒ The "FAN SPEED" LED will flash.
  - ⇒ The combustion (exhaust) blower will the combustion & convection blowers for 10 minutes or until the stove exhaust cools below 120° F, at which point all components will turn off.

**NOTE: If "OFF" is pressed unintentionally, simply press start on the touchpad and the stove will resume operation after it completes a short hot start sequence.**



## IMPORTANT

- Never empty pellets from the burn pot into the hopper. Pellets that may appear cool may retain enough heat to ignite other pellets resulting in smoke or fire damage.
- If stove fails to light within 15 minutes, the controller will shut off. If this happens, empty burn grate and begin the starting procedure again. If stove fails to ignite a second time, disconnect stove power and contact your dealer.
- Stove paint is not fully cured until the stove is fired (3) times. During this curing process fumes will be given off. Open windows and doors and use fans to provide fresh air while curing. Fumes will not be present after paint fully cures. (See Section #2.1 "Pre-Installation Checklist")
- Never use liquid or volatile fire starters to start a fire in your stove! Do not in-stall or operate your stove in any room where any liquid or volatile fuels or any other highly combustible items are in the air

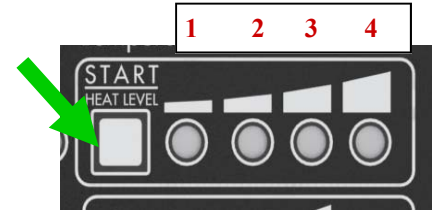
# OPERATING INSTRUCTIONS (CONTINUED)

## ADJUSTING STOVE SETTINGS:

The HEAT LEVEL and FAN SPEED settings may be changed at any time during start-up or run mode.

### SETTING HEAT LEVEL:

- ⇒ Press “START / HEAT LEVEL” repeatedly until it is at the HEAT LEVEL You Wish the stove to run.
- ⇒ Please note that heat setting one is used for start up, higher heat settings will not take effect until after start up mode is complete.
- ⇒ Please note that changing HEAT LEVEL will change the FAN SPEED to the default speeds indicated in red on the HEAT LEVEL table.
- ⇒ Please note that the Enclosure Fan used to maintain internal component temperatures receives power only on HEAT LEVEL #4.

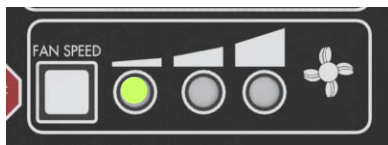


**HEAT LEVEL TABLE**

HEAT LEVEL	ALLOWABLE FAN SPEEDS (Red = default)	Enclosure Fan
1	1,2,3,4	OFF
2	1,2,3,4	OFF
3	2,3,4	ON
4	5	ON

### SETTING FAN SPEED (Room Heat):

- ⇒ Press “FAN SPEED” repeatedly until it is at the setting you wish the stove to run at.
- ⇒ The lights indicate one of five fan speeds.
- ⇒ Please note that changing HEAT LEVEL will change the FAN SPEED to the default speeds indicated in red on the HEAT LEVEL table.
- ⇒ Please note that specific FAN SPEEDS are allowable at each HEAT LEVEL per the HEAT LEVEL table .



**1 = LOW**



**2 = MEDIUM LOW**



**3 = MEDIUM HIGH**



**4 = HIGH**  
(3 LED LIGHTS ON STEADY)



**5 = TURBO**  
(3 LED LIGHTS FLASHING)

# OPERATING INSTRUCTIONS (CONTINUED)

## COMBUSTION FAN SPEED ADJUSTMENT (F1)

The speed of the combustion fan can be increased or decreased by adjusting the F1 Trimmer. This adjustment allows for fine tuning of the combustion fan for elevation & venting during initial set-up. This along with the fresh air damper (See Section #4.11 "Adjusting Air Intake Damper") allows you to fine tune the amount of combustion air to match your particular installation. During normal use you will not need to adjust this trimmer as the damper provides sufficient adjustability. *Turn Clockwise to decrease. Turn counterclockwise to increase.* To lower the fan speed turn trimmer clockwise and vice versa to increase fan speed

**NOTE:** Trimmer adjustment affects lowest three combustion settings only.

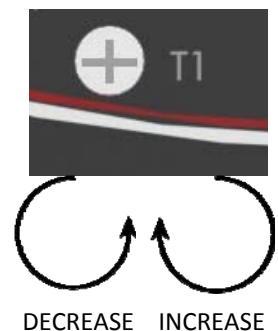


## ITC TEMPERATURE ADJUSTMENT (T1)

**T1** is the ITC temperature trim. This allows for heat setting temperature to be raised or lowered to meet your heating needs. Counter clockwise decreases the ITC temperature setting and clockwise ITC increases the temperature setting.

**NOTE:** The trim pot slot is made of plastic and can be damaged or stripped. When adjusting, use a small precision screwdriver with non-metallic blade.

**NOTE:** Trim Pots do not make a full rotation. Do not apply extra force, damage may occur.

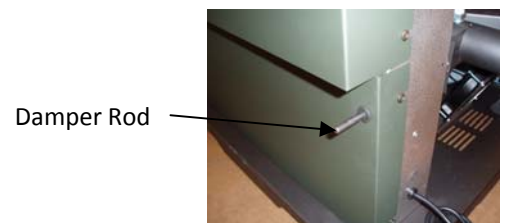
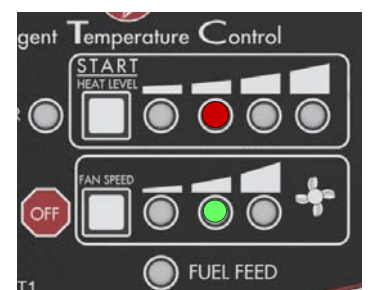


## ADJUSTING INTAKE DAMPER FOR BEST PERFORMANCE

A HIGH QUALITY FIRE should burn with a brisk, vibrant, yellow to white color flame. When watching the fuel burn in the grate, you should see a slight movement of the embers. However, you should not see embers whisked out of the burn grate from high velocity intake air. A flame exhibiting a lazy, orange or sooty characteristic is an inefficient flame. This type of flame produces less heat, increases soot and smoky exhaust.

Before making combustion adjustments, let the appliance go through the entire START-UP procedure. When the HEAT LEVEL LED stays solid, turn the HEAT LEVEL to the # 2 setting and FAN LEVEL to setting #3. Allow the appliance to run on this setting for 10 minutes before making fine adjustments.

Adjust the air intake damper and watch the burn grate and flame for characteristics as described above.



# OPERATING INSTRUCTIONS (CONTINUED)

## SETTING MODE OF OPERATION

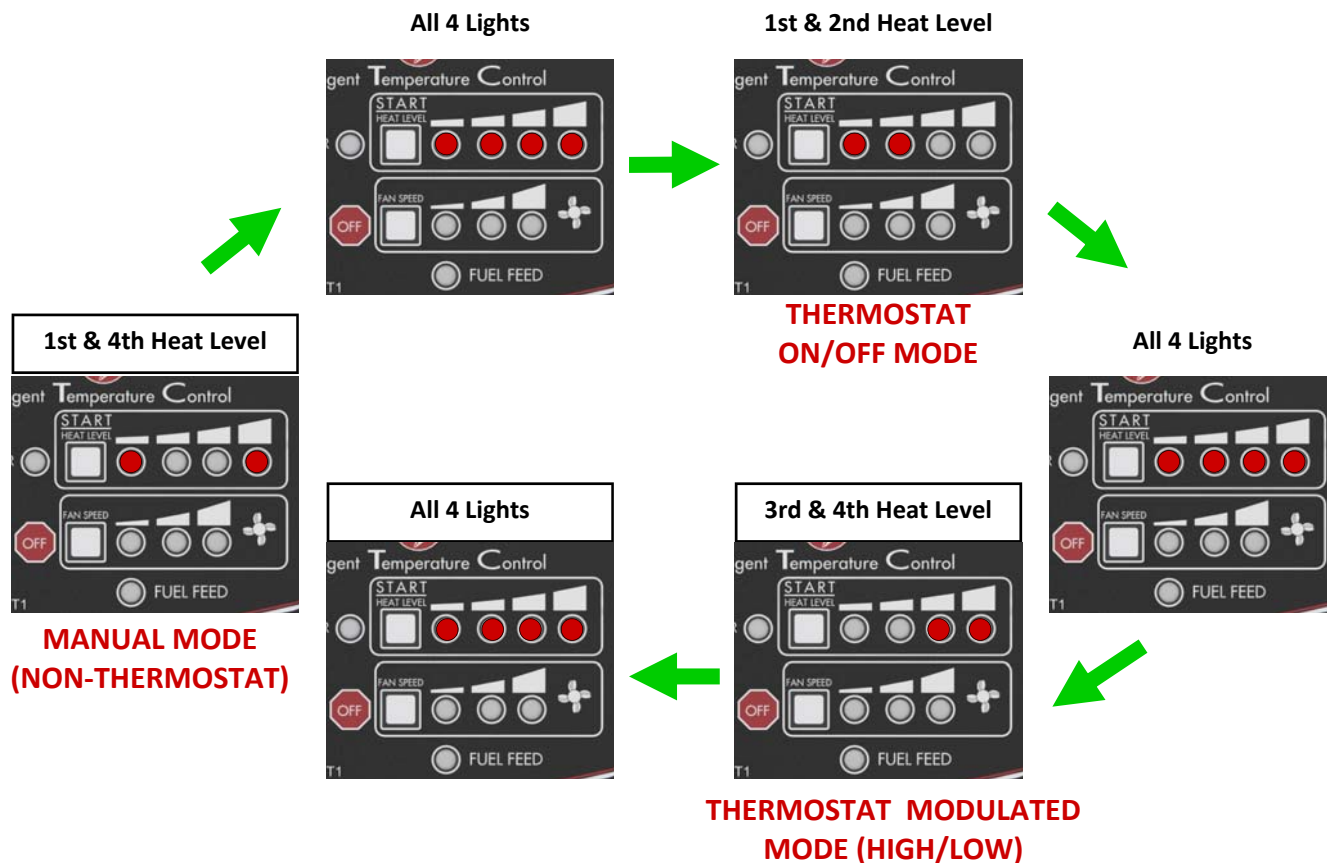
The ITC can be operated in one of three modes:

- ⇒ **Manual Mode** (Factory default)
- ⇒ **Thermostat ON/OFF Mode**
- ⇒ **Thermostat Modulated Mode** (High/Low)

**NOTE:** To operate in either of the two thermostat modes, an optional thermostat kit must be purchased and installed. Thermostats compatible with your Hearthland stove are available from your local dealer.

### To change mode of operation:

1. Press and hold the **OFF** button.
2. While you are holding the OFF button the following cycle will occur:
3. All four feed rate lights light solid.
4. 2 of the feed rate lights will flash indicating current operation mode.
5. All four feed rate lights light solid.
6. 2 of the feed rate lights will flash indicating current operation mode.
7. This cycle will continue as long as you continue to hold the OFF button. To select a mode, simply release the OFF button when the desired mode is displayed.



# OPERATING INSTRUCTIONS (CONTINUED)

## THERMOSTAT SPECIFICATION:

To operate in either of the two thermostat modes, an optional thermostat must be purchased and installed. If a thermostat is installed, it must only service the single pellet stove appliance. The thermostat will serve only as a temperature dependant switch to turn the stove **On/Off** or **High/Low** depending on the mode setting (refer to manual for selecting operating mode) The levels for convection fan and heat must be set at the controller, not the thermostat. The controller is compatible with a great variety of thermostat types including: Low-voltage<sup>1</sup>, mechanical and digital, wired and wireless, non-programmable and programmable<sup>2</sup>. Examples of readily available thermostats that are compatible with the stove controller are:

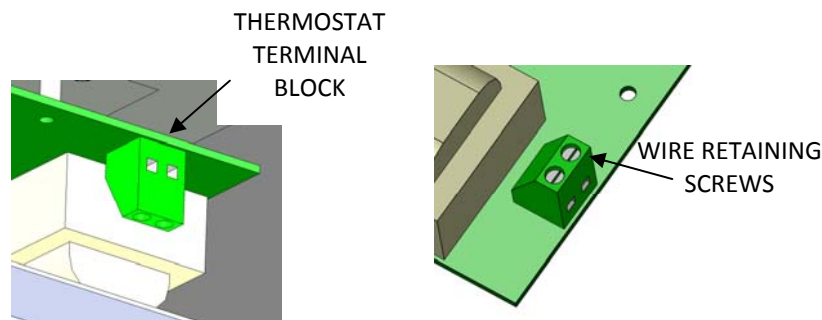
Honeywell (Manual, wired, non-programmable):	CT30, CT31, CT33, CT50, CT51, CT53, CT54, CT55, CT87
Honeywell (Digital, wired, non-programmable):	RTH110B
Honeywell (Digital, wired, programmable):	RTH111B, RTH221B, RTH6300B, RTH2300B, RTH230B, RTH2310B, RTH4300B, RTH2410B, RTH2510B, RTH2520B
SkyTech (Digital, wireless, non-programmable):	SKY-1001-TH, SKY-1410-TH, TS/R-2A, SKY-3301, SKY-5301, SKY-5310
SkyTech (Digital, wireless, programmable):	SKY-3301P, SKY-3301PF, SKY-3301P2, SKY-5301P

## NOTES:

- <sup>1</sup> Thermostats with 24 volt rating are compatible with the controller. Millivolt thermostats are also compatible provided they have an upper voltage limit of at least 24 volts.
- <sup>2</sup> The stove controller uses only two wires to connect to the thermostat, therefore if a thermostat has Heat & Cool capabilities, the stove will only utilize the heat related functions of the thermostat.

## THERMOSTAT INSTALLATION:

1. Turn the stove off and allow stove to cool.
2. Unplug the stove electrical plug from the power receptacle.
3. Remove the right side panel to Access the controller.
4. Route the (2) thermostat wires through the rubber grommet in the stove back wall.
5. Use a small screwdriver to connect the (2) thermostat wires to the control board thermostat terminal block as shown.
6. Replace the side panel and refasten. **NOTE: Use caution when routing the wires from the stove to the thermostat so that the wires do not come into contact with the exhaust venting.**
7. Connect the other end of the (2) wires to the heat terminals of the thermostat. (Typically these are the W & R terminals if more than (2) terminals exist)
8. Reconnect electrical plug to power.
9. Set the controller mode to the desired thermostat mode (refer to operating manual)
10. You are now ready to operate your stove with a thermostat.



## THERMOSTAT LOCATION

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

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

# OPERATING INSTRUCTIONS (CONTINUED)

**NOTE:** To operate in either of the two thermostat modes, an optional thermostat kit must be purchased and installed. Thermostats compatible with your Hearthland stove are available from your local dealer.

## **Thermostat Modulated Mode** has advantages over **Thermostat ON/OFF mode**.

- ⇒ More consistent room temperature will be maintained.
- ⇒ Life of the Auto Igniter is increased, seeing fewer ignition cycles.
- ⇒ The stove will tend to operate primarily at the low setting, resulting in more efficient use of energy to maintain desired temperature setting.

### **THERMOSTAT MODULATED MODE (HIGH-LOW)**

This feature of your stove allows for modulated heating with use of a thermostat connected to the ITC. In this mode your stove will run at the heat setting 2,3 or 4 when the thermostat calls for more heat, and drop to heat setting 1 when the set room temperature is achieved. This makes your stove more responsive to your heating needs, and eliminates the need to re-ignite with each heat demand cycle.

#### **TO START**

- ⇒ To operate in High Low thermostat mode, press the START touch pad to activate the stove as described in *section #4.7 "Starting Stove & Shutting Off Stove"*.
- ⇒ Select desired HIGH heat output level (2 or 3 position) by pressing the START / HEAT LEVEL touch pad.
- ⇒ Select desired FAN SPEED setting as described in *section #4.8 "Setting Fan Speed"*.
- ⇒ Once settings are selected your high HEAT LEVEL and FAN SPEED LED's will flash while your stove goes through the initial start up cycle.
- ⇒ Upon completion of startup cycle, the stove will cycle between HEAT LEVEL 1 and the high setting selected (2 or 3 position) the HEAT LEVEL indicator light will light indicating its current setting.

#### **TO SHUT DOWN**

- ⇒ To turn off the appliance press the OFF touch pad per *section #4.7 "Starting Stove & Shutting Off Stove"*.

### **THERMOSTAT ON-OFF MODE**

In this mode the thermostat is set at the desired room temperature. If the room temperature drops below the level on the thermostat the stove will automatically light and operate at HEAT LEVEL setting 1,2 or 3 until the temperature setting is reached at which time the stove will shut down.

#### **TO START**

- ⇒ Press START to activate the stove per *section #4.7 "Starting Stove & Shutting Off Stove"*.
- ⇒ Select desired HIGH heat output level (1,2 or 3 position) by pressing the START / HEAT LEVEL touch pad.  
NOTE: The Heat Level can be adjusted between setting 1-3 at any time.
- ⇒ Select desired FAN SPEED setting as described in *section #4.8 "Setting Fan Speed"*.

#### **TO SHUT DOWN**

- ⇒ To turn off the appliance press the OFF touch pad per *section #4.7 "Starting Stove & Shutting Off Stove"*.

**Note:** If in THERMOSTAT ON-OFF MODE the stove turns off and on frequently, we suggest you turn the HEAT LEVEL to a lower setting so that it stays on for longer periods. This will result in a more consistent room temperature.

# WOOD PELLETS SPECIFICATIONS

## PELLET QUALITY

The performance of your pellet appliance is greatly affected by the type and quality of wood pellets burned. Your Hearthland Stove is designed to burn wood pellets that meet Pellet Fuel Institute standards for "Premium" or "Standard" quality wood pellets. Wood pellets falling below or outside these standards will result in reduced performance. Note: Store wood pellets in a dry location to prevent them from absorbing excess moisture.

### PELLET FUEL INSTITUTE (PFI) PELLET STANDARDS [www.pelletheat.org](http://www.pelletheat.org)

<b>Length:</b>	1.5 inches, maximum.
<b>Diameter:</b>	.235 to .312 inches, ( 1/4" to 5/16")
<b>Bulk Density:</b>	Not less than 40 lb per cubic foot.
<b>Fines:</b>	.2 lb. max. per 40lb. Bag shall pass through 1/8" screen.
<b>Salts:</b>	Less than 300 parts per million .
<b>Ash Content:</b>	- Premium Quality 1% by weight, maximum, (.3 lb per 40 lb bag of pellets.) - Standard Quality 3% by weight, maximum, (1.2 lb per 40 lb of pellets.)

**FINES:** Fines in pellets are small pieces of sawdust or broken down pellets that are small enough to pass through square mesh screen with 1/8" spacing. Pellets can break down from handling, transporting and/or storage. Fines adversely affect the pellet feed system and combustion system greatly increasing the requirements for periodic cleaning.

**SCREENING:** Excessive fines can be removed from pellets through a process called "screening". This can be accomplished by pouring pellets down an incline of 1/8" mesh screen into a container or hopper. This process will allow the good pellets to flow into the container while the fines fall through the mesh to be discarded.

**PELLET CONSUMPTION:** With Intelligent Temperature Controller (ITC), the pellet stove will regulate fuel consumption to maintain the exhaust temperature to a set level. Factors affecting consumption rate depend on factors such as:

- ⇒ **Fuel BTU Content:** Typically wood pellets contain 7,000 to 8,700 BTU's per pound. Higher BTU content will burn at a lower rate than lower BTU content pellets.
- ⇒ **FAN SPEED setting:** Higher FAN SPEED settings (room heat) will draw more heat from the heat exchanger, causing an increased fuel consumption rate than at lower FAN SPEED settings.
- ⇒ **Heat Exchanger Cleanliness:** Ash build-up on heat exchange tubes and heat exchange back panel will significantly reduce heat transfer to convection air causing fuel consumption rates to reduce. It is important that heat exchanger be kept clean for efficient heat transfer to convection air (room heat).
- ⇒ **Excessive Combustion Air:** Excessive combustion air will result in increased fuel consumption.
- ⇒ **Air Circulation:** Settings with good air circulation will yield more efficient heat transfer to convection air a resulting in increased fuel consumption over settings with poor air circulation.

HEAT LEVEL SETTING	CONVECTION FAN SPEED SETTING	PELLETS BURNED PER HOUR (lb/hour)*	FULL HOPPER BURN TIME (HOURS/70 LBS)
1	1	1.25	56 hours
2	1	2.92	24 hours
3	3	4.66	15 hours
4	4	5.80	12 hours

The following "***ROUGH GUIDE***" to pellet usage's may be useful in assessing your stove's operation.

## MAINTENANCE AND REQUIRED CLEANING

Proper care of your **Hearthland** pellet appliance is required for peak, sustained performance. The need for and frequency of cleaning depends on the amount of pellets burned, pellet quality, length of time since last cleaning and the quality of combustion. While becoming acquainted with your new stove, **inspect your BURN GRATE, BURN POT, HEAT EXCHANGE TUBES, ASH DRAWER, and WINDOW daily and clean until a pattern of cleaning re-requirement is determined.** The following outlines aspects of required maintenance and provides performance frequency as a “rough guide.” As heating demands increase the need for stove and exhaust system cleaning and ash removal will increase.



### IMPORTANT

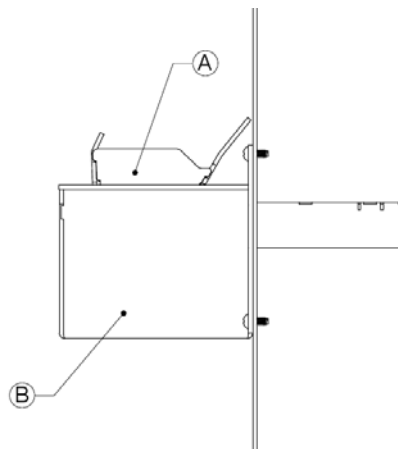
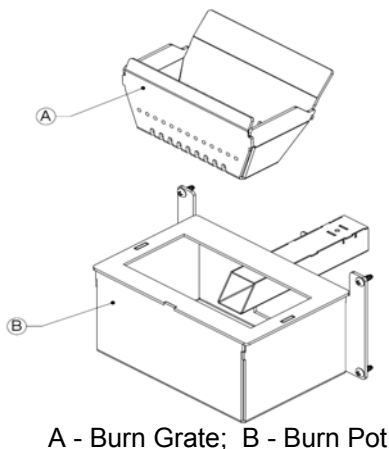
- Regular maintenance must be conducted for safe and efficient operation.
- Disconnect power to the stove if maintenance requires the opening of service panels.
- Conduct maintenance on a COLD appliance only.
- Never empty pellets from the burn pot into the hopper. Pellets that may appear cool may retain enough heat to ignite other pellets resulting in smoke or fire damage.
- When removing ash build-up, use an approved ash vacuum only. A cleaning brush can be used to loosen any ash build-up before vacuuming. **DO NOT USE A STANDARD HOUSEHOLD VACUUM OR SHOP VAC AS THE FILTERS WILL LEAK FINE PARTICLES OF ASH INTO THE HOME.**
- Do not use abrasive chemical cleaners on your stove as they will abrade surfaces and leave scratches.

### **CHECK BURN GRATE FOR CLINKERS** (APPROXIMATE FREQUENCY: 3—7 DAYS OR 280 LBS PELLETS)

If the flames seem to be coming only from the sides, or are orange/black in color, turn the stove off and check for Clinker build up in the grate. Silica in the fuel, along with other impurities, can cause clinkering. A clinker is a hard mass of silica formed in the burning process. Clinkering is a function of the fuel and not the stove, however it adversely affects the performance of the stove by blocking off the air passages of the burn grate. Even PFI approved pellet fuel may tend to form clinkers.

#### **To Clean: (Cold Stove Only)**

- ⇒ Open door, remove the burn grate, knock out any debris into the ash pan.
- ⇒ It may be necessary to scrape the holes clean.
- ⇒ Replace the burn grate making sure it is tightly seated in the burn pot.





# MAINTENANCE AND REQUIRED CLEANING (CONTINUED)

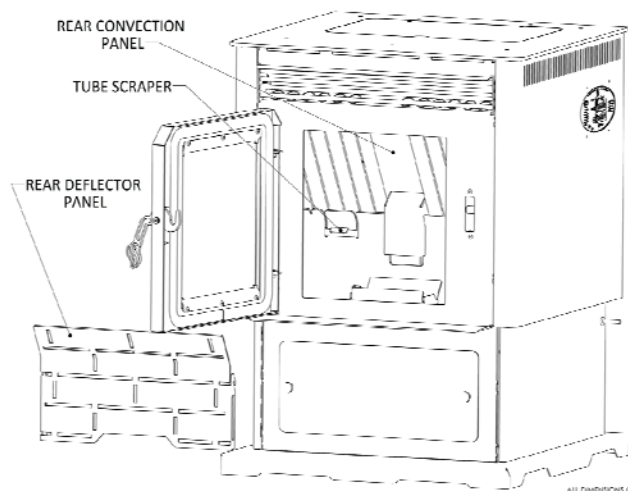
## **GLASS CLEANING:** (APPROXIMATE FREQUENCY: 3—7 DAYS OR 280 LBS PELLETS)

To enjoy a clear view of the fire you should clean your window as needed with a soft cloth or paper towel. Only clean the glass when the stove is off and cool. Use a Fireplace glass cleaner or vinegar & water to remove heavy build up from the window. An alternate glass cleaning method is to wipe the glass with water moistened newspaper that has been lightly dipped in fly ash.

## **HEAT EXCHANGER CLEANING:** (APPROXIMATE FREQUENCY: 3—7 DAYS OR 280 LBS PELLETS)

Under normal use, ash will build up on your stoves heat exchange tubes and rear convection panel. This ash will thermally insulate these components resulting in reduced heat transfer to convection air. To clean these components:

- ⇒ Shut down stove and allow stove to completely cool.
- ⇒ Open door and remove rear deflector panel.
- ⇒ Gripping the finger tab, slide tube scraper full length along heat exchanger tubes on both the right and left side.
- ⇒ Return tube scrapers to their lowest resting position.
- ⇒ Scrap exposed portions of the rear convection panel.
- ⇒ Replace rear deflector panel.



## **IMPORTANT**

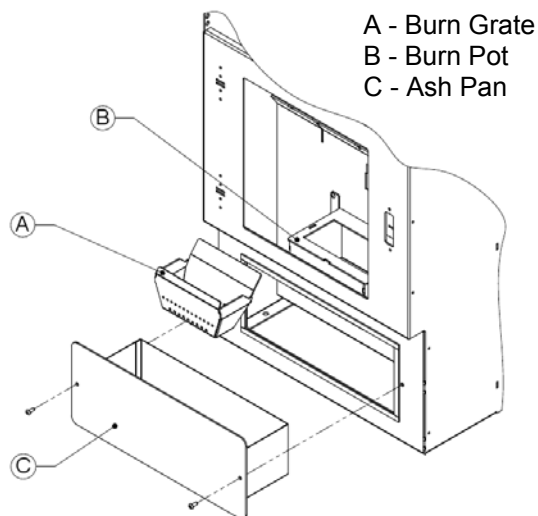
- Do not use commercial glass cleaners or oven cleaners as they tend to leave film on the glass that will accelerate the soiling of the glass.
- **DO NOT OPERATE STOVE WITH BROKEN GLASS AS LEAKAGE OF FLUE GASES MAY RESULT.**
- **Clean glass only when the stove is cold as hot glass will cause serious burns.**
- **NEVER perform any inspections, cleaning, maintenance or service on a HOT STOVE. Turn off stove and allow to cool before service.**

## **ASH PAN:** (APPROXIMATE FREQUENCY: MONTHLY OR 2000 LBS PELLETS)

Remove two fasteners and remove ash pan from stove. Dispose ashes into a metal container with a tight fitting lid. Before replacing ash pan, inspect gasketing to ensure it is not damaged and will provide an airtight fit when secured in position. If the gasket needs replacing, use an OEM gasket. This specifically designed gasket is engineered to make replacement clean and easy. See Section #10 "Replacement Parts List" When replacing the ash pan, ensure it is pushed tightly to stove and replace the two fasteners securely.

## **BURN POT:** (APPROXIMATE FREQUENCY: MONTHLY OR 2000 LBS PELLETS)

This is the "pot" where the pellets are burned in the grate. When removing your grate for cleaning, check the burn pot area for ash build up. Some ash will fall through the grate holes and build up under the grate. This needs to be cleaned out to prevent lack of air flow through the burn grate. DO NOT push the ash to the back of the opening, as this is not an ash trap and will effect or block off the air flow to the grate.



## MAINTENANCE AND REQUIRED CLEANING (CONTINUED)

### **DOOR GASKET:** (APPROXIMATE FREQUENCY: MONTHLY OR 2000 LBS PELLETS)

Inspect the main door gasket to ensure it is pliable and is not damaged providing an air-tight fit when secured in position. If the gasket needs replacing, use an OEM gasket. This specifically designed gasket is engineered to make replacement clean and easy. See Section #10 "Replacement Parts List"

### **ASH TRAP:** (APPROXIMATE FREQUENCY: ANNUALLY)

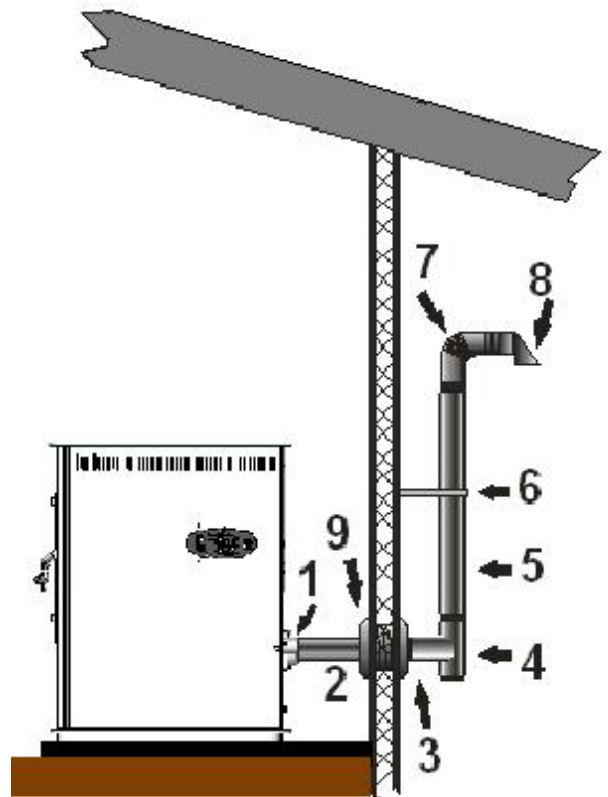
Remove the trap cover from behind the ASH PAN, this will expose the ash trap. Fly ash may be removed by vacuuming inside the trap area. It is also good to use a brush (bottle cleaner) to reach up and down to scrape the build up off the metal areas. Before replacing trap cover, inspect gasketing to ensure it is not damaged and will provide an air-tight fit when secured in position. If the gasket needs replacing, use an OEM gasket. This specifically designed gasket is engineered to make replacement clean and easy. See Section #10 "Replacement Parts List" Re-secure trap cover ensuring a snug air tight fit.

### **EXHAUST VENTING:** (APPROXIMATE FREQUENCY: ANNUALLY)

#### **Soot and Flyash: Formation and Need for Removal.**

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

- ⇒ Check the clean out tee (4) and elbows (7) in the exhaust system. To remove dust from the vent pipe, tap lightly on the pipe to dislodge any loose ash. Open the bottom of the "T" (4) to dump the ash, then vacuum as much of the ash out of the vent pipe as possible.
- ⇒ Use 3 or 4-inch diameter chimney brushes to pass through venting dislodging build-up.
- ⇒ If the exhaust system has a screen (8) on it, inspect and clean the screen. A plugged screen will shut off combustion air and cause a fire to die or burn poorly.



## IMPORTANT

- ⇒ Whenever any portion of the pellet venting is disconnected, the joints must be sealed, gas tight with High Temp (550°F) RTV silicone sealant and/or high heat foil tape.
- ⇒ **DISPOSAL OF ASHES:** Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled.

# MAINTENANCE AND REQUIRED CLEANING (CONTINUED)

**FAN MOTORS:** (APPROXIMATE FREQUENCY: ANNUALLY)

Clean the in-take on CONVECTION (ROOM AIR) fan as well as the air holes on the motors of both COMBUSTION and CONVECTION fans annually.

**FRESH AIR INTAKE:** (APPROXIMATE FREQUENCY: ANNUALLY)

Inspect periodically to be sure that it is not clogged with any foreign materials. A plugged screen will restrict or shut off combustion air and cause a fire to die or burn poorly.

**CHECK AND CLEAN THE HOPPER:** (APPROXIMATE FREQUENCY: MONTHLY OR 2000 LBS PELLETS)

Check the hopper periodically to determine if there is any sawdust or pellets that are sticking to the hopper surface. Clean as needed. An excess build up of fines, will lead to improper feeding and possible auger jams. You may wish to allow your hopper to run empty, to aid inspection and reduce saw dust.

**GASKET INSPECTION:** (APPROXIMATE FREQUENCY: ANNUALLY)

Air leaks into the firebox will decrease the appliance's performance greatly, leading to excessive soot and inefficient combustion. If gasketing needs replacing, use an OEM gasket. This specifically designed gasket is engineered to make replacement clean and easy. *See Section #10 "Replacement Parts List"*

**GLASS GASKET:** (APPROXIMATE FREQUENCY: ANNUALLY)

On the Itasca, there is no gasket across the top or bottom edges of the glass. This .040" gap is to allow for an air wash aiding in keeping the glass clean. Check this area for build-up or obstructions and clean as needed. The gasketing found on glass sides does go completely around the glass corners on the top and bottom acting as a spacer for the glass. If gasketing needs replacing, use an OEM gasket. This specifically designed gasket is engineered to make replacement clean and easy. *See Section #10 "Replacement Parts List"* If replacing this gasket, ensure the gasket covers the entire side and approximately 1 inch of the top and bottom edges.

**STOVE PAINTED & PLATED SURFACES:** (APPROXIMATE FREQUENCY: MONTHLY OR 2000 LBS PELLETS)

These surfaces may be wiped down with a soft damp cloth.

# MAINTENANCE AND REQUIRED CLEANING (CONTINUED)

## **FALL START UP:**

Prior to lighting the first fire check the outside area around the exhaust and air intake systems for obstructions. Clean the screens on the exhaust system and the outside air intake pipe. Turn all controls on to make sure they are working prior to lighting the first fire. Clean and remove fly ash from exhaust venting.

## **SPRING SHUTDOWN:**

After the last burn in the Spring, remove pellets from the hopper and the auger. Scoop out the pellets then run the auger until the hopper is empty and pellets stop flowing. Vacuum out the hopper. Thoroughly clean the burn grate, burn box, ash drawer and ash traps. The **exhaust system** should be thoroughly cleaned. Remove the Exhaust Manifold access panel and clean the exhaust manifold and the Combustion Blower blades and housing. Inspect Exhaust Manifold access panel gasket and replace access panel. Leave unit unplugged for summer season for added electrical protection.

## **SERVICE CONTRACTS**

Many Hearthland Authorized Dealers as well as NFI or WETT Certified Pellet Specialists offer yearly customer service contracts. The advantages of these are they establish an ongoing, mutually beneficial relationship with a qualified service technician. Many will offer an end of the season service such as a through cleaning and equipment inspection and repair or replacement, if necessary.

# MANUAL IGNITION OF STOVE

In event of an inoperable Automatic Ignition System, the Hearthland stove can be started manually using the following procedure.

## MANUAL STOVE LIGHTING PROCEDURE

1. Place a small amount of a solid fuel fire starter, such as those made from sawdust and wax or use wood shavings, in the bottom of the burn grate.
2. Add a small handful of pellets to the starter material.
3. Add a small amount of fire starter over the pellets.
4. Light the fire starter.
5. Press **START** on the touch pad
6. Slowly close and latch the door.
7. If the fire goes out, press **STOP** on the touch pad and add more fire starter; re-light the fire; Press **START** and slowly close and latch the main door.
8. The **COMBUSTION FAN** (exhaust) will start and operate at full speed for a few seconds, then adjust to a lower setting.
9. The **CONVECTION FAN** (heating) will start and the LED will go solid on LOW setting
10. The **AUGER CYCLE** LED will go solid for 3 seconds, indicating signal being sent to auger motor.
11. Adjust the **HEAT LEVEL** and the **FAN SPEED** to your desired settings you require upon completion of startup sequence.

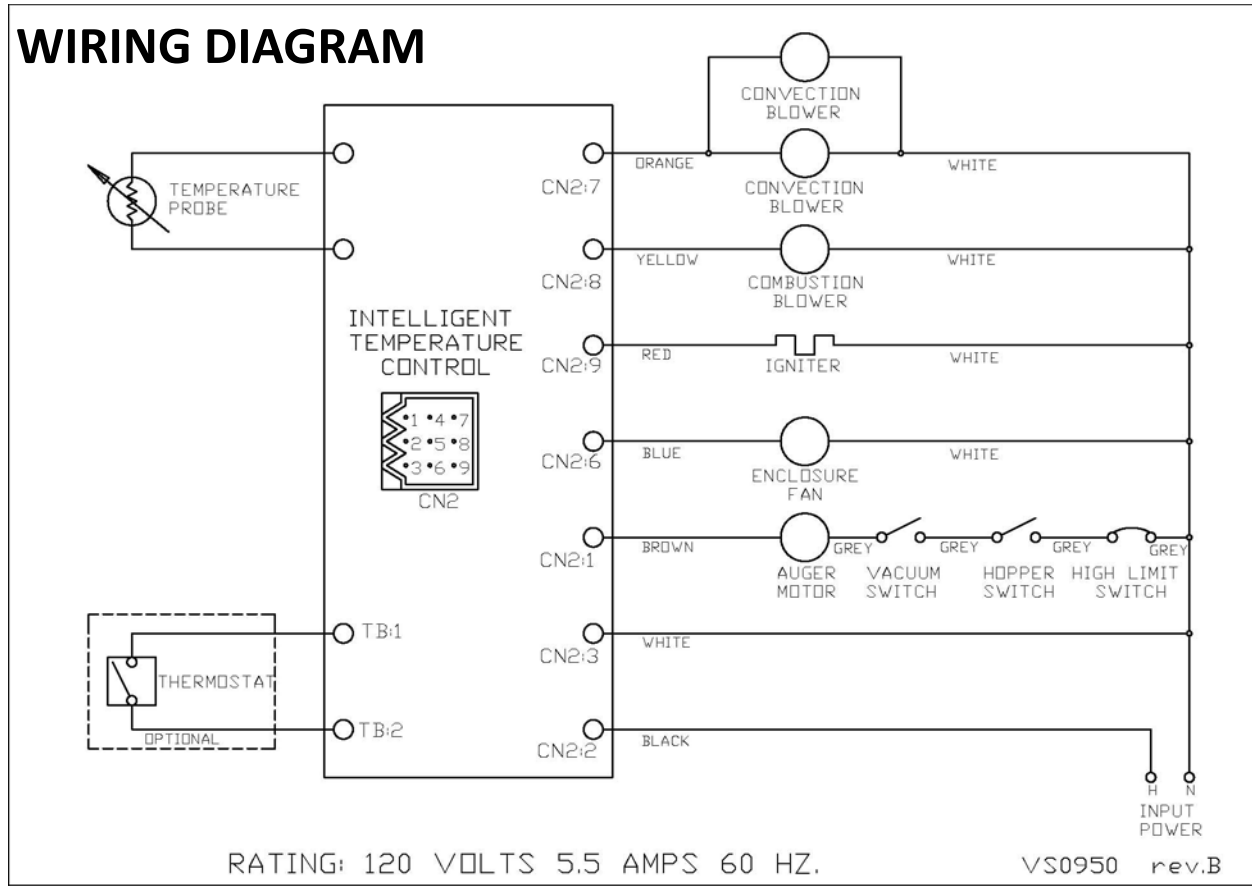


## IMPORTANT

**NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR 'FRESHEN UP' A FIRE IN THIS HEATER! KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IT IS IN USE.**

# WIRE DIAGRAM

## WIRING DIAGRAM



### ELECTRICAL COMPONENT SPECIFICATIONS

Auger Motor	120 V .45 A 60 Hz	Combustion Blower	120 V .94 A 60 Hz
Convection Blower (2)	120 V .7 A 60 Hz	Cabinet Cooling Fan	120 V .17 A 60 Hz
Igniter	120 V 2.5 A 60 Hz		



## IMPORTANT

- CAUTION:** MOVING PARTS MAY CAUSE INJURY! DO NOT OPERATE WITH SIDE OR REAR ACCESS PANELS REMOVED!
- DANGER:** RISK OF ELECTRIC SHOCK! DISCONNECT POWER BEFORE SERVICING UNIT!
- WARNING:** HOT PARTS! DO NOT OPERATE WITH SIDE OR REAR ACCESS PANELS REMOVED!

# TROUBLESHOOTING

Proper cleaning, maintenance and the use of clean, dry, quality fuel will prevent the more common stove operational problems. However, when your stove is simply operating poorly or not at all, the following trouble shooting tips may be helpful.

The following is not a exhaustive list. For more details or updated information please check our website [www.Hearthlandproducts.com](http://www.Hearthlandproducts.com), contact your local authorized Dealer or **Hearthland Products Customer Service** at 1-888-883-2260.



## IMPORTANT

- **Disconnect the electrical cord prior to opening the sides of your stove for any inspection, cleaning, maintenance or service work.**
- **NEVER perform any inspections, cleaning, maintenance or service on a HOT STOVE. Turn off stove and allow to cool before service.**

PROBLEM	CAUSE	SOLUTION
<b>Stove Will Not Start</b>	1. No electrical power.	*Ensure the stove is plugged in to a 120VAC electrical outlet and a Surge Protection unit. *Check outlet for electrical power and proper voltage. *Check spade connections from the stove power cord to the main wiring harness.
	2. Control Board	*Confirm mode of operation. <i>(See Section #4.12 "Setting Mode of Operation" for details)</i> *Confirm power to the board by pressing the START touch pad. Do any LED's light up? *Check the 9 pin wire connection to the board. *Inspect the board for any blown circuitry. Before replacing check for the cause of the blown circuit. *It could be a shorted wire or defective electrical component. *Inspect the main wire harness, connections and wire.
	3. No Fuel feed.	*Ensure the hopper is filled with fuel. *Check the Auger Cycle LED on the control, if flashing rapidly, this indicates a vacuum problem, hopper lid open or over temperature error. *Ensure door is closed and securely latched. An open door will trip the vacuum switch and disengage the feed auger. *Check vacuum hose for blockage or disconnection *Listen for a faint intermittent hum of an operating feed auger motor. The motor only runs for 3 seconds at a time. *Check for possible jam, clean out drop chute area. *Ensure the hopper lid is closed. *Ensure ash pan is tightly secured.

## TROUBLESHOOTING (CONTINUED)

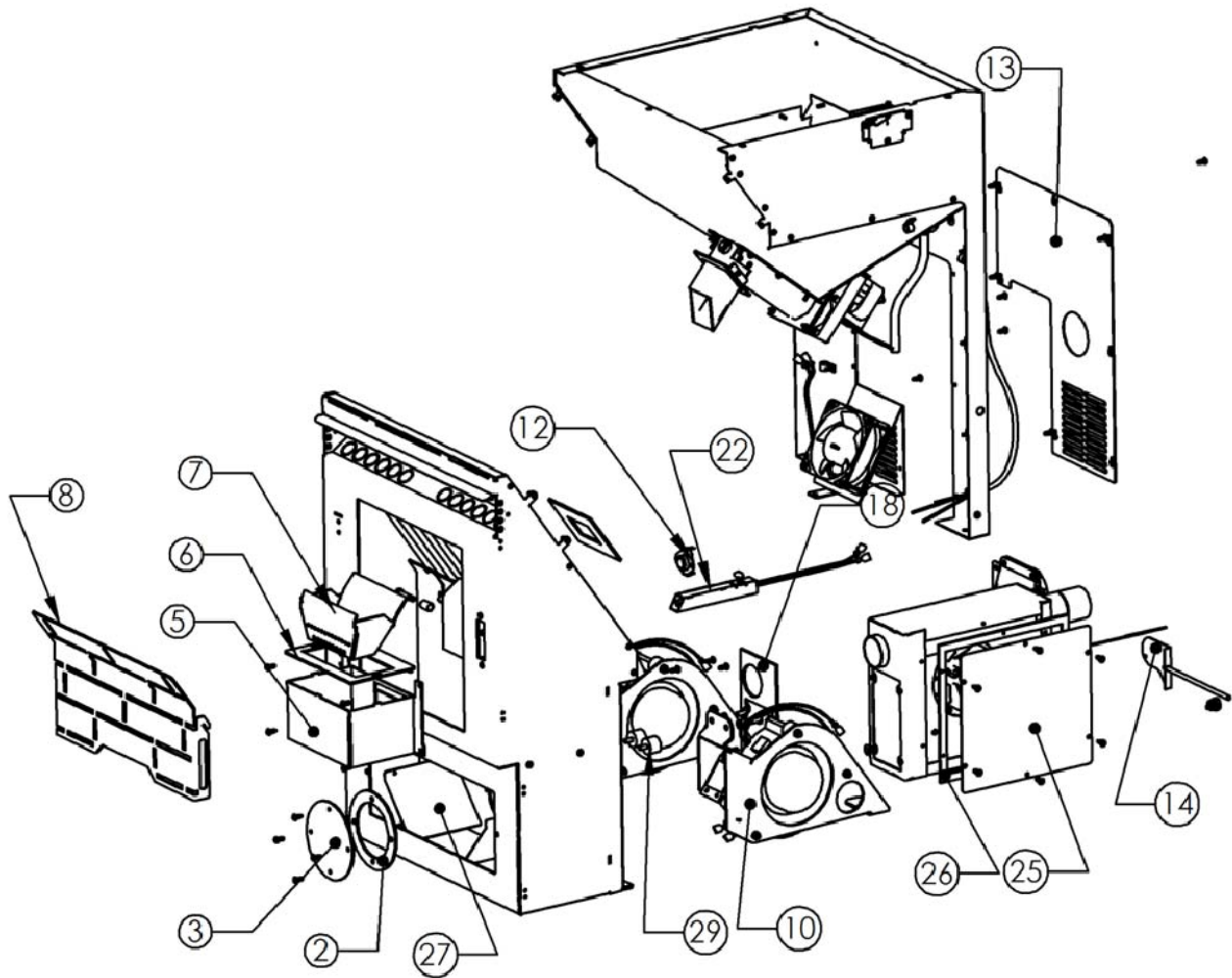
PROBLEM	CAUSE	SOLUTION
<b>Stove Will Not Start (continued)</b>	4. Air Inlet Damper setting	*Check for proper setting. Too much air or not enough air will effect starting time. *Check for blockage in the air intake connector and fresh air intake.
	5. Excessive negative pressure in the room	*Balance pressure in the room by opening a window. *Turn off fan forced exhaust systems.
	6. Clogged exhaust fan or exhaust system	*Inspect and clean venting. *Inspect, remove and clean exhaust fan. *Check air passage below and behind the burn grate area.
	7. Defective exhaust fan	*Check for operation of the exhaust blower.
<b>Fuel feeds into the burn grate but will not start. Burn grate fills with fuel and then shuts down.</b>	1. Burn Grate is not installed or seated properly.	*Ensure grate is installed and seated properly.
	2. Burn Grate is clogged.	*Remove and inspect burn grate. Remove all ash and clinkers. *Ensure air holes are free of debris or build-up.
	3. Igniter is not glowing	*Remove burn grate, close door, and re-start the appliance. If the igniter does not glow red inside the tube it is defective. *Remove back panel and confirm wire connections and condition of wires. *If igniter is defective, the stove can be started manually. See manual lighting instructions.
	4. Air Inlet Damper setting, if igniter is glowing and burn grate is seated properly.	*Check for proper setting. Too much air or not enough air will effect starting time. *Check for blockage in the air intake connector and fresh air intake.
<b>Unit starts, fuel feeds and starts properly, but no heat output</b>	1. Control Board	*Increase HEAT LEVEL setting. *Turn Heating Fan speed down. *Confirm mode of operation. *Confirm proper operation of convection blowers.
	2. Air Inlet Damper setting	*Check the setting of the air damper. It may have been accidentally closed or opened all the way. *Follow "Fine Tuning" procedure in this manual.
	3. Fuel	*Check on quality or amount of fines found in the fuel and hopper. *Check the moisture content. *Try different brand or different batch.
	4. Setting	*Check air flow patterns, amount of insulation, Location, size of room, ceiling heights and obstructions.



## TROUBLESHOOTING (CONTINUED)

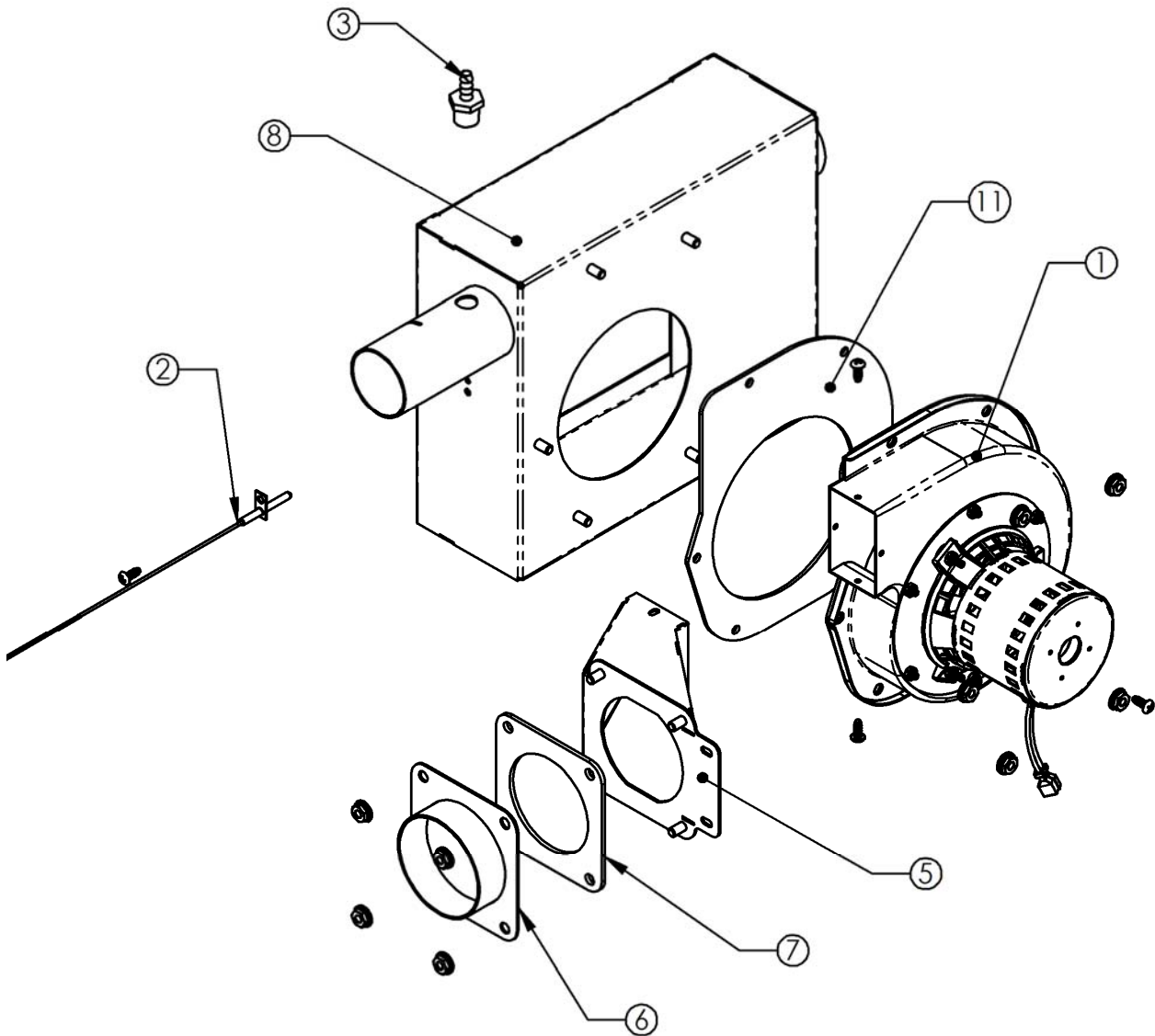
PROBLEM	CAUSE	SOLUTION
<b>Fire burns with a yellow flame. Fuel builds up in the burn grate. Window gets real dirty quickly.</b>	1. Insufficient combustion air.	<ul style="list-style-type: none"> <li>*Adjust the air inlet damper.</li> <li>*Check for blockage of air intake both inside as well as outside.</li> <li>*Confirm proper placement of burn grate.</li> <li>*Inspect and clean burn grate.</li> </ul>
	2. Fuel	<ul style="list-style-type: none"> <li>*Inspect fuel for amounts of fines and debris.</li> <li>*Change to dry clean fuel.</li> <li>*Use high quality premium grade fuel.</li> <li>*Adjust or fine tune feed rates.</li> </ul>
	3. Air Leaks	<ul style="list-style-type: none"> <li>*Ensure glass and gasket seated properly</li> <li>*Ensure door is close and latched securely</li> <li>*Check ash pan and gasket, secure and tight.</li> </ul>
	4. Combustion Fan	<ul style="list-style-type: none"> <li>*Check and clean ash build up on fan propellers and exhaust intakes and venting.</li> <li>*Check for blockages.</li> <li>*Check for proper voltage to the stove</li> <li>*Replace defective part and gasket.</li> </ul>
	5. Exhaust System	<ul style="list-style-type: none"> <li>*Check for blockage, ash build.</li> <li>*Inspect vent cap and clean out tee.</li> <li>*Too many elbows, too long of run, or change size</li> <li>*Protect venting from extreme weather elements.</li> </ul>
<b>Smoke or smoke smell spillage.</b>	1. Exhaust System	<ul style="list-style-type: none"> <li>*Hi-Heat RTV silicone all joints -even manufactured. Ensure venting is gas tight.</li> <li>*Inspect exhaust fan and gasket area, ensure a tight fit</li> <li>*Proper maintenance and cleaning.</li> </ul>
	2. Over Feeding. Fuel overflow-ing burn grate	<ul style="list-style-type: none"> <li>*Check air inlet damper for proper setting.</li> <li>*Reduce Heat Level setting.</li> </ul>
<b>The stove keeps going out.</b>	1. Fresh unburned fuel or powder like ash build up in the grate.	<ul style="list-style-type: none"> <li>*Check air inlet damper, may need more air.</li> <li>*Fine tune feed rate, to lower amount of fuel</li> <li>*Ensure good quality day fuel supply.</li> <li>*Proper maintenance and cleaning.</li> </ul>
	2. No fuel or ashes found in The burn grate	<ul style="list-style-type: none"> <li>*Adjust air inlet damper to reduce amount of air to burn grate.</li> <li>* Check auger operation.</li> <li>*Adjust control to increase fuel feed rate.</li> </ul>
<b>The stove will not shut off.</b>	1. Control	<ul style="list-style-type: none"> <li>*Press OFF touch pad, the stove will continue to run up to 30 minutes after the exhaust has cooled properly</li> <li>*Confirm mode of operation</li> </ul>
	2. Wall Thermostat	<ul style="list-style-type: none"> <li>*Ensure wall thermostat is turned down below the room temperature.(Thermostat On/Off Mode)</li> <li>*Unit will not shut off in the (Thermostat Modulated mode). You must press the OFF touch pad.</li> </ul>

# REPLACEMENT PARTS LIST



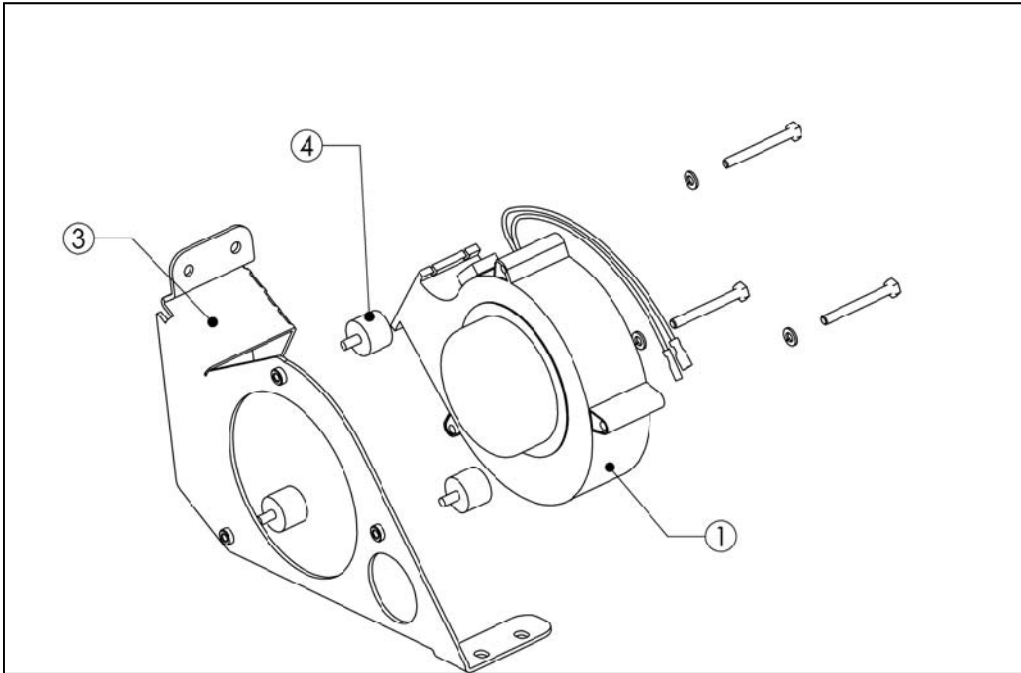
ITEM NO.	Default/QT Y.	PART NUMBER	Revision	DESCRIPTION
2	1	VS0901	B	FAN PLATE GASKET
3	1	VS0111	D	FAN ACCESS PLATE
5	1	VS0112	D	Burn Pot
6	1	VS0113	D	Burn Pot Lid
7	1	VS0114	D	BURN GRATE
8	1	VS0116	D	Decorative Plate
10	2	VS1925	E	CONVECTION BLOWER ASSY
11	1	VS2200	D	HOPPER FINAL ASSY
12	1	VS0906 (SE-L250)	A	250° SNAP SWITCH
13	1	VS0167	D	REAR ACCESS PANEL
14	1	VS1119	D	DAMPER ASSY
18	1	VS0936	C	EXHAUST MANIFOLD GASKET
22	1	VS1179	D	IGNITER ASSEMBLY, STOVE
25	1	vs0147	D	ACCESS PANEL, MANIFOLD
26	1	VS0940	C	MANIFOLD ACCESS GASKET
27	2	VS0184	D	ASH DIVERTER
29	4	VS0907	-	NEOPRENE VIBRATION MNT,

## REPLACEMENT PARTS LIST (CONTINUED)

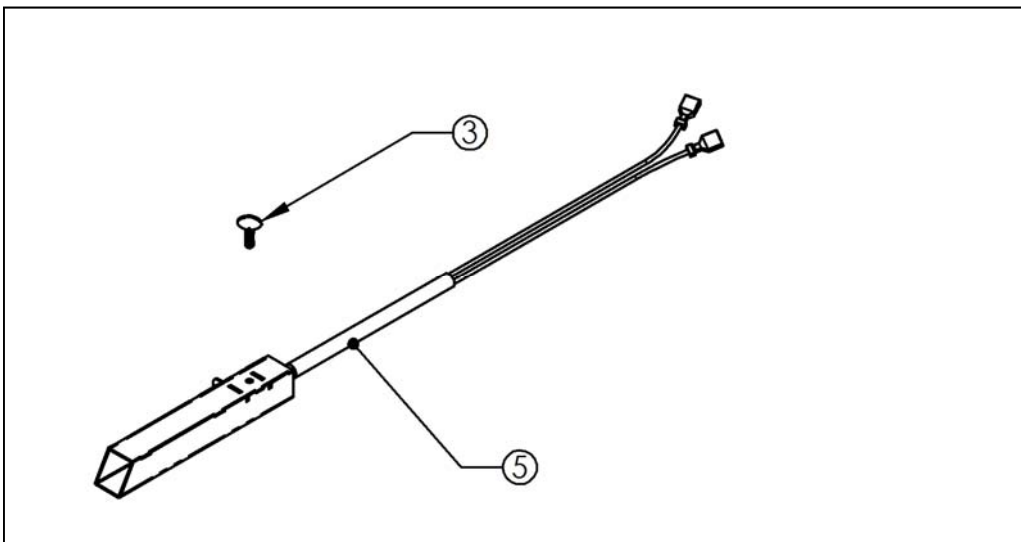


ITEM NO.	QTY.	PART NUMBER	Revision	DESCRIPTION
1	1	vs0923	B	COMBUSTION BLOWER
2	1	VS0927	A	RTD PROBE
3	1	VS0930		MALE HOSE BARB
5	1	VS1171	D	EXHAUST TRANSITION ASSY
6	1	VS1172	D	EXHAUST QUICK DISCONNECT
7	1	VS0949	B	EXHAUST MOUNT GASKET
8	1	VS1148	D	EXHAUST SUB-ASSY
11	1	VS0941	A	COMBUSTION BLOWER GASKET

## REPLACEMENT PARTS LIST (CONTINUED)

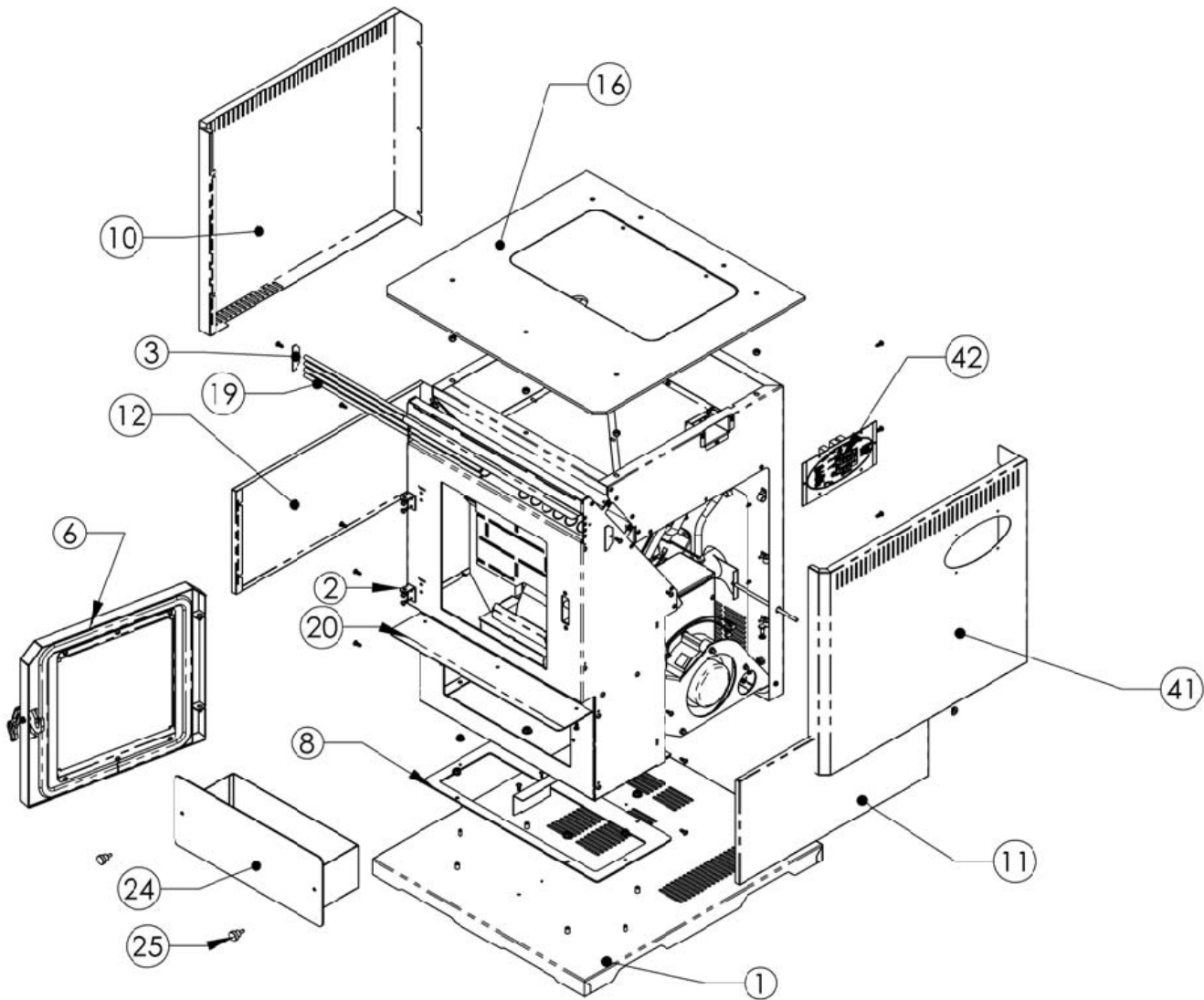


ITEM NO.	QTY.	PART NUMBER	Revision	DESCRIPTION
1	1	VS0925	-	CONVECTION BLOWER
3	1	VS0222	A	CONVECTION BRACKET
4	3	VS0907	-	NEOPRENE VIBRATION MNT



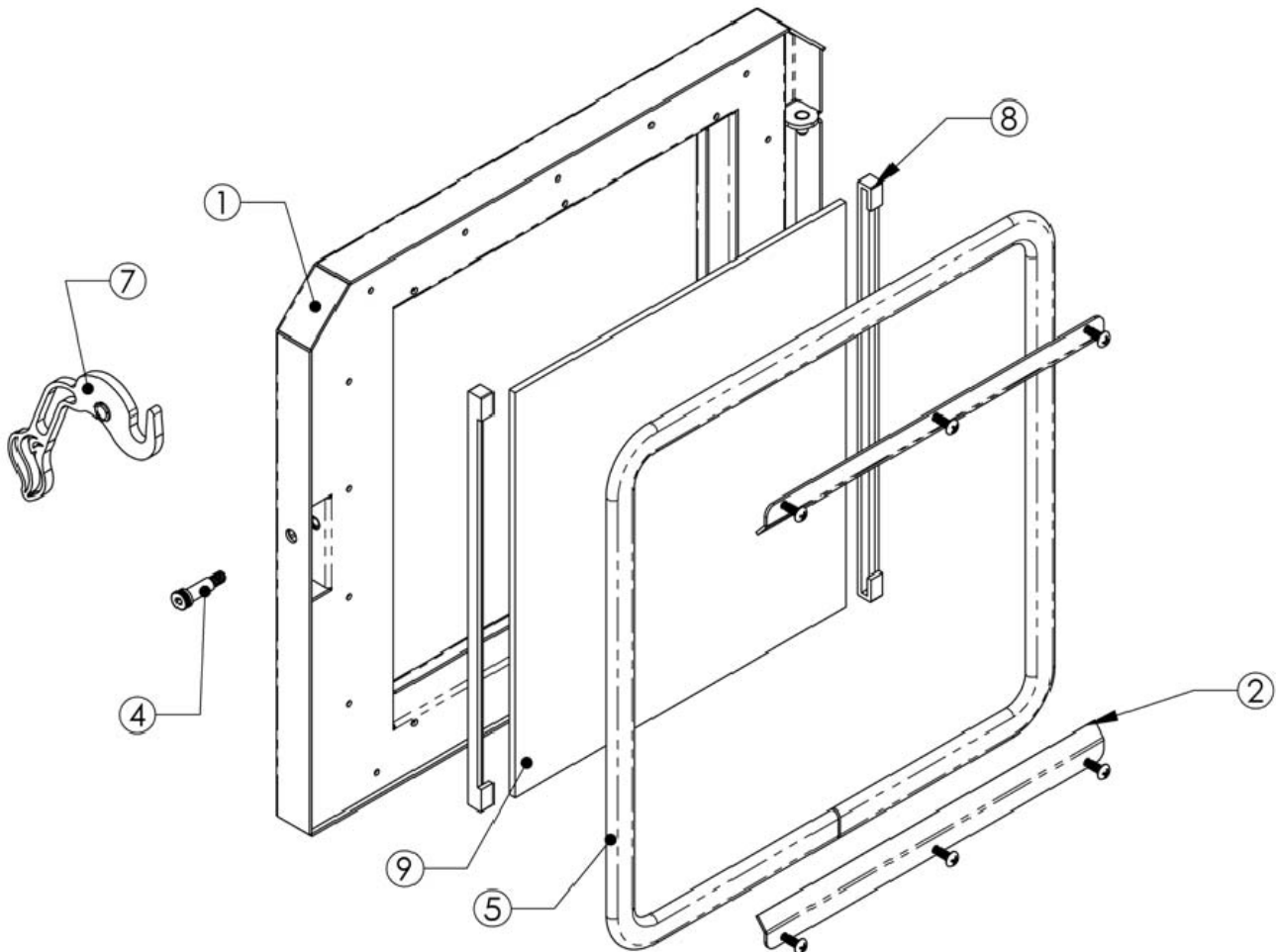
ITEM NO.	QTY.	PART NUMBER	Revision	DESCRIPTION
3	1	VG0929	3	THUMBSCREW
5	1	VS0955		IGNITER CARTRIDGE

## REPLACEMENT PARTS LIST (CONTINUED)



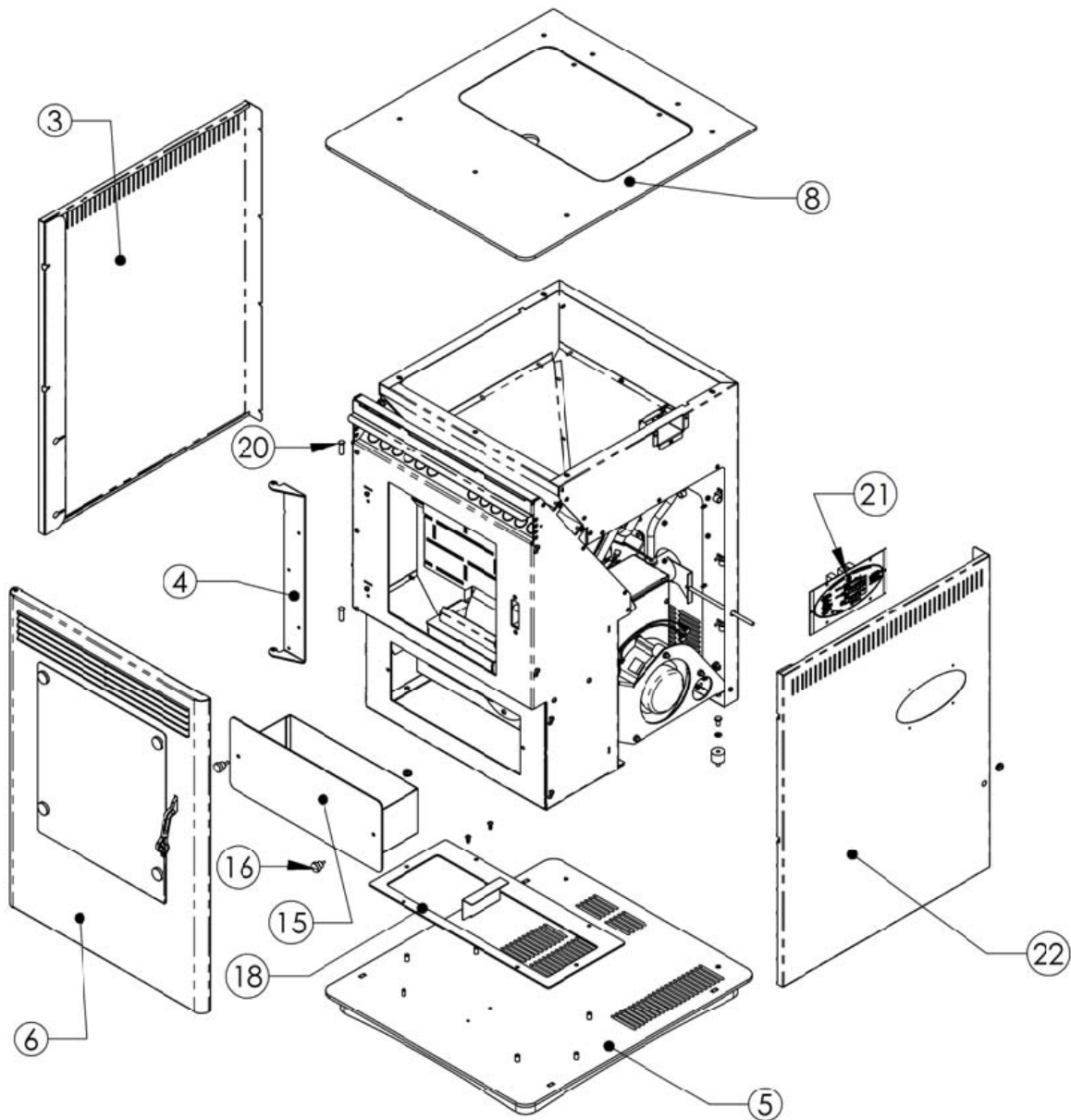
ITEM NO.	Default/ QTY.	PART NUMBER	Revision	DESCRIPTION
1	1	VS0301	D	3000 BASE ASSEMBLY
2	2	VS0108	D	3000 DOOR HINGE BRKT
3	2	VS0143	D	3000 GRILL BAR RETAINER
6	1	VS1118	D	3000 DOOR FINAL ASSY
8	1	VS0944	D	MAIN GASKET
10	1	vs0702	D	3000 SIDE PANEL, UPPER, L.H.
11	1	VS0725	D	3000, LOWER SIDE, R.H.
12	1	VS0726	D	3000, LOWER SIDE, L.H.
16	1	VS2720	D	3000 TOP ASSEMBLY
19	4	VS0144	E	3000 GRILL CROSS BAR
20	1	VS0117	E	3000 ASH LEDGE
24	1	VS1110	D1	ASH PAN ASS'Y
25	2	VS0998	-	ASH PAN FASTENER

## REPLACEMENT PARTS LIST (CONTINUED)



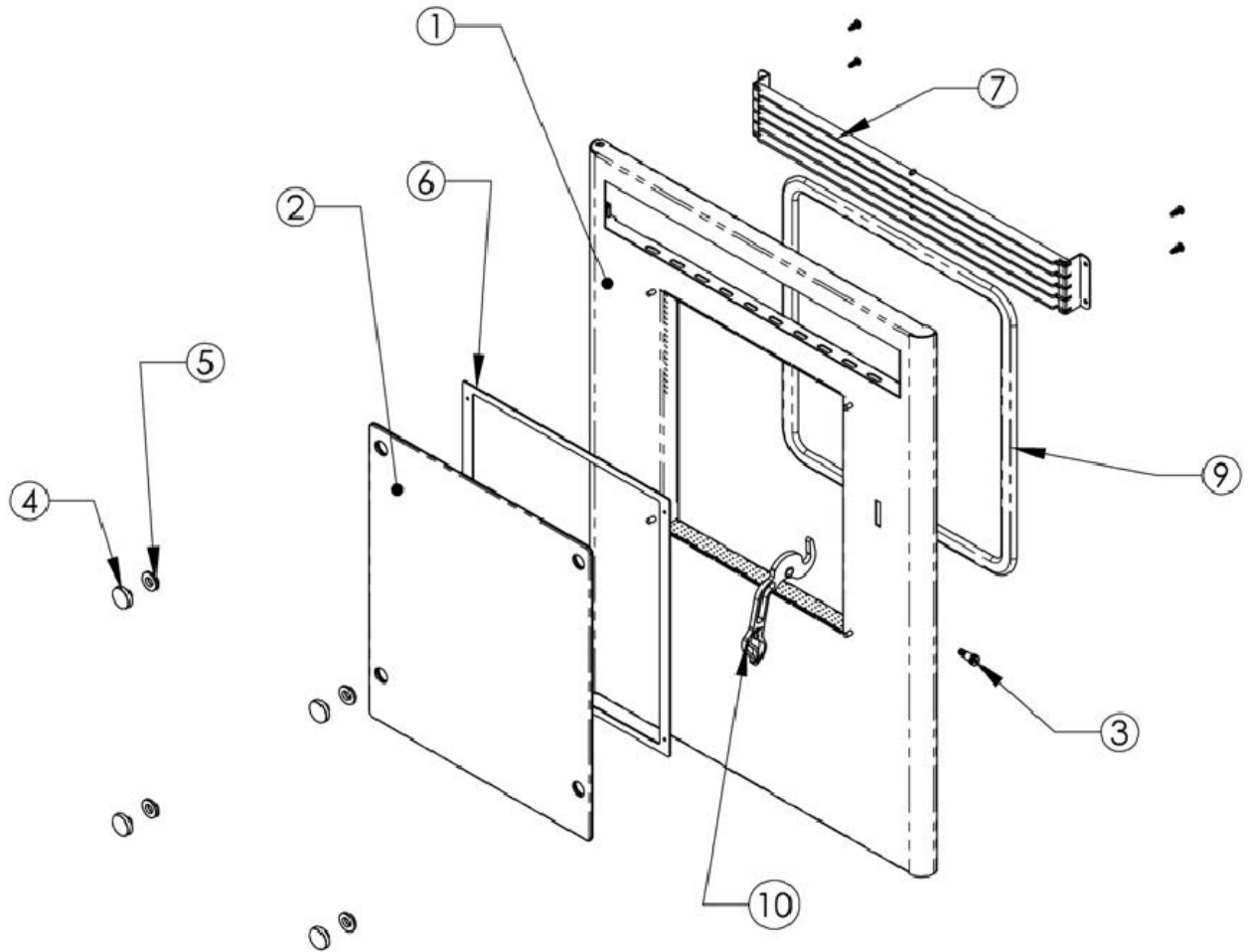
ITEM NO.	QTY.	PART NUMBER	Revision	DESCRIPTION
1	1	VS1132	D	3000 DOOR WELDMENT
2	2	VS0134	D	GLASS RETAINER
4	1	DS2198		3000 DOOR SHOULDER BOLT
5	1	VS0945	B	3000 DOOR CLIP GASKET
7	1	VS0178	D	DOOR HANDLE ASSEMBLY
8	2	VS0946-1	-	GLASS GASKET
9	1	VS0917	B	DOOR GLASS

## REPLACEMENT PARTS LIST (CONTINUED)



ITEM NO.	Default/ QTY.	PART NUMBER	Revision	DESCRIPTION
3	1	VS0602	D	4000 SIDE PANEL, L.H.
4	1	VS0160	D	4000 HINGE BRKT
5	1	vs1605	D	4000 BASE ASSY
6	1	vs1158	D	4000 DOOR FINAL ASSY
8	1	vs2612	D	4000 HOPPER TOP WITH DOOR ASSY
15	1	VS1110	D	ASH PAN ASS'Y
16	2	VS0998	-	ASH PAN FASTENER
18	1	VS0944	D	MAIN GASKET
20	2	DS4488	-	HINGE PIN
21	1	VS0921	-	BURN 251 CONTROLLER
22	1	VS0603	D	4000 SIDE PANEL, R.H.

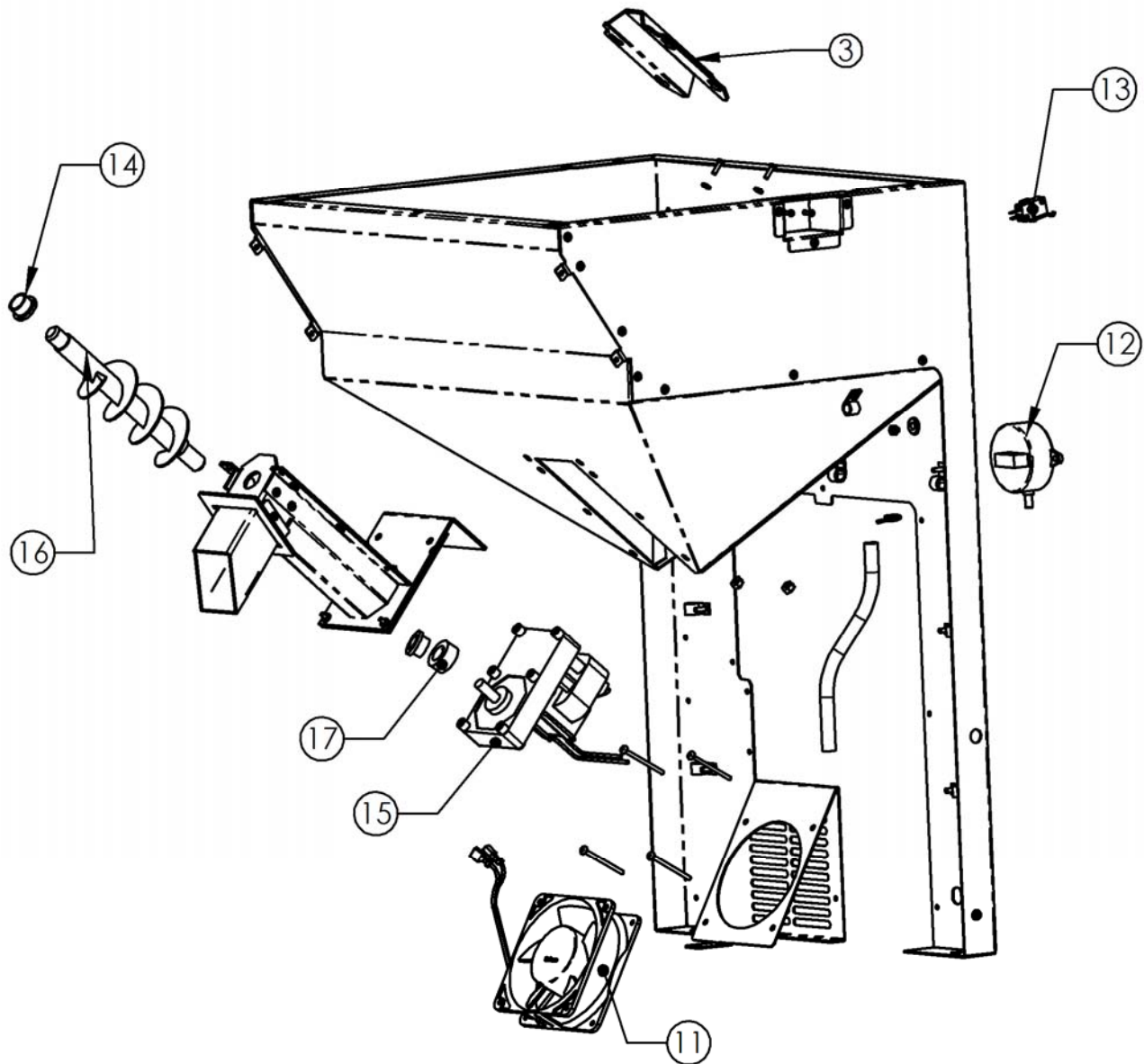
## REPLACEMENT PARTS LIST (CONTINUED)



ITEM NO.	QTY.	PART NUMBER	Revision	DESCRIPTION
1	1	VS1159	D	VS4000 DOOR SUB ASSY
2	1	VS0933-2	C	4000 VIEWING PANEL
3	1	DS2078		DOOR HANDLE SHOULDER BOLT
4	4	VS0934	E	GLASS RETAINING FASTENER
5	4	vs0935	-	CERAMIC INSULATOR
6	1	VS0948	B	4000 DOOR GASKET
7	1	VS1610	D	4000 GRILL HORIZONTAL
9	1	VS0945	B	4000 DOOR CLIP GASKET
10	1	VS0178	D	DOOR HANDLE ASSEMBLY



## REPLACEMENT PARTS LIST (CONTINUED)



ITEM NO.	QTY.	PART NUMBER	Revision	DESCRIPTION
3	2	VS0211	D	AUGER COVER
11	1	VS9902	D	COOLING FAN
12	1	VS0929	-	VACUUM SWITCH
14	2	VG0904	A	BUSHING
15	1	VS0908	A	GEAR MOTOR
16	1	VS9901	A1	PELLET AUGER, STOVE
17	1	VG0912	A	SHAFT RETAINER BUSHING
18		VS0913		HOPPER SWITCH

# LIMITED WARRANTY

The **Hearthland SERIES** wood pellet appliance, carries a five (5) year limited warrant for from the date of sale to the original owner against defects and workmanship on all steel parts, (excluding the burn grate), and two (2) years on electrical components. There specifically is no warranty on the paint, glass, burn grate, fire brick and all gaskets or against damage caused from corrosion.

**There is no written or implied performance warranty on *Hearthland SERIES* stoves as the manufacturer has no control over the installation, operations, cleaning, maintenance or the type of fuel burned.**

This limited warranty will not apply if your stove has not been installed, operated, cleaned and maintained in strict accordance with the manufacturer's instructions. Burning other than quality wood pellets may void the warranty. The warranty does not cover damage or breakage due to misuse, improper handling or modifications.

Your purchase must be registered with **HEARTH LAND PRODUCTS, LLC**. Registration card can be found online at [www.hearthlandproducts.com](http://www.hearthlandproducts.com) under the Product Support tab.

**All claims under this limited warranty must be made through the dealer where your stove was purchased.** If an inspection by the dealer indicates that a limited warranty claim is justified, and all conditions of this limited warranty have been met, the manufacturer's total responsibilities and liabilities shall be to repair or replace, at the manufacturer's option, the defective part(s). All costs of removal, shipment to and from the dealer or manufacturer, any losses during shipment and reinstallation, and any other losses due to your stove being re-moved, shall be covered by the owner of the stove.

**NEITHER THE MANUFACTURER, NOR THE SUPPLIERS TO THE PURCHASER, ACCEPTS RESPONSIBILITY, LEGAL OR OTHERWISE, FOR THE INCIDENTAL OR CONSEQUENTIAL DAMAGE TO THE PROPERTY OR PERSONS RESULTING FROM THE USE OF THIS PRODUCT. ANY WARRANTY IMPLIED BY LAW, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANT-ABILITY OR FITNESS, SHALL BE LIMITED TO ONE (1) YEAR FROM THE DATE OF ORIGINAL PURCHASE. WHETHER A CLAIM IS MADE AGAINST THE MANUFACTURER BASED ON THE BREACH OF THIS WARRANTY OR ANY OTHER TYPE OF WARRANTY EXPRESSED OR IMPLIED BY LAW, MANUFACTURER SHALL IN NO EVENT BE LIABLE FOR ANY SPECIAL, INDIRECT, CONSEQUENTIAL OR OTHER DAMAGES OF ANY NATURE WHATSOEVER IN EXCESS OF THE ORIGINAL PURCHASE PRICE OF THIS PRODUCT. ALL WARRANTIES BY MANUFACTURER ARE SET FORTH HEREIN AND NO CLAIM SHALL BE MADE AGAINST MANUFACTURER ON ANY ORAL WARRANTY OR REPRESENTATION.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations of implied warranties, so the limitations or exclusions set forth in this limited warranty may not apply to you. This limited warranty gives you specific legal rights and you may have other rights, which vary from state to state.

## Parts, Service and Returns

**It is Hearthland Products policy that NO pellet appliance be returned to any dealer without prior authorization from Hearthland Technical Service Department.**

We strongly suggest that if you do need to order any parts or options or require service, that you first deal with your local dealer. Many dealers do stock parts and options. The majority of the part names can be found within this manual.

If for any reason you do not have a local dealer, Hearthland Inc. is proud to offer the best technical and sales support in the industry. **Call TOLL FREE 1-888-883-2260**

## Additional Hearthland Products

[www.memphisgrills.com](http://www.memphisgrills.com)  
[www.natureswaybbqpellets.com](http://www.natureswaybbqpellets.com)



## Warranty and Registration Card

Complete and return this Product Registration Card within 30 days of purchase to register your warranty.

**THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.**

First Name \_\_\_\_\_

Last Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip Code \_\_\_\_\_

Model \_\_\_\_\_

Serial Number \_\_\_\_\_

(Located on safety label on rear of stove)

**Include a copy of your dated sales receipt to complete the registration.**

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If you would like to receive periodic e-mails, promotions and other useful information, please write your e-mail address below. Your information will be used by Hearthland Products exclusively and will not be sold to any outside agency.

E-MAIL \_\_\_\_\_

Send Registration Card to the following address:

**Hearthland Products, LLC.  
Memphis Stove Warranty Registration  
9111 Grand Ave S.  
Bloomington, MN 55420**

Thank you for choosing a **Hearthland Wood Pellet Stove!**