



## MODEL: AW40

SAVE THESE INSTRUCTIONS THIS MANUAL WILL HELP YOU TO OBTAIN EFFICIENT, DEPENDABLE SERVICE FROM THE HEATER, AND ENABLE YOU TO ORDER REPAIR PARTS CORRECTLY. KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

**SAFETY NOTICE:** If this heater is not properly installed, a house fire may result. For your safety, follow the installation instructions. Never use make shift compromises during the installation of this heater. Contact local building or fire officials about permits, restrictions and installation requirements in your area.

**CAUTION!** Please read this entire manual before you install or use your new room heater. Failure to follow instructions may result in property damage, bodily injury, or even death. Improper Installation Could Void Your Warranty!

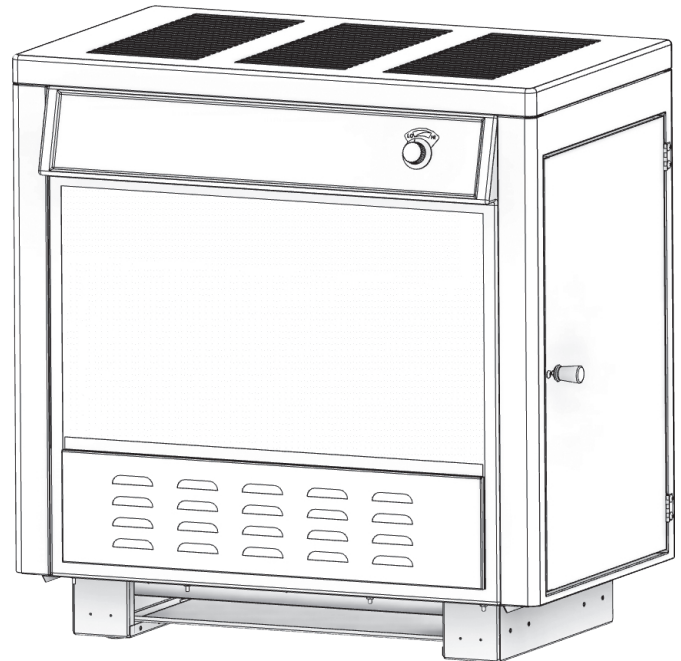
ALL PICTURES SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. ACTUAL PRODUCT MAY VARY DUE TO PRODUCT ENHANCEMENT.

This manual is subject to change without notice.

**U.S. Environmental Protection Agency**  
Certified to comply with 2020  
particulate emissions standards.

**⚠ CALIFORNIA PROPOSITION 65 WARNING:**

This product can expose you to chemicals including carbon monoxide, which is known to the State of California to cause cancer, birth defects and/or other reproductive harm. For more information, go to [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)



Report #: F20-596

Tested to ALT-125, ASTM E2515,  
ASTM E3053 and CSA B415.1-10  
Certified to: UL 1482-11 (R2015) and  
Certified to: ULC-S627-00  
Room Heater, Solid Fuel Type, Also  
For Use In Mobile Homes (USA Only)

**UNITED STATES  
STOVE CO**  
EST<sup>®</sup> 1869

United States Stove Company  
227 Industrial Park Rd.,  
South Pittsburg, TN 37380  
PH: (800) 750-2723  
[www.usstove.com](http://www.usstove.com)

853757B-2404J

The instructions pertaining to the installation of your wood stove comply with UL-1482 (R2015) and ULC-S627-00 (R2016) standards. This manual describes the installation and operation of the Ashley, AW40 wood heater. This heater meets the 2020 U.S. Environmental Protection Agency's cordwood emission limits for wood heaters sold after May 15, 2020. Under specific test conditions, this heater has been shown to deliver heat at rates ranging from 17,611 to 48,127 Btu/hr (0.91g/hr and efficiency of 72%). Note: The BTU ratings mentioned above are based on the EPA test protocol under specific test conditions. Our advertised BTU's are based on the first hour of operation at high burn rate burning cordwood.

Combustible:	Wood
Colors:	Metallic Black
Flue Pipe Diameter:	6" (153 mm)
Flue Pipe Type: (Standard Single Wall or Double Wall):	Black or Blued Steel 2100°F (650°C)
Minimum Chimney Height:	12' (3.7 m)
Maximum Log Length:	21" (534 mm)
Dimensions	
Overall: Depth x Width x Height:	21.5" x 32" x 33.5" (547 mm x 813 mm x 864 mm)
Combustion Chamber: Width x Depth:	11-3/8" x 24-3/4" (289 mm x 629 mm)
Volume: Cubic Feet:	2.32 ft³
Door Opening: Width x Height:	10" x 11-3/8" (854 mm x 289 mm)

#### CAUTIONS:

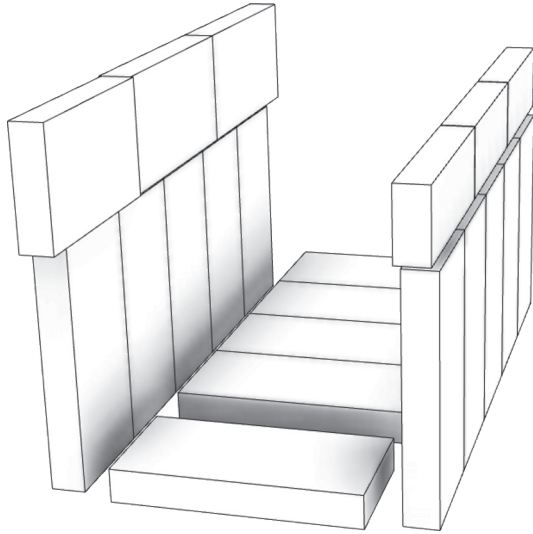
- Hot while in operation. Keep children, clothing and furniture away. Contact may cause skin burns.
- Do not use chemicals or fluids to ignite the fire.
- Do not leave the stove unattended when the door is slightly opened.
- Do not burn garbage, flammable fluid such as gasoline, naphtha or motor oil.
- Do not connect to any air distribution duct or system.
- Always close the door after the ignition.

Note: Register your product on line at [www.usstove.com](http://www.usstove.com). Save your receipt with your records for any claims.

# Assembly Instructions

## **UNPACK AND INSPECT**

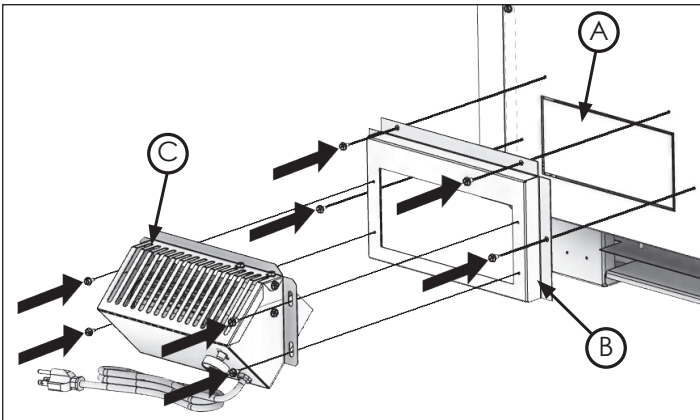
Remove the packing from the appliance and inspect for any damage. Ensure that the bricks are positioned correctly and not broken (see illustration for proper brick arrangement). Make sure that the baffle board, above the air tubes, is in place and undamaged.



## **BLOWER ASSEMBLY**

The blower assembly must be disconnected from the source of electrical supply before attempting the installation.

1. Remove the Panel (A) using tin snips or knock out using a hammer and chisel careful not to distort the mounting surface.
2. Attach the Blower Mounting Box (B) to the rear of the unit using four(4) of the supplied #10 screws.
3. Then mount the Blower Assembly (C) with the four (4) remaining screws.



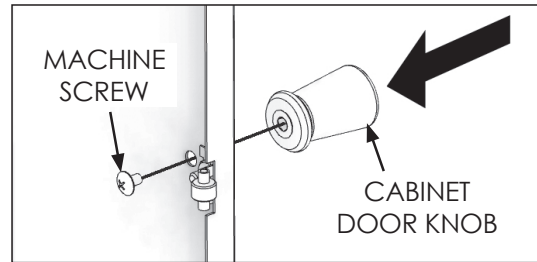
## **CABINET DOOR KNOB ASSEMBLY**

The cabinet door knob is mounted on the inside of the cabinet door for shipping purposes and must be removed and re-installed for proper usage. To get the cabinet door open, place your hand under the cabinet frame (right-hand side of the cabinet door) and pull out on the door.

Follow these instructions for door knob assembly:

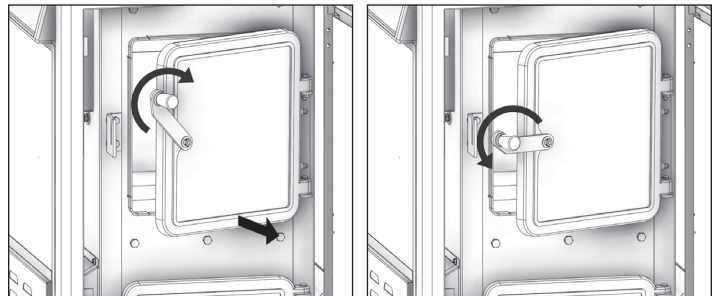
1. Remove the machine screw and the door knob.

2. Place the knob on the outside of the cabinet door, re-install the machine screw and tighten. Be careful not to strip out the threads in the handle.



## **HANDLE & FEED DOOR OPERATION**

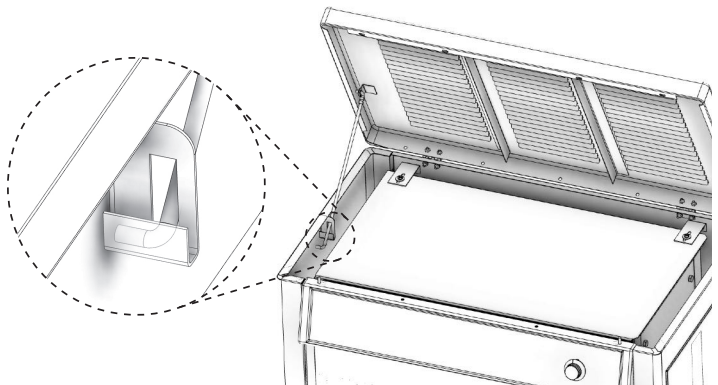
1. Lift the handle up to disengage the latch.
2. Crack open the feed door for approximately 10 seconds to allow excess heat to escape.
3. After approximately 10 seconds lower the handle and continue to pull the door open.



NOTE: During opening and closing of the feed and ash doors of this heater, it may seem that the fit of the door is "too tight". As the heater is fired, the gasketing "settles" or "seats" itself in the door. The tight fit at the factory and before the heater's initial firing is to ensure a good seal after the gasketing "settles".

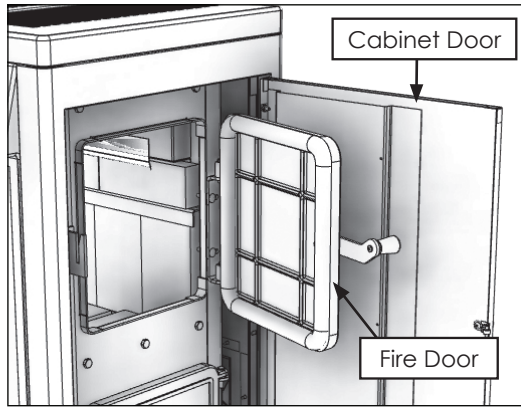
## **HOW TO OPEN THE TOP LID**

CAUTION! DO NOT OPEN OR CLOSE THE TOP WHEN THE HEATER IS HOT! To open, grasp the top at the front or on each corner and lift all the way up until the support rod stops the motion. Then gently lower the top allowing the support rod to settle in the cup, holding the top open. To close, lift the top until the support rod is out of the cup. Pull the rod forward and lower the lid closed.

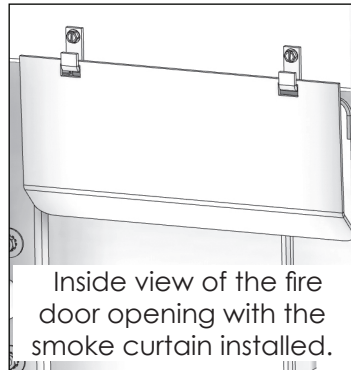


## **SMOKE CURTAIN INSTALLATION**

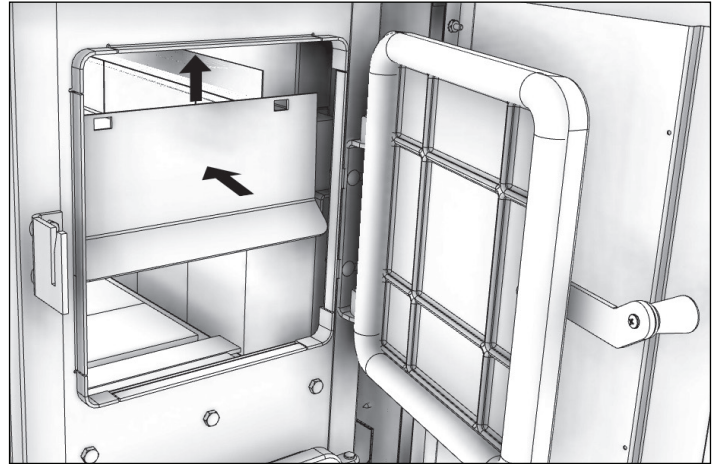
1. Open the cabinet door and the fire door.



2. Locate the two hooks inside the firebox above the fire door opening as shown.



3. Slide the smoke curtain through the fire door and hook into place. Note: the smoke curtain has a bend at the bottom. When placing the smoke curtain into place ensure the bend is facing toward the fire door as shown.



## **Installation**

### **SAFETY NOTICE**

- If this stove is not properly installed, a house fire may result. To reduce the risk of fire, follow the installation instructions.
- Consult your municipal building department or fire officials about permits, restrictions and installations requirements in your area.
- Use smoke detectors in the room where your stove is installed.
- Keep furniture and drapes well away from the stove.
- 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.
- In the event of a chimney fire, push the air control full closed to deprive the fire of oxygen. Call the fire department.
- Do not connect to any air distribution duct or system.
- A source of fresh air into the room or space heated shall be provided when required.

## **POSITIONING THE STOVE**

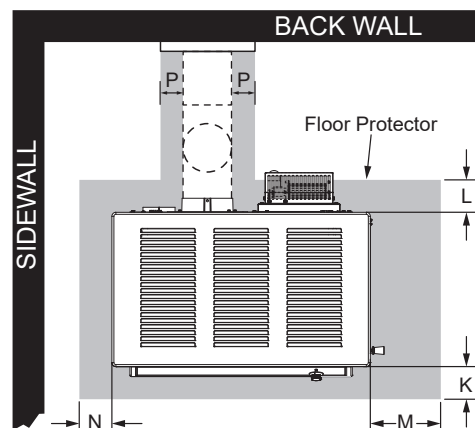
It is very important to position the wood stove as close as possible to the chimney, and in an area that will favour the most efficient heat distribution possible throughout the house. The stove must therefore be installed in the room where the most time is spent, and in the most spacious room possible. Wood stoves produce radiating heat, that is the heat we feel when we are close to a wood stove. A wood stove also functions by convection. Convection is the displacement of hot air accelerated upwards and its replacement with cooler air. If necessary, the hot air distribution from the stove may be facilitated by the installation of a blower. The wood stove must not be hooked up to a hot air distribution system since an excessive accumulation of heat may occur. A wood stove must never be installed in a hallway or near a staircase, since it may block the way in case of fire or fail to respect required clearances.

## FLOOR PROTECTOR

This heater must have a non-combustible floor protector with a minimum type 1 ember protection extending beneath the heater if the floor is constructed of combustible material. If a floor pad is used, it should be UL listed or equal. The floor protector should be large enough to extend under the stove and beyond each side as indicated. If there is a horizontal run of flue pipe, there needs to be floor protection under it that extends two inches beyond either side of the pipe.

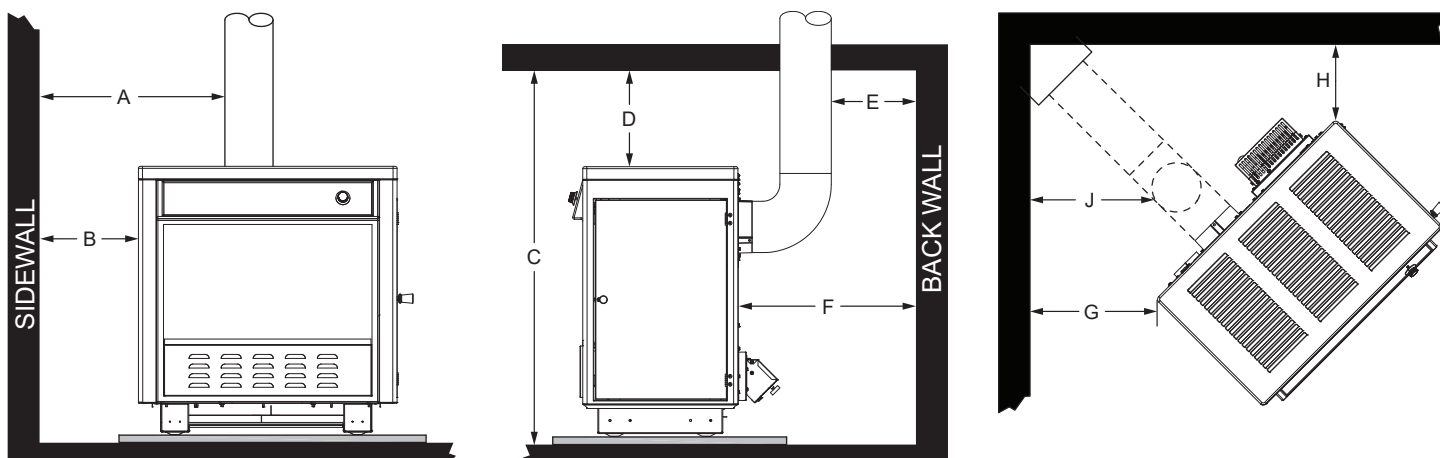
Key		in	mm
K	Front	8	204
L	Rear	8	204
M	Fuel Loading Side	16 (USA) 18 (CAN)	407 (USA) 458 (CAN)
N	Left Side	8	204
P	Flue Pipe	2	51

Note: When choosing a location for this unit, make sure there is enough space available to fully open the door.



## CLEARANCES TO COMBUSTIBLES

It is of utmost importance that the clearances to combustible materials be strictly adhered to during installation of the stove.



Key		in	mm
A	Sidewall To Flue	23	585
B	Sidewall To Stove	14	356
C	Ceiling Height	84	2134
D	Top Of Stove To Ceiling	50.5	1283
E	Back Wall To Flue	18	458
F	Back Wall To Stove	28	712
G	Wall To Corner (Angled Installation)	18	458
H	Wall To Corner Fuel Loading Side (Angled Installation)	18	458
J	Wall To Flue (Angled Installation)	18	458

- Floor to ceiling height must be at least 7' (2.13 m) in all cases.
- Do not place any combustible material within 4' (1.2 m) of the front of the unit.
- The clearance between the flue pipe and a wall are valid only for vertical walls and for vertical flue pipe.
- The chimney connector must not pass through an attic or roof space, closet or similar concealed space, a floor, or a ceiling.
- For Canadian installations, where passage through a wall, or partition of combustible construction is desired, the installation must conform to CAN/CSA-B365.
- A flue pipe crossing a combustible wall must have a minimum clearance of 18" (458 mm).
- To reduce flue clearances from combustible materials, contact your local safety department.
- The provision that clearances may only be reduced by means approved by regulatory authority



## **SPECIAL MOBILE HOME REQUIREMENTS (APPROVED FOR USE IN MOBILE HOMES (USA ONLY)**

**WARNING - DO NOT INSTALL IN A SLEEPING ROOM.**

**CAUTION - THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL, AND CEILING/ROOF MUST BE MAINTAINED.**

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

- The space heater is to be connected to a factory-built chimney conforming to UL 103, therefore it must be a Type HT (2100°F).
- The heater must be permanently attached to the floor.
- The heater must be electrically grounded to the steel chassis of the mobile home with 8 ga copper wire using a serrated or star washer to penetrate paint or protective coating to ensure grounding.
- When moving your mobile home, all exterior venting must be removed while the mobile home is being relocated. After relocation, all venting must be reinstalled and securely fastened.
- Outside air is mandatory for mobile home installation. See your dealer for purchasing.
- Check with your local building officials as other codes may apply.
- Only use the specified components listed in this manual for this unit. The use of components that are not meant for this unit can cause unsafe conditions.

## **COMBUSTION AIR ASSEMBLY INSTRUCTIONS (REQUIRED FOR MOBILE HOME INSTALLATIONS)**

This appliance requires a source of combustion air when installed in a mobile home.

If the building this unit is being installed in is of tight construction or has negative pressure problems, an outside source of air is needed. Below is a list of possible indicators that a source of outside combustion air may be required.

- The stove does not draw steadily, smoke rollout occurs, wood burns poorly, or back-drafts occur whether or not there is combustion present.
- Existing fuel-fired equipment in the house, such as fireplaces or other heating appliances, smell, do not operate properly, suffer smoke roll-out when opened, or back-drafts occur whether or not there is combustion present.
- Opening a window slightly on a calm (windless) day alleviates any of the above symptoms.
- The house is equipped with a well-sealed vapor barrier and tight fitting windows and/or has any powered devices that exhaust house air.
- There is excessive condensation on windows in the winter.
- A ventilation system is installed in the house.

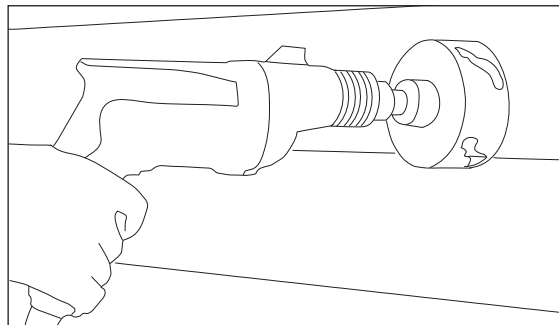
If an outside air intake is required, you may purchase a standard 4" fresh air kit from you local stove dealer.

### **4FAK INSTALLATION**

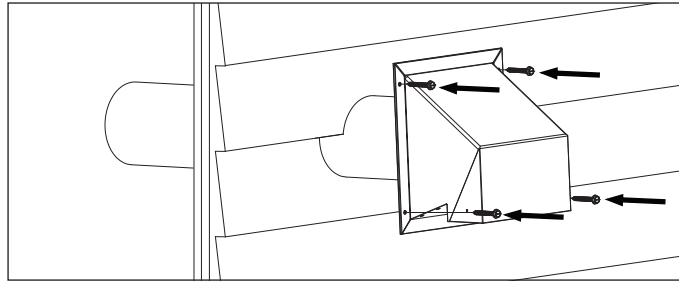
Installation of a fresh air kit is required when installing this stove inside a mobile home. Installation must adhere to all local codes. If after reading these instructions you have any doubt about your ability to complete the installation properly, you must obtain the services of a licensed heating and cooling contractor or certified stove installer.



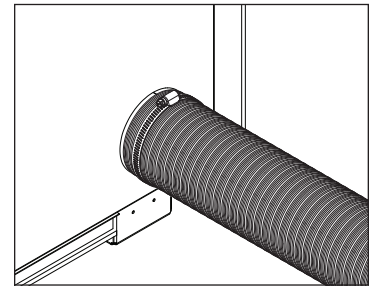
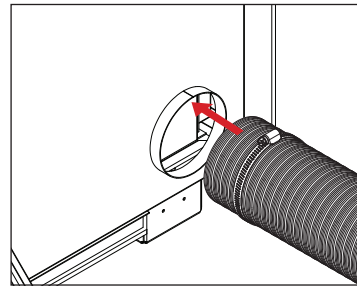
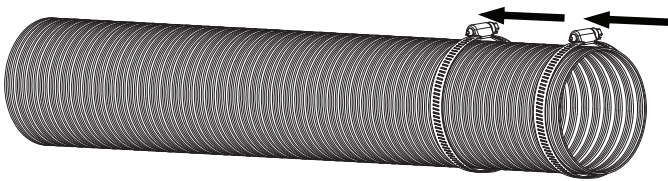
1. With the stove in the operating position, mark and drill a 5" hole through the wall at the desired point of entry. The point of entry should be at or below the level of the intake air tube on the stove.



- Slide the tail portion of the weather hood through the hole. Secure the weather hood with the provided screws at each of the four corners. Caulk around the edges of the hood and screws to seal. This task should be done after the stove has been installed and the exhaust piping routed. Try to position the hole for the air intake as near as possible to the stove.



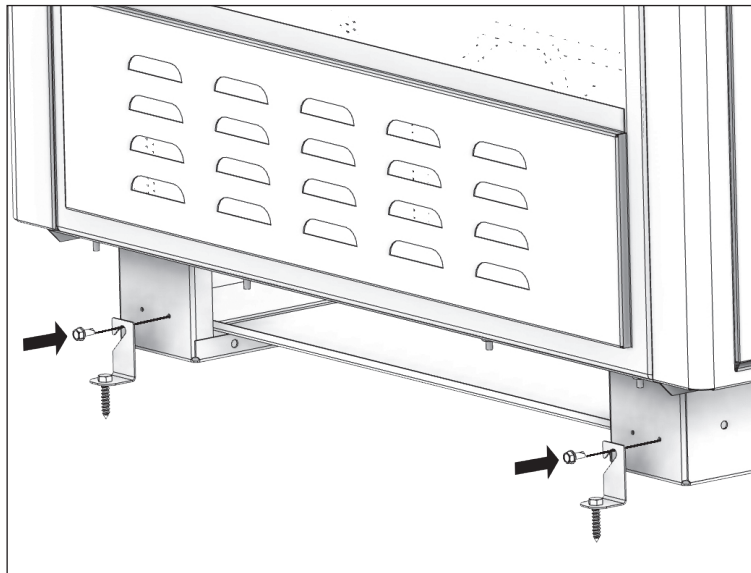
- Slide both hose clamps over the aluminium flex pipe. Then slide the flex pipe over the air intake tube of the stove. Next tighten the hose clamp over the end of the aluminium flex hose.



- Route the flex pipe to the through wall connection and slide the flex pipe over the tail piece. Apply the second hose clamp over the tail piece and tighten.

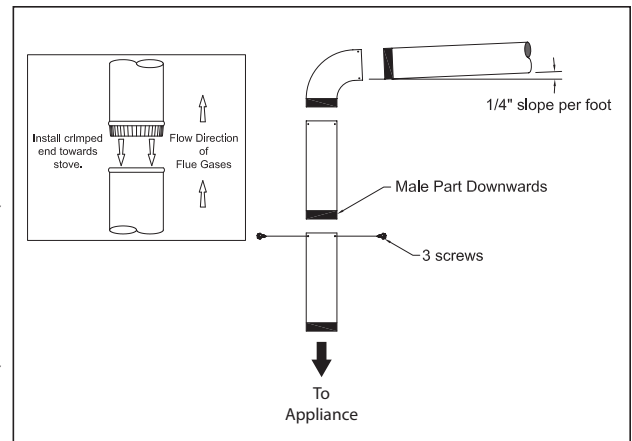
### **SECURING APPLIANCE TO THE FLOOR**

Use the designated holes to secure the unit to the floor as shown.



## **CHIMNEY CONNECTOR (STOVE PIPE)**

Your chimney connector and chimney must have the same diameter as the stove outlet (6"). If this is not the case, we recommend you contact your dealer in order to ensure there will be no problem with the draft. The stove pipe must be made of aluminized or cold roll steel with a minimum thickness of 0.021" or 0.53 mm. It is strictly forbidden to use galvanized steel. Your smoke pipe should be assembled in such a way that the male section (crimped end) of the pipe faces down. Attach each of the sections to one another with three equidistant metal screws. The pipe must be short and straight. All sections installed horizontally must slope at least 1/4 inch per foot, with the upper end of the section toward the chimney. Any installation with a horizontal run of chimney pipe must conform to NFPA 211. You may contact NFPA (National Fire Protection Association) and request the latest edition of the NFPA Standard 211. To ensure a good draft, the total length of the coupling pipe should never exceed 8' to 10' (2.4m to 3.04 m). Except for cases of vertical installation, cathedral-roof style where the smoke exhaust system can be much longer and connected without problem to the chimney at the ceiling of the room. There should never be more than two 90° elbows in the smoke exhaust system. Installation of a "barometric draft stabilizer" (fireplace register) on a smoke exhaust system is prohibited. Furthermore, installation of a draft damper is not recommended. Indeed, with a controlled combustion wood stove, the draft is regulated upon intake of the combustion air in the stove and not at the exhaust.

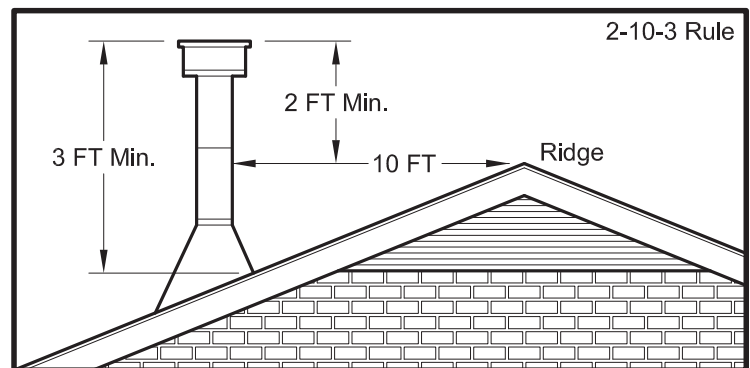


## **IMPORTANCE OF PROPER DRAFT**

Draft is the force which moves air from the appliance up through the chimney. The amount of draft in your chimney depends on the length of the chimney, local geography, nearby obstructions and other factors. Too much draft may cause excessive temperatures in the appliance. Inadequate draft may cause backpuffing into the room and 'plugging' of the chimney. Inadequate draft will cause the appliance to leak smoke into the room through appliance and chimney connector joints. An uncontrollable burn or excessive temperature indicates excessive draft.

## **CHIMNEY**

Take into account the chimney's location to ensure it is not too close to neighbors or in a valley which may cause unhealthy or nuisance conditions. Your wood stove may be hooked up with a 6" factory built or masonry chimney. If you are using a factory built chimney, it must comply with UL 103 or CSA-B365 standard; therefore it must be a Type HT (2100°F). It is extremely important that it be installed according to the manufacturer's specifications. If you are using a masonry chimney, it is important that it be built in compliance with the specifications of the National Building Code. It must be lined with fire clay bricks,



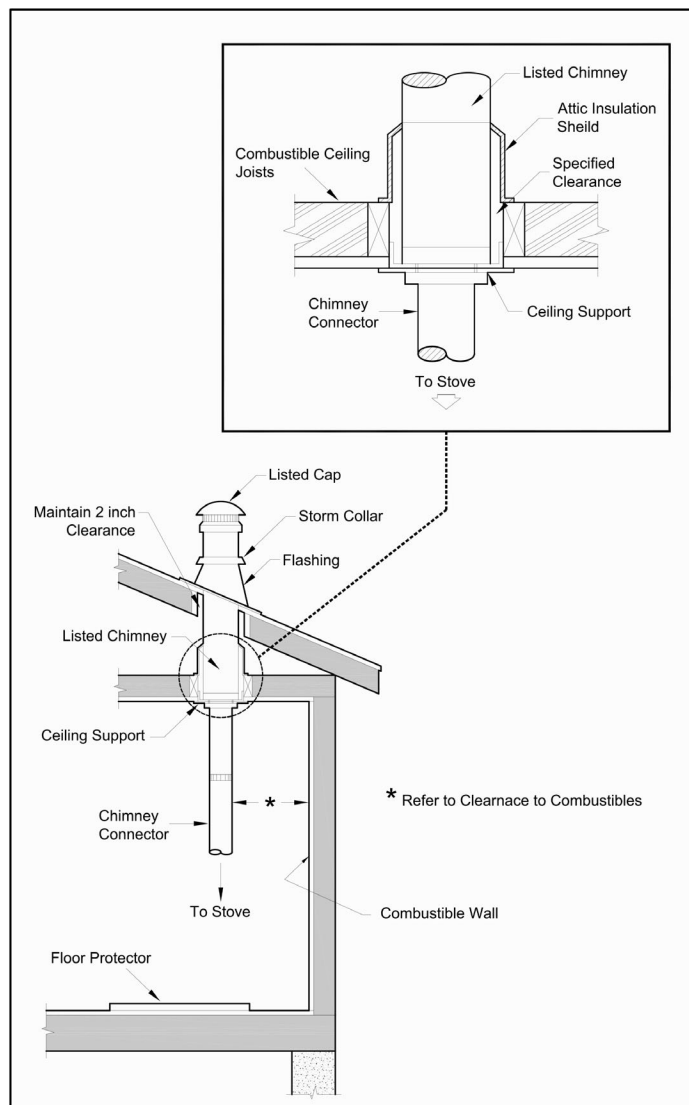
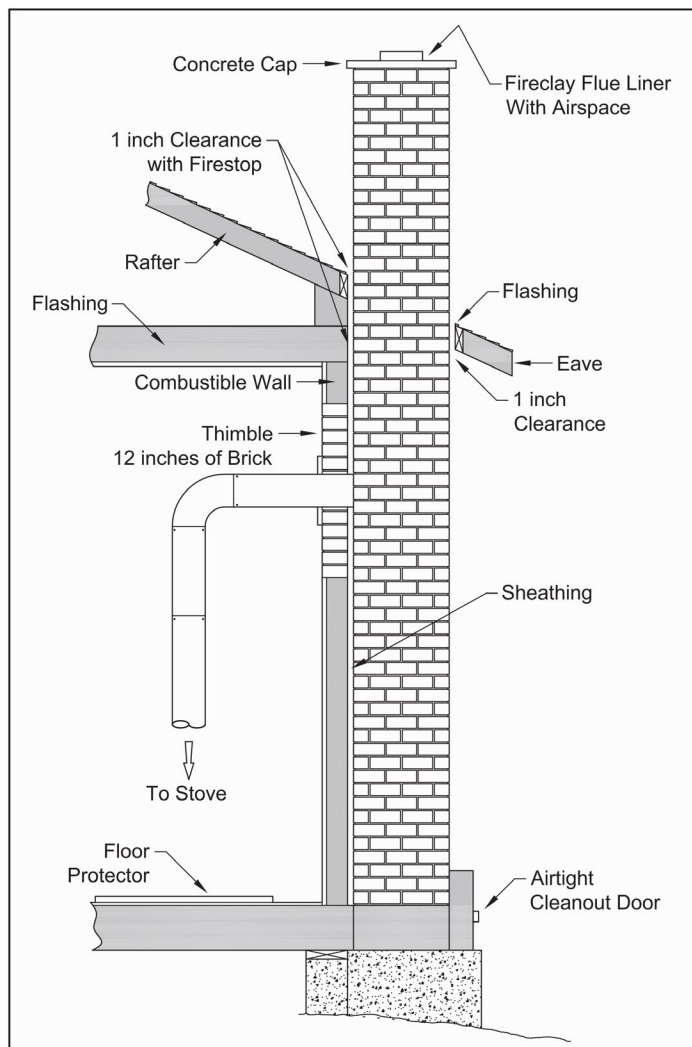
metal or clay tiles sealed together with fire cement. Note: Round flues are the most efficient. The interior diameter of the chimney flue must be identical to the stove smoke exhaust. A flue which is too small may cause draft problems, while a large flue favours rapid cooling of the gas, and hence the build-up of creosote and the risk of chimney fires. Note that it is the chimney and not the stove which creates the draft effect; your stove's performance is directly dependent on an adequate draft from your chimney. The following recommendations may be useful for the installation of your chimney:

- 1. DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.**
2. It must rise above the roof at least 3' (0.9m) from the uppermost point of contact.
3. The chimney must exceed any part of the building or other obstruction within a 10' (3.04m) distance by a height of 2' (0.6m).
4. Installation of an interior chimney is always preferable to an exterior chimney. Indeed, the interior chimney will, by definition, be hotter than an exterior chimney, being heated up by the ambient air in the house. Therefore the gas which circulates will cool more slowly, thus reducing the build-up of creosote and the risk of chimney fires.
5. The draft caused by the tendency for hot air to rise will be increased with an interior chimney.
6. Using a fire screen at the extremity of the chimney requires regular inspection in order to ensure that it is not obstructed thus blocking the draft, and it should be cleaned when used regularly.



## **FACTORY BUILT CHIMNEY**

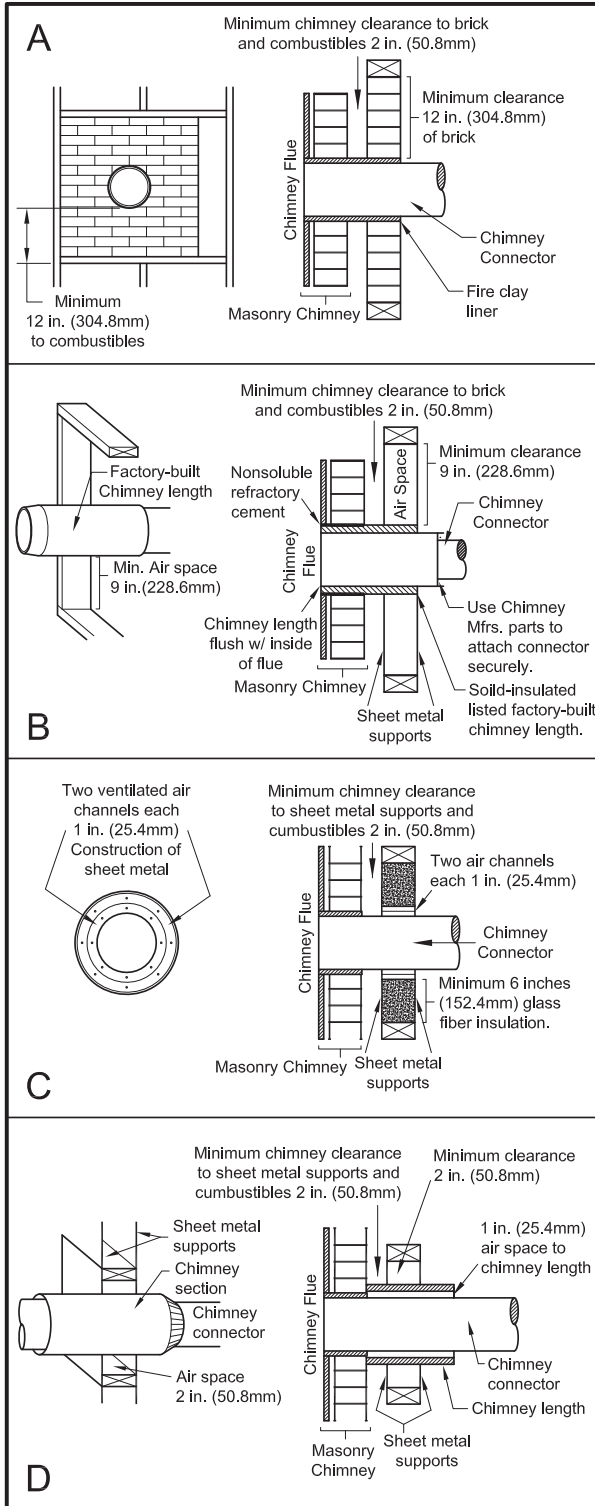
When a metal prefabricated chimney is used, the manufacturer's installation instructions must be followed. You must also purchase (from the same manufacturer) and install the ceiling support package or wall pass-through and "T" section package, firestops (where needed), insulation shield, roof flashing, chimney cap, etc. Maintain proper clearance to the structure as recommended by the manufacturer. The chimney must be the required height above the roof or other obstructions for safety and proper draft operation.



## **MASONRY CHIMNEY**

Ensure that a masonry chimney meets the minimum standards of the National Fire Protection Association (NFPA) by having it inspected by a professional. Make sure there are no cracks, loose mortar or other signs of deterioration and blockage. Have the chimney cleaned before the stove is installed and operated. When connecting the stove through a combustible wall to a masonry chimney, special methods are needed.

## COMBUSTIBLE WALL CHIMNEY CONNECTOR PASS-THROUGHS



### NOTES:

1. Connectors to a masonry chimney, excepting method B, shall extend in one continuous section through the wall pass-through system and the chimney wall, to but not past the inner flue liner face.
2. A chimney connector shall not pass through an attic or roof space, closet or similar concealed space, or a floor or ceiling.

Method A. 12" (304.8 mm) Clearance to Combustible Wall Member: Using a minimum thickness 3.5" (89 mm) brick and a 5/8" (15.9 mm) minimum wall thickness clay liner, construct a wall pass-through. The clay liner must conform to ASTM C315 (Standard Specification for Clay Fire Linings) or its equivalent. Keep a minimum of 12" (304.8 mm) of brick masonry between the clay liner and wall combustibles. The clay liner shall run from the brick masonry outer surface to the inner surface of the chimney flue liner but not past the inner surface. Firmly grout or cement the clay liner in place to the chimney flue liner.

Method B. 9" (228.6 mm) Clearance to Combustible Wall Member: Using a 6" (152.4 mm) inside diameter, listed, factory-built Solid-Pak chimney section with insulation of 1" (25.4 mm) or more, build a wall pass-through with a minimum 9" (228.6 mm) air space between the outer wall of the chimney length and wall combustibles. Use sheet metal supports fastened securely to wall surfaces on all sides, to maintain the 9" (228.6 mm) air space. When fastening supports to chimney length, do not penetrate the chimney liner (the inside wall of the Solid-Pak chimney). The inner end of the Solid-Pak chimney section shall be flush with the inside of the masonry chimney flue, and sealed with a non-water soluble refractory cement. Use this cement to also seal to the brick masonry penetration.

Method C. 6" (152.4 mm) Clearance to Combustible Wall Member: Starting with a minimum 24 gage (.024" [.61 mm]) 6" (152.4 mm) metal chimney connector, and a minimum 24 gage ventilated wall thimble which has two air channels of 1" (25.4 mm) each, construct a wall pass-through. There shall be a minimum 6" (152.4 mm) separation area containing fiberglass insulation, from the outer surface of the wall thimble to wall combustibles. Support the wall thimble, and cover its opening with a 24-gage minimum sheet metal support. Maintain the 6" (152.4 mm) space. There should also be a support sized to fit and hold the metal chimney connector. See that the supports are fastened securely to wall surfaces on all sides. Make sure fasteners used to secure the metal chimney connector do not penetrate chimney flue liner.

Method D. 2" (50.8mm) Clearance to Combustible Wall Member: Start with a solid-pak listed factory built chimney section at least 12" (304 mm) long, with insulation of 1" (25.4 mm) or more, and an inside diameter of 8" (2 inches [51 mm] larger than the 6" [152.4 mm] chimney connector). Use this as a pass-through for a minimum 24-gauge single wall steel chimney connector. Keep solid-pak section concentric with and spaced 1" (25.4 mm) off the chimney connector by way of sheet metal support plates at both ends of chimney section. Cover opening with and support chimney section on both sides with 24 gage minimum sheet metal supports. See that the supports are fastened securely to wall surfaces on all sides. Make sure fasteners used to secure chimney flue line.

# Fuel Recommendations

## WOODSTOVE UTILIZATION

Your heating appliance was designed to burn wood only; no other materials should be burned. Waste and other flammable materials should not be burned in your stove. Any type of wood may be used in your stove, but specific varieties have better energy yields than others. Please consult the following table in order to make the best possible choice.

TYPE	WEIGHT (LBS. CU. FT., DRY)	PER CORD	EFFICIENCY RANKING	SPLITS	MILLIONS BTU's/ CORD
Hickory	63	4500	1.0	Well	31.5
White Oak	48	4100	.9	Fair	28.6
Red Oak	46	3900	.8	Fair	27.4
Beech	45	3800	.7	Hard	26.8
Sugar Maple	44	3700	.6	Fair	26.2
Black Oak	43	3700	.6	Fair	25.6
Ash	42	3600	.5	Well	25.0
Yellow Birch	40	3400	.4	Hard	23.8
Red Maple	38	3200	.3	Fair	22.6
Paper Birch	37	3100	.3	Easy	22.1
Elm/Sycamore	34	2900	.2	Very Difficult	20.1
Red Spruce	29	1800	.1	Easy	16.1

It is EXTREMELY IMPORTANT that you use DRY WOOD only in your wood stove. The wood should have dried for 9 to 15 months, such that the humidity content (in weight) is reduced below 20% of the weight of the log. It is very important to keep in mind that even if the wood has been cut for one, two, or even more years, it is not necessarily dry, if it has been stored in poor conditions. Under extreme conditions it may rot instead of drying. This point cannot be over stressed; the vast majority of the problems related to the operation of a wood stove is caused by the fact that the wood used was too damp or had dried in poor conditions. These problems can be:

- ignition problems
- creosote build-up causing chimney fires
- low energy yield
- blackened windows
- incomplete log combustion

Smaller pieces of wood will dry faster. All logs exceeding 6" in diameter should be split. The wood should not be stored directly on the ground. Air should circulate through the cord. A 24" to 48" air space should be left between each row of logs, which should be placed in the sunniest location possible. The upper layer of wood should be protected from the element but not the sides.

## TESTING YOUR WOOD

- When the stove is thoroughly warmed, place one piece of split wood (about five inches in diameter) parallel to the door on the bed of red embers.
- Keep the air control full open and close the door. If ignition of the piece is accomplished within 90 seconds from the time it was placed in the stove, your wood is correctly dried. If ignition takes longer, your wood is damp.
- If your wood hisses and water or vapor escapes at the ends of the piece, your wood is soaked or freshly cut (green). Do not use this wood in your stove. Large amounts of creosote could be deposited in your chimney, creating potential conditions for a chimney fire.

# Operating Instructions

## CAUTIONS: HOUSE FIRE HAZARDS

- Do not store wood on floor protector, underneath stovepipe(s) if applicable, or anywhere within clearances to combustible surfaces specified for this appliance.
- Never operate with secondary tubes, fiber board, or insulation removed.

## OPERATING SAFETY PRECAUTIONS

- Never overfire this appliance by building excessively hot fires as a house/building fire may result. You are overfiring the appliance if it begins to glow or turn red.
- Never build excessively large fires in this type of appliance as damage to the firebox or smoke leakage may result.
- Hot while in operation. Keep children, clothing, and furniture away. Contact may cause skins burns. Do not touch the appliance until it has cooled.
- Provide adequate air for combustion to the room where the appliance is installed.
- Inspect chimney liner every 60 days. Replace liner immediately if it is rusting or leaking smoke into the room.
- Attempts to achieve heat output rates that exceed heater design specifications can result in permanent damage to the heater.

## WARNING: EXPLOSION HAZARD

- Never use chemicals, gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar flammable liquids to start or "freshen up" a fire in the appliance.
- Keep all flammable liquids, especially gasoline, out of the vicinity of the appliance - whether in use or in storage.

This heater is designed to burn natural wood only. Higher efficiencies and lower emissions generally result when burning air dried seasoned hardwoods, as compared to softwoods or to green or freshly cut hardwoods. DO NOT BURN:

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

Burning these materials may result in release of toxic fumes or render the heater ineffective and cause smoke. Dead wood lying on the forest floor should be considered wet, and requires full seasoning time. Standing dead wood can usually be considered to be about 2/3 seasoned. Splitting and stacking wood before it is stored accelerates drying time. Storing wood on an elevated surface from the ground and under a cover or covered area from rain or snow also accelerates drying time. A good indicator if wood is ready to burn is to check the piece ends. If there are cracks radiating in all directions from the center then the wood should be dry enough to burn. If your wood sizzles in the fire, even though the surface is dry, it may not be fully cured, and should be seasoned longer.

Do not burn manufactured logs made of wax impregnated sawdust or logs with any chemical additives. Manufactured logs made of 100% compressed sawdust can be burned, but be careful burning too much of these logs at the same time. Start with one manufactured log and see how the stove reacts. You can increase the number of logs burned at a time to making sure the temperature never rises higher than 475°F (246°C) on a magnetic thermometer for installation on single wall stove pipes or 900°F (482°C) on a probe thermometer for installation on double wall stove pipe. The thermometer should be placed about 18" (457 mm) above the stove. Higher temperatures can lead to overheat and damage your stove.





## **TAMPER WARNING**

This wood heater has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this wood heater in a manner inconsistent with operating instructions in this manual.

## **EFFICIENCIES**

Efficiencies can be based on either the lower heating value (LHV) or the higher heating value (HHV) of the fuel. The lower heating value is when water leaves the combustion process as a vapor, in the case of woodstoves the moisture in the wood being burned leaves the stove as a vapor. The higher heating value is when water leaves the combustion process completely condensed. In the case of woodstoves this would assume the exhaust gases are room temperature when leaving the system, and therefore calculations using this heating value consider the heat going up the chimney as lost energy. Therefore, efficiency calculated using the lower heating value of wood will be higher than efficiency calculated using the higher heating value. The best way to achieve optimum efficiencies is to learn the burn characteristic of your appliance and burn well-seasoned wood. Higher burn rates are not always the best heating burn rates; after a good fire is established a lower burn rate may be a better option for efficient heating. A lower burn rate slows the flow of usable heat out of the home through the chimney, and it also consumes less wood.

Notice: Use solid wood fuel only! Do not burn garbage, or flammable fluids. Do not use coal. This appliance is not designed to accommodate the air flow (draft) required to properly burn coal or coal products. Do not elevate the fire using grates or irons. Build the fire directly on the firebrick.

## **FUELING INSTRUCTIONS**

This wood stove has been certified by the US EPA to meet strict 2020 guidelines. To ensure this unit produces the optimal minimum emissions it is critical that only well-seasoned cordwood is burned (see the "Fuel Recommendations" section of this manual). Burning unseasoned wet wood only hurts your stove's efficiency and leads to accelerated creosote buildup in your chimney. Be considerate of the environment and only burn dry wood.

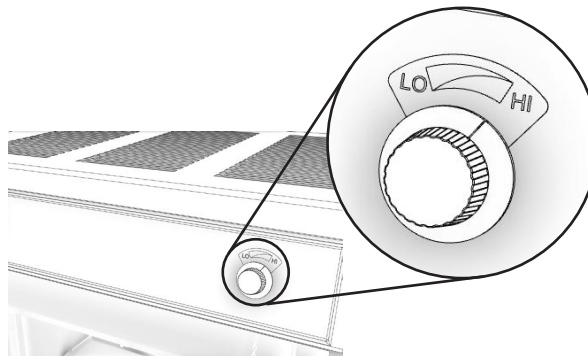
CAUTION: DO NOT LEAVE APPLIANCE UNATTENDED WITH THE DOOR OPEN.

For a cold start-up, place 3 to 4 pieces of newspaper into the firebox. On top of the newspaper, lay 4 lbs of kindling in random placement to ensure airflow through the kindling. On top of the kindling, place approximately 6 lbs of small pieces of cordwood. NOTE: Use smaller pieces of wood during start-up and a high burn rate to increase the stove's temperature.



Turn the air control knob to the high position. Light the newspaper, close the door, and allow the kindling to ignite. Once the kindling has burned down to a starter coal bed, load the unit with approximately 24 lbs of fuel for the first high burn load. Close the door immediately.

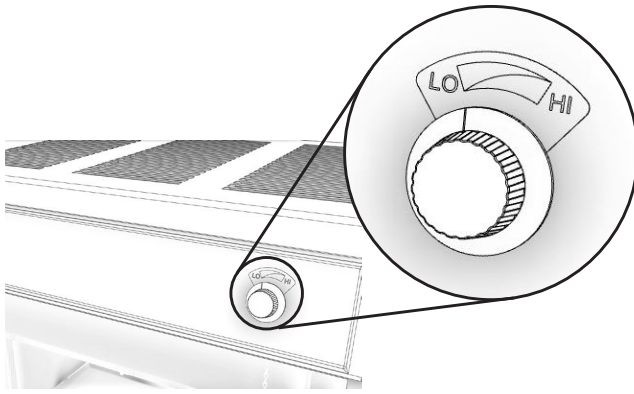
After the first high burn load and the stove is well warmed up, adjust the unit as needed for a medium or low burn setting.



For a medium burn, once the high burn fuel load is burned down to an established coal bed, load the unit with 27-28 lbs of cordwood and keep the door slightly open for 5 minutes. Leave the air control fully open (in the "HI" position) for 15 minutes. After 15 minutes turn the air control knob to the medium position. The blower can be turned on after 30 minutes.



For a low burn setting once the high burn (or medium) fuel load is burned down to an established coal bed, load the unit with 27-28 lbs of cordwood and keep the door slightly open for 5 minutes. Leave the air control fully open (in the "HI" position) for 15 minutes. After 15 minutes begin to turn the air control knob to the "Low" position. NOTE: Do not close the air too quickly. Closing the air too quickly will cause the unit to smoke.



#### **WARNINGS:**

- NEVER OVERFIRE YOUR STOVE. IF ANY PART OF THE STOVE STARTS TO GLOW RED, OVER FIRING IS HAPPENING. READJUST THE AIR INTAKE CONTROL AT A LOWER SETTING.
- THE INSTALLATION OF A LOG CRADLE or GRATES IS NOT RECOMMENDED IN YOUR WOOD STOVE. BUILD FIRE DIRECTLY ON FIREBRICK.
- NEVER PUT WOOD ABOVE THE FIREBRICK LINING OF THE FIREBOX.
- Attempts to achieve heat output rates that exceed heater design specifications can result in permanent damage to the heater.

#### **ADDING FUEL**

1. Once you have obtained a good bed of embers, you should reload the unit. To do so, turn the air control knob to high a few seconds before opening the stove's door.
2. Open the door very slowly; open it one or two inches for 5 to 10 seconds, before opening it completely to increase the draft and thus eliminate the smoke which is stagnant in a state of slow combustion in the stove.
3. Rake the glowing embers to the front of the door opening. Add fuel being careful not to overload or overfire the appliance. When adding fuel be careful not to smother the fire. Make sure the embers do not obstruct the air inlet. NOTE: For optimal operation of this unit, it is recommend to operate it with a wood load approximately equivalent to the height of fire bricks. It is important to note that wood combustion consumes ambient oxygen in the room. In the case of negative pressure, it is a good idea to allow fresh air in the room, either by opening a window slightly or by installing a fresh air intake system on an outside wall.
4. Close the feed door and secure tightly.
5. Adjust the air inlet control as described in the "Fueling Instruction" section of this manual.
6. Empty ashes regularly. Do not allow ashes to pile up. Properly dispose of hot ashes (see the "Ash Removal And Disposal" section of this manual).
7. Burn small, intense fires instead of large, slow burning fires when possible. Large slow burning fires can deposit creosote within the heating system.
8. Learn your appliance's operating characteristics to obtain optimum performance.

#### **VISIBLE SMOKE**

The amount of visible smoke being produced can be an effective method of determining how efficiently the combustion process is taking place in the given settings. Visible smoke consists of unburned fuel and moisture leaving your stove. Learn to adjust the air settings of your specific unit to produce the smallest amount of visible smoke. Wood that has not been seasoned properly and has a high wood moisture content will produce excess visible smoke and burn poorly.

#### **AIR TUBES**

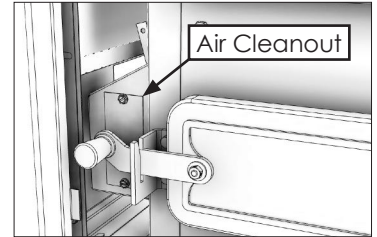
The air tubes assembled in this unit are designed to provide an accurate mix of secondary air to ensure the highest efficiency. Any damage or deterioration of these tubes may reduce the efficiency of combustion. The air tubes are held in position by screws or snap pins. Locate these to either side of the tube and remove it to allow the tube to be removed and replaced.

## **BLOWER OPERATION**

The variable speed blower circulates air warmed by the firebox into the living area to distribute the heat more evenly. The blower control knob is located on the side of the blower housing. Turn the knob clockwise to turn the blower on. The speed is controlled by turning the knob clockwise for slower speeds and counter-clockwise for faster speeds. To turn the blower off, turn the speed control knob fully counter-clockwise. It is recommended to turn the blower off when the unit is not in operation. The blower needs to be removed and air-blown clean. Make sure the blades do not have build up. Caution! Route the Power Supply Cord away from the heat source and out of high traffic areas.

## **CLEAN OUT MAINTENANCE**

Burning unseasoned wet wood only hurts your stoves efficiency and leads to accelerated creosote buildup in your chimney. The clean outs are secured to the firebox with two 5/16" screws. Remove the clean outs and vacuum out any accumulated ash. This should be done at least once per month or more frequently if large amounts of ash are noticed while cleaning or if the stove does not seem to be burning properly. The firing and ash doors must be closed and sealed during operation.



# **Chimney Maintenance**

**CAUTION:** Do not overfire appliance. You are overfiring if any part of the appliance glows red. Close the door and shut the damper immediately to reduce the air supply and slow down the fire.

**CAUTION:** Slow burning fires for extended use or burning green wood may cause excessive creosote build-up. Ignition of creosote or overfiring could cause a chimney fire. Chimney fires burn extremely hot and may ignite surrounding combustible materials. In case of a chimney fire, call the fire department immediately!

## **CREOSOTE FORMATION AND NEED FOR REMOVAL**

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely high temper fire. The chimney connector and chimney should be inspected at least once every two months during the heating season to determine if a creosote build-up has occurred. If creosote has accumulated (3 mm or more), it should be removed to reduce the risk of a chimney fire.

We strongly recommend that you install a magnetic thermometer on your smoke exhaust pipe, approximately 18" above the stove. This thermometer will indicate the temperature of your gas exhaust fumes within the smoke exhaust system. The ideal temperature for these gases is somewhere between 275°F and 500°F. Below these temperatures, the build-up of creosote is promoted. Above 500°F, heat is wasted since a too large quantity is lost into the atmosphere.

## **TO PREVENT CREOSOTE BUILD UP**

- Always burn dry wood. This allows clean burns and higher chimney temperatures, therefore less creosote deposit.
- Leave the air control fully open for about 5 minutes every time you reload the stove to bring it back to proper operating temperatures. The secondary combustion can only take place if the firebox is hot enough.
- Always check for creosote deposit once every two months and have your chimney cleaned at least once a year.
- If a chimney or creosote fire occurs, close all dampers immediately. Wait for the fire to go out and the heater to cool, then inspect the chimney for damage. If no damage results, perform a chimney cleaning to ensure no more creosote deposits are remaining in the chimney.

**CAUTION:** A chimney fire may cause ignition of wall studs or rafters which were assumed to be a safe distance away from the chimney. If a chimney fire occurs, have your chimney inspected by a qualified expert before using again.

## **ASH REMOVAL & DISPOSAL**

Whenever ashes get 3 to 4 inches deep in your firebox or ash pan, remove excess ashes. Leave an ash bed approximately 1 inch deep on the firebox bottom to help maintain a hot charcoal bed. Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a non-combustible floor or the ground, away from all combustible materials, pending final disposal. The ashes should be retained in the closed container until all cinders have thoroughly cooled.

- ASHES COULD CONTAIN HOT EMBERS EVEN AFTER TWO DAYS WITHOUT OPERATING THE STOVE.
- THE ASH PAN CAN BECOME VERY HOT. WEAR GLOVES TO PREVENT INJURY.
- NEVER BURN THE STOVE WITH THE ASH TRAP OPEN. THIS WOULD RESULT IN OVER FIRING THE STOVE. DAMAGE TO THE STOVE AND EVEN HOUSE FIRE MAY RESULT.

Burning wood naturally produces smoke and carbon monoxide (CO) emissions. CO is a poisonous gas when exposed to elevated concentrations for extended periods. While the modern combustion systems in heaters drastically reduce the amount of CO emitted out the chimney, exposure to the gases in closed or confined areas can be dangerous. Make sure your stove gaskets and chimney joints are in good working order and sealing properly to ensure unintended exposure. It is recommended that you use both smoke and CO monitors in areas having the potential to generate CO.

This unit's door uses a 1" diameter rope gasket. It is recommended that you change the door gasket (which makes your stove door air tight) once a year, in order to ensure good control over the combustion, maximum efficiency and security. To change the door gasket, simply remove the damaged one. Carefully clean the available gasket groove, apply a high temperature silicone sold for this purpose, and install the new gasket. You may light up your stove again approximately 24 hours after having completed this operation.

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

**DANGER: SHOCK HAZARD DISCONNECT POWER SOURCE BEFORE INSTALLATION AND WHENEVER SERVICING BLOWER ASSEMBLY.**

**CAUTION: MOVING PARTS CAN CAUSE INJURY. DO NOT OPERATE WITH COVER REMOVED.**

**WHITE / BLANC**

**BLACK / NOIR**

**BLACK / NOIR**

**BLACK / NOIR**

**BLACK / NOIR**

**BLACK / NOIR**

**BLOWER RHEOSTAT / RHÉOSTAT DU VENTILATEUR**

**BLOWER MOTOR / MOTEUR DU VENTILATEUR**

**BLOWER SPECS: 120VAC, 60 Hz AC, 0.55amp / DÉTAILS TECHNIQUES: 120VAC, 60 Hz CA, 0,55AMP**

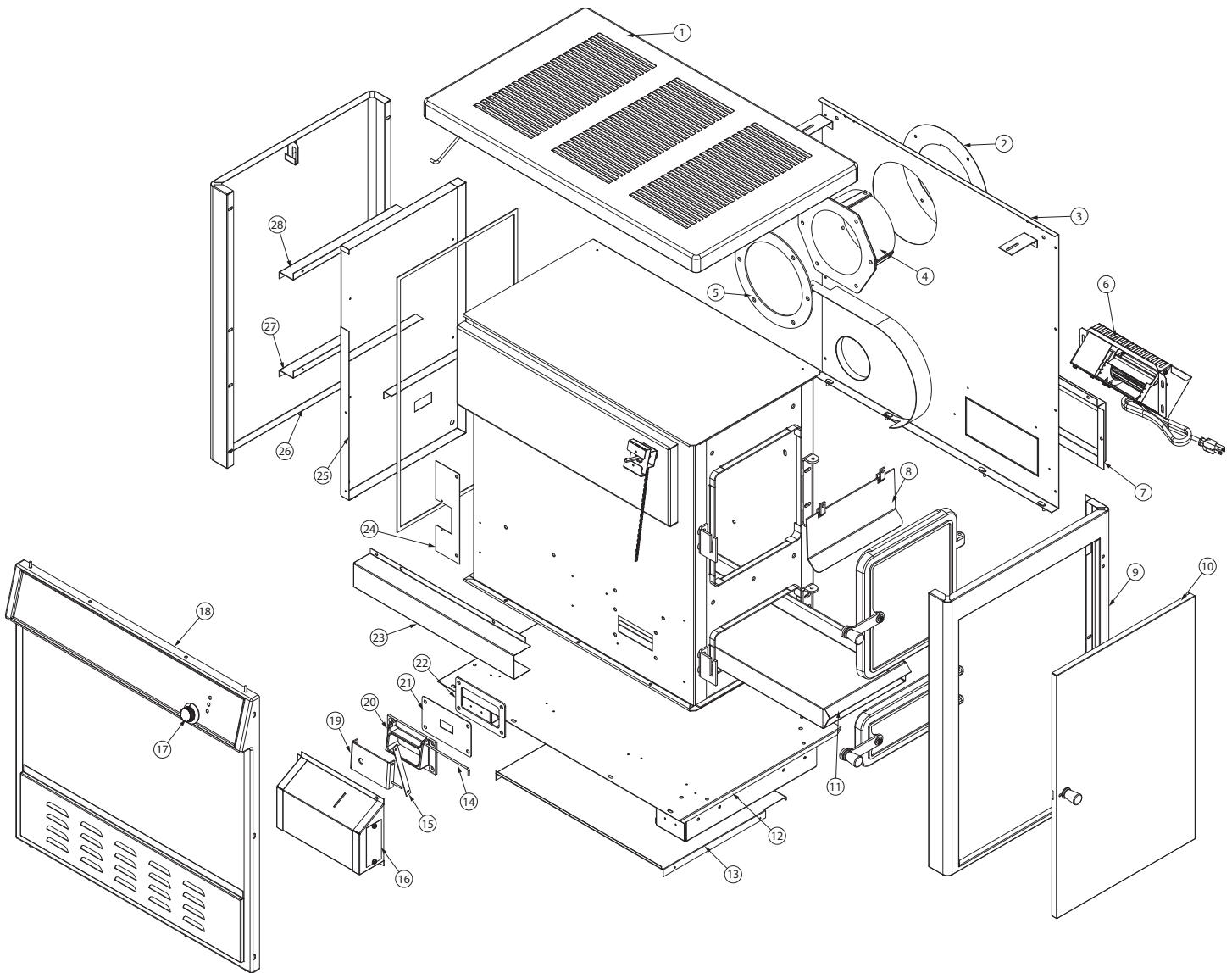
**GREEN / VERT**

**WHITE / BLANC**

**NOTICE: ANY REPLACEMENT WIRING MUST HAVE EQUIVALENT INSULATION AND TEMPERATURE RATING (105° C).**

**NOTICE: DO NOT ALLOW THE POWER CORD TO TOUCH HOT SURFACES! KEEP THE POWER CORD AT LEAST 12"/30.5 CM FROM THE STOVE OR PIPE SURFACES.**

# Repair Parts



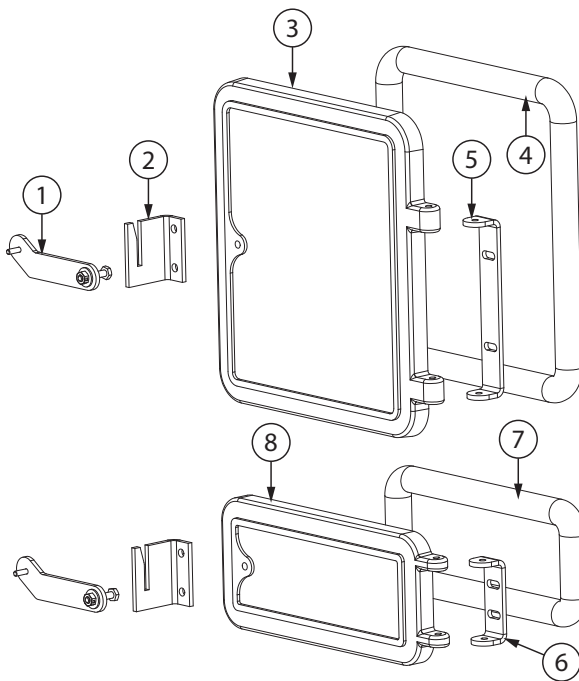
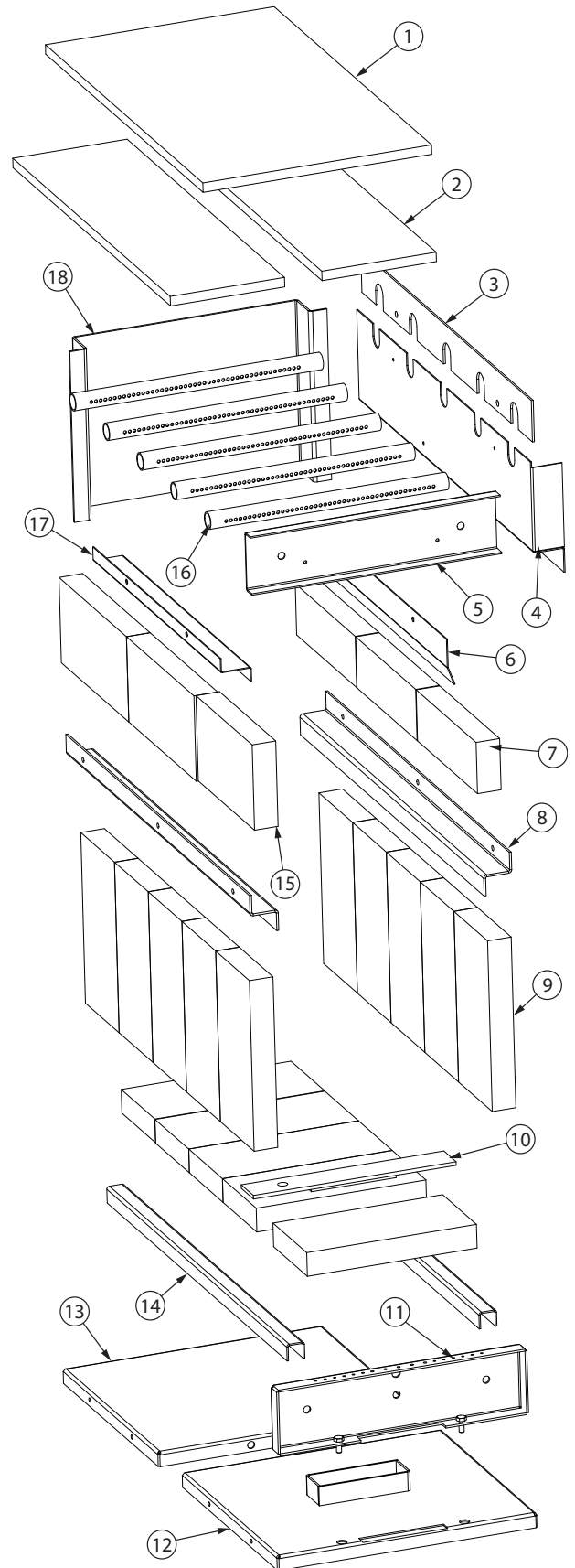
Key	Part #	Description	Qty
1	67966	Cabinet Top Assy	1
2	22761	Flue Collar Ring	1
3	610143	Casing Back	1
4	40246	6" C.I. Flue Collar	1
5	88032	Flue Collar Gasket	1
6	891492	Blower Assembly (B36)	1
7	25598	Blower Mounting Box	1
8	29329	Smoke Curtain	1
9	610508	Right Side Casing	1
10	67969	Cabinet Door Assy.	1
11	67444	Ash Pan Weldment	1
12	67859	Base Weldment	1
13	22110	Heat Shield	1

14	25550	H. Pin Draft Damper	1
15	27469	Damper Arm	1
16	610987	Air Distribution Box Assembly	1
17	89687	Black Thermostat Knob	1
18	610985	Cabinet Front Weldment/Assy.	1
19	611015	Draft Door Weldment	1
20	40075	Draft Door Frame	1
21	29422	Restrictor	1
22	88090	Gasket	1
23	27461	Main Air Channel	1
24	27491	Air Channel Stop	1
25	611018	Secondary Panel Weldment	1
26	67967	Cabinet Left End Assy.	1
27	27467	Bottom Back Spacer	1
28	27466	Top Back Spacer	1

**IN ORDER TO MAINTAIN WARRANTY, COMPONENTS MUST BE REPLACED USING ASHLEY PARTS PURCHASED THROUGH YOUR DEALER OR DIRECTLY FROM ASHLEY. USE OF THIRD PARTY COMPONENTS WILL VOID THE WARRANTY.**

# Repair Parts

Key	Part #	Description	Qty
1	88336	Insulation Blanket	1
2	88335	Baffle Board	2
3	29437	Tube Retainer	1
4	29438	Baffle Side	1
5	27291	Front Liner Top	1
6	29408	Right Retainer	1
7	893285	Firebrick	3
8	27484	Top Brick Rack	2
9	89066A	Pumice Firebrick (4-1/2 X 9)	17
10	610223	Cleanout Cover Weldment	1
11	610227	Primary Air Outlet (Welded)	1
12	610221	Floor (Welded)	1
13	27564	Floor Back	1
14	27472	Brick Spacers	2
15	892945	Pumice Firebrick(4-1/2 X 7-1/2)	1
16	893289	Secondary Tube (13.125")	5
17	29407	Left Retainer	1
18	27478	Rear Brick Spacer	1



Key	Part #	Description	Qty
1	27486	Door Handle	2
2	27462	Door Catch	2
3	40763	Feed Door	1
4	88032	1" Rope Fiber	3.75 ft
5	27489	Fire Door Hinge	1
6	27460	Ash Door Hinge	1
7	88032	1" Rope Fiber	2.5 ft
8	40764	Cast Door	1

**IN ORDER TO MAINTAIN WARRANTY, COMPONENTS MUST BE REPLACED USING ASHLEY PARTS PURCHASED THROUGH YOUR DEALER OR DIRECTLY FROM ASHLEY. USE OF THIRD PARTY COMPONENTS WILL VOID THE WARRANTY.**



# Service Record

It is recommended that your heating system is serviced regularly and that the appropriate Service Interval Record is completed.

## SERVICE PROVIDER

Before completing the appropriate Service Record below, please ensure you have carried out the service as described in the manufacturer's instructions. Always use the manufacturer's specified spare part when replacement is necessary.

<b>Service 01</b>	Date:_____
Engineer Name: _____	
License No.: _____	
Company: _____	
Telephone No.: _____	
Stove Inspected: <input type="checkbox"/> Chimney Swept: <input type="checkbox"/>	
Items Replaced: _____	

<b>Service 02</b>	Date:_____
Engineer Name: _____	
License No.: _____	
Company: _____	
Telephone No.: _____	
Stove Inspected: <input type="checkbox"/> Chimney Swept: <input type="checkbox"/>	
Items Replaced: _____	

<b>Service 03</b>	Date:_____
Engineer Name: _____	
License No.: _____	
Company: _____	
Telephone No.: _____	
Stove Inspected: <input type="checkbox"/> Chimney Swept: <input type="checkbox"/>	
Items Replaced: _____	

<b>Service 04</b>	Date:_____
Engineer Name: _____	
License No.: _____	
Company: _____	
Telephone No.: _____	
Stove Inspected: <input type="checkbox"/> Chimney Swept: <input type="checkbox"/>	
Items Replaced: _____	

<b>Service 05</b>	Date:_____
Engineer Name: _____	
License No.: _____	
Company: _____	
Telephone No.: _____	
Stove Inspected: <input type="checkbox"/> Chimney Swept: <input type="checkbox"/>	
Items Replaced: _____	

<b>Service 06</b>	Date:_____
Engineer Name: _____	
License No.: _____	
Company: _____	
Telephone No.: _____	
Stove Inspected: <input type="checkbox"/> Chimney Swept: <input type="checkbox"/>	
Items Replaced: _____	

<b>Service 07</b>	Date:_____
Engineer Name: _____	
License No.: _____	
Company: _____	
Telephone No.: _____	
Stove Inspected: <input type="checkbox"/> Chimney Swept: <input type="checkbox"/>	
Items Replaced: _____	

<b>Service 08</b>	Date:_____
Engineer Name: _____	
License No.: _____	
Company: _____	
Telephone No.: _____	
Stove Inspected: <input type="checkbox"/> Chimney Swept: <input type="checkbox"/>	
Items Replaced: _____	

# How To Order Repair Parts

This manual will help you obtain efficient, dependable service from your heater, and enable you to order repair parts correctly.

Keep this manual in a safe place for future reference.

When writing, always give the full model number which is on the nameplate attached to the heater.

When ordering repair parts, always give the following information as shown in this list:

1. The part number \_\_\_\_\_
2. The part description \_\_\_\_\_
3. The model number \_\_\_\_\_
4. The serial number \_\_\_\_\_

## Comment Commander Des Pièces De Rechange

Ce manuel vous aidera à obtenir un service fiable et efficace de votre appareil de chauffage, et vous permettre de commander correctement les pièces de rechange.

Conservez ce manuel dans un endroit sûr pour référence future.

Lors de l'écriture, toujours donner le numéro de modèle complet qui se trouve sur la plaque signalétique fixée sur l'appareil de chauffage.

Lors de la commande des pièces de rechange, fournir les informations suivantes comme indiqué dans cette liste:

1. Le numéro de pièce \_\_\_\_\_
2. La description de la pièce \_\_\_\_\_
3. Le numéro de modèle \_\_\_\_\_
4. Le numéro de série \_\_\_\_\_



United States Stove Company  
227 Industrial Park Rd.,  
South Pittsburg, TN 37380  
PH: (800) 750-2723  
[www.usstove.com](http://www.usstove.com)