

PIONEER STOVES



PIONEER DUCHESS

Manufactured in USA by:

Pioneer Stoves LLC

9269 Antrim Church Road

Greencastle, Pennsylvania 17225

SAVE THESE INSTRUCTIONS

Dear Stove Customer:

*Thank you for
purchasing our stove.*

*We hope you enjoy your
new stove and that it will
serve you well for many
years.*

*Your friends at
Pioneer Stoves*

!! CAUTION !!

Remember stove is HOT while in operation.

Keep children, clothing, furniture, or any other combustible items away.

Surface temperatures may reach 500 °F (260 C°). Can cause severe burns.

Always wear hand protection when handling stove controls or adding fuel.

Do not use chemicals or fluids to start fire.

Do not burn garbage or liquids.

GOOD SAFETY PRACTICES

- 1) Read these instructions carefully before installing your new cook stove. Consult your local government officials, such as Municipal building Department, Fire Department or Fire Prevention Bureau for information of any restrictions and installation inspection requirements in your area. Installation must comply with all local and national building codes.
- 2) **DO NOT INSTALL IN ANY FIREPLACE.**
- 3) Before “firing” the stove, have each family member read this manual and be aware of safety practices.
- 4) Keep children, clothing, and furniture away from the stove.
- 5) The stove is HOT while in operation – **DO NOT TOUCH** the stove, because contact may cause burns.
- 6) Keep a fire extinguisher nearby, and have a clearly understood plan on how to extinguish a fire.

SAFETY TIPS

- Thoroughly educate all family members on function and dangers of stove.
- Keep clothing, furniture, cardboard, paper, firewood, and any other combustible items away.
- Wear gloves when operating/adding fuel.
- Keep a fire extinguisher close and formulate a clear plan for putting out potential fires.
- Do not store firewood within combustible range. (see pg 2)
- You are over heating when the oven thermometer shows a temperature of 600+ degrees. Over heating can cause a house fire and will void your warranty.
- Inspect stove pipe often (at least every 60 days during heating season). If pipe is leaking smoke or rusting it should be replaced.
- Flammable liquids such as gasoline, diesel, kerosene, lantern fuel, charcoal lighter fluid, should never be used to start or liven up a fire and must be kept well away from stove at all times.
- Even when stove is out of use for the season or in storage keep the above liquids out of the vicinity.

Read this entire manual before you install and use your new room heater/cook stove. If this room heater/cook stove is not properly installed a house fire may result. To reduce the risk of fire follow the installation instructions. Failure to follow instructions may result in property damage, bodily injury or even death.

CLEARANCES TO COMBUSTIBLES

Unit to back wall - 18-in (457-mm)

Flue to back wall - 11.5-in (292-mm)

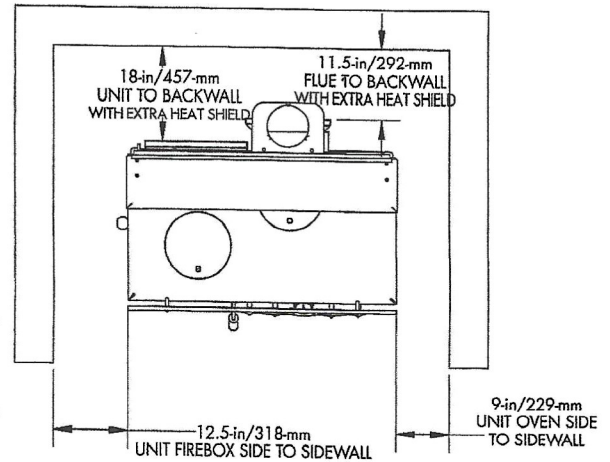
Unit firebox side to sidewall - 12.5-in (318-mm)

Unit oven side to sidewall - 9-in (229-mm)

Unit is acceptable with optional wood or metallic firebox handle.

The unit is required to have an insulated floor protector with a minimum R-value of 1.0

Floor protection must extend 16-in (450-mm) in front of the firebox, 8-in (200-mm) beyond either side of fueling door, and 2-in beyond either side of horizontal chimney connector.



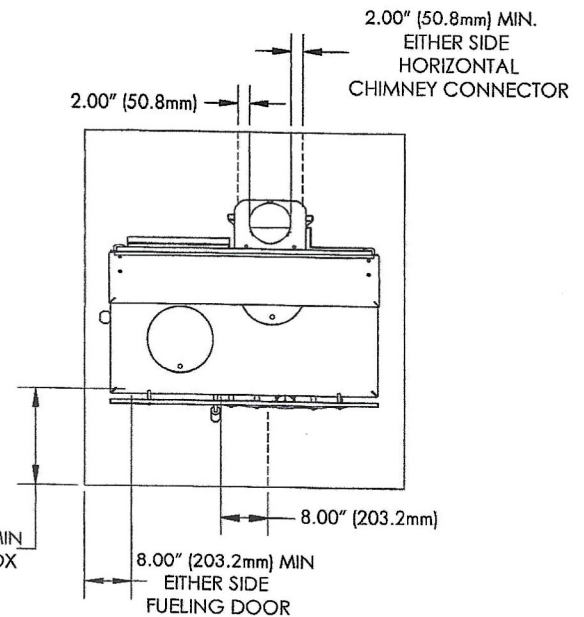
UNIT IS ACCEPTABLE WITH OPTIONAL WOOD OR METALLIC FIREBOX HANDLE

THE STOVE MUST BE SET ON A NON-COMBUSTIBLE MATERIAL

Floor Protection: When installing this stove on a combustible floor, a UL1618 floor protector of minimum R-value of 1.0 must be used. This protector must extend at least 16-in (450-mm) in front of the firebox, 8-in (200-mm) beyond either side of fueling door, 2-in beyond either side of horizontal chimney connector and 10 inches behind. The parts or materials to be employed for the floor protector including the minimum areas to be covered and their relationship to the product. At least the following areas shall be specified. (1) Under the stove (78" x 50"), (2) Under the chimney connector and 2 inches (50 mm) beyond each side.

For reduced clearance and further information on using your wood stove safely, obtain a copy of the following booklet:

In United States: National Fire Protection Association publication NFPA 211, Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances The address of NFPA is: 11 Tracy Drive, Avon, MA 02322. In Canada: Canada Mortgage and Housing Corp. publication "Heating with Wood Safely". It is available through any C.M.H.C. office. Installation shall be in accordance with CSA B365, Installation Code for Solid-Fuel-Burning Appliances and Equipment, building codes, and standards that apply to the structure where the space heater is installed. The instructions shall include the information provided in Sections 31 and 32, as applicable. It is important to use all parts specified in this manual. Not adhering to this, will offset the standards and may cause a house fire.



FLOOR PROTECTOR
R-VALUE 1.0" (25.4mm)

Make sure that any penetration through the ceiling or walls are sealed air tight and water proofed so that rain or smoke will not leak in. **DO NOT USE BARRIERS** that would prevent air circulation around the stove for the clearances provided.

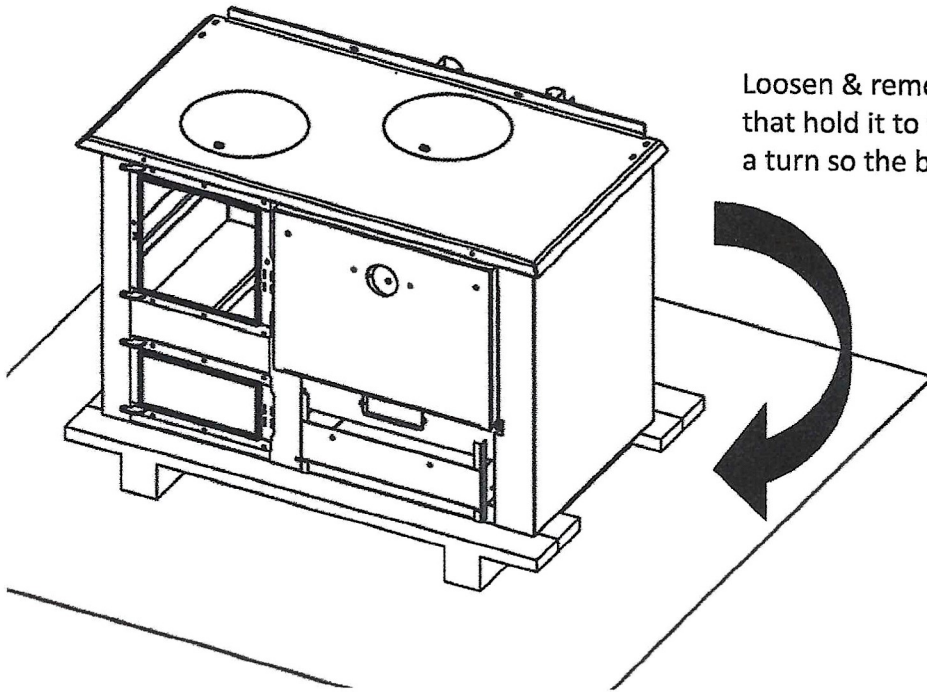
DO NOT INSTALL IN A TRANSPORTABLE BUILDING. DO NOT INSTALL IN AN ALCOVE

The parts or materials to be employed for ember protectors and the minimum areas to be covered and their relation to the space heater, as well as the notice: "In Canada, to comply with CSA B365, Installation Code for Solid-Fuel-Burning Appliances and Equipment, any combustible covering beneath the appliance and/or within the area extending horizontally at least 450 mm (18 in) beyond the appliance on any side equipped with a door, and at least 200 mm (8 in) beyond the appliance on other sides, shall be protected by a continuous, durable, non-combustible pad that will provide ember protection. The 450 mm (18 in) ember protection required on any side with a door shall extend for the full width of the appliance plus the 200 mm (8 in) required on each side of the appliance without a door. Where an appliance is installed less than 200 mm (8 in) from a wall, the ember pad need only extend to the base of the wall. An ember pad shall not be placed on top of a carpet unless the pad is structurally supported to prevent displacement and distortion"

ASSEMBLY INSTRUCTIONS

(The heater is not to be connected to any air distribution system.)

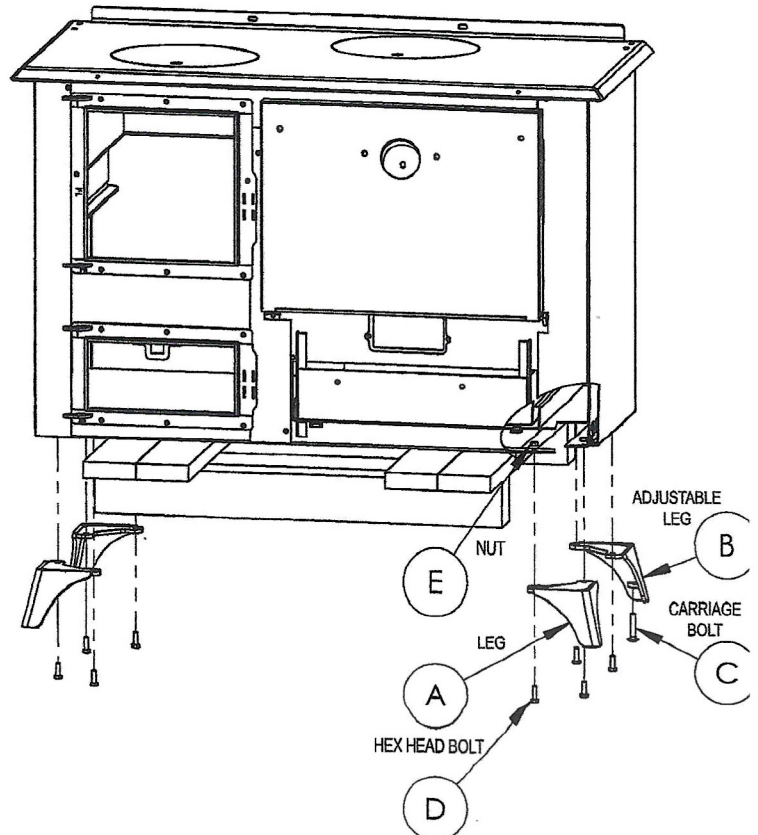
Remove all wooden crating from around the stove, being careful not to wedge or pry against the stove, as damage to the enameled liner may result. Inspect stove for possible shipping damage, and notify your freight carrier immediately if any damage has occurred.

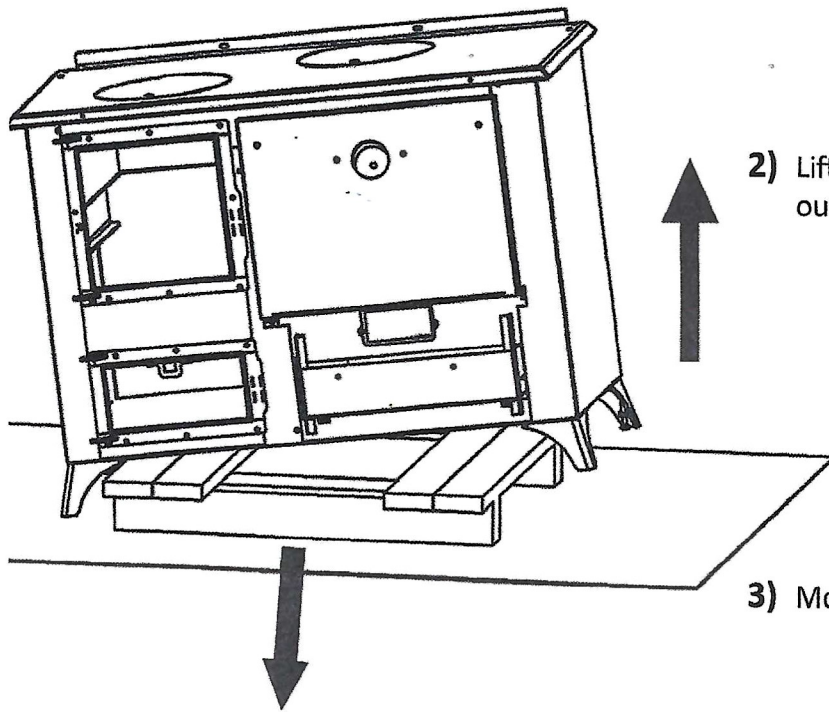


Loosen & remove the 4 bolts at the base of the stove that hold it to the pallet. Twist the stove one fourth of a turn so the bolt holes for the legs are accessible.

1) Bolt the legs to the stove. (adjustable leg in the rear, right hand side ideally)

- A - Legs
- B - Adjustable leg in rear
- C - Carriage Bolt for Adjustment
- D - Hex Head bolts 5/16" X 1" (7.94mmx25.4mm)
- E - Nuts for fastening all four feet to the stove.



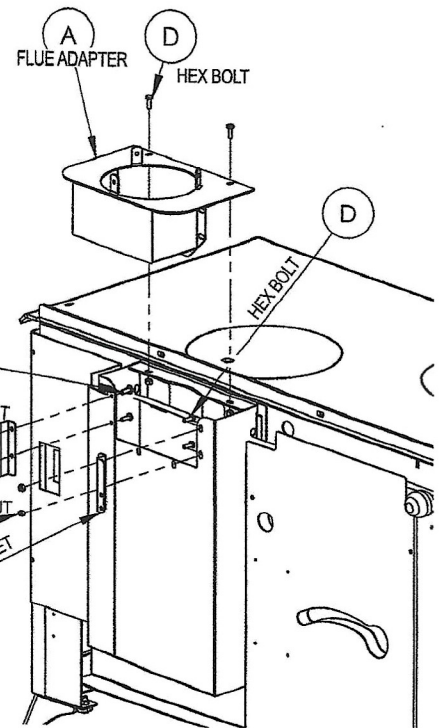


2) Lift oven side (lighter weight) and slide pallet out from under stove

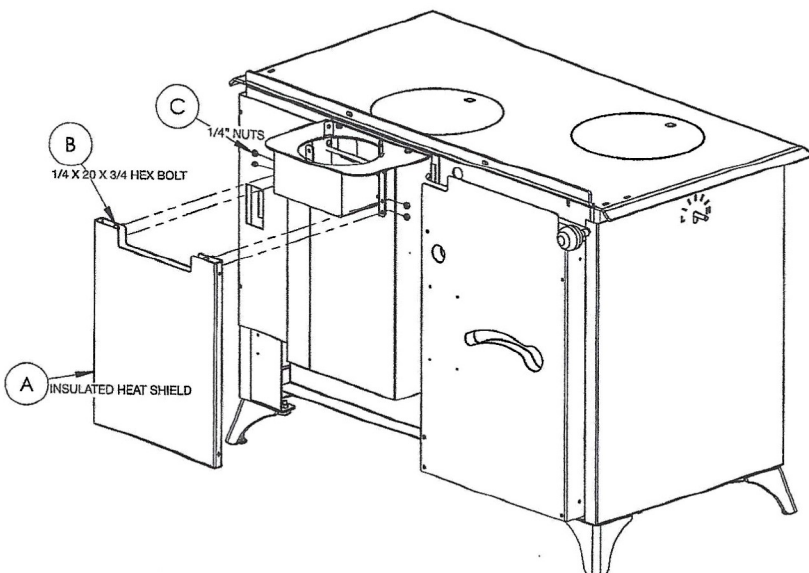
3) Move your Pioneer Duchess to the desired position.

4) Slide flue adapter down to align with holes. (UL only) Remove 1/4" bolt holding the heat shield to the flue. Install flue adapter making sure the bolt flanges are on the inside of flue. Next, align right side bracket (see diagram) and reinstall 1/4" bolt from inside through flue adapter, flue, heat shield, and right side bracket (in this order). Add and tighten second bolt. The other side is the same except there is no heat shield. Once the flue adapter and shield brackets are in place, the insulated flue shield can be mounted (see diagram).

- A- Insulated Heat Shield
- B- 1- 1/4x20x3/4 (158.75mm x 508mm x 19.05mm) Hex bolts (Head inside) except top
- C- 1/4 (158.75mm) Nuts

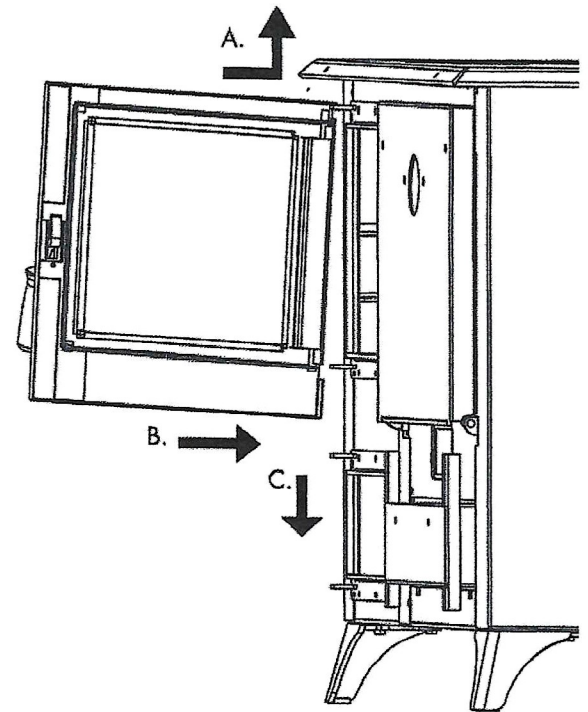


- A- Flue Adapter
- B- Right Bracket for Shield (UL only)
- C- Left Bracket for Insulated (UL only)
- D- 6- 1/4x20x3/4 (158.75mm x 508mm x 19.05mm) Hex bolts (Head inside) except top
- E- 6- 1/4 x20 (158.75mm x 508mm) Nuts

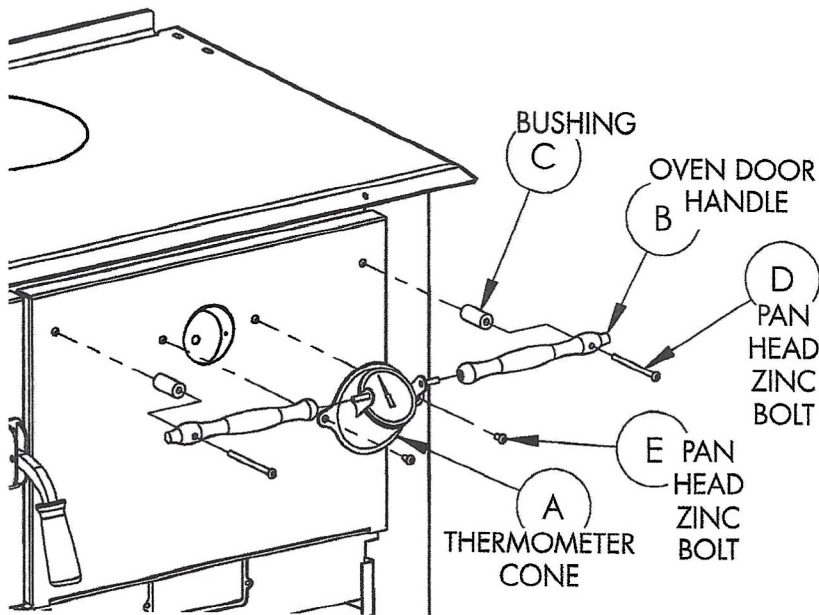


5) Install the ash & fire door by holding them perpendicular with the stove.

- A. Insert the top pin through the top hinge eyelet.
- B. Align the bottom pin.
- C. Drop through the bottom hole allowing it to sit on the hinge.



Make sure both doors swing freely and latches properly.

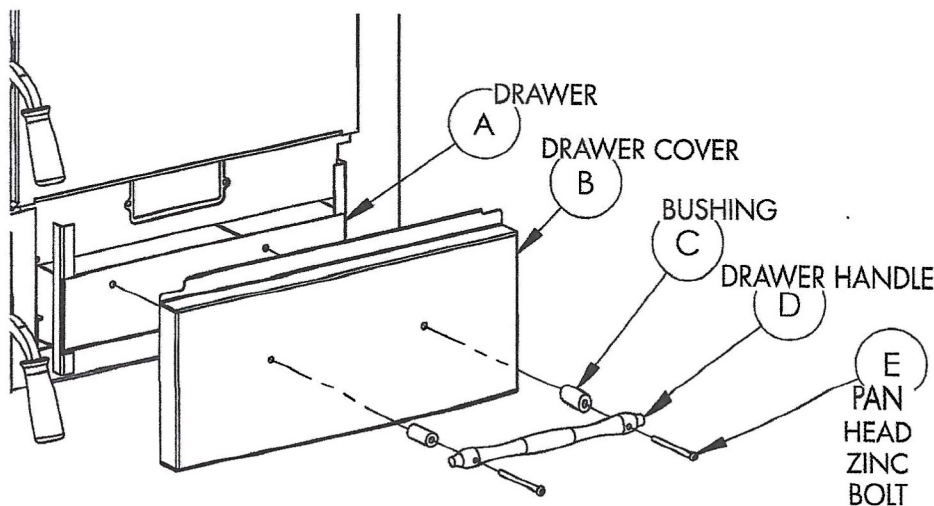


- A- Thermometer Cone
- B- Oven Door Handles
- C- $\frac{1}{4}$ " x $\frac{3}{4}$ " x $1\frac{5}{8}$ " (6.35mm x 19.05mm x 42.09mm) bushing
- D- $\frac{1}{4}$ " x 20" x $3\frac{1}{2}$ " (6.35mm x 508 mm x 88.9 mm) Phillips pan head zinc bolts
- E- $\frac{1}{4}$ " x 20x $\frac{1}{2}$ " (6.35mm x 520.7mm) Phillips pan head stainless

6) Thermometer and Oven Door Handles:

Fasten thermometer bracket to door using $\frac{3}{4}$ " pan head screws. Then slide handles onto the bracket pins and fasten ends with $\frac{1}{4}$ " x 3-1/2" screws and chrome spacers (see diagram).

7) Drawer Assembly: Fasten with washers & nuts inside drawer



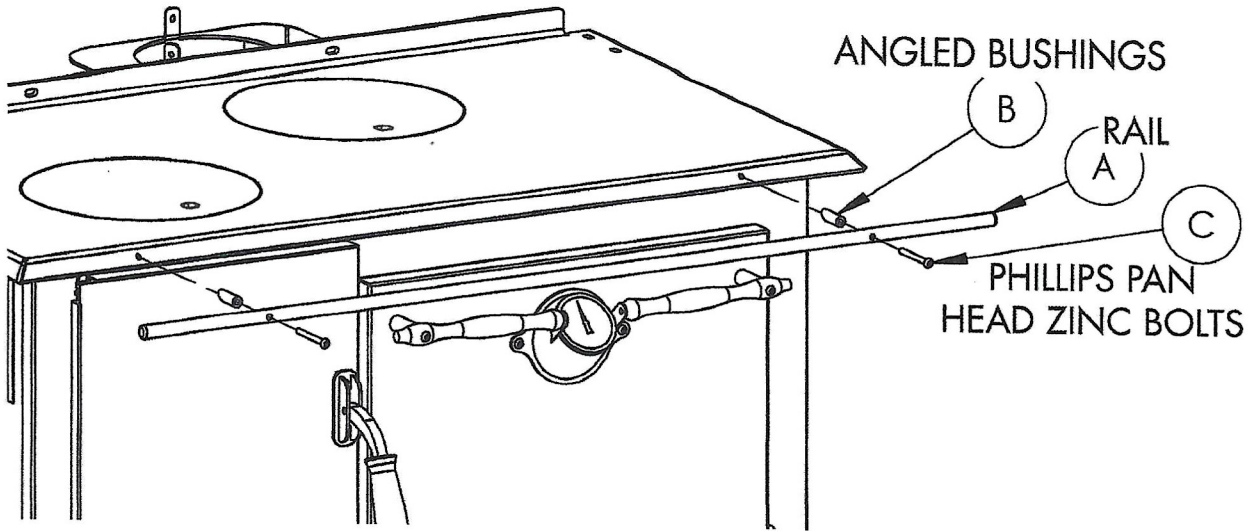
- A- Drawer
- B- Porcelain Drawer cover
- C- $\frac{1}{4}$ " x $\frac{3}{4}$ " x $1\frac{5}{8}$ " (6.35mm x 19.05mm x 42.09mm) bushing
- D- Drawer Handle
- E- $\frac{1}{4}$ " x 3 $\frac{1}{2}$ " (6.35mm x 88.9 mm) Phillips pan head zinc bolts

8) Rail Assembly : Holes in the stove top are threaded already, so nuts are not needed.

A- Rail

B- Angled Bushings $\frac{1}{4}$ " x $\frac{1}{2}$ " x $1\frac{1}{2}$ " (6.35mm x 12.7mm x 38.1mm) long

C- Phillips pan head zinc bolts w $\frac{1}{4}$ " x $2\frac{1}{2}$ "

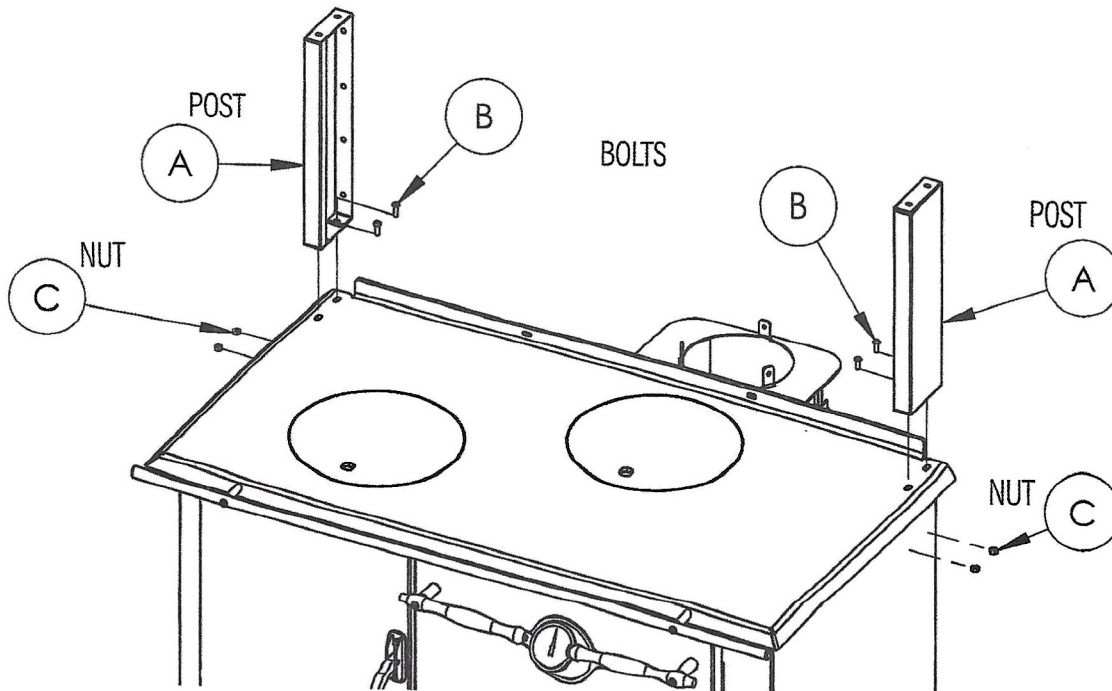


9) Post Assembly

A- Posts mounted with holes facing the rear.

B- Phillips pan head stainless steel bolts $\frac{1}{4}$ " X $\frac{3}{4}$ " (6.35mm x 19.05mm)

C- $\frac{1}{4}$ " (6.35mm) nuts

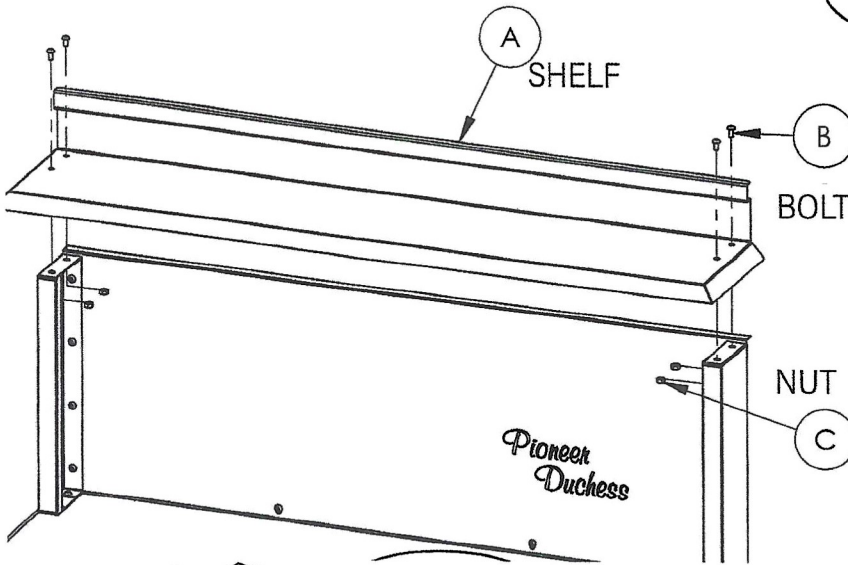
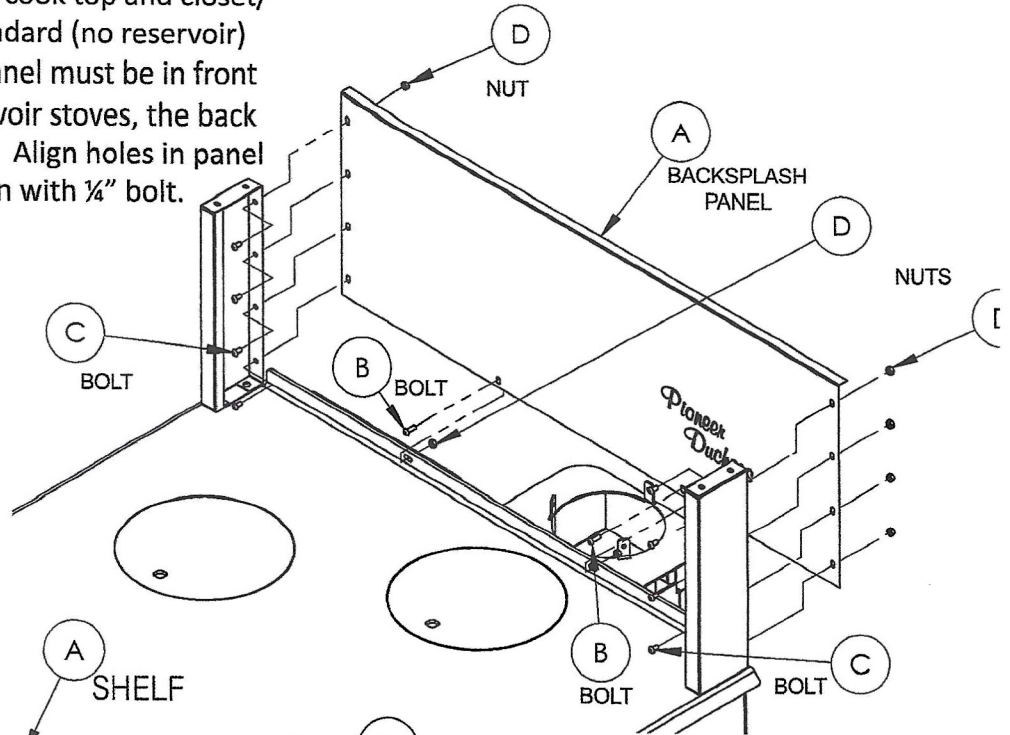


10) Back splash Assembly:

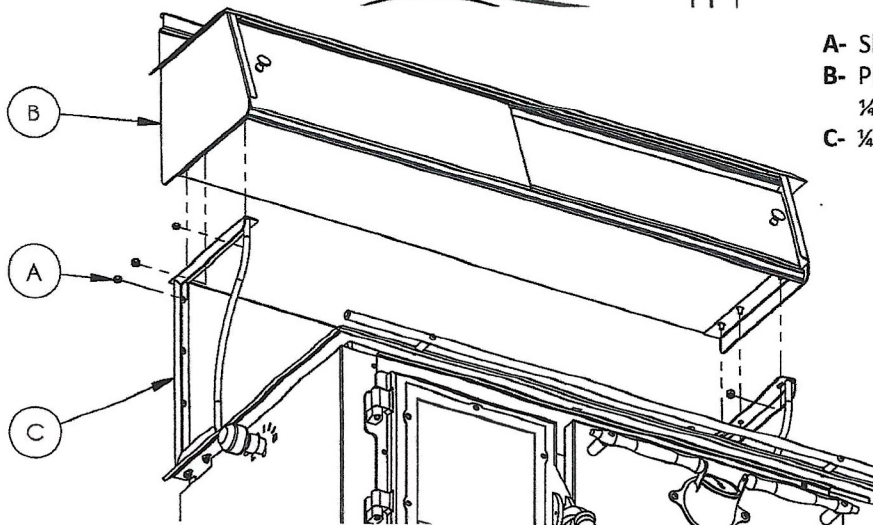
CAUTION!! Tighten all bolts until snug, over tightening will cause porcelain to chip!

Install back splash by fastening to cook top and closet/shelf posts. On end reservoir, standard (no reservoir) and combo stoves, back splash panel must be in front of cook top flange. On back reservoir stoves, the back splash panel has a bottom flange. Align holes in panel flange with holes in top and fasten with $\frac{1}{4}$ " bolt.

- A- Back splash Panel
- B- Phillips pan head stainless steel bolts $\frac{1}{4}$ " X $\frac{3}{4}$ " (6.35mm x 19.05mm)
- C- Phillips pan head stainless steel bolts, $\frac{1}{4}$ " x $\frac{1}{2}$ " (6.35mm x 12.7mm).
- D- $\frac{1}{4}$ " (6.35mm) nuts



11) Shelf Assembly: Install the shelf to the top of shelf posts. Bolts should be tightened until snug, but do not over tighten.



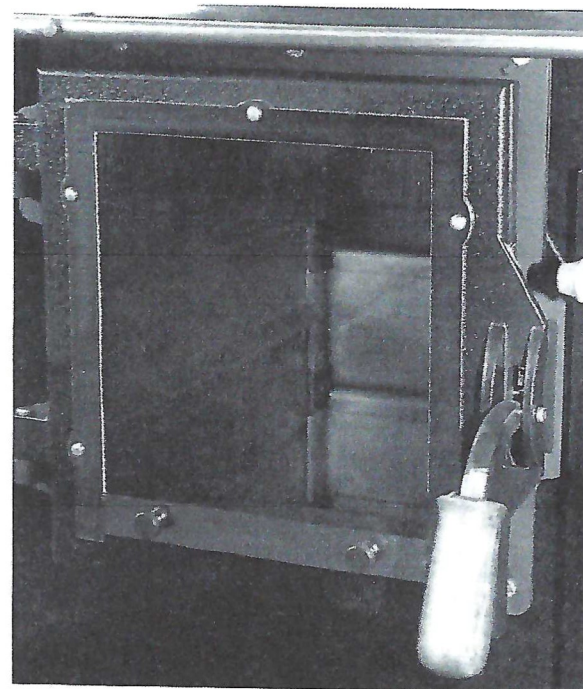
- A- Shelf
- B- Phillips pan head stainless steel bolts, $\frac{1}{4}$ " x $\frac{1}{2}$ " (6.35mm x 12.7mm).
- C- $\frac{1}{4}$ " (6.35mm) nuts

12) Closet Mounting: Loosen & remove nuts underneath the closet, one side at a time. Once you insert the remaining bolts into the holes provided in the closet posts. Tighten till snug.

The Pioneer design of the Flame View (if equipped), has 2 -10x10" x 5.12 mm thick Ceramic Glass, Replace glass only with (Ceramic) glass supplied from the manufacturer or distributor of this appliance.

Warning!!

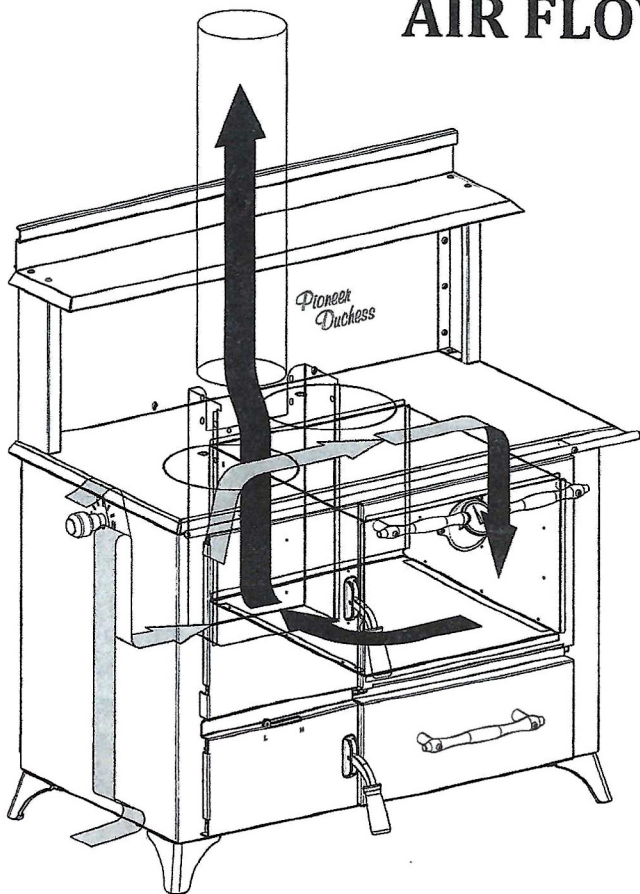
- Do Not abuse the glass doors such as striking or slamming shut
- Do not operate stove with broken or removed glass.
- Be cautious against building the fire too close to the glass
- Use only water to clean the glass. Not Windex or similar glass cleaner. The new glass fire door will easily smoke up at first. After a few months it will "season" and stay clean longer.
- Never clean glass when hot or use abrasive cleaners



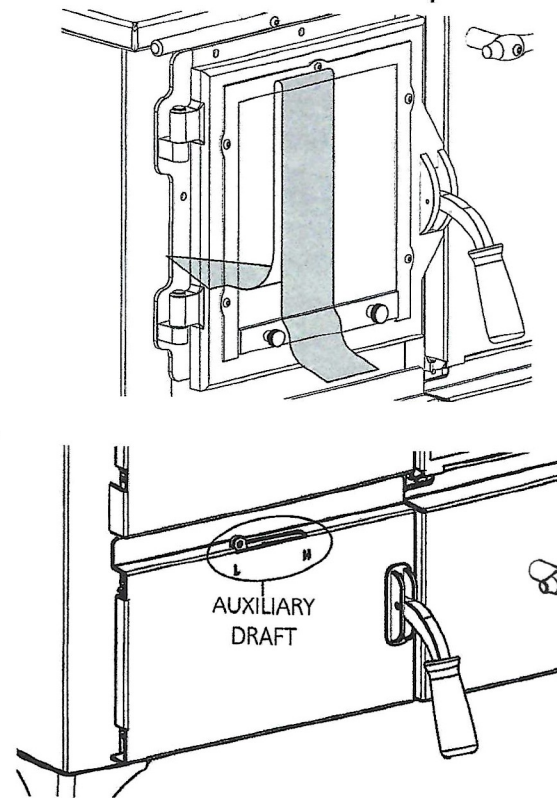
If your glass in your fire door cracks or breaks, shut down the stove as quick as possible. Once cooled, gently lift the door off of the unit. Use leather gloves to pickup the pieces. Remove the remainder of the glass, Clean all the corners of creosote and ashes. Replace gasket where needed on 3 sides as brittle and hardness will not seal and protect as well. Insert the new glass (should fit snug), tighten the brackets using the screws provided.

DO NOT SUBSTITUTE ANY MATERIALS, other glass will not hold up to the high temperatures of the unit and will shatter or explode. Clean glass when cooled, use warm water to soften the creosote on the glass. After it is thoroughly soaked, wipe the glass door till clean. May take several attempts depending on how much build-up has accumulated.

AIR FLOW DIAGRAMS

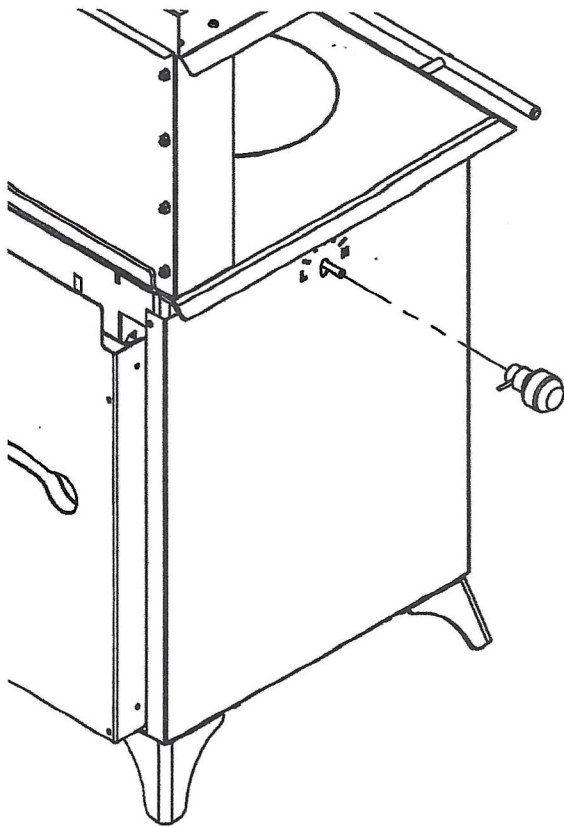


Flame View Door Only



OPERATING YOUR STOVE

AUTOMATIC THERMOSTAT & HOW IT WORKS

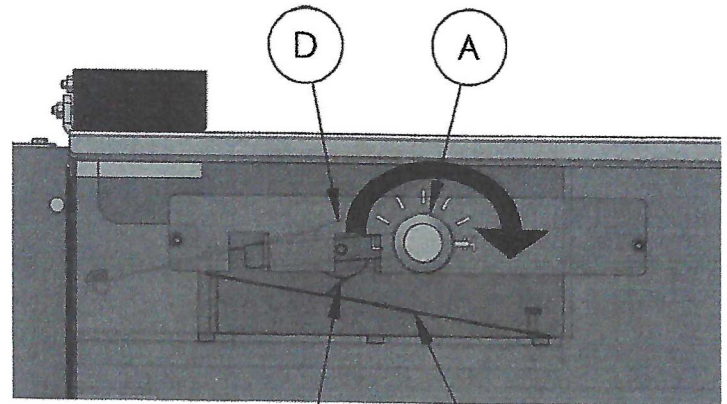


A- Use the Allen Key Wrench Provided tighten set screw with the indicator pointing at the L (low)

With a cold automatic thermostat the Flapper Plate (B) should have a $\frac{1}{4}$ " gap at the Low Setting

When turning from Low to High the Flapper Plate will hit the top approximately at the half way mark.

While the stove is heating up, the spring will gradually open up causing the Flapper Plate to close. After that there will be enough room turn it all the way up if more heat is desired.



Adding wood when stove is cold

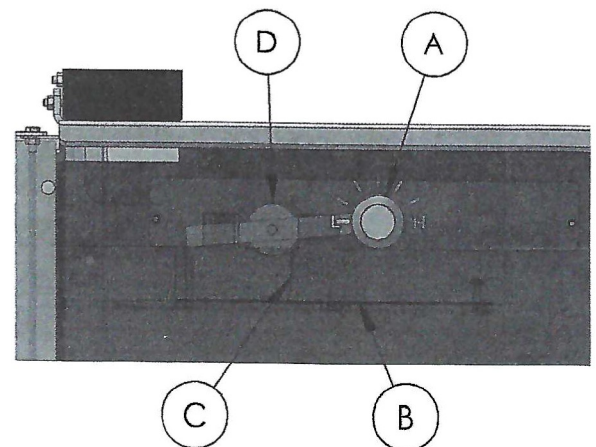
Turn thermostat toward the "high" position as far as possible. Pull damper slide all the way out. Slowly open fire door and stir ashes with poker looking for any sign of live embers. If all ashes are cold remove most, not all (see pg. 16) and restart fire (see pg. 14).

Add a few small dry pieces of wood, then close and securely latch door. Next run the shaker handle back and forth rapidly 8-12 times to shake ash buildup into ash compartment. This exposes live embers in firebox to fresh air. Within a few moments you should see live flame. Once the chimney seems hot and drafting well, push draft control in.

Adding wood when stove is hot

Pull draft control out and slowly open fire door watching that live embers don't fall out. Stir fire with poker to settle any burning structure. Carefully insert fresh logs and close and latch fire door. Push draft control back in. To keep the fire controlled, the fire & ash door must remain closed while in operation. Not adhering to this Warning, will initiate the stove to over fire and shoot sparks beyond the floor protector, that could possibly spark off a house fire.

A. REGULATING ADJUSTMENT KNOB
B. FLAPPER PLATE
C. BEAD CHAIN (18")
D. IDLER PULLEY



UNDERSTANDING YOUR CONTROLS

1. Draft Control

Pulling on the draft control knob allows the heat from the fire box to short cut straight to the chimney. This setting makes the stove draft easier, but burn less efficient. When the draft control is in, the heat is forced to travel around the oven. This maximizes heat in your house and minimizes heat out the chimney. Use this mainly for starting a fire in a cold stove, and for minimizing smoke when adding fuel.

2. Thermostat

This is how you control your fire. "L" is low "H" is high. At the low position, it allows just enough oxygen through to keep the fire smoldering as long as fuel is available. At this setting the oven thermometer will read at its' coldest. At the high position the stove will become very hot with the oven reaching up to 600°F depending on the type of fuel used. You have the whole range in between to achieve the desired temp. *See diagram pg. 9.*

Note: the thermostat functions correctly only when all other air entry points are closed.

3. Auxiliary Draft

Open this to get a sluggish fire to take off.

Note: Your stove will not burn as efficiently with air coming in places other than the thermostat.

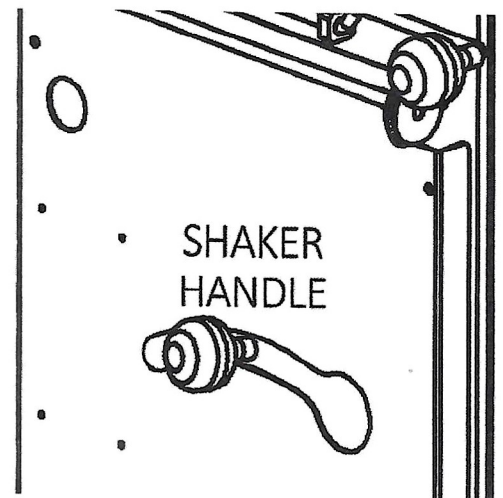
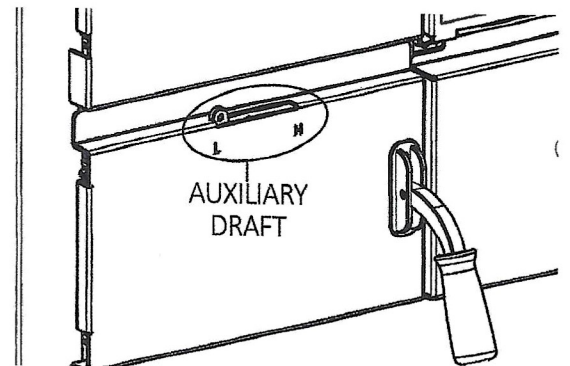
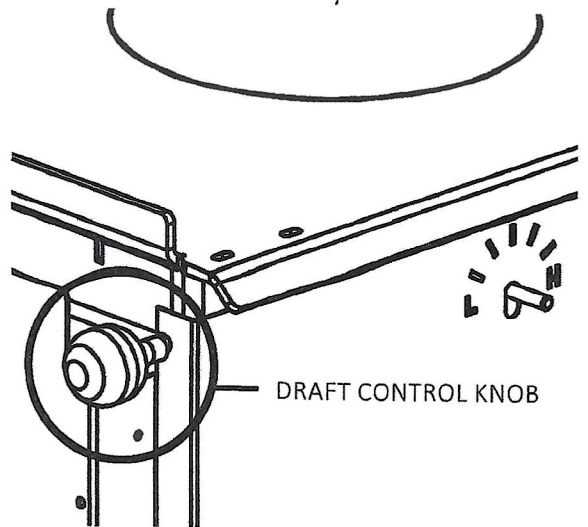
4. Shaker Handle

Over time the ashes from the burning wood build up, doing two things; 1, diminish your usable fire box space 2, block off air intake points. Run this handle back and forth rapidly to shake ashes down into the ash compartment. This is a great help in getting a response out of your fire.

Note; doing this aggressively for a long time will cause a lot of live embers fall into the ash compartment and burn out the bottom of your firebox prematurely.

5. Air Wash Flameview fire door only!

Unscrew both thumb screws below glass pain 2 or 3 turns to allow cool air to enter and wash down across inside of interior pain. This is to help keep the glass from becoming black. Leaving this open at night will decrease your overnight burn time, but closing it will, of course, smoke the glass up.



Why does my thermometer read 100°F when the stove is cold?

We preset the thermometer to compensate for being on the coldest part of the oven. This gives you a temperature reading close to what the center of the oven is. For example, let's say the oven is 350°F in the very center, the temp. at the door is going to be around 250°F. Because the thermometer is preset 100 degrees high, it shows the correct 350°F.

CHIMNEY REQUIREMENTS

The stove must be connected to its own dedicated chimney. Ideal chimney size is 7", however, this size is not as easy to find as 6" or 8". If the 7" stove pipe cannot be acquired, we recommend going to 8". If you are not able to install 8" do to existing structure (such as clay lined brick chimneys) or obstruction, we allow the use of 6", however keep in mind this could hamper the stove from achieving maximum performance. Chimney should be kept vertical as much as possible. Where a horizontal run is unavoidable, be sure to slope chimney toward the stove as much as possible, 1/4" per foot is minimum.

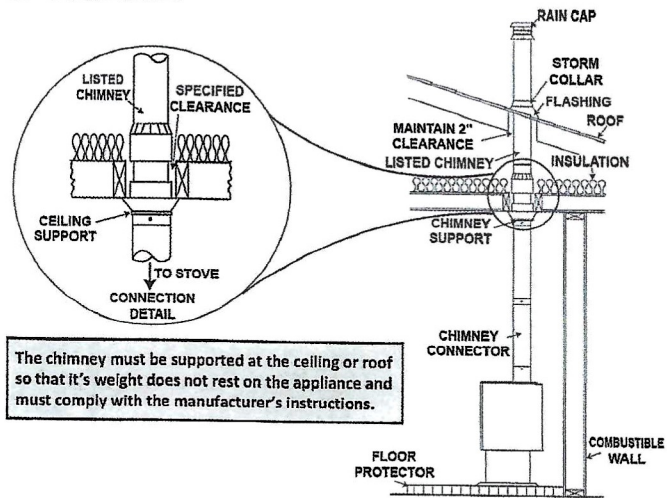
Please note that the chimney and the required chimney connector must be in good condition and kept clean. A stove does not create draft. Draft is created by the chimney. Make sure your chimney is high enough to give a good draft. Factors such as wind, trees, terrain, barometric pressure, local exterior structures, and chimney temperature can all affect chimney draft. The manufacturer is not responsible for external factors leading to poor drafting. As a general rule, taller chimneys create more draft. Exhaust fans, such as bathroom and kitchen, can cause a drop in air pressure in your house, which will increase the chance of your stove "puffing" smoke or leaking smoke. If you have any trouble with smoke leakage related to exhaust fans, you will need to provide extra ventilation to minimize the air pressure drop in your house. If you are experiencing poor draft and cannot identify the problem, you should contact a licensed, heating and cooling contractor to assist in solving the problem.

WOOD STOVE INSTALLATION ASSESSMENT GUIDE

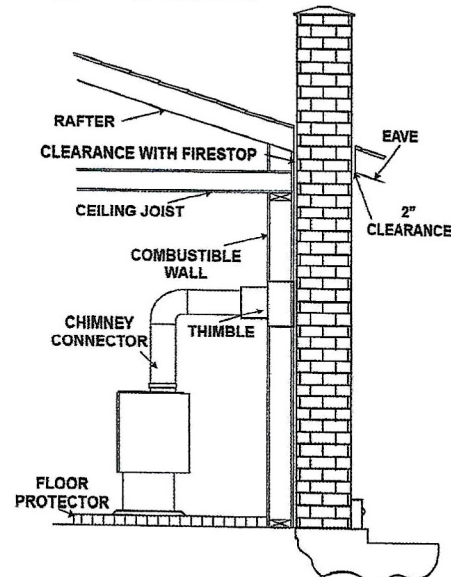
The following notes and diagrams are provided as a supplement to assist with the visual assessment of solid fuel heating appliance, flue pipe and chimney installations. Please refer to this guide when completing a Red River Mutual Solid Fuel Heating Questionnaire and note any hazard areas or non-code compliant components of the installation.

TYPICAL WOOD STOVE INSTALLATIONS

Through Ceiling

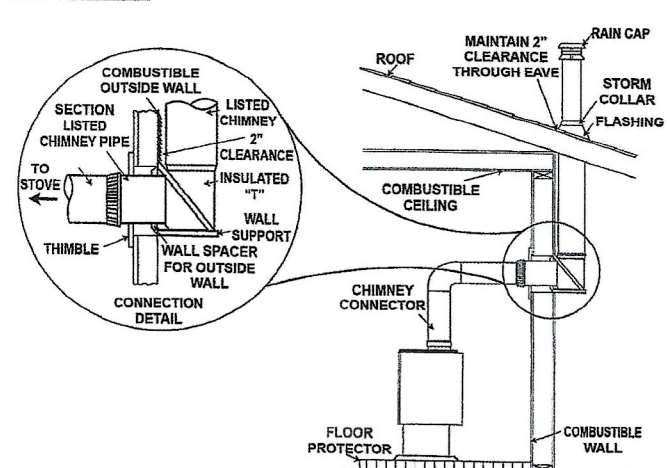


Into Masonry Chimney



Red River Mutual requires a stainless steel liner be installed in masonry chimneys in order to be approved for use.

Through Wall



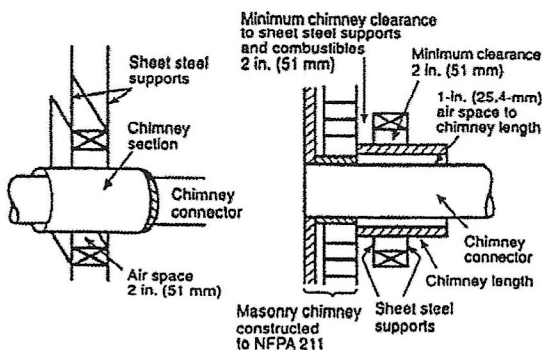
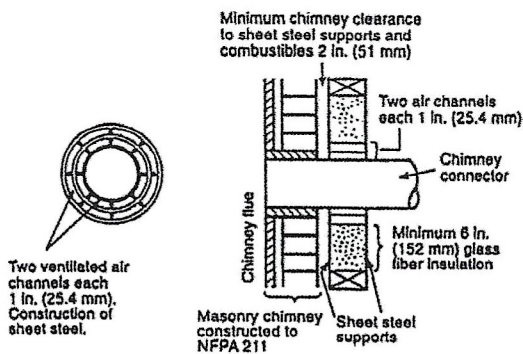
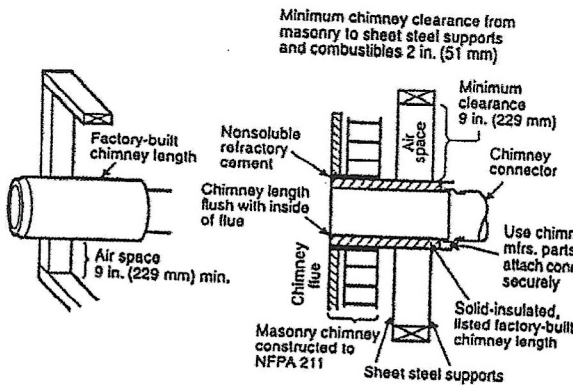
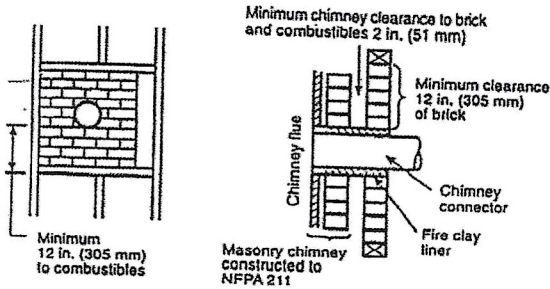
TYPICAL EXISTING MASONRY

You can also install your appliance using your existing masonry chimney. To do so, follow the guidelines below. You may want to use a factory-built thimble, or construct your own brick thimble. If you are using a masonry chimney it is important that it be built in compliance with the specifications of the Building Code in your region. It must normally be lined with fire clay bricks, metal or clay tiles sealed together with fire cement. (Round flues are the most efficient). The maximum flue size is 8"x8" square or 6" round.

!! IMPORTANT !!

In addition to installation requirements outlined in this manual, installer must also follow all local building codes and fire protection ordinances. Failure to do so could result in a chimney and, or, structural fire. It is the responsibility of the purchaser to ensure this stove has been installed according to all safety requirement prior to operating this stove.

Chimney Connector Systems and Clearances from Combustible Walls for Residential Heating Appliances



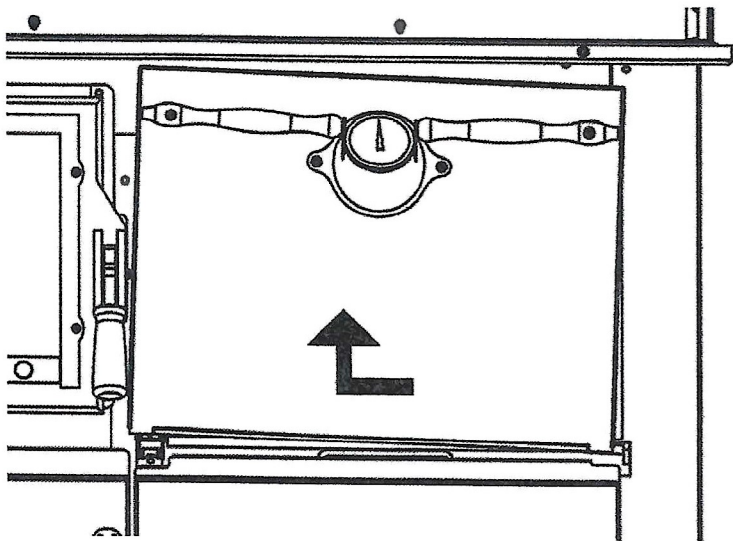
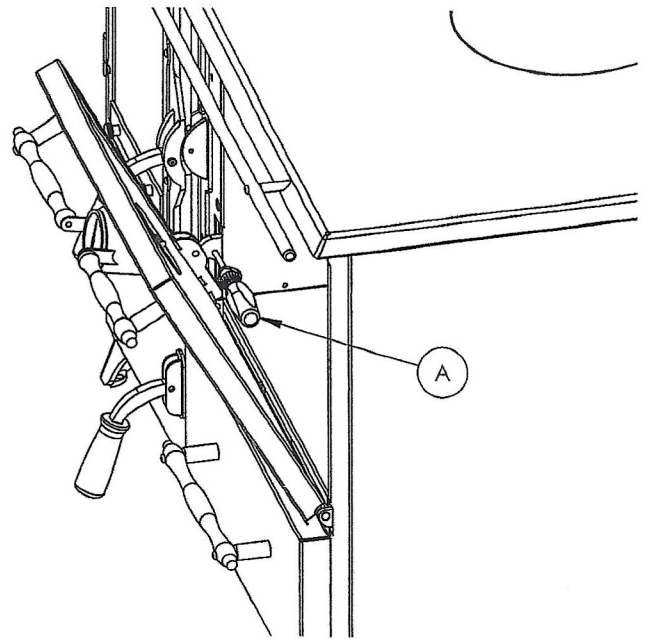
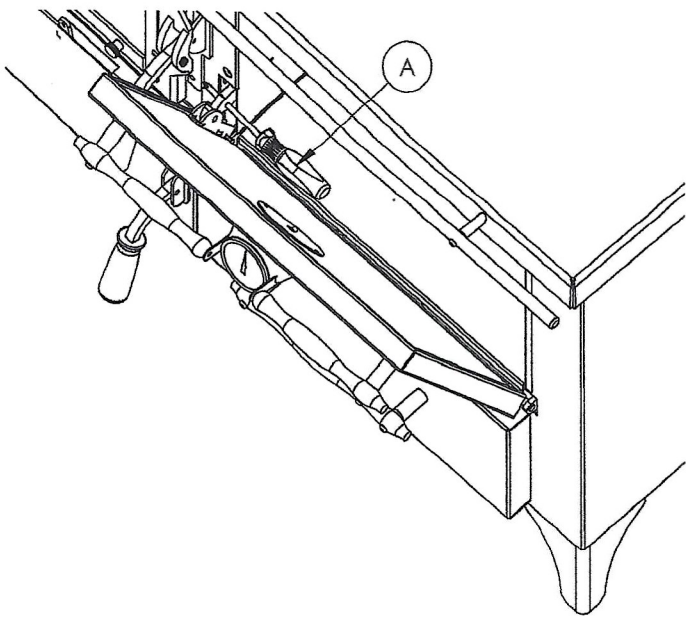
A Minimum 3.5in (88.9mm) thick brick masonry all framed into combustible wall with a minimum of 12in (304.8mm) brick separation from clay liner to combustibles. The fire clay liner shall run from outer surface of brick wall to, but not beyond, the inner surface of chimney flue liner and shall be firmly cemented in place.

B Solid-insulated, listed factory-built chimney length of the same inside diameter as the chimney connector and having 1in.(25.4mm) or more of insulation with a minimum 9in.(228.6mm) air space between the outer wall of chimney length and combustibles.

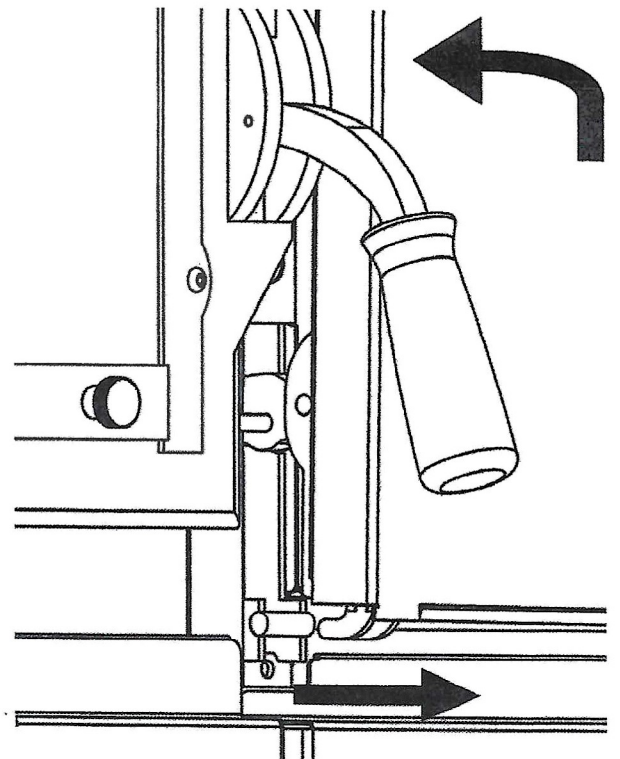
C Sheet steel chimney connector, minimum 24 gauge in thickness, with a ventilated thimble, minimum 24 gauge in thickness, having two 1in. (25.4mm) air channels, separated from combustibles by a minimum of 6in.(152.4mm) of glass fiber insulation. Opening shall be covered, and thimble supported with a sheet steel support, minimum 24 gauge in thickness.

D Solid insulated, listed factory-built chimney length with an inside diameter 2in.(50.8mm) larger than the chimney connector and having 1in.(25.4mm) or more of insulation, serving as a pass-through for a single wall sheet steel chimney connector of minimum 24 gauge thickness, with a minimum 2in.(50.8mm) air space between the outer wall of chimney section and combustibles. Minimum length of chimney section shall be 12in. (304.8mm) chimney section spaced 1in.(25.4mm) away from connector using sheet steel support plates on both ends of chimney section. Opening shall be covered, and chimney section supported on both sides with sheet steel supports securely fastened to wall surfaces of minimum 24 gauge thickness.

With a Duchess Stove, comes a Removable Oven Door: Simply insert a screw driver (Approx the same diameter) into the hole provided. Gently close the door till it is stopped by the screw-driver. Lift up & out till removed.



Oven Door removal. Lift out with arrow.



THIS STOVE IS ENGINEERED TO BURN WOOD FUEL ONLY!!

Hardwood, cut 16-18 in. long, should be air dried for a minimum of 12 months.

Store firewood in a dry well ventilated area. Moisture content should be no more than 20%.

Rapid creosote buildup, chimney fires, and poor stove performance, will be the result of using wood that is too green or wet. It is also possible to have too much draft through your chimney. In this situation, simply install a draft damper close to the stove end to easily control air flow.

More than anything else, your choice of a chimney will determine how well you like the performance of your new *Pioneer* cook stove.

STARTING YOUR FIRST FIRE

- 1) After we finish polishing your stove top we cover it with a clear film to protect it during shipping and storage. The film we use has a very strong adhesive and may leave a residue behind on the steel top. Remove protective sticker film from the cooking surface top. Use the included scratch pad with dish detergent and very hot water to remove the residue before you light your first fire in your new stove. We also use these scratch pads on our own stove tops at home to keep them smooth and clean. **Double check the Oven, inside the Fire box on top of the oven for the poker, scraper, water coil, etc. and Oven Drawer, that it is free from all packing items.**
- 2) Open the draft control, so that your smoke and gases can travel directly into the flue. This will increase the draft to your firebox, and reduce the stove's tendency to smoke while the chimney is still cold.
- 3) Turn the thermostat knob to "High". Slide the Accessory Draft located in the Ash Door (*see pg. 11*).

Place kindling and crumbled newspaper into the firebox. Light with a match at a point close to the air intake side. Do not overheat your stove during your first burn. A small fire is best to break in your stove when it is new. If your fire becomes too hot, close the accessory draft and adjust the thermostat as necessary.

HELPFUL TIP: when starting a fire, stacking kindling in a tee pee facilitates the easiest combustion.

HELPFUL TIP: for a quick, hot burn insert wood vertically in the firebox. For a long, slow burn insert wood horizontally. Rounds burn slower than split wood.

HELPFUL TIP: handheld propane torches seem to be one of the most economical and easy ways to get a fire started.

- 4) Once the fire is burning strong and steady, close the flue damper slide to divert heat around the oven, this is how you get the most use out of your fire.
- 5) Expect smoke and unpleasant odors, on a new stove till all the manufacturing oils and paint undertakes the curing process.
- 6) **DO NOT OVER FIRE:** Over firing will warp & crack your stove and void ALL warranty.
- 7) Never use gasoline, lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen-up" a fire in this stove. Keep all such liquids well away from the heater while it is in use.

CONTROL AIR FLOW

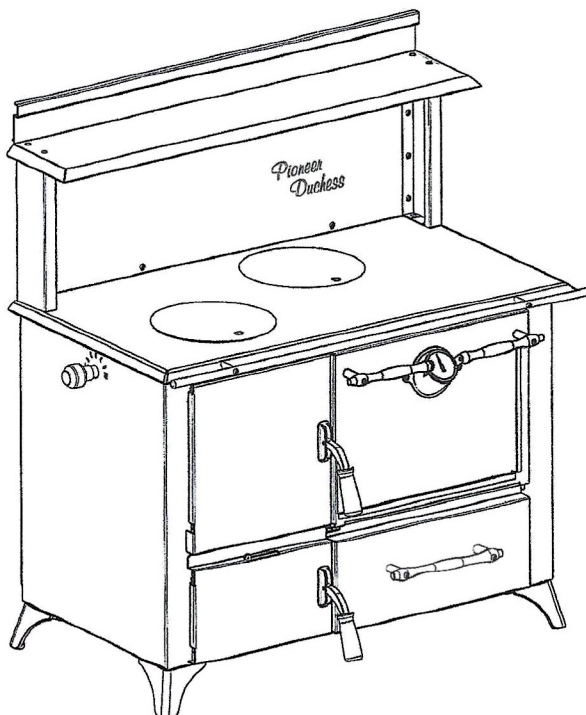
DO NOT ATTEMPT TO BURN COAL, PLASTIC, OR ANY OTHER PETROLEUM PRODUCTS
Some fuels create more CO than others, for example charcoal. Do not burn fuels that can create high concentrations of CO." Smoke emitted during the fueling process could activate smoke detectors.

BE SURE THAT SMOKE DETECTORS ARE INSTALLED


Do not store the wood fuel within heater installation clearances or within the space required for charging and ash removal.

Any alternate or make-shift parts used or welded on any part of the stove during or after installation **VOIDS ALL** Warranty and may result in a fire hazard.

CARBON MONOXIDE HAZARD...Burning fuel of any kind inside can kill you. It gives off carbon monoxide, which has no odor. **NEVER BURN** any kind of fuel inside homes, vehicles or tents.



MODEL PIONEER DUCHESS LISTED SOLID FUEL ROOM HEATER/FIREPLACE STOVE
MODÈLE PIONEER DUCHESS CLASSE SOUS APPAREIL DE CHAUFFAGE D'APPOINT/FOYER-POÊLE.

 **CERTIFIED TO UL1482 CAN/ULC S627**
CERTIFIÉ UL1482 CAN/ULC S627

WH-000001

Intertek REFER TO THE INTERTEK DIRECTORY OF BUILDING PRODUCTS (<https://bpdirectory.intertek.com>) FOR DETAILED INFORMATION.
RÉFÉRER LA DIRECTION INTERTEK DES PRODUITS DE BÂTIMENT (<https://bpdirectory.intertek.com>) POUR LES INFORMATIONS DÉTAILLÉES.

PREVENT HOUSE FIRES - INSTALL AND USE ONLY IN ACCORDANCE WITH THE OWNER'S MANUAL PROVIDED WITH THIS APPLIANCE. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTIONS IN YOUR AREA.
PRÉVENIR LES INCENDIES DOMESTIQUES - INSTALLER ET UTILISER UNIQUEMENT CONFORMÉMENT AU MANUEL DU PROPRIÉTAIRE FOURNI AVEC CET APPAREIL. COMMUNIQUEZ AVEC LES RESPONSABLES LOCAUX DES BÂTIMENTS OU DES POMPIERS AU SUJET DES RESTRICTIONS ET DES INSPECTIONS D'INSTALLATION DANS VOTRE RÉGION.

INSTALLATION REQUIREMENTS: DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE. USE A RESIDENTIAL LINED MASONRY OR LISTED TYPE HT FACTORY-BUILT CHIMNEY. USE 24 MSG BLACK CHIMNEY CONNECTOR OR LISTED DOUBLE WALL CHIMNEY CONNECTOR. REFER TO LOCAL CODES AND THE CHIMNEY MANUFACTURER'S INSTRUCTIONS FOR PRECAUTIONS REQUIRED FOR PASSING A CHIMNEY THROUGH A COMBUSTIBLE WALL OR CEILING. PLACE ON NON-COMBUSTIBLE FLOOR PROTECTION WITH A MINIMUM R VALUE OF 1.0 WHICH EXTENDS 16 INCHES (450 MM) TO THE FRONT AND 8 INCHES (200 MM) TO EACH SIDE OF THE FUEL OPENING, AND 2 INCHES (50.8 MM) BEYOND EITHER SIDE OF THE CHIMNEY CONNECTOR. DO NOT OBSTRUCT THE SPACE BENEATH THE HEATER. ADHERE TO THE FOLLOWING MINIMUM CLEARANCES TO COMBUSTIBLES WHEN USING A SINGLE WALL CHIMNEY CONNECTOR. SEE OWNER'S MANUAL FOR ADDITIONAL CLEARANCE INFORMATION.
EXIGENCES D'INSTALLATION - NE BRANCHEZ PAS CETTE UNITÉ À UN CONDUIT DE FUMÉE SERVANT UN APPAREIL PLUS PUISSANT. UTILISEZ UNE MAÇONNERIE DOUBLÉE RÉSIDENNELLE OU UNE CHEMINÉE CONSTRUITE EN USINE DE TYPE HT RÉPERTORIÉE. UTILISEZ LE CONNECTEUR DE CHEMINÉE NOIR 24 MSG OU LE CONNECTEUR DE CHEMINÉE À DOUBLE PAROI RÉPERTORIÉE. REPORTEZ-VOUS AUX CODES LOCAUX ET AUX INSTRUCTIONS DU FABRICANT DE LA CHEMINÉE POUR LES PRÉCAUTIONS À PRENDRE POUR FAIRE PASSER UNE CHEMINÉE À TRAVERS UN MUR OU UN PLAFOND COMBUSTIBLE. PLACER UNE PROTECTION DE PLANCHER INCOMBUSTIBLE D'UNE VALEUR R MINIMALE DE 0,60 QUI S'ÉTEND SUR 16 POUCES (450 MM) À L'AVANT ET 8 POUCES (200 MM) DE CHAQUE CÔTÉ DE L'OUVERTURE DU CARBURANT, ET 2 POUCES (50,8 MM) AU-DELÀ DE CHAQUE CÔTÉ DU CONNECTEUR DE CHEMINÉE. N'OBSTRUEZ PAS L'ESPACE SOUS L'APPAREIL DE CHAUFFAGE. RESPECTEZ LES DÉGAGEMENTS MINIMAUX SUIVANTS POUR LES COMBUSTIBLES LORS DE L'UTILISATION D'UN CONNECTEUR DE CHEMINÉE À PAROI UNIQUE. CONSULTEZ LE MANUEL DU PROPRIÉTAIRE POUR OBTENIR DES RENSEIGNEMENTS SUPPLÉMENTAIRES SUR L'AUTORISATION.

PULL THE DAMPER CONTROL OUT BEFORE OPENING THE FIRE DOOR. DO NOT OPERATE UNIT WITH BROKEN OR REMOVED GLASS (IF EQUIPPED) REPLACE GLASS ONLY WITH (CERAMIC) GLASS FROM THE MANUFACTURER OR DISTRIBUTOR OF THIS APPLIANCE.
PEUT LE CONTRÔLE DAMPER AVANT OUVRE LA FIRE DOOR. NE PAS OPÉRATER UNITÉ AVEC BROKEN OU REMOUEVE (SI ÉQUIPÉ) RÉPLACÉZ SEULEMENT AVEC (CERAMIQUE) GLASS DE LA FABRICATION OU DISTRIBUTEUR DE LA PRÉSENTE APPLICATION.

FLOOR PROTECTION/PROTÈGE-PLANCHER

A=UNIT TO BACKWALL - 18-in/457-mm
B=FLUE TO BACKWALL - 11.5-in/292-mm
C=UNIT FIREBOX SIDE TO SIDEWALL - 12.5-in/318-mm
D=UNIT OVEN SIDE TO SIDEWALL - 9-in/229-mm


UNIT IS ACCEPTABLE WITH OPTIONAL WOOD OR METALLIC FIREBOX HANDLE.
L'UNITÉ EST ACCEPTABLE AVEC LA POIGNÉE DE BOÎTE À FEU EN BOIS OU MÉTALLIQUE EN OPTION.

THE UNIT IS REQUIRED TO HAVE AN INSULATED FLOOR PROTECTOR WITH A MINIMUM R-VALUE OF 0.60.
L'UNITÉ DOIT ÊTRE MONTÉE D'UN PROTECTEUR DE PLANCHER ISOLÉ D'UNE VALEUR R MINIMALE DE 0,60.

FLOOR PROTECTION MUST EXTEND 16-IN (450-MM CAN) IN FRONT OF THE FIREBOX, 8-IN (200-MM CAN) BEYOND EITHER SIDE OF THE FUELING DOOR, AND 2-IN (50.8-MM CAN) BEYOND EITHER SIDE OF HORIZONTAL CHIMNEY CONNECTOR.
LA PROTECTION DU SOL DOIT S'ÉTENDRE DE 450-MM (16 POUCES) DEVANT LE FIREBOX, 200-MM (8 POUCES) DE CHAQUE CÔTÉ DE LA PORTE DE RAVITAILEMENT ET 50.8-MM (2 POUCES) DE CHAQUE CÔTÉ DU CONNECTEUR HORIZONTAL DE CHEMINÉE.

OPERATION REQUIREMENTS - FOR USE WITH SOLID WOOD FUEL ONLY. DO NOT OVERFIRE, IF HEATER OR CHIMNEY CONNECTOR GLOWS YOU ARE OVERFIRING, INSPECT AND CLEAN CHIMNEY FREQUENTLY, UNDER CERTAIN CONDITIONS OF USE CREOSOTE BUILDUP MAY OCCUR RAPIDLY. DO NOT USE GRATE OR ELEVATED FIRE, BURN WOOD FIRE DIRECTLY ON HEARTH. RISK OF SMOKE AND FLAME SPILLAGE, OPERATE ONLY WITH DOORS FULL CLOSED.
EXIGENCES D'EXPLOITATION - POUR UNE UTILISATION AVEC DU COMBUSTIBLE EN BOIS MASSIF SEULEMENT. NE PAS TROP TIRER, SI LE CHAUFFAGE OU LE CONNECTEUR DE CHEMINÉE BRILLE, VOUS ÊTES OVERFIRING, INSPECTER ET NETTOYER LA CHEMINÉE FRÉQUEMMENT, DANS CERTAINES CONDITIONS D'UTILISATION, L'ACCUMULATION DE CRÉOSOTE PEUT SE PRODUIRE RAPIDEMENT. N'UTILISEZ PAS DE GRILLE OU DE FEU SURÉLEVÉ, BRÛLEZ LE FEU DE BOIS DIRECTEMENT SUR LE FOYER. RISQUE DE FUITE DE FUMÉE ET DE FLAMME, FONCTIONNER SEULEMENT COMPLÈTEMENT FERMÉ.

CAUTION-HOT WHILE IN OPERATION. DO NOT TOUCH. KEEP CHILDREN, CLOTHING, AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS. SEE NAMEPLATE AND INSTRUCTIONS. *HOT PARTS. PROVIDED MUST BE INSTALLED AS SHOWN IN THE INSTALLATION INSTRUCTIONS. THE PIONEER PRINCESS IS TO BE OPERATED WITH THE FIRE & ASH DOORS CLOSED AND AS A FREESTANDING SPACE HEATER WITH THE CLEARANCES IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. DO NOT INSTALL IN ANY FIREPLACE.
PRUDENCE-CHAUD PENDANT LE FONCTIONNEMENT. NE TOUCHEZ PAS. ÉLOIGNEZ LES ENFANTS, LES VÊTEMENTS ET LES MEUBLES. LE CONTACT PEUT CAUSER DES BRÛLURES DE LA PEAU. VOIR PLAQUE SIGNALÉTIQUE ET DES INSTRUCTIONS. *PIÈCES CHAUDES. FOURNI DOIT ÊTRE INSTALLÉ COMME INDIQUÉ DANS LES INSTRUCTIONS D'INSTALLATION. LE PIONEER PRINCESS DOIT ÊTRE UTILISÉ AVEC LES PORTES FIRE & ASH FERMÉES ET COMME UN APPAREIL DE CHAUFFAGE AUTOPORTANT AVEC LES DÉGAGEMENTS DANS LES INSTRUCTIONS D'INSTALLATION DU FABRICANT. NE PAS INSTALLER DANS UN FOYER.



MANUFACTURED BY/FABRIQUÉ PAR:
PIONEER STOVES LLC
9269 ANTRIM CHURCH ROAD
GREENCASTLE, PENNSYLVANIA 17225

**DATE OF MANUFACTURE/
DATE DE FABRICATION:**

MAINTENANCE

PROPER MAINTENANCE IS CRITICAL TO PROTECTING THE LIFE AND SAFETY OF YOUR STOVE.

ASH REMOVAL

It is ideal to remove ashes when there is the least amount of live embers possible, in the firebox.

- 1) Be careful to empty the ashes only where they cannot ignite a building or anything combustible. Even ashes that appear to be dead can become alive when exposed to air. 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 the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.
- 2) Using the scraper, rake excess ashes to and through the ash grate. Always leave at least 2" of ashes on top of the grate. Be careful not to clean your grate too well. Continually building a fire directly on the grate will cause it to wear out prematurely.
- 3) Wait 2 hours before emptying the ash pan to give any live embers in the ash pan time to cool off.
- 4) Ashes should be emptied into a closed noncombustible container until they can be properly disposed of.
- 5) When you want to use your oven, be sure the flue damper slide is closed (when the handle is pushed in) forcing the heat around the oven. If your stove is hot but the oven is slow to heat, you probably have a slow chimney draft. Check for obstructions that may be reducing your draft.
- 6) Do not store the wood fuel within heater installation clearances or within the space required for charging and ash removal.

CREOSOTE FORMATION AND NEED FOR REMOVAL

!! WARNING !! CLEANING CREOSOTE SHOULD ONLY BE DONE WHEN THE STOVE IS COLD.

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

CREOSOTE IN STOVE

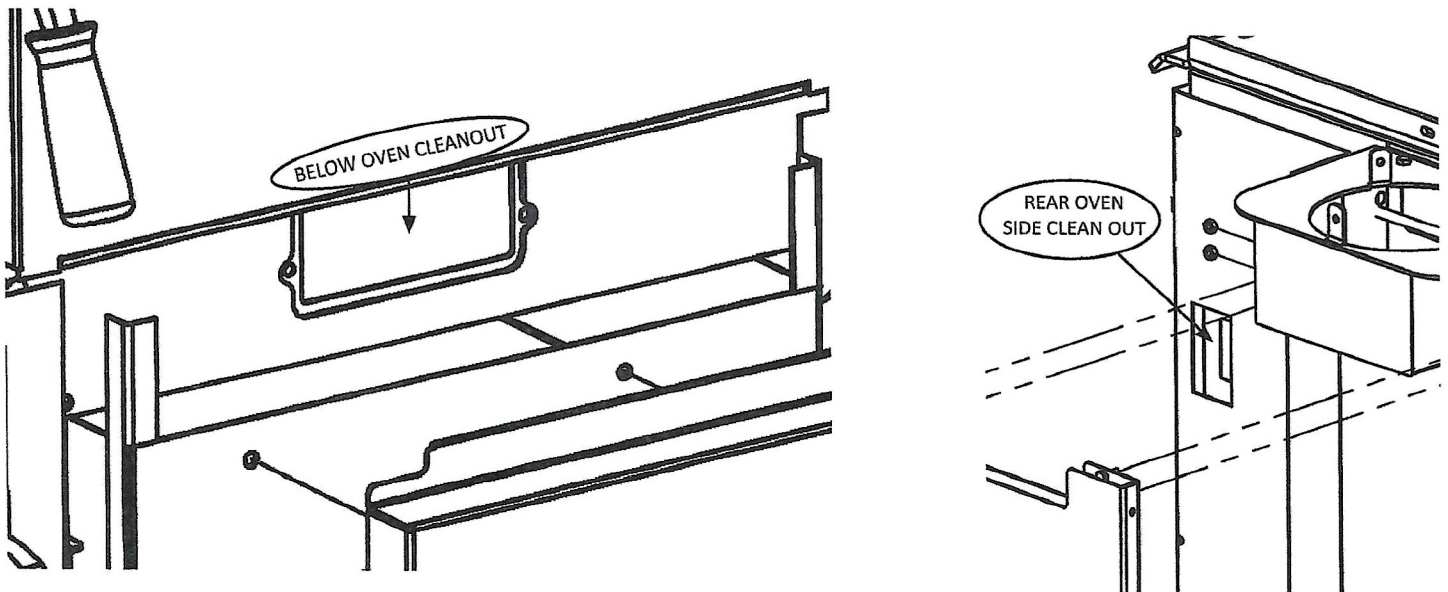
About every two months you should check the build-up of soot and creosote around and beneath the oven.

- 1) Open the clean out below the oven by removing both 7/16" (11.125 mm) nuts, sliding off cover plate and removing stainless shield. Use the scraper provided to clean out this area, being sure to scrape out on both sides of the baffle that intersects the clean-out opening, Also be sure to clean the deposits in the flue itself that projects to the rear of the stove.
- 2) Clean above oven by removing oven side lid on the cook top and scraping ash and soot build-up into firebox to be removed from there.

- 3) There is a section of the flue path located on the right side of the oven. This narrow channel may also accumulate some creosote periodically. To clean it, remove the rear oven side clean out plate and slide scraper in to scrape both walls clean. These loose flakes can then be removed from stove by cleaning under oven (see no. 1). Note; when replacing plate, be sure the tab on the bottom is inside the stove.

CREOSOTE IN CHIMNEY

- 1) Slide a correct size chimney sweep through the chimney. Doing this will knock the creosote flakes off the pipe wall causing them to fall down to the bottom of the flue box on the back of the stove, so they can then be scraped out from the below oven clean out. The ideal way to clean the chimney is to first disconnect it from the stove so you can slide a bucket or other container under the open end of the pipe allowing the soot to fall directly into the container. However, depending on your situation, this may not be possible.
- 2) Cleaning the chimney will cause some loose soot to accumulate on the flat floor of the flue adapter. This can be scraped out by reaching through the oven side lid hole and through the draft control opening with a screw driver or other slender tool (our scraper will not fit).



OTHER GENERAL MAINTENANCE

- 1) To clean the cooking surface, use fine (000) steel wool, soap and warm water. Dry with a clean damp towel. Rub cooking surface with paraffin wax or light cooking oil, and polish with a soft cloth. When stove is not in use for longer than one week coat surface with light oil. Heat will darken the cooking surface; the hottest sections turning dark first. This is normal on any new stove and nothing to worry about.
- 2) If you have a reservoir model, be sure there is water in the reservoir at all times, a minimum of at least three inches. Never put anything except water into the reservoir.
- 3) Do not sit or stand on the open oven door, or in other ways subject it to excessive weight. To do so may cause enamel to chip, or the door to bend out of shape.
- 4) You will notice that the bottom of bottom of the oven is not stainless steel. This is enameled steel for easier cleaning and better more even baking. It is possible that, with time, the oven bottom may show signs of corrosion, depending on how much creosote your fires are producing. When this happens, contact us, or the dealer that you purchased the stove from. Replacement oven bottoms are available and installation is not difficult

MAINTENANCE SCHEDULE

Every burn	Every day	Every week	Every month	Every year	Before extended periods of disuse
Stir the ashes to break up any clods.	Inspect fire door gasket.		Inspect your chimney and all flue connectors for creosote buildup.	Closely examine all parts of the stove for signs of wear.	Vacuum all the ashes out of the firebox
Using the shaker handle, shake ash buildup into ash compartment.	Clean all residue resulting from cooking or baking.	Remove any creosote that may have built up around the oven.	Apply a light food grade oil to the cook top to prevent rust.	Order new parts to replace worn ones wherever needed	Insert a moisture absorbent such as Damp rid®, charcoal, or newspaper in the fire box
	Check and empty the ashpan if necessary				Disassemble and clean the flue pipe
	Burn at maximum heat for at least 30 minutes to reduce creosote accumulation.				Close the air intake control
					Seal off the smoke outlet with tinfoil, plastic wrap, or a similar product

Clean the top daily. You may use soap and water for initial cleaning. Follow up with emery cloth to maintain a smooth, glossy finish. The top will turn blue and finally turn black, which is normal. If it is properly cared for, it will remain smooth and shiny.

When the stove is not in use for more than a couple of days, coat with a light oil to prevent rust. It will rust if left uncoated when the stove is cold.

The porcelain is easily cleaned with soap and water.

DO NOT CLEAN THE PORCELAIN WITH OVEN CLEANER; IT WILL RUIN THE FINISH.

TROUBLE SHOOTING

Problem	Cause	Solution
Oven won't heat up	Draft control is pulled out	Push Draft control in
	Creosote buildup in chimney or stove	Clean out creosote in chimney and stove.
	Wood has too much moisture	Allow wood to dry out more before using
	Thermostat turned too low	Adjust thermostat to allow more air into the firebox
	Chimney is sized too big or too small	Contact a certified chimney sweep or chimney retailer for help getting the right sized chimney.
	Chimney is too short or gets downdrafts	Contact a certified chimney sweep or chimney retailer for ways to safely add to your chimney's length.
	Thermometer may be giving an inaccurate reading	Install a different oven thermometer
	Thermostat Malfunction	Remove cover and check thermostat. <i>See diagram pg. 9</i>
Oven gets too hot	Fire box gets too hot	Check (trouble shooting firebox gets too hot)
	Thermometer may be giving an inaccurate reading	Install a different oven thermometer
Fire box gets too hot	Thermostat turned too high	Adjust thermostat to allow less air into the firebox
	Fire door gasket no longer sealing	Replace fire door gasket
	Ash door gasket no longer sealing	Replace ash door gasket
	Stove has warped through over firing and created air leakage points	Replace damaged parts or stove
	Less than ideal fuel is being used	Burn only dry, seasoned hardwood
	Excessive drafting	Install a damper in the flue pipe
	Nearly all overheating related symptoms can be resolved simply and economically by installing a damper in the flue pipe. This does not address the problem but it easily and effectively treats the symptoms.	

TROUBLE SHOOTING

Problem	Cause	Solution
Stove top is rusting	Top was not properly oiled	Scrub top with an emery cloth or wire brush and reapply oil
Baked items come out lopsided	Stove is not level	Level the stove with the adjustable leg and if needed insert metal or masonry shims under the necessary stove legs
Fire box smokes when refueling	Creosote buildup in chimney or stove	Clean out creosote in chimney and stove.
	Chimney is sized too big or too small	Contact a certified chimney sweep or chimney retailer for help getting the right sized chimney.
	Fire box door is being left open for too long.	Add less wood at a time or add wood faster
	Draft control is on (L) Low position	Slide draft control to (H) High position
	Oven bypass handle is not pulled out	Pull oven bypass handle out when refueling
	Chimney gets down drafts	Consult a Certified Chimney Sweep or chimney retailer for ways to prevent down drafts.
Stove smokes during normal operations	Creosote buildup in chimney or stove	Clean out creosote in chimney and stove.
	Chimney is sized too big or too small	Contact a certified chimney sweep or chimney retailer for help getting the right sized chimney.
	Chimney is too short	Contact a certified chimney sweep or chimney retailer for help getting the right sized chimney.
	Chimney leaks	Replace chimney
	Chimney gets down drafts	Consult a Certified Chimney Sweep or chimney retailer for ways to prevent down drafts.
	House is too airtight	Crack open a window or open a vent
<p>Getting a chimney to draw in all weather conditions can be a complicated process. It is common for some chimney sweeps or chimney retailers to “pass the buck” by blaming a drafting problem on the stove itself. However, the simple science of the matter is that smoke will go in whatever direction has the most pull. If your house has more draw than your chimney, your stove will want to smoke into your house. Smoke problems are almost always chimney related.</p>		

STAINLESS STEEL BRICK INSTALLATION

Pioneer Princess – New Style

Step 1: Ensure absence of all ash and debris on firebox floor.

Step 2: Install one End Brick in the front of the firebox with the vertical tabs facing the rear of the stove.

Step 3: Install one Side Brick on the left side of the firebox with one end behind the vertical tab of the End Brick.

Step 4: Place a Retainer Angle at the rear of the firebox against the left Side Brick.

Step 5: Slide an End Brick between the end of the Side Brick and the back of the firebox. (with the vertical tabs facing the front of the stove).

Step 6: Install a Side Brick on the right side of the firebox.

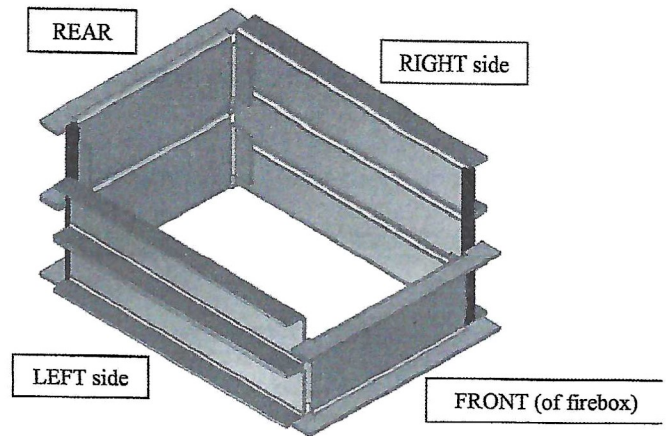
Step 7: Slide a Retainer Angle between the right Side Brick and the front End Brick. (same as the Angle in the left rear firebox)

Step 8: Install a Side Brick on top of the left brick. You will need to slide it up behind the baffle plate and then let it rest on the bottom left brick. Make sure the brick is seated behind the tabs of both the front and rear brick.

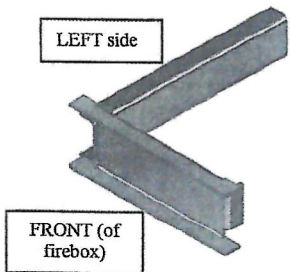
Step 9: Install the final End Brick on top of the brick in the rear of the firebox with the vertical tabs facing the front of the stove.

Step 10: Install the two remaining Side Brick on top of the right brick. Make sure the brick is seated behind the tabs of the back brick and the front retainer angle.

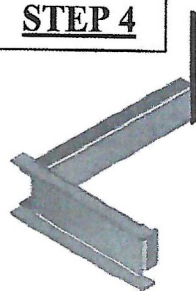
Layout of Fire Brick



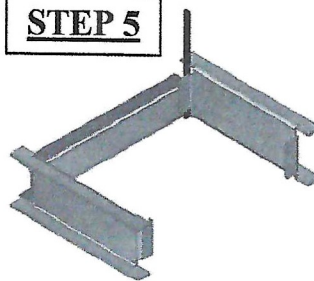
STEP 2-3



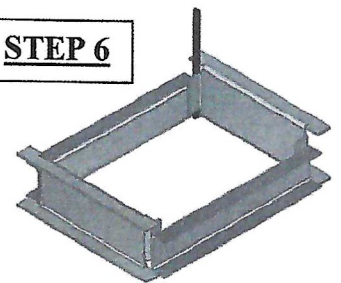
STEP 4



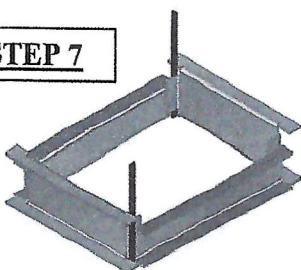
STEP 5



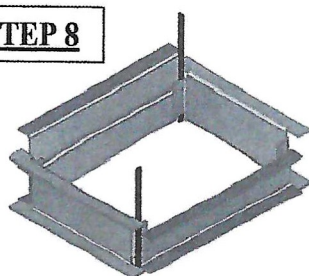
STEP 6



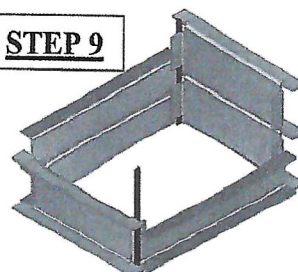
STEP 7



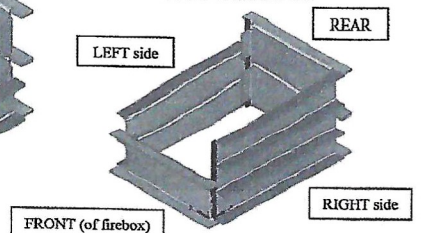
STEP 8



STEP 9



STEP 10



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NOTES

WARRANTY

Thank you for choosing a cook stove from Pioneer Stoves. We hope this stove will give you many years of service.

Your stove body is covered under our **10 year** warranty plan against any manufacturing defect. The prorated value of your stove **depreciates by 10%** each year for ten years after the **date of purchase**. In case of a **manufacturing defect**, we will credit you the full depreciated value of the stove towards the price of a new stove.

This warranty does **not** cover cracked or warped tops if the top has been heated repeatedly to a reddish glow, or if the stove has been altered and modified in any way.

All replacement parts, such as wooden handles, enameled parts, nickel plated parts, fire brick, oven bottom etc. are covered by a full **2 year** warranty and can be supplied by your local dealer or directly from us at minimal price.

Please activate your warranty by filling out the enclosed form and mailing it to the address below within 30 days of purchase.

**Pioneer Stoves LLC
9269 Antrim Church Rd.
Greencastle, PA 17225
(717)-387-9932 office
(717) 597-0055 fax**

PLEASE DETACH THIS SECTION AND MAIL

Name _____

Address _____

Date Purchased: _____

Purchased from: _____

Model _____

Serial# _____

PLACE
STAMP
HERE

**Pioneer Stoves LLC
9269 Antrim Church Rd.
Greencastle, PA 17225**