



509 Stoves Owner's Operation Manual Model 509-1 **OPTIMUM**

UL 1482 STANDARD FOR SOLID-FUEL TYPE ROOM HEATERS- UL-1482-2011 (R2015)
ULC S627-00 SPACE HEATERS FOR USE WITH SOLID FUELS- Edition 3 - Issue Date 2000/06/01

OMNI PROJECT NUMBER:
0559WS001E
0559WS001S



MANUAL REVISION DATE: 02-22-2019



MODEL 509-1
OPTIMUM

CAUTION!!!
IMPORTANT OPERATING AND MAINTENANCE
INSTRUCTIONS INCLUDED.
DO NOT DISCARD.
LEAVE THIS MANUAL WITH THE HOMEOWNER.



CAUTION DO NOT RUN THE UPPER STOVE BLOWER ON LOW FOR EXTENDED PERIODS OF TIME
DO NOT RUN THE STOVE ON LOW FOR EXTENDED PERIODS OF TIME

Failure to follow the information in this manual may result in a fire; causing property damage, personal injury, or death. Read this booklet completely before installing or operating this appliance.

Do not modify this appliance in any way. Operation of the appliance in a manner inconsistent with this owner's manual will void the warranty.

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. If emissions are visible, stove needs to be turned up to a higher setting. One reason for visible emissions is stove burning too cold. Familiarize yourself with your stove and the fuel you are burning to minimize visible emissions.

FOR USE WITH DENSIFIED FUEL LOGS ONLY.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

Comply with all minimum clearances to combustibles as specified. Failure to comply may cause a house fire.

Certified to comply with 2020 particulate emission standards using densified fuel logs. This wood heater was found to have an average emissions rate of 1.5 g/hr using ASTM E2779

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.

Glass and other surfaces are hot during operation and for some time after the fire has gone out. Supervise children around this appliance. Warn children and adults about high temperatures. High temperatures may ignite clothing or other flammable materials. Keep clothing, furniture, draperies and other combustible materials away.

CAUTION: DO NOT OPERATE STOVE WITH DOOR OPEN. Keep the main door closed and the fuel door closed during operation. It is important to keep all seals / gaskets in good working condition.

DO NOT INSTALL IN A MOBILE HOME.

DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE.

DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA, OR ENGINE OIL.

DO NOT OPERATE WITH THE HOT AIR IGNITER VALVE OPEN AFTER THE STOVE IS LIT.

CALIFORNIA PROP 65 WARNING:

Use of this product may produce smoke which contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

IMPORTANT WARNINGS

CAUTION: Read this manual thoroughly before starting installation. For your safety, follow the installation, operation and maintenance instructions exactly without deviation. Failure to follow these instructions may result in a possible fire hazard and will void the warranty. If this appliance is not properly installed, a house fire may result. Contact local building or fire officials about requirements and installation inspection in your area.

1. DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE CONNECTED TO ANOTHER APPLIANCE.
2. Do not connect this appliance to air ducts or any air distribution system.
3. Do not install a flue damper in the exhaust venting system of this appliance.
4. Do not use class B venting intended for gas appliances as a chimney or connector pipe on this appliance.
5. The minimum clearances must be maintained for all combustible surfaces and materials including; furniture, carpet, drapes, clothing, wood, papers, etc. Do not store firewood next to or touching the appliance.
6. INSTALLATION DISCLAIMER - This stove's exhaust system works with negative combustion chamber pressure and a slightly positive chimney pressure. Therefore, it is imperative that the exhaust system is gas tight and installed correctly. Since 509 Fabrications, Inc. has no control over the installation of your stove, 509 Fabrications, Inc. grants no warranty, implied or stated for the installation or maintenance of your stove, and assumes no responsibility for any consequential damage(s).
7. Burning any kind of fuel consumes oxygen. If outside air is not ducted to the appliance, ensure that there is an adequate source of fresh air available to the room where the appliance is installed.
WE HIGHLY RECOMMEND USING OUTSIDE AIR SOURCE IN CASE OF APPLIANCE SHUT DOWN, SMOKE WILL FILL THE ROOM.
8. Most states require a fresh air intake at time of install.
9. The stove will not operate using natural draft, nor without a power source for the blower and fuel feeding systems.
10. 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.
11. CONTINUOUS OPERATION: When operated correctly, this appliance cannot be overfired. Continuous operation at a maximum burn can, however, shorten the life of the electrical components (blowers, motors, and electronic controls), and is not recommended. Typical approved operation would include running at the low to mid-range setting with occasional running on the maximum setting during the coldest periods of the winter. **The blower speed control should be turned to HIGH when operating the stove on the high heat setting.**
12. **CAUTION:** HOT IN OPERATION. An appliance hot enough to warm your home can severely burn anyone touching it. Keep children, clothing and furniture away. Contact may cause skin burns. Do not let children touch the appliance. Train them to stay a safe distance from the unit.
13. APPROVED FUEL: This appliance is designed specifically for **densified wood fuels only**. This appliance is NOT approved to burn cardboard, nut hulls, cherry pits, corn, etc. regardless if it is in log form. Failure to comply with this restriction will void all warranties and the safety listing of the stove. Consult with your authorized 509 Fabrications, Inc. dealer for more information on approved densified log fuels.
14. FLY ASH BUILD-UP: For all densified fuel heaters, the combustion gases will contain small particles of fly ash. This will vary due to the ash content of the fuel being burned. Over time, the fly ash will collect in the exhaust venting system and restrict the flow of the flue gases. The exhaust venting system should be inspected regularly and cleaned as necessary.
15. SOOT FORMATION Incomplete combustion, such as occurs during startup, shutdown, or incorrect operation of the room heater will lead to some soot formation which will collect in the exhaust venting system. A precautionary inspection on a regular basis is advisable to determine the necessity of cleaning. The exhaust venting system should be inspected regularly and cleaned as necessary.
16. DISPOSING OF ASHES: Any ashes removed from the stove must be deposited 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, outside of the dwelling 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 been thoroughly cooled.
17. SAVE THESE INSTRUCTIONS.
18. See the listing label on the appliance or see Safety / Listing Label
19. When you light the stove for the first time you will get some smoke and odor off of the stove as it heats up and the paint cures. It is recommended that you open the windows in the room where you are burning the stove to let the vapors escape. After lighting the stove for the first time, slide the damper on the side of the stove to the "High" setting and run for at least 3 hours to let the stove paint cure.

509 Fabrication

Thank you for purchasing our 509 Fabrications, Inc Densified Fuel Log Stove.

This manual is designed to be simple. After reading through it if you have any questions, please feel free to email me anytime at Dusty@509Fab.com <mailto:Dusty@509Fab.com>. I will respond to you as soon as possible.

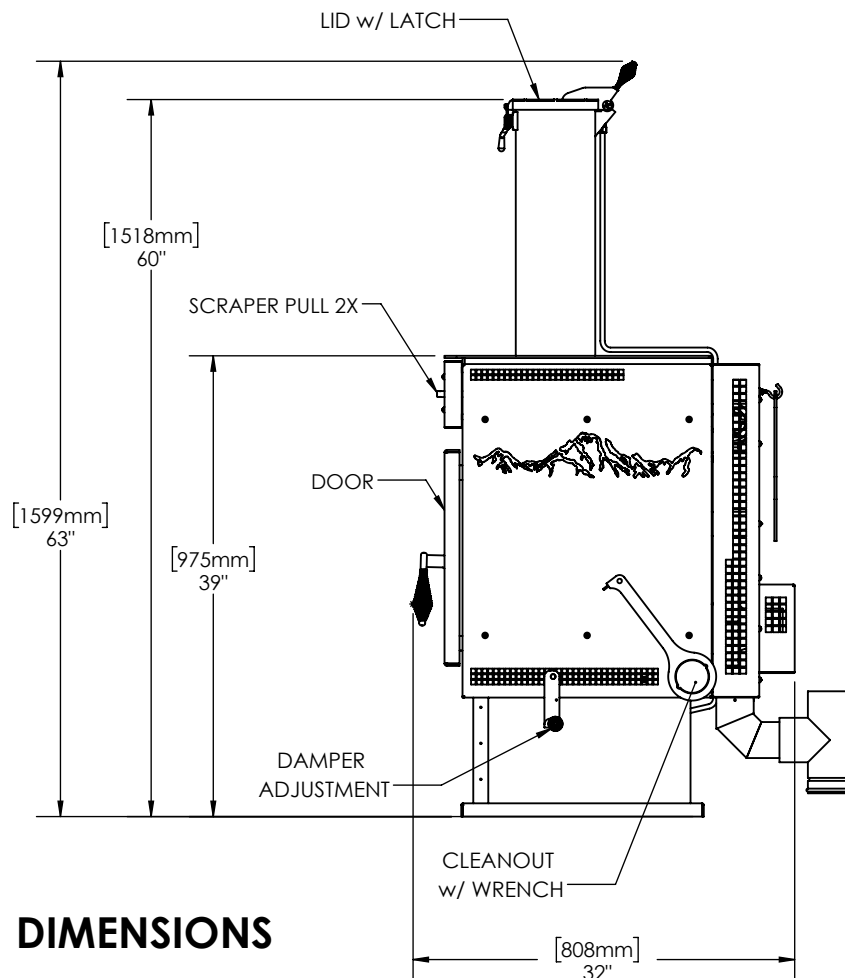
Very Important: In the unlikely event if your electricity goes out, do not open the door or the lid on the top of the stove. The stove is designed to be air tight. Let the fire go out naturally.

Do not have the lid and the door open at the same time while the fire is burning. You will get smoke in the room. Only open one at a time.

Do not burn wood or any other substance in this stove except natural densified fuel logs with no additives. Burning these types of fuel will void your warranty and heavily damage the inner workings of the stove and exhaust motor.

This manual will cover:

1. Where and How to Install the stove including air intake and exhaust
2. How to Power the stove
3. Types of fuel you “Can and Cannot Burn”
4. How to Light the stove
5. How to Operate the stove and problem solving
6. How to Clean the stove
7. Maintenance
8. Clearance to combustibles
9. Limited Warranty
10. Important Warnings



How to Install the stove

The stove should be installed by a licensed stove company or a licensed HVAC Technician. Some states and counties require permits be obtained before you install your stove.

The outlet on the bottom combustion blower motor is 3" in diameter. Double wall pipe with stainless steel for the inner liner must be used in all installs. It is most commonly called Pellet Pipe. Three inch (3 inches) (76mm) diameter Listed DOUBLE WALL pipe with MH8381 & MH14420) to UL 641 Type L Low Temperature Venting Systems** Listed factory-built Class "A" chimney, or a masonry chimney.

(**In Canada must comply with Standard CAN/ULC-S629-M87 for the 650oC Factory-built chimney.)

FLOOR PROTECTION:

Floor protector must be 1/2 in. minimum noncombustible material extending beneath heater and to front/sides/rear as indicated on the diagram below.

Exception: Non-combustible floor protections must extend beneath the flue pipe when installed with horizontal venting and extend 2 inches (51mm) beyond each side.

The stove is designed to be pushed back to within inches of the back wall and to be at least one foot from any sidewalls or any other surface. Check with your local permit inspector to verify your clearance from combustibles in your state. We have UL specifications on the stove for clearance to combustibles. Add here after striking 8. Refer to this manual and the drawings for install specifications.

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 hot fire.

The chimney connector and chimney should be inspected at least once every two months during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.

Using "Make-Shift" parts or not following the guidelines of correct installation procedures and clearances can result in failure of the stove or a fire in your home.

The chimney connector shall not pass through an attic or roof space, closet or similar concealed space, or a floor, or ceiling. Where passage through a wall or partition of combustible construction is desired, the installation shall conform to Can/CSA-B365, Installation Code for Solid-Fuel-Burning Appliances and Equipment.

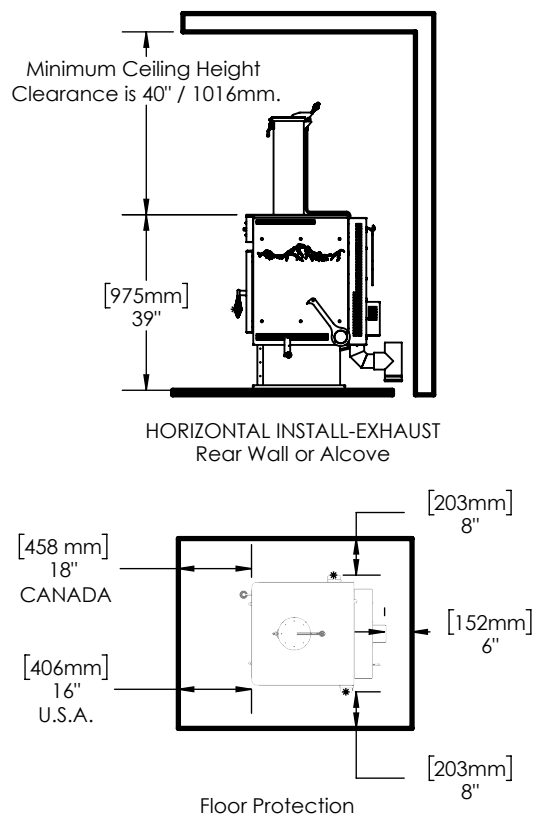
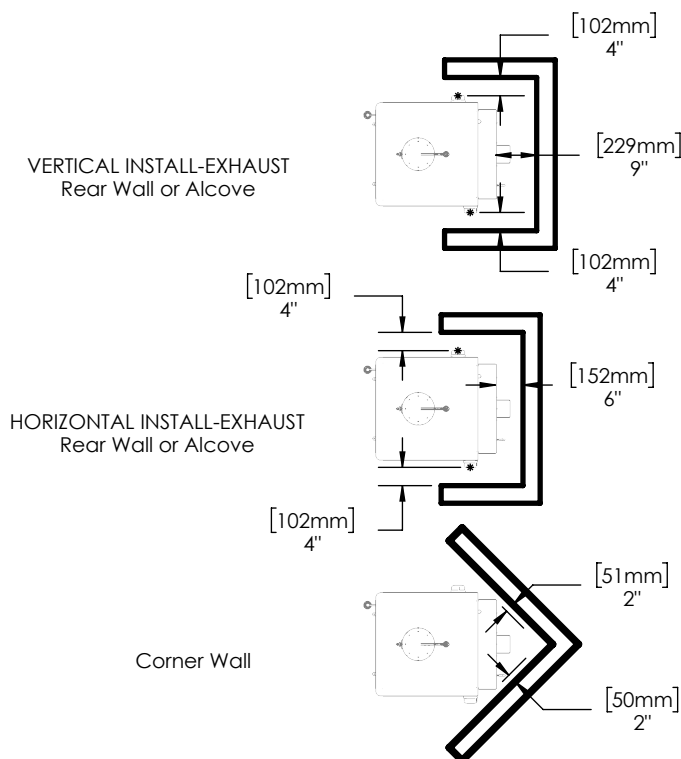
Clearances may only be reduced by means approved by the regulatory authority.

THE STOVE OPERATES BEST WHEN THE PELLET PIPE IS INSTALLED IN A HORIZONTAL POSITION THROUGH AN OUTSIDE WALL. WE RECOMMEND A HORIZONTAL INSTALLATION WITH A COUPLE FT OF RISE ONCE OUTSIDE THE WALL BEFORE INSTALLING YOUR TERMINATION END. THIS WILL HELP DRAFT OUTSIDE IF A POWER FAILURE OCCURS.

INSTALLATION OF A 3 INCH FLEXIBLE ALUMINUM FRESH AIR INTAKE IS ALSO HIGHLY RECOMMENDED TO PULL VAPORS OUT OF THE STOVE IN CASE OF POWER FAILURE.

DO NOT INSTALL IN A MOBILE HOME.

IT IS RECOMMENDED IN CASE OF POWER OUTAGE TO HAVE AT LEAST 2 FT OF RISE ABOVE MOTOR ELEVATION IN STOVE PIPE BEFORE TERMINATING EXHAUST.



DuraVent - PelletVent Pro - Pipe

Building structure and Air intake and output, The following pages show requirements per UL testing of this stove

509 FAB suggest's the DuraVent products and Specifications (See Attached Manual) As an Industrial leader in Pellet Stove Pipe products

How to Power the stove

The stove has one plug-in, 3 prong 8 ft. cord. Plug this cord into a 3-prong dedicated outlet.

The stove should be plugged into its own outlet for safety and power surges.

The Fan and Igniter switches are on the left side of the stove on the base. The upper convection fan is plugged into the outlet under the stove.

The round knob controls your upper convection blower. Turning counter clockwise until it “clicks” is the off position. First turning the knob on clockwise is the high setting for the fan. The stove fan should be run on high as much as possible. If you need to turn it down for quieter operation, do not do so for extended periods of time. This is very hard on both motors because the stove operates hotter when this upper fan is turned down.

The middle toggle switch is for your combustion / exhaust motor. This toggle must be in the up position for the stove to operate. If you turn on this toggle switch and the motor does not turn on, try turning the toggle override on the snap disc on the side of the back cover. Once the stove is heated up, push down the rear cover toggle switch. (If equipped with a snap disc switch.) This will let your exhaust motor turn off automatically when the stove is out of fuel.

The timer switch is for the igniter to light the stove. Turn this switch past 5 min. to light the stove. (See lighting instructions.)

What you “Can and Cannot Burn” in your stove.

1. The stove **is not** designed to burn cord wood or wood round logs. **DO NOT BURN CORD WOOD!**

FOR USE WITH DENSIFIED FUEL LOGS ONLY. ie Presto Logs, North Idaho Energy Logs, Home Fire Prest Logs.

2. The stove **is not** designed to burn any log that has additives in the log to help it burn. These types of logs will void your warranty if burned in your stove. The materials in these logs will also “clog up” the way the stove breathes to be able to operate efficiently and it will also plug up the fan blades on the motor that takes the exhaust out of the stove. Most of these logs that **are not** designed to be burned in your stove will have a wrapper on the log. Some examples of these types of logs are:

DO NOT BURN

- A. Duraflame
- B. Java Log
- C. Pine Mountain
- D. Enviro Log
- E. Cord Wood
- F. Pellets

3. You can use the little fire starters that have wax additives in them to light your fire if needed.

One per starting operation.

Log Fuel for the Stove .

All log fuel must be stored in a dry area like a garage, basement, etc. Do not store out in the direct weather. Some logs over time become “Scaley” or “Rough Feeling”, not smooth. This means that they have taken on moisture, just like a pellet that is burned in pellet stoves will over time. You cannot burn old wet pellets in your pellet stove and you should not burn this wet fuel in your 509 Stove. This will create a lot of moisture inside the stove causing incomplete combustion, and creosote buildup inside the stove which could catch on fire and start a chimney fire as well. Use these logs that have taken on moisture for your kindling to light the stove. After making them into little pieces for kindling it is best to bring them in the house to help dry them out for proper fire starting. Be careful when selecting your new logs when you buy them. They should be smooth to the touch and have dark coloring on the outside of the log. Some older logs that have taken on moisture can even start to take the shape of a banana, these logs do not buy. If a log sticks inside your feed tube, we have provided a stainless steel scraper to help tap that log loose and help it get down to the fire box. After this has happened you need to clean out the tube so the logs flow freely into the fire with your scraper. It is recommended to scrape your tube clean when the fire is out and then vacuum out the scrapings.

How to Light the stove

DO NOT USE ANY TYPE OF FIRE STARTING LIQUIDS LIKE CHARCOAL LIGHTER FLUID, GAS, OR ANY OTHER COMBUSTIBLE FOR ANY REASON.

1. Open the door and make sure there is not a log left in the firebox. You can do this by looking at the bottom of the feed tube and down inside the square box. If you cannot clearly see in the fire box, slide the front over and look in with a flashlight. Slide the brick back into place when finished. **If there is a log in there then follow this procedure**

A. Move the log over to the right.

B. Drop in several little chunks of new log on the left-hand side, as many as can be fit in there without packing them in. Then proceed to # 8.

2. Close the door and latch it.

3. Open up the top lid on the stove`

4. Move the damper stop block out of the way and push in the damper rod until it stops and then pull it out slightly.

5. Break off some small ends of the logs using a hatchet or our log chipper found on our website. Take the sawdust portions and the smallest size chips and drop about 2 handfuls of them down the feed tube.

6. Chop or break off 3 round discs about ½ inch thick from a log and drop those down the tube.

7. Grab a North Idaho Energy Log, a Presto Log, or a Home Fire Prest-Log or any natural style log and drop it down the tube.

Try and hang onto it as you initially slide it down the tube

8. Close the top lid and latch it.

9. Open up the red handled valve on the left side of the stove by turning it to the vertical position or so the handle is indicated up and down.

10. Turn the round dial switch. High speed is located when you first click on the dial. The fan will run slower the further you turn the knob clockwise. It is recommended to run the fan on high while the stove is operating. If your stove is equipped with a snap disc switch, The fan will turn on automatically when the stove reaches temperature if your dial switch is turned on

11. Turn on the Combustion blower motor, the second middle switch to the up position. Move the damper setting bracket out of the way and push the damper in all the way and then pull out approximately one inch.

12. Turn the igniter dial timer switch past 5 minutes. This will power the igniter to light the stove.

13. When you see flames inside the stove, pull the damper setting bracket away from the damper handle and slide the damper out so that the end of the spring is past the damper setting bracket. Slide the damper setting bracket over the damper rod and slide the damper spring up against the damper setting block. This is the low position of the stove and the stove should not be operated with the damper in any farther than the bracket will allow.

14. Make sure that the igniter Dial Switch is off or run out of time.

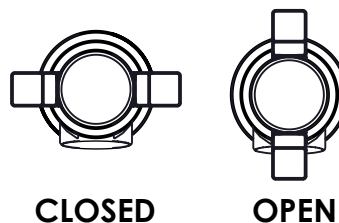
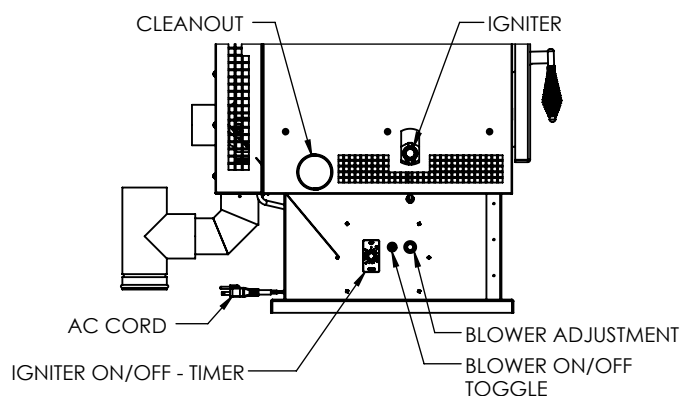
15. Turn the valve back to the closed position so it is in-line with the side of the stove.

16. Load the stove with extra logs.

17. Let the stove burn on this setting for a minimum of 25 to 30 minutes. This is the low setting of the stove and the damper cannot be pushed in any further after the stove is lit. If you want the stove to burn hotter, slide the damper out in very small increments. When the spring end of the damper handle is approximately ½" out from the block setting, this is as high as the stove should be run. Sliding the damper out all the way is for use at very high altitudes if you need the extra air. (The damper will slide further open for operation of the stove at high altitude and care must be taken to ensure not to under-fire the stove at higher altitudes. Low setting may be a little further out past the damper setting block.)

18. Establish a routine for the fuel, wood burner and firing technique. Check daily for creosote build-up until experience shows how often you need to clean to be safe. Be aware that the hotter the fire the less creosote is deposited, and weekly cleaning may be necessary in mild weather even though monthly cleaning may be enough in the coldest months. Contact your local municipal or provincial fire authority for information on how to handle a chimney fire. Have a clearly understood plan to handle a chimney fire.

19. **DO NOT USE PELLETS TO LIGHT / START THE STOVE**



OPERATION - START UP

How to Operate the stove and Problem Solving

The stove is very easy to operate as it does not have moving parts, and only the 2 fan motors. The biggest mistake to be made on this stove is to not let it burn for at least 25 minutes on high after lighting it. This is crucial to how the stove performs.

1. **I can't get my fire to light with the igniter.** Solutions: The igniter may be covered by a piece of fuel in the fire box. Slide the front brick over and look down in the fire box. Slide the log chunks over to the right of the left edge of the firebox. This will uncover the hole in the brick where the hot air is introduced to light the kindling in the firebox.
2. **My stove is not putting out any heat.** Inspect the fire through the door and make sure that the combustion blower is running and the upper convection blower is blowing air. If you can see a log in the firebox that is not glowing red or flaming, you may need to turn it up. Open up the damper by sliding the lever handle towards the rear of the stove. Let the stove burn for at least half an hour and then turn down to the setting you desire.
3. **My stove is not putting out any heat.** Inspect the fire through the door and make sure the combustion blower is running and the upper convection blower is blowing air. If you do not see glowing or burning in the firebox, then you may have a log stuck in the feed tube. Open up the top lid and look down the feed tube. If you can see a log in the feed tube, then follow this procedure: First, close the lid on top and then open the door. Feel for heat without touching anything on or inside the stove. If it is very hot when you open the door, then close the door and open the feed tube lid. Using a suitable tool, like a round rod, tap the log from the lid side down the feed tube. It will fall into the firebox. Open up the damper by sliding it towards the rear of the stove and let it burn on high for ½ hour and then reset to your desired setting.
4. **My stove is not putting out any heat.** Check the combustion blower and make sure it is on. It is powered "ON" by the middle toggle switch on the base of the stove. Make sure you have power to the plug where the stove is plugged in. You can do this by plugging another appliance into the wall and see if it comes on. If the appliance comes on you will need to call a repair company to replace the blower motor. (I have the blower motors available on my website and I will get you one out right away.)
5. **My stove is not blowing any heat from the convection blower out the front of the stove.** Make sure the blower is plugged in and the switch is turned on. Try unplugging the blower motor from the plug in on the backside of the stove under the base and plugging it into an extension cord. Then plug that cord directly into the wall. If the blower motor does not come on, then the switch or the blower motor is bad. Have a repair company come and fix it and order a blower off of our website.
6. **CAUTION DO NOT RUN THE UPPER STOVE BLOWER ON LOW FOR EXTENDED PERIODS OF TIME**
7. **YOUR LID LATCH IS ADJUSTIBLE. IT SHOULD BE TIGHTEND DOWN AFTER BURNING YOUR STOVE ABOUT 5 TIMES.** This will make the stove more airtight and eliminate a leak from the lid if a power outage occurs. Do not tighten so much that you cannot operate the latch, just enough so it is a little harder to get the latch closed. After a short period of time the latch will become easier to close. This will ensure the lid gasket is firmly sealed into the feed tube edge under the lid.
8. **ALWAYS OPEN LID VERY SLOWLY TO LOAD FUEL.**

GLASS REPAIR / REPLACEMENT

CAUTION: Follow instructions completely and always wear leather gloves when removing the glass or removing broken glass.

CAUTION: NEVER OPERATE THE STOVE WITH BROKEN GLASS

CAUTION: NEVER USE ABRASIVE CLEANERS

CAUTION: DO NOT CLEAN GLASS WHEN HOT.

WARNING: Never Use Substitute Materials

WARNING: Never slam the door shut, strike the glass, or abuse the glass in any way.

New glass should be ordered off our website or cut and the edges ground from your supplier to the exact size of 10.50 x 12.50 x 3/16" Neo-Ceram glass only.

FOR BROKEN GLASS

Put an old disposable towel on the ground in front of the stove. When you open the door, make sure the stove is cool, put on your gloves, and open the door slowly. Any loose or broken glass should fall onto the towel. Any residual glass pieces should be picked up with gloves and placed on the towel.

Take a 7/16" end wrench or socket and slowly loosen the nuts around the sides of the glass and remove any remaining pieces.

The gasket should be disposed of. (Install new gasket during installation of new glass, see below.)

Make sure all glass is placed on the towel, and wearing your gloves, fold up the towel and dispose of in a correct manner.

Remove remaining hardware.

FOR GLASS REPLACEMENT

Make sure the stove is cool and open the door.

Use a 7/16" wrench or socket to remove the hardware. The glass hold downs are all the same dimension and will fit on any side of the glass during new glass installation. (Be careful during installation that the glass hold downs are set against the glass in the right direction to assure they are flat against the glass before installing hardware.)

Remove all the hardware and leave the bars holding the glass in place. Put on your gloves and remove the bars and set aside while holding the glass in place with one hand. With your other hand use it to push the glass slowly towards the inside of the door to remove.

Grab the top of the edge of the door and lightly tap on the bottom of the door to lift it off the 3 hinges, being careful to not let the little brass washers on the hinge not come off with the door removal. If the brass washers come off, they must be put back down on the post of the hinge before the door goes back on.

Put the door on a flat surface with the outside of the door down.

Take the new glass and with gloves on, wrap the edge of the glass so the heat tape is centered on the edge of the glass and it folds over both the front and back side of the glass. You should start in the middle edge of one of the sides of the glass. **DO NOT START ON A CORNER.** The adhesive side should be against the edge of the glass to keep it secure. Go all the way around the glass edge until you meet ends and then cut the fire tape with scissors.

Place the glass back in the door and hold it in place by hand, making sure it is centered by looking at all edges making sure you have the same distance on the inset that the glass sits in.

VERY IMPORTANT

IF THE GLASS IS NOT CENTERED, PUSH IT BACK THROUGH AND RE-CENTER IT. DO NOT SLIDE IT AROUND AS THIS MAY FOLD THE GASKET OVER AND CREATE A NON AIRTIGHT SEAL.

Slide on one of the bars making sure it is placed correctly to sit flat against the glass and install one set of hardware to hold it in place hand tight.

Tip the door up and look around the other side of the door and make sure the gasket does not have any folded gaps or the gasket has not slipped out of place.

Continue to install bars and hardware all the way around the glass and tighten finger tight.

After inspecting glass from the front one more time, making sure there are no gaps or folds in the gasket go around the door and very lightly tighten the hardware so it is snug with the wrench handle. **DO NOT OVERTIGHTEN.** you should not be able to loosen any of the nuts with your fingers.

Re-install the door by sliding all 3 hinges together at the same time keeping the door in a straight up and down position and fully seat the door until both sides of the hinge are touching the brass washer.

Clean the glass.

Close and latch the door.

GLASS REPAIR / REPLACEMENT

CAUTION: Follow instructions completely and always wear leather gloves when removing the glass or removing broken glass.

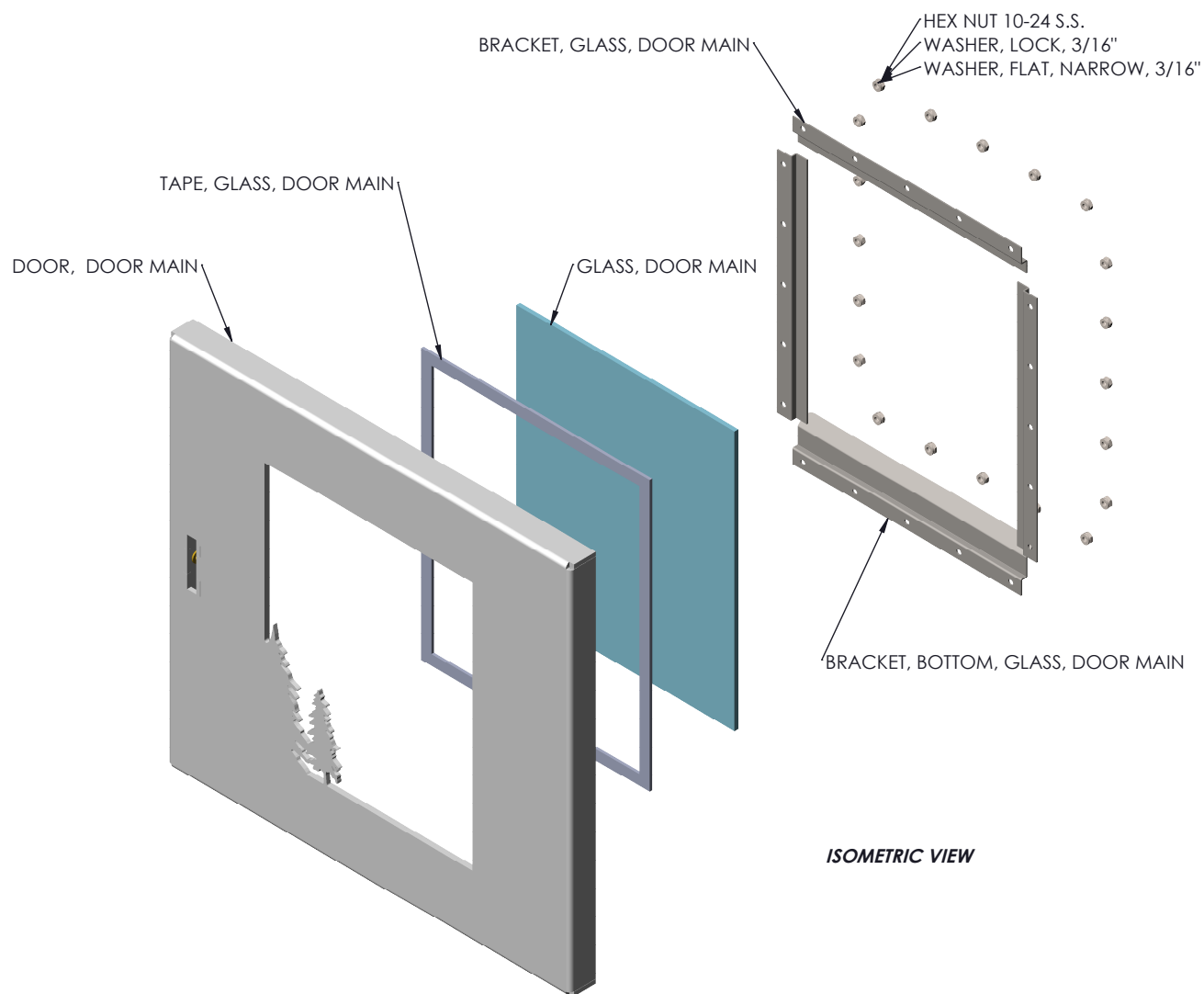
CAUTION: NEVER OPERATE THE STOVE WITH BROKEN GLASS

CAUTION: NEVER USE ABRASIVE CLEANERS

CAUTION: DO NOT CLEAN GLASS WHEN HOT.

WARNING: Never Use Substitute Materials

WARNING: Never slam the door shut, strike the glass, or abuse the glass in any way.



FIRE ROPE / REPLACEMENT

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FIRE ROPE AND FIRE TAPE MUST BE INSPECTED AND KEPT IN GOOD WORKING ORDER TO MAINTAIN THE STOVE'S BURN RATES AND CHARACTERISTICS. DO NOT BURN STOVE IF GASKETS ARE DAMAGED.

Glass Fire Tape Gasket

11/16" wide with adhesive backing and rolled out edges. Available off our website or AW Perkins Item #170. See Picture.

DOOR and FEED TUBE LID GASKETS

Gaskets for both of these applications are available on our website or from a dealer in your area.

The gasket is called 3/4" Double Core Fire Rope.

Hytex 1000

Part # RK0092

These gaskets need to be installed after thoroughly removing the existing gasket and cleaning the adhesive residue completely out of the channel. An adhesive called High Temp Stove Gasket Cement must be used to seal the gasket in the channel. One brand is Rutland and it is black in color.

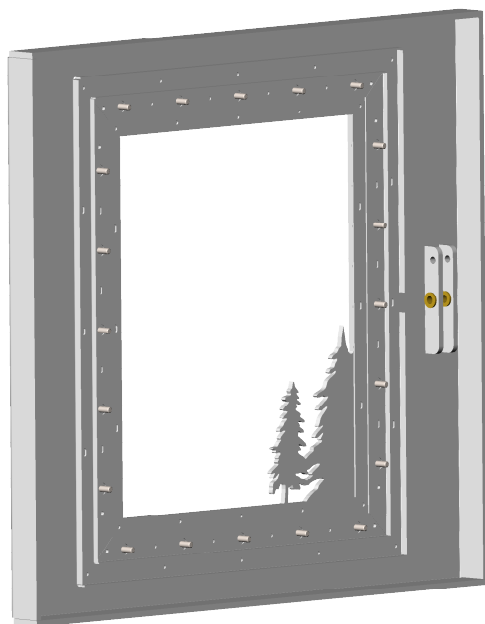
When installing the fire rope the ends must come together to create an airtight seal.

Do not start the door fire rope on a corner, start in the middle of the door along the hinge edge side.

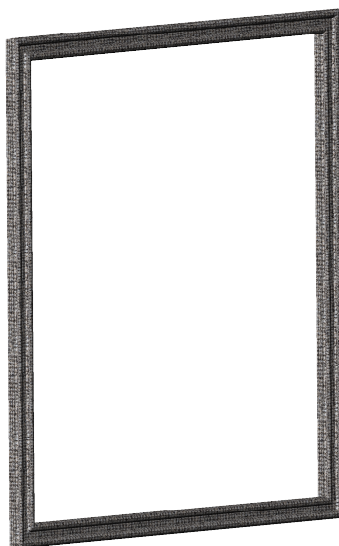
The first time closing the door will be difficult.

YOU MUST PRESS FIRMLY ON THE OUTSIDE FACE OF THE DOOR ON THE HANDLE SIDE TO GET IT CLOSED.

DO NOT LET THE DOOR LATCH PULL IT CLOSED AS YOU MAY DAMAGE THE HINGE SIDE OF THE DOOR.



ISOMETRIC VIEW



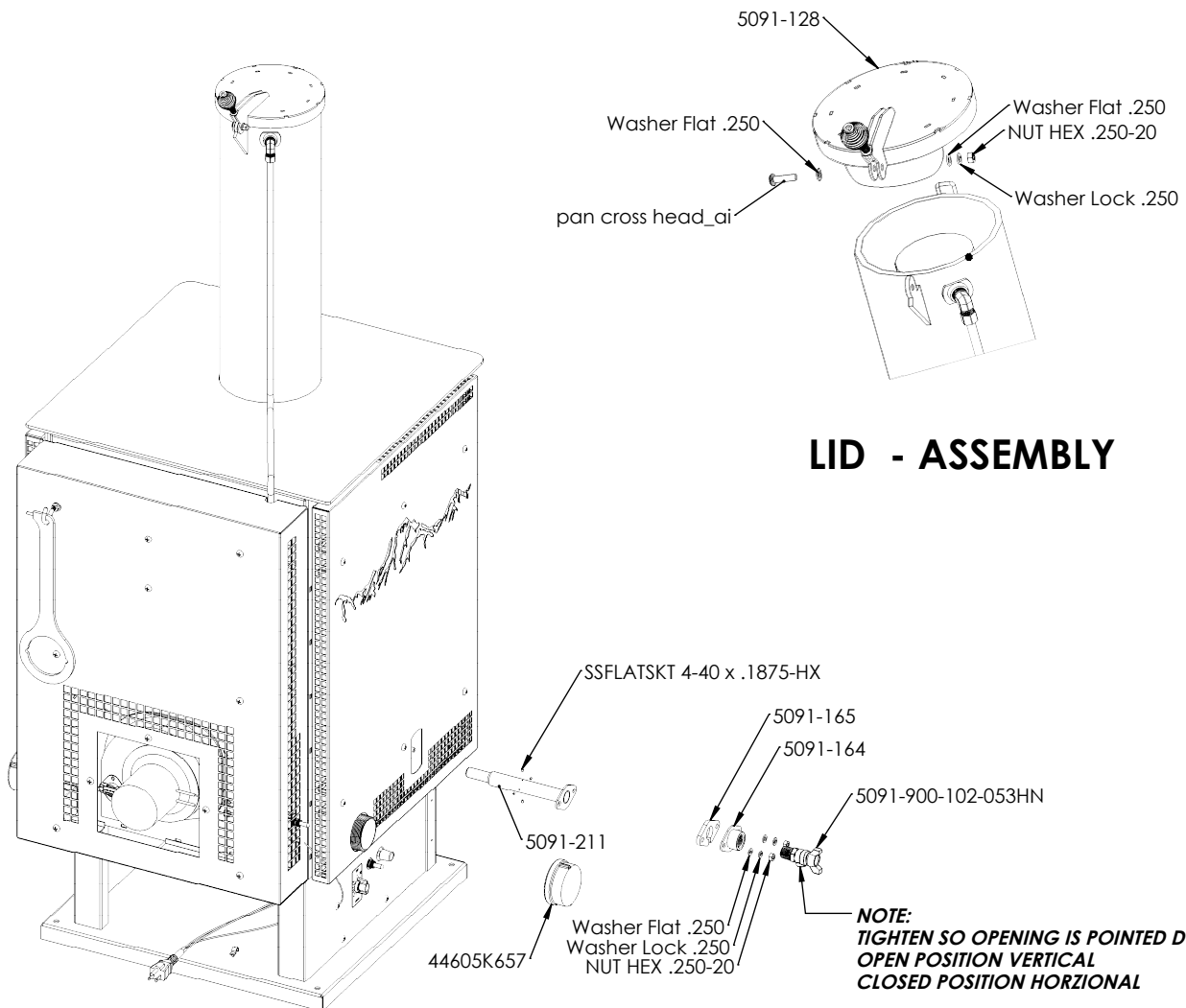
LID w/ FIRE ROPE

DOOR w/ FIRE ROPE

How to Clean the stove

FOR YOUR SAFETY, IT IS IMPERATIVE TO MAKE SURE THE STOVE IS OFF AND COLD FOR ANY CLEANING PROCEDURE.

1. The glass is NORMALLY easy to clean. The best way to clean the glass is to take a razor blade with a built in safety handle and scrape the glass and then clean it with a product like "Simple Green" or glass cleaner and a paper towel.
2. The inside around the firebox needs to be vacuumed out about every 2 to 3 weeks or longer depending on how often you burn. **Use an "ash vacuum" only to do this. It is what they are made for and then the dust will not blow in the house.** The ash vacuums are available on my website.
3. Inspect the firebox by sliding the front brick to the side or removing the brick. Use a flash light to look in the firebox. If needed, vacuum the firebox out completely.
4. **VERY IMPORTANT!!** Every day take the special wrench provided and using the pin end slide it into the hole on the rod sticking out by the tubes on the top front of the stove. Use wrench to pull the rod from front to back completely 5 or 6 times. This will clean off the radiant tubes so they transfer heat better.
5. **Every Time you clean the stove...** Use the special wrench provided to loosen the caps on each side of the stove. Unscrew them and use the ash vacuum to vacuum out those tubes. You can slide the end of the hose all the way in until it hits the other side of the stove. Look inside the tube with a light to make sure you have that area clean.
6. The body of the stove itself can be cleaned with glass cleaner, **ONLY WHEN COLD.**

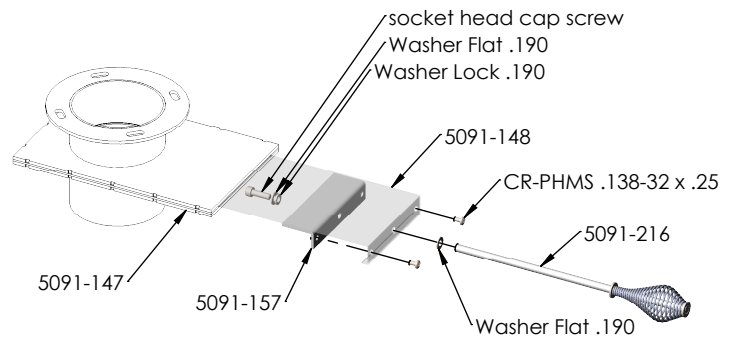


SIDE - IGNITOR

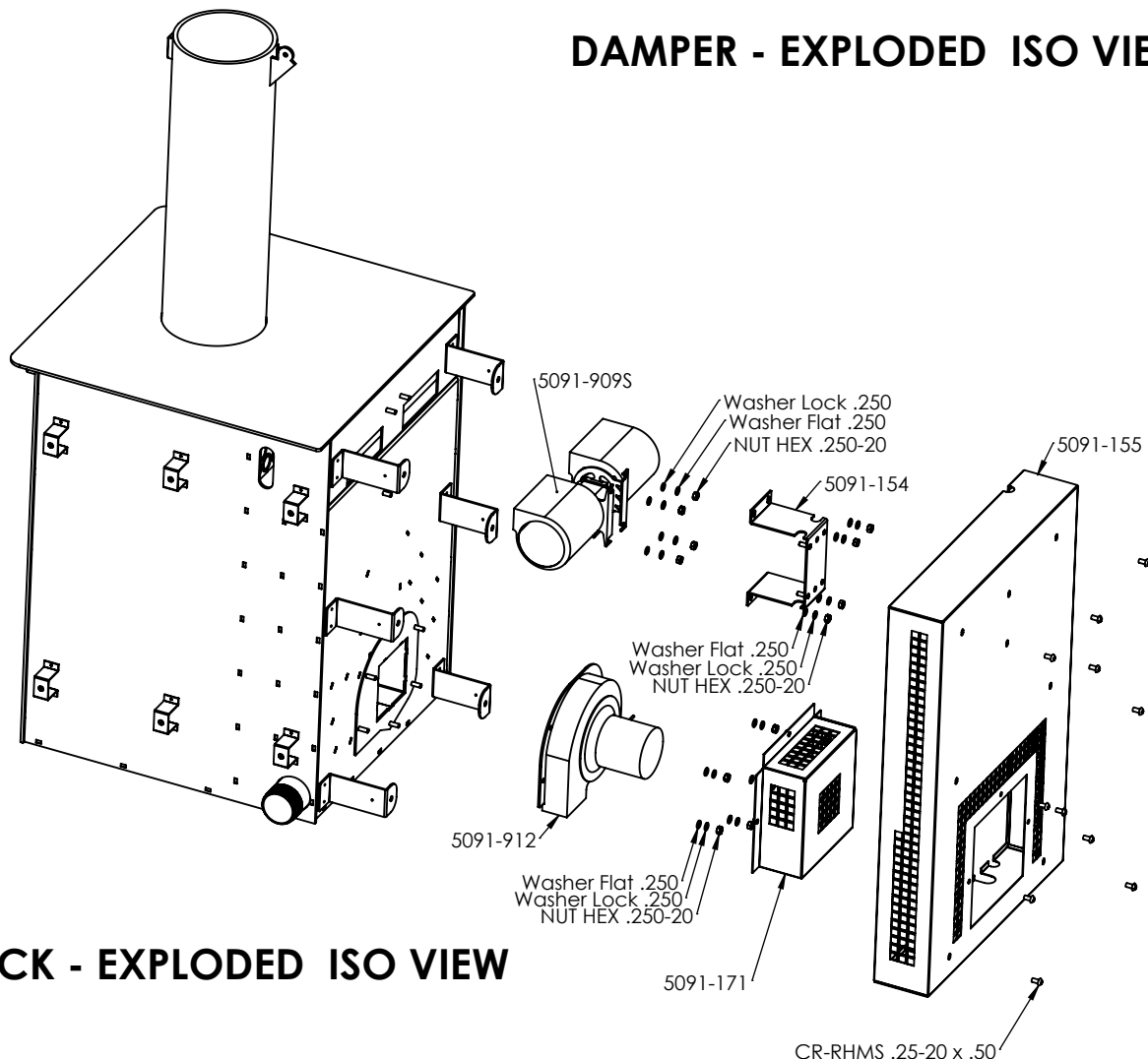
Maintenance

1. Normal cleaning should be all that is necessary. Make sure to clean the radiant heat tubes with the scraper rod and wrench handle every day. This is a 30 second procedure.

One time a year the Lower Combustion motor should be removed and cleaned. The blades will have buildup on them from regular burning. This buildup needs to be removed and cleaned by a professional and the motor re-installed, making sure all nut fasteners and lock washers are used for re-install and tightened down securely. Do not over-tighten the nuts. If the gasket is damaged, it should be replaced to prevent air leaks. With the combustion motor removed, inspect your chimney pipe inspected for debris, and have it cleaned by a professional at this time if needed. When it is re-installed make sure that all connections are re-sealed and secure.



DAMPER - EXPLODED ISO VIEW

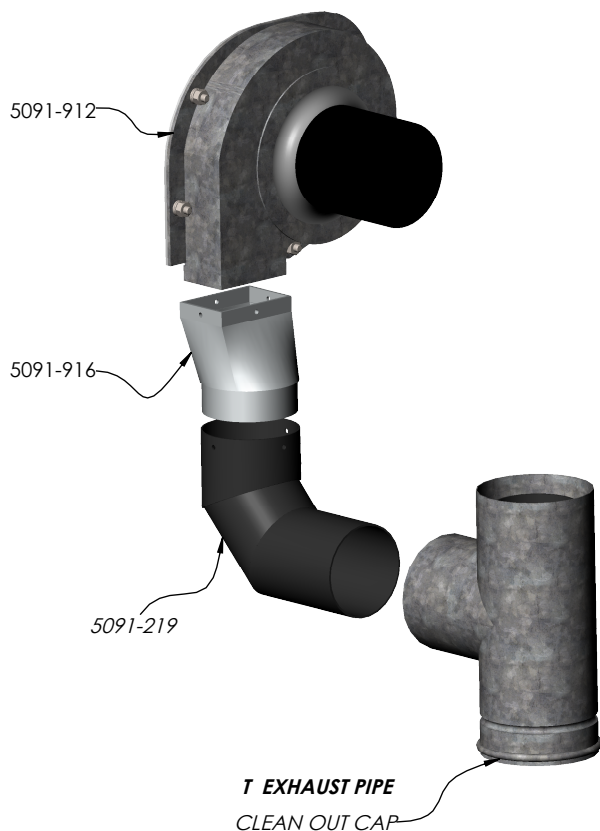


BACK - EXPLODED ISO VIEW

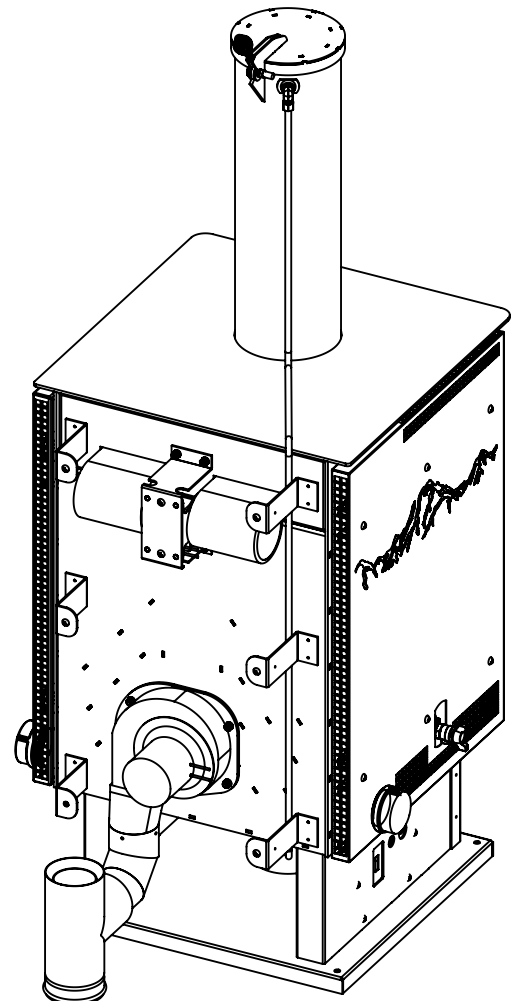
Vertical Install

Always follow standard Pellet Pipe Install Guidelines.

A 509-1 Optimum Elbow (Part # 5091-219) will NEED to be attached and sealed to the 3" round exhaust motor fitting with High-Temp RTV sealant and 3 self-drilling / tapping screws. Attaching the 509-1 Optimum Elbow will transition your exhaust to the horizontal position. The exhaust elbow can be attached to a 3" to 4" or 3" to 3" Exhaust cleanout "T" Exhaust Pipe for your vertical exhaust termination, or to an appliance adapter and pellet pipe to go out the wall horizontally. It is recommended to put a minimum of 3ft rise above the elevation of the motor after going through a sidewall for draft in case of a power outage. See Pictures Below.



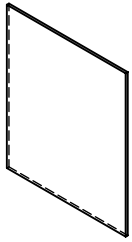
VERTICAL VENT
EXPLODED



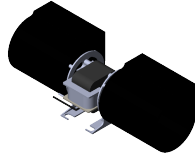
VERTICAL VENT
BACK COVERS REMOVED

Replacement Parts and Accessories

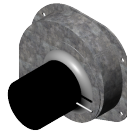
Call 509 Fabrication for Price and Availability



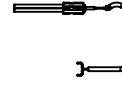
GLASS, DOOR MAIN



BLOWER



DRAFT FAN



IGNITER



WRENCH-PULLER



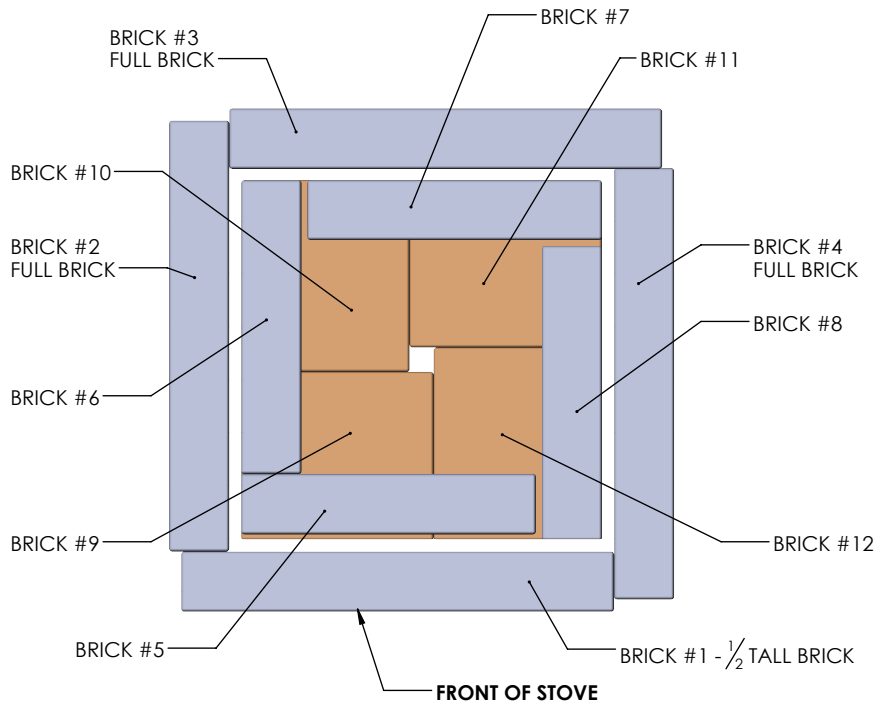
FIRE ROPE
CUT TO LENGTH
LID



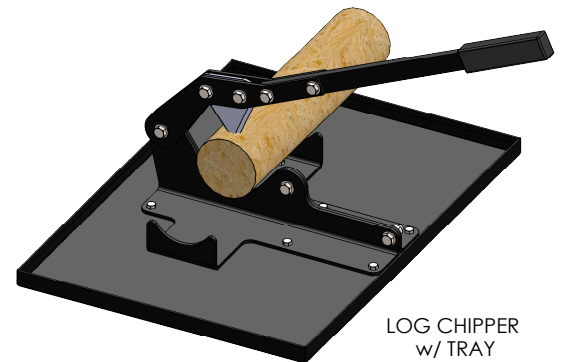
FIRE TAPE
CUT TO LENGTH
DOOR



SCRAPER, ASSEMBLY



BRICK-FIREBOX



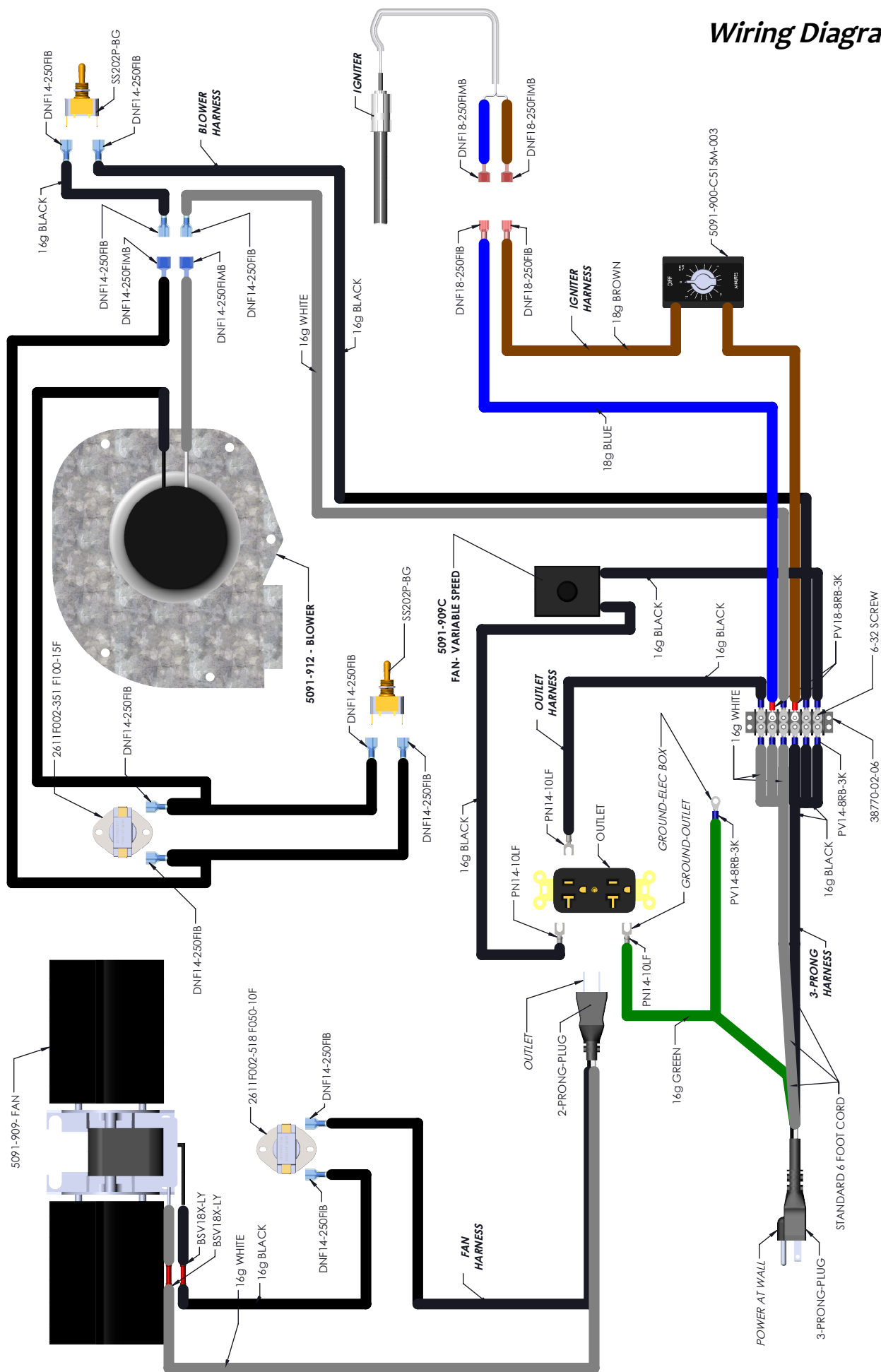
LOG CHIPPER
w/ TRAY

Brick replacement

The upper row of bricks are standard fire bricks except for the front facing brick. It has been cut down for air flow. The bricks can be obtained on the website or a home improvement store.

The inside row of bricks are identified and counted from the front facing brick that stands on its side. Front brick is #1 brick. #2 is to the left, brick #3 is in the back and brick #4 is the one on the right. These bricks are all special to their designated placement, and how they are cut and shaped.

The bricks in the bottom of the firebox, if needing replaced, will all have to be replaced at the same time. They are available on the website.

[illegible]

Warranty

These stoves are all built by hand and Made in America by 509 Fabrications, Inc. Post Falls, ID. They have been made with the finest parts and materials available and metal thicknesses that will last a lifetime.

1. The stove body itself is warranted for a period of 10 years by the original owner.
2. The convection blower is warranted for 1 year from date of purchase.
3. The Combustion blower motor is warranted for 1 year from date of purchase.
4. The glass is warranted for 1 year from date of purchase.
5. The fire bricks do not have any warranty.
6. The stove paint is warranted for a period of 1 year by original owner. Scratches and nicks are not warranted, only complete paint failure.
7. One year warranty on igniter

509 Fabrications, Inc.

Post Falls, ID.

www.509Fab.com <<http://www.509Fab.com>>

Dusty@509Fab.com <<mailto:Dusty@509Fab.com>>

<https://www.facebook.com/509Fab/>

Warranty

These stoves are all built by hand and Made in America by 509 Fabrications, Inc. Post Falls, ID. They have been made with the finest parts and materials available and metal thicknesses that will last a lifetime.

1. The stove body itself, minus the finish paint, is warranted for life by the original purchaser.
2. The convection blower is warranted for 2 year from date of purchase.
3. The Combustion blower motor is warranted for 2 year from date of purchase.
4. The glass is warranted for 1 year from date of purchase.
5. The fire bricks do not have any warranty.

509 Fabrications, Inc.

Post Falls, ID.

www.509Fab.com <<http://www.509Fab.com>>

Dusty@509Fab.com <<mailto:Dusty@509Fab.com>>

<https://www.facebook.com/509Fab/>