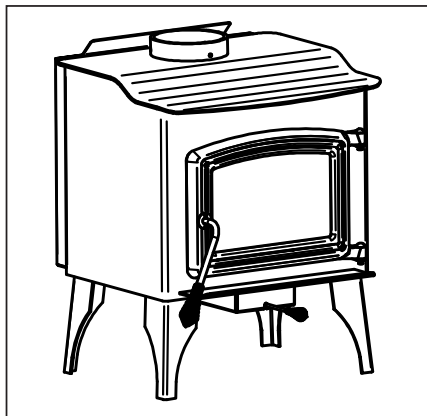
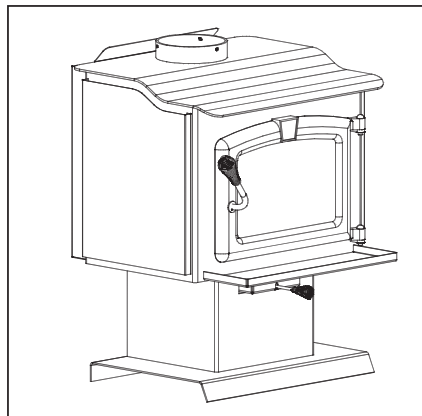




## High Efficiency Wood Stove - Small



**Model Series:**  
PH1200WS, PH1200WS-B, GWS-1200,  
GWS-1200-B, WSL-1200, WSL-1200-B,  
WS-1200, WS-1200-B  
Non-Mobile Home rated with Legs



**Model Series:**  
SWS-1200, HWS-1200, HWS-1200-B  
Mobile Home Approved in USA Only  
Not for use in Mobile Homes in Canada

Español p. 21

Français p. 43

**SAFETY NOTICE: IF THIS WOOD BURNING APPLIANCE IS NOT PROPERLY INSTALLED, OPERATED, AND MAINTAINED, A HOUSE FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THE INSTALLATION INSTRUCTIONS. FAILURE TO FOLLOW THE INSTALLATION INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY OR EVEN DEATH. CONTACT LOCAL BUILDING OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.**

### WARNING

BEFORE LIGHTING YOUR FIRST FIRE, REMOVE PLASTIC FILM OFF TRIM AND CLEAN THE PLATED SURFACES WITH DENATURED ALCOHOL OR A GOOD QUALITY, NON-ABRASIVE LIQUID GLASS CLEANER. APPLY WITH A VERY SOFT, CLEAN CLOTH. DO NOT USE PAPER TOWELS TO CLEAN THE PLATED PARTS. FAILURE TO CLEAN ALL MARKS AND FINGERPRINTS FROM THE PLATED SURFACES WILL CAUSE PERMANENT DAMAGE.

NOTE: Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages. The above limitations may not apply to you.

US Environmental Protection agency certified to comply with 2020 particulate emissions standards using cordwood. Please read this entire manual before you install and use your new room heater. 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. Please read this entire manual before you install and use your new room heater. Failure to follow instructions may result in property damage, bodily injury, or even death.

This stove is listed by OMNI-Test Laboratories of Portland, Oregon using Test Method ASTM 3053 and Tested to UL-1482-11 (R2015)/ULC-S627-00 (UM) 84 HUD, mobile home approved.

**6" Flue  
required**



REPORT NO. 0418WS019E/0418WS019S



6440 W. Howard St.  
Niles, IL 60714-3302  
877-447-4768

**Save These Instructions**

**Do Not Discard This Manual: Retain for Future Use**

Questions, problems, missing parts? Before returning to your retailer, call our customer service department at 877-447-4768 8:00 a.m. - 4:30 p.m. CST, Monday - Friday or e-mail us at [customerservice@ghpgroupinc.com](mailto:customerservice@ghpgroupinc.com).

80-10-635  
11/02/2022

The sum of weighted particular emissions = 1.89 grams/ h

The weighted average HHV efficiency = 77.7%

The Heat Output range = 15,963 to 56,107 BTU/ Hr

**Note:** The BTU ratings mentioned above are based on the EPA test protocol under specific test conditions. Our advertised BTU's are based on the first hour of operation at high burn rate burning dry cordwood.

## CAUTION

After reading these instructions, if you have any doubt about your ability to complete your installation in a professional like manner you should obtain the services of an installer versed in all aspects as to the correct and safe installation. Do not use temporary makeshift compromises during installation.

### BEFORE INSTALLATION OF YOUR APPLIANCE

1. Check with the building inspector's office for compliance with local codes; a permit may be required.
2. The room heater must be connected to 1) a chimney complying with the requirements for Type HT chimneys in the standard for Chimneys, Factory-Built, Residential Type and Building Heating Appliance, UL 103, or in Canada CAN/ULC-S629 Standard for 650 degree C Factory Built Chimneys and applicable building codes or 2) a code-approved masonry chimney with a flue liner.
3. A 6" (152mm) diameter, 24 gauge Black Steel flue is required for proper performance.
4. Always connect this unit to a chimney and NEVER vent to another room or inside a building.
5. DO NOT connect this unit to any duct work to which another appliance is connected such as a furnace.
6. **DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.**
7. The connector pipe and chimney should be inspected periodically and cleaned if necessary.
8. Remember the clearance distances when you place furniture or other objects within the area. **DO NOT** store wood, flammable liquids or other combustible materials too close to the unit.

**Refer to certification label on back of your unit for required clearances.**

9. 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. In the event of a Chimney fire, turn air control to closed position and **CALL THE FIRE DEPARTMENT.**

10. **DO NOT** tamper with combustion air control beyond normal adjustment.
11. **DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.**

12. When installing a solid fuel appliance, it is also recommended to install Smoke and Carbon Monoxide Detectors on every level of the house. During the initial firing of the appliance, some smoke or odor may occur due to paint curing. You may want to keep some windows open for ventilation during the first few hours of burning to prevent smoke detector activation. Test your smoke and carbon monoxide detectors regularly.



## CAUTION

**DO NOT** operate heater if glass window is broken.

## OPERATION

### WHY THE CORRECT FLUE SIZE IS IMPORTANT - 6"

Draft is the force which moves air from the appliance up through the chimney. The amount of draft in your chimney depends on the length of the chimney, local geography, nearby obstructions, and other factors. Too much draft may cause excessive temperatures in the appliance. An uncontrolled burn or a glowing red part or chimney connector indicates excessive draft. Inadequate draft may cause back puffing into the room and "plugging" of the chimney and/or cause the appliance to leak smoke into the room through appliance and chimney connector joints.

Today's solid fuel appliances are more efficient than in the past. The units are designed to give you controlled combustion, and maximum heat transfer, using less fuel to do so.

The design of your new appliance is such that the exhaust smoke is now at lower temperatures than in the past, therefore requiring proper chimney size to give adequate draft. If your chimney is too large, the heating appliance will have a difficult time to raise the chimney flue temperature to give adequate draft, therefore causing a smoke back up, poor burn, or both.

**Should you experience such a problem call in a local chimney expert.**

With the door closed, the rate of burning is regulated by the amount of air allowed to enter the unit through the air control. With experience you will be able to set the control for heat and burning time desired.

Once the required chimney draft is obtained, operate only with doors closed and open doors slowly when re-fueling. (This will reduce or eliminate smoke from entering the room). Attempts to achieve higher output rates that exceed heater design specifications can result in permanent damage to the heater. The recommended wood load is level with the top of the firebricks.

Overloading may prevent sufficient air entering the heater to properly fuel the fire.

Operate this heater only with the door closed.

**DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS, SUCH AS GASOLINE, NAPHTHA, OR ENGINE OIL  
DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE.**

**IMPORTANT:** It is highly recommended that the wood stove and chimney be installed by a qualified installer. (A qualified installer is a person or entity who regularly installs wood heating products and chimneys, in the ordinary course of their regular business.)

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.

**ALWAYS PROVIDE A SOURCE OF FRESH AIR INTO THE ROOM WHERE THE UNIT IS INSTALLED. FAILURE TO DO SO MAY RESULT IN AIR STARVATION OF OTHER FUEL BURNING APPLIANCES AND THE POSSIBLE DEVELOPMENT OF HAZARDOUS CONDITIONS.**

**HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.**



OPTIONAL BLOWER: MODEL PBAR-2427,  
120 VOLTS, 60Hz, 1.0 AMPS, 2900 RPM  
**DANGER:** RISK OF ELECTRIC SHOCK.  
DISCONNECT POWER BEFORE SERVICING UNIT.  
**IMPORTANT:** FOR OPTIMUM HEATER  
PERFORMANCE AT LOW BURN RATE, OPERATE  
THE FAN AT LOW SPEED.

For installation information on optional blower PBAR-2427, please refer to the Wood Stove Blower Installation and Operating Instructions supplied with the blower.

### **WARNING**

This product and the fuels used to operate this product (charcoal or wood), and the products of combustion of such fuels, can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, and carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm.

For more information go to [www.p65Warnings.ca.gov](http://www.p65Warnings.ca.gov)

## **MOBILE HOME APPROVED**

This appliance, excluding Model # WS-2417 is approved for mobile home installations when not installed in a sleeping room and when an outside combustion air inlet is provided. The structural integrity of the mobile home floor, ceiling, and walls must be maintained. The appliance must be properly grounded to the frame of the mobile home and use only listed double-wall connector pipe. An Outside Air Kit must be installed in a mobile home installation.

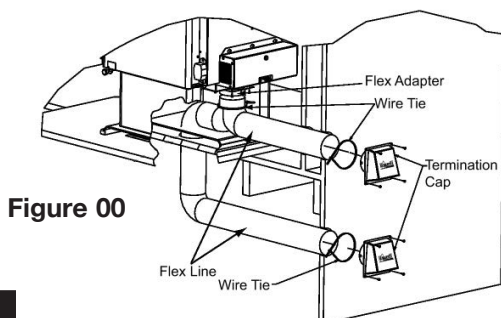
NOTE: This installation must conform with local codes. In the absence of local codes you must comply with the UL1482, (UM) 84-HUD and NPFA211 in the U.S.A. and the CAN/ULC-S629 and CAN/CSA-B365 Installation Codes in Canada.

## **OUTSIDE AIR KIT INSTALLATION**

A source of air (oxygen) is necessary in order for combustion to take place. Whatever combustion air is consumed by the fire must be replaced. Air is replaced via air leakage around windows and under doors. In homes that have tightly sealed doors and windows, an outside air source is needed.

### **Items Needed for Installation**

- Pipe clamp, termination cap, (2) wire ties, and fasteners
- 4 inch flex aluminum pipe, or if using alternate material, then it shall be made from durable, non-combustible, heat resistant material up to 350°F. Cut the pipe to the required length for your installation.



**Figure 00**

- Electric screw driver with bits
- Silicone sealant
- Drills and saws necessary for cutting holes through the wall or flooring in your home

**AN OUTSIDE AIR KIT (ITEM NO: OAK-MH) IS AVAILABLE FOR PURCHASE BY CALLING GHP GROUP CUSTOMER SERVICE AT 1-877-447-4768.**

1. Remove all materials from packing boxes.
2. **Floor & Rear Installation:** Cut a 4 inch (102mm) hole in outside wall or floor to accommodate outside air piping. Use 4 inch (102mm) aluminum metal flex or rigid piping to directly connect outside air to appliance intake. Use a termination cap with a rodent screen. Seal between the wall (or floor) and the pipe with silicone to prevent moisture penetration.
3. Using a #2 Phillips screw driver attach the flex pipe to the flex adaptor on the stove using a pipe clamp.

**Figure 00.**

### **WARNING**



**Fire Risk.**

**Asphyxiation Risk.**

Do not draw outside combustion air from:



- Wall, floor, or ceiling cavity
  - Enclosed space such as an attic or garage
  - Close proximity to exhaust vents or chimneys
- Fumes or odors may result

### **WARNING**



**Asphyxiation Risk.**

Outside air inlet must be located to prevent blockage from:

- Leaves
- Snow or ice
- Other debris

Block may cause combustion air starvation.

Smoke spillage may set off alarms or irritate sensitive individuals.

### **WARNING**



**Asphyxiation Risk.**

Length of outside air supply duct shall NOT exceed the length of the vertical height of the exhaust flue.

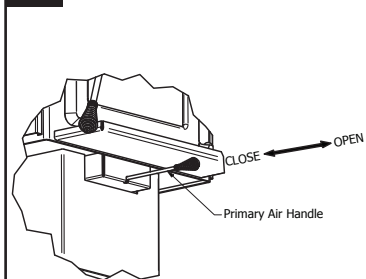
- Fire will not burn properly.
- Smoke spillage occurs when door is open due to air starvation.

# WOOD STOVE QUICK START GUIDE

## ITEMS NEEDED FOR FIRST FIRE:

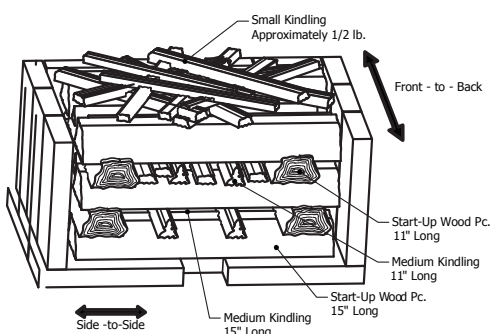
- Approximately 1/2 lb. of small kindling
- 6 pcs. of medium kindling 11" long
- 6 pcs. of medium kindling 15" long
- 6 pcs. of start up logs 11" long
- 6 pcs. of start up logs 15" long
- 5 pcs. of logs 12" to 14" long

### 1 OPEN AIR CONTROL

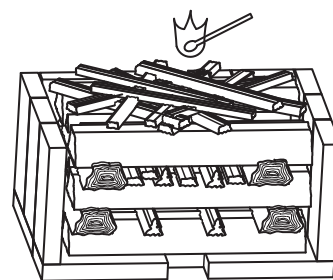


Pull damper control all the way toward you to completely open the damper.

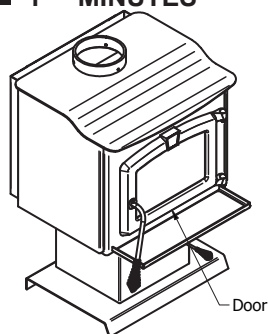
### 2 START-UP FUEL CONFIGURATION



### 3 LIGHT THE KINDLING

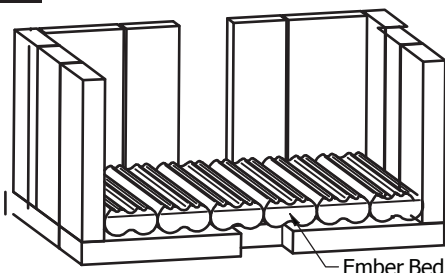


### 4 KEEP DOOR OPEN FOR 1 1/2 MINUTES



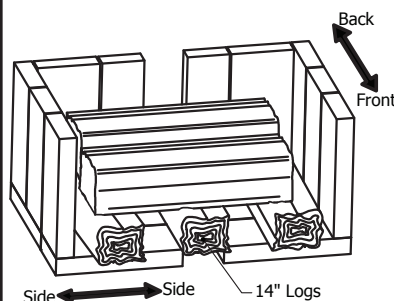
- Keep door open for 1 1/2 Minutes.
- Latch door securely and monitor fire. Reposition logs if fire starts to go out.
- Burn until there is a layer of glowing embers.

### 5 RAKE EMBER BED FLAT



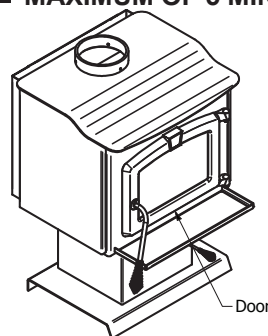
- Rake embers into a flat bed covering the complete bottom.

### 6 FUEL LOADING CONFIGURATION



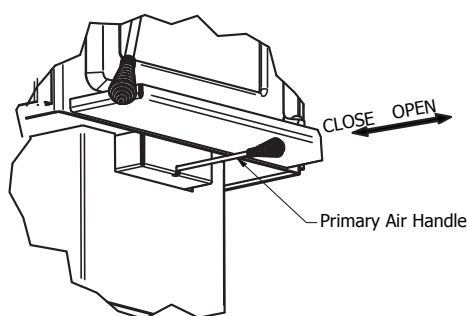
- The normal Fuel Loading Configuration consists of Five 14" Logs. Three Logs placed evenly on the bottom Front to Back and Two 14" Logs placed on the second row Side to Side.

### 7 KEEP DOOR OPEN FOR MAXIMUM OF 5 MINUTES



- Keep door open for 5 minutes then latch door securely.

### 8 ADJUST PRIMARY AIR CONTROL



- Adjust Primary Air Control to desired level for your comfort.
  - Pull "Out" to increase run rate.
  - Push "In" to decrease run rate.
- Congratulations! Your Wood Stove is ready for operation.

### 9 WARNING! Risk of Fire

Close and securely latch the door after the fire has started, and after refueling, to prevent:

- Spillage of smoke, flame and carbon monoxide
- Spillage of sparks, coals and logs
- Over-firing

DO NOT leave the stove unattended with the door open.

Starting a fire may not require an open door to draft. The air control should supply adequate draft.

Questions, problems, missing parts? Before returning to your retailer, call our customer service department at 877-447-4768 8:30 a.m. – 4:30 pm CST, Monday – Friday.  
or email us at [customerservice@ghpgroupinc.com](mailto:customerservice@ghpgroupinc.com)



## OPERATION

Do not use a grate or elevate fire. Never burn with door open as this may result in fire. Build wood fire directly on hearth. When the stove is used for the first time the solvents in the paint will smoke off.

### WOOD

This heater is designed to burn natural wood only. Higher efficiency and lower emissions generally result when burning air dried seasoned hardwood, as compared to softwood or to green or freshly cut hardwood. Only use dry seasoned wood. Green wood, besides burning at only 60 percent of the fuel value of dry wood, deposits creosote on the inside of your stove and along the chimney. This can cause an extreme danger of chimney fire. To be called seasoned, wood must be dried for a year. Regardless of whether the wood is green or seasoned, it should be stored in a well-sheltered, ventilated area to allow proper drying during the year to come. Wood should be stored beyond recommended clearance from combustibles.

### DO NOT BURN:

- Treated Wood • Solvents • Trash • Coal
- Garbage • Cardboard • Coloured Papers

Burning of these items can generate excessive levels of carbon monoxide.

### INSTRUCTIONS FOR FIRST BURN - CURING THE STOVE PAINT

Your stove has been painted with the highest quality stove paint and has special break-in procedures. The heat generated by the normal operation of the stove, will serve to harden the paint. Ventilate the house during the first three times the stove is used. The paint on the stove will give off smoke, carbon dioxide and an odor. Without adequate ventilation, concentrations of smoke could irritate you or cause damage to person and/or property. Open doors and windows and use a fan if necessary. After the initial burns, the paint will be cured and there should be no more smoke.

Each of the initial burns should be conducted as follows:

1. The first and second burns should be at approximately 250 deg F (120 deg C) for approximately 20 minutes.
2. The third burn should be between 500 deg F (260 to 370 deg C) for at least 45 minutes. The important fact is the paint should be cured slowly. Avoid hot fires during the curing process. During the curing process the paint will be gummy. Once cured the paint will remain hard. It is normal to see flat spots on painted surfaces of the stove. The flat spots on the paint surface indicate the hotter surfaces of the stove, and is caused by the heat radiating through the paint. It is also expected that shiny spots caused by friction from the packaging materials, will disappear during the curing of the stove.

### SO:

1. Remember to Ventilate well.
2. Allow the stove to cure before burning for long periods at high temperatures.
3. Flat spots on the painted surfaces are normal.
4. Shiny spots on the paint surface before burning is normal.
5. Call your dealer if you have any questions.

## BUILDING A FIRE

1. Open inlet air control fully.
2. Place a small amount of crumpled paper in the stove.
3. Cover the paper with a generous amount of kindling in a teepee fashion and a few small pieces of wood.
4. Ignite the kindling and close door. If fire dies down substantially, open door slightly.
5. Add wood as instructed in the "start up instructions" above.  
Do not fill firebox beyond firebrick area. An ideal coal bed of 1" to 2" should be established to achieve optimum performance.
6. This unit is designed to function most effectively when air is allowed to circulate to all areas of the firebox. An ideal means of achieving this is to rake the coal bed evenly along the entire bottom of the firebox. prior to loading the fuel.
7. Load the remaining fuel as stated in "Step 6" in the "Quick Start Guide" above, then close door and open air inlet control fully until fire is well established (approx. 10 minutes) being careful not to overfire.
8. Readjust air inlet control to desired burn rate. If excessive smoke fills firebox, open air inlet control slightly until flames resume and wood is sufficiently ignited. A basic rule of thumb is "closed-low", "approximately 1/16 inch( 1.6 mm) opened for medium" and "fully open-high".
9. When refuelling, adjust air control to the fully open position. When fire brightens, slowly and carefully open the door. This procedure will prevent gases from igniting causing smoke and flame spillage.
10. Add fuel being careful not to overload.
11. Do not build fire close to glass. May result in glass breakage.

**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.**

## GLASS CARE

The following use and safety tips should be observed:

1. Inspect the glass regularly for cracks and breaks.  
If you detect a crack or break, extinguish the fire immediately, and contact your dealer for replacement.
2. Do not slam door or otherwise impact the glass.  
When closing doors, make sure that logs or other objects do not protrude and impact the glass.
3. Do not clean the glass with materials which may scratch (or otherwise damage) the glass. Scratches on the glass can develop into cracks or breaks.
4. Never attempt to clean the glass while unit is hot. If the deposit is not very heavy, normal glass cleaners are adequate with a plain, non-abrasive scouring pad. Heavier deposits may be removed with the use of a readily available oven cleaner.
5. Never put substances which can ignite explosively in the unit since even small explosions in confined areas can blow out the glass.
6. This unit has an airwash system, designed to reduce deposits on glass.
7. Deposits may build on the glass during normal operation and use. Normal glass cleaners work well to remove these deposits. Heavier deposits may be removed by using a damp cloth dipped in wood ashes or by using a commercially available oven cleaner.

REPLACE GLASS ONLY WITH GHP GROUP 5MM CERAMIC GLASS (SEE REPLACEMENT PARTS PAGE 18).

## GLASS REPLACEMENT

**CAUTION:** Make sure fire is out and stove is completely cool to the touch.

1. Find an area that will ensure safe removal and no damage to surface of door frame or decorative home furnishing.
2. Wearing a pair of protective gloves, remove the push nuts that retain the door pins from being pulled out and then lift the door off of the hinges.
3. Lay the door face down on a protective surface located in Step 2.
4. Remove the screws from all glass retainers and remove the broken glass, ensuring that the door frame is free from any slivers. (If even small slivers are left, the new glass will not seal correctly causing the stove to

burn improperly.)

5. Attach glass gasket (from GHP Group replacement parts page 18) to new glass and install in door frame.
6. Replace glass retainers with screws making sure not to cross thread or overtighten.
7. Place door on hinges and replace new push nuts, purchased from GHP Group, on door pins to ensure door does not move after reinstall.

## GASKET REPLACEMENT

After extensive use, the sealing material which provides glass and door seal may need to be replaced if it fails to sustain its resilience. Inspect glass and door seal periodically to ensure for proper seal. If gaskets become frayed or worn, replace immediately.

Contact your dealer or GHP Group Customer Service for approved replacement parts. The following steps should be followed for glass gasket replacement:

1. Ensure appliance is not in operation and is thoroughly cooled.
2. Remove screw and glass clip.
3. Lift glass out from glass clip.
4. Remove old gasket and clean glass.
5. Replace new gasket starting at the bottom of glass working along edges, being sure to centre gasket channel on glass.
6. Trim to length and butt ends together.
7. Replace glass in door, being sure not to over-tighten screw and clip.

The following steps should be followed for door gasket replacement:

1. Ensure appliance is not in operation and is thoroughly cooled.
2. Remove old door gasket and clean channel.
3. Using an approved high temperature gasket cement, apply a thin coat in bottom of channel.
4. Starting at hinge side of door, work into channel around door unit, end butt and trim to length.
5. Close door and allow three to four hours for cement to set before restarting appliance.

## CREOSOTE

Creosote - Formation and Need for Removal

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely 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 (3 mm or more) it should be



removed to reduce the risk of a chimney fire.

## WAYS TO PREVENT AND KEEP UNIT FREE OF CREOSOTE

1. Burn with air control open for several minutes at numerous intervals throughout the day during the heating season, being careful not to over-fire unit. This removes the slight film of creosote accumulated during low burn periods.
2. Burn stove with draft control wide open for several minutes every time you apply fresh wood. This allows wood to achieve the charcoal stage faster and burns wood vapours which might otherwise be deposited within the system.
3. **BURN ONLY SEASONED WOOD.** Avoid burning wet or green wood. Seasoned wood has been dried for at least one year.
4. A small hot fire is preferable to a large smouldering one that can deposit creosote within the system.
5. 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 cleanings may be necessary in mild weather even though monthly cleanings may be enough in the coldest months. Contact your local municipal authority for information on how to handle a chimney fire. Have a clearly understood plan to handle a chimney fire..

### **WARNING: Things to remember in case of chimney fire:**

1. **CLOSE DRAFT CONTROL.**
2. **CALL THE FIRE DEPARTMENT.**

## ASH DISPOSAL

This unit features a convenient ash lip for easy removal of ash. During constant use, ashes should be removed every few days, or whenever ashes get to three to four inches deep in the firebox. Remove ashes only when the fire has died down and the ashes have cooled. Even then, expect to find a few hot embers.

### **Disposal of Ashes:**

Ashes should be placed in a steel container with a tight-fitting lid. The container of ashes should be moved outdoors immediately and placed on a noncombustible floor or on the ground, well away from 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. Other waste shall not be placed in

this container.

### **1. What type of wood is best to use as Firewood?**

Dry seasoned hardwood should be used. Avoid green unseasoned wood. Green wood, besides burning at only 60 percent of the fuel value of dry seasoned wood, will deposit creosote on the inside of your stove and along the inside of your chimney.

### **2. What does dry seasoned wood mean, and what is considered hardwood?**

Wood that has been dried for a period of one year in a well-ventilated and sheltered area would be considered dry seasoned wood. Hardwoods are generally from slow growth trees (Example: Oak and Fir). Softwoods are generally from fast growth trees. (Example: Pine and Spruce)

### **3. Will following the above listed steps for starting a fire result in perfect results all the time?**

The quick answer is most of the time. There are many variables that may affect your success rate when starting a fire. Most of those variables and how to deal with them will be learned through experience. Your ability to start a good fire will significantly increase with time and patience. Some of the reasons for poor stove performance will be covered in the next section of these instructions.

### **4. Why can't I get the fire lit?**

Damp or wet wood and poor draft are the main reasons for poor results in starting a fire. Always use dry seasoned wood for your fire. Even wood dried for two years will be difficult to ignite, if it has become wet.

### **5. Why is there always a large quantity of thick black smoke present in the firebox?**

A large quantity of thick black smoke in the firebox, is a good indication that the draft is poor.

### **6. Is it normal for soot to cover the glass at the beginning of a fire?**

Your stove has been built with an air wash system that will help keep the glass clear when the firebox has reached a good operating temperature, and has a good draft. Cold firebox temperature and poor draft cause sooting of the glass. Once the firebox temperature and the draft increases, the soot will burn off.

### **7. What is draft?**

Draft is the ability of the chimney to exhaust draw by-products produced during the normal combustion process.

### **8. What can cause a poor draft?**

The most common factors for poor draft are:

- a) Atmospheric pressure and air supply
- b) Environmental conditions
- c) Cold chimney temperature
- d) Poor chimney installation and maintenance

### **Atmospheric Pressure and Air Supply**

Atmospheric pressure affecting the draft from a chimney can be either outside the home, inside the home or both. Outside the home, a high-pressure day (clear and cool) generally creates a better draft in the chimney than a low-pressure day (overcast and damp). Inside the home, normal household appliances, such as clothes dryers and forced air furnaces compete for air resulting in inadequate amounts of air available to fuel a fire and create a condition known as negative pressure. Under extreme conditions of negative pressure the combustion by-products can be drawn from the chimney and into the house. This condition is commonly referred to as down drafting. There are several factors that impact the amount of air available in the home. Increased amounts of insulation vinyl windows, extra caulking in various places and door seals can all keep heat in but may also make a home too airtight. If you are in doubt about whether or not there is sufficient air in your home for your stove, refrain from using those appliances known to consume the air where possible, or open a window or door to allow air to enter the home.

### **Environmental Conditions**

High trees, low lying house location such as in a valley, tall buildings or structures surrounding your house and windy conditions can cause pool draft or down drafting.

### **Cold Chimney Temperature**

Avoid cold chimney temperatures by burning a hot fire for the first fifteen to forty minutes, being careful not to over fire. If any part of the chimney or parts of the stove start to glow, you are over firing the stove. Where possible, install a temperature gauge on the chimney so temperature drops can be seen.

### **Chimney Installation and Maintenance**

Avoid using too many elbows or long horizontal runs. If in doubt, contact a chimney expert and/or chimney manufacturer for help. Clean chimney, rain caps and especially spark arrester regularly, to prevent creosote build-up, which will significantly reduce chimney draw and may cause a chimney fire.

## **9. Should I close or open the air control fully when shutting down the stove?**

When shutting down the stove, fully open the air control. This allows the chimney temperatures to remain as high as possible for as long as possible.

Cold chimney temperatures create creosote.

**NOTE:** This sheet is intended as an aid and does not supersede any local, provincial or state requirements. Check with officials or authorities having jurisdiction in your area.



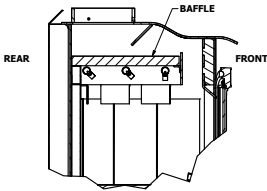
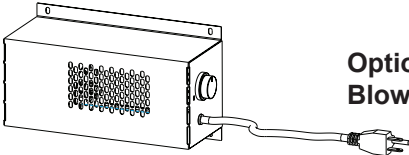
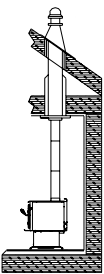
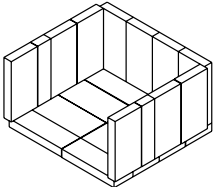
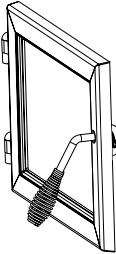
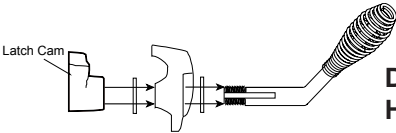


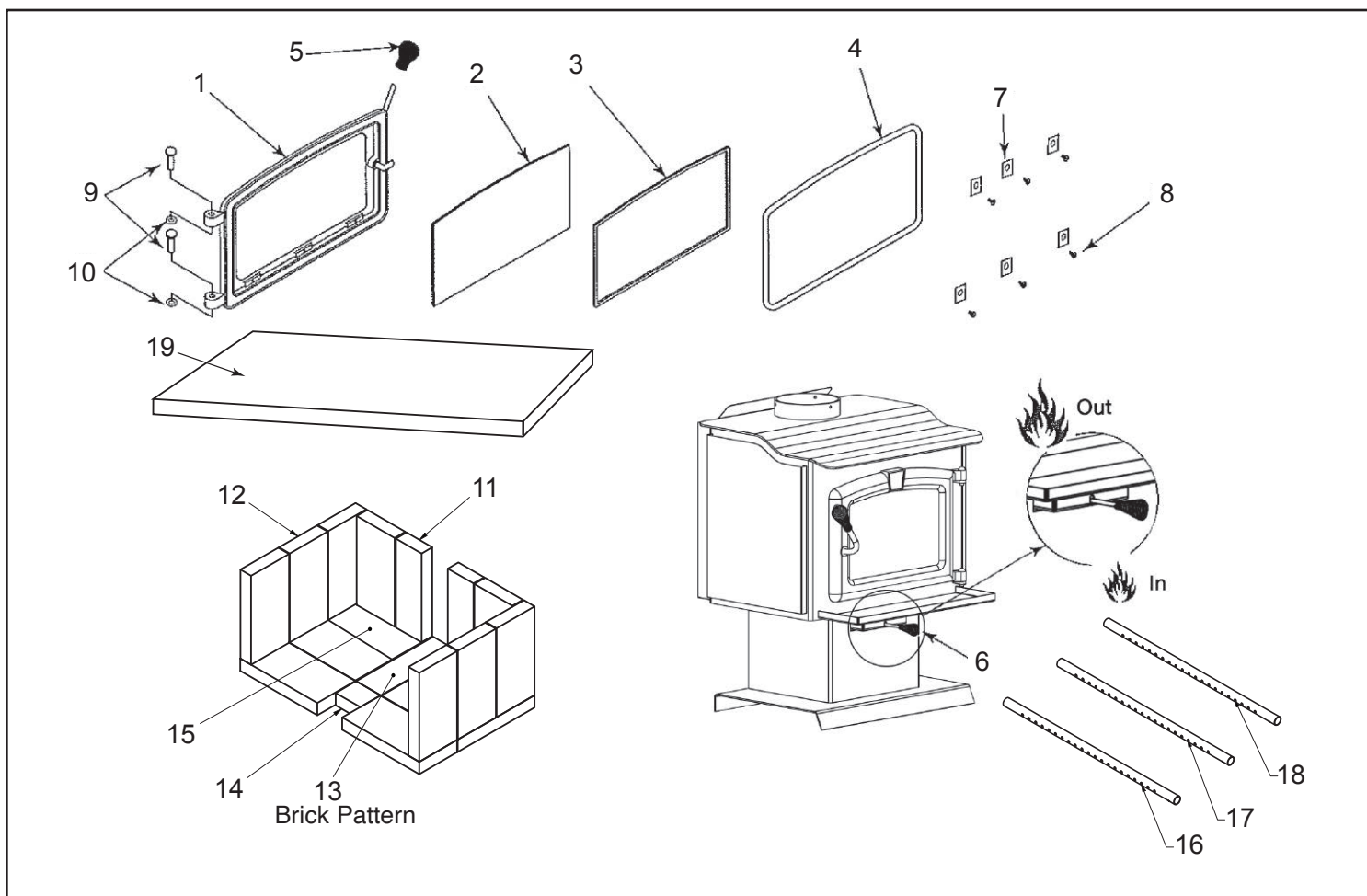
## QUICK REFERENCE MAINTENANCE GUIDE



**CAUTION!** Allow the appliance to completely cool down before performing any cleaning or maintenance.

Start the first inspection after the first 2 months of use, or if performance changes, and adjust your schedule accordingly. Maintenance is required for safe operation and must be performed to maintain your warranty.

AREA OF MAINTENANCE	FREQUENCY	TASK
 <b>Baffle &amp; Blanket</b>	MONTHLY or After Every Cord of Wood	Baffle placement is critical to heat output, efficiency and overall life of the unit. Make sure the baffle is centered on the secondary air manifold and is laying flat. Inspect baffle for cracks.
 <b>Optional Blower</b>	YEARLY or After Every 4 Cords of Wood	Vacuum the blower impellers.
 <b>Chimney System</b>	EVERY 2 MONTHS or After Every 4 Cords of Wood	<p>The chimney and chimney cap must be inspected for soot and creosote every two months during the burn season or more frequency if chimney exceeds or is under 14-16 ft (4.3m- 4.8m) measured from bottom of appliance.</p> <p>This will prevent pipe blockage, poor draft, and chimney fires.</p> <p>Always burn dry wood to help prevent cap blockage and creosote build-up.</p>
 <b>Firebrick &amp; Ash Removal</b>	WEEKLY or After Every 25 Loads of Wood	<p>Ashes must be cool before you can dispose of the ashes in a non-combustible container.</p> <p>Firebrick is designed to protect your firebox. After ashes are removed, inspect the firebrick and replace firebricks that are crumbling, cracked or broken.</p>
 <b>Door &amp; Glass Assemblies</b>	WEEKLY or After Every 25 Loads of Wood	<p>Keep door and glass gasket in good shape to maintain good burn times on a low burn setting. To test: place a dollar bill between the stove and door and then shut the door. If you can pull the dollar out, replace the door gasket.</p> <p>Check the glass frame for loose screws to prevent air leakage. Check glass for cracks.</p>
 <b>Door Handle</b>	WEEKLY or After Every 25 Loads of Wood	Check the door latch for proper adjustment. This is very important especially after the door rope has formed to the stove face. Check door handle for smooth cam operation.



GHP Group reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

Item No.	Description	Qty.	Part No.
1.	Door Assembly	1	75-23-115
2. & 3.	Glass (13.00"W x 8.38"H) and Gasket	1	75-23-511
3.	1/8" Glass Gasket	1	75-23-117
4.	5/8" Door Gasket	1	75-23-124
5.	Spring Handle	1	75-20-140
6.	Air Control Spring Handle	1	75-20-141
7.	Glass Clip	6	75-25-131
8.	Screw	6	75-21-141
9.	Hinge Pin	2	75-20-132
10.	Push Nut	2	75-21-150
11.	Fire Brick, 9" x 3" x 1 1/4"	2	75-23-512
12.	Fire Brick Lt. 9" x 4 7/16" x 1 1/4"	12	75-21-147
13.	Fire Brick, 9" x 2 11/8" x 1 1/4"	1	75-23-513
14.	Fire Brick, 2 5/8" x 2 1/8" x 1 1/4"	1	75-23-514
15.	Fire Brick, 9" x 4 7/16" x 1 1/4" with 1 1/2" Chamfer	2	75-21-183
16.	Air Tube, Front	1	75-23-134
17.	Air Tube, Middle	1	75-23-132
18.	Air Tube, Rear	1	75-23-133
19.	Insulation Baffle	1	75-23-001