



Installation and Operation Manual

BISTRO SERIES

Stone Hearth Cooking Appliance
Gas-Fired Residential Models
Jet Style Burner



BISTRO 3030

WS-BH-3030-RFG

BISTRO 4343

WS-BH-4343-RFG

WS-BH-4343-RFG-W

BISTRO 4355

WS-BH-4355-RFG

WS-BH-4355-RFG-W



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INSTALLATION AND OPERATION MANUAL FOR THE WOOD STONE RESIDENTIAL BISTRO

STONE HEARTH COOKING APPLIANCE

**WS-BH-3030-RFG-(NG OR LP), WS-BH-4343-RFG-(NG OR LP),
WS-BH-4343-RFG-W-(NG OR LP), WS-BH-4355-RFG-(NG OR LP),
WS-BH-4355-RFG-W-(NG OR LP),**

RESIDENTIAL INTERNAL TRANSITION MODELS

ADDITIONAL COPIES AVAILABLE UPON REQUEST



WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

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

Keep the area under and around this appliance free and clear of any and all combustible materials.



WARNING: Installation and servicing of this product could expose you to glasswool/ ceramic fibers as well as Calcium Silicate dust. **ALWAYS WEAR RESPIRATORY AND EYE PROTECTION WHEN INSTALLING OR SERVICING THIS APPLIANCE.** Please read this entire manual before you install the appliance . Failure to follow instructions may result in property damage, bodily injury or even death. Contact your local building or fire officials about restrictions and installation inspection in your area.



WARNING: Do Not pack required air space (clearance) with insulation or other materials. When non-combustible building materials contact the body of the oven, the clearances to combustibles are transferred to those non-combustibles.



WOOD STONE RESIDENTIAL BISTRO GAS COOKING APPLIANCE INSTALLATION AND OPERATING INSTRUCTIONS

DO NOT THROW THIS MANUAL AWAY

RETAIN THIS MANUAL FOR FUTURE REFERENCE

Additional copies of this manual and prompt responses to service/maintenance questions are available from Wood Stone @ 1-800-578-6836.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electrical switch.
- Do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone.
- Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY, OR THE GAS SUPPLIER.

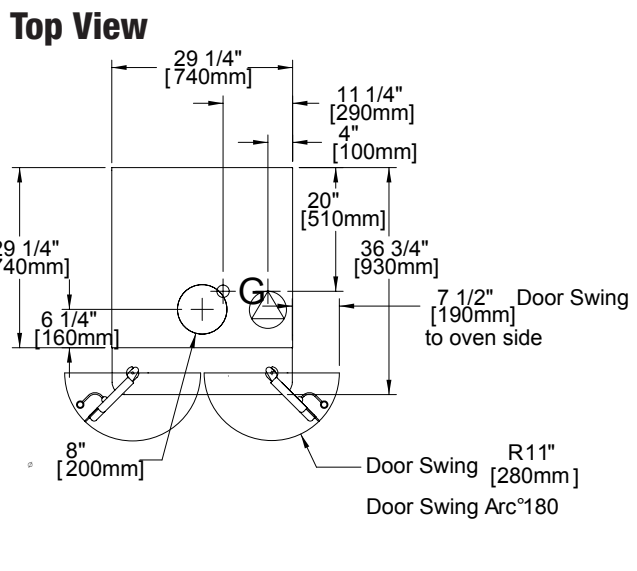
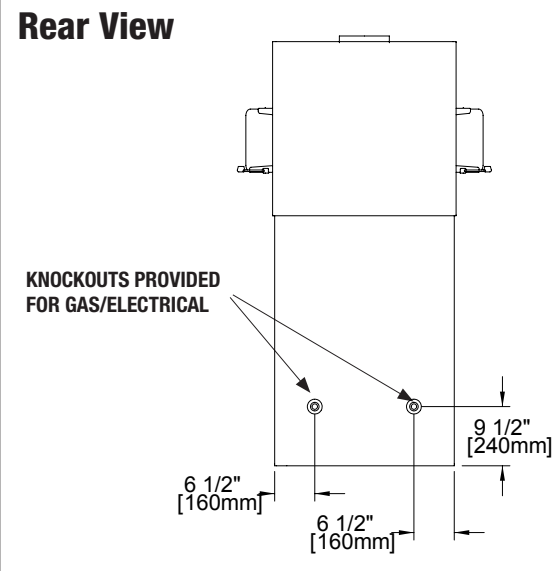
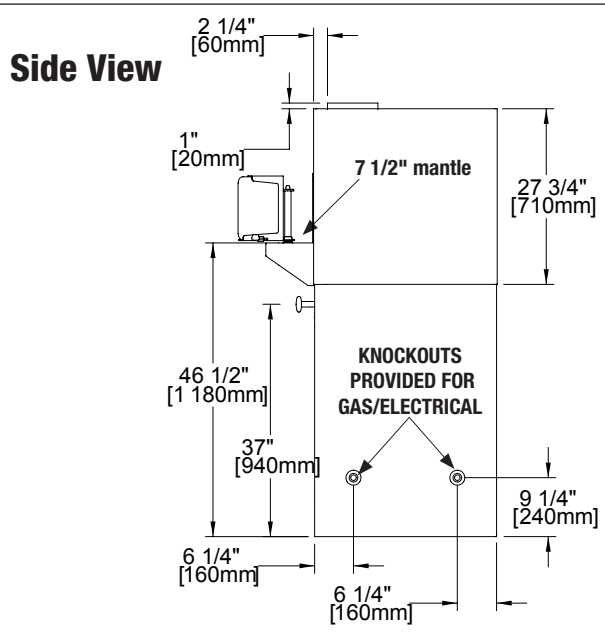
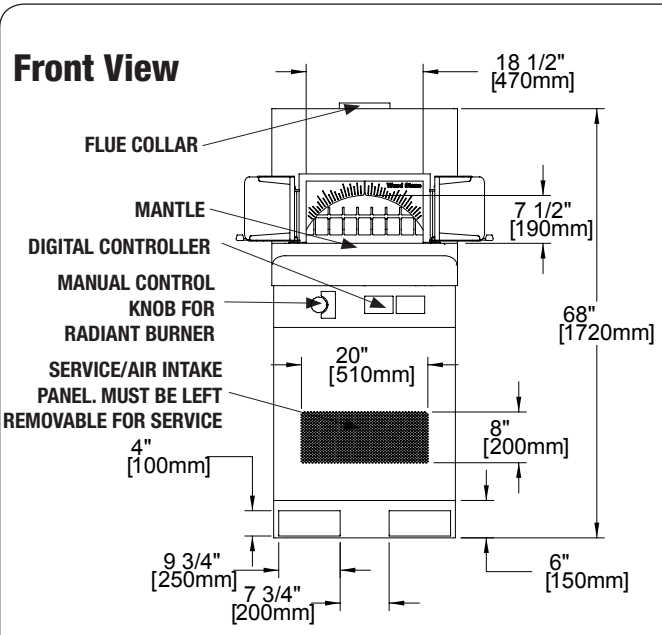
WARNING: Improper installation, adjustment, alteration, service or maintenance can result in property damage, injury or death. Read the installation, operation and maintenance instructions thoroughly before installing or servicing this equipment.

WARNING: This product must be installed by a Licensed Plumber or Gas Fitter when installed within the Commonwealth Of Massachusetts.

This appliance has been tested and approved by Intertek Testing Services, and are ETL Listed to ANSI Z21.1b - 2008



Please read this entire manual before you install the appliance. Failure to follow instructions may result in property damage, bodily injury or even death. Contact your local building or fire officials about restrictions and installation inspection in your area.



UTILITIES SPECIFICATIONS

Gas-3/4 inch FNPT gas inlet (female threaded) \ominus
 55,000 BTU Natural Gas Supply OR
 48,000 BTU Propane (LP) Supply

Actual Weight: 850 lbs.
Shipping Weight: 1100 lbs.

Electrical

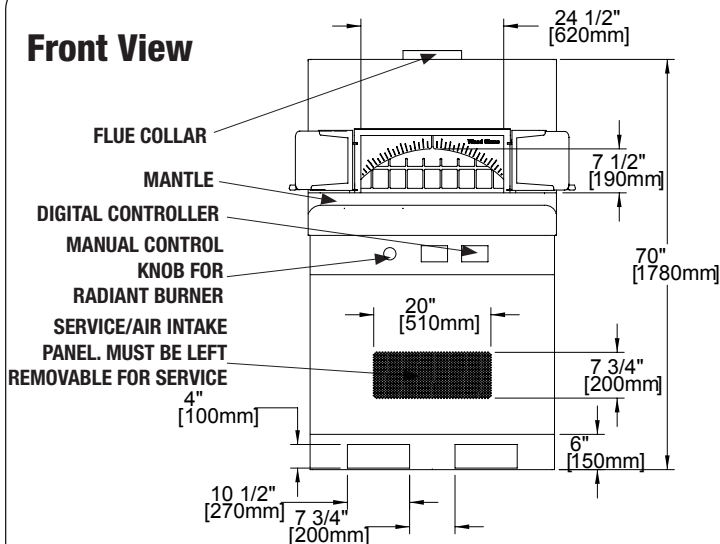
120 VAC, 2 amp, 50/60 Hz \oplus
 All utility connections made on the back of the appliance control box. Remove front or rear panel for access, use utility knockouts (provided) to route gas and electrical supplies.

VENTING INFORMATION

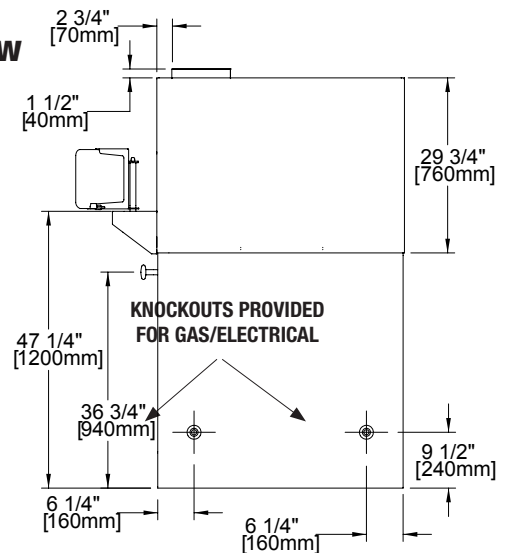
The Bistro appliance can be direct connected to a power-ventilated, grease-rated chimney or can be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The appliance must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.



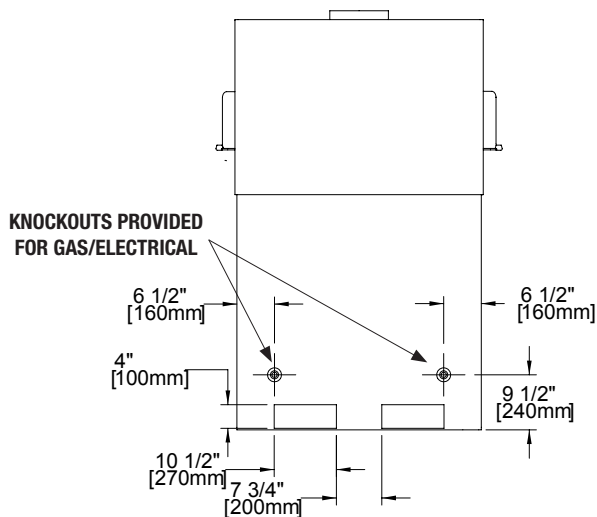
Front View



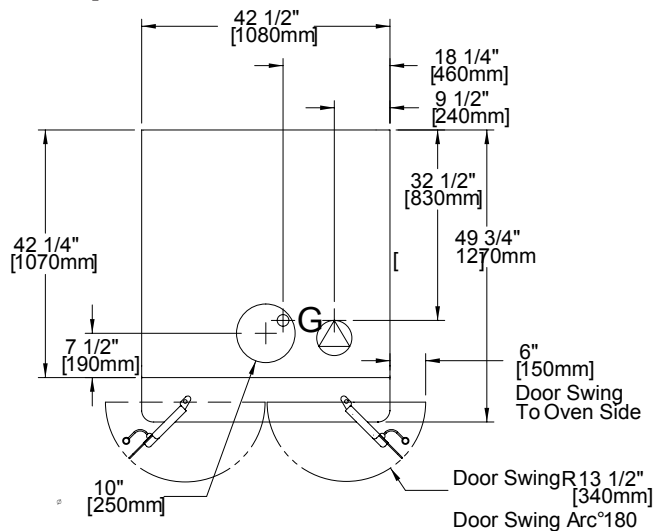
Side View



Rear View



Top View



UTILITIES SPECIFICATIONS

Gas-3/4 inch gas inlet (female threaded)
80,500 BTU Natural Gas Supply OR ⚡
68,000 BTU Propane (LP) Supply

Actual Weight: 1650 lbs.
Shipping Weight: 2100 lbs.

Electrical

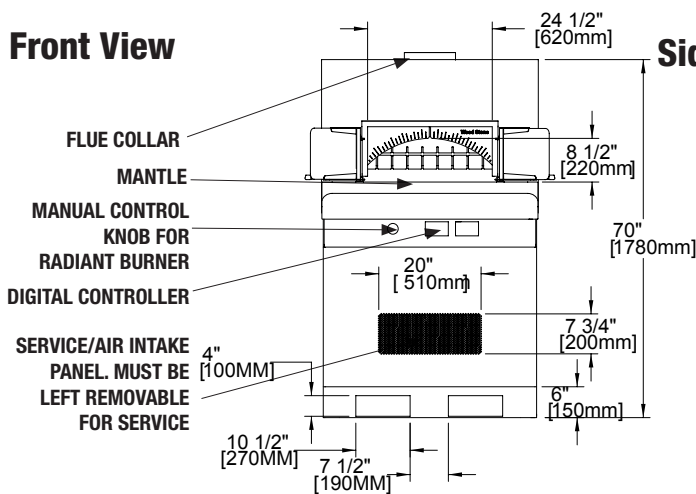
120 VAC, 2 amp, 50/60 Hz ⚡
All utility connections made on the back of the appliance control box. Remove front or rear panel for access, use utility knockouts (provided) to route gas and electrical supplies.

VENTING INFORMATION

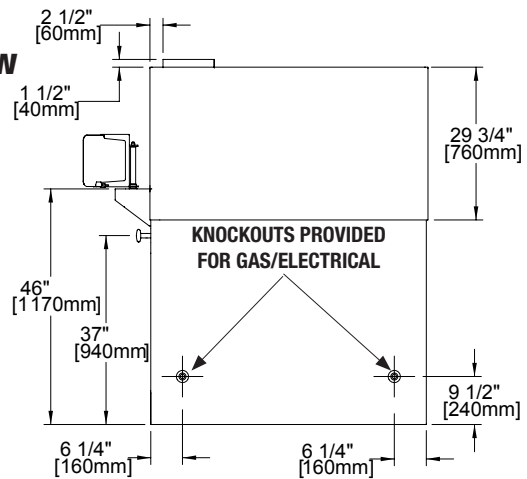
The Bistro appliance can be direct connected to a power-ventilated, grease-rated chimney or can be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The appliance must be vented in accordance with all relevant local and national codes and in a manner acceptable to the authority having jurisdiction.



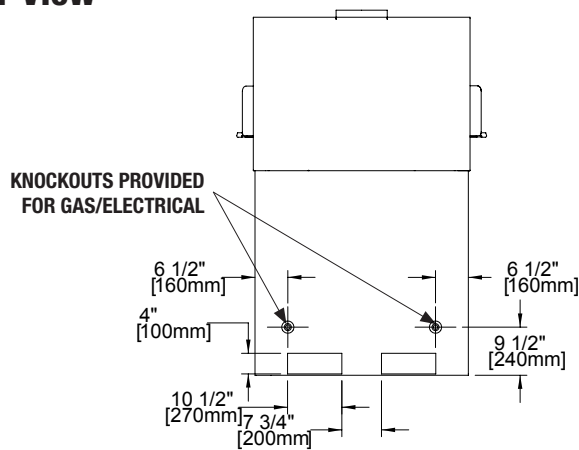
Front View



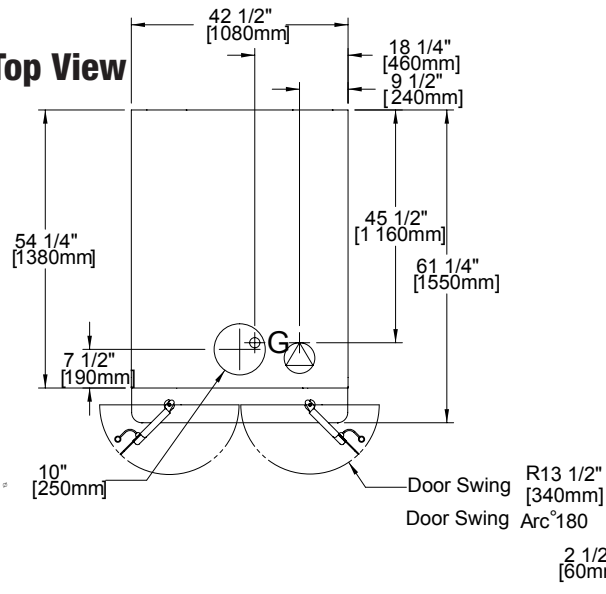
Side View



Rear View



Top View



UTILITIES SPECIFICATIONS

Gas-3/4 inch gas inlet (female threaded)
80,500 BTU Natural Gas Supply OR ϕ
68,000 BTU Propane (LP) Supply

Actual Weight: 2200 lbs.
Shipping Weight: 2500 lbs.

Electrical

120 VAC, 2 amp, 50/60 Hz \oplus
All utility connections made on the back of the appliance control box. Remove front or rear panel for access, use utility knockouts (provided) to route gas and electrical supplies.

VENTING INFORMATION

The appliance can be direct connected to a power-ventilated, grease-rated chimney or can be vented with a Listed Type 1 exhaust hood, or one constructed in accordance with NFPA 96 and all relevant local and national codes. The appliance must be vented in accordance with all local and national codes and in a manner acceptable to the authority having jurisdiction.

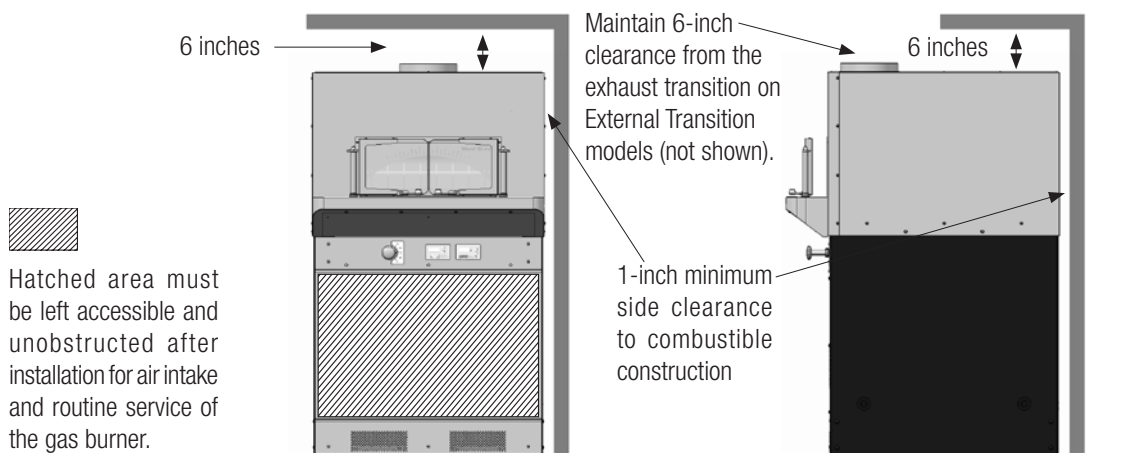


IF THIS APPLIANCE IS NOT PROPERLY INSTALLED A FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THESE INSTALLATION INSTRUCTIONS. A MAJOR CAUSE OF APPLIANCE RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF THE UTMOST IMPORTANCE THAT THIS APPLIANCE BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

CLEARANCES

1. This appliance must have a **minimum 1-inch clearance to combustibles from all sides, 6-inch clearance to combustibles from the top, and 6-inch clearance from the exhaust transition and flue collar.** If building a facade that will contact the appliance, use completely non-combustible materials. Any facade wall built above and or 6 inches to either side of the doorway must be of non-combustible construction. Please note that standard drywall (or sheet rock) is considered a combustible.
2. This appliance should be installed on a non-combustible floor surface. As with any cooking equipment, we suggest that care be taken when choosing the surfaces in front of the appliance to protect them from potential damage from hot, heavy items that may be removed from the cooking chamber. **Models burning solid fuel must be installed on a non-combustible floor surface.**

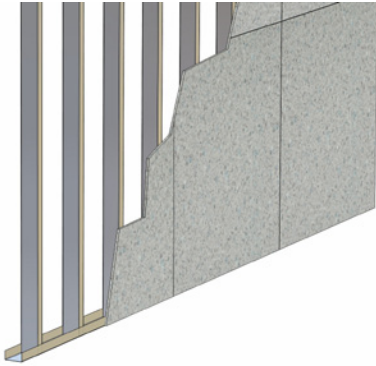
NOTICE: FOR STUCCO COVERED APPLIANCES (MODEL NUMBERS ENDING IN 'S'), 36" TOP AND SIDE CLEARANCE TO COMBUSTIBLE BUILDING MATERIALS IS REQUIRED. STUCCO IS NOT AN OPTION FOR THE BH-3030 MODEL APPLIANCE. NON-COMBUSTIBLE STUCCO MIX MUST BE USED AND APPLIED TO A MINIMUM THICKNESS OF 1". *When non-combustible building materials contact the body of the appliance, the clearances to combustibles are transferred to those non-combustibles.



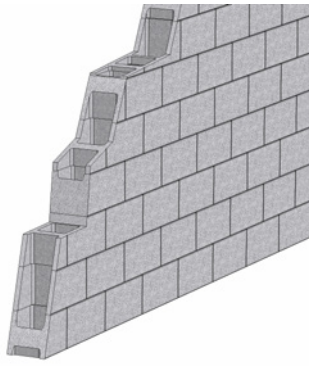
SEE FOLLOWING PAGE FOR EXAMPLES OF NON-COMBUSTIBLE AND COMBUSTIBLE WALL CONSTRUCTION.



EXAMPLES OF **NON-COMBUSTIBLE** WALL CONSTRUCTION



Metal Studs faced with Cement Board

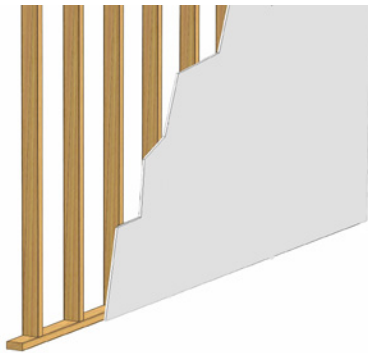


Concrete Block Wall

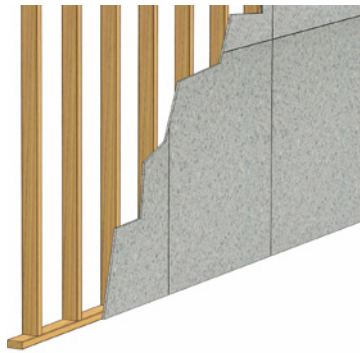


Poured Concrete Wall

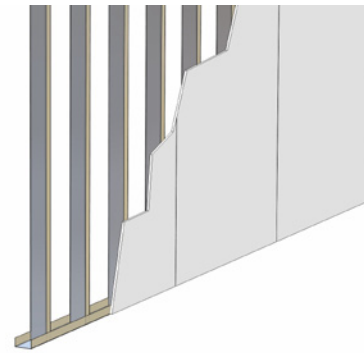
EXAMPLES OF **COMBUSTIBLE** WALL CONSTRUCTION. *REQUIRES 1 INCH SIDE CLEARANCE*



Wood Studs faced with Drywall or Fire-Rated Drywall



Wood Studs faced with Cement Board



Metal Studs faced with Drywall or Fire-Rated Drywall

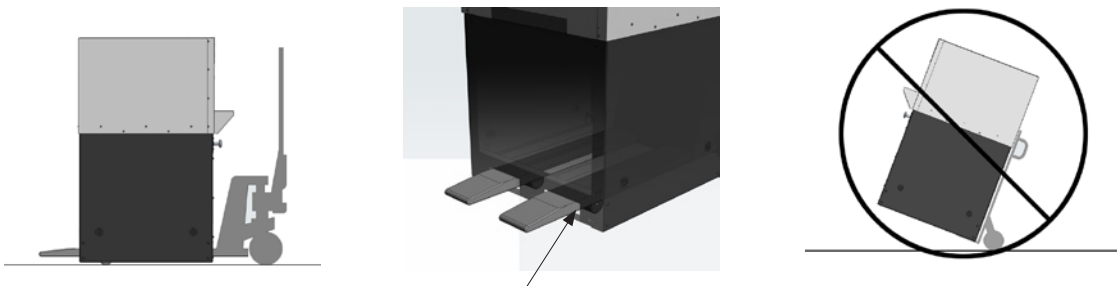


IF YOU NEED TO DISASSEMBLE THE OVEN TO MOVE IT THROUGH A NARROW DOOR OR PASSAGEWAY, SEE DISASSEMBLY SECTION.

Bistro models are shipped fully assembled. The oven can be moved into place with a pallet jack using the **LOWER** forklift pockets. If the oven is to be installed against a wall, you may need to leave access to the back of the oven to complete the utility connections. **Note:** Rear panel **must** be installed.

CAUTION

CAUTION: The 3030 model Bistro weighs approximately 850 lbs. The 4343 model Bistro weighs approximately 1700 lbs. The 4355 model Bistro weighs approximately 2200 lbs. The appliances are very top-heavy. **IF THE APPLIANCE TIPS IT CAN CAUSE SEVERE INJURY OR DEATH! NEVER ATTEMPT TO USE A HAND TRUCK TO MOVE THE APPLIANCE!** The appliance should only be moved using a Pallet Jack on a **LEVEL FLOOR**. If the appliance must be moved over an inclined surface, a forklift or other suitable means should be employed. If the installer does not have the equipment or experience required to move the appliance safely, we recommend you secure the services of a qualified rigging company.



Make sure the pallet jack wheels do not contact the underside of the fork pocket when lifting to avoid damaging the stand.

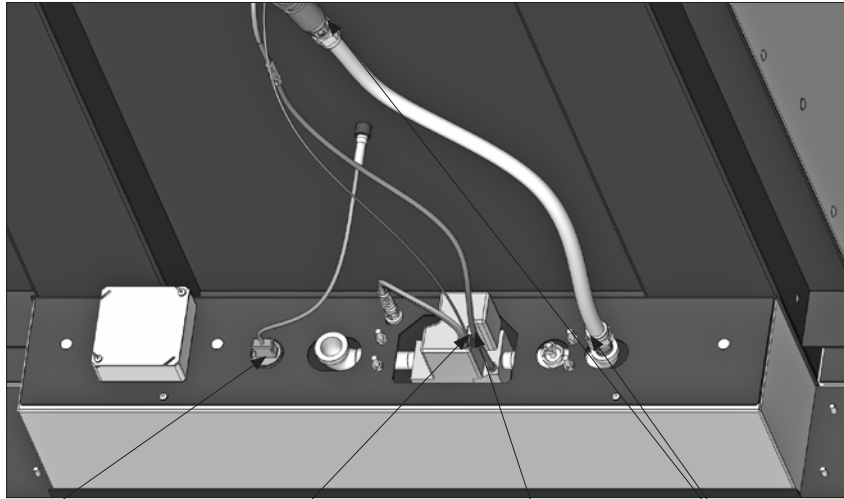
Once you have moved the appliance to where it will be installed, go to Step 11 on page 20 for instructions regarding electrical and gas connections.



IF YOU NEED TO DISASSEMBLE THE APPLIANCE TO MOVE IT THROUGH A NARROW DOOR OR PASSAGEWAY...

1.

Interlock connection to relay will need to be disconnected.



Unplug thermocouple wire and coil it to prevent damage while moving the main body.

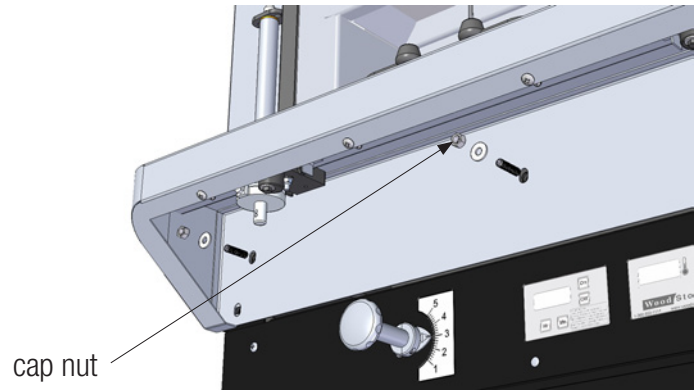
Unplug igniter wires and coil them up and tuck them into the burner.

Remove the flexible gas connector.

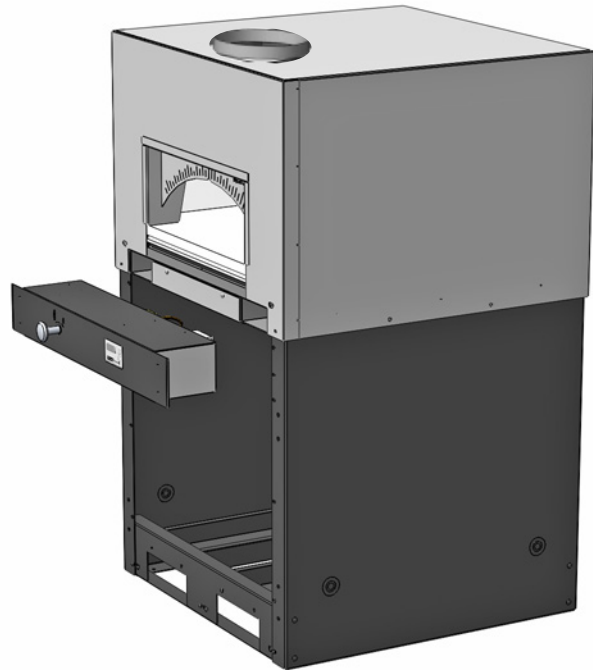
Disconnect pilot tube at the gas valve and at the union. Carefully bend the remaining length of tube from the pilot up inside the burner assembly to protect it.



2. Remove the (3) cap nuts that hold the mantle in place, and remove the mantle. It may be necessary to cut the silicone at the joint between the mantle and the appliance.



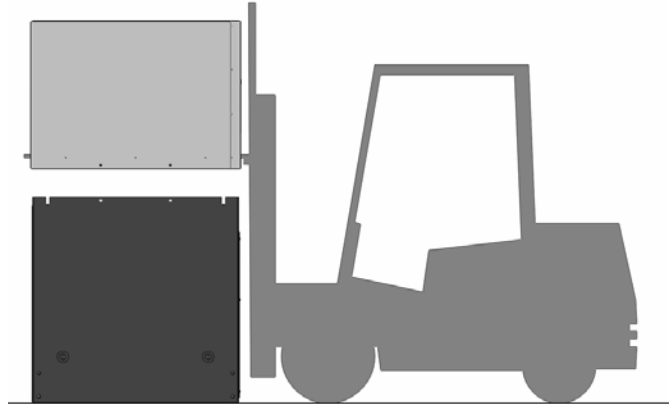
3. Remove the control box from the appliance.





Using the upper forklift pockets support the appliance with a forklift or other suitable device. Remove the bolts that attach the appliance body to the stand. Lift the appliance off of the stand and place it on blocks as shown in **Step 1** on **page 14**.

For **Bistro 3030** models - forklift pockets are on the front only and do not extend all the way through the appliance. Disassemble the stand if necessary. Follow the instructions on **page 10** for tilting and moving the appliance body. Follow the assembly instructions on **page 17** to reassemble the appliance.

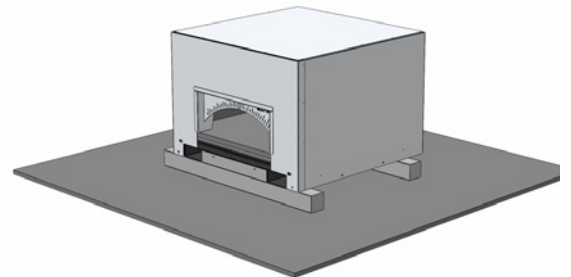




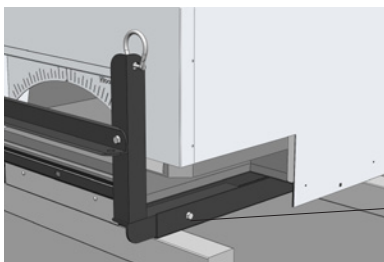
If your appliance was originally shipped assembled, the optional lifting system is available from Wood Stone.

An optional lifting system is available from Wood Stone to facilitate tipping the oven body onto its back or side (as shown below).

1. Use a forklift or other suitable lifting means to set the appliance body onto blocks as shown. If the appliance has the optional decorative logset, remove it before tipping the appliance.

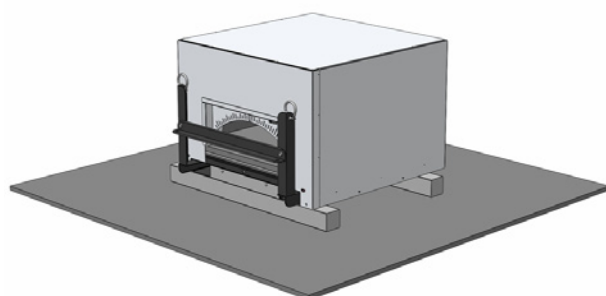
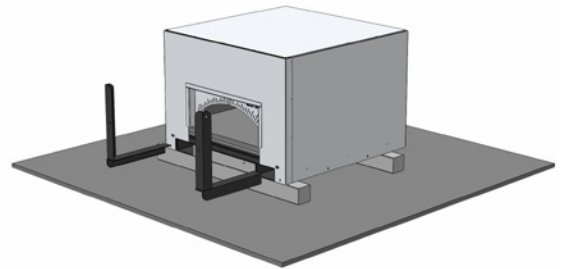


2. Install the side pieces of the tipping assembly.



bolt

Cut away view



3. Bolt the side piece to the appliance as shown, and attach the cross-piece using the hardware provided.

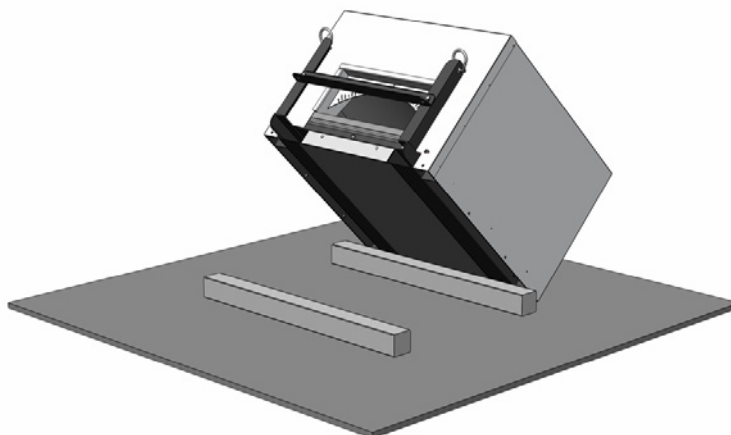
4. Install a clevis in the top hole of each side piece of the tipping assembly. Use these for attachment of a lifting strap or chain.



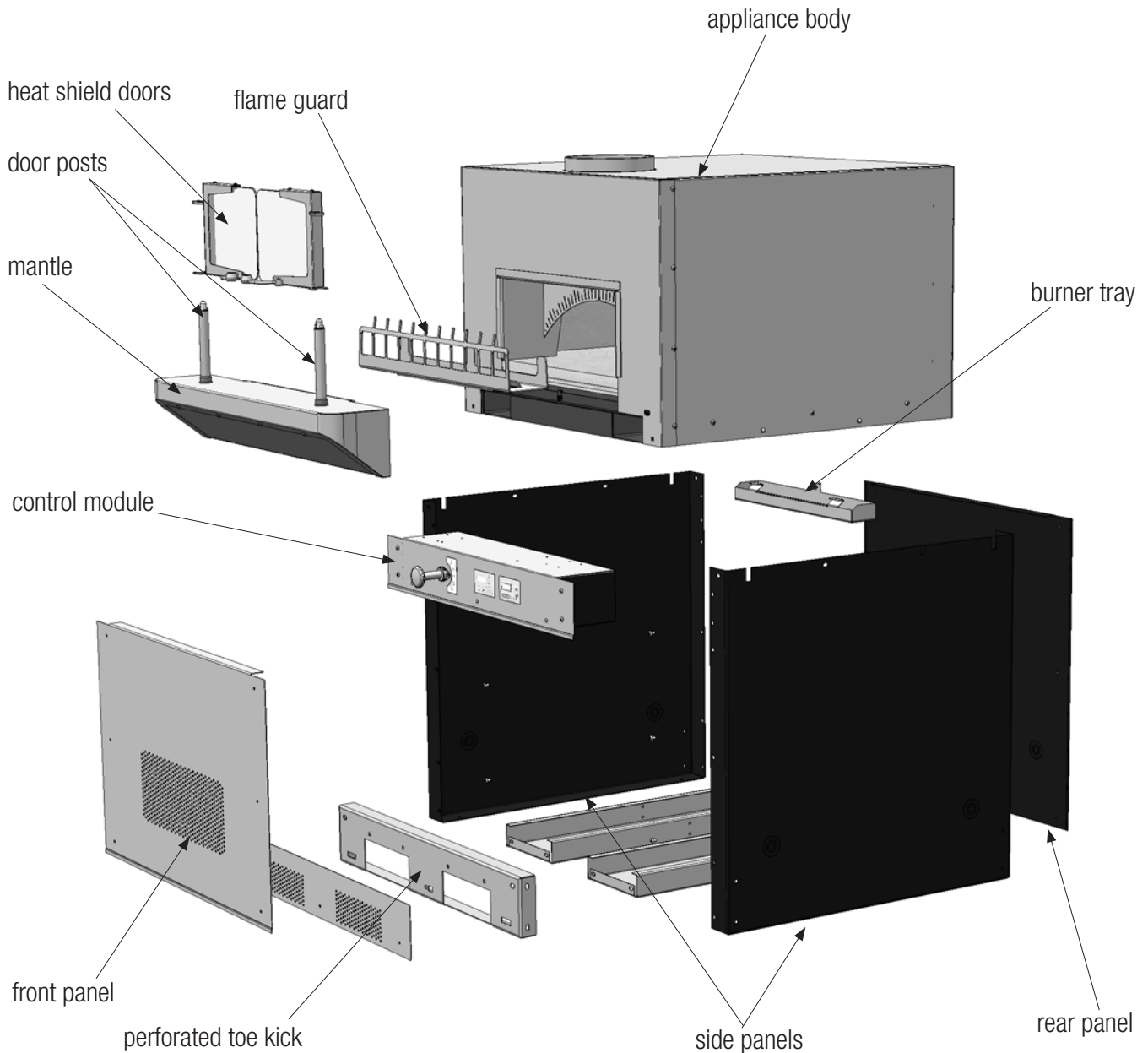
5. Using an appropriate hoist or lift, the appliance may now be tilted (on its back) onto a pallet jack or suitable dolly. The appliance can now be moved through a narrow doorway etc.

DANGER:

Never attempt to move the appliance in this manner on any type of incline or sloped floor.



CONTINUE TO THE EXPLODED DIAGRAM AND RE-ASSEMBLY INSTRUCTIONS



All parts shown above and provided with the appliance (except the shipping panel) **MUST** be installed to ensure the safety and proper operation of the appliance.



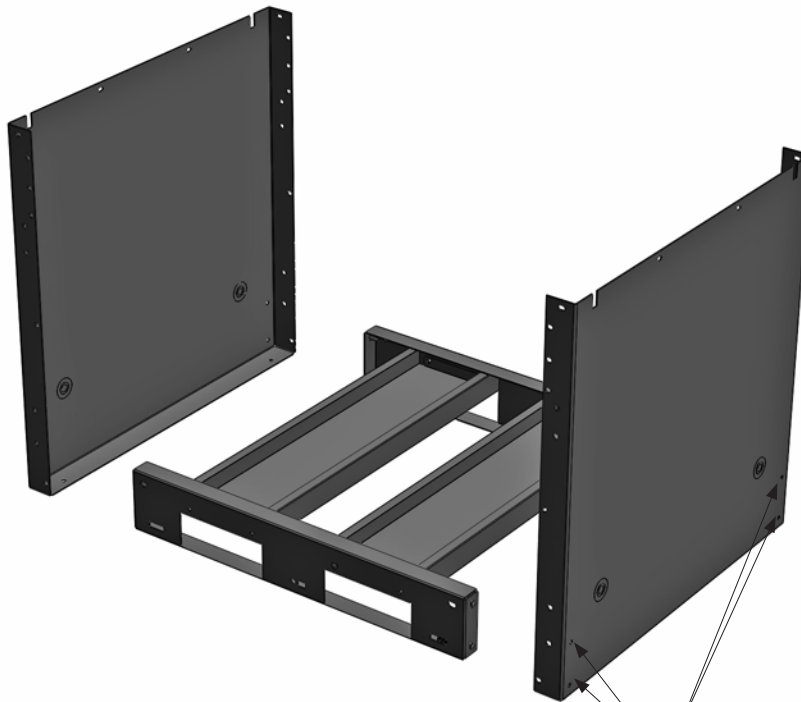
FOLLOW THESE INSTRUCTIONS ONLY IF THE BISTRO WAS SHIPPED DISASSEMBLED

Use the 3/8" x 1" carriage bolts to assemble the stand on a level surface. Be sure to use the washers provided and to tighten nuts and bolts securely.

1.



2.

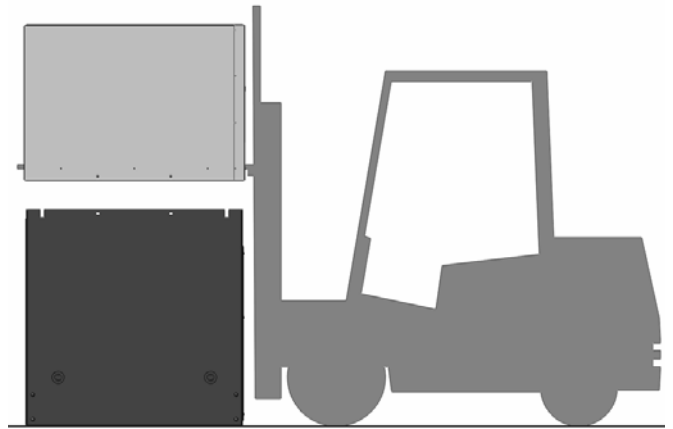


insert long carriage bolts here

On 3030 Models only: Use 3/8"x 3/4" long carriage bolts to attach the sides instead of the 3/8"x 1" long carriage bolts.

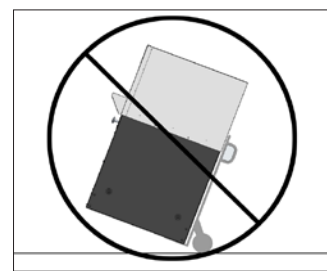
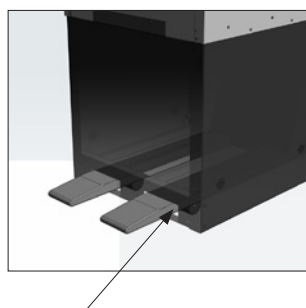
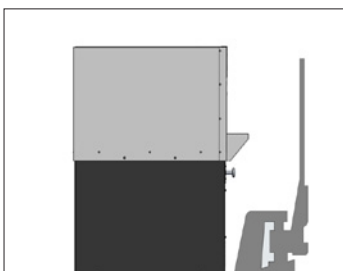


3. Using a forklift, carefully lower the body of the appliance on to the stand so that the bolt holes line up. While supporting the appliance with the lift, install the 3/8" x 1" carriage bolts. Use the washers provided and tighten all nuts securely. Be sure to use the forklift pockets when lifting the body of the appliance. **Bistro 3030 models** - forklift pockets are on the front only and do not extend all the way through the appliance.



4. After the appliance body is bolted to the stand, the appliance can be moved into place with a pallet jack using the **LOWER** forklift pockets. If the Bistro is to be installed against a wall, leave access to the back of the appliance until the assembly is completed.

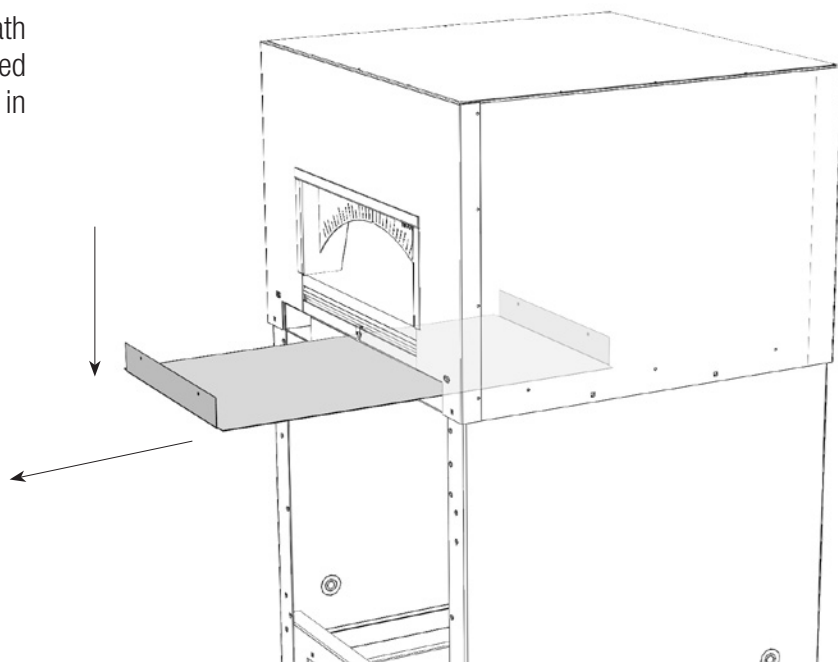
CAUTION: The appliance is very top-heavy. **IF THE APPLIANCE TIPS IT CAN CAUSE SEVERE INJURY OR DEATH!** The appliance should only be moved using a Pallet Jack on a **LEVEL FLOOR**. Do not attempt to move the appliance with a hand truck. If the appliance must be moved over an inclined surface, a forklift or other suitable means should be employed. If the installer does not have the equipment or experience required to move the appliance safely, we recommend you secure the services of a qualified rigging company.



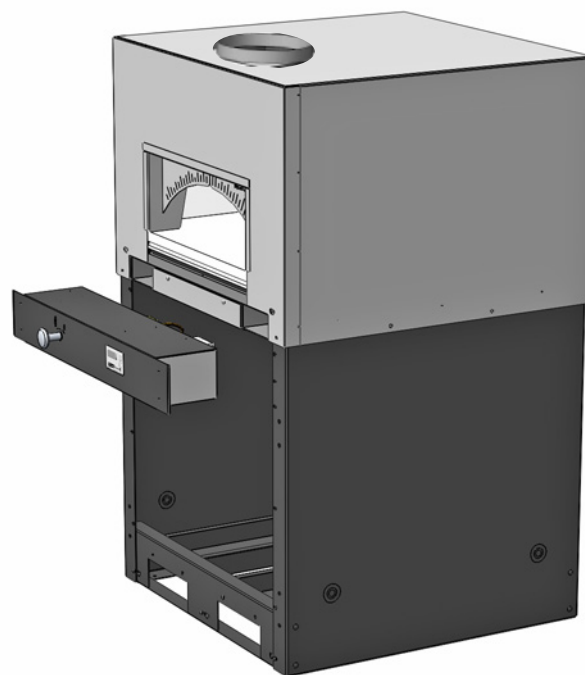
Make sure the pallet jack wheels do not contact the underside of the fork pocket when lifting to avoid damaging the stand.



5. Remove the Shipping Panel from beneath the appliance. The Shipping Panel is secured with (2) screws in the front, and (2) screws in the back. Discard the Shipping Panel.

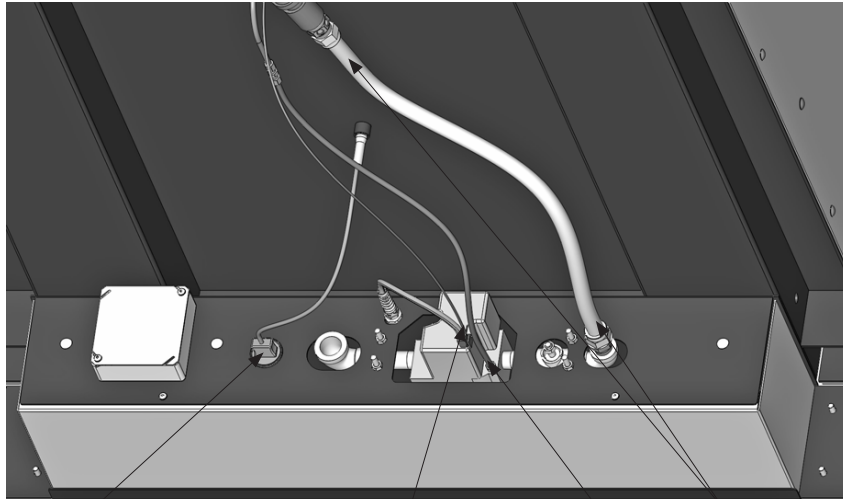


6. Attach the Control Box to the appliance using (4) 1/4-20 screws. The Control Box should be oriented so the knob is on the left side of the Control Box.





7. Connect burner assembly components and thermocouple at the rear of the control box.

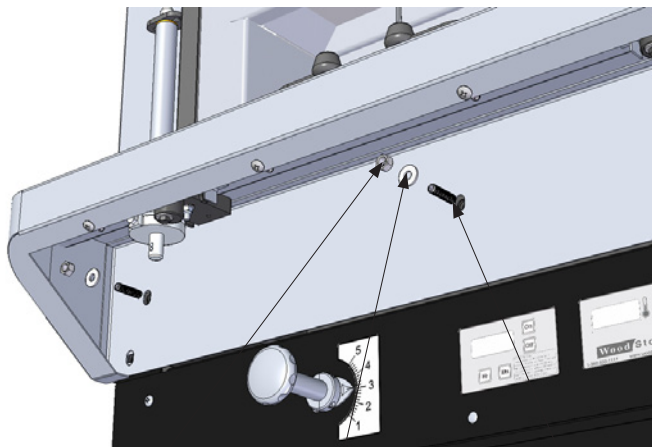


Plug in thermocouple wire here.

SV-2 Gas Valve. Plug in igniter wires from the burner here.

Use flexible gas pipe provided to connect the burner.

Attach flexible pilot tube here. Tighten the fitting firmly.



nut

washer

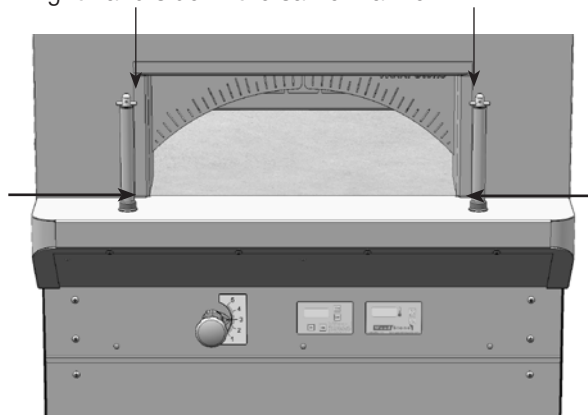
threaded stud

8. Install the mantle. Install the (3) threaded studs into the clips on the front of the appliance. Slide the mantle over the studs, then slip one washers onto each stud. Install and tighten the nuts onto studs securely.

If the appliance has been supplied with a granite mantle, affix the granite slab to the mounting bracket using a generous amount of the adhesive provided. If the appliance has been supplied with a mantle bracket for use with customer's own material, a mantle template will be included for cutting the stone to fit over the door posts and onto the mantle.

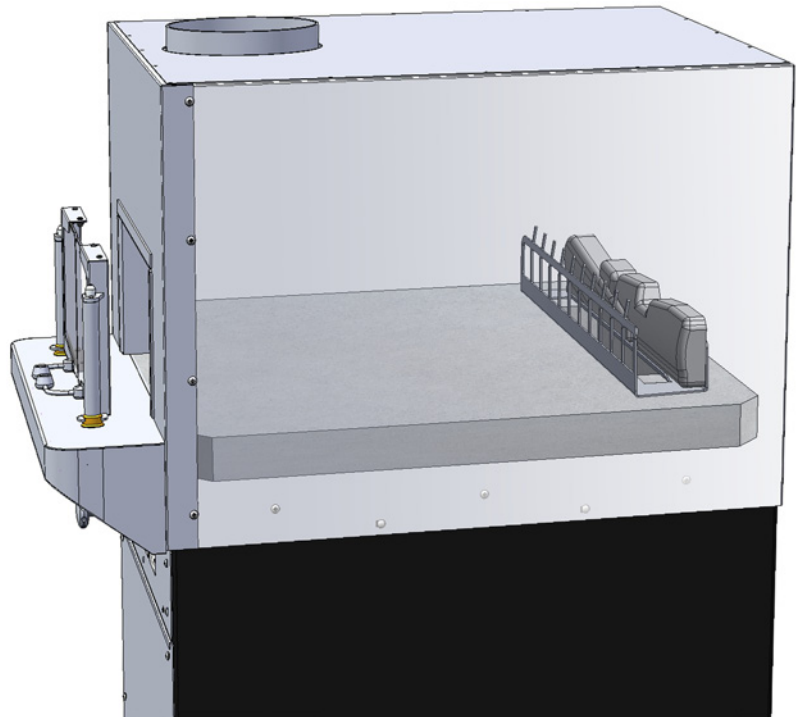
9. Run a bead of silicone (provided) along the joint between the mantle and the front of the appliance as shown in the drawing.

Apply silicone to this joint. Apply to right hand side in the same manner.



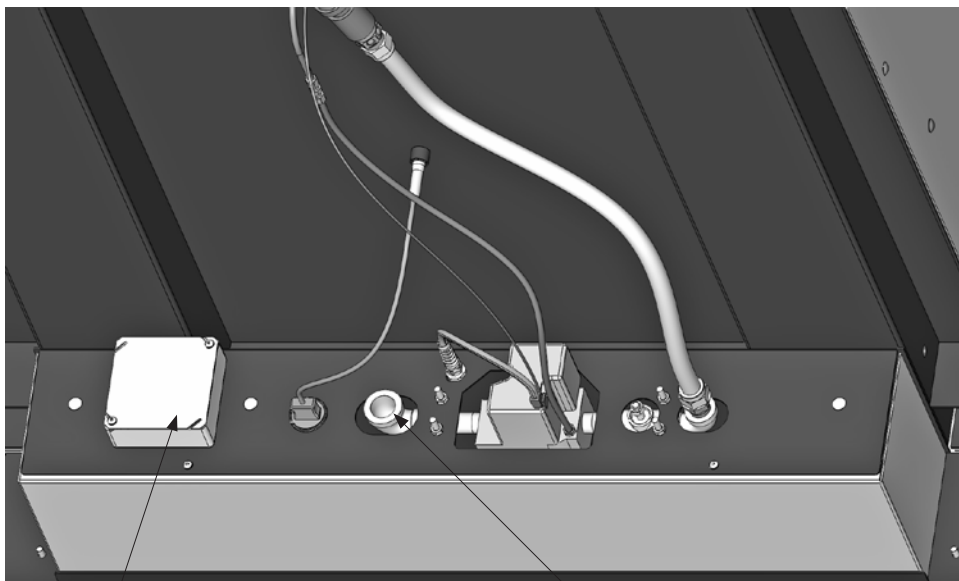


10. Reinstall the burner guard, and optional logset if supplied. The lower tab of the guard fits into the front of the burner opening. Check that this did not shift during shipment and installation. The logset pieces fit onto the studs on the burner guard, behind the opening in the guard, so the logs sit at the rear of the burner opening.





11. Make utility connections, at the rear of the control box. Gas and electrical connections must comply with all relevant national and local codes, and in a manner acceptable to the authority having jurisdiction.



Make the electrical connection to the terminals in this junction box. *Correct voltage is specified on this junction box and the equipment data plate

Connect the incoming gas supply to the 3/4 inch NPT (female) gas inlet.

Knockouts are provided on the sides and back of the appliance stand for the incoming gas and electrical supplies. If necessary, holes may be drilled in the back panel for the incoming gas and electrical. Gas and electrical supplies should be routed in such a way that they do not interfere with the removal of the appliance burner, or block the access to the space under the appliance for service. The area beneath the burner needs to be kept clear of conduit and piping to allow for removal of the burner for service. **The rear panel must be installed!**

A 3/4 inch full-flow gas shut-off valve should be installed on the gas supply near the appliance in such a way that it is readily accessible. This appliance must be electrically grounded in accordance with local code, or in the absence of local code, with the national electrical code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.2, as applicable.

An electrical diagram is provided inside the bottom cover of the control box, and at the end of this manual.



The installation must conform with local codes, or in the absence of local codes with the National Fuel Gas Code, ANSI 223.1, Natural Gas Installation Code, CAN/CGA-B149.1, as applicable.

The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi. The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply system at test pressures equal to or less than 1/2 psi. The incoming gas supply pressure must not exceed 1/2 psi (14 inches WC). If the incoming gas pressure exceeds 1/2 psi, an external gas regulator must be installed in the supply line. If the supply pressure is less than 1/2 psi, no external regulator is required.

The installer should bleed any air out of the gas line supplying the appliance. All gas connections and fittings on the appliance should be leak checked with an approved soap solution.

12. Checking the burner manifold pressure. The burner manifold pressure has been set at the factory, however it should be checked by the installer. The pressure should be checked at the outlet tap on the Honeywell gas valve, located on the back of the control box. Once the manometer is connected, turn the appliance on and use the knob on the appliance to adjust the flame to its maximum height. Then check the manifold pressure.

Natural Gas (NG) 4343 and 3030 Models: 4.5" WC

Propane (LP) 3030 models: 7" WC Propane (LP) 4343 Models: 7" WC Natural Gas (NG) 4355 Models: 4.5" WC

Propane (LP) 4355 and CS-REC-11 Models: 7" WC

This information can also be found on the data plate located beneath the appliance.

13. Install the rear panel, front panel, and toe kick using the 1/4-20 screws provided. The front panel must remain removable, so as to allow access for service to the appliance components. If this area is covered with a combustible material, it must be 1" away from the service panel. The appliance should be bolted to the floor using the holes provided at the base of the stand.



VENTING

All of the combustion products and cooking vapors from the **WS-BH-4343-RFG**, **WS-BH-4343-RFG-W**, **4355-RFG**, and **4355-RFG-W** pass through the 10-inch diameter flue collar. These models may be connected to an 8-inch duct. The **WS-BH-3030** models are equipped with an 8-inch collar located atop the exhaust transition. The appliance can be connected to a power ventilated chimney, or placed under a commercial grease-rated Type 1 hood. The **WS-BH-4343-RFG-W** models may burn up to 3 lbs. of wood per hour and must be vented as a solid fuel burning piece of equipment.

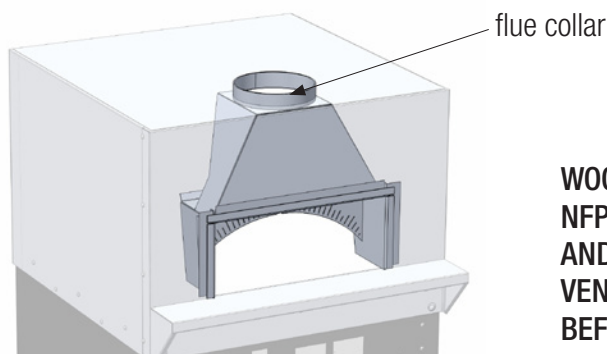
The following are the manufacturer's recommendations for venting the Wood Stone Bistro. It is never appropriate to use "B vent" in any part of an exhaust system connected to a Wood Stone appliance. All ducting material must be manufactured to the specifications of a grease duct. Due to the possibility of sparks entering the duct, exhaust systems serving **SOLID FUEL** equipment **SHOULD NOT** be combined with exhaust systems serving other (non-solid fuel) cooking equipment.

There are two options:

1. A Listed building heating appliance chimney, also listed as a grease duct connected directly to the appliance flue collar and provided with a power ventilator listed for restaurant appliance exhaust and rated for operation at a minimum of 300 degrees F. Use a stack or curb mounted fan. Wood Stone does not recommend the use of an in-line fan. A field built grease duct installed and constructed according to the requirements spelled out in NFPA 96 or the International Mechanical Code may also be used. Field built duct must be a minimum of 0.044" stainless steel or 16 ga. mild steel (0.055") and must maintain a minimum of 18" clearance to combustibles, and must be fully welded.

A static pressure of -0.1 inches water column is necessary at the appliance flue collar to ensure proper flue temperatures at the fan. The airflow required to attain this static pressure will depend on the configuration of your particular installation but will probably be between 300 and 500 CFM. The exhaust fan must be turned on any time the appliance is running. See instructions for interlocking of the appliance to the fan at the end of this manual.

2. Wood Stone offers eyebrow-type hoods designed specifically for Wood Stone by Gaylord Industries.



WOOD STONE APPLIANCES MUST BE VENTED IN ACCORDANCE WITH NFPA 96, UL 103 AND/OR ALL PERTINENT NATIONAL, REGIONAL AND LOCAL CODES CONCERNING SUCH APPLIANCES; CHECK VENTING PLANS WITH THE AUTHORITY HAVING JURISDICTION BEFORE PROCEEDING WITH INSTALLATION.



NOTE: The ceramic materials used in the construction of your Wood Stone oven will absorb moisture if exposed to high humidity or damp conditions during shipment from the factory or extended periods of storage before installation. Occasionally, through the course of the initial start-up, as the oven heats up it is possible that you will see some water dripping from the sides of the oven as this moisture is driven out of the ceramic. This is not a defect in the oven, and once the oven has been fully saturated with heat the moisture will be driven fully from the oven. After this initial process, you will not see any additional moisture from the oven unless the oven is not used for an extended period of time **AND** it is exposed to excessive moisture or high humidity.

INITIAL APPLIANCE STARTUP

NEVER OPERATE THIS APPLIANCE WITH THE STAINLESS STEEL NIGHT DOOR (OPTIONAL) IN PLACE!

THE OPTIONAL NIGHT DOOR IS FOR HEAT RETENTION ONLY, AND SHOULD ONLY BE USED WHEN THE APPLIANCE IS TURNED OFF!

FIRST DAY

1. Make sure exhaust fan is properly wired and interlocked to the appliance.
2. Make sure main gas supply is on (valve parallel with gas line).
3. Push I/O button on controller. It may take a while for the gas to purge all the air from the gas lines.
4. Once the burner ignites, the exhaust fan should come on as well. Make sure the flame is at its lowest setting and allow the appliance to operate at this setting for about 1 hour.
5. After 4 hours, raise radiant flame to 25% (~ 5-inch flame which is #2 on the pointer dial).
6. After 4 hours at 25% flame, raise to 50% flame (# 3 on the pointer dial) and allow the appliance to run until it reaches a temperature of 500 degrees F. This will take approximately 3-4 hours ..



GENERAL OPERATION

The appliance floor temperature is displayed on the controller readout.

1. TURNING ON THE APPLIANCE

Push I/O button and turn the radiant flame to its highest setting. To set the appliance to turn on automatically using the programmable timer, see the timer programming section on page

2. HEAT-UP

The appliance should reach cooking temperatures of 550-575 degrees F in 3-3 1/2 hours. Use the flame height control knob to control the amount of heat in the appliance. If the appliance is still warm from the previous day, push the I/O button and turn the radiant flame to its highest setting (#5). The appliance should reach 500-550 degrees F within 1 1/2-2 hours. See www.woodstonehome.com for detailed information on cooking in your Wood Stone Bistro.

3. TURNING OFF THE APPLIANCE

Push I/O button, all gas will go off, even the pilot.

COOKING INSTRUCTIONS ARE AVAILABLE ONLINE AT www.woodstonehome.com

4. CLEANING THE APPLIANCE INTERIOR

1. As needed, use the natural fiber brush to sweep stray food debris to the corner near the doorway, where it can be easily removed when you are finished cooking or once the appliance is cool.
2. As needed, swab the deck using a damp (not wet) rag wrapped around the floor brush. This is best to do when the appliance is hot. Take care to avoid brushing debris into the radiant flame burner.

NEVER PLACE ANYTHING IN OR ABOVE THE RADIANT FLAME

Gas fired models with a '-W' in the model number are listed for the burning of up to 3 lbs. of wood per hour when properly vented as a Solid Fuel appliance. Build the fire on the side wall of the appliance, 6-10 inches inside the doorway of the appliance or use a smoker tray. Never use the gas (radiant) flame as a fire starter, and keep the fire away from the radiant flame. Keep all ash and debris away from the radiant flame. See next page for ash disposal guidelines.

5. CLEANING THE APPLIANCE EXTERIOR

All painted and stainless steel surfaces should be cleaned as necessary using an approved mild detergent, hot water and a soft cloth or sponge. Stubborn residues may be removed using a nonmetallic scouring pad. When scouring stainless steel surfaces, scrub with the grain of the metal to prevent scratching.



Wood Stone recommends the use of the natural fiber brush for sweeping aside excess food particles that will accumulate on the floor of the appliance during use. The appliance floor can be cleaned with a damp rag. **DO NOT USE ICE OR EXCESSIVE WATER ON THE FLOOR; THIS IS TO PREVENT THERMAL SHOCKING OF THE STONE.** There is a stainless steel burner guard to prevent food from falling on and thereby obstructing the gas orifices of the radiant flame. If food gets into the radiant flame well and the flame is visibly obstructed, turn the appliance off immediately, and call for service.

DO NOT USE THE RADIANT BURNER WELL AS A DUMP FOR DEBRIS OR TRASH INCINERATION; MAKE EVERY ATTEMPT TO KEEP DEBRIS FROM DROPPING INTO THE WELL.

CLEANING THE HEAT SHIELD DOORS

With normal use, the heat shield doors will become splattered or soiled. To keep the doors clear, it is important to occasionally clean them to keep the build-up to a minimum and to make the process easier. First, remove the doors from the posts that support them. For minor cleaning and up-keep however, you can use window cleaner to keep the glass clean and do not need to remove them from their posts. Make sure the doors are cool to the touch. If they are not cool, wait to clean them until they are cool to avoid being burned. Next, open the doors and place one hand above and one hand below one door and gently lift up. The bracket that holds the door on the post has a small retainer that keeps the door from being accidentally knocked off the post. Once the top bracket is above this retainer, the door will lift easily and can be removed from the vertical post that supports it. Repeat the process with the second door and take them to the sink. Wash the doors with warm water and liquid dish soap (such as Dawn) on a sponge. Never use 'Scotch Brite' or any other abrasive pad, powder or solution as they can scratch the ceramic glass surface. If there is baked on soil or grease, we recommend the use of appliance cleaning products that have been labeled as safe for appliance door glass. Some of these products, like EASY-OFF® FUME FREE MAX™ are also fume free and more user friendly. While they might require some soaking time, they can actually work quite well. **Do not allow chemical cleaners to contact the oven ceramic as they can cause damage.** Please keep in mind that many heavy duty appliance cleaning products are caustic and contain sodium hydroxide and should not be used on you doors. These compounds can permanently pit or fog your ceramic glass doors and are also generally unpleasant to use - note the extensive list of hazards. After they are clean, dry and return the doors to the appliance and re-install them.

THERMAL CLEANING

Gas-fired Appliance- If a Wood Stone gas-fired appliance is operated at low temperatures (below 525 degrees Fahrenheit [F]), you may notice a buildup on the appliance floor. Note that this floor buildup may be perceived as the floor flaking away. If you operate the appliance below 450 degrees F, you may also notice some buildup on the interior walls and/or ceiling of the appliance. To remove any buildup that has accumulated inside of the appliance, simply turn the radiant flame to its highest setting. Monitor the floor temperature displayed on the controller. When the floor reaches 650 degrees F, lower the flame slightly so as to maintain the appliance floor temperature near 650 degrees F for about an hour. Heavy accumulations may require more time. Heavy accumulations on the floor may require some additional scraping with a utility peel or a floor scraping tool. Once the appliance appears clean, allow the appliance to return to normal operating temperatures and continue normal operation.



WOOD AND ASH

Wood should be stored and handled in accordance with the recommendations outlined in section 11 of NFPA96. **The interior floor and dome of the appliance do not require creosote or soot removal. The appliance flue and exhaust system will require inspection and cleaning. The exhaust system should be inspected and cleaned per the manufacturer's and or local code official's recommendations.**

DISPOSE OF ASH PER THE FOLLOWING:

1. Place ashes into a metal container with a tight fitting lid.
2. Place the closed container of ashes on a non-combustible floor or on the ground.
3. Place the closed container of ashes well away from all combustible materials, pending final disposal.
4. Retain the ashes in the closed container until all the cinders have thoroughly cooled. Ashes can then be disposed of safely.

NOTE: Wood Stone's stainless steel ash shovel and double compartment ash disposal system offer a safe and convenient way to dispose of ash.

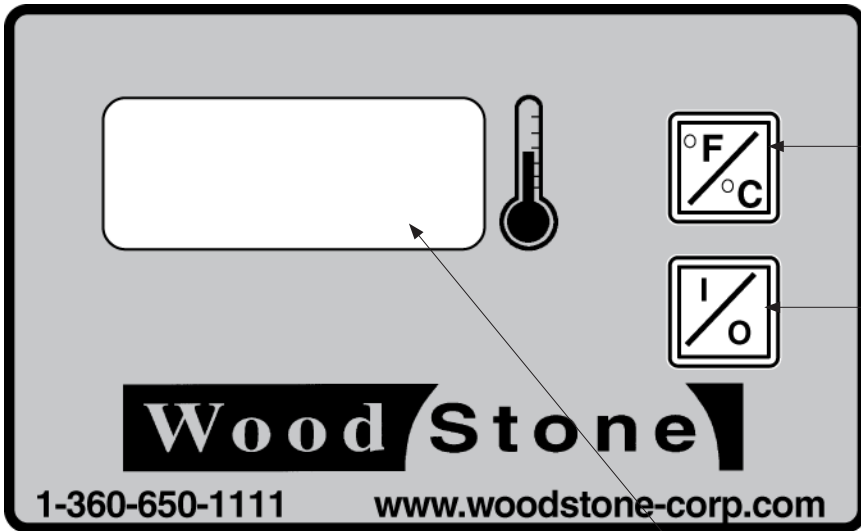
REMOVAL OF CREOSOTE AND SOOT

Only RFG-W models are intended to allow the additional burning of wood. As with all cooking equipment and solid fuel exhaust systems, a regular inspection and cleaning schedule is needed to prevent the possibility of a hood or duct fire. The frequency of inspection and cleaning will depend on hours of use and type and quality of wood used as fuel. Only use hardwood species dried to a moisture content of 20% or less.

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 appliance flue of a slow-burning fire. As a result, creosote residue accumulates in the duct. When ignited, this creosote makes an extremely hot fire.

The duct serving this appliance should be inspected at least twice a month during the first two months of operation, to establish a rate of creosote buildup and necessary cleaning schedule. If creosote or soot has accumulated, it should be removed to reduce the risk of a flue fire.

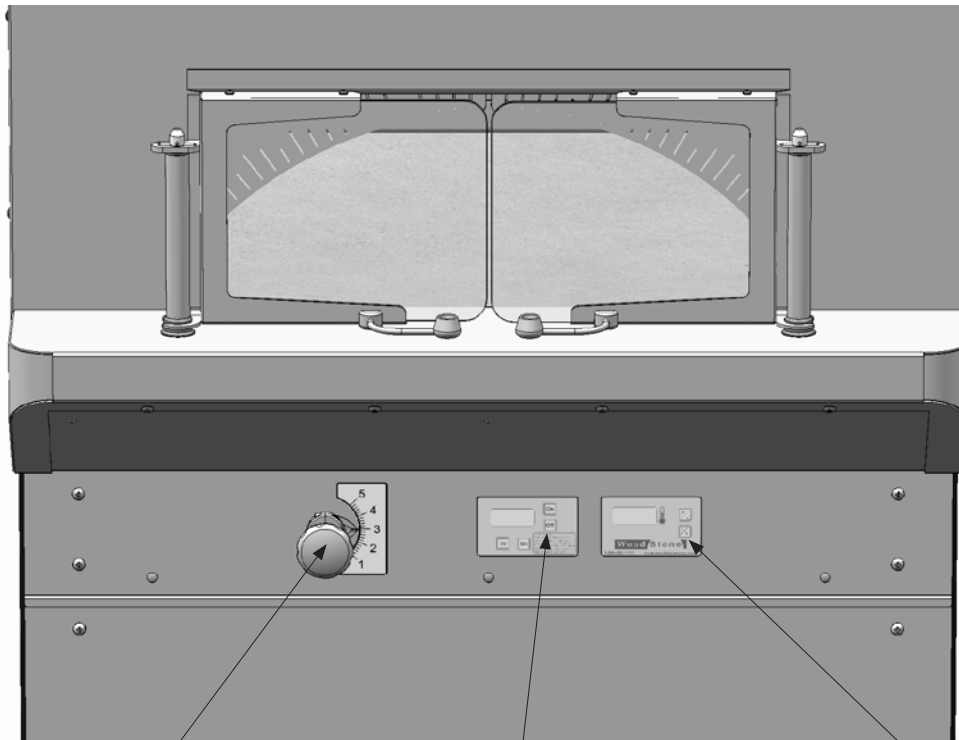




Temperature Units- press and hold to switch between Fahrenheit and Celsius.

'ON/OFF' Button- press to turn appliance on and off

Hearth Temperature- The hearth temperature will be displayed here, any time the appliance is turned on. Display will read 'LO' when the temperature is below 100 F.



Timer Module

Controller

Flame Height Control Knob- Use this knob to raise/lower the flame to control the appliance temperature.

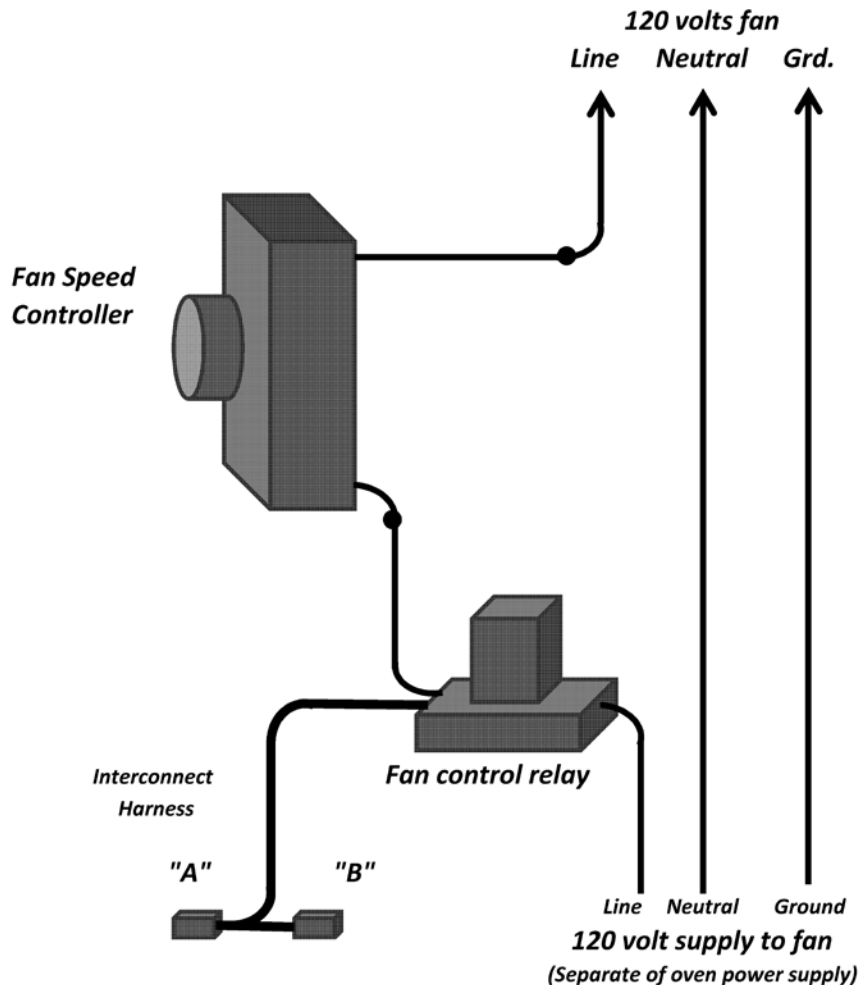


PROBLEM	CAUSE/SOLUTION
Controller will not turn on	<ol style="list-style-type: none"> Incoming power to appliance turned off. Check circuit breaker for circuit supplying the appliance. Check that any wall switches external to the appliance that control appliance power are turned on. Check that any interlocks external to the appliance are turned on. If control still does not turn on, please contact Wood Stone for assistance.
Flame does not light	<ol style="list-style-type: none"> Is gas turned on to the appliance? Is gas shut-off valve turned all the way on? Debris in burner. Burner may require cleaning. Contact Wood Stone for assistance. Damaged igniter or gas valve. Contact Wood Stone for assistance. <p>If the appliance is being started for the first time:</p> <ul style="list-style-type: none"> Has all air been bled from the gas line? Is the switch on the SV-2 valve in the 'ON' position? <p>NOTE: (Valve is locate on the back of the control box, beneath the appliance.</p>
Flame cuts out	<ol style="list-style-type: none"> Debris in burner. Fan is turned on too high Wind blowing into the appliance, or other venting issues. Appliance is not vented properly - Call Wood Stone
Display reads 'OPEN'	<ol style="list-style-type: none"> Thermocouple is not plugged into control box. Damaged thermocouple - call Wood Stone.
Flame and controller turn off. Unit will not turn back on.	High limit device has tripped. Allow the cooking chamber to cool and then turn the controller back on.

Please contact Wood Stone at 1-800-578-6836 should service be necessary, or if you have any questions about your appliance. Our office hours are 8am to 4:30pm Pacific Standard Time. Follow the recorded instructions for Emergency Service if you require assistance during non-business hours. A Wood Stone technician will promptly respond to your call.



FAN INTERCONNECT INSTRUCTIONS

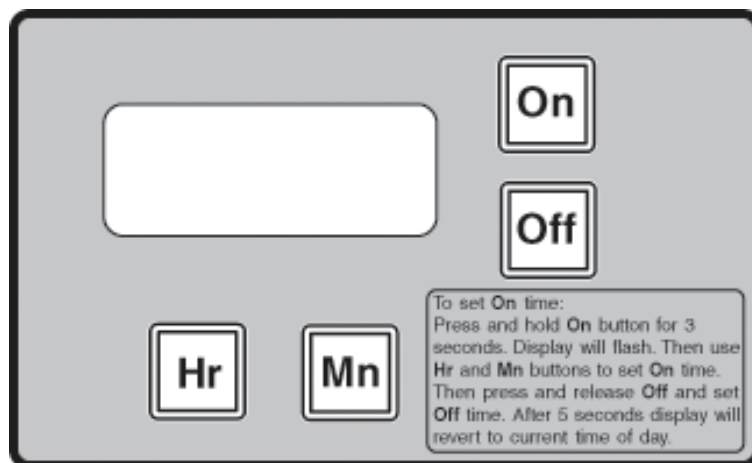


Wire the incoming 120 volts to the oven J-box as instructed in the 'Assembly' section of this manual.

Have the electrician mount the fan control relay and speed controller under the oven near the back of the stand and bring in the 120 volt power for your roof mounted Exhausto fan. The line wire will pas through the relay on the black wires (terminals 5 and 9) then through the fan speed control before going out to the fan. Turn the speed control fully clockwise to the LOW position to start.

Unplug the power harness from the gas valve on the back of the control box on Bistro ovens or the rear gas valve on MH ovens. Plug side "A" of the interconnect harness.

Turn on the oven control. The relay should close and switch on the fan. When the oven is turned off, the fan will switch off.



CLOCK/TIMER PROGRAMMING

NOTE: If an exhaust fan is installed on the appliance ventilation system, it must be interlocked to the appliance. An unsafe condition will result if the appliance is programmed to start automatically without the exhaust fan running. If an exhaust fan is installed it must be running whenever the appliance is turned on. See page 31 for interlock diagram.

INITIAL POWER UP/CLOCK SET UP FOR CORRECT TIME

When the appliance is connected to power for the first time, or after a power outage lasting more than several hours, it will be necessary to re-set the time on the clock, which will be flashing 'AM 12:00'.

Press and hold both the 'Hr' (hour) and 'Mn' (minute) buttons together for 3 seconds until the display starts flashing rapidly. Now use the 'Hr' and 'Mn' buttons to set the correct time of day. After making the adjustment, wait 5 seconds for the display to stop flashing. The time is now set.

PROGRAMMING 'ON'/'OFF' TIMER MODE

When setting the timer, it is necessary to program both 'ON' start time and 'OFF' stop time. To set the timer, press and hold the 'ON' button for 3 seconds until the display shows 'PM 0:00' and the clock face icon appears and flashes in the display. Use the 'Hr/Mn' buttons to set the 'ON' time. Then press and release the 'OFF' button. The display will show '0:00', and then will show the previously set 'ON' time. Use the 'Hr/Mn' buttons to set the 'OFF' time. After the 'OFF' time is set, wait 5 seconds and the display will show the current time of day. The clock icon will come on, indicating the timer is set and active.

The timer function can be canceled by holding both the 'ON' and 'OFF' buttons down for 5 seconds, until the clock icon disappears.

The 'ON' and 'OFF' settings can be reviewed by holding the respective button for 5 seconds. The time will be displayed for 5 seconds and then revert back to the current time of day.



TIMER MODE OPERATION

When the timer is programmed for 'ON'/'OFF' mode operation and the time of day reaches the programmed 'ON' time, the appliance controls will be switched on and the clock face icon will flash until the off time is reached, at which time the clock face icon will go off.

If the appliance is turned on manually while the timer is set, the clock face icon will start flashing indicating the 'OFF' function is still enabled, and the appliance will still shut off at the preset time.

If the appliance is manually turned off before the preset time is reached, the preset time will be overridden and the clock face icon will go out.

MINUTE (COUNT DOWN) TIMER OPERATION

To set the count down time, press and hold either the 'Hr' or 'Mn' button for 5 seconds. The display will start flashing '0:00'. Use the 'Hr' and 'Mn' button to set the desired count down time. The display will continue to flash the count down time. To start the count down timer, press the 'ON' button once. The display will show solid with only the colon flashing at a rate of once per second, showing the timer is running. When the timer counts down to '0:00', the beeper will sound 1 second on and one second off for 30 seconds. The timer will then beep once every 10 seconds until it is reset by pressing the 'OFF' button. Pressing the 'OFF' will silence the beeper and the display will revert to clock mode showing the time of day.

The timer function can be canceled by holding the 'ON' and 'OFF' buttons down at the same time for 5 seconds.

CLOCK/TIMER OPERATION DURING A POWER OUTAGE

In the event of a power outage, the clock will continue to display the correct time for several hours. The minute timer may be used during a power outage, but the beeper will not sound. Programmed 'ON'/'OFF' times will remain active unless the programmed 'ON' time is reached before power is restored, in which case the program will be canceled and the clock face icon will go out. If power is restored before the programmed 'ON' time is reached, the appliance will work normally at the preset times.

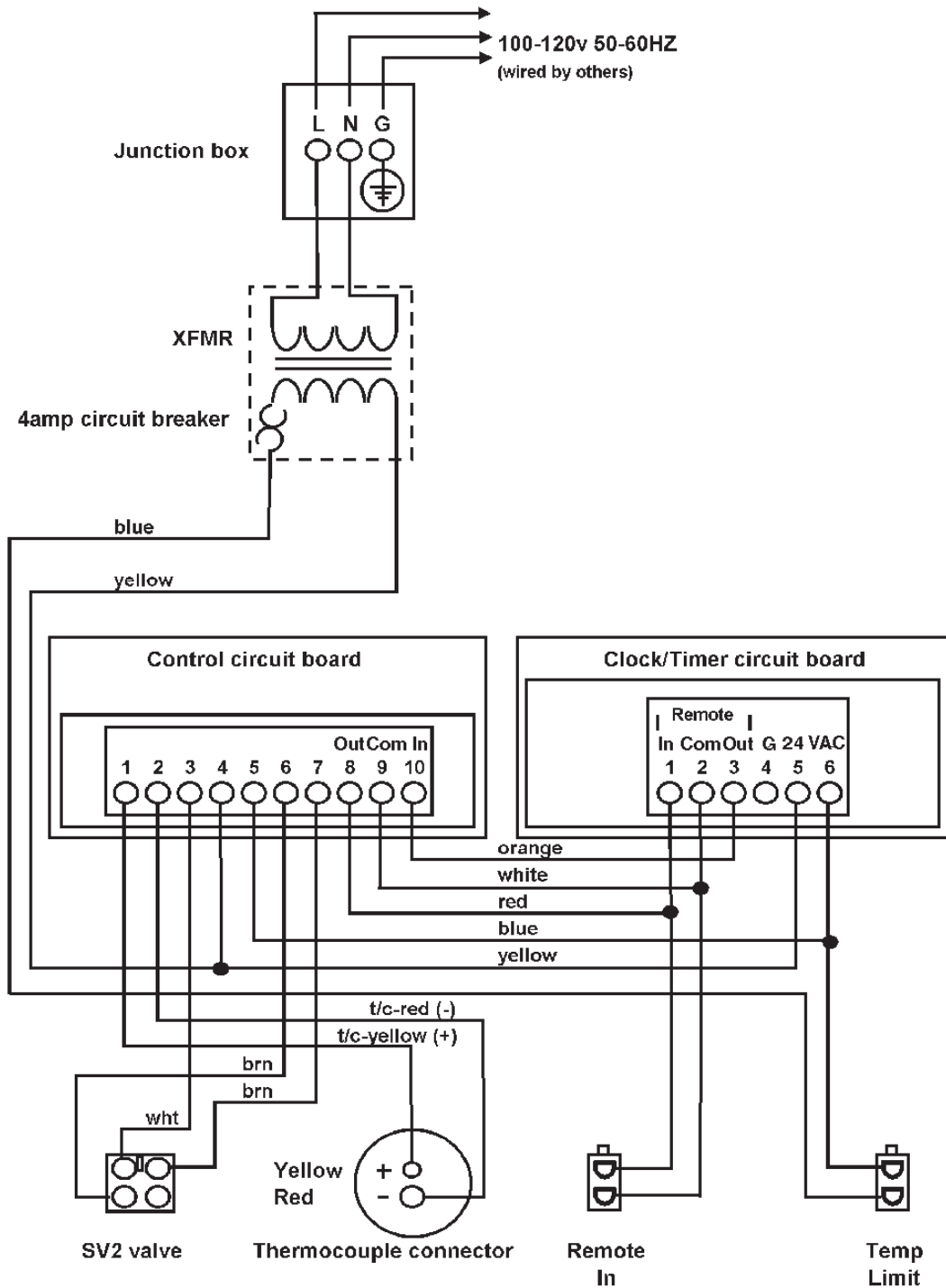
If the power remains off for an extended period the clock will eventually turn off (go blank) and will flash 'AM 12:00' once the power is restored and must be reset per the instructions in section A above.

EXTERNAL CONTROL

If the appliance is turned on manually when the timer is programmed for 'ON'/'OFF' times, the 'ON' time will be canceled, but the 'OFF' time will remain programmed. The clock face icon will blink to indicate this. If the appliance is then turned off manually the 'OFF' time will be canceled and the clock face icon will go out.



BISTRO WITH HOT SURFACE IGNITION AND TIMER





**ALL WARRANTY SERVICE MUST BE PRE-APPROVED BY WOOD STONE
PLEASE CONTACT THE FACTORY FIRST**

Please call 1-800-578-6836 or 1-360-650-1111 seven days a week. Our normal business hours are 8am to 4:30pm Pacific Standard time Monday through Friday. If calling during non-business hours, follow the recorded instructions for emergency service and a Wood Stone technician will get back to you promptly. Wood Stone warrants its equipment to the original purchaser against defects in material or manufacture for a period of one year from the original date of purchase subject to the following exclusions and limitations.

EXCLUSIONS

The warranties provided by Wood Stone do not apply in the following instances:

1. In the event that the equipment is improperly installed. Proper installation is the responsibility of the installer; proper installation procedures are prescribed by the Wood Stone installation manual.
2. In the event the equipment is improperly maintained. Proper maintenance is the responsibility of the user; proper maintenance procedures are prescribed in the Wood Stone installation manual.
3. In the event that the failure or malfunction of the appliance or any part thereof is caused by abnormal use or is otherwise not attributable to defect in material or manufacture.
4. In the event that the appliance, by whatever cause, has been materially altered from the condition in which it left the factory.
5. In the event that the rating plate has been removed, altered or obliterated.
6. On parts that would be normally worn or replaced under normal conditions.
7. Normal cracking due to expansion and contraction stress relief in either the dome or appliance deck.
- 8. In the event that pressed log products of any type have been burned in the equipment.**

If any oral statements have been made regarding this appliance, such statements do not constitute warranties and are not part of the contract of sale. This Limited Warranty constitutes the complete, final and exclusive statement with regard to warranties.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER WRITTEN, ORAL OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OR WARRANTY AGAINST LATENT DEFECTS

LIMITATIONS OF LIABILITY:

In the event of warranty claim or otherwise, the sole obligation of Wood Stone shall be the repair and/or replacement, at the option of Wood Stone, of the appliance or component or part thereof. Such repair or replacement shall be at the expense of Wood Stone with the exception of travel over 100 miles or two hours, overtime, and holiday charges which shall be at the expense of the purchaser. Any repair or replacement under this warranty does not constitute an extension of the original warranty for any period of the appliance or for any component or part thereof. Parts to be replaced under this warranty will be repaired or replaced at the option of Wood Stone with new or functionally operative parts. The liability of Wood Stone on any claim of any kind, including claims based on warranty, expressed or implied, contract, negligence, strict liability or any other theories shall be solely and exclusively the repair or replacement of the product as stated herein, and such liability shall not include, and purchaser specifically renounces any rights to recover, special, incidental, consequential or other damages of any kind whatsoever, including, but not limited to, injuries to persons or damage to property, loss of profits or anticipated profits, or loss of use of the product.

TO SECURE WARRANTY SERVICE:

If you claim a defect covered by this Limited Warranty, direct your claim to:
Wood Stone Corporation 1801 W. Bakerview Rd. Bellingham, WA 98226 USA Attn: National Service Manager