Installation and Operation Manual





FIRE DECK AUTOMATIC

Stone Hearth Oven

Gas-Fired Automatic Model

FIRE DECK AUTOMATIC 9660 WS-FA-9660



WOOD STONE CORPORATION

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WOOD (A) STONE

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FIRE DECK AUTOMATIC FA-9660

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



INSTALLATION AND OPERATION MANUAL FOR THE WOOD STONE FIRE DECK-AUTOMATIC

STONE HEARTH COOKING EQUIPMENT WS-FA-9660

ADDITIONAL COPIES AVAILABLE UPON REQUEST



PG 3 OF 36

An ongoing program of product improvement may



CAUTIONS & WARNINGS

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



WOOD STONE WS-FD-9660-A FIRE DECK INSTALLATION AND OPERATING INSTRUCTIONS

RETAIN THIS MANUAL FOR FUTURE REFERENCE

Additional copies of this manual at woodstone-corp.com. For prompt responses to service/maintenance questions, call us at @ 1-800-988-8103.

READ ALL INSTRUCTIONS BEFORE INSTALLING AND USING THIS APPLIANCE Please read this entire manual before you install the oven. 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.

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

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

FOR YOUR SAFETY: Consult your local gas supplier for a statement outlining a procedure to be followed in the event you smell gas. Post the statement in a prominent location.

FOR YOUR SAFETY: Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

ESURE DE SÉCURITÉ: Ne pas entreposer ni utiliser de'essence ni autres vapeurs ou liquides inflammables à proximté de cet appareil ou de tout autre appareil.

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

AVERTISSEMENT: L'installation, le réglage, la modification, la réparation ou l'entretien incorrect de cet appareil peut causer des dommages matériels, des blessures ou la mort. Lire attentivement les instructions d'installation, de fonctionnement et d'entretien avant de procéder à son installation ou entretien.

SAVE THE INSTRUCTIONS



CAUTIONS & WARNINGS

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



A MAJOR CAUSE OF OVEN RELATED FIRES IS A FAILURE TO MAINTAIN REQUIRED CLEARANCES TO COMBUSTIBLE MATERIAL. IT IS OF UTMOST IMPORTANCE THAT THIS OVEN BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

WARNING: In the event of a power failure, no attempt should be made to operate this appliance

It is recommended that this oven be installed, maintained and serviced by authorized professionals.

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

CAUTION: DISCONNECT POWER TO THE OVEN BEFORE SERVICING OR CLEANING.

Wood Stone Fire Deck ovens have been tested and approved by Intertek Testing Services and conform to ANSI Z83.11 and CGA 2.17; are certified to CSA 1.8; and to NSF/ANSI 4.





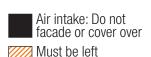
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FD-9660 SPECIFICATIONS

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual

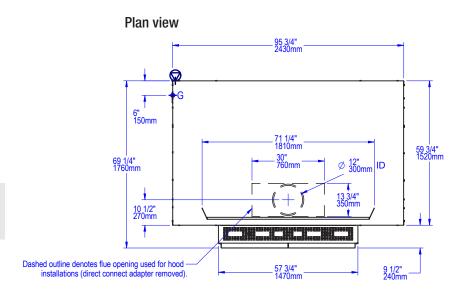


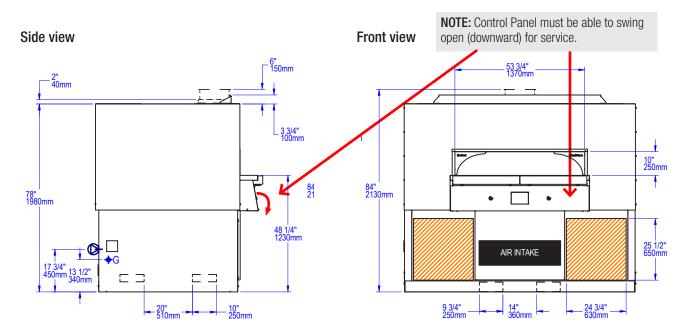


removable for service

Shipping weight: 6,000 lbs. 2,722 kg

NOTE: Using the optional temporary casters (SEE PAGE 9) will add 3" to the total height of the oven, for a total of 84-3/4".





UTILITIES SPECIFICATIONS

Gas +

1 inch FNPT gas inlet 295,000 BTU/hr Natural Gas (NG)

Optional Decorative Flame Adds 15,000 BTU/hr

Maximum gas inlet pressure: 1/2 psi (14 inches W.C.)

Electrical 😡

120 VAC, 2 A, 50/60 Hz Utility connections made underneath the oven. Refer to data plate when installing.

Venting

The Fire Deck Automatic FA-9660 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 oven must be vented in accordance with all relevant local and national codes, and in a manner acceptable to the authority having jurisdiction.

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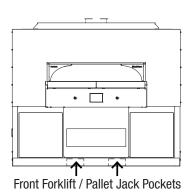
E-MAIL info@woodstone-corp.com woodstone-corp.com

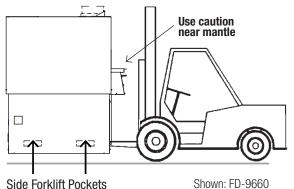


UNLOADING & MOVING THE OVEN

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual







AWARNING Minimum Required Forklift Capacities						
6' FORKS MINIMUM						
Model	Lifting from Front or Rear	Lifting from Sides				
FA-9660	11,000 lbs	13,000 lbs				

USING A FORKLIFT

The Wood Stone Fire Deck Automatic FA-9660 weighs approximately 6,000 lbs., and is top heavy.

Use a forklift with adequate fork lengths and lifting capacity. When using a forklift, always use the forklift pockets. Lifting the oven any other way with a forklift may result in damage. Use extreme caution and make sure that the forks extend all the way through the pockets provided. The fork pockets accommodate forks up to 9" wide. Fork length must be at least 6' long. If it is necessary to approach the oven from the front, be sure the mast does not contact the mantle (shelf).

There are fork pockets at the front and sides of the oven. **Note:** Forklift capacity is different if lifting from the front/rear or the sides. Once the oven is on a **smooth flat level** surface it can be rolled on its optional heavy-duty, temporary shipping Casters (details next page).

USING A PALLET JACK

The oven may also be moved with a Pallet Jack using the front or rear fork pockets only. Once the oven is on a **smooth, flat** floor it can be rolled to its final position. **DO NOT ATTEMPT TO MANUALLY ROLL THE OVEN UP OR DOWN A RAMP OR INCLINE.** Do not position yourself between the moving oven and an immovable object or surface such as a wall or door frame.

DO NOT TURN THE OVEN ON ITS SIDE!

Moving a Wood Stone oven can present interesting challenges to even the most experienced riggers. Make sure to secure the proper equipment and make safety your first priority. Please don't hesitate to call the factory for technical support.

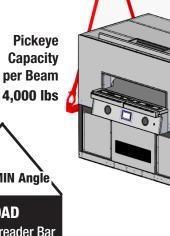
USING A CRANE

If you are planning to use a crane to unload the oven, specify a flatbed truck delivery.

Use the Pickeyes provided on the sides of the oven to lift the oven with a crane. The Spreader Bar should be of a sufficient length to keep the sling from contacting the oven, and oriented as shown in fig 1.

DELIVERY NOTE

The customer will receive an Oven Shipping Notification when the oven leaves the Wood Stone factory. This will include a PRO# and a trucking company contact number. Wood Stone recommends that you confirm the delivery date/time with the trucking company before committing to heavy equipment and/or labor. Our goal is a smooth and safe delivery.



fia. 1

LOAD
Orient Spreader Bar as shown in fig. 1

WOOD STONE CORPORATION

Beam

Pickeye



INSTALL TEMPORARY CASTERS

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



INSTRUCTIONS FOR INSTALLING AND REMOVING OPTIONAL OVEN CASTERS

The Fire Deck Automatic FA-9660 weighs approximately 6,000 lbs.

Do not attempt to move the oven over any type of grade or sloped surface when using the Casters or Pallet Jack.

WARNING: Failure to follow these instructions may result in severe injury or death.

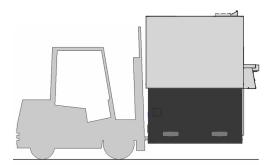
If you have any questions call Wood Stone at 800.988.8103.

NOTE: The casters will add 3" to the total height of the oven, for a total of 84-3/4".

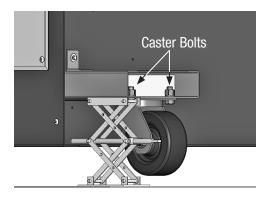
The Vent Shield on top can be removed temporarily, reducing the height with casters to 83".

Casters will also add 16" to the width of the oven.

Shipping Casters are for moving the oven only. THEY MUST BE REMOVED ONCE THE OVEN IS IN PLACE.



1 Use a forklift (or pallet jack) to raise the oven using the front or rear forklift pockets.



- 3 □ Once at final destination, use two scissor jacks (or pallet jack) to lift the one side of the oven by placing one jack under each caster assembly.
 - ☐ Raise the oven just high enough so the wheels clear the floor.
 - ☐ Unbolt each Caster and remove it.

Note: Casters are for moving oven only. They must be removed once the oven is in place.



- **2** □ Insert a Caster Assembly into each of the side fork pockets and secure it to the oven with a Self-Drilling Screw and washer.
- ☐ Install the screw through the Mounting Tab.
- ☐ Once the Caster Assemblies are installed, lower the oven.
- ☐ It may then be rolled over a **smooth flat level** surface to its final destination.



- **4** □ Lower the oven back to the ground.
 - ☐ Remove the Self-Drilling Screw and slide the rest of the Caster Assembly out of the fork pocket.
- ☐ Install Fork Lift Covers.
- \square Repeat steps **3** and **4** for the other side of the oven.
- ☐ This oven is designed to be sealed to the floor upon installation using a silicone sealant acceptable to the local health official. See the Placing & Installation section of this manual for additional instructions.



PLACING & INSTALLATION

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



PLACING THE OVEN

The oven must be installed on a smooth flat level surface. The weight of the oven is carried by the full perimeter of the oven stand. If it is necessary to shim the oven for leveling purposes, it is critical that the shim material be metal, and that the shims are installed in such a way that the full perimeter of the stand is solidly supported. Any gaps created by shimming between the oven and the floor must be sealed (using a silicone sealant acceptable to the local health official) to prevent airflow issues beneath the oven. **Failure to solidly support the full perimeter of the oven stand can result in costly damage to the oven and will void the warranty.** The floor design and construction must be adequate to handle the weight of the oven.

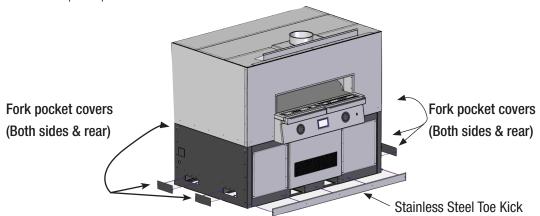
See **woodstone-corp.com** for floor loading information.

TOE KICK AND FORK POCKET COVERS

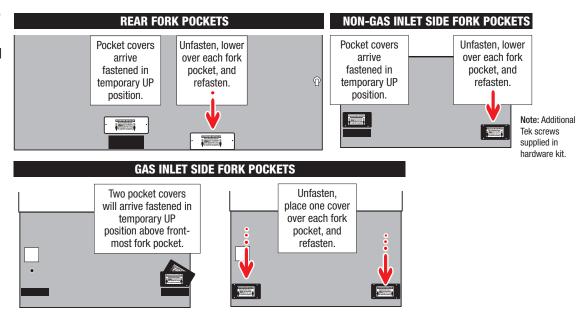
Once the oven is in place, the Toe Kick must be installed along the front, and the Fork Pockets on the sides and back of the oven using the screws provided. The area under the oven must be enclosed in order to prevent pests from entering this space and to prevent air flow issues which can detrimentally effect burner operation.

FACADE READY OVENS: If the lower front of the oven is shipped facade ready, the toe kick will not be included. Instead, fork pocket covers and pre-cut blocks of cement board to cover the pocket covers will be included.

If the sides and/or rear of the oven is shipped facade ready, the Fork Pocket Covers will not be included. Pre-cut blocks of cement board or other facade material will be shipped instead of the Fork Pocket Covers. The blocks must be inserted into the fork pockets before the oven facade is put in place.



FORK POCKET COVER INSTALLATION





INSTALLATION CLEARANCES

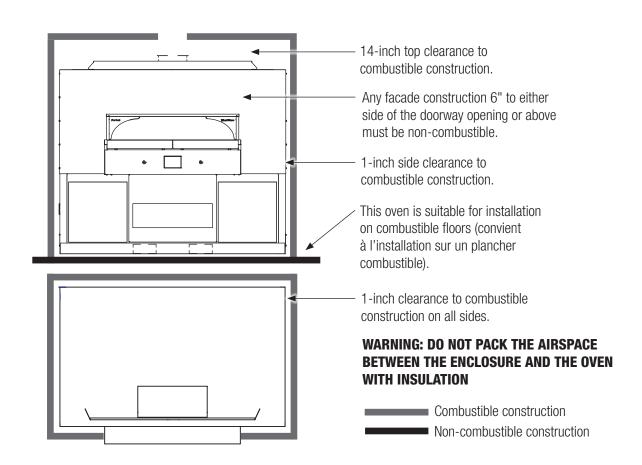
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WARNING: Do not pack required air space (clearance) with insulation or other materials. When non-combustible building materials contact the body of the oven, the clearances to combustibles are transferred to those non-combustibles.

- 1. The Wood Stone Fire Deck oven must have a minimum 1-inch clearance to combustibles from all sides, and 14-inch clearance to combustibles from the top. If building materials will contact the oven, they must be completely non-combustible. Please note that standard Drywall (or Sheetrock) is considered a combustible. When non-combustible building materials contact the body of the oven, the respective clearances are transferred to those non-combustibles.
- 2. Any facade 6 inches to either side of the oven doorway or above, must be constructed of non-combustible building materials.
- 3. This oven is suitable for installation on combustible floors (convient à l'installation sur un plancher combustible).



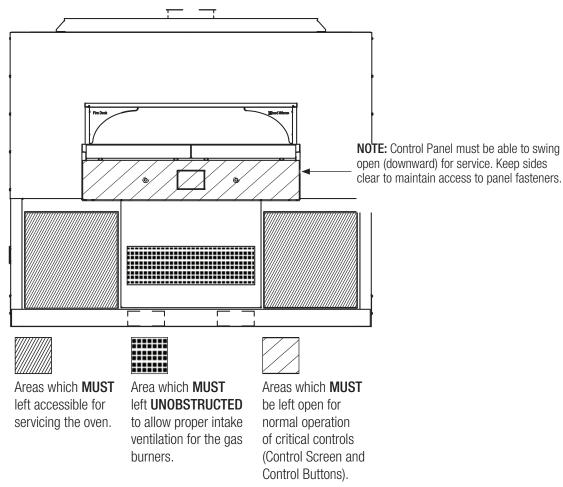


FACADE REQUIREMENTS

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



INSTALLATION CLEARANCES OPERATIONAL ACCESS, SERVICE ACCESS AND CRITICAL AIR INTAKE VENTILATION



FACADE BEST PRACTICES

Fire Deck Series ovens can be finished with any non-combustible decorative material that can be easily affixed to the oven surface, including tile, stone or brick. It is always advisable to consult with the appropriate authority having jurisdiction before proceeding as there may be regulations regarding the suitability of various materials.

- Select materials with the appropriate temperature rating. It is not uncommon for the area above the doorway of the oven to exceed 200 °F. The tile, grout and mortar should all be considered. If applying your own underlayment, it MUST be non-combustible.
- **2.** Use high-temperature silicon at butt edges. This softer material will serve as an absorptive buffer to allow for expansion of tile as it heats. Tile that butts directly to a piece of steel risks breaking or popping loose as it expands.
- **3.** The number one cause of damage to tiles is poor ventilation. Always ensure that your Wood Stone oven is properly exhausted, as insufficient exhaust will cause extra heat to exit via the oven door and potentially cause damage to tile.
- **4.** Do not facade any part of the front of the oven below the Control Panel. **MAKE SURE NOT TO OBSTRUCT THE SIDES OF THE CONTROL PANEL SO IT CAN SWING OPEN FREELY.**



VENTING

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



OVEN VENTING FOR FIRE DECK MODEL FA-9660

It is never appropriate to use "B vent" in any part of an exhaust system connected to this oven. The venting system should be inspected and cleaned at least every 3 months or as necessary. All combustion products and cooking vapors from the Wood Stone Fire Deck 9660-A vent through a 12-inch OD flue collar located on the top of the oven, above the doorway.

The Wood Stone customer support staff is available to answer any questions concerning installation and venting of the oven.

THE FOLLOWING ARE THE MANUFACTURER'S REQUIREMENTS FOR VENTING THE FA-9660 OVEN. THERE ARE TWO OPTIONS SHOWN BELOW.

1. A Listed building heating appliance chimney, also listed as a grease duct connected directly to the oven flue collar and provided with a power ventilator listed for restaurant appliance exhaust and rated for operation at a minimum of 350 °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.

A static pressure of -0.1 inches water column is necessary at the oven flue collar to ensure that gas temperatures do not exceed 300 °F at the fan inlet. This measurement may be taken by inserting the probe of the magnahelic gauge through the oven doorway, upwards to the oven flue collar. The CFM required to attain this static pressure will be approximately 600 CFM for gas only models.

If using direct connect, it must be on its own duct system. Do not tie a duct direct connected to an oven into a duct system serving hoods due to balancing and potential code issues. Also note that if fire suppression is required, a Type 1 hood must be used due to the higher flue temperatures associated with the direct connect type of install.

0R

2. A listed Type 1 Exhaust Hood or one that is constructed and installed in accordance with NFPA 96 and all relevant local and national codes. Wood Stone offers eyebrow-type hoods designed specifically for Wood Stone ovens. Wood Stone does not recommend the use of an in-line fan.

VERY IMPORTANT! Refer to the exhaust hood manufacturer's instructions for additional inspection, maintenance and cleaning information.

FIRE SUPPRESSION - GAS-FIRED OVENS

Check with your local code officials to see if fire suppression is required in your area. If fire suppression is required, you must vent the oven using a Type 1 hood, constructed and installed in accordance with NFPA 96. If fire suppression is required, Wood Stone recommends providing protection for the hood and duct plenum. The fusible link in the hood must be rated at 450 °F minimum. Wood Stone offers UL Listed Exhaust hoods for our ovens that are pre-piped for ANSUL R-102 fire suppression. **Wood Stone does not recommend aiming any fire suppression nozzles into the cooking chamber of the oven.** All installations are subject to the approval of the local authority having jurisdiction.

WOOD STONE RECOMMENDS THAT THE OPERATOR REFER TO THE EXHAUST HOOD MANUFACTURER'S FOR INSPECTION, MAINTENANCE AND CLEANING. WOOD STONE RECOMMENDS THAT YOU SUBMIT YOUR VENTING PLANS TO THE AUTHORITY HAVING JURISDICTION BEFORE PROCEEDING WITH INSTALLATION OF ANY GAS BURNING APPLIANCE.



FLUE ADAPTER INSTALLATION

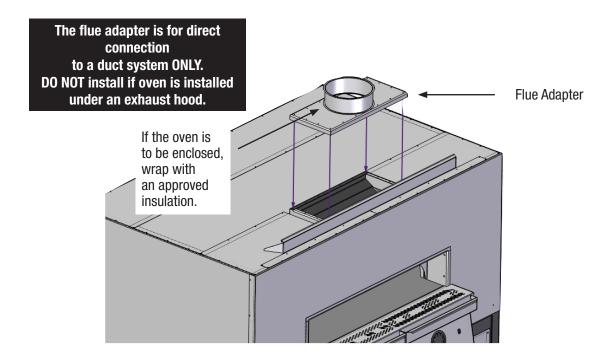
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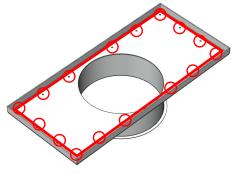


FA-9660 OVENS: FLUE ADAPTER INSTALLATION

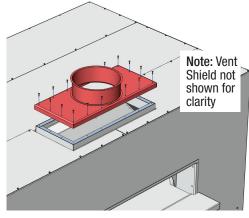
The flue adapter unit is designed to facilitate connection to a round duct. Use the provided stainless steel screws and sealant provided to attach the flue adapter to the exhaust outlet on the oven (12" ID)

Note: If using a Selkirk or other modular-type duct, attach according to the manufacturer's instructions. Otherwise, the duct must be attached with a full perimeter weld. Grease-rated duct is required throughout the system. If the oven is going to be enclosed, the flue adapter and exhaust outlet must be wrapped with an insulating material approved for use with a grease-duct.





Apply the supplied Engineered Grade Ceramic Sealing Compound to the underside of the Flue Adapter with an unbroken bead around the perimeter, and around each individual screw hole.



2 Fasten with the supplied screws.

STUCCO READY OVENS

The Flue Adapter must be installed prior to any grout or stucco application. The Flue Adapter will not fit unless it is installed first.



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HOOD INSTALLATION

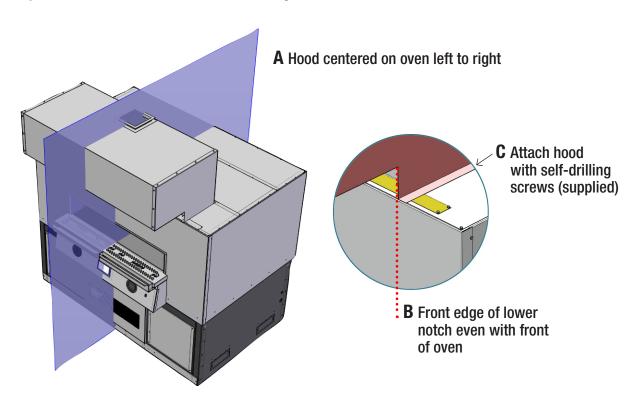
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HOOD INSTALLATIONS

In addition to the information given for installations using the direct connect venting method, the following information applies to installations where the oven is being vented using a Listed Type 1 hood.

- **1.** To mount Wood Stone hood, determine the center line of the hood and place it on the oven in line with the center line of the oven "A".
- **2.** Mount hood as far forward on oven as possible—place the hood so the front edge of lower notch is even with the front of the oven **"B"**.
- **3.** Attach hood to oven top by fastening flange with #10 x 1" self-drilling screws (supplied) "C".
- **4.** Attach grease rated duct to the outlet on the hood. The hood captures over the rectangular flue outlet and oven doorway. Flue collar must not be installed when using a hood.





HOOD SPECIFICATIONS

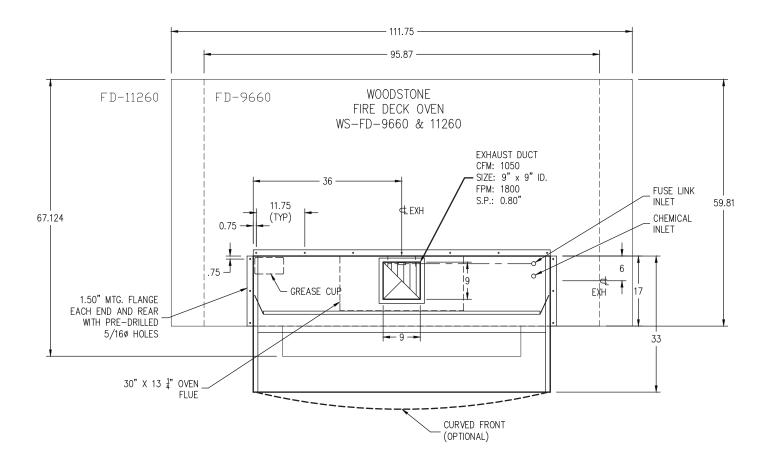
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FA-9660 HOOD - PLAN VIEW

Wood Stone Hoods by Gaylord Specifications

Required CFM: 1050 CFM Static Pressure: 0.80" W.C. Duct Collar: 9" x 9" I.D.



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HOOD SPECIFICATIONS

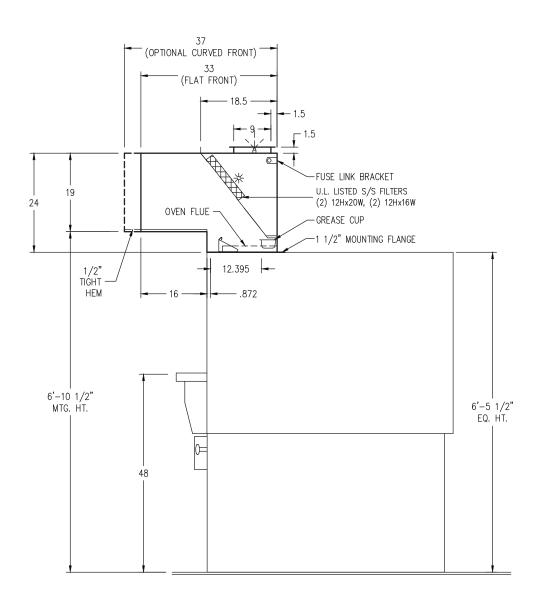
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FA-9660 HOOD - SIDE VIEW

Wood Stone Hoods by Gaylord Specifications

Required CFM: 1050 CFM Static Pressure: 0.80" W.C. Duct Collar: 9" x 9" I.D.





INTERLOCK DIAGRAM

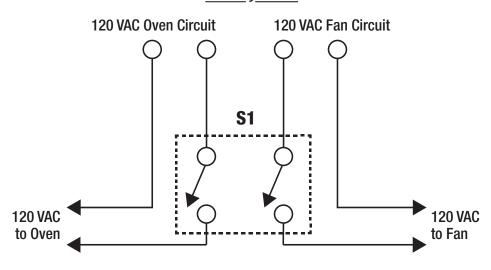
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INTERLOCK OF OVEN CONTROL TO AN EXHAUST FAN

This connection is intended to interrupt power to the oven until the fan is turned ON.

Wired by others



S1 is a Double Pole, Single Throw (DPST) switch provided by others.

S1 is a double pole, single throw switch (provided by others) that interrupts in-coming power to both the oven and the fan. The intent is to prevent the operation of the oven in the event the fan is shut off.

Any interruption of the power to the oven will cause the oven (including all burners and pilots) to shut off, and it will be necessary to restart the oven by pressing the start switch once power is restored.

For additional interlock options, see the Wood Stone Interlock Options supplement in the Manuals section on the website, **woodstone-corp.com**, or contact Wood Stone for additional information.

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GAS SPECIFICATIONS

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



FACTORY SPECIFIED MAXIMUM HOURLY BTU INPUT RATES / BURNER MANIFOLD PRESSURES

	IR Burner	Burner	Burner				Valve Outlet Pressure (W.C.)			
Models	Center Underfloor	Left Side Flame B	Right Side Flame	Decorative Flame	Natural Gas (NG)	Maximum Gas BTU/hr Input	BASO-IR Burner	BASO-Radiant Burner	BASO-Decorative Flame	
WS-FA-9660-RFG-LR-IR	1	1	1		NG	295,000	3.5	3.5		
WS-FA-9660-RFG-LR-IR-DF	1	1	1	1	NG	310,000	3.5	3.5	5.0	

This oven requires no modifications or adjustments for use at high altitudes.

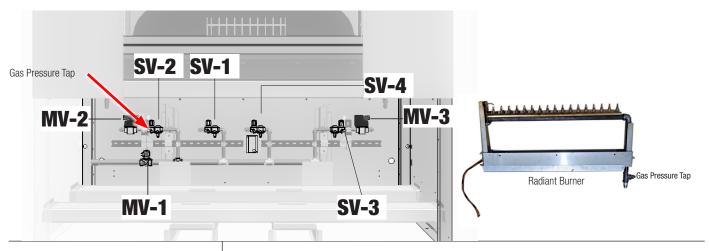
The installation of this appliance must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 or The Natural Gas Installation Code CAN/CGA-B149.1 as applicable.

The burner manifold pressures have been adjusted and tested at the factory. A variety of factors can influence these pressures, so be sure to use a manometer to test the individual burner manifold pressures and adjust the valves as necessary to achieve the required pressures. Pressures should be checked, and adjusted (if necessary), with all burners lit and running at full flame. Use Service Mode (see p. 22 of this manual) to adjust flame heights for testing.

The BASO-IR Burner gas control valve operates the Underfloor Infrared (IR) Burner. The manifold pressure is checked at the pressure tap on the SV-1 valve.

The BASO-Decorative Flame Burner gas control valve operates the Decorative Flame (DF) Burner (if supplied on your model). The manifold pressure is checked at the pressure tap on the SV-4 valve.

The BASO-Radiant Burner gas control valves operate the side Radiant Burner(s). The regulator pressure should be checked at the pressure taps on the the individual gas valves (SV-2 left and SV-3 right). The modulating valves can further reduce burner manifold pressures, so additional checks should be made at the pressure taps on each radiant burner. Pressure at the burner should be found in the range of 0.25" to 3" WC.



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GAS SPECIFICATIONS

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



GAS CONNECTION

The Fire Deck Automatic FA-9660 is equipped with a 1-inch FNPT gas connection (see SPECIFICATIONS section for exact location). Have a licensed gas installer provide the hook-up and test all fittings and pipe connections for leaks. Use approved gas leak detectors (soap solutions or equivalent) over and around the fittings and pipe connections. **DO NOT USE A FLAME TO TEST FOR LEAKS!**

All gas piping up to the oven must have a minimum inside diameter of 1", including all fittings and shut off valves, which should be of the full flow type.

Wood Stone recommends that the Fire Deck be installed with a manual, individual shutoff valve, located between the oven and the main gas supply, and that this shutoff valve (supplied by others) be left readily accessible. Wood Stone also recommends that inspection and maintenance of the burners and gas piping connections of this appliance be performed at regularly scheduled intervals and only by professional gas appliance service agencies.

The Fire Deck Automatic FA-9660 is equipped with an electrically controlled main gas valve located beneath the oven. This valve is controlled with the rocker switch located on the right side of the Control Panel. A manual valve, as noted above, must still be provided and installed by others.

Maximum inlet gas pressure must not exceed 14" W.C. (1/2 psi)

GAS INLET PRESSURE

For ovens running on natural gas, an inlet pressure of 7 to 10" W.C. is recommended to ensure optimum oven performance. Incoming gas pressure below this range will affect oven performance, the lower the pressure the greater the negative impact. If the gas supply pressure is greater than 14" W.C. (1/2 psi), an external regulator, supplied by others, is REQUIRED to lower the gas pressure to the acceptable range. Issues caused by low or high gas pressure are installation issues, and will not be covered under the Warranty.

For all installations, follow best practices for proper gas line pipe sizing for the line serving the oven. To ensure proper operation, all gas piping and fittings leading up to the oven should have an inside diameter equal to or greater than that of the oven gas connection. Also make sure that a readily accessible shut off valve (supplied by others) is installed near the oven, and in accordance with all applicable codes. Shut off valves must be of the full-flow type, and not introduce any restriction into the gas line.

The connection to the oven should be hard-piped whenever feasible. If this is not possible, use a properly sized flexible connector approved for this application. When using a flexible connector make sure that its design does not present any reduction in pipe diameter or other restriction. Oven issues caused by improper pipe sizing, improper shut off valves, restrictive connectors, or any other deficiency in the gas supply design or installation will not be covered under the oven warranty.

GAS CODE LIMITATIONS

The installation of this appliance must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 or The Natural Gas Installation Code CAN/CGA-B149.1 as applicable.

The appliance and its individual shutoff valve (supplied by others) 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 (14" W.C.) (3.45 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve (supplied by others) during any pressure testing of the gas supply piping system at test pressure, equal to or less than 1/2 psi (14" W.C.) (3.45 kPa).

FAX 360.650.1166



ELECTRICAL SPECIFICATIONS

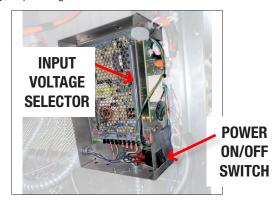
Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



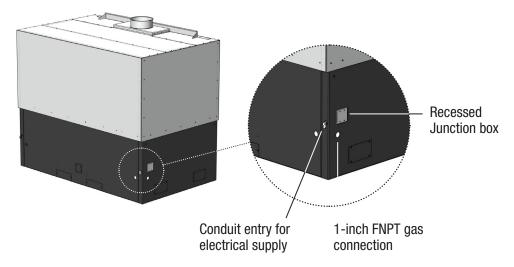
ELECTRICAL CONNECTION

Have a licensed electrician provide the oven with appropriate 120 VAC circuit, in accordance with all relevant local and national codes. Current requirement is less than 2A. Electrical diagrams are located on the electrical junction box inside the oven as well as at the end of this manual. Always check the equipment data plate on the outside left of the oven to verify the proper voltage requirement.

NOTE: The Fire Deck Automatic FA-9660 can be set to run on 120 or 240 VAC with the Input Voltage Selector located in the Power Supply Box. See Wiring Diagram on Pages 30-31. The unit is set to the default setting (120 VAC or 240 VAC) at the factory, depending on oven model.



CONNECTION LOCATION



ELECTRICAL CODE LIMITATIONS

Electrical Grounding: This appliance must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical code, ANSI/NFPA 70 or the Canadian Electrical Code, CSA C22.2 as applicable.



COOKING CONTROLS

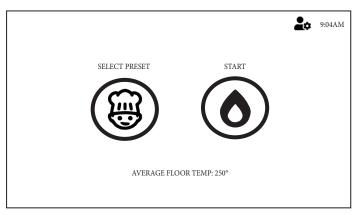
Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



FIRE DECK-FA-9660 COOKING CONTROLS



Left Cook Button



Touchscreen Home Screen



TOUCHSCREEN

The Wood Stone Fire Deck FA-9660 features a user-friendly cooking control system. The **touchscreen** is an 8.5-inch color LCD screen with a graphic user interface used to control the basic functions of the oven The Home screen will appear when the unit is turned on with the on/off toggle switch located on the right side of the oven mantle.

COOK BUTTONS

The Touchscreen located below the oven door is flanked on the left and right by circular **Cook Buttons**. After the toggle switch is turned on, the Cook Buttons are pressed to begin selected cooking cycles when pizza is placed in the oven. Lights display oven status:

- Lights off--Oven is heating up
- Lights green--Oven is ready to cook
- Lights red--flame at cook height (button pressed or load sensed)
- Lights flashing red--oven is over setpoint.

Pushing and holding the right cook button will turn the oven off.



COLD OVEN START-UP

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



The Welcome Screen shown here will be displayed when the Fire Deck Autromatic is first started, or has been off for at least 1 week.

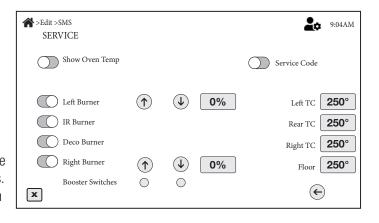


WARNING: Failure to follow the cold oven start-up procedure can result in permanent damage to or failure of this appliance. Read and follow these instructions carefully!

COLD OVEN START-UP PROCEDURE

Your oven was cured at the factory. However, in the course of shipment, storage and periods of inactivity the ceramic materials will absorb moisture. It is critical that the initial oven startup procedure below be followed to ensure that this moisture is driven from the ceramic in a slow, controlled fashion. This will minimize cracking and prevent dangerous steam spalling or other damage to the oven that could otherwise occur by bringing the oven to temperature rapidly. This cold oven start-up procedure must be followed the first time the oven is fired and/or if the oven has not been used for an extended period of time.

- 1. Toggle switch on right side of the mantle to turn oven **ON**. Touchscreen will light.
- 2. Touch the Settings icon, then select SERVICE. Password (1990) must be entered to access the Service screen.
- 3. Light the left and right radiant burners by moving the sliders to the right. Do not light other burners.
- 4. Use up/down arrows to adjust the flame height to the lowest setting (0%).
- 5. Run at this setting continuously until the floor temperature exceeds 280F, about 24-36 hours, depending on conditions. 6. Increase radiant flame height to 10% and continue to run for an additional 24 hours. This should bring the oven temperature to around 400F.



- 7. If, after 24 hours at 10% flame height, the oven has not exceeded 400F, increase the radiant flame height to 15% and let it continue to run.
- 8. Once the oven temperature has exceeded 400F, it is acceptable to exit service mode and start a cooking profile. This will enable the IR Burner and Decorative Flame Burner (if equipped) and heat the oven up to operating temperature.

You may notice some condensation of water or water droplets running down the sides of the oven during the cold oven start-up procedure. This is a normal part of the process, and indicates that moisture is being driven from the oven ceramic.



PRESET SETTINGS

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



PRESET OVEN HEAT PROFILES

The FA-9660 is designed to store up to six user-adjustable Preset Oven Heat Profiles with these cooking parameters:

SETPOINT temperature of the oven floor

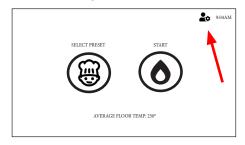
COOK TIME time (in minutes) that the radiant flames will remain at their programmed COOK FLAME % before returning to IDLE FLAME %when the oven is at or above its SETPOINT. When the oven is below SETPOINT, the flames will remain at COOK FLAME % until the oven temperature reaches SETPOINT.

FLOOR INTENSITY On a scale from 1 - 10, this setting controls the intensity with which the underfloor IR burner heats the oven floor. High Production Bake Profiles will use a higher FLOOR INTENSITY setting.

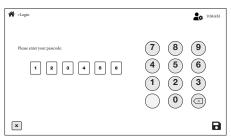
COOK FLAME - Select a percentage for both LEFT and RIGHT flame. They do NOT need to be set at the same percentage. This setting will determine the height of the respective COOK FLAMES flames for a particular Baking Profile. The flames will go to this setting when the oven is at or above SETPOINT, and the TIME TO IDLE has timed out.

EDITING PRESET OVEN HEAT PROFILES

1 Press **Settings** icon on Home screen



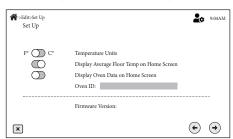
2 Enter Passcode. Default Passcode is 1990.



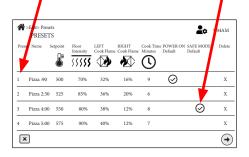
3 On Settings Screen, select Set Up



4 On Set Up Screen, select Temp Units and display.



5 Go back to Settings Screen to select Presets. On **Presets** screen, **choose** a Preset Line for editing. Check Safe Mode default on the preset that will be used for default operation in the unlikely event of a touchscreen failure. See p.25 for Safe Mode Default Operation. Advance to Setpoint screen with forward arrow.



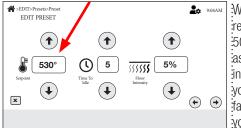


PRESET AND OTHER SETTINGS

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



6 Select **Setpoint** temperature by pressing up/down arrows

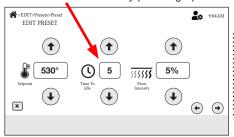


:Wood Stone recommends :500°F-540°F as a starting point as you become familiar with your oven. 10 Select Left and Right Cook Flame with up/down arrows



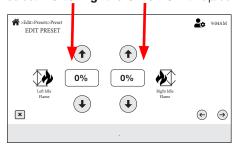
:Wood Stone :recommends a range of :45-60% for proper browning of the top of the pizza.

7 Select **Time to Idle** by pressing up/down arrows.



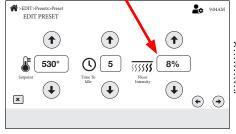
Enter the :approximate itime it takes to cook your pizza.

11 Use forward arrow to advance to Idle Flame Edit screen and select Left / Right Idle Flame with up/down arrows.



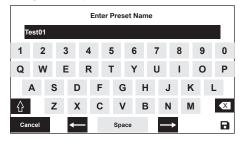
Wood Stone :recommends setting this value at 0%

8 Select Floor Intensity by pressing up/down arrows.



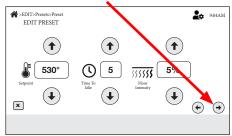
Wood Stone recommends :8%.

12 Name Presets by pressing the forward button and using letter keys to enter the selected name



13 Press **Save** to save Preset. Returns to Settings. Screen.

9 Use forward arrow to advance to Cook Flame Edit screen.



An ongoing program of product improvement may



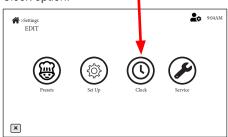
OTHER SETTINGS

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual

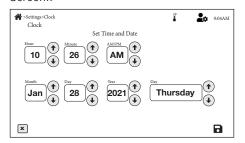


SETTING DATE AND TIME

1 Access Settings screen with passcode (1990), then select Clock option.

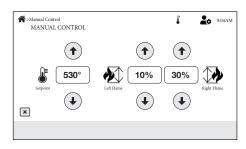


2 Adjust System Date and Time with +/- buttons,, then hit Save button. Press Home symbol to return to Home Screen..



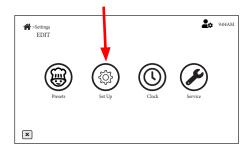
MANUAL CONTROL

1 The Fire Deck Automatic FDA-9660 can be operated by manual adjustment of the Temperature Setpoint and flame heights. Access the Manual Control Screen from the Presets screen. User will be directed to enter the passcode, then settings can be changed manually by using the related up/down arrows. Save the changes in the lower right corner of the screen to activate.

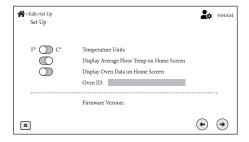


SETTING TEMPERATURE UNITS

1 Access Settings screen with passcode, then select Set Up option.



2 Select F° or C° Units as desired. Choose Home Screen Display options as desired. Press X to return to Settings Screen.



SAFE MODE DEFAULT OPERATION

In the extremely unlikely event that the touchscreen fails, and the operator is not able to select oven functions normally, utilize the following sequence to run the oven with the selected default preset:

- 1. Make sure the On/Off Toggle Switch is in the OFF position.
- 2. Push and hold the right cook button.
- 3. Turn on the ON/OFF toggle switch at the right side of the mantle.
- 4. Hold for 3 seconds to initiate oven start-up and run with the parameters of the selected default preset.

FAX 360.650.1166



DAILY OVEN OPERATION

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



GENERAL DAILY OVEN OPERATION

WARNING: Failure to follow the cold oven start-up procedure can result in permanent damage to or failure of this appliance. Read and follow the instructions on page 22 of this manual carefully!

IMPORTANT: If at any time you feel that the burners are not operating properly, turn the oven OFF and call Wood Stone for service. Before servicing, disconnect the electrical supply at the breaker and turn off the gas supply at the appliance's individual gas shutoff valve. This oven uses electronic ignition systems for the gas burners. During a power failure, no attempt should be made to operate the oven.

BEGINNING OF THE DAY

- 1. Remove the Night Door, if in place.
- **2.** Toggle switch on right side of the mantle to turn oven **ON**. Touchscreen will light.
- **3.** Determine if Preset on touchscreen is correct for first cook.
- **4.** If Preset is correct, touch **START** button on screen--burners will ignite in sequence.
- 5. If Preset is incorrect, touch "Select Preset" button on screen.5a. Touch desired preset. Display will shift to home screen5b. Touch "Start" icon on screen--burners will ignite in sequence.
- **6.** The oven will enter heat-up mode until the Setpoint is reached and thermometer icon changes state.
- 7. When the Setpoint is approached, radiant burner flames will decrease to the Idle Flame Height. Cook button lights will turn green, indicating that the oven is ready for cooking. As cooking proceeds, the flame will modulate between idle flame and cook flame to maintain oven temperature.





DAILY OVEN OPERATION

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual

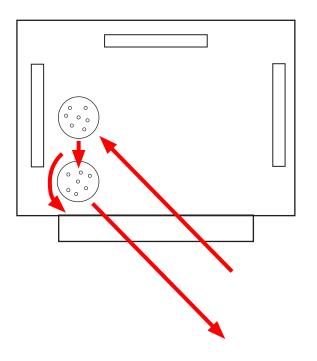


COOKING

- 1. Wood Stone recommends that the first pizza of a cooking period be landed on the oven floor in front of either radiant flame burner, centered between the front and back of the oven.
- 2. Press the cook button for the side of the oven with the landed pizza(s).Radiant flame increases to cooking height for the duration of the Time To Idle according to the selected preset. Cook button changes to red for the duration of the cook timer.
- 3. Rotate pizza and/or move forward as required until done.
- 4. Remove pizza from oven.
- **5.** Oven remains available for additional pizza loading, as the oven modulates radiant flames between idle flame height and cook height to retain temperature when not cooking.
- 6. If pizzas are being cooked intermittently with non-cook periods in between, thermocouples sense the low cook load and will return oven to idle flame height. If the Cook Button Light has returned to green, it must be pressed again when the next pizza is loaded into the oven.
- **7.** For a fast oven temperature increase after an extended non-cooking period, cycle the STOP and START buttons on the touchscreen to return the oven to full flame height.

END OF THE DAY

- 1. Toggle ON/OFF switch to OFF, all gas will go OFF.
- **2.** Place the Night Door into the oven doorway to help retain heat in the oven overnight.



NEVER PLACE ANYTHING IN OR ABOVE THE RADIANT FLAME

Never run the oven with the night door in place. Night heat retention door is only used for heat retention or when the oven is turned off

NOTE: Small "crazing" cracks may occur with normal heating and cooling. They will not affect the performance or durability of the oven. If cracks of 1/8" or more develop, contact Wood Stone for evaluation.



MAINTENANCE & CLEANING

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



OVEN INTERIOR

Wood Stone recommends the use of long-handled brushes for sweeping up surface debris that will accumulate on the floor of the oven during use. Use a natural fiber brush, always brushing away from the Radiant Burner well. For deeper cleaning, use a brass bristled brush. The oven floor can be then cleaned with a damp rag wrapped around the brush head.

Wood Stone offers an assortment of oven brushes available through your dealer. Specification sheets may be viewed on the Wood Stone website under Tools & Accessories.

TAKE CARE NOT TO BRUSH DEBRIS INTO THE RADIANT FLAME BURNER(S).

BURNER CRUMB TRAYS

Remove the front service panel to access the burner crumb trays. Burner Crumb trays can be lowered by removing the Crumb Tray Release Pin and swinging the tray down on the hinge. Use a suitable container to collect and dispose of crumbs from the tray. Be sure to include this step in the regular cleaning and maintenance procedure to avoid buildup of crumbs and debris that can cause damage to the radiant burner. See diagram on p. 29.

OVEN EXTERIOR (DOORWAY AND MANTLE)

All exterior 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 non-metallic scouring pad. When scouring stainless steel surfaces, scrub with the grain of the metal to prevent scratching.

DO NOT POUR OR SPRAY LIQUIDS ONTO THE OVEN DECK OR INTO THE OVEN INTERIOR AS THIS CAN DAMAGE THE CERAMIC AND WILL VOID THE WARRANTY.

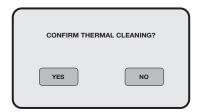
IMPORTANT: DO NOT USE EXCESSIVE AMOUNTS OF LIQUID WHEN WIPING ON OR AROUND THE OVEN CONTROL BOX.

ESTABLISHING A THERMAL CLEANING SCHEDULE

Wood Stone ovens are typically operated at temperatures which preclude the need for cleaning of the interior walls and ceiling (the dome) of the oven. If you notice a buildup on the interior walls and/or ceiling of the oven or you routinely operate the oven at floor temperatures lower than 450 °F, use the following procedure to periodically clean the oven. The frequency of thermal cleaning will be determined by the amount of buildup experienced. The amount and rate of buildup will largely be determined by how long the oven is operated at temperatures low enough to allow buildup to occur.

PERIODIC THERMAL CLEANING PROCEDURE

The Automatic Thermal Cleaning feature is accessed on the Presets Screen--Line # 8. This preset takes the oven to 700° F, well above typical cooking temperatures, and holds for 120 minutes. Thermal clean should only be activated at the end of the day to allow time for cooling after the cycle is complete. Select Thermal Clean from the Presets screen, then confirm thermal cleaning. The Thermal Cleaning Screen will be displayed until thermal cleaning cycle is completed. Cleaning cycle can be canceled by pressing the red "x."





WOOD STONE CORPORATION



DECORATIVE FLAME BURNER

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



OPTIONAL DECORATIVE FLAME BURNER

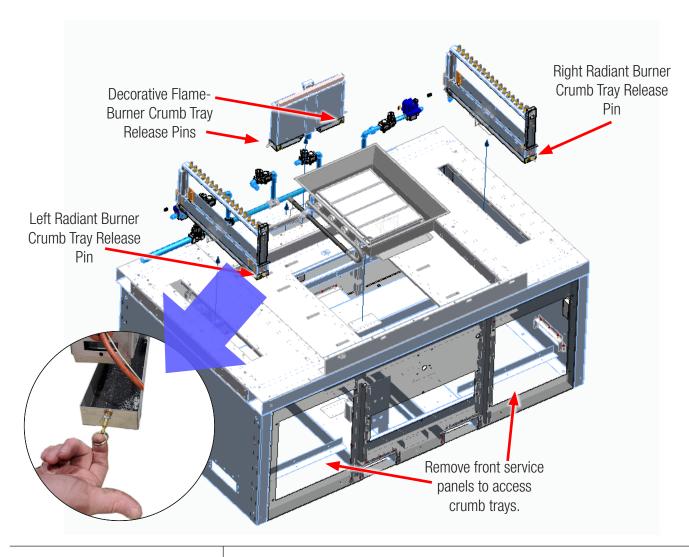
For Fire Deck ovens equipped with a Decorative Flame Burner; the Decorative Flame turns on automatically when the oven Controller is turned ON.

IMPORTANT: TAKE CARE NOT TO BRUSH DEBRIS INTO THE DECORATIVE FLAME BURNER WELL.

Do not use the burner well for dumping debris. Make every effort to keep ash and other debris out of the Decorative Flame Burner Well. Do not use the Decorative Flame Burner as a "backstop" when shoveling debris out of the oven. Using the oven floor brush, remove debris through the oven doorway and dispose of safely. Use the brushes provided to remove debris from around the Burner Wells.

DECORATIVE FLAME CRUMB TRAYS

The two Decorative Flame Crumb trays can be lowered by removing the securing pins and swinging the trays down on the hinges. Use a suitable container to collect and dispose of crumbs from the tray. Be sure to include this step in the regular cleaning and maintenance procedure to avoid buildup of crumbs and debris that can cause damage to the Decorative Flame burner.





TROUBLESHOOTING GUIDE

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



PROBLEM	CAUSE/SOLUTION						
Controller will not turn on with toggle switch	 Incoming power to oven turned off. Check circuit breaker for circuit supplying the oven. Check that any wall switches external to the oven that control oven power are turned on. Check that any interlocks external to the oven are turned on. Check toggle switch on power supply box inside left panel access. If Controller still does not turn on, please contact Wood Stone for assistance. 						
Oven turns on but touchscreen does not display information	Touchscreen fault. If Cook Buttons illuminate briefly when toggle switch is turned on, oven has power and controller is operating. Oven will operate on default preset. See instructions for Default Operation on p. 25 of this manual						
Radiant flame does not light	 Is gas turned on to the oven? Is gas shut-off valve turned all the way on? Is ventilation system on and running? Ventilation system is typically interlocked to gas supply. If the oven is being started for the first time or if gas line has been disconnected, has all air been bled from the gas line? To purge, press Starthen Stop on touchscreen to purge lines and restart. Debris in burner. Burner may require cleaning. Pull pin to lower crumb tray and clean. For further cleaning, contact Wood Stone for assistance. Damaged igniter or gas valve. Contact Wood Stone for assistance. 						
Underfloor IR burner is not running.	Hearth temperature is above the Set Point. If hearth temperature below setpoint, possibly bad igniter or gas valve. Contact Wood Stone for assistance.						
Hearth Temperature is above the Hearth Set Point.	This is normal. Radiant (dome) flame can drive the temperature over the Hearth Set Point. The Hearth Set Point only controls the Underfloor IR burner. Turn down the dome flame if needed.						
Flame cuts out	 Debris in burner. Oven is being run with the Night Heat Retention Door in place. Door must be removed whenever the oven is turned on. Wind blowing into the oven, or other venting issue. Gas pressure issue, bad igniter or gas valve. Contact Wood Stone for assistar 						

Please contact Wood Stone at 1-800-988-8103 should service be necessary, or if you have any questions about your oven. Our normal service hours are Mon.—Fri., 8am—5pm Pacific time. If calling after hours, follow the recorded instructions for emergency service and a Wood Stone technician will get back to you promptly.





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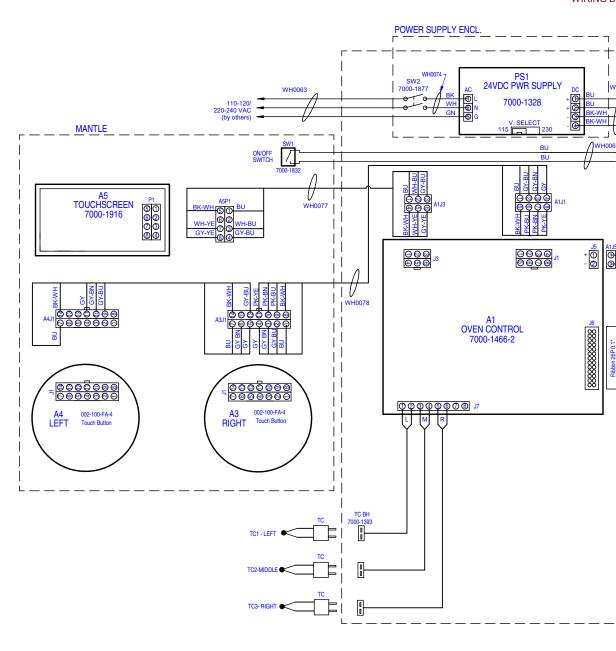
ELECTRICAL DIAGRAMS

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



FA-9660 WIRE DIAGRAM

"Fire Deck A





Bellingham, WA +1(360)650-1111 www.woodstone-corp.com

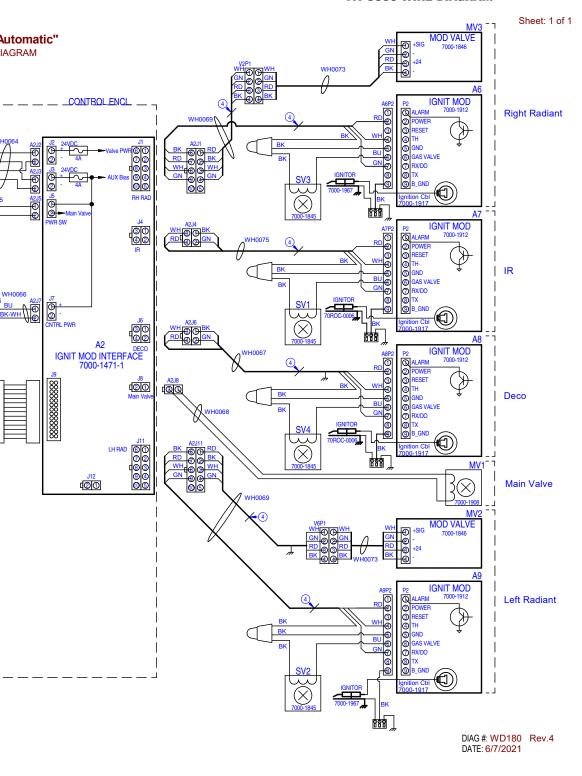


ELECTRICAL DIAGRAMS

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



FA-9660 WIRE DIAGRAM



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LIMITED WARRANTY

Fire Deck Automatic WS-FA-9660 Installation and Operation Manual



ALL WARRANTY SERVICE MUST BE PRE-APPROVED BY WOOD STONE

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.

Please contact the factory first at 1.800.988.8103 or 1.360.650.1111, seven days a week. Our normal business hours are 8am to 5pm Pacific Time Monday–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.

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 and Operation Manual.
- 2. In the event the equipment is improperly or inadequately maintained. Proper maintenance is the responsibility of the user; proper maintenance procedures are prescribed in the Wood Stone Installation and Operation Manual. Burner problems resulting from debris or ash in the burner well will not be covered by the warranty. Call with questions regarding maintenance frequency.
- 3. In the event that the failure or malfunction of the appliance or any part thereof is caused by abnormal or improper 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 the ceramic firebox.
- 8. In wood-fired equipment configurations, in the event that pressed log products of any type have been burned in the equipment.
- 9. In coal-fired oven configurations, in the event any type of coal other than anthracite coal fuel has been used.
- 10. Damage resulting from the use of chemical cleaning products in the oven, as well as any damage from liquids or chemicals, including water, being poured or sprayed into the oven.

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, contact: Wood Stone Corporation, Attn: Service Department, 1801 W. Bakerview Rd., Bellingham, WA 98226 USA Phone 1.800.988.8103 or 1.360.650.1111



WOOD STONE CORPORATION

1801 W. Bakerview Rd. Bellingham, WA 98226 USA Toll Free 800.988.8103 Tel 360.650.1111 Fax 360.650.1166

www.woodstone-corp.com

An ongoing program of product improvement may require us to change specifications without notice.