

Installation and Operation Manual



ROTISSERIES
Gas-Fired Rotisserie



CASCADE
WS-GFR-6
WS-GFR-10



Wood Stone

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**INSTALLATION AND OPERATION MANUAL FOR THE
WOOD STONE CASCADE ROTISSERIE****STONE FIRED COOKING EQUIPMENT****WS-GFR-6 AND WS-GFR-10 MODELS****GAS-FIRED ROTISSERIE****ADDITIONAL COPIES AVAILABLE UPON REQUEST**

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 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.



INSTALLATION AND OPERATING INSTRUCTIONS FOR THE GFR-(6, 10)-(NG, LP) WOOD STONE CASCADE GAS-FIRED ROTISSERIE

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 @ 1-800-988-8103.

IMPORTANT: 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. Also, always keep the area under and around this appliance free and clear of any and all combustible materials.

It is recommended that this oven be installed, maintained and serviced by authorized professionals. In the event of a power failure, no attempt should be made to operate this appliance.

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.

Wood Stone's gas-fired Cascade Rotisserie has been tested and approved by Intertek Testing Services, and is ETL Listed to ANSI Z83.11b - 2006, CSA 1.8b-2006 and to NSF/ANSI Standard 4 - 2007.



ANSI Z83.11b-2006
CSA 1.8b-2006



ANSI/NSF STD 4

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.



All combustible surfaces within 36 inches of the Wood Stone Cascade Gas-fired Rotisserie should be protected in a manner acceptable to the authority having jurisdiction. The unit is suitable for installation on combustible floors.

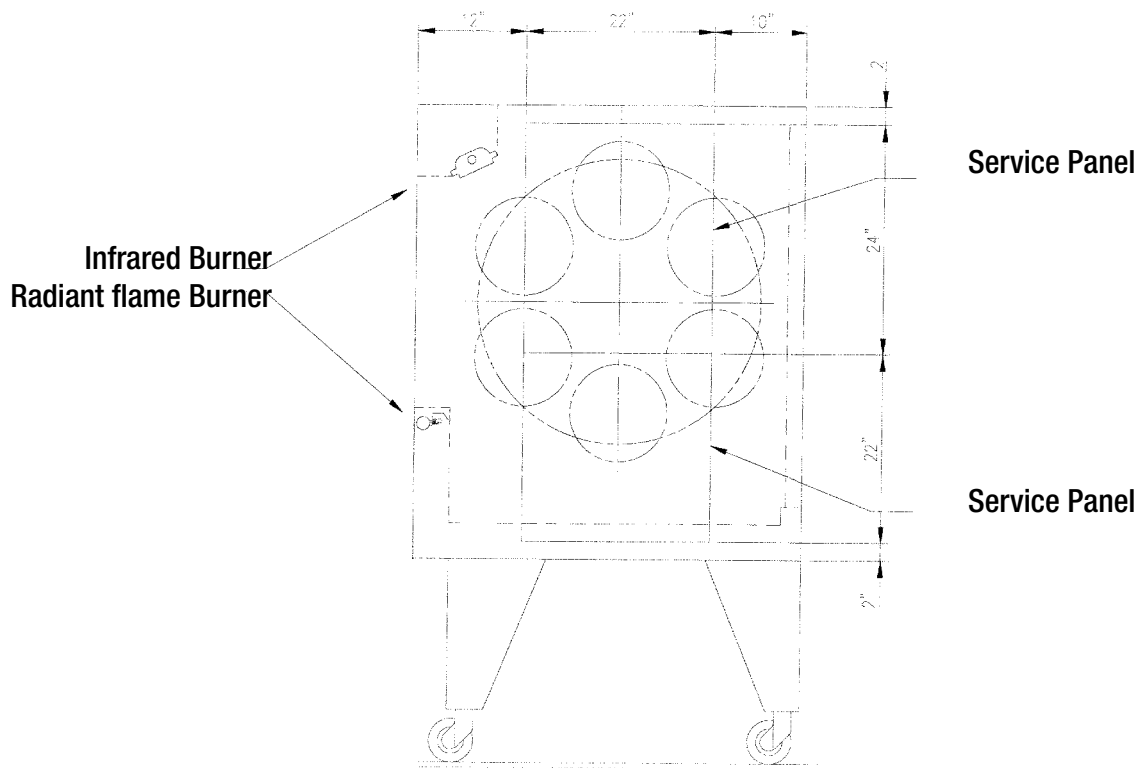
VENTING

THE FOLLOWING ARE THE MANUFACTURER'S RECOMMENDATIONS FOR VENTING THE CASCADE GAS-FIRED ROTISSERIE:

The Wood Stone Cascade, Gas-fired Rotisserie must be vented using a Listed exhaust hood or one constructed in accordance with NFPA-96. It is never appropriate to use "B vent" in any part of an exhaust system connected to this Rotisserie.

VERY IMPORTANT! WOOD STONE RECOMMENDS THAT YOU SUBMIT VENTING PLANS TO LOCAL CODE AUTHORITIES BEFORE PROCEEDING WITH INSTALLATION.

SERVICE ACCESS



Drive-side service panels must be accessible after installation of the Rotisserie. Also, drive-side service panels will need to be removed during the assembly of and utility connection to the Rotisserie.



INSTALLATION OF LEG/CASTER ASSEMBLIES

ROTISSERIE CABINET: With the Rotisserie cabinet supported by a forklift (or other appropriate means), attach the leg/caster assemblies using the bolts provided.

SEAL ALL LEGS TO THE CABINET USING THE SILICONE SEALANT PROVIDED

IMPORTANT NOTICE FOR GAS CONNECTION TO MOVABLE APPLIANCES:

Install using a gas connector that complies to the Standard for Connectors for Movable Gas Appliances (ANSI Z21.69 or CAN/CGA-6.16), and a quick-disconnect device that complies with the Standard for Quick-Disconnect Devices for Use With Gas Fuel (ANSI Z21.41 or CAN 1-6.9).

ATTENTION INSTALLER- EQUIPMENT RESTRAINT MUST BE PROVIDED:

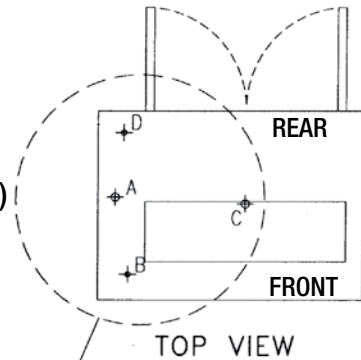
Adequate means must be provided to limit the movement of the appliance without depending on the connector and the quick disconnect device or its associated piping to limit the appliance movement. Use the holes in the lower rails of the Rotisserie cabinet to attach the restraining device(s).



UTILITY CONNECTION

NOTE: This unit is on casters; utility hookups should be made in such a way as to allow mobility of the Rotisserie for service and maintenance purposes.

- A. Electrical Connection
(120V-5A)
- B. Cold Water Inlet
(1/4-inch NPT-F)
- C. Drain to Floor Sink
(1 1/2-inch, use slip connection)
- D. Gas Inlet
(1-inch NPT-F)



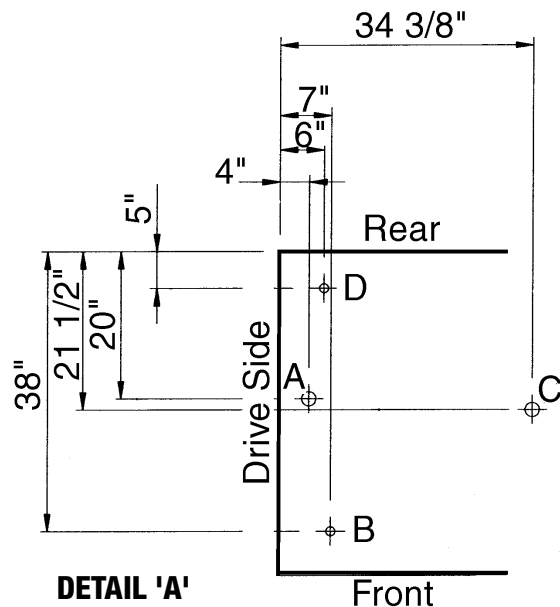
ROTISSERIE

All connections to the Rotisserie are made from the bottom of the unit.

ELECTRICAL CONNECTION: Use only the grounded cord provided to make the electrical connection to the Rotisserie. Plug only into a properly grounded (3)-prong receptacle. Do not cut or remove the grounding prong from the plug.

COLD WATER INLET: Supply an incoming cold water line fitted with a 1/4-inch N.P.T. (male) connector.

DRAIN TO FLOOR SINK (GREASE TRAP): A 1 1/2" drain outlet tube at the bottom of the Rotisserie is provided. This outlet must be connected to an indirect waste pipe and discharge by means of an air gap in accordance with all applicable plumbing codes. The indirect waste pipe should discharge into a drain system that is connected to a grease trap.



GAS CONNECTION: Supply an incoming gas line sufficient to provide the required input. The gas line will need to be fitted with a 1-inch N.P.T. (male) connector. See the following page for more information.



The Cascade Rotisserie is equipped with a 1-inch NPT-Female gas inlet connection. 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!

Wood Stone recommends that a manual, individual appliance shutoff valve be supplied, located between the rotisserie and the main gas supply, and be left readily accessible.

ROTISSERIE BURNER PRESSURE TESTING

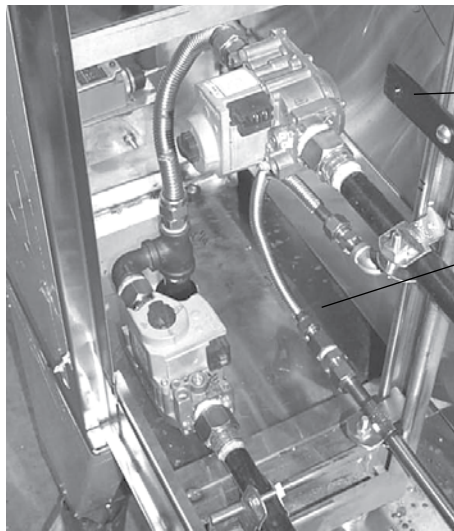
There are (2) pressure test ports (one for each burner), located on the respective valves. The valve outlet pressures have been adjusted and tested at the factory. A variety of factors can influence these pressures, so be sure to test the valve outlet pressures and adjust the valves as necessary to achieve the suggested pressures. **NOTE:** The gas valves are shipped in the 'ON' position.

NATURAL GAS

The factory specified individual valve outlet pressures for models equipped to burn Natural Gas is 4" W.C. The maximum hourly Natural Gas input rate for the Wood Stone Cascade Rotisserie (WS-GFR-6-NG) is 175,000 BTUs.

PROPANE (LP)

The factory specified individual valve outlet pressures for models equipped to burn Propane (LP) is 8" W.C. The maximum hourly Propane input rate for the Wood Stone Cascade Rotisserie (WS-GFR-6-LP) is 185,000 BTUs.



SV-1 Infrared (IR) Burner

SV-2 Radiant Flame Burner

View from the service panel showing the controlling gas valves



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, The Natural Gas Installation Code CAN/CGA-B149.1 or the Propane Installation Code, CAN/CGA-B149.2, as applicable including:

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 (3.45 kPa).

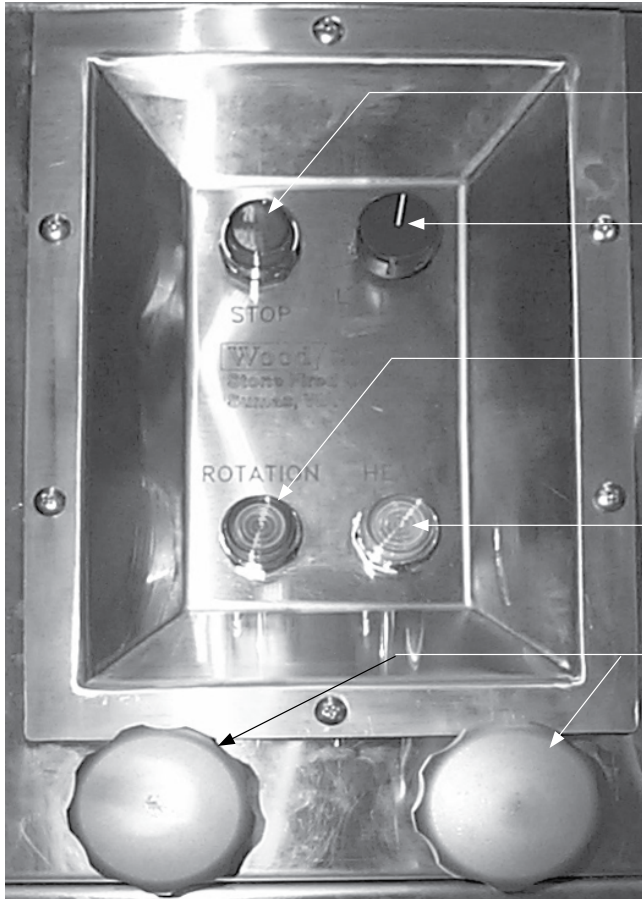
The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve (supplied by others) during any pressure testing of the gas supply piping system at test pressure, equal to or less than 1/2 psi (3.45 kPa).

Wood Stone recommends that the appliance's individual 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.

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 C22.1 as applicable.



THE CONTROLLER



RED: Stop (Both Burners and Rotisserie Drum)

BLACK: Rotisserie Speed Control Rheostat

GREEN: Start Rotisserie Drum (must be activated before burners will light).

YELLOW: Lights both Burners

GAS & WATER THROTTLE KNOBS

CONTROLLER OPERATION: First the Rotisserie drum must be started by pushing the **GREEN BUTTON**. Only then can the gas burners be activated by pushing the **YELLOW BUTTON**. Once turning, the Rotisserie speed can be adjusted by turning the **BLACK KNOB**. If at any time you wish to stop the rotisserie and the gas burners, simply push the **RED BUTTON**.

ALWAYS WAIT FIVE MINUTES BEFORE ATTEMPTING TO RELIGHT THE BURNERS.

ADJUSTING THE FLAME HEIGHT: To increase the height of the radiant flame, turn the gas throttle valve counter clockwise (to the left). To reduce the height of the radiant flame, turn the gas throttle valve clockwise (to the right).

FILLING THE DRIP TRAY WITH WATER: Fill the drip tray with water by turning the water throttle valve counter clockwise (to the left). The drip tray should always be filled with water when the Rotisserie is in operation. Failure to do so can result in warping of the tray. Wood Stone recommends leaving the water running while the Rotisserie is in use.



Contact the Wood Stone factory, a Wood Stone factory representative, or a Wood Stone authorized service agent for any maintenance or repairs.

LOADING THE ROTISSERIE

Open both doors to load the rotisserie. The drum will stop automatically anytime the doors are opened. To advance the rotisserie drum with the doors open, simply push and hold the **GREEN** button. Release the button when the rotisserie drum reaches the desired position and it will stop.

NEVER ATTEMPT TO PLACE OR REMOVE SPITS WHEN THE ROTISSERIE DRUM IS MOVING

WATER FILLING

The drip tray should always be filled with water when the rotisserie is in operation. Failure to do so can result in warping of the tray. Wood Stone recommends that a slow trickle of water be left running whenever the rotisserie is in use.

WATER DRAINING

Lift and turn the stand-pipe in the drip tray slightly to allow the water to drain. The stand pipe can be pulled out for faster drainage and to be washed.

LOADING THE SPITS EVENLY

When loading the rotisserie, make sure the load is evenly distributed by loading equally weighted spits and/or baskets opposite each other. The round end of the spit or basket is always inserted first. Push the round end of the spit into the hole until there is clearance to insert and seat the square end into its socket. Be sure to fully seat the spit so that it locks into place and the round end will rotate freely when the drum turns.

TO RESTART THE ROTISSERIE

Close the doors and push the **GREEN** (rotation) button and then the **YELLOW** (heat) button. The speed of the Rotisserie can be adjusted using the speed control knob located on the controller. The Rotisserie will stop anytime the doors are opened or when the **RED** (stop) button is pushed.

CLEANING THE ROTISSERIE CABINET

Do not attempt to clean the burners. Take care when cleaning near the burners to avoid contact with the spark igniter assemblies to avoid accidental damage. Never spray water onto or around the burners, or into either of the side compartments on the rotisserie. Do not use excess liquid when cleaning the control panels. All other exposed surfaces of the rotisserie should be wiped clean as necessary (or daily) using an approved mild cleaning solution. Stubborn residues may be removed using a non-metallic scouring pad. When scouring stainless steel, scrub with the grain to avoid scratching the finish.

CLEANING THE ACCESSORIES

All rotisserie attachments (spits, forks, basket pins) should be cleaned between uses using an approved mild detergent, hot water, and an approved sanitizing solution. Alternatively, these items can be cleaned in a dishwasher.



ALWAYS DISCONNECT POWER SUPPLY BEFORE SERVICING THIS APPLIANCE

MAIN BEARING LUBRICATION (EVERY 12 MONTHS)

The (2) main shaft bearings should receive one pump of a NLGI Grade (2) Lithium based grease every 12 months. These bearings themselves are located inside the cabinet on either end of the main shaft. A Zerk fitting for each bearing is located directly below the top door hinge on either side of the cabinet on the operator (door) side. Care should be taken not to over lubricate these bearings. 1 pump is sufficient.

REDUCTION GEAR LUBRICATION

The gearbox is permanently lubricated and requires no additional maintenance.

SPUR GEAR BUSHING

Check the spur gear bushings for signs of binding or lateral movement where the gear shank passes through the drive end drum. The gear should rotate in the Rulon inner bushing. If the gear and Rulon bushing are rotating in the drum sleeve instead, remove the gears and rulon bushings, clean and refit. Do not lubricate the bushings or gears. To remove the gears, mark the drum in relation to the shaft to ensure it is reinstalled in the same position. Remove the (6) bolts that retain the drum end to the hub and slide the drum end assembly toward the center of the cabinet. The spur gears can now be removed by loosening the set screw retaining the locking collar and sliding the gears out of the drum.

INNER DRUM SEALING

The condition of the high temperature sealant used to seal the inner drums to the cabinet walls and the inside corners of the cabinet should be checked and renewed if necessary. Use Dow Corning 732 RTV sealant.

DOOR JAMB MICRO SWITCH

Check the jamb switch for proper operation. The switch should move freely in the jamb without sticking or binding and the drums should stop when the doors are opened.

SPEED CONTROL KNOB

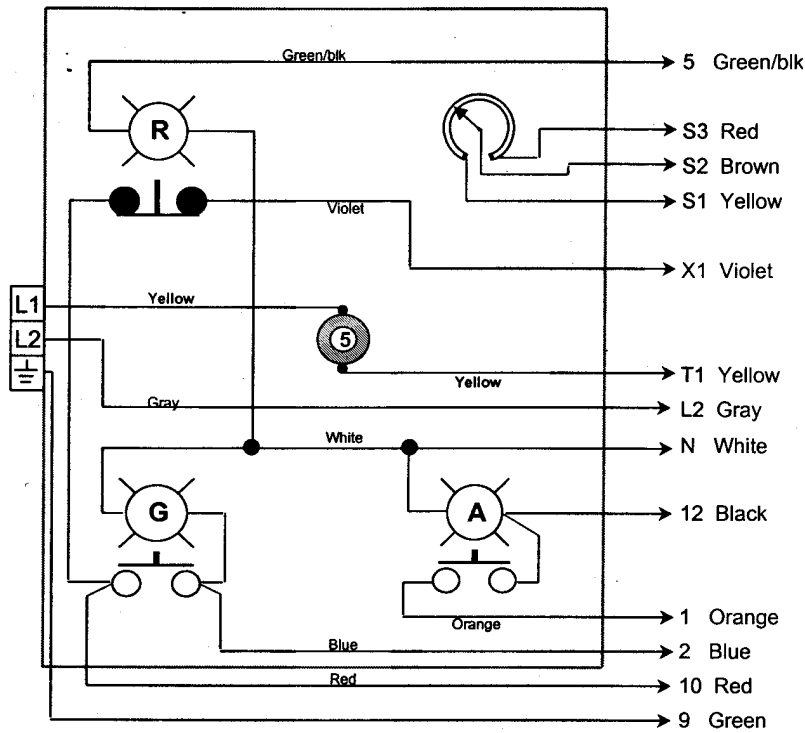
Check the speed control potentiometer for proper operation and the knob for tightness.

DOOR LATCH

Check the door latch mechanism for proper operation. If sticking occurs, remove the wedge pin, clean, refit and adjust.



ELECTRICAL DIAGRAM

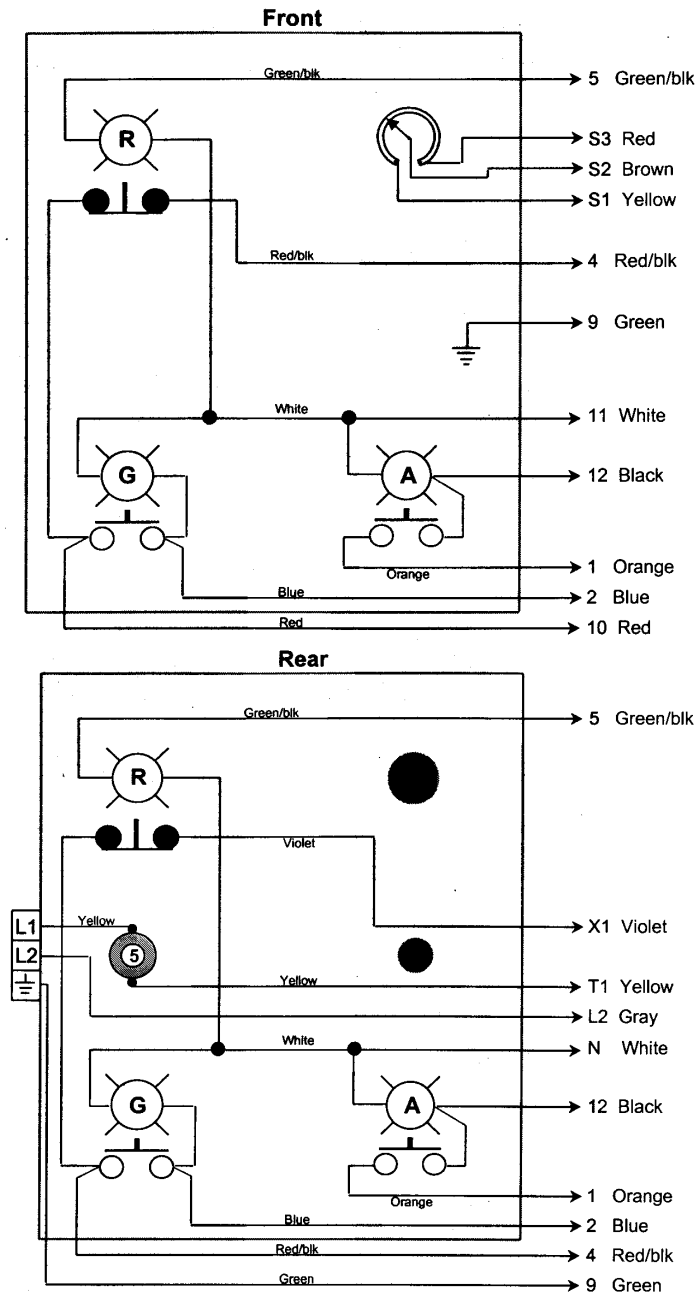


Used on models with single controls and no charbroiler.

This electrical schematic diagram can also be found affixed to the inside of the drive-side service panel of the rotisserie



ELECTRICAL DIAGRAM

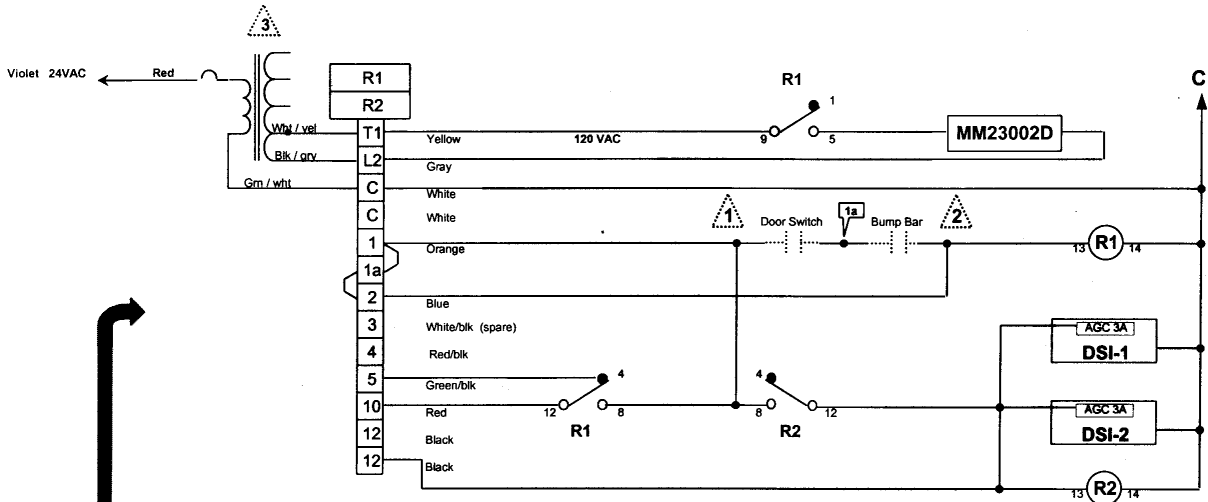


< Used on all models with dual controls >

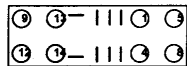
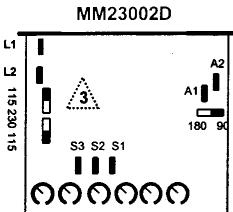
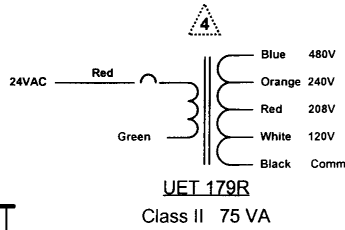
This electrical schematic diagram can also be found affixed to the inside of the drive-side service panel of the rotisserie



ELECTRICAL LINE DIAGRAM



Brad Harrison
Mini-Change Plug
12P Female #47402
(only w / Charbroiler)



R1 & R2 Pin Assignment

- 1 Remove jumper between 1 & 1a when door switch is used.
- 2 Remove jumper between 1a & 2 when bump bar is used.
- 3 120 VAC standard. For other voltages, remove black wire from T1. Add Red / 208 V or Orange / 240V. **CAUTION:** move both AC input switches on the MM23002D to the 230 V position.
- 4 Black is taped Gray & goes to L2. White is taped Yellow & goes to T1. Red (24VAC) goes to Violet. Green is taped White & goes to C.

NOTE: Consult owner / operators manual for the options included with the unit being serviced. This determines which control panels are used.

This electrical line diagram can also be found affixed to the inside of the drive-side service panel of the rotisserie.



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

Please call 1-800-988-8103 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. 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

