

Memphis Wood Fire Convection Grill

Owner's Manual and User's Guide



Congratulations on your purchase of the Memphis Wood Fire Convection Grill. With proper care and maintenance, your grill will give you years of trouble free operation. Please review the following information carefully for useful tips and information that will help you utilize your grill's extensive features and benefits.

Keep in mind that your Memphis Wood Fired Convection Grill is so much more than a grill. It's a true Convection Oven, featuring a computerized Intelligent Temperature Control (ITC) which automatically adjusts for outside ambient conditions. The result is a simple "set it and forget it", way to Cook, Bake, Roast, Sear or Low and Slow Smoke; whether it's 40° or 90° outside, just set the desired temperature and sit back and enjoy.

We all have our favorite recipes and cooking tricks. We suggest you experiment with your new grill to discover just how many ways it adds to your outdoor cooking experience. With little time and effort, you'll amaze your friends and family with your impressive culinary skills. Like many of us you'll find that your Memphis Wood Fired Convection Grill will become your cooking appliance of choice; eliminating heat and odors from cooking indoors while giving you unbeatable results.

Before you get started, take a few moments to **register your grill** and write your model and serial number in the space provided. This will register your warranty and make it quick and easy to reference this information in the future. Your model and serial number are located on the sticker under the hopper lid.

Thank you for choosing the Memphis Wood Fire Convection Grill!

Model _____

Serial Number: _____ 09VG0050- _____

Date of Purchase _____

Dealer _____

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Warning: Read all Safety Information Prior to Operating Grill

- For outdoor use only. Do not use in any enclosed area.
- Keep grill 30" or more from any combustible surface.
- To prevent Grease Fires, clean your grill on a regular basis. This includes the flavorizer and grease tray. *Should a grease fire occur, turn off the grill, unplug the grill and leave lid closed until the fire is out. When cooking exceptionally greasy foods, put a foil pan below the food to catch the grease.*
- Do not put anything flammable in the storage area under the grill.
- Never operate the grill without the rear panel on and fastened. The rear panel must be fastened to ensure proper cooling of the pellet hopper and mechanical cabinet.
- Keep rear panel louvers clear of obstructions.
- Before each use, your Memphis Grill should be checked for burn grate obstructions to make sure proper air flow is maintained. See cleaning instructions in this manual for correct procedures.
- Accessible parts of the grill are very hot. Keep young children away while in use.
- Exercise reasonable care when operating your grill. It will be hot during cooking or cleaning and should be attended if children are present.
- Do not use lava rocks or charcoal in your grill.
- To avoid the chance of serious burns, never lean over an open grill or place hands or fingers on the front edge of the cooking box.
- Use heat-resistant barbeque mitts or gloves when operating this unit.
- Do not move your Memphis Wood Fired Grill while operating or while the grill is hot. Make sure the fire is completely out and that the grill is completely cold before transporting the grill.

Unpacking and Assembling Your Memphis Wood Fired Convection Grill.

Please note that during shipping some movement may have taken place, so a complete visual inspection is required. **Be sure to inspect entire grill after removing the protective shipping carton. Report any damage to your local dealer immediately. Shipping damage is not covered under warranty. Some surfaces may be sharp so wear gloves when assembling. Do not plug in the grill until it's fully assembled, the plastic protective film is removed from all stainless steel surfaces, and you're ready to cook. See: "start up procedure" for more details.**

Your carton will contain the following:

- 1- grill head with ITC mounted in front
- 2- large cooking grates
- 1- Integrated heat deflector / flavorizer
- 4- grill legs
- 1- base bottom
- 1- hardware bag with owners manual
- Note: optional shelves and hardware are packaged in a separate box.

Tools Required

- Two 3/8" open end wrenches for leg and base assembly
- Phillips Head screw driver
- Rubber mallet to install caster sockets

Unpack and Identify Primary Components and Hardware (see supporting diagrams)

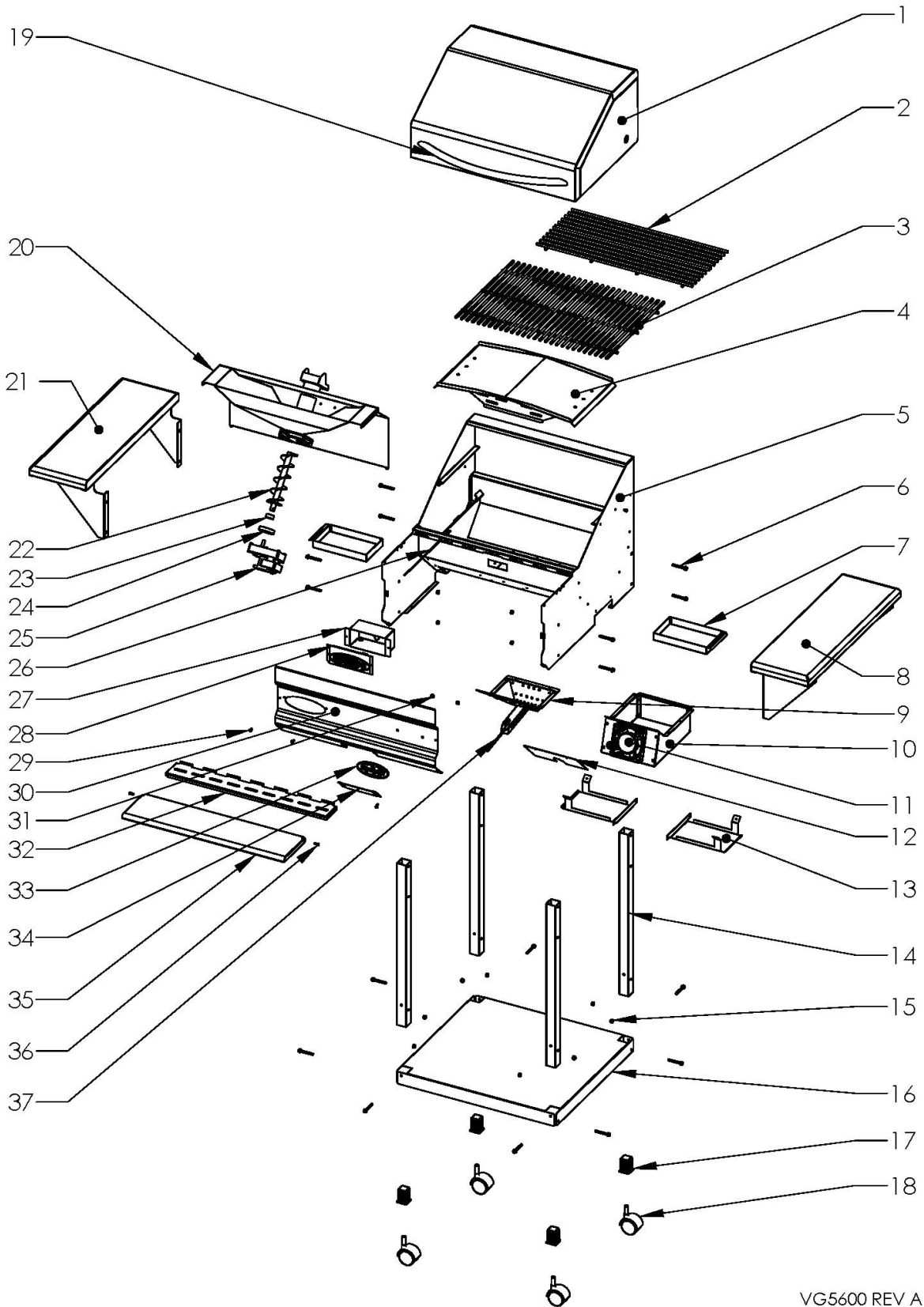
- 16 - 1/4-20 X 2 1/4" bolts
- 16 - 1/4-20 serrated flange nuts
- 4- caster sockets
- 4- push in casters

Optional Shelf Kit Includes:

- 2 – Shelf tops
- 4 – Shelf support brackets
- 2 - Shelf bracket right
- 2 - Shelf bracket left
- 12 - #10 self tapping screws

Procedure for Assembly – See Diagrams on following pages. Note: Optional Shelf Kit installation is also contained in this section.

VG0050 - EXPLODED VIEW



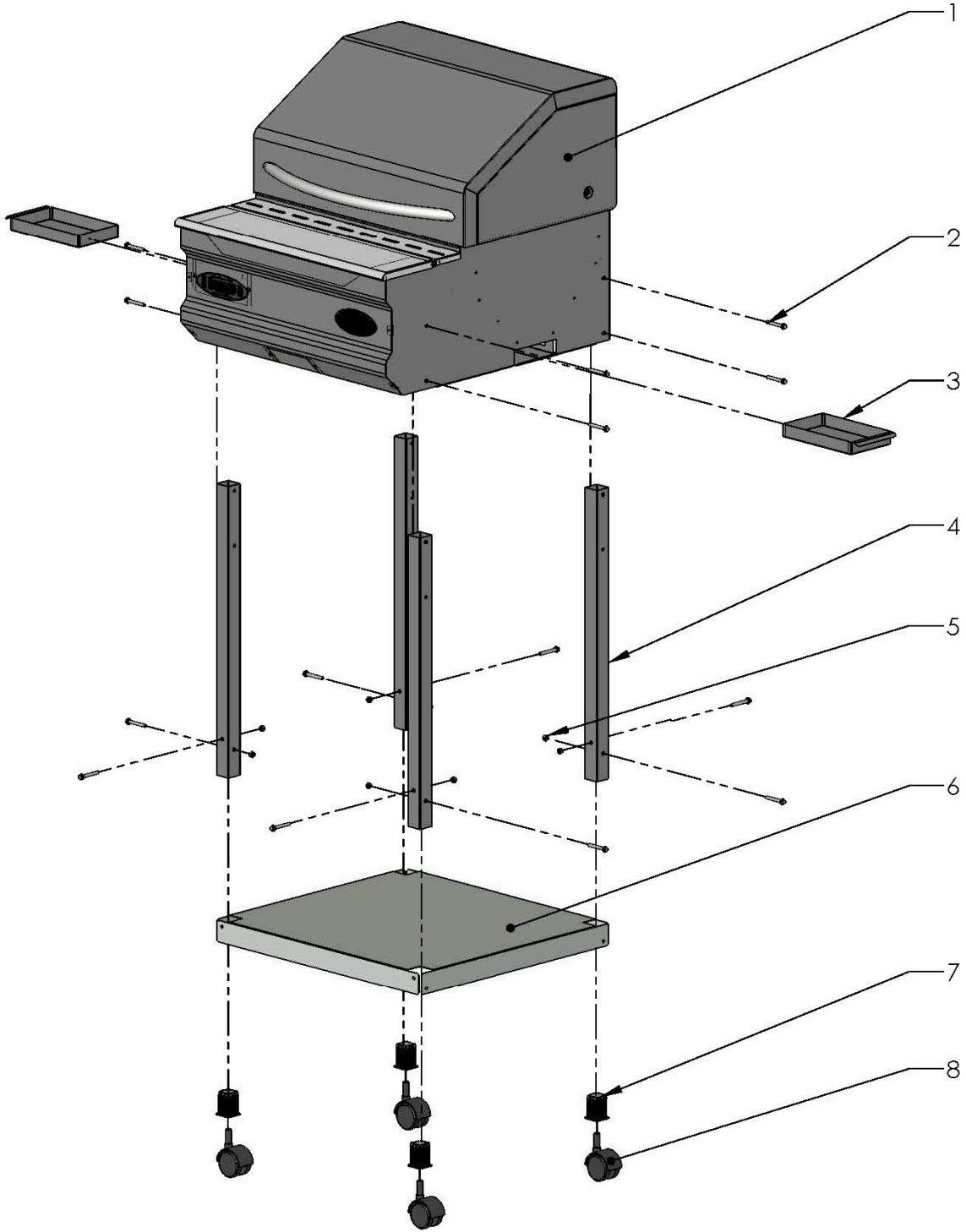
VG5600 REV A 08/24/09

VG0050 - EXPLODED VIEW BOM

ITEM NO.	PART NO.	DESCRIPTION	QTY.	ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	VG5502	HOOD	1	20	VG5503	HOPPER ASSY	1
2	VG4402*	SMALL GRATE ASSY	2	21	VG5510*	SIDE SHELF ASSY LEFT	1
3	VG4401	LARGE GRATE ASSY	2	22	VG9500	AUGER	1
4	VG5505	HEAT DEFLECTOR / FLAVORIZER ASSY	1	23	VG0912	SHAFT COLLAR	1
5	VG5501	MAIN BODY ASSY	1	24	VG0953	AUGER MOTOR BUSHING	1
6	DS2222	1/4-20 x 2 1/4 BOLT BLACK OXIDE	16	25	VG0905	AUGER MOTOR	1
7	VG0543	GREASE BOX	2	26	VS0927	RTD- TEMP PROBE	1
8	VG5511*	SIDE SHELF ASSY RIGHT	1	27	VG0551	CONTROL ENCLOSURE	1
9	VG5504	BURN POT ASSY	1	28	VG0918	INTELLIGENT TEMPERATURE	1
10	VG5506	AIR BOX ASSY	1	29	DS2185	#10 SELF-TAPPING SCREW	4
11	VG0906	FAN	1	30	VG0503	GRILL FRONT	1
12	VG0550	AIR BAFFEL	1	31	DS2183	TINNERMAN CLIP	2
13	VG0506	PAN HOLDER	2	32	VG0549	HOPPER EXT COVER	1
14	VG0544	TUBE LEG	4	33	VG0909	MEMPHIS BADGE	1
15	DS2100	1/4-20 SERRATED FLANGE NUT	16	34	VG0508	MOTOR ACCESS PLATE	1
16	VG0545	BOTTOM PAN	1	35	VG0540	HOPPER COVER	1
17	VG0944	CASTER SOCKET	4	36	DS2220	HOPPER HINGE PIN	2
18	DS4458	HEAVY DUTY, LOCKING, CASTER	4	37	VG0928	IGNITER	1
19	VG0104	HOOD HANDLE	1				

* DENOTES OPTIONAL ITEM

VG0050 Assembly Step 1

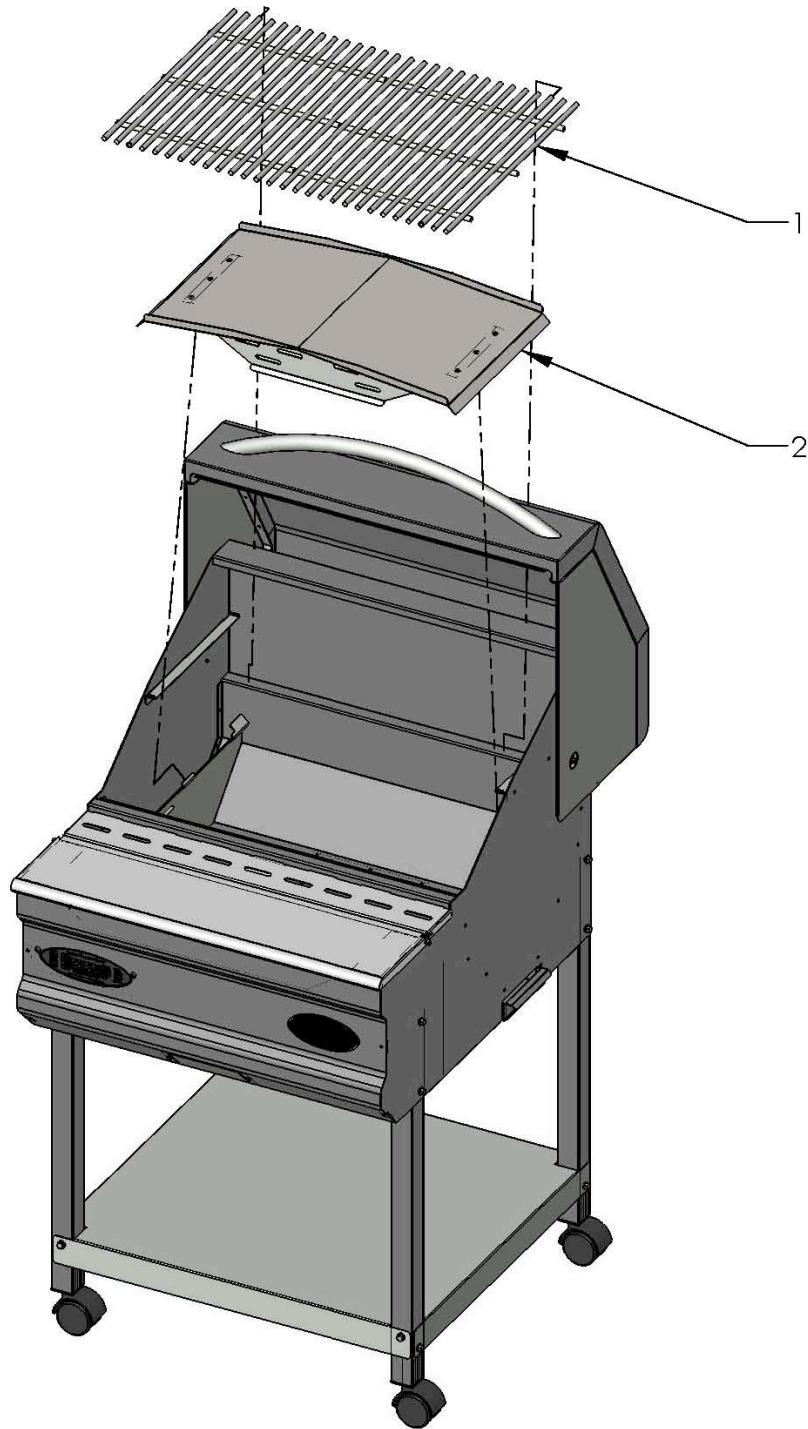


VG0050 - Assembly Step 1 BOM

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	VG0050	GRILL HEAD	1
2	DS2222	1/4-20 x 2 1/4 BOLT BLACK OXIDE	16
3	VG0543	GREASE BOX	2
4	VG0544	TUBE LEG	4
5	DS2100	1/4-20 SERRATED FLANGE NUT	16
6	VG0545	BOTTOM PAN	1
7	VG0944	CASTER SOCKET	4
8	DS4458	HEAVY DUTY, LOCKING, CASTER	4

* DENOTES OPTIONAL ITEM

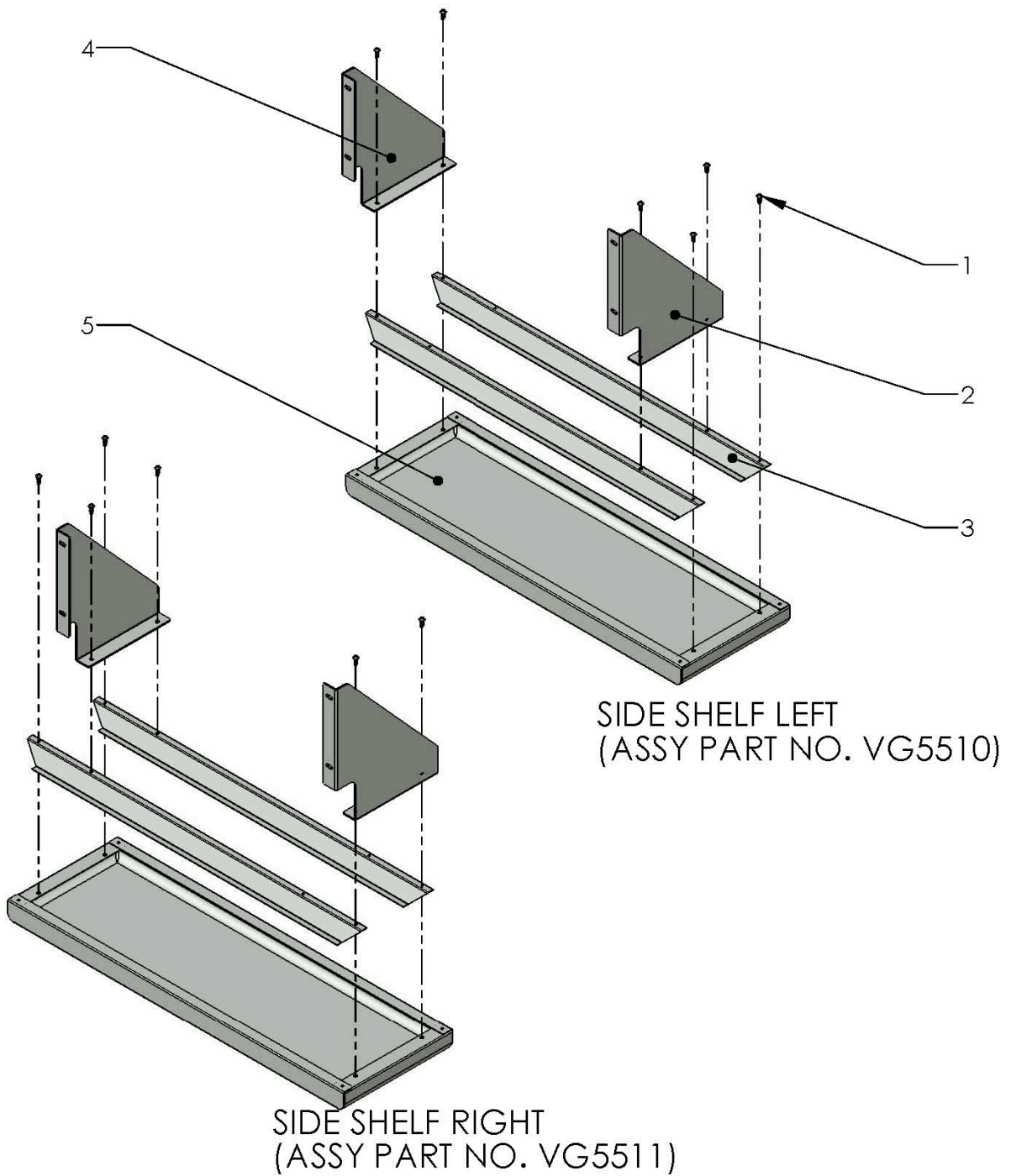
VG0050 ASSEMBLY STEP 2



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	VG4401	LARGE GRATE ASSY	2
2	VG5505	HEAT DEFLECTOR / FLAVORIZER ASSY	1

VG5602 REV A 08/24/09

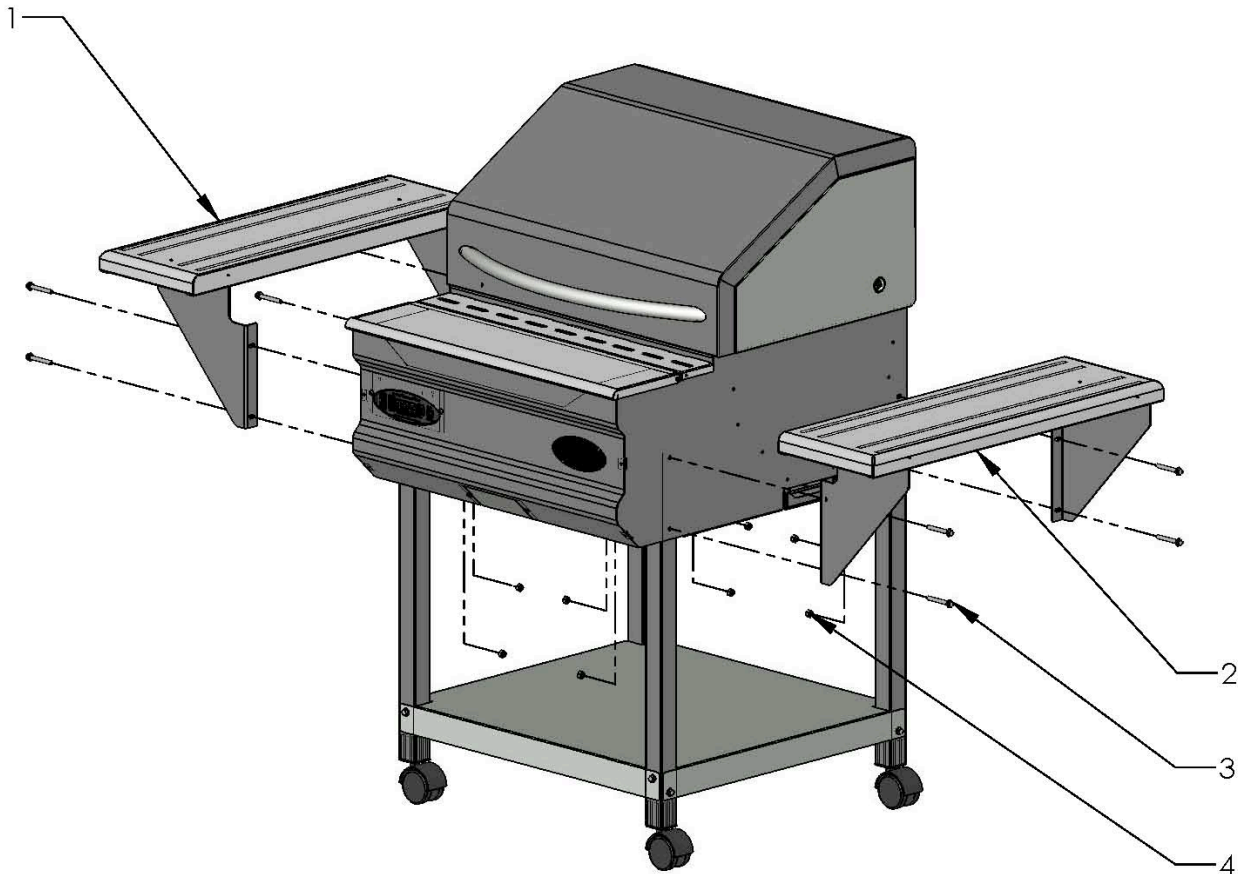
VG0050 - OPTIONAL SIDE SHELF ASSY STEP 1



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	VG0570	SHELF TOP	2
2	VG0571	SHELF BRACKET RIGHT	2
3	VG0572	SHELF BRACKET LEFT	2
4	VG0573	SHELF SUPPORT CHANNEL	4
5	DS2185	#10 SELF-TAPPING SCREW	12

VG5603 REV 3 08/24/09

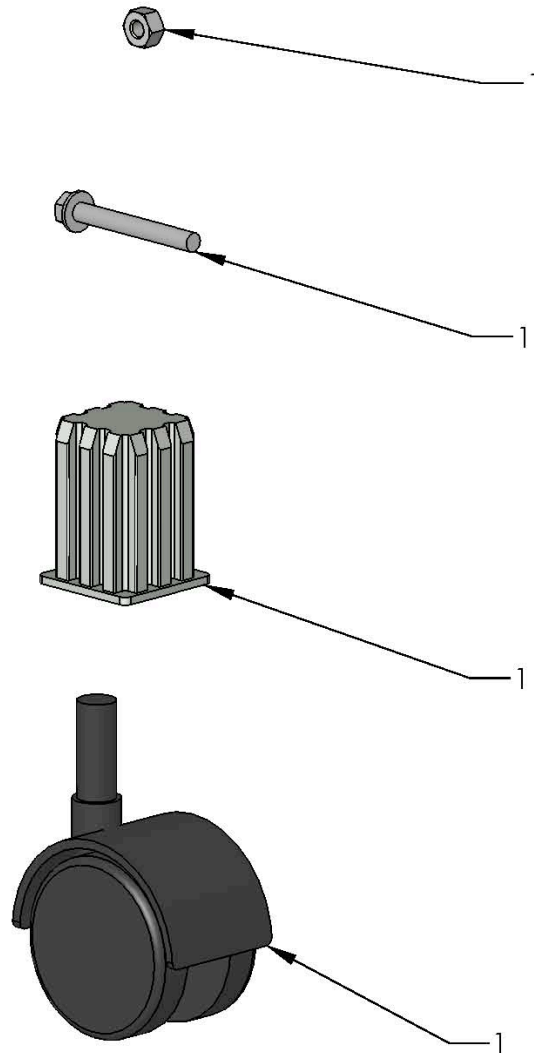
VG0050- OPTIONAL SIDE SHELF ASSY STEP 2



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	VG5510	SIDE SHELF - LEFT	1
2	VG5511	SIDE SHELF - RIGHT	1
3	DS2222	1/4-20 X 2 1/4" BOLT	8
4	DS2100	1/4-20 NUT	8

VG5604 REV A 08/24/09

VG0050 - HARDWARE KIT



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	DS2100	1/4-20 SERRATED FLANGE NUT	16
2	DS2222	1/4-20 X 2 1/4 BOLT BLACK OXIDE	16
3	VG0944	SOCKET CASTER	4
4	DS4458	HEAVY DUTY LOCKING CASTER	4

VG5605 REV A 08/24/09

How Your Memphis Wood Fired, Convection Grill Works:

Your Memphis Wood Fire Convection Grill represents a new way of outdoor cooking. It's a true high quality convection oven that also has grilling and smoking capability. It combines many unique features with time proven pellet-burning technology. Together they give you controlled, quick, savory and repeatable cooking results every time. The perfect cooking experience starts with filling your hopper with all natural, 100% hardwood BBQ pellets. We recommend "Natures Way" flavored BBQ Pellets.

Pushing the ON Button activates the "Electronic Igniter", the combustion fan, and the auger. The auger feeds the wood pellets from the hopper onto the burn pot, where they are ignited using super-heated air. The computerized Intelligent Temperature Control allows you to set the cooking method and temperature desired and will adjust for ambient conditions. Convection/circulation fan provides combustion air to the burn pot as well as provides convective cooking air by distributing the heat evenly throughout the cooking area. The natural smoke flavor produced by the burning pellets, the vapor produced by the juices dripping on the Flavorizer Trays, and the air circulating throughout the cooking area, combine to give you the unique flavor that can only be achieved using a Memphis Wood Fired Convection Grill.

Features:

- Large casters that swivel and lock for easy maneuverability.
- Stainless Steel cooking grids for years of service.
- Simple to use computerized Intelligent Temperature Control (ITC) capable of Smoking, BBQ, Grilling, Baking and Searing temperatures.
- Extra large capacity hopper
- Exceptionally durable and reliable construction.
- Attractive craftsmanship and high quality performance.
- 427 square inch main cooking area that can be increased to 699 square inches with the optional grates.
- 4510 cubic inch cooking area for large roasts and turkeys.
- Low CFM Blower Fan Cause pellets to burn and produce true convection oven cooking.
- Heavy duty construction
- Two Stainless Steel Side Shelves offer a durable easy to clean surface.
- Grease Drawers make for no fuss cleaning.
- Auto Start Button & Electric Igniter eliminate the need for matches & lighter fluids.
- Smoking Mode gives you that savory flavor on demand and is programmable from 200-250F.
- Stainless Steel Flame Deflector reduces the chance of flare-ups and assists in even heat distribution.
- Stainless Steel Burn Pot designed for high performance and longevity.
- Available in Black
- Assembled dimensions H 47" x W 26" x D 29". (H 47" x W 44.5 x D 29" with Optional Side Shelves).
- Made in USA.

Read Prior to Lighting!

Initial Burn Off

Before cooking for the first time, we recommend that you “burn off” the grill to rid it of any foreign matter used in the manufacturing process. Remove the stainless steel cooking grates and wash with a mild soap and detergent. With the grates removed, light and operate the grill at 450F (in cook mode) with the lid down for 20 minutes. After burn off, turn the grill OFF and replace the grates. **Prior to “burn-off” completely remove the plastic film on all Stainless Steel Surfaces. Failure to do so will cause the film to melt to the metal and it will be extremely difficult to remove.**

Lighting your Grill

It is recommended practice to go through the INITIAL SET UP procedures after every 10 uses. This will ensure proper ignition of the pellets and is part of the normal maintenance procedure. Light as per instructions found in detail in this manual. If the grill fails to light, this is most likely due to a dirty or plugged burn pot and or a burn pot obstruction blocking the auto igniter air passages. (refer to **Using Your Memphis Wood Fired Convection Grill** for cleaning instructions.) Should your auto igniter refuse to ignite the wood pellets, it is easy to light your grill manually with a match and lighting agent. (Refer to **Manual Lighting Instructions** for instructions.)

Pre-Heating

It is extremely important to ALWAYS allow your grill to preheat for 15 minutes at 500° before cooking. This allows the grill and grates to heat up and maintain proper temperature once your food is introduced. If you don't allow the grill to preheat, you'll find that it takes a longer period of time to bring both the grill and the food to cooking temperatures.

Lid Position

Always cook with the lid closed. An open lid negates the convection air and lengthens cooking times. Cooking with the lid closed keeps the temperature even, cooking the food faster while using less fuel. A closed lid also helps to create a smokier flavor.

Intelligent Temperature Control - Overview



Control I/O, ON/OFF Touch Pad

This pressure sensitive touch pad is used to turn the grill/appliance on and off.

- Turning the grill “on” activates the automatic start-up mode and illuminates the digital LED readout.
- Pressing the touch pad again activates the shut down mode of the appliance.
- The ON/OFF touch pad allows electricity to flow to the electrical components for 20 minutes. If, after 20 minutes, the appliance reaches a temp of 150F, the igniter and start up feed rate will end and the appliance will continue to operate / burn pellets.
- If 150F is not achieved after 20 minutes, the appliance will turn off and ER-2 will display on the screen.
- When the ON/OFF touch pad is used to turn off the appliance, the board will stop the auger from turning. The convection fans will continue to run until the temperature reaches 130F.
- When the appliance reaches a cool down temperature of 130F the electricity will be shut off to the working components. If the temp has not reached 130F after 20 minutes, the electricity will be shut off to the controller.

Pellet Prime Touch Pad

- When the Pellet Prime touch pad is pressed and held, the fuel feed system will turn and feed more wood pellets to the burn pot.
- This can be used to add more fuel just before opening the grill lid, to help with quicker heat recovery.
- It can also be used to add more fuel while smoking, to increase the smoke intensity.

Temp (Temperature) up and down touch pad

- Pressing either the up or down arrows, the LED readout can be moved in 5 degree increments.
- The temperature setting range is 225-275F for smoking and 280-550F for cooking.

Temp (Temperature) Display Screen

Displays temperature readouts, error messages, and power up readout:

LED Messages

1. **HLnD, GrLL, v 5.01** These three screens will display when the appliance is plugged into a surge protector and then into an electrical outlet. This describes the make and model of the board. (The 5.01 in this example identifies the software revision – your grill may indicate a different version of software.)
2. 350. This is the default temperature at start up. The temperature setting range is from 250F to 550F while the actual temperature readout ranges from room temperature to 600F.
3. ER-1. This error code is to indicate the appliance has overheated.
4. ER-2. This error code indicates a failure to ignite. After pressing the ON touch pad, the appliance must reach an operating temperature of 170F within 20 minutes. If it fails to reach this temperature, the appliance will shut off and the error message will appear on the display screen.
5. ER-3. This error code indicates a power failure causing the grill to cool.

Note: To reset an error, press on or off after correcting the problem

Temperature Display Screen

By pressing the display touch pad, the LED display screen will show either the actual temperature within the appliance or the set-point. The LED besides actual or set-point is used to indicate which temperature is presently displayed. Note: it is normal for the temp readout to vary from time to time. This is caused by pellets being placed in the burn pot and the pellets burning down until the controller calls for more pellets to be placed in to the burn pot. This works similar to an oven when it turns off and on to maintain temperatures. As you preheat your grill, you will see larger deviations in temperature. After the grill is preheated and the cooking temperature is set, the temperature will stabilize within a normal range. An instant readout food temperature probe is highly recommended to get accurate readings of your food.

Function Mode (Cook / Smoke) Touch Pad

By pressing the mode touch pad, the style of cooking and related pellet feed-rates will change. The LED beside Cook or Smoke is used to indicate which mode is being used and blinks to indicate the start up (igniter is on) or shut down (fans are running to cool the grill) status of the grill.

Using Your Memphis –Wood Fired Convection Grill

Prior to starting your cooking center, inspect the Burn area inside the grilling area. It's a recommended practice to go through this procedure at initial start up and after every few uses to ensure peak performance. Actual frequency varies depending on usage and fuel type.

1. Open the main lid and remove the Stainless Steel Cooking Grates.
2. Remove the integrated stainless steel flavorizer and flame deflector. The flame deflector helps distribute heat, contains fly ash, and keeps the flame from making direct contact with cooking grids.
3. If necessary, remove the stainless steel burn grate and check the burn pot area, remove any foreign items ensuring that the air holes in the grate are clear. Take precautions not to damage the igniter wiring connections or pull the igniter out of the igniter tube.
4. Re-install the burn pot, making sure it's sitting flat after installation.
5. Re-install the flavorizer / flame deflector.
6. Reinstall the stainless steel cooking grates.
7. Open the Pellet Hopper Lid, found at the front of your grill. Check for any foreign objects.
8. Fill your hopper with all purpose pellet fuel. Close the hopper lid.
9. Plug your Memphis Wood Fired Convection Grill into the nearest 110 Volt AC outlet. (Note: Use a GFI Outlet. We strongly recommend that if your home does not have a GFI outlet that you install one or use a high quality outdoor surge protector.

Operating Instructions: Memphis Wood Fired Convection Grill and Computerized Intelligent Temperature Control (ITC).



About the ITC: The ITC is very much the same as the control on your kitchen oven. The big difference is the ITC's ability to automatically compensate for different ambient conditions. This means that you can cook outside whether it's 40° or 90°+. When you first start your convection grill, the ITC captures the ambient temperature and then enters a "Learn" mode which allows it to make adjustments to compensate for ambient conditions.

Automatic Start Up

- 1. Place FUNCTION MODE SWITCH to Cook or Smoke Mode.**
(Corresponding light will illuminate)
- 2. Set the TEMP DISPLAY Arrows to the desired temperature (Set light will illuminate)**
- 3. Set TEMP DISPLAY to Actual. (Actual light will illuminate)** Temperature now displayed will be actual temperature in the cooking area. *Note: Actual temperature will fluctuate up or down. This is normal and represents the normal fluctuation of any oven.*
- 4. To Start**
 - Press the **I/O (on-off) button** to initiate the start cycle. At this time the igniter heats up, the Cook light on the control flashes and the combustion fan starts. Additionally the auger will run continuously for approximately 30-40 seconds to prime the grate for ignition. The Cooking Center will automatically start in 4-8 minutes. The igniter will turn off automatically when the either the internal temperature reaches 130° F or 15 minutes has passed.
Note:
 - 1: If hopper was just filled; hold Pellet Prime button in until you hear pellets falling onto the burn grate and then release.*
 - 2: Should the igniter fail to ignite in approximately 15 minutes the Cooking Center will shut down automatically and the display will indicate error code 2.*
 - 3. Your Grill will smoke for a few minutes while the pellets are lighting and coming to full burn.*

NOTE: *If the fire does not start, the Grill will continue to feed pellets and the fan will run for approximately 10-15 minutes. The grill will then automatically shut off. If this happens, some unburned pellets will build up in the burn pot. To restart the fire, clean the excess pellets out of the burn grate and repeat the above steps.*

5. To operate: Once the Convection Grill has started, operate as follows;

Pre-Heat : A unique advantage of the ITC is that when you turn it on and select your mode and temperature, the ITC will enter a *preheat and temperature learning cycle*. At this time your grill will both preheat and compensate for current ambient conditions. After approximately 20-30 minutes (depending on conditions and temperature settings) your grill will be ready for use and to maintain your desired temperature range (see food preparation chart, Appendix A for recommended temperatures)

Cooking Mode: Temperature will be automatically maintained at your set temperature range. You may notice some fluctuation up and down during this time. This is a normal part of any oven / appliance operation.

Smoke Mode: Smoking is a variation on grilling and is one of the unique advantages of your Memphis Wood Fired Convection Grill. The temperature you choose will largely depend on what is being smoked (see Appendix B-C) and your personal preferences.

Smoke TIP: To vary smoke flavor intensity, experiment with the amount of time you use the smoke mode and the mix of flavored pellets you use along with the all purpose pellets. This is more important if you use stronger flavored pellets such as Mesquite. Switching to smoke mode soon after putting your food on the grill allows the smoke to penetrate the meats before they have a chance to sear closed. The smoke mode works best when a longer cooking time is required, such as large cuts of meat, fish, or poultry. Experiment with the length of time you leave for smoking, before cooking thoroughly. Try different combinations of both modes. Some chefs prefer the smoke mode at the end of cooking and to keep the food warm until ready for serving.

You can return to the cook mode at any time by pressing the set mode button to cook (cook light will illuminate). It is not recommended that you go from very high heat (above 400°) to smoke Mode without a cool down period.

CAUTION: If at any time excessive flame is visible i.e. FLAME DEFLECTOR is glowing bright red, turn the temperature set-point down using the down arrow on the keypad. If excessive flame persists turn unit off and check for problem or call your authorized Memphis Grill Dealer.

CAUTION: Grease fires are caused by excessively greasy food, not properly maintaining your grill, or failing to clean your ash drawer on a regular basis. In the unlikely event you experience a grease fire while cooking, remove your food and close the lid. If the grease fire does not go out within 5 minutes, open the lid and lightly sprinkle baking soda on the fire. Be careful not to burn yourself. If the fire remains, unplug the grill and shut the lid until the fire is completely out. In rare cases, the ITC will display and error code "ER1" indicating that the maximum temp was exceeded. To clear the error message, turn the grill off and allow it to cool. Once the grill cools to 130F, restart using the normal starting procedure. *When preparing particularly greasy food place a pan partially filled with water under item to catch grease.*

Manual Start Up:

In case of igniter failure, you can start your “Convection Grill” manually.

1. Remove the stainless steel grills and integrated flavorizer / flame deflector.
2. Inspect the stainless steel burn pot to ensure that is clean of debris and that the igniter air holes are not obstructed. Also check to ensure proper placement of the burn grate.
3. Place a small handful of pellets in the bottom of the burn grate. Add a small amount of solid fuel fire starter, such as those made from sawdust and wax or use wood shavings.
4. Add a small amount of fire-starter to the pellets on the burn grate. **CAUTION: DO NOT USE FLAMMABLE LIQUIDS SUCH A GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR FRESHEN-UP THE FIRE! KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE GRILL WHILE IT IS IN USE.**
5. Turn the Intelligent Temperature Control on by following steps 1-5 as noted in Automatic Start up on page 10
6. Light the fire starter.
7. As soon as pellets are burning briskly, replace the stainless steel flame deflector / flavorizer and cooking grates. Your grill will begin to produce smoke while the start up cycle is taking place. Close the lid.

Self-Cleaning and turning off your Memphis Wood Fired Convection Grill

Your Memphis Wood Fired Convection Grill will give you many years of service with minimum cleaning. An important step is allowing the grill and cooking grates to “Self Clean” by running the grill at a high temperature for 10-15 minutes after each use (or before the next use). While the grill is still burning, make sure the control is in the “cook” mode and use the display to set the temp to 500°. Let the grill burn off any residue inside the grill for 10-15 minutes and then shut off. Once the grill has cooled, scrape the flavorizer clean using a grill brush or putty knife and empty the grease trays.

To shut cooking center off, press I/O (ON-OFF). The fuel feed will stop. When internal temperatures have cooled to approximately 130° the convection fans will automatically shut off. After the cooking center cools, clean the outside with a mild detergent and soft rag. Cover the cooking center with the optional cover. *Note: If grease or smoke discoloration is allowed to stay for long periods of time you may need a stronger cleaner to remove. Frequent through cleanings are strongly advised.*

Information About BBQ Cooking Pellets

Flavored pellets come in a variety of flavors such as Mesquite, Alder, Apple, Hickory, Maple and Cherry to name the most common. They contain approximately 8,200 BTU's of heat per pound, have very little ash and a low moisture content. Always use Premium BBQ Pellets in your grill. Premium BBQ pellets have a maximum length of 1.5" and burn more cleanly. Long pellets and excessive sawdust can greatly effect pellet feeding and temperature consistency.

Wood pellets have been in existence for over 200 hundred years and there are currently more than 125 active pellet mill operations in United States and Canada, producing millions of pounds of pellet each year. "Natures Way" 100% hardwood BBQ pellets are produced in the much the same manner as wood pellet heating fuel is produced. Sawdust and clean wood chips are pulverized and dried. The dried material is then processed under heat and pressure. This material is forced through a hard steel die rotating against rollers and then forcing the material through the die with pressure over 3,000 PSI. As the pellet is forced through the final die it is sheared off at a specific maximum length, cooled, screened, vacuumed, and then bagged or boxed. **Caution: some wood pellets produced for heating fuel have a high content of softwood or even recycled wood furniture which can include pitch, chemicals or glues and should not be used for cooking. For optimum performance and to ensure you are using clean burning pellets manufactured for cooking, purchase "Natures Way" 100% hardwood BBQ pellets. Using low quality BBQ pellets may also adversely affect your grilling temperature performance – especially at low temperatures. Hearthland Products assumes no responsibility for problems associated with the use of lower quality or heating pellets.** Store pellets in a dry location for optimal performance.

Flavored Pellet Guidelines

Mesquite, yields a woody flavor to grilled foods and is often used with poultry. Hickory intensifies the flavor of food with a robust, tangy taste suited to beef, pork or lamb. Apple or most any fruitwood, adds a smoky, mild sweetness and is highly recommended for baking bread, chicken and pork.

Flavor is an individual taste and we suggest you try the different flavors or combination of flavors to find the combinations that suit your needs and tastes. (See you local dealer or go to www.natureswaypellets.com to order individual pellet flavors)

Periodic Grill Maintenance

Stainless Steel Working Surfaces

ALWAYS clean dirt and dust off all stainless steel surfaces before you begin to cook. The dirt can cook into the metal and discolor it. Dirt can be easily cleaned with hot soapy water and a soft cloth. There are also many commercial products made to clean and protect your stainless steel surfaces.

Painted Surfaces

Your painted surfaces have a very durable high temp powder coat finish. The surfaces can be cleaned with mild soap and water and wiped with a soft rag.

Flavorizer

It is recommended that you remove any build up of food or grease from the flavorizer after each use. A clean flavorizer further reduces flare ups. Brush or scrape any build up off of the flavorizer with a grill brush or putty knife. Never clean the flavorizer while it is hot.

Firebox and Hood

Because the firebox is used to channel the fan forced air into the burn grate, there is very little maintenance to be done in this area. Occasionally, you may either vacuum or brush out any build-up of ash or burn debris that has fallen below the burn grate. Remove any accumulation of grease or debris on the inside surfaces.

Stainless Steel Burn Pot and Igniter

Periodically check the air holes found in the burn pot for any blockages or build-ups. Using a wire brush, scrape off any build up or blockage. When reinstalling, confirm the proper positioning in the burn pot. The burn pot should be level from side to side and from front to back as well as should have a snug but not tight fit. You will also want to visually check the air holes in the igniter tube. Clean any debris or blockage out of both areas to ensure a perfect start.

Grease Trays

Always be sure the grease pull out pans are clean and free of debris. During the warmer months empty any grease build-up on a more frequent basis to keep it from going rancid.

Grill Cover

Keep your Memphis Convection Grill Cover clean. This is your best protection against mildew which will form on any dirt or foreign material allowed to accumulate on tops or bottoms of fabric. Use a cleaner such as Armor-All, or a product that will not only clean but also protect. Have any small tears or punctures repaired promptly. Keep away from pets. Keep all shrubs and vines away from your grill cover as many plants contain acids, which harm fabrics. Do not cover your grill while the grill is still hot. Do not store anything on the top of your grill cover. Do not permit leaves, twigs or other organic debris to remain on the cover for long periods of time. Do not use high-pressure hoses or steam to clean or use stiff brushes, harsh detergents, abrasive cleaners or chlorine on your grill cover. Do not store your cover in the lower grill cabinet while the grill is in use.

Recommended Grilling Accessories

Meat Thermometer/Timer (A Must)

The outside temperature, wind conditions, pellet fuel variety and the altitude at which you live affect cooking times. The best way to ensure your meat has reached the proper temperature and is ready to eat is to purchase a good quality **meat thermometer**. We recommend a digital model and particularly like those that feature wireless, remote readouts. Follow thermometer manufacturer's instruction to use.

Tongs

Use tongs rather than a fork for turning and handling meats to avoid losing the natural juices. Extra large ones with long handles allow you to grip a variety of delicate foods.

Basting Brush

You may need a selection of these because you should not use the same brush in two different marinades. Use to apply your favorite sauces and marinades to foods on the grill. Again look for one with a long handle to keep your hands away from the heat. Natural bristles that are cut at a 45° angle make it easier to baste large cuts of meat.

Spatulas/Tongs

A must for turning those delicious burgers and fish filets. Again, look for a long, sturdy handle and the widest blade possible. The holes in the blade prevent the build-up of steam, which could make your food soggy.

Aluminum Foil

Extra-strength foil is always useful for grilling. Used to make foil packages, cover food, or to fold up into a flat dish to act as a drip pan. Also used to speed up cooking, protect bones from burning, and to keep foods warm.

Drip / Roast Pans

Used to prevent flare-ups, keep food from drying out, eliminate basting, and catch those flavorful juices that drip from the meat. Various juices can also be added to the pan to impart a desired flavor, such as apple, lemon, cranberry, pineapple, any cola, etc.

Grill Baskets

Perfect for cooking foods that are difficult to handle on the grill, such as vegetables, seafood, fish and certain cuts of meats. Usually made out of nickel-plated steel these baskets are made of two identical halves being held together with hinges. Not only do they protect food, and make handling easier, but also allow for different foods to be combined and grilled together without piercing the food.

Griddle

One of the most used accessories for those grill enthusiasts that enjoy cooking any foods outdoor. Use to griddle complete breakfasts, grill sandwiches, and toast fajitas. Cook all your bacon and sausages outdoors, and they're great for grilling vegetables, stir-frying, and searing.

Cooking Racks

Nickel-plated roast racks and rib racks are a great way to increase your cooking pleasure. Roast racks can be used to enhance the convective cooking capabilities of your grill, by allowing the smoke flavored air to move around the entire roast evenly. Rib racks are a great way to increase your capacity of your grill for those large gatherings. They can also be used for chops and chicken pieces. (Additional small grates are available for purchase and will allow you to significantly increase your total cooking surface.)

Skewers (wood or metal)

Wood skewers adhere better to meat than the metal ones. When using the wood skewers, remember to soak them in water for at least 30 minutes before using to prevent them from burning in the heat of the grill. Another way to protect them would be to wrap the exposed ends with aluminum foil. Metal skewers should be those with flat blades or dual prong. The flat skewer is designed to prevent the food from rotating when you turn the skewer. The dual prong skewers hold all foods more securely and are ideal way to hold delicate meats and vegetables.

Metal Brush

It is important to clean your grill thoroughly before each use. A long handled brush with metal bristles is the best tool for the job.

Skillets and Woks

These baskets allow you to stir-grill vegetables, seafood, and other small pieces of food the same way you would if you were indoors. The holes allow the smoke and flavors to reach the food.

Food Handling and Safety

Following are some basic hints for food safety. Number one rule is if in doubt about the safety of any food item, error on the side of caution! Make sure your hands are clean before handling food. Be sure you wash your hands thoroughly after handling fresh meat, fish and poultry. Prevent the cross contamination of bacteria by using separate platters and utensils for raw and cooked food. To prevent cross contamination, use different utensils for each basting function.

Bacteria are living organisms that grow and multiply rapidly in warm, moist foods. A marinade should never be saved to used another day. If you are going to use it to serve with your meat, be sure to bring it to a boil before serving. Keep hot foods hot (above 140°F) and cold foods cold (below 37°F). Don't leave hot foods out of refrigeration for more than two hours. Cooked foods and salads should not be left out in the heat for more than an hour. Fill a deep tray or casserole dish with ice to keep salads cool and safe. Don't defrost meat at room temperature or on a counter top. Marinate meat in the refrigerator. Always use a meat thermometer to determine the internal temperature of the foods you are cooking. It's a good idea to put grilled food onto a heated platter, to help keep the food warm. Steaks benefit from resting for several minutes before serving. This seals those delicious juices in the meat.

Appendix A

Approximate Cooking/Grilling Times for Memphis Wood-Fired Convection Grill

Always use a meat thermometer to be sure meats and poultry are cooked to a safe internal temperature and doneness. **Serious Health risks may exist with undercooked meat!** Approximate cooking times are, from various sources and are based on meat at refrigerator temperatures. Use a good quality temperature probe to assure best results. We suggest that when grilling at higher temperatures, you apply barbecue sauce only during the last 15 to 30 minutes of grilling to prevent excess browning or burning.

ITEM	SIZE	Control Set Point	GRILLING TIME	INTERNAL TEMP = ° F
BEEF				
Steaks	3/4" thick	550°- 650°	3 to 4 min./side 4 to 5 min./side 5 to 7 min./side	Medium rare 145 Medium 160 Med Well 170
Kabobs	1-inch cubes	550°- 650°	3 to 4 min./side	145 to 160
Hamburger patties (Note: It is recommended that hamburger be cooked to min of 160° to prevent health hazards)	1/2" thick	450°- 650°	3 min. / side 4 to 5 min./side 5 to 7 min./side	Medium 160 Med Well 170 Well Done 180
Roast, rolled rump (indirect heat) sirloin tip (indirect heat)	4 to 6 lbs. 3 1/2 to 4 lbs.	350°	18 to 22 min./lb. 20 to 25 min./lb.	145 to 160
Ribs, Back (not smoked)	cut in 1-rib portions	325°	10 min./side	Medium 160
Tenderloin	Half, 2 to 3 lbs. Whole, 4 to 6 lbs.	350°	10 to 12 min./side 12 to 15 min./side	Medium rare 145 Medium 160
HAM				
Fully cooked (indirect heat)	any size	350°- 375°	8 to 10 min./lb.	140
Cook-before-eating (indirect heat)	Whole, 10 to 14 lbs. Half, 5 to 7 lbs. Portion, 3 to 4 lbs.	350°- 375°	10 to 15 min./lb. 12 to 18 min./lb. 30 to 35 min./lb.	160 - 170
LAMB				
Chops, shoulder, loin, or rib	1" thick	350°- 375°	5 min./side	145 to 160
Steaks, sirloin, or leg	1" thick	350°- 375°	5 min./side	145 to 160
Kabobs	1" cubes	350°- 375°	4 min./side	145 to 160
Patties, ground	4 oz., 1/2"	450°- 650°	3 min./side	Medium 160

	thick			
PORK, Fresh				
Chops, bone-in or boneless	3/4" thick 1 1/2" thick	450°- 650°	3 to 4 min./side 7 to 8 min./side	Medium 160
Tenderloin	1/2 to 1 1/2 lbs.	450°- 650°	15 to 25 min. total	Medium 160
Ribs (indirect heat)	2 to 4 lbs.	375°	1 1/2 to 2 hrs.	160
Patties, ground	1/2" thick	450°- 650°	4 to 5 min./side	Medium 160
VEAL				
Chops, steaks	1" thick	450°- 650°	5 to 7 min./side	145 to 160
Roast, boneless (indirect heat)	2 to 3 lbs.	350°- 375°	18 to 20 min./lb.	145 to 160
VENISON				
Roast, saddle, or leg	6 to 7 lbs.	350°- 375°	25 to 30 min./lb.	145 to 160
Steaks	3/4" thick	450°- 650°	4 to 5 min./side 6 to 7 min./side	Medium rare 145 Medium 160
CHICKEN				
Whole (indirect heat), not stuffed broiler fryer roasting hen Capon Cornish hens	3 to 4 lbs. 5 to 7 lbs. 4 to 8 lbs. 18 to 24 oz.	325°F, 160°C	60 to 75 min. 18 to 25 min./lb. 15 to 20 min./lb. 45 to 55 min.	180 as measured in the thigh
Breast halves, bone-in boneless	6 to 8 oz. each 4 oz. each	325°F, 160°C	10 to 15 min./side 6 to 8 min./side	170
Other parts: Legs or thighs Drumsticks Wings, wingettes	4 to 8 oz. 4 oz. 2 to 3 oz.	325°F, 160°C	10 to 15 min./side 8 to 12 min./side 8 to 12 min./side	180
DUCK or GOOSE				
Duckling, whole (indirect heat) Quartered (indirect heat)	4 1/2 lbs. (not stuffed)	325°F, 160°C	2 1/2 hrs. 1 hr., 25 min.	180 to 185
Goose, whole (indirect heat)	8 to 12 lbs.	325°F, 160°C	18 to 20 min./lb.	180 to 185
TURKEY				
Whole turkey (indirect heat)	8 to 12 lbs. 12 to 16 lbs. 16 to 24 lbs.	325°F, 160°C	2 to 3 hrs. 3 to 4 hrs. Not recommended	180 as measured in the thigh
Breast, bone-in boneless	4 to 7 lbs. 2 3/4 to 3 1/2	325°F, 160°C	1 to 1 3/4 hrs. Not	170

	lbs.		recommended	
Thighs, drumsticks (indirect heat) Direct heat (pre-cook 1 hr.)	8 to 16 oz.	325°F,160°c	1 1/2 to 2 hrs. 8 to 10 min./side	180
Boneless turkey roll (indirect heat)	2 to 5 lbs. 5 to 10 lbs.	325°F,160°c	1 1/2 to 2 hrs. 2 to 3 1/2 hrs.	170 to 175

Appendix B

Approximate Smoking Times for Memphis Wood-Fired Convection Grill

Always use a meat thermometer to be sure meats and poultry are cooked to a safe internal temperature and doneness. **Serious Health risks may exist with undercooked meat!** Approximate cooking times are, from various sources and are based on meat at refrigerator temperatures. Use a good quality temperature probe to assure best results. We suggest that when grilling at higher temperatures, you apply barbecue sauce only during the last 15 to 30 minutes of grilling to prevent excess browning or burning. **NOTE: Keep lid closed when using Smoke Mode.**

Smoking times are largely dependent on personal preference and the quality of the meat being smoked. **In general the longer you smoke the meat at a lower temperature the more tender the meat will become.** You will also need to consider how much of a smoke taste you want and what flavor of smoke. Oak, Hickory, Apple, Alder, Cherry, Mesquite to name the most common. Here again that is largely a matter of personal preference.

For best results we recommend that you use a set point temperature in Smoke Mode from 225-275° for most meats. If you wish to have a smokier flavor and have the time, you can go as low as 180°, but you usually don't gain much by doing that. *Always use a meat thermometer to be sure meats and poultry are cooked to a safe internal temperature and doneness.*

The following is a general guide and we recommend you experiment to find what temperature and flavor best suites your personal taste. If you want to finish faster use higher temperature. Note: this will in most cases result in a less tender product. When you have the time the lower temperature for a longer time will give you the best results. For additional tips and to view and share a recipe go to www.memphisgrills.com/recipe

ITEM	Control Set Point	INTERNAL TEMP = ° F
BEEF	225°-275°	145 to 160
HAM	225°-275°	140-170
LAMB	225°-275°	145 to 160
PORK, Fresh	225°-275°	160-180
VEAL	225°-275°	145 to 160
VENISON	225°-275°	145 to 160
CHICKEN	225°-275°	170 to 180
DUCK or GOOSE	225°-275°	180 to 185
TURKEY	225°-275°	180 as measured in the thigh

APPENDIX C

Smoking – General Information

The following are a few important facts, tips and techniques to achieve great smoking results.

There are probably as many theories on the best smoking method as there are chefs using them. With that in mind consider the following factors when deciding which method best fits your needs.

While opinions vary on this, a little research will show that smoking in the 225° to 275° F temperature range is by far the temperature choice used for most meats..... *The possible exception would be some fish.....* Not only do you get great results at these temperatures, but it takes a shorter amount of time and frankly most meats don't require super low, extra long smoking times.

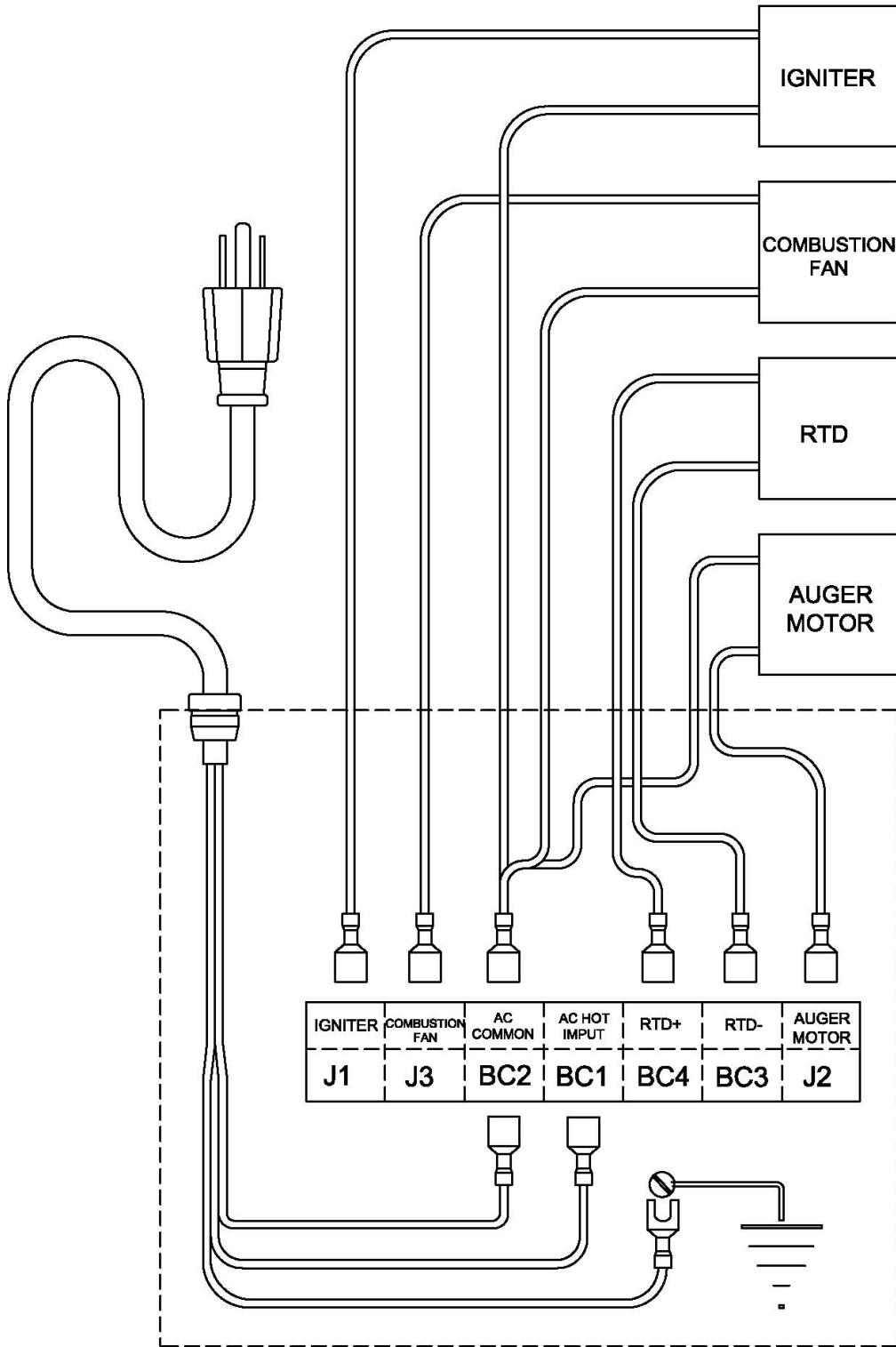
If you wish to smoke at lower temperatures the Memphis Pro is calibrated to allow you to go as low as 180°. **When smoking at the lower temperatures it's critical that you use a premium food grade pellet such as Natures Way flavored BBQ Pellets.** Nature's Way premium pellets are specially formulated from extra clean raw materials and are specifically sized to allow more even feeding at low feed rates. For best results, always use premium pellets.

Caution: We don't recommend that you use the lower temperatures when smoking in cool and or windy conditions. **At temperatures less than 225° to 250° the possibility of ** creosote developing from smoke condensation arises.** As always use your best judgment, but proceed on the side of safety and caution.

The best way to determine where you get the best results is to experiment. We all have different tastes and the best way to determine what's right for you is to try different flavors and techniques. **When you find that "just right" method, don't forget to share it with other owners by going to www.memphisgrills.com/recipes.**

****"Creosote is a gummy, foul smelling, corrosive and flammable substance that, if no precautions are taken, will coat the insides of everything it passes through. It is formed when gases given off in the burning process combine and condense. Typically the gases leave the burn chamber with the smoke. However if restricted too much or if the smoke is cooled below 225°-250°F, the gases can liquefy, forming creosote".**

VG0050 WIRING DIAGRAM



IGNITER	COMBUSTION FAN	AC COMMON	AC HOT INPUT	RTD+	RTD-	AUGER MOTOR
J1	J3	BC2	BC1	BC4	BC3	J2

VG5606 REV A 8/24/09

5 Year Limited Warranty

This limited warranty covers products manufactured by “Hearthland Products, LLC”. **Products carry a 5 year limited warranty from the date of purchase by the original owner against defects in material and workmanship. Electronic and electrical components carry a 2 year replacement warranty when subjected to normal residential use.** Limited warranty does not apply to paint, burn pot, burn grate, grill cover, gaskets or damage caused from corrosion.

Conditions of Limited Warranty

1. During the term of the limited warranty, Hearthland Products LLC.’s (HP) obligation shall be limited to replacement of covered, failed components, F.O.B. point of shipment. HP will repair or replace parts returned to HP, freight prepaid, if the part(s) are found by HP to be defective upon examination. HP shall not be liable for transportation charges, labor costs, or export duties. Except as provided in this CONDITIONS OF LIMITED WARRANTY, repair or replacement of parts in the manner and for the period of time stipulated hereunder shall constitute the fulfillment of all direct and derivate liabilities and obligations from HP to you.
2. The warranty coverage begins on the original date of purchase as stated on the sales receipt. Product registration is required to validate the warranty.
3. Repair or replacement of the HP component does not extend the limited warranty beyond one (1) year from date of purchase.
4. Pouring liquids on or in your HP product will void this warranty.
5. HP takes every precaution to utilize materials that retard rust including the use of high-temperature paint where advisable. Even with these safeguards, the protective coatings can be compromised by various substances and conditions beyond HP control. High temperatures, excessive humidity, chlorine, industrial fumes, fertilizers, lawn pesticides and salt are some of the substances that can affect paint and metal coatings. For these reasons, the limited warranties **DO NOT COVER RUST OR OXIDATION**, unless there is loss of structural integrity on the grill component. Should any of the above occur, refer to you Instruction Manual’s maintenance section for paint finish protection. HP recommends that you purchase a HP full-length protective cover for your grill when not in use.
6. The warranty is based on residential use. Warranty coverage does not apply to products used in commercial applications.

Exceptions to the Limited Warranty

There is no written or implied performance warranty on the HP products, as the manufacturer has no control over the installation, operations, cleaning, maintenance or the type of fuel burned. This limited warranty will not apply nor will HP assume responsibility if your product has not been installed, operated, cleaned and maintained in strict accordance with the manufacturer's instructions. Burning anything other than premium wood pellets may void the warranty. The warranty does not cover damage or breakage due to misuse, improper handling or modifications. **NEITHER THE MANUFACTURER, NOR THE SUPPLIERS TO THE PURCHASER, ACCEPTS RESPONSIBILITY, LEGAL OR OTHERWISE, FOR THE INCIDENTAL OR CONSEQUENTIAL DAMAGE TO THE PROPERTY OR PERSONS RESULTING FROM THE USE OF THIS PRODUCT. ANY WARRANTY IMPLIED BY LAW, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS, SHALL BE LIMITED TO ONE (1) YEAR FROM THE DATE OF ORIGINAL PURCHASE. WHETHER A CLAIM IS MADE AGAINST THE MANUFACTURER BASED ON THE BREACH OF THIS WARRANTY OR ANY OTHER TYPE OF WARRANTY EXPRESSED OR IMPLIED BY LAW, MANUFACTURER SHALL IN NO EVENT**

BE LIABLE FOR ANY SPECIAL, INDIRECT, CONSEQUENTIAL OR OTHER DAMAGES OF ANY NATURE WHATSOEVER IN EXCESS OF THE ORIGINAL PURCHASE PRICE OF THIS PRODUCT. ALL WARRANTIES BY MANUFACTURER ARE SET FORTH HEREIN AND NO CLAIM SHALL BE MADE AGAINST MANUFACTURER ON ANY ORAL WARRANTY OR REPRESENTATION.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations of implied warranties, so the limitations or exclusions set forth in this limited warranty may not apply to you. This limited warranty gives you specific legal rights and you may have other rights, which vary from state to state.

The limited warranty for Five (5) years is in lieu of all other warranties expressed or implied, at law or otherwise, and HP does not authorize any person or representative to assume for HP any obligation or liability in connection with the sale of this product. This means that no warranties, either expressed or implied, are extended to persons who purchase the product from any one other than HP or an authorized HP Distributor.

Procedure for Warranty Service

Call your nearest HP dealer for repair or replacement of your “in-warranty” parts.

Be prepared to furnish the following information:

1. Purchaser’s name, model and serial number of grill and date of purchase.
2. An accurate description of the problem.

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Warranty and Registration Card

Complete and return this Product Registration Card within 30 days of purchase or register online at www.memphisgrills.com. Please submit within 30 days of purchase to register your warranty. **THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.**

First Name _____

Last Name _____

Mailing Address _____

City _____

State _____

Zip Code _____

Model _____

Serial Number _____

Include a copy of your dated sales receipt to complete the registration.

If you would like to receive periodic e-mails with recipes, promotions and other useful information, please write your e-mail address below. Your information will be used by Hearthland Products exclusively and will not be sold to any outside agency.

E-MAIL _____

Send Registration Card to the following address:

Hearthland Products, LLC.
Memphis Grill Warranty Registration
9111 Grand Avenue South
Bloomington, MN 55420

Thank you for choosing a **Memphis Wood Fired Convection Grill.**