

### Premium Pellet Grill - Smoker - Barbecue



Assembly and Operating Instructions

### Model: Platinum SE/Madera 430

Manufactured by Kuma Stoves Inc. Rathdrum Idaho, USA 888-714-5294 www.kumastoves.com

For recipes and cooking tips visit kumastoves.com

Thank you for selecting a Premium Pellet Grill manufactured by Kuma Stoves. We'd like to take this opportunity to share with you a bit about ourselves. We have been making high quality, heavy construction wood stoves for over 30 years. "Quality and performance welded together" has been our motto. Over the years we've maintained the mind set that when someone buys one of our products they're making a significant investment in their home. We appreciate our customers and know that there is plenty of other worthy competition on the market so we build our products right and built them to last. We have now brought that approach and experience to the this pellet grill.

We are a family owned and operated business that still desires to maintain a good relationship with each and every one of our customers. Our mission is to provide you with a quality product that will last. If you should have a problem with your grill we will do what is needed to get it resolved and keep you cooking.

You may have noticed a portion of the Bible included with your owner's packet. It is a gift from us to you. Our faith in Jesus is very important to us and we want to share it with you because of the hope we have in Him. That hope comes from the message of truth that is found in the enclosed Gospel of John.

We're honored to be a part of your family tradition of great outdoor cooking. We anticipate that you will enjoy the use of your new Premium Pellet Grill. From our family to yours –Happy Cooking!

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# **Section 1-** Unpacking, Contents List and Assembly

Step 1:

Unpack your grill and remove all of the components from the box and from inside the grill firebox. If you are installing your grill into an island please go to Built-In Assembly later in this section.

QTY	ITEM	
1	Grill body with digital control box	
4	Legs	
1	Lower Shelf	
4	Casters (2 locking, 2 non-locking)	
2	Side Shelves (one left, one right)	
2	Grease drawers	
4	Disposable grease trays	

1	Quick Grill Zone linkage	
1	Diffuser drip tray	
1	Quick Grill Zone cover	
1	<ul> <li>Hardware/tools:</li> <li>1- QGZ knob</li> <li>26- 1/4-20 hex bolts</li> <li>52- 3/16 flat washers</li> <li>8- 1/4-20 button head (hex key) screws</li> <li>24- 1/4-20 nuts</li> </ul>	<ul> <li>4- 1/2-13 nuts</li> <li>4- 1/2 star washers</li> <li>2- 8-32 button head (hex key) screws</li> <li>5/32 hex key tool</li> <li>3/32 hex key tool</li> <li>3- Tool pegs with backer screw</li> </ul>
3	Cooking grids	
1	Upper cooking grid	
1	Meat probe	
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Required	Tools:

7/16 wrench

3/4 wrench

5/16 wrench

Large flat blade screwdriver

#### Leg Model Assembly Instructions

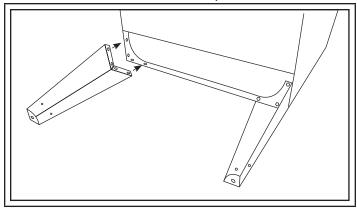
### (For build in model assembly, see instructions located later in this section)

#### Step 1

Lay the grill body on it's back taking care to protect the finish. You may choose to lay the grill on the pallet for a slightly elevated working surface. Do not set the grill body on it's bottom at any time (this could damage the combustion fan).

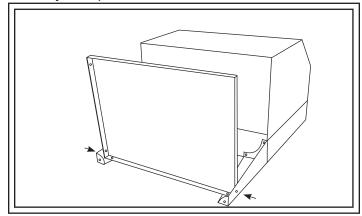
#### Step 2

Install the rear legs to the grill body using the 1/4-20 hex screws, 1/4-20 nuts, and 1/4 washers. Leave the bolts loose until step 4.



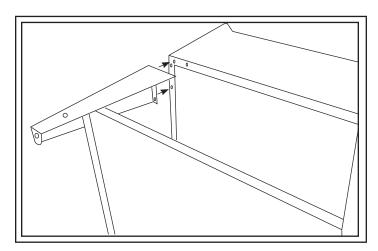
#### Step 3

Install the lower shelf to the rear legs using the 1/4-20 button head screws, 1/4-20 nuts, and 1/4 washers. Tighten the nuts from behind with a 7/16 wrench while securing bolts with the 5/32 hex key tool provided.



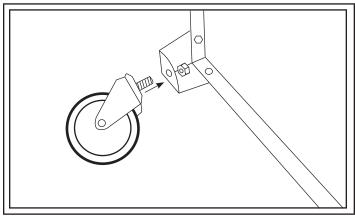
#### Step 4

Install the front legs to the grill body using the 1/4-20 hex screws, 1/4-20 nuts, and 1/4 washers. Tighten all 4 legs with a 7/16 wrench. Attach the lower shelf to the front legs using 1/4-20 but-ton head screws, 1/4-20 nuts, and 1/4 washers. Tighten the nuts from behind with a 7/16 wrench while securing bolts with the 5/32 hex key tool provided.



#### Step 5

Install the 2 locking casters on the front legs and the two non-locking casters on the rear legs using 1/2-13 nuts and 1/2 star washers. Tighten with a 3/4 wrench.

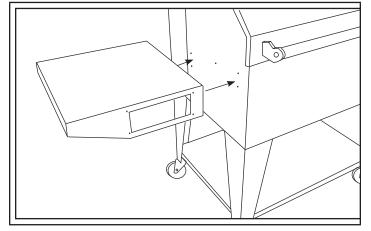


#### Step 6

With help from another person, set upright and finish attaching the lower shelf to the rear legs using the remaining 1/4-20 button head screws.

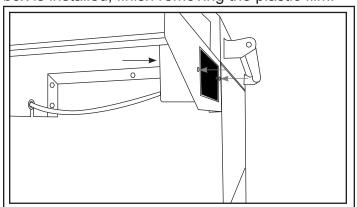
#### Step 7

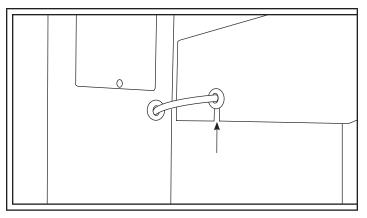
Peel the plastic film back from around the mounting holes of the side shelves. Install the side shelves to the grill body using the 1/4-20 hex screws and 3/16 washers. IMPORTANT: The side shelf with the cut out for the digital control box is installed on the left side as you are facing the grill. Tighten with a 7/16 wrench.



#### Step 8

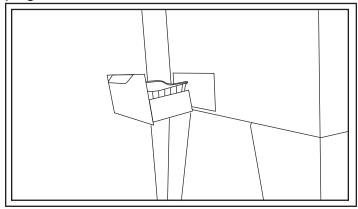
From underneath the left shelf, insert the digital control box face through the cut out and attach with the 8-32 button head screws using the 5/32 hex key tool. Slip the control cable up through the keyhole in the back of the shelf. There is a grommet pre-installed onto the control cable that is to be inserted into the key hole to support and protect the cable. Once the side shelves and control box is installed, finish removing the plastic film.





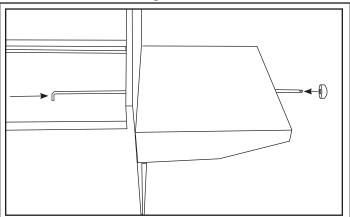
#### Step 9

Pull out the grease drawers located on both sides of the grill. Remove the plastic wrap securing the foil trays to the drawer. Remove one of the two trays in each of the drawers and save for future use. Re-insert the drawer into the grill. They will click into place and are now ready to collect drippings.



#### Step 10

From inside the grill, insert the quick grill zone linkage through the hole on your right and through the hole in the side shelf. Attach the knob to the end of the linkage.



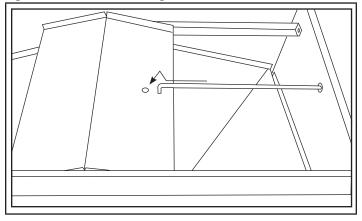
#### Step 11

At this time you may place a small handful of pellets into the burn pot (see section 3: step 2) Install the diffuser drip tray. There is a shelf at the front and back of the grill that the drip tray rests on. With the quick grill zone linkage pulled out of the way, set the drip tray in place as shown in the picture below. It must be inserted below the quick grill zone slide tracks at the front of the grill first then below the slide tracks at the back. Once in place, push the tray all the way to the back of the grill.



#### Step 12

Place the quick grill zone cover onto the tracks so that the linkage hole faces to the right of the grill. With the cover centered in the grill slide the linkage arm into the linkage hole.



#### Step 13

Install the 3 tool hanging knobs through the holes on the right side shelf and tighten from behind with a large flat blade screwdriver. These are aluminum screws so take care not to strip the head.

#### Step 14

Place the 3 cooking grids on the grill and Congratulations, you are ready to go! You may also add or remove the upper cooking grid at any time by keying it into the slots at the back of the grill. Up to 2 additional upper cooking grids can be purchased to expand your cooking surface to nearly 1,000 square inches.

The rest of this section is for installing the grill into an island. Please proceed to Section 2 for important safety information.

## Built-In (Island) kit Assembly Instructions

Considering the Grill Cabinet Size, Location and Access.

**Power Requirement –** One 15 Amp GFCI protected outlet is required.

**Make-up Combustion Air** –A supply of make-up combustion air opening of 24 sq. inches minimum (Approximately 4"X 6") is required for the pellet burner combustion. This can be anywhere on the grill cabinet, as long as the air is common to the grill cavity.

**Pellet Dump –** The grill is equipped with a pellet dump tube located at the rear bottom of the grill body. Access doors into the grill cavity, to catch the pellets when a different wood flavor if desired, is a must. This access will be useful for many things, such as; electrical, blower service and storage as well.

**Grease Collection Containers** – Your grill has internal grease collection containers located at the bottom of the grill, coming out of the left and right side. These will need to be taken into consideration when the access to the grill cabinet is planned. A well-planned Island/Cabinet design can simplify access to all the features on your grill.

Note: the disposable foil grease containers can easily be changed from the top side by removing

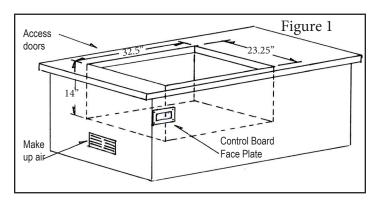
the cooking grids and the diffuser/drip tray, if access to the grill bottom is difficult. If you are only going to access the grease collection containers from the top side you can silicone the drawers shut.

#### **Island/Cabinet Preparation**

**Cabinet Construction –** All materials used in the Island/Cabinet construction must be non-combustible. Materials that are commonly used are: metal framing studs for the framework, cement board coverings, tile, masonry or any other non-combustible fascia. The cabinet top could be tile, granite, or stainless steel.

**Grill Opening/Clearance –** Figure 1 shows the opening size and clearance required for your grill. Simply provide a 23 1/4"W X 32 1/2" L opening in your cabinet top and "drop-in" much like a sink would install. The stainless steel angle support rim simply rests on the Island/Cabinet Top. The dimensions shown in Figure 1 show the minimum clearances required for the grill to drop-in. The cavity shown (14" D X 23 1/4" W X 32 1/2" L) is not meant to be boxed in. In fact, the entire grill Island/ Cabinet can be open inside with the possible exception of creating storage areas behind doors. Clearance for the grease drawer removal needs to be considered if bottom access is planned.

\*\*IMPORTANT\*\* Make sure the grill can breathe! As discussed above, the grill needs a free, open, supply of combustion air. Make sure that the minimum air openings of the 24 sq. inches has unobstructed access to the combustion fan at the grill bottom.



Electrical - Your grill comes with an 8' long

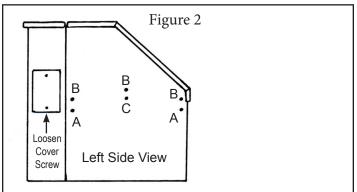
grounded power cord coming from the left side. Supply a grounded GFCI outlet box within that 8' range. Make sure all wiring meets any applicable electrical codes. Contact your dealer, or a qualified electrician if needed.

**Control Box Faceplate** –Your built-in kit includes a control board faceplate. Screw the faceplate to the Island/ Cabinet framework within 6" of the grill front-left-side below the counter top. It is ideal to make this faceplate removable for servicing the grill controls. The clearance must be maintained for the control box to be attached to the faceplate back with the two 8-32 X 1/2" screws.

#### Assembly

- Parts contained in your built-in kit:
- 1-Control Board Faceplate
- 2-Front/Rear Angle Brackets
- 1-Left Side Angle Bracket
- 1-Right Side Angle Bracket
- 1-Hardware Packet Containing:
  - 4-Stainless Steel 1/4" X 3/4" L Bolts
  - 6-Stainless Steel 1/4" Flat Washers
  - 2-Stainless Steel 1/4" Nuts
  - 1-Quick Grill Zone Control Knob
  - 1- 5/16" Push-in Plug
  - 6-3/16 Push-in Plugs
  - 2-8-32 x 1/2 button head screws
  - 1-3/32 hex key tool
  - 1-Stainless Steel Quick Grill Control Rod

Tools Needed: 7/16" hex box end wrench or a ratchet with a 7/16" socket and a hex key tool set.



**Step 1**- Loosen the lower access cover screw 1- 1 1/2 turns. This will facilitate the removal of the equipment access cover without having to

**Step 2-** Press-in the small silver push-in plugs at location "B" on both sides. Press in the large silver push-in plug at location "C" on the left side only. These are holes that are used for side shelves when the grill is used on wheels and are not needed for Island installations.

**Step 3-** At location "A" using 1/4-20 screws and washers, attach the left side angle, leaving the bolts loose for now. Orient the sides (left and right) so that the studs attached to the angle brackets are protruding outward at the back of the grill. Bolt on right side similarly.

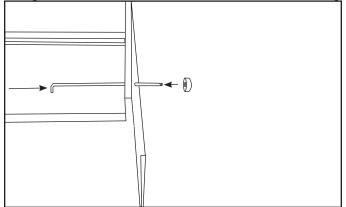
**Step 4-** Install the front angle piece. With the forked tabs pointing back, slide the forked opening onto the front 1/4" bolt that is loose. Make sure the fork is behind the washer as it is tightened. Hold the front angle piece tight against the grill front, and slide the left angle forward for a close fit. Tighten the bolt snugly. Repeat for the right side and tighten.

**Step 5-** Install the rear angle piece. Slide the forked opening of the rear angle onto the studs at the rear of the left and right angles. Install the flat washer and nut on the studs on both sides. Holding the rear angle tight against the grill back, tighten the nuts snugly. Tighten remaining 2 bolts at "A" locations. Check bolt tightness on all fasteners. Do not over-tighten.

**Step 6-** Route the power cable and control cable down through the Island/Cabinet opening being careful not to damage them when lowering the grill into position. Remove grease drawers prior to install.

You will need plenty of help to lower the grill into the cavity as it is 200+ lbs. Place 2" X 4" blocks at the grill opening corners for shims so that fingers are not smashed against the counter top. Lower the grill onto the counter top one side at a time. Remove the plastic wrap securing the foil trays to the grease drawer, remove one of the two foil trays in each drawer and re-insert the drawers. **Step 7-** Bring the control box up to the faceplate from inside the island and fasten the control box to the cabinet faceplate using the two 8-32 X 1/2" screws. Fasten the faceplate to the cabinet front. Plug the grill into the grounded outlet.

**Step 8-** From inside the grill, insert the quick grill zone linkage through the hole on the right side of the grill. Attach the knob to the end of the linkage.

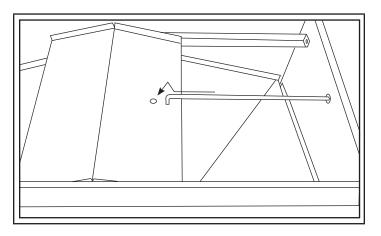


Step 9- At this time you may place a small handful of pellets into the burn pot (see section 3: step 2) Install the diffuser drip tray. There is a shelf at the front and back of the grill that the drip tray rests on. With the quick grill zone linkage pulled out of the way, set the drip tray in place as shown in the picture below. It must be inserted below the quick grill zone slide tracks at the front of the grill first then below the slide tracks at the back. Once in place, push the tray all the way to the back of the grill.



**Step 10-** Place the quick grill zone cover onto the tracks so that the linkage hole faces to the right of

the grill. With the cover centered in the grill slide the linkage arm into the linkage hole.



**Step 11-** Place the 3 cooking grids on the grill and Congratulations, you are ready to go! You may also add or remove the upper cooking grid at any time by keying it into the slots at the back of the grill. Up to 2 additional upper cooking grids can be purchased to expand your cooking surface to nearly 1,000 square inches.

#### **Section 2-** Important Safety Information

- CAUTION: Your Grill is to be used in an outdoor location- one that allows for adequate ventilation and protects from being used in a wet environment.
- Plug the unit into a GFCI (Ground-Fault Circuit Interrupt) protected outlet. Remember to unplug your grill after use. (Wait until cooling fan has automatically shut off.) Unplug unit before cleaning or performing service work.
- All surfaces can become hot, including handles. Use caution and grill gloves if needed.
- Supervise children in the area during and after using the unit as any part of the grill can become hot.
- Maintain a clearance of at least 12 inches from the back and sides of your grill. The grill produces an open flame- do not store any flammable liquid near the grill.
- Cooking certain foods can cause grease to accumulate quickly. To prevent grease fires; regularly clean your grill and replace the foil

drip trays. If you do have a grease fire, remove the food (if you are able to do so safely) and close the lid until the fire is out. Do not use water to put out a grease fire.

- Do not cover the exhaust vents at the top of your grill.
- Be sure the grill has thoroughly cooled before cleaning, moving and covering.
- Use only food-grade wood pellets. Do not use wood chips/chunks, charcoal or lava rocks.
- The grill is for residential purposes.
- Every home should have a type ABC fire extinguisher in good working order

# **Section 3-** Initial Priming and Seasoning the Grill

#### Follow these steps one time before you begin using your grill.

- 1. Fill the hopper at the rear of the unit with quality hardwood cooking pellets.
- Place a handful of pellets (about 1/3 cup) directly into the burn pot. This fuel allows the grill to light while the auger is priming for the first time.
- 3. Plug the grill into a GFCI protected outlet.
- Power on the grill by pushing the power button on the control board. Using the TEMP Arrows set the cook temperature to 400°.
- 5. Push the prime button on the grill for 2 minutes or until you hear pellets dropping into the burn pot.
- 6. Let the grill run for 1 hour then push the power button again to shut down the grill. The initial priming and seasoning process is complete and you are now ready to cook! You will notice that every time you power off your grill the combustion fan will continue to run until the grill is sufficiently cool.

# Section 4- Cooking With the Grill

With your Premium Pellet Grill you will soon be grilling, barbecuing, slow smoking and even bak-

ing. But before we get cooking, here are a few helpful tips to keep your grill looking and working as fantastic as your food is going to taste:

- Only use premium grade BBQ wood pellets. Do not use home heating pellets. We recommend Bear Mountain<sup>™</sup> Premium Hardwood Cooking Pellets available through you dealer or at maderagrills.com
- Keep your pellets and your grill dry by always covering your grill.
- You may cover the sides of the drip tray and Quick Grill Zone cover with aluminum foil to make cleaning easier.
- Wipe down your grill with a damp cloth after each use.

#### About The Quick Grill Zone Slider

The Quick Grill Zone is used for high temperature direct grilling and searing over the center grid of your grill. To use the quick grill zone, simply slide open the cover by pulling out the handle located on the right side shelf until it stops. Place your food on the center of the grill and sear it to perfection. When grilling on high (480° or FL-3), the center cooking grid will reach temperatures over 600°. To close off the quick grill zone and return to indirect cooking, push the handle back in until it stops.

#### About The Adjustable Exhaust Vents

Your grill features adjustable exhaust vents that can be used to create the perfect cooking environment regardless of the weather conditions. Most of the time you will simply leave both vents open. On a windy day you can close off one side of the exhaust to block the wind. On a very cold day you can partially close both vents to minimize heat loss. Remember that your grill automatically controls the temperature inside the grill by adjusting the fuel and combustion air, the adjustable vent can simply be used to block excessive wind or cold weather. CAUTION: Do not touch the exhaust vents while the grill is running as they will be extremely hot. If you would like to adjust the vents while the grill is running, use a bbg tool or hot mitts.

#### About Your Digital Controls

Your grill automatically controls the temperature, smoke, and convection with the push of a button. When you choose an operating temperature of 300° or below, the grill operates in smoke mode. In smoke mode you will notice the fan "bellowing" or coming on and off to control both temperature and smoke. When you choose an operating temperature above 300°, the grill operates in grill mode precisely controlling the temperature of your grill.



- 1. **Power -** This powers on and automatically lights the grill. When you start your grill this is always the first button that you push. Push the button again, at any time to shut down the grill.
- Prime This button manually runs the auger to prime the feed tube and burn pot. Only use this button if you are starting your grill for the first time or if you run the grill out of pellets. (See section 3 for initial seasoning and priming your grill).
- 3. **TEMP Arrows -** Adjusts the set point temperature up or down.
- 4. PROBE Button The PROBE Button toggles the display between •Grill and •Meat. When the •Grill indicator light is on: you are displaying and controlling the temperature of the grill. When the •Meat indicator light is on: you are displaying and controlling the temperature settings of the meat probe. Note: You must plug in your meat probe in order to use the meat probe feature (see "Understanding The Meat Probe" later in this section).
- DISPLAY Button The DISPLAY Button toggles the display between •Actual temperature and •Set point Temperature. When the •Actual indicator light is on: the grill is displaying the actual temperature of the selected probe. When the •Set point indicator light is on: the grill is displaying the current set point for the selected probe.

- 6. LED Display Displays the temperature readouts for the grill.
- 7. **Probe Input:** Plug in the meat probe when using the probe feature.

#### **Starting Your Grill**

- Make sure that the hopper is filled with hardwood cooking pellets and make sure that you have completed section 3 (initial priming and seasoning).
- 2. Make sure your grill is plugged into a GFCI protected outlet.
- 3. Push the power button then, using the TEMP arrows, select any desired cooking temperature.
- 4. Your grill will automatically run a lighting sequence that will last about 10 minutes. You will notice that the **Grill** indicator light will flash on the board during the lighting sequence. Once the lighting sequence is over the grill will begin to operate at the temperature that you have selected.
- If your grill fails to light and reach a minimum temperature after 30 minutes, your grill will automatically shut down and display ER-2 (Failure to light). If this happens, clean out the burn pot and restart.

#### **Using Your Grill:**

Once lit, the grill uses the internal temperature probe to adjust fuel and fan cycles (bellowing) allowing the grill to maintain the cooking temperature that you select. If you would like to see the current temperature inside the grill, simply push the **DISPLAY** button. The **OActual** indicator light will be on and the LED display will show the current temperature inside the grill. Allow the grill to pre-heat for 15-30 minutes before placing your food on the grill. You can change the temperature of your grill at any time by pressing up or down on the temperature arrows. Important: to maintain your desired cooking temperature, always use the grill with the lid closed as much as possible. Opening the lid too often will waste pellets, reduce temperatures, and greatly increase your cooking time.

#### Grilling. ~350°-480+°

Grilling is done over high heat and is the way to

go for backyard staples such as steaks, hamburgers and hot dogs. For wood-fired grilling on your Grill simply power on your grill and set to the desired grilling temperature.

#### Using the quick grilling zone

For high temperature grilling and searing you can easily slide open the quick grill zone by pulling out the handle located on the right side shelf until it stops. Place your food on the center of the grill and sear it to perfection. When grilling on high (480° or FL-3), the center cooking grid will reach temperatures over 600°. To close off the quick grill zone and return to normal barbecuing, push the handle back in until it stops.

#### Manual Cooking Mode:

The grill has 3 manual cooking modes in which the feed system delivers preset amounts of fuel to achieve a low, medium and high flame. To use manual cook modes, push up on the TEMP arrows until the set point is 480°. Continue to push the up arrow and the display will read FL-1 (low flame) FL-2 (medium flame) and FL-3 (High flame). Warning: operating the grill in FL-3 for extended periods of time with the lid closed may cause the grill to overheat and automatically shut down. To return to normal operation simply push down on the TEMP arrow and select a desired temperature. Pellet grills should usually always be run with the lid closed to conserve pellets, but if you would like to cook with the lid open, these modes provide a consistent flame without using too much fuel.

#### Barbecuing. ~220°-350°

To BBQ is to cook with indirect heat in a smoky environment. Roasts, ribs, chicken and various vegetables are excellent on the Barbecue. Great BBQ is easy with the Grill. Be sure the Quick Grill Zone is closed and using the TEMP control pad, set the your grill to your desired BBQ temperature. In about 15 minutes the barbecue will be hot and ready. Load the cooking grids with food, close the lid and let the Grill do the rest. There's no need to tend your food, turning it often, or worry about it getting burned. That's the beauty of indirect cooking. Through convection the woodfire heat is distributed all around the food, sealing in juices while cooking evenly. When barbecuing, leave the lid closed. This will help maintain a more even temperature, efficient cook time, smoky flavor and save your wood fuel. For larger items, such as a big roast or whole chicken, use the meat probe for worry-free barbecuing. Make sure you insert the meat probe horizontally into the center of the largest part of meat (e.g. - on whole chicken- the center of the breast.) Your grill will turn down to 200° and sound an alarm when the food is done (see: "Using Your Meat Probe" below).

#### Slow Smoking. ~180°-220°

When your temperature is set below 300° the grill is in Smoke Mode and automatically adjusts the fuel and combustion air for optimal smoking. Preparation for slow smoking in your grill is similar to barbecuing. With the Quick Grill Zone closed, set the controls to your desired temperature and load the grids with food. Remember that some smoked foods need a longer cooking time so be sure to fill your pellet hopper before smoking. *When smoking at low temperatures (below 180°) extreme care should be taken to ensure bacteria does not grow on food.* If you are unsure about how to properly smoke meats, only use your grill at low temperatures to smoke fish, nuts etc.

A tip to help achieve your desired level of smoke flavor is to combine a slow smoke session with a grill or barbecue session. You can smoke a whole chicken at 180° for an hour then finish it off by barbecuing at 350° until done. You can also bake in your new pellet grill. It will achieve as consistent a temperature as your kitchen oven, and makes excellent pizza, calzones and breads. As a rule, the higher the temperature your grill is set to the less smoke it will produce. Thus, a pizza cooked at 425° will have just a hint of brick-oven smoke flavor. Desserts like oatmeal raisin cookies and apple pie are uniquely delicious when prepared in your grill.

#### Tips For Smoking In Warm Weather

Your new pellet grill is very well insulated which means you will cook with less fuel and more even temperatures. This also means that in warmer weather (70° and above) it can be more difficult to achieve low temperature smoking (below 200°). Make sure that your exhaust vents are fully open when low temperature smoking. If you require lower temperatures in hot weather, you can prop open the lid of the grill 1-2" to allow excess heat to bleed off, lowering the temperature of the grill.

#### Low and High Temperature Warning

If the grill goes below the minimum operating temperature, it will re-enter ignition mode and attempt to relight the grill. If the grill does not re-light within 30 minutes, the grill will shut down and display ER--2 (failure to start). If the grill detects temperatures above 600°, it will shut down and display ER--1 (over temperature error).

#### If You Run The Grill Out Of Pellets.

Try to always watch the level of fuel in the pellet hopper so that you do not run the grill out of fuel. If you do, you will need to re-prime the auger feed tube just like you did when you lit the grill for the first time:

- Fill the hopper with quality hardwood cooking pellets. Place a small handful of pellets directly into the burn pot
- Power on the grill (any temperature setting) and push the prime button for 2 minutes or until you hear pellets dropping into the burn pot.

#### When to use the meat probe

Using the meat probe allows you to barbecue your food to an internal temperature that you select. Use the meat probe when you are cooking larger cuts of meat such as roasts, whole turkeys, and brisket. For checking the internal temperature of smaller cuts like steak, chicken thighs, and fish, we recommend using an instant read handheld BBQ thermometer.

#### Understanding The Meat Probe Function

When the probe is plugged in and the Probe Button is set to **•Meat** the target temperature for the meat probe is displayed. The Temperature arrows can be used to adjust the meat probe set point between 80° and 200°. Press Display to see the **•Actual** temperature of the meat. Note: If you adjust the temperature settings, the display will automatically revert to the **•Set point** Display state.

#### Using your meat probe.

Before setting your probe see the cook time chart below to determine the minimum safe internal temperature for different cuts of meat.

**Step 1:** Insert the meat probe plug into the input located on the face of the Digital Control Board **Step 2:** Insert the probe through the exhaust vent on the side of the grill and into the thickest part of your meat.

Step 3: Fire up your grill and set your desired cooking temperature just as your normally would.Step 4: Push the PROBE button so that the

•Meat indicator light is on. Select your desired internal meat temperature by pressing up or down on the Temperature arrows.

**Step 5:** Closely monitor your meat's internal temperature by pushing the **DISPLAY** button so that the **Actual** indicator light is on. When the meat is within 5° internal temperature that you have set, the grill will automatically turn down to 180° and the display will read "dOnE".

If you are going to continue cooking after your meat is done simply unplug the meat probe and select your desired temperature using the temperature arrows.

Thoroughly wash your meat probe with warm soapy water in between each use.

#### **Meat Temperature Chart**

This chart is a guideline for cooking meats to a safe minimum internal temperature using a food thermometer. You may prefer to cook your food more but you should not cook less than these internal temperatures.

Meat	Minimum Internal Temperature	Rest Time
Beef, Pork, Veal & Lamb Steaks, chops, roasts	145°F	3 minutes
Ground Beef, Veal, Lamb, and Pork	160°F	N/A

Meat	Minimum Internal Temperature	Rest Time
Ham: Fresh or smoked (un- cooked)	145°F	3 minutes
All types and cuts of poultry	165°	N/A
Fish	145°	N/A

### Recommended Cook Temperatures and Times

Food	Weight/Size	Temp/Time
Hamburgers	1/3 lb.	450° -480° for 3-5 mins./side
Pork Chops	1" Thick	400° for 5 min./side
Steaks (rare)	3/4" Thick	480° for 4 min./side
Steaks (me- dium)	3/4" Thick	480° for 5 min./side
Steaks (well done)	3/4" Thick	480° for 6-7 min./side
Pork Loin	1.5 lbs.	480° for 20-25 minutes
Whole Chick- en (180° in thigh)	3-4 lbs.	325° for 60-70 minutes
Chicken Breasts	5-8 oz. each	325° for 10-15 mins./side

#### Using the Hopper Stopper<sup>™</sup> Quick Change Pellet System

#### Step 1: ALWAYS POWER OFF AND UNPLUG YOUR GRILL BEFORE EMPTYING THE HOP-PER.

Step 2: Place a bucket on the lower shelf of the grill underneath the pellet drain tube. The tube is located directly under the center of the hopper.Step 3: Open the hopper lid and pull forward and down on the stopper handle until it comes free. Pull the stopper entirely out of the hopper. The

pellets will now drain into the bucket on the shelf. If the pellets stop draining, stir them with the stopper until they begin to flow again.

**Step 4:** Make sure no pellets or dust remain on the drain flange next to the auger screw. Replace the stopper by depressing the button and clicking back into place.

**Step 5:** Refill the hopper with a new flavor of pellets and you are ready to light your grill.



#### Section 5- Care and Maintenance

#### Grill Exterior (every use)

Wipe the exterior of the grill with a warm damp cloth. Cleaning foreign material off before the unit is heated will prevent "baked on" grime. Do not use any abrasive scrubber/cleaner on the black surfaces of your grill. Grease cutting cleaners or warm soapy water works well for these surfaces. Only clean the grill when it is completely cooled. Be sure to thoroughly remove any cleaner residue with a damp cloth.

#### Grease Trays (check every use)

Pull out the removable grease drawers located on the sides of the grill and inspect the aluminum foil grease trays in the grill. Keep the grease trays clean or you can simply throw them away and replace with new ones every few times you use the grill. (Available at your local dealer or www. kumastoves.com)

#### Grilling Grids (every use)

Clean the grids with a long handled BBQ brush as soon as you are done using the grill. They clean easily when warm and will be ready to go for you next time. The grids are also dishwasher safe. Use caution to avoid burns.

#### Temperature Sensor (once a month)

There is a temperature sensor (also called an RTD) located in the left rear of the grilling area. Keeping this clean allows the digital control to accurately maintain temperature. When the grill is cool, gently wipe the sensor with a damp cloth.

#### Burn pot & Grill Bottom (every 3-5 uses)

With unit completely cool, remove all the grids. Remove the quick grill zone cover and slide control rod out of the way. Carefully lift the diffuser drip tray up and out of the grill. Remove any ash from the bottom of the grill and the burn pot. Very important! If you us a shop vac to clean the burn pot you must be absolutely certain the ashes are completely cooled before vacuuming. If you have just used the grill, do not use a shop vac. A tiny ember left to smolder in a shop-vac could result in a house fire!

#### Air Box (once a year)

Make sure that the grill is unplugged and completely cool before cleaning the air box. Remove the two screws that secure the burn pot to the air box. Remove the burn pot from the air box and set aside being careful not to pull the ignitor wires attached to the pot. Vacuum out the air box and reattach the burn pot.

#### Cover Grill.

Although your grill is constructed from stainless and aluminized powder coated steel which makes it weather resistant, it still needs to be protected from weather. You should always cover your grill when it is not being used.

#### Pellet Hopper (extended storage)

If you are going to store your grill for an extended period of time, we recommend removing the pellets from the hopper and the auger tube. **Unplug your grill before cleaning out the hopper.** Follow the instructions at the end of section 4 to empty the hopper using the Hopper Stopper<sup>™</sup> pellet dump. Close the hopper lid and plug in your grill. Run the grill on high until the auger is empty and the grill goes out.

# **Section 6-** Troubleshooting Guide

Use this guide if you are have trouble operating your grill. For additional help you can contact your dealer, call Kuma Stoves directly at 888-714-5294 or send an e-mail to jack@kumastoves.com

#### **Error Codes:**

If an error is detected, the system will perform the normal shutdown procedure regardless of the error value. The system cannot run while an error is present. If an error has been detected, it can be cleared by pressing the On / Off button to enter the Run Mode. However, if the cause of the error is still present it will enter the Error Mode again. **ER-1** – Over Temperature Error – This error can be detected at any time, and simply means the Grill Probe temperature exceeded 600°F. This can also be a sign of an open connection between the grill control and the Grill Probe. ER-2 – Failure to Start Error – Occurs when the ignition procedure fails to increase the temperature above 160°F within a 30 minute window. ER-3 – Power Failure Error – Occurs when the system is in the Run Mode and power is lost. When power is reapplied if the system detects a temperature of less than 160°F, the assumption is that power was lost and the fire went out while power was removed. It does not attempt to re-light the grill in this case. If power is re-applied before the temperature falls, the system will return to the last set point and continue the Run Mode normally.

**ER-4 – Grill Probe Short Circuit –** Occurs when the system detects a shorted Grill Probe that cannot be used to reliably measure temperature

Problem	Solution
Grill powers on but will not light or stay lit	<ul> <li>Make sure there are pellets in the hopper.</li> <li>Check for excess ash in the burn pot</li> <li>Without touching, carefully see if the ignitor is getting hot.</li> <li>Make sure the combustion fan is running.</li> </ul>
Grill will not power on	<ul> <li>Make sure the grill is plugged in to a working outlet.</li> <li>Check the fuse on the back of the digital control. Replace if blown.</li> </ul>
Grill will not maintain correct tem- perature	<ul> <li>Make sure the combustion fan is running. (The fan will "bellow" or run intermittently).</li> <li>Check for excess ash in the burn pot.</li> <li>Protect the grill from high winds and keep the lid closed as much as possible.</li> </ul>
Center grid gets too hot or experi- encing flare- ups	<ul> <li>Make sure that the Quick Grill Zone is fully closed.</li> <li>Make sure the diffuser is cor- rectly installed.</li> <li>Clean excess grease from the diffuser.</li> </ul>
Too much or very thick smoke	<ul> <li>Check for excess ash in the burn pot</li> <li>Check for wet pellets in the hopper</li> </ul>
Auger is not running	<ul> <li>During startup and normal operation the auger runs intermittently - this is normal.</li> <li>With the grill unplugged, empty the hopper and check for any obstruction in the auger tube.</li> </ul>

# **Section 7-** Basic Service, Replacement Parts and Accessories

These are basic guidelines for servicing the components that make up your grill. Check with your local dealer for all replacement parts and

accessories. Service questions can also be answered by calling the factory at 888-714-5294 or by contacting your local dealer. **To perform any service to your grill, you must make sure that the grill is not plugged into an outlet.** 

#### **Replacing the Digital Control Board.** To perform any service to your grill, you must make sure that the grill is not plugged into an outlet.

With an hex key tool, remove the two screws on the face of the side shelf that attach the control box to the side shelf. Carefully pull the control box away from behind the side shelf. With a 5/16 wrench or driver bit, remover the 2 screws on the bottom of the control box to disassemble the box. With a hey key tool and 3/8 wrench remove the screws and nuts that attach the control board to the control box. Carefully remove the 7 spade connectors taking note of where each one goes. Carefully connect the spade connectors to the new control board. Black wire connects to HOT. White wire connects to COM. Yellow wire connects to AUG. Blue wire connects to FAN. Red wire connects to IGN. Brown wires connect to PROBE 1. Reassemble and reinstall the control box.

#### Replace the Digital Control Board Fuse. To perform any service to your grill, you must make sure that the grill is not plugged into an outlet.

To protect the digital control from power surges, the board is equipped with a 5 amp 250 volt fuse. To replace the fuse, remove the two screws underneath the side shelf on the bottom of the control box. Slide the control box away from the side shelf exposing the circuit board underneath the side shelf. Carefully remove the blown fuse and replace with a new fuse. Reinstall the control box.

### Remove/Replace the Auger and Auger Motor.

#### To perform any service to your grill, you must make sure that the grill is not plugged into an outlet.

To remove the entire auger assembly, open the side access panel on the left side of the hopper. Disconnect the plug labeled "AUG". Remove the two screws above and below the auger motor.

The motor with the auger attached will now slide straight out of the access panel. To remove the auger motor from the auger assembly, remove the nut and bolt from the auger sleeve. Reinstall and reconnect the auger assembly and the auger connection wire making sure they are clear of the fan blades.

#### Remove/Replace the Combustion Fan. To perform any service to your grill, you must make sure that the grill is not plugged into an outlet.

Open the side access panel on the left side of the hopper. Disconnect the plug labeled "FAN". From below the grill, unbolt the fan cage to expose the combustion fan. Remove the 4 screws that fasten the fan to the air box. Reinstall the fan and reconnect the fan wire making sure that all wires are clear of the fan blades.

#### Remove/Replace the Ignitor.

#### To perform any service to your grill, you must make sure that the grill is not plugged into an outlet.

Remove the 2 screws that fasten the burn pot to the air box inside the grill. Remove the burn pot and loosen the ignitor set screw with a hex key tool. Remove the ignitor and the small sleeve inside the set collar. Open the side access panel on the left side of the hopper. Disconnect the plug labeled "IGN" (you will need to cut a small zip tie). Pull the old ignitor through the hole in the air box and out the side access panel. Thread the new ignitor through the same hole in the air box. Slip the ignitor sleeve onto the new ignitor. Insert the new ignitor into the burn pot until 1/16" is extending past the ignitor tube. You will need to align the ignitor sleeve with the set collar before tightening. Tighten the set screw securing the ignitor in place. Re-install the burn pot. From the side access panel, connect the new ignitor to the plug labeled IGN making sure that all wires are clear of the fan blades.

### Remove/Replace the RTD (Temperature Sensor)

To perform any service to your grill, you must make sure that the grill is not plugged into an outlet. Open the side access panel on the left side of the hopper. Find and disconnect the plug labeled "RTD". With a pair of wire cutters, cut the plug housing off of the RTD lead wires. DO NOT CUT THE PLUG HOUSING OFF OF THE OTHER SIDE (HARNESS SIDE) OF THE PLUG. From inside the grill at the back right, remove the screws that fasten the RTD to the grill. Remove the RTD pulling the lead wire through the small hole in the back of the grill. Slip the lead wires for your new RTD down through the center hole between the 2 screw holes then through the hole in the back of the grill. You can reach up from underneath the hopper to guide the wires above the fan air box over to the left side access panel. Insert the 2 lead wires to the new plug housing (you will hear a click when they are in place). It does not matter which way the wires are connected. Give them a little tug to make sure they are secure in the housing. Plug the RTD back into the plug labeled "RTD". Fasten the new RTD to the grill using the same 2 screws.

#### Section 8- Warranty Information

Your grill manufactured by Kuma Stoves Inc. has a 5 year limited warranty effective from the date of purchase by the original owner against defects in material and workmanship. All electronic components have a 3 year replacement warranty. The limited warranty does not apply to the meat probe, burn pot, or cooking grids.

#### Warranty Coverage:

To ensure warranty coverage, it is very important that you save your proof of purchase and register your warranty within 30 days of purchase at kumastoves.com or fill out and return the warranty registration in your owners packet. This warranty covers your new grill from defects in materials and workmanship for the period outlined in this warranty. Kuma Stoves reserves the right to replace, repair or authorize repair of any defective part at its sole discretion. This warranty is not transferable and covers only the original owner of the product from the time of purchase. All parts that have been replaced under this warranty will have 90 day warranty coverage. The maximum value of this warranty is the original purchase price of the product. This warranty is subject to the conditions and limitations outlined in this section.

#### Warranty instructions:

For your warranty claim, please contact the dealer where you purchased your grill. You may also contact Kuma Stoves directly at 888-714-5294 or contact us online at kumastoves.com. When making warranty inquiries please have your proof of purchase and model name. Also, please remember that shipping and handling costs are not covered under this warranty.

#### Warranty exclusions:

Due to variables beyond the manufactures' control, no implied or written performance guarantee or warranty is given for the unit or food product. This warranty does not cover: 1. The formation of rust- except in the case of structural damage within the five year period. 2. The finish of any surface on the unit. 3. Any unit used in a commercial or nonresidential application. 4. Damage caused from: power surges, unauthorized modifications, using incorrect fuel and/or accelerants, shipping/handling, failing to follow the manufacturer's assembly/installation instructions. 5. Damages due to ordinary wear and tear. 6. Damages due to a failure of the customer to provide normal maintenance and care for the unit. 7. Damages due to natural disaster or natural elements. 8. Wear characteristics typical of the materials that are used. 9. Damages to any product not manufactured by Kuma Stoves. 10. Shipping costs associated with replacement parts. Please talk with an authorized dealer about the potential charges for shipping.