



# PELLET GRILL OWNER'S MANUAL

## **FOR OUTDOOR USE ONLY!**

Please read this entire manual before using your Pitts & Spitts Pellet Grill. Failure to follow these instructions could result in property damage, bodily injury or even death. Contact your local building or fire officials about restrictions and inspection requirements in your area.

# SAFETY INSTRUCTIONS

FAILURE TO MAINTAIN THE REQUIRED CLEARANCE TO COMBUSTIBLES MATERIALS SIGNIFICANTLY INCREASES THE CHANCES OF A FIRE.

IT IS OF UTMOST IMPORTANCE THAT THIS PRODUCT BE INSTALLED AND OPERATED IN ACCORDANCE WITH THESE INSTRUCTIONS.

## DANGER!

- Hazardous voltage is present which can shock, burn or cause death. Disconnect the power cord before servicing the pellet grill.
- Never use or store flammable liquids or combustible materials near the pellet grill.
- Never use gasoline or other fuel oils to manually light your pellet grill.
- Never add pellets by hand to or touch a hot burn pot. This is dangerous and you may be seriously burned. If you run out of pellets and lose your fire while cooking, start again with the initial Startup Procedure.

## WARNING!

- When operating this pellet grill, maintain a minimum distance of 36" from the exterior of the pellet grill to combustibles.
- When operating this pellet grill under overhead combustibles (ceilings, tents, etc.) allow at least 40 inches of clearance from the top of the smoke stack.
- Operate your pellet grill only within the guidelines of this Owner's Manual.
- This pellet grill is intended for OUTDOOR USE ONLY.
- Never use heating fuel pellets in your pellet grill.
- USE PITTS & SPITTS HARDWOOD PELLETS TO PRESERVE YOUR WARRANTY AND FOR BEST COOKING RESULTS.
- You should never move your pellet grill while it is hot.
- Never put water into the burn pot.
- DO NOT ALLOW CHILDREN TO OPERATE THE PELLETT GRILL OR PLAY WITH THE BUTTONS.
- Do not allow your pellets to overflow in the burn pot without reigniting the fire using the ignitor. Doing so could cause a complete combustion of the pellets in the burn pot.
- Do not leave your grill plugged in when not in use.

## CAUTION!

- Always store wood pellets in a dry location, away from heat-producing appliances and other fuel containers.
- Keep your pellet grill clean and do not allow excess grease or ash to collect inside or on the pellet grill. Doing so significantly increases the chances of a grease fire and additional smoke which can taint the flavor of your food.
- Make sure the deflector plate completely covers the burn pot. If not situated properly, direct heat and flame could come up out of the burn pot and cause a grease fire.

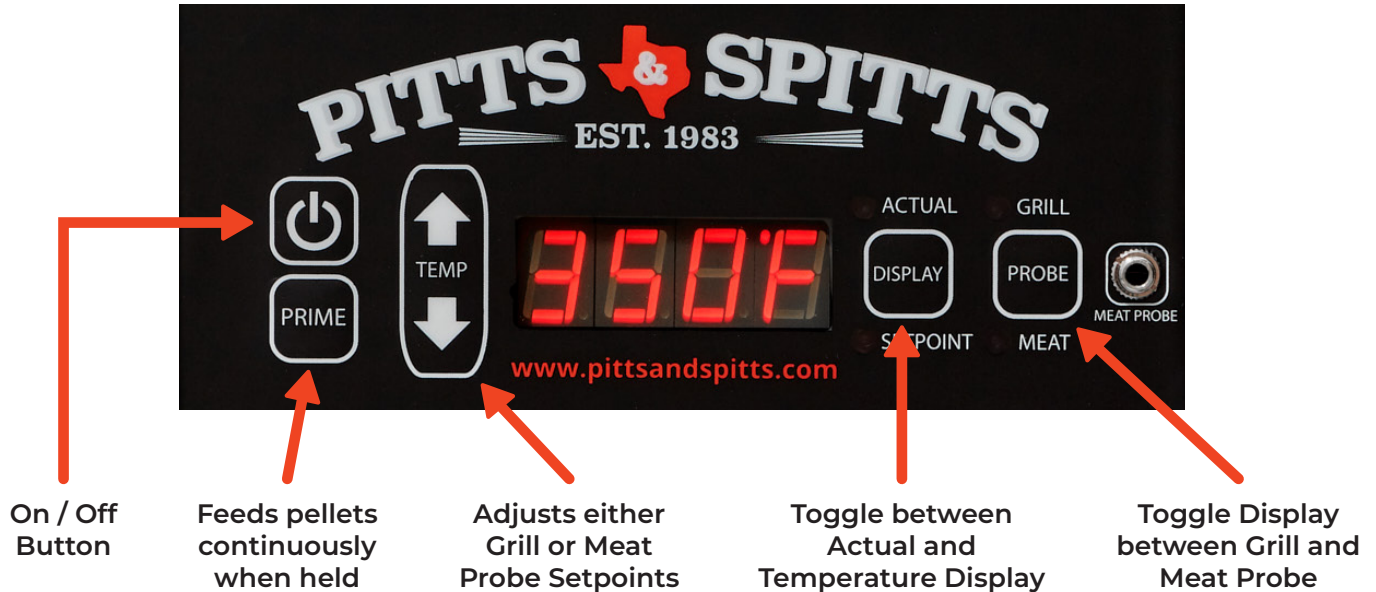
# INTRODUCTION

The Pitts & Spitts Pellet Grill uses a PID controller, meaning that it uses several variables in order to consistently maintain the desired temperature, unlike traditional dial controllers. The Pitts & Spitts Pellet Grill uses both auger timing and speed in conjunction with the fan motor timing and speed to reduce temperature swings and eliminate the need to control your cook manually.

With the Pitts & Spitts Pellet Grill, you will receive all the benefits of a wood fire cook but with the ease of a “set it and forget it” digital controller. Additional benefits our pellet grill has to offer are:

- The only Texas made pellet grill available
- HEAVY GAUGE, handcrafted construction for enhanced heat distribution and temperature control
- 35 lbs. hopper capacity
- Easy pellet cleanout chute
- Fully digital PID controller for accuracy and ease of operation
- Temperature increments of 5°
- Temperature set range of 180°F – 600°F
- Ability manually feed pellets using the “PRIME” button
- Approx. 15 minute shutdown cycle to burn out the fire in the burn pot and make subsequent start ups easier
- Meat probe for real time feedback
- Maintains temperature within 5°F of set temperature
- High heat coating rated up to 1,000°F

# CONTROLLER BUTTON OVERVIEW



## INITIAL STARTUP PROCEDURE

You'll need to do this to "season" or "prime" your pellet grill for the **FIRST TIME**.

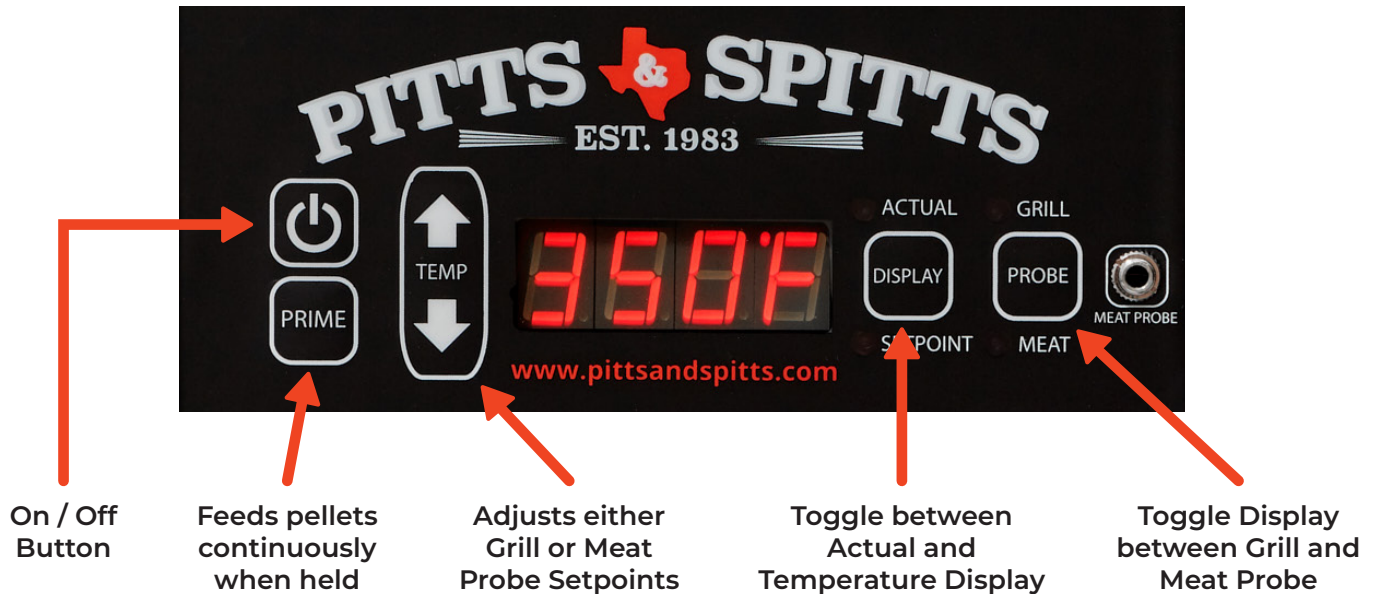
1. Open the lid of the grill and remove the bottom grate, drip pan, and deflector plate.
2. Open the pellet hopper lid and make sure there are no foreign objects in the auger and fill hopper with pellets. Close the hopper lid.
3. Plug the power cord into an appropriate, grounded electrical outlet. (20 Amp GFI preferred)
4. Place a handful of pellets in the burn pot until the hotrod is almost covered. This is about  $\frac{1}{4}$ " of the overall burn pot capacity.
5. Turn the power on by pressing the "ON/OFF" button. Within a few seconds, the hot rod will ignite and glow red. **DO NOT TOUCH IT!**
6. The auger will automatically start to feed pellets down the auger tube and into the burn pot. After approx.. 15 minutes, you should hear and / or see pellets falling into the burn pot.
  - a. If you would like to prime your auger tube (fill it with pellets) faster, you can hold down the "PRIME" button until the auger has run pellets into the burn pot. This will take approx.. 4 minutes.
  - b. Once pellets begin to fall into the burn pot, release the "PRIME" button.
7. Once smoke is visible, carefully replace the deflector plate, drip pan, and grate and close the lid.
8. Using the "↓" and "↑" buttons, set the temperature to 375°F and run for 30 minutes.
9. After 15 min, open the roll top lid and turn controller "Off" by pressing the "ON/OFF" button to initiate the 15 minute Shutdown Cycle. During the Shutdown Cycle, spray a salt-free cooking spray inside of the cooking chamber. This will help seal the steel similar to a cast iron skillet.
10. Be sure all pellets are extinguished and close the lid.
11. If you will not be cooking on your pellet grill within the next 72 hours, please follow the Cleanout Procedure.

# SUBSEQUENT STARTUP PROCEDURE

1. Make sure you have pellets in your hopper.
2. Plug in your grill and open the lid.
3. Press the "ON/OFF" button. The grill will be automatically set to the temperature at which your last cook ended.
4. Once smoke becomes visible in the cooking chamber, close the lid, set your grill to your desired temperature using the "↓" and "↑" buttons.
5. At the end of your cook, open the lid and press the "ON/OFF" button to power off. The grill will run through a 15 minute Shutdown Cycle to burn out all pellets in the burn pot. If you do not allow the Shutdown Cycle to run in its entirety, 1) the fire in the burn pot may continue to burn and 2) starting the grill the next cook may be more difficult due to the hot rod being covered by spent pellets.

FOR MOST CONSISTENT RESULTS, CONFIRM THE GRILL HAS REACHED THE DESIRED TEMPERATURE AND THE PELLET HOPPER IS FULL BEFORE LEAVING THE GRILL UNATTENDED.

# CONTROLLER OVERVIEW



## BUTTONS

- "ON/OFF" – turns the pellet grill on and light the ignitor. Turns the grill off and initiates the Shutdown Cycle
- "PRIME" – allows you to feed pellets down the auger into the burn pot – must be continuously held down
- "DISPLAY" – toggles between the pellet grill's actual temperature and the set temperature
- "PROBE" – toggles between the pellet grill's target meat internal temperature and the actual internal temperature as read by the meat probe
- "↓" and "↑" – allows the operator to set their desired temperature from 160°F – 600°F in 5°increments.

## FUNCTIONALITY

- After plugging the grill in and pressing the "ON/OFF" button, the ignitor will turn on, pellets will begin feeding into the burn pot, you will hear the fan running, and the grill will begin going to the temperature set on the controller.
- If you would like to feed pellets, press and hold the "PRIME" button.
- When turning the grill off, it will run through a "SHUTDOWN CYCLE," where only the fan runs for 15 minutes to ensure that the remaining pellets in the burn pot are extinguished.
  - Before storage, check to make sure all pellets are extinguished after the shutdown cycle.
- After running on "HIGH" or any set temperature over 300°F, run the grill at 200°F for 15 minutes with the lid open before running the "SHUTDOWN CYCLE" to avoid any burn back.

OWER REQUIREMENTS: 110V - 220V ±10%; 50 - 60 HZ FUSE: GLASS 5A 250VAC 3AB 3AG

FOR SAFE, RELIABLE OPERATION USE NO SMALLER THAN A 12/3 GAUGE EXTENSION CORD ALONG WITH A 20AMP GFI

## ADDITIONAL CONTROLLER FEATURES

- When cooking, the grill is attempting to control the Meat Probe to the Meat Probe setpoint first, and the Grill Probe to the Grill Probe setpoint second. If a Meat Probe isn't detected, the system does not attempt to control to it. While a Meat Probe is present and the Meat Probe temperature is below the Meat Probe setpoint, the system will control the Grill Probe to the Grill Probe setpoint. When the Meat Probe is within 5 degrees of the Meat Probe setpoint or higher, the system will no longer control the grill temperature to the Grill Probe setpoint, but will instead use the minimum Grill Probe setpoint of 180°F and the display will change to "DONE".
- Reactions to falling temperatures -- The controller will react to a falling temperature in several ways. First, it will increase the amount of fuel and possibly the amount of air being supplied to the combustion area. If the temperature continues to fall more than 25°F below the setpoint, the ignitor will turn on. If the system continues to fall below a minimum operating temperature of 115°F, it will reenter the ignition mode, and if after 30 minutes, the system has failed to reach at least 160°F, it will shut down and display the error code for failure to start (ER-2).
- Reaction to Over-Temperature -- If the controller detects a temperature inside the grill exceeding 700°F, it will shut down and display the Over Temperature error code (ER-1).

## SMART MEAT PROBE INSTRUCTIONS AND FEATURES

1. Plug the Meat Probe into the Meat Probe Jack on the front of the controller.
2. Start your grill according to the Subsequent Start Up Procedure.
3. Press the Probe Display button on the controller until the Meat light is illuminated. (The probe Display button and Meat light are disabled if the Meat Probe is not connected).
4. Press Temp Display button until the Set light is illuminated. Now you can set your meat's desired target internal temperature using the "↓" and "↑" buttons.
5. When ready, insert the Meat Probe into our food and close the lid.
6. You can toggle between your grill temperature and meat temperature by pressing the Display and Probe buttons. Whichever light is illuminated indicates which temperature is being shown on the controller.
7. When the food reaches your targeted internal temperature, "Done" will show across the controller screen and the grill will turn to resting mode which targets a grill temperature of 180°F.
8. If you unplug your Meat Probe, it will return to the currently set target temperature.

You can clean your Meat Probe using a warm, wet cloth but NEVER submerge the probe in water. This could damage your Meat Probe and void the grill's™ warranty.

# OPERATING TIPS AND BEST PRACTICES

Your Pitts & Spitts Pellet Grill generally operates under this principle:

***After successfully igniting the fire in your burn pot, select your cooking temperature. The auger will operate as needed until the selected temperature is reached. Once the target temperature is reached, the PID controller will cycle the auger and fan off and on to maintain the selected temperature.***

Your Pitts & Spitts Pellet Grill is designed to operate outdoors with the roll top lid closed. Cooking with the lid open generally makes cooking impossible and if nothing else, significantly increases your cooking time.

When considering how much time your cook will require, the outside weather and temperature will have to be very important to keep in mind. If it is hot outside, it will take less time for your grill to reach its set temperature. If it is cold, your grill will take longer to heat up. If you're diligent about monitoring your cook, it should turn out great under either scenario.

Below are a few more guidelines / tricks of the trade to keep in mind while using your Pitts & Spitts Pellet Grill:

- Temperatures over 350°F are generally used for baking and grilling.
- The temperature range of 225°F - 325°F settings are for slower, Central Texas barbecue style cooking.
- The lower temperature settings (below 225°F) is for adding more smoke flavor to foods being cooked and can also be used to hold or warm foods.
- To have your pellet grill perform correctly and without jams, your pellets need to be completely dry. Over time, pellets can absorb moisture from humid climates. If left for an extended period, pellets in the auger tube can swell and cause a jam. Our recommendation is that if your grill will not be used for 48 hours, at the end of your cook, you should clean out all pellets in the hopper and store them in a moisture tight, re-sealable plastic bucket. If you will not be cooking on your pellet grill for more than one week, at the end of your cook, we recommend, 1) turning your grill to 400°F for 5 minutes, 2) while at temp, empty all pellets in the hopper into a re-sealable plastic bucket via the pellet clean out chute (BE CAREFUL NOT TO PUT YOUR FINGERS ANYWHERE NEAR THE AUGER), and 3) at the end of 5 minutes, run the shutdown cycle. This should clean all pellets out of your grill so you have no jamming issues during your next startup.

**Pellet Clean Out Chute** – the Pellet Clean Out Chute makes changing your pellets quick and easy. When you're ready to change hardwood flavors, place an empty 5-gallon bucket beneath the rear of the pellet hopper. Remove the door on the end of the chute and allow all of the pellets to empty into the bucket. When complete, replace the door. Seal your bucket with a water tight lid to ensure your pellets do not absorb excess humidity during storage.

**CAREFUL!** Some of your grates are made of expanded metal. Always use caution when handling your grates as there may be sharp edges!

# GRILL SETUP AND COOKING BASICS

Generally speaking, you should cook on your Pitts & Spitts Maverick Pellet Grill using the same time and temperatures as whatever other apparatuses you used in the past. For example, if you smoke your ribs at 275°F for five hours and you like the result, then you should cook your ribs at 275°F for five hours on your pellet grill. This is true across any protein or food.

## **GRILL SETUP:**

**Deflector Plate** - Your deflector plate (the heavy “U” or “C” shaped piece of steel in your cooking chamber) should generally be centered above your burn pot when cooking. If you would like to further “tune” your grill, you may shift your deflector plate left or right when it is cool. Shifting any of the internal parts of the grill when it is on or hot could result in serious burns.

The deflector plate may be shifted out of the way when using the Trapdoor Drip Pan as described below.

**Drip Pan** - To help keep heat even and consistent through your grill, make sure your drip pan is positioned all the way against the left wall of your grill and at the spaces in the front and back of the grill are even. This will all air to circulate evenly throughout the grill.

**Trapdoor Drip Pan** - The Trapdoor Drip Pan is an upgrade. Please call your dealer or Pitts & Spitts directly for purchasing information. The Trapdoor Drip Pan is meant to facilitate direct grilling and searing. This will allow you to reach 600°F+ on the bottom grate. To use the Trapdoor Drip Pan, remove your standard Drip Pan and place the Trapdoor Drip Pan with the removeable trapdoor to the right. This will allow you to access the burn pot when grilling.

To reverse sear a steak, we recommend starting you grill with the Trapdoor in place and setting the grill to 225°F and target an internal temperature of 100°F. Once that is complete, remove the steak and wrap in aluminum foil to keep warm. Carefully slide out your bottom grate and remove the Trapdoor. Using tongs or another tool, carefully slide your deflector plate to the left to expose the flame in your burn pot. Turn your grill up to 600°F. At this point, to achieve a crust, you will need to place either Grill Grates (extruded aluminum grates and our preferred method) or a cast iron skillet above your trapdoor opening and above the fire. Alternatively, you can grill directly above or right next to your Trapdoor. Once your controller is showing an actual temperature of 400°F or more, you are ready to grill at the Trapdoor section of your grates.

To direct sear, simply open your Trapdoor, shift your Deflector Plate to the left, and turn your grill to 600°F. Once your controller is showing an actual temperature of 400°F or more, you are ready to grill at the Trapdoor section of your grates – this is because the Trapdoor is purposely distance from the RTD probe to allow for higher heats.

# MAINTAINING AND CLEANING YOUR PELLET GRILL

With proper care and maintenance, your Pitts & Spitts pellet grill will give you years of grilling and smoking enjoyment. We recommend, that after each use, you clean the cooking grates, the deflector plate, the drip pan, the burn pot, and the grease bucket. We recommend covering your grill with one of our high-quality Pitts & Spitts covers to protect your grill from the elements. We also recommend wiping down the RTD probe inside the grill with a warm, wet cloth once a month. Every 3-5 uses, we recommend cleaning all ash out of the bottom of the grill.

**PREPPING AND CLEANING YOUR DRIP PAN:** Before you ignite your pellet grill, you'll want to wrap your drip pan with heavy duty aluminum foil. You will not need to cover the bottom of your drip pan, however, you will want to completely cover the top and edges of your drip pan. Ensure the foil is generally smooth to allow grease to drip off effectively. If the foil is not smooth and causes grease to pool, it could cause a grease fire. Change the aluminum foil on the drip pan after each use -- clean foil on the drip pan will keep your smoke cleaner, avoid any foul tastes attaching to your food, and reduce the risk of a grease fire.

**CLEANING GREASE FROM YOUR PELLET GRILL:** With the power turned off and power cord disconnected remove the grill grate and drip pan. This will provide complete access to the grease draining area and grease drain valve from inside the grill. Scrape the grease accumulation from the inside using a rigid, non-metallic tool. Much of the loosened grease should be able to be pushed down through the grease drain valve and will fall into the grease bucket. You can wipe up the remaining grease residue with paper towels or disposable rags.

Alternatively, you can shut the grease drain valve and carefully pour warm water into the grease draining area. Be careful not to overfill this area – you do not want water to be in your main cooking chamber. Once the grease has softened, you can open the valve and drain the liquid into your grease bucket.

Keep in mind, accumulated grease is easier to clean when the grill is still warm – NOT HOT. BE CAREFUL NOT TO BURN YOURSELF. Heat resistant gloves are recommended if you are cleaning the pellet grill while it's warm.

While cooking, you should leave your drain valve open so grease drains into your bucket during the cook.

**CLEANING THE STAINLESS STEEL SURFACES:** With the pellet grill off and the power cord disconnected, apply a high quality stainless steel cleaner (we like Sprayway) and a disposable rag or cloth to wipe down the stainless steel surfaces. Be careful not to use any abrasives that may cause scratches to the stainless steel. If you do have stuck on grease, we recommend using a kitchen degreaser – follow direction per the manufacturer.

**CLEANING PAINTED OUTSIDE SURFACES:** With the pellet grill off and the power cord disconnected, use a disposable rag or cloth, dampened with warm water to wipe the grease from the outside of the grill. DO NOT use soap, cleaner, abrasive cleansers or abrasive cleaning pads on the outside grill surfaces. DO NOT pressure wash the exterior of your pellet grill as it may remove the paint.

**STORING YOUR GRILL OUTSIDE:** If the grill is stored outside, the proper Pitts & Spitts cover should be used to cover it when not in use. DO NOT cover the grill when it is hot. Care should be taken to ensure that water does not get in the pellet hopper or behind on the controller. Wood pellets will absorb moisture and expand and will jam your auger.

**CLEANING THE ASH FROM INSIDE AND AROUND THE BURN POT:** With the pellet grill off, the power cord disconnected, and the grill cold, remove the grate, drip pan, and deflector plate.

A vacuum cleaner is the best way to remove ashes from the burn pot and cooking chamber but this must be done with extreme care to avoid the risk of fire inside the vacuum cleaner due to embers being in the burnt pellets.

**CLEANING THE ASH FROM THE BURN POT OR COOKING CHAMBER SHOULD BE DONE ONLY WHEN THE GRILL IS COLD!**

A heavy duty shop vac without a bag collection system would be best for this task. However, almost any vacuum cleaner will work safely if this procedure is properly performed. Start by emptying out the vacuums collection chamber. Then vacuum the ash from the inside of the burn pot and cooking chamber. Once complete, empty the ashes and dust into a container or receptacle that is safe to receive ashes or used charcoal.

Often, much of the ash in the bottom of the cooking chamber can be swept to the grease draining area at the right of the firewall by hand or using a small broom or brush. It can then be pushed through the grease drain valve and into the grease bucket for easy disposal.

# TROUBLESHOOTING

If your **Grill Will Not Turn On**, check to make sure the grill is plugged in. Also check that there have been no power failures in your home. Next, check the fuse on the back of your controller. If you have checked all of these potential issues and replaced your fuse, and the grill still does not turn on, contact Pitts & Spitts.

If your **Grill Will Not Maintain Set Temperature**, check to make sure you have pellets in the hopper and they are properly feeding into the auger tube. Next, when your grill is cool, make sure ash has not built up in your burn pot. If it has, vacuum the cold ashes out with a shop vac. If the problem persists, contact Pitts & Spitts.

## **ERROR MODE:**

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. Below are the Error Codes which will be displayed on your controller:

**ER-1** – Over Temperature Error – This error can be detected at any time, and simply means the Grill Probe temperature exceeded 700°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 re-applied 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 setpoint 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.

# WARRANTY REGISTRATION

Register online at [pittsandspitts.com/warranty-registration](http://pittsandspitts.com/warranty-registration)

First Name	
Last Name	
Mailing Address	
City	
State	
Postal Code	
Coutry	
Phone Number	
Email	
Model	
Serial Number	

Contact us with any questions at [1-844-650-6250](tel:1-844-650-6250) or [sales@pittsandspitts.com](mailto:sales@pittsandspitts.com).

Your Pitts & Spitts Wood Pellet Grill is covered by a 10-year warranty on the barrel, 3-years on the controller, and 1 year on parts. If you believe you have issues covered by warranty, please contact your local Pitts & Spitts dealer.