



Model FEC100 Fixed Shelf Smoker Operator's Manual

Not intended for use in a commercial setting.

Please read this entire manual for installation and use of this smoker. Failure to follow these instructions could result in property damage, bodily injury or even death.

SAVE THESE INSTRUCTIONS.



Version 18.03.19

Revision Date: 03/19/2018

Serial Number: _____

Purchase Date: _____



Dear Customer,

Thank you for choosing Cookshack! Your Fast Eddy's™ by Cookshack FEC100 will produce great barbecue and smoked foods. It is easy to operate, clean and maintain. Use this Operator's Manual to familiarize yourself with the smoker and its operation. If you have a question or problem not covered in the manual, call us at 1.800.423.0698 Monday through Thursday, 8 a.m. to 4 p.m. CST, Friday, 8 a.m. to 2 p.m. or email us at info@cookshack.com. You can also join the Cookshack Barbecue Forum on our website at www.cookshack.com which has participation by both Cookshack customers and team members.

This unit is Warnock Hershey and ETL Listed Cooking Equipment in both the USA and Canada.

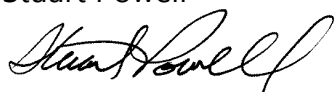
You must observe safe operating practices when using this smoker. Cookshack, Inc. assumes no responsibility for results of careless and dangerous operation of Cookshack smokers or other products. If you do not follow the practices described in the Operator's Manual, all warranties will be null and void.

Read the following instructions thoroughly and completely before using your smoker! Observe the instructions carefully. Be certain that you understand completely how it functions before attempting to operate it.

This smoker oven is intended for use as a food smoker. It is not intended for any use not specifically described in this manual. Misuse of this smoker can result in serious injury and a fire hazard.

With these precautions in mind, enjoy your smoker and the delicious foods it will produce.

Stuart Powell



President and CEO
Cookshack Inc.

Email: support@cookshack.com

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Sales: (580) 765-3669

Customer Service: (800) 423-0698

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Find Cookshack, Inc. on all your favorite Social Media!



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General Safety Instructions

Cookshack does not recommend this unit for commercial use. Cookshack recommends the FEC100 for competition or home use only. Only licensed professionals should work on or service this unit.

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

- Keep the oven free from combustible materials.
- Never store or use gasoline in the vicinity of this oven.
- Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire in this oven. Keep all such liquids well away from the oven while in use.
- Whenever working on or servicing this unit **ALWAYS** disconnect the power.
- This oven is equipped with a grounded plug for your protection from shock hazard. Always plug this unit directly into a properly grounded receptacle.
- **WARNING!** Exterior surfaces may be **HOT!**
- Make sure all operating personnel are instructed on the proper use of the oven.
- Never leave the oven door open while the oven is running.
- Never use a high-pressure washer around electrical components.
- Always clean the drip tray before the cooker is used.

Included Equipment

Once you have unpackaged your smoker, you should find the following standard equipment:

- Cookbook (LT163)
- Operator's Manual (MN500)
- Registration Card
- Drain Pan – 4" Full Size (PV702)
- 40 lbs. Pellets
- 4 Grills (PV005)
- Set of 2 Side Racks (PM027)
- Pre-Installed Casters (PV175)
- Sauce and Spice Sample Kit

Registration Card

Registering your smoker by filling out the registration card is a very important part of caring for your pellet grill. We continue to improve the grills that we make for you and consequently, parts that are installed in the grills may change. By registering, our Customer Service Department will be better equipped to service your unit should the need arise. Registration Methods include:

- Register on our website at www.cookshack.com/registration
- Fill out Registration card and mail back to us
- Call customer service at 1-800-423-0698.

Once you register, you will receive a 10% discount on your next order of Cookshack barbecue sauce, spices, pellets or accessories.

General Installation Instructions

WARNING! Unit is very HEAVY. Extra care must be taken when unloading and moving.

The unit requires a separate 120 volt, 20 amp circuit and must be grounded in accordance with your local codes, in the US, follow the National Electric Code ANSI/NFPA 70-1990 or other comparable codes outside the United States.

Location

Choose a dry, sheltered and well ventilated location. Do not expose the smoker to rain. Do not place flammable or combustible materials on or adjacent to the smoker.

Stationary installation should be on a level surface.

Keep the oven free from combustible materials. A good rule of thumb is to allow an 18" clearance space around the oven, however, the minimum spacing requirements from combustible material is 6." For clearance of non-combustible materials, follow these recommended service spacing guidelines:

- Top – 18"
- Left Side – 24" to load pellets
- Right Side – minimum of 6"
- Back – 4"
- Front – Must have enough room to open door for loading and unloading of product (approximately 29")

Exhaust Systems and Ventilation

The Fast Eddy's™ by Cookshack FEC100 comes with a standard system which vents smoke out of the oven.

Operating this smoker indoors is not recommended because smoke will escape the smoker from around the door and out of the side flue. If you store this smoker in a garage or storage building, it is a good idea to move it outside when cooking.

Please contact Cookshack Customer Service with any questions at **1.800.423.0698** or email us at sales@cookshack.com.

Electrical Specifications

120 volts in the United States or 240 volts outside the United States, 60 HZ, single phase, 7 amp service required.

Operating Instructions/Start up Guide

This smoker oven is intended for use as a food cooker. While this smoker oven is equipped with a REST cycle to allow meat to stay warm in the smoker until it is ready to be served it was not designed as a warm holding cabinet.

1. For easy clean up, heavy duty aluminum foil can be used to line the inside of your smoker:
 - Line the bottom of your smoker with foil. Make sure you press through the foil to ensure the drain hole is still accessible
 - Cover the grease shield with foil
2. Check the following:
 - Pellets are in pellet hopper
 - **Only 100% hardwood food-grade pellets** should be used in your smoker. Pellets should be no larger than ¼" in diameter and ¾"

long. Use of heating fuel pellets can be harmful to both the food you are cooking and your smoker.

- Ensure that the fire pot is clean and clear of ash.
 - Check to ensure there is not a buildup of grease in the bottom of the cooking chamber.
 - Make sure the pellet slide is clean.
3. Make sure the Main Power Switch is ON.
 4. Push the "POWER" button on the control panel. Unit has an automatic ignition system.
 5. In the event of failure with the igniter system use the following manual lighting instructions WITH OVEN OFF:
 - Pour ½ cup of pellets into the fire pot.
 - Squirt approximately 2 tablespoons of alcohol gel into the fire pot.
 - Ignite with a match.

NOTE: Never attempt to squirt alcohol gel into burning embers. This has the potential for serious injury.

- Let the pellets burn for 4 to 5 minutes.
 - Make sure the Main Power Switch is ON.
 - Push the "POWER" button on the control panel.
 - Set the thermostat to 180°F.
 - Press "START"
6. Always preheat the oven to at least 180°F prior to cooking. This should take approximately 10 to 15 minutes.
 7. ALWAYS CLEAN THE FIRE POT BEFORE RESTARTING THE OVEN.

Product Loading Instructions

The maximum capacity of this unit is 100 lbs. pork butts, 80 lbs. briskets, 60 lbs. ribs or 24 whole chickens (about 3 lbs. per chicken) per load.

- Do not blanket load (completely load) the bottom rack. Blanket loading the bottom rack prevents adequate airflow inside the unit.
- When cooking large pieces of meat, turn the fat cap down on the bottom rack and on the upper racks.

Control Panel Operation (IQ5 Controller)

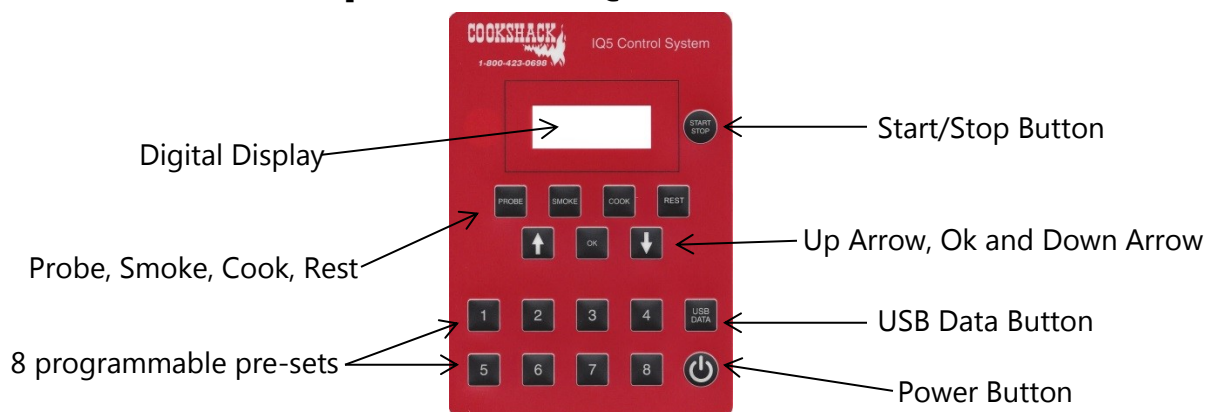


Figure 1 – Control Panel

Recommended cooking times and temperatures are based on full loads with no resting cycle. Larger or smaller loads or the addition of resting time may require adjustment of cooking time and temperature.

An audible signal indicates that the cook cycle is complete and that the oven is going to the Rest Temperature Mode.

In order to see the set the smoking temperature, cooking temperature, probe temperature or rest temperature, briefly press the corresponding button, set temperature and press "OK."

Smoke/Cook Mode (3 stage cooking)

SMOKE/COOK MODE is for standard operation and is the default mode. Since pellet-fired smoker ovens produce more smoke at temperatures of 180°F or below, 3 stage cooking is ideal for increasing the amount of smoke flavor into foods.

In SMOKE/COOK MODE the oven will cook at the set smoking temperature for the set smoking time, then will cook at the set cooking temperature for the set cooking time. At that point, the controller will change to the set resting temperature and remain there until the unit is manually shut down.

PLEASE NOTE: This smoker oven was not designed to replace a warming cabinet.

1. Make sure the Main Power Switch is ON.
2. If display reads off, Press the Power Button on the oven control panel.
3. Set Mode by pressing "PROBE" and use the UP or DOWN arrows until display reads "TIMER" then press OK.
4. Set smoking time by pressing the SMOKE button and use the UP or DOWN arrows to change smoke time setting.
5. Press OK.

6. Set smoking temperature by using the UP or DOWN arrows to change smoke temperature setting.
7. Press OK.
8. Set cooking time by pressing the COOK button and use the UP or DOWN arrows to change cook time setting.
9. Press OK.
10. Set cooking temperature by using the UP or DOWN arrows to change cook temperature setting.
11. Press OK.
12. Set rest temperature by pressing the REST button and use the UP or DOWN arrows to change rest temperature setting.
13. Press OK.
14. Press START.

PLEASE NOTE: The oven temperature displayed while the oven is running is the actual air temperature inside the oven.

Cook Mode (2 stage cooking)

In COOK MODE the oven will cook at the set cooking temperature for the set cooking time. At that point, the controller will change to the set resting temperature and remain there until the unit is manually shut down.

1. Make sure the Main Power Switch is ON.
2. If display reads off, Press the Power Button on the oven control panel.
3. Set Mode by pressing "PROBE" and use the UP or DOWN arrows until display reads "TIMER" then press OK.
4. Set smoking time by pressing the SMOKE button and use the UP or DOWN arrows to change smoke time setting to 00:00.
5. Press OK.
6. Set cooking time by pressing the COOK button and use the UP or DOWN arrows to change cook time setting.
7. Press OK.
8. Set cooking temperature by using the UP or DOWN arrows to change cook temperature setting.
9. Press OK.
10. Set rest temperature by pressing and holding the REST button and use the UP or DOWN arrows to change rest temperature setting.
11. Press OK.
12. Press START.

PLEASE NOTE: The oven temperature displayed while the oven is running is the actual air temperature inside the oven.

Probe Mode (2 or 3 stage cooking)

PROBE MODE is used when cooking with the optional meat probe. In PROBE MODE the oven will cook at the set smoking time and temperature then cook at the cooking temperature until the internal temperature of the meat reaches the temperature at which the probe is set. At that point, the controller will change to the set resting temperature and remain there until the unit is manually shut down.

1. Connect the two-pin plug with twist lock into the meat probe connector on the control panel.
2. Place the probe end through the door seal and insert probe into the largest piece of meat in the smoker oven.
3. Make sure the Main Power Switch is ON.
4. If display reads off, Press the Power Button on the oven control panel.
5. Set Probe Mode by pressing "PROBE" and use the UP or DOWN arrows until display reads "PROBE"
6. Press OK.
7. Set PROBE meat temperature using the UP or DOWN arrows.
8. Press OK.
9. If desired, set smoking time by pressing the SMOKE button and use the UP or DOWN arrows to change settings or use the UP or DOWN arrows until the time reads 00:00. (If you set time to 0, skip steps 11-12)
10. Press OK.
11. If desired, set smoking temperature by using the UP or DOWN arrows to change settings.
12. Press OK.
13. Set cooking time by pressing the COOK button and use the UP or DOWN arrows to change settings.
14. Press OK.
15. Set cooking temperature by using the UP or DOWN arrows to change settings.
16. Press OK.
17. Set holding temperature by pressing and holding the HOLD button and use the UP or DOWN arrows to change settings.
18. Press OK.
19. Press START.

PLEASE NOTE: The probe temperature displayed is the internal temperature of the product.

Preset Buttons

The IQ5 controller is equipped with 8 **“PRESET BUTTONS”** for easy selection of common settings for popular foods.

Pressing each of the pre-set buttons will put the smoker in the following cycles:

Pre-Set #	Description	Hours	Cycle	Temp
1	Brisket	4	Smoke	180°F
		10	Cook	225°F
			Hold	140°F
2	Pulled Pork	6	Smoke	180°F
		8	Cook	250°F
			Hold	140°F
3	Slab Ribs	1	Smoke	180°F
		4	Cook	250°F
			Hold	140°F
4	St. Louis Ribs	1	Smoke	180°F
		3	Cook	250°F
			Hold	140°F
5	Baby Back Ribs	1	Smoke	180°F
		2	Cook	250°F
			Hold	140°F
6	Sides of Salmon	1	Smoke	140°F
		2	Cook	190°F
			Hold	140°F
7	Sausage 1" Casing	1	Smoke	140°F
		2	Cook	180°F
			Hold	140°F
8	Prime Rib	2	Smoke	180°F
		2	Cook	250°F
			Hold	140°F

Once one of these preset buttons has been pushed you may start a cook cycle using these settings by simply pressing **“START.”**

All pre-sets are also programmable. To set a preset button to your own preferences, make all settings as desired following the steps listed for each Mode Setting. Once your settings have been made hold the pre-set button down for 5 seconds to save the settings. If done correctly, the display will read **“Program [#] Saved.”**

PLEASE NOTE: A factory reset will delete all saved settings and programs.

USB Download Instructions

With the IQ5 controller, you have the option to download your smoking, cooking and rest logs to a FAT formatted USB flash drive. The IQ5 Controller will hold approximately 1023 cycles which is 512 hours of cook time.

To use this feature, while the smoker is on:

- Ensure smoker is idle.
- Plug in your flash drive to the USB port.
- Press the USB DATA button until the digital controller reads "File Saved."
- It will then ask "Do you want to clear log?"
- Press the UP or DOWN arrow until the controller reads "Yes" (The smoker will clear your log as it runs out of memory. Clearing your log will stop the accidental loss of data).
- Press OK – **Figure 2** shows example of download.

	A	B	C	D
324	4	177	95	
325	4	178	96	
326	4	178	97	
327	4	178	97	
328	4	177	96	
329	4	177	96	
330	4	177	96	
331	4	177	96	

Figure 2 – This is what your download of information will look like. Column A is the current Cook Cycle. Column B is Oven Temperature. Column C is Probe Temperature.

Shut Down and Maintenance Procedure

Follow the shutdown procedures listed:

1. Press Start/Stop button for 5 seconds.
2. Press the Power button, switch the master switch to OFF and then unplug smoker from the outlet.
3. Allow oven to cool.
4. After allowing the oven to cool, carefully remove the ash from the firepot and douse the contents with water.

NOTE: Failure to follow the shutdown procedure instructions may result in a fire hazard!

To properly maintain your smoker, consider the following:

- If the oven is stored outdoors care should be taken to ensure that water does not get into the pellet hopper and/or controller. Wood pellets expand greatly when wet and will jam the auger system. A cover for the unit is highly recommended.
 - Cookshack's FEC100 Cover Part Number
 - PV024 for standard or
 - PV030 for reverse.
- Soot and Fly ash:

- The products of combustion will contain small particles of fly ash. The fly ash will collect in the exhaust venting system and restrict the flow of the flue gases. Incomplete combustion can occur during startup, shutdown, or incorrect operation of the smoker oven and will lead to some soot formation which will collect in the exhaust venting system.

Normal maintenance procedures should be performed **after each use**:

- Clean ash from the fire pot and combustion chamber. You can do this with an ash vac once all embers in the fire pot are out.
- Ash should be placed in a metal container with a tight-fitting lid. The closed container of ash should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ash is disposed of by burial in soil or otherwise locally dispersed, it should be retained in the closed container until all cinders have thoroughly cooled.
- To make cleaning easier, you can line the drip tray and the bottom of the unit with foil
- Keep the grates and inner walls scraped.

Normal maintenance procedures should be performed **weekly**:

- Clean the pellet slide to prevent pellet dust buildup – **Figure 3**.

Figure 3 – Pellet Slide Cleaning



- Clean the racks and inside of cooking chamber with a degreaser. You can power wash the grills (Recommended cleaner is Zep FS10184 Degreaser).
 - **NOTE: PROTECT ALL ELECTRICAL COMPONENTS FROM MOISTURE DURING THIS PROCESS.**

Normal maintenance procedures should be performed **yearly**:

- Inspect the exhaust venting system to determine if cleaning is necessary.

Troubleshooting Guide

This is an initial guide for troubleshooting. If any of the following steps do not correct your issue, contact Cookshack Customer Service at 1.800.423.0698.

Trouble	Probable Cause	Solution
Control panel does not power up	Unit is not plugged into a working outlet (110 VAC) High temperature limit switch tripped	Check the outlet to ensure it is working or plug into alternate source Press the reset button on the back of the hopper Reset limit switch by pushing in on the button
Fire goes out during operation	Pellet hopper is empty Auger motor is turning but the auger is not turning Not enough intake air	Inspect hopper and clean pellet dust out and fill with pellets Check shear pin between auger and motor-replace if broken Check auger for binding-clear cause of binding (such as jammed pellets) Check air intake air fan-if not turning, contact Customer Service If fan is turning, refer to installation instructions and verify that the vent is properly installed
Fire does not light	Excessive pellet feed	Pellet auger is not cycling, contact Customer Service

	<p>Pellet Hopper is empty</p> <p>Switch on pellet hopper is not in contact with the lid</p> <p>Dirty fire pot</p> <p>Trouble with igniter</p> <p>Not enough intake air</p> <p>Oven temp is over 130°F</p>	<p>Inspect hopper and clean pellet dust out, then fill with pellets</p> <p>Clear pellets so the lid will fully close or adjust the switch to make contact with closed hopper lid</p> <p>Open door and clean fire pot and try to restart unit</p> <p>Open pellet hopper lid and push the start button</p> <p>Open the door and feel over the pot. If the pot is hot, the igniter is fine. If pot is cold, contact Customer Service.</p> <p>You can manually light the unit also-see procedure in startup section</p> <p>Check air intake fan-if not turning, contact Customer Service</p> <p>If fan is turning, refer to the installation instructions and verify that the vent is properly installed</p> <p>Light manually or wait for oven to cool</p>
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Limited Warranty Policy

Cookshack Smoker Ovens are guaranteed to be free from defects in material and workmanship under normal use and when installed in accordance with factory recommendations. **Warranty is voided unless 100% hardwood food-grade pellets are used.**

This limited warranty includes two (2) two years for parts only.

Cookshack, Inc.'s obligation under this warranty shall be to repair or replace at its option any part deemed defective upon examination by Cookshack, Inc., or its authorized agent, for a period of two (2) years from the date of sale.

1. The Limited Warranty extends to the original purchaser only.
2. To make claim or request for the Limited Warranty, the original purchaser must notify Cookshack, Inc. Customer Service for instructions as to the repair or replacement of the defective merchandise prior to attempting or contracting for repair of the oven. (See following page for Return Merchandise Policies).
3. The model number and serial number of the Cookshack Smoker Oven must accompany any request for service to the oven.
4. The Limited Warranty shall not apply if the merchandise has been improperly installed, damaged due to abuse, misuse, misapplication, accident, or as a result of service or modification by any other than an authorized Cookshack, Inc. service agent.
- 5. The Limited Warranty is for Household Use Only. Warranty does not apply if used in a commercial setting.**

There are no express warranties other than the limited warranty stated herein above. No warranties whether express or implied, including, but not limited to, any implied warranties of merchantability of fitness for a particular purpose, shall extend beyond the respective warranty periods described above.

Cookshack, Inc. shall not be liable for any direct, indirect, special, consequential, incidental, or punitive damages; lost profits or loss of use or interruption of business regardless of the form of action or theory of liability resulting from any defect in or use of the Cookshack smoker oven, accessories and/or heating elements.

Additional information on obtaining service under this Limited Warranty is available on the following page or by contacting a Cookshack, Inc. Customer Service Representative directly at (800)423-0698.

Return Merchandise Policy

If you have merchandise that you believe is defective and requires repair or replacement:

1. Call Cookshack, Inc. at (800)423-0698. Ask to speak to a Customer Service Representative. Have your Smoker Oven model number and serial number ready.

If you are advised to return the merchandise to the factory for repair or replacement, please observe the following procedures.

2. You will be issued a return number. A Customer Service Representative will issue you a return number and/or mail you an instruction form (called a Return Merchandise Authorization) for returning the merchandise with the return number on it.

All return merchandise must have a return number. Do not return merchandise without a return number.

3. Attach the return number to the merchandise.

If you were sent a Return Merchandise Authorization, attach it to the merchandise you are returning.

If you were issued an RETURN NUMBER by phone and not sent a Return Merchandise Authorization, attach a note to the merchandise with your name, address and RETURN NUMBER.

Print the RETURN NUMBER on the outside of the return packaging.

4. Ship the merchandise back to Cookshack.

Return the merchandise to Cookshack, Inc., shipping prepaid, F.O.B. destination, in the original container or equivalent.

All return merchandise must be shipped to: Cookshack, Inc., 2405 Sykes Blvd., Ponca City, OK, 74601.

You assume the risk of any loss or damage that occurs during transit due to improper packaging of the returned merchandise. Use the original container that the merchandise was shipped in or equivalent.

5. Repair or replacement of merchandise under warranty.

Replacement or repairing defective merchandise is at Cookshack, Inc.'s option.

If repair of merchandise is deemed necessary by Cookshack, Inc. you will be instructed as to the necessary arrangements in order to affect the repair of the merchandise.

If replacement merchandise is deemed necessary by Cookshack, Inc. you will be invoiced for the replacement merchandise upon shipment. Credit for merchandise under warranty deemed to be defective by Cookshack, Inc. will be issued upon return of the defective merchandise.

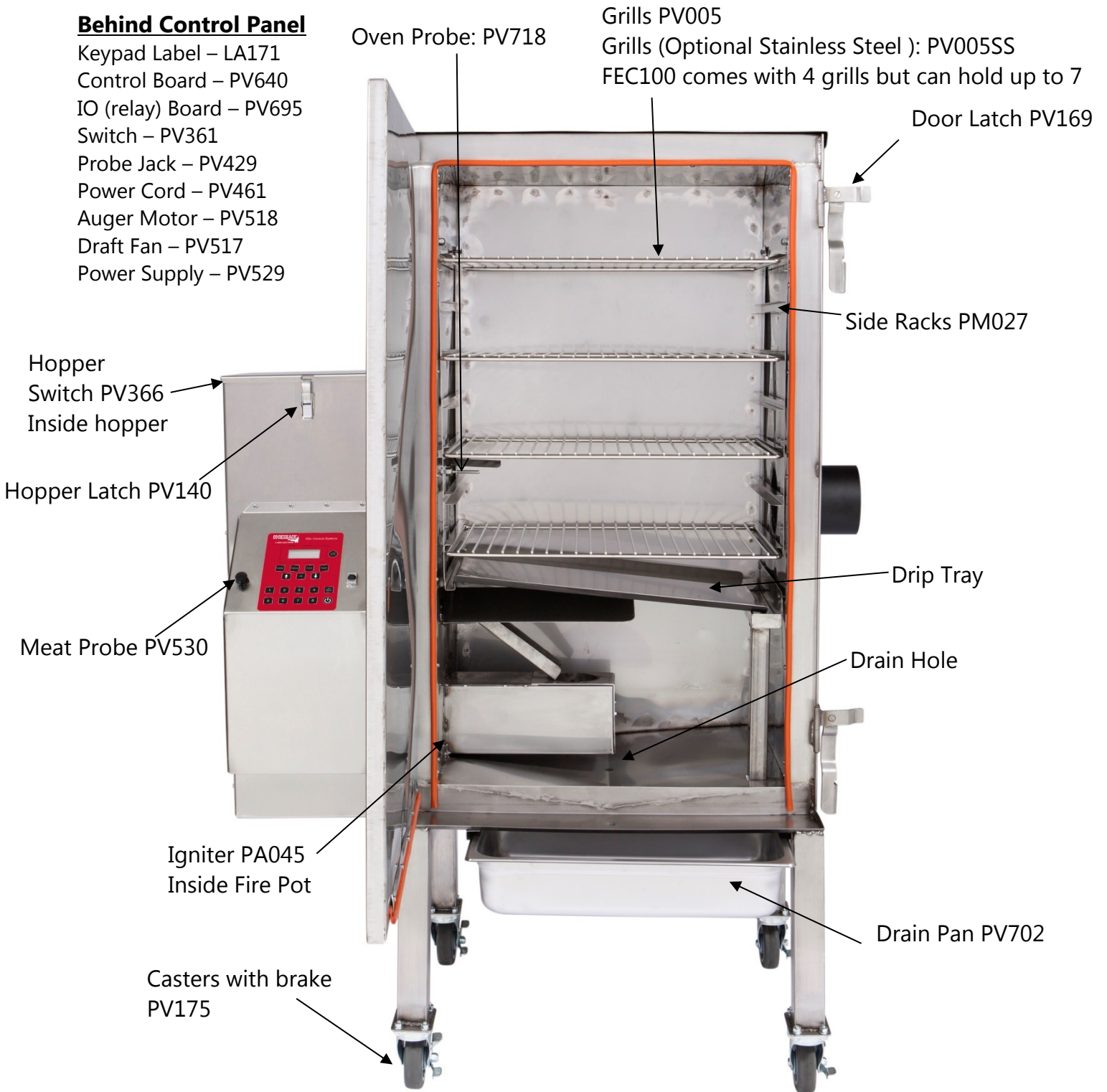
Credit may be denied if the returned merchandise is not found to be defective by Cookshack, Inc.; if it is not under warranty; if it is not received at Cookshack, Inc. 30 days after your RETURN NUMBER is issued; if it is damaged due to abuse, misuse, misapplication or accident; if it has been serviced or modified by any other than an authorized Cookshack, Inc. service agent; is not returned with an RETURN NUMBER; is not in clean condition; is not complete; is damaged or lost in transit.

Replacement merchandise is sent to you via FedEx Ground or common carrier. If you request replacement merchandise to be sent by faster service than FedEx Ground or common carrier you shall incur the cost of shipping.

FEC100 Illustration

Behind Control Panel

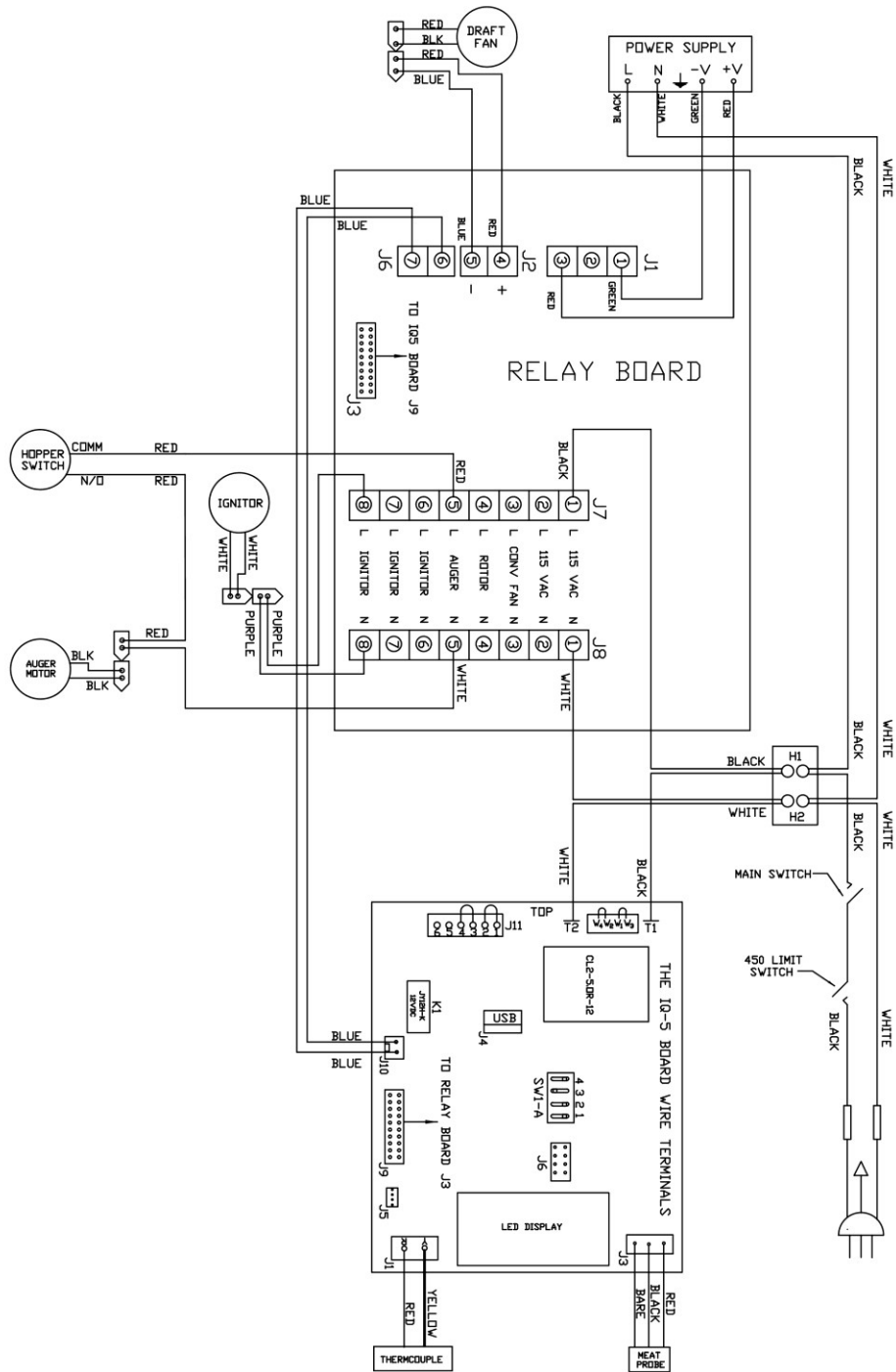
- Keypad Label – LA171
- Control Board – PV640
- IO (relay) Board – PV695
- Switch – PV361
- Probe Jack – PV429
- Power Cord – PV461
- Auger Motor – PV518
- Draft Fan – PV517
- Power Supply – PV529



FEC100 Wiring Diagram

FEC-100 IQ-5 120 VOLT WIRING DIAGRAM

03/05/18



FEC100 Wiring Diagram (Export)

FEC-100 IQ-5 OVERSEAS 240 VOLT WIRING DIAGRAM

03/05/18

