

**Cookshack, Inc.**  
Model FEC100  
Fast Eddy Oven

# Operator's Manual

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

Contact local building or fire officials about restrictions and installation inspection requirements in your area.

**SAVE THESE INSTRUCTIONS**



Version 10.1  
10/7/10

Dear Cookshack Customer

Your model FEC100 ðFAST EDDYðS BARBEQUE OVENö by Cookshack will produce great barbecue and smoked foods. It is easy to operate, clean and maintain. Use this operatorðs Manual to familiarize yourself with the smoker and its operation. If you have a question or problem not covered in the manual, call us as **1.800.423.0698** Monday through Friday, 9:00 AM to 4:00 PM or e-mail us at [info@cookshack.com](mailto:info@cookshack.com). You can also join the **Cookshack Barbecue Forum** on our website at [www.cookshack.com](http://www.cookshack.com) which has high participation by both Cookshack customers and staff.

You must observe safe operating practices when using the smoker. Cookshack, Inc. assumes no responsibility for results of careless and dangerous operation of Cookshack smokers or other products. All warranties are null and void if the practices described in the Operatorðs Manual are not observed.

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 in will produce.

Stuart Powell

President and CEO  
Cookshack Inc.  
2304 N Ash Street  
Ponca City, OK 74601

# TABLE OF CONTENTS

Fast Eddyø Smoker Oven  
Model FEC100  
Version 10.1  
October 2010

GENERAL INSTRUCTIONS	4
INSTALLATION INSTRUCTIONS	4
EXHAUST SYSTEMS	5
OPERATING INSTRUCTIONS	6
CONTROL PANEL OPERATION	6-9
LOADING INSTRUCTIONS	9
SHUT DOWN PROCEDURES	9
SAFETY TIPS	9
MAINTENANCE	9-10
ELECTRICAL SPECIFICATIONS	10
TROUBLE SHOOTING GUIDE	11-12
WARRANTY	13
NATIONAL SERVICE POLICY	13-14
ELECTRICAL WIRING DIAGRAM	15
SMOKER ILLUSTRATION	16

# FAST EDDY'S BARBEQUE OVEN MODEL FEC100

## GENERAL INSTRUCTIONS

- Keep the oven free from combustible materials. A good rule of thumb is to allow 24 inch clearance space around the access panel and flue opening.
- Never store or use gasoline or other flammable material in the vicinity of this oven.
- Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or refreshen upö 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 3 prong plug for your protection from a shock hazard. Always plug this unit directly into a properly grounded 3 prong receptacle.
- **WARNING!** Exterior surfaces may be **HOT!**
- Make sure all operator personnel are instructed on the proper use of the oven.

## INSTALLATION INSTRUCTION

- Local Code Officials and a Commercial Kitchen Ventilation Contractor should be consulted prior to installation to determine the need to obtain a permit. Unit must be installed per state and local fire codes and NFPA 96.
- Provisions must be made for adequate air supply for the oven. If the oven is to be installed in a sealed room or building utilizing exhaust fans, the room must be supplied with a return air system. Return air must be equal or slightly higher than that of the exhausted air. **WARNING!** Do not pack required air spaces with insulation or other materials.
- Chimneys are 5 inches in diameter and should be type L-Vent and are required to extend 3 feet above the highest point where they pass through the roof and at least 2 feet higher than any portion of a building within 10 feet or in accordance with state and local fire codes (NFPA 96). A rain cap must be utilized on a chimney exhaust. A 4 foot extension is required for all units used outdoors.
- **DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.**
- **DO NO CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.**
- Attachment and securement of the exhaust venting system to the product and to each adjoining section of connector pipe are required to be fastened with at least three screws.
- This unit must be electrically grounded in accordance to your state and local codes or with the National Electrical Code ANSI/NEPA 70-1990.

- Minimum spacing from combustible material is 6ö; these clearances must be maintained unless materials used are non-combustible. Following is the recommended service spacing:

Top ó 18ö

Left Side ó 24ö to load pellets and access to service panel.

Right Side ó 24ö

Front ó 48ö for loading and unloading of product.

Back ó 6ö

Floor ó Must be a non-combustible material and must extend 6ö beyond each side of the unit.

**Install vent at clearances specified by the vent manufacturer.**

- Visually inspect the cooking racks and deflector to ensure proper position prior to turning the oven on.

## **EXHAUST SYSTEM(S)**

- All FEC100ø come with a standard system which vents smoke out of the oven through a 5 inch pipe. It is the customerø responsibility to provide a method to move smoke from this exhaust to the outside following applicable local codes (NFPA 96). This system must remain in place any time the unit is operated inside a building.

**ADEQUATE MAKEUP AIR IS REQUIRED FOR SAFE OPERATION. Consult manual for more information. It is your responsibility to maintain essential combustion air at all times during operation of unit.**

## **\*\*\*IMPORTANT\*\*\* READ CAREFULLY**

- Positive Air Flow through the air shutter on the burner must be maintained for safe and proper operation of the unit.
- Burner air flow may be affected by one or a combination of the following.
  1. Improper flue installation
  2. Inadequate makeup air for hood system or exhaust fans
  3. Competing hood systems or ventilation in the building
  4. Extreme drafts or inadequate clearance.
- Please contact Cookshack Customer Service with any questions at **1.800.423.0698** Monday through Friday, 9 AM to 4 PM or e-mail us at [info@cookshack.com](mailto:info@cookshack.com).

# OPERATING INSTRUCTIONS

- Before starting check the following:
  1. Pellet level
  2. Insure that the fire pot is clean and clear of ash.
  3. Check to insure that there is not a build up of grease in the bottom of the cooking chamber.
  4. Insure that the heat deflector is in place and clean.
  5. Make sure that the pellet slide is clean.
- Push the "START" button on the control panel. Unit has an automatic ignition system.
- In the event there should be a failure with the igniter system use the following manual lighting instructions:
  1. Pour ½ cup of pellets into the fire pot.
  2. Squirt approximately 2 tablespoons of alcohol gel into the fire pot.
  3. Ignite with a match. **NOTE: Never attempt to squirt alcohol gel into burning embers. This has a potential for serious injury.**
  4. Let the pellets burn for 4 to 5 minutes.
  5. Set the thermostat to 180 degrees.
- Always warm the oven to at least 180 degrees prior to cooking. This should take approximately 10 to 15 minutes.

## SELECTION OF FUEL

Only food grade barbecue 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.

## CONTROL PANEL OPERATION

Your Cookshack Model 250/260 has the new Cookshack IQ4 control system. This controller has the same great cook & hold features as previous models of the IQ controller, but with an additional feature that allows you to cook with a meat probe. This optional probe plugs into the unit and allows you to set the internal temperature to which you want the product cooked. If you did not purchase the meat probe with your unit, call Cookshack Customer Service at (800) 423-0698 to order your probe.



1. Turn Master Switch on the oven control panel to the ON position.
2. Choose the desired operating mode by pressing the MODE button while pushing the up or down arrow until the desired mode flashes: Cook Mode for standard operation, which automatically drops into the preset hold temperature after the preset cooking time is completed; Probe Mode if cooking with the optional meat probe. The default mode is Cook Mode.
3. Set cooking temperature by pressing and holding the COOK TEMP button while using the ADJUST TIME OR TEMP buttons to change settings.
4. Set holding temperature by pressing and holding the HOLD TEMP button while using the ADJUST TIME OR TEMP buttons to change settings.
5. If using the Cook Mode, set cooking time by pressing and holding the COOK TIME button while using the ADJUST TIME OR TEMP buttons to change settings.
6. If using the Probe Mode, set probe temperature by pressing and holding the PROBE TEMP button while using ADJUST TIME OR TEMP buttons to change settings.
7. Press START.

To use the meat probe, simply insert the jack into the RCA receptacle on the controller panel. Place the probe end through the vent hole on the oven top and press into the largest piece of meat in the smoker oven. The oven will cook at the set 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 holding temperature and remain there until the unit is manually shut down. An audible signal indicates that the cook cycle is complete and that the oven is going to the Hold Temperature Mode. If cooking in the default Cook Mode the smoker will cook the product at the selected cooking temperature for the selected cooking time and then change to the selected holding temperature until it is shut off manually.

During the Cook Mode the LCD display of the IQ continually displays oven status after the cook cycle has been started. Using these features any kitchen staff can easily determine the status of the load in progress.

Please note that the oven temperature displayed while the oven is running is the actual air temperature inside the oven. The probe temperature displayed is the internal temperature of the product. In order to see the set cooking temperature, probe temperature, or holding temperature, briefly press the corresponding button.

The IQ controller is equipped with two **preset buttons** for easy selection of common settings for popular foods. Pressing the button marked Ribs/Chickens will make the following settings.

- CookTemp 225
- HoldTemp 140
- Cook Time 3:00

Pressing the button marked Briskets will make the following settings:

- CookTemp 225
- HoldTemp 140
- Cook Time 12:00

Once one of these preset buttons has been pushed you may start a Cook cycle using these settings by simply pressing Start.

The IQ controller is equipped with a power backup system to prevent your Smoker from forgetting what it is doing in the case of a power failure. The IQ will wait out power failures of up to 10 minutes and resume normal cooking. This backup system means that turning off the Master Switch will not cause the IQ to forget its current instructions. The **Reset button** may be used to clear these current instructions and cause the IQ to start over from the beginning.

- **\*\*\*CAUTION\*\*\*** the “**RESET BUTTON**” is used to clear the current instructions and cause the IQ4 to start over from the beginning. **ALWAYS CLEAN THE FIRE POT BEFORE USING THE RESTARTING THE OVEN.**
- Recommended cooking times and temperatures are based on full loads with no holding cycle. Larger or smaller loads or the addition of holding time may require adjustment of cooking time and temperature.
- When you think the product is finished, press the reset button and wait ten minutes before turning off the master switch and opening the oven door to check the product for doneness.
- When the product is done to your satisfaction, remove from the smoker.

## **LOADING INSTRUCTIONS**

All station rack units are hotter at the bottom than the top. When loading the oven take into consideration that air must flow from the bottom of the oven to the top. Do not blanket load the bottom rack. When cooking large pieces of meat turn the fat cap down on the bottom rack and up on the upper racks.

## **SHUT DOWN PROCEDURE**

- Press the reset button and wait ten minutes then turn the master on/off switch to the **OFF** position.
- The 10 minutes is to allow for cooling before opening the smoker.

## **\*\*\*SAFETY TIPS\*\*\***

- **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.**
- **Always use a grounded 3 prong plug and plug in receptacle.**
- **Always unplug the unit before any maintenance.**
- **Never leave the oven door open while the oven is running.**
- **Never use a high pressure washer around electrical components.**
- **Always clean the heat deflector before the cooker is used.**
- **All switches should be in the “OFF” position before plugging into receptacle**

## **MAINTENANCE PROCEDURES**

- Soot and Fly ash: Formation and Need for Removal ó 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 such as occurs during startup, shutdown, or incorrect operation of the smoker oven will lead to some soot formation which will collect in the exhaust venting system. The exhaust venting system should be inspected at least once every year to determine if cleaning is necessary.

- Clean Ashes from fire pot and combustion chamber weekly or if it appears as if there is a buildup of ash.
- Disposal of Ashes ó Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.
- Clean the racks and inside of cooking chamber with a degreaser. (Recommended cleaner is Zep FS10184 Degreaser) **NOTE: PROTECT ALL ELECTRICAL COMPONENTS FROM MOISTURE DURING THIS PROCESS.**
- If the oven is stored outdoors care should be taken to insure that water does not get into the pellet hopper. Wood pellets expand greatly when wet and will jam the auger system. A vinyl cover for the hopper is highly recommended.
- Clean the pellet slide periodically to prevent pellet dust buildup ó Figure 5.



Figure 5 – Pellet Slide Cleaning

## ELECTRICAL SPECIFICATIONS

- 110 volts, 60 HZ, single phase, 4 amp service required.
- The fire pot igniter element is 200 watts.
- Auger motor and burner induction fans are 25 watts each.

# TROUBLE SHOOTING GUIDE

<u>Trouble</u>	<u>Probable Cause</u>	<u>Solution</u>
<p><b>Control Panel does not power up</b></p>	<p><b>Unit not plugged into a working outlet (110VAC)</b></p> <p><b>High Temperature limit switch tripped.</b></p>	<p><b>Check the outlet to insure working. Plug into alternate source.</b></p> <p><b>Unplug Unit</b>  <b>Remove control panel access cover. Reset limit switch by pushing in on button.</b></p> <p><b>If these procedures do not allow control panel power up, call Customer Service.</b></p>
<p><b>Fire goes out during operation</b></p>	<p><b>Pellet hopper empty</b></p> <p><b>Auger motor turning but auger not turning</b></p> <p><b>Not enough intake air</b></p>	<p><b>Inspect hopper and clean pellet dust out and fill with pellets.</b></p> <p><b>Check shear pin between auger and motor—replace if broken</b></p> <p><b>Check auger for binding—clear cause of binding (jammed pellets)</b></p> <p><b>If auger clear and motor not turning—call Customer Service</b></p> <p><b>Check air intake air fan—if not turning call Customer Service</b></p> <p><b>If fan turning, refer to installation instruction and verify that vent pipe is properly installed</b></p>

<p><b>Fire does not light</b></p>	<p><b>Excessive pellet feed</b></p> <p><b>Pellet hopper empty</b></p> <p><b>Switch on pellet hopper not in contact with lid</b></p> <p><b>Dirty combustion pot</b></p> <p><b>Trouble with igniter</b></p> <p><b>Not enough intake air</b></p>	<p><b>Pellet auger not cycling, call Customer Service.</b></p> <p><b>Inspect hopper and clean pellet dust out and fill with pellets.</b></p> <p><b>Clear pellets so lid will fully close or adjust switch to make contact with closed hopper lid.</b></p> <p><b>Open fire box and clean combustion pot and try to restart unit.</b></p> <p><b>Open pellet hopper lid (stops pellet feed). Push start button. Open fire box and feel over pot If hot igniter is ok, if cold call Customer Service. Can manually light—see procedure in start up section.</b></p> <p><b>Check air intake air fan—if not turning call Customer Service</b></p> <p><b>If fan turning, refer to installation instruction and verify that vent pipe is properly installed</b></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.

This limited warranty includes parts and labor for the first 90 days. Following the 90 day period, the two (2) year limited warranty is 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.

Customer must obtain approval from Cookshack, Inc. before performing any service. Cookshack, Inc. is not responsible for any unauthorized service work.

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.

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 or 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 (580)765-3669.

## **COOKSHACK, INC. NATIONAL SERVICE POLICY**

Cookshack, Inc.'s National Service Policy is to build quality equipment with easy serviceability. Because of the ease in serviceability, Cookshack does not have National Service Companies to repair their equipment. This allows each customer to use the service company of their choice.

It your unit needs repairs, please contact your preferred local service company. If warranty work is deemed necessary, equipment owners should have their local service company contact Cookshack, Inc. for authorization to perform the repairs. Repair phone number is 580.765.3669.

## **RETURN MERCHANDISE POLICY**

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

1. Call Cookshack, Inc. at (580)765-3669. 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.

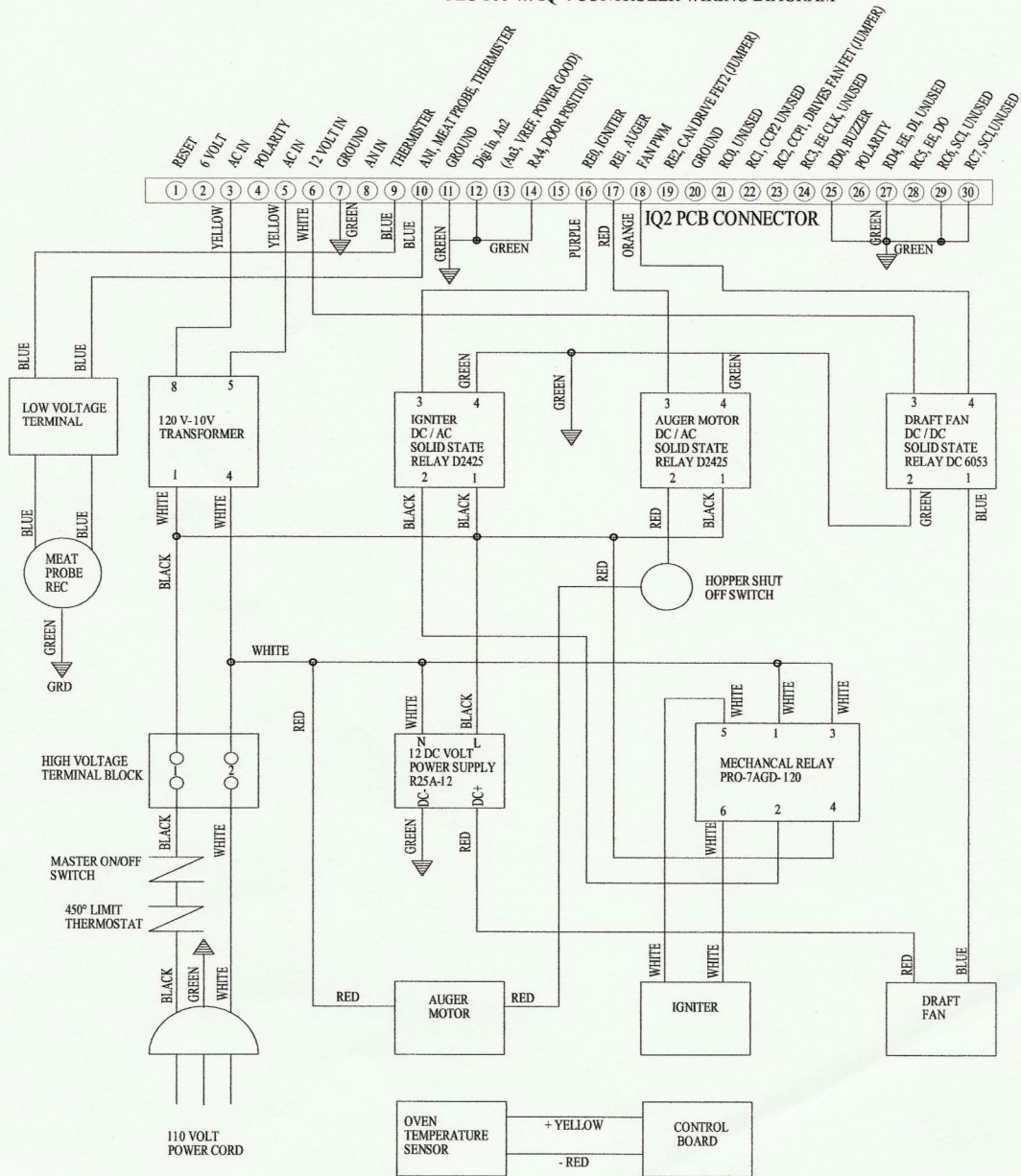
All return merchandise must be shipped to: Cookshack, Inc., 2304 N. Ash St., Ponca City, OK, 74601.

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.

# APPENDIX C

Cookshack Inc.  
 2304 North Ash St.  
 Ponca City, Ok. 74601  
 Ph. 580-765-3669, 1-800-423-0698

FEC-100 W/IQ-4 CONTROLLER WIRING DIAGRAM



# APPENDIX D

