

# **OPERATOR'S MANUAL**

## **COOKSHACK MODEL 150/160 SMARTSMOKER® OVEN**

Version: 10.1  
Model: 150/160  
Serial No.: \_\_\_\_\_

Dear Cookshack Customer:

Your Model 150/160 Cookshack SmartSmoker® oven 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 book, write to us at 2304 N. Ash St., Ponca City, OK 74601. Or call Cookshack Customer Service at (580)765-3669, Monday through Friday, 9am to 4pm.

You must observe safe operating practices when using the smoker. It is an electrical appliance, and is therefore potentially dangerous!

**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 Operator's 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 operates before attempting to operate it.**

This smoker oven is intended for use as a food smoker. It generates heat from an electric heating element. 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 those cautions in mind, enjoy your smoker and the delicious foods it will produce.

The Folks at Cookshack, Inc.



Sales & Customer Service: (580)765-3669  
Toll Free Orders: (800)423-0698  
24 Hr. Fax: (580)765-2223

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### MODEL 150/160

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# SETTING UP

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## Choosing a Location

Your smoker must be operated inside. Placement will be determined by convenience to rest of cooking operation, ventilation, wiring connection, and clearance from flammable materials.

Do not place flammable or combustible materials on or adjacent to the smoker.

## Ventilation

A small amount of smoke will escape from the vent hole in the top of the oven, and from around the door. The oven should be placed under a hood or near a door or window with an outside exhaust.

A simple wall vent fan is adequate in many locations. **Fasten no pipes to oven vent.**

An optional vent hood for your smoker is available from COOKSHACK. The stainless steel Smokehood incorporates a removable grease filter and an exhaust fan. It mounts directly on top of the smoker and removes the smoke vented during normal smoke/cooking.

## Electrical Power Connections

***WARNING: All warranties are null and void if the installation of the power receptacle is not done in strict compliance with these instructions, NEMA codes, and any other applicable electrical codes.***

COOKSHACK Models 150/160 have a single burner system using 120V AC power. Connect these ovens to the power supply by plugging the power cord into a 120V receptacle which is protected by a breaker or fuse rated at 15 amperes.

***Note: Due to the expense of this equipment and the risk of damage to the electrical system contained within this equipment, installation of power receptacles should be done only by a qualified electrician.***

A long or light-duty extension cord will reduce the efficiency of the heating element and food will take longer to cook.

# COOKING

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## Seasoning of Oven

The interior of your oven should be "broken in" or seasoned before you cook your first load of meat. Place wood (see Wood Selection, below) in the Wood Box. Close and latch the oven door. Set temperature to 200° - 225°, and turn the smoker on. Let the oven smoke, without meat, for a minimum of four hours. Further seasoning will occur as you cook in the oven.

Don't be alarmed if the oven temperature climbs somewhat higher than the setting. That is normal. When oven is loaded, the meat will absorb the extra heat.

## Wood Selection

You may use any fruit or nut hardwood in your smoker, as long as it has good flavoring abilities. The most popular woods for smoking are hickory, mesquite and apple. Any of these will work in your smoker and are available from Cookshack.

Other regional favorites are alder, beech, cherry, apple, pecan, maple, oak, buttonwood, and mangrove. Use local woods only if logs are selected and sized properly and if you are satisfied with their flavoring abilities.

***Caution: the maximum amount of wood to be used in your Cookshack Model 150/160 smoker oven is 6 ounces. Do not overload Wood Box.***

Use only dry wood. You will get the best results in finished product with dry wood. Wet wood will release acids that will damage heating elements and reduce the length of their life.

## Preparing the Oven for Cooking

**CAUTION - Operation of a dirty oven may create a fire hazard. Do not allow debris to accumulate in oven interior or on oven grills. Such debris may create a fire hazard! Follow all shutdown and cleaning instructions carefully.**



1. Place properly loaded Wood Box in oven as shown. Do not remove the Wood Box from the oven bottom during cooking cycle.

**IMPORTANT: Do not operate oven without Wood Box in proper position.**

2. Line the bottom of the oven with aluminum foil and punch a hole in the foil corresponding to the drain hole. Cover the Deflector with foil for easy cleaning. Discard the foil after each cooking and replace with fresh foil.

3. Place drain pan beneath the drain holes located in oven bottom and in the trough at bottom front of the smoker. This drip pan should be emptied after each cooking.

4. Notice that the grills in your smoker can be rearranged to accommodate different sizes of meat.

When smoking thick items, such as turkeys or large hams, remove alternate grills.

When hang-smoking ribs, remove all except the top and bottom grills, and raise side racks to highest position.

## Smoker Oven Maximum Load Capacity

|         | Ribs | Brisket | Pork Butt | Chickens | Jerky |
|---------|------|---------|-----------|----------|-------|
| Model   | Lbs. | Lbs.    | Lbs.      | Each     | Lbs   |
| 150/160 | 80   | 100     | 120       | 20       | 12    |

***IMPORTANT: Do not overload your smoker. Use the Smoker Oven Maximum Load Capacity chart below to determine the maximum capacity of your smoker.***

The following chart shows maximum cooking capacities, per load, of various Cookshack smoker ovens.

Capacities are based on 3 lb. ribs, 8 - 10 lbs. heavy cuts, and 3 lb. chickens. Capacities are specifically limited by the amount of heat available. **Fill smoker 50% to 100% of maximum capacity for best results.**

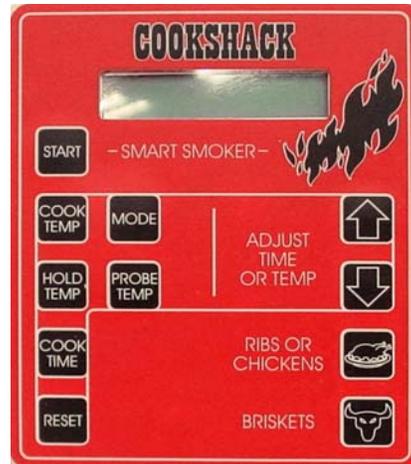
## Loading the Oven with Meat

1. Keep meat approximately 1" away from the back and side oven walls at all times.
2. Arrange meat with fewer cuts on lower grills. Heavy loading of bottom grills will block heat and prevent smoke from traveling to the top of the oven. This will result in undercooked meat on upper grills. (Allowances are made for loading arrangements when oven capacities are calculated.)
3. Load only half full the first time you cook, and gradually increase to a full load with successive batches. Monitor closely to determine what cooking time and load amount produce the results you desire. **Best results are obtained by loading the smoker from 50% to 100% of maximum capacity.**
4. When possible, cooking schedules should be arranged so that the same amount of an item is cooked each time. This allows full use of the automatic operation of the oven; it will save time; a better and more consistent product will be obtained.

When the oven is loaded according to above instructions, close and latch the oven door. Fasten the door latches securely.

## Setting the Cooking Temperature

Your Cookshack Model 150/160 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:

|           |      |
|-----------|------|
| Cook Temp | 225  |
| Hold Temp | 140  |
| Cook Time | 3:00 |

Pressing the button marked Briskets will make the following settings:

|           |       |
|-----------|-------|
| Cook Temp | 225   |
| Hold Temp | 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.

The IQ controller is also equipped with a **door position sensor**. If the oven door is open, the oven heating elements are disabled an alarm sounds and the display reads door open. Please contact your Cookshack Service Representative for assistance if you experience this problem. The door position sensor is a safety feature and must be kept in working order.

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 turn the switch to the OFF position. Wait ten minutes before opening the oven door to check the product for doneness. When the product is done to your satisfaction, remove from the smoker.

## Holding

Meat should always be wrapped or sealed immediately upon removal from your smoker, and held this way until ready to serve.

To minimize the danger of food becoming contaminated, follow a few key steps.

The most important step is hand washing. Employees can easily transmit germs to clean food if they don't follow basic personal hygiene. It is very important to wash after touching raw meat, fish, poultry, or dirty utensils.

Refrigerated cases should keep food at 38°F or below. Hot display cases should keep food above 140°F.

Some microorganisms, which can cause disease when present in low numbers, don't require temperature abuse to be dangerous. To avoid these diseases, exclude infected personnel from foodservice operations, use clean utensils when handling food, practice clean personal hygiene, and use the proper containers when covering food.

Remember, these are basic guidelines only and are not intended to replace laws, regulations, or restrictions concerning the handling and processing of food products. For further information, use your local health department guidelines to determine the best method for holding product, hot or cold.

# SHUTDOWN PROCEDURE

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## Safety First

- A. Press reset button then turn On/Off switch to **OFF** position.
- B. Wait at least 5 minutes before opening door.
- C. **Open door slowly.** This allows the wood and element to cool sufficiently so that a fire will not occur when the cold air rushes into the oven.

**IMPORTANT!!** If oven is to be left unattended with the door open remove the Wood Box from the oven using the wood box handle and douse the contents with water.

***FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN A FIRE HAZARD!***

# CLEANUP

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## Procedures

***Always disconnect the oven from its electrical supply before cleaning or servicing.***

Your Cookshack smoker must be kept clean. Loose grease and scale should be removed regularly to prevent buildup, which may cause strong fumes. It is desirable to allow seasoned coating, such as that found on a well-seasoned cast iron skillet, to remain on the oven walls. For this reason we do not recommend attempting to restore the oven walls to a "like new" state after each cooking. The use of detergent, chemical cleaners, or "oven cleaner" is not advised.

***IMPORTANT: Caustic oven cleaners may damage heating element and grills. Use of oven cleaners or other caustic cleaners will void the warranty on heating element and grills.***

**Follow this procedure after each load:**

- \* Disconnect oven from power supply.
- \* Allow the oven to cool.
- \* Remove the grills and racks; scrape and wash with soap and water.

- \* Empty Wood Box. (Remember it's hot!) Use the Wood Box handle supplied with oven.
- \* Discard aluminum foil.
- \* Remove all grease from interior of oven.
- \* Empty drip pan.
- \* Leave door slightly ajar when oven is not in use.
- \* Refer to safety precautions above.
- \* Replace Wood Box to correct position.

**Follow this procedure every 4 - 5 loads:**

- \* Remove grills and racks; scrape and wash.
- \* Empty Wood Box. (Remember it's hot!)
- \* Scrape loose grease and scale from walls with flat edge scraper.
- \* Replace racks and grills.
- \* Replace Wood Box to correct position.

***IMPORTANT: Reverse the above cleaning instructions after each cleaning to re-assemble the oven correctly. Do not operate oven without Wood Box in proper position.***

***IMPORTANT: Bottom of oven must be kept clean. Change foil in oven after each cooking and remove all excess grease from interior of oven. Drain hole must be open at all times. If drain becomes plugged, oven bottom can fill with grease and a fire hazard may occur!***

## MAINTENANCE

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- Periodically check electrical plug and wire for any type of wear or damage.
  - Twice annually put two drops of lightweight oil on the hinge pins to prevent binding.
  - Check casters for free movement.
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**TROUBLESHOOTER'S GUIDE, COOKING**


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| <b>PROBLEM</b>  | <b>POSSIBLE CAUSE</b>                 | <b>SOLUTION</b>   |
|---|---------------------------------------|---|
| Uneven cooking  | Improper meat loading                 | See loading instructions  |
| Strong grease fume "charcoal" flavor  | Excessively dirty oven                | See loading instructions  |
| Meat sticks to lower grill  | Heavy "blanket" loading               | Load with ample room for upward passage of heat   |
| Meat sticks to lower grill  | Direct burner heat in center of grill | Place foil under meat on bottom grill   |
| Smoke coming from top of door   | Normal                                |   |
| Product gets too done on the bottom grills, product on top grills is raw or underdone                     | Improper loading                      | Load lighter at the bottom for efficient heat and smoke circulation   |
| Door alarm sounds when door is closed   | Door Closed switch is malfunctioning  | Clean door switch. Call Cookshack customer service for instructions   |
| Although smoker is set with the same time and temperature as always, product is now taking longer to cook | Malfunctioning heating element        | Have electrician change element   |
| Actual oven temperature reads 5 to 20° higher or lower than set temperature                               | Normal                                |   |
| Poultry too dark  | Too much wood                         | Use less wood<br>Poultry absorbs smoke easily so start with the minimum amount suggested and gradually increase quantity wood with successive loads until desired smoke flavor is reached |
| Bitter skin on poultry  | Too much wood                         | Use less wood   |
| Fish too dark   | Too much wood                         | Use less wood   |

**TROUBLESHOOTER'S GUIDE, COOKING****PROBLEM****POSSIBLE CAUSE****SOLUTION**

|                                  |  |   |
|----------------------------------|--|---|
| No smoke taste                   | Not enough wood  | Use more wood   |
| Ribs too dry                     | Oven humidity too low                                  | Increase cooking temperature and decrease cooking time  |
| Skin cracking on poultry         | Oven humidity too low                                  | Rub with vegetable oil, butter, or mayonnaise before smoking<br>Use a Cookshack Water Magazine to increase oven humidity  |
| Fish falls through grills        | Overcooking<br>Grill spacing too large to support fish | Cook for shorter time<br>Use Cookshack Seafood Grills   |
| Ribs fall off Rib Hooks          | Ribs not securely fastened                             | Review Rib Hook instructions, make sure ribs are securely fastened  |
|                                  | Overcooking  | Cook shorter time   |
| Poultry not getting done         | Overloading  | Review loading and capacity instructions  |
| Dry product                      | Oven humidity too low                                  | Use Cookshack Water Magazine to increase humidity<br>Purchase product with fat on   |
| Load cooks unevenly              | Improper loading                                       | Follow smoker oven loading instructions in Operator's Manual<br>Always load bottom shelves lighter<br>Do not use sheet pans in the smoker they block even circulation of heat and smoke |
| Brisket on bottom cooks too fast | Improper loading                                       | Load bottom grill with fewer briskets, and load with fat side down  |

# APPENDIX A

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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 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 (580)765-3669.

# APPENDIX B

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## 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.

#### 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.

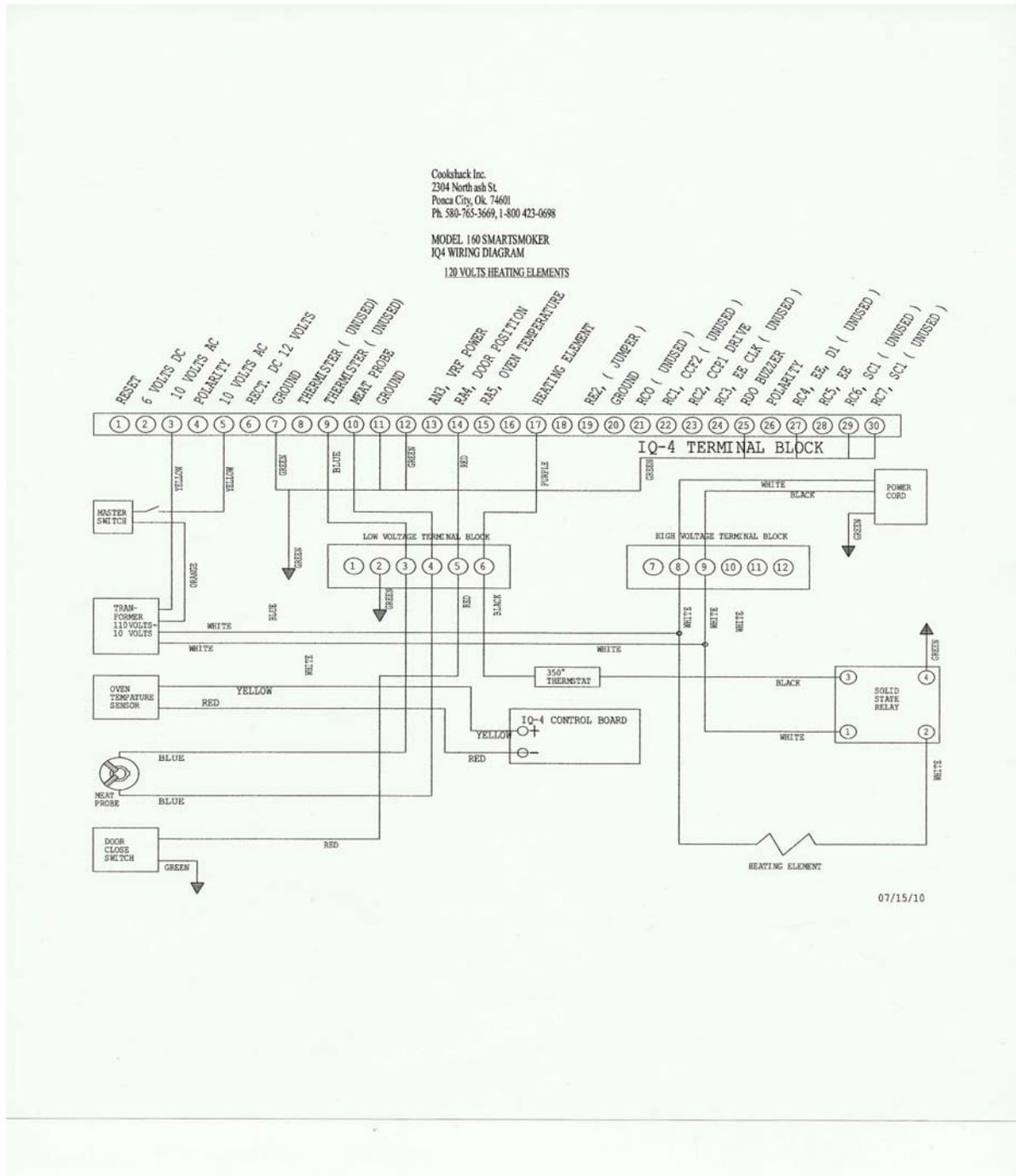
If replacement merchandise is deemed necessary by Cookshack, Inc. you will be invoiced for the replacement merchandise upon shipment. Credit for merchandise under warranty deemed to be defective by Cookshack, Inc. will be issued upon return of the defective merchandise.

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 UPS Ground or common carrier. If you request replacement merchandise be sent by faster service than UPS Ground or common carrier you shall incur the cost of shipping.

# Appendix C

## Wiring Diagram



# Appendix D

## Smoker Oven Illustration

