Old Version

COOKSHACK SUPER SMOKER OVEN OPERATOR'S MANUAL Models 301, 302 Model No. ______ Serial No.

Dear COOKSHACK Operator:

READ THE FOLLOWING INSTRUCTIONS THOROUGHLY BEFORE USING YOUR SMOKER!!

- Read your Operator's Manual BEFORE you use the smoker, not after. You will avoid problems.
- 2. Observe the following practices carefully:

*Load lower grills lightly to ensure upward circulation of heat and smoke.

*Always leave the woodbox in place during cooking..

COOKSHACK, Inc., assumes no responsibility for results of careless and dangerous operation of COOKSHACK smokers.

ALL WARRANTIES ARE NULL AND VOID IF THE ABOVE PRACTICES, AND THOSE DESCRIBED IN THE OPERATOR'S MANUAL AND THE SERVICE MANUAL, ARE NOT OBSERVED.

You are going to like this smoker. It will produce great barbecue and smoked foods. It is easy to operate, clean, and maintain. Use this Operator's Guide to familiarize yourself with the smoker and its operation. If you have a question or problem not covered in the book, call us.

We are glad to have you as a customer, and we want your smoker to work well for you.

The Ellis Family Owners and Founders

COOKSHACK
SUPER SMOKER OVENS
Operator's Manual
Models 301, 302

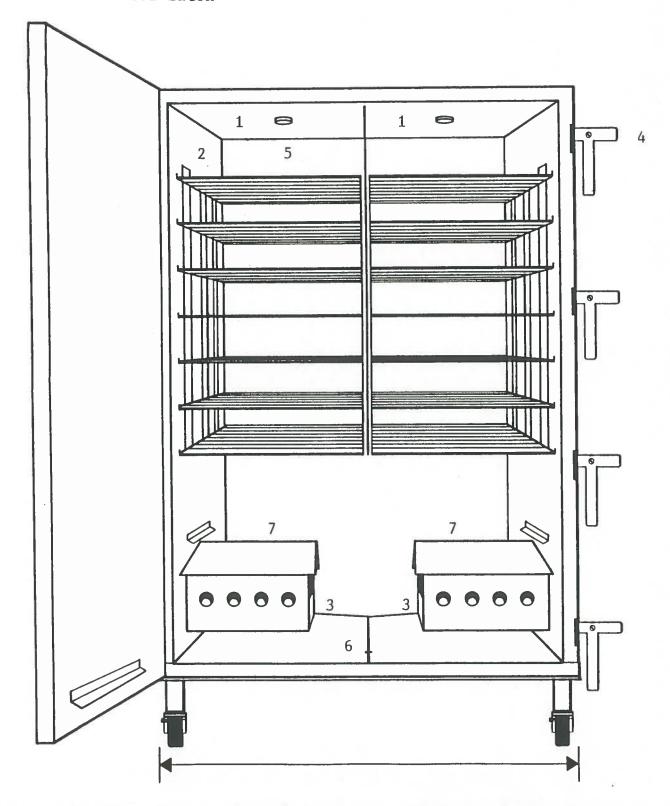
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COOKSHACK SUPER SMOKER OVENS Series 300 Oven Shown Below

- 1. Vent
- 2. Rack
- 3. Heating Element
- 4. Door Latch
- 5. Grill
- 6. Drippings Outlet
- 7. Woodbox



COOKSHACK SUPER SMOKER OVEN Operator's Manual Models 301, 302

SETTING UP

Choosing a Location

Your smoker can be operated inside. Placement will be determined by four factors:

- * Convenience to rest of cooking operation
- * Ventilation
- * Wiring connection
- * Clearance from flammable materials

Make sure that your smoker is clear of flammable materials as shown in Illustration 1 (next page).

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

- 1) under a hood or
- 2) 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 COOK-SHACK. 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.

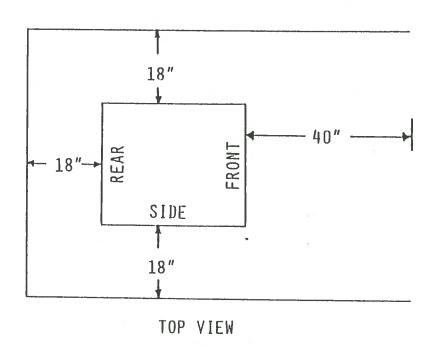
Electrical Power Connections

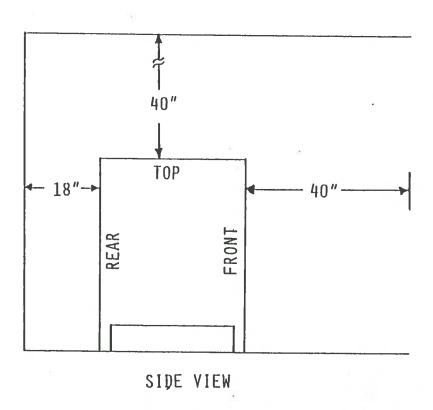
COOKSHACK Models 301 and 302 have a four burner system using 120/240V AC single phase power. Connect these ovens to the power supply by connecting to a receptacle with a NEMA L14-30R pin configuration plug (Leviton P/N 71430-FR) with a 120/240V AC single phase power supply protected by a 30 ampere fuse or circuit breaker. 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.

ILLUSTRATION 1

MINIMUM DISTANCES FROM SMOKER TO FLAMMABLE MATERIALS. FOLLOW THESE LIMITS AT TIME OF INSTALLATION. DO NOT PLACE FLAMMABLE MATERIALS NEAR SMOKER.





COOKING

Oven Controls

Cookshack Models 301 and 302 have a temperature controller in the left side panel. To heat the oven, turn the master switch and 4 heater switches to the ON position. Adjust the controller dial to $275^{\circ}\mathrm{F}$ heater temperature. The oven will now heat to normal cooking temperature of $200^{\circ}\mathrm{F}$.

The four heaters may be turned OFF, as desired, by their individual control switches. This is suitable with cooking requiring plenty of smoke at a low temperature.

Models 301 and 302 are equipped with a thermometer 'hand' on the Fenwal controller and with a thermometer mounted on the oven door. The door mounted thermometer is the actual cooking temperature in the oven. The controller thermometer indicates heater temperature. It is normal for the heater temperature to read 75° higher than the cooking temperature.

Seasoning of Oven

The interior of your oven should be "broken in" or seasoned before you cook your first load of meat. Place a properly sized log (see Wood Selection, below) in the woodbox. Close and <u>latch</u> the oven door. Set temperature to 225°, turn the Master switch to the ON position. Let the oven smoke, without meat, for a minimum of eight hours. Further seasoning will occur as you cook in the oven.

During the break-in described here a "temperature overshoot" may be observed. This will be seen as the oven temperature being higher than the smoke temperature that you have selected. This is a normal characteristic of the oven and is corrected by putting a load of meat in to cook.

Wood Selection

The most popular woods for smoking are hickory and mesquite. Either of these will work in your smoker and are available from COOKSHACK or your COOKSHACK dealer. Use local woods only if logs are selected and sized properly and if you are satisfied with their flavoring abilities. Be sure your woodcutter knows his wood.

One or two pounds of wood is all that is needed for each 60 lbs. of meat in Series 300 smokers. Either of these sizes and shapes will work:

1) approximately 2" to 3" in diameter and 6" to 8" in length

2) several smaller chunks of wood totaling one to two lbs. is acceptable

Do NOT use small chips, sawdust, or oversize logs.

Pointers for placing the wood in the woodbox:

*Use larger logs for longer cooking times

*Use more logs for more smoke

*The round side of a log facing downward will create slow initial smoke and heavier smoke later -- ideal for heavy meat cuts which require longer cooking times

*Placing the flat side of a split log down gives heavy initial smoke -- desirable for shorter cooking cycles such as ribs and chicken

Preparing the Oven for Cooking

- 1. Grill Arrangement. 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. Do not remove the woodbox from the oven bottom. It covers the burner and wood; and it prevents grease from dripping onto the heat source and creating strong fumes.
- 2. Line the bottom of the oven with aluminum foil and punch a hole in the foil corresponding to the drain hole. Place the drip pan under the hole. The foil must be discarded after each cooking, and replaced with fresh foil. The drip pan should be emptied after each cooking.

Loading the Oven with Meat

A temperature probe can be seen protruding from the back of the oven interior. This probe must be kept clear of meat.

- *Keep meat approximately 1" away from the back and side oven walls at all times.
- *Arrange meat with fewer cuts on lower grills. Heavy loading of bottom grills will block heat and smoke from traveling to the top of the oven. This will result in undercooked meat on the upper grills. (Allowances are made for loading arrangements when oven capacities are calculated.)
- *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.
- *When possible, cooking schedules should be arranged so that the same amount of an item is cooked each time. This will allow full use of the automatic operation of the oven; it

will save time; a better and more consistent product will be obtained.

How to Cook

If you have skipped directly to this section, go back and read the preceding information!

When the oven is loaded, according to above instructions, close and latch the oven door. <u>Fasten all latches securely</u>. Turn the master switch to the ON position, program the smoker, and start the cooking cycle.

Check the appendices at the end of this manual for cooking times. When you think the product is finished, 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.

IMPORTANT; MEAT SHOULD ALWAYS BE WRAPPED OR SEALED IMMEDIATELY UPON REMOVAL FROM THE OVEN, AND HELD THIS WAY UNTIL READY TO SERVE.

Wrap in aluminum foil or butcher paper. Ground meat or ribs should not be held longer than 36 hours after cooking. Heavy meat cuts may be held up to 60 days when frozen.

The appendices at the end of this manual will help you to determine how to cook specific products.

Shut Down Procedure

IMPORTANT!!

If oven is to be left unattended with the door open:

1. ON/OFF control MUST be in the OFF position.

2. Remove the woodbox from the oven and douse the contents with water. Any wood which remains on the burner must be removed. Rake it on to the foil bottom. Remove the foil from the oven immediately.

FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN A FIRE HAZARD.

Cleanup

ALWAYS DISCONNECT THE OVEN FROM ITS ELECTRICAL SUPPLY BEFORE CLEANING OR SERVICING.

Your COOKSHACK SUPER SMOKER must be kept clean. Loose grease and scale should be removed regularly to prevent buildup, which will 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 WILL DAMAGE HEATING ELEMENT.
USE OF OVEN CLEANERS WILL VOID THE WARRANTY ON THE HEATING ELEMENT.

Follow this procedure after each load:

- * Wipe grills with paper towels or equivalent.
- * Empty woodbox.
- * Brush wood remnants and ash from burner.
- * Empty drip pan.
- * Leave door slightly ajar when oven is not in use.

Follow this procedure weekly:

- * Remove grills and racks; scrape and wash.
- * Scrape loose grease and scale from walls with flat edge scraper.
- * Replace racks and grills.

IMPORTANT: BOTTOM OF OVEN MUST BE KEPT CLEAN. CHANGE FOIL IN BOTTOM AFTER EACH COOKING. BE SURE THAT DRAIN HOLE IS OPEN AT ALL TIMES. IF DRAIN BECOMES PLUGGED, OVEN BOTTOM CAN FILL WITH GREASE AND A FIRE HAZARD CAN OCCUR!

TROUBLESHOOTER'S GUIDE

| Problem | Possible Cause | Solution |
|--|---|---|
| Uneven cooking | Improper meat loading | See loading instructions |
| | Excessive door leakage | Inspect and correct by cleaning off residue or adjusting door |
| Strong grease fume "charcoal" flavor | Excessively dirty oven | See cleaning in- structions |
| | Dislocated wood box | Check visually and correct |
| Meat sticks to lower grill | Heavy "blanket" loading | Load with ample room for upward passage of heat |
| | Direct burner heat in center of grill | Place foil under meat on bottom grill |

APPENDIX A

BEEF

Brisket, Heavy Meat Cuts 200 - 210 degrees

Buy briskets untrimmed and cook with fatty side up. Cooking time will vary with size of cuts. A full load of small briskets will cook in as little as 7 to 8 hours. Large ones can take twice as long. The usual cooking time for ten pound briskets is 12 hours. Briskets will be tough if undercooked. A meat thermometer may be used, but the old-fashioned "fork test" is still a reliable and simple way to test for doneness.

COOKSHACK Chili 225 - 240 degrees

Place chili meat in a foil pan, spread to 3/4" thick, and cook for 30-40 minutes. Use this meat to make chili according to instructions furnished with COOKSHACK Chili Spice, available from COOKSHACK or from your dealer.

Hamburgers 225 - 240 degrees

Make patties 1/2" thick and cook 30-40 minutes, depending upon size of load. Salt upon removal from oven. Wrap in foil unless meat is to be served immediately.

Meat Loaf 210 - 220 degrees

Prepare the loaf, seasoning as desired. Shape to approximately 2" thick. Place in a foil pan and set on grill. Cooking time will run 3 to 4 hours, depending on thickness and amount being cooked.

Prime Rib 200 - 210 degrees

Prime rib should be cooked approximately 7 hours, depending upon desired doneness, meat thickness, and loading. For gourmet preparation, cook 5 hours at 160 degrees, followed by 5 hours at 200 degrees. Vary conditions according to meat size, quality, and personal preference.

Beef Ribs 200 - 210 degrees

Place racks of beef ribs flat on grills, 3 racks per shelf. Smoke/cook 2 - 3 hours. Remove from smoker, wrap and cool down.

Smoky Jerky

"Jerking" meat is a drying process, not a cooking process. Smoker temperature must be kept high enough to keep the wood smoking, but low enough to dry (not cook) the meat: 125 - 130 degrees. At this temperature 10 -12 lbs. of meat strips will smoke/dry in a Series 100 SUPER SMOKER in about 16 hours.

Any muscle meat will jerk. Try brisket, flank steak, top round. Slice with grain into strips of any workable length, and 1/8" to 1/4".

Regional tastes dictate seasoning of jerky. Some favorites are: cayenne pepper, garlic, red chiles, salt, black pepper, onion.

Steaks 240 - 250 degrees

Cook 1-1/4" steaks one hour, allowing for size of load. Salt and wrap immediately when done. (Cook steaks at a slightly higher temperature than other cuts.)

PORK

Ham, Shoulders, Heavy Meat Cuts
200 - 210 degrees

Follow the same general rules as for brisket, allowing for weight and thickness of meat.

Pork Ribs 225 - 240 degrees

Trim off all fat, loose membrane tissue, scrap ends and thin edges. Trimmings may be cooked separately in a foil pan on the top grill. Cooking time for ribs will vary with the size of the load and the thickness of the slabs, but will run 3 - 4 hours.

Move side racks to highest position. Use rib hooks to hang ribs from top grill. Place hook through slab at third or fourth bone from small end of slab, securely hooking around bone. Hang ribs with the heavy end of the slab down for more even cooking. Or, lay ribs flat on grills, with lighter loading on bottom grills.

If ribs have a tendency to dry out while smoking, increase oven temperature approximately 30 degrees. Cover vent hole to increase oven humidity.

Sausage 180 - 190 degrees

Hang sausage from top grill, or coil and lay flat on grills. Cooking time is determined by composition and size of sausages. Allow about six hours at 180 degrees for one lb. sausages. Wrap in butcher paper for holding.

POULTRY

Chicken, Duck, Cornish Hen 225 - 240 degrees

Poultry may be smoked in appropriately sized foil pans. Salt to taste and sprinkle with COOKSHACK Ribrub or Spicy Chicken Rub. Use the resulting seasoned stock for gravy or sauce.

Cooking time will vary with amount being cooked, but will run 60 - 75 minutes per lb. Giblets may be placed in a foil pan and cooked with the bird.

Turkey 200 - 210 degrees

Salt turkeys inside and out before cooking. We recommend smoking turkeys in appropriately sized foil pans. Allow approximately 9 hours for a full load. As with other poultry, finished appearance and taste is enhanced by a sprinkling of COOKSHACK Ribrub or Spicy Chicken Rub before cooking.

SPECIALTY ITEMS

Smoky Baked Apples 200 degrees

Put butter, sugar, cinnamon in center of cored apples. Place in shallow baking pan. Bake for 4 hours. DO NOT USE A LOG IN THE SMOKER. Test with fork for doneness. Serve warm, topped with vanilla ice cream.

FISH & SHELLFISH

Smoke cooking, while it has a preserving effect, is not a preserving process. Curing in a brine solution reduces moisture content, retards formation of bacteria, and enhances flavor.

Use a brine of the same strength each time for consistent results. Vary the length of time the product stays in the brine, rather than the strength of the brine. Sam Collier, owner of the Heritage House Smorgasbord in Columbia, Missouri, recommends an 80% salt solution for brining. An 80% salt solution is one that will float a fresh raw egg or potato. Here is Sam's brine recipe:

Basic Fish Brine

4 gals. water
5 lbs. uniodized salt
2-1/2 lbs. brown sugar
1-1/2 T. lemon juice
2 T. liquid garlic
2 T. liquid onion

Add flavoring ingredients to enhance the flavor of the finished product: experiment with dill, dry white wine, ginger, allspice, black pepper, crushed bay leaves, fruit juices, flavored vinegars, soy sauce, etc.

Soak the fish or shellfish in the brine solution in a non-metall-ic container. Brining time varies from 30 minutes for small shellfish, to 18 hours for large, whole fish. As a general rule, soak product in brine one hour per pound.

Remove from brine, rinse lightly, and allow to dry thoroughly in refrigerator, for several hours.

Place shellfish in oiled baking pans, or on oiled screens cut to size of grill. Place fish directly on oiled grills, baking pans, or aluminum foil cut to size of individual pieces of fish.

Smoke at 150 - 190 degrees until done. Cooking time will vary from one-half hour for small shellfish, to 8 - 10 hours for large fish. Use the "one hour per pound" rule and check periodically to avoid overcooking. Fish should flake easily with a fork, and have a firm feel to it. Shellfish will be mealy if overcooked and rubbery if undercooked.

When product is done to your satisfaction, remove from smoker and wrap immediately. Cool and refrigerate. Fish will keep in the refrigerator for up to 2 weeks, shellfish up to one week. Oysters can be placed in a jar and covered with olive oil for storage in the refrigerator.

COOKING NOTES

Date Product Degrees Time In/Time Out Comments