

INSTRUCTION AND SERVICE MANUAL



*Type "C" Wilcolator
Gas oven Heat Control*

THE WILCOLATOR COMPANY • 1001 Newark Avenue, Elizabeth, N. J.
WILCOLATOR (CANADA) LTD., 24 Buckingham St., Mimico, Toronto, Canada

The Wilcolator Oven Heat Control



The best results in oven cooking depend on accuracy in measurement of the oven temperature, the ingredients and the time.

The purpose of the Wilcolator is to automatically regulate the oven flame and so maintain any selected oven temperature.

Before attempting to use the oven, read these instructions and any instructions supplied by the range manufacturer. Be sure that all specified adjustments have been made.

Wilcolator GIVES YOU WORRY FREE COOKING

- 1—Insures correct baking results by measuring just the right amount of gas, the same as you measure a teaspoonful of sugar. Automatically maintains the correct oven temperature.
- 2—Saves gas. The Wilcolator prevents waste of gas and soon pays for its cost. Eliminates loss of foods.
- 3—Takes all the guess work out of baking.
- 4—Lets you use new recipes with confidence that the results will be satisfactory.
- 5—Allows you to roast meats to your individual taste—rare, medium or well-done, just as you like them.
- 6—Lets you play all afternoon. Complete oven meals may be cooked at the same time. Dinner is ready and piping hot right on the dot.
- 7—Permits the use of low oven temperatures for roasting, and for warming, drying and sterilizing dishes.
- 8—Helps you do your canning. Any method you wish may be used.





RECIPES

As there are many excellent recipe books, it is not the intention of this booklet to list detailed recipes, but to provide general instructions for the use of the oven thermostat. On the following pages will be found an approved time and temperature cooking chart. By following this chart, you can cook foods to your taste.

DIRECTIONS FOR USING YOUR *Wilcolator* OVEN THERMOSTAT

Read carefully before using the oven.

- 1—Push dial in and turn to desired temperature.
- 2—Light burner. On stoves equipped with automatic ignition, it is not necessary to light burner. Follow the range manufacturer's instructions for oven equipped with automatic ignition.
- 3—Prepare food while the oven is heating.

"SOME DON'TS"

- 1—Don't place food in oven until the large flame has automatically reduced to a small flame. (Unless the recipe specifically directs to the contrary.)
- 2—Don't turn the *Wilcolator* to a higher temperature than required. This wastes both time and gas and will probably spoil your baking product.
- 3—Don't worry because the flame remains low after the selected dial temperature is reached. It doesn't take much gas to keep the oven hot once it is heated.



EXAMPLES OF USING THE *Wilcolator*

I BAKING BISCUITS

- 1—Push dial in and turn to 450° dial setting.
- 2—Light oven.
- 3—Mix biscuits.
- 4—Wait until flame is reduced to a small one.
- 5—Place biscuits in oven.
- 6—Bake according to recipe directions.



II BROILING A STEAK OR CHOPS

- 1—Select a tender cut of steak—do not salt.
- 2—Lay on greased broiler rack.
- 3—Set dial at "Broil" and heat broiler for 5 minutes.
- 4—Place broiler pan with meat 2" to 3" below flame.
- 5—Turn food only once during broiling.
- 6—Serve meat on hot platter.



METHODS FOR ROASTING MEATS

There are two methods for roasting meats. It is a matter of personal choice which of the following you prefer.

1—Preheat—Hot Start—Searing Method:

Gives roast an attractive outside appearance. Cooks outside fat to a crispness. Improves quality of drippings from which gravy is made.

Meat should be seared at 500° for 20 minutes in an uncovered pan, then proceed according to particular meat to be roasted.

2—Modern—Cold Start—Non-Searing Method:

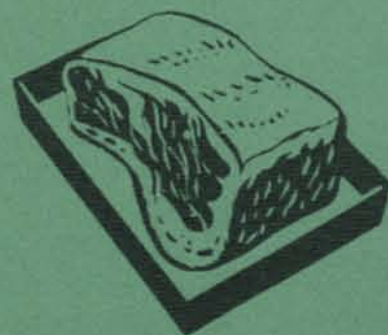
Gives uniformity of doneness. Less shrinkage in fat and less loss in juices than by searing method.

Meat is roasted at a constant low temperature. See cooking chart for time and temperature.

CAKES AND COOKIES

A few general mixing rules:

- 1—If butter is used as basis of cake, be sure to cream well.
- 2—Egg yolks are lightest if beaten with a twirling egg beater.
- 3—Egg whites should be whipped with a wire egg beater as the result is lighter and fluffier.



4—If egg whites are to be used in any cooked dish, such as, cakes, souffles, meringues, etc. whip until egg whites are stiff but stop before that wet stiffness changes to a dry glazed appearance.

5—Never stir stiffly beaten egg whites into any mixture. This will break walls of egg whites and much of the carefully caught air will be lost.

Always use a spoon or a spatula, cut down and fold over the beaten egg whites, working from outside toward the center. With a little practice, you can acquire a skillful manipulation that does the work as quickly as beating would do.

6—Nuts or fruits added to any mixture should always be floured with a small amount of flour to prevent their settling.



BAKING HINTS

1—There are two classes of cakes, sponge and butter cakes.

2—Layer cakes require higher temperatures.

3—Do not jar or move a cake until baking is complete.

4—If the cake is breadly or solid, too much flour has been used.

5—Deeper baking pans require longer baking times.

6—Do not grease pans for angel and sponge cakes.

7—Heavy cakes are caused by too much sugar or butter.

8—If a browner cake is desired, raise the temperature 25 degrees the last few minutes of cooking.

Cooking Charts . . .

ROASTING

MEAT	Set Temperature	Time in Minutes Per Pound	Time in Minutes Per Pound Started Cooking From Frozen State
BEEF			
Standing Rib 6-8 Pounds	300	Rare 18-20 Medium 22-25 Well Done 27-30	43 47 55
Less than 6 Pounds.....	300	Rare 33 Medium 45 Well Done 50	55 60 65
Rolled Ribs	300	Rare 32 Medium 38 Well Done 48	53 57 65
Rump (High Quality)			
Standing	300	25-30	50
Rolled	300	30-35	55
LAMB			
Leg	300	30-35	40-45
Rolled Shoulder	300	40-45	40-45
Shoulder (bone-in or cushion style)....	300	30-35	40-45
VEAL			
Leg	300	25-35	40-45
Shoulder	300	25	40-45
Boned and Rolled.....	300	40-45	40-45
PORK			
Loin	350	35-40	50-55
Fresh Ham	350	30-35	50-60
SMOKED PORK			
Ham (New style, tendered)			
Whole 10-12 pounds.....	300	15	
Half 5-8 pounds.....	300	18-20	
Ham Butts 3-4 pounds.....	300	35-40	



POULTRY (In computing time use shorter time for larger birds.)

POULTRY	Set Temperature	Time in Minutes Per Pound	Total Cooking Time
CHICKEN			
Stuffed weight ready for oven			
3½-4 pounds	350	45-40	2-2¼ hours
4-5 pounds	350	40-35	2½-3 hours
Over 5 pounds.....	325	35-30	3-3½ hours
TURKEY			
8-10 pounds	325	25-20	3-3½ hours
10-14 pounds	325	20-18	3½-4 hours
14-18 pounds	300	18-15	4-5 hours
18-20 pounds	300	15-13	5-7 hours
GOOSE			
10-12 pounds	325	30-25	4-4½ hours
DUCK			
5-6 pounds	350	35-30	2-3 hours
FISH			
	400	15-25	



BROILING

FOOD	Time in Minutes For Medium Done
Porterhouse, 1½ inches thick.....	30
Lamb Chops, 1 inch thick.....	15
Chicken (Split)	30
Fish, 1 inch thick.....	25
Allow 5 inches between flame and food for following:	
Bacon	5
Smoked Ham, 1 inch thick.....	25

Food may be placed clear to heat if a more seared or charred effect is desired.

Cooking Charts...



BAKING

FOOD	Set Temperature	Time in Minutes	Temperature Reset To	Time in Minutes		
BREADS, (Yeast)						
Bread, Yeast	375-400	45-60	350-375	30-40		
or						
Bread, Yeast	400-425	15				
Rolls, Yeast	400-425	15-25				
Coffee, Cake, Yeast.....	375-400	25-30				
BREADS, (Quick)						
Baking Powder Biscuits.....	450-475	12-15	350	20		
Corn Bread	400-425	20-30				
Gingerbread	350-375	35-45				
Loaf, Nut Bread, etc.....	325-350	60-75				
Muffins	400-425	20-25				
Popovers	450	20				
CAKES						
Angel Food	325	60-75	350	20		
Sponge Cake	325	40-60				
Layer Cake	375	25-35				
Chocolate Layer	350	30-35				
Loaf Cake	350	45-60				
Cup Cakes	350-375	20-30				
Pound Cake	325	60-75				
Fruit Cake (large).....	250-275	3-4 hours				
Fruit Cake (small).....	275-300	1½-2½ hours				
COOKIES						
Brownies	350	30-35				
Drop Cookies	375-400	12-15				
Roller Cookies	375-400	8-12				
Refrigerator Cookies	400-425	8-12				
Molasses Cookies	350-375	10-15				

BAKING (Cont'd)

FOOD	Set Temperature	Time in Minutes	Temperature Reset To	Time in Minutes
PASTRIES				
Cream Puffs	400	40-50	375	25
or				
Cream Puffs	450	15		
Pie Shells	450	12-15		
PIES				
Fruit Pies	450	15	350	35-45
or				
Fruit Pies	400-425	40-50	325	25-30
Custard Type Pies.....	450	10		
MISCELLANEOUS				
Custard (Cup)	300-325	30-40		
Custards (Casserole)	300-325	60-75		
Souffles	300-325	45-60		
Scalloped Dishes (Cooked Food).....	400	25-35		
Meringue (Topping)	325	15-20		
Meringue Shells	275	1¼-1½ hours		
Potatoes, Baked	400-450	50-60		
Potatoes, Scalloped	375-400	50-60		

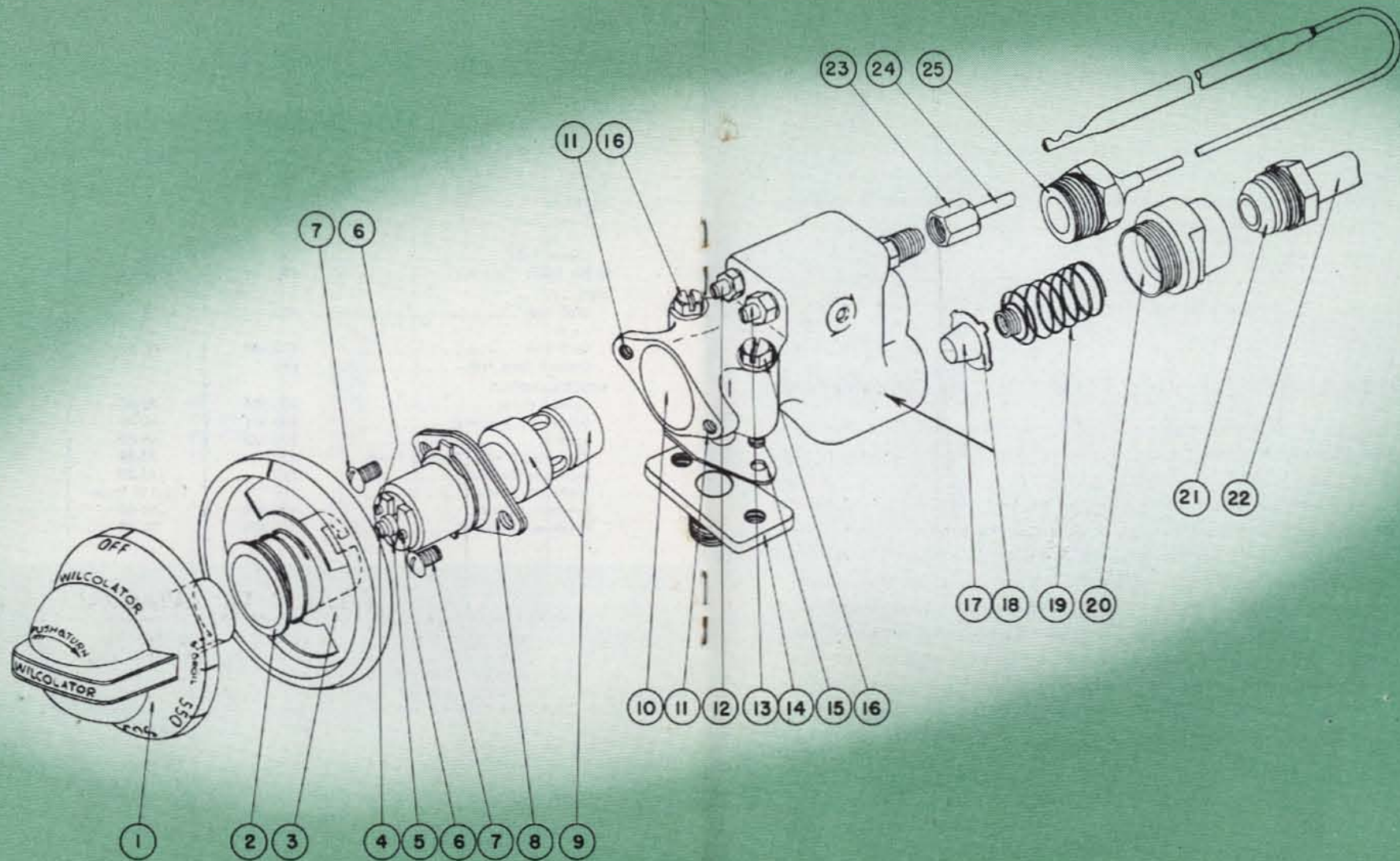


TABLE OF MEASURES AND WEIGHTS

2 cups butter (packed).....	1 pound	4 cups flour (white)	1 pound	A few grains or a pinch is less than one-eighth teaspoon.
2 cups granulated sugar	1 pound	4½ cups Graham flour	1 pound	
2½ cups powdered sugar.....	1 pound	3¾ cups entire wheat flour.....	1 pound	3 teaspoons
3½ cups confectioners' sugar.....	1 pound	4½ cups coffee	1 pound	1 tablespoon
2½ cups brown sugar.....	1 pound	2 cups chopped meat (packed)	1 pound	16 tablespoons
2½ cups oatmeal	1 pound	1 square section of cooking chocolate	1 ounce	1 cup
4¾ cups rolled oats.....	1 pound	½ cup almonds blanched and chopped	1 ounce	2 tablespoons butter
2½ cups granulated corn meal..	1 pound			1 ounce
4½ cups rye meal	1 pound			4 tablespoons flour.....
1½ cups rice	1 pound			1 ounce

Powdered sugar, confectioners' sugar and flour should be sifted before measuring.

- ① Dial
- ② Center Ring
- ③ Bezel
- ④ Center Screw
- ⑤ Calibration Indicator
- ⑥ Lock Screws
- ⑦ Screws
- ⑧ Valve Plug Assembly
- ⑨ Plug
- ⑩ Inside Bore
- ⑪ Die Casting
- ⑫ By-pass Valve



- ⑬ Pilot Valve
- ⑭ Flange Assembly
- ⑮ Gasket
- ⑯ Cap Screws
- ⑰ Valve
- ⑱ Valve Face and Valve Seat
- ⑲ Valve Spring
- ⑳ Valve Cap
- ㉑ Nut
- ㉒ Oven Burner Gas Line
- ㉓ Compression Nut
- ㉔ Pilot Tube
- ㉕ Bellows and Bulb Assembly

