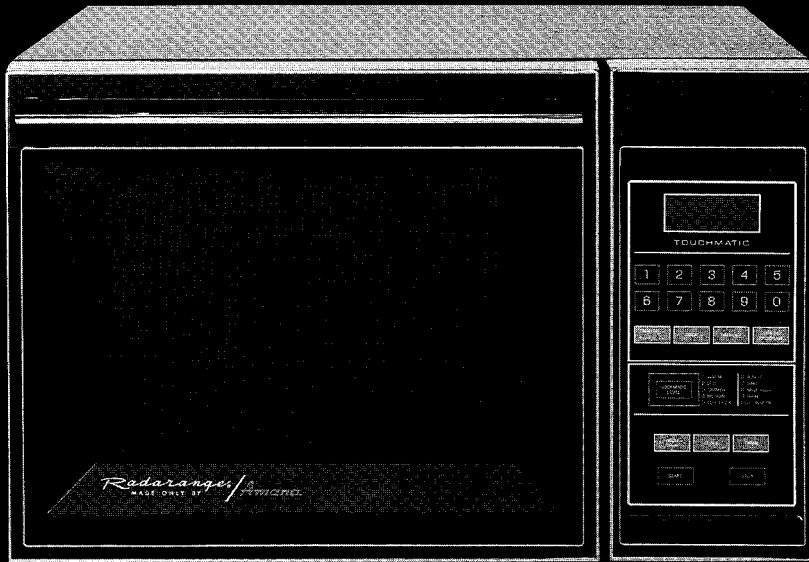


# Touchmatic® Amana® Radarange®

MICROWAVE OVEN

## Model RRL920\* Use & Care Manual



\*Model number may be preceded by the letter "C" in Canada.

Record in the space below the Model No., Manufacturing (Mfg) No. and Serial No. found on the nameplate of your oven. The nameplate is located either on the back of the oven or underneath the oven near the right front foot.

Model No. \_\_\_\_\_

Mfg. No. \_\_\_\_\_

Serial No. \_\_\_\_\_

Date Installed \_\_\_\_\_

Selling Dealer \_\_\_\_\_

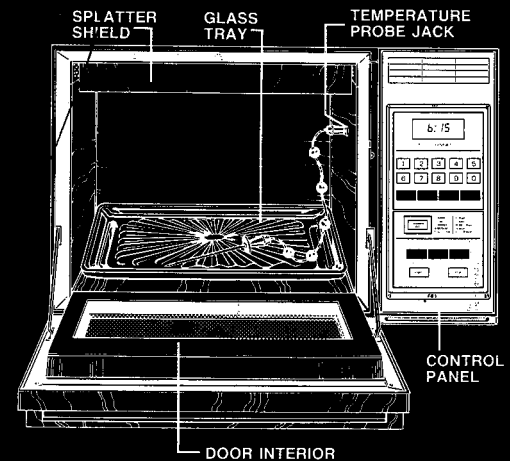
Retain these numbers and your Sales Receipt for proof of purchase should warranty questions arise. Your Sales Receipt is required if warranty service is needed. Complete the registration card, which is included with the packet that comes with the oven. This must be filled out and returned to Amana Refrigeration, Inc. Federal regulations require that all manufacturers of microwave ovens have a permanent record of the owners of each oven.

### READ THIS MANUAL BEFORE OPERATING YOUR RADARANGE OVEN

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#### OVEN PARTS



**NOTE: DO NOT STORE TEMPERATURE PROBE IN RADARANGE OVEN**

# IMPORTANT SAFETY INSTRUCTIONS

When using electrical appliances, basic safety precautions should be followed, including the following:

**WARNING** — to reduce the risk of burns, electrical shock, fire, injury to persons or exposure to excessive microwave energy:

1. Read all instructions before using the appliance.
2. Read and follow the specific "PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY" found on page 3.
3. This appliance must be grounded. Connect only to properly grounded outlet. See "GROUNDING INSTRUCTIONS" below.
4. Install or locate this appliance only in accordance with the provided installation instructions.
5. Some products such as whole eggs and sealed containers — for example, closed glass jars—may explode and should not be heated in this oven.
6. Use this appliance only for its intended use as described in this manual.
7. As with any appliance, close supervision is necessary when used by children.
8. Do not operate this appliance if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped.
9. This appliance should be serviced only by qualified service personnel. Contact nearest authorized service facility for examination, repair or adjustment.
10. Do not cover or block any openings on the appliance.
11. Do not use outdoors.
12. Do not immerse cord or plug in water.
13. Keep cord away from heated surfaces.
14. Do not let cord hang over edge of table or counter.
15. See door cleaning instructions on page 13.
16. To reduce the risk of fire in the cavity:
  - a. Do not overcook food. Carefully attend appliance if paper, plastic, or other combustible materials are placed inside the oven to facilitate cooking.
  - b. Remove wire twist-ties from paper or plastic bags before placing bag in oven.
  - c. If materials inside the oven should ignite, keep oven door closed, turn oven off, and disconnect the power cord, or shut off power at the fuse or circuit breaker panel.

## SAVE THESE INSTRUCTIONS

### UNPACKING THE OVEN

Inspect the oven for any damage such as damaged gasketing around the door, dents or holes in the screen of the door or dents inside the cavity.

Any dents or breakage should be reported to your Amana Dealer

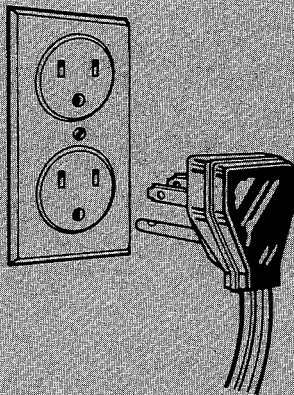
immediately. You will be told if the unit will operate correctly. After removing packing material and literature from around the glass oven tray, place tray in oven so the word "FRONT" is readable. Do not operate oven without glass tray in place.

### OVEN PLACEMENT

Do not build the oven in with the sides, top or bottom airflow restricted. The oven must have sufficient airflow around it. If you wish to build in the Radarange Oven, use only model "MS" trim kits that have

a label on the bottom that identifies which Amana Radarange Model Series may be used. Trim Kits can be purchased from your Amana Dealer.

## GROUNDING INSTRUCTIONS



INSURE PROPER GROUND  
EXISTS BEFORE USING.

This appliance must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This appliance is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded. Do not use a two-prong adaptor.

**WARNING** - Improper use of the grounding plug can result in a risk of electric shock.

Consult a qualified electrician or serviceman if the grounding instructions are not completely understood, or if doubt exists as to whether the appliance is properly grounded. If it is necessary to use an extension cord, use only a 3-wire extension cord that has a 3-blade grounding plug, and a 3-slot receptacle that will accept the plug on the appliance. The extension cord must be a minimum of 15 amps, 120 volts, and should be no more than six feet in length. This oven should be plugged into a separate 120 volt, 15 amp, 60 hertz circuit. When a microwave oven is on a circuit with other appliances, cooking times can be increased and fuses can be blown.



# SAFETY INSTRUCTIONS

## Read and follow these Rules for Safe Operation.

This microwave oven is designed to be safe and reliable. As with all appliances, there are certain rules to follow. Make sure everyone who cooks with this oven is familiar with this product's operation and with these precautions.

## PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

- (a) Do not attempt to operate this oven with the door open since open-door operation can result in harmful exposure to microwave energy. It is important not to defeat or tamper with the safety interlocks.
- (b) Do not place any object between the oven front face and the door or allow soil or cleaner residue to accumulate on sealing surfaces.
- (c) Do not operate the oven if it is damaged. It is particularly important that the oven door close properly and that there is no damage to the: (a) Door (bent), (b) hinges and latches (broken or loosened), (c) door seals and sealing surfaces.
- (d) The oven should not be adjusted or repaired by anyone except properly qualified service personnel.

## PRECAUTIONS

- (a) Always press **CHANGE/CANCEL** twice before programming the oven.
- (b) **WARNING: Liquids** must be briskly stirred or poured (to mix in air) before being heated in a microwave oven. If air is not mixed into a liquid, the liquid can erupt in the oven or after removal from the oven.
- (c) **Eggs** must not be cooked or reheated in the shell, or with an unbroken yolk. To do so may result in a pressure build-up and eruption. Pierce the yolk with a fork or knife before cooking.  
Do not reheat previously cooked eggs in the microwave oven unless finely chopped or scrambled.
- (d) **Home canning** must not be done in a microwave oven. Home canning is generally done with metal lids. Since metal lids reflect microwaves, you cannot be assured that the food product will be heated uniformly to 212°F or above, and there is a probability of deterioration of the food product. USDA extension specialists do not recommend home canning in microwave ovens.
- (e) **Deep fat frying** must not be done in any microwave oven. The fat could overheat and be hazardous to handle.
- (f) **WARNING: Do not heat sealed containers in any microwave oven. Containers with restricted openings** such as syrup bottles must not be used for cooking. Food or liquid could expand quickly and cause the container to break.
- (g) **Regular cooking thermometers** must not be used in a microwave oven. Most cooking thermometers contain mercury and may cause "arcing", malfunction, and/or damage to the oven.
- (h) **Plastic bags (and other air-tight containers)** must always be pierced or opened before heating in a microwave oven. This is needed to allow steam to escape during cooking.
- (i) **Metal or ceramic accessories** which have a special design to absorb microwave energy to provide heat ("active" accessories such as browning skillets) may be used with caution. Be sure to test any such device before use and to read carefully and follow manufacturer's instructions provided with the accessory. Any questions concerning these accessory products should be referred to the accessory manufacturer. Amana Refrigeration, Inc., does not endorse any brand of accessory. Remember that all microwave accessories are not "top quality"; some may not be suitable for microwave cooking. Caution must be used when purchasing microwave accessories.
- (j) **Newspapers** must never be used in a microwave oven since they may ignite.
- (k) **Paper towels** which contain nylon or other synthetic fibers woven through them must not be used because the heated synthetics could melt and cause the paper to ignite.

## CHECKING OVEN OPERATION

- A. **Set the optional entry signal.** This optional signal can be set to "beep" whenever a pad is pressed. It confirms the oven has "read" and accepted your entry.

**To program the entry signal:**

1. Plug in the oven. Dash lines will appear in the display.

2. Press **0**. The oven will "beep" now and whenever you press any pad.

**To cancel the entry signal:**

Unplug the oven and reconnect it, but do not press **0**. Dash lines will appear in the display. The oven will not beep when you press the pads.

- B. **To deactivate the end-of-cycle signal.**

This optional signal can be set to "beep" to indicate when cooking time has elapsed and when food has reached a set temperature. The signal is automatically set when you plug in the oven.

**To cancel the end-of-cycle signal:**

Press **TIMER** before setting the clock (while the dash lines are still displayed).

**Note:** Throughout this manual, you will note references to a tone that signals the end of a cooking or timing operation. If you have cancelled the end-of-cycle signal, disregard these references.

- C. **Oven Light**

The oven light will come on when the door is opened. It will also come on when the oven is operating.

- D. **Set the Clock**

1. Press **CHANGE/CANCEL** twice.

2. Enter the time of day by pressing the numbers in sequence. For example, if it is 10:35 (a.m. or p.m.),

press number pads **1, 0, 3** and **5**, in that order.

3. Press **CLOCK** twice. The clock is now set. If oven power is interrupted (for example, if the supply circuit is disconnected, or if there is a power failure), all programming instructions will be erased, and dashes will appear in the display. You must then reset the desired signal options and clock as indicated above.

- E. Check operation of the interlock systems. The **START** and **STOP** pads turn the oven on and off. Microwave energy is generated only when the door is closed, cooking time or temperature has been set, and **START** has been pressed. In addition, the oven has interlock switches to assure no microwave energy is generated when the door is open. To check or remove food before the cooking time has elapsed, you may either press **STOP** or open the oven door to turn the oven off. Before the oven door opens, hidden interlock switches sense the motion of the door handle and automatically turn the oven off.

Here is how you may check the operation of **START, STOP** and the interlock switches:

1. Place a glass of water in oven and close oven door.
2. Press **CHANGE/CANCEL** twice.
3. Press **5**, then **0**.
4. Press **START**. The oven should operate and the oven light should come on.
5. Press **STOP**. The oven should shut off immediately and the sound of the motor should cease. The oven light should go out.
6. Open oven door fully. The oven light should come on when the door is opened.
7. Press **CHANGE/CANCEL** twice.

If under any of the preceding conditions the oven does not operate as stated, do not use it. Call your Amana dealer or authorized service agency.

## THE CONTROL PANEL

**READOUT DISPLAY** — Normally shows time of day.

- Shows remaining time when cooking by time or using the Timer.
- Shows actual or set temperature when cooking to temperature.

**NUMBERS** — Always press numbers first when programming the oven. Press in the same order as you would write them. Then press the desired word pad.

**CHANGE/CANCEL** — Press to change instructions. To change only a time entry, press once. To cancel everything you've programmed, press twice.

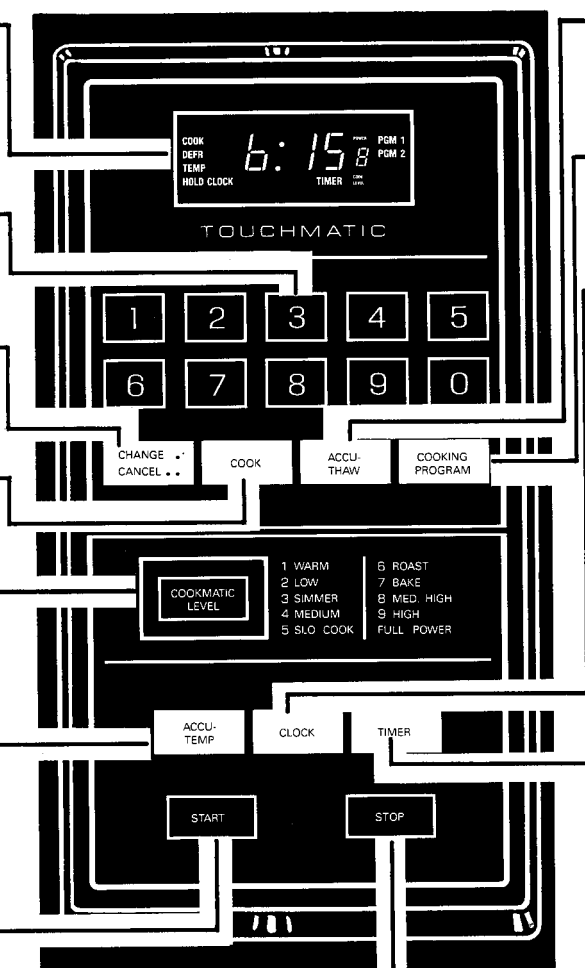
**COOK** — Programs oven to cook by time. Press after pressing numbers for the cooking time. (See page 5.)

**COOKMATIC LEVEL** — Programs cooking power level. Press after pressing number pad corresponding to cook levels imprinted on control panel. (See page 10.)

**ACCU-TEMP** — Programs oven to cook to temperature. Oven then automatically holds food for up to 60 minutes, or until you turn the oven off. Press after pressing number pads for temperature. (See pages 11-12.)

**START** — Starts oven operation.

**STOP** — Stops oven. The oven can also be stopped by opening the door.



**ACCU-THAW** — Programs the oven to defrost food. Press after pressing numbers for the defrosting time. (See page 5.)

**COOKING PROGRAM** — Press after 0 to find out what's happening right now. Use to program 2 cooking programs. (See page 12.)

**CLOCK** — Sets time of day. Press twice after pressing numbers for the current time. (See above.)

**TIMER** — Lets you time a separate task, even when the oven is cooking. Press after pressing numbers for time to be measured. (See page 5.)

### IF YOU MAKE A MISTAKE

- If the oven is not operating yet, press **CHANGE/CANCEL** twice. This cancels everything. You must program the oven again.
- If the oven is operating, press **0**, then **COOKING PROGRAM** to see what the oven is doing right now. If the oven appears to be doing something you don't want it to do, press **STOP**, then press **CHANGE/CANCEL** twice. This cancels everything. You must program the oven again.

### THE ERROR SIGNAL

The oven will sound an Error Signal (a short tone) when you attempt to program something illogical:

- If you attempt to program a Cookmatic Level with Defrost.
- If you attempt to program Start Time after the oven has begun cooking.
- If you attempt to program a temperature lower than 100°F, or higher than 195°F. The temperature probe sensing range is from 100°F to 195°F.
- If you attempt to program the oven to cook to temperature without having inserted the temperature probe plug into the oven wall receptacle first.

## TRY IT! COOKING WITH FULL POWER

This is the fastest and easiest way to cook. At Full Power, your oven provides approximately 700 watts\* of cooking power. It's very fast!

1. **Place food in oven and close oven door.** When using the oven, always have food or water inside to absorb microwave energy.
2. **Press CHANGE/CANCEL twice.**
3. **Press numbers for cooking time** (to cook 1 minute 10 seconds, press **1,1,0**). The display will show the time you have set. If you make a mistake, simply press

**CHANGE/CANCEL** once and enter the desired time.

4. **Press START** and the oven will begin operating. The display will show "PGM 1" and "COOK" to indicate the oven is cooking in Program 1. The oven always starts cooking in Program 1. "POWER" indicates the oven is operating at Full Power.
5. **The oven will stop and sound a signal at the end of cooking time.**

## TRY IT! USING THE TIMER

You can use the oven like a separate timer to time mixing, steeping or even telephone calls!

**If the oven is not cooking:**

1. **Press CHANGE/CANCEL twice.**
2. **Press the number for the time desired.**
3. **Press TIMER.** The display will "count down" and show "TIMER", indicating the timer function is in use.
4. **A signal will sound when the time has elapsed.**

**If the oven is cooking:**

1. **Press numbers for the time desired.** Do not stop the oven.

2. **Press TIMER.** The display will "count down" the timer time and show "TIMER" along with other ongoing oven functions. The oven will continue to cook undisturbed. When timer time has elapsed, a signal will sound, the display will show any remaining cooking time and the oven will finish cooking.
3. **To change a timer setting, simply press the new time desired and press TIMER again.** Do not stop the oven.
4. **To check cooking time remaining before timer has elapsed, press 0 and COOKING PROGRAM.**

## TRY IT! DEFROSTING WITH THE ACCU-THAW™ FEATURE

Most frozen foods can be defrosted quickly by using **ACCU-THAW**, which automatically selects various power levels for optimum defrosting results, without much of the premature cooking that occurs with many ordinary microwave oven defrost cycles. It pulses microwave energy on and off at the proper power levels. During the "on" periods, the exterior of the food is heated. During the "off" periods, heat is conducted to the interior of the food, allowing uniform defrosting with little or no cooking on the exterior. **Note:** Many foods, especially meats, must be defrosted completely before cooking begins. If ice crystals remain inside foods, cooking will be uneven because the outside of the food will be done, but the inside will be underdone. Consult the charts on the following pages when using **ACCU-THAW**.

**To defrost foods using ACCU-THAW:**

1. **Place frozen food inside oven and close oven door.** If food is inside a plastic bag, slit the bag to allow steam to escape.

2. **Press CHANGE/CANCEL twice.**
3. **Press numbers for defrosting time.** Start with the shortest amount of time and increase if needed.
4. **Press ACCU-THAW.**
5. **Press START** and the oven will operate. The display will show "DEFR", indicating the oven is programmed to defrost. Microwave power cycles on and off automatically, as indicated by "POWER" flashing on and off. **Note:** Some frozen foods defrost better on #3 Cookmatic Level instead of the ones selected by the **ACCU-THAW** pad. If the cookbook specifies this, follow the directions for cooking with Cookmatic power levels (see page 10). Do not use **ACCU-THAW**.

## ACCU-THAW™ DEFROSTING GUIDE

Use this guide when using Accu-Thaw to defrost foods. The cookbook introduction provides General Hints for Defrosting Foods. These hints and other defrosting tips throughout the cookbook can be used with the Accu-Thaw feature. However, if you decide to use any defrosting charts and times in the cookbook, use Cookmatic Level 3. Charts in the cookbook are not used with Accu-Thaw.

The number of frozen convenience foods available in today's market is endless. This makes it almost impossible to include preparation instructions for all of them in this guide! Since most frozen convenience foods packages include microwave preparation instructions, you should follow those package instructions when defrosting and heating frozen convenience foods in your microwave oven.

**FROZEN BEVERAGE DEFROSTING CHART**

TYPE OF BEVERAGE	CARTON OR CAN SIZE	UTENSIL *	HEATING TIME	SETTING	SPECIAL INSTRUCTIONS
Frozen Juice Concentrate	6 oz. can	1-quart casserole or glass measure	35 to 45 sec.	Full Power	Place frozen juice concentrate in utensil. Heat, according to time and setting, or until defrosted. If necessary, continue stirring until mixture is melted and smooth.
	12 oz. can	2-quart casserole or glass measure	1 to 1 min., 30 sec.	Full Power	
	16 oz. can	2½-quart casserole	2 to 2 min., 30 sec.	Full Power	
Frozen Non-Dairy Creamer	1 pint carton	Defrost in carton	12 to 15 min.	Defrost **	Open carton. Defrost according to time and setting, or until defrosted. Shake or stir occasionally during defrosting time.

\* Frozen juice concentrate can be placed directly in the serving pitcher and heated in the microwave oven. Be certain the pitcher is microwave oven-safe and fits inside the microwave oven.

\*\* For more information regarding defrosting, see page 5.

**FROZEN BREAD DEFROSTING CHART**

BREAD TYPE	PKG. SIZE	DEFROSTING TIME *
Frozen Coffee Cakes	9 to 10 oz.	3 to 4 min.
	11 to 12 oz.	3 min., 30 sec. to 4 min., 30 sec.
Frozen Croissants	6 to 9 oz.	5 to 6 min., 30 sec.
Frozen Danish Rolls	7 to 9 oz.	4 to 5 min.

\* For more information regarding defrosting, see page 5.

**General Instructions for Defrosting Bread**

Remove coffee cake or rolls from the container, if metal. Place on plastic rack or paper plate. Cover with a microwave-safe paper towel.

**FROZEN CONVENIENCE BREAD DEFROSTING CHART**

BREAD TYPE	PKG. SIZE	DEFROSTING TIME *	SPECIAL INSTRUCTIONS
Frozen Bread Dough	1 lb. loaf	9 to 11 min.	Wrap dough loosely in waxed paper. Turn over halfway through defrosting time. Bake bread dough conventionally.
Frozen Cinnamon Roll Dough	25 to 27 oz.	10 to 12 min.	Place rolls in greased 9 x 2-inch round dish. Cover loosely with waxed paper.
Frozen Dinner Roll Dough	15 oz.	7 min., 30 sec. to 8 min., 30 sec.	Place rolls in greased 9 x 2-inch round dish. Cover loosely with waxed paper.
Frozen Donuts	2 donuts	1 min., 45 sec. to 2 min., 15 sec.	Place donuts on plastic rack or paper plate. Cover with microwave-safe paper towel.
	4 donuts	2 min., 45 sec. to 3 min., 15 sec.	
Frozen French or Vienna Bread	1 lb. loaf	4 min., 30 sec. to 5 min., 30 sec.	

Frozen French Toast (4 slices)	9 oz. pkg.	4 to 5 min.	Place on plastic rack or paper plate. Cover with microwave-safe paper towel.
Frozen Jelly Donuts	2 donuts	2 min., 45 sec. to 3 min., 15 sec.	Place on plastic rack or paper plate. Cover with microwave-safe paper towel.
	4 donuts	4 to 5 min.	
Frozen Sandwich Bread Loaf	1½ lb. loaf	4 min., 30 sec. to 5 min., 30 sec.	
Frozen Sweet Rolls	2 individual rolls	2 min., 45 sec. to 3 min., 15 sec.	Place on plastic rack or paper plate. Cover with microwave-safe paper towel.

\* For more information regarding defrosting, see page 5.

#### General Instructions for Defrosting Frozen Convenience Breads

1. Read the "Special Instructions" on the chart before defrosting frozen convenience bread.
2. If defrosting only, not reheating bread loaves, defrost until still cold in center. Allow to stand until defrosted. Reheat only as much bread as is needed at each meal.

#### FROZEN FISH AND SEAFOOD DEFROSTING CHART

TYPE	PKG. SIZE	DEFROSTING TIME*	SPECIAL INSTRUCTIONS
Crab Claws or Legs	12 oz.	7 to 10 min.	Rearrange halfway through defrosting time.
Crab Meat	6 oz.	4 to 5 min.	Stir halfway through defrosting time.
Fillets, Flounder, Cod, Sole, Haddock, etc.	16 oz.	9 to 12 min.	Turn fillets over halfway through defrosting time.
Lobster Tail	16 oz.	9 to 12 min.	Wrap in plastic wrap or waxed paper. Turn over halfway through defrosting time.
Shrimp	12 oz.	7 to 10 min.	Turn over halfway through defrosting time.

\* For more information regarding defrosting, see page 5.

#### General Instructions for Defrosting Fish and Seafood

1. Read the "Special Instructions" on the chart before defrosting frozen fish and seafood.
2. Place frozen seafood in glass casserole or utility dish. Cover loosely with plastic wrap or waxed paper.
3. Allow defrosted seafood to stand for a short period of time before cooking to be certain the seafood is totally defrosted. Larger seafood pieces can be held under cold running water, if necessary, to finish the defrosting process, or to allow still-frozen fillets to be separated. Fish and seafood should be totally defrosted before cooking, so that cooking will be done evenly.

#### FROZEN FRUIT DEFROSTING CHART

PACKAGE SIZE	UTENSIL	DEFROSTING TIME*
.10 oz.	1-quart casserole	7 to 9 min.
20 oz.	1½-quart casserole	12 to 15 min.

\* For more information regarding defrosting, see page 5.

#### General Instructions for Defrosting Fruit

1. Place the fruit in the utensil recommended on the chart. Cover the fruit with a glass lid or plastic wrap.
2. Defrost, according to the time recommended on the chart. Stir the fruit halfway through the defrost time to break the fruit apart and rearrange.



### FROZEN SMALL SIZE MEAT DEFROSTING CHART

MEAT TYPE	WEIGHT	DEFROSTING TIME*	SPECIAL INSTRUCTIONS
Bacon	16 oz.	6 to 8 min.	Turn over halfway through defrosting time.
Bratwurst	16 oz.	12 to 15 min.	Turn over halfway through defrosting time.
Chops	16 oz.	12 to 15 min.	Turn over halfway through defrosting time.
Frankfurters	12 oz.	7 to 9 min.	Turn over halfway through defrosting time.
	16 oz.	9 to 11 min.	
Ground Beef, Pork, or Lamb			
Bulk	16 oz.	12 to 15 min.	Turn over halfway through defrosting time.
Patties	16 oz.	11 to 14 min.	Arrange in circle. Turn over halfway through defrosting time.
Sausage	12 oz.	7 to 9 min.	Turn over halfway through defrosting time.
Steaks (beef)	16 oz.	12 to 15 min.	Turn over halfway through defrosting time.

\* For more information regarding defrosting, see page 5.

#### General Instructions for Defrosting Small Size Meat

1. Read the "Special Instructions" on the chart before defrosting frozen small meat items.
2. Defrost, according to the time recommended on the chart.

### FROZEN ROAST DEFROSTING CHART\*

WEIGHT	DEFROSTING TIME**	SPECIAL INSTRUCTIONS
Under 3 lbs.	13 to 15 min./lb.	Turn over halfway through defrosting time.
3 to 6 lbs.	15 to 17 min./lb.	Turn over after 5 minutes and halfway through remaining defrosting time. Let stand to finish defrosting if not completely defrosted.

\* The "Frozen Roast Defrosting Chart" lists defrosting times for roasts, in terms of minutes-per-pound.

\*\* For more information regarding defrosting, see page 5.

#### General Instructions for Defrosting Roasts or Large Cuts of Meat

1. Read the "Special Instructions" on the chart before defrosting frozen roasts.
2. Place meat on cooking grill and cover with plastic wrap or place in heavy-duty plastic roasting bag in 2-quart utility dish.
3. Defrost, according to the time recommended on the chart. For example, if a roast weighs 2 pounds, defrost it for 13 minutes per pound, or 26 minutes on the defrost setting.  
$$2 \text{ lbs.} \times 13 \text{ min./lb.} = 26 \text{ minutes}$$
4. Thicker cuts of meat weighing between 2 to 3 pounds should be defrosted for 15 minutes per pound, rather than 13 minutes per pound.
5. Larger roasts may need a standing time before cooking to allow completion of the defrosting process.
6. To cook a roast immediately after defrosting in one automatic process, see the charts and information in the cookbook that came with your oven.

### FROZEN MAIN DISH DEFROSTING AND COOKING CHART

DISH SIZE	DEFROSTING TIME*	COOKING TIME** ON FULL POWER
1-quart	35 to 45 min.	5 to 7 min.
1½-quart	45 to 55 min.	6 to 9 min.
2-quart	1 hr., 5 min. to 1 hr., 15 min.	7 to 10 min.
3-quart	1 hr., 45 min. to 1 hr., 55 min.	9 to 13 min.

\* For more information regarding defrosting, see page 5.

\*\* When heating casseroles on Full Power, stir halfway through the cooking time.



## General Instructions for Defrosting and Cooking Frozen Main Dishes

1. Select the defrosting and cooking instructions, according to the size of dish in which your frozen main dish is being cooked. Cover the dish with a glass lid or plastic wrap.
2. Defrost and cook, according to the times recommended on the chart.
3. After defrosting, you may wish to cook the main dish to 150°F using the Automatic Temperature Control System, if your microwave oven has this feature. You will not need to set an amount of cooking time since the Automatic Temperature Control System will determine when the main dish has finished cooking. Insert the temperature probe into the center of the main dish. Cover the dish with a glass lid or plastic wrap. Cook in the microwave oven on Full Power to the final temperature of 150° F. Stir halfway through the cooking time. For more information about the Automatic Temperature Control System, see pages 11-12.

### FROZEN TURKEY ROAST DEFROSTING AND COOKING CHART

ROAST SIZE	UTENSIL	DEFROSTING TIME*	COOKING TIME ON FULL POWER
2 lb.	9 x 5 x 2-inch utility dish	55 to 60 min.	15 to 20 min.
3 lb.	2-quart utility dish	1 hr., 10 min. to 1 hr., 15 min.	25 to 30 min.

\* For more information regarding defrosting, see page 5.

## General Instructions for Defrosting and Cooking Frozen Turkey Roasts

1. Remove the frozen roast from the metal container. Place it in the glass utensil listed on chart. Cover loosely with plastic wrap.
2. Defrost and cook, according to the times recommended on the chart.
3. After defrosting, you may wish to cook the roast to 170°F using the Automatic Temperature Control System. You will not need to set an amount of cooking time since the automatic temperature control system will determine when the roast has finished cooking. Insert the temperature probe into the center of the roast through the plastic wrap, thereby piercing the plastic wrap. Cook in the microwave oven on Full Power to the final temperature of 170° F. Turn roast over halfway through cooking time. For more information about the Automatic Temperature Control System, see pages 11-12.

### FROZEN POULTRY DEFROSTING CHART\*

WEIGHT & SIZE OF POULTRY	DEFROSTING TIME **	SPECIAL INSTRUCTIONS
<b>Pieces</b>		
3 lbs. or less; package is less than 1-inch thick	11 to 14 min./lb.	Turn over halfway through defrosting time.
3 lbs. or more; package is greater than 1-inch thick.	13 to 15 min./lb.	Turn over halfway through defrosting time.
<b>Whole</b>		
1 to 5 lbs.	13 to 15 min./lb.	Turn over halfway through defrosting time.
5 to 8 lbs.	13 to 15 min./lb.	Turn over after 5 minutes and halfway through the remaining defrosting time. Soak in cool water if not completely defrosted.
8 to 10 lbs.	13 to 15 min./lb.	Turn over every 5 minutes during the first 15 minutes and twice during the remaining defrosting time. Soak in cool water if not completely defrosted.
10 to 15 lbs.	13 to 15 min./lb.	Turn over every 5 minutes during the first 20 minutes and 3 times during the remaining defrosting time.

\* The "Frozen Poultry Defrosting Chart" lists defrosting times for all types of poultry, in terms of minutes-per-pound. The chart applies to Cornish hens, capon, duck and individual poultry pieces, as well as to whole chicken and turkey. For best results when defrosting, be sure to consider the general hints.

\*\* For more information regarding defrosting, see page 5.

### General Instructions for Defrosting Poultry

1. Read the "Special Instructions" on the chart before defrosting frozen poultry.
2. Place the frozen poultry on a plate or cooking grill. Cover with plastic wrap. Remove all metal pieces, if possible.
3. You may wish to cover the wing tips, the narrow part of the legs, and the high point of the breast bone and back with small strips of foil to prevent them from dehydrating and cooking.
4. If the item takes longer than 99 minutes 99 seconds to defrost, manually enter any remaining time on power level 1.

### FROZEN CONVENIENCE CAKE DEFROSTING CHART

CAKE TYPE	SIZE	DEFROSTING TIME*
Cake	12 to 14 oz.	3 to 4 min.
	16 to 18 oz.	4 to 5 min.
Pound Cake	10 to 11 oz.	3 min., 30 sec. to 4 min., 30 sec.

\* For more information regarding defrosting, see page 5.

### General Instructions for Defrosting Frozen Cakes

1. Remove the cake from the container, if metal. Place on a plastic rack or a paper plate. Cover with a microwave-safe paper towel, if not frosted.
2. Defrost, according to the time recommended on the chart. Do not melt the frosting.

### FROZEN BAKED PIE DEFROSTING CHART

SIZE OF PIE	DEFROSTING TIME*
8-inch (20 to 30 oz.)	10 to 15 min.
9-inch (30 to 40 oz.)	20 to 25 min.

\* For more information regarding defrosting, see page 5.

### General Instructions for Defrosting Frozen Baked Pies

1. Pies need to be cooked before freezing. In all recipes, the bottom crust needs to be cooked before the filling is added. This is necessary to achieve a completely cooked flaky bottom crust. Purchased frozen pies are usually unbaked. For good results, bake these pies conventionally and then freeze. Later the frozen pies can be transferred to glass pie plates and quickly defrosted in the microwave oven. When baking pies "from scratch" bake them in glass pie plates and then freeze. Or, bake two pies, eat one and freeze the other for later use.
2. Place cooked frozen pie in glass pie plate. Do not cover. Defrost, according to the time recommended on the chart.

## TRY IT! COOKING AT COOKMATIC® POWER LEVELS

Just as some foods cook better conventionally at lower rather than higher oven temperatures, some foods cook better at lower rather than higher microwave power levels. This oven has 10 power levels, each well-suited for different types of foods. The cookbook provided with this oven specifies the proper power levels to be used for optimum cooking. When no power level is programmed, the oven operates at Full Power.

1. Place food or water in oven and close oven door.
2. Press **CHANGE/CANCEL** twice.
3. Press numbers for cooking time. The time will appear in the display.
4. Press **COOK**.
5. Press number for Cookmatic Level (to cook at Level 8, press **8**, which is 80% of Full Power). The number will appear in the display.
6. Press **COOKMATIC LEVEL**.

7. Press **START** and the oven will operate. The display will show "COOK", "PGM 1" and the power level selected (for example, "8 COOK LEVEL" for Level 8). The magnetron tube cycles on and off to cook at lower power levels, so "POWER" flashes on and off accordingly as microwave energy is produced.
8. To change power levels during cooking, press the number for the new power level, then simply press **COOKMATIC LEVEL**. The oven display will change accordingly. You do not need to stop the oven. To change to Full Power, simply press **0**, then press **COOKMATIC LEVEL**.
9. The oven will stop and sound a signal at the end of cooking time.

# USING THE AUTOMATIC TEMPERATURE CONTROL SYSTEM

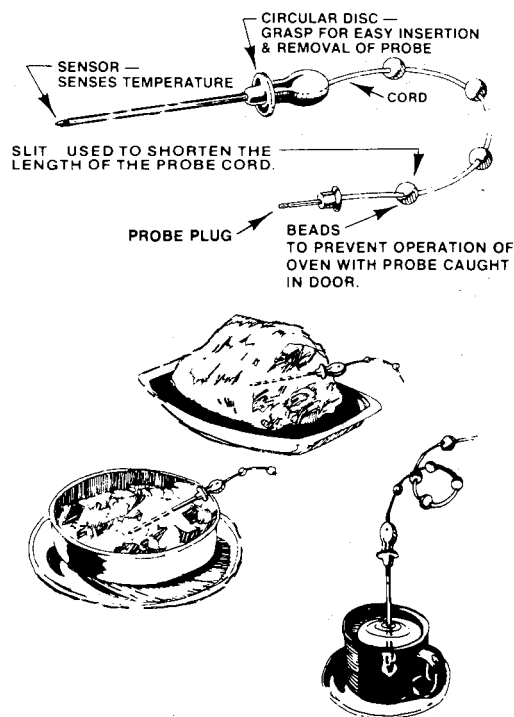
Read these special hints first.

Use the automatic temperature control system to cook foods, especially meats, to a precise temperature. It can also be used for reheating leftovers, warming soups and beverages and many other tasks. And you can hold a casserole, fondue, meat or almost any other food at serving temperature for even the latest of the late-arrivals.

1. **Do not use the temperature probe to cook candies.** The highest temperature sensed by the probe is 195°F, while most candies require temperatures of 230°F or higher.
2. **Insert the temperature probe as shown at right:**  
**Meats** — Insert probe sensor tip in the thickest lean section, halfway between the center and the exterior, but away from fat and bone.  
**Casseroles, Leftovers, Beverages** — Insert probe sensor tip in center, without touching bottom or sides.
3. **Be sure probe is securely inserted into food.** If the probe accidentally falls out of food, air temperature will be sensed and food will not cook properly. The probe could become damaged.
4. **Do not use the probe with foil or other metal.** Arcing could result. If the recipe suggests using foil, do not use the probe.
5. **Do not operate the oven if probe is caught in oven door.**
6. **Do not use the automatic temperature control system when cooking different foods at the same time.** Different foods cook at different speeds, and the results may be unsatisfactory.
7. **Do not force the temperature probe into frozen food.** The sensor tip could be damaged or the probe could break.
8. **Use a hot pad to remove the hot temperature probe.** During cooking, the probe could become hot enough to burn you.
9. **Always remove the probe after use.** Do not store it in the oven. Keep it in a place where it won't become lost

or damaged.

10. **Wash the probe with hot, soapy water.** Do not immerse the probe plug in water nor wash in an automatic dishwasher. Rinse and dry probe thoroughly.



## TRY IT! COOKING TO TEMPERATURE/ HOLDING AT TEMPERATURE

**Note:** The Temperature-Hold feature is designed to operate when the set temperature is 140°F or above. Food such as cooked meat, poultry or fish should be held at 140°F or above to prevent the growth of bacteria or the production of toxins.

1. **Read the rules and hints above.**
2. **Place food in oven. Insert temperature probe tip into food, insert probe plug into right oven interior wall near the back and close oven door.**
3. **Press CHANGE/CANCEL twice.**
4. **Press numbers for desired temperature** (to cook to 140°F, press **1, 4, 0**). The numbers will be displayed. The probe's temperature sensing range is 100° to 195° F.
5. **Press ACCU-TEMP.** The display will show "TEMP" if the probe has been inserted securely. (If the probe is not inserted securely or is damaged, the Error Signal will sound a short tone and the display will show the cooking program number when you press **ACCU-TEMP**. Reinsert probe and reprogram instructions. If the problem persists, see page 14 for how to correct it.)
6. **If less than full microwave power is desired, press**

number for Cookmatic power level, then simply press **COOKMATIC LEVEL**.

7. **Press START** and the oven will operate. (You don't program cooking time, because the oven will cook to temperature only.) The display will show "POWER" and the actual temperature of the food. To see the end temperature, press **ACCU-TEMP**.
8. **To change the set temperature during cooking, press numbers for the new temperature, then press ACCU-TEMP.** Do not stop the oven.
9. **When set temperature is reached, the oven will sound a signal.** If the set temperature is 139° F or lower, the oven will automatically stop when the temperature is reached.  
**AUTOMATIC HOLD** — If the set temperature is 140°F or higher, the oven will automatically "hold" food at that temperature for 60 minutes or until you press **STOP**. If you stop and restart the oven during the hold period, the timing of the 60 minutes will begin again. (If you wish to keep track of the time the food is held, press

numbers for the time desired, then press **TIMER**. To see the actual temperature, press **0**, then **COOKING PROGRAM**. To see the amount of time remaining, press **TIMER**.)

## TRY IT! USING THE TEMPERATURE PROBE WITHOUT COOKING

You can use the temperature probe as a thermometer, even when the oven isn't cooking. For example, you may want to see if tap water is warm enough to soften dry yeast (112°F), or if food is less than serving temperature (less than 140°F).

1. Place food or water item in the oven.
2. Insert temperature probe tip into item and probe plug into oven cavity wall receptacle.

## TRY IT! PROGRAMMED COOKING USING 2 COOKING PROGRAMS

This oven can remember up to two cooking programs, so you can defrost food and cook, all with one set of instructions, simply by pressing **COOKING PROGRAM** between each instruction.

NOTE: If using the temperature probe, the Accu-Temp function must occupy the final program in a sequence for the automatic "hold" feature to work. Programming Accu-Temp in the first program will cause the oven not to hold after cooking to temperature.

1. Put food in oven and close oven door.
2. Insert temperature probe in the food and in the oven if one of your programs will involve cooking to temperature.
3. Close oven door.
4. Press **CHANGE/CANCEL** twice.
5. Enter your instructions for Cooking Program 1. The

## TRY IT! CHANGING A COOKING PROGRAM AFTER THE OVEN STARTS

To change part of a 2 cooking program sequence after the oven starts, proceed as follows:

1. To change the program in which the oven is cooking, simply enter the correct instructions while the oven continues to operate. The oven will immediately follow the new instructions.
2. To change one program while the oven cooks in

## TRY IT! INSTANT REPLAY

Your oven has "instant replay" features that let you ask questions about what you've programmed before and after the oven starts. Just press the word pad that describes what you want to know and the answer will be displayed. Always press **0 COOKING PROGRAM** to return to the original readout.

To ask the oven:

- "WHAT'S THE TEMPERATURE OF THE FOOD?" (when cooking to temperature) — Press **ACCU-TEMP** and the answer will be displayed.

10. When cooking is finished, press **STOP**, then press **CHANGE/CANCEL** twice to return to the time of day. Remove probe from the oven.

3. Press **CHANGE/CANCEL** twice.
4. Press **ACCU-TEMP**. The number displayed is the actual temperature of the item.
5. Remove probe and press **CHANGE/CANCEL** twice to return display to the time of day.

display will flash "PGM 1" to indicate you are in that program.

6. Press **COOKING PROGRAM** to "step" or "advance" to Program 2. The display will stop flashing "PGM 1" and begin flashing "PGM 2".
7. Enter your instructions for Program 2, then press **START**.
8. Always check programming instructions before starting the oven. Uncorrected mistakes can cause food to cook improperly or be ruined. To check, press **COOKING PROGRAM** until the time of day is displayed. Then press repeatedly to advance to each program. The display will show your instructions. If the oven is already operating, the program indicator lights will not flash for the program being used.

another program, press **STOP**, then press **COOKING PROGRAM** to advance to the program to be changed. Enter new instructions, then press **0** and **COOKING PROGRAM** to return the display to the current program. Then press **START**.

- "WHAT DID I TELL YOU TO DO IN THE SECOND COOKING PROGRAM?" (when using 2 cooking programs) — Press **COOKING PROGRAM** repeatedly until "PGM 2" flashes in the display. The answer will also be displayed.

- "WHAT TIME OF DAY IS IT?" — Press **CLOCK** and the answer will be displayed.



# MAINTENANCE — CLEANING THE OVEN

## The Oven and Door Interior

If the inside walls, floor, door and splatter shield at the top of the oven should become splattered, simply wipe them with a paper towel or clean with a mild detergent in warm water using a soft sponge or cloth. A cup of water can be boiled in the oven to loosen soil before cleaning. After boiling the water, allow the water vapor to settle on the oven walls and soften the soil for several minutes before you open the door.

Do not use an abrasive to clean the inside. It might damage the finish on stainless steel. Never pour water into the bottom of the oven.

**To Clean The Glass Tray**, lift up the tray and remove. Wash in warm detergent or in a dishwasher. Replace tray so the word "Front" is readable. Do not operate the oven without tray in position.

## To Clean The Splatter Shield Inside Oven

The splatter shield keeps the top of the oven and antenna from getting dirty. Normally, a damp cloth will remove any splatter from the shield.

However, if you want to clean it more thoroughly, remove the splatter shield. Be careful not to bend the antenna when removing the splatter shield. The shield is secured by four screws in recessed wells in the front underside of the shield and four tabs which fit into slots in the back oven wall. Remove the four screws. Then carefully lower the shield and,

clearing the antenna, pull the shield forward out of the back wall slots and out of the oven.

Wash the shield in hot soapy water. Do not wash in a dishwasher. Do not use harsh or abrasive cleansers.

When replacing, again be careful not to bend the antenna. Also be sure the splatter shield tabs fit snugly into the slots in the back of the oven before replacing the screws.

To check antenna operation, place a glass or cup of water in the unit, close the oven door and start the unit. A rotating shadow should be visible above the splatter shield.

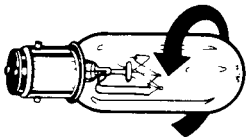
**To Clean The Temperature Probe** wash the metal probe in hot, soapy water. Do not immerse the probe or wires in water. Do not wash probe in dishwasher.

**To Clean The Oven Exterior**, use a soft sponge or cloth dampened with mild, sudsy water. Do not use abrasive cleaners.

## To Clean The Discharge Air Vents

There will be a slight buildup of cooking vapors in the discharge vent in the upper right hand corner, above the control panel. This vent should be cleaned occasionally. Do not attempt to remove the front control; it is an integral part of the oven. Clean the air vent with a damp cloth.

## HOW TO CHANGE THE OVEN LIGHT



To remove bulb, press in and turn counterclockwise

The lightbulb for the inside of the oven can be changed only from the back. On the upper left hand side of the oven back is a metal plate with one screw. The lightbulb is located behind this plate.

Follow these steps to change the bulb:

- Unplug the oven from the electrical outlet.

- Facing the oven back, remove the screw, allowing the metal plate and light to swing outward.
- Remove the bulb, being careful not to burn fingers or break the bulb. To remove bulb, press into socket and turn counterclockwise.
- Replace the bulb with a 25-watt, 25T8DC bayonet base bulb. To replace the bulb press into socket before turning clockwise.
- Reposition the plate, being careful not to bend the hinge tabs. Replace the screw.
- Connect the oven to power outlet.

## BEFORE YOU CALL FOR SERVICE:

Be sure you have read and followed the operating instructions. Avoid unnecessary service calls. The space-age, electronic control module used in this microwave oven is the finest in versatility, quality and reliability. In many cases, a customer call for module timer service is caused by conditions other than failure of the controls. That's why you should read the following before calling for service.

If you find that the readout display will not light up, appears incorrect or garbled, or that the control will not accept instructions, it could be for any of the following reasons:

- Electrical storm
- Momentary power interruption
- Drills, vacuum cleaners, welders, light dimmers on same circuit.
- Static discharge to touch pads
- Extraneous signals: radio or TV transmitting equipment



**NOTE:** A Power Interruption Signal (dash lines) will appear in the display whenever the oven is initially plugged into an electrical outlet. The lines will also appear whenever electrical power to the oven has been interrupted and then restored. When you see these lines, simply set the clock.

## IF THE READOUT DISPLAY DOESN'T LIGHT UP:

- Is the oven plugged securely into the proper power outlet?
- Is a fuse blown or circuit breaker open?
- If the condition remains unchanged, perform the steps listed in the box on the next page.

#### IF THE READOUT APPEARS WRONG:

- Did you remember to press **CHANGE/CANCEL** twice before programming the oven?
- Have you (or someone else) pressed the controls after cooking has started?
- If the condition remains unchanged, perform the steps listed in the box on this page.

#### IF THE CONTROL WILL NOT ACCEPT YOUR INSTRUCTIONS:

- For cooking to temperature, was "TEMP" displayed when you connected the temperature probe? If not, check to see if the probe jack is securely inserted into the oven receptacle. (Review explanation, page 11.)
- For cooking by time, if the condition remains unchanged, perform the steps listed in the box on this page.

#### IF ANOTHER FEATURE DOESN'T APPEAR TO BE OPERATING CORRECTLY:

- Have you followed the use and care instructions exactly? Review them to be sure.
- Did you press **CHANGE/CANCEL** twice before programming the oven?
- Is the oven plugged into a properly grounded and polarized outlet as described in the grounding instructions (page 2)? Improper installation can result in erratic operation.
- If the condition remains unchanged, perform the steps listed in the box on this page.

#### IF MICROWAVE POWER WON'T COME ON:

- Did you press **START** ?
- Is the oven door securely closed?
- If the condition remains unchanged, perform the steps listed in the box on this page.

#### IF THE OVEN LIGHT PULSES DIMMER, THEN BRIGHTER:

- Is the line voltage to your home low or lower than usual? (The power company in your area should be able to tell you if there is low voltage to your home.)

If condition remains unchanged, please perform the following steps:

1. Check to see if a fuse or circuit breaker is open.
2. Unplug the oven.
3. Reconnect the oven to the wall outlet. Dash lines will appear in the display.
4. Press **CHANGE/CANCEL** twice. (Dash lines will disappear.)

**YOUR OVEN MUST BE ON A GROUNDED, POLARIZED CIRCUIT.**

#### IF ROOM LIGHTS DIM OR PULSE DIMMER, THEN BRIGHTER WHEN THE OVEN IS IN USE:

- Is the microwave oven on a separate circuit? (Review grounding instructions on page 2.)

#### IF THE TEMPERATURE PROBE APPEARS NOT TO FUNCTION CORRECTLY:

- Is the probe jack securely inserted into the receptacle? This tells the oven that it is about to be set to cook to temperature.
- Is the food you're attempting to heat already hotter than the temperature you've programmed?
- Is the food completely defrosted?
- Has the probe been accidentally left in the oven when cooking by a method other than temperature cooking? The probe could be destroyed by leaving it in the oven when cooking by a method other than temperature cooking.

#### IF FOOD IS OVERCOOKED:

- Did you remember to program the correct cooking power level? (Review instructions, page 10.)

#### IF FOOD IS UNDERCOOKED:

- Are there other energy-consuming appliances on the same circuit as the microwave oven? (Review grounding instructions, page 2.)
- Is the line voltage to your home low or lower than usual? (The power company in your area should be able to tell you if there is low voltage to your home.)
- Did you remember to program the correct cooking power level? (Review instructions, page 10.)

## IF THE GLASS TRAY SHOULD BREAK

The glass oven tray must be in place when operating the oven. This allows the microwaves to be reflected up into the bottom of the food that is being cooked. The tray is a special type of

glass and, if it is accidentally broken, it must be replaced with the same type of glass tray from your Amana dealer.

## WHEN SERVICE IS REQUIRED:

Call nearest authorized Amana service agency. (The dealer from whom you purchased your microwave oven can give you the name of your authorized Service Center.) Help them give you prompt service by providing:

1. An accurate description of the trouble.
2. Complete model and serial numbers. (See front cover)
3. Date of installation. (We also suggest you retain your sales receipt.)

Remember, repair by an unauthorized service person that results in subsequent failure will void the warranty promise. Amana has a large network of Authorized Service Centers in

the U.S. However, if you should have a service problem that is not resolved locally,

Write:  
Customer Relations Department  
AMANA REFRIGERATION, INC.  
Amana, Iowa 52204

Or dial: (319) 622-5511 Monday through Friday (8 a.m.-5 p.m., Central Time Zone) and ask for Customer Relations.